

PROJECT BU 82195-29  
 PART 1; ROADS  
 PART 2; S-28 OF 82195E & X-01 OF 82072  
 PART 3; P-01 OF 82195E

PROJECT BI 82251-50  
 PART 1; ROADS  
 PART 2; RETAINING WALLS WO2, WO3, WO4, OF 82251B  
 PART 3; RETAINING WALL WO1 OF 82251Z

# STATE OF MICHIGAN DEPARTMENT OF STATE HIGHWAYS

## PLANS OF PROPOSED

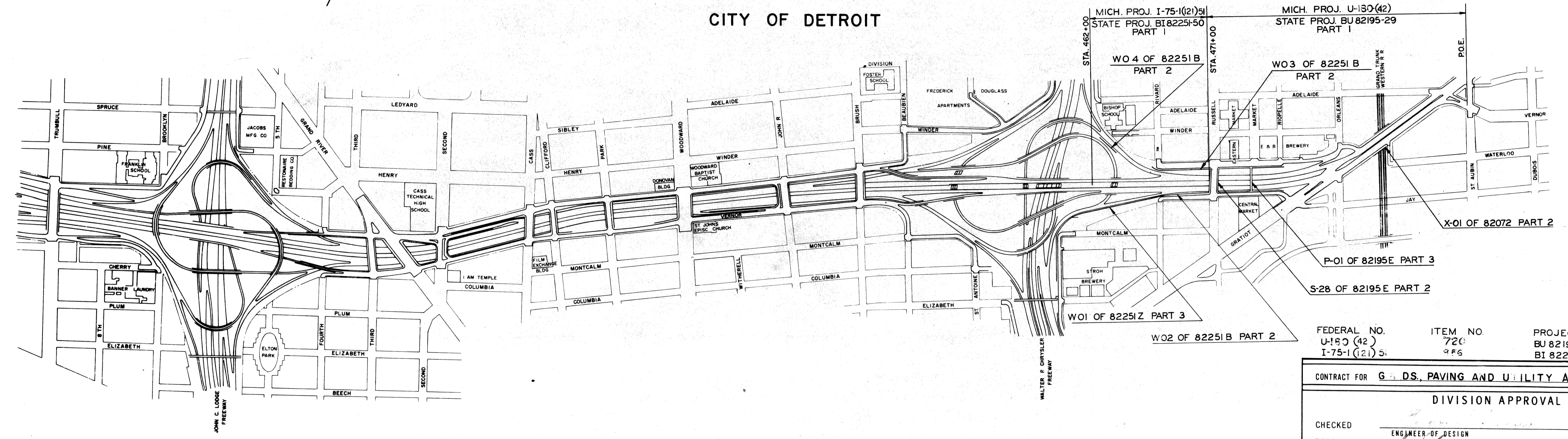
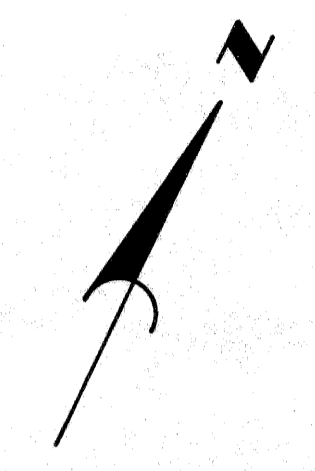
MICHIGAN PROJECTS U-180(42) I-75-1(121)51  
 STATE PROJECTS BU 82195-29, BI 82251-50  
 FISHER FREEWAY

WAYNE COUNTY  
 CITY OF DETROIT

ROUTE	STATE PROJECT NO.	FEDERAL NO.	SHEET NO.	TOTAL SHEETS
82195	82251	U-180(42)	I	
		I-75-1(121)51		

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

LEGEND  
 A. D. T. . . . . 65,000' \*  
 D. H. V. . . . . 6500' \*  
 COMM. % . . . . . 8  
 DESIGN SPEED . . . . . 60  
 \* 2 WAY



FEDERAL NO.	ITEM NO	PROJECT NO	MILES
U-180(42)	720	BU 82195-29	0.369
I-75-1(121)51	9FG	BI 82251-50	0.170

CONTRACT FOR **GRADATIONS, PAVING AND UTILITY ALTERATIONS.**

DIVISION APPROVAL		
CHECKED	ENGINEER OF DESIGN	DATE
RECOMMENDED FOR APPROVAL	<i>[Signature]</i>	DATE
RECOMMENDED FOR APPROVAL	TRAFFIC ENGINEER	DATE
	<i>[Signature]</i>	DATE
	ENGINEER OF BRIDGE AND ROAD DESIGN	DATE

OFFICES OF DESIGN & CONSTRUCTION		
APPROVED	<i>[Signature]</i>	DATE
	CONSTRUCTION ENGINEER	DATE
APPROVED	<i>[Signature]</i>	DATE
	CHIEF OF DESIGN AND TRAFFIC	DATE

DEPARTMENT OF STATE HIGHWAYS  
 HOWARD E. HILL - STATE HIGHWAY DIRECTOR

APPROVED BY *[Signature]* DEPUTY DIRECTOR OF ENGINEERING DATE

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

APPROVED *[Signature]* HEAD ENGINEER OF EXPRESSWAYS  
 APPROVED *[Signature]* ASSOCIATE CITY ENGINEER-HIGHWAYS AND EXPRESSWAYS  
 APPROVED *[Signature]* CITY ENGINEER  
 APPROVED *[Signature]* COMMISSIONER OF PUBLIC WORKS AND EXPRESSWAY COORDINATOR

DEPARTMENT OF COMMERCE  
 BUREAU OF PUBLIC ROADS

APPROVED *[Signature]*  
 FOR THE DIVISION ENGINEER

82195-29			
STATE PROJECT NO.	FEDERAL PROJECT	SHEET NO.	TOTAL SHEETS
82195-29	U-180(42)	I	
82251-50	I-75-1(121)51		

**ROADWAYS AND MISCELLANEOUS**

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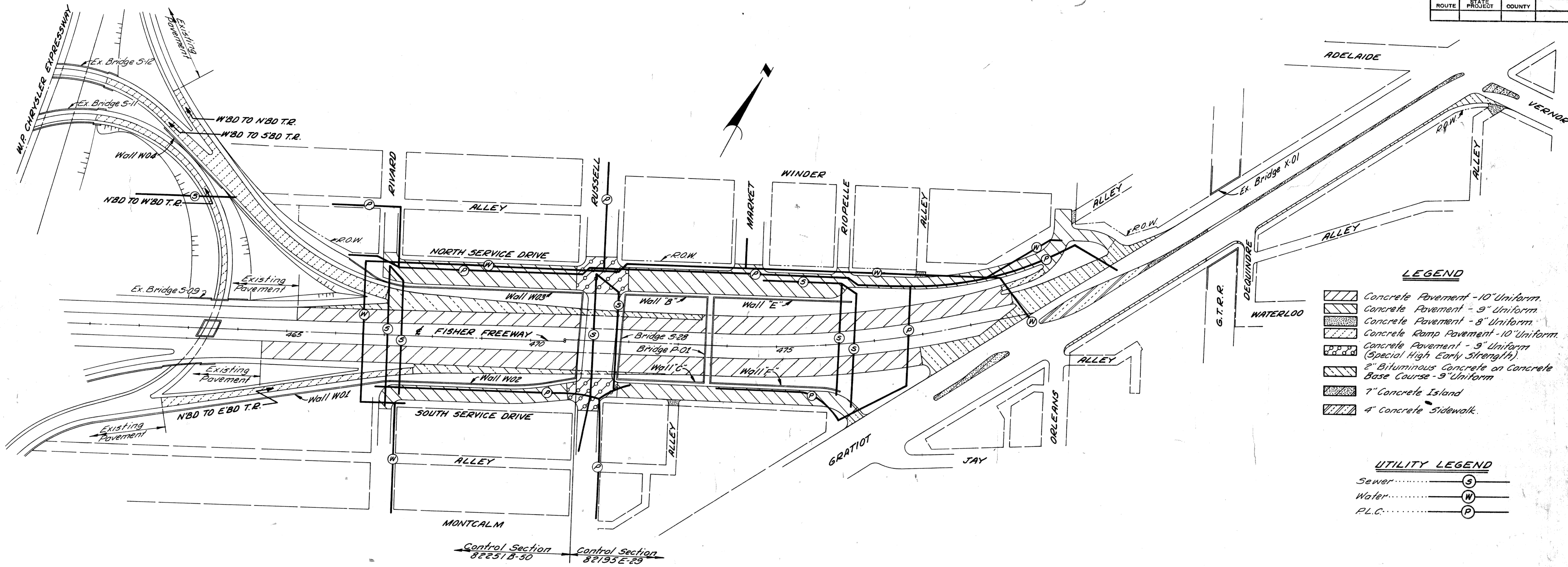
**QUANTITY SHEETS**

- 113-112 QUANTITY SHEETS

FOR INDEX FOR BRIDGES AND RETAINING WALLS SEE SHEET NO. 1A.

STATE PROJECT NO. BU 82195-29, BI 82251-50

B.P.D. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195		Wayne	Detroit	2	
B.P.D. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS



- LEGEND**
- Concrete Pavement - 10" Uniform.
  - Concrete Pavement - 9" Uniform.
  - Concrete Pavement - 8" Uniform.
  - Concrete Ramp Pavement - 10" Uniform.
  - Concrete Pavement - 9" Uniform (Special High Early Strength).
  - 2" Bituminous Concrete on Concrete Base Course - 9" Uniform.
  - 7" Concrete Island.
  - 4" Concrete Sidewalk.

- UTILITY LEGEND**
- Sewer..... (S)
  - Water..... (W)
  - P.L.C..... (P)

**ITEMS IN CONTRACT**

**SEWERS**

- Rivard Sanitary & Storm Sewer Relocation.
- Russell Sanitary & Storm Sewer Relocation.
- North Service Drive Interceptor Sewer Market to Riopelle.
- Riopelle Sanitary & Storm Sewer Relocation.
- Miscellaneous Sewer Alterations.

**WATER MAINS**

- Header Main-North Service Drive Rivard to Gratiot.
- Concrete Encased Freeway Crossing at Rivard.
- Rivard Water Main-Vernor to Gratiot.
- Miscellaneous Water Alterations.

**LIGHTING**

- Freeway Lighting Chrysler to Gratiot.
- Alterations to City Power, Communications, and Lighting Facilities.
- North and South Service Drive Lighting, Rivard to Gratiot.
- Gratiot Lighting Relocation Orleans to Vernor.
- Alterations in Russell-North Service Dr. to Division.

**DEPRESSED FREEWAY**

- Grading, Drainage, Subbase, Paving, Sodding, and Fencing of Main Roadway and Turning Roadways, from Chrysler Expressway to Gratiot.

**SERVICE DRIVES**

- Grading, Drainage and Paving of North Service Drive from Rivard to Orleans and South Service Drive from Rivard to Gratiot.
- Channelization of Gratiot and the Gratiot-Vernor and Gratiot-Jay Intersections.

**BRIDGES AND STRUCTURES**

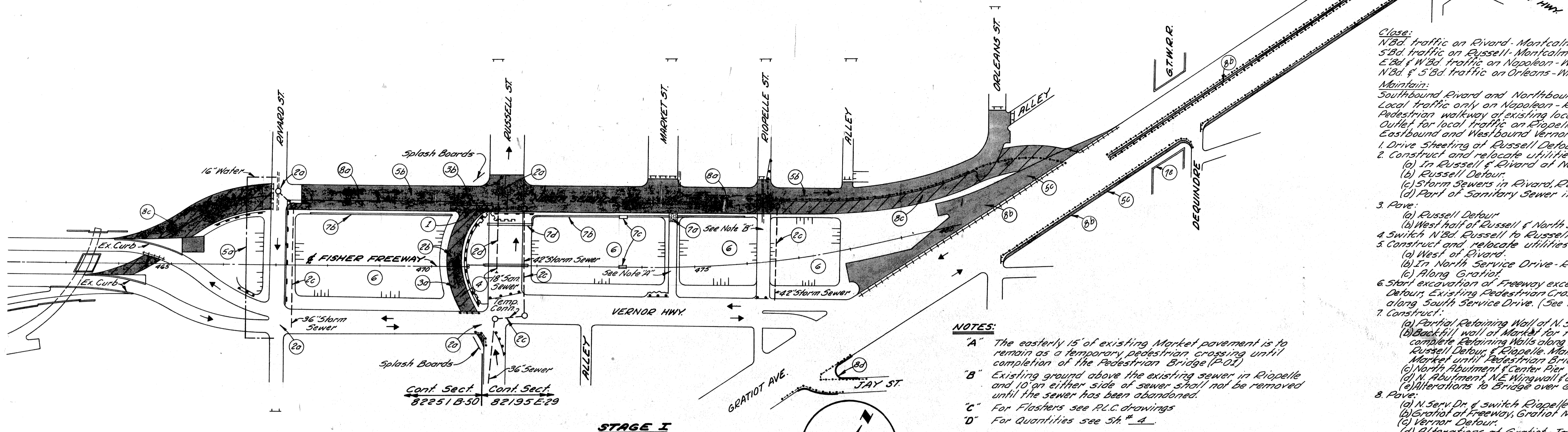
- Russell Bridge 528 of 82195E
- Market Pedestrian Bridge POI of 82195E
- Retaining Walls Along North and South Sides of Freeway (Walls W02, W03, B, C, E, F) and Between WBD to SBD and NBD to WBD Turn. Rdways (Wall W04) and Along NBD to E'BD Turning Roadway (Wall W01)
- Alterations to Gratiot Bridge over G.T.W.R.R. (X01 of 82072)

PLANS PREPARED BY  
 N. McLEAN  
 M. POLITO  
 R. CONLY  
 7-66  
 7-66  
 7-66  
 7-66  
 CHECKED BY  
 APPROVED  
 BUREAU OF HIGHWAYS AND EXPRESSWAYS

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 N. McLEAN  
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 R. CONLY  
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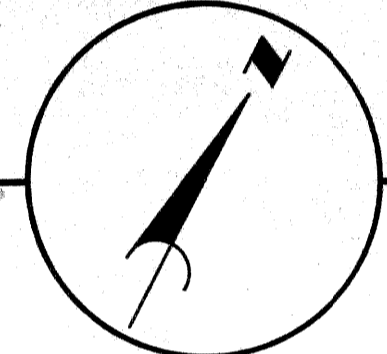
GENERAL PLAN

R.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Wayne	Detroit	3	



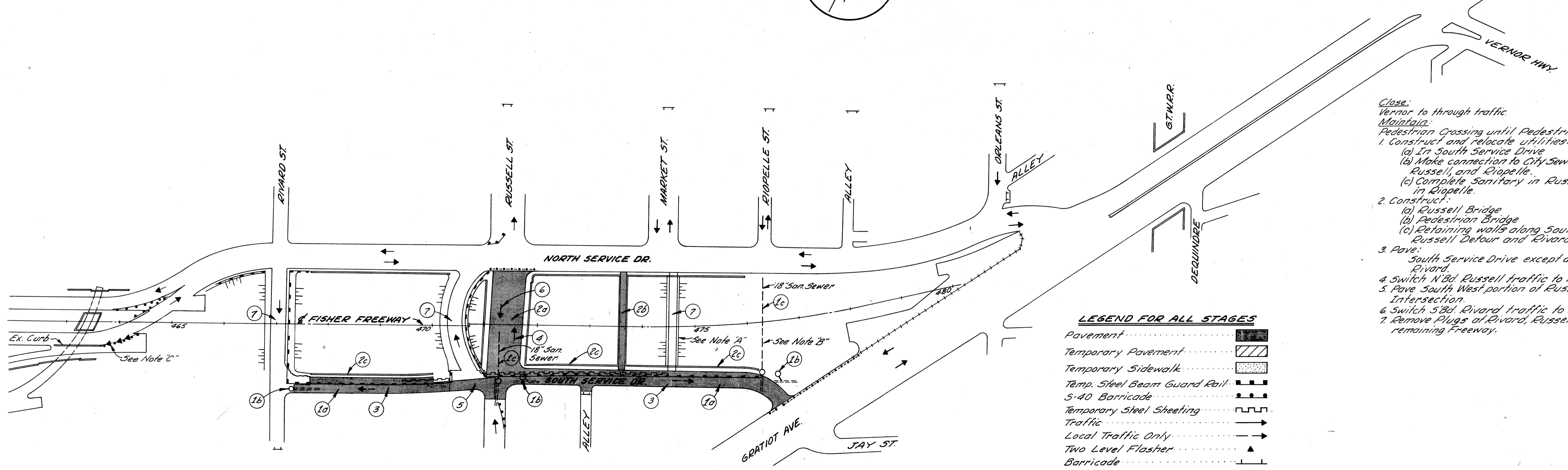
- Close:**  
N'bd traffic on Rivard - Montcalm to Winder  
S'bd traffic on Russell - Montcalm to Winder  
E'bd & W'bd traffic on Napoleon - W. of Rivard  
N'bd & S'bd traffic on Orleans - Winder to Gratiot.
- Maintain:**  
Southbound Rivard and Northbound Russell  
Local traffic only on Napoleon - Rivard to Russell  
Pedestrian walkway at existing location 1/2 block East of Russell  
Outlet for local traffic on Riopelle  
Eastbound and Westbound Vernor traffic.
1. Drive Sheet piling of Russell Detour.
  2. Construct and relocate utilities:  
(a) In Russell & Rivard at North & South Service Drives.  
(b) Russell Detour.  
(c) Storm Sewers in Rivard, Russell and Riopelle.  
(d) Part of Sanitary Sewer in Russell.
  3. Pave:  
(a) Russell Detour  
(b) West half of Russell & North Service Drive Intersection.
  4. Switch N'bd Russell to Russell Detour.
  5. Construct and relocate utilities:  
(a) West of Rivard.  
(b) In North Service Drive - Rivard to Orleans.  
(c) Along Gratiot.
  6. Start excavation of Freeway except plugs at Rivard, Russell Detour, Existing Pedestrian Crossing, Riopelle Outlet and along South Service Drive. (See Note 4).
  7. Construct:  
(a) Partial Retaining Wall of N. Serv. Dr. & Market (See Wall Drawg.)  
(b) Backfill wall at Market for Temp. Pedestrian Crossing and complete Retaining Walls along N. Serv. Dr. except at Rivard, Russell Detour, & Riopelle. Maintain Pedestrian Crossing at Market until Pedestrian Bridge (P.O.I.) is completed.  
(c) North Abutment & Center Pier of Pedestrian Bridge (P.O.I.)  
(d) N. Abutment, NE Wingwall & center pier of Russell Br. (3-28)  
(e) Alterations to Bridge over 67' WISSE (X-02).
  8. Pave:  
(a) N. Serv. Dr. & Switch Riopelle traffic to N. Serv. Dr.  
(b) Gratiot at Freeway, Gratiot Median & Gratiot Widening.  
(c) Vernor Detour.  
(d) Alterations at Gratiot - Jay Intersection.
  9. Switch Vernor traffic to North Service Drive.

- NOTES:**
- "A" The easterly 15' of existing Market pavement is to remain as a temporary pedestrian crossing until completion of the Pedestrian Bridge (P.O.I.)
- "B" Existing ground above the existing sewer in Riopelle and 10' on either side of sewer shall not be removed until the sewer has been abandoned.
- "C" For Flashers see P.I.C. drawings
- "D" For Quantities see Sh. # 4.



7-66	N. McLEAN
7-66	M. POLITO
7-66	N. McLEAN
7-66	ROAD ENGR.

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

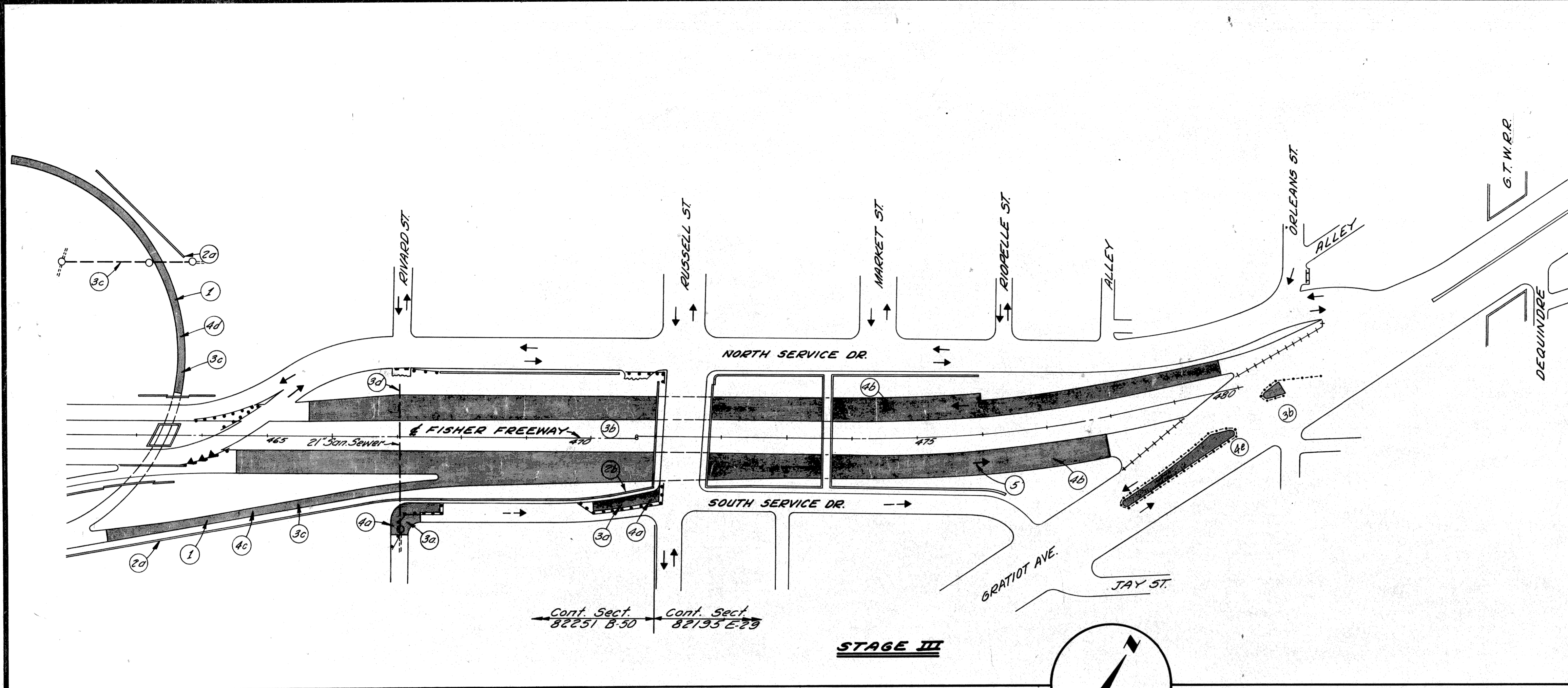


- Close:**  
Vernor to through traffic
- Maintain:**  
Pedestrian Crossing until Pedestrian Bridge is completed.
1. Construct and relocate utilities:  
(a) In South Service Drive  
(b) Make connection to City Sewer (Prop. by Others) at Rivard, Russell, and Riopelle.  
(c) Complete Sanitary in Russell and part of Sanitary in Riopelle.
  2. Construct:  
(a) Russell Bridge  
(b) Pedestrian Bridge  
(c) Retaining walls along South Service Drive except at Russell Detour and Rivard.
  3. Pave:  
South Service Drive except at Russell Detour and at Rivard.
  4. Switch N'bd Russell traffic to Russell Bridge.
  5. Pave South West portion of Russell - South Service Drive Intersection.
  6. Switch S'bd Rivard traffic to Russell Bridge.
  7. Remove Plugs at Rivard, Russell and Market and excavate remaining Freeway.

- LEGEND FOR ALL STAGES**
- Pavement
  - Temporary Pavement
  - Temporary Sidewalk
  - Temp. Steel Beam Guard Rail
  - 5-40 Barricade
  - Temporary Steel Sheet piling
  - Traffic
  - Local Traffic Only
  - Two Level Flasher
  - Barricade
  - Incidental Barricade
  - Timber Curb & Snow Fence
  - Proposed Curb

CONSTRUCTION SEQUENCE

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
82195	Wayne	Detroit		4	



- Excavate for N'bd. to W'bd. & N'bd. to E'bd. Turning Roadways.
- Construct:
  - Retaining Wall W'bd. & Wall W'bd. in Interchange
  - Remaining Retaining Walls along S. Service Dr.
- Construct & Relocate Utilities:
  - In South Service Drive
  - In Main Roadway & Gratiot
  - In N'bd. to E'bd. & W'bd. Turning Roadways
  - Part of Rivard Sanitary Sewer.
- Pave:
  - Remaining South Service Drive
  - E'bd. & W'bd. Main Roadway
  - N'bd. to E'bd. Turning Roadway
  - N'bd. to W'bd. Turning Roadway
  - Portions of Gratiot Median
- Switch Vernor Traffic to Main Roadway.

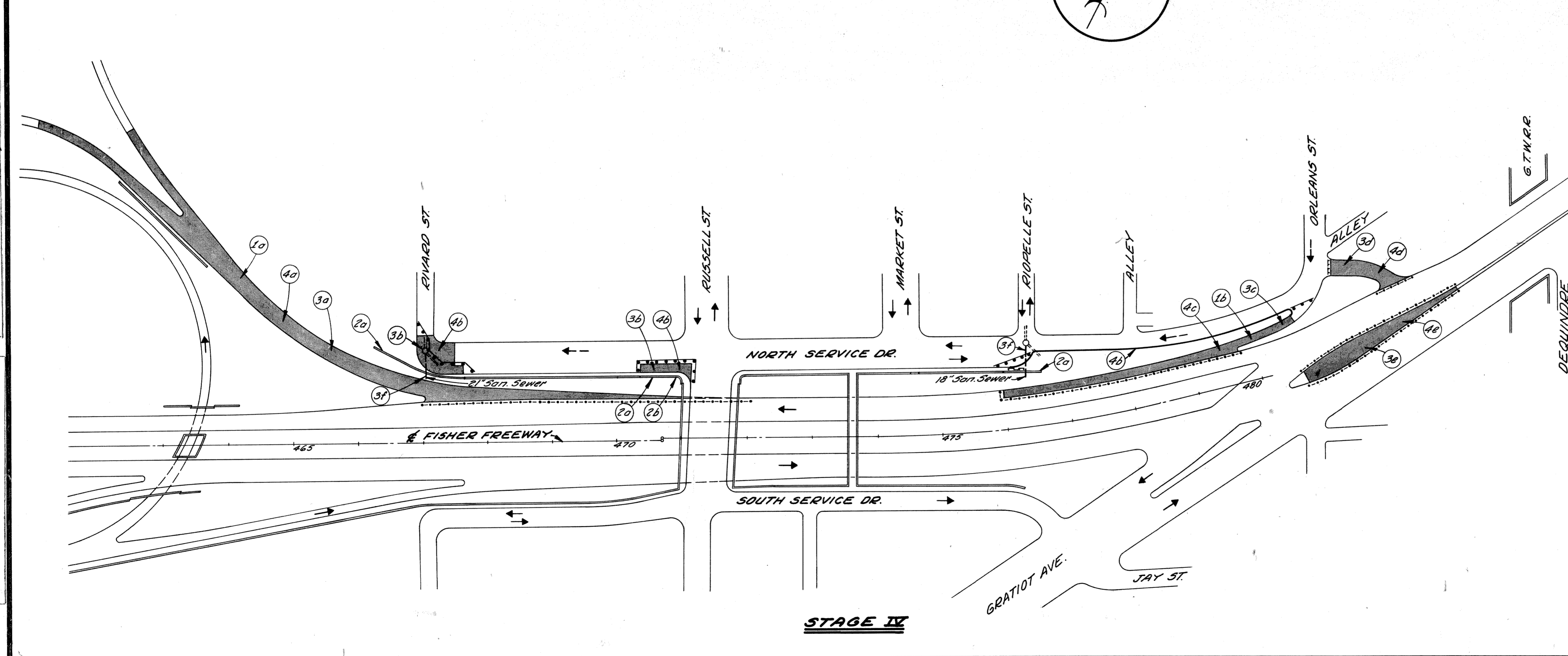
Items Required to Maintain Traffic During Construction which have not been Billed on other Sheets are listed below

* ITEM	UNIT	CONT. SECT. 82251 B-50			CONT. SECT. 82195 E-29		
		Furnish & Install	Relocate	Remove	Furnish & Install	Relocate	Remove
S-40 Barricade	Lin. Ft.	525	425	975	350	400	350
Timber Curb & Snow Fence	Lin. Ft.	85	—	85	610	30	610
Barricade	Each	5	3	5	16	4	16
Incidental Barricade	Lin. Ft.	445	720	445	2165	3910	2165
Temp. Stl. Bm. Guard Rail	Lin. Ft.	—	1300	—	—	650	—
Splash Boards	Lin. Ft.	—	—	—	—	48	—
Temp. Conc. Sidewalk	Sq. Ft.	—	—	—	—	255	—
Bit. Wearing Course 3/1AA	Tons	—	1	—	—	2	—
Bit. Leveling Course	Tons	—	2	—	—	5	—
Bit. Band Coat	Gals.	—	5	—	—	12	—

\* These quantities include existing items in the Interchange area to be removed & items in intermediate stages, not all are necessarily shown.

7-66	N. McLEAN
7-66	M. POLITO
7-66	N. McLEAN
7-66	W. G. ...

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



- Complete the excavation:
  - At W'bd. to N'bd. & S'bd. Turning Roadways
  - At Orleans Entrance Ramp
- Complete construction of:
  - Remaining walls along North Service Dr. at Rivard, Russell & Riopelle
  - N.W. Wingwall of Russell & Riopelle
- Construct and Relocate Utilities:
  - On W'bd. to N'bd. & S'bd. Turning Roadways
  - At North Service Dr.
  - At Orleans Entrance Ramp
  - At Gratiot Connection
  - At Gratiot Median
  - Remaining Rivard & Riopelle San. Sewer Crossing
- Pave:
  - W'bd. to N'bd. & S'bd. Turning Roadways
  - Remaining North Service Dr.
  - Orleans Entrance Ramp
  - Gratiot Connection
  - Gratiot Median
- Open Freeway, Service Drives, Ramp, and Turning Roadways to Traffic.

CONSTRUCTION SEQUENCE

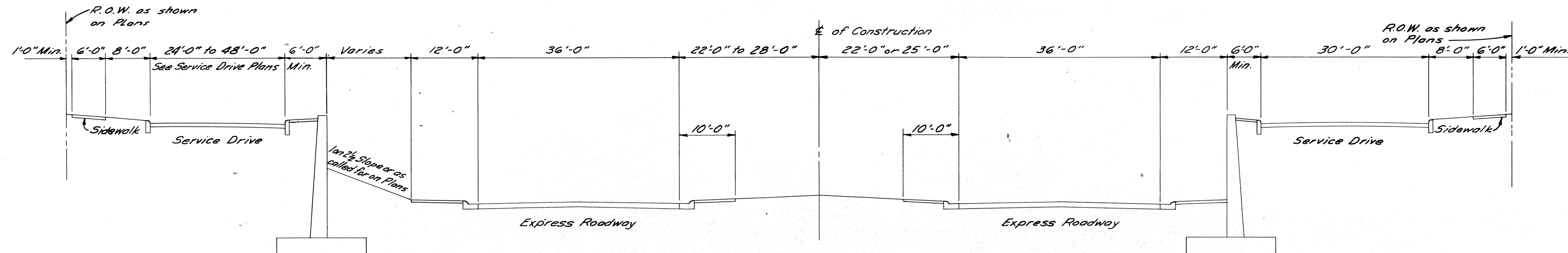
FILE NO. 82195-29, 82251-50	PROJECT 82195	PROUGH U-180(42)	SHEET 4
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# TYPICAL CROSS-SECTIONS

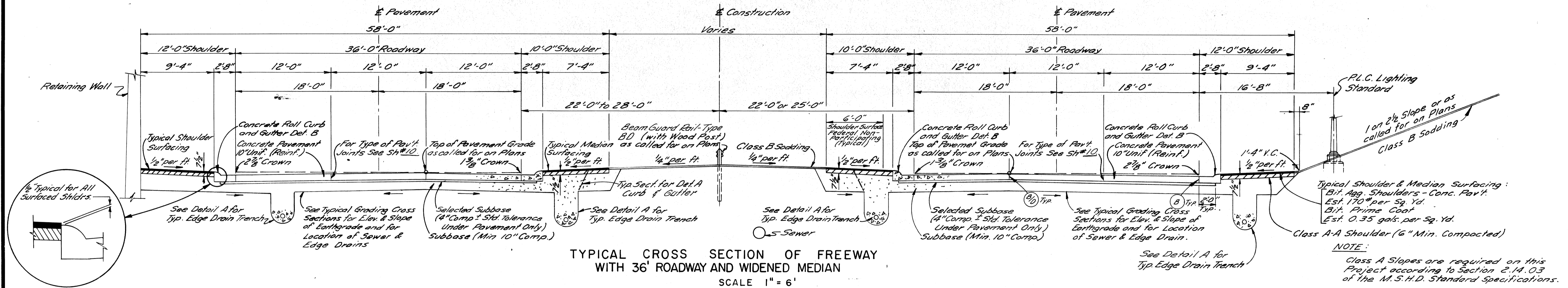
B. P. R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
	82195	Wayne	Detroit	5	

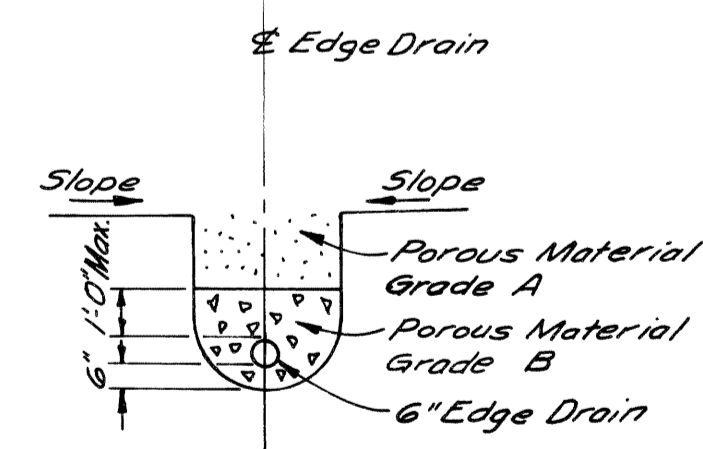
B. P. R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
	82195	Wayne	Detroit	5	



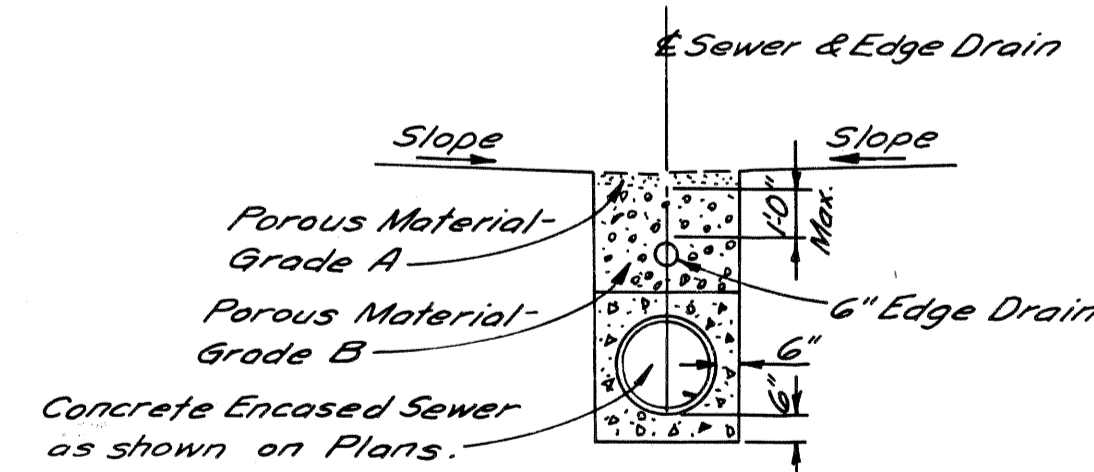
GENERAL TYPICAL CROSS-SECTION  
OF 36' PAVEMENT WITH  
WIDENED MEDIAN  
SCALE 1" = 10'



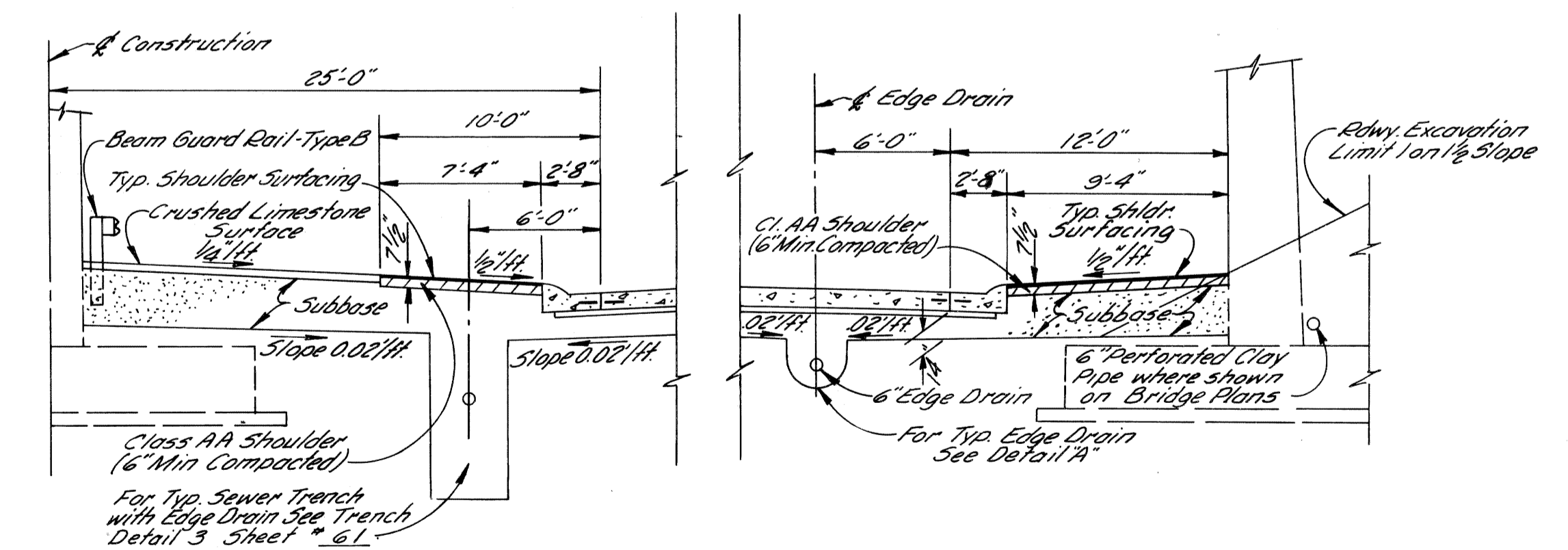
TYPICAL CROSS SECTION OF FREEWAY  
WITH 36' ROADWAY AND WIDENED MEDIAN  
SCALE 1" = 6'



DETAIL A  
EDGE DRAIN TRENCH  
SCALE 1" = 4'



DETAIL B  
ENCASED SEWER TRENCH WITH EDGE DRAIN  
SCALE 1" = 4'



TYPICAL SHOULDER SECTIONS UNDER STRUCTURES  
SCALE 1" = 6'

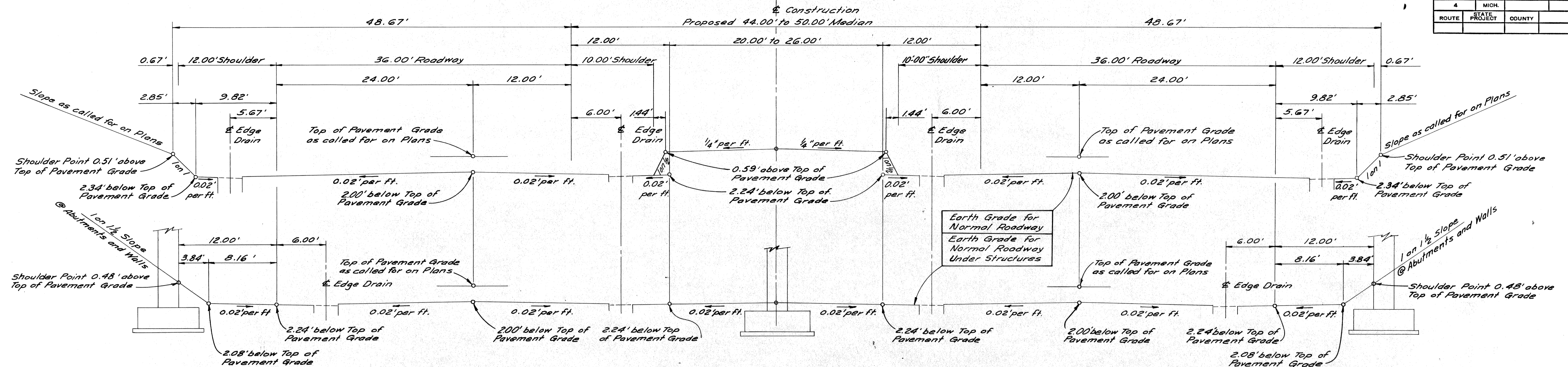
SECTIONS OF FINISHED ROADWAYS

# TYPICAL CROSS-SECTIONS

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
82195	Wayne	Detroit		6	

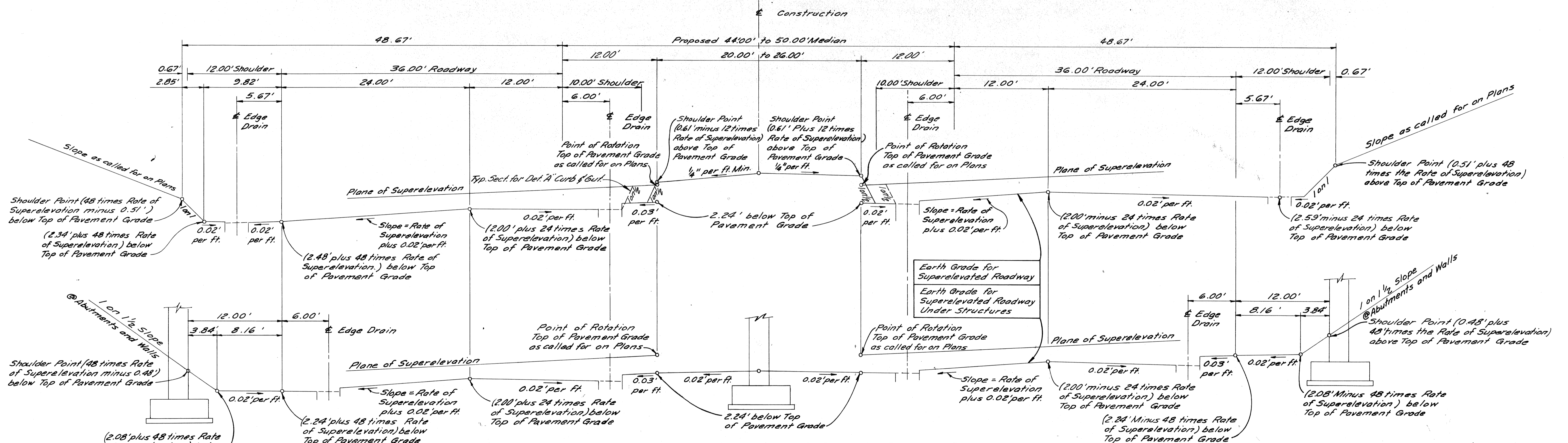
  

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS



TYPICAL CROSS-SECTIONS FOR GRADING NORMAL 36' ROADWAY WITH WIDENED MEDIAN

SCALE 1" = 6'



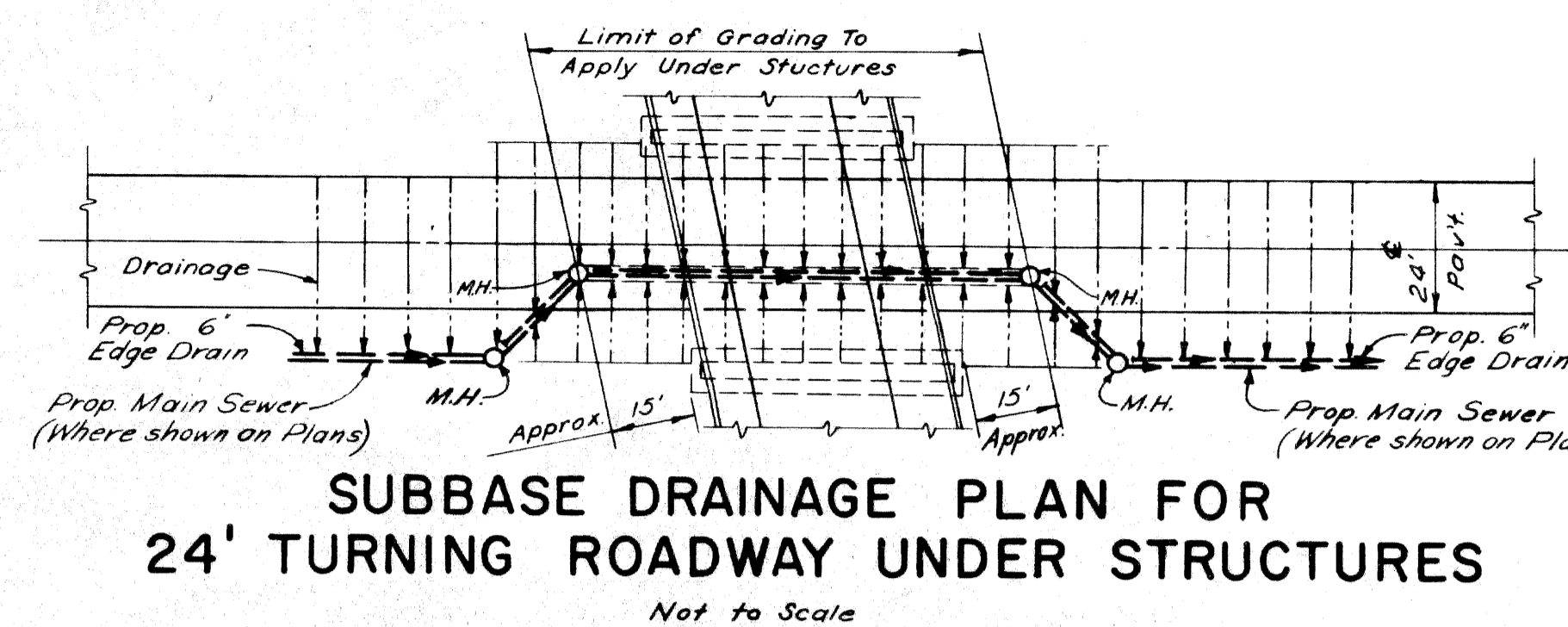
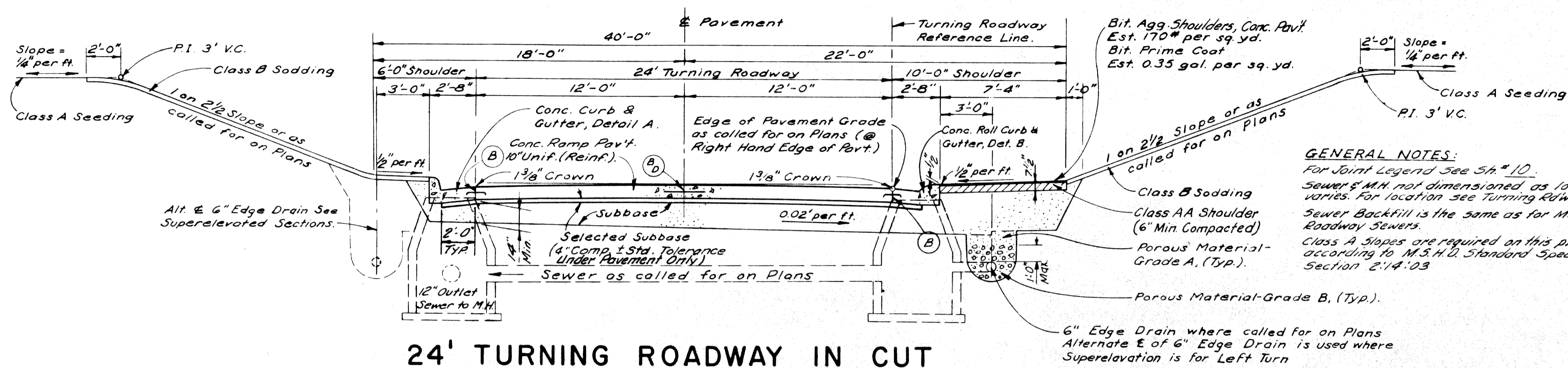
TYPICAL CROSS-SECTION FOR GRADING SUPERELEVATED 36' ROADWAY WITH WIDENED MEDIAN

SCALE 1" = 6'

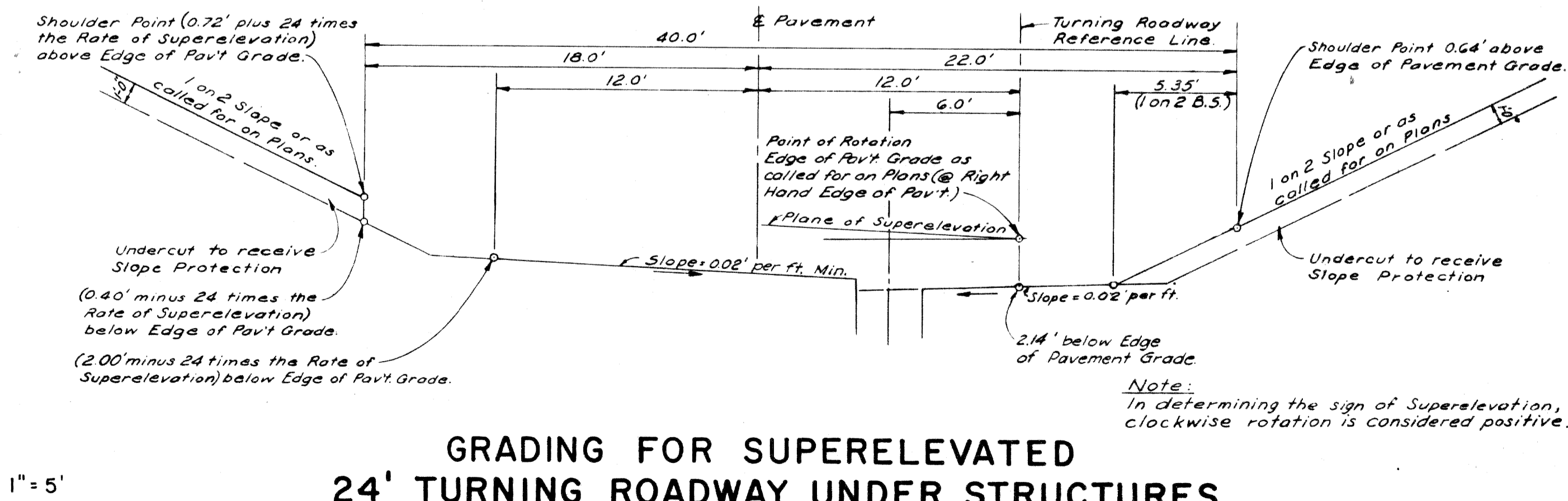
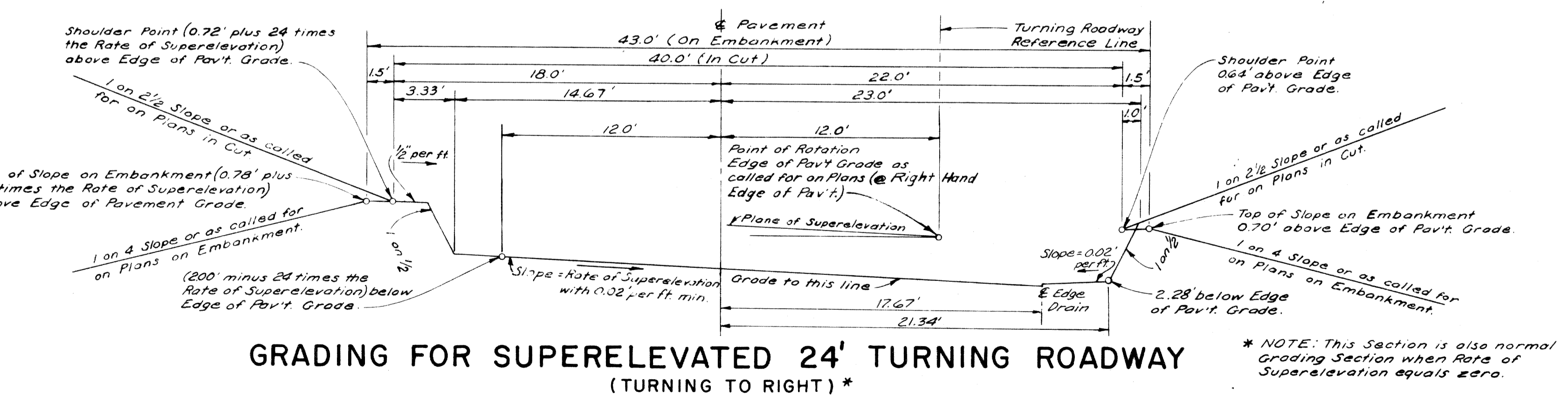
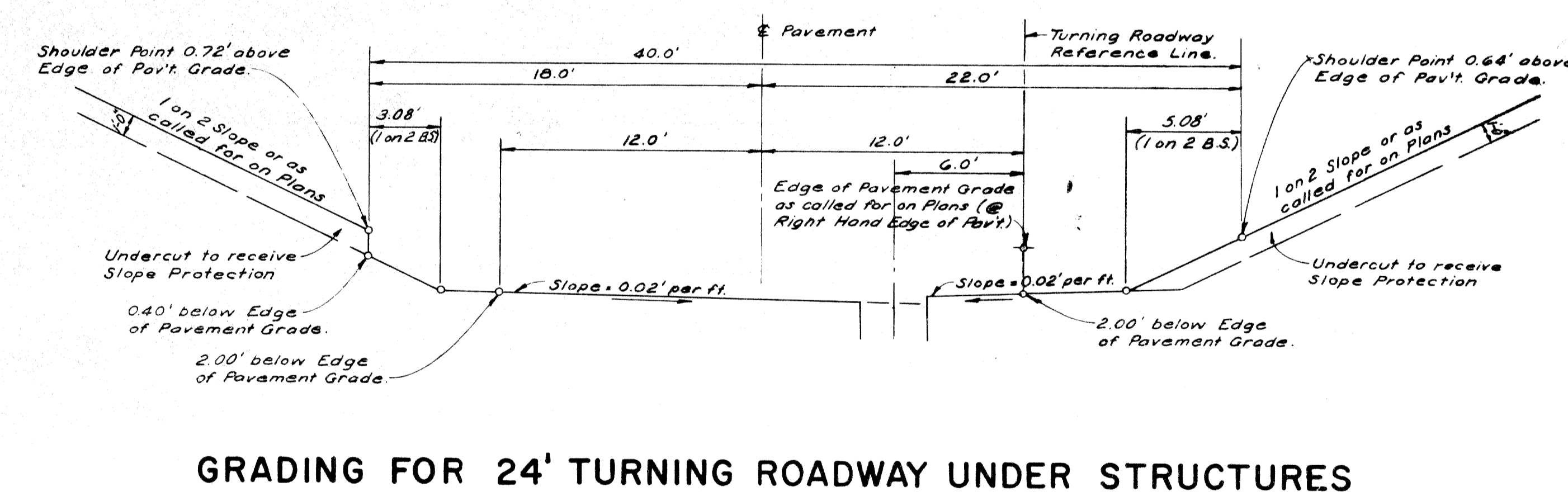
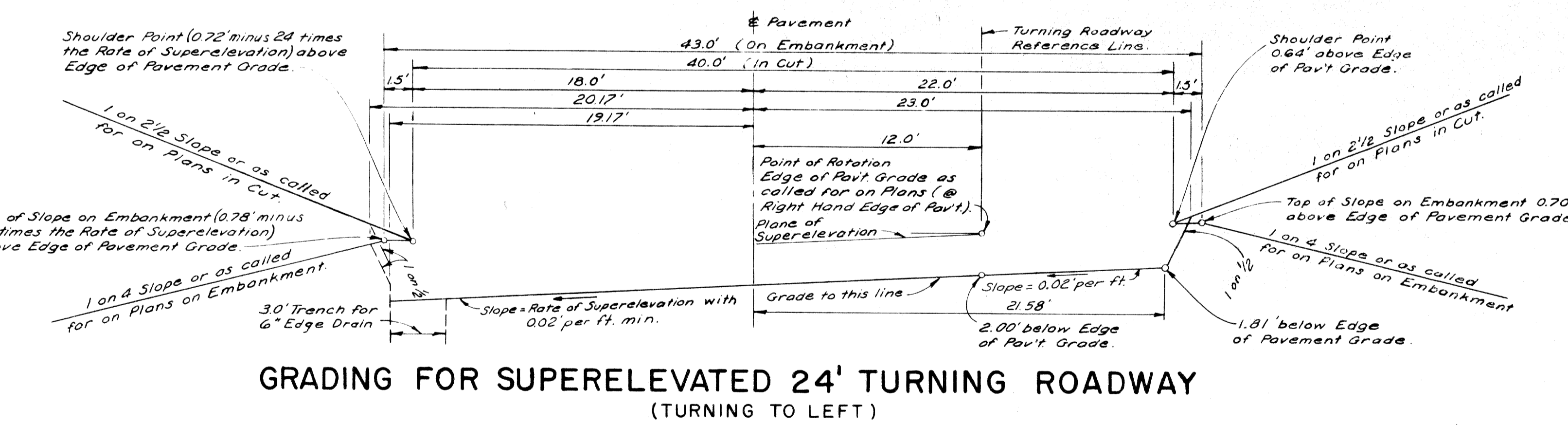
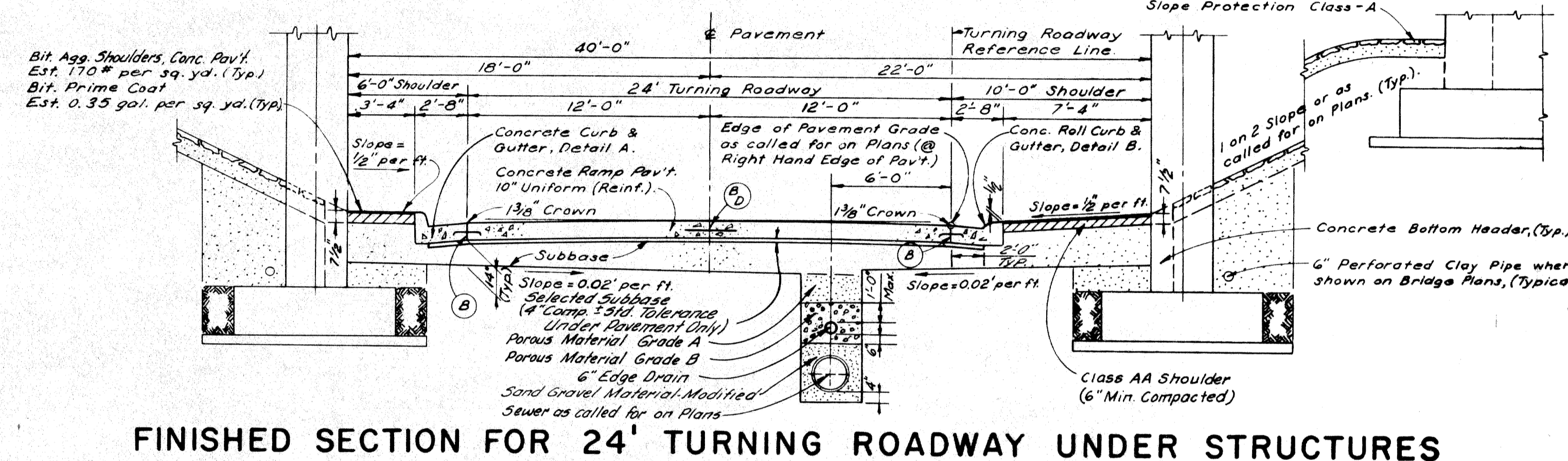
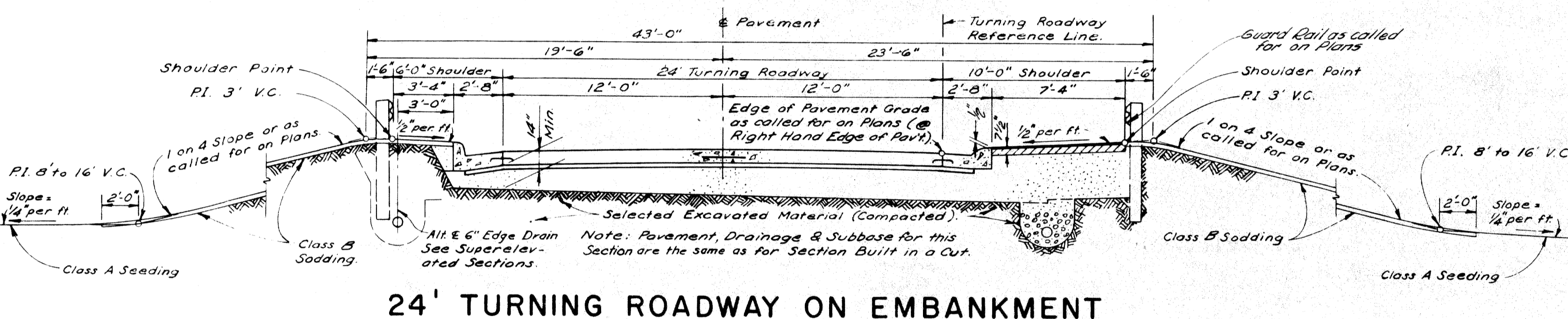
GRADING SECTIONS FOR 36' ROADWAY WITH WIDENED MEDIAN

# TYPICAL CROSS-SECTIONS

D.P. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			7	
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82/93	Wayne	Dearborn		7	



**GENERAL NOTES:**  
For Joint Legend See 5th \* 10.  
Sewer M.H. not dimensioned as location varies. For location see Turning Roadway Plans.  
Sewer Backfill is the same as for Main Roadway Sewers.  
Class A Slopes are required on this project according to M.S.H.D. Standard Specifications, Section 214.03



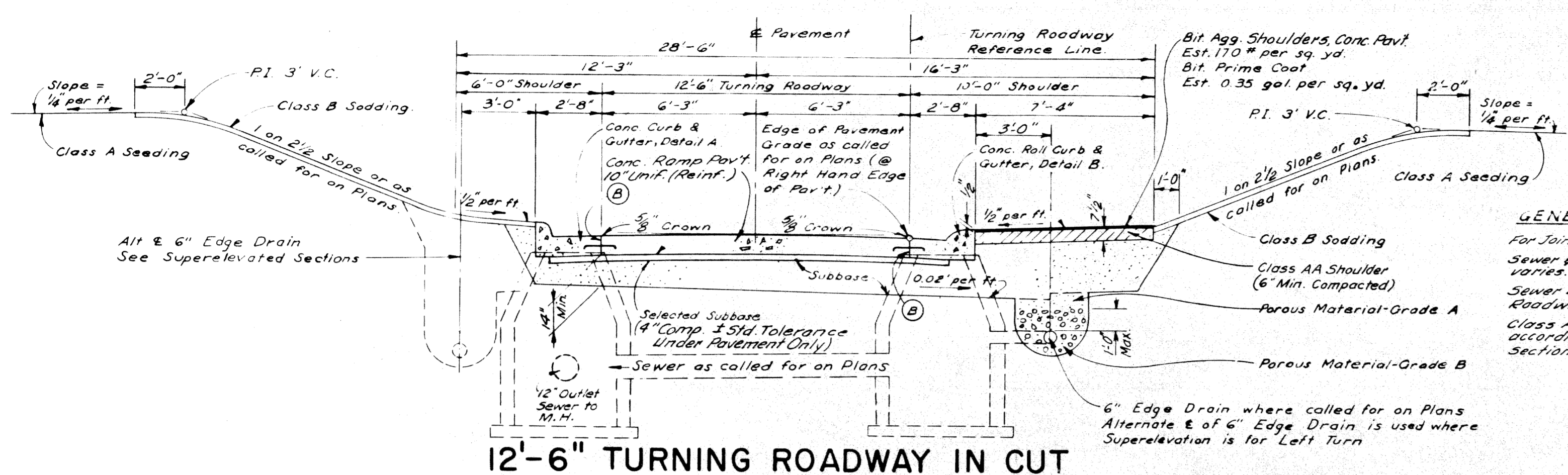
\* NOTE: This Section is also normal Grading Section when Rate of Super-elevation equals zero.

SCALE: 1" = 5'

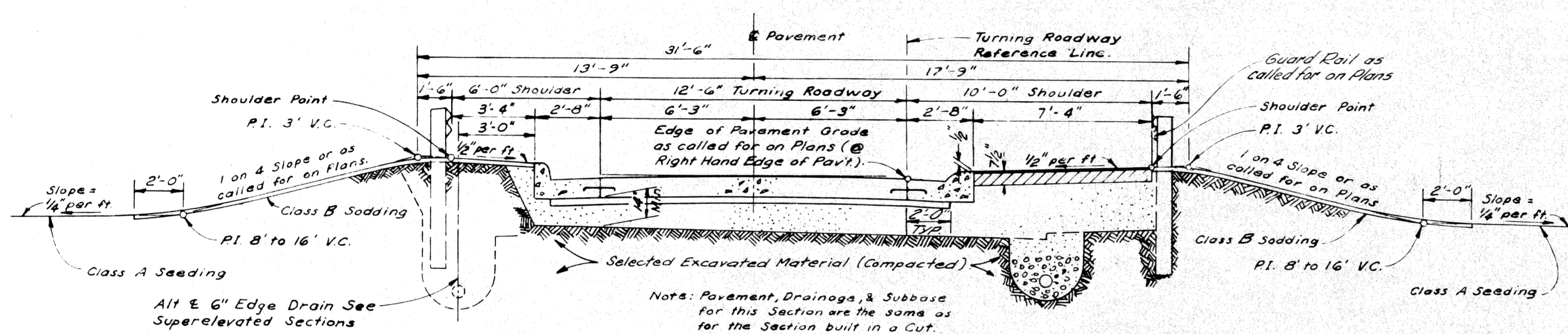
Note: In determining the sign of Super-elevation, clockwise rotation is considered positive.

# TYPICAL CROSS-SECTIONS

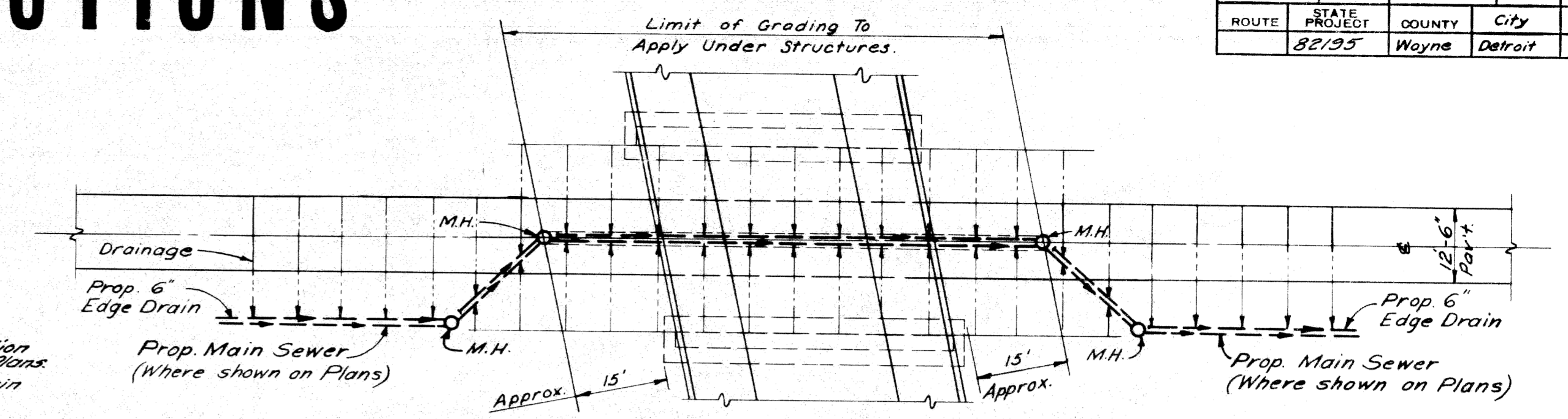
DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Detroit	3		



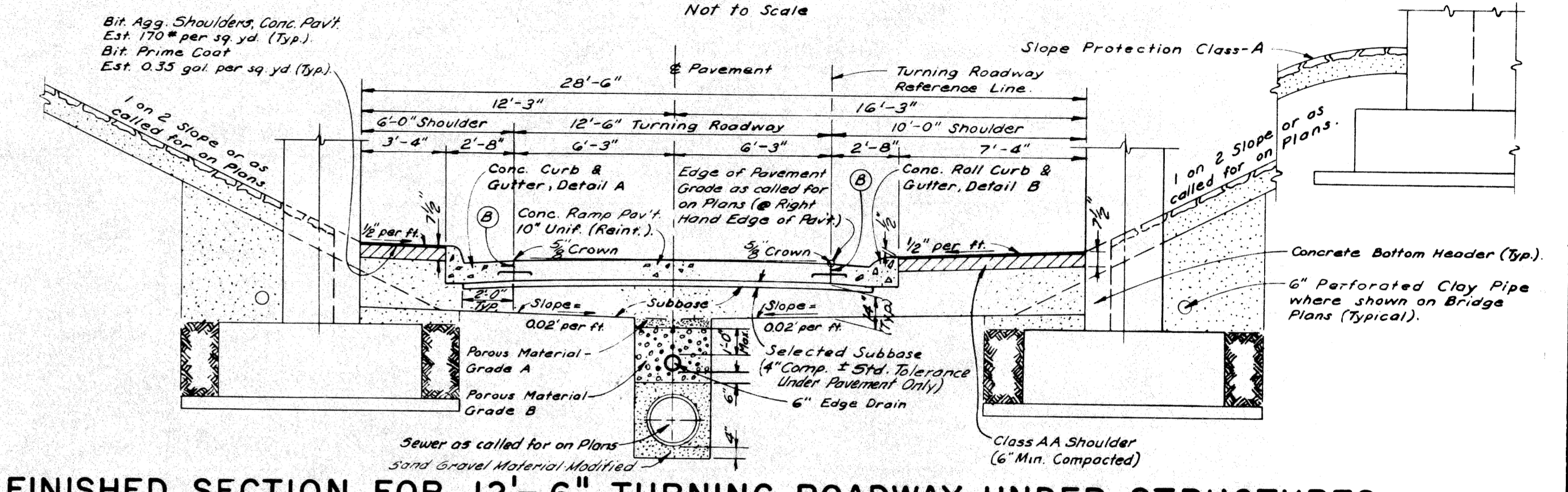
12'-6" TURNING ROADWAY IN CUT



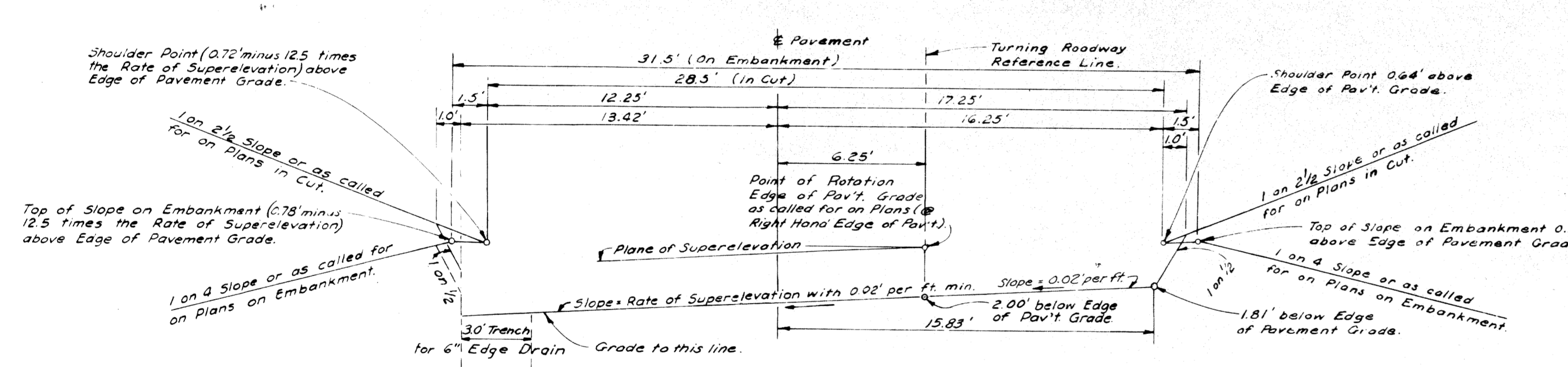
12'-6" TURNING ROADWAY ON EMBANKMENT



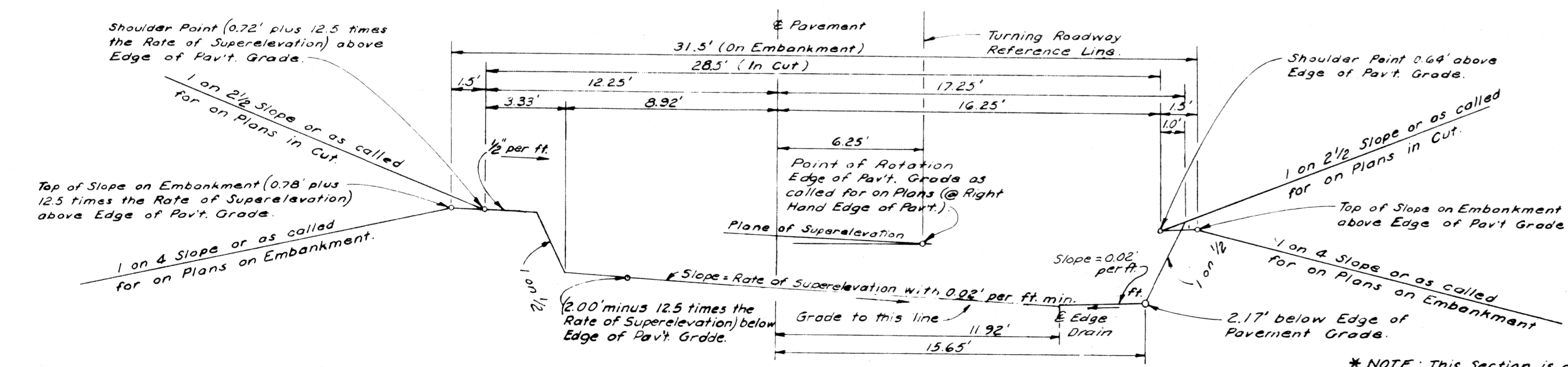
SUBBASE DRAINAGE PLAN FOR 12'-6" TURNING ROADWAY UNDER STRUCTURES



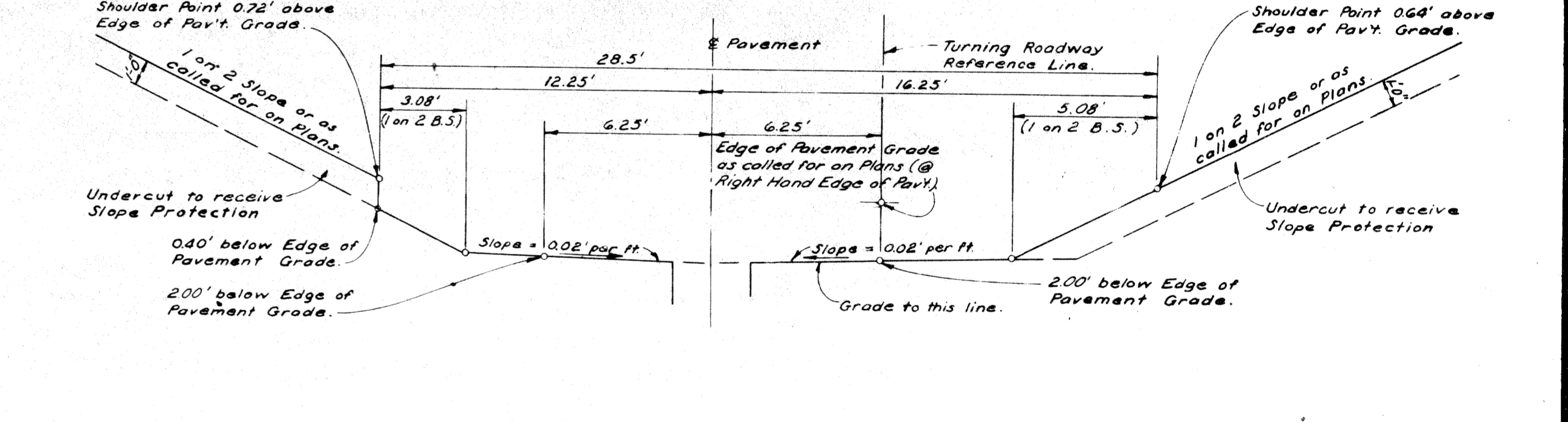
FINISHED SECTION FOR 12'-6" TURNING ROADWAY UNDER STRUCTURES



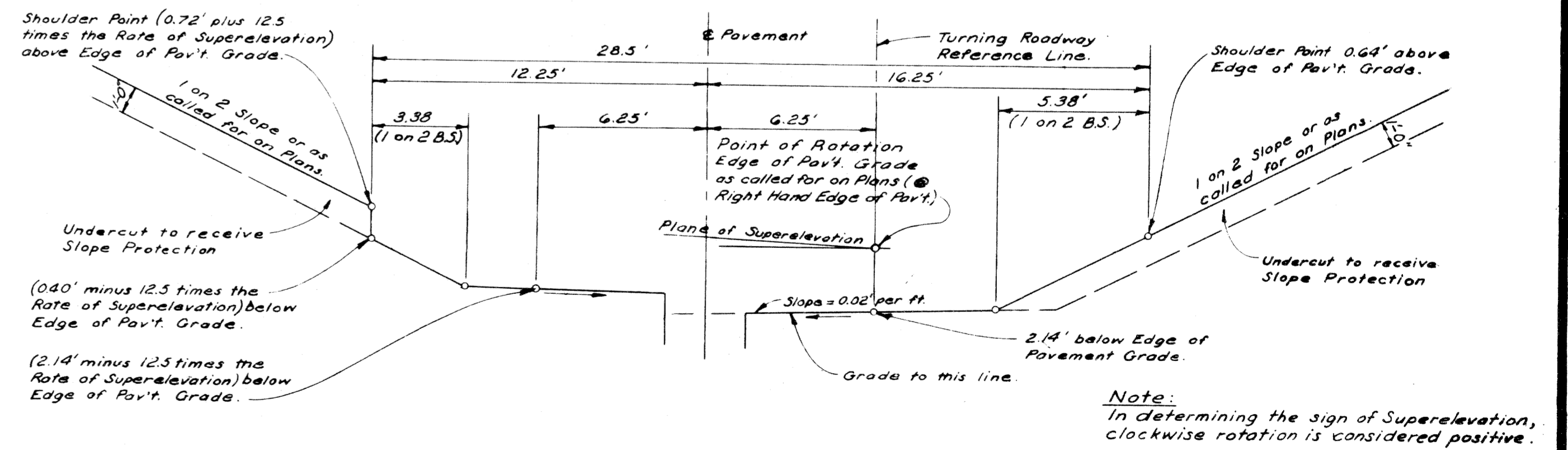
GRADING FOR SUPERELEVATED 12'-6" TURNING ROADWAY (TURNING TO LEFT)



GRADING FOR SUPERELEVATED 12'-6" TURNING ROADWAY (TURNING TO RIGHT)



GRADING FOR 12'-6" TURNING ROADWAY UNDER STRUCTURES



GRADING FOR SUPERELEVATED 12'-6" TURNING ROADWAY UNDER STRUCTURES

\* NOTE: This Section is also normal grading Section when Rate of Superelevation equals zero.

SCALE: 1"=4'

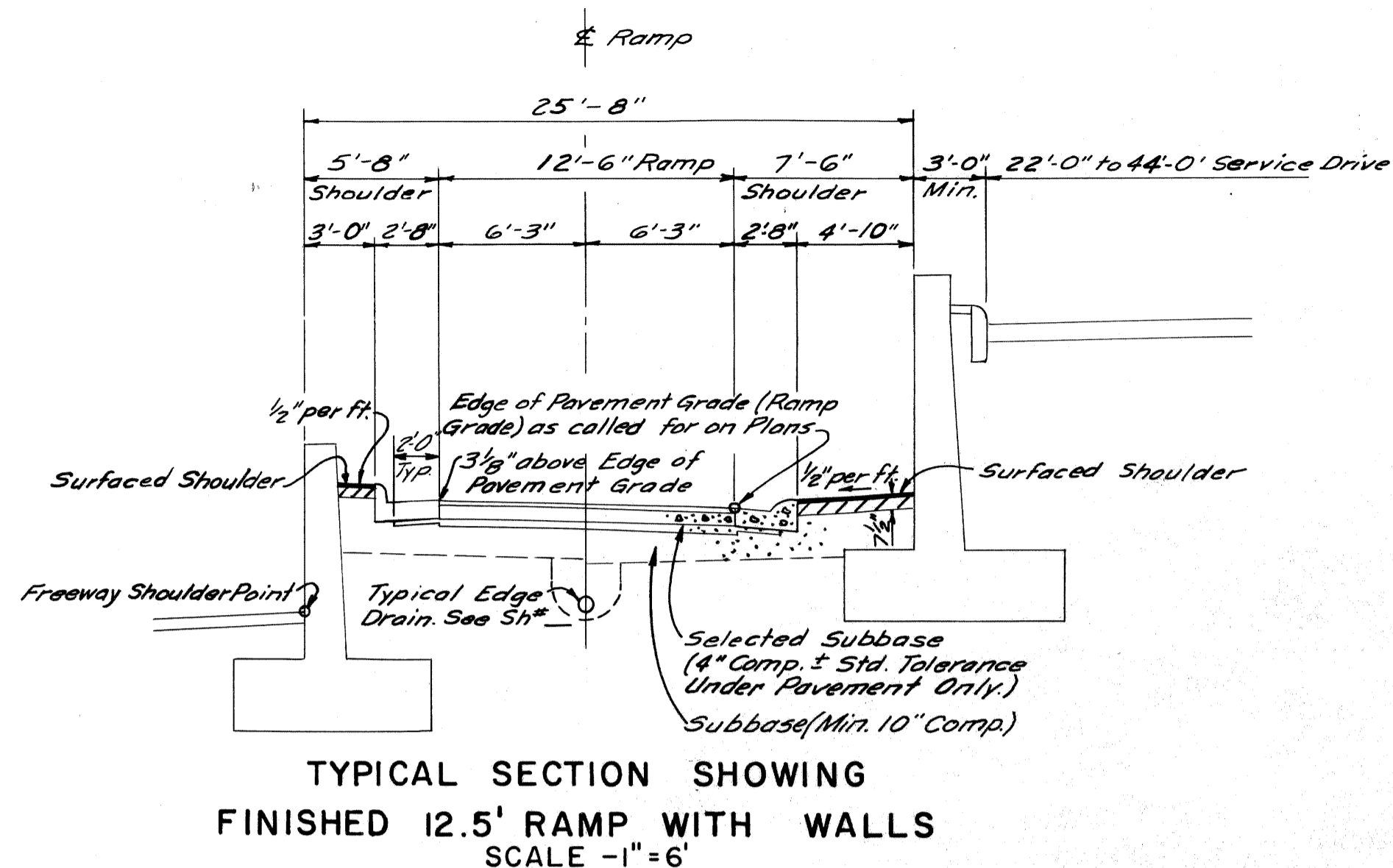
Note: In determining the sign of Superelevation, clockwise rotation is considered positive.

FILE NO.	STATE PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
82195-29, 82251-50	Wayne		3	

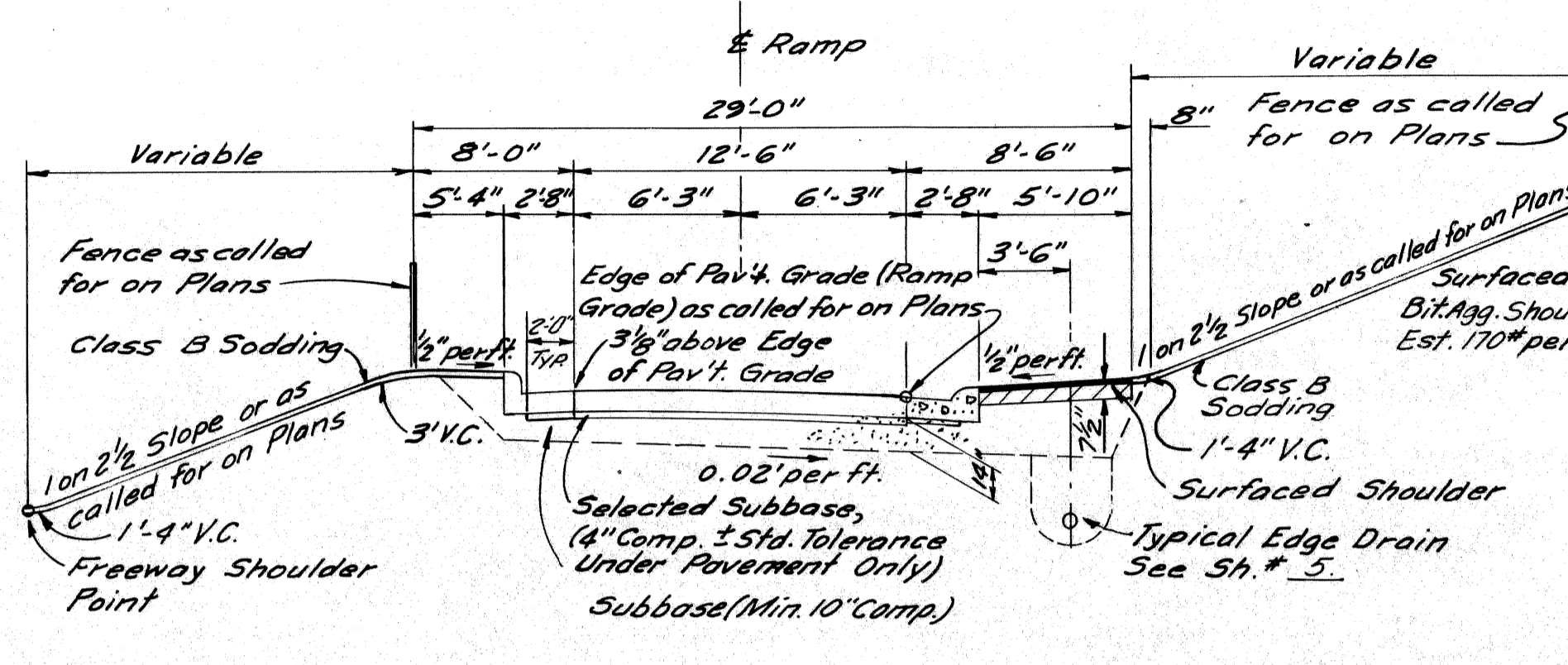


# TYPICAL CROSS-SECTIONS

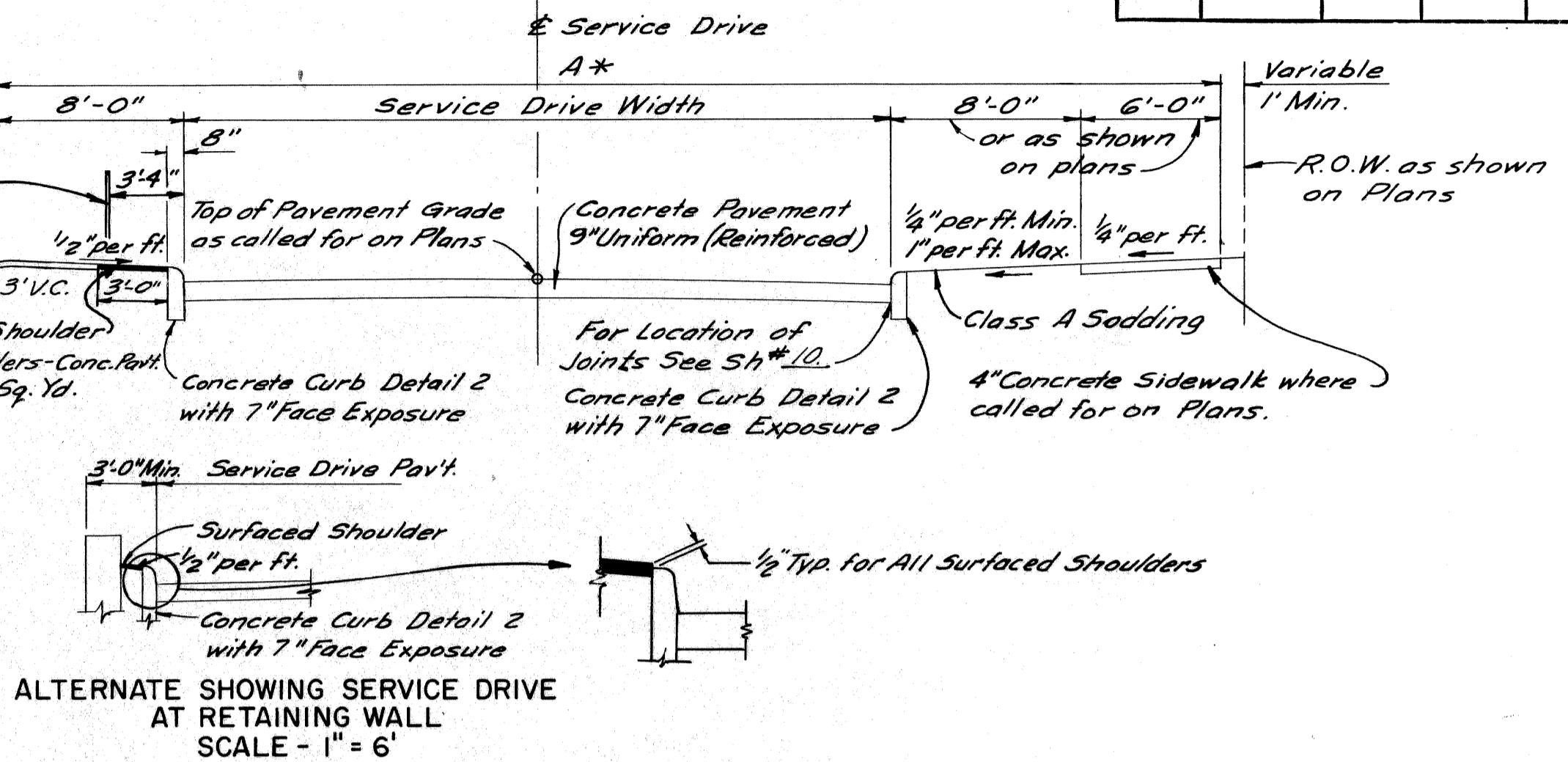
B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Dearborn		9	



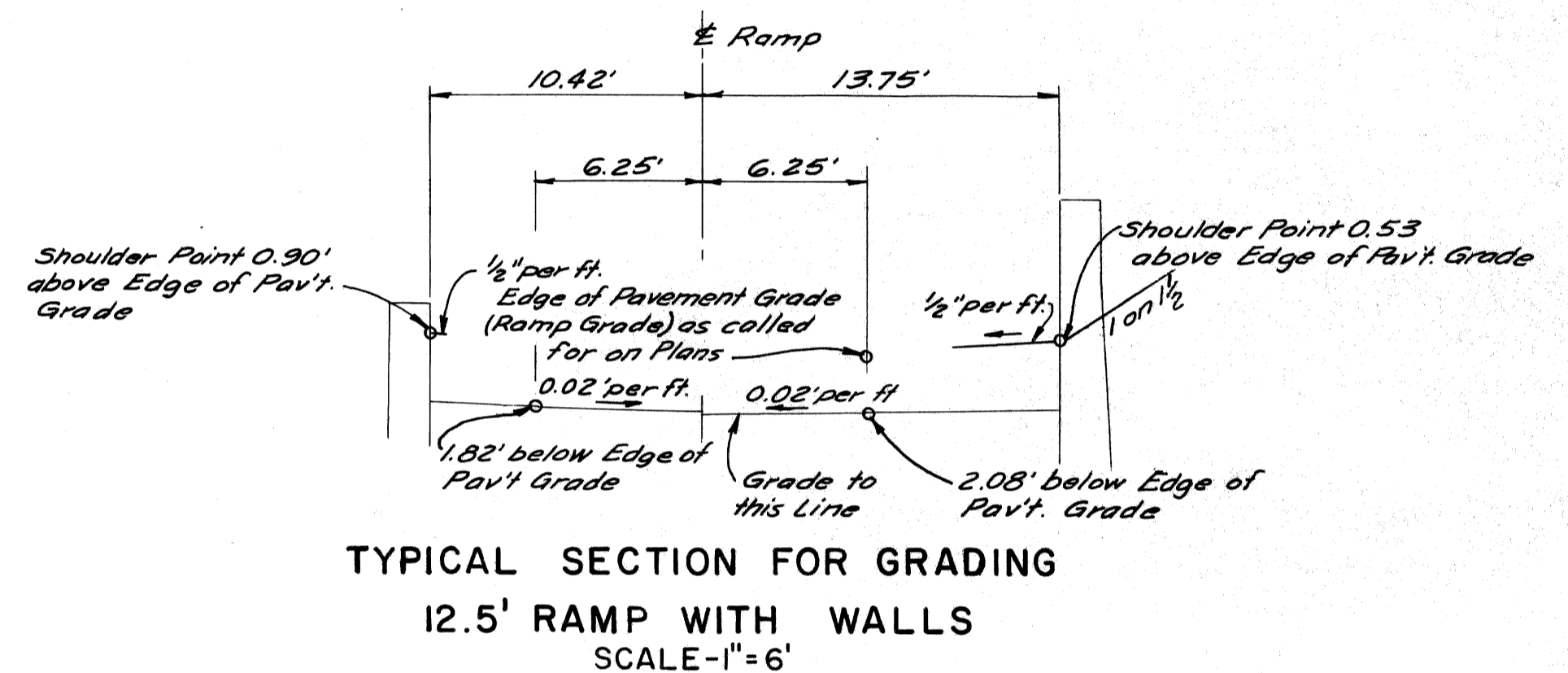
TYPICAL SECTION SHOWING FINISHED 12.5' RAMP WITH WALLS SCALE - 1" = 6'



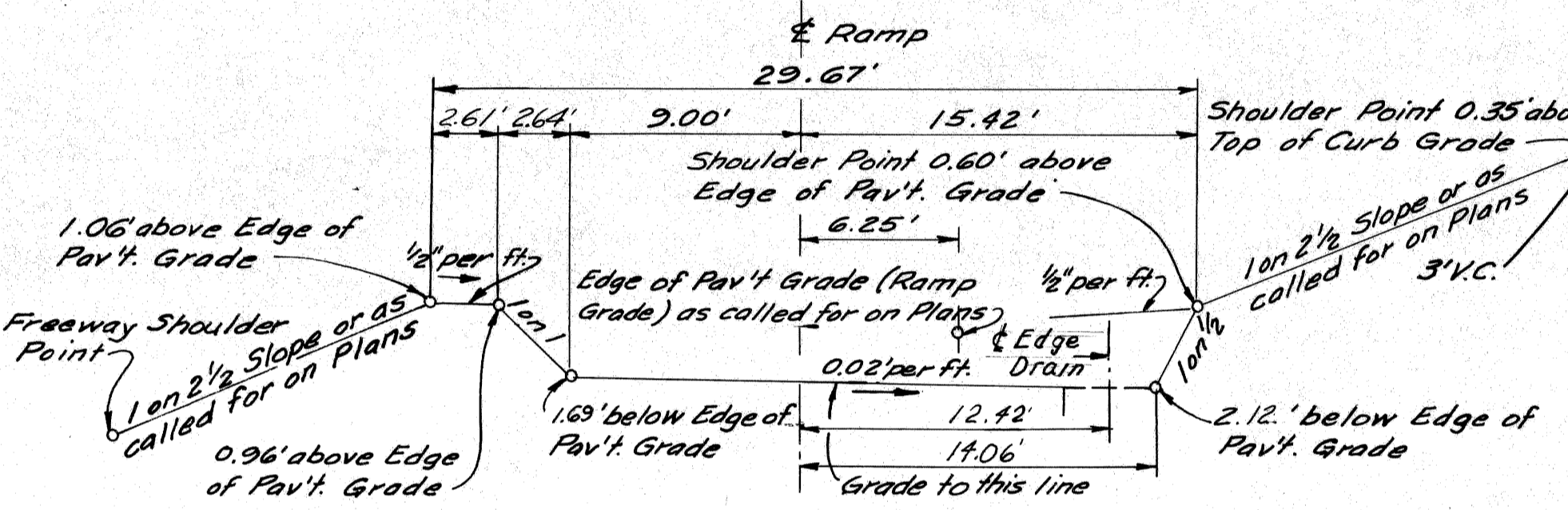
TYPICAL SECTION SHOWING FINISHED 12.5' RAMP AND SERVICE DRIVE SCALE - 1" = 6'



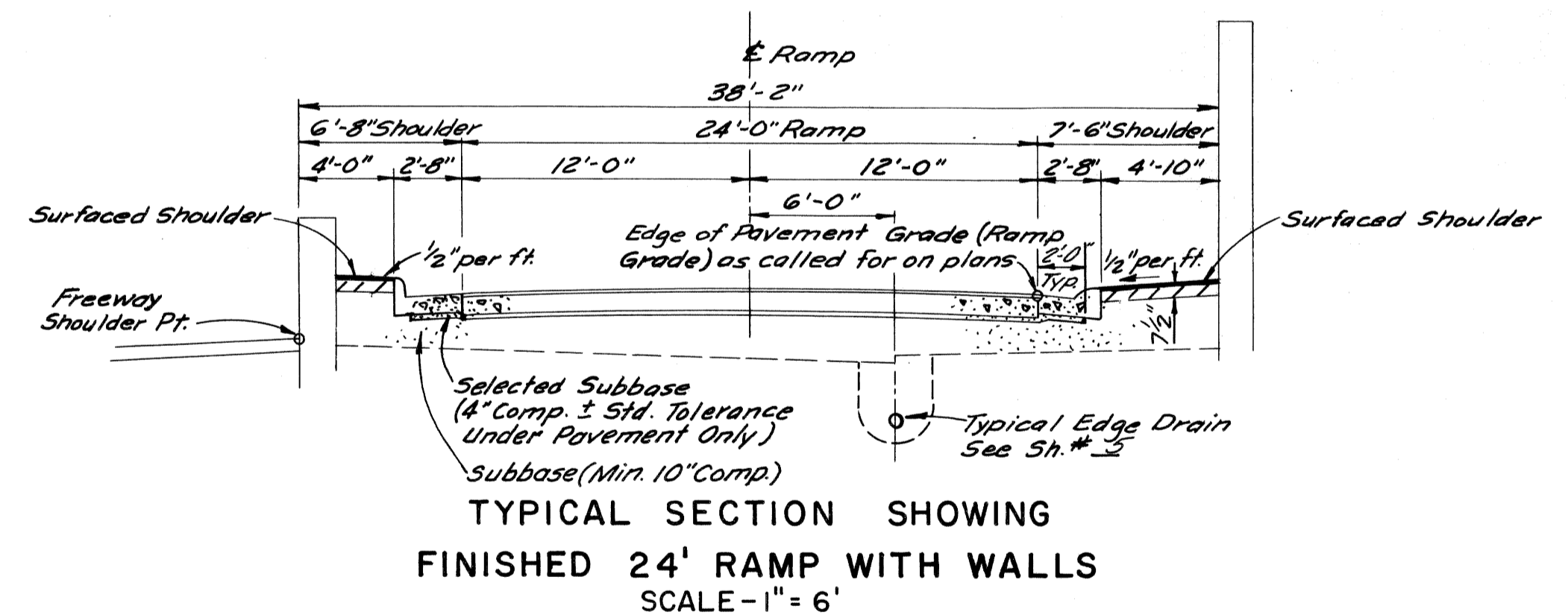
ALTERNATE SHOWING SERVICE DRIVE AT RETAINING WALL SCALE - 1" = 6'



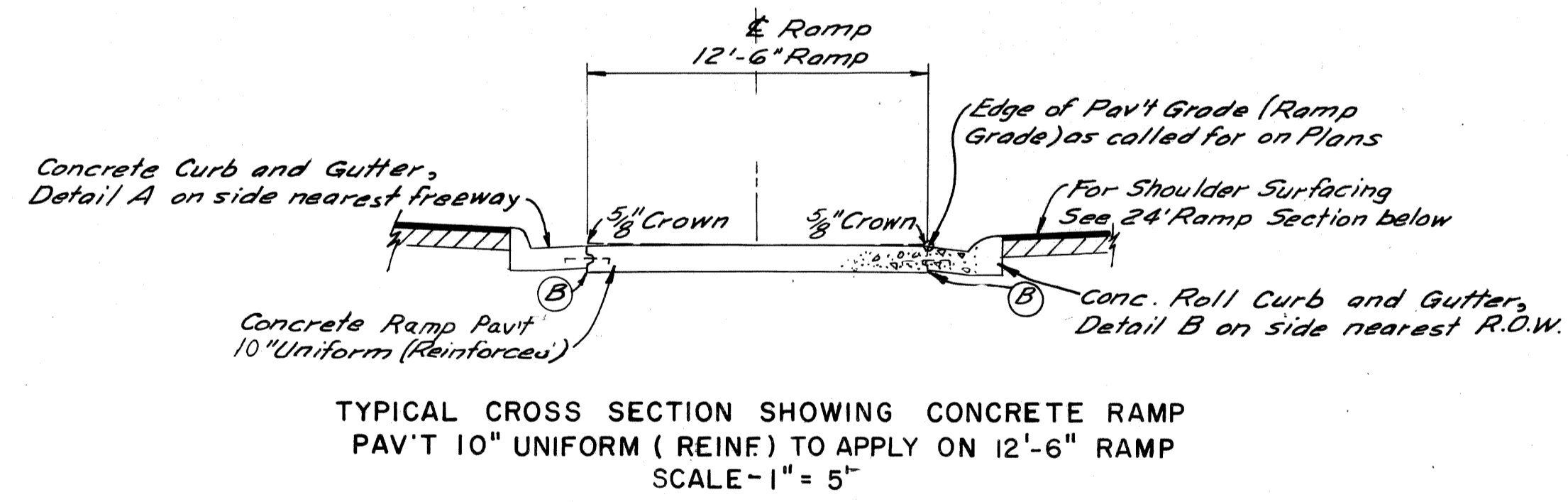
TYPICAL SECTION FOR GRADING 12.5' RAMP WITH WALLS SCALE - 1" = 6'



TYPICAL SECTION FOR GRADING RAMP AND SERVICE DRIVE SCALE - 1" = 6'



TYPICAL SECTION SHOWING FINISHED 24' RAMP WITH WALLS SCALE - 1" = 6'

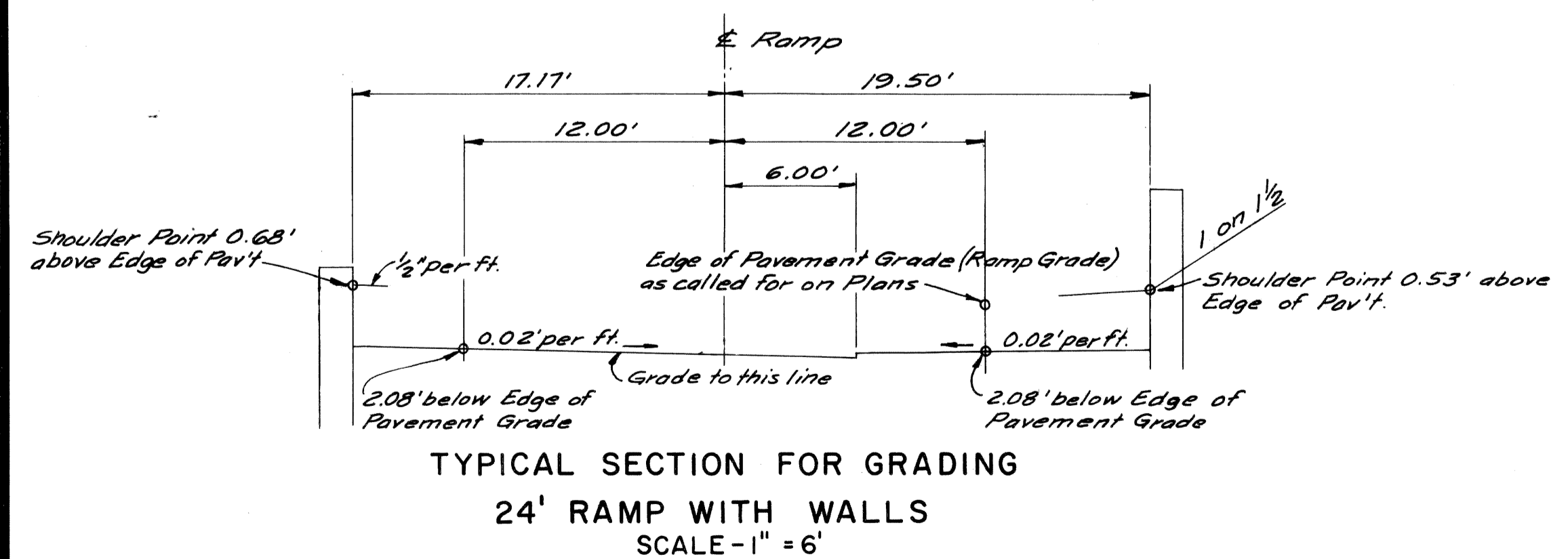


TYPICAL CROSS SECTION SHOWING CONCRETE RAMP PAV'T 10" UNIFORM (REIN) TO APPLY ON 12'-6" RAMP SCALE - 1" = 5'

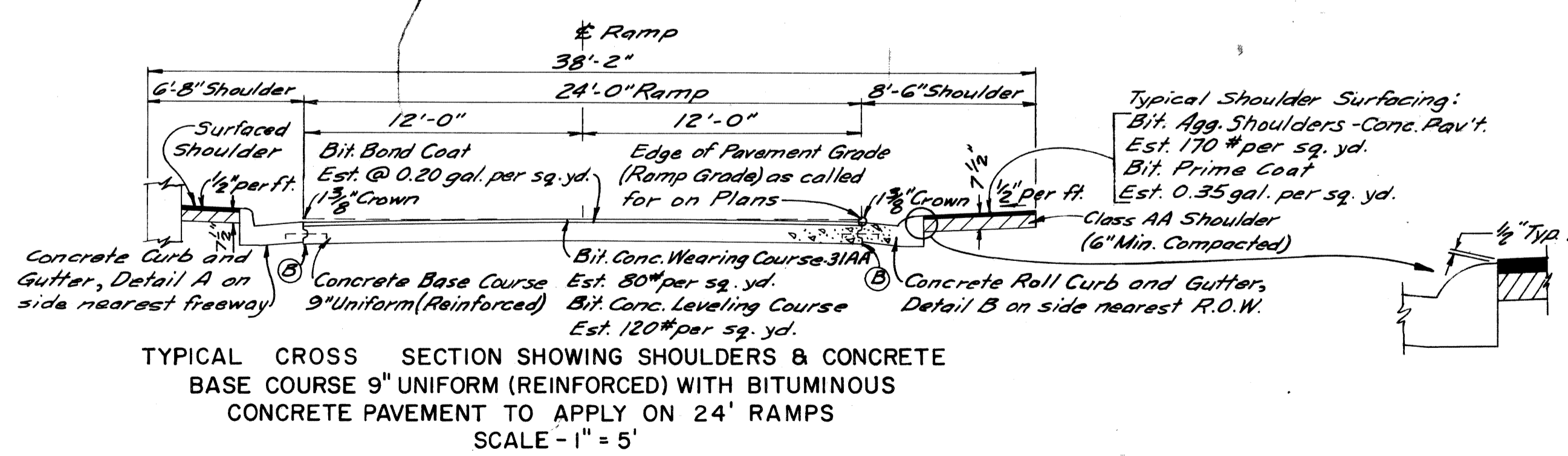
\*STANDARD DIMENSIONS & GRADING CONSTANTS FOR SERVICE DRIVES

Service Dr. Width (feet)	Crown (Inches)	A (feet)	B (feet)	C (feet)	D (feet)
22'	1 3/4	44	38	11.67	0.90
24'	2	46	40	12.67	0.92
30'	2 3/4	52	46	15.67	0.98
33'	3 1/4	55	49	17.17	1.02
48'	5 3/4	70	64	24.67	1.23

NOTES:  
 (B) - Longitudinal Bulkhead Construction Joint in accordance with M.S.H.D. Special Details Sh.# 53.  
 The Concrete Pavement and Concrete Base Course shall be reinforced throughout in accordance with M.S.H.D. Std. Plan E-4-A-216.  
 Concrete Curb, Detail 2 and Concrete Curb and Gutter, Details A and B shall be in accordance with M.S.H.D. Std. Drwg. E-4-A-29 F.  
 Class A Slopes are required on this project according to Section 2.14.03 of the M.S.H.D. Std. Specifications



TYPICAL SECTION FOR GRADING 24' RAMP WITH WALLS SCALE - 1" = 6'

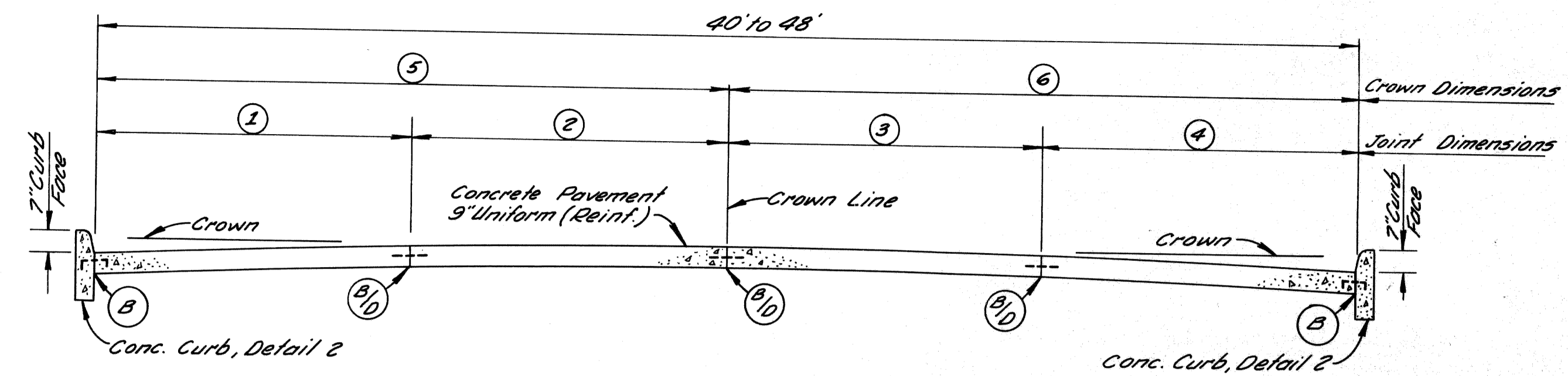


TYPICAL CROSS SECTION SHOWING SHOULDERS & CONCRETE BASE COURSE 9" UNIFORM (REINFORCED) WITH BITUMINOUS CONCRETE PAVEMENT TO APPLY ON 24' RAMPS SCALE - 1" = 5'

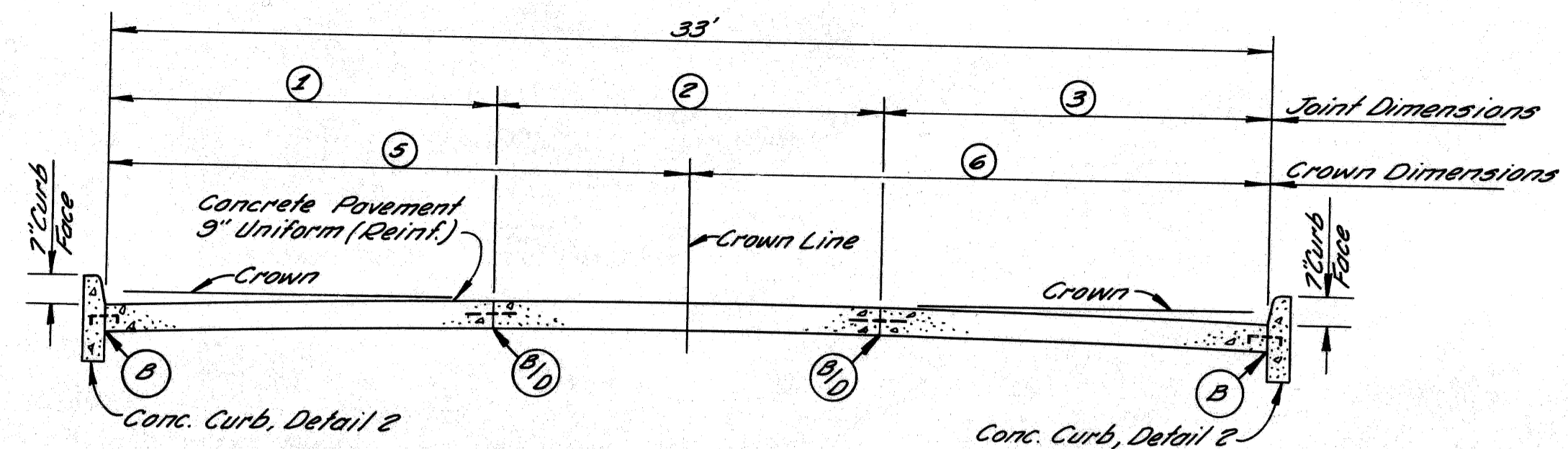
RAMPS AND SERVICE DRIVES

# TYPICAL CROSS-SECTIONS

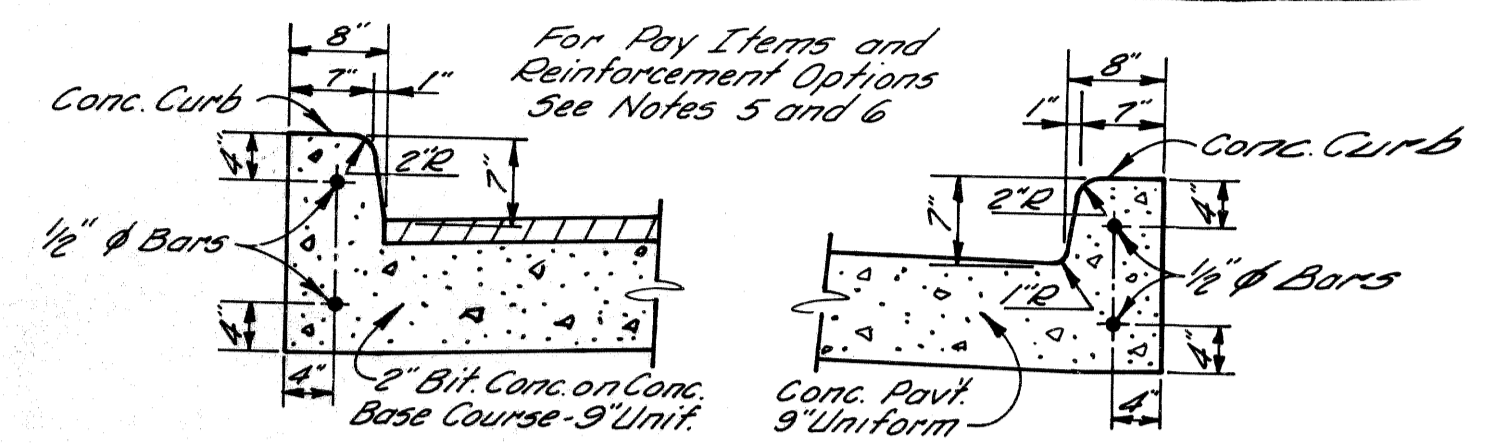
B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE PROJECT	COUNTY	CITY		SHEET NO.	TOTAL SHEETS
82195	Wayne	Detroit		10	10
B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE PROJECT	COUNTY	CITY		SHEET NO.	TOTAL SHEETS
82195	Wayne	Detroit		10	10



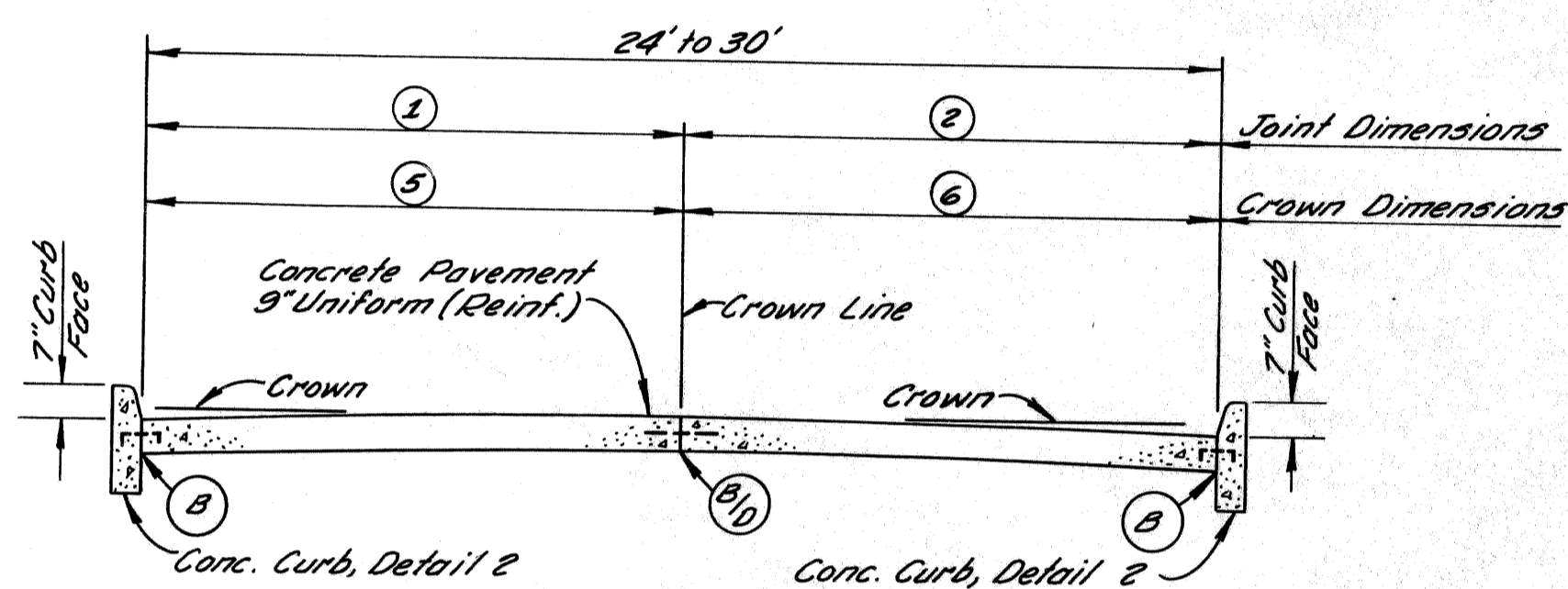
TYPICAL CROSS-SECTION SHOWING CONCRETE PAVEMENT 9" UNIFORM (REINFORCED) TO APPLY ON 40' TO 48' SERVICE DRIVES



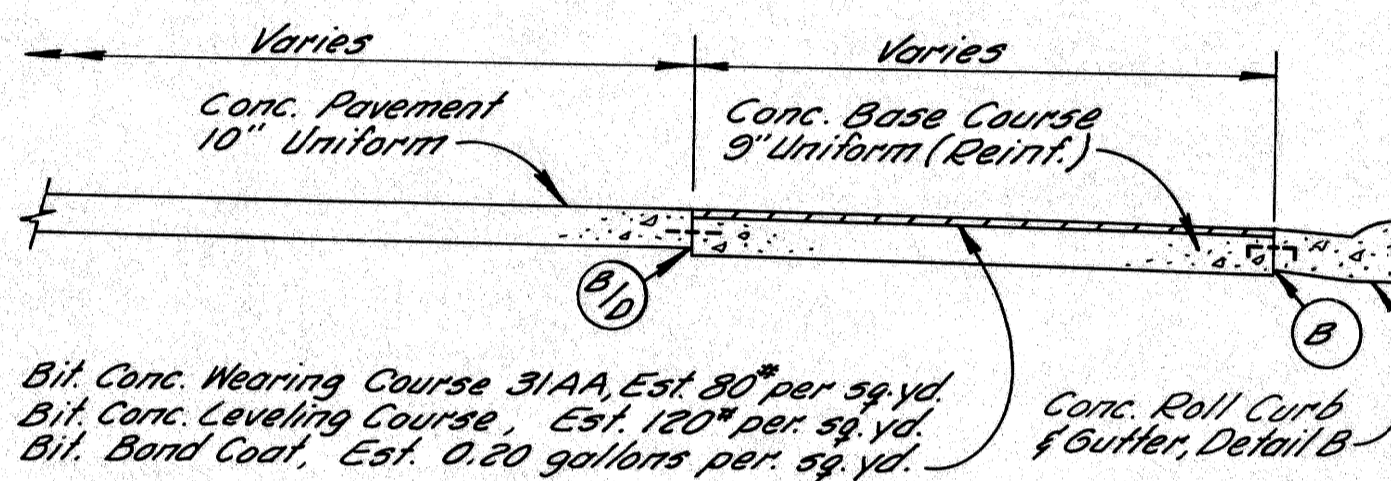
TYPICAL CROSS-SECTION SHOWING CONCRETE PAVEMENT 9" UNIFORM (REINFORCED) TO APPLY ON 33' SERVICE DRIVES



INTEGRAL CURB ALTERNATES FOR USE ON SERVICE DRIVES

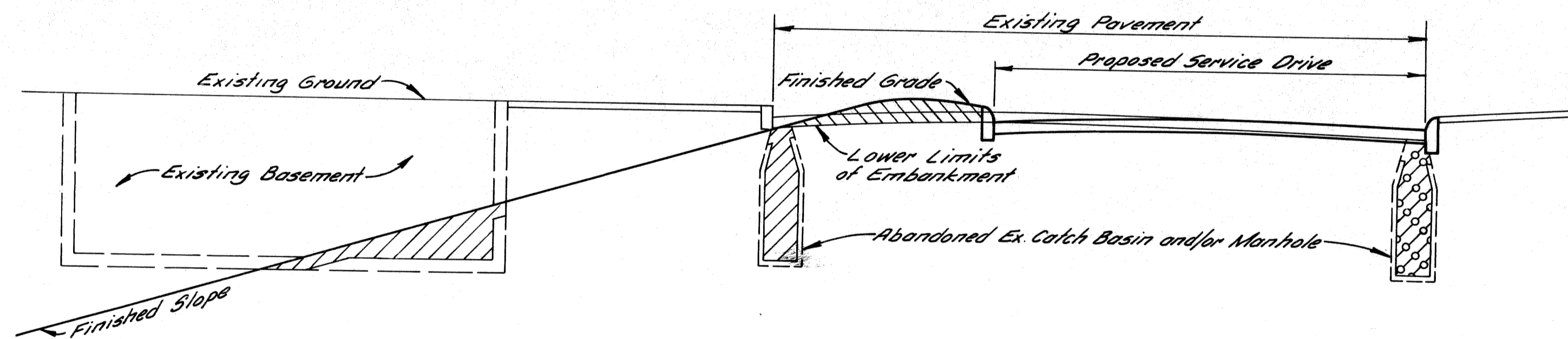


TYPICAL CROSS-SECTION SHOWING CONCRETE PAVEMENT 9" UNIFORM (REINFORCED) TO APPLY ON 24' TO 30' SERVICE DRIVES

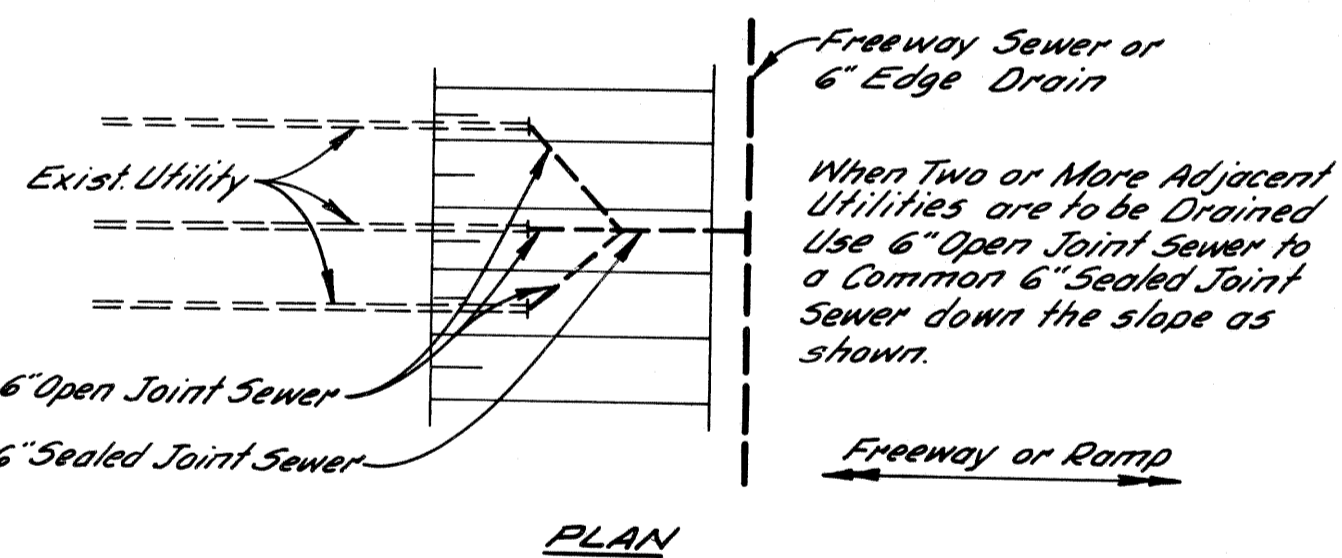


TYPICAL CROSS-SECTION SHOWING CONCRETE PAVEMENT 10" UNIFORM (REINFORCED) TO APPLY ON EXPRESSWAY WITH BITUMINOUS LANE

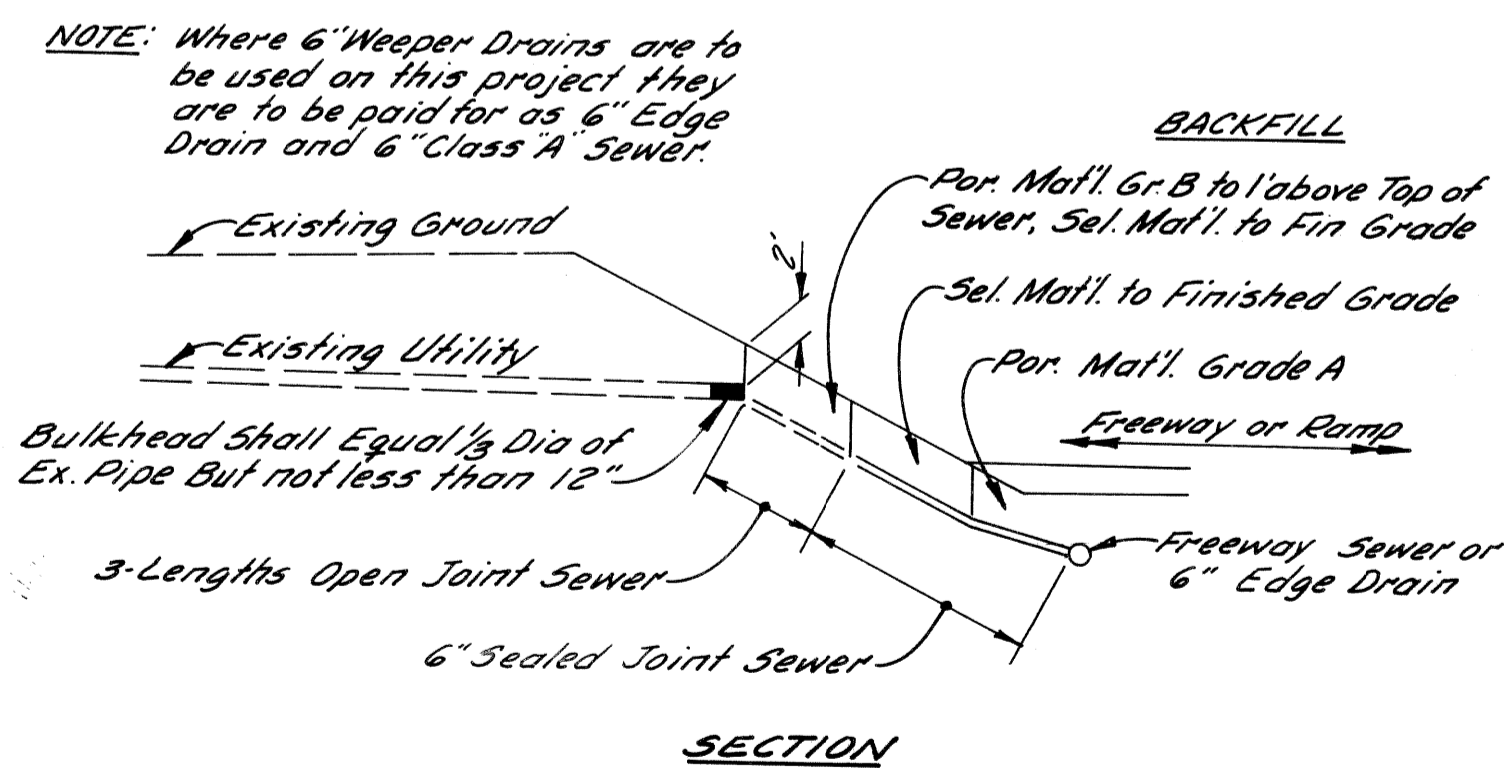
SERVICE DRIVE CROWN TABLE																									
Distance from $\frac{1}{2}$ in FEET	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Crown in INCHES	1/8	1/8	1/4	3/8	1/2	3/4	7/8	1 1/8	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 3/4	4	4 1/4	4 3/4	5	5 1/4	5 3/4	
SERVICE DR. WIDTH	STANDARD SERVICE DRIVE DIMENSIONS						REMARKS																		
	Inches	Feet																							
	Crown	①	②	③	④	⑤	⑥																		
24'	2	12	12	—	—	12	12																		
30'	2 3/4	15	15	—	—	15	15																		
33'	3 1/4	11	11	11	—	16 1/2	16 1/2																		
40'	6 L.F. 2 3/4 R.F.	10	11	11	8	25	15																		
44'	5	11	11	11	11	22	22																		
48'	5 3/4	12	12	12	12	24	24																		



TYPICAL CROSS-SECTION OF EMBANKMENT & BACKFILL

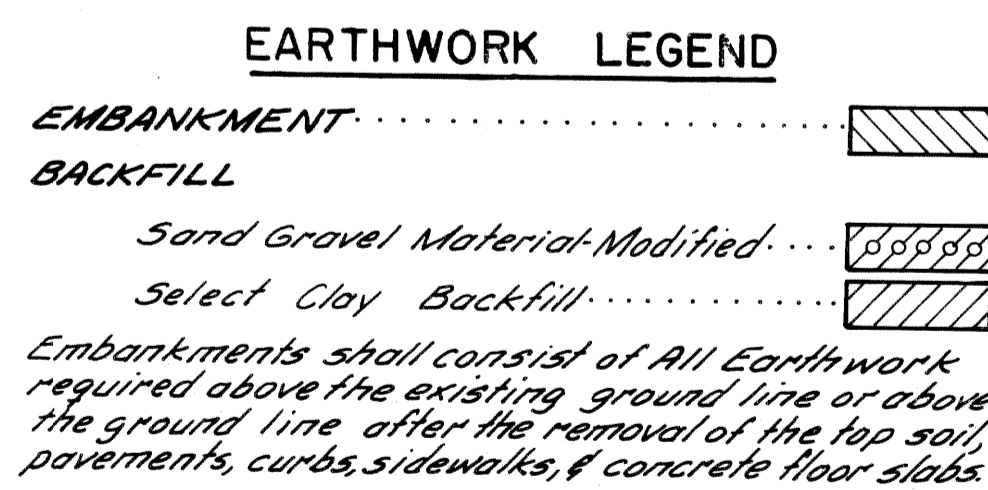


PLAN

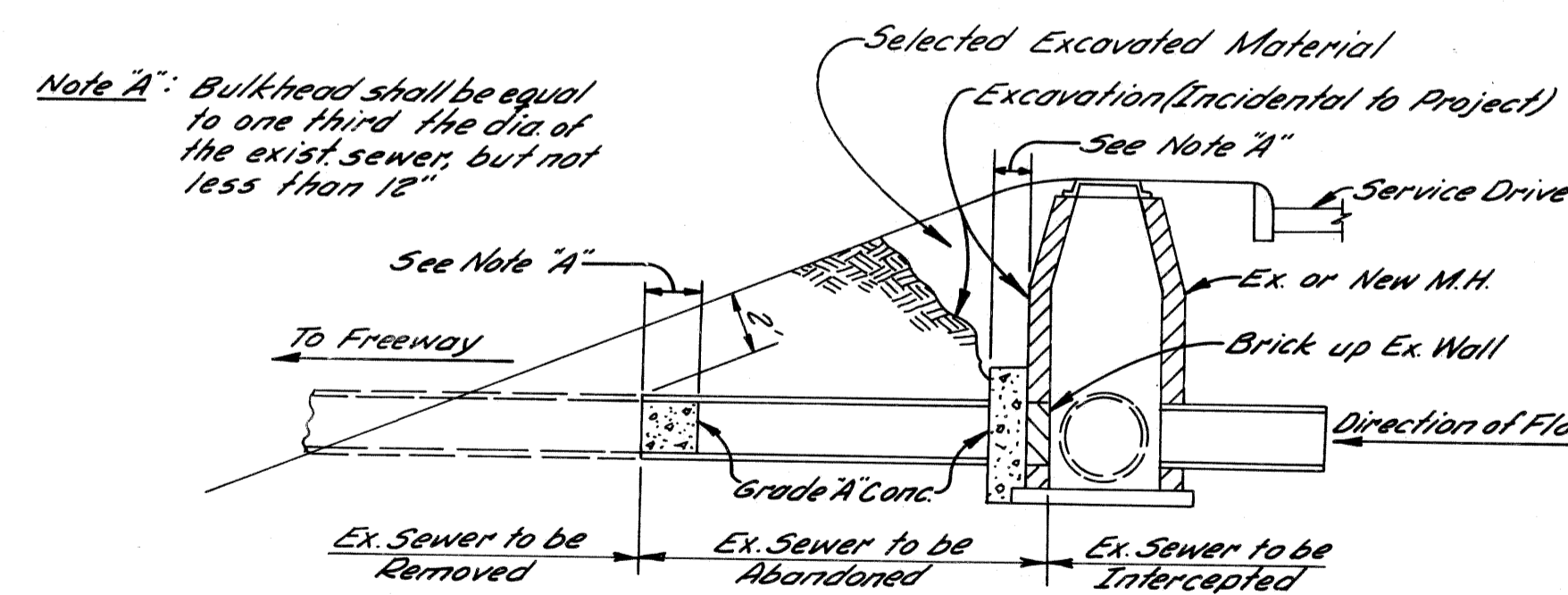


SECTION

6" WEEPER DRAINS



EARTHWORK LEGEND



SKETCH SHOWING METHOD FOR BULKHEADING SEVERED SEWERS

NOTES:

- The Concrete Base Course and Concrete Pavement shall be reinforced throughout in accordance with M.S.H.D. Standard Plan E-4-A-216.
- The Pavement Crown for express roadways, turning roadways, and ramps, shall be in accordance with M.S.H.D. Standard Plan E-4-A-49C.
- Concrete Curb, Detail 2 and Concrete Curb and Gutter Details A and B shall be in accordance with M.S.H.D. Standard Plan E-4-A-29F.
- For Temporary Pavement cross-sections and jointing see Detail Pavement drawings.
- Regardless of the option selected by the Contractor, the pay item shall remain the same as if a separate Concrete Curb Detail 2, were constructed.
- Standard Pavement Reinforcement may be substituted for the lower 1/2" dia. Pavement Reinforcement for such shall be incidental to the Concrete Curb Detail 2.

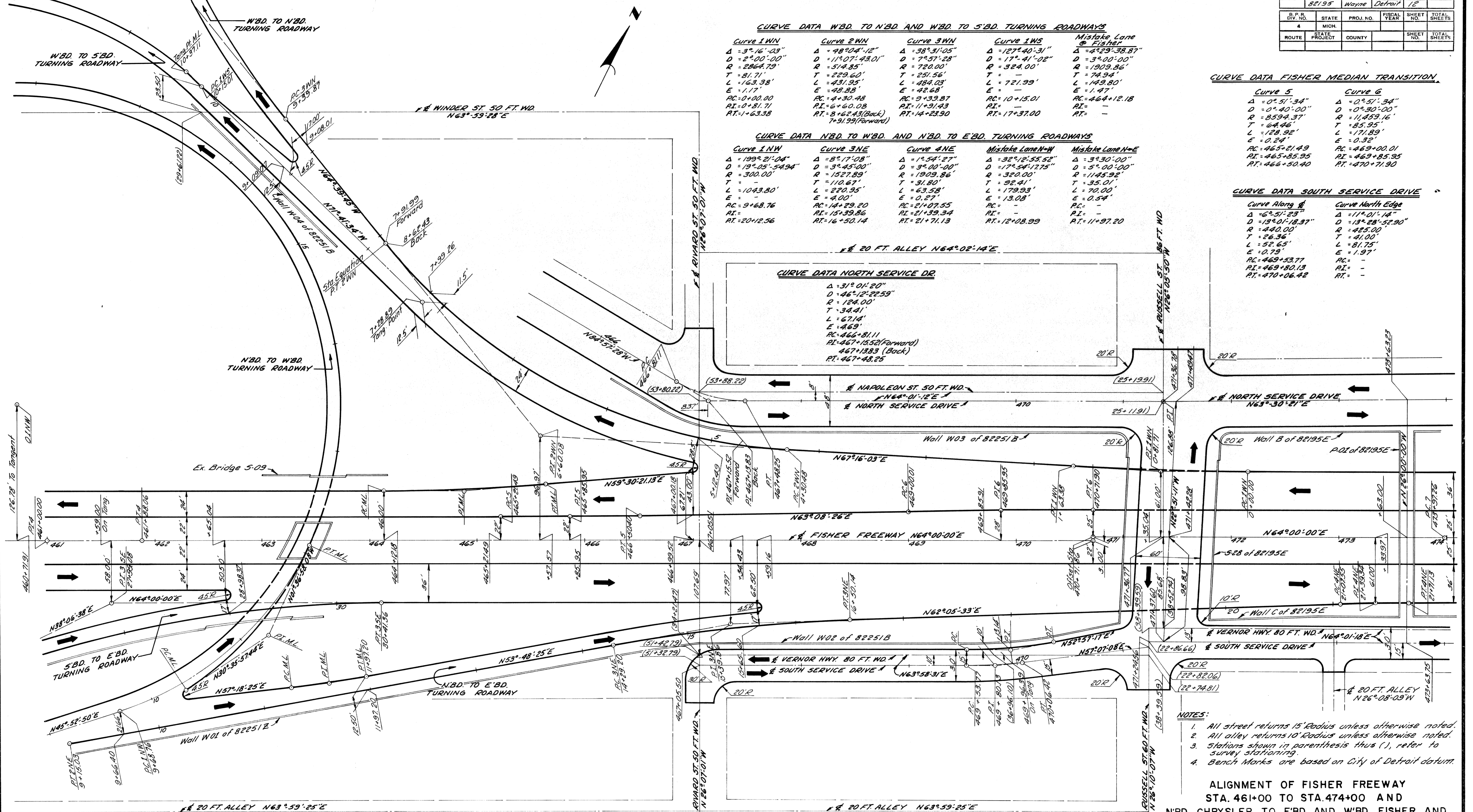


C.B.M.#49 Elev. 140.43 Arrow on Hydrant  
N.E. corner Rivard St. & Montcalm St.  
C.B.M.#49A Elev. 139.57 Arrow on Hydrant  
N.E. corner Russell St. and Gratiot Ave.  
C.B.M.#52A Elev. 144.98 Arrow on Hydrant  
S.W. corner of Russell St. and Winder St.  
C.B.M.#47 Elev. 142.57 Arrow on Hydrant  
N.E. corner Rivard St. and Napoleon St.

R.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			12	
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Wayne	Detroit	12	

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



**CURVE DATA W.B.D. TO N.B.D. AND W.B.D. TO S.B.D. TURNING ROADWAYS**

Curve 1 NW	Curve 2 NW	Curve 3 NW	Curve 1 WS	Mistake Lane @ Fisher
$\Delta = 3^{\circ}16'03''$	$\Delta = 48^{\circ}04'12''$	$\Delta = 38^{\circ}31'05''$	$\Delta = 127^{\circ}40'31''$	$\Delta = 4^{\circ}29'38.87''$
$D = 2^{\circ}00'00''$	$D = 11^{\circ}07'43.01''$	$D = 7^{\circ}57'28''$	$D = 17^{\circ}41'02''$	$D = 3^{\circ}00'00''$
$R = 2864.79'$	$R = 514.85'$	$R = 720.00'$	$R = 324.00'$	$R = 1909.86'$
$T = 81.71'$	$T = 229.60'$	$T = 251.56'$	$T = 74.94'$	$T = 74.94'$
$L = 163.38'$	$L = 431.95'$	$L = 484.03'$	$L = 721.99'$	$L = 149.80'$
$E = 1.17'$	$E = 48.88'$	$E = 42.68'$	$E = -$	$E = 1.47'$
$PC = 10+00.00$	$PC = 4+30.48$	$PC = 9+33.87$	$PC = 10+15.01$	$PC = 464+12.18$
$PI = 0+81.71$	$PI = 1+60.08$	$PI = 11+31.43$	$PI = -$	$PI = -$
$PT = 1+63.38$	$PT = 8+12.43(Back)$	$PT = 14+23.90$	$PT = 17+37.00$	$PT = -$
	$7+91.99(Forward)$			

**CURVE DATA N.B.D. TO W.B.D. AND N.B.D. TO E.B.D. TURNING ROADWAYS**

Curve 1 NW	Curve 3 NE	Curve 4 NE	Mistake Lane N-W	Mistake Lane N-E
$\Delta = 199^{\circ}21'04''$	$\Delta = 8^{\circ}17'08''$	$\Delta = 1^{\circ}54'27''$	$\Delta = 32^{\circ}12'55.58''$	$\Delta = 3^{\circ}30'00''$
$D = 19^{\circ}05'54.94''$	$D = 3^{\circ}45'00''$	$D = 3^{\circ}00'00''$	$D = 17^{\circ}54'17.75''$	$D = 5^{\circ}00'00''$
$R = 300.00'$	$R = 1527.89'$	$R = 1909.86'$	$R = 320.00'$	$R = 1145.92'$
$T = -$	$T = 110.67'$	$T = 31.80'$	$T = 92.41'$	$T = 35.01'$
$L = 1043.80'$	$L = 220.95'$	$L = 63.58'$	$L = 179.93'$	$L = 70.00'$
$E = -$	$E = 4.00'$	$E = 0.27'$	$E = 13.08'$	$E = 0.54'$
$PC = 9+68.76$	$PC = 14+29.20$	$PC = 21+07.55$	$PC = -$	$PC = -$
$PI = 0+81.71$	$PI = 15+39.86$	$PI = 21+39.34$	$PI = -$	$PI = -$
$PT = 20+12.56$	$PT = 16+50.14$	$PT = 21+71.13$	$PT = 12+08.99$	$PT = 11+97.20$

**CURVE DATA NORTH SERVICE DR**

$\Delta = 31^{\circ}01'20''$
$D = 46^{\circ}12'22.59''$
$R = 184.00'$
$T = 34.41'$
$L = 67.14'$
$E = 4.69'$
$PC = 466+81.11$
$PI = 467+15.52(Forward)$
$467+13.83(Back)$
$PT = 467+48.25$

**CURVE DATA FISHER MEDIAN TRANSITION**

Curve 5	Curve 6
$\Delta = 0^{\circ}51'34''$	$\Delta = 0^{\circ}51'34''$
$D = 0^{\circ}40'00''$	$D = 0^{\circ}40'00''$
$R = 8594.37'$	$R = 11,459.16'$
$T = 64.46'$	$T = 85.95'$
$L = 128.92'$	$L = 171.89'$
$E = 0.28'$	$E = 0.32'$
$PC = 465+21.49$	$PC = 469+00.01$
$PI = 465+85.95$	$PI = 469+85.95$
$PT = 466+50.40$	$PT = 470+71.90$

**CURVE DATA SOUTH SERVICE DRIVE**

Curve Along E	Curve North Edge
$\Delta = 6^{\circ}57'23''$	$\Delta = 17^{\circ}01'14''$
$D = 19^{\circ}01'18.37''$	$D = 19^{\circ}28'52.90''$
$R = 440.00'$	$R = 485.00'$
$T = 26.36'$	$T = 41.00'$
$L = 52.65'$	$L = 81.75'$
$E = 0.79'$	$E = 1.97'$
$PC = 469+53.77$	$PC = -$
$PI = 469+80.13$	$PI = -$
$PT = 470+06.42$	$PT = -$

PLAN  
Scale: 1" = 40'

- NOTES:**
- All street returns 15' Radius unless otherwise noted.
  - All alley returns 10' Radius unless otherwise noted.
  - Stations shown in parenthesis thus ( ), refer to survey stationing.
  - Bench Marks are based on City of Detroit datum.

**ALIGNMENT OF FISHER FREEWAY  
STA. 461+00 TO STA. 474+00 AND  
N.B.D. CHRYSLER TO E.B.D. AND W.B.D. FISHER AND  
W.B.D. FISHER TO N.B.D. AND S.B.D. CHRYSLER  
TURNING ROADWAYS**

C.B.M. #50A Elev. 141.45 Arrow on Hydrant  
S.W. corner Riopelle St. & Gratiot Avenue  
C.B.M. #51A Elev. 143.98 Arrow on Hydrant  
N.W. corner Winder St. and Riopelle St.

P.B.M. #39-253A Elev. 137.959 City of Detroit Manu.  
3' S. of N. & Chestnut St. & 4' W. of E. R. St. Aubin St.  
P.B.M. #39-253 Elev. 138.515 City of Detroit Manu.  
Brass Cap in sidewalk on North and South  
& of G.T.R.R. Bridge & 4' S. of N.P.L. Chestnut St.

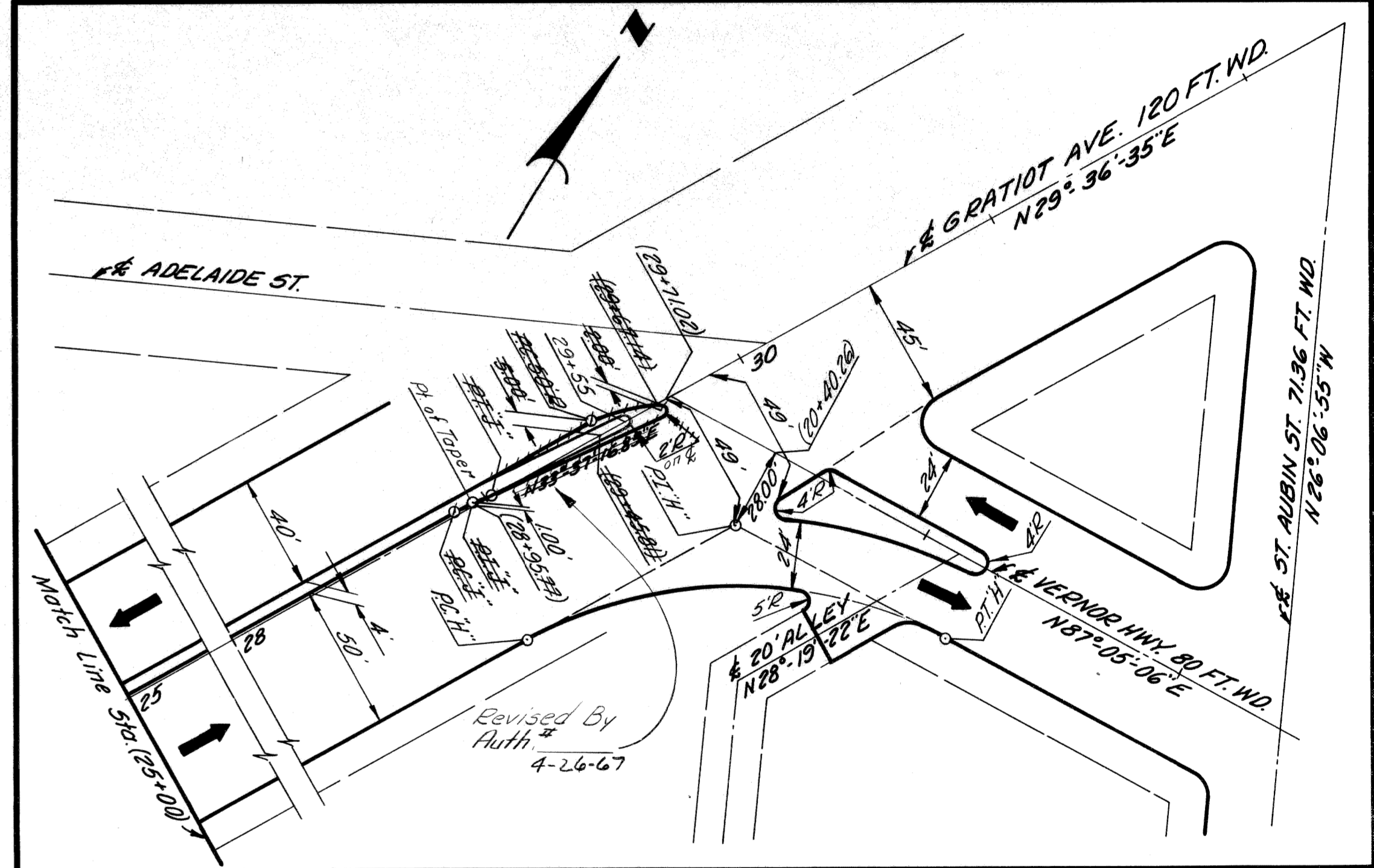
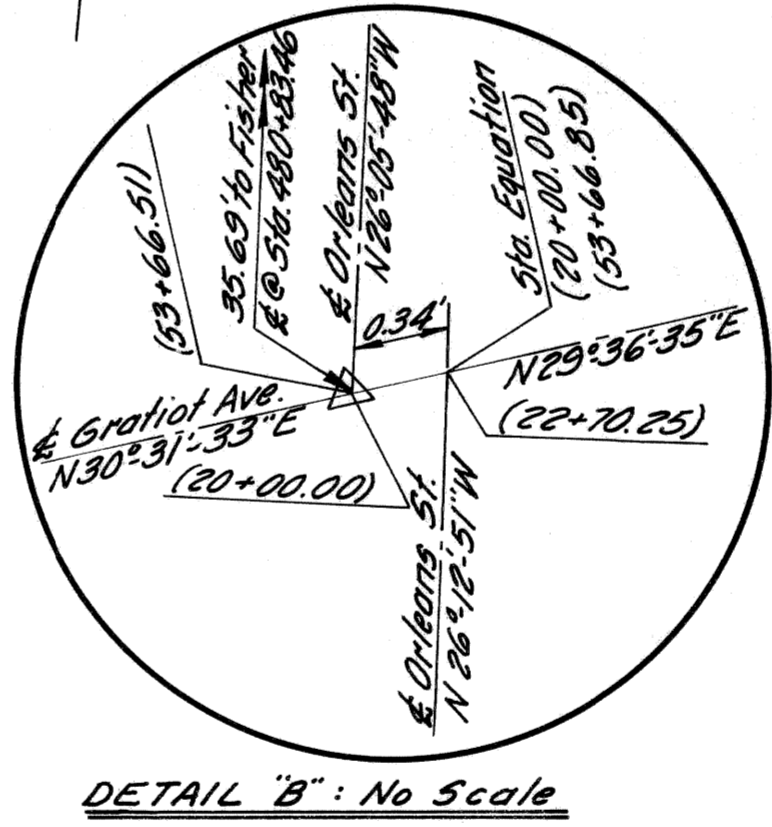
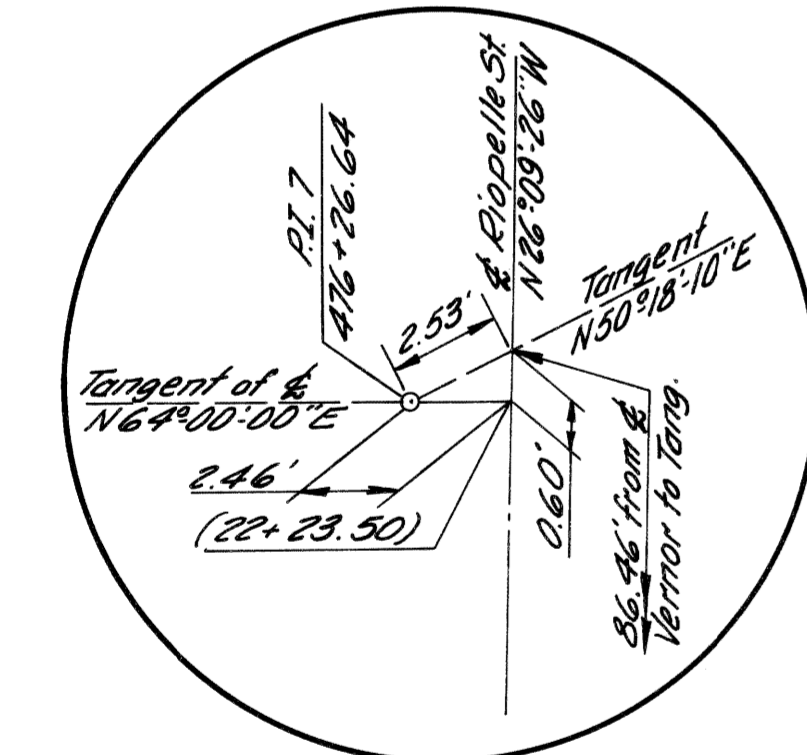
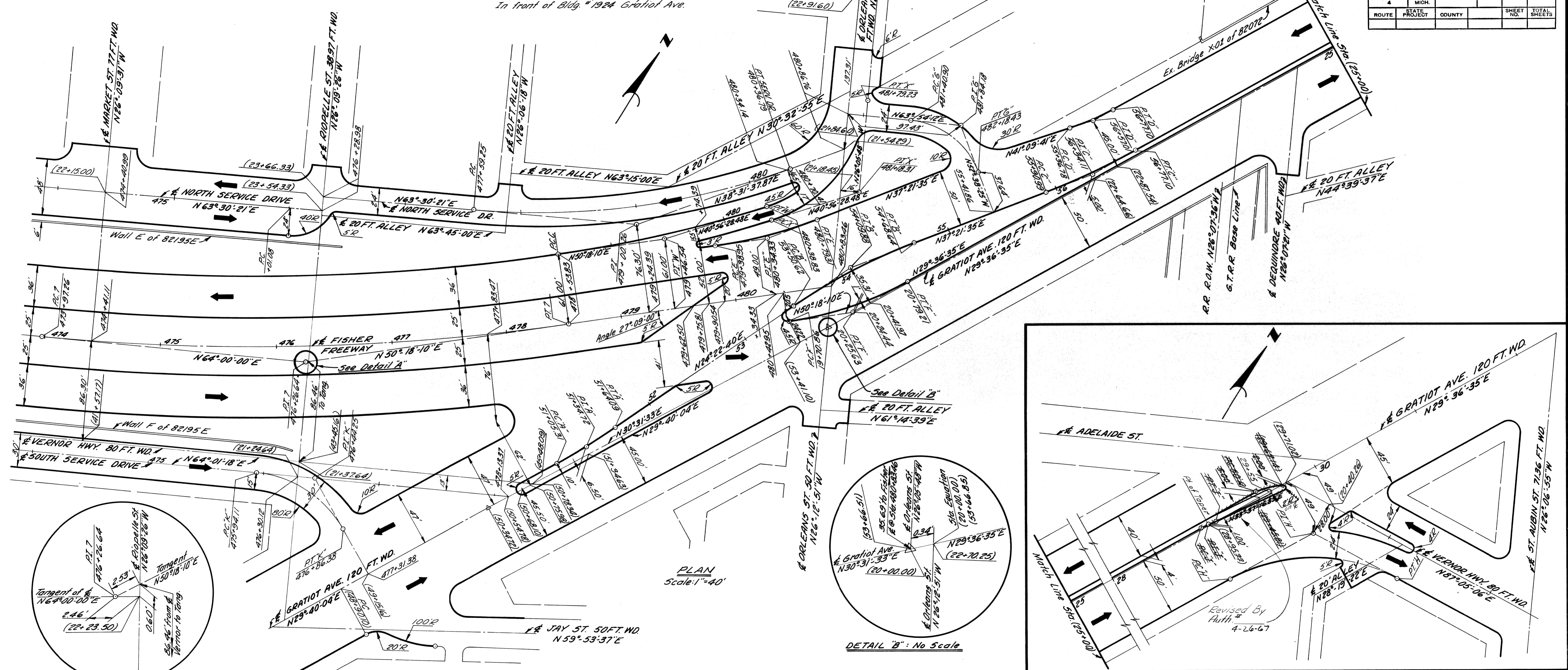
C.B.M. #1 Elev. 141.55 Arrow on Hydrant  
N. Side Gratiot Ave. & W. of Riopelle St.  
In front of Bldg. # 1461 Gratiot Ave.  
C.B.M. #2 Elev. 145.41 Arrow on Hydrant  
S. Side Gratiot Ave. & E. of Dequindre St.  
In front of Bldg. # 1924 Gratiot Ave.

C.B.M. #3 Elev. 144.82 Arrow on Hydrant  
N. Side Gratiot Ave. & W. of St. Aubin St.  
In front of Bldg. # 2021 Gratiot Ave.

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			13	
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
	82195	Wayne	Detroit	13	

B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			13	
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
	82195	Wayne	Detroit	13	



**CURVE DATA FISHER FREEWAY**

Curve	Curve 7
Δ = 13° 41' 50"	
D = 3° 00' 00"	
R = 1909.86'	
T = 229.38'	
L = 456.57'	
E = 13.73'	
PC = 473+97.26	
PI = 476+26.64	
PT = 478+53.83	

**CURVE DATA GRATIOT AVENUE**

Curve	Curve A	Curve B	Curve C	Curve D	Curve E
Δ = 5° 17' 24"					
D = 9° 00' 00"					
R = 636.62'					
T = 29.41'					
L = 58.78'					
E = 0.68'					
PC = 51+05.31					
PI = 51+34.72					
PT = 51+64.09					

Curve	Curve F	Curve G	Curve H	Curve J
Δ = 20° 41' 35"				
D = 19° 05' 54.93"				
R = 300.00'				
T = 54.77'				
L = 108.35'				
E = 4.96'				
PC = 19+70.86				
PI = 20+25.63				
PT = 20+79.21				

**CURVE DATA NORTH SERVICE DRIVE**

Curve	Curve E
Δ = 24° 58' 43.13"	
D = 9° 00' 00"	
R = 636.62'	
T = 141.01'	
L = 277.54'	
E = 15.43'	
PC = 477+59.25	
PI = 479+00.26	
PT = 480+36.79	

**CURVE DATA ENTRANCE RAMP TO W.B.D. FISHER**

Curve	Curve W	Curve X
Δ = 9° 21' 41.52"		
D = 5° 03' 37.30"		
R = 1132.25'		
T = 92.71'		
L = 185.00'		
E = 3.79'		
PC = 478+53.83		
PI = 479+46.54		
PT = 480+38.83		

**CURVE DATA SOUTH SERVICE DRIVE**

Curve	Curve K
Δ = 55° 38' 46"	
D = 60° 18' 40.85"	
R = 95.00'	
T = 50.14'	
L = 92.27'	
E = 12.42'	
PC = 475+94.11	
PI = 476+44.25	
PT = 476+86.38	

- NOTES:**
- All street returns 15' Radius unless otherwise noted.
  - All alley returns 10' Radius unless otherwise noted.
  - Stations shown in parenthesis thus ( ), refer to survey stationing.
  - Bench Marks are based on City of Detroit datum.

Auth # 4-26-67

ALIGNMENT OF FISHER FREEWAY  
STA. 474+00 TO GRATIOT AVE. AND  
GRATIOT AVE. FROM JAY ST. TO VERNOR HWY.

**QUANTITIES THIS SHEET**

Removing Trees 13" 24" Dia	2	Each
Removing Old Pavement & Thick Slabs*	14,104	Sq. Yds.
Removing Old Pavement (Patching)	510	Sq. Yds.
Removing Bituminous Surface	47	Sq. Yds.
Removing Masonry & Concrete Structures	181	Cu. Yds.
Removing Sidewalks	1,083	Sq. Yds.
Removing Curb & Gutter	175	Lin. Ft.
Removing Underground Storage Tanks	5	Each
Abandoning Catch Basins Including Backfill	9	Each
Pavement Replacement	82	Sq. Yds.
Patching Pavement with Bituminous Material	26	Tons
Concrete Pavement Patching	204	Sq. Yds.
Temporary Concrete Sidewalk	55	Sq. Ft.
4" Concrete Sidewalk	361	Sq. Ft.
7" Concrete Sidewalk	160	Sq. Ft.
Aggregate Base	87	Cu. Yds.

\* Includes removal of Temporary Pavement

**EARTHWORK**

Earth Excavation (Incl. Debris Removal)	568	Cu. Yds.
Select Clay Backfill (C.I.P.)	590	Cu. Yds.
Sand Gravel Mat'l - Mat'l Backfill (C.I.P.) (3" Bedding for Service Drives)	66	Cu. Yds.

R. P. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET	TOTAL SHEETS
	82251	Wayne	Detroit	14	

R. P. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET	TOTAL SHEETS
	82251	Wayne	Detroit	14	

ALL WORK THIS SHEET CONTROL SECTION 82251 B 50

**LEGEND**

Removing Trees	(Symbol)
Removing Curb	(Symbol)
Removing Curb & Gutter	(Symbol)
Removing Old Pavt. (Patching) with 7" Conc. Sidewalk Replacement	(Symbol)
Removing Old Pavement and Thick Slabs	(Symbol)
Removing Old Pavt. (Patching) with Pavement Replacement	(Symbol)
Removing Old Pavt. (Patching) with Conc. Pavement Patching	(Symbol)
Removing Old Pavt. (Patching) with Patching Pavt. with Bit. Mat'l's	(Symbol)
Removing Old Pavement (2 Layers)	(Symbol)
Removing Sidewalk	(Symbol)
Removing Sidewalk with Sidewalk Replacement	(Symbol)
Removing Sidewalk with Temp. Conc. Sidewalk Replacement	(Symbol)
Existing Foundation Wall	(Symbol)
Existing Basement	(Symbol)
Existing Concrete Slab	(Symbol)
Proposed Pavement	(Symbol)
Proposed Sidewalk	(Symbol)

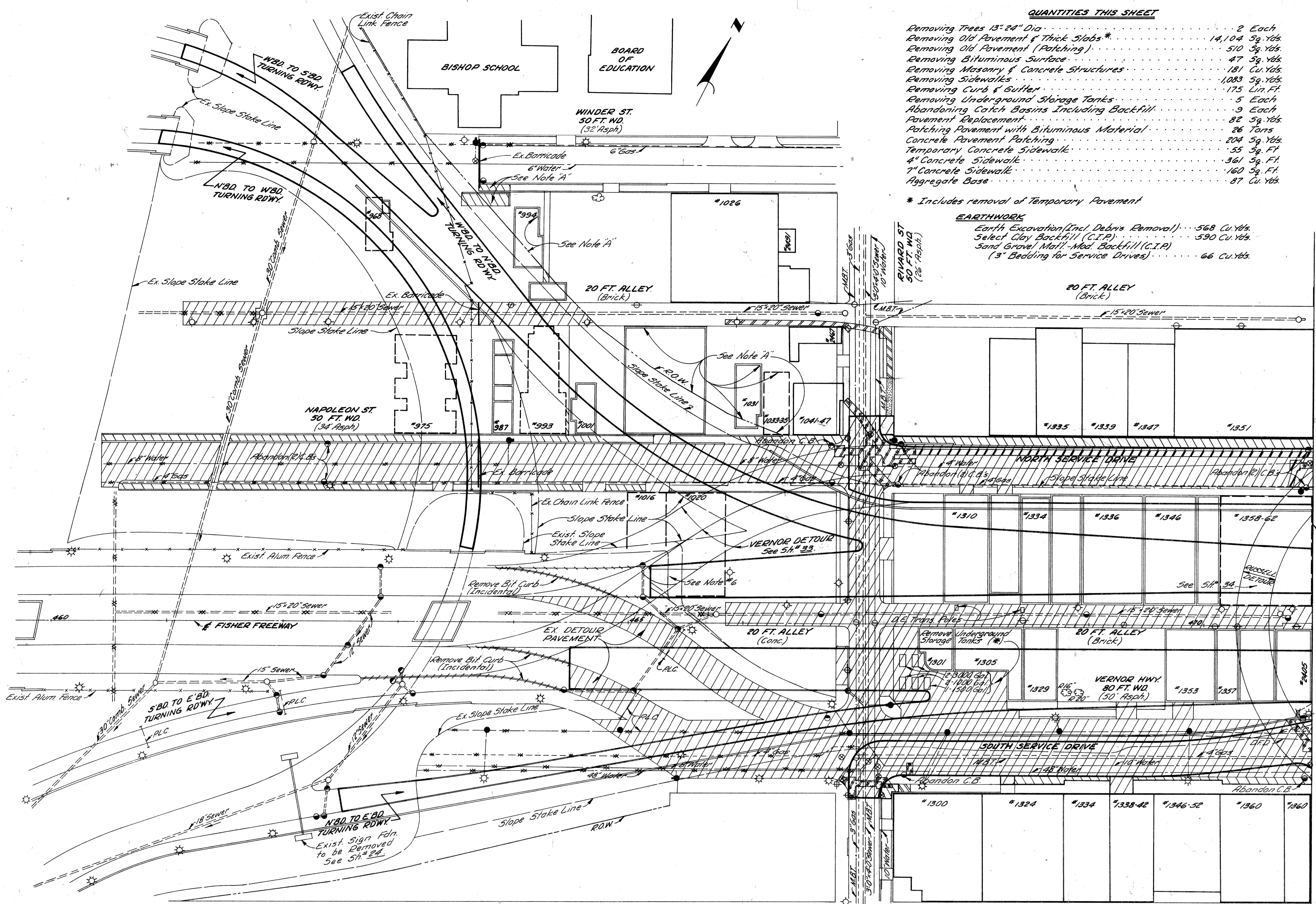
**NOTES:**

- The Removal of Trees Less than 8" in Diameter, Various Posts, Poles and Columns is Incidental to the Contract.
- For Typical Cross Sections of Embankment and Backfill See 5th 10.
- The location of Underground Storage Tanks Noted Thusly (\*) is unknown.
- The exact location of Areaways along the south sidewalk of Vernor Highway is unknown.
- Some of the buildings shown west of Ervand have been removed to one foot below the existing ground.
- Remove Temp. Bituminous Concrete Pavement on Vernor Detour.
- Removal Quantities South of South of Vernor Hwy. on Ervand appear on "Alterations to Water Mains" drawing.

Note 'A': The following Items and Quantities are required for the restoration of areas adjacent to highway limits. These Quantities are included in Totals listed above.

Removing Sidewalk	45	Sq. Yds.
<b>EARTHWORK</b>		
Earth Excavation (Incl. Debris Removal)	59	Cu. Yds.
Select Clay Backfill (C.I.P.)	59	Cu. Yds.

REMOVAL ITEMS BETWEEN CHRYSLER FREEWAY AND WEST RUSSELL



PLAN Scale: 1"=40'

PLANS PREPARED BY N. McLELLAN, M. FOLIO, B. KLATT, BUREAU OF HIGHWAYS AND EXPRESSWAYS, CITY OF DETROIT, DEPARTMENT OF PUBLIC WORKS, CIVIL ENGINEERS' OFFICE, CHECKED BY, APPROVED

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
82195	Wayne	Detroit		15	
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
82195	Wayne	Detroit		15	

ALL WORK THIS SHEET  
CONTROL SECTION 82195E 29

**LEGEND**

Removing Trees	..... (Symbol)	3 Each
Removing Curbs	..... (Symbol)	1 Each
Removing Old Pavt. (Patching) with 7" Conc. Sidewalk Replacement	..... (Symbol)	6.96 Sq. Yds.
Removing Old Pavt. (Patching) with Pavement Replacement	..... (Symbol)	179.39 Sq. Yds.
Removing Old Pavt. (Patching) with Conc. Pavement Patching	..... (Symbol)	474.59 Sq. Ft.
Removing Old Pavt. (Patching) with Patching Pavt. with Bit. Marls.	..... (Symbol)	74.59 Sq. Ft.
Removing Old Pavt. (2 Layers)	..... (Symbol)	65 Cu. Yds.
Removing Sidewalk	..... (Symbol)	410 Sq. Yds.
Removing Sidewalk with Temp. Conc. Sidewalk Replacement	..... (Symbol)	179.39 Sq. Yds.
Removing Sidewalk with Temp. Conc. Sidewalk Replacement	..... (Symbol)	474.59 Sq. Ft.
Existing Foundation Wall	..... (Symbol)	16 Each
Existing Basement	..... (Symbol)	1 Each
Existing Concrete Slab	..... (Symbol)	1 Each
Proposed Pavement	..... (Symbol)	179.39 Sq. Yds.
Proposed Sidewalk	..... (Symbol)	474.59 Sq. Ft.

**QUANTITIES THIS SHEET**

Removing Trees 8" 1/2 Dia.	.....	3 Each
Removing Trees 13" 3/4 Dia.	.....	1 Each
Removing Old Pavt. (Patching) and Thick Slabs	.....	6.96 Sq. Yds.
Removing Old Pavt. (Patching) with Conc. Sidewalk	.....	179.39 Sq. Yds.
Removing Old Pavt. (Patching) with Patching Pavt. with Bit. Marls.	.....	474.59 Sq. Ft.
Removing Curbs	.....	329 Lin. Ft.
Removing Undergrad. Storage Tanks	.....	1 Each
Removing D.S.P. Track Strip	.....	75 Sq. Yds.
Abandoning Catch Basins, Including Backfill	.....	16 Each
Abandoning Sewer Manholes, Including Backfill	.....	1 Each
Pavement Replacement	.....	410 Sq. Yds.
Patching Pavt. with Bit. Marls.	.....	179.39 Sq. Yds.
Concrete Pavement Patching	.....	474.59 Sq. Ft.
Temporary Concrete Sidewalk	.....	179.39 Sq. Yds.
4" Concrete Sidewalk	.....	474.59 Sq. Ft.
7" Concrete Sidewalk	.....	74.59 Sq. Ft.
Aggregate Base	.....	65 Cu. Yds.

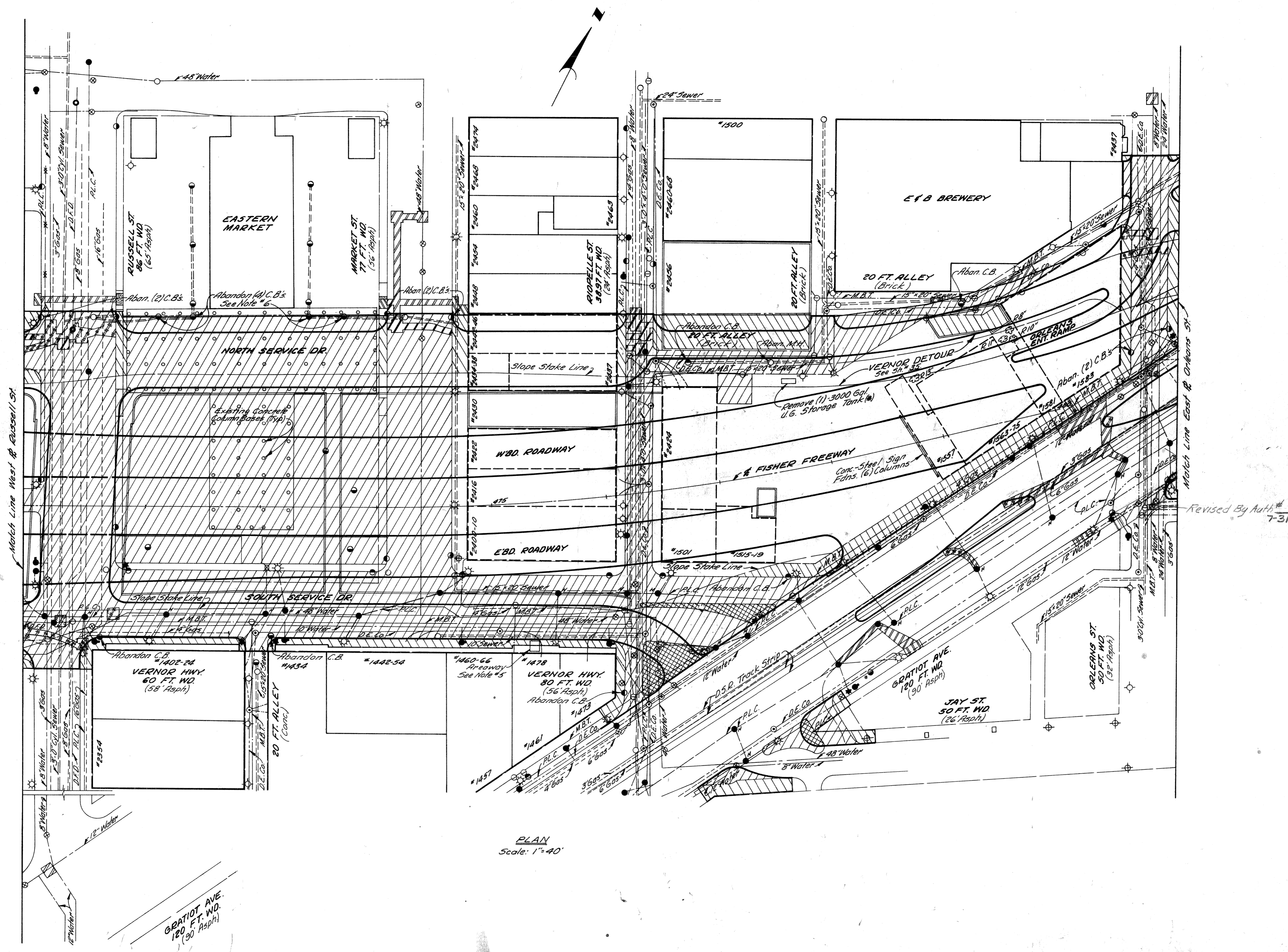
\*Includes Removal of Temp. Pavt.

- NOTES:**
- The removal of trees less than 8" in dia. and various posts, poles and columns is incidental to the contract.
  - Removing Bituminous Surface is not shown on this sheet.
  - For Typical Cross Sections of Embankment and Backfill See Sheet 10.
  - The location of the Underground Storage Tanks noted thusly (\*) is unknown.
  - The existing location of Arroyos along the south sidewalk of Vernor Highway is unknown.
  - Maintain flow in sewer.
  - Removal of Column Bases is paid for as Masonry and Concrete.
  - Removal Quantities North of North 12 of Napoleon St on Russell appear on Alterations to Public Lighting Drawg.

**EARTHWORK**

Earth Excavation (Incl. Debris Removal)	.....	2123 Cu. Yds.
Select Clay Backfill (C.I.P.)	.....	2,199 Cu. Yds.
Sand Gravel Mat. Backfill (C.I.P.)	.....	34 Cu. Yds.
3" Bedding for Service Dns.	.....	34 Cu. Yds.

Auth. # 7-31-67  
REMOVAL ITEMS  
BETWEEN WEST OF RUSSELL ST.  
AND EAST OF ORLEANS ST.



PLAN  
Scale: 1"=40'

PREPARED BY:  
N. MCELLEAN  
M. POLITO  
R. KLATT  
CITY ENGINEERS OFFICE  
BUREAU OF HIGHWAYS AND EXPRESSWAYS

7-66  
7-66  
7-66  
7-66

S. P. D. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195		Wayne	Detroit	16	
S. P. D. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS

ALL WORK THIS SHEET CONTROL SECTION 82195E-29

**LEGEND**

Removing Curb	++++
Removing Old Pavement & Thick Slabs	▨
Removing Old Pavt. (Patching) with Conc. Pavt. Patching	▧
Removing Old Pavt. (Patching) with Pavt. Replacement	▩
Proposed Pavement	—
Proposed Sidewalk	—
Existing Basement	▭
Removing Sidewalk	▨
Removing Sidewalk with Sidewalk Replacement	▩

**QUANTITIES THIS SHEET**

Removing Old Pavement & Thick Slabs*	792	788	Sq. Yds.
Removing Old Pavement (Patching)	54		Sq. Yds.
Removing Masonry & Concrete Structures	50		Cu. Yds.
Removing Sidewalks	1233	1209	Sq. Yds.
Removing Curb	905		Lin. Ft.
Abandoning Catch Basins, Including Backfill	1		Each
Pavement Replacement	41		Sq. Yds.
4" Concrete Sidewalk	121		Sq. Ft.
Concrete Pavement Patching	13		Sq. Yds.

\*Includes Removal of Temporary Pavement

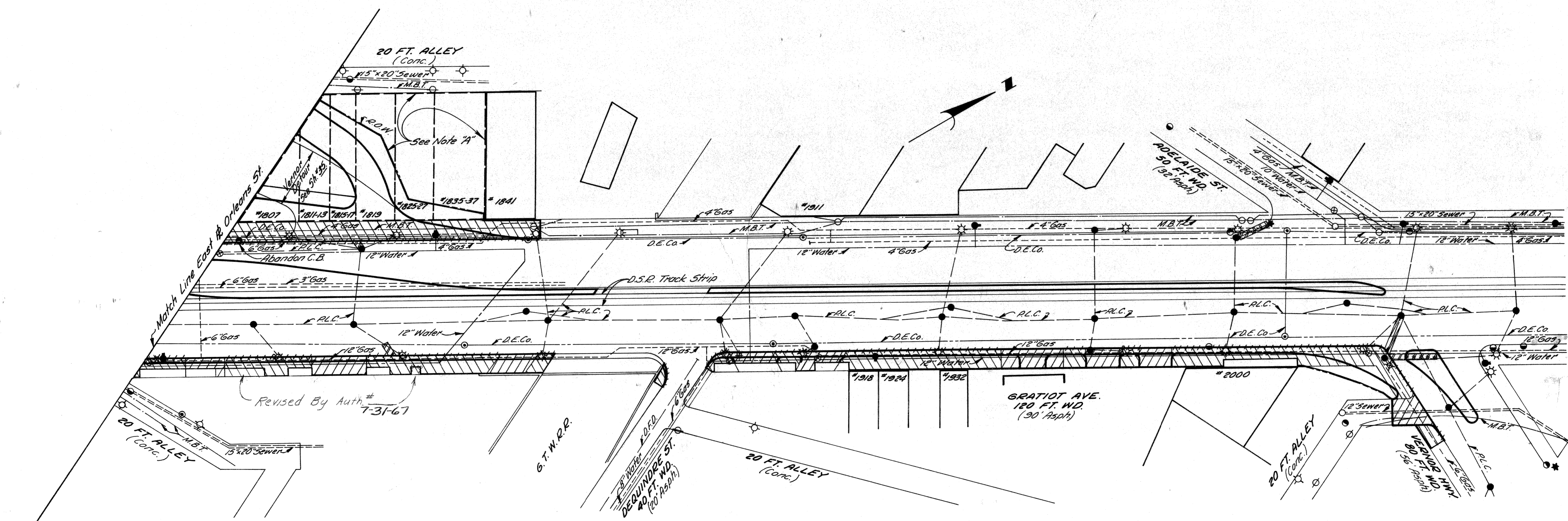
- NOTES:**
- The removal of trees less than 8" in dia. and various posts, poles and columns is incidental to the contract.
  - Removing Bituminous Surface is not shown on this sheet.
  - For Typical Cross-Sections of Embankment and Backfill, See Sh. # 10.

**Note 10:** The following Items & Quantities are required for the restoration of areas adjacent to highway limits. These Quantities are included in Totals on this sheet.

Removing Masonry & Concrete Structures	1	Cu. Yd.
<b>EARTHWORK</b>		
Earth Excavation (Incl. Debris Removal)	1355	Cu. Yds.
Select Clay Backfill (C.I.P.)	1355	Cu. Yds.

**EARTHWORK**

Earth Excavation (Incl. Debris Removal)	2581	Cu. Yds.
Select Clay Backfill (C.I.P.)	2607	Cu. Yds.



PLAN  
Scale: 1" = 40'

7-66	N. McLEAN
7-66	M. POLITO
7-66	R. KLATT
7-66	APPROVED

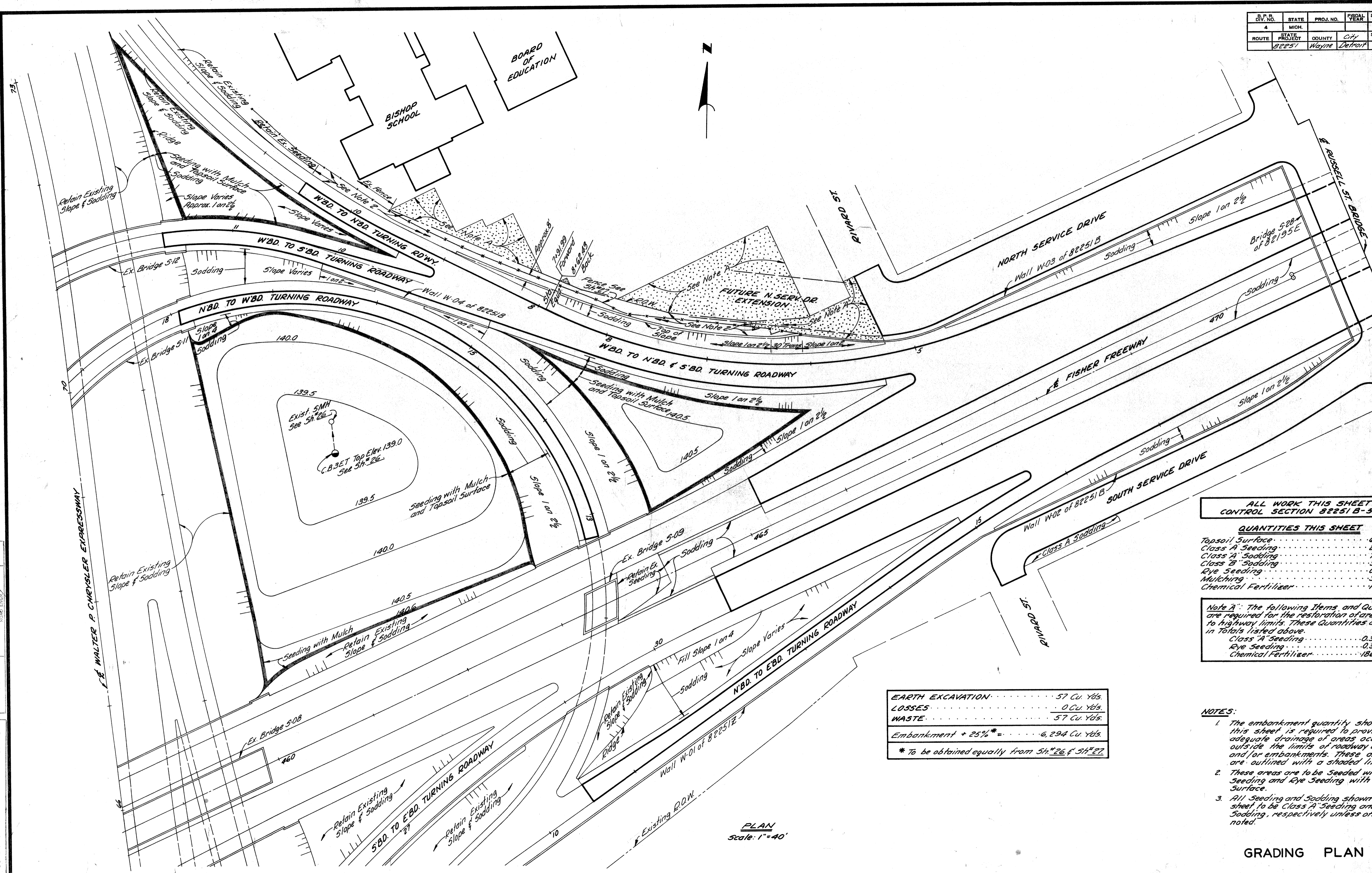
PLANS PREPARED BY  
CITY OF DETROIT  
DEPARTMENT OF PUBLIC WORKS  
CITY ENGINEERS OFFICE  
BUREAU OF HIGHWAYS AND EXPRESSWAYS

AUTH. # 7-31-67  
REMOVAL ITEMS  
BETWEEN EAST OF ORLEANS ST  
AND VERNOR HWY.

FILE NO. 82195-29	STATE PROJECT 82195	FEDERAL PROJECT U-180(2)	SHEET NO. 16
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DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			17	
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82251		Wayne	Detroit	17	



DESIGNED BY	7-66
DRAWN BY	7-66
CHECKED BY	7-66
APPROVED	7-66

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

ALL WORK THIS SHEET  
 CONTROL SECTION 82251 B-50

**QUANTITIES THIS SHEET**

Topsail Surface	619	Cu. Yds.
Class A Seeding	2.6	Acres
Class A Sodding	78	Sq. Yds.
Class B Sodding	9381	Sq. Yds.
Rye Seeding	0.5	Acres
Mulching	3	Tons
Chemical Fertilizer	1612	Pounds

**Note A:** The following items and quantities are required for the restoration of areas adjacent to highway limits. These quantities are included in Totals listed above.

Class A Seeding	0.3	Acres
Rye Seeding	0.3	Acres
Chemical Fertilizer	186	Pounds

**EARTH EXCAVATION** ..... 57 Cu. Yds.  
**LOSSES** ..... 0 Cu. Yds.  
**WASTE** ..... 57 Cu. Yds.

Embankment + 25%\* = 6,294 Cu. Yds.  
 \* To be obtained equally from Sh. #26 & Sh. #27.

- NOTES:**
- The embankment quantity shown on this sheet is required to provide adequate drainage of areas occurring outside the limits of roadway excavs. and/or embankments. These areas are outlined with a shaded line.
  - These areas are to be Seeded with Class A Seeding and Rye Seeding with Topsail Surface.
  - All Seeding and Sodding shown on this sheet to be Class A Seeding and Class B Sodding, respectively unless otherwise noted.

**GRADING PLAN**

PLAN  
 Scale: 1"=40'

FILE NO.	82251-29	STATE	FEDERAL	SHEET NO.	TOTAL SHEETS
NO. 380		82251	195-10205	17	

# ANNEXATION MAP

INDEX TO ANNEXATION BOUNDARIES	INDEX TO ANNEXATION BOUNDARIES	INDEX TO ANNEXATION BOUNDARIES	INDEX TO ANNEXATION BOUNDARIES
1 ELY LINE CASS	41 200' OF E. 6 MI. RD.	81 ELY LINE EVERSON	121 200' E. OF TELEGRAPH RD.
2 ALEXANDER	42 W. LINE OF R.R. R.O.W.	82 ELY LINE EVERSON	122 W. LINE OF TELEGRAPH RD.
3 W. LINE OF R.R. R.O.W.	43 W. LINE OF R.R. R.O.W.	83 ELY LINE EVERSON	123 W. LINE OF TELEGRAPH RD.
4 W. LINE OF R.R. R.O.W.	44 W. LINE OF R.R. R.O.W.	84 ELY LINE EVERSON	124 W. LINE OF TELEGRAPH RD.
5 W. LINE OF R.R. R.O.W.	45 W. LINE OF R.R. R.O.W.	85 ELY LINE EVERSON	125 W. LINE OF TELEGRAPH RD.
6 W. LINE OF R.R. R.O.W.	46 W. LINE OF R.R. R.O.W.	86 ELY LINE EVERSON	126 W. LINE OF TELEGRAPH RD.
7 W. LINE OF R.R. R.O.W.	47 W. LINE OF R.R. R.O.W.	87 ELY LINE EVERSON	127 W. LINE OF TELEGRAPH RD.
8 W. LINE OF R.R. R.O.W.	48 W. LINE OF R.R. R.O.W.	88 ELY LINE EVERSON	128 W. LINE OF TELEGRAPH RD.
9 W. LINE OF R.R. R.O.W.	49 W. LINE OF R.R. R.O.W.	89 ELY LINE EVERSON	129 W. LINE OF TELEGRAPH RD.
10 W. LINE OF R.R. R.O.W.	50 W. LINE OF R.R. R.O.W.	90 ELY LINE EVERSON	130 W. LINE OF TELEGRAPH RD.
11 W. LINE OF R.R. R.O.W.	51 W. LINE OF R.R. R.O.W.	91 ELY LINE EVERSON	131 W. LINE OF TELEGRAPH RD.
12 W. LINE OF R.R. R.O.W.	52 W. LINE OF R.R. R.O.W.	92 ELY LINE EVERSON	132 W. LINE OF TELEGRAPH RD.
13 W. LINE OF R.R. R.O.W.	53 W. LINE OF R.R. R.O.W.	93 ELY LINE EVERSON	133 W. LINE OF TELEGRAPH RD.
14 W. LINE OF R.R. R.O.W.	54 W. LINE OF R.R. R.O.W.	94 ELY LINE EVERSON	134 W. LINE OF TELEGRAPH RD.
15 W. LINE OF R.R. R.O.W.	55 W. LINE OF R.R. R.O.W.	95 ELY LINE EVERSON	135 W. LINE OF TELEGRAPH RD.
16 W. LINE OF R.R. R.O.W.	56 W. LINE OF R.R. R.O.W.	96 ELY LINE EVERSON	136 W. LINE OF TELEGRAPH RD.
17 W. LINE OF R.R. R.O.W.	57 W. LINE OF R.R. R.O.W.	97 ELY LINE EVERSON	137 W. LINE OF TELEGRAPH RD.
18 W. LINE OF R.R. R.O.W.	58 W. LINE OF R.R. R.O.W.	98 ELY LINE EVERSON	138 W. LINE OF TELEGRAPH RD.
19 W. LINE OF R.R. R.O.W.	59 W. LINE OF R.R. R.O.W.	99 ELY LINE EVERSON	139 W. LINE OF TELEGRAPH RD.
20 W. LINE OF R.R. R.O.W.	60 W. LINE OF R.R. R.O.W.	100 ELY LINE EVERSON	140 W. LINE OF TELEGRAPH RD.
21 W. LINE OF R.R. R.O.W.	61 W. LINE OF R.R. R.O.W.	101 ELY LINE EVERSON	141 W. LINE OF TELEGRAPH RD.
22 W. LINE OF R.R. R.O.W.	62 W. LINE OF R.R. R.O.W.	102 ELY LINE EVERSON	142 W. LINE OF TELEGRAPH RD.
23 W. LINE OF R.R. R.O.W.	63 W. LINE OF R.R. R.O.W.	103 ELY LINE EVERSON	143 W. LINE OF TELEGRAPH RD.
24 W. LINE OF R.R. R.O.W.	64 W. LINE OF R.R. R.O.W.	104 ELY LINE EVERSON	144 W. LINE OF TELEGRAPH RD.
25 W. LINE OF R.R. R.O.W.	65 W. LINE OF R.R. R.O.W.	105 ELY LINE EVERSON	145 W. LINE OF TELEGRAPH RD.
26 W. LINE OF R.R. R.O.W.	66 W. LINE OF R.R. R.O.W.	106 ELY LINE EVERSON	146 W. LINE OF TELEGRAPH RD.
27 W. LINE OF R.R. R.O.W.	67 W. LINE OF R.R. R.O.W.	107 ELY LINE EVERSON	147 W. LINE OF TELEGRAPH RD.
28 W. LINE OF R.R. R.O.W.	68 W. LINE OF R.R. R.O.W.	108 ELY LINE EVERSON	148 W. LINE OF TELEGRAPH RD.
29 W. LINE OF R.R. R.O.W.	69 W. LINE OF R.R. R.O.W.	109 ELY LINE EVERSON	149 W. LINE OF TELEGRAPH RD.
30 W. LINE OF R.R. R.O.W.	70 W. LINE OF R.R. R.O.W.	110 ELY LINE EVERSON	150 W. LINE OF TELEGRAPH RD.
31 W. LINE OF R.R. R.O.W.	71 W. LINE OF R.R. R.O.W.	111 ELY LINE EVERSON	151 W. LINE OF TELEGRAPH RD.
32 W. LINE OF R.R. R.O.W.	72 W. LINE OF R.R. R.O.W.	112 ELY LINE EVERSON	152 W. LINE OF TELEGRAPH RD.
33 W. LINE OF R.R. R.O.W.	73 W. LINE OF R.R. R.O.W.	113 ELY LINE EVERSON	153 W. LINE OF TELEGRAPH RD.
34 W. LINE OF R.R. R.O.W.	74 W. LINE OF R.R. R.O.W.	114 ELY LINE EVERSON	154 W. LINE OF TELEGRAPH RD.
35 W. LINE OF R.R. R.O.W.	75 W. LINE OF R.R. R.O.W.	115 ELY LINE EVERSON	155 W. LINE OF TELEGRAPH RD.
36 W. LINE OF R.R. R.O.W.	76 W. LINE OF R.R. R.O.W.	116 ELY LINE EVERSON	156 W. LINE OF TELEGRAPH RD.
37 W. LINE OF R.R. R.O.W.	77 W. LINE OF R.R. R.O.W.	117 ELY LINE EVERSON	157 W. LINE OF TELEGRAPH RD.
38 W. LINE OF R.R. R.O.W.	78 W. LINE OF R.R. R.O.W.	118 ELY LINE EVERSON	158 W. LINE OF TELEGRAPH RD.
39 W. LINE OF R.R. R.O.W.	79 W. LINE OF R.R. R.O.W.	119 ELY LINE EVERSON	159 W. LINE OF TELEGRAPH RD.
40 W. LINE OF R.R. R.O.W.	80 W. LINE OF R.R. R.O.W.	120 ELY LINE EVERSON	160 W. LINE OF TELEGRAPH RD.

DATE	ACRES	SQ. MI.	TOTAL SQ. MI.
SEPT. 1, 1896	300.788	0.6987	0.6987
OCT. 24, 1896	366.6816	0.7724	1.4711
AUG. 5, 1898	1068.9440	2.4058	3.8769
APR. 4, 1898	520.7232	1.1850	5.0619
FEB. 20, 1899	547.0784	1.2428	6.3047
MAY 3, 1875	1849.3440	4.2153	10.5200
MAY 2, 1875	2.8950	0.0066	10.5266
FEB. 12, 1857	2.1695	0.0049	11.0315
FEB. 12, 1857	3.4573	0.0078	11.7393
APR. 2, 1875	1794.7792	4.0703	15.8096
MAY 3, 1891	2.7103	0.0061	16.4157
MAY 19, 1907	1734.5864	3.9386	20.3543
MAY 2, 1907	4.6500	0.0105	20.8648
APR. 2, 1907	4.3510	0.0099	21.3647
JUNE 19, 1907	6.80710	0.0154	22.1201
JUNE 19, 1907	0.55339	0.0012	22.6735
JUNE 19, 1907	0.80710	0.0018	23.4806
OCT. 24, 1907	1.9535	0.0044	25.4340
OCT. 24, 1907	5.16827	0.1172	26.5513
DEC. 20, 1912	626.6792	1.4252	27.9765
DEC. 20, 1912	0.97918	0.0022	28.9787
DEC. 20, 1912	46.15042	0.1049	29.0836
DEC. 20, 1912	1.9535	0.0044	29.5271
DEC. 20, 1912	1.65771	0.0037	29.9268
DEC. 20, 1912	1550.8400	3.5271	33.4539
DEC. 20, 1912	1060.9344	2.4058	35.8597
NOV. 22, 1916	1.65771	0.0037	36.2574
DEC. 11, 1916	1596.8192	3.6138	39.8712
APR. 23, 1917	5240.6288	11.8852	51.7564
APR. 23, 1917	74.3709	0.1682	51.9246
APR. 23, 1917	8.1852	0.0184	52.1430
APR. 23, 1917	82.55871	0.1868	52.3298
APR. 23, 1917	83.65432	0.1896	52.5194
APR. 23, 1917	1.09501	0.0024	52.7144
APR. 23, 1917	171.1904	0.3891	53.1035
MAY 3, 1922	1514.0800	3.4058	56.5093
MAY 3, 1922	86.82021	0.1937	56.7030
NOV. 10, 1922	2.26927	0.0051	57.2181
NOV. 10, 1922	89.82021	0.2018	57.4199
NOV. 10, 1922	0.50246	0.0011	57.9220
NOV. 10, 1922	359.1944	0.8164	58.7384
NOV. 10, 1922	197.8496	0.4496	59.1880
NOV. 10, 1922	1514.0800	3.4058	62.5938
NOV. 10, 1922	86.82021	0.1937	62.7875
NOV. 10, 1922	2.26927	0.0051	63.2926
NOV. 10, 1922	89.82021	0.2018	63.4944
NOV. 10, 1922	0.50246	0.0011	64.0005
NOV. 10, 1922	359.1944	0.8164	64.8169
NOV. 10, 1922	197.8496	0.4496	65.2665
NOV. 10, 1922	1514.0800	3.4058	68.6723
NOV. 10, 1922	86.82021	0.1937	68.8660
NOV. 10, 1922	2.26927	0.0051	69.3711
NOV. 10, 1922	89.82021	0.2018	69.5729
NOV. 10, 1922	0.50246	0.0011	70.0780
NOV. 10, 1922	359.1944	0.8164	70.8944
NOV. 10, 1922	197.8496	0.4496	71.3440
NOV. 10, 1922	1514.0800	3.4058	74.7498
NOV. 10, 1922	86.82021	0.1937	74.9435
NOV. 10, 1922	2.26927	0.0051	75.4486
NOV. 10, 1922	89.82021	0.2018	75.6504
NOV. 10, 1922	0.50246	0.0011	76.1555
NOV. 10, 1922	359.1944	0.8164	76.9719
NOV. 10, 1922	197.8496	0.4496	77.4215
NOV. 10, 1922	1514.0800	3.4058	80.8273
NOV. 10, 1922	86.82021	0.1937	81.0210
NOV. 10, 1922	2.26927	0.0051	81.5261
NOV. 10, 1922	89.82021	0.2018	81.7279
NOV. 10, 1922	0.50246	0.0011	82.2330
NOV. 10, 1922	359.1944	0.8164	83.0494
NOV. 10, 1922	197.8496	0.4496	83.4990
NOV. 10, 1922	1514.0800	3.4058	86.9048
NOV. 10, 1922	86.82021	0.1937	87.0985
NOV. 10, 1922	2.26927	0.0051	87.6036
NOV. 10, 1922	89.82021	0.2018	87.8054
NOV. 10, 1922	0.50246	0.0011	88.3105
NOV. 10, 1922	359.1944	0.8164	89.1269
NOV. 10, 1922	197.8496	0.4496	89.5765
NOV. 10, 1922	1514.0800	3.4058	93.0823
NOV. 10, 1922	86.82021	0.1937	93.2760
NOV. 10, 1922	2.26927	0.0051	93.7811
NOV. 10, 1922	89.82021	0.2018	93.9829
NOV. 10, 1922	0.50246	0.0011	94.4880
NOV. 10, 1922	359.1944	0.8164	95.3044
NOV. 10, 1922	197.8496	0.4496	95.7540
NOV. 10, 1922	1514.0800	3.4058	99.1598
NOV. 10, 1922	86.82021	0.1937	99.3535
NOV. 10, 1922	2.26927	0.0051	99.8586
NOV. 10, 1922	89.82021	0.2018	100.0604
NOV. 10, 1922	0.50246	0.0011	100.5655
NOV. 10, 1922	359.1944	0.8164	101.3819
NOV. 10, 1922	197.8496	0.4496	101.8315
NOV. 10, 1922	1514.0800	3.4058	105.2373
NOV. 10, 1922	86.82021	0.1937	105.4310
NOV. 10, 1922	2.26927	0.0051	105.9361
NOV. 10, 1922	89.82021	0.2018	106.1379
NOV. 10, 1922	0.50246	0.0011	106.6430
NOV. 10, 1922	359.1944	0.8164	107.4594
NOV. 10, 1922	197.8496	0.4496	107.9090
NOV. 10, 1922	1514.0800	3.4058	111.3148
NOV. 10, 1922	86.82021	0.1937	111.5085
NOV. 10, 1922	2.26927	0.0051	112.0136
NOV. 10, 1922	89.82021	0.2018	112.2154
NOV. 10, 1922	0.50246	0.0011	112.7205
NOV. 10, 1922	359.1944	0.8164	113.5369
NOV. 10, 1922	197.8496	0.4496	113.9865
NOV. 10, 1922	1514.0800	3.4058	117.3923
NOV. 10, 1922	86.82021	0.1937	117.5860
NOV. 10, 1922	2.26927	0.0051	118.0911
NOV. 10, 1922	89.82021	0.2018	118.2929
NOV. 10, 1922	0.50246	0.0011	118.7980
NOV. 10, 1922	359.1944	0.8164	119.6144
NOV. 10, 1922	197.8496	0.4496	120.0640
NOV. 10, 1922	1514.0800	3.4058	123.4698
NOV. 10, 1922	86.82021	0.1937	123.6635
NOV. 10, 1922	2.26927	0.0051	124.1686
NOV. 10, 1922	89.82021	0.2018	124.3704
NOV. 10, 1922	0.50246	0.0011	124.8755
NOV. 10, 1922	359.1944	0.8164	125.6919
NOV. 10, 1922	197.8496	0.4496	126.1415
NOV. 10, 1922	1514.0800	3.4058	129.5473
NOV. 10, 1922	86.82021	0.1937	129.7410
NOV. 10, 1922	2.26927	0.0051	130.2461
NOV. 10, 1922	89.82021	0.2018	130.4479
NOV. 10, 1922	0.50246	0.0011	130.9530
NOV. 10, 1922	359.1944	0.8164	131.7694
NOV. 10, 1922	197.8496	0.4496	132.2190
NOV. 10, 1922	1514.0800	3.4058	135.6248
NOV. 10, 1922	86.82021	0.1937	135.8185
NOV. 10, 1922	2.26927	0.0051	136.3236
NOV. 10, 1922	89.82021	0.2018	136.5254
NOV. 10, 1922	0.50246	0.0011	137.0305
NOV. 10, 1922	359.1944	0.8164	137.8469
NOV. 10, 1922	197.8496	0.4496	138.2965
NOV. 10, 1922	1514.0800	3.4058	141.7023
NOV. 10, 1922	86.82021	0.1937	141.8960
NOV. 10, 1922	2.26927	0.0051	142.4011
NOV. 10, 1922	89.82021	0.2018	142.6029
NOV. 10, 1922	0.50246	0.0011	143.1080
NOV. 10, 1922	359.1944	0.8164	143.9244
NOV. 10, 1922	197.8496	0.4496	144.3740
NOV. 10, 1922	1514.0800	3.4058	147.7798
NOV. 10, 1922	86.82021	0.1937	147.9735
NOV. 10, 1922	2.26927	0.0051	148.4786
NOV. 10, 1922	89.82021	0.2018	148.6804
NOV. 10, 1922	0.50246	0.0011	

D.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82251	Wayne	Detroit		12	

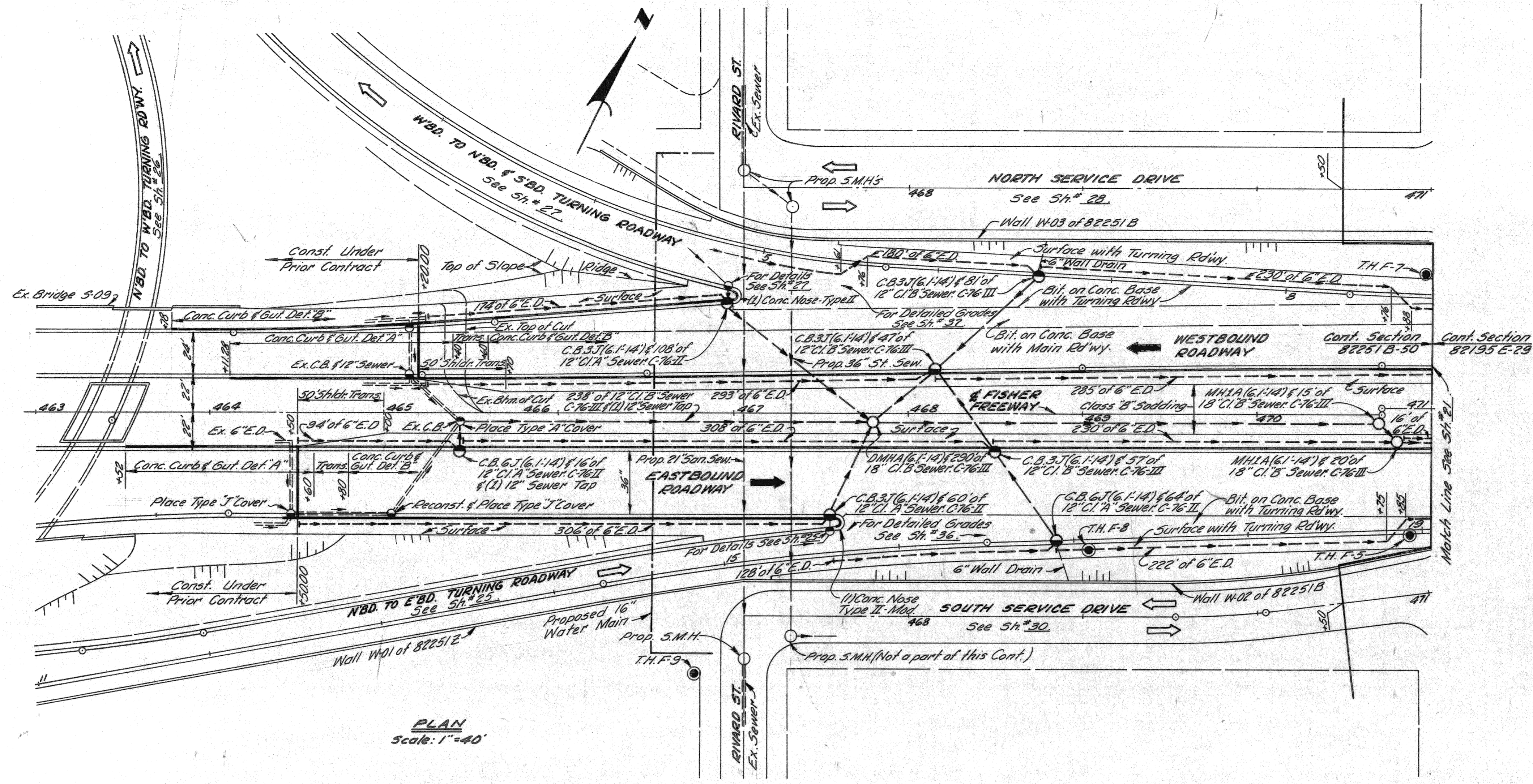
  

D.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82251	Wayne	Detroit		12	

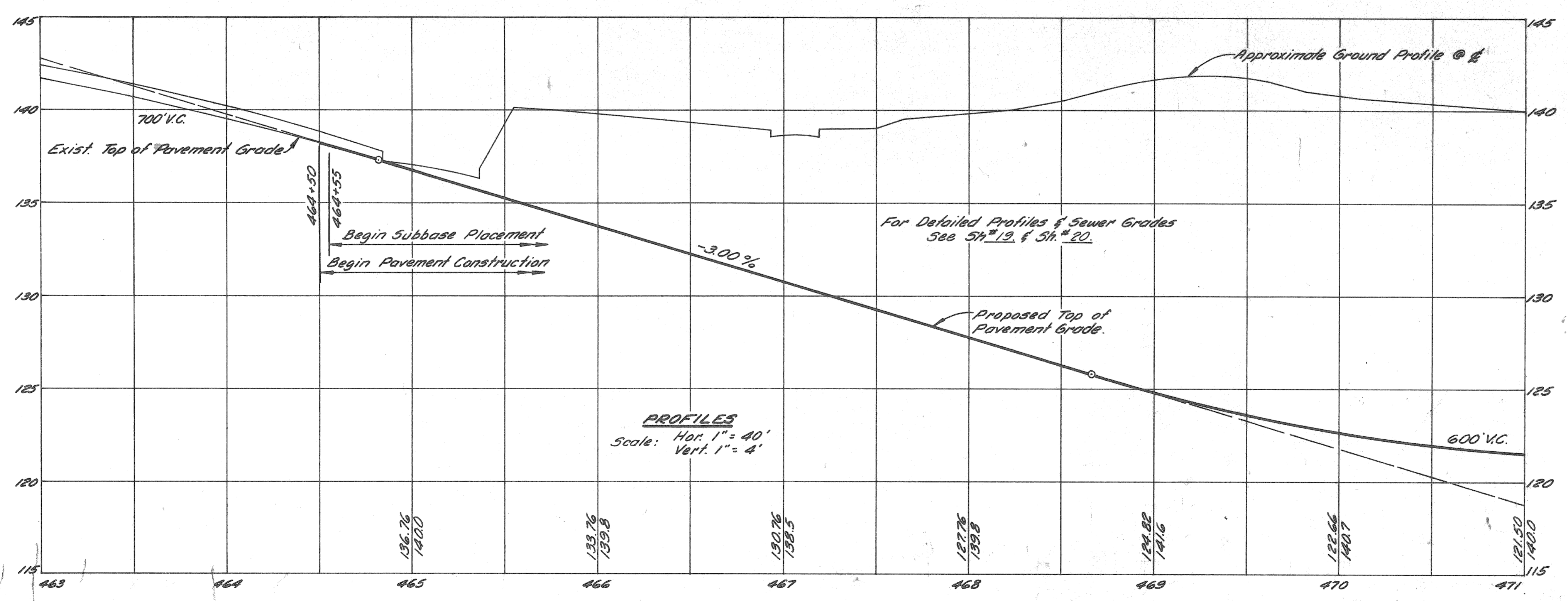
ALL WORK THIS SHEET CONTROL SECTION 82251 B-50

Trenches with both Sewer and Edge Drain shall be Trench Def. 5. Trenches with Edge Drain only shall be Trench Def. A. All other Trenches shall be Trench Def. 5.

**QUANTITIES THIS SHEET**  
 Conc. Curb & Gutter, Def. A..... 252 Lin. Ft.  
 Conc. Roll Curb & Gutter, Def. B..... 1815 Lin. Ft.  
 Bit. Conc. Leveling Course..... 43 Tons  
 Bit. Conc. Wearing Course 3(AA)..... 29 Tons  
 Bit. Agg. Shoulders - Conc. Pavt..... 136 Tons  
 Bituminous Bond Coat..... 142 Gals.  
 Bituminous Prime Coat..... 560 Gals.  
 Class AA Shoulders (G.C.I.R.)..... 1600 Sq. Yds.  
 Concrete Nose..... 2 Each



PLAN Scale: 1"=40'



PROFILES Scale: Hor. 1"=40' Vert. 1"=4'

- NOTES:**
1. For Alignment, See 5th 12.
  2. For Log of Soil Borings (Symbol) See Bridge 528 of 82195E.
  3. For Guard Rail & Traffic Sign Foundations, See 5th 17.
  4. For Grading Plan, See 5th 17.
  5. For Construction Sequence, See 5th 3 & 5th 4.
  6. For Utility Trench Section Details See 5th 5 & 5th 6.

FISHER FREEWAY ITEMS STA. 464+50 TO STA. 471+00

DESIGNED BY	M. B. LITTON	DATE	7-66
CHECKED BY	R. COLEY	DATE	7-66
APPROVED	Walter S. [Signature]	DATE	7-66

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

SOIJA LEADER  
 M. McLEAN  
 M. POLITO  
 TRACED BY  
 R. CONLY  
 CHECKED BY  
 APPROVED  
 DATE

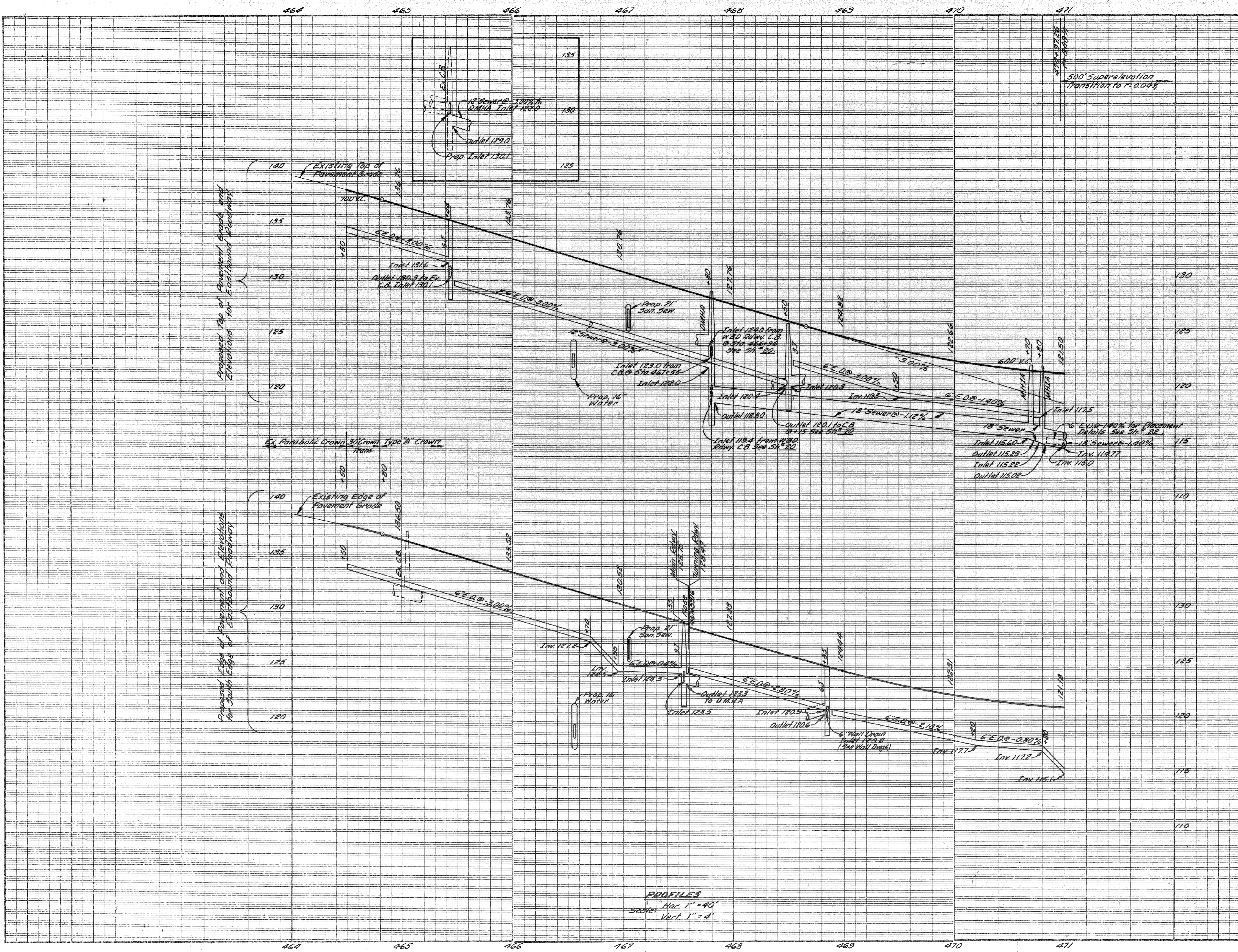
OPERATION  
 SURVEYED  
 PLAN PLOTTED  
 PLAN CHECKED  
 PROFILE CHECKED  
 PRELIMINARY GRADE  
 GRADE INSPECTION  
 FEDERAL INSPECTION  
 BY  
 DATE

OPERATION  
 PRELIMINARY C.O.W. CHECKED  
 FINAL DESIGN CHECKED  
 TRACED  
 QUANTITIES CHECKED  
 SOIJA  
 BY  
 DATE

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

STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MICH.			19	
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.
4	82251	Wayne	Detroit	19

ALL WORK THIS SHEET  
 CONTROL SECTION 82251B 50



<b>E'BD &amp; W'BD ROADWAY</b>	
EARTH EXCAVATION	53,136 C.Y.
<b>LOSSES</b>	
Embankment + 25%	
This Sheet	16 C.Y.
N.S.D. 5h #28	245
S.S.D. 5h #30	55
Vermor Det. 5h #33	833
Select Clay Backfill (C.I.P.)	
Removal 5h #14	590
	1,739 C.Y.
WASTE	31,397 C.Y.
SUBBASE (C.I.P.)	3,955 C.Y.
SELECTED SUBBASE	6,444 C.Y.

**FISHER FREEWAY**  
 E'BD ROADWAY PROFILES  
 STA. 464+50 TO STA. 471+00

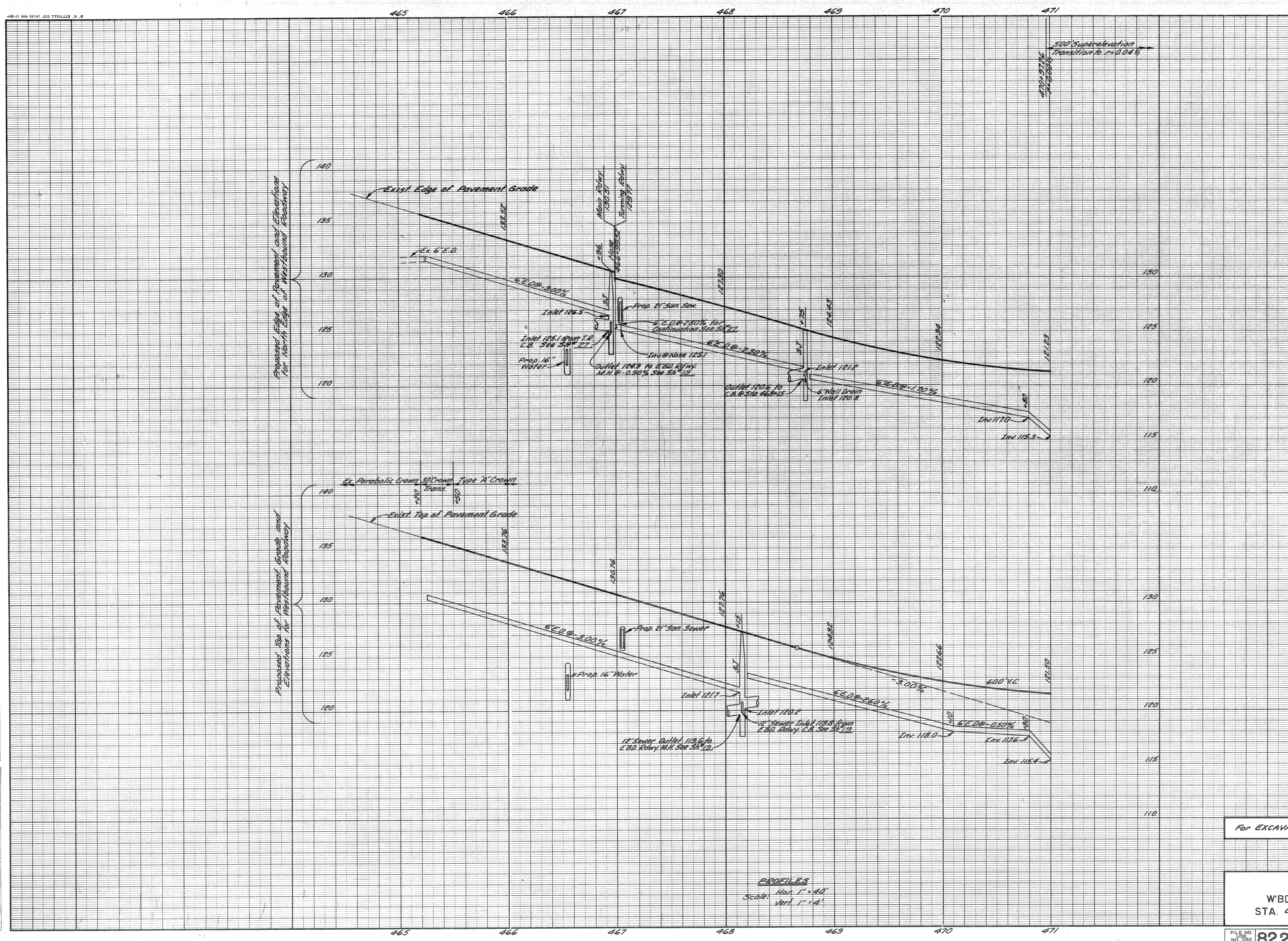
**PROFILES**  
 Scale: Hor. 1" = 40'  
 Vert. 1" = 4'

OPERATOR: N. McLELLAN  
 DATE: 7-66  
 CHECKED BY: R. COMLY  
 APPROVED: [Signature]

SURVEYED: [ ]  
 PLAN PLOTTED: [ ]  
 PROFILE CHECKED: [ ]  
 PRELIMINARY GRADE: [ ]  
 FEDERAL INSPECTION: [ ]

OPERATOR: [ ]  
 DATE: [ ]  
 CHECKED: [ ]  
 QUANTITIES CHECKED: [ ]

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



DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			20	
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82251		Wayne	Detroit	20	

ALL WORK THIS SHEET CONTROL SECTION 82251 B 50

For EXCAVATION, SUBBASE, Etc. See 5h 19.

FISHER FREEWAY  
 WBD. ROADWAY PROFILES  
 STA. 464+20 TO STA. 471+00

PROFILES  
 Scale: Hor. 1" = 40'  
 Vert. 1" = 4'

FILE NO. 82251-29	STATE PROJECT 82251	FEDERAL PROJECT E751(2)51	SHEET NO. 20
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S.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne		Detroit	21	

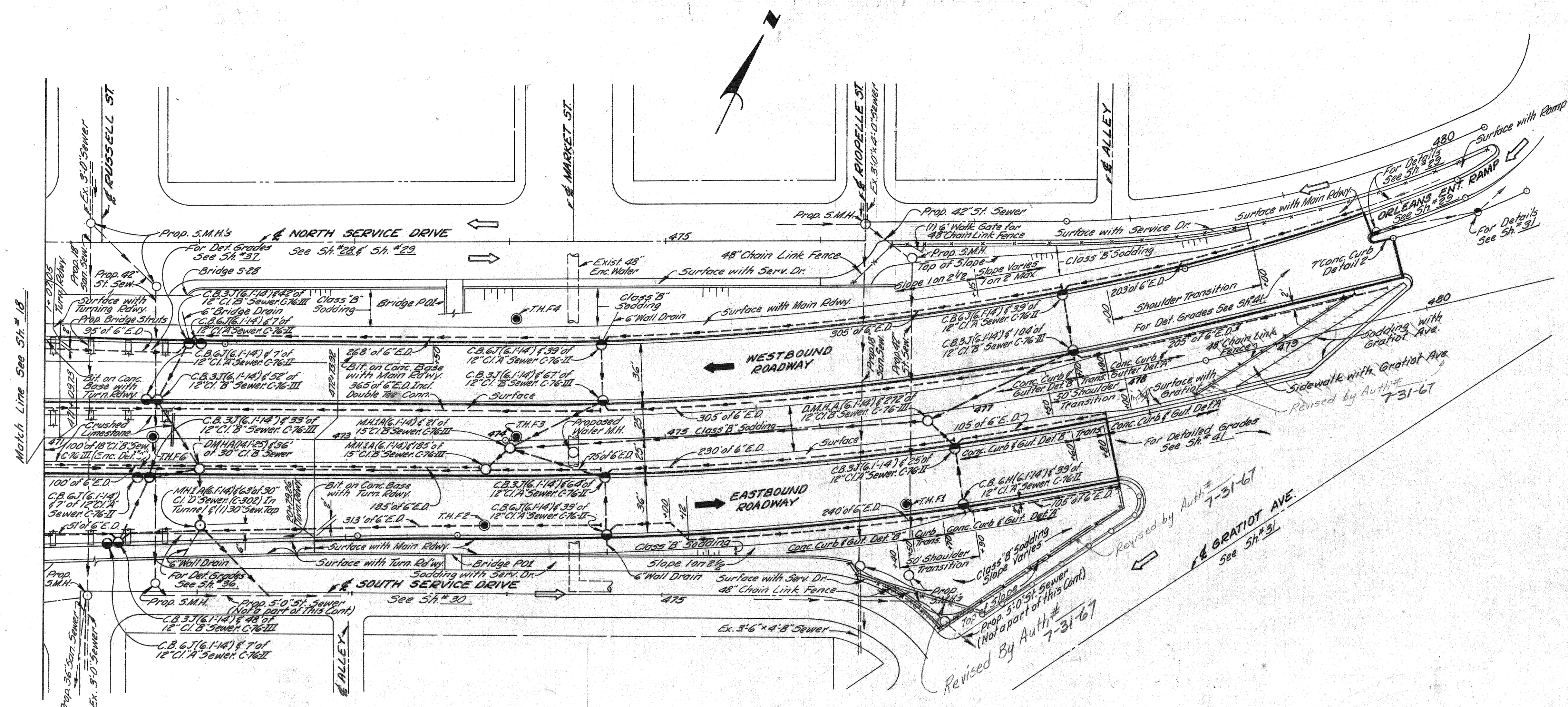
S.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne		Detroit	21	

ALL WORK THIS SHEET CONTROL SECTION 82195 E 29

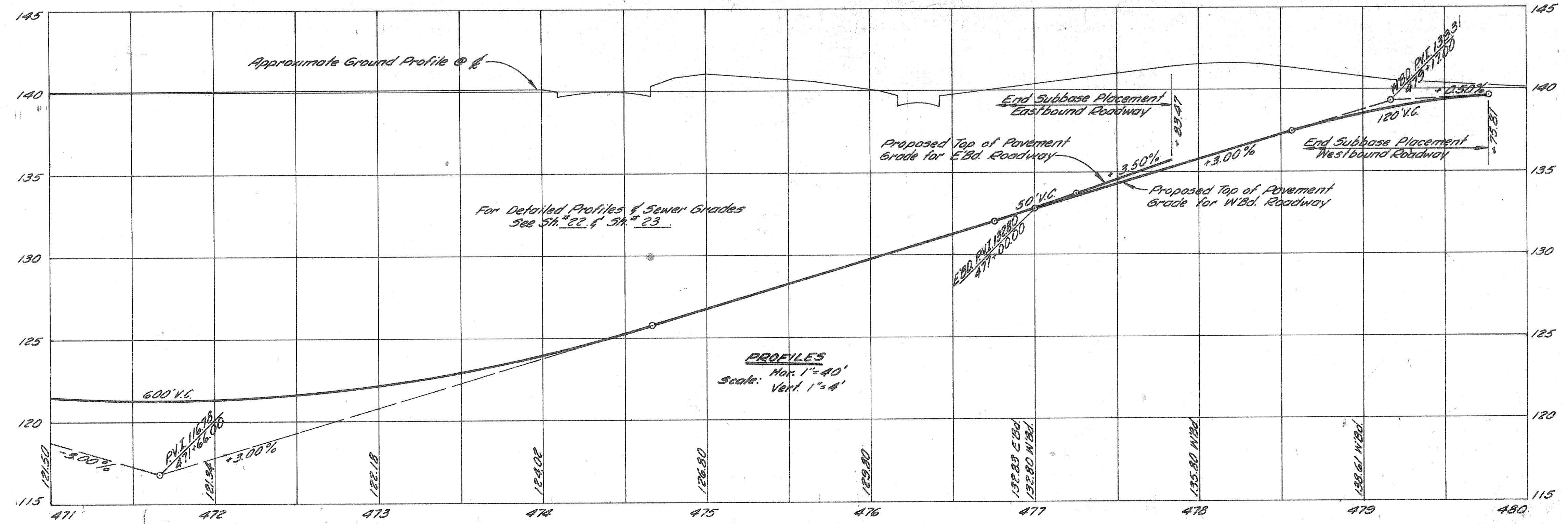
Trenches with both Sewer and Edge Drain shall be "Trench Det. 3". Trenches with Edge Drain only shall be "Trench Det. A". All other trenches shall be "Trench Det. 5" unless otherwise noted.

**QUANTITIES THIS SHEET**

Conc. Curb, Det. 2 ..... 5 Lin. Ft.  
 Conc. Curb & Gutter, Det. A ..... 341 Lin. Ft.  
 Conc. Curb & Gutter, Det. B ..... 2606 Lin. Ft.  
 Bit. Conc. Leveling Course ..... 20 Tons  
 Bit. Conc. Wearing Course 3/1A ..... 13 Tons  
 Bit. Agg. Shoulders-Conc. Pavt. .... 210 Tons  
 Bituminous Bond Coat ..... 67 Gals.  
 Bituminous Prime Coat ..... 864 Gals.  
 Class AA Shdts. (6" I.P.) ..... 2468 Sq. Yds.  
 Class B Sodding ..... 5609 Sq. Yds.  
 48" Chain Link Fence SOT ..... 770 Lin. Ft.  
 6" W. Gate for 48" Chain Link Fence ..... 1 Each  
 Crushed Limestone Surface ..... 277 Sq. Yds.



PLAN  
Scale: 1"=40'



PROFILES  
Hor. 1"=40'  
Vert. 1"=4'

- NOTES:**
- For Alignment See 5th # 19
  - For Log of Soil Borings (Symbol) See Bridges 5-28 & 5-29 of 82195 E
  - For Guard Rail & Traffic Sign Foundations, See 5th # 44
  - For Construction Sequence See 5th # 3 & 5th # 4
  - For Utility Trench Section Details See 5th # 5 & 5th # 6

FISHER FREEWAY ITEMS  
 STA. 471+00 TO GRATIOT AVE.  
 Revised by Auth # 7-31-67

7-66	7-66
7-66	7-66
7-66	7-66

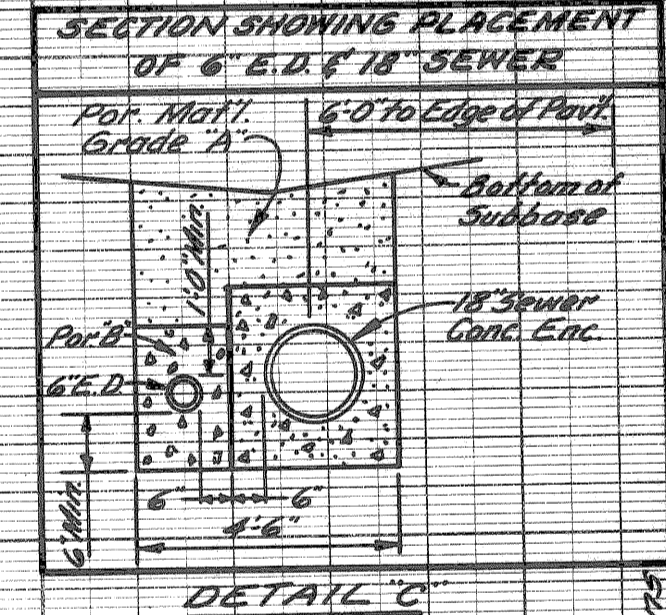
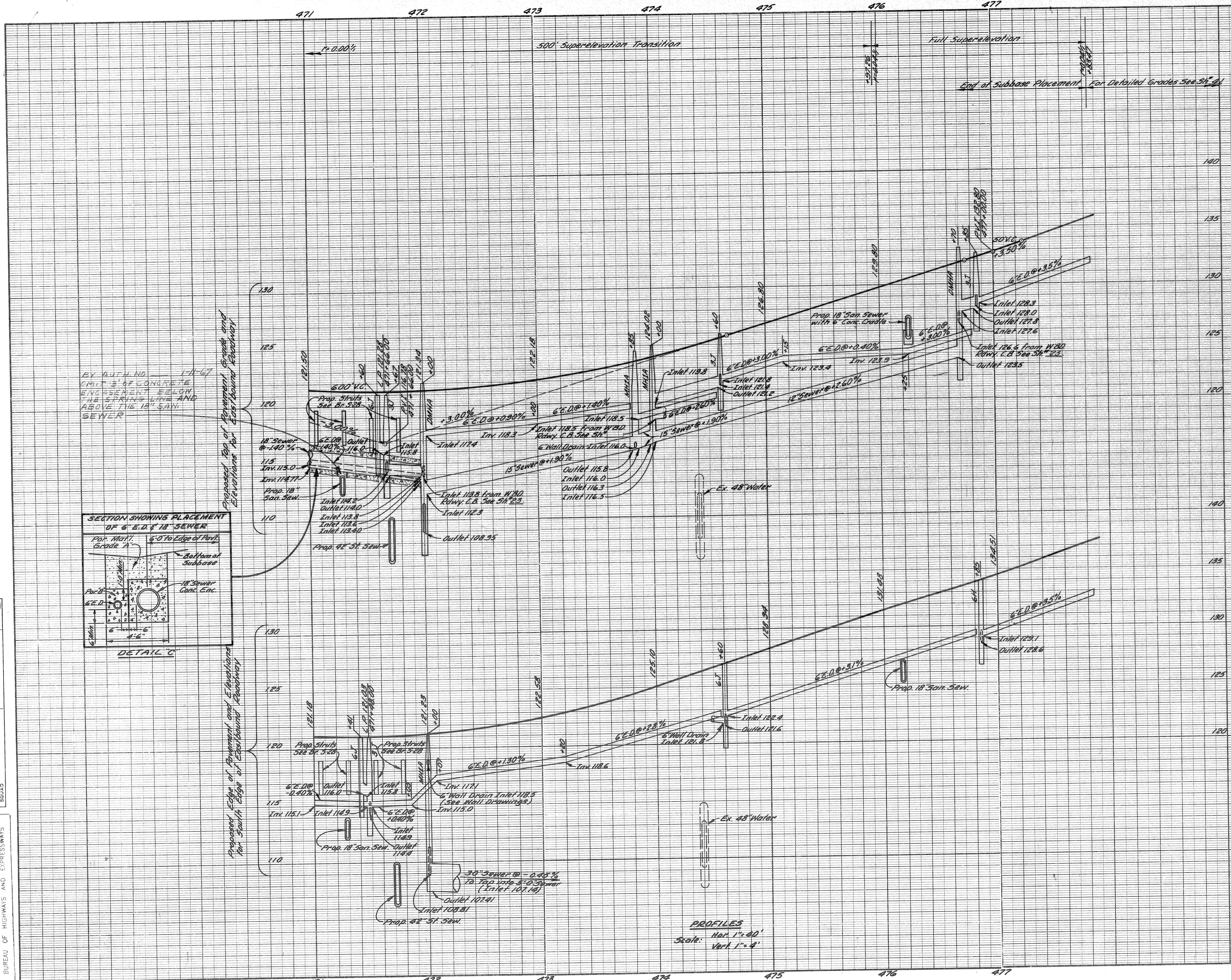
PLANS PREPARED BY  
 CITY OF DETROIT  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEERS OFFICE  
 BUREAU OF HIGHWAYS AND EXPRESSWAYS

7-59  
 7-60  
 7-60  
 7-60  
 7-60  
 7-60  
 N. McLEAN  
 M. POLITO  
 R. CONLEY  
 J. B. ...  
 APPROVED

SURVEYED  
 PLAN PLOTTED  
 PLAN CHECKED  
 PROFILE CHECKED  
 PRELIMINARY GRADE  
 OPERATIONAL  
 GENERAL INSPECTION

PRELIMINARY R.O.W. CHECKED  
 FINAL DESIGN CHECKED  
 TRACED  
 FINAL R.O.W. CHECK  
 QUANTITIES CHECKED  
 SQA/QA

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



PROFILES  
 Scale: Hor. 1" = 40'  
 Vert. 1" = 4'

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	
4	MICH.					
ROUTE	STATE	PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Detroit		22		

ALL WORK THIS SHEET  
 CONTROL SECTION 82195E29

E'80 & W'80 ROADWAY	
EARTH EXCAVATION	72,001 C.Y.
LOSSES	
Embankment + 25%	
This Sheet	51 C.Y.
S.S.D. 3h 30'	144
Gravel Ave. 3h 30'	140
Vertical Det. 3h 35'	410
Select Clay Backfill (C.I.P.)	
Removal 3h 15'	2,199
Removal 3h 16'	2,607
Total Losses	5,431 C.Y.
WASTE	66,550 C.Y.
SUBBASE (C.I.P.)	4767 C.Y.
SELECTED SUBBASE	7,029 S.Y.

AUTH. NO. 1-11-67  
 FISHER FREEWAY  
 E'80 ROADWAY PROFILES  
 STA. 471+00 TO STA. 477+83.47

FILE NO.	82195-29	STATE PROJECT	82195 U-180(42)	SHEET NO.	22
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7-66  
 N. McLEAN  
 M. BULL  
 7-66  
 R. COMLY  
 7-66  
 7-66

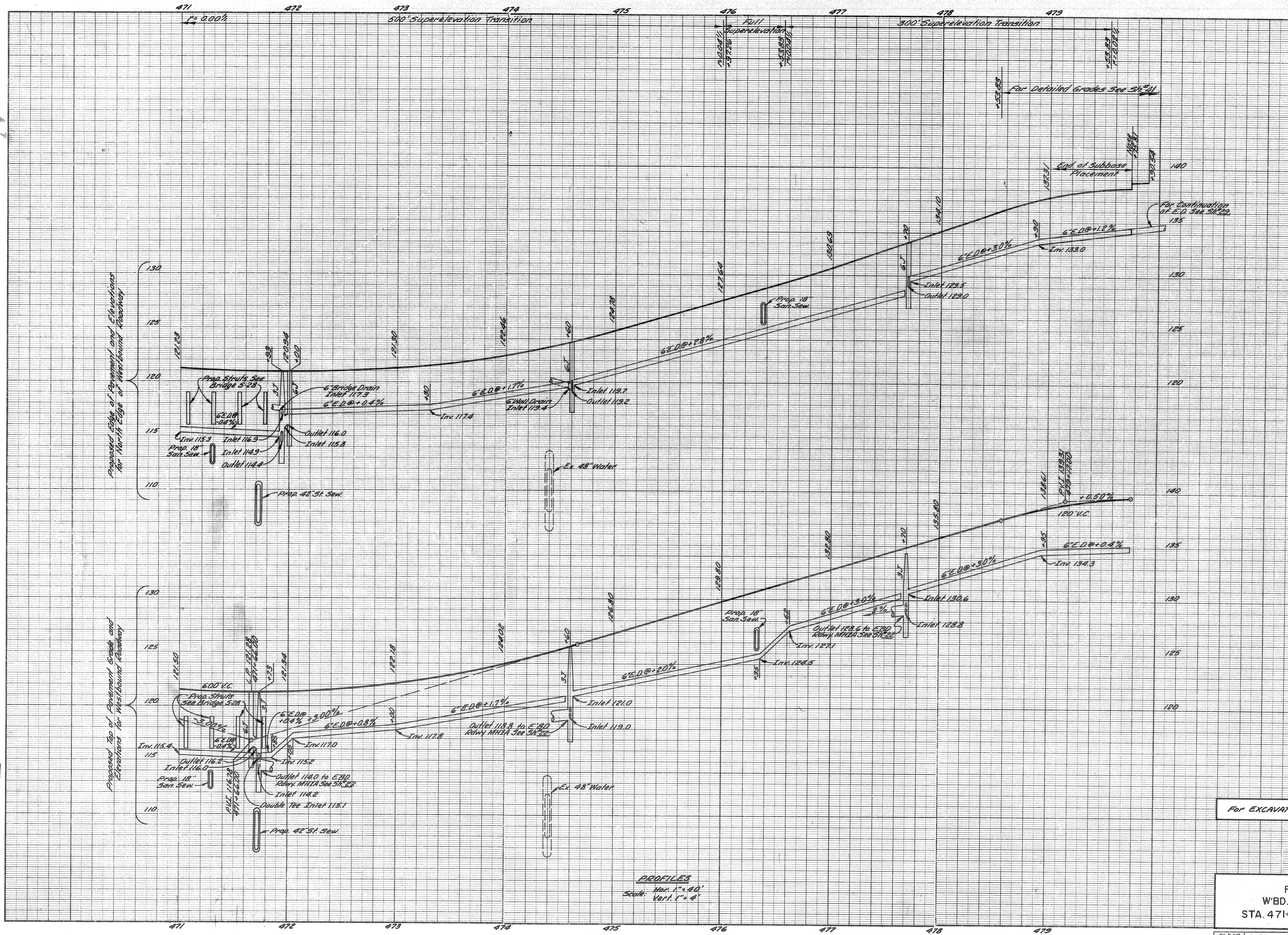
SURVEYED  
 PLAN CHECKED  
 PROFILE PLOTTED  
 PROFILE CHECKED  
 GRADE INSPECTED  
 FEDERAL INSPECTION

PRELIMINARY R.O.V. CHECKED  
 FINAL DESIGN CHECKED  
 TRACED  
 R.O.V. CHECK  
 QUANTITIES CHECKED  
 SQUAD

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

S.P.R. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195		Wayne	Detroit	29	
S.P.R. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

ALL WORK THIS SHEET CONTROL SECTION 82195E 29



For EXCAVATION, SUBBASE, Etc. See SH # 22.

FISHER FREEWAY  
 W.B.D. ROADWAY PROFILES  
 STA. 471+00 TO STA. 479+90.54

PROFILES  
 Scale: Hor. 1"=40'  
 Vert. 1"=4'



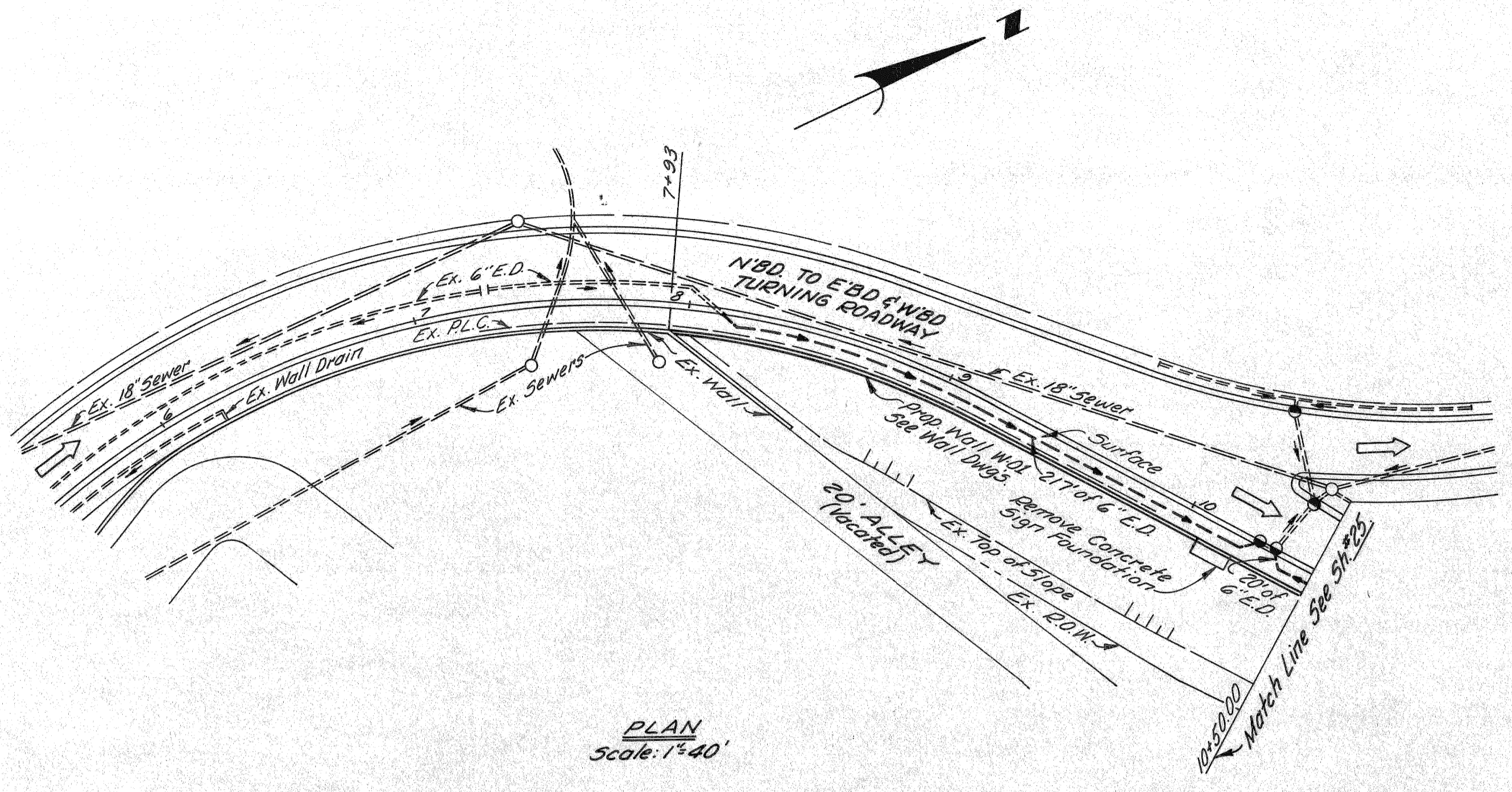
DATE	BY	OPERATION
7-66	M. McLEAN	PRELIMINARY R.O.W. CHECKED
7-66	M. POLITO	FINAL DESIGN CHECKED
7-66	R. COMLY	TRACED
7-66	Allen E. Jager	FINAL R.O.W. CHECK
		QUANTITIES CHECKED
		SQUAD

DATE	REVISION
	FINAL R.O.W.

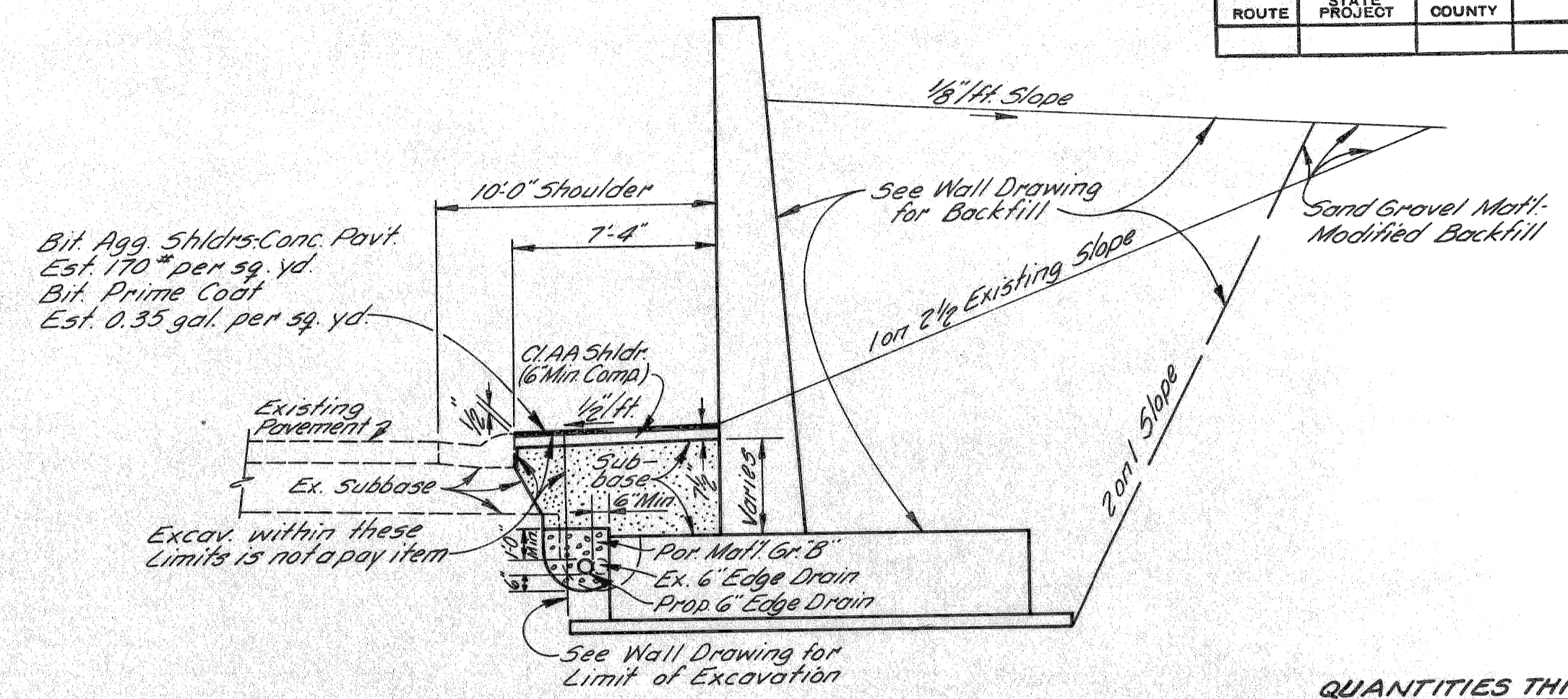
DATE	BY	OPERATION
		PLAN PLOTTED
		PROFILE PLOTTED
		PRELIMINARY GRADE
		GRADE INSPECTION
		FEDERAL INSPECTION

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

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
82251	Wayne	Detroit		24	



PLAN  
Scale: 1"=40'



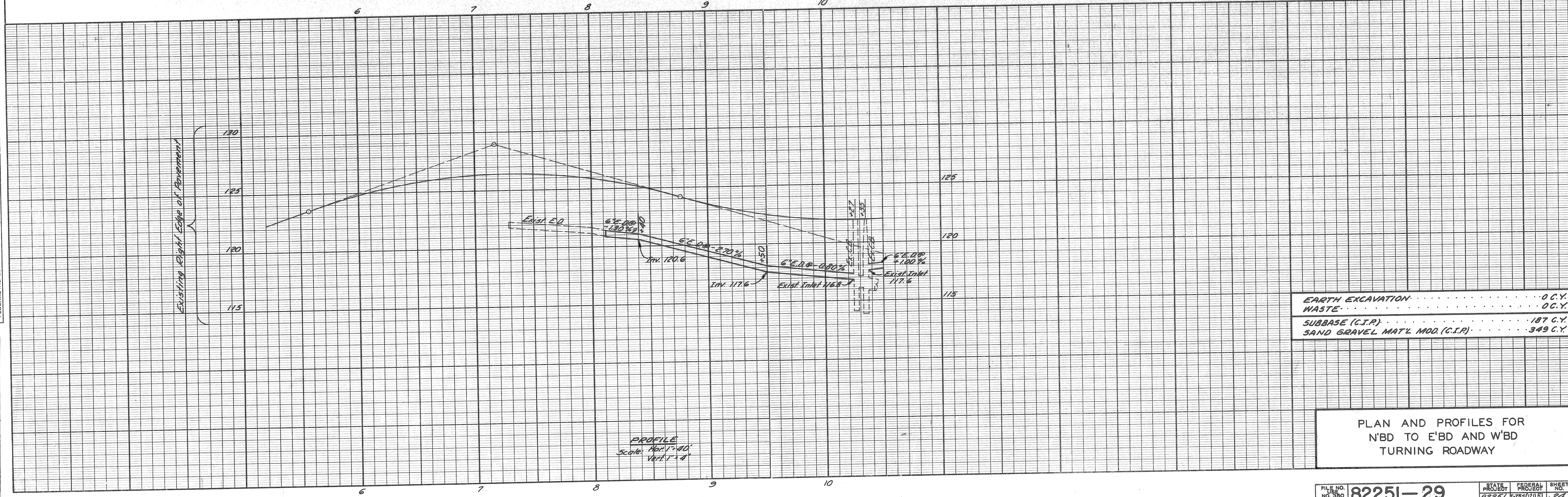
TYPICAL CROSS-SECTION OF WALL W02  
No Scale

**QUANTITIES THIS SHEET**

Bit. Agg. Shoulders - Conc. Pavt.	18 Tons
Bituminous Prime Coat	73 Gal.
Class AA Shoulders (6\"C.I.P.)	209 Sq. Yds.
Rem. Masonry & Conc. Structures	7 Cu Yds.

**NOTES:**  
1. All work billed on this Sheet is Non-Participating.

ALL WORK THIS SHEET  
CONTROL SECTION 82251E



PROFILE  
Scale: Hor. 1"=40'  
Vert. 1"=4'

EARTH EXCAVATION	0 C.Y.
WASTE	0 C.Y.
SUBBASE (C.I.P.)	187 C.Y.
SAND GRAVEL MAT'L MOD. (C.I.P.)	349 C.Y.

PLAN AND PROFILES FOR  
N'BD TO E'BD AND W'BD  
TURNING ROADWAY

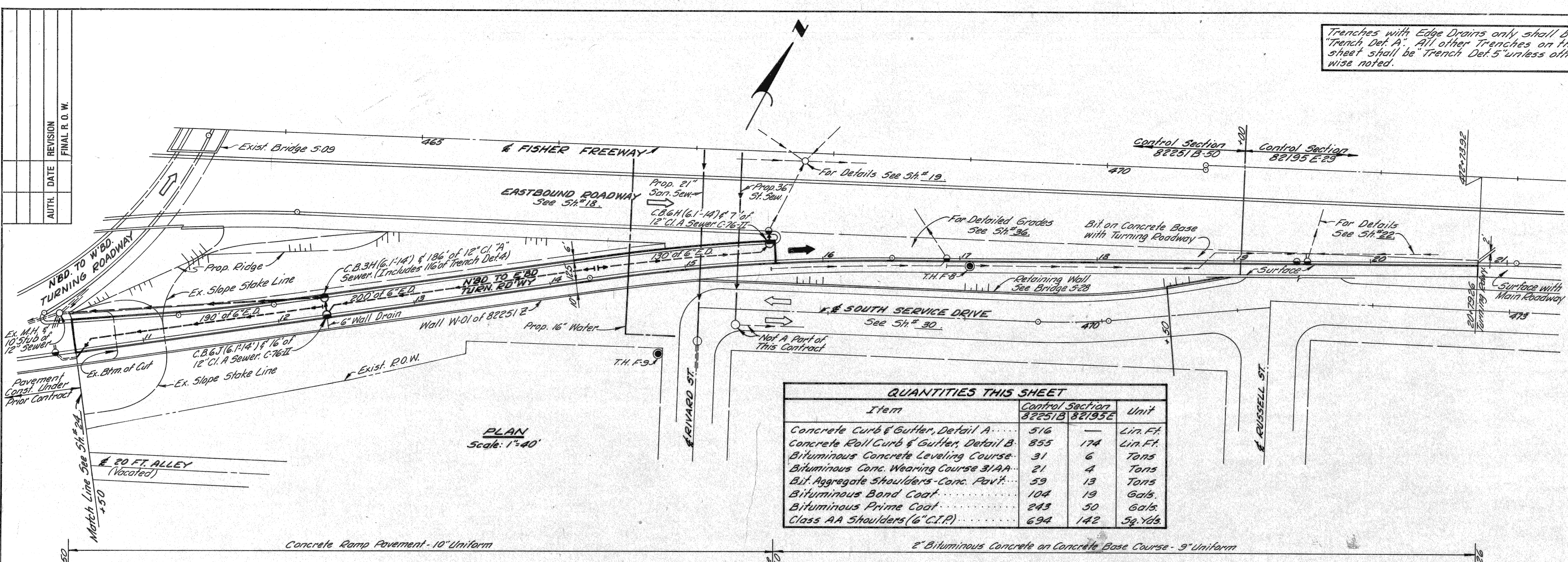
FILE NO. 82251-29	STATE PROJECT 82251	FEDERAL PROJECT 6751(2)51	SHEET NO. 24
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SQUAD LEADER: K. McLEAN  
 DRAWN BY: M. POLITO  
 CHECKED BY: R. COMLY  
 APPROVED: [Signature]

OPERATION: PRELIMINARY R.O.W. CHECKED  
 FINAL DESIGN CHECKED  
 TRACED  
 QUANTITIES CHECKED  
 SQUAD

SURVEYED BY: [Blank]  
 PLAN PLOTTED  
 PROFILE CHECKED  
 PRELIMINARY GRADE  
 FEDERAL INSPECTION

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

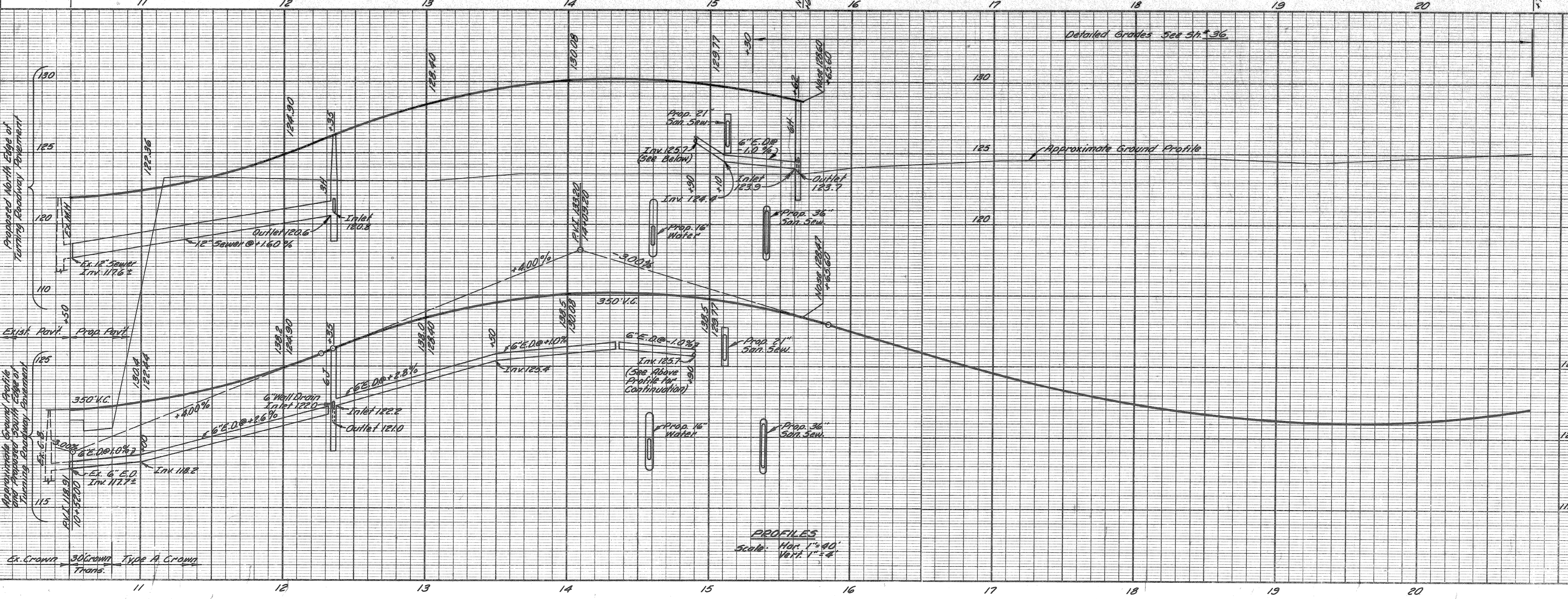


Item	Control Section 82251B	82195E	Unit
Concrete Curb & Gutter, Detail A	516	—	Lin. Ft.
Concrete Roll Curb & Gutter, Detail B	855	174	Lin. Ft.
Bituminous Concrete Leveling Course	31	6	Tons
Bituminous Conc. Wearing Course 31A	21	4	Tons
Bit. Aggregate Shoulders - Conc. Pav't	59	13	Tons
Bituminous Bond Coat	104	19	Gals.
Bituminous Prime Coat	243	50	Gals.
Class AA Shoulders (6" C.I.P.)	694	142	Sq. Yds.

Trenches with Edge Drains only shall be Trench Def. A. All other trenches on this sheet shall be Trench Def. 5 unless otherwise noted.

S.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
	82195	Wayne	Detroit	25	

- NOTES:**
- For Alignment See 5th 12
  - For Log of Soil Borings (Symbol) See Bridge 5-28 of 82195E-29
  - For Guard Rail & Traffic Sign Foundations, See 5th 44
  - For Grading Plan, See 5th 17
  - For Utility Trench Section details See 5th 5 & 5th 6L



EARTH EXCAVATION	9,024 C.Y.
LOSSES	0
WASTE	9,024 C.Y.
SUBBASE (C.I.P.)	560 C.Y.
SELECTED SUBBASE	972.5 Y.

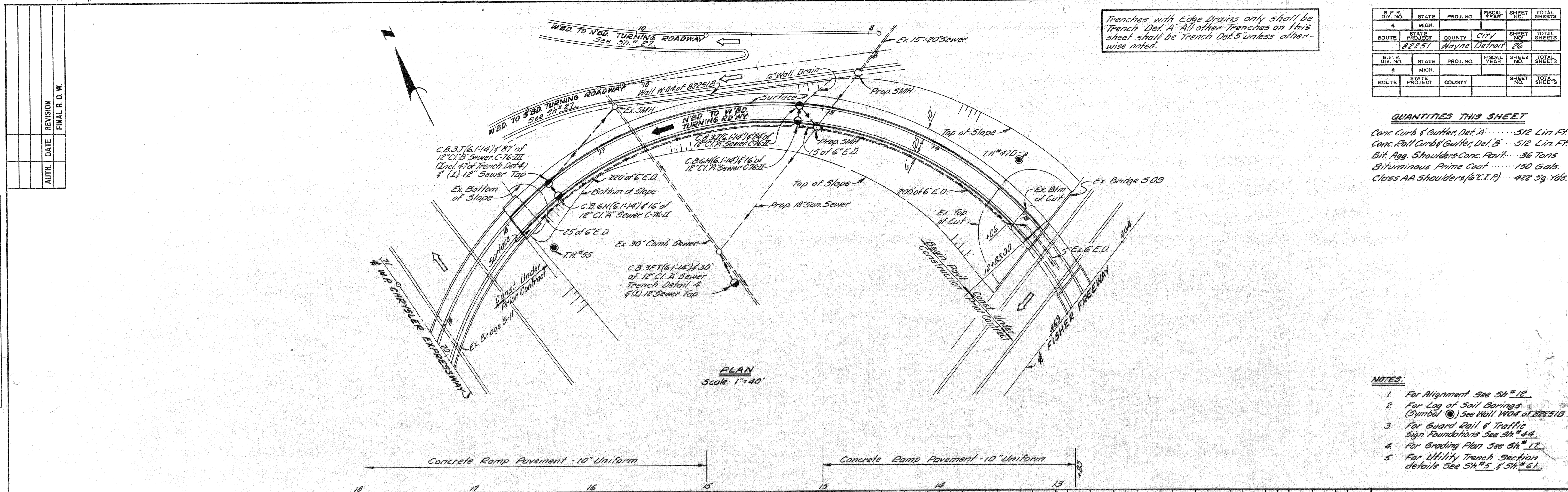
**PLAN AND PROFILES FOR NORTHBOUND TO EASTBOUND TURNING ROADWAY**

DATE	BY	OPERATION	DATE	BY	OPERATION
7-66	N. McLEAN	PRELIMINARY DESIGN CHECKED			
7-66	M. POLITO	FINAL DESIGN CHECKED			
7-66	R. KLATT	TRACED			
7-66		CHECKED			
		QUANTITIES CHECKED			
		SQUAD			

DATE	BY	OPERATION
		PRELIMINARY DESIGN CHECKED
		FINAL DESIGN CHECKED
		TRACED
		CHECKED
		QUANTITIES CHECKED
		SQUAD

DATE	BY	OPERATION
		SURVEYED
		DESIGNED
		PLAN CHECKED
		PROFILE PLOTTED
		PROFILE CHECKED
		CONSTRUCTION
		GRADE INSPECTION
		FEDERAL INSPECTION

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



Fences with Edge Drains only shall be "Trench Det. A". All other Fences on this sheet shall be "Trench Det. 5" unless otherwise noted.

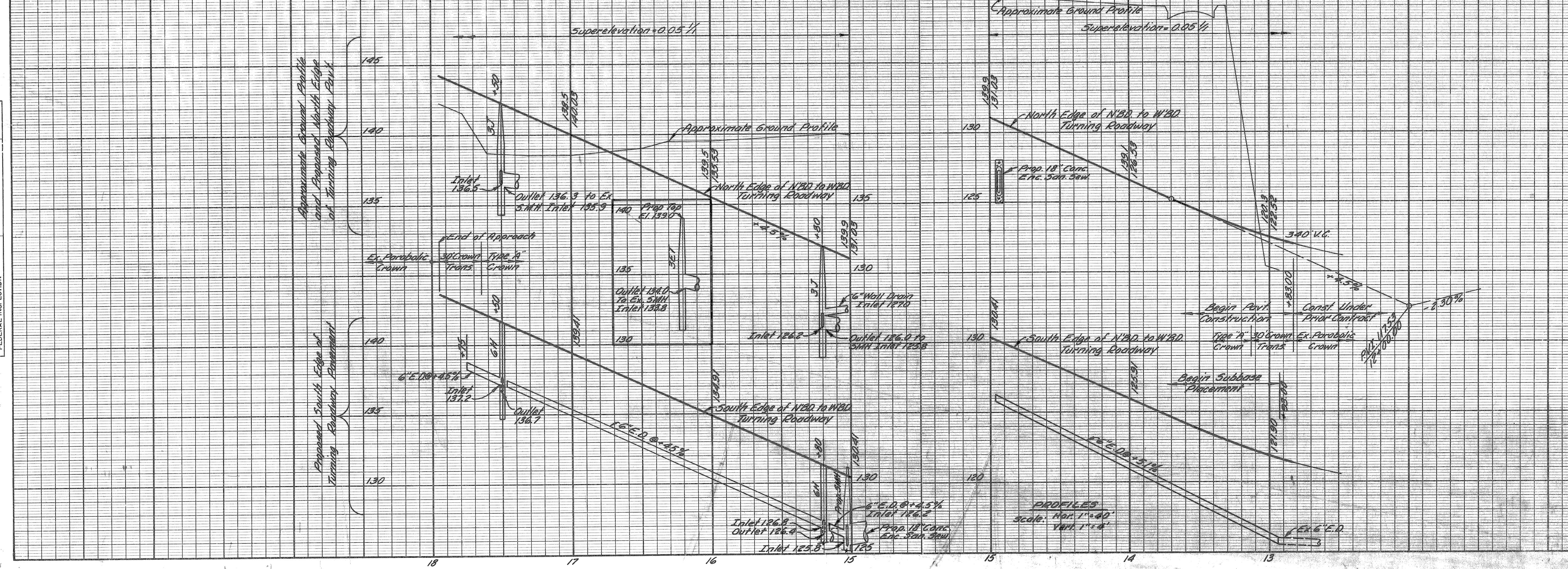
S.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
	82251	Wayne	Detroit	26	

**QUANTITIES THIS SHEET**

Conc. Curbs & Gutters, Det. A	512 Lin. Ft.
Conc. Boll Curbs & Gutters, Det. B	512 Lin. Ft.
Bit. Agg. Shoulders-Conc. Pavt.	36 Tons
Bituminous Prime Coat	150 Gals.
Class AA Shoulders (6 C.I.P.)	422 Sq. Yds.

- NOTES:**
1. For Alignment See SH# 12.
  2. For Log of Soil Borings (Symbol ⊙) See Wall W04 of 82251B.
  3. For Guard Rail & Traffic Sign Foundations See SH# 44.
  4. For Grading Plan See SH# 17.
  5. For Utility Trench Section details See SH# 5 & SH# 61.

ALL WORK THIS SHEET CONTROL SECTION 82251B-30



EARTH EXCAVATION	7,461 C.Y.
LOSSES	
Embankment + 25%	
This Sheet	431 C.Y.
Grading Plan SH# 17	3,147
Total Losses	3,578 C.Y.
WASTE	3,883 C.Y.
SUBBASE (C.I.P.)	786 C.Y.
SELECTED SUBBASE	927 S.Y.

PLAN AND PROFILES FOR NORTHBOUND TO WESTBOUND TURNING ROADWAY

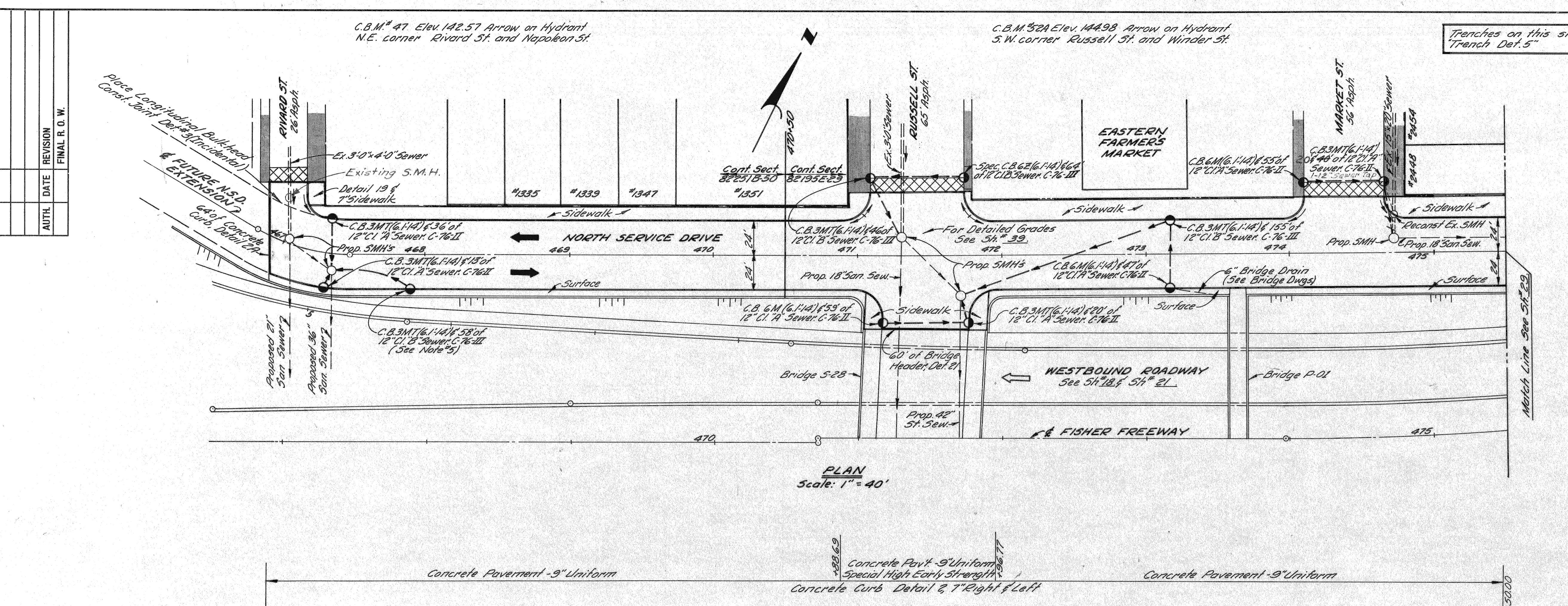


7-66  
7-66  
7-66  
7-66

OPERATION  
PRELIMINARY R.O.W. CHECKED  
FINAL DESIGN CHECKED  
TRAFFIC BY  
FINAL R.O.W. CHECK  
QUANTITIES CHECKED  
SQUAD

OPERATION  
SURVEYED  
PLAN CHECKED  
PROFILE PLOTTED  
PROFILE CHECKED  
GRADE INSPECTION  
FEDERAL INSPECTION

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



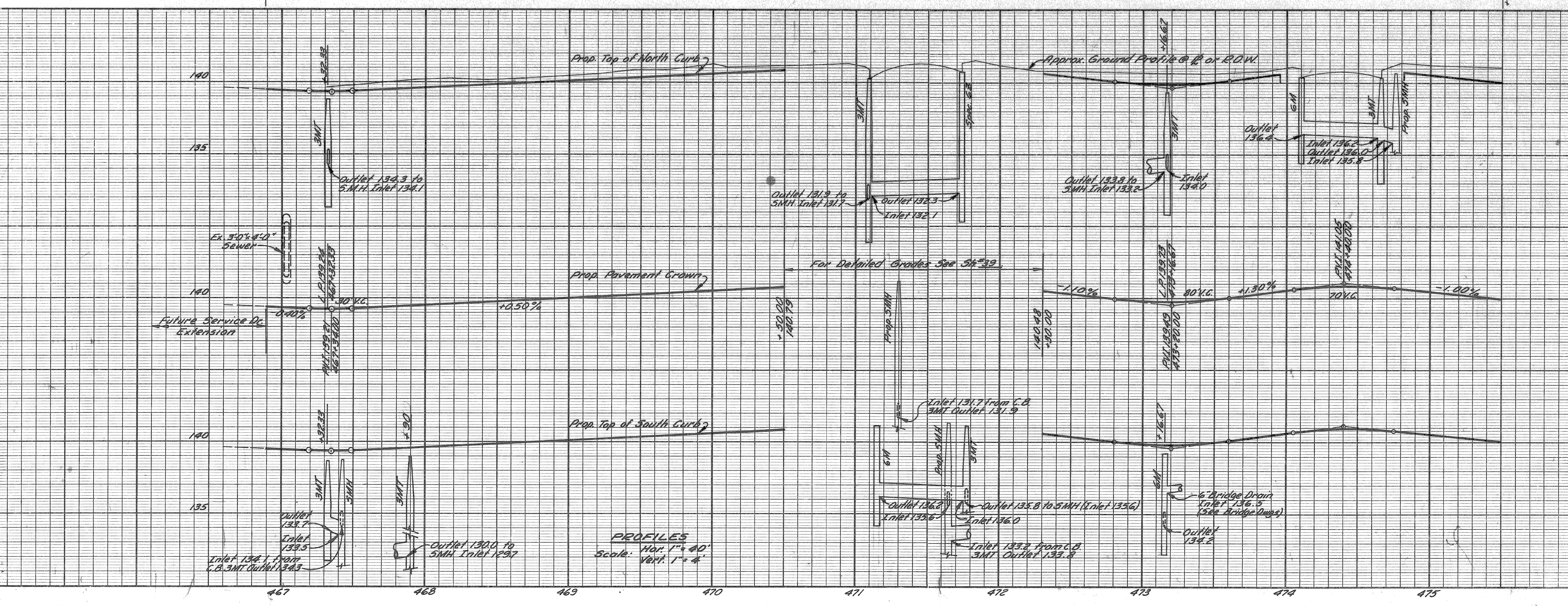
DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Detroit	28		

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

STATION	Removing Bit. Surface (Sq. Yds.)	
	CONTROL SECTION	
476+04	29	—
471+37	—	72
474+41	—	62
TOTALS	29	134

QUANTITIES THIS SHEET			
ITEM	CONT. SECT.	82195E	UNIT
Concrete Curb, Detail 2	709	900	Lin. Ft.
Concrete Curb, Detail 2A	64	—	Lin. Ft.
Bit. Conc. Leveling Course	2	8	Tons
Bit. Conc. Wearing Course 31AA	2	8	Tons
Bit. Mfg. Shoulders - Conc. Pavt.	14	15	Tons
Bituminous Bond Coat	6	27	Gals.
7" Concrete Sidewalk	144	—	Sq. Ft.
4" Concrete Sidewalk	2772	5480	Sq. Ft.

- NOTES:
- For Utility Trench Section details See Sh. 361.
  - For Alignment See Sh. 12 & 13.
  - For Detail Pavement See Sh. 33.
  - Existing Sidewalk to remain.
  - Box Catch Basin Line out to protect it from future Retaining Wall Excav.



ITEMS	CONT. SECT.	82195E	UNITS
EARTH EXCAVATION - LOSSES	103	1096	C.Y.
Embankment + 25% This Sheet	0	131	C.Y.
WASTE	103	965	C.Y.
* EMBANKMENT + 25%	245	—	C.Y.

\* To be obtained from Roadway Excavation Sh. 19.

PLAN & PROFILE FOR  
NORTH SERVICE DRIVE  
RIVARD TO STA 475+50

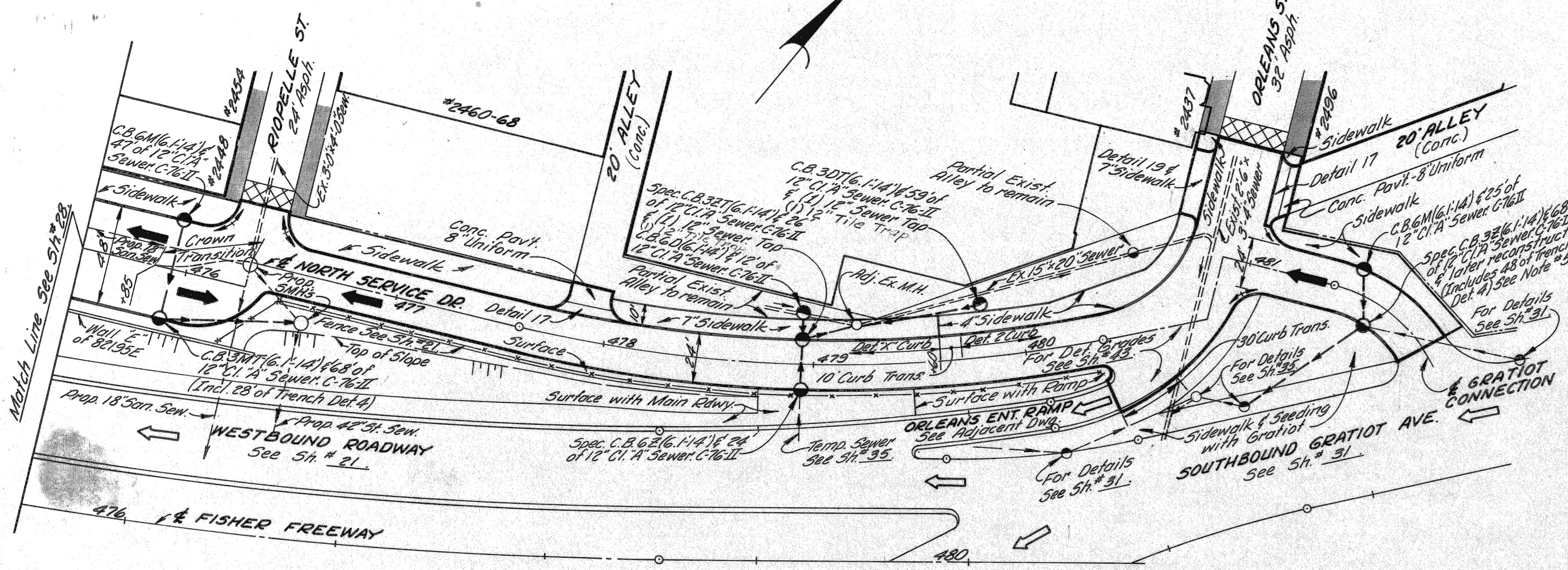
766  
 N. McLEAN  
 M. POLITO  
 R. CONLY  
 766  
 766  
 766

SQUAD LEADER  
 DRAWN BY  
 CHECKED BY  
 APPROVED

DATE  
 BY  
 OPERATION  
 PRELIMINARY E.O.W. CHECKED  
 FINAL DESIGN CHECKED  
 TRACKED  
 FINAL E.O.W. CHECK  
 QUANTITIES CHECKED  
 SQUAD

C.B.M. #52A Elev. 144.98 Arrow on Hydrant  
S.W. corner Russell St. and Winder St.

C.B.M. #51A Elev. 143.98 Arrow on Hydrant  
N.W. corner Winder St. and Orleans St.



PLAN  
Scale: 1"=40'

NOTES:

1. For Alignment See 5h # 13.
2. Existing Sidewalk to remain
3. For Detour Pavement See 5h # 35.
4. For Guard Rail See 5h # 44.
5. This C.B. is to be used for temporary drainage on the Vernal Detour. Reconstruct for permanent condition.
6. For Utility Trench Section details See 5h # 5 & 5h # 6L.

Trenches on this sheet shall be Trench  
Det. 5" unless otherwise noted.

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

STATION	Removing Bit. Surface (Sq. Yds.)
476 + 29	27
Orleans Near 20' Alley	36
TOTALS	63

STATION @	Conc. Driveway Return, Det. 17 (Lin. Ft.)	Driveway Opening, Det. 19 (Lin. Ft.)
477 + 89	40	
20' Alley @ 018025	36	
Driveway On Orleans		40
TOTALS	76	40

QUANTITIES NORTH SERVICE DRIVE

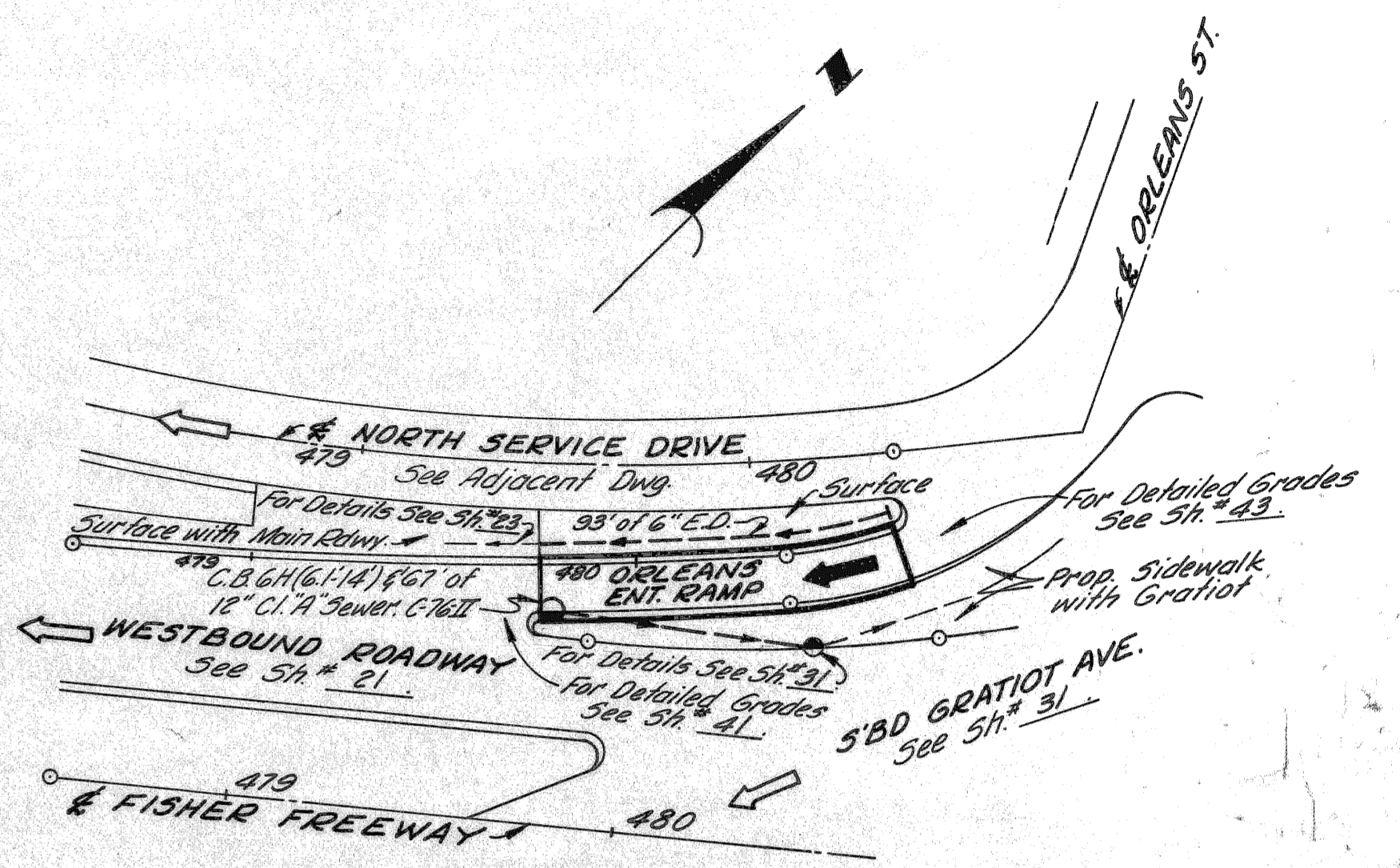
Conc. Curb, Det. 2 ..... 1,145 Lin. Ft.  
 Conc. Curb & Gutter, Det. A ..... 15 Lin. Ft.  
 Conc. Roll Curb & Gutter, Det. B ..... 14 Lin. Ft.  
 Bit. Conc. Leveling Course ..... 4 Tons  
 Bit. Conc. Wearing Course, 31AA ..... 8 Tons  
 Bit. Agg. Shoulders-Conc. Pavt. .... 13 Gals.  
 Bituminous Bond Coat ..... 13 Gals.  
 Special Conc. Curb, Det. X ..... 130 Lin. Ft.  
 4" Concrete Sidewalk ..... 4923 Sq. Ft.  
 7" Concrete Sidewalk ..... 1,766 Sq. Ft.

QUANTITIES ORLEANS ENT. RAMP

Conc. Curb & Gutter, Det. A ..... 95 Lin. Ft.  
 Conc. Roll Curb & Gutter, Det. B ..... 93 Lin. Ft.  
 Bit. Agg. for Shoulders-Conc. Pavt. .... 9 Tons  
 Bituminous Prime Coat ..... 36 Gals.  
 Class AA Shoulders (6" C.I.P.) ..... 102 Sq. Yds.

R.F.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			29	

ALL WORK THIS SHEET  
CONTROL SECTION 82195E-29

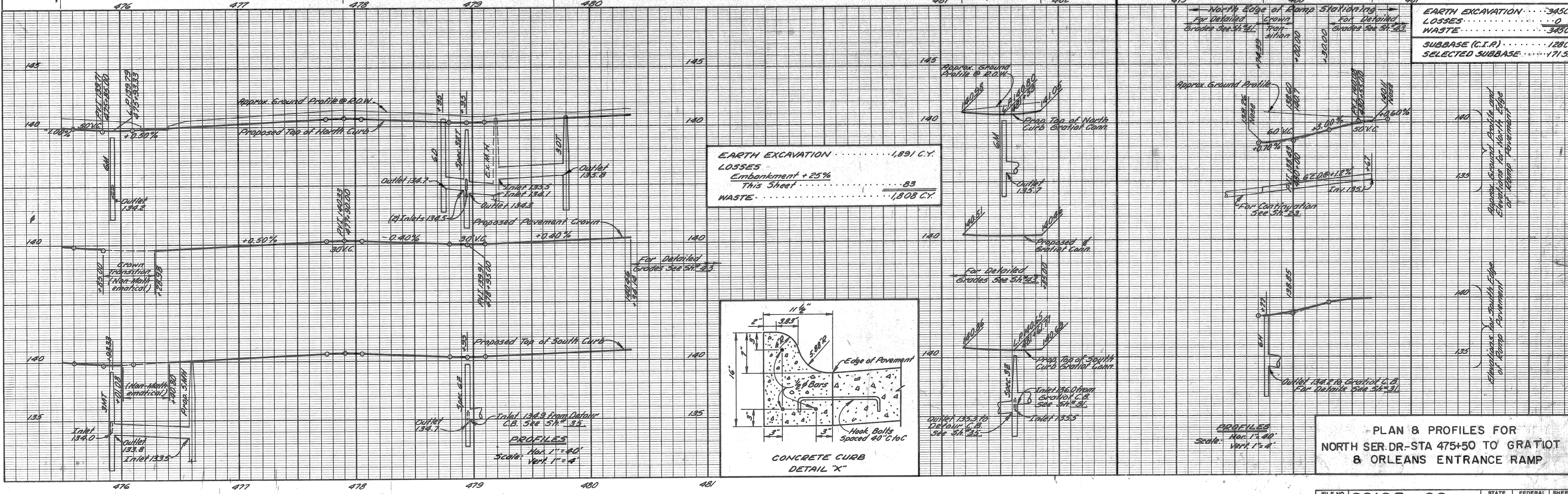


PLAN  
Scale: 1"=40'

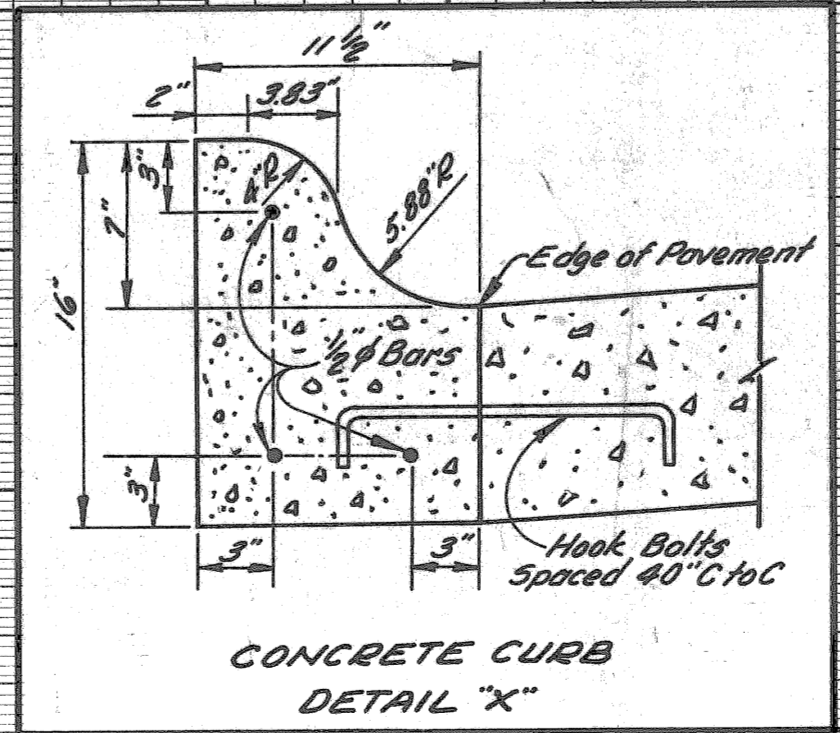
NOTES:

1. For Alignment See 5h # 13.
2. For Guard Rail & Traffic Sign Foundations See 5h # 44.

Concrete Pavement - 9" Uniform  
 Concrete Curb, Detail 2 - 7" Lt.  
 Concrete Curb, Detail X Lt.  
 Conc. Curb Det. 3, 7" Lt.



EARTH EXCAVATION ..... 1,891 C.Y.  
 LOSSES ..... 0  
 Embankment + 25% ..... 83  
 WASTE ..... 1,808 C.Y.



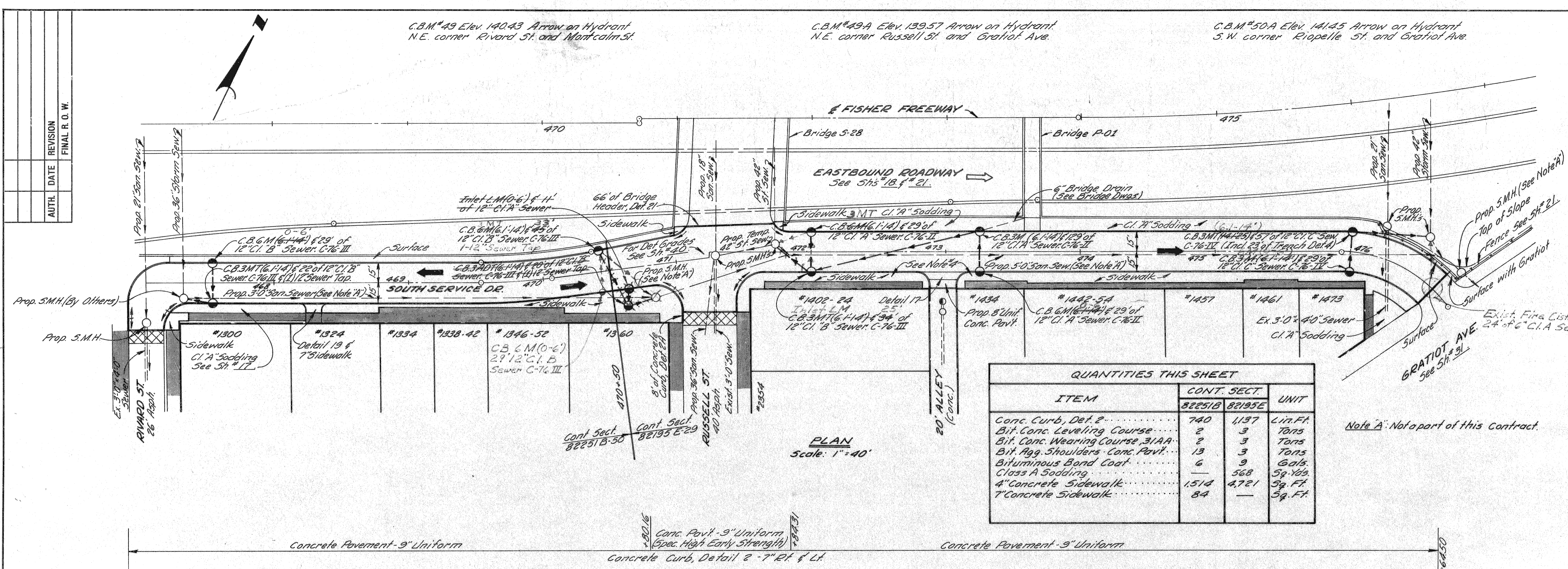
PLAN & PROFILES FOR  
NORTH SER. DR. STA 475+50 TO GRATIOT  
& ORLEANS ENTRANCE RAMP

7-66  
 N. McLEAN  
 M. POLITO  
 R. COMLY  
 7-66  
 7-66

OPERATION  
 PRELIMINARY R.O.W. CHECKED  
 FINAL DESIGN CHECKED  
 TRAGED  
 FINAL R.O.W. CHECK  
 QUANTITIES CHECKED  
 SQUAD

OPERATION  
 SURVEYED  
 PLAN CHECKED  
 PROFILE PLOTTED  
 PROFILE CHECKED  
 GRADE INSPECTION  
 FEDERAL INSPECTION

DESIGNED BY  
 CITY ENGINEERS  
 BUREAU OF HIGHWAYS AND EXPRESSWAYS



QUANTITIES THIS SHEET

ITEM	CONT. SECT.		UNIT
	82251B	82195E	
Conc. Curb, Det. 2	740	1137	Lin. Ft.
Bit. Conc. Leveling Course	2	3	Tons
Bit. Conc. Wearing Course, 3/4\"/>			

D.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Detroit		30	

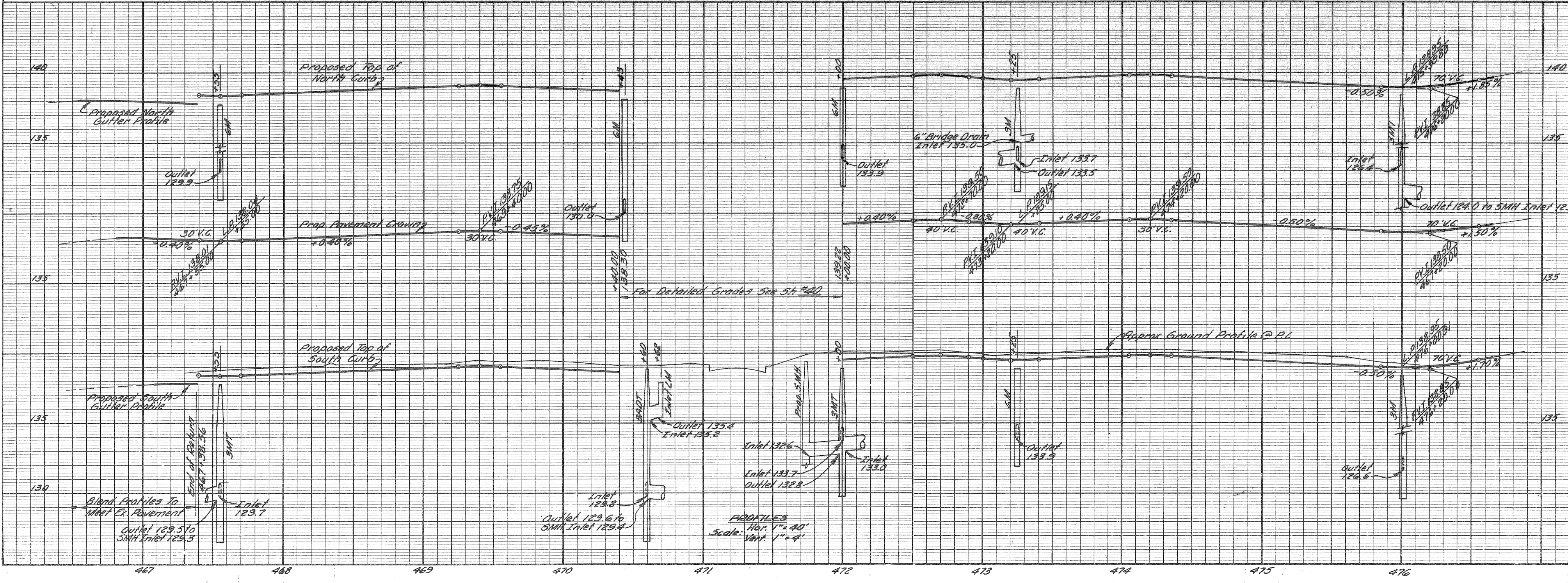
Trenches on this sheet shall be "Trench Det. 5" unless otherwise noted.

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

STATION	Removing Bituminous Surface (Sq. Yds.)
467+06	29
TOTALS Cont. Sect. 82251B	29
471+25	44
TOTALS Cont. Sect. 82195E	44

STATION @ B. OF OPENING	CONTROL SECTION	
	82251B	82195E
468+30	20	—
472+98	—	40
TOTALS	20	40

- NOTES:
- For Alignment See 5H\*22 & 5H\*13.
  - For Detail Pavement See 5H\*22.
  - Existing Sidewalk to remain.
  - There are a number of manholes in this area. Location is unknown.
  - For Util. Trench Sect. details See 5H\*21.



ITEMS	CONT. SECT.		UNITS
	82251B	82195E	
EARTH EXCAVATION	164	384	C.Y.
LOSSES	0	0	
WASTE	164	384	C.Y.
EMBANKMENT + 25%	*55	*144	C.Y.

\* To be obtained from Roadway Excavation 5H\*19.  
 @ To be obtained from Roadway Excavation 5H\*22.

PLAN & PROFILES FOR SOUTH SERVICE DRIVE RIVARD TO GRATIOT

7-66  
7-66  
7-66

SQUAD LEADER: N. McLEAN  
DRAWN BY: M. POLITO  
CHECKED BY: E. COMLY  
APPROVED: [Signature]

OPERATION: PRELIMINARY DESIGN, FINAL DESIGN, QUANTITIES CHECKED, SURVEY CHECKED, FEDERAL INSPECTION

DATE: [Blank]

BY: [Blank]

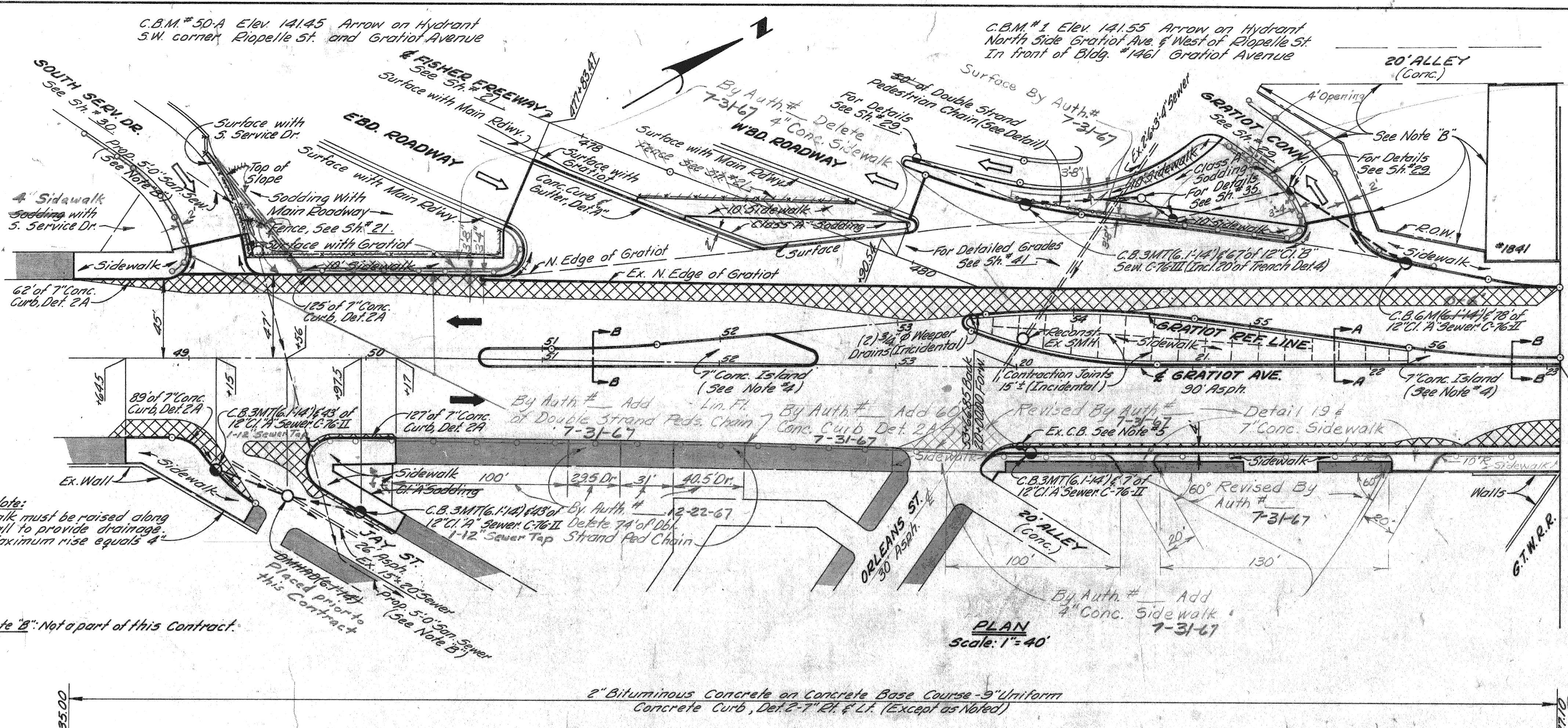
OPERATION: SURVEYED, PLAN PLOTTED, PROFILE PLOTTED, PROFILE CHECKED, PRELIMINARY GRADE, FEDERAL INSPECTION

DATE: [Blank]

BY: [Blank]

PLANS PREPARED BY: [Blank]

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

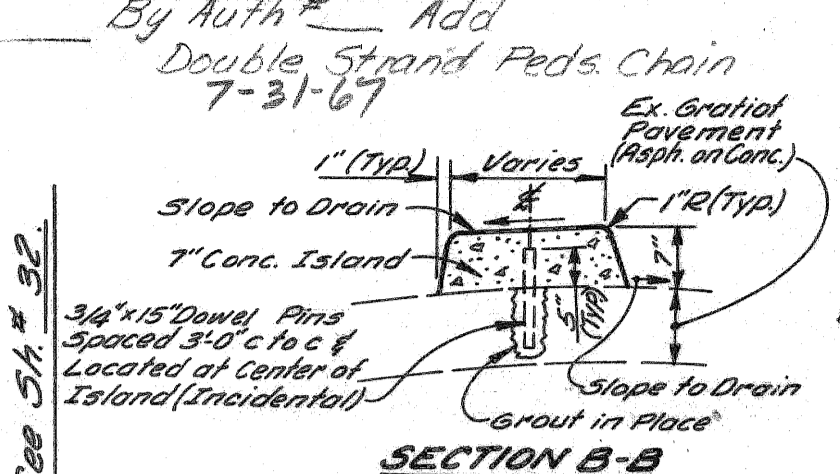


Note: Walk must be raised along wall to provide drainage. Maximum rise equals 4\"/>

Note "B": Not a part of this Contract.

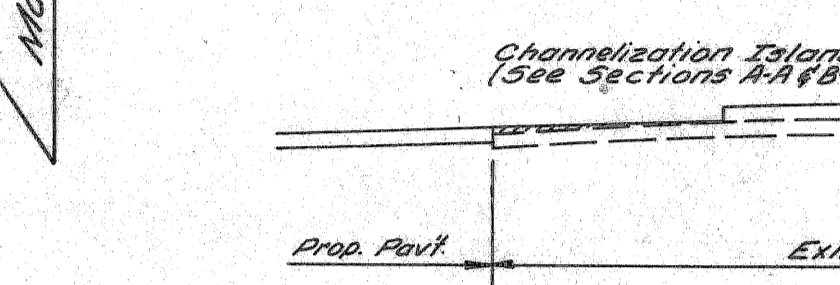
PLAN Scale: 1" = 40'

Trenches on this sheet shall be Trench Det-5 unless otherwise noted.



SECTION A-A  
SECTION B-B

NOTE: Reinforcement in Concrete Pavement (or Base) Widening, to longitudinal Reinforcing Bars may be substituted for Standard Pavement Reinforcement provided that the Longitudinal Bars be spaced at 12\"/>



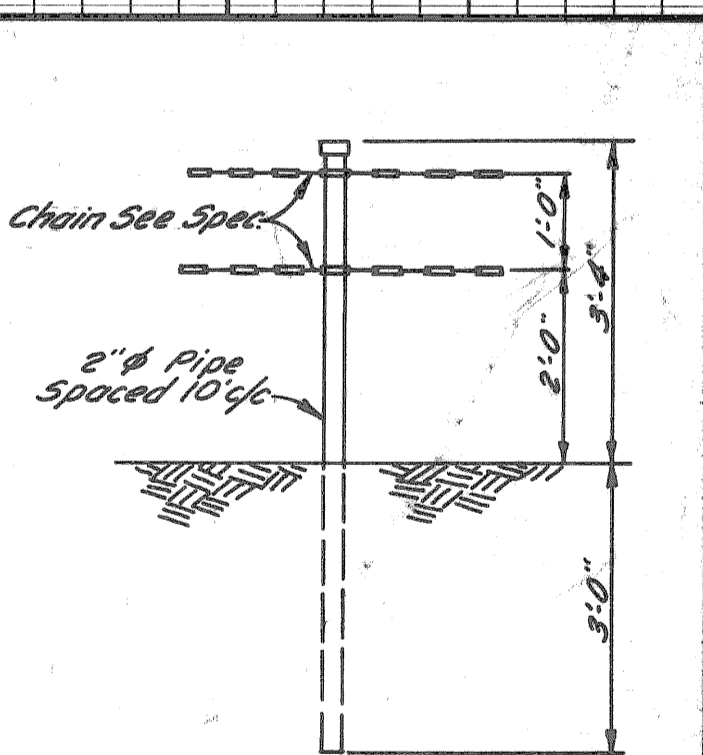
TYPICAL GRATIOT CROSS-SECTION No Scale

Remove Bituminous Surface shown cross-hatched to provide for a smooth connection & to adjust crown. Replace with Bituminous Concrete Pavement.

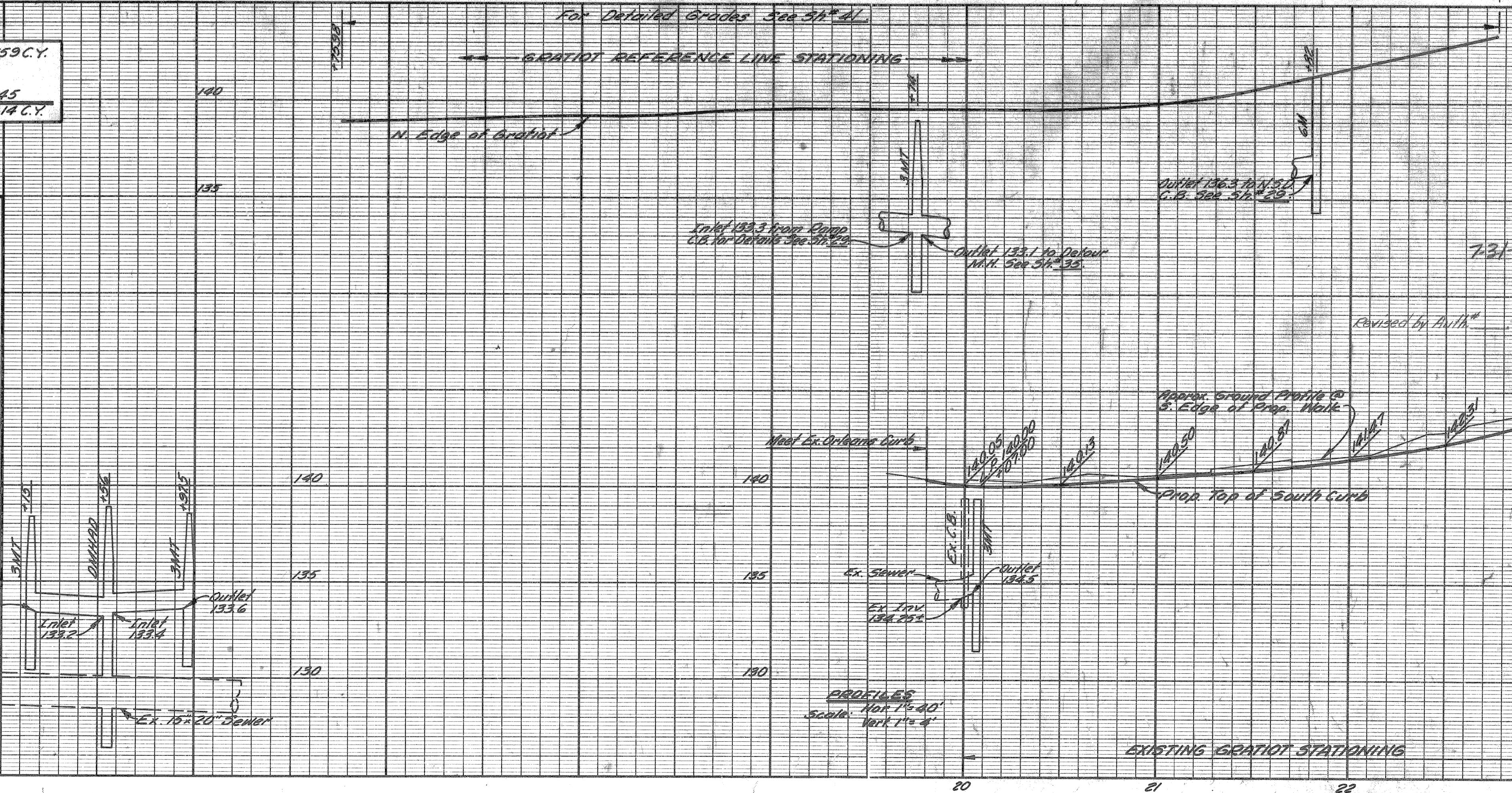
LOCATION	Remove Bit. Surface (Sq. Yds)
N. Side of Gratiot 55.0 to 56.0	980
S. Side of Gratiot @ 55.5	167
S. Side of Gratiot Orleans to Match Line	103
TOTALS	1250 1330

- NOTES:
- For Alignment See 5th 13.
  - For Const. Sequence See 5th 3, 4.
  - For Pavement Joint Legend See 5th 10.
  - Transverse Construction Joints spaced on 15 foot centers (max) required for the 7\"/>

EARTH EXCAVATION	759 C.Y.
LOSSES Embankment + 25%	
THIS SHEET	145
WASTE	614 C.Y.



DETAIL OF DOUBLE STRAND PEDESTRIAN CHAIN No Scale



QUANTITIES THIS SHEET

Concrete Curb, Detail 2	839 Lin. Ft.
Concrete Curb, Detail 2A	463 403 Lin. Ft.
Special Concrete Curb, Detail A	516 Lin. Ft.
Concrete Curb & Gutter, Detail A	179 Lin. Ft.
Bituminous Concrete Leveling Course 200# 204 Tons	
Bituminous Concrete Wearing Course 31A+153 1075	
Bituminous Agg. Shoulders-Conc. Pavt. 30 & Tons	
Bituminous Band Coat	719 701 Gal.
7\"/>	

Note "B": The following items & quantities are required for the restoration of areas adjacent to any limits. These quantities are included in totals listed above.

Class A Seeding	0.2 Acres
Eye Seeding	0.2 Acres
Chemical Fertilizer	124 Pounds

PLAN AND PROFILES FOR GRATIOT AVENUE JAY ST. TO E. GRATIOT STA. 23+07.78



7-66  
7-66  
7-66  
7-66

N. McLEAN  
M. POLITO  
R. COMLY

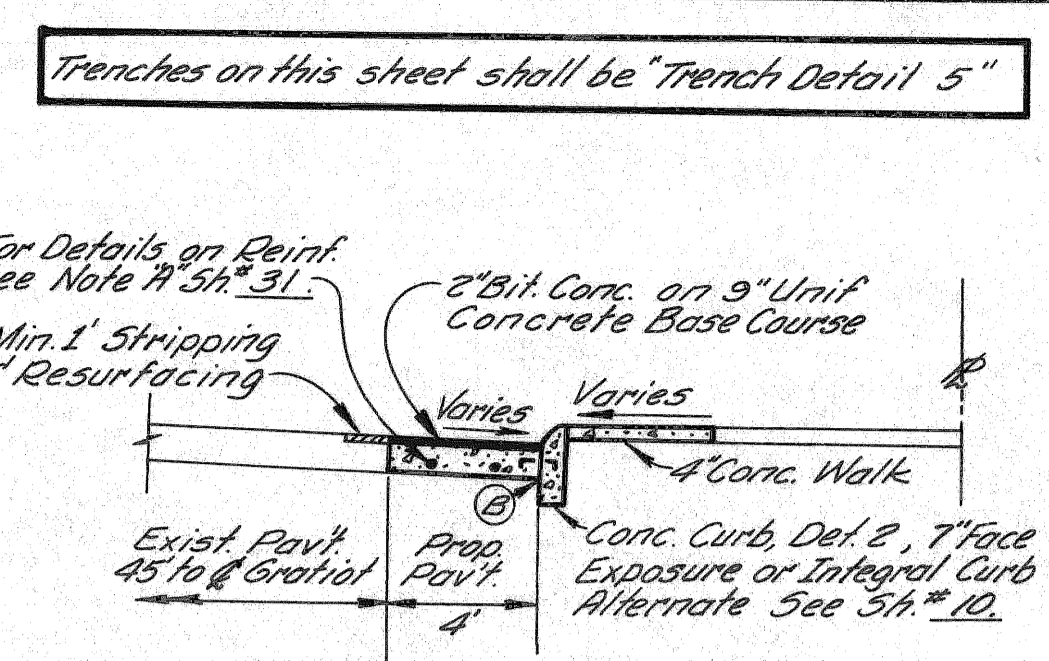
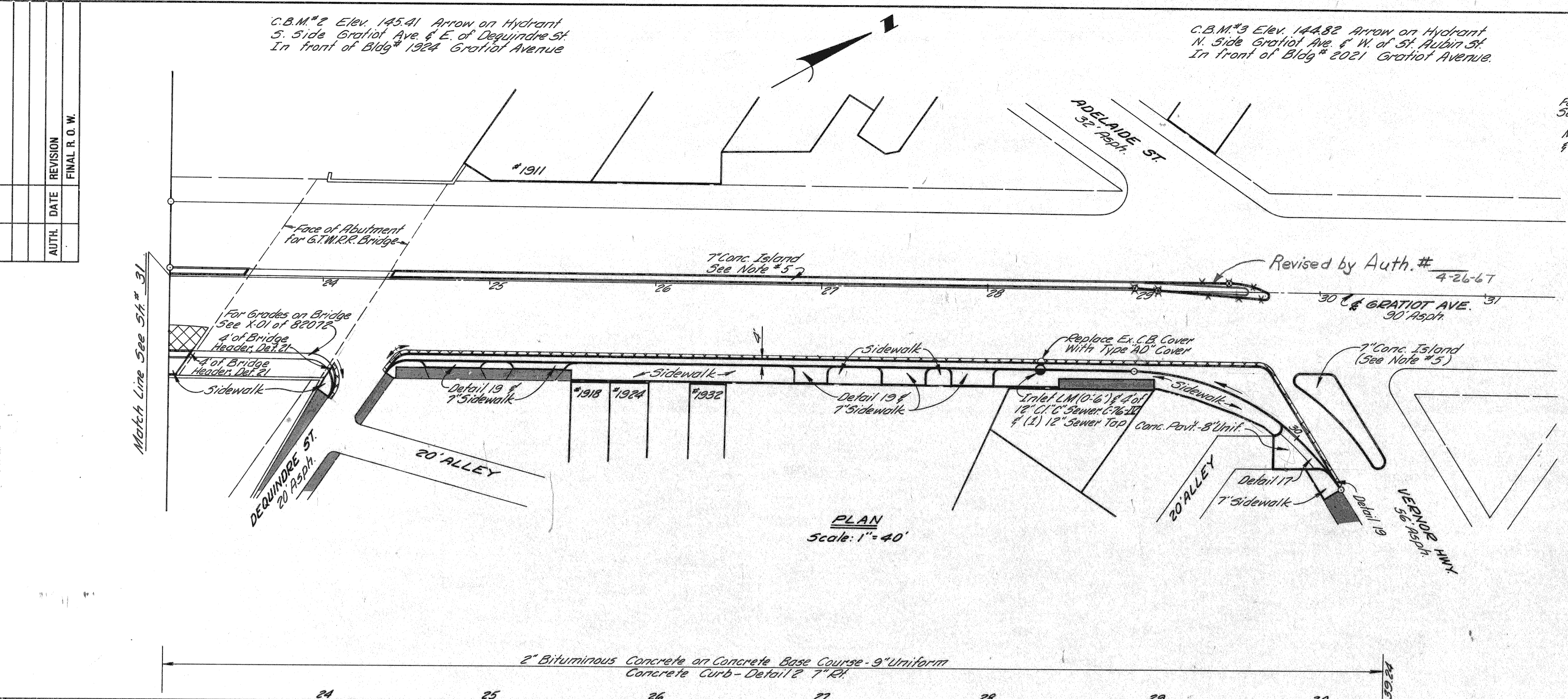
OPERATION BY DATE

PRELIMINARY P.O.W. CHECKED  
FINAL DESIGN CHECKED  
TRACED  
FINAL P.O.W. CHECK  
QUANTITIES CHECKED  
SQ/AD

OPERATION BY DATE

SURVEYED  
PLAN PLOTTED  
PROFILE CHECKED  
PROFILE CHECKED  
PRELIMINARY GRADE  
GRADE INSPECTION  
FEDERAL INSPECTION

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



Revised by Auth.# 4-26-67

QUANTITIES THIS SHEET

Concrete Curb, Detail 2	598 Lin. Ft.
Bit. Conc. Leveling Course	28 Tons
Bit. Conc. Wearing Course, 3/AA	21 Tons
Bituminous Bond Coat	94 Gals.
4" Concrete Sidewalk	3600 Sq. Ft.
7" Concrete Sidewalk	1,205 Sq. Ft.
7" Concrete Island	348 Sq. Yds.
TOTALS	48

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

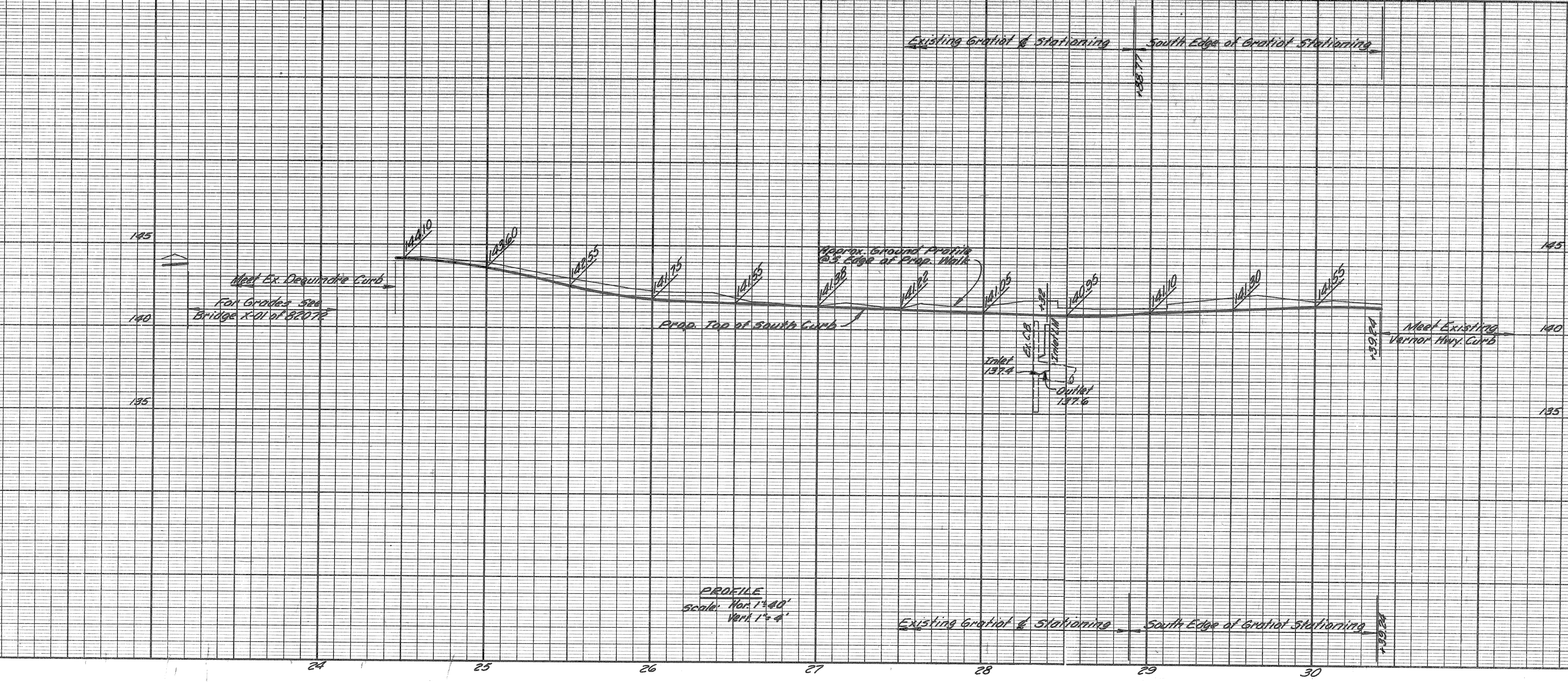
Gratiot Stationing	Removing Bit. Surface (Sq. Yds)
S. Edge of Gratiot W. of Dequindre	33
S. Edge of Gratiot Dequindre to Vernor	72
TOTALS	105

S.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Detroit		32	

ALL WORK THIS SHEET CONTROL SECTION 82195 E-29

Gratiot Sta. @ E. of Opening	Conc. Dr. W. Return Det. 17 (Lin. Ft.)	Dr. W. Opening Detail 19 (Lin. Ft.)
24+74	—	42
25+33	—	42
26+94	—	28
27+49	—	33
27+83	—	33
30+18	48	—
S. Ed. Gratiot Sta. 30+34	—	9
TOTALS	48	187

- NOTES:
- For Alignment See 5h# 13.
  - Existing Sidewalk to remain
  - Consult Property Owner Before Constructing Driveways.
  - For Pavt. Joint Legend See 5h# 10.
  - Transverse Contraction Joints Spaced on 15 foot centers (max) required for the 7" Concrete Islands are incidental. (See also section B-B Sheet # 31.)
  - For Util. Trench Sect. Details See 5h# 61.



EARTH EXCAVATION	159 C.Y.
LOSSES	0
WASTE	159 C.Y.
* EMBANKMENT + 25%	40 C.Y.

\* To be obtained from Roadway Excavation 5h# 22

Auth.# 4-26-67

PLAN AND PROFILE FOR  
GRATIOT AVENUE  
STA. 23+07.78 TO VERNOR HWY.

7-66  
7-66  
7-66  
7-66

N. McLEAN  
M. POLITO  
R. COMLY  
S. J. JONES

LEADER  
DESIGNER  
CHECKER  
APPROVED

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

OPERATION: \_\_\_\_\_

PRELIMINARY: \_\_\_\_\_

FINAL DESIGN: \_\_\_\_\_

PLANNING: \_\_\_\_\_

PROFILES: \_\_\_\_\_

QUANTITIES: \_\_\_\_\_

QUANTITIES CHECKED: \_\_\_\_\_

QUANTITIES: \_\_\_\_\_

QUANTITIES CHECKED: \_\_\_\_\_

QUANTITIES: \_\_\_\_\_

QUANTITIES CHECKED: \_\_\_\_\_

CURVE DATA WESTBOUND DETOUR		CURVE DATA EASTBOUND DETOUR	
Curve 1	Curve 2	Curve 3	Curve 4
$\Delta = 33^{\circ}30'38.63''$	$\Delta = 33^{\circ}31'50.69''$	$\Delta = 34^{\circ}44'36''$	$\Delta = 34^{\circ}45'48''$
$D = 17^{\circ}41'01.98''$	$D = 17^{\circ}41'01.98''$	$D = 19^{\circ}29'18.10''$	$D = 17^{\circ}41'01.98''$
$R = 324.00'$	$R = 324.00'$	$R = 294.00'$	$R = 324.00'$
$T = 97.55'$	$T = 97.61'$	$T = 91.97'$	$T = 101.42'$
$L = 189.50'$	$L = 189.61'$	$L = 178.28'$	$L = 196.58'$
$E = 14.37'$	$E = 14.38'$	$E = 14.05'$	$E = 15.50'$
$PC = 0+68.62$	$PC = 2+58.12$	$PC = 0+00$	$PC = 2+51.15$
$PI = 1+66.16$ (Forward)	$PI = 3+55.72$ (Forward)	$PI = 0+91.97$ (Forward)	$PI = 3+52.56$ (Forward)
$PT = 2+58.12$	$PT = 4+47.73$	$PT = 0+96.30$ (Back)	$PT = 3+46.31$ (Back)
		$PT = 1+78.28$	$PT = 4+47.73$

Note: As an option the detour may be poured to a 48' width with the additional width being cast as an integral curb or the integral curb alternate. See 5th<sup>th</sup> 10. The detour will be paid for as 52' pavement and conc. curb Detail 2A regardless of method of construction.

C.B.M. # 48 Elev. 141.79 Arrow on Hydrant N.E. corner Rivard St. and Vernor Hwy.  
C.B.M. # 49 Elev. 140.43 Arrow on Hydrant N.E. corner Rivard St. and Maricain St.

Trenches on this sheet shall be "Trench Def. 5"

Remove Bituminous Surface shown cross-hatched to provide for a smooth connection and to adjust crown. Replace with Bituminous Concrete Pavement. Also place Bituminous Concrete Pavement where shown on plans.

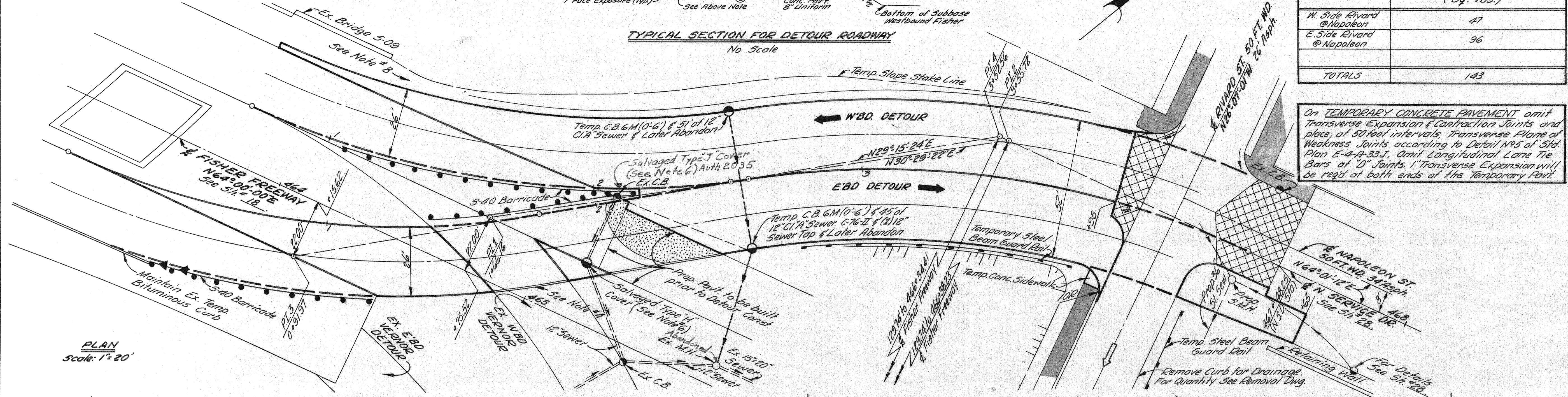
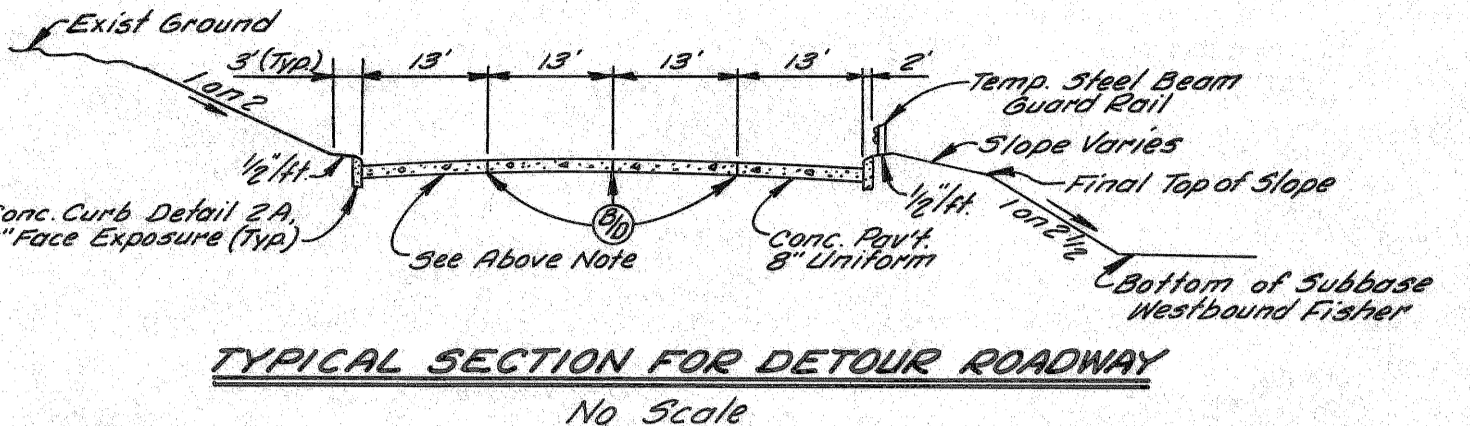
LOCATION	Removing Bit. Surface (Sq. Yds.)
W. Side Rivard @ Napoleon	47
E. Side Rivard @ Napoleon	96
TOTALS	143

ALL WORK THIS SHEET CONTROL SECTION 82251B-50

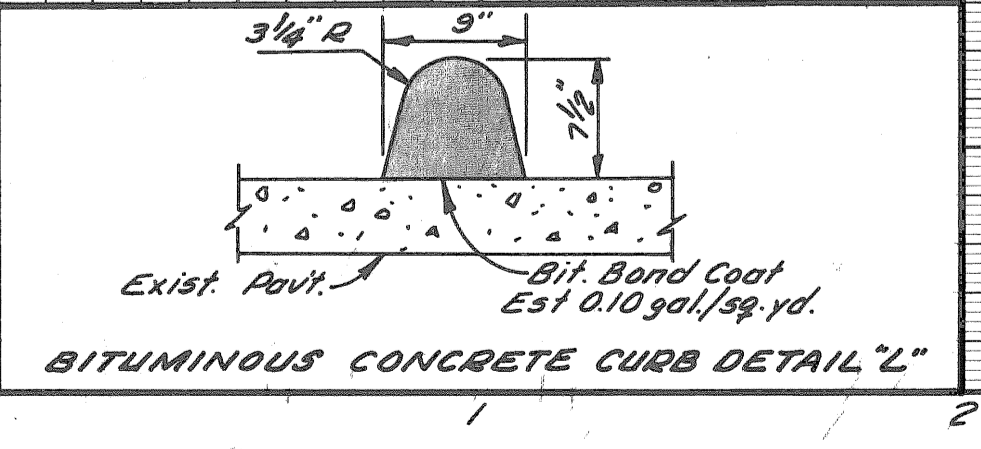
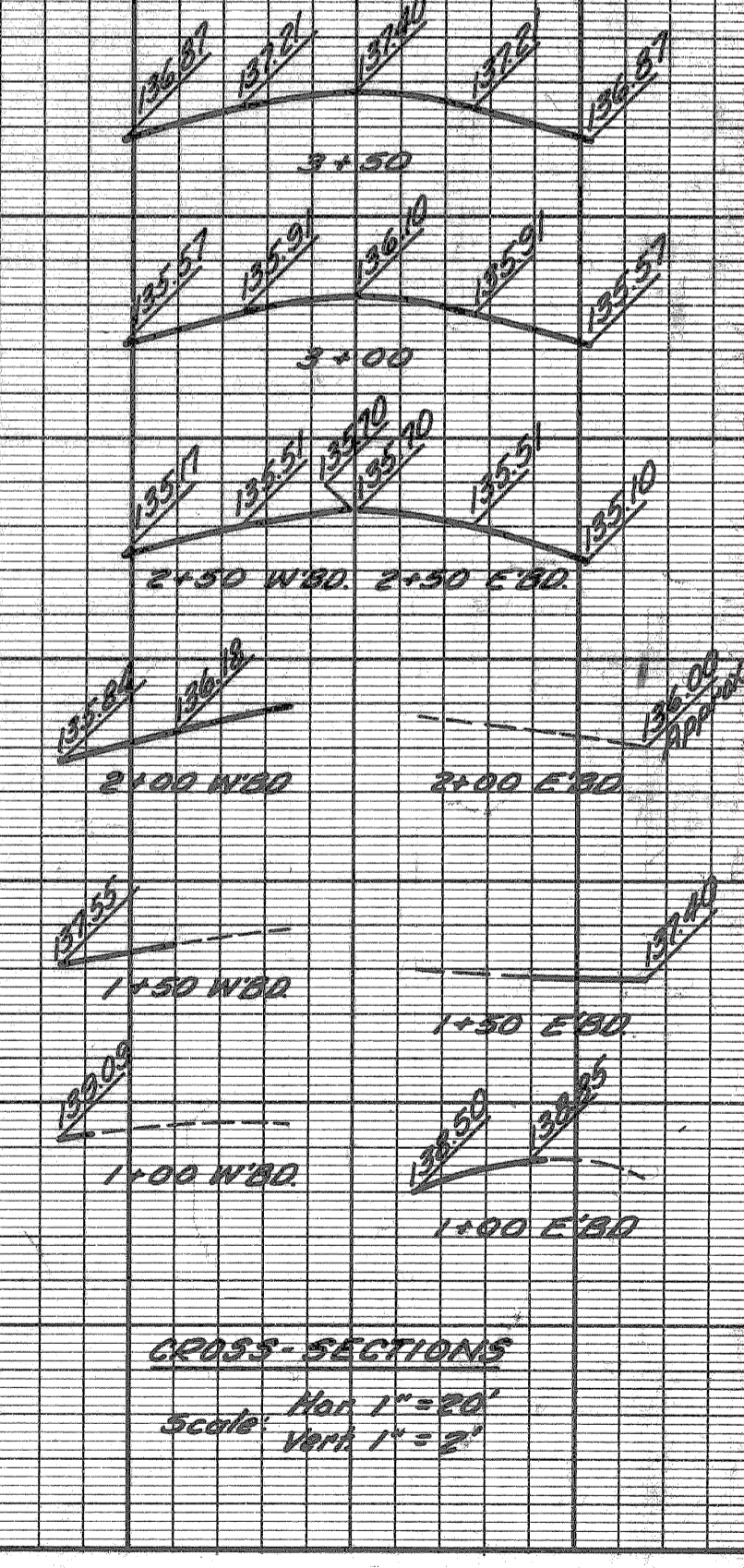
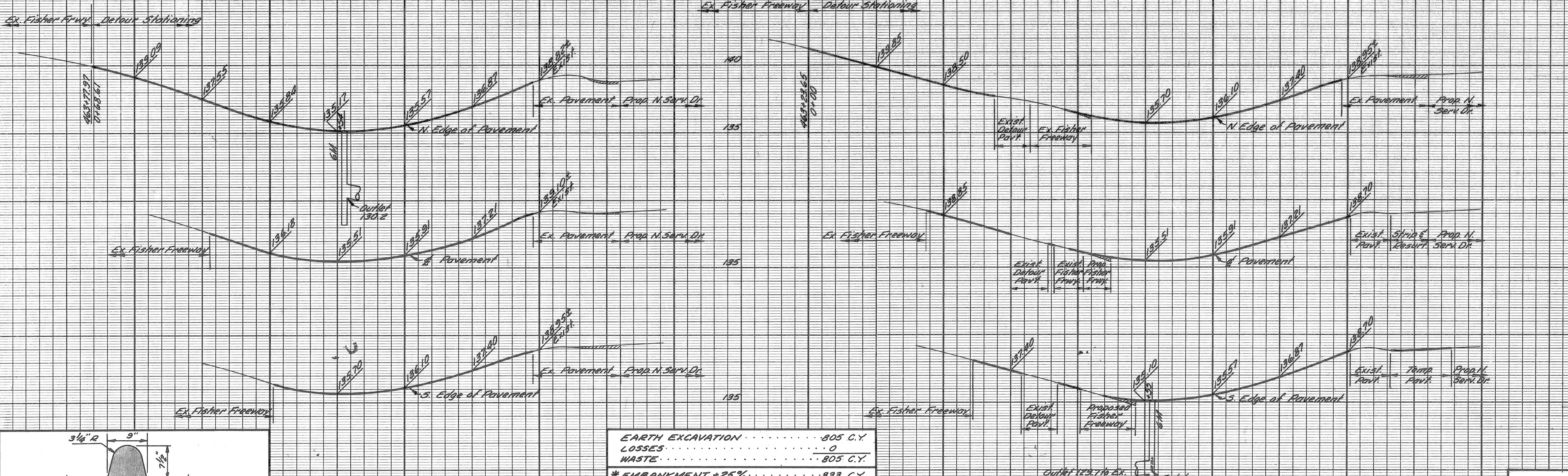
QUANTITIES THIS SHEET

Conc. Curb, Det. 2A	736 Lin. Ft.
Bit. Conc. Leveling Course	8 Tons
Bit. Conc. Wearing Course, 31AA	8 Tons
Bituminous Bond Coat	37 Gal.
Temp. Conc. Sidewalk	28 Sq. Ft.
Bit. Conc. Wearing Course, 25A	4 Tons
Spec. Bit. Conc. Curb, Det. L	69 Lin. Ft.

- NOTES:
- For Pavement Joint Legend, See 5th<sup>th</sup> 10.
  - For Billing of all Barricades and Temp. Steel Beam Guard Rail, See 5th<sup>th</sup> 4.
  - Existing Sidewalk to remain.
  - Bituminous Curb, Detail "L".
  - Temp. Bituminous Conc. Pavt. (25A Wearing Course Only).
  - Remove Existing Type "H" Cover and later replace for permanent condition. Cover opening in top of Catch Basin with 1/4" plate and pave over. All above described work will be paid for as Salvaged Type "H" Cover.
  - Two Level Flasher.
  - See P.L.C. drawings for location of existing buried cable in this area.
  - For Util. Trench Sect. Details See 5th<sup>th</sup> 6L.



Concrete Pavement - 8" Uniform  
Concrete Curb, Detail 2A - 7" Ft. & Lt.



EARTH EXCAVATION	805 C.Y.
LOSSES	0
WASTE	805 C.Y.
* EMBANKMENT +25%	833 C.Y.
* To be obtained from Main Entry, Excav. 5th <sup>th</sup> 19.	

WESTBOUND DETOUR  
PROFILES  
Hor. 1" = 40'  
Vert. 1" = 4'

EASTBOUND DETOUR  
PROFILES  
Hor. 1" = 40'  
Vert. 1" = 4'

PLAN AND PROFILES FOR  
VERNOR DETOUR  
AT RIVARD ST.

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

OPERATION: \_\_\_\_\_

SURVEYED: \_\_\_\_\_

PLAN CHECKED: \_\_\_\_\_

PLAN PLOTTED: \_\_\_\_\_

PROFILES CHECKED: \_\_\_\_\_

PRELIMINARY GRADE: \_\_\_\_\_

GRADE INSPECTION: \_\_\_\_\_

FEDERAL INSPECTION: \_\_\_\_\_

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

7-66  
7-66  
7-66  
7-66

SCRIPT LEADER  
DRAWN BY  
CHECKED BY  
APPROVED

M. McLEAN  
M. POLITO  
R. COMLY  
R. COMLY

DATE  
BY  
OPERATION  
CHECKED  
QUANTITIES CHECKED  
SOUND

DATE  
BY  
OPERATION  
CHECKED  
QUANTITIES CHECKED  
SOUND

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

C.B.M. #49A Elev. 139.57 Arrow on Hydrant  
N.E. corner Russell St. and Gratiot Ave.

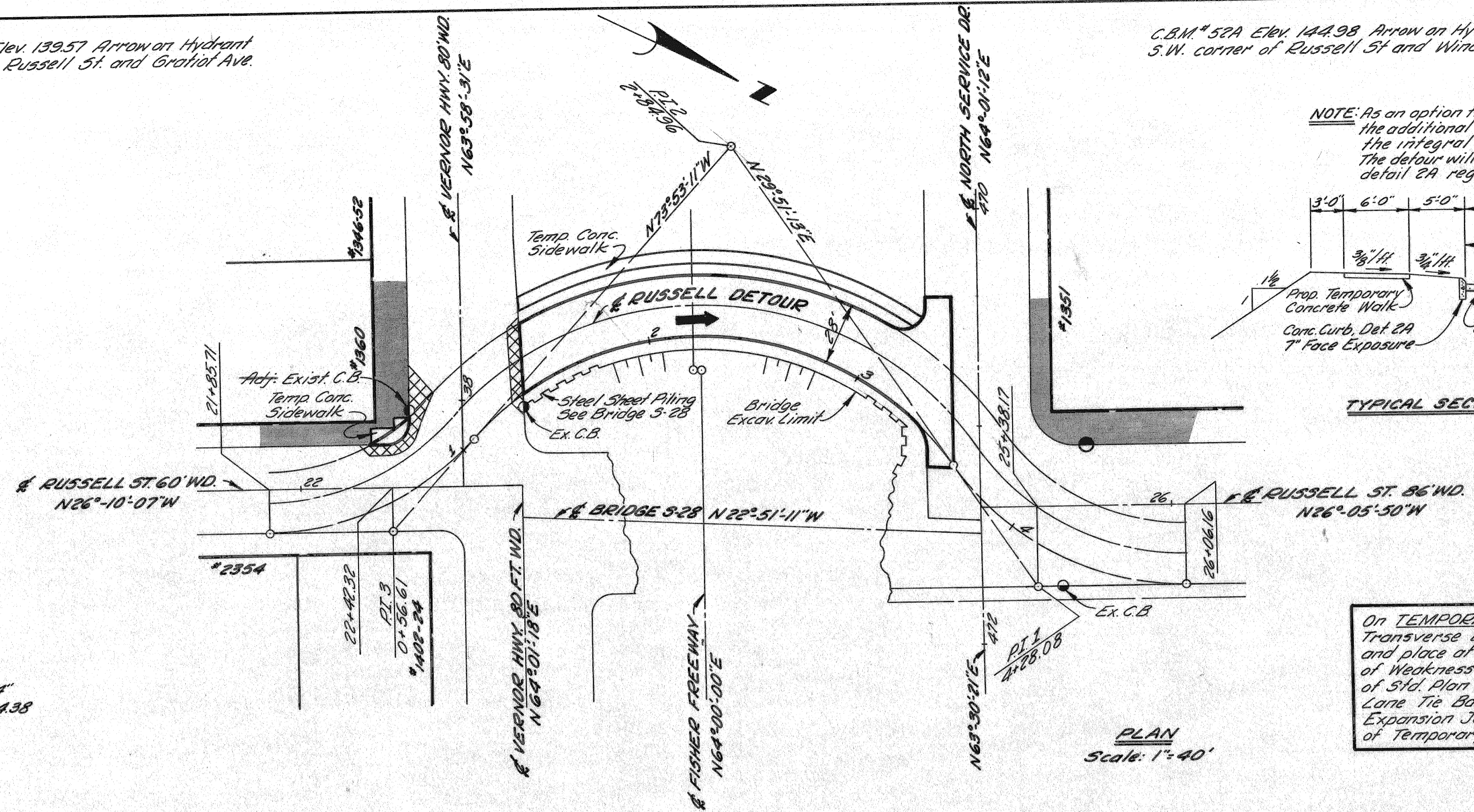
C.B.M. #52A Elev. 144.98 Arrow on Hydrant  
S.W. corner of Russell St and Winder St.

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

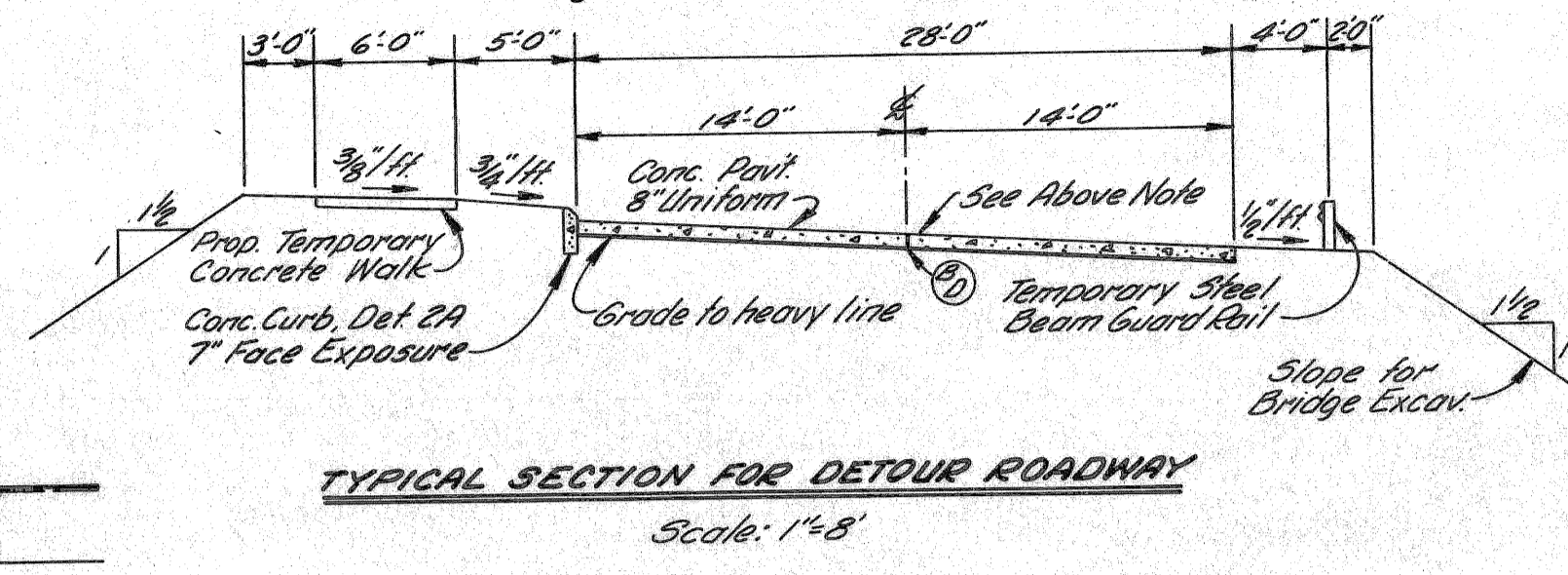
LOCATION	Removing Bit. Surface (Sq. Yds.)
Russell Detour @ Verner	22
S.W. Corner of Verner & Russell	35
TOTALS	57

**CURVE DATA RUSSELL ST. DETOUR**

Curve 1	Curve 2	Curve 3
$\Delta = 55^\circ 57' 03''$	$\Delta = 103^\circ 44' 24''$	$\Delta = 47^\circ 43' 04''$
$D = 44^\circ 45' 44.38''$	$D = 40^\circ 55' 32.00''$	$D = 44^\circ 45' 44.38''$
$R = 128.00'$	$R = 140.00'$	$R = 128.00'$
$T = 67.99'$	$T = 178.36'$	$T = 56.61'$
$L = 125.00'$	$L = 253.49'$	$L = 106.60'$
$E = 16.94'$	$E = 86.74'$	$E = 11.96'$
$PC = 3+60.09$	$PC = 1+06.60$	$PC = 0+00$
$PI = 4+28.08$	$PI = 2+84.96$	$PI = 0+56.61$
$PT = 4+85.08$	$PT = 3+60.09$	$PT = 1+06.60$



NOTE: As an option the detour may be paved to a 26' width with  
the additional width being cast as an integral curb or  
the integral curb alternate. See Sh. #10.  
The detour will be paid for as 26' pavement and concrete curb  
detail 2A regardless of method of construction.



TYPICAL SECTION FOR DETOUR ROADWAY  
Scale: 1"=8'

On TEMPORARY CONCRETE PAVEMENT omit  
Transverse Expansion and Contraction Joints  
and place at 50' intervals, Transverse Plane  
of Weakness Joints according to Detail No. 5  
of Std. Plan E-4-A-33-T. Omit Longitudinal  
Lane Tie Bars at "D" Joints. If Transverse  
Expansion Joints will be required at both ends  
of Temporary Pavement.

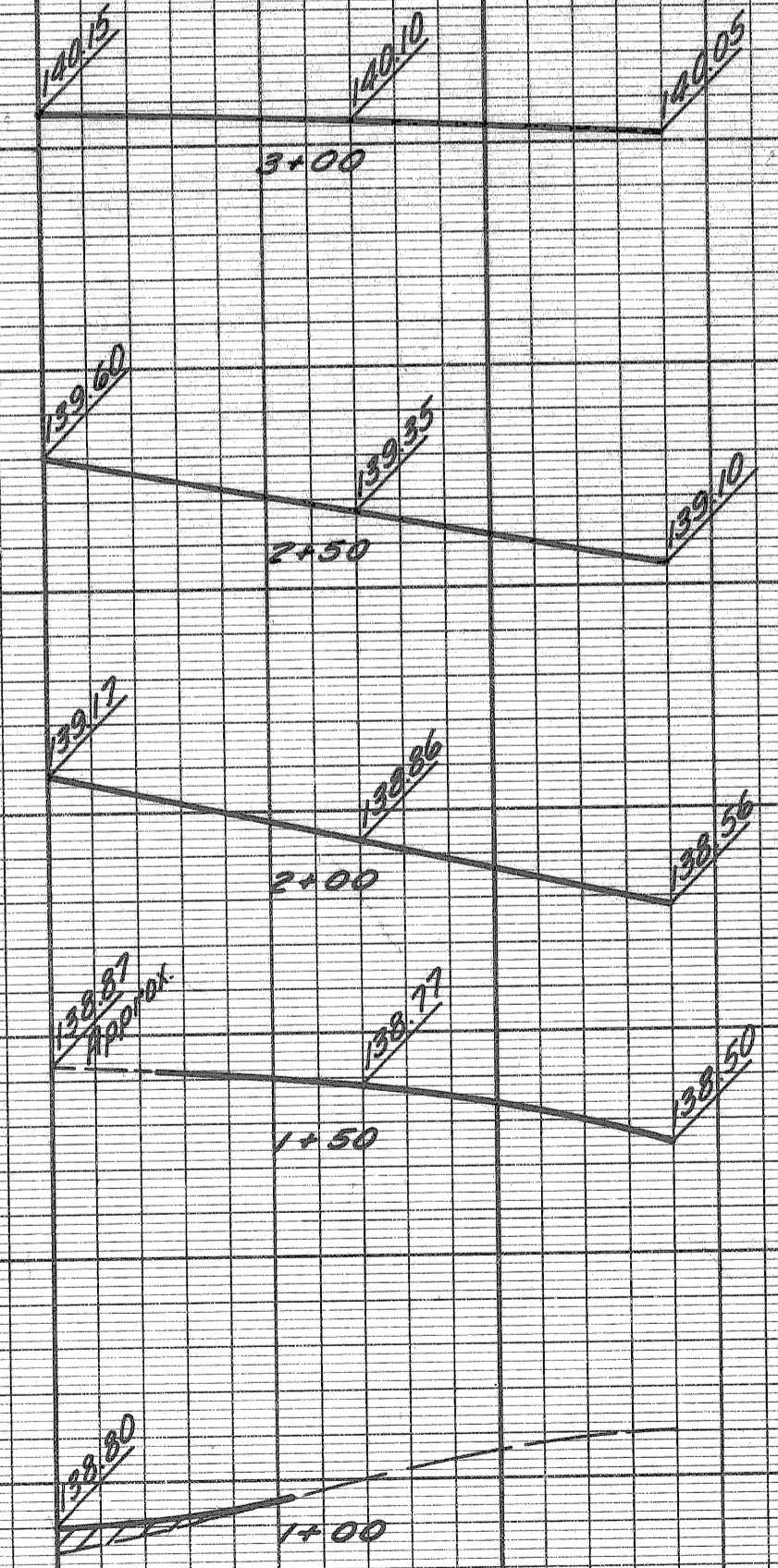
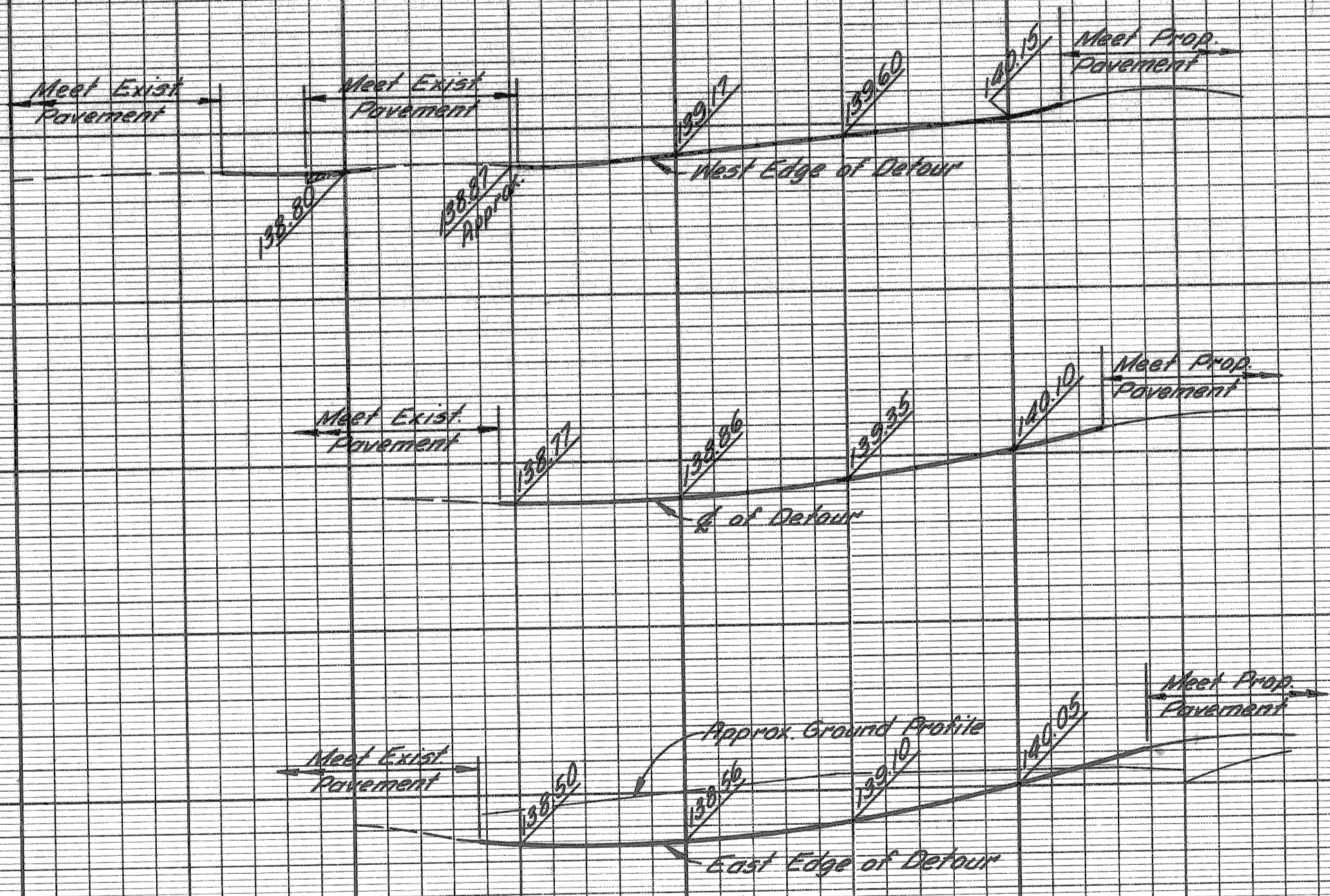
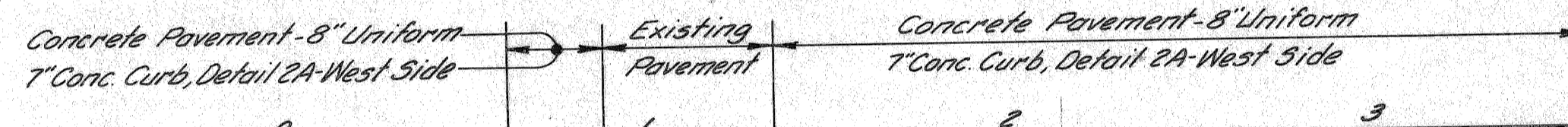
B.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82251	Wayne	Wayne	Detour	34	

ALL WORK THIS SHEET  
CONTROL SECTION 82251B-50

QUANTITIES THIS SHEET  
Conc. Curb, Det. 2A ..... 223 Lin. Ft.  
Bit. Conc. Leveling Course ..... 4 Tons  
Bit. Conc. Wearing Course, 3/1A ..... 4 Tons  
Bituminous Bond Coat ..... 12 Gal.  
Temp. Conc. Sidewalk ..... 1158 Sq. Ft.

See Sh. #2 for Billing of  
1. All Barricades  
2. Temporary Steel Beam Guard Rail  
3. Bit. Materials Required to Maintain  
Traffic During Construction of  
Approach Pavement.

NOTES:  
1. For Russell Bridge, See S-28 of 82195E  
2. For Pavement Joint Legend, See Sh. #10.  
3. Existing Sidewalk to remain



PROFILES  
Hor. 1"=40'  
Scale: Vert. 1"=8'

CROSS-SECTIONS  
Hor. 1"=8'  
Scale: Vert. 1"=8'

EARTH EXCAVATION = 0\*  
\* Excavation within the general cut lines  
is included with the item earth on 12.

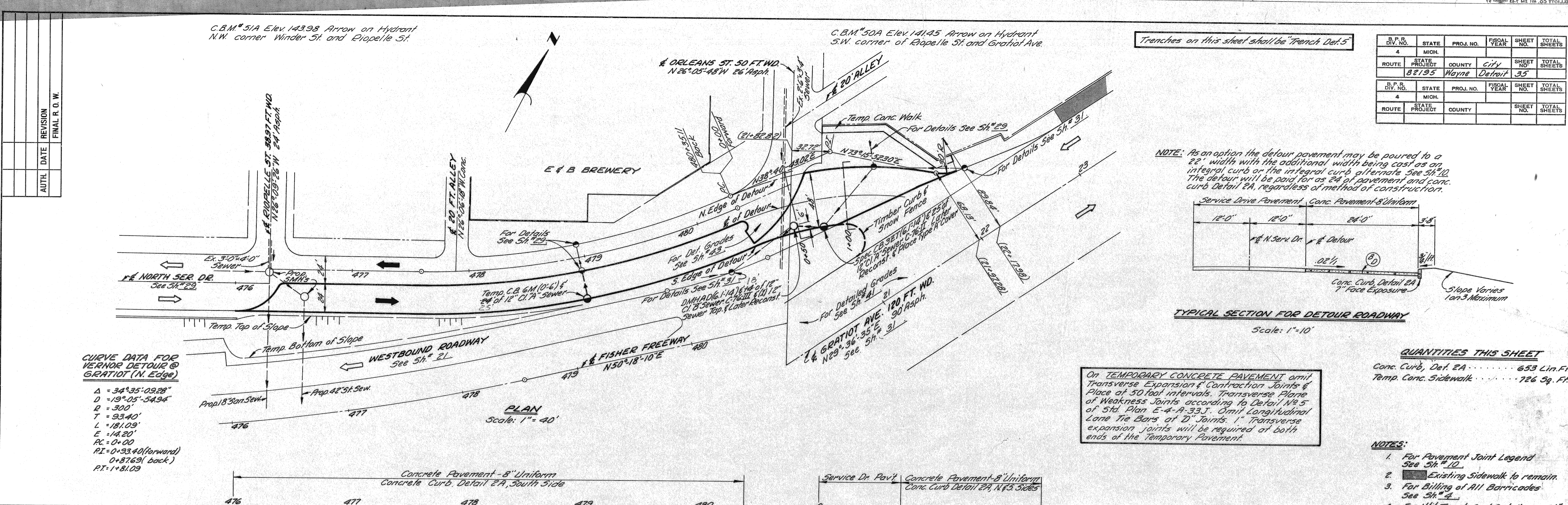
PLAN & PROFILES FOR  
RUSSELL ST. DETOUR

N. McLEAN  
 M. POLITO  
 R. COMLY  
 APPROVED  
 766  
 766  
 766

OPERATION  
 SURVEYED  
 PLAN PLOTTED  
 PROFILE PLOTTED  
 PROFILE CHECKED  
 PRELIMINARY GRADE  
 FEDERAL INSPECTION

BY  
 DATE  
 OPERATION  
 SURVEYED  
 PLAN PLOTTED  
 PROFILE PLOTTED  
 PROFILE CHECKED  
 PRELIMINARY GRADE  
 FEDERAL INSPECTION

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



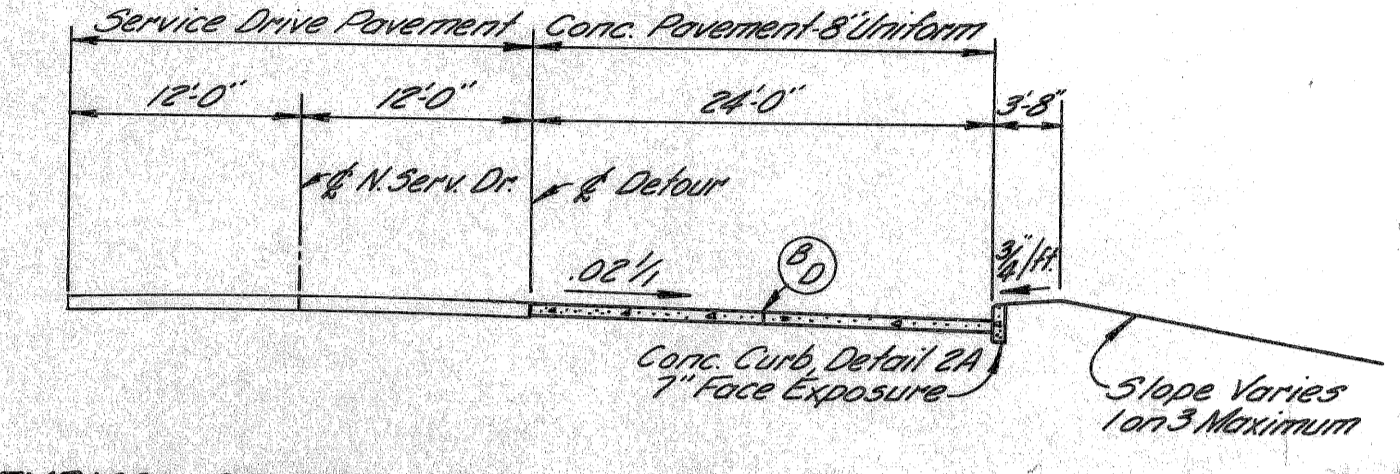
**CURVE DATA FOR VERNOR DETOUR @ GRATIOT (N. Edge)**  
 $\Delta = 34^{\circ}35'09.28''$   
 $D = 19^{\circ}05'54.94''$   
 $R = 300'$   
 $T = 93.40'$   
 $L = 181.09'$   
 $E = 14.20'$   
 $PC = 0+00$   
 $PT = 0+33.40$  (forward)  
 $0+37.63$  (back)  
 $PT = 1+81.09$

**PLAN**  
 Scale: 1" = 40'

Trenches on this sheet shall be "Trench Det. 5"

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			35	
ROUTE	STATE	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Wayne	Detour	35	
DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.			35	
ROUTE	STATE	COUNTY	CITY	SHEET NO.	TOTAL SHEETS

**NOTE:** As an option the detour pavement may be poured to a 22' width with the additional width being cast as an integral curb or the integral curb alternate. See Sh. 20. The detour will be paid for as 24' of pavement and conc. curb Detail 2A, regardless of method of construction.



**TYPICAL SECTION FOR DETOUR ROADWAY**  
 Scale: 1" = 10'

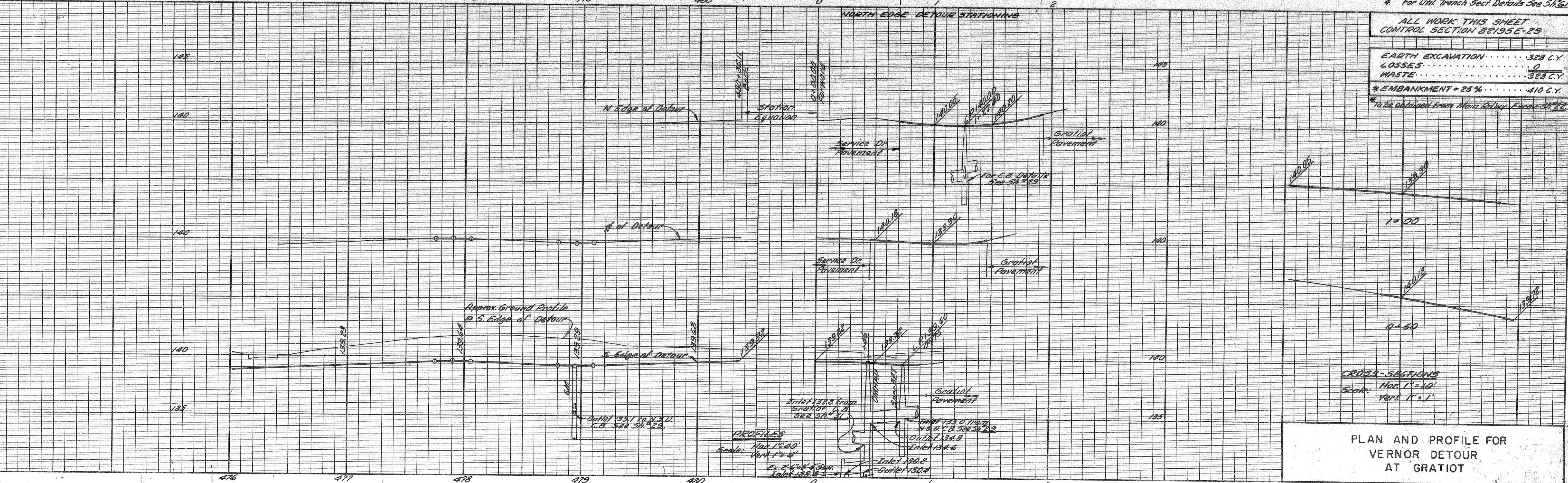
**QUANTITIES THIS SHEET**  
 Conc. Curb, Det. 2A ..... 653 Lin. Ft.  
 Temp. Conc. Sidewalk ..... 726 Sq. Ft.

On TEMPORARY CONCRETE PAVEMENT omit Transverse Expansion & Contraction Joints & Place at 50 foot intervals. Transverse Plane of Weakness Joints according to Detail N° 5 of Std. Plan E-4-A-33J. Omit Longitudinal Lane Tie Bars at "D" Joints. 1" Transverse expansion joints will be required at both ends of the Temporary Pavement.

- NOTES:**
- For Pavement Joint Legend See Sh. 10.
  - Existing Sidewalk to remain.
  - For Billing of All Barricades See Sh. 4.
  - For Util. Trench Sect. Details See Sh. 6.

**ALL WORK THIS SHEET CONTROL SECTION 82195-E-29**

EARTH EXCAVATION ..... 328 C.Y.  
 LOSSES ..... 0  
 WASTE ..... 328 C.Y.  
 \* EMBANKMENT + 25% ..... 410 C.Y.  
 \* To be obtained from Main Relay. Excl. Sh. 26.



**CROSS-SECTIONS**  
 Scale: Hor. 1" = 10'  
 Vert. 1" = 1'

**PLAN AND PROFILE FOR VERNOR DETOUR AT GRATIOT**

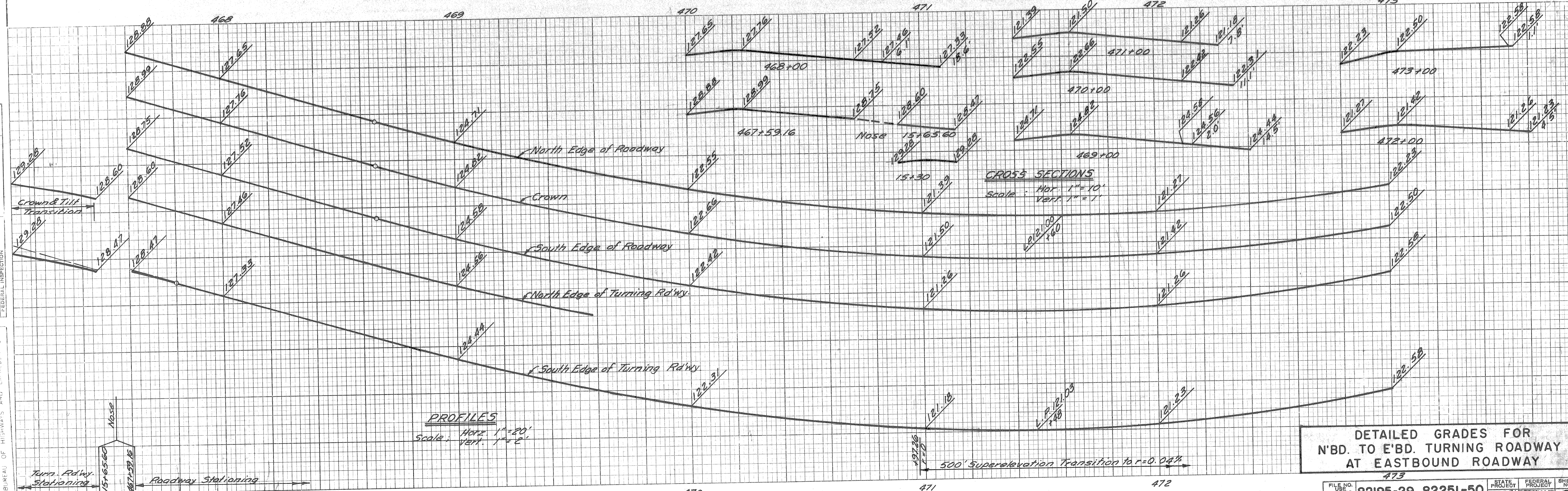
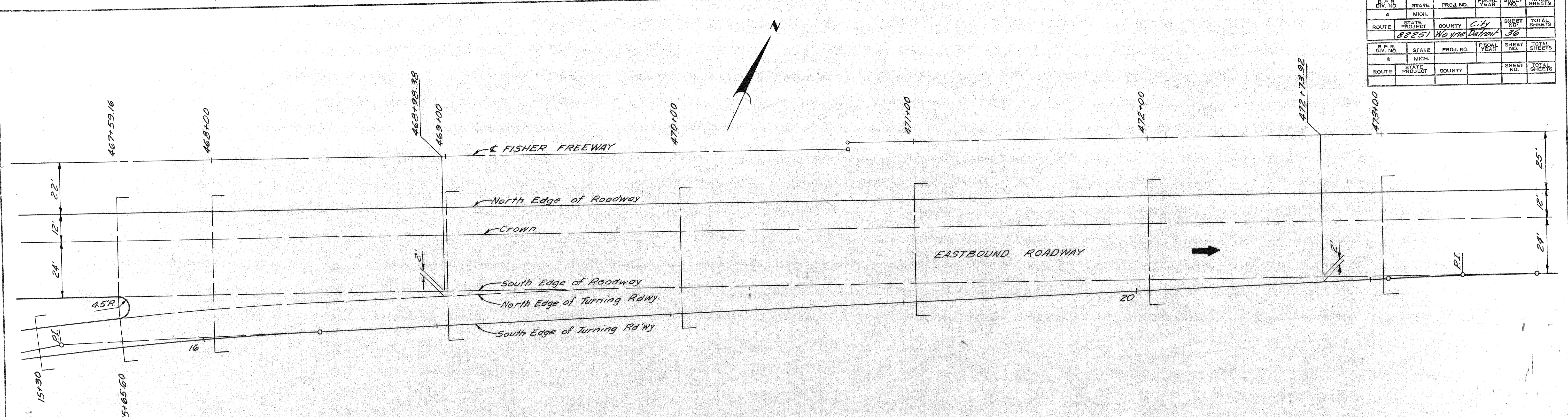
OPERATION	DATE	BY
PRELIMINARY R.O.W. CHECKED		
FINAL DESIGN CHECKED		
FRAGILE DESIGN CHECKED		
FINAL R.O.W. CHECK		
CONTRACT DOCUMENTS CHECKED		
CONTRACT SPECIFICATIONS CHECKED		
SQUAD		

OPERATION	DATE	BY
SURVEYED		
PLAN PLOTTED		
PROFILES CALCULATED		
PROFILES CHECKED		
PROFILES INSTRUCTIONS		
FEDERAL INSPECTION		

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

PREPARED BY	DATE
N. McLEAN	
L. HRET	
R. COMLY	
Approved	

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
82251	Wayne	Detroit		36	



DETAILED GRADES FOR  
 N'BD. TO EAST. TURNING ROADWAY  
 AT EASTBOUND ROADWAY

FILE NO.	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
82195-29, 82251-50	82251	1751(1205)	36

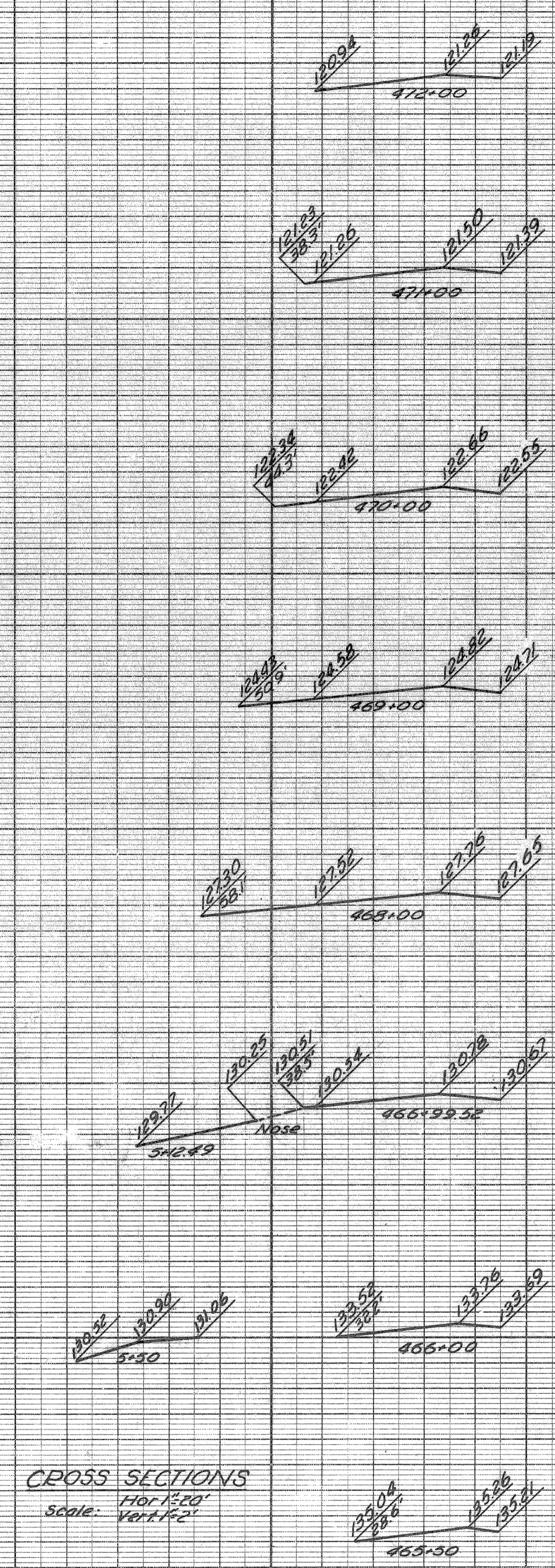
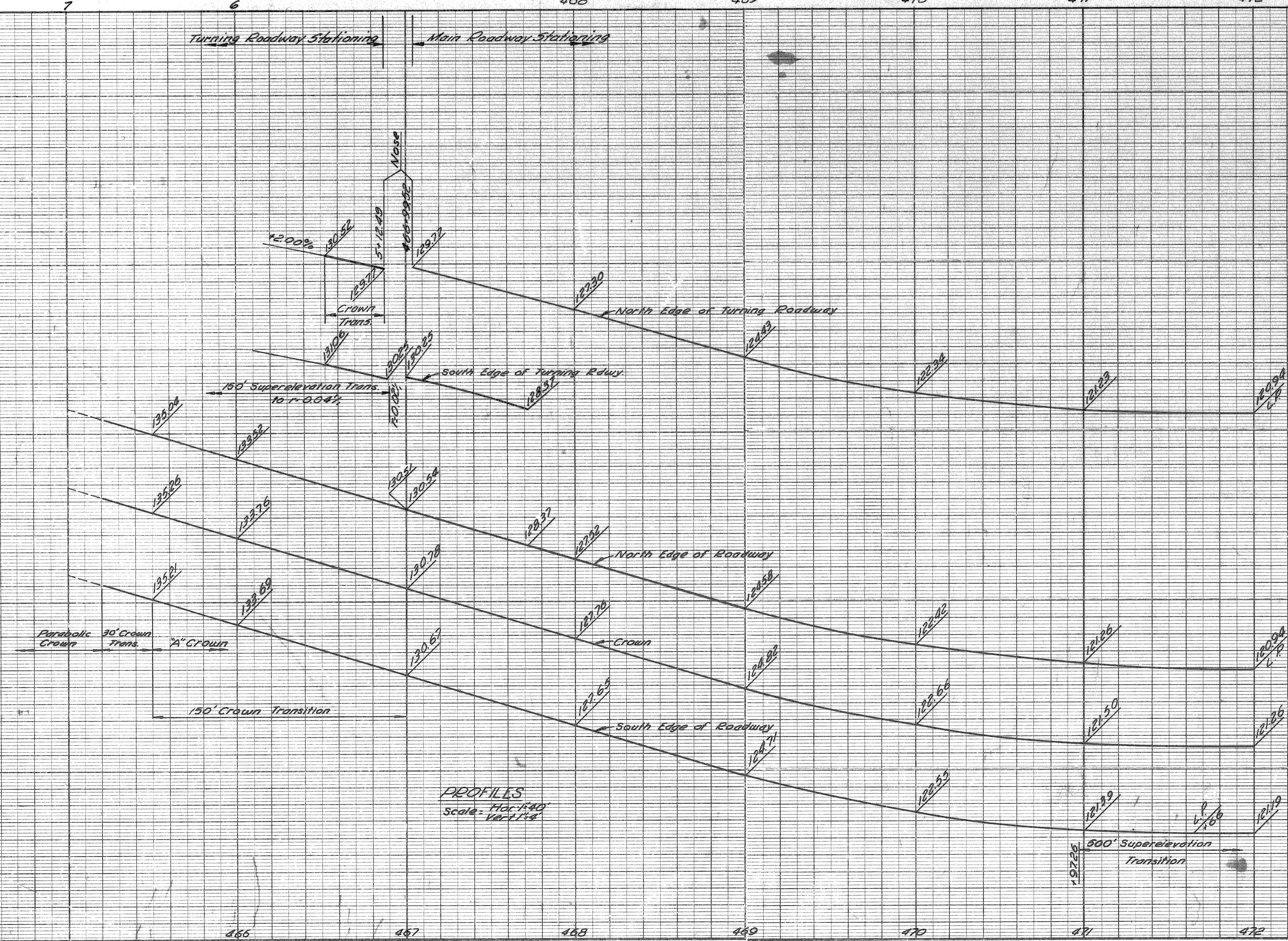
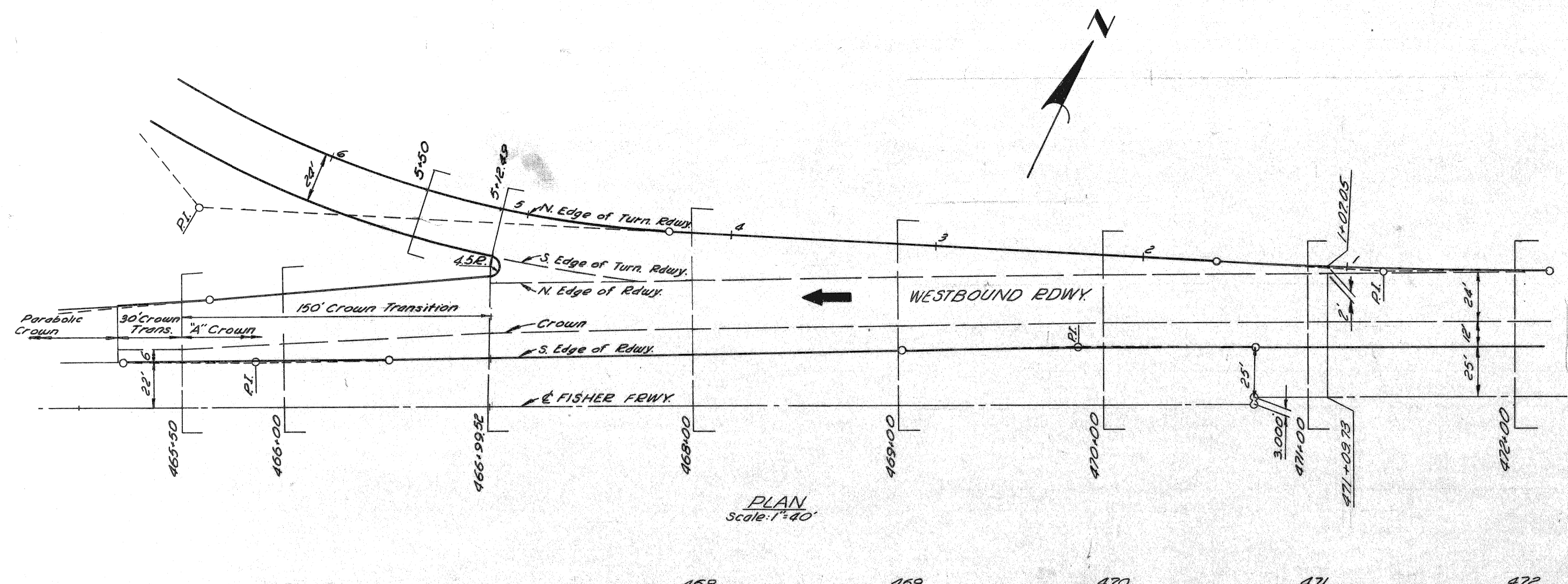
DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
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 PROFILE PLOTTED: \_\_\_\_\_  
 PROFILE CHECKED: \_\_\_\_\_  
 PRELIMINARY QUANTITIES CHECKED: \_\_\_\_\_  
 FEDERAL INSPECTION: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 OPERATION: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLAN PLOTTED: \_\_\_\_\_  
 PROFILE PLOTTED: \_\_\_\_\_  
 PROFILE CHECKED: \_\_\_\_\_  
 PRELIMINARY QUANTITIES CHECKED: \_\_\_\_\_  
 FEDERAL INSPECTION: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 OPERATION: \_\_\_\_\_  
 PRELIMINARY R.O.W. CHECKED: \_\_\_\_\_  
 FINAL DESIGN CHECKED: \_\_\_\_\_  
 FINAL R.O.W. CHECK: \_\_\_\_\_  
 QUANTITIES CHECKED: \_\_\_\_\_  
 SQUARE: \_\_\_\_\_

PLANS PREPARED BY: \_\_\_\_\_  
 CITY OF DETROIT: \_\_\_\_\_  
 CITY ENGINEER: \_\_\_\_\_  
 BUREAU OF HIGHWAYS AND TOWNSHIPS

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 OPERATION: \_\_\_\_\_



DETAILED GRADES FOR  
 WBD. TO NBD. & SBD. TURNING ROADWAY  
 AT WESTBOUND ROADWAY

FILE NO. 82195-29, 82251-50  
 STATE PROJECT 82251  
 FEDERAL PROJECT 175-1(20)51  
 SHEET NO. 37

B. P. R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MI.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82251	Wayne	Detroit		37	

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

OPERATION	DATE
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FINAL DESIGN	
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QUANTITIES CHECKED	
SQUAD	

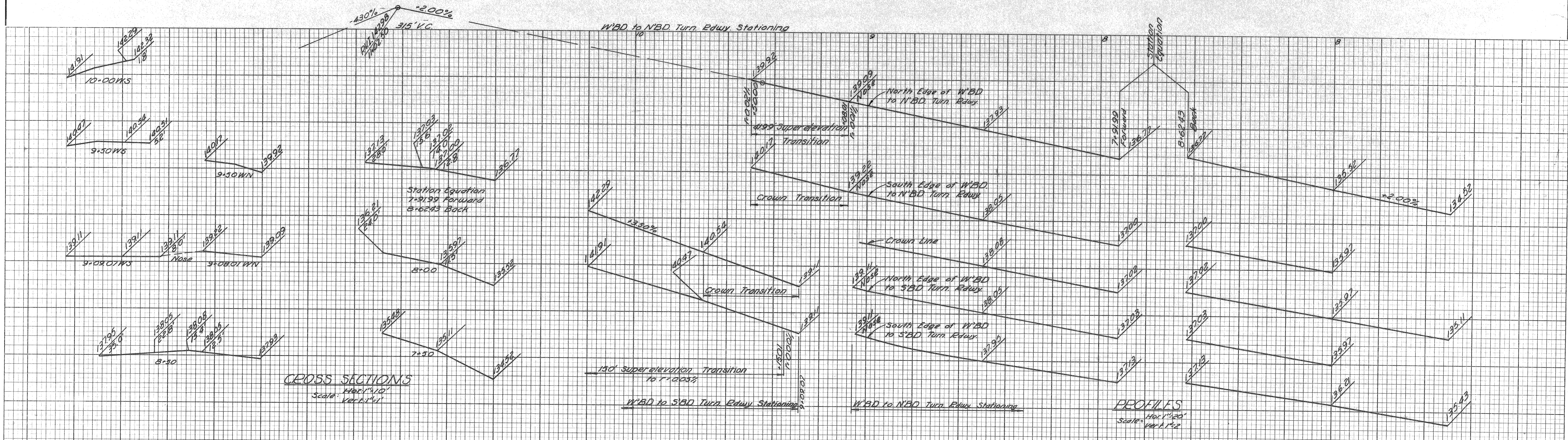
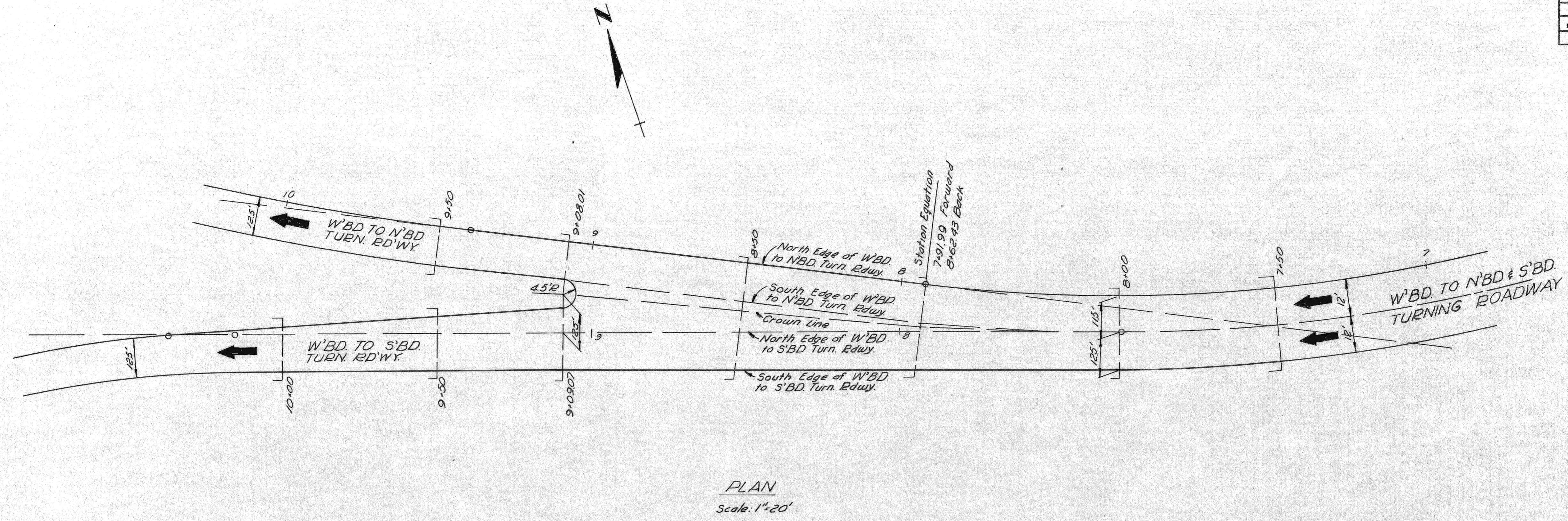
BY	DATE

OPERATION	DATE
SURVEYED	
PLAN PLOTTED	
PROFILE PLOTTED	
PRELIMINARY GRADE	
FEDERAL INSPECTION	

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

REVISION	DATE	BY
FINAL R.O.W.		

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
	82251	Wayne	Detroit	38	



DETAILED GRADES FOR  
 W'BD. TO N'BD. TURNING ROADWAY  
 AT W'BD. TO S'BD. TURNING ROADWAY

FILE NO.	82251-29	STATE PROJECT	82251	FEDERAL PROJECT	175-112151	SHEET NO.	38
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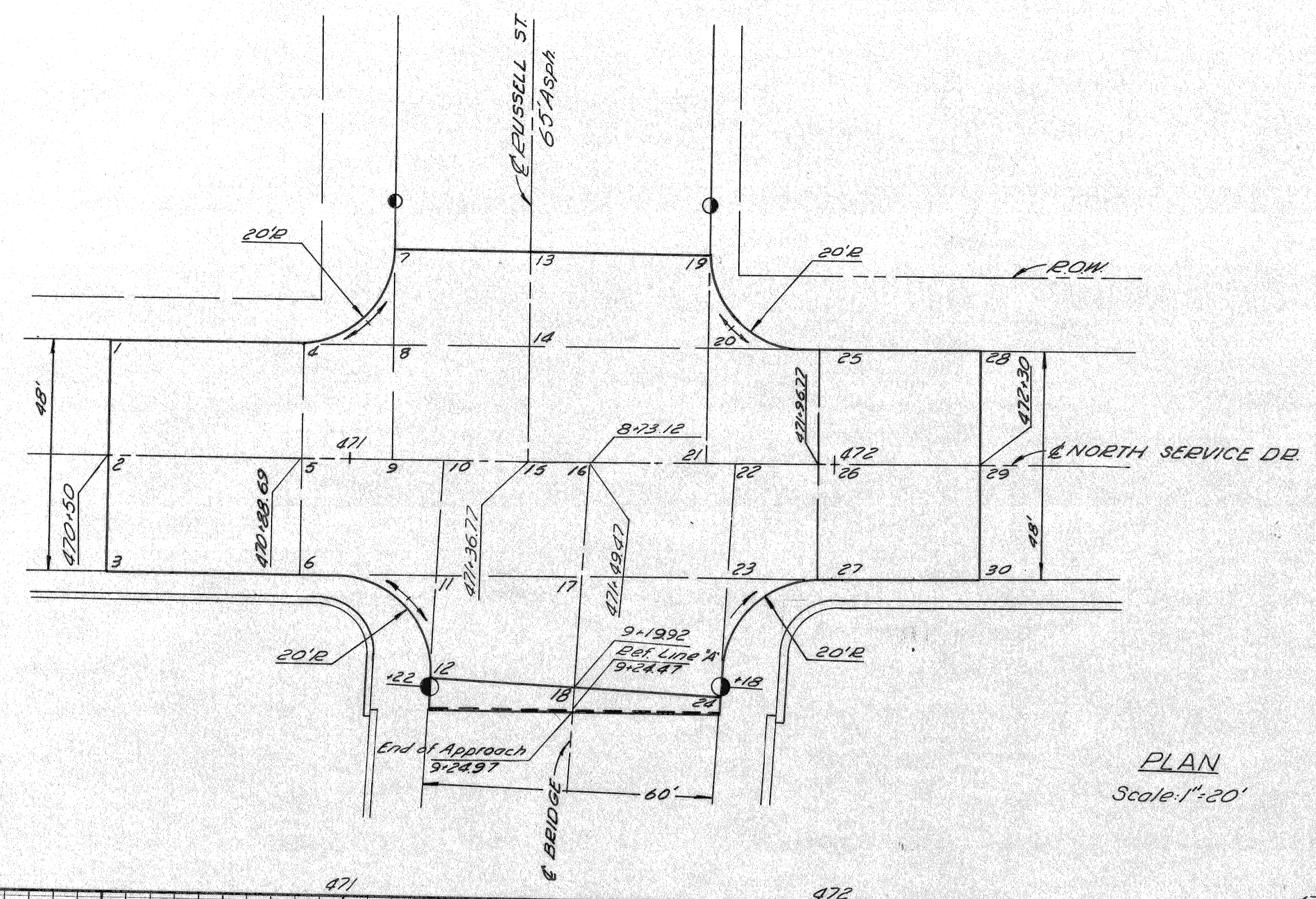
SCHEMATIC LEADER  
 N. McLEAN  
 L. HART  
 766  
 766  
 766  
 766  
 766

OPERATION  
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 FINAL DESIGN CHECKED  
 TRAGEDY CHECKED  
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 QUANTITIES CHECKED  
 SQUAD

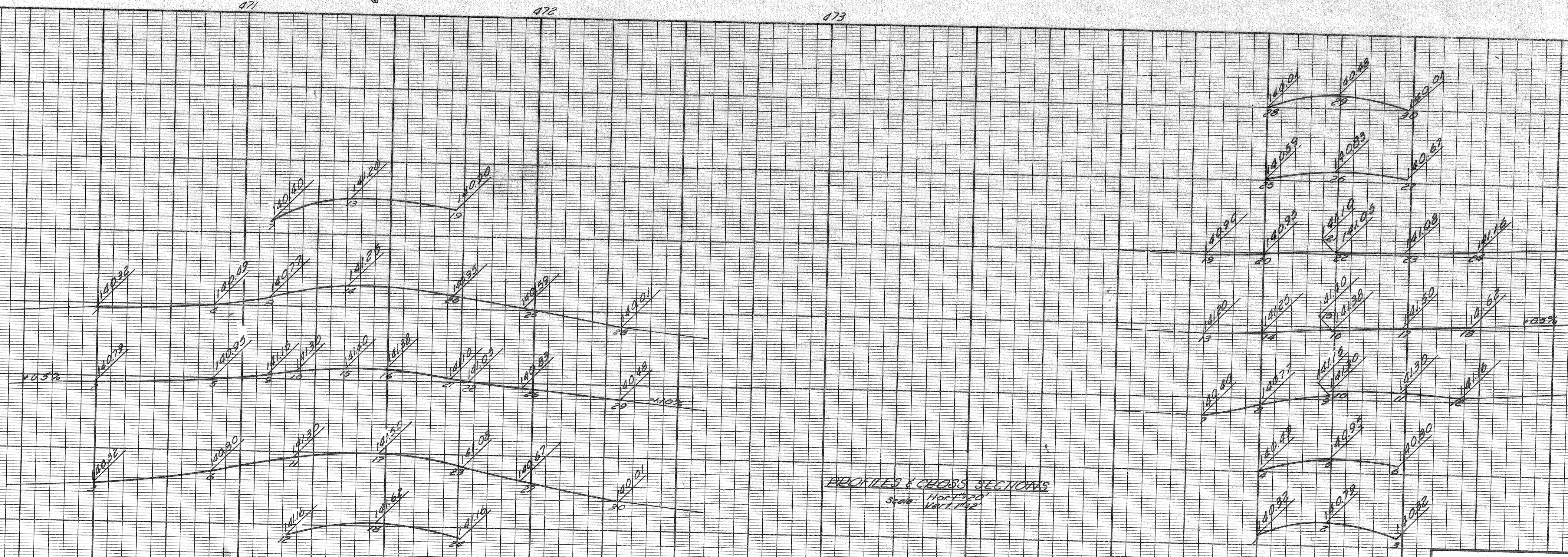
SURVEYED BY  
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 PROFILE PLOTTED  
 PROFILE CHECKED  
 PRELIMINARY GRADE  
 FEDERAL INSPECTION

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

AUTH.	DATE	REVISION	FINAL R. O. W.



PLAN  
 Scale: 1"=20'



PROFILES & CROSS SECTIONS  
 Scale: 1"=20'

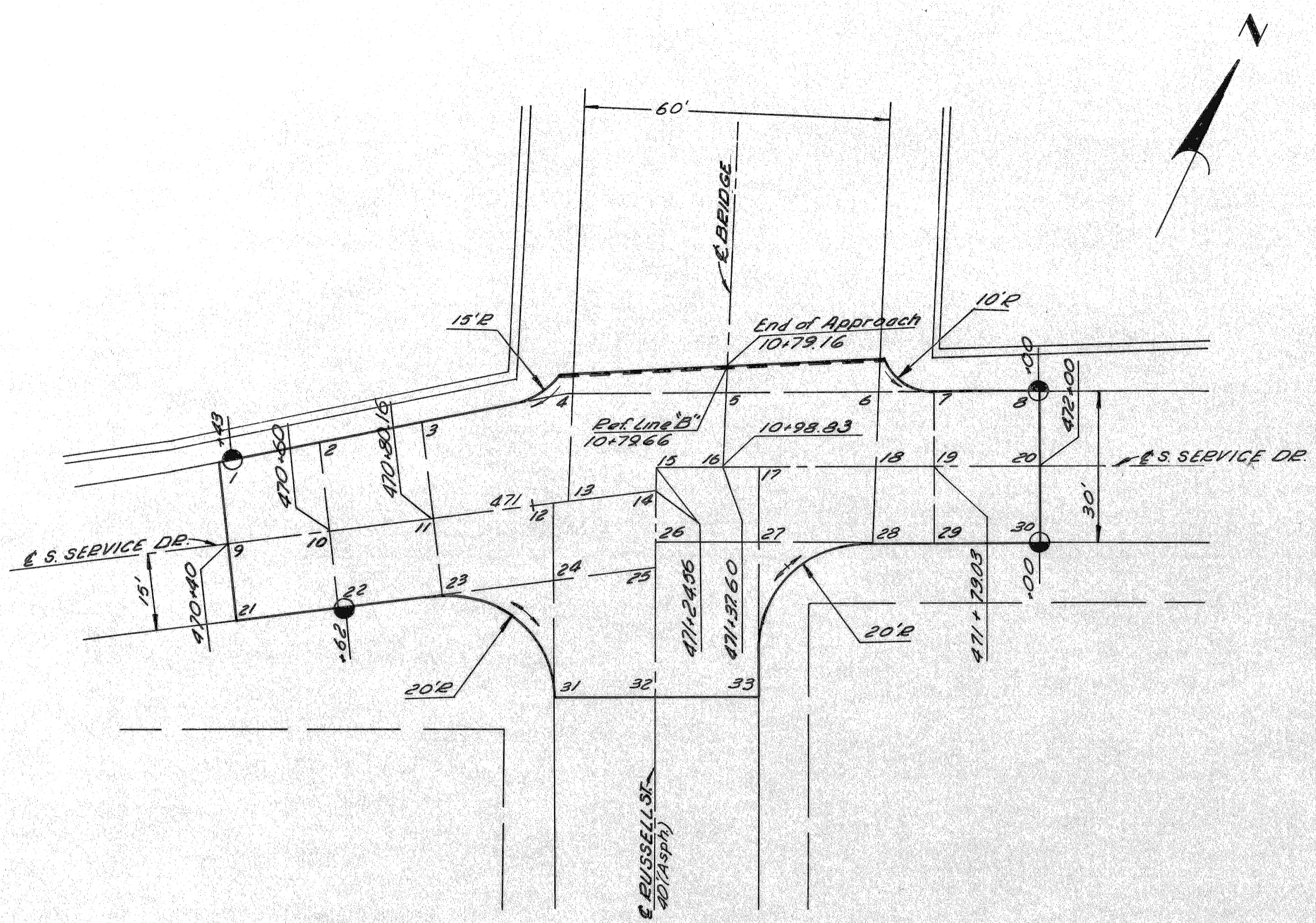
DETAILED GRADES FOR  
 NORTH SERVICE DRIVE  
 AT RUSSELL ST.

D.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
4	82195	Wayne	Detroit	39	



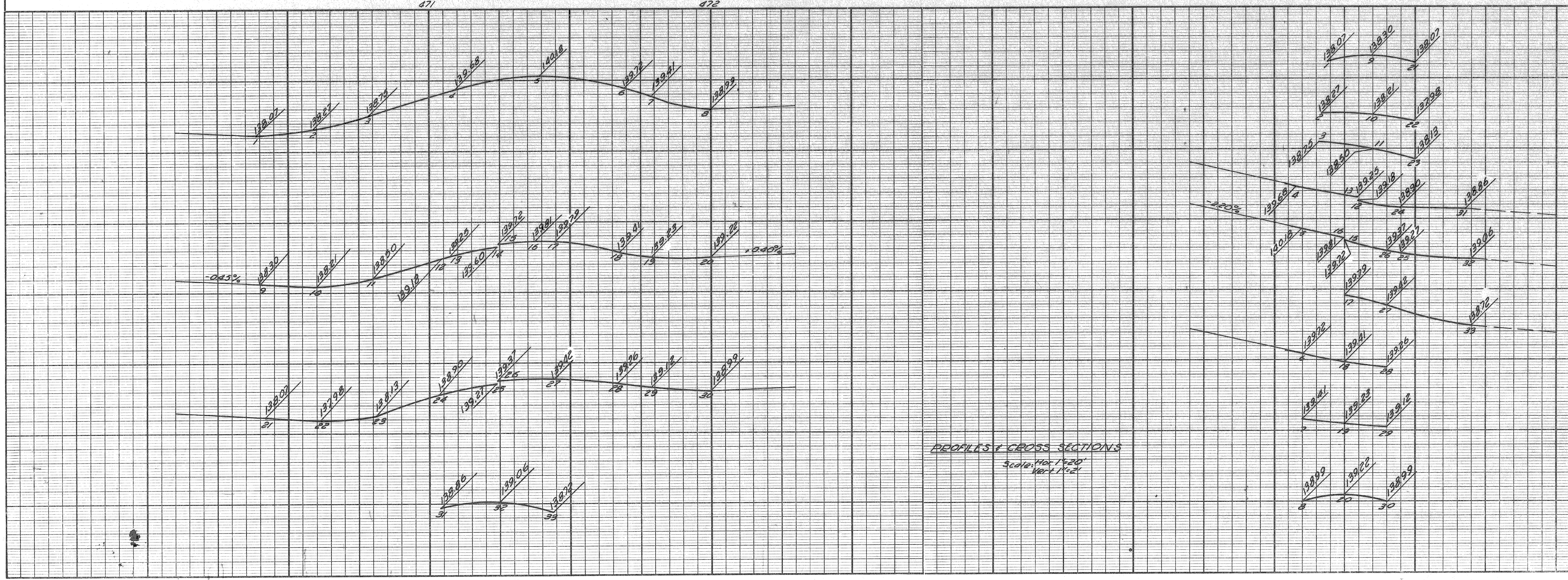
DATE: 7-66  
 BY: N. McLEAN, L. HART, R. COMLY  
 OPERATION: PRELIMINARY R.O.W. CHECKED, FINAL DESIGN CHECKED, TRACED DESIGN CHECKED, FINAL R.O.W. CHECK, QUANTITIES CHECKED, SQUAD

AUTH.	DATE	REVISION
		FINAL R.O.W.



PLAN  
 Scale: 1"=20'

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 OPERATION: SURVEYED, PLAN PLOTTED, PROFILE PLOTTED, PROFILE CHECKED, PRELIMINARY GRADE, FEDERAL INSPECTION



PROFILES & CROSS SECTIONS  
 Scale: Max 1"=20'  
 Ver 1"=2'

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
4	82195	Wayne	Detroit	40	

DETAILED GRADES FOR  
 SOUTH SERVICE DRIVE  
 AT RUSSELL ST.

PLANS PREPARED BY: \_\_\_\_\_  
 CITY OF DETROIT  
 DEPARTMENT OF PUBLIC WORKS  
 CITY ENGINEER: \_\_\_\_\_  
 BUREAU OF HIGHWAYS AND EXPRESSWAYS

DATE	BY	OPERATION	PREPARED BY
		DESIGN CHECKED	N. McLEAN
		FINAL DESIGN CHECKED	M. POLITO
		TRAFFIC CHECKED	R. COMLY
		QUANTITIES CHECKED	
		SUBMITTAL	

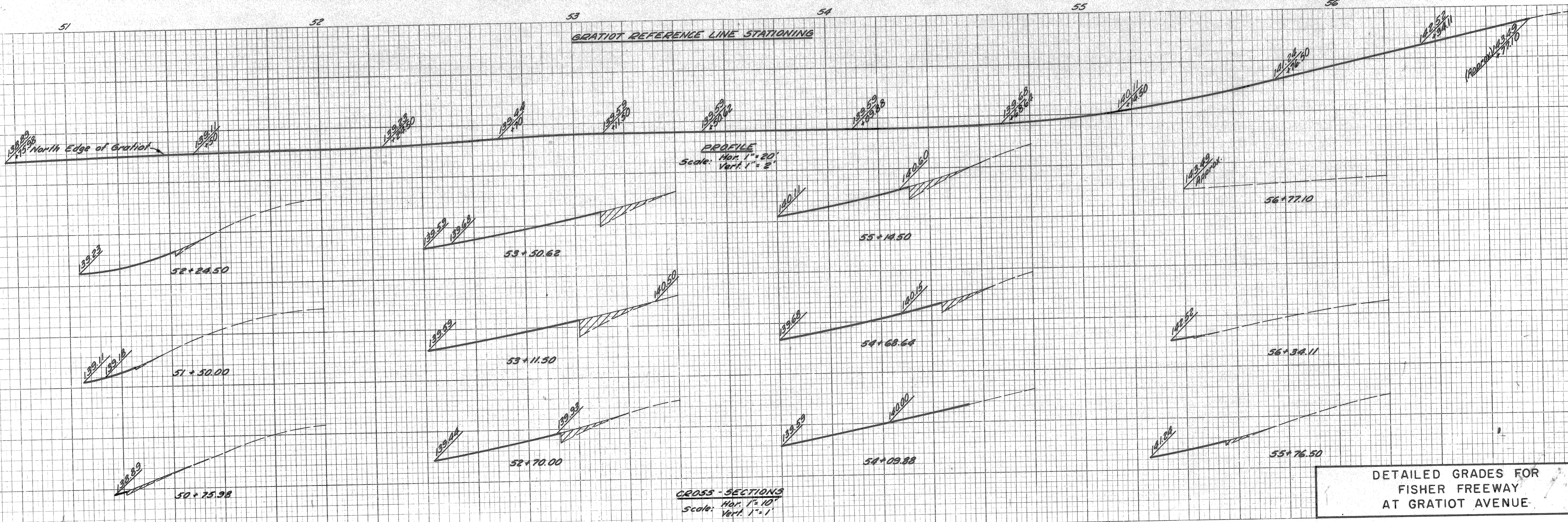
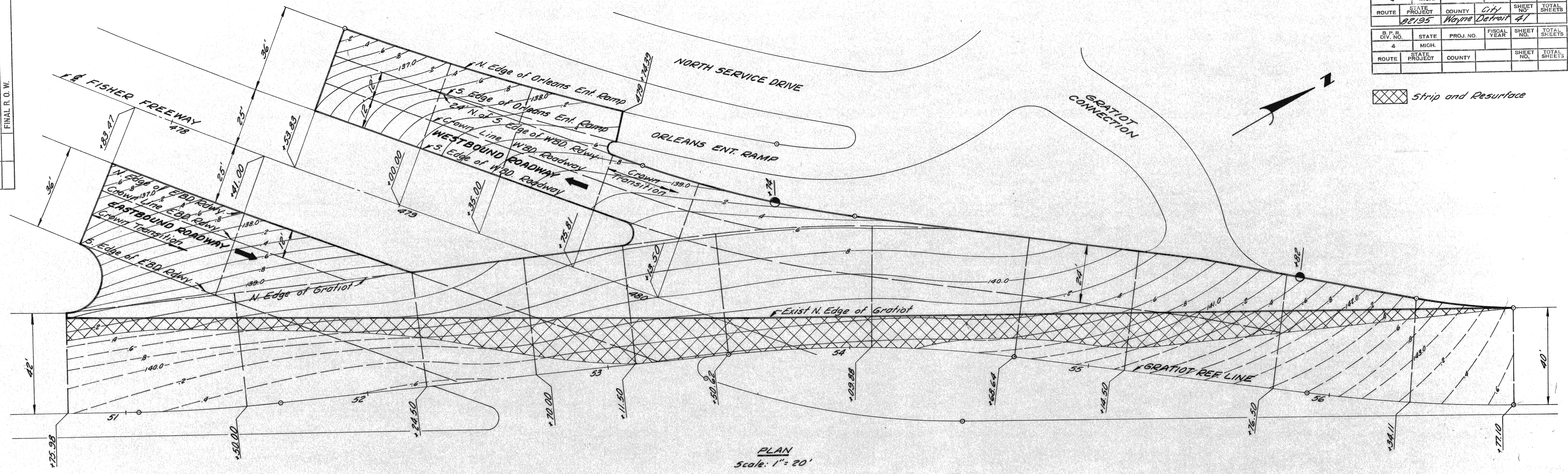
DATE	BY	OPERATION
		SURVEYED
		PLANS CHECKED
		PROFILES CHECKED
		PRELIMINARY GRADES
		GRADE INSPECTION
		FEDERAL INSPECTION

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

AUTH.	DATE	REVISION
		FINAL R.O.W.

D.P.R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne	Detroit	41		

Strip and Resurface



DETAILED GRADES FOR  
FISHER FREEWAY  
AT GRATIOT AVENUE

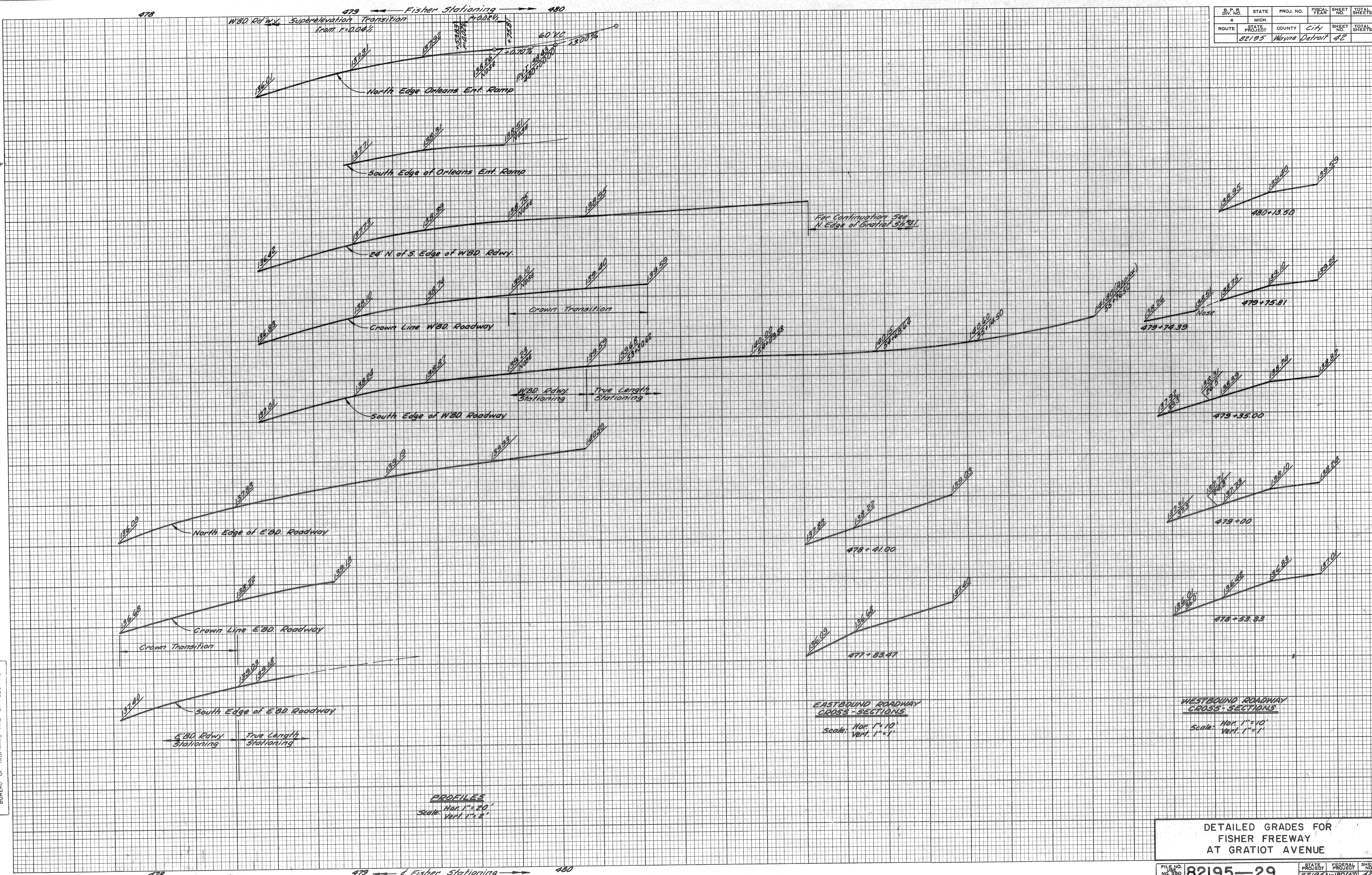
FILE NO.	82195-29	STATE PROJECT	82195	FEDERAL PROJECT	U-180(42)	SHEET	41
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B. P. R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
82195	Wayne Detroit			42	

SOUND LEADS  
 DRAWN BY  
 CHECKED BY  
 APPROVED  
 N. MURPHY  
 M. POLITO  
 R. COMLY  
 [Signature]

BY  
 DATE  
 PLOTTED  
 COMPUTED  
 CHECKED

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



DETAILED GRADES FOR  
 FISHER FREEWAY  
 AT GRATIOT AVENUE

FILE NO.	82195-29	STATE PROJECT	82195	FEDERAL PROJECT	M-180(42)	SHEET NO.	42	TOTAL SHEETS	
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7-66  
7-66  
7-66

7-66  
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7-66  
7-66  
7-66

OPERATIONS:  
 PRELIMINARY R.O.W. CHECKED  
 FINAL DESIGN  
 FINAL R.O.W. CHECK  
 QUANTITIES  
 QUANTITY CHECKED

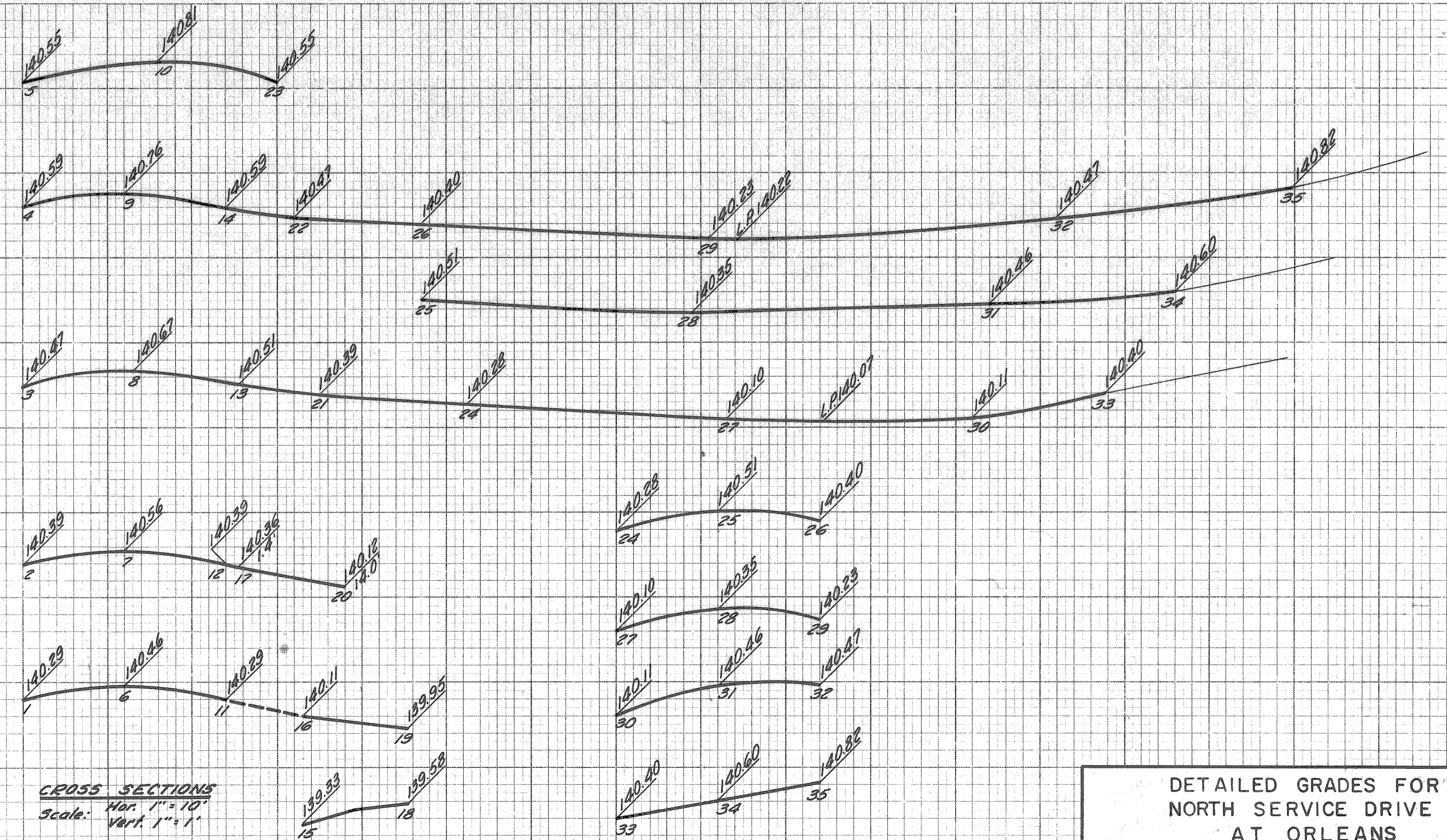
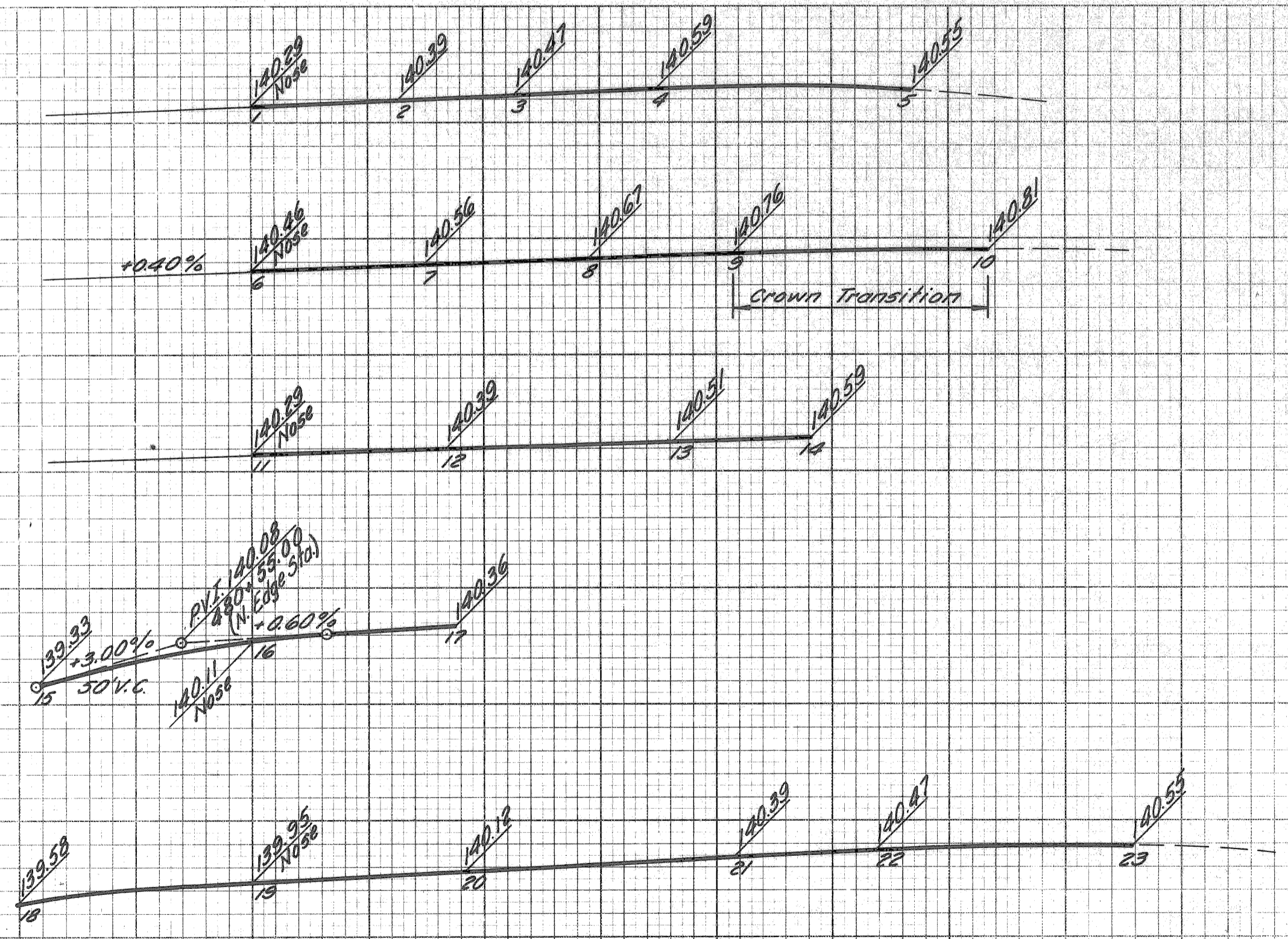
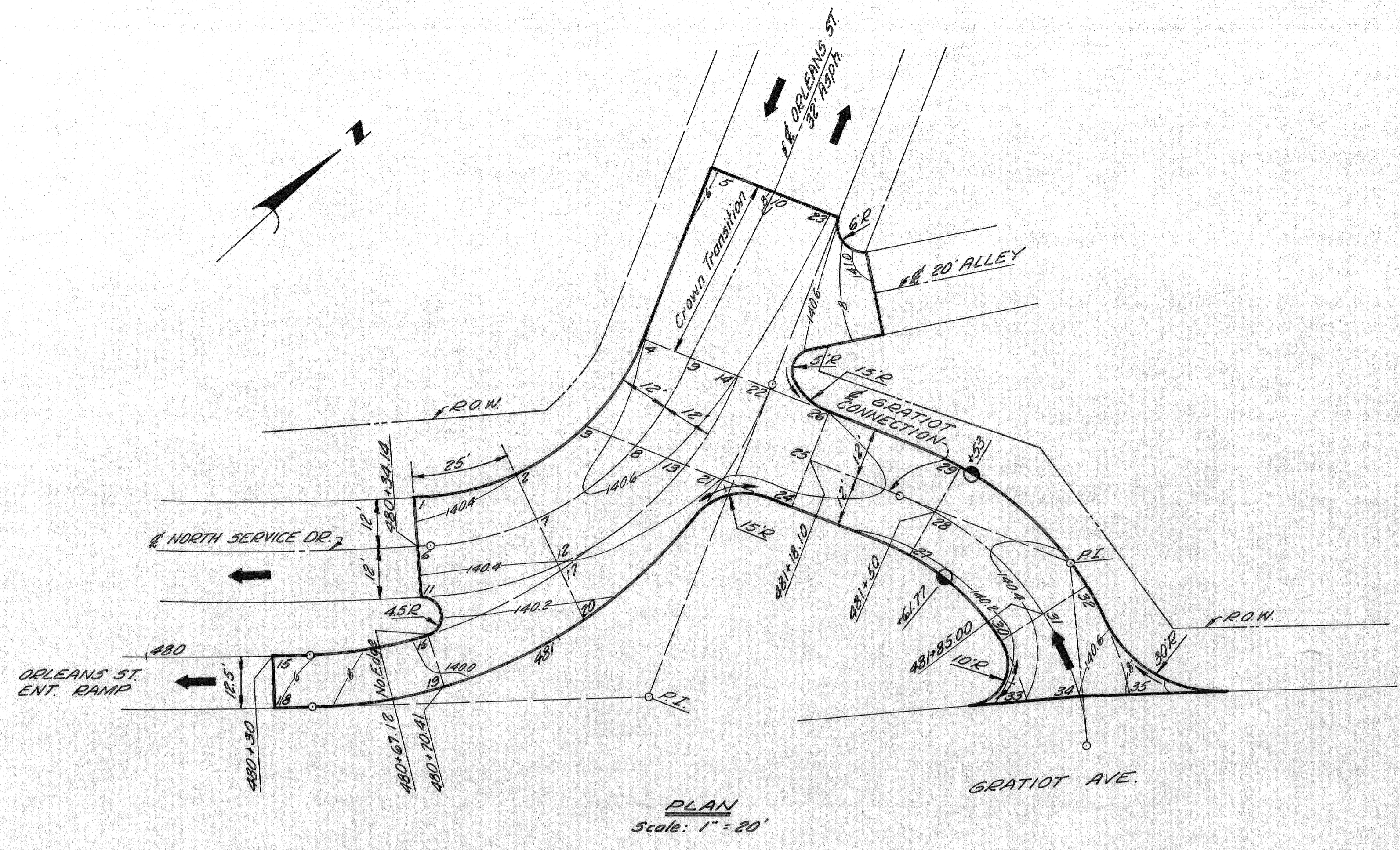
DATE  
 BY

OPERATION:  
 SURVEYING  
 PLAN DEVELOPED  
 PROFILE PLOTTED  
 PRELIMINARY GRADE  
 DESIGN INSPECTION  
 FEDERAL INSPECTION

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

AUTH.	DATE	REVISION	FINAL R.O.W.

S.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	43	



DETAILED GRADES FOR  
 NORTH SERVICE DRIVE  
 AT ORLEANS

FILE NO. 82195-29  
 PROJECT NO. 350  
 STENCIL

STATE PROJECT 82195  
 FEDERAL PROJECT 1-180(42)  
 SHEET NO. 43