

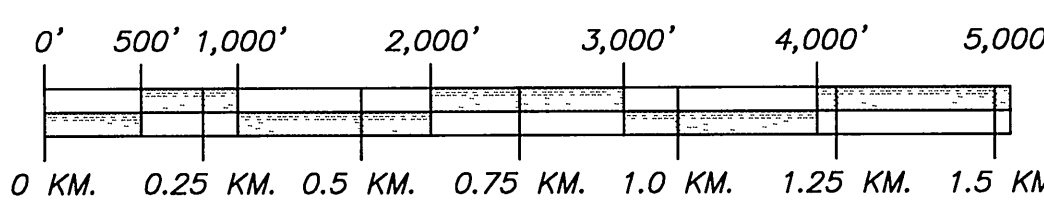
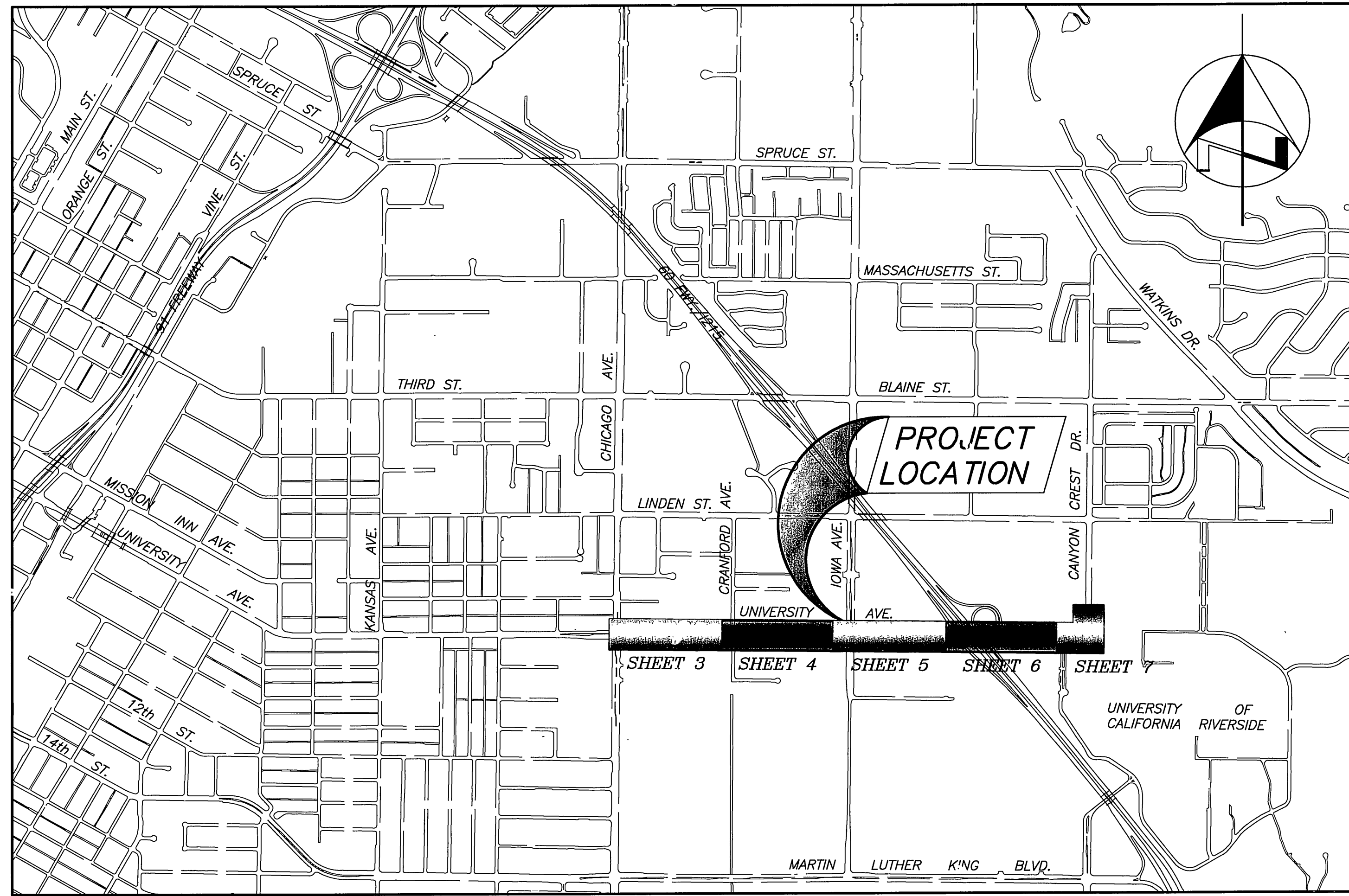
GENERAL CONSTRUCTION NOTES:

- 1 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.
2 PRIME CONTRACTORS BIDDING THIS WORK SHALL HAVE A CLASS "A", "C-34", OR A "C-42" LICENSE.
3 ALL ELEVATIONS SHOWN ON THE PLANS SHALL BE STAKED IN THE FIELD.
4 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.
5 CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE STANDARD DRAWINGS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2006
6 OUTSIDE OF STATE R/W TRENCHES SHALL BE EITHER BACKFILLED AND COMPACTED PER THE PLANS OR COVERED WITH TRAFFIC RATED STEEL PLATES AT THE END OF EACH WORK DAY. THE CONTRACTOR MAY AT HIS OPTION, INSTALL K-RAILING (PLUS WARNING DEVICES AS REQUIRED BY THE ENGINEER) IN LIEU OF STEEL PLATING OR BACKFILLING. THE OPTION TO INSTALL K-RAIL SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO PROVIDE ACCESS TO RESIDENCES AND BUSINESSES DURING NON-WORKING HOURS.
7 WATER VALVES ENCOUNTERED DURING PIPELINE CONSTRUCTION OR DURING RESTORATION OF SURFACE IMPROVEMENTS SHALL BE PROTECTED IN PLACE, RESTORED TO PRECONSTRUCTION CONDITION AND/OR ADJUSTED TO GRADE BY THE CONTRACTOR.
8 PIPE BEDDING SHALL BE PER STD. DWG. 452 AND SHALL BE CASE 1 UNLESS SPECIFIED OTHERWISE ON THE PLANS.
9 CONTRACTOR SHALL REPLACE ALL TRAFFIC DETECTOR LOOPS AFFECTED BY CONSTRUCTION.
10 CONTRACTOR SHALL RELOCATE ALL TRAFFIC SIGNS REMOVED DUE TO CONSTRUCTION, PER CITY STANDARDS.
11 DUCTILE IRON PIPE SHALL BE POLYETHYLENE ENCASED PRESSURE CLASS 250 AND SHALL BE UNIFORMLY LINED WITH A 40-MIL THICK COATING OF CERAMIC EPOXY SUITABLE FOR SANITARY SEWAGE.
12 CONTRACTOR SHALL PERFORM A PRECONSTRUCTION VIDEO OF ALL MAINLINE SEWERS IN UNIVERSITY AVENUE FROM CHICAGO AVE. TO CANYON CREST DRIVE AND LOCATE ALL ACTIVE SEWER LATERALS.
13 CONNECT EXISTING ACTIVE LATERALS TO PROPOSED SEWER PER STD. DWGS. 554 & 562.
14 PIPE JOINTS FOR NEW CONSTRUCTION OF BELL & SPIGOT V.C.P. SHALL BE TYPE "G", PER SECTION 208-2.3 OF THE STANDARD SPECIFICATIONS. PIPE JOINT TO CONNECT EXISTING V.C.P. TO PROPOSED V.C.P. SHALL BE TYPE "Z", PER SECTION 208-5 OF THE STANDARD SPECIFICATIONS. ALL OTHER V.C.P. TO V.C.P. CONNECTIONS EXCEPT FOR "MICROTUNNEL" PIPE SHALL BE TYPE "G".
15 PIPE LENGTHS FOR 18" "MICROTUNNEL" VCP SHALL BE TWO (2) METERS (6.56'), MINIMUM.
16 AFTER COMPLETION OF ALL SEWER WORK AND RESTORATION OF ALL SURFACE IMPROVEMENTS THE CONTRACTOR SHALL INSTALL A SLURRY SEAL OVER THE ENTIRE ROADWAY WITH THE EXCEPTION OF THE 18" SEWER TRENCH RESURFACING.
17 WITHIN 48 HOURS OF COMPLETION OF BASE PAVING, THE CONTRACTOR SHALL INSTALL TEMPORARY TRAFFIC SIGNAL DETECTOR LOOPS (TWO PER LANE) THAT HAVE BEEN REMOVED OR DISRUPTED BY THE CONTRACTOR'S OPERATIONS.

CONSTRUCTION LEGEND:

- 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. ANY NUMBER SHOWN BELOW THE STANDARD DRAWING NUMBER INDICATES THE SPECIFIC ALTERNATE TO BE CONSTRUCTED.
PIP PROTECT IN PLACE.
1 RECHANNEL BASE OF EXISTING SEWER MANHOLE TO ACCOMMODATE PROPOSED SEWER OR REVISED FLOWS PER STANDARD DRAWING 500.
2 REMOVE AND SALVAGE EXISTING TRAFFIC SIGNS PER THE SPECIAL PROVISIONS. REMOVE AND SALVAGE THE EXISTING "UCR" MONUMENT SIGN AND DELIVER TO UCR. CONTACT MR. MIKE MILLER, ASST. VICE CHANCELLOR, AT (951) 827-3658 TO COORDINATE DELIVERY OF THE MONUMENT.
A ABANDON EXISTING SEWER. PERFORATE BASE OF MANHOLES DESIGNATED TO BE ABANDONED. REMOVE INTERFERING PORTIONS OF EXISTING SEWERS TO ACCOMMODATE PROPOSED CONSTRUCTION. WITHIN STATE R/W ALL FACILITIES ENCOUNTERED THAT ARE NO LONGER IN USE SHALL BE ABANDONED PER SECTION 613 OF THE ENCROACHMENT PERMITS MANUAL. FILL ABANDONED SEWER PIPES WITH 2-SACK SLURRY. OUTSIDE OF STATE R/W FILL ABANDONED MANHOLES WITH SAND AND PLUG ENDS OF SEWER PIPES WITH PCC.
R REMOVE EXISTING MANHOLE.
TL INSTALL TYPE "E" TRAFFIC SIGNAL DETECTOR LOOPS. LOOPS SHALL BE PLACED IN CENTER OF LANE, 1' OFF LIMIT LINE, AND TYPICAL LOOP SPACING IS 10', 15', AND 30'.
P REGARDLESS OF WHETHER OR NOT INDICATED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES CROSSING SEWER MAINS AND LATERALS AND SHALL DETERMINE THE HORIZONTAL LOCATION AND ELEVATION OF THE UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING IF A CONFLICT BETWEEN THE PROPOSED SEWERS AND EXISTING UTILITIES EXISTS. ALL UTILITIES SHALL BE EXPOSED AND THEIR LOCATIONS AND ELEVATIONS DETERMINED PRIOR TO THE ISSUANCE OF GRADE SHEETS.
CWD-023 CONST. P.C.C. ENCASEMENT PER PU STD. DWG. CWD-023, TYPE B.
S STEEL PIPE ENCASEMENT, SEE STEEL CASING PIPE AND SKID DETAIL, SHEET 1.
XG REMOVE EXIST. CURB RETURN, S/W, WCR, CROSS GUTTER AND SPANDREL. RECONSTRUCT CURB RETURN; S/W, CROSS GUTTER AND SPANDREL PER STD. DWGS 200, 220 & 325.
CONSTRUCT EMULSION-AGGREGATE SLURRY (SLURRY SEAL)
REMOVE EXISTING AC PAVING AND CONSTRUCT STRUCTURAL SECTION PER PERMANENT TRENCH RESURFACING DETAIL, SHEET 2.

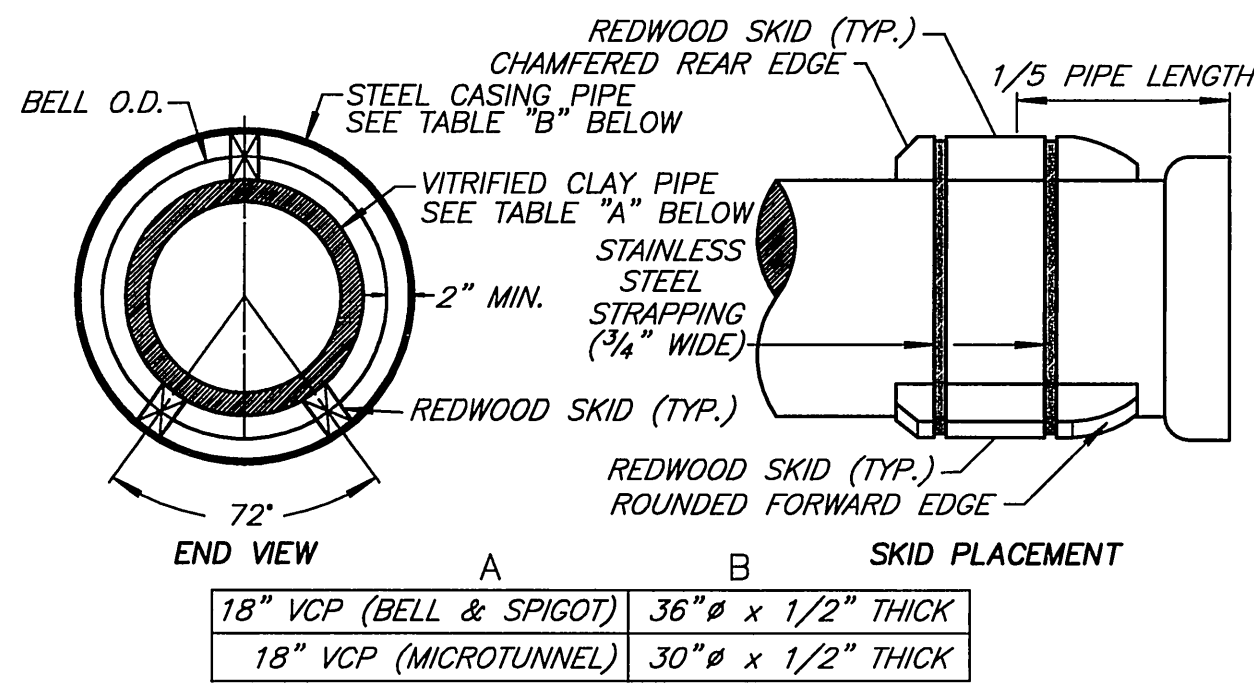
PROJECT LOCATION & SHEET INDEX MAP



SCALE: 1"=1,000'

BENCHMARK 17-B BRASS DISK STAMPED 17-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE. ELEVATION 956.733'

- 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 WELD.
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 TWO SACK CEMENT 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" MINIMUM PVC PIPE AT DOWNSTREAM INVERT OF CASING (THROUGH BRICK) AND SURROUND WITH 2 CUBIC FEET CRUSHED ROCK.



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

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ENGINEER IN RESPONSIBLE CHARGE EANNIS LEW YOUNG R.C.E. No. 43216 expires 03/31/2010 DATE 06/11/2009



Table with columns for MARK, REVISIONS, APPR., DATE. Includes notes on revised construction legend and VCP length.

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT. Includes approval fields for Principal Engineer, Contract Administrator, and Surveyor.

UNIVERSITY AVE. TRUNK SEWER FROM CHICAGO AVE. TO CANYON CREST DR. S-1857 SHEET 1 OF 7. SCALE: AS SHOWN.

EXISTING UNDERGROUND & TOPOGRAPHY LEGEND

EXISTING UNDERGROUND UTILITIES:

- Sanitary Sewer 8"-S, Water Line 6"-W, Storm Drain 24"-D, Gas Line 3"-G, Abandoned Utility 6"-G(ABAND.), Telephone Conduit T, Electrical Conduit E, Electrolier Lighting Conduit ELC, Traffic Signal SIG, Sewer Lateral L.

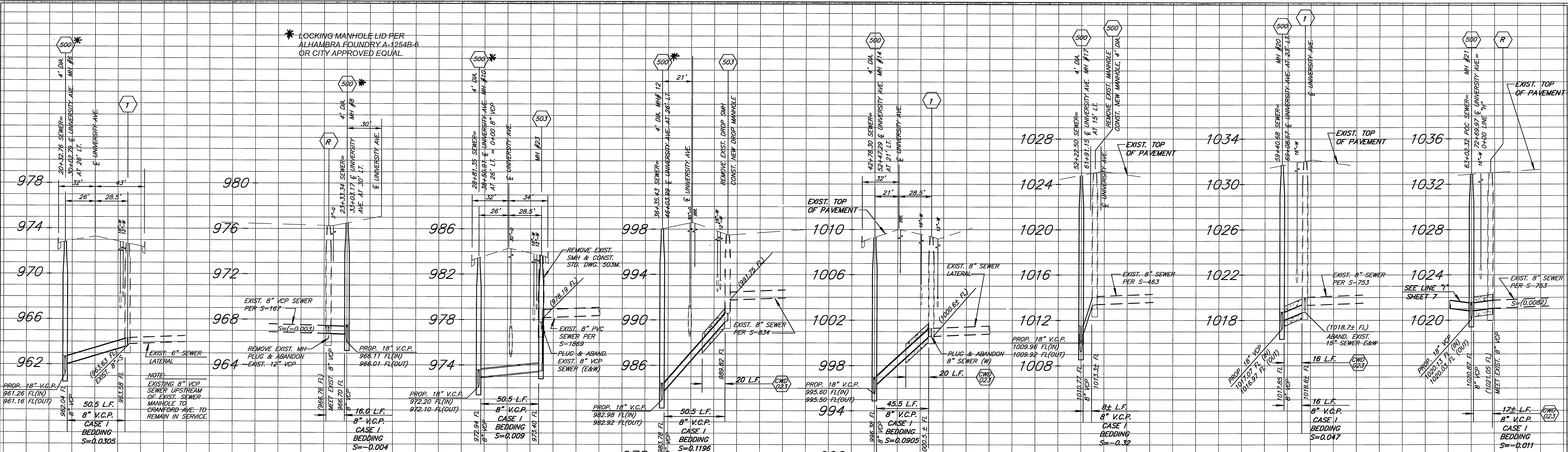
EXISTING TOPOGRAPHY:

- Block Wall, Board Fence, Wire Fence, Chain Link Fence, Pole & Guy Anchor, Power Pole, Telephone Pole, Telephone Riser, Joint Use Pole, Pull Box, Traffic Sign, Traffic Signal, Traffic Signal Controller, Traffic Signal Pressure Detector, Traffic Signal Loop Detector, Street Light & Traffic Signal on Mast Arm, Gas Meter, Mail Box, Faucet, Walk-Don't Walk Pedestrian Signal, Electrical Test Station, Wheel Stop, A.C. Berm, Railroad Tracks, Railroad Sign, Street Light (Upright), Steel Post, Wood Post.

CALTRANS CONSTRUCTION NOTES:

- A. ALL WORK IN STATE R/W SHALL BE IN COMPLIANCE WITH BORE AND JACK REQUIREMENTS AS PER SECTION 623.1, 623.1A, & 623.1B OF THE ENCROACHMENT PERMIT, EP MANUAL.
B. THE CITY WILL PLACE THE REQUIRED 24 SHINERS, FOR THE ENCROACHMENT PERMIT SURVEY GRID, DIRECTLY OVER AND 3' OFFSET, AT 100' INTERVALS OVER THE CENTERLINE OF THE EASEMENT. THIS SURVEY GRID SHALL BE ESTABLISHED AND MAINTAINED PRIOR TO THE START OF BORING OPERATIONS IN COMPLIANCE WITH THE ENCROACHMENT PERMIT SURVEY GRID, TR-0151 DATED 09/2006, LOCATED IN APPENDIX "E" OF THE EP MANUAL.
C. AN ENGINEERED SHORING PLAN SIGNED AND STAMPED BY A CALIFORNIA REGISTERED ENGINEER IS REQUIRED FOR THE BORING PITS. THE PITS SHALL BE DESIGNED IN COMPLIANCE WITH THE RECOMMENDATION OF THE GEOTECHNICAL REPORT, DATED OCTOBER 26, 2007. THE CONTRACTOR HAS THE CHOICE TO UTILIZE EITHER 1" STEEL PLATES PUSHED DOWN, OR SOLDIER PILES AND LAGGING, PRIOR TO EXCAVATING TO PLACE BOXES IN THE PITS. A FULL DESCRIPTION WILL BE REQUIRED OF THE TYPE OF BOXES TO BE UTILIZED FOR SHORING WITHIN THE PITS FOR THE JACKING OPERATION.
D. THE BOTTOM OF PITS SHALL BE LINED WITH FILTER FABRIC AND CRUSHED ROCK. SUMP AREAS SHALL BE CREATED TO CONTAIN AND CLEAR ANY GROUND WATER AND/OR WATER USED IN THE CLEANING OF EQUIPMENT AND ENCASEMENT PIPE. ALL WATERS SHALL BE PROPERLY REMOVED BY VAC-TRAILER/ VAC-TRUCK AND DISPOSED OF PROPERLY AT A CERTIFIED LOCATION, WHICH SHALL BE DISCLOSED TO THE STATE'S REPRESENTATIVE AND THE LOCAL ENTITY REPRESENTATIVE. NO DUMPING OF WATERS WILL BE ALLOWED IN ANY TYPE OF STORM DRAINAGE FACILITIES, CREEKS, STREAMS, OR BODIES OF WATER.
E. IN THE EVENT THAT GROUND WATER IS DISCOVERED WITHIN THE PIT LOCATIONS, ALL WORK SHALL BE HALTED AND THE CONTRACTOR SHALL NOTIFY THE STATE'S REPRESENTATIVE AND THE LOCAL ENTITY REPRESENTATIVE. THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN WHICH WILL REQUIRE REVIEW AND APPROVAL PRIOR RESUMPTION OF WORK.
F. PURPOSELY LEFT BLANK.
G. DAILY, UPON COMPLETION OF THE WORK PERIOD, THE CONTRACTOR SHALL RETURN ROADWAYS TO FUNCTIONAL CAPACITIES BY THE PLACEMENT OF ENGINEERED (PLANS SIGNED AND STAMPED) NON-SKID STEEL PLATES OVER THE BORING/RECEIVING PITS.
H. PURPOSELY LEFT BLANK.
I. PURPOSELY LEFT BLANK.
J. COPIES OF ALL "MATERIALS" CERTIFICATION OF COMPLIANCE" (STEEL PIPE, AND OTHER MATERIALS UTILIZED WITHIN STATE R/W) & "MATERIALS TICKETS" (BACKFILL & ANNUAL BACKFILL) SHALL BE PROVIDED TO THE DEPARTMENT'S REPRESENTATIVE TO BE INCLUDED IN THE ENCROACHMENT PERMIT FILE, FOR THE SEGMENTS INSTALLED WITHIN STATE RIGHT-OF-WAY.
K. THE CONTRACTOR WILL BE REQUIRED TO APPLY FOR AND OBTAIN A DOUBLE PERMIT (DP) FROM CALTRANS. A DEPOSIT WILL BE REQUIRED TO COVER THE EXPENSE OF ONE-HOUR FOR REVIEW AND FOR THE REQUIRED HOURS OF INSPECTION. SEE SECTION 7-5 OF THE SPECIAL PROVISIONS.
L. A MATERIALS FORM, CEM 101, IS REQUIRED LISTING ALL MATERIALS TO BE USED OR PLACED WITHIN STATE R/W IN RESPECT TO THIS PROJECT, I.E. ENCASEMENT & CARRIER PIPE TYPE, BACKFILL, ETC.
M. PURPOSELY LEFT BLANK.
N. BORE PITS FOR BORING WITHIN STATE R/W, REGARDLESS OF LOCATION/PLACEMENT, FALL UNDER THE JURISDICTION OF CALTRANS.
O. PURPOSELY LEFT BLANK.
P. ALL TRAFFIC CONTROL APPURTENANCES STIPULATED WITHIN THE TRAFFIC CONTROL/DETOUR HANDLING PLAN SHALL HAVE LOCAL ENTITY APPROVAL AND CONCURRENCE BY CALTRANS, AND SHALL BE IN COMPLIANCE WITH THE CALIFORNIA MUTCD 2006.
Q. WHEN DAMAGE TO EXISTING IMPROVEMENTS/FACILITIES WITHIN STATE R/W IS CAUSED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL, AT HIS EXPENSE, REPAIR OR REPLACE DAMAGED IMPROVEMENTS/FACILITIES PROMPTLY IN ACCORDANCE WITH STATE SPECIFICATIONS.

* LOCKING MANHOLE LID PER ALHAMBRA FOUNDRY A-1254B-6 OR CITY APPROVED EQUAL.



LINE "A" LOOKING UPSTREAM SCALE: HORIZ. 1"=40' VERT. 1"=4' FOR PLAN VIEW SEE SHEET 3

LINE "B" LOOKING UPSTREAM SCALE: HORIZ. 1"=40' VERT. 1"=4' FOR PLAN VIEW SEE SHEET 4

LINE "C" LOOKING UPSTREAM SCALE: HORIZ. 1"=40' VERT. 1"=4' FOR PLAN VIEW SEE SHEET 4

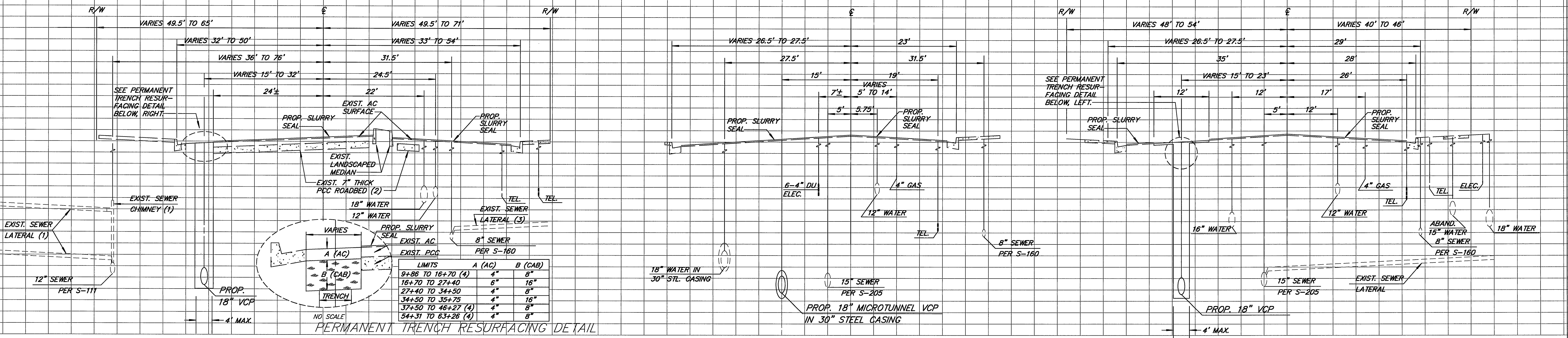
LINE "D" LOOKING UPSTREAM SCALE: HORIZ. 1"=40' VERT. 1"=4' FOR PLAN VIEW SEE SHEET 5

LINE "E" LOOKING UPSTREAM SCALE: HORIZ. 1"=40' VERT. 1"=4' FOR PLAN VIEW SEE SHEET 5

LINE "F" LOOKING UPSTREAM SCALE: HORIZ. 1"=40' VERT. 1"=4' FOR PLAN VIEW SEE SHEET 6

LINE "G" LOOKING UPSTREAM SCALE: HORIZ. 1"=40' VERT. 1"=4' FOR PLAN VIEW SEE SHEET 7

LINE "H" LOOKING UPSTREAM SCALE: HORIZ. 1"=40' VERT. 1"=4' FOR PLAN VIEW SEE SHEET 7



TYPICAL SECTION UNIVERSITY AVENUE. FROM STA. 10+00 TO STA. 46+29.35

TYPICAL SECTION UNIVERSITY AVENUE. FROM STA. 46+29.35 TO STA. 54+30

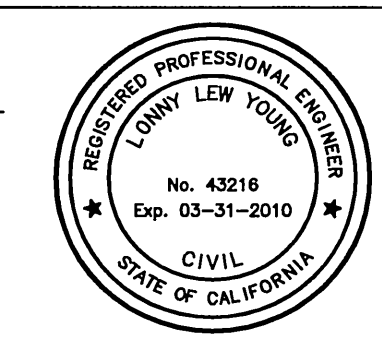
TYPICAL SECTION UNIVERSITY AVENUE. FROM STA. 54+30 TO STA. 63+27.76

BENCHMARK
17-B, BRASS DISK STAMPED 17-B
CAPPED AT THE INTERSECTION OF
UNIVERSITY AVENUE AND CHICAGO
AVENUE.
ELEVATION 956.733'

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- NOTES:
- FROM CHICAGO AVE. TO CRANFORD AVE. LATERALS CONNECTED TO THE EXIST. 12" SEWER ARE CONNECTED THROUGH CHIMNEYS EXCEPT AS NOTED ON THE PLAN. IN ALL OTHER LOCATIONS, RECORDS INDICATE SEWER LATERALS ARE CONNECTED DIRECTLY TO THE SEWER.
 - APPROXIMATE LIMITS OF 7" ± THICK PCC ROADBED FROM STA. 17+60 ± SEWER TO 46+30 ± SEWER. PCC ROADBED WAS REMOVED FROM MEDIAN AREAS AND IS ASSUMED CONTINUOUS WHERE NO MEDIAN EXISTS. WHERE NO PCC ROADBED EXISTS, ASPHALT THICKNESSES OVER 20" IN DEPTH MAY BE ENCOUNTERED.
 - PROPOSED SEWER LATERALS ON THE SOUTH SIDE OF UNIVERSITY AVE. MAY PASS UNDER THE EXISTING PCC ROADBED.
 - FOR DETAILS AND LIMITS OF TRENCH RESURFACING SEE STD. DWG. 453.
 - SLURRY SEAL AREAS OF EXISTING PAVEMENT AND OVER NEW LATERAL (4" & 8" SEWER) TRENCHES. OMIT SLURRY SEAL OVER NEW PAVEMENT AND OVER PERMANENT TRENCH RESURFACING FOR NEW 18" SEWER.

ENGINEER IN RESPONSIBLE CHARGE
Lonny L. Young
LONNY L. YOUNG
R.C.E. No. 43216 expires 03/31/2010
DATE 7/10/2009



REVISIONS	APPR.	DATE
DESIGNED BY SK	DRAWN BY SK	CHECKED BY LLY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY: *[Signature]*
DATE: 7/10/09

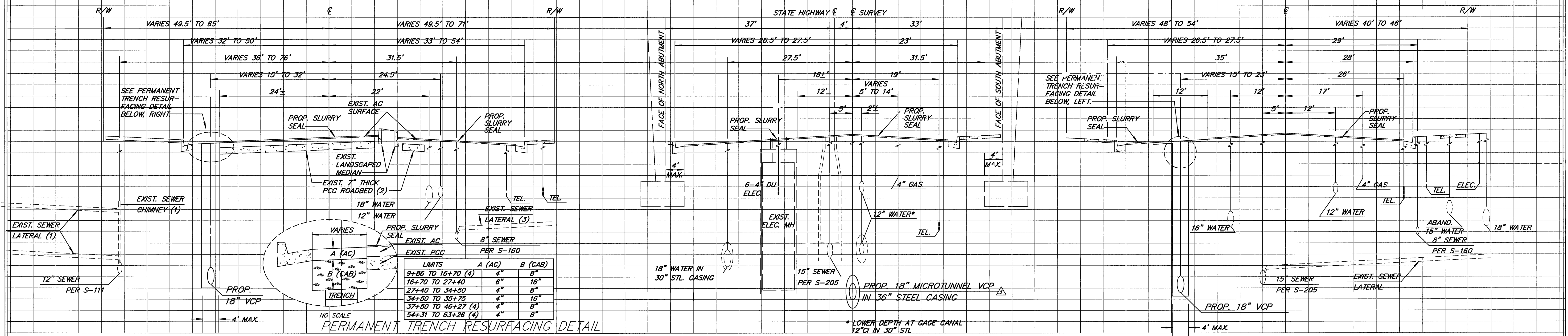
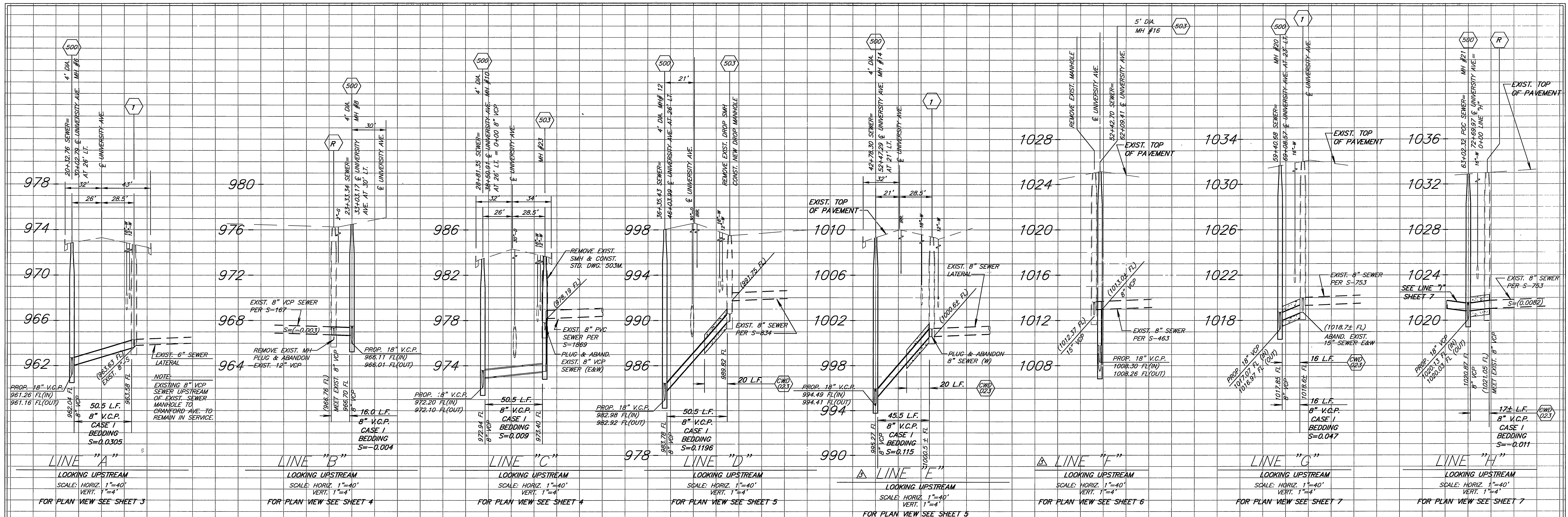
UNIVERSITY AVE.
TRUNK SEWER
FROM CHICAGO AVE. TO CANYON CREST DR.

NO. 0903236
ACCT. NO. 571123203 440301XX

S-1857

SHEET 2 OF 7

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



BENCHMARK
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TYPICAL SECTION UNIVERSITY AVENUE.
FROM STA. 10+00 TO STA. 46+29.35
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TYPICAL SECTION UNIVERSITY AVENUE.
FROM STA. 46+29.35 TO STA. 54+30
SCALE: HORIZ. - 1" = 10'
VERT. - 1" = 4'

ENGINEER IN RESPONSIBLE CHARGE
LONNY LEW YOUNG
R.C.E. No. 43216 expires 03/31/2010
DATE

REVISIONS
REVISED ALIGNMENT OF SEWER THROUGH CALTRANS' RIGHT OF WAY & STEEL ENCASEMENT FROM 30" TO 36".

MARK: REVISIONS: APPR. DATE: CHECKED BY: LLY

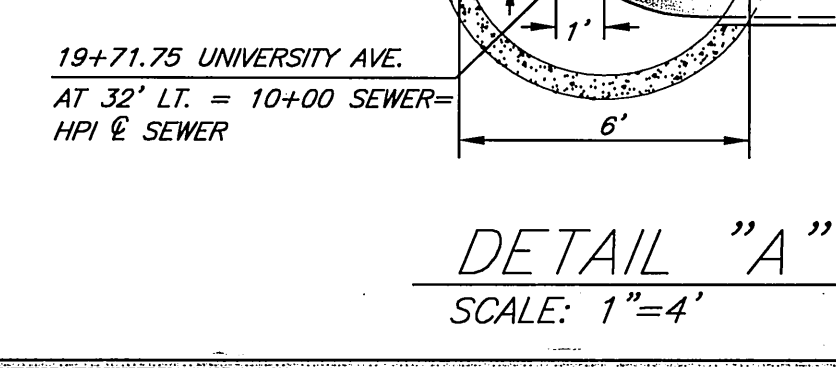
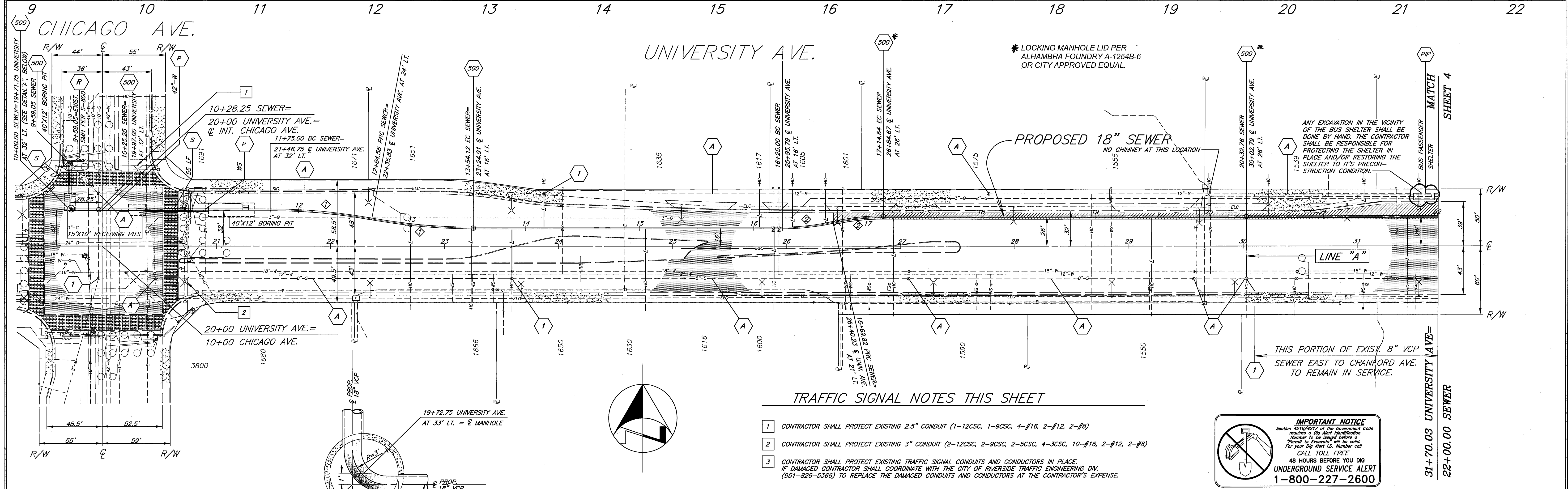
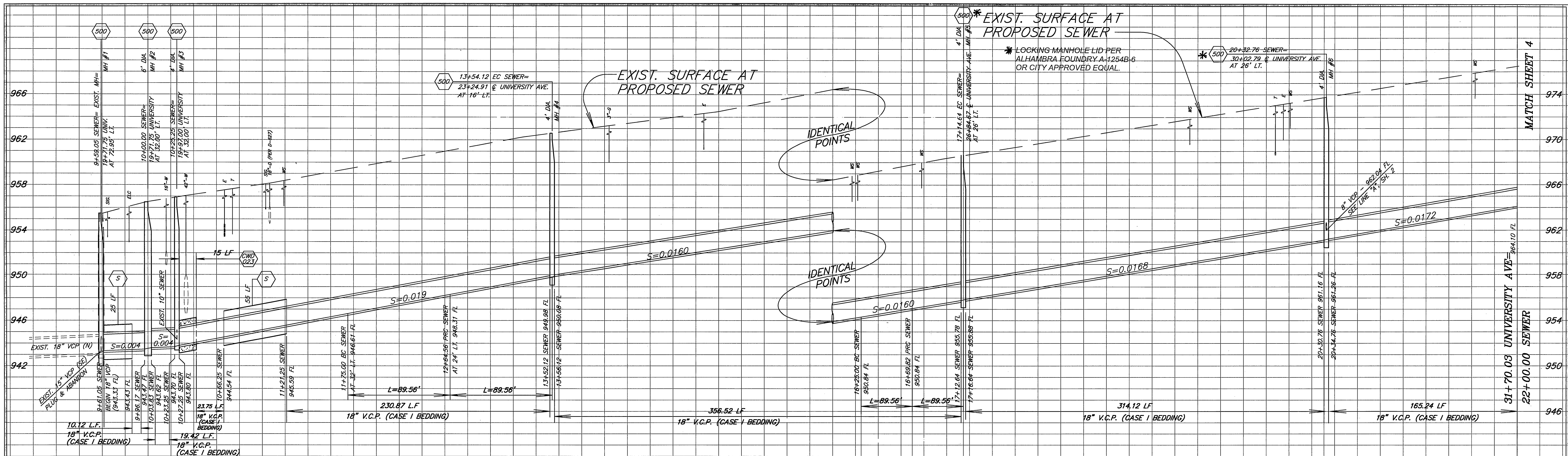
TYPICAL SECTION UNIVERSITY AVENUE.
FROM STA. 54+30 TO STA. 63+27.76
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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

UNIVERSITY AVE. TRUNK SEWER
FROM CHICAGO AVE. TO CANYON CREST DR.

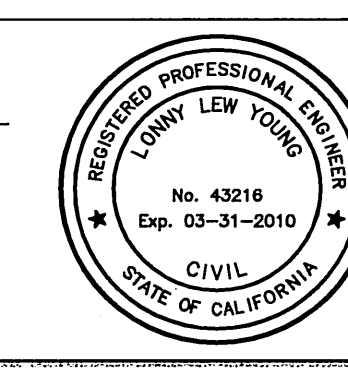
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S-1857
SHEET 2A OF 7

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



BENCHMARK
 17-B BRASS DISK STAMPED 17-B
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ENGINEER IN RESPONSIBLE CHARGE
 Lenny Young
 CIVIL
 STATE OF CALIFORNIA
 DATE 7/10/09



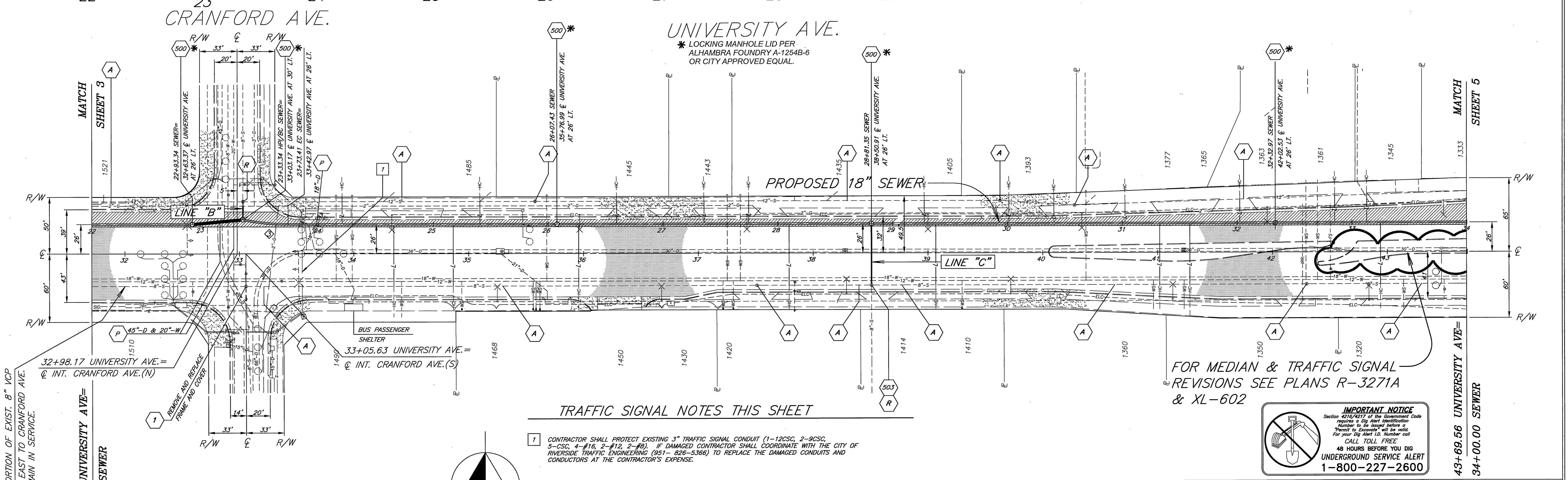
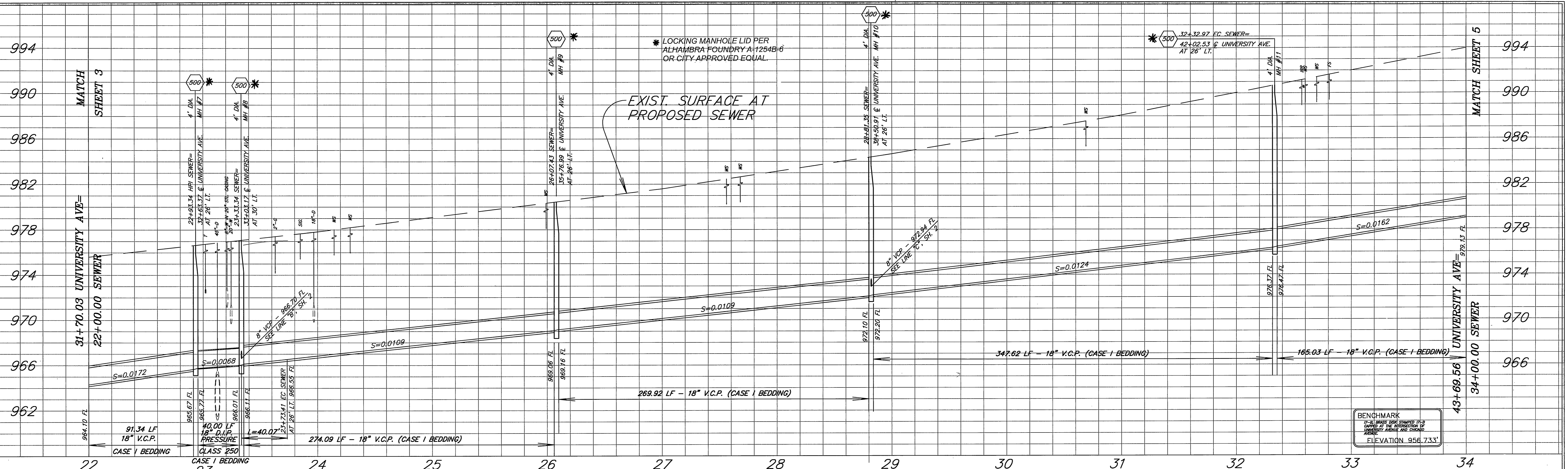
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
 APPROVED BY: [Signature]
 DATE: 7/10/09

UNIVERSITY AVE. TRUNK SEWER
 FROM CHICAGO AVE. TO CANYON CREST DR.
 S-1857
 SHEET 3 OF 7
 HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

IMPORTANT NOTICE
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- TRAFFIC SIGNAL NOTES THIS SHEET**
- CONTRACTOR SHALL PROTECT EXISTING 2.5" CONDUIT (1-12CSC, 1-9CSC, 4-#16, 2-#12, 2-#8)
 - CONTRACTOR SHALL PROTECT EXISTING 3" CONDUIT (2-12CSC, 2-9CSC, 2-5CSC, 4-3CSC, 10-#16, 2-#12, 2-#8)
 - CONTRACTOR SHALL PROTECT EXISTING TRAFFIC SIGNAL CONDUITS AND CONDUCTORS IN PLACE. IF DAMAGED CONTRACTOR SHALL COORDINATE WITH THE CITY OF RIVERSIDE TRAFFIC ENGINEERING DIV. (951-826-5366) TO REPLACE THE DAMAGED CONDUITS AND CONDUCTORS AT THE CONTRACTOR'S EXPENSE.



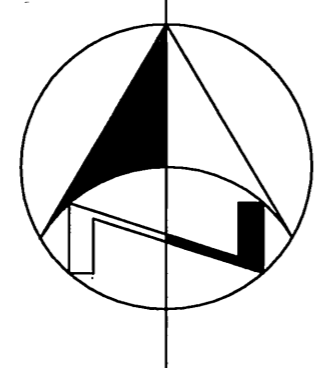
CURVE DATA

◇	△	R	L	T
3	11° 28' 42"	200'	40.07'	20.10'

1 CONTRACTOR SHALL PROTECT EXISTING 3" TRAFFIC SIGNAL CONDUIT (1-12CSC, 2-9CSC, 5-CSC, 4-#16, 2-#12, 2-#8). IF DAMAGED CONTRACTOR SHALL COORDINATE WITH THE CITY OF RIVERSIDE TRAFFIC ENGINEERING (951-826-5366) TO REPLACE THE DAMAGED CONDUITS AND CONDUCTORS AT THE CONTRACTOR'S EXPENSE.

FOR MEDIAN & TRAFFIC SIGNAL REVISIONS SEE PLANS R-3271A & XL-602

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ENGINEER IN RESPONSIBLE CHARGE
 LINDA LEW YOUNG
 R.C.E. No. 43216 Expires 03/31/2010
 DATE 7/10/2009

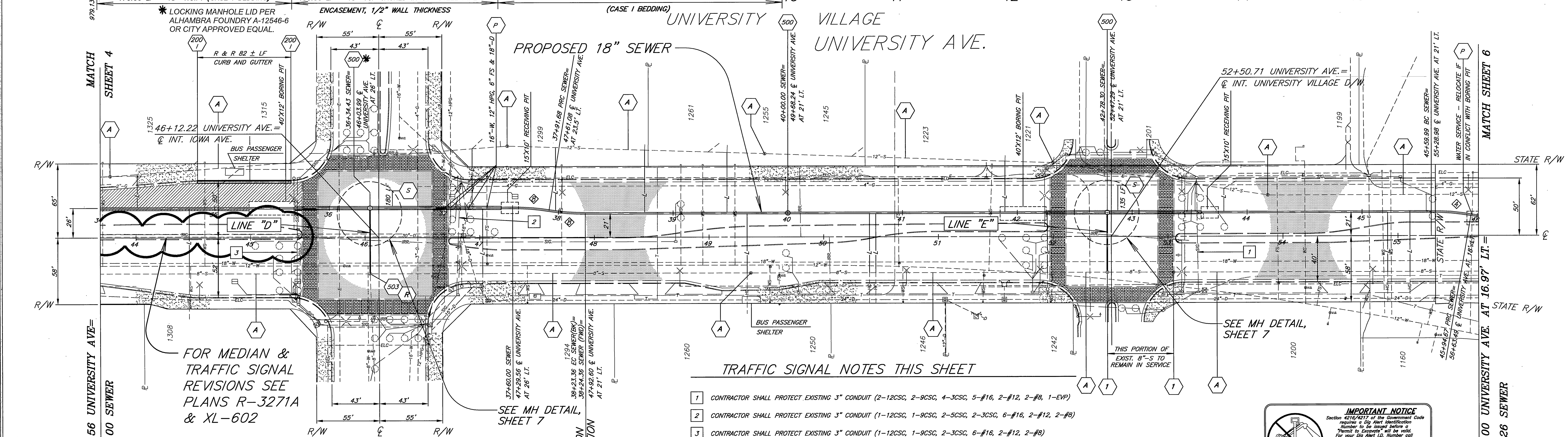
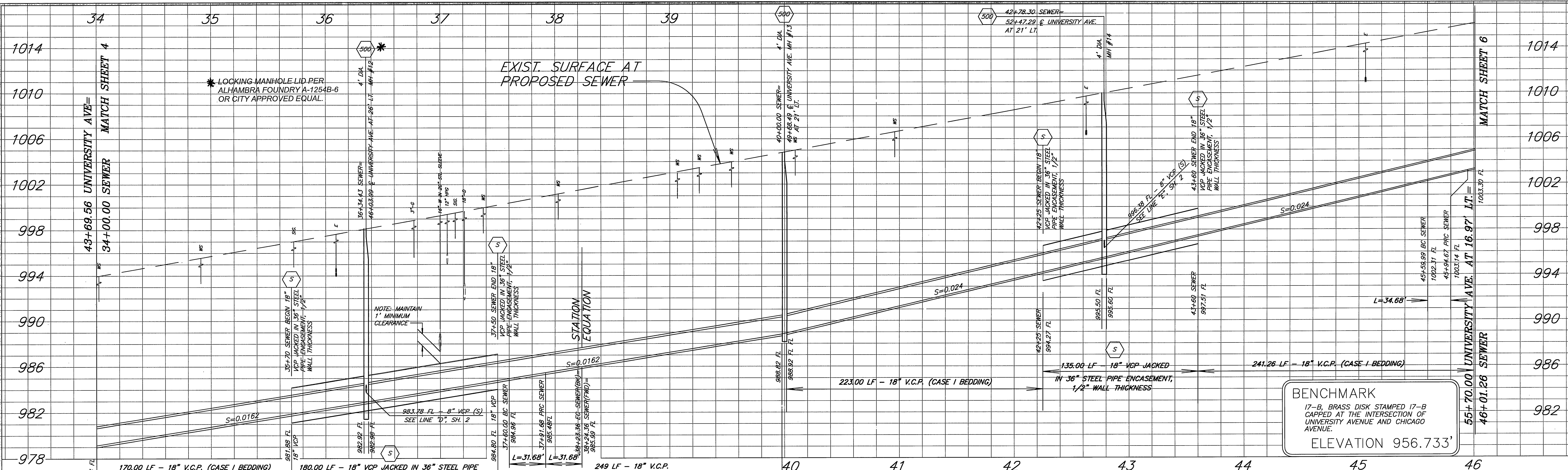


MARK	REVISIONS	APPR.	DATE
SK	SK	LLY	7/10/09

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 APPROVED BY: [Signature]
 DATE: 7/10/09

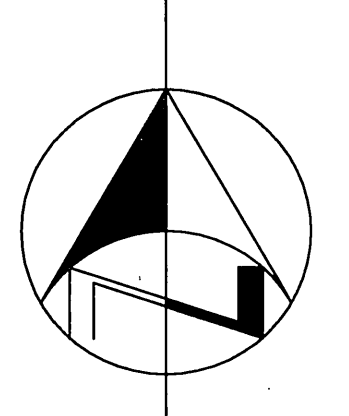
UNIVERSITY AVE.
 TRUNK SEWER
 FROM CHICAGO AVE. TO CANYON CREST DR.
 HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

WD. NO. 0903236
 ACCT. NO. 3771123203 440301XX
 S-1857
 SHEET 4 OF 7

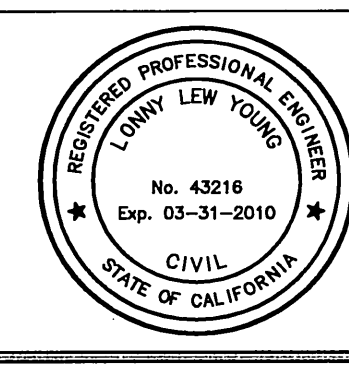


CURVE DATA

Δ	R	L	T
4	09° 56' 11"	200'	17.39'
8	09° 04' 07"	200'	15.86'



ENGINEER IN RESPONSIBLE CHARGE
LONNAY LEW YOUNG
R.C.E. No. 43216 expires 03/31/2010
DATE 7/10/09



CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

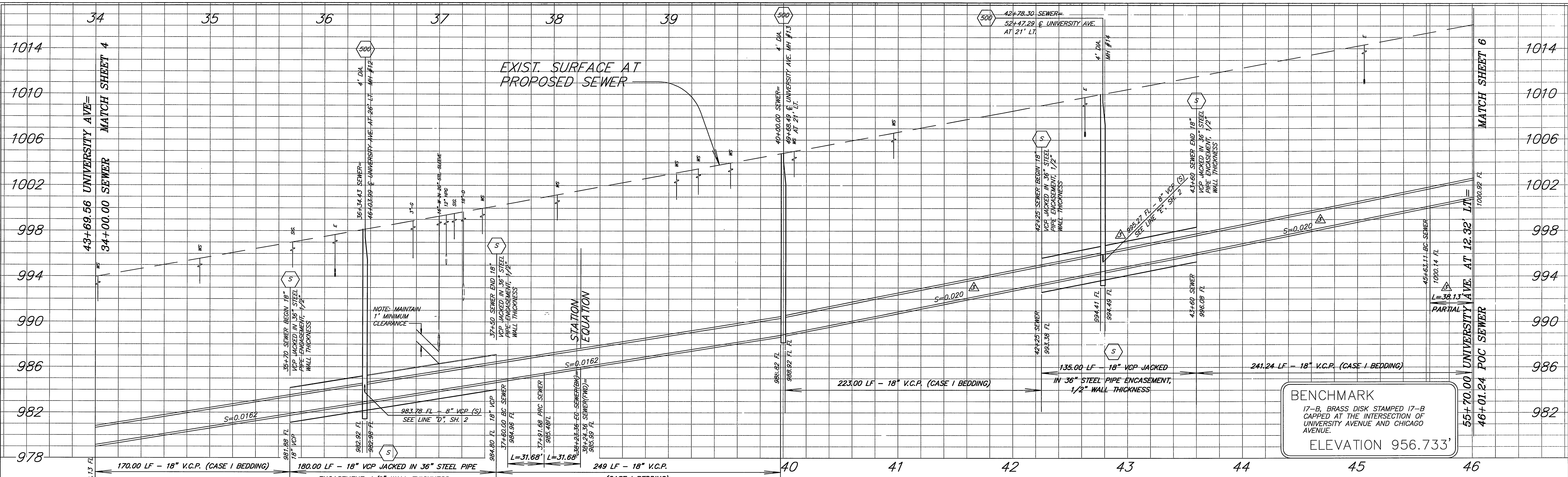
APPROVED BY: [Signature]
DATE: 7/10/09

IMPORTANT NOTICE
Section 4216/4217 of the Government Code requires a Dig Alert Identification Number to be assigned 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

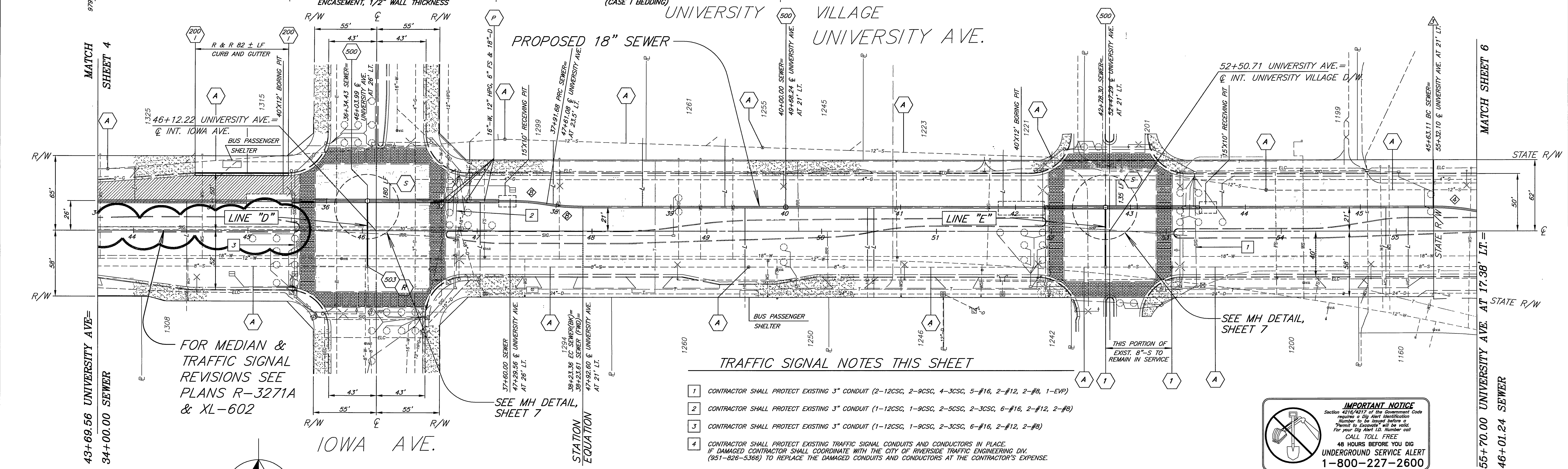
UNIVERSITY AVE. TRUNK SEWER
FROM CHICAGO AVE. TO CANYON CREST DR.

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

S-1857
SHEET 5 OF 7



BENCHMARK
 17-B, BRASS DISK STAMPED 17-B
 CAPPED AT THE INTERSECTION OF
 UNIVERSITY AVENUE AND CHICAGO
 AVENUE.
 ELEVATION 956.733'



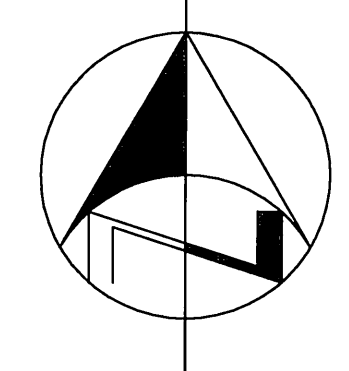
FOR MEDIAN &
 TRAFFIC SIGNAL
 REVISIONS SEE
 PLANS R-3271A
 & XL-602

- TRAFFIC SIGNAL NOTES THIS SHEET
- 1 CONTRACTOR SHALL PROTECT EXISTING 3" CONDUIT (2-12CSC, 2-9CSC, 4-3CSC, 5-#16, 2-#12, 2-#8, 1-EVP)
 - 2 CONTRACTOR SHALL PROTECT EXISTING 3" CONDUIT (1-12CSC, 1-9CSC, 2-5CSC, 2-3CSC, 6-#16, 2-#12, 2-#8)
 - 3 CONTRACTOR SHALL PROTECT EXISTING 3" CONDUIT (1-12CSC, 1-9CSC, 2-3CSC, 6-#16, 2-#12, 2-#8)
 - 4 CONTRACTOR SHALL PROTECT EXISTING TRAFFIC SIGNAL CONDUITS AND CONDUCTORS IN PLACE. IF DAMAGED CONTRACTOR SHALL COORDINATE WITH THE CITY OF RIVERSIDE TRAFFIC ENGINEERING DIV. (951-826-5366) TO REPLACE THE DAMAGED CONDUITS AND CONDUCTORS AT THE CONTRACTOR'S EXPENSE.

IMPORTANT NOTICE
 Section 4714.4217 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

CURVE DATA

Δ	R	L	T
4	18' 38" 53"	200'	65.09'
8	09' 04" 07"	200'	31.68'



ENGINEER IN RESPONSIBLE CHARGE
 LONNY LEW YOUNG
 R.C.E. No. 43216 expires 03/31/2010
 DATE



DESIGNED BY SK DRAWN BY SK CHECKED BY LLY

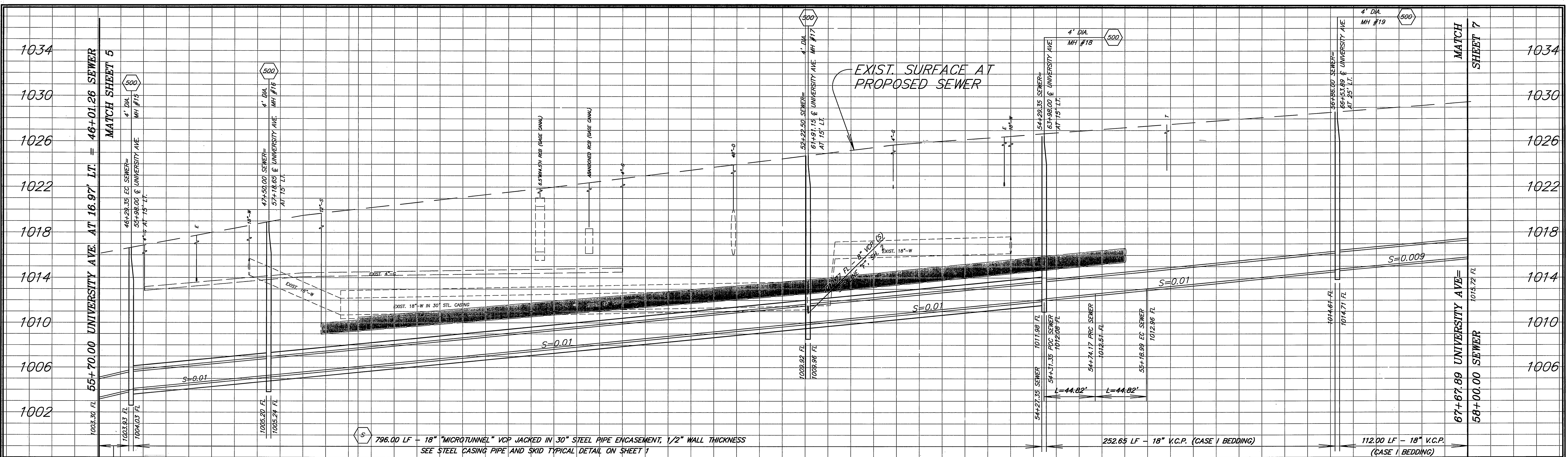
**CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT**

APPROVED BY: _____ DATE: _____
 CITY ENGINEER

**UNIVERSITY AVE.
 TRUNK SEWER**
 FROM CHICAGO AVE. TO CANYON CREST DR.

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

NO. 0903736
 ACC. NO. 977123203 440201XX
S-1857
 SHEET 5A OF 7



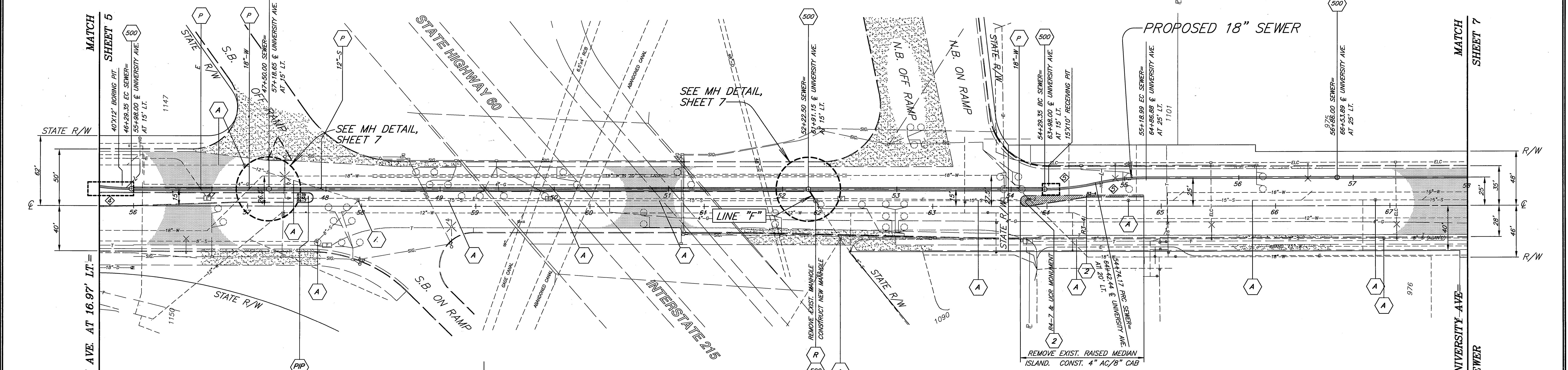
UNIVERSITY AVE.

26.09 LF 18" V.C.P. (CASE 1 BEDDING) S=0.02408

796.00 LF - 18" MICROTUNNEL VCP JACKED IN 30" STEEL PIPE ENCASEMENT, 1/2" WALL THICKNESS SEE STEEL CASING PIPE AND SKID TYPICAL DETAIL ON SHEET 1

252.65 LF - 18" V.C.P. (CASE 1 BEDDING)

112.00 LF - 18" V.C.P. (CASE 1 BEDDING)



TRAFFIC SIGNAL NOTES THIS SHEET

1 CONTRACTOR SHALL PROTECT CALTRANS CONDUITS IN PLACE. IF DAMAGED CONTRACTOR SHALL COORDINATE WITH CALTRANS TO REPLACE, AT CONTRACTOR'S EXPENSE, ANY DAMAGED CONDUIT OR CONDUCTORS.

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

BENCHMARK
 17-B, BRASS DISK STAMPED 17-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE. ELEVATION 956.733'

CURVE DATA				
Station	Curve Type	R	L	T
4	9° 56' 11"	200'	34.68'	17.39'
5	12° 50' 19"	200'	44.82'	22.36'

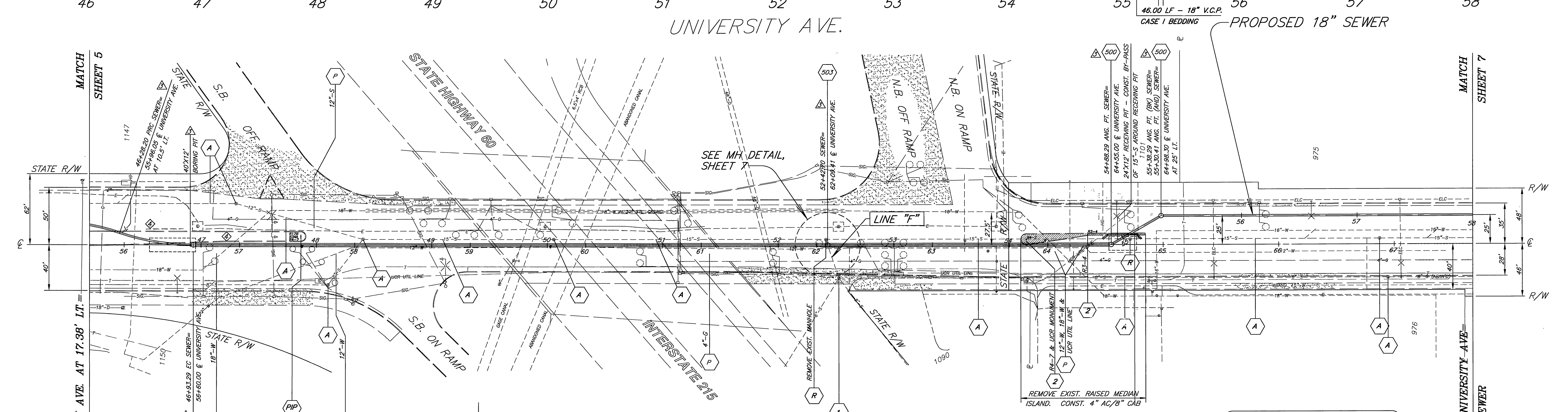
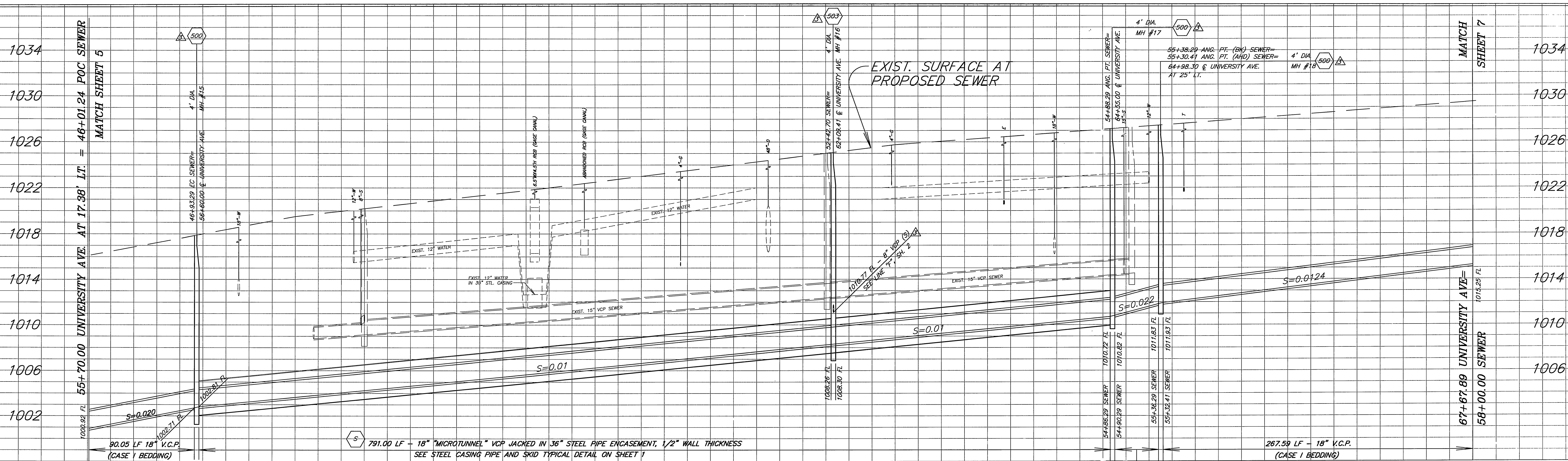
ENGINEER IN RESPONSIBLE CHARGE
 LONNY LEW YOUNG
 R.C.E. No. 43216 expires 03/31/2010
 DATE 04/11/2009

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT

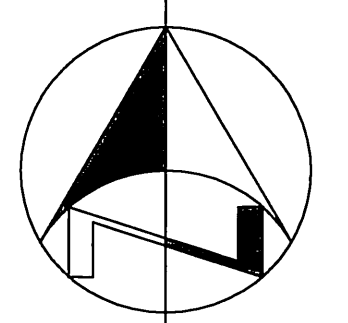
UNIVERSITY AVE. TRUNK SEWER
 FROM CHICAGO AVE. TO CANYON CREST DR.

NO. 0903736
 ACCT. NO. 977123203 440301XX
S-1857
 SHEET 6 OF 7

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



CURVE DATA				
Station	Angle	R	L	T
4	21° 45' 33"	200'	75.95'	38.44'
5	23° 15' 22"	200'	81.18'	41.16'



TRAFFIC SIGNAL NOTES THIS SHEET

1 CONTRACTOR SHALL PROTECT CALTRANS CONDUITS IN PLACE. IF DAMAGED CONTRACTOR SHALL COORDINATE WITH CALTRANS TO REPLACE, AT CONTRACTOR'S EXPENSE, ANY DAMAGED CONDUIT OR CONDUCTORS.

IMPORTANT NOTICE
 Section 4216/4217 of the Government Code requires a Dig Alert notification Number to be posted 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

BENCHMARK
 17-B, BRASS DISK STAMPED 17-B CAPPED AT THE INTERSECTION OF UNIVERSITY AVENUE AND CHICAGO AVENUE.
 ELEVATION 956.733'

ENGINEER IN RESPONSIBLE CHARGE
 LONNY LEW YOUNG
 R.C.E. No. 43216 expires 03/31/2010
 DATE

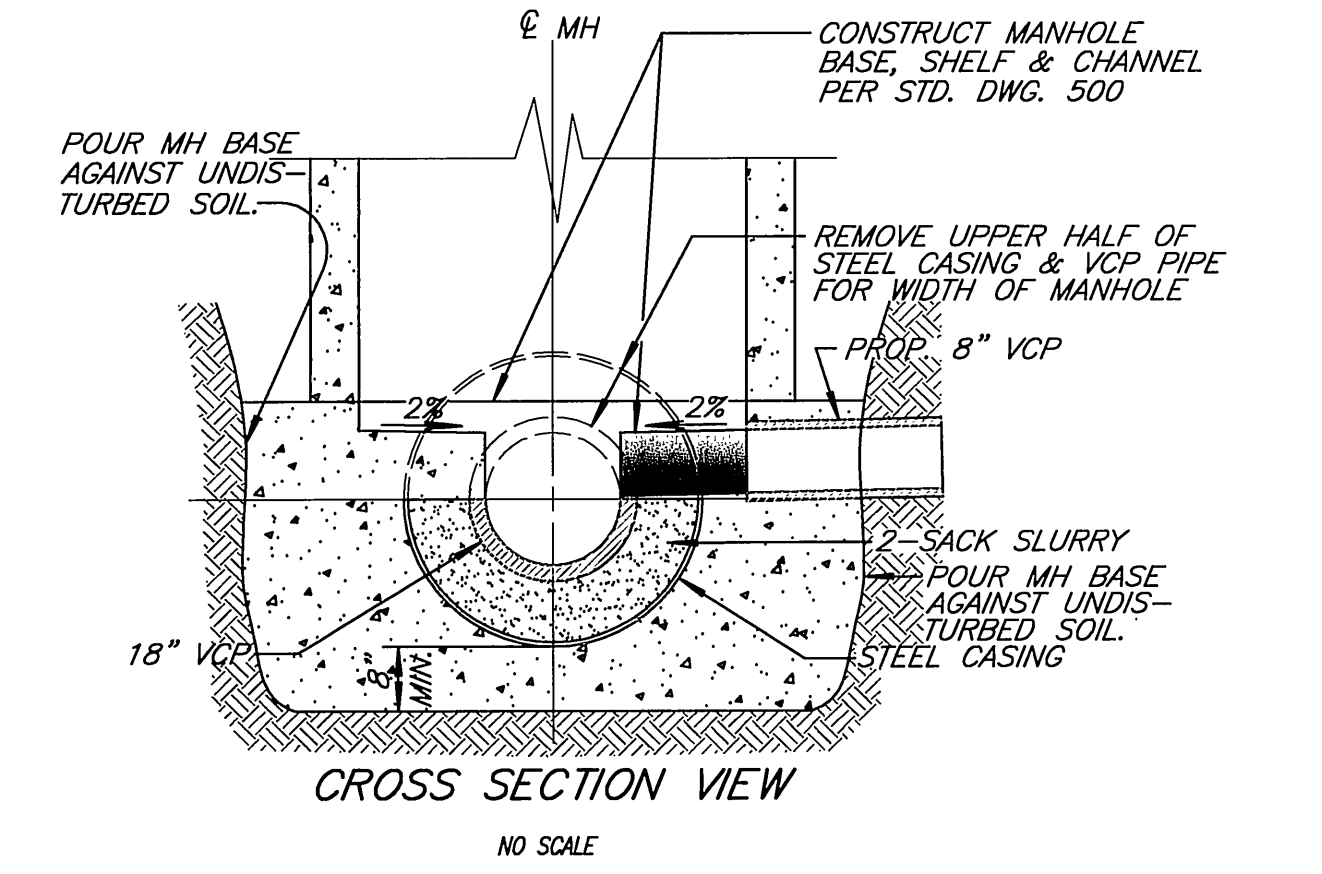
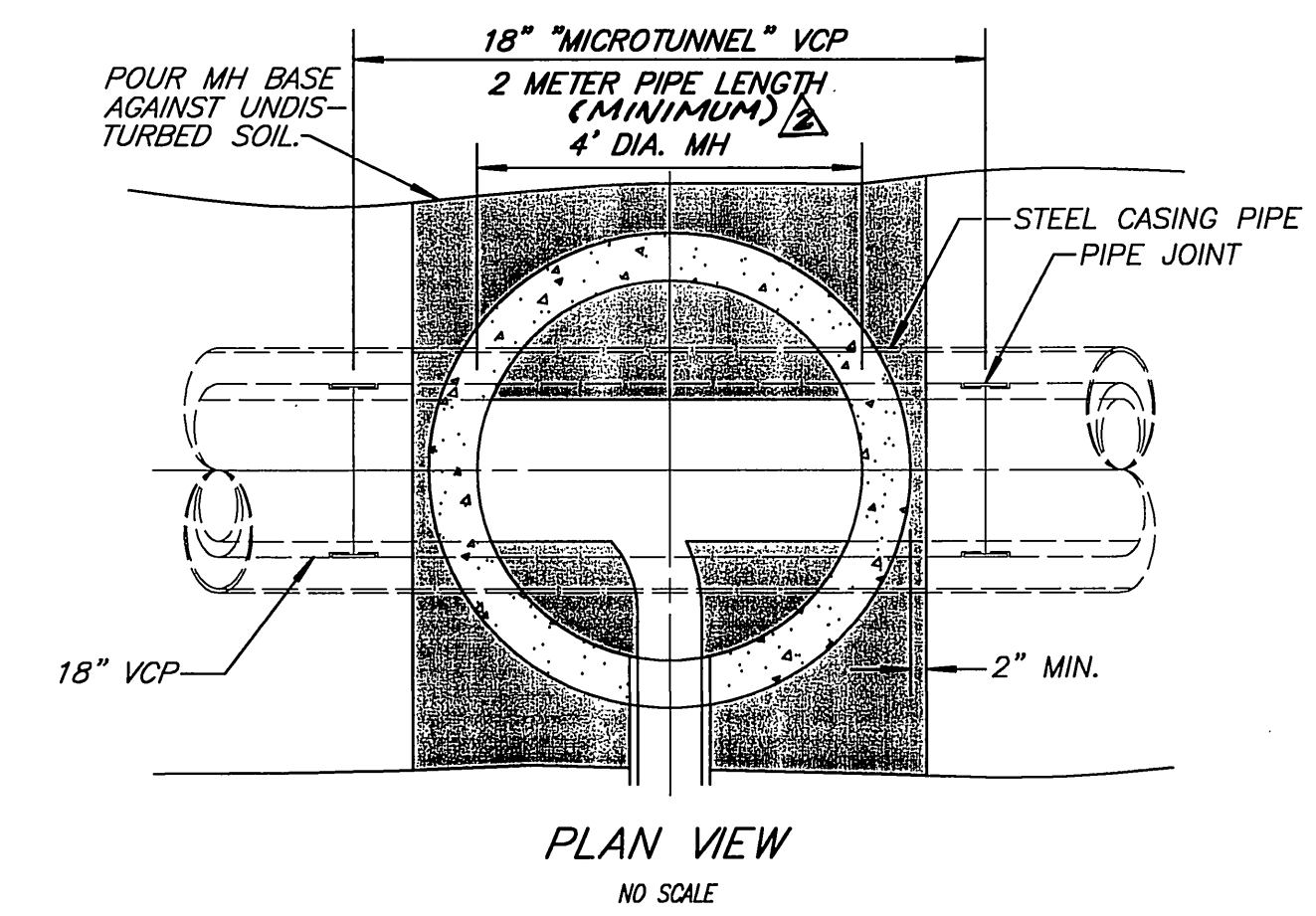
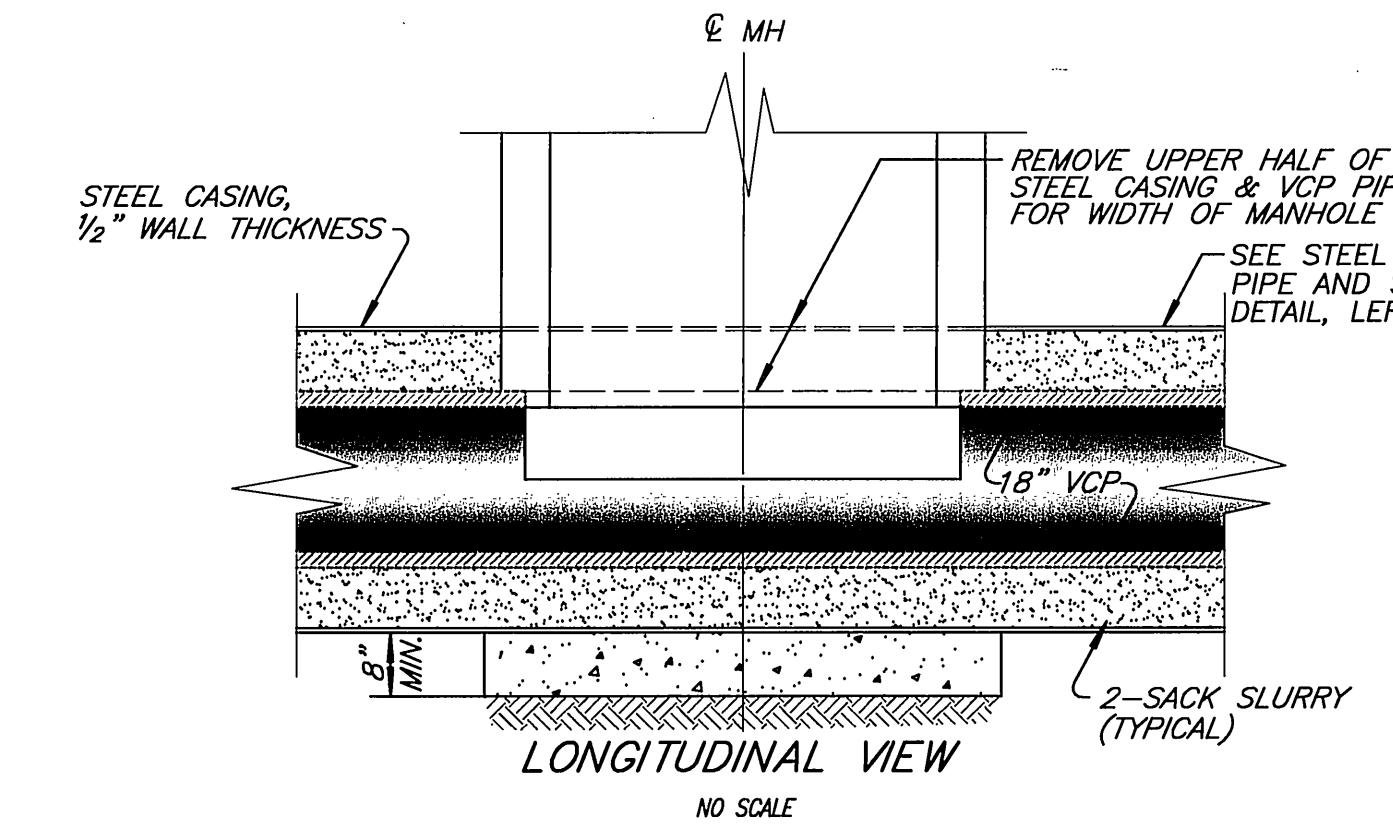
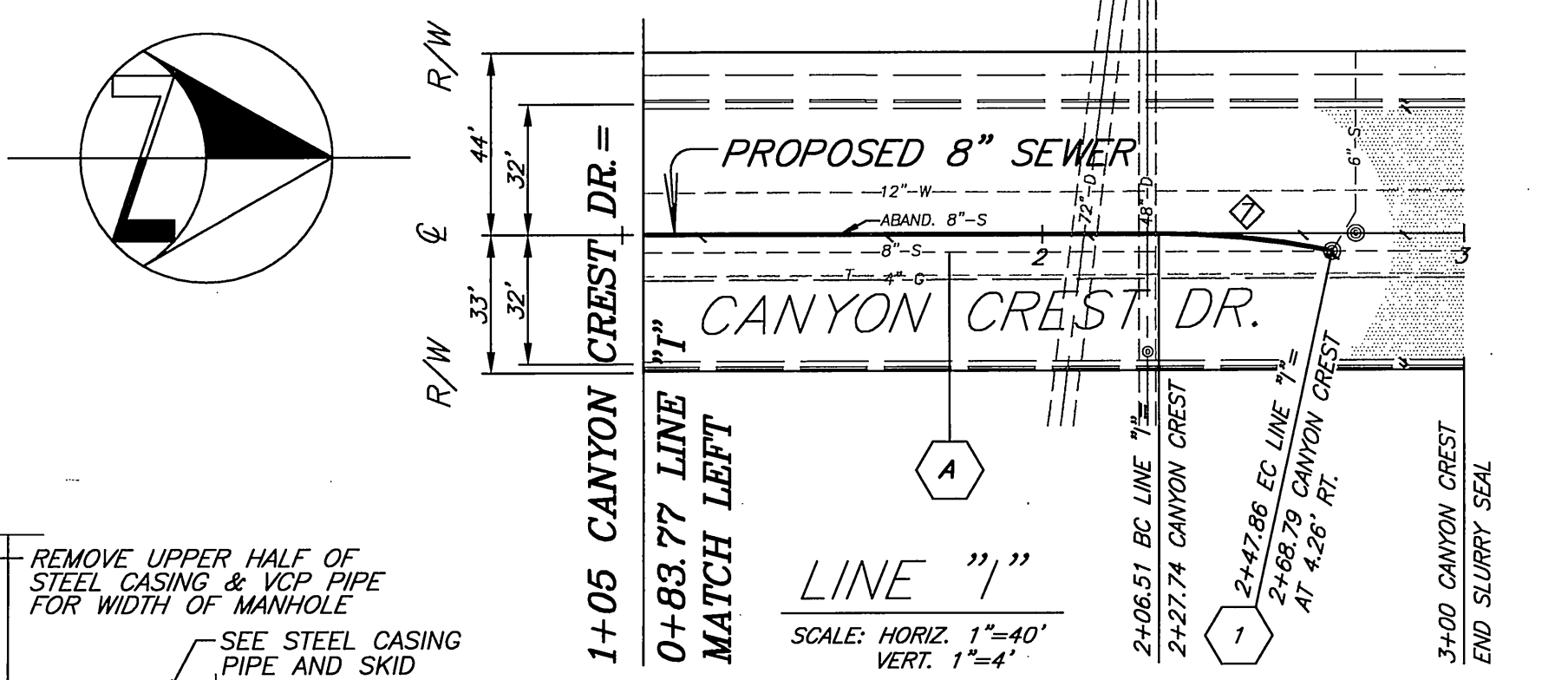
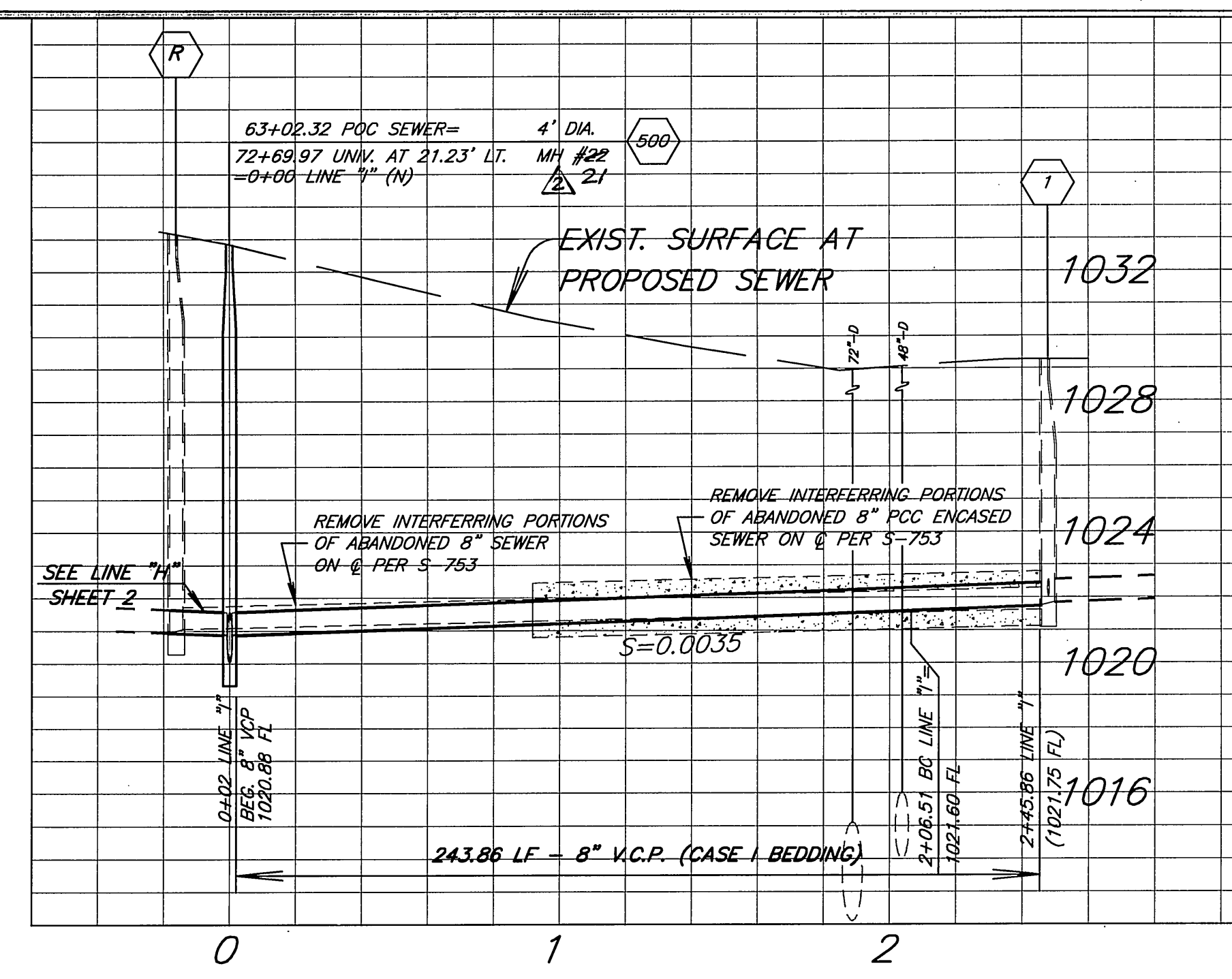
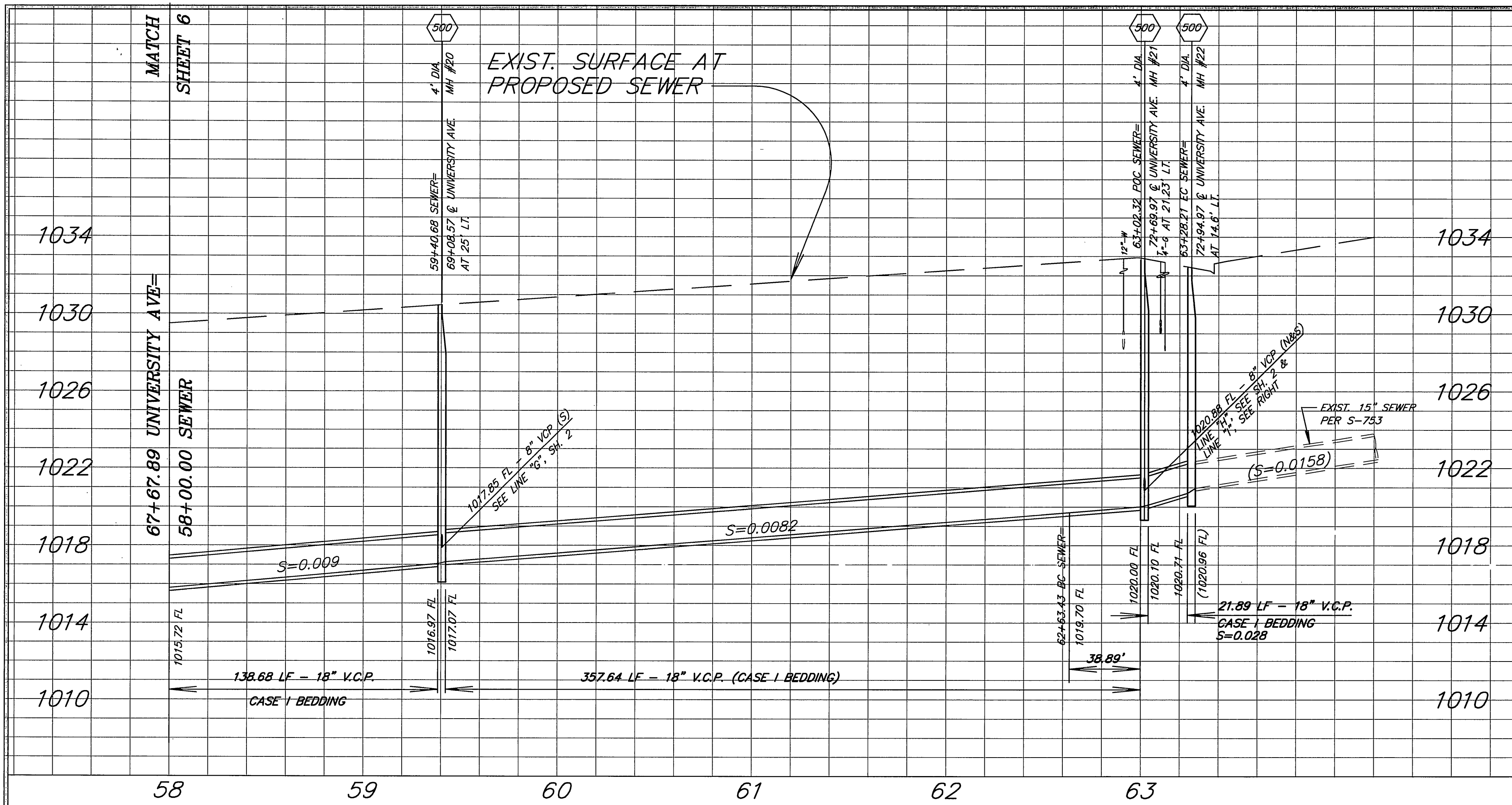


MARK	REVISIONS	APPR.	DATE
Δ	REVISED ALIGNMENT OF SEWER THROUGH CALTRANS' RIGHT OF WAY & STEEL ENCASUREMENT FROM 30" TO 36".		

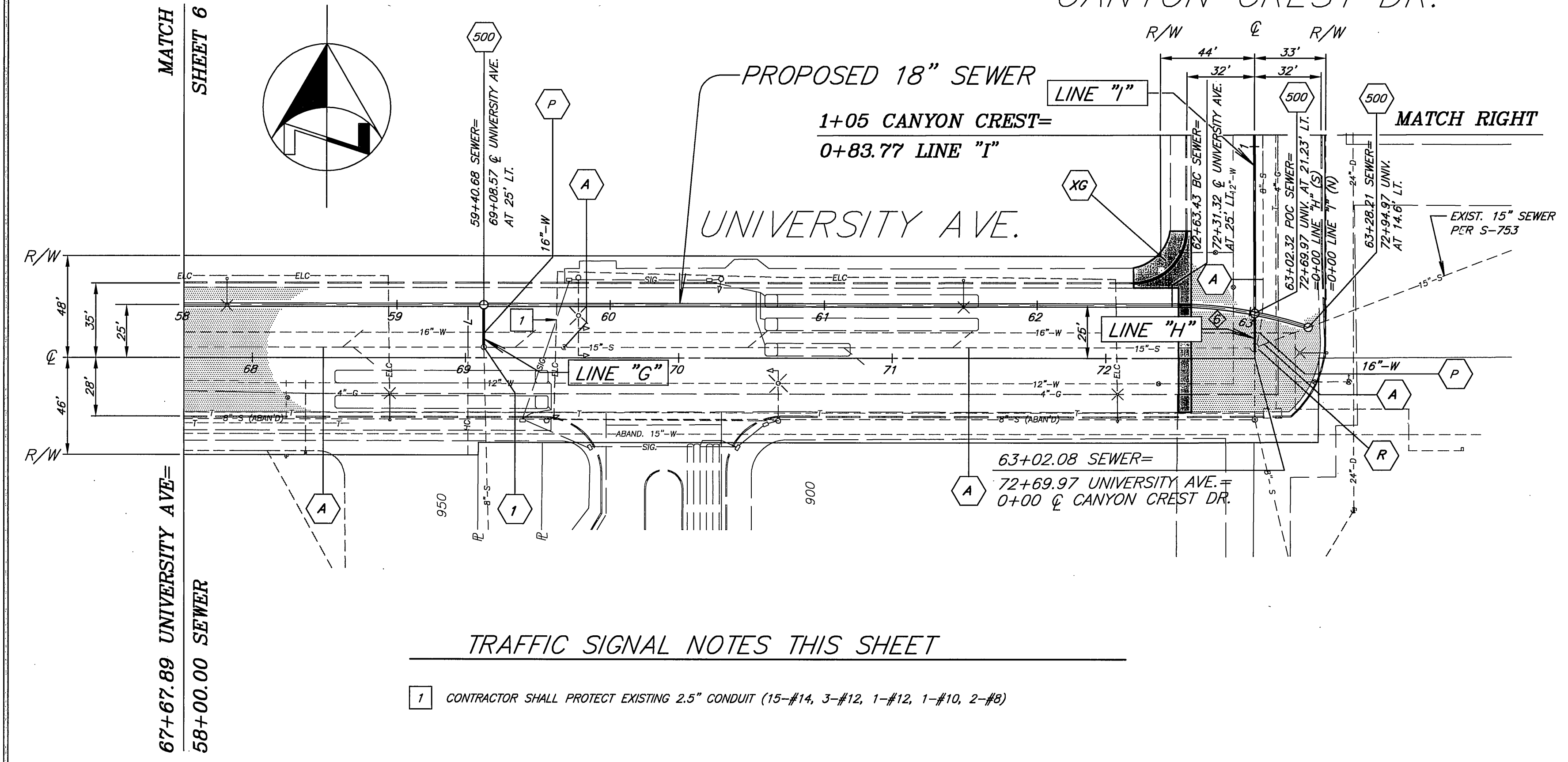
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
 APPROVED BY: _____ BY: _____ DATE: _____
 PRINCIPAL ENGINEER: _____
 CONTRACT ADMINISTRATOR: _____
 SURVEY SERVICES: _____
 SURVEYOR: _____
 TRAFFIC DIVISION: _____
 PARKS DEPARTMENT: _____
 WASTE WATER OP. MGR: _____

UNIVERSITY AVE. TRUNK SEWER
 FROM CHICAGO AVE. TO CANYON CREST DR.

NO. 0903736
 ACCT. NO. 9771123203 4403011X
S-1857
 SHEET 6A OF 7



- NOTES**
1. CONTRACTOR SHALL LOCATE LENGTH OF PIPE TO CENTER ON MANHOLE AS DIRECTED BY THE ENGINEER.
 2. DETAIL SHOWS "MICROTUNNEL PIPE". MANHOLE LOCATIONS APPLY TO "BELL & SPIGOT PIPE", ALSO.
 3. FOR DETAILS NOT SHOWN, SEE STD. DWG. 500.



TYP. MH DETAIL AT SEWER ENCASEMENT LOCATIONS
SEE PLAN SHEETS 5 & 6

TRAFFIC SIGNAL NOTES THIS SHEET

1 CONTRACTOR SHALL PROTECT EXISTING 2.5" CONDUIT (15-#14, 3-#12, 1-#12, 1-#10, 2-#8)

CURVE DATA				
Δ	R	L	T	
6	18' 33'30"	200'	64.78'	32.68'
7	11'50'49"	200'	41.35'	20.75'

BENCHMARK
17-B, BRASS DISK STAMPED 17-B
CAPPED AT THE INTERSECTION OF
UNIVERSITY AVENUE AND CHICAGO
AVENUE.
ELEVATION 956.733'

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

ENGINEER IN RESPONSIBLE CHARGE
LONNY LEW YOUNG
R.C.E. No. 43216 expires 03/31/2010
DATE 7/10/2009



MARK	REVISIONS	APPR.	DATE
1	REVISED MICROTUNNEL VCP PIPE LENGTH TO 2 METERS (6.56') MINIMUM	SK	7/10/09

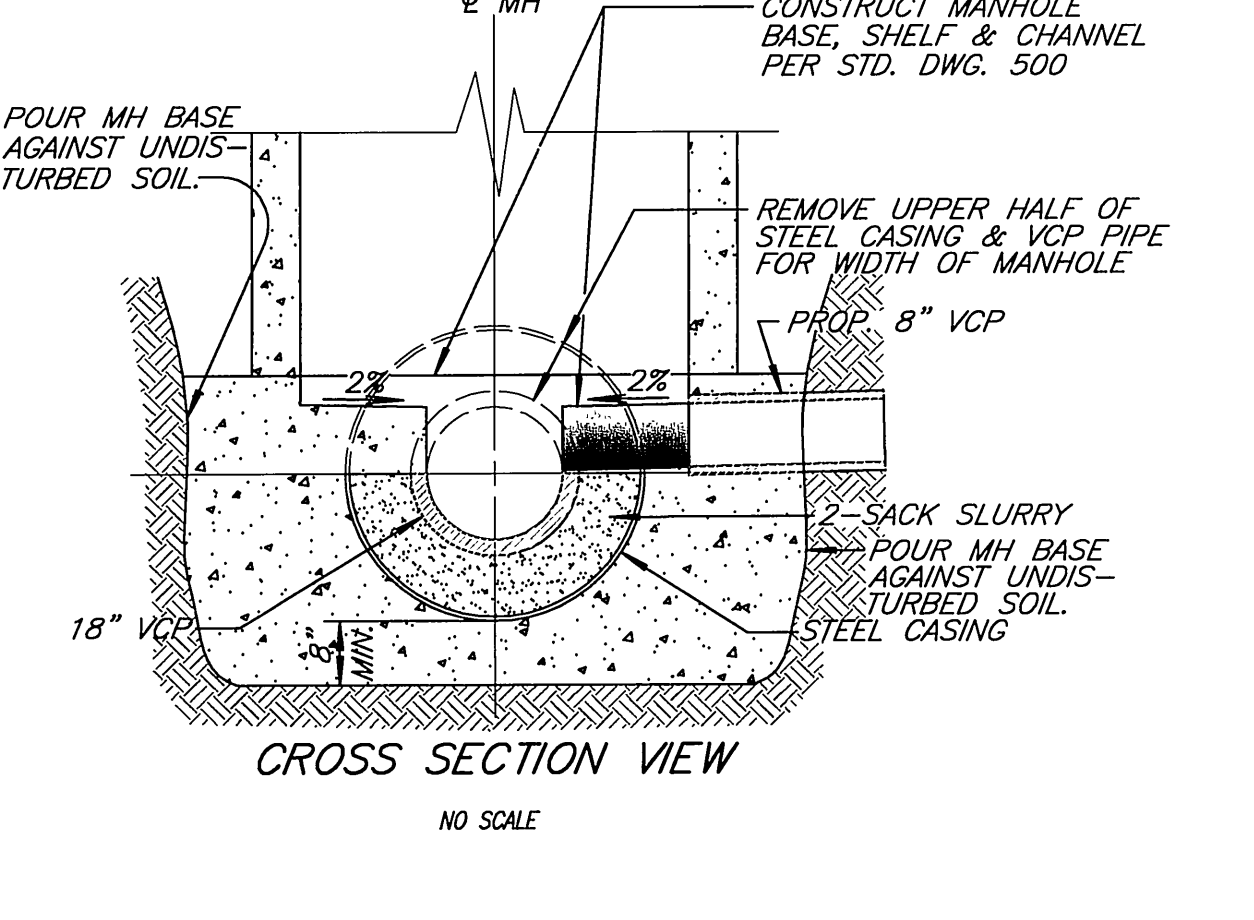
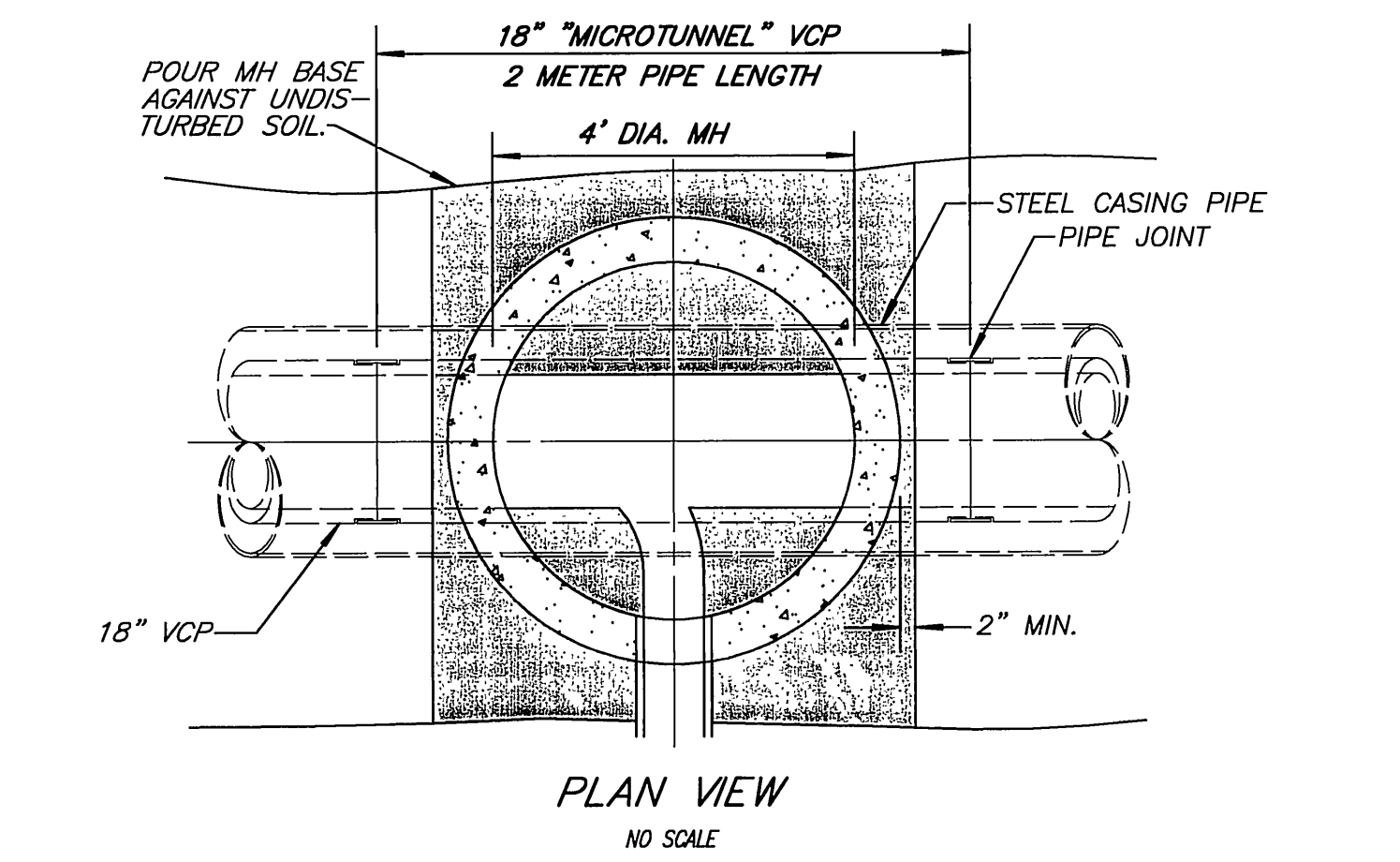
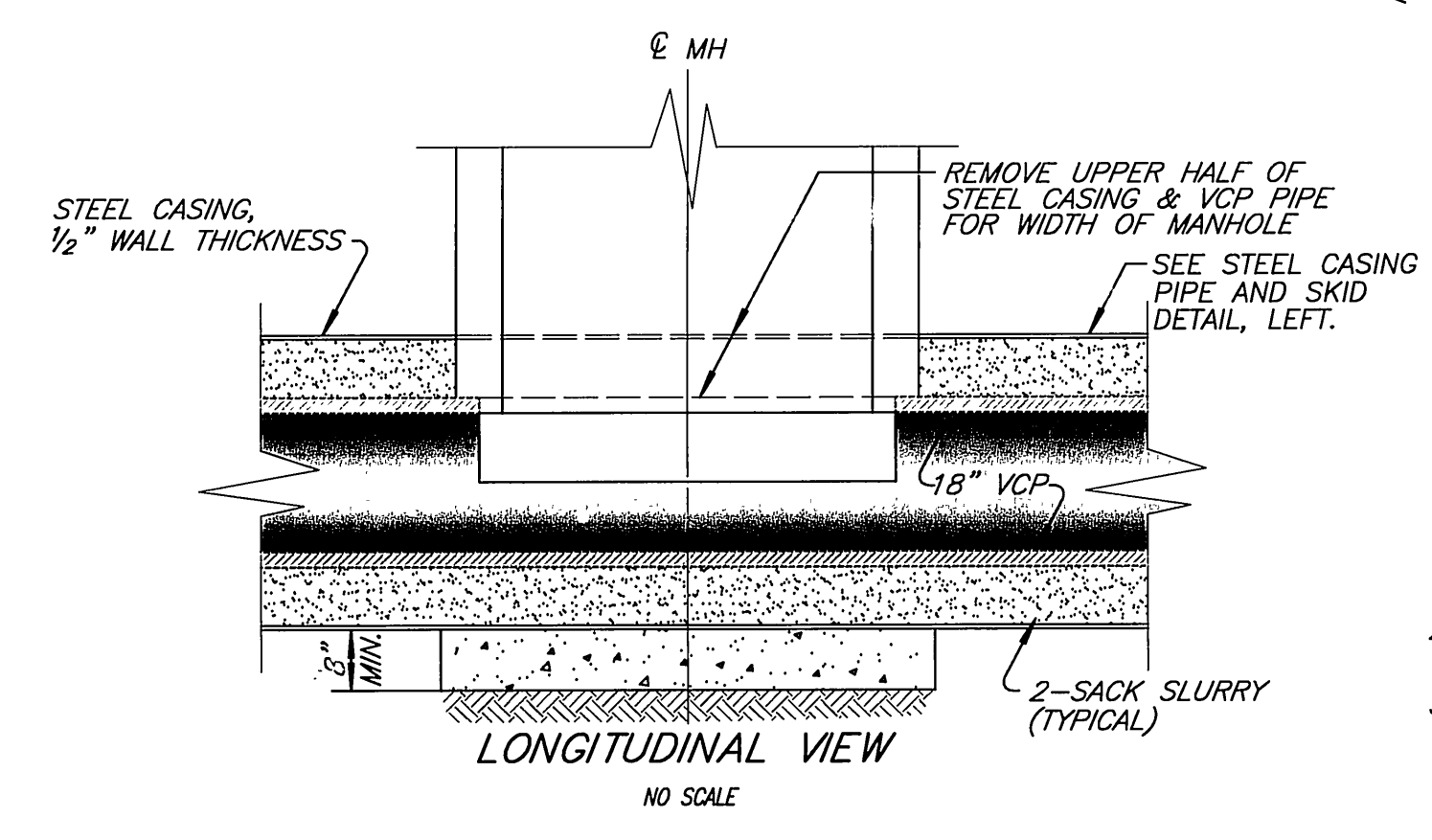
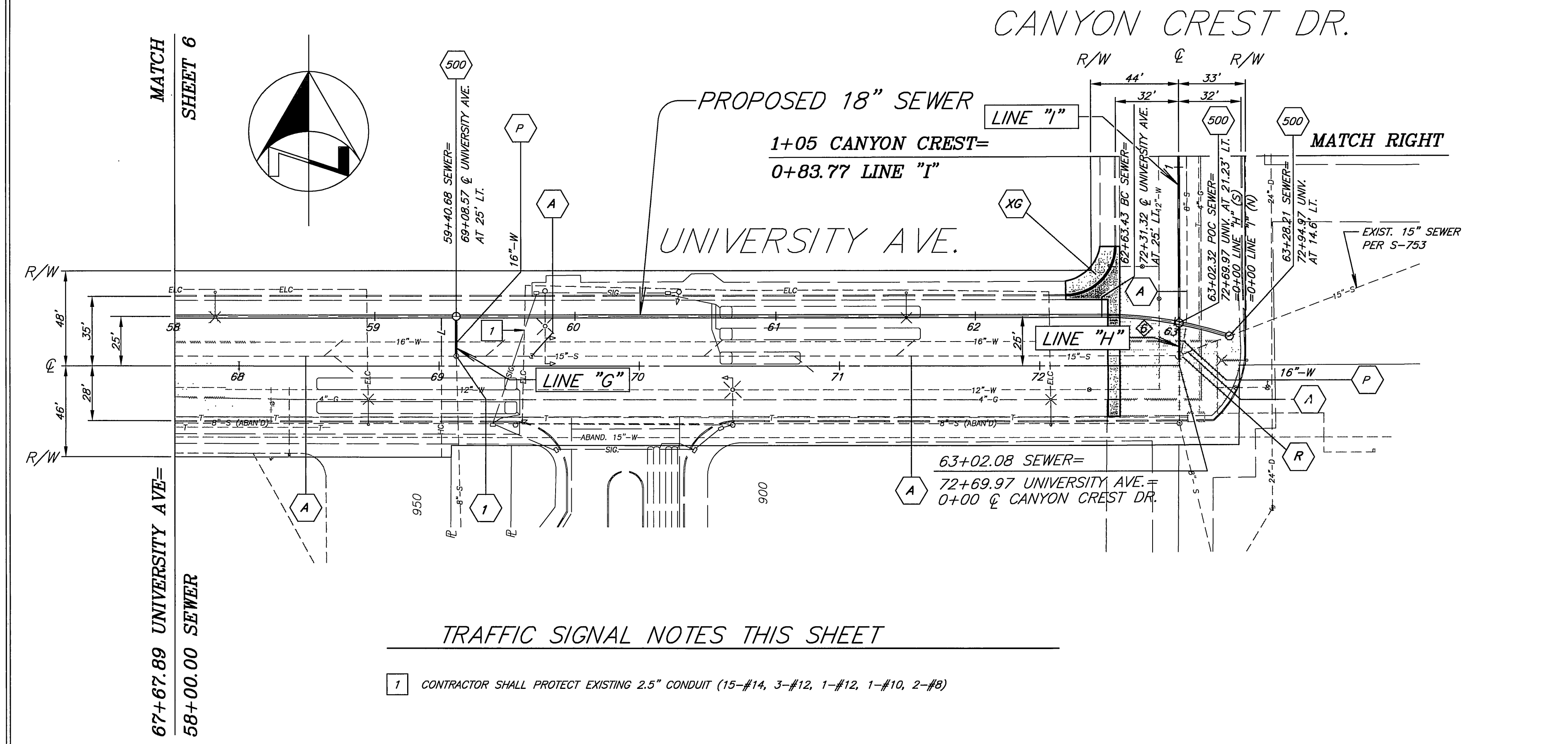
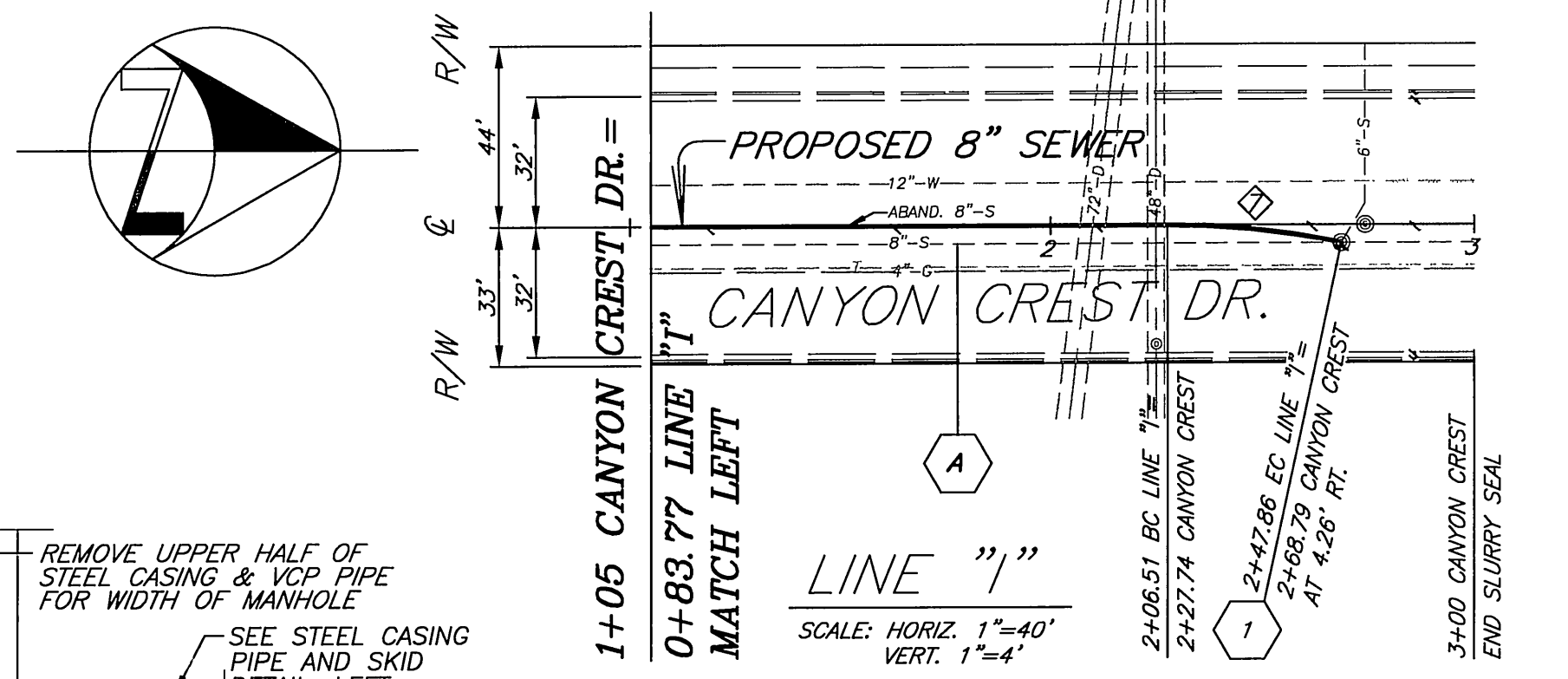
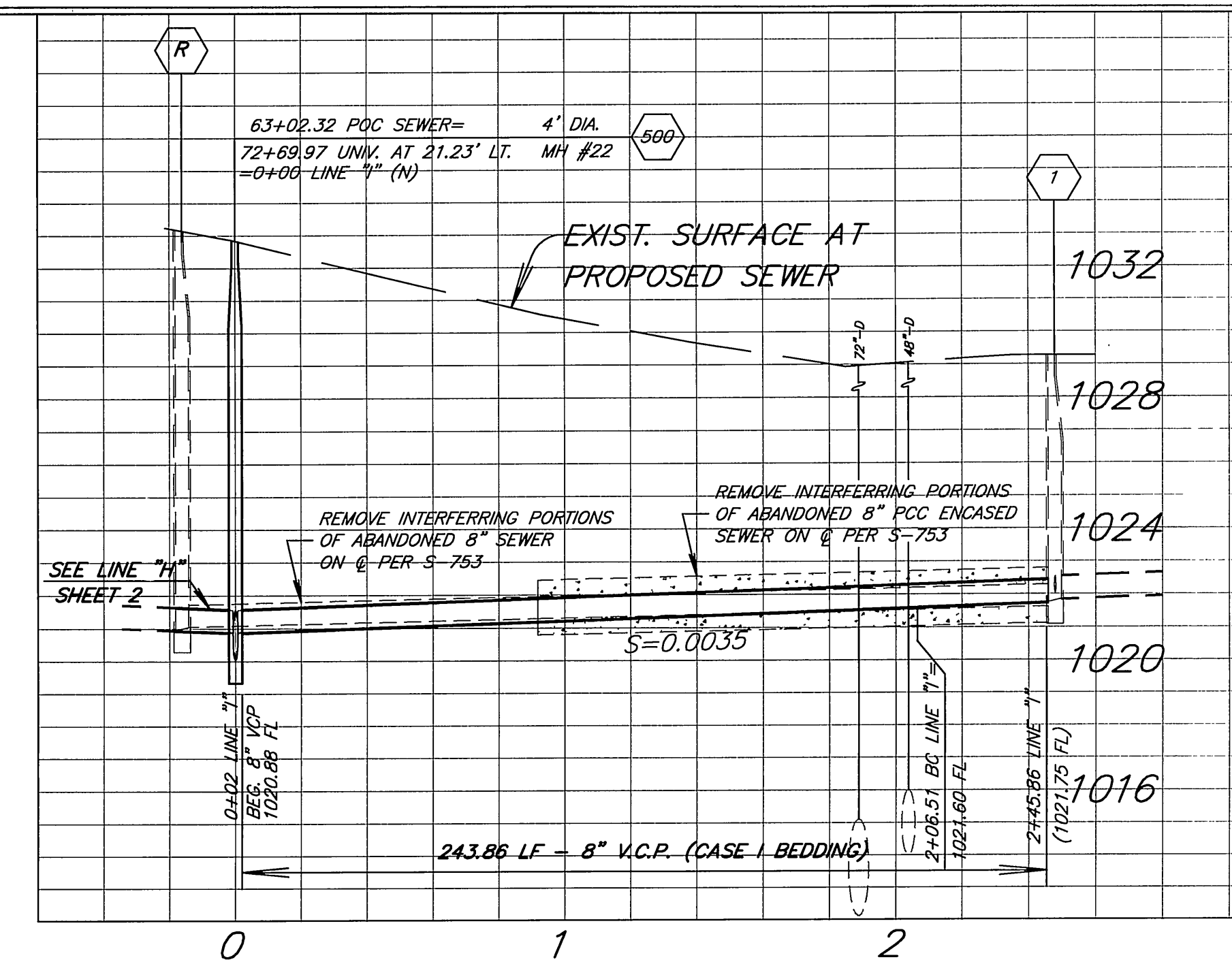
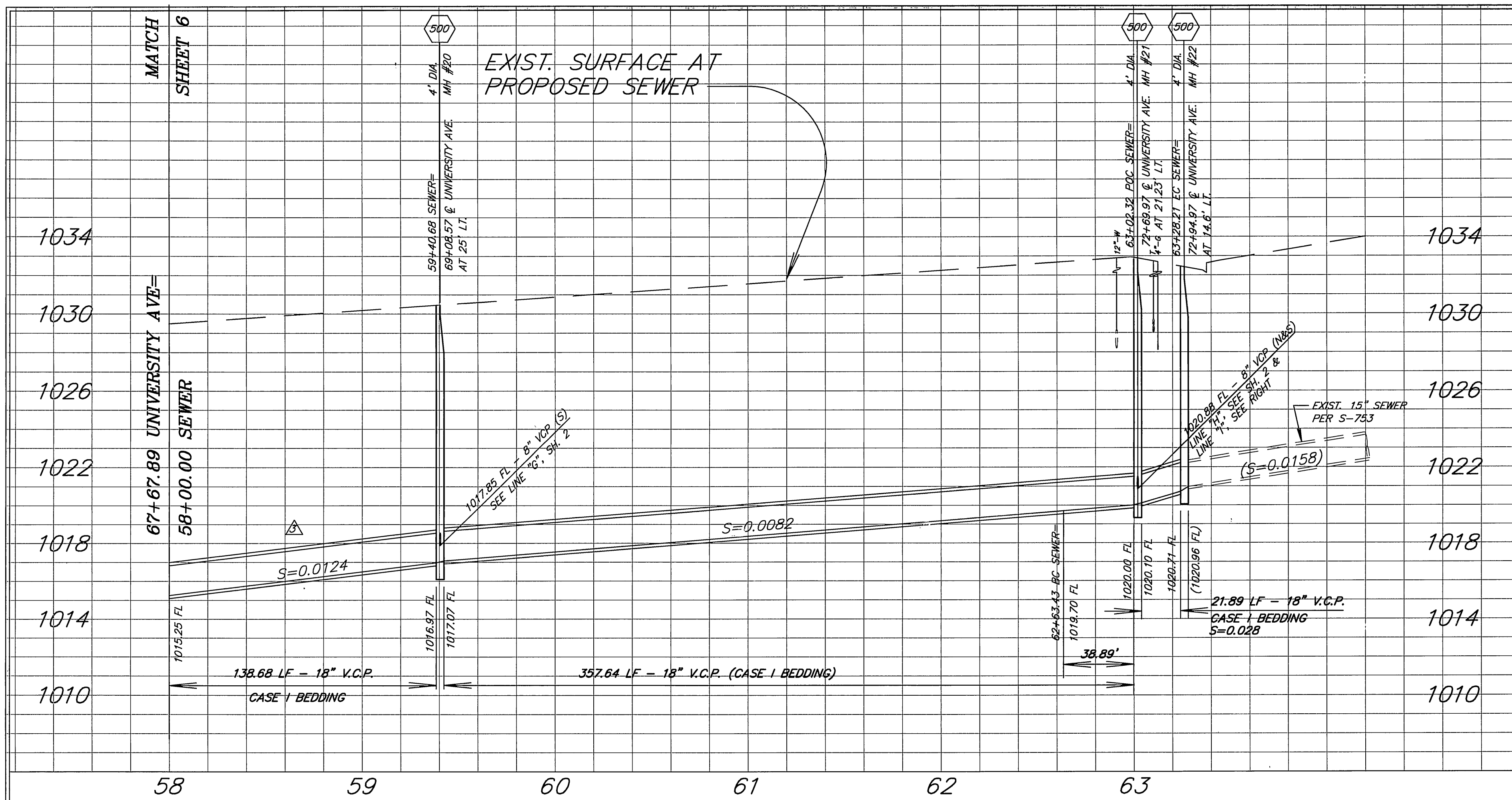
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY: [Signature]
DATE: 7/10/09

UNIVERSITY AVE.
TRUNK SEWER
FROM CHICAGO AVE. TO CANYON CREST DR.

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

NO. 0903736
ACCT. NO. 977123203 440301XX
S-1857
SHEET 7 OF 7



- NOTES**
- CONTRACTOR SHALL LOCATE LENGTH OF PIPE TO CENTER ON MANHOLE AS DIRECTED BY THE ENGINEER.
 - DETAIL SHOWS "MICROTUNNEL" PIPE. MANHOLE LOCATIONS APPLY TO "BELL & SPIGOT PIPE", ALSO.
 - FOR DETAILS NOT SHOWN, SEE STD. DWG. 500.

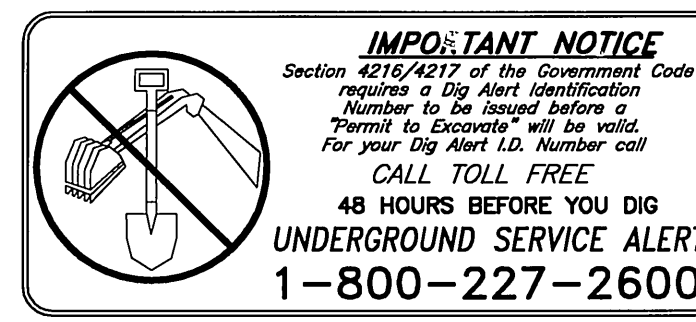
TYP. MH DETAIL AT SEWER ENCASEMENT LOCATIONS
SEE PLAN SHEETS 5 & 6

TRAFFIC SIGNAL NOTES THIS SHEET

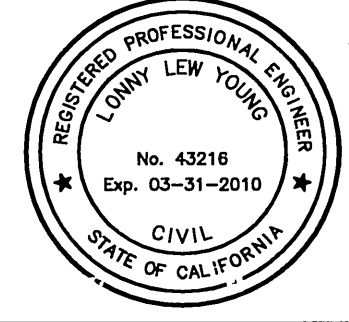
- 1 CONTRACTOR SHALL PROTECT EXISTING 2.5" CONDUIT (15-#14, 3-#12, 1-#10, 2-#8)

CURVE DATA				
Δ	R	L	T	
6	18' 33.30"	200'	64.78'	32.68'
7	11'50'49"	200'	41.35'	20.75'

BENCHMARK
17-B, BRASS DISK STAMPED 17-B
CAPPED AT THE INTERSECTION OF
UNIVERSITY AVENUE AND CHICAGO
AVENUE.
ELEVATION 956.733'



ENGINEER IN RESPONSIBLE CHARGE
LONNY LEW YOUNG
R.C.E. No. 43218 expires 03/31/2010
DATE



MARK	REVISIONS	APPR.	DATE
Δ	REVISED ALIGNMENT OF SEWER THROUGH CALTRANS RIGHT OF WAY		

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
APPROVED BY: _____ BY: _____ DATE: _____
CITY ENGINEER

UNIVERSITY AVE.
TRUNK SEWER
FROM CHICAGO AVE. TO CANYON CREST DR.
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

WD NO. 0903236
ACCT. NO. 9771123203 440301XX
S-1857
SHEET 7A OF 7