

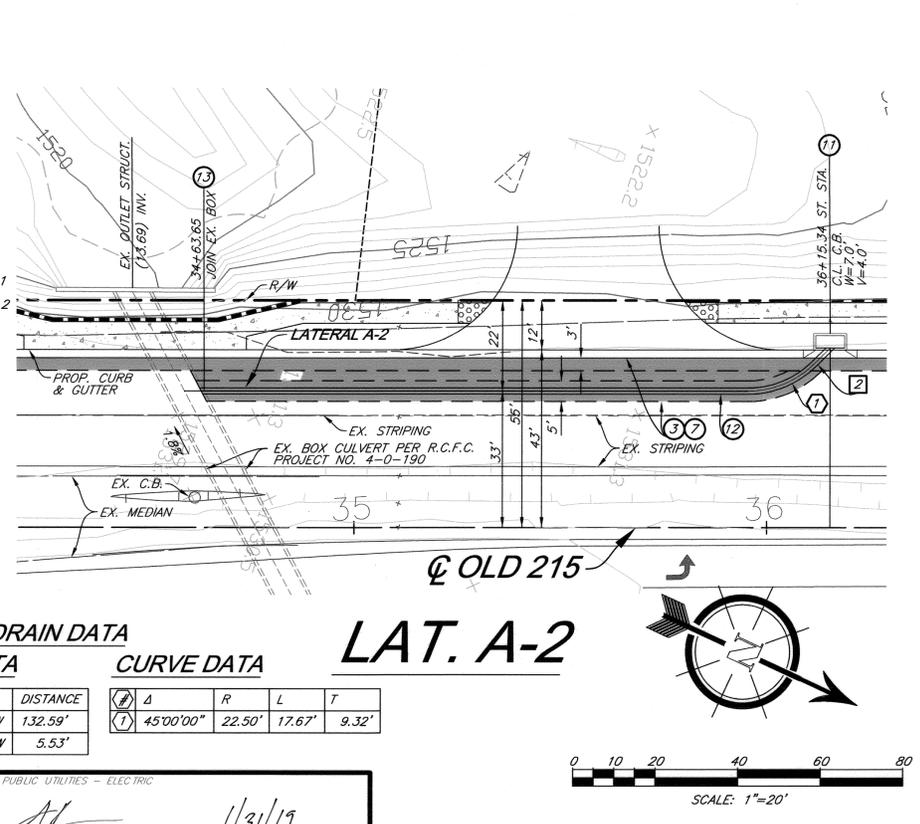
**CONSTRUCTION NOTES**

- CONSTRUCT COMMERCIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE STD. 302
- 4" AC OVER 6" CAB PER STD. 101 (OLD 215)
- 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD. 200 (TYPE 1)
- PROPERTY LINE SIDEWALK PER CITY OF RIVERSIDE STD. 325
- SAWCUT AND REMOVE
- HANDICAP RAMP PER CITY OF RIVERSIDE STD. 304, TYPE 1
- CONSTRUCT CATCH BASIN PER CITY STD. 405
- CONSTRUCT 18" R.C.P. PIPE (SEE CITY PIPE BEDDING STD. 452) -CASE 1
- CONSTRUCT JUNCTION STRUCTURE 3 PER R.C.F.C. STD. J.S. 228 -CASE 2
- PROCESS ENFORCEMENT PERMIT FOR CONNECTION THROUGH ROFF
- CURB SIDEWALK PER CITY OF RIVERSIDE STD. 325
- CONSTRUCT CONCRETE RETAINING WALL PER CALTRANS STD. PLAN 63-7A PIPE-65 STRUCTURAL NOTES AND DETAILS ON SHEETS 445

\* NOTE TO CONTRACTOR:  
SAWCUT MIN. 6" @ E.P. FOR CLEAN EDGE

\* NOTE TO CONTRACTOR:  
REPAIR/REPLACE ALL STRIPING IN-KIND

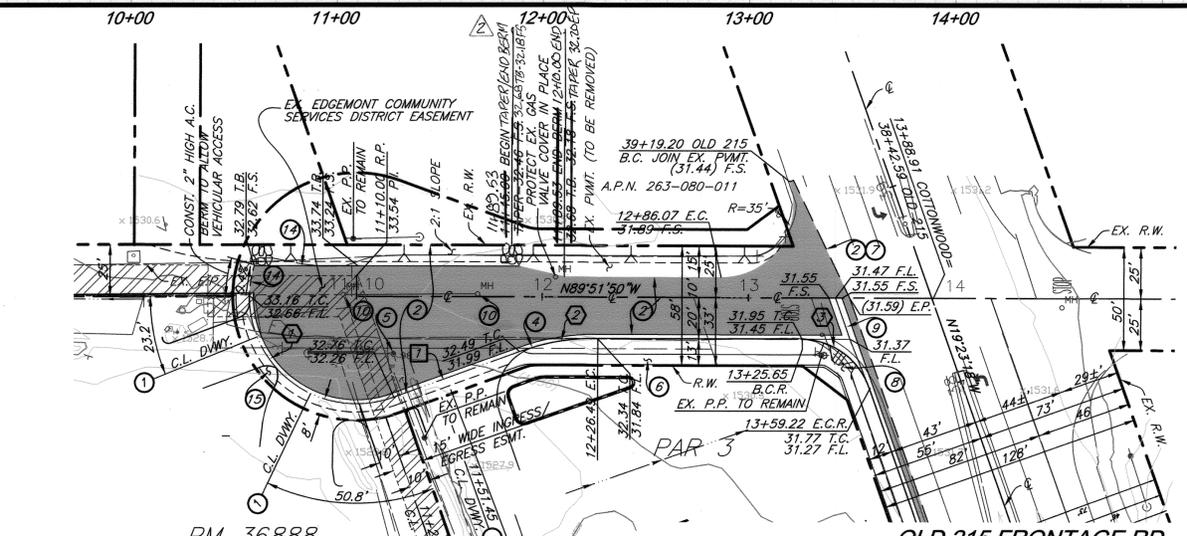
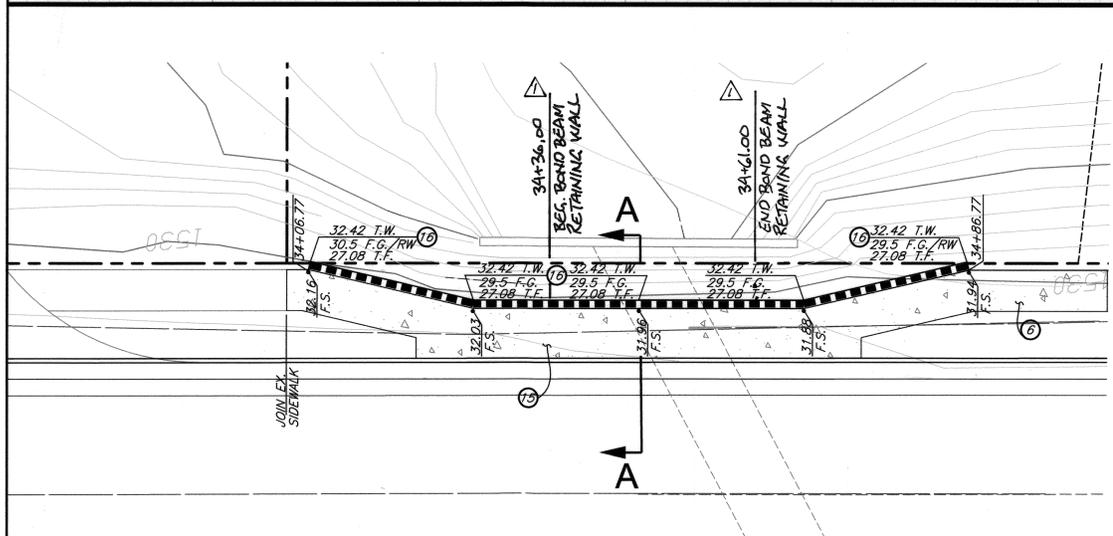
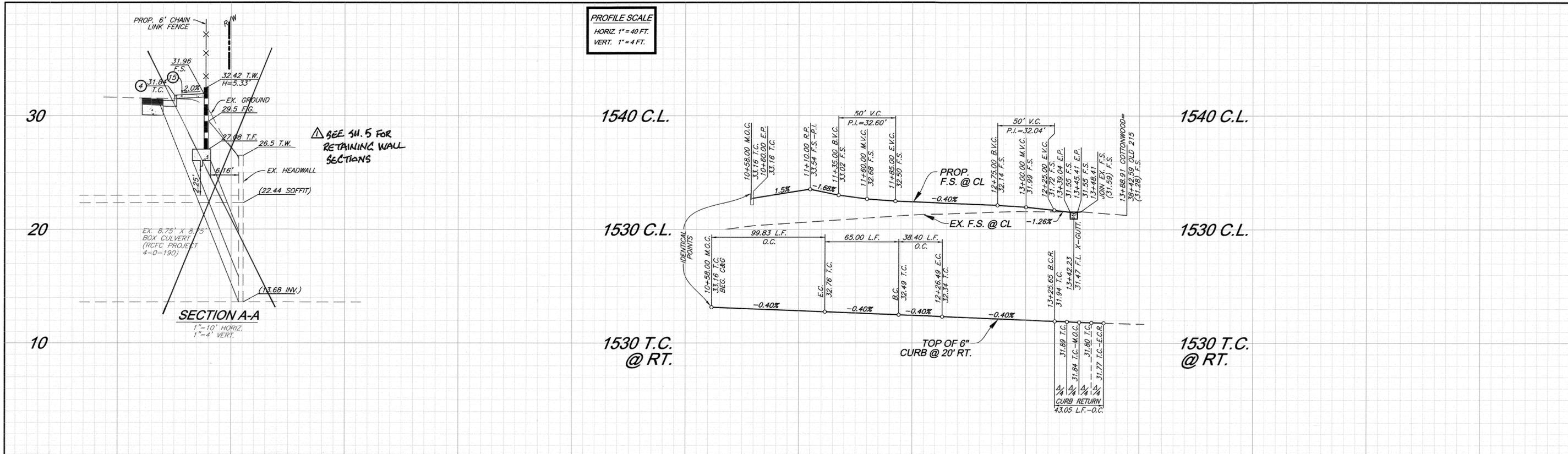
\* NOTE TO CONTRACTOR:  
EXPOSE PIPE PRIOR TO CONNECTION TO CONFIRM INVERT ELEVATION



**STORM DRAIN DATA**

LINE DATA		CURVE DATA				
#	BEARING	DISTANCE	Δ	R	L	T
1	N19°23'18"W	132.59'	45°00'00"	22.50'	17.67'	9.32'
2	N64°23'18"W	5.53'				

<p><b>Underground Service Alert</b></p> <p>CALL BEFORE YOU DIG CALL TOLL FREE 1-800-227-2600</p> <p>TWO WORKING DAYS BEFORE YOU DIG</p>	<p><b>PRIVATE ENGINEERING NOTE</b></p> <p>CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.</p>	<p>PLANS PREPARED UNDER SUPERVISION OF</p> <p><i>Robert C. Van Zanten</i> ROBERT C. VAN ZANTEN R.C.E. 62325 Exp. 9-30-19</p> <p>DATE: 1/29/19</p>	<p><b>SDH ASSOCIATES INCORPORATED</b></p> <p>SDH AND ASSOCIATES INC. 5225 CANYON CREST DRIVE 71439 Riverside, California 92507 TEL: (951) 683-3691 FAX: (951) 788-2314</p>	<p>APPROVED BY: <i>[Signature]</i> DATE: 1/31/19</p> <p>CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT</p>	<p>BUSINESS TAX CERTIFICATE NO. 107994 EXP. DATE 6-30-19</p>	<p><b>STREET IMPROVEMENT PLAN</b> <b>OLD 215</b> FROM STA. 34+04.14 TO STA. 38+42.59 &amp; STORM DRAIN LAT A-2</p>	<p><b>R-4380</b></p> <p>SHEET 2 OF 2</p> <p>PW16-0284</p>



- CONSTRUCTION NOTES**
- ① CONSTRUCT COMMERCIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE STD. 302
  - ② 4" AC OVER 6" CAB PER STD. 101 (COTTONWOOD AVE.)
  - ③ 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD. 200 (TYPE 1)
  - ④ EXISTING POWER POLE TO BE RELOCATED/REMOVED
  - ⑤ PROPERTY LINE SIDEWALK PER CITY OF RIVERSIDE STD. 325
  - ⑥ SAWCUT AND REMOVE
  - ⑦ HANDICAP RAMP PER CITY OF RIVERSIDE STD. 304, TYPE 1
  - ⑧ CROSS GUTTER PER CITY OF RIVERSIDE STD. 220
  - ⑨ ADJUST EX. SEWER MANHOLE TO GRADE PER ECSD STD. DWG. S-7
  - ⑩ CONSTRUCT 2" "TYPE II" A.C. BERM PER CITY STD. 250
  - ⑪ CURB SIDEWALK PER CITY OF RIVERSIDE STD. 325
  - ⑫ CONSTRUCT CONCRETE RETAINING WALL PER CALTRANS STD. PLAN R3-7A TYPE 60 STRUCTURAL NOTES AND DETAILS ON SHEETS 4-5
  - \* NOTE TO CONTRACTOR: SAWCUT MIN. 6" @ E.P. FOR CLEAN EDGE
  - \* NOTE TO CONTRACTOR: REPAIR/REPLACE ALL STRIPING IN-KIND

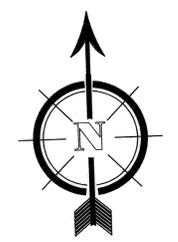
**LINE DATA**

BEARING	DISTANCE
1	N70°08'10"E 65.00'

**CURVE DATA**

DELTA	RADIUS	LENGTH	TANGENT
1	110°00'00"	52.00'	99.83' 74.26'
2	20°00'00"	110.00'	38.40' 19.40'
3	70°28'32"	35.00'	43.05' 24.72'



SCALE  
1"=10'

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**PRIVATE ENGINEERING NOTE**  
CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.



PLANS PREPARED UNDER SUPERVISION OF  
*Robert C. Van Zanten* 1/29/19  
ROBERT C. VAN ZANTEN DATE  
R.C.E. 62325  
EXP. 9-30-19  
**BENCHMARK: FB-H3**  
P.K. NAIL AND CITY ENGINEER TAG IN THE CONCRETE BASE OF A STREET LIGHT POLE ALONG THE NORTHERLY CURB OF ALESSANDRO BLVD. ELEV. - 1624.840 (NAVD 88)

**SDH ASSOCIATES INCORPORATED**  
SDH AND ASSOCIATES INC.  
5225 CANYON CREST DRIVE 71439  
Riverside, California 92507  
TEL: (951) 683-3691 FAX: (951) 788-2314

DESIGNED BY: S.S. DRAWN BY: S.J.S. CHECKED BY: R.V.Z.

PUBLIC UTILITIES - ELECTRIC  
APPROVED BY: [Signature] 1/31/19 DATE  
CITY OF RIVERSIDE, CALIFORNIA  
PUBLIC WORKS DEPARTMENT  
APPROVED BY: [Signature] DATE  
DATE: Feb. 6, 2019

BUSINESS TAX CERTIFICATE NO. 107994 EXP. DATE 6-30-19  
**STREET IMPROVEMENT PLAN**  
**COTTONWOOD AVE.**  
FROM STA. 10+00.00 TO STA 13+88.91

**R-4380**  
SHEET 3 OF 3  
PW16-0284

GENERAL STRUCTURAL NOTES

- ALL CONSTRUCTION, INCLUDING MATERIAL AND WORKMANSHIP, SHALL CONFORM TO THE PROVISIONS OF THE 2016 EDITION OF THE "CALIFORNIA BUILDING CODE" (CBC) WITH THE GOVERNING AGENCY AMENDMENTS, AND STANDARDS REFERENCED THEREIN. WHERE EVER A CODE OR CALIFORNIA BUILDING CODE (CBC) IS REFERENCED IN THE FOLLOWING GENERAL NOTES OR OTHER NOTE SECTIONS, IT SHALL COMPLY THE CBC CODE WITH GOVERNING AGENCY AMENDMENTS.
- ALL ASTM STANDARDS LISTED HEREIN, SHALL BE AS REFERENCED IN THE LATEST ISSUE OF THE ANNUAL BOOK OF STANDARDS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE DESIGNER AND STRUCTURAL ENGINEER SHALL IMMEDIATELY BE NOTIFIED, IN WRITING, OF ANY DISCREPANCIES.
- ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE FIELD INSPECTOR AND A SOLUTION GIVEN BY THE DESIGNER AND STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH ANY WORK AFFECTED BY THE CONFLICT OR OMISSION.
- IN CASE OF CONFLICT, NOTES AND DETAILS OFF THESE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE "GENERAL NOTES" AND/OR "STANDARD DETAILS". TYPICAL DETAILS SHALL BE USED WHENEVER APPLICABLE.
- IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.
- WORKING DIMENSIONS SHALL NOT BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THESE STRUCTURAL DRAWINGS.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE ERECTION SHORING AND BRACING AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION.
- PIPES, DUCTS, SLEEVES, OPENINGS, POCKETS, CHASES, BLOCK-OUTS, ETC., SHALL NOT BE PLACED IN SLABS, BEAMS, GIRDERS, COLUMNS, WALLS, FOUNDATIONS, ETC., NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR SUCH ITEMS, UNLESS SPECIFICALLY DETAILED ON THESE STRUCTURAL DRAWINGS. IF ANY PIPES, DUCTS, ETC., DO OCCUR, THAT ARE NOT SHOWN ON THESE STRUCTURAL DRAWINGS, THE DESIGNER AND STRUCTURAL ENGINEER SHALL BE NOTIFIED.
- ANCHOR BOLTS OR INSERTS FOR EQUIPMENT ANCHORAGE OR INSTALLATION SHALL BE DESIGNED FOR I.O.W., (U.O.N.) BY A CIVIL ENGINEER OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA AND SHALL BE SHOWN ON THE MECHANICAL OR ELECTRICAL SHOP DRAWINGS.
- THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE STRUCTURAL ENGINEER FREE AND HARMLESS FROM ALL CLAIMS, DEMANDS AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE STRUCTURAL ENGINEER.
- IF ANY SUBSTITUTION IS PROPOSED BY THE CONTRACTOR, NEW CALCULATIONS MAY HAVE TO BE PREPARED, THE DETAILS MAY HAVE TO BE ALTERED, AND NEW DRAWINGS MAY HAVE TO BE SUBMITTED TO THE BUILDING DEPARTMENT. THE CONTRACTOR SHALL PAY THE STRUCTURAL ENGINEER'S FEES TO ALTER THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO PROCESS THE REVISED PLANS REFLECTING ALL SUBSTITUTIONS THROUGH THE APPROPRIATE OFFICE OF ALL GOVERNING AGENCIES.

GENERAL MASONRY NOTES

- MASONRY UNITS SHALL CONFORM TO ASTM C90 HOLLOW CORE, NORMAL WEIGHT,  $f'_m = 1500$  psi (U.O.N.) ALL UNITS SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH ASTM C140.
- MORTAR SHALL BE TYPE N AND SHALL CONFORM TO ASTM C270 AND CONFORM TO THE PROPORTION SPECIFICATIONS OF 2013 CBC TABLE 2103.11. THE THICKNESS OF THE BED JOINTS SHALL NOT EXCEED 5/8".
- GROUT SHALL CONFORM TO ASTM C476, OR CONFORM TO THE REQUIREMENTS OF Article 2.2 of TMS 602/ACI 530.1/ASCE 6 AND THE COMPRESSIVE STRENGTH OF GROUT SHALL BE DETERMINED IN ACCORDANCE WITH ASTM C1019. WHEN GROUT CONFORMS TO ASTM C476, THE GROUT SHALL BE SPECIFIED BY PROPORTION REQUIREMENTS OR PROPERTY REQUIREMENTS. THE MINIMUM COMPRESSIVE STRENGTH OF GROUT SHALL BE 2000 psi.
- PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C150. BLENDED CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C595. MASONRY CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C91. MORTAR CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C1329.
- COARSE AGGREGATE SHALL CONFORM TO ASTM C404. COARSE AGGREGATE SHALL BE PEA GRAVEL.
- FINE AGGREGATE SHALL CONFORM TO ASTM C114.
- LIME SHALL BE HYDRATED LIME AND CONFORM TO ASTM C207, TYPE S.
- ADMIXTURES SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE ENGINEER OF RECORD.

GENERAL CONCRETE NOTES (cont.)

- AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C33 FOR NORMAL WEIGHT CONCRETE AND ASTM C330 FOR LIGHTWEIGHT CONCRETE.
- ADMIXTURES SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND APPROVED BY THE ENGINEER OF RECORD.
- READY-MIX CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH THE REQUIREMENTS OF "STANDARD SPECIFICATION FOR READY-MIXED CONCRETE" ASTM C94.
- MINIMUM CONCRETE COVER (IN INCHES) FOR REINFORCING STEEL IN NON-PRESTRESSED CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS, U.O.N.:  
LOCATION: MIN. COVER (INCHES):  
A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"  
B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER:  
- #6 AND LARGER BARS 2"  
- #5 BARS, 3/8" WIRE, AND SMALLER 1 1/2"
- ALL SLEEVES THROUGH BEAMS, GIRDERS AND FOUNDATION WALLS SHALL BE INSTALLED AND SECURED IN POSITION PRIOR TO PLACING CONCRETE. EXCEPT AS SHOWN ON STRUCTURAL DRAWINGS, SLEEVING SHALL NOT BE PERMITTED UNLESS APPROVED BY THE DESIGNER AND STRUCTURAL ENGINEER.
- SLEEVES, PIPES, OR CONDUITS SHALL NOT BE PLACED THROUGH CONTINUOUS OR SPREAD FOOTINGS, GRADE BEAMS, FLEE CAPS, OR TIE BEAMS, UNLESS SPECIFICALLY DETAILED BY THE ENGINEER.
- CONDUIT SHALL NOT BE PLACED IN ANY CONCRETE SLAB LESS THAN 3 1/2" THICK. IF CONDUIT IS PLACED IN CONCRETE SLAB, ITS OUTSIDE DIAMETER SHALL NOT BE GREATER THAN 1/3 OF THE SLAB THICKNESS. THE MINIMUM CLEAR DISTANCE BETWEEN CONDUITS SHALL BE 3".
- ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" U.O.N.
- REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, CLIPS, OR GROUNDS REQUIRED TO BE CAST IN THE CONCRETE AND FOR EXTENT OF DEPRESSIONS, CURBS, AND RAMPS.
- ALL VERTICAL SURFACES OF CONCRETE ABOVE FINISHED GRADE SHALL BE FORMED.
- REFERENCE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS DUE TO ARCHITECTURAL C.I.P. CONCRETE.

TABLE 1705.3  
REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD	IBC REFERENCE
1. Inspect reinforcement, including prestressing tendons, and verify placement.	—	X	ACI 318 Ch. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
2. Reinforcing bar welding: a. Verify weldability of reinforcing bars other than ASTM A706; b. Inspect single-pass fillet welds, maximum $\frac{1}{16}$ " and c. Inspect all other welds.	—	X	AWS D1.4 ACI 318: 26.5.4	—
3. Inspect anchors cast in concrete.	—	X	ACI 318: 17.8.2	—
4. Inspect anchors post-installed in hardened concrete members: a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads b. Mechanical anchors and adhesive anchors not defined in 4.a.	X	—	ACI 318: 17.8.2.4	—
5. Verify use of required design mix.	—	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	—	ASTM C172 ASTM C31 ACI 318: 26.4.5, 26.12	1908.10
7. Inspect concrete and shotcrete placement for proper application techniques.	X	—	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
8. Verify maintenance of specified curing temperature and techniques.	—	X	ACI 318: 26.4.7-26.4.9	1908.9
9. Inspect prestressed concrete for: a. Application of prestressing forces; and b. Grouting of bonded prestressing tendons.	X	—	ACI 318: 26.9.2.1 ACI 318: 26.9.2.3	—
10. Inspect erection of precast concrete members.	—	X	ACI 318: Ch. 26.8	—
11. Verify in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	—	X	ACI 318: 26.10.2	—
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	—	X	ACI 318: 26.10.1(b)	—

GENERAL STRUCTURAL STEEL NOTES

- BAR REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615. THE FOLLOWING GRADES SHALL BE USED:  
GRADE 40 - #4 AND SMALLER  
GRADE 60 - #5 AND LARGER
- DETAILS OF REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-14 CHAPTER 7 AND OTHER SECTIONS ACCORDING TO APPLICATION.
- LAPS AT BAR SPLICES IN CONCRETE CONSTRUCTION SHALL BE AS FOLLOWS:

BAR SIZE	TOP BARS (CLASS B)		OTHER THAN TOP BARS (CLASS B)	
	$f'_c = 2500$	$f'_c = 3000$	$f'_c = 2500$	$f'_c = 3000$
#5	30	27	24	21
#6	35	33	28	25
#7	40	38	32	29
#8	45	43	36	33

- LAPS AT BAR SPLICES IN MASONRY CONSTRUCTION SHALL BE 48 BAR DIAMETERS BUT NOT LESS THAN 2'-0".
- VERTICAL REINFORCEMENT SHALL BE TIED OR OTHERWISE FIXED IN POSITION AT THE TOP AND BOTTOM AND AT INTERMEDIATE LOCATIONS, SPACED NOT GREATER THAN 192 BAR DIAMETERS.
- WELDED STEEL WIRE FABRIC REINFORCEMENT SHALL CONFORM TO ASTM 185. LAPS OF WELDED STEEL WIRE FABRIC AT SPLICES SHALL BE NOT LESS THAN 12 INCHES.
- WALLS, PILASTERS, AND COLUMNS SHALL BE DOWELED TO THE SUPPORTING FOOTINGS WITH REINFORCEMENT OF THE SAME SIZE, GRADE AND AT THE SAME SPACING AS THE VERTICAL REINFORCEMENT IN THE WALLS, PILASTERS, OR COLUMNS (U.O.N.)
- BAR SUPPORTS SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF "BAR SUPPORT SPECIFICATIONS" AS CONTAINED IN THE LATEST EDITION OF THE "MANUAL OF STANDARD PRACTICE" BY THE CONCRETE REINFORCING STEEL INSTITUTE (CRSI).
- REINFORCING STEEL DETAILING, BENDING AND PLACING SHALL BE IN ACCORDANCE WITH THE CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE", LATEST EDITION.
- ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE BEFORE PLACING CONCRETE OR GROUT.
- WELDING OF REINFORCING BARS SHALL CONFORM TO "STRUCTURAL WELDING CODE-REINFORCING STEEL", ANSI / AWS D1.4 OF THE AMERICAN WELDING SOCIETY.
- WELDING OF ALL REINFORCING STEEL TO STRUCTURAL STEEL SHALL BE LIMITED TO THOSE AREAS SPECIFICALLY SHOWN ON THE PLANS. ANY OTHER WELDING SHALL REQUIRE THE APPROVAL OF THE GOVERNING AGENCY, FIELD INSPECTOR, AND STRUCTURAL ENGINEER.
- WELDING OF CROSSING BARS AND TACK WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED.
- ALL WELDS SHALL, IN ADDITION, TO ALL THE SPECIFICATIONS LISTED ABOVE, COMPLY WITH THE REQUIREMENTS OF THE NINTH EDITION OF THE "MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN" AS PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.

BY THE LOCAL JURISDICTION, DEVELOPMENT SERVICES, FOR TESTING OF MATERIALS, SYSTEMS, COMPONENTS, AND EQUIPMENTS.

C. THE SPECIAL INSPECTIONS IDENTIFIED ARE IN ADDITION TO THOSE REQUIRED BY THE BUILDING CODE, AS AMENDED. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY A CITY BUILDING INSPECTOR.

D. FABRICATOR MUST BE REGISTERED AND APPROVED BY THE LOCAL JURISDICTION, DEVELOPMENT SERVICES FOR THE FABRICATOR OF MEMBERS AND ASSEMBLIES ON THE PREMISES OF THE FABRICATOR'S SHOP.

E. SPECIAL INSPECTION IS REQUIRED FOR WELDS DONE IN A SHOP OF A FABRICATOR WHICH IS NOT APPROVED BY INSPECTION SERVICES. AN "APPLICATION TO PERFORM OFF-SITE FABRICATION" MUST BE SUBMITTED TO AND APPROVED BY INSPECTION SERVICES.

A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE INSPECTION SERVICE DEPARTMENT.

GENERAL CONCRETE NOTES

- CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 318-14 CHAPT. 5. THE MINIMUM 28-DAY CYLINDER STRENGTH SHALL BE AS FOLLOWS:  
FOUNDATIONS: STRENGTH:  
SLAB ON GRADE & RAISED WOOD FLOOR 2500 psi  
CAISSONS / GRADE BEAMS 3000 psi  
ALL OTHER CONCRETE (U.O.N.) 2500 psi
- WHERE CONCRETE STRENGTH IS 3000 psi OR GREATER, CYLINDER TESTS ARE REQUIRED PER ACI 318-14 5.6.3.
- PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C150, TYPE II.

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PLANS PREPARED UNDER SUPERVISION OF  
*Robert C. Van Zanten* 4/3/19  
ROBERT C. VAN ZANTEN  
R.C.E. 62325  
Exp. 9-30-19  
DATE  
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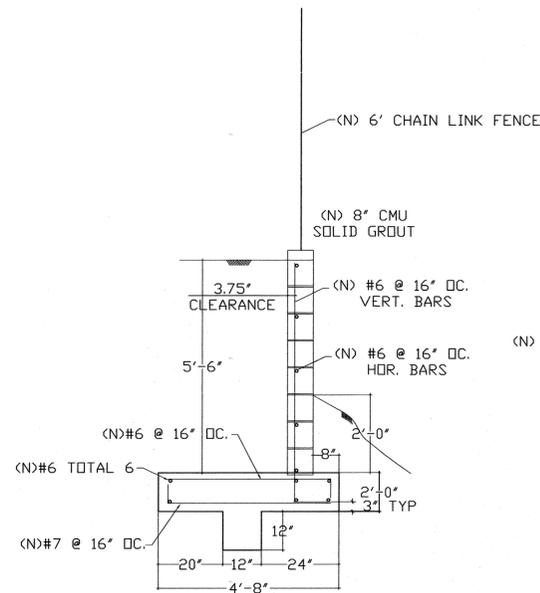
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SDH AND ASSOCIATES INC.  
5225 CANYON CREST DRIVE 71439  
Riverside, California 92507  
TEL: (951) 683-3691 FAX (951) 788-2314

MARK	REVISIONS	DATE
DESIGNED BY: S.S.	DRAWN BY: S.J.S.	CHECKED BY: R.V.Z.

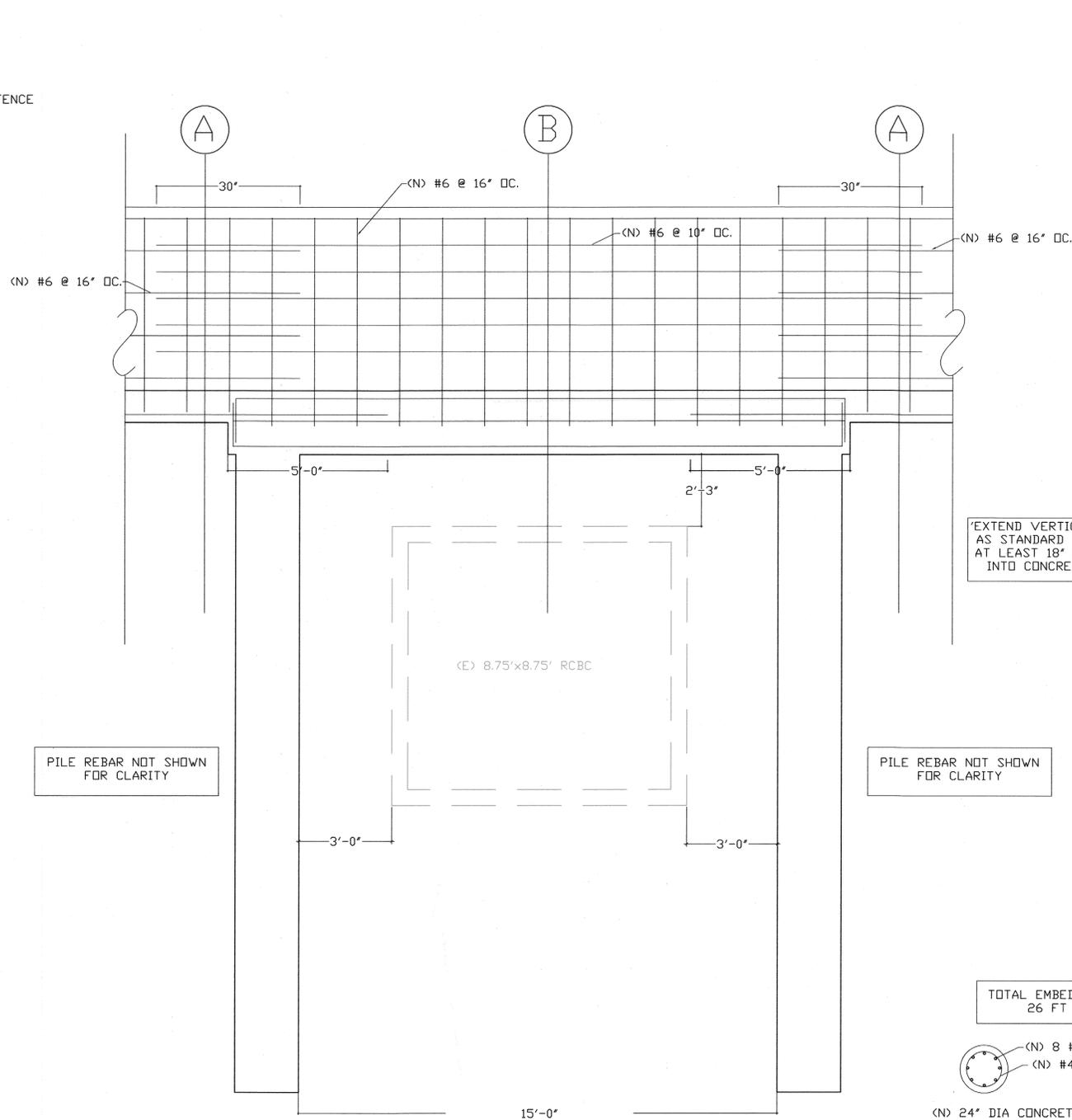
CITY OF RIVERSIDE, CALIFORNIA  
PUBLIC WORKS DEPARTMENT  
APPROVED BY: [Signature]  
ENGINEERING MANAGER  
DATE: April 4, 2019

OLD 215 & COTTONWOOD AVE.  
STRUCTURAL NOTES  
SHEET 4 OF 5  
PW16-0284

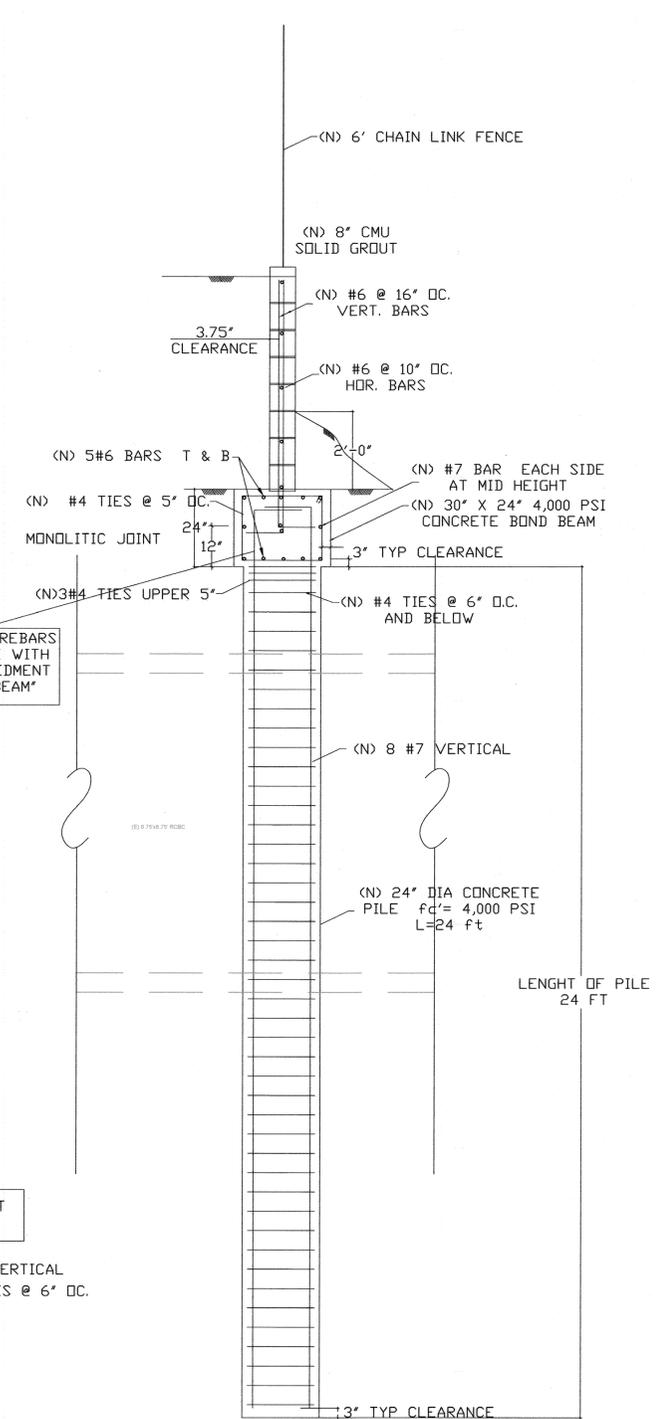
R-4380  
SHEET 4 OF 5  
PW16-0284



SECTION A  
 STA. 34+06.77 TO STA. 34+36.00  
 STA. 34+61.00 TO STA. 34+86.77



RETAINING WALL ELEVATION  
 STA. 34+06.77 TO STA. 34+86.77



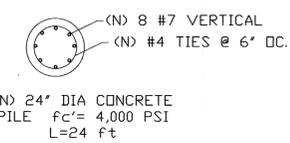
SECTION B  
 STA. 34+36.00 TO STA. 34+61.00

GEOTECHNICAL REPORT 18996-16 BY:  
 NOR CAL ENGINEERING CONSULTANTS  
 10642 HUMBOLT STREET  
 LOS ALAMITOS, CA 90720  
 PHONE: 562-799-9469

PILE REBAR NOT SHOWN  
 FOR CLARITY

PILE REBAR NOT SHOWN  
 FOR CLARITY

TOTAL EMBEDMENT  
 26 FT



(N) 24" DIA CONCRETE  
 PILE  $f'_c = 4,000$  PSI  
 L=24 ft



**PRIVATE ENGINEERING NOTE**  
 CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.



PLANS PREPARED UNDER SUPERVISION OF  
*Robert C. Van Zanten* 4/3/19  
 ROBERT C. VAN ZANTEN  
 P.E. No. 62325  
 Exp. 9-30-19  
**BENCHMARK: FB-H3**  
 P.K. NAIL AND CITY ENGINEER TAG IN THE CONCRETE BASE OF A STREET LIGHT POLE ALONG THE NORTHERLY CURB OF ALESSANDRO BLVD. ELEV. - 1624.840 (NAVD 88)



SDH AND ASSOCIATES INC.  
 5225 CANYON CREST DRIVE 71439  
 Riverside, California 92507  
 TEL: (951) 683-3691 FAX (951) 788-2314

MARK	REVISIONS	APPRO. DATE

DESIGNED BY: S.S. DRAWN BY: S.J.S. CHECKED BY: R.V.Z.

CITY OF RIVERSIDE, CALIFORNIA  
 PUBLIC WORKS DEPARTMENT

APPROVED BY: [Signature] DATE: April 4, 2019

ENGINEERING MANAGER: [Signature]  
 PRINCIPAL ENGINEER: [Signature]  
 DRAWING DIVISION

BUSINESS TAX CERTIFICATE NO. 107994 EXP. DATE 6-30-19

**OLD 215 & COTTONWOOD AVE. STRUCTURAL DETAILS**

**R-4380**

SHEET 5 OF 5  
 PW16-0284