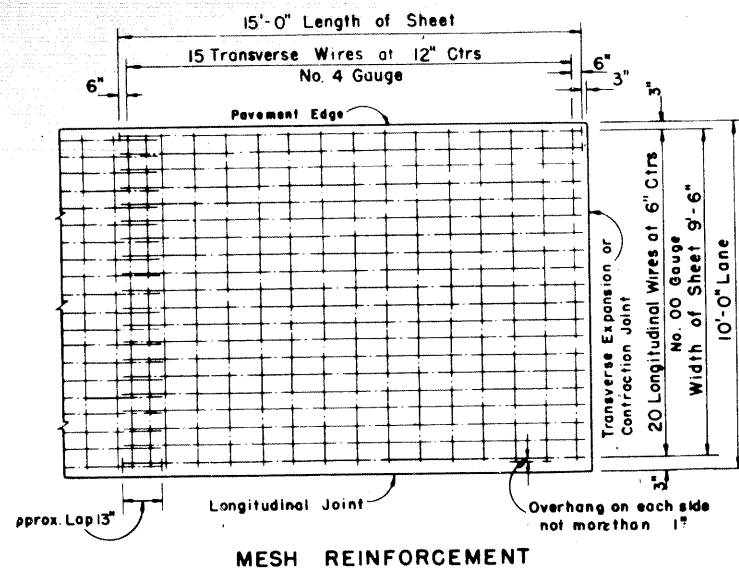
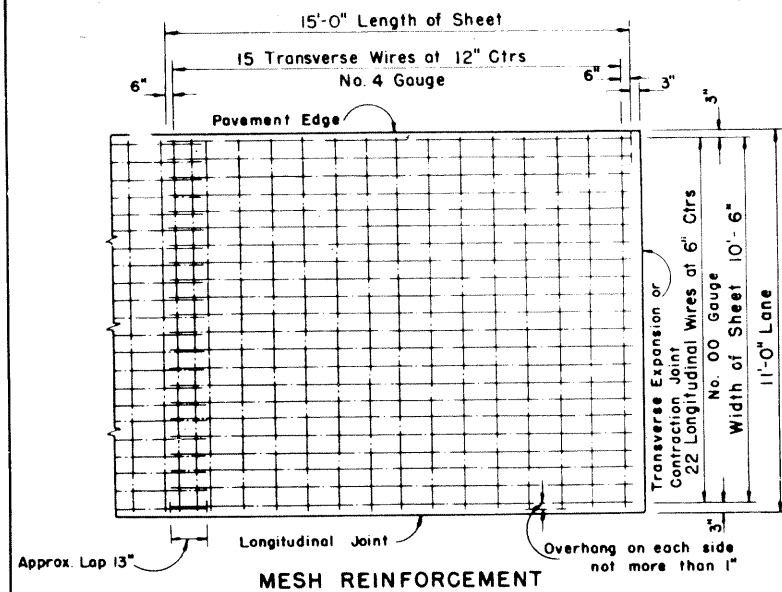


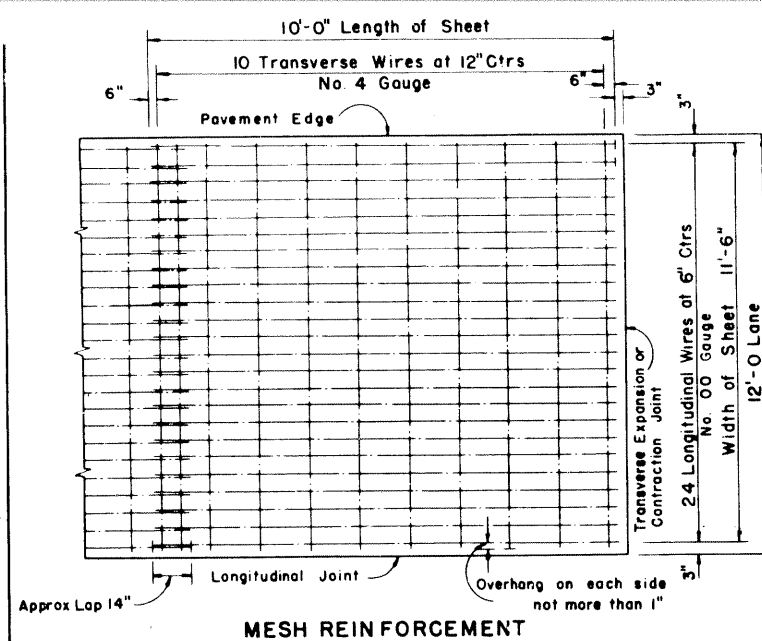
REINFORCEMENT FOR 10 FT. LANES



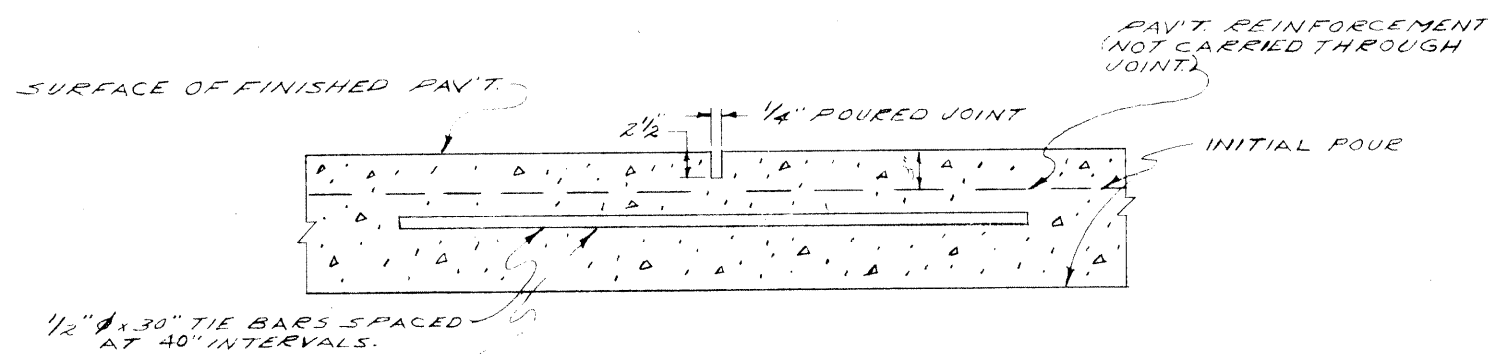
REINFORCEMENT FOR 11 FT. LANES



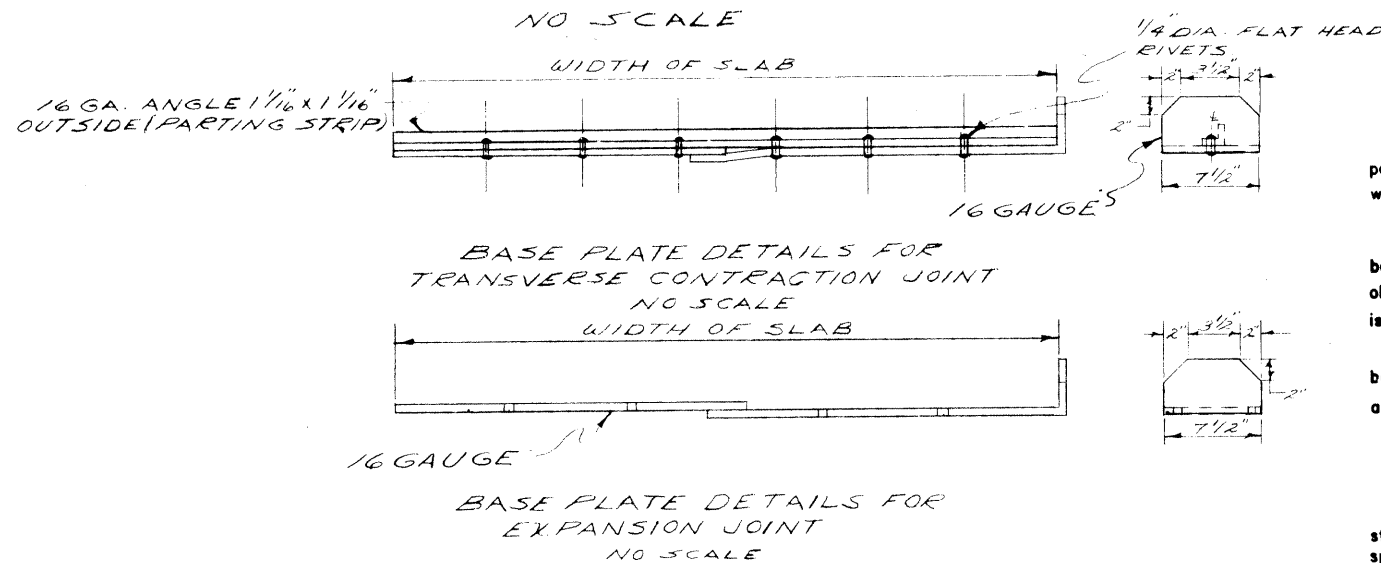
REINFORCEMENT FOR 12 FT. LANES



STANDARD PLAN FOR PAVEMENT REINFORCEMENT



D-LONGITUDINAL LANE TIE JOINT DETAIL



The pavement reinforcement shall be shipped and delivered to the work in flat sheets or mats.

The reinforcement shall be placed 3 inches below the surface of the finished pavement.

Pavement reinforcement will be measured by area in square yards. The area paid for shall be equal to the square yards of pavement specified or required to be reinforced with no allowance for necessary laps or splices.

Where the unit width of pavement slab is more than shown, the reinforcement requirements shall be the same as shown on this standard plan except that the reinforcement shall be widened by adding split sheets or mats or by inserting special sheets or mats. Side laps shall be not less than the spacing of longitudinal wires or bars for wire mesh and bar mat, and the width of diamond for expanded metal mesh.

Where the unit width of pavement slab is less than shown, the reinforcement requirements shall be the same as shown on this standard plan. Special sheets of the required width may be used or standard sheets may be cut to the required size. Side laps shall be not less than the spacing of longitudinal wires or bars for wire mesh and bar mat, and the width of diamond for expanded metal mesh.

Size of wires are based on U.S. Steel Wire Gauge and weights for Mesh Reinforcement are according to the Wire Reinforcement Institute Tables. Weights of bars in Bar Mat Reinforcement are according to the table for weights as shown in the Standard Specifications.

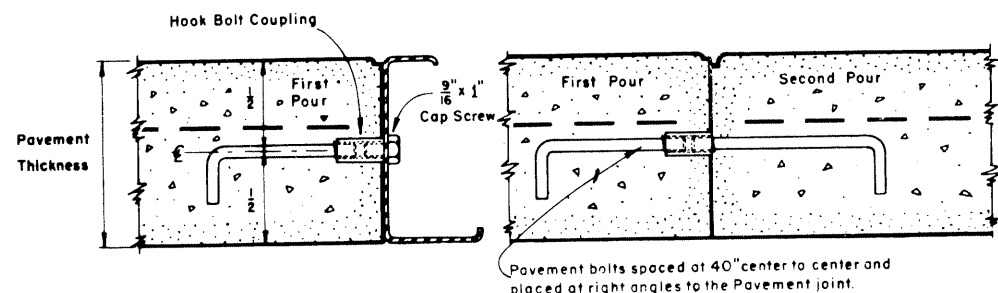
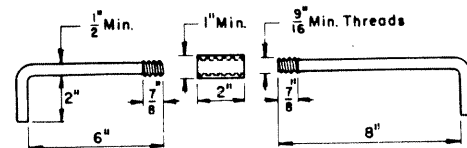
Reinforcement for 12 foot lanes may consist of sheets 15 feet long with a longitudinal lap. The reinforcement requirements shall be the same as shown on this standard plan. Side laps shall be as specified above.

COMPUTED WEIGHTS OF STEEL

Type Of Reinforcement	Average Weight per 100 Sq. Ft. Of Pavement (pounds)	Average Weight per Sq. Yard Of Pavement (pounds)	Weight per Standard Sheet (pounds)
MESH	75.9	75.9	79.6
			6.8
			6.8
			7.2
			107.3
			118.1
			85.9

LONGITUDINAL BULKHEAD CONSTRUCTION JOINT

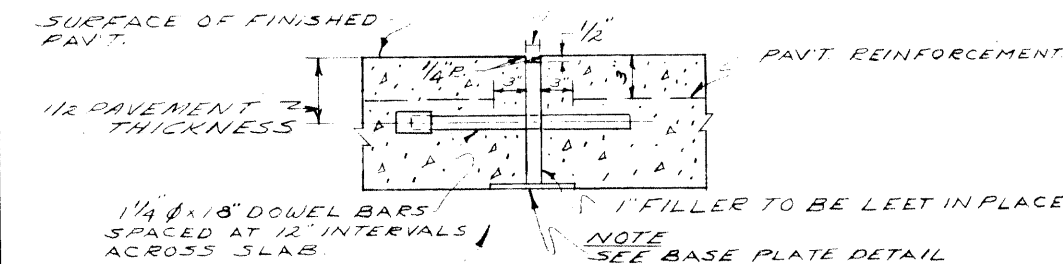
Other methods of holding the first half of the Hook Bolt in position will be permitted, if approved by the Engineer.



JOINT DOWEL HOOK BOLT

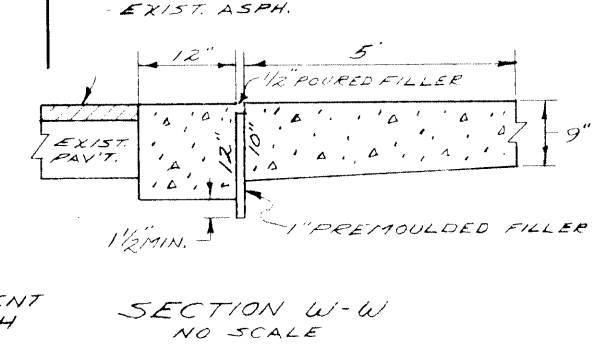
STANDARD PLAN FOR CONCRETE PAVEMENT JOINTS

F					DESIGNED BY		APPROVED	
E					DRAWN BY	L. CHAPMAN	<i>Erickson</i>	
D					TRACED BY		<i>Behm</i>	
C					CHECKED BY			
B								
A								
	DESCRIPTION	DRW	CKD	APR	DATE			
	REVISIONS							

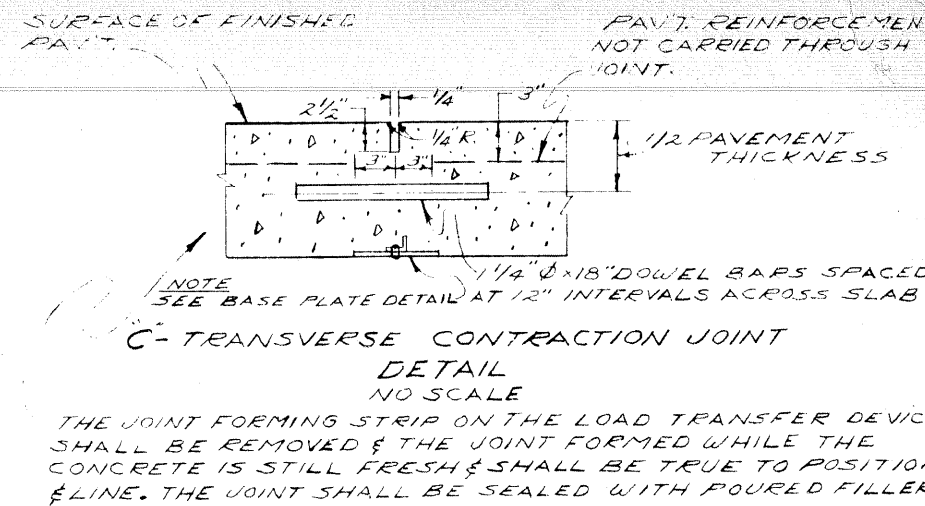


THE FILLER STRIP SHALL BE LEFT IN PLACE & THE JOINT FORMED WHILE THE CONCRETE IS STILL FRESH & SHALL BE TRUE TO POSITION & LINE. SEAL WITH POURED FILLER.

E-TRANSVERSE EXPANSION JOINT WITH LOAD TRANSFER DETAIL



NOTE: EXPANSION & CONTRACTION JOINTS TO EXTEND THRU CURB



THE JOINT FORMING STRIP ON THE LOAD TRANSFER DEVICE SHALL BE REMOVED & THE JOINT FORMED WHILE THE CONCRETE IS STILL FRESH & SHALL BE TRUE TO POSITION & LINE. THE JOINT SHALL BE SEALED WITH POURED FILLER.

CONCRETE PAVEMENT-MULTIPLE LANES REINFORCED

- NOTES
- B LONGITUDINAL BULKHEAD CONSTRUCTION JOINT
 - C TRANSVERSE CONTRACTION JOINT
 - D LONGITUDINAL LANE TIE JOINT
 - E 1" TRANSVERSE EXPANSION JOINT WITH LOAD TRANSFER DEVICE
 - BD OPTIONAL B OR D JOINT

NOTES: The surfaces of the metal shields, metal end plates and metal parting strips, which will be in contact with concrete, shall be painted with form oil to prevent bonding with the concrete.

Changes in the lengths of the various pieces that make up the base plate will be permitted, provided that the correct overall length is obtained and a minimum of 3" lap as shown at all joints in base plates is provided.

End plates may be made as an integral part of the main base plate by bending, instead of separate pieces as shown, when approved by the Engineer.

MATERIAL: The base plate metal shall be no. 16 gauge copper bearing steel having a 2-ounce uniform coating of prime spelter. The prime spelter coating shall be applied by the hot process to the base metal by an approved method which forms a perfect bond and amalgamation between the base metal and the coating. The finished sheet, coated by any process shall withstand the forming and shaping required for the sheet without flaking or powdering of the coating. The sampling, testing and acceptance of the plates for chemical composition, gauge, and weight of spelter coating will be based on the current A.A.S.H.O. Designation M 36.

92134

CITY OF DETROIT
DEPARTMENT OF PUBLIC WORKS
CITY ENGINEERS OFFICE

FOREST-WARREN
REROUTING
DETAIL SHEET

BOOK NO. PG. NO. SCALE DATE

SHEET 13 OF 14 SHTS.
JOB NO. A-1125
CONTRACT NO. 14-3935

**STREET PAVING PLAN
CITY OF DETROIT**

DEPARTMENT OF PUBLIC WORKS - CITY ENGINEERS OFFICE
FOREST - WARREN REROUTING

NAME OF STREET RUSSELL

FROM 29' E. OF W.P.L. OF FOREST
TO 154.10' E. OF F.P.L. OF HANCOCK

SHEET 10
OF
14 SHEETS

TYPE OF PAVEMENT 9" UNIFORM CONCRETE- INTEGRAL CURB EXCEPT AS NOTED
10" UNIFORM AT STREET INTERSECTION EXCEPT AS NOTED

DATE	REVISIONS
6-4-62	ADDED C BASIN TO ABANDON N.S. FOREST AT 143' E. RUSSEL

SUPPLEMENTARY DETAILS			
C-325	C-524	C-733	E-738
C-326A	C-585	C-739	C-1608
C-327	C-586	C-739A	C-1783
C-390	C-587	C-739B	

C-4378 THRU C-4395

BEFORE STARTING CONSTRUCTION
CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

SCALE

LOTS & ALLEYS 1" = 40'

STREET WIDTH 1" = 40'

VERTICAL 1" = 2'

DRAINAGE COMPLETED

PAVING COMPLETED C.C. 8-21-62

QUANTITIES	ESTIMATED	
	LOTS	CITY
EXCAVATION CU. YDS.		
NEW CURB LIN. FT.		
PAVING SQ. YDS.		
TEST CORES		
SIDEWALK SQ. FT.		
MANHOLES	ADJUST	
	CONSTRUCT	
BASINS	ADJUST	
	CONSTRUCT	
SEWER-12 LIN. FT.		

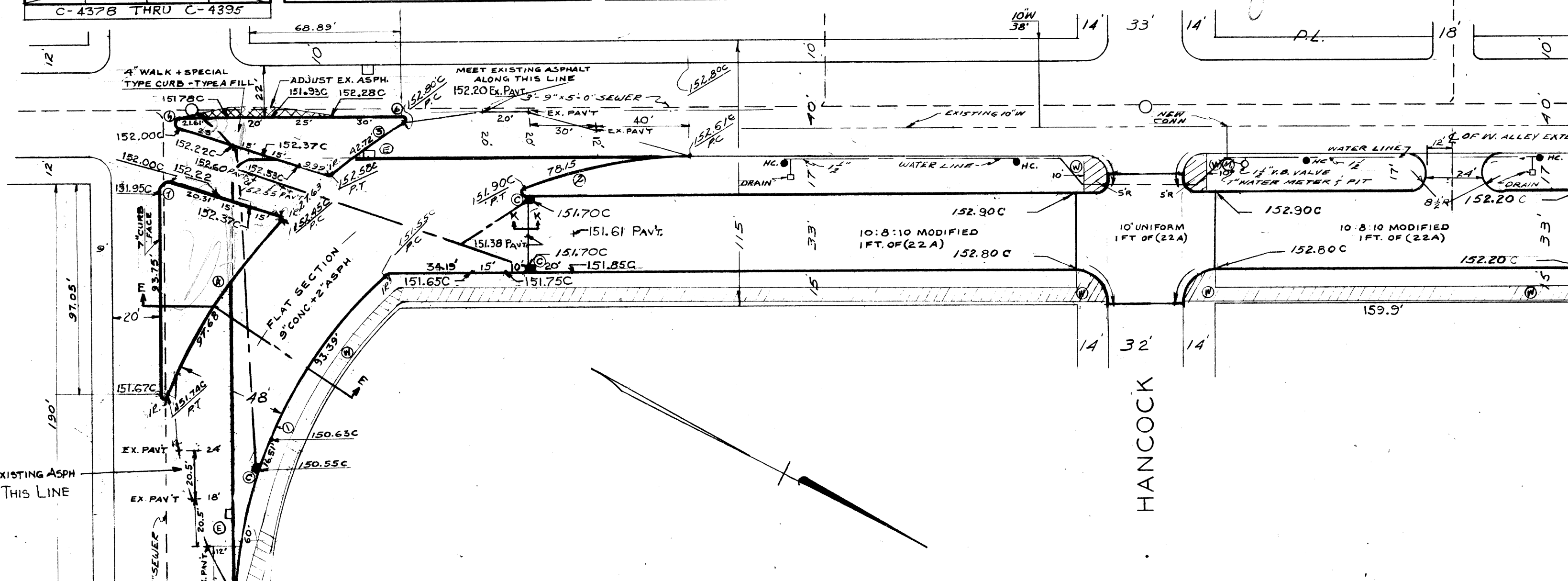
PETITION NO.	PETITION DATE
NO. A01025	
ASSIGNMENT NO. 909	GROUP NO.
BOOK NO. 1911 PG.	LEVEL DATE

LOTS 2L	LENGTH
CITY 2L	LENGTH
TOTAL	LENGTH

DATE OF DRAWING: MARCH 29, 1961

MADE BY	CHECKED BY
CHAPMAN	
CHAPMAN	
W. OWENS	BRANTIGAN
ESTIMATE	
SEWER APPROVED 3/29/61	
FINAL CHECK	G.E.O.
APPROVED	
<i>Erickson</i>	
<i>Behm</i>	
ENGINEER OF STREETS	
CITY ENGINEER	

INDEX NO.
6
TOPO NO.
40
INDEXED



BENCH MARKS	ELEV.
P.L.B.M. # 40-251 N.E. COR. HASTINGS & WARREN	151.840 R.
P.L.B.M. # 40-251A N.E. COR. RIVARD & WARREN	151.405 R.
ARROW ON HYD. S.E. COR. OF ST. ANTOINE & FOREST	153.52
ARROW ON HYD. S.E. COR. OF RUSSELL & WARREN	156.11

NOTE FOR SYMBOLS (A) ETC. SEE STD. DET. DWG. C-4378.

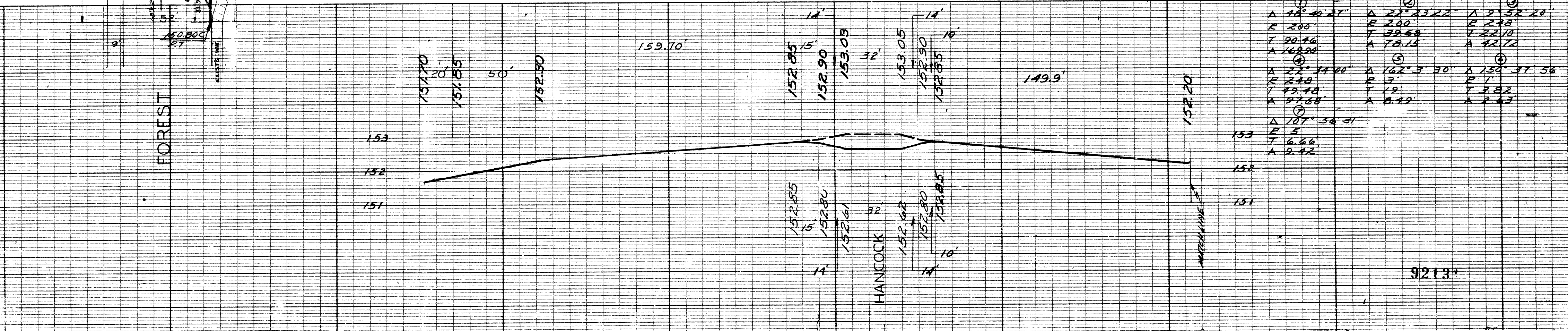
FOR DETAIL SECTIONS SEE DETAIL SHEETS 11 OF 14 & 12 OF 14 FOR WATER SUPPLY SYSTEM SYMBOLS SEE SHEET 12

HORIZONTAL CONTROL FOR HORIZONTAL CONTROL SEE BUREAU OF SURVEYS DWG. S-170.

SEE SHEET 5 OF 14 FOR UTILITY LOCATION & REMOVAL

FOR SECTION E-E SEE DETAIL SHEET 11 OF 14
FOR SECTION K-K SEE DETAIL SHEET 12 OF 14

SEE MATCH LINE B'S SHEET 9



Δ 18° 40' 21"	Δ 22° 23' 22"	Δ 27° 52' 20"
R 200'	R 200'	R 238'
T 90.76'	T 39.68'	T 22.10'
A 169.90'	A 78.15'	A 42.72'
Δ 27° 34' 00"	Δ 162° 3' 30"	Δ 150° 37' 56"
R 240'	R 3'	R 1'
T 89.48'	T 19'	T 2.82'
A 27.68'	A 0.49'	A 2.43'
Δ 107° 56' 31"		
R 5'		
T 6.66'		
A 9.42'		

9213'

**STREET PAVING PLAN
CITY OF DETROIT**

DEPARTMENT OF PUBLIC WORKS - CITY ENGINEERS OFFICE
FOREST - WARREN REROUTING

NAME OF STREET **ST. ANTOINE**

FROM **29° E. OF W. PL. OF FOREST**
TO **171.90° N. OF N.P.L. OF HANCOCK**

SHEET **6**
OF
14 SHEETS

TYPE OF PAVEMENT **9" UNIFORM CONCRETE INTEGRAL CURB EXCEPT AS NOTED**
9" UNIFORM AT STREET INTERSECTION EXCEPT AS NOTED

BENCH MARKS ELEV.

- PL.B.M. #40-251 N.E. COR. HASTINGS & WARREN 151.840 R.
- PL.B.M. #40-251A N.E. COR. RIVARD & WARREN 151.405 R.
- ARROW ON HYD. S.E. COR. ST. ANTOINE & FOREST 153.52
- ARROW ON HYD. S.E. COR. OF RUSSELL & WARREN 156.11

NOTE FOR SYMBOLS (A) ETC. SEE STD. DET. DWG. C-4378

SEE SHEET 1 OF 14 FOR UTILITY LOCATION & REMOVAL

HORIZONTAL CONTROL FOR HORIZONTAL CONTROL SEE BUREAU OF SURVEYS DWG. S-170

CURVE DATA

① Δ 35° 59' 04"	② Δ 87° 19' 40"	③ Δ 90° 00' 00"
R 221 FT.	R 20 FT.	R 173 FT.
T 72.10 FT.	T 19.18 FT.	T 173 FT.
A 138.79	A 30.53 FT.	A 271.74 FT.

FOR SECTION A-A, B-B F-F SEE DETAIL SH# 11 OF 14

DATE	REVISIONS

SUPPLEMENTARY DETAILS			
C-525	C-524	C-733	C-998
C-326A	C-583	C-737	DE-1608
C-327	C-586	C-332A	VE-1783
C-350	C-587	C-739B	

C-4378 THRU C-4395

BEFORE STARTING CONSTRUCTION
CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

SCALE

LOTS & ALLEYS **1" = 40'**

STREET WIDTH **1" = 40'**

VERTICAL

DRAINAGE COMPLETED

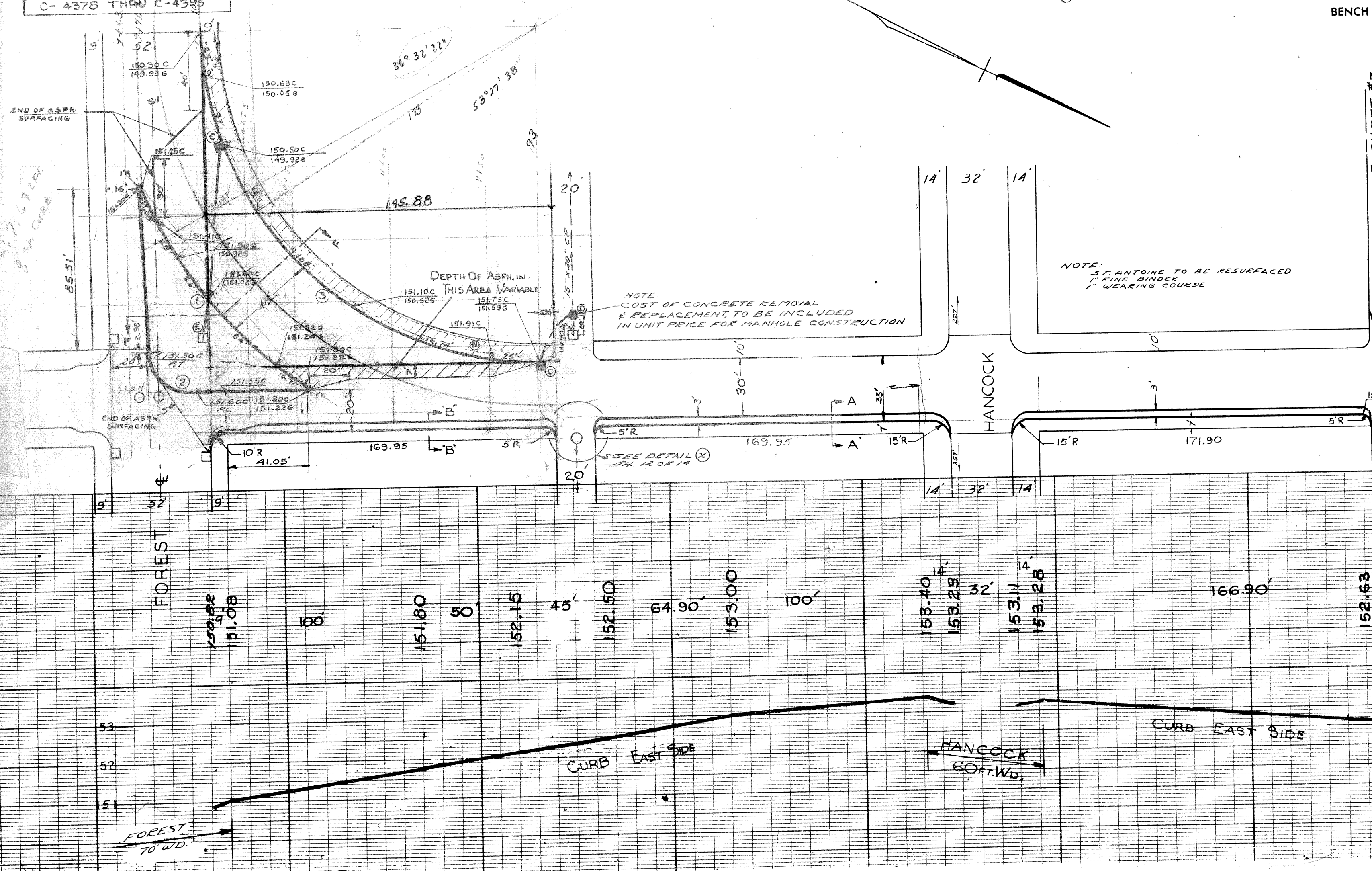
PAVING COMPLETED **C.C. 8-21-62**

QUANTITIES	ESTIMATED	ESTIMATED	
		LOTS	CITY
EXCAVATION	CU. YDS.		
NEW CURB	LIN. FT.		
PAVING	SQ. YDS.		
TEST CORES			
SIDEWALK	SQ. FT.		
MANHOLES	ADJUST		
	CONSTRUCT		
BASINS	ADJUST		
	CONSTRUCT		
SEWER-12"	LIN. FT.		

PETITION NO.	PETITION DATE
ASSIGNMENT NO. AO-1025	GROUP NO.
BOOK 1909	LEVEL DATE
NO. 1911 PG.	
LOTS 2L	LENGTH
CITY 2L	LENGTH
TOTAL	LENGTH
DATE OF DRAW'G. MARCH 29, 1961	

MADE BY	CHECKED BY
PLAN WANYCKYJ	
PROFILE WANYCKYJ	
GRADE W. OWENS	BRANTIGAN
ESTIMATE	Wingfield Morris
SEWER APPROVED 9/2/61	R. W. ...
FINAL CHECK	G.E.O.
APPROVED Erickson	
Belm	ENGINEER OF STREETS
...	CITY ENGINEER

INDEX NO.
5-6
TOPO NO.
30
INDEXED



**STREET PAVING PLAN
CITY OF DETROIT**

DEPARTMENT OF PUBLIC WORKS - CITY ENGINEERS OFFICE

FOREST-WARREN REROUTING

NAME OF STREET WARREN

FROM 272.39' W. OF W.P.L. OF RUSSELL

TO E. OF E.P.L. OF RUSSELL

SHEET **9**
OF
14 SHEETS

TYPE OF PAVEMENT **9" UNIFORM CONCRETE INTEGRAL CURB EXCEPT AS NOTED**
9" UNIFORM AT STREET INTERSECTION EXCEPT AS NOTED

DATE	REVISIONS
5-3-62	ALLEY RETURN ADDED SOUTH SIDE OF WARREN

SUPPLEMENTARY DETAILS			
C-4325	C-524	C-733	C-938
C-326A	C-585	C-239	C-1609
C-327	C-586	C-232A	C-1783
C-330	C-587	C-737B	

C-4378 THRU. C-4395

BEFORE STARTING CONSTRUCTION
CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

SCALE

LOTS & ALLEYS $1" = 40'$

STREET WIDTH $1" = 40'$

VERTICAL

DRAINAGE COMPLETED

PAVING COMPLETED **C.C. 8-21-62**

QUANTITIES		ESTIMATED	
		LOTS	CITY
EXCAVATION	CU. YDS.		
NEW CURB	LIN. FT.		
PAVING	SQ. YDS.		
TEST CORES			
SIDEWALK	SQ. FT.	ADJUST	
		CONSTRUCT	
MANHOLES		ADJUST	
		CONSTRUCT	
BASINS			
SEWER-12"	LIN. FT.		

PETITION NO.	PETITION DATE
ASSIGNMENT NO. A.O. 1025	GROUP NO.
BOOK 1909	LEVEL DATE
NO. 1911 PG.	

LOTS 2L	LENGTH
CITY 2L	LENGTH
TOTAL	LENGTH

DATE OF DRAWG. **MARCH 29, 1961**

MADE BY	CHECKED BY
PLAN CHAPMAN	
PROFILE CHAPMAN	
GRADE W. OWENS	BRANTIGAN
ESTIMATE	
SEWER APPROVED 7/29/61	G.E.D.
FINAL CHECK	
APPROVED Erickson	
Behm	
CITY ENGINEER	

INDEX NO.
6

TOPO NO.
40

INDEXED

BENCH MARKS	ELEV.
P.L.B.M. #40-251 NE. COR. HASTINGS & WARREN	151.840 R.
P.L.B.M. #40-251A NE. COR. RIVARD & WARREN	151.405 R.
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ARROW ON HYD. S.E. COR. OF RUSSELL & WARREN	156.11

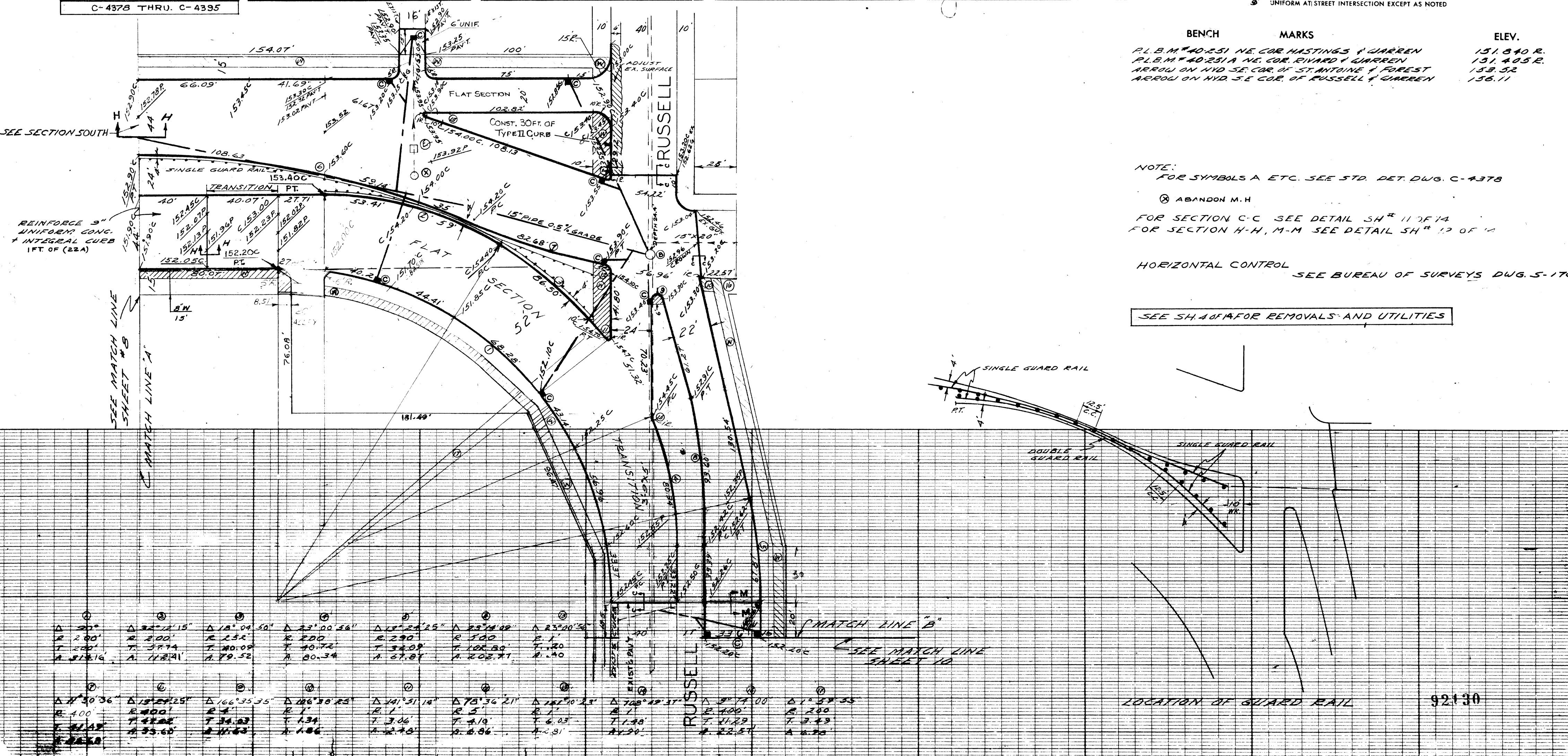
NOTE:
FOR SYMBOLS A ETC. SEE STD. DET. DWG. C-4378

⊗ ABANDON M.H.

FOR SECTION C-C SEE DETAIL SH # 11 OF 14
FOR SECTION H-H, M-M SEE DETAIL SH # 12 OF 14

HORIZONTAL CONTROL SEE BUREAU OF SURVEYS DWG. S-170

SEE SH. 4 OF 14 FOR REMOVALS AND UTILITIES



Δ 20°	Δ 32° 15'	Δ 18° 04' 50"	Δ 23° 00' 56"	Δ 13° 24' 25"	Δ 25° 14' 08"	Δ 23° 00' 36"			
R 200'	R 200'	R 252'	R 200'	R 290'	R 300'	R 1'			
T 200'	T 387.4'	T 40.09'	T 40.72'	T 34.09'	T 108.80'	T 1.20'			
A 212.16'	A 112.91'	A 79.52'	A 80.34'	A 67.87'	A 203.71'	A 1.40'			
Δ 30° 36'	Δ 18° 22' 25"	Δ 166° 35' 35"	Δ 116° 50' 25"	Δ 141° 51' 18"	Δ 75° 36' 21"	Δ 161° 10' 23"	Δ 708° 29' 37"	Δ 9° 14' 00"	Δ 1° 53' 35"
R 400'	R 400'	R 4'	R 1'	R 1'	R 5'	R 1'	R 1'	R 400'	R 200'
T 31.42'	T 44.02'	T 34.03'	T 1.34'	T 1.06'	T 1.19'	T 6.03'	T 1.48'	T 11.29'	T 3.43'
A 212.16'	A 33.68'	A 11.63'	A 1.06'	A 2.70'	A 8.86'	A 2.91'	A 2.30'	A 22.57'	A 6.30'

LOCATION OF GUARD RAIL 92130