

SECTION 32 13 13 – CONCRETE POOL DECK

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Provide labor, equipment and materials to construct the pavement base course and colored and exposed aggregate paving as indicated on the drawings.

1.02 RELATED WORK

- A. Section 31 00 00 - EARTHWORK
- B. Section 13 11 13 - SWIMMING POOL
- C. Section 32 13 19- ORNAMETAL PICKET FENCING

1.03 QUALITY ASSURANCE

- A. All methods and materials shall conform to the applicable sections of the Virginia Department of Transportation (VDOT) Road and Bridge Specifications dated January, 1994 and Standards dated 1993, or current addition.
- B. Provide strength testing of cured concrete as per ACI standards. Testing shall be accomplished by a state certified concrete testing lab.

1.04 SUBMITTALS

- A. Test Reports, Material Certifications: Submit following reports directly to Landscape Architect.
 - 1. Certifications of job - mix formula for each source of aggregate material, and hydraulic cement concrete.
 - 2. Test results from concrete testing lab certifying that concrete paving has attained design strength.
- B. Materials for concrete paving:
 - 1. Self-leveling joint sealant
 - 2. Matt finish concrete sealer for paving surfaces
 - 3. Manufacturer's literature on deck drains
- C. Provide 4' x 6' sample panel which indicate expansion joint, saw cut and concrete finish.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Aggregate Base Course: Type I, size 21, 21A or 26 in accordance with Section 209, VDOT Road and Bridge Spec. Other grades as specified shall comply with VDOT specifications when shown on plans.
- B. Concrete: In accordance with ACI 318, sampling - ASTM C172, slump - ASTM C143, air

- content - ASTM C173. 3,500 psi. Minimum.
- C. Drainage gravel. VDOT #57 when shown on plans.
 - D. Backer rod closed cell type 'SonoFoam' brand by 'Sonneborn Building Products' 404-355-6767.
 - E. Joint Sealant - 'Paving Joint Sealant' and '2 Parts Polysulfide' brand sealant as manufactured by 'Sonneborn Building Products'. '2 Parts Polysulfide' to be used where joint is in contact with pool water. Color as selected by landscape architect.
 - F. Joint Filler - 'Sonoflex 'F'' brand Joint Filler by 'Sonneborn Building Products'.
 - G. Matt finish clear , spray-on sealer for paving surfaces as selected by paving installer.
 - H. Bronze finish deck drain shall be Model #2270-04-T-U-B-NB by Jay R. Smith Manufacturing, 2781 Gunter Park Dr, East, Montgomery, AL 36109-0237 (334) - 277-8520.

PART 3 EXECUTION

3.01 PAVEMENT

- A. Subgrade - Compact to 95% standard proctor density and compressive strength - ASTM C39.
 - 1. Prior to installation of aggregate base course and pavement, the subgrade CBR values shall be verified as specified on plans. Contractor shall not proceed with further work without approval of Landscape Architect.
- B. If aggregate base course is not constructed immediately after subgrade has been prepared, compacted, and approved by Landscape Architect, and subgrade becomes cut-up or rough, scarify a minimum of 8 inches depth, mix, reshape, and recompact to 95% of maximum density.
- C. Construct aggregate base course of thickness indicated in accordance with Section 309, VDOT Road and Bridge Specifications.
- D. Construct concrete pavement of thickness indicated on the plans in accordance with Section 321, VDOT Road and Bridge Specifications except specimen beams shall not be required.

3.02 CONCRETE SIDEWALKS AND POOL PATIO

- A. Concrete walks and pool deck shall be constructed of concrete to the width indicated and shall be 4 to 6 inches thick as shown on drawings.
- B. Round edges, including expansion joints and grooves, with steel finishing tool.
- C. Forms shall remain in place twenty-four (24) hours. Protect walks from traffic for three (3) days after placing.
- D. Contractor shall comply with ACI standards for concreting in cold and hot weather.
- E. Joints and Grooves: Provide joints and grooves at locations indicated on the plans and in accordance with the following:
 - 1. Provide expansion joints spaced not more than 40 ft. max. apart both ways and where

sidewalks and pool deck abut walls, curbs, steps or other structures when not indicated. Plans shall govern when indicated. Discontinue reinforcing at expansion joints.

2. Match joints in curbs when not indicated. Plans shall govern when indicated.
 3. Cut transverse grooves 1/8 inch wide and 1 1/2 inch deep at 5 foot maximum both ways or as shown on the plans; plans shall govern.
- F. Cut transverse crack control grooves 1/8 inch wide and 2 1/2 inch deep at 20 foot maximum both ways. Discontinue reinforcing at joint
- G. Finish: All panels shall have consistent color and texture.
- H. Where walks terminate at curbs, finish 1/4 inch above curb and bevel.
- I. Upon finishing of paving installation, seal all concrete, colored and exposed aggregate concrete with one coat of matt finish clear concrete sealer. Install as per manufacturer's installation instructions.
- J. Ground and bond rebar and metal drains in concrete pool deck as per local codes and National Electrical Code (NEC).
- K. Crack control joints shall be sawn in paving with motorized, walk behind, water cooled, self-propelled commercial concrete cutting equipment. Use of a quickie saw or quickie saw on a stand is not acceptable. Concrete saw cutting shall be accomplished at proper time to reduce and prevent concrete thermal shrinkage cracking in the surface of the concrete.

3.03 QUALITY CONTROL OF CONCRETE SIDEWALKS AND PATIO

- A. Concrete paving shall be installed as per the highest finish standards in the industry. Concrete will be rejected if the following standards are not met:
1. Concrete shall be consistent in color.
 2. Concrete shall be consistent in texture.
 3. Broom finish shall be of consistent texture and in consistent smooth direction.
 4. Sawn control joints shall be cut in a straight line and shall not vary 1/4" in 5'-0" length.
 5. Sawn control joints shall be void of chipped edges or divots created from the sawing process.
 6. Adjacent paving panels shall not vary 3/16" in height between panels, expansion joints or control joint.
 7. Edges of adjacent paving panels at expansion joints shall not vary 3/16" in height between panels.
 8. Widths of expansion joints and caulk joints shall be of consistent width and shall not vary 1/8" in 5'-0".
 9. Corners at expansion joints and sawn control joints shall be square and sound and shall not be rounded, chipped or depressed.
 10. Rounded edges at expansion joint shall be of consistent radius and should be of proper height to prevent collection of water.
 11. Concrete paving at coping shall be level with back edge of coping and shall not project above brick coping at concrete intersection.
 12. Concrete around skimmer tops shall be of similar color and texture to the pool deck.
 13. Concrete panels with improper design strength.
 14. Concrete which has set up too quickly and has improper surface texture or appearance.
 15. Concrete panels which have bird bath depressions, or areas that collect water.
 16. Finished concrete work shall be devoid of chalk marks and markings.

END OF SECTION