

**KITTITAS COUNTY JAIL
MECHANICAL REPAIRS**

ADDENDUM NO. 1
February 25, 2010

This Addendum forms a part of the Contract Documents and modifies the original Contract Documents as described. Acknowledge receipt of this Addendum in the space provided on the Form of Proposal. Failure to do so may subject Bidder to disqualification. This Addendum is issued to all known Plan Holders.

SPECIFICATIONS

1. Table of Contents **REVISE** page numbers to be:
 - Section 00100 from “1” to “2”
 - Section 00200 from “3” to “4”
 - Section 00220 from “3” to “2”
 - Section 00400 from “2” to “3”
 - Section 00710 from “16” to “17”
 - Section 01730 from “3” to “4”
2. Section 00100, Advertisement to Bid, Mandatory Pre-bid Conference, **REVISE** time to 1:00pm.
3. Section 01030, **REVISE** section title (upper right-hand corner) to read “ALTERNATES”.
4. Section 01030. 1/03, Alternate Bid No. 1B: **REPLACE** “Section 09” with words “Section 09671”.
5. Section 01730, 3.01, B., **REVISE** sentence to read: “interference with roads, streets, walks, walkways, and other adjacent...”.
6. Section 01730, 3.03, A, 8., **ADD** the following after the second sentence: “Maintain fire watch and portable fire suppression devices during flame-cutting operations.”
7. Section 01750, **REVISE** header and footer section callout, from “02073” to “01750”, on pages 2 and 4.
8. Section 01090. 1.03, B., 2nd line, **DELETE** “/Cross”.
9. Section 09671 - Fluid Applied Epoxy Flooring, **ADD** in its entirety, the attached Section.
10. Section 15500, 2.03, A., 4., **REVISE** the word “facoty” to “factory”.
11. Section 15500, 2.03, A., 4., **REVISE** “respons” to “response”.
12. Section 15810, 3.02, A., **REVISE**: “provide fully functioning s close to...” to read: “provide fully functioning as close to...”

13. Section 15820, 1.02, F., **REVISE** “Air Balancing” to “Air and Hydronic Balancing”.
14. Section 15820, 2.02, **DELETE** subparagraph K.
15. Section 15820, 2.03, E., 1., **ADD**: “Provide VFD where indicated; VFD shall comply with Section 15900 specification, but be furnished with fan.”
16. Section 15840, 1.02, **ADD**: “G. Section 15955 - Air and Hydronic Balancing.”
17. Section 15851, 1.02, F., **REVISE** “Air Balancing” to “Air and Hydronic Balancing”.
18. Section 15900, 2.01, C., **DELETE**: “No substitutions”.
19. Section 15900, 2.03, B., **REVISE** “utilized” to “utilize”.
20. Section 15900, 4.06, A. line 2, **REVISE** words “see Section 15670” to “chiller is existing”.
21. Section 15900, 4.06, C., **REVISE** “Chiller Pumps: Primary pump...” to “Chiller Pump: Pump...”
22. Section 15900, 4.10, **DELETE** subparagraph C.
23. Section 15900, 4.10, **DELETE** subparagraph D.

ATTACHMENTS

1. Section 09671-Fluid Applied Epoxy Flooring.

END OF ADDENDUM NO. 1

PART 1 – GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Drawings and general provisions of Contract, including General and Special Conditions and Divisions 0 & 1 Specification sections, apply to work of this section.
- B. Refer to Specification Section 00400 – Bid Proposal Form for information concerning additive alternate bids.

1.02 SUMMARY

This section includes

- A. Fluid-applied epoxy flooring on existing substrate in the quantities indicated on the drawings.

1.03 QUALITY ASSURANCE

- A. The finished floor coating shall be uniform in color, texture and appearance. All edges that terminate at walls, floor discontinuities and other embedded items shall be sharp, uniform and cosmetically acceptable with no thick or ragged edge. The Contractor shall work out an acceptable masking technique to ensure the acceptable finish of all edges.
- B. Reference Standards:
 - 1. ACI 308 – Standard Practice for Curing Concrete
 - 2. ACI 302.1R-80 – Guide for Concrete Floor and Slab Construction
 - 3. United States Department of Agriculture Acceptance
- C. Contractor Pre-qualification Requirements:
 - 1. Each bidder for this project shall be a pre-qualified and “Approved Applicator” at the time of bid submittal with 5 years minimum experience.
 - 2. Each approved applicator shall have been pre-qualified in all phases of surface preparation and application of the specified floor coating system.

1.04 SUBMITTALS

- A. Acceptance Sample: The acceptance sample shall be a one-foot square sample of ‘Tnemec’ OR approved equivalent fluid-applied epoxy flooring system applied to hardboard or similar backing for rigidity and handling.
- B. Manufacturer’s Literature: Descriptive data and specific recommendations for initiating, mixing, application and curing.

- C. Manufacturer's Material Safety Data Sheets (MSDS) for each respective product being used.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. All materials shall be delivered in original manufacturer's sealed containers with all pertinent labels intact and legible.
- B. Store materials in protected areas at a temperature between 70° F and 90° F.
- C. Follow all manufacturer's specific instructions and prudent safety practices for storage and handling.

1.06 JOB CONDITIONS

- A. The material, air and surface temperatures shall be in the range of 60° F to 85° F during application and cure.
- B. The relative humidity in the specific location of the application shall be less than 85% and the surface temperature shall be at least 5° F above the dew point.
- C. The surfaces to be coated shall have been prepared as specified in Section 3.2 "Surface Preparation".
- D. Protect all adjacent surfaces not to be coated with masking and covers.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

- A. Tnemec Company Inc., 6800 Corporate Drive Kansas City, MO 64120-1372; (800) 863-6321 OR approved equivalent.

2.02 APPROVED MATERIALS

- A. Tnemec Series 237/238 Power-Tread Epoxy Flooring System OR approved equivalent:
 - 1. Saturating Prime Coat: Tnemec Series 201 100% Solids Epoxy Primer/Sealer OR approved equivalent.
 - 2. Intermediate Coat: Tnemec Series 237/238 Power-Tread 100% Solids Epoxy with sand broadcast, x2 to achieve to 1/8" thickness OR approved equivalent.
 - 3. Topcoat: Tnemec Series 280 100% solids epoxy topcoat OR approved equivalent.
 - 4. Color shall be as selected by the architect and approved by the Owner from the manufacturer's standard color and product line.

2.03 MATERIAL PREPARATION

- A. Mix all material in strict accordance with the manufacturer's specific instructions and procedures for the respective material being used.
- B. Pot life and cure times are very short; mix only enough product to satisfy immediate application requirements.

PART 3 – EXECUTION

3.01 PRE WORK INSPECTION

- A. Examine all surfaces to be coated with these materials and report any conditions that adversely affect the appearance or performance of the coating systems and which cannot be put into acceptable condition by the preparatory work specified in Paragraph 3.2.
- B. Do not proceed with surface preparation and application until the surface is acceptable or authorization to proceed is given by the Architect or Engineer.
- C. Ensure that floor drains, proximate equipment and any other items sensitive to dust and contamination are properly and adequately masked and protected.
- D. For slabs on grade to be treated, Calcium Chloride tests will be run for every 1,000 square feet prior to installation: ASTM F 1869 – Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride

3.02 SURFACE PREPARATION

- A. General:
 - 1. Initially, dislodge dirt, mortar spatter and other dry surface accumulations and contamination by scraping, brushing, sweeping, vacuuming or compressed air blow-down.
 - 2. Surfaces that are heavily contaminated with petroleum or other process products shall be cleaned with the appropriate degreaser, detergent or other effective cleaner/surfactant followed by thoroughly rinsing with fresh water to remove the accumulation prior to mechanical cleaning efforts. Mechanical cleaning will not remove such deposits, but will only drive them deeper.
 - 3. All concrete floor surfaces shall be visibly dry, especially in cracks and other deep surface discontinuities, prior to commencing mechanical cleaning and preparation.
- B. Mechanical Surface Preparation and Cleaning:
 - 1. All accessible concrete floor surfaces shall be mechanically cleaned using a "Blast-Trac" method OR approved equivalent. All surface and embedded

accumulations of paint, toppings, hardened concrete layers, laitance, power trowel finishes and other similar surface characteristics shall be removed leaving a bare concrete surface having a minimum profile of 30 mils and exposing the upper facades of concrete aggregate. (Reference SSPC-SP13 / NACE 6, ICRI CSP 3-5)

2. Floor areas that are inaccessible to the cleaning machine shall be mechanically abraded to the specified degree of cleanliness, soundness and profile using vertical disc scarifiers, starwheel scarifiers, grinders, needle guns or other suitable effective equipment.
3. Cracks in the floor 3/16" and wider, shall be routed out to a minimum 1/2" deep V-groove of sound concrete and filled with materials recommended by the manufacturer. Other significant surface discontinuities such as holes, pits, depressions and exposed aggregate areas shall be filled with similar materials.
4. Allow the surface to dry or force dry with heat and circulating air to ensure that all surface, especially discontinuities, are visibly dry.
5. All concrete floor terminations and leading edges shall be saw-cut and chiseled down to 1/4 to 1/2" as to avoid feathered edge terminations. This includes drains, construction & expansion joints and all leading edges of concrete floor where they meet dissimilar materials.

3.03 APPLICATION

A. Over existing concrete floor substrate

1. This application shall consist of applying the Primer/Intermediate/Sealer, allowing time for cure, and then applying the topcoats in the sequence and film thicknesses as specified herein below and in Paragraph 3.6.
2. Open only the containers of components to be used in each specific application. Refer to manufacturer's data sheets for pot life/temperature relationship to determine size of batches to mix.
3. Pour the mix onto the floor surface, flat squeegee and back-roll to form a uniform, continuous film, ensuring that all crevices, cracks and other surface discontinuities have been saturated and coated.
4. Allow sufficient time for the Primer/Sealer to cure.
5. Pour intermediate resin onto floor, spread with 40 mil notched squeegee and back-roll. Broadcast with sand to rejection. Allow to cure, sweep and repeat process to achieve approximately 1/8" thick intermediate coat.
6. After full cure, sweep, vacuum and apply topcoat. If a smooth surface is desired, a second topcoat may be necessary.

3.04 INSPECTION

- A. Request acceptance of the Primer/Intermediate coats before application of the Topcoat commences.
- B. All work that is not acceptable to the Architect, Engineer or Owner must be corrected before consideration of final acceptance.

3.05 CLEAN-UP

- A. Remove any material spatters and other material that is not where it should be. Remove masking and covers and clear area of installation materials, taking care not to contaminate surrounding areas, drains, and adjacent equipment or installations.
- B. Repair any damage that should arise from either the application effort or from the clean-up effort.

3.06 COATING/ PRODUCT APPLICATION SCHEDULE

- A. Primer/Sealer Coat: Tnemec Series 201 100% Solids Epoxy primer/sealer saturation at 150 sq. ft per gallon. DFT of 8 mils.
- B. Intermediate Coats: Tnemec Series 237/238 Power-Tread 100% Solids Epoxy at 1/8" with sand covering 100% of surface.
- C. Topcoat: Tnemec Series 280 100% Solids Epoxy at 100-150 sq. ft. per gallon. A second coat may be necessary for smoother finish.
DFT of 8-10 mils per coat.

OR similar coating schedule for any equivalent product as approved by the architect.

END OF SECTION