

CONSTRUCTION CHANGE DIRECTIVE

Project: Roof Improvements - 2018 Williamson County
Jail and Sheriff's Office

Directive Number: 01

Date: July 17, 2018

Contractor: L Wallace Construction Co., Inc.

Project Number: 1712-207

Contract for: Roof Improvements – 2018 Wilco
Jail and Sheriff's Office

Contract Date:

This document becomes immediately effective when signed by the Owner and Consultant and received by the Contractor. You are hereby directed to execute promptly this Change Directive, which interprets the Contract Documents, and make the following change(s) in this Contract.

Description of Proposed Change Item(s):

Provide labor and material breakdown pricing for the following scope of work:

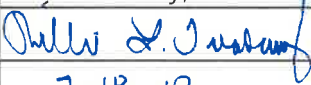
1. Waterproof Concrete Surface of North and South Rec Yards:
 - a. Clean, prepare concrete, install sealant, and apply a slip resistant waterproof coating to concrete deck in accordance with the Contract Documents and Specifications Section 071800.
2. Re-caulk Control Joints, Window and Door Openings, and Penetrations thru Brick of North and South Rec Yard Walls:
 - a. Remove existing sealants, clean, prime joints, and install new backer-rod and sealant in accordance with the Contract Documents and Specifications Section 079200.
 - b. Remove mortar from glass block and prep joints to manufacturer's recommendations, accept new sealant, and install new silicone sealant.

Proposed Adjustments:

1. The basis for the adjustment in Contract Amount is:

Lump sum **(increase)** or (decrease) in the amount of \$ 74,200.00
 Unit price in the amount of \$ _____ per _____
 Other _____ \$ _____

2. Contract Time is to be **(increased)** (decreased) (remain unchanged). The proposed change is (an increase of 30 days) (a decrease of _____ days).

	Owner	Consultant	Contractor
Address 1	Williamson County	Jim Whitten	L Wallace Construction
Address 2	3101 SE Inner Loop Road	PO Box 200925	14220 South Meridian Ave.
City, state, ZIP	Georgetown, TX 78626	Austin, TX 78720	Oklahoma City, OK 73173
Signature (1)			
Date			7-18-18

(1) The signature of the Contractor indicates agreement with the proposed adjustments in Contract Amount and Contract Time.

Copies: Owner A/E Contractor Consultant



SECTION 071800 – TRAFFIC COATINGS, PEDESTRIAN TRAFFIC

PART 1 - GENERAL

1.1 SECTION INCLUDES

1. Polyurethane methacrylate traffic coatings for pedestrian traffic applications.

1.2 RELATED REQUIREMENTS

1. Section 079200 "Joint Sealants" for joint sealants and accessories and joint preparation.

1.3 REFERENCES

- A. References, General: Versions of the following standards current as of the date of issue of the project apply to the Work of this Section.

- B. ASTM International (ASTM): www.astm.org:

1. ASTM C 920 - Standard Specification for Elastomeric Joint Sealants
2. ASTM C 957 - Standard Specification for High-Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane with Integral Wearing Surface
3. ASTM C 1127 - Standard Guide for Use of High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane with an Integral Wearing Surface
4. ASTM C 1193 - Standard Guide for Use of Joint Sealants
5. ASTM D 4258 - Standard Practice for Surface Cleaning Concrete for Coating
6. ASTM D 4259 - Standard Practice for Abrading Concrete

- C. International Concrete Repair Institute (ICRI): www.icri.org:

1. ICRI 310.2R - Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Conference: Conduct conference at Project Site.

1. Review requirements for traffic coating products and installation, including surface preparation, substrate conditions, project and manufacturer's details, installation procedures, mockups, testing and inspection requirements, protection and repairs, and coordination and sequencing of traffic coating work with work of other Sections.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of traffic coating product specified, indicating compliance with requirements.

- B. Shop Drawings: Show locations for traffic coating system components. Show details for each type of substrate, movement joints, corners, and edge conditions, including penetrations, transitions, and terminations.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and manufacturer.

- B. Product Test Reports: Test data for traffic coating products and traffic coating system, by qualified testing agency, indicating proposed traffic coating meets performance requirements, when requested by Consultant/Architect.
- C. Warranty: Sample of unexecuted manufacturer and installer special warranties.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: A manufacturer-approved firm with minimum five years' experience in installation of specified products in successful use on similar projects, employing workers trained by manufacturer, including a full-time on-site supervisor with a minimum of three years' experience installing similar work, and able to communicate verbally with Contractor, Consultant/Architect, and employees.
- B. Mockups: Provide traffic coating mockup application within mockups required in other sections, or if not specified, in an area of not less than 150 sq. ft. of surface where directed by Owner for each type of substrate condition. Include examples of surface preparation, crack and joint treatment, traffic coating application, slip-resistant aggregate application, and flashing, transition, and termination conditions, to set quality standards for execution.
 - 1. Include intersections of deck traffic coating with adjacent vertical coating and moisture control system applications.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Accept materials on site in manufacturer's unopened original packaging.
- B. Store products in weather protected environment, clear of ground and moisture, within temperature ranges recommended by traffic coating manufacturer.

1.9 ENVIRONMENTAL REQUIREMENTS

- A. Environmental Limitations: Apply traffic coating within the range of ambient and substrate temperatures recommended by traffic coating manufacturer.
 - 1. Protect substrates from environmental conditions that affect coating performance.
 - 2. Do not apply traffic coating to a damp or wet substrate or during snow, rain, fog, or mist or when dew is present.

1.10 SCHEDULING

- A. Coordinate installation of traffic coating with completion of roofing and other work requiring interface with traffic coating.

1.11 WARRANTY

- A. Applicator: Company specializing in performing the work of this section qualified by system manufacturer for warranted membrane installation. Applicator shall submit the following certification for review:
 - 1. Applicator shall submit documentation from the membrane manufacturer to verify contractor's status as a qualified approved applicator for warranted installations.
- B. Special Manufacturer's Warranty: Manufacturer's standard form in which traffic coating manufacturer agrees to furnish traffic coating material to repair or replace those materials

installed according to manufacturer's written instructions that exhibit material defects or otherwise fail to perform as specified under normal use within warranty period specified.

1. Access for Repair: Owner shall provide unimpeded access to the Project and the traffic coating system for purposes of testing, leak investigation, and repair,
2. Cost Limitation: Manufacturer's obligation for repair or replacement shall be limited to the original installed cost of the work.
3. Warranty Period: Twenty years from date of Substantial Completion.

C. Special warranties specified in this article exclude deterioration or failure of traffic coating materials from the following:

1. Movement of the structure caused by structural settlement or stresses on the traffic coating exceeding manufacturer's written specifications for elongation.
2. Mechanical damage caused by outside agents.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Products: Provide traffic coating products manufactured by Tremco, Inc., Commercial Sealants and Waterproofing Division, or comparable products of other manufacturer approved by Consultant/Architect in accordance with Instructions to Bidders and Division 01 General Requirements.
- B. Source Limitations: Provide traffic coating system materials and accessory products from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

- A. General: Traffic coating system shall be capable of performing as a continuous watertight installation and as a moisture drainage plane transitioned to adjacent flashings and discharging water to the structure exterior. Traffic coating shall accommodate normal substrate movement and seal expansion and control joints, construction material transitions, opening transitions, penetrations, and perimeter conditions without resultant moisture deterioration.
- B. Compatibility: Provide traffic coating system materials that are compatible with one another and with adjacent materials under conditions of service and application required, as demonstrated by traffic coating manufacturer based on testing and field experience.

2.3 TRAFFIC COATING FOR PEDESTRIAN TRAFFIC, EXTREME WEAR SYSTEM (EWS)

- A. Traffic Coating: Manufacturer's polyurethane methyl methacrylate system for extreme exterior exposure conditions, traffic-bearing, seamless, high-solids-content, cold liquid-applied, elastomeric, waterproofing membrane system with integral wearing surface for pedestrian traffic.
 1. Basis of Design Products: Tremco, Inc., Vulkem EWS System
- B. Primer: Two-component, chemically curing methyl methacrylate
 1. Tremco PUMA Primer
- C. Base Coats: Modified polyurethane methacrylate
 1. Tremco PUMA BC or Tremco PUMA BC LM
- D. Top Coat: Methyl Methacrylate
 1. Tremco PUMA TC
 2. Color: As selected by Architect from manufacturer's full range.

- E. Aggregate: Manufacturer's standard aggregate for each use indicated of particle sizes, shape, and minimum hardness recommended in writing by traffic-coating manufacturer.
 - 1. 16-30 Mesh silica sand for the Base coat
 - 2. 30-50 Mesh silica sand for the primer

2.4 ACCESSORY MATERIALS

- A. General: Accessory materials as described in manufacturer's written installation instructions, recommended to produce complete traffic coating system meeting performance requirements, and compatible with traffic coating material and adjacent materials.
- B. Initiator; Benzoyl Peroxide
 - 1. Tremco PUMA Initiator
- C. Cleaner; One component polyurethane methyl methacrylate
 - 1. Tremco PUMA Cleaner
- D. Cold Weather Catalyst;
 - 1. Tremco PUMA Cold Weather Catalyst
- E. Crack and Joint Detailing Coating
 - 1. Tremco PUMA BC LM and/or Tremco PUMA WC with silica
- F. Vertical and Ramp Application Coating
 - 1. Tremco PUMA BC R

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Surface Condition: Before applying traffic coating materials, examine substrate and conditions to ensure substrates are fully cured and free from high spots, depressions, loose and foreign particles and other deterrents to adhesion, and conditions comply with manufacturer's written recommendations.
 - 1. Verify concrete surfaces are visibly dry, have cured for time period recommended by traffic coating manufacturer, and are free from release agents, curing agents, laitance, and other contaminates.
 - 2. Test surfaces following cleaning and abrasion specified below.
 - a. Test for capillary moisture by method recommended in writing by traffic-coating manufacturer.
 - b. Test for traffic coating adhesion per manufacturer's recommended method.
 - c. Notify Consultant/Architect in writing of unsatisfactory conditions.
- B. Proceed with installation once unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Preparation: Clean, prepare, and treat substrates in accordance with ASTM C 1127 and traffic coating manufacturer's written instructions.
 - 1. Remove contaminants, curing compounds, and film-forming coatings from substrates.
 - 2. Remove projections and excess materials and fill voids with manufacturer's recommended substrate patching material.

3. Prepare surfaces to a uniform profile in accordance with ASTM D 4259 and meeting ICRI Surface Profile CSP 2 - 4. Do not acid etch.
 4. Clean prepared surfaces in accordance with ASTM D 4258.
- B. Protect adjacent finished surfaces by masking. Mask termination point on vertical surfaces. Protect weep holes and drains.

3.3 TERMINATIONS AND PENETRATIONS

- A. Prepare vertical and horizontal surfaces at horizontal to vertical transitions, terminations, joints, and penetrations through traffic coatings in accordance with ASTM C 1127 and manufacturer's written instructions, using accessory materials specified.
- B. At terminations of traffic coating exposed to traffic, rout 1/4 by 1/4 inch keyway in concrete.
- C. Detail Preparation: Prepare non-moving shrinkage cracks, large cracks, construction joints, expansion joints, projections and protrusions, penetrations, drains, and changes in plane in accordance with manufacturer's written instructions and details, .
1. Prepare joints and cracks in substrate in accordance with ASTM C 1127 and ASTM D 4258 and manufacturer's written instructions.
- D. Joint Coating Installation: Comply with manufacturer's written instructions. Allow joint coatings to cure adequately before coating with traffic coating.
1. Provide coating cants at penetrations and at horizontal-to-vertical intersections. Tool coating material to form 45 degree angle transition. Penetrations must be grouted solid at all instances.
 2. Rout and fill cracks with coating and tool flush with surface.
 3. Feather edges of joint coating applications.
 4. Allow coating to cure.
 5. Fill expansion joints with backer rod and joint sealant contact manufacturer for sealant recommendation. Do not apply traffic coating over expansion joints.

3.4 PEDESTRIAN TRAFFIC-COATING APPLICATION

- A. Primer: Prime surfaces to receive traffic coating system. Allow to cure before proceeding.
- B. Start traffic-coating application in presence of manufacturer's technical representative.
- C. Apply traffic coating according to manufacturer's written instructions.
1. Verify that wet film thickness of each coat complies with requirements every 100 sq. ft.
- D. Apply number of coats of specified compositions for pedestrian coating at locations indicated on Drawings, per manufactures written installation instructions.
- E. Apply traffic coatings to prepared wall terminations and vertical surfaces to height indicated; omit aggregate on vertical surfaces.
- F. Cure traffic coatings. Prevent contamination and damage during application and curing stages.

3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Manufacturer to inspect substrate conditions, surface preparation, traffic coating application, and furnish written report to Consultant/Architect.

- B. Correction: Correct deficient applications not passing tests and inspections, make necessary repairs, and retest as required to demonstrate compliance with requirements.

3.6 CLEANING AND PROTECTING

- A. Clean spills, stains, and overspray resulting application utilizing cleaning agents recommended by manufacturers of affected construction. Remove masking materials.
- B. Protect traffic coating from damage from subsequent work. Protect traffic coating materials from exposure to UV light for period in excess of that acceptable to traffic coating manufacturer; replace overexposed materials and retest.

END OF SECTION