

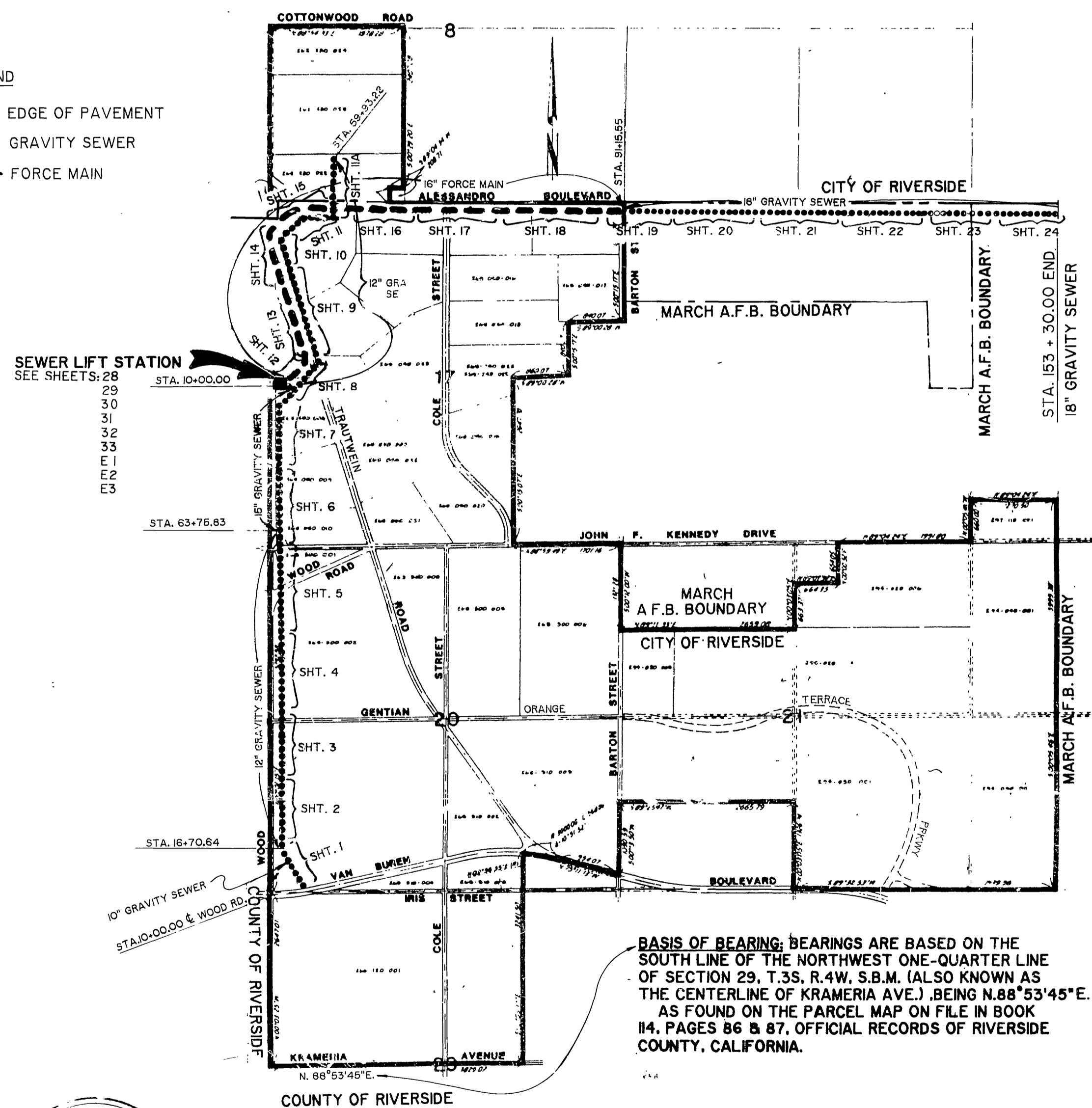
CITY OF RIVERSIDE  
CALIFORNIA  
CONSTRUCTION PLANS  
FOR  
**WOOD ROAD SEWAGE LIFT STATION**  
FOR  
**ALESSANDRO BLVD. & WOOD ROAD**  
**TRUNK SEWER**

DWG. INDEX

SHT. NO.	TITLE
1.	NOT USED
2.	NOT USED
3.	NOT USED
4.	NOT USED
5.	NOT USED
6.	NOT USED
7.	NOT USED
8.	18" GRAVITY SEWER TRAUTWEIN RD.
9.	NOT USED
10.	NOT USED
11.	NOT USED
11A.	NOT USED
12.	16" F.M. LIFT STATION TO TRAUTWEIN RD.
13.	NOT USED
14.	NOT USED
15.	NOT USED
16.	NOT USED
17.	NOT USED
18.	NOT USED
19.	NOT USED
20.	NOT USED
21.	NOT USED
22.	NOT USED
23.	NOT USED
24.	NOT USED
25.	NOT USED
26.	NOT USED
27.	NOT USED
28.	SITE GRADING ACCESS RD. FOR SEWER LIFT STATION
29.	SEWAGE LIFT STATION STRUCT. DETAILS & GEN. NOTES
30.	SEWAGE LIFT STATION PLAN VIEW
31.	SEWAGE LIFT STATION SECTIONAL VIEW
32.	SEWAGE LIFT STATION PUMP & PIPING DETAILS
33.	SEWAGE LIFT STATION GENERATOR & FUEL TANK DETAIL
E1	ELECT. SERV. & SW. BD. SINGLE LINE DIAGRAM & ELEV. VIEW
E2	ELECTRICAL WIRING DETAILS
E3	ELECTRICAL LIGHTING DETAILS

LEGEND

///	EDGE OF PAVEMENT
●●●	GRAVITY SEWER
---	FORCE MAIN



**BASIS OF BEARING:** BEARINGS ARE BASED ON THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER LINE OF SECTION 29, T.3S, R.4W, S.B.M. (ALSO KNOWN AS THE CENTERLINE OF KRAMERIA AVE.) BEING N.88°53'45"E. AS FOUND ON THE PARCEL MAP ON FILE IN BOOK 114, PAGES 86 & 87, OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

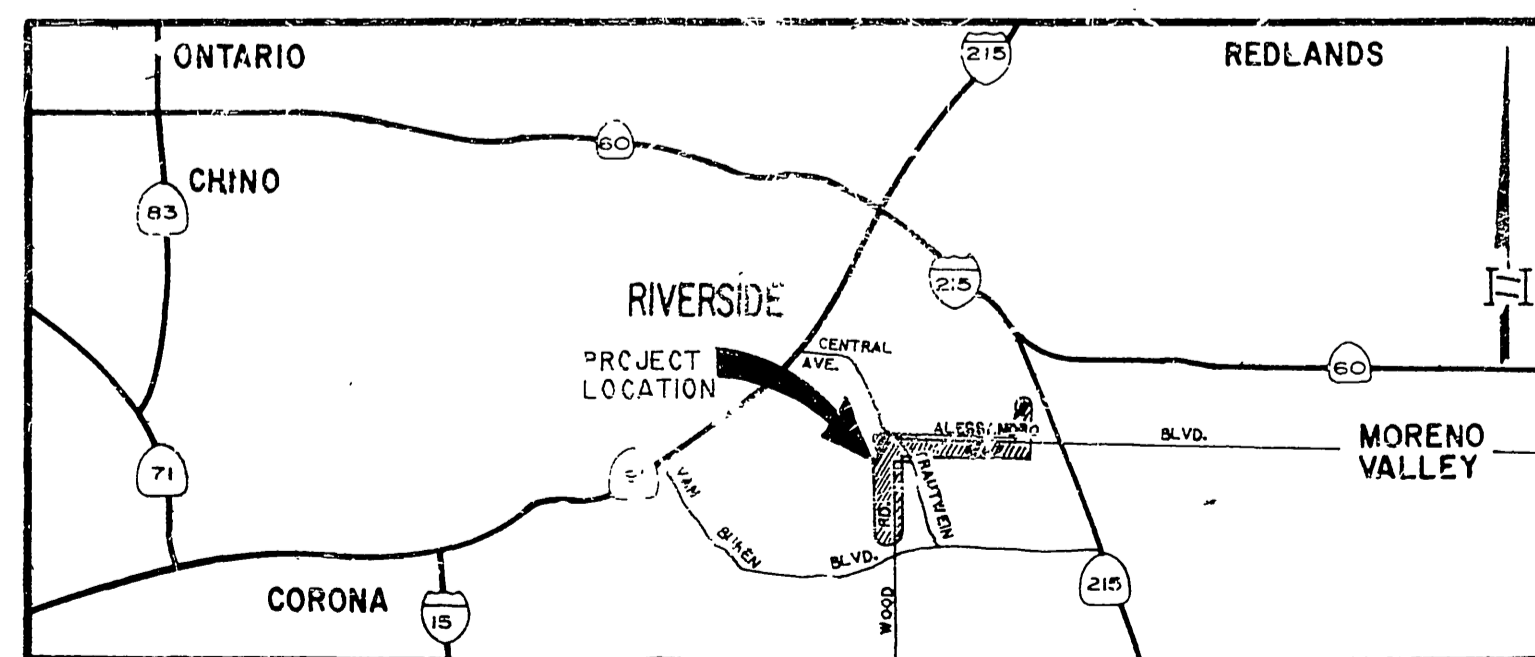
LOCATION & INDEX MAP  
N.T.S.

GENERAL NOTES:

- LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS WERE OBTAINED FROM AVAILABLE RECORDS. NEITHER THE CITY OR THE ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN, OR NOT IN LOCATION SHOWN. CONTRACTOR SHALL VERIFY ALL LOCATIONS & ELEVATIONS AND SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT UTILITY LINES WEATHER OR NOT SHOWN. UTILITIES SHOWN IN THE PROFILE HAVING A BROKEN LEADER LINE WITH A "X" ATOP (---X---) INDICATES THAT THE COVER OF THE UTILITIES ARE UNKNOWN, BUT THE UTILITY IS NOT EXPECTED TO CONFLICT WITH THE PROPOSED IMPROVEMENTS.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS, WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE. ALL IMPROVEMENTS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED TO THE ENGINEER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
- THE CONTRACTOR SHALL COMPLY WITH THE STATE DEPT. OF HEALTH SERVICES CRITERIA FOR THE SEPARATION OF WATER MAINS AND SANITARY SEWERS AS SET FORTH IN SECTION 64630, TITLE 22 OF THE CALIFORNIA ADMINISTRATIVE CODE.
- THE CONTRACTOR SHALL CONTACT "UNDERGROUND SERVICES ALERT" (U.S.A.) AT 1-800-422-4133 FOR FIELD LOCATION OF UTILITIES.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" 1985 EDITION, AND 1986 SUPPLEMENT, ALONG WITH CITY OF RIVERSIDE STANDARD DWGS.
- THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY & ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION & REVISING THE PLANS FOR APPROVAL BY THE CITY.

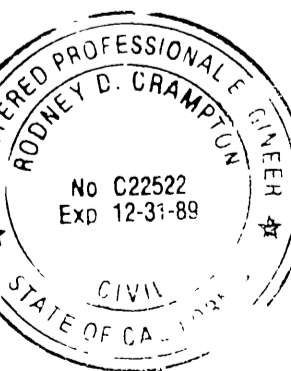
CONSTRUCTION NOTES:

- SEWER ELEVATIONS SHOWN ARE TO INVERT (FLOW-LINE OF CONDUIT).
- STRAIGHT SLOPES SHALL BE MAINTAINED BETWEEN INVERTS SHOWN.
- SEWER PIPE ZONE AND TRENCH BACKFILL SHALL BE IN ACCORDANCE WITH DETAIL DRAWINGS AND SPECIFICATIONS. BEDDING SHALL BE CLASS I, UNLESS NOTED OTHERWISE.



VICINITY MAP  
N.T.S.

PREPARED UNDER THE DIRECTION OF:  
*Rodney D. Gramrick*  
REGISTERED CIVIL ENGINEER NO. C22522  
EXPIRATION DATE 12-31-89 DATE: 2-26-87



**J. F. DAVIDSON ASSOCIATES**  
CIVIL ENGINEERS • PLANNERS • SURVEYORS



COUNTY OF RIVERSIDE, CALIFORNIA  
EASTERN MUNICIPAL WATER DISTRICT  
APPROVED BY: *[Signature]*  
DATE: 2-25-87

COUNTY OF RIVERSIDE, CALIFORNIA  
WESTERN MUNICIPAL WATER DISTRICT  
REVIEWED BY: *[Signature]*  
DATE: 2-17-87

CITY OF RIVERSIDE, CALIFORNIA  
DEPARTMENT OF PUBLIC WORKS  
APPROVED BY: *[Signature]*  
DATE: 4/24/87

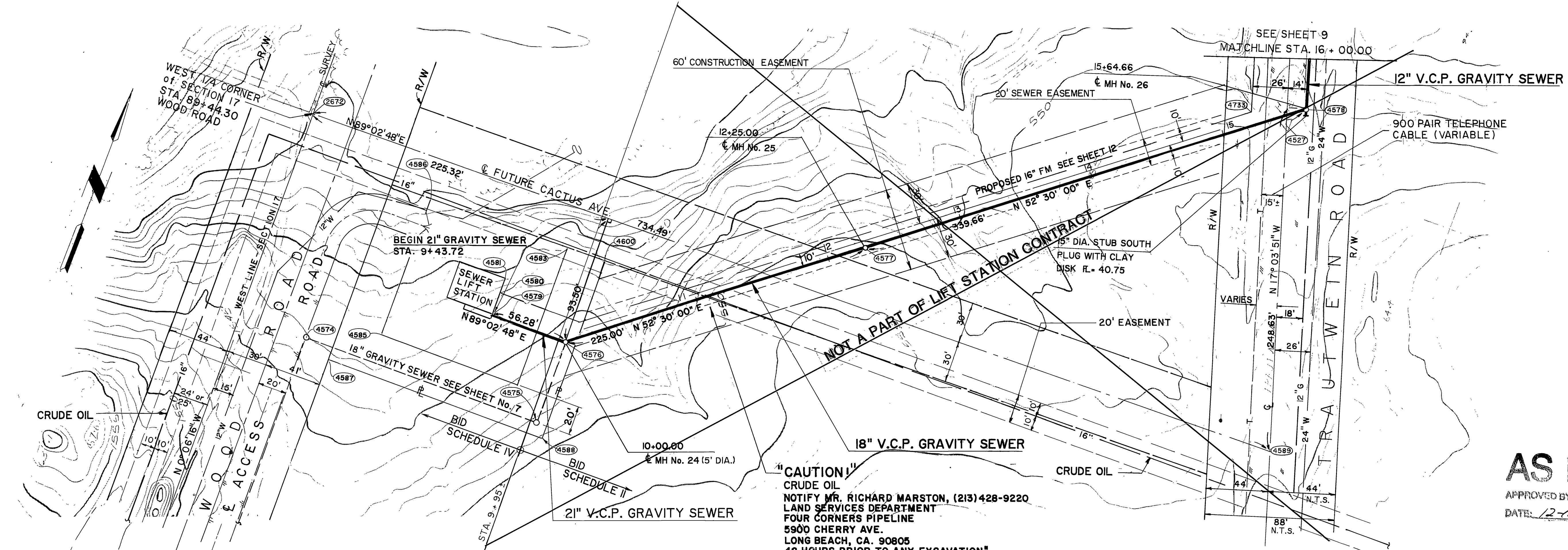
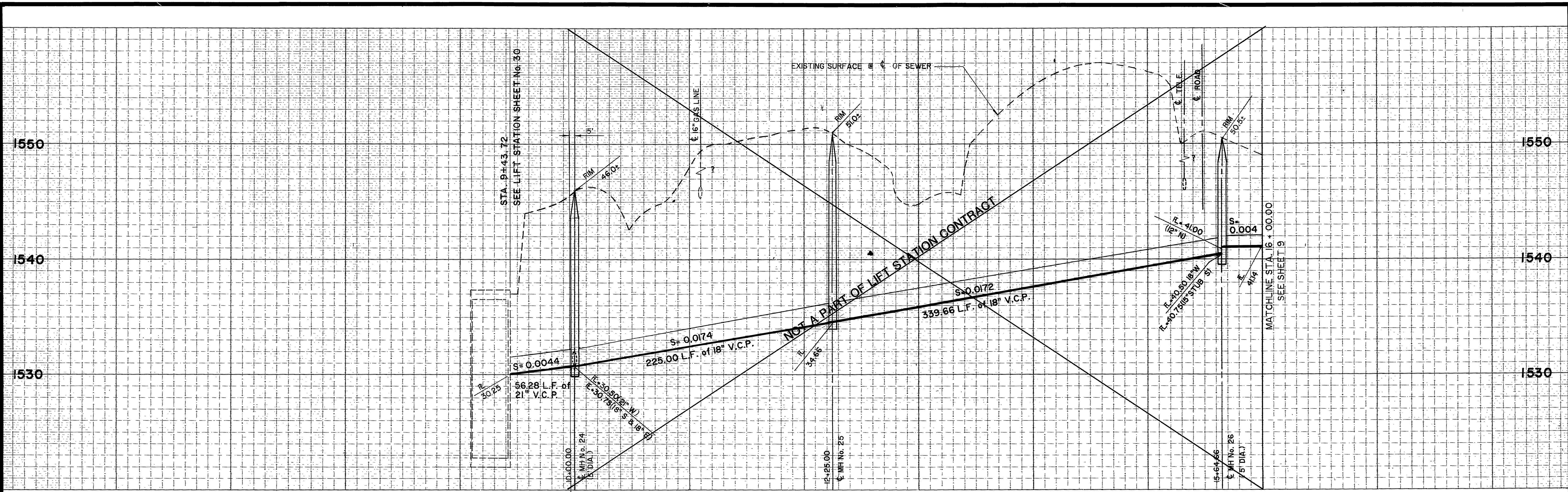
WOOD RD. SEWAGE LIFT STATION FOR  
ALESSANDRO BLVD. & WOOD ROAD  
**TRUNK SEWER**  
**TITLE SHEET**

PROJECT NO.  
**S-1430B**  
FILE NO. 86-9202

**AS BUILT**  
APPROVED BY: *[Signature]*  
DATE: 12-15-89

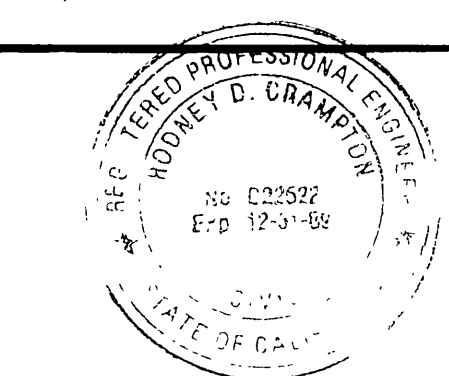
COUNTY OF RIVERSIDE, CALIFORNIA  
VOLUNTARY CASE 2738  
APPROVED BY: *[Signature]*  
DATE: 12/21/87





**"CAUTION!"**  
 CRUDE OIL  
 NOTIFY MR. RICHARD MARSTON, (213) 428-9220  
 LAND SERVICES DEPARTMENT  
 FOUR CORNERS PIPELINE  
 5900 CHERRY AVE.  
 LONG BEACH, CA. 90805  
 48 HOURS PRIOR TO ANY EXCAVATION"

**AS BUILT**  
 APPROVED BY: *Robney D. Crumpton*  
 DATE: 12-15-89



PREPARED UNDER THE DIRECTION OF:  
*Robney D. Crumpton*  
 REGISTERED CIVIL ENGINEER NO. C22522  
 EXPIRATION DATE 12-31-89 DATE: 2-17-87

**J F DAVIDSON ASSOCIATES, INC.**  
 CIVIL ENGINEERS • SURVEYORS • PLANNERS  
 P.O. BOX 493 11200 SO. MT. VERNON AVE., #D 73-080 EL PASO, #103  
 RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260  
 (714) 686-0844 (714) 825-1082 (619) 346-5691

MARK	REVISIONS	APPR.	DATE
DESIGNED BY	DRAWN BY	CHECKED BY	DATE

**CITY OF RIVERSIDE, CALIFORNIA**  
**DEPARTMENT OF PUBLIC WORKS**

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	<i>W. J. ...</i>	3-7-87
SAFETY SUPERVISOR		
TRAFFIC DIVISION		
CHIEF P. W. INSPECTOR	<i>W. J. ...</i>	4-24-87

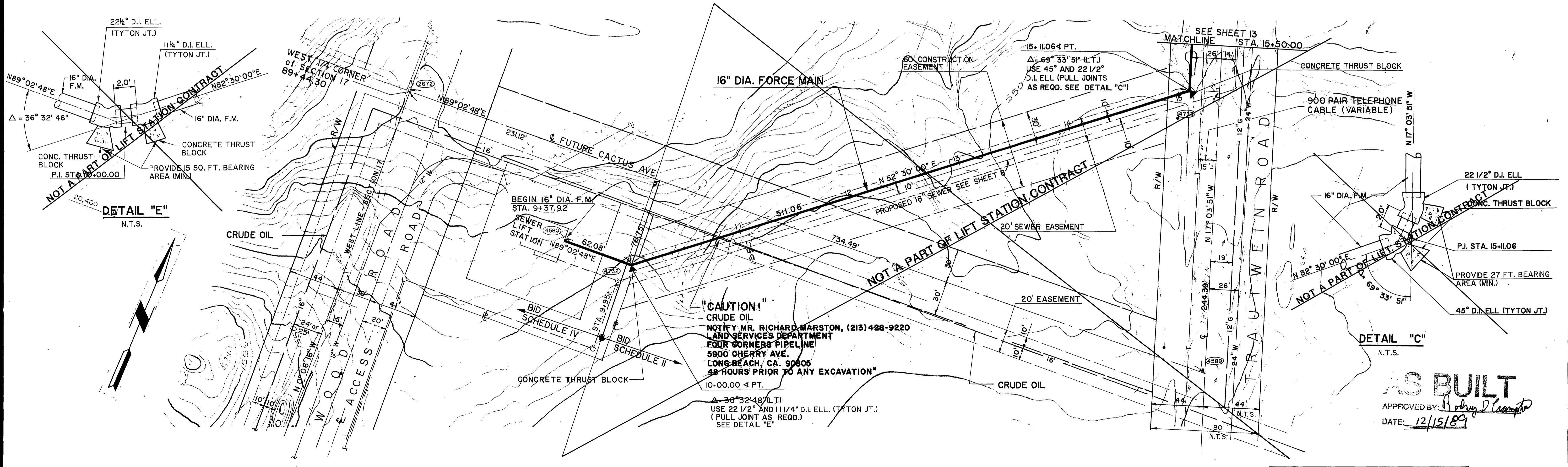
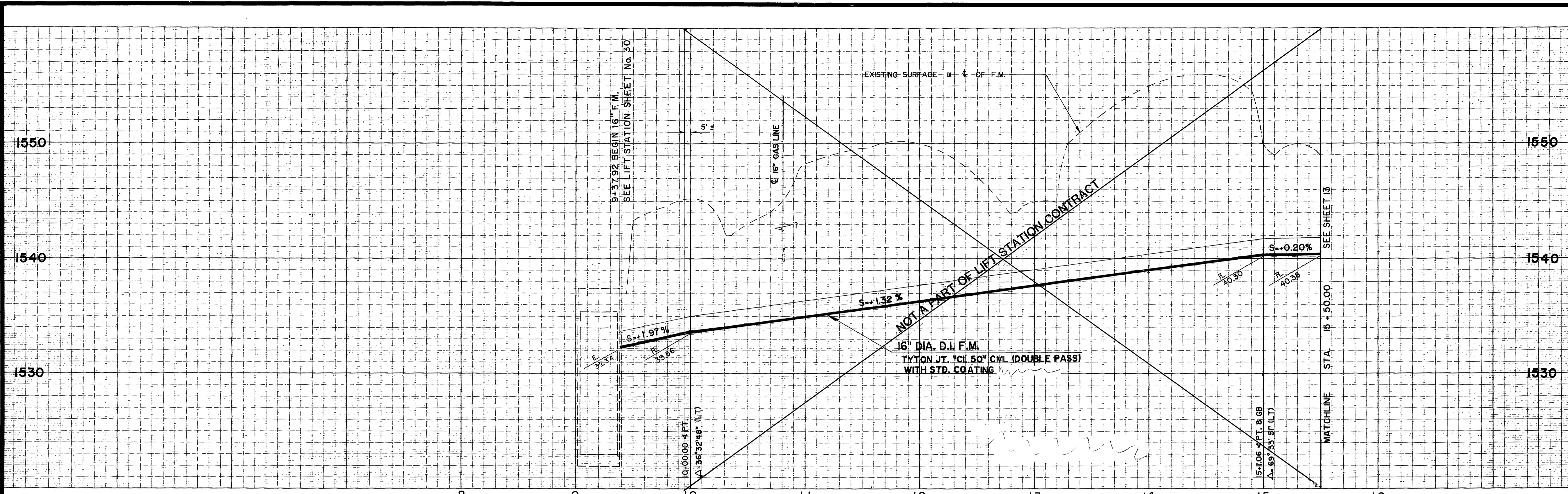
**WOOD RD. SEWAGE LIFT STATION FOR**  
**ALESSANDRO BLVD. & WOOD RD.**  
**TRUNK SEWER**  
 18" GRAVITY SEWER TRAUTWEIN RD.  
 STA. 09+ 43.72 TO STA. 16 + 00.00

PROJECT NO.  
**S-1430B**  
 SHEET **8** OF **37**  
 FILE NO. 86-9202

HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

INDEXED 12-15-89 84H





PREPARED UNDER THE DIRECTION OF:  
**RODNEY D. CRAMPTON**  
 REGISTERED CIVIL ENGINEER NO. C22522  
 EXPIRATION DATE 12-31-89 DATE: 2-17-87

**J F DAVIDSON ASSOCIATES, INC.**  
 CIVIL ENGINEERS • SURVEYORS • PLANNERS  
 P.O. BOX 493 RIVERSIDE, CA 92502 (714) 686-0844  
 11200 SO. MT. VERNON AVE. #D COVINGTON, CA 92324 (714) 825-1082  
 73-080 EL PASO, #103 PALM DESERT, CA 92260 (951) 346-5491

**JFD ASSOCIATES**  
 MARK REVISIONS APPR. DATE DESIGNED BY DRAWN BY CHECKED BY

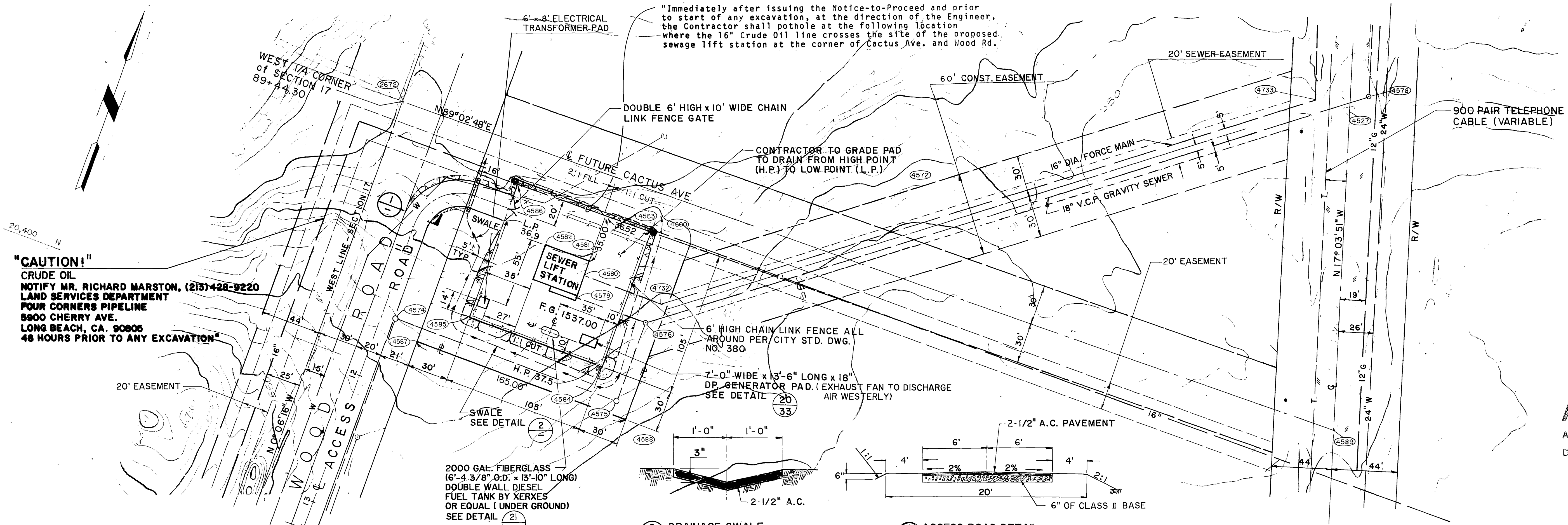
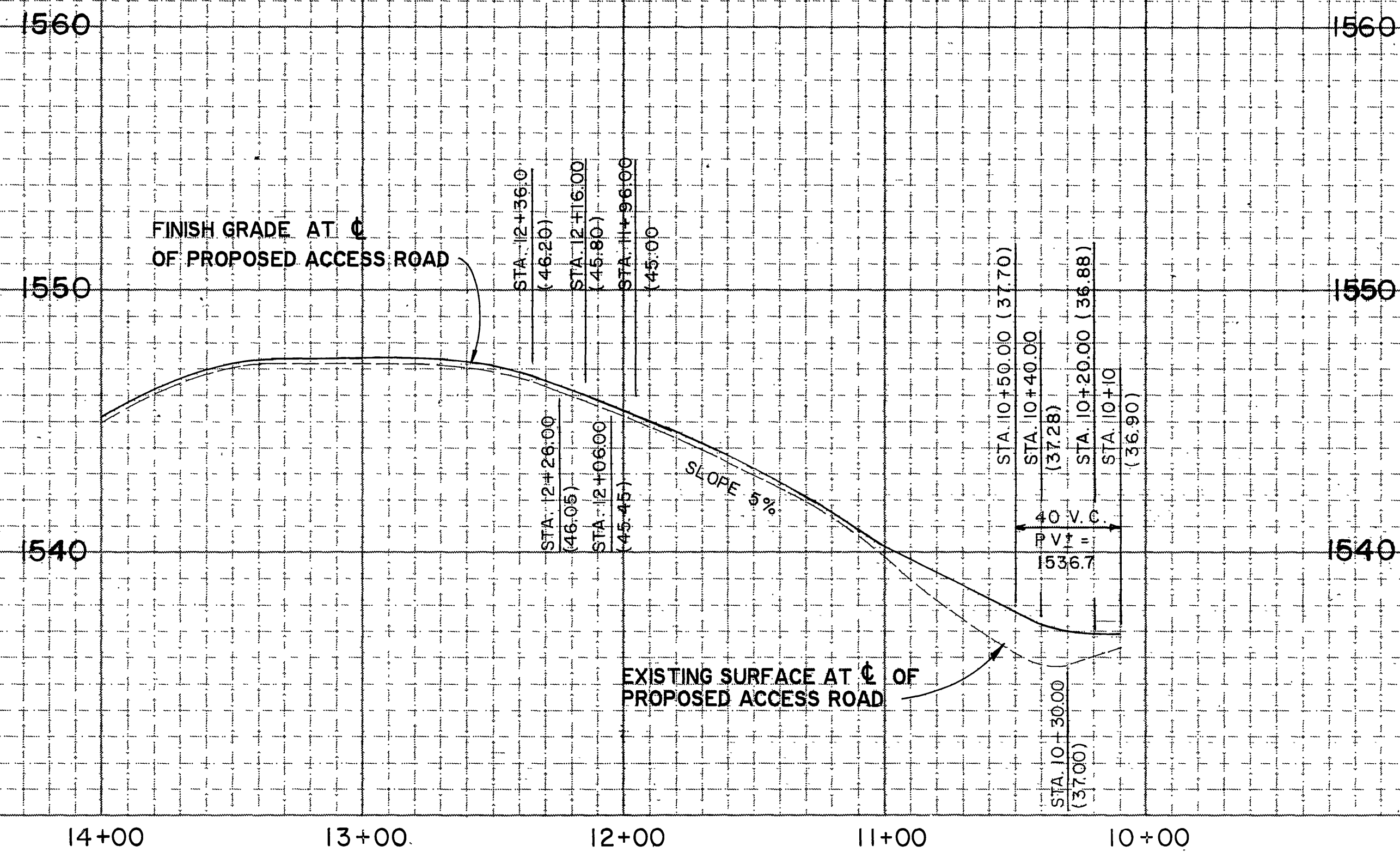
**CITY OF RIVERSIDE, CALIFORNIA**  
**DEPARTMENT OF PUBLIC WORKS**  
 APPROVED BY: [Signature] DATE: 4/24/87  
 TRAFFIC DIVISION CHIEF P. W. INSPECTION

**WOOD RD. SEWAGE LIFT STATION FOR**  
**ALESSANDRO BLVD. & WOOD RD.**  
**TRUNK SEWER**  
 16" F.M. LIFT STA. TO TRAUTWEIN RD.  
 STA. 9+37.92 TO STA. 15+50.00  
 PROJECT NO. S-1430B  
 SHEET 12 OF 37  
 HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'  
 FILE NO. 86 - 9202

**AS BUILT**  
 APPROVED BY: [Signature]  
 DATE: 12/15/89

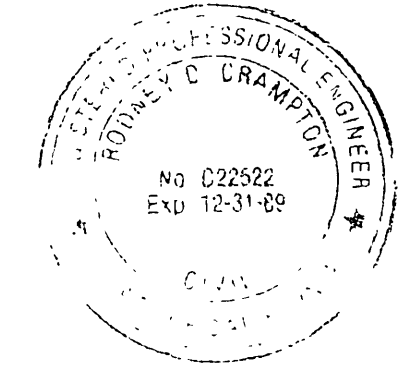
INDEXED 12-15-87 JFD





**"CAUTION!"**  
 CRUDE OIL  
 NOTIFY MR. RICHARD MARSTON, (213) 428-9220  
 LAND SERVICES DEPARTMENT  
 FOUR CORNERS PIPELINE  
 5900 CHERRY AVE.  
 LONG BEACH, CA. 90805  
 48 HOURS PRIOR TO ANY EXCAVATION

**AS BUILT**  
 APPROVED BY: *Rodney D. Crampton*  
 DATE: 12/15/89



PREPARED UNDER THE DIRECTION OF:  
*Rodney D. Crampton*  
 REGISTERED CIVIL ENGINEER NO. C22522  
 EXPIRATION DATE 12-31-89 DATE: 2-7-87

**J F DAVIDSON ASSOCIATES, INC.**  
 CIVIL ENGINEERS • SURVEYORS • PLANNERS  
 P.O. BOX 493 11200 SO. MT. VERNON AVE., #D 73-080 EL PASO, #103  
 RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260  
 (714) 686-0844 (714) 825-1082 (619) 346-5691



SCALE: \_\_\_\_\_ BENCH MARK: \_\_\_\_\_ DATE: 07/1 RIVERSIDE COUNTY ELEV. 1700.870  
 BRASS DISK FLUSH & MARKED V. S. 10-64, 0.5 MI. E. ON VAN BUREN BLVD. FROM INT. OF VAN BUREN & WOOD RD. 808' N. OF VAN BUREN AT THE GRANITE BOULDER ON TOP OF 3' X 8' X 10' BOULDER.

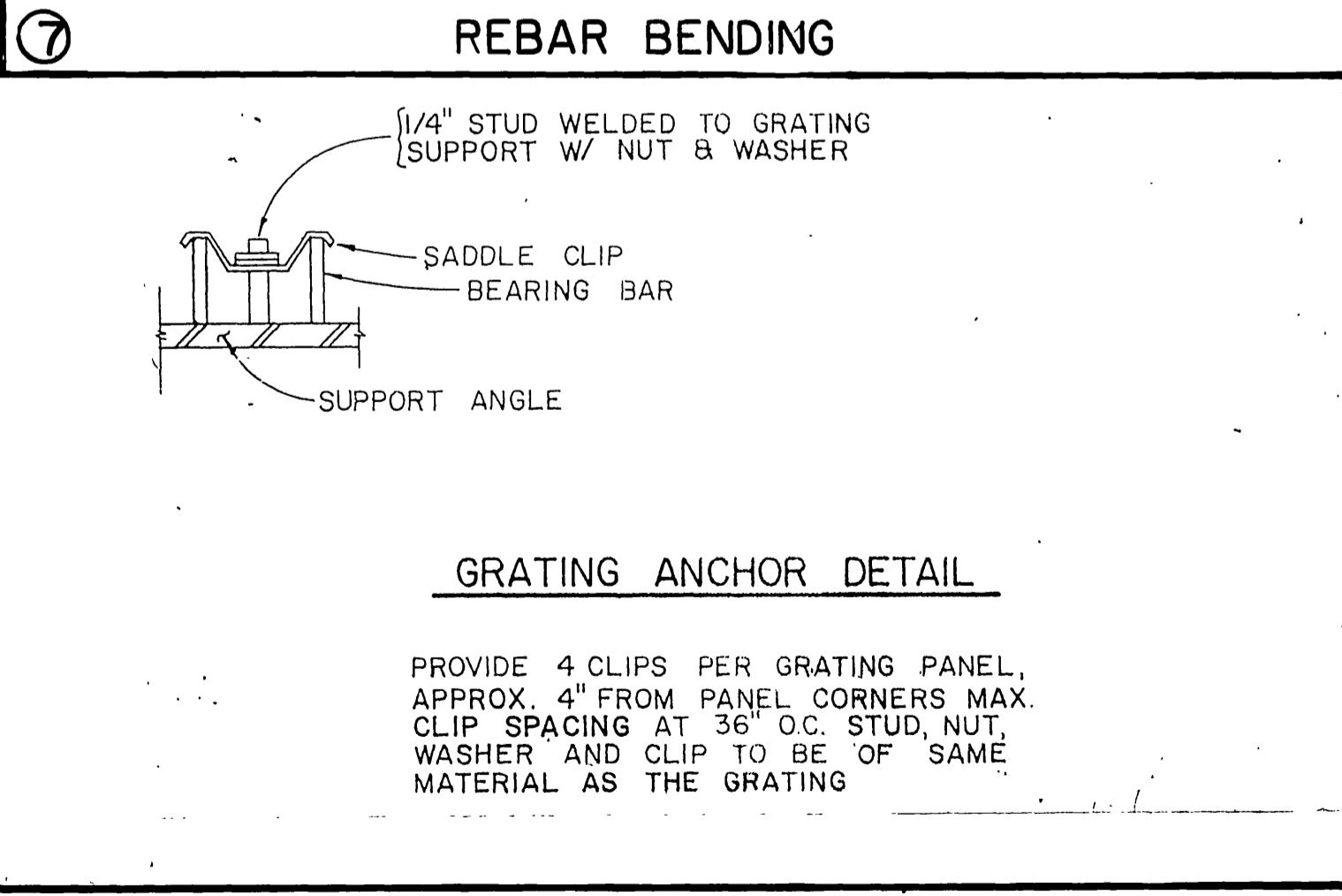
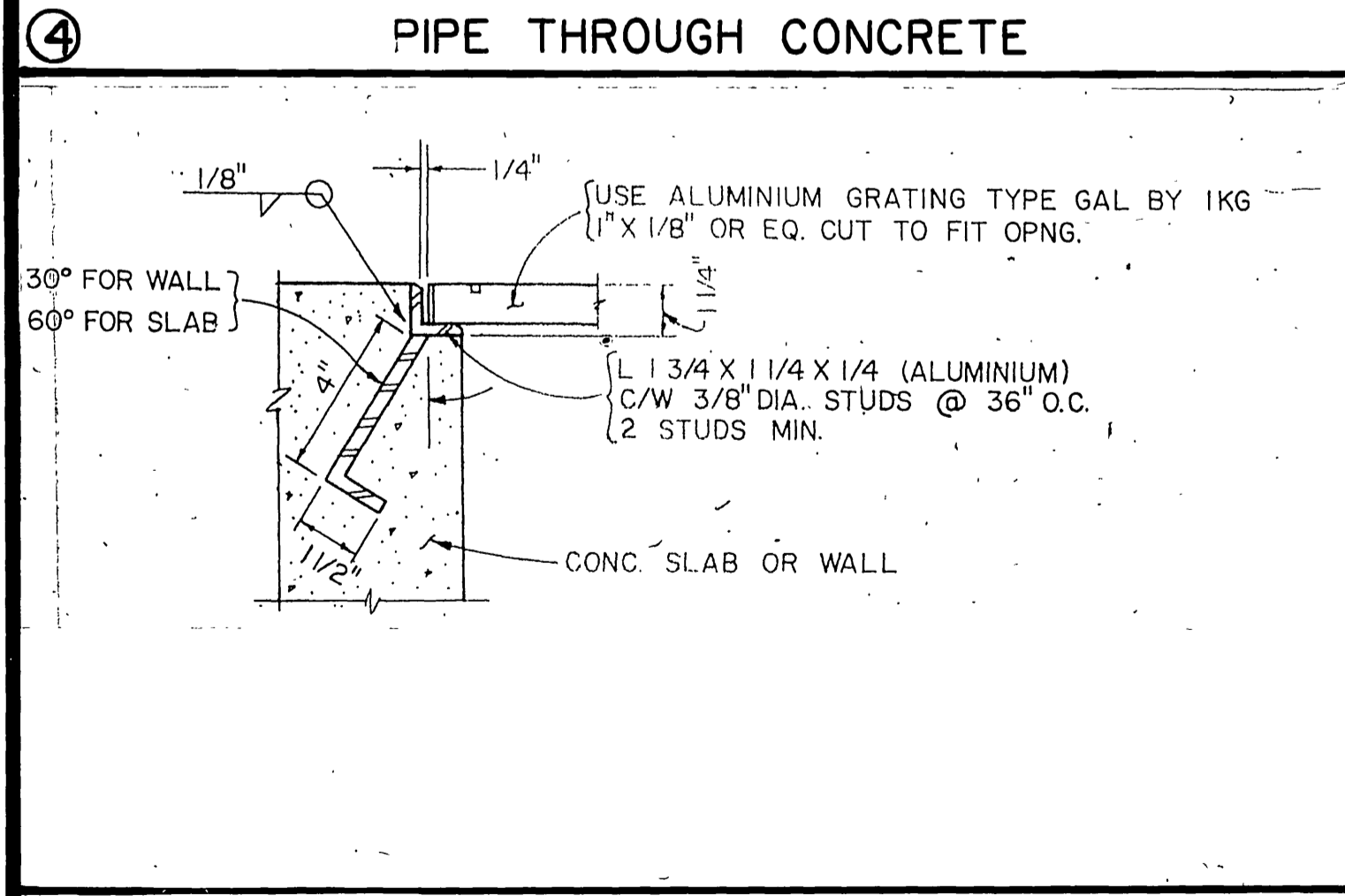
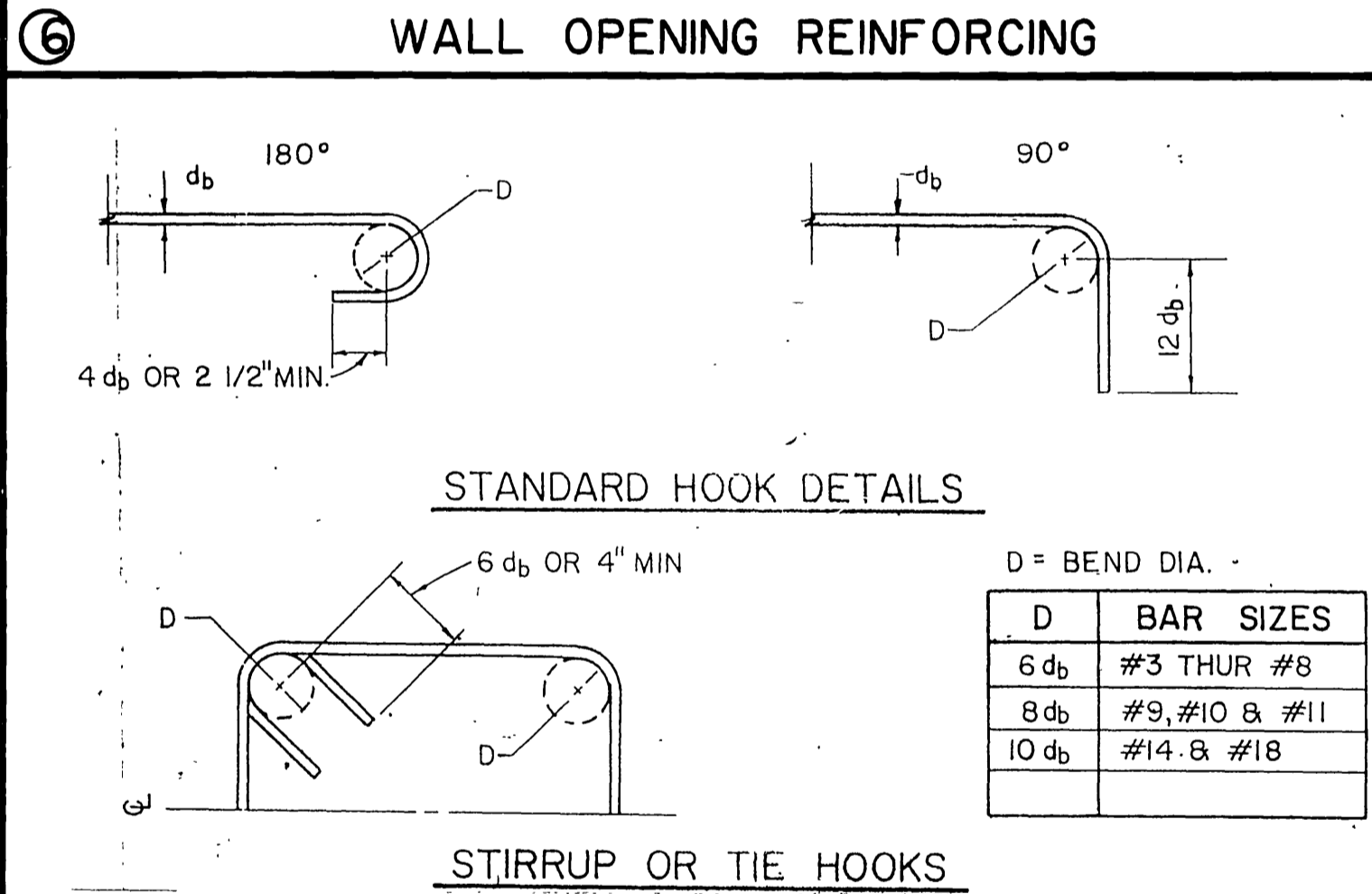
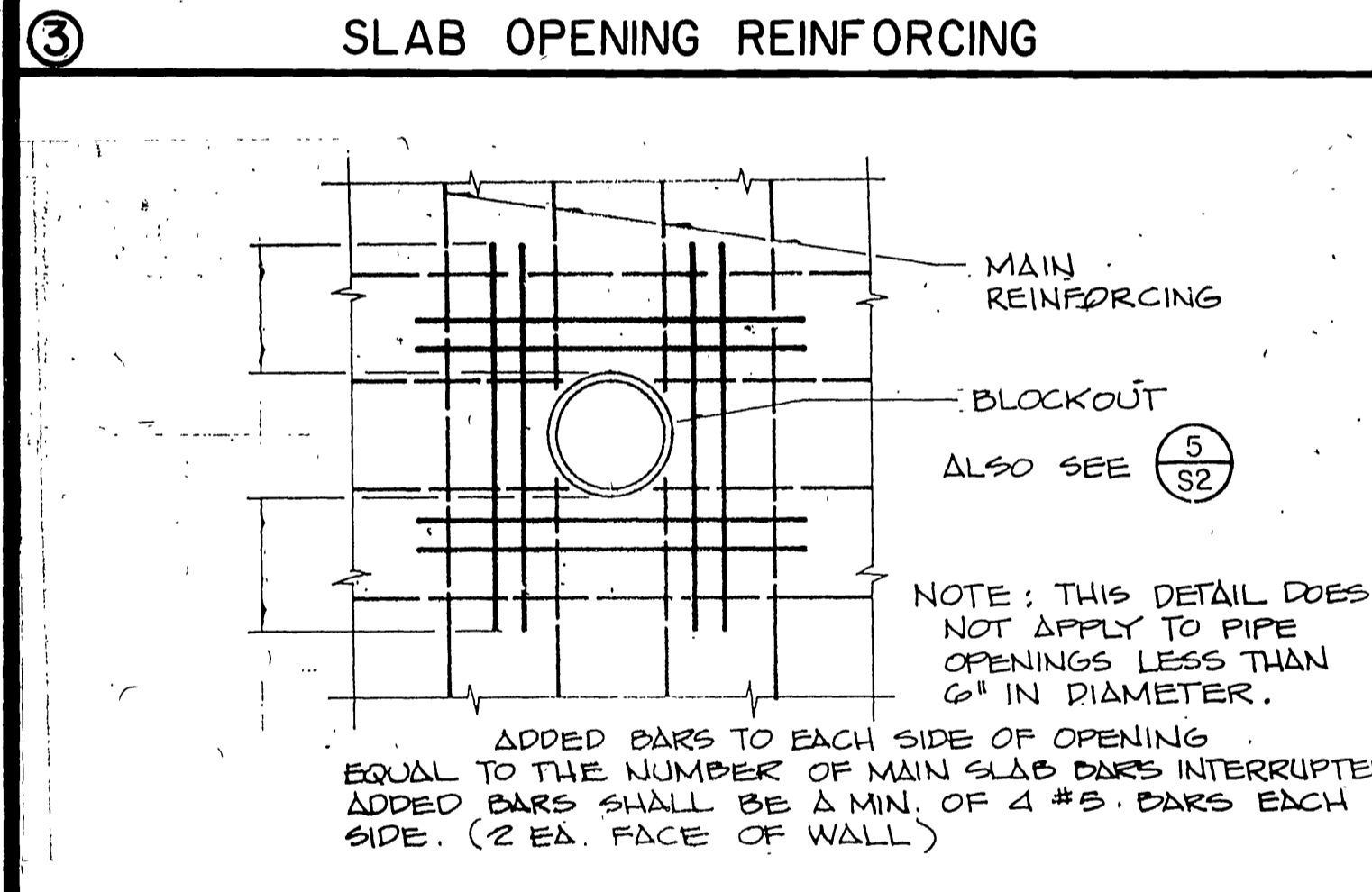
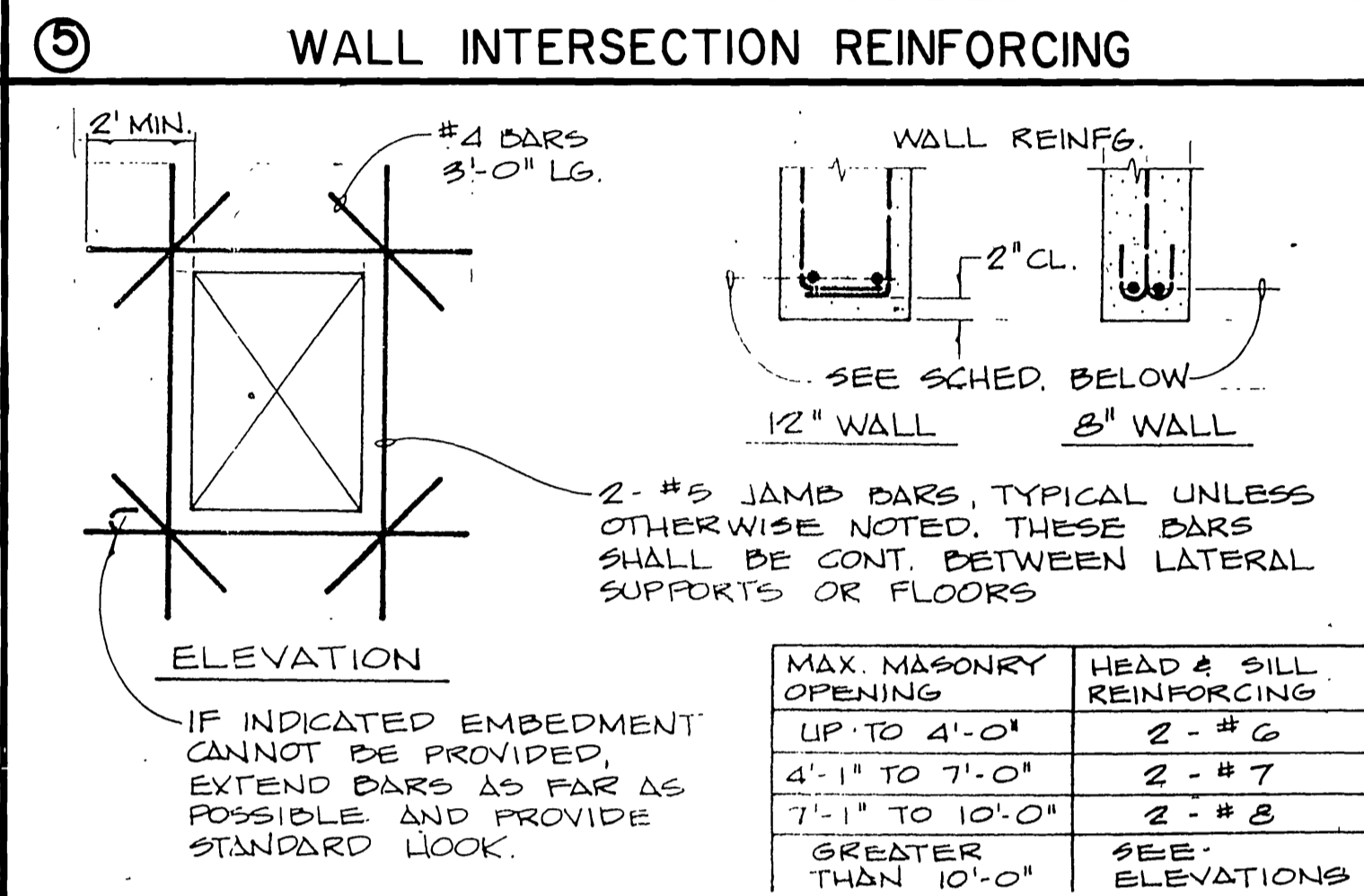
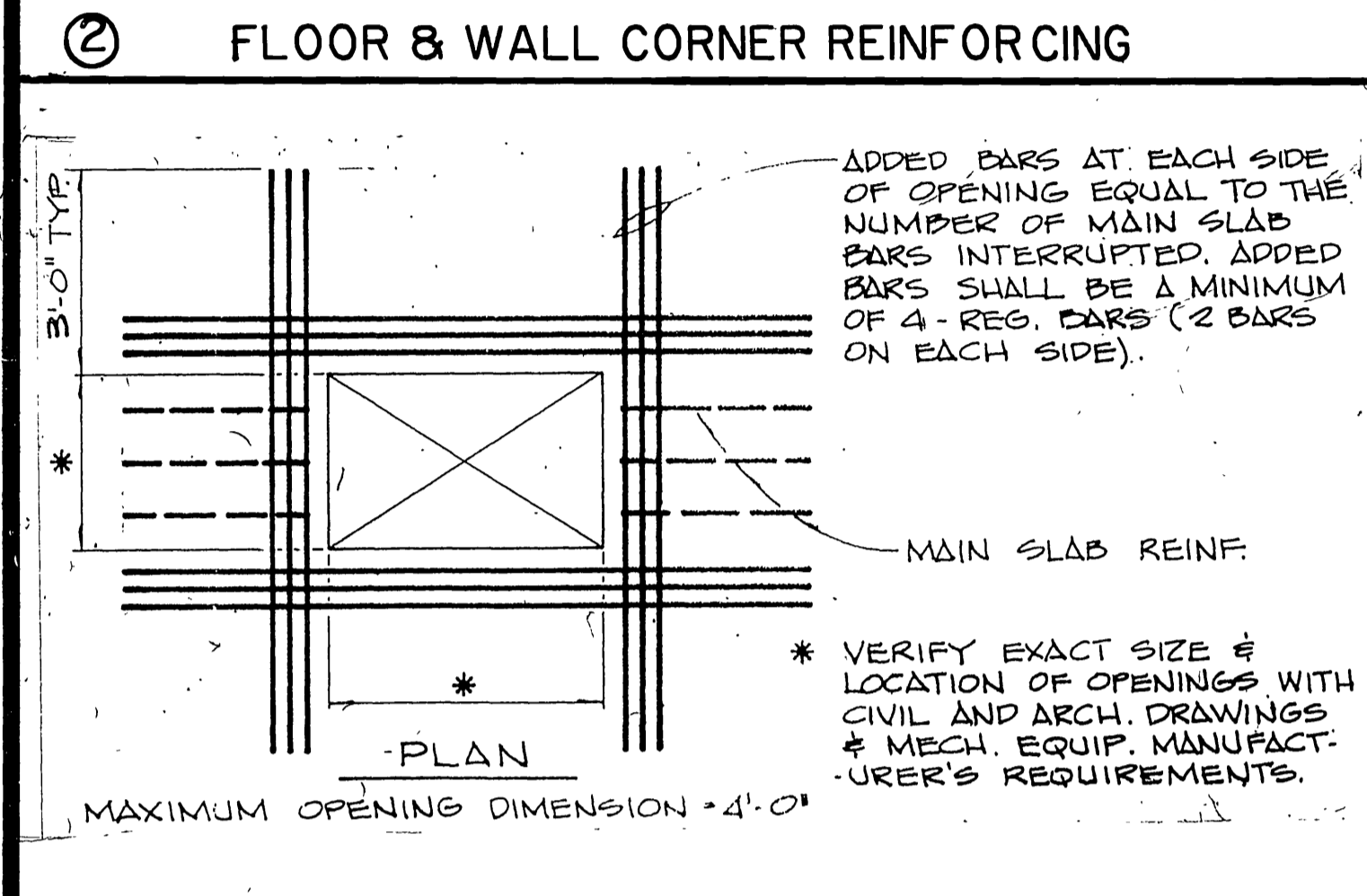
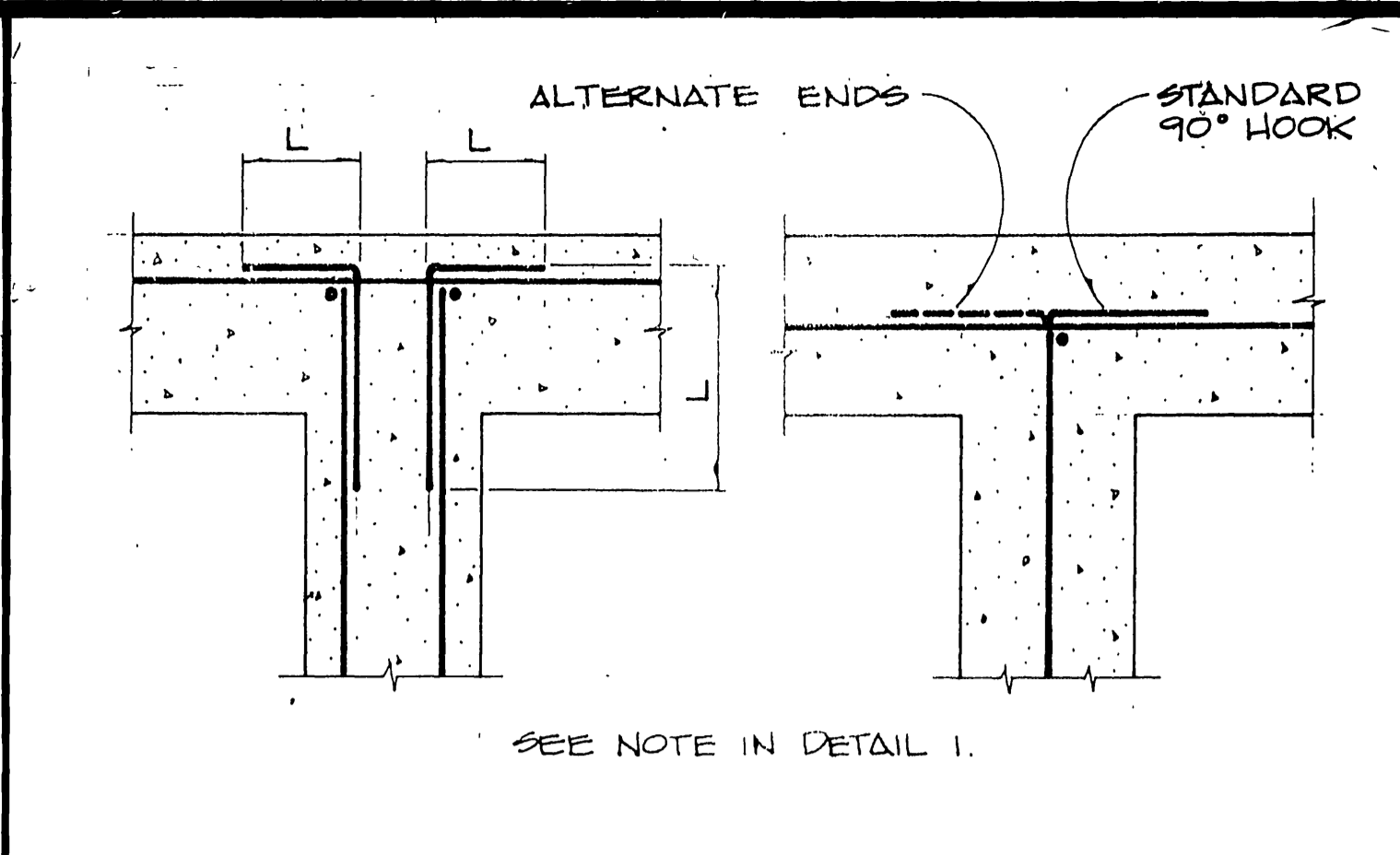
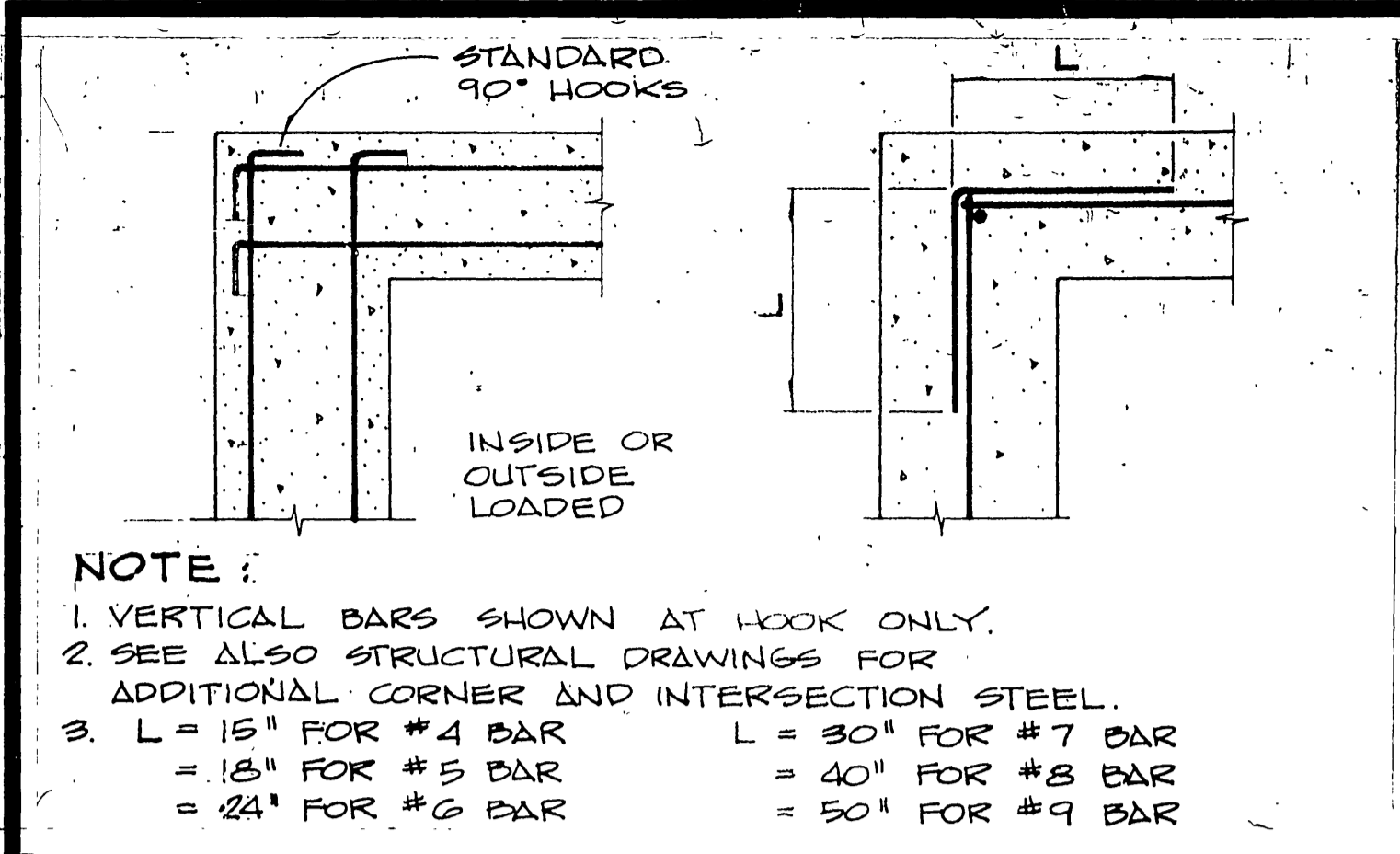
MARK	REVISIONS	APPR.	DATE
DESIGNED BY	DRAWN BY	CHECKED BY	

CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS		
APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	<i>W. B. Anderson</i>	2-7-87
TRAFFIC DIVISION		
CHIEF P. W. INSPECTOR		
APPROVED BY	BY	DATE
DIRECTOR OF PUBLIC WORKS	<i>William B. Anderson</i>	4/24/87

**WOOD RD. SEWER LIFT STATION FOR ALESSANDRO BLVD. & WOOD RD.**  
 TRUNK SEWER  
 SITE GRADING ACCESS ROAD FOR SEWER LIFT STATION

PROJECT NO. \_\_\_\_\_  
**S-1430B**  
 SHEET 28 OF 37  
 FILE NO. 86-9202





**GENERAL NOTES:**

- GENERAL CONSTRUCTION**
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND TO CROSS CHECK DETAILS AND DIMENSIONS SHOWN ON THE CIVIL, MECHANICAL, AND ELECTRICAL DRAWINGS. FLOOR AND WALL OPENINGS, SLEEVES, VARIATIONS IN THE STRUCTURAL SLAB ELEVATIONS AND OTHER CIVIL, MECHANICAL, OR ELECTRICAL REQUIREMENTS MUST BE COORDINATED BEFORE THE CONTRACTOR PROCEEDS WITH CONSTRUCTION.
  - IN ALL CASES WHERE A CONFLICT MAY OCCUR, SUCH AS ITEMS COVERED BY SPECIFICATIONS OR NOTES ON THE DRAWINGS OR BETWEEN GENERAL NOTES AND SPECIFIC DETAILS, THE CIVIL ENGINEER SHALL BE NOTIFIED; AND HE WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS.
  - IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON STRUCTURAL DRAWINGS.
  - THE DETAILS ON DRAWING S-1 AND S-2 SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY DETAILED OR NOTED OTHERWISE. WHERE NO SPECIFIC DETAIL IS SHOWN, THE FRAMING OR CONSTRUCTION SHALL BE IDENTICAL OR SIMILAR TO THAT INDICATED FOR LIKE CASES OF CONSTRUCTION ON THIS PROJECT.
  - WALL AND FLOOR OPENINGS AS REQUIRED BY CIVIL, MECHANICAL, ELECTRICAL, OR SIMILAR REQUIREMENTS AS WELL AS EQUIPMENT INSTALLATION SHALL BE VERIFIED BY SHOP DRAWINGS, EQUIPMENT DATA, ETC., AS REQUIRED.
  - STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURES. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND BALANCING WHEREVER EXCESSIVE CONSTRUCTION LOADS MAY OCCUR.
  - WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE UNIFORM BUILDING CODE AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND ADDENDA.

- FOUNDATIONS**
- ALL FOOTINGS SHALL EXTEND 12" MINIMUM INTO FIRM NATURAL MATERIAL UNLESS OTHERWISE NOTED ON THE PLANS.

- REINFORCING STEEL**
- ALL REINFORCING STEEL SHALL BE GRADE 60 CONFORMING TO ASTM A-615. DEFORMATION SHALL BE IN ACCORDANCE WITH ASTM A-305.
  - ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI-315, LATEST EDITION.
  - REINFORCING MARKED "CONTINUOUS" AND TEMPERATURE REINFORCING OF WHICH THE LAP LENGTH HAS NOT BEEN SPECIFIED MAY BE SPLICED WITH A LAP AS INDICATED ON NOTE 3 OF DETAIL 2, HEREON. ALL OTHER LAPS REQUIRED SHALL BE AS SHOWN ON THE DRAWINGS OR AS APPROVED BY THE ENGINEER.
  - UNLESS OTHERWISE SHOWN, ASIDE FROM NORMAL ACCESSORIES USED TO HOLD REINFORCING BARS FIRMLY IN POSITION, THE FOLLOWING SHALL BE ADDED:
    - IN SLAB: #4 MIN RISER BARS AT 48 INCHES O.C. MAX. TO SUPPORT TOP REINFORCING BARS.
    - IN WALLS: WITH 2 CURTAINS #3 U OR 2 SHAPE SPACERS AT 6 FEET O.C. EACH WAY.
  - METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUBGRADE. CONCRETE BLOCKS (OR DOBBIES) SUPPORTING BARS ON SUBGRADE SHALL BE IN SUFFICIENT NUMBERS TO SUPPORT THE BARS WITHOUT SETTLEMENT, BUT IN NO CASE SUCH SUPPORT SHALL BE CONTINUOUS.
  - DOWELS SHALL BE WIRED OR OTHERWISE HELD IN POSITION. THEY SHALL NOT BE PLACED INTO FRESHLY POURED CONCRETE.
  - REINFORCING BARS AND ACCESSORIES SHALL NOT BE PLACED IN CONTACT WITH ANY PIPE, PIPE FLANGE, OR METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM OF 2 INCHES CLEARANCE SHALL BE PROVIDED AT ALL TIMES.
  - CERTIFICATION AND TESTING OF REINFORCED STEEL SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF ASTM STANDARDS. THE CONTRACTOR SHALL SUPPLY SUCH CERTIFICATION TO THE ENGINEER PRIOR TO PLACEMENT OF ANY REINFORCEMENT.
  - UNLESS OTHERWISE SHOWN ON DRAWINGS, ALL REINFORCING SHALL HAVE THE FOLLOWING CONCRETE COVERAGE:
    - SLABS OR WALLS (SURFACES EXPOSED TO THE WEATHER OR IN CONTACT WITH EARTH OR WATER) . . . . . 2"
    - WALL (UNEXPOSED, INTERIOR) . . . . . 1 1/2"
    - BEAMS AND COLUMNS (MAIN PART) . . . . . 2"
    - SLABS (UNEXPOSED INTERIOR) . . . . . 1 1/2"
    - SURFACES DEPOSITED DIRECTLY AGAINST EARTH . . . . . 3"
    - SURFACES DEPOSITED DIRECTLY AGAINST EARTH (FORMED) . . . . . 2"
  - USE "LOW HYDROGEN" ELECTRODES FOR ALL WELDING ON REINF. STEEL.

- STRUCTURAL STEEL**
- STEEL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS AS CONTAINED IN THE LATEST EDITION OF THE AISC STEEL CONSTRUCTION MANUAL.
  - ALL STRUCTURAL SHAPES, BARS, PLATES, AND SHEETS SHALL MEET ASTM A-36 SPECIFICATIONS.
  - ALL WELDING SHALL BE BY THE SHIELDED ARC METHOD AND SHALL CONFORM TO AWS CODE FOR ARC AND GAS WELDING. QUALIFICATION OF WELDERS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS FOR STANDARD QUALIFICATIONS PROCEDURE OF AWS.
  - SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
  - ALL EXPOSED METAL WORK SHALL BE GALVANIZED AS PER SPECIFICATIONS AFTER FABRICATION, UNLESS OTHERWISE NOTED.

- MASONRY**
- CONCRETE BLOCK MASONRY SHALL BE NORMAL WEIGHT, HOLLOW UNITS CONFORMING TO ASTM C-90, GRADE N-1 SIZE OF UNITS, COLOR, AND TEXTURE SHALL BE AS PER SPECIFICATIONS.
  - ALL CELLS OF MASONRY CONCRETE BLOCK SHALL BE GROUTED UNLESS OTHERWISE NOTED ON DRAWINGS.
  - BAR SPLICES SHALL BE 40 BAR DIAMETER UNLESS OTHERWISE NOTED.
  - MORTAR SHALL BE IN ACCORDANCE WITH TABLE 24-A OF U.B.C. TYPE M AND SHALL HAVE MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 2500 PSI. GROUT SHALL BE IN ACCORDANCE WITH PARA. 2403 (D) OF U.B.C. AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.

- WOOD**
- ALL HORIZONTAL LOAD CARRYING MEMBERS AND POSTS SHALL BE NO. 1 GRADE DOUGLAS FIR OR LARCH (EXCEPT AS NOTED).
  - STUDS, PLATES, SILLS, AND BLOCKING TO BE CONSTRUCTION GRADE DOUGLAS FIR, OR BETTER.
  - SILLS UNDER BEARING AND NON-BEARING STUD PARTITIONS SHALL BE PRESSURE TREATED DOUGLAS FIR BOLTED TO CONCRETE WITH 5/8" DIA X 10" ANCHOR BOLTS SPACED NOT MORE THAN 4'-0" O.C. UNLESS NOTED OTHERWISE, THERE SHALL BE ONE BOLT WITHIN 9" OF EACH END OF ALL SILL PLATE, MINIMUM 2 BOLTS PER PIECE.
  - BRIDGING SHALL BE PROVIDED AS PER CODE.
  - FRAMING MEMBERS SHALL NOT BE NOTCHED IN ANY MANNER EXCEPT WHERE SPECIFICALLY DETAILED OR APPROVED BY THE ENGINEER.
  - MINIMUM NAILING FOR ALL WOOD MEMBERS SHALL BE PER CODE UNLESS SPECIFICALLY NOTED.
  - STRUCTURAL PLYWOOD SHALL BE C-DX (24/0) IN CONFORMANCE WITH UBC STANDARD NO. 25-9 AND OF THICKNESS AS NOTED ON PLANS.
  - EDGES OF ALL OPENINGS THROUGH THE ROOF SHALL BE NAILED PER BOUNDARY OF PLYWOOD DIAPHRAGM NAILING REQUIREMENTS.
  - JOIST HANGERS AND OTHER CONNECTORS SHALL BE SIMPSON TYPE, OR EQUAL.

- CONCRETE**
- ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.
  - ALL KEYWAYS IN CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED TO OBTAIN MAXIMUM BONDING.
  - THE LOCATION OF ALL CONSTRUCTION JOINTS NOT SPECIFICALLY NOTED OR SHOWN SHALL BE APPROVED BY THE CIVIL OR STRUCTURAL ENGINEER.
  - ALL WATER HOLDING STRUCTURES SHALL REQUIRE WATER STOPS AT ALL CONSTRUCTION AND EXPANSION JOINTS, EXCEPT AT JOINTS ONLY COMMON TO WATER HOLDING STRUCTURES.
  - DOWELS, PIPES, WATER STOPS, AND OTHER INSTALLED MATERIALS OR ACCESSORIES SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.
  - ALL EXPOSED CORNERS AND EDGES OF SLABS, WALLS, AND COLUMNS SHALL HAVE TOOLED EDGES OR 3/4" CHAMFER.
  - CONCRETE SHALL HAVE THE FOLLOWING ULTIMATE COMPRESSIVE STRENGTH AFTER 28 DAYS: 4000 PSI FOR ALL REINFORCED CONCRETE CONSTRUCTION, (CLASS "A"); 3000 PSI FOR ALL PIPE ENCASEMENT, (CLASS "B"); 2000 PSI FOR CONCRETE BACKFILLING AND PLAIN CONCRETE, (CLASS "C").
  - CEMENT CONTENTS FOR 4000, 3000, AND 2000 PSI CONCRETE SHALL NOT BE LESS THAN 6.2, 5.5, AND 5.0 SACKS OF CEMENT (94 LB. SACK) PER C.Y. RESPECTIVELY (FOR SULPHATE RESISTANT CONCRETE USE 7.0 SACK).
  - AN APPROVED POZZOLAN ADMIXTURE SHALL BE ADDED TO THE CONCRETE MIX AT A RATE OF 4 OZ. PER SACK OF CEMENT.
  - THE CONTRACTOR SHALL SUBMIT A CONCRETE MIX DESIGN TO THE ENGINEER FOR APPROVAL 14 DAYS PRIOR TO POURING OF CONCRETE.
  - ALL HORIZONTAL SURFACES SHALL BE RENDERED NON-SLIP BY DUSTING ON AN APPROVED ABRASIVE AGGREGATE AT THE RATE OF 4 OZ. PER SQUARE FOOT BEFORE FINAL TROWELING, UNLESS NOTED OTHERWISE.

AS BUILT  
 APPROVED: *Robyn D. Cantor*  
 DATE: 12/15/89

**REGISTERED PROFESSIONAL ENGINEER**  
 ROBYN D. CANTOR  
 No. C22522  
 Exp. 12-31-89  
 CIVIL  
 STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:  
*Robyn D. Cantor*  
 REGISTERED CIVIL ENGINEER NO. C22522  
 EXPIRATION DATE 12-31-89 DATE: 2-7-87

**J F DAVIDSON ASSOCIATES, INC.**  
 CIVIL ENGINEERS • SURVEYORS • PLANNERS  
 P.O. BOX 493 11200 SO. MI. VERNON AVE., #D 73-080 EL PASO, #103  
 RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260  
 (714) 686-0844 (714) 825-1082 (619) 346-5591

SCALE NONE BENCH MARK DATE: 07/1 RIVERSIDE COUNTY ELEV. 1700.470  
 SHEET NO. 29 OF 37  
 DESIGNED BY RDC DRAWN BY JS CHECKED BY RDC

**JFD ASSOCIATES**

CITY OF RIVERSIDE, CALIFORNIA  
 DEPARTMENT OF PUBLIC WORKS

APPROVED BY: *Robyn D. Cantor*  
 DATE: 4/24/87

DESIGNED BY RDC DRAWN BY JS CHECKED BY RDC

**WOOD RD. SEWAGE LIFT STATION FOR ALESSANDRO BLVD. & WOOD RD.**

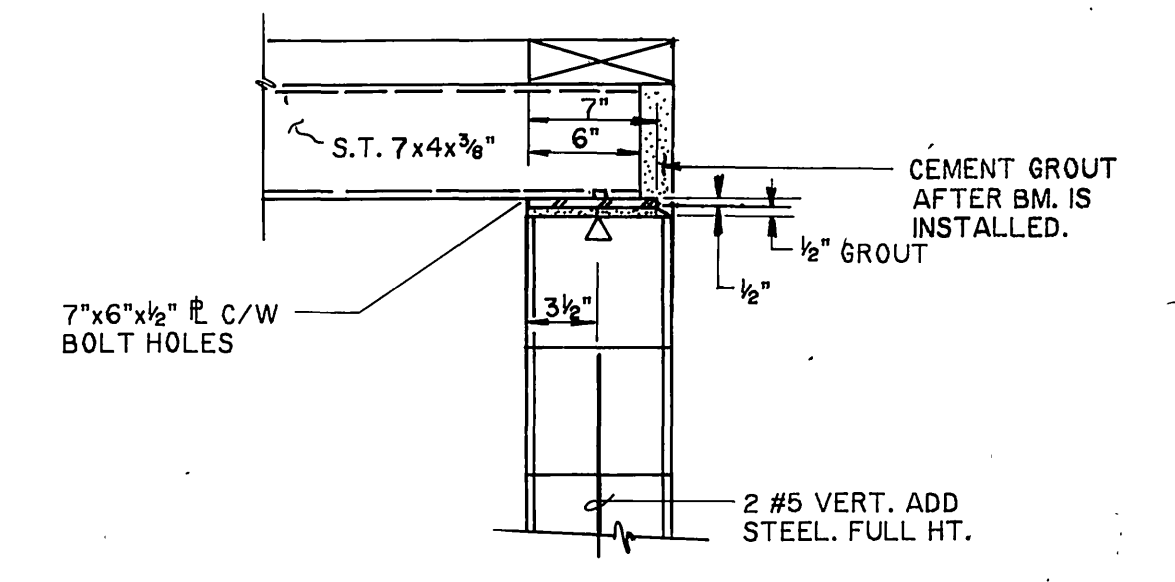
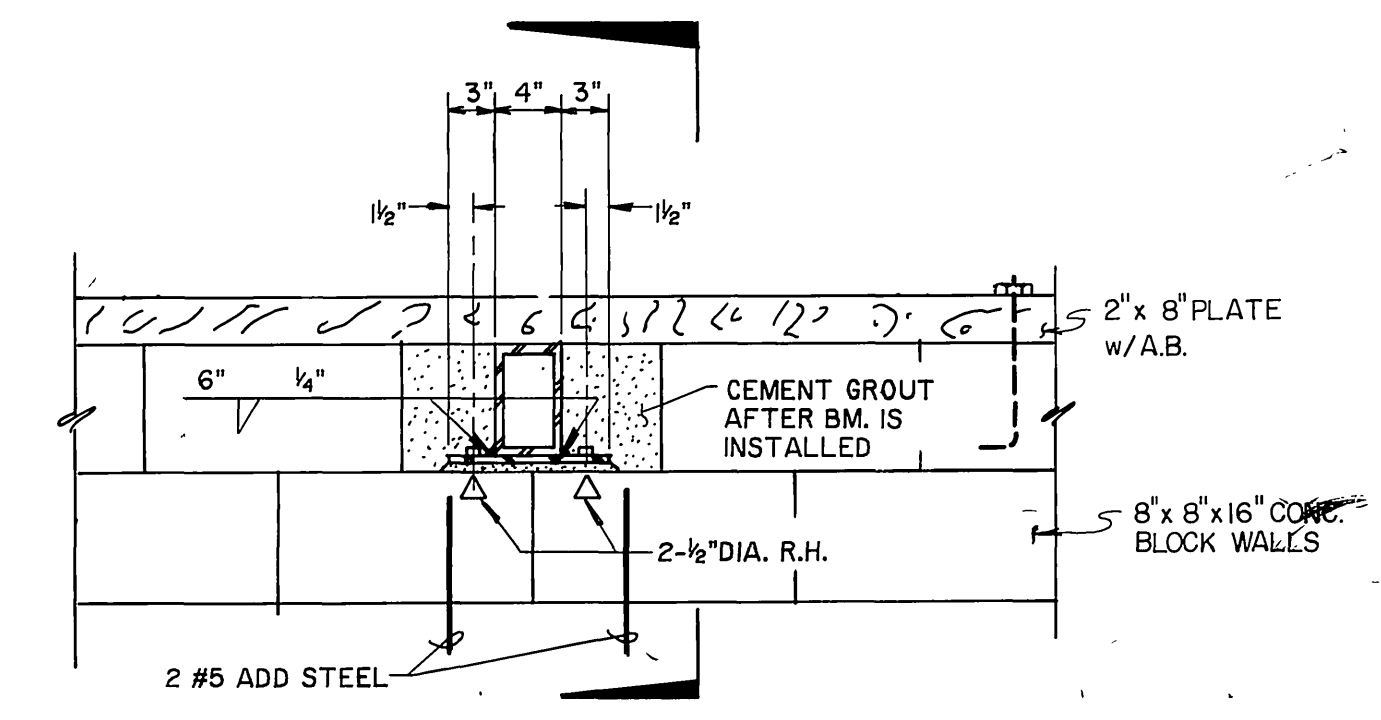
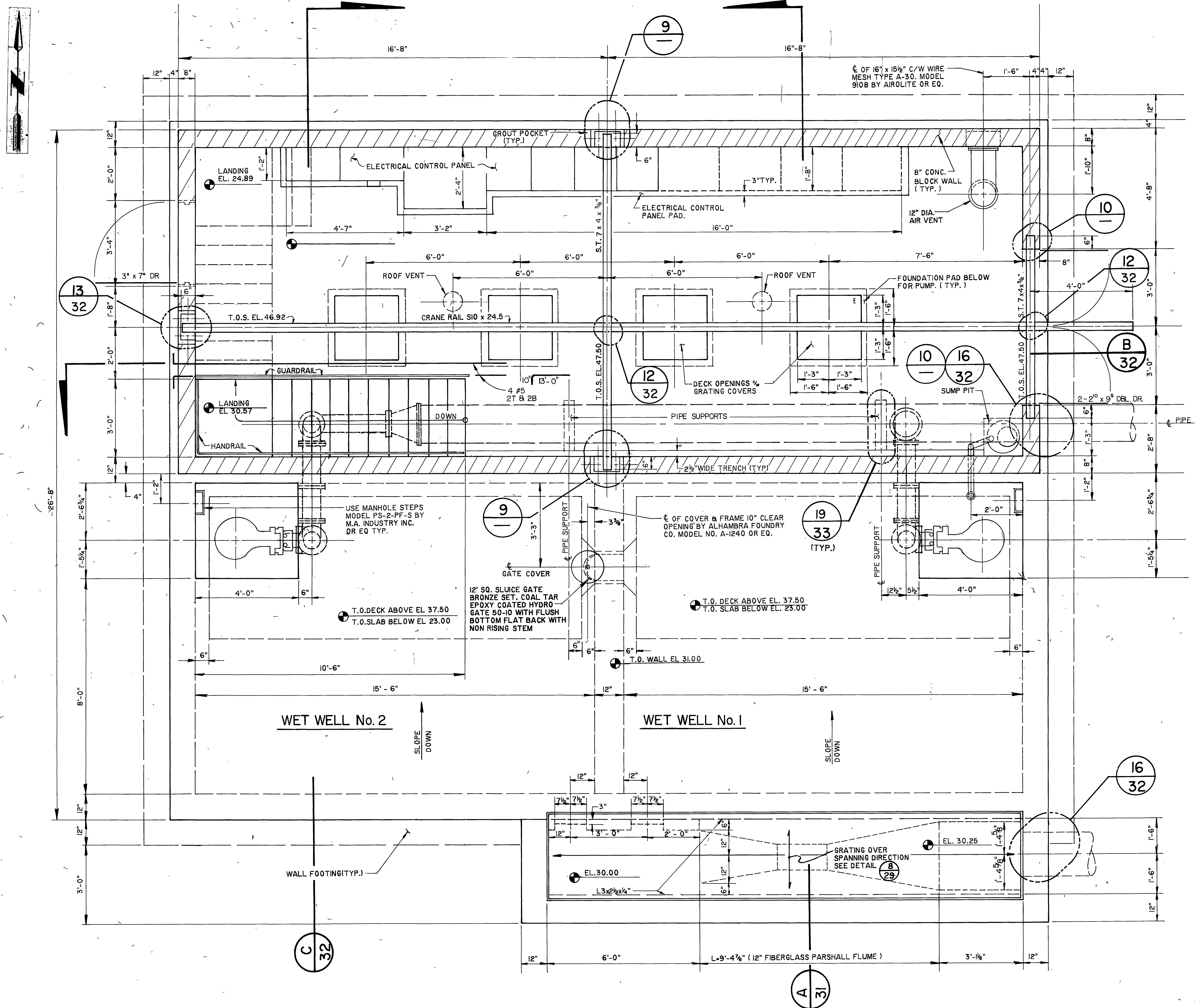
**TRUNK SEWER SEWAGE LIFT STATION**  
 STRUCTURAL DETAILS & GENERAL NOTES

PROJECT NO. S-1430B  
 SHEET 29 OF 37  
 FILE NO. 86-9202

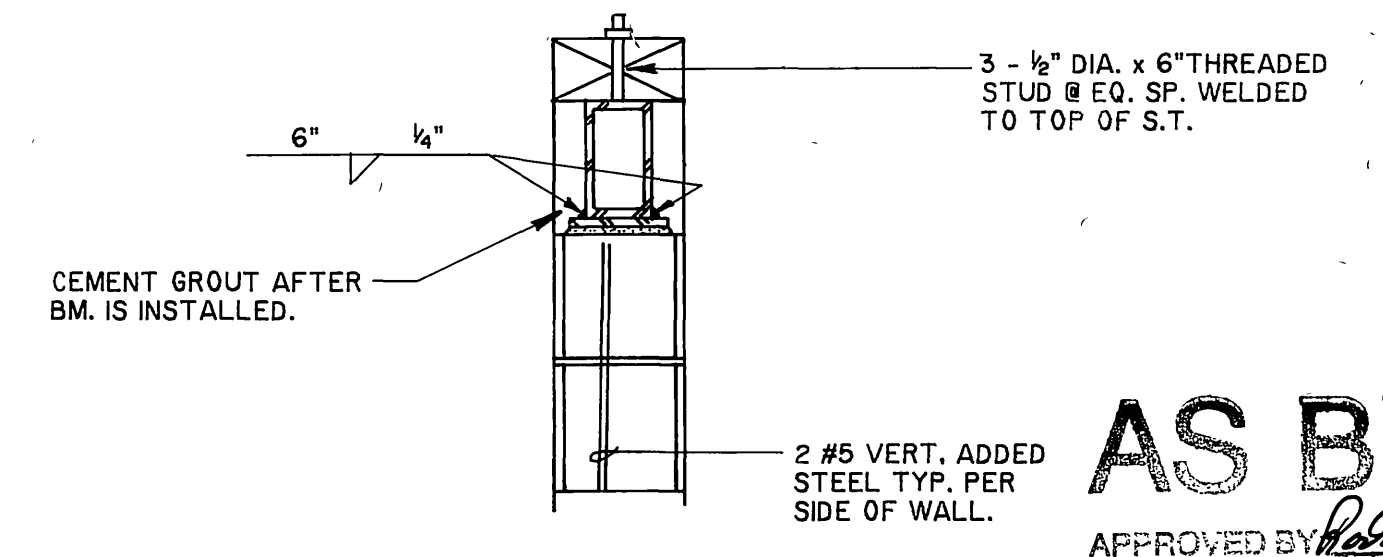
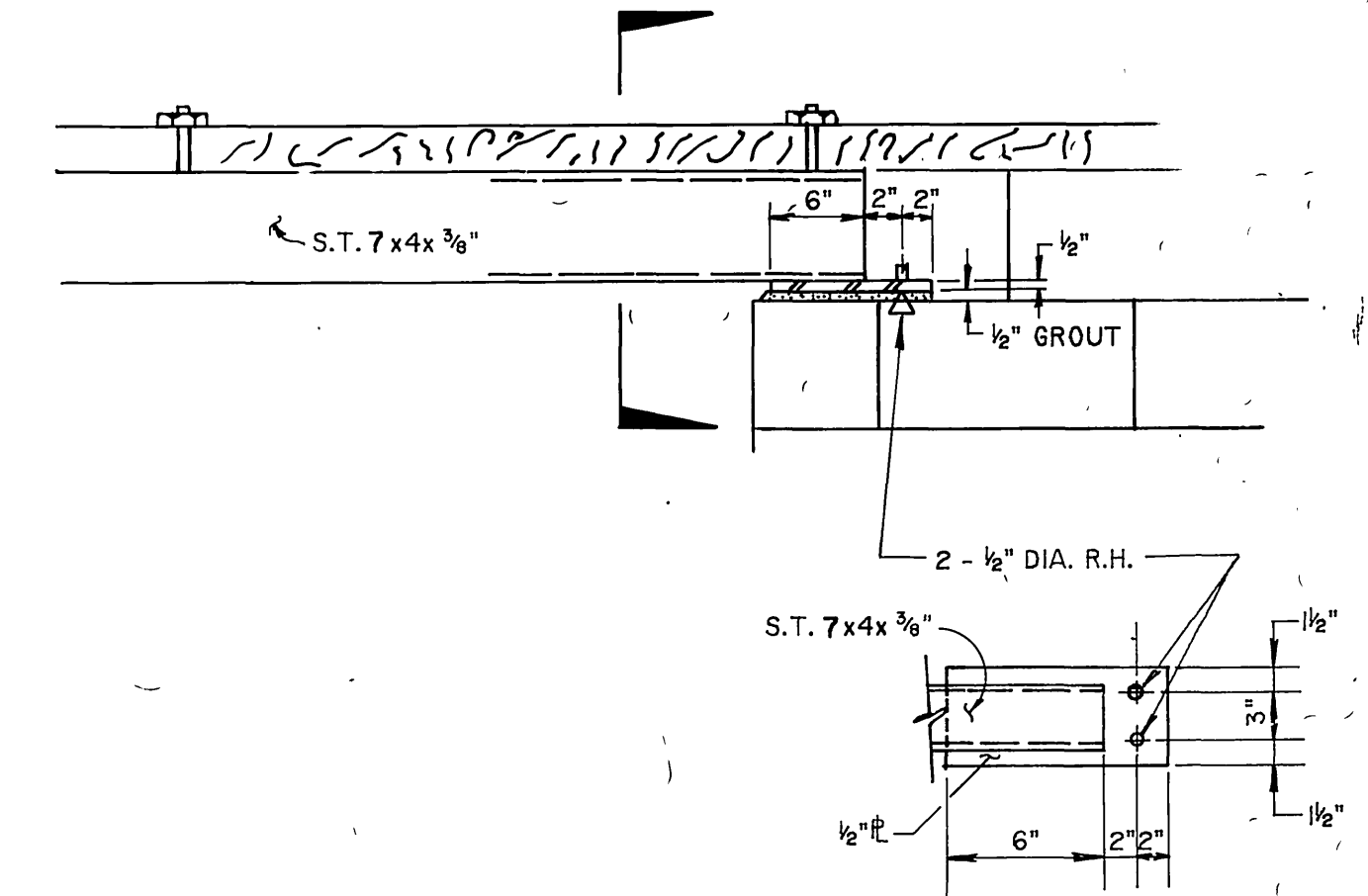
HORIZ. SCALE: 1" = 10' VERT. SCALE: 1" = 4'

INDEXED 12-15-87 441



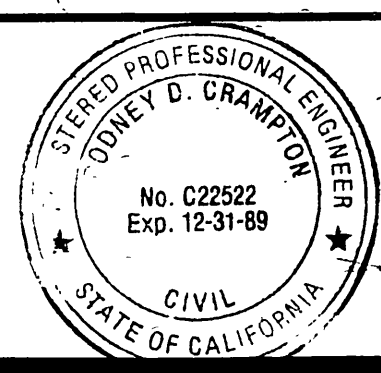


**9 CRANE RAIL SUPPORT BEAM END CONNECTION**  
N.T.S.



**10 HEADER BEAM CONNECTION**  
N.T.S.

**AS BUILT**  
APPROVED BY *Randy D. Crumpton*  
DATE: 12/15/89



PREPARED UNDER THE DIRECTION OF:  
*Randy D. Crumpton*  
REGISTERED CIVIL ENGINEER NO. C22522  
EXPIRATION DATE 12-31-89 DATE: 2-17-87

**J F DAVIDSON ASSOCIATES, INC.**  
CIVIL ENGINEERS • SURVEYORS • PLANNERS  
P.O. BOX 493 11200 SO. MT. VERNON AVE. #D 73-080 EL PASO, #103  
RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260  
(714) 686-0844 (714) 825-1082 (619) 346-5691



SCALE AS NOTED  
DATE  
BENCH MARK  
DATE: 2-9-87  
DESIGNED BY: LC DRAWN BY: JS CHECKED BY: RC

CHANGED MANSARD ROOFING  
REVISIONS  
APPR. DATE  
DATE: 2-9-87

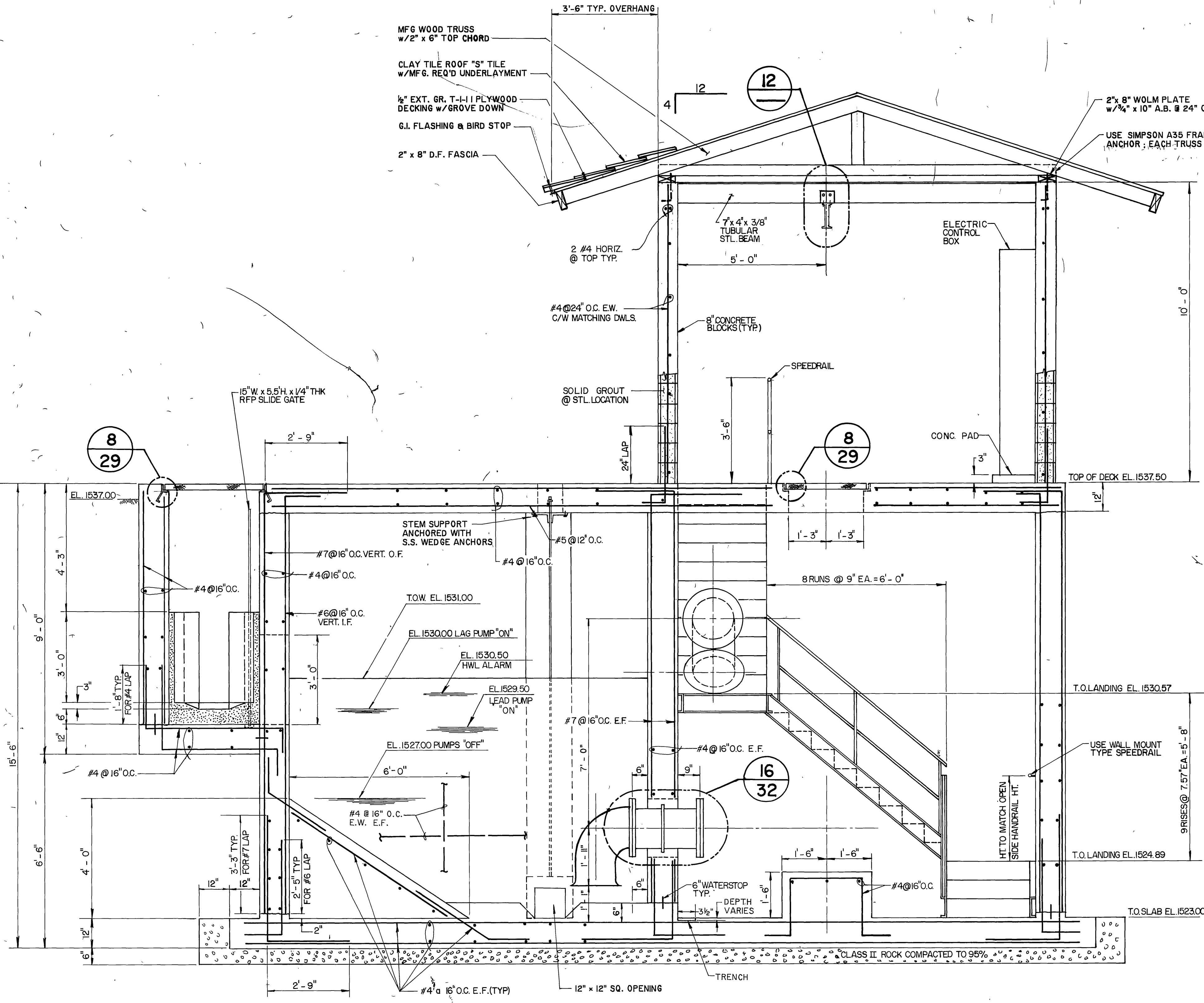
**CITY OF RIVERSIDE, CALIFORNIA**  
**DEPARTMENT OF PUBLIC WORKS**  
APPROVED BY *Randy D. Crumpton*  
PRINCIPAL ENGINEER  
DATE: 4/24/87  
TRAFFIC DIVISION  
CHIEF P. W.

**WOOD RD. SEWAGE LIFT STATION FOR**  
**ALESSANDRO BLVD. & WOOD RD**  
**TRUNK SEWER**  
**SEWAGE LIFT STATION**  
**PLAN VIEW**  
HORIZ. SCALE: 1" = ... VERT. SCALE: 1" = ...

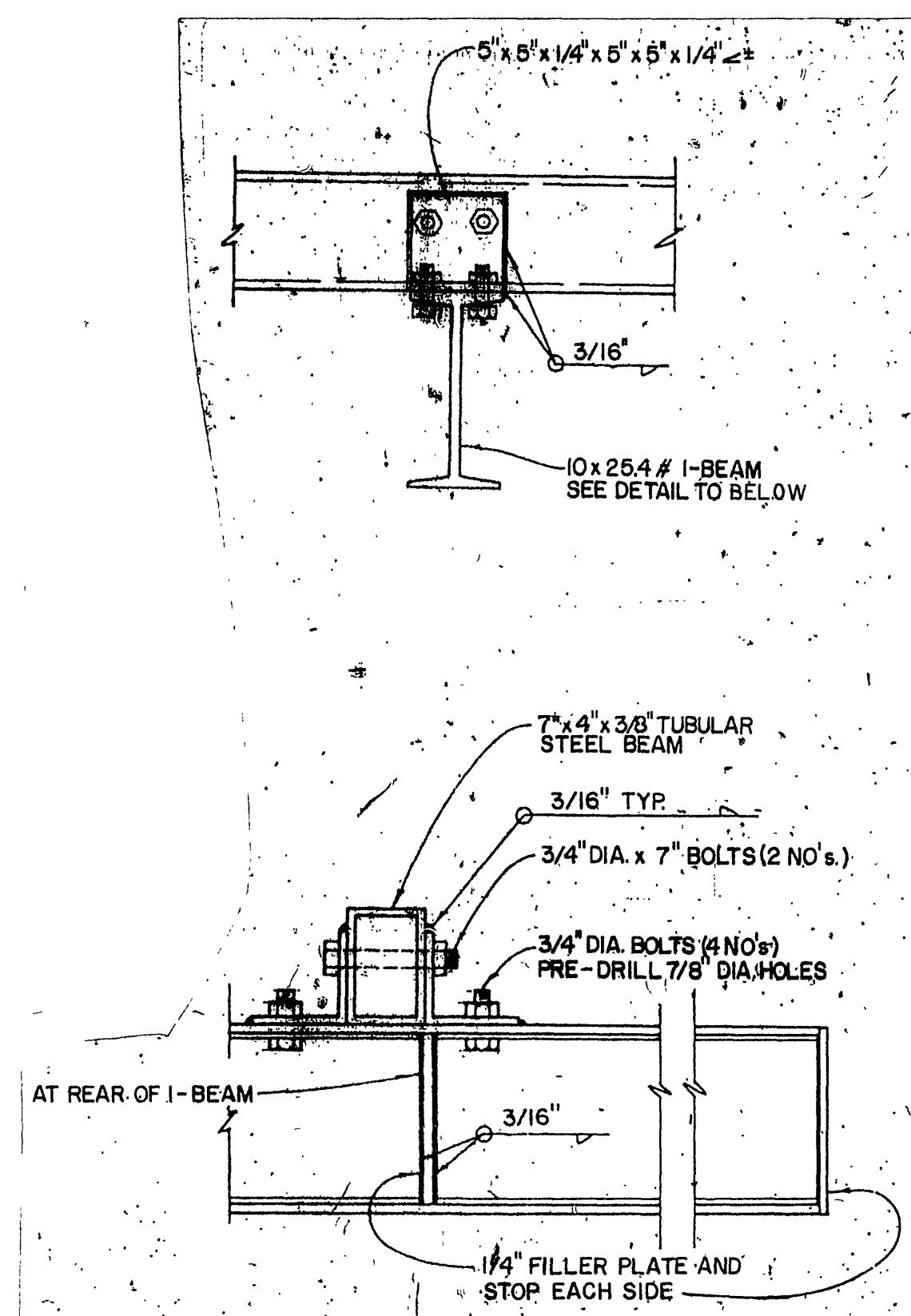
PROJECT NO.  
**S-1430B**  
SHEET **30** OF **37**  
FILE NO. 86-9202  
INDEXED 12-15-87



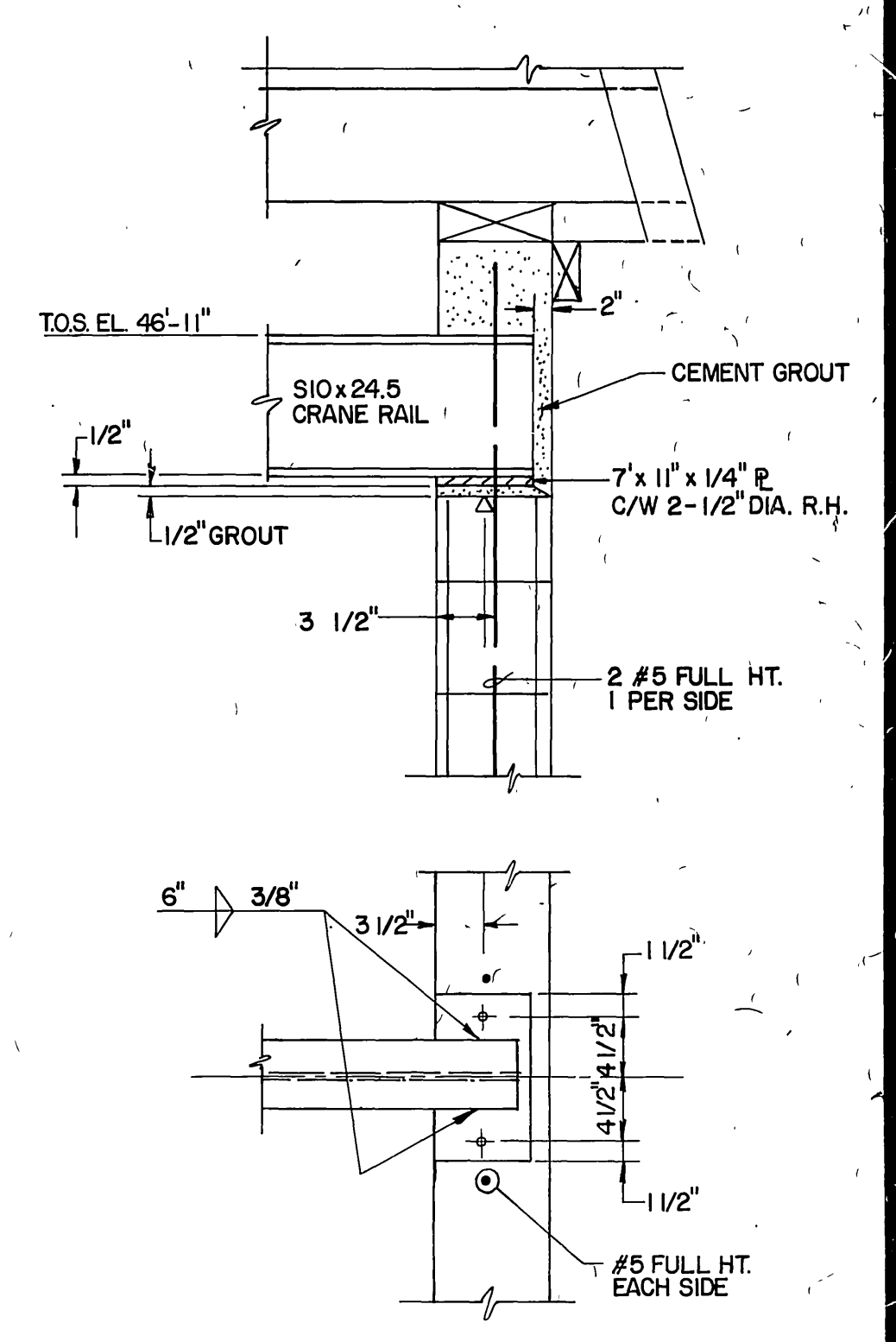
NOTE:  
 PROVIDE A PAINTED WOODEN SIGN ATTACHED  
 TO WEST SIDE OF BUILDING TO READ "CITY OF  
 RIVERSIDE \*\* WOOD ROAD LIFT STATION"



**A SECTION**  
 SCALE 1/2" = 1'-0"



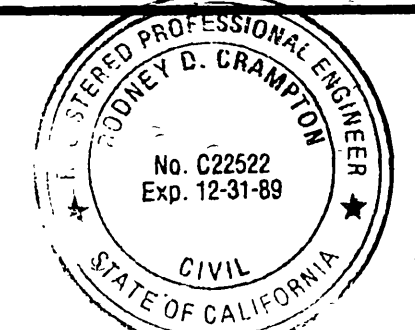
**12 TYPICAL SUPPORT BEAM DETAIL**  
 FOR TROLLEY TRACKS  
 SCALE 1" = 1'-0"



**13 CRANE RAIL WEST END CONNECTION**  
 SCALE 1" = 1'-0"

**AS BUILT**

APPROVED BY: *[Signature]*  
 DATE: 12/15/89



PREPARED UNDER THE DIRECTION OF:  
*Rodney D. Crawford*  
 REGISTERED CIVIL ENGINEER NO. C22522  
 EXPIRATION DATE 12-31-89 DATE: 2-17-87

**J F. DAVIDSON ASSOCIATES, INC.**  
 CIVIL ENGINEERS • SURVEYORS • PLANNERS  
 P.O. BOX 493 11200 SO. MT. VERNON AVE., #D 73-080 EL PASO, #103  
 RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260  
 (714) 686-0844 (714) 825-1082 (619) 346-5691

DATE: 1071 RIVERSIDE COUNTY	EL. 51700.070
DESIGN CHG. FLUSH & MARKED V. S. 12-84. ON M.E. ON VAN BUREN BLVD. FROM	
HT. OF VAN BUREN & WIDE RD. SOUTH OF VAN BUREN AT THE GRANITE	
BOULDER ON TOP OF 3' X 10' BOULDER.	
DESIGNED BY: RDC	DRAWN BY: JS
CHECKED BY:	

CITY OF RIVERSIDE, CALIFORNIA		DEPARTMENT OF PUBLIC WORKS	
APPROVED BY:	BY:	DATE:	
PRINCIPAL ENGINEER	<i>[Signature]</i>	3-2-87	
TRAFFIC DIVISION			
CHIEF P. W.			
APPR. DATE:	DATE:		
	4/24/87		

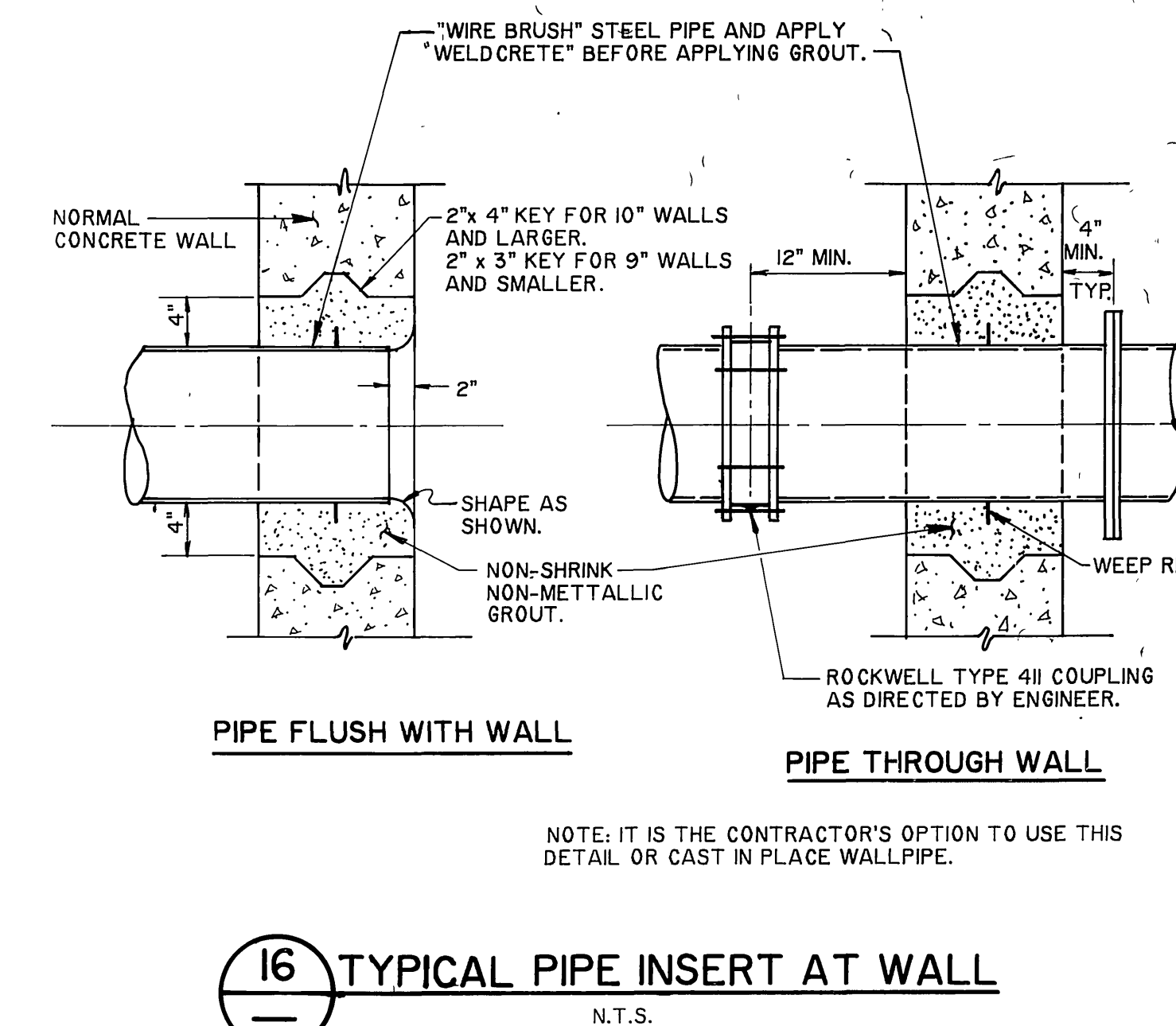
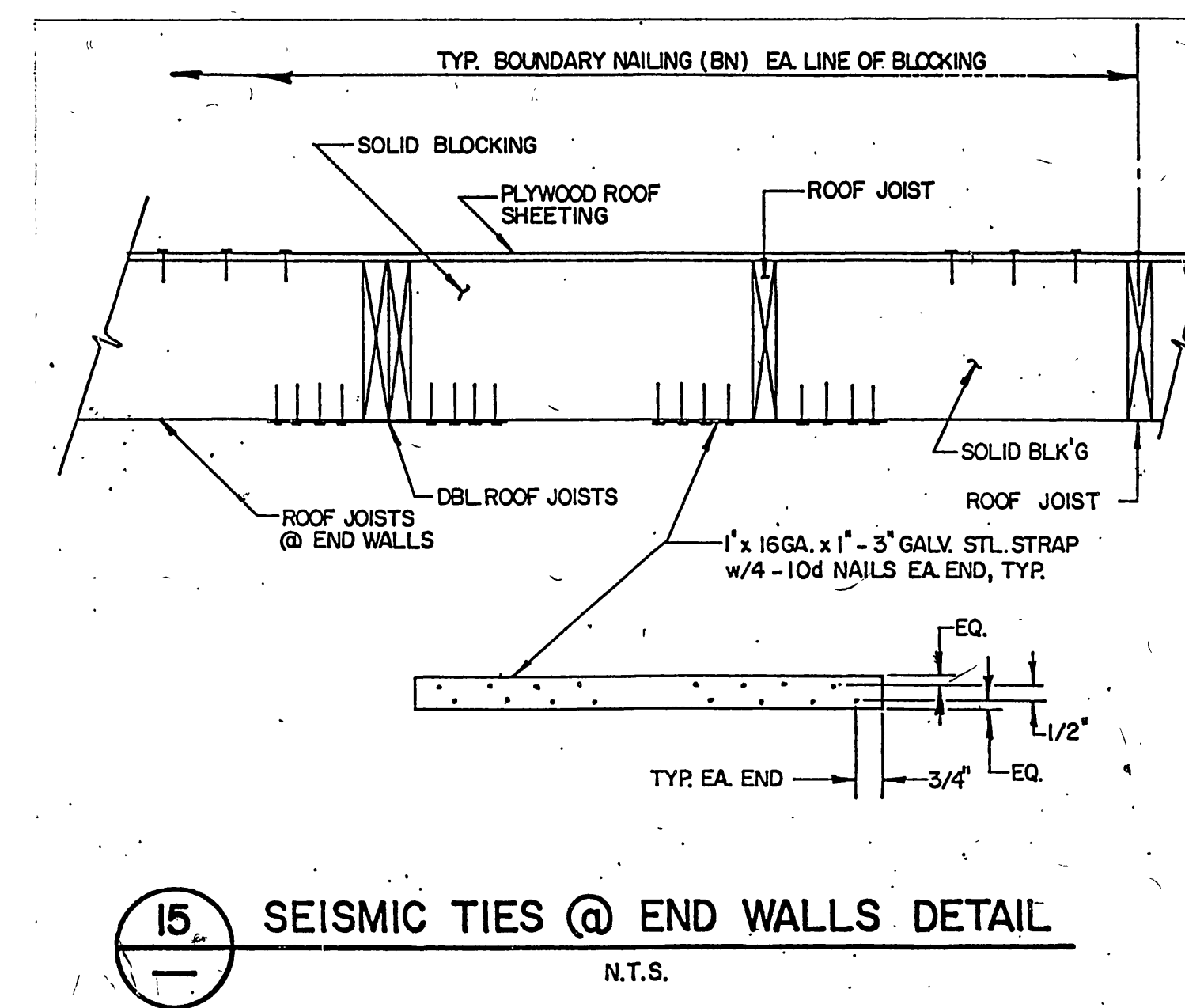
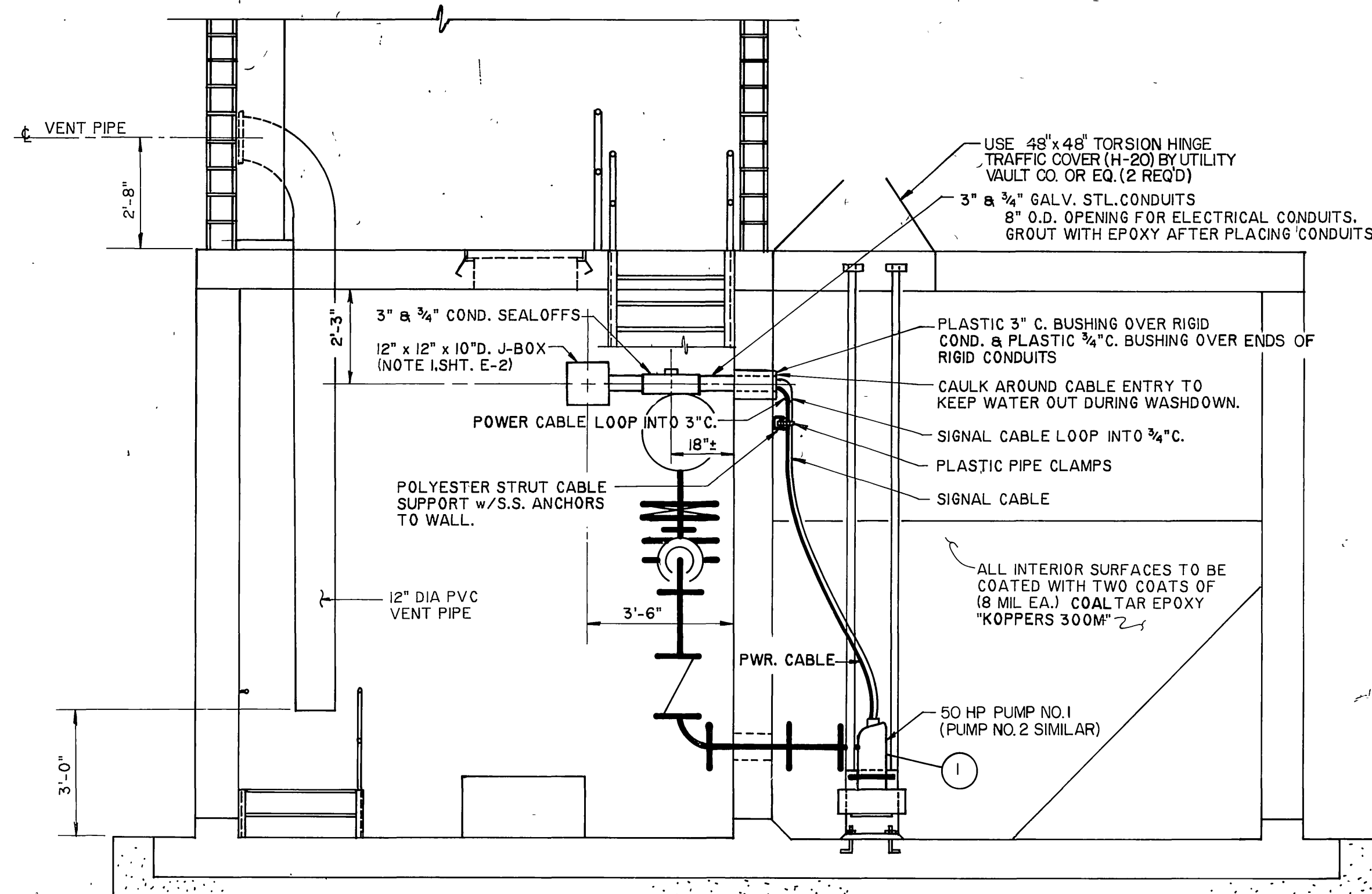
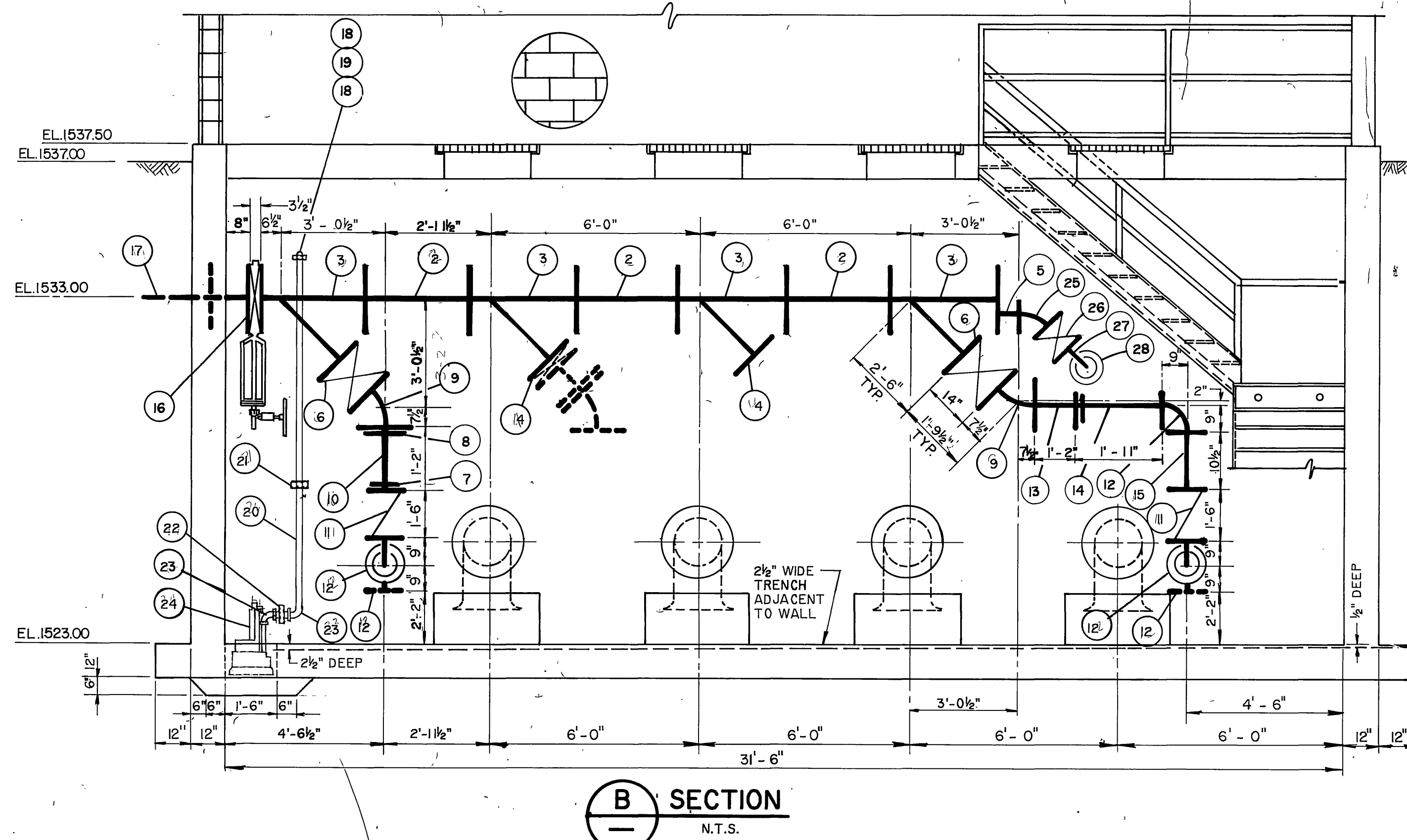
WOOD RD. SEWAGE LIFT STATION FOR  
 ALESSANDRO BLVD. & WOOD RD.  
**TRUNK SEWER**  
 SEWAGE LIFT STATION  
 SECTIONAL VIEW

PROJECT NO.  
**S-1430B**  
 SHEET 31 OF 37  
 FILE NO. 86-9202



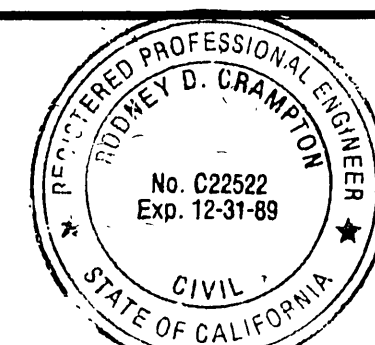
EQUIPMENT LIST

ITEM No.	DESCRIPTION	QTY.
1	SUBMERSIBLE PUMP AND MOTOR WITH S.S. SLIDE RAIL SYSTEM. WEMCO 4x15" 800 GPM @ TDH = 105', 50 HP, 440 VOLT, 3Ø MOTOR.	2
2	16" DIA. D.I.P. FLANGED x FLANGED NIPPLE x 2'-11 1/2" LONG.	3
3	16"x16"x12" D.I. FLANGED WYE.	4
4	12" DIA. 125# D. I. BLIND FLANGE.	2
5	16" x 6" D. I. FL. 6" D NIPPLE REDUCER	1
6	12" DIA. FL. 6" D PLUG VALVE ROTARY GEAR ACTUATOR "DEZURIK" FIG 118-F-6 RS17, AG66H2 KEYSITE 740 (3 COATS 10 TO 12 MIN. HOLIDAY TEST)	2
7	8" DIA. VICTAULIC FLANGE (STYLE 341)	2
8	12" DIA. VICTAULIC FLANGE (STYLE 341)	1
9	12" DIA. D.I. 45° ELL.	2
10	12"x8" DIA. D. I. VIC. x VIC. CONCENTRIC REDUCER (VIC. NO. 50-C)	1
11	8" DIA. OIL CUSHION SWING CHECK VALVES "APCO SERIES 6000"	2
12	8" DIA. D.I. 90° ELL.	5
13	12"x8" DIA. D.I. ECCENTRIC REDUCER.	1
14	8" DIA. D.I.P. FLANGED x VICTAULIC GROOVE x 1'-1" LONG.	1
15	8" DIA. D.I.P. FLANGED x FLANGED NIPPLE x 10 1/2" LONG.	1
16	16" DIA. KNIFE GATE VALVE RESILIENT SET WITH BEVEL GEAR OPERATOR "DEZURIK FIG 801 RS16"	1
17	16" DIA. D.I. WALL FLANGED x PLAIN END x 3'-0" LONG.	1
18	2" DIA. BRASS 90° ELL.	2
19	2" DIA. BRASS THREADED NIPPLE SCH. 80 x 2'-0" LONG.	1
20	2" DIA. PVC PIPE SCH. 80 x LENGTH AS REQUIRED.	1
21	2"x1/2" S.S. STRAP WALL FASTENER AND 1/4" DIA. S.S. WEDGE ANCHORS.	2
22	2" DIA. PVC UNION SCH. 80.	1
23	2" DIA. PVC 90° ELL.	2
24	SUMP PUMP 40 GPM @ TDH=20" "MYERS WHR5", V&HP, 110 VOLT, 1Ø MOTOR, WITH FLCA CONTROL.	1
25	6" DIA. D. I. 45° ELL.	1
26	6" DIA. FL. 6" D PLUG VALVE ROTARY GEAR ACTUATOR "DEZURIK" FIG 118, F.6.RS16, AG66H2 KEYSITE 740 (3 COATS 10 TO 12 MIN. HOLIDAY TEST)	1
27	6" DIA. D. I. 90° ELL.	1
28	6" DIA. D. I. WALL FLANGED x PLAIN END 24" LONG.	1



AS BUILT

APPROVED BY: *Robyn D. Clanton*  
DATE: 12/15/89



PREPARED UNDER THE DIRECTION OF:  
*Robyn D. Clanton*  
REGISTERED CIVIL ENGINEER NO. C22522  
EXPIRATION DATE 12-31-89 DATE: 2-17-87

J F DAVIDSON ASSOCIATES, INC.  
CIVIL ENGINEERS • SURVEYORS • PLANNERS  
P.O. BOX 493 11200 SO. MT. VERNON AVE. #D 73-080 EL PASO, #103  
RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260  
(714) 686-0844 (714) 825-1082 (619) 346-5691



SCALE AS NOTED BENCH MARK: DATE: 12-15-89  
DESIGNED BY: J.F.D. DRAWN BY: J.S. CHECKED BY: R.C. DATE: 12/15/89

MARK REVISIONS APPR. DATE  
DESIGNED BY: J.F.D. DRAWN BY: J.S. CHECKED BY: R.C. DATE: 12/15/89

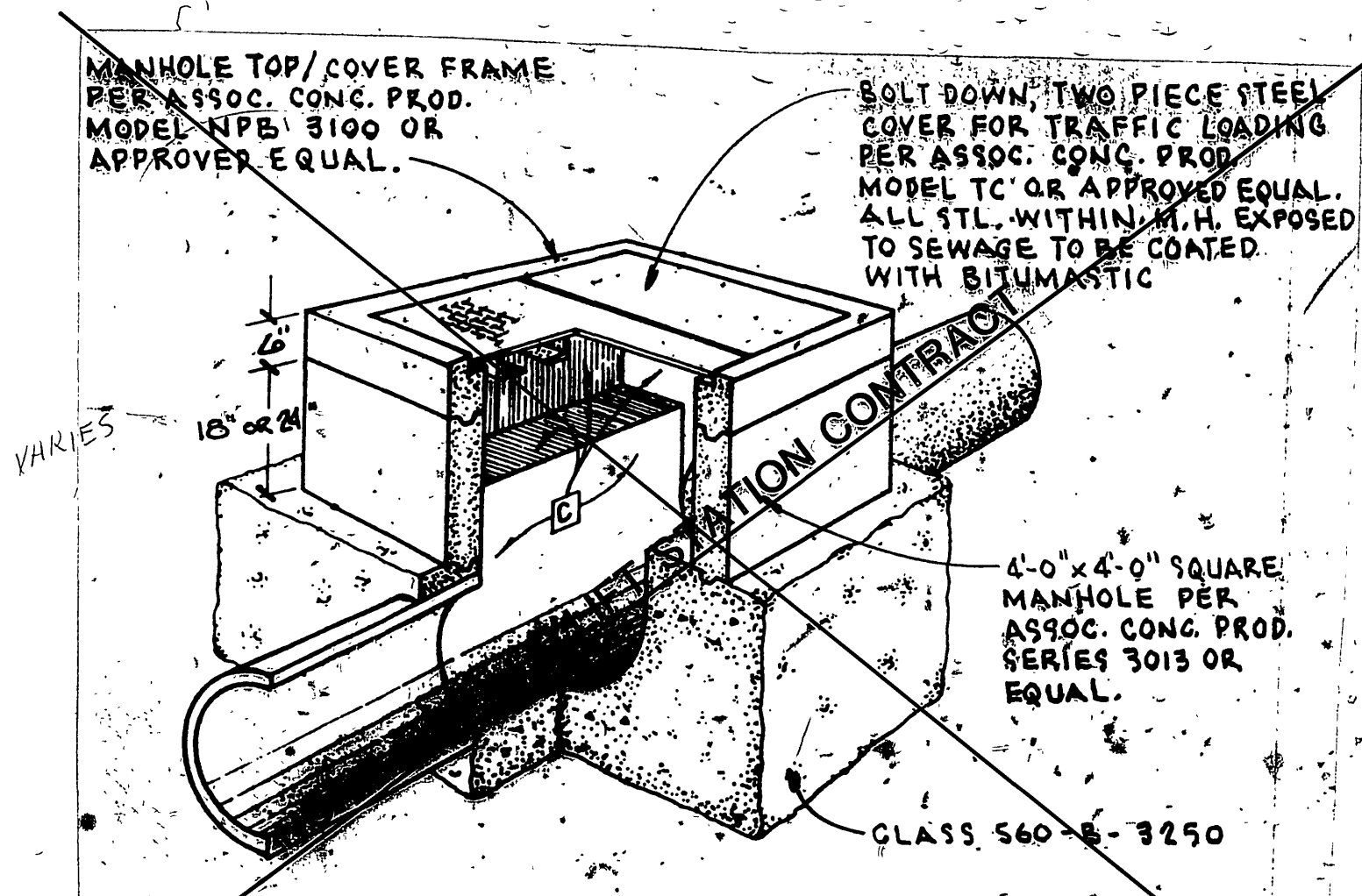
CITY OF RIVERSIDE, CALIFORNIA  
DEPARTMENT OF PUBLIC WORKS  
APPROVED BY: *William S. Davidson*  
PRINCIPAL ENGINEER DATE: 4/24/87  
TRAFFIC DIVISION  
CHIEF P. W.

WOOD RD. SEWAGE LIFT STATION FOR  
ALESSANDRO BLVD. & WOOD RD.  
TRUNK SEWER  
SEWAGE LIFT STATION  
PUMP & PIPING DETAILS

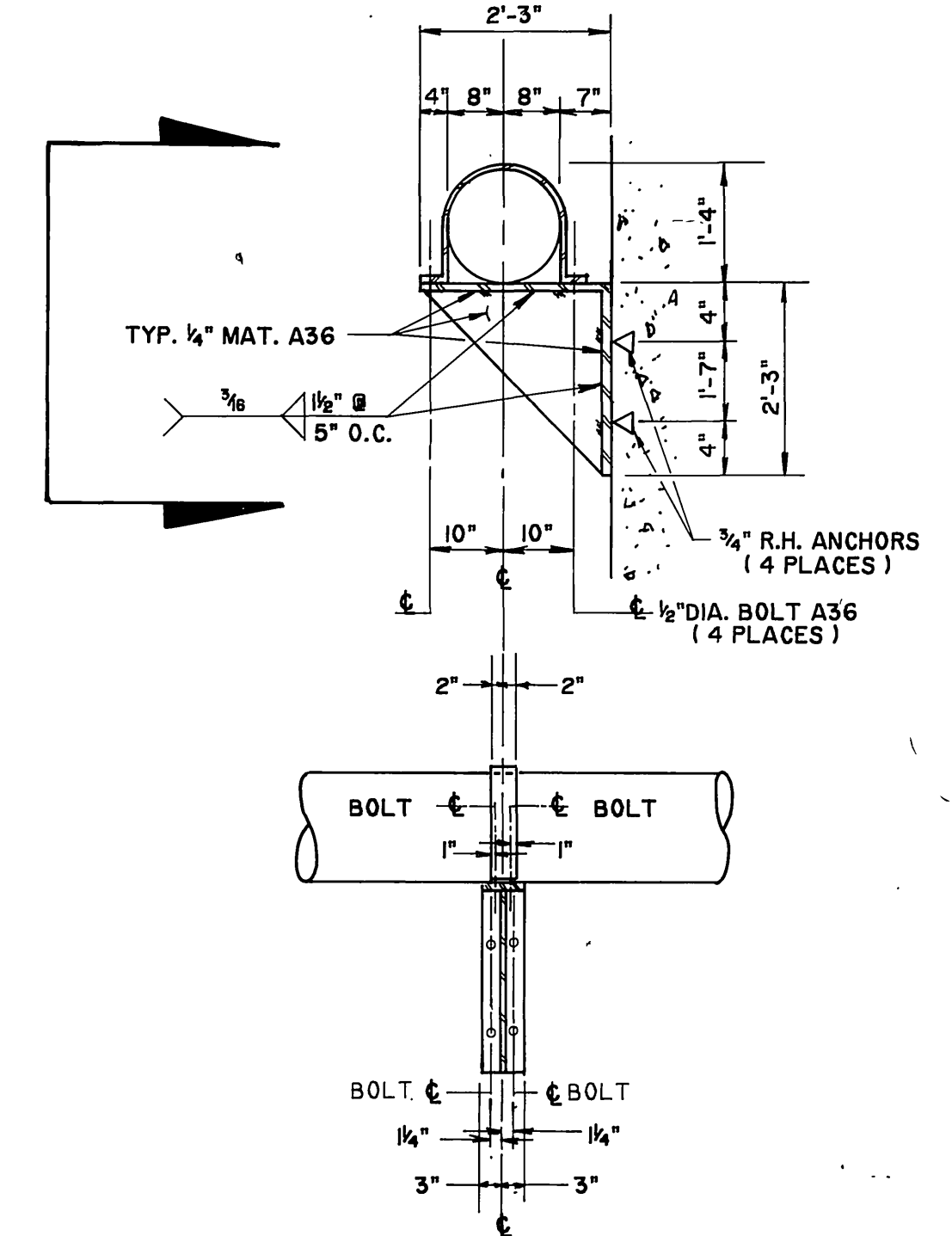
PROJECT NO.  
S-1430B  
SHEET 32 OF 37  
FILE NO. 86-9808

INDEXED 12-15-87 lht

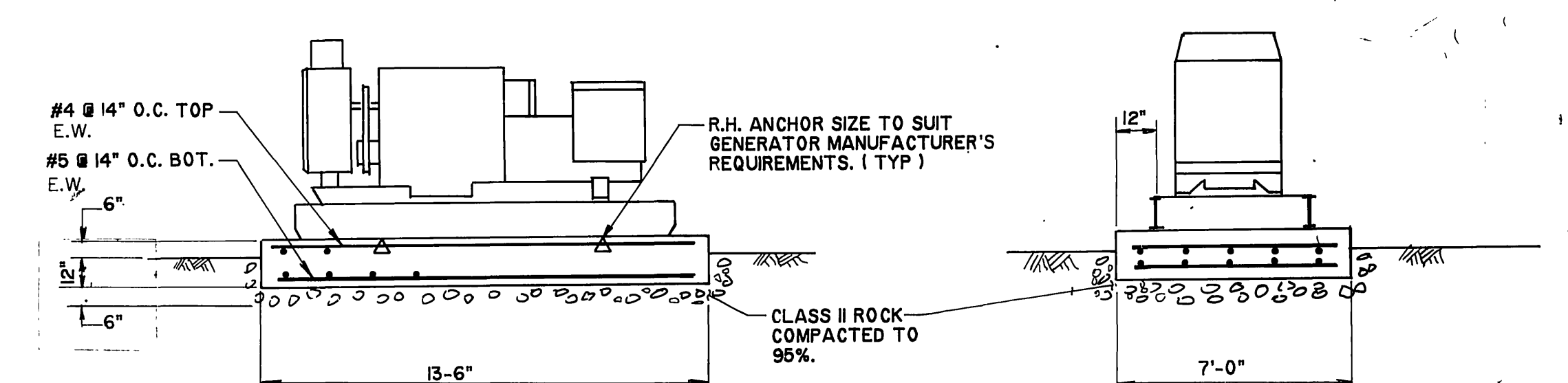




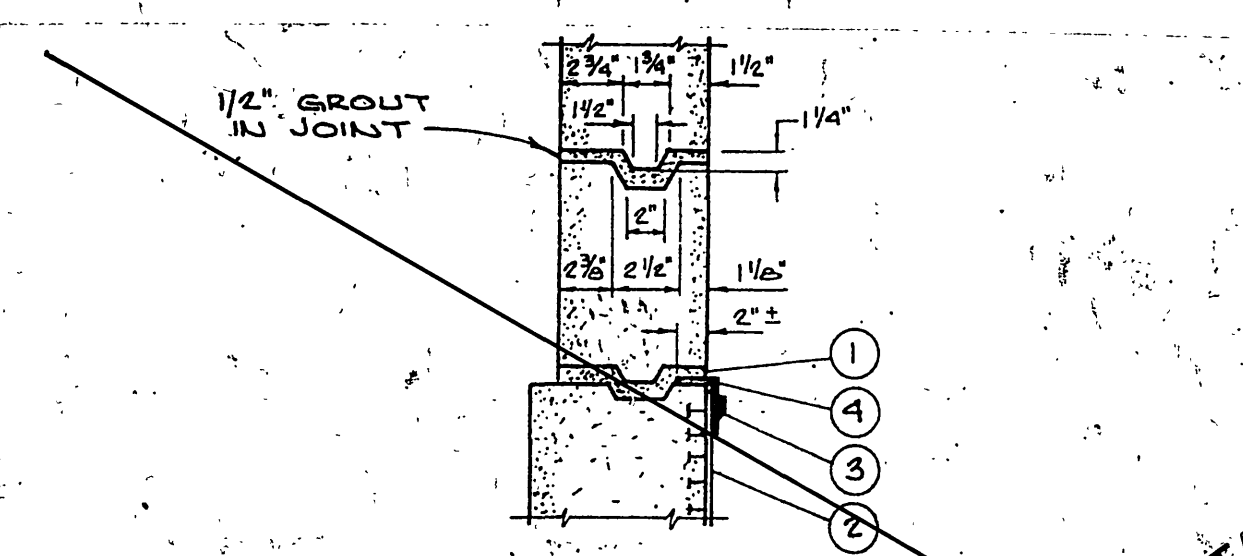
17 SHALLOW MANHOLE DETAIL



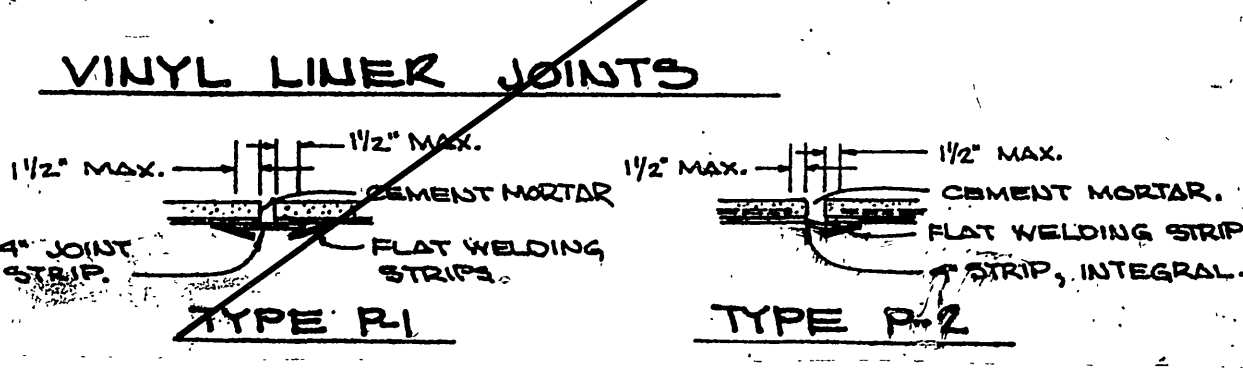
19 PIPE SUPPORT DETAIL  
(2 REQ'D)  
SCALE 1/2" = 1'-0"



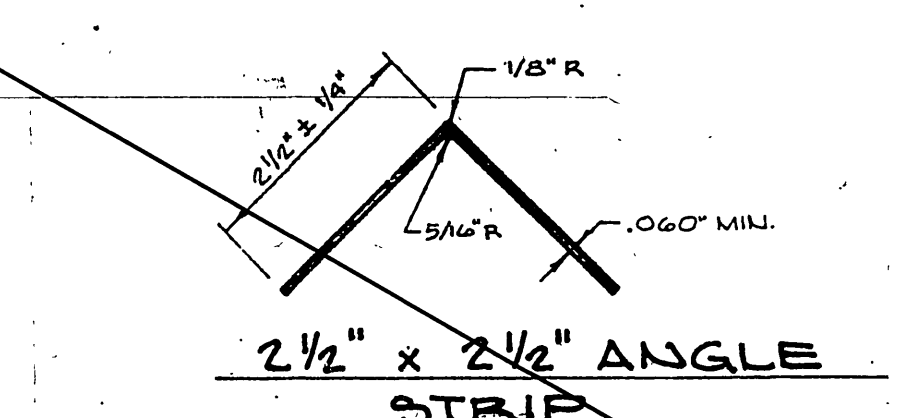
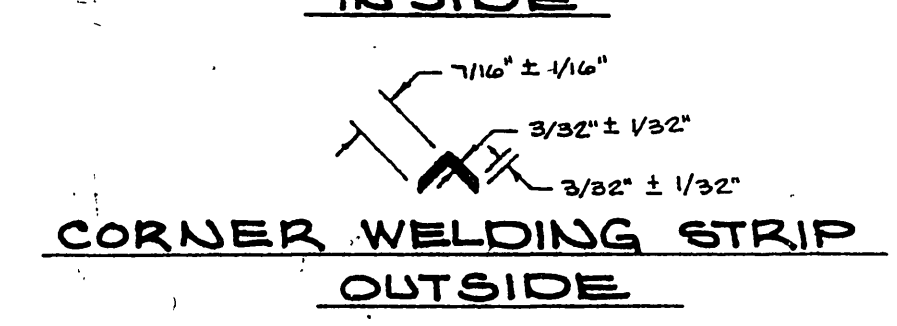
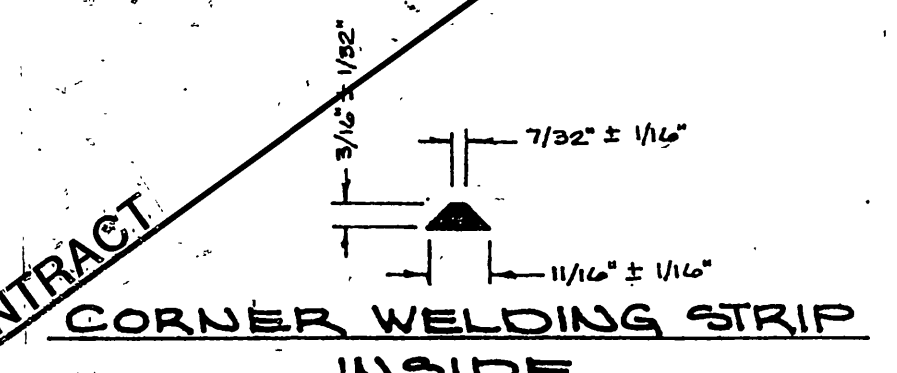
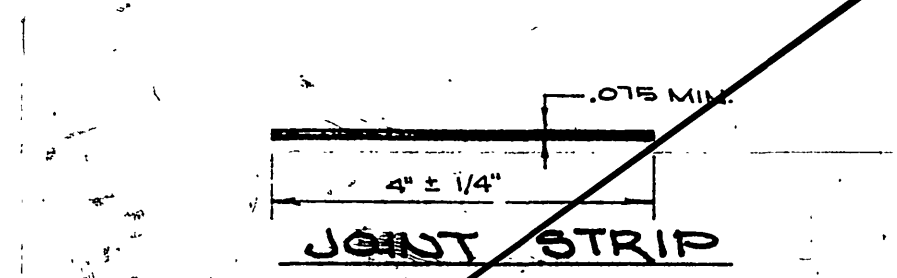
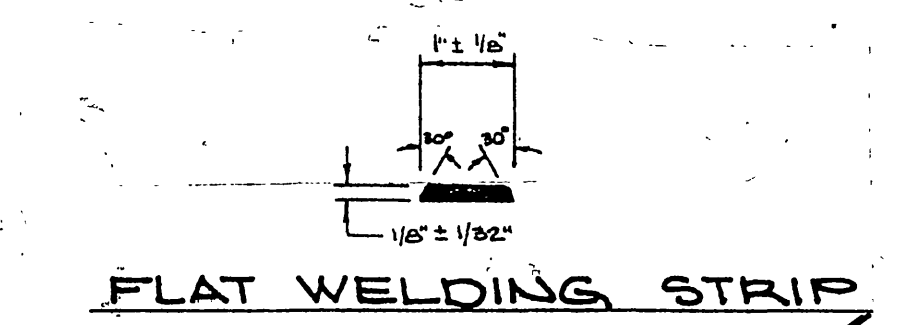
20 GENERATOR FOUNDATION DETAIL  
SCALE 1/4" = 1'-0"



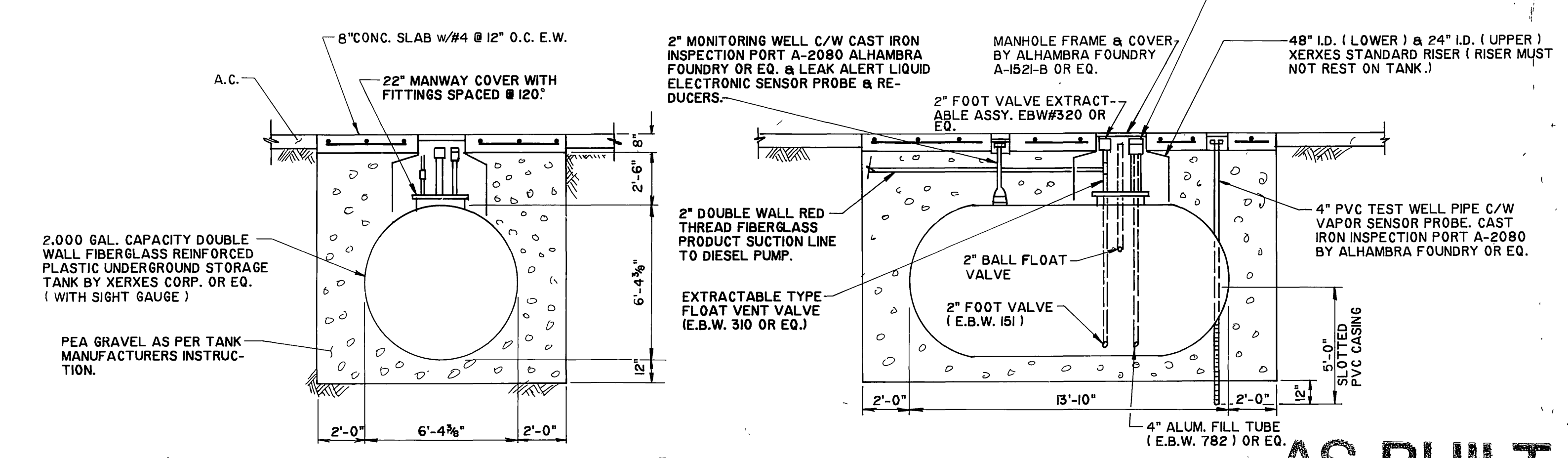
- PVC LINER INSTALLATION NOTES**
- 1 SET MANHOLE SHAFT AND GRADE BINGS IN CEMENT GROUT ON TOP OF PVC LINER.
  - 2 T-LOCK PVC LINER INSTALLED IN PLACE BY PIPE FABRICATOR.
  - 3 1-INCH WELD STRIP.
  - 4 2 1/2" x 2 1/2" ANGLE STRIP.



18 DETAILS FOR VINYL LINING

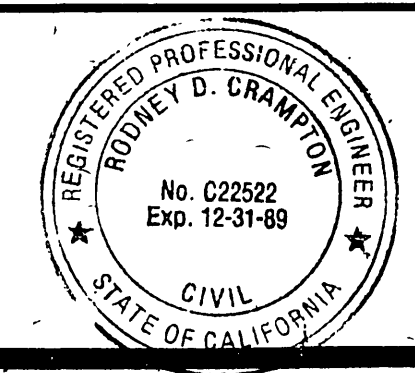


STANDARD INSTALLATION ACCESSORY STRIPS



21 2,000 GAL. FUEL TANK DETAIL  
SCALE 1/4" = 1'-0"

**AS BUILT**  
APPROVED BY: *[Signature]*  
DATE: 12/15/89



PREPARED UNDER THE DIRECTION OF:  
*Robyn D. Crampin*  
REGISTERED CIVIL ENGINEER NO. C22522  
EXPIRATION DATE 12-31-89 DATE 2-17-87

**J F DAVIDSON ASSOCIATES, INC.**  
CIVIL ENGINEERS • SURVEYORS • PLANNERS  
P.O. BOX 493 11200 SO. MT. VERNON AVE., #D 73-080 EL PASO, #103  
RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260  
(714) 686-0844 (714) 825-1082 (619) 346-5691

MARK	REVISIONS	APPR.	DATE

**CITY OF RIVERSIDE, CALIFORNIA**  
**DEPARTMENT OF PUBLIC WORKS**  
APPROVED BY: *[Signature]*  
PRINCIPAL ENGINEER  
PARK DEPARTMENT  
TRAFFIC DIVISION  
CHIEF P. W.  
DATE 4/24/87

**WOOD RD. SEWAGE LIFT STATION FOR**  
**ALESSANDRO BLVD. & WOOD RD.**  
**TRUNK SEWER**  
**SEWAGE LIFT STATION**  
**GENERATOR & FUEL TANK DETAILS**

PROJECT NO. **S-1430B**  
SHEET **33** OF **37**  
FILE NO. 86-9202

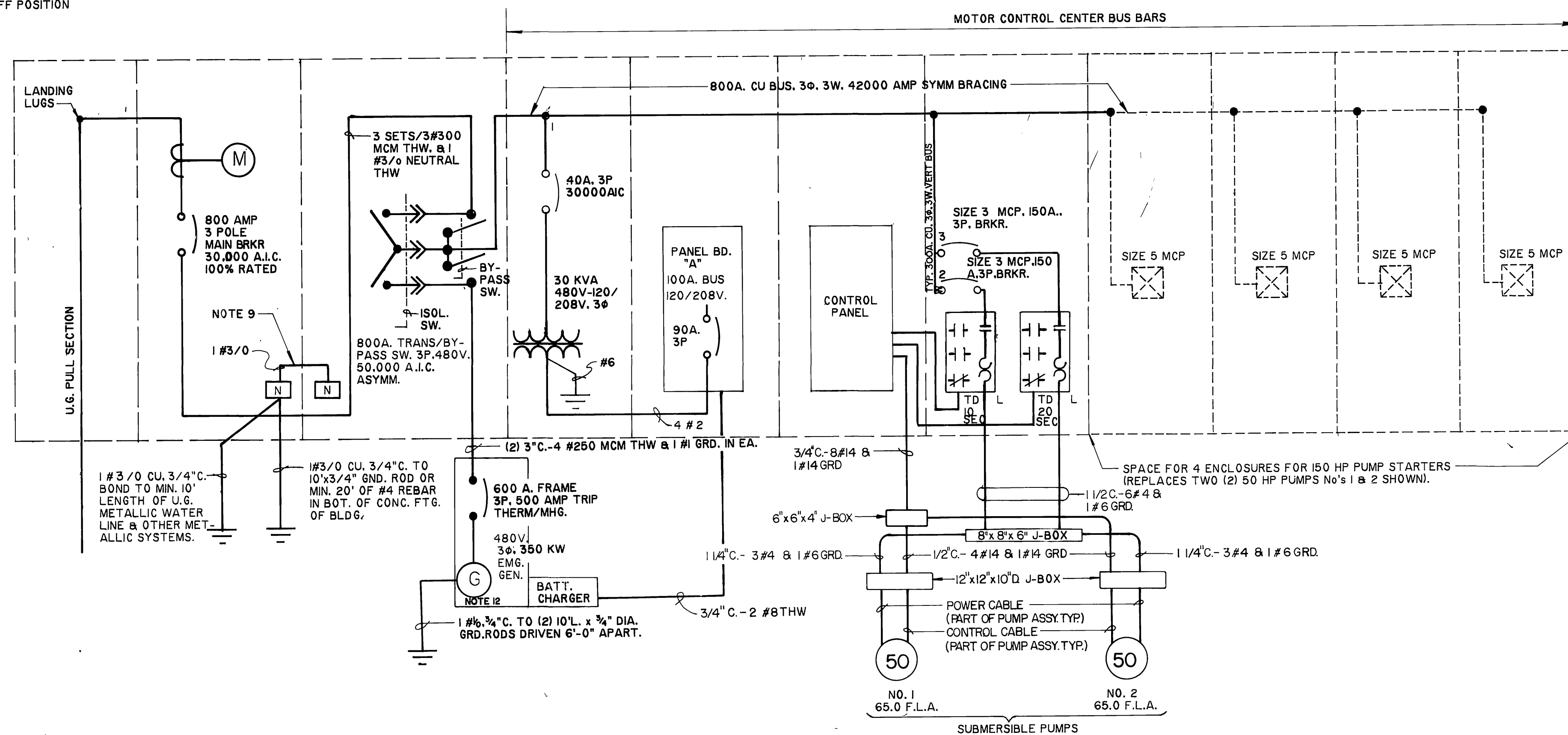


ABBREVIATIONS:-

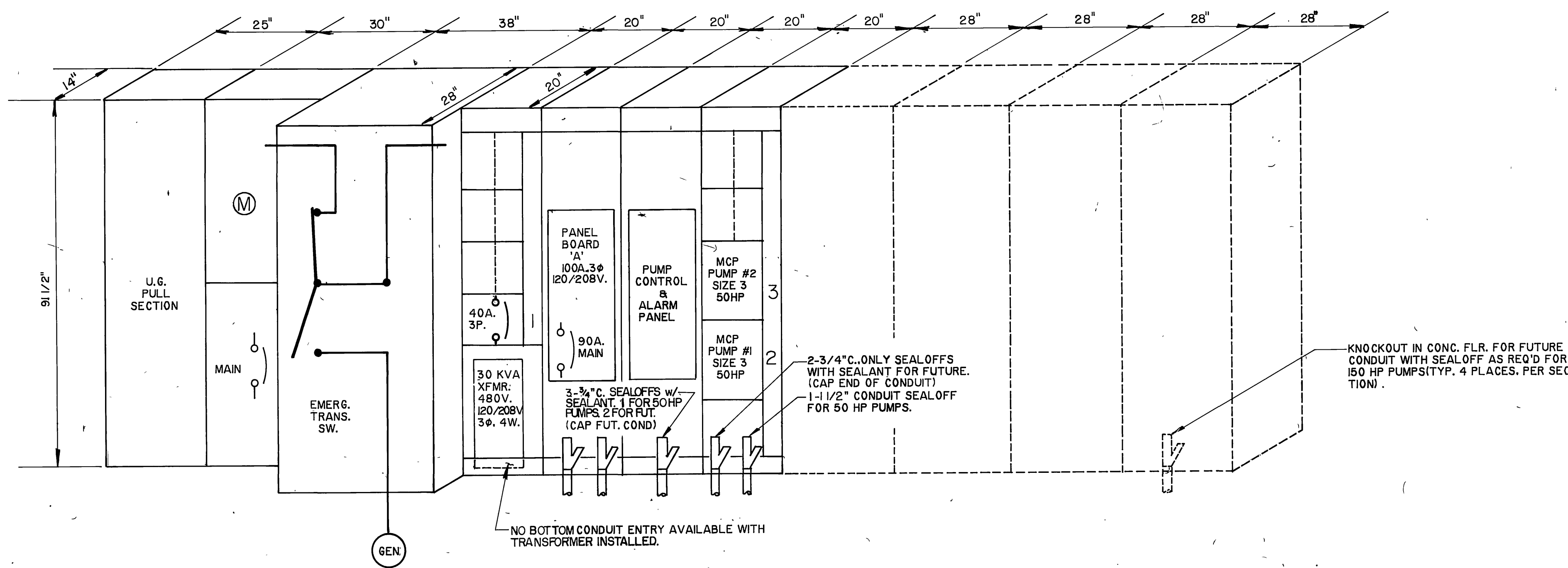
3P	THREE POLE	FLA	FULL LOAD AMPS
CU	COPPER	XFMR	TRANSFORMER
THW	MOISTURE & HEAT RESISTANT THERMOPLASTIC WIRE INSULATION, 75° C. RISE	1/4" C.	1/4" INSIDE DIA. CONDUIT
THHN	HEAT RESISTANT THERMOPLASTIC WIRE, 90° C. RISE	ETM	ELAPSED TIME METER
P.B.	PULL BOX	MCC	MOTOR CONTROL CENTER
L	DISCONNECT SWITCH IS LOCKABLE IN THE OFF POSITION	TD	TIME DELAY RELAY ADJUSTABLE 0-120 SECONDS SET AT 10 SECONDS
		SW	SWITCH

NOTES:

- ELECTRIC POWER UTILITY LATERAL AND SERVICE ENTRANCE CONDUIT LOCATIONS, SIZES AND PLANTING INCLUDING CONDUCTORS AND TRANSFORMER SIZES ARE NOT AVAILABLE AT THE TIME OF THIS PRINTING. THE CONTRACTOR SHALL OBTAIN CONSTRUCTION INFORMATION AND POWER UTILITY LOCATIONS AND REQUIREMENTS AND CHARGES PRIOR TO BID. CONTRACTOR TO INSTALL SERVICE IN COMPLIANCE WITH THE SERVING UTILITY AND OWNER'S REPRESENTATIVE AND PAY ALL UTILITY CHARGES EXCEPT FIRST PERIOD BILLING DEPOSIT.
- ALL CIRCUIT BREAKERS IN MCC SECTIONS SHALL BE PLUG-IN TYPE OR DRAW-OUT TYPE. ALL CIRCUIT BREAKERS IN PANELBOARD "A" SHALL BE PLUG-IN OR BOLT-ON TYPE.
- ALL CIRCUIT BREAKERS IN MCC SECTIONS SHALL HAVE SYMMETRICAL INTERRUPTING CAPACITIES NOT LESS THAN 30,000 AMPERES OR OTHERWISE EXCEED THE UTILITY COMPANY'S AVAILABLE SHORT CIRCUIT CURRENT.
- ALL CIRCUIT BREAKERS IN PANELBOARD "A" SHALL HAVE SYMMETRICAL INTERRUPTING CAPACITIES NOT LESS THAN 30,000 AMPERES.
- SWITCHGEAR MANUFACTURER SHALL SUBMIT A COORDINATION STUDY STATING SETTING ON ALL BREAKERS AND SPECIFYING THE TIME VS. CURRENT REQUIREMENT OF THE PROTECTION. PROVIDE TIME VS. CURRENT CURVES FOR ALL CIRCUIT BREAKERS AND FUSES.
- ALL CONDUCTORS ARE COPPER WITH THW INSULATION RUN IN RIGID GALVANIZED STEEL CONDUIT UNLESS SHOWN OTHERWISE.
- ALL ELECTRICAL EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 1984 EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL STATE AND LOCAL REGULATIONS.
- CONTRACTOR AGREES THAT HE 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. THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- TRANSFER SWITCH SHALL HAVE OVERLAPPING NEUTRAL TRANSFER CONTACTS.
- PUMP MOTOR OVERLOAD DEVICES SHALL BE SIZED AT A MAXIMUM OF 125% OF THE MOTOR (WITH 1.15 SERVICE FACTOR) NAMEPLATE FULL-LOAD CURRENT. IF THE OVERLOAD DEVICE SELECTED WILL NOT ALLOW THE MOTOR TO START OR CARRY THE LOAD, THEN THE NEXT HIGHER RATED OVERLOAD DEVICE IS PERMITTED TO BE INSTALLED PROVIDED ITS RATING DOES NOT EXCEED 140% OF THE MOTOR FULL-LOAD CURRENT.
- MOTOR CONTROL CIRCUITS SHALL BE SO ARRANGED THAT THEY WILL BE DISCONNECTED FROM ALL SOURCES OF SUPPLY WHEN THE MOTOR DISCONNECTING MEANS IS IN THE OPEN POSITION. SEE NEC 430-74.
- VERIFY EMERGENCY GENERATOR SIZING, CONDUIT, CONDUCTORS AND PROTECTION WITH GENERATOR SUPPLIER DETAILS FOR GENERATOR SHOWN ON THIS PLAN IS FOR OPERATING TWO 50 HP PUMPS & PANEL BOARD "A" CIRCUITS DURING COMMERCIAL POWER FAILURE.
- LABELS ON SWITCHGEAR EQUIPMENT SHALL BE BLACK PLASTIC 2 1/2" W. x 3/4" H. WITH WHITE ETCHED LETTERS. SCREW MOUNTED.



SINGLE LINE DIAGRAM



ELEVATION VIEW - ELECTRICAL SERVICE & DISTRIBUTION

DIMENSIONS SHOWN ARE TYPICAL AND ARE NOT MANDATORY



PREPARED UNDER THE DIRECTION OF:  
*Irving Hella*  
REGISTERED ENGINEER NO. E8222  
EXPIRATION DATE 9-30-90 DATE: 2-17-87

J F DAVIDSON ASSOCIATES, INC.  
CIVIL ENGINEERS • SURVEYORS • PLANNERS  
P.O. BOX 493 11200 SO. MT. VERNON AVE. #D 73-080 EL PASO, #103  
RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260  
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CITY OF RIVERSIDE, CALIFORNIA  
DEPARTMENT OF PUBLIC WORKS

WOOD RD. SEWAGE LIFT STATION FOR  
ALESSANDRO BLVD. & WOOD RD.  
TRUNK SEWER  
ELECTRICAL SERVICE 8-SW. BD.  
SINGLE LINE DIAG. & ELEV. VIEW

PROJECT NO.  
**S - 1430B**  
SHEET **E-1** OF **37**

SCALE AS NOTED

BENCH MARK: 1987 NATIONAL GEODESIC SURVEY  
MARK: 1987 NATIONAL GEODESIC SURVEY

DESIGNED BY: E.H. DRAWN BY: J.S. CHECKED BY: R.G.

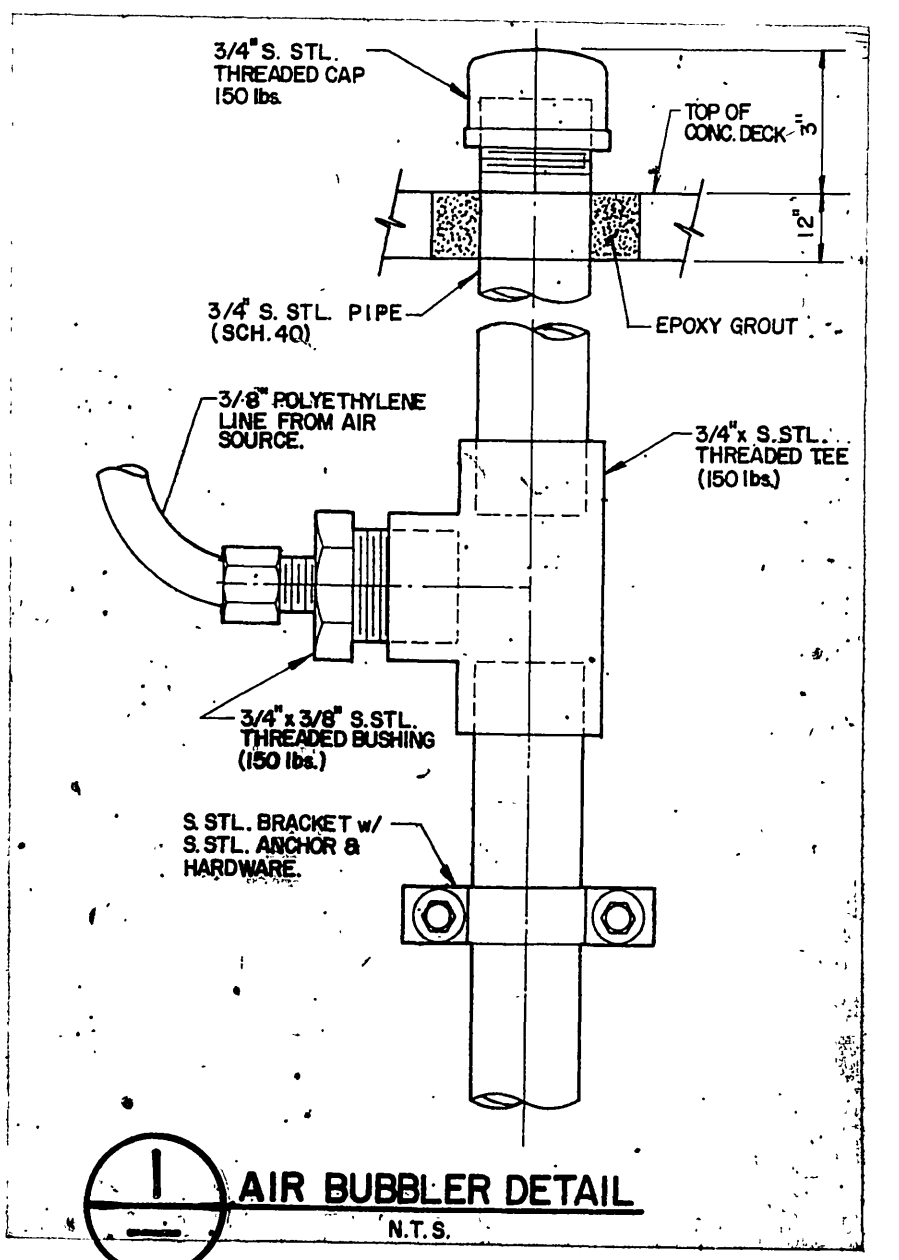
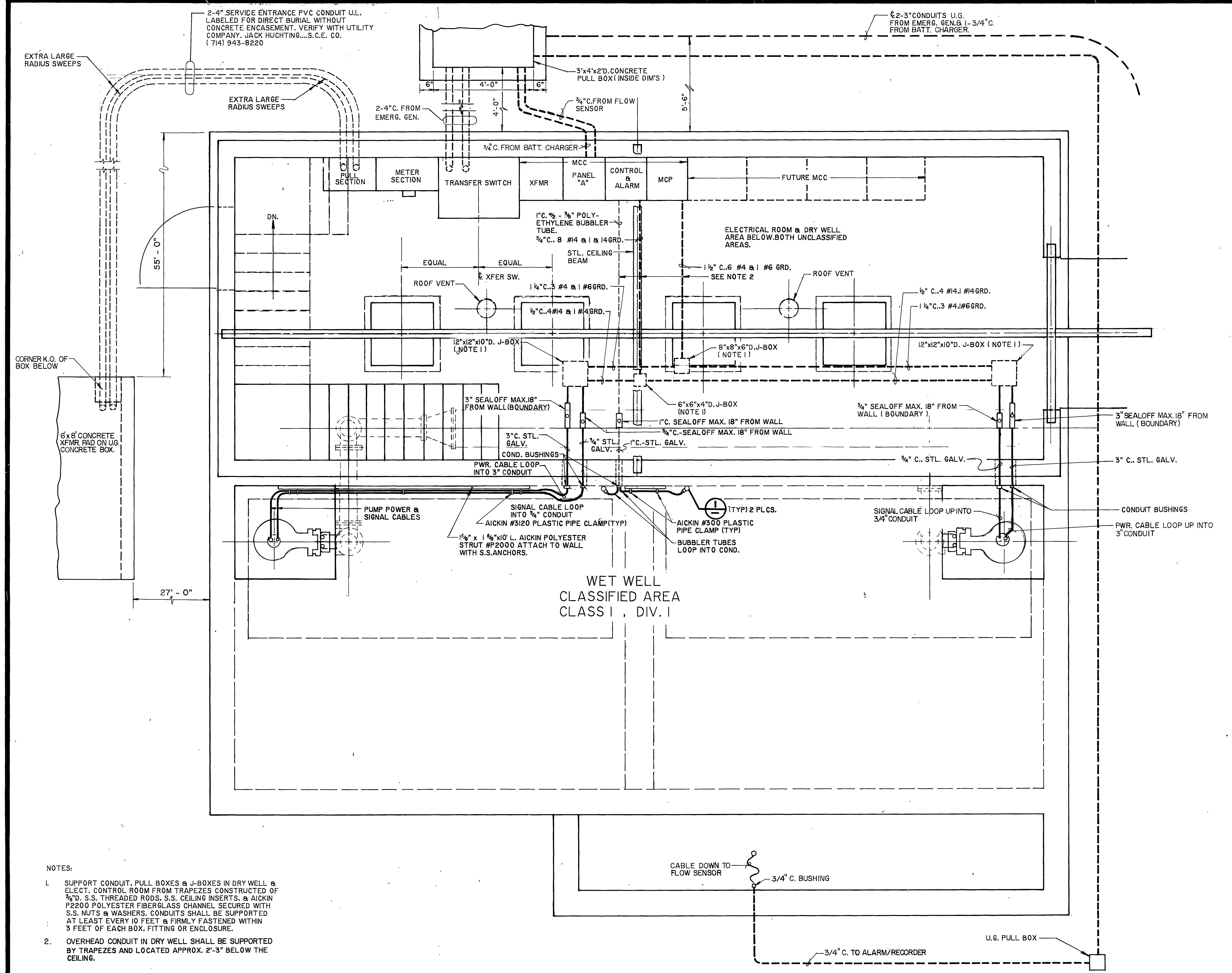
APPROVED BY: *William S. Davidson*  
PRINCIPAL ENGINEER  
DATE: 4/24/87

APPROVED BY: *William S. Davidson*  
DIRECTOR OF PUBLIC WORKS  
DATE: 4/24/87

HORIZ. SCALE: 1" = ... VERT. SCALE: 1" = ... FILE NO. 86-9202

INDEXED 12-15-87 LHM





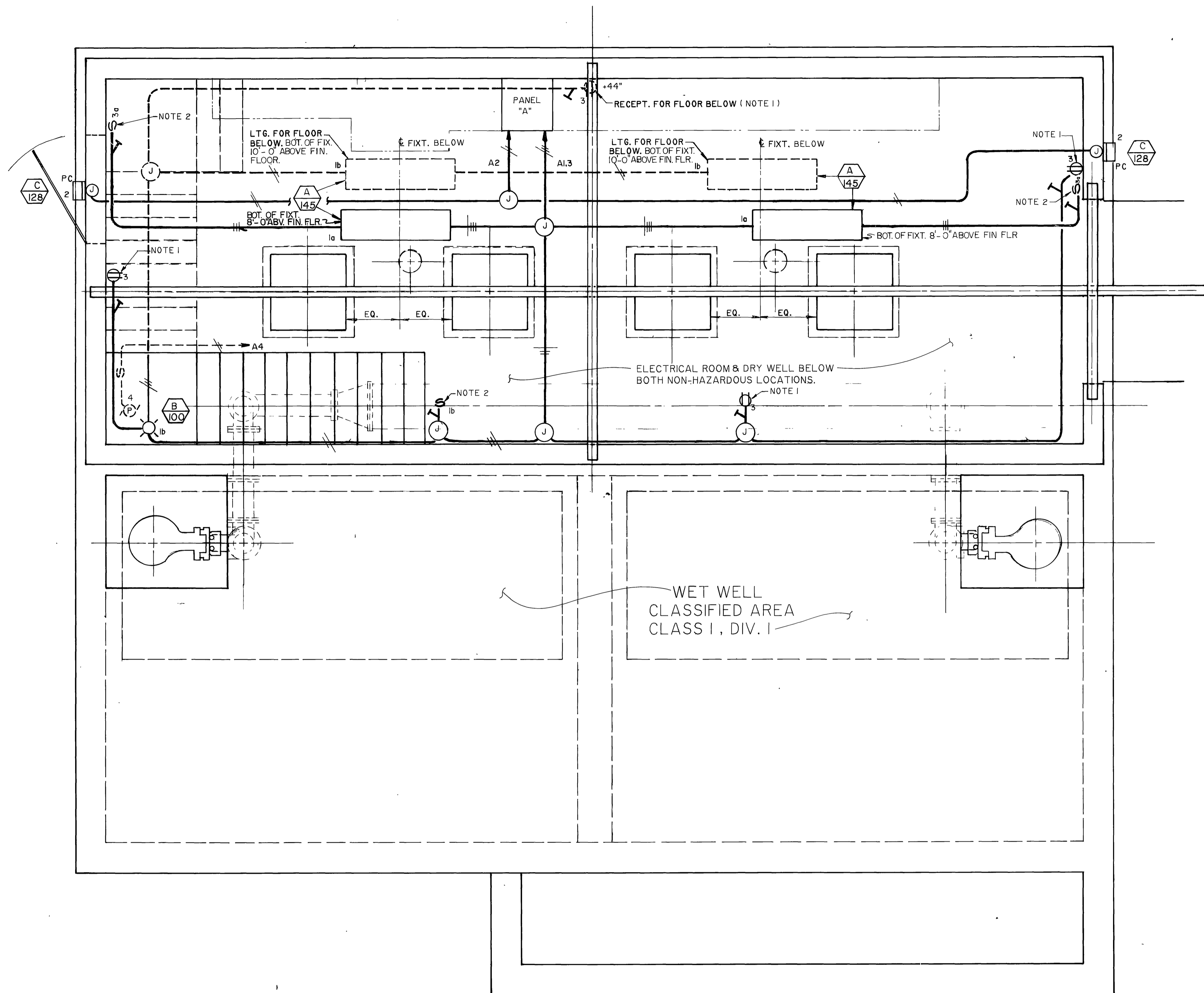
- NOTES:
- SUPPORT CONDUIT, PULL BOXES & J-BOXES IN DRY WELL & ELECT. CONTROL ROOM FROM TRAPEZES CONSTRUCTED OF 3/4" S.S. THREADED RODS, S.S. CEILING INSERTS, & AICKIN #2200 POLYESTER FIBER GLASS CHANNEL SECURED WITH S.S. NUTS & WASHERS. CONDUITS SHALL BE SUPPORTED AT LEAST EVERY 10 FEET & FIRMLY FASTENED WITHIN 3 FEET OF EACH BOX, FITTING OR ENCLOSURE.
  - OVERHEAD CONDUIT IN DRY WELL SHALL BE SUPPORTED BY TRAPEZES AND LOCATED APPROX. 2'-3" BELOW THE CEILING.



**AS BUILT**  
 APPROVED BY: *Robert D. Campbell*  
 DATE: 12/15/89

PREPARED UNDER THE DIRECTION OF: <i>Irving Heller</i> REGISTERED PROFESSIONAL ENGINEER NO. E8222 EXPIRATION DATE 9-30-90 DATE 2-17-87	<b>J F DAVIDSON ASSOCIATES, INC.</b> CIVIL ENGINEERS • SURVEYORS • PLANNERS P.O. BOX 493 11200 SO. MI. VERBENA AVE. #D 73-80 EL PASO #103 RIVERSIDE, CA 92502 COLTON, CA 92314 PALM DESERT, CA 92260 (714) 686-0844 (714) 825-1082 (919) 346-5691	<b>CITY OF RIVERSIDE, CALIFORNIA</b> DEPARTMENT OF PUBLIC WORKS APPROVED BY: <i>William D. Gardner</i> PRINCIPAL ENGINEER PARK DEPARTMENT TRAFFIC DIVISION CHIEF P.W. DATE 4/24/87	<b>WOOD RD. SEWAGE LIFT STATION FOR</b> <b>ALESSANDRO BLVD. &amp; WOOD RD.</b> <b>TRUNK SEWER</b> <b>SEWAGE LIFT STATION</b> <b>ELECTRICAL WIRING DETAILS</b> PROJECT NO. S-1430B SHEET E-2 OF 37
SCALE N/A DATE	BENCH MARK DATE 8/71 RIVERSIDE COUNTY ELEV. 1000.070 MARK: REVISIONS APPR. DATE DESIGNED BY <i>L.H.</i> DRAWN BY <i>J.S.</i> CHECKED BY <i>R.E.</i>	APPROVED BY: <i>William D. Gardner</i> DIRECTOR OF PUBLIC WORKS DATE 4/24/87	HORIZ. SCALE: 1" = ... VERT. SCALE: 1" = ... FILE NO. 86-9202





**PANEL "A"** FEEDER 4 No. 2 THW ; 90 AMP MAIN  
 LOCATION: SWBD. SECTION ; 100 AMP BUS ; 120 / 208 VOLTS ; 3 PHASE ; 4 WIRE

CIRC	NOTE	AMP	LOCATION	LTS	REC	MIS	A	B	C	A B C	A	B	C	MIS	REC	LTS	LOCATION	AMP	NOTE	CIRC
1	LCL	25	INDOOR LIGHTS	5	4		580				256					2	OUTDOOR LIGHTS	25	LCL	2
3			RECEPTACLES				720				1294						SUMP PUMP 1/2 HP			4
6			TELEMETRY														DRY WELL HI-WAT. ALM.			6
7	LCL	15	BATTERY CHARGER								100						INFLU. FLOW. SEN/Record			8
2	LCL	5					740													10
11																				12
13																				14
15																				16
17																				18
19																				20
21																				22
23			CONT. & ALM. PANEL								360									24
25																				26
27																				28
29																				30
31																				32
33																				34
35																				36
37																				38
39																				40
41																				42
COLUMN TOTALS							1320	720	1460		356	1294	50							
PANEL TOTAL							= 5200 WATTS													
LONG CONT. LOAD (.25 x _____)							= 579 WATTS			TOTAL PANEL LOAD AMPS. 16.9										
LARGEST MOTOR (.25 x _____)							= 324 WATTS													
TOTAL PANEL LOAD							= 6103 WATTS													

\* LOCKABLE IN POSITION.

**LIGHTING FIXTURE SCHEDULE**

FIXT. TYPE	FIXT. WATTS	DESCRIPTION OR EQUIV.	LAMP QUAN/TY	LAMP WATTS	REMARKS
A 145	145	GUTH CO. PLASCOLUME FIXT. ACS-7765-120-HL-0". S.STL. ENCL. SWIV. ACRYL BASKET LENS. 2-1/2" HUBS. 120V.	2	4' FLUOR. HIGH OUTPUT 800 M.A.	LOW TEMP 10" F.M.N. BALLAST PENDANT SUPPORTED WITH 1/2" RIG. STL. COND.
B 100	100	RAB CO. VXBRI006 CL I. DIV. 2 HAZ LOC. CLEAR GLASS & WIREGUARD, 3 OR 4-1/2" C. HUBS. CAST ALUM. BODY. 120V., 150W. MAX.	1	INCAND. A19 BASE.	WALL MOUNT TO 4" SURF. MT'D. BOX.
C 128	128	HUBBELL CO. PERMALITER PVL-0100S-18-PBT-1. PVL-RK. WET LOC. VANDAL RESIST., 120V., PHOTO CELL. LEXAN LENS.	1	H.P.S. CLEAR	HIGH R.F. LOW TEMP BALLAST MT'D. ON WALL, BOT. 8'-0" ABOVE GRADE.

\* FIXTURE WATTS INCLUDES BALLAST WHERE APPLICABLE.

- NOTES:
- RECEPTACLES SHALL BE CROUSE-HINES TYPE CFS DELAYED ACTION LISTED FOR CLASS I, DIV. 2 LOCATIONS WITH SEAL-OFFS AT CONDUIT ENTRY.
  - LIGHTING SWITCHES SHALL BE LISTED FOR CLASS I, DIV. 2 WITH SEAL-OFFS AT CONDUIT ENTRY, APPLETON EFS 150-F3W FOR THREE-WAY SWITCHES & APPLETON EFS 150-F1 FOR 1-POLE SINGLE SWITCH, OR EQUAL.

**AS BUILT**  
 APPROVED BY: *William D. Davidson*  
 DATE: 12-15-89

**LIGHTING & RECEPTACLE OUTLETS**



PREPARED UNDER THE DIRECTION OF *Irving Hill*  
 REGISTERED CIVIL ENGINEER NO. E8222  
 EXPIRATION DATE 9-30-90 DATE 2-17-87

**J F DAVIDSON ASSOCIATES, INC.**  
 CIVIL ENGINEERS • SURVEYORS • PLANNERS  
 PO BOX 493 RIVERSIDE, CA 92502 (714) 586-0844  
 11200 SO MI VERNON AVE #D COLTON, CA 92324 (714) 825-1282  
 71-080 EL PASO, #103 PALM DESERT, CA 92260 (619) 346-5091

DATE: 12/15/89 RIVERSIDE COUNTY ELEV. 1700470  
 BENCH MARK: GRAASS DISK FLUSH & MARKED V. B. 10-84, 0.8 MI E. ON VAN BUREN BLVD. FROM INT. OF VAN BUREN & WOOD RD. 208' N. OF VAN BUREN AT THE GRANITE BOLLDER ON TOP OF 3' X 18" X 18" BOLLDER.

**CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS**  
 APPROVED BY: *William D. Davidson* DATE: 4/24/87  
 PRINCIPAL ENGINEER  
 PARK DEPARTMENT  
 TRAFFIC DIVISION  
 CHIEF P W

**WOOD RD. SEWAGE LIFT STATION FOR ALESSANDRO BLVD. & WOOD RD.**  
**TRUNK SEWER SEWAGE LIFT STATION ELECTRICAL LIGHTING DETAILS**

PROJECT NO. **S-1430B**  
 SHEET **E-3** OF **37**  
 FILE NO. 86-9202

HORIZ. SCALE: 1" = ... VERT. SCALE: 1" = ...