

Project: Aquatic Facilities Maintenance Rehabilitation

Wilson Senior High School The Wilson School District 2601 Grandview Boulevard West Lawn, Pennsylvania 19609 Project No: 20795

Date: 29 MAR 2021

ADDENDUM 01

CHANGES TO BIDDING DOCUMENTS

The Project Manual dated 05 MARCH 2021, and Drawings forming a part thereof, are modified as follows:

PROJECT MANUAL

- 1) Project Manual: the following additions and changes shall be incorporated in all bids for the proposed work. Small Construction Package Ceramic Tile Deck Replacement, Pool Re-Grouting, and Stainless-steel Gutter Maintenance
- 2) Include the following altered and new Specification Sections in Division O, Division 1, Division 9, and Division 13

011000 - Summary: - Revise Scope of Work

012200 - Unit Prices: - Add grinding and reshaping of existing concrete decks

012200 - Unit Prices: - Remove reference to setting bed removal

093000 - Tiling: - add Thin-set installation materials

131129 - Ceramic Tile Swimming Pool and Deck Finish: add clarifications and additional manufactures

DRAWINGS

1. Architectural Drawings AP101 Control Joint Plan revision to areas of potential concrete slab reshaping, enclosed, and hereby made a part of this Addendum. Changes include:

Changes to Drawings

- 1. Sheet AP101 Control Joint Plan
 - a. Revise area of flooring to be reshaped (limited grinding and milling to remove high points in several locations) to improve slopes and drainage to existing drains to remain. No thick set leveling setting bed material was installed in the original installation. The original installation was installed with a thin-set installation directly on concrete pool decks. This will dictate the use of thin set for the remediation work with crack isolation and smoothing membranes to enhance draining on the pool decks.
 - b. Remove existing original Zurn drain, (Model Z880, 2-1/2" x 48" x 3") and supplemental deck drain on starting block headwall side of the pool and install a single run of new deck drain of similar size and manufacturer (Zurn, Model Z880, 2-1/2" x 48" x 3") to promote proper drainage.
 - c. Install new marble thresholds to men's locker room and pool equipment rooms to enable additional slope to the deck drain. Verify height in field, match threshold width to align with existing floor tile scheduled to remain.
- d. Adjust floor section details to reflect thin-set tile installation on concrete decks rather than a full setting bed set application.

END OF ADDENDUM 01

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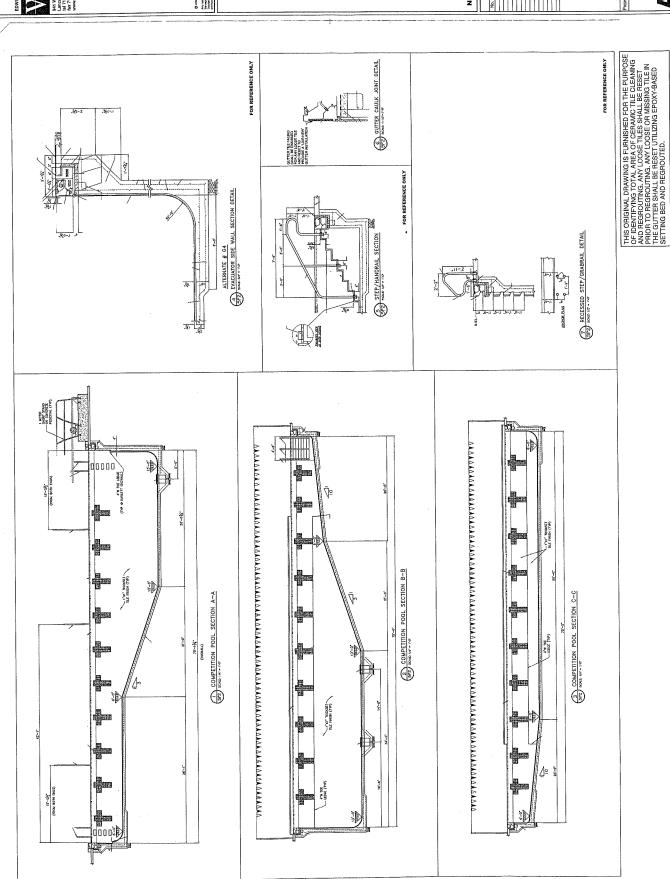
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POOL SECTIONS AND
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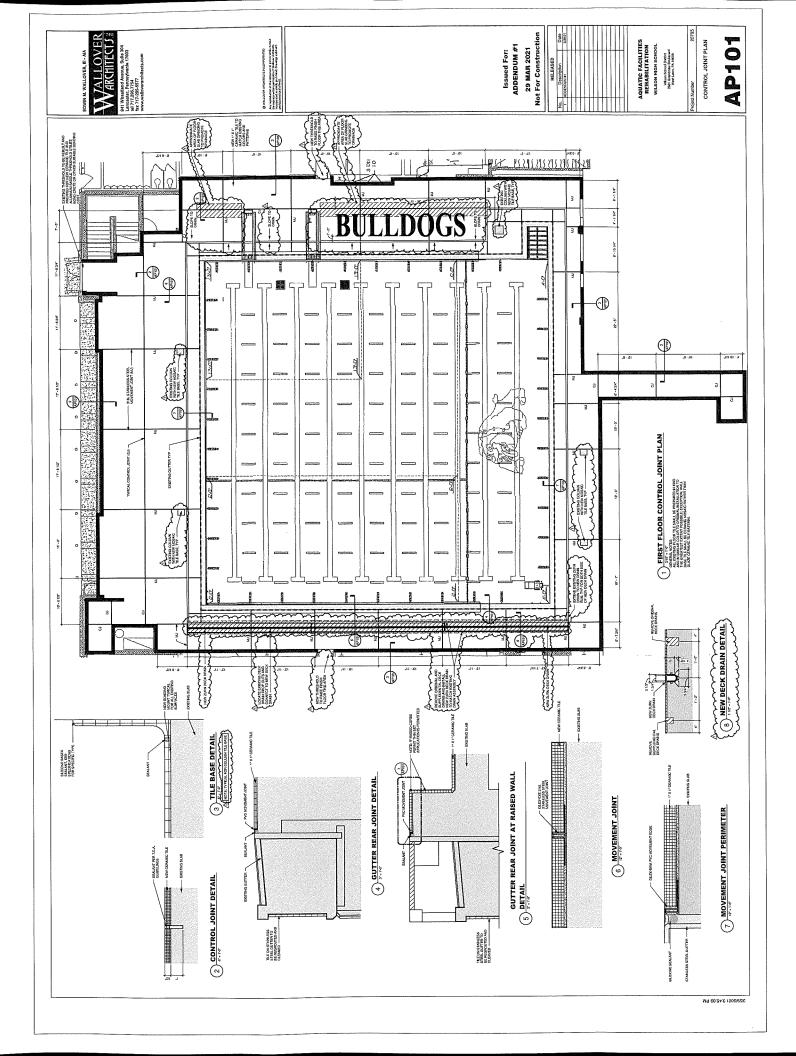
POOL PLAN, SECTIONS, AND EQUIPMENT TOTIAN 29 MAR 2021 Not For Construction AQUATIC FACILITIES REHABILITATION WILSON HIGH SCHOOL hey regretation of the determine to part or with with the argusts wither perception of Withers Architects becomes side a soliday perhibble. Deserge a half with project on a test allower. Issued For: ADDENDUM #1 RELEASED THIS DRAWING FURNISHED FROM ORIGINAL CONSTRUCTION DRAWING FOR REFERENCE ONLY TO ALLUW CONTRACTOR TO UNDERSTAND ORIGINAL CONSTRUCTION ALL THE TILE MARKINGS INDICATING POOL DEPTH SHALL BE REPARED IN EXACT LOCATION AND SAME CONSTRUCTION AND SAME TRAY AS ORIGINAL. NO DEWATTON HOW ORIGINAL DESIGN IS PERMITTED. IT IS THE INTENT OF THIS WORK TO REPLICATE THE ORIGINAL DESIGN TO THE GREATEST EXTENT POSSIBLE NOT IN CONTRACT | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 NOT IN CONTRACT NOT IN CONTRACT NOT IN CONTRACT (4) RAISED END WALL SECTION DETAIL SEP) Socia ave 1:00 (5P) Socia ave 1:00 (5P) Socia ave 2:00 (5P) Socia REGROUT ALL INTERIOR POOL CERAMIC MOSAIC THE 1818 SHORT STAND -SHORT STAND -ON CONCRETE OF SURFACE
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SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Definitions (applicable to all Sections).
- 2. Project information.
- 3. Project Milestone Dates.
- 4. Work covered by Contract Documents.
- 5. Contractor's use of site and premises.
- 6. Coordination with occupants.
- 7. Work restrictions.
- 8. Specification and Drawing conventions.
- 9. Permits.

B. Related Requirements:

- 1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
- 2. Section 017300 "Execution" for coordination of Owner-installed products.

1.3 DEFINITIONS

- A. Work Package: A group of specifications, drawings, and schedules prepared by the design team to describe a portion of the Project Work for pricing, permitting, and construction.
- B. Day: Shall be a calendar day, unless specifically noted as a workday.

1.4 PROJECT INFORMATION

- A. Project Identification: Aquatic Facilities Rehabilitation, Architect's Project No. 20795.
 - 1. Project Location: West Lawn Township, Berks County, Pennsylvania. Site address is 2601 Grandview Boulevard, West Lawn, Pennsylvania 19609.

- B. Owner: Wilson School District.
 - 1. Owner's Representative: Mr. Jeff Simcox, (610) 670-0180; SimJef@wilsond.org.
- C. Architect: Wallover Architects, Inc.
 - 1. Architect's Representative: Mr. Edwin M. Wallover, III AIA, (717) 295-7754; ewallover@walloverarchitects.com.
- D. Electronic Project Management System: Project software will be used for purposes of managing communication and documents during the construction stage.
 - 1. See Section 013100 "Project Management and Coordination" for requirements for using electronic project management system.

1.5 PROJECT MILESTONE DATES

- A. Anticipated Notice to Proceed for Procurement Only: April 21, 2021 <u>or</u> announced date.
- B. Start of Construction/Mobilization: May 3, 2021 or announced date.
- C. Substantial Completion: August 2, 2021
- D. Final Completion: August 23, 2021

1.6 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and includes, but is not limited to, the following:
 - 1. The renovation, clean and re-grout entire swimming pool and gutter face, complete in-kind pool deck mosaic tile replacement, install new control joints at all outside corners of the pool gutter to control potential cracking and as indicated on the drawings, and install new soft joints between pool gutter and new ceramic tile flooring, cleaning and re-passivating of all exposed stainless-steel deck edge components other architectural element and other Work indicated in the Contract Documents.
 - 2. The existing floor installation was found to be a thin-set application without a full bed setting bed installation. The new work shall be installed utilizing a standard thin set methodology with the movement and control joints installed as indicated on the drawings.
 - 3. Grinding and re-shaping of limited areas of the existing concrete slab will required. The drawings indicate the anticipated limits of concrete modifications.
 - 4. The existing floor drain and parallel supplemental floor drains d shall be removed in their entirety and a single matching floor drain of similar manufacture and size shall be installed to improve the deck drainage along the starting block headwall pool deck.

B. Type of Contract:

1. Project will be constructed under a coordinated, single contract. See Section 011200 "Single Contract Summary" for a list of contracts, a description of work included under the contract, and the responsibilities of Project coordinator.

1.7 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Limits on Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits on Use of Site: Confine construction operations to the aquatic facility, its locker rooms, and its mechanical room.
 - 2. Driveways, Walkways and Entrances: Keep driveways, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials, except where shown on the Drawings.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- B. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.
 - 1. Architect will take pre-construction photographs to document existing building conditions to use as a basis for comparison to post-construction conditions. Any Prime Contractor that damages the building, including the exterior and roof, when compared to the pre-construction photographs, shall be responsible for repairing the damage to the original condition, or better.
- C. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.
 - 1. Architect will take pre-construction photographs to document existing grounds conditions to use as a basis for comparison to post-construction conditions. Any Prime Contractor that damages the grounds, including the pavement, sidewalks, and turf, when compared to the pre-construction photographs, shall be responsible for repairing the damage to the original condition, or better.

1.8 COORDINATION WITH OCCUPANTS

- A. Partial Owner Occupancy: Owner will occupy the premises (Wilson High School) during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits unless otherwise indicated.
 - Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner. Excluded from this requirement is the parking and sidewalk areas noted on the Drawings.
 - 2. Provide not less than <u>3 working days</u>' notice to Owner of activities that will affect Owner's operations.
 - 3. Adjacent areas of the high school, the site and grounds, and other parts of the campus will be occupied during entire construction period.
 - 4. Crane Use: Coordinate and schedule all crane operations 14 days prior to the anticipated crane mobilization date. Since crane operations likely will disrupt Owner's use of Site, Grounds and Building, Contractor shall schedule crane operations to suit Owner's schedule and operations. This may result in crane operations being conducted during premium time. If crane operations are conducted during premium time, no additional costs will be payable to Contractor for premium time work.

1.9 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work to between 7:00 a.m. to 5:00 p.m., Monday through Thursday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Architect and Owner.
 - 1. The Work Hours are set to follow the District's summer work week of four 10-hour days, Monday through Thursday, and will be in effect for the Project duration.
 - Contractor shall comply with the West Lawn Township Ordinance No. 7 of 2020, Ordinance 2261 (NHT Noise Ordinance). A copy of the ordinance follows this Section.
 - 3. Weekend Hours: Only with prior approval by Architect and Owner, and in accordance with the NHT Noise Ordinance.
 - 4. Work in Existing Building: Any work performed outside of the Aquatic Facility shall be scheduled with Architect and Owner.
 - 5. Hours for Utility Shutdowns: All utility shutdowns or interruptions performed outside of the Aquatic Facility shall be scheduled with Architect and Owner.

- C. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Architect not less than <u>2 working days</u> in advance of proposed disruptive operations.
 - 2. Obtain Owner's written permission, through the Architect, before proceeding with disruptive operations.
- D. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, and other controlled substances on Owner's property is not permitted.
- E. Employee Screening: Comply with Owner's and Commonwealth of Pennsylvania, Department of Education's requirements for background screening of Contractor personnel working on Project site.
 - 1. Maintain list of approved screened personnel with Owner's representative.

1.10 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.
 - 3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.
 - 4. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 00 Contracting Requirements: General provisions of the Contract, including General and Supplementary Conditions, apply to all Sections of the Specifications.
- C. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- D. Definitions of Key Terms.
 - Furnish: The purchase or procurement, and delivery to the Project site, F.O.B.

- 2. Install: To put into place or assemble into the Project.
- 3. Provide: To both Furnish and Install.
- E. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.

1.11 PERMITS

- A. Building Permit: Owner has applied for and will pay for the Building Permit. Within 10 days after receiving its executed contract, General Contractor shall complete the permit application by providing its business name and jobsite contact's information, pick up the Building Permit and deliver it to Architect.
- B. Trade Permits: General construction permits shall be applied for, paid for, and secured by the Prime Contractors performing the trade permit work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related Requirements:
 - 1. Section 012300 "Alternates" for procedures for using unit prices to adjust Project alternates.
 - 2. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.

1.3 DEFINITIONS

A. Unit price is an amount incorporated into the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-inplace that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the Part 3 "Schedule of Unit Prices" Article contain requirements for materials described under each unit price.

UNIT PRICES 012200 - 1

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Unit Price No. 1: Ceramic tile removal cost /SF
 - 1. Description: All costs associated with the removal of existing ceramic mosaic <u>floor</u> tile located on the main pool decks including any <u>residual</u> thin-set setting bed material deemed to be unsuitable for installing new thin-set ceramic tile or as necessary to be removed to maintain specific dimensions around the pool deck to promote positive drainage to the existing (and new) floor drains.
 - 2. Unit of Measurement: Square feet of tile removed.
 - 3. Quantity Alternates: Coordinate unit price with alternate adjustment requirements in Section 012300 "Alternates."
- B. Unit Price No. 2: Ceramic tile replacement cost /SF
 - 1. Description: All costs associated with the replacement of demolished ceramic mosaic tile located on the main pool decks in a horizontal orientation including <u>new thin-set</u> setting bed material deemed to be necessary to align new tile with existing deck drains, door thresholds, deck transitions with new stainless-steel gutter system, etc.
 - 2. New ceramic mosaic wall base where indicated on the drawings, including all column bases and associated structures within the natatorium space.
 - 3. Unit of Measurement: Square feet of tile replaced.
- C. Unit Price No. 2: Concrete Grinding or Milling cost /SF
 - 1. Description: All costs associated with the grinding or milling of identified visually prominent concrete deck high points remaining from the original concrete deck installation. After the removal of the ceramic mosaic tile finish the contactor shall flood the decks to verify low and high points on the existing concrete pool decks. The main pool decks shall be ground or milled to remove as much of the identified high points as possible to promote positive drainage to the existing and new pool deck drains. This applies to all tile in a horizontal orientation including new thin-set setting bed material deemed to be necessary to align new tile with existing deck drains, door thresholds, deck transitions with new stainless-steel gutter system, etc.
 - 2. <u>Unit of Measurement: Square feet of concrete grinding or deck milling required to promote proper drainage.</u>

END OF SECTION 012200

UNIT PRICES 012200 - 2

SECTION 093000 - TILING

PART 1 - GENERAL

1.1 SUMMARY

- A. Drawings and general provisions of the Contract, including the Division 1 Specification Sections, apply to this Section. All work to be performed under this Section is to be included in the General Construction Contract.
- B. Refer to other Divisions of these Specifications to determine the type and extent of work therein affecting the work of this trade, whether such work is specifically mentioned in this Section.

1.2 SUBMITTALS

- A. Submittals: Product Data for tile and installation materials and samples for tile.
- B. Floor Tiles: ANSI 137.1 Dynamic Coefficient of Friction (DCOF) STANDARD For surfaces that would be specified in interior areas that will be walked on when wet, ANSI 137.1 stipulates they should have a DCOF of >0.42. Should an area or area function require additional friction due to standing water, ramps etc.

PART 2 - PRODUCTS

2.1 CERAMIC TILE

- A. Ceramic tile that complies with Standard grade requirements in ANSI A137.1, "Specifications for Ceramic Tile."
- B. Ceramic Floor Tile: see Division 13, Section 131129.2.6.
- C. Pool Tile: See Division 13, Section 131129.2.6.
- D. Unglazed Porcelain Mosaic Trim: See Division 13, Section 131129.2.6.

2.2 INSTALLATION MATERIALS

- A. VOC Limit for Adhesives and Fluid-Applied Waterproofing Membranes: 65 g/L when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- B. Setting and Grouting Materials: Comply with material standards in ANSI's "Specifications for the Installation of Ceramic Tile" that apply to materials and methods indicated.
 - 1. Thin-Set Mortar Type: Latex- Portland cement.
 - 2. Grout Type: Epoxy modified unless otherwise indicated.
 - 3. Grout Color: To match existing.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Comply with tile installation standards in ANSI's "Specifications for the Installation of Ceramic Tile" that apply to materials and methods indicated.
 - 1. For installations indicated below, follow procedures in ANSI's "Specifications for the Installation of Ceramic Tile" for providing 95 percent mortar coverage.
 - a. Tile floors in wet areas.
- B. Comply with TCA's "Handbook for Ceramic Tile Installation."
- C. Floor Tile Installation Method(s):
 - 1. <u>Over Concrete slabs on grade: TCA thinset mortar bed guidelines</u> with bond coat over existing concrete.
 - 2. Do not install tile over waterproofing until waterproofing has cured and been tested to determine that it is watertight.
- D. Lay tile in grid pattern, unless otherwise indicated. Align joints where adjoining tiles on floor, base, walls, and trim are the same size.
- E. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.

END OF SECTION 093000

SECTION 131129 - CERAMIC TILE SWIMMING POOL AND DECK FINISH

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. All work outlined in this Section shall be furnished by the General Contractor or his select Sub-contractor to be included in the General Construction Contract.
- C. Preparation of pool surfaces to receive new grouting and repair.

1.2 SUMMARY

- A. The extent of ceramic tile re-grouting and related work is indicated on the Drawings, and in general includes, but is not limited to:
 - 1. Entire swimming pool interior finish.
 - 2. Safety stripe.
 - 3. Lane markings, floor, and wall.
 - 4. Swimming pool deck with contrasting waterjet cut solid porcelain tile depth markings.
- B. The appropriate provisions of the 2020 Tile Council of America (TCA) Handbook for Ceramic Tile Installation (or latest edition). Section P601-09 shall apply and be incorporated in this Section the same as if written out in full herein.

1.3 QUALIFICATIONS OF TILE CONTRACTOR

- A. Tile Contractor must have had at least three (3) years' experience in the construction of the type of swimming pool finish system specified and shall provide a list of at least five (5) pools of this type each with a water surface area of not less than this pool which he has constructed and which upon investigation, would be found to be completed in a satisfactory manner and in operation at least two (2) years.
- B. The Contractor's foreman and mechanics must have at least three (3) years' experience in the installation of setting bed and ceramic mosaic tile finishes on concrete pool decks associated with swimming pool structures. Satisfactory written evidence of such experience shall be presented to the Owner upon request.
- C. The ceramic tile installation must be performed by an appropriately skilled Contractor with supervision by the General Contractor's own personnel.

This portion of the work may be sub-contracted if all requirements set forth herein are met by the sub-contractor and its personnel. The Architect must be notified if this portion of the work is to be subcontracted.

D. The Owner reserves the right to reject any Contractor if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such Contractor is properly qualified to carry out the obligations of the contract and to complete the work described, or if the General Contractor or his select Sub-contractor does not meet the qualifications stated herein.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's specifications, details and installation instructions for the products used in conjunction with the Swimming Pool.
- B. Submit samples of full color line of proposed ceramic tile prior to initiating ceramic tile installation. All colors and layouts must be reviewed and approved by the Architect prior to installation.

1.5 WARRANTY

- A. General Contractor warrants that all materials used in completing the installation contracted for are new and of high quality; that all work has been done in a competent and workmanlike manner; that if any substantial defect occurs in the workmanship or materials it will be remedied without cost to the Owner if written notice thereof is given to the General Contractor within one (1) year from the Date of Substantial Completion. Assemblies or units (such as deck inserts, ladders, etc.) and standard fittings or accessories purchased by the General Contractor for use in this installation are subject only to the extent of the manufacturer's warrantee.
- B. The General Contractor shall warrantee for ten (10) years repair of the Ceramic Tile covering any defects, cracks and/or delamination in the ceramic tile caused by defective workmanship or material, exclusive of damages due to subsurface hydrostatic conditions, provided the pool is kept full of water at all times except for required cleaning and that during such cleaning the pool does not remain entirely empty for more than a ninety-six (96) hour period. The Ardex System one tile setting methodology is the standard for this specification to obtain a 10-year warranty against delamination.*

1.6 QUALITY ASSURANCE

A. The General Contractor will be responsible for checking measurements in the field prior to the preparation of Shop Drawings and actual fabrication of the system. Field fitting may be allowed only if measurements will delay the fabrication process.

PART 2 - PRODUCTS

- 2.1 BOND/LEVELING/GAUGING COAT* (Note: All similar systems and components as manufactured by Laticrete, or approved equal, may be submitted for review and approval. The intent of the specification is to obtain a proper thin-set application for all area of ceramic mosaic tile scheduled for removal and replacement. Recent core drilling examination of the floor slab indicates no thickened cementitious setting bed was utilized under any areas of the ceramic mosaic tile to enhance floor slopes to the drain assemblies. A thinset application was initially utilized and must be used in this application to align with the existing gutter assembly and door thresholds. In addition, the existing concrete slab will require limited grinding and milling to remove high spots and improve drainage to existing drain locations. The setting bed materials in this section shall be of the highest quality and leveling compounds shall be used in areas subject to improper drainage.)
 - A. Ardex AM 100TM—Smoothing and Ramping Mortar, 1" to 1-1/4" (thicker application rate permitted by manufacturer provided substrate is examined by the manufacturer prior to installation).
 - B. Basecrete, acrylic modified cementitious membrane/waterproof setting bed bond coat, 1/4" to 4" application rate depending upon conditions as manufactured by Basecrete Technologies LLC, 6148 Clark Center Ave., Sarasota, FL 34238, info@basecreteuse.com, (914) 312-5142.

2.2 WATERPROOFING MEMBRANE*

- A. Ardex AM 8+9TM Waterproofing and Crack Isolations Membrane, 3 coat application to provide 10-year waterproof warranty.
- B. Ardex P4TM Pre-Mixed, Rapid-Drying Multipurpose Primer for prepping existing ceramic tile to receive new ceramic tile finish. One coat system.
- C. Basecrete, acrylic modified cementitious membrane/waterproof setting bed bond coat, 1/4" to 4" application rate depending upon conditions as manufactured by Basecrete Technologies LLC, 6148 Clark Center Ave., Sarasota, FL 34238, info@basecreteuse.com, (914) 312-5142.

2.3 INTERIOR SETTING BED*

A. Ardex X77 TM Microtec Fiber Reinforced Thin set mortar. Polymer modified trowel applied thin set setting bed. Install in strict compliance for ceramic mosaic tile in a wet environment.

2.4 GROUT*

A. Ardex FLTM Rapid Set Flexible Grout. Color to be selected by Architect.

2.5 SEALANT*

- A. Ardex SX TM 100% Silicone Sealant for Tile and Stone for all areas not in contact with or immersed in pool water. Color to be selected by Architect.
- B. Latasil 100% Silicone sealant for all areas of sealant immersed, or in direct contact with pool water.

2.6 CERAMIC TILE

- A. Basis-of-Design: Dal-Tile Corporation, 800-993-TILE
 - 1. Approved equal: American Olean
- C. Type: Color body porcelain, floor and wall tile.
- D. Size:
 - 1. $1" \times 1" \times 1/4"$
- E. Colors:
 - 1. Color selection by Architect from manufacturer's full range matching the original tile color palate from the original construction project. (See drawings for original colors.)
- F. Furnish and install all required shapes, coves, caps, and stretchers to provide uniform complete impervious ceramic tile interior swimming pool deck finish. No rough or sharp edges will be accepted. Include ceramic mosaic material for all column bases.

2.7 MOVEMENT CONTROL JOINT

A. DILEX-EXE 316L stainless steel movement joint or approved equal.

2.8 ISOLATION JOINT

A. DILEX-BWA PVC control joint or approved equal.

EXECUTION

3.1 INSTALLATION

- G. The ceramic tile finish shall not be applied until:
 - 1. All work by others in the pool area including finish grade, deck work, exterior-painting, etc. have been completed.
 - 2. Swimming pool has been tested for watertight integrity.
- H. Prior to application of finish, the surfaces to be coated shall be thoroughly cleaned of dust, oil, paint, loose materials, and any foreign matter.

- I. Set ceramic tile as indicated elsewhere in these specifications. All ceramic tiles shall be installed over a crack isolating/leveling course membrane I to produce a smooth and level installation. All transition areas shall be free of any tripping hazards and produce a smooth level joint between finishes. Install ceramic tile finish in strict compliance with manufacturer's written recommendations. Curing shall be performed in strict compliance with TCA guidelines. Precautions shall be taken during filling pool structure with water to avoid damage to new grouted surfaces caused by direct flow of make-up water. Protective coating can be removed once sufficient depth of water has been reached to avoid damage to grout.
- J. Monitor water chemistry to allow for proper curing of grout and ceramic tile. Consult manufacturer for proper pH range, total calcium hardness and total alkalinity during the curing period.

FND OF SECTION 131129

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