STORM DRAIN PLAN
UNIVERSITY VILLAGE
NORTH END

GENERAL NOTES

1. NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OR INSTALL ANY OBJECTS WITHIN THE PUBLIC RIGHTS-OF-WAY OR EASEMENTS OF THE CITY OF RIVERSIDE WITHOUT A VALID CONSTRUCTION PERMIT OR, A STREET OPENING PERMIT OR AN ENCROACHMENT PERMIT ISSUED BY THE CITY'S PUBLIC WORKS DEPARTMENT.

2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACT TO CLEAR THE RIGHT-OF-WAY IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCE, AND AT NO COST TO THE CITY.

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

4. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY (THIS NOTE REQUIRED ON ALL PLANS).

5. QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND THE CITY OF RIVERSIDE IS NOT RESPONSIBLE FOR THEIR ACCURACY.

6. WHEN A PORTION OF THE WORK IS TO BE DONE BY THE CITY, THE DEVELOPER AND/OR CONTRACTOR SHALL GIVE THE CITY 60-DAYS NOTICE SO THAT THE DEVELOPER'S WORK AND THE CITY'S WORK CAN BE PROPERLY COORDINATED. THE DEVELOPER SHALL PREPARE AND COMPACT THE SUBGRADE TO ELEVATIONS WITHIN ±0.1' OF THE DESIGN ELEVATIONS AND SHALL BE RESPONSIBLE FOR THE CONDITION OF THE SUBGRADE UNTIL ACCEPTED BY THE CITY. THE DEVELOPER SHALL ALSO BE RESPONSIBLE FOR ANY BARRICADING DURING THIS TIME.

7. THE DEVELOPER AND/OR CONTRACTOR SHALL CONTACT THE PUBLIC WORKS DEPARTMENT 30 DAYS PRIOR TO BEGINNING CONSTRUCTION TO NEGOTIATE THE COST OF THE CITY'S PORTION OF THE WORK.

8. THE DEVELOPER SHALL BE RESPONSIBLE FOR PRESERVING OR RE-ESTABLISHING AND REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF CONSTRUCTION SHOWN HEREON.

9. SEE "STREET LIGHTING PLANS" FOR QUANTITY AND LOCATION OF REQUIRED STREET LIGHTS.

10. ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE PRIVATE ENGINEER.

11. WHERE NEW PAVEMENT IS TO JOIN THE EXISTING PAVEMENT, THE EDGE OF THE EXISTING PAVEMENT SHALL BE TRIMMED IN A SMOOTH AND STRAIGHT LINE. CONSTRUCT MATCH-UP PAVING AS SHOWN ON THE PLANS AND OVERLAY PAVING AS DIRECTED IN THE FIELD TO PRODUCE A SMOOTH SECTION.

12. CONSTRUCT DRIVEWAY APPROACHES PER STANDARD DRAWING 302. EXACT SIZE AND LOCATION TO BE STAKED BY THE PRIVATE ENGINEER PRIOR TO CONSTRUCTION OF THE CURB AND GUTTER.

13. THE SUBDIVIDER SHALL ARRANGE FOR A SOIL TEST TO BE MADE BY A SOILS ENGINEER AFTER THE STREETS HAVE BEEN PREPARED TO ROUGH GRADE AND PRIOR TO CURB AND GUTTER CONSTRUCTION. DEPTH OF BASE MATERIAL AND A.C. PAVING SHALL BE DETERMINED BY THE CITY OF RIVERSIDE DESIGN STANDARDS AND TEST PROCEDURES. (FOR TRACTS ONLY - SEE CHECK LIST ITEM 25 FOR OTHER PLANS).

14. ALL OVERHANGING TREE LIMBS THAT ARE LESS THAN 14' ABOVE THE STREET GRADE SHALL BE TRIMMED BACK.

15. THE DEVELOPER IS RESPONSIBLE FOR PROVIDING ACCESS PAVING. SHOULD THE DEVELOPER AND/OR CONTRACTOR DECIDE TO INSTALL THE ACCESS PAVING PRIOR TO THE CITY COMMENCING ITS PAVING WORK, THE DEVELOPER SHALL COORDINATE HIS INSTALLATION OF ACCESS PAVING ON WITH THE CITY INSPECTOR. FINAL COURSE OF PAVING IN ACCESS AREA TO BE PAID FOR BY DEVELOPER PRIOR TO THE CITY COMMENCING ITS PAVING OPERATION. DEVELOPER SHALL INSTALL TYPE F-1 FLEXIBLE DELINEATORS AT 20' INTERVALS ON OUTGOING TAPERS.

OWNERSHIP

TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:

UNIVERSITY VILLAGE. LLC

DEVELOPER

UNIVERSITY VILLAGE, LLC
ATTN: MICHAEL KEELE, GENERAL MANAGER
C/O SOUTHLAND LAND CORPORATION
2990 EAST COLORADO BLVD.
SUITE C-105
PASADENA, CA 91107
(626) 568-8000

LEGAL DESCRIPTION

PORTIONS OF PARCEL D OF THE CERTIFICATE OF COMPLIANCE, RECORDED ON DECEMBER 16, 1997 AS INSTRUMENT NUMBER 460624 RECORDS OF RIVERSIDE COUNTY CALIFORNIA, WITHIN SECTION 19 TOWNSHIP 2 SOUTH, RANGE 4 WEST, S.B.B.M.

ENGINEER

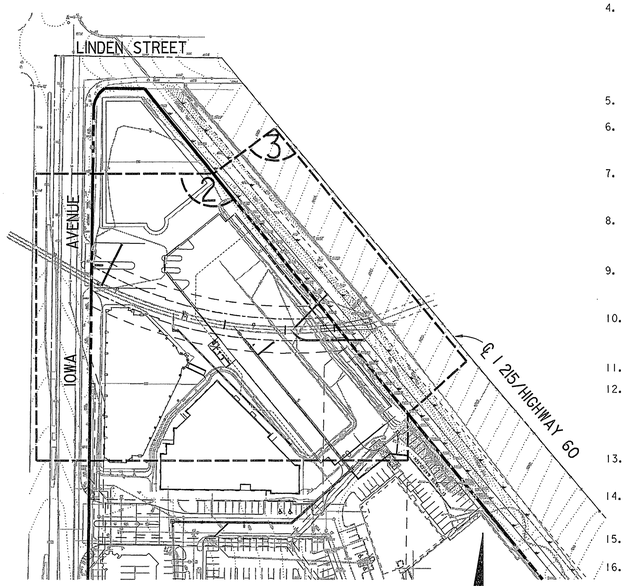
RICK ENGINEERING COMPANY
1223 UNIVERSITY AVENUE, SUITE 240
RIVERSIDE, CA 92507
(626) 782-0707
CITY BUSINESS TAX CERTIFICATE NO. 44187 EXPIRATION DATE: 11/01/2000

BENCHMARK

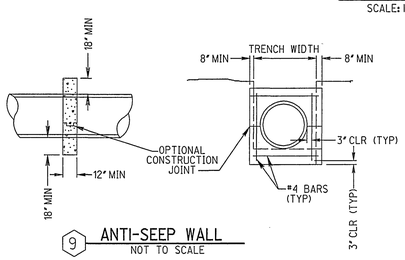
UNI-11 1/4" BRASS DISK IN CITY OF RIVERSIDE WELL MONUMENT AT THE CENTERLINE INTESECTION OF UNIVERSITY AVE. AND IOWA AVE. ELEV.=996.445 [303.717 M]

UTILITIES

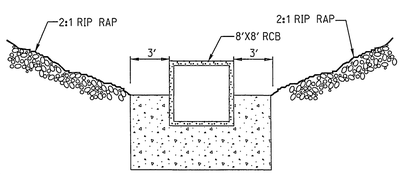
POWER - CITY OF RIVERSIDE
WATER - CITY OF RIVERSIDE
GAS - SO. CALIFORNIA GAS CO.
TELEPHONE - PACIFIC TELEPHONE CO.
SEWER - CITY OF RIVERSIDE



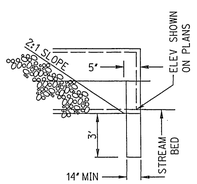
INDEX MAP
SCALE: 1"=100'



9 ANTI-SEEP WALL
NOT TO SCALE



FACE ELEVATION



SIDE ELEVATION

10 CUT-OFF WALL
NOT TO SCALE

CALTRANS NOTES

1. THE CONTRACTOR SHALL APPLY AND OBTAIN AN ENCROACHMENT PERMIT FROM CALTRANS BEFORE BEGINNING WORK WITHIN STATE RIGHT-OF-WAY.
2. ALL WORK WITHIN THE STATE RIGHT-OF-WAY SHALL CONFORM TO THE LATEST STATE STANDARD PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE STATE'S REPRESENTATIVE. STANDARDS OTHER THAN STATE STANDARDS MUST BE JUSTIFIED AND PRE-APPROVED.
3. ALL DISTRIBUTED AREAS IN THE STATE RIGHT OF WAY MUST BE TREATED FOR EROSION CONTROL (HYDRO-SEEDING OR EQUIVALENT, OR AS DIRECTED BY THE STATE'S REPRESENTATIVE). THE RESPONSIBILITY FOR MAINTAINING EROSION CONTROL WILL NOT BE RELEASED UNTIL THE SEEDING IS WELL ESTABLISHED. THE CONTRACTOR WILL BE RESPONSIBLE FOR CALTRANS' COST OF CLEANING ANY CLUTTERED DRAINS WITH DEBRIS AND/OR SILT AS A RESULT OF DRAINAGE STRUCTURES OR CHANNELS WHICH HAVE BEEN CAUSED BY THE CONSTRUCTION PROJECT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ANY STATE DRAINAGE FACILITY WHICH IS CONNECTED TO OR DIRECTLY AFFECTED BY THE CONTRACTORS OPERATION SHALL BE OPERATIONAL PRIOR TO FINAL ACCEPTANCE OF THE PERMIT WORK BY THE STATE. ADEQUATE CLEAN OUTS AND ACCESS OPENINGS SHALL BE PROVIDED IN ANY CONSTRUCTION WITHIN THE STATE'S RIGHT-OF-WAY FOR FUTURE MAINTENANCE AND REPAIR WORK AS NEEDED. THIS WORK SHALL BE FURNISHED AT NO COST TO THE STATE.
5. ALL THE LANDSCAPE DAMAGED, REMOVED OR ADVERSELY AFFECTED BY THE OPERATION SHALL BE REPLACED IN KIND.
6. WHERE SURVEY MONUMENTS EXIST, SUCH MONUMENTS SHALL BE PROTECTED OR SHALL BE REFERENCED AND RESET PURSUANT TO BUSINESS AND PROFESSIONS CODE, SECTIONS 8700 TO 8805 (LAND SURVEYOR'S ACT).
7. WHERE REQUIRED, THE PAVEMENT MUST BE SAW-CUT AT LANE LINE OR A MINIMUM 2 FEET FROM THE EXISTING EDGE OF THE PAVEMENT. THE SAW-CUTS MUST BE PERPENDICULAR TO, PARALLEL, OR CONCENTRIC WITH THE STATE HIGHWAY CENTERLINE.
8. ALL SIGNS, ROADSIDE MARKERS, ELECTROLIERS, ETC., SHALL BE PROTECTED AND/OR REPLACED IN KIND, AT NO COST TO THE STATE, IN ACCORDANCE WITH THE CURRENT STATE STANDARD PLANS AND LATEST EDITION OF THE TRAFFIC MANUAL.
9. NO FREEWAY RAMPS OR FREEWAY LANES MAY BE CLOSED OR OBSTRUCTED AT ANY TIME UNLESS SPECIFICALLY ALLOWED PER THE ENCROACHMENT PERMIT AND/OR AS DIRECTED BY THE STATE'S REPRESENTATIVE.
10. ALL FENCE RELOCATED TO FACILITATE THE CONSTRUCTION OF THIS PROJECT INSIDE THE STATE RIGHT-OF-WAY SHALL BE REPLACED WITH TYPE CL-6 FENCE AS SHOWN IN THE STATE'S STANDARD PLANS, UNLESS OTHERWISE APPROVED BY THE STATE'S REPRESENTATIVE.
11. NO EQUIPMENT OR MATERIALS MAY BE STORED ON THE STATE RIGHT-OF-WAY.
12. ALL SIGNING, STRIPING AND PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE TRAFFIC MANUAL, PUBLISHED BY THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, AND THE SPECIAL PROVISIONS. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED ON THE PLANS.
13. ALL CONFLICTING STRIPING AND PAVEMENT MARKINGS NOT SHOWN ON THE PLANS SHALL BE REMOVED FROM THE PAVEMENT BY SANDBLASTING BY THE CONTRACTOR.
14. WHERE TYPE CL-6 FENCE DOES NOT EXIST, THE STATE RIGHT-OF-WAY FENCE MUST BE UPGRADED TO TYPE CL-6 FENCE, AS SHOWN IN THE STANDARD PLANS.
15. TEMPORARY SIGNS SHALL BE PROVIDED IF EXISTING SIGNS NEED TO BE REPLACED DURING THE CONSTRUCTION.
16. CONSTRUCTION AREA SIGNS AND TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, INSTALLED, AND MAINTAINED DURING CONSTRUCTION , AND REMOVED WHEN NO LONGER REQUIRED.
17. RELATIVE COMPACTION OF NOT LESS THAN 90 PERCENT SHALL BE OBTAINED FOR EMBANKMENT, EXCEPT AS SPECIFIED BELOW.
18. ALL CONSTRUCTION BMP's (EROSION CONTROL) SHALL BE REMOVED PRIOR TO REPLACE HIGHWAY PLANTING
19. THE CONTRACTOR SHALL NOT STOCKPILE SOIL WITHIN THE STATE RIGHT OF WAY.
20. THE CONTRACTOR SHALL REMOVE AND STOCKPILE, OFF THE STATE RIGHT OF WAY, THE TOP 0.5 METER OF TOPSOIL. AFTER OVEREXCAVATION AND RECOMPACTION TO ORIGINAL GRADE, THE TOP SOIL SHALL BE REAPPLIED TO AN EVEN DEPTH OF 0.5 METERS.
21. LOCAL AGENCY (CITY OR COUNTY) STANDARDS WILL BE PERMITTED IN THE STATE RIGHT OF WAY ONLY IF THEY EXCEED STATE STANDARDS AND ARE APPROVED PRIOR TO PERMIT ISSUANCE.
22. ALL UTILITY CROSSINGS SHOULD BE EXPOSED USING A HYDRO-EXCAVATION OR OTHER APPROVED METHOD (POTHOLING) TO ONFIRM DEPTH.
23. THE COMPACTION OF BACKFILL SOILS WITHIN THE STATE RIGHT OF WAY SHALL BE TO THE STATE STANDARDS AND SPECIFICATIONS.
24. ALL WORK WITHIN 6' OF THE SHOULDER WILL REQUIRE CLOSURE OF THE SHOULDER. ALL WORK WITHIN 6' OF THE EDGE OF TRAVELED WAY WILL REQUIRE CLOSURE OF THE OUTSIDE LANE.
25. THE TRAFFIC CONTROL PLAN SHALL CLEARLY SHOW: PLACEMENT OF TEMPORARY BARRIER RAILING TYPE K (K-RAIL), DIRECTION OF TRAFFIC, ALL SIGNAGE TYPE, EXISTING SIGN LOCATIONS, NEW SIGN LOCATIONS, AND RELOCATED SIGN LOCATIONS. ALL GENERAL NOTES RELATED TO TRAFFIC CONTROL NEED TO BE PLACED ON THE PLAN.
26. TRAFFIC CONTROL IS GENERALLY AUTHORIZED ONLY FROM 9:00 AM TO 3:00 PM, MONDAY THROUGH FRIDAY, EXLUDING HOLIDAYS, IF LANE CLOSURE IS APPROVED BY THE STATE.
27. WHILE BACKFILLING, THE SIDE HILL EMBANKMENT SLOPE SHALL BE CUT INTO A MINIMUM OF 2 METERS INTO EXISTING GROUND PER SECTION 19 OF THE STATE STANDARD SPECIFICATIONS.
28. INGRESS AND EGRESS TO THE CONSTRUCTION SITE WILL BE THROUGH THE IOWA AVENUE DRIVEWAY. ALL CONSTRUCTION TRAFFIC SHALL PROCEDE THROUGH THE PAVED PARKING LOT TO GAIN ACCESS TO THE OVER-EXCAVATION AREA.
29. NO UTILITIES WILL NEED TO BE RELOCATED TO PERMIT CONSTRUCTION. ALL EXISTING UTILITIES MIGHT BE ALLOWED TO REMAIN IN PLACE DURING CONSTRUCTION AND WILL NOT REQUIRE RELOCATION FOR ULTIMATE CONSTRUCTION.
30. ALLOWANCE OF EXISTING UTILITY FACILITIES WITHIN THE RIGHT OF WAY WILL NOT PRESENT A SERIOUS SAFETY PROBLEM AND WILL NOT CAUSE HIGHWAY MAINTENANCE PROBLEMS.

LEGEND

EXISTING CONTOUR & ELEVATION ..... 305.41[1002]
PROPOSED CONTOUR & ELEVATION ..... 304.80[1000]
SPOT ELEVATION ..... ×1235.00
EXISTING FENCE
FINISH GRADE ..... FG
INVERT ELEVATION ..... INV
EARTHEN SWALE
REINFORCED CONCRETE PIPE ..... R.C.P.
REINFORCED CONCRETE BOX ..... R.C.B.

WORK TO BE DONE / STANDARD SPECS

THESE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS, THE CITY OF RIVERSIDE STANDARDS AND SPECIFICATIONS, THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT (RCFC) STANDARD DRAWINGS, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, "GREENBOOK", 1994 EDITION, AND ANY SUBSEQUENT SUPPLEMENTS, AND CURRENT CALTRANS STANDARD DRAWINGS AND STANDARD SPECIFICATIONS.

ENGINEER'S NOTES

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY OF DESIGN AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER CITY APPROVAL OR DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE PRIVATE ENGINEER FOR CLARIFICATION. THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.

THE PRIVATE ENGINEER WILL NOT BE PROVIDING INSPECTION SERVICES OR CONSTRUCTION REVIEW. THESE FUNCTIONS ARE THE RESPONSIBILITY OF THE CITY, RIVERSIDE COUNTY FLOOD CONTROL DISTRICT AND/OR RIVERSIDE COUNTY BUILDING SERVICES. THE PRIVATE ENGINEER ACCEPTS NO LIABILITY FOR SUCH FUNCTIONS OR WORK THEREOF.

PRIVATE ENGINEER'S NOTES TO CONTRACTOR

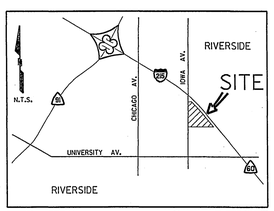
ALL CONTRACTORS AND SUB-CONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATION SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUB-CONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS "CONSTRUCTION SAFETY ORDERS". THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUB-CONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

THE CONTRACTOR FURTHER AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY OF JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION FOR 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, CITY AND THE CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY RISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

THE EXISTENCE AND APPROXIMATE LOCATIONS OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS AND FROM FIELD OBSERVATION OF SURFACE IMPROVEMENTS. THE CIVIL ENGINEER ASSUMES NO LIABILITY AS TO THE EXACT LOCATION OF SAID UTILITIES OR FOR UTILITIES WHOSE LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY AND IRRIGATION COMPANIES PRIOR TO WORK OR EXCAVATION TO DETERMINE THE EXACT LOCATIONS OF ALL LINES AFFECTING THIS WORK, WHETHER OR NOT SHOWN HEREON, AND FOR ANY DAMAGE OR PROTECTION TO THESE LINES.

CONSTRUCTION NOTES, QUANTITY ESTIMATE

		PRIVATE	CALTRANS
1	CLEAR & GRUB AREA (FOR STORM DRAIN CONSTRUCTION ONLY).	1 L.S.	1 L.S.
2	REMOVE AND DISPOSE OF PORTIONS OF EXISTING CONCRETE OR ROCK STRUCTURES (I.E. HEADWALL, WING WALLS, PARAPET, APRON, RIP RAP BLANKET, ETC.).	1 L.S.	1 L.S.
3	REMOVE END SECTION OF EXISTING 96" RCP, EXPOSE END OF REMAINING 96" RCP AND CLEAN AND REPAIR ANY DEFECTS.	8 L.F.	-----
4	CONSTRUCT TRANSITION STRUCTURE FROM 96" RCP TO 8' W X 8' H RCB. (TRANSITION STRUCTURE DETAILS PER STRUCTURAL ENGINEER'S PLAN)	18.18 L.F.	-----
5	PLACE 30" RCP, CL IV.	19.0 L.F.	-----
6	PLACE 24" RCP, CL IV.	80.36 L.F.	21.09 L.F. [6.428M]
7	PLACE 18" RCP, CL IV.	112 L.F.	15.87 L.F. [4.837M]
8	CONSTRUCT JUNCTION STRUCTURE NO. 4 PER CITY OF RIVERSIDE STANDARD DRAWING NO. 423 ELEVATION S AND ANGLE OF CONVERGENCE PER PLAN.	1 EA.	2 EA.
9	CONSTRUCT MANHOLE AX PER CITY OF RIVERSIDE STANDARD 430.	1 EA.	----
10	CONSTRUCT ANT-SEEP WALL PER DETAIL HEREON.	2 EA.	----
11	CONSTRUCT CUT-OFF WALL PER DETAIL HEREON.	1 EA.	----
12	CONSTRUCT JUNCTION STRUCTURE "B" PER CITY OF RIVERSIDE STANDARD DRAWING NO. 421.	1 EA.	----
13	CONSTRUCT TRANSITION STRUCTURE FROM 8' X 8' RCB TO DOUBLE 8' W X 8' R.C.B. TRANSITION STRUCTURE PER STRUCTURAL ENGINEER'S PLAN.	-----	51.63 LF [15.737M]
14	CONSTRUCT EXTENSION OF EXISTING DOUBLE 8' W X 8' H R.C.B. TO "SQUARE-OFF" EXISTING R.C.B. L= 3.74' [1.140] AT CENTERLINE. TRANSITION STRUCTURE PER STRUCTURAL ENGINEER'S PLAN.	-----	3.74 L.F [1.140M]
15	CONSTRUCT OMPI PIPE INLET PER CALTRANS STANDARD DRAWING D-75.	-----	2 EA.
16	CONSTRUCT 2.25' [686mm] DIA. ACCESS OPENING MANHOLE "PRESSURE" TYPE PER APWA STANDARD DRAWING NO. 211-1	-----	1 EA.



VICINITY MAP

DIG ALERT
CALL BEFORE YOU DIG!
1-800-422-4133
UNDERGROUND SERVICE ALERT
Call at least 2 working days prior to excavating.

CAUTION:
EXACT LOCATION OF EXISTING UNDERGROUND FACILITIES IS UNKNOWN. CONTRACTOR TO VERIFY IN FIELD.

REGISTERED PROFESSIONAL ENGINEER ROBERT A. STOCKTON No. C033591 Exp. 6-30-02 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF
ROBERT A. STOCKTON 04/04/01
REGISTERED CIVIL ENGINEER NO. C033591 DATE
EXPIRATION DATE 6-30-02

APPROVED BY

RICK ENGINEERING COMPANY
San Diego Riverside Orange Phoenix Tucson
1223 University Ave., Ste. 240 • Riverside, CA 92507-3418 • (909)782-0707 • FAX (909)782-0723 • www.rickeng.com

SCALE: 1"=100'
DATE: MARCH 2001
BENCH MARK
UNI-11 1/4" BRASS DISK IN CITY OF RIVERSIDE WELL MONUMENT AT THE CENTERLINE INTERSECTION OF UNIVERSITY AVE. & IOWA AVE. EL=996.445

MARK	REVISIONS	APPR	DATE

DESIGNED BY SML/RG DRAWN BY SML/RG CHECKED BY R.A.S.

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER	—	—
PARK DEPARTMENT	—	—
TRAFFIC DIVISION	—	—
DEPUTY P.W. DIRECTOR		

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 5/14/01

STORM DRAIN PLAN
UNIVERSITY VILLAGE
NORTH END
IN THE CITY OF RIVERSIDE

PROJECT NO. D-694
SHEET 1 OF 3
HORIZ.SCALE VERT.SCALE FILE NO.

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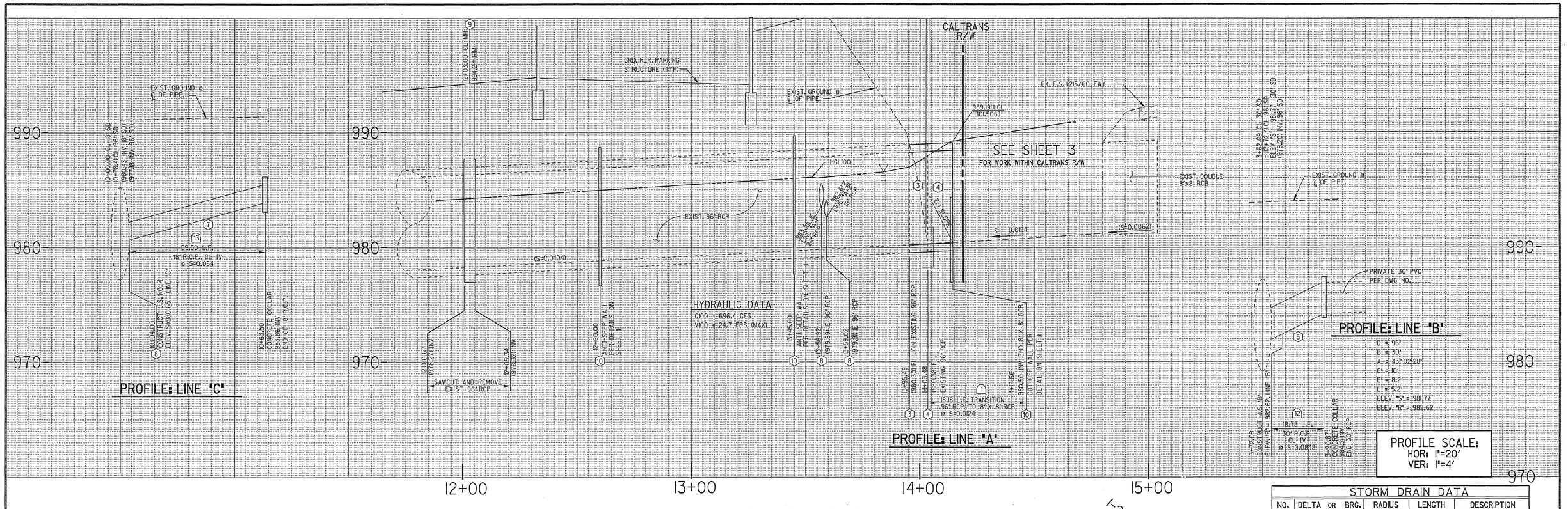
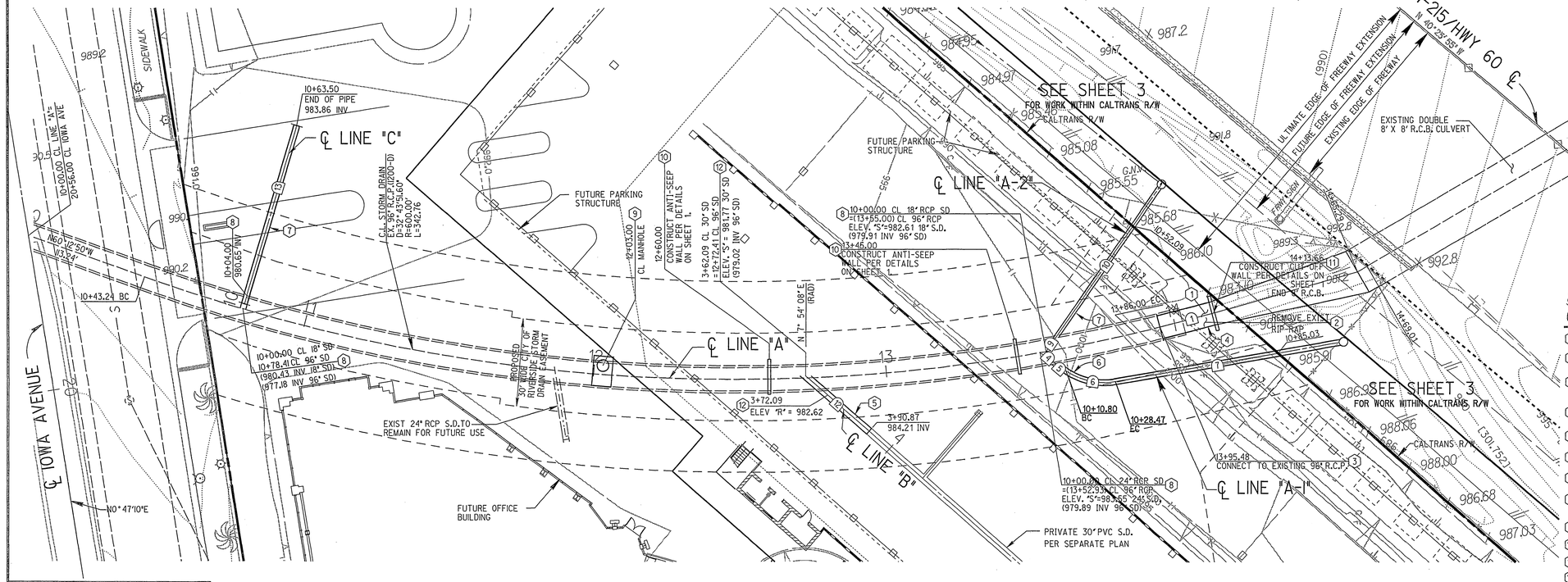
PLOT DATE: 04-APR-2001 J.N. 13626
INDEXED 6-20-01 KH



STORM DRAIN DATA				
NO.	DELTA OR BRG.	RADIUS	LENGTH	DESCRIPTION
1	N 88°16'04" E		18.18'	TRANSITION STR.
4	N 45°08'13" W		5.64'	A-1 SKEW L. IN MAIN
5	N 45°08'13" W		5.16'	A-1 24" RCP, BC
6	44°59'58"	22.50'	17.67'	A-1 24" RCP, EC
7	N 89°51'49" E		56.56'	A-1 24" RCP
9	N 44°39'59" E		5.66'	A-2 SKEW L. IN MAIN
10	N 44°39'59" E		46.43'	A-2 18" RCP
12	N 39°03'24" W		28.78'	LINE "B" 30" RCP
13	N 26°25'40" E		63.50'	LINE "C" 18" RCP



CONSTRUCTION NOTES

1. CLEAR & GRUB AREA (FOR STORM DRAIN CONSTRUCTION ONLY).
2. REMOVE AND DISPOSE OF PORTIONS OF EXISTING CONCRETE OR ROCK STRUCTURES (I.E. HEADWALL, WING WALLS, PARAPET, APRON, RIP RAP BLANKET, ETC.).
3. REMOVE END SECTION OF EXISTING 96" RCP, EXPOSE END OF 96" RCP AND CLEAN AND REPAIR ANY DEFECTS.
4. CONSTRUCT TRANSITION STRUCTURE FROM 96" RCP TO 8' W X 8' H R.C.B. TRANSITION STRUCTURE PER STRUCTURAL ENGINEER'S PLAN.
5. PLACE 30" RCP, CL IV.
6. PLACE 24" RCP, CL IV.
7. PLACE 18" RCP, CL IV.
8. CONSTRUCT JUNCTION STRUCTURE NO. 4 PER CITY OF RIVERSIDE STANDARD DRAWING NO. 423.
9. CONSTRUCT MANHOLE AX PER CITY OF RIVERSIDE STANDARD DRAWING NO. 430
10. CONSTRUCT ANTI-SEEP WALL PER DETAIL ON SHEET 1.
11. CONSTRUCT CUT-OFF WALL PER DETAIL ON SHEET 1.
12. CONSTRUCT JUNCTION STRUCTURE 'B' PER CITY OF RIVERSIDE STANDARD DRAWING NO. 421.

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REGISTERED PROFESSIONAL ENGINEER ROBERT A. STOCKTON No. C033591 Exp. 6-30-02 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF ROBERT A. STOCKTON — DATE 04/04/01
REGISTERED CIVIL ENGINEER NO. C033591
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APPROVED BY

RICK ENGINEERING COMPANY
San Diego Riverside Orange Phoenix Tucson
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SCALE: AS SHOWN
DATE: MARCH 2001
BENCH MARK

MARK	REVISIONS	APPR	DATE

DESIGNED BY SML/RG DRAWN BY SML/RG CHECKED BY R.A.S.

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
DEPUTY P.W. DIRECTOR		

APPROVED BY
DIRECTOR OF PUBLIC WORKS
DATE 5/4/01

STORM DRAIN PLAN
UNIVERSITY VILLAGE
NORTH END PHASE I
IN THE CITY OF RIVERSIDE

PROJECT NO. D-694
SHEET 2 OF 3
HORIZ. SCALE 1" = 20' VERT. SCALE 1" = 4'
FILE NO.

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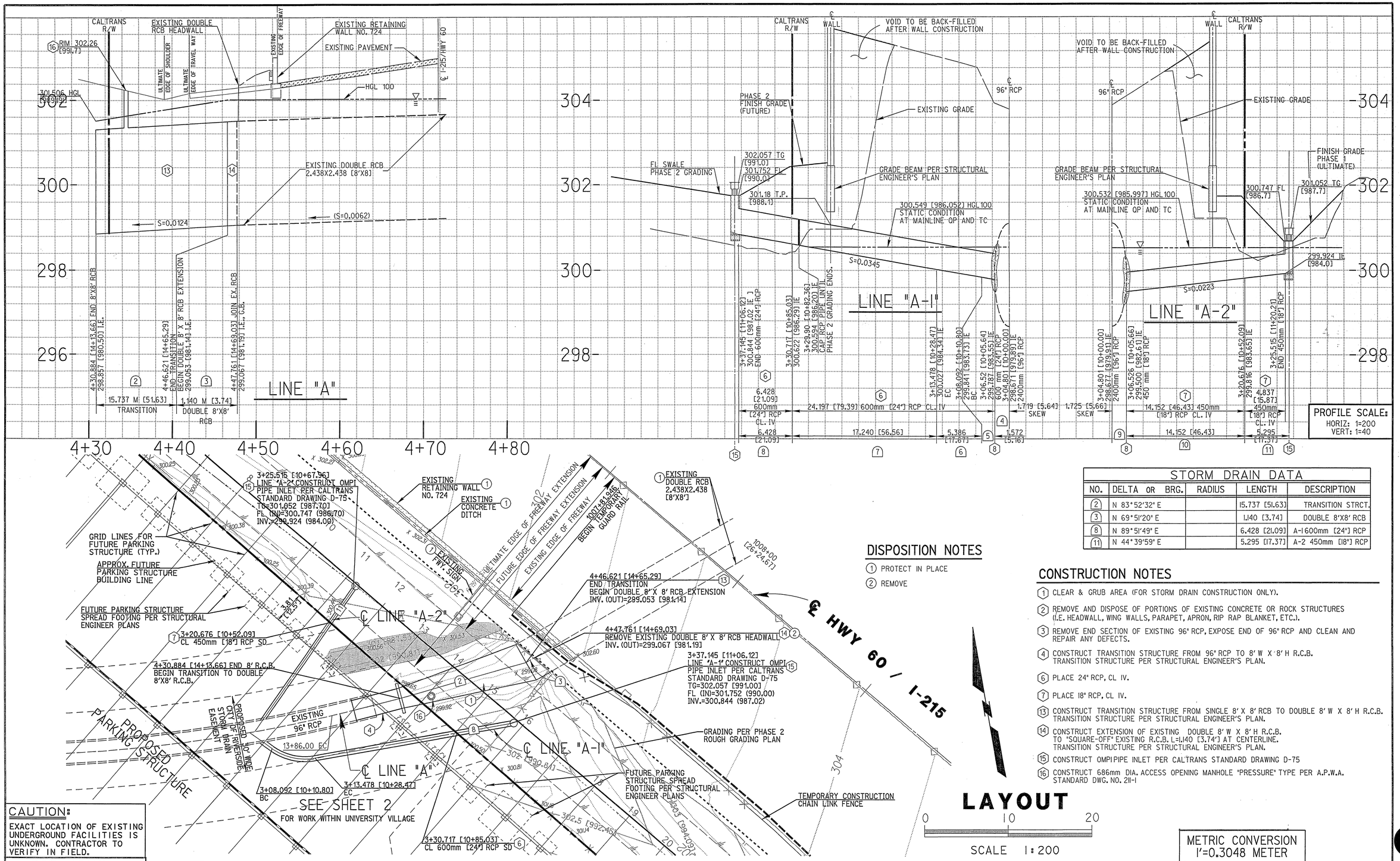
PLOT DATE: 04-APR-2001 J.N. 13626
INDEXED 6-20-01 GH



STORM DRAIN DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH	DESCRIPTION
2	N 83°52'32" E		15.737 [51.63]	TRANSITION STRCT.
3	N 69°51'20" E		1.140 [3.74]	DOUBLE 8'X8' RCB
8	N 89°51'49" E		6.428 [21.09]	A-1 600mm [24"] RCP
11	N 44°39'59" E		5.295 [17.37]	A-2 450mm [18"] RCP

DISPOSITION NOTES

1. PROTECT IN PLACE
2. REMOVE

CONSTRUCTION NOTES

1. CLEAR & GRUB AREA (FOR STORM DRAIN CONSTRUCTION ONLY).
2. REMOVE AND DISPOSE OF PORTIONS OF EXISTING CONCRETE OR ROCK STRUCTURES (I.E. HEADWALL, WING WALLS, PARAPET, APRON, RIP RAP BLANKET, ETC.).
3. REMOVE END SECTION OF EXISTING 96" RCP, EXPOSE END OF 96" RCP AND CLEAN AND REPAIR ANY DEFECTS.
4. CONSTRUCT TRANSITION STRUCTURE FROM 96" RCP TO 8' W X 8' H R.C.B. TRANSITION STRUCTURE PER STRUCTURAL ENGINEER'S PLAN.
6. PLACE 24" RCP, CL IV.
7. PLACE 18" RCP, CL IV.
13. CONSTRUCT TRANSITION STRUCTURE FROM SINGLE 8' X 8' RCB TO DOUBLE 8' W X 8' H R.C.B. TRANSITION STRUCTURE PER STRUCTURAL ENGINEER'S PLAN.
14. CONSTRUCT EXTENSION OF EXISTING DOUBLE 8' W X 8' H R.C.B. TO "SQUARE-OFF" EXISTING R.C.B. L=1.140 [3.74'] AT CENTERLINE. TRANSITION STRUCTURE PER STRUCTURAL ENGINEER'S PLAN.
15. CONSTRUCT OMPI PIPE INLET PER CALTRANS STANDARD DRAWING D-75
16. CONSTRUCT 686mm DIA. ACCESS OPENING MANHOLE "PRESSURE" TYPE PER A.P.W.A. STANDARD DWG. NO. 211-1

METRIC CONVERSION
1'=0.3048 METER

CAUTION:
EXACT LOCATION OF EXISTING UNDERGROUND FACILITIES IS UNKNOWN. CONTRACTOR TO VERIFY IN FIELD.

DIG ALERT
CALL BEFORE YOU DIG!
1-800-227-2600
UNDERGROUND SERVICE ALERT
Call at least 2 working days prior to excavating.

NOTE:
WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY OF THE DESIGN AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER CALTRANS APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY CALTRANS.

DATE	BY	MARK	REVISIONS	APPR.	DATE

ENGINEER — CITY

DESIGNED BY: R.G. DRAWN BY: R.G. CHECKED BY: R.A.S.

SEAL: REGISTERED PROFESSIONAL ENGINEER ROBERT A. STOCKTON No. C033591 Exp. 6-30-02 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF: ROBERT A. STOCKTON R.C.E. C033591
DATE: 04/04/01 REGISTRATION EXPIRES 6-30-02
APPROVED BY: DATE:

RICK ENGINEERING COMPANY
San Diego Riverside Orange Phoenix Tucson
1522 University Ave., Ste. 240 • Riverside, CA 92507-2618 • (909)782-0707 • FAX (909)782-0723 • www.rickeng.com

SCALE: DATE:

BENCH MARK: UNI-1 1¼" BRASS DISK IN CITY OF RIVERSIDE WELL MONUMENT AT CL INT. OF UNIV. AVE. AND IOWA AVE. ELEV. 303.717 [996.445]

STORM DRAIN PLAN
UNIVERSITY VILLAGE
NORTH END PHASE 2
IN THE CITY OF RIVERSIDE

W.O. FOR: F.B.

D-694
3 OF 3 SHEETS
FILE NO.

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

DATE: 04-APR-2001 J.N. 13626

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INDEXED 6-20-01 4th