IN THE CITY OF RIVERSIDE
STORM DRAIN IMPROVEMENT PLANS
TWELFTH STREET, MARKET STREET, & MAIN STREET

STORM DRAIN NOTES

1. Quantities shown are for information only and the City of Riverside is not responsible for their accuracy.
2. Construction shall be in accordance with City of Riverside Dept. of Public Works Standard Drawings, ~~its supplemental notes~~ and the Standard Specifications for Public Works Construction, Current Edition.
3. It shall be the responsibility of the contractor to clear the right of way in accordance with the provisions of law as it affects each utility including irrigation lines and appurtenances and at no cost to the City
4. Notice to contractor. The existence and location of any underground utility pipes or structures shown on these plans were obtained by a search of the available records. To the best of our knowledge there are no existing utilities exept as shown on these plans. The contractor is required to take precautionary measures to protect the utility lines shown and any other lines not of record or not shown on these plans.

⚠ ~~5. 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.~~

6. The contractor shall call in a locations request to UNDERGROUND SERVICE ALERT (USA), Phone No. 1-800-227-2600, two working days before digging No construction permit will be issued by the Public Works Department involving excavation for underground facilities unless the applicant has been provided an Inquiry Identification Number by U.S.A.

⚠ ~~7. The developer preparing these plans shall be responsible for preserving or re-establishing and referencing survey monuments destroyed, disturbed or buried as a result of construction shown hereon.~~

8. All flagged elevations shall be staked in the field ~~by the private engineer.~~

⚠ ~~9.~~ Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of 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 and the engineer harmless from any and all liability, real o r alleged, in connection with performance of work on this project, excepting for liability arising from the sole negligence of the owner or the engineer.

⚠ 10. The concrete cover on the inside of all concrete pipe must be increased to provide a min. of 1.5" over the reinforcing when the design velocities exceed 20 fps. The concrete design strength in these reaches shall be:
fc = 5000 psi. for velocities exceeding 20 fps. and
fc = 6000 psi. for velocities exceeding 30 fps.

11. 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.

⚠ 12. *CONTRACTOR* ~~DEVELOPER~~ **TO GIVE CITY WATER DIVISION FIVE (5) WORKING DAYS WRITTEN NOTICE PRIOR TO START OF CONSTRUCTION AND TO ALLOW CITY TEN (10) WORKING DAY'S FOR COMPLETION OF WORK. (909) 351-6368**

UNDERGROUND UTILITY NOTES

1. Prior to construction, the contractor shall pothole all utility crossings and connections and verify the location and elevation of all utilities affected. The engineer shall be notified of any discrepancies before construction begins.
2. Locations of substructures as shown on plans are shown from the best available information. However, such locations as shown or failure to show existing substructures shall not relieve the contractors from the responsibility of verifying the location and protecting all substructures.

⚠ ~~3. It shall be the responsibility of the contractor to contact and make necessary arrangements with the appropriate utility companies prior to the beginning of construction.~~

4. Contractor shall notify underground service alert at least two days prior to construction. Phone: 1-800-227-2600.

TOPOGRAPHY

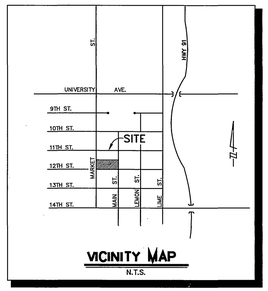
EXISTING TOPOGRAPHY PER J.F. DAVIDSON ASSOCIATES, INC. FIELD SURVEY AND INLAND AERIAL SURVEY PERFORMED MARCH 1996.

SHEET INDEX

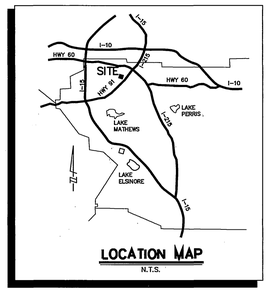
1. TITLE SHEET
2. 12th STREET STA 5+92 TO 9+75

STORM DRAIN CONSTRUCTION NOTES & ESTIMATE OF QUANTITIES

⚠ 20	Install 48" R.C.P. (~~1750~~ 1250 D). Pipe bedding per City of Riv. Std. Dwg. No. 452 (Case ~~III~~ II). New pipe to be installed in same alignment as the exist. pipe.	383	LF
21	Install 18" R.C.P. (2000D). Pipe bedding per City of Riv. Std. No. 452 (Case II).	~~83~~	LF
22	Construct concrete collar per City of Riv. Std. Dwg. No. 424.	1	EA
23	Construct catch basin per City of Riv. Std. Dwg. No. 405 ("W" and "V" as shown on plans).	2	EA
24	Construct junction structure No. 4 (Case I) per City of Riv. Std. Dwg. No. 423 (Angle "A" as shown on plans).	2	EA
⚠ 25	~~Connect to existing manhole. Reconstruct exist. m.h. to accept prop. 48" R.C.P. storm drain. Match exist. m.h. flowline.~~	~~1~~	~~EA~~
⚠ 26	Existing utility conduits to be protected in place. Location to be verified (alignment and elevation) in the field prior to construction.		
⚠ 27	~~Install temp. C.S.P. inlet per City of Riv. Std. Dwg. No. 412.~~	~~1~~	~~EA~~
20	Remove existing 54" egg-shaped concrete storm drain.	383	LF
21	Remove existing catch basin.	3	EA.
22	Remove existing storm drain.	38	LF.
⚠ ~~28~~	~~TEMPORARY 18" CSP~~	~~71~~	~~LF~~



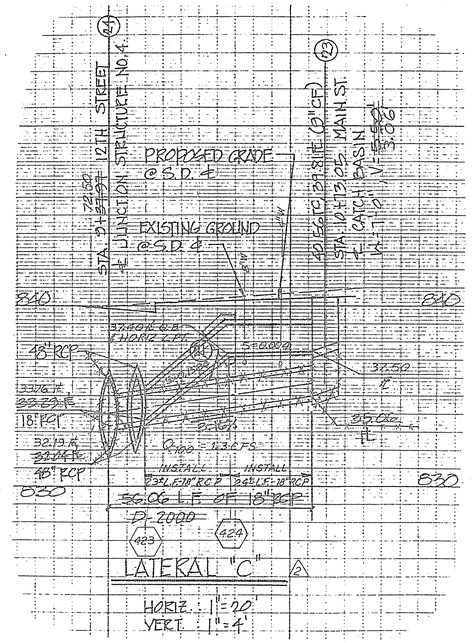
VICINITY MAP
N.T.S.

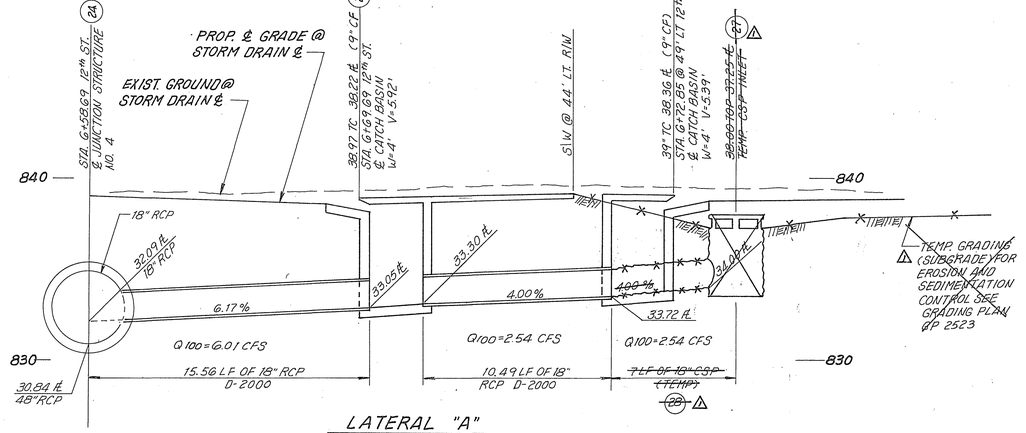


LOCATION MAP
N.T.S.

LEGEND

T.C.	Indicates top of curb elevation
F.L.	Indicates flow line elevation
———	Indicates property line
(T.C. 53.78) / (F.L. 53.28)	Indicates existing elevations
---(W)---	Indicates existing water line
---(S)---	Indicates existing sewer line
---(E)---	Indicates existing electric line
---(SD)---	Indicates existing storm drain
---(G)---	Indicates existing gas line
---(T)---	Indicates existing telephone
◯	Construction notes (Proposed)
□	Remove/Relocate/Adjust construction notes (Existing)





LATERAL "A"
SCALE: 1"=4' HORIZ
1"=40' VERT

CITY OF RIVERSIDE PUBLIC UTILITIES DEPARTMENT—ELECTRIC OVERHEAD & UNDERGROUND		
APPROVED BY	7/15/97	DATE
THE GAS COMPANY		
APPROVED BY	6/20/97	DATE
PACIFIC BELL TELEPHONE		
APPROVED BY	7/2/97	DATE
CHARTER COMMUNICATIONS		
APPROVED BY	6-20-97	DATE
CITY OF RIVERSIDE PUBLIC UTILITIES DEPARTMENT—WATER		
APPROVED BY	6/25/97	DATE

VOID ONE YEAR FROM THIS DATE

Underground Service Alert
Call: TOLL FREE
1 - 800
227 - 2600
TWO WORKING DAYS BEFORE YOU DIG

PRIVATE ENGINEERING NOTE
CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

REGISTERED PROFESSIONAL ENGINEER — JOHN W. CANTY No. 17550 Exp. 6-30-01 CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
JOHN W. CANTY, PE
REGISTERED CIVIL ENGINEER NO. 17550
EXPIRATION DATE: 6-30-01 DATE: 4/22/97

SCALE: AS SHOWN
DATE: JUNE, 1997

BENCH MARK: BENCHMARK IG -1 ELEVATION= 840.914'
PK NAIL IN THE TOP OF CURB 12' SE'LY OF THE CURB RETURN AT THE MOST S'LY CORNER OF MARKET ST. FB 975/10

CEG CANTY ENGINEERING GROUP, INC.
CIVIL ENGINEERING - PLANNING - SURVEYING
3120 CHICAGO AVENUE, SUITE 180, P.O. BOX 52050, RIVERSIDE, CA 92517
TEL (909) 683 - 5234 FAX (909) 683 - 5301
CITY OF RIV. BUSINESS TAX ACCT. NO. 69372 EXP. DATE 04-07-98

MARK	REVISIONS	APPR.	DATE
1	CHANGES MADE FOR CITY CONTRACT	JWC	10/9/97
2	S.D. REVISIONS TO CLEAR WATER & FIRE SERVICES	JWC	11/6/97

DESIGNED BY DLD DRAWN BY JAO CHECKED BY JWC

CITY OF RIVERSIDE, DEPARTMENT OF PUBLIC WORKS

	BY	DATE
APPROVED BY		
PRINCIPAL ENGR.	[illegible]	9/16/97
STREET SERVICES	[illegible]	11-7-97
TRAFFIC DIVISION	[illegible]	10/16/97
CHIEF P.W.ENGR.	[illegible]	11/7/97

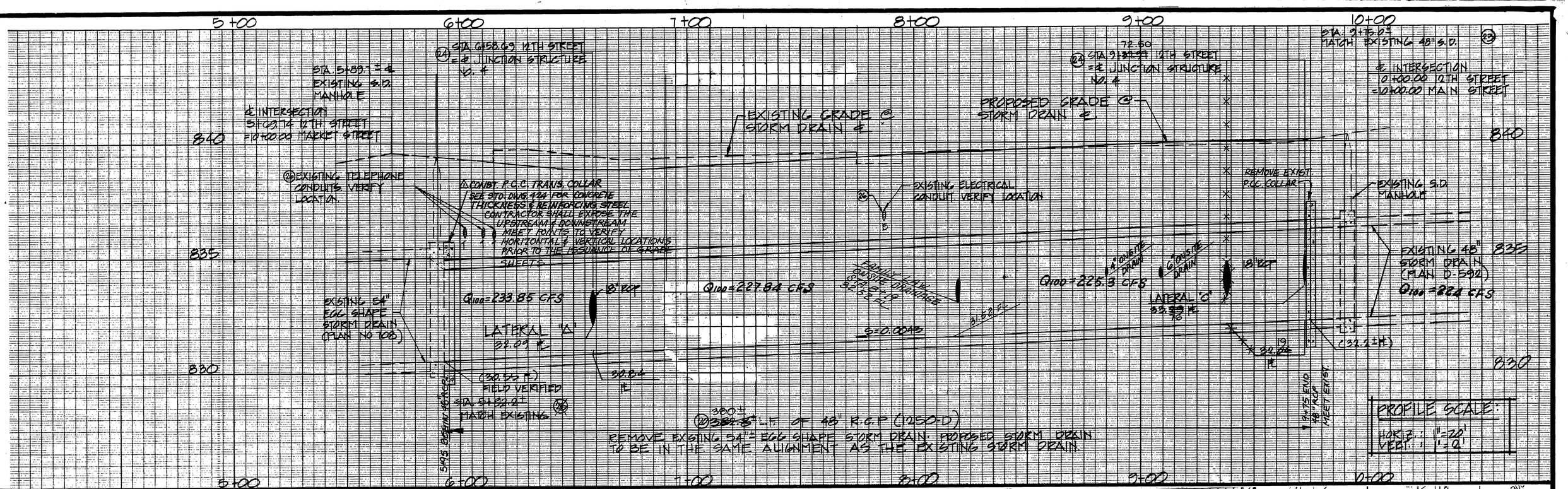
APPROVED BY R. M. Scott
DIRECTOR OF PUBLIC WORKS
DATE 12-12-97

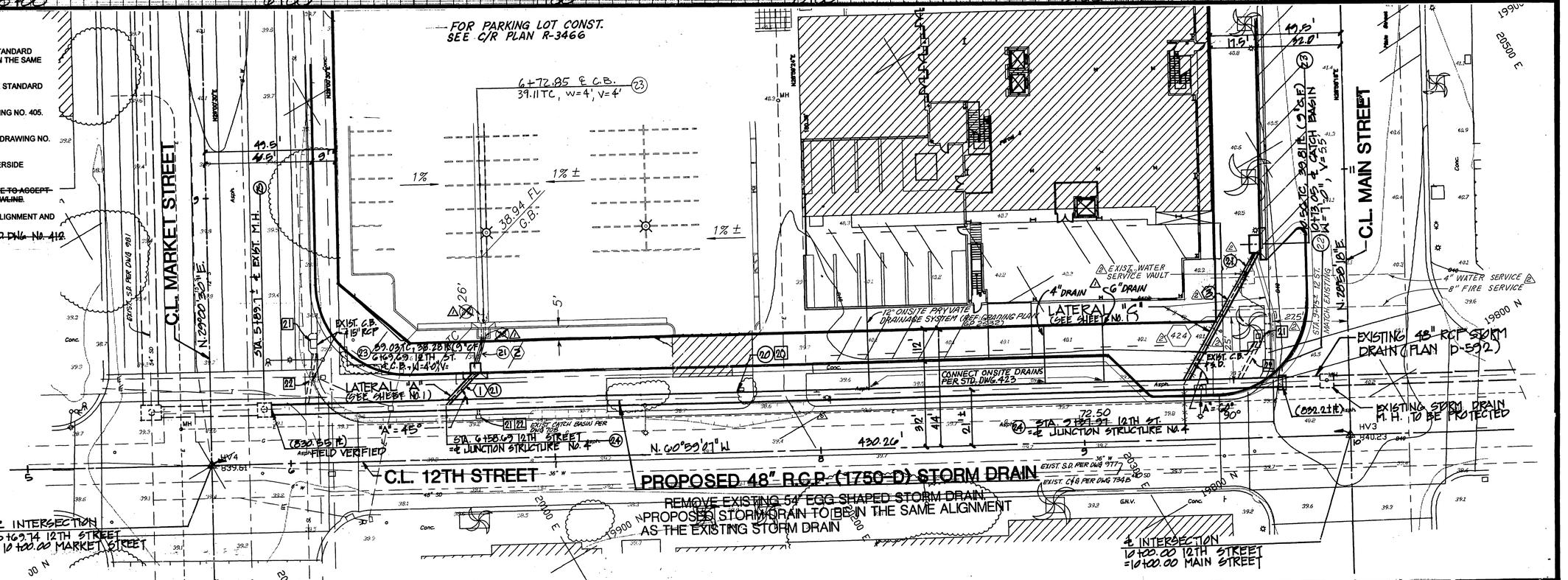
CITY OF RIVERSIDE
STORM DRAIN IMPROVEMENT PLANS
TITLE SHEET
TWELFTH STREET
MARKET STREET & MAIN STREET
FOR: McLARAND, VASQUEZ & PARTNERS

PROJECT NO. D-652
SHEET 1 OF 2
FILE NO.: 9613363

REF: K:\96133363\33633D01.DWG
DATE: 3-11-97

INDEXED 2/19/98 GH





STORM DRAIN CONSTRUCTION NOTES:

△1250

(20) INSTALL 48" R.C.P. ~~(1750-D)~~. PIPE BEDDING PER CITY OF RIVERSIDE STANDARD DRAWING NO. 452 (CASE II). PROPOSED 48" R.C.P. TO BE INSTALLED IN THE SAME ALIGNMENT AS THE EXISTING STORM DRAIN.

(21) INSTALL 18" R.C.P. (2000-D). PIPE BEDDING PER CITY OF RIVERSIDE STANDARD DRAWING NO. 452 (CASE II).

(23) CONSTRUCT CATCH BASIN PER CITY OF RIVERSIDE STANDARD DRAWING NO. 405. "W" AND "V" AS SHOWN ON PLAN.

(22) CONSTRUCT CONCRETE COLLAR PER CITY OF RIVERSIDE STANDARD DRAWING NO. 424.

(24) CONSTRUCT JUNCTION STRUCTURE NO. 4 (CASE 1) PER CITY OF RIVERSIDE STANDARD DRAWING NO. 423. ANGLE "A" AS SHOWN ON PLAN.

△ ~~(25) CONNECT TO EXISTING MANHOLE. RECONSTRUCT EXISTING MANHOLE TO ACCEPT PROPOSED 48" R.C.P. STORM DRAIN. MATCH EXISTING MANHOLE FLOWLINE.~~

(26) EXISTING TO BE PROTECTED IN PLACE. LOCATION TO BE VERIFIED (ALIGNMENT AND ELEVATION) IN THE FIELD PRIOR TO CONSTRUCTION.

△ ~~(28) INSTALL TEMP. C&G P. INLET PER CITY OF RIVERSIDE STD DWG NO. 412~~

STORM DRAIN REMOVAL NOTES:

20 REMOVE EXISTING 54" EGG SHAPE CONCRETE STORM DRAIN.

21 REMOVE EXISTING CATCH BASIN.

22 REMOVE EXISTING STORM DRAIN.

LINE DATA

NO	BEARING	LENGTH
1	N.74°00'53"E.	15.56'
2	N 11°29'05"E.	10.49'
3	N.59°00'53"E.	56.06'

CITY OF RIVERSIDE
PUBLIC UTILITIES DEPARTMENT—WATER

Richard L. Drake 6/25/97
APPROVED BY DATE

Underground Service Alert
DIG ALERT BEFORE YOU DIG
Call: TOLL FREE 1-800 227-2600
TWO WORKING DAYS BEFORE YOU DIG

PRIVATE ENGINEERING NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

REGISTERED PROFESSIONAL ENGINEER — JOHN W. CANTY No. 17550 Exp. 6-30-98 CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE DIRECTION OF:
JOHN W. CANTY, P.E.
REGISTERED CIVIL ENGINEER NO. 17550
EXPIRATION DATE: 6-30-98 DATE: 6/27/97

CBG CANTY ENGINEERING GROUP, INC.
CIVIL ENGINEERING - PLANNING - SURVEYING
3120 CHICAGO AVENUE, SUITE 180, P.O. BOX 52050, RIVERSIDE, CA 92517
TEL (909) 683 - 5234 FAX (909) 683 - 5301
CITY OF RIV. BUSINESS TAX ACCT. NO. 69372 EXP. DATE 04-07-98

SCALE: AS SHOWN
DATE: NOVEMBER, 1996
BENCH MARK: BENCHMARK: IG - 1 ELEVATION= 840.914' PK NAIL IN THE TOP OF CURB 12' SE'LY OF THE CURB RETURN AT THE MOST S'LY CORNER OF TENTH AND MARKET ST. PB 9/5/10

MARK	REVISIONS	APPR.	DATE
△1	CHANGES MADE FOR CITY CONTRACT	MC	12/8/97
△2	S.D. REVISIONS TO CLEAR WATER & FIRE SERVICES	MC	12/9/97

DESIGNED BY TT DRAWN BY TT CHECKED BY DD/TT

CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		12/10/97
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P.W. ENGR.		
STREET SERVICES	RC	12/9/97

APPROVED BY R. Mcknight DIRECTOR OF PUBLIC WORKS
DATE 12-12-97

CITY OF RIVERSIDE
STORM DRAIN IMPROVEMENT PLANS
12TH STREET
STA. 5+92± TO STA. 9+75±
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 2'

PROJECT NO. D-652
SHEET 2 OF 2
FILE NO. 96133G3

INDEXED 2-19-98 GH