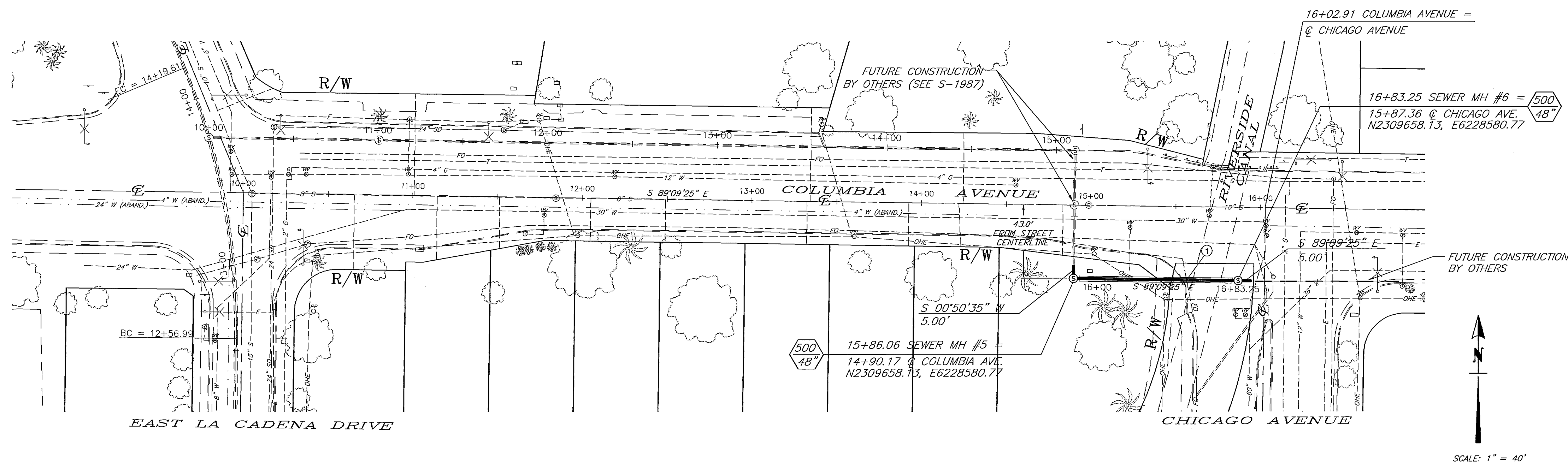
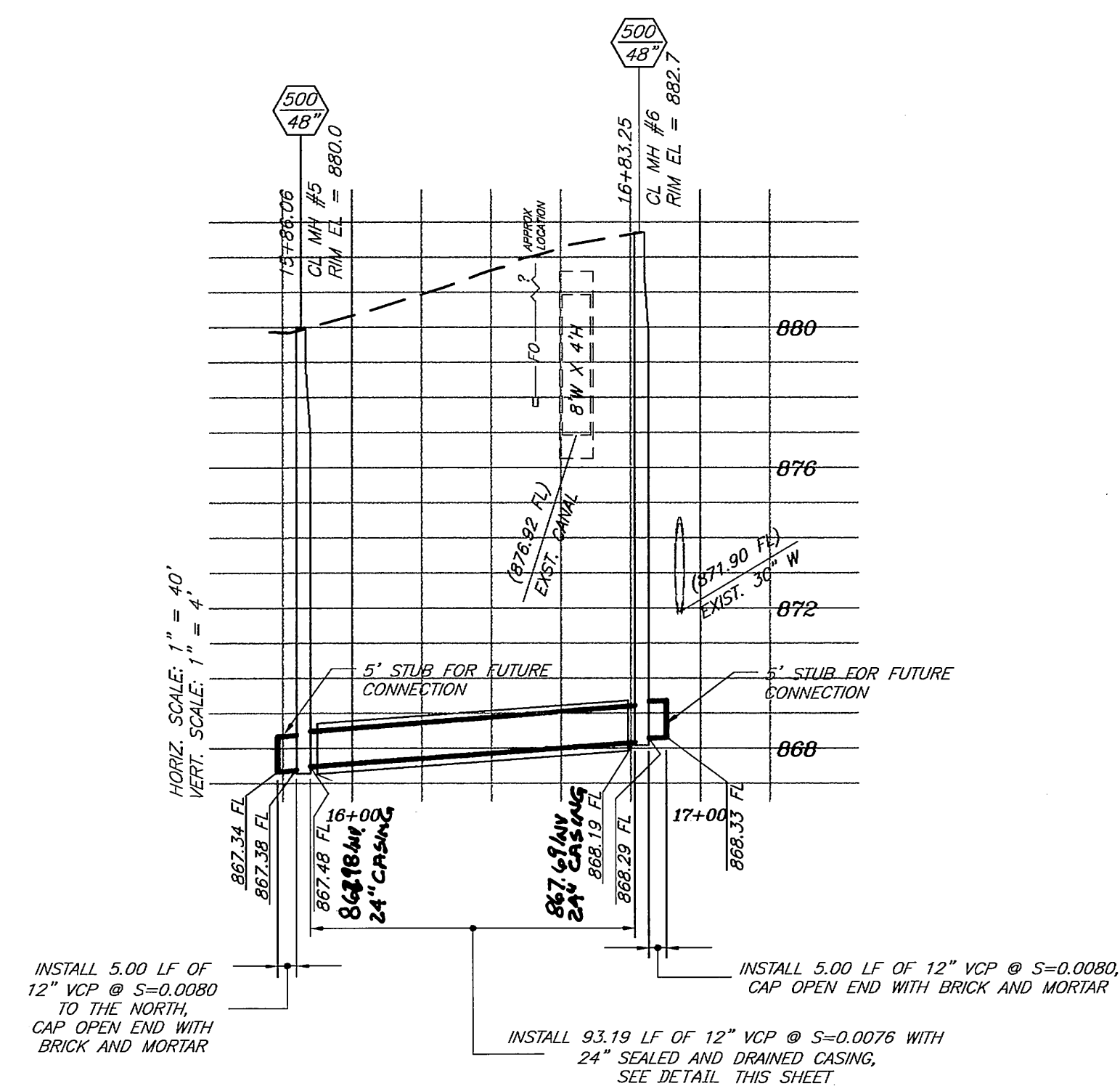


**CASING DETAIL NOTES**

1. SKIDS SHALL BE REDWOOD, 30" LONG, 4" WIDE, AND OF SUFFICIENT HEIGHT TO PROVIDE A MINIMUM 2" CLEARANCE BETWEEN INVERT OF CASING AND BELL OF VCP. ALL SKIDS SHALL BE OF EQUAL DIMENSIONS AND POSITIONED UNIFORMLY.
2. ALL STEEL CASING PIPE FIELD JOINTS SHALL BE WELDED WITH A CONTINUOUS CIRCUMFERENTIAL WELDS.
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 ELEVATIONS TO BE VERIFIED PRIOR TO SEALING CASING.
6. ENDS OF CASING TO BE SEALED WITH BRICK AND MORTAR. PLACE 1" DIA MINIMUM PVC PIPE AT INVERT OF CASING (THROUGH BRICK) AND SURROUND WITH 2 CUBIC FEET CRUSHED ROCK.

**CONSTRUCTION NOTE**

1. CONTRACTOR TO FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION. PROTECT AND SUPPORT EXISTING UTILITY(S) IN PLACE.
2. ALL INDICATED LOCATIONS OF TREES, PALMS AND SHRUBS ARE APPROXIMATE.



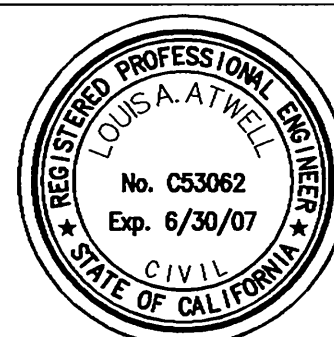
THE BASIS OF BEARING OF THIS DRAWING IS N89°09'25"W, CENTERLINE OF COLUMBIA AVENUE, AS SHOWN ON PARCEL MAP NO. 21696, COUNTY OF RIVERSIDE P.M.B. 140/94.

**BENCHMARK**  
P.K. NAIL AND CITY ENGINEER TAG IN THE WESTERLY WALL OF A CATCH BASIN 1' NORTH OF THE NORTHERLY CURB OF COLUMBIA AVENUE, 155' EASTERLY OF E. LA CADENA DRIVE.  
ELEV- 871.063

**IMPORTANT NOTICE**  
Section 4216/4217 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call CALL TOLL FREE  
**48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600**

PLANS PREPARED BY:  
**ARROYO ENGINEERING SOLUTIONS, INC.**  
1150 N. MOUNTAIN AVENUE, SUITE 214  
UPLAND, CA 91786  
TEL.(909) 579-0842 FAX (909) 579-0804

**ENGINEER IN RESPONSIBLE CHARGE**  
*Louis A. Atwell*  
LOUIS A. ATWELL  
R.C.E. No. 053062 expires 6/30/07  
DATE 3/29/07



DESIGNED BY \_\_\_\_\_ DRAWN BY CDRAKE CHECKED BY \_\_\_\_\_

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT			
APPROVED BY	BY	DATE	APPROVED BY
Principal Engineer	[Signature]	6/17/07	[Signature]
INSPECTOR	CS	6/17/07	CITY ENGINEER
SURVEYOR	CS	6/17/07	
WASTE WATER OPS. MGR.	CS	6/17/07	
Const. Cont. Room	CS	6/17/07	
ENG. MGR.	CS	6/17/07	

**SEWER PIPELINE CAPACITY IMPROVEMENT  
COLUMBIA AVENUE**  
DETAIL OF RIVERSIDE CANAL CROSSING  
SCALE: AS SHOWN

ACC. No. \_\_\_\_\_ W.O. \_\_\_\_\_  
**S-1987A**  
SHEET 1 OF 1