

GENERAL NOTES

- CONSTRUCTION SHALL BE IN ACCORDANCE WITH APWA "GREEN BOOK" STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, ITS SUPPLEMENTAL NOTES AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
- EXISTING UTILITIES SHOWN ON THIS PLAN ARE PLOTTED FROM PUBLIC RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT ALL UTILITIES WHETHER OR NOT SHOWN ON THIS PLAN. POTHOLING OF EXISTING FACILITIES WAS NOT PERFORMED.
- CONTRACTOR SHALL POTHOLE AND VERIFY ALL LOCATIONS AND ELEVATIONS OF UTILITIES PRIOR TO THE START OF CONSTRUCTION TO ELIMINATE INTERFERENCE WITH NEW CONSTRUCTION.
- PRIME CONTRACTOR BIDDING THIS WORK SHALL HAVE A CLASS "A, C-34 OR C-42" LICENSE.
- ALL ELEVATIONS SHOWN ON THIS PLAN SHALL BE STAKED IN THE FIELD.
- BACKFILLING OF TRENCH AND PAVEMENT REPLACEMENT SHALL BE DONE PER CITY OF RIVERSIDE STANDARD DRAWING 453.
- ANY WORK THAT WILL CAUSE DAMAGE TO THE DETECTOR LOOPS SHALL NOT BE PERFORMED UNTIL TRAFFIC SIGNAL MAINTENANCE PERSONNEL HAVE BEEN NOTIFIED AND THE NECESSARY TIMING ADJUSTMENTS ARE MADE TO MAINTAIN SIGNAL OPERATION.
- CONTRACTOR SHALL REPLACE ALL EXISTING TRAFFIC DETECTOR LOOPS AFFECTED BY CONSTRUCTION.
- CONTRACTOR SHALL RELOCATE ALL TRAFFIC SIGNS, REMOVED DUE TO CONSTRUCTION, PER CITY STANDARDS.
- DRIVEWAY AND PEDESTRIAN ACCESS MUST BE MAINTAINED WHENEVER CONSTRUCTION IS NOT OCCURRING.
- VCP PIPE JOINTS SHALL BE TYPE "G" PER SECTION 208-2.3 OF THE APWA "GREEN BOOK" STANDARD SPECIFICATION.
- ALL INDICATED LOCATIONS OF TREES, PALMS AND SHRUBS ARE APPROXIMATE.
- CONTRACTOR OR EQUIPMENT MANUFACTURER SHALL SUBMIT DIMENSIONED DIAGRAM OF JACKING AND RECEIVING PITS.

SPECIFIC CONSTRUCTION NOTES

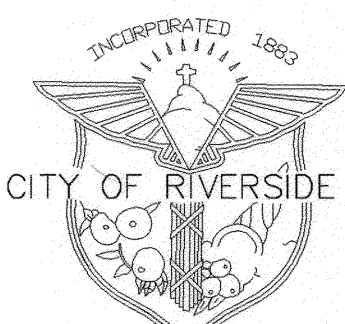
- NUMBERS ABOVE 100 IN A HEXAGON ON THE PLAN REFER TO THE RESPECTIVE STANDARD DRAWING AND SHALL BE CONSTRUCTED ACCORDINGLY. UNLESS MODIFICATIONS ARE NOTED ON THE PLAN OR COVER SHEET. ANY NUMBER SHOWN BELOW THE STANDARD DRAWING NUMBER INDICATES THE SPECIFIC ALTERNATE TO BE CONSTRUCTED.
- 431 M STD. DWG. 431 MODIFIED PER DETAIL 1 AND 2 ON SHT. 5.
- ABANDON EXISTING SEWER MANHOLE(S) PER SPECIFICATIONS.
 - EXISTING SEWER AND/OR MANHOLE TO REMAIN IN SERVICE.
 - REMOVE INTERFERING AC BERM, CURB, GUTTER AND SIDEWALK AS NEEDED TO NEAREST JOINT. RESTORE AC BERM, CURB, GUTTER AND SIDEWALK AFTER CONSTRUCTION.
 - ABANDON EXISTING SEWER MAIN IN PLACE PER SPECIFICATIONS.
 - CONTRACTOR TO FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION. PROTECT AND SUPPORT EXISTING UTILITY(S) IN PLACE.
 - PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR TO FIELD VERIFY LOCATION OF WATER UTILITY AND PROTECT IN PLACE. IF RELOCATION IS REQUIRED CONTRACTOR IS TO NOTIFY THE ENGINEER. THE WATER UTILITY SHALL HAVE 30 CALENDAR DAYS TO RELOCATE THE INTERFERING FACILITIES.
 - JACK AND BORE WITH CASING PER DETAIL B, SHEET 8 AND PER SPECIFICATIONS.
 - PLUG INLET FOR ABANDONED UPSTREAM PIPELINE.
 - CUT EXISTING PIPELINE AND DEMOLISH INTERFERING PORTION. ABANDON UPSTREAM SEGMENT AND PLUG END OF REMAINING DOWNSTREAM PIPE.
 - RECONNECT LATERALS TO NEW SEWER PIPELINE PER STD. DWG. 554 OR REPLACE EXISTING PER STD. DWG. 562 AND PER SPECIFICATIONS. CONTRACTOR TO FIELD VERIFY LATERAL LOCATION AND CONNECTION.
 - DEMOLISH AND REMOVE EXISTING SEWER MAIN WITHIN MANHOLE AND SEAL DOWNSTREAM OPENING PER SPECIFICATIONS.
 - RESHAPE BOTTOM OF EXISTING MANHOLE TO NEW OUTLET. PLUG EXISTING OUTLET.
 - DEMOLISH AND REMOVE INTERFERING PORTIONS OF ABANDONED SEWERLINE WHERE NECESSARY.
 - DEMOLISH AND REMOVE EXISTING SEWER MAIN WITHIN MANHOLE PER SPECIFICATIONS.
 - CONTRACTOR TO FIELD VERIFY INVERT ELEVATIONS OF CONNECTIONS TO EXISTING SEWER MAINS. ENGINEER TO BE NOTIFIED OF ANY SIGNIFICANT VARIANCE FROM NOTED ELEVATIONS.
 - APPROXIMATE LOCATION OF BURIED MANHOLE.
 - POWER POLE TO BE MOVED AS NECESSARY. THE ELECTRICAL UTILITY SHALL HAVE 30 CALENDAR DAYS TO RELOCATE INTERFERING FACILITIES.
 - RESHAPE BOTTOM OF EXISTING MANHOLE TO NEW INLET. PLUG EXISTING INLET.
 - REMOVE APPROXIMATELY 16 LF OF EXISTING 8" VCP AND RELAY TO NEW GRADE. CONTRACTOR TO FIELD VERIFY LOCATION AND CONNECTION.

BENCHMARK: No. J7-M2

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

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.

IMPORTANT NOTICE
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RIVERSIDE CALIFORNIA
 PUBLIC WORKS DEPARTMENT
SEWER PIPELINE CAPACITY IMPROVEMENT PROJECT
PALMYRITA AVENUE

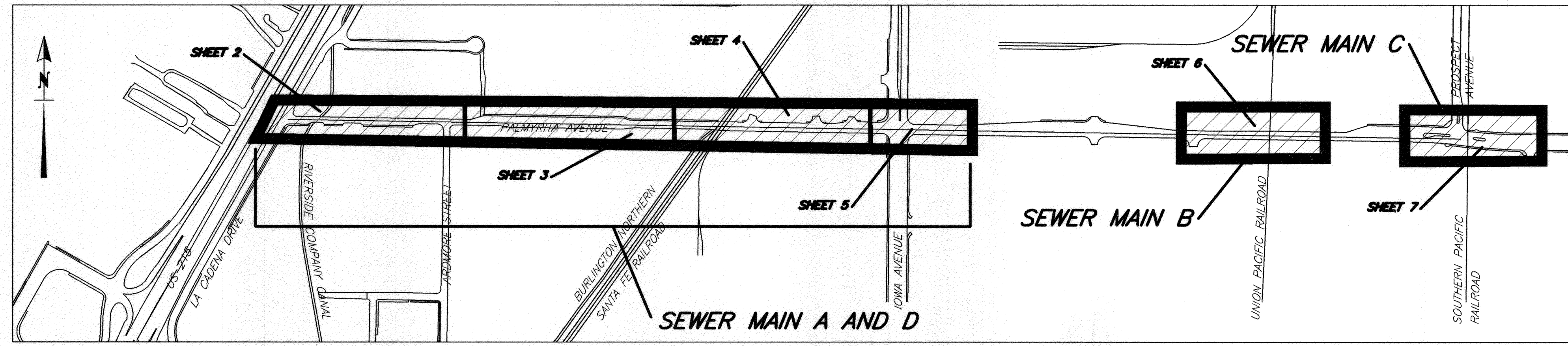
EXISTING UNDERGROUND & TOPOGRAPHY LEGEND

EXISTING UNDERGROUND UTILITIES:

- SANITARY SEWER ----- 8" S -----
 WATER LINE ----- 12" W -----
 STORM DRAIN ----- 10" SD -----
 FIBER OPTIC ----- FO -----
 TELEPHONE CONDUIT ----- T -----
 ELECTRICAL CONDUIT ----- E -----
 GAS LINE ----- 3" G -----
 OVERHEAD ELECTRICAL ----- OHE -----

TOPOGRAPHY LEGEND

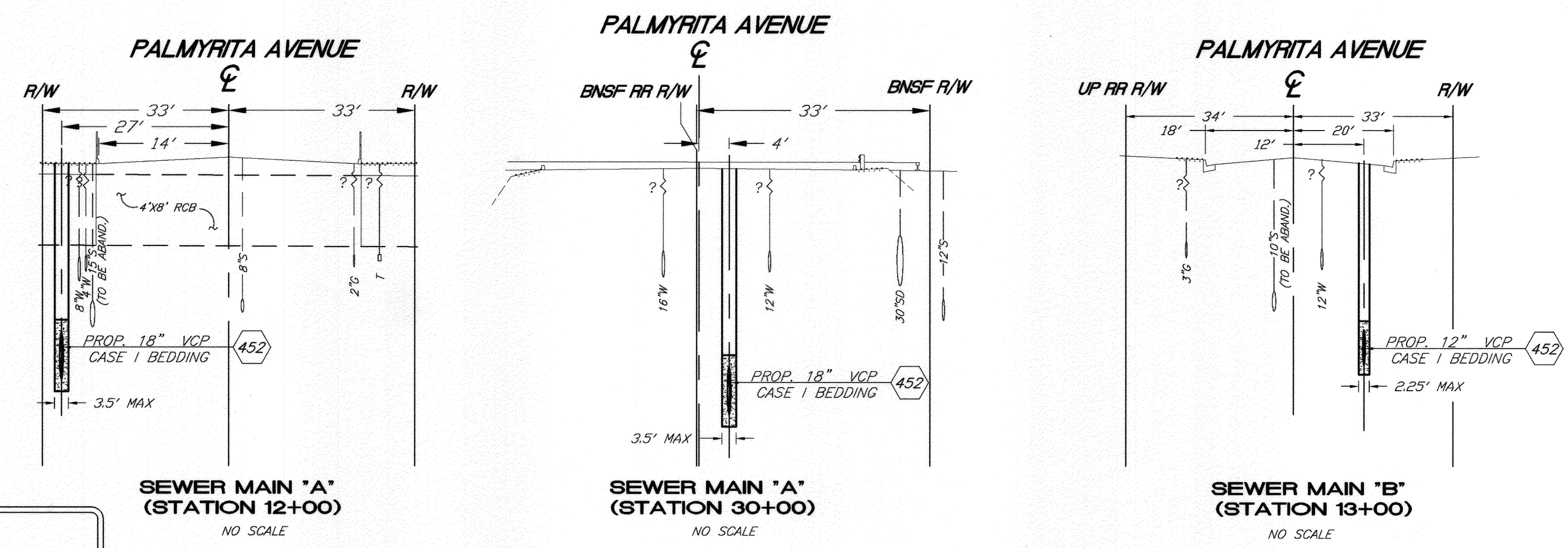
- STREET SIGN
- STORM DRAIN M.H.
- SEWER MH, PROPOSED
- SEWER MH, EXISTING
- STREET LIGHT
- WATER VALVE
- MISC MANHOLE
- PULL BOX
- FIRE HYDRANT
- CONTROL
- TRAFFIC SIGNAL BOX
- GAS MANHOLE
- TELEPHONE MANHOLE
- TRAFFIC SIGNAL
- TELEPHONE BOX
- POWER POLE
- MONUMENT
- STORM DRAIN INLET
- GUARD RAIL
- EDGE OF PAVEMENT
- PALMS
- TREES AND SHRUBS



PROJECT LOCATION MAP
NTS

SHEET INDEX

SHT NO:	SHT. TITLE
1	TITLE SHEET
2	SEWER MAIN A - FROM STATION 10+00.00 TO STATION 18+50.00
3	SEWER MAIN A - FROM STATION 18+50.00 TO STATION 28+00.00, SEWER MAIN D - FROM STATION 10+00.00 TO STATION 10+27.75
4	SEWER MAIN A - FROM STATION 28+00.00 TO STATION 37+00.00
5	SEWER MAIN A - FROM STATION 37+00.00 TO STATION 45+75.99
6	SEWER MAIN B - FROM STATION 10+00.00 TO STATION 14+37.59
7	SEWER MAIN C - FROM STATION 10+00.00 TO STATION 14+44.40
8	DETAILS
9	DETAILS



PROPOSED SEWER TYPICAL SECTIONS

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
 R.C.E. No. CS3062 expires 6/30/07
 DATE 6/1/07



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

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 APPROVED BY: [Signature] DATE: 6/1/07
 INSPECTOR: [Signature] DATE: 6/1/07
 SURVEYOR: [Signature] DATE: 6/1/07
 WASTE WATER OPS. MGR. [Signature] DATE: 6/1/07
 CIVIL ENGINEER [Signature] DATE: 6/1/07

PALMYRITA AVENUE
 SEWER PIPELINE CAPACITY IMPROVEMENT
 TITLE SHEET
 SCALE: AS SHOWN

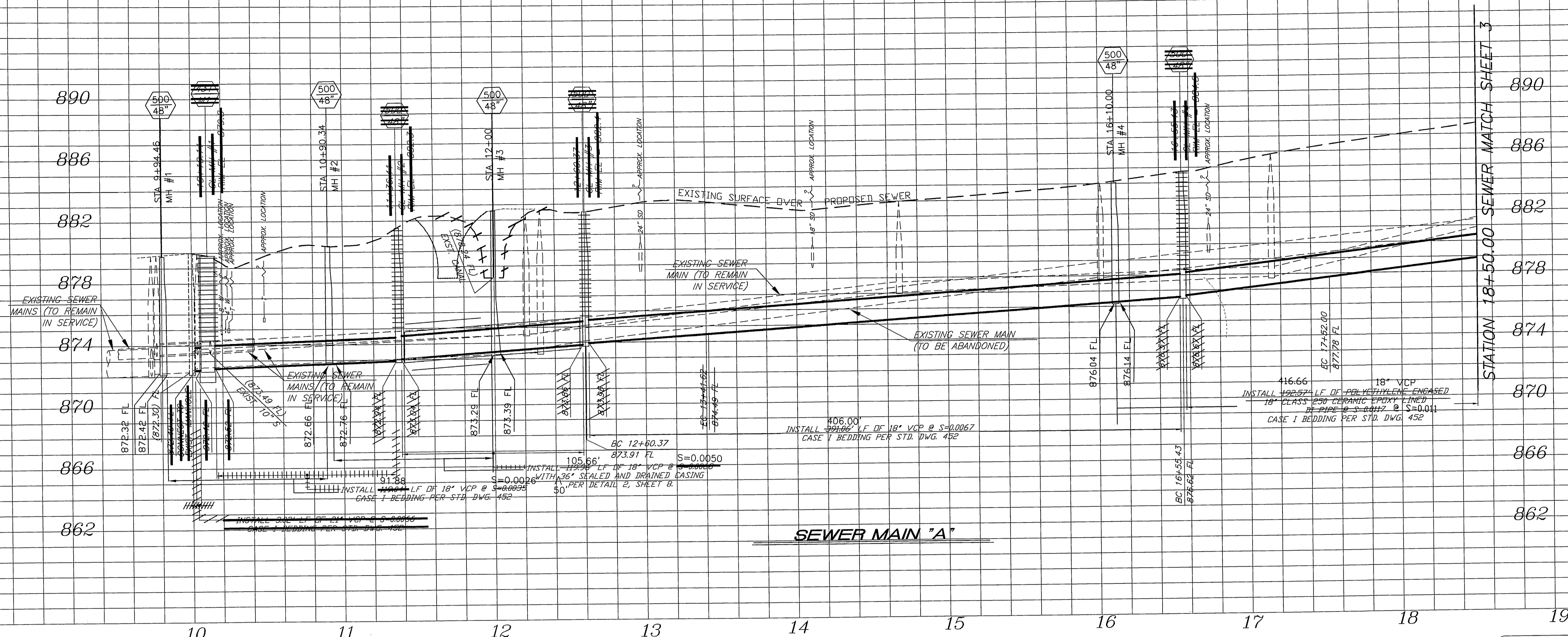
ACC. No. 9785723203-44030100
 W.D. 0808414
S-1986
 SHEET 1 OF 9

U:\Projects\06022 La Cadena\DWG\CDCDCS Palm-Sheet.DWG 06/01/07 8:57

AS-BUILT 9-12-07

INDEXED 9-12-07 4H

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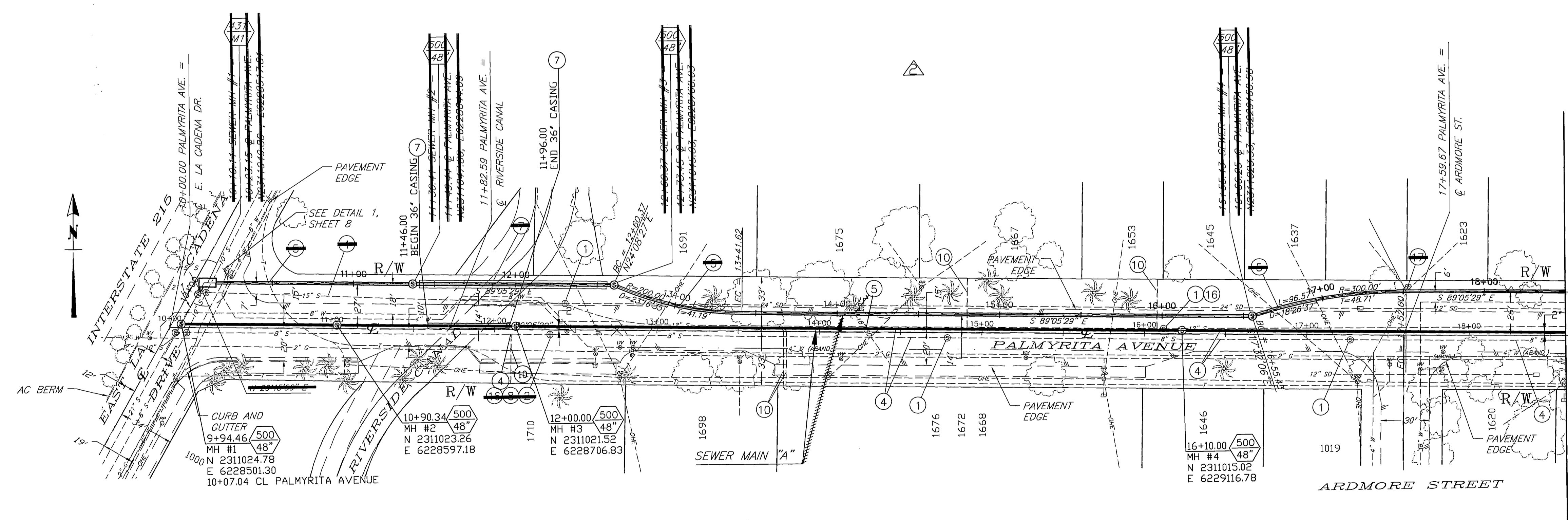


890
886
882
878
874
870
866
862

STATION 18+50.00 SEWER MATCH SHEET 3

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: No. J7-M2
 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



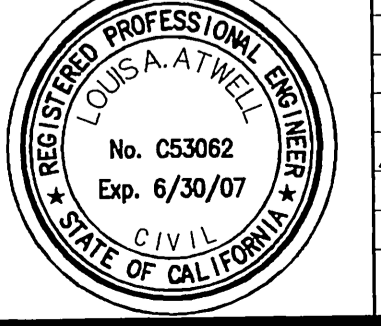
STATION 18+50.00 SEWER MATCH SHEET 3

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ENGINEER IN RESPONSIBLE CHARGE
 REVISION 2
 LONNY L. YOUNG RCE 43216

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
 R.C.E. No. C53062 expires 6/30/07
 DATE 6/11/07



DESIGNED BY: _____ DRAWN BY: CDRAKE CHECKED BY: _____

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

APPROVED BY: _____ DATE: 6/15/07
 PRINCIPAL ENGINEER
 INSPECTOR: _____ DATE: 6/17/07
 SUPERVISOR: _____ DATE: 6/17/07
 WASTE WATER OPS. MGR.: _____ DATE: 6/17/07
 ENV. MGR.: _____ DATE: 6/17/07

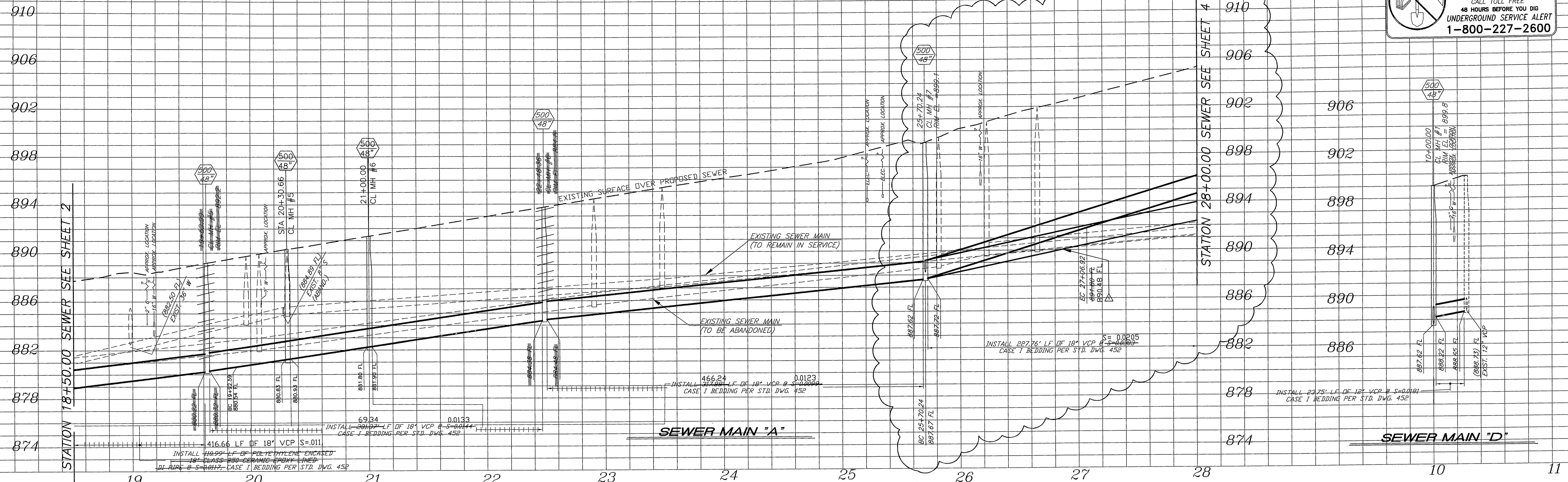
PALMYRITA AVENUE
 SEWER PIPELINE CAPACITY IMPROVEMENT
 SEWER MAIN A
 FROM STATION 10+00.00 TO STATION 18+50.00

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

ACC. No. 9785723203-440301XX
 W.O. 0608414
 S-1986
 SHEET 2 OF 9

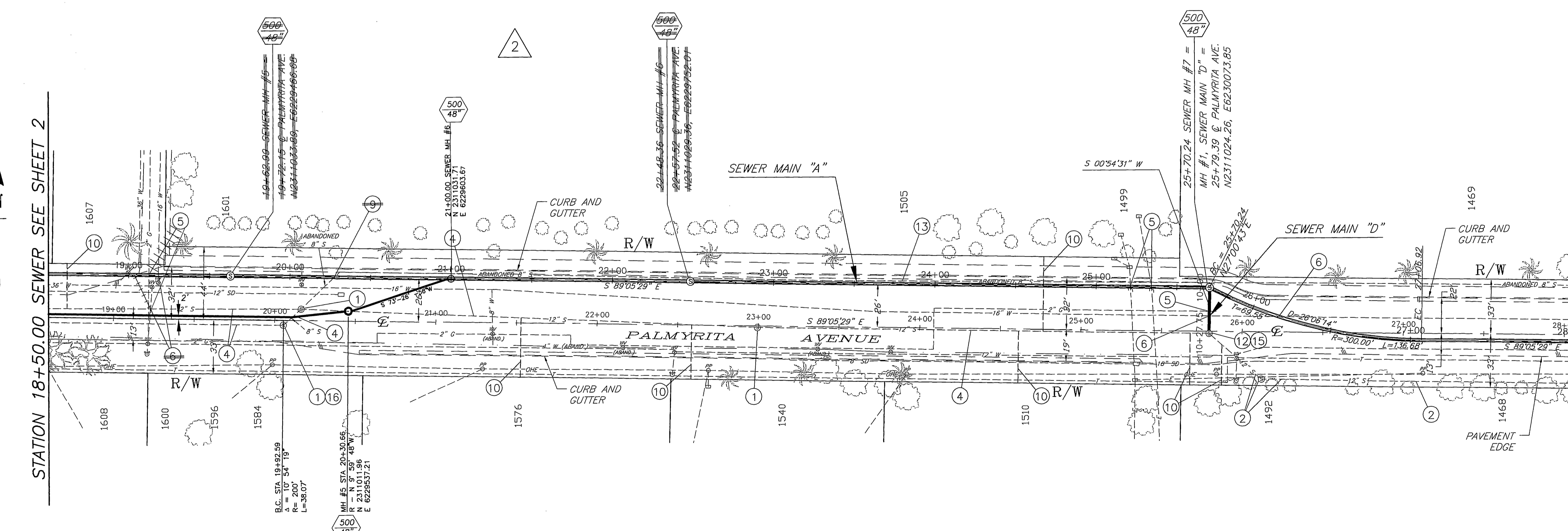
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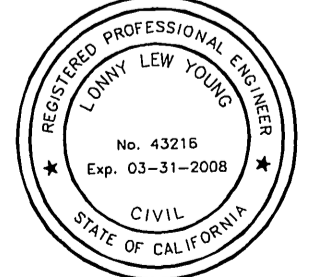


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ENGINEER IN RESPONSIBLE CHARGE
 REVISION 1 & 2
 LONNY L. YOUNG
 1/20/2007

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
LOUISA A. ATWELL
 R.C.E. No. C63082 expires 6/30/07
 DATE 6/11/07



△	MOVE SEWER 2 FT. NORTH OF CL STA 9+94 TO 20+30.66		
△	ADJUST PIPE SLOPE FROM M.H. NO. 7 - STA. 25+70.24 TO STA. 28+00	10/29/07	
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

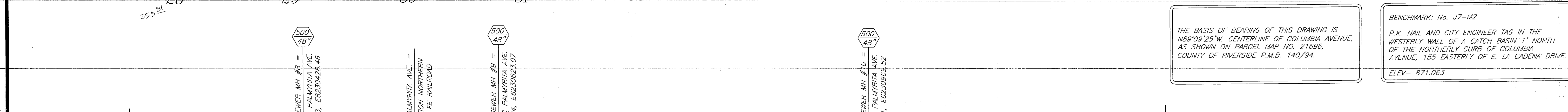
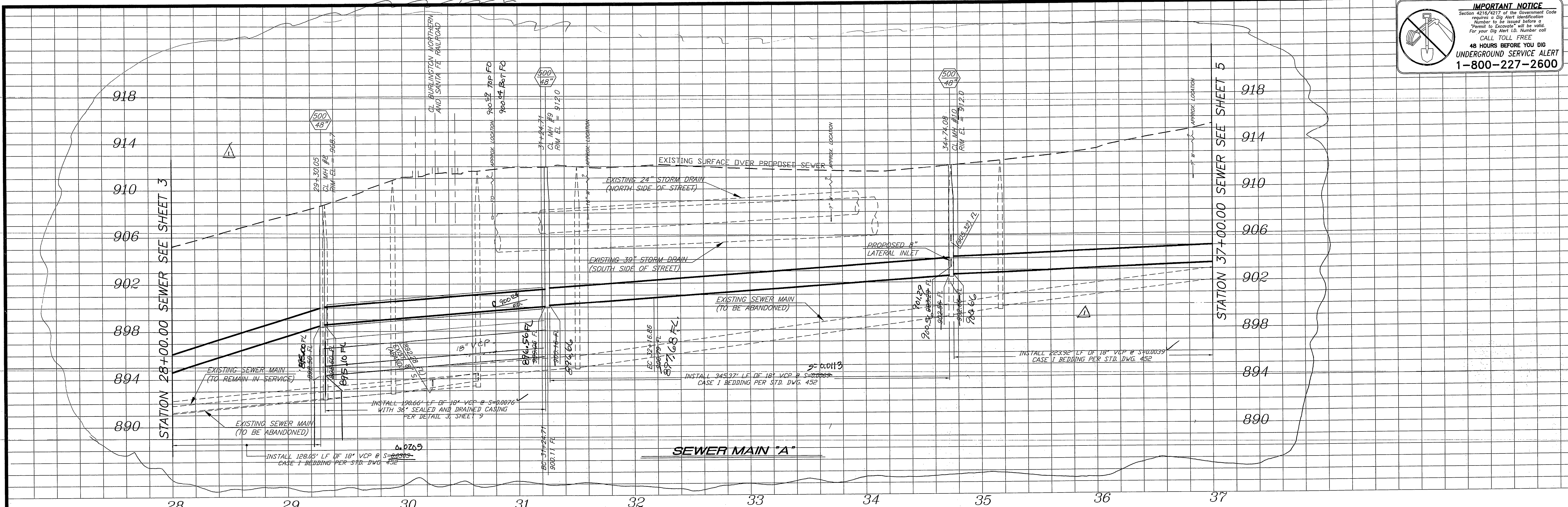
APPROVED BY	BY	DATE	APPROVED BY
PRINCIPAL ENGINEER	Am	6/15/07	Am
INSPECTOR			
SURVEYOR	CS	6/11/07	
WASTE WATER OPS. MGR.	SE		
CONTRACT ADMIN.	EA		
			DATE 6/15/07

PALMYRITA AVENUE
 SEWER PIPELINE CAPACITY IMPROVEMENT
 SEWER MAIN A - FROM STA. 18+50.00 - STA. 28+00.00
 SEWER MAIN D - FROM STA. 10+00.00 - STA. 10+27.75
 S-1986
 ACC. No. 9785723203-440301XX
 W.D. 0608414
 SHEET 3 OF 9
 HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

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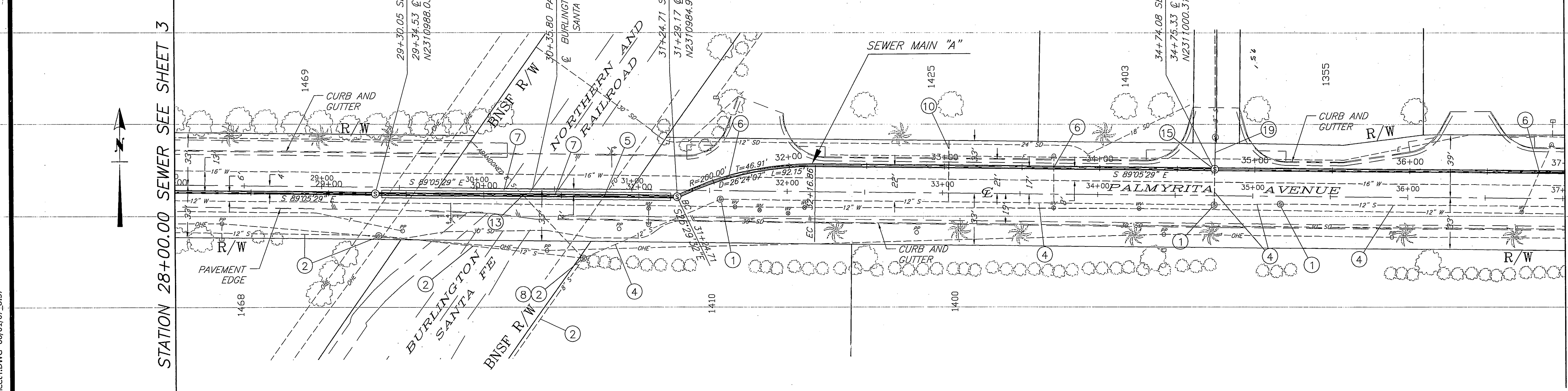
INDEXED 9-11-07

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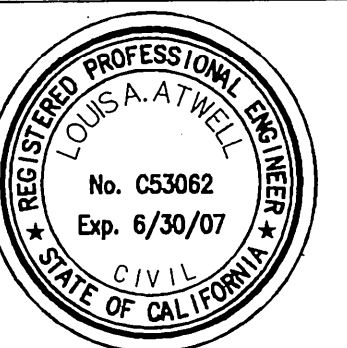
BENCHMARK: No. J7-M2
 P.K. NAIL AND CITY ENGINEER TAG IN THE WESTERLY WALL OF A CATCH BASIN 1' NORTH OF THE NORTHERLY CURB OF COLUMBIA AVENUE, 155' EASTERLY OF E. LA CADENA DRIVE. ELEV= 871.063



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

ENGINEER IN CHARGE
LOUIS A. ATWELL
 C.E. No. C53082 expires 6/30/07
 DATE: 4/10/07



MARK	REVISIONS	APPR.	DATE
Δ	INCREASE DEPTH M.H. NO. 8 & 9 BY 3.5'		10/21/07
Δ	INCREASE DEPTH M.H. NO. 10 BY 2.0'		
Δ	ADJUST PIPE SLOPE AS SHOWN.		

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE
PRINCIPAL ENGINEER	2/16/07
INSPECTOR	
SURVEYOR	ES 6/17/07
WASTE WATER OPS. MGR.	22 4/18/07
CONSTRUCTION SUPERVISOR	22 4/18/07
EXP. MGR.	22 4/18/07

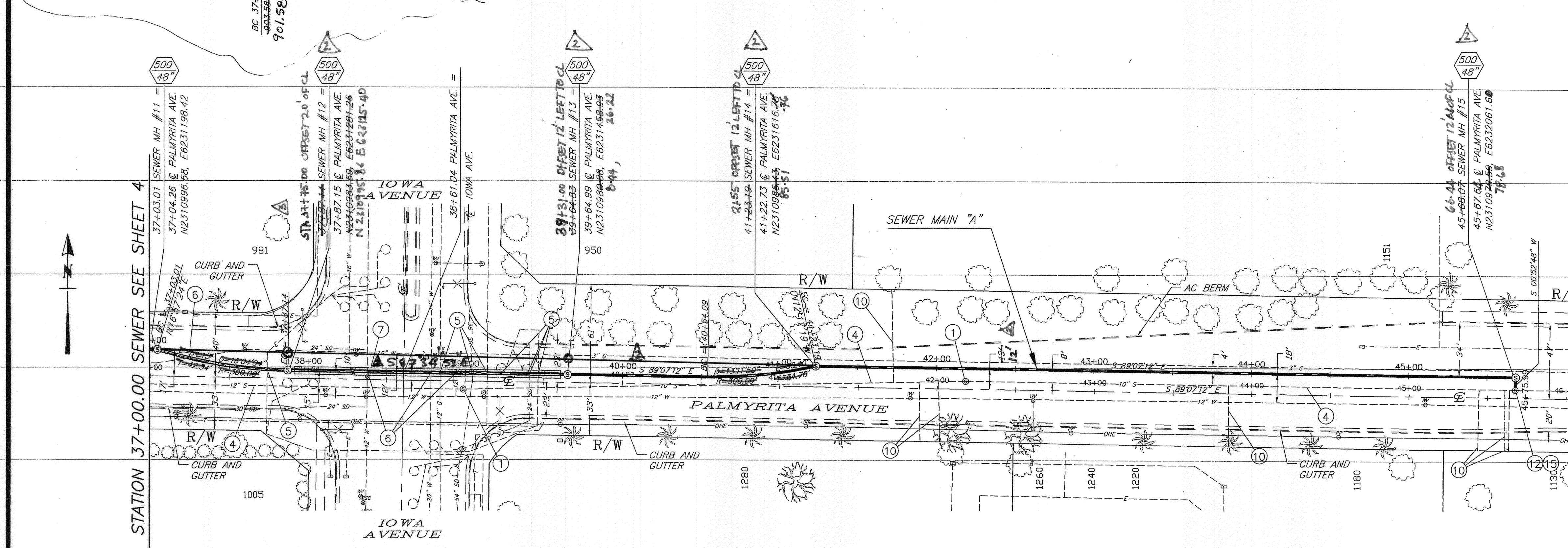
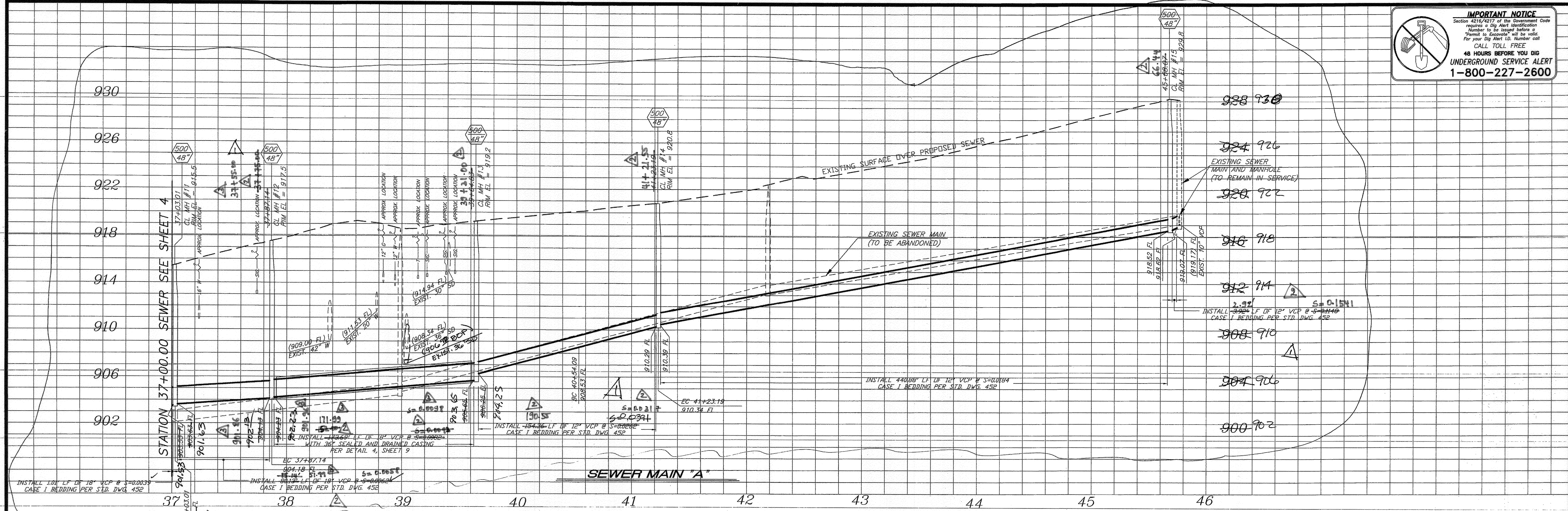
DATE: 4/15/07

PALMYRITA AVENUE
 SEWER PIPELINE CAPACITY IMPROVEMENT
 SEWER MAIN A
 FROM STATION 28+00.00 TO STATION 37+00.00

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

ACC. No. 9/85723203-440301XX
 W.O. 0508414
S-1986
 SHEET 4 OF 9

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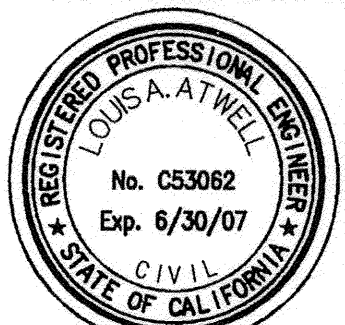
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ENGINEER IN RESPONSIBLE CHARGE
LOUIS A. ATWELL
 R.C.E. No. C53062 expires 6/30/07
 DATE: 6/1/07



Moved MH # 13, 14, 15
 REALIGN SEWER FROM STA. 37+15 TO STA. 37+25
 INCREASE DEPTH M.H. No. 11, 12, 13 BY 2'-0". ADJUST PIPE SLOPE AS SHOWN.

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

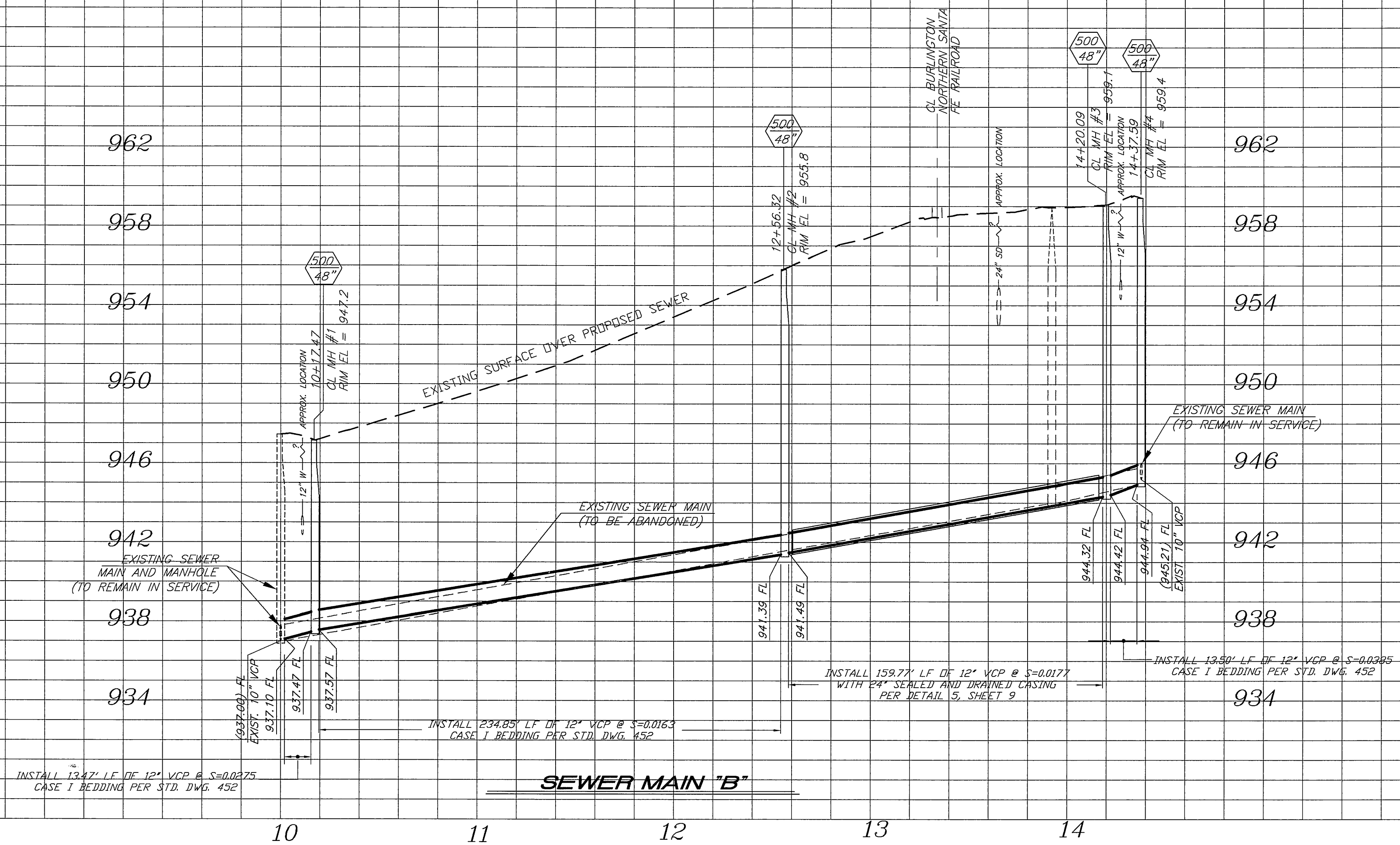
APPROVED BY	BY	DATE	APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	CS	6/1/07	CITY ENGINEER	CS	6/1/07
INSPECTOR	CS	6/1/07			
SURVEYOR	CS	6/1/07			

PALMYRITA AVENUE
 SEWER PIPELINE CAPACITY IMPROVEMENT
 SEWER MAIN A
 FROM STATION 37+00.00 TO STATION 45+75.99

ACC. No. 9785723203-440301XX
 W.D. 0608414
S-1986
 SHEET 5 OF 9

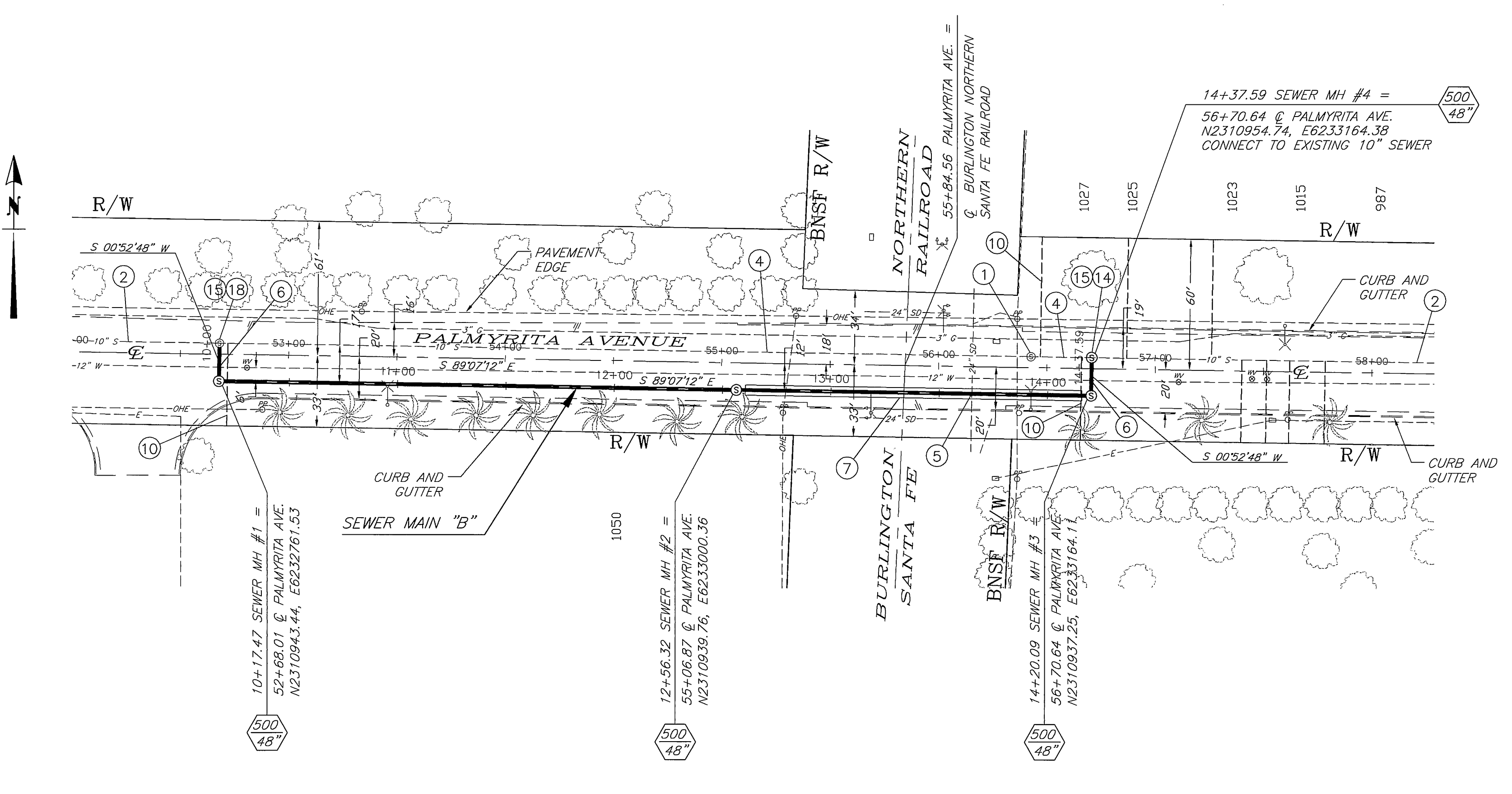
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

IMPORTANT NOTICE
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 For your Dig Alert I.D. Number call
**CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT
 1-800-227-2600**



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: No. J7-M2
 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



SPECIFIC CONSTRUCTION NOTES

- 1 ABANDON EXISTING SEWER MANHOLE(S) PER SPECIFICATIONS.
- 2 EXISTING SEWER AND/OR MANHOLE TO REMAIN IN SERVICE.
- 4 ABANDON EXISTING SEWER MAIN IN PLACE PER SPECIFICATIONS.
- 5 CONTRACTOR TO FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION. PROTECT AND SUPPORT EXISTING UTILITY(S) IN PLACE.
- 6 PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR TO FIELD VERIFY LOCATION OF WATER UTILITY AND PROTECT, IN PLACE. IF RELOCATION IS REQUIRED CONTRACTOR IS TO NOTIFY THE ENGINEER. THE WATER UTILITY SHALL HAVE 30 CALENDAR DAYS TO RELOCATE THE INTERFERING FACILITIES.
- 7 JACK AND BORE WITH CASING PER DETAIL B, SHEET 8 AND PER SPECIFICATIONS.
- 10 RECONNECT LATERALS TO NEW SEWER PIPELINE PER STD. DWG. 554 OR REPLACE EXISTING PER STD. DWG. 562 AND PER SPECIFICATIONS. CONTRACTOR TO FIELD VERIFY LATERAL LOCATION AND CONNECTION.
- 14 DEMOLISH AND REMOVE EXISTING SEWER MAIN WITHIN MANHOLE PER SPECIFICATIONS.
- 15 CONTRACTOR TO FIELD VERIFY INVERT ELEVATIONS OF CONNECTIONS TO EXISTING SEWER MAINS. ENGINEER TO BE NOTIFIED OF ANY SIGNIFICANT VARIANCE FROM NOTED ELEVATIONS.
- 18 RESHAPE BOTTOM OF EXISTING MANHOLE TO NEW INLET. PLUG EXISTING INLET.

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
 R.G.E. No. C53062 expires 6/30/07
 DATE 6/1/07

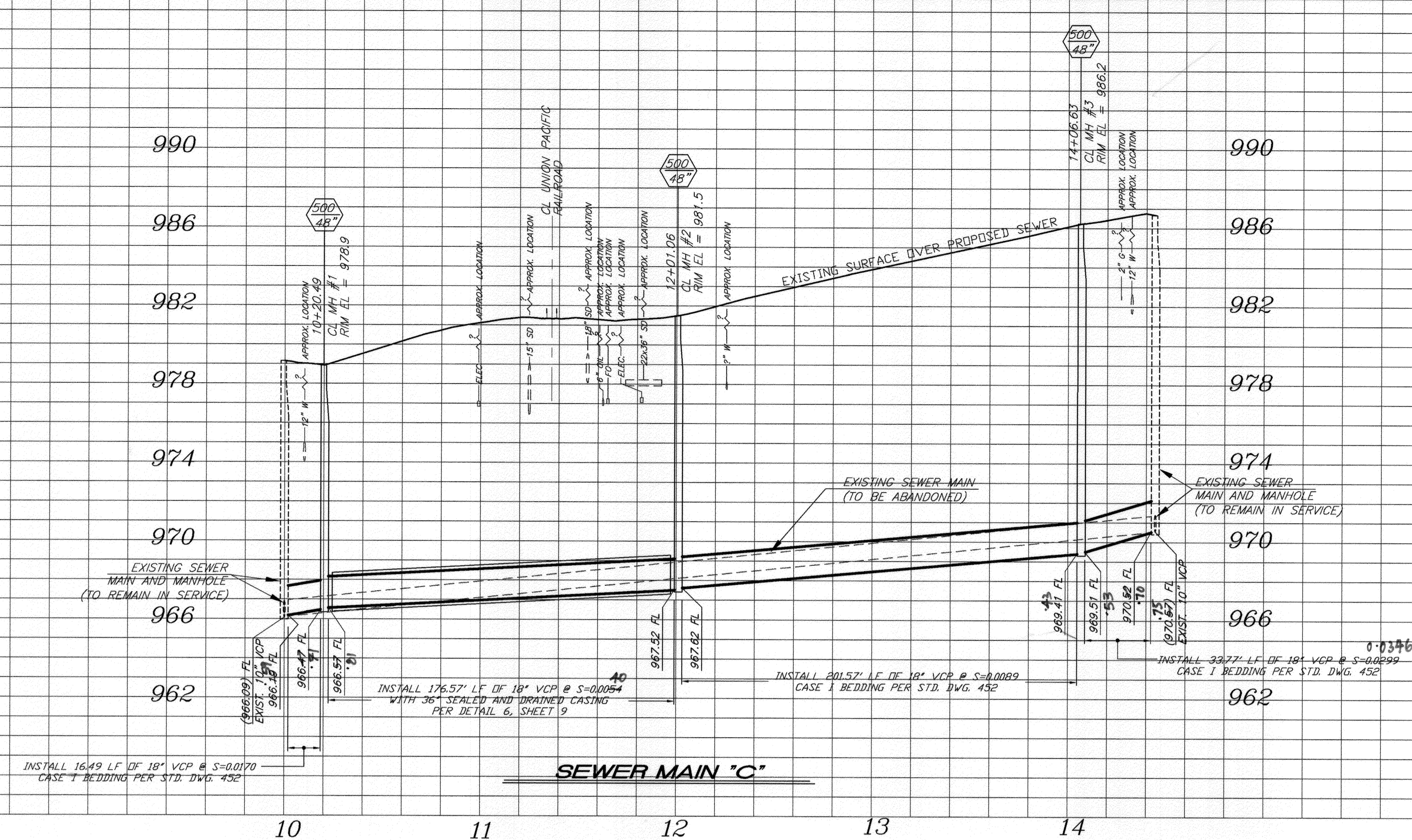


CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT			
APPROVED BY	BY	DATE	APPROVED BY
PRINCIPAL ENGINEER	[Signature]	6/1/07	[Signature]
INSPECTOR	[Signature]	6/1/07	CITY ENGINEER
SUPERVISOR	[Signature]	6/1/07	
WASTE WATER OPS. MGR.	[Signature]	6/1/07	
ENV. MGR.	[Signature]	6/1/07	

PALMYRITA AVENUE
 SEWER PIPELINE CAPACITY IMPROVEMENT
 SEWER MAIN B
 FROM STATION 10+00.00 TO STATION 14+37.59
 HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

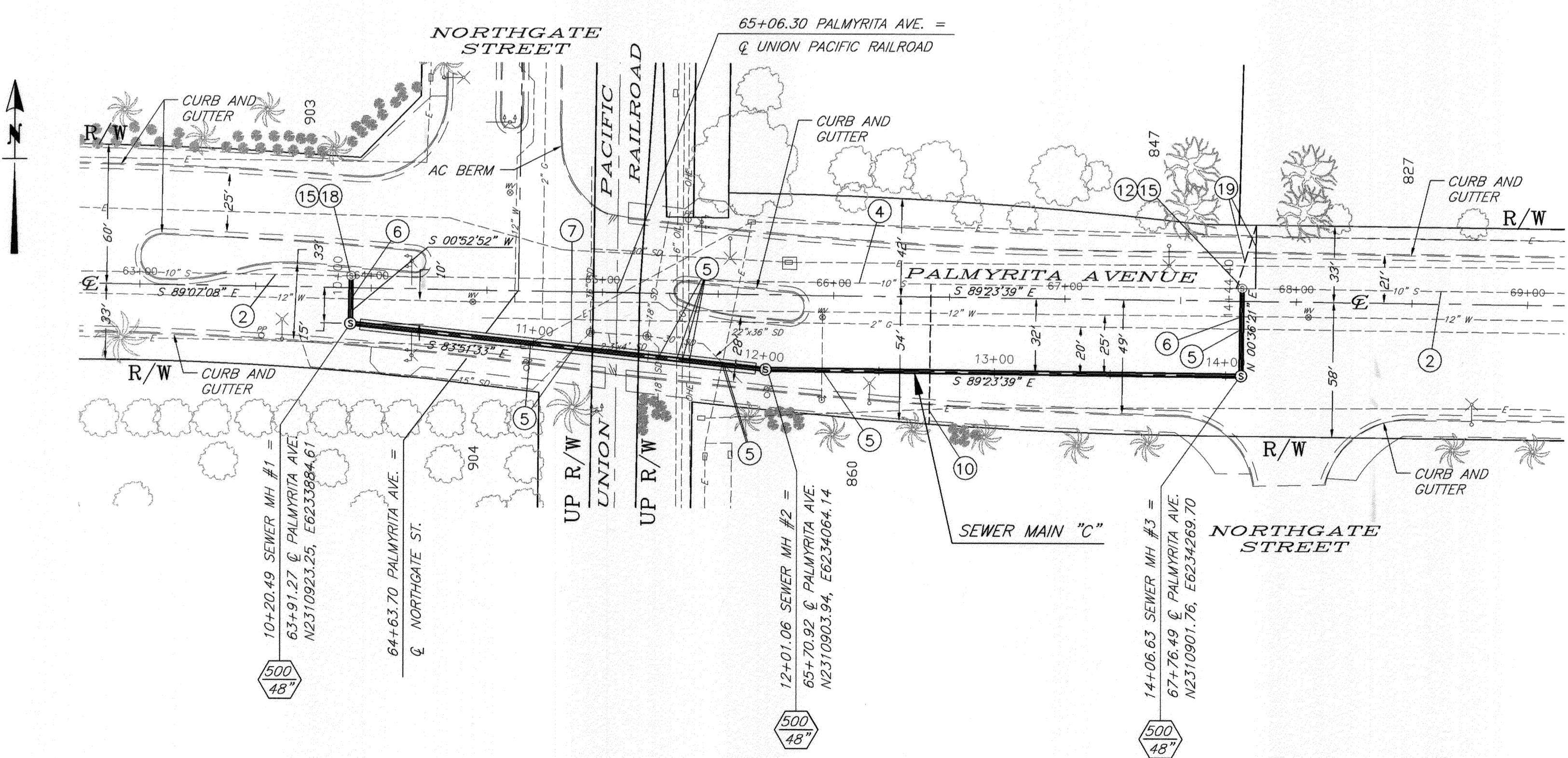
ACC. No. 9785723203-440301HX
 W.D. 0608414
S-1986
 SHEET 6 OF 9

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BENCHMARK: No. J7-M2
 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



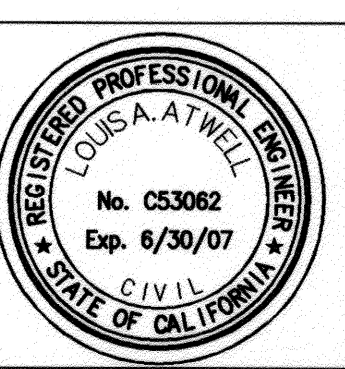
SPECIFIC CONSTRUCTION NOTES

- 2 EXISTING SEWER AND/OR MANHOLE TO REMAIN IN SERVICE.
- 4 ABANDON EXISTING SEWER MAIN IN PLACE PER SPECIFICATIONS.
- 5 CONTRACTOR TO FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION. PROTECT AND SUPPORT EXISTING UTILITY(S) IN PLACE.
- 6 PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR TO FIELD VERIFY LOCATION OF WATER UTILITY AND PROTECT IN PLACE. IF RELOCATION IS REQUIRED CONTRACTOR IS TO NOTIFY THE ENGINEER. THE WATER UTILITY SHALL HAVE 30 CALENDAR DAYS TO RELOCATE THE INTERFERING FACILITIES.
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- 12 RESHAPE BOTTOM OF EXISTING MANHOLE TO NEW OUTLET. PLUG EXISTING OUTLET.
- 15 CONTRACTOR TO FIELD VERIFY INVERT ELEVATIONS OF CONNECTIONS TO EXISTING SEWER MAINS. ENGINEER TO BE NOTIFIED OF ANY SIGNIFICANT VARIANCE FROM NOTED ELEVATIONS.
- 18 RESHAPE BOTTOM OF EXISTING MANHOLE TO NEW INLET. PLUG EXISTING INLET.
- 19 DEMOLISH EXISTING LATERAL AND CONSTRUCT NEW LATERAL PER STD. DWG. 554 PER STD. DWG. 562 AND PER SPECIFICATIONS. CONTRACTOR TO FIELD VERIFY LATERAL LOCATION AND CONNECTION.

U:\Projects\06022 La Cadena\DWG\CDOKS\ Palm-Sheet7.DWG 06/01/07_7:49

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
 R.C.E. No. C53062 expires 6/30/07
 DATE 6/1/07



CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE	APPROVED BY
PRINCIPAL ENGINEER	<i>[Signature]</i>	6/1/07	<i>[Signature]</i>
INSPECTOR	<i>[Signature]</i>	6/1/07	CITY ENGINEER
SURVEYOR	CS	6/1/07	
WASTE WATER OPS. MGR.	<i>[Signature]</i>	6/1/07	
CONV. SEWER ADMIN. EMP. MGR.	<i>[Signature]</i>	6/1/07	

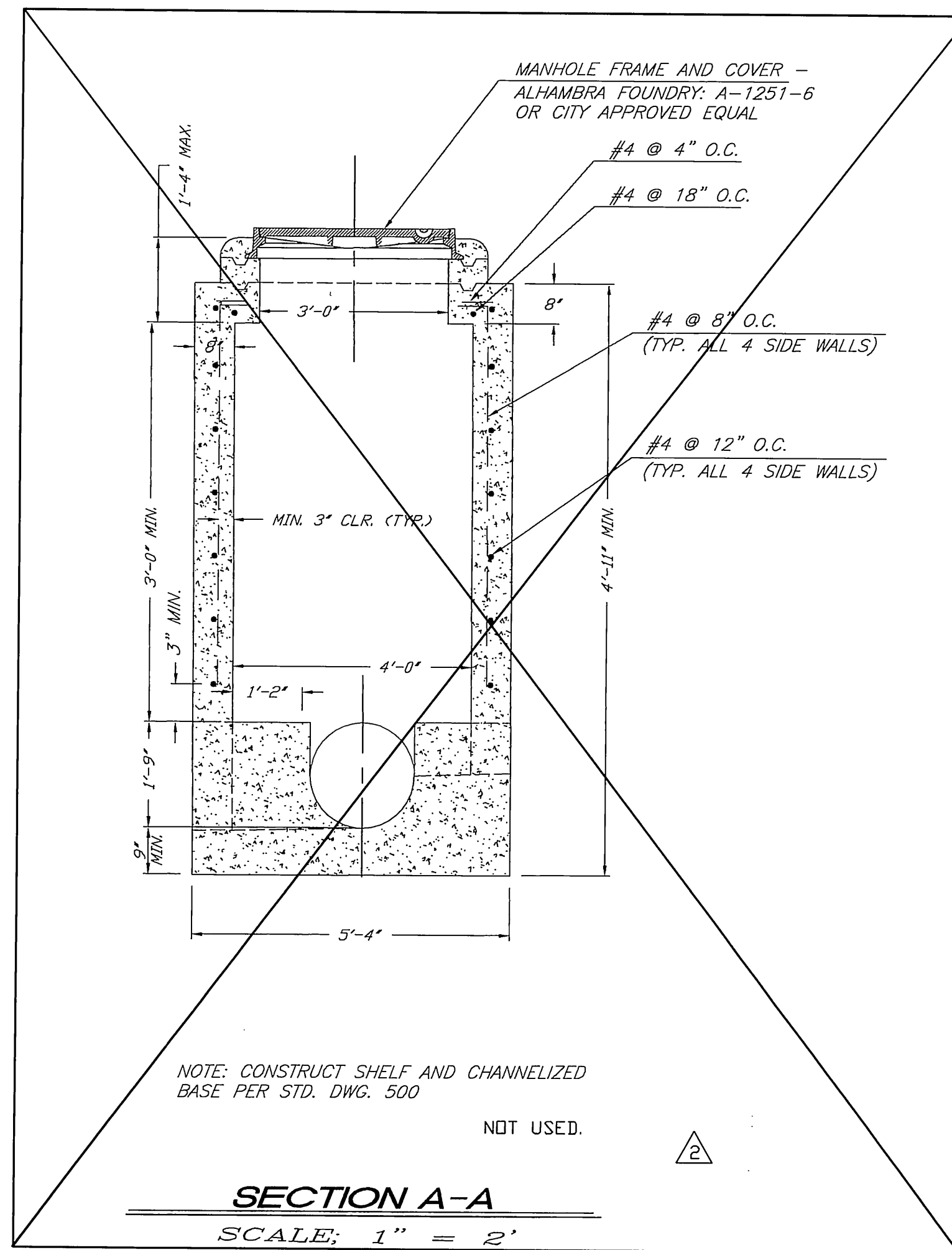
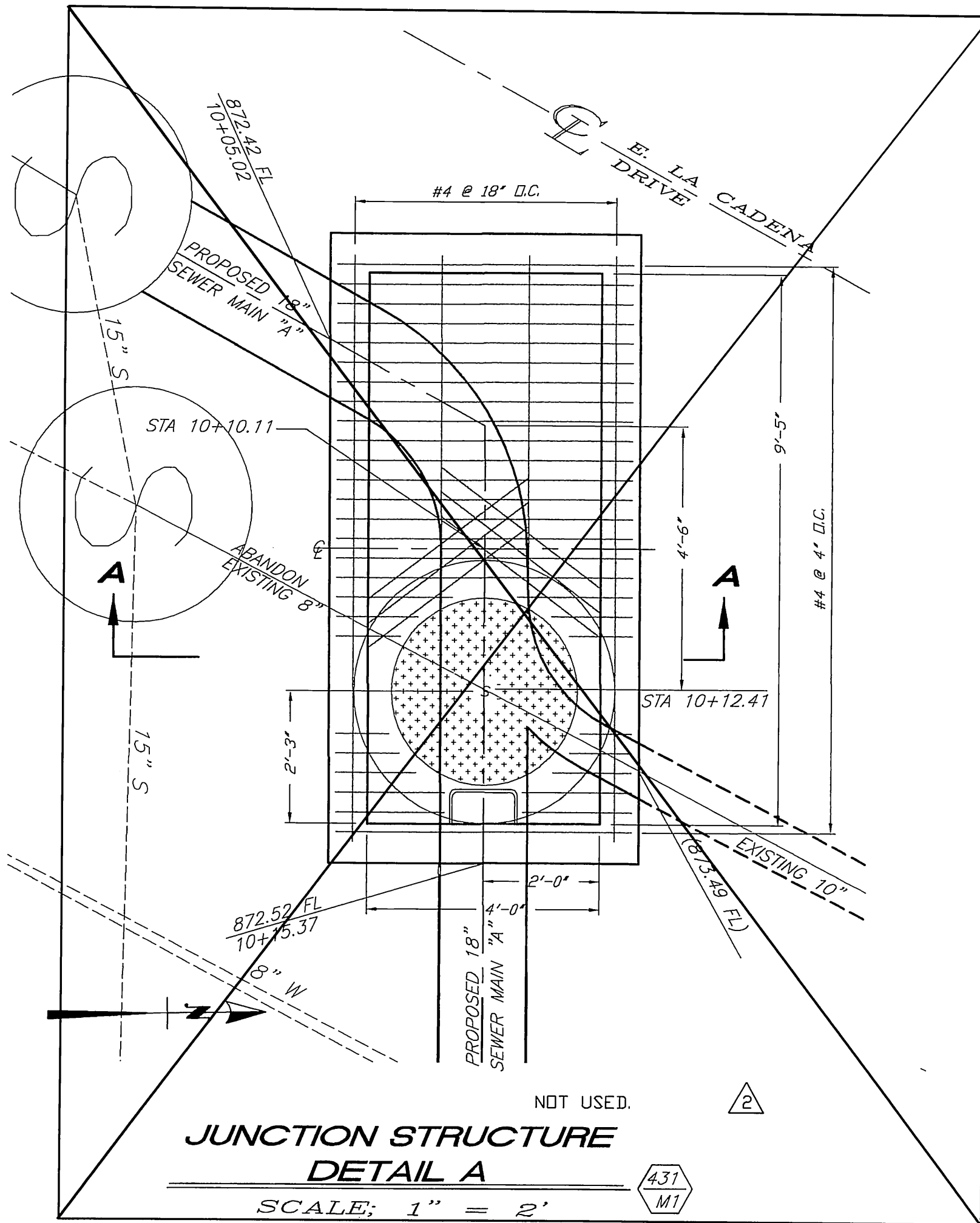
MARK REVISIONS APPR. DATE
 ADJUST GRADES LINE 'C' 11/18/07

PALMYRITA AVENUE
 SEWER PIPELINE CAPACITY IMPROVEMENT
 SEWER MAIN C
 FROM STATION 10+00.00 TO STATION 14+44.40

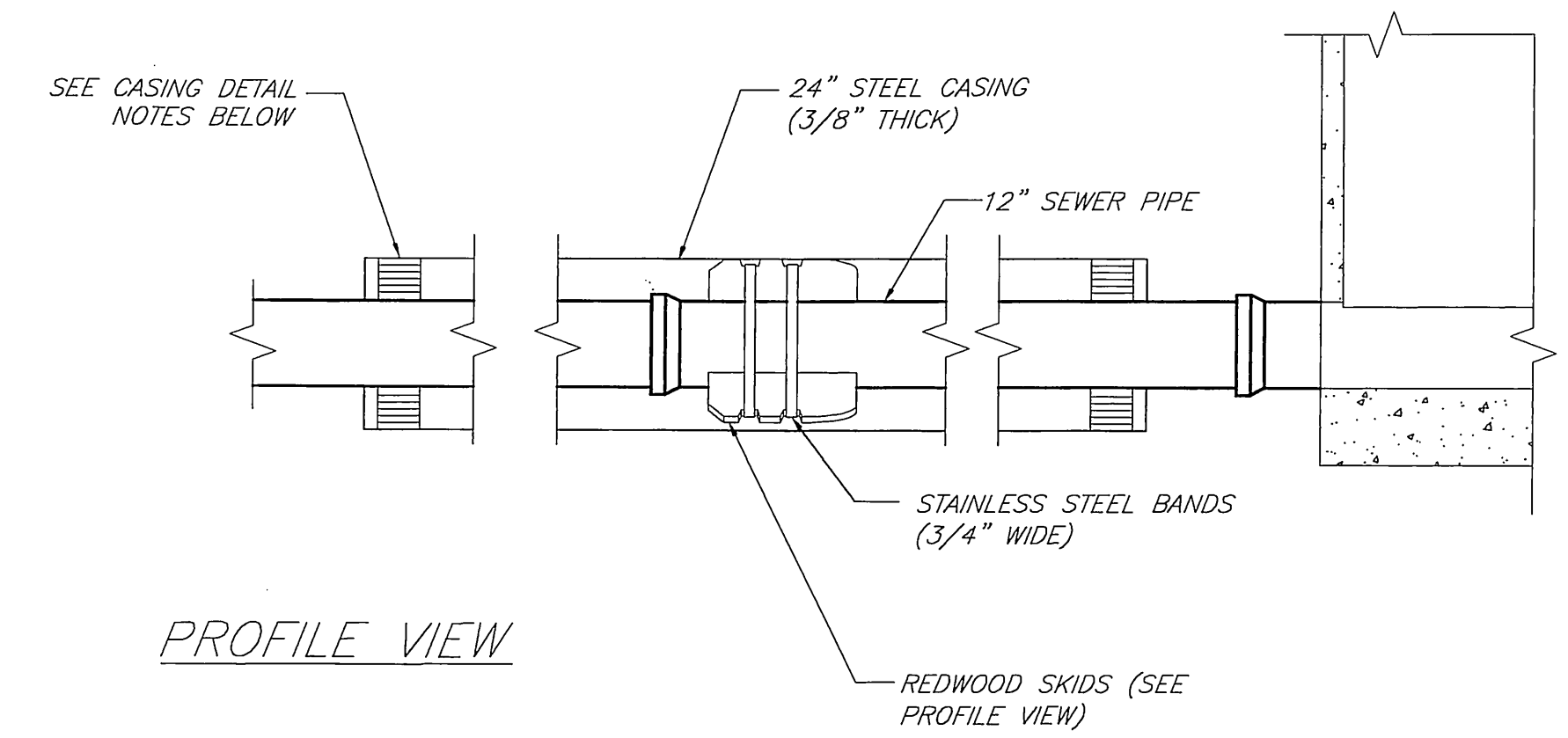
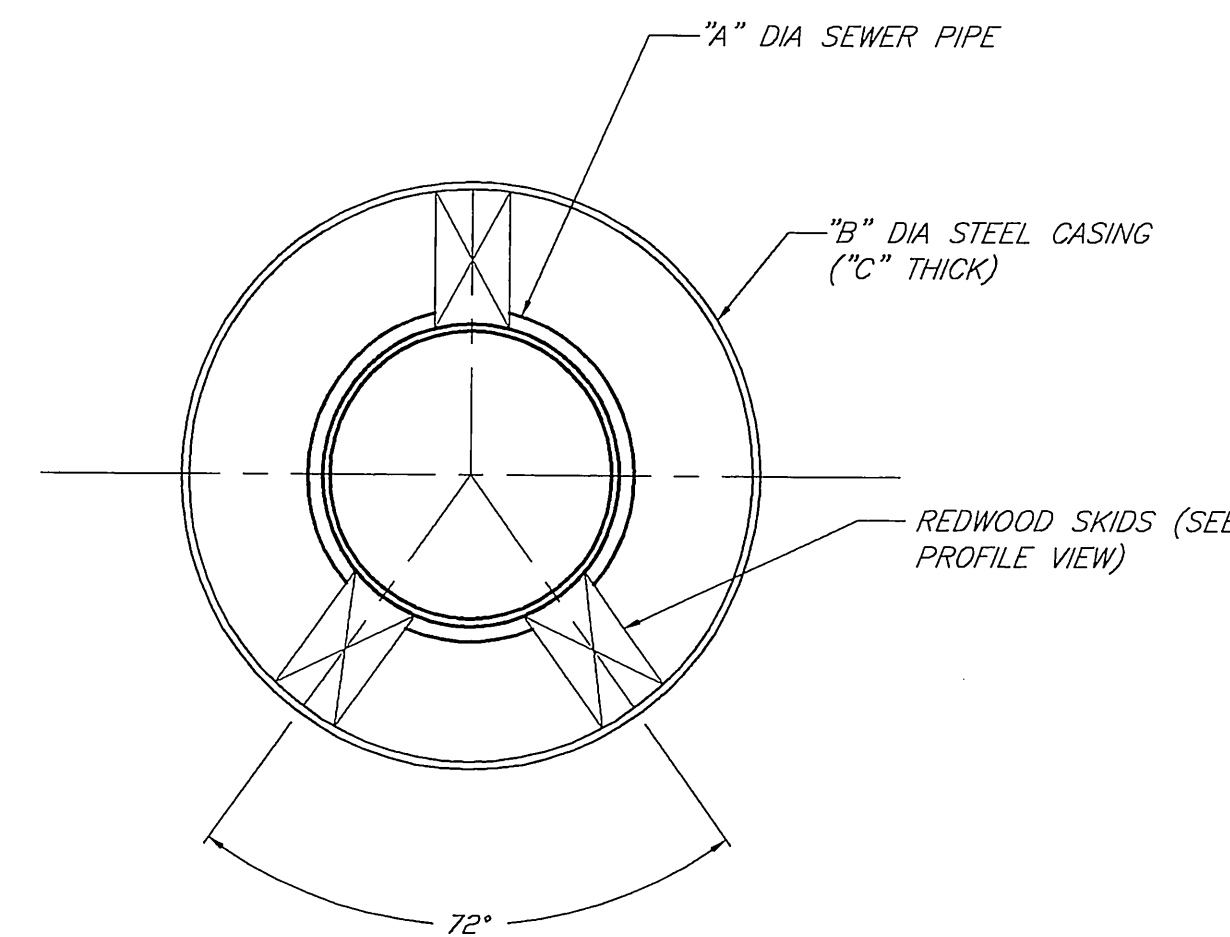
HORIZ. SCALE: 1" = 40'
 VERT. SCALE: 1" = 4'

ACC. No. 978573203-440301XX
 W.O. 0608414
S-1986
 SHEET 7 OF 9

INDEXED 9-12-07 LH



CASING TABLE		
PIPE DIA	CASING DIA	WALL THICK. (MIN)
12"	24"	0.375"
18"	36"	0.562"



CASING DETAIL NOTES

- 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.
- ALL STEEL CASING PIPE FIELD JOINTS SHALL BE WELDED WITH A CONTINUOUS CIRCUMFERENTIAL WELDS.
- CARRIER PIPE SHALL BE AIR TESTED PRIOR TO SLURRY BACKFILLING AND SEALING CASING.
- VOID BETWEEN CASING AND CARRIER PIPE SHALL BE FILLED WITH A ONE SACK PCC SLURRY MIX.
- UPSTREAM AND DOWNSTREAM ELEVATIONS TO BE VERIFIED PRIOR TO SEALING CASING.
- 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.

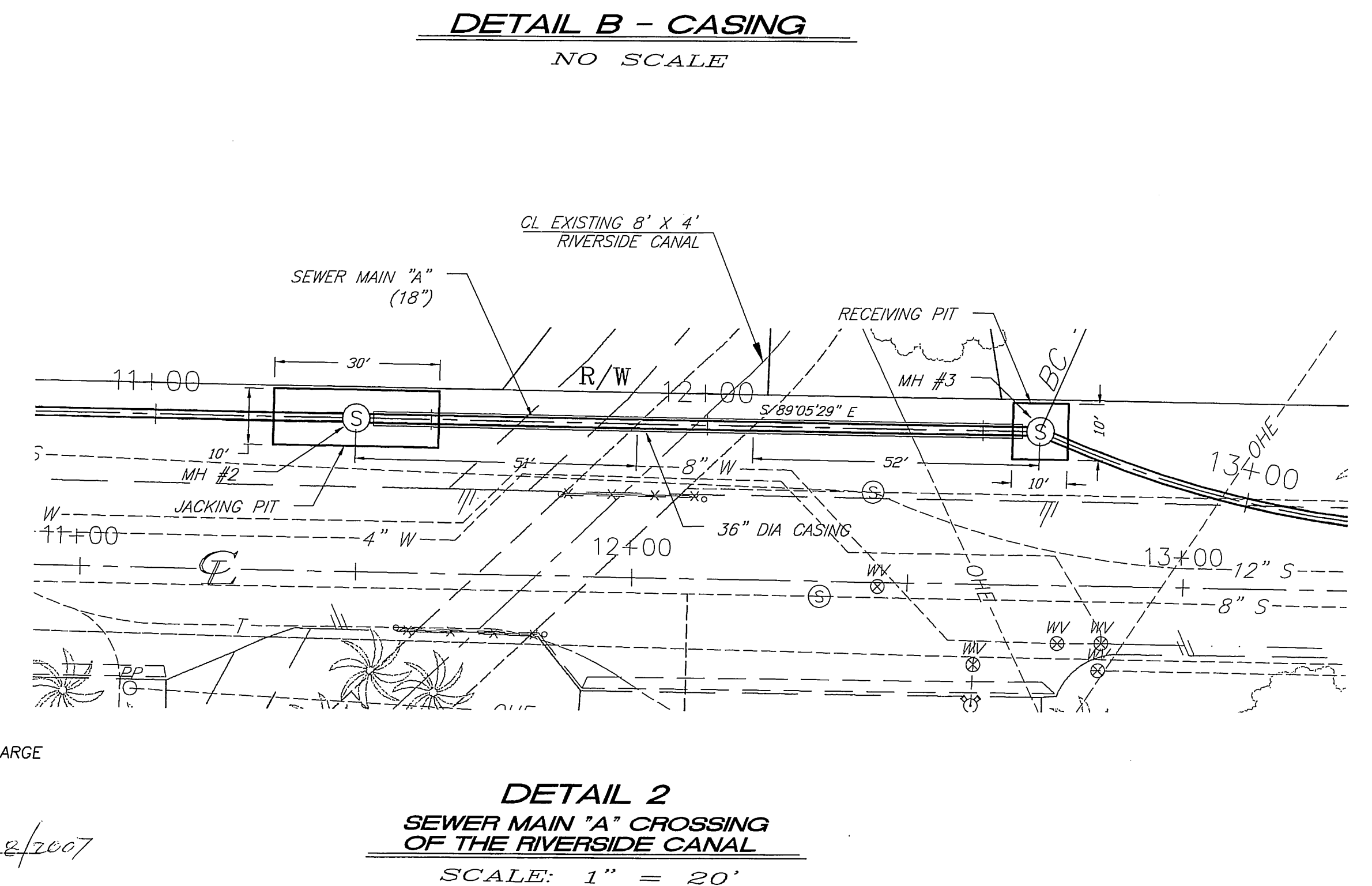
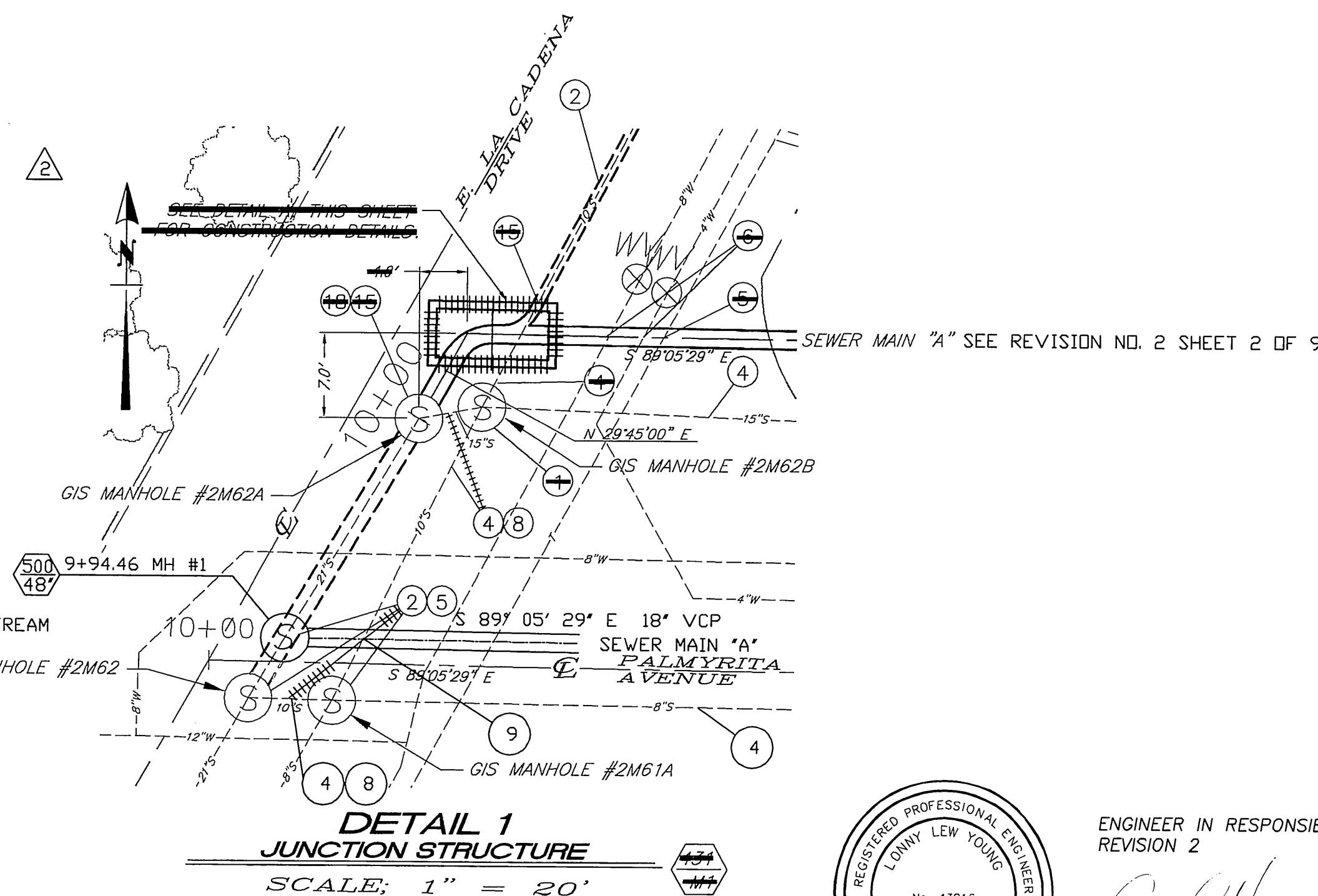
SPECIFIC CONSTRUCTION NOTES

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- PLUG INLET FOR ABANDONED UPSTREAM PIPELINE.
- CONTRACTOR TO FIELD VERIFY INVERT ELEVATIONS OF CONNECTIONS TO EXISTING SEWER MAINS. ENGINEER TO BE NOTIFIED OF ANY SIGNIFICANT VARIANCE FROM NOTED ELEVATIONS.
- RESHAPE BOTTOM OF EXISTING MANHOLE TO NEW INLET. PLUG EXISTING INLET.
- RESHAPE BOTTOM OF EXISTING MANHOLE TO NEW OUTLET. PLUG EXISTING OUTLET.

THE BASIS OF BEARING OF THIS DRAWING IS N89°05'25"W, CENTERLINE OF COLUMBIA AVENUE, AS SHOWN ON PARCEL MAP NO. 21696, COUNTY OF RIVERSIDE P.M.B. 140/94.

BENCHMARK: No. J7-M2
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

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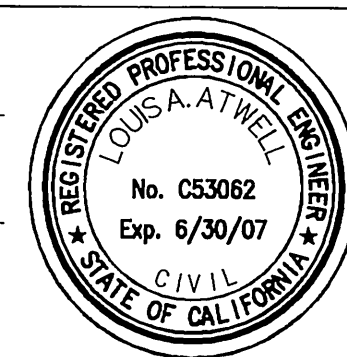


ENGINEER IN RESPONSIBLE CHARGE
REVISION 2

Lonny L. Young 04/28/2007
Lonny L. Young RCE 43216

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
No. CS3062
Exp. 6/30/07
CIVIL
STATE OF CALIFORNIA
DATE: 5/10/07



MARK	REVISIONS	APPR.	DATE
1	MOVE 18" VCP SEWER TO LOCATION SHOWN.		

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

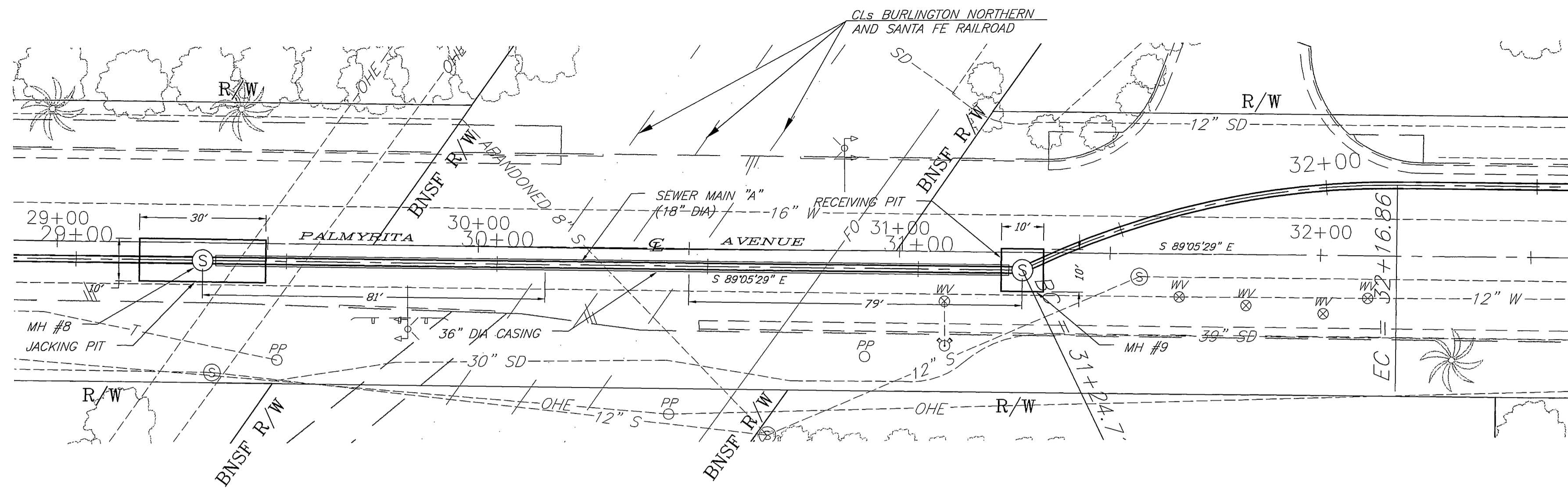
APPROVED BY	BY	DATE	APPROVED BY
PRINCIPAL ENGINEER	LS	6/1/07	Lonny L. Young
INSPECTOR	CS	6/1/07	City Engineer
SURVEYOR	CS	6/1/07	
WASTE WATER OPS. MGR.	CS	6/1/07	
CONST. CONT. ADMIN.	CS	6/1/07	
ENG. MGR.	CS	6/1/07	

DESIGNED BY: _____ DRAWN BY: CORRAKE, CHECKED BY: _____ DATE: 6/15/07

PALMYRITA AVENUE
SEWER PIPELINE CAPACITY IMPROVEMENT
DETAILS

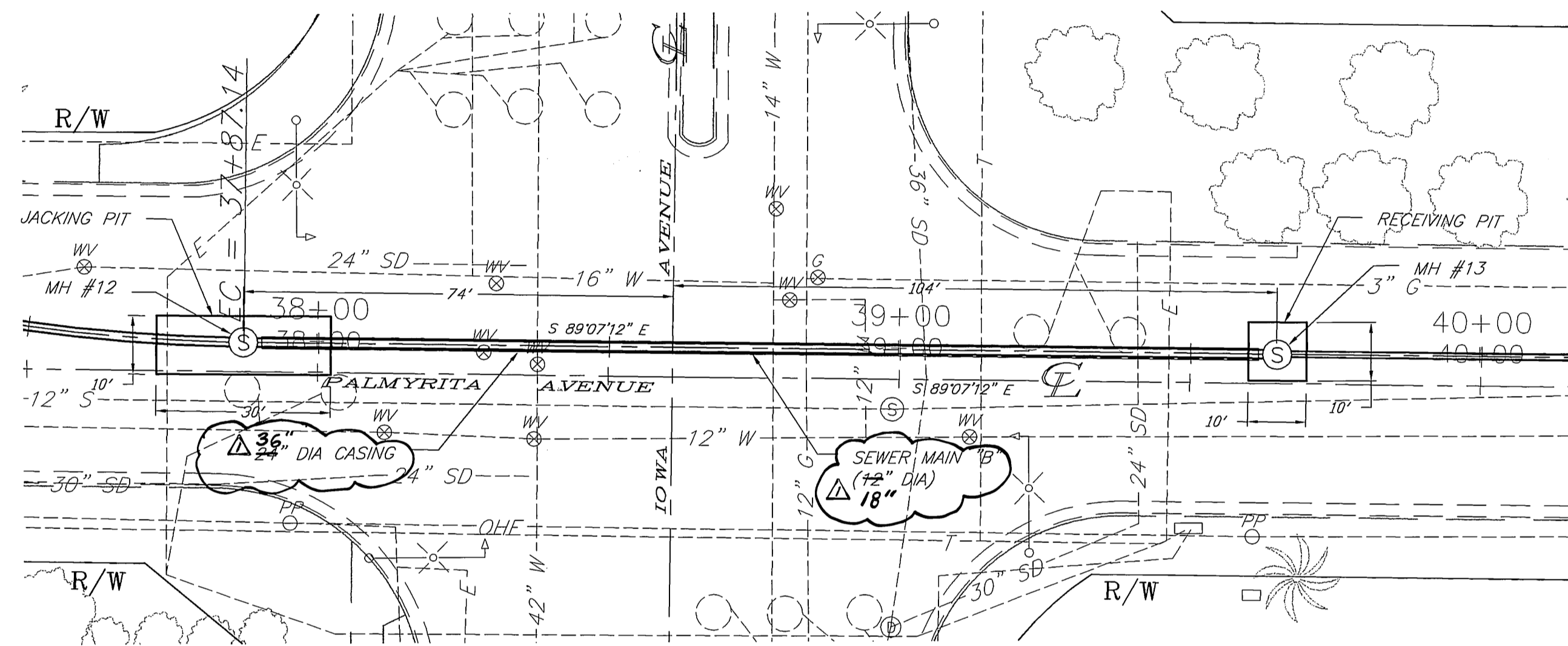
SCALE: AS SHOWN

ACC. No. 9785723203-440301XX
W.O. 0808414
S-1986
SHEET 8 OF 9



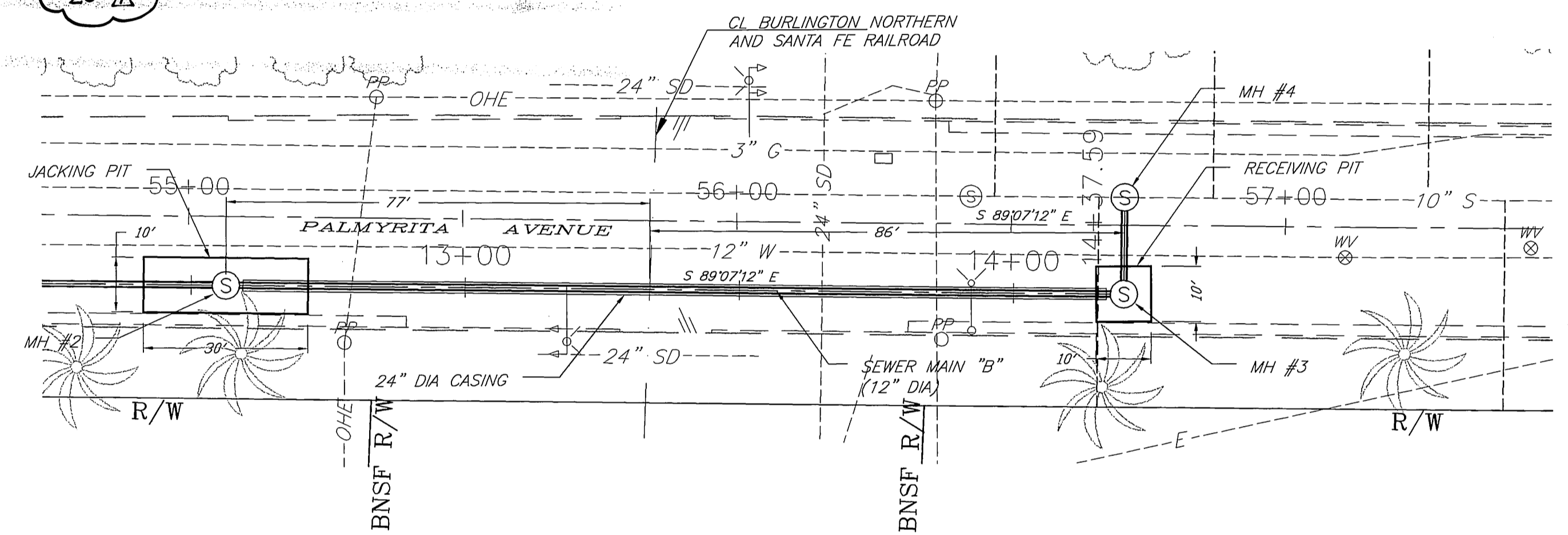
DETAIL 3
SEWER MAIN "A" CROSSING
OF THE BURLINGTON NORTHERN
SANTA FE RAILROAD

SCALE: 1" = 40' ± 20' Δ



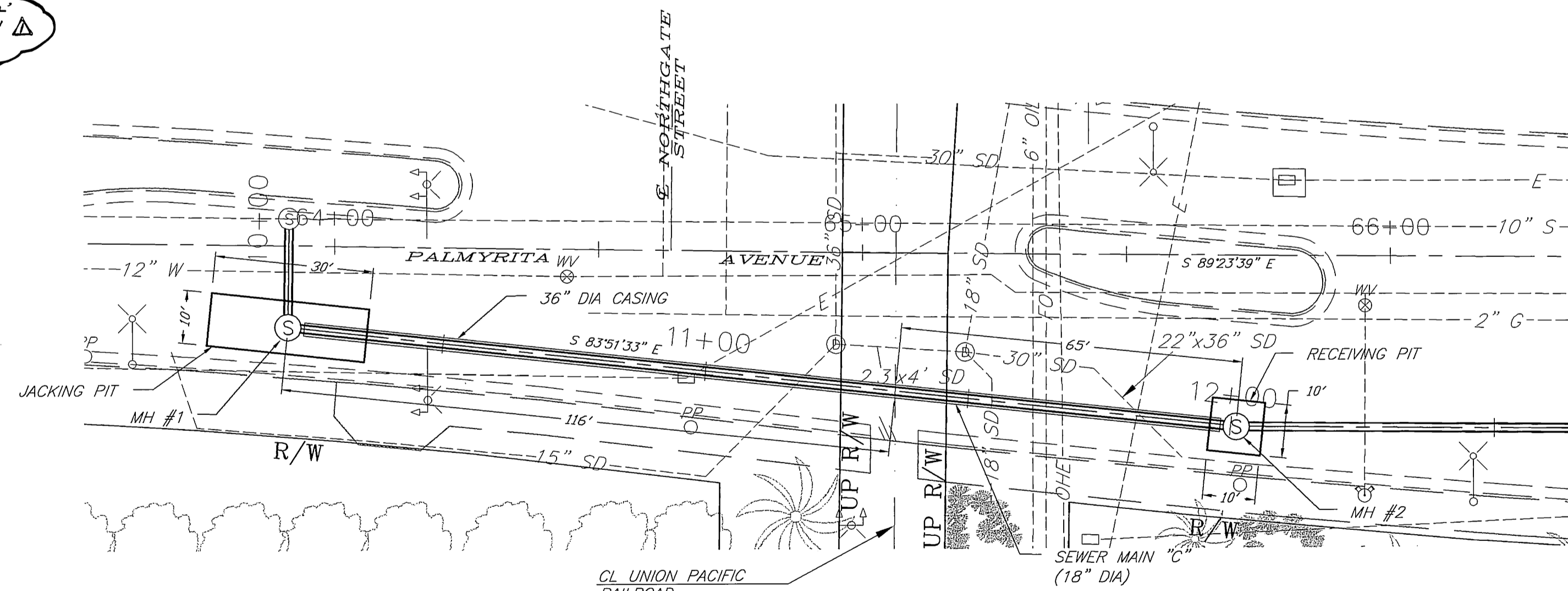
DETAIL 4
SEWER MAIN "A" CROSSING
OF IOWA AVENUE

SCALE: 1" = 40' ± 20' Δ



DETAIL 5
SEWER MAIN "A" CROSSING
OF THE BURLINGTON NORTHERN
SANTA FE RAILROAD

SCALE: 1" = 40' ± 20' Δ



DETAIL 6
SEWER MAIN "C" CROSSING
OF THE UNION PACIFIC RAILROAD

SCALE: 1" = 40' ± 20' Δ

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UPLAND, CA 91786
TEL: (909) 579-0842 FAX: (909) 579-0804

ENGINEER IN RESPONSIBLE CHARGE
LOUIS A. ATWELL
CIVIL
P.C.E. No. C83082 expires 6/30/07
DATE 6/1/07



CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT			
APPROVED BY	BY	DATE	APPROVED BY
PRINCIPAL ENGINEER	<i>[Signature]</i>	6/1/07	CITY ENGINEER
INSPECTOR	CS	6/1/07	
SURVEYOR	CS	6/1/07	
WASTE WATER OPS. MGR.	CS	6/1/07	
CONTRACT ADMIN. MGR.	CS	6/1/07	
DATE	6/1/07		
DESIGNED BY	DRAWN BY	CDRAKE	CHECKED BY

PALMYRITA AVENUE
SEWER PIPELINE CAPACITY IMPROVEMENT
DETAILS

SCALE: AS SHOWN

ACC. No. 9785723203-440301XX
W.G. 060841X

S-1986

SHEET 9 OF 9