CONTROL SECTION EDA 82522 | JOB NO. 40935A | SH. NO. 1

EXISTING BY: DATE:
PROPOSED BY: DATE:
LAST CORRECTION BY: DATE:

DETROIT ECONOMIC GROWTH CORPORATION

IN CO-OPERATION WITH

CITY OF DETROIT

AND

MICHIGAN DEPARTMENT OF TRANSPORTATION

•

PLANS OF PROPOSED

RECONSTRUCTION OF ACKLEY AVENUE FROM STRONG TO BENHAM
AND
WIDENING AND PAVING OF ALLEY BETWEEN DECATUR AND PENN R.R. FROM ELMIRA TO CHADWICK
&
RESURFACING OF ELMIRA FROM ALLEY TO SCHAEFER
AND
MISCELLANEOUS CONSTRUCTION

CONTROL SECTION EDA 82522 JOB NO. 40935A

WAYNE COUNTY

ROAD PLANS	SHEET NUMBERS
TITLE	1
ACKLEY TYPICAL CROSS SECTIONS	2
ELMIRA TYPICAL CROSS SECTIONS	3-4
NOTE SHEET	5
STANDARD SYMBOLS	6
ACKLEY REMOVAL	7
ACKLEY PLAN & PROFILE	8
ELMIRA PLAN & PROFILE	9-11
ACKLEY DETAIL GRADES	12
ELMIRA DETAIL GRADES	13
QUANTITY SHEET	14

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 1996 STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS.

ACKLEY TRAFFIC

	1997	2017
A.D.T.	307	370
D.H.V.	37	44
COMM. %	50%	50%
DESIGN SPEED	40 kph	40 kph
POSTED SPEED	25 mph	

ELMIRA TRAFFIC

	1997	2017
A.D.T.	832	998
D.H.V.	100	120
COMM. %	30%	30%
DESIGN SPEED	40 kph	40 kph
POSTED SPEED	25 mph	

THESE PLANS HAVE BEEN DESIGNED IN ACCORDANCE WITH CURRENT AASHTO STANDARDS.

SEG — SNELL ENVIRONMENTAL GROUP, INC. A DLZ Company
151 W. CONGRESS, SUITE 328, DETROIT, MICHIGAN 48226
TELEPHONE (313) 961-4040

MUNICIPAL APPROVAL

William L. Talley — 7/11/97
WILLIAM L. TALLEY, P.E. CITY OF DETROIT HEAD ENGINEER — DATE

Nadim Haidar — 7/11/97
NADIM HAIDAR, P.E. CITY OF DETROIT, ENGINEER OF STREETS — DATE

PREPARED UNDER SUPERVISION OF

David W. Starr — 20117
DAVID W. STARR REGISTERED PROFESSIONAL ENGINEER — REGISTRATION NO.

SNELL ENVIRONMENTAL GROUP, INC.
ORGANIZATION

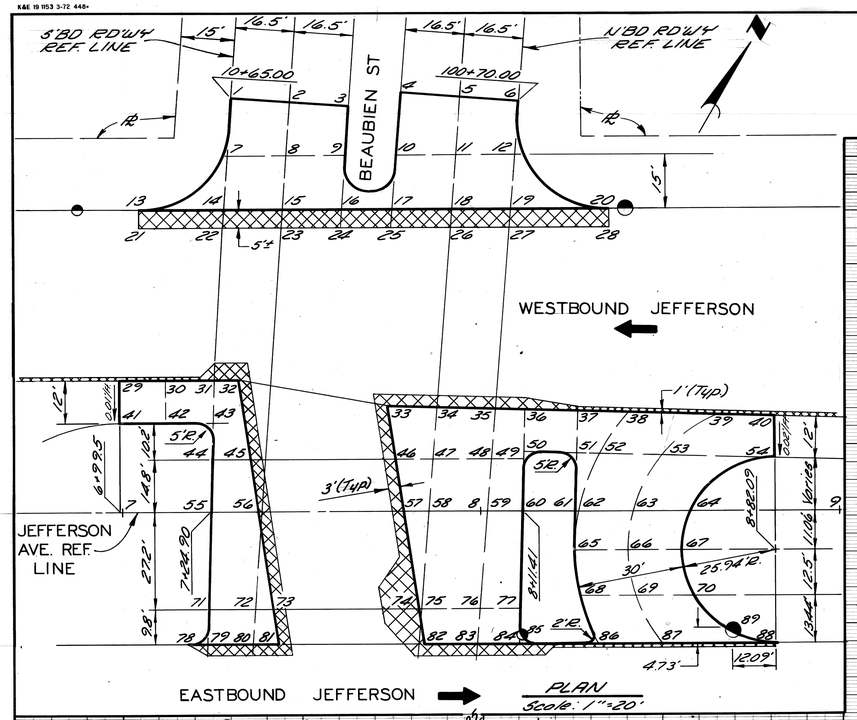
151 W. CONGRESS, SUITE 358, DETROIT, MICHIGAN 48226
ADDRESS

STATE OF MICHIGAN — DAVID W. STARR ENGINEER No. 20117 — REGISTERED PROFESSIONAL ENGINEER

CONTROL SECTION — JOB NUMBER
C.S. EDA 82522 J. No. 40935A

©

K&E 10 1153 3-72 448+



PLAN LEGEND

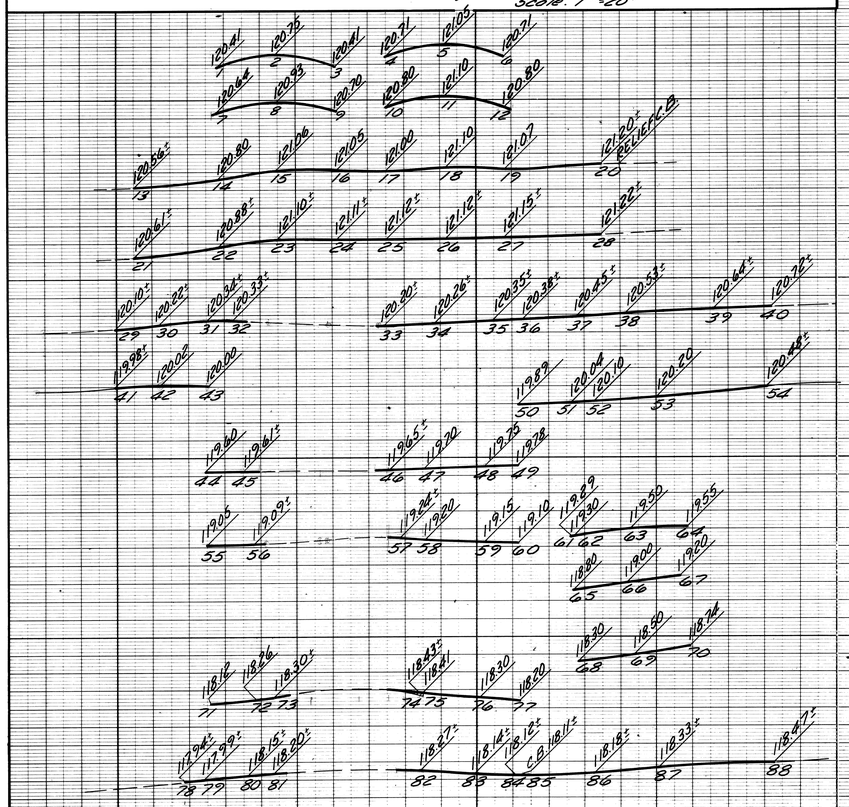
- Strip & Resurface
- Prop. Pav't Limits
- Prop. Catch Basin
- Ex. Catch Basin

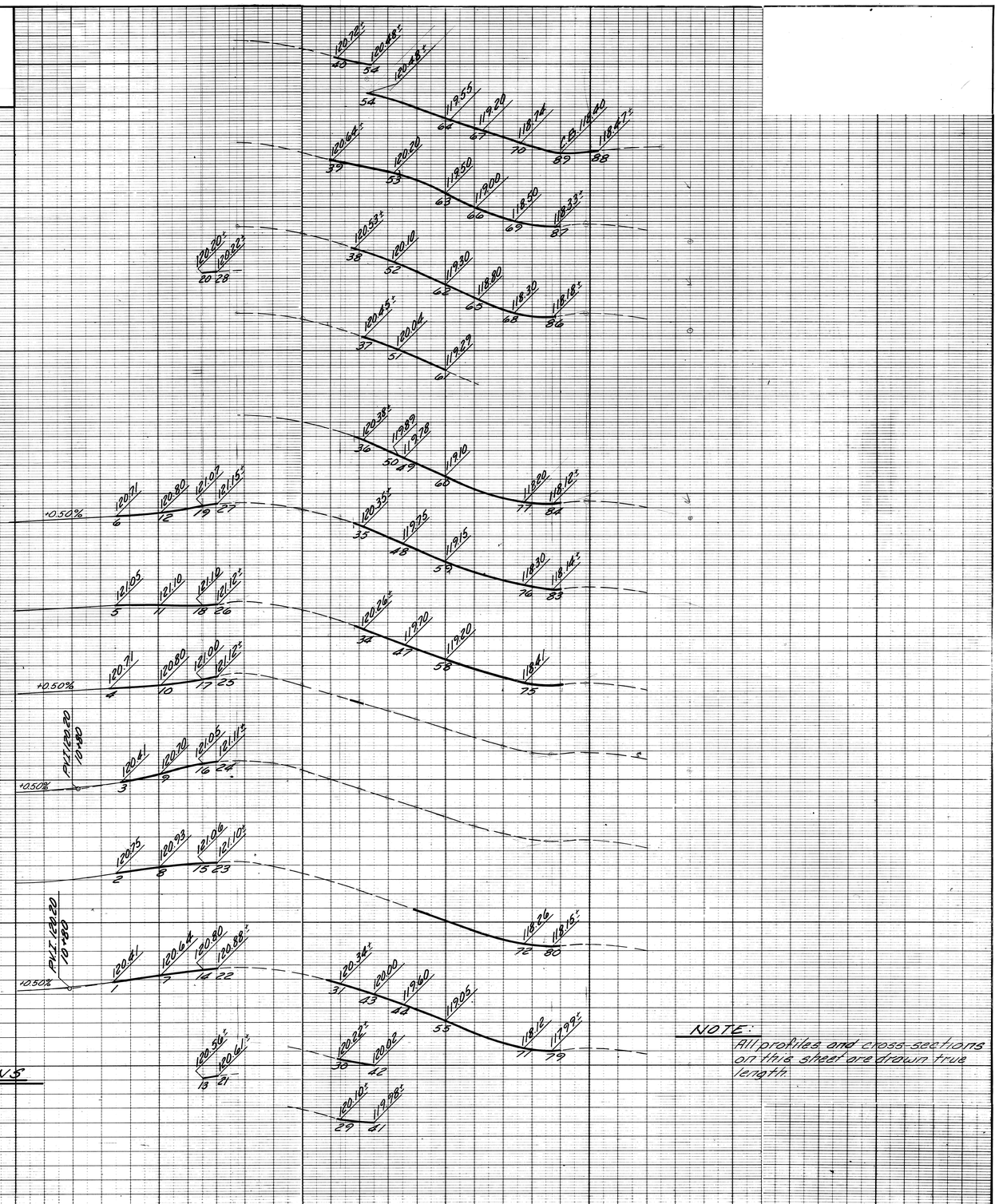
PROFILE LEGEND

- Ex. Pav't Grade
- Prop. Pav't Grade
- Prop. Bit. Resurf.

PROFILES & CROSS-SECTIONS

Scale: Hor. 1"=20'
Vert 1"=2'





NOTE:
All profiles and cross-sections on this sheet are drawn true length.

	BY	CHECKED BY
PLAN	M.S	W.B.
GRADE	M.S	W.B

APPROVED
ENGINEER OF EXPRESSWAYS

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

JEFFERSON AVE.
INTERSECTION IMPROVEMENT
RANDOLPH ST. TO ST. ANTOINE ST.

DETAILED GRADES FOR JEFFERSON AVE. AT BEAUBIEN ST.

SHEET 24 OF 71 SHEETS
CONT. NO. 10225A
ASSIG NO. C-5521
DATE FEB. 21, 1976

B. P. R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
		Wayne	Detroit		

PLANS PREPARED BY CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEERS OFFICE BUREAU OF HIGHWAYS AND EXPRESSWAYS

RANDOLPH 120' WD.

JEFFERSON AVE. 120' WD.

JEFFERSON AVE. REF LINE

Match Line Sta. 4+38, See Sh. No. 26

BRUSH

CALL MISS DIG
48 HOURS PRIOR TO CONSTRUCTION 647-7344

EXIST. UTILITY LEGEND

Exist. (Typ) — UNDERGROUND — Constructed in recent Contract (Typ)

- Sewer & Manhole
- Sewer Inlet or Catch Basin
- Water Main & Gate Well & Valve
- Water Gate & Box
- P.L.C. Cable & Manhole
- P.L.C. Handhole
- D.E. Co. Cable & Manhole
- Steam Line & Manhole
- M.B.T. Cable & Manhole
- Telegraph Cable & Manhole
- Gas Main & Manhole
- D.F.D. Cable & Manhole
- Utilities Abandoned - Prior Contract
- Utilities Abandoned - Prior Contract

ABOVE GROUND

- D.S.R. Pole
- M.B.T. Pole
- Traffic Signal or R.R. Flasher
- D.F.D. Alarm Box
- Fire Hydrant
- D.E. Co. Pole
- P.L.C. Pole (Without Light)
- P.L.C. Lightpole
- Police Box
- Traffic Signal Box

SCALE
1" = 20'

PAVEMENT LEGEND

- EXIST. PAV'T. EDGE
- PROP. PAV'T. EDGE

SQUAD LEADER	J.T. HICKEY	4/63	
DRAWN BY	J. SMITS	4/63	
TRACED BY			
CHECKED BY	W. LOCHER	4/63	
CORRECT	A. Lugus	5/63	
RECOMMENDED FOR APPROVAL	A. F. Hoehn	5/63	
	DES. ASSOC. ENGR.	DATE	

Revised By - M.S. - Feb. 1976
Checked By - B.C. - Feb. 1976

RANDOLPH TO STA. 4+38

GENERAL UTILITY DRAWING

FILE NO. USE NO. 350 STENCIL	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
10225A			25

E-5581 25 OF 71

S.F.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	U-404(32)			
ROUTE	STATE PROJECT	COUNTY	City	SHEET NO.	TOTAL SHEETS
	82111	Wayne	Detroit	36	

PLANS PREPARED BY
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER'S OFFICE
BUREAU OF HIGHWAYS AND EXPRESSWAYS

JEFFERSON AVE. 120' WD.

Match Line Sta. 4+38, See Sh. No 25

Match Line Sta. 10+00, See Sh. No 27

JEFFERSON AVE. REFERENCE LINE

RENAISSANCE CENTER

20' ALLEY

BEAUBIEN ST. 60' WD.

6" Gas
20" Water
4" Gas
6" Gas
48" Water
16" Water
10" Water
6" Water
D.E. Steam
P.L.C.
12" Gas
D.E. Co.
Prop. 6" Edge Drain (Typ.)
15" Sewer
18" Sewer
P.L.C. M.H. Drain
Exist 6" Edge Drain (Typ.)
12" Water
7'-0" Sewer
15" x 20" Sewer
4" Water
M.B.T.
12" Water
12" Gas
3" Gas
2'-6" x 3'-4" Sewer
16" Water
18" Cgl. Sewer
30" Sewer
6'-6" Sewer
2" Water
18" Cgl. Sewer & Water

EXISTING UTILITY LEGEND

UNDERGROUND

Exist (Typ.) / Constructed in recent Contract (Typ.)

- Sewer & Manhole
- Sewer Inlet or Catch Basin
- Water Main & Gate Well & Valve
- Water Gate & Box
- P.L.C. Cable & Manhole
- P.L.C. Handhole
- D.E. Co. Cable & Manhole
- Steam Line & Manhole
- M.B.T. Cable & Manhole
- Telegraph Cable & Manhole
- Gas Main & Manhole
- D.F.D. Cable & Manhole
- Utilities Abandoned-Prior Contract
- Utilities Abandoned-Prior Contract

ABOVE GROUND

- D.S.R. Pole
- M.B.T. Pole
- Traffic Signal or R.R. Flasher
- D.F.D. Alarm Box
- Fire Hydrant
- D.E. Co. Pole
- P.L.C. Pole (Without Light)
- P.L.C. Lightpole
- Police Box
- Traffic Signal Box

PAVEMENT LEGEND

- EXIST PAV'T EDGE
- PROP PAV'T EDGE

SCALE
1" = 20'

Revised By — M.P. — Feb. 1976		
Checked By — R.P. — Feb. 1976		
SQUID LEADER	J. V. WICKEY	4/63
DRAWN BY	J. SMITS	4/63
CHECKED BY	W. LOCHER	5/63
CORRECT	Clint F. Hayes	5/63
RECOMMENDED FOR APPROVAL	F. P. Kuehn	5/63

CALL MISS DIG
48 HOURS PRIOR TO
CONSTRUCTION 647-7344

STA. 4+38 TO STA. 10+00 — GENERAL UTILITY DRAWING

FILE NO. USE NO. 330 STENCIL	10225A	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
				26

C-5521 26 OF 71

B. P. R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	C-375-(63)38			
ROUTE	STATE PROJECT	COUNTY	City	SHEET NO.	TOTAL SHEETS
	82111	Wayne	Detroit	37	

PLANS PREPARED BY
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE
AND
BUREAU OF HIGHWAYS AND EXPRESSWAYS

JEFFERSON AVE. 120' WD.

Match Line Sta. 10+00, See Sh. No. 26

ST. ANTOINE ST. 50'

12" Gas
20" Water
6" Gas
D.E. Steam
4" Gas
48" Water
16" Water
10" Water
D.E. Co.
P.L.C.
6' Edge drain (Typ.)
Prop. 6' Edge Grass
3" Water
2" Water
15" Sewer
12" Gas
3" Gas
4" Water
6" Water
4" Gas
12" Water
6'-6" Sewer
M.B.T.
5'-0" Gal. Sewer
8" Water
4'-6" Gal. Sewer
3'-0" Gal. Sewer
Aband. M.H.

EXIST. UTILITY LEGEND

UNDERGROUND

Exist. (Typ.) / Constructed in recent Contract (Typ.)

- Sewer & Manhole
- Sewer Inlet or Catch Basin
- Water Main & Gate Well & Valve
- Water Gate & Box
- P.L.C. Cable & Manhole
- P.L.C. Handhole
- D.E. Co. Cable & Manhole
- Steam Line & Manhole
- M.B.T. Cable & Manhole
- Telegraph Cable & Manhole
- Gas Main & Manhole
- D.F.D. Cable & Manhole
- Utilities Abandoned - Prior Contract
- Utilities Abandoned - Prior Contract

ABOVE GROUND

- D.S.R. Pole
- M.B.T. Pole
- Traffic Signal or R.R. Flasher
- D.F.D. Alarm Box
- Fire Hydrant
- D.E. Co. Pole
- P.L.C. Pole (Without Light)
- P.L.C. Lightpole
- Police Box
- Traffic Signal Box

PAVEMENT LEGEND

- EXIST. PAV'T. EDGE
- PROP. PAV'T. EDGE

SCALE
1" = 20'

SQUAD LEADER	J.F. WILKEY	4/63
DRAWN BY	J. SMITS	4/63
TRACED BY	W. LOCHER	4/63
CHECKED BY	Edward Rapp	5/63
CORRECT	A.A. Kuehl	5/63
RECOMMENDED FOR APPROVAL		

Revised By - M.S. - Feb. 1976
Checked By - E.P. - Feb. 1976

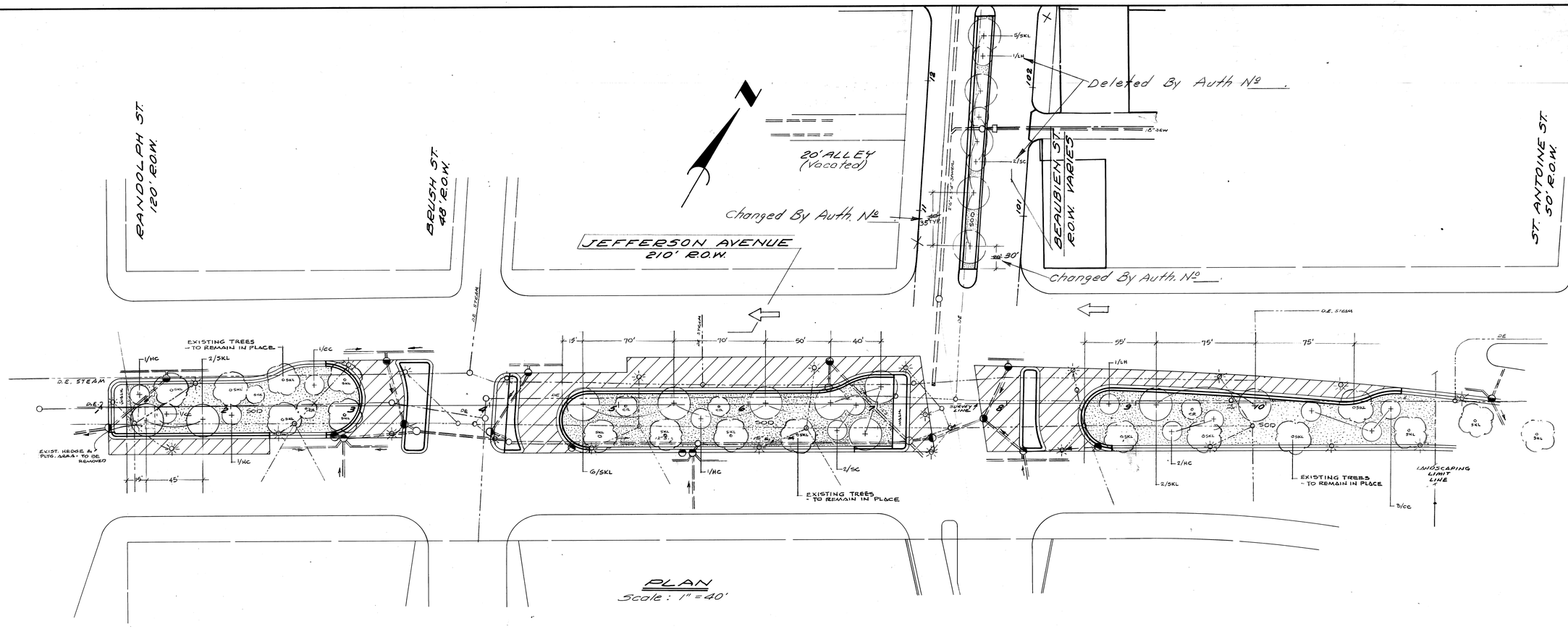
CALL MISS DIG
48 HOURS PRIOR TO
CONSTRUCTION 647-7344

STA. 10+00 TO ST. ANTOINE – **GENERAL UTILITY DRAWING**

FILE NO. USE NO. 200 STENCIL	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
10225A C-5521			27

27 OF 71

K&E 17 0133 12-73 57142



PLAN

Scale: 1" = 40'

RENAISSANCE CENTER

- LEGEND
  - ⊕ - PROPOSED TREES
  - ▨ - SOD AREAS
  - ⊙ - EXISTING TREES

PLANT MATERIALS LIST

KEY	QUANTITY	PLANT NAME	SIZE	ROOT
SKL	15	SKYLINE HONEY LOCUST	4" CAL.	B&B
CC	5	CARMINE CRAB	7-8' H.	"
HC	5	HOPA CRAB	7-8' H.	"
SC	~~4~~ 2	SCHEIDECKER CRAB	7-8' H.	"
LH	~~2~~ 1	LAVELLE HAWTHORNE	7-8'	"

NOTE:

- TREE LOCATIONS MAY BE ADJUSTED IN ORDER TO ALLOW A MINIMUM OF 10' PLANTING SPACE FROM EXISTING/PROPOSED LIGHT STANDARDS.
- ISLANDS SHALL BE "FINISH-LANDSCAPED" WITH A SLIGHT CENTER CROWN IN ORDER TO INSURE PROPER DRAINAGE.

COOR'D	DESCRIPTION	DR'N	CK'D	APV'D	DATE
REVISIONS LOCATED BY COORDINATES ON SHEET					

REFERENCE DRAWINGS

DESIGNED BY J. ECKERT
DRAWN BY
TRACED BY
CHECKED BY E.H. VIALL

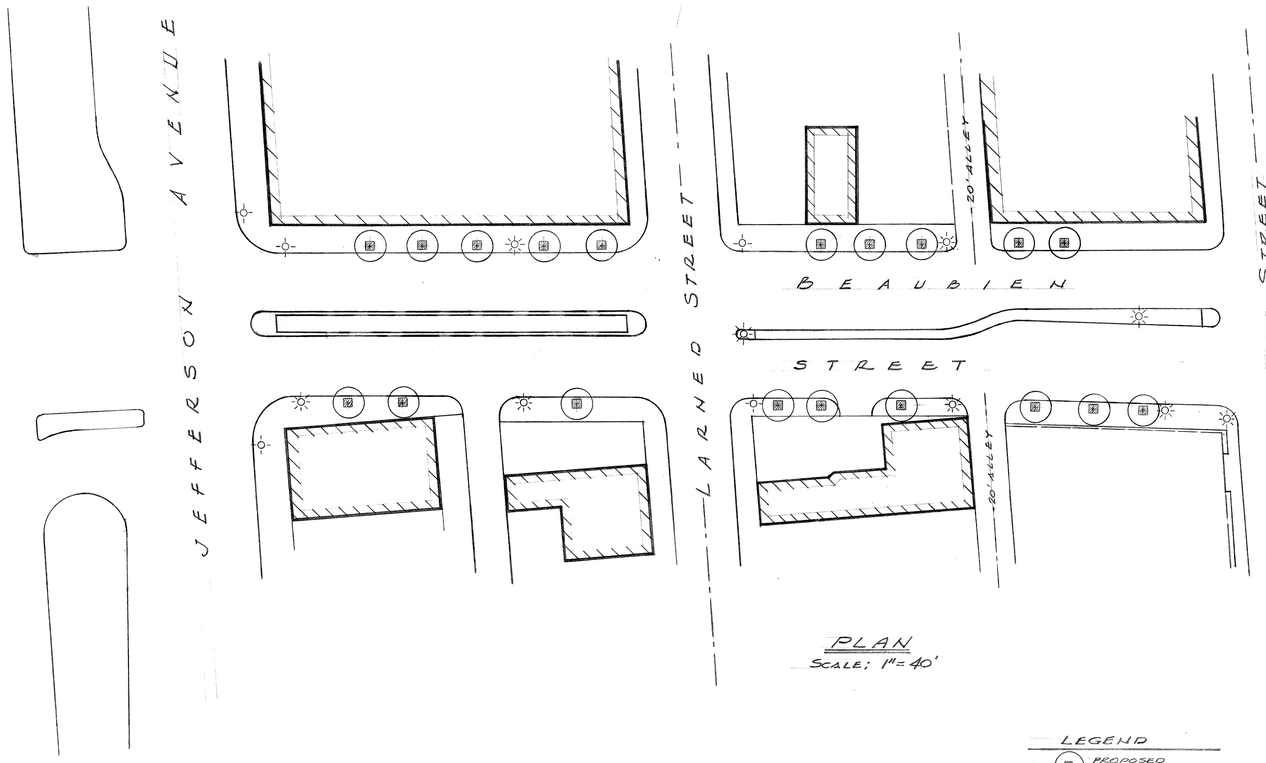
APPROVED: M. Emory Wellman 1/28/76
CHIEF OF LANDSCAPE ARCHITECTURE

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

JEFFERSON ISLANDS REVISION
RANDOLPH ST. TO ST. ANTOINE.
BEAUBIEN AVENUE WIDENING
JEFFERSON TO CONGRESS
• LANDSCAPE DEVELOPMENT PLAN •

SHEET 28 OF 71 SHEETS
CONTRACT No. 06819 A
10225 A
DRWG No. C-5521
DATE FEB. 21, 1976

K&E 17 0153 12-73 3714±

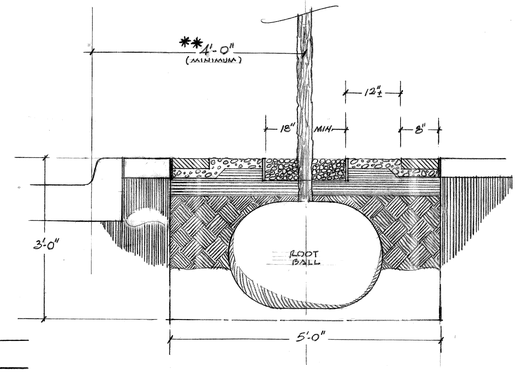


PLAN
SCALE: 1"= 40'

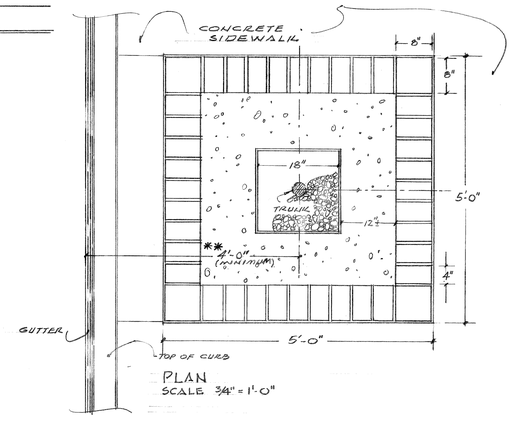
LEGEND
PROPOSED TREE AND WELL

PLANT MATERIAL REQUIRED:
19 - "SKYLINE" HONEY LOCUSTS 4" cal. B&B
Tree Well Paving - - - - 19 Each

** Trees shall be placed so that a minimum 6'0" clear walking space is provided between the tree & the property line. The first two trees north of Larned St. along the east curb line shall have the well placed immediately behind the curb to provide the minimum walking space.



SECTION
SCALE 3/4"=1'-0"



PLAN
SCALE 3/4" = 1'-0"

COOR'D	DESCRIPTION	DR'N	CK'D	AP'VD	DATE
REVISIONS LOCATED BY COORDINATES ON SHEET					

REFERENCE DRAWINGS

DESIGNED BY	J. ECKERT
DRAWN BY	J. ECKERT
TRACED BY	
CHECKED BY	

APPROVED: W. Emory Wellman
CHIEF OF LANDSCAPE ARCHITECTURE

CITY OF DETROIT
CITY ENGINEERING DIVISION
E. P. M. D.

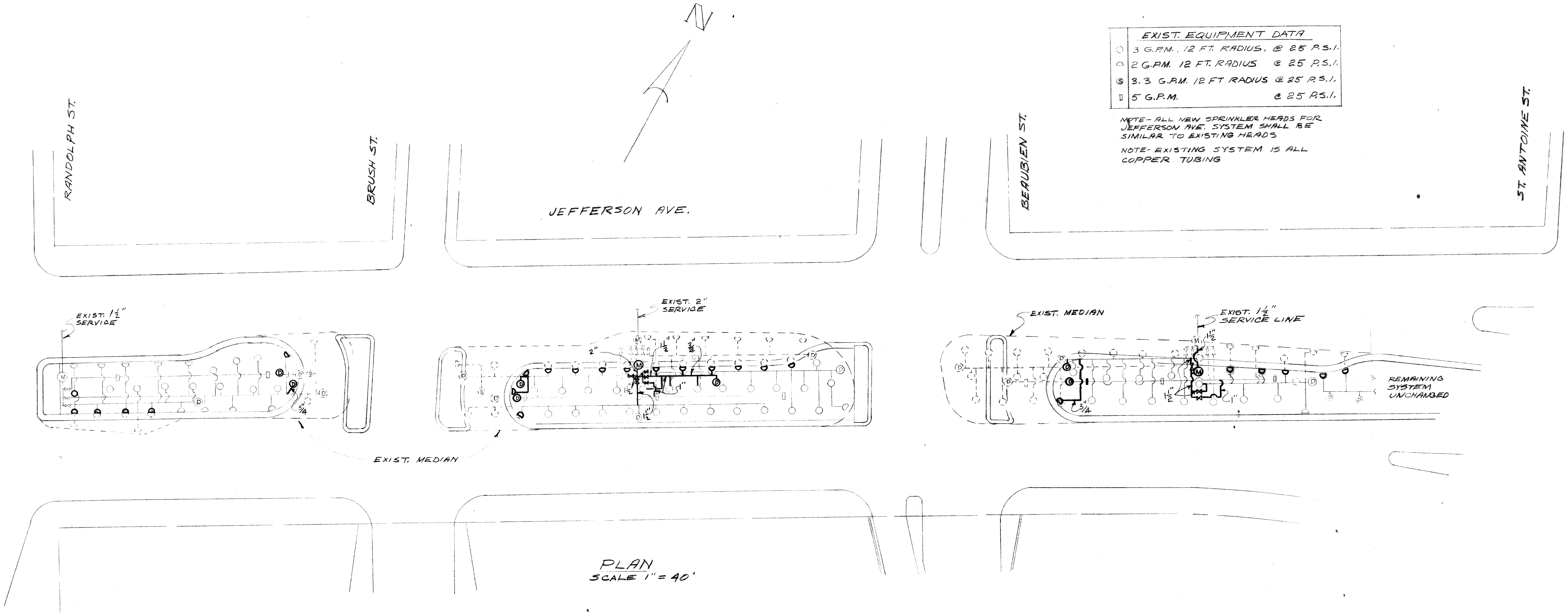
BEAUBIEN ST. WIDENING
JEFFERSON AVE. TO CONGRESS ST.
LANDSCAPE DEVELOPMENT PLAN

SHEET 28A OF 71 SHEETS
CONTRACT No. 06819 A
DRWG No. C-5521
DATE AUGUST 1974

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11

A | B | C | D | E | F | G

K&E 17 0153 12-73 5714±



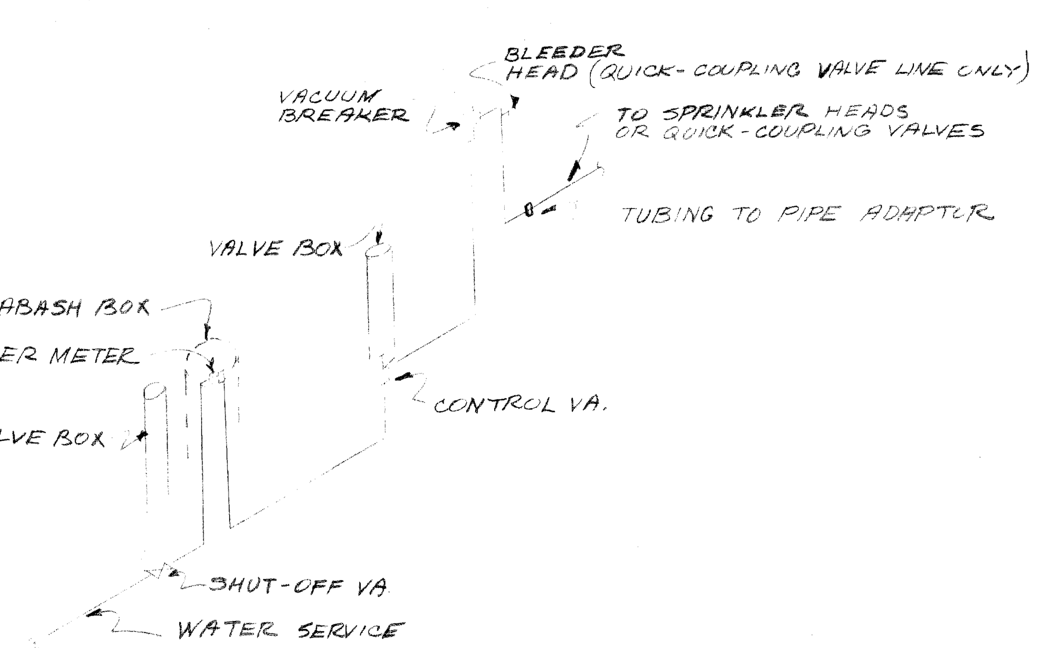
PLAN
SCALE 1" = 40'

	EXIST. EQUIPMENT DATA
○	3 G.P.M., 12 FT. RADIUS, @ 25 P.S.I.
◠	2 G.P.M. 12 FT. RADIUS @ 25 P.S.I.
Ⓢ	3.3 G.P.M. 12 FT RADIUS @ 25 P.S.I.
▯	5 G.P.M. @ 25 P.S.I.

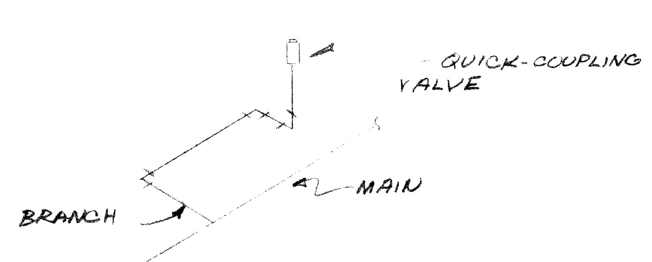
NOTE- ALL NEW SPRINKLER HEADS FOR JEFFERSON AVE. SYSTEM SHALL BE SIMILAR TO EXISTING HEADS

NOTE- EXISTING SYSTEM IS ALL COPPER TUBING

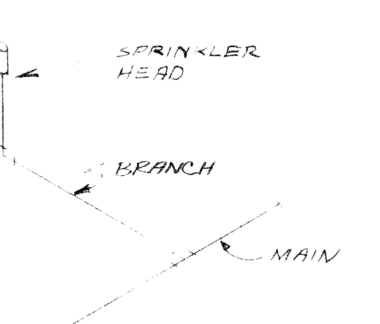
LEGEND	
FULL CIRCLE SPRINKLER HEAD 3 G.P.M. 25 FT. DIA.	ABANDON EXISTING EXISTING TO REMAIN NEW
HALF CIRCLE SPRINKLER HEAD 2 G.P.M. 12 FT. RAD.	
MANUAL DRAIN	
FULL CIRCLE SHRUB HEAD 3.3 G.P.M. 25 FT. DIA.	
1-INCH WATER METER	ABANDON EXISTING LOCATION EXISTING LOCATION TO REMAIN NEW LOCATION
COMBINATION GATE VALVE AND VACUUM BREAKER	ABANDON EXISTING LOCATION EXISTING LOCATION TO REMAIN NEW LOCATION
HOSE CONNECTION 5 G.P.M.	ABANDON EXISTING EXISTING TO REMAIN NEW



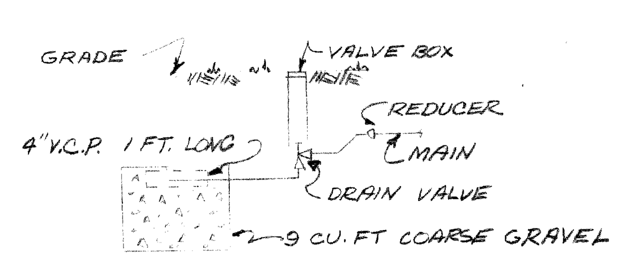
WATER SUPPLY PIPING
NO SCALE



TYP. 3-ELBOW SWING JOINT
NO SCALE



TYP. SPRINKLER HEAD BRANCH CONN.
NO SCALE



TYP. DRAIN CONN.

COOR'D | DESCRIPTION | DR'N | CK'D | AP'VD | DATE
REVISIONS LOCATED BY COORDINATES ON SHEET

REFERENCE DRAWINGS

DESIGNED BY Carlo Darro
DRAWN BY CS
TRACED BY CS
CHECKED BY J. Mayer

APPROVED: [signature] MECHANICAL ENGINEER

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

JEFFERSON AVE.
INTERSECTION IMPROVEMENT
RANDOLPH ST. TO ST. ANTOINE ST.

REVISED LAWN WATERING SYSTEM

SHEET 29 OF 71 SHEETS
CONTRACT No. 10225A
DRWG No.
DATE FEB. 21 1976

#2357

QUANTITY SHEET – E

ITEMS	AS PER PLANS – BEAUBIEN ST.											AS PER PLANS – JEFFERSON AVE.										
	SHEET NO'S.																					
	UNITS	CONTRACT TOTALS	TYPICAL CROSS-SECTIONS	CONSTRUCTION SEQUENCE	REMOVALS	PLAN & PROFILES	UTILITIES	FIRE HYDRANTS	LAWN WATERING SYS.	LANDSCAPE DEVELOPMENT	BEAUBIEN TOTALS	TYPICAL CROSS-SECTIONS	CONSTRUCTION SEQUENCE	REMOVALS	PLAN & PROFILES	UTILITIES	FIRE HYDRANTS	LAWN WATERING SYS.	LANDSCAPE DEVELOPMENT	JEFFERSON TOTALS
Removing Trees, 8-18 in.	Each	4												4						4
Removing Pavement	Sq. Yds.	4893		66	4288						4354			539						539
Removing Curb	Lin. Ft.	62												62						62
Removing Curb & Gutter	Lin. Ft.	827			63						63			764						764
Removing Sidewalk	Sq. Yds.	1488	44		945						989	28		471						499
Basement Cleanout	Cu. Yds.	1472	300		1172						1472									
Abandoning Drainage Structures	Each	15			10						10			5						5
Removing Old Pavement (Patching)	Sq. Yds.	53		43	10						53									
Removing Bituminous Surface	Sq. Yds.	294				158					158				136					136
Earth Excavation	Cu. Yds.	4914				2615					2615				2299					2299
Subgrade Undercutting : Type II	Cu. Yds.	350	250								250	100								100
Subbase (C.I.R)	Cu. Yds.	827													827					827
Aggregate Base - Concrete (4 inches in place)	Sq. Yds.	8354				5917					5917				2437					2437
Concrete Pavement Patching - 9 in. - Nonreinforced	Sq. Yds.	53		43	10						53									
Concrete Base Course - Reinforced - 9 inch	Sq. Yds.	2110													2110					2110
Aggregate Surface Course	C.Y.	21				21					21									
Bituminous Concrete Leveling Course 25-A	Tons	135.4		2	0.4	9					11.4				124					124
Bituminous Concrete Wearing Course Type M	Tons	135.4		2	0.4	9					11.4				124					124
Adjust Water Shut-Off	Each	11					11				11									
Concrete Pavement-Reinforced-9" with Integral Curb	Sq. Yds.	3949				3949					3949									
Concrete Pavement - Nonreinforced - 8"	Sq. Yds.	42				42					42									
Concrete Pavement - Nonreinforced - 9"	Sq. Yds.	119				119					119									
Conc. Pavt. GR 35 P.HE Reinf: 9 in. With Integral Curb	Sq. Yds.	1745				1745					1745									
Conc. Pavt. GR 35 P.HE Nonreinforced - 8 in.	Sq. Yds.	41				41					41									
Temporary Concrete Pavement - Nonreinforced - 8 in.	Sq. Yds.	50		50							50									
Expansion Anchored Lane Ties	Lin. Ft.	1360													1360					1360
12" Class B Sewer (Trench Detail 9)	Lin. Ft.	29				29					29									
12" Sewer C-76-III (Trench Detail 8)	Lin. Ft.	17				10					10			7						7
12" Sewer C-76-III (Trench Detail 9)	Lin. Ft.	325				238					238			87						87
12" Sewer C-76-IV (Trench Detail 9)	Lin. Ft.	14				14					14									
6" Sewer Tap	Each	2													2					2
12" Sewer Tap	Each	7				4					4				3					3
Drainage Structure 4 Ft. (0-8) (with salvaged frame & cover)	Each	1													1					1
Drainage Structure 2 Ft. (0-8) (with salvaged frame & cover)	Each	3													3					3
Catch Basin A	Each	1				1					1									
Catch Basin B	Each	9				9					9									
Catch Basin L	Each	2				2					2									
Catch Basin 18"x 12" Special Y	Each	2				2					2									
Manhole - Standard	Each	1				1					1									
Manhole - Drop	Each	2				2					2									
Manhole Frame and Cover	Each	2				2					2									
Drainage Structure Covers	Pounds	1625													1625					1625
Adjust Drainage Structure Covers	Each	8				7					7				1					1
Reconstruct Drainage Structure	Each	3				1					1				2					2
12" Sewer Trap	Each	8				7					7				1					1
Edge Drains - 6 in.	Lin. Ft.	605													605					605
Concrete Curb and Gutter - Detail C-5	Lin. Ft.	1220													1220					1220
4" Concrete Sidewalk	Sq. Ft.	13805	400		50	10462					10912	252			2641					2893
6" Concrete Sidewalk	Sq. Ft.	1859				1395					1395				464					464
7" Concrete Sidewalk	Sq. Ft.	1943		593							593				1350					1350
Sidewalk Ramps - Type 1	Sq. Ft.	504													504					504
Sidewalk Ramps - Type 3	Sq. Ft.	322				245					245				77					77
~~Field Laboratory: Concrete Proportioning~~	~~Each~~	~~1~~		~~1~~							~~1~~									
Maintaining Traffic - Beaubien	Lump Sum	Lump Sum		L.S.							Lump Sum									
Maintaining Traffic - Jefferson	Lump Sum	Lump Sum											Lump Sum							Lump Sum
Type II Barricade (Drums) Lighted	Each	123		60							60		63							63
Type III Barricade	Each	3		3							3									
Drum Guide Rail	Lin. Ft.	1160		1000							1000		160							160
Class A Sodding	Sq. Yds.	2016				267					267	1178			571					1749
Topsoil Surface - 3 in.	Sq. Yds.	2016				267					267	1178			571					1749
Mobilization - Beaubien	Lump Sum	Lump Sum									Lump Sum									
Adjust Gate Well Manhole Cover	Each	13					13				13									
6" Fire Hydrant (Incl. 6" Gate Valve, Gate Box & Related Piping)	Each	3						3			3									
Remove High Pressure Fire Hydrant	Each	1						1			1									
Lawn Watering System - Beaubien	Lump Sum	Lump Sum							L.S.		Lump Sum									
Lawn Watering System - Jefferson	Lump Sum	Lump Sum														L.S.				Lump Sum
Mobilization - Jefferson	Lump Sum	Lump Sum																		Lump Sum
Trees - Skyline Honey Locust - 4 inch	Each	15							5	5				10	10					10
Trees - Cormine Crab 7-8 Ft. H.	Each	5												5	5					5
Trees - Hopa Crab 7-8 Ft. H	Each	5												5	5					5
Trees - Scheidecker Crab 7-8 Ft. H	Each	4							2	2				2	2					2
Trees - Lavelle Hawthorne 7-8 Ft. H	Each	2							1	1				1	1					1
On the Job Training	Each	2								1					1					1

AS CONSTRUCTED – BEAUBIEN ST.											AS CONSTRUCTED – JEFFERSON AVE.										
SHEET NO'S.																					
UNITS	CONTRACT TOTALS	TYPICAL CROSS-SECTIONS	CONSTRUCTION SEQUENCE	REMOVALS	PLAN & PROFILES	UTILITIES	FIRE HYDRANTS	LAWN WATERING SYS.	LANDSCAPE DEVELOPMENT	BEAUBIEN TOTALS	TYPICAL CROSS-SECTIONS	CONSTRUCTION SEQUENCE	REMOVALS	PLAN & PROFILES	UTILITIES	FIRE HYDRANTS	LAWN WATERING SYS.	LANDSCAPE DEVELOPMENT	JEFFERSON TOTALS
Each	2												2			AUTH 1005				2 ✓
Sq. Yds	4777		66	4231			AUTH 1001, 12, 13			4297 ✓			482			AUTH 1011				482 ✓
Lin. Ft.	213						AUTH 1001, 13			147 ✓			66			AUTH 1005				66 ✓
Lin. Ft.	1040			67			AUTH 1003			67 ✓			973			AUTH 1005, 15				973 ✓
Sq. Yds	1467	44		909			AUTH 1012, 13			953 ✓	28		486			AUTH 1015				514 ✓
Cu. Yds	1486	300		1186			AUTH 1003, 12			1486 ✓										-
EACH	14			9			AUTH 1014			9 ✓			5							5 ✓
Sq. Yds	4			4			AUTH 1013			4 ✓										-
Sq. Yds	258				156		AUTH 1016			156 ✓				97		AUTH 1017				97 ✓
Cu. Yds	4058				2015		AUTH 1012			2015 ✓				2043		AUTH 1011				2043 ✓
Co. Yds.	6	0					AUTH 1014			0 ✓	6					AUTH 1015				6 ✓
Co. Yds.	741									-				741		AUTH 1011				741 ✓
Sq. Yds.	8471				6065		AUTH 1012			6065 ✓				2406		AUTH 1011				2406 ✓
Sq. Yds	4			4			AUTH 1013			4 ✓										-
Sq. Yds.	2106						AUTH 1004, 12			13 ✓				2093		AUTH 1011				2093 ✓
Cu. Yds	0				0		AUTH 1013			0 ✓										-
Tons	176.8		3	1.4	16		AUTH 1013, 21			20.4 ✓				156.4		AUTH 1005, 20				156.4 ✓
Tons	208.9		5	1.4	24.5		AUTH 1013, 21			30.9 ✓				178.0		AUTH 1015, 20				178 ✓
Each	8					8	AUTH 1018			8 ✓										-
Sq. Yds	5692				5692		AUTH 1006, 07, 13			5692 ✓										-
Sq. Yds	141				141		AUTH 1004, 07, 14			141 ✓										-
Sq. Yds	125				125		AUTH 1007, 14			125 ✓										-
Sq. Yds	0				0		AUTH 1006, 07, 13			0 ✓										-
Sq. Yds	0				0		AUTH 1007			0 ✓										-
Sq. Yds	53				53		AUTH 1003			53 ✓										-
Lin. Ft.	1361									-				1361		AUTH 1017				1361 ✓
Lin. Ft.	37				37		AUTH 1003, 12			37 ✓										-
Lin. Ft.	15				10		AUTH 1006, 12			10 ✓				5		AUTH 1011				5 ✓
Lin. Ft.	395				317		AUTH 1012			317 ✓				78		AUTH 1011				78 ✓
Lin. Ft.	32				32		AUTH 1006, 12			32 ✓										-
Each	2									-				2						2 ✓
Each	7				4					4 ✓				3						3 ✓
Each	1									-				1						1 ✓
Each	3									-				3						3 ✓
Each	7				7		AUTH 1001, 04, 06, 07			7 ✓										-
Each	6				6		AUTH 1004, 07			6 ✓										-
Each	0				0		AUTH 1001, 06			0 ✓										-
Each	2				2					2 ✓										-
Each	0				0		AUTH 1001			0 ✓										-
Each	2				2					2 ✓										-
Each	3				3		AUTH 1004			3 ✓										-
Pounds	1662									-				1662		AUTH 1011				1662 ✓
Each	9				7					7 ✓				2		AUTH 1011				2 ✓
Each	7				5		AUTH 1009, 13, 18			5 ✓				2		AUTH 1011, 17				2 ✓
Each	6				5		AUTH 1007, 12			5 ✓				1						1 ✓
Lin. Ft.	643									-				643		AUTH 1005, 11				643 ✓
Lin. Ft.	1172									-				1172		AUTH 1015				1172 ✓
Sq. Ft	13476	400		50	9973		AUTH 1018			10423 ✓				3053		AUTH 1015				3053 ✓
Sq. Ft	1728				1286		AUTH 1014			1286 ✓				442		AUTH 1015				442 ✓
Sq. Ft	2345		829				AUTH 1014			829 ✓				1516		AUTH 1015				1516 ✓
Sq. Ft	680				292		AUTH 1014			292 ✓				388		AUTH 1015				388 ✓
Sq. Ft	990				639		AUTH 1004, 07, 14			639 ✓				351		AUTH 1015				351 ✓
Lump Sum	Lump Sum		L.S.							Lump Sum ✓										-
Lump Sum	Lump Sum											Lump Sum								Lump Sum ✓
Each	141		74				AUTH 1006, 13			74 ✓		67				AUTH 1005, 17				67 ✓
Each	3		3							3 ✓										-
Lin. Ft.	1013		825				AUTH 1001, 16			825 ✓		188				AUTH 1005, 15				198 ✓
Sq. Yds	3662				208	2325	AUTH 1014			208 ✓	2325			1129		AUTH 1017				3454 ✓
Sq. Yds	3688				211	2340	AUTH 1014			211 ✓	2340			1137		AUTH 1017				3477 ✓
Lump Sum	Lump Sum									Lump Sum ✓										-
Each	12					12	AUTH 1016			12 ✓										-
Each	3					3				3 ✓										-
Each	0					0	AUTH 1006			0 ✓										-
Lump Sum	Lump Sum							L.S.		Lump Sum ✓										-
Lump Sum	Lump Sum									-								L.S.		Lump Sum ✓
Lump Sum	Lump Sum									-										Lump Sum ✓
Each	32								22	22 ✓									10	10 ✓
Each	5									-									5	5 ✓
Each	5									-									5	5 ✓
Each	2						AUTH 1006		0	0 ✓									2	2 ✓
Each	1						AUTH 1006		0	0 ✓									1	1 ✓
Each	.13						AUTH 1018			.11 ✓				.02		AUTH 1017				.02 ✓

CHECKED
CONTRACT SECTION
DATE 11-9-76

PLAN ESTIMATE BY _____ DATE _____ CHECKED BY R.P. DATE 2-18-76 R.A.C. DATE 2-18-76 DATA COMPLETED _____ PROJ. ENG DATE _____ HISTORY CHECKED ENTERED ON PLANS BY _____ DATE 2-21-76

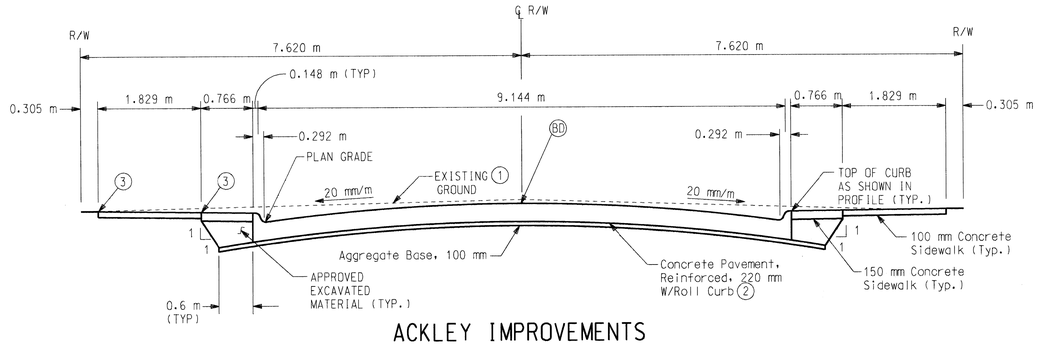
BEAUBIEN ST. AND JEFFERSON AVE. QUANTITIES SHEET NO. C-5521

CONTRACT No 06819A & 10225A SH. 30 OF 71

CONTROL SECTION EDA 82522 | JOB NO. 40935A | SH. NO. 2

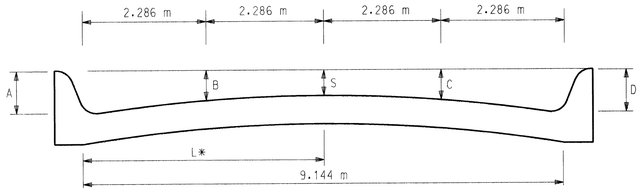
EXISTING BY: DATE:
PROPOSED BY: DATE:
LAST CORRECTION BY: DATE:

			FINAL R.O.W.
AUTH	DATE	NO.	REVISION



ACKLEY IMPROVEMENTS
TYPICAL SECTION

APPLIES: STA. 1+006.880 TO STA. 1+227.750



ELEMENTS OF A 9.144 m PAVEMENT

CURB HEIGHT	A	B	C	D	L*	S
178 mm	0.178	0.106	0.106	0.178	4.572	0.083

* DISTANCE FROM FACE OF CURB TO CROWN

JOINT LEGEND

(B) LONGITUDINAL BULKHEAD CONSTRUCTION JOINT PER MDOT STANDARD PLAN R-41 B

(D) LONGITUDINAL LANE TIE JOINT WITH TIE BARS PER MDOT STANDARD PLAN R-41 B

(BD) OPTIONAL B OR D

NOTES:

1. MAJORITY OF EXISTING PAVEMENT ON ACKLEY IS CRUSHED BITUMINOUS MIXED WITH ROAD GRAVEL. THE BLOCK BETWEEN VARNEY AND BENHAM HAS A 76 mm BITUMINOUS CAP OVER EXISTING GRAVEL WHICH IS TO BE REMOVED AS PART OF AND INCLUDED IN THE COST OF EARTH EXCAVATION.
2. TYPE IV CURB-ROLL INTEGRAL, REFERENCE CITY OF DETROIT STREETS DETAIL PAVING AND DRAINAGE STANDARDS C-4381 STANDARD TYPES OF CONCRETE CURBS
3. ELEVATION AS SHOWN ON DETAIL GRADING SHEET. (TYPICAL BOTH SIDES)

SNELL ENVIRONMENTAL GROUP, INC. A DLZ Company
151 W. CONGRESS, SUITE 328, DETROIT, MICHIGAN 48226
TELEPHONE (313) 961-4040

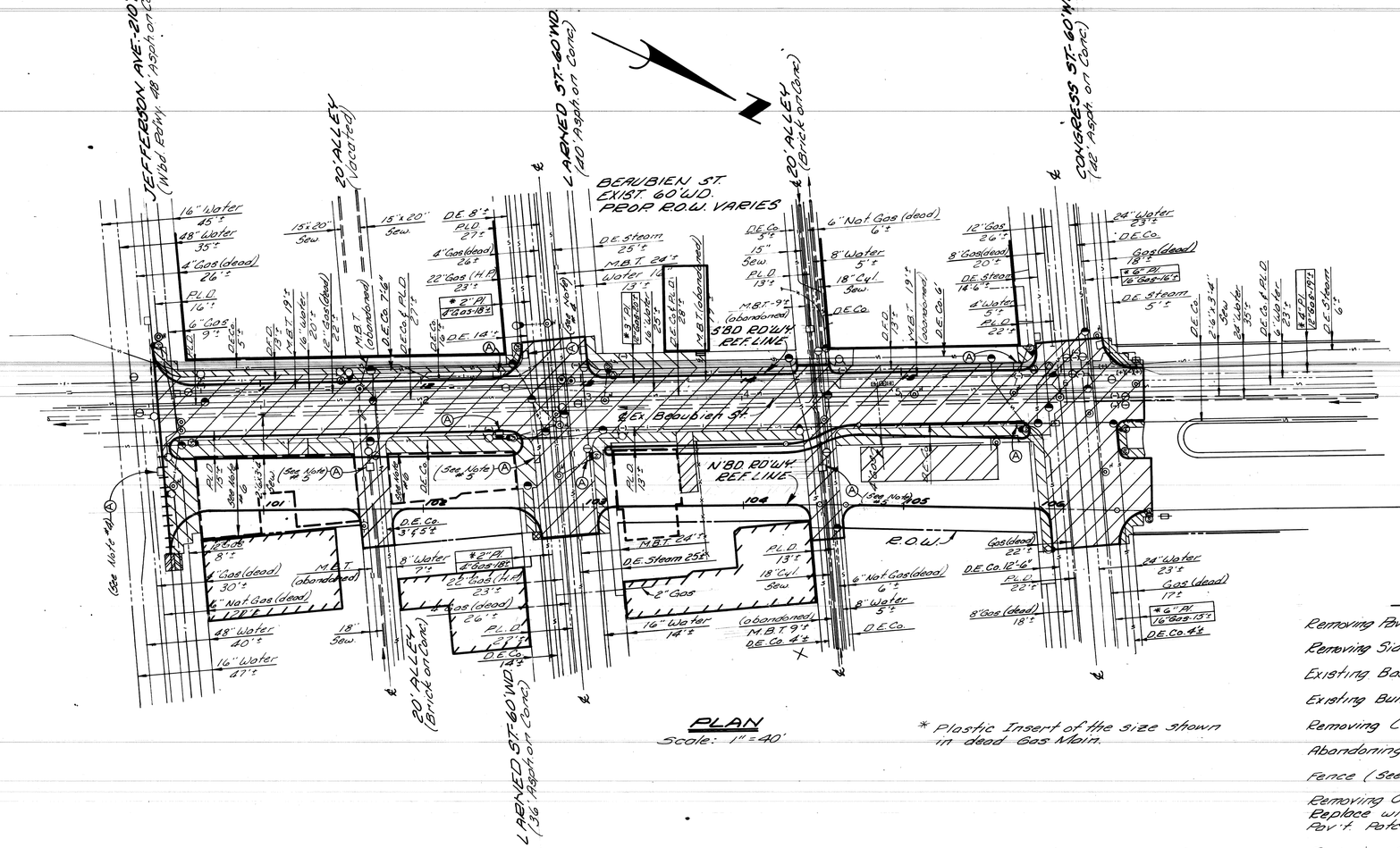
CITY OF DETROIT
CITY ENGINEERING DEPARTMENT
900 CADILLAC TOWER
DETROIT, MICHIGAN 48226
PHONE (313) 224-3955

ACKLEY TYPICAL CROSS SECTION

DATE	SCALE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO. R.O.W	SHEET NO. CONST.
06/23/97	N.T.S.	EDA 82522	40935A	SEG		2 of 14

FILE NAME: h:\97415268.00\combind\acktyp.dgn Jul. 15, 1997 10:37:24

K&E 17 0153 12-73 37142



PLAN
Scale: 1" = 40'

* Plastic Insert of the size shown in dead Gas Main.

REMOVAL LEGEND

- Removing Pavement
- Removing Sidewalk
- Existing Basements
- Existing Buildings to Remain
- Removing Curb & Gutter
- Abandoning Drainage Structures
- Fence (See Note #3) — A
- Removing Old Pav't (Patching). Replace with 2" Bit. Conc. on Conc. Pav't Patching – 9" non-reinf.
- Removing Sidewalk. Replace with 4" Conc. Sidewalk
- Prop. Pav't.
- Removing Old Pav't (Patching) Replace with Conc. Pav't Patching – 9" non-reinf.

NOTES

1. Dimensions locating existing utility lines are based on best available records and are not guaranteed for accuracy.
2. For Utility Legend & Symbols See Sh. # 14
3. The removal & disposal of all fence shall be incidental to the Contract Cost
4. Before abandoning the C.B. install the connecting sewer to maintain flow.
5. Abandon Catch Basin but maintain Sewer flow.
6. These basements were excavated and backfilled in accordance with the typical cross-section for this project when the buildings were demolished. If the Engineer finds the existing backfill satisfactory, the excavation and backfill called for in this contract should be deleted.

CALL MISS DIG
48 HOURS PRIOR TO
CONSTRUCTION 647-7344

COOR'D	DESCRIPTION	DR'N	CK'D	APV'D	DATE
REVISIONS LOCATED BY COORDINATES ON SHEET					

REFERENCE DRAWINGS

DESIGNED BY
DRAWN BY M.S.
TRACED BY
CHECKED BY R.C.

APPROVED:
ENGINEER OF EXPRESSWAYS

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

BEAUBIEN STREET WIDENING
JEFFERSON AVE. TO CONGRESS ST.
REMOVALS

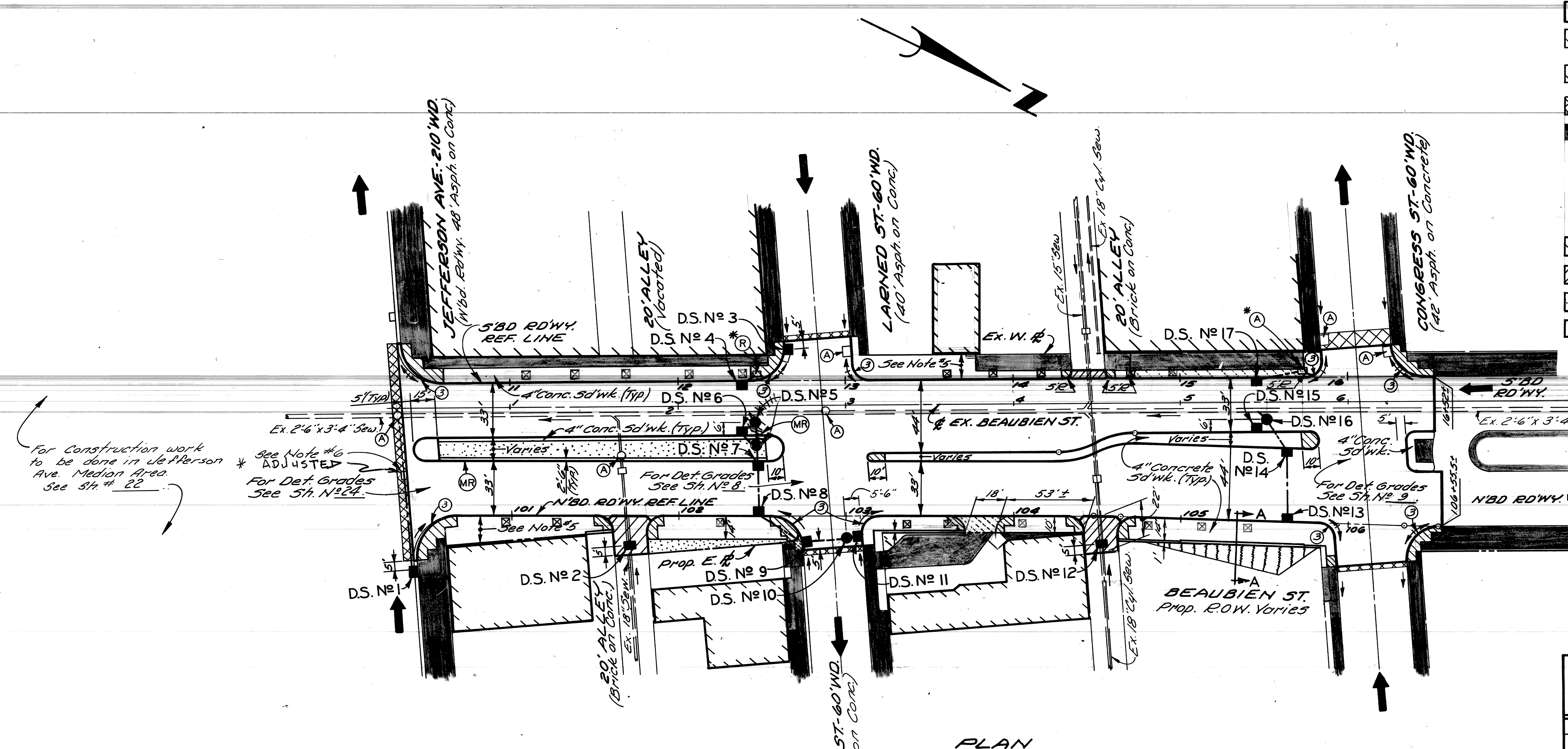
SHEET 5 OF 71 SHEETS
CONTRACT No. 06819A
DRWG No. C5521
DATE FEB 21, 1976

C.B.M.-Elev. 124.04 Arrow on Hydrant West Side Beaubien at Sta. 10+63 S'BD. RD.WY.

C.B.M.-Elev. 123.50 Arrow on Hydrant East Side Beaubien at Sta. 102+42 N'BD. RD.WY.

C.B.M.-Elev. 122.27 Arrow on Hydrant West Side Beaubien at Sta. 14+62 S'BD. RD.WY.

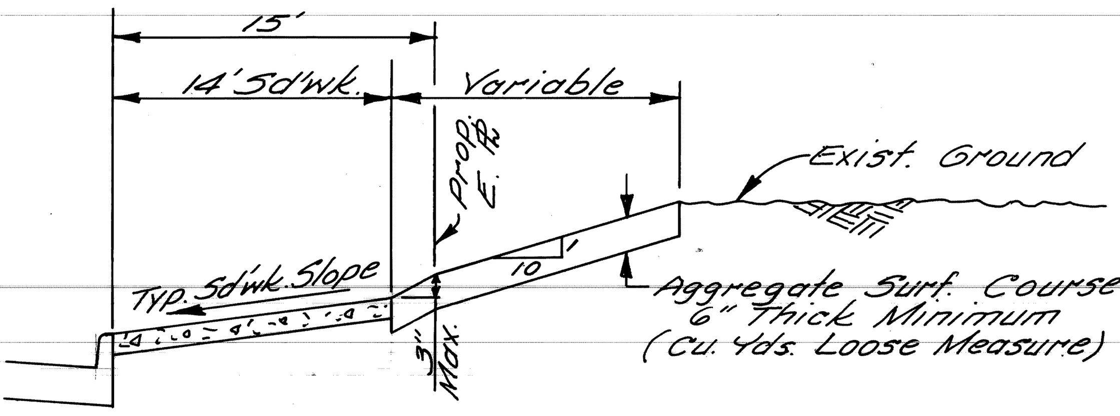
P.B.M. # 28-354A Elev. 120.898 NE Corner Jefferson & Brush



PLAN
Scale: 1" = 40'

*Remove Ex. C.B. Cover (Incidental) & Replace with M.H. Frame & Cover

* ADJUSTED DRAINAGE STRUCTURE COVER STRUCTURE HAS EXISTING EDGE DRAINS IN SERVICE. NOT ABANDONED.



SECTION A-A
No Scale

LEGEND

- Conc. Pav't. - Reinf. - 9" with Int. Curb
- Conc. Pav't. Non. Reinf. - 8" (Driveway)
- 6" Conc. Sidewalk - (Sidewalk Ramps are paid for Separately.)
- Strip and Resurface
- Existing Sidewalk or Driveway to Remain
- (1), (3) Sidewalk Ramps (4" or 6") Types 1 & 3
- (A) Adjusting Drainage Structure Covers.
- (MR) Mower Ramp (Incidental to Contract Cost) For Construction details, See Sh. # 17.
- Existing Building
- Conc. Pav't. - Non-Reinf. - 9" (Alley)
- Class "A" Sodding
- Grade Private Property as shown in Section A-A
- (R) Reconstructing Drainage Structures.
- ⊠ Sidewalk Tree Wells, See Sh. # 28A.

D. S. NO.	TYPE OF STRUCT.	WITH TRAP (T)	SEWER LENGTH & TYPE LEAVING D.S. LENGTH (FT.)	SIZE (IN.)	CLASS	SEWER TAP SIZE (IN.)	TRENCH DETAIL 8 (LIN. FT.)	9	COMMENTS
1	C.B. ~~B~~A	T	57 ~~56~~	12	C-76-III			56	
2	C.B. 18"x12" Special "Y"		19 ~~18~~	12	B			18	
3	C.B. ~~B~~A	T	3 ~~4~~	12	C-76-III			4	See Note #7
4	C.B. ~~A~~B	Const. half-trap (Incid.)	9.9 ~~9~~	12	C-76-III	12		9	See Note #10
(1) 5	M.H.-Drop		18.5 ~~6~~	12	C-76-IV	12		6	
6	C.B. B	T	12.9 ~~4~~	12	C-76-III			4	
7	C.B. B	T	3.8 ~~5~~	12	C-76-III		10	5	
8	C.B. B		30.9 ~~27~~	12	C-76-III			27	
9	C.B. ~~B~~A		31.3 ~~28~~	12	C-76-III			28	
~~10~~	~~M.H.-Std.~~		~~26~~	~~12~~	~~C-76-III~~			~~26~~	See Notes #8 & #9
11	C.B. ~~A~~A		34 ~~12~~	12	C-76-III			2	See Note #9
12	C.B. 18"x12" Special "Y"		15.1 ~~X~~	12	B			11	
13	C.B. A		41.8 ~~39~~	12	C-76-III			39	
14	C.B. B	T	24.8 ~~14~~	12	C-76-III			14	
15	C.B. B	T	10.2 ~~8~~	12	C-76-III			2	
16	M.H.-Drop		13.5 ~~8~~	12	C-76-IV	12		8	
17	C.B. ~~B~~A	T	26.5 ~~22~~	12	C-76-III	12		22	

(1) LOCATED 12.5' E. OF PLAN LOCATION

NOTES:
1. For Alignment, See Sh. # 3.
2. For Utility Legend & Symbols, See Sh. # 14.
3. For Driveway Details, See Sh. # 14.
4. For Construction Sequence, See Sh. # 4.
5. Place full sd'wk. to building in this area.
6. Salvage Exist. Catch Basin frame & cover and place on D.S. #1.
7. Connect new sewer to existing catch basin outlet sewer (Connection incidental to new sewer.)
8. Place 4' stub of 3" sewer on the North Side & connect to existing 3" sewer placed by property owner to drain parking lot. (Incidental to contract cost.)
9. Construct C.B. A instead of D.S. Nº's 10 & 11 if it will not interfere with existing 16" Water line.
10. Construct C.B. B with trap if this will not interfere with D.E. line.
11. All drainage construction on this sheet shall be done according to City of Detroit Standards.

COOR'D	DESCRIPTION	DR'N	CK'D	AP'VD	DATE
	Added Sd'wk. Tree Wells, Symbol ⊠	MP	RP		8-76

REVISIONS LOCATED BY COORDINATES ON SHEET

REFERENCE DRAWINGS

DESIGNED BY:
DRAWN BY: M.P.
TRACED BY:
CHECKED BY: I.K.

APPROVED: Allen E. [signature]
ENGINEER OF EXPRESSWAYS

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

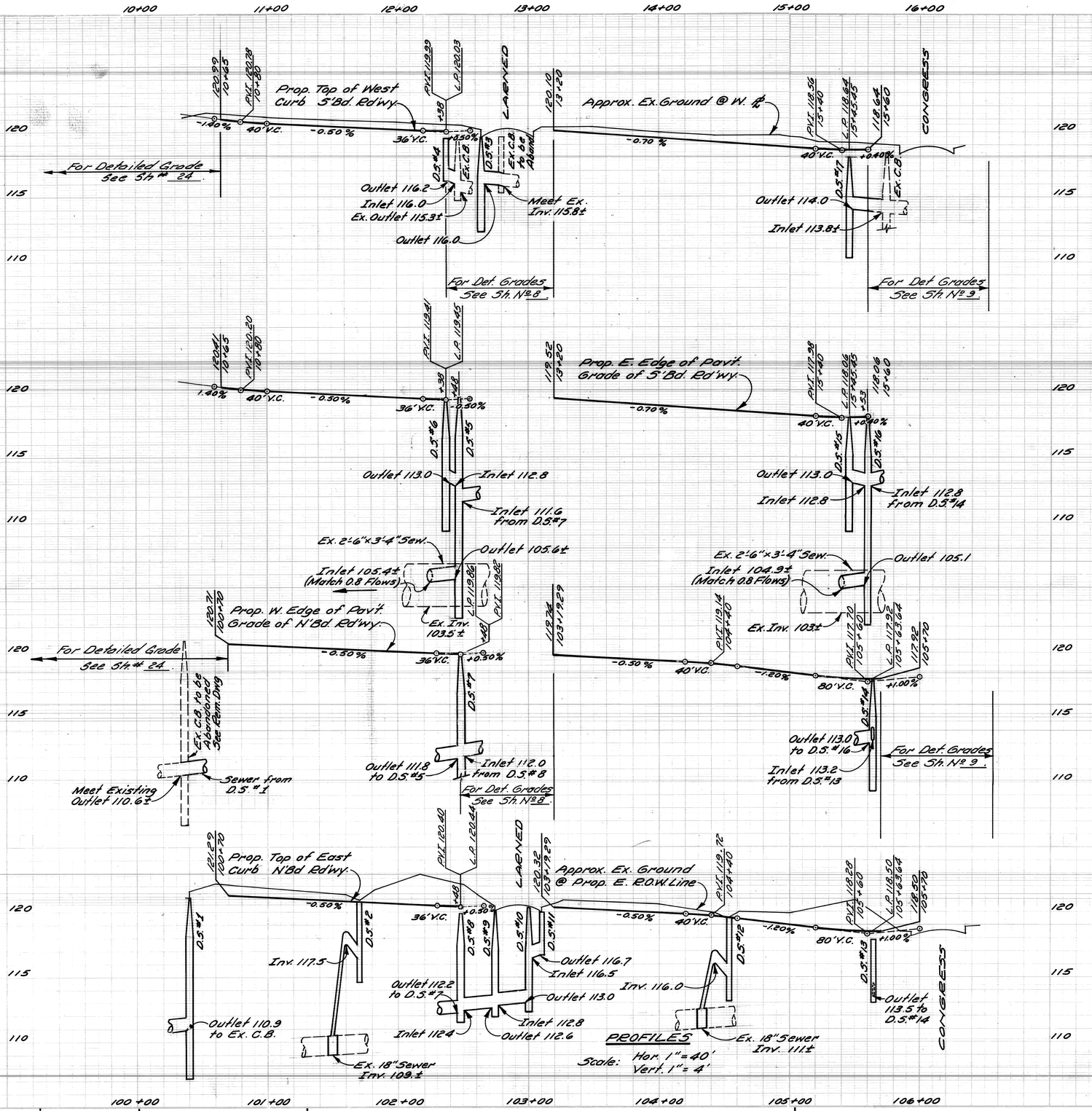
BEAUBIEN STREET WIDENING
JEFFERSON AVE TO CONGRESS ST

PLAN

SHEET 6 OF 71 SHEETS
CONTRACT No. 06819 A
DRWG No. C-5521
DATE FEB 21, 1976

K&E 19 8153 3-72 448-

FINAL R.O.W.



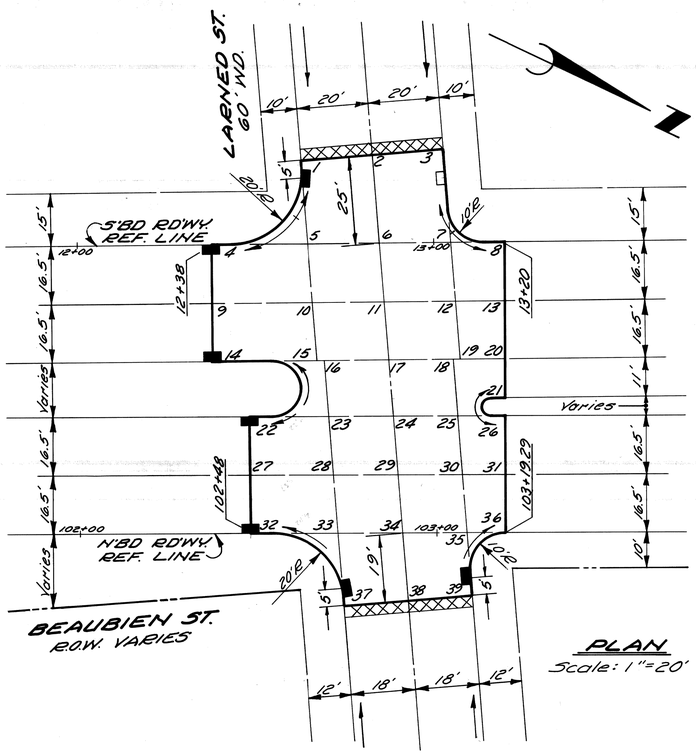
DESIGNED BY		APPROVED: Allen E. Pfeiffer ENGINEER OF EXPRESSWAYS	CITY OF DETROIT CITY ENGINEERING DEPARTMENT	BEAUBIEN STREET WIDENING JEFFERSON AVE. TO CONGRESS ST. PROFILES	SHEET 7 OF 71 SHEETS CONTRACT NO. 06819A C-5521 DATE: FEB 21, 1976
DRAWN BY	M. P.				
CHECKED BY	W. B.				

EDCO+ 127M 1-75 59721

SCALE	HORIZONTAL	BOOK	LEVEL	BEFORE STARTING CONSTRUCTION_____CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.
	VERTICAL	NO. PG.	DATE	
		PAVING COMPLETED		

NOTE - FOR SYMBOLS (A) ETC., SEE STANDARD DETAIL DRAWING NO C-4375

BENCH MARKS ELEV

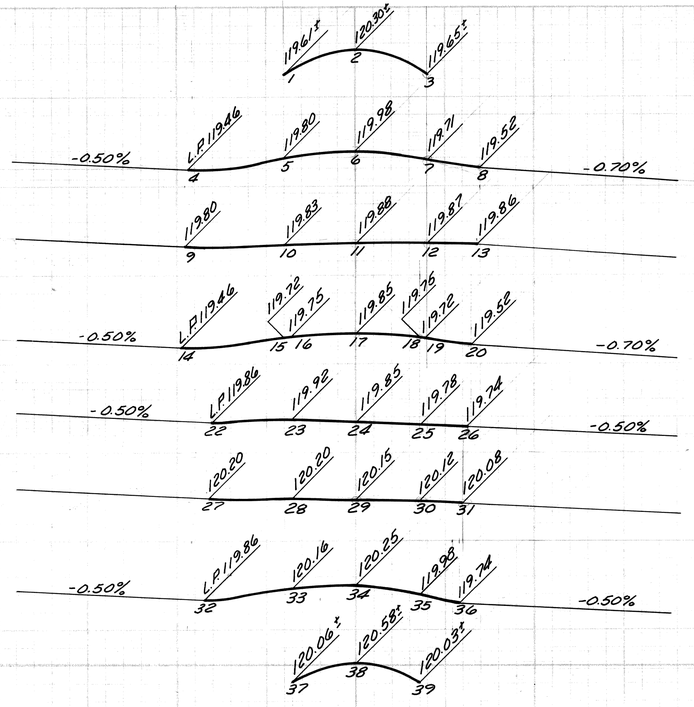


PLAN

Scale: 1"=20'

PLAN LEGEND

- Prop. Pav't Limits
- Strip & Resurface
- Prop. Catch Basin
- Exist. Catch Basin



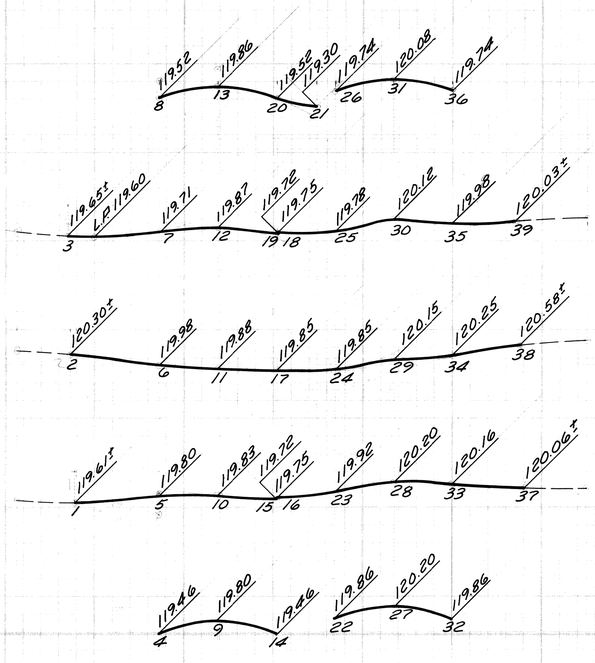
PROFILES & CROSS-SECTIONS LEGEND

- Prop. Pavement Grade
- Exist. Pavement Grade

NOTES:
All Profiles & Cross-Sections on this sheet are drawn true length

PROFILES & CROSS-SECTIONS

Scale: Hor. 1"=20'
Vert. 1"=2'



DESCRIPTION	DR'N	CK'D	AP'VD	DATE
REVISIONS				

	BY	CHECKED BY
PLAN	M.P.	W.B.
GRADE	M.S.	W.B.
ESTIMATE		
FINAL	CHECK	REVIEW

APPROVED:
ENGINEER OF EXPRESSWAYS
HIGHWAY ENGINEER

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

BEAUBIEN STREET WIDENING
JEFFERSON AVE TO CONGRESS ST.
DETAILED GRADES FOR BEAUBIEN ST. AT LARNED ST.

INDEX NO.
TOPO NO.
INDEXED

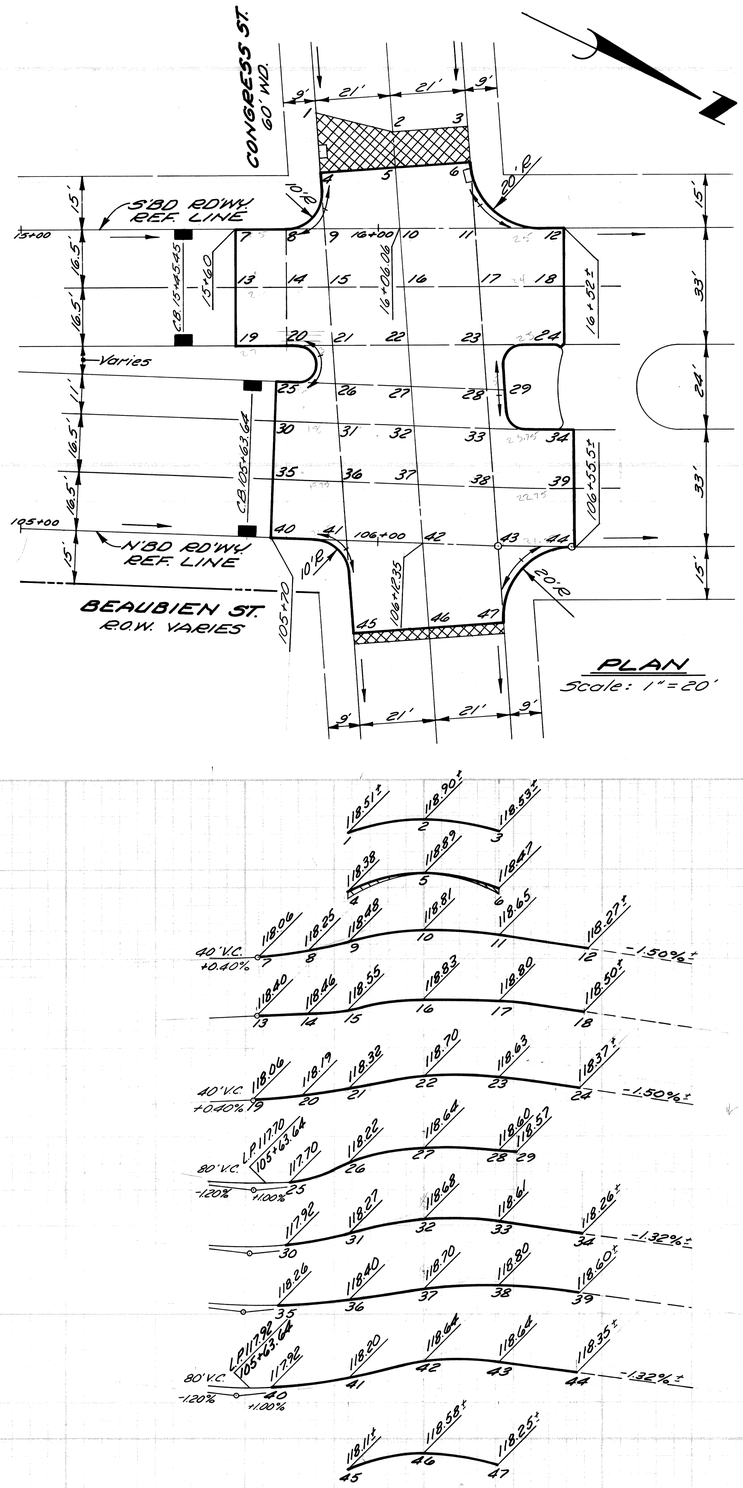
SHEET 8 OF 71 SHEETS
CONTRACT NO. 06819A
ASSIGNMENT NO. C-5521
DATE FEB 21, 1976

EDCO• 127M 1-75 59721

SCALE	HORIZONTAL	BOOK NO. PG.	LEVEL	BEFORE STARTING CONSTRUCTION_____CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.
	VERTICAL	PAVING COMPLETED	DATE	

NOTE – FOR SYMBOLS (A) ETC., SEE STANDARD DETAIL DRAWING NO C-4378

BENCH MARKS ELEV

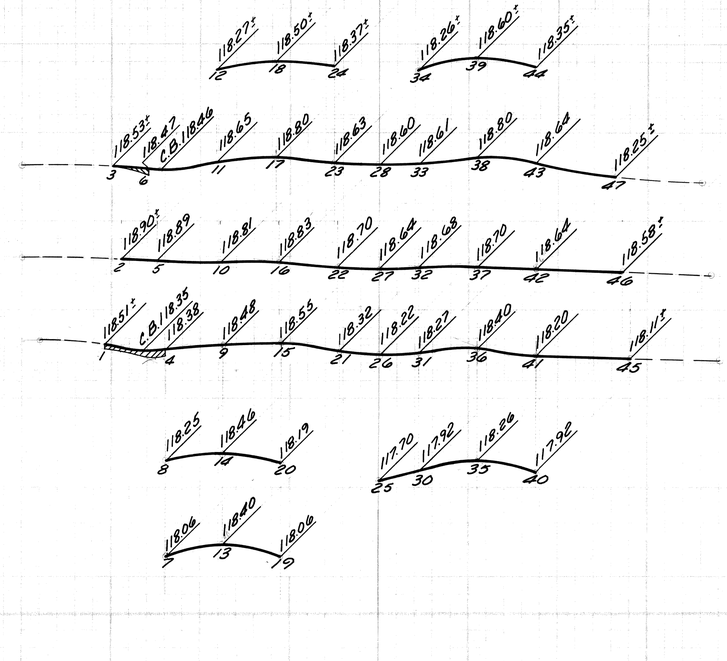


PLAN
Scale: 1" = 20'

LEGEND
Strip & Resurface

LEGEND
Ex. Pav't Grade
Prop. Pav't Grade
Prop. Bit. Resurfacing

NOTE:
All profiles and cross-sections on this sheet are drawn true length.



PROFILES & CROSS-SECTIONS
Scale: Hor. 1" = 20'
Vert. 1" = 2'

		BY	CHECKED BY
	PLAN	Bonus	R.B.P.
	GRADE	Bonus	R.B.P.
	ESTIMATE		
	FINAL	CHECK Comly	REVIEW

DESCRIPTION | DR'N | CK'D | AP'VD | DATE
REVISIONS

APPROVED: Allen E. Rogers
ENGINEER OF EXPRESSWAYS
HIGHWAY ENGINEER

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

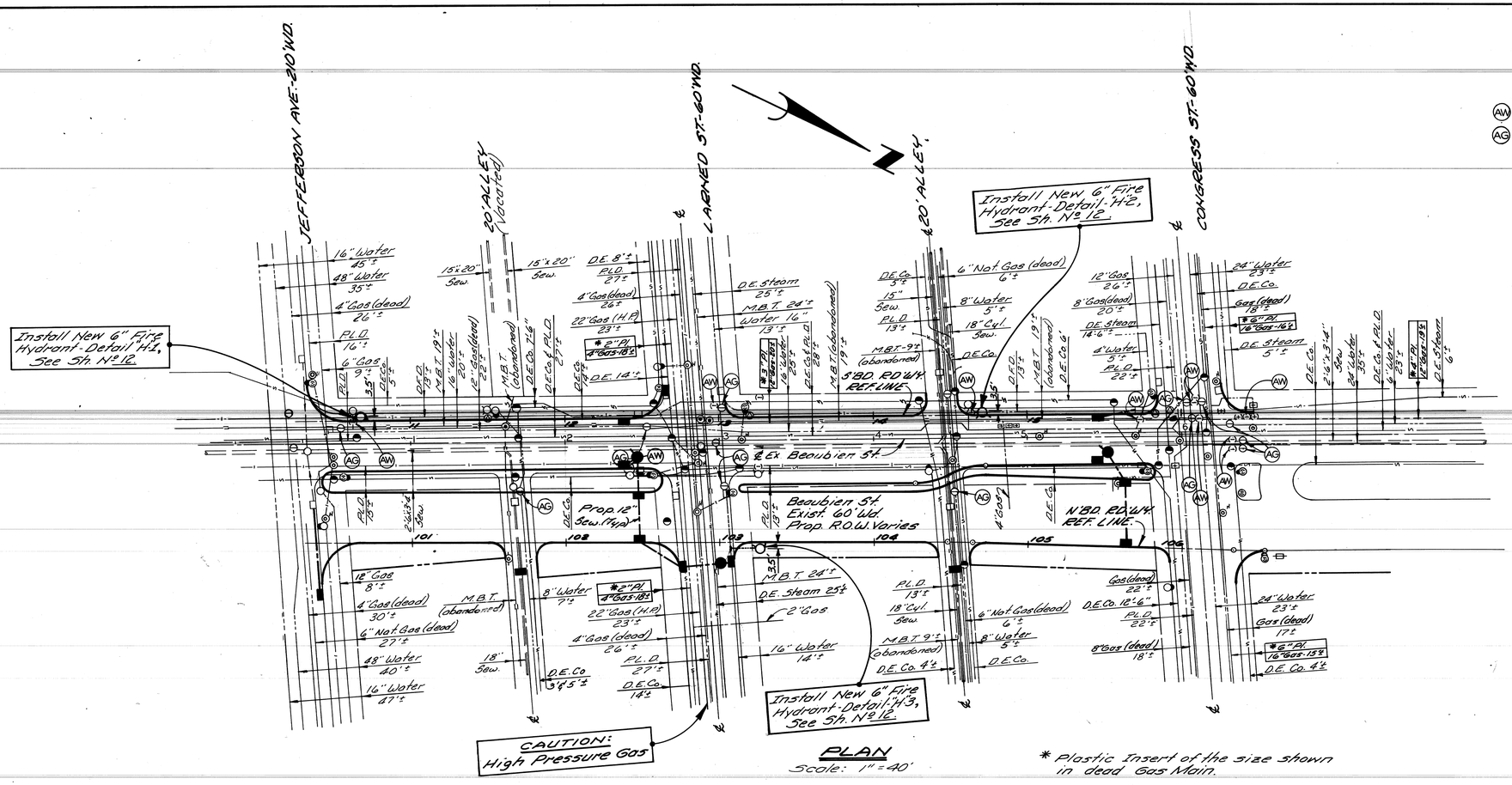
BEAUBIEN STREET WIDENING
JEFFERSON AVE. TO CONGRESS ST.

DETAILED GRADES FOR BEAUBIEN AT CONGRESS

INDEX NO.
TOPO NO.
INDEXED

SHEET 9 OF 71 SHEETS
CONTRACT NO. 06819 A
ASSIGNMENT NO. C-5521
DATE FEB 21, 1976

K&E 17 0153 12-73 3714±



WORK LEGEND

(AW) Adjusting Water Shutoffs

(AG) Adjusting Gatewell Manhole Cover

PLAN

Scale: 1" = 40'

* Plastic Insert of the size shown in dead Gas Main.

NOTES:

1. Dimensions locating existing utility lines are based on the best available records but are not guaranteed for accuracy.
2. For utility legend and symbols, See Sh. # 14.

CALL MISS DIG
48 HOURS PRIOR TO CONSTRUCTION 647-7344

COOR'D	DESCRIPTION	DR'N	CK'D	APV'D	DATE	REFERENCE DRAWINGS	
	REVISIONS LOCATED BY COORDINATES ON SHEET					DESIGNED BY	
						DRAWN BY	M.S
						TRACED BY	
						CHECKED BY	I.K.

APPROVED: Allen E. Rogge
ENGINEER OF EXPRESSWAYS

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

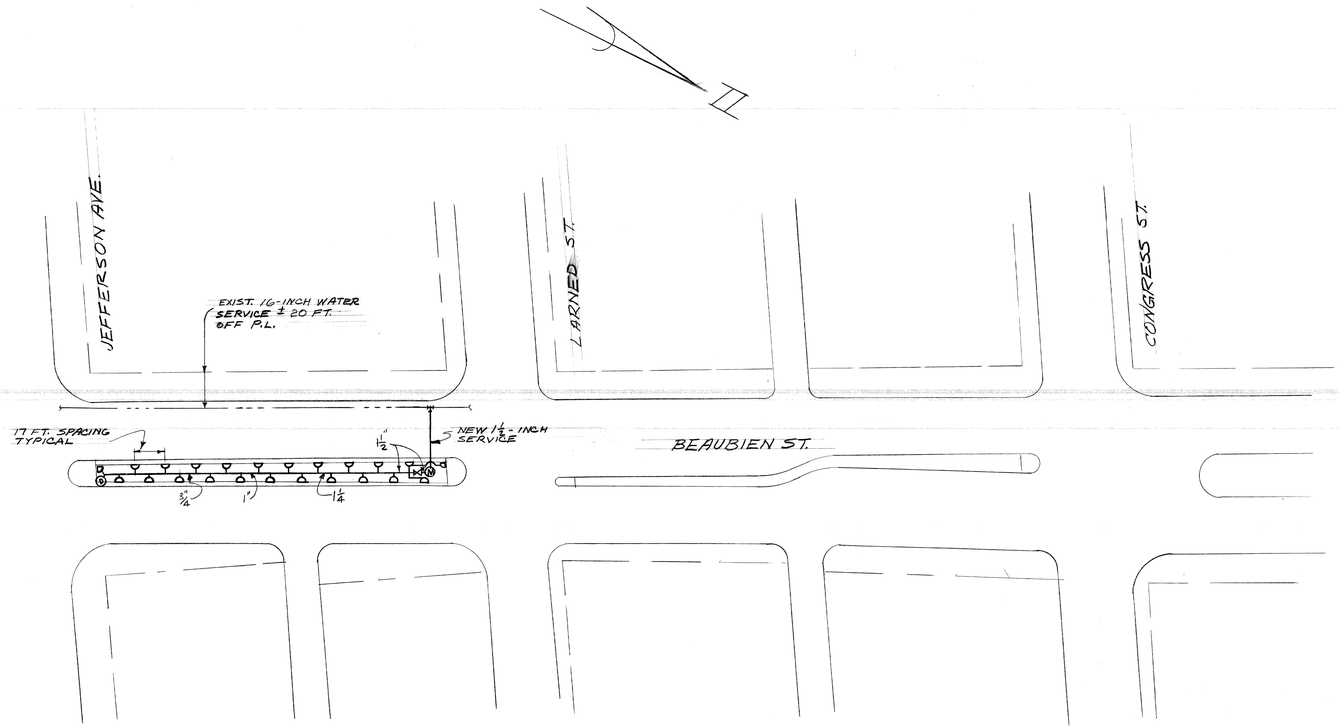
BEAUBIEN STREET WIDENING
JEFFERSON AVE. TO CONGRESS ST.
UTILITIES

SHEET 10 OF 71 SHEETS
CONTRACT No. 06819A
~~DRWG No. C-5521~~
DATE FEB 21, 1976

1 2 3 4 5 6 7 8 9 10 11

2334

K&E 17 0153 12-73 5714±



PLAN
SCALE 1"=40'

LEGEND						
	PATTERN	P.S.I.	G.P.M.	RADIUS	TYPE*
a	180°	25	1	12 FT.	TORO 542-00
b	90°	25	.7	12 FT.	TORO 541-00

* OR EQUAL

(M) 1-INCH WATER METER

(D) MANUAL DRAIN

COMBINATION VALVE AND VACUUM BREAKER

NOTE
SEE JEFFERSON AVE. LAWN WATERING SYSTEM SHEET FOR PIPING DETAILS

COOR'D	DESCRIPTION	DR'N	CK'D	APV'D	DATE
REVISIONS LOCATED BY COORDINATES ON SHEET					

REFERENCE DRAWINGS

DESIGNED BY Carlo Sarin
DRAWN BY OS
TRACED BY OS
CHECKED BY J. Meyer

APPROVED: [signature]
MECHANICAL ENGINEER

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

BEAUBIEN STREET WIDENING
JEFFERSON AVE TO CONGRESS ST
LAWN WATERING SYSTEM

SHEET 11 OF 71 SHEETS
CONTRACT No. 06819A
DRWG No. C-5521
DATE FEB. 21, 1976

#8352

GENERAL NOTES

Existing Water Mains, as shown, indicate approximate location only as shown by D.M.W.D. records and no guarantee is made as to completeness or accuracy.

The locations and elevations of existing utilities are shown in accordance with available data. The Contractor shall expose these utilities, where required, to determine actual locations.

other utilities may be making alterations to their existing systems in the vicinity of the Water Main construction shown on the plans. These utilities should be consulted for the latest information regarding the location of their facilities.

A minimum clearance of one foot vertically and three and one half feet horizontally shall be maintained between the Water Main and other utilities, unless otherwise shown on the plans or approved by the Engineer. If a conflict is indicated between the Water Main and any other utility, that utility should be consulted.

The location of Fire Hydrants, as shown, are approximate. D.F.D. will give exact location of Proposed Fire Hydrants prior to installation.

"Ductile Iron Pipe in sizes 3" through 16" is permitted as a part of the Cast Iron Pipe Specifications."

CONSTRUCTION NOTES

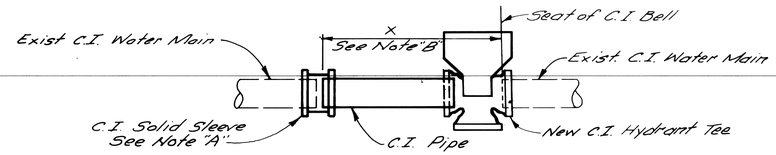
Encasements and Thrust Blocks shall be poured against undisturbed earth. Bottom 3" of Encasement may be poured separate from Encasement and used as a subfooting.

All Encasements and Thrust Blocks shall terminate at the face of pipe bells.

Removal of abandoned Water Mains as required for clearance to construct the Proposed Water Mains is incidental to Water Main Construction.

Sheeting and bracing, where required, shall be installed by the Contractor as incidental to Water Main const.

Scheduling of the connections shall be governed by the "Sequence of Operations" and "Flushing and Chlorination" specifications which are included in the Water Main portion of the Proposal.



PLAN

DETAIL "A"

HYDRANT CONNECTION TO WATER MAIN

NO SCALE

SCHEDULE OF HYDRANT INSTALLATION ON EXISTING MAINS
DETAILS H-1 THROUGH H-3 *

DETAIL Nº	FROM SHEET Nº	SIZE OF NEW OR EX. HYD. TEE	6" PIPE FROM HYDRANT TO EX. MAIN		DETAIL "A"		
			LENGTH	TRENCH DETAIL	PIPE SIZE	X	TRENCH DETAIL
H-1	10	Ex. 16"x6"	4'	12	–	–	–
H-2	10	Ex. 16"x6"	4'	12	–	–	–
H-3	10	New 16"x6"	20'	12	16"	6'	12

(A) 6" Gate Valve & Gate Box shall be furnished & installed with Hydrant.

* Information herein is to be considered only as a guide. Final figures depend upon the exact location of the hydrant as determined by the Fire Department just prior to installation.

PAY ITEMS

ALL "A" DETAILS, "C" DETAILS, GATE BOXES, VALVES, TEES, EXCAVATION, BACKFILL, WATER MAIN PIPING AND CONNECTIONS TO WATER MAINS ARE INCIDENTAL TO THE INSTALLATION OF THE NEW FIRE HYDRANTS AND ARE, THEREFORE, INCLUDED IN THE PAY ITEM "6"-FIRE HYDRANT."

NOTES FOR CONTRACTOR'S CONNECTIONS

Contractor shall cut and cap or plug existing Water Mains to remain in service where required in accordance with supplemental specifications.

4" C.I. Blow-off Assemblies, C.I. Plugs and Caps to be installed and/or removed by Contractor have not been shown.

Contractor shall install and later remove all temporary C.I. Plugs, Tees and Blow-off Assemblies.

Contractor shall furnish and install C.I. Pipe and Fittings necessary to complete the connections shown.

Contractor shall construct all Concrete Thrust Blocks and Gate Wells.

Contractor shall install all Temporary bracing for Water Main work.

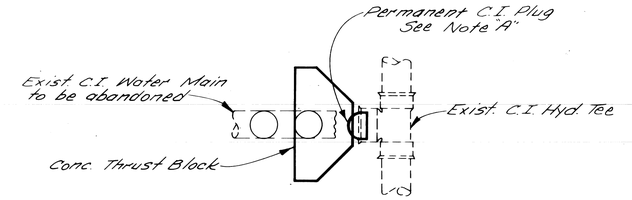
It is not normally anticipated that bends requiring Thrust Blocks will be required for Connections unless otherwise shown.

NOTE "A"

Plugs and caps, temporary blow-offs, air valves, corporation stops, pipe jacks, solid sleeves, jointing material, bracing and blocking are incidental to water main construction and will not be paid for separately.

NOTE "B"

Limits shown for dimension "X" shall be used to measure laid length of pipe.



PLAN

DETAIL "C"

DETAIL OF ABANDONMENT OF
EXISTING HYDRANT CONNECTION TO WATER MAIN

NO SCALE

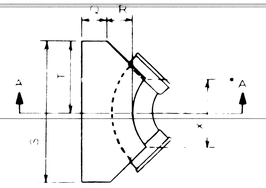
DESIGNED BY	I.H.K.	APPROVED: Allen E. Proger ENGINEER OF EXPRESSWAYS	CITY OF DETROIT CITY ENGINEERING DEPARTMENT
DRAWN BY	Patto		
TRACED BY			
CHECKED BY	R.B.P.		

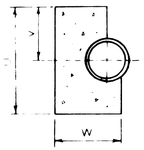
DESCRIPTION
REVISIONS LOCATED BY COORDINATES ON SHEET

BEAUBIEN STREET WIDENING
JEFFERSON AVE TO CONGRESS ST.

FIRE HYDRANTS
(CONTRACTOR'S CONNECTIONS)

SHEET 12 OF 71 SHEETS
PROJECT No. 06819 A
ASSIGN No. C-5521
DATE FEB 21, 1976

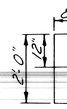


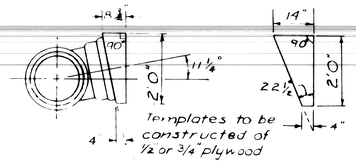


SCHEDULE OF THRUST BLOCK DIMENSIONS								
BEND SIZE	CODE							
	Q	R	S	T	U	V	W	X
6"ϕ 8" 90°	0' 9"	1' 0"	3' 4"	1' 8"	2' 6"	1' 3"	1' 11"	1' 2"
12" 90°	0' 9"	1' 4"	5' 6"	2' 9"	3' 0"	1' 6"	2' 4"	1' 8"
16" 90°	1' 0"	1' 8"	6' 0"	3' 0"	5' 0"	2' 6"	3' 0"	2' 8"
6"ϕ 8" 45°	0' 9"	1' 0"	2' 4"	1' 2"	2' 0"	1' 0"	1' 11"	1' 4"
12" 45	0' 9"	1' 4"	3' 6"	1' 9"	2' 6"	1' 3"	2' 4"	1' 4"
16" 45°	1' 0"	1' 8"	5' 4"	2' 8"	3' 0"	1' 6"	3' 0"	2' 6"
6"ϕ 8" & 12" 22½°	0' 9"	1' 0"	2' 6"	1' 3"	2' 0"	1' 0"	2' 0"	1' 4"
16" 22½°	1' 0"	1' 8"	3' 4"	1' 8"	2' 6"	1' 3"	3' 0"	1' 2"

DETAIL OF STANDARD THRUST BLOCKS FOR BENDS

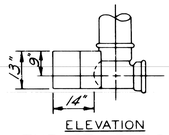
No Scale





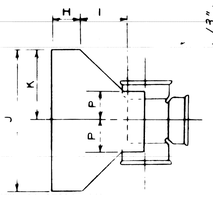
TEMPLATE FOR SETTING TEES AT 11¼° & 22½° ANGLES

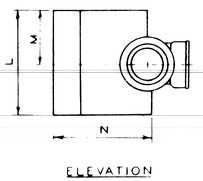
No Scale



THRUST BLOCK FOR 6" HYDRANT

No Scale





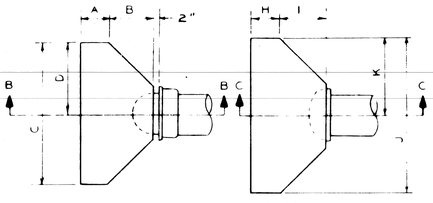
SCHEDULE OF THRUST BLOCK DIMENSIONS								
TEE SIZE	CODE							
	H	I	J	K	L	M	N	P
8" x 8"	0' 9"	1' 0"	3' 0"	1' 6"	2' 0"	1' 0"	8" 2' 3"	8" 0' 6"
12" x 8"							12" 2' 5"	12" 0' 8"
16" x 8"							16" 2' 9"	16" 0' 6"
12" x 12"	0' 9"	1' 4"	4' 0"	2' 0"	3' 0"	1' 6"	12" 2' 9"	8" 0' 8"
16" x 12"							16" 3' 1"	16" 0' 8"
16" x 16"	1' 0"	1' 8"	5' 0"	2' 6"	4' 0"	2' 0"	16" 3' 8"	16" 0' 11"

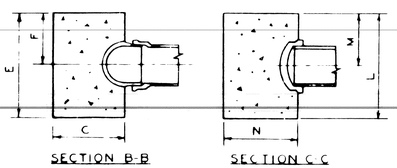
DETAIL OF STANDARD THRUST BLOCKS FOR TEES

No Scale

NOTES

The bearing face of all thrust blocks shall be poured agoinst undisturbed earth Thrust Blocks will be required on all Bends 6 inches in Diameter or larger and greater than 11¼°.

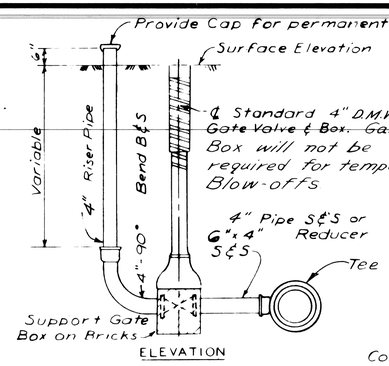




SCHEDULE OF THRUST BLOCK DIMENSIONS							
PLUG SIZE	CODE						
	A	B	C	D	E	F	G
6" ϕ 8"	0' 9"	1' 2"	3' 0"	1' 6"	2' 0"	1' 0"	1' 11"
12"	0' 9"	1' 4"	4' 0"	2' 0"	3' 0"	1' 6"	2' 1"
16"	1' 0"	1' 8"	5' 0"	2' 6"	4' 0"	2' 0"	2' 8"
CAP SIZE	CODE						
	H	I	J	K	L	M	N
6" ϕ 8"	0' 9"	1' 2"	3' 0"	1' 6"	2' 0"	1' 0"	1' 11"
12"	0' 9"	1' 4"	4' 0"	2' 0"	3' 0"	1' 6"	2' 1"
16"	1' 0"	1' 8"	5' 0"	2' 6"	4' 0"	2' 0"	2' 8"

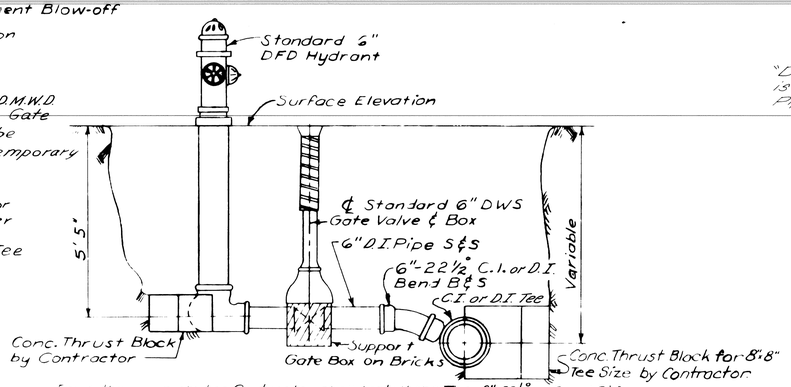
DETAIL OF STANDARD THRUST BLOCKS FOR PLUGS & CAPS

No Scale



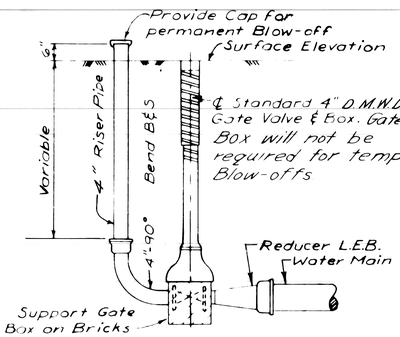
DETAIL OF 4" BLOW-OFF

No Scale



From the new main the Contractor shall install the Tee, 6"-22½° Bend B&S, 6" Pipe, 6" D.M.W.D. Gate Valve & Box, 6" Pipe, Concrete Thrust Blocks, and Hydrant.
From any existing main the complete Hydrant installation shall be done by the Contractor.

Hydrants to be a minimum of 6' behind Curb, unless otherwise noted on the drawings.
Dimensions given from the Curb are from Pavement Joint line which is at face of Curb.

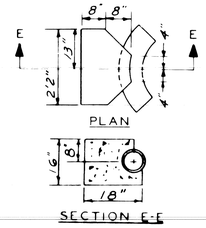


DETAIL OF 4" BLOW-OFF

No Scale

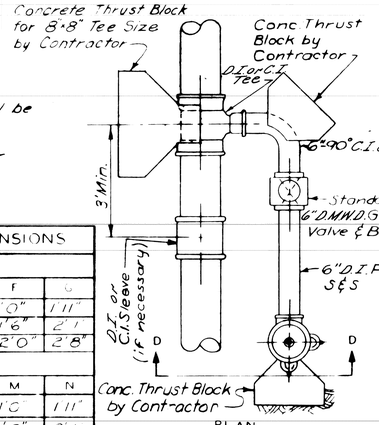
DETAIL OF 6" HYDRANT INSTALLATION

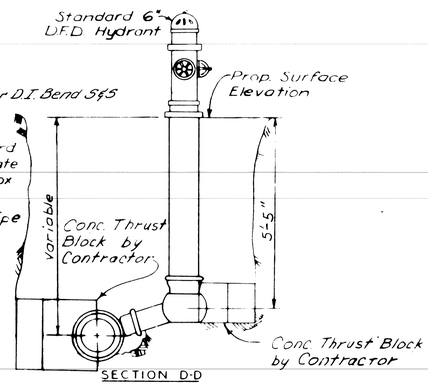
No Scale



THRUST BLOCK FOR 6" HYDRANT BEND

No Scale





From the new main the Contractor shall install the Tee, 8"-90° Bend S&S., 6" Pipe, 6" D.M.W.D. Gate Valve & Box, 6" Pipe Concrete Thrust Blocks and Hydrant.
From any existing main the complete Hydrant installation shall be done by the Contractor.

Hydrants to be a minimum of 6' behind the Curb, unless otherwise shown on the drawings.
Dimensions given from Curb are from Pavement Joint line which is at face of Curb

DETAIL OF 6" HYDRANT INSTALLATION

No Scale

GENERAL NOTES

"Ductile Iron Pipe in sizes 3" through 16" is permitted as a part of the Cast Iron Pipe Specifications."

PROJECT NO. 06819 A | ASSIGN No.

FIRE HYDRANT
MISCELLANEOUS DETAILS

REVISIONS			
NO	DESCRIPTION	DATE	BY

DESIGN BASIS	RBP
DRAWN BY	MP
TRACED BY	
CHECKED BY	JC
DATE	
SHEET	

C-5521

COLOR	SYMBOL	DESCRIPTION
BLACK		PROPERTY AND LOT LINES
"		PROPOSED CURB LINES AND HEADERS AT RETURNS
"		EXISTING CURB LINES OR EDGE OF PAVEMENT
"		PROPOSED CURB OR PAVING ON INTERSECTING STREET
"		PROPOSED SEWER TO CATCH BASINS
"	12"CR. INV. ELEV. 15"CR.	EXISTING LATERAL SEWERS
"	4'-6"CYL. 5'-0"CYL.	EXISTING PUBLIC SEWERS
"		EXISTING GAS LINES
"		EXISTING WATER LINES
BLACK	CURB LINE / CURB LINE	ELEV. OF SEWER INVERT PROPOSED C.B. M.H. & INLET SEWER
"		ELEV. EXISTING C.B. M.H. & INLET SEWERS
"		PROPOSED C.B. M.H. & INLET SEWERS ON INTERSECTING STREETS

SYMBOL	DESCRIPTION
	SEWER MANHOLE
	P.L.C. HANDHOLE
	P.L.C. MANHOLE
	WATER MANHOLE OR GRATE
	GAS MANHOLE OR GRATE
	WESTERN UNION MANHOLE
	MICHIGAN BELL MANHOLE
	EDISON STEAM MANHOLE
	EDISON ELECTRIC MANHOLE
	FIRE DEPT MANHOLE
	POLICE DEPT MANHOLE
	D.S.R. MANHOLE
	FIRE DEPT STANDARD HYDRANT
	FIRE DEPT HIGH PRESSURE HYDRANT
	FIRE DEPT CALL BOX
	FIRE DEPT HIGH PRESSURE MANHOLE
	POLICE DEPT CALL BOX
	P.L.C. LIGHT POLE
	P.L.C. POLE
	TELEPHONE POLE
	EDISON POLE
	TRAFFIC CONTROL BOX

SYMBOL	DESCRIPTION
#	STREET SIGN POST
	CATCH BASIN
(W)	WATER METER
(-)	WATER SHUT OFF
(+)	GAS SHUT-OFF
	GAS DRIP
	DRAIN OR VENT
	GUY POLE
	MAIL BOX
	AREAWAY OR COAL CHUTE
	FLAG POLE
	SPRINKLER BOX
	DEAD MANHOLE
	TREE
	P.L.C. & F.D. MANHOLE FILLED WITH SAND
	TRACK DRAIN
‡	TRAFFIC SIGN POST
(S)	TRAFFIC SIGNAL LIGHT
	TRAFFIC SIGNAL ON LIGHT POST
	D.S.R. DANGER PLATE
	R.R. SIGNAL CONTROL BOX

SYMBOL	DESCRIPTION
	DETROIT EDISON ELECTRIC CONDUIT
	DETROIT EDISON STEAM CONDUIT
	WESTERN UNION DUCTS
	MICHIGAN BELL TELEPHONE DUCTS
	P.L.C. CONDUITS
	DETROIT FIRE OR POLICE DEPT. CONDUITS (P.L.C. COMMUNICATIONS)

REVISIONS	DESCRIPTION	DATE	APP. BY	APP. DATE
A	3 SIGNALIZED INTERS.	4-9-68	WWB	
B	CHANGE EXISTING STREET & M.B. STRAND L.S. TO NEW L.C.	4-9-68	WWB	
C				
D				
E				

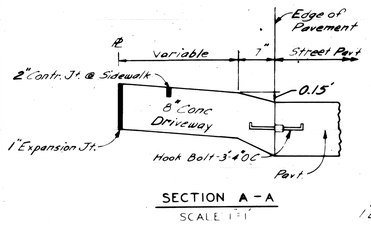
DESIGNED BY
DRAWN BY T. KANOW
TRACED BY T.K.
CHECKED BY M. KAWAMOTO

APPROVED: J. F. Nagel, ENGINEER OF DESIGN
APPROVED: Alfred R. Andrews, DIRECTOR OF PUBLIC WORKS

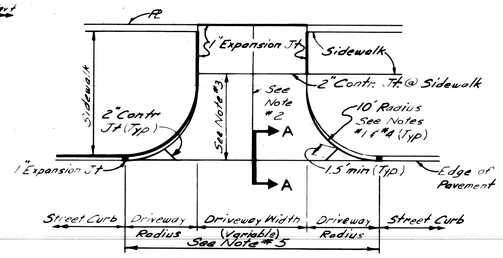
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER'S OFFICE
BUREAU OF DESIGN
PAVING
DETAIL NO. 25

STANDARD SYMBOLS FOR UTILITIES

BOX NO. | SCALE NO SCALE | DATE 12-1-54 | DWG. NO. C-902-A



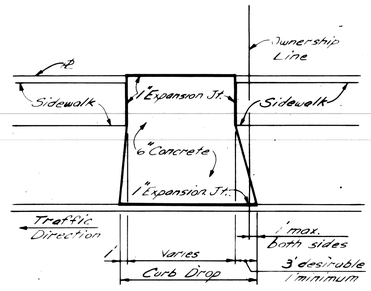
SECTION A-A
SCALE 1"=1'



COMMERCIAL DRIVEWAY DETAIL
SCALE 1"=10'

NOTES - COMMERCIAL DRIVEWAY

1. Transition edge of driveway from curb at the street to no curb at the end of the driveway radius.
2. Where driveway exceeds 15' in width, a contraction joint shall be placed longitudinally along ℄.
3. When distance exceeds 15', a transverse contraction joint will be required.
4. Radius 10' unless otherwise directed by the Engineer, or as shown on plans.
5. All work and materials required to construct the driveway between the end of returns will be paid for as "Driveway" of the specified thickness.



RESIDENTIAL DRIVEWAY DETAIL
SCALE 1"=10'

REVISIONS (LOCATED BY COORDINATES ON SHEET)	DESCRIPTION	DATE	APP. BY	APP. DATE

REFERENCE DRAWINGS

DESIGNED BY
DRAWN BY J.R.D.
TRACED BY
CHECKED BY RBH

APPROVED: ENGINEER OF EXPRESSWAYS

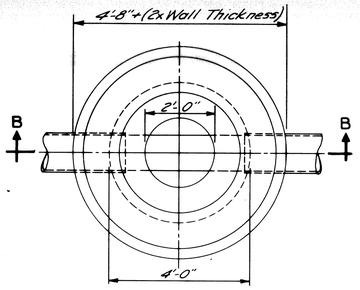
CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

BEAUBIEN STREET WIDENING
JEFFERSON AVE. TO CONGRESS ST.

SPECIAL STANDARDS & SPECIAL DETAILS

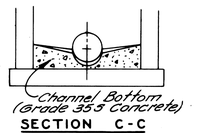
SHEET 14 OF 71 SHEETS
CONTRACT No. 06819A
ASSIGNMENT No. C-5521
DATE FEB 21, 1976

K&E 17 0193 1-62+

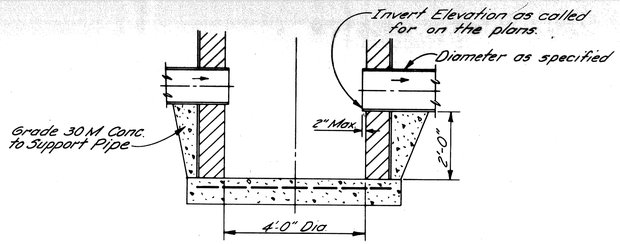


PLAN VIEW

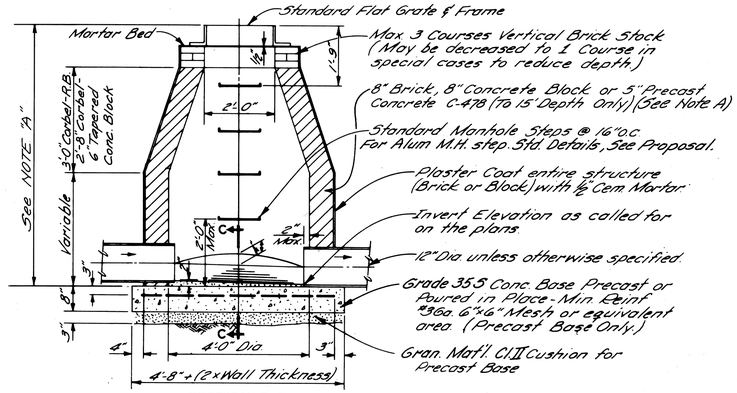
NOTE "A"
Wall thickness below a depth of 15 feet shall be 12 inches.



SECTION C-C



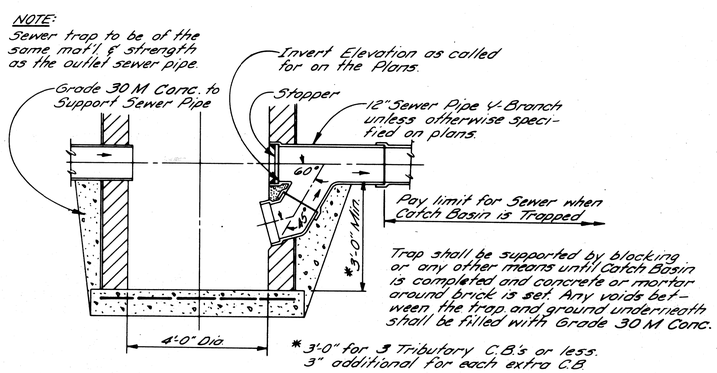
DETAIL OF SUMP FOR CATCH BASIN "B"
NO SCALE



SECTION B-B

CATCH BASIN "B"
NO SCALE

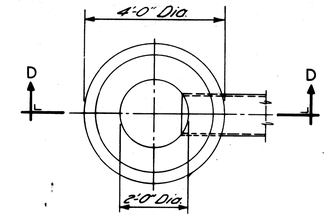
NOTE:
Sewer trap to be of the same mat'l & strength as the outlet sewer pipe.



Trap shall be supported by blocking or any other means until Catch Basin is completed and concrete or mortar around brick is set. Any voids between the trap and ground underneath shall be filled with Grade 30 M Conc.

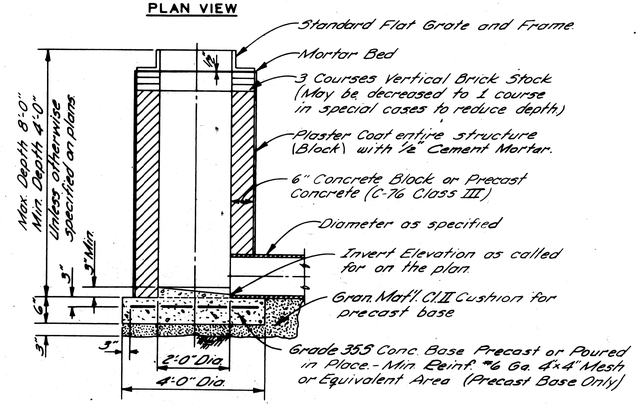
* 3'-0" for 3 Tributary C.B.'s or less. 3" additional for each extra C.B.

DETAIL OF TRAP FOR CATCH BASIN "B"
NO SCALE



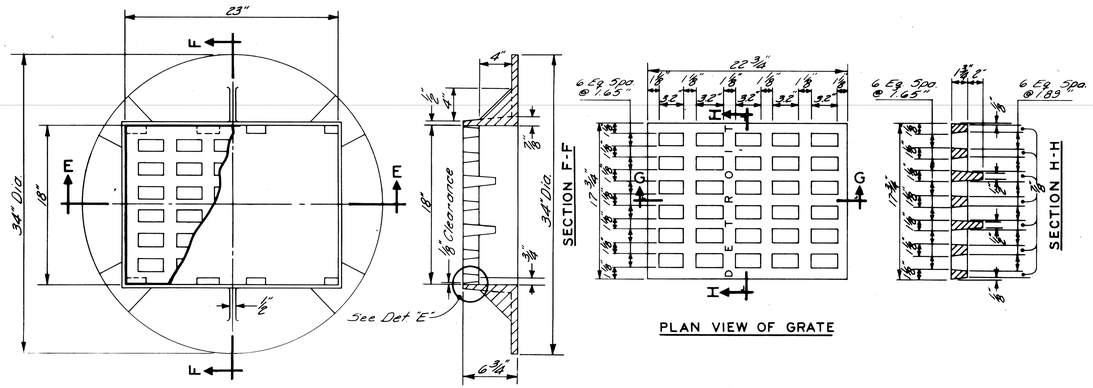
PLAN VIEW

NOTE:
Catch Basin "A" will be used only when outletting to a Catch Basin "B"



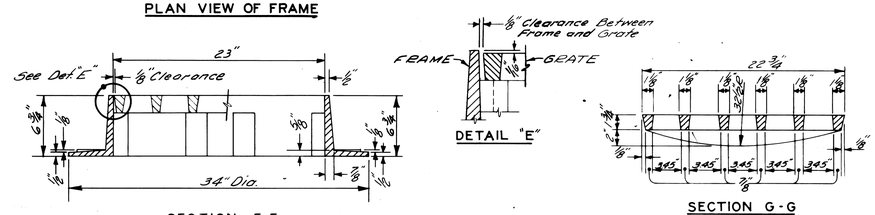
SECTION D-D

CATCH BASIN "A"
NO SCALE



PLAN VIEW OF FRAME

PLAN VIEW OF GRATE



SECTION E-E

DETAIL "E"

SECTION G-G

STANDARD FLAT GRATE AND FRAME
NO SCALE

GENERAL NOTES

1. The materials & workmanship shall be in accordance with the current Standard Specifications.
2. Center of Catch Basin shall be 20 inches from back of curb.
3. All sizes & flow lines of pipe, and elevations for top & bottom of structures shall be determined from the plans or construction requirements.
   The bell shall be removed from the first length of outlet pipe projecting through the wall of the structures.
   When any structure is constructed of precast concrete or concrete block, the top of the masonry shall be left sufficiently low to permit proper adjustment of cover to grade by the use of mortar or bricks as directed by the Engineer.
4. A Trap, as detailed on this sheet, shall be placed where called for in the outlet sewer line of Catch Basins "B".
   This trap shall be set into the masonry wall as shown on the detail.
   The space between the faces of the wall & the trap shall be completely filled with cement, mortar or concrete, so as to hold Trap securely in place.
   The Traps will be paid for separately at the Contract Unit Price each, which price shall include the extra catch basin construction required and for furnishing and installing the trap.
5. A plaster coat of mortar ½ inch in thickness shall be applied to the outer surface of the structure as shown. A ½ inch cement plaster coat shall be placed on the inside of all sumps.
6. Contractor shall verify elevations of existing utilities to enable construction to indicated elevations shown on drawings. If necessary, invert elevations shown on the drawings may be altered in the field to clear existing utilities. Such alterations, upward or downward, shall be at no change in contract price.
7. When precast concrete pipe sections are used for catch basins, either a section of the inlet and outlet pipes or an opening or eye for the inlet & outlet pipes shall be cast into the wall of the catch basin pipe when it is being manufactured. Eyes in precast pipe sections shall be furnished to accommodate a flexible joint connection such as Press-Wedge by Press Seal Gasket Corp or Res-Seal by Scales Mfg. Corp.
8. Pay limit for sewers shall be inside faces of structures unless otherwise noted.

DESCRIPTION	DRN.	CK'D.	APP'D.	DATE
REVISIONS LOCATED BY COORDINATES ON SHEET				

REFERENCE DRAWINGS

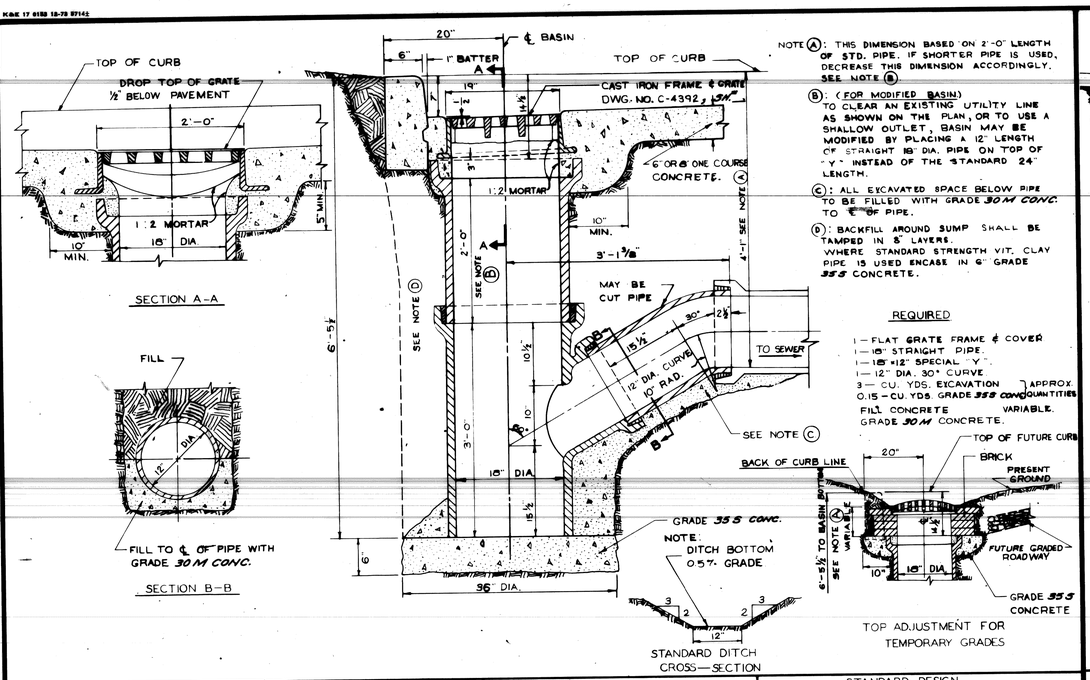
DESIGNED BY	
DRAWN BY	M. POLITO
TRACED BY	
CHECKED BY	D. MILZ

APPROVED: John Erickson
ENGINEER OF STREETS
Allen E. Pregon
ENGINEER OF EXPRESSWAYS
W. R. Bommel
HEAD CIVIL ENGINEER

CITY OF DETROIT
CITY ENGINEERING DEPAPTMENT

DETAILS OF STANDARD
CATCH BASINS "A" & "B"
AND FLAT GRATE & FRAME

SHEET 16 OF 71 SHEETS
CONTRACT No 06819A
ASSIGN. NO.
DATE FEB 21, 1976



NOTE (A): THIS DIMENSION BASED ON 2'-0" LENGTH OF STD. PIPE. IF SHORTER PIPE IS USED, DECREASE THIS DIMENSION ACCORDINGLY. SEE NOTE (B)

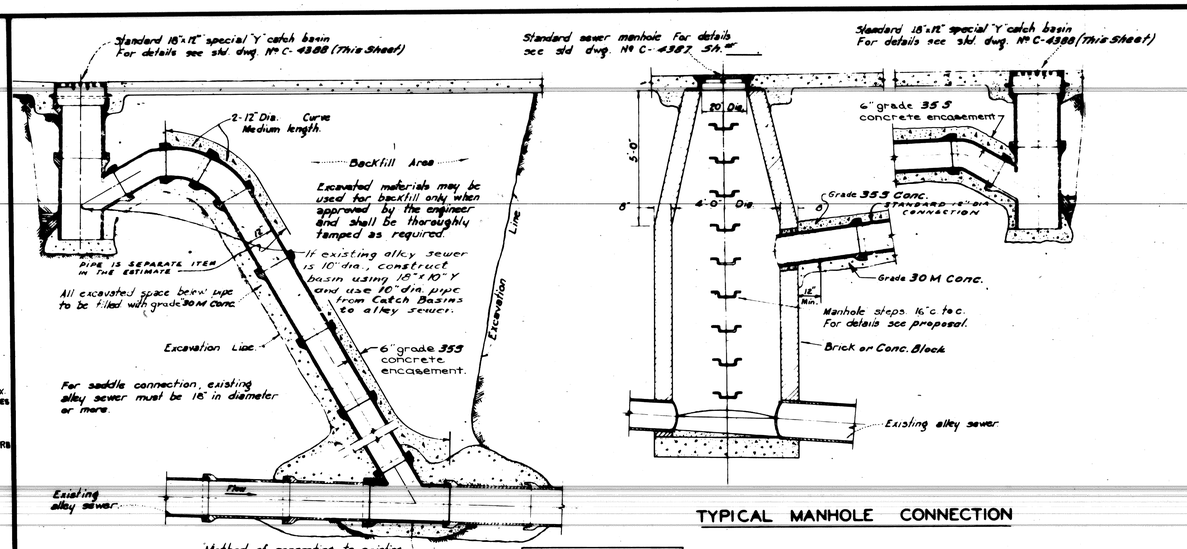
(B): (FOR MODIFIED BASIN) TO CLEAR AN EXISTING UTILITY LINE AS SHOWN ON THE PLAN, OR TO USE A SHALLOW OUTLET, BASIN MAY BE MODIFIED BY PLACING A 12" LENGTH OF STRAIGHT 18" DIA. PIPE ON TOP OF "Y" INSTEAD OF THE STANDARD 24" LENGTH.

(C): ALL EXCAVATED SPACE BELOW PIPE TO BE FILLED WITH GRADE 30M CONC. TO ℄ OF PIPE.

(D): BACKFILL AROUND SUMP SHALL BE TAMPED IN 8" LAYERS. WHERE STANDARD STRENGTH VIT. CLAY PIPE IS USED ENCASE IN 6" GRADE 355 CONCRETE.

REQUIRED

1 — FLAT GRATE FRAME & COVER
1 — 18" STRAIGHT PIPE.
1 — 18"×12" SPECIAL "Y".
1 — 12" DIA. 30° CURVE
3 — CU. YDS. EXCAVATION
0.15 — CU. YDS. GRADE 355 CONC. } APPROX. QUANTITIES
FILL CONCRETE VARIABLE.
GRADE 30M CONCRETE.



Catch basin unit price shall include standard catch basin complete as s/dwg. C-4388 (this sheet)

A	Added conc. encasement	J.C.		11-29-65	
	Revised M.H. Steps	J.C.	G.B.	1-18-66	
	WAS CLASS B				
	Superseded Dwg. No.	C- 801			
	DESCRIPTION	DR'N	CK'D	APP'D	DATE
	REVISIONS				

DESIGNED BY
DRAWN BY P.C.
TRACED BY
CHECKED BY

APPROVED: P. Erickson
ENGINEER OF STREETS
R. P. Hicks
ASST. CITY ENGINEER
Leonard Bruenhaus
CITY ENGINEER

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER'S OFFICE
BUREAU OF DESIGN

DETAIL STANDARD NO. 23

ALLEY INSTALLATION
STANDARD 18"×12" SPECIAL 'Y' CATCH BASIN.

BOOK NO. —— PAGE NO. ——
SCALE ⅜"=1'-0"
DATE 3-16-59
DRWG. NO. C-4399

A	Change Sheet No. To 8" Minor C.E.				
	DESCRIPTION REVISIONS	DR'N	CK'D	AP'VD	DATE

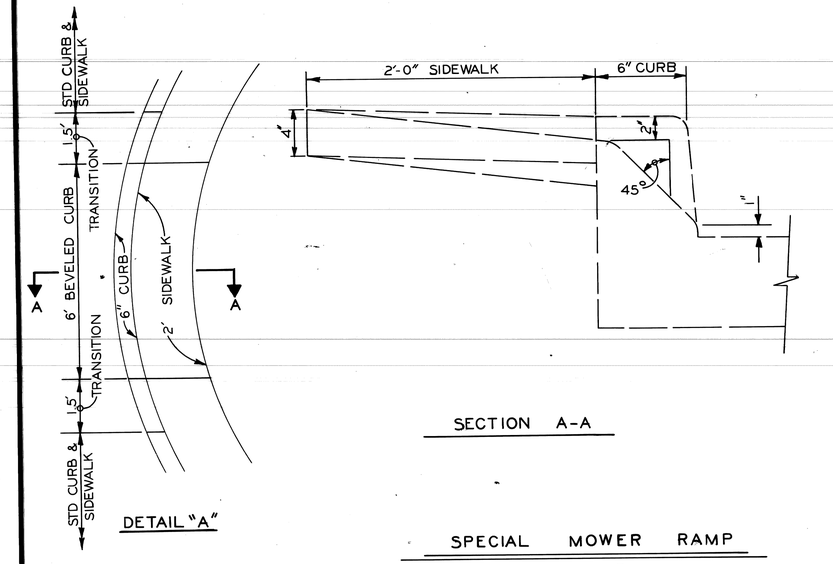
DESIGNED BY
DRAWN BY G. Clark
TRACED BY M. Kawalas
CHECKED BY

APPROVED: P. Erickson
ENGINEER OF STREETS
R. P. Hicks
ASST. CITY ENGINEER
Leonard Bruenhaus
CITY ENGINEER

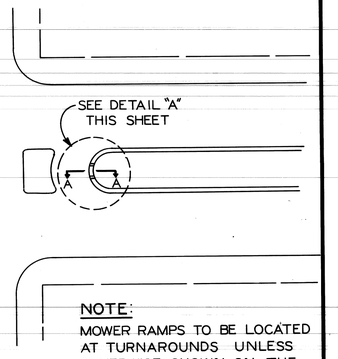
CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEER'S OFFICE
BUREAU OF DESIGN
DETAIL STANDARD NO. 11

STANDARD DESIGN
18" × 12" SPECIAL "Y" CATCH BASIN
TO BE USED UNLESS DIRECTED OTHERWISE BY FIELD ENGINEER

BOOK NO. —— PAGE NO. ——
SCALE 1"=1'-0"
DATE 8-19-66
DWG. NO. C-4388



SPECIAL MOWER RAMP
NO SCALE



NOTE:
MOWER RAMPS TO BE LOCATED AT TURNAROUNDS UNLESS OTHERWISE SHOWN ON THE PLANS. EXACT LOCATION WILL VARY.

LOCATION PLAN

	DESCRIPTION	DR'N	CK'D	AP'VD	DATE
	REVISIONS LOCATED BY COORDINATES ON SHEET				

REFERENCE DRAWINGS

DESIGNED BY
DRAWN BY
TRACED BY
CHECKED BY

APPROVED: Allen E. Pregon
ENGINEER OF EXPRESSWAYS

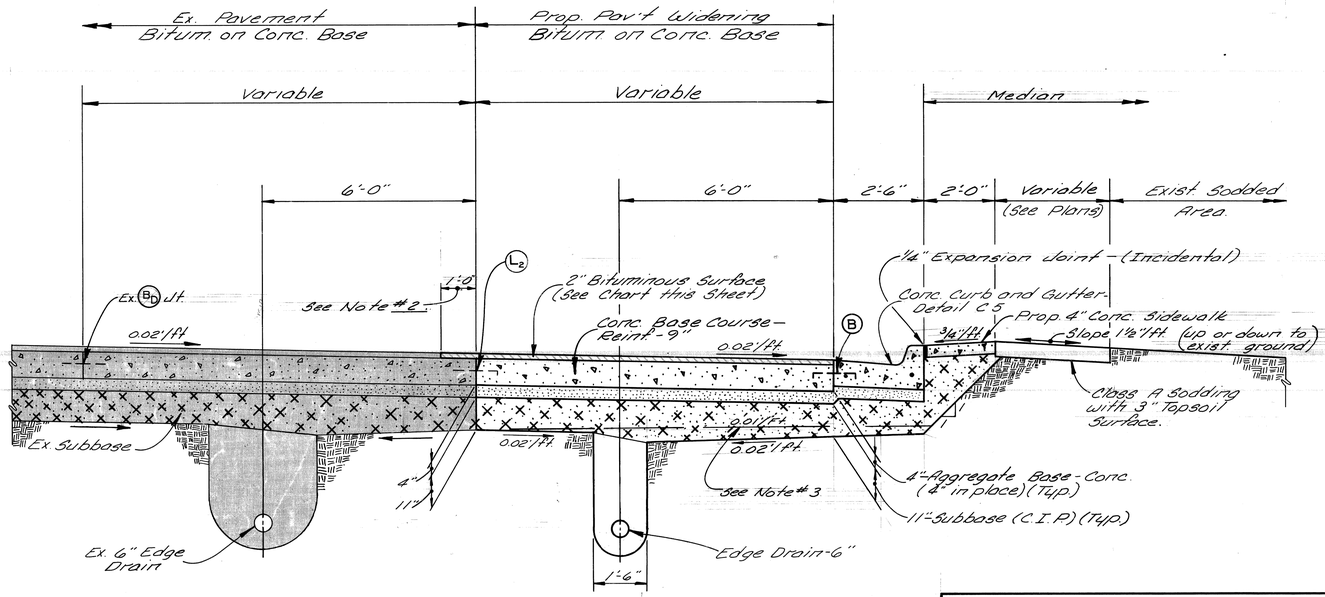
CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

BEAUBIEN STREET WIDENING
JEFFERSON AVE. INTERSECTION IMPROVEMENTS

SPECIAL DETAILS

SHEET 17 OF 71 SHEETS
CONTRACT No. 06819A 10225A
DRWG No. C-5521
DATE FEB 21, 1976

KOKE 17 0153 12-73 9714 E



TYPICAL CROSS SECTION

JEFFERSON AVE. WIDENING
RANDOLPH TO ST. ANTOINE
NO SCALE

EARTHWORK LEGEND

- Aggregate Base - Conc. (4" in place)
- Subbase (C.I.P.)

JOINT LEGEND

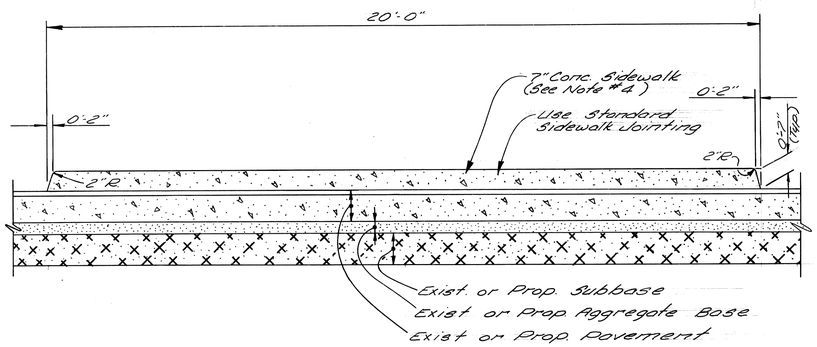
- (B) Longitudinal Bulkhead Joint, Detail 2 *
- (L2) Longitudinal Bulkhead Joint, Detail 4A *
- * According to MDSH&T Std. Dwg. II-390.

The following Quantities are estimated for use throughout Jefferson Ave. at the discretion of the Engineer.

Class "A" Sodding	1178	Sq. Yds.
Topsoil Surface, 3 Inches	1178	Sq. Yds.
4" Concrete Sidewalk	252	Sq. Ft.
Removing Sidewalk	28	Sq. Yds.
Subgrade Undercutting Type II	100	Cu. Yds.

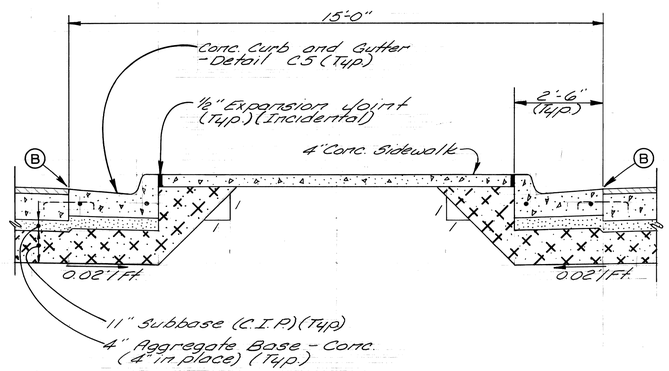
NOTES:

1. Any miscellaneous fill areas under sodded areas shall be filled with selected excavated materials (Incidental to Contract Cost).
2. 1'-0" Stripping and resurfacing (2" ± Bit. Surf.) The Contractor shall saw cut (one inch min. depth) a longitudinal line along the limit of the one foot stripping. The sawing shall be by a method approved by the Engineer and will not be paid for separately, but will be incidental to the Contract.
3. At E'bd. Jefferson, just east of Randolph, only, drain the new subbase @ 0.01 Ft. per Ft. to the existing edge drain.
4. All work necessary to construct the concrete island as shown will be paid for as 7" concrete sidewalk.



ISLAND AT STA. 3+27 ±

(LOOKING NORTH)
NO SCALE



ISLAND AT STA. 8+18 ±

(LOOKING NORTH)
NO SCALE

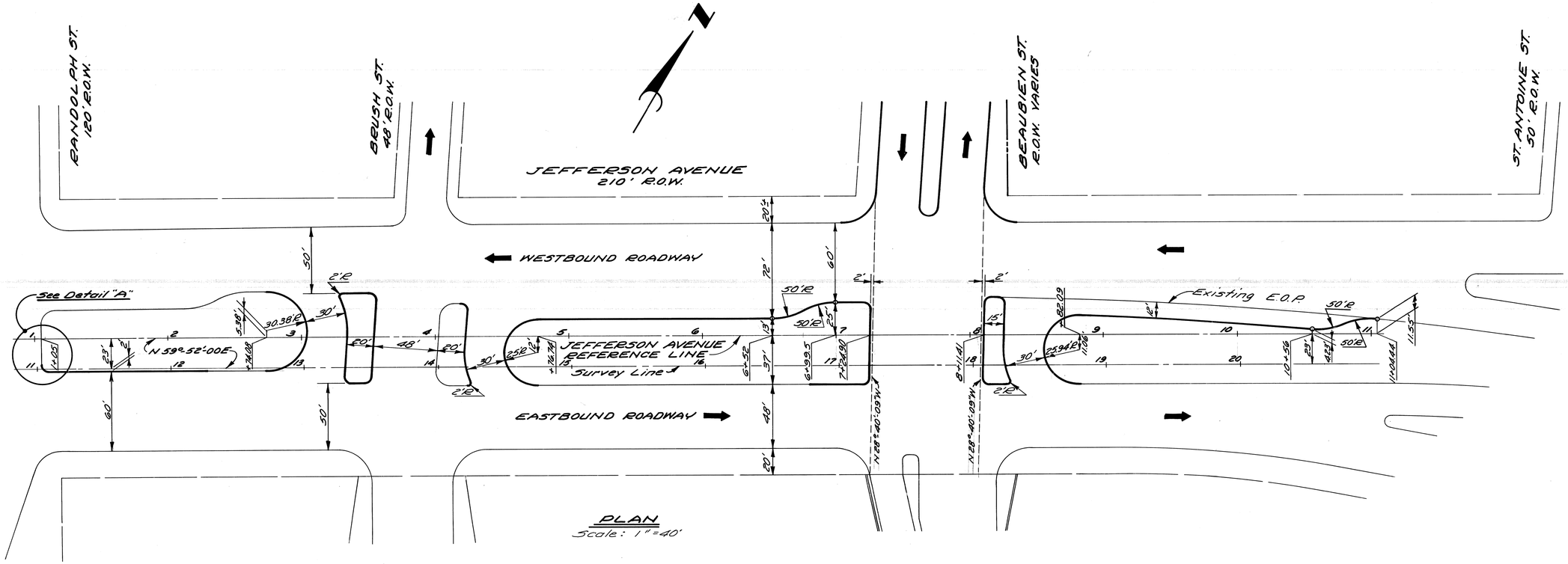
BITUMINOUS APPLICATION RATES			
ITEM	RATE OF APPLICATION	ESTIMATED THICKNESS	ASPHALT PENETRATION
Bit. Conc. Leveling Course (25A)	110 #/SY	1 Inch	85-100
Bit. Conc. Wearing Course (31A) Type M	110 #/SY	1 Inch	85-100
Bit. Bond Coat - 0.10 Gal/SY for rigid bases & 0.05 Gal/SY Tack Coat bet. bit. layers			

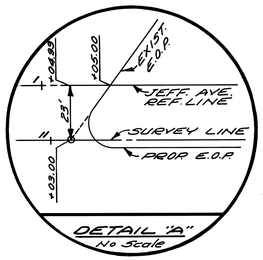
Bit. Bond Coat RC 70 may be used in lieu of M3.2a & 33.1A on this project where thru traffic is detoured from the construction area. The contractor, however, is cautioned of the flammable characteristic of this matl. & shall take due precautions when using same.

REVISIONS LOCATED BY COORDINATES ON SHEET						REFERENCE DRAWINGS	DESIGNED BY	R. C.	APPROVED: Allen E. Rieger ENGINEER OF EXPRESSWAYS	CITY OF DETROIT CITY ENGINEERING DEPARTMENT	JEFFERSON AVE. INTERSECTION IMPROVEMENT RANDOLPH ST. TO ST ANTOINE ST.	SHEET 18 OF 71 SHEETS
COOR'D	DESCRIPTION	DR'N	CK'D	AP'VD	DATE		DRAWN BY	M. S.				CONTRACT No. 10225A
							TRACED BY				TYPICAL CROSS - SECTION	DRWG No. C-5521
							CHECKED BY	R. B. P.				DATE FEB. 21, 1976

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11

K&E 17 0153 12-73 3714±





RENAISSANCE CENTER

NOTES:

1. For Beaubien St. Alignment, See Sh. No 3.
2. All distances shown on this sheet are to edge of pavement, not face of curb. The curb face is 2'± back of the edge of pavement. The heavy line depicts the proposed edge of pavement.
3. All proposed return radii shall be 5' unless otherwise noted.

COOR'D	DESCRIPTION	DR'N	CK'D	AP'VD	DATE
REVISIONS LOCATED BY COORDINATES ON SHEET					

REFERENCE DRAWINGS

DESIGNED BY

DRAWN BY M.P.

TRACED BY

CHECKED BY R.C.

APPROVED: Allen E. Prague
ENGINEER OF EXPRESSWAYS

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

JEFFERSON AVE.
INTERSECTION IMPROVEMENT
RANDOLPH ST. TO ST. ANTOINE ST.
ALIGNMENT

SHEET 19 OF 71 SHEETS
CONTRACT No. 10225A
DRWG No.
DATE FEB. 21, 1976

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11

K&E 17 0153 12-73 5714±

COOR'D	DESCRIPTION	DR'N	CK'D	AP'VD	DATE

REVISIONS LOCATED BY COORDINATES ON SHEET

REFERENCE DRAWINGS

DESIGNED BY
DRAWN BY M.C.
TRACED BY
CHECKED BY R.B.P.

APPROVED: Allen E. Pioger
ENGINEER OF EXPRESSWAYS

CITY OF DETROIT

CITY ENGINEERING DEPARTMENT

JEFFERSON AVE.
INTERSECTION IMPROVEMENT
RANDOLPH ST. TO ST. ANTOINE ST.

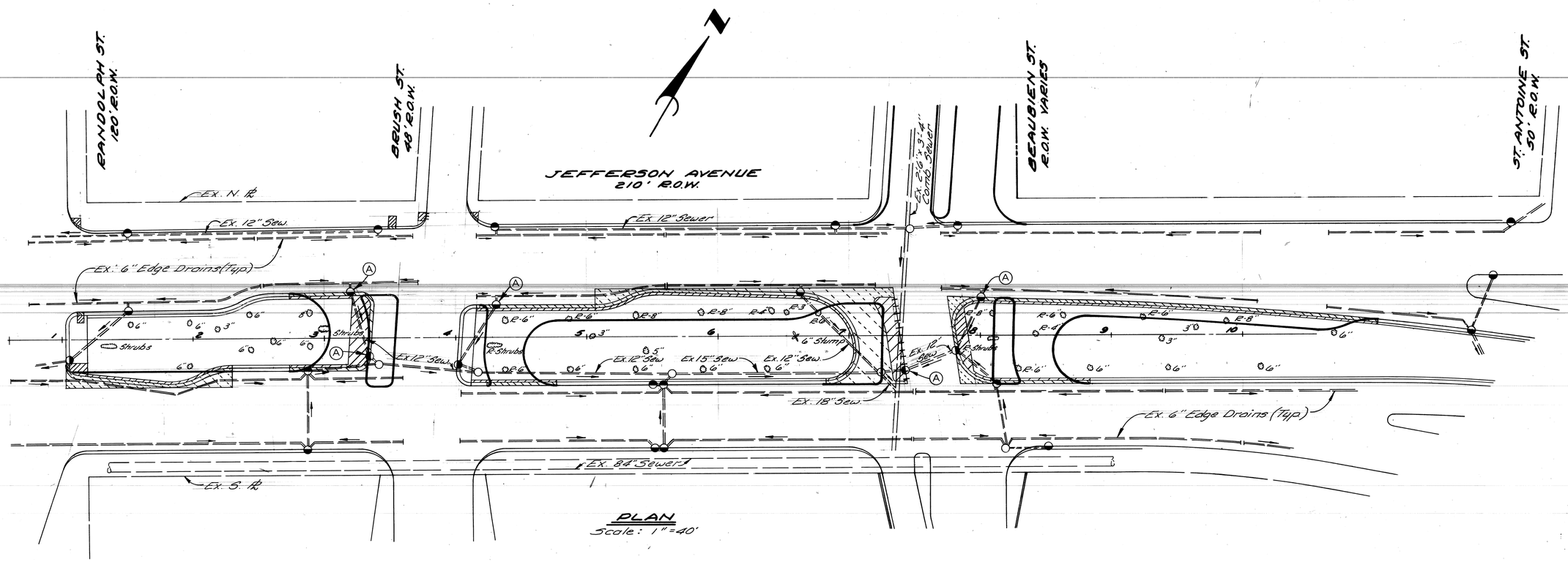
CONSTRUCTION SEQUENCE

SHEET 20 OF 71 SHEETS
CONTRACT No. 10225A
DRWG No. C-5521
DATE FEB. 21, 1976

1 2 3 4 5 6 7 8 9 10 11

A B C D E F G

KOBE 17 0188 18-78 97142



PLAN
Scale: 1" = 40'

RENAISSANCE CENTER

REMOVAL LEGEND

- Removing Curb
- Removing Curb & Gutter
- Removing Sidewalk
- Removing Pavement
- (A) Abandoning Drainage Structures (Maintain Flow)
- R.(Size) Removing Trees
- Prop. Edge of Pavement

NOTE:
1. For utilities, See Sh. #25, #26 & #27.
2. The removal of trees less than 8" in dia. is incidental to the contract.

CODE'D	DESCRIPTION	DR'N	CK'D	AP'VD	DATE	REFERENCE DRAWINGS	DESIGNED BY	
REVISIONS LOCATED BY COORDINATES ON SHEET							DRAWN BY	MMP
							TRACED BY	
							CHECKED BY	I. K.

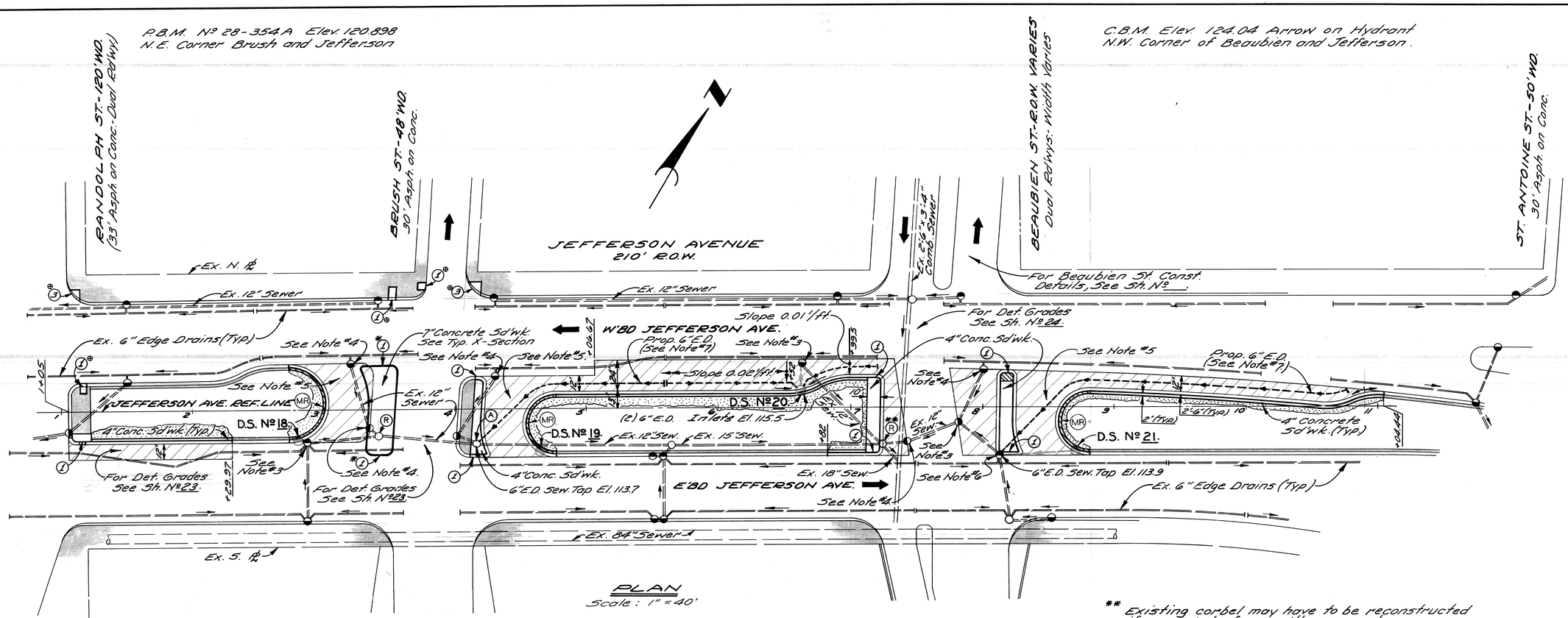
APPROVED: Allen E. Pfeiffer
ENGINEER OF EXPRESSWAYS

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

JEFFERSON AVE.
INTERSECTION IMPROVEMENT
RANDOLPH ST. TO ST. ANTOINE ST.
REMOVALS

SHEET 21 OF 71 SHEETS
CONTRACT No. 10225A
DRWG No. C-5521
DATE FEB. 21, 1976

K&E 17 0153 12-73 3714±



PLAN
Scale: 1" = 40'

RENAISSANCE CENTER

* Strip 2 Inch ± Bituminous Surface off Existing Concrete Base & Chip out 2 Inches ± of Conc. Base in order to provide 4" minimum thickness of Sidewalk Ramp (Incidental to Sidewalk Ramps)

** Existing corbel may have to be reconstructed if cover interferes with new curb.

⊕ Construct new Curb & Gutter — Detail C5 with Longitudinal Bulkhead Joint Detail 4A.

D.S. No.	JEFF. AVE. REF. LINE STA. OF D.S.	TYPE OF D.S.	WITH TRAP (T)	SEWER LENGTH & TYPE LEAVING D.S. LENGTH (FT.)	SIZE (IN)	CLASS	TRENCH DETAIL 8 (FT.)	9 (FT.)	SEWER TAPS SIZE (IN)	D.S. FT. (0-8)	COMMENTS	AS BUILT LENGTH OF SEWER PIPE
18	2+80	⊕⊕ C.B.13		8	12	C-76-III		8	12	2	Outlet Elev. 111.9. Tap into Ex. C.B. @ El. 111.7	4.8 LIN. FT.
19	4+65	⊕⊕ C.B.10	T	7	12	C-76-III	7			4	Outlet Elev. 110.3. Connect to Ex. 12" Sew. @ El. 110.1 ±	5.0 LIN. FT.
20	6+62	⊕⊕ C.B.13		22	12	C-76-III		22	12	2	Outlet Elev. 115.2. Tap into Ex. C.B. @ El. 113.0	15.8 LIN. FT.
21	8+70	⊕⊕ C.B.13		57	12	C-76-III		57	12	2	Outlet Elev. 112.5. Tap into Ex. C.B. @ El. 112.2	57.2 LIN. FT.

⊕⊕ Place salvaged frame and cover from an existing catch basin which is to be abandoned or will have its cover replaced.

LEGEND

- Conc. Base Course - Reinf. - 9" with 2" Bit. Surface
- 6" Conc. Sd'wk. (Sd'wk Ramps are paid for separately.)
- Strip & Resurface (See Note #2, Typ. Cross-Sections) (Also, See Det. Grades)
- Existing Sidewalk to Remain
- Class "A" Sodding with 3" Topsoil
- Conc. Curb & Gutter - Detail C5
- (1), (2) or (3) Sidewalk Ramps (4" or 6") Types (1), (2) or (3)
- (A) Adjusting Drainage Structure Covers
- (R) Reconstructing Drainage Structures
- (MR) Mower Ramp (Incidental to Contract Cost) For Construction Details, See Sh. No 17.

NOTES:

1. For Alignment, See Sh. No 19.
2. For Utility Legend & Symbols, See Sh. No 25-22.
3. Remove Existing C.B. Cover (Incidental) and Replace with Drainage Structure Cover "A"
4. Abandon C.B. & Maintain Flow, Abandonment Billed on Removals.
5. Place subbase parallel to prop. pav't. grade & drain into exist. edge drains along E'bd. Rd'wy.
6. Remove exist. D.S. cover & replace with D.S. cover D. Warp. island gutter grades to drain into existing structure.
7. Place prop. 6" Edge Drain Invert 2'-0" ± below bottom of subbase & parallel to proposed grade except as noted on plan.
8. All work on this sheet shall be done according to State Standards.

COOR'D	DESCRIPTION	DR'N	CK'D	AP'VD	DATE
REVISIONS LOCATED BY COORDINATES ON SHEET					

REFERENCE DRAWINGS

DESIGNED BY
DRAWN BY MMP
TRACED BY
CHECKED BY W. B.

APPROVED: Allen E. Rogers
ENGINEER OF EXPRESSWAYS

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

JEFFERSON AVE.
INTERSECTION IMPROVEMENT
RANDOLPH ST. TO ST. ANTOINE ST.
PLAN

SHEET 22 OF 71 SHEETS
CONTRACT No. 10225A
DRWG No. C-5521
DATE FEB. 21, 1976

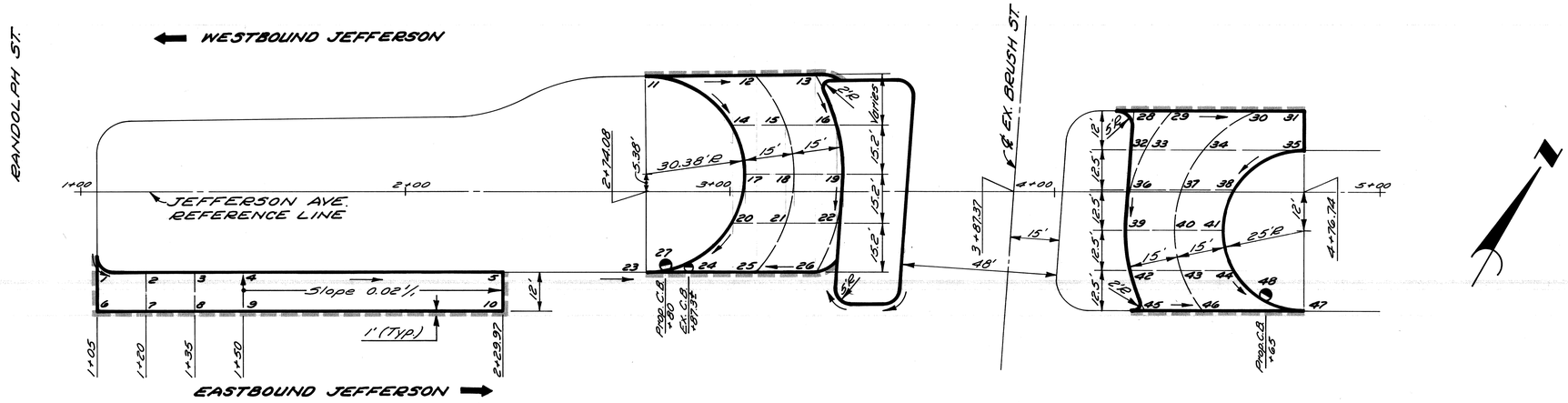
1 2 3 4 5 6 7 8 9 10 11

EDCO• 127M 1-75 59721

SCALE	HORIZONTAL / VERTICAL	BOOK NO. PG. PAVING COMPLETED	LEVEL DATE	BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

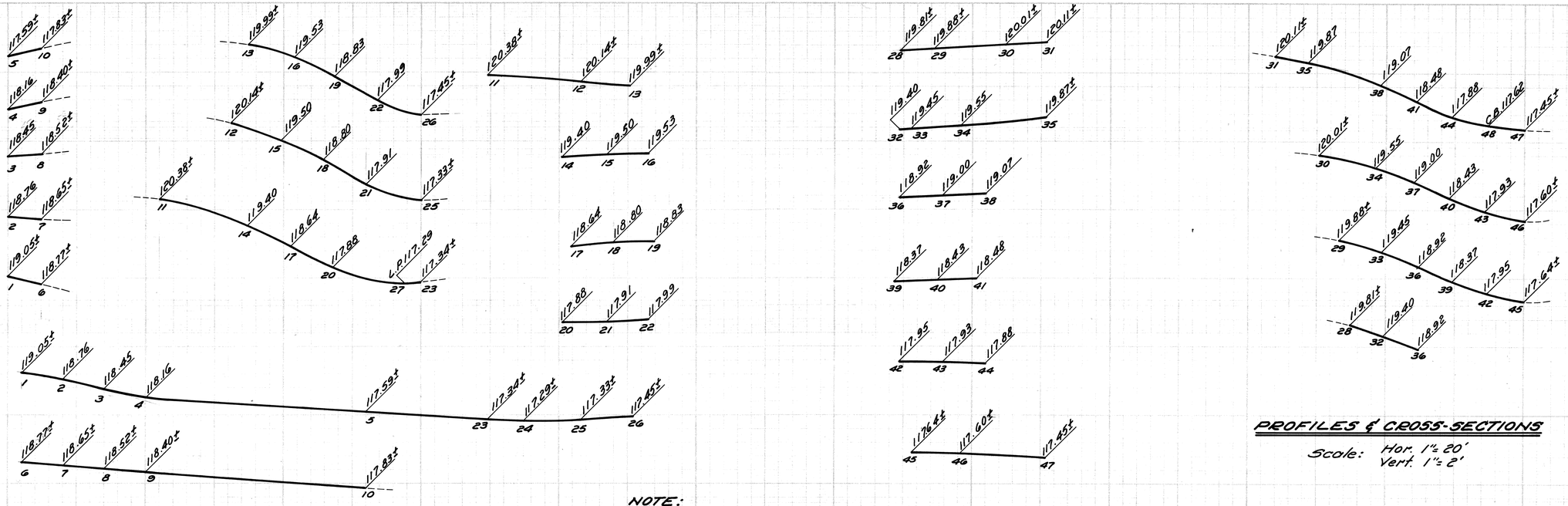
NOTE - FOR SYMBOLS Ⓐ ETC., SEE STANDARD DETAIL DRAWING NO C-4375

BENCH MARKS ELEV



PLAN
Scale: 1" = 20'

LEGEND
Strip and Resurface
Prop. Pavement Limits



PROFILES & CROSS-SECTIONS
Scale: Hor. 1"= 20'
Vert. 1"= 2'

NOTE:
All profiles & cross-sections on this sheet are drawn true length.

DESCRIPTION	DR'N	CK'D	AP'VD	DATE
REVISIONS				

	BY	CHECKED BY
PLAN	M.P.	W.B.
GRADE	M.P.	W.B.
ESTIMATE		
FINAL	CHECK	REVIEW

APPROVED: Allen E. Prague
ENGINEER OF EXPRESSWAYS
HIGHWAY ENGINEER

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

JEFFERSON AVE.
INTERSECTION IMPROVEMENT
RANDOLPH ST. TO ST. ANTOINE ST.

DETAILED GRADES FOR BRUSH ST. AT JEFFERSON AVE.

INDEX NO.
TOPO NO.
INDEXED

SHEET 23 OF 71 SHEETS
CONTRACT NO. 10225A
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DATE FEB. 21, 1976