

PROJECT:

Lemoore Police Department Dispatch Building Modular Bid Package 658 Hill St. Lemoore, CA 93245

Date : 02/26/19 TETER Project No.: A 17-10678 D

CLIENT:

City of Lemoore 119 Fox St. Lemoore, CA 93245

The following additions, deletions and revisions to the plans, specifications and Addenda shall become a part of the plans and specifications. It is the responsibility of the General Contractor to submit the information contained in this addendum to all subcontractors and suppliers. The Bidder shall acknowledge receipt of the Addendum in the Bid Proposal. (Addendum number of pages: **1** page + **10** attachments = **11** total pages).

PROJECT MANUAL:

5-01R: **PROJECT MANUAL, SPECIFICATION SECTION M_093000 – "TILING,"** revision as follows:

A. Omit Section M_093000 – "TILING" in its entirety and replace with the attached revised **Section M_093000 – "TILING."** (10 pages)

CLARIFICATIONS:

- 5-02R: Refer to Sheets M-A200 "FLOOR PLAN" and M-A400 "BUILDING SECTIONS."
 - A. The building sections on Sheet M_A400 are to illustrate desired interior vertical elements of the building. Alternative module floor types and foundation systems will be acceptable, including raised floor with stem wall foundations. Raised floor systems shall include provisions for lightweight concrete slab (rat slab) to be installed over subfloor. Foundation and floor systems shall account for the access floors in the Dispatch Room (Room 116) and Radio Room (Room 117).

END OF ADDENDUM NO. 5R

Loren Aiton Architect of Record

SECTION 093000 TILING

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. Ceramic tiling for interior floors and walls.
 - 2. Waterproof membrane.
- B. Related Sections include the following:
 - 1. Division 07 Section "Joint Sealants" for sealing of expansion, contraction, and isolation joints in tile surfaces.

1.3 DEFINITIONS

- A. General: Definitions in the ANSI A108 series of tile installation standards and in ANSI A137.1 apply to Work of this Section unless otherwise specified.
- B. ANSI A108 Series: ANSI A108.01, ANSI A108.02, ANSI A108.1A, ANSI A108.1B, ANSI A108.1C, ANSI A108.4, ANSI A108.5, ANSI A108.6, ANSI A108.8, ANSI A108.9, ANSI A108.10, ANSI A108.11, ANSI A108.12, ANSI A108.13, ANSI A108.14, ANSI A108.15, ANSI A108.16, and ANSI A108.17, which are contained in "American National Standard Specifications for Installation of Ceramic Tile."
- C. Module Size: Actual tile size plus joint width indicated.
- D. Face Size: Actual tile size, excluding spacer lugs.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples for Initial Selection: For each type of tile and grout indicated. Include Samples of accessories involving color selection.

- C. Samples for Verification:
 - 1. Full-size units of each type and composition of tile and for each color and finish required.
 - 2. Full-size units of each type of trim and accessory.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirements in ANSI A137.1 for labeling tile packages.
- B. Store tile and cementitious materials on elevated platforms, under cover, and in a dry location.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination can be avoided.
- D. Store liquid materials in unopened containers and protected from freezing.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations for Tile: Obtain all tile of same type from one source or producer.
 - 1. Obtain tile from same production run and of consistent quality in appearance and physical properties for each contiguous area.
- B. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from a single manufacturer and each aggregate from one source or producer.
- C. Source Limitations for Other Products: Obtain each of the following products specified in this Section through one source from a single manufacturer for each product:
 - 1. Waterproofing.

2.2 PERFORMANCE REQUIREMENTS

A. Static Coefficient of Friction: For tile installed on level walkway surfaces, provide products with a minimum static coefficient of friction of 0.6 as determined by testing identical products per ASTM C 1028.

2.3 PRODUCTS, GENERAL

- A. ANSI Ceramic Tile Standard: Provide tile that complies with ANSI A137.1, "Specifications for Ceramic Tile," for types, compositions, and other characteristics indicated.
 - 1. Provide tile complying with Standard grade requirements, unless otherwise indicated.
- B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced by TCNA installation methods specified in tile installation schedules, and other requirements specified.
- C. Colors, Textures, and Patterns: Where selection of colors, surface textures, patterns, and other appearance characteristics are required, selections shall be made by Architect from manufacturer's full range unless otherwise indicated.

2.4 TILE PRODUCTS

- A. Basis-of-Design Manufacturer: Provide products indicated as manufactured by the following:
 - 1. Dal-Tile International Corporation.
 - a. Subject to compliance with requirements, provide products indicated or equal products by one of the following:
 - 1) Crossville Ceramics Company, L.P.
 - 2) Florida Tile Industries, Inc.
 - 3) Interceramic Tile.
 - 4) Summitville Tiles, Inc.
 - 5) United States Ceramic Tile Company.
- B. Unglazed Floor Tile: As indicated on Drawings.
 - 1. Tile Color and Pattern: To be selected by Architect at a later date.
 - 2. Module Size: 2 by 2 inches.
 - 3. Thickness: 1/4 inch.
 - 4. Face: Plain with cushion edges.
 - 5. Grout Color: To be selected by Architect at a later date.
- C. Glazed Wall Tile: As indicated on Drawings.
 - 1. Tile Color and Pattern: To be selected by Architect at a later date.
 - 2. Module Size: 4 by 4 inches.
 - 3. Thickness: 5/16 inch.
 - 4. Face: Plain with cushion edges.
 - 5. Grout Color: To be selected by Architect at a later date.

- D. Trim Units: Coordinated with sizes and coursing of adjoining tile where applicable and matching characteristics of adjoining tile indicated. Provide shapes as follows, selected from manufacturer's standard shapes:
 - 1. Base for Portland Cement Mortar Floor Installations: Coved, module size and tile matching adjoining floor tile.
 - 2. Base for Thin-Set Mortar Floor Installations: Cove base with square top, module size and tile matching adjoining wall tile.
 - 3. Wainscot Cap for Portland Cement Mortar Installations: Bullnose cap, module size matching adjoining wall tile.
 - 4. Wainscot Cap for Thin-Set Mortar Installations: Surface bullnose, module size matching adjoining wall tile.
 - 5. Wainscot Cap for Flush Conditions: Regular flat tile for conditions where tile wainscot is shown flush with wall surface above it, same size as adjoining wall tile.
 - 6. External Corners for Portland Cement Mortar Installations: Bullnose shape with radius of at least 3/4 inch unless otherwise indicated.
 - 7. External Corners for Thin-Set Mortar Installations: Surface bullnose, same size as adjoining wall tile.
 - 8. Internal Corners: Field-butted square corners. For coved base and cap use angle pieces designed to fit with stretcher shapes.

2.5 EDGE-PROTECTION AND TRANSITION PROFILES FOR FLOORS

- A. Schluter SCHIENE
 - 1. Description: L-shaped profile with 1/8" (3.2 mm) wide top section and vertical wall section that together form the visible surface, integrated trapezoid-perforated anchoring leg, and integrated grout joint spacer.
 - 2. Anchoring Leg:
 - a. Provide with straight anchoring leg.
 - b. Provide with special radius anchoring leg for radius applications.
 - 3. Material and Finish:
 - a. EV4A Stainless Steel Type 316 L = V4A
 - b. E Stainless Steel Type 304 = V2A
 - c. EB Brushed Stainless Steel Type 304 = V2A
 - d. M Solid Brass
 - e. A Aluminum
 - f. AE Satin Anodized Aluminum
 - g. ACB Bright Chrome Anodized Aluminum
 - h. ATB Bright Nickel Anodized Aluminum
 - i. AKB Bright Copper/Bronze Anodized Aluminum
 - j. AMB Bright Brass Anodized Aluminum
 - 4. Height: Height as required.

2.6 WATERPROOF MEMBRANE

- A. General: Manufacturer's standard product, selected from the following that complies with ANSI A118.10 and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.
 - 1. Chlorinated-Polyethylene-Sheet Product: Nonplasticized, chlorinated polyethylene faced on both sides with nonwoven polyester fabric, 0.030-inch nominal thickness.
 - a. Available Product: Noble Company (The); Nobleseal TS.
 - 2. PVC Sheet: PVC sheet heat-fused on both sides to facings of nonwoven polyester; 0.040-inch nominal thickness.
 - a. Available Product: Compotite Corporation; Composeal Gold.
 - 3. Polyethylene Sheet: Polyethylene faced on both sides with fleece webbing; 0.008-inch nominal thickness.
 - a. Available Product: Schluter Systems L.P.; KERDI.
 - 4. Fabric-Reinforced, Fluid-Applied Membrane: System consisting of liquid-latex rubber or elastomeric polymer and continuous fabric reinforcement.
 - a. Subject to compliance with requirements, provide one of the following:
 - 1) Custom Building Products; 9240 Waterproofing and Anti-Fracture Membrane.
 - 2) Laticrete International, Inc.; Laticrete 9235 Waterproof Membrane.
 - 3) MAPEI Corporation; Mapelastic L (PRP M19).
 - 4) Mer-Kote Products, Inc.; Hydro-Guard 2000.
 - 5) Summitville Tiles, Inc.; S-9000.

2.7 SETTING MATERIALS

- A. Portland Cement Mortar (Thickset) Installation Materials: ANSI A108.02.
 - 1. Cleavage Membrane: Asphalt felt, ASTM D 226, Type I (No. 15); or polyethylene sheeting, ASTM D 4397, 4.0 mils thick.
 - 2. Reinforcing Wire Fabric: Galvanized, welded wire fabric, 2 by 2 inches by 0.062 inch diameter; comply with ASTM A 185 and ASTM A 82 except for minimum wire size.
 - 3. Latex Additive: Manufacturer's standard water emulsion, serving as replacement for part or all of gaging water, of type specifically recommended by latex-additive manufacturer for use with field-mixed portland cement and aggregate mortar bed.

- B. Latex-Portland Cement Mortar (Thin Set): ANSI A118.4.
 - 1. Prepackaged dry-mortar mix containing dry, redispersible, ethylene vinyl acetate additive to which only water must be added at Project site.
 - a. For wall applications, provide mortar that complies with requirements for nonsagging mortar in addition to the other requirements in ANSI A118.4.
 - 2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Boiardi Products Corporation.
 - b. Bonsal, W. R., Company.
 - c. Custom Building Products.
 - d. LATICRETE International Inc.
 - e. MAPEI Corporation.
 - f. Summitville Tiles, Inc.

2.8 GROUT MATERIALS

- A. Sand-Portland Cement Grout: ANSI A108.10, composed of white or gray cement and white or colored aggregate as required to produce color indicated.
- B. Standard Prepackaged Cement Grout: ANSI A118.6, color as indicated.
- C. Polymer-Modified Prepackaged Tile Grout: ANSI A118.7.

2.9 ELASTOMERIC SEALANTS

A. General: Provide sealants, primers, backer rods, and other sealant accessories that comply with the applicable requirements in Division 07 Section "Joint Sealants."

2.10 MISCELLANEOUS MATERIALS

- A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
- B. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.
- C. Grout Sealer: Product recommended by manufacturer for sealing grout joints that does not change color or appearance of grout.
 - 1. Grout sealers shall comply with requirements of FloorScore certification.

2.11 MIXING MORTARS AND GROUT

- A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.
- B. Add materials, water, and additives in accurate proportions.
- C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify that substrates for setting tile are firm, dry, clean, and free of coatings that are incompatible with tile-setting materials including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove coatings, including curing compounds and other substances that contain soap, wax, oil, or silicone, that are incompatible with tile-setting materials.
- B. Fill cracks, holes, and depressions with trowelable leveling and patching compound according to tile-setting material manufacturer's written instructions. Use product specifically recommended by tile-setting material manufacturer.
- C. Where indicated, prepare substrates to receive waterproofing by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot toward drains.
 - 1. Floor surfaces that are part of an accessible route for persons in a wheelchair shall have a maximum cross slope of 2% (1/4:12).

3.3 TILE INSTALLATION

- A. Comply with TCNA's "Handbook for Ceramic Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 Series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used. Follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage.
- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions, unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- D. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.
- E. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.
- F. Joint Widths: Unless otherwise indicated, install tile with 1/16 inch joint widths.
- G. Grout Sealer: Apply grout sealer to grout joints in tile floors according to grout-sealer manufacturer's written instructions. As soon as grout sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

3.4 WATERPROOF MEMBRANE INSTALLATION

- A. Install waterproofing to comply with ANSI A108.13 and manufacturer's written instructions to produce waterproof membrane of uniform thickness bonded securely to substrate.
- B. Allow waterproofing to cure and verify by testing that it is watertight before installing tile or setting materials over it.

3.5 REPAIR AND CLEANING

A. Remove and replace tile that is damaged or that does not match adjoining tile. Provide new matching units, installed as specified and in a manner to eliminate evidence of replacement.

- B. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
 - 1. Remove grout residue from tile as soon as possible.
 - 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions, but no sooner than 10 days after installation. Use only cleaners recommended by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.

3.6 PROTECTION

- A. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear. If recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors.
- B. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
- C. Before final inspection, remove protective coverings and rinse neutral protective cleaner from tile surfaces.

3.7 FLOOR TILE INSTALLATION SCHEDULE

- A. Floor Tile Installation: Ceramic tile over mortar bed (thickset) over waterproof membrane over concrete subfloor.
 - 1. Installation Method: TCNA B414 and ANSI A108.1C, Unglazed ceramic mosaic tile over mortar bed (thickset) over cleavage membrane over concrete.
 - 2. Mortar: Portland cement mortar.
 - 3. Grout: Polymer-modified unsanded grout.
 - 4. Use with TCNA wall tile installation method W244C.
 - 5. The finished floor slope shall not exceed 2% (1/4:12) in any direction.

3.8 SHOWER RECEPTOR INSTALLATION SCHEDULE

- A. Shower Receptor Installation: Ceramic tile over mortar bed (thickset) over waterproof membrane over concrete subfloor.
 - 1. Installation Method: TCNA B414 and ANSI A108.1C, Unglazed ceramic mosaic tile over mortar bed (thickset) over cleavage membrane over concrete.
 - 2. Mortar: Portland cement mortar.
 - 3. Grout: Polymer-modified unsanded grout.
 - 4. Use with TCNA wall tile installation method W241.
 - 5. The finished floor slope of wheelchair accessible showers shall not exceed 2% (1/4:12) in any direction.

3.9 WALL TILE INSTALLATION SCHEDULE

- A. Wall Tile Installation: Ceramic tile over mortar bed (thickset) over waterproof membrane over metal studs (Shower walls).
 - 1. Installation Method: TCNA W241 and ANSI A108.1B, Glazed wall tile over cement mortar bed (thickset), over waterproof membrane, over metal studs.
 - 2. Mortar: Latex-portland cement mortar.
 - 3. Grout: Polymer-modified unsanded grout.
- B. Wall Tile Installation: Ceramic tile thinset over cementitious backer board.
 - 1. Installation Method: TCNA W244C and ANSI A108.5, Glazed wall tile thinset over cementitious backer units.
 - 2. Thin-Set Mortar: Latex-portland cement mortar.
 - 3. Grout: Polymer-modified unsanded grout.
 - 4. NOTE: Contractor has option to use thickset method in lieu of thinset over cementitious backer board.

END OF SECTION