

**CONSTRUCTION NOTES:**

- 1 CONSTRUCT EXTRA STRENGTH 8 INCH VCP SEWER
- 2 CONSTRUCT EXTRA STRENGTH BEVELED EDGE 8 INCH VCP SEWER 6 FT MAX PIPE LENGTH. REFER TO PLAN FOR CURVE DATA
- 4 CONSTRUCT 48 INCH DIAMETER SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
- 6 CONSTRUCT EXTRA STRENGTH 4 INCH SEWER LATERAL TO NEW SEWER PER CITY OF RIVERSIDE STANDARD 562. MODIFIED PER PLAN
- 7 CONSTRUCT 60 INCH DIAMETER SEWER MANHOLE PER CITY OF RIVERSIDE STANDARD 500
- 8 INSTALL 20 INCH DIAMETER ASTM A283, GRADE C CARBON STEEL CASING MIN THICKNESS 3/8 INCHES PER DETAIL HEREON, ASPHALT COATED OPEN TRENCH CONSTRUCTION PER CITY OF RIVERSIDE STANDARD SPECS. NO WELDED FIELD JOINTS
- 9 CONSTRUCT SEWER CLEANOUT PER CITY OF RIVERSIDE STANDARD 562.

**EXISTING FACILITIES:**

- A PROTECT IN PLACE
- B REMOVE EXISTING SEWER MANHOLE AND BACKFILL
- C REMOVE INTERFERING PORTIONS OF EXISTING SEWER AND SEAL OPENING WITH MINIMUM 6" CONCRETE
- D SLURRY FILL, CAP ENDS AND ABANDON EXISTING SEWER IN PLACE
- E REMOVE LIQUID & SOLID WASTE FOR DISPOSAL AT AN APPROVED SITE AND REMOVE EXISTING SEPTIC TANK AND BACKFILL
- F REMOVE LIQUID & SOLID WASTE FOR DISPOSAL AT AN APPROVED SITE AND REMOVE UPPER 5' OF SEEPAGE PIT, SLURRY BACKFILL AND ABANDON IN PLACE

**GENERAL NOTES:**

EXISTING UTILITIES SHOWN ON THE PLAN ARE PLOTTED FROM UTILITY RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT ALL UTILITIES WHETHER OR NOT SHOWN ON THIS PLAN.

ALL ELEVATIONS SHOWN ON THE PLAN SHALL BE STAKED IN THE FIELD.

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE STANDARD DRAWINGS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.

TRENCHES SHALL EITHER BE BACKFILLED AND COMPACTED PER STD. DWG. 453 OR COVERED WITH TRAFFIC RATED STEEL PLATES AT THE END OF EACH WORK DAY AS SPECIFIED IN THE SPECIAL PROVISIONS.

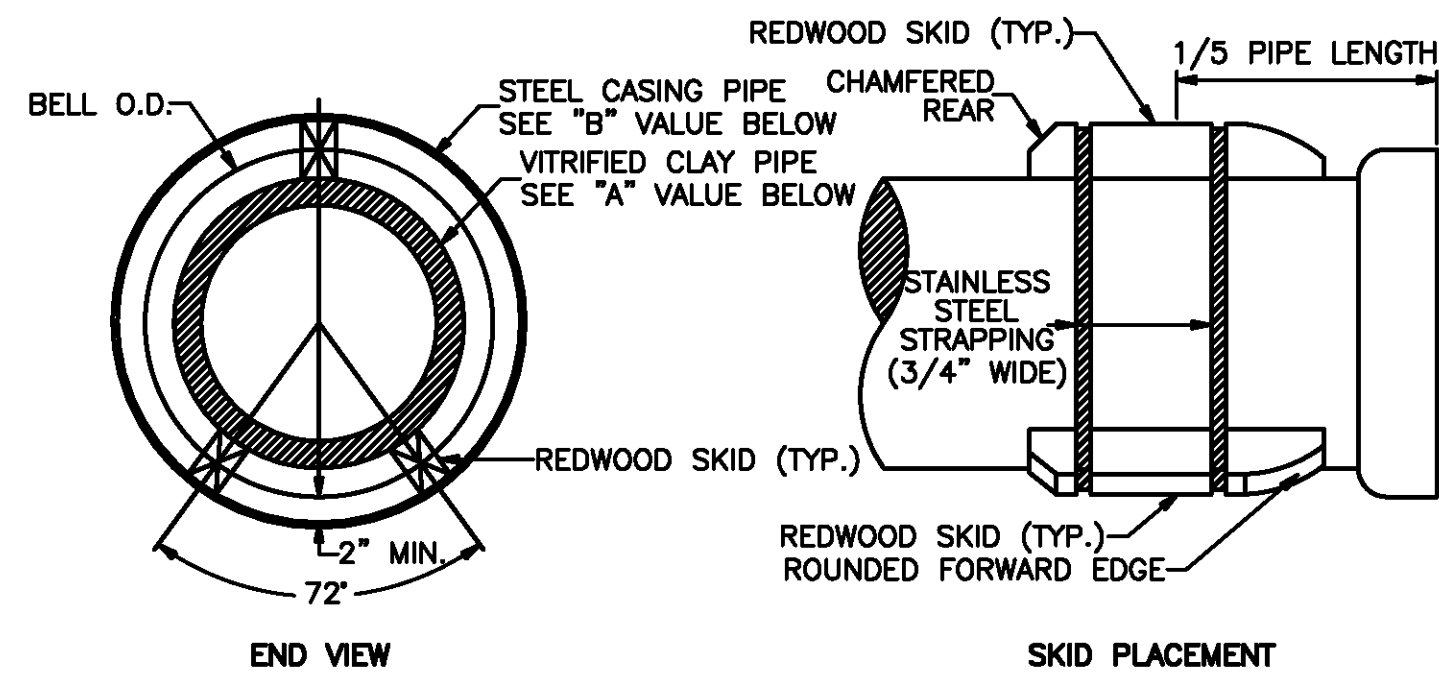
PIPE BEDDING SHALL BE PER STD. DWG. 452 AND CASE II AS SPECIFIED ON THE PLANS.

CONTRACTOR SHALL PERFORM A PRECONSTRUCTION VIDEO OF THE SEWER MAIN LINES. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VIDEOING ALL SEWER LATERALS FROM THE MAINLINE TO PROPERTY LINE.

PIPE JOINTS FOR PROPOSED VCP SHALL BE TYPE "G", PER SECTION 208-2.3 OF THE STANDARD SPECIFICATIONS. PIPE JOINTS FOR JOINING EXISTING VCP TO PROPOSED VCP SHALL BE TYPE "Z", PER SECTION 208-5 OF THE STANDARD SPECIFICATIONS.

**NOTES**

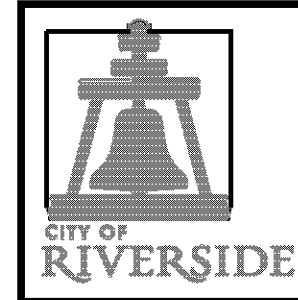
1. SKIDS SHALL BE REDWOOD, 30" LONG, 4" WIDE, AND OF SUFFICIENT HEIGHT TO PROVIDE A MIN. 2" CLEARANCE BETWEEN INVERT OF CASING AND BELL OF VCP. ALL SKIDS SHALL BE OF EQUAL DIMENSIONS AND POSITIONED UNIFORMLY
2. ENDS OF CASING TO BE SEALED WITH BRICK AND MORTAR. PLACE 1" Ø MIN. PVC PIPE AT DOWNSTREAM INVERT OF CASING (THROUGH BRICK) AND SURROUND WITH 2 CUBIC FEET CRUSHED ROCK
3. CARRIER PIPE SHALL BE AIR TESTED PRIOR TO SLURRY BACKFILLING AND SEALING CASING
4. VOID BETWEEN CASING AND CARRIER PIPE SHALL BE FILLED WITH A ONE SACK PCC SLURRY MIX
5. UPSTREAM AND DOWNSTREAM ELEV. TO BE VERIFIED PRIOR TO SEALING CASING



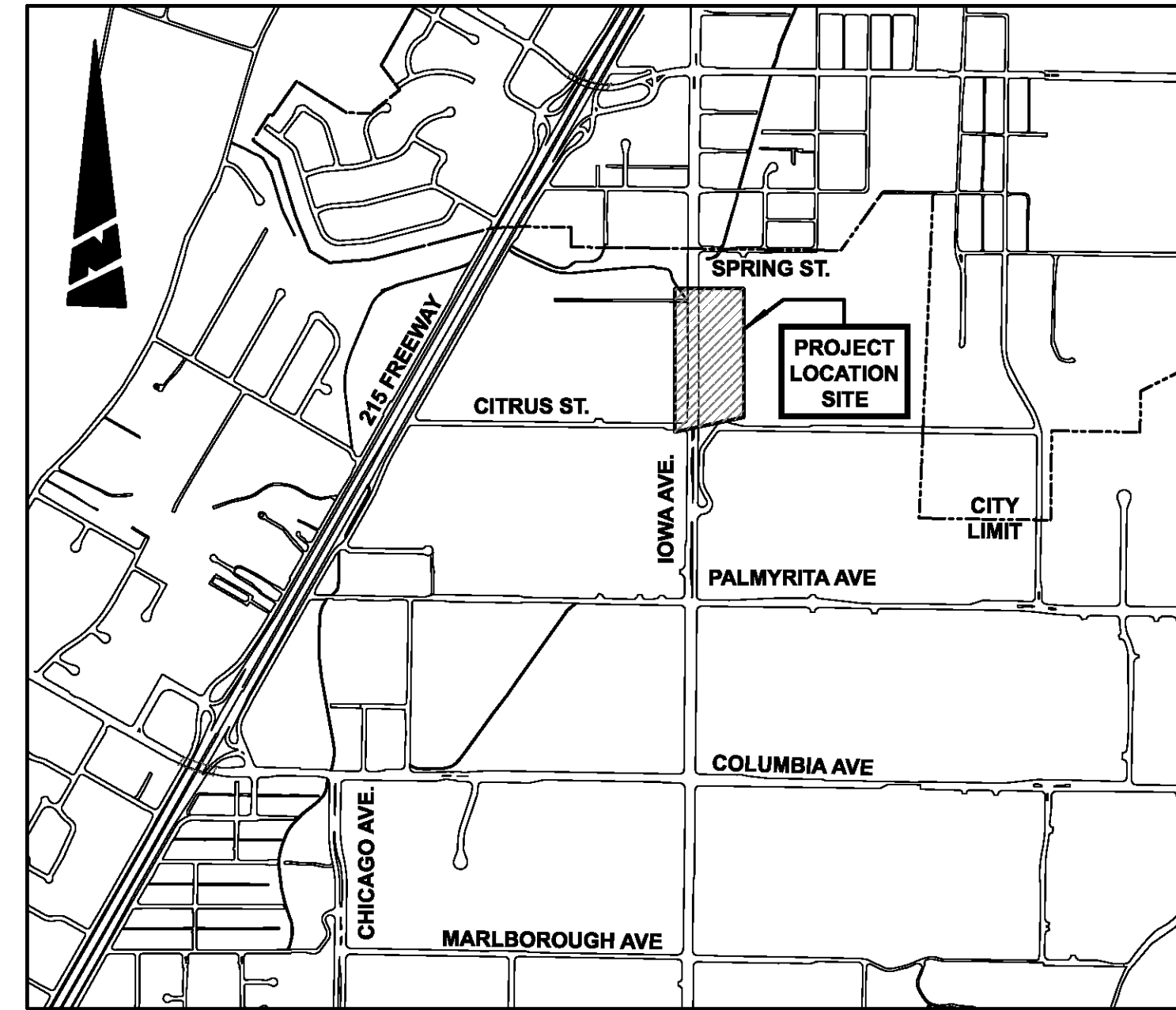
STEEL CASING PIPE AND SKID  
TYPICAL DETAIL  
N.T.S.

A B  
8" VCP (BELL & SPIGOT) 20" X 3/8" THICK

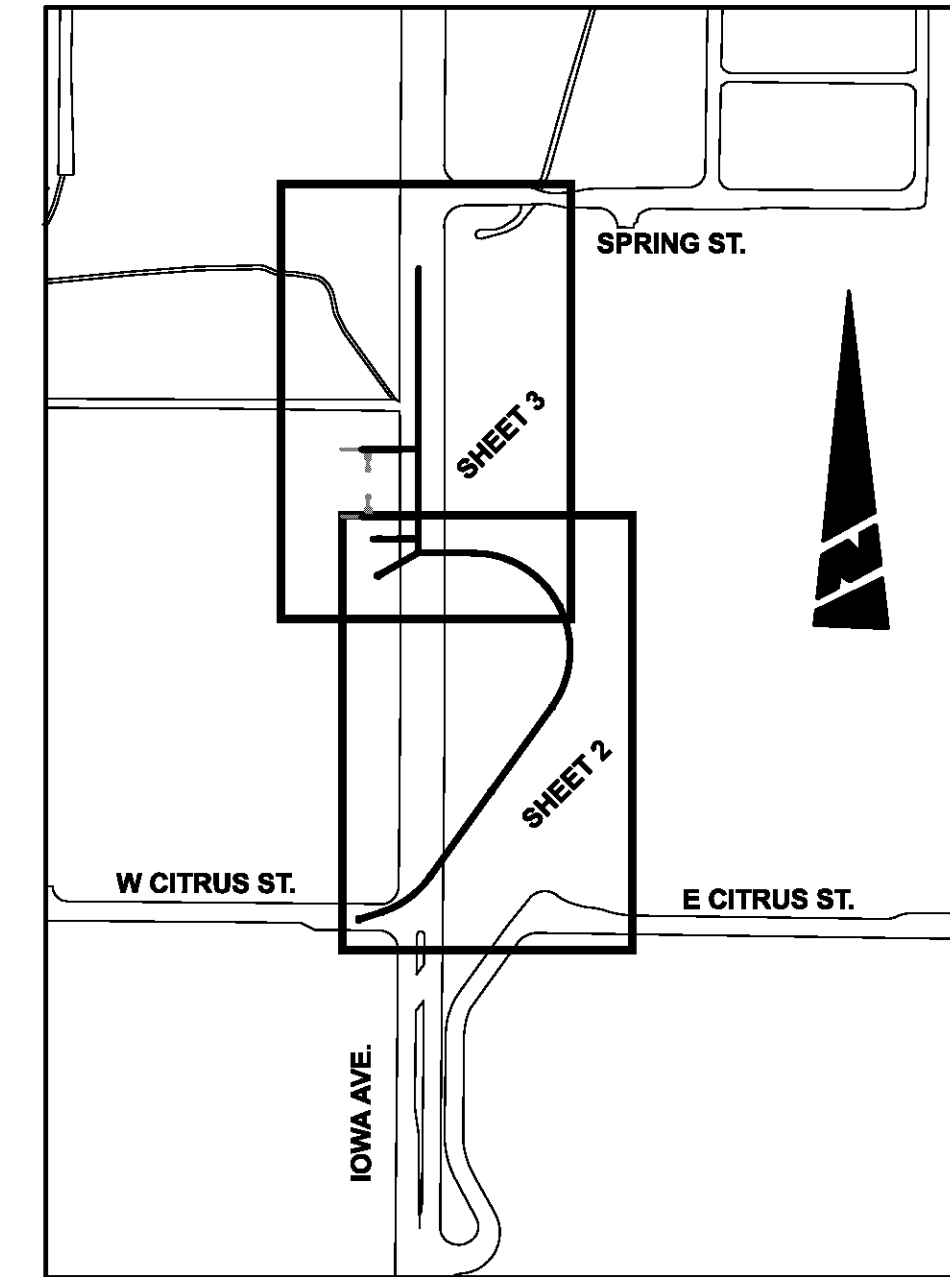
# RIVERSIDE CALIFORNIA



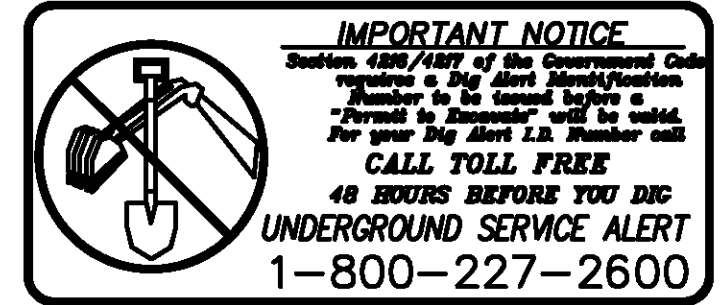
## PUBLIC WORKS DEPARTMENT IOWA AVENUE GRADE SEPARATION IOWA AVENUE SEWER FROM WEST CITRUS STREET TO SPRING STREET



LOCATION MAP  
N.T.S.



INDEX MAP  
N.T.S.

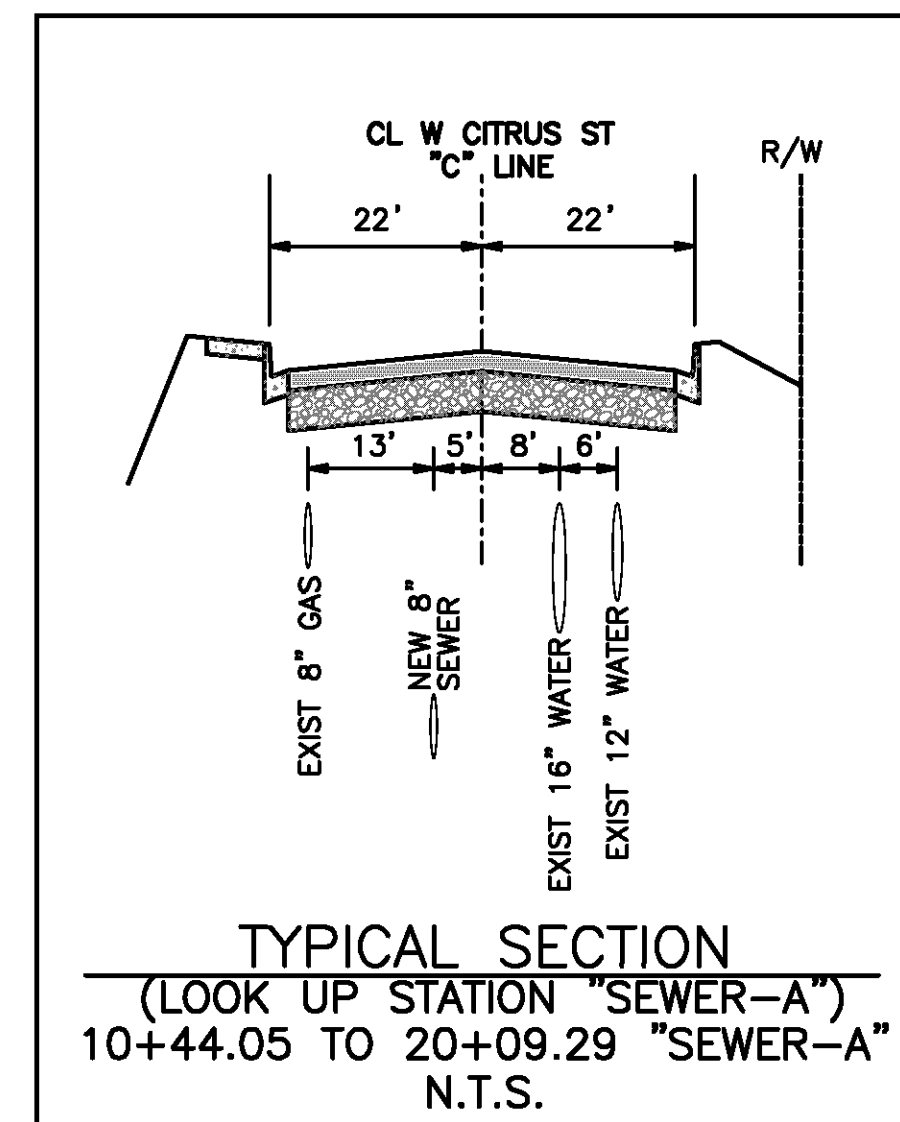


**EXISTING TOPOGRAPHY:**

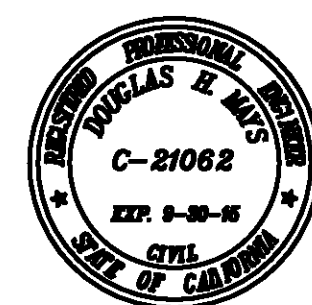
- ⊙ SANITARY SEWER M.H.
- ⊕ WATER GATE VALE
- ⊙ ELECTRIC M.H.
- ⊙ TELEPHONE M.H.
- ⊕ WATER METER
- ⊕ FIRE HYDRANT
- ⊕ IRRIGATION METER
- ⊕ BLOW-OFF VALVE
- ⊕ TRAFFIC SIGN
- ⊕ POWER POLE
- ⊕ GUY ANCHOR
- ⊕ STREET LIGHT ON MAST ARM
- ⊕ ELECTRICAL TEST STATION (PIPELINE)
- 🌴 PALM TREE
- 🌳 MISC TREE
- 🏠 BUILDING
- ↗ TOP OF SLOPE
- ↘ TOE OF SLOPE
- ➔ DIRECTION DRAINAGE FLOW
- ▬▬▬ EDGE OF PAVEMENT

**EXISTING UTILITIES:**

- SANITARY SEWER ---S---
- WATER LINE ---W---
- STORM DRAIN ---sd---
- UNDERGROUND ELEC ---e---
- OVERHEAD ELEC ---e---(oh)
- SCG GAS ---gs---
- AT&T UNDERGROUND ---tc---



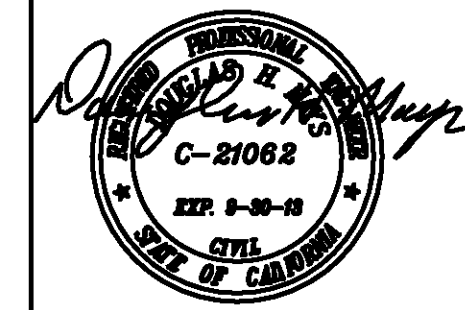
TYPICAL SECTION  
(LOOK UP STATION "SEWER-A")  
10+44.05 TO 20+09.29 "SEWER-A"  
N.T.S.



**AS-BUILT**  
NO AS-BUILT CHANGES

**BENCHMARK**  
Horizontal Datum: NAD83 (NRS2007) CCS83 ZONE 6 (4428) - CORS CONTROL  
Vertical Datum: NGVD 1929, 1971 adjustment per City benchmarks  
3572 902.77800 CHS BOX CENTER & TRANSIT  
JTMG 871.06300 PK & RV CITY ENG WASHER  
ELEV.

**DOUGLAS ENGINEERING, INC.**  
414 TENNESSEE STREET, SUITE "G"  
REDLANDS, CA 92373-8152  
PH # 909-335-8670



DATE	REVISIONS	APPROVAL

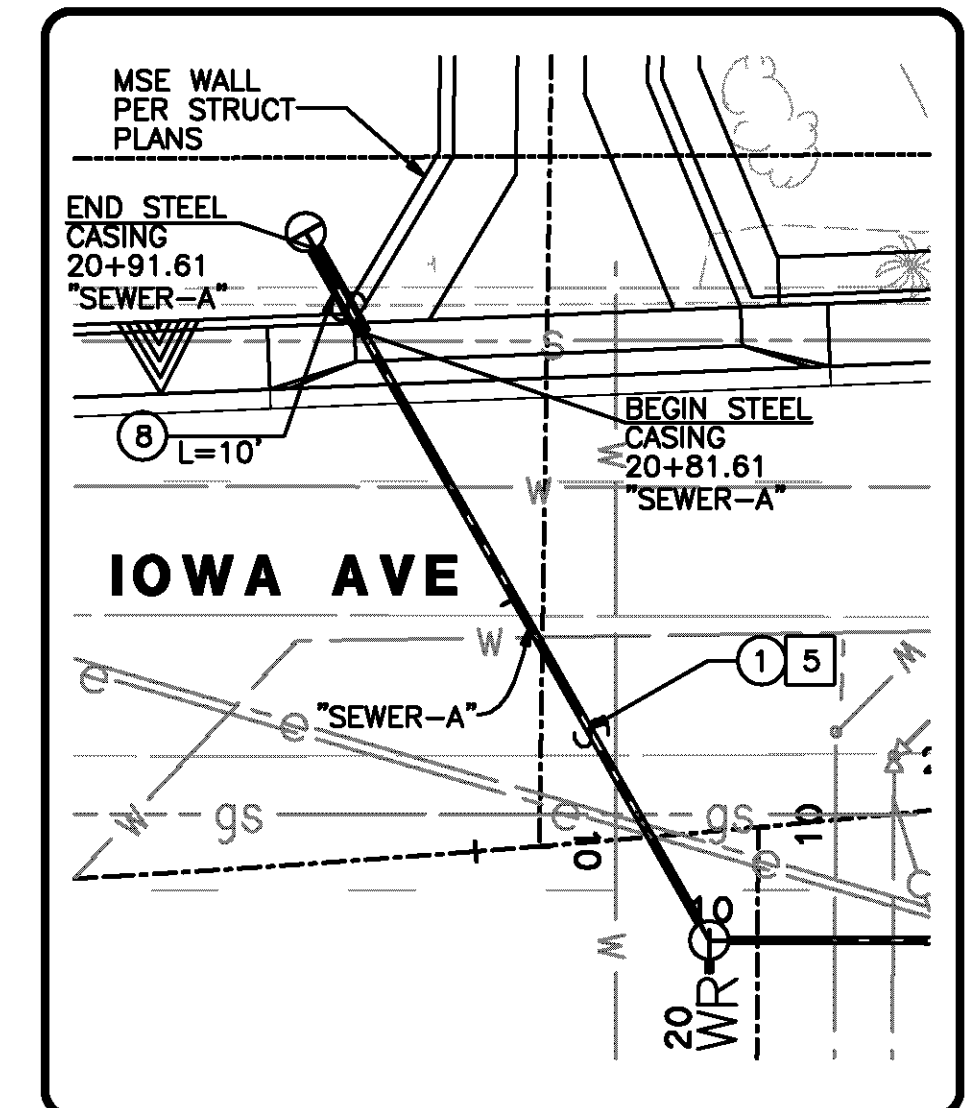
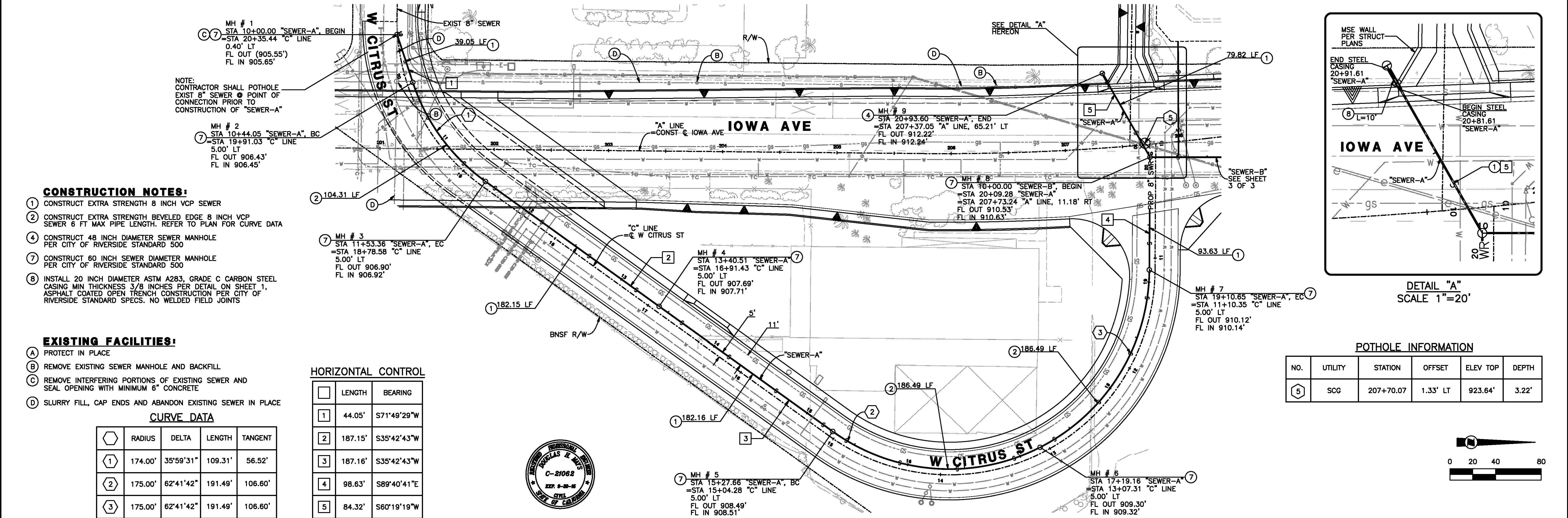
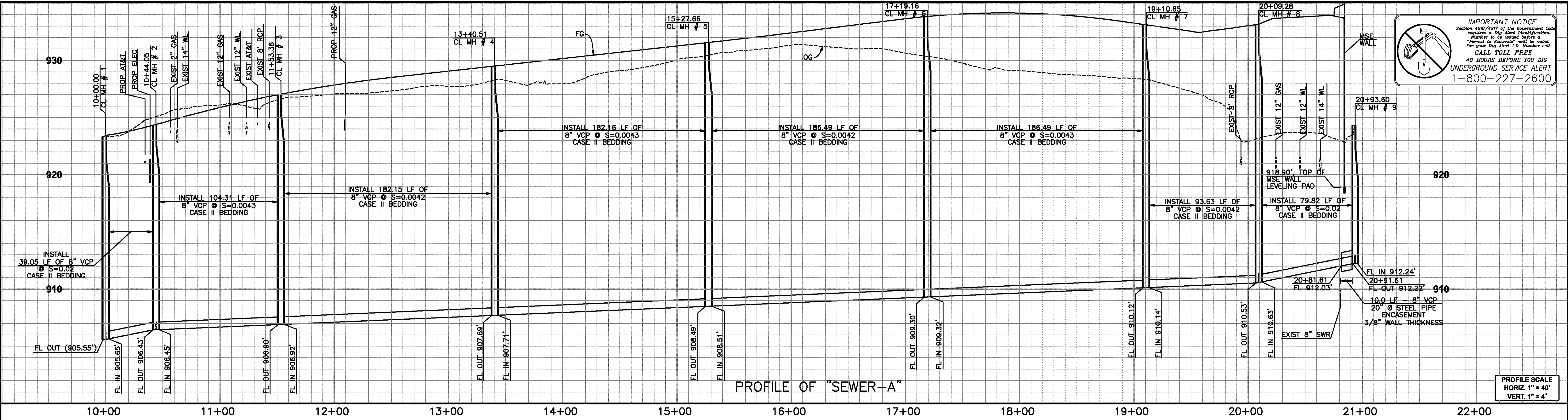
**IOWA SEWER**  
FROM WEST CITRUS STREET  
TO SPRING STREET

DWG NO.  
S-2091

NOT TO SCALE

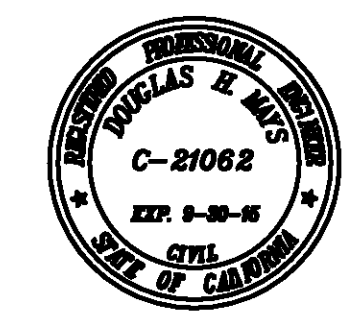
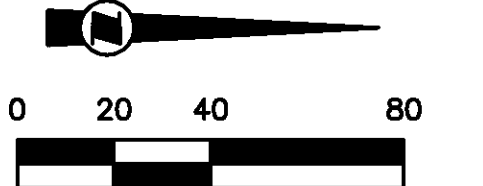
SHEET 1 OF 3

**IMPORTANT NOTICE**  
 Section 426/427 of the Government Code requires a Dig Alert Sign/Position Number to be used before a "Permit to Excavate" will be valid. For your Dig Alert 1-D Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600



**POTHOLE INFORMATION**

NO.	UTILITY	STATION	OFFSET	ELEV TOP	DEPTH
5	SCG	207+70.07	1.33' LT	923.64'	3.22'



**AS-BUILT**  
 08/01/14  
 NO AS-BUILT CHANGES

**BENCHMARK**  
 Horizontal Datum: NAD83 (NSRS2007) CCS83 ZONE 6 (049) - CORS CONTROL  
 Vertical Datum: NGVD 1929, 1971 adjustment per City benchmarks  
 3672 902.77800 CHS BOX CENTER & TRANSIT JTMG 871.06300 PK & RV CITY ENG WASHER ELEV.

**DOUGLAS ENGINEERING, INC.**  
 414 TENNESSEE STREET, SUITE "G"  
 REDLANDS, CA 92373-8152  
 PHONE NO. 909-335-8670



NO.	REVISIONS	DATE

**IOWA SEWER**  
 FROM WEST CITRUS STREET  
 TO SPRING STREET  
 DWG NO. S-2091  
 HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'  
 SHEET 2 OF 3



