SHOTCRETING SHALL CONFORM TO ALL REQUIREMENTS OF ACI 506-90, PUBLISHED BY

- 1. THE AMERICAN CONCRETE INSTITUTE, DETROIT, MICHIGAN. EXCEPT AS MODIFIED BY THE REQUIREMENTS OF
- THE CONTRACT DOCUMENTS. APPLICATORS OF STRUCTURAL WET MIX SHOTCRETE SHALL HAVE A COPY OF ACI 506-90 ON EACH WORK SITE AT THE TIME OF SHOTCRETING. THE WORD "SHALL" WILL BE SUBSTITUTED

WHENEVER THE WORD "SHOULD" OCCURS IN ACI 506-90

AT LEAST 40 BAR DIAMETERS OR 24"

- MATERIALS CEMENT: ASTM C150 TYPE 11, LOW ALKALI AGGREGATE: ACI 506 GRADATION NO. 2 OR 3, C33 POTABLE, FRESH WATER: REINFORCING STEEL: ASTM A615 GRADE 60 THE CONTRACTOR SHALL SUBMIT A MIX DESIGN COMPLYING WITH METHOD B OF CODE
- 3. SECTION 1905A.3 4. SHOTCRETE CONTRACTOR SHALL SHOW A MINIMUM OF 5 YEARS EXPERIENCE ON SIMILAR SEISMIC BUILDING PROJECTS AND SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. THE SLUMP MEASURED AT THE MIXER, SHALL BE BETWEEN 1-1/2 AND 3 INCHES.
- 5. CONTINUOUS INSPECTION IS REQUIRED DURING PLACEMENT OF SHOTCRETE AND TAKING OF CORES PER SECTION 1924A.11 OF THE CODE
- NOT USED 7. CONTACT SPLICES MAY BE MADE IN BARS WHICH ARE #5 AND SMALLER. LAP SPLICES SHALL BE
- 8. SHALL BE HELD AT RIGHT ANGLES TO THE SURFACES AND A DISTANCE OF NOT MORE THAN 3 FEET. ANY DEPOSITS OF LOOSE SAND OR REBOUND SHALL BE CAREFULLY REMOVED FROM THE 9. SURFACE BEFORE APPLYING ADDITIONAL CONCRETE. WHEN ENCLOSING REINFORCING STEEL, THE NOZZLE SHALL SO AS TO DIRECT MATERIAL AROUND THE BARS. EACH BAR SHALL BE SHOT FROM AT LEAST TWO DIRECTIONS. A SECOND EXPERIENCED MAN EQUIPPED WITH AN AIR JET
- SHALL ATTEND THE OPERATORS WHENEVER REINFORCING STEEL IS BEING ENCLOSED AND SHALL CAREFULLY PRECEDE THE NOZZLE AND BLOW OUT ALL REBOUND AND SAND WHICH MAY BE LODGED BEHIND THE STEEL.

MOVEMENT DURING PLACEMENT OF MIX. THE CONTRACTOR SHALL PROVIDE THE STRUCTURAL

ENGINEER A WRITTEN PROCEDURE 11. FOR PLACING OF SHOTCRETE PRIOR TO COMMENCEMENT OF WORK. THE HEIGHT OF A LAYER S HALL NOT BE MORE THAN THREE FEET AND A SUCCEEDING LAYER SHALL NOT BE PLACED IN LESS THAN THREE HOURS

10. REINFORCING STEEL WILL BE SECURELY TIED IN PLACE IN A MANNER THAT PREVENTS ANY

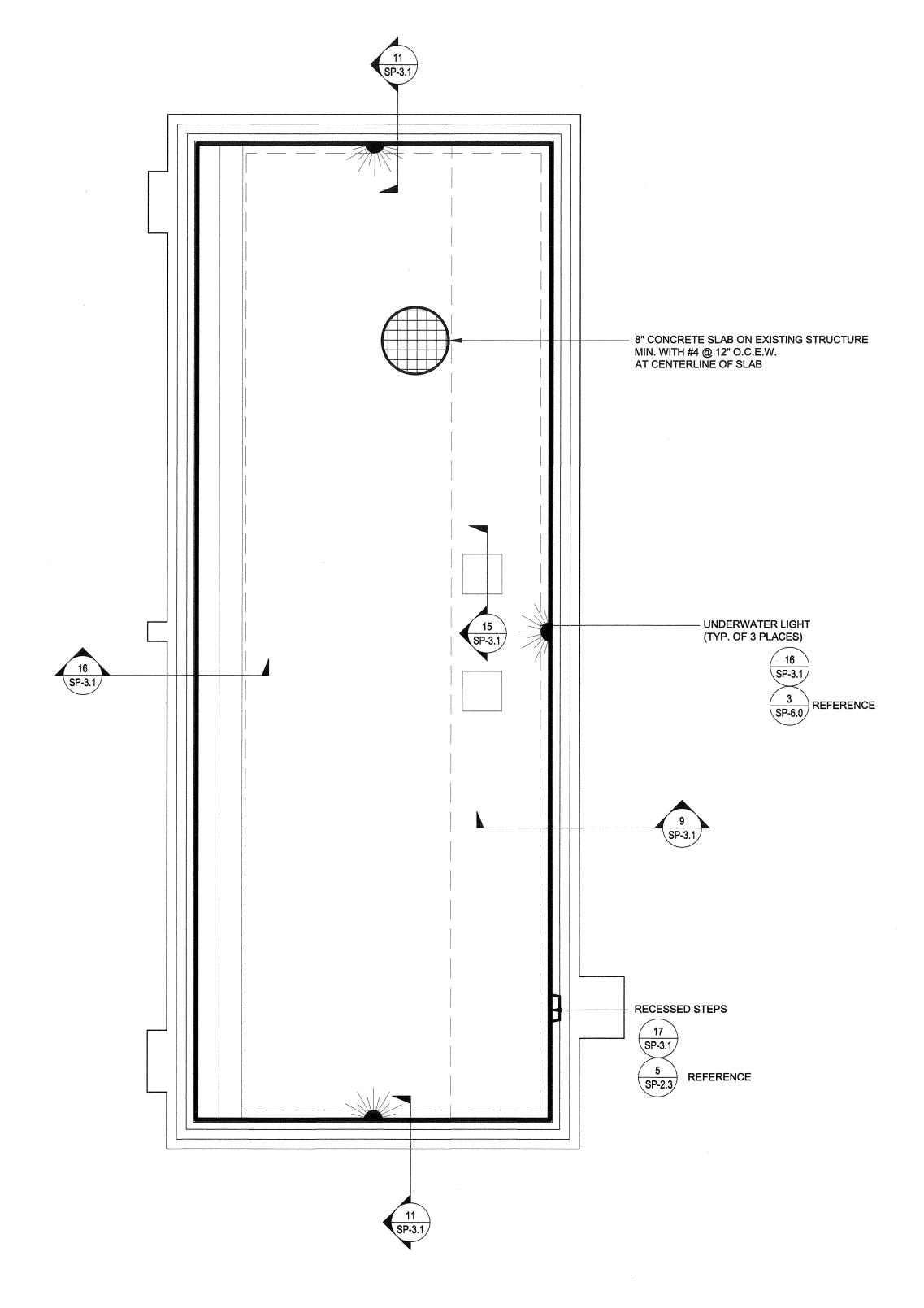
- UNLESS AUTHORIZED BY THE STRUCTURAL ENGINEER. NO SLOUGHING OR SAGGING IS PERMITTED. CONTINUED SATISFACTORY PERFORMANCE IS REQUIRED. COMPLY WITH SECTION 1924A.8 OF THE CODE.
- 12. THE MINIMUM SLUMP SHALL BE 1-1/2" AND MAXIMUM SLUMP OF 3" SHALL BE MEASURED AT THE POINT OF DISCHARGE FROM MIXER, EXCEPT THE INSPECTOR MAY REQUIRE SLUMP TESTS AT THE DISCHARGE POINT WHEN WATER MAY HAVE BEEN ADDED. ADDITIONAL WORKERS MAY BE REQUIRED TO TAKE THE REBOUND FROM THE WORK, IF

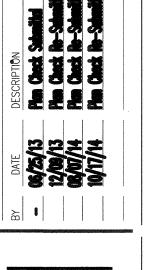
13. THE REBOUND CANNOT BE REMOVED BY THE AIR BLOWPIPE.

- 14. NO KEYWAYS OR EMBEDMENTS SHALL BE PLACED ON THE FRONT FACE, WHICH WILL INTERFERE WITH THE NOZZLE STREAM. THE CONTRACTOR AGREES TO PROVIDE A DESIGNATED LIAISON BETWEEN HIS CREW
- 15. THE SPECIAL INSPECTOR AND THE GENERAL INSPECTOR. 16. THE INSPECTOR SHALL BE APPROVED PRIOR TO INSPECTING THE WORK AT THE JOB SITE AND
- ONE SPECIAL INSPECTOR SHALL BE ASSIGNED TO EACH NOZZLE. 17. TESTING SHALL BE PERFORMED BY EACH TEAM OF THE PERSON AT THE NOZZLE AND THE HELPER BY SHOOTING A TEST PANEL OF THE THICKNESS AND WITH THE TYPICAL REINFORCING STEEL PATTERN USING EACH SHOOTING POSITION BEFORE COMMENCING ANY WET MIX SHOTCRETE WORK. THE SPECIAL INSPECTOR SHALL WITNESS THE ASSEMBLY, REINFORCING, SQUARE. AFTER SHOOTING, THE PANEL SHALL BE DISASSEMBLED BY CUTTING INTO 3' SQUARES OR CORING 3" CORES. THE CUT OR CORED EDGES SHALL BE VISUALLY GRADED
- 18. 19. 20. IN THE EVENT THAT A PREVIOUSLY PRESUMED SOLID EMBANKMENT SHOULD SLOUGH OR SHED DIRT IN SUFFICIENT QUANTITY TO DAMAGE THE CONCRETE. THE WET MIX SHOTCRETE PLACEMENT WORK IN THAT AREA SHALL CEASE UNTIL A RIGID BACKING IS INSTALLED AND CONTAMINATED SHOTCRETE IS REMOVED.

NOTES:

- 1 REFER TO SHEET SP-2.0 FOR TOLERANCES AND FINISH DIMENSIONS AND PROVIDE ROUGH OPENING
- TO ACCOMMODATE 1/2" PLASTER.
- 2 NOT USED
- 3 REFER TO SHEET SP-2.0 FOR MAINDRAIN LOCATIONS AND PROVIDE STRUCTURE PER DETAIL 15/SP-3.1
- 4 REFER TO SHEET SP-2.0 FOR RECESSED STEP LOCATIONS AND PROVIDE STRUCTURE PER DETAIL 17/SP-3.1 5 REFER TO SHEET SP-2.0 FOR UNDERWATER LIGHT LOCATIONS AND PROVIDE STRUCTURE PER DETAIL 16/SP-3.1
- 6 SHOTCRETE STRENGTH TO BE 3000 PSI MINIMUM 28 DAYS.
- 7 ALL REINFORCING STEEL SHALL BE GRADE 60. 8 MAINTAIN MIN. 2" CLEAR FROM REINFORCING STEEL TO SHOTCRETE SURFACE ON POOL INTERIOR.
- 9 MAINTAIN MIN. 3" CLEAR FROM REINFORCING STEEL TO SHOTCRETE SURFACE (EARTH SIDE).
- 10 PROVIDE STRUCTURE TO ACCOMMODATE FOR STANCHIONS, WEDGE ANCHORS, DISABLED LIFT SOCKET, ETC.
- 11 CAST IN PLACE CONCRETE STRENGTH TO BE 4500 PSI MINIMUM 28 DAYS.





<u>CONSULTANTS</u>



