



Florida Department of Transportation

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SECRETARY

October 23, 2009

ADDENDUM NO. 6

TO: PROSPECTIVE BIDDERS AND PLAN HOLDERS

PROPOSAL/CONTRACT ID: E9080

FINANCIAL PROJECT NUMBER(S): 422511 4 52 01 and 422511 2 52 01

COUNTY(IES): Alachua

PROJECT NAME(S): SMO Test Track Expansion Project and Calibration Bay Addition

RESPONSE TO CONTRACTORS' QUESTIONS

Enclosed are the Department's responses to Contractors' questions.

ADDENDUM NOTIFICATION

If you are a PROPOSAL HOLDER, please acknowledge receipt of this Addendum on the Bid Proposal Page of your Proposal in the space provided. Failure to acknowledge all addenda will cause the bid to be rejected.

Sincerely,

A handwritten signature in cursive script that reads "Juanita Moore".

Juanita Moore, Manager
Contracts Administration Office

JM:pd

Enclosure

- 1) No signage is shown or listed in the specs, ie; room signs, doors, etc. Will there be any included in this bid?

Signs are not required.

- 2) What type of paint is to be used for the black floors? Specs call for a Pro Mar 200 Alkyd Enamel for concrete, this paint is typically not used for floors.

Add TSP SECTION 09960 - FLOOR COATING SYSTEM
(See attached file: TSP 09960 -Deck Coating System.doc)

- 3) I am unclear on the stucco, will it be painted or is the color part of the stucco? Specs: Painting 09900 show 1 coat primer, 2 coats latex, Stucco 09220 2.01 H says ...formulated with colorfast mineral pigments...?

Cement plaster shall be pigmented as specified. Disregard reference to painting

- 4) We submitted the details for the pole lights shown on E-05 directly to our distributor, since we are not familiar with the items being required by detail 3, 4 and 6. The suppliers and the lighting manufacturer's representative expressed the same lack of understanding. A typical street pole installation often includes a breakaway plug such as the attached cut sheet shows. These, however are not molded and are usually attached to individual wires, not a cable as shown. As you can see, fuses are integral with the plug, not a separate item in the ground box as shown on the details. Surge is usually placed in the pole handhole, not in the ground box which is subject to ground water. Also no specification is given for the surge suppression.

Are the HEX connectors and fuses installed as described above acceptable? What is the specification or manufacturer model for the pole surge and should it be mounted in the pole? If HEX connectors are not acceptable, please provide manufacturer/part numbers for the cable with molded breakaway plugs for both up the pole and to the ground box, the fuse block, and the surge with what appears to be an additional molded plug.

The design is in accordance with FDOT standards. Here are some suppliers that can furnish the materials specified:

Duraline, Division of J.B. Nottingham
75 Hoffman Lane
Islandia, NY 11749
www.jbn-duraline.com

MG Squared, Inc.
3233 Oak Hill Drive, Suite 201
Birmingham, AL 35216
(205) 823-6688
Fax (205) 823-6615
www.mgsquared.com
martin@mgsquared.com

SECTION 09960 – FLOOR COATING SYSTEM

PART 1 GENERAL

1.01 DESCRIPTION

- A. Furnish all labor, materials, tools and equipment to perform application of Floor Coating System intended for concrete slabs as specified in this section. Work shall include providing all striping.

1.02 RELATED SECTIONS

- A. Section 09900 PAINTING

1.03 QUALITY ASSURANCE

- A. Manufacturer qualifications: Company regularly engaged in manufacturing and marketing of products specified in this section.
- B. Contractor qualifications: Qualified to perform work specified by reason of experience or training provided by product manufacturer.
 - 1. Certification: Written approval or license of applicator by coating manufacturer.
- C. Mockup: Finished tested area which will be the basis for comparison for acceptable/completed work. Colors to be used will be representative in this mock-up.
- D. Notify manufacturer's authorized representative at least two weeks before start of work. Schedule minimum of 3 job site inspections by manufacturer's authorized representative, first scheduled before application of product. Application of Floor Coating System without prior notice will not constitute acceptance by manufacturer of five-year waterproofing inspection and guarantee procedure.

1.04 SUBMITTALS

- A. Submit intent to warranty document from manufacturer of Floor Coating System and all materials with performance guarantee against blistering, cracking, softening, delaminating, discoloration and water penetration for 5 years with any necessary replacement material and labor supplied at no cost to Department. It is the intent of this document to provide the Department with a Full System Warranty from a single manufacturer covering all products utilized in this work scope.
- B. Submit statement from Manufacturer attesting to applicators pre-qualified status.
- C. Submit laboratory tests or data that validate product compliance with performance criteria specified.

1.05 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in original factory packaging bearing identification of product, manufacturer, and batch number. Provide Material Safety Data Sheets for each product.

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- B. Store product in location protected from freezing, damage, construction activity, precipitation, and direct sunlight, in strict accordance with manufacturer's recommendations.
- C. Condition products to 55 to 90 degrees F for use in accordance with manufacturer's recommendations.
- D. Handle all products with appropriate precautions and care as stated on Material Safety Data Sheet.

1.06 PROJECT CONDITIONS

- A. Do not use products under conditions of precipitation or freezing weather or when such conditions are imminent. Use appropriate measures for protection and supplementary heating to ensure proper drying and curing conditions in accordance with manufacturer's recommendations.
- B. Ensure substrate is dry.
- C. Protect all adjacent work from contamination due to mixing, handling, and application of preparation and repair products and Floor Coating System.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design: For purpose of defining quality of materials in this Section Sherwin Williams conforms to requirements of this specification.
- B. Substitutions:
 - 1. Alternates to acceptable manufacturer will be considered only on basis of written requests. Include substantiation of product performance as listed in section 2.02 below.

2.02 PERFORMANCE CRITERIA

- A. Base Coat Compliance:
 - 1. Abrasion Resistance: Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load
Result: 64.8 mg loss
 - 2. Adhesion, over concrete: Method: ASTM D4541
Result: 350 psi, 100% concrete failure
 - 3. Direct Impact Resistance Method: ASTM D2794
Result: 58 in. lbs
 - 4. Dry Heat Resistance: Method: ASTM D2485
Result: 180°F
 - 5. Pencil Hardness: Method: ASTM D3363
Result: HB
 - 6. Slip Resistance, Floors: Method: ASTM C1028-96, .60 minimum Static Coefficient of Friction
Result: Passes wet and dry, with and without SharkGrip Additive

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B. Subsequent Coat(s) Compliance:

1. Abrasion Resistance: Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load
Result: 76 mg loss (average of 5 trials)
2. Adhesion, steel: Method: ASTM D3359 Method B
Result: 5B, 100%
3. Retention Method: ASTM D4541
Result 1200 psi
4. Direct Impact Resistance Method: ASTM D2794
Result: 100 in. lb.
5. Dry Heat Resistance Method: ASTM D2485
Result: 200°F, 250°F intermittent
6. Humidity Resistance Method: ASTM D4585, 100°F, 2000 hours
Result: No blistering, cracking, softening or delamination
7. Pencil Hardness: Method: ASTM D3363
Result: 6H
8. Salt Fog Resistance, with primer: Method: ASTM B117, 1000 hours
Result: Rating 10 per ASTM D610 for rusting, less than 1/16" creepage at scribe. No blistering, cracking, softening, or delamination of the film.
9. Slip Resistance, Floors: Method: ASTM C1028-96, .60 minimum Static Coefficient of Friction Passes wet and dry, with and without SharkGrip Additive.

2.03 PRODUCT CHARACTERISTIC

A. Base Coat Compliance:

1. Weight Solids, mixed: 74% ± 2%, may vary by color VOC (EPA Method 24), mixed.
2. Recommended Spreading Rate per coat:
Wet mils: 5.0 - 8.0
Dry mils: 3.0 - 5.0
3. Coverage: 206 - 350 sq ft/gal approximate with film thickness and uniformity of appearance.
4. Drying Schedule @ 6.0 mils wet @ 50% RH:

	@ 50°F	@ 77°F	@ 120°F
To touch:	4 hours	2 hours	30 minutes
To recoat:			
min:	24 hours	8 hours	4 hours
max:	7 days	7 days	
Foot traffic:	48 hours	24 hours	12 hours
Heavy traffic:	4-5 days	48-72 hrs	24-36 hrs
To cure:	10 days	7 days	4 days
5. Pot Life: 6 hours 4 hours 2 hours
6. Sweat-in-Time: 2 hours 30 minutes 10 minutes

Note: If maximum recoat time is exceeded, abrade surface before recoating.

7. Shelf Life: 36 months, unopened
8. Store indoors at 40°F to 100°F.
9. Flash Point: 105°F, Seta, mixed

B. Subsequent Coat(s) Compliance:

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1. Finish: Gloss
 2. Color: As selected by Department from range of standard colors (Haze Gray, Extra White, Clear, Safety Yellow, and a wide range of colors available).
 3. Volume Solids: 65% ± 2%, mixed.
 4. Weight Solids: 76% ± 2%, mixed.
 5. VOC (EPA Method 24): Unreduced: <340 g/L; 2.8 lb/gal mixed Reduced 10%: 400g/L; 3.3 lb/gal
 6. Mix Ratio: 3:1 by volume
 7. Spreading Rate per coat:
Wet mils: 3.0 - 4.5
Dry mils: 2.0 - 3.0
 8. Coverage: 360 - 545 sq ft/gal approximate
 9. Drying Schedule @ 3.0 mils wet @ 50% RH:

	@50°F	@ 77°F	@100°F
To touch:	6 hours	2 hours	30 minutes
To handle:	24 hours	10 hours	2 hours
Foot traffic:	24 hours	12 hours	8 hours
Heavy traffic:	5 days	72 hours	48 hours
To recoat:			
min:	24 hours	12 hours	2 hours
max:	3 days	48 hours	24 hours
To cure:	7 days	7 days	5 days
 10. Pot Life: 5 hours 4 hours 45 minutes
 11. Sweat-in-Time: None required
- Note: If maximum recoat time is exceeded, abrade surface before recoating.
12. Shelf Life: 12 months, unopened
 13. Store indoors at 40°F to 100°F
 14. Flash Point: 102°F TCC, mixed

2.03 FLOOR COATING SYSTEM:

A. Base Coat:

1. ARMORSEAL 1000 HS high solid, heavy duty, two-component, catalyzed, polyamide epoxy coating formulated for demanding resistant to alkalies, abrasion, corrosion, and chemical attack.

B. Subsequent Coat(s):

1. ARMORSEAL FLOOR-THANE CRU is a heavy duty, two component, exterior/interior, VOC compliant, high solids, polyester- aliphatic urethane industrial floor coating. High gloss, flexible finish and maximum gloss retention, color retention, and chalk resistance.

C. Finish Color

1. Tinted flat black.

PART 3 EXECUTION

3.01 EXAMINATION

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- A. Inspect all areas involved in work to establish extent of work, access and need for protection of surrounding construction.
- B. Protect all surroundings from floor coating system work to include, but not be limited to, walls, equipment, doors and windows.

3.02 SITE VERIFICATIONS OF CONDITIONS

- A. Conduct all pre-application inspections of site verification with authorized Manufacturer Representative.
- B. Inspect surfaces to receive new coating to ensure there is no deteriorated sealant, adhesion loss or non-elastomeric caulks installed in joints. Repair all deficient sealant or caulk with SL 2.

3.03 SURFACE PREPARATION

- A. Surfaces must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion. Minimum surface preparation as follows:
 - 1. Concrete:
 - a. Prepare surface in accordance with SSPC-SP13/NACE 6 or ICRI 03732, CSP 1-3 and clean to remove all foreign material using a strong detergent and in accordance with ASTM D4258.
 - b. Rout cracks and joints over 1/16 inch wide to minimum of 1/4 inch by 1/4 inch and clean. Install bond breaker tape to prevent adhesion to bottom of joint. Prime joint faces only with primer as recommended by the coating manufacturer. Seal with SL 2 sealant. Allow sealant to cure.
 - d. Cut 1/4 inch by 1/4 inch keyway into concrete deck where coating system will be terminated and no wall, joint, or other appropriate break exists (i.e. at ramps). Fill and coat keyway as application progresses.
 - e. Provide sealant cants at rigidly connected wall and slab intersections. Form sealant cant into corner at junction of all horizontal and vertical surfaces (wall sections, curbs, columns) by priming with primer as recommended by coating manufacturer. Lay 1/4 inch SONOLASTIC7 Closed Cell Backer-Rod in corner and apply 1 inch diameter bead of SL 2 Slope Grade sealant. Tool to form 45 degree cant. Allow sealant to cure.
 - f. Apply masking tape to vertical sections at appropriate height above sealant cant to provide clean termination of vertical detail coat. Prime with primer as recommended by the coating manufacturer and apply 25 wet mils of base coat over treated cant up to masking tape and 4 inches onto deck surface. Feather onto deck surface.
 - 3. Test Area: Apply a test area, allowing coating to dry one week before testing adhesion.

3.04 APPLICATION

- A. Complete all surface preparatory work before application begins.
- B. Floor Coating System consists of the followings coats

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- 1st Coat (Base): ARMORSEAL 1000 HS
 - 2nd Coat ARMORSEAL FLOOR-THANE CRU
 - 3rd Coat: ARMORSEAL FLOOR-THANE CRU
- Verify mil thickness of all coats by use of wet-mil thickness gauge.

C. Base Coat Application:

1. Mix contents of each component thoroughly with a variable speed drill with a metal mixing blade.
2. Combine one Part A with one Part B by volume and mix for 3 minutes and until uniform. Allow the material to sweat-in as indicated. Re-stir before using.
3. Apply paint at the film thickness and spreading rate as indicated below:
 Spreading Rate per coat:
 Wet mils: 5.0 - 8.0
 Dry mils: 3.0 - 5.0
 Coverage: 206 - 350 sq ft/gal approximate
 NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.
4. Drying Schedule @ 6.0 mils wet @ 50% RH:

	@ 50°F	@ 77°F	@ 120°F
To touch:	4 hours	2 hours	30 minutes
To recoat: min:	24 hours	8 hours	4 hours
max:	7 days	7 days	7 days
Foot traffic:	48 hours	24 hours	12 hours
Heavy Traffic	4-5 days	48-72 hours	24-36 hours
To cure:	10 days	7 days	4 days
5. Pot Life: 6 hours 4 hours 2 hours
6. Sweat-in-Time: 2 hours 30 minutes 10 minutes

D Subsequent Coat(s) (2nd and 3rd) Application:

1. Mix contents of each component thoroughly with power agitation. Make certain no pigment remains on the bottom of the can.
2. Combine three parts by volume of Part A with one part by volume of Part B. Thoroughly agitate the mixture with power agitation. Allow the material to sweat-in as indicated. Re-stir before using. Mix anti-slip additive into the final coat just prior to application.
3. Apply paint at the film thickness and spreading rate as indicated below:
 Spreading Rate per coat:
 Wet mils: 3.0 - 4.5
 Dry mils: 2.0 - 3.0
 Coverage: 360 - 545 sq ft/gal approximate
4. Drying Schedule @ 3.0 mils wet @ 50% RH:

	@50°F	@ 77°F	@100°F
To touch:	16 hours	2 hours	30 minutes
To handle:	24 hours	10 hours	2 hours
Foot traffic:	24 hours	12 hours	8 hours
Heavy traffic:	5 days	72 hours	48 hours
To recoat min:	24 hours	12 hours	2 hours
max:	3 days	48 hours	24 hours

	To cure:	7 days	7 days	5 days
5.	Pot Life:	5 hours	4 hours	45 minutes
6.	Sweat-in-Time:	None required		

3.06 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service. Final inspection: Warranty request. Manufacturer's representative will inspect finished surface preparation, application, and finished coating and may require further preparation or application to achieve appropriate result. In no case will manufacturer's representative approve surface or finish if following conditions are found: pinholes, insufficient coating thickness, or any other conditions, that, in manufacturer's representative's opinion, may cause failure of installation.

3.07 CLEANING

- A. Clean surfaces, grounds, or adjacent property soiled by work of this Section.

END OF SECTION 09960