

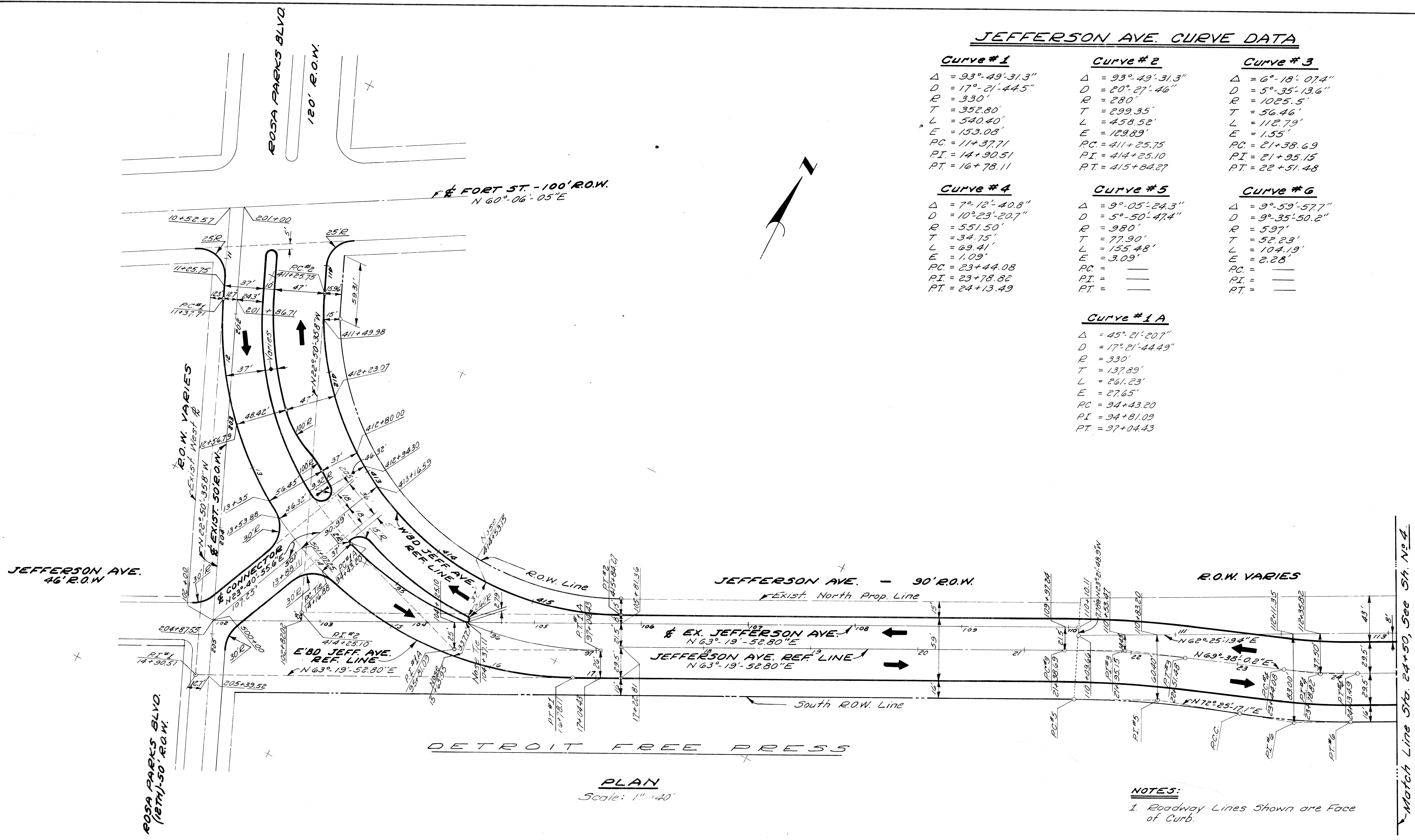
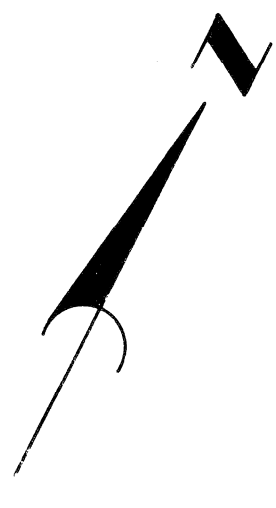
JEFFERSON AVE. CURVE DATA

Curve #1	Curve #2	Curve #3
$\Delta = 93^{\circ}-49'-31.3''$	$\Delta = 93^{\circ}-49'-31.3''$	$\Delta = 6^{\circ}-18'-07.4''$
$D = 17^{\circ}-21'-44.5''$	$D = 20^{\circ}-27'-46''$	$D = 5^{\circ}-35'-13.6''$
$R = 330'$	$R = 280'$	$R = 1025.5'$
$T = 352.80'$	$T = 299.35'$	$T = 56.46'$
$L = 540.40'$	$L = 458.52'$	$L = 112.79'$
$E = 153.03'$	$E = 129.89'$	$E = 1.55'$
$PC = 11+37.71$	$PC = 411+25.75$	$PC = 21+38.69$
$PI = 14+90.51$	$PI = 414+25.10$	$PI = 21+95.15$
$PT = 16+78.11$	$PT = 415+84.27$	$PT = 22+51.48$

Curve #4	Curve #5	Curve #6
$\Delta = 7^{\circ}-12'-40.8''$	$\Delta = 9^{\circ}-05'-24.3''$	$\Delta = 9^{\circ}-59'-57.7''$
$D = 10^{\circ}-23'-20.7''$	$D = 5^{\circ}-50'-47.4''$	$D = 9^{\circ}-35'-50.2''$
$R = 551.50'$	$R = 980'$	$R = 597'$
$T = 34.75'$	$T = 77.90'$	$T = 52.23'$
$L = 69.41'$	$L = 155.48'$	$L = 104.19'$
$E = 1.09'$	$E = 3.09'$	$E = 2.28'$
$PC = 23+44.08$	$PC =$	$PC =$
$PI = 23+78.82$	$PI =$	$PI =$
$PT = 24+13.49$	$PT =$	$PT =$

Curve #1 A

$\Delta = 45^{\circ}-21'-20.7''$
$D = 17^{\circ}-21'-44.49''$
$R = 330'$
$T = 137.89'$
$L = 261.23'$
$E = 27.65'$
$PC = 94+43.20$
$PI = 94+81.09$
$PT = 97+04.43$



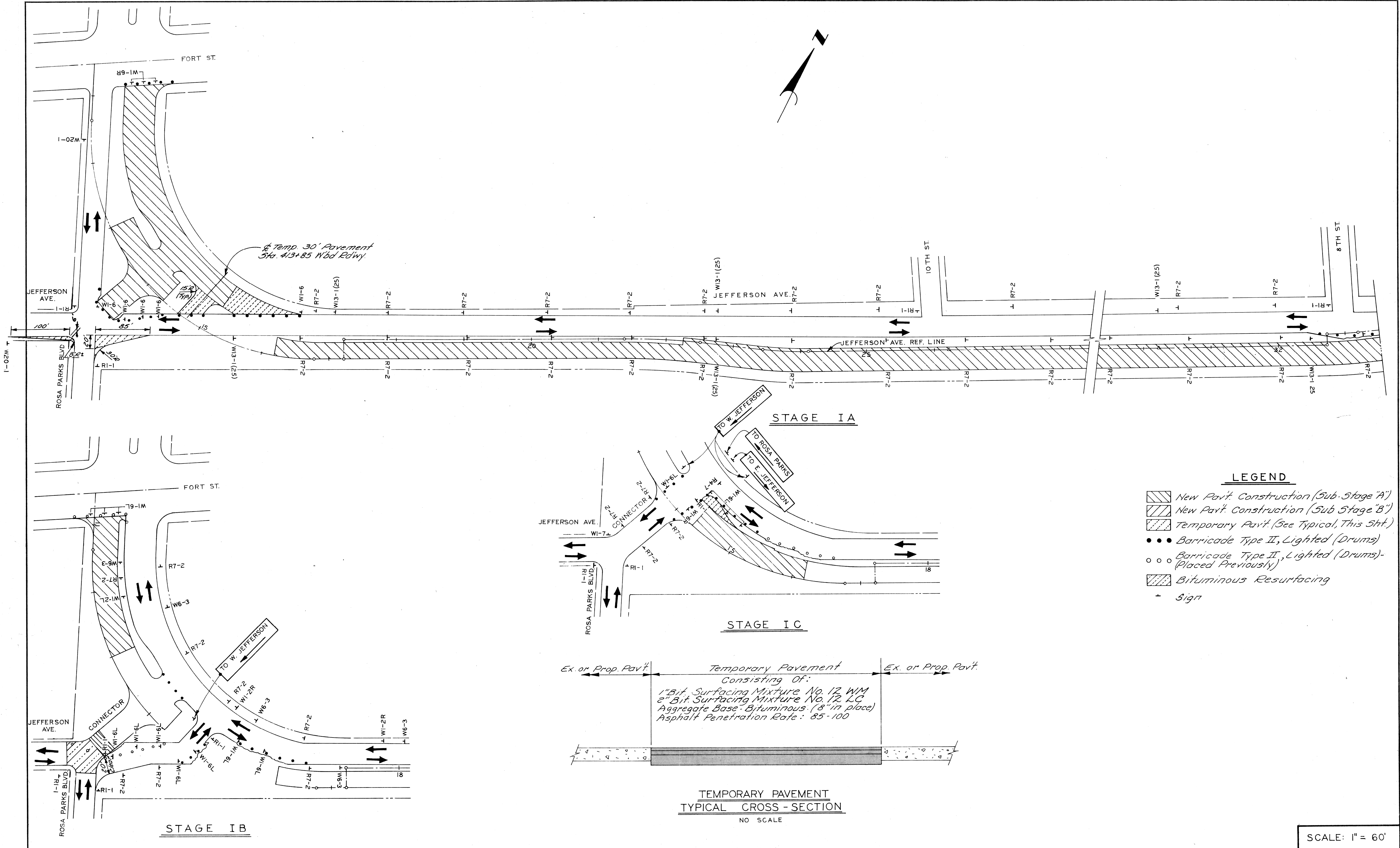
PLAN
Scale: 1" = 40'

NOTES:
1. Roadway Lines Shown are Face of Curb.

For Stid

Match Line Sta. 24+50, See Sh. No. 4

<table border="1"> <tr> <td>DESIGNED BY</td> <td>Polito</td> </tr> <tr> <td>DRAWN BY</td> <td>Polito</td> </tr> <tr> <td>TRACED BY</td> <td></td> </tr> <tr> <td>CHECKED BY</td> <td>Plater</td> </tr> </table>		DESIGNED BY	Polito	DRAWN BY	Polito	TRACED BY		CHECKED BY	Plater	<table border="1"> <tr> <td>ENGINEER OF STREETS</td> <td></td> </tr> <tr> <td>HIGHWAY ENGINEER</td> <td></td> </tr> </table>		ENGINEER OF STREETS		HIGHWAY ENGINEER		CITY OF DETROIT CITY ENGINEERING DIVISION - EPMD BUREAUS OF STREETS AND HIGHWAYS			JEFFERSON AVENUE RECONSTRUCTION ROSA PARKS BLVD. TO EIGHTH ST. ALIGNMENT FORT ST. TO STA. 24+50			SHEET 3 OF 78 SHEETS CONTRACT NO. 16562A ASSIGNMENT NO. DATE JAN. 1980	
DESIGNED BY	Polito																						
DRAWN BY	Polito																						
TRACED BY																							
CHECKED BY	Plater																						
ENGINEER OF STREETS																							
HIGHWAY ENGINEER																							



LEGEND

- New Pav't. Construction (Sub-Stage "A")
- New Pav't. Construction (Sub-Stage "B")
- Temporary Pav't. (See Typical, This Sht.)
- Barricade Type II, Lighted (Drums)
- Barricade Type II, Lighted (Drums) - (Placed Previously)
- Bituminous Resurfacing
- Sign

COORD	DESCRIPTION	DWN	CHKD	APVD	DATE

DESIGNED BY	
DRAWN BY	
TRACED BY	
CHECKED BY	

APPROVED: _____

ENGINEER OF STREETS

HIGHWAY ENGINEER

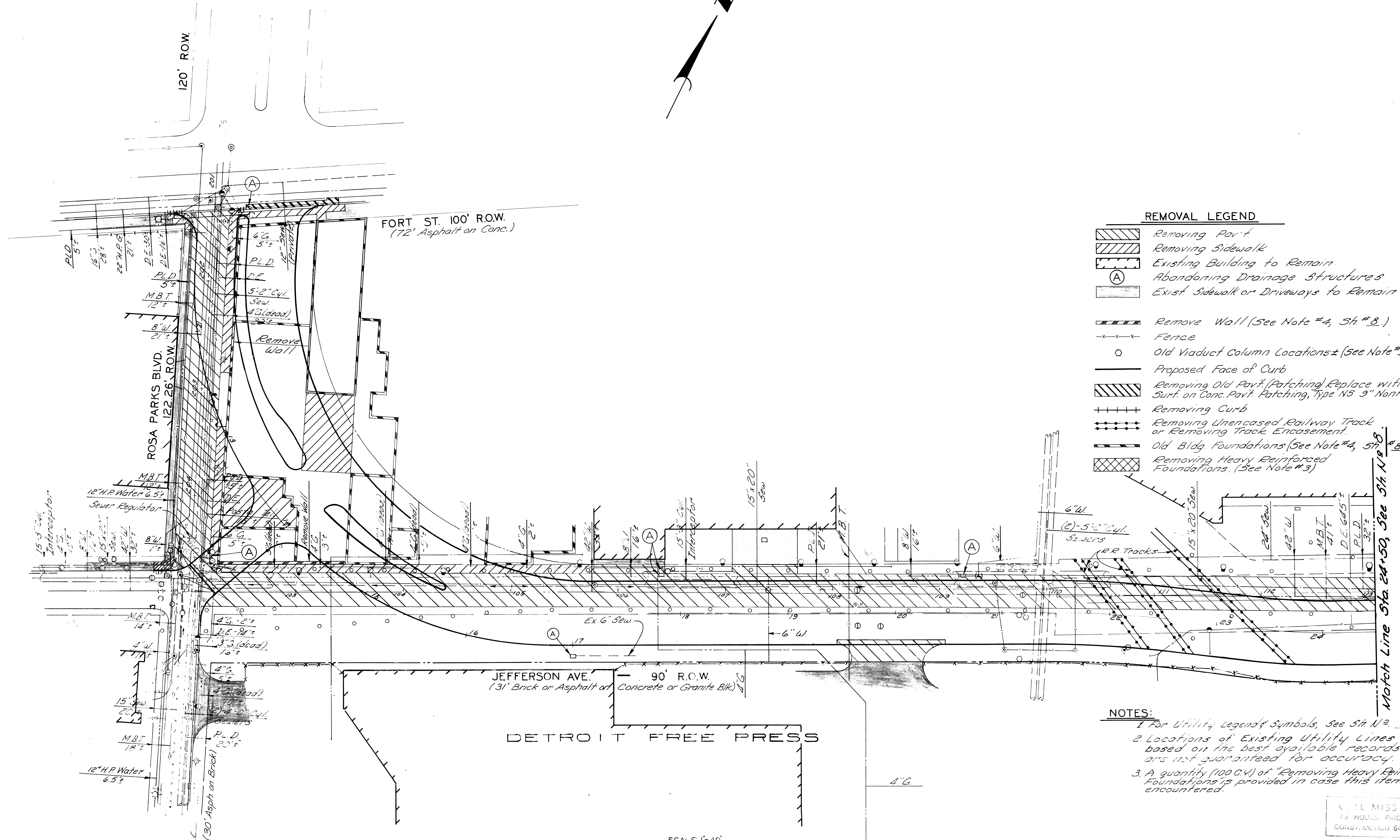
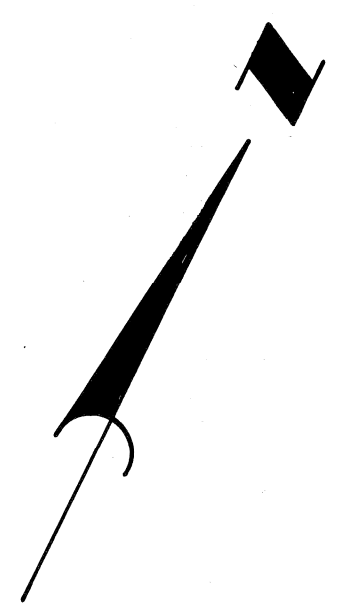
CITY OF DETROIT
 CITY ENGINEERING DIVISION - EPMD
 BUREAUS OF STREETS AND HIGHWAYS

JEFFERSON AVENUE RECONSTRUCTION
 ROSA PARKS BLVD. TO EIGHTH ST.

CONSTRUCTION SEQUENCE

SCALE: 1" = 60'
SHEET 5 OF 78 SHEETS
CONTRACT NO. 16562 A
ASSIGNMENT NO.
DATE JAN. 1980

2/8/82



REMOVAL LEGEND

- Removing Pav't
- Removing Sidewalk
- Existing Building to Remain
- Abandoning Drainage Structures
- Exist Sidewalk or Driveways to Remain
- Remove Wall (See Note #4, Sh #8.)
- Fence
- Old Viaduct Column Locations± (See Note #5, Sh #8.)
- Proposed Face of Curb
- Removing Old Pav't. (Patching) Replace with 2" Bit. Surf. on Conc. Pav't. Patching, Type N5 9" Nonreinf.
- Removing Curb
- Removing Unencased Railway Track or Removing Track Encasement
- Old Bldg Foundations (See Note #4, Sh #8.)
- Removing Heavy Reinforced Foundations. (See Note #3)

- NOTES:**
1. For Utility Legend & Symbols, See Sh. No. 24.
 2. Locations of Existing Utility Lines are based on the best available records and are not guaranteed for accuracy.
 3. A quantity (100 C.Y.) of "Removing Heavy Reinforced Foundations" is provided in case this item is encountered.

Match Line Sta. 24+50, See Sh. No. 78

SCALE: 1"=40'

REFERENCE DRAWINGS	DESIGNED BY	APPROVED	CITY OF DETROIT CITY ENGINEERING DIVISION - EPMD BUREAU OF STREETS AND HIGHWAYS				JEFFERSON AVE. RECONSTRUCTION ROSA PARKS BLVD. TO EIGHTH ST.		SHEET 7 OF 78 SHEETS
	DRAWN BY <i>Buech</i>	ENGINEER OF STREETS					REMOVALS		CONTRACT NO. 16562 A
	TRACED BY	HIGHWAY ENGINEER					FORT ST. TO STA. 24+50		ASSIGNMENT NO.
	CHECKED BY <i>W. B.</i>						2/8/82		DATE JAN. 1980
COORD. DESCRIPTION		DRN. CHK. AP. V. DATE	REVISIONS LOCATED BY COORDINATES ON SHEET						

C.B.M. Arrow on Hydrant E. of 12TH - N. Side Jefferson Elev. 106.41
 C.B.M. Arrow on Hydrant N. Side Fort - 50'± E. of 12TH Elev. 117.43

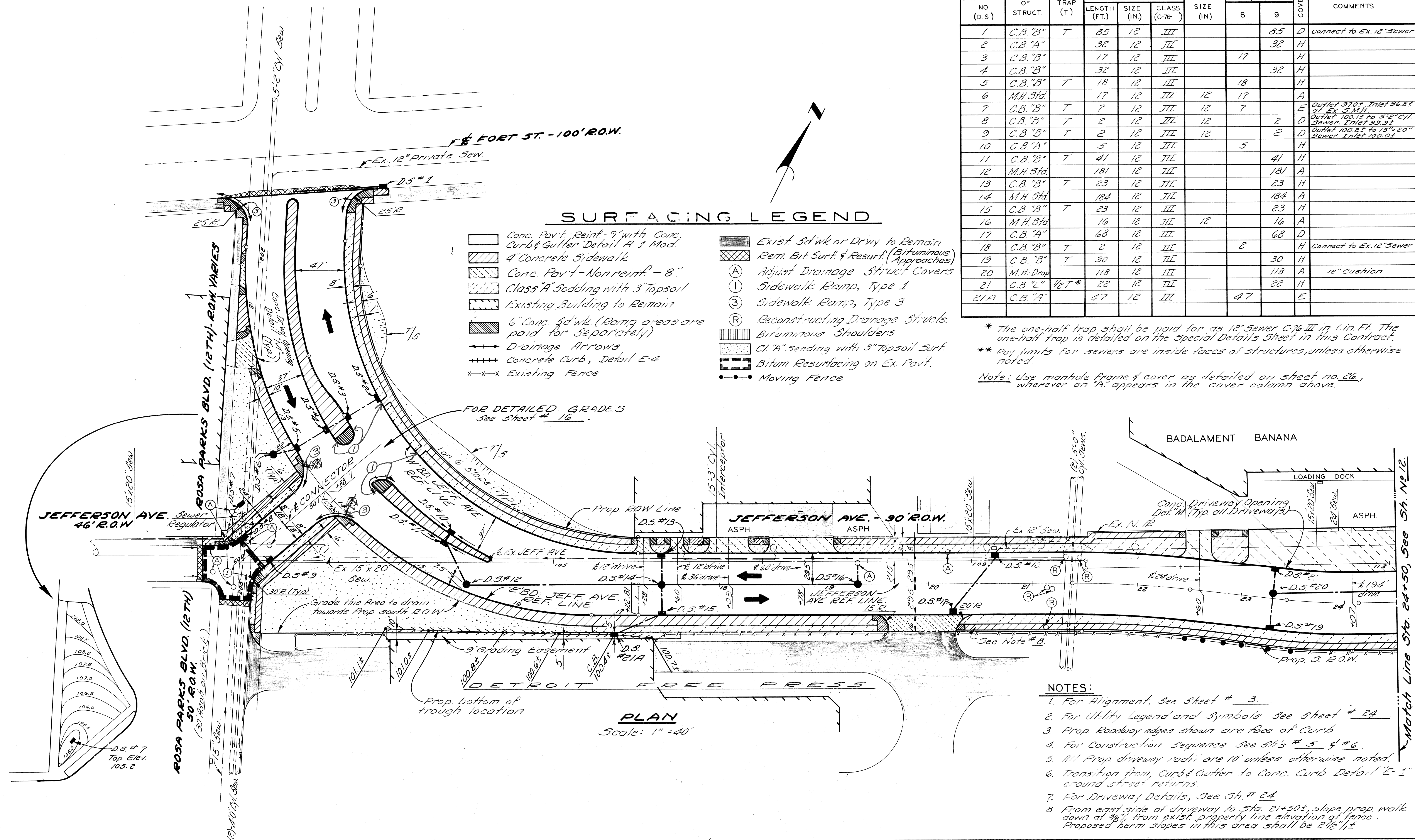
DRAINAGE STRUCTURE TABLE

DRAINAGE STRUCTURE NO. (D.S.)	TYPE OF STRUCT.	WITH TRAP (T)	SEWER LENGTH & TYPE LEAVING (D.S.)			SEWER TAP SIZE (IN)	TRENCH DETAIL (L.F.)		COVER	COMMENTS
			LENGTH (FT.)	SIZE (IN)	CLASS (C-76)		8	9		
1	C.B."B"	T	85	12	III			85	D	connect to Ex. 12" Sewer
2	C.B."A"		32	12	III			32	H	
3	C.B."B"		17	12	III			17	H	
4	C.B."B"		32	12	III			32	H	
5	C.B."B"	T	18	12	III			18	H	
6	M.H. 5fd		17	12	III	12		17	A	
7	C.B."B"	T	7	12	III	12		7	E	Outlet 370±, Inlet 36.8± of Ex. 5 M.H.
8	C.B."B"	T	2	12	III	12		2	D	Outlet 100.1± to 5"± Cyl. Sewer, Inlet 99.9±
9	C.B."B"	T	2	12	III	12		2	D	Outlet 100.2± to 15"± 20" Sewer, Inlet 100.0±
10	C.B."A"		5	12	III			5	H	
11	C.B."B"	T	41	12	III			41	H	
12	M.H. 5fd		181	12	III			181	A	
13	C.B."B"	T	23	12	III			23	H	
14	M.H. 5fd		184	12	III			184	A	
15	C.B."B"	T	23	12	III			23	H	
16	M.H. 5fd		16	12	III	12		16	A	
17	C.B."A"		68	12	III			68	D	
18	C.B."B"	T	2	12	III			2	H	Connect to Ex. 12" Sewer
19	C.B."B"	T	30	12	III			30	H	
20	M.H. Drop		118	12	III			118	A	12" cushion
21	C.B."L"	1/2 T	22	12	III			22	H	
21A	C.B."A"		47	12	III			47	E	

* The one-half trap shall be paid for as 12" Sewer C-76-III in Lin. Ft. The one-half trap is detailed on the Special Details Sheet in this Contract.
 ** Pay limits for sewers are inside faces of structures, unless otherwise noted.
 Note: Use manhole frame & cover as detailed on sheet no. 26, wherever an "A" appears in the cover column above.

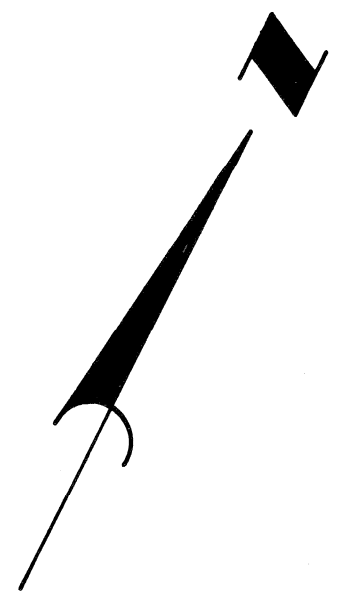
SURFACING LEGEND

- Conc. Pav't - Reinf. - 9" with Conc. Curb & Gutter Detail A-1 Mod.
- 4" Concrete Sidewalk
- Conc. Pav't - Non reinf. - 8"
- Class "A" Sodding with 3" Topsoil
- Existing Building to Remain
- 6" Conc. Sidewalk (Ramp areas are paid for separately)
- Drainage Arrows
- Concrete Curb, Detail E-4
- Existing Fence
- Exist Sidewalk or Drwy. to Remain
- Rem. Bit. Surf. & Resurf. (Bituminous) (Approaches)
- Adjust Drainage Struct. Covers.
- Sidewalk Ramp, Type 1
- Sidewalk Ramp, Type 3
- Reconstructing Drainage Structs.
- Bituminous Shoulders
- Cl. "A" Seeding with 3" Topsoil Surf.
- Bitum. Resurfacing on Ex. Pav't.
- Moving Fence

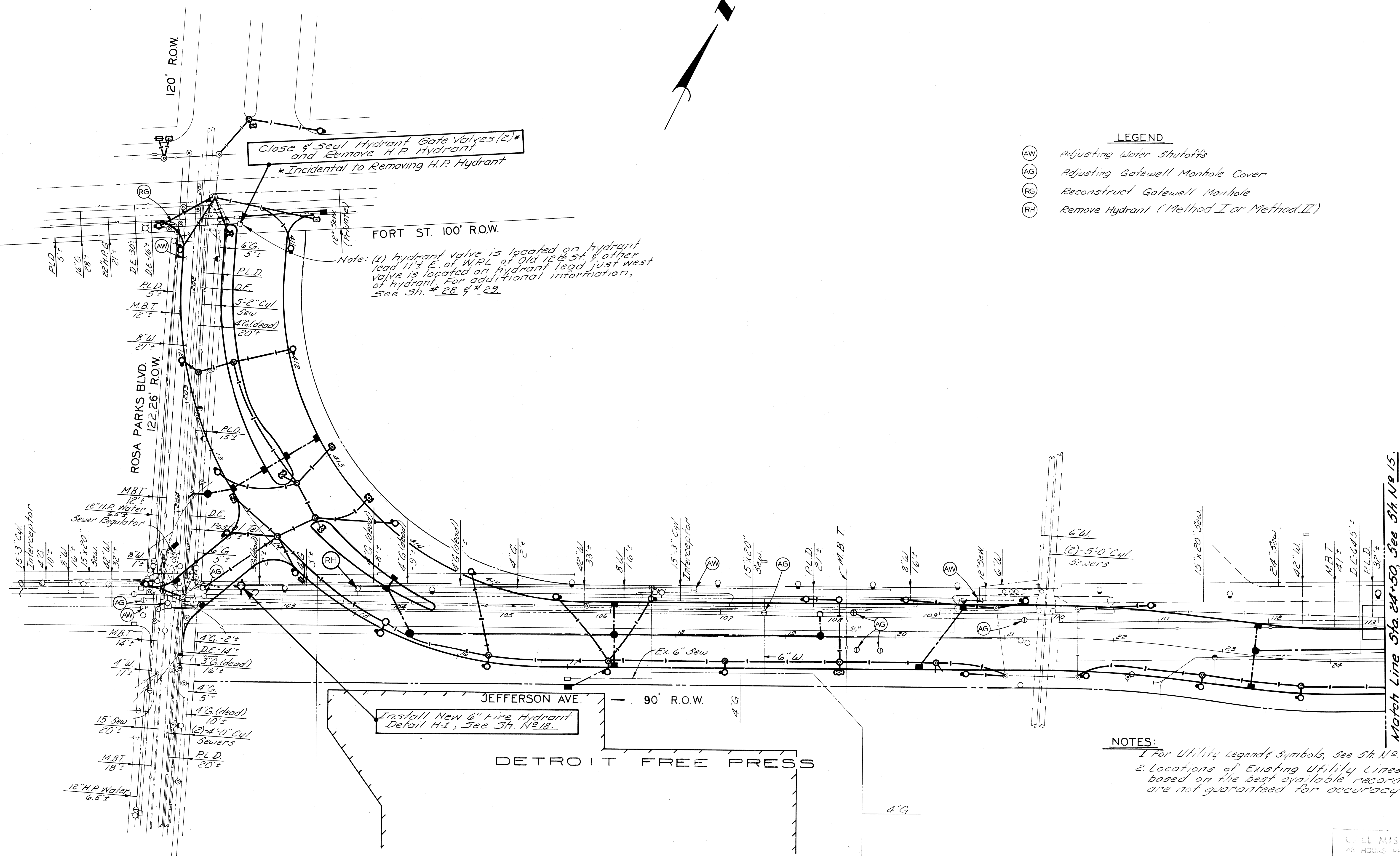


- NOTES:**
1. For Alignment, See Sheet # 3.
 2. For Utility Legend and Symbols See Sheet # 24.
 3. Prop. Roadway edges shown are face of Curb.
 4. For Construction Sequence See Sh's # 5 & # 6.
 5. All Prop. driveway radii are 10' unless otherwise noted.
 6. Transition from Curb & Gutter to Conc. Curb Detail "E-1" around street returns.
 7. For Driveway Details, See Sh. # 24.
 8. From east side of driveway to Sta. 21+50±, slope prop. walk down at 3/8% from exist. property line elevation of fence. Proposed berm slopes in this area shall be 2 1/2%±.

REFERENCE DRAWINGS DESIGNED BY DRAWN BY <i>Sucech</i> TRACED BY CHECKED BY <i>I.K.D.</i>		APPROVED ENGINEER OF STREETS HIGHWAY ENGINEER		CITY OF DETROIT CITY ENGINEERING DIVISION - EPMD BUREAUS OF STREETS AND HIGHWAYS		JEFFERSON AVENUE RECONSTRUCTION ROSA PARKS BLVD. TO EIGHTH ST. PLAN, JEFFERSON AVE. FORT ST. TO STA. 24+50		SHEET 9 OF 78 SHEETS CONTRACT NO. 16562 A ASSIGNMENT NO. DATE JAN. 1980	
--	--	---	--	--	--	---	--	--	--



- LEGEND**
- (AW) Adjusting Water Shutoffs
 - (AG) Adjusting Gatewell Manhole Cover
 - (RG) Reconstruct Gatewell Manhole
 - (RH) Remove Hydrant (Method I or Method II)



Close & Seal Hydrant Gate Valves (2)*
and Remove H.P. Hydrant
*Incidental to Removing H.P. Hydrant

Note: (1) hydrant valve is located on hydrant lead 11'± E. of W.P.L. of Old 12th St. & other valve is located on hydrant lead just west of hydrant. For additional information, see Sh. # 28 & # 29.

Install New 6" Fire Hydrant
Detail H.1, See Sh. N#18.

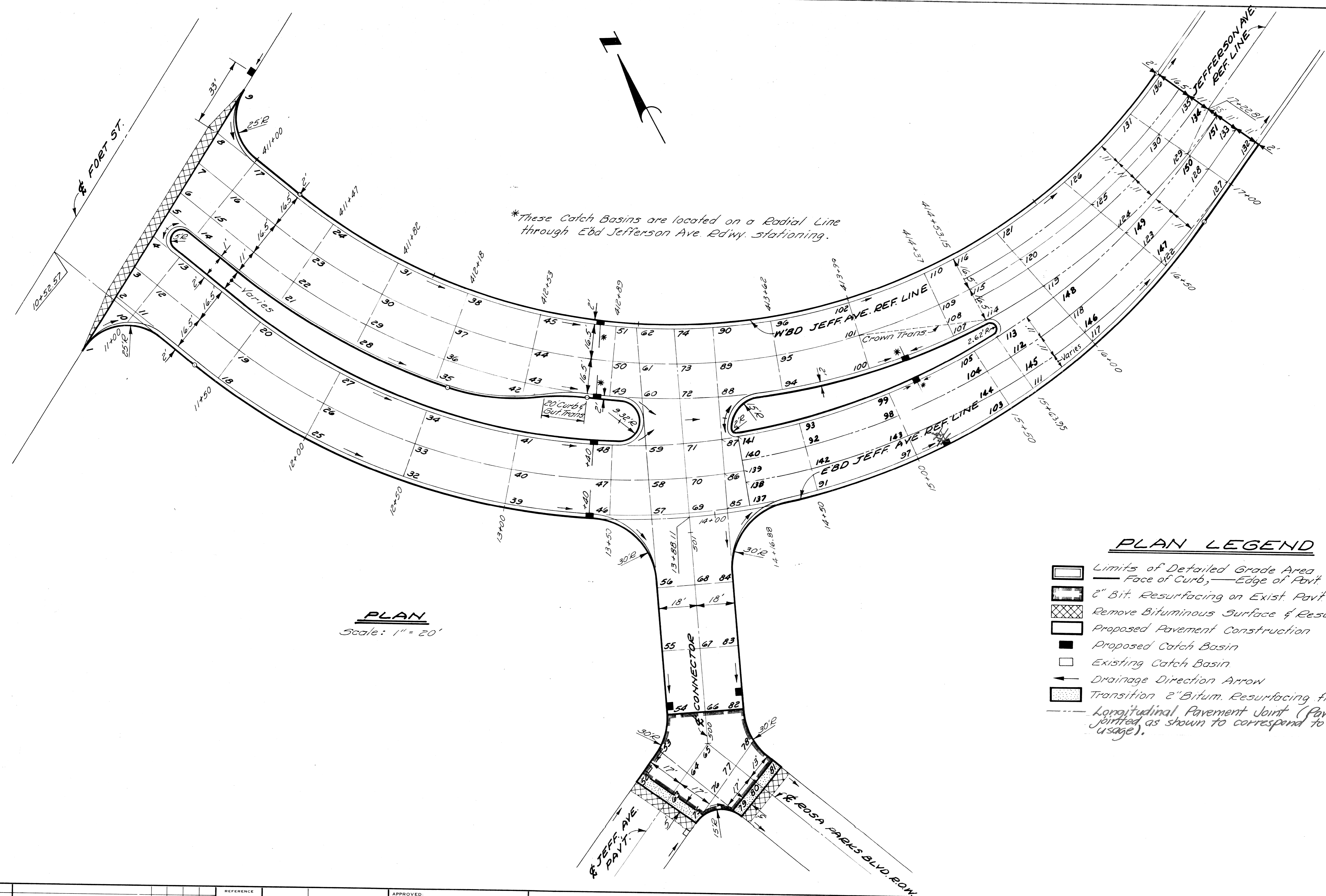
NOTES:
1. For Utility Legend & Symbols, See Sh. N# 24.
2. Locations of Existing Utility Lines are based on the best available records and are not guaranteed for accuracy.

Match Line Sta. 24+50, See Sh. N# 15.

SCALE: 1"=40'

CALL MISS DIG
48 HOURS PRIOR TO
CONSTRUCTION 647-7344

REVISIONS LOCATED BY COORDINATES ON SHEET 1 2		REFERENCE DRAWINGS DESIGNED BY DRAWN BY <i>Sucech</i> TRACED BY CHECKED BY	APPROVED: ENGINEER OF STREETS HIGHWAY ENGINEER	CITY OF DETROIT CITY ENGINEERING DIVISION - EPMD BUREAUS OF STREETS AND HIGHWAYS	JEFFERSON AVE. RECONSTRUCTION ROSA PARKS BLVD. TO EIGHTH ST. UTILITIES FORT ST. TO STA. 24+50 2/8/82	SHEET 14 OF 78 SHEETS CONTRACT NO. 16562 A ASSIGNMENT NO. DATE JAN. 1980
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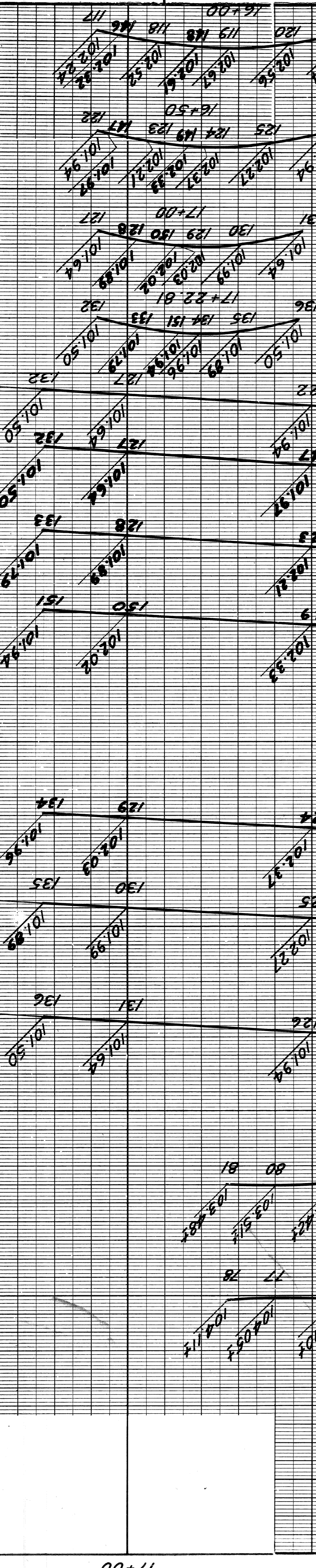
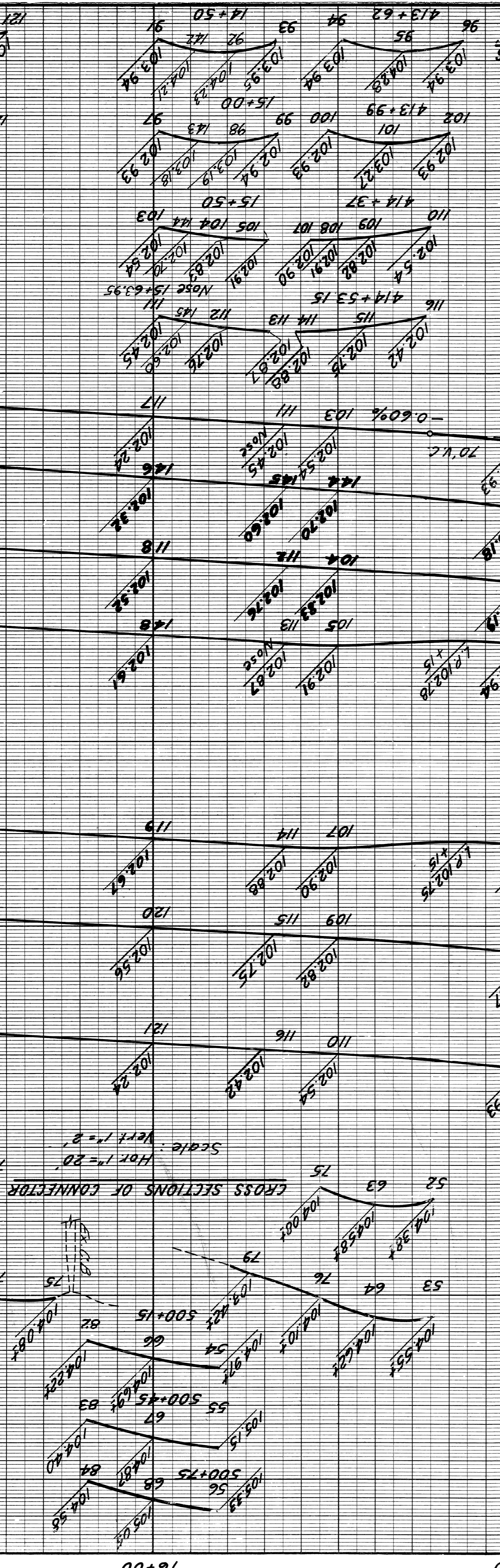
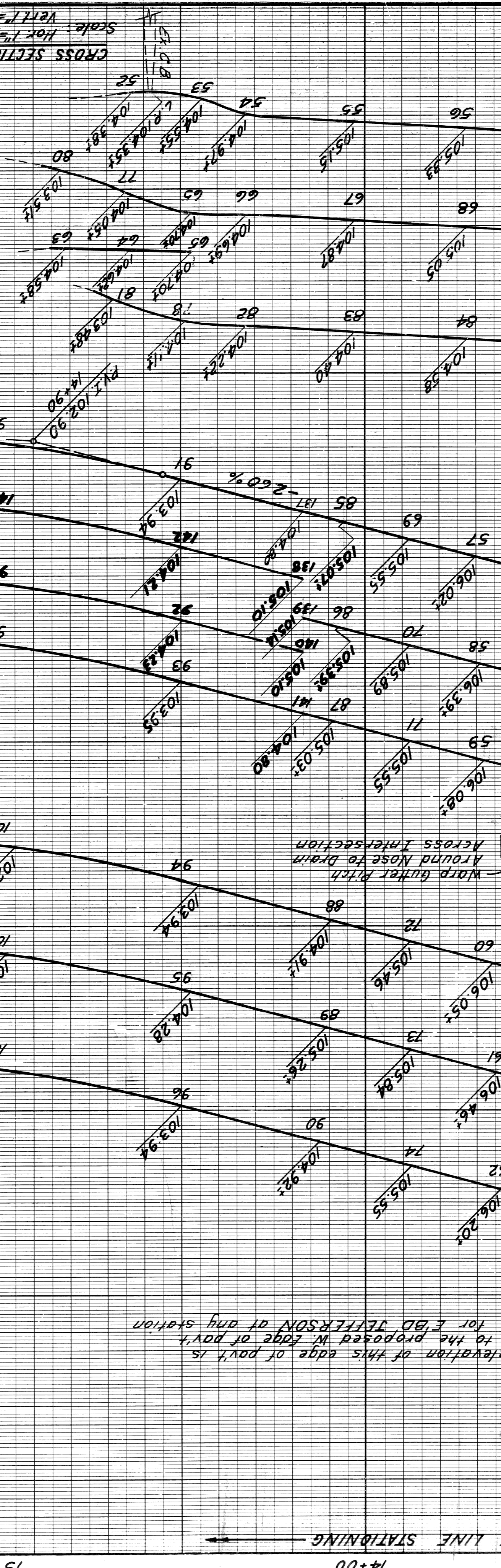
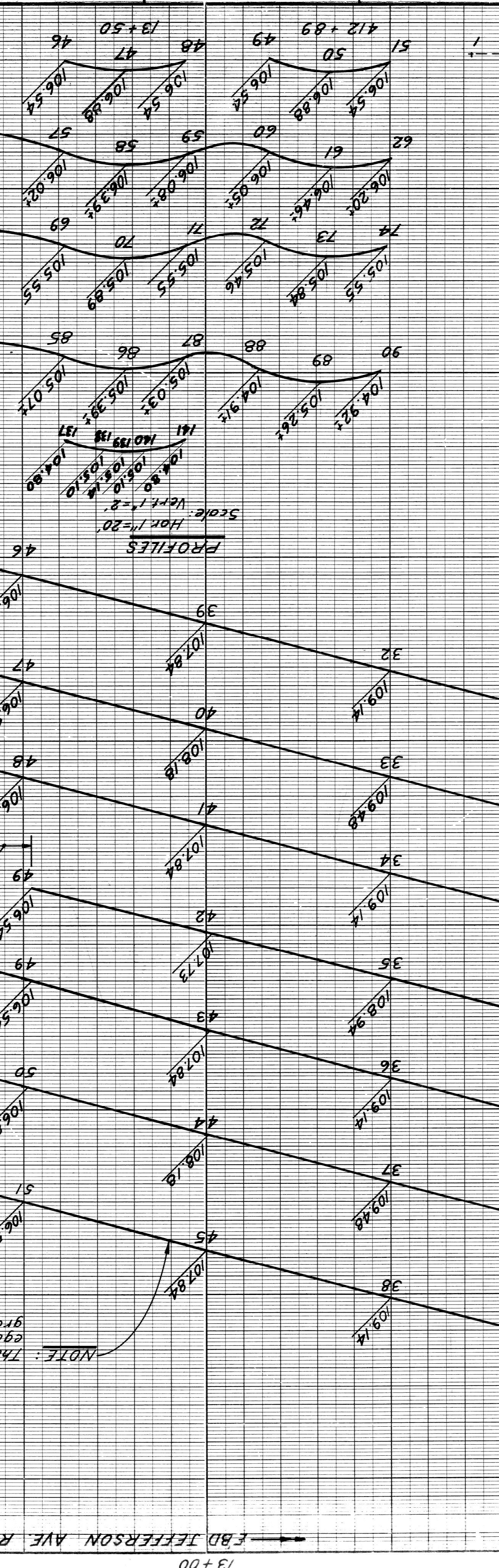
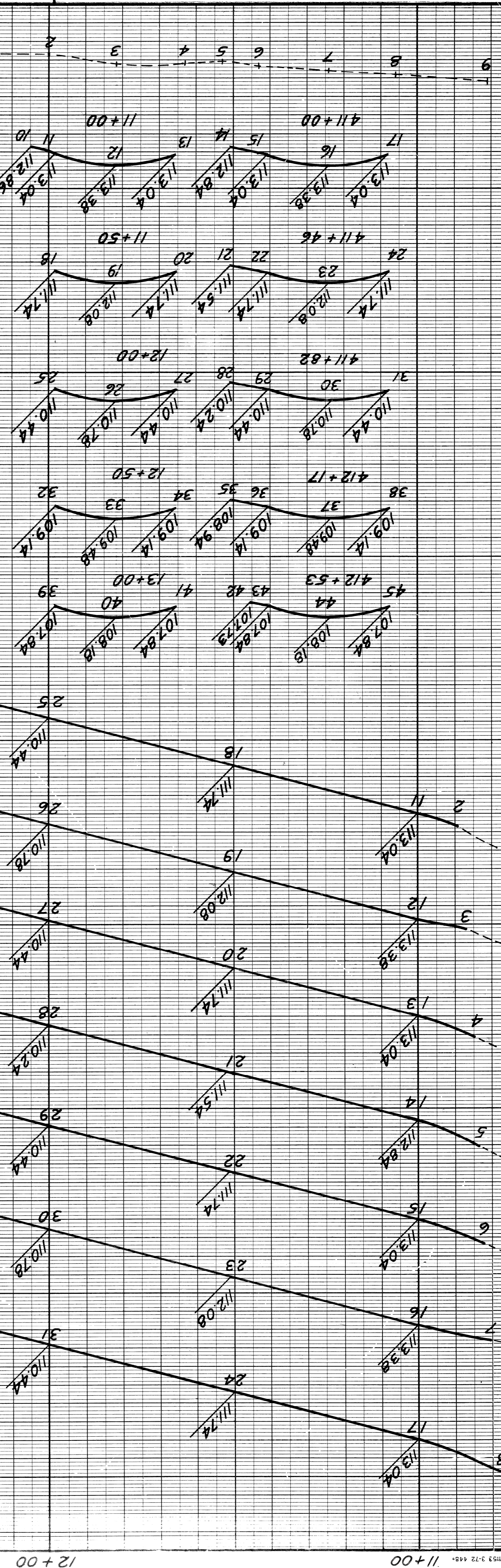
PLAN
Scale: 1" = 20'

PLAN LEGEND

- Limits of Detailed Grade Area
- Face of Curb, — Edge of Pavt.
- 6" Bit. Resurfacing on Exist. Pavt. to Remain
- Remove Bituminous Surface & Resurf. (Bitum. Approaches)
- Proposed Pavement Construction
- Proposed Catch Basin
- Existing Catch Basin
- Drainage Direction Arrow
- Transition 2" Bitum. Resurfacing from 2" to 1"
- Longitudinal Pavement Joint (Pavement to be jointed as shown to correspond to proposed lane usage).

REFERENCE DRAWINGS	DESIGNED BY	APPROVED:		CITY OF DETROIT CITY ENGINEERING DIVISION - EPMD BUREAU OF STREETS AND HIGHWAYS										
	DRAWN BY <i>WHP</i>	ENGINEER OF STREETS												
	TRACED BY	HIGHWAY ENGINEER												
COORD. DESCRIPTION	DRN	CKD	APVD	DATE	JEFFERSON AVE. RECONSTRUCTION ROSA PARKS BLVD. TO EIGHTH ST. DETAILED GRADES FORT ST. TO STA. 17+22.81			SHEET <u>16</u> OF <u>78</u> SHEETS CONTRACT NO. <u>16562 A</u> ASSIGNMENT NO. DATE <u>JAN. 1980</u>						
REVISIONS LOCATED BY COORDINATES ON SHEET				1	2	3	4	5	6	7	8	9	10	11

FINAL R.O.W.



CITY OF DETROIT
CITY ENGINEERING DIVISION-ERM.D
BUREAUS OF STREETS AND HIGHWAYS

JEFFERSON AVE. RECONSTRUCTION
ROSA PARKS BLVD. TO EIGHTH ST.
DETAILED GRADES

JAN 1980
16562A
SHEET 17 OF 78 SHEETS

I.K.
GOMLY

2/8/82

FORT ST TO STA. 17+22.81

17+00

16+00

15+00

14+00

13+00

12+00

11+00

E.B.D. JEFFERSON AVE REF. LINE STATIONING

MM

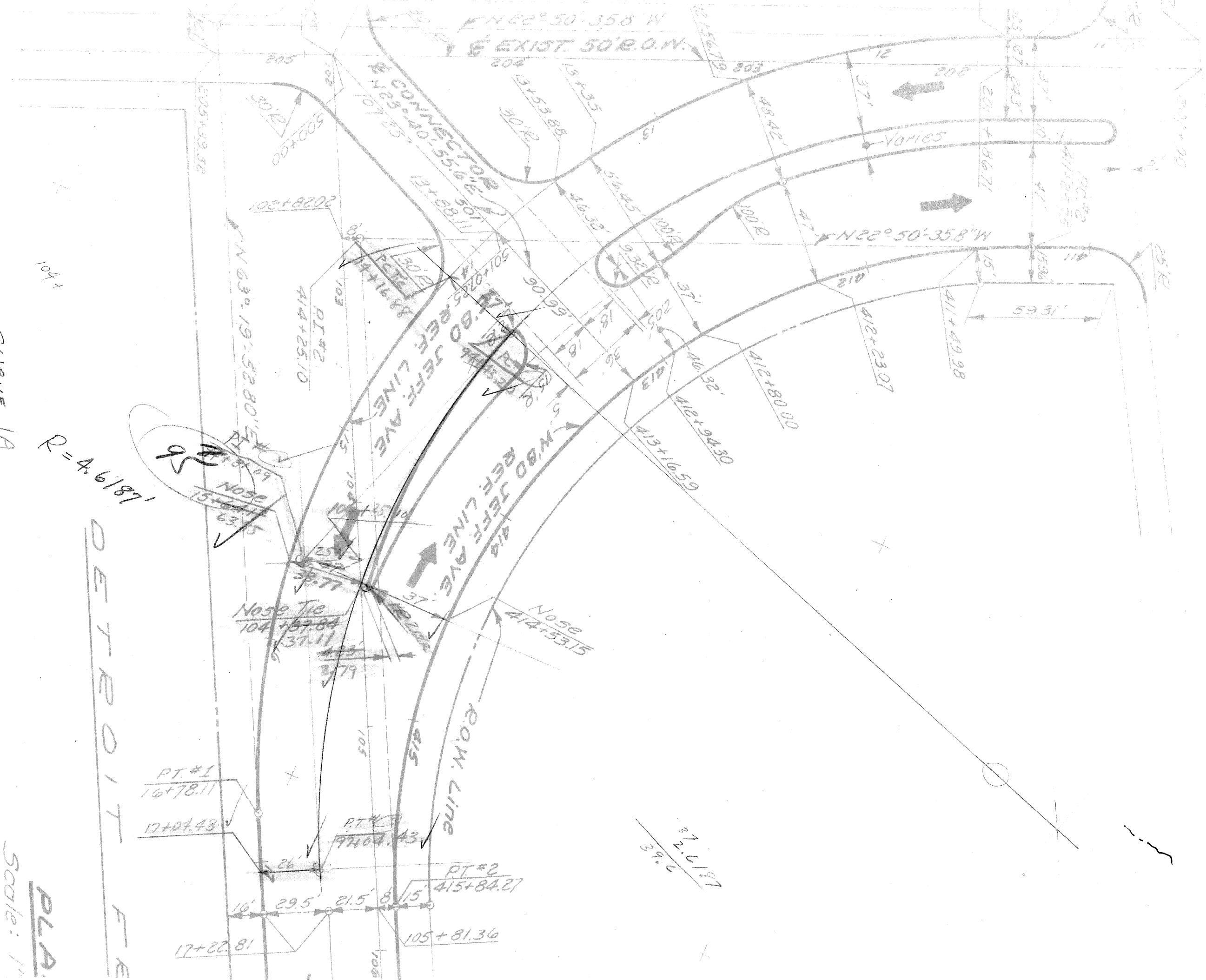
$\Delta = 45^\circ 21' 20.7''$
 $D = 170.36235743^\circ = 170^\circ 21' 44.49''$
 $R = 330'$
 $T = 137.89'$
 $L = 261.23'$
 $E = 27.65'$
 $P = 94+43.20$

CURVE 1A

$R = 4.6187'$

DETROIT FIVE

PLA
Scale: 1" = 100'



EXIST. 50' R.O.W.
 N 60° 06' 05" E

$\frac{27.12}{0.93} = 29.15$

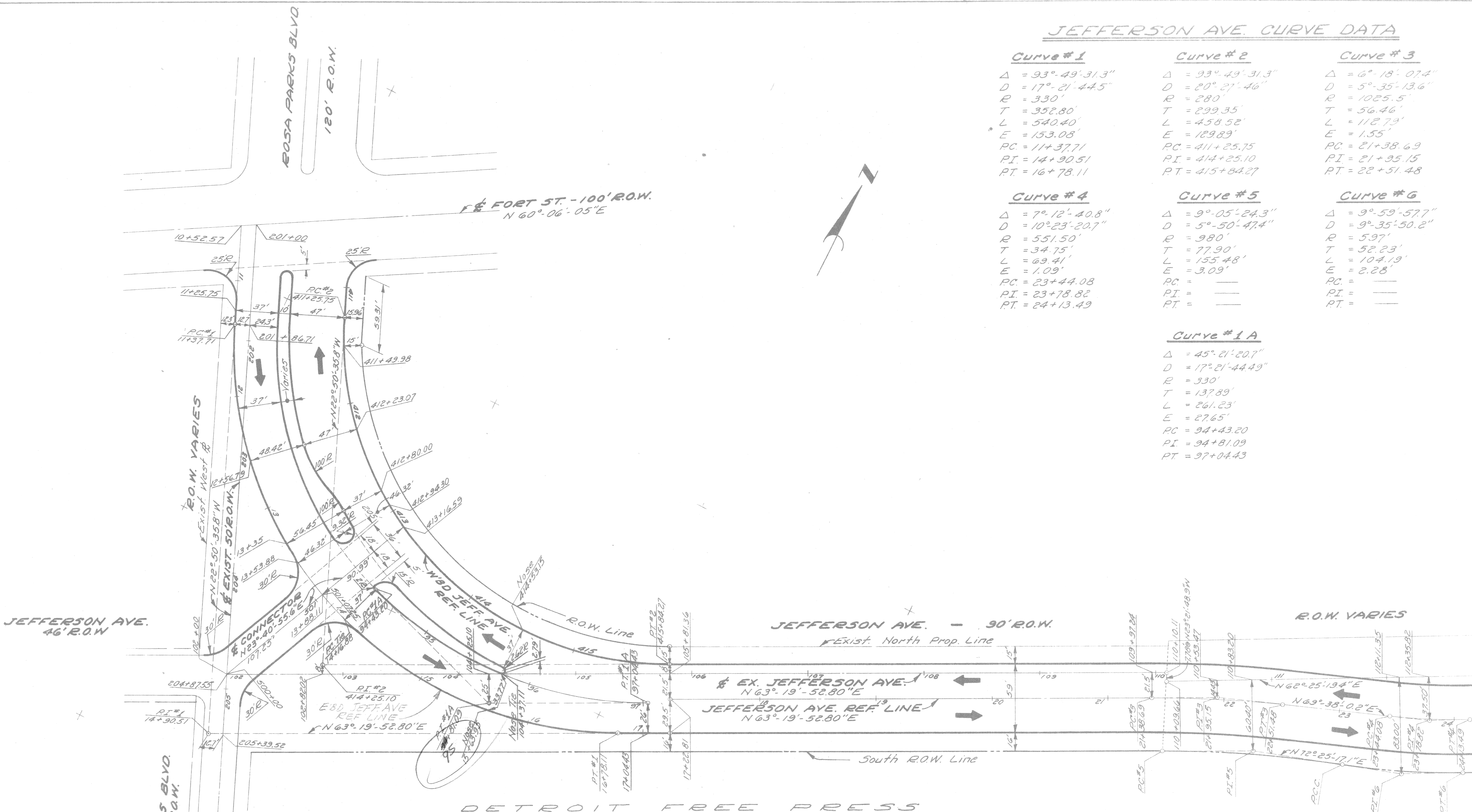
JEFFERSON AVE. CURVE DATA

Curve #1	Curve #2	Curve #3
$\Delta = 93^{\circ} 49' 31.3''$	$\Delta = 93^{\circ} 49' 31.3''$	$\Delta = 6^{\circ} 18' 07.4''$
$D = 17^{\circ} 21' 44.5''$	$D = 20^{\circ} 27' 46''$	$D = 5^{\circ} 35' 13.6''$
$R = 330'$	$R = 280'$	$R = 1025.5'$
$T = 352.80'$	$T = 299.35'$	$T = 56.46'$
$L = 540.40'$	$L = 458.52'$	$L = 112.79'$
$E = 153.08'$	$E = 129.89'$	$E = 1.55'$
$PC = 11+37.71$	$PC = 411+25.75$	$PC = 21+38.69$
$PI = 14+90.51$	$PI = 414+25.10$	$PI = 21+95.15$
$PT = 16+78.11$	$PT = 415+84.27$	$PT = 22+51.48$

Curve #4	Curve #5	Curve #6
$\Delta = 7^{\circ} 12' 40.8''$	$\Delta = 9^{\circ} 05' 24.3''$	$\Delta = 9^{\circ} 59' 57.7''$
$D = 10^{\circ} 23' 20.7''$	$D = 5^{\circ} 50' 47.4''$	$D = 9^{\circ} 35' 50.2''$
$R = 551.50'$	$R = 980'$	$R = 597'$
$T = 34.75'$	$T = 77.90'$	$T = 52.23'$
$L = 69.41'$	$L = 155.48'$	$L = 104.19'$
$E = 1.09'$	$E = 3.09'$	$E = 2.28'$
$PC = 23+44.08$	$PC =$	$PC =$
$PI = 23+78.82$	$PI =$	$PI =$
$PT = 24+13.49$	$PT =$	$PT =$

Curve #1A

$\Delta = 45^{\circ} 21' 20.7''$
$D = 17^{\circ} 21' 44.49''$
$R = 330'$
$T = 137.89'$
$L = 261.23'$
$E = 27.65'$
$PC = 94+43.20$
$PI = 94+81.09$
$PT = 97+04.43$



PLAN
Scale: 1" = 40'

NOTES:
1. Roadway Lines Shown are Face of Curb.

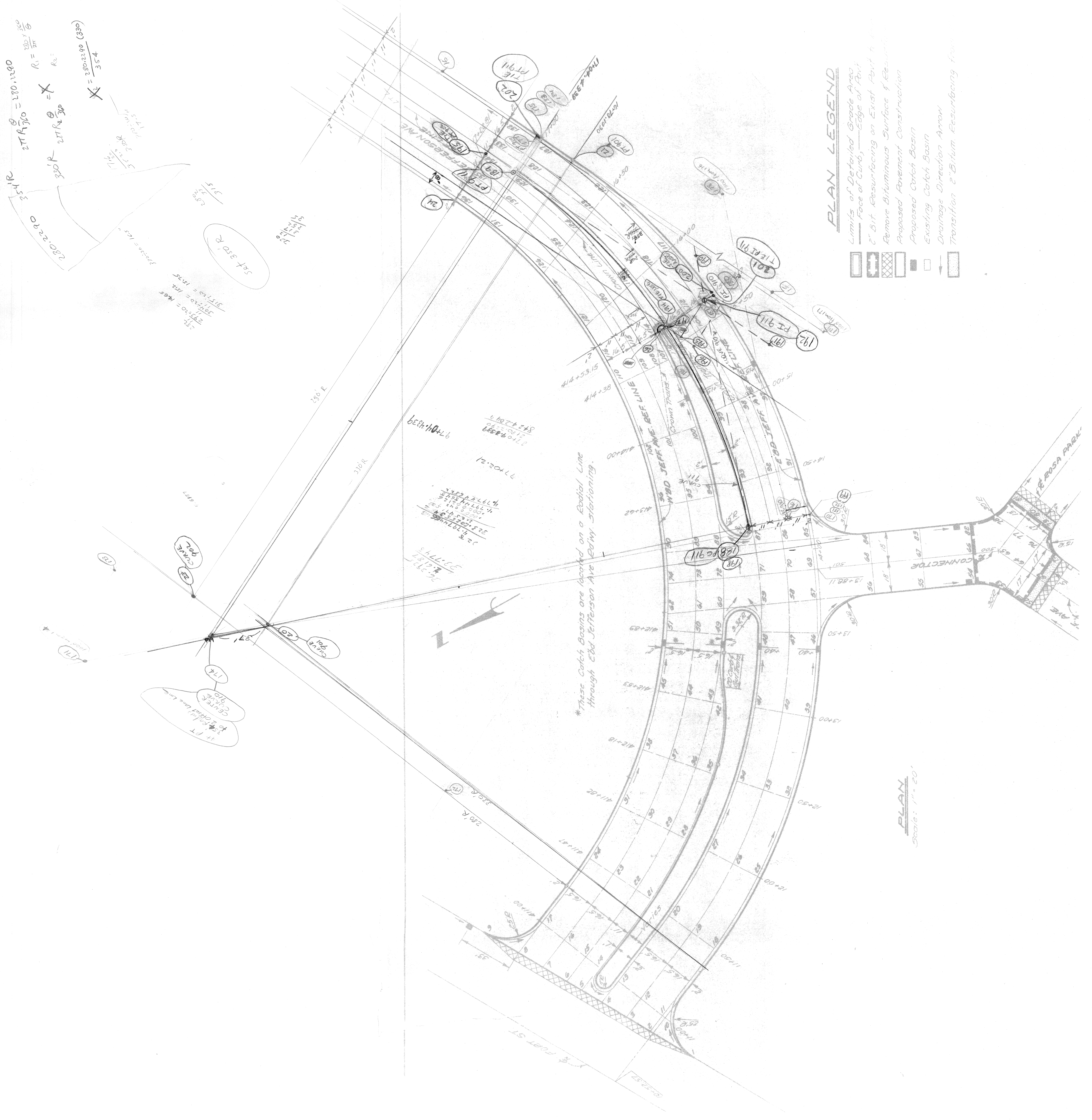
Checked by WB 2/3/82
Tracing OK WB 2/5/82

CITY OF DETROIT CITY ENGINEERING DIVISION - EPMD BUREAUS OF STREETS AND HIGHWAYS		JEFFERSON AVENUE RECONSTRUCTION ROSA PARKS BLVD TO EIGHTH ST. ALIGNMENT FORT ST. TO STA 24+50		SHEET 3 OF 78 SHEETS CONTRACT NO 16562 A ASSIGNMENT NO DATE JAN 1980
DESIGNED BY Polito	DRAWN BY Polito	TRACED BY Plater	CHECKED BY Plater	APPROVED: ENGINEER OF STREETS HIGHWAY ENGINEER

$2\pi R_{360} = 280,1200$
 $R_1 = \frac{280,1200}{2\pi}$
 $R_2 =$
 $X_L = \frac{280,1200 (330)}{354}$

$2\pi R_{360} = 280,1200$
 $R_1 = \frac{280,1200}{2\pi}$
 $R_2 =$
 $X_L = \frac{280,1200 (330)}{354}$

$2\pi R_{360} = 280,1200$
 $R_1 = \frac{280,1200}{2\pi}$
 $R_2 =$
 $X_L = \frac{280,1200 (330)}{354}$



*These Catch Basins are located on a Radial Line
 Through Edd Jefferson Ave Radwy Stationing.

PLAN LEGEND

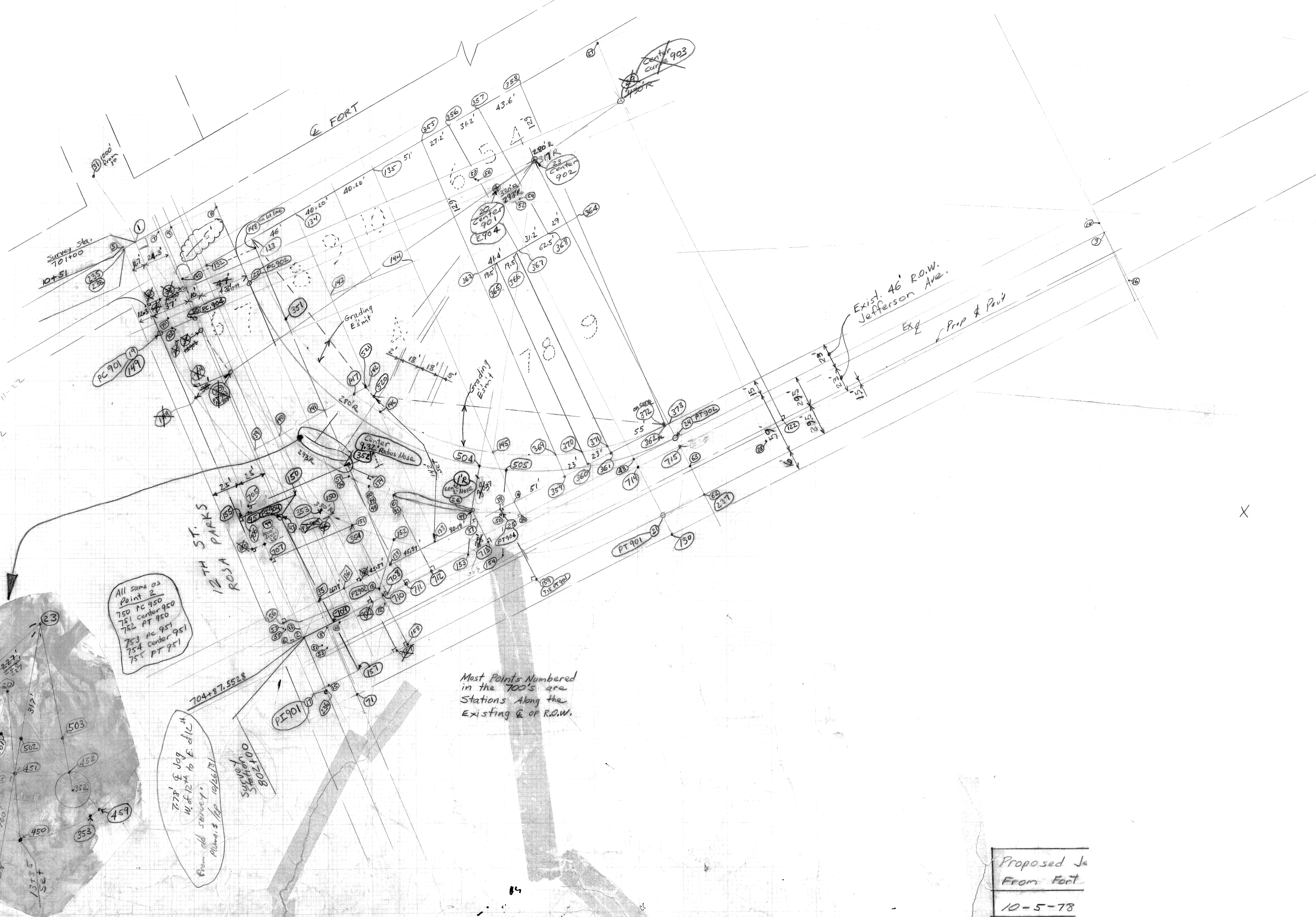
- Limits of Detailed Grade Area
- Face of Curb, — Edge of Pavt
- 2" Bit Resurfacing on Exist Pavt to
- Remove Bituminous Surface & Resurfacing
- Proposed Pavement Construction
- Proposed Catch Basin
- Existing Catch Basin
- Drainage Direction Arrow
- Transition 2" Bitum Resurfacing from

PLAN
 Scale: 1" = 20'

900
800
700
600
500
400
300
200
100

94800 X

120' E FORT @ E 10TH



5-19
7-33
32-32

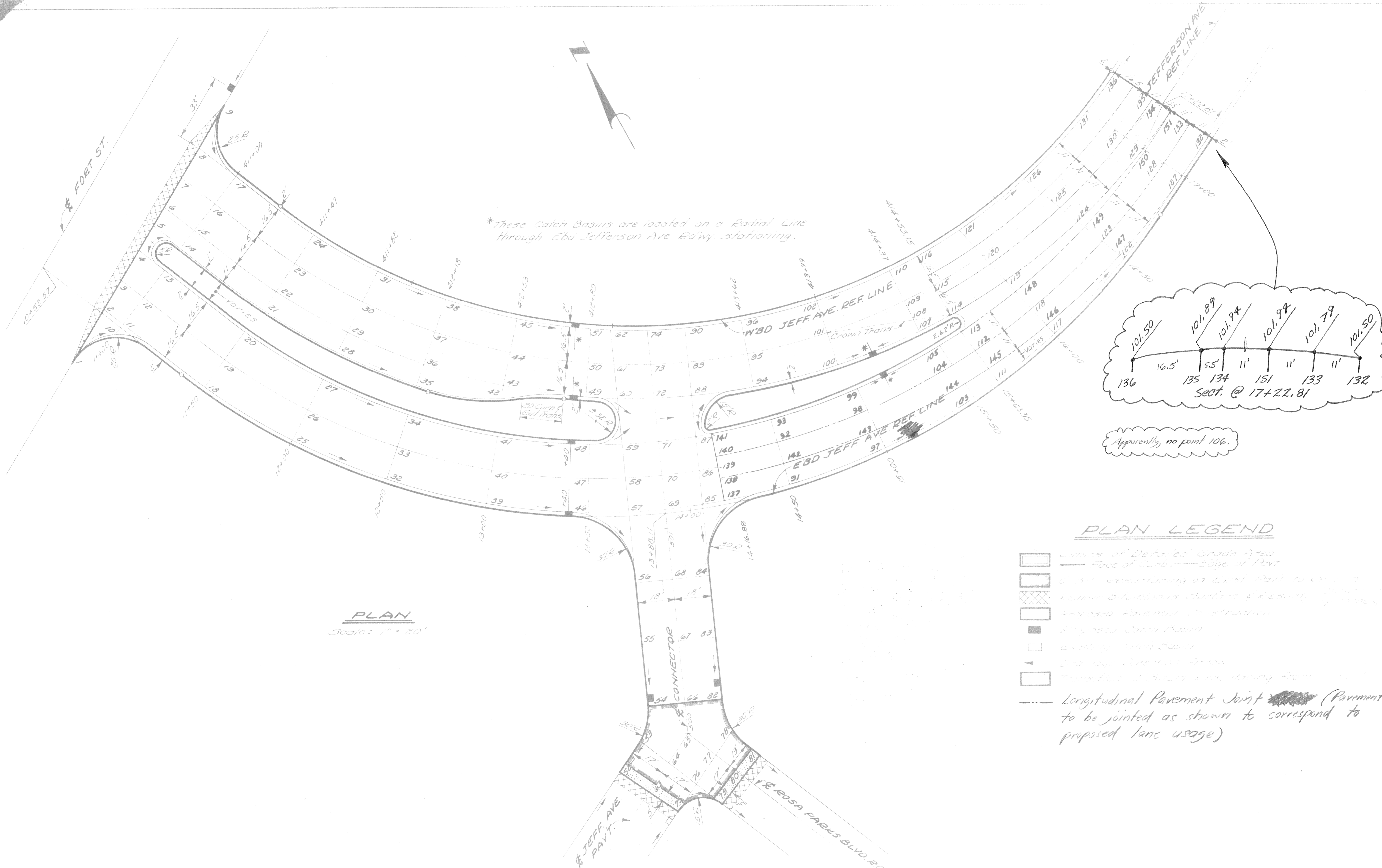
All same as Point 2
 750 PC 950
 751 Center 950
 752 PT 950
 753 PC 951
 754 Center 951
 755 PT 951

778' E Jog
 W.F.R. to E d/c
 from old survey.
 Muns. Map 10/26/31

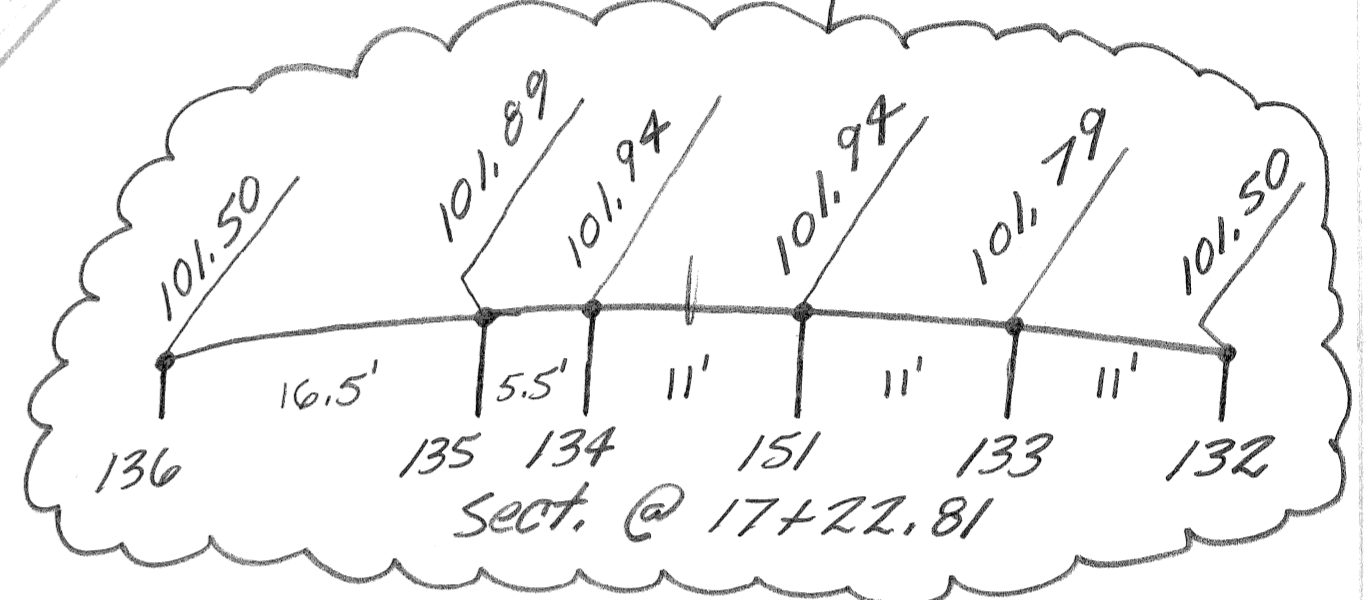
007208
 Survey
 10/26/31

Most Points Numbered
 in the 700's are
 Stations Along the
 Existing E of R.O.W.

Proposed Jc
 From Fort
 10-5-78



PLAN
Scale: 1" = 20'



Apparently, no point 106.

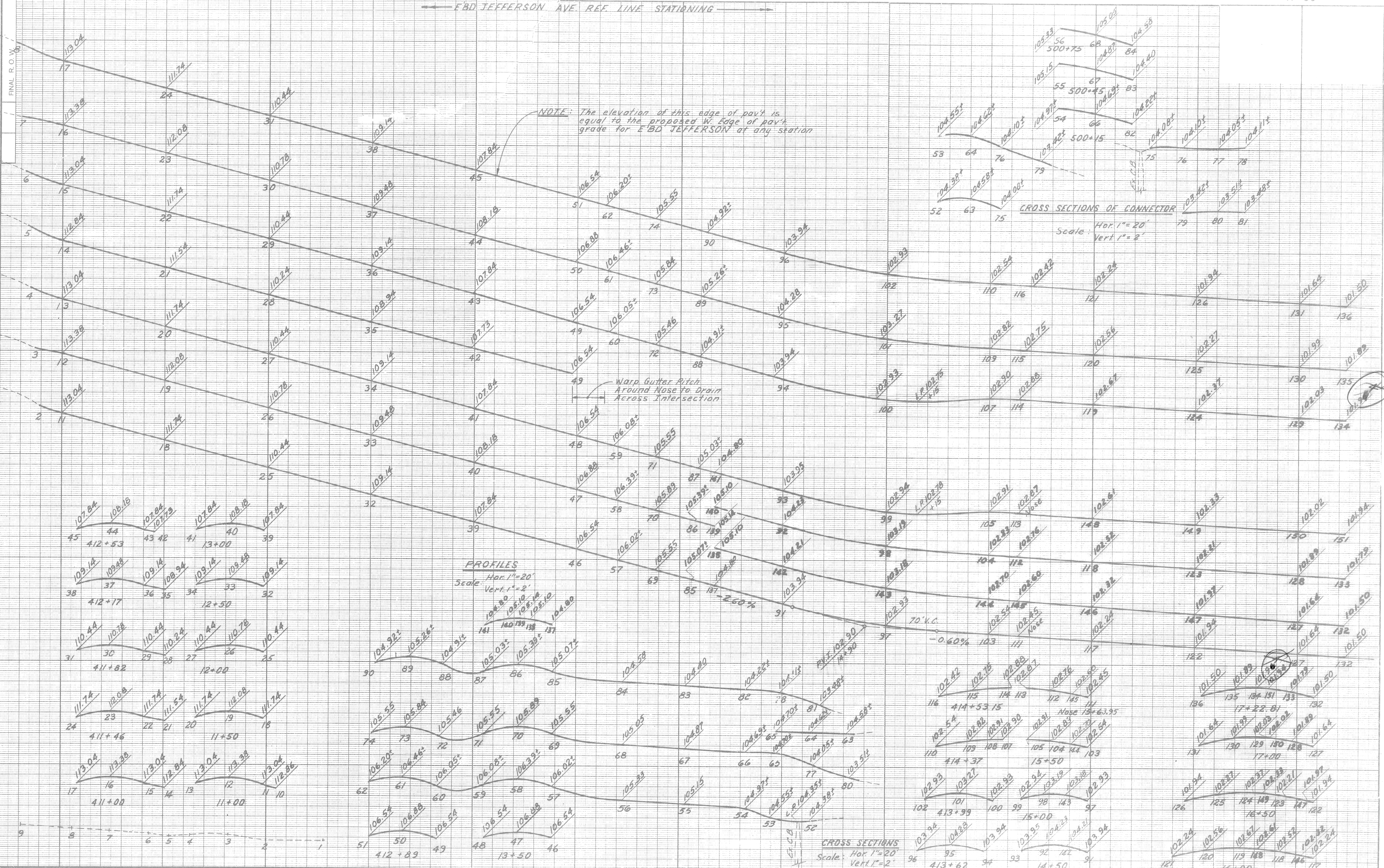
PLAN LEGEND

- Limits of Detailed Grade Area
- Face of Curb - Edge of Pavt
- Existing Pavt to be removed
- Proposed Pavement Construction
- Proposed Catch Basin
- Existing Catch Basin
- Proposed Street Light
- Transition of Pavt Construction
- Longitudinal Pavement Joint (Pavement to be jointed as shown to correspond to proposed lane usage)

DESIGNED BY	APPROVED
DRAWN BY	ENGINEER IN CHARGE
TRACED BY	PROJECT ENGINEER
CHECKED BY	

CITY OF DETROIT
CITY ENGINEERING DIVISION - E.P.M.D.
BUREAU OF STREET AND HIGHWAYS

JEFFERSON AVE RECONSTRUCTION
EUSA PARKS BLVD. TO 10TH ST
SHEET 16 OF 78
PROJECT NO. 16562A



Smiley

CITY OF DETROIT
CITY ENGINEERING DIVISION-EPMD
BUREAU OF STREETS AND HIGHWAYS

JEFFERSON AVE. RECONSTRUCTION
ROSA PARKS BLVD TO EIGHTH ST.
DETAILED GRADES
E221 100' STA. 11+00.81

SHEET 17 OF 78 SHEETS
16562 A
JAN 1920