

CITY OF DETROIT  
 COLEMAN A. YOUNG — MAYOR  
 CITY ENGINEERING DEPARTMENT

PLANS FOR PROPOSED  
 REPAVING AND MISCELLANEOUS CONSTRUCTION  
 CHRYSLER WEST SERVICE DRIVE — GRATIOT TO LAFAYETTE  
 CHRYSLER EAST SERVICE DRIVE — LAFAYETTE TO N. OF MONROE



CHRYSLER WEST SERVICE DRIVE: GRATIOT TO LAFAYETTE  
 CHRYSLER EAST SERVICE DRIVE: LAFAYETTE TO N. OF MONROE

**INDEX OF SHEETS**

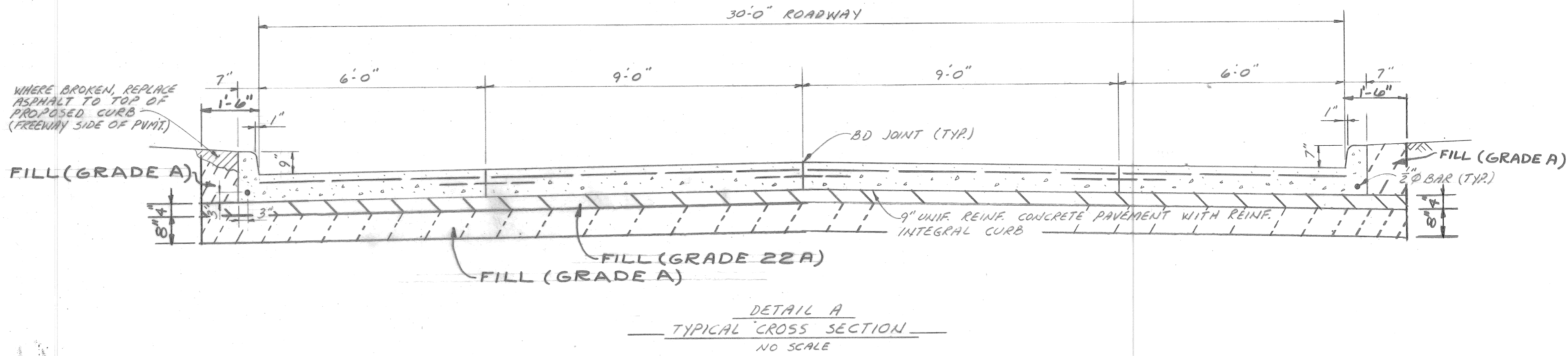
- 1 TITLE SHEET
- 2 TYPICAL CROSS SECTION AND QUANTITIES
- 3-4 ALIGNMENT
- 5-8 PLAN AND PROFILE

<b>PROJECT:</b> REPAVING AND MISCELLANEOUS CONSTRUCTION CHRYSLER WEST SERVICE DRIVE — GRATIOT TO LAFAYETTE, CHRYSLER EAST SERVICE DRIVE — LAFAYETTE TO N. OF MONROE		<b>CONTRACT NO.</b> PW-6747
<b>PLANS PREPARED BY</b> CITY ENGINEERING DEPARTMENT		
RECOMMENDED FOR APPROVAL ENGINEER OF INSPECTION	<i>W. H. Hase</i>	7/25/86 DATE
RECOMMENDED FOR APPROVAL ENGINEER OF STREETS	<i>William L. Talley</i>	7/25/86 DATE
APPROVED DEPUTY DIRECTOR	<i>E. M. Kennedy Jr.</i>	7/29/86 DATE
APPROVED DIRECTOR	<i>C. R. Hopkins</i>	7-28-86 DATE
DATE 7 - 25 - 86		DRWG. NO. 1 OF 8



QUANTITIES					
ITEM NO.	DESCRIPTION OF ITEM	UNIT	J. B.D. CHRYSLER GRATIOT TO LAFAYETTE	M. B.D. CHRYSLER SERVICE DR. LAFAYETTE TO N. OF MONROE	TOTAL
1	EXCAVATION	CYDS.	2370	940	3310
2	STREET PAVEMENT REMOVAL - UNREINFORCED	SYDS.	—	125	125
3	STREET PAVEMENT REMOVAL - REINFORCED	SYDS.	5845	2410	8255
4	SEPARATE TYPE CURB REMOVAL	LFT.	—	100	100
5	SEPARATE TYPE CURB REMOVAL - REINFORCED	LFT.	2580	845	3425
6	CURB AND GUTTER REMOVAL - REINFORCED (2'-8" WIDE)	LFT.	455	250	705
7	DRIVEWAY REMOVAL	SFT.	250	150	400
8	FILL (GRADE A)	CYDS.	1032	648	2280
9	FILL (GRADE 22A)	CYDS.	738	292	1030
10	MANHOLE ADJUSTMENT	EACH	34	6	40
11	STOP BOX ADJUSTMENT	EACH	4	3	7
12	MANHOLE - RECONSTRUCT CONE	EACH	—	—	1
13	CATCH BASIN - FRAME AND COVER REPLACEMENT	EACH	14	4	18
14	SIDEWALK REPLACEMENT - 4"	SFT.	365	180	545
15	SIDEWALK REPLACEMENT - 6"	SFT.	500	250	750
16	DRIVEWAY REPLACEMENT - 6"	SFT.	195	—	195
17	PAVEMENT - 9" UNIFORM - REINFORCED ***	SYDS.	6170	2545	8715
18	TEST CORES	EACH	7	2	9
19	CLEANING STRUCTURES	EACH	—	—	1
20	JOINT SAWING	LFT.	—	—	50
21	SHEET ASPHALT WEARING SURFACE MIXTURE	TONS	—	—	10
22	STRIP AND ADJUST ASPHALT SURFACE	SYDS.	35	10	45
23	MAINTAINING TRAFFIC	LUMP SUM	—	—	—

\*\*\* INCLUDES REINFORCED INTEGRAL CURBS, SEE STD. DRAWING C-4943



SHEET 2 OF 8

REFERENCE DRAWINGS		DESIGNED BY	APPROVED:	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS FOR	REPAVING AND MISCELLANEOUS CONSTRUCTION CHRYSLER WEST SERVICE DRIVE-GRATIOT TO LAFAYETTE CHRYSLER EAST SERVICE DRIVE-LAFAYETTE TO N. OF MONROE TYPICAL CROSS SECTION AND QUANTITIES	SHEET ___ OF ___ SHEETS
		DRAWN BY A. G.	<i>William L. Talley</i> ENGINEER OF STREETS			CONTRACT NO. PW-6747
		TRACED BY	HIGHWAY ENGINEER		ASSIGNMENT NO.	DATE 7-25-86
COORD	DESCRIPTION	DRN	CK'D	AP'VD	DATE	
REVISIONS LOCATED BY COORDINATES ON SHEET						



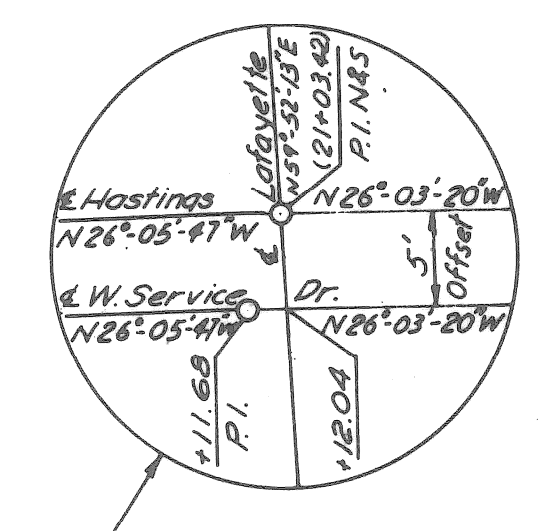
DIV. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	MI	82111A C19	3	8

DIV. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	MI	82111A C19	3	8

**Off Ramp Curve Data**  
 $\Delta = 6^{\circ}-41'-52''$   
 $D = 5^{\circ}-00'-00''$   
 $R = 1145.92'$   
 $T = 67.05'$   
 $L = 133.96'$   
 $P.C. = 31+97.28$   
 $P.I. = 32+64.33$   
 $P.T. = 33+31.24$   
 $E = 1.96'$

C.B.M. #17 Elev. 121.348 Arrow on hydrant  
 S.W. corner of St. Antoine and Lafayette.  
 C.B.M. #18 Elev. 122.386 Arrow on hydrant  
 W. side of St. Antoine, 20' N. of Monroe.  
 C.B.M. #33 Elev. 121.741 Arrow on hydrant  
 S.W. corner of Lafayette and Hastings.



C.B.M. #19 Elev. 123.279 Arrow on hydrant  
 N.W. corner of St. Antoine and Macomb.

**Off Ramp Curve Data**  
 $\Delta = 7^{\circ}-43'-44''$   
 $D = 3^{\circ}-00'-00''$   
 $R = 1909.86'$   
 $T = 129.01'$   
 $L = 257.63'$   
 $PC = 38+50.76$   
 $PI = 39+79.77$   
 $PT = 41+08.39$   
 $E = 4.35'$

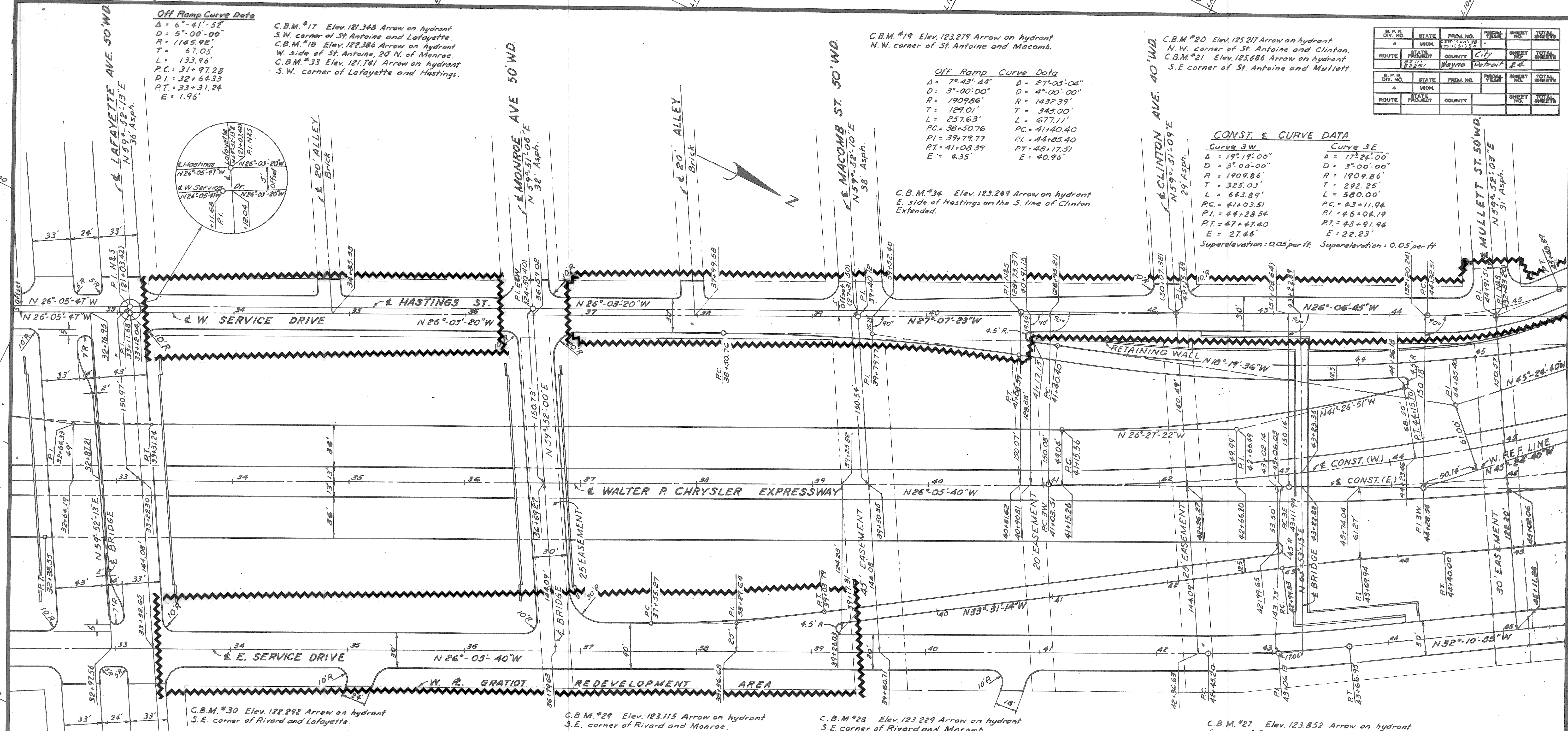
C.B.M. #20 Elev. 125.217 Arrow on hydrant  
 N.W. corner of St. Antoine and Clinton.  
 C.B.M. #21 Elev. 125.686 Arrow on hydrant  
 S.E. corner of St. Antoine and Mullett.

**CONST. & CURVE DATA**  
**Curve 3W**  
 $\Delta = 19^{\circ}-19'-00''$   
 $D = 3^{\circ}-00'-00''$   
 $R = 1909.86'$   
 $T = 325.03'$   
 $L = 643.89'$   
 $PC = 41+03.51$   
 $PI = 44+28.54$   
 $PT = 47+47.40$   
 $E = 27.46'$

**Curve 3E**  
 $\Delta = 17^{\circ}-24'-00''$   
 $D = 3^{\circ}-00'-00''$   
 $R = 1909.86'$   
 $T = 292.25'$   
 $L = 580.00'$   
 $PC = 43+11.94$   
 $PI = 46+04.19$   
 $PT = 48+91.94$   
 $E = 22.23'$

Superelevation: 0.05 per ft. Superelevation: 0.05 per ft.

C.B.M. #34 Elev. 123.249 Arrow on hydrant  
 E. side of Hastings on the S. line of Clinton Extended.



**LEGEND (FOR SHEET 3, 4 OF 8)**

EXISTING SERVICE DRIVE PAVEMENT TO BE REMOVED AND RECONSTRUCTED TO ORIGINAL ALIGNMENT AND GRADE. SEE SHEETS 5 THRU 8 FOR EXISTING PROFILE, DRAINAGE, AND UTILITIES INFORMATION. SEE SHEET 2 FOR PROPOSED TYPICAL SECTION AND QUANTITIES. (NOTE: SHEETS 5 THRU 8 ARE REPRODUCTIONS OF ORIGINAL PAVING PLANS AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.)

**On Ramp Curve Data**  
 $\Delta = 7^{\circ}-25'-34''$   
 $D = 5^{\circ}-00'-00''$   
 $R = 1145.92'$   
 $T = 74.37'$   
 $L = 148.52'$   
 $PC = 37+55.27$   
 $PI = 38+29.64$   
 $PT = 39+03.79$   
 $E = 2.41'$

**E. Service Dr. Curve Data**  
 $\Delta = 6^{\circ}-05'-15''$   
 $D = 5^{\circ}-00'-00''$   
 $R = 1145.92'$   
 $T = 60.93'$   
 $L = 121.75'$   
 $PC = 42+45.20$   
 $PI = 43+06.13$   
 $PT = 43+66.95$   
 $E = 1.62'$

**Mistake Lane Curve Data**  
 $\Delta = 14^{\circ}-59'-29''$   
 $D = 4^{\circ}-59'-41''$   
 $R = 1147.11'$   
 $T = 150.93'$   
 $L = 300.14'$   
 $PC = 41+15.56$   
 $PI = 42+66.49$   
 $PT = 44+15.70$   
 $E = 9.89'$

**W. Service Dr. Curve Data**  
 $\Delta = 23^{\circ}-16'-34''$   
 $D = 20^{\circ}-00'-00''$   
 $R = 286.48'$   
 $T = 59.00'$   
 $L = 116.38'$   
 $PC = 44+32.51$   
 $PI = 44+91.51$   
 $PT = 45+48.89$   
 $E = 6.01'$

**NOTE**  
 Stations shown in brackets, thus ( ), refer to Hastings St. Survey Stationing.  
 Bench Marks are on City of Detroit Datum.  
 Curbs of Streets and Avenues are 15'R except as noted.  
 Curbs at Alleys are 5'R except as noted.

PW - 6747

**SHEET 3 OF 8**  
**DETAILS OF**  
**EXPRESSWAY ALIGNMENT**

Scale 1" = 40'



C.B.M. #21 Elev. 125.686 Arrow on hydrant  
S.E. corner of St. Antoine and Mullett.

**CONST. & CURVE DATA**

**Curve 3W**  
 $\Delta = 19^{\circ}19'00''$   
 $D = 3^{\circ}00'00''$   
 $R = 1909.86'$   
 $T = 325.03'$   
 $L = 643.89'$   
 $PC = 41+03.51$   
 $PI = 44+28.54$   
 $PT = 47+47.40$   
 $E = 27.46'$   
 Superelevation = 0.05 per ft.

**Curve 3E**  
 $\Delta = 17^{\circ}24'00''$   
 $D = 3^{\circ}00'00''$   
 $R = 1909.86'$   
 $T = 292.25'$   
 $L = 580.00'$   
 $PC = 43+11.94$   
 $PI = 46+04.19$   
 $PT = 48+91.94$   
 $E = 22.23'$   
 Superelevation = 0.05 per ft.

**West Service Dr. Curve Data**

$\Delta = 23^{\circ}16'34''$   
 $D = 20^{\circ}00'00''$   
 $R = 286.48'$   
 $T = 59.00'$   
 $L = 116.38'$   
 $PC = 44+32.51$   
 $PI = 44+91.51$   
 $PT = 45+48.89$   
 $E = 6.01'$

**Exit Ramp Curve Data**

$\Delta = 27^{\circ}05'04''$   
 $D = 4^{\circ}00'00''$   
 $R = 1432.39'$   
 $T = 345.00'$   
 $L = 677.11'$   
 $PC = 41+40.40$   
 $PI = 44+85.40$   
 $PT = 48+17.51$   
 $E = 40.96'$

C.B.M. #23 Elev. 125.272 Arrow on hydrant  
S.E. corner of Madison and Gratiot.  
C.B.M. #25 Elev. 125.029 Arrow on hydrant  
E. side of Hastings on the S. line of Madison  
Extended.

C.B.M. #24 Elev. 127.040 Arrow on hydrant  
S.W. corner of Hastings and Gratiot.

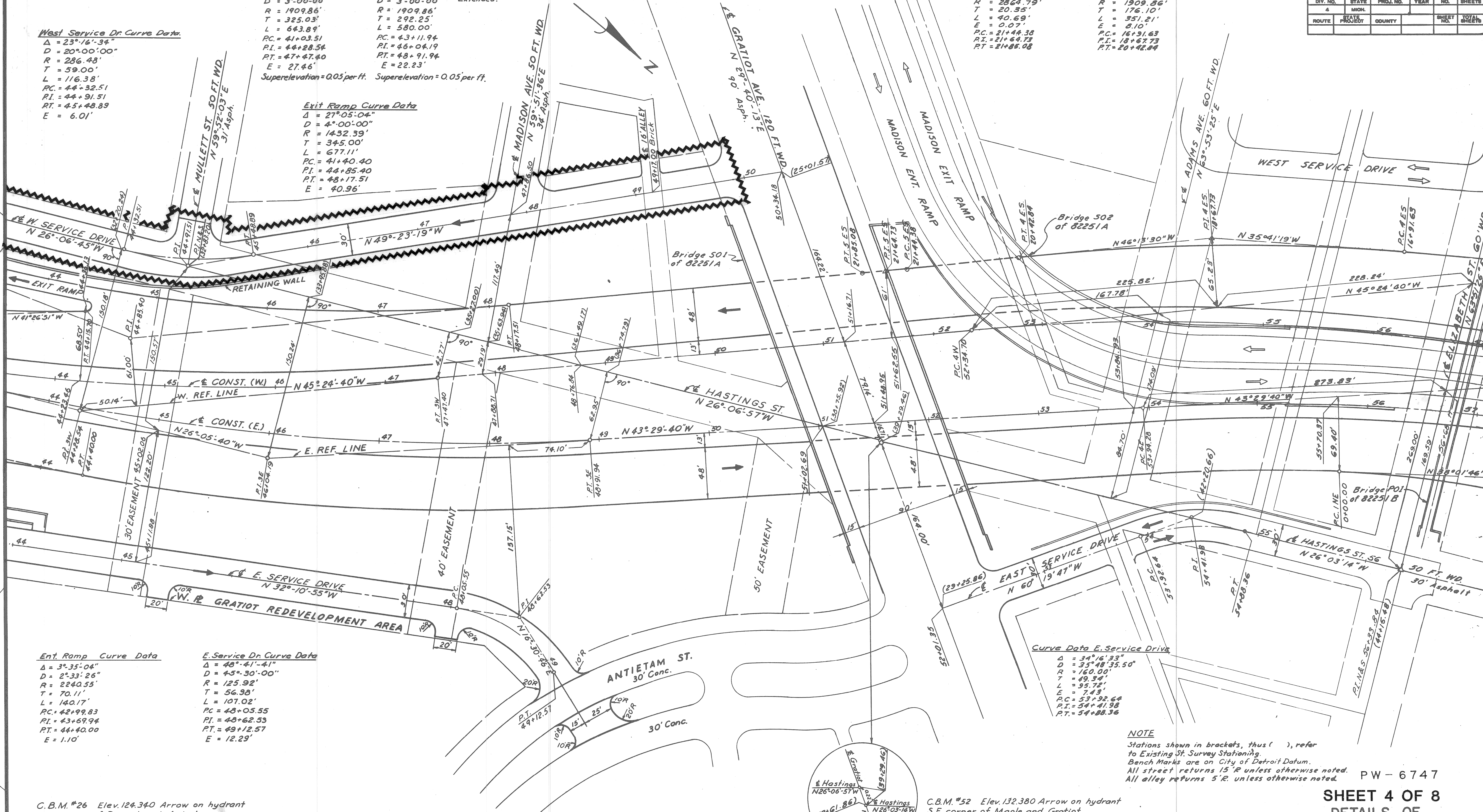
**Curve 5 ES**

$\Delta = 0^{\circ}48'50''$   
 $D = 2^{\circ}00'00''$   
 $R = 2864.79'$   
 $T = 20.35'$   
 $L = 40.69'$   
 $E = 0.07'$   
 $PC = 21+44.38$   
 $PT = 21+64.73$   
 $RT = 21+85.08$

**Curve 4 ES**

$\Delta = 10^{\circ}32'11''$   
 $D = 3^{\circ}00'00''$   
 $R = 1909.86'$   
 $T = 176.10'$   
 $L = 351.21'$   
 $E = 8.10'$   
 $PC = 16+91.63$   
 $PI = 18+67.73$   
 $PT = 20+42.84$

DIV. NO.	STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	MICH.	82251	16	16
ROUTE	PROJECT	COUNTY	CITY	
4	82251	Wayne	Detroit	



**Ent. Ramp Curve Data**

$\Delta = 3^{\circ}35'04''$   
 $D = 2^{\circ}33'26''$   
 $R = 2240.55'$   
 $T = 70.11'$   
 $L = 140.17'$   
 $PC = 42+99.83$   
 $PI = 43+69.94$   
 $PT = 44+40.00$   
 $E = 1.10'$

**E. Service Dr. Curve Data**

$\Delta = 48^{\circ}41'41''$   
 $D = 4^{\circ}30'00''$   
 $R = 125.92'$   
 $T = 56.98'$   
 $L = 107.02'$   
 $PC = 48+05.55$   
 $PI = 48+62.53$   
 $PT = 49+12.57$   
 $E = 12.29'$

**Curve Data E. Service Drive**

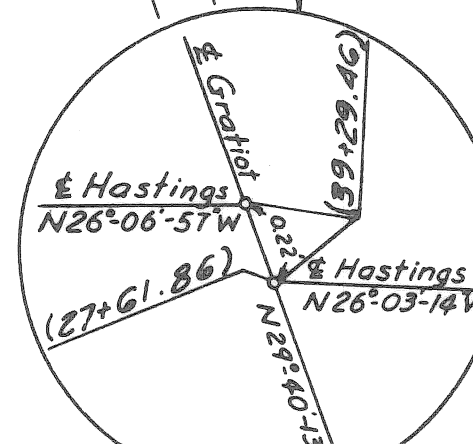
$\Delta = 34^{\circ}16'33''$   
 $D = 3^{\circ}48'35.50''$   
 $R = 160.00'$   
 $T = 49.34'$   
 $L = 95.72'$   
 $E = 7.43'$   
 $PC = 53+92.64$   
 $PI = 54+41.98$   
 $PT = 54+88.36$

**NOTE**

Stations shown in brackets, thus ( ), refer to Existing St. Survey Stationing.  
 Bench Marks are on City of Detroit Datum.  
 All street returns 15' R unless otherwise noted.  
 All alley returns 5' R unless otherwise noted.

C.B.M. #26 Elev. 124.340 Arrow on hydrant  
S.E. corner of Rivard and Antietam.

C.B.M. #52 Elev. 132.380 Arrow on hydrant  
S.E. corner of Maple and Gratiot.



Scale 1" = 40'

PW-6747  
**SHEET 4 OF 8**  
**DETAILS OF**  
**EXPRESSWAY ALIGNMENT**  
**STA. 44+00 TO STA. 57+00**

FILE NO.	82251A C-3	PROJECT	82251	SHEET NO.	16	TOTAL SHEETS	16
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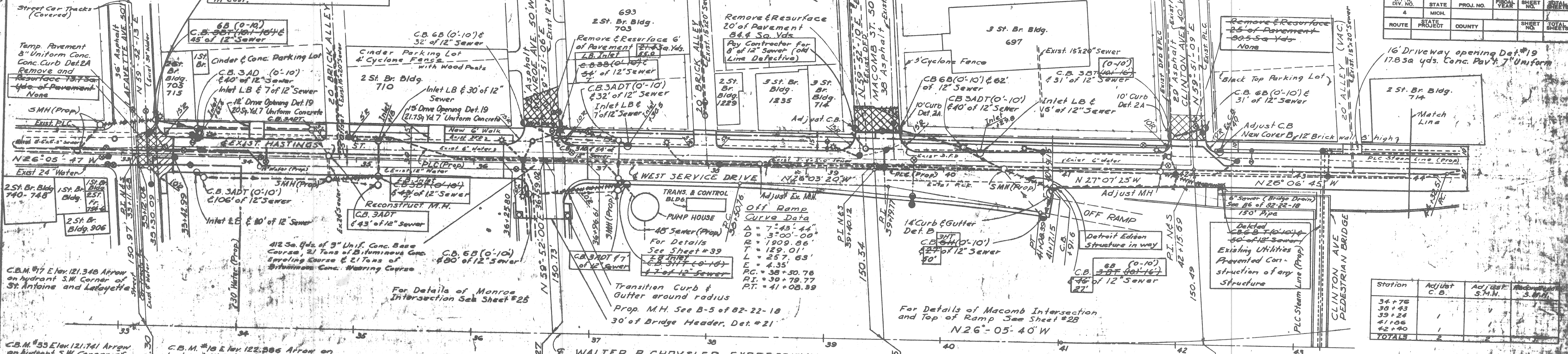




Station	Conc. Pavement 8" Unif. Sa. Yds.	Conc. Pavement 7" Unif. Sa. Yds.
35+30	58	
34+18 Lf.		20
34+18.6 Lf.	22.5	
34+70 Lf.		21.7
37+98 Lf.	22.5	
43+50 Lf.		17.8
<b>Total</b>	<b>103.0</b>	<b>59.5</b>

Remove Asphalt surface shown cross hatched to provide for a smooth connection and to adjust crown. Replace with Bituminous Concrete Pavement. 1987 2355a Yds. Removing Asphalt Surface. 29.85 43 Tons Bituminous Concrete Wearing course. 23.85 43 Tons Bituminous Concrete Leveling course.

Contractor Requested Change to Avoid Lafayette Ave. Traffic. No Increase in Cost.



**PLAN Scale 1"=40'**

9" Uniform Concrete Pavement Concrete Curb Detail 2, Rt. and Lt.

9" Uniform Concrete Pavement Concrete Curb and Gutter Detail A Rt. and Concrete Curb Detail 2 Lt.

9" Uniform Concrete Pavement Concrete Curb Detail 2, Rt. and Lt.

B.P. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	1-07-122			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
4	02111	WAYNE	DETROIT	21	

16' Driveway opening Det. #19 17.85a yds. Conc. Pav. 7" Uniform

2 St. Br. Bldg. 714

Match Line

Adjust C.B. New Cover by 12" Brick wall 3' high

Black Top Parking Lot

Adjust C.B. 68 (0-10) 31' of 12" Sewer

Adjust C.B. 68 (0-10) 31' of 12" Sewer

Adjust C.B. 68 (0-10) 31' of 12" Sewer

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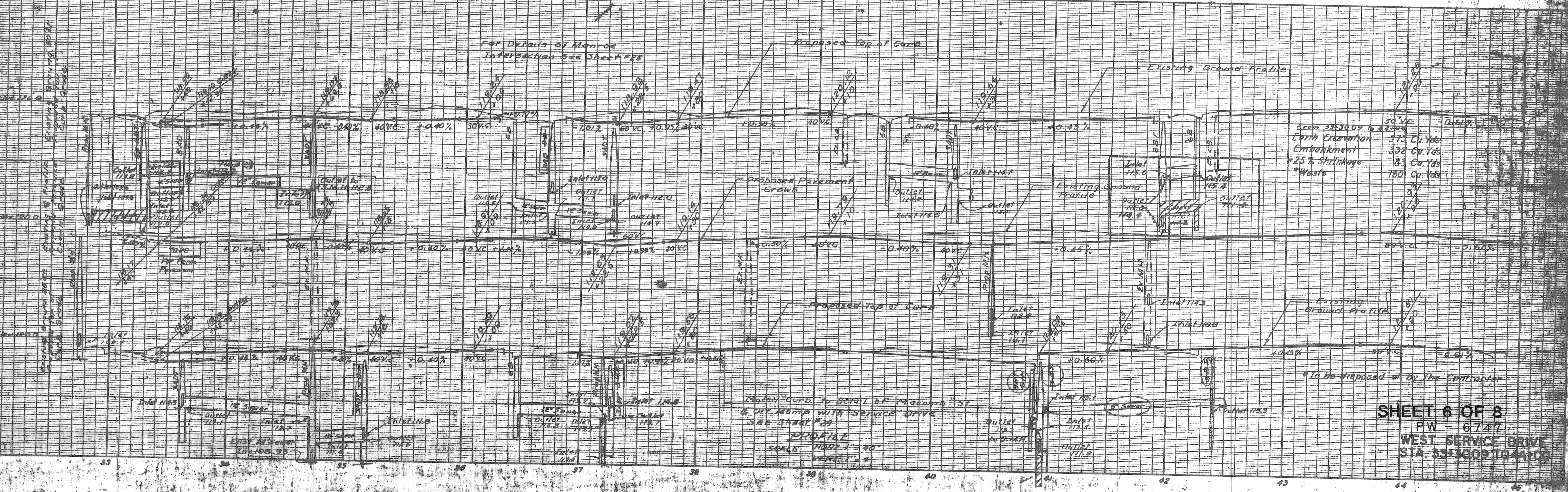
Adjust C.B. 68 (0-10) 31' of 12" Sewer

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Adjust C.B. 68 (0-10) 31' of 12" Sewer

Adjust C.B. 68 (0-10) 31' of 12" Sewer



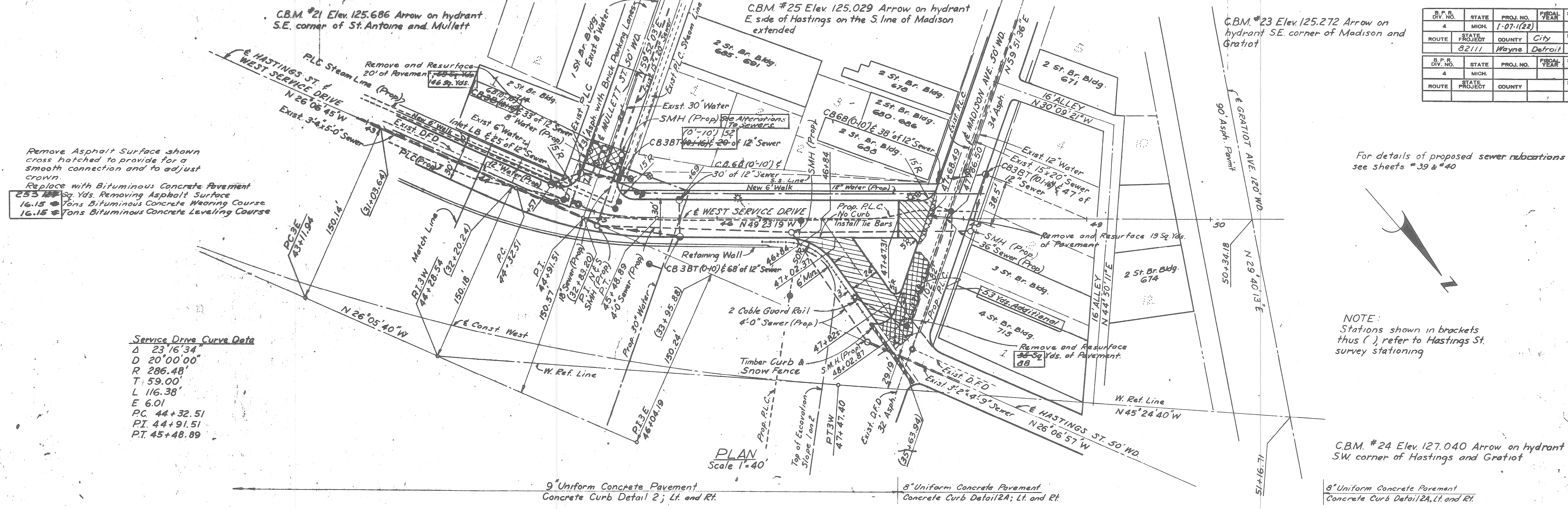
**SHEET 6 OF 8**  
PW - 6747  
WEST SERVICE DRIVE  
STA. 33+3009 TO 44+00

W-32-1



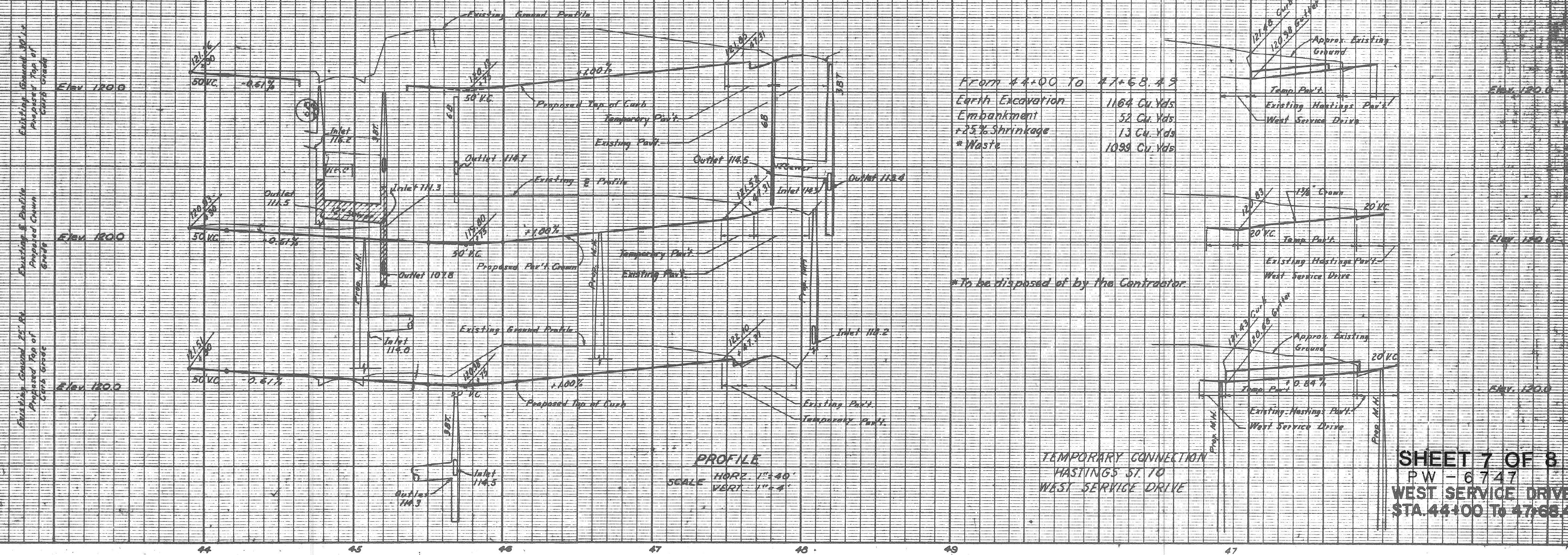
DATE: 7/19  
 BY: A. E. PRAGER  
 PLAN DESIGNED: CATALANO, SUTHERLAND  
 PLAN DRAWN: SUTHERLAND  
 PLAN CHECKED: SUTHERLAND  
 QUANTITIES CHECKED: SUTHERLAND  
 RECOMMENDED FOR APPROVAL: [Signature]

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	1-07-1(22)		22	22
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82111	Wayne	Detroit		22	22



For details of proposed sewer rubrications see sheets #39 & 40

NOTE: Stations shown in brackets thus ( ) refer to Hastings St. survey stationing



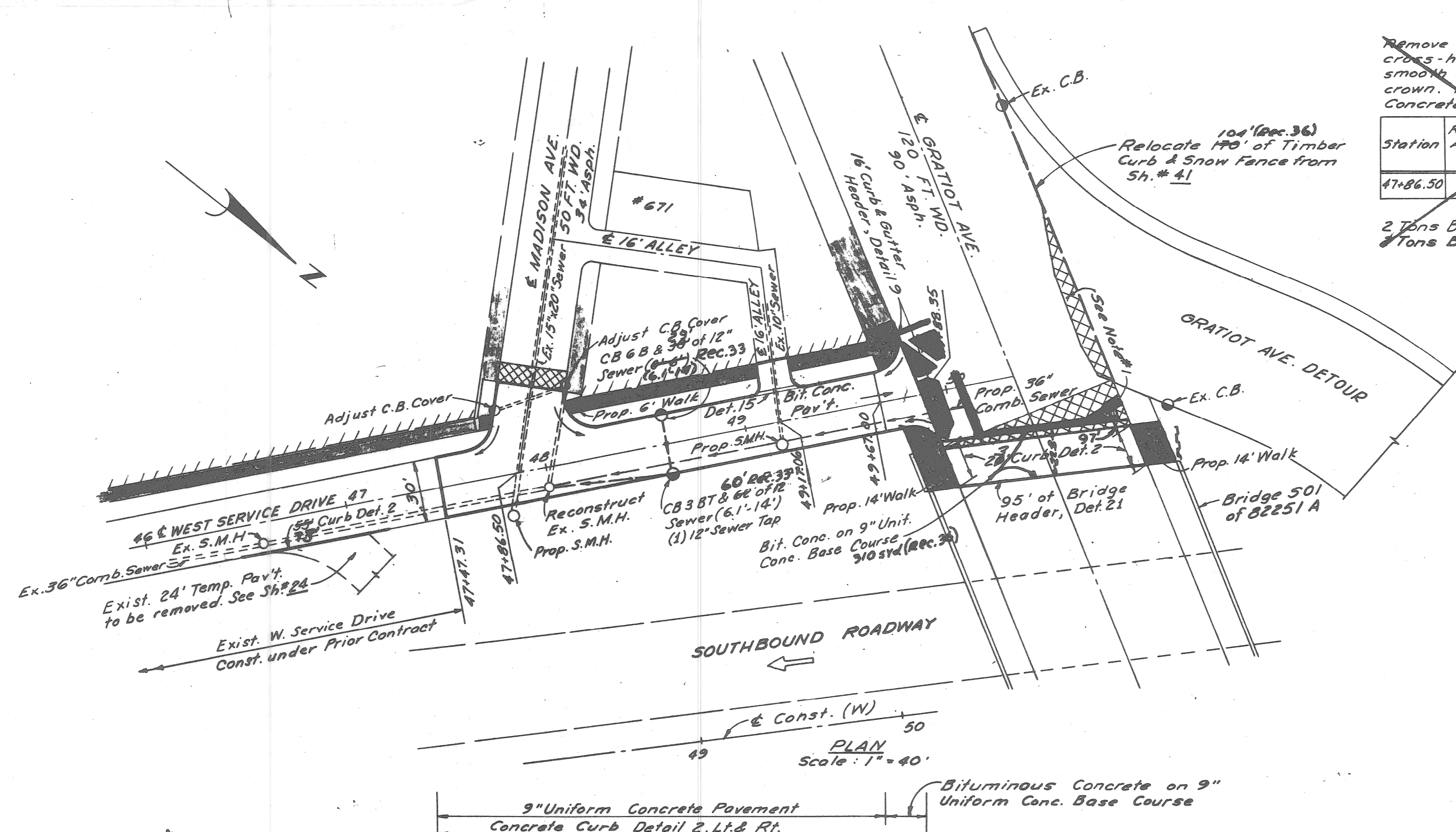
SHEET 7 OF 8  
 PW-6747  
 WEST SERVICE DRIVE  
 STA. 44+00 TO 47+68.49



FINAL DESIGN CHECKED  
 TRACED BY CHECKER  
 QUANTITIES CHECKED  
 SOLID

DEPARTMENT OF HIGHWAYS  
 CITY ENGINEERING OFFICE  
 BUREAU OF HIGHWAYS AND EXPRESSWAYS

SURVEYED  
 PLAN CHECKED  
 PROFILE PLOTTED  
 PROFILE CHECKED  
 GRADE INSPECTION  
 FEDERAL INSPECTION



Remove asphalt surface shown cross-hatched to provide for a smooth connection and to adjust crown. Replace with Bituminous Concrete Pavement.

Station	Remove Ex. Asphalt	Replace with Bit. Conc. Pav't.
47+86.50	38 Sq. Yds.	58 Sq. Yds.

Deleted  
 2 Tons Bit. Conc. Wearing Course  
 8 Tons Bit. Conc. Leveling Course

S.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	2257 (67) 30	1973	39	39
ROUTE	STATE PROJECT	CITY	SHEET NO.	TOTAL SHEETS	
82251	Wayne	Detroit	39	39	

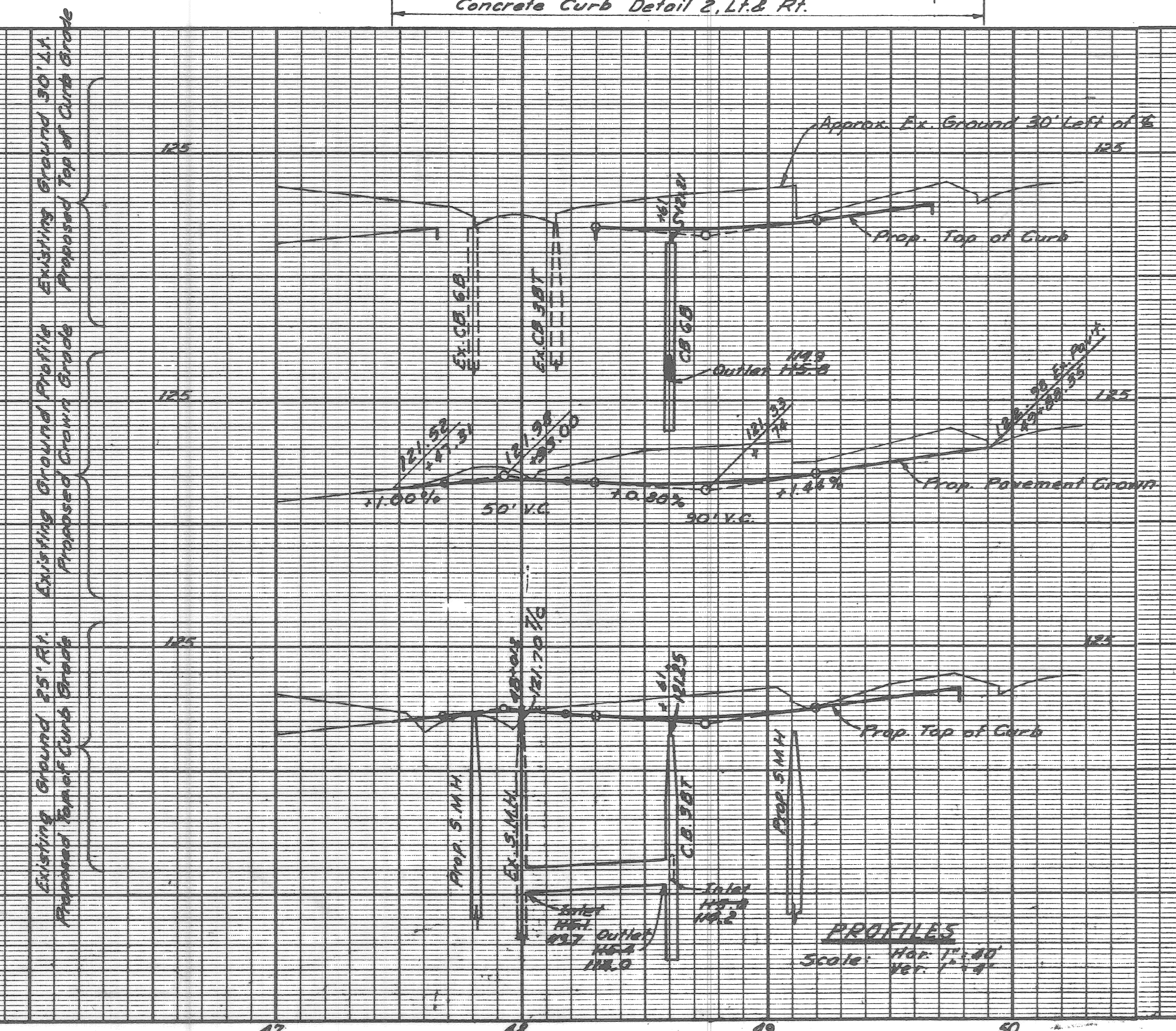
Note #1:  
 After completion of bridge construction, remove 160 Sq. Yds. asphalt surface shown cross-hatched. Replace with 160 Sq. Yds. Bituminous Concrete Pavement.

Use:  
 9 Tons Bituminous Concrete Leveling Course  
 9 Tons Bituminous Concrete As Constructed Wearing Course  
 Asphalt Stripping As Constructed 63 sq. Yd. (Rec. 36)  
 Bituminous Concrete placed on Existing Surface 31 sq. Yd. (Rec. 36)  
 Bituminous Concrete Wearing Course 22 Tons (Rec. 36)  
 Bituminous Concrete Leveling 20 Tons (Rec. 36)  
 4" Concrete Sidewalk As Constructed (Rec. 36)

All Quantities this Sheet Control Section 82251 A C-3

Notes:  
 For Alignment and Bench Marks. See SH # 16  
 All Street returns 15' unless otherwise noted.  
 All alley returns 5' unless otherwise noted  
 Existing Sidewalks to remain.

Excavation Waste  
 475 Rec. 65  
 459 Cu. Yds.  
 499 Cu. Yds.  
 475 -



PW - 6747  
 SHEET 8 OF 8

PLAN AND PROFILE  
 WEST SERVICE DRIVE  
 STA. 47+47.31 TO STA. 49+86.35