

Bidders List

Bid No. 27-10, Cooper Middle School Administration Building Alterations

The companies listed below have been notified of this bid opportunity. Companies are not required to be on the list to bid. This is not the pre-qualification list for public works projects.

Company Name	City	State	Contact Email List
Central CA Builders Exchange	Fresno	California	projectinfo@cencalbx.com
Construct Connect	Cincinnati	Ohio	content@constructconnect.com
Construction Bid Board (eBidboard)	San Diego	California	planroom@ebidboard.com
Fresno Reprographics	Fresno	California	donm@fresnorepro.com
McGraw-Hill Construction Dodge	Sacramento	California	dodge.bidding@construction.com; Dodge.Docs@construction.com;
Tulare & Kings Counties Builders Exchange	Visalia	California	info@tkcbe.com
3C Engineering Inc.	San Luis Obispo	California	accounting@3ceng.com, dmcbride@3ceng.com
47th Place Carpet One	Madera	California	jose@47thplace.net
A&P custom painting	Fresno	California	Apainting101@yahoo.com
A.M.V Construction Inc.	Madera	California	aramelvillaaamv@gmail.com
A1 METROPOLITAN CONSTRUCTION, INC.	FRESNO	California	a1metro@gmail.com
AAA Network Solutions, Inc.	Buena Park	California	sveith@aaansi.com
Able Heating & Air Conditioning, Inc.	Chula Vista	California	snunn@ableac.net
A-C Electric Company	Bakersfield	California	isaacobelj@a-celectric.com, JenniferByrd@a-celectric.com, TomHenderson@a-celectric.com
ACC Contractors, Inc.	Azusa	California	eileen@acccontractors.com
ACCO Engineered Systems, Inc.	Fresno	California	alrodriguez@accos.com, cadler@accos.com, dholman@accos.com, drrea@accos.com, jarganda@accos.com, jwong@accos.com, kdunn@accos.com, rmendes@accos.com
Act Global, LLC	Austin	Texas	mbesani@actglobal.com
Advance Services Group	Los Angeles	California	ask@advanceservicesgroups.com
Advanced Air	Visalia	California	advancedair20@yahoo.com
AI Construction LLC	Fresno	California	mmegag@gmail.com
Air & Lube Systems, Inc.	Sacramento	California	mmicheltorena@airandlube.com
AJ Fistes Corporation	San Pedro	California	AJFistes@gmail.com
Alco Building Solutions	Arcadia	California	sgreenbeck@alcobuildingsolutions.com
Aleston Construction, Inc	Fresno	California	chelsea@alestoninc.com, deanna@alestoninc.com
All About Building Inc	Antelope	California	allaboutbuildinginc@yahoo.com
All about Construction and Electrical	Newcastle	California	Allaboutce@yahoo.com
Alliance Contracting Services, Inc.	San Leandro	California	james@alliance-contracting.com, rooftear@sbcglobal.net, Victorg@alliance-contracting.com
Ambit Construction and Design, Inc.,	Pacoima	California	muhammad.ambitcd@gmail.com
AMERICAN CHILLER SERVICE, INC.	RANCHO CORDOVA	California	KEVIN@AMERICANCHILLER.COM
american foam experts	sacramento	California	david@americanfoamexperts.com
American Incorporated	Visalia	California	bids@aminc.com, fsaucedo@aminc.com, tshardinha@aminc.com
American Tile & Brick Venner Inc.	Signal Hill	California	cris.atbv@gmail.com
AMG & Associates, Inc.	Santa Clarita	California	estimating@amgassociatesinc.com
AMPCO Contracting, Inc	Irvine	California	egarza@ampcocontracting.com
Anixter	Roseville	California	Alianna.Reyes@anixter.com
Applied Equipment LLC	Danville	California	alalex@att.net
Ardent General, Inc.	Fresno	California	estimating@ardentgeneral.com
ARIA ELECTRIC CONSTRUCTION	Orangevale	California	ariatyazdi@gmail.com, asiemengineering@gmail.com
Arts Construction Company Inc	FRESNO	California	samk.acc@gmail.com
Associated Electrical Industries, Inc.	Ceres	California	natejacobs@aeipower.net
Audeamus dba Sebastian	Fresno	California	contract_admin@sebastiancorp.com, estimating@sebastiancorp.com, jduncan@sebastiancorp.com
Automated Electric Corporation	Rancho Cordova	California	jluna@automatedelectric.net
Aventus NV, Inc.	Boulder City	Nevada	ron@aventusnv.com

Company Name	City	State	Contact Email List
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AZ Rebar, Inc.	Fresno	California	azamora@azrebar.net
B&D Equipment	FRESNO	California	briancameron3@gmail.com
B&M Civil LLC	Rancho Cordova	California	HVAC@bm-builders.com
Balanced Comfort	Fresno	California	aaron@balancedcomfort.com
Baltimore City Public Schools	Baltimore	Maryland	pjgraff@bcps.k12.md.us
BDM Inc.	Hanford	California	admin@bdminc.net, chrisd@bdminc.net, lyleb@bdminc.net
Beam and Company, Inc.	Fresno	California	brandon@beamandcompany.com
Beer Monument Works, Inc.	kingsburg	California	johnle43@comcast.net
Benevento's Cleaning & Restoration Service, Inc.	Fresno	California	scotts@smbenevento.com
Bernards Bros. Inc.	Fresno	California	bid@bernards.com, CHer@bernards.com, gjames@bernards.com
Best Contracting Services, Inc.	Gardena	California	estimating@bestcontracting.com
Better Enterprises, Inc.	Fresno	California	marc@betterenterprisesinc.com, susan@betterenterprisesinc.com
Bid America	Murrieta	California	planroom@bidamerica.com
Blackridge Research & consulting	Peoria	Illinois	venkatesh@blackridgeresearch.com
BMV Construction Group, Inc.	Fresno	California	ebower@bmyinc.com, estimating@bmyinc.com
Bobo Construction inc	Elk Grove	California	bestimating@boboconstructioninc.com, cbobo@boboconstructioninc.com
Boneso Brothers Construction	Paso Robles	California	tim@bonesobrothers.com
Bound Enterprises DBA ScrubCan	Fresno	California	corey@scrubcan.com
Braun Electric	Bakersfield	California	Estimating@braunelec.com, jimbyrd@braunelec.com
BSG	Timergera		bsg.precon@gmail.com
Burke Diversified dba Burke Construction Co.	Chowchilla	California	soh@burkediversified.com
BUSH ENGINEERING, INC.	FRESNO	California	jarreola@bushconstruction.net
BVI Construction, Inc.	Fresno	California	cheryl@bviprojects.com, ken@bviprojects.com, marla@bviprojects.com
C R Lewis Development	Fresno	California	crlewisdevelopment@att.net
Caliber Contracting Services, Inc.	Fresno	California	christina@calibercontracting.net, kim@calibercontracting.net, mike@calibercontracting.net, shay@calibercontracting.net
CALIFORNIA ASSOCIATION OF AFRICAN AMERICAN	Granada Hills	California	dwrightbonds@caaasa.org
California Commercial Pools, Inc	Glendora	California	bids@calcommppools.com
Calwest Services	Fresno	California	calwestservices@yahoo.com
Carpenters local 701	Fresno	California	ehipolito@nccrc.org
Carpenters Local 99	Fresno	California	malfaro@ncscarpenters.org
Cash & Lincoln Fence Co	Clovis	California	melissa@valleyfence.company, valleyfence@sbcglobal.net
Castone Roofing and Construction Inc.	Clovis	California	jpadama@castoneinc.com
CenCal Impact Mentoring	Fresno	California	wlbroomfield@prodigy.net
CENCAL Services, Inc.	Fresno	California	britni@cencaldemo.com, carl@cencaldemo.com, jacob@cencaldemo.com, jamesd@cencaldemo.com, juan@cencaldemo.com, mikeg@cencaldemo.com, paulsen@cencaldemo.com, shannon@cencaldemo.com
Center State Fence and Construction Inc.	Madera	California	centerstatefenceoffice@gmail.com
Central California Builders Exchange	Fresno	California	kandice@cencalbx.com, office-assistan@cencalbx.com
Central Unified School District	Fresno	California	scuadros@centralusd.k12.ca.us
Central Valley Reinforcing, Inc.	Fresno	California	vzamora@cvrfresno.com
Champion Industrial Contractors, Inc.	Modesto	California	tcook@championindustrial.com
Chase Kennel Construction	Clovis	California	chasekennel@outlook.com
City Service Lighting	Fresno	California	citysvc@gmail.com
Clark Construction	San Diego	California	jihad.kotb@clarkconstruction.com
Class Leasing LLC	Perris	California	dsylvia@classleasing.net, timothy@classleasing.net
Climatec	Riverside	California	jstingley@climatec.com
CMA Painting Inc	Berkeley	California	cmapaintingteam@gmail.com
cmgsolarpanelcleaning	fresno	California	rick@cmgsolarpanelcleaning.com
CMW Builders, Inc.	Hilmar	California	clint@cmwbuildersinc.com
Coastwide Environmental Technologies, Inc.	Watsonville	California	jason@coastwide.net

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Construct Connect	Cincinnati	Ohio	content@constructconnect.com
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Construction Bid Source, LLC	Felton	North Carolina	lhitchcock@constructionbidsource.com
ConstructionBid Source	Holly Springs	North Carolina	syates@constructionbidsource.com
Contract Builders Corp	Fresno	California	contractbuilderscorp@gmail.com
Creekside Commercial Builders Inc.	McClellan Park	California	hhockett@creeksideinc.net
CRG	Tracy	California	kmiller@crg.us.com
Crumbly - Sunnyside	Fresno	California	Ca.sunnyside@crumbly.com
CVE Contracting Group, dba Central Valley Environ	Fresno	California	andream@cvecorp.com, davidp@cvecorp.com, Gregg@cvecorp.com, jasona@cvecorp.com, jeffw@cvecorp.com
CVE Demolition, Inc.	Fresno	California	dustind@cvecorp.com
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DAC Service, Inc. DBA Four Cs Construction	Fresno	California	chriss@fourcsmetal.com, davido@fourcsmetal.com, linda@fourcsmetal.com, maleenam@fourcsmetal.com, preston@fourcsmetal.com
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David A. Bush, Inc.	Hanford	California	jasmine@bushconstruction.net, kprice@bushconstruction.net, phil@bushconstruction.net
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Durham Construction Company, Inc.	Clovis	California	chris@durham-construction.com
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Efrain Yanez Construction, Inc., dba Yanez Construc	Reedley	California	julio@yanezconstruction.com
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F&H Construction	Lodi	California	estimating@f-hconst.com
FACSCO	FRESNO	California	ashley@facscosales.com, jeffery@facscosales.com
Fed Alliance	Wahington	District Of Columbi	tcuberli@fedalliance.org
FHM Construction	Fresno	California	Fhmconstructioninc@yahoo.com
FLEX PRO, INC.	FRESNO	California	LROSS@MARKOCONSTRUCTION.COM, PKGONG@FLEXPROINC.COM
Fluid Power Training Institute	West Valley	Utah	matt@fpti.org

Company Name	City	State	Contact Email List
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Fresno Landscape Services inc	Fresno	California	camezcua@fresnolandscapenet.net
FRESNO PLUMBING & HEATING, INC.	FRESNO	California	WYNDIEG@FPHINC.COM
Fresno roofing co., Inc.	FRESNO	California	bill@fresnorooftingco.net, diane@fresnorooftingco.net
Fuchs General Contracting	Clovis	California	fuchsgc@outlook.com
FUER Contractors Inc.	Fresno	California	fuer@fuercontractors.com
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GA Technical Services Inc	Glendora	California	bids@gatechservices.com
Garage Door Skillz Inc	Fresno	California	garagedoorskillz@gmail.com
GCB1 Inc.	Fresno	California	Alisyn@gc-builders.com, christina@gc-builders.com, connie@gc-builders.com, GCbuilders137@yahoo.com, tiffany@gc-builders.com
GCD Painting	wilmington	California	hectorg@gcdpainting.com
GCSysytems Inc.	Sacramento	California	info@groundcontrolsystems.com
Genesis Painting & Construction	Fresno	California	phillip@genesispinc.com
Geometric Construction Inc.	Fresno	California	scott@geometricconst.com
Geometrik Manufacturing INC.	Kelowna	British Columbia	ryanl@geometrik.com
Global Data Products	Sacramento	California	mikec.gdp@gmail.com
GoJRM Construction Inc.	Tehachapi	California	canaan@gojrmconstruction.com
Golden Bay Fence plus Iron Works, Inc.	Stockton	California	acrivello@goldenbayfence.com, wmoreno@goldenbayfence.com
Gouin Construction	Paso Robles	California	joe@gouinconstruction.com
Graham Prewett, Inc.	Fresno	California	meghan@gpiroofting.com
Hanover Insurance	Temecula		jcaldwell@hanover.com
Hansen Builders LLC	San Francisco	California	ahansen@hansenbuilders.com
Harmonson Construction	Fresno	California	heidi@harmonsonconstruction.com
Harris Construction Co., Inc.	Fresno	California	mdavies@harrisconstruction.com
Harris Construction Services, LLC	Fresno	California	kgallyer@harrisconstruction.com
Harris Dev. Corp. dba HBC Enterprises	Clovis	California	dallanara@hdc-hbc.com, rob@hdc-hbc.com
HBC Enterprises	Fresno	California	Robathbc@gmail.com
HD Supply Facilities Maintenance Ltd.	Atlanta	Georgia	brenda.welch@hdsupply.com, hds-fmbids@hdsupply.com, John.Pettinelli@hdsupply.com
Heagy Construction Improvements inc	Camino	California	info@hciformyhome.com
Heather Perrell	FELTON	California	heather@constructionbidsource.com
Helix Electric, Inc	SAN DIEGO	California	mcestimating@helixelectric.com
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Hilbers Incorporated	Yuba City	California	bids@hilbersinc.com
Hilly Howl Incorporated	Fresno	California	betsyunnell@hillyhowl.com
Holloway Construction Inc.	Hanford	California	projects@hollowayconstructioninc.net
Howe Electric Construction Inc	Fresno	California	kirstin.howe@howe-electric.com
HPS Mechanical, Inc.	Bakersfield	California	alma@hpsmechanical.com, efelix@hpsmechanical.com, planroom@hpsmechanical.com
HS CONSTRUCTION, INC.	Clovis	California	hart@hs-constructioninc.com
iMod systems	Mare Island	California	robert@imodsystems.com
Infinite Home Solutions LLC	Fresno	California	fwarder@roofmaxx.com
Integra Construction Services, Inc	Pleasanton	California	hayley@integra-csi.com, isaac@integra-csi.com
Integrated Demolition and Remediation Inc.	Anaheim	California	info@idrdemo.com
INTEGRITY CUSTOM TILE, INC.	fresno	California	integritycustomtileinc@gmail.com
Iron Industries	Hanford	California	keely@ironindustriesinc.com
Isaac Vang dba I-Construct	Lawndale	California	iconstruct11@yahoo.com
J Boone Mechanical, Inc.	Clovis	California	jim@jboonemechanical.com
J W. Construction	Oakland	California	edagbe.ea@gmail.com
J. Franklin Consulting Service LLC	Herndon	Virginia	Jermyn@jfranklinconsultingservice.com

Company Name	City	State	Contact Email List
J.I. Garcia Construction, Inc.	Fresno	California	rhondas@jigarcia.com
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Jackson Young Drywall Inc.	Clovis	California	jacksonyoungdrywall@gmail.com
JCS Land Management	Kingsburg	California	jcslandmgmt@yahoo.com
Jeremiah Lee	Fresno	California	realgoodco@gmail.com
JFS General Inc.	Fresno	California	estimating@jfsgeneral.com
JL Construction, Inc.	Santa Rosa	California	barbaral@jlcbuild.com
JL Pieretti Construction Co	Fresno	California	jlpieretticonstruction@hotmail.com
JM Environmental	Roseville	California	craney@jmenvironmental.net
Jo & Ja LLC dba Peerless Construction	Fresno	California	Office.Joja@gmail.com
Joes Landscaping and Concrete Inc	Newman	California	Joe@joeslc.com, john@joeslc.com
John Burns Company	Fresno	California	john@jburnsdrywall.com
Johnson and Wood Construction Inc dba JWC Com	Fresno	California	jdictos@jwccommercial.com, swood@jwccommercial.com
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JPB Designs Inc.	Orangevale	California	anna.jpbdesigns@gmail.com
JT2INC. DBA Todd Companies	Visalia	California	assistant@jt2inc.com, estimating@jt2inc.com, Estimating3@jt2inc.com, estimating4@jt2inc.com, flo@jt2inc.com, jt2@jt2inc.com
JTS Modular, Inc.	Bakersfield	California	adame@jtsmodular.com
Just Click Solar	Madera	California	admin@justclicksolar.com
JWD Construction Inc	Bakersfield	California	jonathan@jwdconstruction.co
K C CONSTRUCTION COMPANY	Clovis	California	kc.construction1997@yahoo.com
Katch Environmental, Inc.	Fresno	California	jenn@katchgeneral.com, tom@katchenvironmental.com
KC&S Construction Specialties Inc	Modesto	California	David.Harris@kcsconstructionspecialties.com
Kern County Builders Exchange	Bakersfield	California	kcbex@kcbex.com
Kingdom Builders	Fresno	California	kingdombuilderselectronics@gmail.com
Kings County Air Conditioning, Inc.	Armona	California	mark@kcairinc.com
Kitchell CEM, Inc.	Sacramento	California	proposal@kitchell.com
Klassen Corporation	Bakersfield	California	jennad@klassencorp.com
Kleinfelder	Fresno	California	hstewart@kleinfelder.com
Kompan California Inc	Rancho Santa Margar	California	bids@kompan.com
KYA Services LLC	Fresno	California	dylan.alewel@theyagroup.com
KYA Services LLC	Fresno	California	ted.walstrom@theyagroup.com
Landmark Associated Builders, Inc.	Downey		admin@landmarkab.com
LaNotte Refrigeration, Inc.	Fresno	California	CCOSTALANOTTE@gmail.com, davidk.lanotte@gmail.com, frankl@lanotteinc.com, kenp@lanotteinc.com
Lawrence Backhoe Service, Inc.	Atwater	California	art@lawrencebackhoe.com, dillon@lawrencebackhoe.com
Lawson Mechanical Contractors, LLC	SACRAMENTO	California	jharris@lawsonmechanical.com, mbennett@lawsonmechanical.com, SBecerra@LawsonMechanical.com
Limerence Construction	Palo Alto	California	info@limerenceconstruction.com
Lindsay Electric Inc.	Clovis	California	steve@lindsay-electric.com
Luna Inspections	Clovis	California	lunainspections55@gmail.com
Madrigal and J Concrete inc	fresno	California	Anguianoymad@yahoo.com
Magnetar.us, Inc.	Fresno	California	Sales@magnetar.us
Maid Fast Construction	Escondido	California	srikanthg@maid-fast.com
Makai Solutions	Gardena	California	danny@makaisolutions.com
Mark III Construction, Inc.	Sacramento	California	estimating@mark-three.com
Mark Wilson Construction, Inc.	Fresno	California	contracts@markwilsonconstruction.com, dawnette@markwilsonconstruction.com, doug@markwilsonconstruction.com, estimating@markwilsonconstruction.com, rebekah@markwilsonconstruction.com
MARKO CONSTRUCTION GROUP, INC.	FRESNO	California	PKGONG@MARKOCONSTRUCTION.COM
Marvulli, Inc.	Merced	California	rocky@marvulli.com

Company Name	City	State	Contact Email List
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Meehleis Modular Buildings Inc.	Lodi	California	carmen@meehleis.com
Meehleis Modular Buildings, Inc.	LODI	California	pcullen@meehleis.com
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Meyers Constructors, Inc	Fresno	California	bryan@meyersconstructors.com
MIK Construction Inc.	Artesia	California	stevehan@mikinc.us
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MOSES CONSTRUCTION CO.	Fresno	California	moses@mcc.ceo
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MTZ COMPANY	SACRAMENTO	California	talha@theboulevard.us
NECA-IBEW Labor Compliance Dept.	Santa Maria	California	sam@prolabor.com
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NH Environmental Inc	City of Industry	California	msoto@nhenvironmental.com
No Fault LLC	San Bernardino	California	westcoast@nofault.com
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NV5	Fresno		julianita.jauregui@nv5.com
Nycbiddata	new york	New York	wikipedia0332@gmail.com
Ohno Construction Company	Jurupa Valley	California	estimating@ohnoconstruction.com, mail@ohnoconstruction.com
Olsen Construction and Restoration CO., INC.	FRESNO	California	blair@olsencr.com, cody@olsencr.com, desiree@olsencr.com, mike@olsencr.com, tamee@olsencr.com
Ontiveros Consulting	Clovis	California	javier@completecc.net
Orion Global Construction	Fresno	California	robertorionglobal@gmail.com
Pacific Contractors Group Inc.	Northridge	California	pacificcontractorsinc@gmail.com
Pacific Solar	Clovis	California	dramos@pacificsolarcompany.com
Pacific Sound Control	Santa Ana	California	cdunwoody@pacificsoundcontrol.com, info@pacificsoundcontrol.com
Pacific Tide Construction	Northridge	California	estimating@pacifictideconstruction.com
Panos Concrete Inc	Fresno	California	ana@panosconcreteinc.com
Papich Construction	Arroyo Grande	California	Kyoung@papichco.com
Pearls Construction	Seattle	Washington	adam@pearlsconstruction.com
PICKETTS PONDEROSA CONSTRUCTION LP	Fresno	California	heather@donpickett.com
Pillars of Allstar Enterprises	Indianapolis	Indiana	lenee@pillarsforallstar.com
Pisor Fence Division Inc.	Antelope	California	jalexander@pisorfence.net
PlanHub	West Palm Beach	Florida	hadams@planhub.com
Polychrome Construction Inc.	Northridge	California	info@polychromepainting.com
Power Design Electric Inc	Kingsburg	California	glopez@powerdesignelectric.com, robert@powerdesignelectric.com
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Pro-Craft Construction, Inc.	Redlands	California	estimating@procraftci.com
PRO-EX CONSTRUCTION, INC	Rancho Cordova	California	pavel@proexconstruction.com
Professional Asbestos Removal Corporation dba PA	Fresno	California	ekidd@parcenvironmental.com, sferry@parcenvironmental.com
ProWest PCM, Inc.	Wildomar	California	sridlon@prowestconstructors.com

Company Name	City	State	Contact Email List
Puma Construction	Fresno	California	mattf@pumacon.com, npuma@pumacon.com
Pure Diamond	FRESNO	California	amr@purediamondgc.com
PureTek Group Inc	Boonton	New Jersey	bidspc@gmail.com
Pwxpress	Jacksonville	Florida	bids@pwxpress.com
QTO Solutions	Los Angeles	California	nisar@qtosol.com
Quality Carpets Design Center	Clovis	California	christy@qcdesigncenter.com
Quantum FSD, Inc	Fresno	California	luisa@quantum-fsd.com
Quiring General, LLC	Fresno	California	rcurry@quiring.com
R & Construction Inc	Madera	California	rhconstructioninc23@gmail.com
R&H Construction	Fresno	California	jbelmont@rhconst.org
R.E. Jacobs Construction	Lemoore	California	Reid@rejacobs.com, richej03@hotmail.com
Rakkar Development & Construction	Fresno	California	estimating@rpccompanies.com, Taj@rpccompanies.com
Ray Figueroa Construction Inc.	Hanford	California	madie@figueroaconcretepartners.com
RCH Construction	Paso Robles	California	mundo@rch-construction.com
RE Schultz Construction, Inc.	Orange	California	chris@reschultzconstruction.com
Red Phoenix Construction Inc	Sanger	California	jesusmt@redphoenixconstructioninc.com
Red Wave Comm. Inc.	Fresno	California	paul@redwavecomm.com
Renewable Solar, Inc.	Hanford	California	akladde@rsi.solar
Resource Environmental Inc	CERRITOS	California	chase@resource-env.com, Cynthia@resource-env.com, mia@resource-env.com
Retrofit Technology LLC	Bloomington	California	erugg@retrofittechnology.com
Rex Moore Group, Inc.	Sacramento	California	jennifer.fudem@rss-support.com
Reyes & Sons Electric, Inc.	Sylmar	California	dede@reyesnsonsinc.com
Reza Khorami	Union City	California	maricel@esconbuilders.com
RF Con, Inc	Fresno	California	drzazga.custom@gmail.com
RF MacDonald	Fresno	California	tim.brouwer@rfmacdonald.com
RL International NJ Inc.	roselle	New Jersey	aika@rlint.net
RMC Constructors	Fresno	California	jbarton@rmc-constructors.com, palvarez@rmc-constructors.com, rbrenner@rmc-constructors.com
RMC Enterprises, Inc.	Fresno	California	jermaine@rmcentinc.com, rmark@rmcentinc.com
RMS LIFE SAFETY/RMS Construction	Signal Hill	California	nortiz@rmslifesafety.com, ocastro@rmslifesafety.com
Robbie's Construction	Coalinga	California	robbiesconst@gmail.com
Rock Art Landscape Inc	Fresno	California	miguel.aguilar29@yahoo.com
Rockaway Construction	PACIFICA	California	dsong@rockawayconstruction.com
Roebbelen Contracting, Inc	El Dorado Hills	California	estimating@roebbelen.com
RO'S PRECISE PAINTING, INC.	SANGER	California	estimating@rppaintinginc.com
Royal Media Network Inc.	Windsor Mill	Maryland	cath@royalimagingolutions.com, ricca@roualimagingolutions.com
Rubriks3	Las Vegas	Nevada	Sales@Rubriks3.com
S&H Construction, Inc	Fremont	California	shcalifornia@yahoo.com
S.C. Anderson, Inc	Bakersfield	California	estimating@scanderson.com
SACTOWN CONTRACTORS CORP	Antelope	California	Sactowncontractors@gmail.com
Sage Construction & Development LLC	Tulare	California	office@sageconstructiondevelopment.com
Sanger Fence Co	Sanger	California	melissa@sangerfence.com
Sankofa Company	Inglewood	California	raphael@sankofacompany.com
Schneider Electric Buildings Americas, Inc.	Carrollton	Texas	rachel.torgerson@se.com
SCHOOL WHOLESALE SUPPLIES LLC	Nashville	Tennessee	jpdas@eii-usa.com
Schreder & Brandt MFG., Inc	Chico	California	carolyn@schrederandbrandt.com, jackie@schrederandbrandt.com
Seals Construction Inc.	Visalia	California	gina.seals@sealsconstruction.com, matt.seals@sealsconstruction.com, nick.seals@sealsconstruction.com
Serna Construction, Inc	Fresno	California	ramacias24@outlook.com
Service Station Systems	San Jose	California	Brian.Able@servicestationsystems.com
SILVER CREEK INDUSTRIES, LLC.	PERRIS	California	dshaughnessy@silver-creek.net
Silver Creek Modular LLC	Perris	California	adela@silvercreekmodular.com, dtavarez@silvercreekmodular.com

Company Name	City	State	Contact Email List
Simco Mechanical, inc.	Altadena	California	bids@simcomechanical.com
Simile Construction Service Inc	MODESTO	California	estimating@similebuilt.com
Skyline Builders GC Inc	Clovis	California	Gjimenez@skylinebuildersteam.com
Smith Construction Company, Inc.	Fresno	California	dsmith@scc-smithconstruction.com
Smith Mechanical-Electrical-Plumbing	Santa Maria	California	kcloud@smithmep.com
SOLPAC Construction Inc.	San Diego	California	cfroese@soltekpacific.com, estimating@soltekpacific.com, marketing@soltekpacific.com, rhicks@soltekpacific.com, tduerksen@soltekpacific.com
Sports Venue Padding, Inc.	Cerritos	California	teresa@svpadding.com
SRB Home Services, Inc.	Fresno	California	fresno.owner@mrhandyman.com
SSB Construction	Salinas	California	lvillalobos@ssbconstruction.com
SSBV Construction and Development Inc. Db	Clovis	California	lyle@copperheadcandd.com
Stephens Construction Inc.	Arnold	California	damiensstephens@msn.com
Steve Dovali Construction Inc	Fresno	California	Dovaliconstruction@gmail.com
Strategic Mechanical Inc.	Fresno	California	estimating@strategicmech.com
Straub Construction, Inc.	Fallbrook	California	plans@straubinc.com
StructureCast	Bakersfield	California	anna@structurecast.com
STW Contractors Inc.	Selma	California	stwconst@yahoo.com
Superior Industry Builders Inc	Merced	California	cgarcia.superior@yahoo.com
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Swinerton Management & Consulting	Sacramento	California	mark.kizonak@swinerton.com
Syserco Energy Solutions, Inc.	Fremont	California	h.roeme@syserco-es.com, s.meinzen@syserco-es.com
Tarlton and Son, Inc.	Fresno	California	estimating@tarltonandson.com
Technical Professionals, LLC	Columbia	Maryland	twhittle@technical-professionals.com
The Lopez Construction Family LLC	Fresno, CA	California	arturo@lopezconstruction.ca, eduardo@lopezconstruction.ca
Thomas Gilstrap	Fresno	California	gilstrapconstruction@outlook.com
Thompson Builders Corporation	Novato	California	bids@tbcorp.com
THP Mechanical, LLC	El Dorado Hills	California	kfilippo@thpmechanical.com, kspriggs@thpmechanical.com, stherkildsen@thpmechanical.com
TimberQuest	Milpitas	California	lrush@xlconstruction.com
Todd D. Phillips, Inc. dba Buildings Unlimited	Madera	California	Estimating@buildingsunlimited.net
Toneman Concrete	Lancaster	California	estimating@tonemanconcrete.com
Toor Construction	Visalia	California	Ekam@Toor-Construction.com
Tosted Asphalt, Inc.	Fresno	California	brinntosted@gmail.com, jtosted@gmail.com, shaynetosted@gmail.com
Trane Technologies	Fresno	California	dbwalker@trane.com, ileisle@trane.com, nathan.gagliardi@trane.com
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Tricore Enterprises Inc	Riverside	California	tyler@quielschoolsigns.com
Turner Construction Company	Fresno	California	alona@tcco.com, cwilliams@tcco.com, dcosta@tcco.com
United Restorations, LLC	Fresno	California	jorden@unitedrestorations.co
Universal Coatings, Inc	FRESNO	California	christina@universalcoatings.net
Unlimited Environmental, Inc.	Santa Fe Springs	California	info@ueiteam.com
V&G Builders, Inc.	Fresno	California	cpgonzalez@vg-builders.com
VARN Painting, Inc.	Tujunga	California	admin@varnpainting.com
Veregy Pacific, LLC	Costa Mesa	Arizona	Bsmith@veregy.com, cscamihorn@veregy.com
Veregy Pacific, LLC	Costa Mesa	California	FLynch@veregy.com, sdibble@veregy.com
Viking Enterprises	Fresno	California	heysiebert@yahoo.com
Vista Point Builders Inc	REDDING	California	mturner@vistapointbuilders.com
VLA Construction Inc	Woodland Hills	California	vlainc@hotmail.com
VNH Builders	Burlingame	California	administration@vnhbldrs.com
Vomela	Saint Paul	California	Andy.Rodriguez@vomela.com
WABO Landscape & Construction, Inc.	Hercules	California	bids@wabo.com
Washington Construction	Fresno	California	washingtonconst@yahoo.com

Company Name	City	State	Contact Email List
Western State Builders, Inc.	San Marcos	California	estimating@westernstatebuilder.com
Western Water Features, Inc.	El Dorado Hills	California	kooper@westernwaterfeatures.com
Willscot	Fresno	California	matthew.radesi@willscot.com
WISECOM TECHNOLOGIES Inc.	Lanham	Maryland	Jeff@wisecomtech.com
Wurth-Northern Safety & Industrial	Fresno	California	dledieff@northernsafety.com
X-ACT TECHNOLOGY SOLUTIONS, INC	LOS ANGELES	California	ed@xactts.com
Yengoyan Development Inc.	Fresno	California	brian@yengoyandev.com



Invitation for Bid

Bid No. 27-10

Cooper Middle School Administration Building Alterations

SPECIAL NOTICE:

Inquiries: Any questions regarding this Bid or selection process must be directed solely to the Buyer through the online bidding portal “clarifications tab”. Submitters inclusive of any perspective team members and their employees or others who may be involved or engaged in the work and contract following this solicitation are requested not to contact FUSD, Board members, or District staff other than the Buyer in connection with this selection process or their interest in it. Any submitters who violate this request may be disqualified from further consideration.

STAY INFORMED!

If you are interested in submitting to this Bid, or just want to stay informed about this or future opportunities from us please create a free account and register at:

<https://fresnousedpurchasing.procureware.com/home>

FRESNO UNIFIED SCHOOL DISTRICT
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TECHNICAL SPECIFICATIONS

DIVISION 01-32

TECHNICAL SPECIFICATIONS BY ARCHITECT/ENGINEER

END OF SECTION

**FRESNO UNIFIED SCHOOL DISTRICT
00 11 00 NOTICE TO BIDDERS**

NOTICE INVITING BIDS PURSUANT TO PUBLIC CONTRACT CODE 22000, ET SEQ.
(THE UNIFORM PUBLIC CONSTRUCTION COST ACCOUNTING ACT)

Notice is hereby given that the Fresno Unified School DISTRICT (“DISTRICT”) will receive sealed bids for **Bid No. 27-10, Cooper Middle School Administration Building Alterations**, to alter an existing administration building to include bathroom upgrades and other site improvements.

DISTRICT hereby notifies all bidders that they will affirmatively ensure that in any Contract entered into pursuant to this advertisement, disabled veteran business enterprises (DVBE) will be afforded full opportunity to submit proposals in response to this invitation and will not be discriminated against on the grounds of race, color, creed, sex or national origin in consideration for award. The DVBE goal for the project is as follows: three percent (3%) of the dollar amount of the Contract.

Prime Contractor must have a valid **Class “B” Contractor’s License**.

The time allowed for completion for the project shall be **120** Calendar days.

The Architect/Engineers’ estimate for this project is around \$993,000 inclusive of add alternates (estimate as of August 2026)

A MANDATORY pre-bid conference has been scheduled at **10:00 AM, September 29, 2026** in front of the **Administration Office at Cooper Middle School, 2277 W. Bellaire Way, Fresno CA 93705**. Contractors bidding as a Prime Contractor for the project must attend in order for their bid to be “responsive”. Immediately following the pre-bid conference will be a mandatory job-walk of the site(s). All visitors must check-in at the school office using our visitor management system which requires ID verification via government-issued identification card or driver’s license to receive a badge and enter the campus. Bidders may arrive earlier than the scheduled time to obtain their badge.

This Project is estimated to be over \$1,000,000 and is subject to prequalification, in accordance with Public Contract Code 20111.6.-Prequalification applications are to be submitted through Quality Bidders at <https://www.qualitybidders.com/> no later than 11:59 PM, October 2, 2026.

Sealed Bids and the DVBE Declaration must be received prior to **2:00 P.M. on October 21, 2026** on Procureware, the DISTRICT’s online bidding portal, after which time the bids will be opened and bid results posted.

Bids shall be accompanied by a certified check, cashier’s check, or a bidder’s bond in an amount not less than ten percent (10%) of total bids made payable to Fresno Unified.

Bid documents may be downloaded at no charge from the district’s bidding portal, Procureware, at: <https://fresnousedpurchasing.procureware.com/home>. All bids must be submitted through the portal. Refer questions to Marisa Thibodeaux marisa.thibodeaux@fresnounified.org.

The District reserves the right to accept or reject any or all bids, or any combination of bids and to waive any irregularities or informalities which may be legally waived.

Published: September 21, 2026

00 21 00 INFORMATION TO BIDDERS

General. This instruction to bidders is in addition to any instructions, conditions, terms and/or requirements stated elsewhere in the Contract Documents. It is imperative that you review all of the Bid/Contract documents in order to be fully apprised of all the terms, conditions and other requirements comprising the contract.

Report Fraud, Waste or Abuse. Call the Anti-Fraud Hotline, (559) 325-3200, or by completing the fraud, waste or abuse reporting form online at: <http://www.ppcpas.com/fresno-unified-fraud-alert> The anti-fraud waste or abuse reporting hotline is available to report alleged fraud in the DISTRICT. The responsibility for monitoring the hotline rests with the internal auditor for Fresno Unified School DISTRICT, Price, Page & Company. A report may be made anonymously.

Anti-discrimination. Fresno Unified School DISTRICT prohibits discrimination, harassment, intimidation, and bullying based on actual or perceived race, color, ethnicity, national origin, immigration status, ancestry, age, creed, religion, political affiliation, gender, gender identity, gender expression, genetic information, mental or physical disability, sex, sexual orientation, marital status, pregnancy or parental status, medical information, military veteran status, or association with a person or a group with one or more of these actual or perceived characteristics or any other basis protected by law or regulation, in its educational program(s) or employment. If you believe you, or your student, have been subjected to discrimination, harassment, intimidation, or bullying you should contact your school site principal and/or the DISTRICT's Chief Compliance and Title IX Officer Paul Idsvoog, by phone at 559-457-3593, by email at TitleIX@fresnounified.org, or in person at 2309 Tulare Street Fresno, CA 93721.

Securing Contract Documents.

Copies of the bid documents may be downloaded at no charge at:

<http://fresnoudpurchasing.procureware.com/home> Refer any questions to **Marisa Thibodeaux (559) 457-3584**.

Bid Proposals. To receive consideration, bid proposals shall be made in accordance with the following instructions.

1. **Contact with DISTRICT Personnel during Bid Process.** From the time the bid packets are released until an award recommendation or rejection of all bids is made, no direct contact shall be made with DISTRICT personnel except Purchasing Division without the Buyer's specific authorization. All requests for information shall be referred to the DISTRICT's ARCHITECT/ENGINEER or BUYER as identified on the Notice to Bidders. Interpretations, clarifications, changes, or deletions verbally expressed by DISTRICT's staff other than ARCHITECT/ENGINEER or BUYER are not binding and shall not be used in determining BIDDER'S response to invitation to bid.

2. **Architect/Engineers' Estimates.** Any Architect/Engineers' estimate(s) provided by the DISTRICT or its Representatives is intended only to aid with prequalification and bid bond requirements. Any amount provided is an estimated range and may not reflect recent scope changes, addenda, and/or alternate bid items; nor does it reflect an approved or not approved budget for this project. The Architect/Engineers' estimate for this project is around \$993,000 inclusive of add alternates (estimate as of August 2026)

3. **Bid Limit Thresholds.** On January 8, 2014, DISTRICT elected to become subject to the California Uniform Public Construction Cost Account Act (CUPCCAA) which provides for alternative bidding thresholds and procedures pursuant to public contract codes 22000 through 22045 when an agency performs construction work by contract. Public projects of \$220,000 or less may be let to contract by the informal procedures set forth in the Act PCC220329(b); and Public project of more than \$220,000 shall be let to contract by formal bidding procedures set forth in the Act PCC22032(c).

Informally Bid Projects: If all bids received under the informal bid process are in excess of \$220,000, the governing board may by adoption of a resolution by a four-fifths vote award the contract at \$235,000 or less to the lowest responsible bidders as set forth in the Act PCC22034(d). Fresno Unified may also choose to reject all bids and rebid; whichever is in the best interest of the DISTRICT as determined solely by the DISTRICT.

4. **Mandatory Pre-Bid Conference/Job-Walk.** A Mandatory Pre-bid conference is only applicable to this bid if the "Notice to Bidders" section identifies the pre-bid as mandatory. MANDATORY pre-bid conferences must be attended by Prime Contractors to be eligible to bid the project. A Sign-In Sheet will be circulated at the pre-bid conference to verify attendance. The Sign-In Sheet will be posted on DISTRICT Purchasing Web Site and distributed by Addenda for mandatory pre-bid conferences. Failure to sign-in and attend will result in the rejection of prime contractor's bid as "non-responsive".

Immediately following a pre-bid conference will be a job-walk of the site(s) to provide an opportunity for bidders to view the project site and become familiar with existing conditions. Changes, clarifications, additions, and deletions discussed at the pre-bid conference and job-walk are only binding when incorporated by written addenda. **As part of pre-bid/job-walk CONTRACTOR shall be responsible for inspection and verification of all dimensions and measurements identified in drawings; submitted proposal shall be inclusive of actual measurements required to deliver a turn-key project.**

Interpretations, clarifications, changes, or deletions verbally expressed by DISTRICT's Staff or Representatives at pre-bid/job-walk are not binding and shall not be used in determining BIDDER'S response unless followed by written addenda.

The Pre-bid conference is scheduled at **10:00 AM, September 29, 2026** in front of the **Administration Office at Cooper Middle School, 2277 W. Bellaire Way, Fresno CA 93705**. School sites are using the Raptor visitor management system that requires all visitors to show either a government-issued identification card or driver's license to receive a badge and enter the campus. **Bidders** may arrive earlier than the scheduled time to obtain their badge.

5. **Prequalification Requirement.** Prequalification is only applicable if the "Notice to Bidders" section identifies this project as a prequalification bid. In accordance with Public Contract Code 20111.6, all Bidders performing as either a General Engineering Contractor (A license), General Building Contractor (B license), Electrical Contractor, Mechanical Contractor, or Plumbing Contractor utilized as a Prime Contractor or Subcontractor must be prequalified prior to submitting bids on this project. For purpose of prequalification, Electrical, Mechanical, and Plumbing Contractors are Contractors pursuant to Section 7058 of the Business and Professions Code inclusive of: C-4, C-7, C-10, C-16, C-20, C-34, C-36, C-38, C-42, C-43, and C-46 licenses.

District reserves the right to reject bids as non-responsive for any of the following reasons: (1) Prime Contractor is not on the Prequalified Contractors List; or (2) Prime Contractor listed either an electrical, mechanical, or plumbing subcontractor not on the Prequalified Contractors List. Prequalification applications are to be submitted through Quality Bidders at <https://www.qualitybidders.com/> no later than **11:59 PM, October 2, 2026** for prequalification on the project. Contractors and Subcontractors interested in bidding shall notify DISTRICT if their application is not approved seven (7) business days before the bid due date. Prequalification status is valid for one (1) calendar year for any subsequent projects requiring prequalification.

Prequalification lists shall reflect the contractor's license classification(s) held at time of prequalification application submittal and is not updated once application is approved. If additional licenses are added after application approval, the district at time of bid will verify license classifications on the Contractor State License Board website.

Prime Contractor and Subcontractor for prequalification purpose are defined in accordance with PCC Section 4113: the word "subcontractor" shall mean a contractor, who contracts directly with the prime contractor. "Prime contractor" shall mean the contractor who contracts directly with the awarding authority.

6. **Deadline for Receipt of Bid Proposals.** Sealed Bids and the DVBE Declaration must be received **prior to 2:00 P.M. on October 21, 2026** in the DISTRICT's online bidding portal Procureware, <https://fresnousedpurchasing.procureware.com/home> after which time they will be opened and results posted. BIDS received later than the designated time and date will not be accepted. Facsimile (FAX) copies of the bid will not be accepted.

7. **License.** Bidder may bid only on work of a kind for which it is properly licensed by the California Contractor's State License Board and Registered by the DIR. Joint venture bidders must possess a joint venture license. The bidder and all subcontractors must be properly licensed, as required by law, at the time of bid and all licenses must remain current for the duration of the Project. All bids shall state the contractor's license number and its expiration date. Failure to supply complete contractor's license information and appropriate signatures on the bid form may result in the bid being considered non-responsive. It is the bidder's responsibility to ensure that the DISTRICT can verify licensure before bid awards are made.

8. **License Required.** To perform the work required by this bid, PRIME CONTRACTOR must possess the following type of contractor's license: **Class "B"** California State Contractors license.

9. **Preparation of Bid Form.** The DISTRICT invites bids to be submitted at the time and place stated in the Notice to Bidders calling for bids. All form fields in the bid form must be appropriately filled in, and all prices must be stated in figures. It is the sole responsibility of the bidder to ensure that the bid is received at the proper place and time. Any bid received after the scheduled closing time for receipt of bids will be rejected as non-responsive pursuant to Public Contract Code 20111 .

10. **Bid Security.** Each bid shall be accompanied by a certified or cashier's check payable to the DISTRICT, or a satisfactory bid bond in favor of the DISTRICT executed by the bidder, as principal, and an admitted surety insurer in an amount not less than **Ten Percent (10%)** of the maximum amount of the bid to cover all sections bidder is bidding made payable to Fresno Unified School DISTRICT. Bidder will attach the bid bond in Procureware, <https://fresnousedpurchasing.procureware.com/home> in the Bid Bond attachment field. Personal sureties and unregistered surety companies are unacceptable. The DISTRICT will accept a certified check, or cashier's check in lieu of a bidder's bond and must be physically submitted to the Purchasing Department, 4498 N. Brawley, Fresno, CA 93722, prior to the bid deadline. The check or bid bond shall be given as a guarantee that the bidder will execute the contract, if it is awarded to him, in conformity with the Contract Documents, and shall provide the surety bond(s) and other required contract documents, as specified, within ten (10) calendar days after notification of award of the Contract to the bidder. The security shall be forfeited to the DISTRICT should the bidder to whom the Contract is awarded fail to execute the Agreement and provide the bonds and other documents within ten (10) calendar days of award.

11. **Execution of Forms.** Each bid must give the full business address of the bidder and be signed by him with his usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership, or by an authorized representative, followed by the signature and designation of the person signing. Bids by corporations must be signed with the legal name of the corporation followed by the name of the state of the incorporation and by the signature and designation of the president, secretary, or other person authorized to bind it in the matter. The name of each person signing shall also be typed or printed below the signature. When requested by the DISTRICT, satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished.

12. **Bid Proposal Negotiations.** A bid response to any specific item of this bid with terms such as "negotiable", "will negotiate" or similar counter proposal will result in the bid being rejected as non-responsive.

13. **Pricing.** If required, unit prices on all classes of work, as specified or required, shall be submitted. Additions to or deductions from the contract sum shall be based on these unit prices. Unit pricing on additions and deductions will remain firm throughout the contract term.

14. **Taxes.** Taxes shall be included in the amount bid. Federal excise taxes are generally not applicable to school DISTRICTs.

15. **Bid Exceptions.** All exceptions which are taken in response to this bid must be stated clearly. The taking of bid exceptions or providing false, incomplete or unresponsive statements may result in the disqualification of the bid. Allowance of exceptions will be determined by the governing board, whose decisions shall be final. Any bid exceptions or additional conditions requested after bid closure, which are not detailed within the bid response, may result in disqualification of the bid. No oral or telephonic modification of any bid submitted will be considered.

16. **Withdrawal of Bids.** Bids may be withdrawn by the bidder prior to the time fixed for the opening of bids. A successful bidder may not be relieved of his bid unless by consent of the governing board of DISTRICT and in conformity with the provisions of Public Contract Code Sections 5100-5107, or other applicable law

17. **Opening of Bids.** Opening of bids shall be as soon after the hour set as practicable; opening to be as set forth in the Notice to Bidders. All bids submitted shall be considered binding contractual offers to perform the work in accordance with the Contract Documents for 90 calendar days from the date of the bid opening.

18. **Examination of Site and Contract Documents.** Each bidder shall visit the site of the proposed work and fully acquaint himself with the conditions relating to the construction and labor so that he may fully understand the facilities, difficulties, and restrictions attending the execution of the work under the Contract. Bidders shall thoroughly examine and be familiar with the drawings and specifications. The failure or omission of any bidder to receive and/or examine any Contract Document, form, instrument, addendum, or other document, or to visit the site and acquaint himself with the conditions attendant thereto shall not relieve any bidder from any duties and/or obligations with respect to his bid or to the Contract. The submission of a bid shall be incontrovertible evidence that the bidder has complied with this section.

19. **Modifications.** Changes in or additions to any bid document, recapitulations of the work bid upon, alternative proposals, or any other modification of the bid form which is not specifically called for in the Contract Documents may result in the DISTRICT's rejection of the bid as not being responsive to the invitation to bid. No oral, telephonic, or telegraphic modification of any bid submitted will be considered.

20. **Agreements and Bonds.** The Agreement form which the successful bidder, as CONTRACTOR, will be required to execute, and the form of the payment and performance bonds which he will be required to furnish prior to execution of the Agreement, are included in the Contract Documents and said bonds shall each be in the amount of One Hundred Percent (100%) of the amount of the Contract.

The performance and payment bonds shall be issued by an admitted surety insurer as defined by and in conformity with California law. Furthermore, at the time required for submission of the foregoing bonds, each bond should have attached to it the following documentation:

- a. A certified copy of the power of attorney of the person who executed the bond;
- b. A certified copy of the certificate of authority of the surety;

21. **Interpretation of Plans and Documents.** If any bidder is in doubt as to the true meaning of any part of the Contract Documents, or finds discrepancies in, or omissions from the drawings and specifications, a written request for an

interpretation or correction thereof may be submitted to the DISTRICT. The bidder submitting the written request shall be responsible for its prompt delivery. Any interpretation or correction of the Contract Documents will be made only by addendum duly issued by the DISTRICT, and a copy of such addendum will be uploaded to the DISTRICT online bidding portal Procurement and emailed to each bidder known to have received a set of the Contract Documents. No person is authorized to make any oral interpretation of any provision in the Contract Documents, nor shall any oral interpretation be binding on the DISTRICT. If discrepancies on drawings, or in the plans or specifications, or conflicts between drawings, plans, specifications, terms or conditions exist, the interpretation of the DISTRICT shall prevail. Bidder shall become familiar with the plans, specifications and drawings.

Submittal of a bid without clarifications shall be incontrovertible evidence that the bidder has determined that the plans, specifications and drawings are sufficient for bidding and completing the Project; that bidder is capable of reading, following and completing the Project in accordance with the plans, specifications and drawings; and that the plans, specifications and drawings fall within an acceptable standard for plans, specifications and drawings; and that bidder agrees that the Project can and will be completed according to the DISTRICT's time lines and according to the progress schedule to be submitted by the successful bidder incorporating the DISTRICT's time lines for completion of the Project.

22. **Order of Precedence**. Contractor acknowledges that the bid documents are the combined efforts of multiple parties and in the event of inconsistency between the provisions, the order of precedence shall be: (1) DISTRICT's Special Conditions (if any); (2) DISTRICT's General Conditions and General Requirements; (3) DISTRICT's specifications; (4) DISTRICT's drawings. Without limiting Contractor's obligation to identify conflicts for resolution by the ARCHITECT, it is intended that the more stringent, higher quality, more costly or expensive interpretation and greater quantity of Work shall apply. Drawings and specifications are intended to be fully cooperative and to agree.

23. **Addenda or Bulletins**. Any addenda or bulletins issued during the time of bidding, upon approval of ARCHITECT/ENGINEER and/or Division of the State Architect, for part of the drawings and specifications loaned to the bidder for the preparation of his proposal, shall be covered in the proposal and shall be made a part of the Contract.

24. **Award of Contract(s)/Rejection of Bids**. Upon notice of award, the successful bidder shall post all required bonds and submit proper evidence of insurance coverage as called for by the Contract Documents. If this is not accomplished within ten (10) calendar days, the DISTRICT reserves the right to retain/cash CONTRACTOR'S bid security to cover any and all expenses, costs and damages, and award the bid to the next lowest bidder or otherwise proceed as allowed by law. Rejection of any or all proposals, to contract work with whomever and in whatever manner, to abandon the work entirely or partially, or to waive any informality/irregularity in the bids received or the bidding process is reserved as the right of the DISTRICT.

25. **Bid Protest Procedure**. This DISTRICT review procedure must be followed by any bidder who believes that a bid award recommendation is not consistent with DISTRICT regulations, the bid specifications, or in compliance with law:

- a. Protest on a bid must be filed in writing with the Executive Director of Purchasing within two working days after receipt of the bid summary and its recommendations are sent to the bidders. Failure to file a timely bid protest shall constitute a bidder's waiver of the right to have the bid award reviewed.
- b. The Executive Director of Purchasing will convene a meeting with the review requestor to attempt to resolve the problem.
- c. In the event the protest is not resolved, the protest will be referred to the Superintendent or his designee, normally the Chief Financial Officer.
- d. Should the protest not be resolved at this level, it shall be referred to the Board along with all documentation regarding the protest and the responses at each level.
- e. The Board will not act upon a protest until each of the proceeding steps has been exhausted.

26. **Definitions.**

- a. **Responsible Bidder** – A bidder who has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform a public works contract.
- b. **Responsive Bid** – A bid which meets all of the requirements and specifications provided in the applicable Contract Documents.

27. **Evidence of Responsibility.** Upon the request of the DISTRICT, a bidder whose bid is under consideration for the award of the Contract shall submit promptly to the DISTRICT satisfactory evidence showing the bidder's financial resources, construction experience and organization.

28. **Listing Subcontractors.** Each bidder shall submit a list of the proposed subcontractors on the project as required by the Subletting and Subcontracting Fair Practice Act (Public Contract Code Sections 4100 et seq.). Forms for this purpose are furnished with the Contract Documents.

29. **Alternates.** Pursuant to the provisions of Public Contract Code Section 20103.8, the DISTRICT may require that a bid include prices for items that may be added to, or deducted from, the scope of work of the Contract for which the bid is submitted. In accordance with Assembly Bill 2182 and Public Contract Code 10126 (c) (2) the contract may be awarded at the election of the governing board to the lowest cost, responsible bidder. This section does not preclude the DISTRICT from adding to or deducting from the Contract any of the additive or deductive items after the lowest responsible bidder has been determined.

The Method for determining the lowest bid will be the price total of Base Bid.

30. **Execution of Contract.** The Contract shall be awarded to the lowest responsible bidder submitting a responsive bid and shall be executed by the successful bidder within ten (10) calendar days after the date so notified by the DISTRICT. The award, if made, will be made within ninety (90) days after the opening of the bids. If the bidder(s) to whom an award is made, fails or refuses to execute the Contract and provide the required bonds and other documents within ten (10) calendar days from the date of receiving notification that the Contract has been awarded to the bidder, the DISTRICT may declare the bidder's bid deposit or bond forfeited and may award the work to the next lowest responsible bidder, reject all bids and call for new bids, or abandon the work entirely.

31. **Bidders Interested in More than One Bid.** No person, firm, or corporation shall be allowed to make, file, or be interested in more than one bid for the same work/Project unless alternate bids are specifically called for by the DISTRICT. A person, firm, or corporation that has submitted a sub-proposal to a bidder, or quoted prices for materials to a bidder, is not disqualified for that reason from submitting a sub-proposal or quoting prices to other bidders or making a prime bid.

32. **Instruction for Insurance.**

A. CONTRACTOR, at CONTRACTOR'S expense, shall obtain and maintain insurance at all times during the prosecution of the Contract, in companies and through agencies approved by the DISTRICT and with limits not less than those stated hereinafter.

B. Acceptance of the Certificates of Insurance shall not relieve or decrease the liability of the CONTRACTOR.

C. Certificates of Insurance shall be originally signed by an authorized representative and shall be submitted in duplicate and shall contain transcripts from the policies authenticated by the proper office of the insurer evidencing, in particular, those insured, the extent of the insurance, the location of and the operation to which the insurance applies and thirty (30) days' NOTICE OF CANCELLATION of the policy. Policy shall read "SHOULD ANY OF THE ABOVE

DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED”.

D. All of CONTRACTOR’S insurance policies shall name the Fresno Unified School DISTRICT, and the Architect/Engineer, and its officers, employees, agents, and governing board members as additional insured and specify the project number, name, and location. Certificates of Insurance must have attached Additional Insured Endorsement (Insurance Services Officer form CG2010). Such policy(ies) of insurance shall be endorsed so that the CONTRACTOR’S insurance shall be primary and no contribution shall be required of the DISTRICT.

E. Insurance coverages shall not be less than the following:

- 1) Workers’ Compensation in accordance with the provisions of Section 3700 of the Labor Code. CONTRACTOR shall sign and file with DISTRICT the following certificate prior to performing the work under this contract: “I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Workers’ Compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with those provisions before commencing the performance of the work of this contract.” The form for this certificate is included as a part of the Contract Documents.
- 2) Comprehensive General Liability coverage covering claims for personal injury, bodily injury and property damage arising out of the Work and in a form providing coverage no less broad than that of the current ISO Commercial General Liability Insurance policy (Occurrence Form, number CG 00 01). Such insurance shall provide coverage for all operations including the products-completed operations hazard and shall be maintained for ten years after Final Completion of the last Phase to be completed and acceptance of the final payment for the Work, or to the applicable Statute of Repose, whichever is less. The limits of such insurance shall not be less than:
 1. \$2,000,000 each Occurrence
 2. \$4,000,000 aggregate for products-completed operations
 3. \$4,000,000 general aggregate limit, which shall apply separately and be reinstated annually.The policy shall not contain any exclusions directed toward any types of projects, materials or processes involved in the Work.
- 3) Comprehensive Auto Liability insurance with limits of not less than **\$2,000,000 CSL, BI and PD**
- 4) Builder’s Risk Insurance. N/A

33. **Prevailing Law.** In the event of any conflict or ambiguity between these instructions and state or federal law or regulations, the latter shall prevail. Additionally, all equipment to be supplied or services to be performed shall conform to all applicable requirements of local, state and federal law.

34. **General Prevailing Rates of Wages and Apprenticeship Training Requirements.** Notice is hereby given pursuant to the provisions of sections 1770 et seq of the California Labor Code, the Director of the Department of Industrial Relations has determined the general prevailing rates of per diem wages in the locality in which this work is to be performed for each craft or type of workman or mechanic needed to execute the contract which will be awarded to the successful bidder, and the prevailing rates are as set forth in the web address www.dir.ca.gov/DIRdatabases.html and are incorporated herein by reference.

35. **Contractor Registration Program (SB 854).** Pursuant to Labor Code Section 1725.5, the Department of Industrial Relations (DIR) established a public works contractor registration program for prevailing wage compliance monitoring and enforcement on all public works projects. The cost to register for the program is currently \$400 and is non-refundable. This

is a DIR fee paid to the State by the CONTRACTOR; the DISTRICT will not register a contractor, nor collect funds. Pursuant to Labor Code Section 1725.5; Starting March 1st, 2015 no contractor or subcontractor may be listed in a bid proposal unless registered with the DIR. Starting April 1st, 2015 no contractor or subcontractor may be awarded a contract, nor employed on a Public Work project unless registered with the DIR. The project is subject to compliance monitoring and enforcement by the DIR and will require prime contractors and subcontractors to upload ALL payroll records on the DIR website: <http://www.dir.ca.gov/Public-Works/PublicWorks.html>.

36. **Drawings and Specifications.** All drawings, specifications and other documents used or prepared during the Project shall be the exclusive property of DISTRICT, Section 00 72 00.02 of the “General Requirements” section notwithstanding.

37. **Substitution of Materials.** Substitution of materials shall be in accordance with Section 01 25 13. 01, of the “General Requirements” section.

38. **Payments.** Payments to the CONTRACTOR on account of the Contract shall be made in accordance with terms of the Contract. CONTRACTOR may be required to submit separate pay applications per site, section, or due to funding as requested by District.

39. **Performance Retention Agreement.** In accordance with Public Contract Code Section 22300, CONTRACTOR shall be permitted to substitute securities for any monies withheld by the DISTRICT to insure performance under the contract with a financial institution satisfactory to the DISTRICT. No escrow retention agreement shall be accepted unless it complies with all requirements of Public Contract Code Section 22300. A sample agreement is included herein as “Escrow Agreement”.

40. **Governing Law and Venue.** In the event of litigation, the bid documents, specifications, Contract Documents and all matters related to the bid, Contract and performance of the Contract shall be governed by and construed only in accordance with the laws of the State of California. Venue shall only be with the appropriate state or federal court located in Fresno County, California.

41. **Early Termination.** Notwithstanding any provision herein to the contrary, if for any fiscal year of this Contract the governing body of the DISTRICT fails to appropriate or allocate funds for future periodic payments under the Contract after exercising reasonable efforts to do so, DISTRICT will not be obligated to pay the balance remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and either party hereto may terminate the agreement upon thirty (30) days written notice. Upon such notice, the DISTRICT shall be released of its obligations to make all further installment payments to the CONTRACTOR.

42. **Liquidated Damages.** In accordance with Government Code Section 53069.85, for each calendar day completion is delayed beyond the time specified in the Notice to Proceed, Contractor agrees to forfeit and pay to DISTRICT the Sum of **One Thousand dollars (\$1,000) for each calendar day**.

All liquidated damages shall be deducted from any payments due to or to become due to CONTRACTOR. Notwithstanding any provisions of the Contract Documents to the contrary, liquidated damages shall be imposed until final completion of the entire project in conformity with all the terms, conditions, and requirements of the Contract Documents.

43. **Time of Completion.** The time allowed for completion for the project shall be **120** Calendar days from Notice to Proceed date. All work to be done concurrently and subject to all phasing and milestone dates. CONTRACTOR shall not commence Work on the Project site before the effective date of the accepted insurance and bonds. The anticipated start date for this project is January 4, 2027.

In accordance with General Conditions Section 00 73 16 (F), CONTRACTOR shall not commence Work on the Project site before the effective date of the insurance and bonds. The Notice to proceed and duration will not be altered for issuance of insurance and bonds.

44. **Forms Required to be Submitted with Bid.** Notwithstanding any provisions to the contrary, all proposals shall include the following completed documents/forms. Failure to submit the documents/forms may render the bid non-responsive.

FORMS to be uploaded:

- Bid Bond (Bonds issued must be on the DISTRICT form included in this bid)
- Noncollusion Declaration
- Designation of Subcontractors (final due within 24hrs. of bid opening)
- Workers' Compensation Certification
- Student Safety Declaration Form (fingerprinting)
- Iran Contracting Act Certification (if over \$1 million)
- DVBE Declaration
- Good Faith Effort Worksheet (due within 24hrs of bid opening)
- No Prohibited Interest/Conflicts of Interest Declaration

45. **Asbestos and/or Hazardous Substance.** In accordance with the California Health and Safety Code, Section 25914.2, in the event a contractor encounters, on the site, a substance or material he or she reasonably believes to be asbestos or a hazardous substance they shall immediately cease work on the area affected and report the condition to the owner, the owner's representative or the ARCHITECT/ENGINEER in writing. Work will not resume in the area affected until approved by the owner or owner's representative.

46. **Noncollusion Declaration.** In accordance with Public Contract Code Section 7106, each bidder shall be required to complete the Noncollusion Declaration form which is included in and part of the bid documents.

47. **Reject Any or All Proposals.** The DISTRICT reserves the right to accept or reject any or all proposals or bids or any combination thereof, including but not limited to accepting or rejecting particular sections of a bid alone or in combination with any others. The DISTRICT also reserves the right to waive any minor irregularities or informalities in the bids received or in the bidding process.

48. **Prohibited Interests/Conflict of Interest.** BIDDER is responsible for understanding and ensuring adherence to California Government Code section 1090 et seq., with respect to the Project. Pursuant to Government Code section 1090, no DISTRICT officers or employees shall be financially interested in any contract made by them in their official capacity, or by any body or board of which they are members. Nor shall DISTRICT officers or employees be purchasers at any sale or vendors at any purchase made by them in their official capacity. No official or employee of DISTRICT who is authorized in such capacity and on behalf of DISTRICT to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting or approving, any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the Project, shall become, directly or indirectly, financially interested in the Project or in any part thereof.

An officer shall not be deemed to be interested in a contract entered into by the Board if the officer has only a "remote interest" in the contract (as "remote interest" is defined in Government Code section 1091(b)) and if the fact of that interest is disclosed to the Board and noted in its official records, and thereafter the Board authorizes, approves, or ratifies the contract in good faith by a vote of its membership sufficient for the purpose without counting the officer's vote with the remote interest per Government Code 1091.

By way of non-exclusive example relating to whether a financial interest is a "remote interest" or not:

- 1) If the date upon which BIDDER first started doing business with a DISTRICT Officer/Board Member (i.e., the date BIDDER first received goods or services supplied by the Board Member) was at least 5 years prior to Board Member's election or appointment, then the Board Member has a remote interest and BIDDER is not prohibited from submitting a bid on this Project.
- 2) If the date upon which BIDDER first started doing business with the Officer/Board Member (i.e., the date CONTRACTOR first received goods or services supplied by a Board Member) is less than five years before Board Member's election or appointment, then the Board Member has a prohibited conflict of interest and BIDDER cannot bid on this project.
- 3) The provision of a bid/quote to BIDDER over 5 years prior to Board Member's election or appointment, without the goods or services included in the bid actually being furnished to BIDDER, i.e., an unaccepted bid/quote, does not qualify to cause a financial interest to be a "remote interest" as that term is defined in California Government Code section 1091(b)(8).

In accordance with Government Code section 1092, every contract made in violation of any of the provisions of Section 1090 may be avoided at the instance of any party except the Officer (Board Member) interested therein. No such contract may be avoided because of the interest of an Officer (Board Member) therein unless such contract is made in the official capacity of such Officer, or by the Board. In the event any such contract is avoided due to a violation of California Government Code section 1090, BIDDER shall receive no compensation and shall repay DISTRICT any compensation received by BIDDER hereunder. BIDDER shall not aid, abet or knowingly participate in a violation of Government Code Section 1090, et seq.

00 25 13 PRE-BID MEETING & JOB WALK

10:00 AM, September 29, 2026

**Administration Office at Cooper Middle School, 2277
W. Bellaire Way, Fresno CA 93705**

MANDATORY: Contractors bidding as a Prime Contractor for the project must attend in order for their bid to be “responsive”. The job-walk sign-in sheet will be posted in Procureware following the meeting.

School sites are using the Raptor visitor management system that requires all visitors to show either a government-issued identification card or driver’s license to receive a badge and enter the campus. Bidders may arrive earlier than the scheduled time to obtain their badge.

00 31 13. 13 PRELIMINARY PROJECT SCHEDULE
Reserved

00 31 13. 16 PRELIMINARY CONSTRUCTION SCHEDULE
Reserved

00 31 13. 23 PRELIMINARY PROJECT PHASES
Reserved

00 31 13. 33 PRELIMINARY PROJECT MILESTONES
Reserved

00 31 16 ARCHITECT/ENGINEER'S CONSTRUCTION ESTIMATE

The Architect/Engineers' estimate for this project is around \$993,000 inclusive of add alternates (estimate as of August 2026)

Base Bid Estimate \$ 830,000

Add Alternate #1 Workroom estimate \$40,000

Add Alternate #2 Entry Structure estimate \$123,000

Method of Award is Price total of the Base Bid.

The bid will include an allowance amount of \$15,000 unknown and unforeseen underground utilities performed on a time and materials basis. Any remaining allowance is to be credited back to owner.

THE ABOVE ALLOWANCE(S), IS WITHIN THE CONTRACT PRICE ONLY TO THE EXTENT CONTRACTOR HAS BEEN AUTHORIZED IN WRITING TO PERFORM WORK ENCOMPASSED BY THE ALLOWANCE DESCRIPTION, HAS PERFORMED THE WORK AND HAS APPROPRIATELY INVOICED FOR THAT WORK, AND DISTRICT HAS APPROVED CONTRACTOR'S INVOICE. USE OF ALLOWANCE(S) SHALL FOLLOW THE PROCESS AND THE IDENTICAL STRUCTURE AS A CHANGE ORDER. THE UNUSED PORTION OF ALLOWANCE(S) SHALL BE RETAINED BY THE DISTRICT AND MAY BE CLOSED BY A UNILATERAL CHANGE ORDER.

Bid Bond # _____

00 43 13 BID BOND
(TO BE EXECUTED AND SUBMITTED WITH BID)

KNOW ALL MEN BY THESE PRESENT, that we, the undersigned _____ as Principal, and _____ as Surety, are hereby held and firmly bound unto the Fresno Unified School DISTRICT, hereinafter called the “DISTRICT” in the sum of equal to **ten percent of the total bid (10%)** for payment of which sum, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to DISTRICT a certain bid, attached hereto and hereby made a part hereof, to enter into a contract in writing for the COOPER MIDDLE SCHOOL ADMINISTRATION BUILDING ALTERATIONS, BID NO. 27-10 in strict accordance with Contract Documents.

NOW, THEREFORE,

- a. If said bid shall be rejected, or, in the alternative,
- b. If said bid shall be accepted and the Principal shall execute and deliver a contract in the form of Agreement attached hereto and shall execute and deliver the required insurance certificates, Performance Bond and Payment Bond in the forms attached hereto (all properly completed in accordance with said bid), and shall in all other respects perform the Contract created by the acceptance of said bid;

Then this obligation shall be void, otherwise the same shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of the obligation as herein stated.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the call for bids, or to work to be performed thereunder, or the specifications accompanying the same, shall in anyway affect its obligation under this bond and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this bond by the DISTRICT and judgment is recovered, the Surety shall pay all litigation expenses incurred by the DISTRICT in such suit, including reasonable attorney fees to be fixed by the court.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their several seals this ____ day of _____. The name and corporate party being hereto affixed, and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In presence of:

(Principal Seal)

PRINCIPAL

BY: _____

Title: _____

Address

/ Telephone No. / Fax No.

~~~~~

(Surety Seal)

SURETY

By: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_  
Agent's Address

\_\_\_\_\_  
Telephone No. / Fax No

\_\_\_\_\_  
Surety's Address

\_\_\_\_\_  
Surety (Claim) Telephone No. / Fax No.

**00 43 36 DESIGNATION OF SUBCONTRACTORS**  
(TO BE SUBMITTED WITH BID)

In compliance with the Subletting and Subcontracting Fair Practices Act (Public Contract Code section 4100 et seq) and any amendments thereof, each bidder shall set forth below: (a) the name, the location of the place of business, the California contractor license number, DIR Registration number and type of work of each subcontractor who will perform work or labor or render service to the bidder (prime contractor) in or about the construction of the work or improvement to be performed under this Contract or a subcontractor licensed by the State of California who, under subcontract to the bidder (prime contractor), specially fabricates and installs a portion of the work or improvement according to be detailed drawings contained in the plans and specifications in an amount in excess of one-half of one percent of the bidders (prime contractors) total bid and (b) the portion of the work which will be done by each subcontractor. The bidder (prime contractor) shall list only one subcontractor for each portion as is defined by the bidder (prime contractor) in this bid. **In accordance with Public Contract Code 4104(B), any information requested (other than subcontractor's name, location of business, contractor license number, DIR Registration number, and portion of work) may be submitted up to 24 hours after the deadline for receipt of bids.**

If a bidder (prime contractor) fails to specify a subcontractor or if a bidder (prime contractor) specifies more than one subcontractor for the same portion of work to be performed under the contract in excess of one-half of one percent of the bidders (prime contractors) total bid, bidder shall be deemed to have agreed that bidder is fully qualified to perform that portion, and that bidder alone shall perform that portion.

No bidder (prime contractor) whose bid is accepted shall (a) substitute any subcontractor, (b) permit any subcontractor to be voluntarily assigned or transferred or allow it to be performed by anyone other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the bidder (prime contractors) total bid as to which the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act. Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the bidders (prime contractors) total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and only after a finding reduced to writing as a public record of the DISTRICT awarding this contract setting forth the facts constituting the emergency or necessity.

Note: If alternate bids are called for and bidder intends to use different or additional subcontractors on the alternates, a separate list of subcontractors must be provided for each such alternate. Identify any such additional subcontractors by alternate bid number.

**Prime Contractor** \_\_\_\_\_  
License No. \_\_\_\_\_ DIR Registration No. \_\_\_\_\_

**\* Required at time of bid**

**Subcontractors Information**

**1. \*Company Name:**

|                               |                           |
|-------------------------------|---------------------------|
| <b>*Location of Business:</b> | <b>Email:</b>             |
| Ph. No. (      )              | <b>*License No.:</b>      |
| <b>*Type of Work:</b>         | <b>*Registration No.:</b> |

\* Required at time of bid

## Subcontractors Information

## 2. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

## 3. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

## 4. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

## 5. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

## 6. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

## 7. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

\* Required at time of bid

**Subcontractors Information**

8. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (      )       | *License No.:      |
| *Type of Work:         | *Registration No.: |

9. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (      )       | *License No.:      |
| *Type of Work:         | *Registration No.: |

10. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (      )       | *License No.:      |
| *Type of Work:         | *Registration No.: |

11. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (      )       | *License No.:      |
| *Type of Work:         | *Registration No.: |

12. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (      )       | *License No.:      |
| *Type of Work:         | *Registration No.: |

13. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (      )       | *License No.:      |
| *Type of Work:         | *Registration No.: |

\* Required at time of bid

**Subcontractors Information****14. \*Company Name:**

|                               |                           |
|-------------------------------|---------------------------|
| <b>*Location of Business:</b> | Email:                    |
| Ph. No. (      )              | <b>*License No.:</b>      |
| <b>*Type of Work:</b>         | <b>*Registration No.:</b> |

**15. \*Company Name:**

|                               |                           |
|-------------------------------|---------------------------|
| <b>*Location of Business:</b> | Email:                    |
| Ph. No. (      )              | <b>*License No.:</b>      |
| <b>*Type of Work:</b>         | <b>*Registration No.:</b> |

**16. \*Company Name:**

|                               |                           |
|-------------------------------|---------------------------|
| <b>*Location of Business:</b> | Email:                    |
| Ph. No. (      )              | <b>*License No.:</b>      |
| <b>*Type of Work:</b>         | <b>*Registration No.:</b> |

**17. \*Company Name:**

|                               |                           |
|-------------------------------|---------------------------|
| <b>*Location of Business:</b> | Email:                    |
| Ph. No. (      )              | <b>*License No.:</b>      |
| <b>*Type of Work:</b>         | <b>*Registration No.:</b> |

**18. \*Company Name:**

|                               |                           |
|-------------------------------|---------------------------|
| <b>*Location of Business:</b> | Email:                    |
| Ph. No. (      )              | <b>*License No.:</b>      |
| <b>*Type of Work:</b>         | <b>*Registration No.:</b> |

**19. \*Company Name:**

|                               |                           |
|-------------------------------|---------------------------|
| <b>*Location of Business:</b> | Email:                    |
| Ph. No. (      )              | <b>*License No.:</b>      |
| <b>*Type of Work:</b>         | <b>*Registration No.:</b> |

\* Required at time of bid

## Subcontractors Information

20. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

21. \*Company Name:

|                        |                   |
|------------------------|-------------------|
| *Location of Business: | Email:            |
| Ph. No. (       )      | *License No.:     |
| *Type of Work:         | Registration No.: |

22. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

23. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

24. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

25. \*Company Name:

|                        |                    |
|------------------------|--------------------|
| *Location of Business: | Email:             |
| Ph. No. (       )      | *License No.:      |
| *Type of Work:         | *Registration No.: |

## 00 45 19 NONCOLLUSION DECLARATION

(TO BE EXECUTED AND SUBMITTED WITH BID)

Public Contract Code section 7106

The undersigned declares:

I am the \_\_\_\_\_ [name/title] of  
\_\_\_\_\_ [company], the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on \_\_\_\_\_ [date], at  
\_\_\_\_\_ [city], \_\_\_\_\_ [state].

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name



**CONTRACTORS CERTIFICATE  
REGARDING WORKERS COMPENSATION**  
(TO BE EXECUTED BY AND SUBMITTED WITH BID)

Labor Code Section 3700 Provides:

Every employer except the State shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, either as an individual employer, or as one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees.

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Workers Compensation or to undertake self-insurance in accordance with the provisions of that Code and I will comply with those provisions before commencing the performance of the work of this Contract.

CONTRACTOR:

\_\_\_\_\_

By:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name/Title

\_\_\_\_\_  
Date

(In accordance with Labor Code section 1860, this certificate must be signed and filed with the awarding body prior to performing any work under this Contract.)

## 00 45 27 STUDENT SAFETY DECLARATION

### Education Code Section 45125.2

(TO BE EXECUTED BY AND SUBMITTED WITH BID)

I, \_\_\_\_\_ [name/title], declare as follows:

1. I am a representative of \_\_\_\_\_ [company], and am authorized to make this declaration on its behalf;
2. Pursuant to Education Code section 45125.2, I shall not permit any employee, agent or subcontractor to have more than limited contact with pupils without taking protective steps as set forth in that section and this declaration.
3. I declare that I have taken one or more of the following protective measures pursuant to Education Code section 45125.2 and General Conditions Section 00 73 19:
  - a. Neither I, my employees, agents nor subcontractors will have more than limited contact with students.
  - b. I have installed or will install a physical barrier at the worksite such that no employee, agent or subcontractor will have more than limited contact with students.
  - c. An employee, agent or subcontractor will continually monitor and supervise all employee(s), agent(s) and subcontractor(s) who will have more than limited student contact. I will **have individual(s) processed through the DISTRICT** to submit fingerprints to the Department of Justice (DOJ) for the monitoring and supervisory of employee(s), agent(s) or subcontractor(s). I will not begin work on the job site until a DOJ cleared supervisor submitted through the DISTRICT is provided on the job site, and I certify that none of these supervisory employees, agents or subcontractors will have been convicted of a felony as defined in Education Code section 45122.1.

I know the above of my own personal knowledge and if called as a witness could competently testify thereto. I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed

on \_\_\_\_\_ [month/year], \_\_\_\_\_ [day], at \_\_\_\_\_ [city], California.

\_\_\_\_\_  
Name of Contractor

By: \_\_\_\_\_

*Refer to Attachment "C" for fingerprinting and I.D. Badge Procedure.*

## 00 45 28 NO PROHIBITED INTEREST/CONFLICTS OF INTEREST DECLARATION

(TO BE EXECUTED AND SUBMITTED WITH BID)

I hereby certify and declare that the undersigned Bidder has reviewed and understands Article 47 of the Information to Bidders, Prohibited Interests/Conflicts of Interest, and that Bidder has no business relationship with any member of the Board of Education ("BOE") that gives any BOE member a financial interest in any contract between Bidder and the DISTRICT, other than a financial interest that qualifies as a "remote interest" or a "noninterest," and that no Prohibited Interests/Conflicts of Interest exist which violate Article 47 of the Information to Bidders and thereby preclude Bidder from contracting with the Fresno Unified School DISTRICT. Bidder further understands that the provision of a bid/quote to Bidder over 5 years prior to a BOE member's election or appointment, without the goods or services included in the bid actually being furnished to Bidder, i.e., an unaccepted bid/quote, does not qualify to cause a financial interest to be a "remote interest" as that term is defined in California Government Code section 1091(b)(8).

Consistent with the foregoing and with Article 47 of the Information to Bidders relating to Prohibited Interests/Conflicts of Interest, Bidder understands that if Bidder is awarded the contract for this Project and a Prohibited Interests/Conflict of Interest is thereafter discovered which violates Article 47 of the Information to Bidders, Prohibited Interests/Conflicts of Interest, the contract between Bidder and Fresno Unified School DISTRICT may be void, and in such event Bidder may be required to disgorge all monies received pursuant to such void contract.

I declare under penalty of perjury under the laws of the State of California that 1) Bidder has reviewed all necessary documents and exercised all due diligence in determining that no Prohibited Interests/Conflicts of Interest exist as set forth above and as described in Article 47 of the Information to Bidders relating to Prohibited Interests/Conflicts of Interest, with respect to the undersigned Bidder, 2) I am authorized by Bidder to execute this form on Bidder's behalf and to make the certifications contained herein, and 3) the representations and certifications set forth herein are true and correct.

Dated: \_\_\_\_\_,

\_\_\_\_\_  
[Company Name]

\_\_\_\_\_  
[Name and Title of Bidder's Representative]

\_\_\_\_\_  
[Signature]

Footnote - Pursuant to:  
Article 47 of Information to Bidders  
Section 00 72 00.16 of General Conditions

# 00 45 29 IRAN CONTRACTING ACT CERTIFICATION

(TO BE EXECUTED BY AND SUBMITTED WITH BID)

## Public Contract Code sections 2202-2208

Pursuant to Public Contract Code 2204. (a) A public entity shall require a person that submits a bid or proposal to, or otherwise proposes to enter into or renew a contract with, a public entity with respect to a contract for goods or services of one million dollars (\$1,000,000) or more to certify, at the time the bid is submitted or the contract is renewed, that the person is not identified on a list created pursuant to subdivision (b) of Section 2203 as a person engaging in investment activities in Iran described in subdivision (a) of Section 2202.5, or as a person described in subdivision (b) of Section 2202.5, as applicable.

To comply with this requirement, please insert your company/entity and Federal ID Number (if available) and complete **one** of the options below. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts in accordance with Public Contract Code section 2205.

### **OPTION #1 - CERTIFICATION**

I, the official named below, certify I am duly authorized to execute this certification on behalf of the company/entity identified below, and the company/entity identified below is **not** on the current list of persons engaged in investment activities in Iran created by DGS and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person or entity, for 45 days or more, if that other person or company/entity will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS in accordance with subdivision (b) of Public Contract Code 2203.

|                                              |                                                          |                            |
|----------------------------------------------|----------------------------------------------------------|----------------------------|
| Company Name/Financial Institution (Printed) |                                                          | Federal ID Number (or n/a) |
| By (Authorized Signature)                    |                                                          |                            |
| Printed Name and Title of Person Signing     |                                                          |                            |
| Date Executed                                | Executed in the County of _____ in<br>the State of _____ |                            |

### **OPTION #2 – EXEMPTION**

Pursuant to Public Contract Code sections 2203(c) and (d), a public entity may permit a vendor/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enters into or renews, a contract for goods and services.

If you have obtained an exemption from the certification requirement under the Iran Contracting Act, please fill out the information below, and attach documentation demonstrating the exemption approval.

|                                             |                            |
|---------------------------------------------|----------------------------|
| Vendor Name/Financial Institution (Printed) | Federal ID Number (or n/a) |
| By (Authorized Signature)                   |                            |
| Printed Name and Title of Person Signing    | Date Executed              |

**00 45 26 CONTRACTOR'S CERTIFICATION OF  
NON-USE OF ASBESTOS OR ASBESTOS CONTAINING  
PRODUCTS OR MATERIALS**

To be Executed and Submitted upon Completion of Project

To:      Fresno Unified School DISTRICT

**Project:**   Bid No. 27-10 - COOPER MIDDLE SCHOOL ADMINISTRATION BUILDING  
ALTERATIONS

I, \_\_\_\_\_, declare that I am the party responsible for performing the Work required by the foregoing bid and, by my signature I certify that no asbestos or asbestos-containing products or materials were used in the construction of the above referenced project.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

CONTRACTOR:                      \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Type/Print Name

\_\_\_\_\_  
Title

**DISABLED VETERAN BUSINESS ENTERPRISES**  
**00 45 51 (DVBE) DECLARATION**  
(TO BE EXECUTED AND SUBMITTED WITH BID)

I, \_\_\_\_\_, declare that I am \_\_\_\_\_  
(Name of Representative) (Title of Representative)

of \_\_\_\_\_.  
(Business Name of Bidder)

The party making the foregoing proposal declares that the bidder made good faith efforts to meet the participation goal of not less than three percent (3%) of the bid amount to include disabled veteran business enterprises ("DVBE") in the work to be performed. (Education Code section 17076.11) Good faith efforts may be met in one of two ways, either: (1) by complying with the safe harbor provisions of Public Contract Code section 10115.2, subdivision (b), or (2) by complying with Public Contract Code section 10115.2, subdivision (a) by making good faith efforts other than by following the safe harbor language in Public Contract Code section 10115.2, subdivision (b). Under Public Contract Code section 10115.2 subdivision (a), the DISTRICT will exercise its discretion as to whether the good faith effort has been made. All Bidders shall submit the required DVBE Declaration with bid. (See DVBE Policy in bid documents for additional submittals).

I declare under penalty of perjury under the law of the State of California that the DVBE requirement for this bid was met through one of the two foregoing methods and that the foregoing is true and correct (check applicable box):

☐

I have met the 3% DVBE goal.

☐

I have made a good faith effort to meet the 3% goal.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ at \_\_\_\_\_, California.

\_\_\_\_\_  
(Signature of Representative)

NOTE: This declaration does not have to be notarized.

## DVBE POLICY



### DISABLED VETERAN BUSINESS ENTERPRISE PARTICIPATION GOAL

**Submittals**      24 hours after bid opening, Prime Bidder shall provide to DISTRICT Purchasing Department completed DVBE forms including (1) Contractor Good Faith Effort Worksheet and (2) Prime Bidder Certification of Disabled Veteran Business Enterprise Participation.

**Definitions**      The term “Disabled Veteran Business Enterprise” (DVBE) means a business concern that is certified as a DVBE by the Office of Small and Minority Business.

The term “contract” means an agreement awarded by a school DISTRICT in which all or part of the funding provided is required to meet DVBE Participation Goals or demonstrate that a good faith effort was made to meet the goal.

The term “bidder” means any person or persons, firm, partnership, corporation or combination thereof who makes an offer, competitive or noncompetitive, with the intent of forming a contract with one or more school DISTRICTs.

**Disabled Veterans** In addition to the school DISTRICTs contracting requirements, potential contractors seeking Business Enterprise to enter into contracts with school DISTRICTs for labor, services, materials, supplies, Goals equipment, construction, alteration repair or improvement shall be required to meet a 3 percent participation goal for certified DVBE's or demonstrate that a good faith effort was made to meet the goal.

A Business Enterprise with no opportunity for subcontracting or purchasing of supplies must provide a narrative and be able to demonstrate its inability to subcontract or purchase supplies if an audit occurs.

In order for any sole proprietorship, partnership, corporation or other enterprises to obtain certification or to be counted toward meeting the DVBE contract goals, such business concern must possess current and valid certification as a DVBE through the Office of Small and Minority Business.

For contracts awarded by competitive bid/RFP, a bidder should demonstrate fulfillment of this requirement at or prior to the time of bid opening in order to qualify as a responsive bidder. For contracts not awarded by competitive bid, a potential contractor should demonstrate fulfillment of this requirement prior to entering into the contract.

Any bidder meeting the 3 percent participation goal for DVBE's may be eligible for award of a school DISTRICT contract. If a bidder is unable to meet the 3 percent participation goal, the bidder may demonstrate a good faith effort by submitting documentation of the following actions:

- Contact was made with state agencies or with local DVBE organizations to identify DVBE's;
- Advertising was published in trade papers and papers focusing on DVBE'S
- Invitations to bid were submitted to potential DVBE contractors; Available DVBE's were considered.

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## DVBE POLICY (continued)

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The school DISTRICT shall evaluate the effort made by the bidder to seek out and consider DVBE's as potential subcontractors, and/or material or equipment suppliers. In evaluating such effort, the school DISTRICT should consider documentation of the actions specified above. Based on the evaluation, the school DISTRICT may make a finding that the 3% DVBE participation goal or the good faith effort requirement has been met. The school DISTRICT finding in this regard is subject to audit by OPSC. A bidder is eligible for award of a school DISTRICT contract upon a finding by the school DISTRICT that a 3% DVBE participation goal or good faith effort to meet the participation goal has been achieved.

If a bidder fails to meet either the goal, a good faith effort, or a narrative explaining its inability to meet the 3% goal, such bidder may be deemed not to be a responsive bidder for purposes of the school DISTRICT's evaluation of an award of contract and may be ineligible for an award.



## DVBE

### SUBSTITUTIONS

Substitutions If awarded the contract, the successful bidder must use the DVBE subcontractor and/or supplier proposed in its bid unless the contractor requested a substitution from the school DISTRICT prior to the execution of the contract and the DISTRICT has approved such substitution. At a minimum, the request must include:

4. A written explanation of the reason for the substitution,
5. The identity of the person or firm substituted, and
6. Satisfactory evidence that the Contractor has made a good faith effort to satisfy DVBE contract participation certified in the bid.

The school DISTRICT's approval or disapproval of the substitution is not to be construed as an excuse for noncompliance with any other provision of law including, but not limited to, the Subletting and Subcontracting Fair Practices Act or any other contract requirements relating to substitution of sub-contractors.

FAILURE TO ADHERE TO AT LEAST THE DVBE PARTICIPATION PROPOSED BY THE SUCCESSFUL BIDDER MAY BE CAUSE FOR CONTRACT TERMINATION AND RECOVERY OF DAMAGES UNDER THE RIGHTS AND REMEDIES DUE THE DISTRICT UNDER THE DEFAULT SECTION OF THE CONTRACT.

**CONTRACTOR GOOD FAITH EFFORT WORKSHEET**

This worksheet is to be used to assist the Contractor in meeting the 3% DVBE participation goal.

|                  |                  |                |
|------------------|------------------|----------------|
| BIDDER NAME      | BUSINESS ADDRESS | CONTACT PERSON |
| TELEPHONE NUMBER | SCHOOL DISTRICT  | COUNTY         |

**GENERAL INSTRUCTIONS:**

This worksheet is to be used to assist you in meeting the 3 percent DVBE participation goal. If specific information is not provided for Parts I through III, you may not meet the test of the "Good Faith Effort" and may not so certify. If you are qualifying based on a "Good Faith Effort" include this form with your bid/proposal to the DISTRICT.

**PART I – CONTACTS**

To identify DVBE sub-contractors/suppliers for participation in your bid/proposal, contact should be made with at least one of the following categories. It is recommended that you contact DVBE organizations.

| CATEGORY                                                                                                                                                                                                                                                       | TELEPHONE NUMBER | DATE CONTACTED | PERSON CONTACTED |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|------------------|
| 1. Office of Small Business and Disabled Veterans Business Enterprises Services (OSDS)                                                                                                                                                                         | (916) 375-4940   |                |                  |
| OSDS publishes a list of Disabled Veteran Business Enterprises.<br>Website:<br><a href="https://caleprocure.ca.gov/pages/PublicSearch/supplier-search.aspx?psNewWin=true">https://caleprocure.ca.gov/pages/PublicSearch/supplier-search.aspx?psNewWin=true</a> |                  |                |                  |
|                                                                                                                                                                                                                                                                |                  |                |                  |
|                                                                                                                                                                                                                                                                |                  |                |                  |
|                                                                                                                                                                                                                                                                |                  |                |                  |
| 2. DVBE Organizations (List):                                                                                                                                                                                                                                  |                  |                |                  |
|                                                                                                                                                                                                                                                                |                  |                |                  |
|                                                                                                                                                                                                                                                                |                  |                |                  |
|                                                                                                                                                                                                                                                                |                  |                |                  |
|                                                                                                                                                                                                                                                                |                  |                |                  |

\*Write "recorded message" in this column, if applicable

**PART II – ADVERTISEMENTS** You should make at least two (2) advertisements, one (1) in a paper that focuses on DVBE and one (1) in a trade paper. Advertisements should be published at least 14 days prior to bid/proposal opening; if you cannot advertise 14 days prior, advertise as soon as possible and provide an explanation. (Advertisements must be published in time to allow for a reasonable response). Advertisements should include that your firm is seeking DVBE participation, the project name and location, your firm's name, your firm's contact person, and phone number.

**Attach copies of advertisements to this form.**

| FOCUS/TRADE PAPER NAME | CHECK ONE |       | DATE OF ADVERTISEMENT |
|------------------------|-----------|-------|-----------------------|
|                        | TRADE     | FOCUS |                       |
|                        |           |       |                       |
|                        |           |       |                       |
|                        |           |       |                       |

**PART III – SOLICITATIONS** List DVBE subcontractors/suppliers that were invited to bid. Use the following instructions to complete the remainder of this section (read the three columns as a sentence from left to right). If you need additional space to list DVBE solicitations, please use separate page and attach to this form.

| IF THE DVBE .....                                | THEN.....                                                                                                    | AND.....                                      |                      |             |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------|-------------|
| was selected to participate                      | check "yes" in the "SELECTED" column, include the applicable dollar amount in Part III of the Form SAB 515PB | Include a copy of their DVBE letter from OSMB |                      |             |
| Was not selected to participate                  | check "no" in the "SELECTED" column                                                                          | State why in the "REASON NOT SELECTED" column |                      |             |
| Did not respond to your solicitation             | check the "NO RESPONSE" column                                                                               |                                               |                      |             |
| DISABLED VETERANS BUSINESS ENTERPRISES CONTACTED | SELECTED                                                                                                     |                                               | REASONS NOT SELECTED | NO RESPONSE |
|                                                  | YES                                                                                                          | NO                                            |                      |             |
|                                                  |                                                                                                              |                                               |                      |             |
|                                                  |                                                                                                              |                                               |                      |             |
|                                                  |                                                                                                              |                                               |                      |             |

**IMPORTANT NOTE:**

Please be aware that certification of the "Good Faith Effort" may only be made by completing Parts I, II, and III on both sides of this form. A copy of this form must be retained by you and may be subject to a future audit.

**CERTIFICATION**

I \_\_\_\_\_ certify that I am the bidder's Chief Executive Officer and that I have made a diligent effort to ascertain the facts with regard to the representations made herein. Further, I acknowledge that the school DISTRICT, not the SAB/OPSC, is responsible for determining compliance with the DVBE Program. In making this certification, I am aware of Section 12650 et. seq. of the Government Code providing for the imposition of treble damages for making false claims.

|                                      |      |
|--------------------------------------|------|
| Signature of Chief Executive Officer | Date |
|--------------------------------------|------|

# CONTRACTOR CERTIFICATION OF DISABLED VETERAN BUSINESS ENTERPRISE PARTICIPATION

To be completed by the Contractor

Page 1 of 2

## PART I – IDENTIFICATION

|                 |                  |                  |
|-----------------|------------------|------------------|
| BIDDER'S NAME   | BUSINESS ADDRESS | TELEPHONE NUMBER |
| SCHOOL DISTRICT | COUNTY           |                  |

## GENERAL INSTRUCTIONS

The DISTRICT requires that all contracts awarded should meet a DVBE participation goal of not less than 3 percent of the contract amount or if your firm cannot meet the 3 percent DVBE participation goal, you should demonstrate a good faith effort to attempt to meet the 3 percent participation. The DISTRICT is responsible to assure compliance with the DVBE program

**PART II – METHOD OF COMPLIANCE WITH DVBE PARTICIPATION GOALS** – Include this form and any other applicable documents listed in this table with your bid/proposal. Read the three columns in the table below as sentences from left to right. Check the appropriate box to indicate your method of committing the contract dollar amount. If no box can be checked, your bid/proposal may be deemed non-responsive and disqualified.

| YOUR BUSINESS ENTERPRISE                                                                                                       | AND YOU                                                                                           | AND YOU                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| A. <input type="checkbox"/> is Disabled Veteran owned and your force, will perform at least 3 percent of this contract         | will include a copy of your DVBE letter from the office of Small Minority Business (OSMB).        |                                                                                     |
| B. <input type="checkbox"/> is Disabled Veteran owned but is unable to perform the 3 percent of this contract with your forces | will use DVBE subcontractors/ suppliers to bring the contract participation to at least 3 percent | will include copy of each DVBE's letter from OSMB (including yours, if applicable). |
| C. <input type="checkbox"/> is not Disabled Veteran owned                                                                      | will use DVBE subcontractors/ suppliers for at least 3 percent of this contract                   |                                                                                     |
| D. <input type="checkbox"/> is unable to meet the required Participation goals                                                 | will complete a Good Faith Effort to obtain DVBE participation                                    | will include the form Prime Bidder's Good Faith Effort Worksheet                    |

**NOTE:** An Office of Small and Minority Business (OSMB) letter must be attached for each DVBE participating in the contract. The DVBE letter is obtained by application through OSMB and must be provided at the time of bid opening. If the letter is not provided, the bid may be deemed non-responsive and may be ineligible for award of the contract.

PART III – DVBE DOLLAR PARTICIPATION OF BID/PROPOSAL

Show deductive alternate(s) in parenthesis. For more alternates/base bids, use a separate page to show items.

- A. If your business enterprise is a DVBE, list in the appropriate column the total dollar amount of your bid to be performed by your own participation.

B. List all your DVBE subcontractors/suppliers. Enter in the appropriate column the dollar amount for each of your subcontractors/suppliers.

C. Enter the total of Lines A and B for each column.
- D. Enter the dollar amount of the bid/proposal to be performed by non-DVBE firms. Note: This line is the sum of the prime and subcontractor(s) non-DVBE dollar participation.

E. Enter the Sum of the column totals from Line C and Line D. Note: Please be Aware that the final determination of DVBE compliance is made based on the contract amount resulting from the DISTRICT's acceptance or rejection of alternates.

|                                            | BASE BID/PROPOSAL | ALTERNATE<br>#1 | ALTERNATE<br>#2 |
|--------------------------------------------|-------------------|-----------------|-----------------|
| A. Contractor, if DVBE (own participation) | \$                | \$              | \$              |
| B. DVBE Subcontractor or Supplier          |                   |                 |                 |
| 1.                                         |                   |                 |                 |
| 2.                                         |                   |                 |                 |
| 3.                                         |                   |                 |                 |
| 4.                                         |                   |                 |                 |
| C. Subtotal (A & B)                        |                   |                 |                 |
| D. Non-DVBE                                |                   |                 |                 |
| E. Total Bid                               |                   |                 |                 |

## 00 52 13 SAMPLE AGREEMENT

**THIS AGREEMENT** dated as of \_\_\_\_\_ (“Effective Date”), is made and entered into by and between the Fresno Unified School DISTRICT (“DISTRICT”), and \_\_\_\_\_ (“CONTRACTOR”).

For the consideration stated below, DISTRICT and CONTRACTOR agree as follows:

1. The complete Contract includes and incorporates by reference herein all of the “Contract Documents” including: the Contract, Notice to Bidders, Information to Bidders, Bid Bond, Bid Form, Designation of Subcontractors, Certificate Regarding Workers’ Compensation, Noncollusion Declaration, No Prohibited Interest/Conflict of Interest Declaration, Student Safety Declaration, Iran Contracting Act Certification Form, Performance Bond, Payment Bond, Escrow Agreement for Security Deposits, DVBE Policy and related Forms (if applicable), Asbestos Certification, Insurance Policies, General Conditions, Supplementary General Conditions if any, General Requirements, Drawings, Plans, Specifications, the Contract, and all modifications, addenda, bulletins, and amendments issued hereto for and hereafter, Notice to Proceed, and any and all certifications, declarations, Guarantees and affidavits that are required by bid specifications as referenced in Section 00 72 00.01(k) of the General Conditions. The Contract Documents are complementary and what is called for by any one shall be as binding as if called for by all.

2. CONTRACTOR shall perform everything required to be performed and shall provide and furnish all the labor, materials, necessary tools, expendable equipment and all utility and transportation services required for the COOPER MIDDLE SCHOOL ADMINISTRATION BUILDING ALTERATIONS

All of said work to be performed and materials furnished shall be completed in a good, workmanlike manner in strict accordance with the plans, specification, drawings and all provisions of the complete Contract as herein defined. The CONTRACTOR shall be liable to the DISTRICT for any damages arising as a result of a failure to fully comply with this obligation, and the CONTRACTOR shall not be excused with respect to any failure to so comply by any act or omission of the Architect, Engineer, Inspector, Division of the State Architect, or representative of any of them, unless such act or omission actually prevents the CONTRACTOR from complying with the requirements of the Contract Documents, and unless the CONTRACTOR protests, at the time of such alleged prevention, that the act or omission is preventing the CONTRACTOR from fully complying with the Contract Documents. Such protest shall not be effective unless reduced to writing and filed with the DISTRICT within (3) working days of the date of occurrence of the act or omission preventing the CONTRACTOR from fully complying with the Contract Documents. All work to be performed and materials furnished shall be in strict accordance with the Contract Documents.

3. As full consideration for the faithful performance of the contract, DISTRICT shall pay to CONTRACTOR, subject to any additions or deductions as provided in the Contract Documents, the sum of \_\_\_\_\_ (\$XX,XXX.XX) which is the total of the following amounts stated in the bid form for \_\_\_\_\_.

4. The Contract Time shall commence on the date stated in the DISTRICT’s Notice to Proceed and shall be completed within **120** Calendar days from Notice to Proceed date. All work to be done concurrently and subject to all phasing and milestone dates. CONTRACTOR shall not commence Work on the Project site before the

effective date of the accepted insurance and bonds. The established date of commencement of the Contract Time will not be changed/delayed due to any delay in the issuance or effective date of such insurance and/or bonds.

5. Payment of undisputed contract amounts is contingent upon CONTRACTOR furnishing DISTRICT with a release of all claims against the DISTRICT arising out of the contract payment. Any disputed contract claim must be specifically excluded from the operation of the release.

6. **Time is of the essence.** In accordance with Government Code Section 53069.85, CONTRACTOR agrees to forfeit and pay to DISTRICT the sum of One Thousand dollars (\$1,000) for each calendar day completion is delayed beyond the time specified in paragraph 4 of this Agreement, which said amount shall be deducted from any payments due or to become due to CONTRACTOR. Notwithstanding any provision of the Contract Documents to the contrary, liquidated damages shall be imposed until final completion of the entire project in conformity with all the terms, conditions and requirements of the Contract Documents. Any use or occupancy of any portion of the project by DISTRICT prior to final completion thereof shall not obviate or extinguish said imposition of liquidated damages. Time extensions may be granted by the DISTRICT as provided in the General Conditions.

In addition to any liquidated damages which may be assessed, if the CONTRACTOR fails to complete the project within the time period provided in the contract documents and if as a result DISTRICT finds it necessary to acquire alternate facilities pending completion of the project, CONTRACTOR shall pay all costs and expenses related to the acquisition and use of the alternate facilities incurred by DISTRICT. The costs and expenses may include, but are not limited to such items as rental payments, inspection fees and additional architectural fees. These costs and expenses may be retained by DISTRICT from any payments otherwise due to CONTRACTOR.

**“Liquidated Damages,” is expressly understood and agreed to by the parties hereto:**

Int es :signer1:initials}} Contractor’s Initials

Int es :signer3:initials}} DISTRICT’s Initials

7. During the life of this contract, CONTRACTOR shall take out and maintain insurance as required by the Contract Documents.

8. To perform the work required by this agreement, CONTRACTOR must possess the type of contractor’s license required by the Contract Documents.

9. Contractor acknowledges that he is an independent CONTRACTOR and not an employee, agent, or representative of DISTRICT. CONTRACTOR acknowledges that he shall be solely responsible for and shall indemnify and hold DISTRICT harmless from all matters relating to payment of CONTRACTOR’S employees, subcontractors and others, including compliance with Social Security, withholding and all other laws and regulations governing such matters.

The complete Contract, as set forth in paragraph 1. Herein above, constitutes the entire agreement of the parties. No other agreements, oral or written, pertaining to the Project to be performed, exists between the parties. This Agreement/Contract can be modified only by an amendment in writing, signed by both parties.

The parties have executed this agreement by the signatures of their authorized representatives on the dates indicated.

GOVERNING BOARD,

FRESNO UNIFIED SCHOOL DISTRICT

CONTRACTOR

By {{Sig\_es\_:signer5:signature}}

By {{Sig\_es\_:signer1:signature}}

Patrick Jensen, Chief Financial Officer  
Type Name

{{Field1\_es\_:signer1}}  
Type Name

{{Dte\_es\_:signer5:date}}  
Date

{{Dte\_es\_:signer1:date}}  
Date

PREVIOUSLY APPROVED AS TO FORM  
BY GENERAL COUNSEL, FRESNO UNIFIED SCHOOL DISTRICT

(Corporate Seal)

Approved As to Form:

{{Sig\_es\_:signer3:signature}}  
Stacey Sandoval, Executive Director  
Risk Management

{{Dte\_es\_:signer3:date}}  
Date



Escrow Account No. \_\_\_\_\_

**00 54 00 ESCROW AGREEMENT FOR SECURITY DEPOSIT IN  
LIEU OF RETENTION**

This Escrow Agreement is made and entered into by and between the Fresno Unified School DISTRICT (hereinafter called the "DISTRICT"), whose address is 4498 N. Brawley, Fresno, California 93722, and \_\_\_\_\_ (hereinafter called "CONTRACTOR"), whose address is \_\_\_\_\_ and \_\_\_\_\_ (hereinafter called "Escrow Agent"), whose address is \_\_\_\_\_.

For the consideration described below, the DISTRICT, CONTRACTOR and Escrow Agent agree as follows for Bid No. 27-10, COOPER MIDDLE SCHOOL ADMINISTRATION BUILDING ALTERATIONS:

1. Pursuant to Section 22300 of the Public Contract Code of the State of California, CONTRACTOR has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by DISTRICT pursuant to the construction Contract ("Contract") entered into between the DISTRICT and CONTRACTOR for Bid No. 27-10, COOPER MIDDLE SCHOOL ADMINISTRATION BUILDING ALTERATIONS in the amount of \_\_\_\_\_ (\$XX,XXX.XX), dated \_\_\_\_\_. When CONTRACTOR deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the DISTRICT within 10 days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the DISTRICT and CONTRACTOR. Securities shall be held in the name of the DISTRICT, and shall designate the CONTRACTOR as the beneficial owner.

2. The DISTRICT shall make progress payments to the CONTRACTOR for funds which otherwise would be withheld from progress payments provided that the Escrow Agent holds securities in the form and amount specified above.

3. Alternatively, upon written request of the CONTRACTOR, the DISTRICT shall make payments of the Contract retention directly to the Escrow Agent until this escrow is terminated. When the DISTRICT makes payments of earned retentions directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the CONTRACTOR until the time the escrow created under this Escrow Agreement is terminated. The CONTRACTOR may direct the investment of the payments into those securities specified in Public Contract Code section 22300, subdivision (c). Escrow Agent shall advise DISTRICT of the types of eligible securities to which the escrow funds have been invested. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the DISTRICT pays the Escrow Agent directly.

4. CONTRACTOR shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the escrow account. These expenses and payment terms shall be determined by the CONTRACTOR and Escrow Agent.

5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on the interest, shall be for the sole account of CONTRACTOR and shall be subject to withdrawal by CONTRACTOR at any time and from time to time, without notice to the DISTRICT.

6. Upon providing written authorization to the Escrow Agent, executed by an authorized representative of the DISTRICT, CONTRACTOR may withdraw all or any part of the principal contained in the escrow account. The written authorization executed by the DISTRICT shall specify the amount that may be withdrawn by the CONTRACTOR from the escrow account.

7. The DISTRICT shall have the right to draw upon the securities or earned retention contained in the escrow account upon notifying the Escrow Agent that CONTRACTOR has defaulted or otherwise breached the parties construction Contract. Upon seven days prior written notice to the Escrow Agent from the DISTRICT of the default/breach, the Escrow Agent shall immediately convert, if such be the case, the securities to cash, and shall distribute the cash and/or earned retention as instructed by the DISTRICT.

8. Notwithstanding any provision of this Escrow Agreement to the contrary, for a period of 35 days following the recordation of the Notice of Completion **(And Acceptance)**, DISTRICT shall have unlimited access to the securities/earned retention to respond to stop payment notice claims, punch list and/or warranty items, and contract change orders. Pursuant to this paragraph, DISTRICT may withdraw from the escrow sufficient cash to cover 125% of the principal amount claimed in any stop payment notice, 150% of the estimated amount necessary to remedy any punch list and/or warranty items, and an amount reflective of adjusting retention to change order revised contract price. To withdraw funds, DISTRICT shall present to the Escrow Agent copies of any and all stop payment notices and/or a letter from its ARCHITECT/ENGINEER concerning the punch list and/or warranty items and/or approved change order, together with written notification from DISTRICT making demand for the funds. In response to DISTRICT'S demand, upon seven (7) days written notice, Escrow Agent shall immediately convert sufficient securities to cash and distribute the cash and/or earned retention to DISTRICT. In no event will Escrow Agent have any obligation to pay to DISTRICT more than the amount Escrow Agent is holding. DISTRICT'S rights under this paragraph are in addition to and do not supplant any other rights or remedies contained in this section or the remainder of this Escrow Agreement.

9. Upon receipt of written notification from the DISTRICT certifying that the Contract is final and complete and that the CONTRACTOR has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to CONTRACTOR all securities and earned retentions and interest on deposit less escrow fees and charges of the escrow account. The escrow shall be closed immediately upon disbursement of all monies and securities on deposit and payment of fees and charges.

10. Escrow Agent shall rely on the written notifications from DISTRICT and CONTRACTOR pursuant to the provisions of this Agreement and DISTRICT and CONTRACTOR shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

11. The names of the persons authorized to give written notice or to receive written notice or to receive written notice on behalf of the DISTRICT and on behalf of CONTRACTOR in connection with this Agreement and exemplars of their respective signatures are as follows:

On behalf of DISTRICT

Executive Director of Purchasing

Title

Ann Loorz

Name

Signature

Fresno Unified School DISTRICT

Name of Company

4498 N. Brawley Avenue

Address

Fresno, California 93722

On behalf of CONTRACTOR

Title

Name

Signature

Name of Company

Address

On behalf of ESCROW AGENT

Title

Name

Signature

Name of Escrow Company

Address

Phone No.

Fax No

At the time the escrow account is opened, the DISTRICT and CONTRACTOR shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

As WITNESSES, the parties have executed this Agreement by their proper officers on the first date shown below.

DISTRICT

Executive Director of Purchasing

Title

Ann Loorz

Name

Signature

Date

CONTRACTOR

Title

Name

Signature

Date

Phone No.

Fax No.

**00 61 13.1 SAMPLE PERFORMANCE BOND****BE ADVISED THAT:**

The **Fresno Unified School DISTRICT** of Fresno County, California (“DISTRICT”) has awarded to \_\_\_\_\_ as Principal (“Principal”) the Contract for the work described as follows for COOPER MIDDLE SCHOOL ADMINISTRATION BUILDING ALTERATIONS, Bid No. 27-10. The Principal is required to furnish a bond in connection with the Contract guaranteeing faithful performance;

We, the undersigned Contractor, as Principal, and Surety, are held and firmly bound to the DISTRICT in the sum of \_\_\_\_\_ (\$XX,XXX.XX) this amount being not less than one hundred percent (100%) of the total amount payable by the DISTRICT under the terms of the Contract awarded by the DISTRICT to the Contractor/Principal), lawful money of the United State of America, for payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bonded Contractor/Principal, its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by and well and truly keep and perform all the undertakings, terms, covenants, conditions, and agreements in the said Contract and any alteration thereof, made as therein provided, including, but not limited to, the provisions regarding contract duration and liquidated damages, all within the time and in the manner therein designated in all respects according to their true intent and meaning, then this obligation shall become null and void, otherwise, it shall be and remain in full force and effect.

Whenever Contractor/Principal shall be, and is declared by the DISTRICT to be, in default under the Contract, the DISTRICT having performed the DISTRICT’s obligations thereunder, the Surety shall promptly remedy the default, or shall promptly:

1. Complete the contract in accordance with its terms and conditions; or
2. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a contract between such bidder and the DISTRICT, and make available, as work progresses, sufficient funds to pay the cost of completion less the balance of the Contract price, but not exceeding, including other costs and damages for which Surety may be liable hereunder, the amount set forth above. The term “balance of the Contract price,” as used in this paragraph, shall mean the total amount payable to Contractor/Principal by the DISTRICT under the Contract and any modifications thereto, less the amount previously, properly paid by the DISTRICT to the Contractor/Principal.

Surety expressly agrees that the DISTRICT may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the principal.

Surety shall not utilize Contractor/Principal in completing the Contract nor shall Surety accept a bid from Contractor/Principal for completion of the Project if the DISTRICT, when declaring the Contractor/Principal in default, notifies Surety of the DISTRICT’s objection to Contractor’s/Principal’s further participation in the completion of the Project. No right of action shall accrue on this bond to or for the use of any person or corporation other than the DISTRICT named herein or the successors or assigns of the DISTRICT. Any suit under this bond must be instituted when the applicable statute of limitations period as provided by the laws of the State of California.

FURTHER, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Contract, or of the work to be performed thereunder, shall in any way affect its obligations on this bond; and it does hereby waive notice of any change, extension of time, alteration or modification of the Contract or of the work to be performed thereunder.

Contractor/Principal and Surety agree that if the DISTRICT is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay DISTRICT/s reasonable attorney fees incurred, with or without suit, in addition to the above amount.

**AS WITNESSES**, we have affixed our signatures and seals this \_\_\_\_ day of \_\_\_\_\_.

(Principal Seal)

PRINCIPAL

BY: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_  
Address

\_\_\_\_\_  
Telephone No. / Fax No.

~~~~~

(Surety Seal)

SURETY

By: _____

Title: _____

Address

Telephone No. / Fax No

Surety's Address

Surety (Claim) Telephone No. / Fax No.

00 61 16.1 SAMPLE PAYMENT BOND FOR PUBLIC WORKS**BE ADVISED THAT:**

The **Fresno Unified School DISTRICT** of Fresno County, California ("DISTRICT"), by appropriate action, has awarded to _____ as Principal ("Principal"), the Contract for the work described as follows for COOPER MIDDLE SCHOOL ADMINISTRATION BUILDING ALTERATIONS, Bid No. 27-10.

The PRINCIPAL is required by Chapter 7, commencing with Section 9550 of the California Civil Code to furnish a bond in connection with the Contract;

THEREFORE, we, the PRINCIPAL and Surety, are held and firmly bound unto the DISTRICT in the penal sum of _____ (\$XX,XXX.XX), lawful money of the United States of America for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by this bond.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, or its heirs, executors, administrators, successors, or assigns, or a subcontractor, shall fail to pay any person or persons named in California Civil Code Section 9100 or fail to pay for any materials, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the California Unemployment Insurance Code, with respect to work or labor thereon of any kind, or shall fail to deduct, withhold, and pay over to the California Employment Development Department, any amounts required to be deducted, withheld, and paid over by Section 13020 of the California Unemployment Insurance Code with respect to work and labor thereon of any kind, the Surety will for the same, in or to an amount not exceeding the amount herein above set forth, and also will pay in case suit is brought upon this bond, such reasonable attorney fees and other litigation expenses and costs as shall be fixed by the court, awarded and taxed as provided in Chapter 7 commencing with Section 9550 of the California Civil Code.

This bond shall inure to the benefit of any of the persons named in Section 9100 of the California Civil Code, so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any Contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement described above or pertaining or relating to the furnishing of labor, materials, or equipment for it, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement described above, nor by any rescission or attempted rescission of the Contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond shall be construed most strongly against the Surety and in favor of all persons for whose benefit it is given, and under no circumstances shall Surety be released from liability to those for whose benefit the bond has been given, by reason of any breach of Contract between the DISTRICT and original Contractor or on the part of any obligee named in the bond, but the sole condition of recovery shall be that claimant is a person described in Section 9100

of the California Civil Code and has not been paid the full amount of its claim. The Surety hereby waives notice of any changes, extension of time, addition, alteration, or modification mentioned above.

AS WITNESS, we have affixed our signatures and seals this _____ day of _____.

(Principal Seal)

PRINCIPAL

BY: _____

Title: _____

Address

Telephone No. / Fax No.

~~~~~  
(Surety Seal)

SURETY

By: \_\_\_\_\_

Title: \_\_\_\_\_

\_\_\_\_\_  
Address

\_\_\_\_\_  
Telephone No. / Fax No.

\_\_\_\_\_  
Surety's Address

\_\_\_\_\_  
Surety (Claim) Telephone No. / Fax No.



## **CERTIFICATIONS TO BE COMPLETED BY CONTRACTOR**

THE UNDERSIGNED MUST **CHECK EACH BOX** (select the correct boxes for the Roofing Certification) AND EXECUTE THIS FORM AND HEREBY CERTIFIES TO THE GOVERNING BOARD OF THE DISTRICT THAT:

He/she is a representative of the Contractor,

He/she is familiar with the facts herein certified and acknowledged,

He/she is authorized and qualified to execute this Agreement and these certifications on behalf of Contractor and that by executing the Agreement and these Certifications he/she is certifying the following items.

☐ **Workers' Compensation** (Labor Code Sections 1860-1861. In accordance with Labor Code section 3700, every contractor will be required to secure the payment of compensation to his or her employees. I acknowledge and certify under penalty of perjury that I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

☐ **Drug-Free Workplace** (Government Code Sections 8355-8357). I acknowledge and certify under penalty of perjury that I will provide a drug-free workplace by doing all of the following:

(1) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's or organization's workplace and specifying the actions that will be taken against employees for violations of the prohibition.

(2) Establishing a drug-free awareness program to inform employees about all of the following:

(A) The dangers of drug abuse in the workplace.

(B) The person's or organization's policy of maintaining a drug-free workplace.

I Any available drug counseling, rehabilitation, and employee assistance programs.

(D) The penalties that may be imposed upon employees for drug abuse violations.

(3) Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by subdivision (a) and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I also acknowledge that this Contract may be subject to suspension of payments under the contract or grant or termination of the contract or grant, or both, and the contractor or grantee thereunder may be subject to debarment, in accordance with the requirements of the above-referenced statute, if the contracting or granting agency determines that any of the following has occurred:

(1) The contractor or grantee has made a false certification under Section 8355.

(2) The contractor or grantee violates the certification by failing to carry out the requirements of subdivisions (a) to (c), inclusive, of Section 8355.

I also acknowledge that the Department of General Services shall establish and maintain a list of individuals and organizations whose contracts or grants have been canceled due to failure to comply with the above-referenced statute.

This list shall be updated monthly and published each month. No state agency shall award a contract or grant to a person or organization on the published list until that person or organization has complied with the above-referenced statute.

☐ **Tobacco-Free Environment.** Pursuant to, without limitation, 20 U.S.C. section 6083, Labor Code section 6400 et seq., Health & Safety Code section 104350 et seq. and District Board Policies, all District sites, including the Project site, are tobacco-free environments. Smoking and the use of tobacco products by all persons is prohibited on or in District property. District property includes school buildings, school grounds, school owned vehicles and vehicles owned by others while on District property.

I acknowledge and certify under penalty of perjury that I am aware of the District's policy regarding tobacco-free environments at District sites, including the Project site and acknowledge and certify that I will adhere to the requirements of that policy and not permit any of my firm's employees, agents, subcontractors, or my firm's subcontractors' employees or agents to use tobacco and/or smoke on the Project site. The District also prohibits electronic cigarettes, "vaping" or similar product uses on District sites.

☐ **Mandated Reporter Training Certification.** [CHECK APPLICABLE BOX BELOW]

In connection with services provided by the Contractor to the District, the Contractor hereby certifies under Penal Code section 11165.7 and Education Code section 44691 that Contractor:

☐ **WILL** have contact with or supervision of District students.

☐ **WILL NOT** have contact with or supervision of District students.

**IF CONTRACTOR HAS CHECKED "WILL",** Contractor and its subcontractors shall at all times comply with the Mandated Reporter Training certification requirements as set forth below.

Contractor hereby acknowledges that all of its employees, subcontractors, volunteers, and officers that Contractor assigns to perform services for the District and whose duties require contact with or supervision of pupils, are each deemed "mandated reporters" under California law. Contractor certifies that:

- Each person has completed or will complete mandated reporter and sexual abuse prevention training in compliance with applicable law within six (6) weeks of commencing services, and annually within the first six (6) weeks of each school year thereafter.
- The required training shall consist of the California Department of Social Services online Mandated Reporting of Child Abuse & Neglect in California (General) and the California Child Abuse Prevention for School Personnel modules (<https://mandatedreporter.ca.com/>), unless an equivalent program has been expressly approved in writing by the District;
- Contractor shall maintain that documentation of training and will provide it to the District upon request; and
- Contractor understands that its failure to comply with mandated reporter obligations may result in criminal penalties under Penal Code section 11166, including misdemeanor liability.

☐ **No Hazardous Materials.** I acknowledge and certify under penalty of perjury that no Asbestos, or Asbestos-Containing Materials, polychlorinated biphenyl (PCB), or any material listed by the federal or state Environmental Protection Agency or federal or state health agencies as a hazardous material, or any other material defined as being hazardous under federal or state laws, rules, or regulations ("New Hazardous Material"), shall be furnished, installed, or incorporated in any way into the Project or in any tools, devices, clothing, or equipment used to affect any portion of

Contractor's work on the Project for District. I have instructed our employees with respect to the above-mentioned standards, hazards, risks, and liabilities.

Asbestos and/or asbestos-containing material shall be defined as all items containing but not limited to chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite. Any or all material containing greater than one-tenth of one percent (.1%) asbestos shall be defined as asbestos-containing material. Any disputes involving the question of whether or not material is New Hazardous Material shall be settled by electron microscopy or other appropriate and recognized testing procedure, at the District's determination. The costs of any such tests shall be paid by Contractor if the material is found to be New Hazardous Material.

All Work or materials found to be New Hazardous Material or Work or material installed with equipment containing "New Hazardous Material," will be immediately rejected and this Work will be removed at Contractor's expense at no additional cost to the District.

The Contractor must immediately notify the District within two (2) Business Days, if the Contractor finds and before it disturbs, any material that the Contractor believes may be hazardous waste, as defined in section 25117 of the Health and Safety Code, and requires removal to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

 **Lead as a Health Hazard.** Lead poisoning is recognized as a serious environmental health hazard facing children today. Even at low levels of exposure, much lower than previously believed, lead can impair the development of a child's central nervous system, causing learning disabilities, and leading to serious behavioral problems. Lead enters the environment as tiny lead particles and lead dust disbursts when paint chips, chalks, peels, wears away over time, or is otherwise disturbed. Ingestion of lead dust is the most common pathway of childhood poisoning; lead dust gets on a child's hands and toys and then into a child's mouth through common hand-to-mouth activity. Exposures may result from construction or remodeling activities that disturb lead paint, from ordinary wear and tear of windows and doors, or from friction on other surfaces.

Ordinary construction and renovation or repainting activities carried out without lead-safe work practices can disturb lead-based paint and create significant hazards. Improper removal practices, such as dry scraping, sanding, or water blasting painted surfaces, are likely to generate high volumes of lead dust.

Because the Contractor and its employees will be providing services for the District, and because the Contractor's work may disturb lead-containing building materials, **Contractor is hereby notified** of the potential presence of lead-containing materials located within certain buildings utilized by the District. All school buildings built prior to 1993 are presumed to contain some lead-based paint until sampling proves otherwise.

#### Overview of California Law

Education Code section 32240 et seq. is known as the Lead Safe Schools Protection Act. Under this act, the Department of Health Services ("DHS") is to conduct a sample survey of schools in the State of California for the purpose of developing risk factors to predict lead contamination in public schools. (Ed. Code, § 32241.)

Any school that undertakes any action to abate existing risk factors for lead is required to utilize trained and state-certified contractors, inspectors, and workers. (Ed. Code, § 32243, subd. (b).) Moreover, lead-based paint, lead plumbing, and solders, or other potential sources of lead contamination, shall not be utilized in the construction of any new school facility or the modernization or renovation of any existing school facility. (Ed. Code, § 32244.)

Both the Federal Occupational Safety and Health Administration (“Fed/OSHA”) and the California Division of Occupational Safety and Health (“Cal/OSHA”) have implemented safety orders applicable to all construction work where a contractor’s employee may be occupationally exposed to lead.

The OSHA Regulations apply to all construction work where a contractor’s employee may be occupationally exposed to lead. The OSHA Regulations contain specific and detailed requirements imposed on contractors subject to that regulation. The OSHA Regulations define construction work as work for construction, alteration, and/or repair, including painting and decorating. It includes, but is not limited to, the following:

- Demolition or salvage of structures where lead or materials containing lead are present;
- Removal or encapsulation of materials containing lead;
- New construction, alteration, repair, or renovation of structures, substrates, or portions thereof, that contain lead, or materials containing lead;
- Installation of products containing lead;
- Lead contamination/emergency cleanup;
- Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed; and
- Maintenance operations associated with the construction activities described in the subsection.

Because it is assumed by the District that all painted surfaces (interior as well as exterior) within the District contain some level of lead, it is imperative that the Contractor, its workers and subcontractors fully and adequately comply with all applicable laws, rules and regulations governing lead-based materials (including title 8, California Code of Regulations, section 1532. 1).

The Contractor must notify the District if any Work may result in the disturbance of lead-containing building materials. Any and all Work that may result in the disturbance of lead-containing building materials must be coordinated through the District. A signed copy of this Certification must be on file prior to beginning Work on the Project, along with all current insurance certificates.

#### Renovation, Repair and Painting Rule, Section 402I(3) of the Toxic Substances Control Act

In 2008, the U.S. Environmental Protection Agency, issued a rule pursuant to the authority of Section 402I(3) of the Toxic Substances Control Act, requiring lead safe work practices to reduce exposure to lead hazards created by renovation, repair and painting activities that disturb lead-based paint (Renovation, Repair and Painting Rule). Renovations in homes, childcare facilities, and schools built prior to 1978 must be conducted by certified renovations firms, using renovators with accredited training, and following the work practice requirements to reduce human exposures to lead.

Contractor, its workers and subcontractors must fully and adequately comply with all applicable laws, rules and regulations governing lead-based materials, including those rules and regulations appearing within title 40 of the Code of Federal Regulations as part 745 (40 CFR 745).

The requirements apply to all contractors who disturb lead-based paint in a six-square-foot area or greater indoors or a 20-square-foot area outdoors. If a DPH-certified inspector or risk assessor determines that a home constructed before 1978 is lead-free, the federal certification is not required for anyone working on that particular building.

#### Contractor’s Liability

If the Contractor fails to comply with any applicable laws, rules, or regulations, and that failure results in a site or worker contamination, the Contractor will be held solely responsible for all costs involved in any required corrective actions, and shall defend, indemnify, and hold harmless the District, pursuant to the indemnification provisions of the Contract, for all damages and other claims arising therefrom.

If lead disturbance is anticipated in the Work, only persons with appropriate accreditation, registrations, licenses, and training shall conduct this Work.

It shall be the responsibility of the Contractor to properly dispose of any and all waste products, including, but not limited to, paint chips, any collected residue, or any other visual material that may occur from the prepping of any painted surface. It will be the responsibility of the Contractor to provide the proper disposal of any hazardous waste by a certified hazardous waste hauler. This company shall be registered with the Department of Transportation (DOT) and shall be able to issue a current manifest number upon transporting any hazardous material from any school site within the District.

The Contractor shall provide the District with any sample results prior to beginning Work, during the Work, and after the completion of the Work. The District may request to examine, prior to the commencement of the Work, the lead training records of each employee of the Contractor.

I acknowledge and certify under penalty of perjury, that:

1. I have received notification of potential lead-based materials on the District's property;
2. I am knowledgeable regarding and will comply with all applicable laws, rules, and regulations governing work with, and disposal of, lead.

☐ **Imported Materials.** All soils, aggregate, or related materials ("Fill") that Contractor, a Subcontractor, agent or supplier, in any way, provides or delivers and/or supplies to the Project Site shall be free of any and all hazardous material as defined in section 25260 of the Health and Safety Code, shall satisfy the requirements of any environmental review of the Project performed pursuant to the statutes and guidelines of the California Environmental Quality Act, sections 21000 et seq. of the Public Resources Code ("CEQA"), and shall comply with the requirements of sections 17210 et seq. of the Education Code, including requirements for a Phase I environmental assessment acceptable to the State of California Department of Education and Department of Toxic Substances Control. I acknowledge that, to the furthest extent permitted by California law, the indemnification provisions in the Contract Documents apply to, without limitation, any claim(s) connected with providing, delivering, and/or supplying Fill.

☐ **Roofing Contract Financial Interest Certification (Public Contract Code § 3006)**

I, \_\_\_\_\_ **[Your Name]**, \_\_\_\_\_ **[Firm Name]**  
certify that I have not offered, given, or agreed to give, received, accepted, or agreed to accept, any gift, contribution, or any financial incentive whatsoever to or from any person in connection with a roof project contract or subcontract on the Project. As used in this certification, "person" means any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

I, \_\_\_\_\_ **[Your Name]**, \_\_\_\_\_ **[Firm Name]**  
certify that I do not have, and throughout the duration of the Contract, I will not have, any financial relationship in connection with the performance of the Contract with any architect, engineer, roofing consultant, materials manufacturer, distributor, or vendor that is not disclosed below.

I, \_\_\_\_\_ **[Your Name]**, \_\_\_\_\_ **[Firm Name]**  
have the following financial relationships with an architect, engineer, roofing consultant, materials manufacturer, distributor, or vendor, or other person in connection with the following roof project contract:

☐ **Russian Sanctions Certification**

On February 21, 2022, President Biden issued Executive Order 14065 (<https://www.whitehouse.gov/briefing-room/presidential-actions/2022/02/21/executive-order-on-blocking-property-of-certain-persons-and-prohibiting-certain-transactions-with-respect-to-continued-russian-efforts-to-undermine-the-sovereignty-and-territorial-integrity-of-ukraine/>; “**Federal Order**”) imposing economic sanctions and prohibiting many activities including, but not limited to, investing in, importing to, exporting from, and contracting with, areas of Ukraine and in Russia. On March 4, 2022, California Governor Newsom issued Executive Order N-6-22 requiring state agencies to take steps to ensure any agency and entity under contract with state agencies comply with the Federal Order (<https://www.gov.ca.gov/wp-content/uploads/2022/03/3.4.22-Russia-Ukraine-Executive-Order.pdf>; “**State Order**”).

The District requires the Contractor, as a vendor with the District, to comply with the economic sanctions imposed in response to Russia’s actions in Ukraine, including the orders and sanctions identified on the U.S. Department of the Treasury website (<https://home.treasury.gov/policy-issues/financial-sanctions/sanctions-programs-and-country-information/ukraine-russia-related-sanctions>).

If your Firm’s contract with the District has a cumulative value of \$5 million or more, your certification here constitutes your written response to the District, indicating:

- (2) that your Firm is in compliance with the required economic sanctions of the Federal and State Orders;
- (2) the steps your Firm has taken in response to Russia’s actions in Ukraine, including, but not limited to, desisting from making new investments in, or engaging in financial transactions with, Russian entities, not transferring technology to Russia or Russian entities, and directly providing support to the government and people of Ukraine.

☐ **CARB Off-Road Regulation Certification**

If Contractor or any of its subcontractors intend to use on the Project any In-Use-Off-Road Deisel-Fueled Fleets, as that term is defined in Title 13, California Code of Regulations, section 2449(b)(1), then Contractor must submit a Certificate of Reported Compliance for the each of the fleets and subcontractors listed in the Agreement.

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**I ACKNOWLEDGE AND CERTIFY UNDER PENALTY OF PERJURY THAT I AM DULY AUTHORIZED TO LEGALLY BIND THE CONTRACTOR TO ALL PROVISIONS AND ITEMS INCLUDED IN THESE CERTIFICATIONS, THAT THE CONTENTS OF THESE CERTIFICATIONS ARE TRUE, AND THAT THESE CERTIFICATIONS ARE MADE UNDER THE LAWS OF THE STATE OF CALIFORNIA.**

Date: \_\_\_\_\_

Proper Name of Contractor: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

|                                                                 |                                  |
|-----------------------------------------------------------------|----------------------------------|
| <hr/>                                                           | <hr/>                            |
| Firm Name                                                       | Address                          |
| <hr/>                                                           | <hr/>                            |
|                                                                 | City/State/Zip                   |
| <hr/>                                                           | <hr/>                            |
| Address of branch office used for this Project<br>if applicable | City/State/Zip of branch office  |
| <hr/>                                                           | <hr/>                            |
| If subsidiary, name of parent company                           | Address of parent company        |
| <hr/>                                                           | <hr/>                            |
|                                                                 | City/State/Zip of parent company |

END OF CONTRACTOR CERTIFICATIONS

## DIV 00 - GENERAL CONDITIONS

### **00 72 00. Information and Services Required of the District**

The DISTRICT shall secure and pay for easements for permanent structures or permanent changes in existing facilities unless specified otherwise on the bid plans and specifications

### **00 72 00.0 Amendments**

The terms of this Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except by written agreement signed by both parties.

### **00 72 00.00 Provisions Required by Law Deemed Inserted**

Every provision of law and clause required by law to be inserted in this contract shall be read and enforced as though it were included and if through mistake or otherwise, any provision is not inserted or is not correctly inserted, upon application of either party the Contract shall be amended to make the insertion or correction. All references to statutes and regulations shall include all amendments, replacements and enactments on the subject which are in effect as of the date of this Contract and any later changes which do not materially and substantially alter the positions of the parties-

### **00 72 00.01 Definitions**

- A. Action of the governing board is a vote of a majority of the membership in a lawful meeting.
- B. Addenda are the changes in plans, specifications, drawings and other Contract Documents which have been authorized in writing by the DISTRICT or ARCHITECT, and which alter, explain, modify, correct, add to, delete from or clarify the Contract Documents prior to the bid deadline.
- C. Applicable Laws means all federal, state, and local statutes, laws, ordinances, codes, provisions, rules, and regulations pertaining to the furnishing of or the performance of the Work.
- D. Application for Payment means the DISTRICT approved invoice form along with other supportive documentation as specified in the Contract Documents to be certified and submitted by CONTRACTOR in requesting progress and/or final payment.
- E. ARCHITECT is the person, firm, corporation or entity licensed to practice architecture as identified in the Bidding Documents.
- F. ENGINEER is the person, firm, corporation or entity registered to practice an engineering discipline as identified in the Bidding Documents.
- G. Approval means written authorization by ARCHITECT/ENGINEER or DISTRICT for specific applications within the Contract.
- H. As shown, as indicated, as detailed refer to drawings accompanying the specifications.
- I. Bidding Documents means all documents made available to bidders.
- J. Contract means the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a written



Modification. The Contract Documents form the Contract. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Architect and Contractor, between the Owner and any Subcontractor or Sub-subcontractor, or between any persons or entities other than the Owner and the Contractor.

K. Contract Documents include the Contract and all Contract Documents, including: the Contract, Notice to Bidders, Information to Bidders, Bid Bond, Bid Form, Designation of Subcontractors, Certificate Regarding Workers' Compensation, Noncollusion Declaration, No Prohibited Interest/Conflict of Interest Declaration, Student Safety Declaration, Iran Contracting Act Certification Form, Performance Bond, Payment Bond, Escrow Agreement for Security Deposits, DVBE Policy and related Forms (if applicable), Asbestos Certification, Insurance Policies, General Conditions, Supplementary General Conditions if any, General Requirements, Drawings, Plans, Specifications, the Contract, and all modifications, addenda, bulletins, and amendments, Notice to Proceed, and any and all certifications, declarations, Guarantees and affidavits that are required by bid specifications.

L. Contractor, District, or Owner are those mentioned as such in the Agreement ("CONTRACTOR," "DISTRICT"). "Owner" means "DISTRICT." Throughout the Contract Documents, they are treated as if they are of singular number and neuter gender.

M. Day, as used in the Contract Documents shall mean calendar day.

N. Inspector of Record ("IOR") is the Project Inspector approved by the Division of State Architect and employed by the DISTRICT in accordance with the requirements of Title 24 of the California Code of Regulations.

O. Locality in which the work is performed means the county in which the public work is performed.

P. Project is the undertaking planned by DISTRICT and CONTRACTOR as provided in the Contract Documents.

Q. Record Drawings is a revised set of clean legible drawings submitted by a CONTRACTOR upon completion of a project or a particular job. They reflect all changes made in the specifications and working drawings during the construction process, and show the exact dimensions, geometry, and location of all elements of the work completed under the contract and stamped "Record Drawings". Also called as-built drawings or just as-builts.

R. Provide includes "provide complete in place," that is, "furnish and install."

S. Safety orders include those issued by the Division of Industrial Safety and OSHA Safety and Health Standards for Construction.

T. Subcontractor includes those having a direct contractual relationship with the CONTRACTOR and those who furnish materials worked to a special design according to plans, drawings, and specifications of this work, but does not include those who merely furnish material not so worked.

U. Surety is the person, firm, or corporation that executes, as Surety, the Contractor's Bid Bond, Performance Bond and Payment Bond.

V. The Work shall include all labor, materials, services and equipment necessary for the CONTRACTOR to fulfill all of its obligations pursuant to the Contract Documents. It shall include the initial obligation of any CONTRACTOR or Subcontractor, who performs any portion of the Work, to visit the Site of the proposed Work with DISTRICT's notification, a continuing obligation after the commencement of the Work to fully acquaint and familiarize itself with the conditions as they exist and the character of the operations to be carried on under the Contract Documents, and

make such investigation as it may see fit so that it shall fully understand the facilities, physical conditions, and restrictions attending the Work under the Contract Documents, including the character, quality, and quantity of the surface and subsurface materials or obstacles to be encountered. Each such CONTRACTOR or Subcontractor shall also thoroughly examine and become familiar with the Drawings, Specifications, and associated bid documents. The "Site" refers to the grounds of the Project as defined in the Contract Documents and such adjacent lands as may be directly affected by the performance of the Work.

W. Commissioning During the construction and the warranty period, CONTRACTOR shall perform a systematic process of ensuring that all building systems perform interactively according to the contract documents, and the DISTRICT's objectives and operational needs with actual verification through review, testing and documentation of performance and sequences of operation, and inclusive of but not limited to start-up execution, functional testing, manufacturer checklists, furnishing submittals, shop drawings, warranty documentation, and as-built drawings related to commissioned equipment.

#### **00 72 00.02 Drawings and Specifications**

A. The Contract Documents are complementary and what is required by one shall be as binding as if required by all. Any item of work mentioned in the Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Specifications, shall be provided by Contractor as if shown or mentioned in both. The Contract is intended to include all labor and materials, equipment, services, and transportation necessary for the proper execution of the Work. It is the intent of these Contract Documents that the work performed under the Contract shall result in a complete operating system in satisfactory working condition with respect to the functional purposes of the installation, and no extra compensation will be allowed for anything omitted but fairly implied. Except as otherwise expressly provided in these "General Conditions" or "General Requirements," materials or work described in words which have a well-known technical or trade meaning shall be deemed to refer to those recognized standards. The CONTRACTOR shall carefully examine all Contract Documents and shall immediately report to the ARCHITECT/ENGINEER any error, inconsistency or omission he may discover. The CONTRACTOR shall do no work without proper drawings and specifications or interpretations.

B. Drawings and specifications are intended to comply with all Applicable Laws, including but not limited to all laws, ordinances, rules and regulations of constituted authorities having jurisdiction, and were referred to in the Contract Documents, said laws, ordinances, rules and regulations shall be considered as a part of the Contract within the limits specified. The CONTRACTOR shall bear all expenses of correcting work done contrary to said laws, ordinances, rules and regulations if the CONTRACTOR performed same (1) without first consulting the ARCHITECT in writing for further instructions regarding said work, or (2) disregarded the ARCHITECT'S instructions regarding said work.

C. Interpretations: Figured dimensions on drawings shall govern but work not dimensioned shall be directed by ARCHITECT. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Large scale details as to shape and details of construction shall take precedence over smaller scale drawings. Specifications shall govern as to materials, workmanship and installation procedures. In the event there is a discrepancy between the various Contract Documents, the order of precedence shall be: (1) DISTRICT's Special Conditions (if any); (2) DISTRICT's General Conditions and General Requirements; (3) DISTRICT's specifications; (4) DISTRICT's drawings. Without limiting Contractor's obligation to identify conflicts for resolution by the ARCHITECT, it is intended that the more stringent, higher quality, more costly or expensive interpretation and greater quantity of Work shall apply. Drawings and specifications are intended to be fully cooperative and to agree. CONTRACTOR shall promptly notify the ARCHITECT/ENGINEER in writing. The specification calling for any higher quality material or workmanship shall prevail.

D. Questions regarding interpretation of drawings and specifications shall be clarified by the ARCHITECT/ENGINEER. Should the CONTRACTOR commence work on any part without seeking clarification in writing, CONTRACTOR waives any claim for extra work or damages as a result of any ambiguity, conflict, or lack of information, and CONTRACTOR may be required to remove and replace such work if the ARCHITECT/ENGINEER deems it to be necessary.

E. Organization of Specifications: Organization of the specifications into divisions, and sections, and arrangement of drawings shall not control the CONTRACTOR in dividing the work among subcontractors or in establishing the extent of work to be performed by any trade.

F. Copies Furnished – Drawings/Specifications: CONTRACTOR will be furnished copies of the drawings and specifications as set forth in the Information to Bidders.

G. Ownership of Drawings: All plans, drawings, designs, specifications, and other incidental architectural and engineering work or materials and other Contract Documents and copies thereof furnished by DISTRICT -are DISTRICT's property. They are not to be used by CONTRACTOR, Subcontractor(s), or material or equipment supplier(s) in other work and are to be returned to DISTRICT upon request at the completion of the Project and may be used by DISTRICT as it may require, without any additional costs to DISTRICT. Neither CONTRACTOR, Subcontractor(s), nor material nor equipment supplier(s) shall own or claim a copyright in the Drawings, Specifications, or other Contract Documents.

H. Detail Drawings and Specifications: In case of ambiguity, conflict, difference, discrepancy, or lack of information between the various Contract Documents, then the priorities listed in "Drawings and Specifications" shall govern unless noted otherwise herein. Without limiting CONTRACTOR's obligation to identify conflicts for resolution, it is intended the more stringent, higher level of quality, greater quantity and/or higher level of workmanlike manner shall prevail and control. If ambiguities or discrepancies in the Contract Documents are not corrected by Addenda during the bid period, CONTRACTOR represents and warrants the scope and amount of its bid includes all materials, supplies, equipment, services, facilities, apparatus, and methods of construction that provides for the higher cost, quantity and quality. If appropriate under the circumstances, ARCHITECT/ENGINEER shall furnish additional instructions and/or drawings, as the case may be, necessary for the proper execution of the work. All such drawings and instructions shall be consistent with this Contract. Such additional instructions shall be furnished with reasonable promptness, provided that CONTRACTOR informs the ARCHITECT/ENGINEER of the relationship of the request to the critical path of construction.

I. Execution of Work: Work shall be executed in conformity with those instructions, drawings and/or specifications and CONTRACTOR shall do no work without proper instructions, drawings and specifications.

J. Examination of Contract Documents and other Information: In addition to all pre-bid obligations of CONTRACTOR, and prior to commencing any and each portion of the Work, CONTRACTOR shall carefully examine all of the Contract Documents and any other information available to CONTRACTOR relative to materials and methods of construction of the Work and/or Project requirements. CONTRACTOR shall file any needed Request for Information or Clarification a minimum of nine (9) days prior to the commencement of any Work for any perceived or alleged error, inconsistency, ambiguity, or lack of details or explanation of the intent of the Contract Documents. If CONTRACTOR performs any portion of the Work for which the Contract Documents are ambiguous, inconsistent, lack sufficient details or are otherwise in error, and CONTRACTOR knew or should have known of such defects in the Contract Documents before commencing the Work in question, then CONTRACTOR shall bear any and all resulting costs including, without limitation, the cost of correction, without a corresponding adjustment to the Contract

Amount, Milestones, and/or the Contract Time. If CONTRACTOR performs, permits, or causes the performance of any portion of the Work under those portions of the Contract Documents prepared by or on behalf of CONTRACTOR which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, CONTRACTOR shall bear any and all resulting costs, including, without limitation, the cost of correction, without a corresponding adjustment to the Contract Amount, Milestones, and/or the Contract Time.

#### **00 72 00.03 Assignment**

The CONTRACTOR shall not assign, transfer, convey, sublet or otherwise dispose of this Contract or of its rights, title or interest in or to the same or any part thereof. If the CONTRACTOR shall assign, transfer, convey, sublet, or otherwise dispose of the Contract or its right, title or interest therein, or any part thereof, such attempted or purported assignment, transfer, conveyance, sublease or other disposition shall be null, void and of no legal effect whatsoever, and shall not exonerate CONTRACTOR's surety(ies), and the Contract may, at the option of the DISTRICT, be terminated, revoked and annulled, and the DISTRICT shall thereupon be relieved and discharged from any and all liability and obligations growing out of the same to the CONTRACTOR, and to its purported assignee or transferee.

#### **00 72 00.04 Performance/Payment Bond**

Unless otherwise specified in any Special Conditions, CONTRACTOR shall furnish a performance bond and payment bond each in the amount equal to 100% of the Contract amount. The performance bond shall guarantee the prompt, competent and faithful performance of all terms and conditions of the Contract. The payment bond shall be for 100% of the Contract amount and guarantee, without limitation, the payment in full of all claims for labor, services, materials, supplies, and the like, for the Work as required by Civil Code §§ 9550 and 9554. All bonds shall be provided by an admitted surety insurer acceptable to the DISTRICT, in its absolute discretion. Personal sureties and unregistered sureties are unacceptable. A corporate surety authorized and admitted to transact business in California shall provide the bonds. The bonds shall be in the form set forth in these Contract Documents and shall also contain all other requirements prescribed by Applicable Law. CONTRACTOR shall supply DISTRICT with documentation establishing the necessary requirements of the surety consistent with California law. To the extent, if any, the Contract amount is increased in accordance with the Contract Documents. CONTRACTOR shall cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to DISTRICT. The bonds shall further provide no change or alteration of the Contract Documents (including, without limitation, an increase in the Contract amount, as referred to above), adjustment to any milestones and/or Contract time, or modifications of the time, terms, or conditions of payment to the CONTRACTOR will release or exonerate the sureties. If CONTRACTOR fails to furnish the required bonds or fails to keep such bonds in full force and effect up through such times that such bonds are otherwise required to be in force and effect under the law, DISTRICT may terminate CONTRACTOR's right to proceed with the Work and/or terminate the Contract for cause.

#### **00 72 00.05 Protection of Work and Property**

A. CONTRACTOR shall be responsible for all damages to persons or property which occur as a result of CONTRACTOR's fault or negligence in connection with the performance of this Contract. CONTRACTOR shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by DISTRICT. All CONTRACTOR responsibilities extend to the protection from vandalism and associated costs. With the exception of damage to the work caused by "acts of God," as defined in Public Contract Code Section 7105, CONTRACTOR assumes the risk for all work performed under this Contract. CONTRACTOR shall adequately protect adjacent property from settlement or loss of lateral support as provided by law and this Contract. CONTRACTOR shall take, and require all subcontractors to take, all necessary precautions for the safety of workers employed on the Project and shall comply with applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the work is being performed. In an emergency affecting safety of life, work, or adjoining property, the CONTRACTOR is permitted to act at its

discretion, without special instruction or authorization from ARCHITECT/ENGINEER or DISTRICT, to prevent any threatened loss or injury; and CONTRACTOR shall act if authorized or instructed by ARCHITECT/ENGINEER or DISTRICT. Any compensation claimed by CONTRACTOR on account of emergency work shall be determined by the Contract.

B. CONTRACTOR shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by the DISTRICT. CONTRACTOR shall provide heat, cooling, covering, security, and enclosures as necessary to protect all work, materials, equipment, appliances and tools against damage or loss.

C. CONTRACTOR shall take adequate precautions to protect existing sidewalks, curbs, pavements, landscaping, utilities, adjoining property, structures, and other improvements; and avoid damage to them and repair any damage caused by construction operations.

D. CONTRACTOR shall:

1. Enclose the work area with substantial barricade and arrange work to cause a minimum of inconvenience and danger to students and staff in their regular school activities.
2. Provide substantial barricades around any shrubs or trees to be preserved and ensure adequate irrigation for protection of existing plant material affected by the CONTRACTORS work.
3. Deliver materials to the building area over the route designated by ARCHITECT/ENGINEER or DISTRICT.
4. Take preventative measures to eliminate objectionable dust.
5. Confine apparatus, the storage of materials, and the operations of its workers within limits indicated by law, ordinances, permits, or directions of ARCHITECT/ENGINEER or DISTRICT and not unreasonably encumber the premises with materials; enforce all instruction of DISTRICT and ARCHITECT/ENGINEER regarding signs, advertising, fires, danger signals, barricades and smoking, and require that all persons employed on the Project comply with all regulations while on the construction site.
6. Exercise reasonable care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If markers are disturbed, they shall be replaced by approved civil engineer at no cost to DISTRICT.
7. Not commence work earlier than local ordinances permit nor later than hours permitted.
8. Provide in writing after hours **Emergency Contact information (Attachment A)**, of company representative(s) to DISTRICT with Notice of Award submittals. In the event of inability to contact the CONTRACTOR within 30 minutes, DISTRICT is authorized to mitigate the emergency and withhold from contract associated costs.

#### **00 72 00.06 Defense and Indemnification**

To the maximum extent permitted by Civil Code Section 2782 et seq., DISTRICT shall not be liable for, and CONTRACTOR shall defend and indemnify DISTRICT and its officers, agents, employees and volunteers (collectively 'DISTRICT PARTIES'), against, any and all claims, deductibles, self-insured retentions, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs (hereinafter collectively referred to as 'Claims'), which arise out of or are in any way connected to the Work covered by this Contract arising either directly

or indirectly from any act, error, omission or negligence of CONTRACTOR or its officers, employees, agents, contractors, subcontractors, suppliers, licensees, or servants, including, without limitation, Claims caused by the concurrent negligent act, error or omission, of DISTRICT PARTIES. However, CONTRACTOR shall have no obligation to defend or indemnify DISTRICT PARTIES against Claims caused by the active negligence, sole negligence or willful misconduct of DISTRICT PARTIES. This indemnification shall apply to all liability, as provided for above, regardless of whether any insurance policies are applicable, and insurance policy limits do not act as a limitation upon the amount of the indemnification to be provided by the CONTRACTOR. These obligations of CONTRACTOR shall continue to remain in full force and effect following termination and/or completion of the Contract and Work.

**00 72 00.07 Patents, Royalties, and Indemnification**

The CONTRACTOR shall hold harmless, indemnify and defend the DISTRICT, its officers, agents, employees and members of its governing board, from any liability, cost, demand, judgment, and expense, including attorney fees and costs, arising out of or in any manner related to use of any patented or unpatented invention, process, infringement of patent rights action, section or appliance manufactured or used in the performance of this Contract, including its subsequent use by DISTRICT, unless otherwise specifically provided in the Contract documents and such liability arises from the sole negligence or willful misconduct of the DISTRICT. The CONTRACTOR shall pay all royalties and license fees. If the CONTRACTOR has reason to believe the required design, process, or product is an infringement of a patent, the CONTRACTOR shall be responsible for such loss unless such information is promptly furnished to the ARCHITECT/ENGINEER.

**00 72 00.08 Excise Taxes**

If any transaction under this Contract constitutes a sale on which a federal excise tax is imposed under federal excise tax law and the sale is exempt from such excise tax because it is a sale to a state or local government for its exclusive use, upon request the DISTRICT will execute a certificate of exemption which will certify (1) that the DISTRICT is a political subdivision of the State for the purpose of such exemption and (2) that the sale is for the exclusive use of the DISTRICT. No excise tax for materials shall be included in any bid price.

**00 72 00.09 Audit**

Pursuant to and in accordance with the provisions of Government Code Section 8546.7, or any amendments thereto, all books, records and files of the DISTRICT, the CONTRACTOR, any subcontractor, or material or equipment supplier connected with the performance of this Contract involving the expenditure of public funds in excess of \$10,000 including, but not limited to, the costs of administration of the Contract, shall be subject to, at the request of the DISTRICT, the examination and audit of the State Auditor or as part of any audit of the DISTRICT for a period of three (3) years after final payment is made under this Contract.

**00 72 00.10 Binding Effect**

This Agreement shall inure to the benefit of and shall be binding upon the CONTRACTOR and DISTRICT and their respective successors, heirs and assigns.

**00 72 00.11 No Waiver**

The failure of the DISTRICT in any one or more instances to insist upon strict performance of any of the terms and provisions of this Contract or to exercise any option herein conferred shall not be construed as a waiver of relinquishment, to any extent, of the right to assert or rely upon any such terms, provisions, or option on any future occasion.

**00 72 00.12 Severability**

If any provision of this Contract shall be held invalid or unenforceable by a court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision hereof.

**00 72 00.13 Notice and Service**

A. Any notice from one party to the other under this Contract shall be in writing and shall be dated and signed by the party giving the notice or by a duly authorized representative of the party. Unless required otherwise by law, any notice shall not be effective for any purpose unless served in one of the following ways:

1. If notice is given to DISTRICT, it shall be given by personal delivery to ARCHITECT/ENGINEER or DISTRICT, or by depositing it in the United States mail, enclosed in a sealed envelope addressed to DISTRICT for attention of ARCHITECT/ENGINEER and sent by registered or certified mail with postage prepaid.
2. Unless required otherwise by law, if notice is given to CONTRACTOR, it shall be given by personal delivery to CONTRACTOR or to CONTRACTOR'S Superintendent at the project site, or by fax number / e-mail address provided on contract documents, or by depositing it in the United States mail, enclosed in a sealed envelope addressed to CONTRACTOR at CONTRACTOR'S regular place of business, or at any other address which may have been established for the conduct of work under this Contract and sent by registered or certified mail with postage prepaid.
3. If notice is given to the Surety or other person, it shall be given by personal delivery to the Surety or other person, or by depositing it in the United States mail, enclosed in a sealed envelope, addressed to the Surety or person at its address and sent by registered or certified mail with postage prepaid.

**00 72 00.14 Time of Commencement and Completion**

A. Commencement: The Contract Time will commence on the date specified in the Notice to Proceed. DISTRICT will issue the Notice to Proceed within sixty (60) days after the Notice of Award, unless otherwise stated in the Bid Documents. If, for any reason other than a pre-planned reason stated in the Bid Documents, DISTRICT does not issue the Notice to Proceed within this sixty (60) day period, the Contract will be terminated for convenience by DISTRICT, unless DISTRICT and CONTRACTOR mutually agree in writing to extend the period within which the Notice to Proceed may be issued.

B. Completion: The date of completion of the Project, or designated portion thereof, is the date certified by the ARCHITECT/ENGINEER when construction is complete in accordance with the Contract Documents.

**00 72 00.15 District's Right to Terminate or Suspend Contract**

A. Termination For Cause: If CONTRACTOR refuses or fails to pursue or complete the Project, or any part thereof, with sufficient diligence to ensure its completion within the time specified, or any extension, or fails to complete the Project within the time required, or if CONTRACTOR should file a petition for relief as a debtor, or should relief be ordered against CONTRACTOR as a debtor under Title 11 of the United States Code, or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or if CONTRACTOR should refuse or fail to supply enough properly skilled workers or proper materials to complete the work in the time specified, except in cases for which extension of time is provided, or if CONTRACTOR should fail to make prompt payment to subcontractors or suppliers for material, labor, services, or equipment, or disregard laws, ordinances, rules, codes, regulations, Applicable Law, or instructions of DISTRICT or requirements of any public entity having jurisdiction over the Work or if the CONTRACTOR disregards proper directives of the ARCHITECT/ENGINEER, the DISTRICT's Inspector/IOB or DISTRICT under the Contract Documents; OR if the CONTRACTOR performs Work which deviates from the Contract Documents and neglects or refuses to timely correct such Work, or if CONTRACTOR or its subcontractors should violate any of the provisions of this Contract,

DISTRICT may serve written notice of its intention to terminate this Contract upon CONTRACTOR and its Surety, without prejudice to any other right or remedy. The notice shall contain the reasons for the intended termination. Unless the condition or violation ceases and arrangements satisfactory to DISTRICT for correction are made within ten (10) days after the service of the notice, then DISTRICT may terminate the Contract and/or the CONTRACTOR's performance of the Contract, in whole or in part. Once such time period passes after notice is given and DISTRICT determines that sufficient cause exists to justify the action, DISTRICT may terminate the Contract without prejudice to any other right or remedy the DISTRICT may have, after giving the CONTRACTOR and the Surety at least seven (7) days advance written notice of the effective date of termination. DISTRICT shall have the sole discretion to permit the CONTRACTOR to remedy each or any cause for the termination without waiving the DISTRICT's right to terminate the Contract, or otherwise waiving, restricting or limiting any other right or remedy of DISTRICT under the Contract Documents, the performance bond, or at law. This Contract shall terminate on the effective date provided by DISTRICT in such notice of effective date of termination. In that case, CONTRACTOR shall not be entitled to receive any further payment until the Project is completed, and at such time only if CONTRACTOR is entitled to such payment. In the event of termination, DISTRICT shall immediately serve written notice of termination upon Surety and CONTRACTOR, and Surety shall have the right to take over and perform this Contract, provided, however, that if within seven (7) days after service upon Surety of the notice of termination, Surety does not give DISTRICT written notice of its intention to take over and perform this Contract and does not commence performance within 15 days after the effective date of termination, DISTRICT may take over and complete the work by contract or by any other method it deems advisable for the account and at the expense of CONTRACTOR, and DISTRICT may exclude CONTRACTOR from the site. CONTRACTOR and its surety shall be liable to DISTRICT for any excess cost or other damages incurred by DISTRICT. If DISTRICT takes over the work, as provided above, DISTRICT may take possession of the Work and take possession of and utilize, in completing the Project to the full extent they could be used by the CONTRACTOR, any tools, materials, appliances, construction equipment, machinery, materials, and plant other property belonging to the CONTRACTOR on the work site necessary for completion of the Project, without liability to CONTRACTOR.

B. Additional Rights of DISTRICT Upon Termination: In exercising DISTRICT's right to prosecute the completion of the Work, DISTRICT may also take possession of all materials and equipment stored at the site of the Work or for which the DISTRICT has paid CONTRACTOR, but which are stored elsewhere, and finish the Work as the DISTRICT deems expedient. In exercising the DISTRICT's right to prosecute the completion of the Work, DISTRICT shall have the right to exercise its sole discretion as to the manner, methods, and reasonableness of the costs of completing the Work and DISTRICT shall not be required to obtain the lowest figure for completion of the Work. In the event that DISTRICT takes bids for remedial Work or completion of the Work, CONTRACTOR shall not be eligible for the award of such contract(s).

C. Completion by the Surety: In the event that the Contract or the CONTRACTOR's performance of the Contract is terminated pursuant to this Section, DISTRICT may demand that the Surety take over and complete the Work. DISTRICT may require that in so doing, the Surety not utilize CONTRACTOR in performing and completing the Work. Upon the failure or refusal of the Surety to take over and begin completion of the Work within fifteen (15) days after the effective date of termination, DISTRICT may take over the Work and prosecute it to completion as provided for above. Such remedy is in addition to, and not lieu of, other remedies available to DISTRICT as provided by law or in equity.

D. Assignment and Assumption of Subcontracts and Purchase Orders: DISTRICT shall, in its sole and exclusive discretion, have the option of requiring any Subcontractor or Material Supplier to perform in accordance with its Subcontract or Purchase Order with CONTRACTOR and assign the Subcontract or Purchase Order to DISTRICT or such other person or entity selected by DISTRICT to complete the Work.



E. Costs of Completion: In the event of termination under this Section, CONTRACTOR shall not be entitled to receive any further payment of the Contract Price, if any is due, until the Work is completed. If the unpaid balance of the Contract Price as of the date of termination exceeds DISTRICT's direct and indirect costs and expenses for completing the Work, including without limitation, attorneys' fees and compensation for additional professional and consultant and administrative services, such excess shall be used to pay CONTRACTOR for the cost of the Work performed prior to the effective date of termination with a reasonable allowance for overhead and profit. If DISTRICT's costs and expenses to complete the Work, including but not limited to architectural, engineering, consultant, administrative, managerial, and/or legal services costs and expenses, exceed the unpaid Contract Price, CONTRACTOR and/or the Surety shall pay the difference to DISTRICT within ten (10) days of receipt of a written demand for such payment by DISTRICT to CONTRACTOR and Surety. Expense incurred by DISTRICT, as herein provided, and damage incurred through CONTRACTOR's default, shall be certified to DISTRICT by ARCHITECT.

F. CONTRACTOR Responsibility for Damages: CONTRACTOR and the Surety shall be liable for all damage sustained by DISTRICT resulting from, in any manner, the termination of Contract under this Section, including without limitation, attorneys' fees, and for all costs necessary for repair and completion of the Work over and beyond the Contract Price.

G. Conversion to Termination For Convenience: In the event the Contract is terminated under this Section, and it is finally determined by an arbitrator, court, jury or other tribunal having jurisdiction, for any reason, that CONTRACTOR was not in default under the provisions hereof or that DISTRICT's exercise of its rights under this Section was defective, deficient, ineffective, invalid or improper for any reason, the termination shall be deemed a Termination for Convenience of the DISTRICT and thereupon, the rights and obligations of DISTRICT and CONTRACTOR shall be determined in accordance with the Termination For Convenience Section hereof.

H. DISTRICT's Rights Cumulative: These provisions are in addition to and not a limitation on any other rights or remedies available to the DISTRICT. In the event the Contract is terminated pursuant to this Section, the termination shall not affect or limit any rights or remedies of the DISTRICT against CONTRACTOR or the Surety. The rights and remedies of DISTRICT under this Section are in addition to, and not in lieu of, any other rights and remedies provided by law or otherwise under the Contract Documents. Any retention or payment of monies to CONTRACTOR by DISTRICT shall not be deemed to release CONTRACTOR or its Surety from any liability hereunder.

I. Termination For Convenience: The DISTRICT may at any time, in its sole and exclusive discretion, by written notice to the CONTRACTOR, terminate the Contract in whole or in part when it is in the interest of, or for the convenience of, the DISTRICT. Upon receipt of written notice from the DISTRICT of such suspension for the DISTRICT's convenience, the CONTRACTOR shall:

1. Cease operations as directed by the DISTRICT in the notice; and
2. Take actions necessary, or that the DISTRICT may direct, for the protection and preservation of the Work.

In such case, the CONTRACTOR shall be entitled to payment for:

1. Work actually performed and in place as of the effective date of such termination for convenience, plus fifteen percent (15%) for profit and overhead on such Work,
2. Reasonable costs associated with demobilization that represent excess demobilization costs above what would have normally been expected if the contract had been completed, or as defined in the CONTRACTOR's Schedule of Values, plus fifteen percent (15%) for profit and overhead for such demobilization costs, and;

3. Reasonable termination expenses for protection of Work in place and suitable storage and protection of materials and equipment delivered to the site of the Work but not yet incorporated into the Work, provided that such payments exclusive of termination expenses shall not exceed the total Contract Price as reduced by payments previously made to the CONTRACTOR and as further reduced by the value of the Work as not yet completed. The CONTRACTOR shall not be entitled to profit and overhead on Work which was not performed as of the effective date of the termination for convenience by the DISTRICT. The DISTRICT may, in its sole discretion, elect to have subcontracts assigned after exercising the right hereunder to terminate for the DISTRICT's convenience.

J. Suspension By The DISTRICT For Convenience: The DISTRICT may, without cause, order the CONTRACTOR in writing to suspend, delay, or interrupt the Work in whole or in part for such period of time as the DISTRICT may determine.

K. Adjustments: An adjustment shall be made for increases in the cost of performance of the Contract, including profit on the increased cost of performance caused by suspension, delay, or interruption. No adjustment shall be made to the extent:

1. that performance is, was or would have been so suspended, delayed, or interrupted by another cause for which the CONTRACTOR is responsible or if a suspension of the work is ordered by the DISTRICT due to the failure on the part of the CONTRACTOR to carry out orders or to perform any provisions of the Contract, the days on which the suspension order is in effect shall be considered working days, and shall not in any way modify or invalidate any of the provisions of this Contract, and the CONTRACTOR shall not be entitled to any damages or compensation on account of such suspension or delay; or
2. that an equitable adjustment is made or denied under another provision of this Contract.

L. Adjustments for Fixed Cost: Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.

M. Termination Due To Discovery Of Unknown Or Changed Conditions: The DISTRICT reserves the right to terminate this Contract should the DISTRICT determine not to proceed because of the discovery of any unknown or changed condition described in the Contract Documents. The CONTRACTOR shall receive payment for all Work performed to the date of termination in accordance with the provisions of this Section.

N. Mutual Termination For Convenience: The CONTRACTOR and the DISTRICT may mutually agree in writing to terminate this Contract for convenience. The CONTRACTOR shall receive payment for all Work performed to the date of termination in accordance with the provisions of Termination for Convenience.

#### **00 72 00.16 Prohibited Interests/Conflict of Interest**

CONTRACTOR is responsible for understanding and ensuring adherence to California Government Code section 1090 et seq., with respect to the Project. Pursuant to Government Code section 1090, no DISTRICT officers or employees shall be financially interested in any contract made by them in their official capacity, or by any body or board of which they are members. Nor shall DISTRICT officers or employees be purchasers at any sale or vendors at any purchase made by them in their official capacity. No official or employee of DISTRICT who is authorized in such capacity and on behalf of DISTRICT to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting or approving, any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the Project, shall become, directly or indirectly, financially interested in the Project or in any part thereof.

An officer shall not be deemed to be interested in a contract entered into by the Board if the officer has only a "remote interest" in the contract (as "remote interest" is defined in Government Code section 1091(b)) and if the fact of that

interest is disclosed to the Board and noted in its official records, and thereafter the Board authorizes, approves, or ratifies the contract in good faith by a vote of its membership sufficient for the purpose without counting the officer's vote with the remote interest per Government Code 1091.

By way of non-exclusive example relating to whether a financial interest is a "remote interest" or not:

- 1) If the date upon which CONTRACTOR first started doing business with a DISTRICT Officer/Board Member (i.e., the date CONTRACTOR first received goods or services supplied by the Board Member) was at least 5 years prior to Board Member's election or appointment, then the Board Member has a remote interest and CONTRACTOR is not prohibited from submitting a bid on this Project.
- 2) If the date upon which CONTRACTOR first started doing business with the Officer/Board Member (i.e., the date CONTRACTOR first received goods or services supplied by a Board Member) is less than five years before Board Member's election or appointment, then the Board Member has a prohibited conflict of interest and CONTRACTOR cannot bid on this project.
- 3) The provision of a bid/quote to CONTRACTOR over 5 years prior to Board Member's election or appointment, without the goods or services included in the bid actually being furnished to CONTRACTOR, i.e., an unaccepted bid/quote, does not qualify to cause a financial interest to be a "remote interest" as that term is defined in California Government Code section 1091(b)(8).

In accordance with Government Code section 1092, every contract made in violation of any of the provisions of Section 1090 may be avoided at the instance of any party except the Officer (Board Member) interested therein. No such contract may be avoided because of the interest of an Officer (Board Member) therein unless such contract is made in the official capacity of such Officer, or by the Board. In the event any such contract is avoided due to a violation of California Government Code section 1090; CONTRACTOR shall receive no compensation and shall repay DISTRICT any compensation received by CONTRACTOR hereunder. CONTRACTOR shall not aid, abet or knowingly participate in a violation of Government Code Section 1090, et seq.

**00 72 00.17 Architect/Engineer**

A. The ARCHITECT/ENGINEER, as an agent of the DISTRICT, shall be DISTRICT's representative during the construction period and shall observe the progress and quality of the Work on behalf of DISTRICT. ARCHITECT/ENGINEER shall have authority to stop work whenever stoppage may be necessary, in ARCHITECT/ENGINEER'S reasonable opinion, to ensure the proper execution of this Contract.

B. Nothing contained in the Contract Documents shall create any contractual relationship between the ARCHITECT/ENGINEER and the CONTRACTOR.

C. ARCHITECT/ENGINEER as appearing in these specifications means the ARCHITECT/ENGINEER whose signature appears on the cover sheet of these specifications as having prepared the plans and specifications, if applicable, and as defined in the Definitions herein.

D. The ARCHITECT/ENGINEER will provide general Administration of the construction Contract, including the performance of the functions hereinafter described. The ARCHITECT/ENGINEER will perform their duties in accordance with all applicable provisions of law including, but not necessarily limited to, Title 24 of the California Code of Regulations. The ARCHITECT/ENGINEER will submit verified reports in accordance with all applicable provisions of law including, but not necessarily limited to, Title 24 of the California Code of Regulations.

E. The ARCHITECT/ENGINEER will be the DISTRICT's representative during construction until final payment. The ARCHITECT/ENGINEER will have authority to act on behalf of the DISTRICT to the extent provided in the Contract Documents, unless otherwise modified by written instrument which will be provided to the CONTRACTOR.

The ARCHITECT/ENGINEER will advise and consult with the DISTRICT, and all of the DISTRICT's instructions to the CONTRACTOR shall be issued through the ARCHITECT/ENGINEER.

F. The ARCHITECT/ENGINEER shall at all times have access to the Work wherever it is in preparation and progress. The CONTRACTOR shall provide facilities for such access so the ARCHITECT/ENGINEER may perform their functions under the Contract Documents.

G. The ARCHITECT/ENGINEER will make periodic visits to the site to familiarize themselves generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. On the basis of their on-site observations as an ARCHITECT/ENGINEER, they will keep the DISTRICT informed of the Progress of the Work and will endeavor to protect the DISTRICT against defects and deficiencies in the Work of the CONTRACTOR. The ARCHITECT/ ENGINEER will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The ARCHITECT/ENGINEER will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work.

H. Based on such observations and the CONTRACTOR'S Application for Payment, the ARCHITECT/ENGINEER will determine and verify the amounts owing to the CONTRACTOR and will issue recommendations to the DISTRICT for payment as provided herein.

I. The ARCHITECT/ENGINEER will be, in the first instance, the interpreter of the requirements of the Contract Documents. The ARCHITECT/ENGINEER will, within a reasonable time, render such interpretations as necessary for the proper execution of progress of the Work.

J. The ARCHITECT/ENGINEER will have authority to reject Work which does not conform to the Contract Documents. Whenever, in their reasonable opinion, they consider it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, they will have authority to require the CONTRACTOR to stop the work or any portion thereof, or to require special inspection or testing of the Work as provided herein whether or not such Work be then fabricated, installed or completed. However, neither the ARCHITECT/ENGINEER's authority to act under this direction, nor any decision made by them in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the ARCHITECT/ENGINEER to the CONTRACTOR, any Subcontractor, any of their agents or employees, or any other person performing any of the Work.

K. The ARCHITECT/ENGINEER will review Shop Drawings and samples as provided in the Contract Documents.

L. The ARCHITECT/ENGINEER will prepare change orders in accordance with the Contract Documents and will have authority to order minor changes in the Work. Change orders shall be signed by the DISTRICT, ARCHITECT/ENGINEER and CONTRACTOR and may subsequently be ratified by the governing board.

M. The ARCHITECT/ENGINEER will conduct inspections to determine the date of final completion, will receive written guarantees and related documents required by the Contract and assembled by the CONTRACTOR.

N. The ARCHITECT/ENGINEER will not be responsible for the acts or omissions of the CONTRACTOR, or any subcontractors, or any of his or their agents or employees, or any other persons performing any of the Work.

#### **00 72 00.18 Communications**

A. The CONTRACTOR shall forward all communications to the DISTRICT through the ARCHITECT/ENGINEER, if utilized with the exception of post completion warranty items.

B. The DISTRICT shall issue all instructions to the CONTRACTOR through the ARCHITECT/ENGINEER, if utilized with the exception of post completion warranty items.

**00 72 00.19 Documents on Site**

CONTRACTOR shall keep a copy of all Contract Documents, including addenda, change orders, shop drawings, plans, schedules, specifications, copies of Titles 19 and 24 of the California Code of Regulations, and other modifications on the job at all times. The documents shall be kept in good order and accurately marked promptly to record all changes made during construction. The documents shall be available to ARCHITECT/ENGINEER and its representatives at all times. CONTRACTOR shall be acquainted with and comply with all statutes and regulations as they relate to the project including, without limitation, the applicable provisions of Titles 8, 17 and 24 of the California Code of Regulations (See particularly the Duties of Inspector and Contractor, Title 24, California Code of Regulations, sections 4-342 and 4-343).

**00 72 00.20 Mutual Responsibility of Contractors**

A. The CONTRACTOR shall afford other contractors' reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work and shall properly connect and coordinate his Work with theirs.

B. If the CONTRACTOR'S Work depends for proper execution or results upon the work of any other separate contractor, the CONTRACTOR shall inspect and promptly report to the ARCHITECT/ENGINEER any discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the CONTRACTOR to inspect and report shall constitute acceptance of the other contractor's work as fit and proper to receive his Work, and waiver by CONTRACTOR of any claim for additional time or monetary claim resulting from the same.

C. Should the CONTRACTOR cause damage to the work or property of any separate contractor on the Project, the CONTRACTOR shall, defend, indemnify and hold the DISTRICT harmless for any actual or alleged damages, costs, and expenses as a result thereof.

**00 72 00.21 Integration of Work**

A. CONTRACTOR shall do all cutting, fitting, patching, and preparation of work as required to make its several parts come together properly and fit it to receive or be received by work of other contractors or existing conditions showing upon, or reasonably implied by the drawings and specifications, and shall follow all directions given by the ARCHITECT/ENGINEER. Only tradespersons skilled and experienced in cutting and patching shall perform such work. CONTRACTOR shall not unreasonably withhold consent to the request of DISTRICT or separate contractor to cut, patch or otherwise alter the Work.

B. All costs caused by defective or ill-timed work shall be borne by the CONTRACTOR.

C. CONTRACTOR shall not endanger any work, or the fully or partially completed construction of the DISTRICT or separate contractor by cutting, excavating, or otherwise altering work and shall not cut or alter work of any DISTRICT or any other contractor without the written consent of the ARCHITECT/ENGINEER. CONTRACTOR shall be solely responsible for protecting existing work on adjacent properties and shall obtain all required permits for shoring and excavations near property lines.

D. When modifying existing work or installing new work adjacent to existing work, CONTRACTOR shall match, as closely as conditions of site and materials will allow, the finishes, textures, and colors of the original work, refinishing existing work as required, at no additional cost to DISTRICT.

E. CONTRACTOR is aware that the project may be split into several phases. If the Project is split into phases, then CONTRACTOR has made allowances for any delays or damages which may arise from coordination with contractors for other phases. If any delays should arise from a contractor working on a different phase, CONTRACTOR's sole remedy for damages, including delay damages, shall be against the contractor who caused such damage and not the DISTRICT. CONTRACTOR shall provide access to contractors for other phases as necessary to prevent delays and damages to contractors working on other phases of construction.

#### **00 72 00.22 Soils Investigation Report**

When a soils investigation report obtained from test holes at work site is available, the report shall not be a part of this Contract but will be made available. Any information obtained from the report, or any information given on drawings as to subsurface soil conditions or to elevations of existing grades or elevations of underlying rock is approximate only, is not guaranteed, and does not form a part of this Contract. DISTRICT does not assume any responsibility whatsoever with respect to the sufficiency or accuracy of any borings made, or of any logs of the test borings, or of other investigations, or of any soil's reports furnished, or of the interpretations to be made from such information. There is no warranty or guarantee, either express or implied that the conditions indicated by such investigations, borings, logs, soil reports or other information are representative of those existing throughout the site of the Project, or any part thereof, or that unforeseen developments may not occur. At the DISTRICT's request, the CONTRACTOR shall make available to the DISTRICT the results of any Site investigation, test borings, analyses, studies or other tests conducted by or in the possession of the CONTRACTOR of any of its agents. CONTRACTOR is required to make a visual examination of the site and must make whatever tests it deems appropriate to determine the underground condition of the soil. CONTRACTOR agrees that it will make no claim against DISTRICT for damages in the event that, during progress of the Work, CONTRACTOR encounters subsurface or latent conditions at the site materially different from those shown on drawings or indicated in specifications, or for unknown conditions of an unusual nature which differ materially from those ordinarily encountered in work of the type provided for in the plans and specifications.

#### **00 72 00.23 Utilities: Removal and Restoration**

A. The CONTRACTOR agrees and is required to coordinate and fully cooperate with the DISTRICT and utility owners for the location, relocation, and protection of utilities. The CONTRACTOR's attention is directed to the existence of utilities, underground and overhead, necessary for normal house and commercial service for all buildings along the line of work. The CONTRACTOR shall make arrangements with utility owners for the location of house and commercial services lines in advance of the actual construction and for the relocation of such facilities, if necessary, by the utility owner or the CONTRACTOR.

B. Pursuant to Government Code section 4215, DISTRICT assumes the responsibility for removal, relocation and protection of utilities located on the construction site at the time of commencement of construction under this Contract with respect to any utility facilities which are not identified in the plans and specifications. CONTRACTOR shall notify the DISTRICT a minimum of forty-eight (48) hours (two District business days) in advance of all trenching and earthwork. CONTRACTOR shall notify and receive clearance from any cooperative agency, including but not limited to Underground Service Alert ("USA"), in accordance with Government Code section 4216, et seq., and marking all proposed excavation/trenches in white paint prior to submitting DISTRICT form titled, **Notice of Start/Request for Location of District Utilities (Attachment B)**. CONTRACTOR shall promptly provide a copy of all such notifications to the DISTRICT. CONTRACTOR shall review DISTRICT as-built drawings. CONTRACTOR shall not be assessed liquidated damages for delay in completion of the project, when such delay

was caused by the failure of the DISTRICT or the owner of the utility to provide for removal or relocation of such utility facilities DISTRICT shall compensate CONTRACTOR for the costs of locating, repairing damage not due to the failure of CONTRACTOR to exercise reasonable care, and removing or relocating utility facilities not indicated in the plans and specifications with reasonable accuracy, and for equipment on the project necessarily idled during such work. Repair and or compensation for repair of marked utilities is the responsibility of the party responsible for said damage. The DISTRICT retains the right to either self-perform repairs or require the CONTRACTOR to complete repairs. If CONTRACTOR is at fault, applicable payment for the repair will be deducted from payment of the contract. Nothing herein shall be construed to preclude assessment against the CONTRACTOR for any other delays in completion of the Work. Nothing herein shall be deemed to require the DISTRICT to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Site can be inferred from the presence of other visible facilities, such as buildings, or meter junction boxes on or adjacent to the Site; provided, however, nothing herein shall relieve the DISTRICT from identifying main or trunk lines in the plans and specifications.

C. If while performing work under this Contract, CONTRACTOR discovers utility facilities not identified by DISTRICT in the Contract plans or specifications, CONTRACTOR shall immediately notify in writing the DISTRICT and the utility. CONTRACTOR may not rely upon and must question in writing to the DISTRICT and the ARCHITECT/ENGINEER any information which appears incorrect based upon CONTRACTOR's Site inspection, knowledge of the Project, and prior experience with similar projects), unless specifically stated in writing that the CONTRACTOR may rely upon the designated information.

D. No time extensions will be granted for utility work that, in DISTRICT's opinion, can proceed concurrently with the Work of this Contract.

E. It is understood and agreed that the failure of the CONTRACTOR or its subcontractor to comply fully with these provisions or California Government Code section 4215, et seq., constitutes failure of the CONTRACTOR to exercise reasonable care and precludes CONTRACTOR's recovery from DISTRICT for any related costs or damages.

**00 72 00.24 Use or Existence of Asbestos Materials/Products, PCB's, Mercury Waste, Lead Based Paint, Petroleum, and/or Other Hazardous Materials**

A. Contractor's Certification of Non-Use of Asbestos or Asbestos Containing Products or Materials: CONTRACTOR shall not use any asbestos or asbestos containing products or materials in performing the Work under this Contract. Upon completion of the Project, CONTRACTOR shall certify in writing to DISTRICT that no asbestos or asbestos containing materials or products were used by CONTRACTOR or any subcontractor in performing the work required by this Contract.

B. Responsibility: DISTRICT shall be responsible for any asbestos, polychlorinated biphenyl's (PCB's), mercury waste, lead based paint and petroleum discovered, uncovered and/or otherwise revealed at the Project site which were not identified, described, shown or indicated in the Bidding Documents to be within the scope of the Work. DISTRICT is not responsible for any such materials brought to the Project site by CONTRACTOR, any Subcontractor, material supplier or anyone else CONTRACTOR is directly or indirectly responsible for.

C. Asbestos, PCB's, Mercury Waste, Lead Based Paint, Petroleum, and/or Other Hazardous Materials: If, during construction of the Work in areas where CONTRACTOR is required to perform Work, CONTRACTOR discovers, uncovers and/or otherwise reveals a material reasonably believed to be asbestos, PCB's, mercury waste, lead based paint, petroleum, and/or other hazardous materials which were not identified, described, shown or indicated in the Bidding Documents to be within the scope of the Work, CONTRACTOR shall immediately stop Work in the affected

area and provide written notice to ARCHITECT, advising of the circumstances of such discovery, Work stoppage and whether or not such material was generated by CONTRACTOR or DISTRICT. DISTRICT shall retain an independent testing laboratory to determine the nature of the material encountered and whether corrective measures or remedial action is required. If test results indicate and/or otherwise confirm the material as asbestos, PCB's, mercury waste, lead based paint, petroleum, and/or other hazardous materials requiring treatment and/or removal, ARCHITECT may issue an order suspending the work, and DISTRICT may elect to have such remediation work performed by others under separate contract. Alternatively, ARCHITECT may issue a Construction Directive for the legal treatment and/or removal and disposal thereof. If CONTRACTOR believes a Construction Directive establishes a basis for an adjustment in the Contract Amount and/or Contract Time, CONTRACTOR shall, submit a Change Order Proposal within ten (10) days of the date of issuance of the Construction Directive. After treatment and/or removal, the independent testing laboratory shall test and certify the asbestos, PCB's, mercury waste, lead based paint, petroleum, and/or other hazardous materials have been removed and/or controlled to within legal limits and requirements. Upon receipt of such test results, ARCHITECT will provide notice to CONTRACTOR to proceed with construction in affected Work areas.

D. Indemnification By DISTRICT: In the event the presence of the materials as set forth in this Section are not caused by CONTRACTOR or some person or entity directly or indirectly performing under CONTRACTOR or its Subcontractors, DISTRICT shall pay for all costs of testing and remediation, if any. In addition, DISTRICT shall defend, indemnify and hold harmless CONTRACTOR and its agents, officers, directors and employees from and against any and all claims, damages, losses, costs and expenses incurred in connection with or arising out of, or relating to, the performance of the Work in the area affected by such materials.

E. Indemnification By CONTRACTOR: In the event the presence of the materials as set forth in this Section are caused by CONTRACTOR, Subcontractors, suppliers, or anyone else who would otherwise be a "claimant" under Civil Code § 9100, CONTRACTOR shall pay for all costs of testing and remediation, if any, and shall indemnify and hold DISTRICT harmless from and against such costs even if CONTRACTOR itself is without fault. In addition, CONTRACTOR shall defend, indemnify and hold harmless DISTRICT, ARCHITECT, and their consultants, and its and/or their respective agents, officers, representatives, consultants, and employees from and against any and all claims, actions, damages, losses, costs, penalties and expenses incurred in connection with, arising out of, or relating to, the presence of such materials even if CONTRACTOR itself is without fault. The DISTRICT shall have the right to assess any and all costs or damages against the Contract funds, the CONTRACTOR, and/or the performance bond.

#### **00 72 00.25 Assignment of Antitrust Actions**

A. CONTRACTOR agrees to be bound by and comply with the provisions of Public Contract Code Section 7103.5 which provides:

1. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body (DISTRICT) all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C., Section 15) or under the Cartwright Act (Chapter 2 commencing with Section 16700 of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders' final payment to the contractor, without further acknowledgment by the parties.
2. CONTRACTOR, for itself and all subcontractors, agrees to assign to DISTRICT all rights, title and interest in and to all such causes of action CONTRACTOR and all subcontractors may have under the Contract. This assignment shall become effective at the time DISTRICT tenders' final payment to the CONTRACTOR and CONTRACTOR shall require assignments from all subcontractors in order to comply therewith.



**00 72 00. 26 Separate Contracts/District Forces/Other Contractors**

A. DISTRICT reserves the right to perform construction or operations related to the Project with the DISTRICT's own forces or to award separate contracts in connection with other portions of the Project or other construction or operations at or about the Site. If the CONTRACTOR claims that delay or additional cost is involved because of such action by the DISTRICT, the CONTRACTOR shall seek an adjustment to the Contract Price, or the Contract Time as provided for in the Contract Documents. Failure of the CONTRACTOR to request such an adjustment of the Contract Time or the Contract Price in strict conformity with the provisions of the Contract Documents applicable thereto shall be deemed a waiver of the same. CONTRACTOR shall afford other contractors' reasonable opportunity for introduction and storage of their materials and execution of their work and shall coordinate its work with those other contractors.

B. If any part of CONTRACTOR'S work depends upon work of any other contractor for proper execution or results, CONTRACTOR shall inspect and promptly report in writing to ARCHITECT/ENGINEER any defects in the work that renders it unsuitable for proper execution or results. CONTRACTOR will be held accountable for damages to DISTRICT for that work that it failed to inspect or should have inspected. CONTRACTOR'S failure to inspect and report in writing shall constitute its acceptance of any other contractor's work as fit and proper for reception of its work, except as to defects which may develop in another contractor's work after execution of its work. DISTRICT shall provide for coordination of the activities of the DISTRICT's own forces and of each separate contractor with the Work of the CONTRACTOR, who shall cooperate with them. The CONTRACTOR shall participate with other separate contractors and the DISTRICT in reviewing their respective construction schedules when directed to do so. The CONTRACTOR shall make any revisions to the approved construction schedule for the Work hereunder deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the construction schedules to be used by the CONTRACTOR, separate contractors and the DISTRICT until subsequently revised.

C. To ensure proper execution of CONTRACTOR'S subsequent work, CONTRACTOR shall measure and inspect work already in place and shall report in writing to the ARCHITECT/ENGINEER any discrepancy between executed work and this Contract. The CONTRACTOR shall afford the DISTRICT and any separate CONTRACTORS reasonable opportunity for storage of their materials and equipment and performance of their activities at the Site and shall connect and coordinate the CONTRACTOR's Work, construction and operations with theirs as required by the Contract Documents.

D. CONTRACTOR shall ascertain to CONTRACTOR's satisfaction the scope of the project and nature of any other contracts that have been or may be awarded by DISTRICT in connection with the Project, in order that CONTRACTOR may perform this Contract in the light of any other contracts. Nothing contained in this Contract shall be interpreted as granting to CONTRACTOR exclusive occupancy of the project site. CONTRACTOR shall not cause any unnecessary hindrance or delay to any other contractor working on the project. If simultaneous execution of any contract for the Project is likely to cause interference with performance of some other contract or contracts, DISTRICT shall decide which contractor shall cease work temporarily and which contractor shall continue or whether work can be coordinated so that the contractors may proceed simultaneously. DISTRICT shall not be responsible for any damage suffered or extra costs incurred by CONTRACTOR resulting directly or indirectly from the award of performance or attempted performance of any other contract or contracts on the project or caused by any decision or omission of DISTRICT regarding the order in performing the contracts.

**00 72 00. 27 Nondiscrimination**

In performing this Contract, CONTRACTOR and its subcontractors shall not unlawfully discriminate in the employment of persons on the project because of race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status and sex.

**00 72 00. 28 Subcontracting**

A. CONTRACTOR agrees to bind every subcontractor by the terms and conditions of this Contract as far as the terms are applicable to the subcontractor's work. If CONTRACTOR subcontracts any part of this Contract, CONTRACTOR shall be responsible to DISTRICT for any acts and/or omissions of its subcontractors, suppliers, and of persons either directly or indirectly employed by its subcontractors or suppliers. Nothing contained in this Contract shall create any contractual relationship between any subcontractor/supplier and DISTRICT.

B. DISTRICT's consent to or approval of any subcontractor or supplier under this Contract shall not in any way relieve CONTRACTOR of its obligations under this Contract, and no such consent or approval shall be deemed to waive any provision of this Contract.

C. The substitution of subcontractors shall be permitted only as authorized by Public Contract Code Section 4100 et seq. In the event CONTRACTOR substitutes any subcontractor for a listed subcontractor pursuant to such statutory framework, the new subcontractor shall stand in place and stead of the originally listed subcontractor, and any further request for substitution of the new subcontractor shall only be permitted if it would have been authorized by Public Contract Code Section 4100 et seq. where the subcontractor to be replaced was an originally listed subcontractor. Any subsequent substitution requests must also meet such standards, just as if the subcontractor to be replaced was an originally listed subcontractor.

D. All subcontractors shall be appropriately licensed to perform the work for which employed in conformity with the laws of the State of California.

**00 72 00. 29 Status of Contractor**

A CONTRACTOR is and shall at all times be deemed to be an independent contractor and shall be wholly responsible for the manner in which it performs the services required of it by the terms of the Contract Documents. Nothing contained herein shall be construed as creating the relationship of employer and employee, or principal and agent, between the DISTRICT and CONTRACTOR or any of CONTRACTOR's agents or employees. CONTRACTOR assumes exclusively the responsibility for the acts of its employees as they relate to the services to be provided during the course and scope of their employment. CONTRACTOR, its agents and employees, shall not be entitled to any rights or privileges of DISTRICT employees and shall not be considered, in any manner, to be DISTRICT employees. DISTRICT shall be permitted to monitor the activities of CONTRACTOR to determine compliance with the terms of the Contract Documents.

B. CONTRACTORS are required, by law, to be licensed and regulated by the Contractor's State License Board. Any contractor not so licensed is subject to certain penalties and citations under the law and, if such be the case, the Contract will be considered void and pursuant to Business and Professions Code Section 7028.7.

C. DISTRICT is to at all times have current, CONTRACTOR contact information. If at any time necessary contact cannot be made to CONTRACTOR, the DISTRICT will take whatever measures necessary, and CONTRACTOR will be responsible for any costs incurred.

**00 72 00. 30 Workers**

A. At all times, CONTRACTOR shall enforce strict discipline and good order among its employees and shall ensure that its subcontractors enforce strict discipline and good order among their employees. If any person employed by, or an agent of, CONTRACTOR shall fail or refuse to carry out the directions of DISTRICT, or if any person employed by, or an agent of, any subcontractor or supplier shall fail or refuse to carry out the directions of the CONTRACTOR; or, in the opinion of the DISTRICT, any person working on the Site or the Work is incompetent, unfit, lacks diligence,

is not skilled in the work assigned, consumes or possesses alcoholic beverages, illegal drugs, or tobacco products on the Site, or is disorderly; uses threatening or abusive language to any person representing the DISTRICT on the Work; or is otherwise unsatisfactory, upon DISTRICT's request to CONTRACTOR, he or she shall be dismissed and removed from the Work immediately, and shall not again be employed on the Work except with the written consent of DISTRICT.

B. CONTRACTOR shall provide a competent superintendent and assistants as necessary, all of whom shall be reasonably proficient in speaking, reading and writing English and, who shall be in attendance at the Project site during performance of the Work, attend Project meetings and have prior successful experience in similar projects. The superintendent shall represent CONTRACTOR in the CONTRACTOR's absence, shall have complete authority to represent and act for CONTRACTOR, and communications given to the superintendent shall be as binding as if given to CONTRACTOR. Whenever the Superintendent or his/her assistants are not on site, DISTRICT may stop the work until they arrive.

C. CONTRACTOR and each subcontractor shall: furnish a competent and adequate staff as necessary for the proper administration, coordination, supervision, and superintendence of their portion of the Work; organize the procurement of all materials and equipment so that the materials and equipment will be available at the time they are needed for the Work; and keep an adequate force of skilled workers on the job to complete the Work in accordance with all requirements of the Contract Documents.

#### **00 73 16 Insurance Requirements**

A. Contractor Insurance Requirements: During the term of this Contract, CONTRACTOR shall secure and maintain public comprehensive general liability, workers' compensation, auto liability, Builders Risk and property insurance in amounts provided in the Information to Bidders, Instruction for Insurance article, to protect CONTRACTOR, the DISTRICT and its officers, agents, employees and governing board members from all claims for personal injury, including accidental death, as well as from all claims for property damage arising out of CONTRACTOR's performance of this Contract.

B. Subcontractor Requirements: CONTRACTOR shall require that any subcontractors secure and maintain similar public comprehensive general liability, workers' compensation, auto liability, and property insurance in appropriate amounts.

C. Property Insurance: CONTRACTOR shall purchase and maintain and cause to be maintained property insurance on all work subject to loss or damage. The amount of property insurance shall be sufficient to protect against loss or damage in full until the Project is accepted by DISTRICT. CONTRACTOR and its subcontractors waive all rights against each other and against all other subcontractors, vendors and DISTRICT for loss or damage to the extent reimbursed by Builder's Risk or any other property or equipment insurance applicable to the Project, except such rights as they may have to the proceeds of such insurance. If the policies of insurance referred to in this bid require an endorsement of consent of the insurance company to provide continued coverage where there is a waiver of subrogation, the owners of such policies shall cause them to be so endorsed or obtain such consent.

D. Worker's Compensation Insurance: During the term of this Contract, CONTRACTOR shall provide workers' compensation insurance for all of CONTRACTOR'S employees engaged in work under this Contract on or at the site of the Project and in case any of CONTRACTOR'S work is sublet, CONTRACTOR shall require the subcontractor to provide workers' compensation insurance for all of subcontractor's employees. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the CONTRACTOR'S insurance. In case any class of employees engaged in work under this Contract on or at the site of the Project is not protected under the Workers' Compensation laws, CONTRACTOR shall provide or cause a subcontractor to provide adequate insurance

coverage for the protection of those employees not otherwise protected. CONTRACTOR shall file with the DISTRICT a certificate of workers' compensation coverage pursuant to the Information to Bidders, Instruction for Insurance article, and in compliance with California Labor Code Section 3700. If CONTRACTOR fails to maintain such insurance, DISTRICT may take out compensation insurance which DISTRICT might be liable to pay under the provisions of the Act by reason of an employee of the CONTRACTOR being injured or killed and deduct and retain the amount of the premium for such insurance from any sums due CONTRACTOR.

E. CONTRACTOR shall not commence work or allow any subcontractor to commence work under this Contract until CONTRACTOR has obtained all required insurance and certificates which shall be delivered to and approved by DISTRICT in accordance with Information to Bidders, Instruction for Insurance article.

F. CONTRACTOR shall not commence Work on the Project site before the effective date of the insurance and bonds CONTRACTOR is required to obtain by the Contract Documents. The established date of commencement of the Contract Time will not be changed by the date of such insurance and/or bonds.

### **00 73 19 Student Safety Allowance (Fingerprinting)**

A. Requirements for Contact with Students: Contractor shall comply with Education Code section 45125.2 and this Article. If Contractor's employee(s), agent(s) or subcontractor(s) will have more than limited contact with students, then Contractor must take one or more of the following steps:

1. Install a physical barrier at the worksite to limit contact with pupils.
2. Have an employee, who the Department of Justice has ascertained has not been convicted of a violent or serious felony, continually monitor and supervise employees.
3. Arrange for surveillance by personnel with DISTRICT approval.

B. Emergency or Exceptional Situation: If CONTRACTOR is providing the services in an emergency or exceptional situation, CONTRACTOR is not required to comply with Education Code section 45125.2. An "emergency or exceptional" situation is one in which pupil health or safety is endangered or when repairs are needed to make a facility safe and habitable. DISTRICT shall determine whether an emergency or exceptional situation exists.

C. DISTRICT Processing to Department of Justice: If Contractor is required to receive verification for an employee, agent or subcontractor from the Department of Justice pursuant to this Article or the Education Code, **Contractor will have individual(s) processing submitted through the DISTRICT** to the Department of Justice using the DISTRICT's fingerprinting hardware and materials. The DISTRICT will charge for such assistance at its standard rates charged to its own employees. **Department of Justice clearance processed through any other agency will not be accepted by the DISTRICT.** Refer to Attachment "C" for instructions for obtaining fingerprinting clearance through the DISTRICT.

D. Verification of Compliance Under Penalty of Perjury: Contractor shall certify under penalty of perjury, on a form provided by the DISTRICT, compliance with this Article prior to performing any work in which any employee, agent or subcontractor will have more than limited contact with students.

E. Indemnification and Hold Harmless Agreement: It shall be Contractor's sole responsibility to ensure compliance with Education Code sections 45125.1 and 45125.2 and this Article. In addition to and without limiting any other indemnity promise made in this contract, Contractor agrees to defend, indemnify and hold harmless the DISTRICT for and from any and all actual or potential claims of any kind or description seeking to hold the DISTRICT, its employees or its agents responsible for violation of Education Code sections 45125.1 or 45125.2, or any other

violation arising out of duties imposed by Education Code sections 45125.1 or 45125.2, arising out of Contractor's employee's, agent's or subcontractor's contact with students. Contractor's indemnification obligation shall include, without limitation, judgments, settlements, contributions, payments, fines and penalties, as well as the costs of investigating and complying with equitable decrees or governmental directives. The defense obligation shall include, without limitation, legal fees, litigation expenses, and investigative costs.

F. Definitions:

1. A "violent felony" is any felony listed in subdivision (c) of section 667.5 of the Penal Code.
2. A "serious felony" is any felony listed in subdivision (c) of section 1192.7 of the Penal Code.
3. An "emergency or exceptional situation" is, as determined by the DISTRICT in its sole discretion, a situation in which pupil health or safety is endangered or when repairs are needed to make a school facility safe and habitable.

**00 73 43 Wage Rates**

A. The project is a public works Project, as defined in Labor Code section 1720, and must be performed in accordance with the requirements of Labor Code sections 1720 to 1815 and Title 8 CCR sections 16000 to 17270, which govern the payment of prevailing wage rates on public works projects.

B. Notice is hereby given pursuant to the provisions of Section 1770 et seq of the California Labor Code, Director of the Department of Industrial Relations determined the general prevailing rate of per diem wages, including those for holiday and overtime work, in the locality in which this work is to be performed for each craft or type of workman or mechanic needed to execute the contract which will be awarded to the successful bidder, and the prevailing rates are as set forth in the web address [www.dir.ca.gov/Dirdatabases.html](http://www.dir.ca.gov/Dirdatabases.html) and are incorporated herein by reference. DIR Wage Determinations are kept on file at District Purchasing Department, 4498 N. Brawley Ave., Fresno CA. 93722.

C. When permitted by law, holiday and overtime work shall be paid at a rate of at least one and one-half times the specified rate of per diem wages, unless otherwise specified.

D. Each worker of the CONTRACTOR and any of its subcontractors engaged in work on the Project shall be paid not less than the prevailing wage rate, regardless of any contractual relationship which may be alleged to exist between the CONTRACTOR or any subcontractor and such workers.

E. Each worker needed to execute the Work on the Project shall be paid travel and subsistence payments, as defined in the applicable collective bargaining agreements filed with the Department of Industrial Relations, in accordance with Labor Code Section 1773.1.

F. CONTRACTOR shall post at appropriate and conspicuous location(s) on the Project Site a schedule showing all applicable prevailing wage rates in accordance with Labor Code section 1773.2.

G. As a penalty, the CONTRACTOR and any violating subcontractor under the CONTRACTOR, shall forfeit not more than (\$200) two-hundred dollars for each calendar day, or any portion thereof, any worker is paid less than the established prevailing wage rates for the work or craft in which the worker is employed by CONTRACTOR or any subcontractor on the project. The difference between the established prevailing wage rates and the amount paid to each worker for each whole or partial calendar day for which each worker was paid less than the established prevailing wage rates, shall be paid to each worker by the CONTRACTOR or subcontractor, in accordance with Labor Code Section 1775, and CONTRACTOR and its subcontractors shall comply with Labor Code 1775 in all respects.

H. The subcontracts executed between CONTRACTOR and its subcontractors for the performance of the Work shall include a copy of the provisions of Labor Code Sections 1771, 1775, 1776, 1777.5, 1813, and 1815.

I. Any worker employed to perform work on the Project which is not covered by any classification available in the DISTRICT office, shall be paid not less than the minimum rate of wages specified for the classification which most nearly corresponds with work to be performed by him and that minimum wage rate shall be retroactive to the time of initial employment of the person in the classification.

J. Pursuant to Labor Code Sections 1773.1, per diem wages are deemed to include employer payments for health and welfare, pension, vacation, travel time and subsistence pay.

K. CONTRACTOR and each subcontractor shall keep or cause to be kept accurate payroll records showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by CONTRACTOR and/or each subcontractor in connection with the project. All payroll records shall be made available for inspection as provided by Labor Code Section 1776. The contractor or subcontractor has 10 days in which to comply subsequent to receipt of a written notice requesting the records. As a penalty, the CONTRACTOR shall forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. These penalties shall be withheld from progress payments then due. Failure to timely submit payroll records may result in debarment by the Labor Commissioner. Be aware, California Labor Code Section 1771.5 requires contract payments to be withheld when payroll records are delinquent or inadequate. It is the responsibility of CONTRACTOR to comply with all the provisions of Labor Code Section 1776.

L. The project is subject to compliance monitoring and enforcement by the DIR pursuant to and will require prime contractors and subcontractors to upload **ALL payroll records on the DIR website: <http://www.dir.ca.gov/Public-Works/PublicWorks.html>**. Any additional requirements that materialize from this legislation must be complied with by all contractors to preserve the District's ability to apply for available State bond funding on the project in the future.

#### 00 73 43 1 FEDERAL LABOR, WAGE & HOUR, APPRENTICE, AND RELATED PROVISIONS

##### APPLICABILITY OF THIS SECTION WILL BE NOTED IN THE NOTICE TO BIDDERS

1. As this Project is funded in whole or in part by federal funds, Contractor and all Subcontractors are subject to civil or criminal prosecution for any violation of the federal False Claims Act set forth under section 1001 of title 18 and section 231 of title 31 of the United States Code.

#### 2. **Minimum Wages**

2.1. The Davis-Bacon Act and 29 CFR parts 1 through 7 shall apply if the Project is financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution.

2.2. All laborers and mechanics employed or working upon the Site of the Work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the Project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3) , the full amount of wages and bona fide fringe benefits, or cash equivalents thereof, due at time of payment computed at rates not less than those contained in the applicable wage determination of the Secretary of Labor regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

2.2.1. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of this section; also, regular contributions

made or costs incurred for more than a weekly period, but not less often than quarterly, under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of Work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing Work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which Work is performed. The wage determination including any additional classification and wage rates conformed under this section and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its Subcontractors at the Site of the Work in a prominent and accessible place where it can be easily seen by the workers.

2.2.2. Any class of laborers or mechanics, including helpers, and which is to be employed under the Contract which is not listed in the wage determination shall be classified in conformance with the wage determination. An additional classification and wage rate and fringe benefits will not be approved unless when the following criteria have been met:

2.2.2.1. The Work to be performed by the classification requested is not performed by a classification in the wage determination; and

2.2.2.2. The classification is utilized in the area by the construction industry; and

2.2.2.3. The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

3. If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the District agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the Contractor to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210.
4. In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the District do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contractor shall provide the questions, including the views of all interested parties and the recommendation of the District, to the District for the District's review and referral to the Administrator for determination.
5. The wage rate (including fringe benefits where appropriate) determined pursuant to this section, shall be paid to all workers performing Work in the classification under this Contract from the first day on which Work is performed in the classification.
6. Whenever the minimum wage rate prescribed in any applicable wage determination for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
7. If the Contractor does not make payments to a trustee or other third person, the Contractor may consider, as part of the wages of any laborer or mechanic, the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. If the Secretary of Labor so requires, the Contractor shall set aside in a separate account sufficient assets to meet obligations under the plan or program.
8. **Withholding.**

District may, upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this Contract or any other Federal contract with the same Contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing

wage requirements, which is held by the same Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any Subcontractor the full amount of wages required by the Contract. In the event of Contractor's or any Subcontractors' failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the Site of the Work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the Contract, the District may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as it deems necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

### **8.1. Payrolls and basic records.**

8.2. Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the Work and preserved for a period of three years thereafter for all laborers and mechanics working at the Site of the Work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

8.3. The Contractor shall submit weekly for each week in which any Contract Work is performed a copy of all payrolls to the Department of Industrial Relations (**DIR**) website: <http://www.dir.ca.gov/Public-Works/PublicWorks.html>. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information shall be submitted on a form acceptable to the District. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <https://www.dol.gov/whd/programs/dbra/wh347.htm> or its successor site. Contractor is responsible for the submission of copies of payrolls by all Subcontractors. Contractor and Subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the District, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. Contractor may require a Subcontractor to provide addresses and social security numbers to the Contractor for its own records, without weekly submission to the DIR or other government agency.

8.3.1. Each payroll submitted shall be accompanied by a "**Statement of Compliance**," signed by the Contractor or Subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:

8.3.1.1. That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5,



- 8.3.1.2. That the appropriate information is being maintained under 29 CFR 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and
- 8.3.1.3. That such information is correct and complete;
- 8.3.1.4. That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and
- 8.3.1.5. That no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- 8.3.1.6. That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of Work performed, as specified in the applicable wage determination incorporated into or applicable to the Contract.
- 8.3.1.7. The weekly submission of a properly executed certification in the form set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by this section.
- 8.3.1.8. The falsification of any of the above certifications may subject the Contractor or one or more Subcontractors to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- 8.3.2. The Contractor or Subcontractor shall make the records required under this section available for inspection, copying, or transcription by authorized representatives of the District or the federal Department of Labor, and shall permit representatives to interview employees during working hours on the job. If the Contractor or Subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

## 9. Apprentices and trainees

- 9.1. **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the Work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first ninety (90) days of probationary employment as an apprentice in an eligible apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job Site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of Work actually performed. In addition, any apprentice performing Work on the job Site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the Work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or Subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must

be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the Work performed until an acceptable program is approved.

9.2. **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to Work at less than the predetermined rate for the Work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job Site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of Work actually performed. In addition, any trainee performing Work on the job Site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the Work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the Work performed until an acceptable program is approved.

9.3. **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

10. **Compliance with Copeland Act requirements.** Contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this Contract.

10.1. **Subcontracts.** The Contractor or Subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Federal agency may by appropriate instructions require, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for the compliance by any Subcontractor or lower tier Subcontractor with all the Contract clauses in 29 CFR 5.5.

10.2. **Contract termination: debarment.** A breach of the Contract clauses in 29 CFR 5.5 may be grounds for termination of the Contract, and for debarment as a Contractor and a Subcontractor as provided in 29 CFR 5.12.

10.3. **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this Contract.

10.4. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its

Subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

# **11. Certification of eligibility.**

- 11.1. By entering into this Contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- 11.2. No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- 11.3. Contractor shall be subject to the penalty for making false statements prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
- 11.4. **Clauses Mandated by Contract Work Hours and Safety Standards Act.** As used in the following paragraphs, the terms laborers and mechanics include watchmen and guards.
- 11.5. **Overtime requirements.** No Contractor or Subcontractor contracting for any part of the Contract Work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such Work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 11.6. **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in the foregoing paragraph the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the foregoing paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to Work in excess of the standard workweek of forty hours without payment of the overtime wages required by the foregoing paragraph.
- 11.7. **Withholding for unpaid wages and liquidated damages.** The District may upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of Work performed by the Contractor or Subcontractor under the Contract or any other Federal contract with the same Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated damages as provided in the foregoing paragraph.
- 11.8. **Subcontracts.** The Contractor or Subcontractor shall insert in any subcontracts the foregoing paragraphs concerning "Overtime requirements" and "Violation; liability for unpaid wages; liquidated damages" and also a clause requiring each Subcontractor to include these clauses in any lower tier subcontracts. Contractor shall be responsible for compliance by any Subcontractor or lower tier Subcontractor with the clauses set forth in this section.

## **00 73 44 Apprentices**

A. The CONTRACTOR acknowledges and agrees that if this Contract involves a dollar amount greater than or a number of working days greater than that specified in Labor Code Section 1777.5, this Contract is governed by the provisions of Labor Code Section 1777.5. It shall be the responsibility of the CONTRACTOR to ensure compliance with this Section and with the provisions of Labor Code Section 1777.5 for all apprenticing occupations.

B. Apprentices of any crafts or trades may be employed and, when required by Labor Code Section 1777.5, shall be employed provided they are properly registered in full compliance with the provisions of the Labor Code.

C. Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed and shall be employed only at the work or the craft or trade to which he or she is registered.

D. Only apprentices, as defined in Labor Code Section 3077, who are in training under apprenticeship standards and written apprentice agreements under Chapter 4 commencing with Section 3070 of the Labor Code are eligible to be employed on public works. The employment and training of each apprentice shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which he or she is training.

E. Pursuant to Labor Code Section 1777.5, the CONTRACTOR and any subcontractors employing workers in any apprenticeship craft or trade, in performing any work under this Contract, shall apply to the applicable joint apprenticeship committee for a certificate approving CONTRACTOR or subcontractor under the applicable apprenticeship standards for the employment and training of apprentices.

F. Every contractor and subcontractor shall submit contract award information to the applicable joint apprenticeship committee which shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices to be employed and the approximate dates the apprentices will be employed.

G. The CONTRACTOR and all subcontractors shall comply with Labor Code Section 1777.6, which forbids certain discriminatory practices in the employment of apprentices.

H. CONTRACTOR shall become fully acquainted with the laws concerning apprentices prior to commencement of the Project. Special attention is directed to sections 1777.5, 1777.6 and 1777.7 of the Labor Code and Title 8 of the California Code of Regulations. Questions may be directed to the State Division of Apprenticeship Standards, 455 Golden Gate Avenue, San Francisco, California.

#### **00 73 45 Hours of Work**

A. As provided in the Wage Rates Section commencing with Section 1810 Labor Code, eight hours of labor shall constitute a legal day of work. The standard time of service of any worker employed at any time by the CONTRACTOR, or by any subcontractor on any subcontract under this Contract, upon the Project or upon any part of the Project contemplated by this Contract, shall not exceed eight hours per day and forty hours during any one week unless all overtime and off time laws are complied with in full. Upon completion of all hours worked in excess of eight hours per day and forty hours during any one week, work shall be permitted upon the project at not less than one and one-half times the basic rate of pay. All work performed on Saturday, Sunday, and/or holiday shall be paid pursuant to the Prevailing Wage Determination.

B. The CONTRACTOR shall keep and shall cause each subcontractor to keep accurate records showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by CONTRACTOR in connection with the Project or any part of the Project. The record shall be kept open at all reasonable hours to the inspection of the DISTRICT and to the Division of Labor Standards Enforcement, Department of Industrial Relations, State of California.

C. As a penalty, the CONTRACTOR shall pay \$25.00 for each worker employed by CONTRACTOR or by any subcontractor in the performance of this Contract for each calendar day during which the worker is required or permitted to work more than eight hours in any calendar day and 40 hours in any one calendar week in violation of the provisions of the Wage Rates Section commencing with Section 1810 of the Labor Code. Any work performed after regular working hours or on Sundays or other holidays shall be performed without additional expense to DISTRICT.

**00 91 13 Addenda**  
Reserved

**00 94 00 Record Modifications**  
Reserved

# 01 10 00 DIV 01 - GENERAL REQUIREMENTS

## 01 14 00 WORK RESTRICTIONS

### 01 14 13 01 Access to Work

DISTRICT and its representatives shall at all times have access to the work of the Project. CONTRACTOR shall provide safe and proper facilities for such access. DISTRICT representatives shall check in with the Project Superintendent and observe all safety requirements of CONTRACTOR. All persons entering the Site shall comply with CONTRACTOR's safety requirements as defined in CONTRACTOR's job site specific safety plan, Injury and Illness Prevention Plan and Subcontractor Injury Prevention Plan, while the Site is under the control of CONTRACTOR. CONTRACTOR shall maintain a Daily Job Site Sign-In Log requiring all subcontractors to sign-in at the jobsite each day of work. The log shall include, at minimum, the date, time, number of workers, and the company name. **CONTRACTOR shall submit Daily Job Site Sign-In Log weekly to the DISTRICT Project Manager.**

### 01 14 16 01 Access Policy for Non-District Representatives

CONTRACTOR shall be responsible for enforcing and posting a policy of safe and proper access for NON-DISTRICT REPRESENTATIVES onto the jobsite during the course of construction.

### 01 14 16. 02 Keys

CONTRACTOR may request keys for access onto the site (gate key) and building keys available from DISTRICT Maintenance Lock Shop. Upon approval, keys will be issued contingent on contractor signing district key card and will be responsible for same. Lost keys will be charged at minimum \$250 per key and shall be deducted from owed retention. Should lost or stolen keys require the site to be rekeyed, rekeying costs will be charged to CONTRACTOR through deduction from retention.

### 01 25 13.01 Product Substitution Procedure

A. Whenever any material, process, or section is indicated or specified by grade, patent, brand, name, trade name or proprietary name, or by name of manufacturer, in the specifications, that specification shall be deemed to be used for the purpose of facilitating the description of material, process, or Section desired and shall be deemed to be followed by the words "or equal." Unless otherwise stated, CONTRACTOR may propose to use any material, process, or Section which is substantially equal to or better in every respect to that indicated or specified. If the material, process, or Section offered by CONTRACTOR is not substantially equal to or better in every respect to that specified, in the opinion of the ARCHITECT/ENGINEER or DISTRICT, CONTRACTOR shall furnish the material, process or Section specified. The burden of proof as to the equality of any material, process or Section shall rest with CONTRACTOR. CONTRACTOR may submit a request in writing for substitution of any "or equal" item, together with substantiating data, including submittal of specified item during the bid process, however, no later than **ten (10)** calendar days prior to the bid opening. After the bid opening all requests must be submitted, together with substantiating data, including submittal of specified item within **five (5)** calendar days after the Notice of Award is issued. No substitution requests will be considered after this allowed time. The decision of the ARCHITECT/ENGINEER or DISTRICT to accept or deny any request for substitution shall be final and binding. The provision authorizing submission of "or equal" justification data shall not in any way authorize an extension of time for performance of this Contract.

B. In the event CONTRACTOR furnishes any material, process or Section more expensive than that specified, the difference in cost of the material, process or Section so furnished shall be borne by CONTRACTOR.

C. If the substitution is accepted, the CONTRACTOR shall be solely and directly responsible for fitting accepted substitute materials and equipment into the available space in a manner acceptable to the ARCHITECT/ENGINEER and for the proper operation of the substituted equipment with all other equipment with which it may be associated.

The CONTRACTOR shall bear all costs of meeting the above requirements including any additional ARCHITECT/ENGINEERING design or approval fees for presenting and/or implementing a proposed substitution, if the substitution is accepted.

D. In the event the words “no substitutions” follows any material, product, thing, or service specified by grade, patent, brand, name, trade name or proprietary name, or by name of manufacturer, CONTRACTOR shall provide the specified item. The District Designee has made a finding that a particular material, product, thing, or service is designated by specific brand or trade name for one or more of the purposes listed in California Public Contract Code Section 3400 (c) (1-4). In such event, failure to provide a bid for the specified item(s) will be automatic grounds for rejection of the bid.

### **01 25 13. 02 Standardization of Products and Equipment**

Pursuant to Public Contract Code 3400(c)(2), Fresno Unified School District finds that it is in the best interest of the DISTRICT to standardize the products, equipment, and materials listed in Exhibit A-1 and Exhibit A-2 in order to match other products/equipment in use at on a particular work of improvement either completed or in the course of completion. Where a specific brand, trade name, material, or product identified in the bid documents is also listed in Exhibit A-1 or Exhibit A-2, it shall be deemed to be followed by the words “No Substitutions,” and CONTRACTOR shall not make or request substitutions regarding any such product, equipment or material. Furthermore, inadvertent acceptance by the DISTRICT, DISTRICT REPRESENTATIVE, or ARCHITECT/ENGINEER through a process of submittals, change orders, or oversight shall not constitute an acceptance of a substituted item in lieu of a DISTRICT standardized item. CONTRACTOR shall bear the entire responsibility and cost for removing any installed substituted item and replacing with DISTRICT specified standard. Exhibit A-1 and Exhibit A-2 may be obtained from DISTRICT Purchasing Department web page under public works CUPCCAA menu: <https://www.fresnounified.org/dept/purchasing/Pages/CUPCCAA.aspx> or by contacting the Purchasing Department at (559) 457-3588.

## **01 26 00 CONTRACT MODIFICATION PROCEDURES**

### **01 26 00.01 Changes and Extra Work**

A. DISTRICT may, as provided by law and, without invalidating this Contract, order extra work or make changes by altering, adding to, or deducting from work and the Contract sum shall be adjusted accordingly. Upon a change order request by the DISTRICT or the DISTRICT’S representative, the CONTRACTOR shall submit a breakdown of all costs and/or credits incurred to accomplish the requested change, including subcontractor(s) and supplier(s) written quotations for the extra work or change in work. The breakdown shall be of sufficient detail to allow justification of additional costs and/or credits. CONTRACTOR shall submit the actual completed takeoff and pricing. Time extension(s) will not be granted for insufficient breakdown data that requires re-submittal, or for pricing that in the judgment of the DISTRICT is not consistent with reasonable cost. All the Work shall be subject to the conditions of this Contract, and it shall be in accordance with all applicable legal requirements including, but not limited to, the provisions of Title 24 of the California Code of Regulations except that any claim for extension of time caused by changes shall be adjusted at the time of ordering the change. DISTRICT has the discretionary authority to order changes on a time and material basis, with adjustments to time, made after CONTRACTOR has justified, through documentation, the impact on the critical path of the Project. The issuance of a change order pursuant to this Section in connection with any change authorized by the DISTRICT under this Section shall not be deemed a condition precedent to CONTRACTOR’s obligation to promptly commence and diligently complete any such change authorized in writing by the DISTRICT hereunder. The DISTRICT’s right to make changes shall not invalidate the Contract nor relieve the CONTRACTOR of any liability or other obligations under the Contract Documents. Any requirement of notice of changes in the scope of Work to the Surety shall be the responsibility of the CONTRACTOR.

The DISTRICT may make changes to bring the Work or the Project into compliance with environmental requirements

or standards established by local, state or federal statutes, codes, ordinances, and/or regulations enacted after award of the Contract.

B. Notwithstanding any other provision in the Contract Documents, the adjustment in the Contract sum, if any, and the adjustment in the Contract time, if any, set out in a change order shall constitute the entire compensation and/or adjustment in the Contract time due CONTRACTOR arising out of the change in the Work. **The amount of the compensation due CONTRACTOR shall be calculated pursuant to subparagraph I of this Section.** The entire compensation shall not include delay damages (due to processing of a change order and/or refusal to sign a change order) and/or indirect, consequential, and/or incidental costs including any project management costs, extended home office and field office overhead, administrative costs, and/or profit, other than those amounts authorized under subparagraph I of this Section. If the DISTRICT approves of a change, a written change order prepared on behalf of the DISTRICT shall be forwarded to the CONTRACTOR describing the change and setting forth the adjustment to the Contract Time and the Contract Price, if any, on account of such change. All change orders shall be in full payment and final settlement of all claims for direct, indirect and consequential costs, including without limitation, costs of delays or impacts related to, or arising out of, items covered and affected by the change order, as well as any adjustments to the Contract Time. Any claim or item relating to any change incorporated into a change order not presented by the CONTRACTOR for inclusion in the change order shall be deemed waived. The CONTRACTOR shall execute the change order prepared pursuant to the foregoing. Once the change order has been prepared and forwarded to the CONTRACTOR for execution, without the prior approval of the DISTRICT which may be granted or withheld in the sole and exclusive discretion of the DISTRICT, the CONTRACTOR shall not modify or amend the form or content of such change order, or any portion thereof. The CONTRACTOR's attempted or purported modification or amendment of any such change order, without the prior approval of the DISTRICT, shall not be binding upon the DISTRICT; any such unapproved modification or amendment to such change order shall be null, void and unenforceable. In the event of any amendment or modification made by the CONTRACTOR to a change order for which there is no prior approval by the DISTRICT, in accordance with the provisions of this Section, unless otherwise expressly stated in its approval or ratification of such change order, any action of the Board of Education to approve or ratify such change order shall be deemed to be limited to the change order as prepared by the ARCHITECT; such approval or ratification of such change order shall not be deemed the DISTRICT's approval or ratification of any unapproved amendment or modification by the CONTRACTOR to such change order.

C. In giving instructions, the ARCHITECT/ENGINEER shall have authority to make minor changes in work not involving a change in cost, and not inconsistent with purposes of the Project. Any minor changes affecting building structure or fire ratings shall be by formal Change Order and will require approval by the Division of the State Architect or State Fire Marshall. Otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless made pursuant to a written order from DISTRICT and no claim for any addition to the Contract amount shall be valid unless by action of the governing board of DISTRICT. Within fifteen (15) days after receipt of a written order directing a change in the Work or furnishing the written notice regarding any oral order directing a change in the Work, the CONTRACTOR shall submit to the DISTRICT a detailed written statement setting forth the amount of any adjustment to the Contract Price on account thereof, properly itemized and supported by sufficient substantiating data to permit evaluation of the same, and the extent of adjustment of the Contract Time, if any, required by such change. No claim or adjustment to the Contract Price or the Contract Time shall be allowed if not asserted by the CONTRACTOR in strict conformity herewith or if asserted after Final Payment is made under the Contract Documents.

D. If the CONTRACTOR claims that additional cost or time is involved because of (1) any oral or written interpretation, (2) any order by the DISTRICT to stop the Work where the CONTRACTOR was not at fault, or (3) any written order for a minor change in the Work issued, the CONTRACTOR may make such claim for additional work. However, any oral order, direction, instruction, interpretation, or determination from the DISTRICT, the



DISTRICT's Inspector of Record, or the ARCHITECT/ENGINEER, which in the opinion of the CONTRACTOR causes any change to the scope of the Work, or otherwise requires an adjustment to the Contract Price or the Contract Time, shall be treated as a change only if the CONTRACTOR gives the ARCHITECT and the DISTRICT written notice within ten (10) days of the order, directions, instructions, interpretation or determination and prior to acting in accordance therewith. Time is of the essence in CONTRACTOR's written notice pursuant to the preceding sentence so that the DISTRICT can promptly investigate and consider alternative measures to address the order, direction, instruction, interpretation or determination giving rise to CONTRACTOR's notice. Accordingly, CONTRACTOR acknowledges that its failure, for any reason, to give written notice within ten (10) days of such order, direction, instruction, interpretation or determination shall be deemed CONTRACTOR's waiver of any right to assert or claim any entitlement to an adjustment of the Contract Time or the Contract Price on account of such order, direction, instruction, interpretation or determination. The written notice shall state the date, circumstances, extent of adjustment to the Contract Price or the Contract Time, if any, requested, and the source of the order, directions, instructions, interpretation or determination that the CONTRACTOR regards as a change. Unless the CONTRACTOR acts in strict accordance with this procedure, any such order, direction, instruction, interpretation or determination shall not be treated as a change and the CONTRACTOR hereby waives any claim for any adjustment to the Contract Price or the Contract Time on account thereof.

E. Notwithstanding any other language in the Contract Documents, the language of this Section, Changes and Extra Work, shall control as to the DISTRICT's allowance for labor, material, overhead and profit and labor burden.

F. At the discretion of the DISTRICT, the value of any extra work, change, or deduction shall be determined in one or more of the following ways:

1. By mutually agreeable lump sum proposal from CONTRACTOR. In the event a cost is requested for any extra work, the CONTRACTOR will be required to obtain and submit to the DISTRICT, for evaluation, three competitive price quotes on the work. The DISTRICT reserves the right to select the quotation which best meets its requirements.
2. By unit prices contained in CONTRACTOR's original bid and incorporated in the Contract Documents or fixed by subsequent agreement between DISTRICT and CONTRACTOR. All unit prices, whether set forth in the Contract or subsequently agreed upon, shall include overhead, increased premium on surety bonds, profit and all related expenses.
3. By cost of material and labor and percentage for overhead and profit

G. If none of the methods set forth above is agreed upon, the CONTRACTOR may be directed by DISTRICT to nonetheless promptly proceed with the Work. The cost of such Work shall then be determined by the DISTRICT on the basis of the CONTRACTOR's reasonable expenditures and savings, including, in the case of an increase in the Contract Sum, an allowance for overhead and profit in accordance with this Section. When both additions and/or credits are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net difference.

H. Allowable overhead and profit shall be applied to additions and not exceed the following for calculating the amount of compensation due CONTRACTOR (Refer to Example columns to clarify allowable percentages and method for calculating overhead and profit on changes in work):

|                                       | SUPERVISED WORK                                | OWN WORK (SELF-PERFORM) | Example #1: Contractor Own Work Labor/Material/Equipment Cost = \$1,000         | Example #2: Subcontractor Own Work Labor/Material/Equipment Cost = \$1,000.00   | Example #3: Second or Third Tier Subcontractor Own Work Labor/Material/Equipment Cost = \$1,000 (No First Tier Subcontractor Own Work) |
|---------------------------------------|------------------------------------------------|-------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| To Contractor                         | 10% x (cost plus lower tier subcontractor O&P) | 10% of cost             | O&P = \$1,000 x 10% = \$100<br>Net Compensation (excluding bond cost) = \$1,100 | O&P = \$1,100 x 10% = \$110<br>Net Compensation (excluding bond cost) = \$1,210 | O&P = \$1,155 x 10% = \$115.50<br>Net Compensation (excluding bond cost) = \$1,270.50                                                  |
| To First Tier Subcontractor           | 5% x (cost plus lower tier subcontractor O&P)  | 10% of cost             | N/A                                                                             | O&P = \$1,000 x 10% = \$100                                                     | O&P = \$1,100 x 5% = \$55                                                                                                              |
| To Second or Third Tier Subcontractor | N/A                                            | 10% of cost             | N/A                                                                             | N/A                                                                             | O&P = \$1,000 x 10% = \$100                                                                                                            |

**\*\*When a credit for work is due to the district, 5% will be credited back to the district for overhead and profit.**

1. A first tier Subcontractor means a Subcontractor that has a direct contractual relationship with the CONTRACTOR.
2. A second or third tier Subcontractor means a Subcontractor that has a direct contractual relationship with a First Tier Subcontractor or a Second Tier Subcontractor, respectively.
3. Additional bond premium cost up to 1.5% may be applied to both additions and credits on top of the allowable overhead and profit markup with satisfactory evidence. At no point will additional bond markup be more than 1.5%.

I. The following definitions will apply to contract modifications:

1. **“Labor”** means the actual cost (prevailing locally) for wages paid directly to or on behalf of employee, as set forth by the Department of Industrial Relations, for each craft or type of worker(s) at the time the extra work is done. CONTRACTOR shall be compensated for the costs of labor actually and directly utilized in the performance of the change. Such labor costs shall be limited to field labor for which there is a prevailing wage rate classification. Included in “labor” are employer payments, directly to employee, of health & welfare, pension, vacation/holiday and training/other. The use of a labor classification, which would increase the extra work cost, will not be permitted unless the CONTRACTOR establishes the necessity for such additional costs. Use of a labor classification which would increase labor costs associated with any change shall not be permitted. Labor costs shall exclude costs incurred by the CONTRACTOR in preparing estimate(s) of the costs of the change, in the maintenance of records relating to the costs of the change, coordination and assembly of materials and information relating to the change or performance thereof, or the supervision and other overhead and general conditions costs associated with the change or performance thereof.
2. **“Material”** means all products, equipment and devices which are physically incorporated in the Work to be performed. Materials shall be at invoice or lowest current price at which such materials are locally available. The DISTRICT reserves the right to approve materials and sources of supply or to supply materials to the CONTRACTOR if necessary for the progress of the work. No markup shall be applied to any material provided by the DISTRICT. Any costs or expenses for equipment, facilities, or services not physically incorporated in the Work to be performed but necessary for its completion shall be considered “overhead”, unless the DISTRICT agrees otherwise. CONTRACTOR shall be compensated for the costs of materials and equipment necessarily and actually used or consumed in connection with the performance of changes. If discounts by material suppliers are available for materials necessarily used in the performance of changes, they shall be credited to the DISTRICT. If materials and/or equipment necessarily used in the performance of changes are obtained from a supplier or source owned in whole or in part by the CONTRACTOR, compensation therefor shall not exceed the current wholesale price for such materials or equipment. If, in the reasonable opinion of the DISTRICT, the costs asserted by the CONTRACTOR for materials and/or

equipment in connection with any change is excessive, or if the CONTRACTOR fails to provide satisfactory evidence of the actual costs of such materials and/or equipment from its supplier or vendor of the same, the costs of such materials and/or equipment and the DISTRICT's obligation for payment of the same shall be limited to the then lowest wholesale price at which similar materials and/or equipment are available in the quantities required to perform the change. The DISTRICT may elect to furnish materials and/or equipment for changes to the Work, in which event the CONTRACTOR shall not be compensated for the costs of furnishing such materials and/or equipment or any mark-up thereon.

- 3.” **Construction Equipment.**” CONTRACTOR shall be compensated for the actual cost of the necessary and direct use of construction equipment in the performance of changes to the Work. Use of such construction equipment in the performance of changes to the Work shall be compensated in increments of hourly, weekly or monthly rates, whichever shall be the most economical to the DISTRICT when applied to the scope of the specific change. Rental time for construction equipment moved by its own power shall include time required to move such construction equipment to the site of the Work from the nearest available rental source of the same. If construction equipment is not moved to the Site by its own power, CONTRACTOR will be compensated for the loading and transportation costs in lieu of rental time. The foregoing notwithstanding, neither moving time or loading and transportation time shall be allowed if the construction equipment is used for performance of any portion of the Work other than changes to the Work. Unless prior approval in writing is obtained by the CONTRACTOR from the ARCHITECT, and the DISTRICT, no costs or compensation shall be allowed for time while construction equipment is inoperative, idle or on standby, for any reason. The CONTRACTOR shall not be entitled to an allowance or any other compensation for construction equipment or tools used in the performance of changes to the Work where such construction equipment or tools have a replacement value of \$1,000.00 or less. Construction equipment costs claimed by the CONTRACTOR in connection with the performance of any change to the Work shall not exceed rental rates (Blue Book) established by distributors or construction equipment rental agencies in the locality of the Site; any costs asserted which exceed such rental rates shall not be allowed or paid. Unless otherwise specifically approved in writing by the ARCHITECT, and the DISTRICT, the allowable rate for the use of construction equipment in connection with changes to the Work shall constitute full compensation to the CONTRACTOR for the cost of rental, fuel, power, oil, lubrication, supplies, necessary attachments, repairs or maintenance of any kind, depreciation, storage, insurance, labor (exclusive of labor costs of the construction equipment operator), and any all other costs incurred by the CONTRACTOR incidental to the use of such construction equipment.
4. “**Overhead**” means any necessary costs and expenses which are incurred in the performance of the Work excluding “labor”, “materials,” “labor burden,” and construction equipment”.
5. “**Labor Burden**” means employer paid costs and expenses (other than labor), resulting directly from change order work, associated with the employment of personnel on the project. These costs include additional expenditures for general liability, worker’s compensation, social security, unemployment taxes and other direct costs resulting from Federal, State or local laws as well as assessments or benefits required by collective bargaining agreements. The maximum allowable cost by DISTRICT, for Labor Burden, shall not exceed forty-five percent (45%) of labor costs.
6. “**Other Items**” The DISTRICT may authorize other items which may be required on the extra work. These items would typically be different in their nature from those required by the original work, and which are of a type not ordinarily available from the CONTRACTOR or any of the Subcontractors. Invoices covering all such items may be required by DISTRICT.

J. If CONTRACTOR should claim that any instructions, request, drawing, specification, action, condition, omission, default, or other situation obligates DISTRICT to pay additional to CONTRACTOR or to grant an extension of time for the completion of the Contract, or constitutes a waiver of any provision of the Contract, CONTRACTOR shall notify the DISTRICT in writing of its claim within 10 days from the date it has actual or constructive notice of the factual basis supporting the claim. The CONTRACTOR’S failure to notify DISTRICT within the 10-day period shall

be deemed a waiver and relinquishment of the claim against DISTRICT. If the notice is given within the specified time, the procedure for its consideration shall be as stated above in this Section.

K. Contractor Maintenance of Records: In the event that CONTRACTOR shall be directed to perform any changes to the Work pursuant to this Section, or should the CONTRACTOR encounter conditions which the CONTRACTOR, pursuant to this Section, believes would obligate the DISTRICT to adjust the Contract Price and/or the Contract Time, CONTRACTOR shall maintain detailed records on a daily basis. Such records shall include without limitation hourly records for labor and construction equipment and itemized records of materials and equipment used that day in connection with the performance of any change to the Work. In the event that more than one change to the Work is performed by the CONTRACTOR in a calendar day, CONTRACTOR shall maintain separate records of labor, construction equipment, materials and equipment for each such change. In the event that any Subcontractor, of any tier, shall provide or perform any portion of any change to the Work, CONTRACTOR shall require that each such Subcontractor maintain records in accordance with this Section. Each daily record maintained hereunder shall be signed by CONTRACTOR's Superintendent or CONTRACTOR's authorized representative; such signature shall be deemed CONTRACTOR's representation and warranty that all information contained therein is true, accurate, complete, and relate only to the change referenced therein. All records maintained by a Subcontractor, of any tier, relating to the costs of a change to the Work shall be signed by such Subcontractor's authorized representative or Superintendent. All records maintained hereunder shall be subject to inspection, review and/or reproduction by the DISTRICT, the ARCHITECT, or the DISTRICT's Inspector of Record upon request. In the event that CONTRACTOR shall fail or refuse, for any reason, to maintain or make available for inspection, review and/or reproduction such records and the adjustment to the Contract Price on account of any change to the Work is determined pursuant to this Section, the DISTRICT's reasonable good faith determination of the extent of adjustment to the Contract Price on account of such change shall be final, conclusive, dispositive and binding upon CONTRACTOR. CONTRACTOR's obligation to maintain records hereunder is in addition to, and not in lieu of, any other CONTRACTOR obligation under the Contract Documents with respect to changes to the Work.

L. Adjustments to Contract Time: In the event of any change(s) to the Work pursuant to this Section, the Contract Time shall be extended or reduced by change order for a period of time commensurate with the time reasonably necessary to perform such change to the extent it extends or reduces the critical path on the Project schedule. Such time shall be requested in writing by the CONTRACTOR with the Contract price adjustment proposal. The time extension request shall be justified by the CONTRACTOR by submittal of a CPM analysis accurately portraying the impact of the change on the critical path of the project schedule. Changes performed within available float as indicated in the updated approved construction schedule shall not justify a time extension to the Contract. If completion of the Work is delayed by causes for which the DISTRICT is responsible and the delay is unreasonable under the circumstances involved, and not within the contemplation of the CONTRACTOR and the DISTRICT at the time of execution of the Contract, the CONTRACTOR shall not be precluded from the recovery of damages arising therefrom.

M. Change Order Requests or Claims Based Upon Concealed or Unknown Conditions: If conditions are encountered at the Site which are subsurface or otherwise concealed physical conditions, which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than ten (10) days after first observance of the conditions. The ARCHITECT will promptly investigate such conditions, and if they differ materially and cause an increase or decrease in the CONTRACTOR's cost of, time required for, or performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum, Contract Time, or both. If the ARCHITECT determines that the conditions at the Site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the ARCHITECT shall so notify the DISTRICT and the CONTRACTOR in writing,

stating the reasons. Claims by either party in opposition to such determination must be made within seven (7) days after the ARCHITECT has given notice of the decision. If the DISTRICT and the CONTRACTOR cannot agree on an adjustment in the Contract Sum or the Contract Time, the adjustment shall be referred to the ARCHITECT for initial determination, subject to other proceedings pursuant to the dispute resolution provisions herein.

N. Discounts, Rebates, Refunds, and Excess Materials: For purposes of determining the cost, if any, of any change, addition, or omission to the Work hereunder, all trade discounts, rebates, refunds, and all returns from the sale of surplus materials and equipment shall accrue and be credited to the Contractor, and the Contractor shall make provisions so that such discounts, rebates, refunds and returns may be secured and the amount thereof shall be allowed as a reduction of the Contractor's cost in determining the actual cost of construction for purposes of any change, addition, or omissions in the Work as provided herein. Should a change in work scope be made after materials have already been specially fabricated or delivered or paid for and CONTRACTOR is unable to provide a proper credit for such materials due to its custom or special nature, CONTRACTOR shall notify ARCHITECT/ENGINEER in writing so that DISTRICT can determine whether or not such materials should be delivered and retained by DISTRICT as attic stock or surplus materials. CONTRACTOR shall not sell, give away, throw away, destroy or salvage such materials without DISTRICT's written consent.

**01 26 00.02 Claims for Extensions of Time; Notice of Claim**

O. In the event of a delay, the CONTRACTOR shall provide a Notice of Delay within 24 hours of the event and submit a schedule fragnet depicting the delay with all substantiating documentation within **ten (10) days** of the event.

P. The CONTRACTOR shall detail in writing the causes for any delays within ten (10) days of the beginning of any delay, or within ten (10) days after CONTRACTOR first recognizes the condition giving rise to a claim for additional time, whichever is earlier. The CONTRACTOR's claim for additional time shall include the cost associated with the extension, if any, all facts and documents supporting the claim, and a current schedule showing the impact on the critical path of any claimed delay and that the delay will extend the Work beyond the contractual completion date. In the case of a continuing delay caused by a single event, only one (1) notice of claim for time extension is necessary. If unusually severe weather conditions are the basis for a claim for additional time, such claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and place, could not have been reasonably anticipated, and had an adverse effect on the critical path of the scheduled construction. DISTRICT shall then ascertain the facts and extent of the delay and may, in its sole discretion, grant an extension of time for completing the Project. The DISTRICT'S findings of fact regarding any delay shall be final and conclusive and binding on both parties. Extensions of time shall apply only to that portion of the Work affected by the delay and shall not apply to other portions of the Work not so affected.

Q. In the event CONTRACTOR fails to provide the aforementioned written notice within ten (10) days, CONTRACTOR waives its right to any extension of time. In no event will CONTRACTOR be allowed to reserve its rights to assert a claim for time extension or additional cost associated with a delay later than as required by this Section, unless DISTRICT agrees in writing to allow such reservation. The sole remedy of CONTRACTOR for extensions of time for excusable but non-compensable delays described in this Claim for Extensions of Time, Notice of Claim Section where DISTRICT is not at fault shall be an extension of the Contract Time at no cost to DISTRICT.

R. In the event that the performance and/or completion of the Project is delayed at any time by any act or omission of District or by any employee or agent of District, by strikes, by lockouts, by fire, by embargoes, by flood, by unusually severe weather, by earthquake, by acts of war or force majeure, or by any other cause beyond the reasonable control of Contractor, the date for completion of the Project shall be extended for a reasonable period as a consequence of such delay.

1. Delay Days – Delay Days shall be considered working days. - Delay Days will be evaluated and identified as one of the three categories listed below. Excusable delays will create adjustments in the contract time. Compensable delays will create adjustments in both the contract sum and contract time. In the event of concurrent delays, no delay damages are recoverable by either the DISTRICT or the CONTRACTOR, but an extension in time shall be granted for each contemporaneous delay day occurring on the critical path. Contemporaneous delays shall be evaluated using a schedule fragnet(s), schedule updates, daily reports, notices, and any other records of delaying events.

| Excusable & Compensable                                                                | Excusable & Non-Compensable                                                                                                                                                                                                                    | Inexcusable                                                                  |
|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Delays caused by the DISTRICT, the ARCHITECT, or the DISTRICTS separate contractors(s) | Unusually severe weather<br>Strikes or labor shortages<br>Acts of God<br>Fires, war, Acts of government & pestilence<br>Unusual and unanticipated delays in manufacturing and/or deliveries of materials and/or equipment<br>Concurrent Delays | Delays caused by the CONTRACTOR, Subcontractor(s), materialmen or suppliers. |

2. Time Extensions For Unusually Severe Weather:

A. General:

- 1) **"Inclement Weather"** is the anticipated precipitation-affected days (including Mud Days) set forth in the applicable NOAA Meteorological Data Chart (broken down by each month of the year) which CONTRACTOR is expected to include in its project schedule and which anticipated weather days are not eligible for a time extension. DISTRICT reserves the right to update Meteorological Data included in the NOAA Chart to be provided by CONTRACTOR as set forth below, so that it reflects the most accurate data for the project site, site conditions and locality.
- 2) **"Unusually Severe Weather"** is more severe than the anticipated Inclement Weather set forth in the applicable NOAA Meteorological Data Chart for any given month.
- 3) **NOAA**, is the National Oceanic and Atmospheric Administration.
- 4) **"Mud"** (aka Mud Days) shall be considered as muddy site conditions, which prohibit access to and around the project site, including access to the buildings. CONTRACTOR agrees that even if the anticipated normal precipitation were exceeded for a given month, not all Mud Days are eligible for time extensions. Only a portion of the actual Mud Days will be considered for a time extension, of which they will be the percentage of actual precipitation that are above and beyond the anticipated normal precipitation or "Inclement Weather": See "Unusually Severe Weather" and "Inclement Weather" definitions above. Also, precipitation and Mud need to affect the activities on the critical path in order for them to impact the project schedule. If precipitation and Mud do not affect the critical path of the project schedule, there is no effect to the project and such conditions are not eligible for time extensions. Differing site soil conditions and drainage patterns will create individual variations in how "Mud" affects the site and the progress of the Work. It is the CONTRACTOR's obligation to become aware of the site soil conditions, drainage patterns, and other elements that may affect the resulting impacts due to Mud.

B. The provisions herein specify the procedures for the determination of excusable time extensions for unusually severe weather. Inclement Weather, using the NOAA data (to be provided by the Contractor prior to first payment request and approved by the ARCHITECT - "sample" NORMALS, MEANS AND EXTREMES data chart provided herein below) and resulting Mud impacts due to anticipated precipitation,

shall be scheduled into the schedule. The Inclement Weather and Mud days shall be shown on CONTRACTOR's schedule and if not used shall become float for the project's use. CONTRACTOR will not be allowed a day-for-day weather delay when the work anticipates construction during a period that normally includes Inclement Weather. A day-for-day extension will only be allowed for those days in excess of the norm as set forth in the applicable NOAA Meteorological Data Chart. CONTRACTOR is expected to work seven (7) days per week (if necessary, irrespective of Inclement Weather), to maintain access, and to protect the work under construction from the effects of Inclement Weather. In order for the ARCHITECT and DISTRICT to award a time extension under this clause, CONTRACTOR must satisfy the following conditions:

- 1) The unusual weather experienced at the project site during the affected contract period must be found to be Unusually Severe Weather, that is, more severe than the anticipated Inclement Weather and Mud for any given month.
- 2) The Unusually Severe Weather must actually cause a delay to the critical path of the project schedule, and must not be on a non-work weekday such as a holiday.
- 3) After anticipated Inclement Weather and Mud delays are exceeded, an Unusually Severe Weather delay day will occur when adverse weather prevents CONTRACTOR from proceeding with more than seventy-five percent (75%) of the normal labor and equipment force towards completion of the day's current critical activity controlling item on the accepted schedule for a period of at least five hours, and the crew is dismissed as a result thereof. Upon experiencing a critical path delay due to Unusually Severe Weather, CONTRACTOR shall seek a time extension, in writing, from the ARCHITECT in written form, including a weather time impact analysis supporting any alleged delays due to Unusually Severe Weather. Failure to provide such written information within ten (10) days after experiencing Unusually Severe Weather shall be a waiver of the right to an extension of time therefor.

If each of the foregoing conditions are met, an excusable a non-compensable time extension will be granted.

Upon Notice-to-Proceed being issued and continuing through the contract duration, CONTRACTOR shall record each occurrence of Inclement Weather and Mud, and the resulting impact to the progress of scheduled work. Inclement Weather days will be as defined by the applicable NOAA data (to be submitted by CONTRACTOR as referenced above) and will be counted chronologically from the first to the last day of each month, with each daily incidence of Inclement Weather being counted as whole day. Once the number of days of anticipated Inclement Weather and Mud are exceeded in a given month, CONTRACTOR will become eligible for an excusable, non-compensable time extension for Unusually Severe Weather. CONTRACTOR shall incorporate all approved schedule modifications into the current monthly schedule update.

C. Meteorological Data Chart – (Sample – Applicable Chart to be Submitted)

**Meteorological Data for Fresno, California Normals, Means and Extremes**

| Month | TEMPERATURE (degrees F) |              |                   |                  | PRECIPITATION***                                      |             | FOG                                             |
|-------|-------------------------|--------------|-------------------|------------------|-------------------------------------------------------|-------------|-------------------------------------------------|
|       | Normal                  |              | Extremes          |                  | Mean*<br>Number<br>Calendar<br>/Workdays<br>per month | Normal (in) | Mean**Number<br>Calendar/Work<br>Days per month |
|       | Daily<br>Max            | Daily<br>Min | Record<br>Highest | Record<br>Lowest |                                                       |             |                                                 |
| Jan   | 54.1                    | 37.4         | 78                | 19               | 7.5/5.4                                               | 1.96        | 11.8/8.4                                        |
| Feb   | 61.7                    | 40.5         | 80                | 24               | 7.1/5.1                                               | 1.8         | 6.0/4.3                                         |
| Mar   | 66.6                    | 43.4         | 90                | 26               | 7.1/5.1                                               | 1.89        | 1.7/1.2                                         |

|      |      |      |     |    |                                     |       |                      |
|------|------|------|-----|----|-------------------------------------|-------|----------------------|
| Apr  | 75.1 | 47.3 | 100 | 32 | 4.1/2.9                             | 0.97  | 0.3/0.2              |
| May  | 84.2 | 53.7 | 107 | 36 | 1.9/1.4                             | 0.3 - | 0.1/0.1              |
| Jun  | 92.7 | 60.4 | 110 | 44 | 0.7/0.5                             | 0.08  | 0.0/0.0              |
| Jul  | 98.6 | 65.1 | 112 | 50 | 0.1/1.3                             | 0.01  | 0.0/0.0              |
| Aug  | 96.7 | 63.8 | 111 | 49 | 0.3/0.2                             | 0.03  | 0.1/0.1              |
| Sep  | 90.1 | 58.8 | 111 | 37 | 1.0/0.7                             | 0.24  | 0.1/0.1              |
| Oct  | 79.7 | 50.7 | 102 | 27 | 2.2/1.6                             | 0.53  | 0.9/0.6              |
| Nov  | 64.7 | 42.5 | 89  | 26 | - .2/3.7                            | 1.37  | 5. <sup>8</sup> /4.1 |
| Dec  | 53.7 | 37.1 | 78  | 18 | 6.7/4.8                             | 1.42  | 12.1/8.6             |
| Year |      |      |     |    | 44. <sup>1</sup> / <sub>3</sub> 1.5 | 10.6  | 38.8/27.7            |

Source: NOM, National Oceanic and Atmospheric Administration

\*Precipitation of .01 inches or more

\*\*Heavy Fog visibility % mile or less

\*\*\*Refer to term Mud, for Mud impacts.

#### **01 26 00.02 Claims for Additional Cost or Monetary Damages, Notice of Claim**

If CONTRACTOR claims compensation for any damage allegedly sustained by reason of any acts of DISTRICT or its agents, or employees, CONTRACTOR shall submit to the ARCHITECT/ENGINEER written notice prior to proceeding with the work at issue, where CONTRACTOR is aware or should be aware of such claim's existence before the work at issue is performed. Where monetary damage cannot be ascertained prior to the performance of the work at issue, CONTRACTOR shall submit to the ARCHITECT/ENGINEER a written statement of the damage sustained within five (5) days after sustaining the damage. In addition, on or before the 15<sup>th</sup> day of the month after the month in which the damage was sustained, CONTRACTOR shall file with DISTRICT an itemized statement indicating the factual basis in support of its claim and the amount of damage. Each Claim for additional cost or monetary damage must include any associated claim for additional time and its associated costs, and all facts and documents supporting the claim, and a current schedule showing the impact on the critical path of any claimed delay and that the delay will extend the Work beyond the contractual completion date, including, but not limited to copies of written computations of delay damages and supporting documentation including but not limited to any relevant job cost, bidding and home office overhead information. Prior notice is not required for claims relating to an emergency endangering life or property on the Project. If CONTRACTOR believes additional cost is involved for reasons, including, but not limited to the following: a written interpretation from the ARCHITECT/ENGINEER, an order by DISTRICT to stop the Work where CONTRACTOR or its subcontractors or suppliers were not at fault, a written order for a minor change in the Work issued by the ARCHITECT, failure of payment by DISTRICT, compensable termination of the Contract by DISTRICT, DISTRICT's compensable suspension of the Work, or other reasonable grounds, a claim shall be filed in accordance with the procedure established herein. If CONTRACTOR fails to comply with any provision of this Section concerning the submission of written notice or statements, it waives any claim for compensation and shall not be entitled to consideration for payment on account of any such damage or monetary claim.

Submission of Claim Under Penalty of Perjury: California Penal Code section 72, provides that any person who presents for payment with intent to defraud any district board or officer, any false or fraudulent claim, bill, account, voucher, or writing, is punishable by fines not exceeding ten thousand dollars (\$10,000.00) and/or imprisonment in the state prison. Government Code sections 12650, et seq., pertains to civil penalties that may be recovered from persons (including corporations, etc.) for presenting a false claim for payment or approval, presents a false record or statement to get a false claim paid or approved, or other acts, to any officer or employee of any political subdivision of the State of California. Any person or corporation violating the provisions of Government Code sections 12650, et seq., shall be liable for three times the amount of the damages of the political subdivision, plus a civil penalty, plus costs.

The CONTRACTOR shall certify, at the time of submission of a claim, as follows:



I, \_\_\_\_\_, being the \_\_\_\_\_ (Must be an officer) of \_\_\_\_\_ (CONTRACTOR), declare under penalty of perjury under the laws of the State of California, and do personally certify and attest that: I have thoroughly reviewed the attached claim for additional cost and/or extension of time, and know its contents, and said claim is made in good faith; the supporting data is truthful, accurate and complete; that the amount requested accurately reflects the adjustment for which the CONTRACTOR believes the DISTRICT is liable; and further, that I am familiar with California Penal Code section 72 and Government Code section 12650 et seq, pertaining to false claims, and further know and understand that submission or certification of a false claim may lead to fines, imprisonment and/or other severe legal consequences.

By: \_\_\_\_\_

Dated: \_\_\_\_\_

CONTRACTOR understands and agrees that any claim submitted without this certification does not meet the terms of the Contract Documents, that DISTRICT, or DISTRICT's representatives, may reject the claim on that basis and that unless CONTRACTOR properly and timely files the claim with the certification, CONTRACTOR cannot further pursue the claim in any forum, as a condition precedent will not have been satisfied.

#### **01 26 00.02 Claims Procedure**

S. ARCHITECT's Review: The ARCHITECT will review claims and take one or more of the following preliminary actions within ten (10) days of receipt of a claim: request additional supporting data from the claimant; submit a schedule to the parties indicating when the ARCHITECT expects to take action; reject the claim in whole or in part, stating reasons for rejection; recommend approval of the claim by the other party; or suggest a compromise. The ARCHITECT may also, but is not obligated to, notify the Surety, if any, of the nature and amount of the claim.

T. Documentation if Resolved: If a claim has been resolved, the ARCHITECT will prepare or obtain appropriate documentation.

U. Action if Not Resolved: If a claim has not been resolved, the party making the claim shall, within ten (10) days after the ARCHITECT's preliminary response, take one or more of the following actions: submit additional supporting data requested by the ARCHITECT; modify the initial claim; or notify the ARCHITECT that the initial claim stands.

V. ARCHITECT's Written Decision: If a claim has not been resolved after consideration of the foregoing and of other evidence presented by the parties or requested by the ARCHITECT, the ARCHITECT will notify the parties in writing that the ARCHITECT's decision will be made within seven (7) days. Before the expiration of such time period, the ARCHITECT will render to the parties its written decision relative to the claim, including any change in the Contract Sum or Contract Time or both. The ARCHITECT may, but is not obligated to, notify the Surety and request the Surety's assistance in resolving the controversy. If either party disputes the ARCHITECT's decision, it may proceed with the dispute resolution provisions which follow.

W. Claims: Except for tort claims, all claims by the CONTRACTOR for a time extension, payment of money or damages arising from work done by, or on behalf of, the CONTRACTOR pursuant to this Contract and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or an amount the payment of which is disputed by the DISTRICT, of \$375,000 or less shall be subject to the settlement and arbitration provisions/procedures provided in this Claims Procedure Section and by Public Contract Code Sections 20104 et seq. Those sections require that the claim be in writing, include the documents necessary to substantiate the claim, and be

filed on or before the final date of payment, and that such claim is subject to all time limits and notice and submission requirements for the filing of claims under the Contract.

1. For claims less than \$50,000, the DISTRICT shall respond in writing within 45 days of receipt of the claim or may request in writing within 30 days any additional documentation supporting the claim or relating to defenses to the claim DISTRICT may have against CONTRACTOR, which, if required, shall be provided upon mutual agreement of the DISTRICT and CONTRACTOR. The DISTRICT'S written response to the claim, as further documented, shall be submitted to CONTRACTOR within 15 days after receipt of the further documentation or within a time period no greater than that taken by the CONTRACTOR in producing the additional information, whichever is greater.
2. For claims over \$50,000 and less than or equal to \$375,000, the DISTRICT shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim DISTRICT may have against CONTRACTOR. If additional information is thereafter required, it shall be requested and provided upon mutual agreement of DISTRICT and CONTRACTOR. The DISTRICT's written response to the claim, as further documented, shall be submitted to the CONTRACTOR within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the CONTRACTOR in producing the additional information or requested documentation, whichever is greater.

X. If the CONTRACTOR disputes the DISTRICT's written response or the DISTRICT fails to respond within the time prescribed, the CONTRACTOR may so notify the DISTRICT, in writing, either within 15 days of receipt of the DISTRICT's response or within 15 days of the DISTRICT's failure to respond within the time period prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute, which conference shall be scheduled by DISTRICT within 30 days of such demand.

Y. If the claim or any portion of the claim remains in dispute, the CONTRACTOR may file a claim as provided in Chapter 1 (commencing with section 900) and Chapter 2 (commencing with section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the CONTRACTOR submits his or her written claim until the time that the claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process. Further, should legal action be pursued, the provisions set forth in Public Contract Code Section 20104.4, including but not limited to those relating to mediation and arbitration, shall be followed.

Z. In the event of a dispute between the parties as to performance of the Work, the interpretation of this Contract or payment or nonpayment for work performed or not performed, the parties shall attempt to resolve the dispute. Pending resolution of the dispute, CONTRACTOR agrees to continue the work diligently to completion. If the dispute is not resolved, CONTRACTOR agrees it will neither rescind the Contract nor stop the progress of the work, but CONTRACTOR'S sole remedy shall be to comply with the Contract notice and dispute resolution provisions in all respects, and subsequently submit such controversy to determination by a court of the State of California, in Fresno County, having competent jurisdiction of the dispute, as set forth herein and by statute, after the Project has been completed, and not before.

## **01 29 00 PAYMENT PROCEDURES**

### **01 29 73 01 Cost Breakdown and Periodic Estimates**

D. On forms approved by DISTRICT, CONTRACTOR shall furnish the following:

- i. A detailed estimate giving a complete breakdown of the Contract price for each Project or site within 10 days of award of the Contract. CONTRACTOR shall furnish a detailed Cost Breakdown (Schedule of Values) of the Contract Price consistent with the cost-loaded work activities included in the approved

construction schedule per school site, if award is for multiple sites. In preparing the Cost Breakdown, CONTRACTOR shall carefully list the true cost of each activity or item for which payment will be requested. The CONTRACTOR shall not "front-load" the Cost Breakdown with false dollar amounts for activities to be performed in the early stages of the Project. The DISTRICT may, in its sole discretion, utilize the costs listed in the Cost Breakdown (Schedule of Values) as the true cost of items to be deducted from the Contract Price through credit or deductive change order. The values for each line item shall include the amount of overhead and profit applicable to each item of work and shall include, at a minimum, a breakdown between rough and finish Work for the basic trades as well as individual dollars figures for large dollar equipment and materials to be installed or furnished for the Project. No individual line item or scope of work in the Cost Breakdown shall exceed \$50,000, except with the express, written consent of the DISTRICT. Exceptions will be given by the DISTRICT for a single item of equipment for which the true cost exceeds \$50,000. The Cost Breakdown shall be subject to the DISTRICT's review and approval of the form and content thereof. Upon request, CONTRACTOR shall provide DISTRICT with data and documentation substantiating the accuracy of the proposed line items. In the event that the DISTRICT shall reasonably object to any portion of the Cost Breakdown, within ten (10) days of the DISTRICT's receipt of the Cost Breakdown, the DISTRICT shall notify the CONTRACTOR, in writing of the DISTRICT's objection(s) to the Cost Breakdown together with any request for substantiating data or documentation. Within five (5) days of the date of the DISTRICT's written objection(s) and request for substantiating data and documentation, CONTRACTOR shall submit a revised Cost Breakdown to the DISTRICT for review and approval together with the requested data and documentation. The foregoing procedure for the preparation, review and approval of the Cost Breakdown shall continue until the DISTRICT has approved of the entirety of the Cost Breakdown. Once the Cost Breakdown is approved by the DISTRICT, the Cost Breakdown shall not be thereafter modified or amended by the CONTRACTOR without the prior consent and approval of the DISTRICT, which may be granted or withheld in the sole reasonable discretion of the DISTRICT. Notwithstanding any provision of the Contract Documents to the contrary, payment of the CONTRACTOR's overhead, supervision and general conditions costs and profit, as such items are reflected in the Cost Breakdown, shall be made incrementally as included in the activities included in the approved construction schedule.

- ii. A periodic itemized estimate of work done for the purpose of making partial payments; and
- iii. A schedule of estimated monthly payments due CONTRACTOR within 10 days of request by DISTRICT.

#### **01 29 76.01 Progress Payment Procedures / Final Payment**

A. Procedure: On or before the twenty-fifth (25th) day of each calendar month during the progress of the portion of the Work for which payment is being requested, the CONTRACTOR shall submit to the ARCHITECT an itemized Application for Payment on a form acceptable to DISTRICT for operations completed in accordance with the Cost Breakdown/Schedule of Values per school site, if award is to multiple sites. Such application shall be notarized, if required, and supported by the following, or such portion thereof, as ARCHITECT/DISTRICT require:

1. The amount paid to the date of the Application to the CONTRACTOR, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract.
2. The amount being requested with the Application for Payment by the CONTRACTOR on its own behalf and separately stating the amount requested on behalf of each of the Subcontractors and all others furnishing labor, material, and equipment under the Contract.
3. The balance that will be due to each of such entities after said payment is made.
4. A certification that the Record Drawings and Annotated Specifications are current.
5. The DISTRICT approved additions to and subtractions from the Contract Sum and Time.

6. An updated schedule current through the last working day prior to the date of submission.
7. A summary of the retentions (each Application shall provide for retention as set forth herein).
8. Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the DISTRICT may require from time to time.
9. The percentage of completion of the CONTRACTOR's Work by line item; and
10. A statement showing all payments made by the CONTRACTOR for labor and materials on account of the Work covered in the preceding Application for Payment. Such applications shall not include requests for payment of amounts not authorized by change order or that the CONTRACTOR does not intend to pay to subcontractors or others because of a dispute or other reason.

B. If requested by the DISTRICT, an application for payment shall be accompanied by a summary showing payments that will be made to subcontractors covered by such application, and unconditional waivers and releases of claims and stop payment notices, from each subcontractor listed in the preceding application for payment covering sums disbursed pursuant to that preceding application for payment.

C. DISTRICT shall have the right to correct any error made in any estimate for payment. DISTRICT has the discretionary right to require that the CONTRACTOR provide the following information with the application for payment:

1. certified payroll records covering the period of the prior application for payment.
2. unconditional waivers and releases from all subcontractors and/or suppliers for which payment was requested under the prior application for payment.
3. conditional waivers and releases upon final payment from all subcontractors and/or suppliers for final payment.
4. receipts or bill of sale for any items.
5. revised construction progress schedule as approved by the DISTRICT; and
6. verification by Inspector of Record (IOR) that the as-built drawings and annotated specifications are up to date.

D. Purchase of Materials and Equipment: The CONTRACTOR is required to order, obtain, and store materials and equipment sufficiently in advance of its Work at no additional cost or advance payment from DISTRICT. Payments are only to be made by DISTRICT on account of materials and equipment incorporated in the Work. Any exceptions must be approved in advance in writing and are in the sole and exclusive discretion of DISTRICT.

E. Warranty of Title: The CONTRACTOR warrants that title to all Work covered by an Application for Payment will pass to the DISTRICT no later than the time of payment. The CONTRACTOR further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the DISTRICT shall, to the best of the CONTRACTOR's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances in favor of the CONTRACTOR, Subcontractors, material and equipment suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work.

F. Review of Progress Payment Application: After review by the IOR, the ARCHITECT will, within seven (7) days after receipt of the CONTRACTOR's Application for Payment, either approve such payment or notify the CONTRACTOR in writing of the ARCHITECT's reasons for withholding approval in whole or in part as provided herein. The review of the CONTRACTOR's Application for Payment by the ARCHITECT is based on the ARCHITECT's observations at the Site and the data comprising the Application for Payment that the Work has progressed to the point indicated and that, to the best of the Architect's knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents, to results of subsequent tests and inspections, to minor deviations from the Contract Documents correctable prior to completion, and to specific qualifications expressed by the ARCHITECT. The issuance of a Certificate for Payment will further constitute a representation that the CONTRACTOR is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment will not be a representation that the ARCHITECT has:

1. Made exhaustive or continuous on-Site inspections to check the quality or quantity of the Work.
2. Reviewed construction means, methods, techniques, sequences, or procedures.
3. Reviewed copies of requisitions received from Subcontractors, material and equipment suppliers, and other data requested by the DISTRICT to substantiate the CONTRACTOR's right to payment; or
4. Made an examination to ascertain how or for what purpose the CONTRACTOR has used money previously paid on account of the Contract Sum.

G. Payments to CONTRACTOR:

1. Within thirty (30) days after DISTRICT approval of Application for Payment, CONTRACTOR shall be paid a sum equal to ninety-five percent (95%) of the undisputed value of the Work performed up to the last day of the previous month, less the aggregate of previous payments. The value of the Work completed shall be an estimate only, no inaccuracy or error in said estimate shall operate to release the CONTRACTOR, or any surety, from damages arising from such Work or from enforcing each and every provision of this Contract, and the DISTRICT shall have the right subsequently to correct any error made in any estimate for payment.
2. The CONTRACTOR shall not be entitled to have any payment requests processed or be entitled to have any payment made for work performed, so long as any lawful or proper direction given by the DISTRICT concerning the Work, or any portion thereof, remains out of compliance. Payment shall not be a waiver of any such direction.

H. Payment to Subcontractors and Suppliers: Without creating any rights in favor of the subcontractors or suppliers in this Contract, no later than seven (7) days after receipt, pursuant to Business and Professions Code Section 7108.5, the CONTRACTOR shall pay to each Subcontractor, out of the amount paid to the CONTRACTOR on account of such Subcontractor's portion of the Work or supplier's materials or equipment furnished, the amount to which said Subcontractor or supplier is entitled, reflecting percentages actually retained from payments to the CONTRACTOR on account of such Subcontractor's portion of the Work or supplier's portion of the materials. The CONTRACTOR shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors and Sub-suppliers in a similar manner.

I. Payment Information and Percentage of Completion: The DISTRICT will, on request and in the DISTRICT's sole discretion, furnish to a Subcontractor or supplier, if practicable, information regarding percentages of completion or amounts applied for by the CONTRACTOR, and action taken thereon by the DISTRICT, on account of portions of the Work done by such Subcontractor or materials or equipment furnished by such supplier. The DISTRICT shall have no obligation to pay, or to see to the payment of, money to a Subcontractor or supplier except as may otherwise be required by law.

J. Payment Not Constituting Approval or Acceptance: An approved Application for Payment, issuance of a Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the DISTRICT shall not constitute acceptance of work not performed in accordance with the Contract Documents.

K. Joint Checks: DISTRICT shall have the right, if necessary for the protection of the DISTRICT, to issue joint checks made payable to the CONTRACTOR and Subcontractors and/or material or equipment suppliers. The joint check payees shall be responsible for the allocation and disbursement of funds included as part of any such joint payment. However, DISTRICT has no duty to issue joint checks. In no event shall any joint check payment be construed to create any contract between the DISTRICT and a Subcontractor or supplier of any tier, any obligation from the DISTRICT to such Subcontractor, or rights in such Subcontractor against the DISTRICT.

L. Payment Upon Completion of the Work, or designated portion thereof, and upon application by the CONTRACTOR: the DISTRICT shall make payment reflecting adjustment in retainage, if any, for such Work, or portion thereof, as provided in the Contract Documents in absence of any stop payment notices, liens or claims by DISTRICT for liquidated damages or other damages.

M. Final Payment: CONTRACTOR shall immediately upon issuance of the Punch List described in Section **01 29 93**, initiate work on all items therein related to CONTRACTOR's Work and diligently complete the same. At least fifteen (15) days prior to final inspection, CONTRACTOR shall submit two (2) copies of complete operations and maintenance manuals for review. All such information, manuals, and drawings shall be submitted in 8½" x 11" binders, with a table of contents listing all items within, as well as in digital format on a compact disc. The binder shall also include a list of Subcontractors, with their addresses and phone numbers, and names of persons to contact in case of emergencies. Before calling for a final inspection, CONTRACTOR shall determine that the following work has been performed:

1. The Work has been completed.
2. The facility shall be connected to water, gas, sewer, and electric service, as necessary to the Project, complete and ready for use.
3. Mechanical, electrical, and low voltage work is complete, fixtures in place, connected, tested, commissioned, balanced, and training completed.
4. Electrical circuits scheduled in panels and disconnect switches labeled.
5. Painting and special finishes are complete, and all finished and decorative work shall be cleaned and have marks, dirt, and superfluous labels removed.
6. Doors are complete with hardware, properly adjusted, and tops and bottoms are sealed.
7. Project area is cleared of CONTRACTOR's equipment, debris, trash, broken glass, etc. Work is cleaned, free of stains, scratches or other foreign matter, and damaged or broken material is replaced.

All portions of the Work shall be left in a neat and orderly condition. The final inspection will not be made until this is accomplished.

8. Upon receipt of CONTRACTOR's written notice that all of the Punch List items have been fully completed and the Work is ready for final inspection and acceptance, ARCHITECT shall inspect the Work and shall submit to CONTRACTOR and DISTRICT a final inspection report noting the work, if any, required in order to complete the Work in accordance with the Contract Documents. Absent unusual circumstances, this report shall consist of the Punch List items not yet satisfactorily completed. Within ten (10) calendar days of such notification, the CONTRACTOR shall correct such defects or deficiencies.
9. Upon completion of the Work contained in the final inspection report, the CONTRACTOR shall so notify the DISTRICT and ARCHITECT, who shall again inspect such Work. If the DISTRICT/ARCHITECT finds the Work contained in such final inspection report acceptable under the Contract Documents and, therefore, the Work fully completed, it shall so notify CONTRACTOR, who shall then submit to the ARCHITECT its final Application for Payment.
10. Upon receipt and approval of such final Application for Payment, the ARCHITECT shall issue a final Certificate of Payment stating that to the best of its knowledge, information, and belief, and on the basis of its observations, inspections, and all other data accumulated or received by the ARCHITECT in connection with the Work, such Work has been completed in accordance with the Contract Documents. The DISTRICT may thereupon inspect such Work and shall either accept the Work as complete or notify the ARCHITECT and the CONTRACTOR in writing of reasons why the Work is not complete. Upon acceptance of the Work of the CONTRACTOR as fully complete (which, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), the DISTRICT shall record a Notice of Completion (And Acceptance) with the County Recorder, and the CONTRACTOR shall, upon receipt of payment from DISTRICT, pay the amounts due Subcontractors and suppliers. Final acceptance by the DISTRICT shall not bind the DISTRICT to formal acceptance nor relieve the CONTRACTOR from the responsibility of completing or correcting any work.

N. Retention: The retention, less any amounts disputed by the DISTRICT or which the DISTRICT has the right to withhold, shall not be paid until after approval of the CONTRACTOR's final Certificate of Payment or ratification by the Board of Education and, after satisfaction of the conditions set forth above. DISTRICT may hold the retention for up to sixty (60) days after completion/acceptance of the Work, no interest shall be paid on any retention, or on any amounts withheld due to a failure of the CONTRACTOR to perform, in accordance with the terms and conditions of the Contract Documents, except as provided to the contrary in any Escrow Agreement and General Conditions between the DISTRICT and the CONTRACTOR pursuant to Public Contract Code section 22300. Additionally, if there is any punch list or other contract work remaining outstanding as of the date for payment of retention as described above, DISTRICT may, in its discretion, declare any such outstanding work to be disputed work as described in California Public Contract Code Section 7107 (c), place a reasonable value on such outstanding work, and withhold 150% of the disputed amount from the final payment pending completion of such work by CONTRACTOR.

O. Procedures for Application for Final Payment: The Application for Final Payment shall be accompanied by the same details as required under this Section relating to Applications for Progress Payments, and in addition, the following conditions must be fulfilled:

1. A full and final waiver or release of all Stop Payment Notices in connection with the Work shall be submitted by CONTRACTOR, including a release of Stop Payment Notice in recordable form, together with (to the extent permitted by law) a copy of the full and final waiver of all Stop Payment Notices or a Stop Payment Notice Release Bond from a surety acceptable to the DISTRICT as defined by the Contract Documents, including a release of Stop Payment Notice in recordable form, in

connection with the Work obtained by Contractor from each person to receive a payment thereunder, which waivers of Stop Payment Notice rights shall be in a form as approved by DISTRICT and in compliance with California Civil Code Sections 8132 through 8138. Any stop payment notice release bond shall be executed by a California admitted, fiscally solvent surety, completely unaffiliated with and separate from the surety on the payment and performance bonds, which does not have any assets pooled with the payment and performance bond sureties.

2. The CONTRACTOR shall have made, or caused to have been made, all corrections to the Work which are required to remedy any defects therein, to obtain compliance with the Contract Documents or any requirements of applicable codes and ordinances, or to fulfill any of the orders or directions of DISTRICT required under the Contract.
3. Each Subcontractor shall have delivered to the CONTRACTOR all written guarantees, warranties, applications, and bonds required by the Contract Documents for its portion of the Work.
4. The CONTRACTOR shall deliver to the ARCHITECT reproducible final Record Drawings and Annotated Specifications in hard copy paper and electronic formats showing the CONTRACTOR's Work "as built," with the CONTRACTOR's certification of the accuracy of the Record Drawings and Annotated Specifications, all guarantees, and operation and maintenance instructions for equipment and apparatus.

P. DISTRICT/ARCHITECT shall have issued a Final Certificate of Payment:

1. The CONTRACTOR shall have delivered to the DISTRICT all manuals and materials required by the Contract Documents.
2. The CONTRACTOR shall have removed, or caused to be removed, all waste materials and rubbish from and about the Site, as well as all tools, construction equipment, machinery, surplus material, scaffolding equipment, and any other similar materials of the CONTRACTOR or any subcontractor, shall have cleaned, or caused to be cleaned, all glass surfaces, and shall have left the Work broom-clean, except as otherwise provided in the Contract Documents.
3. CONTRACTOR shall provide extensive assistance in the utilization of any equipment or system such as initial start-up or testing, adjusting and balancing, preparation of operation and maintenance manuals and training personnel for operation and maintenance.
4. Acceptance of final payment shall constitute a waiver of claims by payees except for those previously identified in writing and identified by that payee as unsettled at the time of Final Application for Payment.

Q. Unless otherwise provided, on or before making its request for final payment of the undisputed amount due under the Contract, CONTRACTOR shall submit to DISTRICT, in writing, a summary of all claims for compensation under or arising out of this Contract which were timely filed. The acceptance by CONTRACTOR of the payment of the final amount shall constitute a waiver of all claims against DISTRICT under or arising out of this Contract, except those previously made, in a timely manner and in writing, and identified by CONTRACTOR as unsettled at the time of CONTRACTOR'S final request for payment.

R. The Project shall only be considered complete when the DISTRICT accepts the Project, or it is otherwise deemed to be complete pursuant to applicable California Law. DISTRICT will note the date of completion on any Notice of Completion (And Acceptance) it causes to be recorded. Any such Notice of Completion (And Acceptance) may subsequently be ratified by the Board. DISTRICT shall have no obligation to accept completion of the Project until the entire work, including all punch list items have been completed in accordance with the Contract Documents to



the satisfaction of the DISTRICT and all close-out documents, including, but not limited to, Record Drawings, Operation and Maintenance Manuals and DSA-required forms, and warranty documents have been provided to the DISTRICT, and staff training has been completed to the satisfaction of the DISTRICT. ARCHITECT and Project Inspector (IOR), and any other approved representative of the DISTRICT, shall determine when the Project is complete. However, the DISTRICT, at its sole option, may accept completion of the contract and cause the Notice of Completion (And Acceptance) to be recorded when the entire work shall have been completed to the satisfaction of the DISTRICT, except for minor punch list or corrective items in DISTRICT's sole discretion.

#### **01 29 76. 02 Payments Withheld**

A. The DISTRICT may decide to withhold payment in whole, or in part, to the extent reasonably necessary to protect the DISTRICT if, in the DISTRICT's opinion the representations to the DISTRICT required by items 1 through 23 cannot be made by ARCHITECT. The DISTRICT may withhold payment, in whole, or in part, to such extent as may be necessary to protect the DISTRICT from loss because of:

1. Defective Work not remedied as provided in Section 01 45 00 entitled "Correction of Work,".
2. Stop Payment Notices filed, unless the CONTRACTOR at its sole expense provides a bond or other security satisfactory to the DISTRICT in the amount of at least one hundred twenty-five percent (125%) of the claim, in a form satisfactory to the DISTRICT, which protects the DISTRICT against such claim. Any stop payment notice release bond shall be executed by a California admitted, fiscally solvent surety, completely unaffiliated with and separate from the surety on the payment and performance bonds, which does not have any assets pooled with the payment and performance bond sureties.
3. Liquidated damages assessed against the CONTRACTOR.
4. Reasonable doubt that the Work can be completed for the unpaid balance of any Contract Sum or by the completion date.
5. Damage to the property or work of the DISTRICT, another contractor, or subcontractor.
6. Unsatisfactory prosecution of the Work by the CONTRACTOR.
7. Failure to store and properly secure materials or performance without properly processed shop drawings.
8. Failure of the CONTRACTOR to maintain, update and submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation, monthly progress schedules, shop drawings, submittal schedules, schedule of values, product data and samples, proposed product lists, executed change orders, and verified reports. The DISTRICT may, but is not required to, choose liquidated damages as a reasonable amount to be charged if the CONTRACTOR does not submit progress schedules or other such required submittals in accordance with the Contract Documents.
9. Failure of the CONTRACTOR to maintain record drawings and/or annotated specifications.
10. Erroneous estimates by the CONTRACTOR of the value of the Work performed, or other false statements in an Application for Payment.

11. Unauthorized deviations from the Contract Documents; or
12. Failure of the CONTRACTOR to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates.
13. Subsequently discovered evidence or observations nullifying the whole or part of a previously issued Certificate for Payment.
14. Failure to pay subcontractors or materialmen.
15. Breach of any provision of the Contract Documents.
16. Costs and expenses of alternate educational facilities if the CONTRACTOR fails to complete the Project within the period of time required by the Contract Documents.
17. The cost of materials ordered by the DISTRICT pursuant to Section 01 62 00. 01 titled "Materials and Products".
18. Site clean-up as provided in Section 01 74 00. 02 entitled "Cleaning Up".
19. Payments to indemnify, defend, or hold harmless the DISTRICT.
20. Any payments due to the DISTRICT including but not limited to payments for failed tests, utilities and imperfections.
21. Extra services for the ARCHITECT and/or ENGINEER.
22. Extra services for the Inspector of Record including but not limited to re-inspection required due to CONTRACTOR'S failed tests or installation of unapproved or defective materials and CONTRACTOR's requests for inspection and CONTRACTORS failure to attend the inspection.
23. Any other reason in conformity with the provisions of this Contract including, but not limited, any failure to perform the terms and conditions of this Contract.

B. Written Reasons for Withholding: Payment. Upon request of the CONTRACTOR whose payment is deferred, the CONTRACTOR shall be given a written copy of DISTRICT's reasons for withholding payment.

C. Payment After Cure: When the grounds for declining approval are removed, payment shall be made for amounts withheld because of them on the next scheduled pay application. No interest shall be paid on any retainage or amounts withheld due to the failure of the CONTRACTOR to perform in accordance with the terms and conditions of the Contract Documents.

D. DISTRICT may apply the withheld amount(s) to the payment of the claims or obligations at its discretion. In so doing, DISTRICT shall be deemed the agent of CONTRACTOR and any payment made by DISTRICT shall be considered to be a payment made under this Contract by DISTRICT to CONTRACTOR, and DISTRICT shall not be liable to CONTRACTOR for the payments made in good faith. The payments may be made without prior judicial

determination of the claim or obligations. DISTRICT shall submit to CONTRACTOR an accounting to the funds disbursed on behalf of CONTRACTOR.

#### **01 29 76. 06 Substitution of Securities**

A. Pursuant to the requirements of Public Contract Code Section 22300, upon CONTRACTOR'S request, DISTRICT will make payment to CONTRACTOR of any earned retention funds withheld from payments under this Contract if CONTRACTOR deposits with the DISTRICT or in escrow with a California or federally chartered bank acceptable with DISTRICT, securities eligible for investment pursuant to Government Code Section 16430 or bank or savings and loan certificates of deposit. Any escrow agreement shall be substantially similar to the form included with the Contract Documents and set forth in Public Contract Code 22300.

B. To minimize the expense caused by any substitution of securities, CONTRACTOR shall, prior to or at the time CONTRACTOR requests to substitute security, deposit sufficient security to cover the entire amount to be withheld pursuant to this Contract. Should the value of such substituted security at any time fall below the amount for which it was substituted, or any other amount which the DISTRICT determines to withhold, CONTRACTOR shall immediately and at CONTRACTOR'S expense deposit additional security qualifying under said Public Contract Code Section 22300 until the total security deposited is no less than equivalent to the amount subject to withholding under the Contract.

C. In the alternative, under Public Contract Code Section 22300, CONTRACTOR, at its own expense, may request that DISTRICT make payment of earned retention funds directly to the escrow agent. Also, at the expense of CONTRACTOR, CONTRACTOR may direct investment of the payments into securities, and CONTRACTOR shall receive the interest earned on the investment upon the same conditions as provided in subparagraph A, for securities deposited by CONTRACTOR. Upon satisfactory completion of this Contract, CONTRACTOR shall receive from the escrow agent all securities, interest and payments received by the escrow from DISTRICT, pursuant to the terms of Public Contract Code Section 22300. CONTRACTOR shall pay to each subcontractor, not later than twenty (20) days after receipt of payment, the respective amount of interest earned, net of costs attributed to retention withheld from each subcontractor, on the amount of retention withheld from each subcontractor on the amount withheld to insure performance of the CONTRACTOR.

D. If any provision of this Section is found, by a court of competent jurisdiction, to be illegal or unenforceable, such provision shall be deemed stricken and the remaining provisions of this Section shall remain in full force and effect.

#### **01 29 93 Completion of the Work and Close Out Procedures**

When CONTRACTOR considers that the Work, or a portion thereof which the DISTRICT agrees to accept separately, is complete, CONTRACTOR shall prepare and submit to the DISTRICT a comprehensive list of minor items to be completed or corrected (Punch List). CONTRACTOR and/or its Subcontractors shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of the CONTRACTOR to complete all Work in accordance with the Contract Documents. Upon receipt of the CONTRACTOR's list, DISTRICT and ARCHITECT will make an inspection to determine whether the Work, or designated portion thereof, is complete. If such inspection discloses any item, whether or not included on the CONTRACTOR's list, which is not completed in accordance with the requirements of the Contract Documents, CONTRACTOR shall, before DISTRICT's acceptance of the Project and issuance of the Notice of Completion (And Acceptance), complete or correct such item. CONTRACTOR shall then submit a request for an additional inspection by the DISTRICT/ARCHITECT to determine Completion/Acceptance. When the Work, or designated portion thereof (where DISTRICT agrees to consider approval of a separate portion of the overall Work for warranty purposes), is

complete, DISTRICT will prepare a Notice of Completion (And Acceptance) which shall state the date of Completion, establish the responsibilities of the DISTRICT and CONTRACTOR for security, maintenance, heat, utilities, damage to the Work and insurance, and fix the time within which the CONTRACTOR shall finish all items on the list accompanying the Notice of Completion (And Acceptance). Warranties required by the Contract Documents shall commence on the date of Completion/Acceptance of the Work, or designated portion thereof, unless otherwise provided in the Notice of Completion (And Acceptance).

## **01 31 19. 00 PROJECT MEETINGS**

A. Pre-Construction Meeting: Before commencement of work, CONTRACTOR and all Subcontractors listed in bid documents of CONTRACTORS are required to attend a mandatory preconstruction meeting conducted by DISTRICT's representative and further attended by, but not limited to, ARCHITECT, ENGINEER, and IOR. The agenda will be reviewed in advance by the CONTRACTOR's project manager and DISTRICT's representative. This meeting should be attended by all project participants including owner, designer, and project managers, superintendents and foremen of the prime contractor and all major subcontractors and suppliers. Topics to be discussed will include, but not be limited to, introductions, exchange of organization charts, site issues, plans and rules for on-site conduct, permits, final construction documents, phasing and milestones, pre-mobilization requirements, submittals, mobilization plan, work constraints, relocation plans, safety plan, inspection plans, testing plans, owner-furnished items, drawing logs, project management system, daily reports, communication and correspondence, RFI process, change order process, dispute resolution process, and payment application process, operation and maintenance requirements, commissioning, punch list process, warranties, and as-built record drawings, Such proceedings may be electronically recorded.

B. Site Mobilization Meeting: CONTRACTOR shall hold a Site Mobilization Meeting with its subcontractors to review safety requirements, site-specific safety plan, assignment of safety-related responsibilities, pre-phase scheduling discussions, logistics and schedule of mobilization, confirmation that all necessary insurance policies are in place for construction, confirmation of necessary permissions, approvals, and other statutory requirements are in place and that all necessary planning conditions have been satisfied, review of subcontractor schedules and conditions for mobilization.

C. Progress Meetings: CONTRACTOR shall conduct weekly progress meetings for the duration of the contract. Attendees at these meetings include the CONTRACTOR's principal personnel, the ARCHITECT, and appropriate representatives of the DISTRICT, as required. These meetings address all project issues including safety, schedule, and quality. ARCHITECT is responsible for ensuring that meeting minutes are standardized, recorded, scanned electronically, and saved in an electronic manner for ease of retrieval. The weekly agenda, provided by the ARCHITECT, shall include, among other things, attendance sign-in, review of minutes from last meeting, action items from previous meeting, site observation reports, personnel and prosecution of the work, project inspection and testing log review, safety, report from CONTRACTOR, review of submittal / shop drawing log, review RFI log (new and old), review of corrective action log, change orders, progress schedule, prior week's performance, 2-week look-ahead, critical path schedule, commissioning schedule, special inspection schedule, special training, equipment add-delete modification log, application for payment, DISTRICT and ARCHITECT concerns, and next meeting confirmation.

D. Pre-Installation Meetings: Pre-installation meetings shall be held between CONTRACTOR and installing subcontractors prior to the start of their key installations to help ensure that all parties understand and are adequately prepared for the installation process. Such parties shall review the installation process, the materials and equipment needed, the project specifics, coordination with related work and work under separate contract, and any site-specific concerns shall be discussed and dealt with. Such meetings should take place one to two weeks' prior the actual key installation, where possible. Other members of the project team shall be called upon to participate as necessary. The

installing subcontractor's project manager and on-site supervisor shall participate in the pre-installation meeting, along with the CONTRACTOR's representative(s), representatives of firms whose activities directly affect or are affected by such work, and other project team members as applicable.

## **01 32 00 CONSTRUCTION PROGRESS DOCUMENTATION**

### **01 32 16.01 Progress Schedule**

A. Preliminary Construction Schedule: Within five (5) calendar days after receiving the Notice to Proceed, CONTRACTOR shall prepare and submit to the DISTRICT and ARCHITECT a Preliminary Construction Schedule, in both written and electronic format, indicating, in graphic and tabular form, the estimated rate of progress and sequence of all Work required under the Contract Documents. The purpose of the Preliminary Construction Schedule is to assure adequate planning and execution of the Work so that it is completed within the Contract Time and to permit evaluation of the progress of the Work. The Preliminary Construction Schedule shall indicate the dates for commencement and completion of various portions of the Work, including, without limitation, the procurement and fabrication of major items, material and equipment forming a part of, or to be incorporated into, the Work as well as Site construction activities. The Preliminary Construction Schedule shall identify all major (critical) Submittals required, the portion(s) of the Work for which the identified Submittals relate to and the date upon which each Submittal required will be transmitted to the ARCHITECT for review (the "Submittal Schedule"). CONTRACTOR shall prepare the Preliminary Construction Schedule using Primavera, or comparable software in Critical Path Method format. If CONTRACTOR elects to use software other than Primavera, CONTRACTOR shall provide such software to the DISTRICT at CONTRACTOR's expense. These requirements shall not be deemed control over, or assumption of construction means, methods or sequences, all of which remain the CONTRACTOR's responsibility. Further, these requirements shall not give rise to an increase in the Contract Time or the Contract Price. The CONTRACTOR may submit a Preliminary Construction Schedule depicting completion of the Work in a duration shorter than the Contract Time; provided that such Preliminary Construction Schedule shall not be a basis for adjustment to the Contract Price in the event that completion of the Work shall occur after the time depicted therein, nor shall such Preliminary Construction Schedule be the basis for any extension of the Contract Time, the CONTRACTOR's entitlement to any extension of the Contract Time shall be based upon the Contract Time and not on any shorter duration which may be depicted in the CONTRACTOR's Preliminary Construction Schedule. In the event any of the Construction Schedules required under this Section 01 32 16.01 incorporate therein "float" time, such float shall be deemed to belong to and owned by the DISTRICT. As used herein, "float time" shall be deemed to refer to the time between the earliest start date and the latest start date, or between the earliest finish date and the latest finish date of each activity shown on the Construction Schedule.

B. Review of Preliminary Construction Schedule: The DISTRICT and the ARCHITECT shall review the Preliminary Construction Schedule submitted by the CONTRACTOR pursuant subparagraph A above for conformity with the requirements of the Contract Documents. Within fifteen (15) days of the date of receipt of the Preliminary Construction Schedule, such Schedule will be returned to the CONTRACTOR with comments to the form or content thereof. Review of the Preliminary Construction Schedule and any comments thereto by the DISTRICT and/or the ARCHITECT shall not be deemed to be the assumption of construction means, methods or sequences by the DISTRICT or ARCHITECT, all of which remain the CONTRACTOR's obligations under the Contract Documents.

C. Cost Loaded Construction Schedule: Within ten (10) days of the DISTRICT's return of the Preliminary Construction Schedule to the CONTRACTOR pursuant to subparagraph B above, the CONTRACTOR shall prepare and submit the Cost Loaded Construction Schedule which incorporates therein the comments to the Preliminary Construction Schedule. Upon the CONTRACTOR's submittal of such Construction Schedule, the DISTRICT shall review the same for purposes of determining conformity with the requirements of the Contract Documents. Within

fifteen (15) days of the receipt of the Construction Schedule, the DISTRICT will approve such Construction Schedule or will return the same to the CONTRACTOR with comments to the form or content. In the event there are comments to the form or content thereof, the CONTRACTOR shall within seven (7) days of receipt of such comments, revise and resubmit the Construction Schedule incorporating therein such comments. Upon the DISTRICT's approval of the form and content of a Construction Schedule, the same shall be deemed the "approved construction schedule." The DISTRICT's approval of a Construction Schedule shall be for the sole and limited purpose of determining conformity with the requirements of the Contract Documents. By the approved construction schedule, the DISTRICT shall not be deemed to have exercised control over, or approval of, construction means, methods or sequences, all of which remain the responsibility and obligation of the CONTRACTOR in accordance with the terms of the Contract Documents. Further, the approved construction schedule shall not operate to limit or restrict any of CONTRACTOR's obligations under the Contract Documents nor relieve the CONTRACTOR from the full, faithful and timely performance of such obligations in accordance with the terms of the Contract Documents. The activities, commencement and completion dates of activities, and the sequencing of activities depicted on the approved construction schedule shall not be modified or revised by the CONTRACTOR without the prior consent, or direction, of the DISTRICT. Updates to the approved construction schedule shall not be deemed revisions to the approved construction schedule. In the event that the approved construction schedule shall depict completion of the Work in a duration shorter than the Contract Time, the same shall not be a basis for an adjustment of the Contract Time or the Contract Price in the event that actual completion of the Work shall occur after such the time depicted in such approved construction schedule. In such event, the Contract Price shall not be subject to adjustment on account of any additional costs incurred by the CONTRACTOR to complete the Work prior to the Contract Time, as adjusted in accordance with the terms of the Contract Documents. Any adjustment of the Contract Time or the Contract Price shall be based upon the Contract Time set forth in the Contract Documents and not any shorter duration which may be depicted in the approved construction schedule.

D. Revision to Approved Construction Schedule: In the event that the progress of the Work or the sequencing of the activities of the Work shall materially differ from that indicated in the approved construction schedule, as determined by the DISTRICT in its reasonable discretion and judgment, the DISTRICT may direct the CONTRACTOR to revise the approved construction schedule; within fifteen (15) days of the DISTRICT's direction, the CONTRACTOR shall prepare and submit a revised approved construction schedule, for review and approval by the DISTRICT. The CONTRACTOR may request consent of the DISTRICT to revise the approved construction schedule. Any such request shall be considered by the DISTRICT only if in writing setting forth the CONTRACTOR's proposed revision(s) to the approved construction schedule and the reason(s) therefor. The DISTRICT may consent to, or deny, any such request of the CONTRACTOR to revise the approved construction schedule in its reasonable discretion.

E. Updates to Approved Construction Schedule: The CONTRACTOR shall monitor and update the approved construction schedule on a monthly basis, or more frequently as required by the conditions or progress of the Work, or as may be requested by the DISTRICT. Proper and complete updating of the approved construction schedule shall be a condition precedent to the issuance of progress payments described in these General Requirements. The CONTRACTOR shall provide the DISTRICT with updated approved construction schedules indicating progress achieved and activities commenced or completed within the prior updated approved construction schedule. Updates to the approved construction schedule shall not include any revisions to the activities, commencement and completion dates of activities or the sequencing of activities depicted on the approved construction schedule, without the DISTRICT's consent. Any revisions to the approved construction schedule made without the DISTRICT's consent shall result in the DISTRICT's rejection of such update and CONTRACTOR shall, within seven (7) days of the DISTRICT's rejection of such update, submit to the ARCHITECT and the DISTRICT an updated approved construction schedule which does not incorporate any such revisions. The CONTRACTOR shall also submit, with its updates to the approved construction schedule, a narrative statement including a description of current and anticipated problem areas of the Work, logic and resource changes, delaying factors and their impact, and an

explanation of corrective action taken or proposed by the CONTRACTOR. If the progress of the Work is behind the approved construction schedule, the CONTRACTOR shall indicate what measures will be taken to place the Work back on schedule. The DISTRICT may, from time to time, and in the DISTRICT's sole and exclusive discretion, transmit to the CONTRACTOR's performance bond surety the approved construction schedule, any updates thereof, and the narrative statement described hereinabove. The DISTRICT's election to transmit, or not to transmit such information, to the CONTRACTOR's performance bond surety shall not limit the CONTRACTOR's obligations under the Contract Documents.

F. Contractor Responsibility for Construction Schedule: The CONTRACTOR shall be responsible for the preparation, submittal and maintenance of the construction schedules required by the Contract Documents, and any failure of the CONTRACTOR to do so may be deemed by the DISTRICT as the CONTRACTOR's default in the performance of a material obligation under Contract Documents. Any and all costs or expenses required or incurred to prepare, submit, maintain, and update the construction schedules shall be solely that of the CONTRACTOR and no such cost or expense shall be charged to the DISTRICT. The Contract Price shall not be subject to adjustment on account of costs, fees or expenses incurred or associated with the CONTRACTOR's preparation, submittal, and maintenance or updating of the construction schedules. All schedule submittals shall include electronic discs for use by the DISTRICT in its analysis and approval of the schedule submittal.

G. The scheduling is necessary for the DISTRICT's adequate monitoring of the progress of the Project and shall be prepared in accordance with the time frame described in the Agreement. Time is of the essence in the performance of the Work. The DISTRICT may disapprove such a schedule and require modification to it if, in the opinion of the ARCHITECT or DISTRICT, adherence to the progress schedule will cause the Project not to be completed in accordance with the Contract. CONTRACTOR shall adhere to any such modifications required by the DISTRICT.

H. CONTRACTOR shall exchange scheduling information with subcontractors and suppliers, CONTRACTOR shall order work, equipment and materials with sufficient lead time to avoid interruption of the Work/Project.

I. The CONTRACTOR shall submit to DISTRICT a monthly schedule with CONTRACTOR's pay application to reflect the actual sequence of the Work which shall be totally separate and apart from the original progress schedule. Failure to submit will result in rejection of pay application.

J. In the event the Work is delayed, the CONTRACTOR shall also, if requested by the ARCHITECT or DISTRICT, provide revised recovery schedule within ten (10) calendar days if, at any time, the ARCHITECT or DISTRICT consider the completion date to be in jeopardy. The recovery schedule shall be designed to show how the CONTRACTOR intends to accomplish the work to meet the original completion date. The form and method employed by the CONTRACTOR shall be the same as or the original progress schedule. The CONTRACTOR shall modify any portions of the schedule that become infeasible because of activities behind schedule or for any other valid reason. CONTRACTOR shall provide documents and justification for any schedule changes. An activity that cannot be completed by its original completion date shall be deemed to be behind schedule.

K. CONTRACTOR shall submit a revised schedule within ten (10) consecutive calendar days of CONTRACTOR's request for any extension of time. Failure to submit such schedule will result in CONTRACTOR waiving its right to obtain any extension of time.

L. If CONTRACTOR submits a revised schedule showing an earlier completion date for the Project, DISTRICT'S acceptance of this revised schedule SHALL NOT ENTITLE CONTRACTOR TO ANY DELAY CLAIM OR DISRUPTION CLAIM OR ACCELERATION CLAIM OR DAMAGES DUE TO ANY REVISED SCHEDULE,

ACCELERATION TO MEET THE COMPLETION DEADLINE, OR ANY ADDITIONAL COMPENSATION FOR EARLY COMPLETION.

## **01 33 23 SUBMITTAL PROCEDURES**

### **01 33 23. 00 Submittals and Samples**

A. Sample Submissions Procedure: In case a considerable range of color, graining, texture, or other characteristics may be anticipated in finished products, a sufficient number of samples of the specified materials shall be furnished by the CONTRACTOR to indicate the full range of characteristics, which will be present in the finished products; and products delivered or erected without submittal and approval of full range samples shall be subject to rejection. Except for range samples, and unless otherwise called for in the various sections of the Specifications, samples shall be submitted in duplicate. All samples shall be marked, tagged, or otherwise properly identified with the name of the submitting party, the name of the Project, the purpose for which the samples are submitted, and the date and shall be accompanied by a letter of transmittal containing similar information, together with the Specification section number for identification of each item. Each tag or sticker shall have clear space for the review stamps of CONTRACTOR and ARCHITECT. CONTRACTOR shall furnish for approval, within thirty-five (35) calendar days following award of the Contract unless specified otherwise in specifications, all samples as required in the specifications together with catalogs and supporting data required by ARCHITECT. This provision shall not authorize any extension of time for performance of the Project. ARCHITECT shall review such samples, as to conformance with the design concept of the work and for compliance with Contract Documents and approve or disapprove same within ten (10) working days from receipt of same.

Unless otherwise specified, sampling, preparation of samples and tests shall be in accordance with the latest standards of the American Society for Testing and Materials.

B. Labels and Instructions: Samples of materials, which are generally furnished in containers bearing the manufacturers' descriptive labels and printed application instructions, shall, if not submitted in standard containers, be supplied with such labels and application instructions.

C. ARCHITECT/ENGINEER's Review/Delays: Samples shall, upon demand of ARCHITECT or DISTRICT, be submitted for tests or examinations and considered before incorporation of same into the Work. CONTRACTOR shall be solely responsible for any delays due to samples not being submitted in time to allow for testing. Acceptance or rejection will be made in writing. All work by CONTRACTOR shall at least be equal to any approved samples in every respect. Samples which are of value after testing will remain the property of the CONTRACTOR.

D. The ARCHITECT/ENGINEER will review and, if appropriate, approve submissions and will return them to the CONTRACTOR with the ARCHITECT's stamp and signature applied thereto, indicating the appropriate action in compliance with the ARCHITECT's standard procedures.

E. Equipment Manuals: CONTRACTOR shall obtain and furnish three (3) complete sets of manuals containing the manufacturers' instructions for maintenance and operation of each item of equipment and apparatus furnished under the Contract Documents and any additional data specifically requested under the various sections of the Specifications for each division of the Work. The manuals shall be arranged in proper order, indexed, and placed in three-ring binders. At the completion of its Work, the CONTRACTOR shall certify, by endorsement thereon, that each of the manuals is complete, accurate, and covers all of its Work. Prior to submittal of CONTRACTOR's Application for Final Payment, and as a further condition to its approval by the ARCHITECT, each Subcontractor shall deliver the manuals, arranged in proper order, indexed, endorsed, and placed in three-ring binders, to the CONTRACTOR who



shall assemble these manuals for all divisions of the Work, review them for completeness, and submit them to the DISTRICT through the ARCHITECT/ENGINEER.

F. DISTRICT's Property: All shop drawings and samples submitted shall become the DISTRICT's property.

### **01 33 23.01 Shop Drawings**

A. Shop Drawings: The term "shop drawings" as used herein means drawings, diagrams, schedules, and other data, which are prepared by CONTRACTOR, Subcontractors, manufacturers, suppliers, or distributors illustrating some portion of the Work, and includes: illustrations; fabrication, erection, layout and setting drawings; manufacturer's standard drawings; schedules; descriptive literature, instructions, catalogs, and brochures; performance and test data including charts; wiring and control diagrams; and all other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment, or systems and their position conform to the requirements of the Contract Documents. The CONTRACTOR shall obtain and submit with the shop drawings all seismic and other calculations and all product data from equipment manufacturers. "Product data" as used herein are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the CONTRACTOR to illustrate a material, product, or system for some portion of the Work. As used herein, the term "manufactured" applies to standard units usually mass-produced, and "fabricated" means items specifically assembled or made out of selected materials to meet individual design requirements. Shop drawings shall: establish the actual detail of all manufactured or fabricated items, indicate proper relation to adjoining work, amplify design details of mechanical and electrical systems and equipment in proper relation to physical spaces in the structure, and incorporate minor changes of design or construction to suit actual conditions.

B. Samples: The term "samples" as used herein are physical examples furnished by CONTRACTOR to illustrate materials, equipment, or quality and includes natural materials, fabricated items, equipment, devices, appliances, or parts thereof as called for in the Specifications, and any other samples as may be required by the ARCHITECT to determine whether the kind, quality, construction, finish, color, and other characteristics of the materials, etc., proposed by the CONTRACTOR conform to the required characteristics of the various parts of the Work. All Work shall be in accordance with the approved samples.

C. CONTRACTOR's Responsibility: CONTRACTOR shall obtain and shall submit to ARCHITECT all required shop drawings and samples in accordance with CONTRACTOR's schedule for submission of shop drawings and samples with such promptness as to cause no delay in its own Work or in that of any other contractor, Owner or subcontractor but in no event later than thirty-five (35) days after the execution of the Contract. No extensions of time will be granted to CONTRACTOR or any Subcontractor because of its failure to have shop drawings and samples submitted in accordance with the schedule. Each Subcontractor shall submit all shop drawings, samples, and manufacturer's descriptive data for the review of the DISTRICT, the CONTRACTOR, and the ARCHITECT through the CONTRACTOR. By submitting shop drawings, product data, and samples, the CONTRACTOR and submitting party (if other than CONTRACTOR) represent that they have determined and verified all materials, field measurements, field conditions, catalog numbers, related field construction criteria, and other relevant data in connection with each such submission, and that they have checked, verified, and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. At the time of submission, any deviation in the shop drawings, product data, or samples from the requirements of the Contract Documents shall be narratively described in a transmittal accompanying the submittal. However, submittals shall not be used as a means of requesting any substitutions. Review by DISTRICT and ARCHITECT shall not relieve the Contractor or any Subcontractor from their responsibility in preparing and submitting proper shop drawings in accordance with the Contract Documents. CONTRACTOR shall stamp, sign, and date each submittal indicating its representation that the submittal meets all of the requirements of the Contract Documents. Any submission, which in

ARCHITECT's opinion is incomplete, contains numerous errors, or has been checked only superficially by CONTRACTOR, will be returned unreviewed by the ARCHITECT for resubmission by the CONTRACTOR.

D. Extent of Review: In reviewing shop drawings, the ARCHITECT will not verify dimensions and field conditions. The ARCHITECT will review and approve shop drawings, product data, and samples for aesthetics and for conformance with the design concept of the Work and the information given in the Contract Documents. The ARCHITECT's review shall neither be construed as a complete check nor relieve the CONTRACTOR, Subcontractor, manufacturer, fabricator, or supplier from responsibility for any deficiency that may exist or from any departures or deviations from the requirements of the Contract Documents unless the CONTRACTOR has, in writing, called the ARCHITECT's attention to the deviations at the time of submission and the ARCHITECT has given specific written approval. The ARCHITECT's review shall not relieve the CONTRACTOR or Subcontractors from responsibility for errors of any sort in shop drawings or schedules, for proper fitting of the Work, or from the necessity of furnishing any Work required by the Contract Documents, which may not be indicated on shop drawings when reviewed. CONTRACTOR and Subcontractors shall be solely responsible for determining any quantities, whether or not shown on the shop drawings.

E. Drawing Submission Procedure: All shop drawings must be properly identified with the name of the Project and dated, and each lot submitted must be accompanied by a letter of transmittal referring to the name of the Project and to the Specification section number for identification of each item clearly stating in narrative form, as well as "clouding" on the submissions, all qualifications, departures, or deviations from the Contract Documents, if any. Shop drawings, for each section of the Work, shall be numbered consecutively, and the numbering system shall be retained throughout all revisions. All Subcontractor submissions shall be made through the CONTRACTOR. Each drawing shall have a clear space for the stamps of ARCHITECT and CONTRACTOR. Only shop drawings required to be submitted by the Contract Documents shall be reviewed.

F. Copies Required: Each submittal shall include one (1) legible, reproducible sepia and five (5) legible paper copies and one (1) electronic copy of each drawing, including fabrication, erection, layout and setting drawings, and such other drawings as required under the various sections of the Specifications until final acceptance thereof is obtained. Subcontractor shall submit copies, in an amount as requested by the CONTRACTOR, of manufacturers' descriptive data for materials, equipment, and fixtures, including catalog sheets showing dimensions, performance, characteristics, and capacities; wiring diagrams and controls; schedules; all seismic calculations and other calculations; and other pertinent information as required.

G. Corrections: The CONTRACTOR shall make any corrections required by ARCHITECT/ENGINEER and shall resubmit as required by ARCHITECT the required number of corrected copies of shop drawings or new samples until approved. CONTRACTOR shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections required by the ARCHITECT on previous submissions. Professional services required for more than one (1) re-review of required submittals of shop drawings, product data, or samples are subject to charge to the CONTRACTOR.

H. Approval Prior to Commencement of Work: No portion of the Work requiring a shop drawing or sample submission shall be commenced until the submission has been reviewed by DISTRICT and approved by ARCHITECT unless specifically directed in writing by the DISTRICT. All such portions of the Work shall be in accordance with approved shop drawings and samples.

CONTRACTOR shall check and verify all field measurements and shall promptly submit all shop or setting drawings, schedules and material lists required for the work of various trades, checked and approved by CONTRACTOR, so as to preclude any delay. ARCHITECT/ENGINEER shall check and approve or disapprove those schedules and

drawings, only for conformance with the design concept of the Project and compliance with the information provided by this Contract, within 21 days. CONTRACTOR shall make any corrections required by the ARCHITECT/ENGINEER, file corrected copies with the ARCHITECT/ENGINEER and furnish other copies as needed for construction. ARCHITECT/ENGINEER'S approval of the drawings or schedules shall not relieve CONTRACTOR of its responsibility for deviations from drawings or specifications unless CONTRACTOR has called ARCHITECT/ENGINEER'S attention to the deviations, in writing, at the time of submission and secured ARCHITECT/ENGINEER'S written approval. Nor shall it relieve CONTRACTOR from its responsibility for errors in shop drawings or schedules.

No portion of the work requiring submission of a shop drawing shall be commenced until the submittal has been acted upon by the ARCHITECT/ENGINEER. All such portions of the work shall be in accordance with the reviewed submittals.

THE CONTRACTOR SHALL HAVE NO CLAIM FOR DAMAGES OR EXTENSION OF TIME DUE TO ANY DELAY RESULTING FROM THE CONTRACTOR HAVING TO MAKE THE REQUIRED REVISIONS TO SHOP DRAWINGS UNLESS REVIEW BY THE ARCHITECT OF SAID DRAWINGS IS DELAYED BEYOND THE TIME PROVIDED HEREIN ABOVE AND THE CONTRACTOR CAN ESTABLISH THAT THE ARCHITECT'S DELAY, AS PART OF THE REVIEW PROCESS, ACTUALLY RESULTED IN A DELAY TO THE CONTRACTOR'S CONSTRUCTION SCHEDULE.

### **01 33 23. 13 COORDINATION OF WORK; COORDINATION OF DRAWINGS**

A. CONTRACTOR shall be responsible to perform and shall perform the following:

1. Coordinate the Work according to provisions stated in the Contract Documents, including but not limited to the Contract General Conditions. CONTRACTOR shall not delegate responsibility for coordination to any subcontractor.
2. Anticipate the interrelationship of all subcontractors and their relationship with the total Work. Resolve differences or disputes between subcontractors and materials suppliers concerning coordination, interference, and extent of work between sections. The ARCHITECT is not required to coordinate work between sections and will not do so.
3. Coordinate Work under the Contract with work under separate contracts by DISTRICT.
4. Coordinate utility and building services shutdowns and closures of vehicular and pedestrian thoroughfares, including access to buildings and parking areas, to minimize disruption of DISTRICT activities.
5. Providing anchorage, blocking, joining and other detailing as required to provide a complete Project.
6. Coordinate this work with all associated Work in a manner that will ensure that all Work will be accomplished as rapidly as the progress of the Project will permit and so that no work will be delayed for want of associated work.
7. Construction Interfacing and Coordination: Layout, scheduling and sequencing of Work shall be solely the CONTRACTOR's responsibility. CONTRACTOR shall verify, confirm and coordinate field measurements so that new construction correctly and accurately interfaces with conditions existing prior to construction. CONTRACTOR shall bring together the various parts, components, systems and assemblies as required for the correct interfacing and integration of all elements of Work. CONTRACTOR shall coordinate Work to correctly

and accurately connect abutting, adjoining, overlapping and related elements, including work under separate contracts by DISTRICT, utility agencies and companies.

8. Coordinate matching finish, texture, color, and related attributes for the new Work relating to existing components in the Project, where applicable.
  9. Coordinate schedules, submittals, and work of the various trades to ensure efficient and orderly sequence of installation of construction, with provisions for accommodating items to be installed later. Coordinate the Work with respect to the requirements of the Project Specifications, Drawings, and other Contract Documents. Work shown on any drawing or required by any specification is required by the Contract irrespective of the failure of the other to require it, and irrespective of trade subdivision. CONTRACTOR shall require each trade subcontractor and any custom material supplier to review all other subdivisions of the documents for related work and shall coordinate the subcontracts and/or purchase orders, as applicable, accordingly.
  10. Require all parties involved in the performance of the Work to cooperate in the overall coordination and scheduling of the Work under the direction of the CONTRACTOR. Each party, when requested to do so, shall furnish information concerning its portion of the Work, and shall respond promptly and reasonably to the decisions and requests of persons designated with coordination, supervisory, administrative, or similar authority.
  11. Require that coordinated layout shop drawings show actual architectural and structural constraints and site conditions.
- B. Requirements Relating to Coordination Drawings for Installation of Utility Systems and Equipment Room systems:
1. CONTRACTOR shall prepare coordination drawings for all Work on the site, in above-ceiling spaces, utility chases and utility rooms.
  2. The Contract Documents are generally diagrammatic in nature with respect to mechanical, electrical, fire protection, low voltage, building automation and data systems. Not every necessary bend, offset, elevation, and direction change is shown in the Contract Documents. The Contract Documents represent that these systems will fit in the spaces allotted; however, it is the responsibility of the CONTRACTOR to assign space priorities and lay out and route the systems and the systems components so they will fit efficiently in the allotted spaces and allow for convenient and code-conforming access to all valves, dampers, actuators, and other devices as required by the Contract Documents and/or applicable Code or Law.
  3. The layout of utility rooms is also diagrammatic in nature. The Contract Documents represent that that equipment identified to be installed in utility rooms will fit in the spaces allotted. However, because the CONTRACTOR must submit and provide for equipment to be installed in utility rooms, it is the CONTRACTOR's responsibility to lay-out the equipment room such that all equipment will fit appropriately, with all required clearances and within all required tolerances.
  4. The CONTRACTOR must examine all of the Contract drawings, including but not limited to the architectural drawings, for ceiling space dimensions, and structural for beam/column obstructions, and make allowances in the CONTRACTOR's planned coordination efforts, work sequence, equipment layout, junction boxes, and routing of the systems and components and all connections thereto.

5. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
6. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated, coordinate locations of fixtures and outlets with finish elements.
7. Size ductwork, mechanical pipe, plumbing, electrical, and sprinkler system components required by the Contract Documents, including but not limited to the Drawings and Specifications. Downsizing of Mechanical/Electrical, Plumbing/Sprinkler (M/E/P/S) systems is not permitted without the express written direction and consent and appropriate Change Order documentation approved and signed by the ARCHITECT and DISTRICT.
8. Coordination drawings shall clearly show, at minimum, the following:
  - a. Coordinated layout shop drawings shall be scaled and dimensionally accurate and detailed, giving complete dimensions of all locations, elevations, tolerances, and clearances.
  - b. Show exact locations of the following: ductwork, piping, including fire protection systems, valves and piping specialties, including all air vents and drains, dampers, actuators, access doors, control and electrical panels, adjustable and variable frequency controllers, motor control centers, starters, and transformers, disconnect switches, elevator equipment, electrical cable trays, bus ducts, and main conduits, and all DISTRICT-furnished, CONTRACTOR-installed equipment.
  - c. The location, for maintenance and repair purposes, of all above-ceiling valves, fire dampers, actuators, control devices, meters and gauges, and cooling/heating coils, and the access hatches (in "hard lid) ceilings that provide a means of access to these devices. These devices and appurtenances must be located such that a worker has unimpeded access to perform maintenance, repair or replacement. "Unimpeded access" means that a worker can access the device from a location immediately below the device, via the removal of a lay-in ceiling tile, or an access door/panel. All above-ceiling valves, fire dampers, actuators, control devices and cooling/heating coils shall be located such that there are no interferences from systems furniture, or above-ceiling mechanical electrical, plumbing, or sprinkler systems. The Coordination drawings must clearly depict and represent this accessibility.
  - d. How equipment, controls, valves, actuators, power panels, relay panels, and disconnects will fit in equipment room(s) space, and still comply with code, and manufacturer's maintenance requirements, with respect to clearance and tolerances.

## **01 35 00 SPECIAL PROCEDURES**

### **01 35 13. 02 Campus Disruption Due to Noise, Dust Control, or Other Operations**

If school is in session at any point during the progress of the project, and in the DISTRICT's reasonable discretion, the noise and/or other disruptions from such Work disrupts or disturbs the students or faculty or the normal operation of the school, at the DISTRICT's request, the CONTRACTOR shall schedule the performance of all such Work around normal school hours or make other arrangements so that the work does not cause such disruption or disturbance. In no event shall CONTRACTOR have a right to receive additional compensation or an extension to the Contract Time as a result of any such rescheduling or the making of such other arrangements. Any temporary power, water, or other utility or service cutoffs must be pre-approved by DISTRICT or its authorized representative. The CONTRACTOR shall be responsible for complying with the requirements of the city and county having jurisdiction with regard to noise ordinances governing construction sites and activities. Construction equipment noise is subject to the control of the Environmental Protection Agency's Noise Control Program (Code of Federal Regulations, Title 40, Part 204). The CONTRACTOR shall be solely responsible for maintaining all areas of the Work free from all

materials and products that by becoming airborne may cause respiratory inconveniences to DISTRICT students and personnel. Damages and/or any liability derived from the CONTRACTOR's failure to comply with these requirements shall be the sole cost of the CONTRACTOR, including all penalties incurred for violations of local, state and/or federal regulations.

#### **01 35 16 Occupancy, partial Occupancy, or Use**

DISTRICT reserves the right to occupy or use any portion or all of the Project at any time before completion. Unless otherwise agreed upon in writing, any occupancy, use, or partial occupancy shall not constitute final acceptance of any part of the work covered by this Contract, nor shall any occupancy or use extend the date specified for completion of the Project or otherwise entitle the CONTRACTOR to any additional compensation. Similarly, beneficial occupancy of any portion or all of the Project does not commence any warranty period, nor shall it entitle CONTRACTOR to any additional compensation whatsoever because of such occupancy or use. DISTRICT and CONTRACTOR shall agree in writing to the responsibilities assigned to each of them for payments, security, maintenance, heat, utilities, damage to the Work, insurance, the period for correction of the Work, and the commencement of warranties required by the Contract Documents for the portion occupied or used. When CONTRACTOR considers a portion complete, CONTRACTOR shall prepare and submit a Punch List to the DISTRICT as provided IN THESE General Requirements. If CONTRACTOR and DISTRICT are unable to agree upon the matters set forth above, DISTRICT may nevertheless use or occupy any portion of the Work, with the responsibility for such matters subject to resolution in accordance with the Contract Documents. Immediately prior to such partial occupancy or use, DISTRICT, CONTRACTOR, and ARCHITECT/ENGINEER shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work. DISTRICT's use or occupancy of the Work or portions thereof pursuant to the proceeding shall not be deemed "completion" of the Work as that term is used in Public Contract Code Section 7107.

#### **01 35 23 Necessary Safeguards**

As required by conditions and progress of work, CONTRACTOR shall erect and properly maintain at all times all necessary safeguards, signs, barriers, lights, and watchmen for protection of the site, workers, students, staff, and the public, and shall post danger signs warning against hazards created in the course of construction. CONTRACTOR shall designate a responsible member of its organization whose duty shall be the prevention of accidents. The name and position of the person designated shall be reported to DISTRICT by CONTRACTOR.

#### **01 35 29 Health, Safety & Emergency Response Procedures**

Reserved.

### **01 41 00 REGULATORY REQUIREMENTS**

#### **01 41 00.01 Code Compliance**

All materials and workmanship shall conform to all legal requirements applicable to the Project including, but not necessarily limited to the most recent edition Title 24 of the California Code of Regulations, and the requirements of the Division of the State Architect, CONTRACTOR shall keep a copy of Title 24 of the California Code of Regulations on the job at all times. In addition, all work and material shall be in full accordance with the latest Rules and Regulations of the State Fire Marshal, National Board of Fire Underwriters, California Electric Code, Safety Orders of Division of Industrial Safety, California Plumbing Code, Title 24 of the California Code of Regulations and other Applicable Laws and regulations. Such laws and regulations shall be considered a part of these specifications as if set forth herein in full and all work hereunder shall be executed in accordance therewith. Nothing in these plans or specifications is to be construed to permit work not conforming to all requirements of law. CONTRACTOR shall perform its duties in accordance with all legal requirements including, but not limited to, Title 24 of the California Code of Regulations.

**01 41 13. 00 Compliance With DTSC Guidelines – Imported Soils**

If the Project requires the use of imported soils, CONTRACTOR, shall be responsible to use imported material that is free of any hazardous and/or toxic substance or material of any nature or type as defined in accordance with California Law, California Health and Safety Code and the guidelines of the Department of Toxic Substances Control (“DTSC”). CONTRACTOR must notify the DISTRICT of the source of material with adequate notice to allow analysis and testing and comply with all applicable regulations. The DISTRICT reserves the right to reject any imported material that has come from agricultural or commercial land uses.

**01 41 16. 00 Laws and Regulations**

CONTRACTOR shall give all notices and comply with all ordinances, rules and regulations, and Applicable Laws, relating to the work required by this Contract. If CONTRACTOR observes that the drawings and specifications are in conflict, CONTRACTOR shall promptly notify ARCHITECT/ENGINEER in writing and any changes deemed necessary by the ARCHITECT/ENGINEER shall be made as provided in the Contract for changes in work. If CONTRACTOR performs any work which he knows, or through the exercise of reasonable care should have known to be contrary to any Applicable Laws, ordinances, rules or regulations and fails to notify ARCHITECT/ENGINEER, CONTRACTOR shall bear all costs arising from the violations-

**01 41 26. 00 Permits and Licenses**

Permits, licenses, and certificates necessary for prosecution of the Work shall be secured and paid for by CONTRACTOR, unless otherwise specified. All such permits, licenses and certificates shall be delivered to the ARCHITECT before demand is made for final payment. CONTRACTOR shall and shall likewise require that all subcontractors maintain contractor licenses in effect as required by law during the term of the Project.

**01 45 00. 00 Correction of Work**

A. CONTRACTOR shall promptly remove from the premises all work identified by DISTRICT or ARCHITECT/ENGINEER as failing to conform to this Contract, whether incorporated or not. CONTRACTOR shall promptly replace and repair its own work to comply with this Contract without additional expense to DISTRICT and shall bear the expense of making good all work of other contractors destroyed or damaged by that removal or replacement, including compensation for the ARCHITECT/ENGINEER’s additional services.

B. If CONTRACTOR does not remove work within a reasonable time following written notification, DISTRICT may remove and store the material at CONTRACTOR’s expense. If CONTRACTOR does not pay the expenses of removal within 10 days, DISTRICT may sell the materials at auction or private sale, upon 10 days’ written notice and shall account for any net proceeds after deducting all costs and expenses that should have been borne by CONTRACTOR.

C. CONTRACTOR shall promptly install, complete, or correct work that is not in accordance with the Contract Documents within ten (10) days of written notice, or an equitable deduction of Contract price may be enforced by the DISTRICT. If CONTRACTOR defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provision thereof, DISTRICT may, after ten (10) days written notice to the CONTRACTOR and without prejudice to any other remedy it may have, make good such deficiencies.

D. The DISTRICT shall adjust the total Contract price by reducing the amount thereof by the cost of making good such deficiencies. If DISTRICT deems it inexpedient to correct work not done in accordance with the Contract Documents, and equitable reduction in the Contract price shall be made.

**01 45 23. 01 District’s Inspector (“IOR”)**

A. The DISTRICT will provide one or more inspectors to provide competent and adequate inspection during normal working periods. The project inspector(s) shall be employed by the DISTRICT subject to approval by the Division of

the State Architect. Inspector and inspection of the Project shall be in accordance with all applicable provisions of law including, but not necessarily limited to, Title 24 of the California Code of Regulations. Special inspections shall be in accordance with all applicable provisions of law including, but not necessarily limited to those contained in Title 24 of the California Code of Regulations.

B. The Inspector shall have free access to any or all parts of the Project at any time. CONTRACTOR shall furnish the Inspector reasonable opportunities for obtaining information necessary to keep the Inspector fully informed regarding progress and manner of Work and character of materials. Inspection of the Work shall not relieve CONTRACTOR from any obligation to fulfill this Contract. The Inspector and ARCHITECT/ENGINEER shall have authority to reject work whenever the provisions of this Contract are not being complied with. In addition, the Inspector may stop any work which poses a probable risk of harm to persons or property. CONTRACTOR shall instruct its employees accordingly.

#### **01 45 23.02 Tests and Inspections**

C. If in this Contract, any Applicable Laws, DISTRICT instructions, ordinances, or any public authority require any work to be specifically tested or approved, CONTRACTOR shall give notice of its readiness for observation or inspection at least two workdays prior to being tested or covered up. If inspection is required by parties other than DISTRICT, CONTRACTOR shall inform DISTRICT of the date fixed for the inspection. Required certificates of inspection shall be secured by CONTRACTOR. Observations by DISTRICT shall be promptly made and where practicable, at the source of supply. If any work is covered up without approval or consent of DISTRICT, if required by DISTRICT, it must be uncovered for examination and satisfactorily reconstructed at CONTRACTOR'S expense in compliance with this Contract. The cost of testing any materials which are not in compliance with the Contract shall be paid for by DISTRICT and charged back to CONTRACTOR. Other costs for tests and inspection of materials shall be paid by DISTRICT unless otherwise provided in this Contract. CONTRACTOR shall pay for all tests and inspections under any of the following conditions: (i) when such costs are stipulated in the provisions of the Contract Documents to be borne by the CONTRACTOR; (ii) when a material is tested or inspected and fails to meet the requirements of the Specifications and/or Drawings; or (iii) when the source of the material is changed after the original test or inspection has been made or approved.

D. Where the inspection and testing will be conducted by an independent laboratory or agency, the materials or samples of materials to be tested shall be selected by the laboratory or agency, or DISTRICT'S representative and not by CONTRACTOR.

E. CONTRACTOR shall notify DISTRICT a sufficient time in advance of the manufacture of materials to be supplied to him under this Contract, which must by the terms of this Contract be tested, in order that DISTRICT may arrange for testing at the source of supply. Any materials shipped by CONTRACTOR from the source of supply prior to having satisfactorily passed testing inspection, or prior to receipt of notice from the representative that the testing and inspection will not be required, shall not be incorporated in the Work without the prior approval of DISTRICT and subsequent testing and inspection. Time is of the essence with respect to this Contract. Tests or inspections required and conducted pursuant to the Contract Documents shall be made or arranged by CONTRACTOR to avoid delay in the progress of the Work.

F. At any time, re-examination of questioned work, including warranty work, may be ordered by DISTRICT. If required, work must be uncovered by CONTRACTOR. If the work is determined to be in accordance with this Contract, DISTRICT shall pay all associated costs of re-examination and replacement. If the work is not in accordance with this Contract, CONTRACTOR shall pay all associated costs for re-examination and replacement. Where required DSA testing of the work identifies a failure rate of ten percent (10%) or greater for any system, scope of work, installation or subtrade that has been specifically investigated, DISTRICT may, at its sole discretion, order



that all such similar systems, installations, scopes of work or subtrade work used in connection with the Project be tested, and the cost to test all such work shall be paid by the CONTRACTOR.

G. Tests and inspections shall otherwise comply with all applicable provisions of law including, but not necessarily limited to, Title 24 of the California Code of Regulations. Title 24, Part 1, Section 4-335 requires the tests of materials for construction projects under the jurisdiction of the DIVISION OF THE STATE ARCHITECT be performed by Laboratory Evaluation and Acceptance (LEA) program testing facilities.

H. In the event of a dispute of questioned work, the DISTRICT may order additional investigative testing or inspection to determine compliance to contract specifications. If the work is determined to be in accordance with this Contract, DISTRICT shall pay the costs of investigative testing or inspection and replacement. If the work is not in accordance with this Contract, CONTRACTOR shall pay all associated costs.

I. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the CONTRACTOR and promptly delivered to the ARCHITECT. If a material is not required to be tested, the ARCHITECT, Inspector of Record, or the DISTRICT may require CONTRACTOR to furnish a certificate bearing the official and legal signature of the supplier with each delivery of such material, which certificate shall state that the material complies with the Specifications.

#### **01 45 23. 33 Code Required Special Inspections**

Reserved

#### **01 45 23. 45 Inspection by District Personnel**

Reserved

#### **01 50 00 Temporary Facilities and Controls: Continuity of Services**

Continuity of all services must maintained at all times during construction. Any and all costs associated with maintaining all services throughout the construction on new or modernization projects will be borne by the contractor. This includes, but is not limited to: electrical, plumbing, irrigation, HVAC, data, fire alarm, intrusion and public address systems.

##### **01 51 00.01 Utilities**

A. For modernization projects: Utilities including electricity, water and gas used on the Project will be furnished by DISTRICT. Telephone service may be furnished by the District, however, long distance calls will be back charged to the CONTRACTOR.

B. If this Contract is for an addition (new construction) to an existing facility, CONTRACTOR shall furnish and install necessary temporary distribution systems, including meters for all utilities including but not limited to electricity, water, gas and telephone service necessary to perform the work. Upon completion of the work, CONTRACTOR shall remove all temporary systems.

##### **01 52 19.01 Sanitary Facilities**

CONTRACTOR shall provide temporary, sanitary toilet facilities, as required by law and additional facilities as directed by the inspector for the use of all workers. The facilities shall be maintained in a sanitary condition and shall be left at the site until removal is directed by the inspector. Use of toilet facilities contained in the Project under construction shall not be permitted except with the approval of the DISTRICT.

##### **01 55 19. 01 Temporary Parking Areas**

Reserved.

**01 55 19. 02 District's Inspector ("IOR") Private Office**

Within seven days after notice to proceed has been received, the CONTRACTOR shall provide the project Inspector with a "private office," which shall be a minimum of 8' x 12'. The room shall be equipped with a window, door with lock, wood floor, two ceiling lights, heating and cooling unit, standard 30" x 60" desk with drawers and file drawer, 110-volt outlet, one plan table (36" x 80" x 39" high, sloped up 3"), one 30" high stool, one desk chair, and one 12" x 28" wall shelf.

**01 55 26 Traffic Control**

Reserved.

**01 55 29 Staging Areas**

Reserved.

**01 56 26 Temporary Fencing**

Reserved.

**01 56 29 Protective Walkways**

Reserved.

**01 56 39 Temporary Tree and Plant Protection**

Reserved.

**01 57 23 Storm Water Pollution Prevention Plan (SWPPP)**

Storm Water Pollution Plan is only applicable if the "Notice to Bidders" section identifies this project as subject to these requirements or incorporated by addenda.

**COMPLIANCE WITH STATE STORM WATER PERMIT FOR CONSTRUCTION:**

A. CONTRACTOR shall comply with all conditions of the State Water Resources Control Board (State Water Board) National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (the "Permit") for all construction activity which results in the disturbance of in excess of one (1) acre of total land area or which is part of a larger common area of development or sale. It shall be CONTRACTOR's responsibility to evaluate the cost of compliance with the SWPPP prior to entering into the Contract for the Project and providing the Bid Price. CONTRACTOR shall comply with all requirements of the State Water Resources Control Board. CONTRACTOR shall include all costs of compliance with specified requirements in the Bid Price.

B. CONTRACTOR shall be responsible for implementing and complying with the provisions of the Permit and the SWPPP, including the standard provisions, monitoring and reporting requirements as required by Permit. CONTRACTOR shall provide copies of all reports and monitoring information to DISTRICT, and appropriate regulatory agencies.

C. CONTRACTOR shall comply with the lawful requirements of any applicable municipality, county, drainage district, and other local agencies regarding discharges of storm water to separate storm drain system or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.

D. Failure to comply with the Permit is a violation of federal and state law. CONTRACTOR hereby agrees to indemnify, defend and hold harmless DISTRICT, its officers, agents, and employees from and against any and all claims, demands, losses or liabilities of any kind or nature which DISTRICT, its officers, agents, and employees may sustain or incur for noncompliance with the Permit arising out of or in connection with the Project, except for liability resulting from the negligence or willful misconduct of DISTRICT, its officers, agents or employees. DISTRICT may seek damages from CONTRACTOR for delay in completing the Project in accordance herewith, including damage caused by CONTRACTOR's failure to comply with Permit requirements.

CONTRACTOR shall familiarize their self and adhere to the SWPPP Specification Section below:

## PART 1 - GENERAL

### 1.01 SUMMARY

#### A. This Section includes the following:

1. Provide all material, labor and services necessary to implement the Storm Water Pollution Prevention Plan (SWPPP).
2. Provide all material, labor, equipment and services necessary to comply with the conditions of the Construction General Permit (CGP) No. 2009-0009-DWQ.
3. Implement the Best Management Practices (BMP) contained within the SWPPP or implement other practices deemed necessary by the CONTRACTOR/Qualified SWPPP Practitioner (QSP) to better accomplish the intent of controlling the quality of runoff water from the Project Site.
4. Submit to the Owner/LRP all reports required for the Annual Report prior to September 1 of each year.
5. All Contract requirements in Division 00 and 01.

#### B. This Section does not include:

1. The Owner's Qualified SWPPP Developer (QSD) will prepare the SWPPP.
2. A Notice of Intent (NOI) to be covered by the CGP will be electronically filed by the Owner/Legally Responsible Person (LRP) with the State Water Resources Control Board (SWRCB). The Owner/LRP will pay the NOI fee and annual fees thereafter when applicable.
3. If applicable, an Erosivity Waiver will be electronically filed by the Owner/LRP with the SWRCB. The Owner/LRP will pay the Erosivity Waiver fee.
4. The Annual Report will be electronically filed by the Owner/LRP with the SWRCB by September 1 of each year.
5. A Notice of Termination (NOT) to terminate the CGP coverage will be electronically filed by the Owner/LRP with the SWRCB at the end of the project upon final stabilization as determined by the owner's QSD.

#### C. Acronyms:

1. BMP Best Management Practices
2. CARB California Air Resources Board
3. CGP Construction General Permit Order No. 2009-0009-DWQ
4. CSMP Construction Site Monitoring Program
5. EPA Environmental Protection Agency
6. FMFCD Fresno Metropolitan Flood Control District
7. NOI Notice of Intent

- 8. NOT Notice of Termination
- 9. NPDES National Pollution Discharge Elimination System
- 10. QSD Qualified SWPPP Developer
- 11. QSP Qualified SWPPP Practitioner
- 12. SJVAPCD San Joaquin Valley Air Pollution Control District
- 13. SWPPP Storm Water Pollution Prevention Plan
- 14. SWRCB State Water Resources Control Board
- 15. RWQCB Regional Water Quality Control Board

#### 1.02 RELATED SECTIONS

- A. Section 31 11 00 – Site Clearing
- B. Section 31 20 00 – Earthwork
- C. Section 33 41 00 – Storm Drainage

#### 1.03 SUBMITTALS

- A. Submit the following in accordance with Section 01 30 00:
  - 1. Construction schedule to be included in the SWPPP.
  - 2. List of subcontractors to be included in the SWPPP.
  - 3. Addenda to the SWPPP.
  - 4. Inspection, training, and testing reports required by the Construction Site Monitoring Program (CSMP) in the SWPPP must be delivered to the Owner/LRP prior to September 1 of each year.

#### 1.04 QUALITY ASSURANCE

- A. SWPPP Certification Requirements:
  - 1. Qualified SWPPP Developer (QSD)
    - a. The SWPPP shall be written, amended, and certified by a QSD. The SWPPP shall contain the QSD's name, certification number, and telephone number.
  - 2. Qualified SWPPP Practitioner (QSP)
    - a. The SWPPP shall be implemented by a QSP. The SWPPP shall contain the QSP's name, certification number, and telephone number. The QSP is responsible for implementing the BMPs and CSMP as described within the SWPPP.
- B. Regulatory Requirements:
  - 1. Prepare and implement the SWPPP in accordance the following:
    - a. CARB Materials and equipment used for this Project shall comply with the current applicable regulations of the California Air Resources Board and the EPA.
    - b. EPA Environmental Protection Agency.
    - c. FMFCD Fresno Metropolitan Flood Control District
    - d. SJVAPCD San Joaquin Valley Air Pollution Control District.
    - e. SWRCB State Water Resources Control Board.
    - f. RWQCB Regional Water Quality Control Board.

### PART 2 - PRODUCTS

#### 2.01 SOURCE QUALITY CONTROL

- A. SWPPP:
  - 1. The SWPPP shall be prepared in accordance with the guidelines contained in the CGP issued by the SWRCB under the National Pollution Discharge Elimination System (NPDES) permit program of

- the EPA.
2. The intent of the CGP is to protect the quality of receiving waters of the United States by limiting the quantity of pollutants in rainfall runoff from construction sites of one acre or more in area. In order to accomplish this goal, each construction project is required to prepare a SWPPP that will govern construction activities to lessen the probability that pollutants will be present in rainfall runoff from their site.
  3. This site will be covered by the CGP by the time construction begins.
    - a. All construction activity must comply with the conditions of the CGP.
    - b. A NOI to be covered by the CGP will be filed by the Owner/LRP with the SWRCB and the fees will be paid by the Owner/LRP.
    - c. Copies of the NOI will be provided to the CONTRACTOR to place in the appropriate Appendix of the SWPPP when the NOI is available.
  4. The BMPs contained in the SWPPP will meet the intent of the CGP.
    - a. The Owner does not have any responsibility for selecting or implementing the BMPs proposed by the CONTRACTOR and QSP to adequately control the quality of runoff from the site.
    - b. The CONTRACTOR and QSP must provide, implement, and carry out the BMPs that comply with the CGP regardless of the BMPs contained in the SWPPP.
    - c. The CONTRACTOR and QSP shall bear full responsibility for reviewing the proposed BMPs, ascertaining their ability to provide adequate controls, and implementing the BMPs or implementing others deemed by the CONTRACTOR and QSP to better accomplish the intent of controlling the quality of runoff water from the project site.
  5. Fresno Metropolitan Flood Control District (FMFCD)
    - a. FMFCD is charged with the responsibility to monitor the quality of runoff received by their storm drain system. FMFCD is not the primary enforcement agency responsible for compliance with the NDPES permit. However, FMFCD can provide notice to the SWRCB that a violation is occurring and request that the SWRCB begin enforcement proceedings.

## PART 3 - EXECUTION

### 3.01 APPLICATION

#### A. General Requirements:

1. The CONTRACTOR shall comply with the conditions of the CGP. The CGP is available at the following website:  
[www.waterboards.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml)
2. The SWPPP is an aid to the CONTRACTOR in complying with the CGP.
3. Under the terms of this Contract, the CONTRACTOR is the Operator/Discharger of the Project Site. It is the CONTRACTOR's and QSP's responsibility to faithfully and fully implement the BMPs contained in the SWPPP, and other BMPs as required to effectively control the quality of runoff water from the project site.
4. The CONTRACTOR shall fully and completely carry out all provisions of the SWPPP and ensure that all of the CONTRACTOR's forces, including sub-contractors, on the site do the same. The CONTRACTOR shall assume full responsibility for the implementation, maintenance and execution of the SWPPP for the life of this project. The CONTRACTOR shall be fully liable for penalties, fines, and clean-up costs resulting from the failure of the CONTRACTOR's personnel or subcontractor's personnel to comply with the provisions of the SWPPP and hold the Owner/LRP harmless from the CONTRACTOR's failure to implement the SWPPP as required by the SWRCB, RWQCB, CGP, and the local authority having jurisdiction.
5. The CONTRACTOR shall be fully aware of the requirements for the full execution of the SWPPP

which are contained in the previously mentioned regulations, the requirements of these specifications for implementing, maintaining, and enforcing the provisions of the SWPPP and the impact that the SWPPP will have on the operation, prosecution and cost of the work. A submittal of a bid on this project will be considered as prima facie evidence that the Contractor fully comprehends these requirements and impacts and has fully allowed for their effect on this project, both in time and cost.

6. The Owner/LRP's QSD shall prepare the Risk Determination, site map, and SWPPP for all construction activities that will occur on the project site. Prior to construction, the CONTRACTOR shall review the provided site map, mark any necessary changes due to their planned construction operations, and submit any revisions to the Owner/LRP's QSD. The QSD will amend the SWPPP as necessary and the Owner/LRP will certify the updated SWPPP on the SMARTS website.

B. Best Management Practices (BMPs):

1. The QSP shall conduct inspections weekly and at least once each 24-hour period during extended storm events, to identify and record BMPs that need installation or maintenance to operate effectively. Should the QSP deem the BMPs proposed in the SWPPP are inadequate to meet the requirements of the CGP, or a change occurs in the nature or manner of construction operations not anticipated in the SWPPP, the QSP shall propose alternative BMPs that are equal to or better than those contained in the SWPPP.
2. Should the CONTRACTOR implement alternative BMPs, he shall prepare all addenda to the SWPPP required by the CGP and notify the Owner's QSD for review of amendments to the original SWPPP.
3. Failure to implement the BMPs as required to meet the intent of the CGP and the SWPPP is a breach of state and federal laws. Punishment for breaking the law can result in fines and imprisonment.
4. BMPs shall be maintained from the start of construction until final stabilization.

### 3.02 FIELD QUALITY CONTROL

A. Monitoring of BMPs

1. Monitoring by QSP
  - a. Implement the CSMP (weekly, pre-storm, storm event, post-storm, quarterly inspections) as required by the CGP.
  - b. Conduct training and testing as required by the CGP.
  - c. Prepare and submit all reports to Owner/LRP and SWRCB as required by the SWPPP and the CGP. The CONTRACTOR is advised that the electronic filing of the Annual Report with the SWRCB by the Owner/LRP on behalf of the CONTRACTOR does not relieve the CONTRACTOR of any responsibility due to his failure to conduct proper inspection, testing, and training as required by the CGP. The CONTRACTOR shall bear full liability arising out of failure to conduct the required inspections, training, and testing detailed in the CSMP in the SWPPP.
2. Monitoring by Owner
  - a. The Owner will monitor the CONTRACTOR's implementation and maintenance of the BMPs.
  - b. Should the Owner determine that the CONTRACTOR's efforts fail to meet the requirements of the CGP, the SWPPP, and SWPPP amendments, the Owner reserves the right to employ any and/or all of the following actions:
    - 1) Notify the SWRCB of the perceived failure of the CONTRACTOR to comply with the CGP and SWPPP.
    - 2) Withhold an amount of money from the CONTRACTOR's Payment Request, equal to the Owner's estimate of the value of the work required to implement and maintain the required BMPs, as well as provide the required inspection, training, and testing forms.

- 3) Hire a separate QSP to perform the work required to implement the CSMP and deduct the costs thereof from the CONTRACTOR's Payment.

B. Availability and access to the SWPPP

1. The CONTRACTOR shall keep a minimum of one copy of the SWPPP and Addenda thereto in the following locations:
  - a. CONTRACTOR's Project Site Field Office.
  - b. CONTRACTOR's General Business Office.
2. The SWPPP shall be available for public inspection at any time during normal business hours.

3.03 CLEANING AND REMOVAL

A. Removal of BMPs

1. Completely remove from the Project Site all materials used to construct and maintain the temporary BMPs upon completion and acceptance of the Project.
2. Remove all accumulated debris and excess material from the BMPs and surrounding locations, and broom clean all adjacent hardscape surfaces to the satisfaction of the Owner.
3. All permanent BMPs shall remain on the Project Site. The Owner will be responsible for ongoing inspection and maintenance after final acceptance.

- B. Under written agreement and with the approval of the Owner, the CONTRACTOR may assign maintenance and removal responsibilities of the project BMPs to a subsequent CONTRACTOR for later work phases at the Project Site.

3.04 RECORD KEEPING

Paper or electronic records of all CSMP inspections, testing, and training reports, including the Annual Report, shall be retained for a period of at least three years. These records shall be available at the project site until construction is completed.

3.05 PAYMENT

Full compensation for all costs involved in implementing, and monitoring the implementation of the SWPPP for this project, including inspections, testing, and training, performing corrective measures as required to better implement the SWPPP, providing all labor, materials, and resources to maintain the SWPPP and all required records of the SWPPP, and being full liable for all failures to fulfill the intent and requirements of the CGP set forth by the SWRCB, shall be included in the cost bid for the various items of work and no additional payment will be made therefore.

**01 58 13 Temporary Project Signage**

Reserved.

**01 62 00.01 Materials and Products**

A. Except as otherwise specifically stated in this Contract, CONTRACTOR shall provide and pay for all materials, supplies, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of every kind and all other services and facilities necessary to perform and complete this Contract within the time specified.

B. Unless otherwise specified, all materials shall be new and of good quality.

C. Materials shall be furnished in ample quantities and at times to ensure uninterrupted progress of the Project and shall be properly stored and protected. CONTRACTOR shall be solely responsible for any damage or loss by weather or other causes to materials or work under this Contract.

D. CONTRACTOR shall, after issuance of the Notice to Proceed by DISTRICT, place orders for materials and/or equipment as specified so that delivery of same may be made without delays to the Work. CONTRACTOR shall, upon demand from the ARCHITECT, furnish to the ARCHITECT documentary evidence showing that orders have been placed.

E. DISTRICT reserves the right, for any neglect in not complying with the above instructions, to place orders for such materials and/or equipment as it may deem advisable in order that the work may be completed at the date specified in the Contract, and all expenses incidental to the procuring of said materials and/or equipment shall be paid for by the CONTRACTOR.

F. No material, supplies, or equipment for work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest in all or any part is retained by the seller or supplier. CONTRACTOR warrants good title to all material, supplies and equipment installed or incorporated in the Work and upon completion of Project agrees to surrender the premises to DISTRICT, together with all improvements and appurtenances constructed or placed by CONTRACTOR, free from any claims, liens, or charges. CONTRACTOR further agrees that neither CONTRACTOR nor any person, firm, or corporation furnishing any materials or labor for any work covered by this Contract shall have any right to a lien upon the premises or any improvement or appurtenance, except that CONTRACTOR may install metering devices or other equipment of utility companies or of political subdivisions, title to which is commonly retained by the utility company or political subdivision. In the event of the installation of any metering device or equipment, CONTRACTOR shall advise DISTRICT as to its owner.

G. Nothing contained in this Section, however, shall defeat or impair the rights of any persons furnishing material or labor under any bond given by CONTRACTOR, for their protection, or any rights under any law permitting such persons to look to funds due CONTRACTOR and within the control of DISTRICT. This provision shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials or labor when no formal contract is entered into for such materials or labor.

H. The title of new materials and/or equipment and attendant liability for its protection and safety shall remain with the CONTRACTOR until incorporated in the Work and accepted by the DISTRICT. No part of said materials and/or equipment shall be removed from its place of storage except for immediate installation in the Work. Further, CONTRACTOR shall keep an accurate inventory of all said materials and/or equipment in a manner satisfactory to the DISTRICT and its authorized representative.

#### **01 71 03. 00 Protection of Work and Property**

A. CONTRACTOR shall be responsible for all damages to persons or property which occur as a result of CONTRACTOR's fault or negligence in connection with the performance of this Contract. CONTRACTOR shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by DISTRICT. All CONTRACTOR responsibilities extend to the protection from vandalism and associated costs. With the exception of damage to the work caused by "acts of God," as defined in Public Contract Code Section 7105, CONTRACTOR assumes the risk for all work performed under this Contract. CONTRACTOR shall adequately protect adjacent property from settlement or loss of lateral support as provided by law and this Contract. CONTRACTOR shall take, and require all subcontractors to take, all necessary precautions for the safety



of workers employed on the Project and shall comply with applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the work is being performed.

B. In an emergency affecting safety of life, work, or adjoining property, the CONTRACTOR is permitted to act at its discretion, without special instruction or authorization from ARCHITECT/ENGINEER or DISTRICT, to prevent any threatened loss or injury; and CONTRACTOR shall act if authorized or instructed by ARCHITECT/ENGINEER or DISTRICT. Any compensation claimed by CONTRACTOR on account of emergency work shall be determined by the Contract.

C. CONTRACTOR shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by the DISTRICT. CONTRACTOR shall provide heat, cooling, covering, security, and enclosures as necessary to protect all work, materials, equipment, appliances and tools against damage or loss.

D. CONTRACTOR shall take adequate precautions to protect existing sidewalks, curbs, pavements, landscaping, utilities, adjoining property, structures, and other improvements; and avoid damage to them and repair any damage caused by construction operations.

**01 71 16 Acceptance of Conditions**

Reserved.

**01 71 23 Excavation, Layout, Field Engineering and Trenches**

A. CONTRACTOR shall provide adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life and limb in trenches and open excavation which conform to applicable safety standards.

B. If this Contract involves the excavation of any trench or trenches four feet or more in depth, the CONTRACTOR shall, in advance of excavation, submit to the DISTRICT or to whomever the DISTRICT designates a detailed plan showing the design for shoring, bracing, shielding, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the Shoring System Standards established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by the CONTRACTOR, and all costs therefor shall be included in the price indicated in the Contract. In no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by CAL-OSHA and a CAL-OSHA permit for such plan delivered to the DISTRICT.

C. If this Contract involves the digging of trenches or excavations below the surface, the following shall apply:

1. The CONTRACTOR shall promptly, and before the following conditions are disturbed, notify the DISTRICT, in writing, of any:
  - a. Material that the CONTRACTOR believes may be material that is hazardous waste, as defined in Health and Safety Code Section 25117 that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law.
  - b. Subsurface or latent physical conditions at the site different from those indicated.
  - c. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for the Contract.

2. The DISTRICT shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the CONTRACTOR's cost of, or the time required for, performance of any part of the Contract, it shall issue a change order as provided in this Contract.
3. In the event a dispute arises between the DISTRICT and the CONTRACTOR, whether the conditions materially differ or involve hazardous waste, or cause a decrease or increase in the CONTRACTOR'S cost of, or time required for, performance of any part of the Project, the CONTRACTOR shall not be excused from any scheduled completion date provided for by the Contract Documents, but shall proceed with all the work to be performed under the Contract. The CONTRACTOR shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

D. All field engineering required for laying out this work and establishing grades for earth-work operations shall be furnished by CONTRACTOR at its expense. The work shall be done by a qualified civil engineer approved by the ARCHITECT/ENGINEER. "As Built" drawings of site development and utilities' location and inverts shall be prepared by an approved civil engineer.

E. CONTRACTOR has made an independent investigation of the job site, including underground conditions and all other conditions that might affect the progress of the Work and is satisfied as to those conditions.

#### **01 71 23. 00 Site and Utility Surveys**

When required by the scope of the Project, the DISTRICT will furnish, at its expense, a legal description or a land survey of the Site, giving, as applicable, grades and lines of streets, alleys, pavements, adjoining property, rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries, and contours of the Site. Surveys to determine locations of construction, grading, and site work shall be provided by the CONTRACTOR. The DISTRICT shall provide the lands, rights of way, and easements upon which the work under this Contract is to be done, and such other lands as may be designated on the Contract drawings for the use of the CONTRACTOR, and the CONTRACTOR shall confine its operations to within these limits. The CONTRACTOR shall provide, at its own expense, any additional land and access thereto that may be required for temporary construction facilities or storage of materials.

Unless otherwise stated in the Contract Documents, the CONTRACTOR shall be responsible to do all necessary staking and engineering services to layout and control the work to the elevations, lines, and dimensions shown on the plans. Any deviations must receive prior written approval of the DISTRICT. All staking and engineering services affecting the line or elevation of underground drainage, sewers, or utilities, and all other work within public rights of way or easements shall be performed by or under the direction and supervision of a Registered Civil Engineer or Licensed Land Surveyor, registered/licensed by the State of California-

#### **01 73 01. 00 Contractor's Supervision, Prosecution and Progress of Work**

A. During progress of the Work, CONTRACTOR shall keep on the work site a competent Superintendent satisfactory to DISTRICT. Before commencing the Project, CONTRACTOR shall give written notice to DISTRICT and ARCHITECT of the name, qualifications and experience of such Superintendent. If Superintendent is found unsatisfactory by DISTRICT, CONTRACTOR shall replace the Superintendent with one acceptable to the DISTRICT. Superintendent shall not be changed except with written consent of DISTRICT, unless a Superintendent proves to be unsatisfactory to CONTRACTOR and ceases to be in its employ, in which case, CONTRACTOR shall notify DISTRICT and ARCHITECT in writing and replace said Superintendent with one acceptable to the DISTRICT. Superintendent shall represent CONTRACTOR and all directions given to Superintendent shall be as binding as if

given to CONTRACTOR. CONTRACTOR is referred to General Conditions, “Workers” Section for additional applicable provisions relating to Workers and Superintendent.

B. CONTRACTOR shall, at all times, enforce strict discipline and good order among CONTRACTOR’s employees and shall not employ on the Project any unfit person or anyone not skilled in the tasks assigned.

C. CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall carefully study and compare all plans, drawings, specifications and other instructions and shall at once report to ARCHITECT any error, inconsistency or omission which CONTRACTOR or its employees may discover. The CONTRACTOR represents itself to DISTRICT as a skilled, knowledgeable, and experienced CONTRACTOR. The CONTRACTOR shall be liable to the DISTRICT for damage resulting from errors, inconsistencies, or omissions in the Contract Documents that the CONTRACTOR recognized, and which CONTRACTOR knowingly failed to report or which a similarly skilled, knowledgeable, and experienced contractor would have discovered.

D. The CONTRACTOR shall verify all indicated dimensions before ordering materials or equipment, or before performing work. The CONTRACTOR shall take field measurements, verify field conditions, and shall carefully compare such field measurements and conditions and other information, known to the CONTRACTOR, with the Contract Documents before commencing work. Errors, inconsistencies, or omissions discovered shall be reported to the DISTRICT at once. Upon commencement of any item of work, the CONTRACTOR shall be responsible for dimensions related to such item of work and shall make any corrections necessary to make the work properly fit at no additional cost to DISTRICT. The responsibility for verification of dimensions is a non-delegable duty and may not be delegated to subcontractors or agents.

E. Omissions from the plans, drawings or specifications, or the misdescription of details of work which are manifestly necessary to carry out the intent of the plans, drawings and specifications, or which are customarily performed, shall not relieve the CONTRACTOR from performing such omitted or misdescribed work, but they shall be performed as if fully and correctly set forth and described in the plans, drawings and specifications.

F. The CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

G. Whenever the CONTRACTOR arranges to work at night, or at any time when work is not usually in progress, or to vary the period during which work is carried out each day, he shall give the DISTRICT due notice so that inspection may be provided. Such work shall be done without extra compensation to the CONTRACTOR, and such additional inspection costs shall be chargeable to the CONTRACTOR providing such work is not performed at the request of the DISTRICT to meet an earlier completion time than that established in the Contract Documents, or for a cause not under control of the CONTRACTOR.

#### **01 74 00.01 Execution of Contract**

Execution of the Contract by the CONTRACTOR is a representation that the CONTRACTOR has visited the site, become familiar with local conditions under which the work is to be performed and correlated personal observations with requirements of the Contract Documents.

#### **01 74 00.01 Cleaning Up**

A. At all times, CONTRACTOR shall keep the premises and all adjoining areas free of debris such as waste, rubbish and excess materials and equipment caused by the Work; debris shall be removed from the premises. CONTRACTOR

shall not leave debris under, in, or about the premises. Prior to completion of the Work, CONTRACTOR shall remove from the Site all rubbish, waste and excess material, tools, construction equipment, machinery, temporary facilities and barricades, and any other items which are not the property of the DISTRICT under the Contract Documents. Upon completion of the Work, the Site and all adjoining areas shall be left in a neat and broom clean condition satisfactory to DISTRICT. Also upon completion of the Work, CONTRACTOR shall clean the interior and exterior of the building, including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, paved areas and sidewalks and any areas where debris has collected so surfaces are free from foreign material and discoloration; CONTRACTOR shall clean and polish all glass, plumbing fixtures and finish hardware and similar finish surfaces and equipment and remove temporary fencing barricades, planking, construction toilet and similar temporary facilities from the site.

B. A safe and clean working environment, which is conducive to student learning, is required by the DISTRICT. If the CONTRACTOR fails to clean up during performance of the Project or at the completion of the Project, the DISTRICT may do so and the cost for such clean up shall be charged back to the CONTRACTOR, with DISTRICT deducting such costs from any portion of the Contract Price then or thereafter due CONTRACTOR.

**01 74 13 Progress Cleaning**

Reserved.

**01 74 16 Site Maintenance**

Reserved.

**01 74 23 Final Cleaning**

Reserved.

**01 76 00 Protecting Installed Construction**

Reserved.

**01 77 00.01 Final Inspection**

If the CONTRACTOR fails to complete the minor corrective items prior to the expiration of the period within which retention must be released as described in California Public Contract Code Section 7107, the DISTRICT shall withhold from the final payment an amount up to 150 percent of estimated cost, as determined by the DISTRICT in its discretion, of each item until such time as the item is completed. At the end of such period, if there are items remaining to be corrected, the DISTRICT may elect to proceed as provided in the "Contract Modification Procedures" Section.

**01 77 00. 02 Cost of Multiple Inspections**

More than two (2) requests of the DISTRICT to make inspections required under Section 01 77 00. 01, Final Inspection, above shall be considered an additional service of ARCHITECT, and all subsequent costs will be invoiced to CONTRACTOR and withheld from remaining payments-

**01 78 23. 00 Equipment Manuals**

CONTRACTOR shall obtain and furnish three (3) complete sets of manuals containing the manufacturers' instructions for maintenance and operation of each item of equipment and apparatus furnished under the Contract Documents and any additional data specifically requested under the various sections of the Specifications for each division of the Work. The manuals shall be arranged in proper order, indexed, and placed in three-ring binders. At the completion of its Work, the CONTRACTOR shall certify, by endorsement thereon, that each of the manuals is complete, accurate, and covers all of its Work. Prior to submittal of CONTRACTOR's Application for Final Payment, and as a further condition to its approval by the ARCHITECT, each Subcontractor shall deliver the manuals, arranged in proper order,

indexed, endorsed, and placed in three-ring binders, to the CONTRACTOR who shall assemble these manuals for all divisions of the Work, review them for completeness, and submit them to the DISTRICT through the ARCHITECT.

#### **01 78 36.01 Warranty and Guarantee**

A. CONTRACTOR warrants that the Work, which includes any equipment furnished by CONTRACTOR as part of the materials, shall:

1. be free from defects in workmanship and material,
2. be free from defects in any design performed by CONTRACTOR,
3. be new, and conform and perform to the requirements stated in the specifications and where detail requirements are not so stated, shall conform to applicable industry standards, and
4. be suitable for the use stated in the specifications.

B. The warranty period for all defective work, labor, materials, and equipment shall commence on the date of completion noted on the Notice of Completion (And Acceptance) of the Work, or designated portion thereof, and continue for the period set forth in the specifications or for **one (1) year if not so specified**. If, during the warranty period, the Work is not available for use due to defective work, such time of unavailability shall not be counted as part of the warranty period. The warranty period for corrected defective work shall continue for a duration equivalent to the original warranty period.

1. One month prior to the expiration of the applicable warranty period, CONTRACTOR shall attend with DISTRICT's representative(s) and consultants a pre-expiration warranty review, including but not limited to a site walk and review meeting (and follow-up meeting, if DISTRICT deems it necessary), for the purpose of identifying and addressing any and all warranty items in existence at such time, including any newly-discovered items during such review and site walk. CONTRACTOR shall see that all warranty items noted as a result of such warranty review are properly addressed and repaired prior to the expiration of the applicable warranty period.

C. DISTRICT shall give CONTRACTOR prompt written notice after discovery of any defective work. CONTRACTOR shall correct any such defective work, as well as any damage to any other part of the Work resulting from such defective work, and provide repair, replacement, or reimbursement, at its sole expense, in a manner approved by the DISTRICT and with due diligence and dispatch as required to make the Work ready for use by DISTRICT, ordinary wear and tear, unusual abuse or neglect excepted. Such corrections shall include, but not be limited to, any necessary adjustments, modifications, changes of design, unless of DISTRICT'S design, removal, repair, replacement and reinstallation, and shall include all necessary parts, materials, tools, equipment, transportation charges and labor as may be necessary, and cost of removal and replacement of work shall be performed at a time and in such a manner so as to minimize the disruption to DISTRICT'S use of the work. Written notice can be, but not limited to, facsimile or e-mail to addresses provided by contractor as a part of bid package.

D. In the event of failure of CONTRACTOR or Surety to commence and pursue with diligence said repairs or replacements within five (5) calendar days after being notified in writing, DISTRICT is hereby authorized to proceed to have any defects repaired or replaced and made good at the expense of CONTRACTOR and Surety who hereby agrees to pay the costs and charges therefor immediately upon demand.

E. If, in the opinion of the DISTRICT, defective work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the DISTRICT or to prevent interruption of operations of the DISTRICT, the DISTRICT will attempt to give the written notice required by this Section. If the CONTRACTOR or Surety cannot be contacted or neither complies with the DISTRICT'S requirements for correction within a reasonable period of time, as determined by DISTRICT, the DISTRICT may, notwithstanding the provisions of this Section, proceed to

make such correction or provide such attention, and the costs of such correction or attention shall be charged against the CONTRACTOR and Surety. Such action by the DISTRICT shall not relieve the CONTRACTOR and Surety of the guarantees provided in this Section or elsewhere in the Contract Documents.

F. This Section does not, in any way, limit the guarantees on any items for which a longer guarantee is specified or on any items for which a manufacturer gives a guarantee for a longer period. CONTRACTOR shall furnish to DISTRICT all appropriate guarantee or warranty certificates upon completion of the Project or upon request by DISTRICT.

G. All guarantees required under this Section shall be submitted to the DISTRICT in the following form on CONTRACTOR letter head as a prerequisite to final payment:

GUARANTEE FOR \_\_\_\_\_. We hereby guarantee the \_\_\_\_\_ which we have installed in the \_\_\_\_\_ at \_\_\_\_\_ for \_\_\_\_\_ years from date of recordation of the Notice of Completion (And Acceptance). CONTRACTOR agrees to repair or replace to the satisfaction of the DISTRICT any and all such work that may prove defective in workmanship of materials within that period, ordinary wear and tear and unusual abuse or neglect excepted, together with any other work which may be damaged or displaced in so doing.

CONTRACTOR agrees to respond to first notice within 48 hours and to remedy the condition within five (5) calendar days. If the CONTRACTOR fails to comply with the above-mentioned conditions within five (5) calendar days after being notified in writing, the DISTRICT may have the defects repaired and made good at the CONTRACTOR'S expense and the CONTRACTOR will pay the costs and charges therefor immediately upon demand. Any and all guarantees offered by manufacturers of equipment used or installed in the Project shall also be extended to the DISTRICT.

\_\_\_\_\_  
Subcontractor/Supplier Contractor

\_\_\_\_\_  
Date

H. In addition, CONTRACTOR shall provide to DISTRICT instruction manuals for all items which require same.

I. Nothing contained in this contract shall limit any other legal rights or remedies available to DISTRICT against either the CONTRACTOR or the Surety.

J. The DISTRICT may recover its reasonable attorney fees and costs in any action to enforce the provisions of this Section.

#### **01 78 39. 00 Record Drawings and Annotated Specifications**

The CONTRACTOR will prepare and maintain on a current basis an accurate and complete set of Record Drawings showing clearly all changes, revisions, and substitutions during construction, including, without limitation, field changes and the final location of all mechanical equipment, utility lines, ducts, outlets, structural members, walls, partitions, and other significant features, and Annotated Specifications showing clearly all changes, revisions, and substitutions during construction. A copy of such Record Drawings and Annotated Specifications will be delivered to DISTRICT in accordance with the schedule prepared by CONTRACTOR. In the event of a specification that allows CONTRACTOR to elect one of several brands, makes, or types of material or equipment, the annotations shall show which of the allowable items the CONTRACTOR has furnished. The CONTRACTOR will update the Record Drawings and Annotated Specifications as often as necessary to keep them current but no less often than weekly. The Record Drawings and Annotated Specifications shall be kept at the Site and available for inspection by the DISTRICT, Inspector of Record, and the ARCHITECT. On completion of the CONTRACTOR's portion of the Work and prior

to Application for Final Payment, the CONTRACTOR will provide one (1) complete paper set and one (1) electronic copy of Record Drawings and Annotated Specifications to the DISTRICT, certifying them to be a complete and accurate reflection of the actual construction conditions of the Work.

**01 78 46 Extra Stock Materials**

Reserved.

**01 79 00 Demonstration & Training**

Reserved.

**01 91 00 General Commissioning Requirements**

A. This Article includes general requirements that apply to implementation of commissioning without regard to specific systems, assemblies, or components, including mechanical, electrical, plumbing, and low voltage systems.

CONTRACTOR shall:

1. Schedule and attend construction phase commissioning meetings.
2. Coordinate and ensure that CONTRACTOR and all SUBCONTRACTORS execute their commissioning responsibilities inclusive of start-up execution, functional testing, sequences of operation, balance, programming, and (if provided) subject to any other commissioning tasks described in the Contract Documents, including but not limited to the Drawings and/or commissioning Specifications.
3. Prepare and maintain the issues log, construction checklist log, point lists, commissioning logs, test data, inspection reports, and certificates.
4. Furnish submittals related to commissioned equipment to the ARCHITECT/ENGINEER and DISTRICT including but not limited to shop drawings, O&M manuals, as-built drawings, manufacturer commissioning tasks checklists, functional/final testing results; and
5. Provide the training of DISTRICT personnel.

B. Where applicable, certain commissioning tasks from the initial commissioning will continue throughout the typical one-year warranty period. CONTRACTOR shall be responsible and coordinate seasonal functional testing and near warranty end review. CONTRACTOR shall ensure that subcontractors and manufacturer's representatives correct deficiencies and make necessary adjustments to O&M manuals and as-built drawings for applicable issues identified in seasonal and near warranty end testing. The commissioning process will be deemed completed when approved by the CONTRACTOR and accepted by the ARCHITECT/ENGINEER and DISTRICT typically at the end of the one-year warranty period. The DISTRICT reserves the right to employ a third-party Commissioner at the DISTRICT's expense.

## ATTACHMENT "A" CONTRACTOR EMERGENCY CONTACT INFORMATION



Date: \_\_\_\_\_

Project Name: \_\_\_\_\_

Project Address: \_\_\_\_\_ City: \_\_\_\_\_ CA Zip: \_\_\_\_\_

District Responsible Manager: \_\_\_\_\_

CELL PHONE # \_\_\_\_\_

## Prime Contractor Company Contact Information

PROJECT PRIMARY CONTACT

TITLE

RESPONSIBLE SAFETY OFFICER

24 HR. PHONE #

E-MAIL

COMPANY NAME

BUSINESS PHONE #

FAX PHONE #

ADDRESS

24 HOUR PHONE #

CITY, ST, ZIP

EMAIL ADDRESS

## EMERGENCY CONTACTS:

24 HR. PHONE

E-MAIL

PRIME CONTRACTOR:

NAME

TITLE

NAME

TITLE

NAME

TITLE

## KEY SUBCONTRACTORS:

NAME

TITLE

24 HR. PHONE

E-MAIL

Sub-Contractor Contacts List Attached:

Yes: \_\_\_\_\_

No: \_\_\_\_\_





## ATTACHMENT "B" NOTICE OF START/REQUEST FOR LOCATION OF DISTRICT UTILITIES

Facilities Management and Planning

Phone: (559) 457-3074 Fax: (559) 457-3060

Submission of Notice of Start to DISTRICT Facilities Management and Planning is required for implementation.

Submit at least 48 hours prior to proposed start of any trenching, excavation or grading operations on District

Property. **Do not start any work without a confirmed start date from DISTRICT.**

**Contractor is responsible for calling USA at (800) 227-2600 prior to submitting this form.**

COMPLETE ALL ITEMS BELOW PRIOR TO SUBMITTING:

Date Submitted: \_\_\_\_\_

To: \_\_\_\_\_ From: \_\_\_\_\_ Fax: \_\_\_\_\_  
DISTRICT FACILITIES PROJECT MGR.

cc: \_\_\_\_\_ E-MAIL: \_\_\_\_\_ Fax: (559) 457-3060  
DISTRICT FACILITIES ASST. P.M.

cc: \_\_\_\_\_ E-MAIL: \_\_\_\_\_ Fax: (559) 457-3060  
DISTRICT FACILITIES ASST. P.M.

Subject: \_\_\_\_\_

School or Site: \_\_\_\_\_

Exact location on site where work is being performed: \_\_\_\_\_

Requesting Contractor Company Name: \_\_\_\_\_

Field Project Superintendent: \_\_\_\_\_ Cell Number: \_\_\_\_\_

Requested Start Date: \_\_\_\_\_ Requested Start Time: \_\_\_\_\_

Contractors' markings must be in white, outline the area and verified by Inspector prior to submitting 48-hour notice to DISTRICT.

Inspector's Name: \_\_\_\_\_

Have markings been verified by Inspector: Yes / No Inspector's Initials: \_\_\_\_\_

Nature of work to be done: (blasting, boring, digging, drilling, grading, trenching, tunneling, etc.) Please provide a detailed description of what is being done and work location. Include diagram marking areas of work: \_\_\_\_\_

|                                      | DISTRICT USE ONLY | DISTRICT USE ONLY | DISTRICT USE ONLY           |
|--------------------------------------|-------------------|-------------------|-----------------------------|
| DISTRICT Confirmed Start Date: _____ |                   |                   | Confirmed Start Time: _____ |
| Approved By: _____                   |                   |                   | Returned To: _____          |
| Returned By: _____                   |                   |                   | Returned Date: _____        |
|                                      |                   |                   | Returned Time: _____        |

USA # \_\_\_\_\_

Date Called: \_\_\_\_\_ Date Expires: \_\_\_\_\_

This form MUST be resubmitted, and USA called again after 30 days.

ATTACHMENT C  
FRESNO USD FINGERPRINTING AND I.D. BADGE PROCEDURE

**1. Fingerprinting Fee**

- **\$69 per person**  
*(Fee subject to change based on negotiated rates with third-party fingerprinting agencies.)*

**2. Accepted Payment Methods**

- **Money orders or cashier's checks only**  
*(No business checks, personal checks, or cash accepted.)*

**3. Identification Requirement**

- Contractors must present a **valid physical ID**.
- **Digital copies are not accepted.**

**4. Clearance Timeframe**

- Standard clearance: **5 business days**
- May take **up to 30 calendar days or longer**

**5. Clearance Notification**

- The **HR Fingerprint Team** updates the District database upon clearance.
- Project Managers will be able to view clearance status and any restrictions.

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**6. Badge Photo & Issuance**

Contractors may obtain their ID badge **after fingerprint clearance** and instruction from the Project Manager. **Badges must be worn at all times on Fresno Unified sites.**

**Badge Location:**

**2348 Mariposa, Fresno, CA 93721**

**Phone:** (559) 457-3500

**Hours:** Monday–Friday, **8:00 a.m.–4:00 p.m.** (No appointment required)

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**7. Badge Validity Period**

- ID badges expire **60 days after the project completion date** listed in the contract documents.

**8. Badge Return or Replacement**

- Contractors must **return their ID badge** to the District's Project Manager when the project is complete.

## **9. Mandated Reporter Training Requirement**

Contractors working **in proximity to minors** must complete **Mandated Reporter Training annually**.

- If able, contractors should complete the **General Training** online before fingerprinting and bring a **Certificate of Completion**.
- If unable to access the training, contact the Project Manager for assistance. HR Training will support providing access.

### **Training Link:**

<https://mandatedreportertraining.com/california/>

FRESNO UNIFIED SCHOOL DISTRICT

00 11 00 NOTICE TO BIDDERS

NOTICE INVITING BIDS PURSUANT TO PUBLIC CONTRACT CODE 22000, ET SEQ.  
(THE UNIFORM PUBLIC CONSTRUCTION COST ACCOUNTING ACT)

Notice is hereby given that the Fresno Unified School DISTRICT (“DISTRICT”) will receive sealed bids for **Bid No. 27-10, Cooper Middle School Administration Building Alterations**, to alter an existing administration building to include bathroom upgrades and other site improvements.

DISTRICT hereby notifies all bidders that they will affirmatively ensure that in any Contract entered into pursuant to this advertisement, disabled veteran business enterprises (DVBE) will be afforded full opportunity to submit proposals in response to this invitation and will not be discriminated against on the grounds of race, color, creed, sex or national origin in consideration for award. The DVBE goal for the project is as follows: three percent (3%) of the dollar amount of the Contract.

Prime Contractor must have a valid **Class “B” Contractor’s License**.

The time allowed for completion for the project shall be **120** Calendar days.

The Architect/Engineers’ estimate for this project is around \$993,000 inclusive of add alternates (estimate as of August 2026)

A MANDATORY pre-bid conference has been scheduled at 10:00 AM, September 29, 2026 in front of the Administration Office at Cooper Middle School, 2277 W. Bellaire Way, Fresno CA 93705 . Contractors bidding as a Prime Contractor for the project must attend in order for their bid to be “responsive”. Immediately following the pre-bid conference will be a mandatory job-walk of the site(s). All visitors must check-in at the school office using our visitor management system which requires ID verification via government-issued identification card or driver’s license to receive a badge and enter the campus. Bidders may arrive earlier than the scheduled time to obtain their badge.

This Project is estimated to be over \$1,000,000 and is subject to prequalification, in accordance with Public Contract Code 20111.6.-Prequalification applications are to be submitted through Quality Bidders at <https://www.qualitybidders.com/> no later than 11:59 PM, October 2, 2026.

Sealed Bids and the DVBE Declaration must be received prior to **2:00 P.M. on October 21, 2026** on Procureware, the DISTRICT’s online bidding portal, after which time the bids will be opened and bid results posted.

Bids shall be accompanied by a certified check, cashier’s check, or a bidder’s bond in an amount not less than ten percent (10%) of total bids made payable to Fresno Unified.

Bid documents may be downloaded at no charge from the district’s bidding portal, Procureware, at: <https://fresnousedpurchasing.procureware.com/home>. All bids must be submitted through the portal. Refer questions to Marisa Thibodeaux [marisa.thibodeaux@fresnounified.org](mailto:marisa.thibodeaux@fresnounified.org).

The District reserves the right to accept or reject any or all bids, or any combination of bids and to waive any irregularities or informalities which may be legally waived.

Published: September 21, 2026

# PROJECT MANUAL CONTRACTUAL-LEGAL REQUIREMENTS SPECIFICATIONS

## COOPER MIDDLE SCHOOL ADMINISTRATION BUILDING ALTERATIONS

DSA APP #: 02-123816



IDENTIFICATION STAMP  
DIV. OF THE STATE ARCHITECT

APP: 02-123816 INC:

REVIEWED FOR

SS ☒ FLS ☒ ACS ☒

DATE: 06/08/2026

Project No. 5599.2

**CURTIS FLYNN**  
Project Architect

**Integrated Designs by SOMAM, Inc.**  
6011 N. Fresno Street, Suite 130  
Fresno, California 93710

5599.2 COOPER MIDDLE SCHOOL  
ADMINISTRATION BUILDING ALTERATIONS

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## SECTION 024119 - SELECTIVE DEMOLITION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

##### A. Section Includes:

1. Demolition and removal of selected portions of building or structure.
2. Demolition and removal of selected site elements.
3. Salvage of existing items to be reused or recycled.

##### B. Related Requirements:

1. Division 01, Temporary Facilities & Controls section for temporary construction and environmental-protection measures for selective demolition operations.
2. Division 01, Photographic Documentation for photographic documentation of pre-demolition conditions.
3. Division 01, Execution for cutting and patching procedures, and for protection of existing construction.

#### 1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse, and store.
- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- E. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

#### 1.4 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.

- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
  - 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

## 1.5 PREDEMOLITION CONFERENCE

- A. Predemolition Conference: Conduct conference at Project site to comply with requirements in Division 01, Section "Project Management and Coordination". Review methods and procedures related to selective demolition.
  - 1. Inspect and discuss condition of construction to be selectively demolished.
  - 2. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
  - 3. Review areas where existing construction is to remain and requires protection.

## 1.6 SUBMITTALS

- A. Predemolition Photographs: Show existing conditions of adjoining construction, including finish surfaces, that might be misconstrued as damage caused by demolition operations. Comply with Division 01, Project Management and Coordination section. Review methods and procedures related to selective demolition.

## 1.7 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.

## 1.8 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Survey of Existing Conditions: Record existing conditions that affect the Work by use of preconstruction photographs. Comply with requirements specified in Division 01, Photographic Documentation section.
- C. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- D. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- E. Hazardous Materials: Present in buildings and structures to be selectively demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
  - 1. Hazardous material remediation is specified elsewhere in the Contract Documents.



2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
  3. Owner will provide material safety data sheets for suspected hazardous materials that are known to be present in buildings and structures to be selectively demolished because of building operations or processes performed there.
- F. Storage or sale of removed items or materials on-site is not permitted.
- G. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
1. Maintain fire-protection facilities in service during selective demolition operations.

## 1.9 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties. Notify warrantor before proceeding. Existing warranties include the following:
- B. Notify warrantor on completion of selective demolition, and obtain documentation verifying that existing system has been inspected and warranty remains in effect. Submit documentation at Project closeout.

## 1.10 COORDINATION

- A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.

- C. Steel Tendons: Locate tensioned steel tendons for existing frames in existing foundation when foundation and/or slab work is within the area of tendon locations. See record drawings for locations provided by the Owner.
- D. Verify that hazardous materials have been remediated before proceeding with building demolition operations.
- E. Survey of Existing Conditions: Record existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
  - 1. Comply with requirements specified in Division 01 "Photographic Documentation."
  - 2. Inventory and record the condition of items to be removed and salvaged. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations.
  - 3. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.

### 3.2 PREPARATION

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Comply with requirements for access and protection specified in Division 01, Temporary Facilities & Controls section.
- C. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  - 1. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.

### 3.3 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
  - 2. Arrange to shut off utilities with utility companies.
  - 3. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.

4. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components indicated on Drawings to be removed.
  - a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
  - b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material and leave in place.
  - c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
  - d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
  - e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
  - f. Ducts to Be Removed: Remove portion of ducts indicated to be removed and plug remaining ducts with same or compatible ductwork material.
  - g. Ducts to Be Abandoned in Place: Cap or plug ducts with same or compatible ductwork material and leave in place.

### 3.4 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
  1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
  2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
  3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
  4. Cover and protect furniture, furnishings, and equipment that have not been removed.
  5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Division 01 "Temporary Facilities and Controls."
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  1. Strengthen or add new supports when required during progress of selective demolition.
- C. Remove temporary barricades and protections where hazards no longer exist.

### 3.5 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  1. Proceed with selective demolition systematically, from higher to lower level.

2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
  3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  4. Do not use plasma or flame cutting torches without written approval from Architect.  
Where allowed, clear area of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations. Maintain fire watch during and for at least two hours after flame-cutting operations. Maintain adequate ventilation when using cutting torches.
  5. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
  6. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
  7. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  8. Dispose of demolished items and materials promptly. Comply with requirements in Division 01 "Construction Waste Management and Disposal."
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- C. Removed and Salvaged Items:
1. Clean salvaged items.
  2. Pack or crate items after cleaning. Identify contents of containers.
  3. Store items in a secure area until delivery to Owner.
  4. Transport items to Owner's storage area designated by Owner.
  5. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items:
1. Clean and repair items to functional condition adequate for intended reuse.
  2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  3. Protect items from damage during transport and storage.
  4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.
1. Items removed, salvaged, and reinstalled for the Contractor's convenience shall be considered the same as items to be removed and salvaged for reinstallation.

### 3.6 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in small sections. Using power-driven saw, cut concrete to a depth of at least 3/4 inch at junctures with construction to remain. Dislodge concrete from reinforcement at perimeter of areas being demolished, cut reinforcement, and then remove remainder of concrete. Neatly trim openings to dimensions indicated.
- B. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals using power-driven saw, and then remove concrete between saw cuts.
- C. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, and then remove masonry between saw cuts.
- D. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, and then break up and remove.
- E. Resilient Floor Coverings: Remove floor coverings and adhesive according to recommendations in RFCI's "Recommended Work Practices for the Removal of Resilient Floor Coverings."
- F. Roofing: Remove no more existing roofing than what can be covered in one day by new roofing and so that building interior remains watertight and weathertight.
  - 1. Remove existing roof membrane, flashings, copings, and roof accessories.
  - 2. Remove existing roofing system down to substrate.

### 3.7 DISPOSAL OF DEMOLISHED MATERIALS

- 1. Recycle or dispose of demolition waste materials according to Division 01 Section "Construction Waste Management and Disposal." Remove demolition waste materials from Project site and legally dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
  - a. Do not allow demolished materials to accumulate on-site.
  - b. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn demolished materials.

### 3.8 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 03300 | CAST-IN-PLACE CONCRETE  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principle Work Items Are:
  - 1. Concrete Work:
    - a. Rough concrete.
    - b. Finish concrete.
    - c. Specially finished concrete.
    - d. Bases for light poles.
    - e. Grouting at folding panel partition sills.
  - 2. Formwork.
  - 3. Curing and protection.
  - 4. Plastic membrane.
  - 5. Off-site work:
    - a. Sidewalks, driveways, curbs and gutters.
  - 6. Work installed but furnished by another Section:
    - a. Setting rough hardware and other embedded items.
    - b. Setting grates and frames for areaways.
- B. Related Work Specified Elsewhere:
  - 1. Furnishing rough hardware and other embedded items: Respective Sections.
  - 2. Earthwork: Division 02.
  - 3. Site Drainage Concrete Structures: Division 02.
  - 4. Chain link fences, footings and mow strips: Division 02, Chain Link Fences and Gates.
  - 5. Steel Reinforcement: Division 03.
  - 6. Structural Steel: Division 05.
  - 7. Bituminous Dampproofing, at planters and retaining walls: Division 07.
  - 8. Door sills: Respective Sections.
  - 9. Rough concrete encasement for certain piping systems and concrete thrust blocks for piping systems: Various Sections of Division 15.
  - 10. Rough concrete encasement for underground electrical conduits: Various Sections of Division 16.
  - 11. Identifying Devices: Division 10.

1.3 SUBSTITUTIONS:

- A. Only written approval of the District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

#### 1.4 QUALITY ASSURANCE:

- A. Design criteria; formwork:
  - 1. Contractor shall be solely responsible for all formwork and Contractor shall:
    - a. Design, construct and maintain formwork to safely support all loads.
    - b. Obtain Governing Agency approval when such is required.
- B. Testing Agency:
  - 1. On-site work: District designated testing laboratory.
  - 2. Off-site work: Governing Agency approved testing laboratory.
- C. Requirements of Regulatory Agencies:
  - 1. Codes: Conform to Titles 21 and 24 of the CAR and conform to U.C.
  - 2. Off-site work:
    - a. Conform to Local Governing Agency requirements.
    - b. Obtain and pay for all permits, licenses and fees.
    - c. Arrange for all tests and inspections.
- D. Tests and Inspection: General: Refer to Section 01400.
- E. Allowable Tolerances for Concrete Surface Smoothness: 1/8" maximum permissible variation from a true plane measured from a 10' straight edge placed anywhere on the surface, non-cumulative.
- F. Job Mock-Ups:
  - 1. General:
    - a. Make samples on-site; revise as required; obtain District's approval, 10 days prior to casting finished work.
    - b. Finished work to match approved samples.
    - c. Approved sample may be incorporated into the work.
  - 2. Specially Finished Concrete: Flatwork:
    - a. Sample size: 20 SF minimum.
    - b. Required for following finishes: Salt.
  - 3. Specially Finished Concrete; School Name Sign:
    - a. Sample size: 2 SF minimum wall area.
    - b. Required for following finishes: Sandblasted.
- G. Source Quality Control:
  - 1. Testing laboratory shall provide continuous inspection at concrete batch plant for all structural concrete, defined as follows:
    - a. Footings, foundation walls, floor slabs-on-grade, exterior reinforced slabs.
    - b. Walls.
  - 2. Furnish Weighmaster's Certificates for all concrete.

#### 1.5 SUBMITTALS:

- A. Shop Drawings for Cast-in Letters: Full-size template layout of wording for school name sign.
- B. Concrete Design Mix: By testing laboratory.
- C. Test Reports: Source and Field Quality Control tests.

- D. Certificates:
  - 1. Weighmaster's Certificates: Per Office of the State Architect requirements.
  - 2. Certificate For Off-site Work: Provide for all off-site work, per Paragraph

## 1.6 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Storage; Concrete Materials:
  - 1. Cement: Store in weather tight enclosures and protect against dampness, contamination and warehouse set.
  - 2. Aggregates
    - a. Stock pile to prevent excessive segregation or contamination with other materials or other sizes of aggregates.
    - b. Use only one supply source for each aggregate stock pile.
  - 3. Admixtures:
    - a. Store to prevent contamination, evaporation or damage.
    - b. Protect liquid admixtures from freezing or harmful temperature ranges.
    - c. Agitate emulsions prior to use.
- B. Delivery: Ready-Mixed Concrete: Conform to Title 24, Section 2-2605(b) (which refers to U.C., Standard 26-13).
- C. Formwork Materials:
  - 1. On delivery to job-site, place materials in area protected from weather.
  - 2. Store materials above ground on framework or blocking and cover with protective waterproof covering providing for adequate air circulation or ventilation.
- 3. Handle materials to prevent damage.

## 1.7 JOB CONDITIONS:

- A. Environmental Requirements:
  - 1. Allowable Concrete Temperatures:
    - a. Cold Weather: When depositing concrete in freezing or near-freezing weather, concrete mix temperature shall be between 50° and 90° F when cement is added. Maintain a concrete temperature of 50° F. minimum for 72 hours minimum after placing or until concrete has thoroughly hardened. When necessary, heat concrete materials before mixing. Take necessary precautions to protect transit-mix concrete.
    - b. Hot Weather: 90° F. maximum.
- B. Protection:
  - 1. Do not place concrete during rain, sleet, or snow unless protection is provided.
  - 2. After placement, protect from injury by elements, traffic, construction operations and other causes.
- C. Sequencing, Scheduling: Coordinate work with earthwork, trenching for foundations, underground utilities, plumbing, electrical, mechanical, Section furnishing imbedded items, steel reinforcement and related work of other Sections.



## PART 2 - PRODUCTS

### 2.1 MATERIALS; GENERAL:

- A. Conform to Codes and additional requirements stated herein.

### 2.2 BASIC CONCRETE MATERIALS:

- A. Portland Cement:
  - 1. Type I or 11; per Title 24, Section 2-2603(c), which refers to U.C., Standard 26-1 and ASTM C150.
  - 2. Use tested cement only. Use same cement brand for all exposed work.
- B. Water: Clean, fresh, free of injurious amounts of minerals, organic, substances, salts, acids or alkali.
- C. Aggregates:
  - 1. General: Per Title 24, Section 2-2603(d), and U.C., Standards.
  - 2. Hardrock Aggregates: Per U.C. Standard 26-2 (which refers to ASTM C33).
    - a. Fine: Sand well graded from coarse to fine.
    - b. Coarse: Uniformly graded from 1/4" to maximum permissible size. Maximum size per Title 24, Section 2-2603(d) (3), but not to exceed 1" in any case.
  - 3. Lightweight concrete: Per U.C. Standard 26-3 (which refers to ASTM Standard C330-80).

### 2.3 MATERIALS; CONCRETE ADDITIVES:

- A. Admixtures:
  - 1. General: Inclusion in concrete mix is at the Contractor's option and expense.
  - 2. Types:
    - a. Conform to Title 24, Section 2-2603(9), which refers to U.C., 26-9 (which is based on ASTM C260, C494, C618). Admixtures shall increase workability and reduce water demand.
    - b. Acceptable Products:
      - 1) Floor slabs-on-grade: Red Label or Anti-Hydro.

### 2.4 MATERIALS; CONCRETE SURFACE TREATMENTS:

- A. Liquid Curing Compounds:
  - 1. General: Conform to ASTM C309.
  - 2. Acceptable Manufacturers: Hunt Process Co., Burke Co., Scofield Sonneborn.
  - 3. Black, Permanent Type (for areas to receive resilient flooring or carpet):
    - a. Hunt Black, as a standard of quality.
  - 4. Clear, Oxidizing Type (for areas to be exposed, interior or exterior):
    - a. Hunt Clear No. ARB as a standard of quality.
- B. Floor Hardeners:
  - 1. Color Hardeners; Dry shake:
    - a. Color: Natural gray.

- b. Acceptable manufacturers and products:
      - 1) Scofield Co., Lithochrome, as a standard of quality.
      - 2) Master Builders, Colorcon.
      - 3) Sonneborn, Harcol.
  - C. Abrasive Grains:
    - 1. Type: 60% minimum aluminum oxide abrasive, ceramically bonded to vitrification, neutral color, homogeneous, rustproof; crushed and graded from 1/32" to all passing 1/4" screen.
    - 2. Acceptable Manufacturers and Products:
      - a. Norton Co., Alundum Fine DF, as a standard of quality.
      - b. Scofield Co., Lithochrome Abrasive Grains.

## 2.5 MATERIALS: CONCRETE JOINTS:

- A. Metal Joint Form/Screed:
  - 1. Type: 24 gauge galvanized formed steel, tongue and groove design, 7/8" diameter rebar knockouts at 6" on center; depth equal to slab depth. Complete system with form/screed, stakes, splice plates, clips and all accessories.
  - 2. Acceptable manufacturers and products:
    - a. Burke, Keyed Kold, as a standard of quality.
    - b. Greenstreak, No. 500 Series, Joint Screed.
    - c. Heckmann, No. 95, Tongue and Groove Joint.
    - d. Jahn, Screed Key Joint.
- B. Zip-top Control Joints:
  - 1. Type: Extruded one-piece plastic T-shape, removable zip-off top.
  - 2. Acceptable manufacturer, Zipcap.
- C. Expansion Joints; Asphalt Impregnated Fiber:
  - 1. Type: Cane fiber, p e-formed, waterproof asphalt impregnated; 1/2" thick x slab depth; per AASHO M213.
  - 2. Acceptable Manufacturers and Products:
    - a. Burke Co., Fiber Expansion Joint.
    - b. Sonneborn, Sonoflex.

## 2.6 MATERIALS; SPECIALLY FINISHED FLATWORK:

- A. Rock Salt: Commercial coarse granular-type, (similar to that used in water softening systems) sized from 1/4" to 3/8", with 65% 3/8" in size.

## 2.7 MATERIALS; WOOD FORMWORK:

- A. Grade Marks and Rules For Lumber and Plywood: Per Section 06100, Rough Carpentry.
- B. Framing Lumber; General: Douglas Fir; Standard Grade Light Framing or better.
- C. Boards for Unexposed Concrete and Basic Forms: Douglas Fir, S4S; Standard Grade or better.

- D. Plywood:
  - 1. For unexposed concrete and basic forms: Douglas Fir; Exterior Grade C-C or better.
  - 2. For exposed concrete: Douglas Fir Plyform, Exterior Class 1; B-B wood face or high density overlay sheet (HDO).
- E. Form Ties; Typical:
  - 1. Type: Snap-ties, carbon steel, 1/4" maximum diameter, 1" minimum break back, 5,000 lb. minimum strength; adjustable or accurately sized.
  - 2. Acceptable manufacturers and products:
    - a. Burke, Penta-Tie, as a standard of quality.
    - b. Concrete Tie, Contac.
- F. Form Coatings and Release Agents--Types:
  - 1. Per manufacturer's recommendations, suitable for type of form materials and finished concrete surface.
  - 2. Materials shall not stain or change color of exposed concrete.
  - 3. Materials shall be compatible with finishes to concrete.
- G. Chamfers and Control Joints:
  - 1. General: Wood or plastic, saw kerf backs, 15 taper sides, width or least equal to depth, configurations as required.
  - 2. Chamfers: 3/4" minimum width.

## 2.8 MATERIALS; ACCESSORIES AND MISCELLANEOUS:

- A. Leveling Filler For Floor Slabs:
  - 1. Type: Liquid latex compound and filler powder.
  - 2. Acceptable manufacturers and products:
    - a. Flintkote, Latex Underlayment Binder and Powder.
    - b. Dowman Products, Fixallatex latex underlayment.
    - c. Webtex No. 660 Latex Underlayment.
- B. Nailing Blocks and Other Embedded Wood: Pressure-treated Douglas Fir, per Division 06.
- C. Plastic Membrane At Slabs:
  - 1. Type: Polyethylene film, 8 mils thick minimum; with manufacturer's recommended self-adhesive joint tape.
  - 2. Acceptable manufacturers and products: Visqueen, Moistop, Durathene.
- D. Sand for Sandblasting: Hard, sharp, quartz sand.
- E. Non-Shrink Grout Por-Rok by Hallemite Co; Masterflow No. 713 Grout by Master Builders; Lithochrome, TRU Grade, by Scofield.
- F. Cast-in Letters for School Name Sign: Wood block style letters similar to West-On Letters, Inc. products.

## 2.9 MIXES; CONCRETE:

- A. Mix Proportioning:

1. General:
  - a. Designed Mix, per Title 24, Section 2-2604(c), by Method B; for all concrete.
  - b. Mix design by designated Testing Laboratory.
  - c. Design shall include all admixtures and/or additives, if any. Use as approved by the Office of the State Architect.
  - d. Do not add salt, chemicals, or other materials to mix to prevent freezing.
2. Strengths, Proportions and Criteria:
  - a. 3,000 psi Concrete: Typical for all locations; except where higher strengths are indicated.
    - 1) Strength: 3,000 psi and 28 days; 1,500 psi at 7 days.
    - 2) Cement content, minimum 5-1/4 sacks (94#) cy.
    - 3) Slump maximum: 4".

B. Mixing:

1. General: Per Title 24, Section 2-2605 and U.C., Standard 26-13 (which refers to ASTM C94).
2. Batch Mixed: Use ASTM C94 batch mixer; or capacity to handle one or more full sack batches. No split-sack batches.
3. Transit Mixed: Per U.C., Standard 26-13.
4. Mix concrete only in quantities necessary for immediate use.
5. Do not retemper concrete.
6. Discharge all wash water from mixer before reloading.
7. Include additives and admixtures.

2.10 MIXES; DRYPACK:

- A. Mix Proportions: One part cement, 1 1/2 parts sand (fine aggregate).
- B. Mixing: With sufficient water to make a stiff mixture, which can be molded by hand into a sphere.

2.11 MIXES; GROUT MIX FOR SACKED FINISH:

- A. Mix Proportions: One part cement, 1 1/2 parts fine sifted sand.
- B. Mixing: With sufficient water, to the consistency of thick paint.

PART 3 - EXECUTION

3.1 INSPECTION:

- A. Examine excavations for foundations, footings, structures and examine earthwork operations and subgrade for defects that will adversely affect the execution and quality of work.
- B. Do not start work until unsatisfactory conditions are corrected.

### 3.2 PREPARATION:

- A. Layout: Accurately lay out work to properly position all elements to lines and levels.
- B. Joining to Previous Pours or Existing Work: Sandblast, roughen and clean existing joining concrete and rebar surfaces to provide a proper bond to new work.

### 3.3 WOOD FORMWORK:

- A. Scope:
  - 1. General: All concrete shall be cast-in forms.
  - 2. Footings: When specifically approved by District/Engineer and the Office of the State Architect, earth banks may be used as forms in lieu of wood forms.
- B. Form Face Types:
  - 1. Unexposed Concrete: Plywood or horizontal boards.
  - 2. Exposed Concrete:
    - a. General: All new materials, or materials reconditioned to like new.
    - b. Typical Work: Plywood panels, 4' x 8' typical size. Layout symmetrically, long diameter vertical; panels stacked; all joints aligned, level, plumb, and tight.
- C. General Construction:
  - 1. Forms shall be substantial, unyielding, true to line and level; sufficiently tight to prevent leakage of mortar; adequately tied and braced; and conform exactly to dimensions of finish concrete.
  - 2. Forms shall provide adequate work clearances, temporary access openings necessary for concrete placement, provisions for attachment to previous work; and provide for stripping without injury to concrete work.
  - 3. Cleanouts: Provide continuous cleanouts on one side at bottom of vertical work (such as walls), and other openings as necessary to facilitate cleaning and inspection of the work.
- D. Fabrication:
  - 1. Nail board and/or plywood form faces securely to studs. Space studs to adequately support form faces and prevent bulging. Provide stud or solid backing at all joints.
  - 2. Install chamfer strips at all exposed corners and edges.
  - 3. Securely fasten chamfers, control joints and other detail work.
- E. Erection:
  - 1. General: Erect formwork plumb and level; double wales; adequately brace, shore and support; set so finished concrete surfaces will drain.
  - 2. Ties and Spreaders:
    - a. General: Position to securely anchor forms; maintain accurate wall dimensions, true surfaces and prevent bulging.
    - b. Exposed Concrete: Position in similar symmetrical patterns.
  - 3. Footings and Foundation Walls: Form both sides; secure to stakes.
  - 4. Walls: Form both sides; set so tops of exposed work will be a straight, level line.
- F. Form Coatings and Release Agents: Apply, per manufacturer's recommendations, to evenly coat all contact surfaces.

### 3.4 INSTALLATION; EMBEDDED ITEMS:

#### A. General:

1. Install per Title 24, Section 2-2606 (c) and U.C., 2606(c).
2. Place accurately; anchor securely to prevent displacement.
3. No wood to be permanently embedded in concrete, except where indicated.
4. Coordinate, notify, provide access for other Sections to set their required work.

### 3.5 INSTALLATION; GRATES AND FRAMES FOR AREAWAYS:

- #### A.
- Install accurately, level, at proper elevations, securely anchored, and with all fastenings in place.

### 3.6 INSTALLATION; SCREEDS FOR SLABS, WALKS AND FLAT WORK:

#### A. General:

1. Set and securely support screeds accurately to lines, levels and grades required for finished work.
2. Where membranes occur, supports shall not puncture membranes.
3. Spacing: 8'-0" on center typically; closer intervals where construction conditions require.

#### B. Permanent Metal Joint Form/Screeds:

1. Scope: Install in all exterior slabs, walks, paving and flatwork.
2. Spacing/Location: 20'-0" on center maximum each way; all points where concrete changes direction; and where indicated.
3. Installation: Burke Keyed Kold system, as a standard of quality.
  - a. Stakes: Space 2'-0" on center typical, and 6" maximum from ends of runs.
  - b. Screeds: Hang screeds on stakes, crimp top leg into hole in stake, clip bottom leg to stake, butt joints and install splice plates.
  - c. Coating: Oil screeds prior to concrete placement.
  - d. When concrete pour is against one side only, bend knock-out tabs into pour at 45° approximate.

### 3.7 INSTALLATION; PLASTIC MEMBRANE:

#### A. Scope:

1. Install under all interior floor slabs on-grade.

#### B. Installation:

1. General: Place over prepared 2" sand over compacted earth, cover with 2" sand, prior to steel reinforcement placement. Use as large sheets as practicable. Cut and fit neatly around all penetrations.
2. Joints: Lap 6" typical; lap floor sheets 2' 0" minimum over footing sheets.
3. Taping: Spot tape joints to hold sheets in place. Tape seal all punctures and around all penetrations and all lap joints.

### 3.8 PREPARATION; CONSTRUCTION JOINTS:

#### A. General:

1. Comply with Title 24, Section 2-2606(d) and U.C., 2606(d).
2. Locate joints where they will least impair strength of structures.
3. For joints at locations other than those indicated, obtain District/Engineer approval.

B. Preparation:

1. Clean and roughen entire joint face to remove entire surface and expose clean aggregate solidly embedded in mortar matrix by one of the following methods.
  - a. Sandblast or chip, not earlier than five days after initial pour.
  - b. Hose wash clean between two and four hours after concrete is placed. Remove all wash water, laitance and debris.
2. Vertical Joints: Wet and flush with neat cement grout, just prior to concrete placement.
3. Horizontal Joints: Wet and deposit 2" to 6" layer of specified modified concrete mix, prior to placing regular mix.

### 3.9 PREPARATION; SLABS-ON-GRADE:

- A. Tamp sand sub-base to a firm unyielding surface.

### 3.10 CONCRETE PLACEMENT:

- A. General: Comply with Title 24, Section 2-2605 and U.C., 2605.

B. Preparation and Inspection Prior to Concrete Placement:

1. Preparation--do not place concrete until:
  - a. Footing excavations are cleaned and dry.
  - b. Steel reinforcement is correctly positioned, securely anchored and cleaned.
  - c. Forms are cleaned, coated, and ties are tightened.
  - d. Embedded items are positioned and anchored.
  - e. Construction joints are cleaned and prepared.
  - f. Subgrade is prepared and moistened.
  - g. All preparations for a pour are completed.
  - h. Work has been inspected.
2. Inspection: All formwork, steel reinforcement, footing excavations and preparation work (as stated in Paragraph No. 1.02. A) to be inspected and approved by District/Engineer, prior to pouring any concrete.

C. Placement:

1. Convey concrete from mixer to final position by method, which will prevent separation or loss of material and cause minimum handling.
2. Deposit concrete in continuous operation will panel or section is completed.
3. Regulate rate of placement so concrete remains plastic and flows into position.
4. Keep tops of vertical lifts approximate level during placement.
5. Maximum permissible free-fall for concrete is 3'. Use elephant trunks or other approved means necessary to meet this limitation.
6. Maximum permissible thickness of concrete layers is 2'.
7. Where reinforcement is congested or consolidation is difficult, specified modified concrete mix may be used in a 2" to 6" layer.
8. Special conveyance and placement methods may be used with prior approval of District/Engineer and the Office of the State Architect.

9. Do not use partially hardened or contaminated concrete; do not retemper concrete; or do not use concrete, which has been remixed after initial set.

D. Consolidation:

1. Use mechanical vibrating equipment. Supplement with hand rodding, spading and tamping.
2. Vertically insert and remove hand-held vibrators.
3. Work concrete thoroughly around reinforcement, embedded items and into all parts of forms.
4. Consolidate to a dense, uniform mass without voids, rock pockets, or entrapped air. Consolidate each layer.

E. Slabs, Walks and Flatwork:

1. Lift reinforcement as placement progresses to proper position in slab.
2. Tamp and screed to required lines and levels.
3. Depress coarse aggregate with grille-blade tamper.

### 3.11 FINISHING FLATWORK; TYPICAL:

A. Scope: Finish all flatwork as specified herein.

B. Interior Slabs:

1. General:
  - a. Monolithically finish all slabs.
  - b. Do not dust with dry cement to remove water.
2. Floating:
  - a. Power float upon disappearance of water shown.
  - b. Hand float areas inaccessible to power float.
3. Trowel Finishing:
  - a. Areas depressed for ceramic and quarry tile: Further finishing is not required.
  - b. Areas to receive carpet and resilient floor coverings: Power trowel to a dense, smooth, even surface, until no more excess water may be brought to surface.
  - c. Exposed concrete areas: Gray color hardened.
    - 1) Just prior to floating, evenly apply 20 lbs. hardener per 100 SF.
    - 2) After floating, spot touch-up uneven areas; then evenly apply ten lbs. hardener per 100 SF.
    - 3) First Troweling: Power trowel per Paragraph B above.
    - 4) Hand steel trowel (causing trowel to ring) to a smooth, slick, burnished surface, free of defects and blemishes.

C. Exterior Flatwork (slabs, walks, paving and similar work):

1. General:
  - a. a. In indicated areas, finish concrete as specified herein, in lieu of typical finishes.
  - b. b. All work to match approved samples.
  - c. c. The Contractor is to limit pour areas and provide sufficient ratio of finishers to produce specified finishes.
2. Sweated Finish; Typical:
  - a. Two steel troweling IS, while concrete is still green.
  - b. Non-slip sweated finish with regular light trowel marks in an approximately 2' circular arc pattern.



3. Salt Finish; where Indicated:
    - a. Preparation: Screed and float. Steel trowel smooth and even in circular arc pattern, free of blemishes and ridges.
    - b. Salt Application:
      - 1) While concrete is still plastic evenly and uniformly seed surface at 10 ls. minimum per 100 SF; 3" maximum between pockmarks any where on surface.
      - 2) Press, roll or trowel salt grains to embed them flush with concrete surface; do not shatter salt grains.
      - 3) After concrete sets, completely dissolve and wash salt away from planting areas.
  4. Marking:
    - a. Type; Typical: V-groove radius tool.
    - b. Patterns: Follow indicated patterns; where not indicated, mark as follows:
      - 1) Walks: Into squares, equal to walk width.
      - 2) All areas 8' or wider: Into approximate squares, 8' maximum diameter.
  5. Tooling: Radius tool all exposed edges, edges adjacent to all permanent wood headers and edges at each side of all metal joint screeds.
- D. Abrasive Surface Treatment:
1. Scope: Apply to all exterior and interior exposed concrete steps and ramps and where indicated:
    - a. Ramp defined as surface sloping exceeding 5% (1:20) or steeper.
  2. Application: Apply evenly at 25 ls. per 100 SF just prior to final troweling Tamp and trowel to securely embed, but not cover abrasive.

### 3.12 FLATWORK CONTROL JOINTS:

- A. General: Conform to Title 24, Section 2-2606(d).
- B. Interior Slabs-on-Grade:
  1. General: Create construction joints to divide slabs into 400 SF maximum approximate rectangular shapes, by any of the following methods.
    - a. Alternate pours, checkerboard pattern.
    - b. Saw cutting within 12 hours from time of pour.
    - c. Install Zip-Top control joints concurrently with tamping and floating work. Using sawing motion, push straight-edge into concrete to form groove. Insert Zip-Top control joint into groove, using sawing motion, until joint top is flush with concrete surface. When concrete sets sufficiently, pull-off removable top flange.
  2. Location: Locate joints typically to occur under partitions, avoid exposed concrete floor areas; align with structural features, points where slab changes configuration or direction and points where stresses localize.
- C. Exterior Flatwork (Walks, Paving and Similar Work); General: Construction joints formed by permanent Metal Joint Form/Screeds per Paragraph 3.06 B.

### 3.13 FORMWORK REMOVAL:

- A. General: Do not remove or disturb forms, shoring or bracing until concrete has hardened sufficiently to permit safe removal, support all imposed loads including its own weight, nor in any case until the following minimum times have elapsed:
  - 1. Foundation Walls: Three days.
  - 2. Slabs-On-Grade: Three days.
  - 3. Walls: Three days.
- B. Ties: Remove or snap-off ties, spreaders, tie rods, and other devices so no metal is left within 1" of concrete face.
- C. Exposed Concrete Work: Carefully remove formwork and detail strips so surfaces, corners, edges, details, and all features will be true, level, sharp, unbroken, unmarred or damaged in any way.

### 3.14 PROTECTION AND CURING OF CONCRETE:

- A. Protection: Protect all work from injury and defacement of any nature during construction operations.
- B. Curing:
  - 1. General:
    - a. Keep concrete surfaces wet until curing medium is applied.
    - b. Cure drypack same as concrete.
  - 2. Walls, Mass and Reinforced Concrete:
    - a. Scope: Maintain in a thoroughly wet condition all forms containing concrete, top of concrete between forms, all exposed concrete surfaces after removal of forms.
    - b. Time Period: Wet continuously each day for 10 consecutive days, including Saturdays, Sundays and holidays.
  - 3. Flatwork:
    - a. Scope: Apply specified liquid curing compounds to all interior floor slabs, and all exterior flatwork (slabs, walks, paving, and similar work).
    - b. Application: Apply uniform, continuous, tightly adhered film, free from pinholes or defects at rate of 1 gallon per 250 SF.

### 3.15 FINISHING WALLS AND VERTICAL CONCRETE SURFACES; TYPICAL:

- A. Scope: Finish all walls and vertical concrete surfaces as specified herein, except for school name sign.
- B. Exposed Concrete At Tops of Forms:
  - 1. Strike concrete smooth and level.
  - 2. Float and/or trowel to texture comparable to formed surfaces.
- C. Preparation, Formed Surfaces:
  - 1. Remove fins and irregularities while concrete is green.
  - 2. Tie Holes: Fill full and flush with compacted drypack.
  - 3. Surface Defects:
    - a. Cut out blemished and defective areas as directed by the District.

- b. Patch flush with drypack, typically, or as directed by the District.

D. Cleaning:

- 1. Exposed Surfaces:
  - a. Remove form coatings, bond breakers and other surface coatings.
  - b. Scrub form surfaces with solution of 1 1/2 lbs. caustic soda per 1 gallon water.
  - c. Scrub smooth wood or waste mold areas with 20% muriatic or hydrochloric acid solution.
  - d. Wash surfaces clean with clear water, immediately after scrubbing.
  - e. If above methods fail to remove all substances, lightly sandblast surfaces clean as directed by the District.
- 2. Surfaces With Finish Materials Applied Directly to Concrete: Clean as stated for Exposed Surfaces, except where uncleaned surface will not affect application, bond, performance or appearance of finish materials.

E. Sacked Finish For All Exposed Concrete:

- 1. General: Schedule work to complete entire panel, element or area in one continuous operation.
- 2. Application:
  - a. Wet surface to control suction of water from grout.
  - b. Apply grout mix; uniformly spread and scour to fill depressions.
  - c. While still plastic, sponge rubber float finish surface and remove excess grout.
- 3. Sacking: Allow surface to dry, but not completely harden; then rub vigorously with clean dry burlap to remove loose excess material. Finished surface to have a smooth slick burnished finish (similar to a steel trowel finish), which is free of defects and blemishes.

3.16 PREPARATION OF HORIZONTAL CONCRETE SURFACES TO RECEIVE MASONRY WALLS:

- A. Prepare and roughen as specified for horizontal concrete construction joints in Paragraph 3.08, B, 1.

3.17 SCHOOL NAME SIGN; CAST-IN LETTERS:

- A. Accurately set letters in place; space to match approved Shop Drawings.  
Coat with bond breaker. After concrete hardens, carefully remove wood letters to leave sharp, clean recesses in the concrete.
- B. Sandblast Finish:
  - 1. General:
    - a. Scope: Heavily and uniformly sandblast to expose coarse aggregate.
    - b. All work to match approved samples.
    - c. Complete entire side in one continuous operation.
  - 2. Preparation: Per Paragraphs 3.15, B and C.
  - 3. Sandblasting:
    - a. Wet or dry processes, as permitted by Local Governing Ordinances.
    - b. Control dust from drifting to adjacent areas.
    - c. Where wet process is used, build dams and otherwise control and direct flow of run-off water.

4. Cleaning:
  - a. Wash down all blasted surfaces with clear water to remove dust, sand and leave them clean.
  - b. Remove all blasting sand and debris.

### 3.18 FIELD QUALITY CONTROL:

- A. General: Refer to Section 01400, Testing and Inspection.
- B. Inspections:
  1. Steel reinforcement.
  2. Structural concrete.
- C. Tests:
  1. Concrete slump.
  2. Making concrete compression test cylinders.
  3. Core tests of defective work.

### 3.19 ADJUSTMENT AND CLEANING:

- A. Correction of Defective Work:
  1. General: Work not conforming to Contract requirements shall be removed and replaced; except where patching or other remedial work is specifically permitted by the District. The Contractor shall bear all costs of correction of defective work.
    - a. Surface patching materials and methods shall be as approved by the Architect.
    - b. Structural concrete replacement, strengthening, and/or repair methods and materials shall be as approved by District/Engineer and the Office of the State Architect.
- B. Filling and Leveling Slab Surfaces to Receive Resilient Flooring or Carpet:
  1. High Spots: Remove, hone or power grind to required levels.
  2. Low Sports: Fill to required levels with specified Leveling Filler, mixed and applied manufacturer's recommendations.
- C. Cleaning: Clean exposed surfaces just prior to acceptance.

END OF SECTION

**SECTION 06100 | ROUGH CARPENTRY**  
**FRESNO UNIFIED SCHOOL DISTRICT**

**PART 1 - GENERAL**

- 1.01 **REFERENCE:**  
Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.
- 1.02 **DESCRIPTION:**
- A. Principal Work Items Are:
    - 1. Framing: Where indicated.
      - a. Walls, ceilings.
    - 2. Blocking and backing for furnished items.
    - 3. Rough hardware, connectors, and fasteners.
    - 4. Drypacking plates.
    - 5. Preservative treatment.
  - B. Related Work Specified Elsewhere:
    - 1. Finish Carpentry: Division 06.
    - 2. Painting: Division 09.
- 1.03 **SUBSTITUTIONS:**  
Only written approval of the District will permit substitutions for materials specified. Refer to Section 06130 and Section 00700 for procedure.
- 1.04 **QUALITY ASSURANCE:**
- A. Erector Qualifications: All work to be organized and directed by an experienced, competent carpentry supervisor; and performed by skilled, experienced workers. Refer to General and Supplementary Conditions requirements also.
  - B. Requirements of Regulatory Agencies, Codes: Conform to Titles 21 and 24, CCR; and UBC.
  - C. Allowable Tolerances; Framing Alignment: 3/16" maximum permissible variation from true plane measured from a 10' straight edge; 1/8" maximum variation between any two adjacent framing members.
  - D. Source Quality Control; Grade Marks: Identify all lumber and plywood by official grade mark of an approved Agency.
  - E. Standards; Grading:
    - 1. Lumber; Douglas Fir: UBC Standard 25-3, based on West Coast Lumber Inspection Bureau (WCLIB) Standard Grading and Dressing Rules No. 16; WCLIB grade marked.
    - 2. Softwood Plywood: UBC Standard 25-9, based on Product Standard (PS) 1-83 for Construction and Industrial Plywood; APA grade-marked.
  - F. Standards; Preservative Treatment: UBC Standard 25-12, based on various Standard Specifications of American Wood Preservers Bureau (AWPB); Quality Mark by Association approved Agency.

- 1.05 PRODUCT DELIVERY, STORAGE AND HANDLING:
- A. Immediately upon delivery to Project site, place materials in area protected from weather.
  - B. Store materials 6" minimum above ground on framework or blocking, and cover with protective waterproof covering providing for adequate air circulation of ventilation.
  - C. Do not store seasoned materials in wet or damp portions of structures.
  - D. Protect sheet materials from corners breaking and damaging surfaces while unloading.
- 1.06 JOB CONDITIONS:  
Sequencing, Scheduling: Coordinate work with concrete, steel, masonry, and veneer, plumbing, mechanical, electrical, staining and related work of other Sections.
- 1.07 ALTERNATIVES:
- A. Machine-Driven Nailing Approval Procedure:
    - 1. Should Contractor wish to use machine-driven nailing, he shall make specific written request, prior to beginning nailing work, for approval of exact fasteners, equipment, and methods proposed.
    - 2. Request will be reviewed by District/Engineer and Office of the State Architect.
    - 3. Approval, if given, will be in writing, subject to satisfactory field installation and continued satisfactory field performance.
      - a. Use of machine nailing is subject to a satisfactory job-site demonstration for each Project and approval by District or Structural Engineer and Office of State Architect. The approval is subject to continued satisfactory performance. Machine nailing will not be approved in 5/16" plywood. If nail heads penetrate the outer ply more than would be normal for a hand hammer or if minimum allowable edge distances are not maintained, the performance will be deemed unsatisfactory.

## PART 2 - PRODUCTS

- 2.01 MATERIALS:
- A. General: Conform to Codes, and additional requirements stated herein.
  - B. Lumber and Plywood:
    - 1. General:
      - a. Per Title 24; Sections 2-2501 and 2-2504.
      - b. Per UBC Sections 2502 and 2503.
      - c. Grade Stamps:
        - 1. Each piece of lumber or plywood shall be grade-stamped as required by UBC Section 2505.
        - 2. Preservative treated material shall have a preservative treated stamp in addition.
    - 2. Framing Lumber:
      - a. General:
        - 1. Conform to UBC Standard 25-3, which is based on WCLIB Standard Grading Rules No. 16.
        - 2. Moisture Content: Air dried or kiln dried to 19% or less per WCLIB Rules No. 16, subparagraphs 3-b, and 3-c.
        - 3. Do not use end-jointed framing lumber.

4. Preservative Treated Lumber: Where treated wood is required, impregnate wood with water-borne preservative salts in a factory applied process per Standard 25-12; then dry as required.
  5. End Sealing: End seal at mill, soon after cutting, all members larger than a 6" x 6" size (36 square inches), or larger in depth than 10", regardless of width. Apply per manufacturer's printed recommendations.
    - a. Acceptable Manufacturers and Products: Moore Dry Kiln Company, Portland, Oregon, Endtite; as a standard of quality.
  - b. Concealed Framing, Typical (unless otherwise indicated): Douglas Fir, WCLIB Grades; all S4S.
    1. Structural Light Framing; 2" to 4" thick, 2" to 4" wide: No. 1, 1750f.
    2. Structural Joists and Planks; 2" to 4" thick, 5" and wider: No. 1, 1500f.
    3. Beams and Stringers: No. 1, 1300f.
    4. Posts and Timbers: No. 1, 1200f.
    5. Sills: No. 1 Douglas Fir, preservative treated.
  - c. Exposed Mullions At Door and Window Openings: Douglas Fir, Grade C, Industrial Clears, selected for appearance.
  - d. Other Stress Grades Or Surfacing: As indicated.
- C. Rough Hardware, Connectors and Fasteners:
1. General: Per Title 24, Section 2-2510, and UBC Standard 25-17 for nails, screws, lag screws, bolts, washers, and similar fasteners.
    - a. All nails shall be common wire nails, unless specifically noted otherwise.
    - b. All fasteners of every type shall be hot-dipped galvanized for all exterior work.
  2. Screws:
    - a. Connecting Plywood To Light Gauge Steel: Self-drilling, flat Phillips head, zinc-plated steel screws.
    - b. Connecting Plywood To Steel Shapes: Thread cutting, flat Phillips head, zinc-plated steel screws with blunt points and tap-fluted pilots.
  3. Framing Anchors, Hangers, and Connectors:
    - a. General: Standard manufacture, stamped or formed steel, galvanized; types indicated for specific uses; complete with nails.
    - b. Metal Cross-Bridging: 16 gauge, V-shaped, nailable type with 2 holes each end.
    - c. Acceptable Manufacturers and Products:
      1. Simpson Company/Strong-Tie Connectors; as a standard of quality.
      2. Timber Engineering Company/Teco.
      3. Silver Metal Products, Inc.
      4. Nuts and Washers For Weld-Studs: Types and sizes as indicated, or required.
      5. Powder-Driven Studs (Shot Pins):
        - a. General: Office of the State Architect approved types for the specific application; with required washers.
        - b. Acceptable Manufacturers and Products:
          1. Winchester-Western, Division of Olin Ramset Products; as a standard of quality.
          2. Hilti Fastening Systems.
          3. Remington.

D. Liquid Preservative Treatment, For Field Application: Per UBC Standard 25 12; pentachlorophenol, coal tar, or creosote.

## 2.02 MIXES; DRYPACK:

### 5599.2 | CAST-IN-PLACE CONCRETE

### 5597.2 | 061000-3 of 6

- A. Mix Proportions: One part cement, 1 1/2 parts sand.
  - B. Mixing: With sufficient water to make a stiff mixture, which can be molded into a sphere.
- 2.03 ERECTION EQUIPMENT:  
Framing Hammers: Shall not exceed 20 ounces maximum, and shall be smooth head.

## PART 3 - EXECUTION

- 3.01 INSPECTION:
- A. Examine concrete, masonry, and steel work to assure that:
    - 1. Work is to proper dimension, alignment, and elevation.
    - 2. Bolts are properly placed for framing connection.
  - B. Do not start work until unsatisfactory conditions are corrected.
- 3.02 PREPARATION:
- A. Layout: Accurately lay out work to properly position all elements to lines, and levels.
  - B. End Sealing Lumber:
    - 1. Should any lumber referred to in Paragraph 2.01 B, 2, a arrive at job-site unsealed, seal ends of members immediately with two coats of boiled linseed oil, well worked in with a stiff brush.
    - 2. All lumber furnished with ends sealed per Paragraph 2.01 B, 2, a, 5 or sealed per Paragraph 1 above, shall have ends re-sealed, immediately after cutting to length, with two coats of boiled linseed oil, well worked in with a stiff brush.
  - C. Preservative Treatment - Field Application To Cuts In Treated Lumber or Plywood: Prior to installation, brush-on preservative treatment to soak all cuts made in the field.
- 3.03 INSTALLATION:
- A. General:
    - 1. Conform to Title 24, Sections 2-2517 and 2-2518.
    - 2. All work to be done by skilled craftsmen under competent supervision.
    - 3. Erect work straight, plumb, level, true to line, with tight joints and full bearings. Frame and cut as required for work of other sections.
    - 4. Work to be a complete assembly with all fasteners, connectors, anchors, rough hardware, framing, sheathing and other required parts and devices.
  - B. Work Sequence:
    - 1. Coordination: Organize and perform work in a logical sequence, which will permit a step-by-step completion of each building element, and avoid out-of-phase work and interferences.
    - 2. Damaged or unsatisfactory work shall be replaced or remedied on a timely basis as work progresses.
    - 3. Sills: Sills must be set, leveled, fastened, drypacked totally underneath, and examined and approved by the District/Engineer before any wall framing is placed on them.
    - 4. Wall Framing: Complete erection of wood stud wall framing.



- C. Cutting: No cutting, notching or boring except as detailed or as approved by Structural Engineer, with prior approval by Division, of the State Architect Structural Safety Section.
- D. Splices: No splices in structural members except as detailed or as approved by Structural Engineer, with prior approval by Office of the State Architect.
- E. Sills:
  - 1. Lumber: Use preservative-treated member for all plates, sills, sleepers and other members bearing directly on:
    - a. Concrete slabs-or-grade.
    - b. Concrete foundations whose tops are less than 18" above earth grade.
  - 2. Set level, fasten, and dry-pack totally underneath for full bearing. Refer to Paragraph 3.03 B, 4, "Work Sequence, Sills."
- F. Wall Framing:
  - 1. Plates and Studs:
    - a. Single bottom plate, double top plates, with end joints offset 4' minimum at splices. Overlap top plates at corners and intersections.
    - b. Studs to be one-piece (no splices), square-cut ends for full bearings. Space 16" on center typical. Coordinate locations with plywood shear panels. Install 3 studs minimum at corners.
  - 2. Openings: Install headers and supporting studs/posts with full bearing.
- G. Miscellaneous Framing, Blocking, and Bridging:
  - 1. Fire Stops: Per Code.
  - 2. Draft Stops: Per Code.
  - 3. Structural Blocking and Bridging:
    - a. Per Title 24, Sections 2-2506(I), and 2-2518.
    - b. Solid block typically, with ends cut for full bearings.
    - c. Cross-Bridging: Install where indicated.
    - d. Solid block between framing members at concentrated loads such as posts, studs at opening.
    - e. Miscellaneous Blocking and Backing: Install as indicated or required for securing finishes, fixtures, equipment, casework, shelving, and all other work.
- H. Rough Hardware, Connectors and Fasteners:
  - 1. General:
    - a. Per Title 24, Table 2-25-P, and as indicated.
    - b. Drive nails up tight, with head bearing on wood. At plywood, nail heads shall not penetrate face-ply more than depth of nail head. Take care not to split or damage members.
    - c. Sub-drill for:
      - 1. All nails 20d and larger.
      - 2. Where nailing splits wood.
  - 2. Bolts and Weld Studs:
    - a. Drill holes 1/16" maximum larger than bolt shank diameter.
    - b. Install washers under all heads and nuts, except where bearing on steel connectors.
    - c. Re-tighten all nuts, just prior to installation of enclosing construction.
  - 3. Screws and Lag Screws:
    - a. Typical:

1. Drill holes; drill to shaft diameter and length; then drill to thread root diameter and length. Countersink where indicated.
2. Drive tight by rotation, without stripping. Do not hammer.
3. Install washers under all lag screw heads, except where bearing on steel connectors.
- b. Connecting Plywood To Light Gauge Steel: Screws shall drill and ream wood and tap steel in one step.
4. Connectors: Install with nails in all nail holes, unless otherwise indicated.
5. Powder-Driven Studs:
  - a. Follow manufacturer's safety and installation recommendations.
  - b. Use limited to locations specifically indicated or approved by District/Engineer and Office of the State Architect.

#### 3.04 FIELD QUALITY CONTROL:

- A. Examination of Work: This work shall be examined at the following stages by District/Engineer.
  1. Framing Sample Area: Prior to doing the remainder of the work.
  2. Sills: Prior to erecting wall framing.
  3. Roof Framing: Prior to installing sheathing.
  4. Concealed Work: Prior to being covered.
  5. General: All work, members, nailing and connections.
  6. All Members 6" x 12" or Larger: Field checked in their installed locations for strict compliance with the Grading Rules, especially splits, checks and end splits.

#### 3.05 ADJUSTMENT AND CLEANING:

- A. Correction of Defective Work: Work not conforming to the Contract requirements shall be removed and replaced as directed except where remedial work is specifically permitted by the District or Engineer. The Contractor shall bear all costs of correction of defective work.
- B. Cleaning: Clean surfaces as work progresses.

END OF SECTION

PART 1 - GENERAL

1.01 REFERENCE:

Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.02 DESCRIPTION:

A. Principal Work Items Are:

1. Finish Carpentry.
2. Millwork.
3. Trim.
4. Frames.
5. Rough-surface for certain members.
6. Work installed but furnished by another Section:
  - a. Custom Casework: Division 06.
  - b. Wood Doors: Division 08.
  - c. Finish Hardware: Division 08.

B. Related Work Specified Elsewhere:

1. Rough Carpentry: Division 06.
2. Steel Doors and Frames: Section 08110.
3. Glazing: Division 08.
4. Gypsum Board: Division 09.
5. Painting: Division 09.

1.03 SUBSTITUTIONS:

Only a written approval by the District will permit substitutions for materials specified. Refer to Division 00, Substitutions, for procedure.

1.04 QUALITY ASSURANCE:

A. Standards; Grade Rules:

1. WIC: Woodwork Institute of California.
2. APA: American Plywood Association grade-marked per Product Standard (PS) 1-83 "Construction and Industrial Plywood".
3. WCLIB: West Coast Lumber Inspection Bureau AStandard Grading and Dressing Rules No. 16".
4. PS-51: Product Standard (PS) 51-71.
5. WWPA: Western Wood Products Association.

B. Be jointly responsible with Hardware Supplier for proper operation of hardware.

1.05 SUBMITTALS:

A. Samples (in duplicate): Rough Surface textures.

B. Shop Drawings:

1. Submit two copies of drawings for all work.
2. Drawings to show WIC Grade of each piece.

C. Certificates: Suppliers certification that all wood products meet Contract

Document requirements. Deliver with the products.

1.06 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Except for frames in exterior wood stud walls, do not deliver items until the buildings are closed-in from weather, and concrete and plaster are dry.
- B. Immediately upon delivery, store in clean, dry, well-ventilated building areas, out of direct sunlight.
  - 1. Set cabinetwork on level floors.
  - 2. Store doors, tops and panels on level surfaces, blocked-up 6" minimum above floor, stack or stick to provide adequate air circulation; place protective covering under bottom and over top of stack. Do not stack on end.
- C. Protect and handle members in a manner to keep them clean, unmarked, undamaged, and prevent discoloration by sun or weather. Use extra care with surfaces to be exposed in finished work, or to receive natural or stained finishes.
- D. Finish Hardware: Receive and store.

1.07 JOB CONDITIONS:

- A. Environmental Conditions: Relative humidity of 50-55% at 70° F.
- B. Sequencing, Scheduling:
  - 1. Coordinate delivery of items installed by this Section, but furnished by other Sections.
  - 2. Coordination with Painting, Section 09900.
    - a. Backpriming: Painter to backprime all portions of exterior and finish lumber, trim, millwork, frames, panels, boards, siding, and finish wood which will be concealed after installation.
    - b. Staining: Painter to stain rough-surface members one coat before assembly and one coat after assembly unless indicated otherwise.
    - c. Hardware: Except where primed for painting, remove before painting work is begun and reinstall after surfaces are dry.
  - 3. Room Identification Signs:
    - a. Coordinate with installation of other door mounted identifying devices.

1.03 ALTERNATIVES:

- A. Rough-Surface Members:
  - 1. Definition: Where notations rough-surface, rough-sawn, or their abbreviations appear, Contractor may, at his option and expense, use members with any one of the following surface textures:
    - a. Saw-Sized: Rough-sawn surface, but same net size as S4S members.
    - b. Sandblasted: S4S members with approved sandblast texture.
  - 2. Use same texture throughout for each specific type of material.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Lumber and Plywood:
  - 1. General: Per WIC Standards, Sections 3 through 6, except as modified herein or otherwise indicated.
    - a. WIC Grade: Custom.

- b. Moisture Content: Per WIC Standards (6% minimum, 12% maximum for pieces 2" nominal thickness and less; 19% maximum for pieces thicker than 2" nominal).
  - c. Plywood Exposed to Weather: Exterior Grade, with exterior glue.
  - d. Materials shall be new clean stock.
  - e. Contractor's Option: In lieu of WIC Custom material for exterior lumber trim and frames at openings, Contractor may, at his option and expense, use the following:
    - 1. Finish Lumber 2" Nominal Dimension or Less: WCLIB, Finish Grade "C and Better".
    - 2. Finish Lumber Greater Than 2" Nominal Dimension: WCLIB, Industrial Clears Grade C, selected for appearance so there are no holes, no through knots, no loose knots, and/or no knots at corners of pieces.
  - 2. Frames at Door and Window Openings: Douglas Fir, S4S typical; rough surface where indicated.
  - 3. Plywood (For Transparent Finishes):
    - a. Typical Locations: Douglas Fir, Grade A exposed face.
  - 4. Oak Handrails: Red Oak, Custom Grade for transparent finish.
- B. Fasteners: Finish nails, common nails, screws, bolts, and other fasteners as required for proper installation.
  - 1. All fasteners of every type shall be hot-dipped galvanized for all exterior work.
- C. Adhesive For Interior Plywood Panel Application: Per adhesive manufacturer's recommendation.

## 2.02 FABRICATION:

- A. Millwork:
  - 1. General: Per AC Standards, Sections 7 through 12, except as modified herein or otherwise indicated.
    - a. WIC Grade: Custom.
    - b. Modification to AC Standards: All frames members shall be solid stock. Veneered members are not permitted.
  - 2. Frames: Mill-assemble all frames with all joints true tight and securely made. Where space limitations make it impossible or impractical to make frames in one piece, mill-fit all parts and assemble into sections as large as possible.
  - 3. Flashing For All Frames in Exterior Wood Stud Walls: Staple 9" minimum wide flashing strip of fiber-reinforced sisal Kraft to all sides of frames, so strip can be lapped over adjoining wood framing when frame is set in place.
  - 4. Saw-Kerfing Flat Trim: To prevent cupping and warping, saw cut the backs of all flat trim 1 x 8 and wider, or 2 x 6 and wider.
- B. Handrails: Securely dowel and glue joints. Finger grooves to conform to handicap requirements. Return ends.

## PART 3 - EXECUTION

### 3.01 INSPECTION:

- A. Examine framing openings and wall surfaces which receive this work for proper dimension and alignment.

B. Do not start work until unsatisfactory conditions are corrected.

### 3.02 PREPARATION:

A. Coordinate back priming and staining work. Properly restack work when dry.

B. Install stripping and furring to surfaces as required for millwork and cabinet work attachment.

### 3.03 INSTALLATION GENERAL:

A. General: All work by skilled craftsmen.

1. Install wood finish plumb, level, square, aligned, tight joints, without distortion and securely anchor in place to withstand the strain of usage and to prevent warping.
2. Apply all trim in full lengths where practical, bevel any necessary butt joints, miter all exterior angles and cope all interior angles of molded parts.
3. Fasteners: Pre-bore for all finish nailing larger than 8d, and for all screws, and bolts. Use finish nails typically for exposed work. Set all nails. Countersink screws typically.
4. Scribe all wood finish, frames and other millwork neatly and accurately in place, maintaining full width of end members.
5. No hammer marks.

B. Final Sanding and Preparation--Typical: Except for rough-surface textures, dress all wood finish and all millwork, sand and clean thoroughly until surfaces are smooth and all defacements are entirely removed and ready for finish specified in Painting Section. Any material showing machinery sanding or other defacing marks will be rejected.

1. Sand with 150 grit or finer sandpaper.
2. Steam out deep defacements before sanding.
3. Ease edges by sanding lightly.

C. Final Preparation, Rough-Surface: Remove splinters and other hazardous projections from the outside edges of interior and exterior finish wood and millwork within 7' 0" of finished floor.

### 3.04 INSTALLATION WOOD FRAMES:

A. General:

1. Conform to Paragraph 3.03.
2. Set all frames plumb and level.
3. Securely anchor to supporting construction to withstand the strain of usage. Secure to rough framing with 16d nails, or larger as required to penetrate 1 1/2" minimum into the framing.

### 3.05 INSTALLATION WOOD DOORS:

A. General: Conform to Paragraph 3.03.

B. Installation:

1. Doors and hardware shall be fitted in the field to their frames after the frames have been installed. Factory pre-fixed and pre-hung doors are not acceptable.
2. Match doors to proper openings. Do not cut doors to fit smaller size openings.
3. Bore and rabbet accurately to fit hardware.
4. Fit doors to following maximum clearances making due allowance for painters finish, except as otherwise indicated.
  - a. Head and Jambs: 1/16".

- b. Bottom: 3/16" from sill or finish floor coverings, except where greater undercut is specifically indicated.
- 5. Bevel as necessary for hardware or door swing.
- 6. Round arises to 1/16" radius.

### 3.06 INSTALLATION FINISH HARDWARE:

#### A. General:

- 1. Fit, install, adjust, and securely fasten with proper devices to withstand strain of service. Drive all screws by rotation.
- 2. Do not bend hinges or otherwise distort mix-installed hardware to make it operate. Remove items and properly install.

#### B. Door Hardware: See Paragraphs 3.05, Installation Wood Doors, and 3.07 Installation Room Identification Signs.

- 1. Mounting Height For Locksets: Heights are measured from centerline of knob to finish floor. Heights shall be 36", except where specifically indicated otherwise.
- 2. Set hinges so doors are plumb and level throughout swing.

### 3.07 INSTALLATION ROOM IDENTIFICATION SIGNS:

#### A. General:

- 1. Refer to Paragraphs 3.05, Installation Wood Doors, and 3.06, Installation Finish Hardware.
- 2. Mount signs to doors before mounting finish hardware.

#### B. Installation:

- 1. Align accurately with hardware mounting holes. Maintain plumb, level, and properly spaced.
- 2. Press and roll signs firmly into place to completely bond adhesive to mounting surface.
- 3. Drill for screws. Install screws in all mounting holes.

### 3.08 INSTALLATION CABINETWORK:

#### A. General: Conform to Paragraph 3.03.

#### B. Installation:

- 1. Install plumb and level, without racking or distortion.
- 2. Securely anchor in place to withstand strain of usage.
- 3. Shim as necessary with concealed shims.
- 4. Accurately scribe and closely fit all faceplates, filler strips and trim strips to irregularities of adjacent surfaces.
- 5. Adjust operating parts.

### 3.09 INSTALLATION MISCELLANEOUS ITEMS:

Handrails: Securely dowel and glue joints. Finger grooves to conform to Handicap requirements.

### 3.10 ADJUSTMENT AND CLEANING:

#### A. Protection: Protect installed work from damaged with protective wrappings or other measures. Maintain them intact. Pay particular attention to items installed during rough framing or other early construction phases.

#### B. Cabinetwork: Adjust and readjust, lubricate and regulate so all parts function smoothly and properly.

END OF SECTION



SECTION 06405  
LAMINATED PLASTIC CASEWORK  
REV DATE: 08/04/11

FRESNO UNIFIED SCHOOL DISTRICT  
LAMINATED PLASTIC CASEWORK

PART 1 – GENERAL

1.01 REFERENCE

Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.02 DESCRIPTION

A. Principal Work Items Are:

1. All Educational Casework.
  - a. Fixed base and upper cabinets.
  - b. Tall cabinets.
  - c. Open shelving units.
  - d. Movable casework on casters.
  - e. Countertops: Plastic laminate.
  - f. Applied items: Tackboard and mirrors.
  - g. Lavatory counter(s), including supports.
  - h. Wall shelving, standards, and brackets.
2. Definition Educational Casework: Factory-finished modular casework, plastic laminate surfaces typical, indicated on drawings.

B. Related Work Specified Elsewhere:

1. Wall Construction: Respective Sections.
2. Mill-Built Casework and certain wall shelving: Division 06, Custom Casework.
3. Resilient base at fixed casework: Division 09, Resilient Flooring.
4. Plumbing: Division 15.
5. Electrical: Division 16.

1.03 SUBSTITUTIONS

Only written approval of the District will permit substitutions for material specified. See FUSD Division 01, General Requirements, Section 01 25 13, Product Substitution Procedure.

1.04 QUALITY ASSURANCE

- A. Standards: Work shall be Certified by **W.I.** to following standards as applicable, and as modified herein: Woodwork Institute “**W.I.**” / AWS manual, latest edition with addenda.
- B. Grade Stamp: W.I. Conformance grade stamp is required on each casework piece and countertop.

- C. The Contractor shall employ an independent Inspector approved by the Woodwork Institute “W.I.” to certify that the construction and installation of all casework is in conformance with the Drawings, Specifications, and W.I. Standards.

#### 1.05 SUBMITTALS

- A. Samples, Materials: Submit in duplicate.
  - 1. Plastic laminates.
  - 2. Finishes.
  - 3. Vinyl wall covering for tackboard.
- B. Shop Drawings:
  - 1. Submit for all work, and shall be in conformance to AWS manual, Section 1” Submittals”.
  - 2. Shop drawings to show W.I. grade for each piece, and construction details of approved cabinets.
  - 3. Shop drawings to show holes and cutouts for plumbing, electrical, and related work of other Sections.
  - 4. Where groups of cabinets occur, provide a continuous drawing and developed elevation showing each unit in group.
- C. Certificate: W.I. Conformance certificate is required for Manufacturing and Installation. Deliver with casework.

#### 1.06 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Delivery: Do not deliver until buildings are closed-in from weather; concrete and plaster are dry.
- B. Storage: Immediately upon delivery, store in clean, dry, well-ventilated building areas, out of direct sunlight. Set cabinetwork on level floors.
- C. Handling: Protect and handle members in a manner to keep them clean, unmarked, undamaged, and prevent discoloration by sun or weather. Use extra care with exposed wood surfaces having natural or stained finishes.

#### 1.07 JOB CONDITIONS

- A. Sequencing, Scheduling:
  - 1. Verify dimensions in field.
  - 2. Obtain and work from templates whenever possible.
  - 3. Coordinate with related work of other Sections. Verify exact size and location of holes in casework for plumbing fixtures, electrical outlets, intercom, signal systems, telephones and other penetrations with respective trade.

#### 1.08 GUARANTEE

- A. Reference: See FUSD Division 01, General Requirements, Section 01 78 01, Close-Out Documents.
- B. The Contractor shall guarantee all work for a two-year period.

### PART 2 - PRODUCTS

## 2.01 LAMINATED PLASTIC CASEWORK

- A. Fabricate in accordance with Section “10” of the AWS Manual, except as modified herein:

|                                                                              |                                                                                                                                                                                                 |
|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. W.I. Grade:                                                               | Custom and/or Premium at casework with visible interiors.                                                                                                                                       |
| 2. Type:                                                                     | Type 1.                                                                                                                                                                                         |
| 3. Construction:                                                             | Style A-Frameless.                                                                                                                                                                              |
| 4. Joinery:                                                                  | Doweled or rabbited.                                                                                                                                                                            |
| 5. Cabinet Backs:                                                            | Required for all casework to be dadoed.                                                                                                                                                         |
| 6. Cabinet Door Type:                                                        | Type “A”. Type “B” for glass.                                                                                                                                                                   |
| 7. Shelves:                                                                  | Per “W.I.” Section “10” 3/4-inch minimum; 1 inch thickness for spans 30” or greater. Facings shall be in addition to these thicknesses. <b>(Shelf spans in excess of 4 foot not permitted).</b> |
| 8. Plastic Laminate:                                                         |                                                                                                                                                                                                 |
| a. Exposed surfaces (including shelves and interior of open front cabinets): | .028-inch high-pressure plastic laminate, color and pattern selected by District. A maximum of 5 colors and patterns to be selected.                                                            |
| b. Semi-exposed surfaces (behind doors and inside drawers):                  | Low-pressure decorative polyester or melamine laminates ALA-85.                                                                                                                                 |
| 9. Shelf edge bands:                                                         | 1mm PVC or PL on front edge. Color to match shelf.                                                                                                                                              |
| 10. Door and Drawer Edge Bands:                                              | 3mm PVC radiused 1/8” at edge. Solid color as selected by District.                                                                                                                             |
| 11. Security Dust Panels:                                                    | Plywood or Particle board 3/4” thick at all lockable drawers.                                                                                                                                   |
| 12. Base:                                                                    | 4” high with 3” toe kick.                                                                                                                                                                       |
| a. Finish                                                                    | Plastic Laminate or Burke Top set per District specifications.                                                                                                                                  |

- B. Plastic Laminates approved for use:

1. Nevamar®
2. Wilsonart®
3. Formica®

## 2.02 CASEWORK FINISH HARDWARE

- A. All casework shall be totally finished in the fabricators shop including the provision and installation of all required hardware. Hardware shall be as scheduled herein, or equal, with exposed surfaces to match the door hardware finishes in the room or area where casework is installed. The following schedule lists a standard of quality

for all typical hardware items, some of which may not be required for this project. Shop drawings shall include hardware schedules.

1. Cabinet Hinge: Rockford RP-851 2 3/4 5 knuckle.
2. Cabinet Door Lock: National C-8173-915KA-26D pin tumbler.
3. Cabinet Drawer Lock: National C-8178-915KA-26D pin tumbler.
4. Cabinet Door Latch System:
  - a. Magnetic Catch: KV-916 (KV-918 on wardrobe doors).
  - b. Friction Catch: 2120 FlexaCatch by Bainbridge.
  - c. Slide Bolt: Surface Bolt by Quality Hardware.
5. Drawer and Door Pulls: Amerock BP-867 Steel Wire type (3-1/2 inches & 4 inches specified sizes).
6. Shelf Standards:
  - a. LD 32mm line boring system 5mm steel pins (shelving under 36" wide).
  - b. KV255 with KV256 supports (shelving 36" and over).
  - c. Provide earthquake pins in back row or notch shelf.
7. Glass Door Lock:
  - a. KV 965 (opening size under 16 square ft.).
  - b. National C-8140 Pin Tumbler (opening size 16 square ft. or larger).
8. Sliding Glass Door Track:
  - a. KV 1092 (opening size under 16 square ft.).
  - b. KVP-992 roll easy (opening size 16 square ft. or larger).
9. Support (Glass Shelves): KV #256-R or LD-KV348.
10. Sliding Glass Door Pull: KV #831 or Mepla 70.1.
11. Counter Top Hinge-Soss #204.

## 2.03 LAMINATED PLASTIC COUNTER TOPS

A. Fabricate in accordance with Section 16 of the Manual of Millwork:

|                       |                                                                                                                                                  |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. W.I. Grade:        | Premium.                                                                                                                                         |
| 2. Core Material:     | .75-inch minimum. Industrial Grade Particle Board.                                                                                               |
| 3. Plastic Laminate:  | .050 inch Formica Color Core, matte finish or equivalent.                                                                                        |
| 4. Adhesives:         | Use manufacturer's recommended adhesives. Use clear types where glue lines will be exposed.                                                      |
| 5. Backing Sheet:     | Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.                                                              |
| 6. Fastenings:        | Fasten countertops with concealed clips, screws, glue blocks or similar hidden fastenings in accordance with the "AWS Manual for Premium Grade". |
| 7. Standard Cabinet:  |                                                                                                                                                  |
| a. Edge Covering:     | 3mm PVC.                                                                                                                                         |
| b. Backsplash:        | Square Butt (glued and screwed to tops).                                                                                                         |
| c. Top of Backsplash: | Square self-edge.                                                                                                                                |

|                                |                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------|
| 8. Sink Cabinets.              |                                                                                                |
| a. Core Material:              | .075 min. Industrial Grade Particle Board.                                                     |
| b. Backsplash:                 | Coved.                                                                                         |
| c. Top of Backsplash:          | Square self-edge or 1mm PVC.                                                                   |
| d. Edge Covering:              | No drip                                                                                        |
| e. Joints:                     | No joints permitted through sink openings or other locations where water is used.              |
| f. Sink Opening Sealer:        | At sink openings, seal cut edges. Reference Section "11" of AWS manual.                        |
| 9. Plastic Colors and Pattern: | As selected from the manufacturer's standard color range, 2 colors minimum, 12 colors maximum. |

## 2.04 SPECIALTY COUNTERTOPS

### A. Phenolic Resin Countertops (high school Chemistry laboratories)

1. Core thickness 1 inch
2. Edge Radius  $\frac{1}{4}$  inch with drip groove
3. Backsplash Coved splash joint
4. Color Black
5. Approved for use: Trespa Toplab worktops

### B. Chemical Resistant Laminate (high school biology and middle school science labs)

1. Grade 25, postforming
2. Backsplash: 5/16" cove
3. Edge: no drip
4. Color: job specific
5. Products approved for use: WA (Chemsurf) or Formica (ChemTop)

### C. Stainless Steel Countertops (refer to section 11400)

## 2.05 FABRICATION; CASEWORK

### A. W.I. Casework Grade:

1. Laminated plastic covered modular casework, Deluxe Grade, flush overlay.
2. Laminated plastic tops. Custom Grade.

### B. Types of Casework Units: Various types of units required are typically identified by a W.I. model number. Furnish unit with all standard features, plus any modifications shown. Where not identified by model number, furnish unit as detailed and/or constructed similar to standard unit it most closely resembles. Furnish numbers of units shown (see drawings); typically, combinations of equal dimension modules.

- C. Closures: Fabricate cabinets to close tight to abutting construction and other Cabinets, including closing the voids where cabinets on adjacent walls meet in corners.
- D. Locks: Provide where indicated. Mount in specified pulls.
- E. Doors and Hinges: Cabinet construction and door hinges shall permit doors to swing 270° whenever possible. Wrap around hinges shall be let into the edge of the door to maintain proper Gap tolerance. Reference Section "10".
- F. Holes and Cutouts for Related Work of Other Sections: Verify exact sizes and locations, prior to fabrication.

## PART 3 - EXECUTION

### 3.01 INSPECTION

- A. Examine building surfaces, mechanical and electrical rough-ins, and other related work for proper dimension and alignment.
- B. Do not start work until unsatisfactory conditions are corrected.

### 3.02 PREPARATION

- A. Layout locations accurately. Install any stripping or furring required for casework attachment.
- B. Field cut openings as required to accept and/or match related work of other Sections.

### 3.03 INSTALLATION; CASEWORK

- A. Install by factory trained representatives. Certification for W.I. Standards typically, except where shown or specified otherwise.
- B. General:
  - 1. Install plumb and level, without racking or distortion.
  - 2. Install continuous cabinet base and anchor to floor.
  - 3. Set cabinets on base.
  - 4. Shim as necessary with concealed shims.
  - 5. Securely anchor in place to base and abutting construction to withstand strain of usage, to conform to OSA requirements, and as indicated.
  - 6. Prebore typically for attaching screws and nails, countersink flush typically.
  - 7. Scribe fit casework and filler strips to irregularities of walls, ceilings, windows and other abutting work; no scribe moldings.
  - 8. Countertops: Scribe fit tops, back splashes, and end splashes to irregularities of walls, windows, and other abutting work. Securely anchor tops to cabinet bodies.
  - 9. Adjust operating parts and hardware.
- C. Sinks:
  - 1. Cut out for sinks and faucets. Seal edges of cut-outs with penetrating wood sealer.

2. Set sink rim and/or Hudee rim watertight to countertop in sealant or plumbers putty.
  3. Install loose backs at sink cabinets; cut accurately and fit over plumbing rough-in; and securely screw back in place.
- D. Keys: Deliver all keys, properly tagged, to F.U.S.D. Key/Lock Shop Supervisor, phone #: 559-457-331.

#### 3.04 INSTALLATION; WALL SHELVING

Screw standards into solid backing. Screw bracket clips to shelving. Install brackets and shelving.

#### 3.05 ADJUSTMENT AND CLEANING

- A. Adjustment: Adjust operating parts, lubricate as required. Repair damaged surface. Install any missing parts.
- B. Cleaning: Wipe and brush surfaces clean.

END OF SECTION

## PART 1 - GENERAL

- 1.01 REFERENCE:  
Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.
- 1.02 DESCRIPTION:
- A. Principal Work Items Are:
    - 1. Thermal insulation at:
      - a. Exterior walls.
      - b. Ceiling cavity space.
  - B. Related Work Specified Elsewhere:
    - 1. Structural Steel: Division 05.
    - 2. Light Gauge Metal Framing: Division 05.
    - 3. Rough Carpentry: Division 06.
    - 4. Built-up Cold Process Roofing: Division 07.
    - 5. Gypsum Board: Division 09.
  - C. Definitions: R-value designations used herein are the thermal resistance of the insulation only.
- 1.03 SUBSTITUTIONS:  
Only written approval of the Architect will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.
- 1.04 QUALITY ASSURANCE:  
Requirements of Regulatory Agencies; Codes: Conform to State of California and other Governing Codes regarding flame spread and smoke densities ratings and energy regulations.
- 1.05 SUBMITTALS:  
Product Data: Submit four copies of manufacturer's technical information brochure with thermal efficiency tables.
- 1.06 PRODUCT DELIVERY, STORAGE AND HANDLING:  
Deliver materials in manufacturers' original packaging, clearly identifying brand, applicable standard, and R-value.
- 1.07 JOB CONDITIONS:  
Sequencing, Scheduling: Coordinate with Rough Carpentry.

## PART 2 - PRODUCTS

- 2.01 MATERIALS:
- A. General: Conform to Code requirements regarding flame spread and smoke density.
  - B. Thermal Insulation:
    - 1. Conform to ASTM C665, and Code.



2. Insulation: Shall conform to UBC Section No. 1713, and UBC Standard No. 42-1. Insulations and their facings shall be rated:

Flame-Spread: 25 or less. Smoke Density: 450 or less.

3. Insulation Types:

- a. For Use in Walls at 6" Stud:
  1. Fiberglass or mineral (rock) wool, foil-Scrim-Kraft vapor barrier on one side, friction fit between studs.
  2. R-Value: R-19 minimum; nominal thickness 6".
  3. Acceptable Manufacturers and Products:
    - a. Manville type FSK-25 or Insul-Shield (IS) as a standard of quality.
    - b. Other manufacturers: Refer Paragraph 1.03, Substitutions.
- b. For Use in Walls at 1 1/2" Stud:
  1. Fiberglass or mineral (rock) wool, rigid, foil-Scrim-Kraft vapor barrier on one side, friction fit between metal studs.
  2. R-Value: R6.5 minimum; thickness 1 1/2".
  3. Acceptable Manufacturers and Products:
    - a. Manville type 1S225 with FSK facings as a standard of quality.
    - b. Other manufacturers: Refer Paragraph 1.03, Substitutions.
- c. For Use in Ceiling Cavity:
  1. Fiberglass or mineral (rock) wool: Fire-rated vinyl faced vapor barrier on one side.
  2. R-value; R-19 minimum: Nominal thickness 6".
  3. Acceptable manufacturers:
    - a. Manville Type No. PSK-26 as standard of quality.
    - b. Other manufacturers: Refer to Paragraph 1.03, Substitutions.
- d. For use in Walls at 4" Stud:
  1. Fiberglass or mineral (rock) wool, foil-Scrim-Kraft vapor barrier on one side, friction fit between metal studs.
  2. R-Value: R-11 minimum; thickness 3-1/2".
  3. Acceptable Manufacturers and Products:
    - a. Manville type FSK-25 as a standard of quality.
    - b. Other manufacturers: See Paragraph 1.03, Substitutions.

## PART 3 - EXECUTION

### 3.01 INSTALLATION:

#### A. General:

1. Follow manufacturer's printed recommendations.
2. Fit insulation snugly between framing, but batts are not to be compressed in their installed positions.
3. Maintain integrity of insulation over entire area to be insulated.
4. Carefully cut and closely fit insulation around pipes, conduits, and other obstructions.
5. Where pipes or conduit are located in stud spaces, place insulation between exterior wall and pipe, compressing insulation where necessary.
6. Securely fasten as required to eliminate any voids and prevent displacement under normal conditions of use in building.

#### B. Thermal Insulation:

1. General: Install faced insulation with integral vapor barrier toward warm-in-winter side of assembly.

2. Walls. Install insulation in all exterior stud walls, full height to join roof and ceiling attic area insulation.
    - a. Install insulation in all exterior stud walls where it will be completely concealed within and covered by the wall covering materials.
  - C. Soundcontrol:
    1. Conform to Federal Specification HH-1-52F, and Code.
    2. USG Thermafiber Sound Attenuation Blankets, 3" nominal thickness or as called for on drawings.
- 3.02 FIELD QUALITY CONTROL:  
Before closing-in insulated spaces, Inspector shall examine all insulation work.
- 3.03 ADJUSTMENT:  
Remedy any defective work. Tape seal any tears or punctures in vapor barriers.

END OF SECTION

## SECTION 072500 - WEATHER BARRIERS

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

**A.** Section Includes:

1. Building paper.
2. Building wrap.
3. Flexible flashing.

**B.** Related Requirements:

1. Division 06 "Sheathing" for sheathing joint and penetration treatment.
2. Division 07 "Flashing & Sheet Metal".

#### 1.3 ACTION SUBMITTALS

**A.** Product Data: For each type of product.

1. For building wrap, include data on air and water-vapor permeance based on testing according to referenced standards.

#### 1.4 INFORMATIONAL SUBMITTALS

- A.** Evaluation Reports: For water-resistive barrier and flexible flashing], from ICC-ES.

### PART 2 - PRODUCTS

#### 2.1 WATER-RESISTIVE BARRIER

**A.** Building Paper: Water-vapor-permeable, asphalt-saturated kraft building paper.

1. Water vapor transmission not less than 35 g/sq. m x 24 hr per ASTM D 779.
2. Water resistance not less than 1 hour per ASTM F 1249.

- B.** Building Wrap: ASTM E 1677, Type I air barrier; with flame-spread and smoke-developed indexes of less than 25 and 450, respectively, when tested according to ASTM E 84; UV stabilized; and acceptable to authorities having jurisdiction.

1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. DuPont (E. I. du Pont de Nemours and Company); Tyvek CommercialWrap.
    - b. Raven Industries Inc.; Fortress Pro Weather Protective Barrier.
    - c. Reemay, Inc.; Typar HouseWrap.
  2. Water-Vapor Permeance: Not less than **50** g through 1 sq. m of surface in 24 hours per ASTM E 96, Desiccant Method (Procedure A).
  3. Air Permeance: Not more than 0.004 cfm/sq. ft. at 0.3-inch wg when tested according to ASTM E 2178.
  4. Allowable UV Exposure Time: Not less than three months.
- C. Building-Wrap Tape: Pressure-sensitive plastic tape recommended by building-wrap manufacturer for sealing joints and penetrations in building wrap.

## 2.2 MISCELLANEOUS MATERIALS

- A. Flexible Flashing: Composite, self-adhesive, flashing product consisting of a pliable, butyl rubber or rubberized-asphalt compound, bonded to a high-density polyethylene film, aluminum foil, or spunbonded polyolefin to produce an overall thickness of not less than 0.025 inch.
1. Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
    - a. DuPont (E. I. du Pont de Nemours and Company); DuPont Flashing Tape.
    - b. Grace Construction Products, a unit of W. R. Grace & Co. - Conn.; Vycor Butyl Self Adhered Flashing.
    - c. Protecto Wrap Company; BT-25 XL.
    - d. Carlisle Coatings & Waterproofing; CCW-705-AVB Air and Vapor Barrier Strips.
    - e. Fiberweb, Clark Hammerbeam Corp.; Aquaflash 500.
    - f. Fortifiber Building Systems Group; Fortiflash 25.
    - g. Grace Construction Products, a unit of W. R. Grace & Co. - Conn.; Vycor Plus Self-Adhered Flashing.
    - h. MFM Building Products Corp.; Window Wrap.
    - i. Polyguard Products, Inc.; Polyguard JT-30 Tape.
- B. Primer for Flexible Flashing: Product recommended by manufacturer of flexible flashing for substrate.
- C. Nails and Staples: ASTM F 1667.

## PART 3 - EXECUTION

### 3.1 WATER-RESISTIVE BARRIER INSTALLATION

- A. Cover exposed exterior surface of sheathing with water-resistive barrier securely fastened to framing immediately after sheathing is installed.

- B. Cover sheathing with water-resistive barrier as follows:
  - 1. Cut back barrier 1/2 inch on each side of the break in supporting members at expansion- or control-joint locations.
  - 2. Apply barrier to cover vertical flashing with a minimum 4-inch overlap unless otherwise indicated.
- C. Building Wrap: Comply with manufacturer's written instructions.
  - 1. Seal seams, edges, fasteners, and penetrations with tape.
  - 2. Extend into jambs of openings and seal corners with tape.

### 3.2 FLEXIBLE FLASHING INSTALLATION

- A. Apply flexible flashing where indicated to comply with manufacturer's written instructions.
  - 1. Prime substrates as recommended by flashing manufacturer.
  - 2. Lap seams and junctures with other materials at least 4 inches except that at flashing flanges of other construction, laps need not exceed flange width.
  - 3. Lap flashing over water-resistive barrier at bottom and sides of openings.
  - 4. Lap water-resistive barrier over flashing at heads of openings.
  - 5. After flashing has been applied, roll surfaces with a hard rubber or metal roller to ensure that flashing is completely adhered to substrates.

END OF SECTION | 072500

073100 | FIBERGLASS SHINGLE ROOFING  
FIBERGLASS SHINGLE ROOFING SYSTEM SBS MODIFIED  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 Scope of Work

- A. Provide all material, labor, equipment and services to remove all existing roofing materials where specified and furnish and install a Class A certified laminated fiberglass shingle 50 yr. roofing system including accessories and other related items necessary to complete the projects as indicated by the Contract Documents unless specifically excluded.

1.2 Quality Assurance:

- A. Contractor Qualifications
1. Contractor shall be approved by the manufacturer as a qualified applicator.
  2. Contractor shall have a minimum of five (5) years experience in the installation of composition shingles.
  3. Contractor shall be acceptable to District, Architect and roofing material supplier.
  4. Contractor shall provide list of at least ten (10) projects available for inspection employing similar system within the last three years.
  5. Contractor shall be responsible for obtaining all data required from roofing material manufacturer. These specifications are generically based on minimum performance qualifications of both the contractor and the roof system manufacturer. Contractor shall be responsible to provide submittal evidence in compliance with all requirements of Section 07510.
  6. State Contractor's license required: Class C-39
  7. Failure to meet any part of all of these requirements may result in the rejection of the bidders proposal. The district has the right to waive any of the above requirements.
- B. Roofing material manufacturer will:
1. Meet all the requirements for membership with the National Roofing Contractors' Association (NRCA)
  2. Be nationally recognized in roofing and waterproofing industry for at least ten (10) years.
  3. Provide employee as Field Representative to inspect the project at each phase of the installation. A written report of each visit will be made and a copy given to the District within five (5) days of the visit. The report will include comments on quality of work, problems noted, overall job progress, etc. Representative will be authorized to make decisions on behalf of material manufacturer.
  4. Provide list of at least ten (10) projects available for inspection employing similar roofing system within 100-mile radius and same climate zone of project building.
  5. Be approved by District /Architect.
  6. Provide District proof/copy of material product liability insurance for minimum five million dollars covering all major roofing components listed in Part 2, Products.

7. The presence and activity of the manufacturer's representative and/or District representative shall in no way relieve the contractor of his contractual responsibilities.

### 1.3 Warranty

- A. Contractor's warranty: Upon project completion and acceptance, the contractor shall issue in writing to the District a labor and workmanship warranty for a period of not less than five (5) years. The product/material manufacturer shall issue in writing a standard material/product warranty for a period of not less than Fifty (50) years.
- B. Manufacturer's warranty: Manufacturer will issue a 10-year non-prorated NDL (no dollar limit) full-system warranty which covers defects in materials and labor for installation.
- C. Warranty Service: Contractor must be capable of responding to emergency roof leaks within two (2) hours of notification by District.

## PART 2 - PRODUCTS

### 2.1 Laminated Fiberglass Shingles, SBS modified

- A. Shingles must meet or exceed the following technical data as tested by an approved roofing material testing laboratory. Approved products are Legacy by Malarkey Roofing Company and StormMaster LM50 by Atlas Roofing Corporation and IKO Grandeur.

|                      |                     |            |
|----------------------|---------------------|------------|
| 1. Tear strength     | ASTM D3462          | Min. 2,000 |
| 2. Impact resistance | UL 2218             | Class 4    |
| 3. Wind resistance   | UL 997, ASTM D 3161 | 100 mph    |
| 4. Fire rating       | UL 790, ASTM E 108  | Class A    |
- B. Ridge Shingles
  1. Low-profile hip and ridge
- C. Starter Shingles
  1. 7" wide with self-sealing adhesive strip

### 2.2 Underlayment

- A. Type IV, 100 cm (39.37 inches) wide, SBS modified fiberglass- reinforced underlayment, complying with ASTM D 226, 37.5 pounds per square, Layfast underlayment TU-35 as manufactured by MB Technology, Malarkey 501-UDL or approved equal.

### 2.3 Metal Products

- A. Flashings:
  1. Edge Metal: 24 gage galvanized, 3"x3" or to fit field conditions, with ½" drip edge and 3/8" hem. Cut to form 3" interlocking joints.
  2. Step Shingle: 24 gage galvanized, 6" x 4" x 10".

3. Valley: 24 gage galvanized, 16" minimum width
4. Roof jacks: 26 gage galvanized
5. Gutters and downspouts: job specific

## 2.4 Deck Vents

- A. Eyebrow Vents: Simpson low profile (49 square inches free air)

## 2.5 Miscellaneous

- A. Roofing nails - hot dipped galvanized, sharp point barbed, 11 to 12 gauge with 7/16" diameter head and 1 1/4" in length unless otherwise specified to provide minimum deck penetration of 3/4". Staples or other type fastening methods are not acceptable. Use 4 fasteners per shingle.
- B. SBS: Peel and stick. RUFTAK made by Henry Co. or ST40 made by MB Technology. Self-stick with minimum thickness of 40 mils.
- C. Caulking: Polyurethane: Vulkem 116 made by Mameco Intl. or Sonolast NP-1 made by Sonneborn Building Products.

# PART 3 - EXECUTION

## 3.1 Installation

- A. General: Comply with manufacturer's instructions and recommendations but not less than those recommended by ARMA's Residential Asphalt Roofing Manual or The NRCA Steep Roofing Manual.
- B. Underlayment
  1. Apply 1 layer of SBS shingle underlayment per manufacturer's recommendations. Slope roofs under 3:12 pitch require an additional layer of underlayment. Shingles that have less than 1" overlap at the nailing strip will provide two layers of the specified underlayment.
  2. Roof valleys: Install 36" width SBS peel & stick waterproofing material in all valleys before applying shingle underlayment.
- C. Shingle Application:
  1. Install starter shingles with adhesive strip to prevent wind uplift
  2. Install new shingle roof in accordance with these specifications and manufacturer's recommendations.
  3. Use vertical and horizontal chalk lines to ensure straight coursing.
  4. Cut and fit shingle at valley, ridges, and edges to provide maximum weather protection. Provide same weather exposure at ridges as specified for roof. Lap shingles at ridges to shed water away from direction of prevailing wind.
- D. Roof jacks
  1. Deck jacks must fit properly without cutting or trimming
  2. Set flange in bed of polyurethane sealant.



3. Seal at penetration point with polyurethane caulk
  4. Slip sheet: Install slip-sheet to go under first layer of underlayment and over flange of jack.
  5. Exposed flange: Attach with pointed screws @12" o.c. with caulk or neoprene washers.
- E. Flashings
1. Step flashing shall be installed with 5" overlap.
  2. Install saddles (cricket high side if over 24"), skirt and step flashing around mechanical equipment as per roof plans and/or job walk.
  3. Valley metal shall be installed using flathead grabber screws. Install metal over 1- layer of SBS peel and stick water barrier. Extend peel and stick 6" beyond metal. Stagger screws @ 9" o.c. Shingles must be cut at the valleys. Provide minimum of 4" overlap.
  4. Install field-soldered lead jacks around conduits, which penetrate the side of equipment platform.
- F. Edge Metal:
1. Install new perimeter metal using Vulkem 116 caulking at joints with at least 3" overlap in accordance with manufacturers recommendations.
  2. Nail pattern: 8" to 10" o.c. staggered.
  3. No joints shall buck water.
- G. Deck Vents:
1. Simpson low-profile vents (49 square inches free air) to be located about 12" below ridgeline. Spacing is job specific. Cut deck and provide blocking if necessary for support. Refer to section 3.01 (D) for installation procedure.
- H. Conduit blocking
1. Single conduit 2" and under
    - a. Minimum size 2 x 4 x 8" treated douglas fir or redwood with unistrut. Attach using 24-gage g.i. strap fastened to bottom of block and to the deck under shingle tab.
  2. Multiple conduit systems or conduits larger than 2" (job specific)
- I. Platforms
1. Security dividers: Install 2x4's or 1/8" x 1" flat metal @ 6" o.c. to prevent entry into building where deck openings are larger than 12" x 12".
  2. Vapor barrier: Install self-adhering vapor barrier over wood platform (Ruftak) by Henry Co. or approved equal) before installing metal cap.
- 3.2 Clean up
- A. On a daily basis, project site shall be kept clear of waste and debris. Waste shall be removed from site promptly to prevent an unsafe or unsightly build-up.

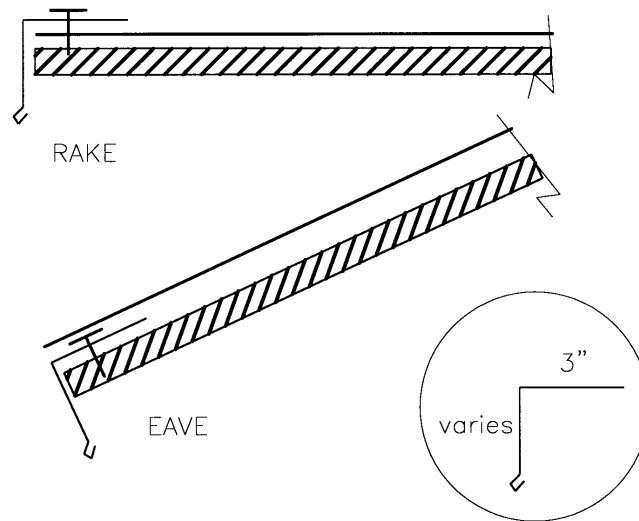
SECTION 07310  
FIBERGLASS SHINGLE ROOFING  
REV DATE: 12/12/2025



ROOFING SYSTEM: FIBERGLASS SHINGLES

DETAIL 1: EDGE METAL (NOSING)

scale: 3" = 1'



NOTES:

1. MATERIAL: 24 gage g.i. with hem and drip edge
2. JOINTS: Interlocking. Overlap 3 inches min.
3. ATTACHMENT: 1 1/2" F.H. Grabber screws 10" o.c. staggered
4. EAVES: Nosing applied directly to deck
5. RAKE: Nosing applied over underlayment

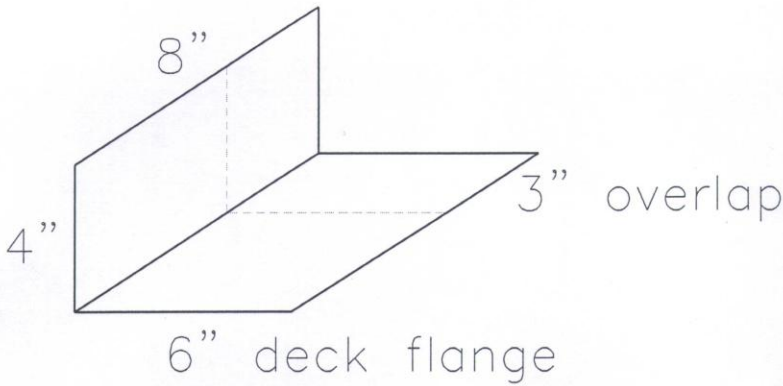
PLANNING & ESTIMATING DEPARTMENT

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| FRESNO, CA. 93722    | FAX: 559-457-3059   | DATE: 03/10/04 | file:FGS_1 |

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ROOFING SYSTEM: FIBERGLASS SHINGLES

DETAIL FGS\_02: STEP SHINGLES



NOTES:

- 1. 26 gage galvanized -- 4" x 6" x 8"
- 2. Place flashing just back of exposed edge of shingle
- 3. 3" top lap



| PLANNING & ESTIMATING DEPARTMENT |                     |                |              |
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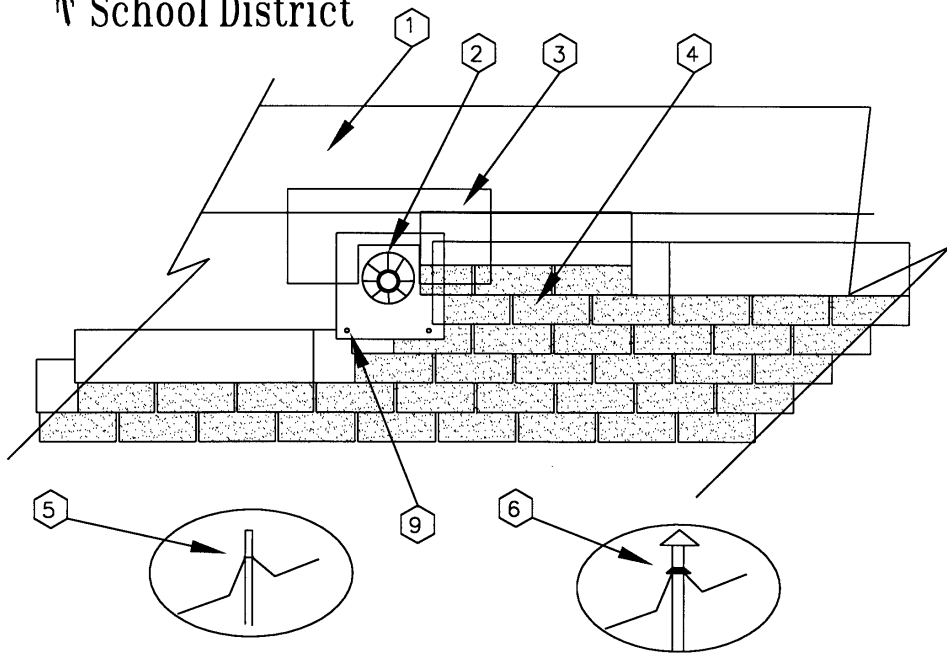
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 FIBERGLASS SHINGLE ROOFING  
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ROOFING SYSTEM: FIBERGLASS SHINGLES

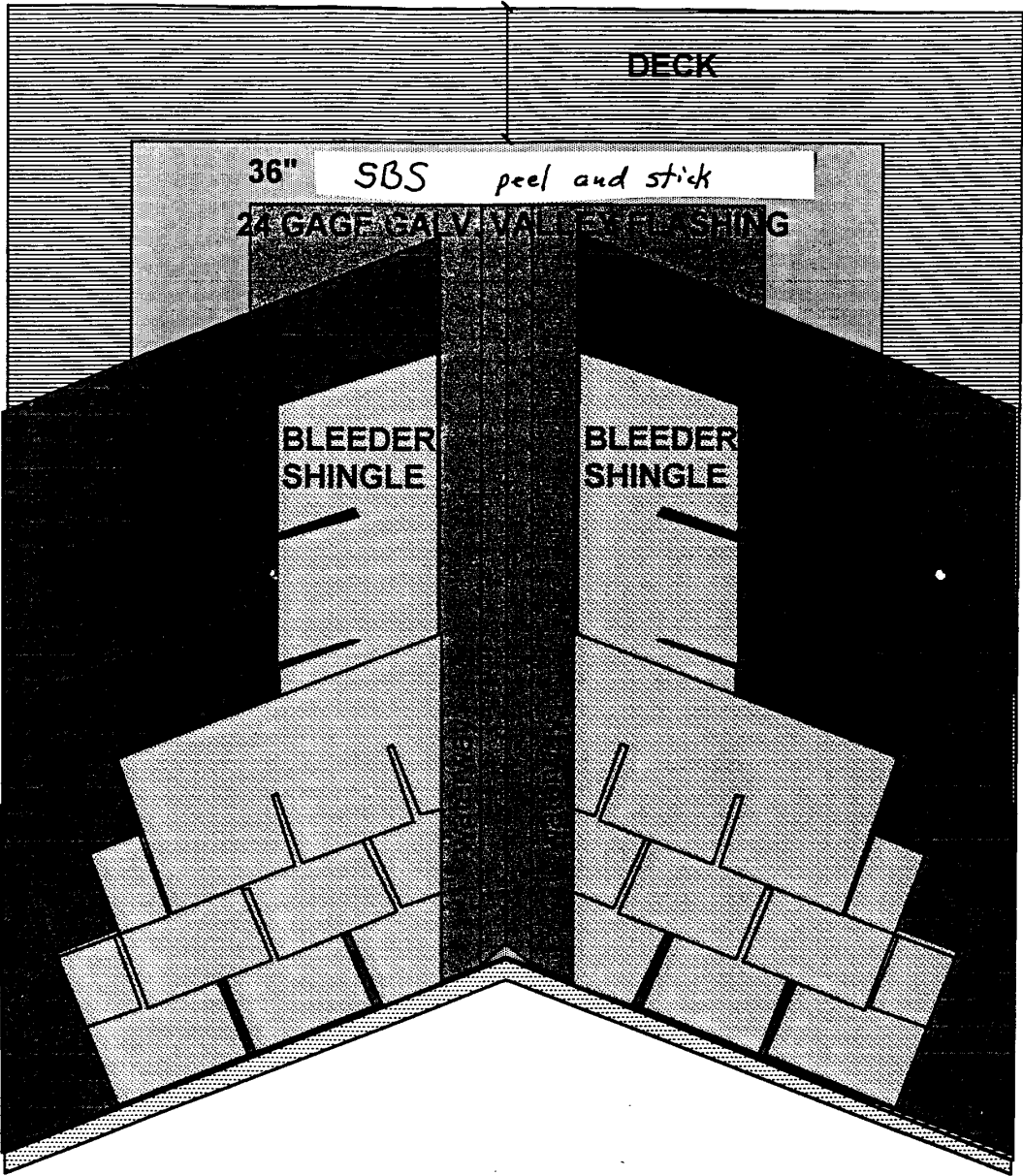
DETAIL: FGS03 DECK JACKS



NOTES

1. SBS modified fiberglass-reinforced underlayment
2. Galvanized deck jack
3. Underlayment slip sheet installed with mastic to jack
4. SBS modified fiberglass shingles
5. Apply urethane caulk (Vulkem 116 or NP1)
6. Galvanized vents require storm collar
7. Jacks which require cutting must be field-soldered 4# lead
8. Multiple jacks: Maintain minimum 12" between deck flanges
9. Exposed flange: Fasten with pointed screws & neoprene washers @ 12" o.c.

| PLANNING & ESTIMATING DEPARTMENT |                     |                |                       |
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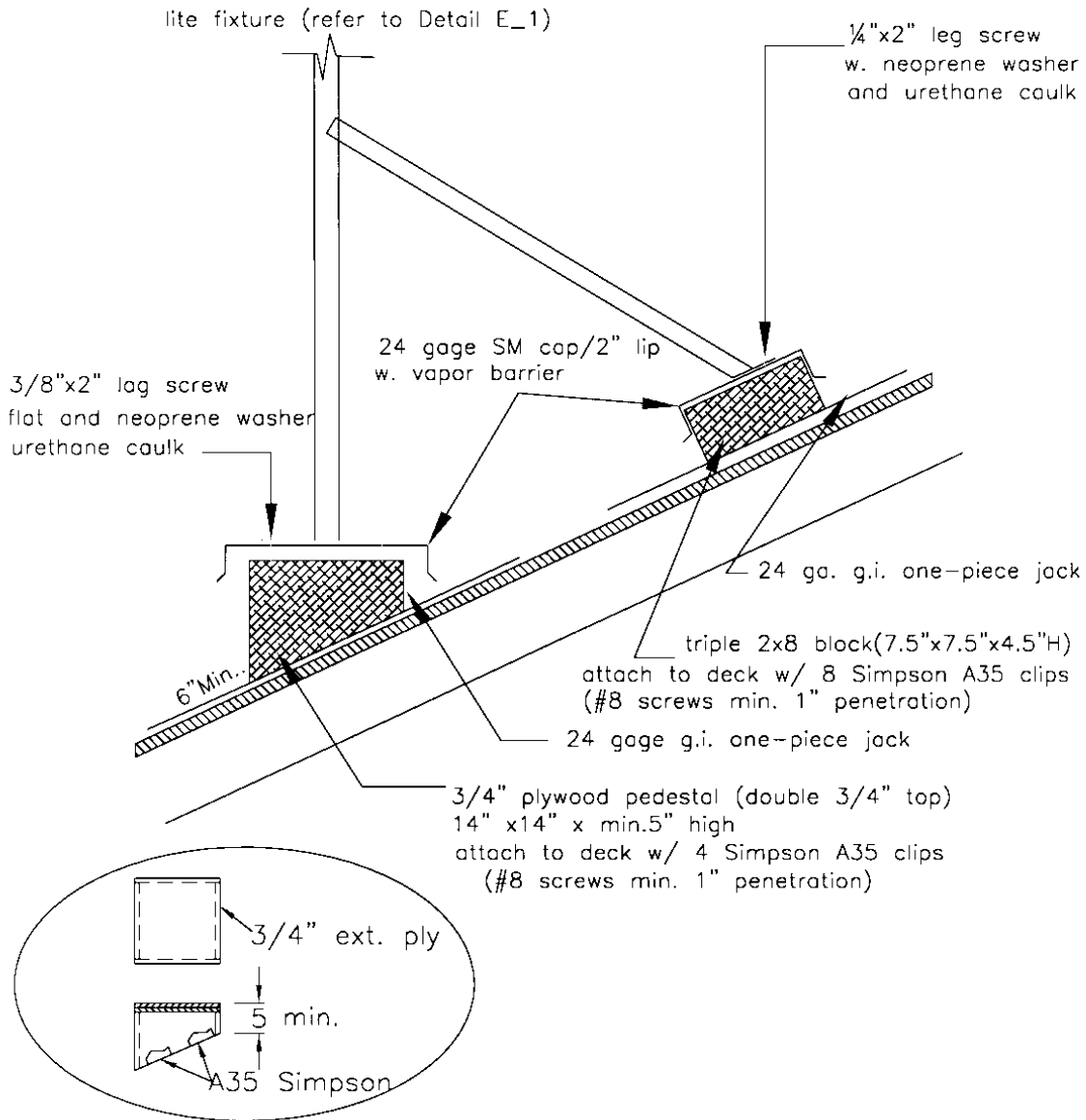
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| Roof Drawing |         | Valley Flashing - F.G. Shingles |    |          |
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SECTION 07310  
FIBERGLASS SHINGLE ROOFING  
REV DATE: 12/12/2025



ROOF SYSTEM: FIBERGLASS SHINGLES

DETAIL FGS\_5: PEDESTALS FOR LIGHT STANDARD



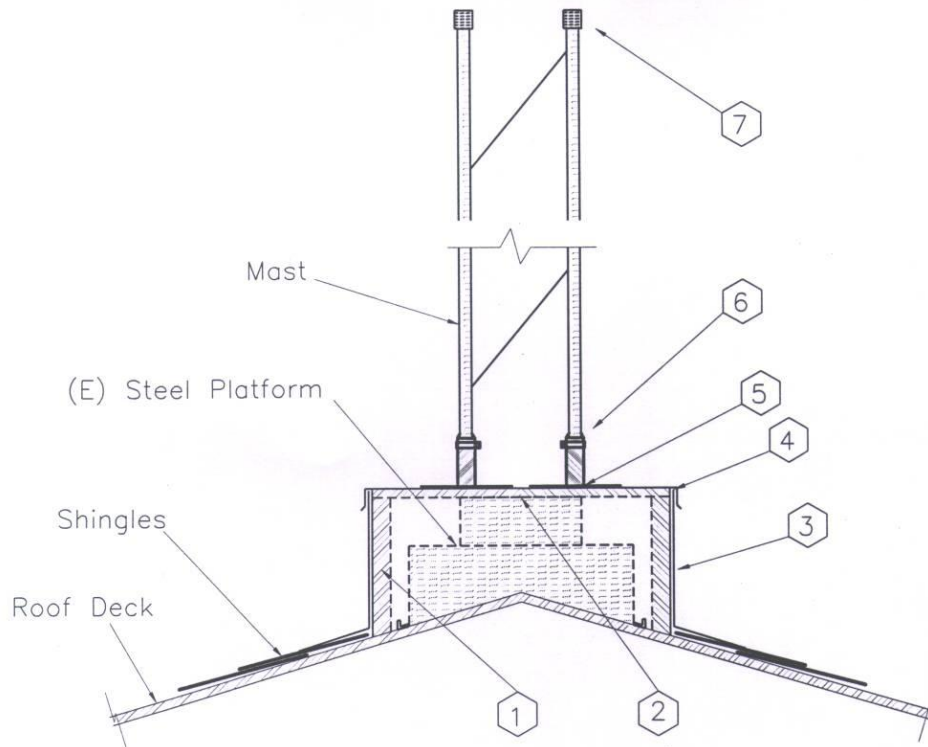
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SECTION 07310  
FIBERGLASS SHINGLE ROOFING  
REV DATE: 12/12/2025

ROOFING SYSTEM: FIBERGLASS SHINGLES

DETAIL FGS\_06: ANTENNA PLATFORM



NOTES:

1. Enclose existing base with 2x12 box flush with top of (E) steel base  
(Toe-nail box to deck using 8d galvanized nails @ 6" o.c.)
2. Install 2-piece 3/4" plywood top. Slot for antenna legs
3. Install 24 gage g.i. saddles, skirting and step shingles
4. Install self-adhering vapor barrier with 1" lap over jack
5. Install 2-piece soldered s.m. cap with lead jacks around legs  
(size to fit field conditions: approx. 25" x 25")
6. Install clamps and apply urethane caulk to seal
7. Cap top of mast legs to prevent water entry

|                                                                                     |                                  |                     |                |                     |
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|  | PLANNING & ESTIMATING DEPARTMENT |                     |                |                     |
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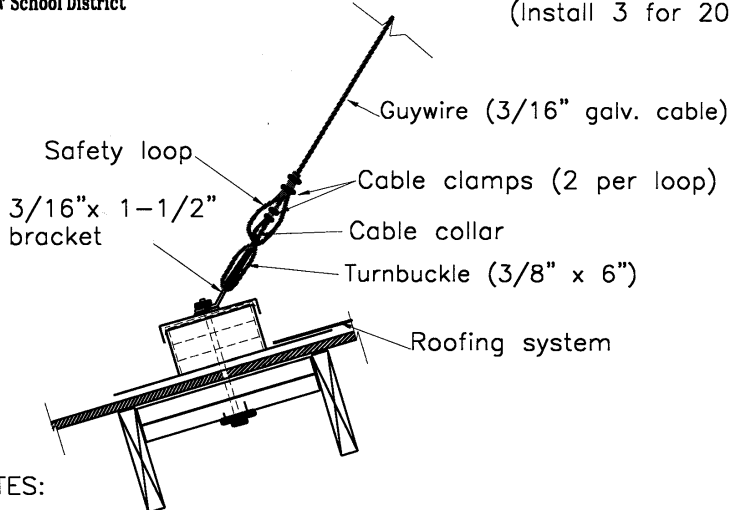
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FIBERGLASS SHINGLE ROOFING  
REV DATE: 12/12/2025



ROOFING SYSTEM: FIBERGLASS SHINGLES

DETAIL FGS\_7: Antenna Guywire Block  
(Install 3 for 20 ft. mast)



NOTES:

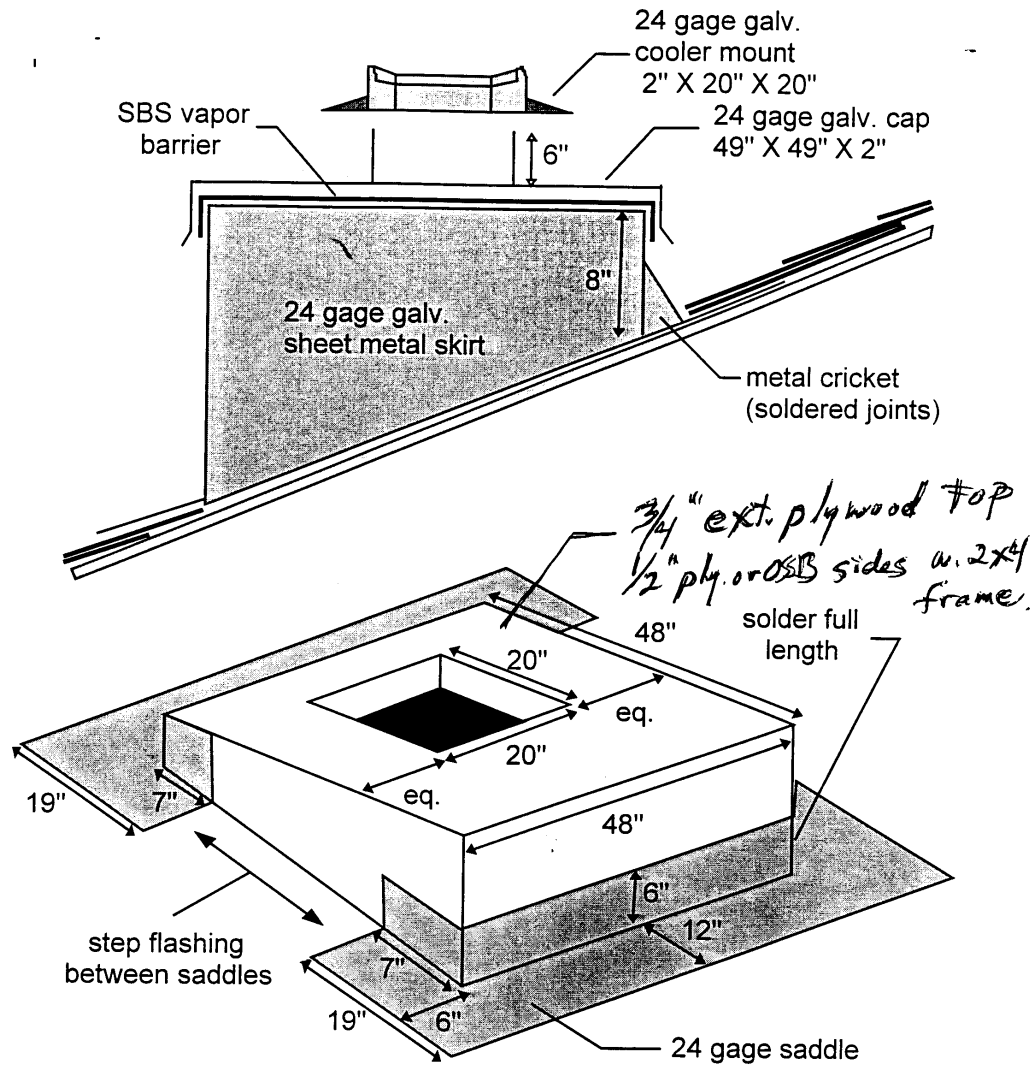
1. Locate 3 anchor points approx. 20 to 30 feet from mast
2. Cut deck to install double 2x6 blocking.  
Nail thru rafters w/3-16d per 2x6.
3. Install 1/2" bolt thru blocking & repaired deck.  
Attach to bottom block w/welded plate & screws.
4. Install triple-layer 2x8 block w/8d toenails into deck.
5. Install 1 pc. 24 ga. g.i. jack w/ soldered joints.
6. Vapor barrier: 40# self-adhering Ruftak. Lap 1" over jack
7. Cap: 24 ga. g.i. w/2" lip and soldered corners
8. Install bracket and nut w/ neoprene washer and polyurethane caulk
9. Install cable & clamps per drawing detail
10. Install roof system per 07310FGS

PLANNING & ESTIMATING DEPARTMENT

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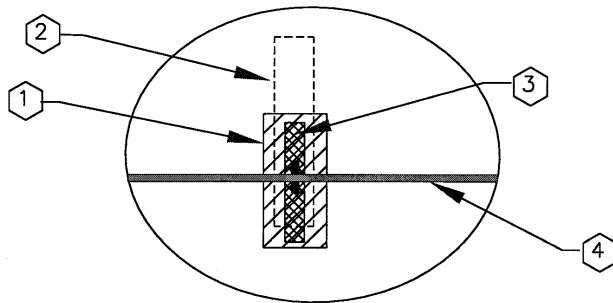
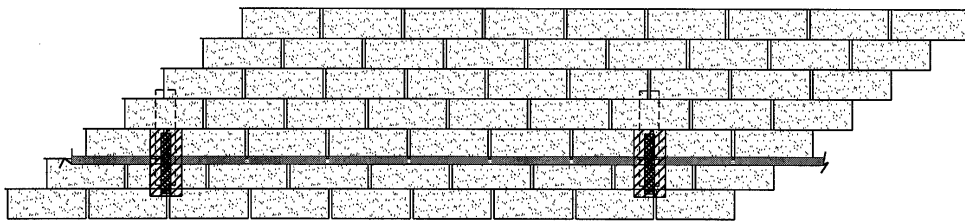
| Roof Drawing |        | Evap. Cooler Platform |    |          |
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SECTION 07310  
FIBERGLASS SHINGLE ROOFING  
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ROOFING SYSTEM: FIBERGLASS SHINGLES

DETAIL FGS09: BLOCKING FOR CONDUITS



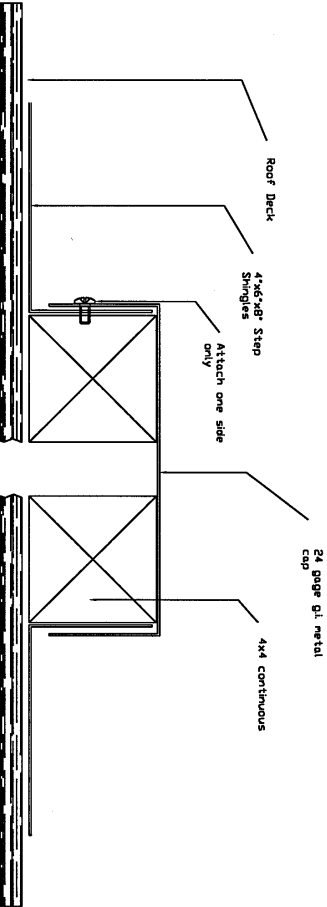
NOTES

1. Block size: job specific (minimum 2" x 4" x 8" )
2. 24 gage galvanized metal strap
  - a. Attach with screws to bottom of block
  - b. Attach to deck with shingle nails under shingle tab
3. Unistrut attached to block
4. Rigid conduit (maximum load)
  - a. 2" -- one conduit per block
  - b. under 2" -- two conduits per block
5. Spacing: job specific
  - a. Typically not to exceed 60 inches o.c.
  - b. Not to exceed 24 inches from joint

| PLANNING & ESTIMATING DEPARTMENT |                     |                |                      |
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ROOFING SYSTEM: FIBERGLASS SHINGLES  
DETAIL FGS10: EXPANSION JOINT

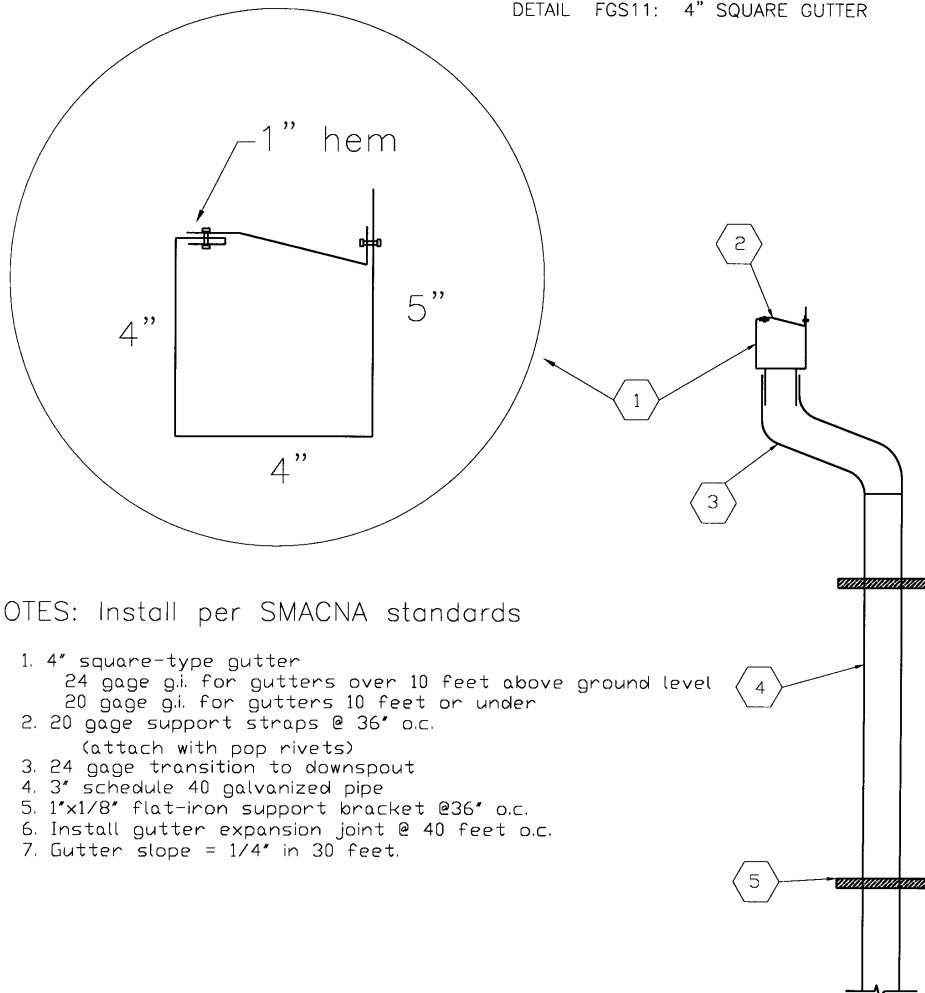


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| EXPANSION JOINT | DRAWN BY: C. CLARK | DATE: 11/06/00 |
| FUSD P&E DEPT.  | (559)457-3046      | FILE: FGS10    |



ROOFING SYSTEM: FIBERGLASS SHINGLES

DETAIL FGS11: 4" SQUARE GUTTER



NOTES: Install per SMACNA standards

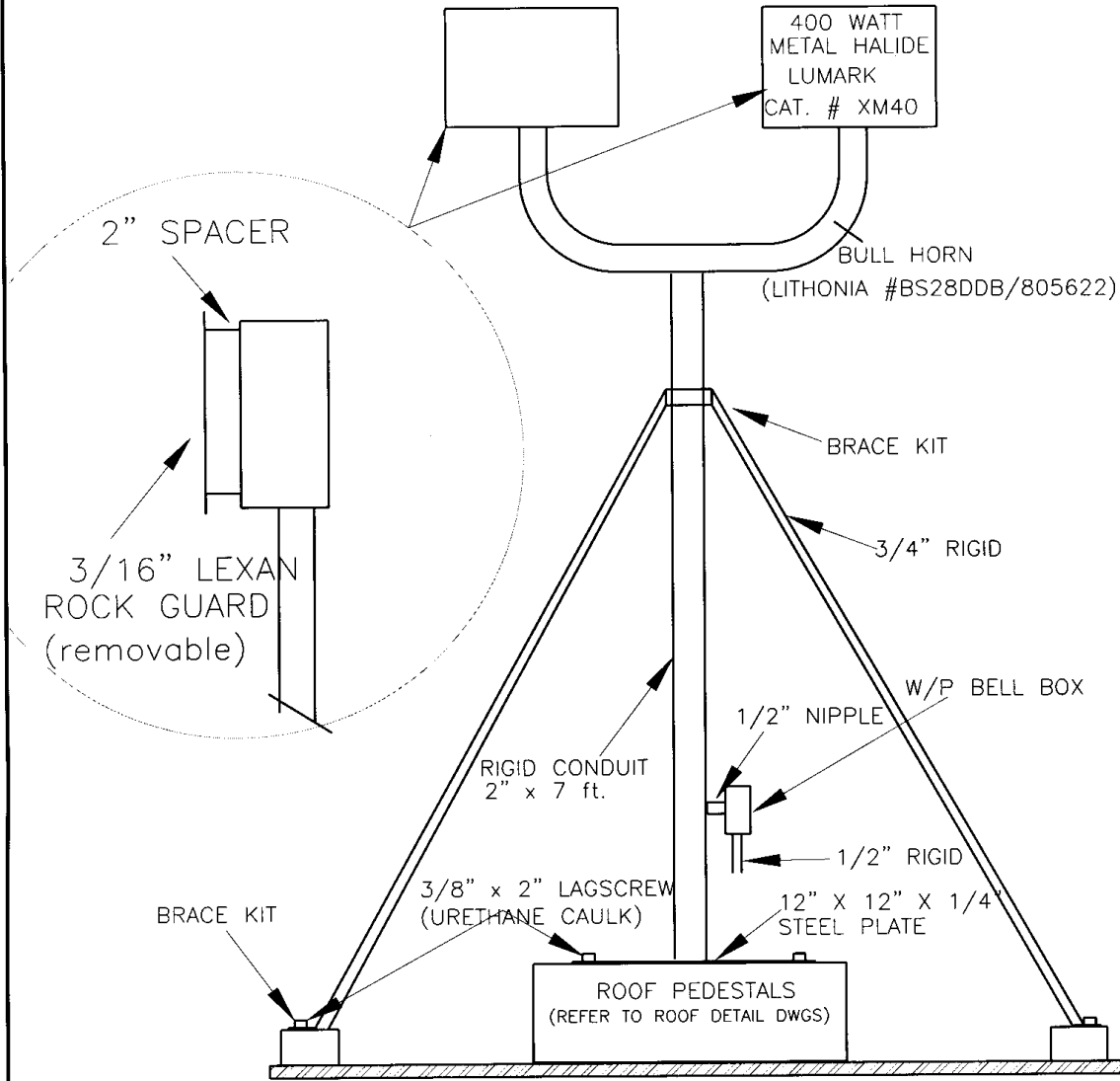
1. 4" square-type gutter  
24 gage g.i. for gutters over 10 feet above ground level  
20 gage g.i. for gutters 10 feet or under
2. 20 gage support straps @ 36' o.c.  
(attach with pop rivets)
3. 24 gage transition to downspout
4. 3" schedule 40 galvanized pipe
5. 1"x1/8" flat-iron support bracket @36' o.c.
6. Install gutter expansion joint @ 40 feet o.c.
7. Gutter slope = 1/4" in 30 feet.

| PLANNING & ESTIMATING DEPARTMENT |                     |                |              |
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# LIGHT STANDARD: ROOF MOUNT DETAIL: EL\_01



| PLANNING & ESTIMATING DEPARTMENT |                     |               |                   |
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END OF SECTION

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 1.02 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Flashings and Metal In Connection With Roof Coverings:
    - a. Flashings and counterflashings.
    - b. Gravel stops.
    - c. Roof edgings.
    - d. Copings.
    - e. Closures.
    - f. Seismic/expansion joints.
    - g. Penetrations through roofing.
    - h. Pitch pans.
    - i. Gutters.
  - 2. General Building Sheet Metal Work:
    - a. Flashings and drips.
    - b. Trim and closures.
    - c. Seismic/expansion joints.
  - 3. Fastenings.
    - a. Sealant work for flashings and sheet metal.
  - 4. Accessories.
    - a. Definition Sheet Metal: In general, sheet metal 11 gauge and thinner.
- B. Related Work Specified Elsewhere:
  - 1. Miscellaneous Metals: Division 05.
  - 2. Roof Accessories: Division 07.
  - 3. Joint Sealing: Division 07.
  - 4. Food Service Equipment: Division 11.
  - 5. Trim for plaster and drywall: Respective Sections.
  - 6. Sleeves, collars, roof jacks, flashings for Plumbing, Mechanical, Electrical: Respective Sections.
  - 7. Metal roof drains and pipe downspouts: Division 15, Plumbing.
  - 8. HVAC Systems: Division 15.

1.3 SUBSTITUTIONS:

- A. Only written approval of District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

#### 1.4 QUALITY ASSURANCE:

- A. Requirements of Regulatory Agencies; Codes: Conform to Titles 21 and 24,
- B. CCR; and UBC Code and Standards.
  - 1. Reference Standards: SMACNA "Architectural Sheet Metal Manual", latest edition, by Sheet Metal and Air-Conditioning Contractors National Association, Inc.

#### 1.5 SUBMITTALS:

- A. Shop Drawings: Submit for listed items; reference to District's detail numbers; two copies for initial checking; four copies of final checking and approval, and distribution:
  - 1. Sheet Metal: All work; show all materials, fabrication methods, joints, assembly and fastenings, finishes, and gauges.

#### 1.6 JOB CONDITIONS:

- A. Sequencing, Scheduling: Coordinate work with roofing installations, and related work of other Specifications Sections.

#### 1.7 GUARANTEE:

- A. Guarantee all sheet metal work in connection with roof coverings for a two-year period. Refer to Division 01, Contract Close-Out.

### PART 2 - PRODUCTS

#### 2.1 2.01 MATERIALS:

- A. Galvanized Sheet Steel:
  - 1. Material: Sheets or coils evenly zinc-coated (galvanized) by hot-dip method; ASTM A-526, "Commercial Quality", 1.25 ounce per square foot zinc coating (G-90 per ASTM A-525); or Federal Specifications QQ-1-716, class D-1, ordinary hot-dip galvanized, 1.25 ounce per square foot.
  - 2. Gauges: Typically per SMACNA Standard's. for the particular "Item", heavier gauges where indicated; but in no case less than 24 gauge.
- B. Solder, For Galvanized Steel: ASTM B-32, Alloy grade 58; 50% tin, 50% lead.
- C. Flux, For Galvanized Steel: 50% denatured alcohol, 50% dilute muriatic acid; J.S. Harris Company, Stay-Clean, or L.B. Allan Company Special-Flux.
- D. Fastenings, For Galvanized Steel: Galvanized or cadmium-plated, per following Federal Specifications; types as required.
  - 1. Nails: FF-N-105B(2).
  - 2. Screws: FF-S-107C(1).
  - 3. Washers: As required; neoprene faced where watertight condition is required.
  - 4. Rivets: Per manufacturer's recommendations for the particular use.

- 5. Bolts and Nuts: FF-B-575C, FF-B-588C.
- E. Plastic Cement, Bituminous: Federal Specifications SS-C-153; Johns Manville "Industrial Roof Cement" as a standard of quality.
- F. Sealant: One-part polysulfide (Thiokol); P.R.C. No. 5000 Rubber-Calk as a standard of quality.
- G. Paint for Touch-up of Galvanized Coating: "Galvalloy", Metalloy Products Company, Los Angeles, California; as a standard of quality.
- H. Underlayment Felt: Asphalt saturated organic felt per UBC Standard 32-1; 15 lb. minimum.

## 2.2 FABRICATION:

- A. General:
  - 1. Fabricate work accurately to profiles, dimensions, gauges, sizes as shown; portions not specifically detailed shall conform to SMACNA Standards listed below for each particular item.
  - 2. Breaks and folds to be straight, sharp, aligned, uniform.
  - 3. Surfaces to be smooth in-plane without twists, warps, bulges, waves, ripples, or other distortions.
  - 4. Edges:
    - a. Cleanly sheared.
    - b. Where exposed, turn back and hem 1/2".
  - 5. Joints:
    - a. Fabricate work into largest practicable pieces and lengths; keep joints to a minimum.
    - b. Corners: Mitered and shop fabricated wherever possible.
    - c. Joints: Watertight, butted and backed typically, securely fastened and soldered, or bedded in thiokol. Backing pieces to lap 4" minimum onto each face piece.
      - 1) No rivets in exposed faces of work.
      - 2) At concealed work only, flashings may be lapped 4" minimum over one another in lieu of butting and backing.
    - d. Expansion: Provide expansion joints and other provisions for movement per SMACNA Standard's.
  - 6. Items In Connection With Roofing: Flanges to permit 4" min. lap to roofing.
  - 7. Soldering: Clean and flux metal; sweat solder completely through joint width.
- B. Roof Edgings:
  - 1. Gauge: 24 gauge minimum; heavier gauges where indicated.
  - 2. Type: Similar to SMACNA Plates No. 36, No. 37A profile, No. 38D joints.
- C. Copings:
  - 1. Gauge: 20 gauge minimum; heavier gauges where indicated.
  - 2. Type: Similar to SMACNA Plates No. 68, No. 68 Alternate No. 3 joints, No. 69B profile.
- D. Seismic/Expansion Joints of Sheet Metal: 24 gauge minimum; W-shapes as detailed.



- E. Roofing Penetrations: SMACNA Plates No. 58 through No. 63, as appropriate for type of penetration.
- F. Pitch Pans:
  - 1. Gauge: 24 gauge minimum; heavier gauges where indicated.
  - 2. Type: SMACNA Plate No. 61 E. All joints to be seamed and be watertight to prevent leakage of pitch.
- G. Sheet metal Covering For Equipment Platforms:
  - 1. Gauges: 24 gauge minimum; heavier gauges where indicated.
  - 2. Type: Flat seam similar to SMACNA Plate No. 84. At platform edges, turn edges down 3" minimum and hem.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Examine supporting and abutting work, and related work of other Sections.
- B. Do not start work until unsatisfactory conditions are corrected.

### 3.2 INSTALLATION:

- A. General:
  - 1. All work to be watertight.
  - 2. Install work level, plumb, aligned, to proper lines and elevations; securely anchored, with proper allowance for expansion and contraction movement.
  - 3. Install work per SMACNA Standards as modified or supplemented herein.
  - 4. Work-in-Connection With Roofing: Generally set on top of roof membrane, bed in Plastic Cement, nail securely, bed laps in Plastic Cement.
  - 5. Flashings and Counterflashings: Seal joints between pieces watertight.
  - 6. Sheet Metal Covered Work: Install over double layer of underlayment. Seal edges watertight.
- B. Field Fabrication: Conform to same standards as shop fabrication.

### 3.3 ADJUSTMENT AND CLEANING:

- A. Adjustment:
  - 1. Examine work; straighten damaged or mis-aligned work; seal leaks, make work watertight.
  - 2. Touch-up damaged galvanized coating with Galvalloy paint.

END OF SECTION

## PART 1 - GENERAL

### 1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions and Division 1 collectively apply to this work.

### 1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Roof hatch.
  - 2. Smoke vents.
- B. Related Work Specified Elsewhere:
  - 1. Built-up Cold Process Roofing: Division 07.
  - 2. Flashing and Sheet Metal: Division 07.
  - 3. Finish Hardware: Division 08.

### 1.3 SUBSTITUTIONS:

- A. Only written approval of District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

### 1.4 QUALITY ASSURANCE:

- A. Requirements of Regulatory Agencies:
  - 1. Conform to Title 19, CCR, UBC and Fire Life and Safety Section of the Office of Regulations Services and local fire jurisdiction.
  - 2. Obtain State Fire Marshal's approval of completed smoke vent installation.

### 1.05 SUBMITTALS:

- A. Shop Drawings: Submit for all work; reference to District's detail numbers; two copies for initial checking; four copies for final checking and approval, and distribution.
- B. Certificates: State Fire Marshal's acceptance of smoke vent installation.

## PART 2 - PRODUCTS

### 2.1 SMOKE VENTS AND ROOF HATCH:

- A. Acceptable Manufacturers and Products:
  - 1. Lane-Aire Manufacturing Corporation, as a standard of quality.
  - 2. Other Manufacturers:
    - a. Bilco Company.
    - b. Babcock-Davis, Inc.

- c. Metal-Tite Products.
- d. Milcor.

B. Types:

1. General Construction: Factory-fabricated, welded, watertight unit, galvanized steel, baked on prime coat; 14 gauge curb with 1" rigid insulation; 14 gauge cover, 1" fiberglass insulation, 22 gauge cover liner; fixed pin hinges, positive action lifting arms and springs; neoprene seal; integral counterflashing; 12" high curb.
2. Roof Hatches; Type RH:
  - a. Conform to Paragraph 2.01.
  - b. Provide inside and outside latching handles, with padlocking lugs.
3. Smoke Vents; Type SV:
  - a. Conform to Paragraph 2.01.
  - b. Provide with cables, pulleys, winches, linkage, and all other parts for complete installation. Provide 160° F maximum Underwriters' Laboratories approved fusible links; or where fire sprinklers occur, provide links rated 20° less than sprinkler head ratings.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION:

- A. General: Securely mount all items, watertight.
- B. Smoke Vents: Terminate cable release at an approved location and height above finished floor line. Vent to be capable of being opened manually or by fusing of the link.

#### 3.2 ADJUSTMENT AND CLEANING:

- A. Test and adjust for proper operation.
- B. Lubricate moving parts as required to provide smooth easy operation.

### END OF SECTION

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Joint Sealing: Sealing building joints with sealant, except where such work is specifically included in another Specifications Section.
    - a. Exterior building joints to be weather tight.
- B. Related Work Specified Elsewhere:
  - 1. Sealant for Glazing: Division 08.
- C. Definitions:
  - 1. Sealant: A collective term to include all types of joint sealing materials, and drawing references to sealant, thiokol, silicone, caulk, caulking, seal weather tight, and similar terms.
  - 2. Joints: Gaps, cracks, or separations of any kind in or between materials, assemblies or units.
  - 3. Weather tight: Sealed to prevent leakage of air, light, or water into building interiors.

1.3 SUBSTITUTIONS:

- A. Only written approval of the District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

1.4 QUALITY ASSURANCE:

- A. Shelf Life: Do not use materials whose shelf life has expired.

1.5 SUBMITTALS:

- A. Samples (in duplicate): Manufacturer's standard color range.
- B. Product Data (duplicate copies): Manufacturer's standard brochures describing all materials, and installation instructions.

## 1.6 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver sealant materials in manufacturer's original sealed containers. Store and handle to prevent damage.

## 1.7 JOB CONDITIONS:

- A. Environmental Requirements: Follow manufacturer's printed recommendations for temperature range, humidity, moisture content of surfaces, and ventilation.
- B. Sequencing, Scheduling: Schedule work to seal various portions of the work, as it progresses.

## 1.8 ALTERNATIVES:

- A. Contractor may, at his option and expense, select anyone, but only one, of the specified sealant materials for use throughout the project.

## 1.9 GUARANTEE:

- A. Refer to Specifications Section 01700, Contract Close-out.
- B. Maintain this work in a weather tight condition for a two-year period.

# PART 2 - PRODUCTS

## 2.1 MATERIALS--SEALANTS:

- A. Sealant Types:
  - 1. Polysulfide:
    - a. Type: One-component, non-sagging, Thiokol base; conforming to Federal Specifications SS-S-200.
    - b. Acceptable Manufacturers and Products:
      - 1) Products Research Corporation, Glendale, CA, PRC Rubber Calk, No. 5000 Sealant as a standard of quality.
      - 2) Other manufacturers: Refer to Paragraph 1.03, Substitutions.
  - 2. Silicone:
    - a. Type: One-component, non-sagging, low-modules, silicone rubber; conforming to Federal Specifications TT-S-001543a and TT-S-00230c.
    - b. Acceptable Manufacturers and Products:
      - 1) Dow Corning No. 790 Silicone Building Sealant as a standard of quality.
      - 2) General Electric GE Silpruf weatherproofing sealant.
    - c. Other manufacturers: Refer to Paragraph 1.03, Substitutions
  - 3. Polyurethane (horizontal traffic bearing joints):
    - a. Type: One part moisture curing, pour grade, polyurethane, conforming to Federal Specifications TT-S-0023C, Type 1, Class A.
    - b. Acceptable Manufacturers and Products:
      - 1) Vulkem 116 as manufactured by Mameco International.
      - 2) Other manufacturers: Refer to Paragraph 1.03, Substitutions.

4. Colors: Selected by the District from manufacturer's standard color range (six colors minimum) to harmonize with colors of adjacent materials.

## 2.2 MATERIALS; PRIMERS, BACKERS, FILLERS, BOND BREAKERS, CLEANERS AND MISCELLANEOUS:

- A. General: Types and brands as recommended by sealant manufacturer, which are compatible with the sealant used.
- B. Backer Filler: Compressible, resilient, foam rod or tubular material sized to joint, and shaped to control sealant depth.
- C. Primers: As recommended by manufacturer.
- D. Bond Breaker: Pressure sensitive adhesive polyethylene tape.
- E. Masking Tape: Adhesive paper tape.
- F. Cleaners: As recommended by sealant manufacturer.
- G. Miscellaneous: As required per manufacturer's recommendations.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Examine surfaces for suitability to receive joint sealing work. Report any unsatisfactory condition.
- B. Do not start work until unsatisfactory conditions are corrected.

### 3.2 PREPARATION OF JOINTS:

- A. Cleaning: Clean joint surfaces, using an appropriate cleaner, free of dust, dirt, oil, grease, rust, wax, bitumen, lacquers, laitance, form release agents, loose aggregate, protective coatings, paints, moisture, and all other matter which will affect proper adhesion of sealant.
- B. Masking: Mask surfaces adjacent to joints as necessary to prevent staining and damage.
- C. Priming: Prime those joint surfaces recommended by sealant manufacturer. Follow manufacturer's recommendations. Keep primer off adjacent surfaces.

### 3.3 APPLICATION:

- A. Bond Breaker Tape: Apply at those shallow three-sided joints recommended by sealant manufacturer to prevent sealant adhesion to the bottom-side of the joint.

- B. Backer Filler: Install backer filler material in joints when recommended by sealant manufacturer, and as necessary to control proper depth, size, and shape of sealant bead.
- C. Sealant:
  - 1. Joint Size, Depth-to-Width Ratio:
    - a. Depth: 1/4" minimum in all joints.
    - b. Joints 1/2" and Smaller: Depth-to-width ratio may vary from 1:1 to 1:2. Ratio may be greater for wide joints when specifically recommended by sealant manufacturer.
  - 2. Application:
    - a. Apply sealant to fill joint completely to required depth, in a uniform continuous bead without gaps or air pockets, with complete adherence to joint sides.
    - b. Use a pressure gun with a nozzle, which will reach the bottom of the joint so the sealant will fill the joint from the bottom up.
    - c. Do not overlap sealant onto adjacent surfaces.
    - d. Tooling Joints: Press sealant into joint with a concave tool to assure complete wetting action and adherence of sealant to joint surfaces. Finished joint to have a smooth, concave, surface free of pockets, bubbles, or defects.
    - e. Completed sealant work to be watertight.

### 3.4 ADJUSTMENT AND CLEANING:

- A. Cleaning:
  - 1. Clean surfaces as work progresses.
  - 2. Remove any spillage, droppings, or stains as soon as possible.
  - 3. Do not use tools or cleaners, which will mar finish or item being cleaned.
- B. Correction of Defective Work: Repair any damaged or incomplete sealant work.

END OF SECTION

SECTION 081100 | METAL DOORS AND FRAMES  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 SCOPE:

- A. Furnish all material, labor, equipment and services necessary to furnish Metal Doors and Frames, Window Frames, accessories and other related items necessary to complete the Project as indicated by the Contract Documents unless specifically excluded.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- A. General Conditions
- B. Concrete Expansion Anchors
- C. Concrete Block Masonry
- D. Structural Metal and Metal Fabrication
- E. Service Windows
- F. Finish Hardware
- G. Glazing
- H. Lath and Plaster
- I. Light Gauge Metal Framing
- J. Gypsum Board
- K. Painting

1.3 WORK FURNISHED BUT NOT INSTALLED:

- A. Division 06 Rough Carpentry (installation of metal frames)
- B. Division 06 Finish Carpentry (installation of metal doors)
- C. Division 07 Joint Sealers

1.4 STANDARDS:

- A. In accordance with:
  - 1. AWS: American Welding Society
  - 2. HMMA: Hollow Metal Manufacturers Association (Division of NAAMM)



- 3. SDI: Steel Door Institute
- 4. USSG: U.S. Standard Gauges

#### 1.5 QUALITY ASSURANCE:

- A. Manufacturers must be members of the Steel Door Institute, who have been engaged for at least two years in the production for sale of swing doors and frames on a national basis.
- B. Products to be shop fabricated to required profiles by forming and continuously welding edges straight, sharp, and true, and in accordance with SDI 117 Manufacturing Tolerances Standard Steel Doors and Frames.
- C. Fit and fabricate accurately with corners, hairline joints, surfaces free from warp, wave, buckle, tool marks, surface imperfections or other defects.
- D. Welding to conform to applicable standards of AWS for high grade finished metal fabrication. Grind all exposed welds smooth with no voids, tool marks, surface imperfections or ridges showing.

#### 1.6 SUBMITTALS:

- A. Submit shop drawings in accordance with Section 01300, Submittals, covering each type of door and frame, each frame condition, and complete anchorage details, hardware locations on doors, supplemented by suitable schedules covering doors and frames. Show glass and louver opening sizes and locations in doors where they are required.
- B. Contractor shall check all drawings and verify all dimensions (including wall thickness) in the field prior to fabrication.

#### 1.7 DELIVERY OF MATERIALS:

- A. Doors shall be individually wrapped for adequate protection during delivery and storage, with the appropriate opening number visible on the package.
- B. Do not deliver doors and frames to project site until the installer is ready to hang doors. Installer is to coordinate with other trades (i.e., the painting of doors, hardware preparation) in the proper preparation of the doors prior to installation.

#### 1.8 STORAGE OF MATERIALS:

- A. Store doors and frames at site, in an upright position protected from elements, on wood blocking and in a manner to prevent damage to, or marring of finish.
- B. Store doors under cover in a secured area. Cut wrapping and without damaging the door and frame finish for ventilation to prevent moisture build up.

## PART 2 - PRODUCT

### 2.1 MANUFACTURERS:

- A. Products specified are from companies listed below. These products listed herein establish the size, pattern, color range and function selected by the Architect for this Project. Manufacturers listed as acceptable must still comply with the requirements of the products listed in order to be approved as an equivalent during the Submittal Process. If not approved during the Submittal Process, the Contractor shall submit product specified.
  - 1. Acceptable door and frame manufacturers:
    - a. CECO Door Division
    - b. Republic Builders Products
    - c. The Steelcraft Manufacturing Company
  - 2. Acceptable grout manufacturers:
    - a. USG
- B. Products from other manufacturers not listed must submit in accordance with Specification Section 01630, Substitutions.

### 2.2 METAL DOORS:

- A. Construction: 1 3/4-inch, in accordance with ANSI/SDI-100 "Recommended Specifications Standard Steel Doors and Frames", Grade III, Model 2, full flush, seamless design, unless otherwise indicated in the Contract Documents.
- B. Material:
  - 1. Faces: Cold-Rolled Steel Sheets, commercial quality carbon steel, complying with ASTM 366 and ASTM A568, 16 gauge.
    - a. Exterior doors to be galvanized complying with ASTM A525 (A60) ("Wipe Coat" galvanized is not permitted.)
  - 2. Core: Honeycombed core in accordance with ANSI/SDI/100 approved honeycombed core designs, and performance tested for up to 5250 lbs/sq. ft. in accordance with ANSI/SDI-A 151.1.
    - a. Provide mineral fiberboard cores when temperature rise requirement of labeled openings do not permit the use of the honeycombed core.
  - 3. Stiffeners: 14 gauge cold rolled steel channels, continuous at bottom and top of door, spot welded within the door construction.
  - 4. Louvers: In locations as indicated on the drawings, 18 gauge formed steel, inverted "Y" blade construction with 30% free area, in accordance with SDI-111-C "Recommended Louver Details for Standard Steel Doors", unless noted otherwise.
  - 5. Hollow metal with backing at hardware especially lockset location. An interior metal box with solid ends and sides should be no larger than 1-inch away from hole for lockset.
- C. Fabrication in accordance with ANSI/SDI-100 "Recommendation Specifications Standard Steel Doors and Frames", and the following:
  - 1. Size and Type: Refer to drawings.
  - 2. Bevel lock edge 1/8-inch in 2-inch typically.

3. Core: Sand the honeycomb core prior to contact adhesive application. Apply adhesive to both sides as well as to both face sheets prior to assembly.
4. Hinge, Lock and Door Edges:
  - a. Seamless vertical seams, continuously welded and ground smooth with no tool marks or surface imperfections or filled with manufacturer's recommended epoxy seam sealer and filler, sanded smooth with no tool marks or surface imperfections.
5. Galvanized metal cap channels at top and bottom of all exterior doors for weather protection. Fill all gaps with epoxy sealer and filler, sand smooth with no tool marks or surface imperfections.
6. Adequately reinforce for all hardware:
  - a. At mortised template hardware: Mortise and reinforce with 7 gauge steel. Drill and tap at factory.
  - b. At locks and all panic devices: Reinforce with 16 gauge steel box reinforcement with centering tab and latch support appropriate to the type of hardware.
  - c. At closer: Reinforce with 12 gauge steel box or U-shaped reinforcement welded to the top channel.
  - d. All surface mounted hardware settings to be drilled and tapped in field.
7. Glass and louver frames, molding and trim to be flush with face sheet of door. Use the same trim on all rated and non-rated openings. Glass thickness is specified in Division 08-Glazing.

## 2.3 TRANSOM PANELS:

- A. Transom panels shall comply with all requirements for Metal Doors.
- B. Attachment:
  1. Attach securely to frame with concealed anchorage and machine screws.
  2. Attachment including screws shall be fully concealed when door is closed.
- C. Astragal: Flat, 1'1/2 inch, 14 gauge, spot welded to panel, ground smooth with no tool marks or surface imperfections.

## 2.4 METAL FRAMES:

- A. Materials:
  1. Metal to be cold-rolled steel, in accordance with ASTM A366 and ASTM A568.
    - a. Galvanize exterior frames in accordance with ASTM A525 (A60) ("Wipe Coat" galvanized is not permitted).
  2. Metal Thickness:
    - a. Frame in interior walls: 16 gauge
    - b. Frame in exterior walls: 14 gauge
- B. Fabrication in accordance with ANSI/SDI-100, and the following:
  1. Size, shape, thickness and profile - Refer to Drawings and Schedules.
  2. Frame sections: Rolled and brake formed with all joints tightly fitted, continuously welded on the inside face, and ground smooth with no tool marks or surface imperfections.
  3. Stops: Integral with frame.
  4. Corners: Saw-mitered and full (continuously) welded on the inside face of frame, and ground smooth with no tool marks or surface imperfections.

5. Dimple metal frames at attachment points, body putty smooth and sand flush with no voids or ridges showing.
6. Rubber Door Silencers:
  - a. Single swing door frames: Provide and install three (3) at strike jamb.
  - b. Double swing door frames: Provide and install four (4) at head.
7. Reinforcing for hardware: Reinforce at factory with 7 gauge steel spot welded to frame to readily accept both standard weight and heavy weight hinges. Apply manufacturer's standard gauge plaster guards over reinforcement in frames for concrete and masonry walls to prevent plaster from obstructing the hardware functions.
  - a. At mortised template hardware: Mortise, drill and tap at factory.
  - b. At surface applied hardware: Drill and tap in field.
8. Metal frame spreader: Provide at bottom of all open frames. Metal frame spreaders shall not be used to set frames.
9. Sound Doors and exterior doors shall have anchors allowing for filled solid (grout or mortar) frame construction without obstructions.

C. Glazing Stops:

1. Material: 18 gauge cold-rolled steel.
2. Glazing Stops shall be drilled and punched to accept counter sunk screws at 12-inches on center maximum.

D. Anchorage:

1. Material: Galvanized iron. Gauge shall be same gauge as frame.
2. Types:
  - a. For masonry wall: Strap and Stirrup Type.
    - 1) At Contractor's option, the wire loop type may be used at all non-rated door frames.
  - b. For concrete walls: Existing opening steel anchors 14 gauge G.I. Spacer with 3/8-inch diameter bolts expansion shield (minimum 2-inch bolt embedment in concrete).
  - c. For wood stud walls: Wood stud anchors.
  - d. For metal stud walls: 14 gauge G.I. Spacer. Refer to drawings for details.
  - e. At jamb base: Provide adjustable steel base anchors.
  - f. At sill on concrete floor: 14 gauge galvanized iron spacer. Refer to drawings for details.
3. Spacing: Maximum eight inches from corners and maximum 24-inches on center.
4. Bolts, washers, shields and other similar fastening devices: Furnished and installed as required by frame installer.

## 2.5 FIRE RATED OPENINGS:

- A. Doors and transom panels shall comply with requirements of this Section, Paragraph 2.02, Metal Doors and Paragraph 2.03, Transom Panels.
- B. Frames shall comply with requirements of this Section, Paragraph 2.04, Metal Frames.
- C. Conform to the requirements, for assemblies and fire tested in accordance with DSA/ORS/FLS standard 12-43-4.
  1. All 20 minute rated assemblies shall be provided with DSA/ORS/FLS approved gasketing material so installed to provide a seal where the door meets the stop on both sides and across the top.

2. All rated doors are to be positive latching and self-closing.
- D. Doors and Frames shall carry Underwriters Laboratory or Warnoch Hersey Labels for fire ratings required on Opening Schedule.

## 2.6 FINISHES:

- A. Factory Finish:
1. After fabrication, all tool marks and surface imperfections shall be dressed, filled and sanded as required to make all faces smooth, level and free of all irregularities.
  2. Clean and chemically treat (phosphatize) the metal for maximum paint adhesion in preparation for primer paint.
  3. Apply one coat of rust-inhibitive shop coated prime paint, 0.7 mils thick, as standard with the manufacturer in accordance with ANSI A224.1.
    - a. Coordinate with Section 09900, Painting, for providing the appropriate field applied prime paint over the manufacturer's shop prime coat that is compatible with any water based latex finish coats to prevent pin-hole rusting.

## 2.7 ACCESSORIES:

- A. Polysulfide (Paintable) Sealants: In accordance with Section 07900, Joint Sealers.
1. Seal all joints exposed to the exterior to provide a positive barrier against penetration of air and moisture at joints where joint sealers are essential to continued integrity of barrier, without causing staining or deterioration of adjacent joint substrates.
  2. Provide joint sealants for interior applications that have been produced and installed to establish and to maintain watertight and airtight continuous seals that aesthetically joint dissimilar materials without causing staining or deterioration of joint substrates.
- B. Metal Frame Grout or Mortar:
1. Whenever frames are required to be filled solid with grout or mortar, coat the inside of the frames with a corrosion resistant bituminous material.
  2. Exterior frames in masonry walls required to be filled solid shall be filled with same mortar used in laying the masonry units as the wall is laid up.
  3. Interior wall frames required to be filled solid because of acoustical requirements shall be filled with a Gypsum Plaster-Sand Mix (i.e., USG "Red Top" 100:2 mix).
    - a. NOTE: Gypsum Plaster-Sand Mix is only recommended for interior Conditions.
  4. Exterior wall frames in other than masonry walls required to be filled solid shall be filled with mortar in accordance with CBC Section 2403(c), and have a minimum compressive strength of 2000 psi.

## PART 3 - EXECUTION

### 3.1 INSTALLATION:

- A. Erect all metal doors, frames and finish hardware, set to established lines, plumb, true, and fully operable, and in accordance with SDI 105 Recommended Erection Instructions for Steel Frames.
- B. Space between frames and masonry and concrete wall construction: Cleaned out to depth of 3/4-inch and filled with sealant. Application shall be in strict compliance with manufacturer's instructions.
- C. Fire-Rated Door Frames shall be installed strictly per manufacturer's printed instructions. Manufacturer's printed instructions shall be made available to the inspecting authorities.

### 3.2 FIELD QUALITY CONTROL:

- A. Inspection:
  - 1. Schedule inspections and notify the District Inspector and any regulatory agencies of the time at least 48 hours prior to the inspection.
  - 2. Prior to installation all frames must be checked and corrected for size, swing, squareness, alignment, twist and plumbness. Permissible installation tolerances shall not exceed the following:
    - a. Squareness:  $\pm 1/16$  inch
      - 1) Measured on a line, 90 degrees from one jamb, at the upper corner of the frame at the other jamb.
    - b. Alignment:  $\pm 1/16$  inch
      - 1) Measured on jambs on a horizontal line parallel to the plane of the wall.
    - c. Twist:  $\pm 1/16$  inch
      - 1) Measured at face corners of jambs on parallel lines perpendicular to the plane of the wall.
    - d. Plumbness:  $\pm 1/16$  inch
      - 1) Measured on the jamb of the wall.
  - 3. Proper door clearances must be maintained as follows:
    - a. Jamb clearances 1/8 inch, even along entire jamb lengths.
    - b. Head clearances 1/8 inch, even along entire head length.
    - c. Threshold clearances Consistent undercut.
      - 1) Doors in fire-rated openings shall not be undercut more than is allowed by DSA/ORS/FLS Standard 12-43-4.

### 3.3 CLEANING:

- A. Door and frames shall be clean and free of mortar, sealants and all foreign materials.

END OF SECTION

SECTION 082100 | WOOD DOORS  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1, collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Work Furnished But Installed By Another Section:
    - a. Wood doors and fixed panels above doors.
    - b. Metal louvers for wood doors.
    - c. Sound retardant doors.
- B. Related Work Specified Elsewhere:
  - 1. Wood door frames, installation of wood doors and finish hardware: Division 06, Finish Carpentry.
  - 2. Steel Doors and Frames: Division 08.
  - 3. Furnishing Finish Hardware: Division 08.
  - 4. Glazing: Division 08.
  - 5. Painting: Division 09.
- C. Definition, Exterior Doors: Doors separating interior spaces from outside air.

1.3 SUBSTITUTIONS:

- A. Only written approval of the District will permit substitutions for materials specified. Refer to Section 01630, Substitutions.

1.4 QUALITY ASSURANCE:

- A. Standards: Woodwork Institute Of California (WIC) "Manual of Millwork", which is based on National Woodwork Manufacturer's Associations (NWMA) latest edition.

1.5 SUBMITTALS:

- A. Shop Drawings:
  - 1. Submit Drawings for all work, referenced to detail numbers; four copies.
  - 2. Show WIC grade of each door.
- B. Certificate: WIC Conformance Certificate is required. Deliver with products.

## 1.6 DELIVERY OF MATERIALS:

- A. Doors shall be individually wrapped for adequate protection during delivery and storage with the appropriate opening number visible on the package.
- B. Do not deliver doors and frames to project site until the installer is ready to hang doors. Installer is to coordinate with other trades (i.e., the painting of doors, hardware preparation) in the proper preparation of the doors prior to installation.

## 1.7 STORAGE OF MATERIALS

- A. Store doors and frames at site, in an upright position protected from elements, on wood blocking and in a manner to prevent damage to or marring of finish.
- B. Store doors under cover in a secured area. Cut wrapping without damaging the door and frame finish for ventilation to prevent moisture build up.

## 1.8 GUARANTEE:

Guarantee doors against warps and other manufacturing defects for a two-year period.

# PART 2 - PRODUCTS

## 2.01 MATERIAL AND FABRICATION: STANDARDS:

- A. Standards: Per WIC Section No. 20, except as specifically modified herein, or otherwise indicated.
- B. Modifications to WIC Standards, Doors:
  - 1. Section 20, Article V111, Allowable Tolerances: Revise warp limits to 1/16" maximum across the door width, and 1/8" in the door length. Limitations are based on a 3' wide x 7' high door, and shall be proportional for smaller or larger door sizes.
  - 2. Pre-fitting and Pre-hanging: Factory pre-fitted and pre-hung doors are not permitted. All doors and hardware must be properly fitted in the field to their frames after the frames have been installed.

## 2.2 FLUSH DOORS:

- A. WIC Grade: Custom for all types of door construction.
- B. Interior Door Faces: WIC Custom Grade for transparent finish, premium grade, plain sliced Birch veneer with matching stiles. Match door and panel grains. Pair match veneers on pairs of doors.
- C. Solid Core Door Construction:
  - 1. General: Typical construction for all doors and transom panels, except where other types are specifically indicated.
  - 2. Type A construction (five-ply) core, with cross-band and face veneer, each face.
  - 3. Core: Solid staved wood block core:



- D. Door Bottoms For Exterior Doors: Provide anodized aluminum channel door bottom, with 1/2" minimum vertical legs.
- E. Fire-Rated Door Construction:
  - 1. Per Section No. 20, Part IV.
  - 2. Mineral core, wood edge bands and wood face veneers with proper rating labels attached.
  - 3. Pairs of Doors: Provide treated maple stiles.
- F. Sound Retardant Door Construction:
  - 1. Per Section No. 20, Part V.
  - 2. STC Rating: 39 minimum.
  - 3. Thickness: 1 3/4".
  - 4. Wood frame, sound dampening fill, face veneers.
- G. Acceptable Manufacturers and Products:
  - 1. Solid Core Doors: Exterior and Interior:
    - a. Weyerhaeuser DSC-1 with solid staved wood block core as a standard of quality.
    - b. Geneerco Institutional Solid Core.
  - 2. Fire-Rated Doors:
    - a. Weyerhaeuser DFM or DFP Series as a standard of quality.
    - b. Geneerco.
  - 3. Sound Retardant Doors:
    - a. Weyerhaeuser DRS-1 as a standard of quality.

## 2.3 METAL LOUVERS FOR WOOD DOORS:

- A. Manufacturer: Anemostat Door Products Department, Carson, California, as a standard of quality.
- B. Non-Rated Doors: Anemostat Type FDLS; fixed inverted split-Y non-vision, 18 gauge steel louvers and frame, baked-on prime paint coat.

## 2.4 2.04 FABRICATION:

- A. Install louvers in doors.
- B. Cut out for glass openings. Provide stops.

## PART 3 - EXECUTION

### 3.1 FIELD QUALITY CONTROL:

- A. Inspection:
  - 1. Schedule inspections and notify the District's Inspector and any regulatory agencies of the time at least 48 hours prior to the inspection.
  - 2. Prior to installation all frames must be checked and corrected for size, swing, squareness, alignment, twist and plumbness. Permissible installation tolerances shall not exceed the following:

- a. Squareness  $\pm 1/16$  inch
  - 1) Measured on a line, 90 degrees from one jamb, at the upper corner of the frame at the other jamb.
- b. Alignment  $\pm 1/16$  inch
  - 1) Measured on jambs on a horizontal line parallel to the plane of the wall.
- c. Twist  $\pm 1/16$  inch
  - 1) Measured at face corners of jambs on parallel lines perpendicular to the plane of the wall.
- d. Plumbness  $\pm 1/16$  inch
  - 1) Measured on the jamb at the floor.
- 3. Proper door clearances must be maintained as follows:
  - a. Jamb clearances 1/8 inch, even along entire jamb lengths
  - b. Head clearances 1/8 inch, even along entire head length
  - c. Threshold clearances Consistent undercut
    - 1) Doors in fire-rated openings shall not be undercut more than is allowed by DSA/ORS/FLS Standard 12-43-4.

### 3.2 LEANING:

- A. Door and frames shall be clean and free of mortar, sealants and all foreign material

END OF SECTION

SECTION 085000 | METAL WINDOWS  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements of Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal work items are:
  - 1. Metal Windows.
- B. Related work specified elsewhere:
  - 1. Rough Carpentry: Division 06.
  - 2. Finish Carpentry: Division 06.
  - 3. Flashing and Sheet Metal: Division 07.
  - 4. Joint Sealers: Division 07.
  - 5. Glazing: Division 08.
  - 6. Portland Cement Plaster: Division 09.
  - 7. Gypsum Board: Division 09.

1.3 SUBSTITUTIONS:

- A. Only written approval of District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

1.4 QUALITY ASSURANCE:

- A. Design Criteria:
  - 1. State of California "Energy Code" and U.C. Code and Standard requirements.
  - 2. Air infiltration per ASTM E 283: .10 cfm @ 6.24 psf (50 mph wind).
  - 3. Water penetration at Static Pressure per ASTM E331: 10 psf.
  - 4. Uniform load-deflection is 40 psf pressure per ASTM E330; L/175.
  - 5. Uniform load-structural is 60 psf per ASTM E 330.

1.5 SUBMITTALS:

- A. Samples (in duplicate): Finish Colors.
- B. Shop Drawings:
  - 1. Materials list of all items proposed to be furnished and installed under this section.
  - 2. Manufacturer's Specifications and other data required to demonstrated compliance with the specified requirements.

3. Drawings indicating details of each type, elevations of each design type; details of construction, installation and anchorage.
4. Schedule for location of each unit.
5. Manufacturer's recommended methods of installation, which when approved by the District, will become the basis for inspecting and accepting or rejecting actual installation procedures used on the work.

#### 1.6 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver in factory protective packing. Store and handle to prevent damage.

#### 1.7 JOB CONDITIONS:

- A. Sequencing, Scheduling: Verify dimensions in field. Verify glazing types with Division 08.

### PART 2 - - PRODUCTS

#### 2.1 METAL WINDOWS:

- A. Acceptable Manufacturers and Products:
  1. DeVac Double Hung Model No. 467, 916-967-3373, Robert Srobonni; manufacturer.
  2. Other Manufacturers: Refer to Paragraph 1.03, Substitutions.
  3. Single sliding dual glazed.
- B. Properties and Description:
  1. Extruded aluminum members shall be prime billet steel alloy 6063T-6 (temper). Ultimate and yield value 30,000 and 25,000 psi respectively.
  2. Nominal wall thickness: .062".
  3. All extruded plastic members shall be virgin poly vinyl chloride.
  4. Joints of the frame and sash shall be butt type, joined neatly in a weather tight manner. Frame corners shall include a permanent gasket seal.
  5. Window shall be double weather stripped with silicone treated polypropylene pile seal and with polypropylene film fin at all sash perimeters.
  6. Weep system: The sill weep shall prevent accumulation of water.
  7. Operation: Operating sash shall be protected from metal-to-metal contact. All sash shall be easily removable from the inside for cleaning. All vertical sliding sash shall operate on spring loaded, nylon tipped pin lock device. Pin locks shall lock sash in fulling closed position.
  8. Hardware: Operating sash exceeding 20 lbs. shall be equipped with overhead mounted block and tackle spring loaded balances (pinlocks optional when balance mechanism counter balances sash weight up to 35 lbs.). Non-operating, removable upper sash exceeding 20 lbs. shall be blocked in a closed position by a removable device in the sash track.
  9. Screen: The screen shall be furnished by window manufacturer. Screen cloth shall be charcoal fiberglass, 18 x 14 mesh, secured by black vinyl spline in a pre-bowed tubular, extruded aluminum frame. The screen shall cover approximately the area of the bottom exterior sash.

- 10. Finish: Anodized Aluminum AA-M10C22A31, coating minimum 0.4 mils thick (204-R1) applied in lineal aluminum extrusion. Submit full range of samples establishing shade variations.
  - 11. Glazing: Factory glaze with 1/4" clear float glass interior, 1/4" 40% solar gray exterior face, or appropriate safety glazing as needed set into sash frames with wrap around flexible, black, vinyl glazing channel.
- C. Sills: Provide aluminum sills of size and configuration indicated on drawings.
    - 1. Finish to match windows.
  - D. Refer to Division 08 for glazing.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Examine framing openings and wall surfaces which receive this work for proper dimension and alignment.
- B. Do not start work until unsatisfactory conditions are corrected.

### 3.2 INSTALLATION:

- A. General: Install under supervision of factory-approved installer. Follow manufacturer's printed recommendations. Install all parts and accessories. Adjoining units to mesh properly, join tightly, function properly in true plumb alignment.
- B. Frames: Install plumb, sills level; securely anchor to supporting structure to withstand all loading conditions and strain of service.
- C. Glazing: Install in frames, adjust; weatherstripping to firmly contact and seal to adjacent surfaces for their full length.

08500 | END OF SECTION

SECTION 087100 - DOOR HARDWARE  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 SUMMARY

- A. All egress doors shall comply with California Assembly Bill No. 211. New buildings on a K-12 Public School Campus shall be provided with locks which allow doors to classrooms and any room with an occupant load of five or more persons to be locked from the inside per CBC 1010.1.11. Exceptions include doors which are normally locked from the outside, relocatable moved within the same campus, reconstruction projects, and student restrooms.
- B. Acoustical Doors & Frames require a 3-3/4" backset.
- C. SECTION INCLUDES:
  - 1. Mechanical door hardware for the following:
    - a. Swinging doors.
    - b. Sliding doors.
    - c. Folding doors.
  - 2. Cylinders for door hardware specified in other Sections.
  - 3. Electrified door hardware.
  - 4. Work Furnished But Installed By Another Section:
    - a. Finish hardware complete.
    - b. For certain items: Keyed cylinders only.
    - c. For certain items: Padlocks only.
- D. RELATED REQUIREMENTS & WORK SPECIFIED ELSEWHERE:
  - 1. Structural Steel: Division 05.
  - 2. Rough Carpentry: Division 06.
  - 3. Finish Carpentry: Division 06.
  - 4. Steel Doors and Frames: Division 08.
  - 5. Wood Doors: Division 08.
  - 6. Identifying Devices: Division 10.
  - 7. Toilet and Bath Accessories: Division 10.
  - 8. Tracks for Curtains and Drapes: Division 12.
  - 9. Hardware completed by Respective Sections:

- a. Custom Casework: Division 06.
  - b. Toilet Compartments: Division 10.
  - c. Laminated Casework: Division 06.
  - d. Chain link Fences and Gates: Division 02 & 32.
  - e. Roof Hatches: Division 07 Roof Accessories.
  - f. Coiling Counter Door: Division 08.
10. Hardware Complete by Respective Sections, Except for Lock Cylinders:
- a. Hardware for Folding Panel Partitions: Division 10.
  - b. Hardware for Accordion Folding Partitions: Division 10.
11. Complete Hardware by Respective Sections, Except for Padlocks:
- a. Chain Link Fence Gates: Division 02 & 32.
  - b. Structural Steel: Division 05 (Metal Gates).
  - c. Roof Hatches: Division 07 (Roof Accessories).
  - d. Flagpoles: Division 10.

### 1.3 SUBSTITUTIONS

- A. Only written approval of District will permit substitutions for materials specified. Refer to Fresno Unified School District's General Conditions and General Requirements, Substitutions, for procedure.

### 1.4 QUALITY ASSURANCE

- A. Supplier Qualifications: Hardware Supplier to have a qualified Hardware Consultant available for project site meetings when requested by District.
- B. Requirements of Regulatory Agencies; Codes:
  - 1. All hardware shall comply with applicable fire and building codes.
  - 2. All exit hardware to be openable from inside without use of key, or any special knowledge or effort.

### 1.5 SUBMITTAL

- A. HARDWARE LIST:
  - 1. Submit two copies for all items.
  - 2. Identify each item by number and manufacturer's name to facilitate checking and job identification and checking.
  - 3. Catalog Cut: With Hardware List, submit one catalog cut of each item.

### 1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Packaging, marking and labeling: Individually pack or wrap each item of finish hardware. Group small items together and mark package with door number, hardware schedule number, building number and location in work. Identify permanent keys similarly on attached tags.
- B. Delivery, handling and storage: Deliver packaged hardware to project site in strong containers. Handle with care to prevent damage. Store inside building in clean, dry, and secure space.

## 1.7 JOB CONDITIONS

### A. SEQUENCING, SCHEDULING:

1. Coordinate with related work of other sections.
2. Furnish templates to other sections as required and in a timely fashion.
3. Furnish reinforcing units and template hardware to metal frame and door manufacturer for application at factory.

## 1.8 GUARANTEE

- A. Refer to the F.U.S.D. General Conditions and Requirements for Contract Close out.

## 1.9 CHANGES IN THE WORK:

- A. Should changes be made in the Finish Hardware, the Hardware Supplier shall credit the District with the full purchase price. No restocking charge will be permitted or allowed.

## PART 2 - PRODUCTS

### 2.1 HARDWARE - GENERAL

- A. Hardware to be complete, all items fully operable, new, in perfect condition; same manufacturer throughout for each product type. Hardware not specifically described shall be similar to items specified for similar uses and locations.
- B. Labeled Openings: Hardware shall conform to label requirements. All labeled doors shall be self-closing.

### 2.2 TEMPLATE HARDWARE

- A. Mortise type hardware and hardware applied to metal frames and doors shall be made to template. Other hardware shall also be made to template wherever possible. Provide templates.

### 2.3 FASTENERS

- A. General: Furnish all necessary fasteners required to securely anchor all hardware in position for heavy use and long life. Fastener types and sizes to be per hardware manufacturer's recommendations, suitable for fastening to material to which hardware is applied. Fastener materials and finishes to match hardware items. At no time are self-tapping / threading fasteners allowed on panic/exit hardware or any of the device's parts including strike plate.
- B. FASTENINGS:
1. All fasteners shall be stainless steel, and pre-drilled; no self-tapping drilling screws.
  2. At existing openings to receive new hardware, the design team shall inventory all the existing hardware for each door that is being upgraded. As part of the



inventory process, photograph both sides of door to show all hardware, hardware functions, and latch side clearances.

C. SCREWS:

1. Stainless steel.
2. To Wood: Phillips flat head, countersunk wood screws, full-threaded.
3. To Metal: Phillips flat head, countersunk machine screws, full-threaded.
4. For Butt Hinges: Phillips flat head, countersunk wood screws, full-threaded.
5. Push-Pull and Kick Plates Phillips oval head, self-tapping.
6. Closer and closer shoes to doors and panels-above-doors Thru-Bolts and Grommets (sex-bolts), sleeved.
7. Panic Devices Thru-Bolts and Grommets (sex-bolts), sleeved.
8. Lock Guards Thru-Bolts and Grommets (sex-bolts), sleeved.
9. Self-Tapping sheet metal screws Do not use, unless noted.
10. Self-tapper screws can be used to fasten push/pull plates or kickplates only.
11. Screws at Interior Doors and Frames To match hardware finish.
12. Screws at Exterior Doors and Frames US26D Stainless Steel.

D. THROUGH BOLTS AND GROMMETS (SEX-BOLTS): Use to fasten following items:

1. Stainless steel.
2. Closer (shoes to doors and panels-above-doors).
3. Panic hardware to doors.

E. FASTENING TO CONCRETE OR MASONRY: Use appropriate expansion anchors or lead shields, with machine screws.

## 2.4 HINGES

A. BUTT HINGES (Any new opening with new frame – New Construction)

1. TYPES:
  - a. EXTERIOR HINGES: Heavy duty, ball bearing, non-removable pins (NRP) at out swinging doors, flat button tips, sherardized or zinc-plated prior to final plating.
  - b. INTERIOR HINGES: Ball bearing typical; flat button tips.
2. Half Surface Roton hinges to be used where specified. Roton Hinge must be installed at jamb prior to attaching to door. Door must have a minimum reveal of 1/8 inch at the top and latch side of door in opening. Then attach Roton to door. This is especially true on retrofit construction.
3. Sizes: As follows, unless otherwise indicated.
  - a. Typical Door Thickness and Frame Conditions:

| <u>Door Thickness</u> | <u>Door Width</u> | <u>Door Height</u> | <u>Number of Hinges</u> |
|-----------------------|-------------------|--------------------|-------------------------|
| 1-3/4"                | to 28"            | to 60"             | 2                       |
| 1-3/4"                | to 40"            | 61" to 90"         | 3                       |
| 1-3/4"                | over 40"          | 91" to 120"        | 4                       |
| 1-3/4"                | over 40"          | greater than 120"  | 4 + 1 for every 30"     |

4. Thicker Doors and Frames with Projecting Trim: Size hinges to following criteria to provide proper width to clear trim projection when doors are fully open.
  - a. Doors 2-1/4" Thick or Less:  
(2x door thickness) + (trim projection) – (1/2").
5. Number of Hinges per Door Leaf:

- a. Doors 4' 0" to 7' 5" High: 2 pair (4 Hinges)

**B. CONTINUOUS HINGES (Retrofit/ modernization projects only)**

1. Use half-surface continuous hinges.
2. Hinge must be installed at frame jamb prior to attaching to door.
3. Doors must have a minimum reveal of 1/8" at the top and latch side of the door opening.
4. Continuous hinges shall be UL rated as required.
5. Continuous hinges shall not obscure fire-rating labels of doors or door frames.
6. Screws shall be sex bolts and screws.
7. Screws inside of room only.

**C. HINGES FOR SITE GATES & DOORS**

1. 1-3/4" Hollow Metal Door – 1256 SPRING SET 4.5 4.5 NRP (1250+bb1279).
2. Ornamental Iron & Chain Link Fencing (Accessible Main Gates) – Loxinox Mammoth 180.

| HINGES/BUTTS: (ANY NEW CONSTRUCTION)                      |                                        |                                          |  |
|-----------------------------------------------------------|----------------------------------------|------------------------------------------|--|
|                                                           | Exterior 1-3/4" doors,<br>Heavy Duty   | BB1168-SS Pin<br>4.5 x 4.5 NRP           |  |
|                                                           | Interior 1-3/4" door,<br>Standard Duty | BB1279<br>4.5 x 4.5 NRP                  |  |
|                                                           | Interior 1-3/4" doors,<br>Heavy Duty   | BB1168<br>4.5 x 4.5 NRP                  |  |
| CONTINUOUS HINGES: (ONLY AT RETROFIT/ MODERNIZATION ONLY) |                                        |                                          |  |
|                                                           | Exterior doors,<br>Heavy Duty          | Hager – Roton<br>Half Surface 780-054-HD |  |
|                                                           | Interior doors                         | Hager – Roton<br>Half Surface 780-054-HD |  |
|                                                           | Gym Doors<br>Extra Heavy Duty          | Hager – Roton<br>1200-XHD                |  |

## 2.5 DOOR CLOSER

- A. General: Heavy duty, surface-mount, flat case, full rack-and pinion action, fully hydraulic, tamper proof concealed adjustment screws, covers attached with machine screws and lock washers. At wood doors use sex-bolts.
- B. Use & location shall be inside of room; opposite side of door from exterior & corridors.
- C. TYPES:
  1. Arms to permit 180° door opening wherever possible; and be adjustable.
  2. Parallel arms for out swinging doors typical LCN 4111 (Handed).
  3. Regular arm installation for in swinging doors typical LCN 4011 (Handed).
  4. Covers: 72 (Plastic).
  5. Extra Duty Arms: 3077EDA.
  6. At Storefront Doors, if top rails are less than 4": LCN 4010-18 /4110-18 Plate
  7. Installation as per manufacturer specifications.
  8. At no time are closers to be mounted on top of weather strip.
  9. Accessories: Shoes, adaptors, drop plates, and other necessary items to suit installation conditions.

10. All labeled doors shall be self-closing; closer to suit label requirements for opening.
11. Set Closer for operation by a maximum opening force of 5 lbs. for exterior doors and 5 lbs. for interior doors (CBC Section 11B-404.2.9).
12. Closer operation at Fire Doors to achieve positive latching not to exceed 15 lbs maximum.
13. A set closing time of door with a closer shall be from the door being in the open position of 90 degrees to when the door is latched is; 5 to 6 seconds.
14. Closers for doors required to be accessible to the physically challenged, provide adjustable units complying with ANSI A 117.1 and CBC Section 11B-404.2.9 provisions for door opening force and delayed action closing. When indicated incorporate an integral electromagnetic holder mechanism designed for use with UL listed fire detectors, provided with normally closed switching contacts. Closures indicated for use on Acoustical Doors and Frames shall allow for a minimum 1/2" up-down movement due to the Cam-Lift hinges.

| DOOR CLOSERS |                                           |                     |                                                                                                     |
|--------------|-------------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------|
|              | DOOR CLOSER:<br>In-Swinging / Pull Doors  | LCN 4011-3077EDA-72 | Handed The 4011 is to be mounted on the PULL Side of the door.                                      |
|              | DOOR CLOSER:<br>Out-Swinging / Push Doors | LCN 4111-3077EDA-72 | Handed The 4111 is to be mounted on the PUSH Side of the door, and all exterior out swinging doors. |

## 2.6 DOORS STOPS AND STOP AND HOLDERS

- A. Types as indicated; bronze or brass body, finish as indicated; risers when necessary.
  1. Anchor at Concrete Floors: TRIMCO concrete anchor; bronze, brass or aluminum body, finish to match stop and holder. No overhead combination stop closer is allowed.
- B. Stops and adjustable holders to be floor type typical, wall type where conditions will not permit floor type; strikes of proper clearance between door and floor.
- C. At frame walls add solid backing behind all wall bumpers.
- D. All Floor Stops shall be installed within four (4) inches maximum from the face of wall, bollard or partition.

| STOPS & HOLDERS |                                                                   |                            |  |
|-----------------|-------------------------------------------------------------------|----------------------------|--|
|                 | DOOR STOPS<br>(Heavy Duty Rubber Stop)                            | TRIMCO<br>1209, 626 Finish |  |
|                 | DOOR STOP / HOLD-<br>OPENS on non-rated custodi-<br>an room doors | TRIMCO<br>1209HO – 626     |  |
|                 | Door Stop / Hold-Opens on<br>site gates                           | TRIMCO<br>1209HOHA - 626   |  |
|                 | Overhead combination stop-<br>closure                             | Not allowed                |  |

## 2.7 ACCESSORIES AND MISCELLANEOUS

- A. PUSH PLATES, DOOR PULLS AND PLATES: 8" x 16" push plates typical: 5" minimum pull on 4" x 16" plate typical: .050" thick plates typical. Cut out for cylinders.
- B. KICK PLATES: Typical beveled three sides, 10" high x 2" less than door width .064 thick.
1. Provide manufacturer's standard exposed fasteners for door trim units consisting of either machine screws or self-tapping screws. Fabricate edge trim of stainless steel to fit door thickness in standard lengths or to match height of protection plates. Fabricate protection plates not more than 1-1/2 inches less than door width on hinge side and not more than 1/2 inch less than door width on pull side by height indicated.

| PLATES: |                         |                                                                                                                                                                      |                                                   |
|---------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
|         | Push Plate:             | Ives (I)<br>8200, 8" x 16"                                                                                                                                           | .050" thick and cut out for cylinders when needed |
|         | Pull Plate:             | Ives (I)<br>8302, 4" x 16"                                                                                                                                           | .050" thick and cut out for cylinders when needed |
|         | Kick Plate:             | Ives (I)<br>8400-626-10" x 2" LDW B3E (beveled 3 sides)                                                                                                              | .050" thick and cut out for cylinders when needed |
|         | Panic Device Pull Plate | Sargent 28-D-HTB Thumbpiece or Pull Trim<br>FUSD Supplied Crush Ring.<br>FUSD Supplied Universal Backing Plate.<br>Sargent 558 Shim.<br>Sargent 3828 Series Chassis. |                                                   |
|         |                         | Sargent 28-K-HTB Night Latch Lever Trim.                                                                                                                             | Key in the lever retracts the latch bolt.         |

- C. THRESHOLDS: Types as indicated.

| THRESHOLDS |                 |                                                                                                  |  |
|------------|-----------------|--------------------------------------------------------------------------------------------------|--|
|            | Interior Nosing | Pemko, NGP, Zero<br>196A                                                                         |  |
|            | Floor Plate     | Pemko, NGP, Zero<br>228A for 6" walls (standard)<br>193A for 4" walls (when required)            |  |
|            | Exterior Nosing | Pemko, NGP, Zero<br>195A with mitered corners, back to wall. Weld back side of plates to nosing. |  |

- D. WEATHER SEALS: Provide protection as may be required for dissimilar metals.
- E. At exterior doors provide door bottom and continuous weather gasketing.

| DOOR GASKETS, BOTTOMS, SWEEPS & SILENCERS |                                           |                                   |              |
|-------------------------------------------|-------------------------------------------|-----------------------------------|--------------|
|                                           | Seals, bottoms & Sweeps                   | Pemko, Zero, NGP                  |              |
|                                           | Gasketing for Fire Rated & Exterior Doors | Pemko 297AV (or Zero / NGP equal) | Top & sides. |
|                                           | EXTERIOR DOORS                            | Pemko 222-APK (or Zero / NGP      |              |

|  |              |                           |                        |
|--|--------------|---------------------------|------------------------|
|  | Door Bottoms | equal)                    |                        |
|  | Door Sweep   | Pemko 345AV or Reese 353A | Surface mounted blade. |

- F. At fire-resistive-rated door assemblies provide door continuous weather-stripping; in accordance with ASTM E 283 "Test method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen".
- G. SILENCERS: At doors with pressed metal frames, furnish Glynn Johnson, No. GJ64, rubber silencers:
  - 1. Three per single door,
  - 2. Four per leaf for pairs of doors.
  - 3. Omit at exterior doors and fire-resistive-rated door assemblies.
- H. FLUSH BOLTS AT DOOR PAIRS
  - 1. Flush Bolts only permitted on storage or mechanical openings as scheduled. Provide dust-proof strikes at the bottom bolt.
  - 2. Provide flush bolt heads a minimum of 1/2 inch diameter rods of stainless steel with minimum 12-inch-long rod for doors up to 7'-0" in height. Provide longer rods as necessary for doors exceeding 7'-0" in height.
- I. AUTOMATIC FLUSH BOLTS AT DOOR PAIRS
  - 1. Provide accessible low operating force Automatic Flush Bolts at doors in the egress route / path of travel.
  - 2. Utilize the top bolt only model for interior doors where applicable and as permitted by testing procedures.

## 2.8 LOCKSETS, LATCH SETS AND PADLOCKS

- A. General: All doors from all rooms or spaces shall have locks or latches of a type which are openable at all times from the inside by merely turning the lever (or knob where knobs are permitted) and not requiring any special knowledge or effort, except those doors provided with exit devices.
- B. All keyway information to be provided by F.U.S.D. Maintenance Lock/Key Department.
- C. I/C Cores and Rim Cylinders: All exterior construction I/C Cores # 23-030 shall be furnished by F.U.S.D. All Rim Cylinders Schlage # 20-079 shall be furnished and installed by the Contractor. At final acceptance of work, all exterior I/C Cores shall be furnished and installed
- D. LOCKSETS: To be Schlage 'ND' series, Rhodes (no substitutes). Contractor to provide Locksets complete with Schlage Classic cylinders # 23-065.
- E. Levers are to be Rhodes.
- F. STRIKES:
  - 1. Furnish wrought box strikes at all locks, latches and deadlocks.
  - 2. Extended Lips: Provide extended lips on strike with length and shape as required to protect jamb and trim from marring by latch bolt and avoid possibility of tearing clothing.
- G. PADLOCKS: Master padlocks keyed as per direction of F.U.S.D. Maintenance.

- H. REFRIGERATED WALK-IN BOXES: All walk-in boxes with deadbolt locks or keyed locking devices shall be Schlage only.

| LOCKSETS:              |                                                                                |                            |                                                  |
|------------------------|--------------------------------------------------------------------------------|----------------------------|--------------------------------------------------|
|                        | OFFICE:                                                                        | Schlage ND53PD             | Rhds Lockset with Push button locking mechanism. |
|                        | CLASSROOM INTERIOR:                                                            | Schlage ND75PD             | Rhds-w/ROSE# XN12-035-626                        |
|                        | EXTERIOR DOORS /SWINGING INWARD:                                               | Schlage ND95PD             | Rhds-w/ROSE# XN12-035-626                        |
|                        | EXTERIOR IN SWINGING LOCKSETS (doors that can't get panic hardware)            | Schlage ND95PD-XN12-035    |                                                  |
|                        | STOREROOM:                                                                     | Schlage ND80PD             | Rhds                                             |
|                        | INTERIOR AND EXTERIOR SINGLE-USE STAFF RESTROOMS                               | Schlage ND85PD-23-000      | RHO                                              |
|                        | INTERIOR STUDENT RESTROOMS (inside lever always unlocked)                      | Schlage ND75PD-XN12-035    |                                                  |
|                        | INTERIOR MULTI-STALL STAFF RESTROOMS, CUSTODIAN, TECHNOLOGY & ELECTRICAL ROOMS | Schlage ND80PD             |                                                  |
|                        | INTERIOR PASSAGE LEVER SET (no locking)                                        | Schlage ND10               |                                                  |
|                        | DEADBOLTS:                                                                     | None                       |                                                  |
|                        | EXTERIOR                                                                       | Furnished by Contractor    | Schlage                                          |
| ACCESS CONTROL LOCKSET |                                                                                |                            |                                                  |
|                        | ELECTRONIC LOCK                                                                | Schlage AD-200 with Keypad | Verify with District lock shop.                  |

## 2.9 PANIC DEVICES & LEVER SETS

- A. EXIT PANIC DEVICES: All exit devices to be:
- EXTERIOR DOOR REQUIRING PANIC DEVICES: Exterior doors of Classrooms, Media Centers, Library, Gymnasium, Assembly areas (Multi purpose Rooms), Food Service areas and Auxiliary Buildings where electrical equipment is housed shall have panic device hardware with exterior pull handles as per Fresno Unified School District Specs.
  - Any questions regarding changes in the installation of exit hardware, as per Fresno Unified School District Standards, then the Contractor is to arrange a meeting with a representative from the following; F.U.S.D. Facilities Architect, F.U.S.D. Key/Lock Department, and project Hardware Installer.
  - Exit Panic hardware shall comply with CCR Title 24, Part 12, Chapter 12-10-302 (a). The release mechanism shall be so designed that a horizontal force of 15 lbs. or less will actuate the release bar and latches applied in the direction of travel.
  - The device shall bear UL label for fire rated doors.

5. USE AND LOCATION: Exterior doors of Classrooms, Media Centers, Library, Gymnasium, Assembly areas (Multi-purpose Rooms), Food Service areas and Auxiliary Buildings where electrical equipment is housed shall have panic device hardware with exterior pull handles.
6. All keyway information to be provided by FUSD Maintenance Lock/Key Department.
7. Device Length measurements for installation are to be conducted when door is in its opening and not prior.
8. Exit Panic Devices to be mounted according to District Standards as per Detail PD-1.
9. Exit Panic Devices measurements for installation are to be done when door is in its opening and not prior.
10. I/C CORES AND RIM CYLINDERS: All exterior construction I/C Cores # 23-030 shall be furnished by F.U.S.D. All Rim Cylinders Schlage # 20-079 shall be furnished and installed by the Contractor. At final acceptance of work, all exterior I/C Cores shall be furnished and installed.
11. Exterior door rim cylinder housing (provided by the Contractor), 20-079 626 without core.
12. Exterior I/C cores (provided by Owner).
13. Exterior I/C cores shall be installed by FUSD, at final acceptance of work.
14. Interior Door Rim Cylinder Housing (provided by Contractor). Von Duprin 20-079 626 with 23-030 FSIC core.
15. All Von Duprin AX22 Exit Devices shall be installed with Glass Bead Kits (GBK). When the GBK is installed it provides more room for adjustments in the vent the door and frame are not hung perfect, and for adjustment in the future.

| PANIC DEVICES & LEVER SETS |                                                                               |                                                            |  |
|----------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------|--|
|                            | <u>EXTERIOR</u><br>Typical Exterior Door                                      | Von Duprin<br>AX22-210NL SP28-299<br>Hex-Key dogging-GBK   |  |
|                            | <u>EXTERIOR</u><br>Electrical Room Doors<br>(High Voltage)                    | Von Duprin<br>AX22-210NL SP28-299-LD-<br>GBK               |  |
|                            | <u>EXTERIOR</u><br>Accessible Gates used by public                            | Von Duprin<br>AX22-210NL SP28-299<br>Hex-Key dogging-GBK   |  |
|                            | <u>INTERIOR</u><br>Typ. Interior Classroom Door                               | Von Duprin<br>AX22-210NL SP28-299 Hex-Key<br>dogging - GBK |  |
|                            | <u>INTERIOR</u><br>Electrical Room Doors<br>(high voltage)                    | Von Duprin<br>AX22-210NL SP28-299-LD - GB                  |  |
|                            | <u>INTERIOR</u><br>Fire Rated Interior Doors                                  | Von Duprin<br>AX99-L-F-02-626 - GBK                        |  |
|                            | <u>VERTICAL MULLIONS</u><br>Keyed removable steel<br>mullions                 | Von Duprin<br>KR 16 / 4954B-SP28                           |  |
|                            | <u>VERTICAL MULLIONS</u><br>(Fire Rated)<br>Keyed removable steel<br>mullions | Von Duprin<br>KR 16 / 9954-SP28                            |  |
|                            | <u>VERTICAL MULLIONS</u><br>Cylinder                                          | Schlage Mullion Cylinder<br>26-094-626<br>0-Bitted Keyway  |  |

|  |                                                     |                    |  |
|--|-----------------------------------------------------|--------------------|--|
|  | <u>VERTICAL MULLION</u><br>Stabilizers              | Von Duprin<br>154  |  |
|  | <u>VERTICAL MULLION</u><br>Wall Brackets (Required) | Von Duprin<br>MT54 |  |

## 2.10 FINISHES

- A. Typical finishes, except where otherwise indicated:
1. Locksets and Latchsets: Stainless Steel, US 26D (Dull Chrome)
  2. Butt Hinges:
    - a. Interior Doors: US 26D
    - b. Exterior Doors: US 26D
  3. Continuous Hinges: Aluminum, with clear finish.
  4. Closer: Sprayed to match finish hardware US 26D.
  5. Panic Bars: US26D or PEN
  6. Stops, Stop and holders: US26D
  7. Kickplates: Stainless Steel No. 4
  8. Pull and Push Plates: US26D
  9. Miscellaneous: US26D, or as noted.
  10. Flat button & matching plug, finished to match leave.

## 2.11 HARDWARE MANUFACTURERS

- A. GENERAL:
1. Specified Manufacturer shall establish a standard of quality.

B. List:

| #: | ITEMS:                                             | SPECIFIED<br>MANUFACTURER: | REMARKS: |
|----|----------------------------------------------------|----------------------------|----------|
|    | <b>ACCESSORIES &amp; MISCELLANEOUS</b>             |                            |          |
|    | Mullion Cyl.                                       | 30-137 626                 | Schlage  |
|    | Door Holders:                                      | Quality, Glynn Johnson     |          |
|    | Door Hold-Open (Non-rated<br>custodian room doors) | Trimco 1209HO              |          |
|    | Lock Guard:                                        | Trimco #1082               |          |
|    | Drip Cap:                                          | Pemko (P)                  |          |

## 2.12 KEYING FOR ALL LOCKS

- A. KEYING:
1. All keying to be as directed by the District.
- B. CONSTRUCTION KEYING:
1. All interior locks to be "0" Bit keyed by Hardware Supplier with keying information provided by F.U.S.D. and installed by Contractor.
  2. All exterior construction I/C Cores #23-030 and construction keys shall be furnished by F.U.S.D. Key/Lock Department.
  3. At the time of final acceptance of work, F.U.S.D. will remove construction I/C Cores and key door to new system.



4. All District issued keys and construction keys issued to the Contractor or Sub Contractor must be returned to the Key Shop before the release of the retention money, no exceptions.

- C. KEY CABINET: Furnish key cabinet to accommodate 150 keys minimum for all schools. Deliver to FUSD Project Manager for delivery to the FUSD Lock Shop.

| KEY CABINET |              |                        |                                                                                         |
|-------------|--------------|------------------------|-----------------------------------------------------------------------------------------|
|             | Key Cabinet: | HPC Inc.<br>KEKAB-160X | Deliver the key cabinet to the FUSD Project Manager for delivery to the FUSD Lock Shop. |

## 2.13 CABINET HARDWARE

### A. GENERAL:

1. Specified manufacturer shall establish a standard of quality.
2. Substitutions: Refer to Paragraph 1.03

### B. LIST:

1. Cabinet hardware shall be Corbin, Hager, or Lawrence.
2. Cabinet locks shall be CompX National – KA “915” or “413”.

### C. MODULAR CASEWORK CABINET LOCKS

1. Refer to Modular Casework specification. The following Casework Hardware are the District Standards.
2. CABINET LOCKS:
  - a. Comp-X National Pin Tumbler Cam Door C413A & 915.
  - b. LOCK KEYS:
    - 1) Keyed all the same, one keyway.

## 2.14 LIST OF CERTAIN HARDWARE ITEMS

### A. PADLOCKS: Master padlocks.

1. For hollow metal gates, service yard gates, chain link gates, roof screen gates, flagpole and roof hatches.
2. For disconnect switches on air conditioning units: Master #7 keyed P607.

### B. FLAGPOLE HOLDERS: TRIMCO.

### C. SPARE LOCKSETS: Deliver to Inspector at project site, for transmittal to the District.

## 2.15 PROPERTY SECURITY

### A. Safe is to be AMSEC, Model UL 1812 XD – LTG-ST w/ ESL 20XL.

1. Safe shall be securely anchored inside a cabinet constructed to accommodate same.
2. Office safe is to be ultimately located in a storage closet or enclosed in casework. Location shall be away from public view.
3. **Safe is to be delivered to F.U.S.D. Maintenance.**

## PART 3 - INSPECTION

### 3.1 INSTALLATION

- A. By Specifications, Section 06200.

### 3.2 FIELD QUALITY CONTROL

- A. The District shall have access to all portions to buildings during construction.
- B. A meeting prior to the installation of exit hardware is to be made with F.U.S.D. Lock Personnel. At 10% & 70% of a phase or job completion, Contractor to notify F.U.S.D. Lock Personnel at: (559) 457-3331, to examine all hardware for proper function and installation. Contractor to certify that examination was made, all hardware is properly installed, and conforms to contract Document requirements. Contractor shall provide to the District all items called out on hardware schedule and plans that are omitted during construction.

### 3.3 PERFORMANCE REQUIREMENTS

- A. TEMPLATES:
  - 1. Templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware.
  - 2. Check shop drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
  - 3. Furnish templates to other sections as required and in a timely fashion.
  - 4. Furnish reinforcing units and template hardware to metal frame and door manufacturer for application at factory.
- B. MEETINGS:
  - 1. Hold four (4) meetings during Construction.
    - a. MEETING 1 - PRE-INSTALLATION MEETING.
      - 1) Scheduled by the Contractor prior to the start of work.
      - 2) To be held with the Contractor, Trade Contractor(s), Designer and the FUSD Lock Personnel.
      - 3) Review hardware schedule, products and installation procedures.
      - 4) Review Owner's keying standards.
      - 5) Provide a plan for coordinating the work with all other related work.
      - 6) Identify any potential problems that may impede planned progress and proper installation of work regarding quality of installation and warranty requirements.
      - 7) Review specific FUSD hardware requirements.
      - 8) Review schedule for FUSD to deliver FUSD supplied components.
    - b. MEETING 2 - 10% PROGRESS MEETING:
      - 1) Scheduled by the Contractor at 10% of the performance of the work.
      - 2) To be held with the Contractor, Trade Contractor(s) and the FUSD Lock Personnel.
      - 3) Contractor to notify FUSD Project Manager and FUSD Lock Personnel at (559) 457-3331.
      - 4) FUSD Lock Personnel will examine all installed hardware for proper function and installation.

- 5) Scheduled by the Contractor during the performance of the work.
- 6) Review proper installation of work progress.
- 7) Identify any installation problems and acceptable corrective measures.
- 8) Identify any measures to maintain or regain project schedule if necessary.

c. MEETING 3 - 70% PROGRESS MEETING:

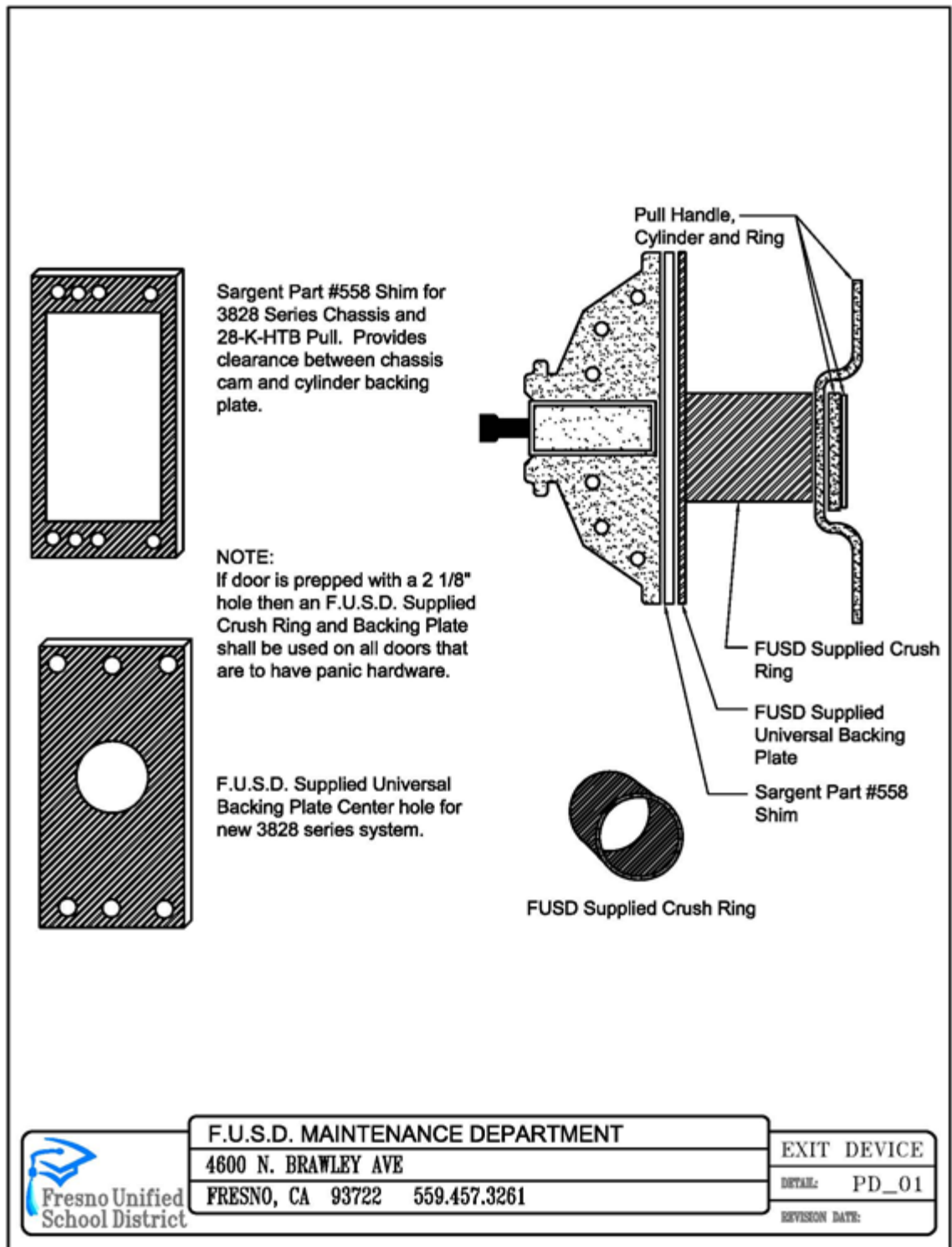
- 1) Scheduled by the Contractor at 70% of proper completion of the work.
- 2) To be held with the Contractor, Trade Contractor(s), Designer and the FUSD Lock Personnel.
- 3) Contractor to notify FUSD Project Manager and FUSD Lock Personnel at (559) 457-3331.
- 4) FUSD Lock Personnel will examine all hardware for proper function and installation.
- 5) Inspect and identify any problems.
- 6) Establish method and procedures to maintain protections while progressing to project completion.
- 7) Inspect and identify any problems that may impede issuance of warranties or guaranties.
- 8) Maintain installed work until the Notice of Substantial Completion has been executed.

d. MEETING 4 – FINAL REVIEW

- 1) Scheduled by the Contractor at 100% completion of the work.
- 2) To be held with the Contractor and Designer as part of the Final Review.
- 3) Refer to the Punch List Certificate.

### 3.4 PUNCH LIST CERTIFICATE:

- A. Provide a letter on Contractor's Letterhead certifying work provided, meets or exceeds the requirements, is completely installed, lubricated, adjusted, inspected and is otherwise complete.
- B. The Certificate shall be furnished upon the request for Final Review and included into the O/M Manuals.
- C. The letter shall include in the title "Punch List Certificate" and include the Contractor / Trade Contractor description of the inspections performed and any issues observed and addressed.

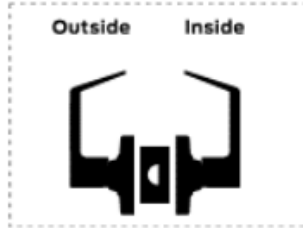
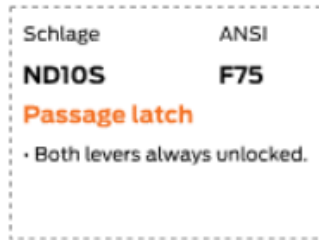


IVES IVES

ZERO Zeor International

NGP National Guard Products, Inc

**SCHLAGE LOCKSET GROUPS 10, 53, 75, 80, 85 & 95 - INTERIOR AND EXTERIOR**



**HARDWARE GROUP NO. 10 – INTERIOR PASSAGE DOOR**

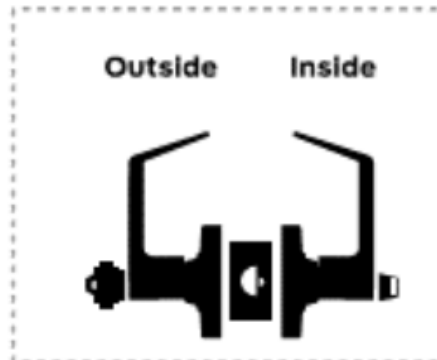
**EACH TO HAVE:**

| QTY |    | DESCRIPTION | CATALOG NUMBER         | FINISH | MFR |
|-----|----|-------------|------------------------|--------|-----|
| 3   | EA | SD HINGE    | BB1279 4.5 X 4.5 NPR   | US-26D | HAG |
| 1   | EA | OFFICE LOCK | ND10PD RHO             | 626    | SCH |
| 1   | EA | CYLINDERS   | NONE                   | 626    | SCH |
| 1   | EA | KICK PLATE  | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1   | EA | DOOR STOP   | 1209                   | 626    | TRI |
| 3   | EA | SILENCER    | GJ64                   | GRY    | GJ  |

Schlage      ANSI  
**ND53PD      F109**

**Entrance lock**

- Turn/push-button locking: Pushing and turning the button locks the outside lever, requiring use of a key until the button is manually unlocked.
- Push-button locking: Pushing button locks outside lever until unlocked by key or by turning the inside lever.



**HARDWARE GROUP NO. 53 – INTERIOR DOOR - OFFICE LOCK**

EACH TO HAVE:

| QTY |    | DESCRIPTION | CATALOG NUMBER         | FINISH | MFR |
|-----|----|-------------|------------------------|--------|-----|
| 3   | EA | SD HINGE    | BB1279 4.5 X 4.5 NPR   | US-26D | HAG |
| 1   | EA | OFFICE LOCK | ND53PD RHO             | 626    | SCH |
| 1   | EA | CYLINDERS   | CLASSIC 23-065         | 626    | SCH |
| 1   | EA | KICK PLATE  | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1   | EA | DOOR STOP   | 1209                   | 626    | TRI |
| 3   | EA | SILENCER    | GJ64                   | GRY    | GJ  |

**HARDWARE GROUP NO. 53C – INTERIOR DOOR - OFFICE LOCK WITH CLOSURE**

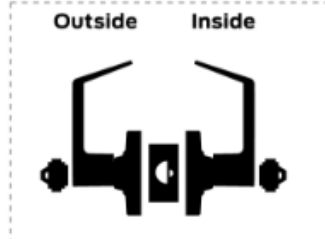
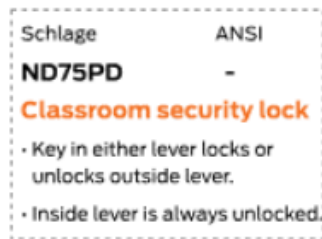
EACH TO HAVE:

| QTY |    | DESCRIPTION    | CATALOG NUMBER           | FINISH | MFR |
|-----|----|----------------|--------------------------|--------|-----|
| 3   | EA | SD HINGE       | BB1279 4.5 X 4.5 NPR     | US-26D | HAG |
| 1   | EA | OFFICE LOCK    | ND53PD RHO               | 626    | SCH |
| 1   | EA | CYLINDERS      | CLASSIC 23-065           | 626    | SCH |
| 1   | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS   | 630    | IVE |
| 1   | EA | DOOR STOP      | 1209                     | 626    | TRI |
| 3   | EA | SILENCER       | GJ64                     | GRY    | GJ  |
| 1   | EA | SURFACE CLOSER | 4111 / 4011 – 3077EDA-72 | 689    | LCN |

**HARDWARE GROUP NO. 53R – INTERIOR DOOR - OFFICE LOCK + RATED**

EACH TO HAVE:

| QTY |     | DESCRIPTION    | CATALOG NUMBER           | FINISH | MFR |
|-----|-----|----------------|--------------------------|--------|-----|
| 3   | EA  | SD HINGE       | BB1279 4.5 X 4.5 NPR     | US-26D | HAG |
| 1   | EA  | OFFICE LOCK    | ND53PD RHO               | 626    | SCH |
| 1   | EA  | CYLINDERS      | CLASSIC 23-065           | 626    | SCH |
| 1   | EA  | KICK PLATE     | 8400 10" X 2" LDW B-CS   | 630    | IVE |
| 1   | EA  | DOOR STOP      | 1209                     | 626    | TRI |
| 1   | SET | GASKET         | 297AV                    | -      | PEM |
| 1   | EA  | SURFACE CLOSER | 4111 / 4011 – 3077EDA-72 | 689    | LCN |



**HARDWARE GROUP NO. 75 – INTERIOR DOOR – CLASSROOM SECURITY LOCK**

EACH TO HAVE:

| QTY |    | DESCRIPTION        | CATALOG NUMBER         | FINISH | MFR |
|-----|----|--------------------|------------------------|--------|-----|
| 3   | EA | HD HINGE           | BB1268 4.5 X 4.5 NPR   | US-26D | HAG |
| 1   | EA | CLASSROOM SECURITY | ND75PD RHO XN12-035    | 626    | SCH |
| 1   | EA | CYLINDERS          | CLASSIC 23-065         | 626    | SCH |
| 1   | EA | KICK PLATE         | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1   | EA | DOOR STOP          | 1209                   | 626    | TRI |
| 3   | EA | SILENCER           | GJ64                   | GRY    | GJ  |

**HARDWARE GROUP NO. 75C – INTERIOR DOOR - CLASSROOM SECURITY LOCK WITH CLOSURE**

EACH TO HAVE:

| QTY |    | DESCRIPTION        | CATALOG NUMBER                 | FINISH | MFR |
|-----|----|--------------------|--------------------------------|--------|-----|
| 3   | EA | HD HINGE           | BB1268 4.5 X 4.5 NPR           | US-26D | HAG |
| 1   | EA | CLASSROOM SECURITY | ND75PD RHO XN12-035            | 626    | SCH |
| 1   | EA | CYLINDERS          | CLASSIC 23-065                 | 626    | SCH |
| 1   | EA | KICK PLATE         | 8400 10" X 2" LDW B-CS         | 630    | IVE |
| 1   | EA | DOOR STOP          | 1209                           | 626    | TRI |
| 3   | EA | SILENCER           | GJ64                           | GRY    | GJ  |
| 1   | EA | SURFACE CLOSER     | 4111 / 4011-3077EDA, 72, TBWMS | 689    | LCN |

**HARDWARE GROUP NO. 75R – INTERIOR DOOR - CLASSROOM SECURITY LOCK + RATED**

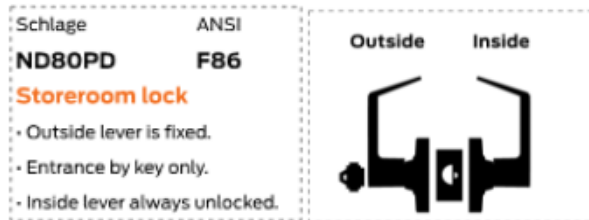
EACH TO HAVE:

| QTY |     | DESCRIPTION        | CATALOG NUMBER                 | FINISH | MFR |
|-----|-----|--------------------|--------------------------------|--------|-----|
| 3   | EA  | HD HINGE           | BB1268 4.5 X 4.5 NPR           | US-26D | HAG |
| 1   | EA  | CLASSROOM SECURITY | ND75PD RHO XN12-035            | 626    | SCH |
| 1   | EA  | CYLINDERS          | CLASSIC 23-065                 | 626    | SCH |
| 1   | EA  | KICK PLATE         | 8400 10" X 2" LDW B-CS         | 630    | IVE |
| 1   | EA  | DOOR STOP          | 1209                           | 626    | TRI |
| 1   | SET | GASKET             | 297AV                          | -      | PEM |
| 1   | EA  | SURFACE CLOSER     | 4111 / 4011-3077EDA, 72, TBWMS | 689    | LCN |

**HARDWARE GROUP NO. 75RR – INTERIOR STUDENT RESTROOM DOOR**

EACH TO HAVE:

| QTY |     | DESCRIPTION        | CATALOG NUMBER                 | FINISH | MFR |
|-----|-----|--------------------|--------------------------------|--------|-----|
| 3   | EA  | HD HINGE           | BB1268 4.5 X 4.5 NPR           | US-26D | HAG |
| 1   | EA  | CLASSROOM SECURITY | ND75PD RHO XN12-035            | 626    | SCH |
| 1   | EA  | CYLINDERS          | CLASSIC 23-065                 | 626    | SCH |
| 1   | EA  | KICK PLATE         | 8400 10" X 2" LDW B-CS         | 630    | IVE |
| 1   | EA  | DOOR STOP          | 1209                           | 626    | TRI |
| 1   | SET | GASKET             | 297AV                          | -      | PEM |
| 1   | EA  | SURFACE CLOSER     | 4111 / 4011-3077EDA, 72, TBWMS | 689    | LCN |



#### HARDWARE GROUP NO. 80 – STOREROOM LOCK

EACH TO HAVE:

| QTY |    | DESCRIPTION    | CATALOG NUMBER         | FINISH | MFR |
|-----|----|----------------|------------------------|--------|-----|
| 3   | EA | SD HINGE       | BB1279 4.5 X 4.5 NPR   | US-26D | HAG |
| 1   | EA | STOREROOM LOCK | ND80PD RHO             | 626    | SCH |
| 1   | EA | CYLINDERS      | CLASSIC 23-065         | 626    | SCH |
| 1   | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1   | EA | DOOR STOP      | 1209HO                 | 626    | TRI |
| 3   | EA | SILENCER       | GJ64                   | GRY    | GJ  |

#### HARDWARE GROUP NO. 80C – STOREROOM LOCK WITH CLOSURE

EACH TO HAVE:

| QTY |    | DESCRIPTION    | CATALOG NUMBER                 | FINISH | MFR |
|-----|----|----------------|--------------------------------|--------|-----|
| 3   | EA | SD HINGE       | BB1279 4.5 X 4.5 NPR           | US-26D | HAG |
| 1   | EA | STOREROOM LOCK | ND80PD RHO                     | 626    | SCH |
| 1   | EA | CYLINDERS      | CLASSIC 23-065                 | 626    | SCH |
| 1   | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS         | 630    | IVE |
| 1   | EA | DOOR STOP      | 1209HO                         | 626    | TRI |
| 3   | EA | SILENCER       | GJ64                           | GRY    | GJ  |
| 1   | EA | SURFACE CLOSER | 4111 / 4011-3077EDA, 72, TBWMS | 689    | LCN |

#### HARDWARE GROUP NO. 80E – EXTERIOR STOREROOM LOCK WITH CLOSURE

EACH TO HAVE:

| QTY |     | DESCRIPTION    | CATALOG NUMBER                 | FINISH | MFR |
|-----|-----|----------------|--------------------------------|--------|-----|
| 3   | EA  | HD HINGE       | BB1268 4.5 X 4.5 NPR           | US-26D | HAG |
| 1   | EA  | STOREROOM LOCK | ND80PD RHO                     | 626    | SCH |
| 1   | EA  | CYLINDERS      | CLASSIC 23-065                 | 626    | SCH |
| 1   | EA  | LOCK GUARD     | LG12 AT OUTSWING DOORS         | 630    | IVE |
| 1   | EA  | KICK PLATE     | 8400 10" X 2" LDW B-CS         | 630    | IVE |
| 1   | EA  | DOOR STOP      | 1209HO                         | 626    | TRI |
| 1   | SET | GASKETING      | 297AV                          | GRY    | GJ  |
| 1   | EA  | SURFACE CLOSER | 4111 / 4011-3077EDA, 72, TBWMS | 689    | LCN |
| 1   | EA  | DOOR BOTTOM    | 222APK                         | AL     | PEM |
| 1   | EA  | THRESHOLD      | 196A-228A-195A                 | AL     | PEM |

#### HARDWARE GROUP NO. 80R – STOREROOM LOCK + RATED

EACH TO HAVE:

| QTY |     | DESCRIPTION    | CATALOG NUMBER                 | FINISH | MFR |
|-----|-----|----------------|--------------------------------|--------|-----|
| 3   | EA  | SD HINGE       | BB1279 4.5 X 4.5 NPR           | US-26D | HAG |
| 1   | EA  | STOREROOM LOCK | ND80PD RHO                     | 626    | SCH |
| 1   | EA  | CYLINDERS      | CLASSIC 23-065                 | 626    | SCH |
| 1   | EA  | KICK PLATE     | 8400 10" X 2" LDW B-CS         | 630    | IVE |
| 1   | EA  | DOOR STOP      | 1209                           | 626    | TRI |
| 1   | SET | GASKET         | 297AV                          | -      | PEM |
| 1   | EA  | SURFACE CLOSER | 4111 / 4011-3077EDA, 72, TBWMS | 689    | LCN |



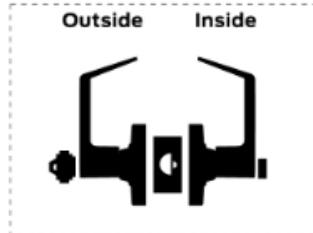
**HARDWARE GROUP NO. 802 – STOREROOM LOCK - INTERIOR PAIR / MECHANICAL CLOSET**

| QTY |     | DESCRIPTION       | CATALOG NUMBER         | FINISH | MFR |
|-----|-----|-------------------|------------------------|--------|-----|
| 6   | EA  | HD HINGE          | BB1268 4.5 X 4.5 NPR   | US-26D | HAG |
| 1   | SET | AUTO FLUSH BOLT   | FB41P                  | 630    | IVE |
| 1   | EA  | DUST PROOF STRIKE | DP2                    | 626    | IVE |
| 1   | EA  | STOREROOM LOCK    | ND80PD RHO             | 626    | SCH |
| 1   | EA  | CYLINDERS         | CLASSIC 23-065         | 626    | SCH |
| 1   | EA  | COORDINATOR       | COR X FL               | 628    | IVE |
| 2   | EA  | MOUNTING BRACKET  | MB                     | 689    | IVE |
| 2   | EA  | KICK PLATE        | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 2   | EA  | DOOR STOP         | 1209                   | 626    | TRI |
| 4   | EA  | SILENCER          | GJ64                   | GRY    | GJ  |
| 1   | EA  | MEETING STILE     | 328AA                  | AA     | ZER |

**HARDWARE GROUP NO. 802R – STOREROOM LOCK - INTERIOR PAIR / MECHANICAL CLOSET - RATED**

| QTY |     | DESCRIPTION       | CATALOG NUMBER         | FINISH | MFR |
|-----|-----|-------------------|------------------------|--------|-----|
| 6   | EA  | HD HINGE          | BB1268 4.5 X 4.5 NPR   | US-26D | HAG |
| 1   | SET | AUTO FLUSH BOLT   | FB41P                  | 630    | IVE |
| 1   | EA  | DUST PROOF STRIKE | DP2                    | 626    | IVE |
| 1   | EA  | STOREROOM LOCK    | ND80PD RHO             | 626    | SCH |
| 1   | EA  | CYLINDERS         | CLASSIC 23-065         | 626    | SCH |
| 1   | EA  | COORDINATOR       | COR X FL               | 628    | IVE |
| 2   | EA  | MOUNTING BRACKET  | MB                     | 689    | IVE |
| 2   | EA  | KICK PLATE        | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 2   | EA  | DOOR STOP         | 1209                   | 626    | TRI |
| 1   | SET | GASKET            | 297AV                  | -      | PEM |
| 1   | EA  | MEETING STILE     | 328AA                  | AA     | ZER |

| Schlage                                                                                                                                                                                                                                                                                                                                                                                                                        | ANSI |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>ND85PD</b>                                                                                                                                                                                                                                                                                                                                                                                                                  | -    |
| <b>Faculty restroom lock</b>                                                                                                                                                                                                                                                                                                                                                                                                   |      |
| <ul style="list-style-type: none"> <li>• Outside lever is fixed.</li> <li>• Entrance by key only.</li> <li>• Push-button in inside lever activates visual occupancy indicator, allowing only emergency master key to operate.</li> <li>• Turn inside lever or close door to release visual occupancy indicator.</li> <li>• Rotation of inside spinner-button provides lock-out feature by keeping indicator thrown.</li> </ul> |      |



**HARDWARE GROUP NO. 85 – INTERIOR / SINGLE OCCUPANCY FACULTY RESTROOM**

EACH TO HAVE:

| QTY |    | DESCRIPTION    | CATALOG NUMBER         | FINISH | MFR |
|-----|----|----------------|------------------------|--------|-----|
| 3   | EA | HD HINGE       | BB1268 4.5 X 4.5 NPR   | US-26D | HAG |
| 1   | EA | STOREROOM LOCK | ND85PD RHO             | 626    | SCH |
| 1   | EA | CYLINDERS      | CLASSIC 23-000         | 626    | SCH |
| 1   | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS | 630    | IVE |
| 1   | EA | DOOR STOP      | 1209                   | 626    | TRI |
| 3   | EA | SILENCER       | GJ64                   | GRY    | GJ  |

**HARDWARE GROUP NO. 85C – INTERIOR / SINGLE OCCUPANCY FACULTY RESTROOM + CLOSURE**

EACH TO HAVE:

| QTY |    | DESCRIPTION    | CATALOG NUMBER                 | FINISH | MFR |
|-----|----|----------------|--------------------------------|--------|-----|
| 3   | EA | HD HINGE       | BB1268 4.5 X 4.5 NPR           | US-26D | HAG |
| 1   | EA | STOREROOM LOCK | ND85PD RHO                     | 626    | SCH |
| 1   | EA | CYLINDERS      | CLASSIC 23-000                 | 626    | SCH |
| 1   | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS         | 630    | IVE |
| 1   | EA | DOOR STOP      | 1209                           | 626    | TRI |
| 3   | EA | SILENCER       | GJ64                           | GRY    | GJ  |
| 1   | EA | SURFACE CLOSER | 4111 / 4011-3077EDA, 72, TBWMS | 689    | LCN |

**HARDWARE GROUP NO. 85R – INTERIOR / SINGLE OCCUPANCY FACULTY RESTROOM + RATED**

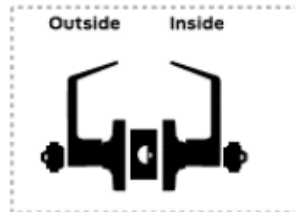
EACH TO HAVE:

| QTY |     | DESCRIPTION    | CATALOG NUMBER                 | FINISH | MFR |
|-----|-----|----------------|--------------------------------|--------|-----|
| 3   | EA  | HD HINGE       | BB1268 4.5 X 4.5 NPR           | US-26D | HAG |
| 1   | EA  | STOREROOM LOCK | ND85PD RHO                     | 626    | SCH |
| 1   | EA  | CYLINDERS      | CLASSIC 23-000                 | 626    | SCH |
| 1   | EA  | KICK PLATE     | 8400 10" X 2" LDW B-CS         | 630    | IVE |
| 1   | EA  | DOOR STOP      | 1209                           | 626    | TRI |
| 1   | SET | GASKET         | 297AV                          | -      | PEM |
| 1   | EA  | SURFACE CLOSER | 4111 / 4011-3077EDA, 72, TBWMS | 689    | LCN |

**HARDWARE GROUP NO. 85E – EXTERIOR / SINGLE OCCUPANCY FACULTY RESTROOM**

EACH TO HAVE:

| QTY |     | DESCRIPTION    | CATALOG NUMBER                 | FINISH | MFR |
|-----|-----|----------------|--------------------------------|--------|-----|
| 3   | EA  | HD HINGE       | BB1268 4.5 X 4.5 NPR           | US-26D | HAG |
| 1   | EA  | STOREROOM LOCK | ND85PD RHO                     | 626    | SCH |
| 1   | EA  | CYLINDERS      | CLASSIC 23-000                 | 626    | SCH |
| 1   | EA  | LOCK GUARD     | LG12 AT OUTSWING DOORS         | 630    | IVE |
| 1   | EA  | KICK PLATE     | 8400 10" X 2" LDW B-CS         | 630    | IVE |
| 1   | EA  | DOOR STOP      | 1209                           | 626    | TRI |
| 1   | SET | GASKETING      | 297AV                          | GRY    | GJ  |
| 1   | EA  | SURFACE CLOSER | 4111 / 4011-3077EDA, 72, TBWMS | 689    | LCN |
| 1   | EA  | DOOR BOTTOM    | 222APK                         | AL     | PEM |
| 1   | EA  | THRESHOLD      | 196A-228A-195A                 | AL     | PEM |



**HARDWARE GROUP NO. 95E – EXTERIOR INSWINGING DOOR CONDITIONS (WHEN APPROVED BY DISTRICT)**

EACH TO HAVE:

| QTY |     | DESCRIPTION    | CATALOG NUMBER                     | FINISH | MFR |
|-----|-----|----------------|------------------------------------|--------|-----|
| 3   | EA  | HD HINGE       | BB1268 4.5 X 4.5 NPR               | US-26D | HAG |
| 1   | EA  | STOREROOM LOCK | ND95PD RHO XN12-035                | 626    | SCH |
| 1   | EA  | CYLINDERS      | CLASSIC 23-065                     | 626    | SCH |
| 1   | EA  | KICK PLATE     | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 1   | EA  | DOOR STOP      | 1209                               | 626    | TRI |
| 1   | SET | GASKETING      | 297AV                              | GRY    | GJ  |
| 1   | EA  | SURFACE CLOSER | INSWINGING 4111-3077EDA, 72, TBWMS | 689    | LCN |
| 1   | EA  | DOOR BOTTOM    | 222APK                             | AL     | PEM |
| 1   | EA  | THRESHOLD      | 196A-228A-195A                     | AL     | PEM |

**VON DUPRIN PANIC HARDWARE GROUPS 22 & 99 - INTERIOR AND EXTERIOR BUILDING HARDWARE**

**HARDWARE GROUP NO. 22 - INTERIOR PANIC DEVICE / NIGHT LATCH WITH HEX DOGGING**

| QTY |    | DESCRIPTION          | CATALOG NUMBER                          | FINISH | MFR |
|-----|----|----------------------|-----------------------------------------|--------|-----|
| 3   | EA | HD HINGE             | BB1268 4.5 X 4.5 NPR                    | US-26D | HAG |
| 1   | EA | PANIC HARDWARE       | AX22-210NL SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 1   | EA | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE                     | 626    | SCH |
| 1   | EA | CONSTRUCTION CORE    | SUPPLIED BY FUSD                        | -      | SCH |
| 1   | EA | PERMANENT CYLINDER   | SUPPLIED BY FUSD                        | 626    | SCH |
| 1   | EA | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS             | 689    | LCN |
| 1   | EA | DOOR STOP            | 1209                                    | 626    | TRI |
| 3   | EA | SILENCER             | GJ64                                    | GRY    | GJ  |
| 1   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS                  | 630    | IVE |

**HARDWARE GROUP NO. 22C - INTERIOR PANIC DEVICE / NIGHT LATCH WITH HEX DOGGING**

| QTY |    | DESCRIPTION          | CATALOG NUMBER                          | FINISH | MFR |
|-----|----|----------------------|-----------------------------------------|--------|-----|
| 3   | EA | HD HINGE             | BB1268 4.5 X 4.5 NPR                    | US-26D | HAG |
| 1   | EA | PANIC HARDWARE       | AX22-210NL SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 1   | EA | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE                     | 626    | SCH |
| 1   | EA | CONSTRUCTION CORE    | SUPPLIED BY FUSD                        | -      | SCH |
| 1   | EA | PERMANENT CYLINDER   | SUPPLIED BY FUSD                        | 626    | SCH |
| 1   | EA | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS             | 689    | LCN |
| 1   | EA | DOOR STOP            | 1209                                    | 626    | TRI |
| 3   | EA | SILENCER             | GJ64                                    | GRY    | GJ  |
| 1   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS                  | 630    | IVE |
| 1   | EA | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS             | 689    | LCN |

**HARDWARE GROUP NO. 22E - EXTERIOR PANIC DEVICE / NIGHT LATCH WITH HEX DOGGING**

| QTY |     | DESCRIPTION          | CATALOG NUMBER                          | FINISH | MFR |
|-----|-----|----------------------|-----------------------------------------|--------|-----|
| 3   | EA  | HD HINGE             | BB1268 4.5 X 4.5 NPR                    | US-26D | HAG |
| 1   | EA  | PANIC HARDWARE       | AX22-210NL SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 1   | EA  | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE                     | 626    | SCH |
| 1   | EA  | CONSTRUCTION CORE    | SUPPLIED BY FUSD                        | -      | SCH |
| 1   | EA  | PERMANENT CYLINDER   | SUPPLIED BY FUSD                        | 626    | SCH |
| 1   | EA  | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS             | 689    | LCN |
| 1   | EA  | DOOR STOP            | 1209                                    | 626    | TRI |
| 1   | SET | GASKETING            | 297AV                                   | GRY    | GJ  |
| 1   | EA  | KICK PLATE           | 8400 10" X 2" LDW B-CS                  | 630    | IVE |
| 1   | EA  | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS             | 689    | LCN |
| 1   | EA  | DOOR BOTTOM          | 222APK                                  | AL     | PEM |
| 1   | EA  | THRESHOLD            | 196A-228A-195A                          | AL     | PEM |

**HARDWARE GROUP NO. 22HO - INTERIOR CORRIDOR DOORS + CLOSURE WITH HOLD-OPEN**

| QTY |    | DESCRIPTION          | CATALOG NUMBER                          | FINISH | MFR |
|-----|----|----------------------|-----------------------------------------|--------|-----|
| 3   | EA | HD HINGE             | BB1268 4.5 X 4.5 NPR                    | US-26D | HAG |
| 1   | EA | PANIC HARDWARE       | AX22-210NL SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 1   | EA | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE                     | 626    | SCH |
| 1   | EA | CONSTRUCTION CORE    | SUPPLIED BY FUSD                        | -      | SCH |
| 1   | EA | PERMANENT CYLINDER   | SUPPLIED BY FUSD                        | 626    | SCH |
| 1   | EA | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS             | 689    | LCN |
| 1   | EA | DOOR STOP            | 1209HO                                  | 626    | TRI |
| 3   | EA | SILENCER             | GJ64                                    | GRY    | GJ  |
| 1   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS                  | 630    | IVE |
| 1   | EA | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS             | 689    | LCN |

**HARDWARE GROUP NO. 222HO – INTERIOR CORRIDOR DOORS + CLOSURE WITH HOLD-OPEN**

| QTY |    | DESCRIPTION          | CATALOG NUMBER                        | FINISH | MFR |
|-----|----|----------------------|---------------------------------------|--------|-----|
| 6   | EA | HD HINGE             | BB1268 4.5 X 4.5 NPR                  | US-26D | HAG |
| 1   | EA | KEYED REMOVABLE      | KR4954-STABILIZERS-MT54               | SP28   | VON |
| 1   | EA | MULLION CYLINDER     | 26-094                                | 626    | SCH |
| 1   | EA | PANIC HARDWARE       | AX-22-DT SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 1   | EA | PANIC HARDWARE       | AX-22-NL SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 2   | EA | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE (NL & MULLION)    | 626    | SCH |
| 2   | EA | CONSTRUCTION CORE    | SUPPLIED BY FUSD                      | -      | SCH |
| 3   | EA | PERMANENT CYLINDER   | SUPPLIED BY FUSD                      | 626    | SCH |
| 2   | EA | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS           | 689    | LCN |
| 2   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS                | 630    | IVE |
| 2   | EA | DOOR STOP / HOLDER   | 1209HO                                | 626    | TRI |
| 4   | EA | SILENCER             | GJ64                                  | GRY    | GJ  |
| 2   | EA | DOOR BOTTOM          | 222APK                                | AL     | PEM |

**HARDWARE GROUP NO. 22HVE – EXTERIOR SINGLE PANIC DEVICE AT HIGH-VOLTAGE ELECTRICAL ROOMS**

| QTY |     | DESCRIPTION          | CATALOG NUMBER              | FINISH | MFR |
|-----|-----|----------------------|-----------------------------|--------|-----|
| 3   | EA  | HD HINGE             | BB1268 4.5 X 4.5 NPR        | US-26D | HAG |
| 1   | EA  | PANIC HARDWARE       | AX22-210NL SP28-299         | 626    | VON |
| 1   | EA  | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE         | 626    | SCH |
| 1   | EA  | CONSTRUCTION CORE    | SUPPLIED BY FUSD            | -      | SCH |
| 1   | EA  | PERMANENT CYLINDER   | SUPPLIED BY FUSD            | 626    | SCH |
| 1   | EA  | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS | 689    | LCN |
| 1   | EA  | DOOR STOP            | 1209                        | 626    | TRI |
| 1   | SET | GASKETING            | 297AV                       | GRY    | GJ  |
| 1   | EA  | KICK PLATE           | 8400 10" X 2" LDW B-CS      | 630    | IVE |
| 1   | EA  | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS | 689    | LCN |
| 1   | EA  | DOOR BOTTOM          | 222APK                      | AL     | PEM |
| 1   | EA  | THRESHOLD            | 196A-228A-195A              | AL     | PEM |

**HARDWARE GROUP NO. 222HVE – EXTERIOR PAIR PANIC DEVICE AT HIGH-VOLTAGE ELECTRICAL ROOMS**

| QTY |     | DESCRIPTION          | CATALOG NUMBER                     | FINISH | MFR |
|-----|-----|----------------------|------------------------------------|--------|-----|
| 6   | EA  | HD HINGE             | BB1268 4.5 X 4.5 NPR               | US-26D | HAG |
| 1   | EA  | KEYED REMOVABLE      | KR4954-STABILIZERS-MT54            | SP28   | VON |
| 1   | EA  | MULLION CYLINDER     | 26-094                             | 626    | SCH |
| 1   | EA  | PANIC HARDWARE       | AX-22-DT SP28-299                  | 626    | VON |
| 1   | EA  | PANIC HARDWARE       | AX-22-NL SP28-299                  | 626    | VON |
| 2   | EA  | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE (NL & MULLION) | 626    | SCH |
| 2   | EA  | CONSTRUCTION CORE    | SUPPLIED BY FUSD                   | -      | SCH |
| 3   | EA  | PERMANENT CYLINDER   | SUPPLIED BY FUSD                   | 626    | SCH |
| 2   | EA  | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS        | 689    | LCN |
| 2   | EA  | KICK PLATE           | 8400 10" X 2" LDW B-CS             | 630    | IVE |
| 2   | EA  | DOOR STOP            | 1209                               | 626    | TRI |
| 1   | SET | GASKETING            | 297AV                              | GRY    | GJ  |
| 2   | EA  | DOOR BOTTOM          | 222APK                             | AL     | PEM |

**HARDWARE GROUP NO. 99R - INTERIOR PANIC DEVICE / NIGHT LATCH - RATED**

| QTY |     | DESCRIPTION          | CATALOG NUMBER              | FINISH | MFR |
|-----|-----|----------------------|-----------------------------|--------|-----|
| 3   | EA  | HD HINGE             | BB1268 4.5 X 4.5 NPR        | US-26D | HAG |
| 1   | EA  | PANIC HARDWARE       | AX-99-L-F-299               | 626    | VON |
| 2   | EA  | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE         | 626    | SCH |
| 2   | EA  | CONSTRUCTION CORE    | SUPPLIED BY FUSD            | -      | SCH |
| 2   | EA  | PERMANENT CYLINDER   | SUPPLIED BY FUSD            | 626    | SCH |
| 1   | EA  | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS | 689    | LCN |
| 1   | EA  | DOOR STOP            | 1209                        | 626    | TRI |
| 1   | SET | GASKETING            | 297AV                       | GRY    | GJ  |
| 1   | EA  | KICK PLATE           | 8400 10" X 2" LDW B-CS      | 630    | IVE |
| 1   | EA  | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS | 689    | LCN |

**HARDWARE GROUP NO. 992 - INTERIOR PAIR , PANIC DEVICE - RATED**

| QTY |     | DESCRIPTION          | CATALOG NUMBER                     | FINISH | MFR |
|-----|-----|----------------------|------------------------------------|--------|-----|
| 6   | EA  | HD HINGE             | BB1268 4.5 X 4.5 NPR               | US-26D | HAG |
| 1   | EA  | KEYED REMOVABLE      | KR4954-STABILIZERS-MT54            | SP28   | VON |
| 1   | EA  | MULLION CYLINDER     | 26-094                             | 626    | SCH |
| 1   | EA  | PANIC HARDWARE       | AX-99-D-F--299                     | 626    | VON |
| 1   | EA  | PANIC HARDWARE       | AX-99-NL-F-299                     | 626    | VON |
| 2   | EA  | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE (NL & MULLION) | 626    | SCH |
| 2   | EA  | CONSTRUCTION CORE    | SUPPLIED BY FUSD                   | -      | SCH |
| 3   | EA  | PERMANENT CYLINDER   | SUPPLIED BY FUSD                   | 626    | SCH |
| 2   | EA  | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS        | 689    | LCN |
| 2   | EA  | DOOR STOP            | 1209                               | 626    | TRI |
| 1   | SET | GASKETING            | 297AV                              | GRY    | GJ  |
| 1   | EA  | MULLION SEAL         | 8780N                              | N      | ZER |
| 2   | EA  | KICK PLATE           | 8400 10" X 2" LDW B-CS             | 630    | IVE |

**VON DUPRIN PANIC DEVICE - SITE GATE HARDWARE**

**HARDWARE GROUP NO. 22G - EXTERIOR GATE - PANIC DEVICE / NIGHT LATCH WITH HEX DOGGING**

| QTY |    | DESCRIPTION          | CATALOG NUMBER                          | FINISH | MFR |
|-----|----|----------------------|-----------------------------------------|--------|-----|
| 1   | EA | HINGE                | LOXINOX MAMOTH 180                      | SILVER | LOX |
| 1   | EA | PANIC HARDWARE       | AX22-210NL SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 1   | EA | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE                     | 626    | SCH |
| 1   | EA | CONSTRUCTION CORE    | SUPPLIED BY FUSD                        | -      | SCH |
| 1   | EA | PERMANENT CYLINDER   | SUPPLIED BY FUSD                        | 626    | SCH |
| 1   | EA | DOOR STOP            | 1209HOHA                                | 626    | TRI |

**HARDWARE GROUP NO. 22GHM - EXTERIOR HOLLOW METAL DOOR - PANIC DEVICE / NIGHT LATCH WITH HEX DOGGING**

| QTY |    | DESCRIPTION          | CATALOG NUMBER                          | FINISH | MFR |
|-----|----|----------------------|-----------------------------------------|--------|-----|
| 3   | EA | HINGE                | 1256 SPRING SET (1250+BB1279)           | US-26D | HAG |
| 1   | EA | PANIC HARDWARE       | AX22-210NL SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 1   | EA | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE                     | 626    | SCH |
| 1   | EA | CONSTRUCTION CORE    | SUPPLIED BY FUSD                        | -      | SCH |
| 1   | EA | PERMANENT CYLINDER   | SUPPLIED BY FUSD                        | 626    | SCH |
| 1   | EA | DOOR STOP            | 1209HOHA                                | 626    | TRI |

**HARDWARE GROUP NO. 222E – EXTERIOR PAIR PANIC DEVICE**

| QTY |    | DESCRIPTION          | CATALOG NUMBER                        | FINISH | MFR |
|-----|----|----------------------|---------------------------------------|--------|-----|
| 6   | EA | HD HINGE             | BB1268 4.5 X 4.5 NPR                  | US-26D | HAG |
| 1   | EA | KEYED REMOVABLE      | KR4954-STABILIZERS-MT54               | SP28   | VON |
| 1   | EA | MULLION CYLINDER     | 26-094                                | 626    | SCH |
| 1   | EA | PANIC HARDWARE       | AX-22-DT SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 1   | EA | PANIC HARDWARE       | AX-22-NL SP28-299 Hex-Key dogging-GBK | 626    | VON |
| 2   | EA | RIM CYLINDER HOUSING | 20-079 WITHOUT CORE (NL & MULLION)    | 626    | SCH |
| 2   | EA | CONSTRUCTION CORE    | SUPPLIED BY FUSD                      | -      | SCH |
| 3   | EA | PERMANENT CYLINDER   | SUPPLIED BY FUSD                      | 626    | SCH |
| 2   | EA | SURFACE CLOSER       | OUTSWINGING 4111, 72, TBWMS           | 689    | LCN |
| 2   | EA | KICK PLATE           | 8400 10" X 2" LDW B-CS                | 630    | IVE |
| 2   | EA | DOOR STOP            | 1209                                  | 626    | TRI |
| 4   | EA | SILENCER             | GJ64                                  | GRY    | GJ  |
| 2   | EA | DOOR BOTTOM          | 222APK                                | AL     | PEM |

END OF SECTION

SECTION 088000 | GLAZING  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Glazing: Windows, doors, partitions, and openings.
  - 2. Glazing: Accessories.
  - 3. Aluminum glazing accessories: Stops, H-bars.
- B. Related Work Specified Elsewhere:
  - 1. Cleaning: Division 01.
  - 2. Rough Carpentry: Division 06.
  - 3. Finish Carpentry: Division 06.

1.3 SUBSTITUTIONS:

- A. Only written approval of the District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

1.4 QUALITY ASSURANCE:

- A. Requirements of Regulatory Agencies:
  - 1. Codes:
    - a. Title 19, 21 and 24 of CCR.
    - b. California Building Code.
  - 2. Federal Regulations: Consumer Product Safety Commission "Safety Standard for Architectural Glazing Materials, 16CFR, Part 1201".
- B. Reference Standards:
  - 1. American National Standards Institute (ANSI):
    - a. ANSI Z97.1, Performance Specifications and Methods of Test for Safety Glazing Material Used In Buildings.
  - 2. Federal Specifications (FS):
    - a. FS DD-G-451, Glass, Plate, Sheet, Figured (Float, Flat, For Glazing, Corrugated, Mirrors and Other Uses).
    - b. FS DD-G-1403B, Glass Plate (Float), Sheet, Figured, and Spandrel (Heat Strengthened and Fully Tempered).
  - 3. Other:
    - a. Aluminum Association (M).
    - b. Architectural Aluminum Manufacturer's Association (MMA).
    - c. Flat Glass Marketing Association (FGMA).



- d. National Association of Architectural Metal Manufacturers (NAAMM).

## 1.5 SUBMITTALS:

- A. Samples (in duplicate):
  - 1. All glass except clear sheet or plate less than 3/8" thick.
  - 2. Aluminum finishes when requested by District.
  - 3. All plastic.
- B. Product Data: Manufacturer's descriptive data for glass and/or plastic glazing materials.

## 1.6 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver glass with manufacturer's labels intact.
- B. Deliver glazing compounds and sealants in manufacturer's unopened, labeled containers.
- C. Do not remove labels until glass has been installed.
- D. Deliver plastic glazing with protective paper on both sides.

## 1.7 JOB CONDITIONS:

- A. Environmental Requirements:
  - 1. Perform glazing when ambient temperature is above 40° F.
  - 2. Perform glazing on dry surfaces only.
- B. Sequencing, Scheduling:
  - 1. Coordinate with Sections providing frames, openings or items to be glazed. Verify field dimensions prior to fabrication.
  - 2. Do not install oversized mirrors until latex sealer is applied to concealed gypsum board wall surfaces by Painting Section.

# PART 2 - PRODUCTS

## 2.1 MATERIALS

- A. General:
  - 1. Conform to Codes, and additional requirements stated herein.
  - 2. Glazing:
    - a. Title 24, Chapter 2-54.
    - b. Glazing; Glass: Title 24, Section 2-5401, which refers to U.C. Standard 54-1, which is based on Federal Specifications DD-G-00451 b.
    - c. Safety Glazing: Title 24, Section 2-5406, which refers to U.C. Standard 54-2 (which is based on ANSI Z97.1-1975, and CPSC 16CFR Part 1201).
- B. Glass:

1. Acceptable Manufacturers: ASG Industries Company, Ford Glass Division, Globe-Amerada Glass Company, Libby-Owens-Ford and PPG Industries.
2. Types: Named manufacturer and product shall be a standard of quality.

Type No. 1: Clear, transparent tempered glass; Glazing B: Type 1, Class 1, Quality q5. Thickness (unless otherwise noted): 3/16" thick for openings to 12 SF maximum, 7/32" thick for openings to 30 SF maximum.

Type No. 2: Glare reducing glass: PPG Graylite, 14% light transmission. Thickness: 1/4".

Type No. 3: Safety glass, tempered glare reducing: PPG Graylite, 14% light transmission, fully tempered. Thickness: 1/4".

Type No. 4: Wire glass, clear: 1/4" polished wire glass: Square pattern.

Type No. 5: Spandrel glass: Viracon, "Viraspan", reflective with opacifier thickness: 1/4".

Type No.6: Acrylic: 1/4" clear cast acrylic "G" or glazing grade 1/4" patterned obscure cast acrylic in Restrooms, Solor grey may be used in approved locations

C. Glazing Accessories:

1. Conform to FGMA "Glazing Sealing Systems Manual" and/or printed recommendations by glass or plastic glazing materials manufacturer, whichever is most stringent, for:
  - a. Setting blocks.
  - b. Spacers.
  - c. Glazing Points.
  - d. Glazing Compound.
  - e. Sealant.
  - f. Glazing Tape.

D. Aluminum Glazing Accessories: U.S. Aluminum products as a standard of quality.

1. Glazing Stops and H-Bars:
  - a. General:
    - 1) Material: Extruded aluminum, 6063-T5 alloy.
    - 2) Finish: Satin, anodized finish of specified color.
  - b. Glazing Stops: Arcadia No. 22-103, unless otherwise noted.
    - 1) Glazing Beads: Roll-in, non-stretch, high-shore vinyl with a 60# test fiberglass cord concealed-in and bonded to the vinyl.
    - 2) No exposed screws in stop system.

E. Oversized Mirrors:

1. Mirrors: 1/4" tempered, clear, transparent flat glass of mirror quality (Type I, Class 1, quality q2), silvered with nitrate-of-silver, electro-plated with copper to completely seal silver from contact with air, painted with black hard composition paint. Grind and polish exposed edges.
2. Ledge Molding: Extruded anodized aluminum J-molding with 1/2" short and 1" long legs.

## 2.2 FACTORY FABRICATION OF GLASS:

- A. General:
  - 1. Factory fabricate to exact sizes required for each opening for all tempered glass.
  - 2. Fabricate per Code, FGMA, SIGMA and manufacturer's printed recommendations.
    - a. Provide Code required edge clearances.
    - b. Tinted glass to have clean-cut edges.
- B. Labeling: Label glazing per Title 24, Section 2-5402. Tempered glass to have permanently etched label.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Glazing Stops and Channels: Check for irregularities, debris, proper grip on glazing, projections into required edge clearance spaces for glazing.
- B. Glazing: Check for edge damage, face imperfections, proper size of factory fabricated items.
- C. Do not start work until unsatisfactory conditions are corrected.

### 3.2 PREPARATION:

- A. Measurements for Field Fabrication:
  - 1. Measure size of frame to receive glazing.
  - 2. Compute actual glazing size, allowing for edge clearance.
- B. Preparation of Surfaces:
  - 1. Remove protective coatings from surfaces, frames, and items to be glazed.
  - 2. Clean glazing and surfaces to be glazed, to remove dust, oil and contaminants, and wipe dry.

### 3.3 3.03 FIELD FABRICATION:

- A. General:
  - 1. Do not field alter any tempered glass.
  - 2. Fabricate to same requirements as Paragraph 2.02, Factory Fabrication of Glass.

### 3.4 INSTALLATION:

- A. General:
  - 1. Conform to Code, FGMA, SIGMA, and manufacturer's printed recommendations.
  - 2. Install safety glazing in locations shown, and where required by Title 24, Section 2-5406.
  - 3. Stops:
    - a. Typically, locate the removable stop on the exterior face.

- b. At building exteriors, set stop in a sealant bead to provide a weather tight seal.
  - B. At wood frames and stops and steel frames and stops, install glass with glazing compound, typically.
  - C. Steel Glazing Stops at Fire-Rated Openings: Secure stops at head and sill on exterior side of glazing to be installed. Apply glazing tape to inside faces of stops and plaster beads, install glazing, secure inside stops, and apply glazing compound.
  - D. Aluminum Glazing Stops With Roll-in Beads: Snap-in or secure stops, center glazing, roll-in beads, butt joints tightly.
  - E. Oversized Mirrors: Secure ledge molding level above back splash. Apply adhesive evenly, set mirror into molding and securely adhere to wall.
  - F. Securely anchor stops and clips.
  - G. Entire installation to be watertight.
  - H. Promptly remove compound and sealant smears, and any excess from joints.
- 3.5 ADJUSTMENT AND CLEANING:
- A. Adjustment: Replace defective or damaged work. Seal leaks.

END OF SECTION

SECTION 091300 | ACOUSTICAL TILE SUSPENSION SYSTEM  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Metal suspension systems for:
    - a. Acoustic tile ceilings.
- B. Related Work Specified Elsewhere:
  - 1. Rough Carpentry: Division 06.
  - 2. Gypsum Board: Division 09.
  - 3. Acoustical Treatment: Division 09.

1.3 SUBSTITUTIONS:

- A. Only written approval of the District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

1.4 QUALITY ASSURANCE:

- A. Design Criteria: Suspension system to limit deflection of finished ceiling to 1/360 of span or less.
- B. Allowable Tolerance: 1/8" maximum permissible variation from true plane measured from 10' straight edge placed on finished ceiling surface.
- C. Requirements of Regulatory Agencies:
  - 1. Conform to CCR Titles 19, 21, 24, and CBC, Chapter 8, Section 808.
  - 2. Structural: Per Title 24, Table 2-23-J Part B in particular with all integrated ceiling assemblies being designed brace systems as a minimum standard; and any additional requirements specified herein or shown.
- D. Allowable Tolerance: 1/8" maximum permissible variation from true plane measured from 10' straight edge placed on finished ceiling surface.
- E. Job Mock-Up:
  - 1. General: Erect in building a "Sample Area", in District designated location; revise as required; obtain the District approval, prior to doing any finished work.
  - 2. Sample Size: 8' x 8' minimum.
  - 3. Sample to Include: Wires, grid, wall angle, typical grid connections and splices, acoustic panels, lights, air supply and return grilles.

4. Finished work to match approved "Sample Area".

F. Reference Standards; Acoustical Materials:

1. Acoustical and Insulating Materials Association (AIMA) Bulletin "Performance Data for Architectural Acoustic Materials".
2. Federal Specifications SS-S-118A, Sound Control Blocks and Board (Acoustical Tiles and Panels, Prefabricated).

1.5 SUBMITTALS:

A. Samples; In Duplicate:

1. Lay-in panels, 12" x 12" minimum size.
2. Suspension Grid System: Assembled sample to show all typical members, connections, splices, and wall angle; and colors.

B. Shop Drawings:

1. Submit for all work; reference to detail numbers; four copies.
2. Show complete drawing layouts and installation details for all this work, accurately to scale.
3. Show related work of other Sections which is installed in, attached to, or penetrates ceiling areas, such as: air distribution devices, electrical devices, and fire sprinklers.

C. Product Data: Submit catalog cuts or manufacturer's printed literature; four copies.

1. Printed data for all suspension grid system components, including load tests.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING:

A. Delivery: Deliver all materials to site in original sealed packages; manufacturer, brand, and product clearly identified thereon.

B. Storage: Store materials in building area where they will be installed, in original packaging. Keep clean and free from damage due to water or deteriorating elements.

C. Handle so as to prevent damage during storage and installation.

1.7 JOB CONDITIONS:

A. Environmental Requirements: Maintain temperature in spaces at 55° F or above for 24 hours before and after, and all during application of materials.

B. Sequencing, Scheduling:

1. Before concealing work of other Sections, ascertain that required inspections of such work have been made.
2. Coordinate with related work of other Sections. Coordinate location and symmetrical placement of air distribution devices, electrical devices, fire sprinklers, and all penetrations with appropriate Section.

## 1.8 GUARANTEE:

- A. General: Two year guarantee for all work. Refer to Specifications Section 01700, Contract Close-out.

## PART 2 - PRODUCTS

### 2.1 MATERIALS; WIRE:

- A. General: Galvanized, soft-annealed steel wire; Federal Specifications QQ-W461, Class 1; US wire gauges; gauges where shown.
- B. Hanger Wire; 12 gauge wire minimum for maximum supported areas for 25 SF, heavier gauges where shown.
- C. Bracing Wire: 12 gauge wire minimum, heavier gauges where shown.

### 2.2 MATERIALS; SUSPENSION GRID:

- A. Acceptable Manufacturers and Products:
  - 1. Chicago Metallic Corp., Los Angeles, CA; as a standard of quality or Donn Ceiling Systems, Type DX by USG Inc.
  - 2. Other Manufacturers: Refer to Paragraph 1.03A.
- B. Standards: Grid and connections per Section 3, ASTM C635-69, Intermediate Duty 12 lbs. deflection 1/360 of span in 4'.
- C. Grid System:
  - 1. Type: 1800 System Exposed Steel Grid System, by Chicago Metallic Ceilings, modified as required.
  - 2. Grid Members, Suspended Acoustical Lay-in Ceiling:
    - a. Main Runners: No. 1811, 1 1/2" high x 15/16" wide, .015 thickness metal.
    - b. Cross-Tees: Same as cross-tees; No. 1802 and No. 1814, 1 1/2" high, x 15/16" wide, .015 thickness metal.
    - c. Sub-Tees: Same as Cross-tees: No. 1802.
    - d. Wall Moldings: No. 1409, 3/4" x 15/16", .020" thickness metal.
    - e. Finish: Baked vinyl enamel finish coats, factory applied to cleaned and boulderized members, matte finish typical.
      - 1) Color: White for all members.

### 2.3 MATERIALS; MISCELLANEOUS AND ACCESSORIES:

- A. Screws:
  - 1. Standards; UBC Standard 47-5 (which is based on ASTM C646).
  - 2. Type: Self-drilling, self-tapping, bugle head, No. 6; Type S to metal framing. Lengths to penetrate through metal and 1/4" minimum projection beyond.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Examine framing and other work, which supports or abuts integrated and luminous ceiling areas.
- B. Examine location and placement of air distribution devices, electrical devices fire sprinklers, and all other penetrations for proper alignment with required layouts.
- C. Do not start work until unsatisfactory conditions are corrected.

### 3.2 PREPARATION:

- A. Layout: Accurately lay out about center line of spaces, unless indicated otherwise, true to line and level, modularly spaced, penetrations aligned and regularly spaced.

### 3.3 INSTALLATION; ACOUSTICAL TILE SUSPENSION GRID SYSTEM:

- A. General:
  - 1. System to be complete; all joints neatly and tightly joined and securely fastened; grid members hung in a true, flat, level plane.
  - 2. Hanger Wires: No. 12 typically, larger sizes as indicated.
    - a. Wires exceeding 1:6 out of plumb shall be braced with counter sloping wires.
    - b. Keep wires 6" minimum clear of unbraced ducts, pipes and other items.
    - c. Install wire within 3" of ends of all main runners and cross-tees at ceiling perimeters.
    - d. Where obstructions prevent direct suspension, provide approved trapezes or equivalent devices; 1 1/2" minimum cold rolled channels back to back may be used for spans to 6' maximum.
    - e. Wire to be straight, without extraneous kinks or bends.
  - 3. Bracing wires to resist seismic forces: No. 12 typically, larger sizes as indicated.
    - a. Systems for bracing ceiling which do not support demountable partitions; Install one four-wire set of sway-bracing wires for each 144 SF maximum of ceiling area. Locate wire sets at 12' maximum on center. At ceiling perimeters, wire sets must be within 6' of walls.
    - b. Locate four-wire sets within 2" of cross runner intersection with main runner; space wires 90° from each other.
    - c. Do not install sway bracing wires at an angle greater than 45° with the ceiling plane.
    - d. Wires to be taut without causing ceiling to lift.
  - 4. Provide all additional wires, No. 12 minimum, necessary to properly support grid at electrical devices, air distribution devices, vertical soffits, and other concentrated loads.
  - 5. Grid:
    - a. Grid members may be attached to two adjacent walls; but must be 1/2" minimum clear of other walls.
    - b. Any grid members not attached to walls shall be interconnected to prevent spreading, near their free end, with a horizontal metal strut or 16 gauge taut tie wire.



- c. Provide additional tees or sub-tees to frame openings for lights, air distribution devices, electrical devices, and other items penetrating through ceiling, which do not have an integral flange to support and conceal cut edges of acoustic panels. Provide cross-bracing necessary to securely support any surface mounted fixtures or other items.
- 6. Attachment of wires:
  - a. To wood joist or framing members: As indicated.
  - b. To grid member: Insert through holes in members or supporting clips.
  - c. All wires to be fastened with tight turns; three tight turns minimum for hanger wires; four tight turns minimum for bracing wires. All turns to be made in a 1 1/2" maximum distance.
- B. Grid System for Suspended Acoustical Ceiling Areas:
  - 1. Main Runners: Space No. 1811 main runners in pairs 12" on center maximum along runners, and within 8" of ends.
  - 2. Install No. 1409 wall moldings.
  - 3. Cross-Tees: Install between main runners in a repetitive pattern of 1' and 2' spacings as shown.
  - 4. Sub-Tees: Install No. 1802 at edges of all penetrations, per Paragraph A5c.
  - 5. Bracing Wires: Install as specified in Subparagraph 3.03, A3a for Systems for Bracing Ceilings Which do not Support Demountable Partitions.
  - 6. Color: White for all members.

#### 3.4 ADJUSTMENT:

- A. Check for level, adjust, complete all connections and panel clips.
- B. Cleaning: Clean soiled spots from acoustic panels and all work.
- C. Replace damaged work.

END OF SECTION

SECTION 092200 | PORTLAND CEMENT PLASTER  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Exterior Cement Plaster:
    - a. On horizontal surfaces.
    - b. On vertical surfaces.
    - c. Integral color plaster, in certain exterior areas.
  - 2. Scratch coat plaster backing for tile.
- B. Related Work Specified Elsewhere:
  - 1. Metal Lath: Division 09.
  - 2. Tile: Division 09.
  - 3. Painting: Division 09.

1.3 SUBSTITUTIONS:

- A. Only written approval of the District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

1.4 QUALITY ASSURANCE:

- A. Requirements of Regulatory Agencies: Conform to CCR Titles 19, 21 and 24, and UBC.
- B. Allowable Tolerance: 1/8" maximum permissible variation from true plane measured from 10' straight edge placed at any location on finished surface.
- C. Job Mock-Ups:
  - 1. General: Construct sample area of each plaster finish, showing color, texture, and workmanship; revise as required; obtain the District's approval, prior to doing any finished work.
  - 2. Finished work to match approved samples.
- D. Reference Standards: Lathing and Plastering Reference Specifications by California Lathing and Plastering Contractor's Association, Inc. (CLPCA).

## 1.5 SUBMITTALS:

- A. Samples (in duplicate): Integral color coat plaster.

## 1.6 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver all manufactured materials in original packages and containers, with seals unbroken, bearing manufacturer's name and brand.
- B. Protect materials from dampness or wetting; store off floor.

## 1.7 JOB CONDITIONS:

- A. Environmental Requirements:
  - 1. Cold Weather:
    - a. Exterior: Do not apply plaster when ambient temperature is below 40° F or to surfaces containing frost.
    - b. Interior: Maintain temperatures in spaces at a uniform temperature of 50° F or above for 48 hours before application, all during application, and until plaster is dry.
  - 2. Hot Weather: Protect from uneven excessive evaporation during hot, dry, or windy weather.
  - 3. Ventilation: As necessary to remove excess moisture and aid drying.
- B. Protection: Protect work of other trades with plastic film or other effective shields.
- C. Sequencing, Scheduling:
  - 1. Do not start interior work until roof coverings are in place.
  - 2. Before concealing work of other Sections, ascertain that required inspections of such work have been made.
  - 3. Coordinate this work with metal lathing and related work of other sections.

# PART 2 - PRODUCTS

## 2.1 MATERIALS; GENERAL:

- A. Standards: Conform to UBC Standards and CLPCA Specifications.

## 2.2 BASIC PLASTER MATERIALS:

- A. Cement:
  - 1. Portland Cement: Type 1 or 11; per UBC Standard 26-1 (which is based on ASTM C150).
  - 2. Plastic Portland Cement: Same as Paragraph 1, except for limitations on insoluble residue, air entrainment, and additions subsequent to calcination; with plasticizers added during manufacture, not to exceed 12% by volume.
- B. Water: Clean, fresh, free of injurious amounts of minerals, organic substances, salts, acids or alkali.

C. Sand:

1. General: Per UBC Standard 24-21 (which is based ASTM C144), except gradation to be as stated herein; well graded from coarse to fine.
2. Sand for Exterior Cement Plaster; typical:

| <u>Sieve Size</u> | <u>Percentage Retained on Sieve (by weight)</u> |                |
|-------------------|-------------------------------------------------|----------------|
|                   | <u>Minimum</u>                                  | <u>Maximum</u> |
| No. 4             | 0                                               | 0              |
| No. 8             | 0                                               | 10             |
| No. 16            | 10                                              | 40             |
| No. 30            | 30                                              | 65             |
| No. 50            | 70                                              | 90             |
| No. 100           | 90-95                                           | 100            |

3. Sand for Exterior Cement Plaster Finish Coats; Smooth-Troweled Finish:

| <u>Sieve Size</u> | <u>Percentage Retained on Sieve (by weight)</u> |                |
|-------------------|-------------------------------------------------|----------------|
|                   | <u>Minimum</u>                                  | <u>Maximum</u> |
| No. 30            | 10                                              | 40             |
| No. 50            | 40                                              | 85             |
| No. 100           | 85                                              | 100            |

4. Sand for Interior Cement Plaster; Scratch Coat:

| <u>Sieve Size</u> | <u>Percentage Retained On Sieve (by weight)</u> |                |
|-------------------|-------------------------------------------------|----------------|
|                   | <u>Minimum</u>                                  | <u>Maximum</u> |
| No. 8             | 0                                               | 0              |
| No. 16            | 0                                               | 10             |
| No. 30            | 10                                              | 40             |
| No. 50            | 40                                              | 85             |
| No. 100           | 85                                              | 100            |

## 2.3 MATERIALS; INTEGRAL COLOR EXTERIOR STUCCO FINISH:

- A. Type: Factory mixed, packaged, labeled blend of cement, lime, aggregate, and color.
- B. Standards: Conform to Stucco Manufacturers' Association Specifications and Standards for Manufactured Stucco Finishes, as applicable.
- C. Materials:
  1. Portland Cement, White: Type 1, ASTM C150.
  2. Hydrated Lime: ASTM C206, Type S; or Federal Specifications SS-L-351, Type S.
  3. Sand: Per Paragraph 2.02C.
  4. Color: Pure synthetic mineral-oxide pigment, with dispersal agent.
- D. Acceptable Manufacturers and Products:
  1. La Habra Products, Inc., Exterior Stucco Finishes; as a standard of quality.
  2. Other Manufacturers:
    - a. Highland Stucco and Lime Products, Inc.
    - b. Miracle Stucco Products.
    - c. Bauer Building Products Company.

- E. Color(s): Selected by District from manufacturer's standard color range of light to medium colors plus white.
  - 1. Soffits: One color throughout.
  - 2. Walls: Two colors; Refer Drawings for locations.
  - 3. Canopy Fascia: One color throughout.

## 2.4 MEASURING AND MIXING:

- A. Measuring:
  - 1. Proportion by volume; use suitable calibrated devices.
  - 2. Sand to be loose and damp.
- B. Mix Proportions:
  - 1. Exterior Plaster:
    - a. First (Scratch) Coat: One part plastic cement; 3 1/2 to 4 maximum parts sand.
    - b. Second (Brown) Coat: One part plastic cement; 4 1/2 to 5 maximum parts sand.
    - c. Third (Finish) Coat: One part plastic cement; 2 1/2 to 3 maximum parts sand.
    - d. Third (Finish) Coat: Integral color, factory mixed.
  - 2. Scratch Coat Backing for Tile:
    - a. First (Scratch) Coat: One part plastic cement; 3 1/2 to 4 maximum parts sand.
- C. Equipment: Drum-type mechanical batch mixer for plaster, one sack capacity minimum.
- D. Mixing:
  - 1. General:
    - a. Clean mixer of set or hardened materials before loading a new batch.
    - b. Maintain mixer in continuous operation while adding materials.
    - c. Plasticizers: Do not add plasticizers at job-site when factory-mixed plastic cement is used.
    - d. Factory Prepared Mixes: Mix per manufacturer's printed recommendations.
  - 2. First Stage Mixing:
    - a. Load sand/aggregate, then cement, then water into mixer.
    - b. Mechanically mix two minutes minimum.
  - 3. Second Stage Mixing:
    - a. Lime: Add when specified.
    - b. Color: Add when specified.
    - c. Mechanically mix until thoroughly blended into a uniform mass.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Examine lathing and plaster bases to assure that:
  - 1. Work is to proper dimension, alignment, and levels.

2. Work is free of dust, oil, or other foreign matter, which would affect plaster bonding.

B. Do not start work until unsatisfactory conditions are corrected.

### 3.2 APPLICATION; GENERAL:

A. Codes: Conform to UBC Standards 43 and 47, and CLPCA Standards.

B. Equipment: Maintain in good operating condition, clean of set of hardened plaster materials on working surfaces.

C. General Application:

1. Plaster surfaces to be true to line, level, plumb and square, or as otherwise indicated; full minimum thickness indicated, without excessive thickness.
2. Lay out work to complete an entire surface in one operation; or, if impractical, carry to some logical breaking point or feature.
3. Offset cold joints from preceding coat.
4. Before plaster hardens, roughen surface and remove laitance to provide proper bond and suction for succeeding coat. Where not properly prepared, Contractor shall at his expense, remove laitance by sandblasting or other District approved means.
5. Before applying next coat, evenly dampen previous coat as required to obtain proper uniform suction.
6. Any plaster unused within one hour after initial mixing shall not be used.
7. The Contractor is responsible for determining the most effective procedures for curing and time lapse between application of coats based on climatic and job conditions. Plaster which is excessively cracked or crazed due to improper timing and curing shall not be accepted. Remove and replace unacceptable plaster including plaster base materials, if damaged during removal of defective plaster.

D. First (Scratch) Coat; Typical:

1. Apply with sufficient materials and pressure to force plaster through lath openings, and embed lath.
2. Scratching: Before plaster hardens, scratch evenly, in horizontal direction on vertical surfaces, to provide good mechanical key for next coat.
3. Thickness: Approximately 3/8" (1/2" from backing to crest of scored plaster).

E. Second (Brown) Coat; Typical:

1. Minimum Waiting Period Between Coats: 48 hours.
2. Apply over first coat; double back as required to fill out to proper thickness. Use temporary wire grounds where necessary.
3. Float and rod to a true surface and plane; all corners true, plumb and level, with slightly rounded arises; ready to receive finish coat.
4. Thickness: Approximately 3/8". Total coats one and two: 3/4" minimum.

F. Third (Finish) Coat; Smooth Trowel Finish:

1. Minimum Waiting Period Between Coats: Seven days.
2. Apply in a smooth even coat; fill out to a true even plane.
3. Let stand until hardened sufficiently to work without rubbing off.
4. Moisten surface as required; steel trowel to a smooth even finish, devoid of texture.

5. Thickness: 1/8" minimum total for three coats: 7/8" minimum.
6. Color shall be uniform throughout (integral color).

G. Curing:

1. Scope: Maintain each coat of cement plaster continuously damp for 48 hours minimum after application; including Saturdays, Sundays and holidays.
2. Apply fine fog spray of water; avoid soaking surface; begin as soon as plaster has hardened sufficiently to not be injured.
3. Cure proprietary mixes per manufacturers recommendations.

3.3 APPLICATION; EXTERIOR PLASTER:

- A. General: Conform to Paragraph 3.02.

3.4 APPLICATION; PLASTER BACKING FOR TILE:

- A. Scope: Provide scratch plaster backing for all tile surfacing materials.
- B. Application:
1. General: Conform to Paragraph 3.02 except where indicated otherwise.
  2. First (scratch) coat, typical.

3.5 FIELD QUALITY CONTROL:

- A. Inspection: District to examine each coat, prior to application of next coat.
- B. Do not apply a coat until previous coat has been examined and is properly cured, prepared, and ready to receive next coat.

3.6 ADJUSTMENT AND CLEANING:

- A. Cleaning:
1. Clean surfaces as work progresses.
  2. Remove plaster droppings and stains as soon as possible.
  3. Thoroughly clean exposed finished work.
  4. Leave work clean, and free of droppings, stains, dirt and other defacements.
- B. Correction of Defective Work:
1. General: Work not conforming to Contract requirements shall be removed and replaced; except where patching or other remedial work is specifically permitted by the District. Contractor shall bear all costs of correction of defective work.
    - a. Surface patching materials and methods shall be as approved by District.

3.7 GUARANTEE:

- A. Furnish two-year guarantee against cracking; popping, checking or spalling.

END OF SECTION



SECTION 092500 | GYPSUM BOARD  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Gypsum wallboard.
  - 2. Gypsum wallboard backing for applied materials such as:
    - a. Tackboards.
    - b. Acoustic tile.
    - c. Vinyl wall covering.
    - d. Acoustical fabric.
  - 3. Metal trim for wallboard.
  - 4. Fasteners.
  - 5. Joint treatment, taping, finishing.
  - 6. Accessories.
  - 7. Sound-rated walls.
  - 8. Exterior gypsum sheathing.
  - 9. Sound attenuation blankets.
- B. Related Work Specified Elsewhere:
  - 1. Carpentry: Division 06.
  - 2. Metal Lath: Division 09.
  - 3. Tile Backer Board: Division 09.
  - 4. Acoustical Treatment: Division 09.
  - 5. Painting: Division 09.
  - 6. Tackboards: Division 10.

1.3 SUBSTITUTIONS:

- A. Only written approval of the District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

1.4 QUALITY ASSURANCE:

- A. Requirements of Regulatory Agencies: Conform to CCR Titles 19, 21 and 24 and Uniform Building Codes (UBC).

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver materials in manufacturer's original, unopened protective packaging.

- B. Store inside to keep all products clean and free from damage due to water or other deteriorating elements. Do not store on ground.
- C. Handle so as to prevent damage during storage and installation.

#### 1.6 JOB CONDITIONS:

- A. Environmental Requirements:
  - 1. Cold Weather: Maintain temperature in spaces at 55° F or above for 24 hours before, during, and after wallboard application and joint finishing.
  - 2. Ventilation: As necessary to remove excess moisture and aid drying of joint finishing.
- B. Sequencing, Scheduling:
  - 1. Do not start this work until roof coverings are in place.
  - 2. Before concealing work of other Sections, ascertain that required inspections of such work have been made.
  - 3. Coordinate this work with related work of other Sections. Make cutouts to suit work of other Sections.

### PART 2 - PRODUCTS

#### 2.1 ACCEPTABLE MANUFACTURERS AND PRODUCTS:

- A. United State Gypsum (USG) as a standard of quality, except as noted otherwise.
- B. Other Manufacturers: Flintkote Company, Georgia Pacific, Gold Bond.

#### 2.2 MATERIALS:

- A. Gypsum Wallboard:
  - 1. Standards; Typical Board:
    - a. UBC Standard 47-11, Type X, (based on ASTM C36).
    - b. Water-resistant Board: UBC Standard 47-14 (based on ASTM C630).
  - 2. General:
    - a. Interior Walls and Ceilings: 5/8" thick, Type X, fire-retardant, USG Fire Code.
    - b. Interior Walls and Ceilings: Exposed and concealed in high moisture areas including, but not limited to, kitchen, janitorial rooms, toilets, locker room and similar areas. 5/8" thick, Type X, water-resistant.
    - c. Exterior Sheathing: 1/2" fire-resistant, water repellent gypsum core encased in treated water repellent paper.
- B. Joint Treatment and Sand Sealant:
  - 1. Standards Tape and Joint Compound: UBC Standard 47-6 (based on ASTM C475).
  - 2. General: Per wallboard manufacturer's recommendations for the particular use.
  - 3. Sound Sealant: USG Acoustical Sealant.
- C. Metal Trim:
  - 1. Typical Edge Trim: USG No. 200-B, galvanized.

2. Typical Corner Trim: USG No. 103 Dur-A-Bead, 1 1/4" x 1 1/4"; for all outside corners.
  3. Aluminum Trim; Where Indicated: Fry Reglet Corp., reveal molding, F shaped; extruded aluminum, 6063-T5 alloy, .050" thick; black color baked-on paint finish.
- D. Fasteners:
1. General: Conform to UBC Tables in Chapters 43 and 47, sizes and lengths as required for the particular application, and penetration into support.
  2. Standards:
    - a. Nails: ASTM C514; ASTM C380 Type GWB-54 for annular-ring.
    - b. Screws: UBC Standard 47-5 (which is based on ASTM C646).
  3. Nail Sizes for 5/8" Wallboard: Annular-Ring, .098" diameter, 1 3/8" long or 13 gauge, 19/64 head, 1 5/8" long, or Cooler Nail, 6d, .092" diameter, 1/4" head, 1 7/8" long.
  4. Nail Sizes for 1/2" Wallboard: Annular-Ring, .098" diameter, 1 1/4" long or 13 gauge, 19/64 head, 1 3/8" long, or Cooler Nail, 5d, .086" diameter, 15/64" head, 1 5/8" long.
  5. Screw Sizes: Self-drilling, self-tapping, bugle head, No. 6, type W to wood, Type S to metal framing, Type G for wallboard to wallboard. Lengths to penetrate 5/8" minimum into wood, penetrate through metal and project 1/4" minimum beyond.
  6. Sizes for Other Thicknesses and Conditions: Per Code, as required.
- E. Sound Attenuation Blankets:
1. 3" semi-rigid mineral-fiber mat, noncombustible, thermafiber sound attenuation blankets.
- F. Control Joints:
1. USG No. 093 control joint for interior walls and ceilings.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Examine framing and other work, which supports or abuts wallboard.
- B. Do not start work until unsatisfactory conditions are corrected.

### 3.2 APPLICATION GENERAL:

- A. Codes: Conform to UBC.
- B. Follow wallboard manufacturer's printed installation recommendations, except that Code requirements shall have precedence.

### 3.3 TYPICAL APPLICATION SINGLE-LAYER SYSTEM (ONE-HOUR RATED WALLS AND CEILINGS):

- A. General:
  1. Conform to UBC Tables in Chapters 43 and 47.
  2. Use maximum practical lengths.

3. Apply long edges perpendicular to supports, ends to occur over supports stagger panel and joints, offset end joints on opposite faces of walls.
4. Butt boards for moderate contact, without forcing.
5. Apply boards to ceilings first, then walls.
6. Attachment to metal framing: Type S self drilling, self tapping screws, 9" on center bugle heads at edges, 12" on center in field.
7. Metal Trim: Use three separate applications of compound, feather each coat past previous coat, third coat to provide smooth uniform finish.
8. Sanding: Sand lightly as necessary to remove projections and provide smooth even joints.

#### 3.4 INSTALLATION, ACCESSORIES:

- A. Access Doors: Securely anchor to framing.

#### 3.5 APPLICATION DOUBLE-LAYER SYSTEM (TWO-HOUR RATED WALLS AND CEILINGS):

- A. General: Conform to CBC Tables in Chapter 7; Sizes and lengths of screws as required for particular application and penetration into support.
- B. Standards:
  1. Screws; CBC Table 2508.1 (which is based on ASTM C954).
- C. Application: Similar to Paragraph 3.03, Single Layer Application, except as noted.
- D. Wallboard Type for Both Layers: 5/8" thick fire-rated board per Paragraph 2.02A.
- E. Base Layer: To metal framing; Type S, self-drilling, self-tapping, bugle head, lengths to penetrate through metal and project 1/4" minimum beyond.
- F. Face Layer:
  1. Apply board parallel or perpendicular to base layer, offset joints between layers.
  2. To Metal Framing: Same as base layer.

#### 3.6 APPLICATION; WATER-RESISTANT GYPSUM BOARD:

- A. General: Conform to CBC Section 2509.2.
- B. Wallboard Type: 5/8" thick fire-rated water resistant gypsum ceiling board, per Paragraph 2.02, A.
- C. Application: Similar to Paragraph 3.03, Single Layer Application, except as noted herein.
  1. Joints:
    - a. Material: Durabond joint compound.
    - b. Do not over-mix, do not use in temperatures below 45° F.
    - c. Pre-Fill: Fill joints flush between boards, wipe off any excess compound, allow to harden.
    - d. Finish joint with tape and Durabond compound in a manner similar to typical installation.

### 3.7 APPLICATION; EXTERIOR GYPSUM SHEATHING:

- A. General: Conform to provisions in CBC Chapter 25.
- B. Sheathing Board: 1/2" thick fire-resistant gypsum board sheathing, per Paragraph 2.02A.
- C. Application: Similar to Paragraph 3.03, Single Layer Application.

### 3.8 APPLICATION SOUND-RATED WALLS:

- A. General: Construct wall per requirements of Paragraphs 3.01 through 3.07.
- B. Sound Sealant: In addition: Seal airtight with sealant all penetrations through wall surface, and entire perimeter of wall at its juncture with the floor, other walls, and roof construction, and all other cracks or openings.
- C. Sound Attenuation Blankets: Install in partition cavity full height from floor to structure.

### 3.9 APPLICATION CONTROL JOINTS:

- A. Where interior partition or furring run exceeds 30 linear feet in length, install control joint or as indicated on the Drawings.

### 3.10 ADJUSTMENT AND CLEANING:

- A. Adjustment:
  - 1. Nail Pop: Drive new nail 1 1/2" from existing nail, and reseal nail.
  - 2. Face Paper Punctures At Fasteners: Drive new fastener 1 1/2" from existing remove defective fastener.
  - 3. Surface Damage: Fill finish flush with compound.
- B. Clean-Up: Remove debris, excess material and equipment; clean droppings from adjacent materials and surfaces.

END OF SECTION

## SECTION 095123 - ACOUSTICAL TILE CEILINGS (Direct Attachment)

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Acoustical tiles for interior ceilings.
  - 2. Direct attachment of tiles to substrates with adhesive.

- B. Related Requirements:

- 1. Section 095113 "Acoustical Panel Ceilings" for ceilings consisting of mineral-base and glass-fiber-base acoustical panels and exposed suspension systems.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- B. Samples: For each exposed product and for each color and texture specified, 6 inches in size.

- C. Samples for Verification: For each component indicated and for each exposed finish required, prepared on Samples of sizes indicated below:

- 1. Acoustical Tiles: Set of full-size Samples of each type, color, pattern, and texture.

#### 1.4 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For finishes to include in maintenance manuals.

#### 1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

- 1. Acoustical Ceiling Units: 1 box of full-size tiles.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustical tiles, suspension-system components, and accessories to Project site and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.

- B. Before installing acoustical tiles, permit them to reach room temperature and a stabilized moisture content.

## 1.7 FIELD CONDITIONS

- A. Environmental Limitations: Do not install acoustical tile ceilings until spaces are enclosed and weathertight, wet-work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Source Limitations:
  - 1. Directly Attached Acoustical Tile Ceilings: Obtain each type of acoustical ceiling tile from single source from single manufacturer.

### 2.2 PERFORMANCE REQUIREMENTS

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Flame-Spread Index: Class B according to ASTM E 1264.
  - 2. Smoke-Developed Index: 50 or less.

### 2.3 ACOUSTICAL TILES ATC-1

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Armstrong World Industries, Inc 741 Fine Fissured Medium Textured Tile or comparable product by one of the following:
  - 1. American Gypsum.
  - 2. CertainTeed Corporation.
  - 3. Chicago Metallic Corporation
- B. Acoustical Tile Standard: Provide manufacturer's standard tiles of configuration indicated that comply with ASTM E 1264 classifications as designated by type, form, pattern, acoustical rating, and light reflectance unless otherwise indicated.
- C. Classification: Provide tiles as follows:
  - 1. Type and Form: Type III, mineral base with painted finish; Form 2, water felted.
  - 2. Pattern: CE (perforated, small holes and lightly textured).
- D. Color: White.
- E. Light Reflectance (LR): Not less than 0.85.
- F. Noise Reduction Coefficient (NRC): Not less than 0.55.
- G. Edge/Joint Detail: Tongue and groove.
- H. Thickness: 5/8 inch.
- I. Modular Size: 12 by 12 inches.

- J. Antimicrobial Treatment: Manufacturer's standard broad spectrum, antimicrobial formulation that inhibits fungus, mold, mildew, and gram-positive and gram-negative bacteria and showing no mold, mildew, or bacterial growth when tested according to ASTM D 3273, ASTM D 3274, or ASTM G 21 and evaluated according to ASTM D 3274 or ASTM G 21.

## 2.4 MISCELLANEOUS MATERIALS

- A. Acoustical Tile Adhesive: Type recommended in writing by acoustical tile manufacturer, bearing UL label for Class 0-25 flame spread.
- B. Staples: 5/16-inch-long, divergent-point staples.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, including structural framing and substrates to which acoustical tile ceilings attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage and for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Examine acoustical tiles before installation. Reject acoustical tiles that are wet, moisture damaged, or mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Measure each ceiling area and establish layout of acoustical tiles to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width tiles at borders unless otherwise indicated, and comply with layout shown on reflected ceiling plans.
- B. Layout openings for penetrations centered on the penetrating items.

### 3.3 INSTALLATION OF DIRECTLY ATTACHED ACOUSTICAL TILE CEILINGS

- A. Adhesive Installation: Install acoustical tile by bonding to substrate, using acoustical tile adhesive and procedure recommended in writing by tile manufacturer and as follows:
  - 1. Wipe and prime ceiling.
  - 2. Remove loose dust from backs of tiles by brushing.
  - 3. Install splines in joints between tiles and maintain bottom surface to a uniform level. Shim tile or correct substrate as required to maintain levelness.
  - 4. Maintain tight butt joints, aligned in both directions and coordinated with ceiling fixtures.
- B. Install edge moldings and trim of type indicated at perimeter of acoustical tile ceiling area and where necessary to conceal edges of acoustical units.

### 3.4 ERECTION TOLERANCES

- A. Directly Attached Ceilings: Install bottom surface of tiles to a tolerance of 1/8 inch in 12 feet and not exceeding 1/4 inch cumulatively.



### 3.5 ADJUSTING

- A. Clean exposed surfaces of acoustical tile ceilings, including trim and edge moldings. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage.
- B. Remove and replace tiles and other ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION

SECTION 096500 | RESILIENT FLOOR COVERINGS  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.
- B. American Society for Testing and Materials
  - 1. ASTM F 1066 Standard specification for vinyl composition floor tile.
  - 2. ASTM D 2047 Static coefficient of friction.
  - 3. ASTM F 970 Static load limit.
  - 4. ASTM E 648-97/NFPA 253 *Critical Radiant Flux*.
  - 5. ASTM E 662 Smoke Generation.
  - 6. ASTM F 710 Preparation for installation of Resilient flooring concrete subfloors.
  - 7. ASTM F 1482 Preparation for installation of Resilient flooring wood subfloors.
  - 8. ASTM F 1869, Standard test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
  - 9. ASTM F 2170, Standard Test Method for Determining Relative Humidity in *Concrete Floor Slabs Using In Situ Probes*.
  - 10. ISO 9001:2000 Certification
  - 11. ISO 14001:2004 Certification

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. High Performance Vinyl Quartz Tile and Sheet Vinyl Flooring, Stair Treads and Risers.
  - 2. Resilient base.
    - a. At resilient flooring.
    - b. At carpet flooring.
    - c. At fixed casework.
  - 3. Adhesives and primers.
  - 4. Accessories.
- B. Related Work Specified elsewhere:
  - 1. Division 03, Cast in Place Concrete
  - 2. Division 06, Rough Carpentry, Plywood Subflooring and Underlayment.
  - 3. Division 07, Vapor Retarders, Moisture Remediation.
  - 4. Carpeting: Division 09.

1.3 SUBSTITUTIONS:

- A. Only written approval of F.U.S.D. will permit substitutions for materials specified.

#### 1.4 SUBMITTALS:

- A. Product Data: Submit 3 copies of manufacturer's product data and installation instructions for each type of resilient flooring and accessories as proof of specification compliance.
- B. Shop Drawings: Seaming Diagrams as required.
- C. Samples: Submit 3 sets of samples of each type, color and finish of resilient flooring and accessory required, indication full range of color and pattern variation as proof of specification compliance.
- D. Closeout Submittals: Submit 3 copies of the following:
  - 1. Maintenance and Operations data includes—methods for maintaining installed products, and precautions against cleaning materials and methods detrimental to finishes and performance.
  - 2. Warranty: Warranty documents specified herein.
- E. Flame Spread Certification: Submit manufacturer's certification that resilient flooring furnished for areas indicated to comply with required flame spread rating has been tested and meets or exceeds indicated standard.

#### 1.5 QUALITY ASSURANCE:

- A. Manufacturer: Whenever possible, provide each type of resilient flooring and accessories as provided by a single manufacturer, including recommended primers, adhesives, sealants, finish accessories, and leveling compounds.
- B. Flooring Contractor Qualifications:
  - 1. The Awarded Contractor shall be an established firm, experienced in the installation of the specified product and shall have access to all manufacturer's required technical, maintenance, specifications, and related documents.
  - 2. The Flooring Contractor shall have completed at least three projects of similar magnitude, material and complexity, and must provide project reference details including contact names and telephone numbers.
- C. Installer Qualifications: Installer experienced in performing work of this section who is specialized in installation of work similar to that required for this project.
- D. Standard of Quality: For the purpose of evaluating the quality of workmanship, a mock up installation of the specified floor covering shall be provided by the flooring contractor in an area designated by the Architect as per Section 01450. Upon approval, this test installation shall then be considered the standard of quality and basis of comparison for the balance of the project. The mock up area can then be incorporated into the finished project upon approval. Areas found to be deficient by specification standards or application procedures shall be repaired/replaced at contractor's expense.

#### 1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING:

- A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

- B. Storage and Protection: Store materials protected from exposure to harmful weather conditions and at a temperature and humidity conditions recommended by manufacturer.
  - 1. Move resilient flooring and installation accessories into spaces where they will be installed at least 48 hours before installation, unless longer conditioning periods are recommended in writing by the manufacturer.

## 1.7 PROJECT CONDITIONS:

- A. Substrate Conditions: Use the method described below to determine the dryness as required to ensure initial and long-term success.
  - 1. F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride:
    - a. This test method covers the quantitative determination of the rate of moisture vapor emitted from below-grade, on-grade, and above-grade (suspended) concrete floors.
    - b. Conduct one calcium chloride test for every 1,000 square feet (minimum 3 tests) to ensure concrete moisture emissions do not exceed 3 -5 lbs per 1,000 square feet within a 24-hour period.
  - 2. F2170 Standard Test Method for Determining Relative Humidity in Concrete Slab Using in situ Probes:
    - a. This test method covers the quantitative determination of percent relative humidity in concrete slabs for field or laboratory test.
    - b. Conduct one test for every 1,000 square feet (minimum 3 tests) to ensure concrete does not exceed 85% internal relative humidity.
  - 3. Alkalinity Testing: ASTM F710 Maximum pH of 9.9.
- B. The General Contractor shall be responsible for insuring independent inspection of items 1, 2 and 3 above. The Contractor shall verify in writing to the Owner and Subcontractor, a minimum of thirty (30) days prior to scheduled resilient flooring installation, the following substrate conditions: Reference Section 01450
- C. Contingency for High Moisture Readings: If at the time of testing the moisture readings are in excess of manufacturer's recommendations the Contractor will initiate testing using petrographic core analysis to determine if the Water Cement Ratio and sufficient hydration has taken place. If the Specifications were not followed in their entirety, water/cement ratio (as specified), and or the concrete surface has been inadequately hydrated the Contractor responsible for the placement of the cement shall be responsible for the costs associated with the petrographic analysis and subsequent remediation requirements.
- D. Moisture Remediation: Basic Steps as follows:
  - 1. Removal of all floor coverings, adhesive residue, curing compounds, parting compounds or other surface contaminants by mechanical means (shot-blasting, or other suitable method).
  - 2. Identification and treatment of all cracks and joints, by the sealer manufacturer's approved methods.
  - 3. Application of the sealer (Must be a product designed and warranted for the purpose of controlling excessive concrete moisture vapor emission and the alkali it may carry).
  - 4. Application of a sacrificial cementitious topping to act as a substrate for the installation of resilient floor coverings.

- E. Environmental Requirements/Conditions: In accordance with manufacturer's recommendations. Areas to receive flooring shall be clean, fully enclosed, weather tight with the permanent HVAC set at a uniform temperature of at least 68 degrees F (20 degrees C) 72 hours prior to and during and for not less than 48 hours after installation. The flooring material should be conditioned in the same manner.
- F. Close spaces to traffic during resilient flooring installation and for time period after installation recommended in writing by the manufacturer.
- G. Install resilient flooring material and accessories after other finishing operations, including painting, have been completed.
- H. Where demountable partitions and other items are indicated for installation on top of sheet resilient flooring material, install flooring material before these items are to be installed.

#### 1.8 WARRANTY:

- A. Manufacturer's Warranty: Submit manufacturers standard warranty document.
  - 1. Warranty Period: Fifteen (15) year limited warranty commencing on date of substantial completion.

#### 1.9 MAINTENANCE:

- A. A.Extra Materials: Deliver to owner extra materials from same production run as Products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 1 closeout submittals (maintenance materials) section.
  - 1. Quantity: Furnish quantity of flooring units equal to 5% of amount installed.
  - 2. Delivery, storage and protection: comply with owner's requirements for delivery, storage and protection of extra materials.
- B. Maintenance of finished flooring to be conducted per Manufacturer's maintenance guide.

### PART 2 - PRODUCTS

#### 2.1 MATERIALS:

- A. Colors and Patterns: Reference color schedule.
- B. Certification Upon request by Architect, Flooring manufacturing to provide independent testing labs verification of all applicable test results.

#### 2.2 VINYL QUARTZ TILE:

- A. Acceptable Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include but are not limited to, the following:

1. Meets requirements per ASTM F1066-95A.
2. Size: 2.5mm x 61cm x 61cm
3. Construction: Altro Quartz is a homogeneous constructed product sliced from a pressed vinyl quartz block.
4. Content: Minimum 67% quartz crystals, through marbled construction, prefinished with PUR Finish.
5. Flammability exceeds minimum for Class 1 per ASTM E648
6. Less than 450 per ASTM E 662.
7. Static Coefficient of friction meets or exceeds ADA requirement for level surfaces of 0.6 per ASTM D2047.
8. Meets or exceeds static load limit of 2100 psi per ASTM F 970.
9. ISO 9001:2000 Certification
10. ISO 14001:2004

- B. Altro Quartz Tile is a high performance, durable, fully flexible, compressed quartz vinyl tile suitable for heavy duty commercial, industrial and public sector floor covering applications. Typical areas of use include: heavy pedestrian traffic areas, corridors, entryways, entrance halls, elevators, utility and storage areas, factory floors, sales floors, cafeterias and classrooms. Altro Quartz Tile is suitable for areas requiring the use of forklift trucks, pallet trucks and other wheeled traffic. Alternates will be considered provided they meet or exceed the specification criteria contained herein. The Architect shall be the sole determinant of equivalency.

1. Altro Quartz Tile as supplied by:  
Compass Concepts, 2200 East Artesia Blvd.  
Long Beach CA 1-800-543-6033

## 2.3 VINYL SHEET FLOORING:

### A. General

1. Reference: Federal Specifications L-F-475A (3), Type II, Grade A; Military Standard 1623D.
2. Fire Performance: ASTM E662, ASTM E84, ASTM E648.
3. 50 mil wear thickness.
4. Size: 6' wide.
5. Overall Thickness: .085".
6. Minimum Load Limit: 100 lbs/sq. in.

### B. Acceptable Manufacturer and Product:

1. Armstrong Classic Corlon Series. Design elements shall extend throughout the thickness of the wear layer.

### C. Color Selection: Selected by F.U.S.D.

### D. Underlayment: 1/4" (Weyerhaeuser Structureboard or approved equal). Underlayment for resilient floors should be structurally sound and designed for resilient flooring underlayment purposes with a minimum thickness of 1/4". Underlayment must comply with Sheet Vinyl and V.Q.T. Manufacturer's specifications.

## 2.4 RESILIENT BASE:

### A. General:

1. Standards: Per Federal Specifications SS-W-40, Type I or Type II.
2. Rubber, uniform size, thickness.
3. Size: 4" or 6" height typical, other heights as indicated, 48" lengths typical, .080" minimum thickness, pre-formed inside and outside corners.
4. Style: Coved top-set at resilient flooring and sealed concrete.
5. Colors: Commercial and decorator colors as selected by F.U.S.D.

B. Acceptable Manufacturers and Products:

1. Rubber Base: Burke commercial and decorator colors as a standard of quality.
2. Other manufacturers: See Substitutions.

2.5 ADHESIVES, PRIMERS AND FILLERS:

- A. Types and brands as recommended by manufacturer of flooring and base materials.

2.6 TRANSITIONAL AND EDGE MOLDINGS:

- A. Vinyl transitions and edge as manufactured by Mercer Plastics Company.
- B. Color as selected by F.U.S.D.
- C. Other manufacturers: See substitutions.

2.7 ACCESSORIES:

- A. Adhesive: Provide manufacturers recommended adhesive as required by project conditions.
1. Ecofix 25 for porous or non porous substrate with moisture Emissions of 3 lbs. or less.
  2. Altrofix 31 polyurethane adhesive for wet areas, areas of high rolling loads and for substrates with moisture emissions of 5 lbs. or less.
- B. Leveling and Patching Compounds: Portland Cement types as recommended by flooring manufacturer.
- C. Sealants: Use Altromastic to seal around pipes and other adjacent surfaces. Note! Not to be used for sealing seams or drains.

PART 3 - EXECUTION

3.1 INSPECTION:

- A. Installer must examine areas and conditions under which resilient flooring and accessories are to be installed and must notify General Contractor in writing of conditions detrimental to proper and timely completion of work. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Owner and Architect.

- B. General: Examine surfaces to determine suitability to receive flooring. Do not start work until unsatisfactory conditions are corrected.
- C. Moisture Test: Using the flooring material and recommended adhesives, install 3'x3' panels - tape edges to prevent edge drying of adhesive. If the panels are securely bonded after 72 hours, sub-floor is sufficiently dry.
- D. Calcium Chloride Test: A quantitative test such as the calcium chloride test may be conducted. If test fails, the concrete is not sufficiently dry for installation of resilient flooring.

### 3.2 PREPARATION:

- A. Surface Preparation:
  - 1. Concrete floors shall be constructed in accordance with the American Concrete Institute (ACI) 302.1 R-95 Guide for concrete floor and slab construction.
  - 2. Floors must be finished and cured according to ACI with a minimum compressive strength of 3500 psi.
  - 3. Floors must be clean, dry and smooth. Any surface materials, such as paint, wax, grease, oil, adhesive residues, etc. must be removed. Floors must be free of any sealers, curing, hardening or parting compounds that would adversely affect the adhesive used with the flooring. Refer to ASTM F 710 standard practice for preparing concrete floors and other monolithic floors to receive resilient flooring.
  - 4. Where chemical adhesive removers have been used on existing slab floors, residual chemicals must be neutralized with a solution of 2 cups white vinegar per gallon of water using a floor scrubber with brush attachment and vacuumed dry with a wet dry vacuum so as to not reactivate remover chemicals when new adhesive is applied.
  - 5. A moisture barrier shall be installed prior to pouring of on or below grade slabs. Moisture vapor transmission shall not exceed 3 or 5.0lbs. /1,000 sq. ft./24hours, per ASTM F1869 Calcium Chloride Test.
  - 6. Wood floors must be double construction with a minimum thickness of one (1) inch. The top layer of wood shall be APA Underlayment Grade Plywood or other wood underlayment panel approved and warranted beneath resilient flooring. Refer to ASTM F 1482 Standard Guide to Wood underlayment products available for use under resilient flooring.
  - 7. Maintain room temperature, adhesive and flooring material at 68 – 72 Degrees Fahrenheit (18 – 22C) for 72 hours before during and after installation.
  - 8. Broom clean or vacuum surfaces to be covered and inspect subfloor. Start of flooring installation indicates acceptance of subfloor conditions and full responsibility for completed work.
  - 9. Clean sub-floor and wall surface. All floor fill, toppings, or underlayment must comply with resilient flooring manufacturer's specifications.
  - 10. Prime surfaces as recommended by flooring materials manufacturer.
  - 11. Sub-floor should be dry, smooth, structurally sound, free of depressions, scale or foreign deposits of any kind.
  - 12. Floor fill, toppings or underlayment must have minimum compressive Strength of 4,000 PSI.
  - 13. Level sub-floor within 1/4 inch in 10 feet, non-cumulative, in all directions. Sand or grind protrusions, bumps, and ridges. Patch and repair cracks, and rough areas. Fill depressions.



14. Use stair-tread-nose filler, according to resilient tread manufacturer's written instructions, to fill nosing substrates that do not conform to tread contours.

### 3.3 INSTALLATION:

- A. General: Follow manufacturer's printed instructions. Work to be aligned, square, with tight joints, well fitted to walls, cabinets and other work.
- B. Finish Flooring Patterns: As selected by Architect.
- C. Laying Floors:
  1. Spread adhesive evenly with notched trowel according to manufacturer's recommendation.
  2. Install tile only after all finishing operations, including painting, have been completed and permanent heating system is operating. Moisture content of concrete slabs, building air temperature and relative humidity must be within limits recommended by tile manufacturer.
  3. Butt units tightly to vertical surfaces, thresholds, nosing and edgings. Scribe as necessary around obstructions and to produce neat tight joints with even and straight lines.
  4. Extend units into toe spaces, door reveals, and in closets and similar openings.
  5. Maintain reference markers, holes, or openings that are in place or plainly marked for future cutting by repeating on the finish tile as marked in the subfloor. Use chalk or other non-permanent marking device.
  6. Lay tile from center marks established with principle walls, discounting minor off-sets, so that tile at opposite edges of the room are of equal width. Adjust as necessary to avoid use of cut widths less than 3' at room perimeters. Lay tile square to room axis.
  7. Match tiles for color and pattern by using tile from cartons in the same sequence as manufactured and packaged. Broken, cracked, chipped or deformed tile are not acceptable.
  8. Lay tile pattern selected by F.U.S.D.
- D. Resilient Base:
  1. Apply coved top-set base at all resilient floors, after laying tile. Use maximum practicable lengths.
  2. Apply adhesive, firmly adhere base, press down bottom cove of top-set base to permanently contact flooring at all points.
  3. Corners: Use pre-molded inside and outside corners that fit accurately.
- E. Sheet Vinyl Flooring:
  1. Install in strict accordance with manufacturer's written instructions with a minimum of seams by the Armstrong Securabond Installation System with Armstrong S-200 adhesive at the seams.
  2. Installer shall be competent in the Securabond installation technique.
  3. All flash coving must be by the one-piece flash coving method.
  4. All flash coving must be finished to "hard cap".
  5. All heat-welded seams must be in strict compliance with manufacturer's guidelines.
  6. When seam treatments are recommended and require protection until they cure or dry, provide adequate protection and post signs with necessary cautions.

### 3.4 ADJUSTMENT AND CLEANING:

- A. Adjustment: Remove and replace loose, damaged, mismatched, or misaligned work. Remove adhesive smears.

### 3.5 FIELD QUALITY REQUIREMENTS:

- A. Manufacturer's Field Services: Upon Owner and Architects requests, and with sufficient notice, provide manufacturer's field service consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer's instructions.
  - 1. Site Visits: (specify number and duration of periodic site visits.

### 3.6 CLEANING:

- A. Dispose of all containers in a legal manner.
- B. Follow manufacturers written recommendations for cleaning and routine maintenance.

### 3.7 PROTECTION:

- A. Protection: Protect installed product and finish surfaces from damage during construction. Remove and legally dispose of protective covering at time of substantial completion.

END OF SECTION 09650

PART 1 - GENERAL

1.1 SUMMARY:

- A. Section Includes.
  - 1. Sheet Carpet.
- B. Related Documents: Drawings and general provisions of the Contract, including General and Supplementary Conditions, Division 1 Specification Divisions, 09-Resilient Flooring, 09- Carpet Tile, (other applicable sections), apply to this Section.

1.2 SUBMITTALS:

- A. Shop Drawings showing the extent of carpet, seam direction of carpet, and accessories shall be submitted to Architect for approval prior to installation. Check pattern match, if any, for matching during installation and possible waste factors in ordering required amounts. Should also indicate columns, doorways, enclosing walls or partitions, built-in cabinets, and locations where cutouts are required in carpet. Copy of approved shop drawings to be available on job site during installation.
- B. Carpet schedule using same room designations indicated on drawings.
- C. Product Data: Provide data on specified products, describing physical and performance characteristics, sizes, patterns, colors available, and method of installation.
- D. Selection Samples: Submit manufacturer's complete set of color samples for Architect's initial color selection.
- E. Verification Samples: Submit two 18" x 18" samples illustrating color and pattern for each carpet material specified.
- F. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
- G. Maintenance Data: Include maintenance procedures, recommendations for maintenance materials and equipment, and suggested schedule for cleaning.
- H. Manufacturer's carpet Warranty.
- I. Certification and description of reclamation and recycling process per section 1.07 of this document.
- J. Certifications: Manufacturer to submit copies of the following independent laboratory reports showing compliance with requirements per these methods outlined in part 2 of this document. Submitted results shall represent average results for production goods of the specified style.
  - 1. ASTM E-648 Flooring Radiant Panel
  - 2. ASTM E-662: Smoke Density
  - 3. AATCC 134: Electrostatic Propensity

4. CRI TM-102: Fluorine Analysis
5. ASTM D-3936: Delamination
6. AATCC 20: Fiber Analysis
7. Other from methods specified in part 2.

### 1.3 QUALITY ASSURANCE:

#### A. Manufacturer Qualifications.

1. Company specializing in manufacturing specified carpet with minimum 1 year documented experience.
2. Upon request, manufacturer to provide representative to assist in project start-up and to inspect installation while in process and upon completion. Representative will notify designated contact if any installation instructions are not followed.
3. Single Source Responsibility: Obtain each type of carpet from one source and by a single manufacturer.

#### B. Installer Qualifications.

1. Flooring contractor must be certified by the carpet manufacturer prior to bid.
2. Flooring contractor to be a specialty contractor normally engaged in this type of work and shall have prior experience in the installation of these types of materials.
3. Certify payment of Prevailing Wage Rates to the installers.
4. Flooring contractor possessing Contract for the carpet installation shall not sub-contract the labor without written approval of the Project Manager.
5. Flooring contractor will be responsible for proper product installation, including floor testing and preparation, as specified by the carpet manufacturer and JOB CONDITIONS herein.
6. Flooring contractor to provide Owner a written installation warranty that guarantees the completed installation to be free from defects in materials and workmanship for a period of one year after job completion.

### 1.4 DELIVERY, STORAGE & HANDLING:

- A. Deliver materials to the site in manufacturer's original packaging listing manufacturer's name, product name, identification number, and related information.
- B. Store in a dry location, between 60 degrees F and 80 degrees F and a relative humidity below 65%. Protect from damage and soiling. Stack carpet rolls horizontally on a flat surface, stacked no higher than two rolls.
- C. Make stored materials available for inspection by the Owner's representative.
- D. Store materials in area of installation for minimum period of 48 hours prior to installation.

### 1.5 PROJECT CONDITIONS:

- A. Sub-floor preparation is to include all required work to prepare the existing floor for installation of the product as specified in this document and Manufacturer's installation instructions.

- B. The maximum amount of moisture evacuation from the floor is 5.0 pounds per 1,000 square feet in 24 hours. The acceptable pH level of the substrate is between 7.0 and 9.0. Flooring contractor is responsible for floor testing.
- C. All material used in sub-floor preparation and repair shall be recommended by carpet manufacturer and shall be chemically and physically compatible with the carpet system being bid.
- D. Maintain minimum 65 degrees F ambient temperature and 65% Relative Humidity for 72 hour prior to, during, and 48 hours after installation.
- E. Do not install carpet until space is enclosed and weatherproof, wet-work in space is completed and nominally dry, work above ceilings is complete, and ambient temperature and humidity conditions are and will be continuously maintained at values near those indicated for final occupancy.

#### 1.6 EXTRA MATERIALS:

- A. Provide additional 5% of each type, color, and pattern furnished; product to be rolled and bound. Coordinate storage location with owner prior to beginning installation.
- B. Deliver all unused carpet and large scraps to Owner for "attic stock." Dispose of scraps less than 2 square foot in area or less than 8" in width.

#### 1.7 CARPET WARRANTY:

- A. Warranty to be sole source responsibility of the Manufacturer. Second source warranties and warranties that involve parties other than the carpet manufacturer are unacceptable.
- B. If the product fails to perform as warranted when properly installed and maintained, the affected area will be repaired or replaced at the discretion of the manufacturer.
- C. Chair Pads are not required for carpet warranty coverage.
- D. Warranty shall not exclude carpet product installed on stairs provided it is properly installed and maintained.
- E. Warranty shall be for a specifically defined non-prorated period of twenty-five years. "Lifetime" warranties are not acceptable.
- F. The non-prorated twenty-year warranty shall cover against and specifically define the following:
  - 1. Excessive Surface Wear: More than 15% loss of pile fiber weight.
  - 2. Excessive Static Electricity: More than 3.0 kV per AATCC 134.
  - 3. Resiliency Loss of the Backing: More than 10% loss of backing resiliency.
  - 4. Delamination
  - 5. Edge Ravel
  - 6. Zippering
- G. Tuft Bind warranty in lieu of edge ravel and zippering is not acceptable.

- H. Provide certification and warranty that product is fully or partially recyclable through manufacturer's or aligned partner's currently operational recycling program. Include information regarding the following:
1. The recycling process(es) itself (i.e. separation of components, chopping, melting, palletizing, etc.)
  2. Portions of the product that will be recycled back into itself.
    - a. name/type of resulting product
    - b. end-use of resulting product
    - c. total product recycled content based on total product weight
    - d. whether resulting product is recyclable (fully or partially) or non-recyclable
  3. Portions of the product that will be down-cycled.
    - a. name/type of resulting product
    - b. end-use of resulting product
    - c. total product recycled content based on total product weight
    - d. whether resulting product is recyclable (fully or partially) or non-recyclable
  4. Portions of the product is recyclable that will be landfilled and/or incinerated.  
(NOTE: "incineration" includes waste-to-energy conversion, extraction of embodied energy; using heat from incineration as a fuel source.)

## PART 2 - PRODUCTS

### 2.1 FIBER

- A. Nylon Fiber: Solution Dyed, Multi-Colored / Solid / Patterned. Bulk Continuous Filament (BCF) Type 6, 6 Nylon.
- B. Mill-extruded fibers are not allowed.
- C. Durable stain inhibitor should be applied to the fiber during product manufacturing to resist fiber staining and soiling. (Minimum average of three fluorine analyses of a single composite sample per CRI TM-102: 500 ppm.)
- D. Fiber to contain carbon-core filament for permanent static control Topical treatments not allowed.

### 2.2 BACKING CHARACTERISTICS:

- A. Thermoplastic vinyl composite.
- B. Primary Backing: Synthetic Woven or Non-Woven.
- C. Pre-coat (Fusion Coat): Sealant Vinyl
- D. Secondary Backing: Closed-Cell, Vinyl Cushion backing system.
  1. Density (ASTM D – 1667): 18.5 lbs/cu ft +/- 5%
  2. Compression Set (ASTM D – 1667): Max 10%
  3. Compression Deflection (ASTM D – 1667): Min. 7 psi @ 25%; Max. 25 psi @ 25%
  4. Impermeable to moisture and airflow
  5. Provide for a chemically welded seam that is also impermeable to moisture and airflow
  6. 6' Width Roll Goods

- E. Product to be installed with a mill-applied releasable “dry” adhesive system (when/if available from manufacturer) to securely attach product to sub-floor in compliance with ADA guidelines, Section 4.5.3. Free-lay and stretch-in installations not allowed.

## 2.3 PERFORMANCE CHARACTERISTICS:

- A. Test reports for the following performance assurance testing to be submitted upon request. Submitted results shall represent average results for production goods of the referenced style.
- B. Requirements listed below must be met by all products.
  - 1. Flooring Radiant Panel  
ASTM E – 648 / NEPA 253:Class 1 (CRF: 0.45 watts/sq cm or greater)
  - 2. Federal Flammability  
CPSC FF 1-70: Passes
  - 3. Smoke Density  
ASTM E – 662 / NFPA 258: < 450 Flaming Mode
  - 4. Electrostatic Propensity  
AATCC 134 (Step & Scuff): 3.0 kV or less
  - 5. Static Coefficient of Friction  
ASTM C – 1028: Passes ADA Guidelines for Accessible Routes (Minimum 0.60)
  - 6. Delamination of Secondary Backing of Pile Floor Coverings  
ASTM D-3936: Minimum 15 lbs.
  - 7. Lightfastness  
AATCC 16E: > 4 @ 100 hours
  - 8. Vetterman Drum  
ASTM D-5417: Minimum 3 @ 22,000 cycles
  - 9. Moisture Barrier  
Moisture Penetration by Impact @ 10 psi: No Penetration of backing and seam after 10,000 impacts
  - 10. Seam Integrity  
Seam to Remain intact after 50,000 cycles per Phillips Chair Test
  - 11. VOC Chamber Testing  
ASTM D – 5116: Product inclusive of “dry” adhesive system meets criteria established by the State of Washington Indoor Air Quality Specification for Carpet and/or Carpet & Rug Institute’s (CRI) Indoor Air Quality Carpet Testing Program. If “dry” adhesive (2.02e) not available from manufacturer and “wet” adhesive is used to install the product, carpet and adhesive to meet CRI’s Green Label requirements.
  - 12. Other  
As specified in 2.01 and 2.02 of this document.

## 2.4 MANUFACTURING SPECIFICATIONS:

- A. Manufactured by Collins & Aikman Floorcoverings
  - 1. Sail Away Powerbond RS Vinyl Cushion (Color: Jib)
    - a. Construction: Textured Patterned Loop
    - b. Gauge: 1/13
    - c. Stitch Rate: 7.8 / inch
    - d. Tuft density: 101.4 tufts/sq inch
    - e. Pile Height Average: 0.109 inch
    - f. Pile Thickness: 0.084 inch

- g. Density Factor 6,000 oz/cu yd
- h. Fiber System: Dynex SD BCF Nylon 6, 6 with Static Control & Ensure
- i. Dye Method: 75% Solution Dyed / 25% Yarn Dyed
- j. Total Weight: 79.2 oz/sq yd +/- 5%

B. Substitutes / Alternates

- 1. Subject to compliance with all requirements, "or equal" must match the selected color(s) and have similar aesthetic appearance and tuft density, closed-cell vinyl cushion backing (2.02D), and "dry" adhesive system (if available) to fully attach carpet product to sub-floor (2.02E). Substitution sample and submittals must be submitted for written approval of quality and color at least ten days prior to be considered. Sample of proposed substitute must be inclusive of both the face and proposed backing (color-only sample not acceptable).

## 2.5 ACCESSORIES:

- A. Materials recommended by Manufacturer for patching, priming, chemically welding the seams, etc.
- B. Adhesives: Product to be supplied with a pre-cured, mill-applied or other "dry" adhesive system (2.02E) when available. Otherwise, adhesive should be full spread, extremely low VOC in compliance with CRI Indoor Air Quality Adhesive Testing Program requirements, compatible with materials being adhered, as recommended by the Manufacturer.
- C. Base, Carpet Edge, and Transition Strips: As specified in applicable sections.

## PART 3 - EXECUTION

### 3.1 EXAMINATION / PREPARATION:

- A. Prepare sub-floor to comply with criteria established in Manufacturer's installation instructions. Use only preparation materials that are acceptable to the Manufacturer.
  - 1. Remove all deleterious substances from substrate(s) that would interfere with or be harmful to the installation.(i.e. floor wax)
  - 2. Remove sub-floor ridges and bumps. Fill cracks, joints, holes, and other defects.
- B. Verify that sub-floor is smooth and flat within specified tolerances and ready to receive carpet.
- C. Verify that substrate surface is dust-free and free of substances that would impair bonding of product to the floor.
- D. Verify that concrete surfaces are ready for installation by conducting moisture and pH testing. Results must be within limits recommended by Manufacturer.
- E. There will be no exceptions to the provisions stated in the Manufacturer's installation instructions.



### 3.2 INSTALLATION – GENERAL:

- A. Install product in accordance with Manufacturer's installation instructions.
- B. Verify carpet match before cutting to ensure minimal variation between dye lots
- C. Layout carpet and locate seams in accordance with shop drawings.
  - 1. Locate seams in least traffic, out of areas of pivoting traffic, and parallel to main traffic. Minimize cross seams.
  - 2. Do not locate seams perpendicular through door openings.
  - 3. Align run of pile in same direction as anticipated traffic and in same direction on adjacent pieces.
  - 4. Locate change of color or pattern between rooms under door centerline.
  - 5. Provide monolithic color, pattern, and texture match within any one area.
- D. Install carpet tight and flat on sub-floor, well-fastened at edges, with a uniform appearance.
- E. Double-cut carpet seams with accurate pattern match. Make cuts straight, true, and unfrayed.
- F. Chemically weld all seams with manufacturer's recommended seam sealer as stated in installation instructions. Make sure the seam is fully sealed.
- G. Roll with appropriate roller for complete contact of carpet with mill-applied adhesive to sub-floor.
- H. Trim carpet neatly at walls and around interruptions.
- I. Completed carpet is to be smooth and free of bobbles, puckers, and other defects.

### 3.3 PROTECTION & CLEANING:

- A. Remove excess adhesive and/or seam sealer from floor and wall surfaces without damage.
- B. All rubbish, wrappings, debris, trimmings, etc. to be removed from site and disposed of properly.
- C. Clean and vacuum carpet surfaces using a beater brush/bar commercial vacuum.
- D. After each area of carpet is installed, protect from soiling and damage by other trades.

END OF SECTION

## SECTION 097720 – DECORATIVE FIBERGLASS REINFORCED WALL PANELS

### PART 1 - GENERAL

#### 1.1 SUMMARY

1. Section Includes: Prefinished polyester glass reinforced plastic sheets and adhered to unfinished gypsum, untreated plywood wallboard.
2. Aluminum trim.

#### B. Products Not Furnished or Installed under This Section:

1. Gypsum substrate board.

#### 1.2 RELATED SECTIONS

- A. Division 09 - Gypsum substrate board.
- B. Division 06 - Wood Stud Framing
- C. Division 09 - Painting & Transparent Finishes.
- D. Division 09 - Resilient Base for wall bases in Resilient Floor Coverings.

#### 1.3 REFERENCES

- A. American Society for Testing and Materials: Standard Specifications (ASTM)
  1. ASTM D 256 - Izod Impact Strengths (ft #/in)
  2. ASTM D 570 - Water Absorption (%)
  3. ASTM D 638 - Tensile Strengths (psi) & Tensile Modulus (psi)
  4. ASTM D 790 - Flexural Strengths (psi) & Flexural Modulus (psi)
  5. ASTM D 2583- Barcol Hardness
  6. ASTM D 5319 - Standard Specification for Glass-Fiber Reinforced Polyester Wall and Ceiling Panels.
  7. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.

#### 1.4 SUBMITTALS

- A. Product Data: Submit sufficient manufacturer's data to indicate compliance with these specifications, including:
  1. Preparation instructions and recommendations.
  2. Storage and handling requirements and recommendations.
  3. Installation methods.
- B. Shop Drawings: Submit elevations of each wall showing location of paneling and trim members with respect to all discontinuities in the wall elevation.
- C. Selection Samples: Submit manufacturer's standard color pattern selection samples representing manufacturer's full range of available colors and patterns.

- D. Samples for Verification: Submit appropriate section of panel for each finish selected indicating the color, texture, and pattern required.
  - 1. Submit complete with specified applied finish.
  - 2. For selected patterns show complete pattern repeat.
  - 3. Exposed Molding and Trim: Provide samples of each type, finish, and color.
- E. Manufacturers Material Safety Data Sheets (MSDS) for adhesives and sealants prior to their delivery to the site.

## 1.5 QUALITY ASSURANCE

- A. Conform to building code requirements for interior finish for smoke and flame spread requirements as tested in accordance with:
  - 1. ASTM E 84 (Method of test for surface burning characteristics of building Materials)
    - a. Wall Required Rating – Class A.
- C. Sanitary Standards: System components and finishes to comply with:
  - 1. United States Department of Agriculture (USDA) requirements for food preparation facilities, incidental contact.
  - 2. Food and Drug Administration (FDA) 1999 Food Code 6-101.11.
  - 3. Canadian Food Inspection Agency (CFIA) requirements.

## 1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials factory packaged on strong pallets.
- B. Store panels and trim lying flat, under cover and protected from the elements. Allow panels to acclimate to room temperature (70°) for 48 hours prior to installation.

## 1.7 PROJECT CONDITIONS

- A. Environmental Limitations: Building are to be fully enclosed prior to installation with sufficient heat (70°) and ventilation consistent with good working conditions for finish work
- B. During installation and for not less than 48 hours before, maintain an ambient temperature and relative humidity within limits required by type of adhesive used and recommendation of adhesive manufacturer.
  - 1. Provide ventilation to disperse fumes during application of adhesive as recommended by the adhesive manufacturer.

## 1.8 WARRANTY

- A. Furnish one year guarantee against defects in material and workmanship.

## PART 2 - PRODUCTS

### 2.1 ACCEPTABLE MANUFACTURER

- A. Marlite; 202 Harger Street, Dover, OH 44622. 800-377-1221 FAX (330) 343-4668  
Email: [info@marlite.com](mailto:info@marlite.com) [www.marlite.com](http://www.marlite.com).
- B. Product:
  - 1. Artizan FRP with Sani-Coat.
  - 2. Envue with Sani-Coat.
  - 3. Symmetrix with Sani-Coat.

### 2.2 PANELS

- A. Fiberglass reinforced thermosetting polyester resin panel sheets complying with ASTM D 5319.
  - 1. Coating: Multi layer print, primer and finish coats.
  - 2. Dimensions:
    - a. Thickness – 0.090 inch nominal
    - b. Width - 4'-0" nominal.
    - c. Length – 8'-0" and as indicated on the drawings nominal
  - 3. Tolerance:
    - a. Length and Width: +/- 1/8 inch
    - b. Square - Not to exceed 1/8 inch for 8 foot panels or 5/32 inch for 10 foot panels
- B. Properties: Resistant to rot, corrosion, staining, denting, peeling, and splintering.
  - 1. Flexural Modulus -  $3.1 \times 10^5$  psi per ASTM D 790. (217.9 kilogram-force/square millimeter)
  - 2. Tensile Modulus -  $1.6 \times 10^5$  psi per ASTM D 638. (112.5 kilogram-force/square millimeter)
  - 3. Water Absorption - 0.72% per ASTM D 570.
  - 4. Barcol Hardness (scratch resistance) of 35 55 as per ASTM D 2583.
  - 5. Izod Impact Strength of 72 ft. lbs./in ASTM D 256
- C. Back Surface: Smooth. Imperfections which do not affect functional properties are not cause for rejection.

### 2.3 BASE

- A. Marlite Base Molding for 0.090 inch thick FRP Panels
  - 1. Color: Black
  - 2. Profiles:
    - a. M 612 FRP Base Molding
    - b. M 651 Inside Corner
    - c. M 660 Outside Corner
    - d. M 620 LH End Cap
    - e. M 625 RH End Cap

## 2.4 MOLDINGS

- A. Aluminum Trim: Heavy weight extruded aluminum 6063-T5 alloy prefinished at the factory.
  - 1. Finish: Factory oven-baked finish.
  - 2. Profile:
    - a. F 550 Inside Corner
    - b. F 561 Outside Corner
    - c. F 565 Division
    - d. F 570 Edge
    - e. A551 Inside Corner.
    - f. A560 Outside Corner
    - g. A565 Division
    - h. A570 Edge
  - 2. Color: [Bright Anodized] \_\_\_\_\_
- B. Outside Corner Guard:
  - 1. F 560 Stainless Steel
    - a. Finish: #4 satin
  - 2. M 961 PVC
    - a. 199 White
    - b. 118 Natural Almond
    - c. 140 Ivory
    - d. 145 Silver
    - e. 151 Light Grey

## 2.6 ACCESSORIES

- A. Fasteners: Non-staining nylon drive rivets.
  - 1. Match panel colors.
  - 2. Length to suit project conditions.
- B. Adhesive: Either of the following construction adhesives complying with ASTM C 557.
  - 1. Marlite C-551 FRP Adhesive - Water- resistant, non-flammable adhesive
  - 2. Marlite C-375 Construction adhesive flexible, water-resistant, solvent based adhesive formulated for fast, easy application.
- C. Sealant:
  - 1. Marlite Brand MS-250 Clear Silicone Sealant
  - 2. Marlite Brand MS-251 White Silicone Sealant
  - 3. Marlite Brand - Color Match Sealant,

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Examine backup surfaces to determine that corners are plumb and straight, surfaces are smooth, uniform, clean and free from foreign matter, nails countersunk, joints and cracks filled flush and smooth with the adjoining surface.
  - 1. Verify that stud spacing does not exceed 24 inch (61cm) on-center.

- B. Repair defects prior to installation.
  - 1. Level wall surfaces to panel manufacturer's requirements. Remove protrusions and fill indentations.

### 3.2 INSTALLATION

- A. Comply with manufacturer's recommended procedures and installation sequence.
- B. Cut sheets to meet supports allowing 1/8" inch (3 mm) clearance for every 8 foot (2.43m) of panel.
  - 1. Cut and drill with carbide tipped saw blades or drill bits, or cut with shears.
  - 2. Pre-drill fastener holes 1/8 inch (3.175mm) oversize with high speed drill bit.
    - a. Space at 8 inches (20.32cm) maximum on center at perimeter, approximately 1 inch from panel edge.
    - b. Space at in field in rows 16 inches (40.64cm) on center, with fasteners spaced at 12 inches (30.48 cm) maximum on center.
- C. Apply panels to board substrate, above base, vertically oriented with seams plumb and pattern aligned with adjoining panels.
  - 1. Install panels with manufacturer's recommended gap for panel field and corner joints.
    - a. Adhesive trowel and application method to conform to adhesive manufacturer's recommendations.
    - b. Drive fasteners for snug fit. Do not over-tighten.
- D. Apply panel moldings to all panel edges using silicone sealant providing for required clearances.
  - 1. All moldings must provide for a minimum 1/8 inch (3.18mm) of panel expansion at joints and edges, to insure proper installation.
  - 2. Apply sealant to all moldings, channels and joints between the system and different materials to assure watertight installation.

### 3.3 CLEANING

- A. Remove excess sealant from panels and moldings. Wipe panel down using a damp cloth and mild soap solution or cleaner.
- B. Refer to manufacturer's specific cleaning recommendations Do not use abrasive cleaners.

END OF SECTION

SECTION 099000 | PAINTING  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

A. Principal Work Items Are:

1. Complete application of paint to interior and exterior surfaces.
  - a. Unfinished materials.
  - b. Back-priming.
  - c. Metals, including certain hidden surfaces.
  - d. Woods and fabrications of wood.
  - e. Sheet metal.
  - f. Plaster, except where integrally colored.
  - g. Gypsum wallboard.
  - h. Doors.
  - i. Exposed piping, conduits, ducts, panels, mechanical and electrical equipment and items.
  - j. Visible roof-top equipment.
  - k. Miscellaneous items.
  - l. Concrete block.
  - m. Painted stripes at stairs, to conform to Handicap Requirements.
2. Application of finish coats to shop-primed metal surfaces:
  - a. Door louvers.
  - b. Pressed metal frames.
  - c. Hollow metal doors.
  - d. Coiling grilles.
3. Structural steel.

B. Some Surfaces Not To Be Painted:

1. In general, items with District approved integral finishes, approved plated finishes, approved complete factory finishes, except where otherwise indicated.
2. Finish hardware, except where primed for paint.
3. Integrally colored plaster.
4. Acoustical materials: Acoustic tile, acoustic panels, and exposed suspension grids.
5. Metal items:
  - a. Approved plated or factory finished items.
  - b. Anodized and color anodized aluminum.
  - c. Stainless steel.
  - d. Toilet partitions.
  - e. Factory finished steel or aluminum frame sliding glass doors.
  - f. Passenger lift doors, frames and cars.

C. Related Work Specified Elsewhere:

1. Materials and items which receive paint: Respective Sections.
2. Factory finished items: Respective Sections.
3. Pavement Marking: Division 02.
4. Finish Carpentry: Division 06 and Hardware removal and replacement in coordination with painting work: Division 06.
5. Factory finishing of Custom Casework: Division 06.
6. Joint Sealers: Division 07.
7. Paint Materials List: Division 09.
8. Custom Casework: Division 06.
9. Electrical fixture trim and plates removal and replacement in coordination with painting work: Division 16.

D. Definitions:

1. DFT: Abbreviation for dry film thickness.
2. Concealed Ungalvanized Steel: Defined in Paragraph 3.06B.
3. Paint: A collective general reference to include all materials of every component for finishing systems of every type, and preparation of surfaces for and application of said materials.
4. Rough-surface wood: Rough-sawn, re-sawn, or sandblasted woods.
5. Visible roof-top equipment: Mechanical and electrical equipment, piping, ducts, conduits, panels and other materials exposed on building roof tops which can be seen by a person standing on the earth's surface at any point within 1,000' of any building.

### 1.3 SUBSTITUTIONS:

- A. Only written approval of the will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

### 1.4 QUALITY ASSURANCE:

- A. Reference Standards: Steel Structures Painting Council-Surface Preparation Specifications (SSPC-SP).
- B. Job Mock-Up, Supergraphic Designs: Layout designs full-size on indicated walls, revise as required by District. Obtain District's approval prior to doing any finished work.

### 1.5 SUBMITTALS:

A. Samples

1. Number required: Three each.
2. Paints and enamels:
  - a. Typical: Each type, in each selected color; 8" x 10" size on stiff smooth material typical; on sandpaper for rough surfaces.
  - b. Stipple enamel: Each selected color District approved, roller texture on 12" x 24" piece of drywall.
3. Stains, varnishes, lacquers: Each finish type on each specie and texture of wood; 8" x 10" size for plywood, 16" length for casing or boards, show clearly each step of finishing process.
4. Make samples by same methods to be used to produce actual work.



- Samples will be examined for color, texture, and workmanship.
5. Re-make and re-submit samples when required for approval.

B. Product Data: Complete list of all paint materials.

## 1.6 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver in sealed containers. Manufacturer, brand name, product, and use instructions clearly identified thereon.
- B. Store in assigned spaces.
- C. Handle to prevent damage during storage and use.

## 1.7 1.07 JOB CONDITIONS:

- A. Environmental Requirements:
  1. Follow manufacturer's printed recommendations for product when they are more stringent than limits stated herein.
  2. Do not apply materials when temperature is below 50° F or above 110° F.
  3. Do not apply materials when RH is above 90%.
  4. As necessary to provide air movement, aid drying, disperse noxious fumes.
  5. Do not apply paint to wet-applied construction until such work is dry, and acceptable to District and paint manufacturer.
  6. Do not apply exterior paint in rainy, damp, misty, smoggy, or excessively windy weather.
  7. Do not apply paint in areas where dust is being generated.
- B. Protection:
  1. Cover or otherwise protect finished work of other trades, work not to be painted concurrently, landscaping, and adjacent property from damage.
  2. When not in use, store paints in designated areas. Keep containers closed. At end of day's work, remove empty containers, paint soaked rags, and debris. Vent fumes. Take precautions to prevent fire.
  3. Sequencing, Scheduling:
    - a. Coordinate removal and replacement of hardware, electrical fixtures and trim, and related work of other Sections.
    - b. Stain, prime, back paint, and pre-finish items before installation as required.
- C. Cleaning and Disposal:
  1. Do not use Project plumbing fixtures or piping systems for:
    - a. Cleaning painting equipment and utensils.
    - b. Disposal of waste from cleaning or disposal of paints.

## PART 2 - PRODUCTS

### 2.1 MATERIALS:

- A. Acceptable Manufacturers and Products:

1. Materials shall be those listed in Paint Materials List Specifications, Division 09.
2. Each material type to be same manufacturer throughout. All materials in a coating system to be by a single manufacturer.
3. Brand Names: Shall constitute a standard of quality.
4. Other Manufacturers: Refer to Paragraph 1.03, Substitutions.

B. Colors:

1. As selected by, using ICI/Sinclair color and finish systems as a standard.
2. Concrete block: As selected by District using Triarch Industries, Incorporated and Pittsburgh Paints color and finish systems as a standard.
3. A number of colors (8 minimum to 12 maximum) will be selected, arranged in various combinations, used to accent trim and other Architectural features, and colors and combinations will vary from exterior-to-interior, space-to-space, surface-to-surface, material-to-material, feature-to-feature.
  - a. Supergraphic designs: Two additional colors may be selected.
4. Colors to be factory mixed, and to match approved samples.
5. Tint undercoats sufficiently different so that they are readily distinguishable in any light from each other and the finish coat.

## 2.2 CONCRETE BLOCK AT INTERIOR:

A. Acceptable Manufacturers and Products:

1. Triarch Industries, Incorporated.

B. Materials and Products:

1. DUROPLEX acrylic coating finish, (Smooth Sand; SPRAYTEK II over undercoat).

C. Spray Pattern; SPRAYTEK over undercoat (DS-IV texture).

## 2.3 MIXING:

- A. Follow manufacturer's printed recommendations.
- B. Mix all paints thoroughly prior to application.
- C. Mix only in Inspector's presence in assigned spaces.
- D. Except where thinning is specifically recommended by manufacturer, do not thin products.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Examine surfaces for suitability to receive paint. Prior to application of any paint, surfaces to be cleaned free of dust, corrosion, and other foreign matter.
  1. Sand, scrape, fill and repair surfaces flush with suitable materials. Fill voids between adjoining surfaces flush with suitable fillers.
- B. Wood:

1. Clean solid surfaces.
  2. Except for rough-surface finishes, sand to a smooth even finish and dust clean.
  3. Seal knots, pitch spots, and resinous sapwood with shellac or knot sealer before priming.
  4. Puttying:
    - a. Do after first priming coat is dry.
    - b. For transparent or stained work, color putty to match finish.
    - c. Fill flush all nail holes, open joints, cracks and other defects.
- C. Drywall:
1. Fill any cracks or defects with drywall joint compound or speckle. Sand any rough spots smooth. Do not raise nap on paper covering.
- D. Portland Cement Plaster:
1. Where surfaces alkali is present, wash surface clean with zinc-sulphate in water solution. Fill cracks and defects with cement grout, match surface texture. Small defects may be filled with exterior speckle.
- E. Concrete:
1. Brush and wash with clean water to remove laitance, efflorescence, from oil bond breaker, and other foreign matter. Fill cracks and defects with cement grout; match surface texture.
- F. Galvanized Metal:
1. Cleaning: Solvent clean per SSPC-SP, No. 1, Solvent Cleaning.
  2. Vinyl wash: Apply Dunn-Edwards Galva-Etch, No. GE-123. Follow manufacturer's directions.
    - a. Application: Mop or brush-apply in a thin even coat. Remove excessive solution from surface with rags, squeegee or sponge. When using full strength, rinse surface with water.
    - b. Thinning: Use water, do not reduce solution beyond three parts water to one part Galva-Etch.
    - c. Drying: One-half hour minimum and four hours maximum before priming.
- G. Ungalvanized Shop Primed Structural Steel:
1. Cleaning method: Clean member free of corrosion, loose paint, and foreign matter by either SSPC-SP, No. 2, Hand Cleaning or SSPC-SP, No. 3, Power Brush Cleaning at the Project site after steel is erected.
  2. Touch-up paint, with compatible primer, all abraded, damaged, or uncoated areas.
- H. Ungalvanized Shop Primed Metals Other Than Paragraph G Above:
1. Clean free of all loose paint and foreign matter. Touch-up paint, with compatible primer, all abraded, damaged, or uncoated areas.
- I. Factory Finished Equipment and Items:
1. Where indicated to receive job-applied finish coats, sand or etch factory finish as required for proper paint adherence.
- J. Concrete Block: Substrate shall be cleaned of dust, oils, and other substances that might reduce adhesion of the finish material.

### 3.2 APPLICATION:

- A. Workmanship:
  - 1. Execute all work with skilled craftsmen.
  - 2. Evenly apply all coats with suitable equipment, well flowed on, free of laps, runs, skips, dead spots, and other imperfections. Last coat to present a uniform surface, color and texture.
  - 3. Stipple texture to be as approved by District.
- B. Manufacturer's Printed Recommendations:
  - 1. Follow where more stringent than limits specified herein.
- C. Equipment:
  - 1. Brushes, rollers, and spraying equipment as required and suitable for material being applied; keep clean and in proper operating condition.
- D. General:
  - 1. Paint and color areas per District's color schedules.
  - 2. Mask and cut-in as required to accomplish the various color combinations. Make edges of paint clean and sharp (no overlaps) where they adjoin other colors or materials.
  - 3. Paint entire surface parts and items including reveals, returns, rebates, soffits, projections, openings, and ornamental features.
  - 4. Do not apply initial coating until moisture content of surface is within paint manufacturer's recommended limits.
  - 5. Do not apply next coat until previous coats are properly cured and prepared to receive them.
- E. Examination of Work:
  - 1. Refer to Paragraph 3.04, Field Quality Control, for required examination of work.
  - 2. Notifies Inspector when work is ready for examination.
  - 3. Do not proceed with next operation until required examination has been made.
- F. Number of Coats:
  - 1. Specified number is the minimum number to be applied.
  - 2. Contractor shall, at his expense, apply additional coats as directed by District if:
    - a. Contractor does not produce full even coverage and/or required dry film thickness with specified number of coats.
    - b. Contractor applies a coat before Inspector has examined previous coat.
- G. Dry Film Thickness:
  - 1. DFT thickness stated in Paragraph 3.06, Schedule of Paint Finishes, is the minimum thickness to be applied and must be increased to manufacturer recommended thickness when such exceeds the thickness stated herein.
- H. Drying Time:
  - 1. Minimum interval between coats shall be the most stringent of the following conditions.
    - a. Until coat is dry.
    - b. Manufacturer's printed recommendations.
    - c. Three days for exterior work, two days for interior work, except where other time requirements are specifically stated in manufacturer's printed recommendations.

I. Preparation Work Between Coats:

1. Prepare each coat to receive succeeding coat:
  - a. General: Repair defects, sand, dust, wipe clean.
  - b. Wood, enameled: When dry, lightly sand smooth.
  - c. Wood, varnished or lacquered: When dry, steel wool smooth.
  - d. Plaster and concrete: Neutralize suction spots or hot spots then touch up so coat surface is uniform.

J. Back-Priming:

1. Immediately upon delivery to Project site, back-prime all surfaces which will be concealed after installation for following items: exterior and interior finish lumber and millwork, door frames, trim, plywood wall lining and paneling.
2. Painted or Enameled Work: One coat clear sealer.
3. Work With Stained Finish: One coat linseed oil.
4. Keep back-priming off exposed faces.

K. Priming:

1. General: Prime work as soon as possible after surfaces are prepared.
2. Ungalvanized Steel: Prime immediately after cleaning on the same day.
3. Galvanized Sheet Metal: Prime immediately after erection.
4. Exterior and Interior Woodwork: Prime immediately after erection.
5. At Glazing: Paint all glass beads, stops and rebates, except for aluminum.

L. Application Methods:

1. Apply by brush or roller, except as listed below:
  - a. Enamel: to doors: Roller only.
  - b. Enamel: Roller typically.
  - c. Stipple enamel: Roller only, with District approved texture.
  - d. Varnish or lacquer: Spray.
  - e. Exterior wood stains: Apply by brush or roller only. Work well into surface, especially on rough surface woods.

M. Doors:

1. Finish faces, edges, top, and bottom. On wood doors, apply first coat to all parts at the same time. At exterior doors, paint interior face with same material used on the exterior face.

N. Colors:

1. Make color changes at inside corners typically. Paint to a clean straight line.

### 3.3 FIELD QUALITY CONTROL:

A. Examination of Work (By Inspector):

1. Surface preparation--prior to application of prime coat.
2. Each coat--prior to application of succeeding coat.
3. Final coat and finished work.

### 3.4 ADJUSTMENT AND CLEANING:

A. Cleaning:

1. Clean surfaces as work progresses.
2. Remove all paint spillage and droppings and stains as soon as possible.

3. Do not use tools or cleaners, which will mar finish of item being cleaned.
4. Leave work and paint storage area clean and free of droppings, stains, dirt or defacements resulting from this work.

B. Correction of Defective Work:

1. Repair abraded, damaged or incomplete paint surfaces by methods acceptable to District. Spot repairs to be well-blended into adjacent work. For large repairs, re-coat entire plane or building element in which damaged area occurs.
2. Defaced surfaces of work not to be painted shall be cleaned and their original finish restored.

### 3.5 SCHEDULE OF PAINT FINISHES:

A. Reference: Refer to Paragraphs 3.03, F and G, regarding number of coats and DFT.

B. Metal Work, Exterior and Interior:

1. Galvanized Metal Exterior and Interior:
  - a. Coat 1: Zinc Dust Primer or Oil-Cementitious Primer. If Oil Cementitious Primer is used, it shall be re-coated within 48 hours in accordance with the manufacturer's recommendations.
  - b. Coat 2: Sash and trim.
  - c. Coat 3: Sash and trim.
  - d. DFT: Five mils.
2. Ungalvanized Shop Primed Structural Steel, Exposed On Building Exterior:

Apply prime coat immediately after steel is cleaned.

  - a. Touch-Up: Spot prime any abraded, damaged, rusted, or uncoated areas with rust inhibitive primer for ferrous metals.
  - b. Coat 1: Rust Inhibitive Primer For Ferrous Metals.
  - c. DFT For Coat 1: 1.3 mils.
  - d. Coat 2: Sash and trim.
  - e. Coat 3: Sash and trim.
  - f. DFT For Coats 2 + 3: 3 mils.
3. Ungalvanized Shop Primed Structural Steel, Exposed On Building Interior:
  - a. Touch-up: Spot prime any abraded, damaged, rusted, or uncoated areas with rust inhibitive primer for ferrous metals.
  - b. Coat 1: Sash and trim.
  - c. Coat 2: Sash and trim.
  - d. DFT: 4.5 mils.
4. Ungalvanized Shop Primed Structural Steel, Concealed: Touch-up by spot priming any abraded, damaged, rusted, or uncoated areas with rust inhibitive primer for ferrous metals.
5. Shop Primed Metals and Door Louvers, Exterior and Interior, Except For Subparagraphs 2, 3, and 4 above:
  - a. Coat 1: Sash and trim.
  - b. Coat 2: Sash and trim.
  - c. DFT: Three mils.
6. Factory Finished Equipment and Items, Exterior and Interior:
  - a. Coat 1: Sash and trim.
  - b. DFT: 1.5 mils.
7. Visible Roof-Top Equipment: Refer to definition in Paragraph 1.02, D.

- a. Paint the various materials, items, and equipment per requirements of Paragraph 3.06, B, Metal Work, Exterior and Interior.
- C. Exterior Work, Other Than Metals:
  - 1. Wood Typical:
    - a. Coat 1: Exterior wood primer.
    - b. Coat 2: Sash and trim.
    - c. Coat 3: Sash and trim.
    - d. DFT: Five mils.
  - 2. Surface Trim, Wood, And Plywood:
    - a. Coat 1: Exterior wood stain, opaque.
    - b. Coat 2: Exterior wood stain, opaque.
    - c. Application Rate: 150 SF per gallon per coat.
  - 3. Surface Plywood Siding:
    - a. Coat 1: Exterior wood stain, opaque. Prime all surfaces of all pieces completely before installation (faces, edges, ends).
    - b. After installation, inspect members; touch-up any damage, cuts, and nail holes.
    - c. Application Rate: 150 SF per gallon per coat.
  - 4. Surface Boards Over Plywood at Building Fascias and Certain Building Walls, Both Stained Same Color:
    - a. Finish: Exterior wood stain, opaque.
    - b. Coat 1, Plywood: Apply stain after plywood is installed, but before any boards or trim are installed over plywood.
    - c. 2 x 3 Boards:
      - 1) Boards to be cut to size by Carpentry Section prior to any staining.
      - 2) Coat 1: Prime stain all surfaces of all pieces completely before installation (faces, backs, edges, ends).
      - 3) Touch-Up: After installation over plywood by Carpentry Section, inspect members, touch-up stain any damage, cuts and nail holes.
    - d. Coat 2, All Parts: Apply stain to all exposed wood and plywood surfaces.
    - e. Application Rate: 150 SF per gallon per coat.
  - 5. Exposed Structural Plywood Sheathing At Roof Screens Smooth Surface:
    - a. Coat 1: Exterior wood stain, opaque.
    - b. Coat 2: Exterior wood stain, opaque.
    - c. Application Rate: 250 SF per gallon per coat.
  - 6. Soffit Construction Behind Screen Vents:
    - a. Coat 1: Exterior wood stain, opaque; black color.
    - b. Application Rate: 250 SF per gallon per coat.
    - c. Apply to all construction, which will be visible through installed vents.
    - d. Apply prior to installation of screen.
  - 7. Plaster Smooth Troweled Finish:
    - a. Coat 1: Exterior masonry finish.
    - b. Coat 2: Exterior masonry finish.
    - c. DFT: 2.3 mils.
  - 8. Concrete Exposed Foundation Walls and Curbs, Recessed Letters at Sandblasted Concrete Name and Office Signs:
    - a. Coat 1: Concrete sealer.
    - b. Coat 2: Exterior masonry finish.
    - c. Coat 3: Exterior masonry finish.
    - d. DFT: 3.6 mils.
  - 9. Plastic Condensate Piping and Other Plastic Piping Exposed On Rooftops:
    - a. Coat 1: Chlorinated rubber base paint.

- b. Application Rate: One coat to cover.
- 10. Building Dado (8' Height):
  - a. Coat 1: Light tack coat.
  - b. Coat 2: Semi-gloss enamel.
- D. Interior Work, Other Than Metals:
  - 1. Softwood Typical:
    - a. Coat 1: Enamel undercoater.
    - b. Coat 2: Sash and trim.
    - c. Coat 3: Sash and trim.
    - d. DFT: Four mils.
  - 2. Hardwood Doors and Handrails, Softwood Casework Where Not Factory Finished:
    - a. Sealer: At Contractor's option and expense, Clear Sealer may be used as an aid in obtaining a uniform stain color.
    - b. Coat 1: Oil Stain, or wiped white glaze, as selected by District.
    - c. Coat 2: Gloss varnish. Sand smooth.
    - d. Coat 3: Gloss varnish. Steel wool smooth.
    - e. Coat 4: Satin varnish.
    - f. DFT: 3.5 mils.
    - g. Lacquer Option: With specific approval of District, lacquer may be used in lieu of varnish.
  - 3. Rough Surface Wood and Trim:
    - a. Coat 1: Exterior wood stain, semi-transparent.
    - b. Coat 2: Exterior wood stain, semi-transparent.
    - c. Application Rate: 150 SF per gallon per coat.
  - 4. Rough Surface Board On Plywood Wall Treatment:
    - a. Coat 1: Exterior wood stain, semi-transparent. Prime all pieces completely before installation (faces, edges, and ends). After installation, inspect members, touch up any damage, cuts, and nail holes.
    - b. Coat 2: Exterior wood stain, semi-transparent. Apply to all exposed surfaces.
    - c. Application Rate: 150 SF per gallon per coat.
  - 5. Plywood Wall Lining At Storage Areas:
    - a. Coat 1: Exterior wood stain, semi-transparent.
    - b. Coat 2: Exterior wood stain, semi-transparent.
    - c. Application Rate: 250 SF per gallon per coat.
  - 6. Hardboard Panels At Integrated Ceiling:
    - a. Coat 1: Clear methacrylic lacquer.
    - b. Apply before items are installed.
  - 7. Concrete; Exposed Foundation Wall and Curbs:
    - a. Coat 1: Concrete sealer.
    - b. Coat 2: Exterior masonry finish.
    - c. Coat 3: Exterior masonry finish.
    - d. DFT: 3.6 mils.
  - 8. Drywall Walls; Typical:
    - a. Coat 1: Latex sealer.
    - b. Coat 2: Enamel undercoater.
    - c. Coat 3: Stipple enamel, semi-gloss. Apply with a District approved heavy-texture stipple roller.
    - d. DFT: Five mils.
  - 9. Drywall Ceilings, Soffits, and Beams:
    - a. Coat 1: Latex sealer.



- b. Coat 2: Flat wall latex.
  - c. Coat 3: Flat wall latex.
  - d. DFT: Four mils.
- 10. Drywall Walls and Ceilings At Janitor's Rooms, Toilets, Storage Rooms, And Kitchen:
  - a. Coat 1: Latex sealer.
  - b. Coat 2: Enamel undercoater.
  - c. Coat 3: Stipple enamel, semi-gloss. Apply with a District approved heavy-texture stipple roller.
  - d. DFT: Five mils.
- 11. Painted Strips At Interior Concrete Stairs, Conform To State Handicap Requirements:
  - a. Coat 1: Traffic paint.
  - b. Coat 2: Traffic paint.
  - c. Application Rate: Two coats, at 400 SF per gallon per coat.
  - d. Stripes: 2" wide, located 1" maximum from and parallel to nosing.
  - e. Required Locations: Bottom tread and upper approach of each flight of stairs and landings.
- 12. Concrete Block: Interior.
  - a. SPRAYTEK II over undercoat.
    - 1) Coat 1: Primer, undercoat with hopper or other equipment qualified for heavy bodied material to a minimum thickness of 20 mils.
    - 2) Finish Coat: SPRAYTEK, minimum thickness of 10 mils.
    - 3) Texture: Smooth sand; DS-IV Texture.
  - b. Water-base Acrylic-epoxy
    - 1) Pittsburgh Paints; Pitt-glaze, (tinted).
    - 2) Wet film; 20 to 40 mils thickness as required to fill the surface. Films in excess of 25 mils wet should be applied in two coats to facilitate their cure.
- 13. Special Paint and Varnish Areas:
  - a. Kitchen and cafeteria.
  - b. Walls and ceiling: High Gloss Enamel.
  - c. Pool areas: Marine Epoxy, High Gloss.
  - d. Shower and locker areas: Marine Epoxy, High Gloss.
  - e. Playground equipment: High Gloss Enamel.
  - f. Lunch benches: High Gloss Enamel.
  - g. Furniture, cabinetry and trim: McCloskey Varnish, Plastic, Semi gloss.
  - h. Gym floors: Hockwald Varnish.
  - i. Wood floors: Hockwald Varnish.
  - j. Bleachers: McCloskey Varnish, Gloss Spar.

E. Mechanical and Electrical Work:

- 1. General: Unless otherwise specified herein, paint all exposed mechanical, plumbing, fire sprinklers, and electrical equipment, apparatus, piping, conduit, fittings incidental thereto, and coverings applied thereto as specified above in Paragraph 3.06, B, Metal Work, Exterior and Interior.
  - a. Finished rooms and spaces: Paint equipment, panel boards, and all other items to match room finish.
  - b. Unfinished rooms and spaces: Same requirements as "Finished Rooms and Spaces," except that equipment, panel boards, and other items with complete factory-applied paint finishes need not be painted.
  - c. Do not paint out nameplates, labels, or stamped designations of sizes, qualities, standards and manufacture on pieces of equipment.

- d. Do not paint canvas connections between fans and ducts.
- e. Do not paint brass fittings, rough or polished, plated or non-plated.
- f. Items mounted in floors: Paint cover plates to sumps and pipe trenches, and manhole covers and rings mounted in floors, and similar items two coats of cement color floor paint.
- g. Exposed exterior items: Paint per Paragraph 3.06, B.
- h. Painting flat black: Paint two coats flat black color as far back as visible the inside surfaces of ducts, dampers, louvers, vents, and similar items.
- i. Plumbing fixtures: Paint unfinished exposed surfaces to match adjoining walls.
- j. Main sprinkler riser: Paint bright red color.
- k. Sprinkler head canopies: Paint to match color of adjacent surfaces, unless canopies are chrome-finished or stainless steel.
- l. Paint work not specifically mentioned shall be as specified for work of similar character.

END OF SECTION

SECTION 099550 | VINYL-COATED WALL COVERING  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 1.02 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Vinyl-coated wall coverings.
  - 2. Adhesives, and other installation materials.
- B. Related Work Specified Elsewhere:
  - 1. Gypsum Wallboard: Division 09.
  - 2. Painting: Division 09.
  - 3. Removal and replacement of finish hardware, air distribution diffusers and grilles, electrical fixture trim and plates, and other items in coordination with wall covering work: Respective Sections.

1.3 SUBSTITUTIONS:

- A. Only written approval of District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

1.4 QUALITY ASSURANCE:

- A. Requirements of Regulatory Agencies; Codes: Conform to Title 19, CCR; and UBC Code and Standards for flame spread, fuel contributed, smoke developed.

1.5 SUBMITTALS:

- A. Samples (in duplicate): Vinyl wall covering, 8" x 10" minimum size.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver with protective wrappings intact. Store inside building in a clean, dry area. Handle in a manner to prevent damage.

1.7 JOB CONDITIONS:

- A. Environmental Requirements:

1. Cold Weather: Maintain temperature in spaces at 60 ° F or above for 72 hours before, all during, and 48 hours after application.
  2. Ventilation: Provide adequate ventilation when using adhesives, sealers, and primers.
- B. Sequencing, Scheduling: Coordinate installation with gypsum wallboard, painting, and other related work.

## 1.8 GUARANTEE:

- A. Contractor shall guarantee all materials and workmanship against defects, including shrinkage after application to substrate, for a one-year period. Refer to Section 01700, Contract Close-out.

## PART 2 - PRODUCTS

### 2.1 MATERIALS VINYL WALL COVERINGS:

- A. General:
1. Per Federal Specifications CCC-W-408; ASTM E-84; State Fire Marshal rating for flame spread (25 maximum), fuel contributed, smoke generated; medium gauge fabric-supported vinyl wall covering; withstand 250 hr. min. Fadeometer test.
  2. Per Federal Specifications CCC-T-191b for Tabor abrasion resistance, tear and break strengths, adhesion to backing.
  3. Fabric-supported vinyl film; pigmented, opaque vinyl resins formed into a film, laminated to a dimensionally stable pre-shrink, mildew-resistant fabric backing, and embossed with textures.
  4. The various "Types" of vinyl wall coverings shall meet the following minimum weight and thickness requirements, except where otherwise indicated:

|                                      | Type I |
|--------------------------------------|--------|
| Finished Total Weight (ounce per LY) | 21.0   |
| Finished Total Weight (ounce per SY) | 14.0   |
| Vinyl Weight (ounce per LY)          | 18.0   |
| Backing Fabric weight (ounce per SY) | 3.0    |
  5. Weights: Weights listed hereinafter for vinyl wall coverings are total weight per lineal yard of 54" wide material.
- B. Vinyl Wall Covering For Typical Locations; Colors and Patterns:
1. Pattern: Selected by District from listed materials.
  2. Color: Selected by District from manufacturer's standard color range. Four colors maximum of each pattern may be selected.
  3. Type: Type II per Federal Specifications CCC-W-408.
  4. Acceptable Manufacturer's and Products:
    - a. Pattern:
      - 1) Muratone: 21 ounces.
      - 2) Spellbound: 21 ounces.

## 2.2 MATERIALS; ADHESIVES, PRIMERS, SEALERS:

- A. Adhesives: Heavy-bodies, water-soluble, mildew-resistant paste as recommended by vinyl wall covering manufacturer.
- B. Primers, Sealers: As recommended by vinyl wall covering manufacturer.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Examine surfaces for suitability to receive vinyl wall coverings. Surface to be dry, clean, and smooth. Report any unsatisfactory condition.
- B. Do not start work until unsatisfactory conditions are corrected. Starting work constitutes acceptance of surface.

### 3.2 PREPARATION OF SURFACES:

- A. Properly prepare surfaces to receive vinyl wall coverings. Follow covering manufacturer's recommendations.
- B. Clean surfaces free of dust, corrosion, contaminants, and other foreign material.
- C. Prime and/or seal surfaces as recommended by covering manufacturer.

### 3.3 INSTALLATION:

- A. Layout: Use full-widths typically; arrange panels symmetrically wherever possible; no seams within 6" of corners. Patching is not permitted.
- B. General:
  - 1. Installation to be by skilled workers.
  - 2. Follow manufacturer's recommendations.
  - 3. Examine material for color variations. Variations in color, including edge fading are not acceptable.
  - 4. Number cuts from rolls; install consecutively to minimize color variations.
  - 5. Apply adhesive to back of vinyl fabric.
  - 6. Install non-matching panels by reversing every other strip.
  - 7. At walls, install panels vertical, full height of wall; no horizontal joints. Fill in over openings in sequence with adjoining wall panels.
  - 8. Seams: Tightly butt seams by overlapping material and double-cutting using a straight-edge.
  - 9. Smooth covering onto surface using a brush, roller, or broad knife to ensure complete adhesion and eliminate air bubbles.
  - 10. Remove excess adhesive from seams immediately after they are made.
  - 11. Cut and fit neatly at terminations, penetrations, and openings. Return material into jams typically. Terminate material typically at inside corners (not outside corners) or under trim pieces, where they occur, unless otherwise indicated.

12. Finished Work: After application, vinyl fabric shall be free from blisters, wrinkles gaps, overlaps, or other defects due to faulty workmanship, completely adhered, with joints tightly butted and well matched, and shall be clean and in good condition.

C. Patterns:

1. Apply covering pattern specified in Paragraph 2.01 B; where indicated in the interior finish schedule on the drawings.

3.4 ADJUSTMENT AND CLEANING:

- A. Adjustment: Repair or replace any damaged work.
- B. Cleaning: Remove adhesive from exposed work; wipe surfaces clean.

END OF SECTION

SECTION 101200 | TACKBOARDS  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Tackboards (Pinboard).
    - a. Vinyl fabric covering.
    - b. Fiberboard.
    - c. Adhesives.
- B. Related Work Specified Elsewhere:
  - 1. Gypsum Board: Division 09.
  - 2. Painting: Division 09.
  - 3. Chalkboards: Division 10.

1.3 SUBSTITUTIONS:

- A. Only written approval of the District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

1.4 SUBMITTALS:

- A. Samples in duplicate: Vinyl wall covering, 8" x 10" minimum size.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver with protective wrapping intact. Store inside building in a clean, dry area. Handle in a manner to prevent damage.

1.6 JOB CONDITIONS:

- A. Environmental requirements:
  - 1. Cold Weather: Maintain temperature in spaces at 60 ° F or above for 24 hours before and after, and all during tackboard application.
  - 2. Ventilation: Provide adequate ventilation when using contact adhesives.
  - 3. Sequencing, Scheduling: Coordinate installation with gypsum wallboard, painting, chalkboards and other related work.

## PART 2 - PRODUCTS

### 2.01 MATERIALS:

- A. Vinyl Wall Covering:
  - 1. General: Per Federal Specifications CCC-W-408 type 11, ASTM E-84; State Fire Marshal rating for flame spread (25 maximum), fuel contributed, smoke generated, medium gauge fabric-supported vinyl wall covering, withstand 250 hour minimum Fadeometer test.
  - 2. Per Federal Specifications CCC-T-191b for Tabor abrasion resistance, tear and break strengths, adhesion to backing.
  - 3. Fabric-supported vinyl film, pigmented, opaque vinyl resins formed into a film, laminated to a dimensionally stable pre-shrink, mildew-resistant fabric backing and embossed with textures.
  - 4. Colors and Patterns:
    - a. Pattern: Selected by the Contractor from listed materials.
    - b. Color: Selected by the Architect from manufacturer's standard color range for the Contractor selected pattern. Two colors maximum may be selected.
    - c. Acceptable Manufacturers and Products: Weights are total weight per lineal yard of 54" width.
- B. Fiberboard: Manufactured cellulose fiberboard panel, per requirements of Federal Specifications LLL-1-535, Class A, ASTM C208 Class A, and commercial Standard S C 42-29, Class A. Edges square (damaged or broken edges will not be accepted), 1/2" thick.
  - 1. Domtar Fir-Tex sound deadening board as a standard of quality.
- C. Adhesives: As recommended by fiberboard and fabric manufacturers.

### 2.2 FABRICATION:

- A. General:
  - 1. Fabricate individual panels accurately to size, with no joints in vinyl fabric or in fiberboard panels.
  - 2. Fabricate individual panels by wrapping a single piece of vinyl fabric tightly over all four edges and around to back of a single piece of fiberboard panel, and securely staple or glue fabric to back of panel.
  - 3. Apply vinyl fabric to fiberboard surfaces with skilled workmen, with adhesive in strict conformance with manufacturer's Specifications. Number cuts from rolls and install consecutively on panels to minimize color variations.
  - 4. After application, vinyl fabric shall be free from blisters, wrinkles or other defects due to faulty workmanship, and shall be clean and in good condition.

## PART 3 - EXECUTION

### 3.1 INSPECTION:

- A. Examine surfaces scheduled to receive this work.
- B. Do not start work until unsatisfactory conditions are corrected.



### 3.2 INSTALLATION:

- A. Lay out work accurately.
- B. Panels may be field cut where tight fit is specifically indicate to casework, trim, and other features or cutouts are required at electrical switches or similar devices. All cut edges must be concealed. Vinyl fabric must be wrapped around all exposed edges.
- C. Mount panels to backing surfaces with manufacturer's recommended adhesive. Position accurately, space evenly, arrange symmetrically; edge plumb and level.

### 3.3 ADJUSTMENT AND CLEANING:

- A. Adjustment: Repair or replace any damaged work.
- B. Cleaning: Remove adhesive from exposed work, wipe surfaces clean.

END OF SECTION

## SECTION 101400 – SIGNAGE

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:

- 1. Panel signs.

#### 1.3 DEFINITIONS

- A. ADA-ABA Accessibility Guidelines: U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) Standards for Accessible Design, 2010.

#### 1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation details for signs.
  - 1. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.
  - 2. Provide message list, typestyles, graphic elements, including tactile characters and Braille, and layout for each sign.
- C. Samples for Initial Selection: Manufacturer's color charts consisting of actual units or sections of units showing the full range of colors available for the following:
  - 1. Aluminum.
  - 2. Acrylic sheet.
  - 3. Polycarbonate sheet.
  - 4. Die-cut vinyl characters and graphic symbols. Include representative samples of available typestyles and graphic symbols.
- D. Samples for Verification: For each of the following products and for the full range of color, texture, and sign material indicated, of sizes indicated:
  - 1. Acrylic Sheet: 8 by 10 inches for each color required.
  - 2. Polycarbonate Sheet: 8 by 10 inches for each color required.
  - 3. Fiberglass Sheet: 8 by 10 inches for each color required.
  - 4. Panel Signs: Not less than 12 inches square including border.
  - 5. Accessories: Manufacturer's full-size unit.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and fabricator.
- B. Warranty: Special warranty specified in this Section.

## 1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For signs to include in maintenance manuals.

## 1.7 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products
- B. Fabricator Qualifications: Shop that employs skilled workers who custom-fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.
- C. Source Limitations for Signs: Obtain each sign type indicated from one source from a single manufacturer.
- D. Regulatory Requirements: Comply with applicable provisions in 2022 CBC Chapter 11B.
- E. Inspection: Tactile signs shall be field inspected for compliance after installation (11B-703.1.1.2).

## 1.8 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit installation of signs in exterior locations to be performed according to manufacturers' written instructions and warranty requirements.
- B. Field Measurements: Verify recess openings by field measurements before fabrication and indicate measurements on Shop Drawings.

## 1.9 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of signs that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Deterioration of metal and polymer finishes beyond normal weathering.
    - b. Deterioration of embedded graphic image colors and sign lamination
  - 2. Warranty Period: Five years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. Acrylic Sheet: ASTM D 4802, Category A-1 (cell-cast sheet), Type UVA (UV absorbing).
- B. Polycarbonate Sheet: Of thickness indicated, manufactured by extrusion process, coated on both surfaces with abrasion-resistant coating:
  - 1. Impact Resistance: 16 ft-lbf/in. per ASTM D 256, Method A.
  - 2. Tensile Strength: 9000 lbf/sq. in. per ASTM D 638.
  - 3. Flexural Modulus of Elasticity: 340,000 lbf/sq. in. per ASTM D 790.

4. Heat Deflection: 265 deg F at 264 lbf/sq. in. per ASTM D 648.
  5. Abrasion Resistance: 1.5 percent maximum haze increase for 100 revolutions of a Taber abraser with a load of 500 g per ASTM D 1044.
- C. Graphic Content and Style: Provide sign copy that complies with CBC Section 11B-703, Signs and requirements indicated on Drawings for size, style, spacing, content, mounting height and location, material, finishes, and colors of signage. Where copy has not been determined or is not indicated, provide copy as selected by Architect. All indicated copy is subject to change without additional cost to Owner until released for production following approval by Owner and Architect.
- D. Tactile and Braille Copy: Manufacturer's standard process for producing copy complying with CBC 2019 Requirements, 2010 ADA Standards for Accessible Design. Text shall be accompanied by California contracted (Grade 2) Braille. Produce precisely formed characters with square cut edges free from burrs and cut marks in contrasting color from background.
1. Panel Material: Photopolymer and Clear acrylic sheet with opaque color coating, subsurface applied.
  2. Raised-Copy Thickness: Not less than 1/32 inch raised letters in Sans Serif upper case characters.
  3. Braille shall comply with CBC 11B-703.3 and have domed or rounded dots to comply with Table 11B-703.3.1. Dots shall be 1/10 inch on center in each cell with 3/10 inch space between cells and raised .025-.037 inch above the background.

## 2.2 PANEL SIGNS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Gravotech series signs or a comparable product by one of the following:
1. A. R. K. Ramos.
  2. ASI-Modulex, Inc.
  3. Metalic Arts; Div. of L&H Mfg. Co.
  4. Mills Manufacturing Company.
  5. Mohawk Sign Systems.
  6. Nelson-Harkins Industries.
  7. Southwell Company (The).
  8. Signs of Success
- B. Exterior (and Interior) Panel Signs: Provide smooth sign panel surfaces constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch measured diagonally from corner to corner, complying with the following requirements:
1. Acrylic Sheet: 0.125-inch-thick, extruded, high-impact acrylic sheet in color to match face color.
  2. Edge Condition: Radiused.
  3. Corner Condition: Rounded to 1/8" radius or as indicated.
  4. Mounting: Unframed.
    - a. Wall mounted.
    - b. Manufacturer's standard non-corroding anchors for substrates encountered.
  5. Color: As selected by Architect from manufacturer's full range.

- C. Toilet Room Door Symbols: Refer to drawings for graphic layout. Provide door sign plaques with the following attributes:
1. Material: Cast-acrylic sheet.
  2. Plaque color: Blue (or other approved contrasting color).
  3. Symbol color: White (or other approved contrasting color).
  4. Perimeter: Unframed.
  5. Size: Men's door shall have an equilateral triangle with 12" sides, 1/4" thick with a vertex pointing upward with figure indicated.
  6. Size: Women's door shall have a 12" diameter circle, 1/4" thick with figure as indicated.
  7. Size: A unisex door shall have a 12" diameter circle, 1/4" thick, and a 1/4" thick triangle inscribed and superimposed on the circle with figure indicated.
  8. Margins: Center/center.
  9. Colors: As selected by Architect, subject to jurisdictional approval.
- D. Tactile Toilet Room Wall Signs: Refer to drawings for graphic layout. Provide wall sign plaques to latch side of door with the following attributes:
1. Material: Cast-acrylic sheet (Non-Glare).
  2. Plaque color: Blue (or other approved contrasting color).
  3. Type color: White (or other approved contrasting color)
  4. Perimeter: Unframed with 1/4" radiused comers
  5. Size: 8" minimum width x 9" minimum height with a minimum 6" high field for raised wheelchair logo and adjacent man/woman 5" to 6" high pictogram.
  6. Margins: Center/center.
  7. Copy: 3/4" high (minimum) Sans Serif Bold raised (1/32") letters stating gender with California contracted (Grade 2) Braille below repeating gender (or reading "RESTROOM" or "STAFF") at Unisex toilets.
  8. Text color: White (or other approved contrasting color).
- E. Tactile Exit Signs: Accessible exit and exit route sign text and locations shall be as indicated by the drawings.
1. Material: 1/8 inch thick x 4 inch minimum high non-glare acrylic plate.
  2. Plaque color: As selected by Architect from manufacturer's full range.
  3. Perimeter: Unframed with 1/4" radiused corners.
  4. Size: As indicated by the drawings and as required for length of text.
  5. General: Sub-surfaces Process, with 1/32 inch raised letters with integral contracted (Grade 2) Braille centered below letters.
  6. Text: 3/4 inch high Sans Serif Bold lettering.
- F. Tactile Room Identification Signs (Exterior and Interior): Sign locations shall be as indicated by the drawings.
1. Material: 1/8 inch thick x 4 inch minimum high non-glare acrylic plate.
  2. Plaque color: As selected by Architect from manufacturer's full range.
  3. Perimeter: Unframed with 1/4" radiused corners.
  4. Size: As indicated by the drawings and as required for length of text.
  5. General: Sub-surfaces Process, with 1/32 inch raised border with California Contracted integral Grade 2 Braille copy.
  6. Text: 1- inch high Sans Serif Bold lettering.
  7. Locations: Provide one sign at each main room entry door plus additional signs as required to comply with ADA-ABA and CBC standards and as indicated by drawings.

8. Text allowance: Allow fifteen (15) letters and three (3) numerals for each sign. Classrooms shall be identified by room number (2" high) below the word "Classroom" (1" high) and with Braille below.
- G. Occupancy Signs: Sign text and locations shall be as indicated by the drawings.
1. Material: 1/8 inch thick x 6 inch high non-glare acrylic plate.
  2. Plaque color: As selected by Architect from manufacturer's full range.
  3. Perimeter: Unframed with 1/4" radiused corner.
  4. Size: As indicated by the drawings and as required for length of text.
  5. General: Sub-surfaces Process, with 1/32 inch raised letters with integral Grade 2 Braille copy.
  6. Text: 1/2 inch high (48 point) Sans Serif lettering.
  7. Wording for Sign at Assembly Rooms: As indicated by the drawings.
- H. International Symbol of Accessibility Signs: As indicated by drawings.
1. Figure Symbols: Building Entrance Sign; Size: 6" x 6", typical.
  2. Assistive Listening Systems: At assembly room with public address systems provide symbol of Access for Hearing loss in accordance with 2019 CBC 11 B-703.7.2.4.
- I. Symbols of Accessibility: Provide 6-inch high symbol fabricated from opaque non-reflective vinyl film, 0.0035-inch nominal thickness, with pressure-sensitive adhesive backing suitable for both exterior and interior applications.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Verify that items, including anchor inserts, are sized and located to accommodate signs.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Locate signs and accessories where indicated, using mounting methods of types described and complying with manufacturer's written instructions.
  1. Install signs level, plumb, and at heights indicated, with sign surfaces free of distortion and other defects in appearance.
  2. Interior Wall Signs: Install signs on walls adjacent to latch side of door where applicable. Where not indicated or possible, such as double doors, install signs on nearest adjacent walls. Locate to allow approach within 3 inches of sign without encountering protruding objects or standing within swing of door.
- B. Wall-Mounted Signs: Comply with sign manufacturer's written instructions except where more stringent requirements apply.
  1. Two-Face Tape: Mount signs to smooth, nonporous surfaces. Do not use this method for vinyl-covered or rough surfaces.

2. Shim Plate Mounting: Provide 1/8-inch-thick, concealed aluminum shim plates with predrilled and countersunk holes, at locations indicated, and where other mounting methods are not practicable. Attach plate with fasteners and anchors suitable for secure attachment to substrate. Attach panel signs to plate using method specified above.
3. Mechanical Fasteners: Use nonremovable mechanical fasteners placed through predrilled holes. Attach signs with fasteners and anchors suitable for secure attachment to substrate as recommended in writing by sign manufacturer.
4. Signs Mounted on Glass: Provide matching opaque plate on opposite side of glass to conceal mounting materials.

### 3.3 CLEANING AND PROTECTION

- A. After installation, clean soiled sign surfaces according to manufacturer's written instructions. Protect signs from damage until acceptance by Owner.

END OF SECTION 101400

SECTION 105230 | FIRE EXTINGUISHERS  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Fire extinguishers.
- B. Related Work Specified Elsewhere:
  - 1. Rough Carpentry: Section 06100.

1.3 SUBSTITUTIONS:

- A. Only written approval of District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions, for procedure.

1.4 SUBMITTALS:

- A. Product Data: Four copies of manufacturer's printed data illustrating item and fully describing all features.

PART 2 - PRODUCTS

2.1 FIRE EXTINGUISHERS:

- A. Portable fire extinguishers:
  - 1. All classrooms, except as noted below, are: Amerex Model 500, Classification 2A10BC steel tank dry chemical.
  - 2. Computer office, computer classrooms, electrical and telephone rooms: Amerex Model 369 Classification 1A10BC steel tank, Halon.
  - 3. Kitchen and Home Economics Lab: Amerex Model 462 Classification 40BC steel tank, dry chemical.

2.2 MOUNTING BRACKETS:

- A. Provide manufacturer's standard steel holding brackets for surface mounting fire extinguisher under severe vibration conditions. Finish: Red enamel.



## PART 3 - EXECUTION

### 3.1 GENERAL:

- A. In addition to the number shown on the drawings, provide two extinguishers of each type to be located as directed by District, all in accordance with California Fire Codes.

### 3.2 INSTALLATION:

- A. Install on wall brackets typical at each location shown.
- B. Extinguishers to be filled and tagged by a licensed serviceman; ready for use.

END OF SECTION

SECTION 108000 | TOILET AND BATH ACCESSORIES  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Division 00 General Conditions, and Division 01 General Requirements, collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Grab bars.
  - 2. Mirrors.
  - 3. Toilet paper dispensers.
  - 4. Toilet seat cover dispensers.
  - 5. Paper towel dispensers.
  - 6. Soap dispensers.
  - 7. Sanitary napkin-tampon vendors and disposal.
  - 8. Shower seats.
  - 9. Hand Dryers Electric.
- B. Related Work Specified Elsewhere:
  - 1. Glazing: Division 08.
  - 2. Toilet Compartments: Division 10.
  - 3. Mirrors (for Educational Casework): Division 12.
  - 4. Plumbing: Division 15.

1.3 SUBSTITUTIONS:

- A. Only written approval of the District will permit substitutions for materials specified. Refer to Fresno Unified School District's General Requirements, Section 01 25 13, Product Substitution Procedure.

1.4 QUALITY ASSURANCE:

- A. Requirements of Regulatory Agencies: Conform to State Handicapped Regulations.

1.5 JOB CONDITIONS:

- A. Sequencing, Scheduling: Coordinate work with Architect's drawings and related work of other Sections. Verify types of backing prior to installation of items.

## PART 2 - PRODUCTS

### 2.1 GENERAL:

- A. Acceptable Manufacturers and Products or approved equal:
  - 1. Bobrick Washroom Equipment, Inc., as a standard of quality.
  - 2. Other Manufacturers:
    - a. American Dispenser Company.
    - b. Accessory Specialties.
    - c. Bradley. D. Hallmack.
    - d. Parker.
    - e. Watrous.
    - f. Fort James
    - g. BayWest
- B. Material and Finish: Unless specifically noted otherwise, exposed surfaces to be Type 304 stainless steel, No. 4 satin finish.

### 2.2 PRODUCT ITEMS:

- A. Paper Towel Dispensers:
  - 1. Paper Towel Dispenser, Surface mounted, Push Paddle Roll, Model # Georgia Pacific, GPC54838. Provided by District and installed by Contractor.
    - a. This model to be installed at the following:
      - 1) Elementary Schools Student Toilet Rooms
      - 2) Middle Schools Student Toilet Rooms
      - 3) High Schools Student Toilet Rooms
  - 2. Paper Towel Dispenser, Surface Mounted, LEV-R-MATIC Roll, Model # Kimberly Clark, 09736. Provided by District and installed by Contractor.
    - a. This model to be installed at the following:
      - 1) Staff Toilet Rooms
      - 2) Classrooms with sinks
- B. Toilet Tissue Dispensers:
  - 1. Multi-Roll Toilet Tissue Paper Dispenser, Surface Mounted, Model # Bobrick, B-2888, Satin-finish stainless steel.
    - a. This model to be installed at the following:
      - 1) Toilet Rooms which require ADA accessibility, per Architect's drawings.
  - 2. Jumbo Jr. Toilet tissue Paper Dispenser with Stub Roll Feature, Surface Mounted, Model # Georgia Pacific 58150, See-Through Grey/Plastic. Provided by District and installed by Contractor.
    - a. This high-impact plastic model to be installed at the following:
      - 1) Middle Schools Student Toilet Rooms
      - 2) High Schools Student Toilet Rooms
  - 3. Combo Unit Toilet Tissue Dispenser, Surface Mounted, Model # Kimberly Clark, 09551 IN-SIGHT Cored JRT Combo Unit Smoke/Grey, 20.4"x13.1"x5.8". Provided by District and installed by Contractor.
    - a. This model to be installed at the following:
      - 1) Elementary Schools Student Toilet Rooms
      - 2) Staff Toilet Rooms

- C. Soap Dispensers:
  - 1. Soap Dispenser-Foam, Model # DEB Cleanse Washroom 2000, 11.38H x 6.38W x 5.75D.
    - a. Soap Dispenser shall be provided and installed by: Central Sanitary Supply, Fresno, CA, 559-498-6204, at no cost to the district.
    - b. Installer shall verify locations and mounting heights of soap dispenser with the assigned district supervisor in area and the architectural drawings.
- D. Sanitary Napkin Dispensers:
  - 1. Sanitary Napkin/Tampon Dispensers: Bobrick Series, size and location per Architect's drawings.
- E. Sanitary Napkin Disposals:
  - 1. Sanitary Napkin Disposal: Bobrick Series, size and locations per Architect's drawings.
- F. Grab Bars:
  - 1. Grab bars: Bobrick Series, sizes and locations per Architect's drawings.
- G. Mirrors:
  - 1. Polished Stainless Steel Mirrors: Mirror with Stainless Steel Channel Frame, Model # Bobrick B-1656 Series "\_x\_". Size and locations per Architect's drawings.
  - 2. Tempered Glass Mirrors, Mirror with Stainless Steel Channel Frame, Model # Bobrick B-1658 Series (1/4" tempered glass) "\_x\_". Size and locations per Architect's drawings.
- H. Toilet Seat Cover Dispensers:
  - 1. Toilet Seat Cover Dispenser, Surface Mounted, Model # Krystal KRY KD200, Chrome 16w x 3-1/4d x 11-1/2h half-fold.
    - a. Dispenser provided by District and installed by Contractor in all toilet rooms per Architect's drawings.
- I. Electric Hand Dryers:
  - 1. Electric Hand Dryer, Surface Mounted, Model # \_\_\_\_\_
  - 2. Electric hand dryers shall be installed in all student restrooms where power is available.

## PART 3 - EXECUTION

### 3.1 INSTALLATION:

- A. General:
  - 1. Anchorage: Securely anchor all items into solid backing with manufacturer recommended suitable attachments, Phillips-head typical.
  - 2. Mounting Heights: Conform to handicapped requirements for each particular items installed in areas serving the handicapped. Refer to construction drawing.
- B. Toilet Accessory Schedule (refer to drawings):
  - 1. Install scheduled items at locations indicated on drawings. Use manufacturer recommended anchor plates.

- 2. At toilet partitions, use Bobrick 258 Series anchor plates for single grab bar installations.
- C. Adjust toilet accessories for proper operation and verify that mechanisms function smoothly. Replace damaged or defective items.
- D. Clean and polish all exposed surfaces strictly according to manufacturer's recommendations after removing temporary labels and protective coatings.

END OF SECTION

SECTION 12690 | ENTRY FLOOR MATS  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Provide recessed tire tread floor tile entrance mats where indicated on the drawings.
- B. Related Work Specified In Other Sections:
  - 1. Cast-In-Place Concrete: Division 03.

1.3 QUALITY ASSURANCE:

- A. Work shall be performed by skilled workmen familiar with this type of work.
- B. Contractor shall comply with the manufacturer's recommendations.

1.4 SUBMITTALS:

- A. Product Data: Four copies of manufacturer's printed data illustrating item and fully describing features.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver all materials to the job site in their original, unopened containers with all labels intact and legible at the time of use.
- B. Use all means necessary to protect flooring materials before, during and after installation.

1.6 EXTRA STOCK:

- A. Deliver to the District two unbroken cartons of floor mat tiles, selected from the same run number and same manufacturer as the tile installed.

## PART 2 - PRODUCTS

### 2.1 FLOOR MAT:

- A. Entrance mat shall consist of 12" square, 3/8" thick tiles (color shall be selected) as manufactured by U.S. Mat and Rubber Company, Inc. "Dura-Tile" or Futurus, Inc. "Tuff Stuff".
- B. Provide beveled nosing for trim around mats.

### 2.2 ADHESIVE:

- A. As recommended by the manufacturer of floor tile material being installed.

## PART 3 - EXECUTION

### 3.1 PREPARATION:

- A. For at least 24 hours prior to installation, maintain a temperature of not less than the temperature recommended by the flooring materials manufacturer, in the space in which the flooring is to be installed. If no such minimum temperature is specified by the manufacturer, maintain a minimum of 60° F.
- B. Fill all joints in substrate with a compound such as "Floorfill" or "Dowman's Fixall", strictly conforming to the compound manufacturer's recommendations. Achieve a uniformly smooth, sound and level substrate by sandpapering as necessary.
- C. Thoroughly clean the substrate by sweeping, damp mopping (but not "wet mopping"), vacuuming or other means to remove all loose particles and all dust, dirt, grease and foreign material.
- D. Allow the substrate to dry thoroughly and prevent all unnecessary traffic across it.

### 3.2 INSTALLATION:

- A. Accurately cut the material to fit the area and all projections.
- B. Apply the adhesive in strict accordance with the approved recommendations of the manufacturer, coating the surfaces evenly and not exceeding the recommended working areas.
- C. Install the flooring in strict accordance with the published recommendations of the manufacturer.

### 3.3 FINISHING:

- A. Thoroughly clean all surfaces free from adhesive, soil, dust and construction stains as recommended by the manufacturer.

END OF SECTION



## SECTION 260000 – ELECTRICAL

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

Work in general includes, but is not limited to, the following:

- A. Administration building alterations.
- B. Grounding of equipment.
- C. Complete lighting and power system as shown on Drawings and specified herein, including conduit, wiring, panelboards, circuit breakers, relays, switches, receptacles, and other items necessary for complete and operable systems.
- D. Electrical connection of equipment furnished by others as shown on the Drawings.
- E. Control wiring and installation and connections of control devices as specified herein.

#### 1.3 SITE VISITS, COORDINATION OF CONTRACT DOCUMENTS, VERIFICATION OF DIMENSIONS

- A. Examine existing conditions as applicable. Become acquainted with Specifications and Drawings for all portions of the Project. Notify Project Manager of apparent discrepancies and of inconsistency between the Specifications and the existing conditions. Secure and follow Project Manager's instructions. The Drawings serve as working drawings only, indicating diagrammatically the general layout of the systems and their various components and equipment.
- B. Scaled and figured dimensions are approximate and are given for estimate purposes only. Carefully check and verify dimensions and sizes in order to determine if equipment and materials will fit together and if the dimensions of the assembly are compatible with the space provided. Where equipment is furnished by others, verify that dimensions and requirements for assembly are compatible with the space provided before proceeding with the roughing-in connections. Field verifications of locations shown on Drawings are necessary since actual locations, distances, mounting heights, etc., may be affected by field conditions. The right is reserved to make reasonable changes in locations of equipment or other features shown on Drawings prior to rough-in without additional cost to the Owner.
- C. Where apparatus and equipment have been indicated on the Drawings, dimensions have been taken from typical equipment of the class indicated. Carefully check the Drawings to see that the contemplated equipment will fit into the spaces provided, regardless of whether or not it may have been approved for quality and utility as an equal.

- D. Rough in all equipment, fixtures, etc., as designated on the Drawings and as specified herein. The Drawings indicate only the approximate location of rough-ins. The exact rough-in locations must be determined from large-scale certified Drawings. The Contractor shall obtain all certified rough-in information before progressing with any Work for rough-in connections.
- E. Be responsible for providing outlets and services of proper size at the required locations.
- F. Coordinate requirements of equipment furnished by others, prior to ordering and installation.
- G. No allowance will be made for extra expense due to failure or neglect to follow foregoing directives.

#### 1.4 RULES AND REGULATIONS

- A. Materials and installation shall be in accordance with current rules and requirements of California Code of Regulations and local codes and ordinances including, but not necessarily limited to, the current editions of the following:
  - 1. The California Electrical Code (CEC).
  - 2. Title 8, Chapter 4, California Code of Regulations (Low Voltage Electrical Safety Orders).
  - 3. California State Fire Marshal.
  - 4. California Statewide Qualified Product List (QPL), Title 20.
  - 5. Design Lights Consortium (DLC).
  - 6. NEMA (National Electrical Manufacturers Assoc.).
  - 7. IEEE (Institute of Electrical and Electronic Engineers).
  - 8. California Green Building Code.
  - 9. ANSI (American National Standards Institute).
  - 10. ASTM (American Society for Testing and Materials).
  - 11. UL (Underwriters Laboratories).
  - 12. OSHA (Occupational Safety & Health Act) Federal.
  - 13. Title 24, California Code of Regulations, California Building Code.
  - 14. NFPA (National Fire Protection Association).
  - 15. NESC (National Electrical Safety Code).
  - 16. NECA Standards of Installation.
    - a. NECA/EGSA 404-2007 Standard for Installing Generator Sets (ANSI).
    - b. NECA/IESNA 500-2006, Standard for Installing Indoor Lighting Systems.
    - c. NECA/IESNA 501-2006 Standard for Installing Exterior Lighting Systems.
- B. Where these Specifications call for a higher standard than the above-mentioned rules, the Specifications shall govern.
- C. Should there be any direct conflict between the above-mentioned rules and these Specifications, the rules shall govern.
- D. Nothing in the Drawings or Specifications is to be construed to permit Work not conforming to the rules, codes, and regulations.
- E. All materials utilized shall be new and the best of their respective grades or kinds.

## 1.5 DEFINITIONS

- A. Article 100 of the California Electrical Code shall serve as a guide for definitions.
- B. Industry standard definitions.
- C. Specific Definitions:
  - 1. Concealed: Hidden from sight, as in trenches, chases, hollow construction, above furred spaces, suspended ceilings (acoustical or plastic type), or exposed to view only in tunnels, attics, shafts, crawl spaces, unfinished spaces, or other areas solely for maintenance and repair.
  - 2. Exposed: Not concealed.
  - 3. Unfinished Space: A room or space that is ordinarily accessible only to building maintenance personnel, a room noted on the "Finish Schedule" with exposed and unpainted construction for walls, floor or ceilings, or specifically mentioned as "unfinished".
  - 4. Finished Spaces: Any space ordinarily visible to the visiting public, including exterior areas.

## 1.6 RECOGNIZED TEST LAB

- A. All equipment specified or installed under this project shall be listed by a recognized test lab and bear that label of approval.

## 1.7 RECORD DRAWINGS

- A. Include under this Work complete and accurate record information both during construction and before final acceptance by the Owner, and costs associated therewith shall be included under this Work.
- B. Obtain from the Project Manager, at cost, a complete, full size set of prints. On these prints, systematically and accurately keep an up-to-date and legible dimensional record of Work installed differently from the location or manner indicated by the Drawings, as well as exact locations of stub-outs and hidden or underground features. Have these Drawings readily available for reference and review. When job status permits, submit them to the Project Manager and amend or correct and re-submit if requested.
- C. When the above information is complete and acceptable, deliver Record Drawings to the Project Manager.

## 1.8 SUBMITTALS - SUBSTITUTIONS

- A. Bids shall be based on Drawings and Specifications and references exactly as shown except as substitutions are permitted under terms of the Instructions to Bidders. Acceptance by the Project Manager of a variation or alternate shall not of itself waive other requirements of the Drawings and Specifications.

- B. Before a substitute is used, it shall be equal in quality and utility to the material or make of equipment specified, and furthermore, shall be suitable for the particular application. The decision of the Project Manager as to the quality and utility of the substitute offered shall be final.
- C. When submitting a substitute to a specified item, provide complete data for both the specified item and the substitute. Complete data includes:
  - 1. Catalog cuts with complete dimensions, characteristics, electrical properties, Underwriter's Laboratory listing, harmonics, light output, mounting and support requirements.
  - 2. Calculations, photometrics, system load data, energy effect on system, etc.  
If the substitute is not deemed equal in both utility and quality to the specified item, the specified item will be approved and it shall be provided by the Contractor.
- D. Submit in one package complete systematized lists of equipment and Drawings, catalog cuts, brochures, capacity tables and curves, descriptive information, performance data and guarantees and warranties referenced either to applicable Specification paragraphs or to item numbers as shown on the Drawings, or both. Submit six (6) copies.
- E. Do not order or install equipment until submittals have been reviewed and approved.
- F. Where accepted materials or equipment other than is specified or shown on the Drawings require redesign of structural, architectural, electrical or mechanical features or layouts, such changes shall be made by, or at the expense of the Contractor - all subject to complete review by the Project Manager.
- G. Because of the contingencies involved, review and general acceptance of proposed substitutes shall not relieve the Contractor's responsibility under this Work for ensuring in all respects the suitability of such materials and equipment for the particular Project requirements.

#### 1.9 SHOP DRAWINGS

- A. Prepare shop Drawings of items as required by the Project Manager or by Drawings and Specifications; submit six (6) copies of each to the Project Manager as part of the submittal package, sufficiently in advance of construction, if necessary.
- B. The shop drawings shall be submitted sufficiently in advance of construction to allow time for review and for resubmission, if necessary.
- C. Submit all shop drawings and data at one time for equipment provided under this Section. The complete electrical shop drawings shall be bound in one pamphlet or binder indexed to this Section.
- D. Shop drawing submittals processed are not change orders. The purpose of shop drawing submittals by the Contractor is to demonstrate that the Contractor understands the design concept; he demonstrates his understanding by indicating which equipment and material he intends to furnish and install and by detailing the fabrication and installation methods he intends to use. If deviations, discrepancies or conflicts between shop Drawings and Specifications are discovered, either prior to or after shop drawing submittals are processed, the design Drawings and Specifications shall control and shall be followed.

- E. Manufacturers' data and dimension sheets shall be submitted giving all pertinent physical and engineering data including weights, cross-sections and maintenance instructions. Standard items of equipment such as receptacles, switches, plates, etc., which are cataloged items, shall be listed by manufacturer.
- F. Index all submittals and reference to these Specifications.

#### 1.10 COMPLETION DATA

- A. Submit completion data to the Project Manager in acceptable quantity and form before requesting a final inspection. Such submittal shall be corrected, amended, or completed before final acceptance of the Work.
- B. Include Record Drawings, maintenance manuals, and data; test results; control and wiring diagrams.

#### 1.11 CUTTING, PATCHING, AND REPAIRING

- A. Cutting, patching, and framing of wood members to accommodate this Work shall be done by the Contractor and shall be in conformance with Sections 613 and 617 (F) and (K), Title 24, California Code of Regulations. All such cutting, patching and framing shall be approved by the Project Manager.
- B. Do minor miscellaneous cutting, drilling, and patching necessary and normally required at the time of actually installing this Work. Patching shall be of the same materials, workmanship, and finish as the original or surrounding Work to the complete satisfaction of the Project Manager. Comply with Division-1 CUTTING AND PATCHING Section.
- C. Adequately inform other trades of openings and framing requirements for this Work and provide suitable instructions for establishing locations and sizes of openings or sleeves so that these may be provided in the proper location at the proper time. Concrete shall not be cut, except where approved by the Project Manager.

#### 1.12 SIMILARITY OF MATERIALS

- A. Unless specified otherwise, fixtures, fittings, hangers, and respective type features and equipment, of a similar type or having similar operative or functional features, shall be of the same manufacturer throughout the Project.

#### 1.13 MANUFACTURERS' DIRECTIONS

- A. Follow manufacturers' directions and recommendations in all cases where the manufacturers' equipment or articles are used for this Work. Compliance with the manufacturer's direction is a requirement for that product's listing with a recognized test lab.

#### 1.14 VERIFICATION OF DIMENSIONS

- A. Scaled and figured dimensions are approximate only. Before proceeding with Work, carefully check and verify dimensions, etc., on architectural Drawings, and be responsible for properly fitting equipment and materials together and to the structure in spaces provided.

- B. Drawings are essentially diagrammatic, and many offsets, bends, pull boxes, special fittings, and exact locations are not indicated. Carefully study Drawings and premises in order to determine best methods, exact locations, routes, building obstructions, etc., and install apparatus and equipment in available locations. Install apparatus and equipment in manner and locations to avoid obstructions, preserve headroom, and keep openings and passageways clear.

#### 1.15 IDENTIFICATION OF EQUIPMENT

- A. All electrical equipment shall be labeled, tagged, stamped, or otherwise identified in accordance with the following schedule:
  - 1. Branch Circuit Panelboards:
    - a. Panel identification shall be P-Touch  $\frac{3}{4}$ " label.
    - b. Circuit directory shall be a two-column, 8-1/2 x 11" sheet attached to the inside of the door. Each odd numbered circuit shall be in sequence in the left column and the even numbered circuit in the right column (e.g., 1, 3, 5..., 2, 4, 6...). Each circuit shall be identified as to the use and room name(s) or area(s). Confirm room names and/or room numbers with the Project Manager prior to project completion. Circuit breaker identification shall be by permanently installed metal numbers or plastic numbers under acrylic plastic. "Paste-on" numbers will not be accepted. Refer to "Panelboards" section for additional requirements.
  - 2. Distribution Panelboards: Identification shall be with 1" x 4" laminated, white on black, micarta nameplates on each major component, each with name and/or number of unit and other pertinent data as required. Emergency power distribution panels shall be identified with white on red micarta nameplates. Letters shall be no less than 3/8" high.
  - 3. Circuit breakers shall be identified by number and name with 3/4" x 1-1/2" laminated micarta nameplates with 3/16" high letters mounted adjacent to circuit breaker or switch.
  - 4. Miscellaneous equipment (electrical), such as individually mounted safety switches, starters, step-down transformers, pull boxes, junction boxes, etc., shall be identified by the use of such equipment with P-Touch labels as required.
  - 5. In general, the installed nameplates, as herein called for shall also clearly indicate its use, area served, circuit identification, voltage and any other useful data.
  - 6. All auxiliary systems, including communications, shall be labeled to indicate function.
  - 7. Motor control and motor control centers shall be labeled with the identification given on drawing schedules.

#### 1.16 ARC FLASH LABELING

- A. All panels, circuit breaker enclosures, switchboards and motor control centers shall be labeled with Arc Flash Warning Stickers.

#### 1.17 CLOSING IN OF UNREVIEWED WORK

- A. Do not allow or cause any of this Work to be covered up or enclosed until it has been reviewed by the Project Manager. Should any of this Work be enclosed or covered up before such review, uncover the Work and make repairs with such materials as may be necessary to restore the Work and that of the other trades to its original and proper condition at no additional cost to the Owner.

## 1.18 SAFETY PRECAUTIONS

- A. It is intended that within the scope of this Work during construction and until final acceptance, strict attention be given to matters pertaining to public safety and to safety of the construction workers and complementing personnel; and to other health and building safety requirements as specified and indicated including, but not limited to: Protection of openings in fire-rated construction; clearances from and/or protection of combustibles; proper securement for fixtures, equipment materials; method of performing the Work, operational and safety check of electrical devices, etc.; erection and maintenance of suitable barriers, protective devices, lights and warning signs and adequate provisions for storage and protection of Work, materials and equipment.
- B. It is understood that the responsibility for the proper attention to the above stipulations is included under this Work.

## 1.19 WIRING OF EQUIPMENT FURNISHED UNDER OTHER SECTIONS

- A. All electrical wiring including power wiring and control wiring (except as specified under Automatic Temperature Control), including raceways, wiring, outlet and junction boxes, and labor for installation of the wiring and equipment shall be included in this section of the Specifications.
- B. All control devices, and starters not in motor control centers, for equipment furnished under the Air Conditioning section (except as specified under Automatic Temperature Control paragraph), Plumbing section, Fire Sprinkler or Lawn Sprinkler section are to be furnished under that particular section and installed under this section.
- C. Wiring diagrams complete with all connection details shall be furnished under each respective section.
- D. Coordinate requirements and locations for all equipment prior to ordering and installation.
- E. Comply with requirements of Article 430 of the California Electrical Code.

## 1.20 MOUNTING

- A. Provide materials and accessories necessary to properly mount and secure equipment furnished and/or installed under the electrical Work. This includes but is not limited to such items as conduit, outlets, junction boxes, switches, relays, disconnect switches, lighting fixtures, cabinets, and transformers.
- B. Inserts and Anchors shall be:
  - 1. Furnished and installed for support of Work under this Division.
  - 2. Adjustable concrete hanger inserts installed in new concrete work as manufactured by Hilti or as approved.
  - 3. Installed in locations as approved by Project Manager.
  - 4. Expandable lead type anchors installed in existing concrete with minimum surface damage, as manufactured by Hilti.
  - 5. Toggle bolts, or "molly anchors", where installed in concrete block walls.

- 6. Complete with 3/16" or heavier steel backup plate where used to support heavy items. Through-bolts or backup plate shall be concealed from view, except as otherwise indicated.
- C. Mounting of equipment that is of such size as to be freestanding and that equipment which cannot conveniently be located on walls, such as motor starters, etc., shall be rigidly supported on a framework of galvanized steel angle, Unistrut or as approved.
- D. Furnish and install sleeves for the installation of Work under all sections of this Division. Sleeves through floors, roof and walls shall be as described in conduit section.

#### 1.21 MOUNTING HEIGHTS

- A. Receptacles shall be mounted no lower than 15" to the bottom of the device.
- B. Switches and lighting control stations shall be mounted no higher than 48" to the top of the device.
- C. Overcurrent devices and circuit breakers or disconnect switches shall be mounted no higher than 6 feet-7 inches.
- D. Refer to the Drawings for specific mounting heights.

#### 1.22 ACCESSIBILITY

- A. Install all control devices or other specialties requiring reading, adjustment, inspection, repairs, removal or replacement conveniently and accessibly throughout the project.
- B. All required access doors or panels in walls and ceilings are to be furnished and installed as part of the Work under this Division.
- C. Provide doors which pierce a fire separation with the same fire rating as the separation.
- D. Refer to "Finish Schedule" for types of walls and ceiling in each area and architectural Drawings for rated wall construction.
- E. Coordinate Work of the various sections to locate specialties requiring accessibility with others to avoid unnecessary duplication of access doors.

#### 1.23 FIRE-RATED PENETRATIONS

- A. All penetrations in fire-rated assemblies shall be accomplished using a UL listed method and materials.
- B. Fire-rated assembly penetrations shall be accomplished per details on the Drawings.

#### 1.24 FLASHING

- A. Flash and counterflash all conduits penetrating roofing membrane.



## 1.25 TESTS

- A. Perform electrical tests as required or directed. Provide materials, labor, and equipment necessary for performances of these tests, and at completion of the Work perform a complete "in-service" operation of the entire electrical and power system to show compliance with the Drawings and Specifications. Replace Work showing faults under tests without additional cost to the Owner. Test system voltage at switchboards at completion of Work and provide a written report to the Project Manager.

## 1.26 EQUIPMENT LISTS AND MAINTENANCE MANUALS

- A. Prior to completion of job, Contractor shall compile a complete equipment list and maintenance manual. The equipment list shall include the following items for every piece of material and equipment supplied under this section of the Specifications.
  - 1. Name, model and manufacturer.
  - 2. Complete parts Drawings and list.
  - 3. Local supply for parts and replacement and telephone number.
  - 4. All tags, inspection slips, instruction packages, etc. removed from equipment as shipped from the factory, properly identified as to the piece of equipment it was taken from.
- B. Maintenance manuals shall be furnished for each applicable section of the Specifications, shall be suitably bound with hard covers, and shall include all available manufacturers' operation and maintenance instructions, together with as-built Drawings and lists hereinbefore specified and other diagrams and instructions necessary to properly operate and maintain the equipment. The equipment lists and maintenance manuals shall be submitted in duplicate to Architect for approval not less than 10 days prior to the completion of the job. The maintenance manuals shall also include the name, address and phone number of the General Contractor and all subcontractors involved in any of the Work specified herein. The maintenance manuals shall be finally provided in four copies.

## 1.27 CLEANING

- A. During construction on a daily basis, and upon completion of the Work, remove from the site all debris and excess materials, tools, and removed items, resulting from this Work. Clean equipment, including lighting fixtures, free of dust, dirt, grease, paint, etc.

## 1.28 SALVAGE

- A. Deliver salvaged equipment and material deemed salvageable by Project Manager to location designated by Project Manager. Remove other removed material and equipment from site.

## 1.29 GUARANTEE

- A. Leave the entire installation in complete working order, free from defects in materials, workmanship or finish. Guarantee to repair or replace parts that may develop defects due to faulty materials, equipment, or workmanship within a period of one year after the Work is accepted by the Owner. Also, guarantee to repair or replace with like materials, other existing Work in the building damaged from or during the repair of any such defective equipment, materials, or workmanship.

### 1.30 INSTALLERS QUALIFICATIONS

- A. Installer must have electrical certification per California Labor Code Section 3099.2.
- B. All work described in the Electrical Specifications and shown on Electrical Drawings shall be performed by California State Certified Electricians.
- C. All electrical foremen shall have a minimum of 500 hours of documented classroom training.
- D. All electrical foremen shall have a minimum of 3,000 hours of documented on-the-job training.
- E. At the time equipment submittals are made, provide copies of State Certification and training documents for electricians working on this project

## PART 2 – PRODUCTS AND EXECUTION

### 2.1 GROUNDING

- A. Grounding shall be executed in accordance with applicable codes and regulations of the State of California, California Electrical Code and local authorities having jurisdiction as well as any additional provisions specified or shown on Drawings.
- B. Grounding bushings shall be used wherever conduits are grounded. Feeder conduits to panels and air conditioners shall have grounding bushings.
- C. Grounding conductors should be located to permit, the shortest and most direct path to ground. Connections shall be readily accessible for inspection and connections shall not be permanently concealed in floors or walls.
- D. Non-current carrying metallic parts of electrical equipment and raceways shall be securely grounded to the common system ground. In all locations, ground conductors shall be run through conduits and shall be securely bonded to the conduit at the entrance and exit. The conduit for the grounding conductors shall be continuous from the point of attachment to cabinets or equipment to the grounding electrode, and shall be securely fastened to the ground clamp fittings.
- E. Ground connections to equipment shall be made with an approved type of exothermic weld or shall be bolted or clamped to equipment or conduit. Sheet metal strap types of ground clamps shall not be used. Contact surfaces shall be thoroughly cleaned and bright before connection is made so as to ensure a good metal to metal contact.
- F. Where nonmetallic conduit is used, ground shall be achieved through use of a separate, green-insulated, copper, code-size, ground conductor included in the conduit.
- G. Bonding of cold water piping system shall be achieved at the service entrance. A copper saddle shall be installed over the copper pipe at the location of the clamp to avoid damage to the pipe.

## 2.2 CONDUIT

### A. Rigid Steel Conduit:

1. Rigid steel conduit shall have zinc coated exterior, zinc or enamel interior, standard weight, zinc coated couplings, locknuts and bushings and shall bear the U.L. label. Rigid conduit shall not be installed underground.
2. Use rigid conduit only for exposed exterior conduit runs, wherever subject to physical damage, or where specifically called for on the Drawings or required by a serving utility.
3. Intermediate metallic conduit (I.M.C.) may be used in lieu of rigid steel conduit.

### B. Electrical Metallic Tubing:

1. Electrical metallic tubing (E.M.T.) shall bear the U.L. label and shall be zinc coated thinwall conduit with zinc-coated couplings and connections. "Indent" type fittings shall not be used.
2. E.M.T. may be used where rigid, flexible or non-metallic conduit is not required.
3. E.M.T. shall be used for interior dry locations. EMT shall be used where no specified conduit type is called for on the Drawings.

### C. Flexible Metallic Conduit:

1. Flexible metallic conduit shall be galvanized steel and bear the U.L. label. Fittings for flexible conduit shall be squeeze type. Screw-in connectors and other connectors that decrease the interior diameter of the conduit shall not be used unless specifically approved by the Project Manager.
2. Liquid-tight flexible conduit shall bear the U.L. label and be plastic jacketed moisture and oil resistant with oil and vapor tight connectors.
3. Use flexible conduit for final connection to equipment where vibration may injure direct conduit connection. It may be used for indoor dry locations, for fixture whips not to exceed 72 inches and in other locations where structural conditions will not permit the use of EMT not to exceed six feet, only if approved by the Project Manager.
4. Use liquid-tight flexible conduit in lieu of flexible conduit for wet, damp, or outdoor areas or where weatherproof flexible conduit is called for on the Drawings or by code.

### D. Installation of Conduit:

1. Exposed/Concealed Conduit:
  - a. Provide secure mounting facilities for conduits. Wire or plumbers tape shall not be used for hanging conduit. Strap shall be factory made of the one hole malleable iron or two-hole galvanized clamp type.
  - b. Provide expansion couplings wherever conduits cross expansion joints.
  - c. Run conduit at right angles or parallel to structural members, walls, floors and ceilings. Where several conduits are run together or suspended, they shall be hung on Unistrut trapezes with minimum 3/8-inch rod hangers.
  - d. Cut ends of conduit square and ream to remove burrs or sharp edges. Terminate conduits properly with bushings, locknuts, etc. Terminate one (1) inch and larger conduits with insulated bushings.

- e. Render conduits projecting through the roofing watertight by proper flashings. Securely fasten a sheet metal cap and tighten band or storm collar to the conduits. Extend flashing a minimum of six (6) inches in all directions. Coordinate and install roof flashing for conduits to the satisfaction of the Project Manager.
- f. All conduit runs shall have a code size insulated grounding conductor.
- g. Pull wires shall be installed in empty conduits including telephone conduits and stub-outs, No. 12 AWG, type "THWN" insulated copper wire or 1/8-inch polyethylene rope shall be used.
- h. Flexible conduit connections shall comply with NEC Section 350-22.
- i. Provide Dura Block or similar support for roof-mounted conduits.

## 2.3 OUTLET, JUNCTION AND PULL BOXES

- A. Outlet boxes and junction boxes shall be galvanized one-piece pressed steel, knockout type. The size of each box shall be determined by the number of wires or conduits or size of conduits entering the box, but shall not be less than 4" square and 1-1/2" deep unless otherwise noted. All boxes shall be UL listed.
- B. Minimum box size for data and telephone outlets shall be 4" square and 2-1/8" deep.
- C. Single gang boxes in concrete, for fixture outlets, shall be 4-3/8" octagonal concrete boxes, 2-1/2" deep minimum.
- D. Single gang boxes in concrete, for wiring devices, shall be 3-1/2" deep, 3-3/4" long and 1-7/8" wide.
- E. Single gang outlet boxes installed in concrete or masonry walls shall be a minimum of 3-1/2" deep, 4" long and 2" wide, set flush with the wall and provided with a single gang wall plate.
- F. Install wood blocking for outlet boxes in a rigid, workmanlike manner using new material where wood studs are used. Provide rigid support to avoid twisting of outlet boxes where steel studs are used. Boxes shall be secured such that they are level and plumb.
- G. Locknuts shall be used on both sides of conduit connections to box or panel, in addition to bushing. Where a larger size opening occurs than size of conduit, use reducing washers.
- H. Exposed boxes shall be weatherproof, threaded or hub conduit with gasketed conduit cover suitable for device installed or with blank cover plate when conduit is used as a junction box. Conduit wire fill capacity shall not be exceeded.
- I. Recessed weatherproof outlets or junction boxes shall be equipped with neoprene gasketed covers.
- J. Large size junction or pull boxes shall be fabricated from code gauge sheet steel. Where located indoors, finish shall be gray enamel and covers shall be secured with screws. Where exposed to weather, they shall be weatherproof, NEMA 3R, and rain-tight and hot-dip galvanized after fabrication; also, they shall have weatherproof gaskets, flat covers and galvanized iron screws. Provide knockouts and/or threaded hubs as required for the conduit used. Boxes in finished areas shall be prime painted.
- K. Any unused, removed knockouts shall be filled with a K.O. cover.

- L. Provide bonding or grounding from metal conduit terminating in junction with concentric KO's.
- M. Install boxes and rings such that finished installation is flush with finished surface.

#### 2.4 PLATES AND DEVICE COVERS

- A. Plates for switches, receptacles, telephone and blank outlets shall be stainless steel, Hubbell 302/304 alloy or Legrand "S" line, unless otherwise noted. Plates shall be engraved per Drawings or as covered under the Article of this Specification titled "Identification of Equipment".

#### 2.5 FLOOR BOXES

- A. Floor boxes shall be suited for the type of flooring they are installed on.
- B. Floor boxes shall be fully adjustable or adaptable/trimmable to accommodate finished floor elevation.
- C. Covers for floor boxes shall be brass.
- D. Acceptable manufacturers: Manufacturers shall be one of the following, but not limited to:
  - 1. Wiremold/Legrand.
  - 2. Hubbell.
- E. Components in floor boxes shall be as specified on the Drawings.

#### 2.6 RECEPTACLES

- A. Duplex convenience outlets shall be specification grade, backwire, three wire, NEMA #5-20R, self-grounding type, 20 ampere, 125 volt parallel slots, polarized, in white. Additional receptacles shall be as indicated on the Drawings. Receptacles shall be Hubbell #5253W.
- B. Receptacles indicated weatherproof shall have lift cover plates that are weatherproof "while in use" Hubbell/Taymac expandable flat ML450W or equal.
- C. Ground fault current interrupter receptacles shall be self-testing, Hubbell # GFR5352WST.
- D. Outdoor ground fault circuit interrupter receptacles shall be Hubbell #GFW RST 20W or equal.
- E. USB receptacles shall be Hubbell #USB8200W or equal.

#### 2.7 LIGHTING SWITCHES

- A. Line voltage lighting switches shall be specification grade, quiet type, 20 amp. 120/277 volt A.C. white handled, unless otherwise noted. Switches shall be Hubbell #CS1221W.
- B. Dimmers shall be specification grade 20 amp, 120/277 volt, white. Specific attributes of dimmers: types, loads, configuration, shall be as shown on the drawings. Dimmers shall match the drivers in the light fixtures that they feed.
- C. A neutral conductor shall be routed to each switch and dimmer location.

## 2.8 WIRE AND CABLE

### A. 600 Volt Conductors:

1. Conductors shall be copper and delivered to the site in their original, unbroken packages plainly marked or tagged with U.L. label, size, kind, insulation, name of manufacturer and trade name of the wire.
2. Type "THWN/THHN", 600-volt insulation shall be used for all locations.
3. Minimum size conductor shall be #12.
4. Conductors shall be stranded.
5. Ground conductors shall be bare copper or have green insulation.
6. 120 volt and 277 volt circuits shall have separate neutrals.

### B. MC Luminary Cable:

1. MC Luminary cable may be used for line voltage and 0-10 volt wiring between light fixtures and dimmers.
2. MC Luminary cable shall be UL listed.
3. MC Luminary cable shall be properly supported along its route between fixtures and dimmers.
4. Acceptable manufacturers: Manufacturers shall be one of the following, but not limited to:
  - a. AFC
  - b. Southwire
  - c. General Cable
5. MC Cable sizes shall be as shown on the Drawings.

### C. Installation:

1. Conductors shall be continuous between outlets or junction boxes and no splices shall be made except in outlet boxes, pull boxes, panelboard gutters or handholes.
2. Joints, splices and taps No. 10 or smaller (including fixture pigtails) shall be connected with "floating spring" type connectors. No. 8 and larger shall be connected with solderless connectors of 100% electrolytic copper. Split-bolt connectors are not acceptable.
3. Tighten pressure type lugs on panels and equipment, and then retighten 24 hours or more later after energizing. Provide written report of torque values on lugs.
4. Oil or grease shall not be used when pulling conductors. Use U.L. approved cable lubrication only.
5. Lace or train conductors neatly in panels, cabinets and equipment. Use plastic wire ties to route conductors at edge of enclosure away from overcurrent devices.
6. Branch circuits shall be color coded in compliance with Section 210-5 of the California Electrical Code. Colored tape is not acceptable.
7. All wiring, both line and low voltage, shall be installed in conduit unless otherwise noted.
8. Conductors from different panels or from different power sources shall not be installed in the same conduit, junction box, gutter, or raceway.

D. Tag:

1. Branch circuits shall be left tagged with circuit numbers in gutters and junction boxes where unused circuits terminate.
2. Feeder conductors shall be tagged as phase "A" or "B" or "C".
3. The method of tagging shall be with adhesive preprinted tape numbered or lettered wrap around tags. Colored tape is not acceptable.
4. Tagging shall be applied after wire is installed in conduit.
5. Feeders in panel or equipment shall be tagged by phase letter in each panel or equipment.
6. Where it is impractical to use printed markers on certain wires or cables, use blank tape with identification marked thereon with indelible pen or pencil.

E. Color Coding for Phase Identification: Color code secondary service, feeder, and branch circuit conductors with factory applied color as follows:

| <u>208y/120Volts</u> | <u>Phase</u> |
|----------------------|--------------|
| Black                | A            |
| Red                  | B            |
| Blue                 | C            |
| White                | Neutral      |
| Green                | Ground       |

2.9 DISCONNECT SWITCHES

- A. Non-fusible or fusible as shown on the Drawings, heavy duty, 250 or 600 volts as required, NEMA Type 1 enclosure, except where WP is indicated or required by code, use NEMA Type 3R enclosure.

2.10 LIGHTING FIXTURES

- A. Lighting fixtures shall be of manufacture and type as specified in the Fixture Schedule, and shall have all parts and fittings necessary to completely and properly install the fixture. Fixtures of the same type shall be of one manufacturer and of identical finish and material.
- B. Lighting fixtures shall bear Underwriter's Laboratories labels. Interior light fixtures shall be on the California Energy Commission approved list. Exterior light fixtures shall be on the DLC list.
- C. Fixtures shall be furnished and installed as indicated on the Drawings, including hangers, glassware, auxiliary equipment, drivers, adapters, connectors for continuous installation, etc.
- D. Each fixture shall be wired with conductors suitable for the voltage, current and temperature to which the conductors will be subjected.
- E. If excessive driver flicker develops within 12 months after installation, the condition shall be corrected at no charge to the Owner. Flickering of the LED or failure of an LED array within 12 months of substantial completion shall also be corrected at no charge to the Owner.
- F. Proper LEDs of type, size, color temperature and wattage indicated shall be furnished and installed in each fixture and shall be manufactured by Phillips, Sylvania, Cree, Soraa or Bridgelux. The Contractor shall replace LED arrays which have been burned out prior to final completion. Clean dust, dirt, fingerprints and grease from fixtures before final completion.

- G. Install trims, reflectors, lenses and diffusers with care. Wear cloth or surgical gloves when installing these to avoid leaving fingerprints.
- H. Follow manufacturer's installation instructions when installing light fixtures.

## 2.11 LED LAMPS

- A. Any LED lamps used shall be JA8 compliant.
- B. LED lamps shall be UL listed.
- C. LED lamps shall be tested for use in the fixtures they will be installed in.
- D. LED lamps shall not cause fixtures to overheat or lamps to prematurely fail.

## 2.12 PANELBOARDS

- A. Section Includes:
  - 1. Power Distribution Panelboard: Furnish and install distribution panelboard(s) as specified herein and where shown on the associated schedules on Drawings.
  - 2. Lighting and Appliance Panelboard: Furnish and install lighting and appliance panelboard(s) as specified herein and where shown on the associated schedules on Drawings.
- B. References: The panelboard(s) and circuit breaker(s) referenced herein are designed and manufactured according to the latest revision of the following Specifications.
  - 1. NEMA PB-1 - Panelboards.
  - 2. NEMA PB-1.1 - Instructions for Safe Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less.
  - 3. NEMA AB 1 - Molded Case Circuit Breakers.
  - 4. NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
  - 5. UL 50 - Enclosures for Electrical Equipment.
  - 6. UL 67 - Panelboards.
  - 7. UL 489 - Molded-Case Circuit Breakers and Circuit Breaker Enclosures.
- C. Power Distribution Panelboards: (Square D I-Line, no equal)
  - 1. Interior:
    - a. Shall be rated 600 VAC. Continuous main current ratings as indicated on associated schedules on Drawings not to exceed 1200 amperes maximum. Panelboard bus current ratings shall be determined by heat-rise tests conducted in accordance with UL 67.
    - b. Provide UL Listed short circuit current ratings (SCCR) as indicated on the associated schedules on Drawings not to exceed the lowest interrupting capacity rating of any circuit breaker installed with a maximum of 200,000 rms symmetrical amperes. Main lug and main breaker panelboards shall be suitable for use as



Service Equipment when application requirements comply with UL 67 and NEC Articles 230-F and -G.

- c. The panelboard interior shall have three flat bus bars stacked and aligned vertically with glass reinforced polyester insulators laminated between phases. The molded polyester insulators shall support and provide phase isolation to the entire length of bus.
- d. The bussing shall be fully rated with sequentially phased branch distribution. Panelboard bussing rated 100 through 600 amperes shall be plated copper. Bussing rated 800 amperes and above shall be plated copper. The entire interleaved assembly shall be contained between two (2) U-shaped steel channels, permanently secured to a galvanized steel-mounting pan by fasteners employing the use of a tamper-resistant warning label.
- e. Interior trim shall be of dead-front construction to shield user from all energized parts. Main circuit breakers through 800 amperes shall be vertically mounted. Main circuit breaker and main lug interiors shall be field convertible for top or bottom incoming feed.
- f. Equipment ground bar shall be insulated or bonded as shown on the Drawings. Ground bar shall be copper. Solid neutral shall be equipped with a full capacity grounding strap for service entrance applications. Gutter-mounted neutral will not be acceptable.
- g. Nameplates shall contain system information and catalog number or factory order number. Interior wiring diagram, neutral wiring diagram, UL Listed label, and Short Circuit Current Rating shall be provided. Leveling provisions shall be provided for flush mounted applications.
- h. Arc Flash labeling shall be provided in accordance with Section 1.18 of these specifications.
- i. Panelboard lugs shall be tightened with a torque wrench to values listed on the equipment.

2. Molded Case Circuit Breakers - Mains and Branches:

- a. Common Characteristics:
  - 1) Circuit breakers shall be constructed in accordance with the following standards:  
UL 489 Federal Specification W-C-375B/GEN  
NEMA AB1 CSA 22.2, No. 5-M91  
IEC 157-1 BS 4752
  - 2) Circuit breakers shall be constructed using glass reinforced polyester insulating material providing superior dielectric strength. Current-carrying components shall be completely isolated from the handle and the accessory mounting area.
  - 3) Circuit breakers shall have an overcenter, trip-free, toggle operating mechanism which will provide quick-make, quick-break contact action. The circuit breaker shall have common tripping of all poles.
  - 4) Circuit breakers shall have a push-to-trip button for maintenance and testing purposes.
  - 5) Circuit breaker escutcheon shall have international I/O markings, in addition to standard ON/OFF markings. Circuit breaker handle accessories shall provide provisions for locking handle in the ON or OFF position.

- 6) Breaker faceplate shall indicate rated ampacity. Breaker faceplate shall indicate UL and IEC certification standards with applicable voltage systems and corresponding AIR ratings.
- 7) Circuit breakers shall be factory sealed and shall have a date code on the face of the circuit breaker. Poles shall be labeled with respective phase designations.
  - (a) Circuit breakers shall be UL Listed for use with the following accessories: Shunt Trip, Under Voltage Trip, Auxiliary Switch, Alarm Switch, Ground Fault Shunt Trip, Electrical Operators, Cylinder Locks, Mechanical Lugs Kits, Compression Lugs Kits, and Handle Accessories.
- 8) Lugs shall be UL Listed to accept solid or stranded copper conductors only. Lugs shall be suitable for 90° C rated wire, sized according to the 75° C temperature rating per NEC Table 310-16. Lug body shall be bolted in place; snap-in designs are not acceptable. Lugs shall be torqued with a torque wrench to the value listed on the circuit breaker.
- 9) Two- and three-pole circuit breakers shall have an internal common trip crossbar to provide simultaneous tripping. Circuit breaker frame sizes above 100 amperes shall have a single magnetic trip adjustment located on the front of the breaker, which allows the user to simultaneously select the desired trip level of all poles.
- 10) Standard circuit breakers up to 250 amperes at 600 VAC shall be UL Listed with HACR ratings.
- 11) Enclosures:
  - (a) Type 1 Boxes:
    1. Boxes shall be galvanized steel constructed in accordance with UL 50 requirements. Zinc-coated galvanized steel will not be acceptable.
    2. Boxes shall have removable blank endwalls and interior mounting studs. Interior support bracket shall be provided for ease of interior installation.
    3. Maximum enclosure dimensions shall be 42 in. wide and 9.5 in. deep.
  - (b) Type 1 Trim Fronts:
    1. Trim front steel shall meet strength and rigidity requirements per UL 50 standards. Shall have an ANSI 49 medium gray enamel electrodeposited over cleaned phosphatized steel.
    2. Trim front shall be [4-piece surface] [1- piece with door] [hinged 1-piece with door] available in [flush] [surface] mount. Trim front door shall have rounded corners and edges free of burrs. A clear plastic directory cardholder shall be mounted on the inside of the door.
    3. Locks shall be cylindrical tumbler type with larger enclosures requiring sliding vault locks with 3-point latching. All lock assemblies shall be keyed alike. Two (2) keys shall be provided with each lock.

(c) Type 3R, 4, 4X and 12:

1. Enclosures shall be constructed in accordance with UL 50 requirements. Endwalls shall be welded and sealed. Enclosures shall be painted with ANSI 49 gray enamel electrodeposited over cleaned phosphatized steel.
2. All doors shall be gasketed and be equipped with a tumbler type vault lock and two (2) additional trunk type latches. A clear plastic directory cardholder shall be mounted on the inside of door. All lock assemblies shall be keyed alike. Two (2) keys shall be provided with each lock.
3. Maximum enclosure dimensions shall not exceed 42 in. wide and 12.95 in. deep.

D. Lighting and Appliance Panelboard: (Square D NQOD, no equal)

1. Interior:

- a. Shall be rated for 240 VAC/48 VDC maximum. Continuous main current ratings, as indicated on associated schedules, not to exceed 600 amperes maximum.
- b. Minimum short circuit current rating: As indicated on schedules in rms symmetrical amperes at 240 VAC.
- c. Provide one (1) continuous bus bar per phase. Each bus bar shall have sequentially phased branch circuit connectors suitable for plug-on or bolt-on branch circuit breakers. The bussing shall be fully rated. Panelboard bus current ratings shall be determined by heat-rise tests conducted in accordance with UL 67. Bussing rated 100-400 amperes shall be copper. Bussing rated for 600 amperes shall be copper as standard construction. Panelboards shall be suitable for use as Service Equipment when application requirements comply with UL 67 and NEC Articles 230-F and G.
- d. All current-carrying parts shall be insulated from ground and phase-to-phase by Noryl high dielectric strength thermoplastic or equivalent.
- e. Split solid neutral shall be plated and located in the mains compartment up to 225 amperes so all incoming neutral cable may be of the same length.
- f. Interior trim shall be of dead-front construction to shield user from energized parts. Dead-front trim shall have pre-formed twistouts covering unused mounting space.
- g. Nameplates shall contain system information and catalog number or factory order number. Interior wiring diagram, neutral wiring diagram, UL Listed label and short circuit current rating shall be displayed on the interior or in a booklet format.
- h. Interiors shall be field converted for top or bottom incoming feed. Main and sub-feed circuit breakers shall be vertically mounted. Main lug interiors up to 400 amperes shall be field convertible to main breaker. Interior leveling provisions shall be provided for flush mounted applications.
- i. Panelboard lugs shall be tightened with a torque wrench to values listed on the equipment.
- j. Arc Flash labeling shall be provided in accordance with Section 1.18 of these specifications.

2. Main Circuit Breaker:

- a. Main circuit breakers shall have an overcenter, trip-free, toggle mechanism which will provide quick-make, quick-break contact action. Circuit breakers shall have a

permanent trip unit with thermal and magnetic trip elements in each pole. Each thermal element shall be true rms sensing and be factory calibrated to operate in a 40° C ambient environment. Thermal elements shall be ambient compensating above 40° C.

- b. Two- and three-pole circuit breakers shall have common tripping of all poles. Circuit breakers frame sizes above 100 amperes shall have a single magnetic trip adjustment located on the front of the circuit breaker, which allows the user to simultaneously select the desired trip level of all poles. Circuit breakers shall have a push-to-trip button for maintenance and testing purposes.
- c. Breaker handle and faceplate shall indicate rated ampacity. Standard construction circuit breakers shall be UL Listed for reverse connection without restrictive line or load markings.
- d. Circuit breaker escutcheon shall have international I/O markings, in addition to standard ON/OFF markings. Circuit breaker handle accessories shall provide provisions for locking handle in the ON or OFF position.
- e. Lugs shall be UL Listed to accept solid or stranded copper conductors only. Lugs shall be suitable for 90° C rated wire, sized according to the 75° C temperature rating per NEC Table 310-16. Lug body shall be bolted in place; snap-in designs are not acceptable. Lugs shall be torqued with a torque wrench to the value listed on the main circuit breaker.

3. Branch Circuit Breakers:

- a. Circuit breakers shall be UL Listed with amperage ratings, interrupting ratings, and number of poles as indicated on the panelboard schedules.
- b. Molded case branch circuit breakers shall have bolt-on type bus connectors.
- c. Circuit breakers shall have an overcenter toggle mechanism which will provide quick-make, quick-break contact action. Circuit breakers shall have thermal and magnetic trip elements in each pole. Two- and three-pole circuit breakers shall have common tripping of all poles.
- d. There shall be two forms of visible trip indication. The breaker handle shall reside in a position between ON and OFF.
- e. The exposed faceplates of all branch circuit breakers shall be flush with one another.
- f. Lugs shall be UL Listed to accept solid or stranded copper conductors only. Lugs shall be suitable for 90° C rated wire, sized according to the 75° C temperature rating per NEC Table 310-16. Lugs shall be torqued with a torque wrench to the value listed on the main circuit breaker.

4. Enclosures:

a. Type 1 Boxes:

- 1) Boxes shall be galvanized steel constructed in accordance with UL 50 requirements. Galvanized steel will not be acceptable.
- 2) Boxes shall have removable endwalls with knockouts located on one end. Boxes shall have welded interior mounting studs. Interior mounting brackets are not required.
- 3) Box width shall be [20 in wide] [14 in wide] [8.625 in wide - NQOB column width only].

- b. Type 1 Fronts:
  - 1) Front shall meet strength and rigidity requirements per UL 50 standards. Fronts shall have ANSI 49 gray enamel electrodeposited over cleaned phosphatized steel.
  - 2) Fronts shall be hinged 1-piece with door. Mounting shall be as indicated on associated schedules.
- c. Type 3R, 3S, 5, and 12:
  - 1) Enclosures shall be constructed in accordance with UL 50 requirements. Enclosures shall be painted with ANSI 49 gray enamel electrodeposited over cleaned phosphatized steel.
  - 2) All doors shall be gasketed and equipped with a tumbler type vault lock and two (2) additional trunk type latches. All lock assemblies shall be keyed alike. Two (2) keys shall be provided with each lock. A clear plastic directory cardholder shall be mounted on the inside of door.
  - 3) Maximum enclosure dimensions shall not exceed 20 in. wide and 6.5 in. deep.

#### 2.13 SURGE PROTECTIVE DEVICES (SPD) (TVSS)

- A. Surge protective devices shall be panel integrated.
- B. SPDs shall be provided and installed in the panel by the manufacturer.
- C. SPD size/rating shall be as shown on the Drawings.
- D. SPDs shall be UL listed.
- E. Where independent SPDs are used, they shall be installed adjacent to the equipment they serve. The conductor length from the circuit breaker to the SPD shall be minimized.

END OF SECTION

SECTION 310500 | COMMON WORK RESULTS FOR EARTHWORK  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 REFERENCE:

- A. Requirements in Addenda, Alternates, Conditions, and Division 1 collectively apply to this work.

1.2 DESCRIPTION:

- A. Principal Work Items Are:
  - 1. Grading, excavation, filling, compaction.
  - 2. Stripping vegetation.
  - 3. Construct building pad.
  - 4. Import soil and/or export surplus soil, as required.
  - 5. Excavation for structures.
  - 6. Off-site work:
    - a. Work in street right-of-way.
- B. Related Work Specified Elsewhere:
  - 1. Excavating, filling, backfilling, and compacting for all underground utility lines: Respective Sections and Division 31.
  - 2. Rock sub-base under concrete slabs: Division 03.
  - 3. Site Improvements: Respective Sections.
- C. Description of System:
  - 1. The Contractor is solely responsible for determination of earthwork quantities.
  - 2. The Contractor shall, at his own expense, provide all fill material not obtainable from site work area(s).
  - 3. If any surplus soil is generated, the Contractor may spread it on-site in District designated portions of the turf area of playground area. It shall be placed as compacted fill in an even layer or layers as stated in Paragraph 3.03, C, 4 with edges feathered at a 5% maximum slope to blend smoothly with adjacent grades.

1.3 SUBSTITUTIONS:

Only written approval of District will permit substitutions for materials specified. Refer to Section 00700, Article 30, Substitutions.

1.4 QUALITY ASSURANCE:

- A. Design Criteria; Bracing and Shoring:
  - 1. The Contractor shall be solely responsible for design, construction, and maintenance of all bracing and shoring to safely support all loads.
  - 2. Temporary unsurcharged excavations may be sloped at 1:1 ratio; permanent slopes shall not exceed 2:1 ratio.

- B. Testing Agency:
  - 1. On-Site Work: District designated Soils Engineer.
  - 2. Off-Site Work: Governing Agency approved testing laboratory.
- C. Requirements of Regulatory Agencies:
  - 1. Codes: Conform to Titles 21 and 24, CCR; and UBC, and State of California Safety Regulations.
  - 2. Off-Site Work:
    - a. Conform to local governing agency requirements.
    - b. Obtain and pay for all permits, licenses, and fees.
    - c. Arrange for all tests and inspections.
- D. Tests and Inspections--General: Refer to Section 01400, Quality Control.
- E. Source Quality Control--Import Soil: Tested and approved by Soils Engineer, prior to any placement.
- F. Allowable Tolerance: Finished surfaces shall be smooth and even, and not vary more than 1/10 of a foot,  $\pm$ , in 20' from a true plane.

#### 1.5 SUBMITTALS:

- A. Test Reports: Field quality control tests.
- B. Certificates:
  - 1. On-Site Work: By Soils Engineer.
  - 2. Certificate For Off-Site Work: Provide for all off-site work, per Paragraph 1.05, Section 01700, Contract Close-out

#### 1.6 JOB CONDITIONS:

- A. Environmental Requirements: Provide de-watering and drainage as required to accomplish this work. Discharge water at approved locations.
- B. Protection:
  - 1. Erect shoring, bracing, and other devices as necessary for protection of persons, improvements, and excavations.
  - 2. Remove above items in coordination with work, except those designed to remain permanently in place.
- C. Sequencing, Scheduling:
  - 1. Coordinate work with underground utilities, foundations, site improvements.

### PART 2 - PRODUCTS

#### 2.1 EXISTING SITE SOILS:

- A. Refer to subsurface Exploration Report.

## 2.2 IMPORT SOIL:

- A. Import soil shall be:
  - 1. Classified AVery Low" potential expansion, 0-20 Expansion Index; per Table 29C, CBC.
  - 2. Have no more than 50% of the material pass a No. 200 sieve.
  - 3. Predominantly granular material and shall contain no rocks larger than 4" maximum dimension, no trash, debris or vegetation.
  - 4. Approved by Soils Engineer prior to importing.

## PART 3 - EXECUTION

### 3.1 PREPARATION:

- A. Layout: Lay out all work areas. Set grade stakes.

### 3.2 CLEARING:

- A. Removal: Remove from work area(s).
  - 1. Trash and debris.
  - 2. Vegetation, grass, and weeds to a depth of 6" below the existing surface.
  - 3. Unsuitable soils.
- B. Disposal: Dispose of removed materials off-site at the Contractor's expense.

### 3.3 EARTHWORK:

- A. General:
  - 1. Grade, cut, excavate, fill, and compact work area(s).
  - 2. Fill local holes and depressions.
  - 3. Shape grades to drain water away from buildings, maintain flow lines, and avoid ponding of water.
- B. Equipment:
  - 1. Use suitable mechanical equipment for all operations.
  - 2. Compaction Roller: Tandem sheeps foot, 60" minimum diameter roller, 5-ton minimum weight.
- C. Compaction:
  - 1. General:
    - a. Compact all work area, whether cut or fill, to required densities.
    - b. Densities shall be the stated percentages of the maximum dry soil densities as measured by ASTM Test Method D1557-78.
    - c. Do not place additional lifts over a previous lift, which has not been compacted to the required dry density or when soil conditions are unstable.
  - 2. Laboratory Controlled, Building Areas, 90% Minimum Compaction:
    - a. Areas: Typically to a line 5' minimum beyond all areas to receive foundations, interior concrete floor slabs on-grade, and exterior reinforced concrete slabs. The courtyard area bounded by the building complex shall also be included.



- 1) Line is bottom of excavation.
  - b. Preparation: Clear the area.
  - c. Excavation/Cutting: Excavate to a plane whose elevation is 2' below the bottom of the footings.
  - d. Scarification:
    - 1) Scarify next 6" of exposed soils. Scarification shall continue until soils are broken down and free of large lumps or clods, and the working surface is reasonably uniform and free of features, which would inhibit compaction.
    - 2) Bring to 2% to 4% above optimum moisture content.
    - 3) Compact to 90% minimum, with compaction roller.
  - e. Compacted Fill:
    - 1) Soils: Use site soils and/or import soils.
    - 2) Place in successive 6" thick layers. Spread each layer evenly and mix thoroughly during spreading to attain uniformity of material and moisture in each layer.
    - 3) Bring existing clay site soils to 2% to 4% above optimum moisture content. Bring any import soils to optimum moisture content (12%).
    - 4) Compact each layer to 90% minimum, with compaction roller.
    - 5) Bring to proper subgrade.
  - f. Field Quality Control: Soils Engineer to test compaction.
3. 90% Minimum Compaction:
  - a. Areas: All areas, which receive asphalt concrete paving and concrete flatwork not included in Paragraph 2 above.
  - b. Preparation: Clear the area.
  - c. Excavation/Cutting: Excavate to a plane 1' below final earth subgrade.
  - d. Scarification:
    - 1) Scarify next 6" of exposed soils. Scarification shall continue until soils are broken down and free of large lumps or clods, and the working surface is reasonably uniform and free of features, which would inhibit compaction.
    - 2) Bring to 2% to 4% above optimum moisture content.
    - 3) Compact to 90% minimum; six passes minimum with compaction roller.
  - e. Compacted Fill:
    - 1) Soils: Use site soils and/or import soils.
    - 2) Place in successive 6" thick layers. Spread each layer evenly and mix thoroughly during spreading to attain uniformity of material and moisture in each layer.
    - 3) Bring existing clay site soils to 2% to 4% above optimum moisture content. Bring any import soils to optimum moisture content ( $\pm$  2%).
    - 4) Compact each layer to 90% minimum; six passes minimum with compaction roller.
    - 5) Bring to proper subgrade.
  - f. Field Quality Control: Tests at District's option.
4. 85% Minimum Compaction:
  - a. Areas: Remainder of work area(s) not included in Paragraphs 2 and 3 above.
  - b. Preparation: Clear the area.
  - c. Cutting: Where cutting is indicated, excavate to required levels.
  - d. Scarification: Conform to Paragraph 3, d above.
  - e. Compaction:
    - 1) Conform to Subparagraphs 3, e, 1 through 3, e, 3.

- 2) Compact each layer to 85% minimum.
    - 3) Bring to proper grade.
  5. Banks: Overfill, compact, backroll with sheeps foot rollers each 2' of till elevation gain, and trim back to the required finish plane to provide firm finished bank surfaces. The outer 2' of the bank face shall be compacted to 90% minimum.
- D. Excavation For Structures:
1. General:
    - a. Excavate true to line and required dimensions.
    - b. Allow ample space for construction, inspection, and removal of forms.
    - c. Maintain excavations free of loose dirt and debris of any kind.
  2. Footings:
    - a. Maintain bottom dimensions.
    - b. In general, all but round footings and footing pads will require wood forms.
- E. Backfilling:
1. Preparation: Do not place backfill until:
    - a. Trash and debris are removed.
    - b. Forms are removed.
    - c. Work to be concealed has been inspected, tested, and approved.
  2. Bracing: Adequately brace walls and foundations to withstand eccentric loading induced by backfill operations, except where designed for such loading or where backfill is placed equally and simultaneously on opposing sides.
  3. Placement and Compaction:
    - a. Place earth in 6" layers.
    - b. Compaction.
      - 1) General: Mechanically compact backfill; flooding is not permitted.
      - 2) In existing soils, re-consolidate to same density as surrounding earth prior to excavation.
      - 3) In compaction areas, re-consolidate to requirements of Paragraph C, Compaction, above.
- F. Preparation of Sub-grades:
1. Coordinate with respective Sections; establish earth surfaces at proper levels to receive base courses and/or finish materials.
  2. Roll surfaces smooth and even.
- G. Finished Surfaces: Roll surfaces smooth and even, and true to plane.

### 3.4 FIELD QUALITY CONTROL:

- A. General: Refer to Section 01400, Quality Control, for detailed information on required tests, inspections, and certifications.

### 3.5 ADJUSTMENT AND CLEANING:

- A. Adjustment:
1. Over-Excavation: Remedy at Contractor's expense.
    - a. Fill and re-compact to proper level per Paragraph 3.03, F, Backfilling.
    - b. At foundation, footing areas, Contractor may fill with concrete in lieu of earth.
  2. Repair any damaged sub-grades or other work.

3. Adjust and re-work as necessary until compaction and Contract Document requirements are met.
- B. Protection: Protect finished work from damage by traffic or continued use.
  - C. Cleaning: All work areas to be free of debris, weeds, and excess earth.

END OF SECTION

SECTION 312300 | EXCAVATING, BACKFILLING AND COMPACTION FOR UTILITIES  
FRESNO UNIFIED SCHOOL DISTRICT

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. Work Included: Excavating, backfilling, and compacting trenches for utility pipes, water, gas irrigation and sewer lines, storm drain lines, manholes, vaults, valve boxes, catch basins, underground tanks, thrust blocks, yard boxes, pull boxes and concrete encased electrical conduits.
- B. Related Work:
  - 1. Site Clearing: Division 31.
  - 2. Excavating, Backfilling, and Compacting for Structures: Division 31.
  - 3. Water Distribution System: Division 22.
  - 4. Gas Distribution System: Division 22.
  - 5. Site Drainage: Division 31.
  - 6. Sanitary Sewer System: Division 22.
  - 7. Automatic Irrigation: Division 32.
  - 8. Basic Mechanical Requirements: Division 23.
  - 9. Basic Electrical Requirements: Division 26.

1.2 SOILS INFORMATION:

- A. Information on the drawings or in the soil investigation reports does not constitute a guarantee of uniformity of soil conditions over the construction site.
- B. A copy of the foundation investigation and soils report included herein "For Reference Only."

1.3 IMPORT AND EXPORT OF EARTH MATERIALS:

- A. Fees: Pay as required by the government authority having jurisdiction over the area.
- B. Bonds: Post as required by the government authority having jurisdiction over the area.
- C. Hauling Routes and Restrictions: Comply as with requirements of the government authority having jurisdiction over the area.

PART 2 - PRODUCTS

2.1 MATERIALS:

- A. Use fill materials free of foreign materials, vegetable growths, sod, expansive soils, and all debris.

- B. Imported Fill Material:
  - 1. If the amount of suitable earth materials obtained from the jobsite excavations is not sufficient to properly construct the refill, furnish imported earth materials as necessary.
  - 2. All imported earth shall be of a granular nature with sufficient binder to form a firm and stable unyielding subgrade and shall not have more than 60% of fines passing a 200-mesh sieve. Material shall have a coefficient of expansion of not more than 2% from air dry to optimum moisture content and not more than 6% from air dry to saturation.
- C. Backfill Materials: Use clean earth materials previously removed from excavations or imported fill material as specified above, free from large clods and stones larger than 4".

## 2.2 BASE MATERIALS:

- A. Under Concrete Slabs On Grade: Where indicated on the drawings, use 3/4" maximum size crushed aggregate base.
- B. Under Bituminous Surfacing: As indicated elsewhere on the drawings and specified in "Base Course," Division 31.

## PART 3 - EXECUTION

### 3.1 GENERAL:

- A. Field conditions may require deviations from information indicated on drawings, or recommendations made in Soils Report. Such changes in the work shall be covered by a Change Order indicating an increase or decrease in the Contract sum.
- B. The Contractor shall contact the "Underground Service Alert of U.S.A." for information on buried utilities and pipelines.
- C. Trenches, ditches, pits, sumps, and similar items, which are outside the barricaded working area, shall be barricaded to conform to California OSHA standards.
- D. Trenches over 5' in depth shall conform to Construction Safety Orders of the California Division of Industrial Safety.
- E. Where it is necessary to excavate in lawn areas, protect the same and preserve the sod. Replace the sod upon completion of backfill by bringing sod level with surrounding lawns. If preservation of sod is impossible, seed and fertilize the area after backfilling to match existing turf as directed.
- F. Backfill excess excavations to the required level with earth, gravel, sand, or concrete as directed by the Engineer and compact thoroughly. Grade the ground adjacent to all excavations to prevent water from running in.
- G. No pipe shall be laid lengthwise under concrete walks without the approval of the Project Inspector.

- H. Do not excavate trenches parallel to footings closer than 24" from the face of the footing or below a plane having a downward slope of two horizontal to one vertical, from a line 9" above the bottom of the footings.
1. Unless otherwise indicated on the drawings, depth of excavations outside the buildings shall allow for a minimum coverage above the top of pipe, tank or conduit measured from the adjoining finished grade, as follows:
 

|                                 |                                                                                       |
|---------------------------------|---------------------------------------------------------------------------------------|
| Steel Pipe                      | 24" below finished grade                                                              |
| Copper Water Tube               | 18" below finished grade                                                              |
| Cast-Iron, Pressure Pipe        | 36" below finished grade                                                              |
| Plastic Pipe (other than waste) | 30" below finished grade                                                              |
|                                 |                                                                                       |
| Tanks or other structures       | 36" below finished grade                                                              |
| Soil, sewer and storm drain     | As required for proper pitch. (Install plastic pipe with not less than 12" coverage.) |
  2. Trench width shall provide ample space for working and joining. Dig holes for bells for all bell and spigot pipe and for fittings for all pipe.
- I. Excavate trenches for utilities, pipes, concrete encased electrical conduits and fuel tanks to required depth as indicated on drawings. Grade bottom of trenches to a uniform surface to prevent pockets. Remove all loose soil from the excavation before placing 6" of 90% compacted sand bedding. Use clean fine-grained sand of such size that not less than 90% shall pass through a 1/4" screen and not more than 25% shall pass through a number 50 screen. Sand meeting the specifications for fine aggregate for concrete work may be used. Place pipes, encased conduits and other utilities on a uniformly bearing sand bed.
- J. Keep excavation free of water during the installation work. Dispose of water in such a manner as not to endanger public or private property or public health. Remove accumulated water in excavations by pumping or other approved means.
- K. Where an extension or addition is being made to an existing plant, perform all work in such a manner and at such times as not to interrupt the satisfactory performance of the existing services to the buildings on the site used by the District. Where an interruption is necessary, obtain written approval from the District.
- L. Where portions of existing structures, walks, and paving are or must be removed or cut for pipe or conduit installation, replace the material with equal quality, finished to match adjacent work.
- M. Provide a minimum space of 2" between outer surfaces of buried pipes, including conduits placed in the same trench or, where used, outside surfaces of containers.
- N. Do not place backfill until the work installed has been inspected, tested and approved by the Project Inspector. Remove excavated rocky material unsuitable for backfill from the site.
- O. Trenches for electrical installation outside of the barricaded working area shall be backfilled within 72 hours after approval of the electrical installation by the District Electrical Inspector.

### 3.2 INSPECTION AND TESTING:

- A. The Project Inspector will inspect all subgrades and excavation prior to the placing of fill materials.
- B. Make compaction test in accordance with ASTM D1557, method "C".

### 3.3 EXCESS MATERIAL DISPOSAL:

- A. Remove all excess excavated and imported material not used for fill or backfill and all waste and debris from the jobsite.

END OF SECTION