

Facilities Committee Agenda Item #:	IV- A Action Item
Board Agenda Item #:	II E- Action Item
Date:	March 21, 2019
То:	Magnolia Educational & Research Foundation dba Magnolia Public Schools ("MPS") Facilities Committee (the "Facilities Committee") and the MPS Board of Directors (the "MPS Board")
From:	Alfredo Rubalcava, CEO & Superintendent
Staff Lead:	Patrick Ontiveros, General Counsel & Director of Facilities
RE:	MSA-1 PCIs 020 and PCI 023

# I. Proposed Recommendation(s)

Staff recommends that the Facilities Committee approve and that the Facilities Committee further recommends to the MPS Board that it approve change order requests PCI 020 and PCI 023 presented by Oltmans Construction Co. ("Oltmans")

# II. Background

There are two projects currently underway at MSA-1: (i) a new construction project that will eventually house MSA-1's high school population (the "New Construction Project") and (ii) a rehabilitation project of the existing building that will eventually house MSA-1's middle school population (the "Rehab Investigation Project"). The contract for the New Construction Project was awarded to Oltmans. The Rehab Investigation Project entails various investigations into the state of the structural integrity of the existing building, seismic renovation design, and HVAC renovation design. The purpose of the Rehab Investigation Project is to define a scope of work for a rehabilitation project that can then be bid out (the "Rehab Project") and move forward if funding is available.

Board policy requires that all project change orders be brought to the Board for review and approval. Potential change orders, or in this case Potential Change Items ("PCIs"), are submitted to the Director of Facilities for review.



# III. Change Order Requests by Oltmans

PCIs 020 and 023 for which approval is being sought are described below. Eventually they will be recategorized either singly or collectively with other PCIs as official "change orders." Because time is of the essence, Staff is presenting these PCIs now for Facilities Committee and MPS Board approval due to scheduling and the need to move forward with this work and avoid any delay in project delivery.

#### A. PCI 020 (Roof Play Area Water Proofing)

With the concurrence of MPS Staff, Oltmans hired a water proofing consultant to evaluate the roofing design and the possibility of water infiltration due to having a play surface on the roof. There was agreement among all parties that the design should reviewed carefully by a waterproofing expert and if necessary an alternative design should be considered.

During a review of the roof system after construction began, it was suggested that a paver system be installed. This system was reviewed and preliminary efforts were undertaken which generated a change order (PCI 15) for review with a total cost of \$120,254. This change order was reviewed and rejected by MPS Staff.

At this time, the architect suggested alternate products such as Plydeck or Lifedeck coatings. These coatings are multi-coat systems that reduce moisture vapor emissions, allows for foot traffic and provide another layer of waterproofing on the play deck area. The project's waterproofing subcontractor suggested the use of a Westcoat product that has a crack membrane built in. This PCI encompasses the cost of said deck coating. The advantage of this product is that in addition to providing another layer of protective waterproofing, it can be maintained with relative ease and repairs can be performed on the surface. It is much easier to find and repair problems with a topical coating than it is with a layer of waterproofing under a concrete slab. Additionally, if the deck coating fails, there is still the waterproof membrane under the topping slab.

With credits, the total cost of this PCI is **\$47,429.00**, which will be paid for with owner contingency. A copy of PCI-020 is attached as Exhibit A.

## B. PCI 023 (Parking Lot Replacement)

As shown previously and evidenced by the pictures attached hereto as Exhibit B, the parking lot pavement is in such bad shape that a slurry and seal approach will not guarantee any longevity and no installer will guarantee the work. The pavement could very well require replacement in 1, 2 or 3 years, resulting in wasted money. The only scope included in Oltmans' original bid was to slurry and seal the parking lot. The thinking behind this approach was that if the adjacent ice skating rink ever came to fruition as a collaboration between MSA-1 and City Parks and Rec and the rink was placed on both MPS's property and City property, then anything in the way would be ripped up and the City would pay for the work. At this stage the City has produced a plan to build the rink without using MSA-1 property. See Exhibit C. While the Council office has expressed their interest in creating a rink that would be positioned on two parcels, one of which would be MSA-1's property, so far it far from certain. Therefore Staff believes it would be prudent to plan for a long term solution for the parking lot.



Staff recommends that the entire parking lot be repaved. The total cost, with credits is **\$96,952**. Staff has been carrying an allowance for site work of \$125,000. Therefore, the overall budget will not be impacted and there may be some savings realized. A copy of PCI 023 is attached as <u>Exhibit D</u>.

# IV. Budget Impacts

The cost of the roof play area water proofing (PCI 020) would be paid for from owner's contingency. The present contingency budget balance is approximately \$623,000. Therefore, this PCI would reduce the contingency to approximately \$575,570.

The cost of the removing and replacing the parking lot pavement (PCI 023) would be paid for from a line item allowance carried by the project in the amount of \$125,000. Therefore, this PCI will not impact the overall budget by increasing costs beyond what was budgeted for various categories of work.

#### Exhibits (attachments):

- A. Oltmans PCI 020
- B. Pictures of the Parking Lot Pavement
- C. City Conceptual Plan for Ice Skating Rink
- D. Oltmans PCI 023



## Exhibit A

Oltmans PCI 020

(Roof Play Area Water Proofing)

(see following pages)

# 10005 Mission Mill Road

# **POTENTIAL CHANGE ITEM**

PCI020

Whittier, CA 90601 Phone: (562) 948-4242 Fax: (562) 695-9267

TITLE: DATE: 01/07/2019 Roof Deck Coatings

PROJECT: **PROJECT NO.:** 18049 Magnolia Science Academy

TO:

Magnolia Educational and Research Foundation

250 E. 1st St., 1500 Los Angeles, CA

We respectfully request your approval of the following change to the original scope of work:

#### **DESCRIPTION:**

This change order request includes costs associated with the change from a rubberized traffic coating on the roof top play deck area to a waterproofed traffic deck coating. Please see attached pricing and narrative for additional information. The cost of alternate #1 selected and carried in the contract is itemized below to offset the cost.

Vendor	Description	Amount
SYSTEMS WATERPROOFING, INC.	Furnish and install Westcoat deck coating. See Systems	84,285.00
	Waterproofing COR#1 for reference.	
	SUBTOTAL:	84,285.00
	Alternate #1 Not Used in Lieu of Westcoat deck coating.	-40,484.00
	Bond	359.00
	Gross Tax	57.00
	GL	425.00
	SDI	548.00
	Fee	2,239.00
	SUBTOTAL:	-36,856.00

TOTAL COST FOR THIS CHANGE ORDER REQUEST: 47,429.00

APPROVAL: APPROVAL:

**Oltmans Construction Co.** Magnolia Educational and Research

BY: Trevor Lawton BY: DATE: DATE:

## **PCI 020 Narrative of Deck Coatings**

The bid set of drawings did not indicate a type of deck coating. It stated that the finish surface would be selected by the owner. An add alternate for a rubberized traffic coating was provided with the bid as an add alternate. This alternate (Alternate #1 for \$40,484) was selected by the owner during issuance of the construction contract.

During a review of the roof system after construction began, it was suggested that a paver system be installed. This system was reviewed and preliminary efforts were undertaken which generated a change order (PCI 15) for review with a total cost of \$120,254. This change order was reviewed and rejected by ownership.

At this time, the architect suggested alternate products such as Plydeck or Lifedeck coatings. These coatings are multi-coat systems that reduce moisture vapor emissions, allows for foot traffic and provides another layer of waterproofing on the play deck area. The project's waterproofing subcontractor suggested the use of a Westcoat product that has a crack membrane built in. This PCI encompasses the cost of said deck coating. The advantage of this product is that in addition to providing another layer of protective waterproofing, it can be maintained with relative ease and repairs can be performed on the surface. It is much easier to find and repair problems with a topical coating than it is with a layer of waterproofing under a concrete slab. Additionally, if the deck coating fails, there is still the waterproof membrane under the topping slab.



Date: December 13, 2018

SWP#18213

ATTN: Trevor Lawton Oltmans Construction 10005 Mission Mill Road PHONE: (562) 948-4242 FAX: (562) 695-5299

PO Box 985

Whittier CA 90608-0985

## **Change Order Request #1**

Magnolia Science Academy 18222 Sherman Way Reseda CA 91335

#### **DECK COATINGS:**

#### <u>Step</u>

 To shot blast the concrete topping slab at the roof top deck and apply Aquafin Vaportight coat – SG2 with a sand broadcast

#### Step

Install Westcoat MA Coat which consist of Fiberlath, basecoat, texture coat and a top coat to the roof top PE deck

Total for above work: \$84,285

- All flashing by others
- Drains by others
- Must install dual entry deck drains, check out www.thunderbirdproducts.com
- Finish is per sample and color to be selected by others.

**EXCLUSIONS:** Deck Coatings: Shot blasting, spall repair, slope to drain, plywood replacement and sheet metal flashing. Compatibility of deck coating systems and deck drains to be coordinated prior to drain installation. **General:** Permits and all items that are not included above.

If you have any questions about this proposal please contact Jimmy Dent.

Thanks,

Jimmy Dent, Project Executive

12/13/2018 Date

james@systemswp.com (714) 271 – 9812 Mobile

# **VAPORTIGHT COAT®-SG3**

# 100% Solids, Water - Vapor Barrier Coating

- ✓ One coat system No broadcast
- ☑ Reduces moisture vapor emission rates of up to 25+ lbs to 3 lbs or less
- ☑ Flooring system installed next day
- oxdot Covers even 5 day old concrete
- ☑ Can be applied to damp concrete
- ☑ High alkalinity barrier (pH 13 14)
- ☑ Contributes to LEED (EQ 4.2 = 1 pt.)

#### **Product Description**

AQUAFIN® VAPORTIGHT COAT®-SG3 (in short "SG3") is a unique 2-component, moisture tolerant, low viscosity, solvent free, chemically enhanced epoxy based product which reduces the passage of water vapor and moisture through slabs on or below grade, thus eliminating delamination of adhesives, floor coverings and coatings. "SG3" can be used as a stand-alone coating. Use "SG3/FC" (5 hr Fast Cure) where time is of the essence.

"SG3" reduces water vapor transmission levels of up to 25+ lbs/24 hrs•1000 ft $^2$  to 3 lbs or less (100% RH to  $\leq$ 75%) for the installation of most floor covering systems including VCT, sheet vinyl, carpets, wood, laminates, epoxy, terrazzo & synthetic.

Note: Use VAPORTIGHT COAT-SG2 (in short "SG2") in case of capillary infiltration of oil or other chemicals from the ground or to treat oil-contaminated slabs.

#### **Typical Applications**

# CONCRETE Concrete VAPORTIGHT COAT-SG3 Coating concrete Soil VAPOR

#### Water-Vapor Transmission:

 Concrete slabs, cementitious underlayment (other than gypsum) and ceramic tiles with missing or damaged under-slab vapor barriers

#### Fresh concrete slabs:

 5 day old concrete slabs. (Keep in mind that shrinkage cracks in the concrete may occur.)

#### Areas of application: slabs

- Industrial/retail facilities Office buildings
- Hospitals, Schools, Food processing plants, etc. "SG3" passed Indoor Air Quality Material Emissions Test as per DIN EN ISO 16000 (Report CT-10-06-22-01:250005/2-3)

<u>Call Aquafin for:</u> • Slabs with floor heating • Residential slabs below grade & garages.

#### Features & Benefits

- Solvent free
   Vapor & water barrier
- Compatible with most flooring systems
- Low viscosity Minimal downtime

- · Does not support mold growth
- Indoors: low odor and non-flammable.

#### **Testing for Contaminants**

Request owner of facility to core test slabs with unknown history for contaminants (i.e. hydrocarbons, other organic compounds, un-reacted water soluble silicates, ASR, Sulfurous compounds, etc.) to determine suitability for "SG3". If slabs test positive "SG2" may be recommended in lieu of "SG3", or neither one may be appropriate. Provide Ion Chromatography and IR Spectroscopy data before commencing application.

#### Water-Vapor Emission Testing

AQUAFIN strongly recommends "Anhydrous Calcium Chloride" testing as per ASTM F 1869-98 on slabs to be treated, to determine the MVER (moisture vapor emission rate) in lb/24 hrs-1000 ft² (grams/hr-m²). Alternately determine RH content (%) as per ASTM F 2170. The testing must be carried out before application of "SG3" to obtain AQUAFIN warranty.

**Note:** MVER fluctuates within slab areas, and can have significant seasonal variations (i.e. in Nov./Dec. 6 lbs and in July/Aug. 16 lbs or more).

#### **Preparation of Substrate**

All concrete surfaces to be treated with "SG3", must be clean, sound and have an "open"/ absorptive surface ("tooth and suction").

- Do not apply "SG3" to surfaces which have been previously treated with any kind of sealer prior to contacting Aquafin.
- Remove existing floor coverings, coatings, adhesives, curing compounds, efflorescence, dust, grease, laitance, etc. down to bare concrete with steel shot blasting, scarifying or grinding using a diamond cup blade (run with low RPM and assure that surface is profiled). Standard acid etching is NOT allowed.
- Steel shot blast or abrasive blast concrete slabs to surface profile ICRI CSP 3 - 5.
- Burn off reinforcing fibers and vacuum remains.
- 4. Remove glaze from "quarry tiles".
- 5. Repair cracks with a suitable patching mortar.
- Install cementitious underlayment, leveling mortars, flash patching, etc. using a primer for non-porous substrates (i.e. AQUAFIN-SLU PRIMER) on TOP of "SG3".
- Treat saw cut and expansion joints as per application Guideline 5.1.1-1.
- Carefully pre-dampen all the prepared surfaces (excluding quarry tiles) to be treated several times with clean water to SSD

(saturated surface dry). Leave no standing water!

#### Mixing

- ⇒Use chemical resistant gloves and goggles when mixing or applying "SG3".
- ⇒Material should be minimum 60°F (15°C) at time of mixing.
- ⇒Do not alter mixing ratios. Do not thin.

Part A (A-Component) = resin Part B (B-Component) = hardener

are supplied in the appropriate mixing ratio.

- Assure that Part B completely drains into Part
   A. Always mix a complete kit in the proportions supplied.
- Stir mixture for approximately 3 minutes to a homogenous, streak free consistency, using a slow speed drill (approx. 300 rpm) with a PS Jiffy blade. Avoid any action that may entrap air. Ensure that the material at the pail bottom and sides are agitated.

#### Application

- Pour mixed material from the mixing container into a clean container and carefully mix it once more (approx. 30 seconds).
- ⇒Do not apply at air or slab temperature below 50°F (10°C), or above 95°F (35°C).
- Do not apply to unprotected surfaces or surfaces where water has accumulated (puddles).

"SG3" can be applied to concrete that is at least 5 days old.

- 1. After steel shot blasting or scarifying, check slab surface with the water drop method. Pour a drop of water about the size of a dime in several places. If it beads, surface is not absorptive and requires more preparation. If it penetrates the concrete within approx. 30 seconds the surface is absorptive and ready to receive the "SG3" treatment. However, this method does not replace pre-testing of concrete cores. A test application is highly recommended on old slabs where a sealer may be present, or slabs where an epoxy coating has been removed, followed with an adhesion test (i.e. Elcometer, etc.).
- Protect the area to be treated from strong sun light, wind and rain. Indoors, prevent noticeable drafts.
- Insure that the material is applied within the coverage rate specifications by marking the area to be covered.
- 4. Install "SG3" as per the chart "Application Rates":
- Step 1: pour "SG3" in sufficient quantity over the pre-dampened area (excluding quarry tiles) to be treated and uniformly distribute with a

Sample Water Vapor Transmission Reduction Test: ASTM E 96-99				
Test Results: MACTEC No.6136-03-0302				
BEFORE: Untreated Control	AFTER: VAPORTIGHT COAT®-SG3	REDUCTION %		
<b>24.08</b> 4.89 7.02	Sample A, No.1 <b>0.18</b> 0.04 0.05	99		
16.95 9.69 x 10 <sup>-07</sup>	0.13 7.34 x 10 <sup>-09</sup>	-		
	Test Resu BEFORE: Untreated Control  24.08 4.89 7.02 16.95	Test Results: MACTEC No.6136-03-03    BEFORE: Untreated Control		



# **VAPORTIGHT COAT®-SG3**

"SG3" Application Rates as per ASTM F-1869 (CaCl)										
Moisture vapor en lb/24 h•1000 ft²	Moisture vapor emission rateNo. ofApplication rateIb/24 h • 1000 ft² $g/h/m²$ coatsft²/gal $kg/m²$		Appx. thickness mils mm		<b>~Yield: 2.4 gal</b> (9.2 L) ft² m²		~Yield: 7.3 gal (27.5 L) ft² ㎡			
up to 10	up to 2.0	1	155	0.29	10	0.25	370	33.4	1,130	105
10 - 15	2.0 - 3.0	1	130	0.35	12	0.30	310	28.8	950	88
15 - 20	3.0 - 4.0	1	105	0.43	15	0.38	250	23.2	760	70
20 - 25	3.1 - 5.0	1	80	0.57	20	0.50	190	17.6	580	53
Stand-alone coa	iting on slabs	1	80	0.57	20	0.50	190	17.6	580	<i>53</i>
New concrete (n	nin. 5 days old)	1	80	0.57	20	0.50	190	17.6	580	53

Note: All values theoretical. Application thicknesses are approximate. Some variations may apply due to porosity and absorption of substrate.

#### "SG3" Application Rates as per ASTM F-2170 (RH - Relative Humidity Testing)

<85% RH = 155 ft²/gal (0.29 kg/m²)</p>
85 - 90% RH = 130 ft²/gal (0.35 kg/m²)
90 - 95% RH = 105 ft²/gal (0.43 kg/m²)
95 - 100% RH = 80 ft²/gal (0.57 kg/m²)

notched squeegee or non-shed roller to the <u>still moist substrate</u>.

- Step 2: carefully scrub it into the pores with a long handled scrub brush.
- Step 3: follow with a non-shed roller to achieve uniform coverage.

**Note:** "SG3" is self leveling and has low viscosity, tending to flow to low areas where it can build-up.

- "SG3" does not require broadcasting of sand.
- ⇒Protect fresh application from rain for 4 6 hrs.
- ⇒Observe relative humidity and Dew Point when installing flooring system over "SG3"!
- ⇒Shoes must be protected with cloth (i.e. Tyvek) booties when walking over cured "SG3" prior to installation of flooring system!

#### 5. Resinous Flooring:

- Subsequent top coatings such as epoxy, terrazzo, polyurethane, must be applied within the 12 hr to 5 days recoat time.
- b. "SG3" surface must be roughened if recoat time is missed. Re-treat "outgasing channels" and pin-holes by grinding surface, cleaning off residue. Make sure surface is dry and re-apply "SG3". Does not apply to "fish eyes".

#### 6. VCT, Sheet Vinyl, Carpet, Wood:

- a. Flooring systems including VCT, sheet vinyl, linoleum, carpet and wood must be applied within the 12 hr to 5 days recoat time.
- b. Please note that water based adhesives require a cementitious underlayment of minimum 1/8" (3 mm) thickness to absorb moisture from the adhesive (check with adhesive manufacturer).

- c. Pressure sensitive adhesives installed directly over "SG3" require a longer "tack" time than listed on manufacturer's literature to prevent adhesive moisture or solvent entrapment.
- d. Many floor covering materials (i.e. VCT, sheet vinyl, linoleum, carpet) also require a more level or smooth surface. In such cases an application of a self-leveling cementitious underlayment (minimum 1/8" (3 mm) thickness) is required over "SG3" to provide a proper substrate for the floor covering and the adhesive

#### 7. Underlayment's & Patching:

a. If cement based toppings, such as underlayments, screeds, "flash" patching, repair mortars are to be used, the manufacturer's recommended primer or AQUAFIN-SLU PRIMER must be applied over "SG3".

#### 8. Sand:

Where a broadcast of sand is desired use Aquafin "SG2" in lieu of "SG3".

9. <u>Maximum recoat time</u> (adhesives included) is 5 days. Do not apply flooring system if "SG3" surface is wet due to dew point or other causes. If recoat time is missed, "SG3" surface must be sanded, cleaned with hot water, and allowed to dry, before application of flooring system.

#### 10. Application equipment needed:

Notched squeegee, 1/2" or 3/8" non-shed synthetic nap roller, long handled scrub brush.

#### 11. Cleanup:

Immediately clean all equipment and tools with mineral spirits.

#### 12. Packaging & Shelf Life:

2.4 gal/22 lb (9.2 L/10 kg) kit.
 A-Comp: 1.5 gal/14.48 lb (5.8 L/6.58 kg)
 B-Comp: 0.9 gal/7.52 lb (3.4 L/3.42 kg).

#### • 7.3 gal/66 lb (27.5 L/30 kg) kit.

A-Comp: 4.6 gal/43.43 lb (17.3 L/19.74 kg) B-Comp: 2.7 gal/22.57 lb (10.2 L/10.26 kg).

Shelf life is 2 years in closed, original packaging, stored in a dry, cool place.

<b>Technical Data</b>			
Material & Color	2-component, clear epoxy		
Density	$\sim$ 9.08 lbs/gal (1.09 $\pm$ 0.02 kg/L)		
VOC Content	0 g/L		
Volume Solids	100 %		
Flash Point: Part A Part B	>212°F (>100°C) >248°F (>120°C)		
Mixing Ratio	100:50 (by weight)		
Viscosity	600±80 cps (mPa*s) @ 77°F (25°C)		
Pot Life, approx.	35 Minutes at 73°F (23°C)		
Open to Foot Traffic	after 12 hrs at 73°F (23°C)		
Recoat Time at 73°F (23°C)	minimum 12 hrs max. 5 days, observe dew point!		
Working Temperature	50°F to 95°F (10°C to 35°C)		
Curing Temperature	minimum 50°F (10°C)		
Full Strength	after 7 days at 73°F (23°C)		
Adhesion to Concrete (ASTM D-4541 modified)	500 psi (3.5 MPa) @ 7d (dry conc.) Failure in substrate		
pH 14 Resistance	Pass 14 day test. (ASTM D-1308)		
Average Critical Radiant Flux (CRF)	1.00 W/cm <sup>2</sup> - Passed = non- flammable (ASTM E 648-03)		
Methane Permeability (ISO 15105-2)	2.20 [cm <sup>3</sup> / (m <sup>2</sup> *d*bar)] at 36 mils (0.90 mm) thickness		
Indoor Air Quality Control (DIN EN ISO 16000)	Passed: VOC (0 mg/m³) & Formal- dehyde emissions (<0.01 ppm)		

All data are average values obtained under laboratory conditions. In practical use temperature, humidity and absorbency of the substrate may influence the above given values.

#### 13. Note:

Post-cracking of the concrete, slab warping or warping relaxation at joints or cracks after installation of the "SG3" may cause a breach in the coating and void warranty.

# 14. <u>Safety:</u> KEEP OUT OF REACH OF CHILDREN. Refer to MSDS. <u>FOR COMMERCIAL USE ONLY.</u>

Part A - irritant; sensitizer - contains epoxy resins.

Part B - corrosive: sensitizer - contains amines.

LIMITED WARRANTY: AQUAFIN, INC. warrants to the owner of the premises at the time of installation that for a period of 10 years after installation its products are free of manufacturing defects. As the sole remedy, we will replace or, at our election, refund the purchase price of, any product which is proven to be defective, provided that the product was properly applied. Our product recommendations are based on Industry Standards and testing procedures. We assume no warranties either written, expressed or implied as to any specific methods of application or use of the product. AQUAFIN, INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. AQUAFIN, INC. shall not be liable for damages of any sort including without limitation indirect or consequential damages, down time, or delay. This limited warranty is not transferable without AQUAFIN's prior express written consent.



AQUAFIN Building Product Systems

AQUAFIN, Inc.

505 Blue Ball Road, # 160 Elkton, MD 21921
Phone (410) 392-2300 Fax (410) 392-2324
TOLL FREE 1 - 866 - AQUAFIN (1-866-278-2346)

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(Up-date 06/23/11)





# MACoat™

#### Description

Westcoat's MACoat System is a fiberlath-reinforced deck system installed with a series of two or three separate waterproof acrylic applications, and sealed with Westcoat SC-10 Acrylic Topcoat. The finished product weighs approximately one pound per square foot. MACoat is breathable and allows vapor to pass as opposed to traditional urethane coatings.

#### Uses

The MACoat System is mainly used on elevated concrete and non-fire rated plywood walking decks. MACoat is designed for balconies, corridors, stairs, and landings. It is regularly specified for homes, hotels, condominiums, apartments, and office buildings. In many cases it can be applied over existing deck systems to provide an excellent method for the rehabilitation of problem surfaces.

#### Advantages

Flexible

- Durable
- Fast Access After Installation
- Choice of Colors and Textures
- Tough Final Coat is UV Resistant
- · Safe Skid Resistant Textured Finish
- Environmentally Safe Acrylics
- Waterproof
- Optional Finishes

#### **Packaging**

WP-26 Flashing

WP-51 Polyurethane Sealant

EC-72 Epoxy Patch Paste (½ and 2 gallon kits)

WP-47 Fiberlath (475 sq ft per roll, 38 in. x 150 ft.)

WP-47-3 Seam Tape (3 inch)

WP-90 Waterproofing Resin (I and 5 Gallon pails)

WP-81 Cement Modifier (I and 5 Gallon pails)

TC-I Basecoat Cement (50 lb. Bags)

TC-3 Medium Texture Cement (50 lb. Bags)

SC-10 Acrylic Topcoat (1 and 5 gallon pails)

#### INSPECTION / PREPARATION

#### Inspection

Concrete must have ¼ inch slope per lineal foot with a rough broom finish (equal to 50 to 80 grit sand paper) and be open and porous. Allow concrete to cure a minimum 28 days and make sure that the moisture content is at 4% or less. If doing a calcium chloride test, the reading should be a maximum of 5 lbs./1000 sq ft. Another test can be done by taping a plastic mat or visqueen onto the surface, then waiting 24 hours before checking for moisture. Decks should meet local building code

Plywood must be at least <sup>3</sup>/<sub>4</sub> inch CDX or exterior grade. Slope must be a minimum of <sup>1</sup>/<sub>4</sub> inch per linear foot. Decks should meet local building code. The deck should be tongue and groove properly blocked and screwed into place. Plywood shall have a maximum joist span of 16

inches. Deflection should be less than L/480. OSB is not a suitable substrate.

#### Preparation

On concrete, remove all coatings to a sound concrete base. Prepare surface by grinding, water blasting or shot blasting to achieve surface that feels like 50 to 80 grit sand paper. Over existing coating, abrade the surface and do an adhesion test. For rough concrete, a slurry coat may be applied. Combine I bag of TC-I Basecoat Cement with I gallon of WP-8I Cement Modifier and up to ½ gallon of water, and trowel smooth. Applied prior to the MACoat installation. On plywood be sure the surface is clean, dry and free of grease, paint, oil, dust or any foreign material that may prevent proper adhesion.

#### **APPLICATION**

#### Concrete Expansion Joints

Moving expansion joints should be honored and filled with a 2 part urethane sealant (approved by Westcoat). Sides of joints should be cleaned and applied per joint sealant manufacturers recommendation after the MACoat process is completed.

#### Concrete Seams and Cracks

Cracks greater than  $^{1}/_{32}$  inch should be routed out  $^{1}/_{4}$  x  $^{1}/_{4}$  inch. Install WP-47-3 Seam Tape over all cracks and seams. Apply EC-72 Epoxy Patch Gel into the tape with a trowel or putty knife to smooth and broadcast with 30 silica sand to allow adhesion of the coating. Allow EC-72 3-4 hours to cure before the next coat.

#### Plywood Seams

Seams should be dry and free of debris. WP-47-3 Seam Tape should be installed over all seams and metal flashing. Apply WP-51 Polyurethane Sealant, or EC-72 for a more ridged seam, into the tape with a trowel or putty knife to smooth. Broadcast with 30 silica sand to increase adhesion of the next coat.

An alternate way to minimize re-cracking of concrete and reduce movement of plywood seams is to place a 6 inch strip of WP-40 Sheet Membrane over the plywood seams or the cracks in the concrete as an anti-fracture treatment.

#### Primer Requirements

Priming is not required over properly prepared concrete or plywood. When coating over an existing surface, prime with EC-II Water Based Epoxy at the rate of 300 square feet per gallon and broadcast with #30 or #60 silica sand to increase adhesion of the next coat.

#### Flashing

Flash at the junction of the wall and plywood deck using  $4 \times 4$  inch flashing. Flash the fascia with  $2 \times 4$  inch drip edge flashing. Nail all flashing every 4 to 6 inches. Use a minimum of 26-gauge bonderized sheet metal. Flashing for concrete should be set in a bed of EC-72 and nailed only as needed. The vertical portion of the wall to deck flashing should be nailed at all studs, after the epoxy base has cured. Overlap all seams at least 4 inches. Caulk between overlapped flashing as well as the seam with WP-51 Polyurethane Sealant. (Note: If the flashing is not bonderized it must be etched or roughed up so that the coating will bond.)

#### Base Coat

Lay out WP-47 Fiberlath reinforcing mesh on the deck, overlapping the seams approximately 2 inches.

Combine one bag of TC-I Basecoat Coat Cement with six gallons of WP-90 Waterproofing Resin (2 parts TC-I to 3 parts of WP-90 by volume for smaller batches). Mix with a mechanical mixer until uniform. Pour the mixture into the WP-47, trowel thin and smooth at the coverage rate of approximately 270 square feet per batch. Use a paintbrush to spread the base coat on the flashing, making sure to get the mixture into the seams and corners. Using a brush, wet with water, feather all outside edges. Allow surface to dry for I-4 hours at 70°F. Scrape off any high spots or ridges that may inhibit application of a smooth texture coat. Trim any mesh that is showing on perimeters after the material has hardened.

Note: Should deck coating not be completed in one phase or to allow for other construction trades, deck should be covered and protected to avoid being damaged and to keep clean. It may be necessary to power wash the deck to dislodge any construction debris or any other foreign matter.

#### Feather Patch

Smooth all seams or imperfections by mixing one bag TC-I to 4 gallons of WP-90 (I part TC-I to I part WP-90) and patch all areas where fiber lath is not laminated flat or any visible seams or overlaps. Feather these patches with a paintbrush and water. Scrape or sand all the patches.

#### Slurry Coat

Mix one bag TC-I to 4 gallons of WP-90 and trowel the entire surface smooth and as thin as possible or at the rate of approximately 300 to 350 square feet per batch. For easier application, you may add up to I quart of water to help loosen up the mix. After the texture has dried (30 minutes to I hour at 70 degrees) lightly scrape any trowel marks and sweep or blow the surface clean. You are now ready to apply the knock down texture.

#### Smooth Texture (Optional)

For a smooth texture, mix one bag TC-I to 4 gallons of WP-90 and trowel the entire surface smooth or at the rate of approximately 300 to 350 square feet per batch. For easier application, you may add up to I quart of water to help loosen up the mix. After the cement has dried (30 minutes to I hour at 70 degrees) lightly scrape any trowel marks and sweep or blow the surface clean. You are now ready to apply the topcoat

#### Knockdown Texture (Optional)

If a knockdown texture is desired, combine I bag of TC-3 Medium Texture Cement with I gallon of WP-90 Waterproofing Resin. WP-81 may be used for concrete applications. Mix thoroughly with a mechanical mixer. Add up to ½ gallon of water to achieve the desired consistency. Using an acoustical hopper gun, spray the texture onto the deck with a circular motion to achieve approximately 70% coverage at a rate of about 150-200 square feet per batch. Spray continuously, do not stop in the middle of the deck. After a few moments depending on the temperature, the texture must be "knocked down" using a rounded pool trowel for best results. Wipe the trowel clean with a wet rag as needed.

For an Orange Peel Texture, increase the air pressure and reduce the hole size of the hopper gun. Spray texture evenly at a 90% coverage. If you are unsatisfied with the results, immediately scrape off and re-spray.

After the texture has dried (30 minutes to I hour at 70 degrees) lightly scrape, any trowel marks and sweep or blow the surface clean prior to sealing. To avoid making impressions, the applicator should wear golf, baseball or spiked shoes.

#### Topcoat

Mix all containers of the SC-10 Acrylic Topcoat to ensure a consistent color. The material may be thinned by adding up to one quart of water per gallon to avoid streaks, (especially in hot weather). Roll two thin applications of SC-10 using a <sup>3</sup>/<sub>4</sub> inch roller at a rate of 200-300 square feet per gallon. Roll the material in two directions to achieve a uniform finish. Coverage will vary according to texture.

For best results, allow SC-10 4 to 6 hours drying time before permitting light pedestrian traffic or applying additional coats are applied. Allow 24 hours to cure before heavy traffic is permitted. Allow 48 hours before heavy objects are placed on the surface.

#### Optional Materials

#### Basecoat Options

•For increased waterproofing, when applying basecoat into fiberlath replace WP-90 with WP-91. Mixing at 4 gallons of WP-91 to 1 50lb bag of TC-1 and add up to 1 gallon of water to aid in application.

#### Clean Up

Uncured acrylic material can be removed with soap and warm water. If cured, material can only be removed mechanically or with an environmentally-safe solvent.

#### MAINTENANCE

Exterior surfaces can be swept daily with water and a broom. For tougher dirt or grease use Westcoat CA-24 Degreaser diluted with water 20:1 and a soft bristle brush or broom, be sure to rinse well. To remove calcium or lime build up, brush 100 grain vinegar over the surface, be sure to rinse any residue.

The MACoat System should be inspected for wear every 2 to 4 years. The system should be resealed with the appropriate Westcoat clear sealer every 3 to 5 years depending upon traffic and UV exposure. Contact the original Installer of Westcoat for complete recoating instructions.

#### HEALTH PRECAUTIONS

Inhalation of vapor or mist can cause headache, nausea, irritation of nose, throat, and lungs. Prolonged or repeated skin contact can cause slight skin irritation.

Cements contain silicas, dust mask or respirator should be used when mixing, sanding or grinding.

#### LIMITATIONS

- This system is designed for professional use only.
- •Read Product Specification Sheets for every product you will be using before beginning the project.
- •Do not apply at temperatures below 50°F or above 90°F.
- Rain will wash away uncured Westcoat acrylic products.
- •If inclement weather threatens, cover deck to protect new application.
- •Sealers will make the surface slippery, please be aware the texture of the surface and how the sealer will affect the look, feel, and skid resistance.
- •Approval and verification of proposed colors, textures, and slip resistance is recommended.
- •Do not allow Westcoat product to FREEZE.

#### DISCLAIMER

PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT

OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.

# **Technical Data Sheet**

# **ENDURO-LASTIC ELA Modified Polymer Binder**

#### 1. Description:

**EP - ENDURO-LASTIC ELA** is a one component modified polymer binder designed for use with a fiberglass chopped-strand mat on interior and exterior pedestrian surfaces.

#### 2. Uses:

EP - ENDURO-LASTIC ELA Modified Polymer Binder is applied to reinforce a fiberglass chopped-strand mat on new or existing above grade structural concrete, plywood or steel substrates.

#### 3. Surface Preparation:

3.1 Concrete: All concrete surfaces to receive the EP - ENDURO-LASTIC ELA Modified Polymer Binder reinforced with a fiberglass chopped-strand mat should be of sound structural grade. Metal pans should be vented when used to form new concrete slabs. Concrete installed over precast "T's" should have control joints installed over coinciding joints or openings in the precast. New concrete should be cured by the water curing method for at least 28 days. The cured concrete should be sloped to the drains. Verify plastic drains are not used. A light broom finish is recommended that is free of cracks, voids, fins, ridges, air-entrained holes or other imperfections. Remove dirt, dust, debris, oil, grease, curing agents, bond breakers, and other surface contaminants All contaminants and imperfections that may impair adhesion must be removed from new and existing concrete. They should be removed by sandblasting, shotblasting or mechanical grinding. The concrete should be thoroughly cleaned by using a commercial pressure washer. Imperfections should be repaired with manufacturer approved materials. All cracks over 1/16 inch in width and all moving cracks less than 1/16 inch in width should be saw cut to 1/4 inch wide by 1/2 inch deep. Completely clean all saw cut cracks, expansion joints and control joints. Install backer rod and fill flush with polyurethane sealant. Allow to cure overnight. Be aware that drying time depends on temperatures and humidity.

3.2 Plywood: All plywood surfaces should be selected and installed in accordance with the requirements of the applicable building code. Plywood shall be a minimum of 5/8 inch thick tongue and groove exterior grade and have joints blocked and fastened. Plywood should be fastened with non-corroding screws, twist shank nails or 10d annular ring nails. Plywood must be sloped to drain. All contaminants and imperfections that may impair adhesion must be removed. Verify that plastic drains are not used and that the deck will drain properly, without low spots or high fascia edges. Completely

clean all joints, cracks and seams. Fill all separations over 1/16 inch in width with polyurethane sealant. Apply joint reinforcement consisting of a 5 inch trowel coat of Enduro-Flex Underlayment and reinforcing fabric imbedded into the wet coating.

3.3 Steel: Roughen surfaces sufficiently to ensure proper bonding. Remove dirt, dust, debris, oil, grease, and other surface contaminants, which could adversely affect application of the pedestrian traffic coating. Verify steel surfaces are backed with rigid substrate with sufficient rigidity to avoid excessive deflection. Verify that plastic drains are not used and that the deck will drain properly, without low spots or high fascia edges.

3.4 Metal: Flashing, scuppers, edges, vents, and other metal should be galvanized or non-ferrous. All should be properly secured 4 inches on center with non-corroding screws or ring shank nails to the substrate. Metal should be primed with a thin coat of EN-M-70 Metal Primer by using a sprayer or roller. Flashing should be caulked in front and back with polyurethane sealant. Use the Enduro-Flex Underlayment to adhere reinforcing fabric at the joint of the metal and substrate.

#### 4. Mixing & PrimingMixing:

Stir EP - ENDURO-LASTIC ELA Modified Polymer Binder well before using.

#### 5. Color/Finish/Packaging:

EP - ENDURO-LASTIC ELA Modified Polymer Binder should be used at package consistency. Coatings are available in five-gallon containers. The chopped-strand mat shall be a 0.75-ounce fiberglass, multidirectional chopped-strand mat.

#### 6. Application:

6.1 Fiberglass Underlayment: Lay out the fiberglass chopped-strand mat over the area to be immediately worked in accordance with manufacturer's instructions. Fiber-Glass may be overlapped 1/2 inch.

6.2 EP - ENDURO-LASTIC ELA Modified Polymer Binder: Apply the modified polymer binder in over the fiberglass chopped-strand mat. Eliminate air bubbles and wrinkles. Apply a second coat of the modified polymer binder the next day to obtain proper film thickness, if required. Trim excess fiberglass mat at fascia edge before application of topping.

#### 7. Coverage:

Apply EP-ENDURO-LASTIC ELA Modified Polymer



# © EP ENDURO-LASTIC ELA Modified Polymer Binder

Binder at a rate of 50 SF per gallon.

#### Limitations:

Ambient and surface temperatures must be above 55°F and relative humidity below 80%. Do not apply EP - ENDURO-LASTIC ELA Modified Polymer Binder over any type of lightweight concrete without written approval by Enduro Products. Do not apply to surfaces with excessive moisture content or when there is a threat of rain.

#### 9. Cleaning Instructions:

Clean up tools and equipment with appropriate cleaning fluids after use.

#### 10. Safety Health and Environmental **Recommendations:**

Provide proper ventilation. Avoid coating contact with skin and eyes. Use protective goggles and clothing. In case of eye contact, flood eyes with water and call a physician immediately. Wash hands thoroughly with soap and water after handling. Do not take internally. If ingested, call a physician immediately. Read the Material and Safety Data Sheet for EP ENDURO-LASTIC ELA Modified Polymer Binder prior to handling or application as supplied by Enduro Products in California: (714) 526-5898, Fax (714) 526-6511; in Florida: (305) 591-8309, Fax (305) 591-8565; email: info@endurokote.com.

#### 11. Warranty:

Enduro Products warrants its EP - ENDURO-LASTIC ELA Modified Polymer Binder to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Enduro Products makes no other warranty, expressed or implied, including warranties of merchantability and fitness for a particular purpose with respect for Enduro Products. Enduro option, to replace or to refund the purchase price of the quantity of EP - ENDURO-LASTIC ELA Modified Polymer Binder proved to be defective and Enduro Products shall not be liable for any loss or damage.

## **Technical Data**

TEST	REFERENCE
ILOI	IILI LIILIVUL

Weatherometer ASTM D 1499 & G 152. Model D or H

ASTM D 756. Procedures **Accelerated Aging** 

D & E, 6 Cycles; D, E, & F

**ASTM C 297 Bond Strength** 

After Accelerated Aging ASTM C 297, Procedures D,

& E. 6 Cycles

ASTM D 756, Procedures D, After Accelerated Aging E, & F, 26 Cycles

After Freeze Thaw ASTM C 67

**Abrasion Resistance** ASTM D 1242, Method A

Percolation

Freeze Thaw

**Concentrated Load** 

**Compressive Strength** 

Water Absorption **ASTM D 570** 

**Chemical Resistance ASTM D 2299** 

8.7 percent by weight.

ASTM C 67

**ASTM C 109** 

Unaffected By: Industrial detergent 20% solution, ammonia 5 % solution, salt 20% solution, anti-freeze, kerosene, turpentine, &

Did not exceed maximum loss in thickness

No noticeable leakage on each of 5

2,000 Hours: No crazing, cracking, spalling,

softening, or other surface deterioration.

No crazing, cracking, spalling, softening, or other surface 25 Cycles deterioration.

Average 83 psi minimum.

Average 82 psi minimum.

Average 104 psi minimum.

paint thinner.

test specimens.

RESULTS

Superficially Affected By: Chlorine 10% solution & sulfuric acid 3% solution.

Moderately Affected By: Muriatic acid

10% solution.

No breakage, weight loss, cracking, crazing,

or delamination. Passed bond

strength test requirements.

Average Residual Indentation: 0.009 inch.

5,450 psi.

© EP ENDURO-LASTIC ELA Modified Polymer Binder



# Exhibit B

# Pictures of the Parking Lot Pavement





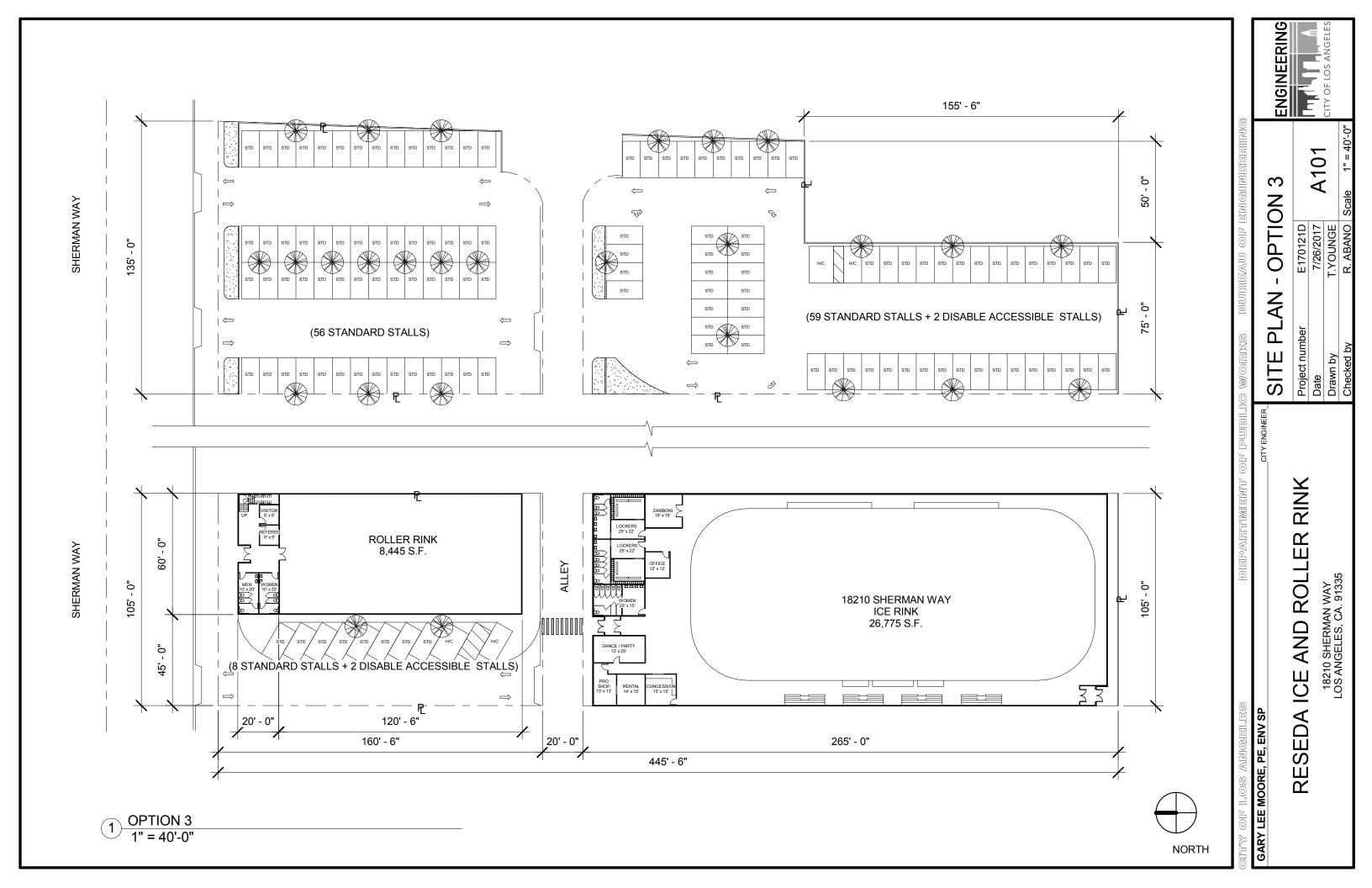




# Exhibit C

City Conceptual Plan for Ice Skating Rink

(see following page)





# Exhibit D

Oltmans PCI 023

(Parking Lot Replacement)

(see following pages)

# CONSTRUCTION CO.

# POTENTIAL CHANGE ITEM

**PCI023** 

96.952.00

10005 Mission Mill Road

Whittier, CA 90601 Phone: (562) 948-4242 Fax: (562) 695-9267

TITLE: New Paving In Lieu of Seal & Slurry DATE: 02/20/2019

PROJECT: **PROJECT NO.:** 18049 Magnolia Science Academy

TO:

Magnolia Educational and Research Foundation

250 E. 1st St., 1500 Los Angeles, CA

We respectfully request your approval of the following change to the original scope of work:

#### **DESCRIPTION:**

This Potential Change Item (PCI) tracks costs associated with the added labor, materials, and equipment required to install new paving in lieu of seal and slurry. Seal and slurry and/or grind and overlay are not recommended or guaranteed by the asphalt paving trade due to existing conditions. The existing pavement is on native, the estimated life of grind and overlay would be limited.

The proposed new paving would include demo, removal of 7" of existing asphalt and subgrade (assume native), hauling-off of material, rough grade, sub-compaction and furnish and install 4" of class 2 CMB and 3" of asphaltic concrete.

The added costs include:

- Credit (\$16,464) for original proposed cost for seal and slurry
- Credit (\$12,000) for damaged to existing paving caused by Oltmans (approximately 2,500 sf)
- \_Add \$118,000 for new base and paving

This PCI excludes any items not identified above including additional move-ins, slurry seal, engineering, testing and permits. It excludes any schedule associated impacts, general conditions, future changes caused by City review or inspections.

Vendor	Description	Amount
	Credit: For Damage Caused by OCCO	-12,000.00
	Credit: Seal & Slurry	-16,464.00
	Add: Asphalt Paving	118,000.00
	Bond	733.00
	Gross Tax	117.00
	GL	869.00
	SDI	1,120.00
	Fee	4,577.00
	SUBTOTAL:	96,952.00

TOTAL COST FOR THIS CHANGE ORDER REQUEST:

APPROVAL: APPROVAL:

**Oltmans Construction Co.** Magnolia Educational and Research

BY: BY: Trevor Lawton DATE: DATE:



# UNIVERSAL ASPHALT CO., INC.

TELEPHONE: (562) 941-0201 (888) 941-0201 FAX: (562) 941-4080

Expires 4/9/2019

10610 South Painter Ave., Santa Fe Springs, California 90670-4030

Fri 2/8/2019 10:41 AM
Curt Fauntleroy < curt@universalasphalt.com>
RE: MSA - Price Request for Parking Lot (G-2) Demo/Grade/Compact
To □ Bizabeth Lara
Retention Policy (50 days)

es it's included I forgot to remove from my standard exclusions. 90% compaction is included!!

Oltmans Construction Company 10005 Mission Mill Road Whittier, Calif. 90608

Attn. Elizabeth Lara

RE: Magnolia Science Academy 18220 Sherman Way Reseda, Calif.



Universal Asphalt Co., Inc

Curt@universalasphalt.com (562) 941-0201 Office

No grade and re-compact included in cost: you have it in exclusions?

Per your request this updated cost proposal is for the following new paving work:

- A) Remove the existing asphaltic concrete and sub-grade to a depth of 7" and haul away to an offsite location.
- B) Pull off the job and return once the underground and concrete is complete.
- C) Furnish and install 4" Class 2 CMB to approx. 25,000 sq. ft., roll and compact.
- D) Apply weed poison to the base.
- E) Furnish and install 3" asphaltic concrete to approx. 25,000 sq. ft., roll and compact.
- F) This price assumes that there is not over saturated subgrade material or sub-grade contamination that needs to be addressed.
- G) Sub-grade to be accepted at +/- four hundredth (.04) to balance. Rough grading, sub-grade compaction,

# TOTAL COST \$ 118,000.00

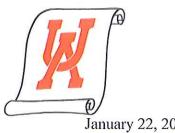
Price good through June 2019 Based on (2) Two Move-ins Standard Exclusions:

Rough grading, sub-grade compaction, soil import, concrete work, base under concrete, engineering, testing, permits, fees, bonds, crack filler, staking, utility adjustment, striping and bumpers, and guarantee for drainage where designed less than 1%.

#### Alternates:

- 1) Striping and wheel stops including 69 stalls, 18 compacts, 4 handicaps w/signage, 2 van handicaps, 6 visitors, 4 electric vehicles, 6 clean air/vanpool, 4 arrows, and (69) 6' wheel stops. Add \$ 6,000.00
- 2) Apply 1 coat of Slurry Seal on the new paving. Add \$ 3,000.00
- 3) Additional Move-ins (if required) Add \$ 9,500.00 each

CURT FAUNTLEROY PROJECT ESTIMATOR



# UNIVERSAL ASPHALT CO., INC.

TELEPHONE: (562) 941-0201 (888) 941-0201 FAX:

(562) 941-4080

Oltmans Construction Company WILL NOT GUARANGEE GRIND 10005 Mission Mill Road Whittier, Calif. 90608 AND OVERLAY WORK DUE TO AND OVEKLAY VICTIONS.

AND OVEKLAY VICTIONS.

AND OVEKLAY VICTIONS.

EXISTING CONDITIONS.

EXISTING CONDITIONS.

18220 Sherman Way
Reseda, Calif

Per your request this updated cost proposal is for the following overlay work:

- A) Coldplane approx. 25,000 sq. ft. of existing asphaltic concrete to a depth of 2" and haul away to an offsite location.
- B) Apply a trackless tack coat just prior to the asphalt installation.
- C) Furnish and install 2" asphaltic concrete overlay to approx. 25,000 sq. ft., roll and compact.
- D) We cannot guarantee this overlay work due to the condition of the existing asphalt.
- E) Sub-grade to be accepted at +/- four hundredth (.04) to balance.

# TOTAL COST \$ 52,500.00

Price good through September 2019 Based on (1) One Move-in **Standard Exclusions:** 

Rough grading, sub-grade compaction, concrete work, base under concrete, engineering, testing, permits, fees, bonds, crack filler, staking, I year warranty, utility adjustment, striping and bumpers, and guarantee for drainage where designed less than 1%.

#### Alternate:

1) Striping and wheel stops including 69 stalls, 18 compacts, 4 handicaps w/signage, 2 van handicaps, 6 visitors, 4 electric vehicles, 6 clean air/vanpool, 4 arrows, and (69) 6' wheel stops. Add \$ 6,000.00

**CURT FAUNTLEROY** PROJECT ESTIMATOR



# G.J. Gentry General Engineering, Inc.

1297 W 9th Street Upland, CA 91786 909-693-3391 Lic. #A991354 DIR #1000045135

\$965.99

To:	Oltmans Construction	Contact:	Trevor Lawton
10:	Olulians Construction	Contact:	Trevoi Lawton
Address:	10005 Mission Mill Road	Phone:	
	Whittier, CA 90601	Fax:	
Project Name:	Magnolia Science Academy RCO	Bid Number:	20180267
Project Location:		Bid Date:	2/12/2019

Item #	Item Description	Estimated Quantity Unit	Unit Price	Total Price
803 <mark>-1</mark>	Demo Remainder Of Parking Area (24,280 SF)	1.00 <b>LS</b>	\$40,615.70	\$40,615.70
803-2	Export For Pavement Section	390.00 CY	\$45.99	\$17,936.10
803-3	Parking Area Scarify & Re-Compaction, Finish Subgrade +/1'	e 1.00 LS	\$14,462.26	\$14,462.26

\$73,014.06

\$965.99

**Alternate** 

803-4 Street Sweeper Option

Notes:

• Overexcavation in the parking area is not included.

OCCO NOTE: effective: Will propose apaver occonot cost expensive.
2/12 not class expensive.
to do all, less

CONFIRMED:
G.J Gentry Engineering Inc
Authorized Signature:
Estimator: David Niederhauser

2/12/2019 3:08:15 PM Page 1 of 1