

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS

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

F H W A REGION	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MICH.				
STREET	CITY	COUNTY	TWP	SHEET NO.	TOTAL SHEETS

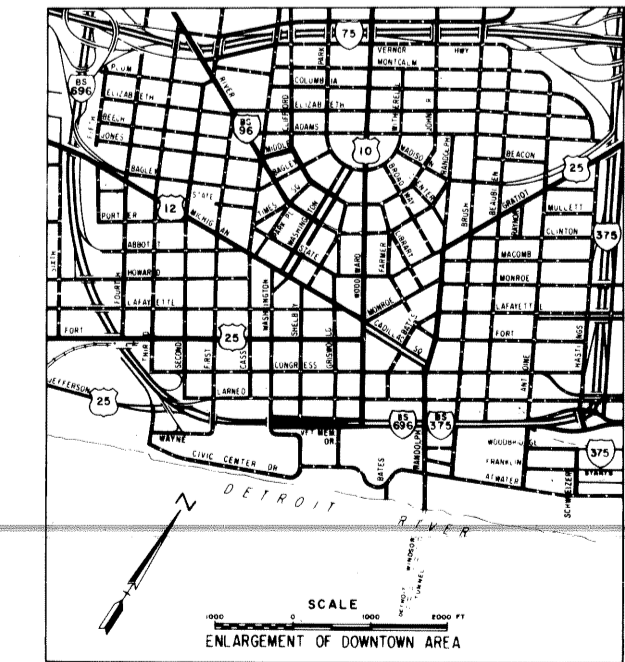
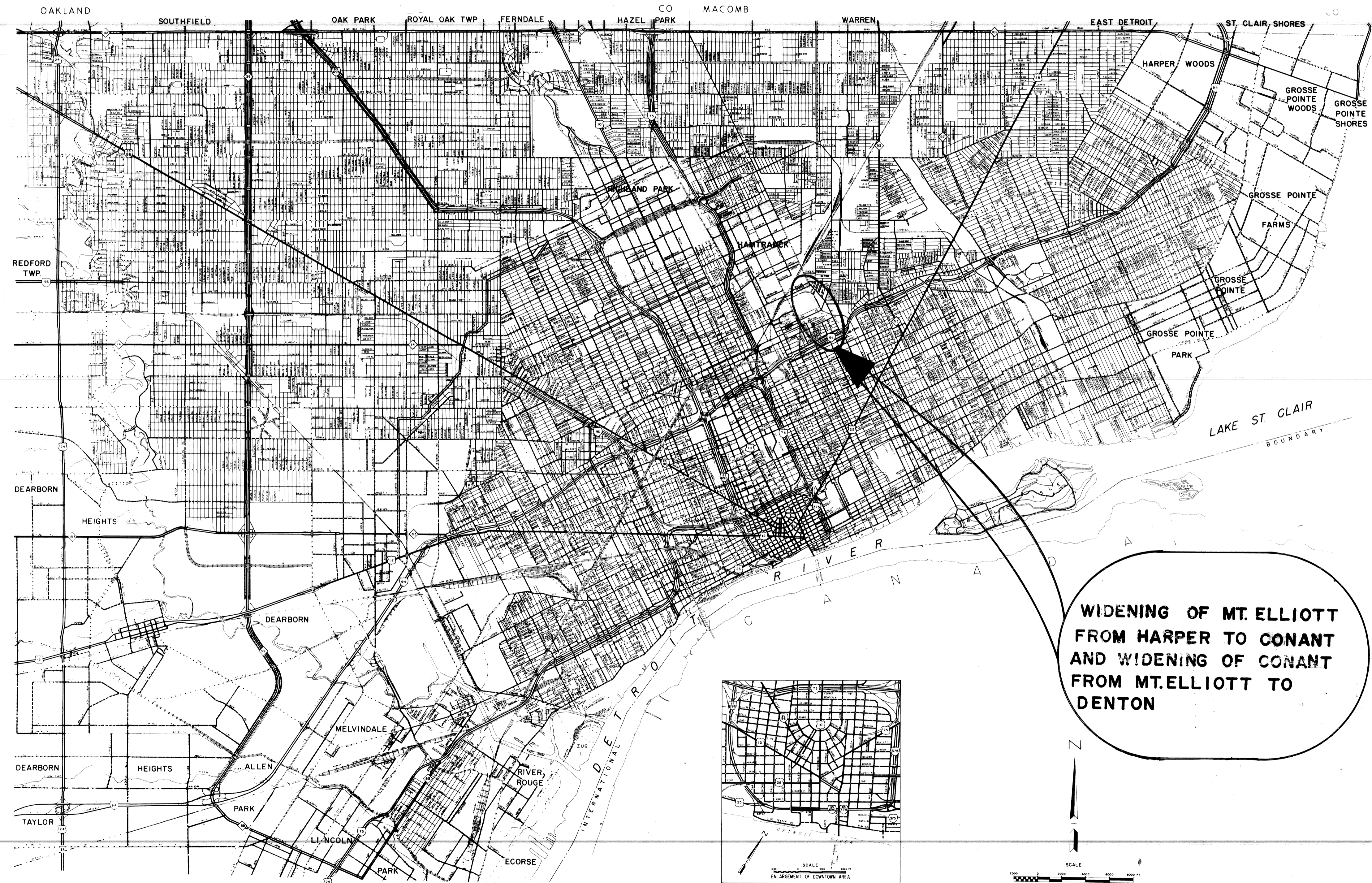
- INDEX OF SHEETS**
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 - 2-3 TYPICAL CROSS-SECTIONS
 - 4 CONSTRUCTION SEQUENCE
 - 5 ALIGNMENT
 - 6-7 REMOVALS
 - 8-9 UTILITIES
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 - 17 FIRE HYDRANT DETAILS
 - 18-21 SPECIAL DETAILS & STANDARDS
 - 22 QUANTITIES

IN CO-OPERATION WITH
MICHIGAN DEPARTMENT OF TRANSPORTATION
AND

FEDERAL HIGHWAY ADMINISTRATION
FEDERAL AID URBAN PROJECT NO. MICHIGAN M 2000 (205)
CONTROL SECTION MU 82400 JOB NO. 19332A

- ELECTRICAL**
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- STANDARD PLANS
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 - II 29 D
 - II 39 G
 - II 40 D
 - II 41 D
 - II 42 C
 - II 43 C
 - II 45 C
 - IV 84 D
 - V 100A
 - VI 124 C
 - VI 125 F



ITEM NO. UFO 866

CONTRACT FOR G, DS, P, & UTILITIES

LOCAL AUTHORITY APPROVAL
CITY OF DETROIT
COLEMAN A. YOUNG, MAYOR
CITY ENGINEERING DEPARTMENT

APPROVED BY J. J. Corvett 8/18/83
DATE
ASSISTANT CITY ENGINEER

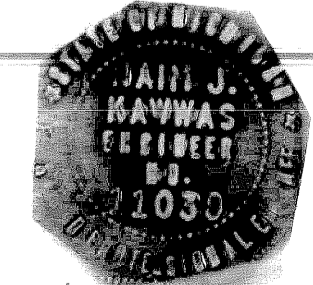
APPROVED BY C. R. Hopkins 8-19-83
DATE
DIRECTOR

PREPARED UNDER SUPERVISION OF
W. J. O'Connell 11039
REGISTRATION NO.
REGISTERED PROFESSIONAL ENGINEER

CITY OF DETROIT
ORGANIZATION

DETROIT, MICHIGAN
ADDRESS

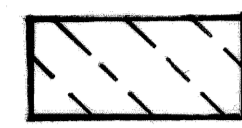
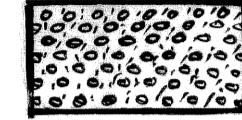
(SEAL)

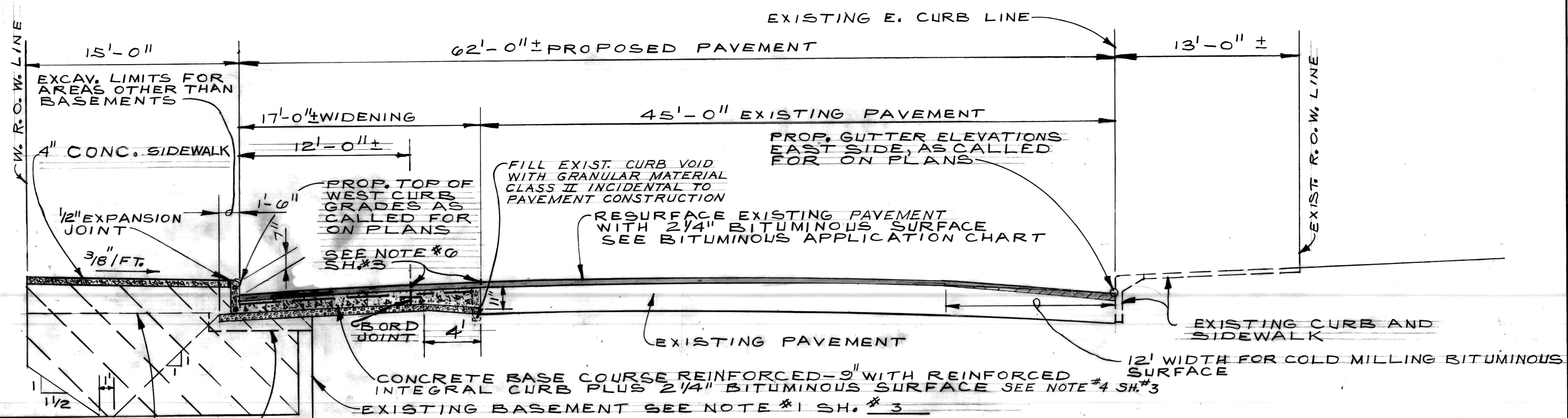


FILE NO.	STATE PROJECT	FEDERAL PROJECT	SHEET NO.	TOTAL SHEETS

19332A
MU 82400
M 2000 (205)

EARTHWORK LEGEND

-  GRANULAR MATERIAL CLASS II (SEE NOTE #3, SH.#3)
-  AGGREGATE BASE CONCRETE (4" IN PLACE)

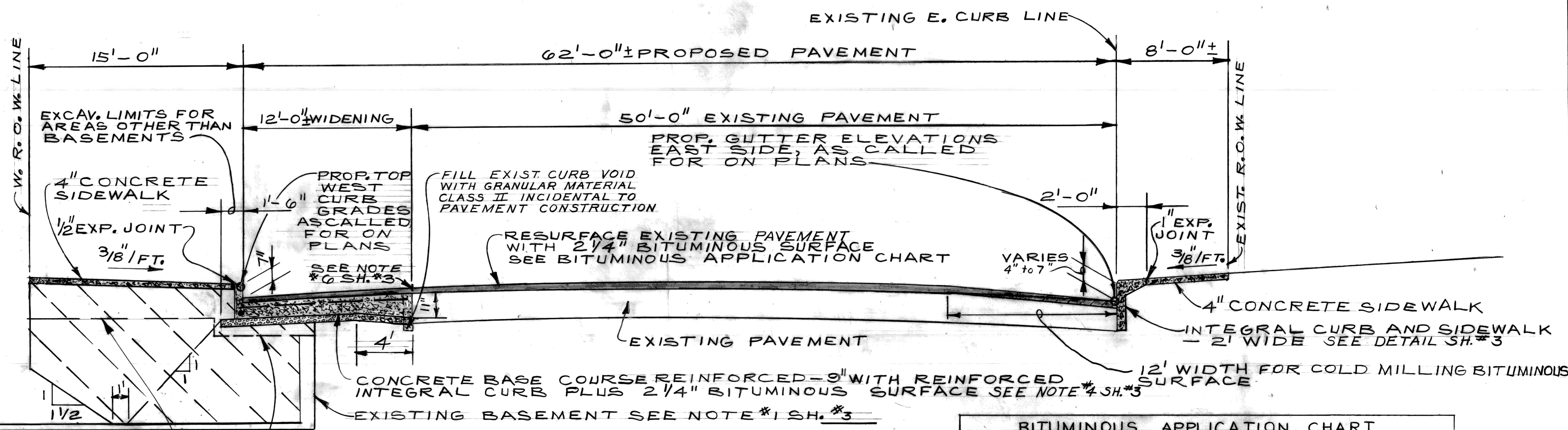


TYPICAL CROSS-SECTION

MT. ELLIOTT - HARPER TO MILWAUKEE

NO SCALE

REMOVE WALLS 2' BELOW BOTTOM OF PROPOSED PAVEMENT UP TO 2' BEHIND FACE OF CURB
REMOVE WALLS TO BOTTOM OF PROP. PAVEMENT SLAB IN SIDEWALK AREAS



TYPICAL CROSS-SECTION

MT. ELLIOTT - MILWAUKEE TO CONANT

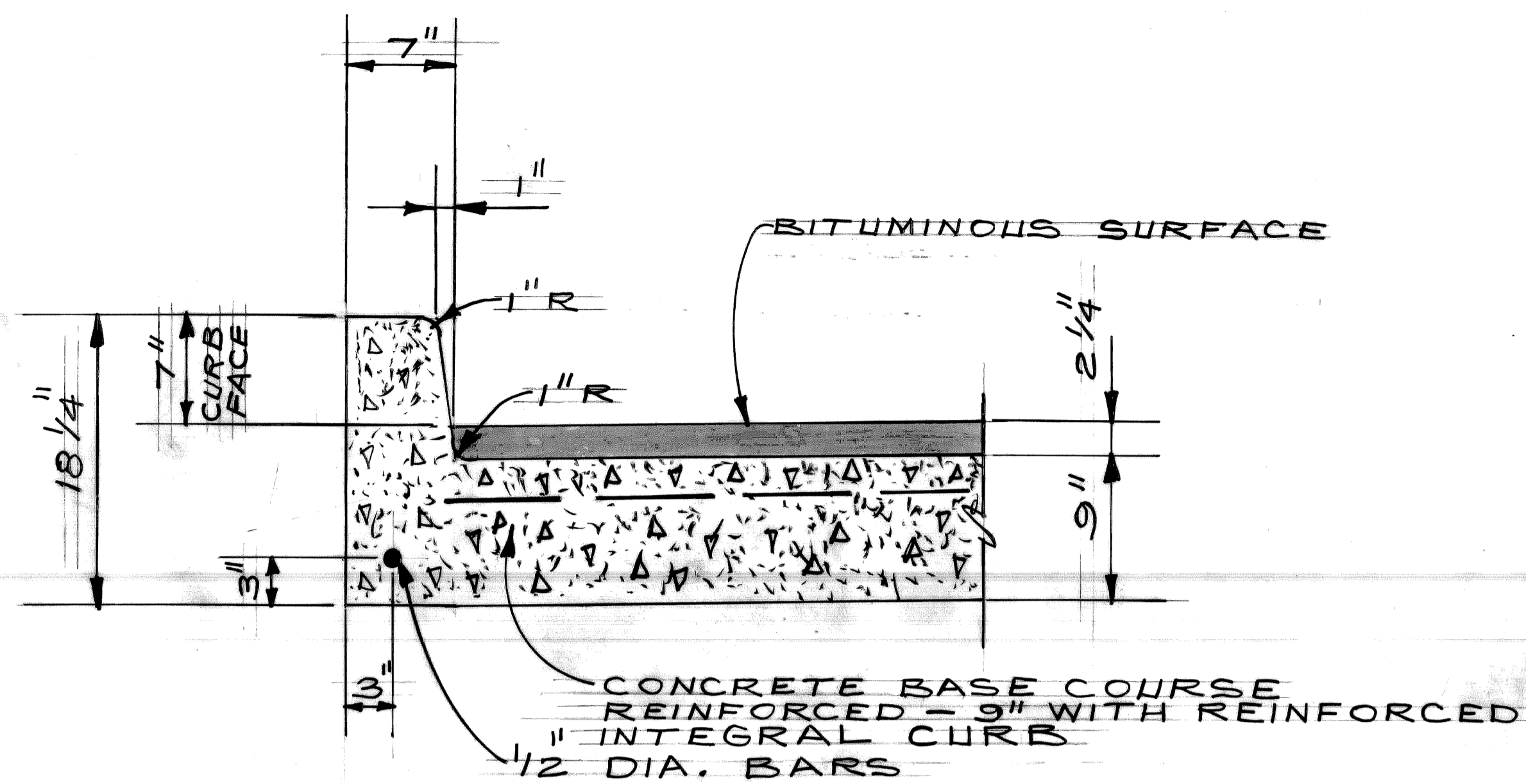
CONANT - MT. ELLIOTT TO DENTON

NO SCALE

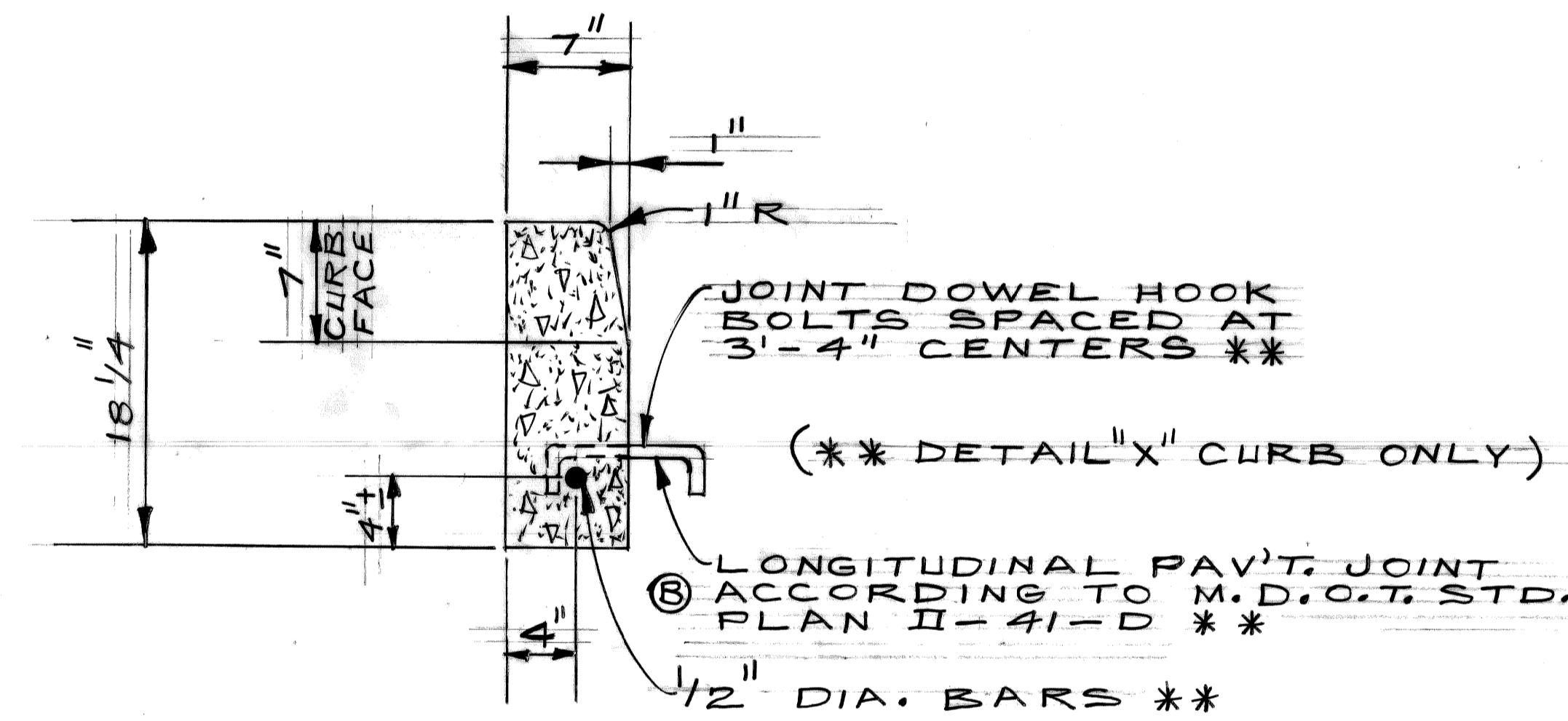
REMOVE WALLS 2' BELOW BOTTOM OF PROPOSED PAVEMENT UP TO 2' BEHIND FACE OF CURB
REMOVE WALLS TO BOTTOM OF PROP. PAVEMENT SLAB IN SIDEWALK AREAS

BITUMINOUS APPLICATION CHART			
ITEM	Rate of Application	Estimated Thickness	Asphalt Penetration
Bit. Mixture No. 1100L, 20AA	130 #/sq.	1 1/4 inch	85-100
Bit. Mixture No. 1100T, 20AA	120 #/sq.	1 inch	85-100
Bit. Bond Coat 0-0.10 Gal./Sq.Yd. to Rigid Bases and 0-0.05 Gal./Sq.Yd. Tack Coat between layers.			

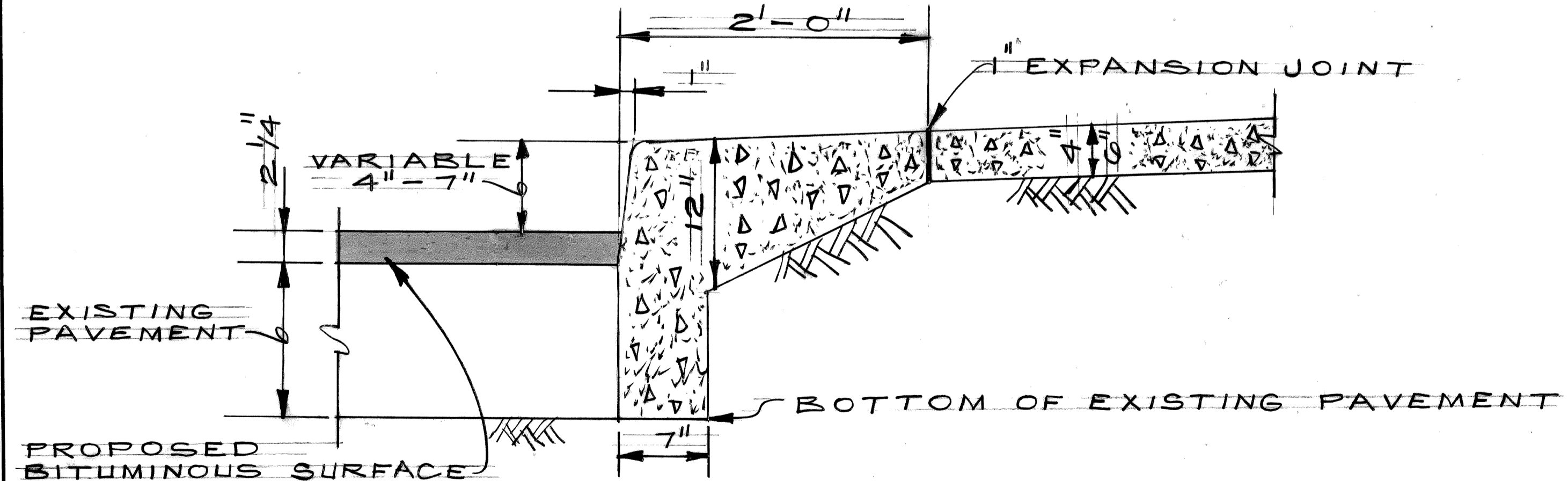
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>COORD</th> <th>DESCRIPTION</th> <th>DRN</th> <th>CK'D</th> <th>AP'D</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td colspan="6">REVISIONS LOCATED BY COORDINATES ON SHEET</td> </tr> </tbody> </table>				COORD	DESCRIPTION	DRN	CK'D	AP'D	DATE	REVISIONS LOCATED BY COORDINATES ON SHEET						REFERENCE DRAWINGS DESIGNED BY: <i>TALLEY</i> DRAWN BY: <i>JONES</i> TRACED BY: CHECKED BY: <i>TALLEY</i>	APPROVED: <i>Haim O. Lawas</i> ENGINEER OF STREETS	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAU OF STREETS AND HIGHWAYS	WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON TYPICAL CROSS-SECTIONS	SHEET 2 OF 60 SHEETS CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983
COORD	DESCRIPTION	DRN	CK'D	AP'D	DATE															
REVISIONS LOCATED BY COORDINATES ON SHEET																				



INTEGRAL CURB
NO SCALE



CONCRETE CURB - DETAIL "X" AND DETAIL "Y"
NO SCALE



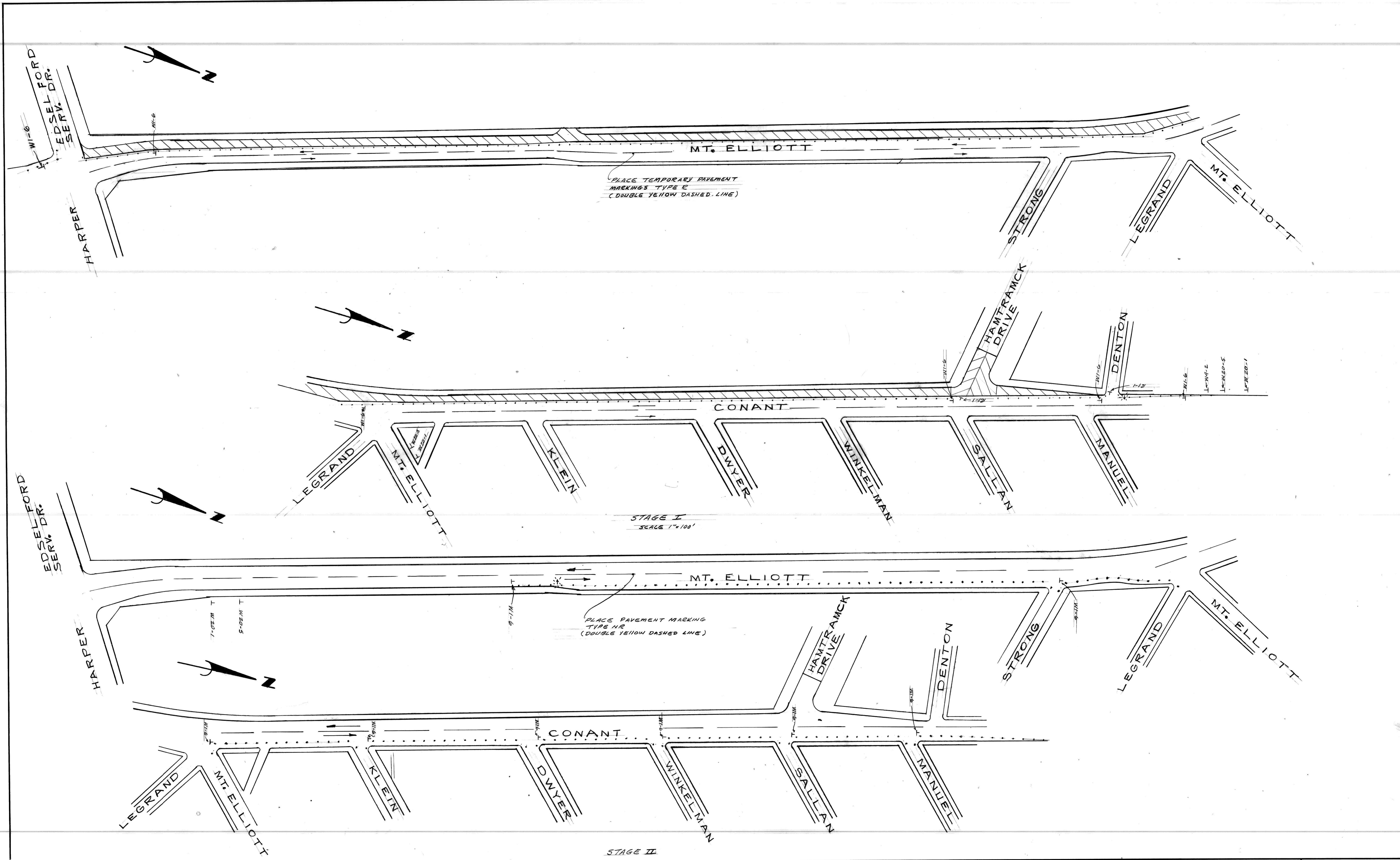
INTEGRAL CURB AND WALK - 2'-0" WIDE
NO SCALE

ESTIMATED QUANTITIES TO BE USED AS DETERMINED BY THE ENGINEER	
REMOVING OLD PAVEMENT (PATCHING)	10 SYDS
CONC. PAVEMENT PATCHING TYPE FS, 9" NONREINF.	10 SYDS
BASEMENT CLEANOUT (SEE NOTE *1)	4300 CYDS
SUBGRADE UNDERCUTTING, TYPE II	1000 CYDS
4" CONCRETE SIDEWALK	400 SFT
REMOVING SIDEWALK	100 SYDS
REMOVING MASONRY & CONCRETE STRUCTURES	250 CYDS
CLEANING EXISTING STORM DRAINAGE STRUCTURES	4 EACH
TOPSOIL SURFACE 3"	75 SYDS
CLASS "A" SODDING	75 SYDS
AGGREGATE BASE CONCRETE (4" IN PLACE)	445 SYDS
WATER	1 UNIT
CEMENT	5 TONS
SEWER CLEANOUT	25 LFT
CONCRETE CURB DETAIL "X"	50 LFT
CONCRETE CURB DETAIL "Y"	50 LFT
12" SEWER C-76-IV TRENCH DETAIL 8	30 LFT
12" SEWER C-76-IV TRENCH DETAIL 9	30 LFT
RECONSTRUCTING DRAINAGE STRUCTURES	1 EACH
REMOVING DRAINAGE STRUCTURES	1 EACH
BITUMINOUS APPROACHES	11 TONS
ADJUSTING WATER SHUTOFFS	9 EACH
MISCELLANEOUS QUANTITIES	
MOBILIZATION	1 LUMP SUM
ON THE JOB TRAINING	2 EACH
MINOR TRAFFIC DEVICES	1 LUMP SUM
FIELD OFFICE	14 MONTHS

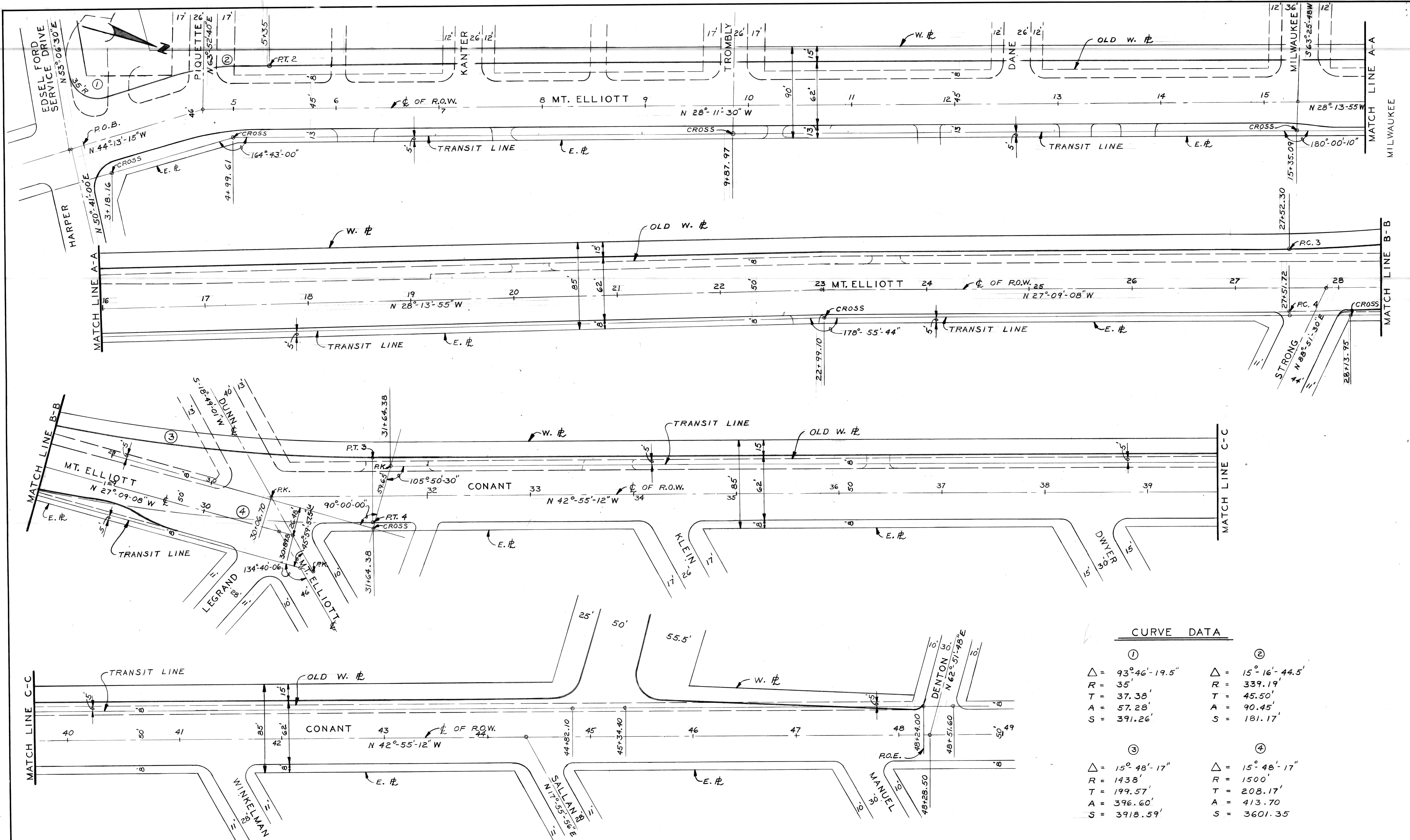
GENERAL NOTES

- BASEMENTS SHOWN ON THE PLANS HAVE BEEN PROPERLY CLEANED OUT AND BACKFILLED UNDER A PRIOR CONTRACT. OTHER BASEMENTS, THE LOCATIONS OF WHICH ARE NOT KNOWN, MIGHT HAVE TO BE CLEANED OUT AND BACKFILLED TO SPECIFICATIONS. A QUANTITY OF "BASEMENT CLEANOUT" HAS BEEN INCLUDED FOR THIS.
- IT IS ESTIMATED THAT APPROXIMATELY 1000 CYDS OF SUBGRADE UNDERCUTTING TYPE II WILL BE REQUIRED FOR THIS CONTRACT.
- GRANULAR MATERIAL CLASS II WHICH IS USED FOR BACKFILL OTHER THAN THAT REQUIRED FOR "BASEMENT CLEANOUT" WILL BE INCIDENTAL TO THE COST OF CONSTRUCTION.
- THE PROPOSED CURB SHALL BE INTEGRAL CURB (SEE DETAIL THIS SHEET) WITH CONCRETE CURB DETAIL "X" AS AN ALTERNATE, REGARDLESS OF CONSTRUCTION METHOD, THE PROPOSED CURB SHALL BE PAID FOR AS "CONCRETE BASE COURSE REINF. - 9" WITH REINF. INTEGRAL CURB".
- ALL OF THE TREES IN THE PROPOSED R.O.W. THAT ARE SHOWN ON THE PLANS HAVE BEEN REMOVED UNDER A PRIOR CONTRACT. THE REMOVAL OF ANY TREES THAT MAY BE REMAINING IN THE PROPOSED R.O.W. WILL BE INCIDENTAL TO THE COST OF CONSTRUCTION.
- SAW PLANE OF WEAKNESS JOINTS OVER THE EXISTING JOINT AS REQUIRED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR AS "SAWED LONGITUDINAL PLANE OF WEAKNESS JOINT".

REFERENCE DRAWINGS		DESIGNED BY	TALLEY	APPROVED:	CITY OF DETROIT		WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT		SHEET 3 OF 60 SHEETS	
		DRAWN BY	JONES	CITY ENGINEERING DEPARTMENT		AND		CONTRACT NO. 19332A		
		TRACED BY		BUREAUS OF STREETS AND HIGHWAYS		WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON		ASSIGNMENT NO. 81-22-01		
		CHECKED BY	TALLEY			TYPICAL CROSS - SECTIONS		DATE AUG. 1983		
COORD	DESCRIPTION	DRN	CKD	APVD	DATE					
REVISIONS LOCATED BY COORDINATES ON SHEET										
1	2	3	4	5	6	7	8	9	10	11



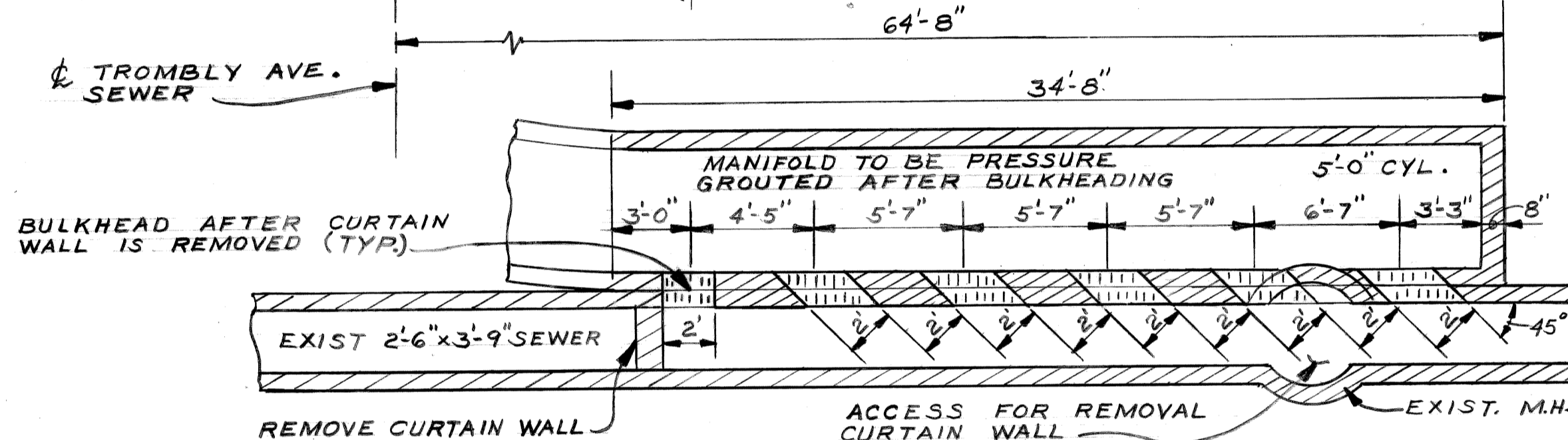
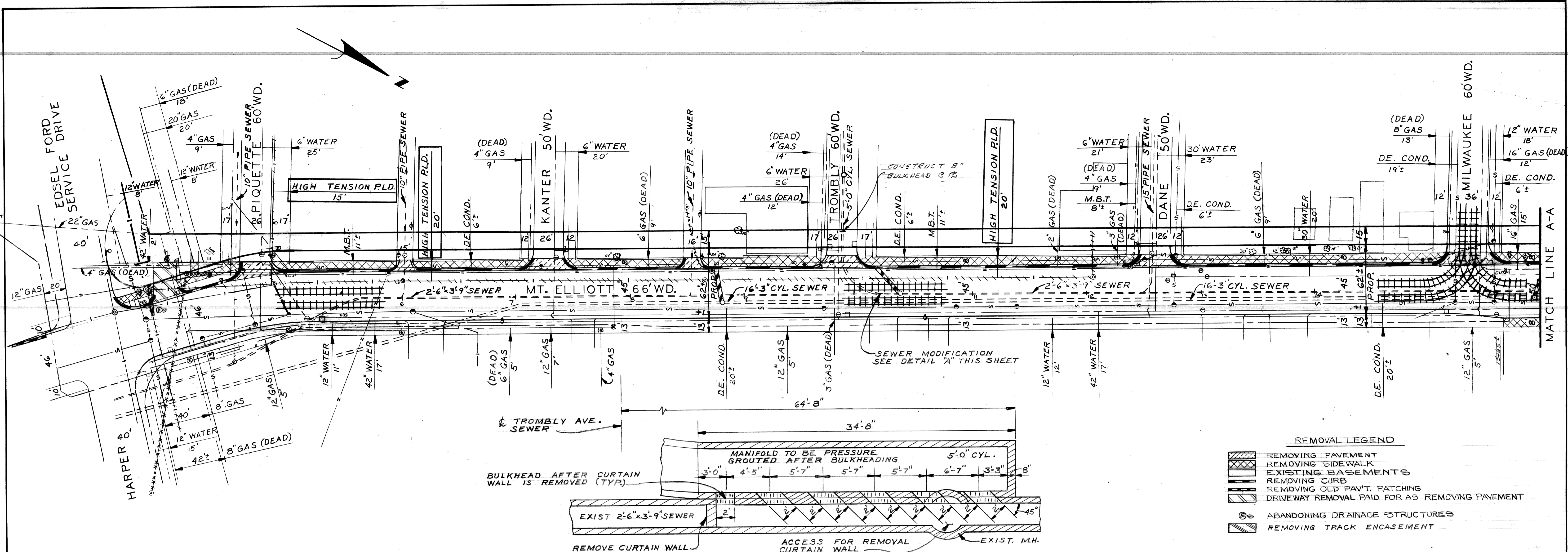
DESIGNED BY <i>TALLEY</i>		APPROVED: <i>Waim O'Kaw W...</i> ENGINEER OF STREETS		CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS	WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON CONSTRUCTION SEQUENCE	SHEET 4 OF 60 SHEETS CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983
DRAWN BY <i>TALLEY</i>		TRACED BY				
CHECKED BY		REVISIONS LOCATED BY COORDINATES ON SHEET				



CURVE DATA			
①	②	③	④
$\Delta = 93^{\circ}46'-19.5''$	$\Delta = 15^{\circ}16'-44.5''$	$\Delta = 15^{\circ}48'-17''$	$\Delta = 15^{\circ}48'-17''$
$R = 35'$	$R = 339.19'$	$R = 1438'$	$R = 1500'$
$T = 37.38'$	$T = 45.50'$	$T = 199.57'$	$T = 208.17'$
$A = 57.28'$	$A = 90.45'$	$A = 396.60'$	$A = 413.70'$
$S = 391.26'$	$S = 181.17'$	$S = 3918.59'$	$S = 3601.35'$

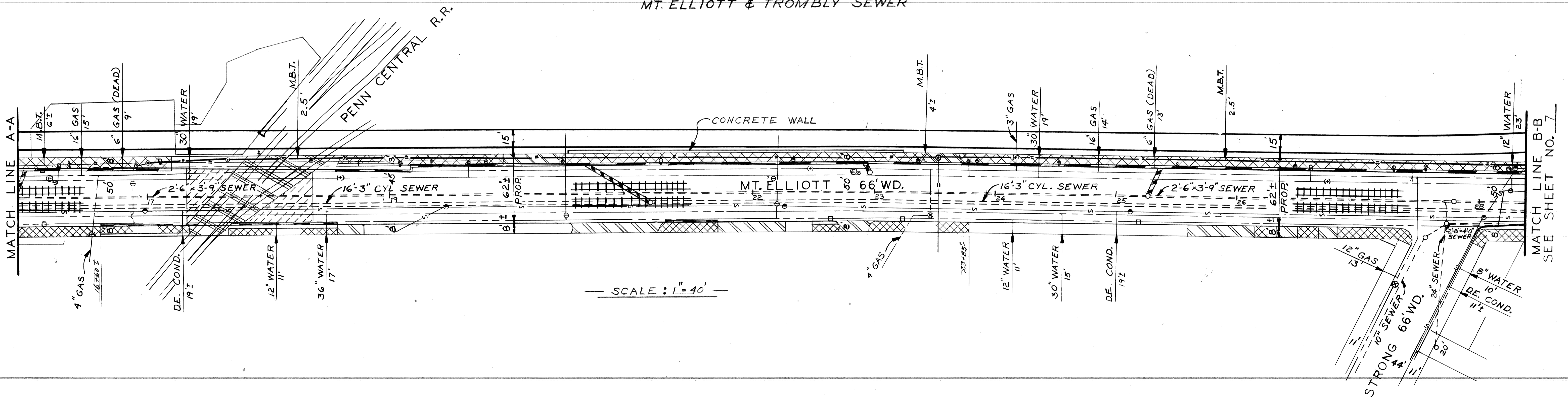
SCALE: 1"=40'

REVISIONS LOCATED BY COORDINATES ON SHEET COORD. DESCRIPTION DRN CKD APVD DATE		DESIGNED BY DRAWN BY R Rosik TRACED BY CHECKED BY TAHEY	APPROVED: <i>Maim O'Rawley</i> ENGINEER OF STREETS HIGHWAY ENGINEER	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAU OF STREETS AND HIGHWAYS FOR	WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON ALIGNMENT SHEET	SHEET 5 OF 60 SHEETS CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983
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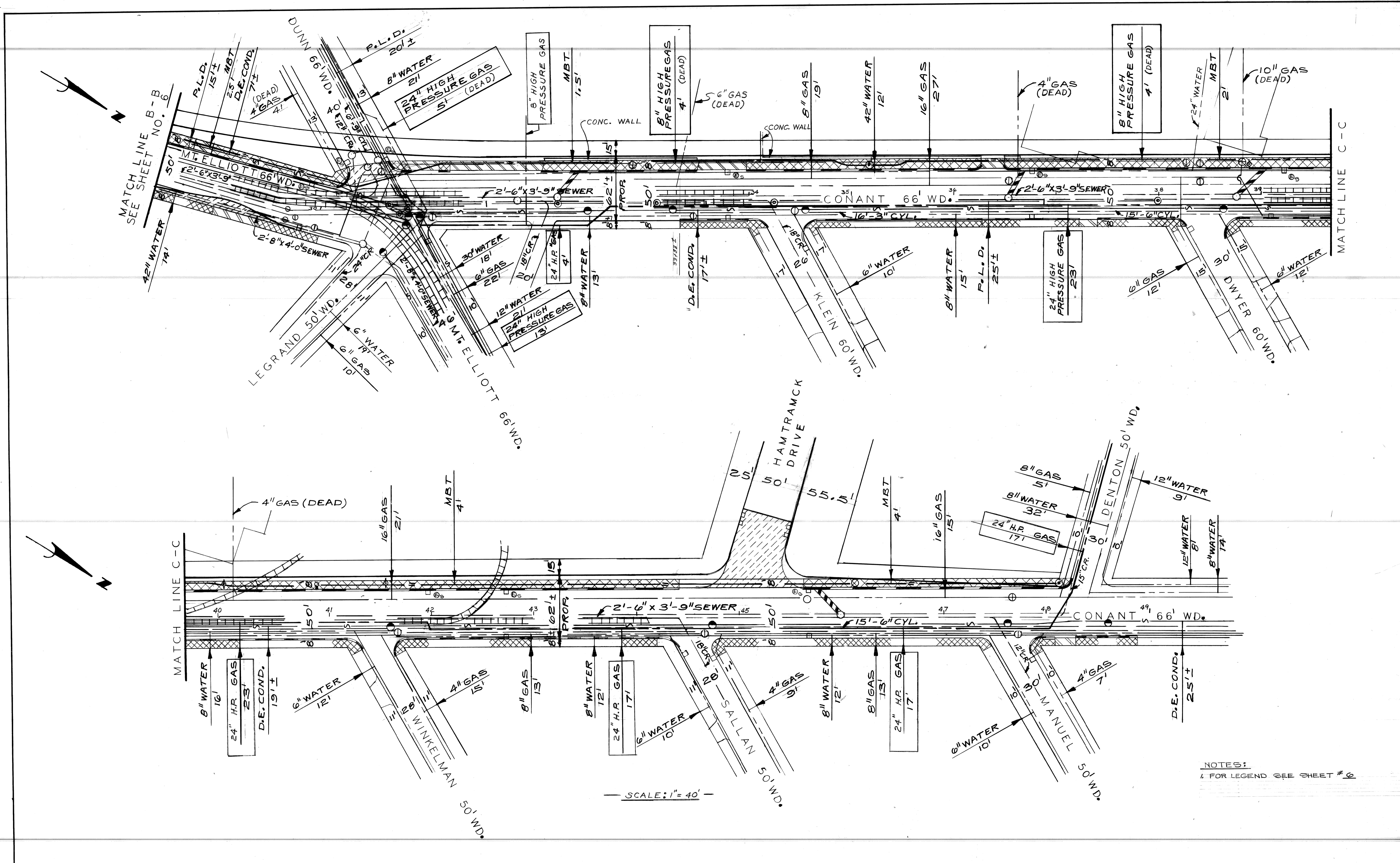
DETAIL A
MT. ELLIOTT & TROMBLY SEWER

- REMOVAL LEGEND
- REMOVING PAVEMENT
 - REMOVING SIDEWALK
 - EXISTING BASEMENTS
 - REMOVING CURB
 - REMOVING OLD PAV'T. PATCHING
 - DRIVEWAY REMOVAL PAID FOR AS REMOVING PAVEMENT
 - ABANDONING DRAINAGE STRUCTURES
 - REMOVING TRACK ENCASEMENT



SCALE: 1" = 40'

COOR D DESCRIPTION DRN CK'D APVD DATE REVISIONS LOCATED BY COORDINATES ON SHEET		DESIGNED BY DRAWN BY R Rosik TRACED BY CHECKED BY TRILES	APPROVED <i>Waim O'Lawley</i> ENGINEER OF STREETS	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS	WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON REMOVAL PLAN	SHEET 6 OF 60 SHEETS CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983
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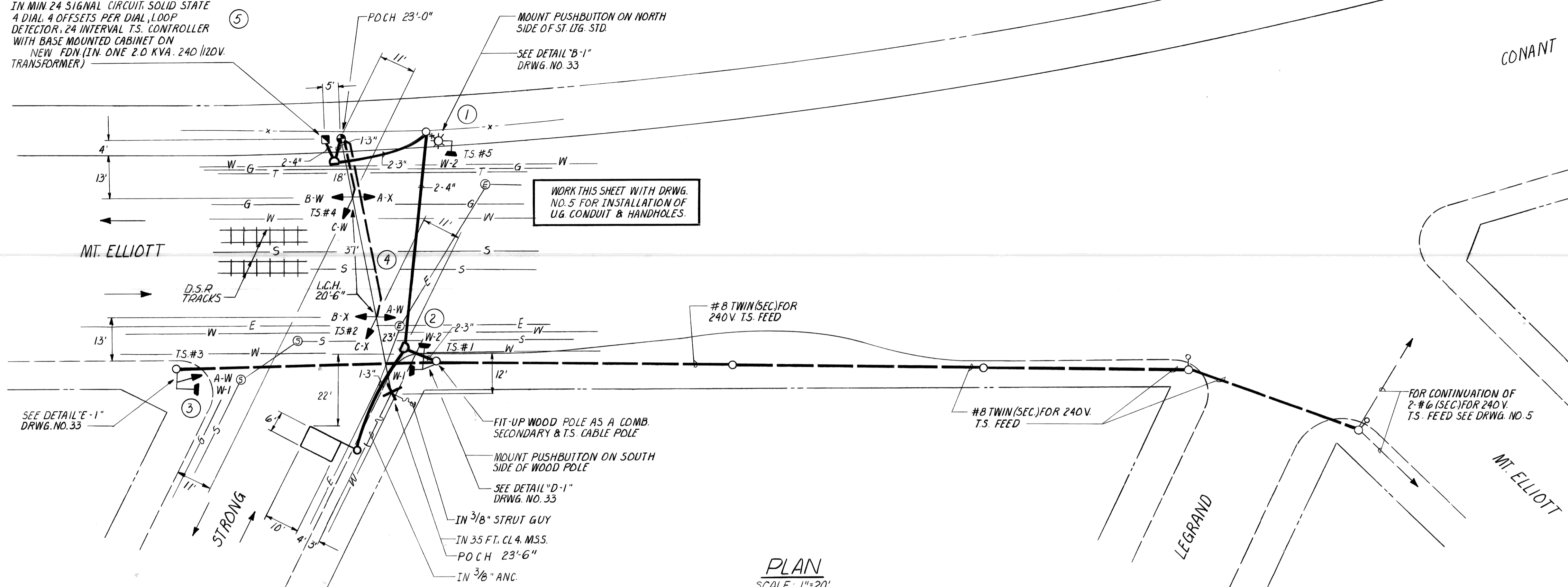


NOTES:
 1. FOR LEGEND SEE SHEET # 6

SCALE: 1" = 40'

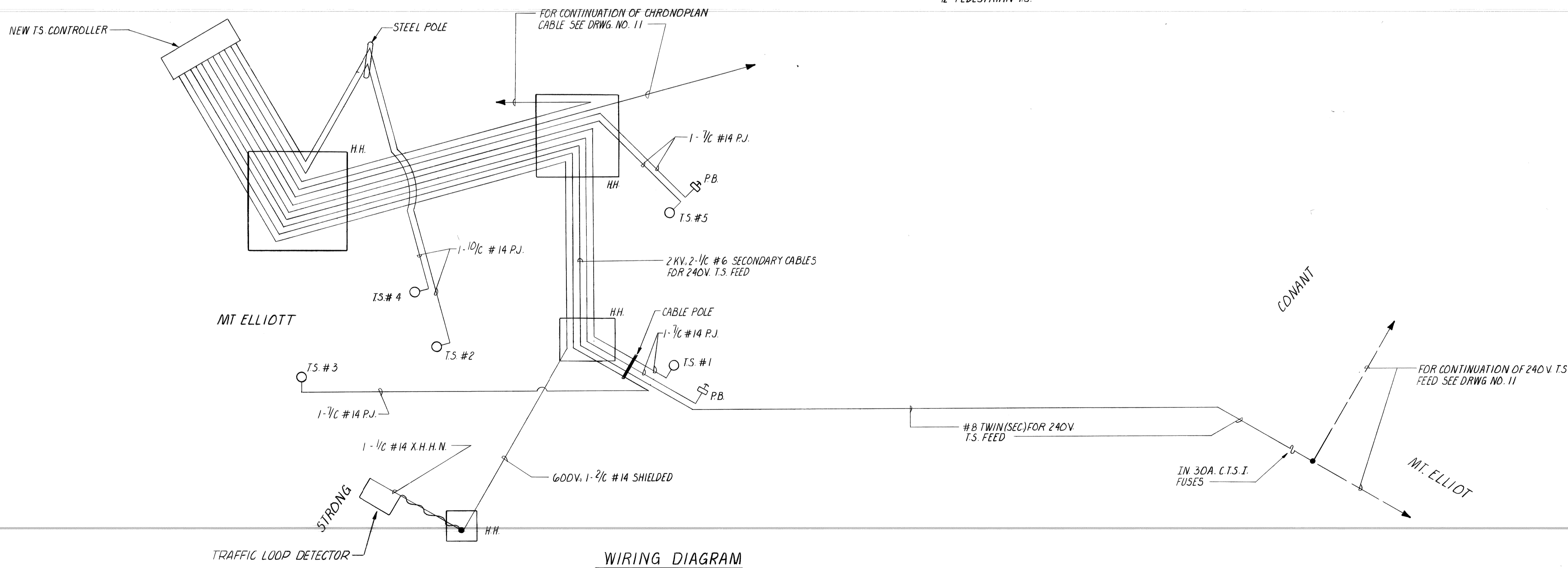
REFERENCE DRAWINGS DESIGNED BY DRAWN BY JONES TRACED BY CHECKED BY TRILEY				APPROVED: ENGINEER OF STREETS		CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS			WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON REMOVAL PLAN			SHEET 7 OF 60 SHEETS
COORD. DESCRIPTION REVISIONS LOCATED BY COORDINATES ON SHEET				DATE AUG. 1983								CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01

IN MIN 24 SIGNAL CIRCUIT. SOLID STATE
4 DIAL 4 OFFSETS PER DIAL LOOP
DETECTOR. 24 INTERVAL T.S. CONTROLLER
WITH BASE MOUNTED CABINET ON
NEW FDN (IN ONE 2.0 KVA. 240 V. 1120V.
TRANSFORMER)



PLAN
SCALE: 1"=20'

NOTE:
ALL PEDESTRIAN T.S. INSTALLED ON
THIS SHEET SHALL BE 2-SECTION,
12" PEDESTRIAN T.S.



WIRING DIAGRAM

LIST OF MATERIAL		
NO.	ITEM	QUANTITIES
①	1-WAY PEDESTRIAN BRACKET ARM T.S.	1 EACH
②	2-WAY PEDESTRIAN BRACKET ARM T.S.	1 EACH
③	1-WAY PEDESTRIAN BRACKET ARM T.S. & 1-WAY T.S.	1 EACH
④	TWO 3-WAY SPAN WIRE T.S. ON NEW SPAN WIRE	1 EACH
⑤	T.S. CONTROLLER WITH BASE MOUNTED CABINET ON NEW FDN.	1 EACH
	1-3" ENCASED CONDUIT	42 LIN. FT.
	2-3" ENCASED CONDUIT	40 LIN. FT.
	2-4" ENCASED CONDUIT	72 LIN. FT.
	ROUND HANDHOLE	1 EACH
	TYPE "D" HANDHOLE	2 EACH
	30 FT. STEEL STRAIN POLE ON NEW FDN.	1 EACH
	35 FT. CLASS 4 WOOD POLE	1 EACH
	2 KV. 2-1/2" #6 SECONDARY CABLES	135 LIN. FT.
	#8 TWIN (SEC.)	280 LIN. FT.
	FIT-UP WOOD POLE AS A COMB. SECONDARY & T.S. CABLE POLE	1 EACH

* TRAFFIC DETECTOR SYSTEM (1 LOOP) SHALL BE INCIDENTAL TO INSTALLATION OF T.S. CONTROLLER ON THIS SHEET.

DATE	DESCRIPTION	CHKD. BY	APPROVED

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

ENGINEER OF STREETS

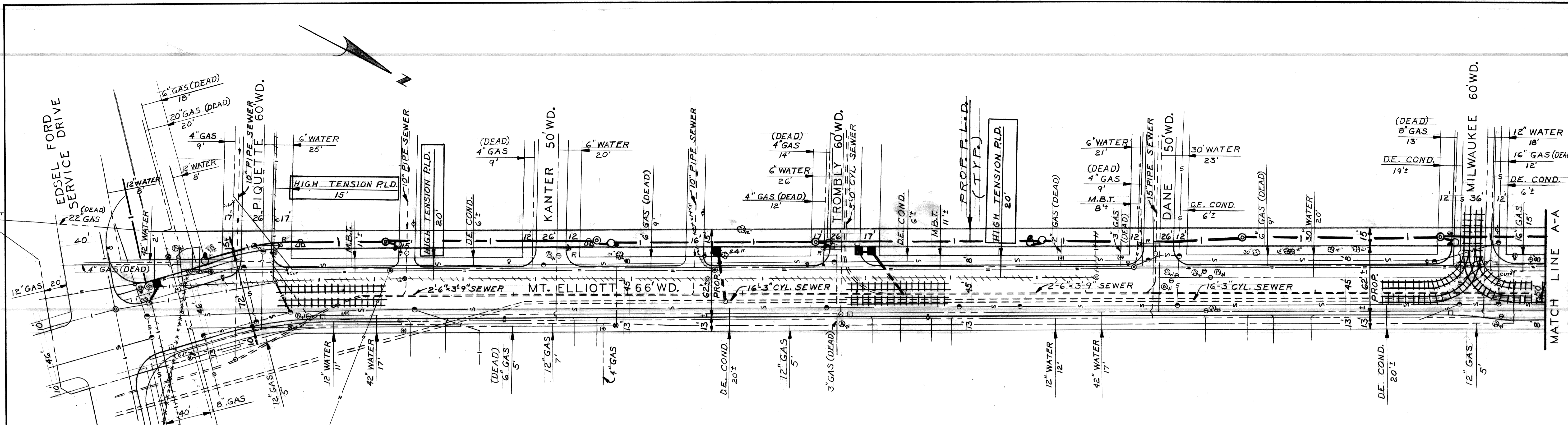
HIGHWAY ENGINEER

WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT
& WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON
T.S. INSTALLATION AT MT. ELLIOTT & STRONG

DRAWN C.E.A.	PLAN PREPARED BY CONSULTING ENGINEERING ASSOCIATES INC. ENGINEERING CONSULTANTS	CHECKED BY
CHECKED [Signature]	16580 WYOMING DETROIT MICH. 48221	APPROVED BY
APPROVED [Signature]	DATE FEB.-1984	DRWG. NO. 8A OF 38
	FILE NO. CEA 1067	

PUBLIC LIGHTING
COMMISSION
CITY OF DETROIT

FILE NO.
51-0575
SHEET NO.
8A OF 38
DATE
FEB.-1984

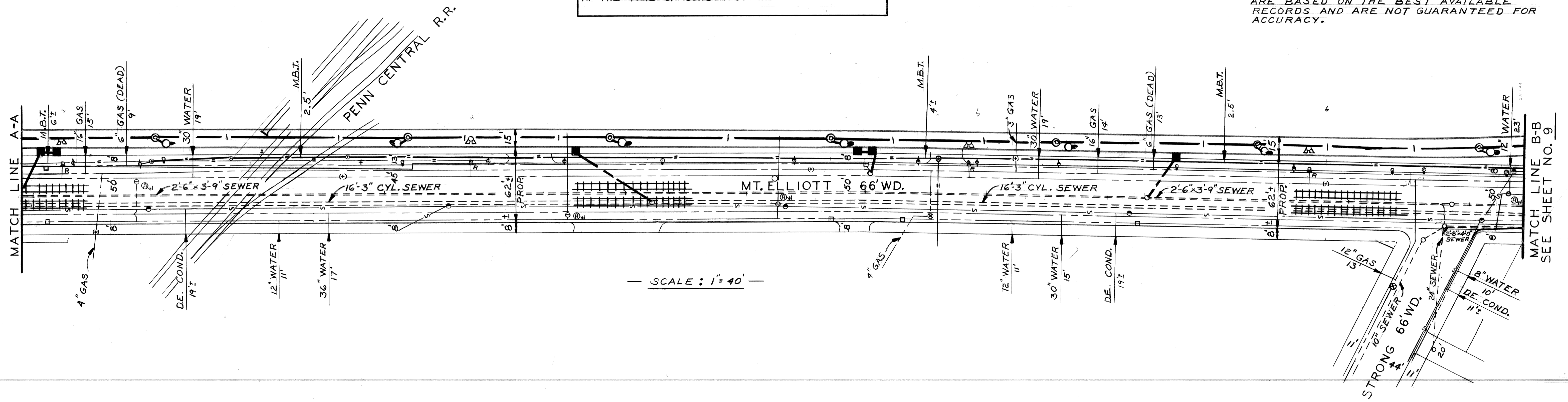


FIRE HYDRANT QUANTITIES (THIS SHEET)	
PAY ITEM	QUANTITY
FIRE HYDRANT	6
REMOVE HYDRANT - METHOD I	3
REMOVE HYDRANT - METHOD II	3

NOTE: FINAL LOCATION OF FIRE HYDRANTS SHALL BE DETERMINED BY THE DETROIT FIRE DEPARTMENT AT THE TIME OF CONSTRUCTION.

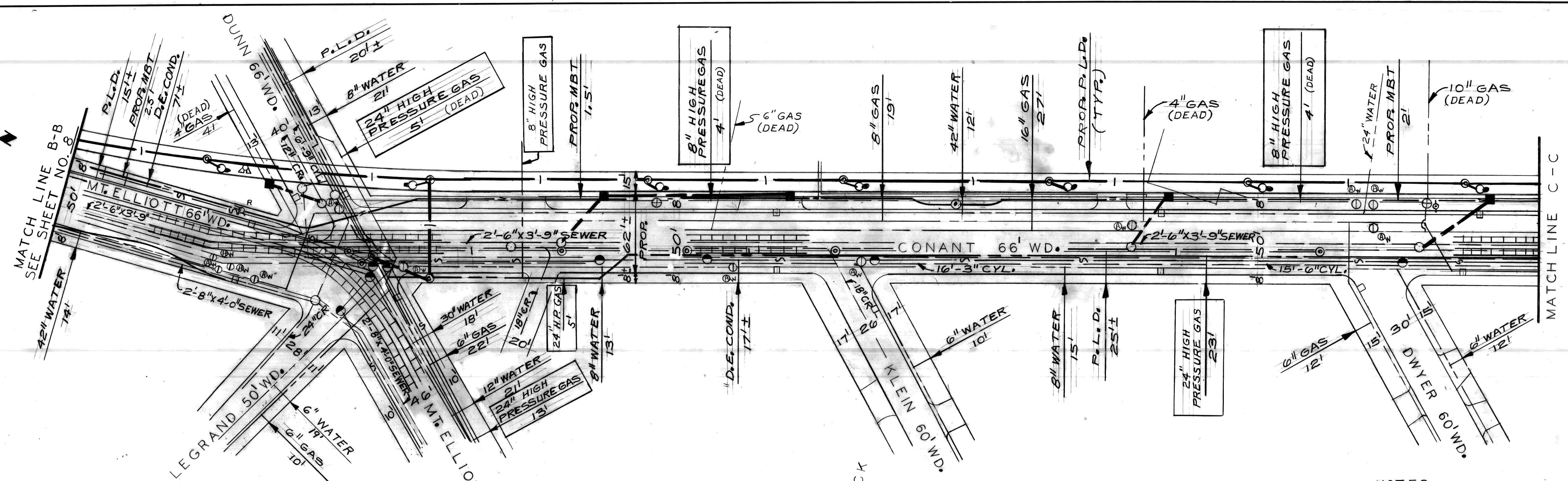
- LEGEND**
- ⊙ ADJUST. GATE WELL COVER
 - ⊕ NEW FIRE HYDRANT LOCATIONS
 - ⊖ FIRE HYDRANT TO BE REMOVED

- NOTES**
1. FOR UTILITY LEGEND SEE SHEET #21.
 2. LOCATIONS OF EXISTING UTILITY LINES ARE BASED ON THE BEST AVAILABLE RECORDS AND ARE NOT GUARANTEED FOR ACCURACY.

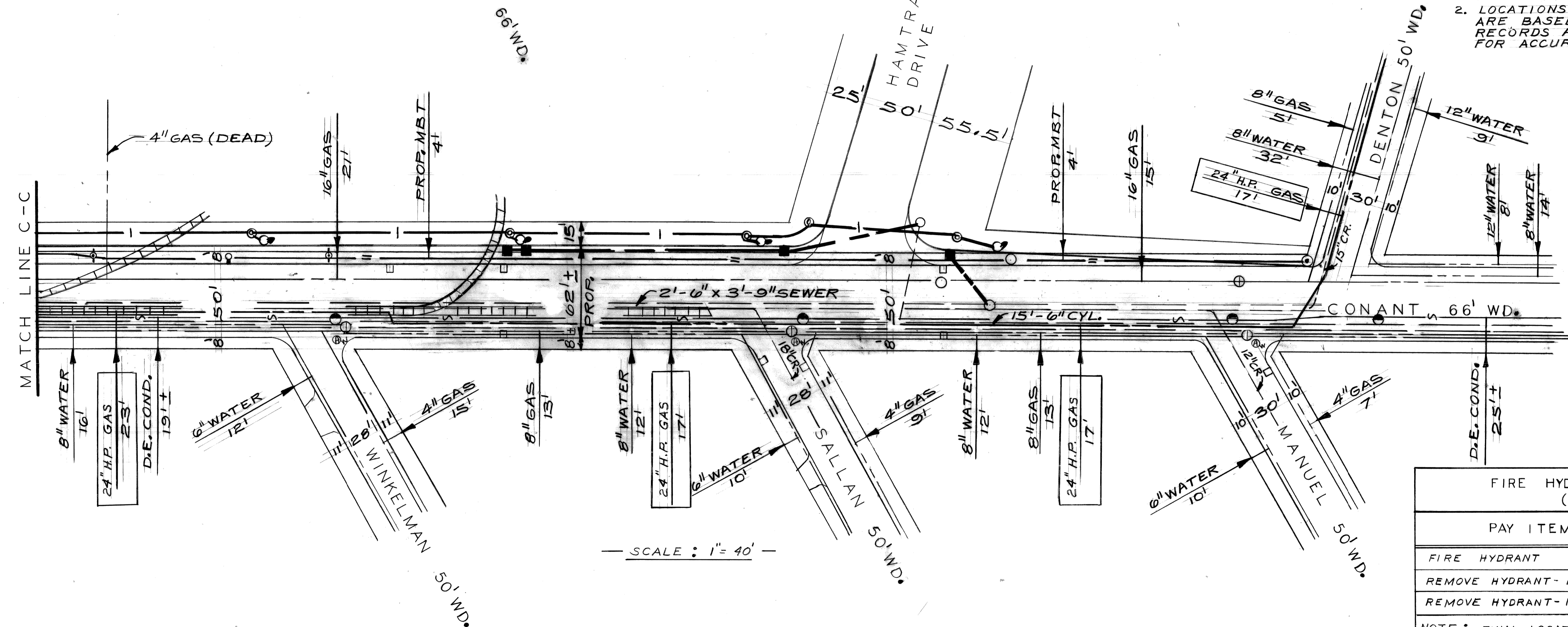


SCALE: 1" = 40'

REVISIONS LOCATED BY COORDINATES ON SHEET COORD. DESCRIPTION DR'N CK'D AP'VD DATE		DESIGNED BY DRAWN BY R Rosik TRACED BY CHECKED BY TALLEY	APPROVED: <i>Naim O. Sawas</i> ENGINEER OF STREETS	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS	WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON UTILITY PLAN	SHEET 8 OF 60 SHEETS CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983
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- NOTES**
1. FOR UTILITY LEGEND SEE SHEET #21.
 2. LOCATIONS OF EXISTING UTILITY LINES ARE BASED ON THE BEST AVAILABLE RECORDS AND ARE NOT GUARANTEED FOR ACCURACY.

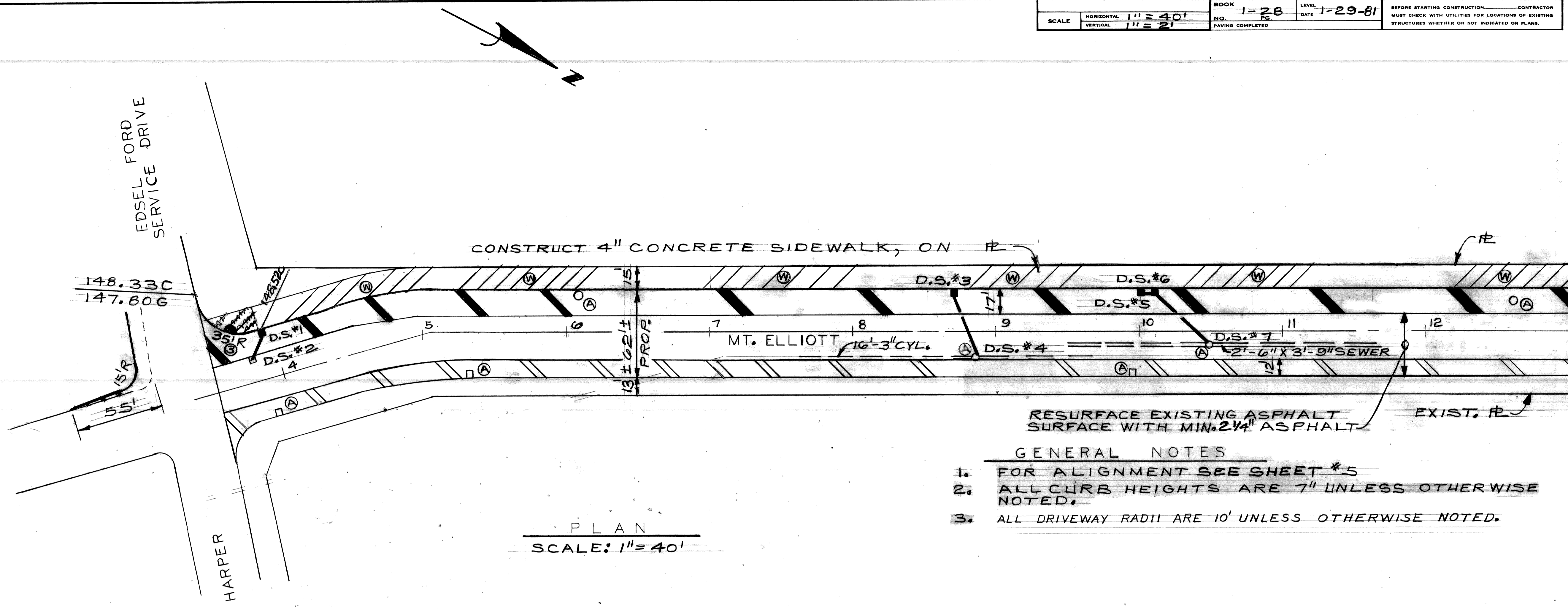


SCALE: 1" = 40'

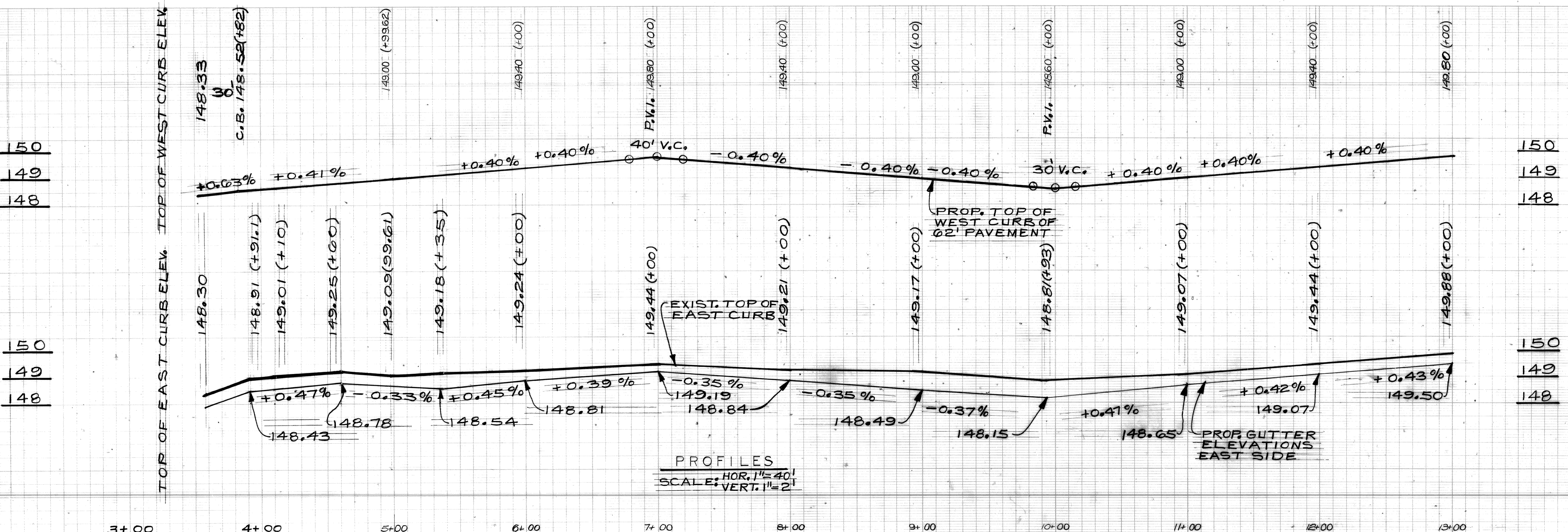
FIRE HYDRANT QUANTITIES (THIS SHEET)	
PAY ITEM	QUANTITY
FIRE HYDRANT	1
REMOVE HYDRANT- METHOD I	1
REMOVE HYDRANT- METHOD II	1

NOTE: FINAL LOCATION OF FIRE HYDRANTS SHALL BE DETERMINED BY THE DETROIT FIRE DEPARTMENT AT THE TIME OF CONSTRUCTION.

CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS		WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON UTILITY PLAN		SHEET 9 OF 60 SHEETS CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983
DESIGNED BY DRAWN BY JONES TRACED BY CHECKED BY TALLEY	APPROVED: <i>Maim O'Rawley</i> ENGINEER OF STREETS			
REVISIONS LOCATED BY COORDINATES ON SHEET				



- BENCH MARKS ELEV
- P.B.M. #49-250 N.E. COR. E. GD. BLVD. & MT. ELLIOTT EL. 147.423
 - P.B.M. #49-251 N.W. COR. PIQUETTE & MT. ELLIOTT EL. 148.884
 - P.B.M. #49-251A N.W. COR. TROMBLY & MT. ELLIOTT EL. 148.797
 - C.B.M. #HYD. S.W. COR. HARPER & MT. ELLIOTT EL. 152.19
 - C.B.M. #HYD. E/S MT. ELLIOTT OPPOSITE S. R. DANE EL. 152.42
- CONSTRUCTION LEGEND
- CONCRETE BASE COURSE REINF. = 9" WITH REINF. INTEGRAL CURB + 2 1/4" BITUMINOUS SURFACE
 - 4" CONCRETE SIDEWALK
 - 6" CONCRETE SIDEWALK
 - CONCRETE PAVEMENT NON-REINFORCED - 8" (DRIVEWAY)
 - COLD MILLING BITUMINOUS SURFACE
 - INTEGRAL CURB AND WALK 2' WIDE
 - SIDEWALK RAMP TYPE III
 - ADJUST DRAINAGE STRUCTURE COVERS

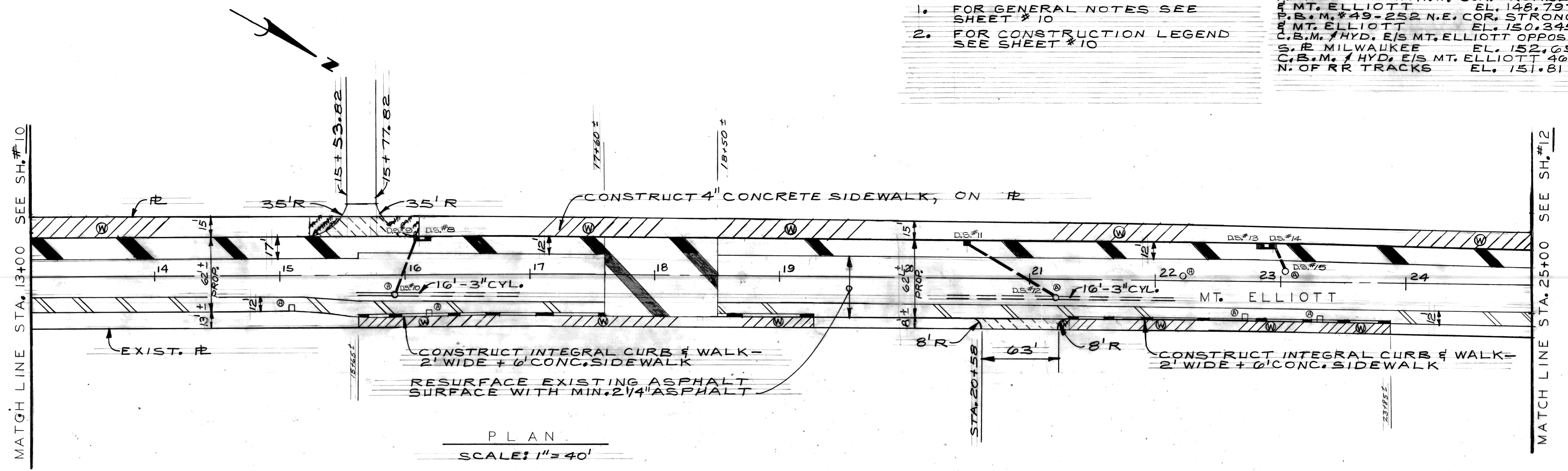


PLAN JONES GRADE D.G.W. ESTIMATE D.G.W. T.H.S. CHECK TALLEY REVISIONS		CHECKED BY TALLEY APPROVED: <i>William E. Sawas</i> ENGINEER OF STREETS	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAU OF STREETS AND HIGHWAYS FOR	WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON PAVING PLAN	INDEX NO. SHEET 10 OF 60 SHEETS CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983
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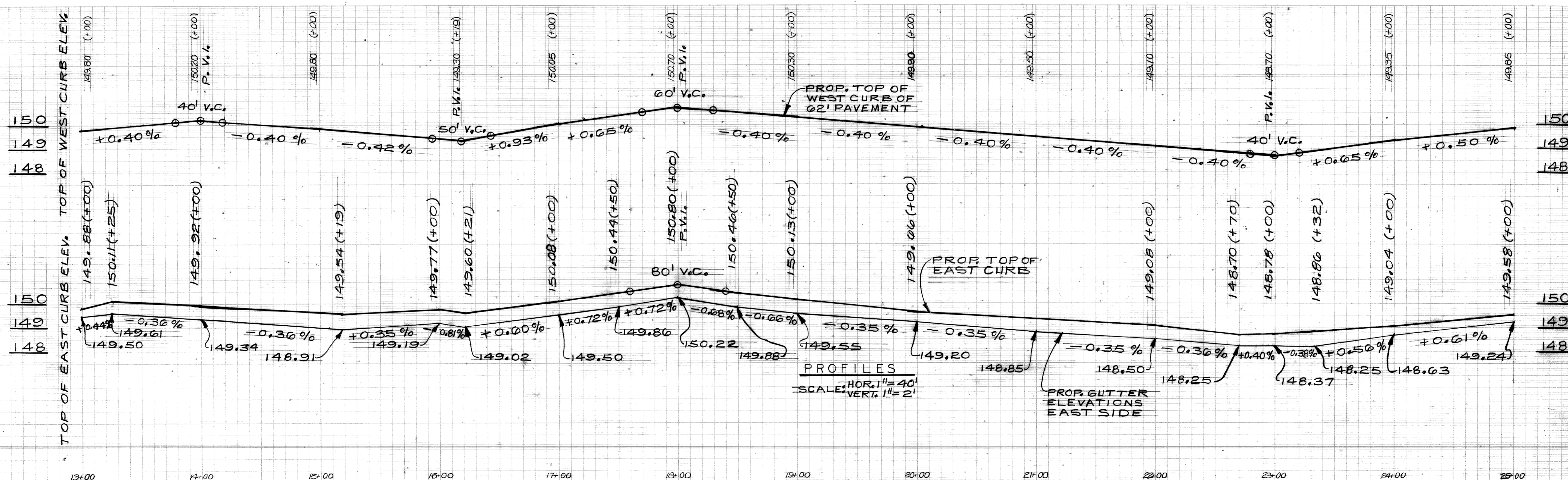
NOTE - FOR SYMBOLS (A) ETC. SEE STANDARD DETAIL DRAWING NO. C-1173

BENCH MARKS ELEV
 P.B.M. #49-251A N.W. COR. TROMBLY & MT. ELLIOTT EL. 148.797
 P.B.M. #49-252 N.E. COR. STRONG & MT. ELLIOTT EL. 150.345
 C.B.M. #HYD. E/S MT. ELLIOTT OPPOSITE S. E. MILWAUKEE EL. 152.69
 C.B.M. #HYD. E/S MT. ELLIOTT 460± N. OF RR TRACKS EL. 151.81

- NOTES
- FOR GENERAL NOTES SEE SHEET #10
 - FOR CONSTRUCTION LEGEND SEE SHEET #10



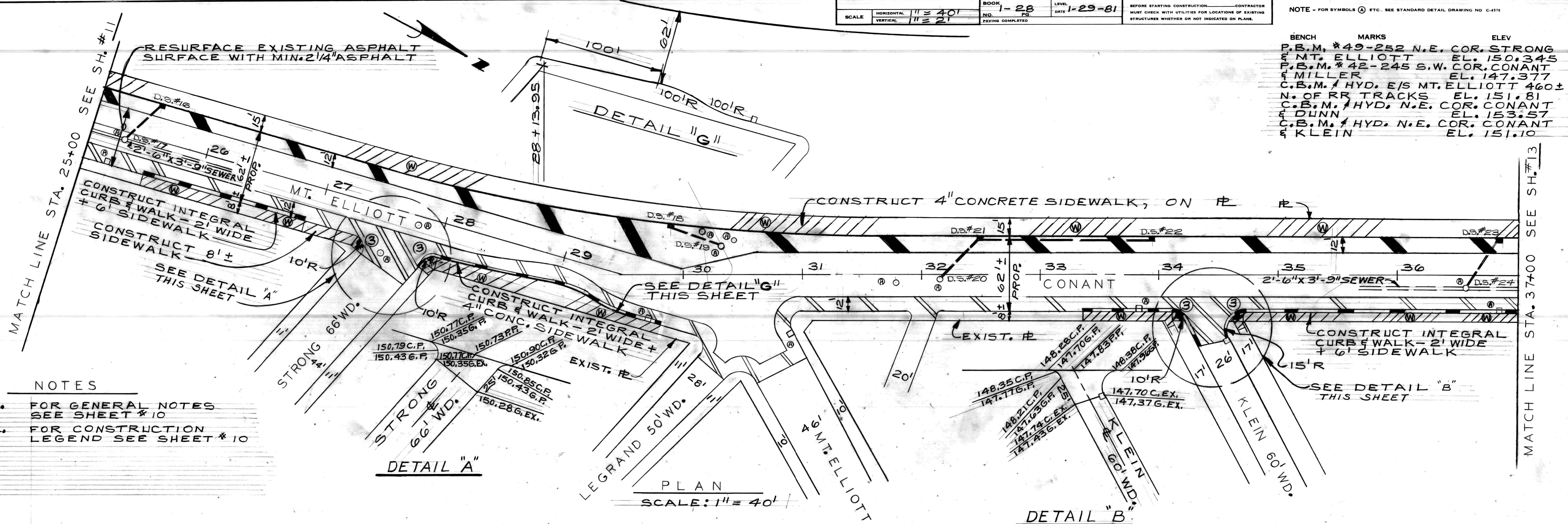
PLAN
 SCALE: 1" = 40'



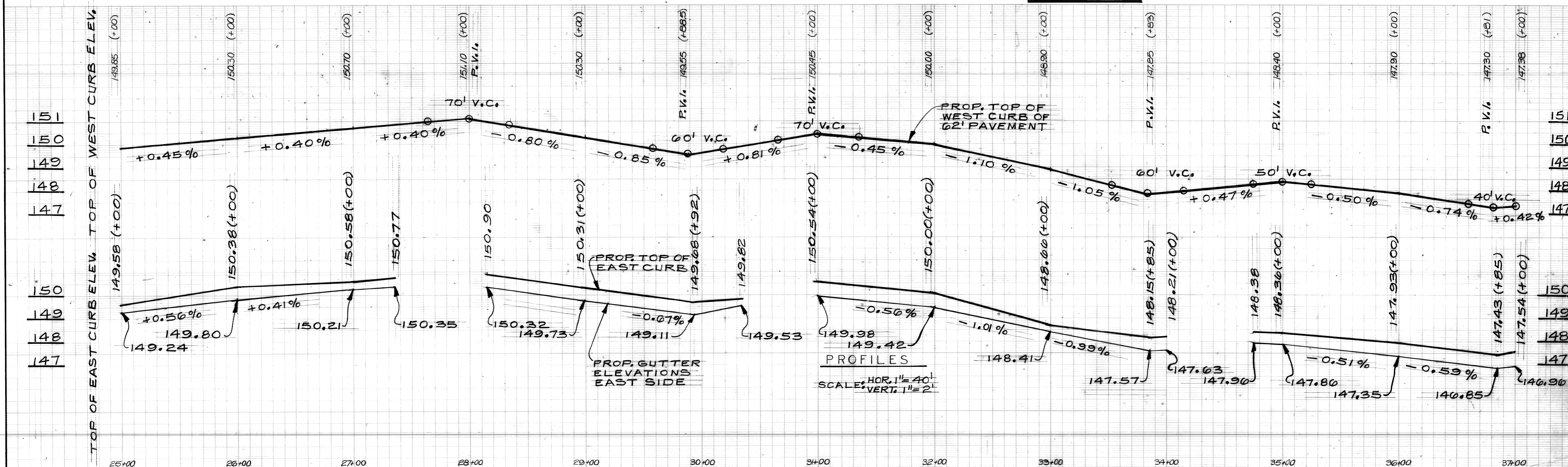
PROFILES
 SCALE: HOR. 1" = 40' VERT. 1" = 2'

PLAN BY JONES GRADE BY [Signature] ESTIMATE BY [Signature] CHECKED BY [Signature] REVISIONS		CHECKED BY [Signature] APPROVED: [Signature] ENGINEER OF STREETS HIGHWAY ENGINEER		CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAU OF STREETS AND HIGHWAYS		WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON PAVING PLAN		INDEX NO. SHEET 11 OF 60 SHEETS TOPO NO. CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983	
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BENCH MARKS	ELEV
P.B.M. #49-252 N.E. COR. STRONG & MT. ELLIOTT	EL. 150.345
P.B.M. #42-245 S.W. COR. CONANT & MILLER	EL. 147.377
C.B.M. #1 HYD. E/S MT. ELLIOTT 460± N. OF RR TRACKS	EL. 151.81
C.B.M. #1 HYD. N.E. COR. CONANT & DUNN	EL. 153.57
C.B.M. #1 HYD. N.E. COR. CONANT & KLEIN	EL. 151.10



- NOTES
- FOR GENERAL NOTES SEE SHEET # 10
 - FOR CONSTRUCTION LEGEND SEE SHEET # 10



<table border="1"> <tr> <td>PLAN</td> <td>JONES</td> <td>CHECKED BY</td> <td>APPROVED:</td> </tr> <tr> <td>GRADE</td> <td>A.G.M.</td> <td></td> <td><i>Mauro</i></td> </tr> <tr> <td>ESTIMATE</td> <td>A.G.M.</td> <td>TALLEY</td> <td>ENGINEER OF STREETS</td> </tr> <tr> <td>DESCRIPTION</td> <td>DR N</td> <td>CK D</td> <td>AP VO</td> </tr> <tr> <td>REVISIONS</td> <td>DATE</td> <td>FINAL</td> <td>REVIEW</td> </tr> </table>	PLAN	JONES	CHECKED BY	APPROVED:	GRADE	A.G.M.		<i>Mauro</i>	ESTIMATE	A.G.M.	TALLEY	ENGINEER OF STREETS	DESCRIPTION	DR N	CK D	AP VO	REVISIONS	DATE	FINAL	REVIEW	<p>CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAU OF STREETS AND HIGHWAYS</p>	<p>WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON PAVING PLAN</p>	<p>INDEX NO. SHEET 12 OF 60 SHEETS TOPO CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983</p>
PLAN	JONES	CHECKED BY	APPROVED:																				
GRADE	A.G.M.		<i>Mauro</i>																				
ESTIMATE	A.G.M.	TALLEY	ENGINEER OF STREETS																				
DESCRIPTION	DR N	CK D	AP VO																				
REVISIONS	DATE	FINAL	REVIEW																				

NOTES

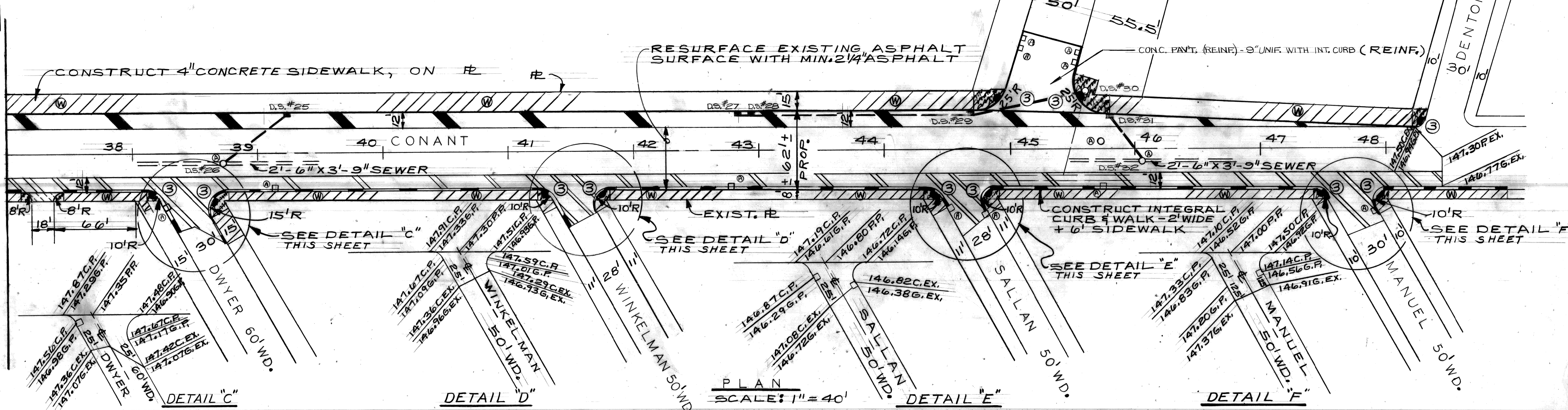
- FOR GENERAL NOTES SEE SHEET # 10
- FOR CONSTRUCTION LEGEND SEE SHEET # 10

SCALE HORIZONTAL 1" = 40'
 VERTICAL 1" = 2'
 BOOK NO. 1-28
 DATE 1-29-81
 LEVEL PS
 PAVING COMPLETED
 BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

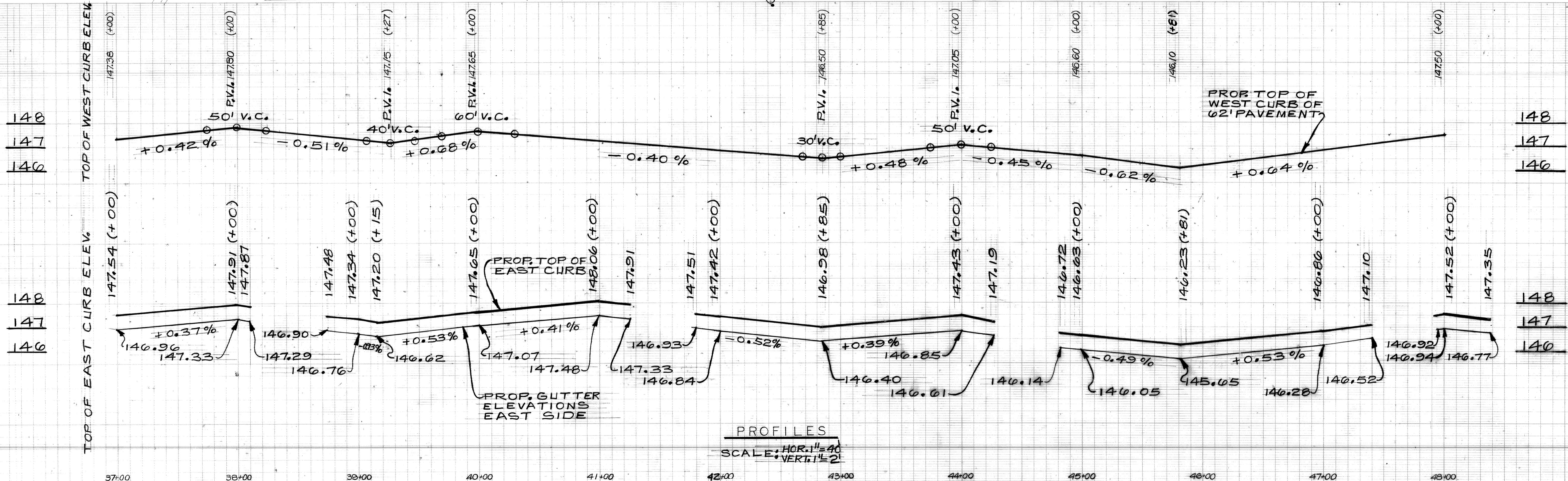
NOTE - FOR SYMBOLS (A) ETC. SEE STANDARD DETAIL DRAWING NO. C-4172

BENCH MARKS ELEV
 P.B.M. #49-252 N.E. COR. STRONG & MT. ELLIOTT EL. 150.345
 P.B.M. #42-245 S.W. COR. CONANT & MILLER EL. 147.377
 C.B.M. #HYD. N.E. COR. CONANT & DWYER EL. 150.84
 C.B.M. #HYD. S.E. COR. CONANT & SALLAN EL. 150.38
 C.B.M. #HYD. S.E. COR. CONANT & MANUEL EL. 150.51

MATCH LINE STA. 37+00 SEE SH. # 12



PLAN SCALE: 1" = 40'



PROFILES SCALE: HOR. 1" = 40' VERT. 1" = 2'

DESCRIPTION	DRN	CKD	JAP	VD	DATE	BY	CHECKED BY	APPROVED	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS	WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON PAVING PLAN	INDEX NO.	SHEET 13 OF 60 SHEETS		
REVISIONS						JONES		Naim O. Jaworski ENGINEER OF STREETS			CONTRACT NO.	19332A	TOPO	
						Talley					ASSIGNMENT NO.	81-22-01	INCHES	

DATE AUG. 1983

DRAINAGE STRUCTURE TABLE

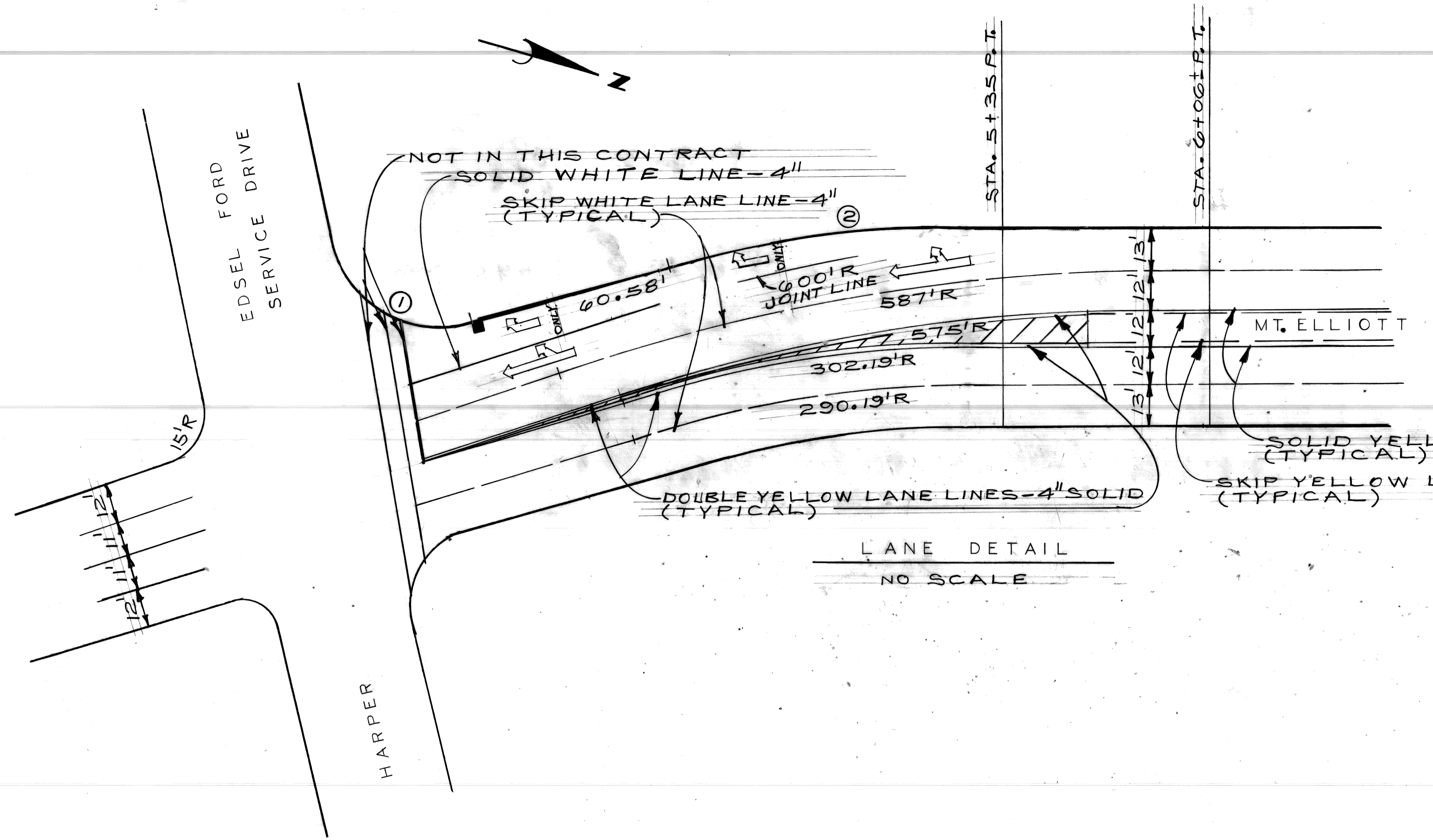
DRAINAGE STRUCTURE NUMBER	SHEET NUMBER	ROADWAY	STATION	DRAINAGE STRUCTURE TYPE	WITH TRAP (T)	TYPE OF DRAINAGE STRUCTURE COVER	OUTLET SEWER SIZE (IN.)	OUTLET SEWER TYPE [C-76-(?)]	OUTLET ELEVATION	OUTLET SEWER RUNS TO:			SEWER LENGTH (FT.)	LENGTH OF TRENCH DETAIL 8 (FT.)	LENGTH OF TRENCH DETAIL 9 (FT.)	SEWER TAP SIZE (IN.)	COMMENTS
										DRAINAGE STRUCTURE NUMBER	EXISTING SEWER (SIZE)	INLET ELEVATION					
1			3+81	C.B."B"	T		12"	II	140.98	2			25	15	10		MEET OUTLET OF EXISTING CATCH BASIN
2			8+70	EX.C.B.			12"	III	142.62	4		142.34±	55	20	35	12"	ABANDON EXISTING CATCH BASIN
3			8+85	EX.S.M.H.			EX.16'-3"CYL.										
4			10+00	C.B."A"			12"	III	142.05	6		142.02±	6	6			
5			10+10	C.B."B"	T		12"	III	141.80±	7		141.55±	50	20	30	12"	
6			10+39	EX.S.M.H.			EX.2'-6"x3'-9"										
7			16+19	C.B."A"			12"	III	141.80	9		141.77±	5	5			
8			16+09.56	C.B."B"	T		12"	III	141.52	10		141.29±	45	10	35	12"	
9			15+95	EX.S.M.H.			EX.16'-3"CYL.										
10			20+50	C.B."B"	T		12"	III	142.12	12		141.72±	80	20	60	12"	
11			21+21	EX.S.M.H.			EX.16'-3"CYL.										
12			22+85	C.B."A"			12"	III	141.19	14		141.14±	10	10			
13			22+95.24	C.B."B"	T		12"	III	140.90±	15		140.80±	20	10	10	12"	
14			23+03	EX.S.M.H.			12"										
15			25+50	C.B."B"	T		12"	II	142.50	17		142.30±	40	10	30	12"	
16			25+32	EX.S.M.H.			EX.2'-6"x3'-9"										
17			29+89.5	C.B."B"	T		12"	II	142.10	19		141.93±	35	35			
18			30+30	EX.S.M.H.			12"										
19			32+10	EX.S.M.H.			EX.2'-6"x3'-9"										
20			32+50	C.B."B"	T		12"	III	141.87	20		141.62±	50	15	35	12"	
21			33+94.45	C.B."A"			12"	III	143.00	21		142.27±	145	145			
22			36+86.52	C.B."B"	T		12"	III	139.77	24		139.52±	50	15	35	12"	
23			36+56	EX.S.M.H.			EX.2'-6"x3'-9"										
24			39+24.14	C.B."B"	T		12"	III	139.62	26		139.32±	60	15	45	12"	
25			38+81	EX.S.M.H.			EX.2'-6"x3'-9"										
26			42+83.64	C.B."A"			12"	III	140.46	28		140.41±	10	10			
27			42+95	C.B."B"			12"	III	139.90	29		139.02±	175	175			
28			44+70	C.B."B"	T		12"	III	138.77	30		138.00±	90	15	75	12"	MEET 12" STUB ON M.H. ELEV. 138.00±
29			45+51	EX.S.M.H.			18"										
30			45+80.6	C.B."B"	T		12"	III	138.60	32		138.37±	45	10	35	12"	
31			45+15	EX.S.M.H.			EX.2'-6"x3'-9"										
32																	

REFERENCE DRAWINGS			DESIGNED BY	APPROVED:			CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS				WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON DRAINAGE STRUCTURE TABLE				SHEET 14 OF 60 SHEETS CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983				
			DRAWN BY	<i>William O. Xaww</i> ENGINEER OF STREETS															
			TRACED BY																
			CHECKED BY	<i>TALLES</i>															
COORD. DESCRIPTION			DRN	CKD	APVD	DATE													
REVISIONS LOCATED BY COORDINATES ON SHEET																			

CURVE DATA

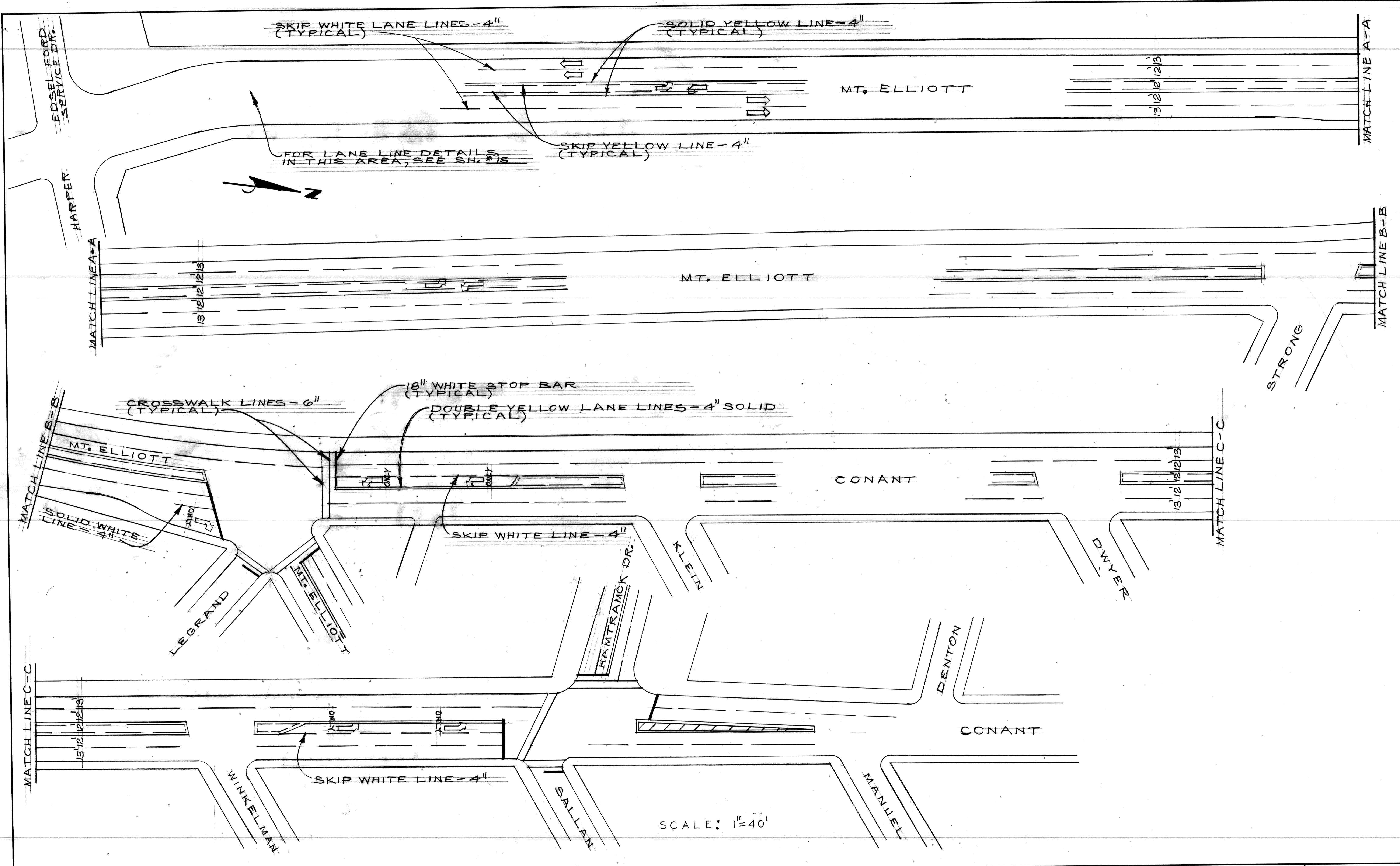
①
 $\Delta = 93^{\circ} 46' 19.5''$
 $R = 35'$
 $T = 37.38'$
 $A = 57.28'$
 $S = 391.26'$

②
 $\Delta = 15^{\circ} 16' 44.5''$
 $R = 339.19'$
 $T = 45.50'$
 $A = 90.45'$
 $S = 181.17'$



LANE DETAIL
 NO SCALE

<table border="1"> <tr> <th>COORD</th> <th>DESCRIPTION</th> <th>DRN</th> <th>CHK'D</th> <th>APVD</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>		COORD	DESCRIPTION	DRN	CHK'D	APVD	DATE							<table border="1"> <tr> <td>DESIGNED BY</td> <td>JONES</td> </tr> <tr> <td>DRAWN BY</td> <td>JONES</td> </tr> <tr> <td>TRACED BY</td> <td> </td> </tr> <tr> <td>CHECKED BY</td> <td>TRUES</td> </tr> </table>	DESIGNED BY	JONES	DRAWN BY	JONES	TRACED BY		CHECKED BY	TRUES	<table border="1"> <tr> <td>APPROVED:</td> <td><i>Harold O. Xadwes</i></td> </tr> <tr> <td> </td> <td>ENGINEER OF STREETS</td> </tr> </table>	APPROVED:	<i>Harold O. Xadwes</i>		ENGINEER OF STREETS	<p>CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS</p>	<p>WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON</p>	<p>SHEET 15 OF 60 SHEETS CONTRACT NO. 19332A ASSIGNMENT NO. 81-22-01 DATE AUG. 1983</p>
COORD	DESCRIPTION	DRN	CHK'D	APVD	DATE																									
DESIGNED BY	JONES																													
DRAWN BY	JONES																													
TRACED BY																														
CHECKED BY	TRUES																													
APPROVED:	<i>Harold O. Xadwes</i>																													
	ENGINEER OF STREETS																													
<p>REVISIONS LOCATED BY COORDINATES ON SHEET</p>						<p>DETAIL SHEET</p>																								



COORD	DESCRIPTION	DRN	CHKD	APVD	DATE
	REVISIONS LOCATED BY COORDINATES ON SHEET				

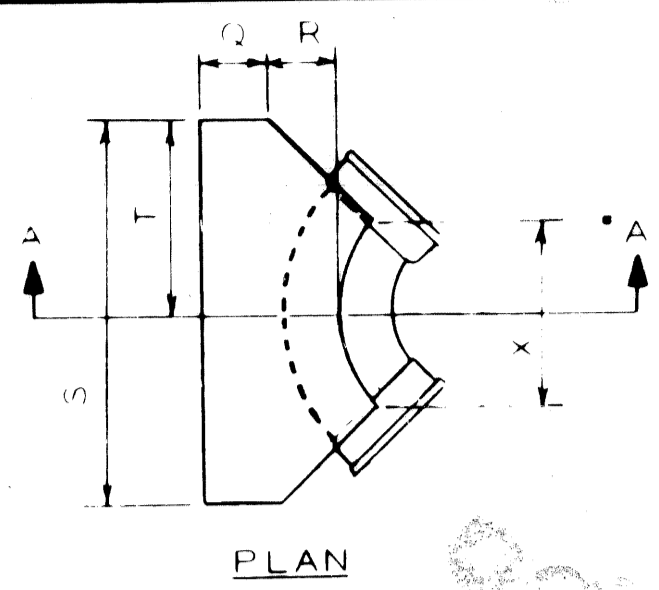
DESIGNED BY	JONES
DRAWN BY	JONES
TRACED BY	
CHECKED BY	TRAVES

APPROVED:
Norm O'Lawless
 ENGINEER OF STREETS

CITY OF DETROIT
 CITY ENGINEERING DEPARTMENT
 BUREAUS OF STREETS AND HIGHWAYS
 FOR

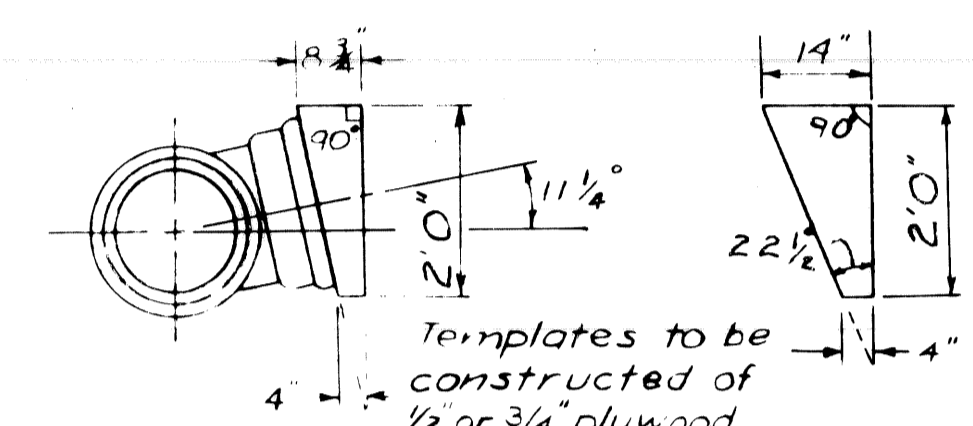
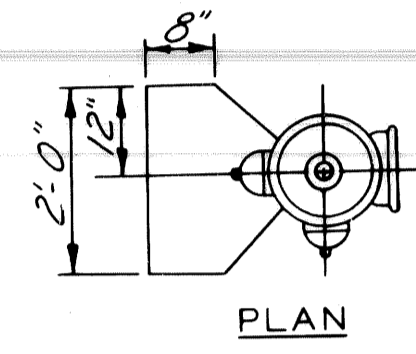
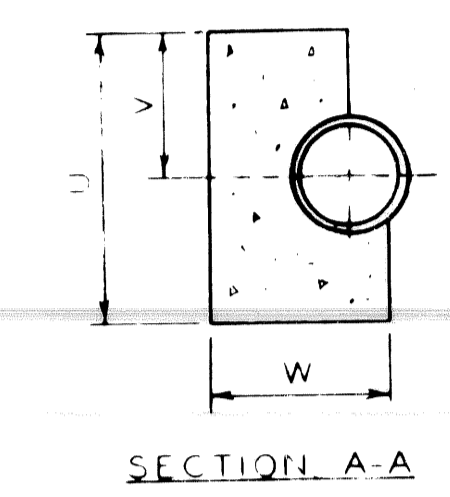
WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT
 AND
 WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON
 PAVEMENT MARKING

SHEET 16 OF 60 SHEETS
 CONTRACT NO. 19332A
 ASSIGNMENT NO. 81-22-01
 DATE AUG. 1983

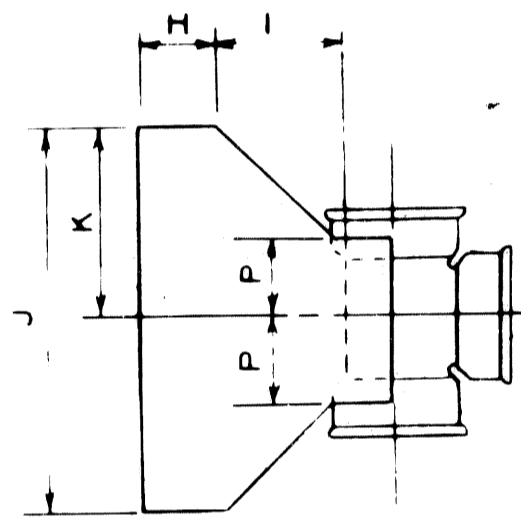


BEND SIZE	CODE									
	Q	R	S	T	U	V	W	X	Y	Z
6" x 8" 90°	0' 9"	1' 0"	3' 4"	1' 8"	2' 6"	1' 3"	1' 11"	1' 2"		
12" 90°	0' 9"	1' 4"	5' 6"	2' 9"	3' 0"	1' 6"	2' 4"	1' 8"		
16" 90°	1' 0"	1' 8"	6' 0"	3' 0"	3' 0"	2' 6"	3' 0"	2' 8"		
6" x 8" 45°	0' 9"	1' 0"	2' 4"	1' 2"	2' 0"	1' 0"	1' 11"	1' 4"		
12" 45°	0' 9"	1' 4"	3' 6"	1' 9"	2' 6"	1' 3"	2' 4"	1' 4"		
16" 45°	1' 0"	1' 8"	5' 4"	2' 8"	3' 0"	1' 6"	3' 0"	2' 6"		
6" x 8" 22 1/2°	0' 9"	1' 0"	2' 6"	1' 3"	2' 0"	1' 0"	2' 0"	1' 4"		
16" 22 1/2°	1' 0"	1' 8"	3' 4"	1' 8"	2' 6"	1' 3"	3' 0"	1' 2"		

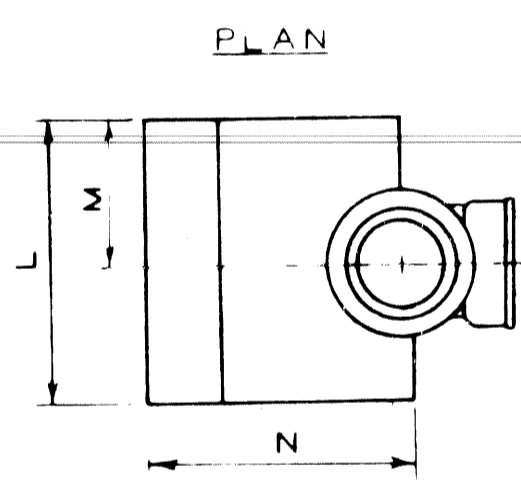
DETAIL OF STANDARD THRUST BLOCKS FOR BENDS
No Scale



TEMPLATE FOR SETTING TEES
AT 11 1/4° & 22 1/2° ANGLES
No Scale



THRUST BLOCK FOR 6" HYDRANT
No Scale

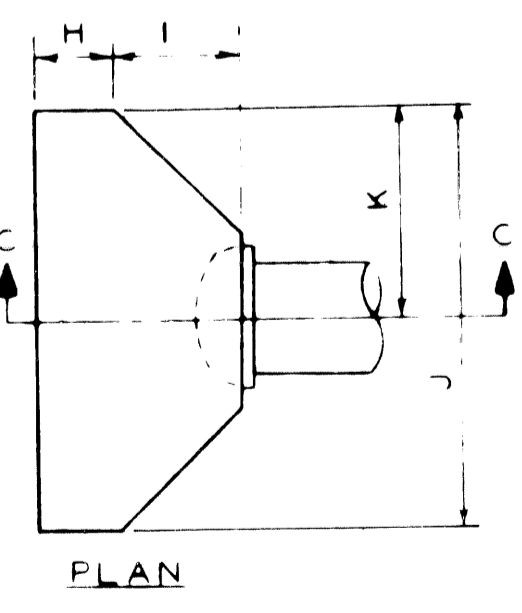
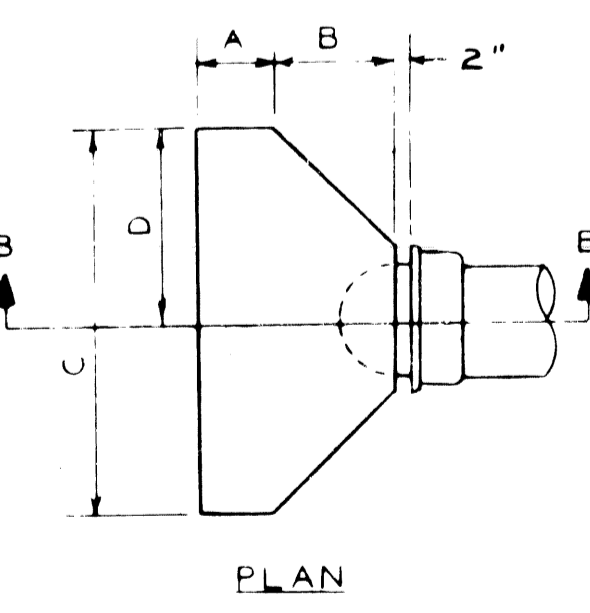


ELEVATION

TEE SIZE	CODE									
	H	I	J	K	L	M	N	O	P	Q
8" x 8"	0' 9"	1' 0"	3' 0"	1' 6"	2' 0"	1' 0"	8' 2' 3"	8' 0' 6"		
12" x 8"	0' 9"	1' 4"	4' 0"	2' 0"	3' 0"	1' 6"	12' 2' 5"	12' 0' 8"		
16" x 8"	1' 0"	1' 8"	5' 0"	2' 6"	4' 0"	2' 0"	16' 2' 9"	16' 0' 6"		
12" x 12"	0' 9"	1' 4"	4' 0"	2' 0"	3' 0"	1' 6"	12' 2' 9"	8' 0' 8"		
16" x 12"	1' 0"	1' 8"	5' 0"	2' 6"	4' 0"	2' 0"	16' 3' 1"	16' 0' 8"		
16" x 16"	1' 0"	1' 8"	5' 0"	2' 6"	4' 0"	2' 0"	16' 3' 8"	16' 0' 11"		

DETAIL OF STANDARD THRUST BLOCKS FOR TEES
No Scale

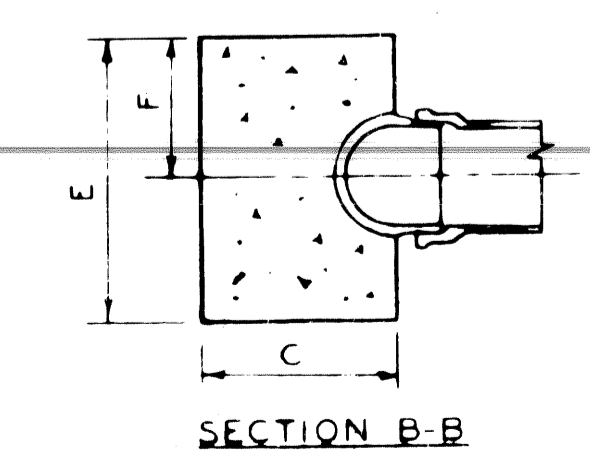
NOTES
The bearing face of all thrust blocks shall be poured against undisturbed earth. Thrust Blocks will be required on all Bends 6 inches in Diameter or larger and greater than 11 1/4°.



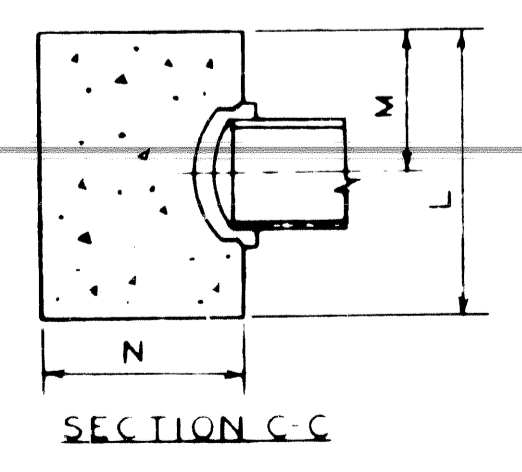
PLUG SIZE	CODE						
	A	B	C	D	E	F	G
6" x 8"	0' 9"	1' 2"	3' 0"	1' 6"	2' 0"	1' 0"	1' 11"
12"	0' 9"	1' 4"	4' 0"	2' 0"	3' 0"	1' 6"	2' 1"
16"	1' 0"	1' 8"	5' 0"	2' 6"	4' 0"	2' 0"	2' 8"

CAP SIZE	CODE						
	H	I	J	K	L	M	N
6" x 8"	0' 9"	1' 2"	3' 0"	1' 6"	2' 0"	1' 0"	1' 11"
12"	0' 9"	1' 4"	4' 0"	2' 0"	3' 0"	1' 6"	2' 1"
16"	1' 0"	1' 8"	5' 0"	2' 6"	4' 0"	2' 0"	2' 8"

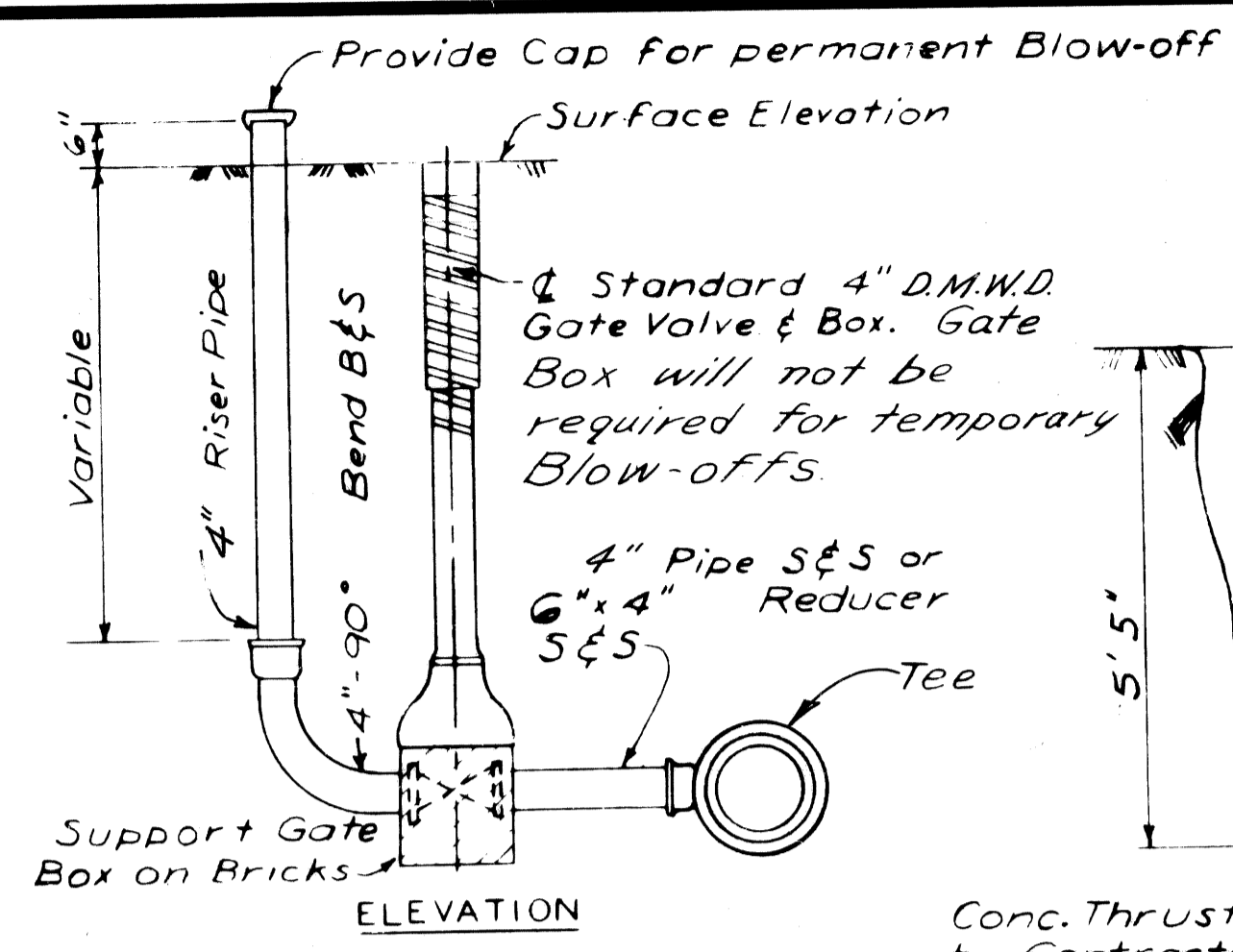
DETAIL OF STANDARD THRUST BLOCKS FOR PLUGS & CAPS
No Scale



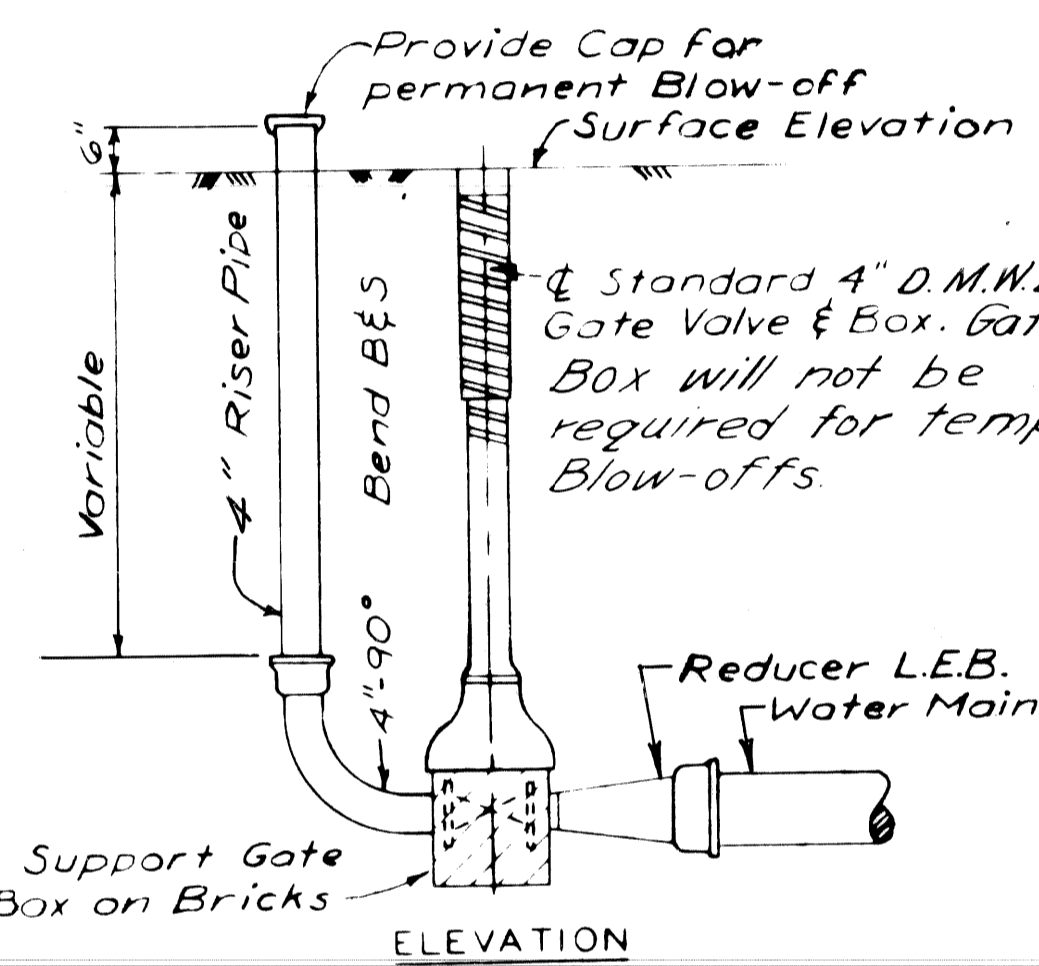
SECTION B-B



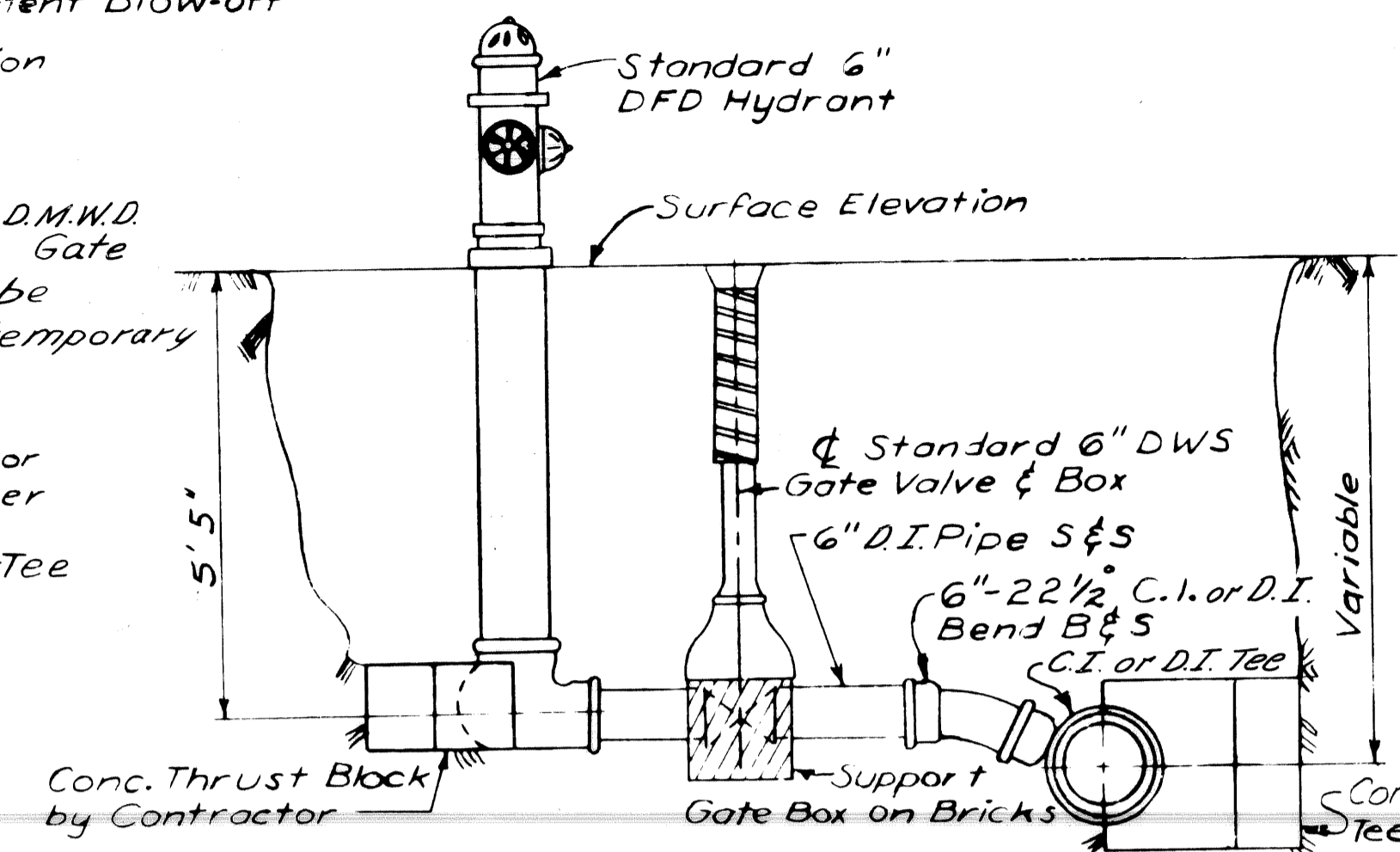
SECTION C-C



DETAIL OF 4" BLOW-OFF
No Scale



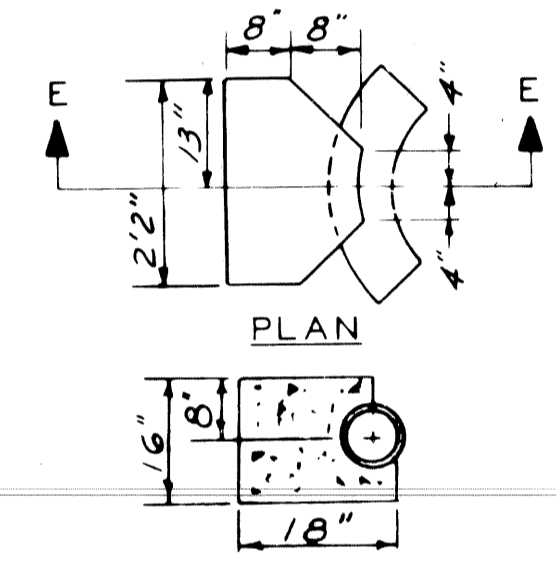
DETAIL OF 4" BLOW-OFF
No Scale



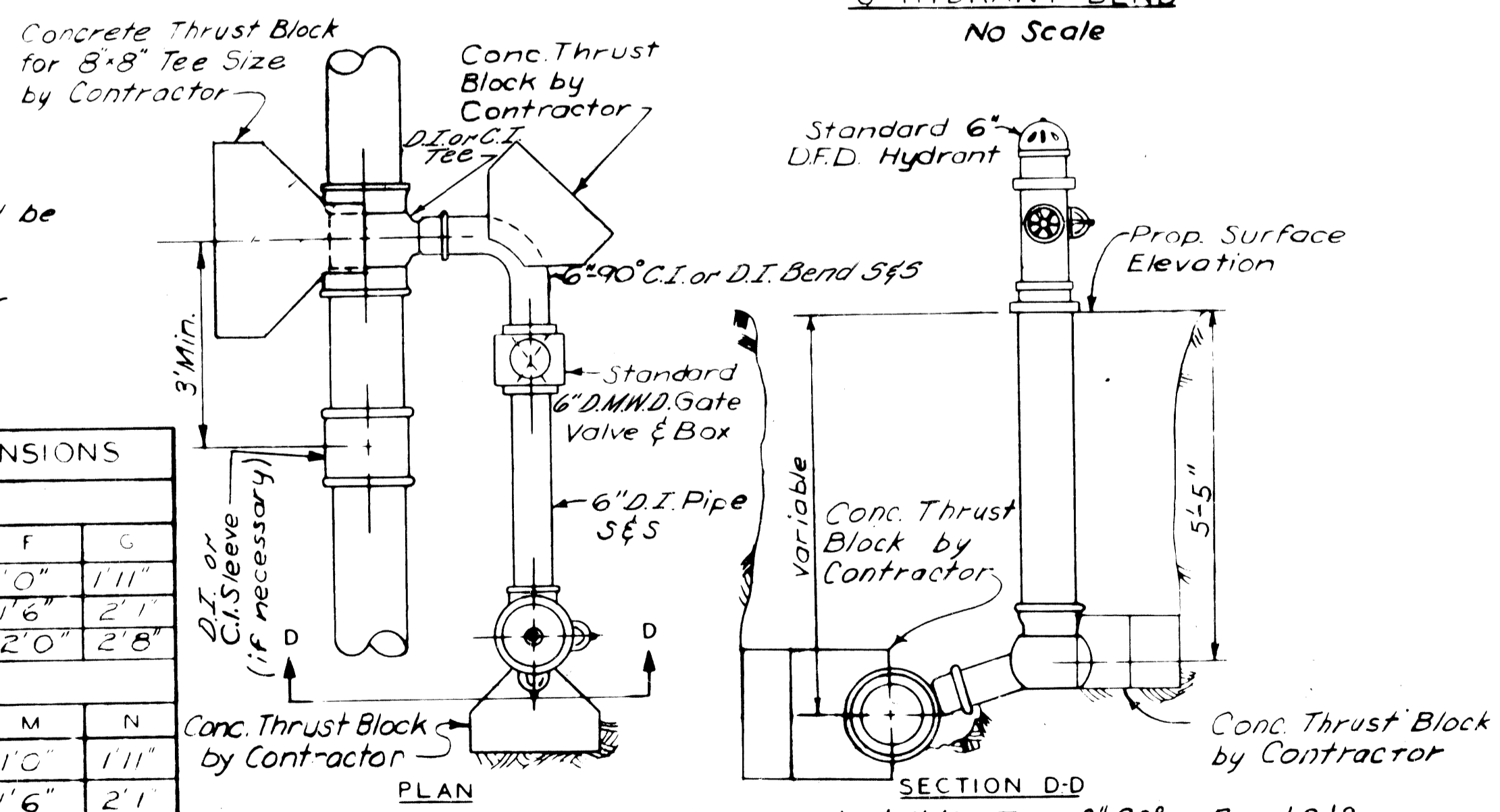
From the new main the Contractor shall install the Tee, 6" 22 1/2° Bend B&S, 6" Pipe, 6" D.M.W.D. Gate Valve & Box, 6" Pipe, Concrete Thrust Blocks, and Hydrant. From any existing main the complete Hydrant installation shall be done by the Contractor.

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

DETAIL OF 6" HYDRANT INSTALLATION
No Scale



THRUST BLOCK FOR 6" HYDRANT BEND
No Scale



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

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

DETAIL OF 6" HYDRANT INSTALLATION
No Scale

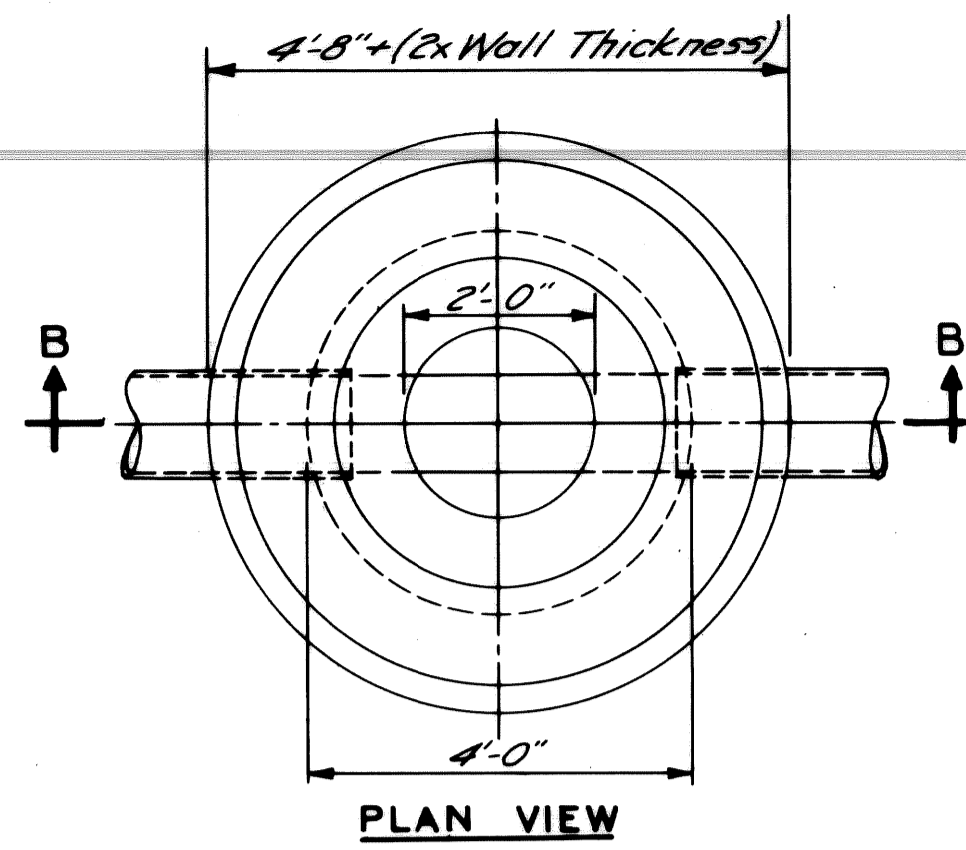
GENERAL NOTES
"Ductile Iron Pipe in sizes 3" through 16" is permitted as a part of the Cast Iron Pipe Specifications."

PROJECT NO. 19332 A ASSIGN No 81-22-01

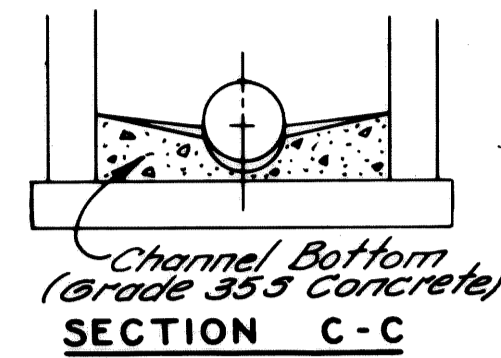
REVISIONS			
NO.	DESCRIPTION	DATE	BY

DESIGNED BY	RBP
DRAWN BY	M.P.
TRACED BY	J.E.
CHECKED BY	J.E.
DATE	

10-31-75
Use in City of State

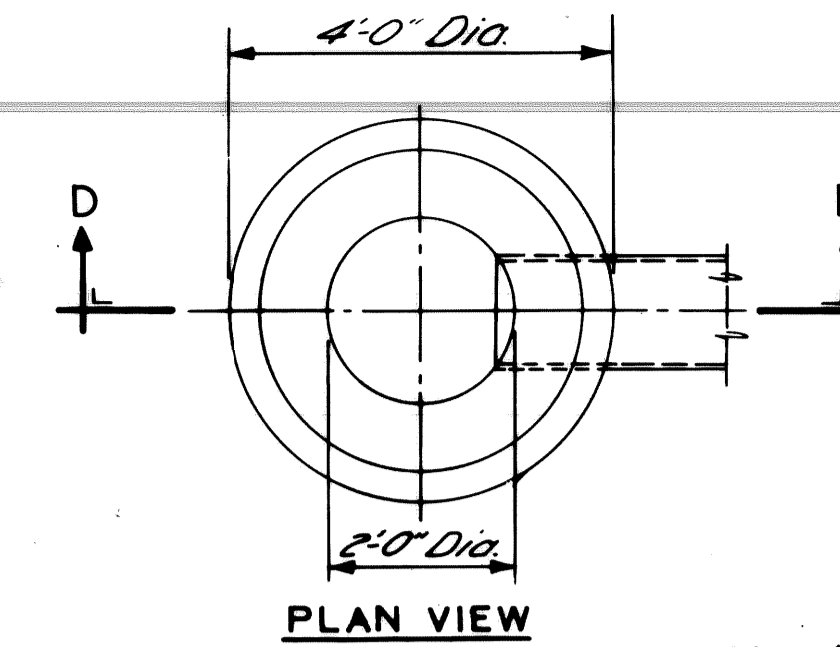
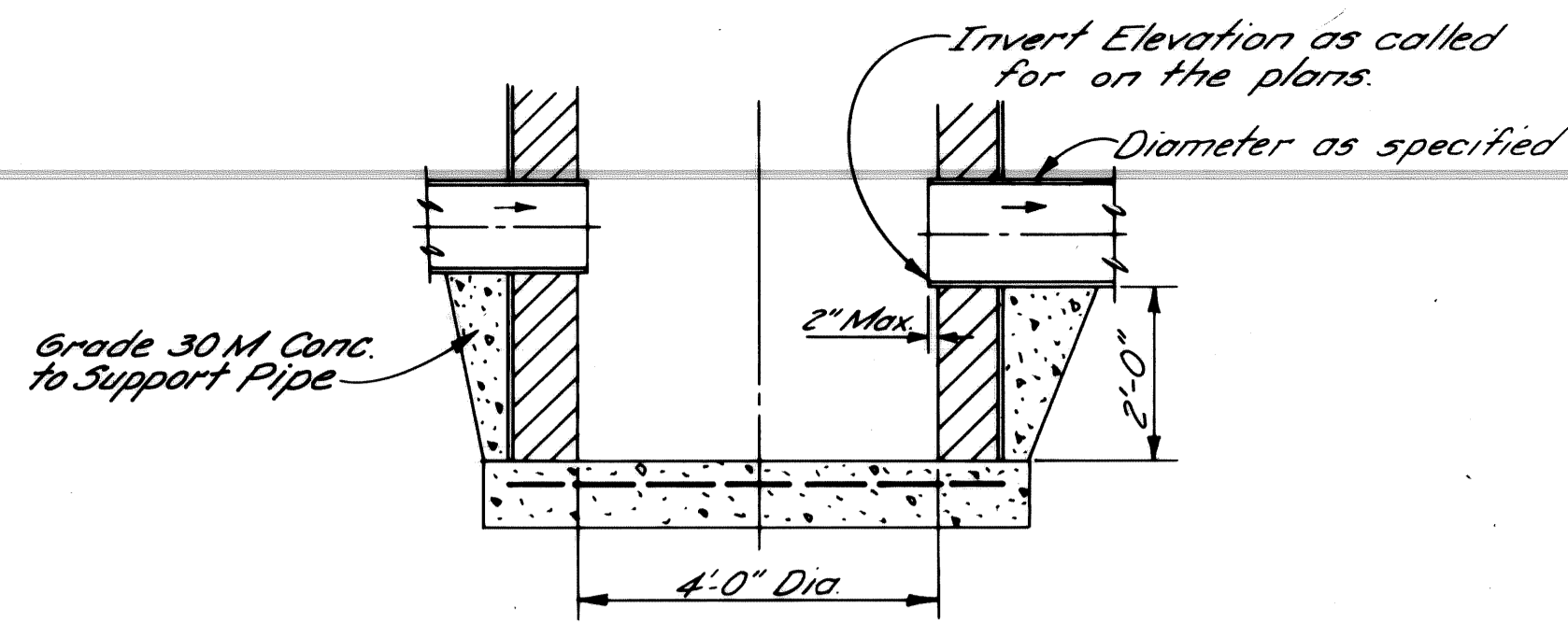


NOTE "A"
Wall thickness below a depth of 15 feet shall be 12 inches.



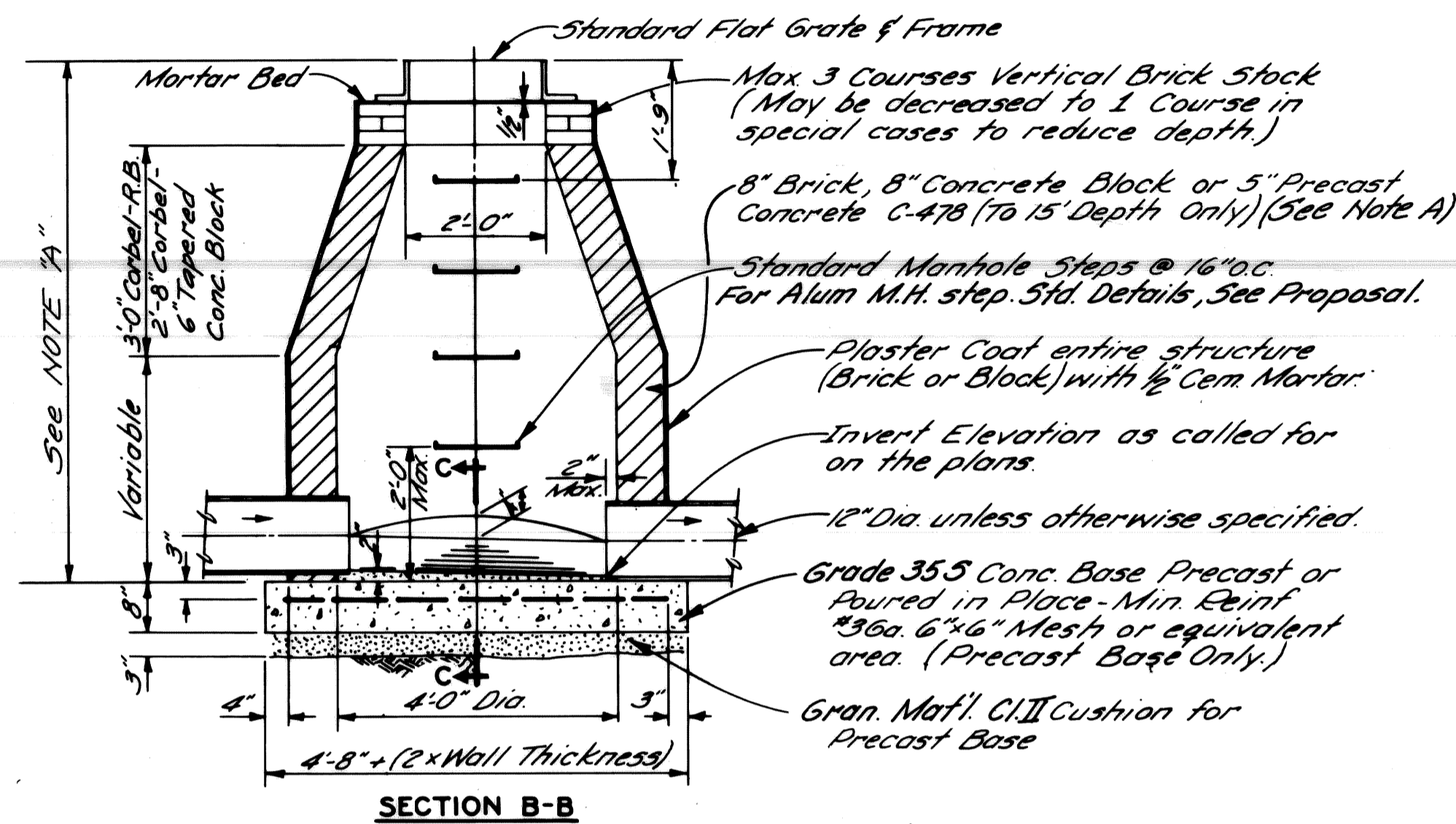
DETAIL OF SUMP FOR CATCH BASIN "B"

NO SCALE



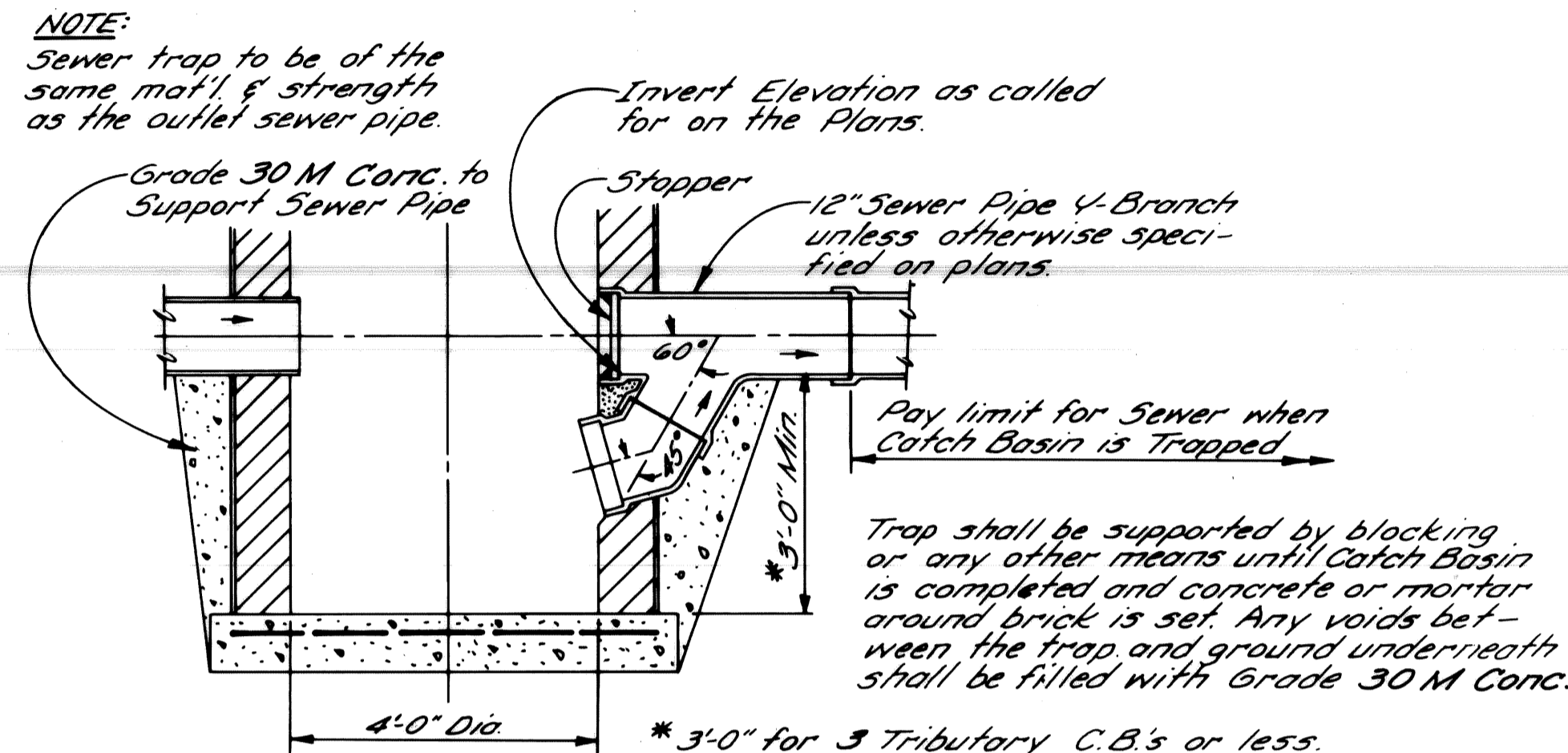
NOTE:
Catch Basin "A" will be used only when outletting to a Catch Basin "B"

PLAN VIEW



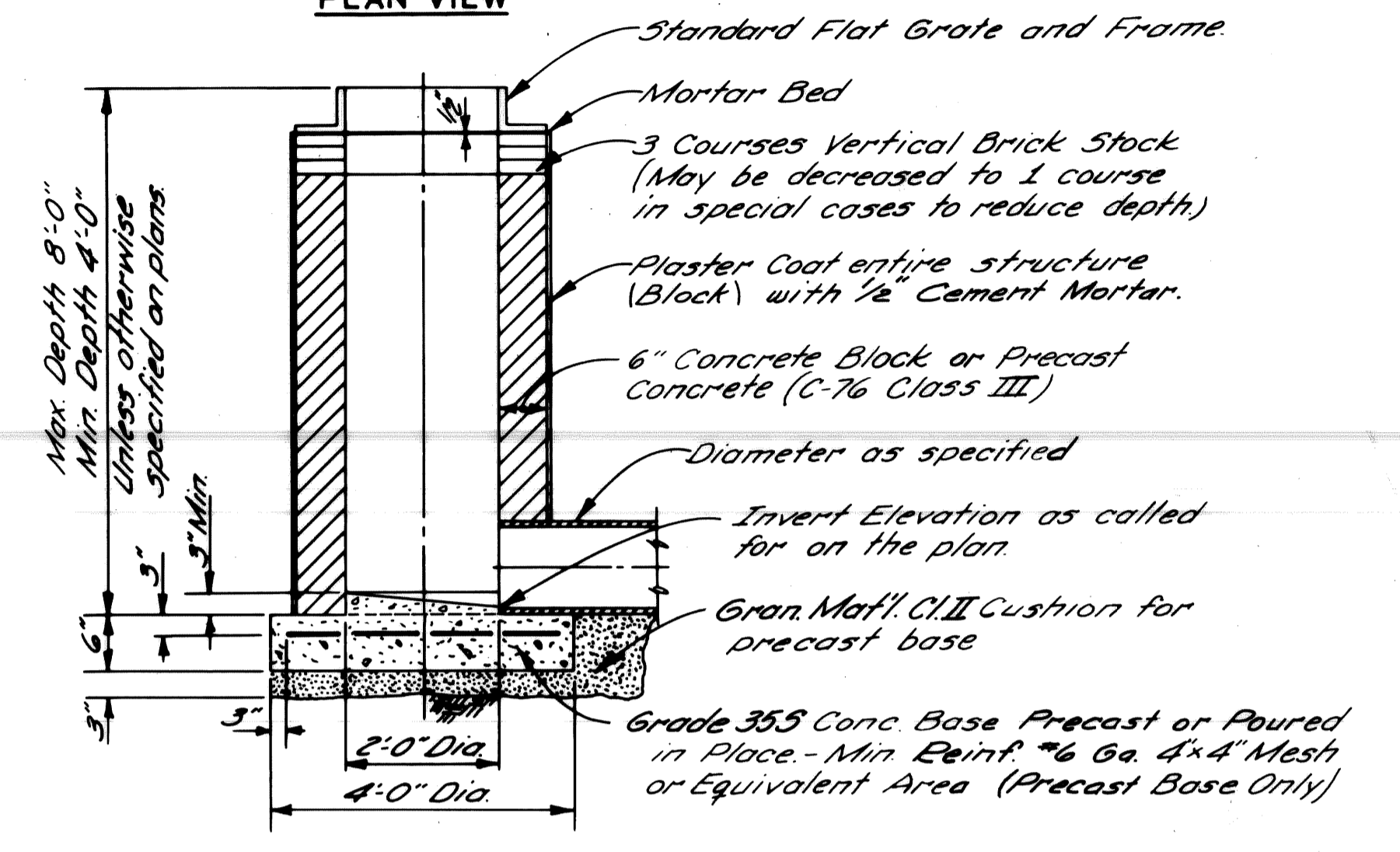
CATCH BASIN "B"

NO SCALE



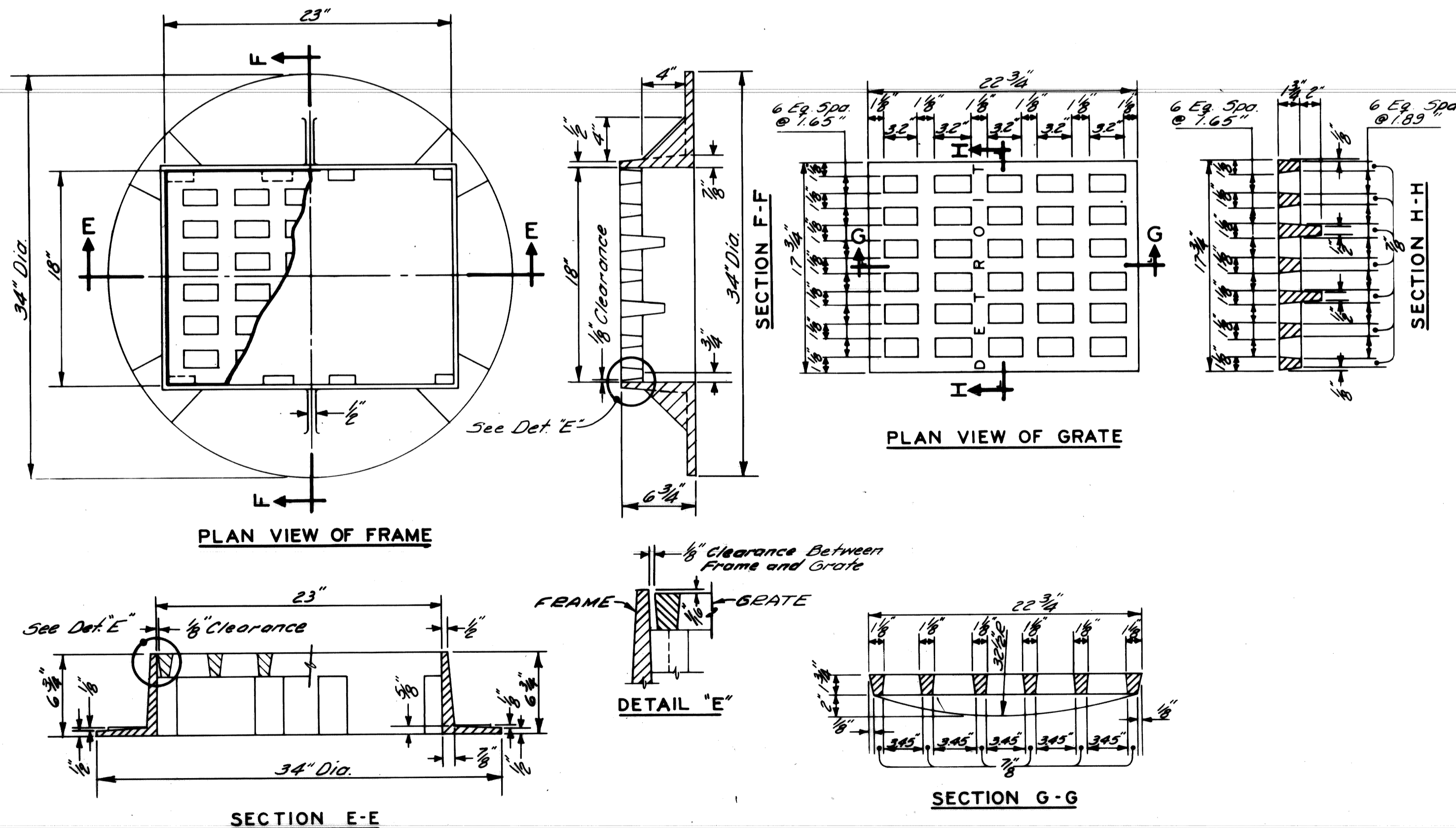
DETAIL OF TRAP FOR CATCH BASIN "B"

NO SCALE



CATCH BASIN "A"

NO SCALE



STANDARD FLAT GRATE AND FRAME

NO SCALE

GENERAL NOTES

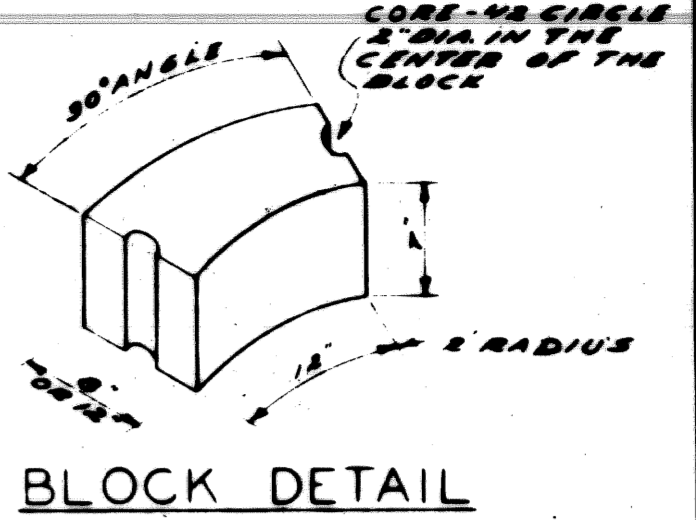
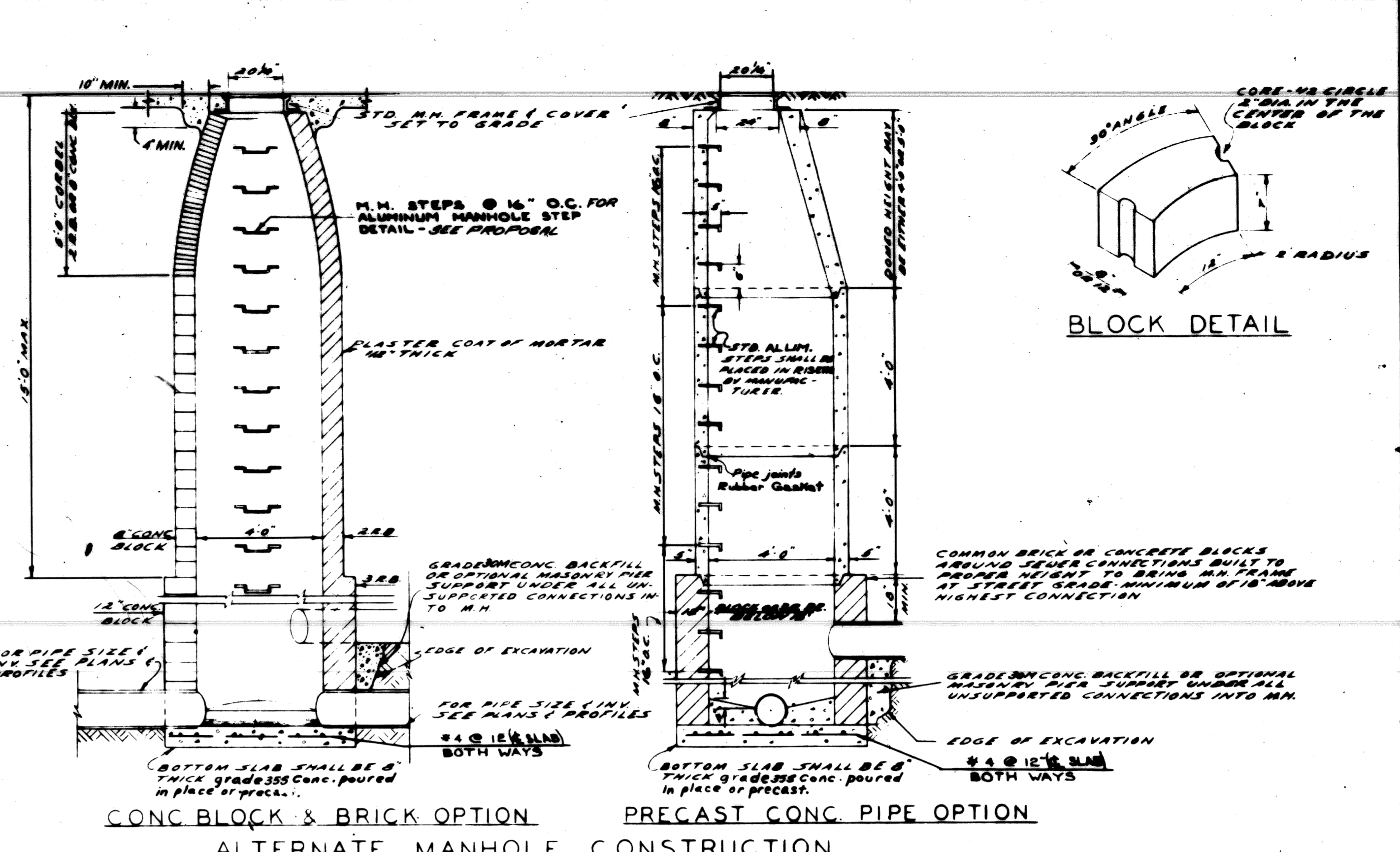
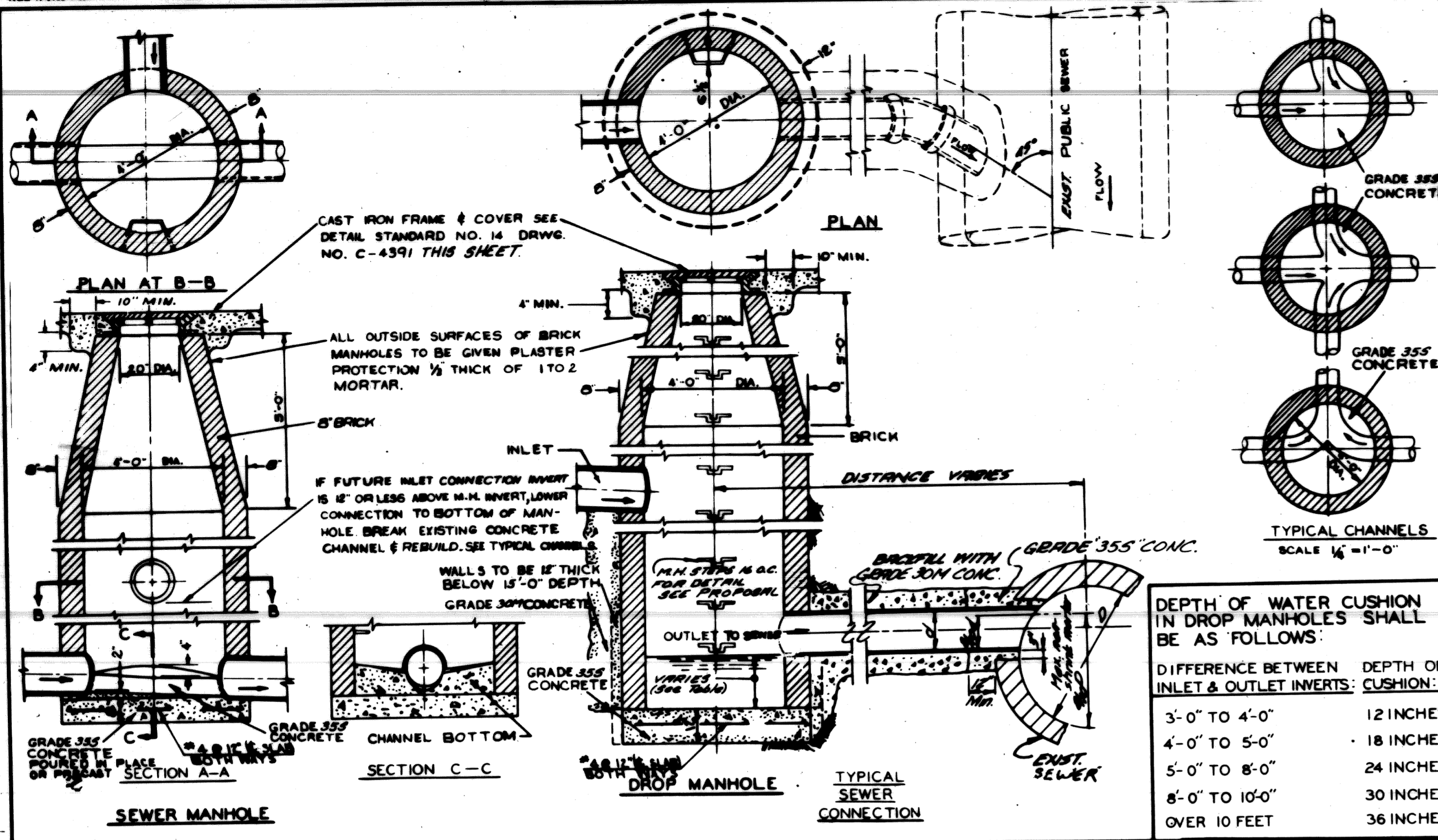
- The materials & workmanship shall be in accordance with the current Standard Specifications.
- Center of Catch Basin shall be 20 inches from back of curb.
- All sizes & flow lines of pipe, and elevations for top & bottom of structures shall be determined from the plans or construction requirements.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

DESIGNED BY	M. POLITO	APPROVED:	John Erickson ENGINEER OF STREETS
DRAWN BY			Alan E. Poyner ENGINEER OF EXPRESSWAYS
TRACED BY			W. B. Bannard HEAD CIVIL ENGINEER
CHECKED BY	D. MILZ		

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT

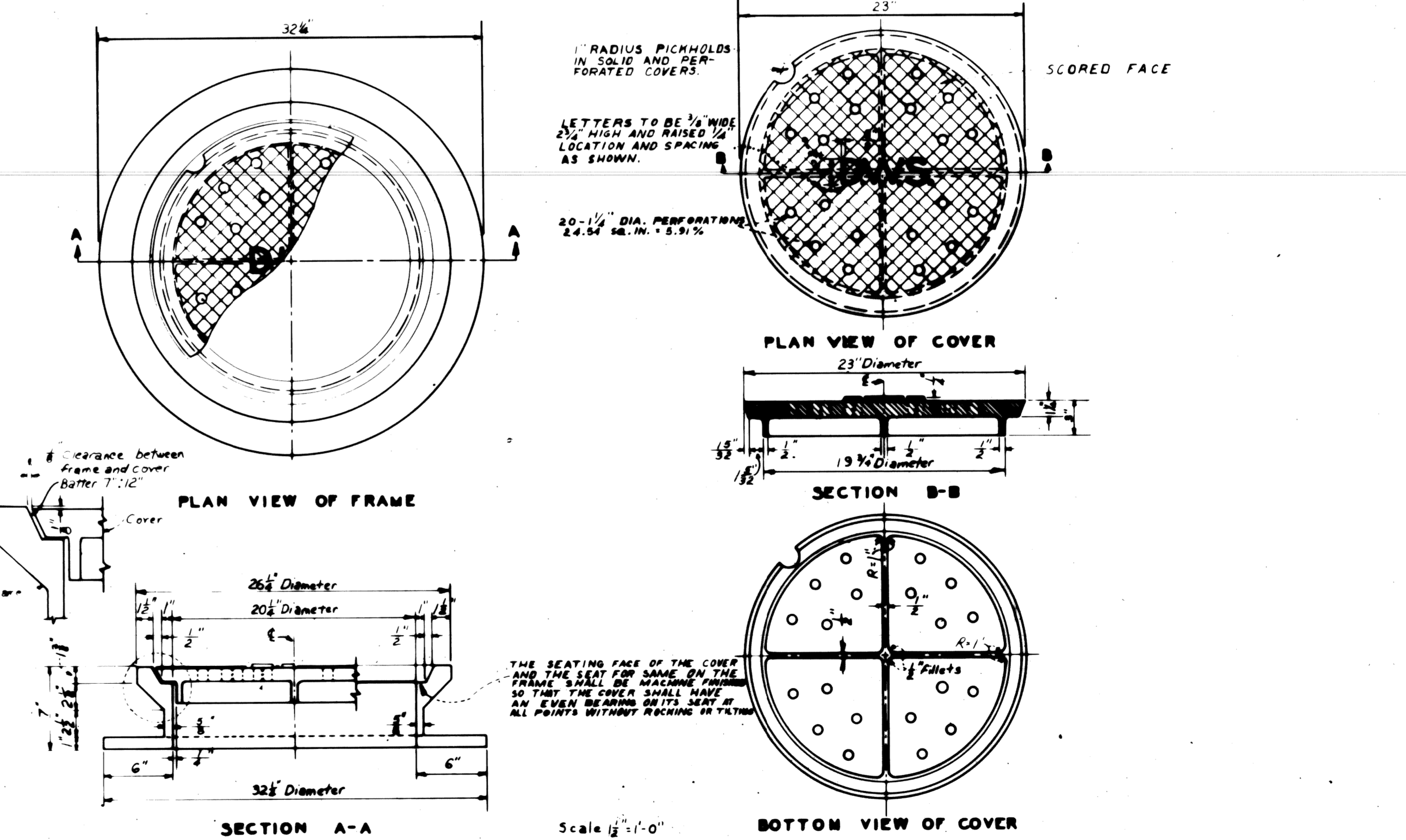
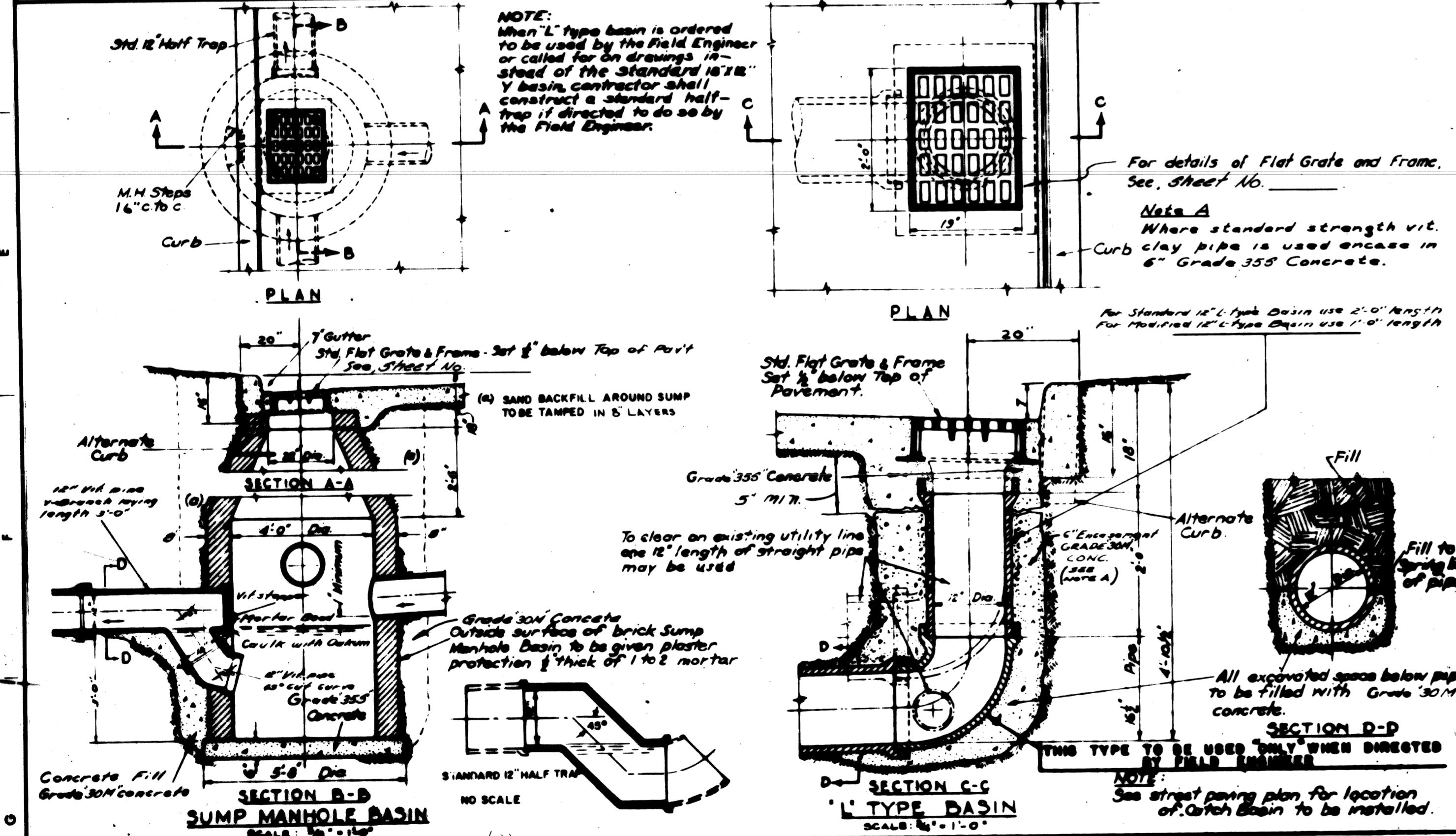
DETAILS OF STANDARD
CATCH BASINS "A" & "B"
AND FLAT GRATE & FRAME

SHEET 18 OF 60 SHEETS
CONTRACT No 19332A
ASSIGN. NO. 81-22-01
DATE



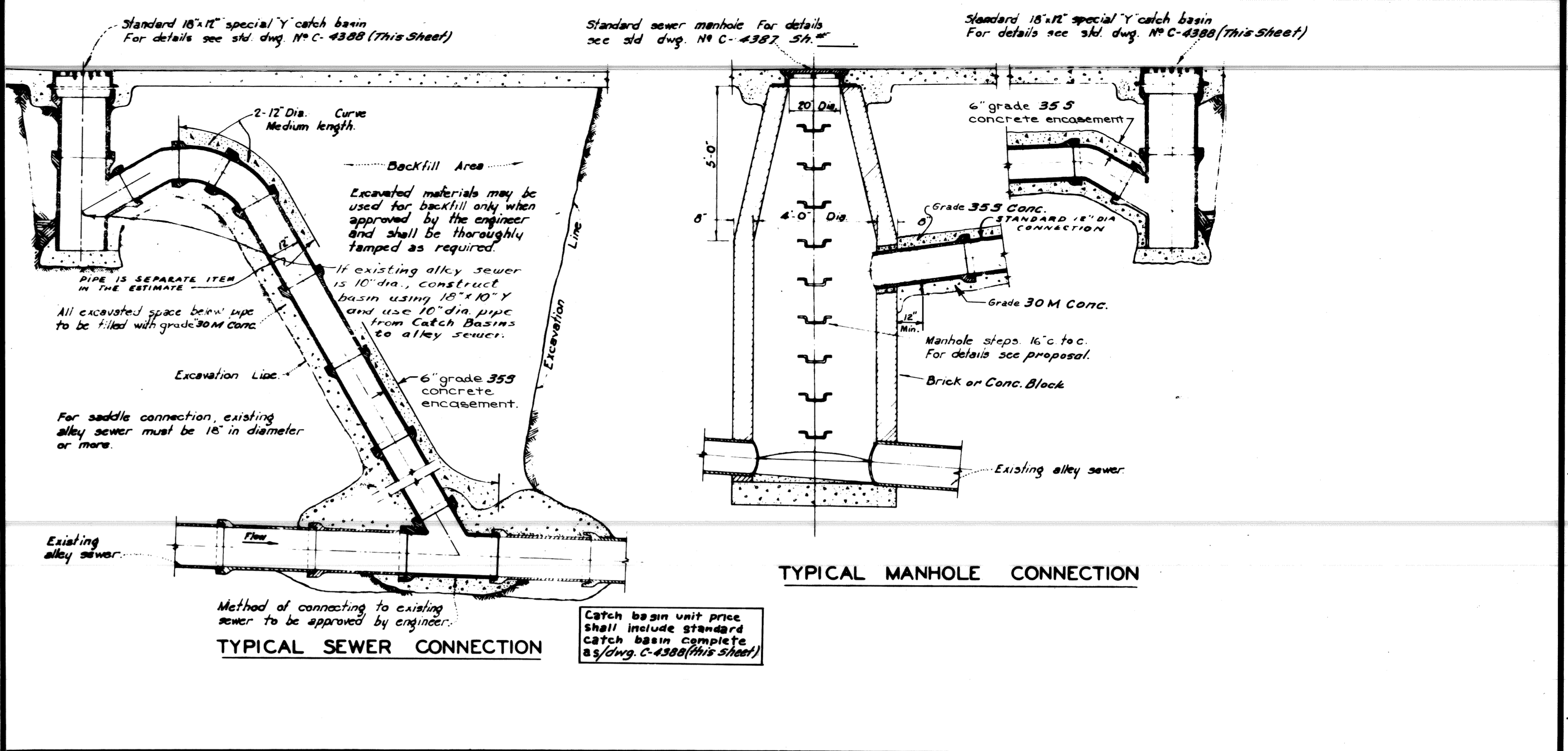
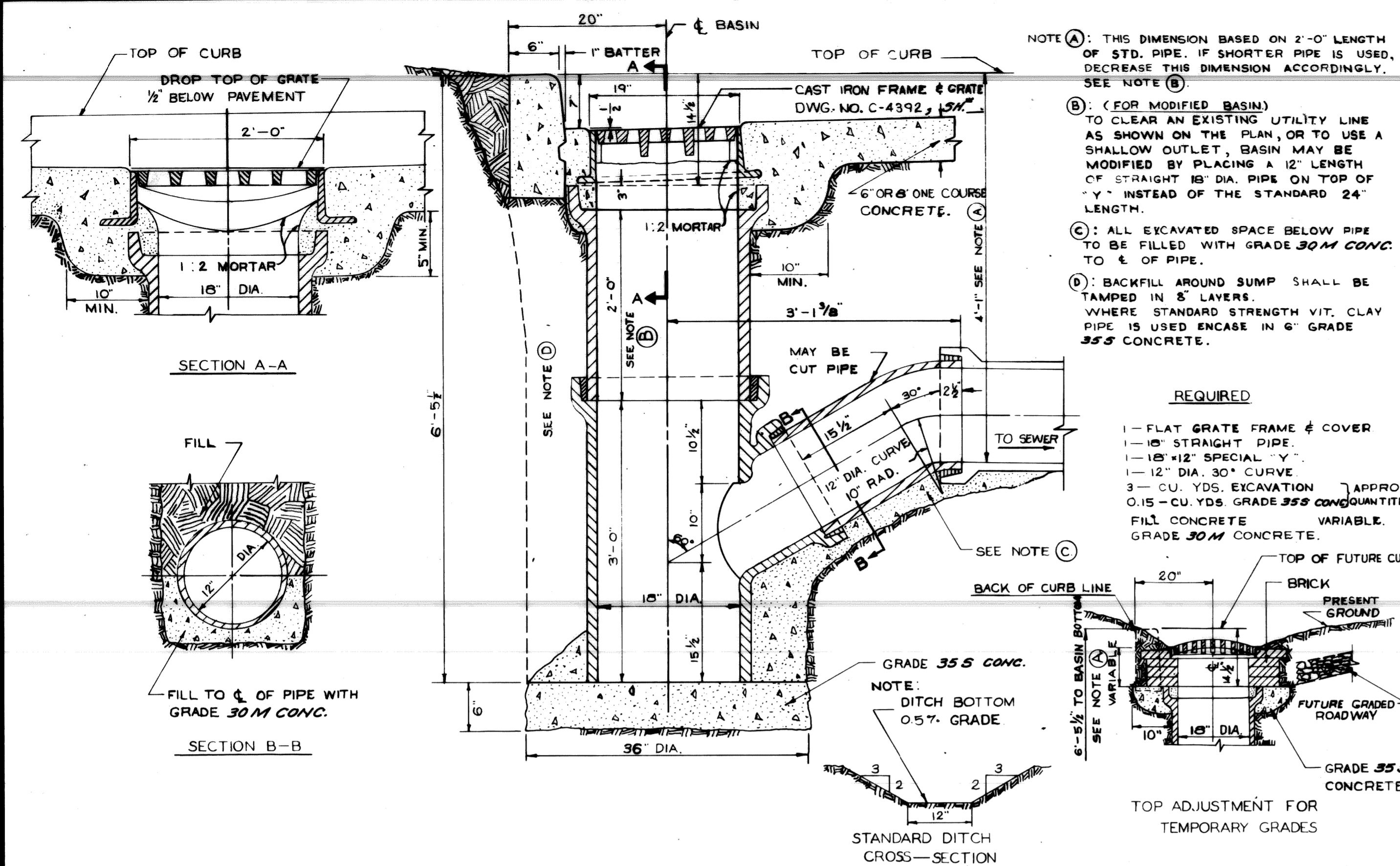
DESIGNED BY	APPROVED BY	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN
DRAWN BY	ENGINEER OF STREETS	
TRACED BY	ASST. CITY ENGINEER	DETAILS OF STANDARD SEWER & DROP MANHOLES BOOK NO. PG. SCALE 3/8" = 1'-0" DATE: 8-27-66 DETAIL STANDARD NO. 10 DWG. NO. C-4387
CHECKED BY	CITY ENGINEER	
REVISIONS		1971 1970 1969 1968 1967

DESIGNED BY	APPROVED BY	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN
DRAWN BY	ENGINEER OF STREETS	
TRACED BY	ASST. CITY ENGINEER	STD SEWER MANHOLES CONSTRUCTION ALTERNATES BOOK NO. PG. SCALE NONE DATE: 3-28-69 DETAIL STANDARD NO. 18 DWG. NO. C-4391A
CHECKED BY	CITY ENGINEER	
REVISIONS		



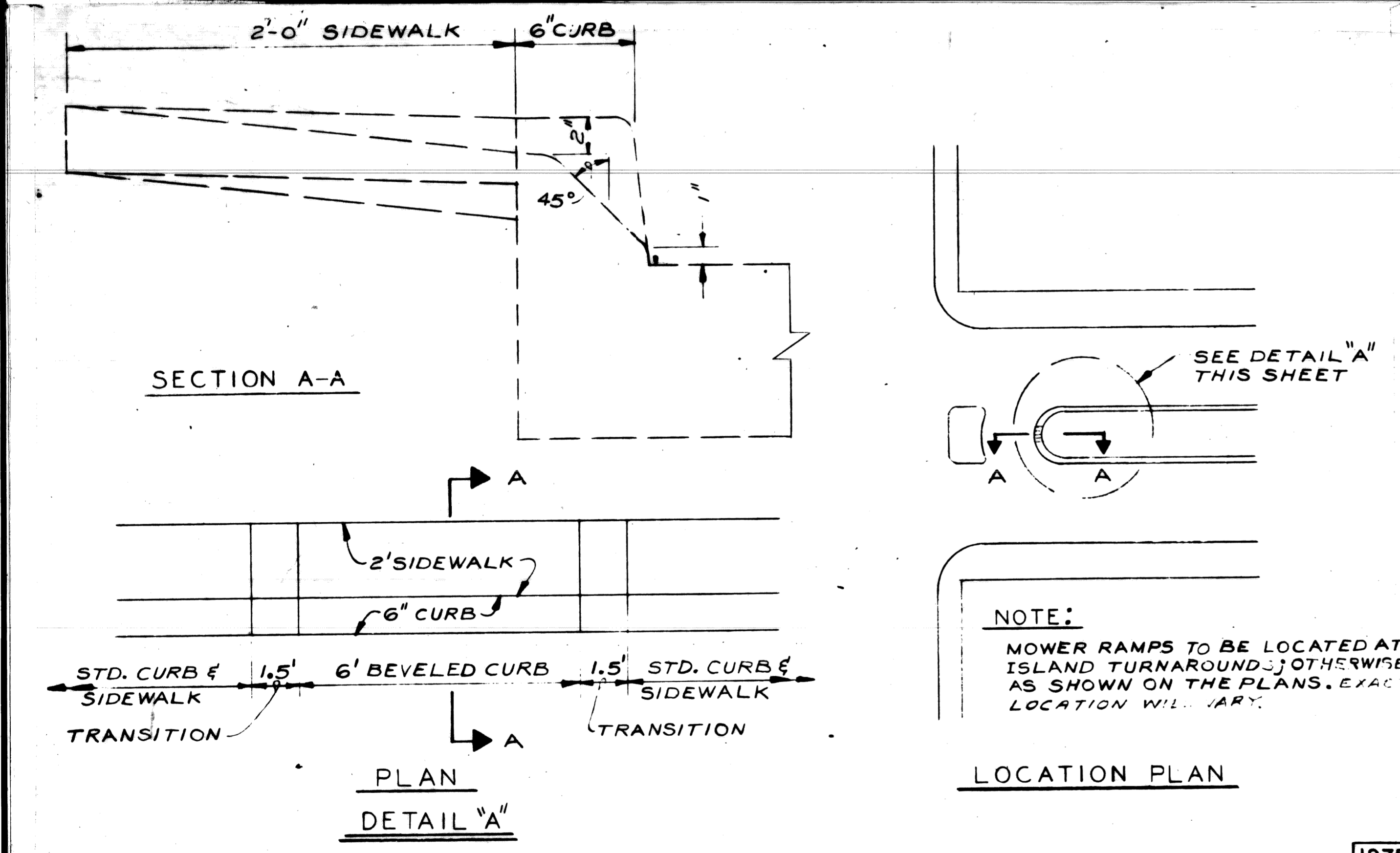
DESIGNED BY	APPROVED BY	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN
DRAWN BY	ENGINEER OF STREETS	
TRACED BY	ASST. CITY ENGINEER	TYPICAL SUMP MANHOLE & L TYPE CATCH BASINS BOOK NO. PG. SCALE 3/8" = 1'-0" DATE: 8-27-66 DETAIL STANDARD NO. 11 DWG. NO. C-4388
CHECKED BY	CITY ENGINEER	
REVISIONS		1971 1970 1969 1968 1967 1966 1965 1964 1963 1962 1961 1960

DESIGNED BY	APPROVED BY	CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS CITY ENGINEER'S OFFICE BUREAU OF DESIGN
DRAWN BY	ENGINEER OF STREETS	
TRACED BY	ASST. CITY ENGINEER	DETAILS OF STANDARD MANHOLE FRAME AND COVER BOOK NO. PG. SCALE AS SHOWN DATE: 3-28-69 DETAIL STANDARD NO. 18 DWG. NO. C-4391A
CHECKED BY	CITY ENGINEER	
REVISIONS		



DESIGNED BY	APPROVED	CITY OF DETROIT	STANDARD DESIGN
DRAWN BY	ENGINEER OF STREETS	DEPARTMENT OF PUBLIC WORKS	18" x 12" SPECIAL 'Y' CATCH BASIN
TRACED BY	ASST. CITY ENGINEER	CITY ENGINEER'S OFFICE	TO BE USED UNLESS DIRECTED OTHERWISE BY FIELD ENGINEER
CHECKED BY	CITY ENGINEER	BUREAU OF DESIGN	BOOK NO. _____ SCALE 1"=1'-0" DWG. NO. C-4388
REVISIONS		DETAIL STANDARD NO. 11	PAGE NO. _____ DATE 8-19-66

DESIGNED BY	APPROVED	CITY OF DETROIT	ALLEY INSTALLATION
DRAWN BY	ENGINEER OF STREETS	DEPARTMENT OF PUBLIC WORKS	STANDARD 18" x 12" SPECIAL 'Y' CATCH BASIN
TRACED BY	ASST. CITY ENGINEER	CITY ENGINEER'S OFFICE	BOOK NO. _____ SCALE 3/4"=1'-0" DWG. NO. C-4399
CHECKED BY	CITY ENGINEER	BUREAU OF DESIGN	PAGE NO. _____ DATE 3-16-59
REVISIONS		DETAIL STANDARD NO. 22	



DESIGNED BY	APPROVED	CITY OF DETROIT	SPECIAL MOWER RAMP
DRAWN BY JONES	ENGINEER OF STREETS	CITY ENGINEERING DEPARTMENT	BOOK NO. _____ SCALE NONE DWG. NO. C-5239
TRACED BY	DEPUTY DIRECTOR		PAGE NO. _____ DATE JULY 22, 1974
CHECKED BY	DIRECTOR		

CITY OF DETROIT CITY ENGINEERING DEPARTMENT		WIDENING OF MT. ELLIOTT FROM HARPER TO CONANT AND WIDENING OF CONANT FROM MT. ELLIOTT TO DENTON		SHEET 20 OF 60 SHEETS
SPECIAL DETAILS				CONTRACT No. 19332A
				DRWG No. 81-22-01
				DATE

