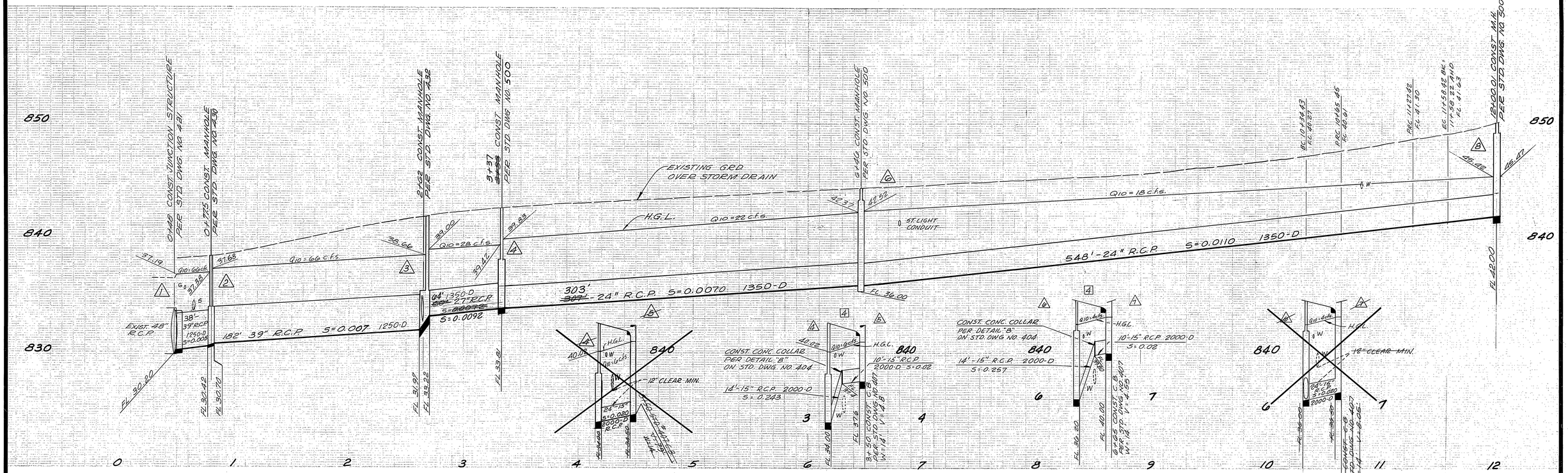
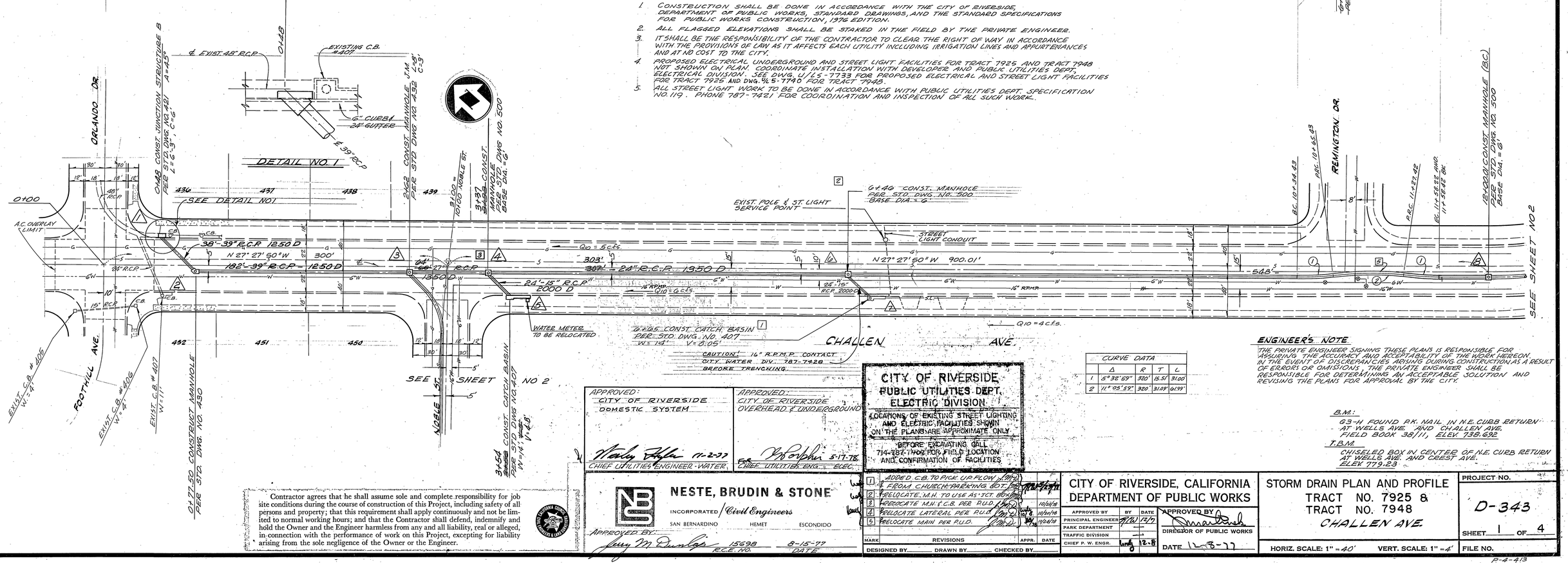




GENERAL NOTES

1. CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CITY OF RIVERSIDE, DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1976 EDITION.
2. ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE PRIVATE ENGINEER.
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. PROPOSED ELECTRICAL UNDERGROUND AND STREET LIGHT FACILITIES FOR TRACT 7925 AND TRACT 7948 NOT SHOWN ON PLAN. COORDINATE INSTALLATION WITH DEVELOPER AND PUBLIC UTILITIES DEPT. ELECTRICAL DIVISION. SEE DWG. U/LS-7733 FOR PROPOSED ELECTRICAL AND STREET LIGHT FACILITIES FOR TRACT 7925 AND DWG. U/LS-7740 FOR TRACT 7948.
5. ALL STREET LIGHT WORK TO BE DONE IN ACCORDANCE WITH PUBLIC UTILITIES DEPT. SPECIFICATION NO. 119. PHONE 787-7421 FOR COORDINATION AND INSPECTION OF ALL SUCH WORK.

CURVE DATA				
	Δ	R	T	L
1	6°32'59"	320'	18.51'	31.00
2	11°05'59"	320'	31.09'	61.99'

ENGINEER'S NOTE

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 AS A RESULT OF ERRORS OR OMISSIONS, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.

B.M.:
G3-H FOUND P.K. NAIL IN N.E. CURB RETURN AT WELLS AVE. AND CHALLEN AVE. FIELD BOOK 38/11, ELEV. 738.692

T.B.M.
CHISELED BOX IN CENTER OF N.E. CURB RETURN AT WELLS AVE. AND CREST AVE. ELEV. 779.23

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 or alleged, in connection with the performance of work on this Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

APPROVED: CITY OF RIVERSIDE DOMESTIC SYSTEM
Wally Hefler 11-2-77
CHIEF UTILITIES ENGINEER-WATER

APPROVED: CITY OF RIVERSIDE OVERHEAD & UNDERGROUND
for R.B. Crabbe 5-17-78
CHIEF UTILITIES ENG. - ELEC.

CITY OF RIVERSIDE
PUBLIC UTILITIES DEPT.
ELECTRIC DIVISION
LOCATIONS OF EXISTING STREET LIGHTING AND ELECTRIC FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY
BEFORE EXCAVATING CALL 714-787-7404 FOR FIELD LOCATION AND CONFIRMATION OF FACILITIES

NESTE, BRUDIN & STONE
INCORPORATED / Civil Engineers
SAN BERNARDINO HEMET ESCONDIDO
APPROVED BY: Jerry M. Dunlap 15698 R.C.E. NO. 8-15-77 DATE

MARK	REVISIONS	APPR.	DATE
1	ADDED C.B. TO PICK UP FLOW FROM CHURCH PARKING LOT		10/4/78
2	RELOCATE M.H. TO USE AS TCT. BOX		10/4/78
3	RELOCATE M.H. & C.B. PER P.U.D.		10/4/78
4	RELOCATE LATERAL PER P.U.D.		10/4/78
5	RELOCATE MAIN PER P.U.D.		10/4/78

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		12/7
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGR.		12-8

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: DIRECTOR OF PUBLIC WORKS
DATE 12-6-77

STORM DRAIN PLAN AND PROFILE
TRACT NO. 7925 & TRACT NO. 7948
CHALLEN AVE.

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

PROJECT NO. D-343
SHEET 1 OF 4
FILE NO.

P-4-413

CAUTION R. P. M. P.

CONSTRUCTION CONTRACTOR SHALL CONTACT WATER ENGINEERING 24 HOURS PRIOR TO CONSTRUCTION TO ARRANGE FOR A WATER DEPARTMENT INSPECTOR TO BE AT THE JOB SITE.

[2] RELOCATE STREET LIGHT CONDUIT TO MISS CATCH BASIN PER CITY STD. DEPT OF PUBLIC UTILITIES (REF. PLAN L-S-13434)

CAUTION-HIGH VOLTAGE ELECTRICAL UNDERGROUND

12+00.01 CONST. MANHOLE PER STD DWG. NO 500 BASE DIA. = 6'

13+97.20 CONST. MANHOLE PER STD DWG. NO 500 BASE DIA. = 6'

[5] 60 CONST CATCH BASIN PER STD DWG NO 407 W=14' V=4.50'

13+97.20 CONST. MANHOLE PER STD DWG NO 500

℄ CURVE DATA (STREET)
Δ = 45° 15' 05"
R = 350.11
L = 276.51

194'-21" R.C.P. S=0.009 1350-D

194'-18" R.C.P. 2000-D

10+61.50 CONST. CATCH BASIN PER STD DWG. NO. 407 W=14' V=5

10+56.03 CONST. CATCH BASIN PER STD. DWG. NO. 407 W=14' V=7.89

CALMELLO DR.

12" WATER MAIN

CAUTION! 16" R.P.M.P. CONTACT CITY WATER DIV. 787-7928 BEFORE TRENCHING.

SEE SHEET NO. 1

CURVE DATA (PIPE)
Δ = 32° 16' 13"
R = 355.11
L = 200.00'

CHALLEN AVE.

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 or alleged, in connection with the performance of work on this Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

CITY OF RIVERSIDE
PUBLIC UTILITIES DEPT.
ELECTRIC DIVISION

LOCATIONS OF EXISTING STREET LIGHTING AND ELECTRIC FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY

BEFORE EXCAVATING CALL 714-787-7409 FOR FIELD LOCATION AND CONFIRMATION OF FACILITIES

APPROVED: CITY OF RIVERSIDE DOMESTIC SYSTEM	APPROVED: CITY OF RIVERSIDE OVERHEAD & UNDERGROUND
11-2-77	
CHIEF UTILITIES ENGINEER-WATER	CHIEF UTILITIES ENGR.-ELEC.

NESTE, BRUDIN & STONE
INCORPORATED / Civil Engineers
SAN BERNARDINO HEMET SAN DIEGO

APPROVED BY: Jerry M. Dunlap R.C.E. NO. 15698 8-15-77 DATE

EXISTING GRADE OVER STORM DRAIN

H.G.L.

Q10 = 18 c.f.s.

170'-24" R.C.P. S=0.045 1350-D

236'-27" R.C.P. S=0.018 1750-D

Q10 = 40.5 c.f.s.

13+71 CONST. CATCH BASIN PER STD. DWG. No. 407 W=25' V=10'

13+53.50 STD DWG NO 407 C.B. W=14' V=4.87 FL 46.43

13+32.28 CONST. T.S. 18" EQEV. S=46.43

13+99.12 EC BKD 13+99.28

12+25 CONST. MANHOLE PER STD. DWG. NO 432

12+05 CONST. MANHOLE PER STD. DWG NO 432

10+58.17 EC FL 39.90

11+41.11 BC FL 39.29

FL 32.60

FL 30.80

13+71 ED ROCK AVE CONST. C.B. PER STD DWG No. 401 W=5 V=10'

FL 43.15

FL 39.00

13+89.65 ED ROCK AVE CONST. MH. PER STD DWG No. 500

Q=33 c.f.s.

18" CL. MIN.

20' of 21" R.C.P.

2000-D

20' - 27" R.C.P. S=0.025 1750-D

CONST. CONC. COLLAR PER DETAIL "B" ON STD. DWG. No. 404

Remove Pkg

SEE SHEET NO. 3

AHD 13+99.12 BACK 13+99.28

CONST. MANHOLE PER STD. EC. DWG. No. 500 BASE DIA = 6'

13+53.50 CONST. CATCH BASIN PER STD. DWG. W=14' V=9.10

13+97.28 CONST. CATCH BASIN PER STD. DWG. No. 407 A=105° C=4'-6" R=2.93' L=5'-6"

13+89.05 CONST. MANHOLE PER STD. DWG. No. 500 BASE DIA. = 6'

13+71 CONST CATCH BASIN PER STD. DWG. No. 407 W=15' V=10'

S 23°41'17"E 53.38'

SEE SHEET NO. 4

Sta 13+36.03 Meet Exist. Storm Drain For Exist. Sta 0+53.43 SHEET 4

EC 21" R.C.P. 2000-D

NEW WATER LINE

13+46.74 S.C. STREET CURVE

SEE STREET LIGHT PLAN (REF. PLAN LS-12476)

INT. 13+69.10 141°18'39" RED ROCK AVE.

12+25 CONST. MANHOLE PER STD. DWG. No. 432 A=45° L=7'-1.0" C=5'-8"

10+58.17 B.C. STREET CURVE

11+41.11 E.C. PIPE CURVE

℄ CURVE (PIPE)
Δ = 45°
R = 50'
T = 20.71'
L = 39.27

230'-27" R.C.P. 1750-D

N 62° 32' 10" E 190.09'

10+00

SEE CUT & CAP BELOW

13+71 CONST. CATCH BASIN PER STD. DWG. No. 407 W=25' V=10'

℄ CURVE (PIPE)
Δ = 51°57'06"
R = 45'
T = 21.42'
L = 40.80'

END EXIST. IMPROVEMENT

NOBLE ST.

CONSTRUCT CONC. COLLAR PER DETAIL "B" ON STD. DWG. No. 404

* CUT & CAP STREET LIGHT CONDUIT IN CONDUIT WITH PROPOSED CATCH BASIN (REF. PLAN LS-12476)

CHALLEN AVE.

CURVE DATA				
	Δ	R	T	L
①	16° 01' 18"	300.00'	42.22'	83.89'
②	21° 28' 29"	300.00'	57.04'	114.28'
③	11° 27' 37"	300.00'	30.10'	60.00'
④	34° 16' 40"	230.84'	71.19'	138.10'
⑤	15° 01' 45"	230.84'	30.45'	60.55'

B.M.
63-H FOUND P.K. NAIL IN N.E CURB RETURN AT WELLS AVE. AND CHALLEN AVE. FIELD BOOK 381/1, ELEV 738.692

T.B.M.
CHISELED BOX IN CENTER OF N.E CURB RETURN AT WELLS AVE. AND CREST AVE. ELEV. 779.23

MARK	REVISIONS	APPR.	DATE
8	SHORTEN C.B. TO 19' BECAUSE OF TREE. 4FT	[illegible]	1-18-78
7	UNDERGROUND ELEC. COND. PLOTTED	[illegible]	10/11/78
6	STREET LIGHTING NOTES ADDED	[illegible]	10/11/78
5	CHANGE ALIGNMENT UP NOBLE ST.	[illegible]	5-24-78
4	STREET LIGHTING PLOTTED AND NOTED	[illegible]	5-17-78
3	Meet Exist. at Sta. 13+36.03	[illegible]	8/31/78
2	RELOCATE M.H. TO MISS NEW [illegible]	[illegible]	12/20/78
1	MOVE C.B. 5' To MISS WM. 4FT	[illegible]	12/20/78

DESIGNED BY R.T.D. DRAWN BY CHECKED BY

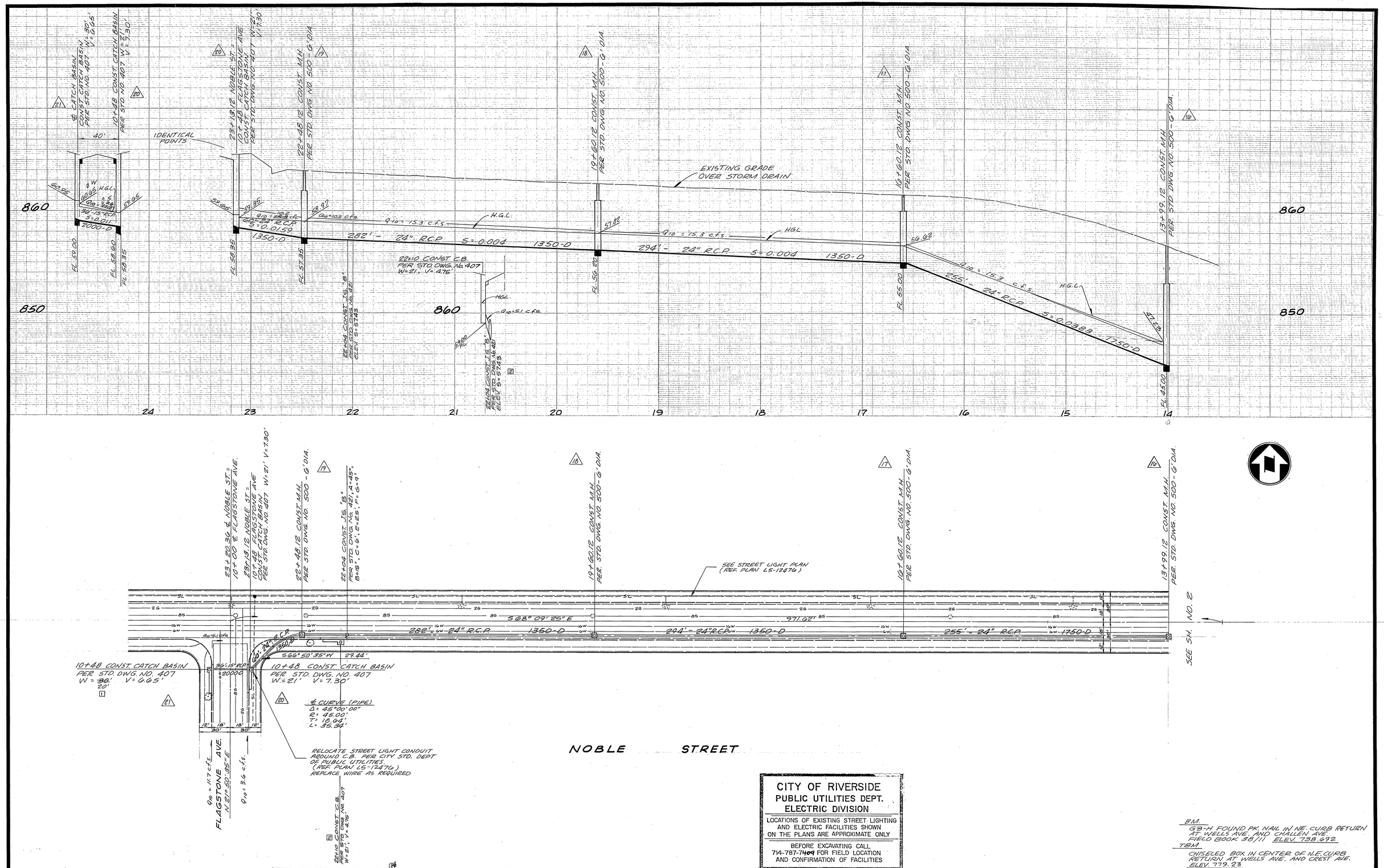
CITY OF RIVERSIDE, CALIFORNIA DEPARTMENT OF PUBLIC WORKS			
APPROVED BY	BY	DATE	APPROVED BY: DIRECTOR OF PUBLIC WORKS
PRINCIPAL ENGINEER	[illegible]	11-8-77	
PARK DEPARTMENT			
TRAFFIC DIVISION			
CHIEF P. W. ENGR.	[illegible]	12-8	DATE 11-8-77

STORM DRAIN PLAN AND PROFILE
TRACT NO. 7925 & TRACT NO. 7948
CHALLEN AVE. & NOBLE ST.

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

PROJECT NO. D-343
SHEET 2 OF 4
FILE NO.

P-4-413



CITY OF RIVERSIDE
PUBLIC UTILITIES DEPT.
ELECTRIC DIVISION

LOCATIONS OF EXISTING STREET LIGHTING AND ELECTRIC FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY

BEFORE EXCAVATING CALL 714-787-7409 FOR FIELD LOCATION AND CONFIRMATION OF FACILITIES

BM.
G3-H FOUND PK. NAIL IN NE. CURB RETURN AT WELLS AVE. AND CHALLEN AVE. FIELD BOOK 58/11 ELEV. 738.692

TBM
CHISELED BOX IN CENTER OF N.E. CURB RETURN AT WELLS AVE. AND CREST AVE. ELEV. 779.23

APPROVED: CITY OF RIVERSIDE DOMESTIC SYSTEM
5-17-78
CHIEF UTILITIES ENG. WATER

APPROVED: CITY OF RIVERSIDE OVERHEAD & UNDERGROUND
5-17-78
CHIEF UTILITIES ENG. ELEC.

NESTE, BRUDIN & STONE
INCORPORATED / Civil Engineers
SAN BERNARDINO HEMET ESCONDIDO
APPROVED BY: Jerry McDonlage 15698 R.C.E. NO. 5-16-78 DATE

MARK	REVISIONS	APPR.	DATE
1	CHANGE SIZE OF C.B. 1/10/79 J.J.R.		1-18-79
2	ADD NEW C.B. 1/10/79 J.J.R.		

DESIGNED BY ____ DRAWN BY ____ CHECKED BY ____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

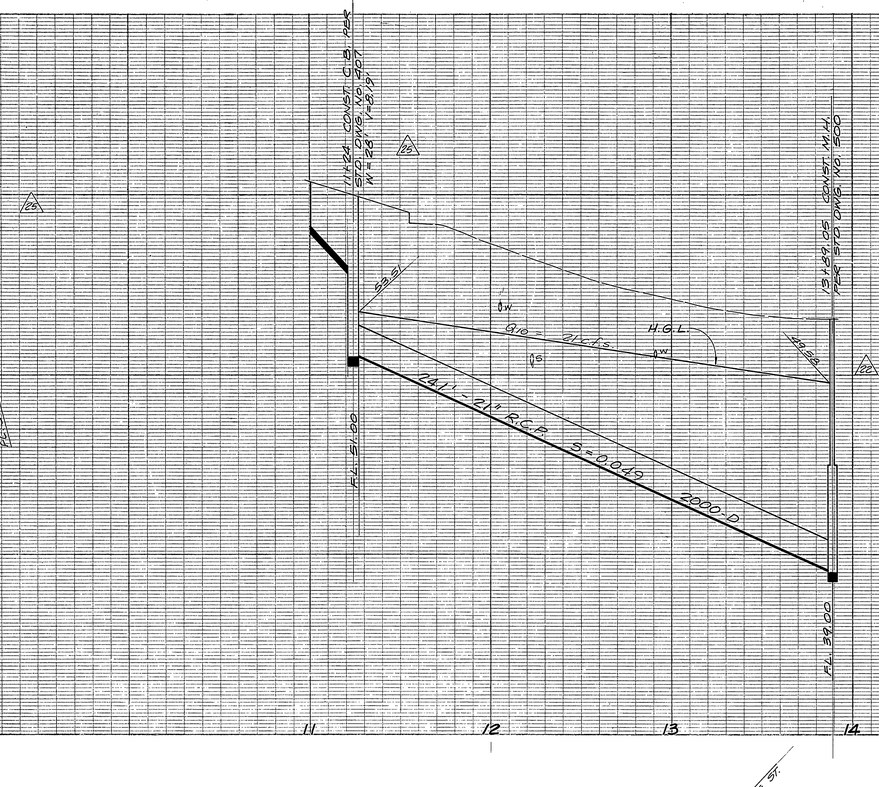
APPROVED BY	BY	DATE
OFFICE ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
ASSISTANT CITY ENG.	WJB	5-25

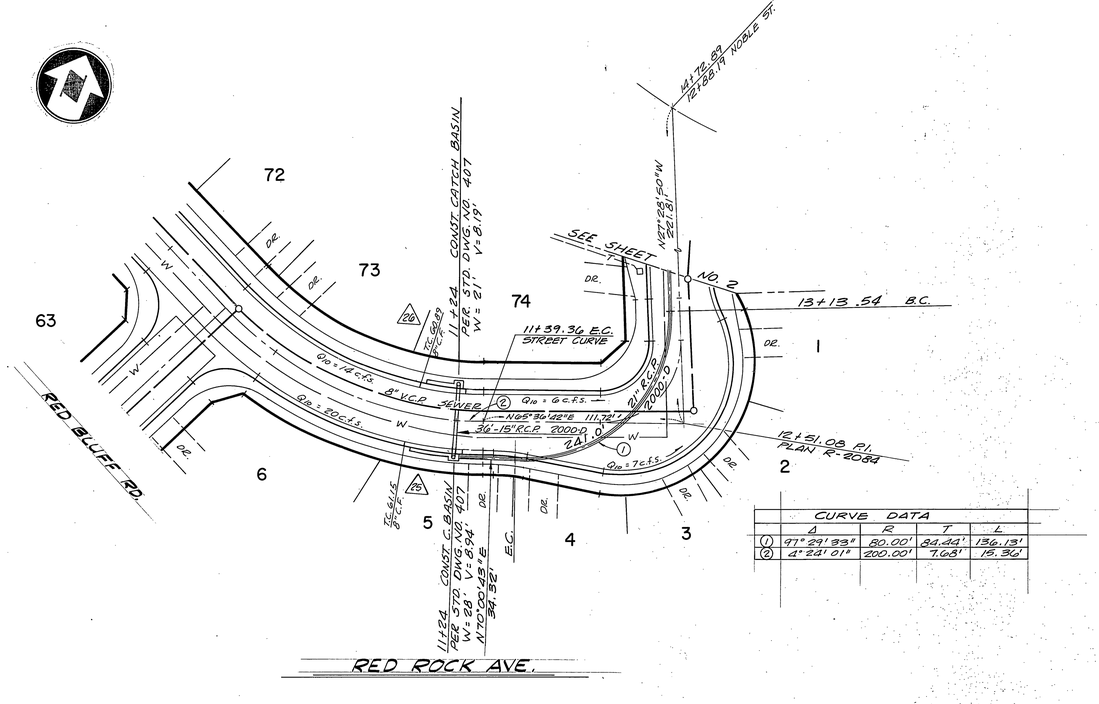
APPROVED BY: Richard P. Wilhelm
DIRECTOR OF PUBLIC WORKS
DATE 5/25/78

STORM DRAIN PLAN AND PROFILE
TRACT NO. 7925 & TRACT NO. 7948
NOBLE ST.

PROJECT NO. D-343
SHEET 3 OF 4
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'
FILE NO.

P-4-413





CURVE DATA				
	Δ	R	T	L
①	97°29'33"	80.00'	84.44'	136.13'
②	4°22'01"	200.00'	7.68'	15.36'

B.M.
G3-H FOUND P.K. NAIL IN NE. CURB RETURN AT WELLS AVE. AND CHALLEN AVE. FIELD BOOK 38/11 ELEV. 738.692

T.B.M.
CHISELED BOX IN CENTER OF NE. CURB RETURN AT WELLS AVE. AND CREST AVE. ELEV. 779.23

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APPROVED: CITY OF RIVERSIDE DOMESTIC SYSTEM
CHIEF UTILITIES ENG. WATER — 6-19-78

APPROVED: CITY OF RIVERSIDE OVERHEAD & UNDERGROUND
FOR CHIEF UTILITIES ENG. ELEC. — 5-17-78

NESTE, BRUDIN & STONE
INCORPORATED
CIVIL ENGINEERS
SAN BERNARDINO HEMET ESCONDIDO

APPROVED BY: _____
DATE: 2-8-78
REGISTERED CIVIL ENGINEER NO. 12698

MARK	REVISIONS	APPR.	DATE

DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P. W. ENGR.		5-25-78

APPROVED BY _____
DIRECTOR OF PUBLIC WORKS
DATE 5/25/78

STORM DRAIN PLAN AND PROFILE
TRACT NO. 7925 &
TRACT NO. 7948
RED ROCK AVE.

PROJECT NO. D-343
SHEET 4 OF 4
FILE NO.

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

P-4-413