RIVERSIDE CITY OF RIVERSIDE CALIFORNIA

PUBLIC WORKS DEPARTMENT

TORONTO ROAD STORM DRAIN

MONROE STREET TO IRVING STREET

CONSTRUCTION LEGEND

CENTER LINE ——————℄——————
RIGHT-OF-WAY ——————R/W——————
SUBDIVISION LOT LINE ——————PL——————
TOP OF SLOPE
TOE OF SLOPE
DIRECTION OF FLOW ——————→

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.

405 M MODIFICATIONS OF THE STANDARD DRAWING ARE AS FOLLOWS:
THE CATCH BASINS AT STA. 25+88.72 AND STA. 28+48.50 SHALL BE CONSTRUCTED WITH WINGS AND GUTTER OMITTED.

~~410 D M~~ ~~MODIFICATIONS OF THE STANDARD DRAWING ARE AS FOLLOWS:~~
~~1) STRUCTURE IS TO BE USED AS AN UNDER S/W DRAIN.~~
~~2) CONCRETE TRANSITION FROM PIPE TO STRUCTURE AND FRAME & COVER SHALL BE OMITTED.~~

MH 254 RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT STANDARD DRAWING

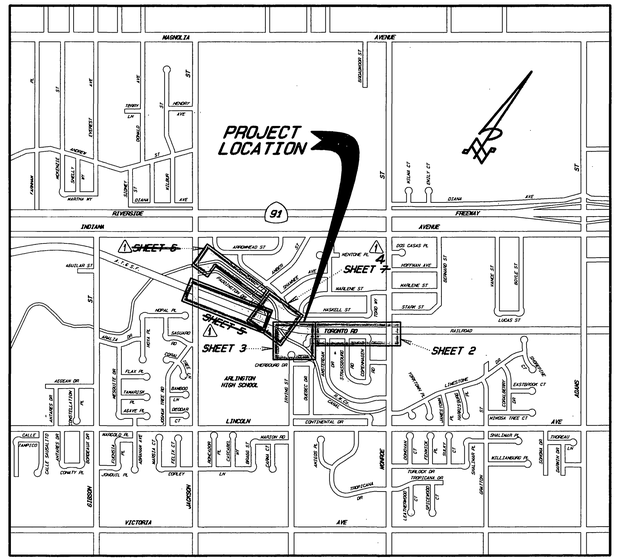
MH 256 RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT STANDARD DRAWING

MH 258 RIVERSIDE COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT STANDARD DRAWING

A / 4 INDICATES DETAIL
INDICATES SHEET NO.

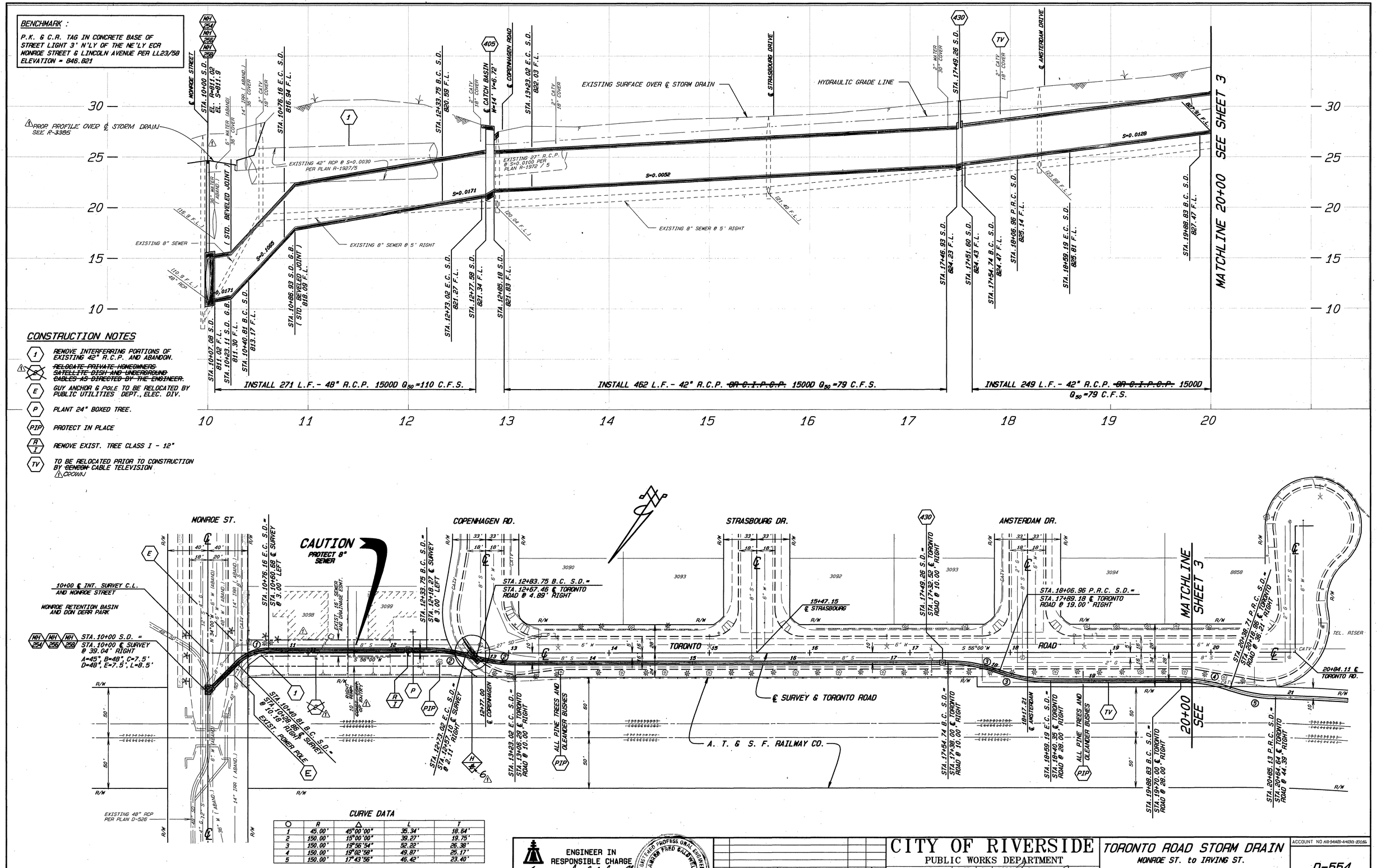
GENERAL CONSTRUCTION NOTES

1. EXISTING UTILITIES SHOWN ON THIS 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. IF THE COVER OF A UTILITY IS KNOWN, IT IS SHOWN INTHE PROFILE. UTILITIES IN THE PROFILE AS——}——{——INDICATES THAT THE COVER IS UNKNOWN, BUT THE UTILITY IS NOT EXPECTED TO CONFLICT WITH THE PROPOSED IMPROVEMENTS.
2. ALL ELEVATIONS SHOWN ON THE PLANS SHALL BE STAKED IN THE FIELD.
3. PRIME CONTRACTORS BIDDING THIS WORK SHALL HAVE A CLASS A, C-34, OR C-42 LICENSE.
4. CONFLICTING UTILITIES SHOWN WITHIN THE CONSTRUCTION AREA WILL BE RELOCATED PRIOR TO CONSTRUCTION.
5. EXISTING 48" R.C.P. AT STA. 10+00 SHALL BE EXPOSED AND ELEVATION VERIFIED BY CITY SURVEYORS PRIOR TO THE ISSUANCE OF GRADE SHEETS.
6. EXISTING 2" WATER SERVICE AT STA. 17+38 SHALL BE EXPOSED BY THE CONTRACTOR AND THE ELEVATION VERIFIED BY CITY SURVEYORS PRIOR TO THE ISSUANCE OF GRADE SHEETS. IF IN CONFLICT WITH PROPOSED STORM DRAIN 2" WATER SERVICE SHALL BE RELOCATED BY PUBLIC UTILITIES DEPARTMENT, WATER DIVISION.


PROJECT LOCATION
MAGNOLIA AVENUE
BROCKTON AVE
RIVERSIDE
INDIANA
AVENUE
FREEWAY
91
SHEET 6
SHEET 4
SHEET 5
SHEET 3
SHEET 2
TORONTO RD
RAILROAD
ARLINGTON HIGH SCHOOL
LINCOLN
VICTORIA
AVE
HARRISON
ADAMS
IRVING
LUCAS ST
ROYCE ST
HARLAND ST
STARK ST
HASWELL ST
HENTONE PL
HOFFMAN AVE
LONGSTONE
EXETERBOCK CT
KENOSHA TREE CT
KELLENBERG PL
CONTINENTAL DR
CHEROKEE DR
CHEYENNE DR
ARAPAHOE ST
HAVEN AVE
MADISON ST
ARLINGTON AVE
CRIPPEN DR
TAYLOR DR
TORTOLANA DR
CATHERINE PL
CALLE PAMPLEO
CALLE SUAVE
CONATY PL
JONQUIL PL
FOREST
LA
ARLENE PL
ARLENE DR
ARLENE CT
ARLENE WAY
ARLENE PL
ARLENE CT
ARLENE DR
ARLENE PL
ARLENE CT
ARLENE DR
ARLENE PL
ARLENE CT
ARLENE DR

BENCHMARK :

P.K. & C.R. TAG IN CONCRETE BASE OF STREET LIGHT 3' N'LY OF THE NE'LY ECR MONROE STREET & LINCOLN AVENUE PER LL23/58
ELEVATION = 846.821



CONSTRUCTION NOTES

1. REMOVE INTERFERRING PORTIONS OF EXISTING 42" R.C.P. AND ABANDON.
2. ~~RELOCATE PRIVATE HOMEOWNERS SATELLITE DISH AND UNDERGROUND CABLES AS DIRECTED BY THE ENGINEER.~~
E. GUY ANCHOR & POLE TO BE RELOCATED BY PUBLIC UTILITIES DEPT., ELEC. DIV.
P. PLANT 24" BOXED TREE.
P1P. PROTECT IN PLACE
R/I. REMOVE EXIST. TREE CLASS I - 12"
TV. TO BE RELOCATED PRIOR TO CONSTRUCTION BY ~~GENEON~~ CABLE TELEVISION
△ CROWN

CURVE DATA

	R	Δ	L	T
1	45.00'	45°00'00"	35.34'	18.64'
2	150.00'	15°00'00"	39.27'	19.75'
3	150.00'	19°56'54"	52.22'	26.38'
4	150.00'	19°02'58"	49.87'	25.17'
5	150.00'	17°43'56"	46.42'	23.40'

ENGINEER IN RESPONSIBLE CHARGE
LAUREN F. CALDWELL
R.C.E. 39441 EXPIRES 12/31/93
DATE 10/18/91

REGISTERED PROFESSIONAL ENGINEER — LAUREN FRED CALDWELL — No. 39441 — CIVIL — STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE
1	REPOSE MH SHAFT @ STA. 10+00 S.D. TO MEET PROPOSED SURFACE GRADE	℄	11/14/94
2	ADD NOTE TO TIE TO ℄ RIGHT OF ENTRY; ADD DOGG, PROFILE OF MONROE ST.	℄	11/14/94
3	UPDATE OF TOPO, DELETE NOTE & REVISE CITY CO. NAME & RENUMBER SHEETS	℄	5/3/95

DESIGNED BY R.G.FANN DRAWN BY R.G.FANN CHECKED BY RCM

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

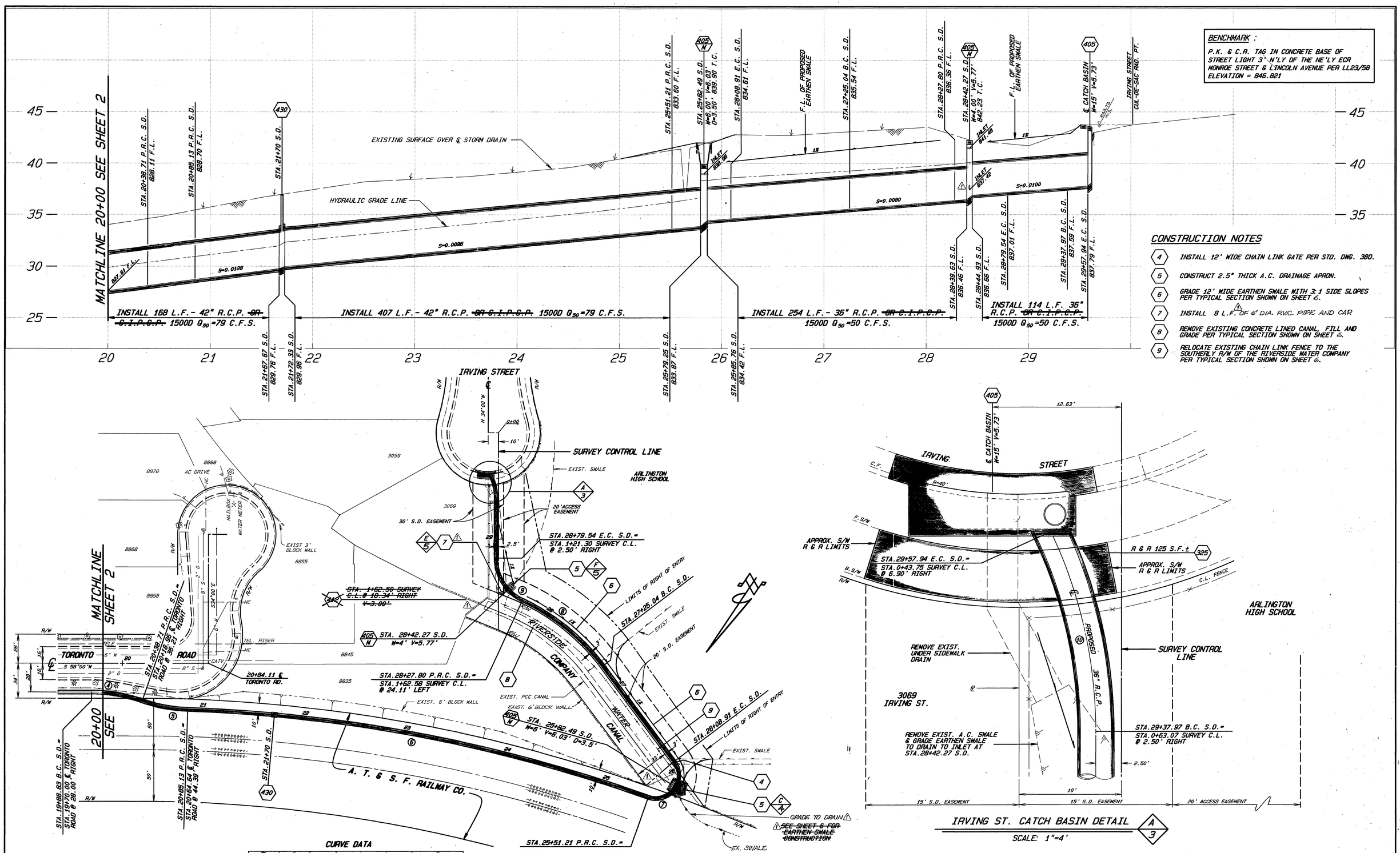
	APPROVED BY	DATE	BY
	DEPUTY P.W. ENGINEER	10/11/91	RMG
	PRINCIPAL ENGINEER	10/18/91	℄
	SURVEYOR	10/18/91	RDM
	CHIEF P.W. INSPECTOR	10/18/91	℄
	TRAFFIC DIVISION		
	STREET SERVICES		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/91

TORONTO ROAD STORM DRAIN
MONROE ST. to IRVING ST.
PLAN and PROFILE
Sta. 10+00 to Sta. 20+00

ACCOUNT NO. 410-54400-44030-20016
D-554
SHEET 2 OF 8
HORIZ. SCALE: 1"= 40' VERT. SCALE: 1"= 4'

INDEXED 5-3-95 GH



CONSTRUCTION NOTES

4. INSTALL 12' WIDE CHAIN LINK GATE PER STD. DWG. 380.
5. CONSTRUCT 2.5" THICK A.C. DRAINAGE APRON.
6. GRADE 12' WIDE EARTHEN SWALE WITH 3:1 SIDE SLOPES PER TYPICAL SECTION SHOWN ON SHEET 6.
7. INSTALL 8 L.F. OF 6" DIA. P.V.C. PIPE AND CAP.
8. REMOVE EXISTING CONCRETE LINED CANAL, FILL AND GRADE PER TYPICAL SECTION SHOWN ON SHEET 6.
9. RELOCATE EXISTING CHAIN LINK FENCE TO THE SOUTHERLY R/W OF THE RIVERSIDE WATER COMPANY PER TYPICAL SECTION SHOWN ON SHEET 6.

IRVING ST. CATCH BASIN DETAIL (A/3)

SCALE: 1"=4'

CURVE DATA

○	R	Δ	L	T
4	150.00'	19°02'58"	49.87'	25.17'
5	150.00'	17°43'36"	46.42'	23.40'
6	1472.40'	18°08'12"	466.08'	236.45'
7	22.50'	146°55'52"	57.70'	75.79'
8	207.27'	28°24'24"	102.76	52.46'
9	45.00'	65°53'02"	51.75'	28.16'
10	45.00'	25°25'46"	19.97'	10.15'

ENGINEER IN RESPONSIBLE CHARGE
Lauren F. Caldwell
LAUREN F. CALDWELL
R.C.E. 39441 EXPIRES 12/31/93
DATE 10/18/91

REGISTERED PROFESSIONAL ENGINEER LAUREN FRED CALDWELL No. 39441 CIVIL STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE
1	SUBMITTAL STD. A16 & 16" C.S.P. ADD 6" DIA. PVC STUB & REMOVABLE SHEETS.	RM	11/26/91
2	UPDATED TO 1988 SPECS. DELETE EARTHEN SWALE & ADD NOTE	RM	1/3/96

DESIGNED BY R.G.FANN DRAWN BY R.G.FANN CHECKED BY REM

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

	APPROVED BY	DATE	BY
DEPUTY P.W. ENGINEER		10/18/91	MAG
PRINCIPAL ENGINEER		10/18/91	
SURVEYOR		10/18/91	APH
CHIEF P.W. INSPECTOR		10/18/91	RGF
TRAFFIC DIVISION			
STREET SERVICES		10/17/91	

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/91

TORONTO ROAD STORM DRAIN
MONROE ST. to IRVING ST.
PLAN and PROFILE
Sta. 20+00 to Sta. 29+57.94

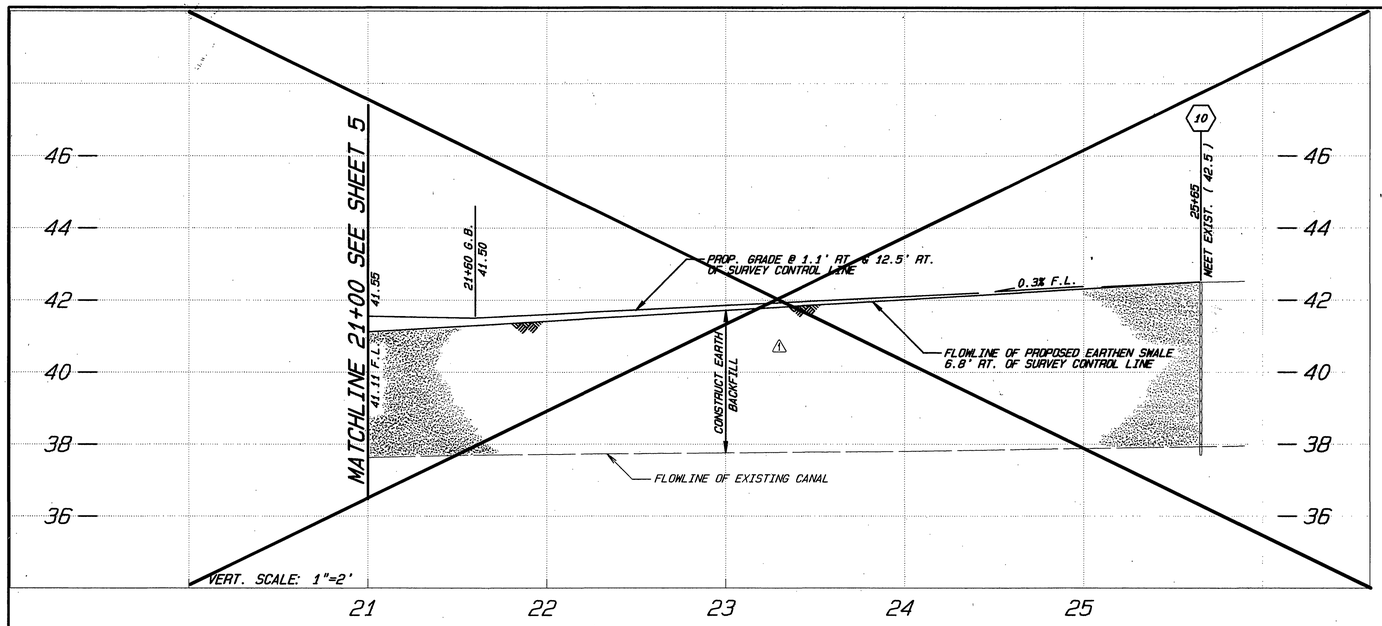
HORIZ. SCALE: 1"= 40' VERT. SCALE: 1"= 4'

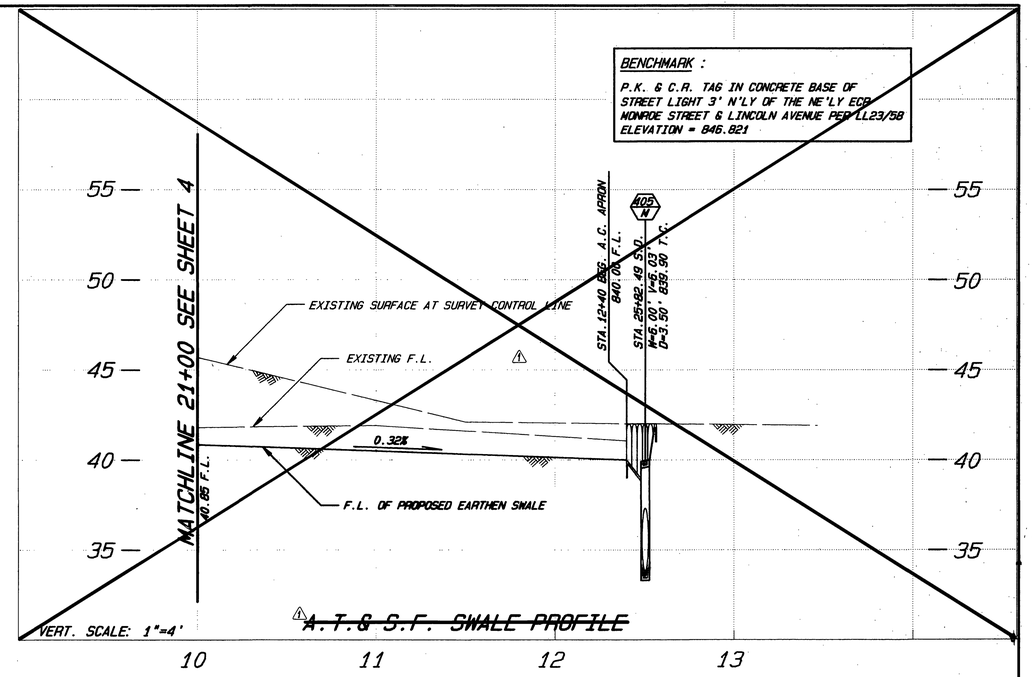
ACCOUNT NO. 410-541400-44501-20026

D-554

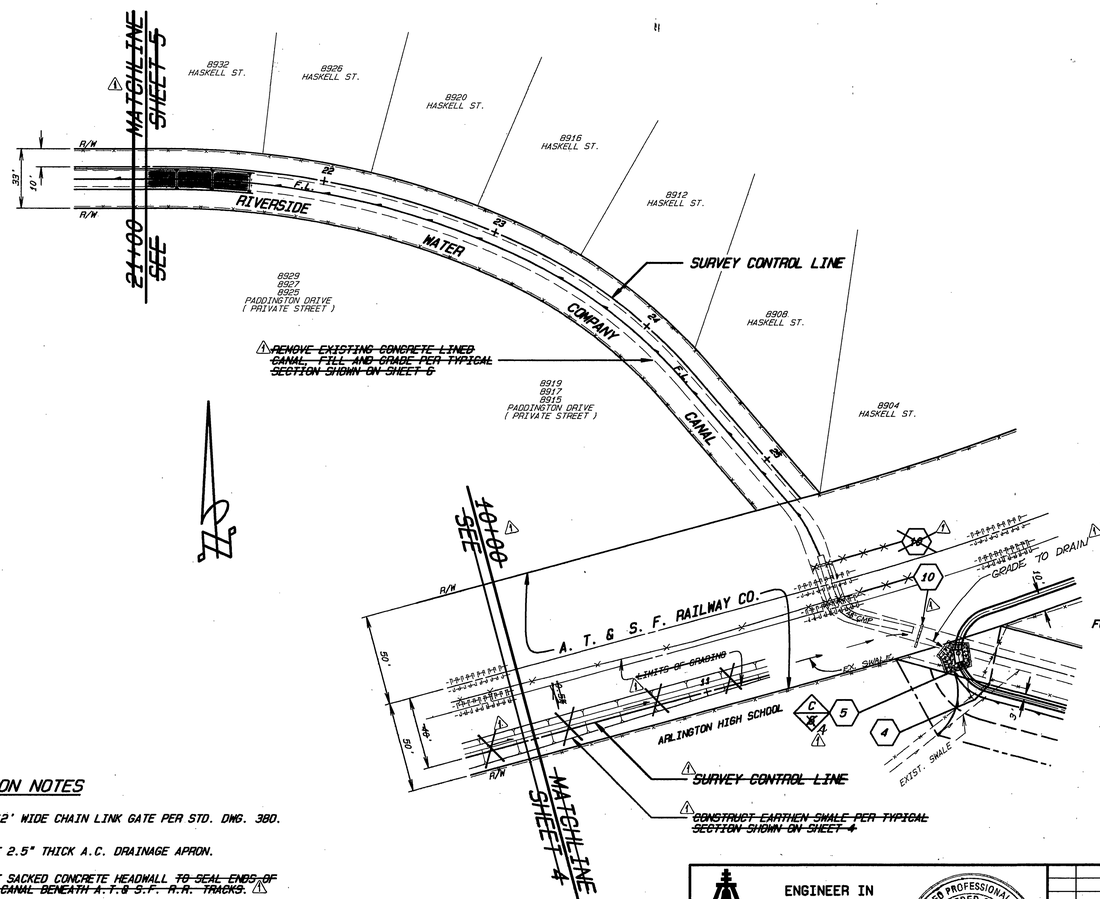
SHEET 3 OF 6

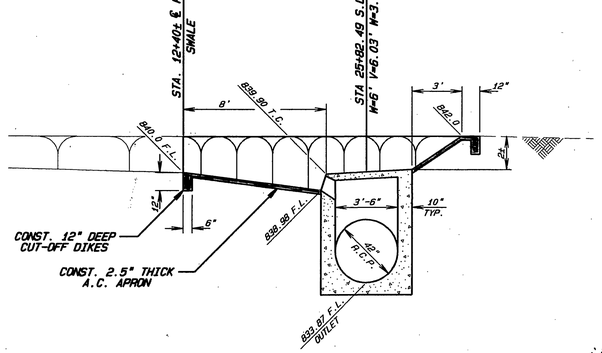
INDEXED 5-3-95 GH





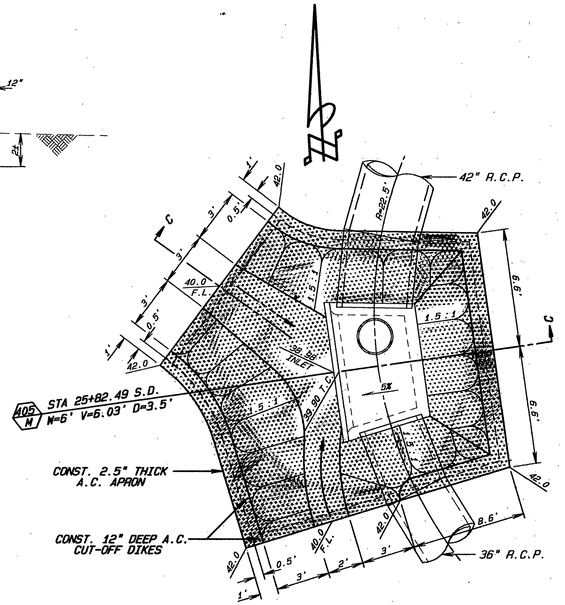
A.T.& S.F. SWALE PROFILE





SECTION C-C

SCALE: 1"=4'



APRON DETAIL

STA. 25+82.49 S.D.

SCALE 1"=4'

CONSTRUCTION NOTES

4. INSTALL 12' WIDE CHAIN LINK GATE PER STD. DWG. 380.
5. CONSTRUCT 2.5" THICK A.C. DRAINAGE APRON.
10. CONSTRUCT SACKED CONCRETE HEADWALL ~~TO SEAL ENDS OF EXISTING CANAL BENEATH A.T.& S.F. R.R. TRACKS.~~ ⚠

ENGINEER IN RESPONSIBLE CHARGE
LAUREN F. CALDWELL
R.C.E. 39441 EXPIRES 12/31/93
DATE 10/10/91

REGISTERED PROFESSIONAL ENGINEER LAUREN FRED CALDWELL No. 39441 CIVIL STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE
⚠	UPDATE EX. TOPO, REVISE NOTE 10.	EC	11/04/91
⚠	REVISIONS SHEET 3	EC	11/04/91
⚠	ELIMINATE EARTHEN SWALE ALONG A.T.&S.F. R.R. TRACK & BACK FILL OF CANAL	EC	11/04/91

DESIGNED BY R.G.FANN DRAWN BY R.G.FANN CHECKED BY RFM

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

	APPROVED BY	DATE	BY
	DEPUTY P.W. ENGINEER	10/18/91	RM.G.
	PRINCIPAL ENGINEER	10/18/91	RFM
	SURVEYOR	10/18/91	CPH
	CHIEF P.W. INSPECTOR	10/18/91	RSE
	TRAFFIC DIVISION		
	STREET SERVICES	10/18/91	RT

APPROVED BY: PUBLIC WORKS DIRECTOR — DATE 10/22/91

TORONTO ROAD STORM DRAIN
MONROE ST. to IRVING ST.

A.T.& S.F. SWALE
Sta. 10+00 to Sta. 12+40

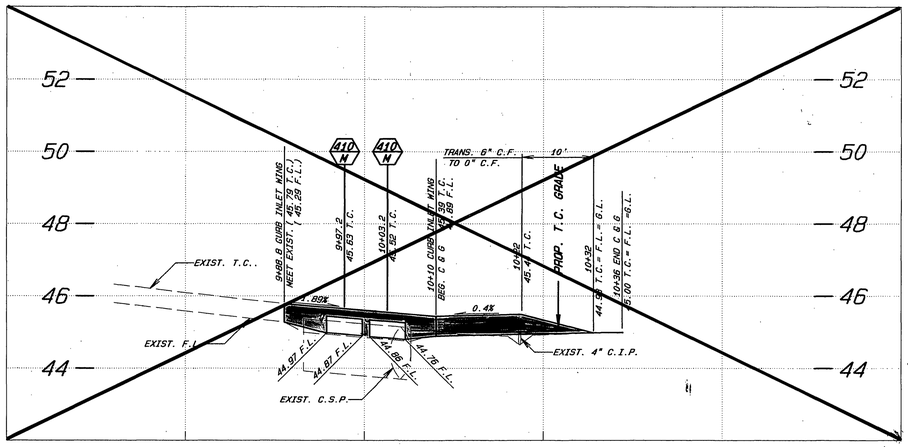
HORIZ. SCALE: 1"= 40' VERT. SCALE: 1"= AS SHOWN

ACCOUNT NO. 410-54400-44050-72005

D-554

SHEET 4 ⚠ 6 OF 6

INDEXED 5-3-95 GH



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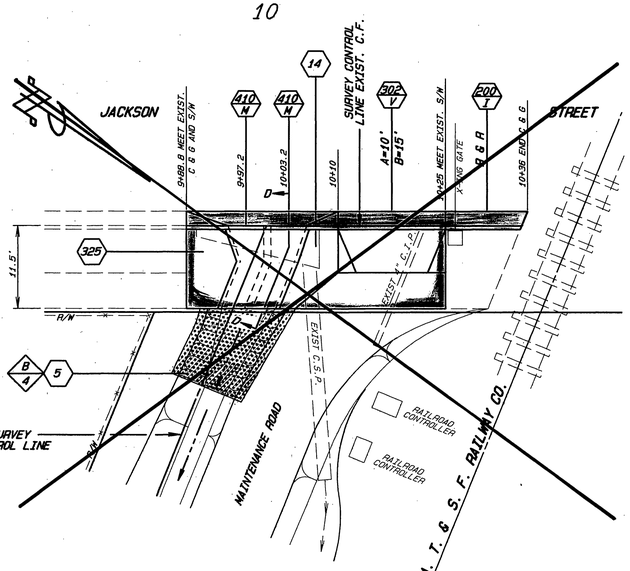
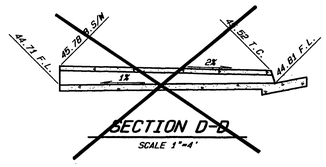
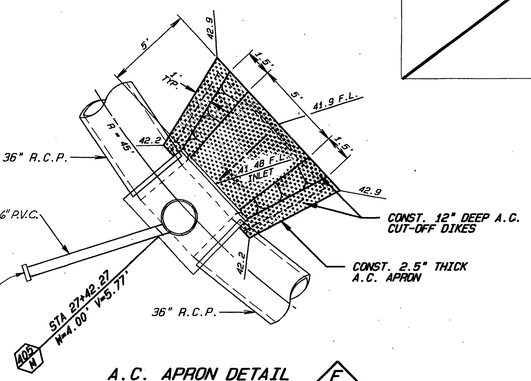






CURB INLET DETAIL

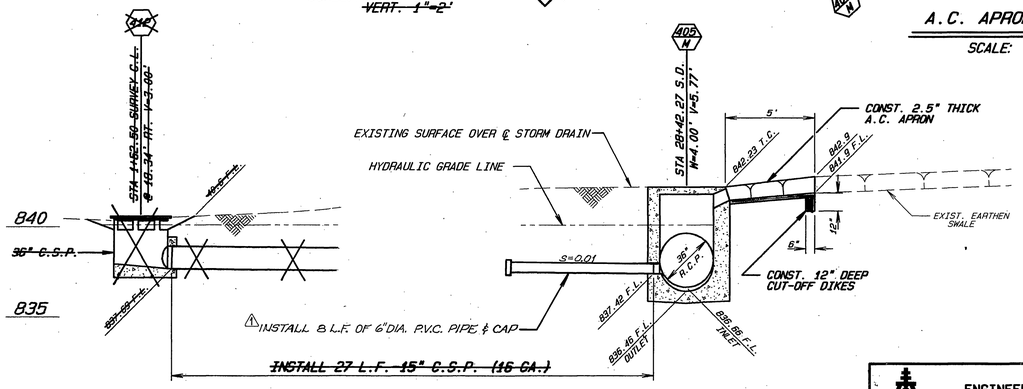
SCALE: HORIZ. 1"=10'
VERT. 1"=2'

D 5

A.C. APRON DETAIL

SCALE: 1"=4'

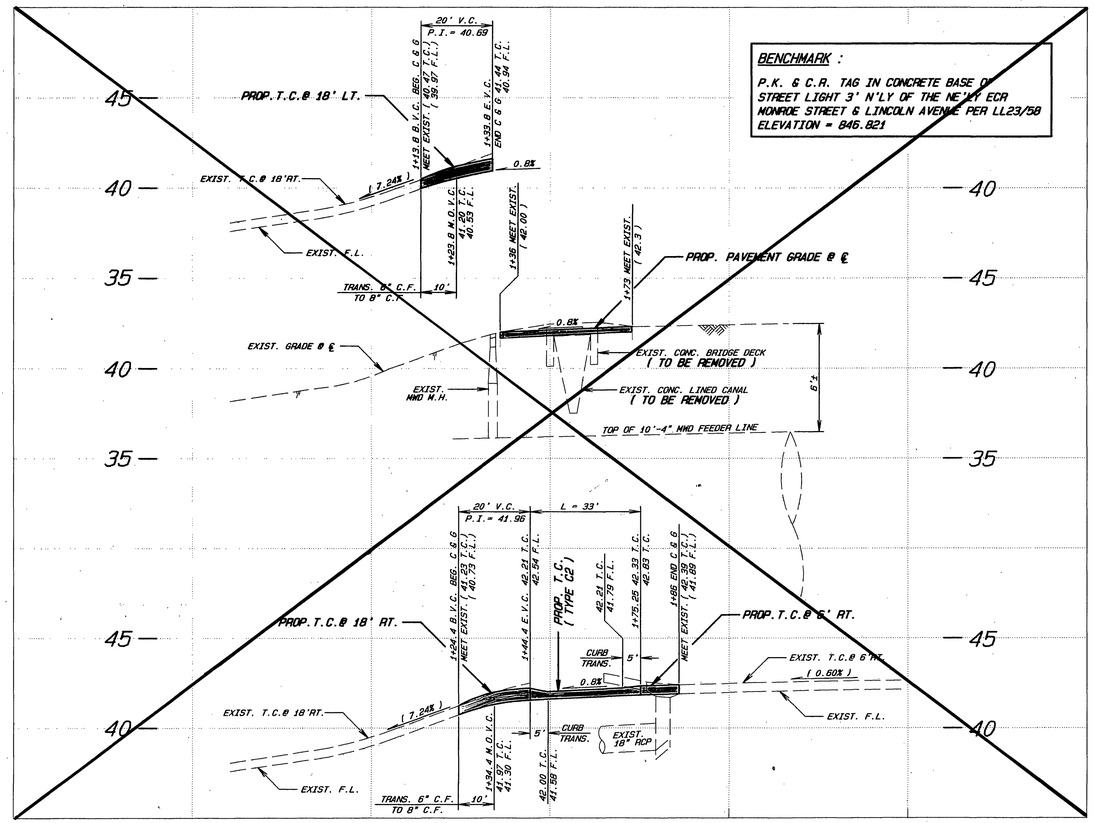
F 5



PROFILE LATERAL "B"

SCALE: 1"=4'

E 5



2

⚠ CONSTRUCTION NOTES

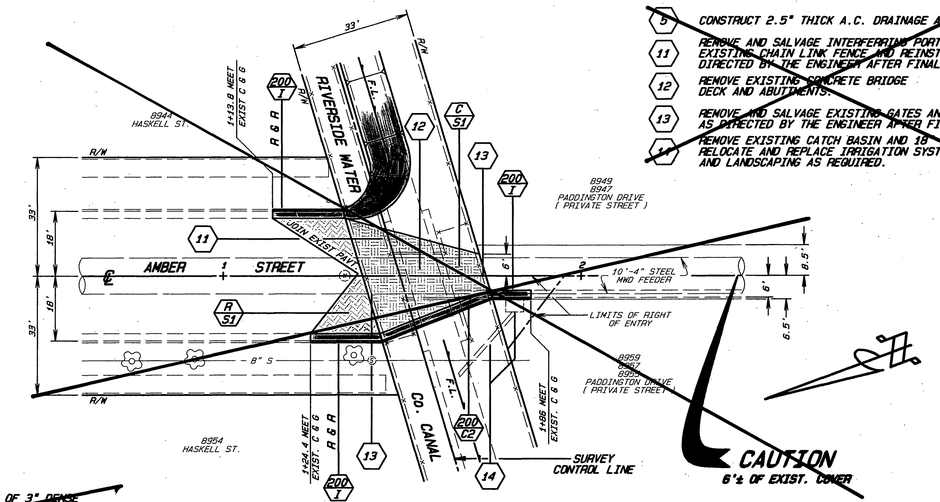
5 CONSTRUCT 2.5" THICK A.C. DRAINAGE APRON.

11 REMOVE AND SALVAGE INTERFERING PORTIONS OF EXISTING CHAIN LINK FENCE AND REINSTALL AS DIRECTED BY THE ENGINEER AFTER FINAL PAVING.

12 REMOVE EXISTING CONCRETE BRIDGE DECK AND ABUTMENTS.

13 REMOVE AND SALVAGE EXISTING GATES AND REINSTALL AS DIRECTED BY THE ENGINEER AFTER FINAL PAVING.

14 REMOVE EXISTING CATCH BASIN AND 18" C.S.P. RELOCATE AND REPLACE IRRIGATION SYSTEMS AND LANDSCAPING AS REQUIRED.



⚠ CONSTRUCTION LEGEND

C 5T CONSTRUCT STRUCTRAL SECTION OF 3" DENSE GRADED A.C. OVER NATIVE SOIL.

R 5T REMOVE AND REPLACE EXISTING STRUCTRAL SECTION WITH 3" DENSE GRADED A.C. OVER NATIVE SOIL.

⚠ EMERGENCY ACCESS DETAIL

SCALE: HORIZ. 1"=20'
VERT. 1"=4'

G

ENGINEER IN RESPONSIBLE CHARGE
LAUREN F. CALDWELL
R.C.E. 39441 EXPIRES 12/31/93
DATE 10/10/91

REGISTERED PROFESSIONAL ENGINEER LAUREN FRED CALDWELL No. 39441 CIVIL STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE
⚠	REVISED PROFILE, LATERAL "B" & A.C. APRON DETAIL.	JC	11/20/92
⚠	REVISED "SHEETS & ELIMINATE CONSTRUCTION NOTES & LEGEND. ELIMINATE CURB INLET'S EMERGENCY ACCESS DETAILS.	JC	11/30/92
⚠		JC	1/31/93

DESIGNED BY R.G.FANN DRAWN BY R.G.FANN CHECKED BY LFC

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

	APPROVED BY	DATE	BY
	DEPUTY P.W. ENGINEER	10/18/91	LFC
	PRINCIPAL ENGINEER	10/18/91	
	SURVEYOR	10/15/91	APH
	CHIEF P.W. INSPECTOR	10/18/91	REC
	TRAFFIC DIVISION		
	STREET SERVICES	10/17/91	RF

APPROVED BY _____
PUBLIC WORKS DIRECTOR
DATE 10/22/91

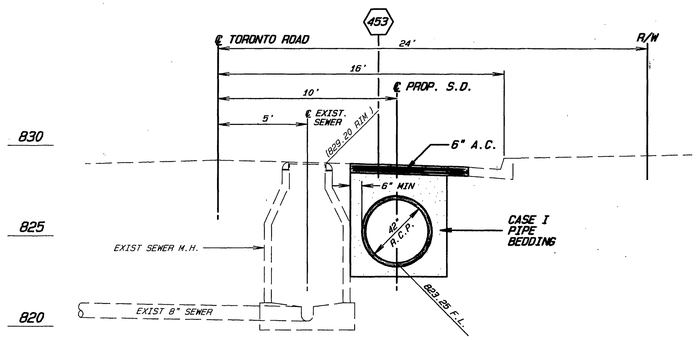
TORONTO ROAD STORM DRAIN
MONROE ST. to IRVING ST.
PLAN and PROFILE

ACCOUNT NO 419-54400-44030-20226

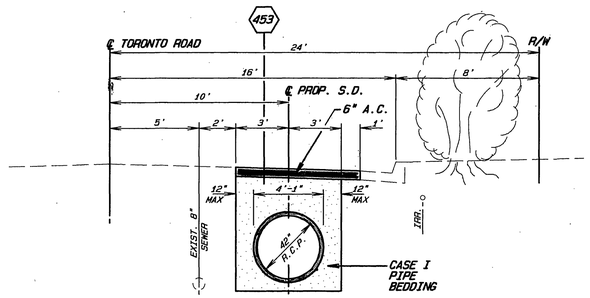
D-554

SHEET 5 ⚠ 6 X OF 8

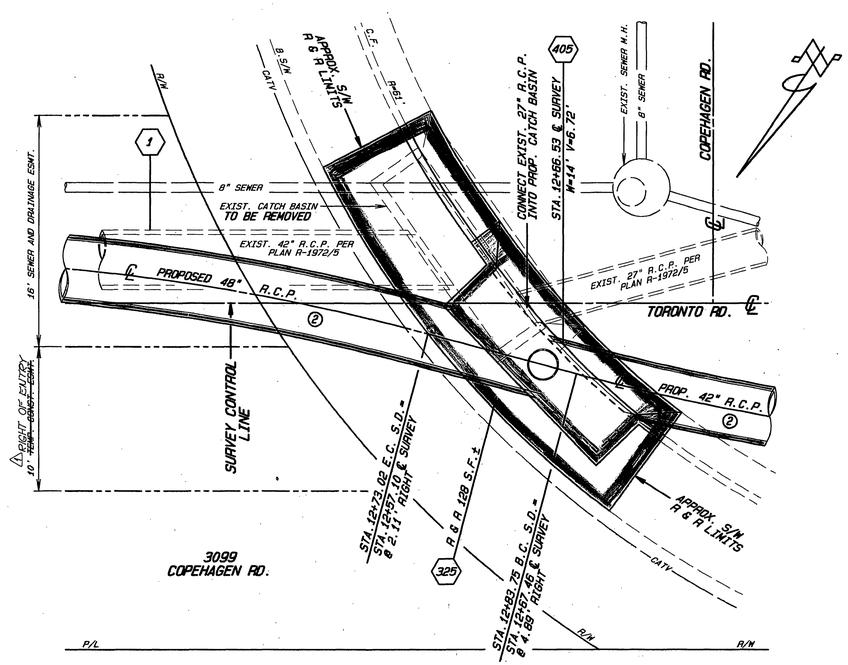
INDEXED 5-3-95 GH



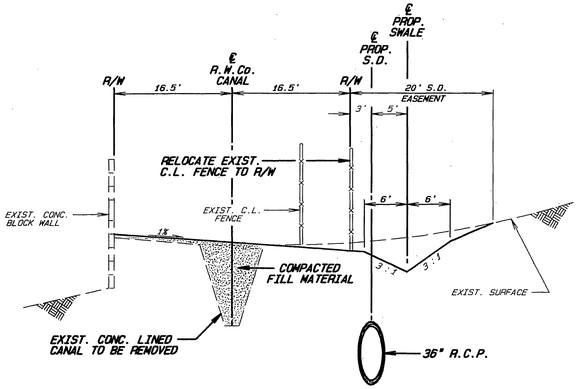
TRENCH SECTION
STA. 15+42 ℄ TORONTO ROAD
SCALE: 1"=4'



TYPICAL TRENCH SECTION
STA. 13+50 TO STA. 17+72
SCALE: 1"=4'



COPEHAGEN RD. CATCH BASIN DETAIL
H 6
SCALE: 1"=5'



TYPICAL SECTION
STA. 26+10 TO STA. 28+30
SCALE: HORIZ. 1"=10' VERT. 1"=4'

CONSTRUCTION NOTES
1. REMOVE INTERFERING PORTIONS OF EXISTING 42" R.C.P. AND ABANDON.

ENGINEER IN RESPONSIBLE CHARGE
LAUREN F. CALDWELL
R.C.E. 39441 EXPIRES 12/31/93
DATE 10/10/91

REGISTERED PROFESSIONAL ENGINEER LAUREN FREE CALDWELL No. 39441 CIVIL STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE
1	CHANGE 10 Y.C.I.C. TO 10' RIGHT OF ENTRY. REMEMBRANCE SHEETS		1/10/91

DESIGNED BY R.G.FANN DRAWN BY R.G.FANN CHECKED BY RCM

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
DEPUTY P.W. ENGINEER	10/10/91	
PRINCIPAL ENGINEER	10/10/91	
SURVEYOR	10/8/91	
CHIEF P.W. INSPECTOR	10/8/91	
TRAFFIC DIVISION		
STREET SERVICES	9/17/91	

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/91

TORONTO ROAD STORM DRAIN
MONROE ST. to IRVING ST.
DETAIL SHEET

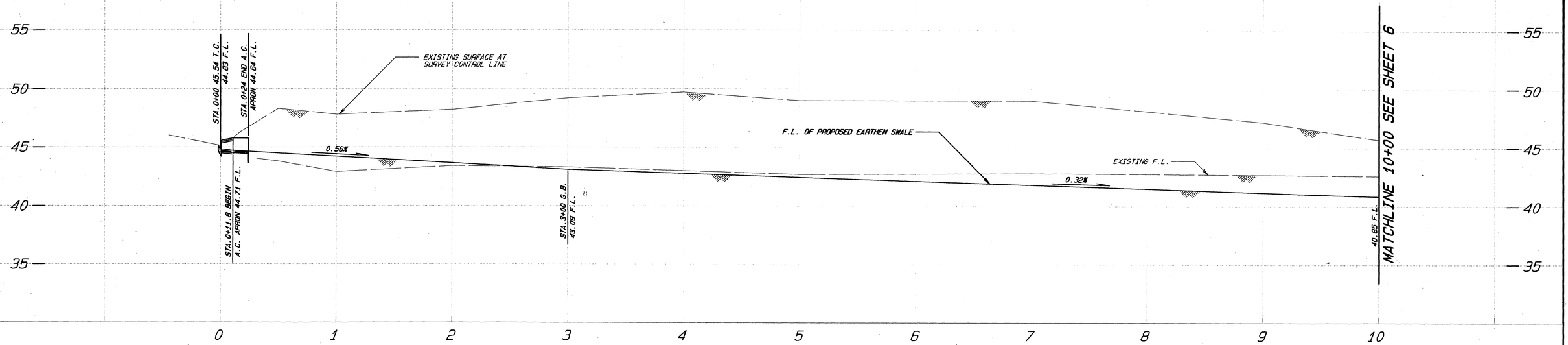
ACCOUNT NO. A18-54H00-440301-22026

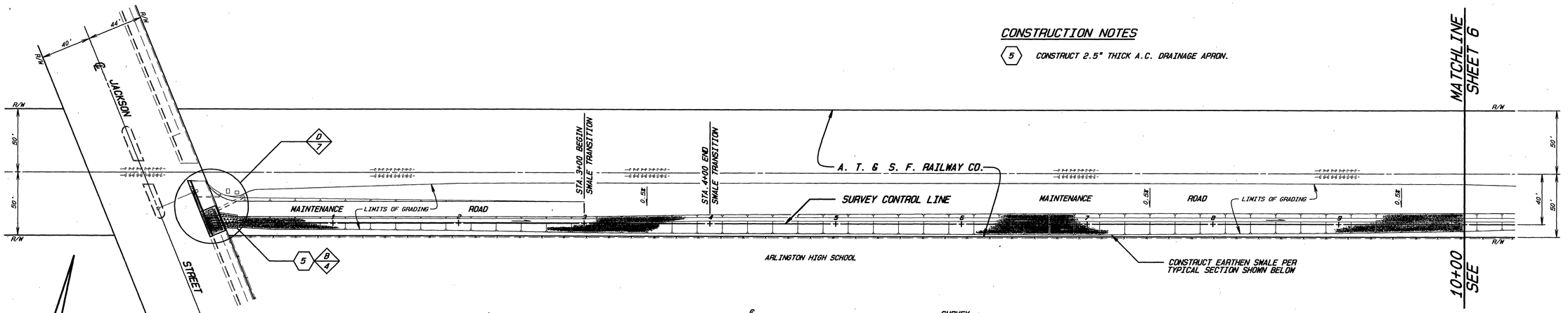
D-554
SHEET 6 OF 6

INDEXED 5-3-95 GH

BENCHMARK :

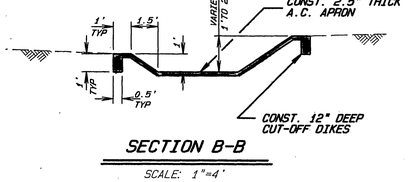
P.K. & C.R. TAG IN CONCRETE BASE OF STREET LIGHT 3' N'LY OF THE NE'LY ECR MONROE STREET & LINCOLN AVENUE PER LL23/58
ELEVATION = 846.821





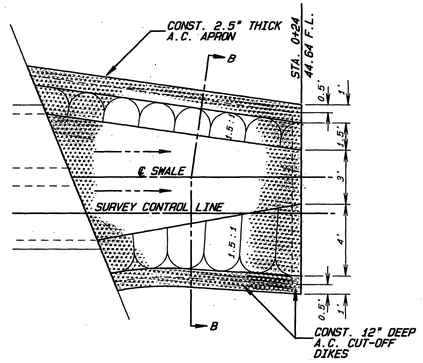
CONSTRUCTION NOTES

(5) CONSTRUCT 2.5" THICK A.C. DRAINAGE APRON.



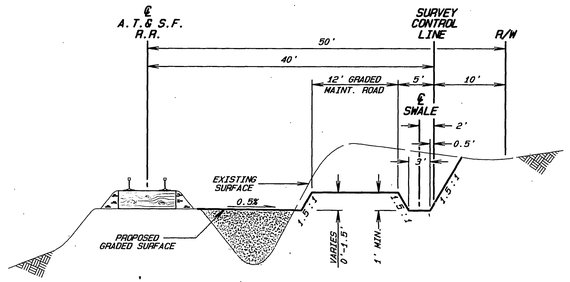
SECTION B-B

SCALE: 1"=4'



A.C. APRON DETAIL (B/4)

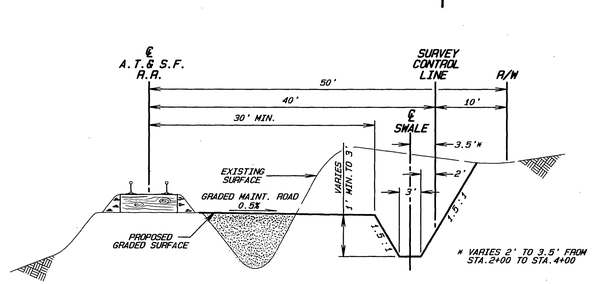
SCALE: 1"=4'



TYPICAL SECTION

STA. 0+24 TO STA. 3+00

SCALE: HORIZ. 1"=10' VERT. 1"=4'



TYPICAL SECTION

STA. 3+00 TO STA. 12+00

SCALE: HORIZ. 1"=10' VERT. 1"=4'

VOID

ENGINEER IN RESPONSIBLE CHARGE

Lauren F. Caldwell

LAUREN F. CALDWELL
R.C.E. 39441 EXPIRES 12/31/93

DATE 10/18/91

REGISTERED PROFESSIONAL ENGINEER LAUREN FRED CALDWELL No. 39441 CIVIL STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY RG.FANN DRAWN BY RG.FANN CHECKED BY RCM

CITY OF RIVERSIDE

PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
DEPUTY P.W. ENGINEER	10/18/91	M.G.
PRINCIPAL ENGINEER	10/18/91	
SURVEYOR	10/18/91	
CHIEF P.W. INSPECTOR	10/18/91	
TRAFFIC DIVISION		
STREET SERVICES	10/22/91	

APPROVED BY

PUBLIC WORKS DIRECTOR

DATE 10/22/91

TORONTO ROAD STORM DRAIN

MONROE ST. to IRVING ST.

A.T.& S.F. SWALE

Sta. 0+00 to Sta. 10+00

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

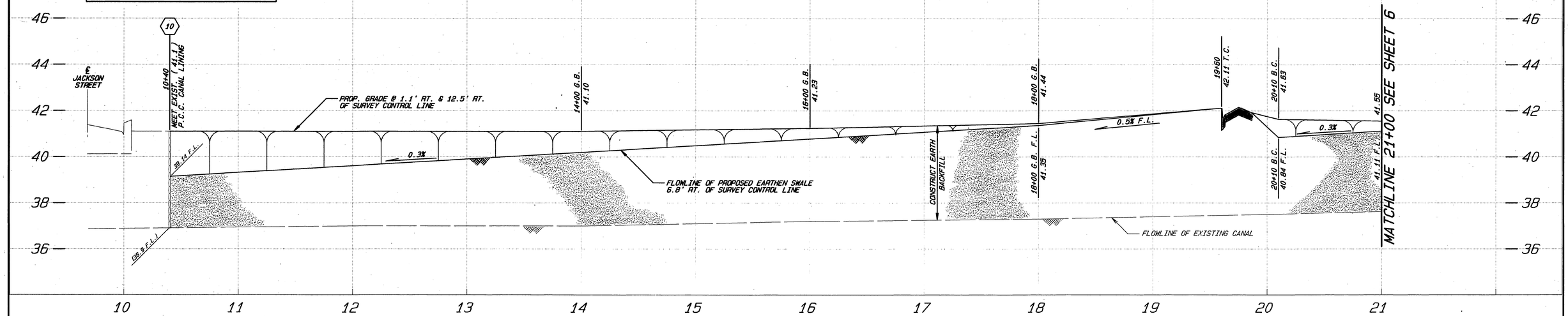
ACCOUNT NO. 410-54100-440301-20026

D 554

SHEET 4 OF 8

BENCHMARK :

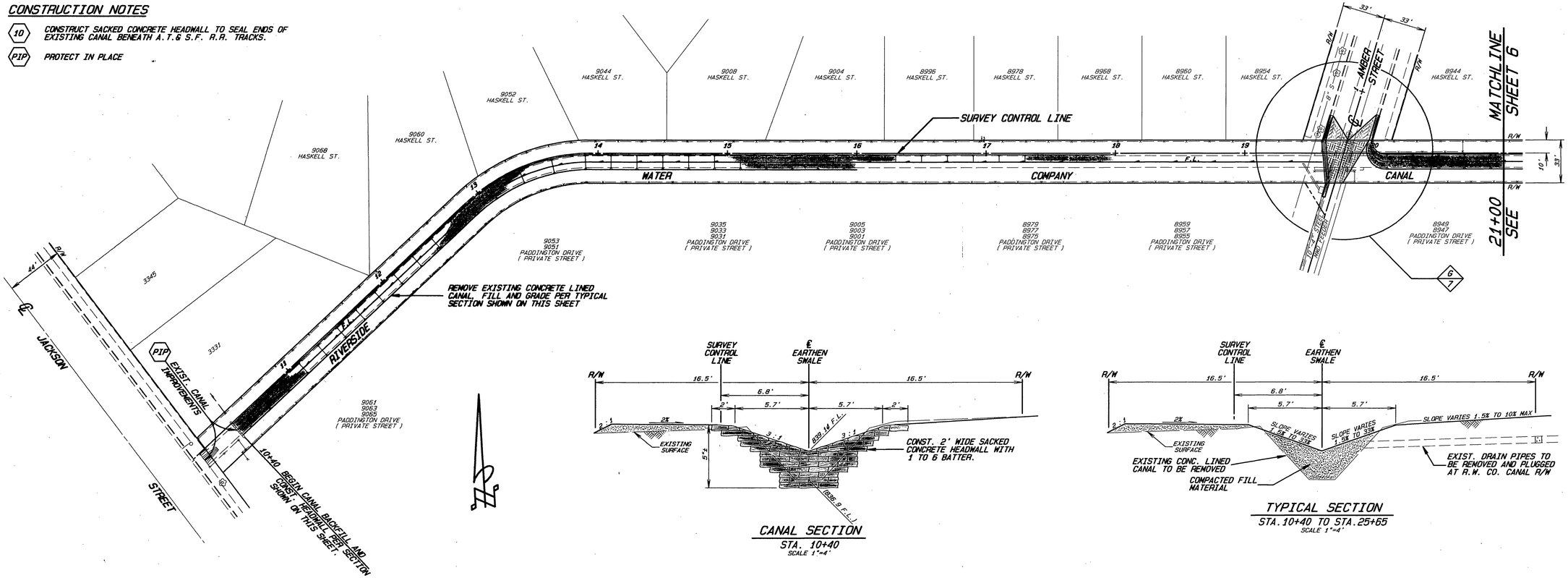
P.K. & C.R. TAG IN CONCRETE BASE OF STREET LIGHT 3' N'LY OF THE NE'LY ECR MONROE STREET & LINCOLN AVENUE PER LL23/58
ELEVATION = 846.821



CONSTRUCTION NOTES

(10) CONSTRUCT SACKED CONCRETE HEADWALL TO SEAL ENDS OF EXISTING CANAL BENEATH A.T.& S.F. R.R. TRACKS.

(P.I.P.) PROTECT IN PLACE



CANAL SECTION
STA. 10+40
SCALE 1"=4'

TYPICAL SECTION
STA. 10+40 TO STA. 25+65
SCALE 1"=4'

VOID

ENGINEER IN RESPONSIBLE CHARGE
LAUREN F. CALDWELL
R.C.E. 39441 EXPIRES 12/31/93
DATE 10/10/91

REGISTERED PROFESSIONAL ENGINEER LAUREN FRED CALDWELL No. 39441 CIVIL STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY R.G.FANN DRAWN BY R.G.FANN CHECKED BY RCM

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
DEPUTY P.W. ENGINEER	10/10/91	RCM
PRINCIPAL ENGINEER	10/10/91	[illegible]
SURVEYOR	10/8/91	RCM
CHIEF P.W. INSPECTOR	10/8/91	[illegible]
TRAFFIC DIVISION		
STREET SERVICES	10/10/91	[illegible]

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 10/22/91

TORONTO ROAD STORM DRAIN
MONROE ST. to IRVING ST.

R.W.Co.CANAL BACKFILL
Sta. 10+40 to Sta. 21+00

ACCOUNT NO. 410-544900-44030-20020

D-554

SHEET 5 OF 8

HORIZ. SCALE: 1"= 40' VERT. SCALE: 1"= 2'