

CROSS SECTION A-A SCALE 1/8":1'-00'

#### WET MIX SHOTCRETE

#### DOCUMENT NO .: P/BC 2020-051

- A. SCOPE The use of structural wet mix shotcrete is allowed by the code when the owner, engineer, contractor, and concrete supplier comply with these procedures, in addition to requirements of Section 1908 of the 2020 Los Angeles Building Code (LABC). B. DEFINITIONS:
- Wet Mix Shotcrete is shotcrete in which all of the ingredients (including water) are mixed before being placed into the placing equipment. C. LIMITATIONS:
- I. General Structural wet mix shotcrete shall no be placed where the stream from the nozzle cannot directlu impinae onto the surface where the concrete is to be placed. Where the condition precludes the possibility of obtaining cores from the structure, method shall no be used. 2. Reinforcement Reinforcing bars shall not exceed size #5
- 3. Columns Shotcrete may only be applied to tied columns where the spacing of the reinforcing steel is the same as for walls. Shotcrete shall not be applied to spirally tied columns
- D. CODES: 1. All applicable parts of ACI 506R-16 shall be followed. Structural wet mix shotcrete applicators shall have a copy of the ACI 506R-16 on each work site during the time that the shotcrete is being applicated. The word "shall" must be substituted whenever the word "should" occurs in ACI 506R-16. The concrete mix comply with ACI 318-14, Chapter 26 and shall not be batched volumetrically. 3. All other applicable requirements of the Code (including all requirements for pneumatically placed wet mixed mortar and maximum time-in mixer) shall apply.
- E. INSPECTION: I. Shotcrete requires continuous inspection by a Registered Deputy Inspector. 2. Continuous inspections shall be provide for the placement of all reinforcing, the placement of shotcrete, and the assembly, noting, testing, and disassembly of test panels.
- F. PRECONSTRUCTION TESTS The test panel shall be a square with a minimum of 4 feet on each side.
- G. CONDITIONS The minimum slump shall be 1 ½" and the maximum slum shall be 2 ½". Slump shall be measured at the point of discharge from the mixer, except when the Building Inspector may require slump tests at the discharge point where water may have been added.
   A capable nozzleman's helper with an air blow pipe shall be provided to assist the nozzleman in keeping all rebound build-up out
- A calphable flozzionian's heiper with all all block pipe shall be provided to assist the nezzionian in recently all recently that all of the work.
   Additional workers may be required to take the rebound from the work if the rebound cannot be removed by the air blow pipe.
   No skyways or embedment shall be place in the front face that will interfere with the stream from the nozzle.
   The contractor agrees to provide a designated liaison between his crew, the Deputy Inspector, and the Building Inspector.
- 6. The Deputy Inspector shall be interviewed and approved by Department representatives prior to inspecting the work at the job site and one Deputy shall be assigned to each nozzle.
- Rigid or other approved backing shall be placed against the earth where there is any likelihood of soil being dislodged in efficient quantity to damage the concrete during the application of wet mix shotcrete. Rigid or other approved backing shall be bridged.
   In the event that a previously presumed solid embankment should slough or shed dirt in sufficient quantity to damage the concrete placement work in that area shall cease until a rigid backing is installed and any contaminate should slough or shed dirt is installed and any contaminate should should be applied by the should should be applied by the should should be applied by the shou
- shotcrete is removed.
- 9. The height of a layer shall be limited to not more than 3' and succeeding layer shall not be placed in less than three hours. Not sloughing or sagging shall be permitted. When specifically designed by the engineer of record for a succeeding layer to be place in less than three hours, the lesser time must be approved by the Plan Check Division.
  10. Details of cold joints, including the slope of the joints, shall be shown on the approved plan. When shooting up to the underside of existing concrete, the last 2" shall be dry packed or an approved method of dry pneumatic concrete shall bed used. EXCEPTION: Provided that the detail of the joint is sloped so that the closure of the cold joint made with structural wet mix shotcrete does not sag away from the upper surface and provided that both sides of the cold joint have taken their initial set, the joint closure may be made with structural Wet mix shotcrete.
- H. Reinforcing steel shall be securely tied in place in a manner that prevents any movement during the wet mix shotcreting.
- QUALIFICATION The engineer of record shall provide <u>shotcrete specifications</u> which shall be part of the plans. This specification shall include but not be limited to the materials and conditions (in conformance with this document) required to achieve the required structural performance, and shall state the minimum type and duration of experience required for the placement team (particularly the nozzleman) so as to insure the conformance with the above. The shotcrete subcontractor shall present, upon the request of a Department of Building and Safety Inspector, a "statement of
- <u>qualifications</u>" signed by an officer of the subcontractor corporation. Both the specification and statement shall included, but not necessarily be limited to, the following:
- I. The duration and type of structural shotcrete experience (not including swimming pools) of the nozzleman, the subcontracting company, the superintendent, and helper. 2. The subcontractor's listed experience shall reference specific projects approved in the City of Los Angeles.

#### A.- GENERAL

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS \$ CONDITIONS AT THE JOB SITE. IN CASE OF CONFLICT, SPECIFIC NOTE AND DETAILS 2 UNLESS OTHERWISE NOTED ON THE PLANS, BAR SPLICES ON THE DRAWINGS TAKE PRECEDENCE OVER THIS SHEET OR OTHER GENERAL NOTES AND TYPICAL
- DETAILS. WHERE NO CONSTRUCTION DETAIL ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, THE DETAILS ALL WORK SHALL CONFORM TO OR EXCEED THE REQUIREMENTS OF ALL STATE AND LOCAL CODES \$
- ORDINANCES AND THE UNIFORM BUILDING CODE. THE LATEST EDITION.
  - B.- CONCRETE
- STRUCTUAL CONCRETE SHAL BE 3,000 PSI AT 28 DAYS, UNLESS HIGHER STRENGTH IS SPECIFIED ON
- PLANS. 2 CONCRETE MATERIALS, MIX PROPORTIONING AND
- PLACING SHALL CONFORM TO APPLICABLE CODE. 3 CLEAR BAR COVER SHALL BE AS INDICATED ON
- THE PLAN BAR SHALL TERMINATE 3 IN. CLEAR FROM FACE OF CONCRETE.
- CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR AT LEAST FIVE DAYS AFTER
- PLACEMENT. 5 PORTLAND CEMNT FOR CONCRETE CONSTRUCTION SHALL CONFORM TO ASTM C-150 TYPE I OR TYPE II

REINFORCING STEEL SHALL BE ASTM A-615 GRADE 40 FOR SMALLER THAN #5, AND GRADE 60 FOR #5 AND LARGER. SHALL BE 40 BAR DIAMETERS OF THE SMALLER LAPPED BAR AND SHALL BE STAGGERED WHERE POSSIBLE. 3 BAR COVER SHALL BE AS NOTED ON THE PLANS. IT

C.- REINFORCING STEEL

SHALL BE 3" UNLESS NOTED OTHERWISWE. BAR BENDS AND STANDARD HOOK SHALL CONFORM TO APPLICABLE SHALL BE THE SAME AS FOR OTHER SIMILAR WORK. 4 NO FIELD WELDING OF REINFORMCEMENT SHALL BE ALLOWED WITHOUT PERMITTING AGENCY APPROVAL.

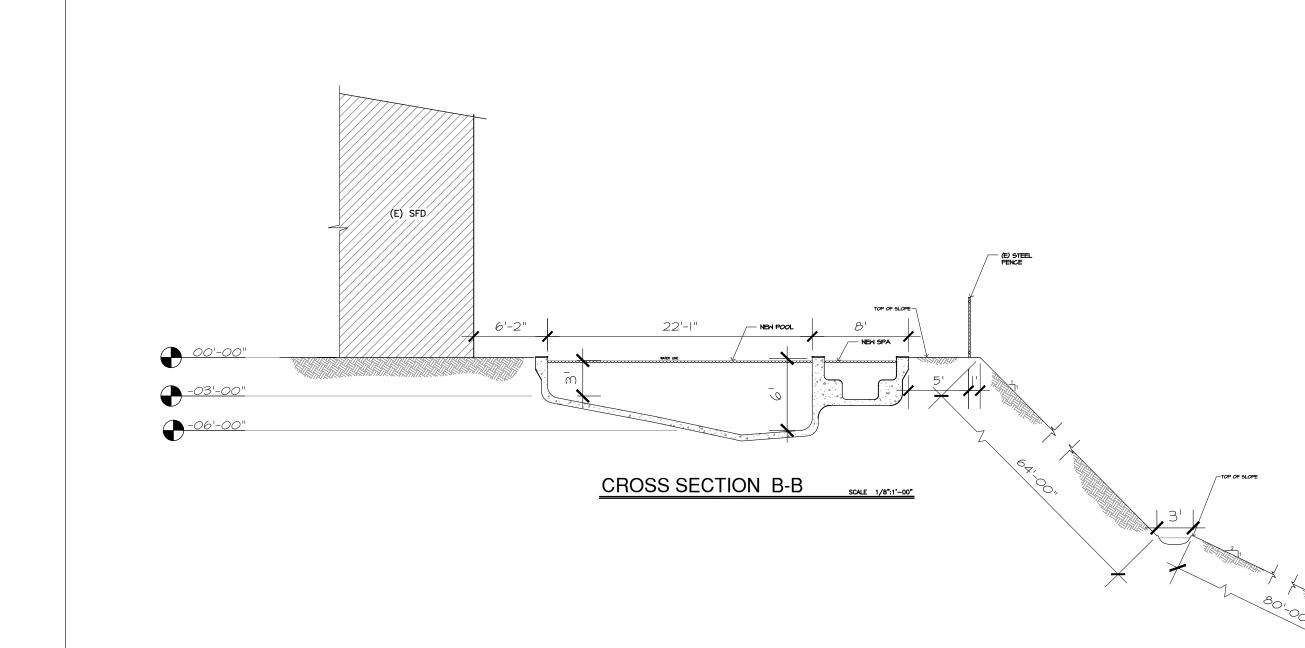
### E.- FOUNDATION AND SOILS

- I ALL DESING SOILS VALUES SHALL BE IN ACCORDANCE WITH TABLE 18-1-A OF THE CODE. ASSUMED SOIL VALUES: COEFFICIENT OF FRICTION= 130 PSF OF CONTACT AREA
- ALLOWABLE BEARING= 1000 PSF PASSIVE RESISTANCE= 100 PSF/FT OF DEPTH 2 ALL FOOTING SHALL BE POURED AGAINST UNDISTURBED . STREET IMPROVEMENT:
- NATURAL SOIL. 3 IN THE EVENT EXCAVATIONS REVEAL UNFAVORABLE CONDITIONS, THE SERVICES OF A GEOTECHNICAL ENGINEER MAY BE REQUIRED

# WHENEVER A BUILDING PERMIT IS ISSUED FOR COI

SECTION 3109.4.4.3

- KEY LOCKABLE DEVICE.
- 4. THE RESIDENCE SHALL BE EQUIPPED WITH EXIST ALARMS ON THOSE DOORS PROVIDING DIRECT ACCESS TO THE POOL
- 5. ALL DOORS PROVIDING DIRECT ACCESS FROM THE HOME TO THE SWIMMING POOL SHALL BE EQUIPPED WITH A SELF-CLOSING, SELF-LATCHING DEVICE WITH A RELEASE MECHANISM PLACED NO LOWER THAN 54" ABOVE THE FLOOR.
- OTHER MEANS OF PROTECTION, IF THE DEGREE OF PROTECTION AFFORDED IS EQUAL TO OR GRATER THAN THAT
- IN ADDITION THE THE REQUIREMENTS OR SECTION 106.4.4, EVERY PERMIT ISSUE SHALL
- THE PLAN.
- DAY, CHRISTMAS DAY, AND NEW YEAR'S DAY.
- THE CONTRACTOR.
- BUILDING OR STRUCTURE ADJACENT TO PUBLIC RIGHT-OF-WAY.
- DIVISION.
- STATES OR FEDERAL LAWS.
- ALL REQUIRED YARDS AND SETBACK AREAS SHALL BE ATTRACTIVELY LANDSCAPED PRIMARILY WITH LIVE PLANT MATERIAL. ALL LANDSCAPED AND PAVED AREAS SHALL BE MAINTAINED IN A NEAT AND ORDERLY CONDITION WITH HEALTHY LANDSCAPING FREE OF WEEDS AND LITTER.
- DRAINAGE: a. LOT DRAINAGE SHALL CONDUCTED TO THE STREET OR AS SHOWN ON THE PLAN **b.** DO NOT BLOCK NATURAL DRAINAGE COURSE FROM ADJACENT PROPERTIES. • GRADING: NO EARTHWORK a.
  - (GRADING) OTHER THAN SHOWN AND APPROVED BY CITY ENGINEER
  - a. REPLACE ALL BROKEN, CRACKED OR UPHEAVED CURB, CURB AND GUTTER, SIDEWALK AND
  - DRIVEWAY APRONS AS MAY BE REQUIRED BY
  - THE CITY ENGINEER.



## SAFETY FEATURES REQUIRED

WHENEVER A BUILDING PERMIT IS ISSUED FOR CONSTRUCTION OF A NEW SWIMMING POOL OR SPA, OR ANY BUILDING
PERMIT IS ISSUED FOR REMODELING OF AN EXISTING POOL OR SPA, AT A PRIVATE, SINGLE-FAMILY HOME, IT SHALL
BE EQUIPPED WITH AT LEAST ONE OF THE FOLLOWING SEVEN DOWNING PREVENTION SAGER FEATURES:
BE EQUIPPED WITH AT LEAST ONE OF THE FOLLOWING SEVEN DOWNING PREVENTION SAGER FEATURES:

THE POOL SHALL BE ISOLATED FROM ACCESS TO A HOME BY AN ENCLOSURE THAT MEETS THE REQUIREMENTS OF 2. THE POOL SHALL INCORPORATE REMOVABLE MESH POOL FENCING THAT MEETS ASTM SPECIFICATIONS F2266 STANDARDS IN CONJUNCTION WITH A GATE THAT IS SELF-CLOSING AND SELF-LATCHING AND CAN ACCOMMODATE A

3. THE POOL SHALL BE EQUIPPED WITH AN APPROVED SAFETY POOL COVER THAT MEETS ALL REQUIREMENT OF THE ASTM SPECIFICATIONS F1446

6. SWIMMING POOL ALARMS THAT, WHEN PLACED IN POOLS, WILL SOUND UPON DETECTION OF ACCIDENTAL OR UNAUTHORIZED ENTRANCE INTO THE WATER. THESE POOL ALARMS SHALL MEET AND BE INDEPENDENTLY CERTIFIED TO THE ASTM STANDARD F2208 " STANDARD SPECIFICATION FOR POOL ALARMS" WHICH INCLUDES SURFACE MOTION, PRESSURE, SONAR, LASER AND INFRARED TYPE ALARMS.

AFFORDED BY ANY OF THE DEVICES SET FORTH IN ITEMS 1-4 AND HAVE BEEN INDEPENDENTLY VERIFIED BY AN APPROVED TESTING LABORATORY AS MEETING STANDARDS FOR THOSE DEVICES ESTABLISHED BY THE ASTM OR THE AMERICAN SOCIETY OF TESTING MECHANICAL ENGINEERS (ASME)

EXPIRE AHND BECOME NULL AND VOID IF THE BUILDING OR WORK AUTHORIZED BY SUCH PERMIT IS NOT COMPLETED WITHIN 2 YEARS FROM DATE OF ISSUENCE OF SAID PERMIT.

2. ALL PROPERTY LINES, EASEMENTS, PROPOSED AND EXISTING STRUCTURES, OVERHEAD POWER LINES, AND ABANDONED OIL WELL, CESSPOOLS, AND SEPTIC THANK ARE SHOWN ON

3. ALL CONSTRUCTION ACTIVITY SHALL BE PROHIBITED, EXCEPT BETWEEN HOURS 7:00 A.M. AND 6:00 P.M. MONDAY, TUESDAY, WEDNESDAY, THURDAY, AND FRIDAY; AND BETWEEN 9:00A.M. AND 5:00 P.M. ON SATURDAY. THERE SHALL BE NO CONSTRUCTION ACTIVITY BETWEEN THE HOURS OF 6:00P.M. AND 7"00 A.M. MONDAY TO FRIDAY, AND BETWEEN 5:00P.M. FRIDAY AND 9.00A.M. ON SATURDAY. NO CONSTRUCTION ACTIVITY SHALL BE PERMITTED ON SUNDAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, THANSGIVEN

4. AT LEAST TWO SIGNS, WEATHER PROOF, 142"x18" MINIMUM SHALL BE POSTED ON THE CONSTRUCTION SITE SHOWING WORKING HOURS, NAME AND EMERGENCY PHONE NUMBER OF

5. PROVIDE A CONSTRUCTION FENCE AND OR CANOPY PER SEC. 3303, CBC AT PUBLIC RIGHT-OF-WAY FOR PEDESTRIANS PROTECTION IF ANY WORK TO BE PERFORMED ON ANY

6. NO CHANGE SHALL BE MADE ON PLAN WHETHER INTERIOR OR EXTERIOR OF THE STRUCTURE WITHOUT WRITTEN APPROVAL PLANS FROM THE PLANNING AND BUILDING

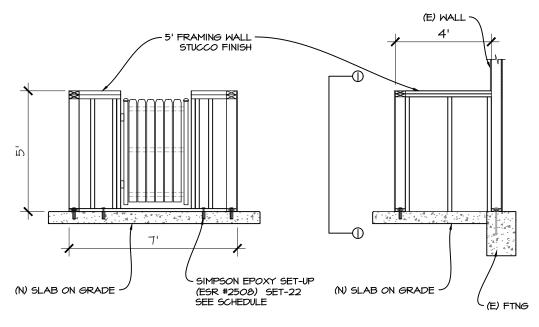
7. THE APPROVAL OF PLAN, SPECIFICATIONS AND CALCULATIONS DOES NOT PERMIT THE VIOLATION OF ANY SECTIONS OF THE BUILDING CODE OR OTHER CITY ORDINANCES,

8. VERIFY THE REQUIRED SMOKE DETETOR IN EACH FLOOR AND SLEEPING ROOM. GENERAL REQUIREMENT

- I. THE CONSTRUCTION SHALL NO RESTRICT A FIVE-FOOT CLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL-BOXES, TRANSFORMER, VAULTS, PUMPS, VALVES, METERS, APPURTENANCES, ETC.) OR THE THE LOCATION OF THE HOOK-UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINE-WHETHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.
- 2. SUCTION OUTLETS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ANSI / APSP-7.
- 3. AN APPROVED SEISMIC GAS SHUTOFF VALVE OR EXCESS FLOW SHUTOFF VALVE WILL BE INSTALLED ON THE FUEL GAS LINE ON THE DOWNSTREAM SIDE OF THE UTILITY METER AND BE RIGIDLY CONNECTED TO THE EXTERIOR TO THE BUILDING OR STRUCTURE CONTAINING THE FUEL GAS PIPING. A SEPARATE PLUMBING PERMIT IS REQUIRED. ORDINANCE 170, 158
- 4. THE RECIRCULATION AND PURIFICATION OF ANY SWIMMING POOL, FISH POND, OR ANY BODY OF MATER REQUIRED TO BE FENCED BY SECTION 6109, SHALL BE OPERATED AND MAINTAINED SO AS TO KEEP THE WATER IN SUCH POOL OR OTHER BODY OF WATER OF WATER CLEAN AND OF REASONABLE
- 5. NEW PERMANENT OUTDOOR POOLS/SPAS FOR A DWELLING OR DUPLEX SHALL BE EQUIPPED WITH A COVER HAVING A "MANUAL OR POWER-OPERATED REEL SYSTEM". ORDINANCE 184, 248

NEW POOL EQUIPMENT			
PUMP: I. PENTAIR INTELLFLO VSF (FILTER PUMP) 2. PETAIR WHISPERFLO (BUSTER PUMP)			
HEATER: PENTAIR MATER TEMP 400 (NATURAL GAS HEATER)			
FILTER: PENTAIR 4000 SERIE SMBW4060			
NOTES: DOOR ALARM: TEKHKO SAFE POOL ENTRY DETECTOR. MODEL S187D ALL ELECTRICAL CABLES ARE UNDERGROUND. NO POOL DECK			
BUILDING CODE REQUIREMENT			

- NO GROUND WATER SHALL BE ABOVE ANY PORTION OF THE POOL CONSTRUCTION.
- ALL SURFACE WATER SHALL DRAIN AWAY FROM THE POOL. · ELECTRICAL INSPECTION SHALL APPROVE GROUNDING OF REINFORCING, PLUMBING
- AND CONDUIT PRIOR TO THE APPROVAL OF REINFORCING STEEL FOR POURING OF CONCRETE OR GUNITE.
- THE NOISE LEVEL FORM THE POOL EQUIPMENT LOCATED LESS THAN 10 FEET FROM A PROPERTY LINE OF AN ADJOINING PROPERTY, SHALL NOT EXCEED AMBIENT NOISE LEVEL BY MORE THAN FIVE DECIBELS.
- CONTINUOUS INSPECTION ID REQUIRED FOR SHOTCRETE/GUNITE POOLS.



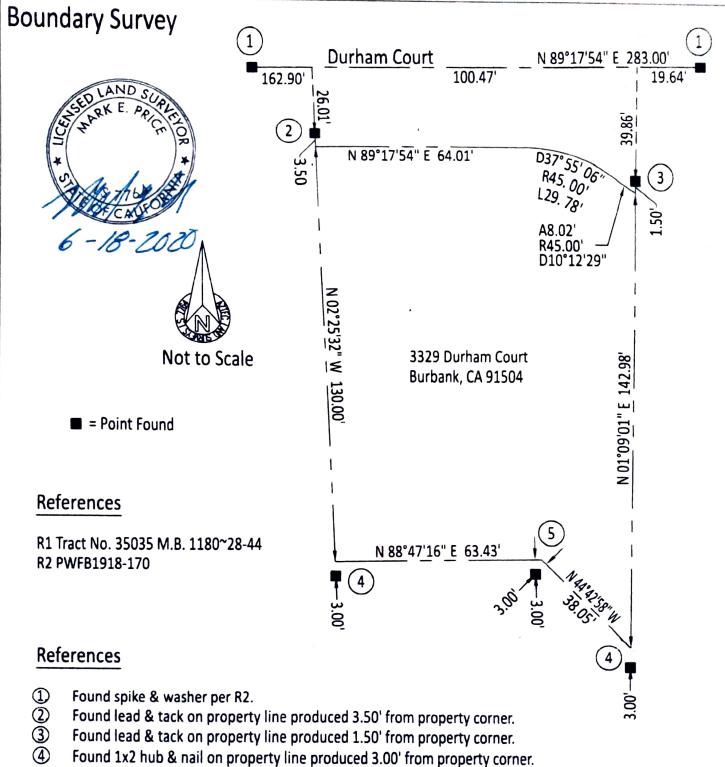
<u>SIDE VIEW</u>

MODEL | BOLT DIA. & LENGTH | RFB# 5x5 5/8¢ x 5" LONG RFB# 5x8 5/8¢ x 8" LONG

(1) POOL ENCLOSURE WALL DETAILS

ВҮ			
REVISIONS			
DATE			
No			
	PROPOSED: CROSS SECTION		
OWNER NAME AND ADDRESS: PROJECT:	ALEXANDER KEITH, JR 3329 DURHAM CT BURBANK, CA 91504 (818) 523 8154		
DATE	DATE 01/29/2021		
drawing by RAUL CUADRA			
DRAV FILE	DRAWING FILE JOB No		
CITY	CITY BURBANK CA		
SHE	A-1		

CITY APPOVAL STAMP



- Found 1x2 hub & nail on property line produced 3.00' from property corner.
- \$ Found 1x2 hub & nail on double 3.00' offset from property lines.

Property Owner information only not for permit purposes.

