

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

PLANS FOR PROPOSED
 COBO HALL AREA STREET
 IMPROVEMENTS

RECONSTRUCTION, RESURFACING AND MISCELLANEOUS CONSTRUCTION

ON
 CONGRESS - WASHINGTON BLVD. TO THIRD

AND ON
 CASS, FIRST, SECOND, AND THIRD -

CONGRESS TO LAFAYETTE

1. TITLE SHEET
2. RECONSTRUCTION AND RESURFACING SITE PLAN
3. CONGRESS FROM SECOND TO THIRD - REMOVAL AND UTILITY PLAN
4. CONGRESS FROM SECOND TO THIRD - PAVING PLAN AND TYPICAL SECTIONS
5. CONGRESS FROM SECOND TO THIRD - CONSTRUCTION SEQUENCE
6. CONGRESS FROM WASHINGTON BLVD. TO FIRST - REMOVAL PLAN
7. CONGRESS FROM WASHINGTON BLVD. TO FIRST - RESURFACING AND GENERAL PLAN
8. CONGRESS - CASS INTERSECTION GRADE DETAILS
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11. THIRD FROM FORT TO LAFAYETTE - RESURFACING PLAN
12. PAVEMENT MARKINGS
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 RECONSTRUCTION, RESURFACING AND MISCELLANEOUS CONSTRUCTION ON
 CONGRESS - WASHINGTON BLVD. TO THIRD AND ON
 CASS, FIRST, SECOND AND THIRD - CONGRESS
 TO LAFAYETTE

CONTRACT
 NO.
 PW-0730

PLANS PREPARED BY

CITY ENGINEERING DEPARTMENT

RECOMMENDED
 FOR APPROVAL

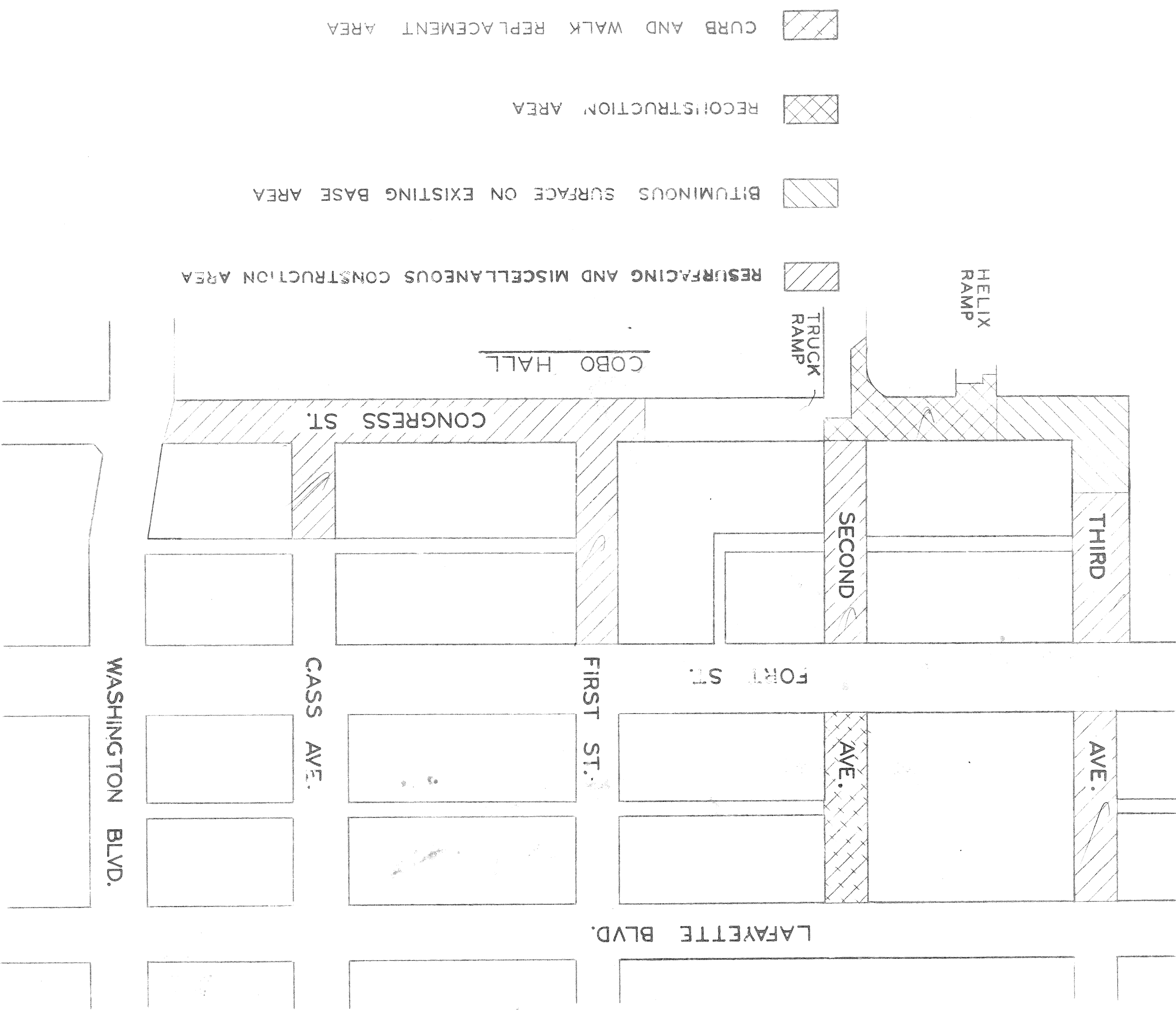
RECOMMENDED
 FOR APPROVAL

APPROVED

APPROVED

DATE MAY 26, 1989

DRWG. NO. 1 OF 21

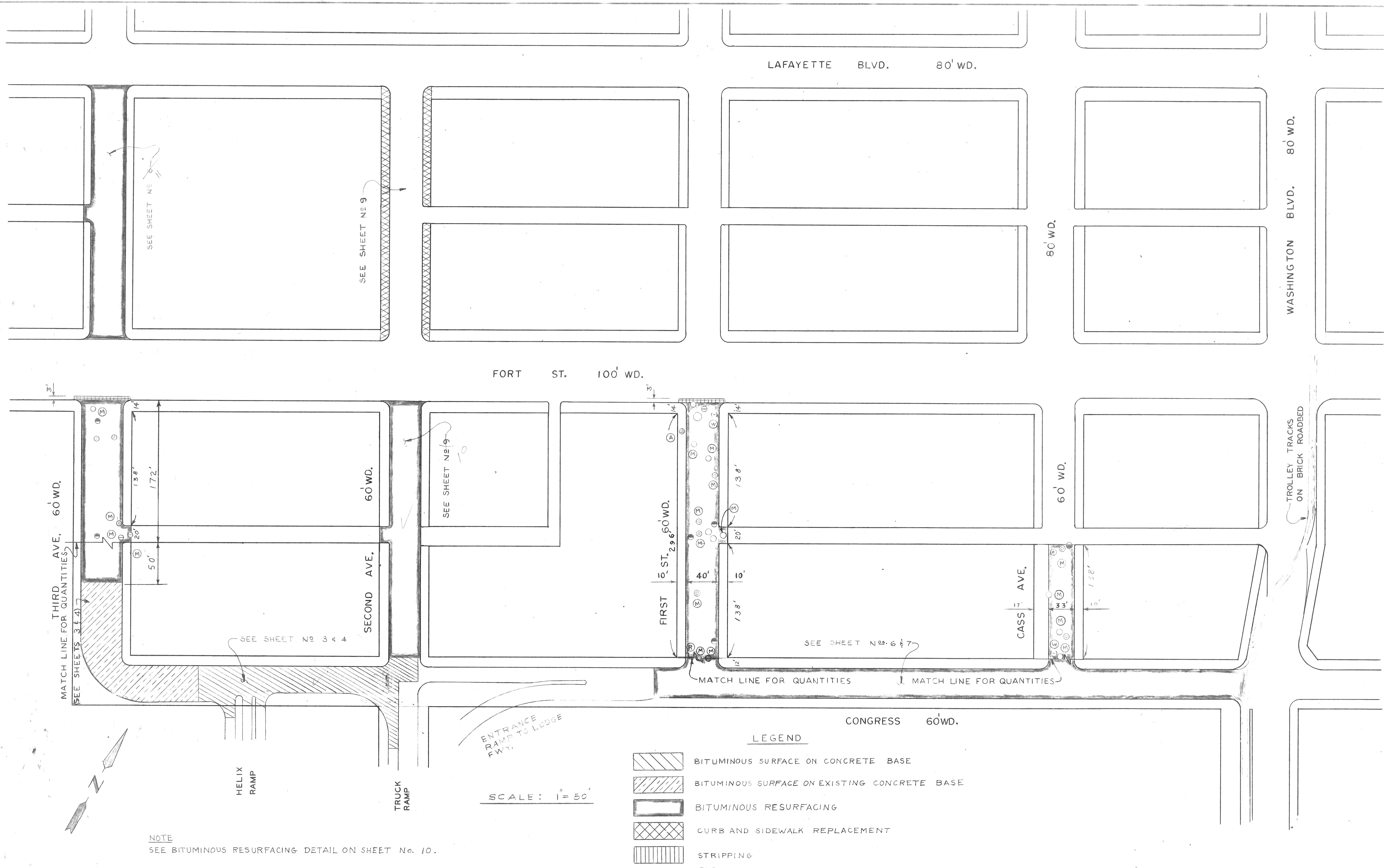


RESURFACING AND MISCELLANEOUS CONSTRUCTION AREA

BITUMINOUS SURFACE ON EXISTING BASE AREA

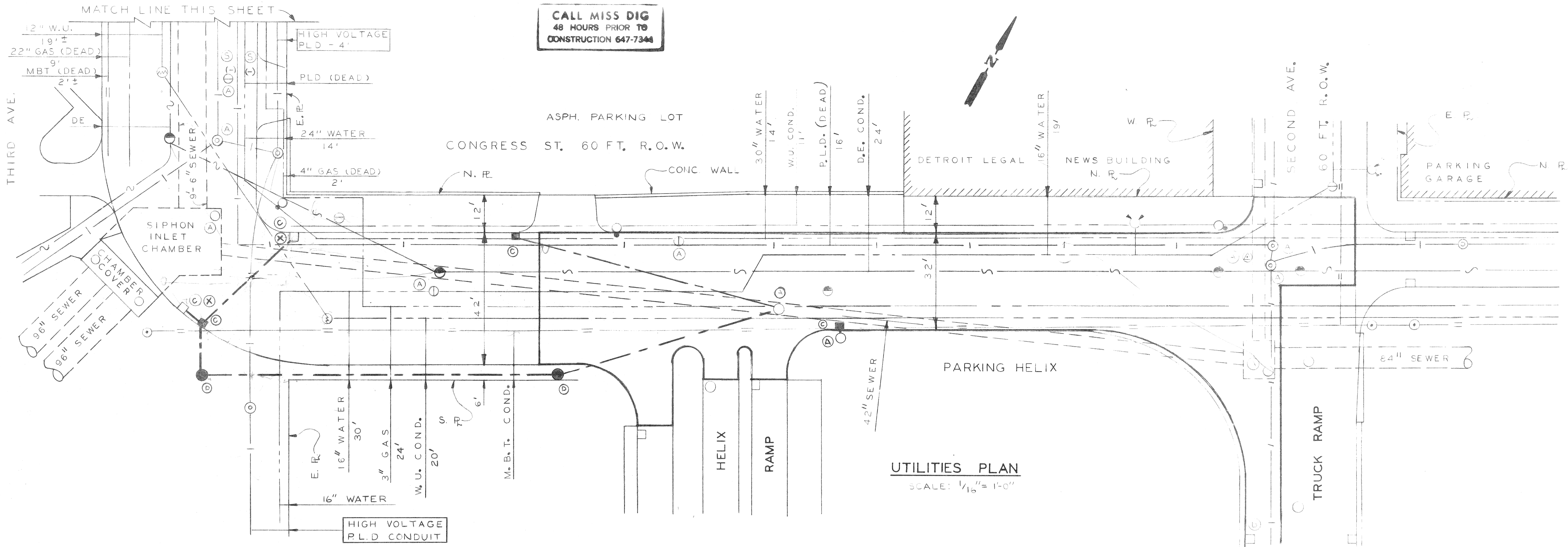
RECONSTRUCTION AREA

CURB AND WALK REPLACEMENT AREA

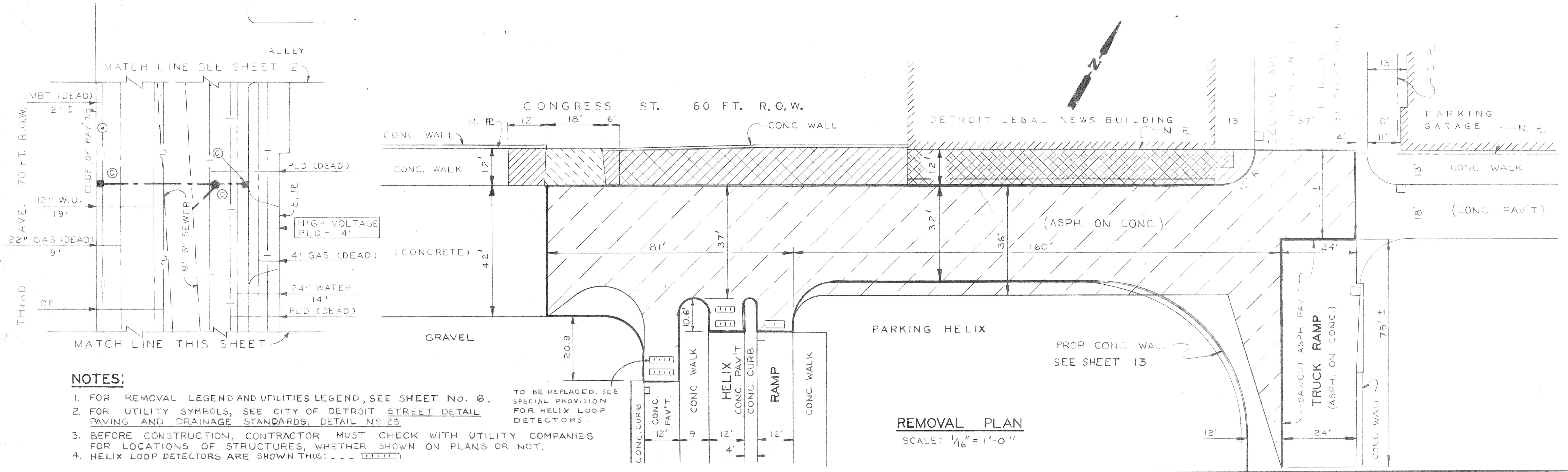


<table border="1"> <tr> <td>COORD</td> <td>DESCRIPTION</td> <td>DRN</td> <td>CKD</td> <td>APVD</td> <td>DATE</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>		COORD	DESCRIPTION	DRN	CKD	APVD	DATE																			<table border="1"> <tr> <td>REFERENCE DRAWINGS</td> <td>DESIGNED BY</td> <td>N. W.</td> <td>APPROVED:</td> <td><i>N.O.W.</i></td> </tr> <tr> <td> </td> <td>DRAWN BY</td> <td>A.B.</td> <td>ENGINEER OF STREETS</td> <td> </td> </tr> <tr> <td> </td> <td>TRACED BY</td> <td> </td> <td>HIGHWAY ENGINEER</td> <td> </td> </tr> <tr> <td> </td> <td>CHECKED BY</td> <td>N. W.</td> <td> </td> <td> </td> </tr> </table>	REFERENCE DRAWINGS	DESIGNED BY	N. W.	APPROVED:	<i>N.O.W.</i>		DRAWN BY	A.B.	ENGINEER OF STREETS			TRACED BY		HIGHWAY ENGINEER			CHECKED BY	N. W.			<p align="center">CITY OF DETROIT CITY ENGINEERING DIVISION - D. P. W. BUREAU OF STREETS AND HIGHWAYS</p> <p align="center">FOR DPW</p>	<p align="center">COBO HALL AREA STREET IMPROVEMENTS</p> <p align="center">RECONSTRUCTION AND RESURFACING SITE PLAN</p>	<p>SHEET 2 OF 21 SHEETS</p> <p>CONTRACT NO. PW-6780</p> <p>ASSIGNMENT NO. 87-60-07</p> <p>DATE MAY, 1989</p>
COORD	DESCRIPTION	DRN	CKD	APVD	DATE																																												
REFERENCE DRAWINGS	DESIGNED BY	N. W.	APPROVED:	<i>N.O.W.</i>																																													
	DRAWN BY	A.B.	ENGINEER OF STREETS																																														
	TRACED BY		HIGHWAY ENGINEER																																														
	CHECKED BY	N. W.																																															

**CALL MISS DIG
48 HOURS PRIOR TO
CONSTRUCTION 647-7344**



UTILITIES PLAN
SCALE: 1/16" = 1'-0"



REMOVAL PLAN
SCALE: 1/16" = 1'-0"

- NOTES:**
- FOR REMOVAL LEGEND AND UTILITIES LEGEND, SEE SHEET NO. 6.
 - FOR UTILITY SYMBOLS, SEE CITY OF DETROIT STREET DETAIL PAVING AND DRAINAGE STANDARDS, DETAIL NO. 25
 - BEFORE CONSTRUCTION, CONTRACTOR MUST CHECK WITH UTILITY COMPANIES FOR LOCATIONS OF STRUCTURES, WHETHER SHOWN ON PLANS OR NOT.
 - HELIX LOOP DETECTORS ARE SHOWN THUS:

TO BE REPLACED. SEE SPECIAL PROVISION FOR HELIX LOOP DETECTORS.

REVISIONS LOCATED BY COORDINATES ON SHEET COORD DESCRIPTION DRN CKD AP'D DATE		DESIGNED BY N.W.	APPROVED: ENGINEER OF STREETS	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS FOR DPW	COBO HALL AREA STREET IMPROVEMENTS CONGRESS FROM SECOND TO THIRD - REMOVAL AND UTILITY PLAN	SHEET 3 OF 21 SHEETS
		DRAWN BY J.J. & A.B.	HIGHWAY ENGINEER			CONTRACT NO. PW-6780
		TRACED BY			ASSIGNMENT NO. 87-60-07	DATE MAY, 1989
		CHECKED BY N.W.				

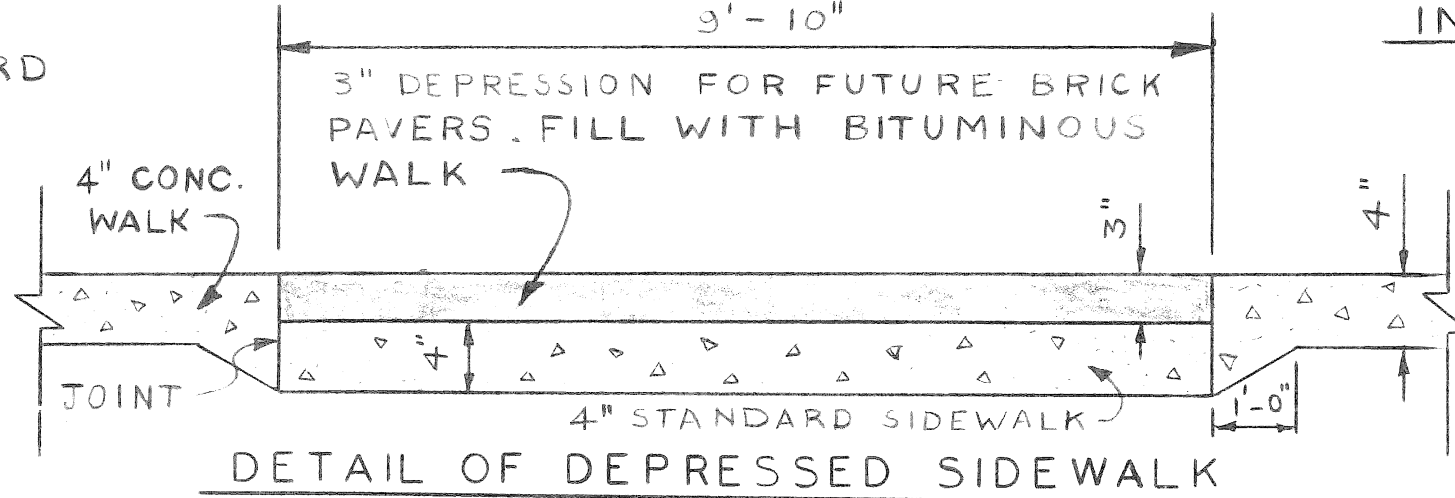
MATCH LINE FOR QUANTITIES
(SEE SHEET 2)

CONSTRUCTION LEGEND

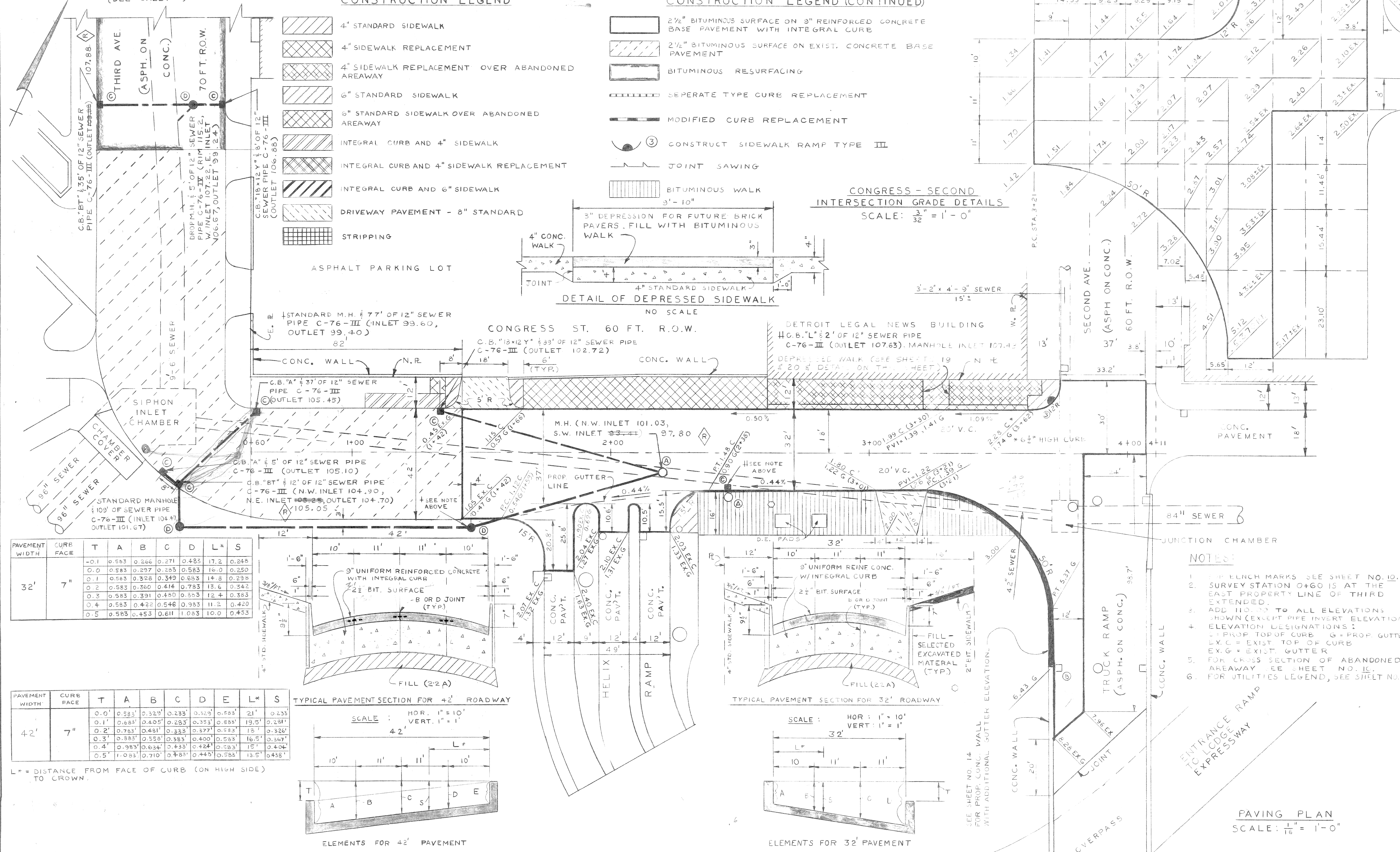
- 4" STANDARD SIDEWALK
- 4" SIDEWALK REPLACEMENT
- 4" SIDEWALK REPLACEMENT OVER ABANDONED AREAWAY
- 6" STANDARD SIDEWALK
- 6" STANDARD SIDEWALK OVER ABANDONED AREAWAY
- INTEGRAL CURB AND 4" SIDEWALK
- INTEGRAL CURB AND 4" SIDEWALK REPLACEMENT
- INTEGRAL CURB AND 6" SIDEWALK
- DRIVEWAY PAVEMENT - 8" STANDARD
- STRIPPING

CONSTRUCTION LEGEND (CONTINUED)

- 2 1/2" BITUMINOUS SURFACE ON 3" REINFORCED CONCRETE BASE PAVEMENT WITH INTEGRAL CURB
- 2 1/2" BITUMINOUS SURFACE ON EXIST. CONCRETE BASE PAVEMENT
- BITUMINOUS RESURFACING
- SEPERATE TYPE CURB REPLACEMENT
- MODIFIED CURB REPLACEMENT
- CONSTRUCT SIDEWALK RAMP TYPE III
- JOINT SAWING
- BITUMINOUS WALK 9'-10"



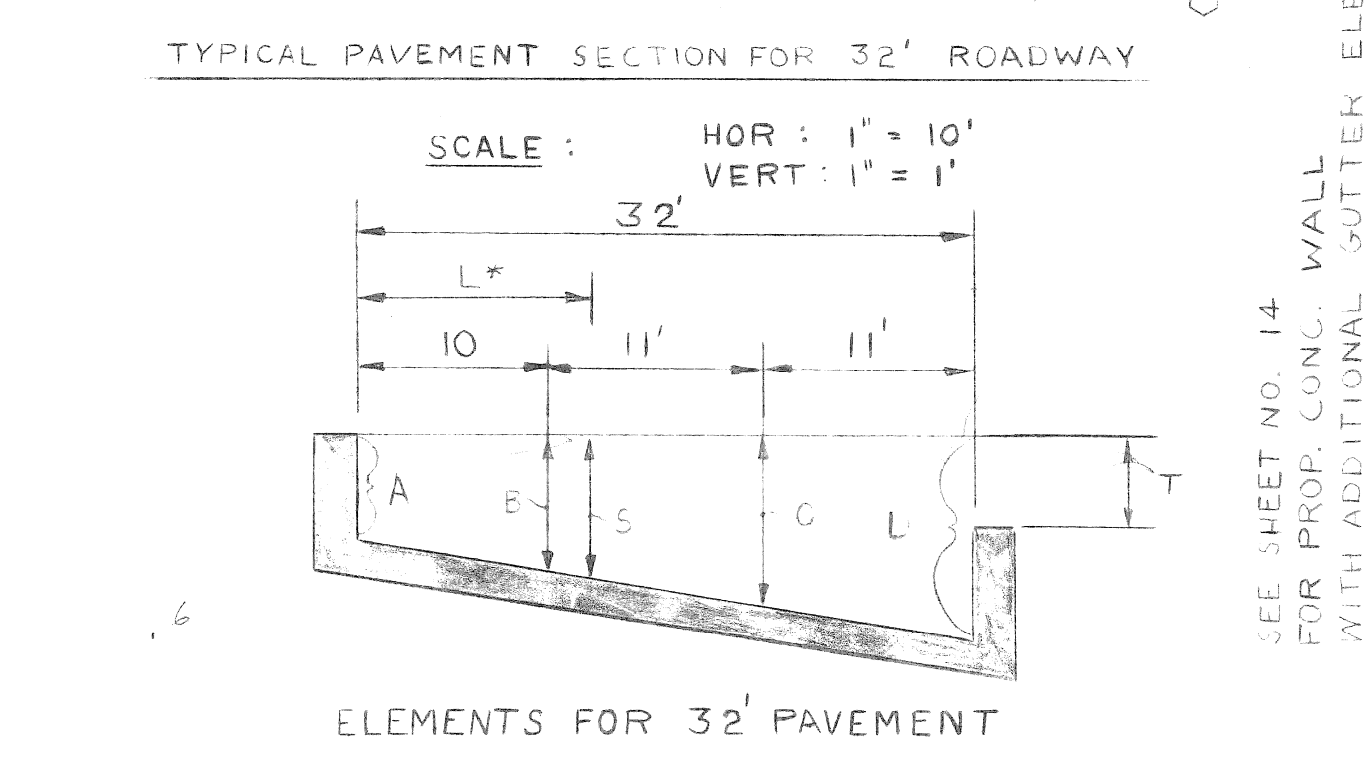
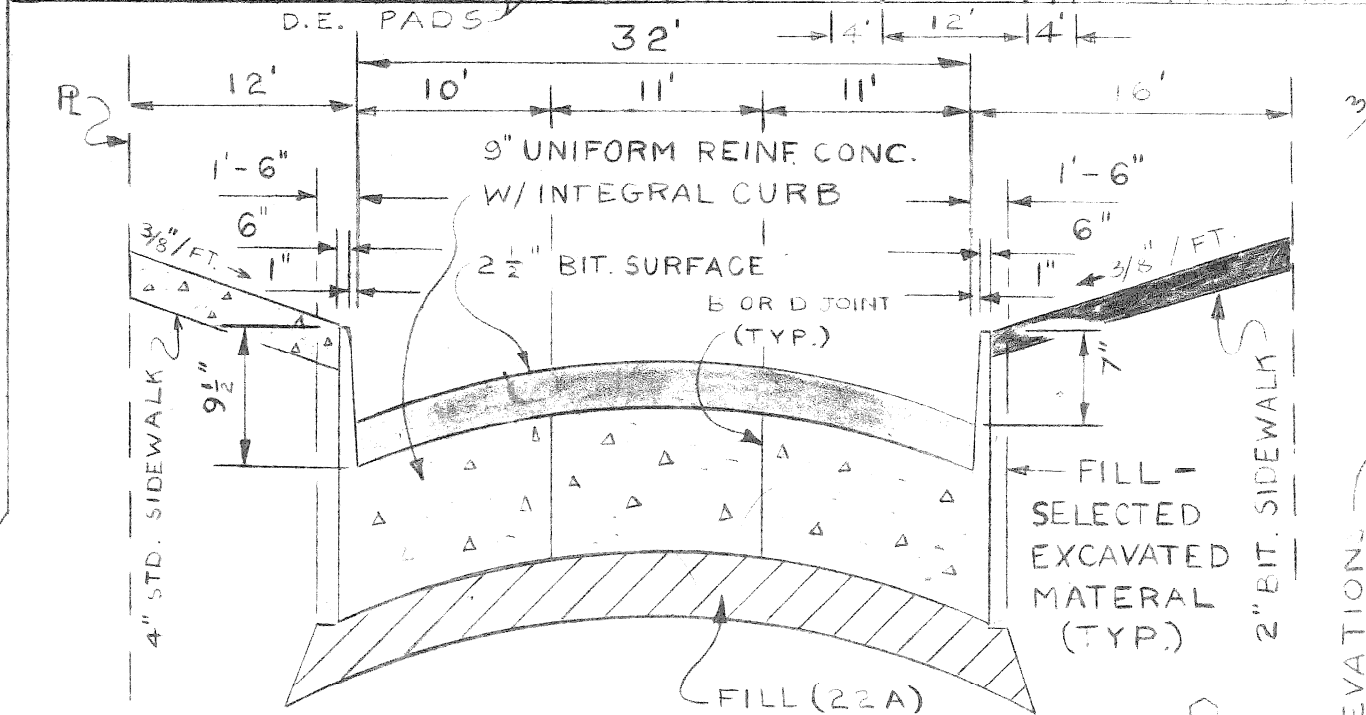
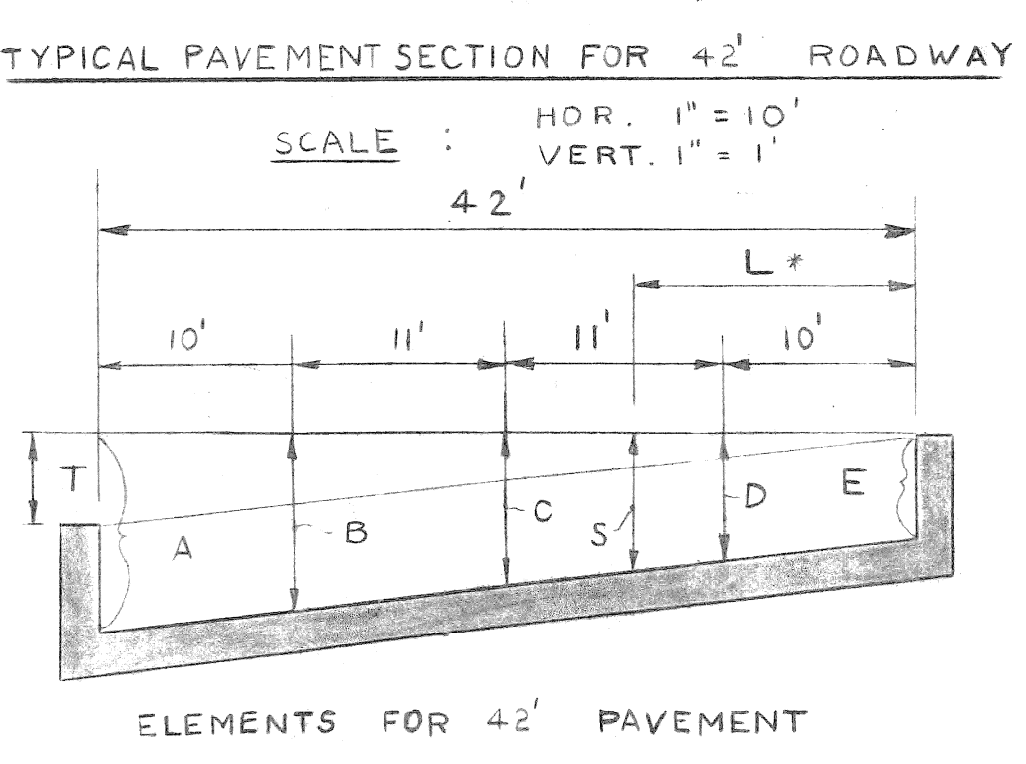
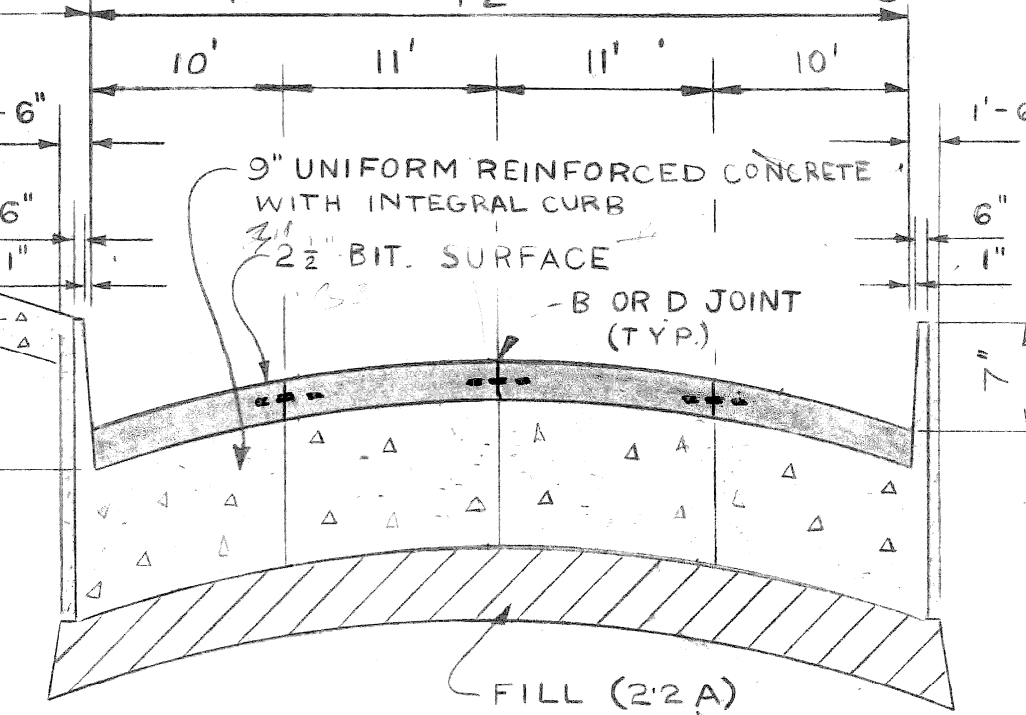
CONGRESS - SECOND
INTERSECTION GRADE DETAILS
SCALE: 3/32" = 1'-0"



PAVEMENT WIDTH	CURB FACE	T	A	B	C	D	L*	S
32'	7"	0.1	0.583	0.266	0.271	0.485	17.2	0.248
		0.0	0.583	0.297	0.283	0.583	16.0	0.250
		0.1	0.583	0.328	0.349	0.883	14.8	0.298
		0.2	0.583	0.360	0.414	0.783	13.6	0.342
		0.3	0.583	0.391	0.480	0.883	12.4	0.383
		0.4	0.583	0.422	0.546	0.983	11.2	0.420
0.5	0.583	0.453	0.611	1.083	10.0	0.453		

PAVEMENT WIDTH	CURB FACE	T	A	B	C	D	E	L*	S
42'	7"	0.0'	0.583'	0.329'	0.233'	0.329'	0.583'	21'	0.233'
		0.1'	0.683'	0.405'	0.283'	0.383'	0.583'	19.5'	0.281'
		0.2'	0.783'	0.481'	0.333'	0.377'	0.583'	18.1'	0.326'
		0.3'	0.883'	0.558'	0.383'	0.400'	0.583'	16.5'	0.367'
		0.4'	0.983'	0.634'	0.433'	0.424'	0.583'	15.1'	0.404'
0.5'	1.083'	0.710'	0.483'	0.445'	0.583'	13.5'	0.438'		

L* = DISTANCE FROM FACE OF CURB (ON HIGH SIDE) TO CROWN.

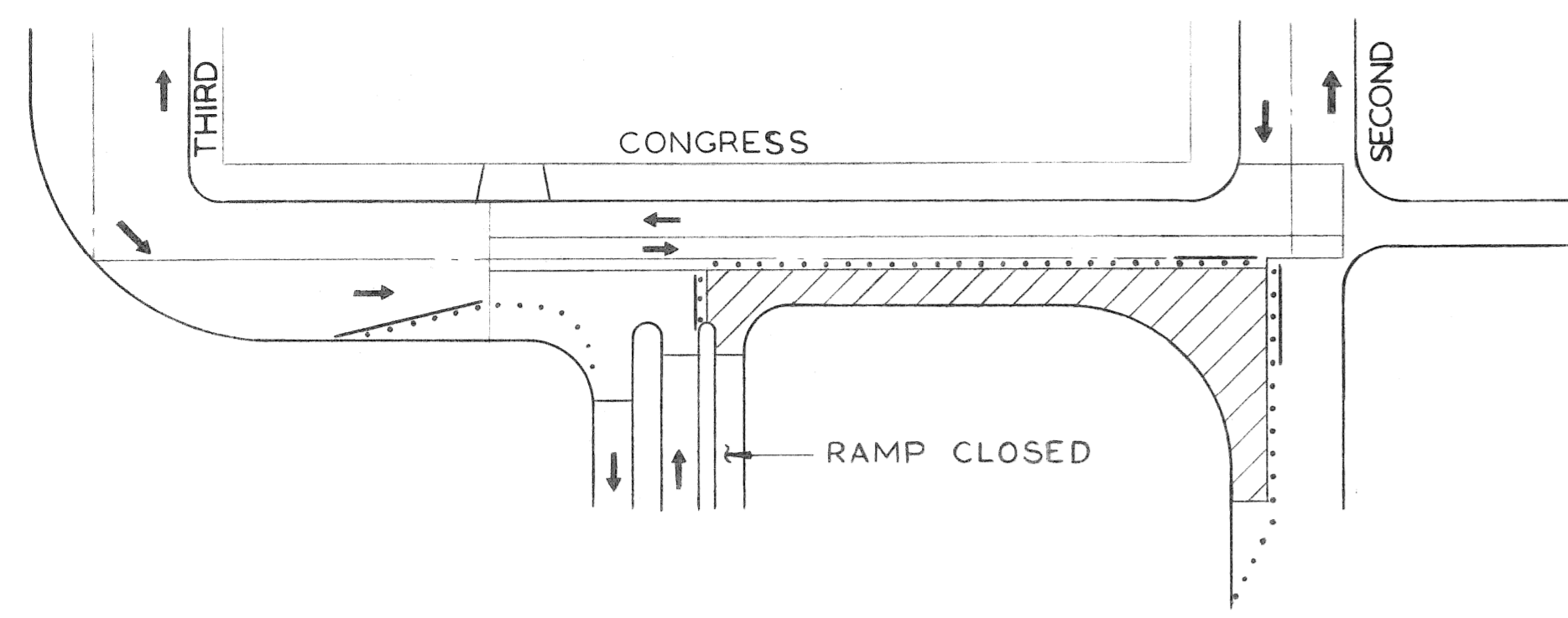


- NOTES:
1. FOR BLANCH MARKS SEE SHEET NO. 10.
 2. SURVEY STATION 0+60 IS AT THE EAST PROPERTY LINE OF THIRD EXTENDED.
 3. ADD 110.00 TO ALL ELEVATIONS SHOWN (EXCEPT PIPE INVERT ELEVATION).
 4. ELEVATION DESIGNATIONS:
 - = PROP. TOP OF CURB
 - G = PROP. GUTTER
 - EX.C = EXIST. TOP OF CURB
 - EX.G = EXIST. GUTTER
 5. FOR CROSS SECTION OF ABANDONED AREAWAY SEE SHEET NO. 10.
 6. FOR UTILITIES LEGEND, SEE SHEET NO. 6.

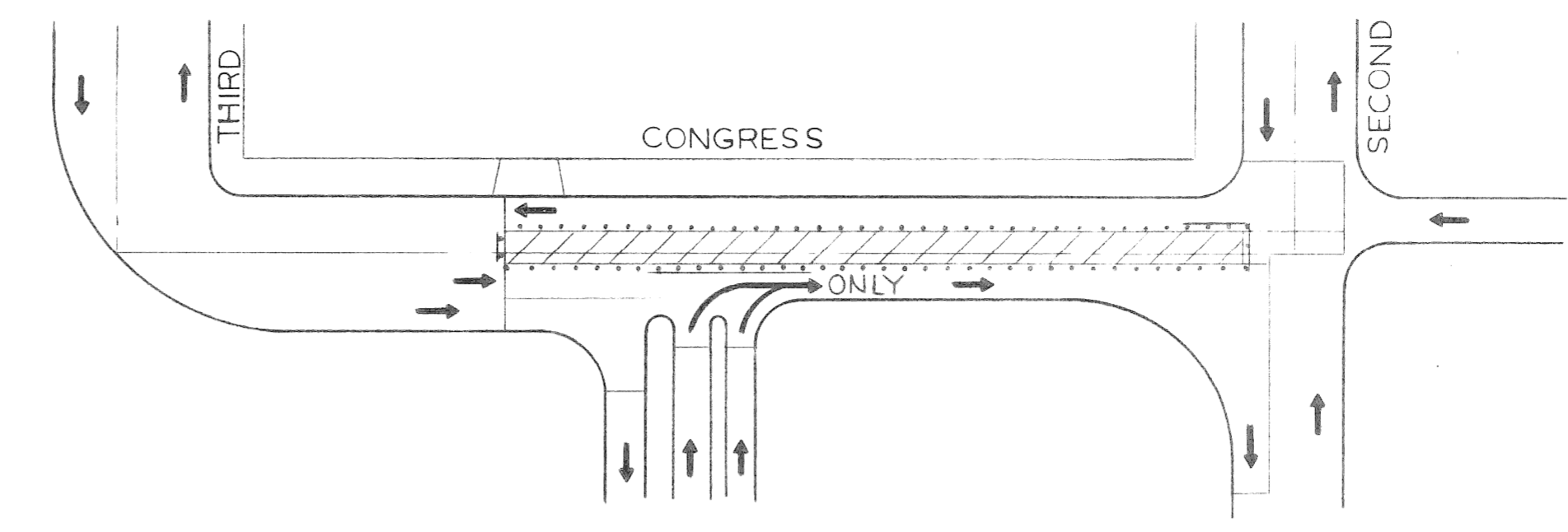
REVISED PROP. SEWER INLET & OUTLET ELEVATIONS AS SHOWN	DESIGNED BY N. W.	APPROVED: N.O.M.
	DRAWN BY J. J.	ENGINEER OF STREETS
	TRACED BY	HIGHWAY ENGINEER
	CHECKED BY N. W.	

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT
BUREAU OF STREETS AND HIGHWAYS
FOR DPW

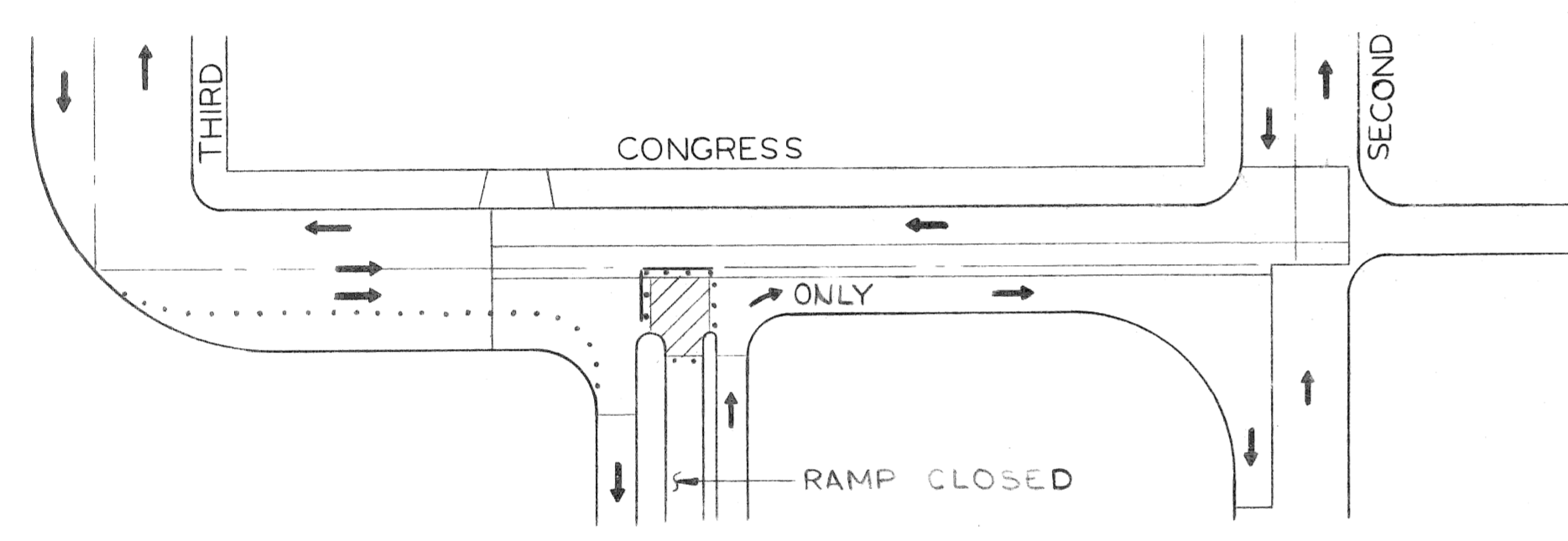
COBO HALL AREA STREET IMPROVEMENTS
CONGRESS FROM SECOND TO THIRD - PAVING PLAN AND TYPICAL SECTIONS
SHEET 4 OF 21 SHEETS
CONTRACT NO. PW-6780
ASSIGNMENT NO. 87-60-07
DATE MAY, 1989



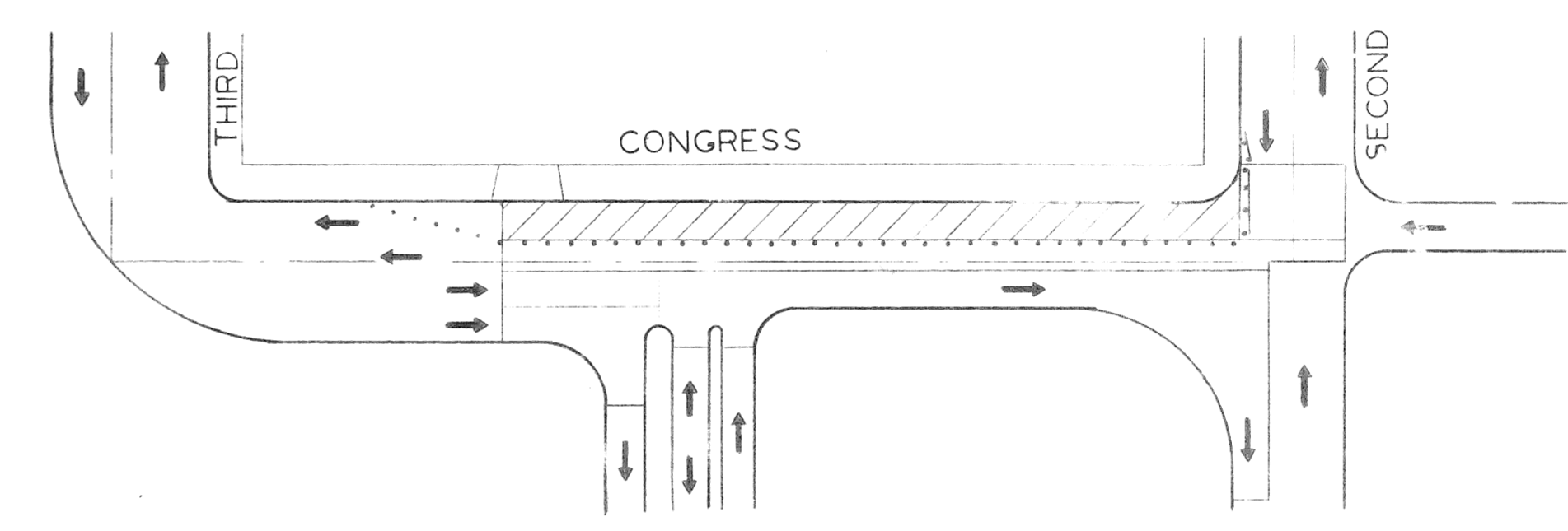
STAGE I



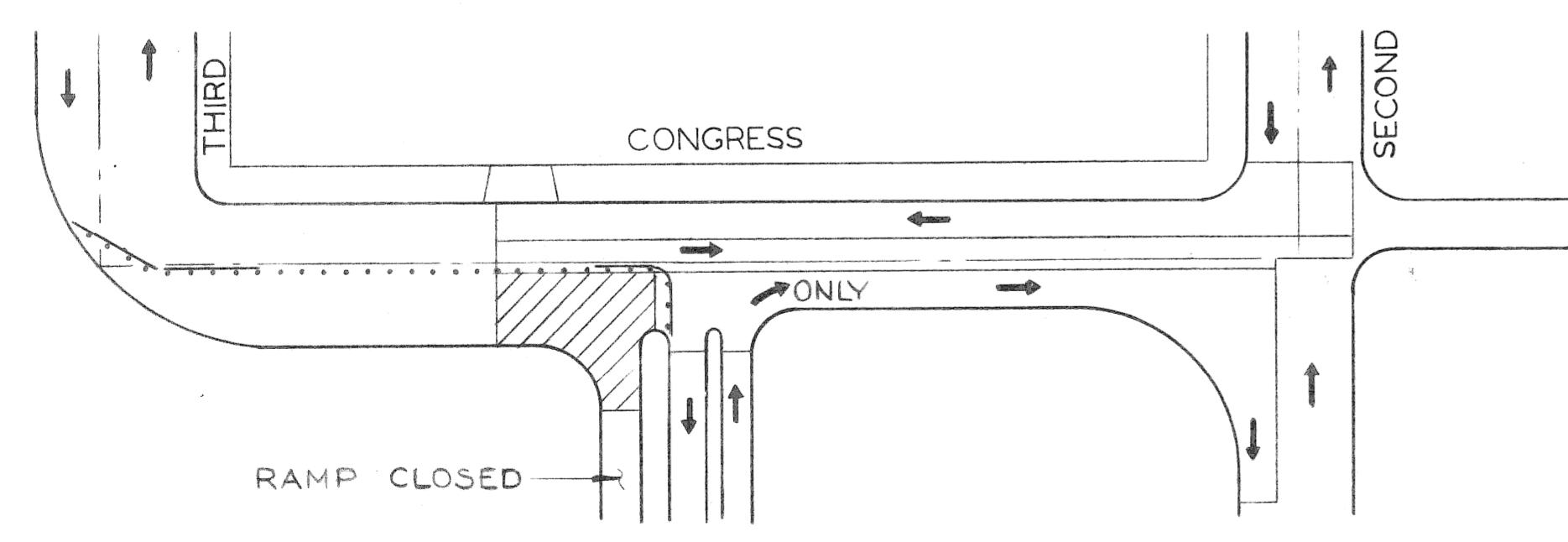
STAGE IV



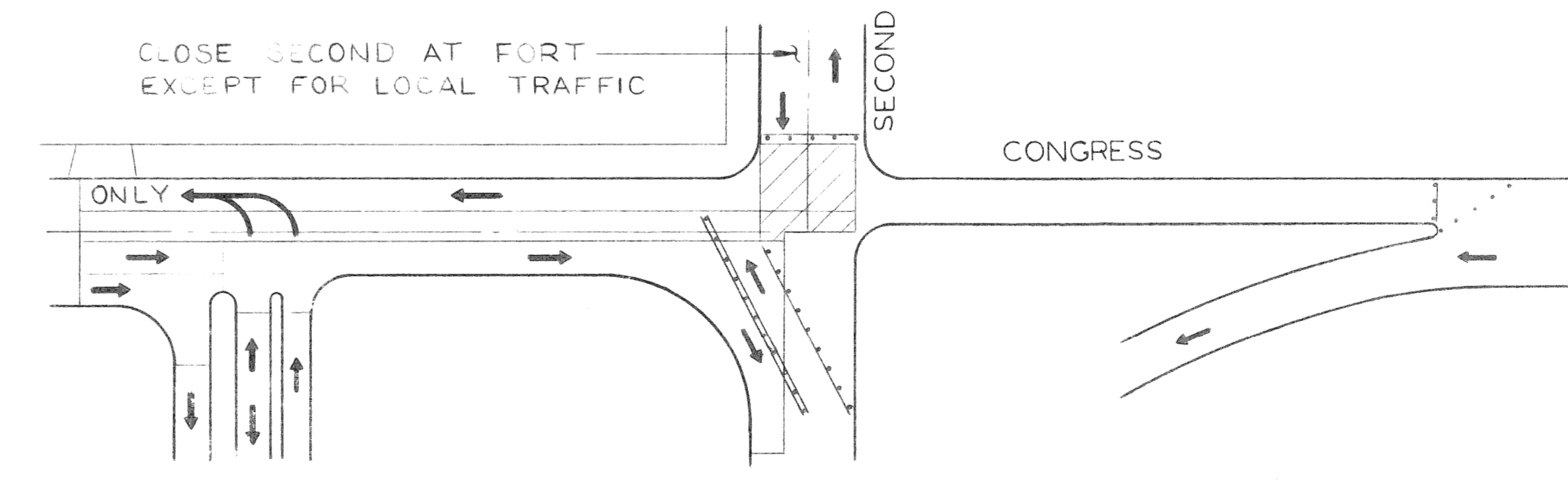
STAGE II



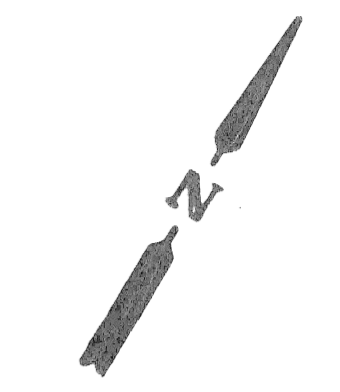
STAGE V



STAGE III



STAGE VI



LEGEND

- PROP. CONC. BASE PAVEMENT
- BARREL BARRICADE
- SINGLE BEAM BARREL BARRICADE
- DOUBLE BEAM BARREL BARRICADE

COORD	DESCRIPTION	DRN	CK'D	AP'VD	DATE

DESIGNED BY	N. W.
DRAWN BY	<i>Δ</i> Brown
TRACED BY	
CHECKED BY	N. W.

APPROVED:	<i>N.O.M.</i>
	ENGINEER OF STREETS
	HIGHWAY ENGINEER

CITY OF DETROIT
CITY ENGINEERING DEPARTMENT
BUREAUS OF STREETS AND HIGHWAYS
FOR
D P W

COBO HALL AREA STREET IMPROVEMENTS

CONGRESS FROM SECOND TO THIRD
CONSTRUCTION SEQUENCE

SHEET 5 OF 21 SHEETS
CONTRACT NO. PW-6780
ASSIGNMENT NO. 87-60-07
DATE MAY, 1989

no.	description	date

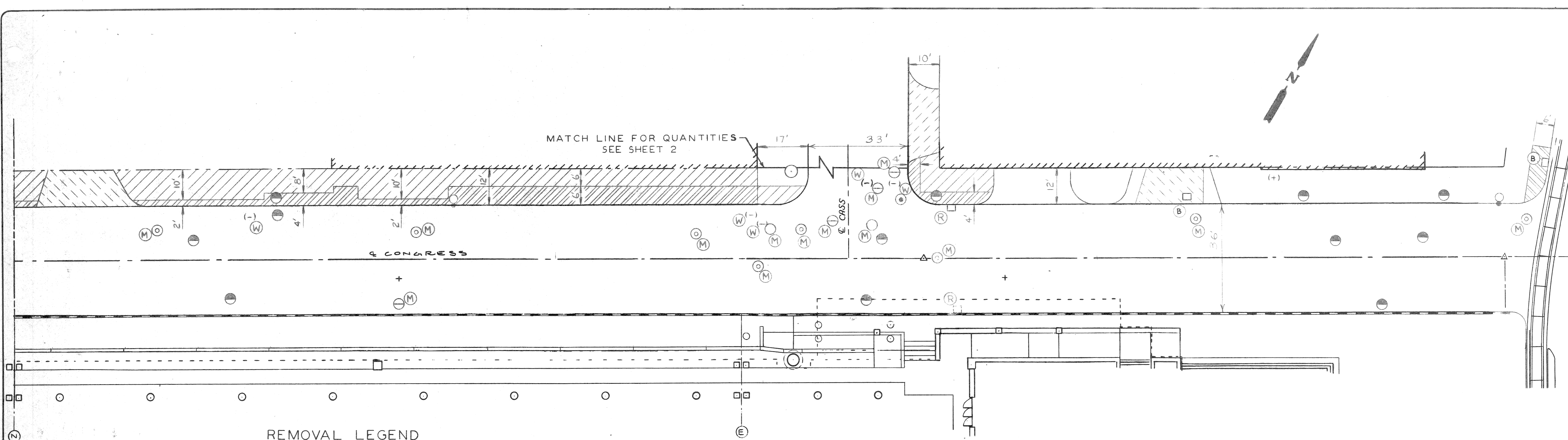
designed by M. K.
 drawn by M. K.
 checked by N. W.
 approved: *N. O. W.*

CITY OF DETROIT
 city engineering department
 for DPW

COBO HALL AREA
 STREET IMPROVEMENTS

CONGRESS FROM WASHINGTON BLVD. TO FIRST-REMOVAL PLAN

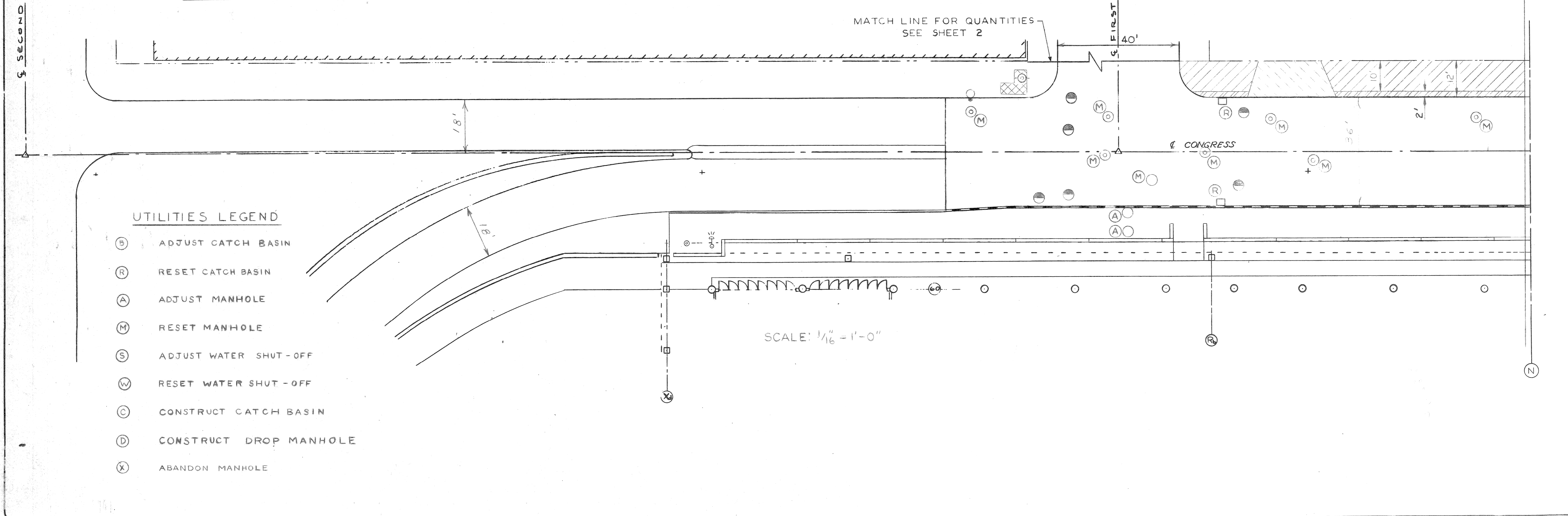
a.o. 87-60-07
 contract no. PW-6780
 sheet 6 of 21
 drawing no.
 date MAY, 1989



REMOVAL LEGEND

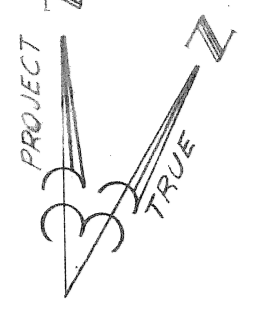
- SIDEWALK REMOVAL
- INTEGRAL CURB AND SIDEWALK REMOVAL
- 4" SIDEWALK REPLACEMENT
- 4" SIDEWALK REPLACEMENT OVER AREAWAY (REMOVE AREAWAY ROOF)
- DRIVEWAY REMOVAL
- PAVEMENT REMOVAL
- SEPERATE TYPE CURB REMOVAL

NOTE
 1. COLD MILL ENTIRE BITUMINOUS SURFACE ON CONGRESS FROM WEST OF FIRST TO WASHINGTON BLVD.
 2. SEE BITUMINOUS RESURFACING DETAIL ON SHEET 10.

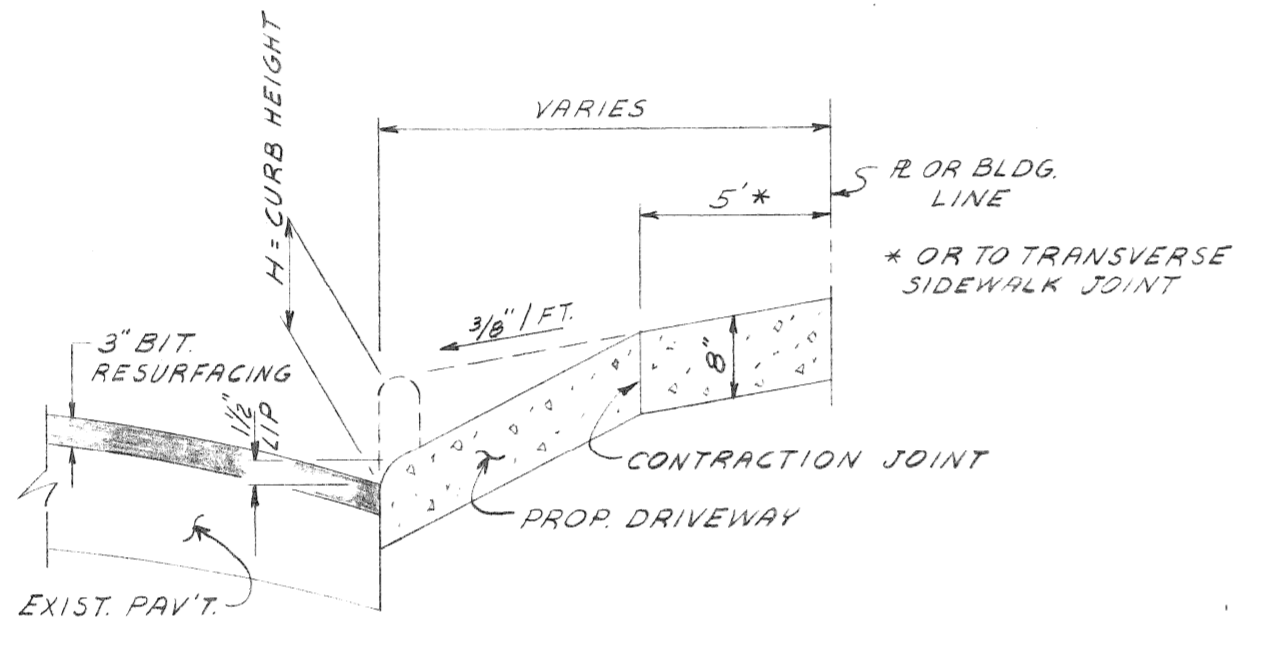
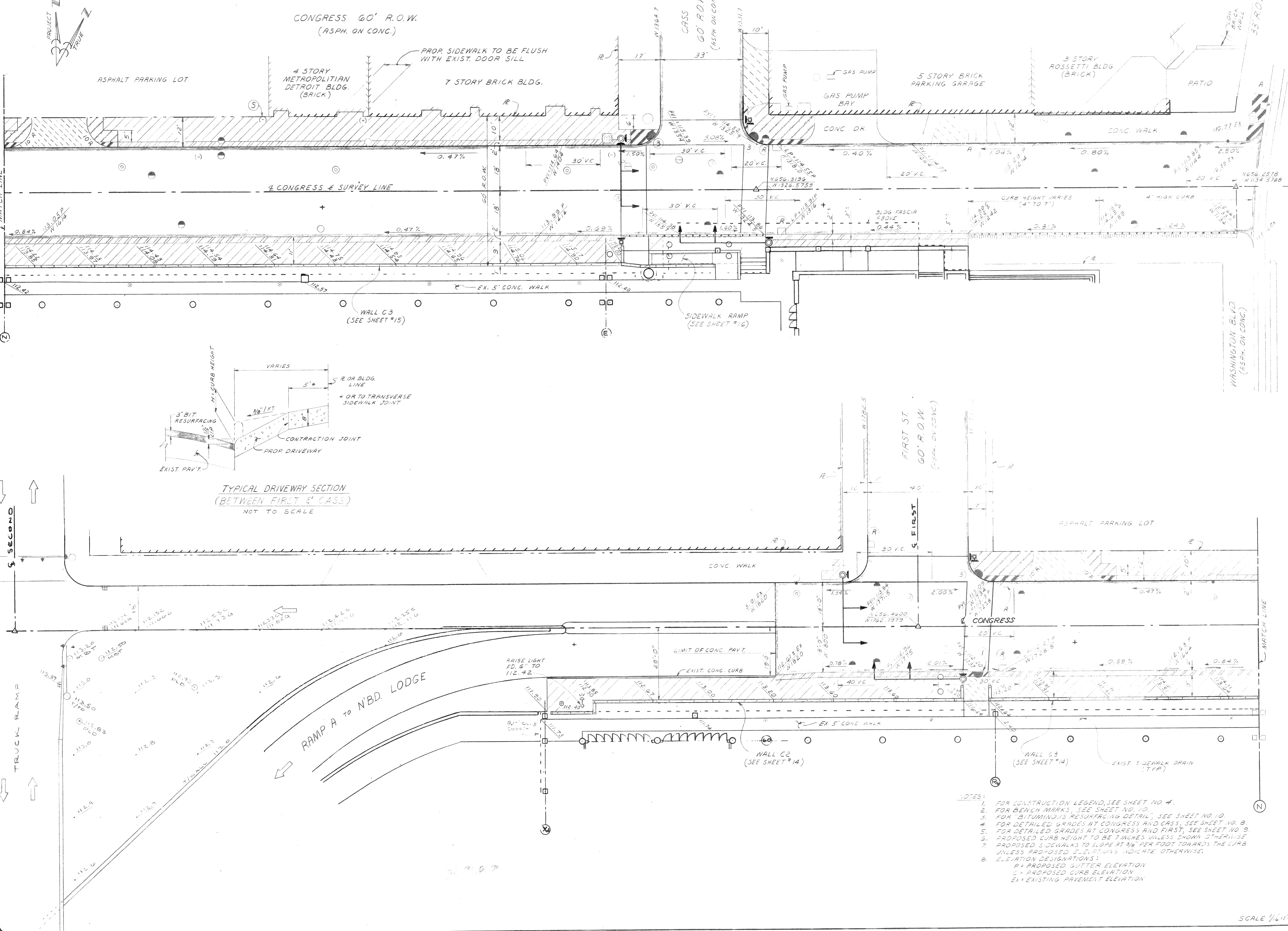


UTILITIES LEGEND

- (B) ADJUST CATCH BASIN
- (R) RESET CATCH BASIN
- (A) ADJUST MANHOLE
- (M) RESET MANHOLE
- (S) ADJUST WATER SHUT-OFF
- (W) RESET WATER SHUT-OFF
- (C) CONSTRUCT CATCH BASIN
- (D) CONSTRUCT DROP MANHOLE
- (X) ABANDON MANHOLE



CONGRESS 60' R.O.W.
(ASPH. ON CONC.)



TYPICAL DRIVEWAY SECTION
(BETWEEN FIRST & CASS)
NOT TO SCALE

- NOTES:
1. FOR CONSTRUCTION LEGEND, SEE SHEET NO. 4.
 2. FOR BENCH MARKS, SEE SHEET NO. 10.
 3. FOR "BITUMINOUS RESURFACING DETAIL", SEE SHEET NO. 10.
 4. FOR DETAILED GRADES AT CONGRESS AND CASS, SEE SHEET NO. 8.
 5. FOR DETAILED GRADES AT CONGRESS AND FIRST, SEE SHEET NO. 9.
 6. PROPOSED CURB HEIGHTS TO BE 7 INCHES UNLESS SHOWN OTHERWISE.
 7. PROPOSED SIDEWALKS TO SLOPE AT 3/8" PER FOOT TOWARDS THE CURB UNLESS PROPOSED ELEVATIONS INDICATE OTHERWISE.
 8. ELEVATION DESIGNATIONS:
P = PROPOSED GUTTER ELEVATION
C = PROPOSED CURB ELEVATION
EX = EXISTING PAVEMENT ELEVATION

NO.	DATE	BY	REVISIONS

designed by N.W.
 drawn by D.N.
 checked by N.W.
 approved by P.D.

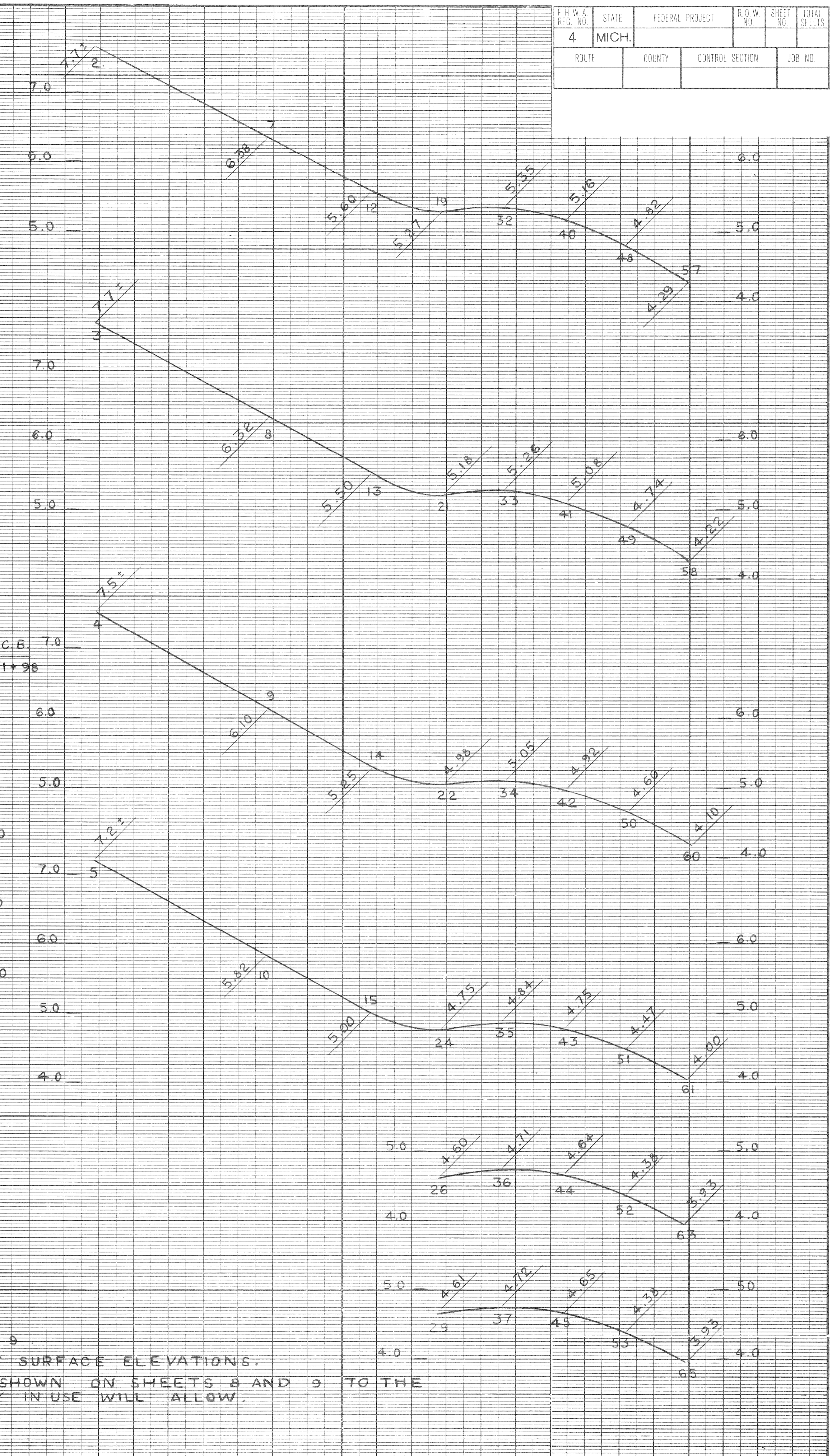
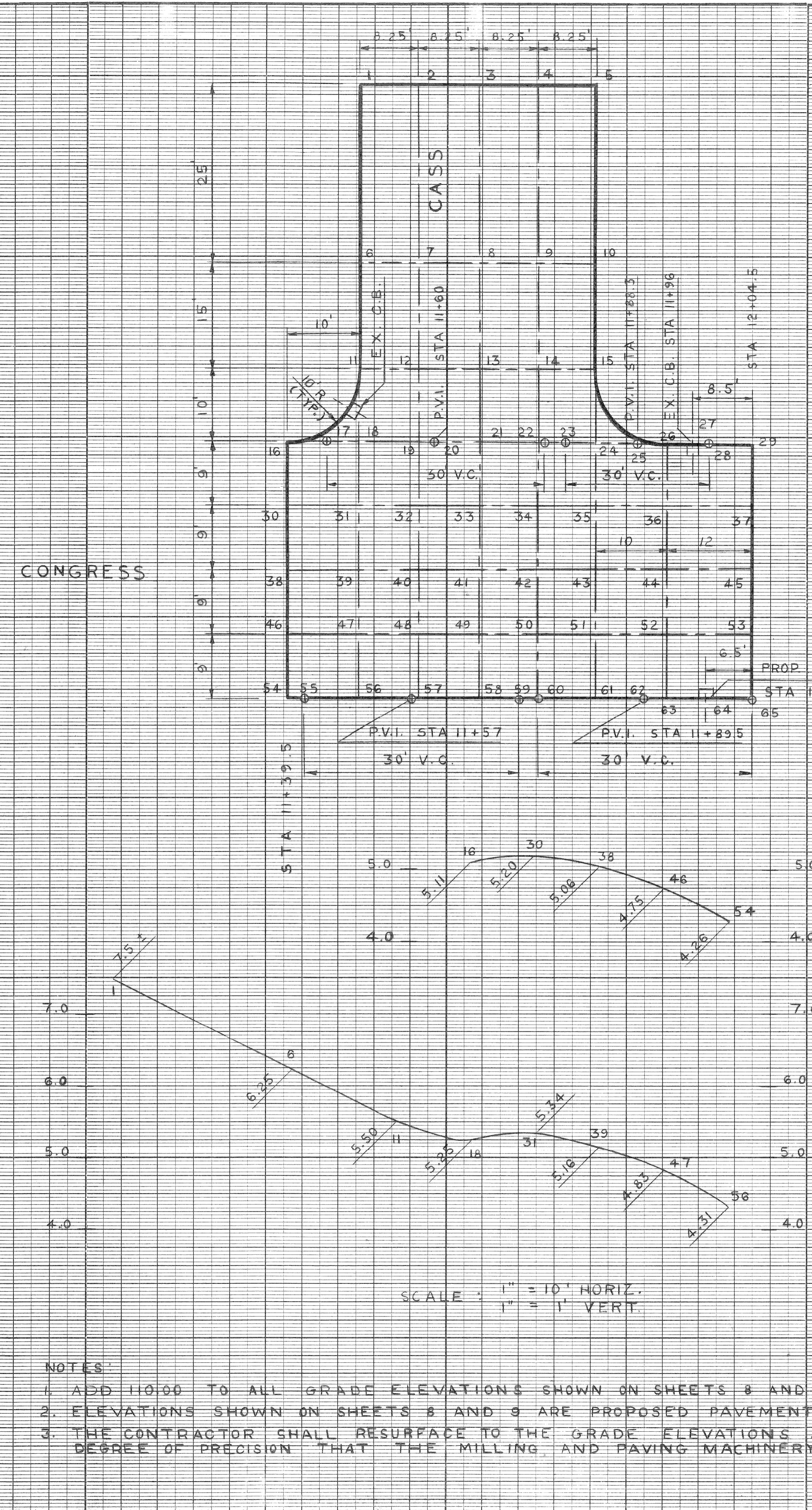
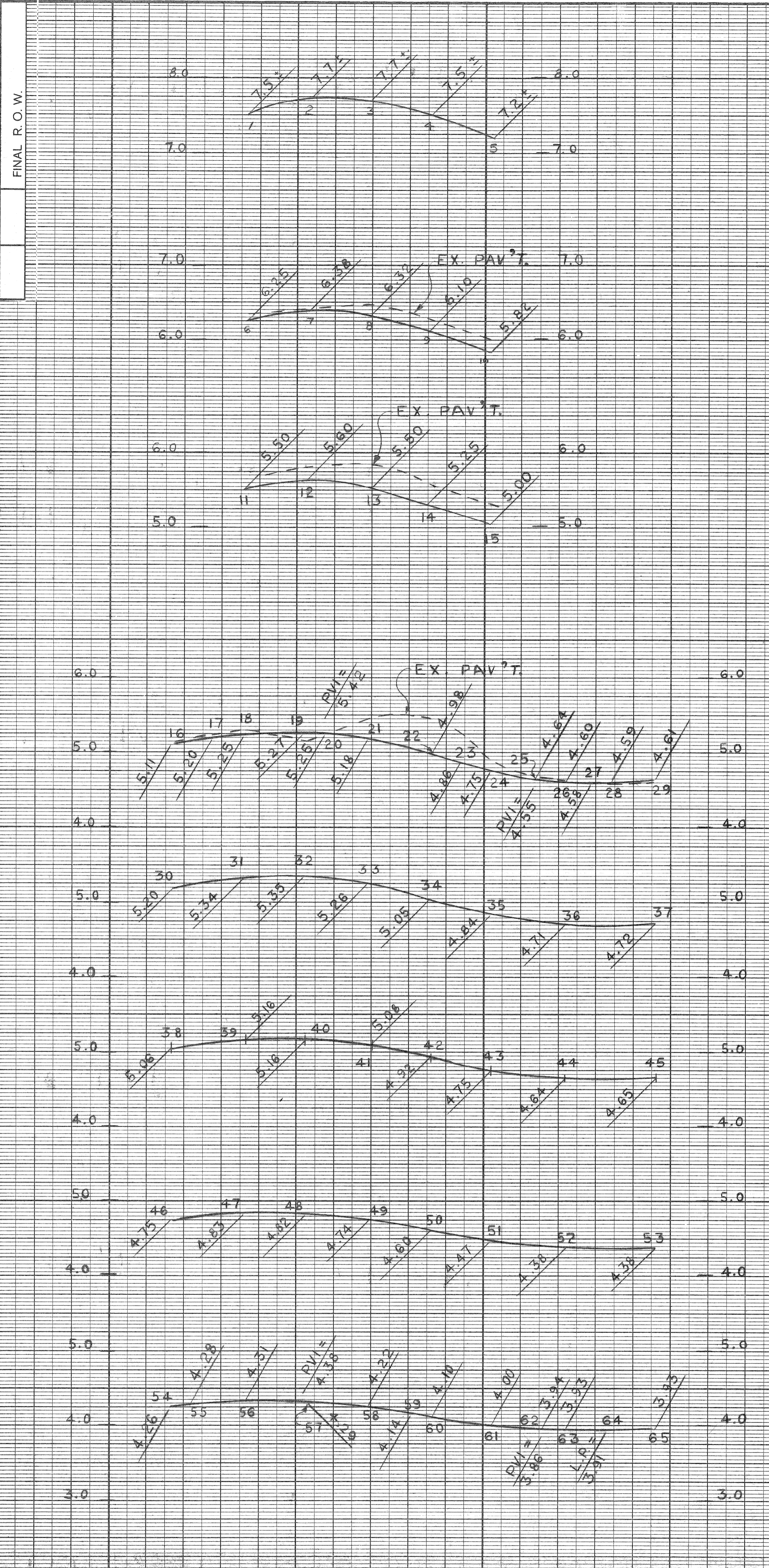
CITY OF DETROIT
 city engineering department
 for DPW

COBO HALL AREA STREET IMPROVEMENTS
 CONGRESS FROM WASHINGTON BLVD. TO FIRST - RESURFACING AND GENERAL PLAN

a.o. 87-60-07
 contract no. PW 6780
 sheet 7 of 21
 drawing no.
 date MAY, 1989

SCALE 1/8"=1'-0"

STATE	FEDERAL PROJECT	R.O.W. NO.	SHEET NO.	TOTAL SHEETS
4 MICH.				
ROUTE	COUNTY	CONTROL SECTION	JOB NO.	

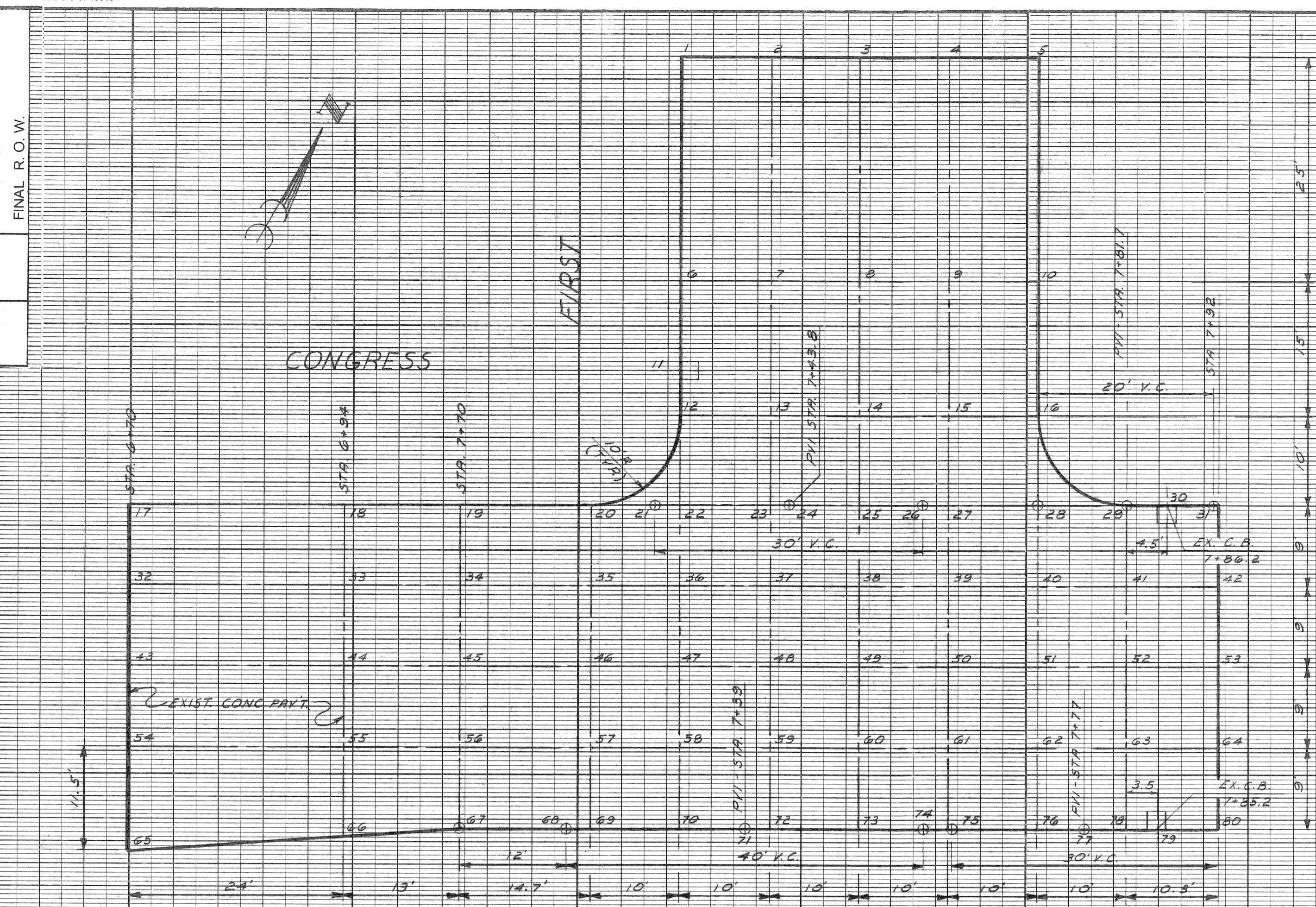


SCALE: 1" = 10' HORIZ.
1" = 1' VERT.

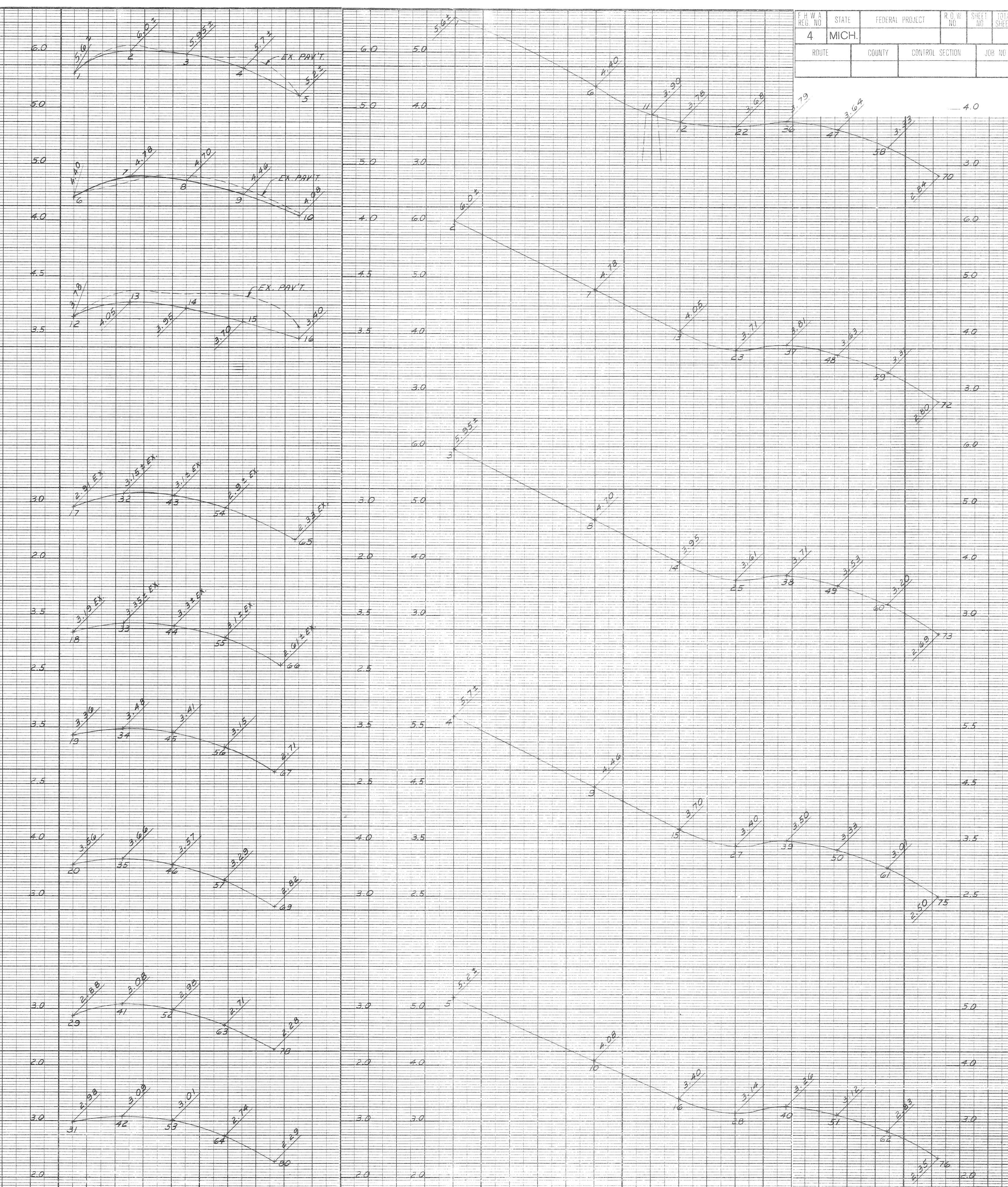
NOTES:
1. ADD 110.00 TO ALL GRADE ELEVATIONS SHOWN ON SHEETS 8 AND 9.
2. ELEVATIONS SHOWN ON SHEETS 8 AND 9 ARE PROPOSED PAVEMENT SURFACE ELEVATIONS.
3. THE CONTRACTOR SHALL RESURFACE TO THE GRADE ELEVATIONS SHOWN ON SHEETS 8 AND 9 TO THE DEGREE OF PRECISION THAT THE MILLING AND PAVING MACHINERY IN USE WILL ALLOW.

DESIGN CHECKED		REFERENCE DRAWINGS	DESIGNED BY	N. W.	APPROVED	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAU OF STREETS AND HIGHWAYS FOR DPW	COBO HALL AREA STREET IMPROVEMENTS	CONTRACT NO. PW-6780	SHEET 8 OF 21 SHEETS	
PROFILE PLOTTED			DRAWN BY	M. K.	ENGINEER OF STREETS					
PRELIMINARY GRADE			TRACED BY							HIGHWAY ENGINEER
FEDERAL INSPECTION			CHECKED BY	N. W.						
COORD.	DESCRIPTION	DRN	CHK'D	APVD	DATE		CONGRESS - CASS INTERSECTION GRADE DETAILS	ASSIGNMENT NO. 87-60-07	DATE MAY, 1989	

F.P.W. REG. NO.	STATE	FEDERAL PROJECT	R.O. NO.	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	COUNTY	CONTRACT SECTION	JOB NO.		



SCALE: 1" = 10' HORIZ.
1" = 1' VERT.



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

DATE	
BY	
PRELIMINARY R.O.W. CHECKED	
FINAL DESIGN CHECKED	
FINAL R.O.W. CHECK	
QUANTITIES CHECKED	
SWAID	

COORD	DESCRIPTION	DRN	CK'D	AP'D	DATE

REVISIONS LOCATED BY COORDINATES ON SHEET

DESIGNED BY	N. W.	APPROVED:	N.O.W.
DRAWN BY	D. N.	ENGINEER OF STREETS	
TRACED BY		HIGHWAY ENGINEER	
CHECKED BY	N. W.		

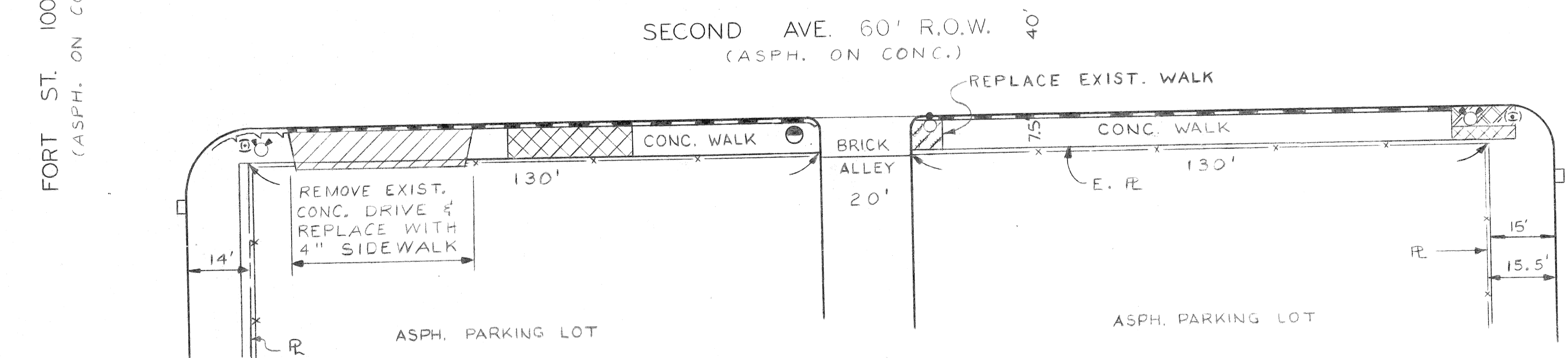
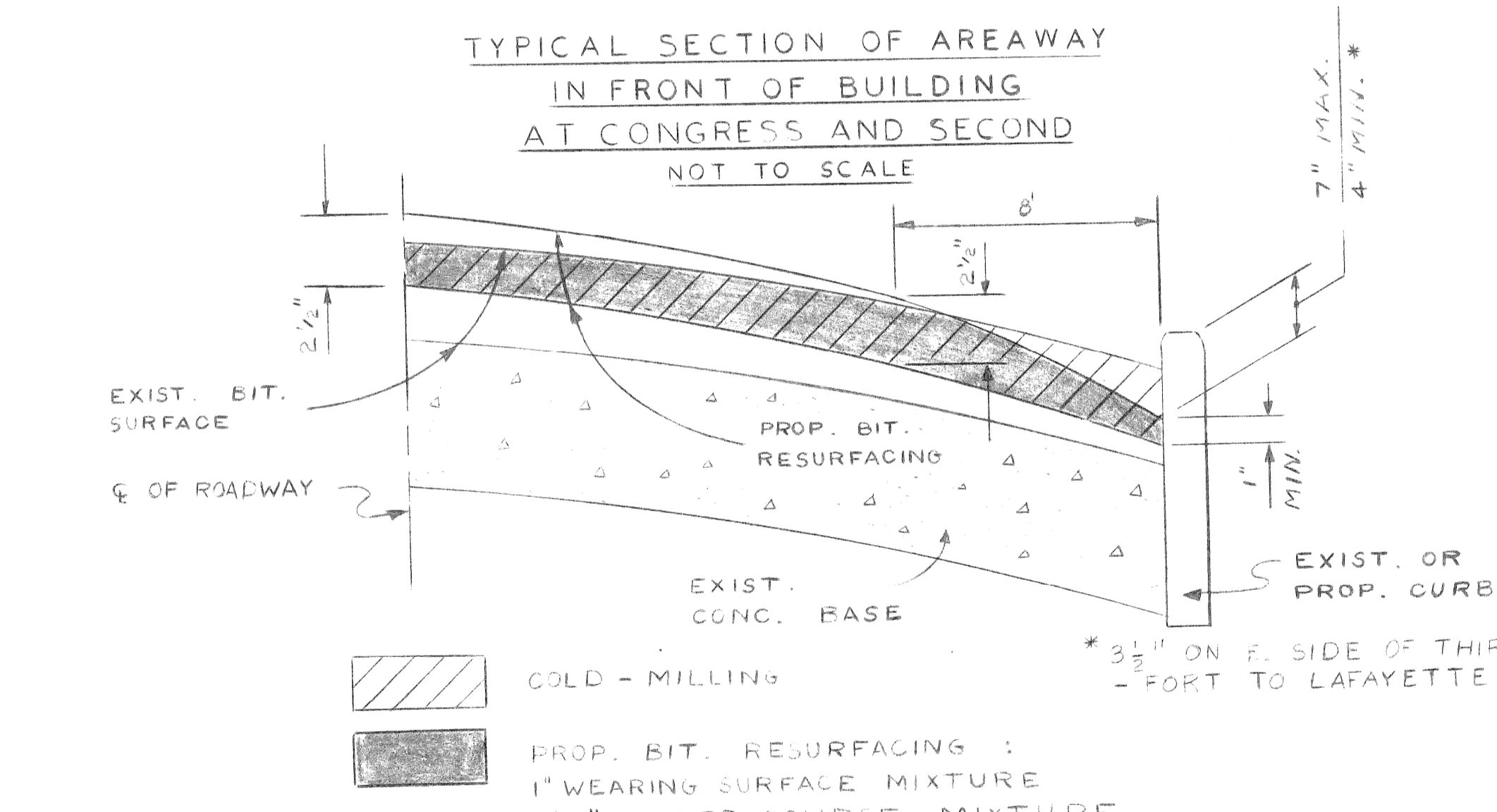
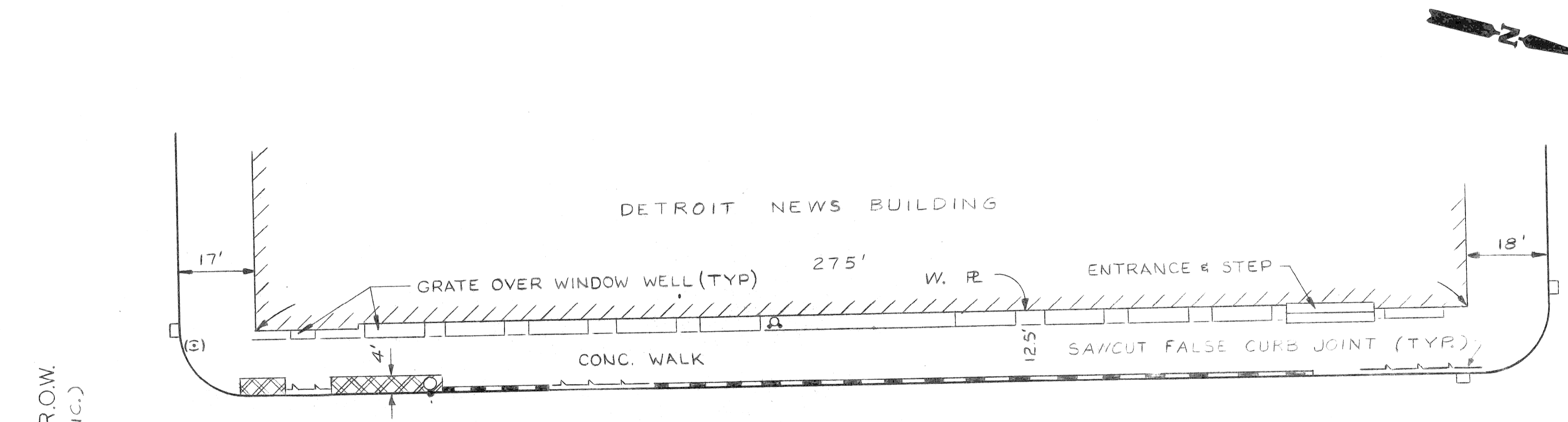
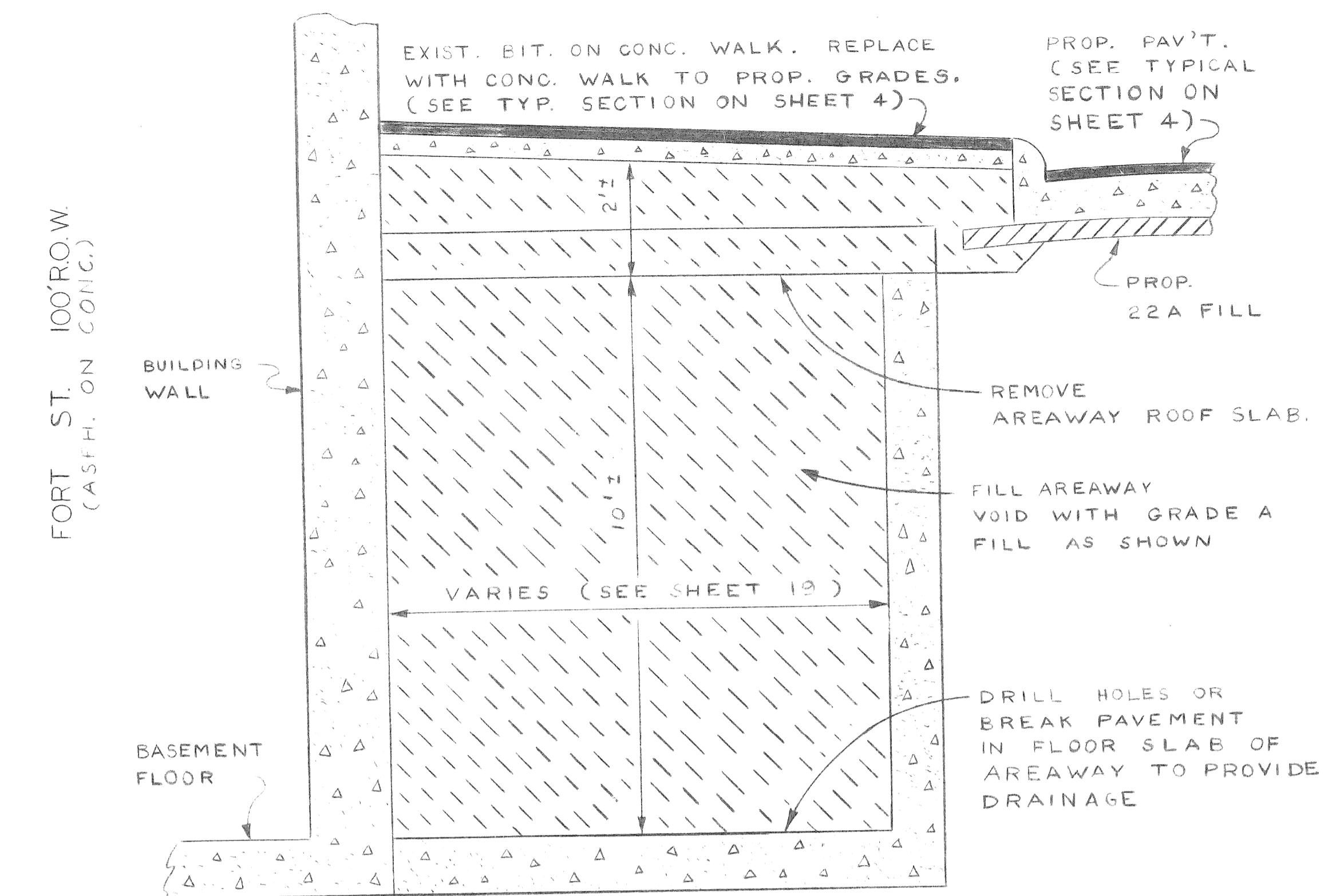
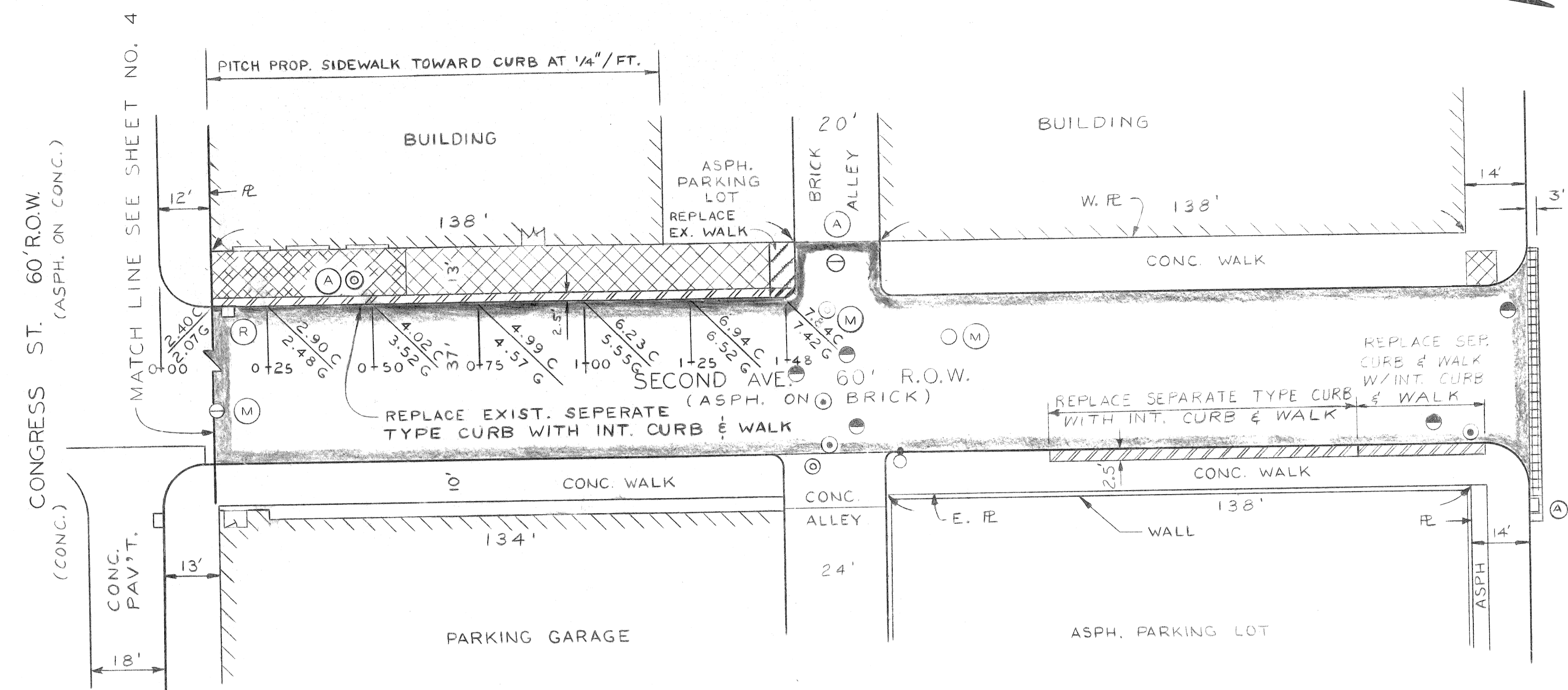
CITY OF DETROIT
CITY ENGINEERING DEPARTMENT
BUREAU OF STREETS AND HIGHWAYS
FOR
D P W

CONTRACT NO.	PW-6780
ASSIGNMENT NO.	87-60-07
DATE	MAY, 1989
SHEET 9 OF 21 SHEETS	

COBO HALL AREA STREET IMPROVEMENTS

CONGRESS - FIRST INTERSECTION GRADE DETAILS

BENCH MARKS
 C.B.M. STA 4+73 N. SIDE CONGRESS ELEV. 113.45
 P.B.M. # 23-353 N.W. COR. SECOND & FORT ELEV. 124.79



- BITUMINOUS RESURFACING DETAIL NOT TO SCALE
- NOTES:
- ELEVATIONS SHOWN ARE PROPOSED CURB AND GUTTER ELEVATIONS.
 - ADD 10.00 TO THE ELEVATIONS SHOWN.
 - FOR CONSTRUCTION LEGEND SEE SHEET NO. 4.
 - FOR UTILITIES LEGEND SEE SHEET NO. 6.
 - D.E. CONDUIT IS HANGING FROM AREAWAY ROOF SLAB ON SECOND NEAR CONGRESS (AS SHOWN ON SHEET 19).
 - CONTACT BILL HOPKINSON OF THE BOWNE BLDG. AT 964-1330 AT LEAST 14 DAYS BEFORE ANY AREAWAY DEMOLITION TO COORDINATE WORK SCHEDULES. THE BOWNE BLDG. WILL BE RESPONSIBLE FOR MAINTAINING ACTIVE UTILITIES.

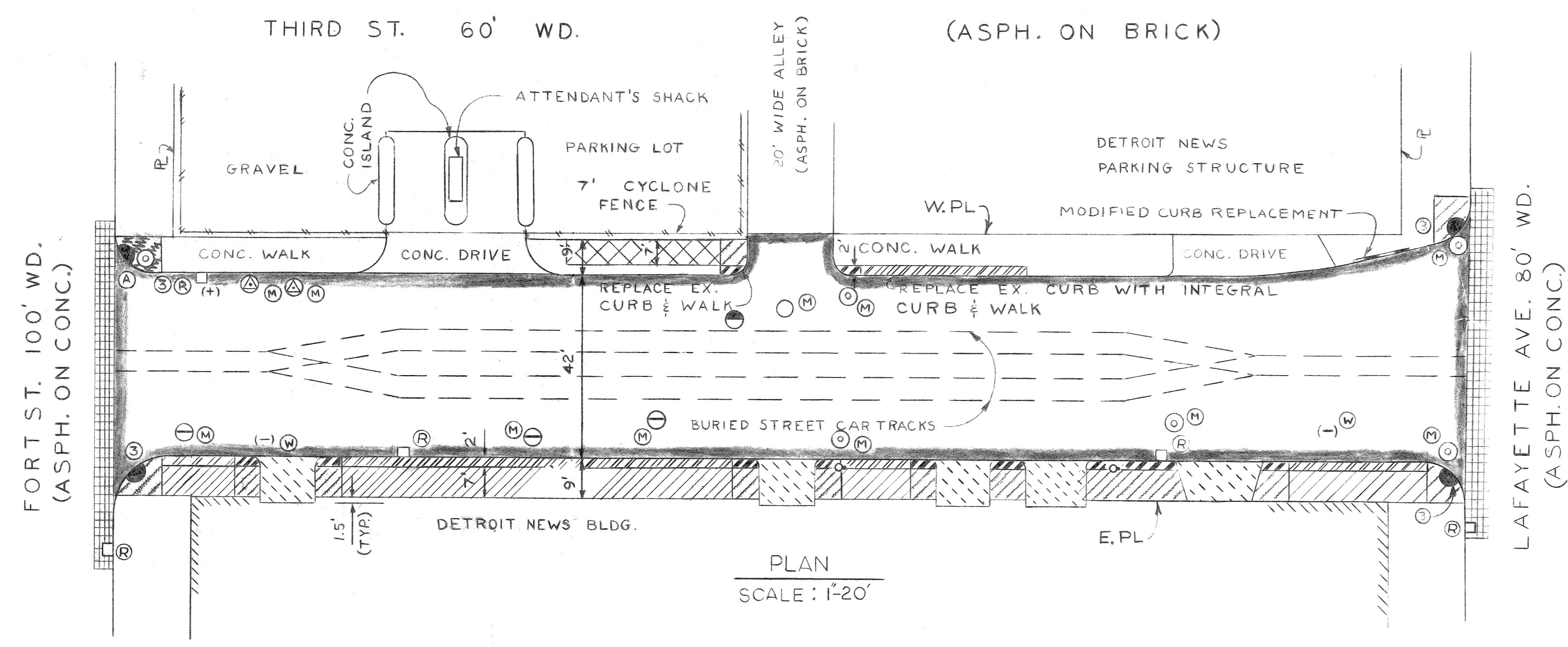
SCALE: 1" = 20'

REVISIONS LOCATED BY COORDINATES ON SHEET COORD. DESCRIPTION DRN CKD AP'D DATE		DESIGNED BY N. H. DRAWN BY ABrown TRACED BY CHECKED BY N. W.	APPROVED: N. O. H. ENGINEER OF STREETS HIGHWAY ENGINEER	CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS FOR DPW	COBO HALL AREA STREET IMPROVEMENTS SECOND FROM CONGRESS TO LAFAYETTE CONSTRUCTION AND RESURFACING PLAN	SHEET 10 OF 21 SHEETS CONTRACT NO. PW-6780 ASSIGNMENT NO. 87-60-07 DATE MAY, 1983
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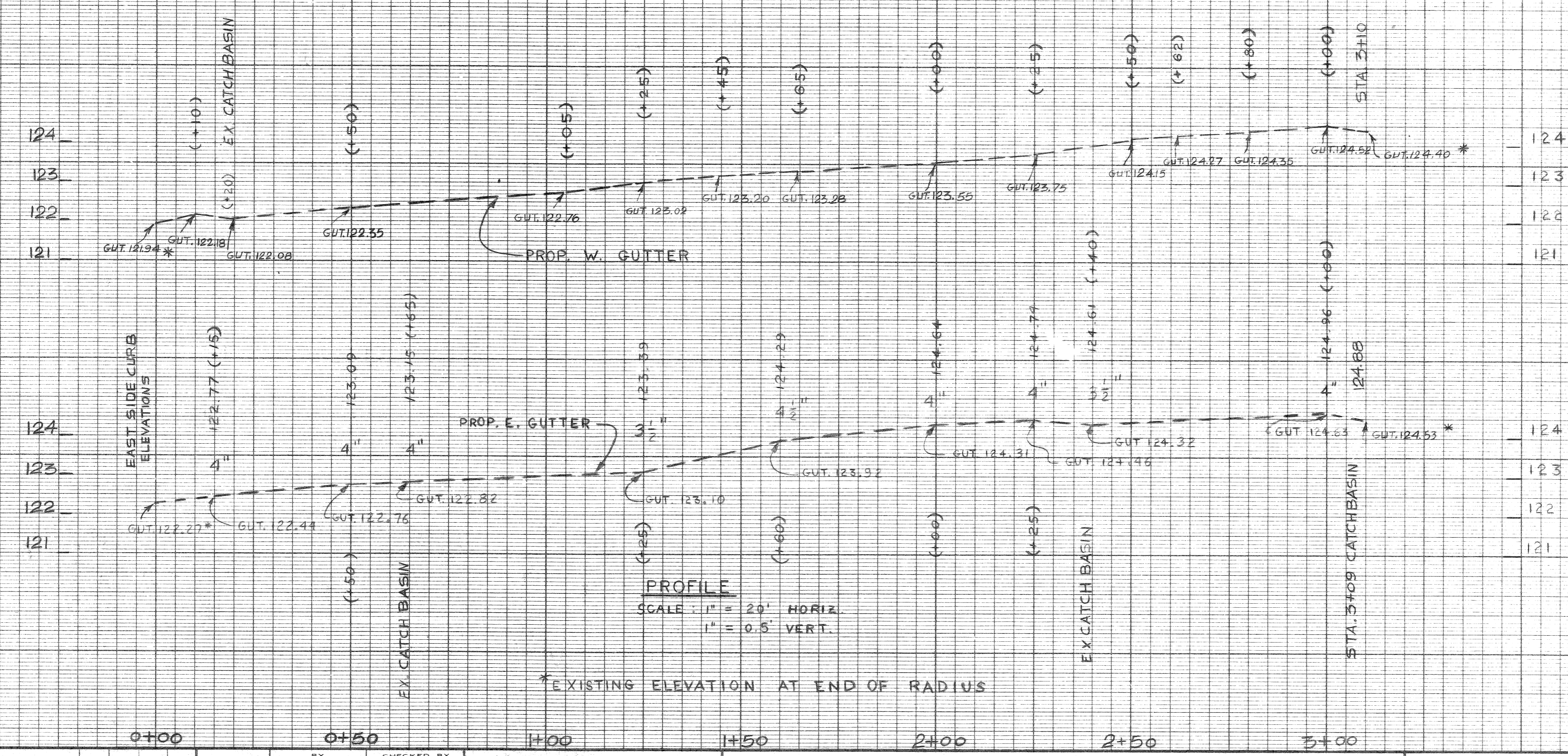
BENCH MARKS

ELEV.

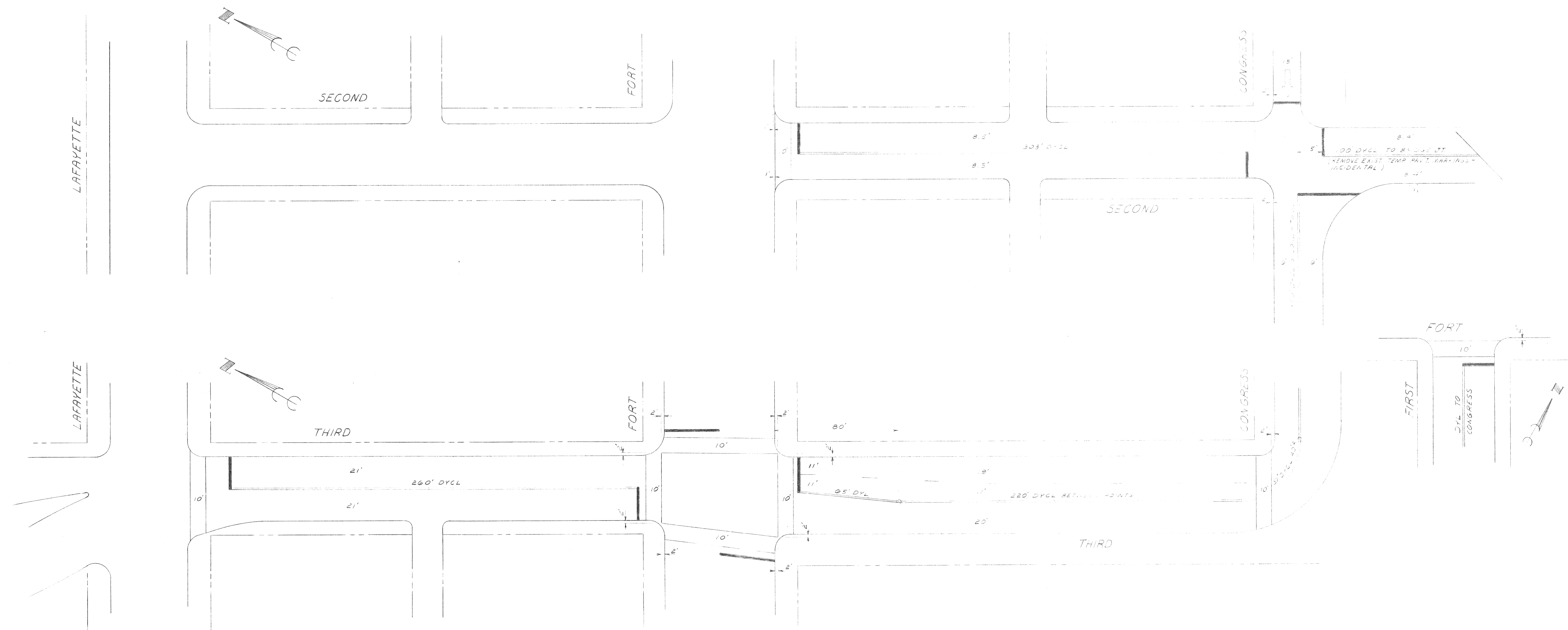
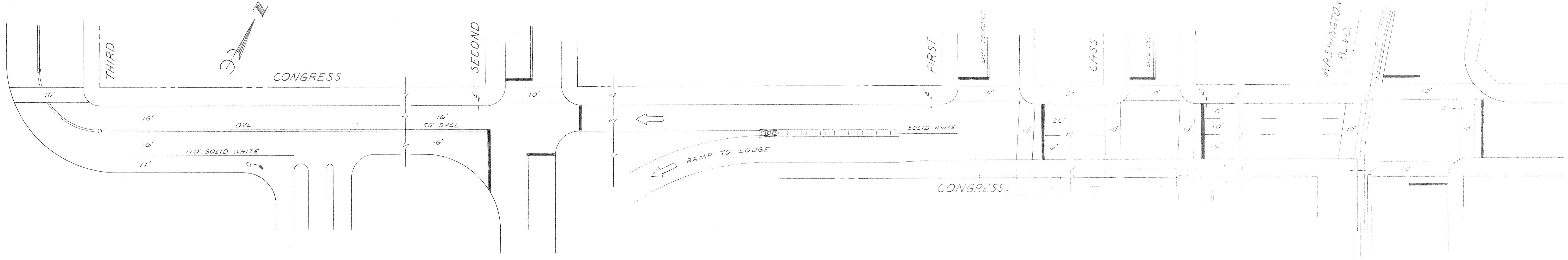
P.B.M. # 28-303 NE COR FORT & SECOND ELEV. 124.79
 C.B.M. → HYD. N.E. COR. THIRD & FORT ELEV. 125.54
 C.B.M. → HYD. N.E. COR. THIRD & LAFAYETTE ELEV. 128.17



- NOTES**
1. PROPOSED DRIVEWAYS TO REPLACE EXISTING DRIVEWAYS.
 2. PROPOSED SIDEWALK AND PROPOSED INTEGRAL CURB AND SIDEWALK TO REPLACE EXISTING SIDEWALK AND EXISTING SEPERATE TYPE CURB.
 3. MILL ENTIRE BITUMINOUS SURFACE AND RESURFACE TO MEET PROPOSED GUTTER GRADES AND TO IMPROVE ROADWAY CROWN (SEE BITUMINOUS RES. READING DETAIL ON SHEET 10).
 4. REPLACE EXISTING SIDEWALK WITH TYPE III RAMP AT CORNERS AS SHOWN.
 5. FOR CONSTRUCTION LEGEND SEE SHEET No. 4.
 6. FOR UTILITIES LEGEND SEE SHEET No. 9.
 7. SEE BITUMINOUS RESURFACING DETAIL ON SHEET No. 10.



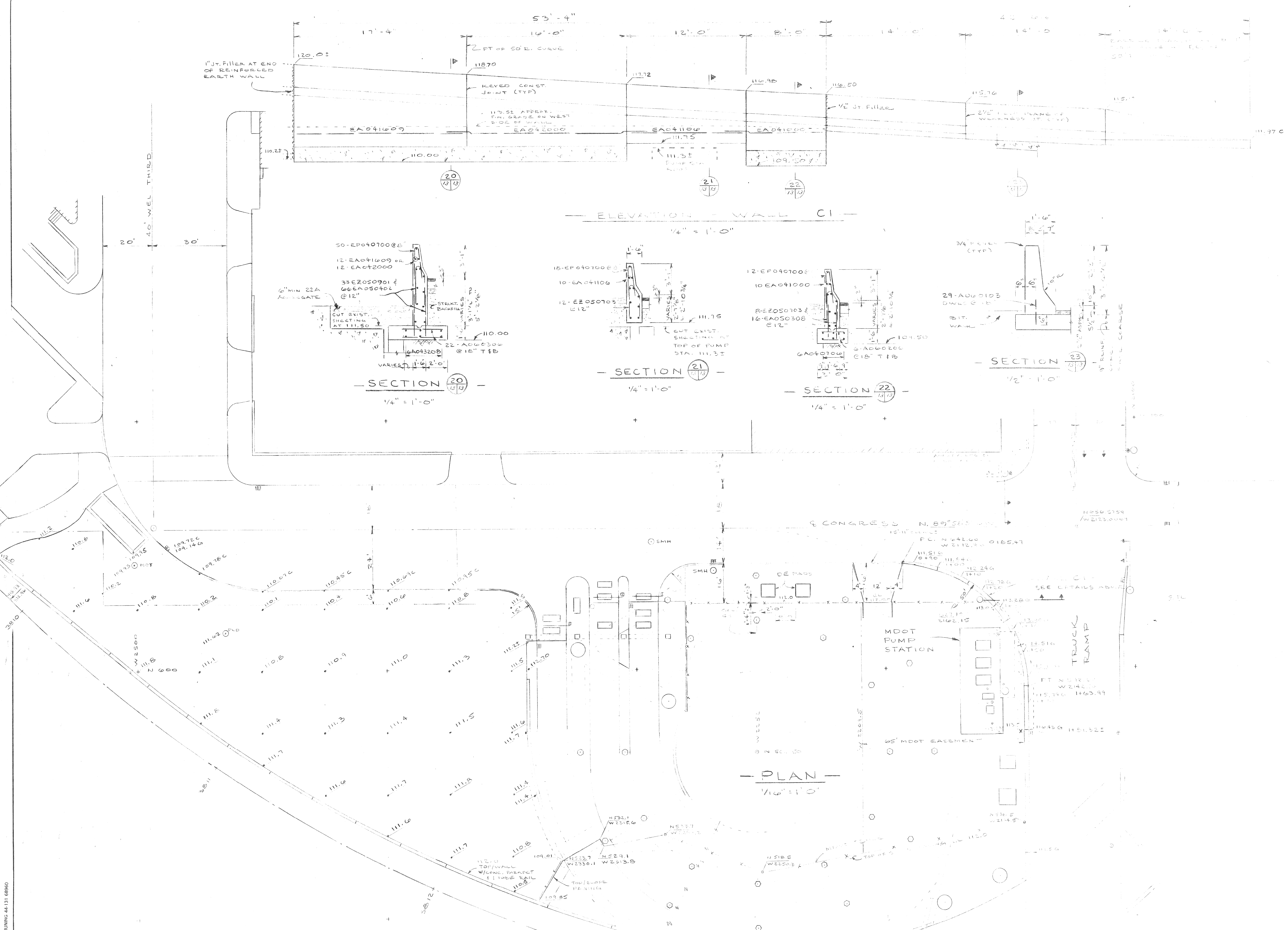
PLAN		AB	CHECKED BY	APPROVED:	<p>CITY OF DETROIT</p> <p>CITY ENGINEERING DEPARTMENT</p> <p>BUREAUS OF STREETS AND HIGHWAYS</p> <p>FOR DPW</p>	COBO HALL AREA STREET IMPROVEMENTS		INDEX NO.	SHEET 11 OF 21 SHEETS
GRADE		R. Fogarty		<p><i>N.W.K.</i></p> <p>ENGINEER OF STREETS</p>		THIRD FROM FORT TO LAFAYETTE RESURFACING PLAN		CONTRACT NO.	PW-6780
ESTIMATE		R. Fogarty		HIGHWAY ENGINEER				ASSIGNMENT NO.	87-60-07
DESCRIPTION	DRN	CK	DATE	FINAL		CHECK	REVIEW	DATE	MAY, 1989



SCALE 1" = 30'

<table border="1"> <tr> <td>COORD</td> <td>DESCRIPTION</td> <td>DRN</td> <td>CK'D</td> <td>AP'D</td> <td>DATE</td> </tr> <tr> <td colspan="6">REVISIONS LOCATED BY COORDINATES ON SHEET</td> </tr> </table>		COORD	DESCRIPTION	DRN	CK'D	AP'D	DATE	REVISIONS LOCATED BY COORDINATES ON SHEET						<table border="1"> <tr> <td>REFERENCE DRAWINGS</td> <td>DESIGNED BY</td> <td>APPROVED:</td> </tr> <tr> <td></td> <td>D. L. N.</td> <td><i>N. O. W.</i></td> </tr> <tr> <td></td> <td>DRAWN BY</td> <td>ENGINEER OF STREETS</td> </tr> <tr> <td></td> <td>TRACED BY</td> <td>HIGHWAY ENGINEER</td> </tr> <tr> <td></td> <td>CHECKED BY</td> <td>N. W.</td> </tr> </table>	REFERENCE DRAWINGS	DESIGNED BY	APPROVED:		D. L. N.	<i>N. O. W.</i>		DRAWN BY	ENGINEER OF STREETS		TRACED BY	HIGHWAY ENGINEER		CHECKED BY	N. W.	<p align="center"> CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAU OF STREETS AND HIGHWAYS FOR DPW </p>	<p align="center"> COBO HALL AREA STREET IMPROVEMENTS PAVEMENT MARKINGS </p>	<table border="1"> <tr> <td>SHEET 12 OF 21 SHEETS</td> </tr> <tr> <td>CONTRACT NO. PW-6780</td> </tr> <tr> <td>ASSIGNMENT NO. 87-60-07</td> </tr> <tr> <td>DATE MAY, 1989</td> </tr> </table>	SHEET 12 OF 21 SHEETS	CONTRACT NO. PW-6780	ASSIGNMENT NO. 87-60-07	DATE MAY, 1989
COORD	DESCRIPTION	DRN	CK'D	AP'D	DATE																															
REVISIONS LOCATED BY COORDINATES ON SHEET																																				
REFERENCE DRAWINGS	DESIGNED BY	APPROVED:																																		
	D. L. N.	<i>N. O. W.</i>																																		
	DRAWN BY	ENGINEER OF STREETS																																		
	TRACED BY	HIGHWAY ENGINEER																																		
	CHECKED BY	N. W.																																		
SHEET 12 OF 21 SHEETS																																				
CONTRACT NO. PW-6780																																				
ASSIGNMENT NO. 87-60-07																																				
DATE MAY, 1989																																				

BRUNING 44131 68960



NO.	DATE	BY	REVISIONS

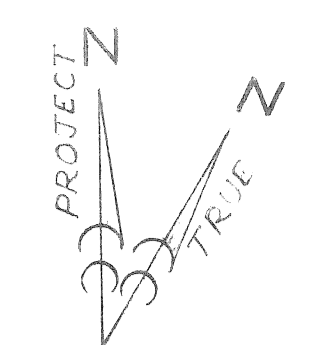
designed by *JK*
 drawn by *JK*
 checked by *JK*
 approved: *[Signature]*

CITY OF DETROIT
 city engineering department
 for DPW

COBO HALL AREA STREET IMPROV.

CONCRETE WALL C1 DETAILS

a.o. 87-60-07
 contract no. PW-6780
 sheet 13 of 21
 drawing no.
 date MAY, 1967



no.	description	date

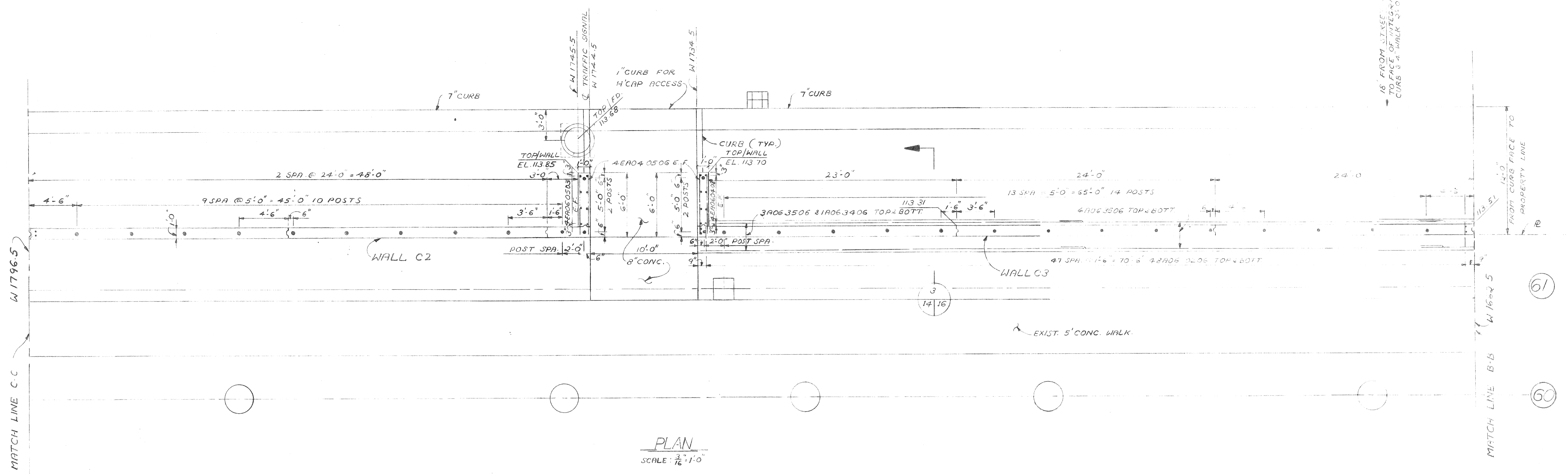
designed by JK
 drawn by JK
 checked by [Signature]
 approved: [Signature]

CITY OF DETROIT
 city engineering department
 for DPW

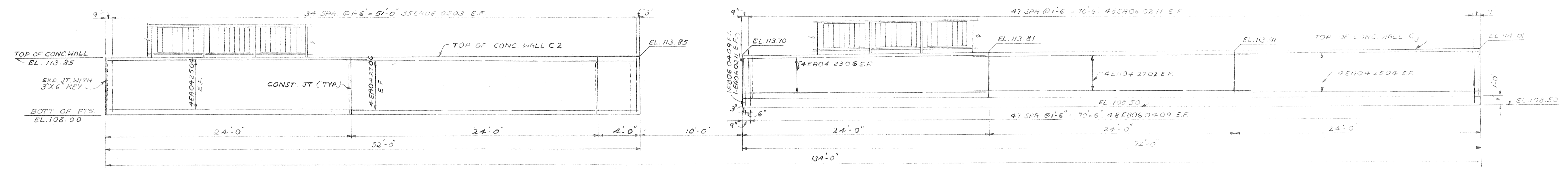
COBO HALL AREA
 STREET IMPROVEMENTS

CONCRETE WALL-C2 & C3
 DETAILS

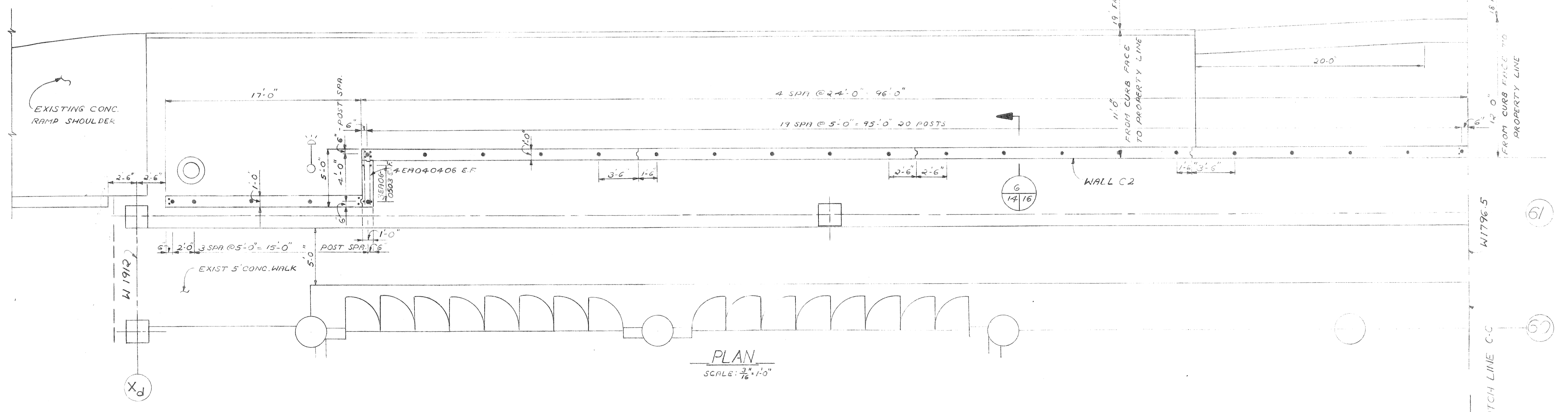
a.o. 87-60-07
 contract no. PW 6780
 sheet 14 of 21
 drawing no.
 date MAY, 1989



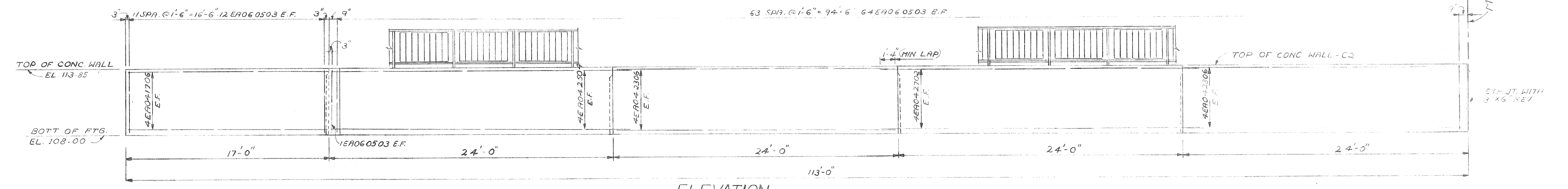
PLAN
 SCALE: 3/8" = 1'-0"



ELEVATION
 SCALE: 3/8" = 1'-0"



PLAN
 SCALE: 3/8" = 1'-0"



ELEVATION
 SCALE: 3/8" = 1'-0"

BRUNING 44-131 68960

designed by	JK
drawn by	J.K.
checked by	
approved:	

CITY OF DETROIT

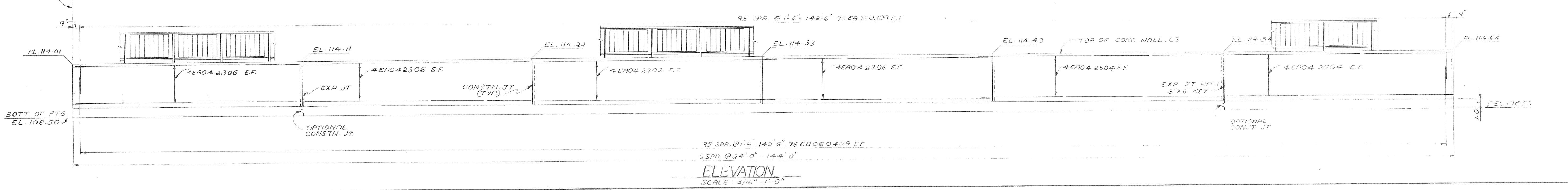
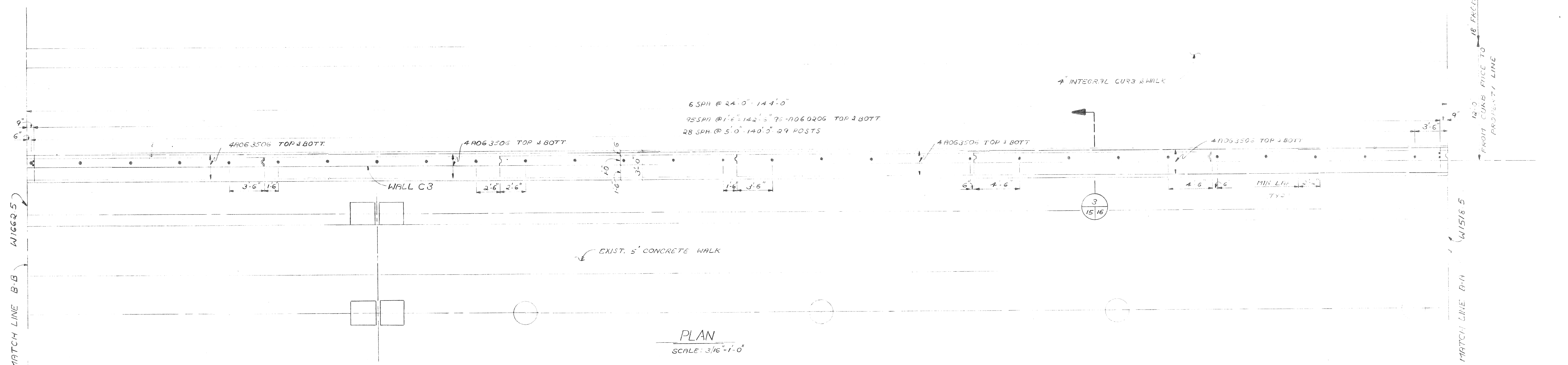
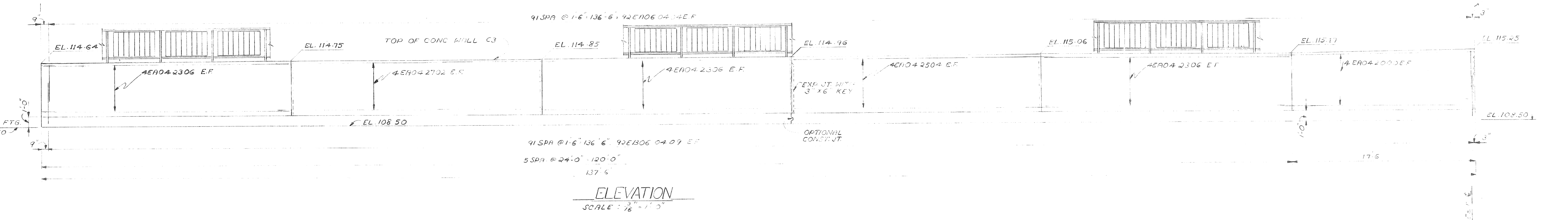
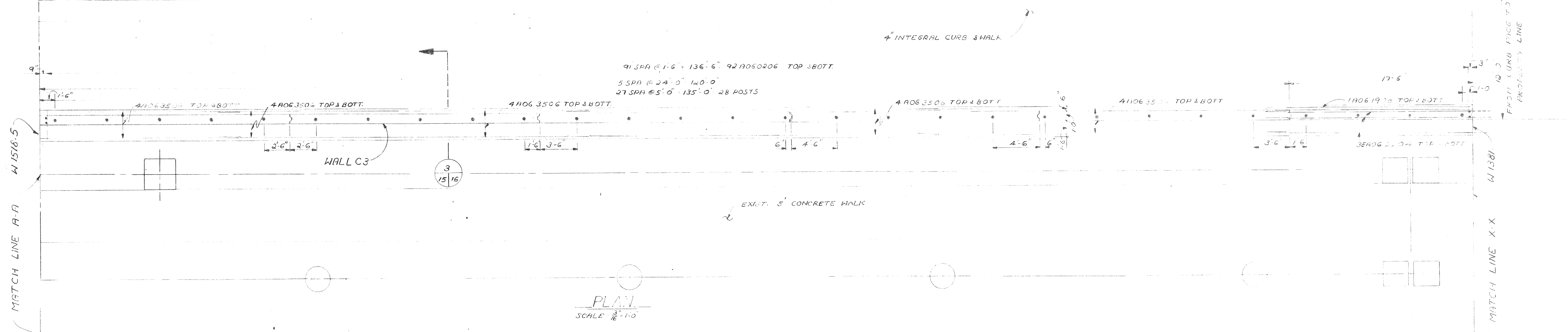
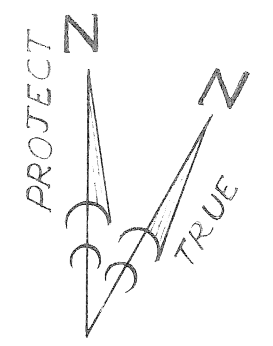
city engineering department

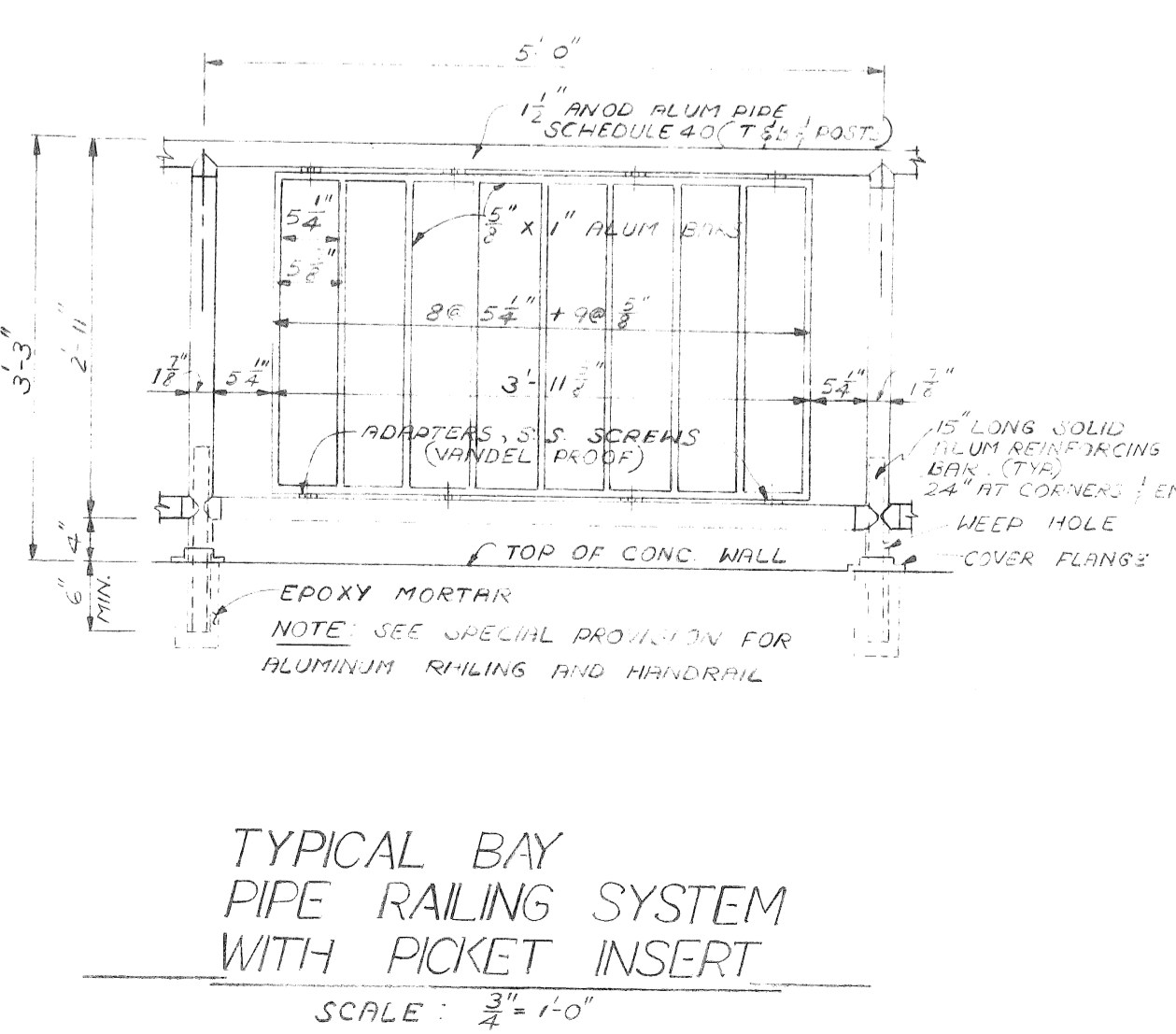
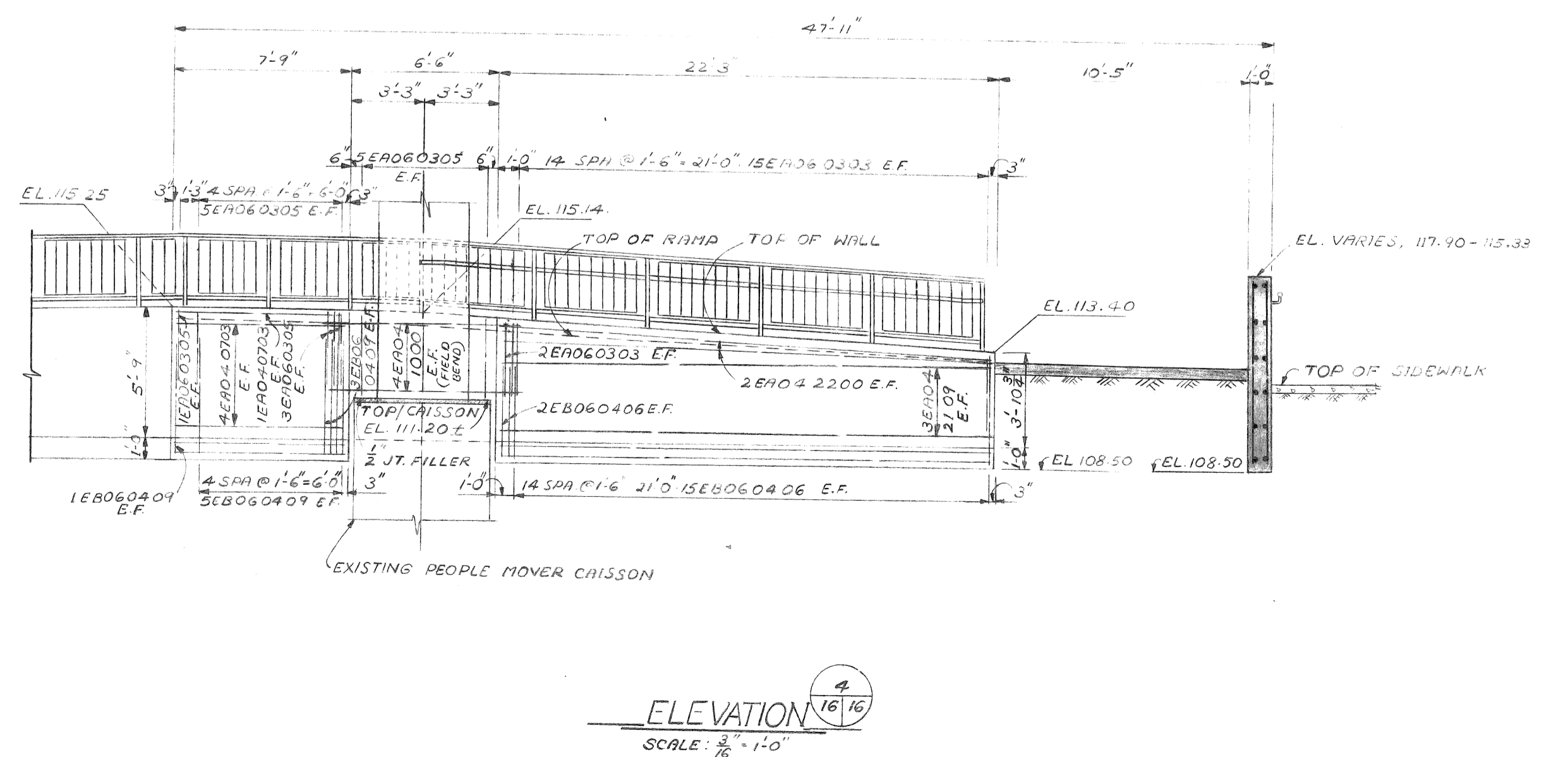
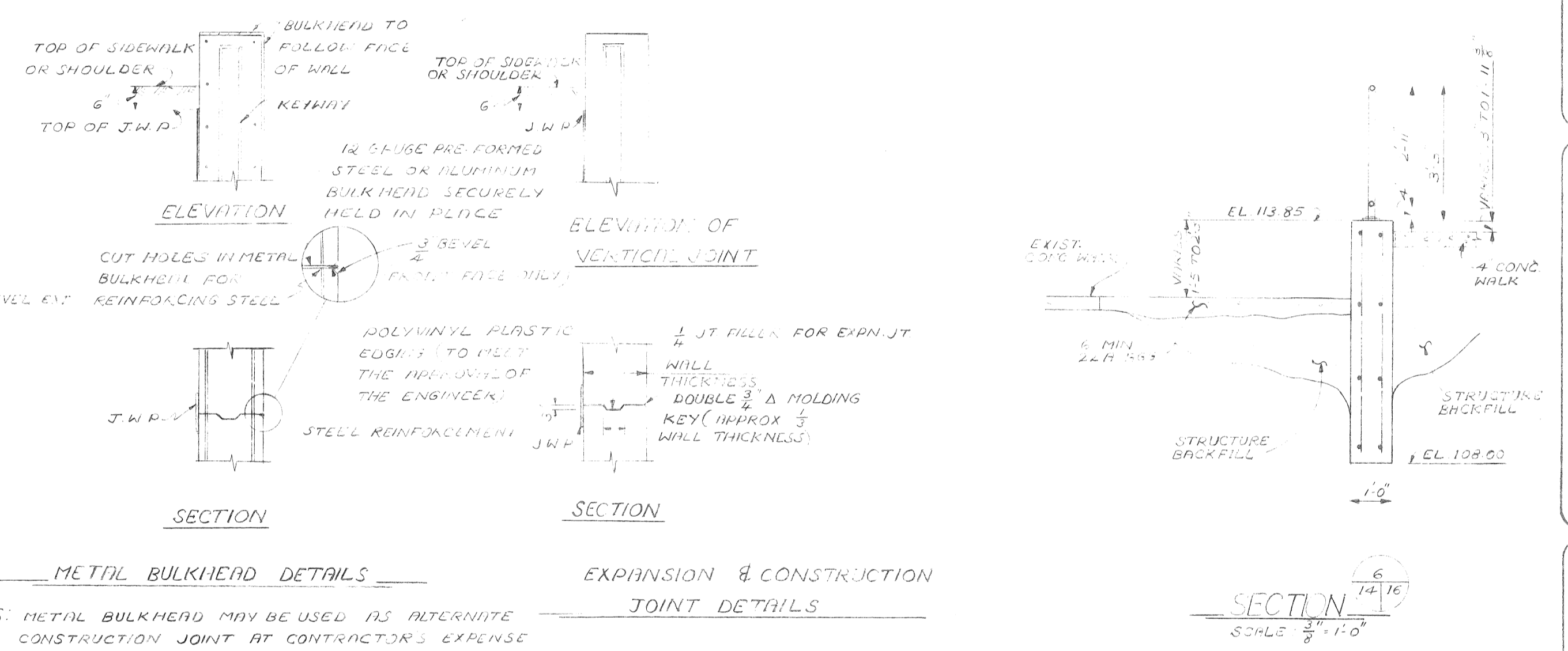
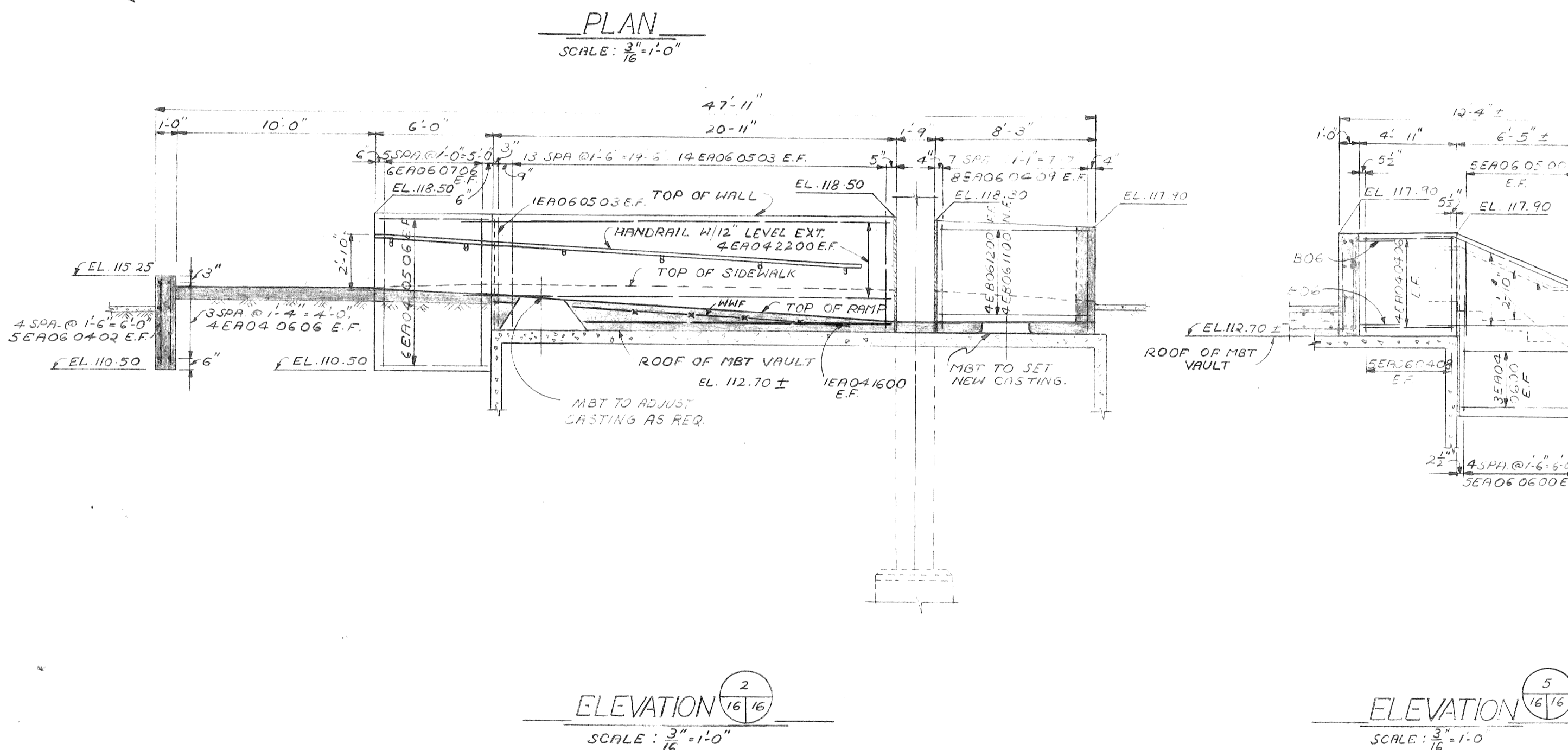
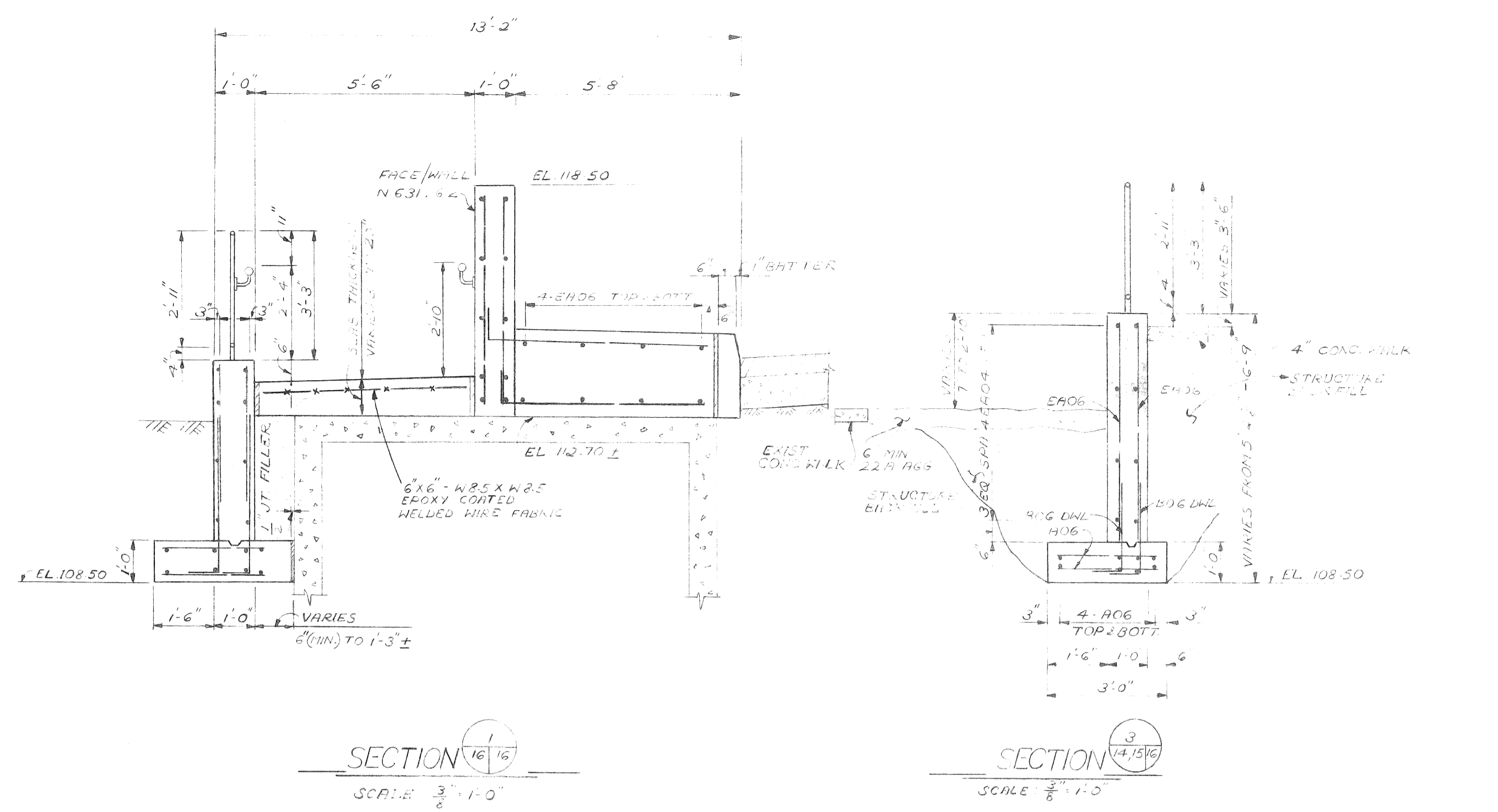
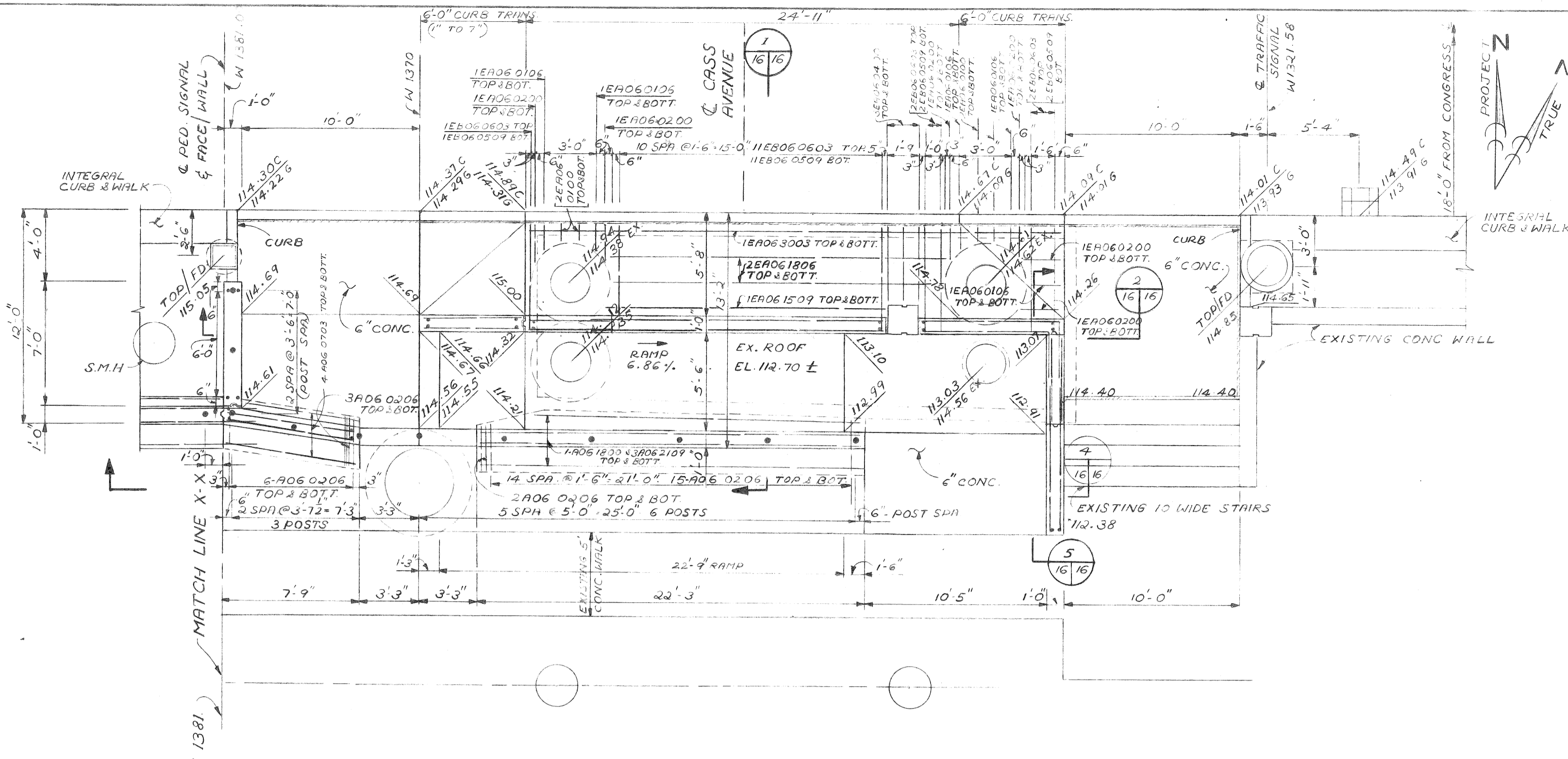
for DPW

COBO HALL AREA STREET IMPROVEMENTS

CONCRETE WALL -C3 DETAILS

a.o. 87-60-07
 contract no. PW 6780
 sheet 15 of 21
 drawing no.
 date MAY, 1989





designed by	JJK
drawn by	JJK
checked by	JJK
approved:	

revisions

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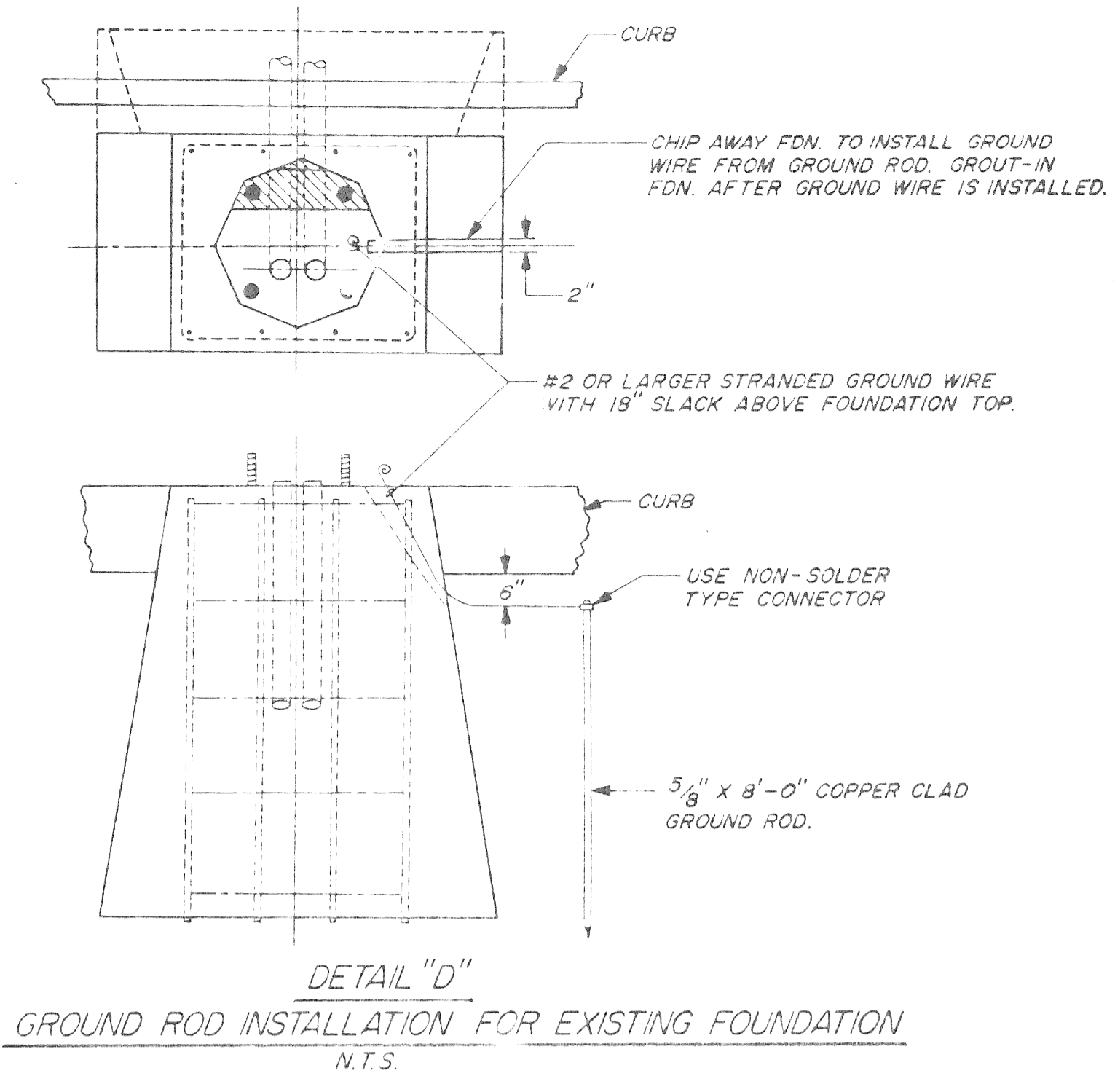
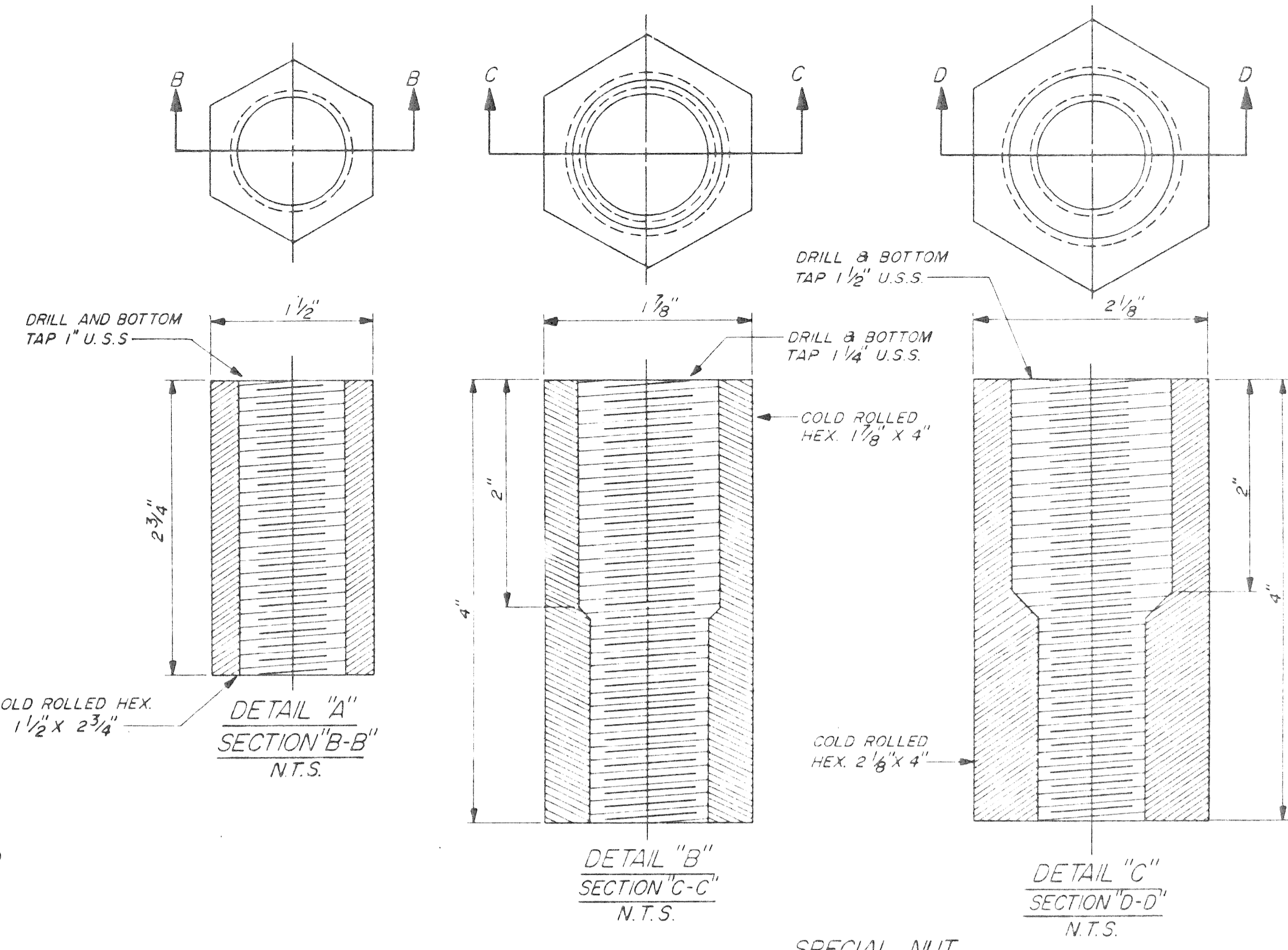
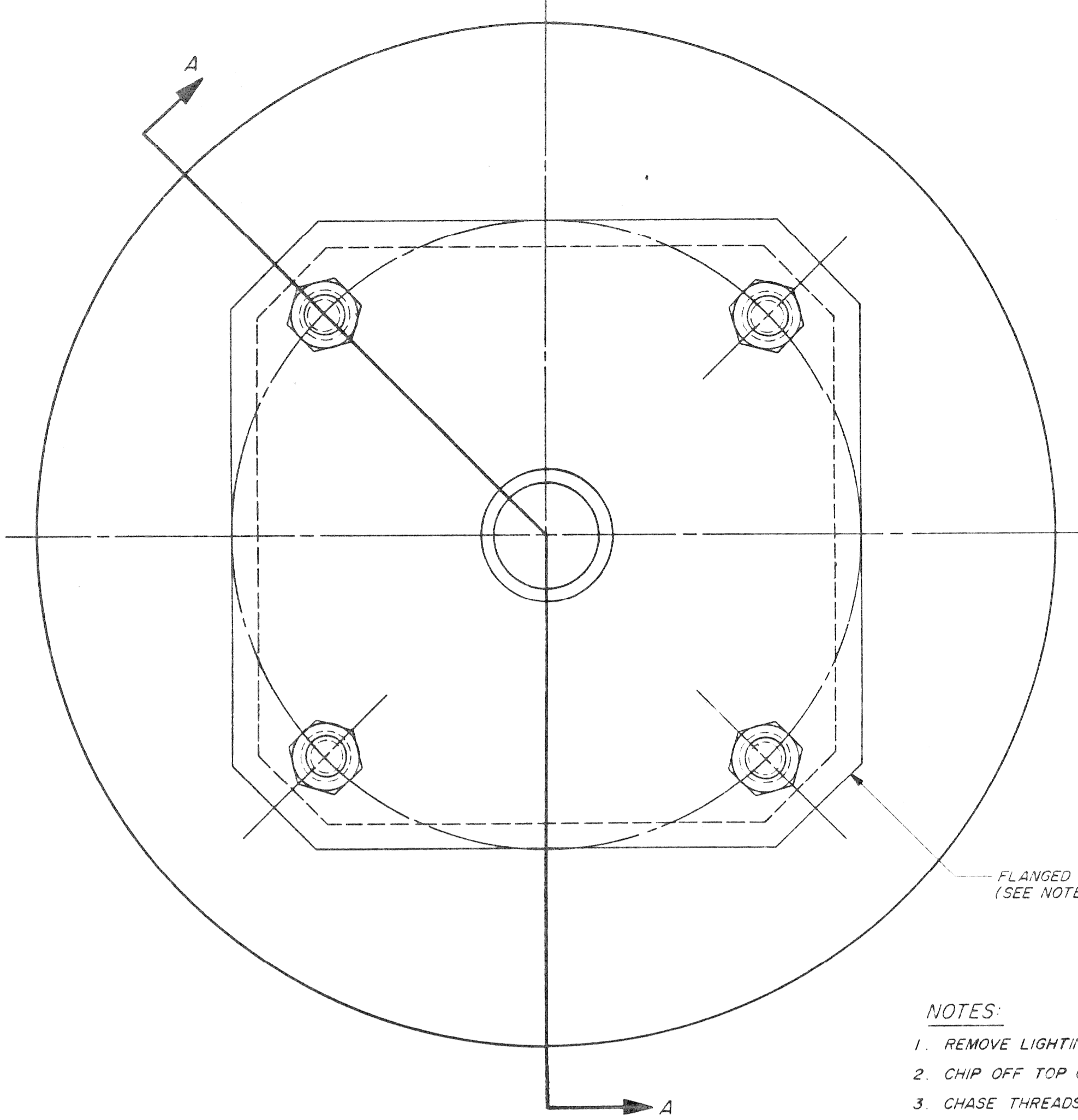
dr'n. ch'd. ap'vd. date

CITY OF DETROIT
city engineering department
for DPW

COBO HALL AREA STREET IMPROVEMENTS

SIDE WALK RAMP DETAILS

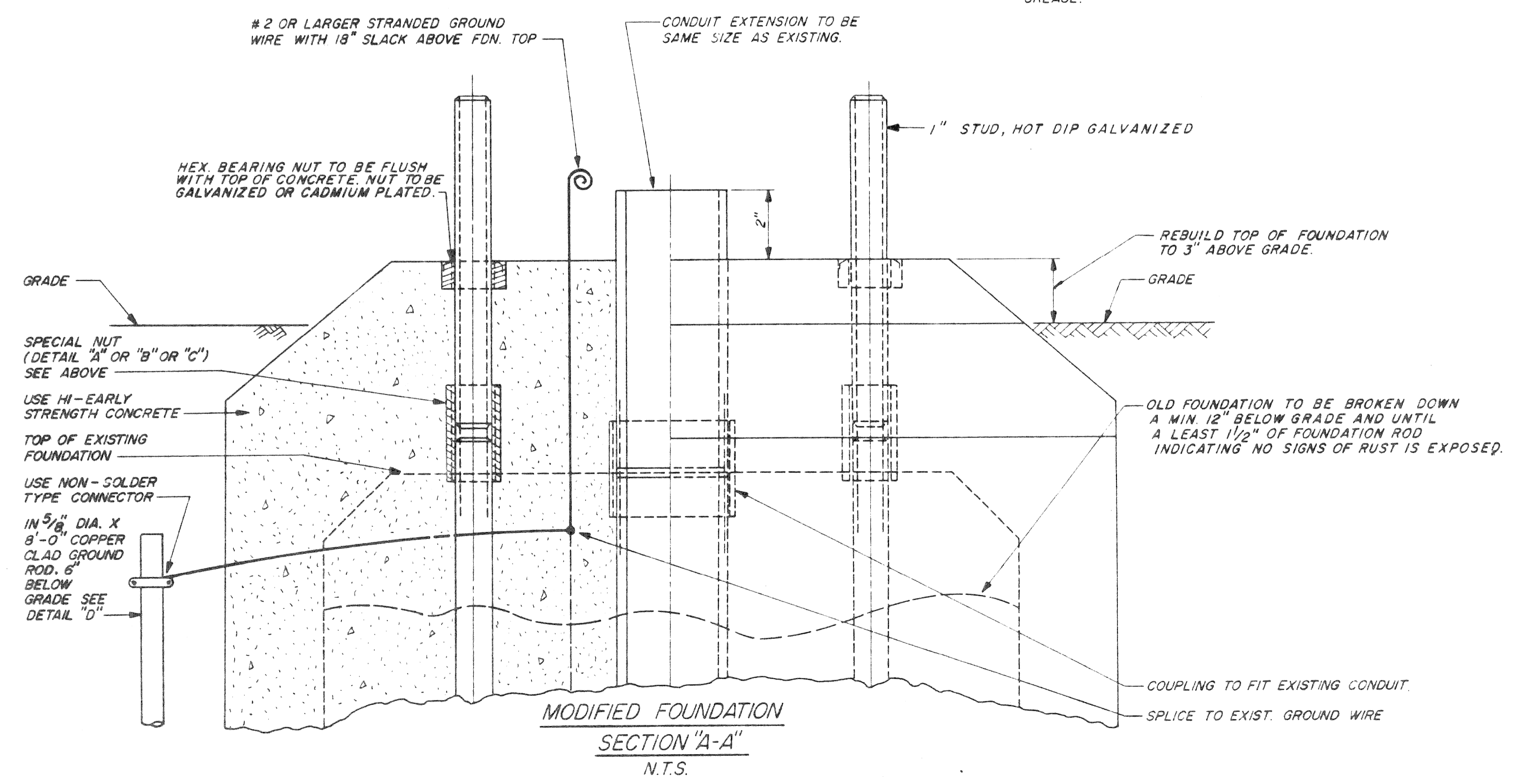
a.o. 87-60-07
contract no. PW-5780
sheet 16 of 21
drawing no.
date MAY, 1989



- NOTES:**
1. REMOVE LIGHTING STANDARD.
 2. CHIP OFF TOP OF FOUNDATION. (SEE DRWG.)
 3. CHASE THREADS ON FOUNDATION BOLTS 1 3/8".
 4. EXTEND CONDUIT (SEE DRWG.)
 5. INSTALL SPECIAL NUTS (SHOWN IN DETAIL). THREADED STUDS AND BEARING NUTS.
 6. COAT TOP OF FOUNDATION WITH A BONDING AGENT.
 7. MOUNT THE FORM AND POUR THE CONCRETE.
 8. COAT BOLTS AND NUTS WITH "NO-OX-10" GREASE.

NOTE:
THE TOP OF FOUNDATION SHALL EXTEND 1" BEYOND THE CAST FLANGED BASE OF THE STREET LIGHTING STANDARD.

PLAN FOUNDATION
N.T.S.



ALL FOUNDATION CAPS SHALL HAVE A SMOOTH FINISH WITH BEVELED EDGES & SHALL BE SHAPED TO ALLOW COMPLETE DRAINAGE OF WATER. ANCHOR BOLT PROJECTIONS ABOVE CAP SHALL BE CLEANED OF ALL CONCRETE & FULLY USABLE THEIR FULL LENGTH.

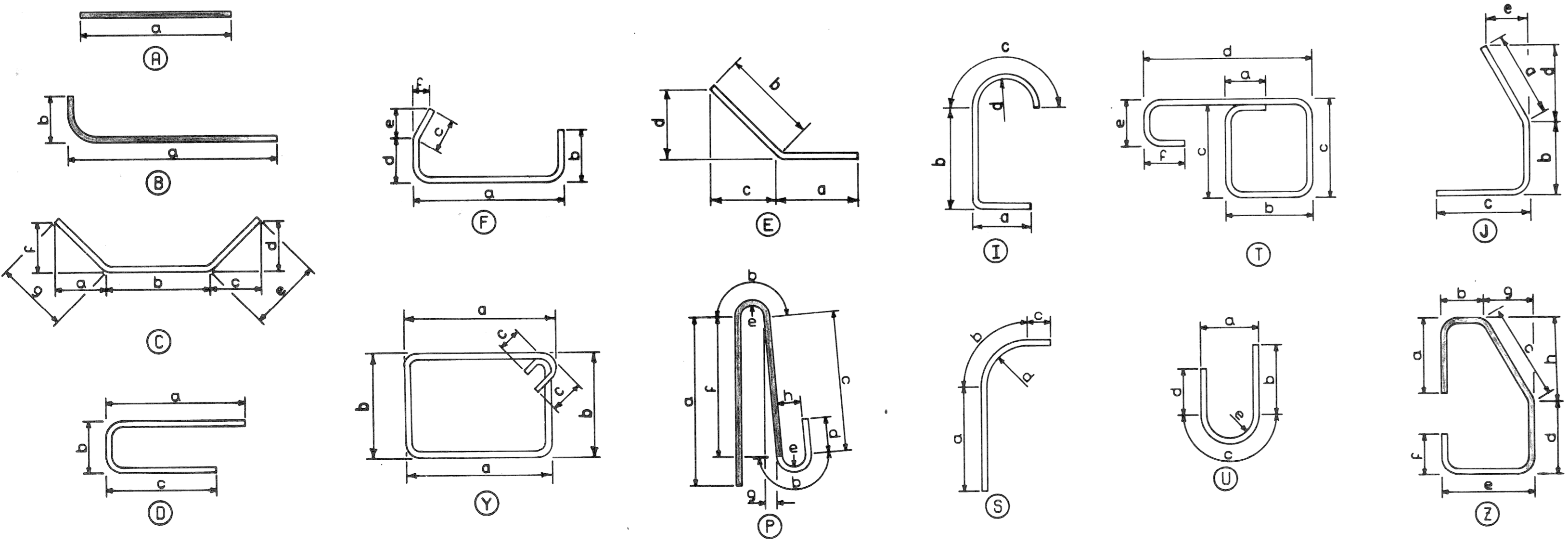
PAY ITEM:
ADJUST LIGHT FD. - 1 EACH

DATE 11-3-86	DESCRIPTION CHANGED FOUNDATION TOP	CHKD. BY 8	PROJECT COBO HALL AREA STREET IMPROVEMENTS	SHEET 17 OF 21 SHEETS	DRAWN BY	PLAN PREPARED BY CONSULTING ENGINEERING ASSOCIATES INC. ENGINEERING CONSULTANTS	FILE NO.
			LIGHT FOUNDATION MODIFICATION DETAILS	CONTRACT NO. PW-6780	CHECKED BY N/N	16580 WYOMING DETROIT, MICH. 48221	SHEET NO. 17 OF 21
				ASSIGNMENT NO. 87-60-07	DATE MAY, 1989	DRWG. NO.	DATE
							CITY OF DETROIT

BAR	DIMENSIONS								NO. REQ'D	TOTAL WT.
	a	b	c	d	e	f	g	h		
EA062106	35'-6"								2	4523
EA063406	34'-6"								2	104
EA062204	22'-2"								6	201
EA062109	21'-1"								6	192
EA061712	17'-2"								2	54
EA061800	18'-0"								2	54
EA062702	7'-3"								8	87
EA063116	3'-6"								44	231
EA063128	3'-8"								52	203
EA063128	3'-8"								21	52
EA043208	32'-8"								8	151
EA043108	31'-8"								8	30
STEEL REINFORCEMENT = 7746 LB.										
EA061003	30'-3"								2	71
EA061802	18'-2"								4	111
EA061304	13'-4"								2	47
EA060706	7'-6"								12	135
EA060620	6'-0"								10	90
EA060503	5'-3"								268	2113
EA060500	5'-0"								10	75
EA060409	4'-9"								16	114
EA060408	4'-8"								18	126
EA060404	4'-4"								184	1197
EA060402	4'-2"								10	53
EA060309	3'-9"								6	36
EA060307	3'-7"								192	1021
EA060305	3'-5"								28	144
EA060303	3'-3"								34	165
EA060211	2'-11"								92	429
EA060200	2'-0"								12	36
EA060106	1'-6"								17	23
EA060100	1'-0"								8	12
EA060402	4'-2"								66	287
EA060308	3'-8"								16	61
EA060306	3'-6"								18	61
EA060305	3'-5"								20	151
EA042105	21'-6"	4 1/2"	1'-6"	2'-10 1/4"	0	0	9 1/2"	1'-2 3/4"	8	141
EA042702	27'-2"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	32	521
EA042504	25'-4"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	48	812
EA042306	23'-6"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	72	1130
EA042203	22'-3"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	12	173
EA042000	20'-0"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	6	87
EA041706	17'-6"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	20	231
EA041600	16'-0"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	8	91
EA041600	16'-0"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	12	134
EA041600	16'-0"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	2	21
EA041106	11'-6"	4 1/2"	1'-6"	1'-11 1/4"	0	0	9 1/2"	1'-2 3/4"	10	77

BAR	DIMENSIONS								NO. REQ'D	TOTAL WT.
	a	b	c	d	e	f	g	h		
EA041031	10'-3"								12	120
EA040806	8'-6"								8	45
EA040703	7'-3"								11	21
EA040606	6'-6"								8	35
EA040600	6'-0"								2	21
EA040506	5'-6"								18	134
EA040402	4'-2"								13	42
EA061200	7'-9"	4'-0"							4	72
EA061000	7'-3"	3'-7"							4	66
EA060802	2'-6"	3'-7"							13	152
EA060702	2'-0"	3'-7"							18	133
EA060407	4'-0"	3'-7"							422	301
EA060402	3'-7"	0'-9"							52	200
EA040100	3'-0"	0	3'-0"	0	1'-0"	0	3'-0"	0	27	100
EPOXY COATED STEEL REINFORCEMENT = 15370 LB.										

BAR	DIMENSIONS								NO. REQ'D	TOTAL WT.
	a	b	c	d	e	f	g	h		



NOTES:
ALL BENDS IN REINFORCING STEEL TO BE MADE ABOUT A PIN OF THE MINIMUM DIAMETER ALLOWED BY THE STANDARD SPECIFICATION.

TOLERANCES IN CUTTING AND BENDING BARS ARE AS ESTABLISHED IN MANUAL OF STANDARD PRACTICE OF THE REINFORCING STEEL INSTITUTE AND DETAILING MANUAL OF THE AMERICAN CONCRETE INSTITUTE.

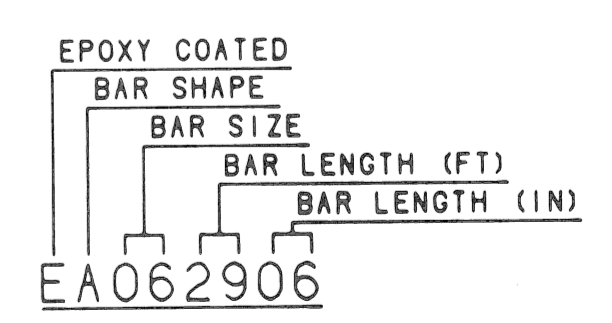
WHERE FIELD CUTTING OF EPOXY BARS IS REQUIRED, THE CONTRACTOR SHALL REPAIR THE EPOXY COATING AT THE CUT END AS PROVIDED FOR IN STANDARD SPECIFICATION 8.05.03 (INCIDENTAL TO STEEL REINFORCEMENT EPOXY COATED).

REINFORCEMENT SHALL BE BUNDLED AND TAGGED AS TO THE LOCATION AS SHOWN ON THIS SHEET.

WHERE A DIMENSION OF A BAR IS NOT SHOWN ON THE PLANS, OR CANNOT BE DETERMINED FROM THE DETAILED DIMENSIONS, THE DIMENSION SHALL BE THE STANDARD BEND LENGTH.

THE CONTRACTOR SHALL SUBMIT ORIGINAL SHOP DRAWINGS FOR FABRICATION, BENDING AND PLACEMENT OF CONCRETE REINFORCEMENT. THE SHOP DRAWINGS SHALL COMPLY WITH ACI 315-80 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND ACI 315R-80 "MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES" SHOWING BAR SCHEDULES, STIRRUP SPACING, DIAGRAMS OF BENT BARS, ARRANGEMENT, SPACING AND BAR MARKS OF CONCRETE REINFORCEMENT.

BAR NUMBERS:



WORK THIS SHEET WITH SHEET NO. 13 THRU 21

COBO HALL AREA STREET IMPROVEMENTS

STEEL REINFORCEMENT DETAILS

CONTRACT NO. PW-6780
ASSIGNMENT NO. 87-60-07

REVISIONS

NO.	DESCRIPTION	DATE	BY

REVISIONS

SHEET 16 OF 21

MAY, 1989

Issued For
 4-1-88 90% OWNER'S REVIEW
 4-27-88 OWNER'S REVIEW
 7-7-88 BID'S
 7-26-88 BUILDING PERMIT
 9-1-88 CITY REVIEW
 9-9-88 BULLETIN NO. 2
 10-17-88 BULLETIN NO. 3

COBO HALL
 AREA
 STREET
 IMPROVEMENTS
 LEGAL NEWS
 BUILDING
 RENOVATION,
 REFERENCE
 DRAWING
 R-1

A.O. 87-60-07
 CONTRACT NO.
 PW-6780
 SHEET 19
 OF 21
 DATE MAY, 1989

Harley Ellington
 Pierce & Associates, Inc.
 Architects/Engineers/Planners
 26015 Northwestern Highway,
 Suite 200
 Southfield, Michigan 48034
 313 262 1500

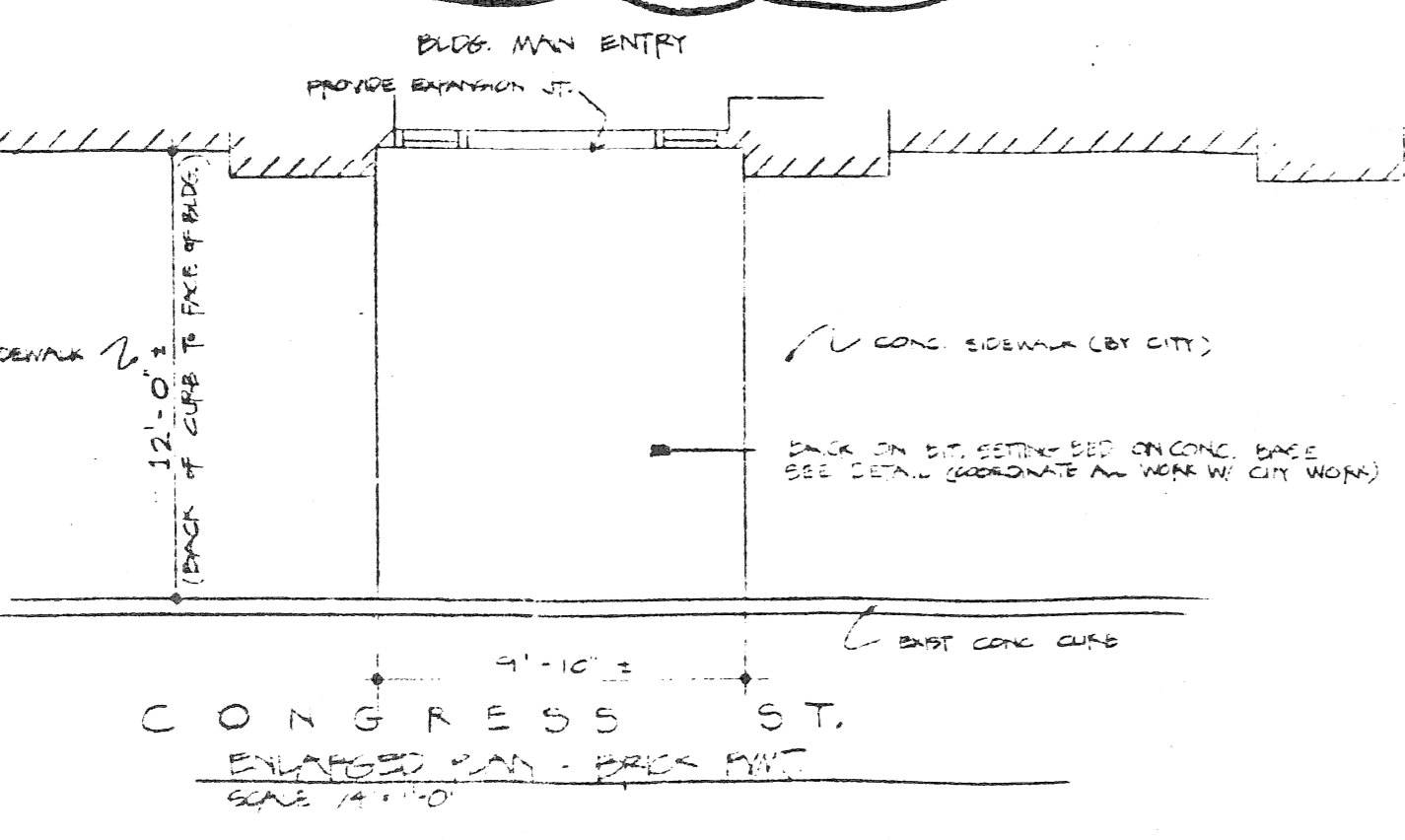
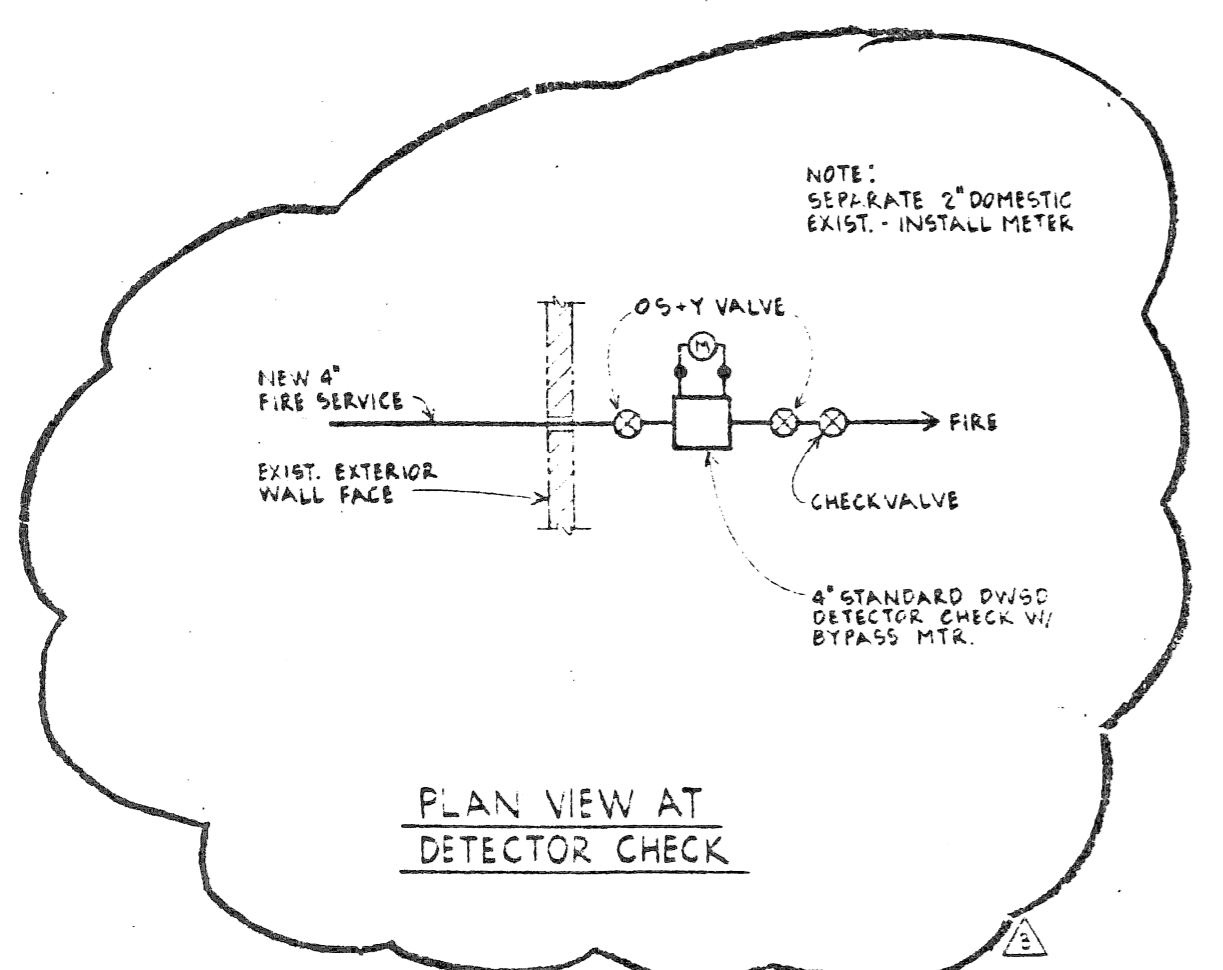
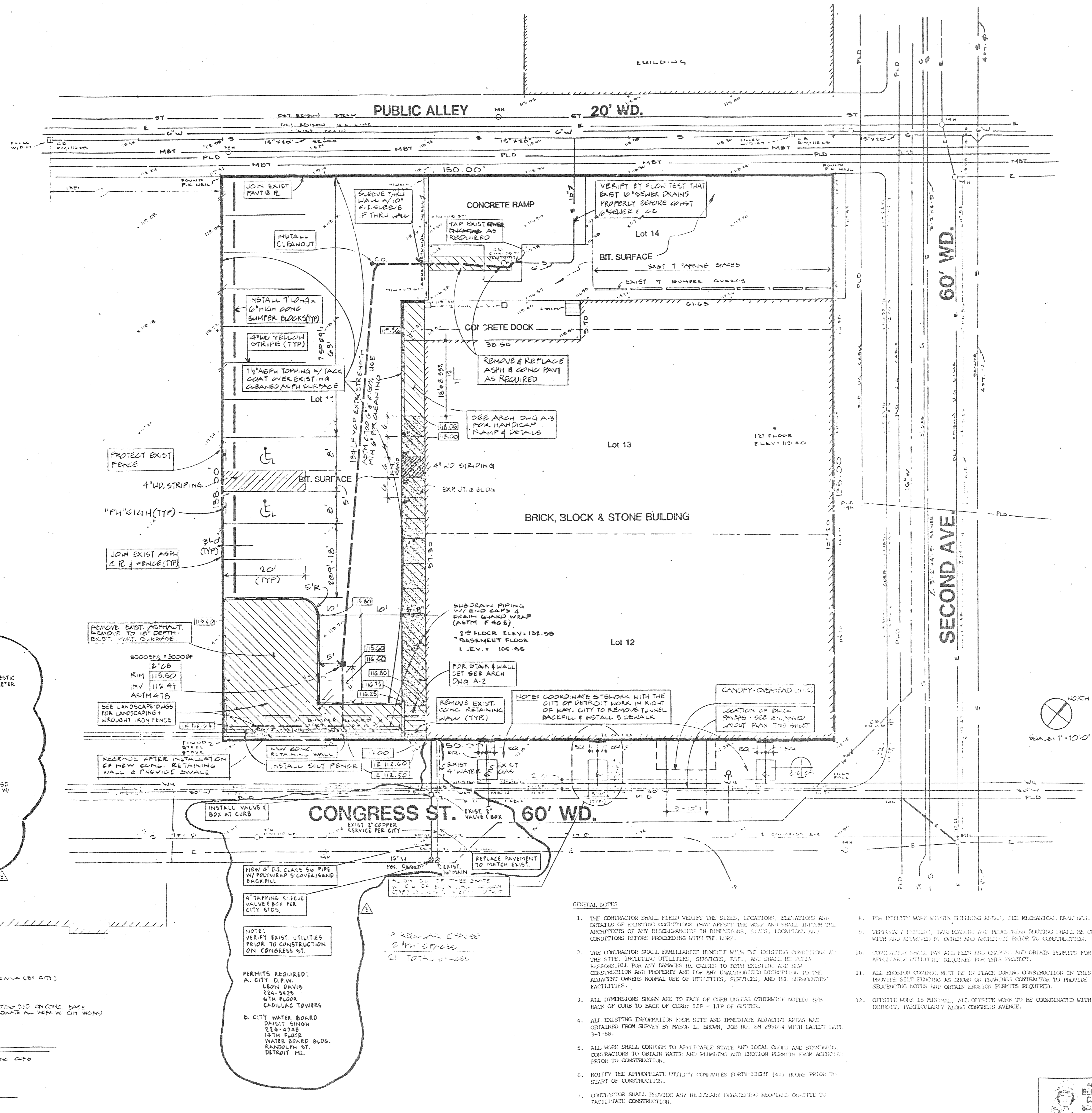


BOWNE
 Bureau of Detroit, Inc.
 200 East Warren, Detroit, MI 48224

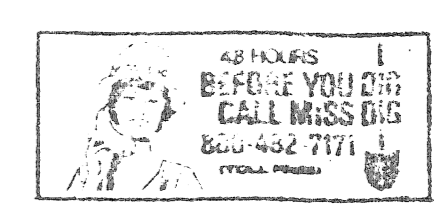
Renovation

Site Improvement Plan

10781
 R-1



Concrete Drawings
 Basic Drawings
 Plan & Detailing



COBO HALL AREA STREET IMPROVEMENTS

LEGAL NEWS BUILDING RENOVATION, REFERENCE DRAWING R-2

A.O. 87-60-07 CONTRACT NO. PW-6780 SHEET 20 OF 21 DATE MAY, 1989

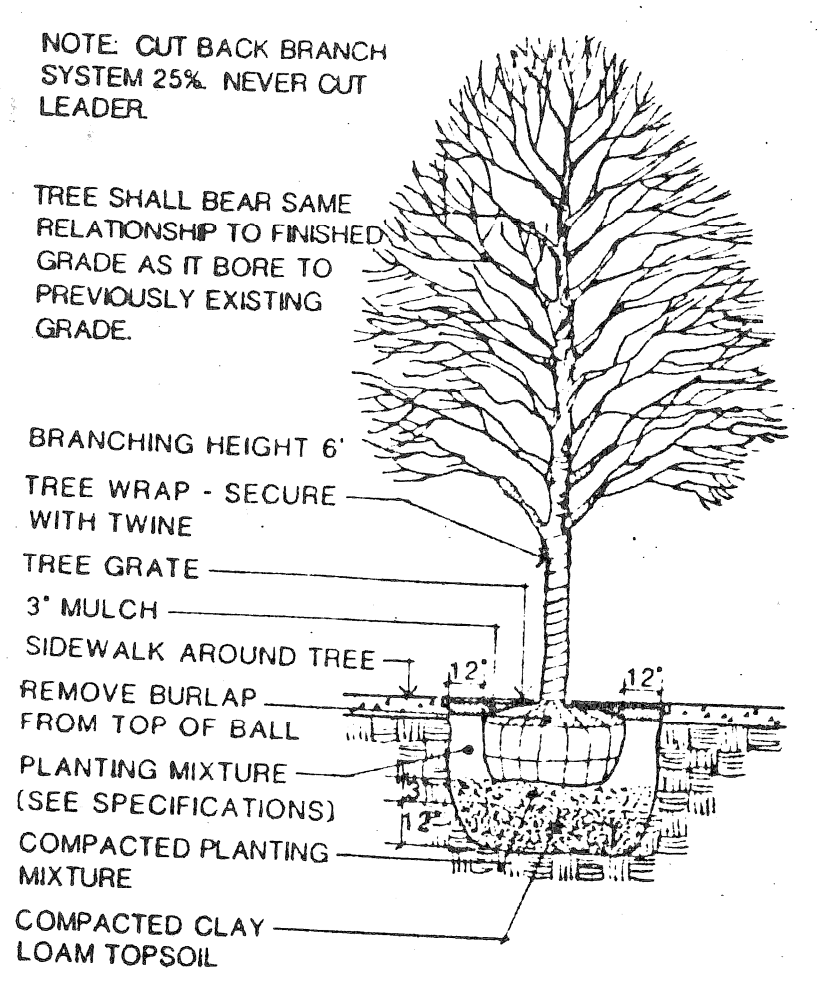
Harley Ellington Pierce Yoe Associates, Inc. 26913 Northwestern Highway Suite 200 Southfield, Michigan 48034 313 262 1500



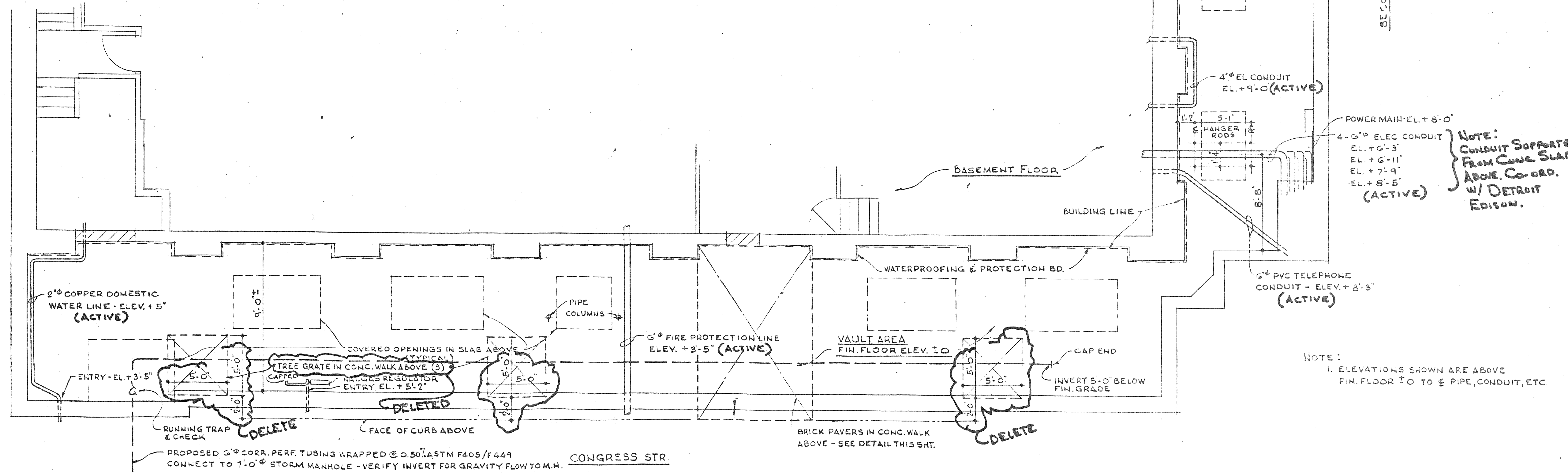
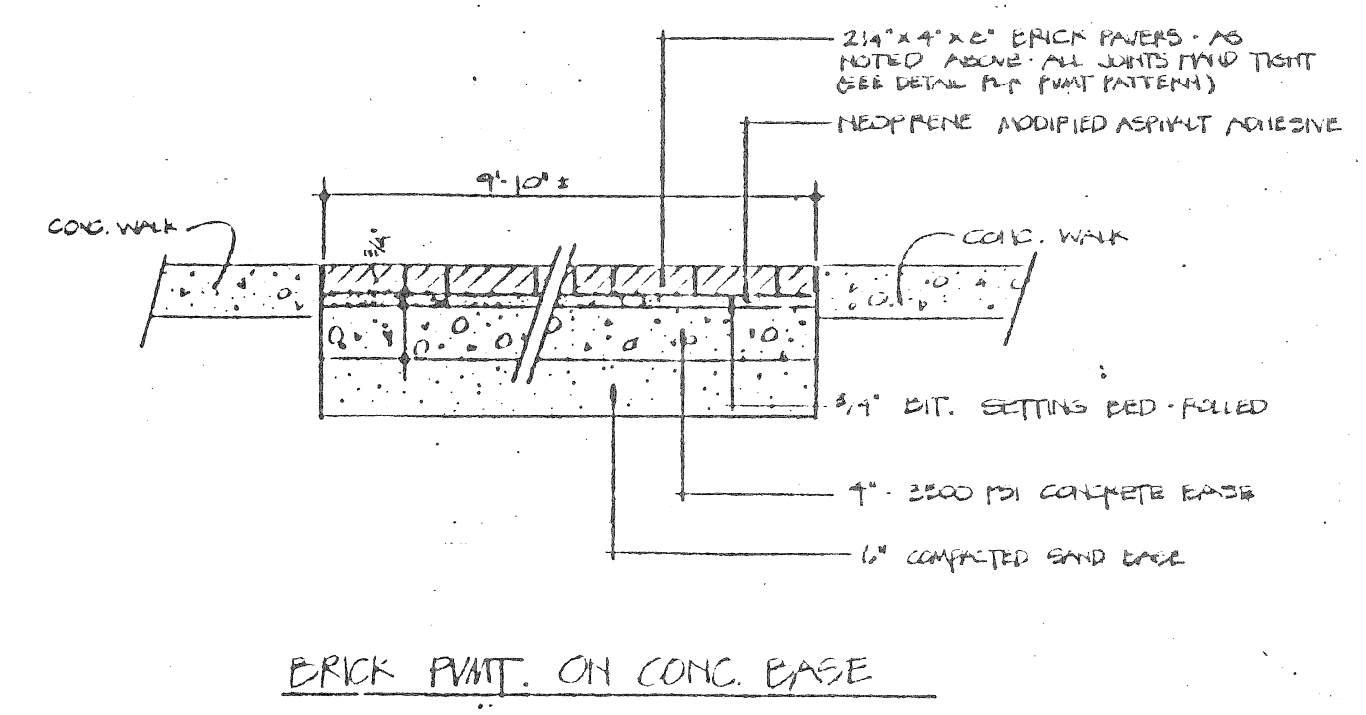
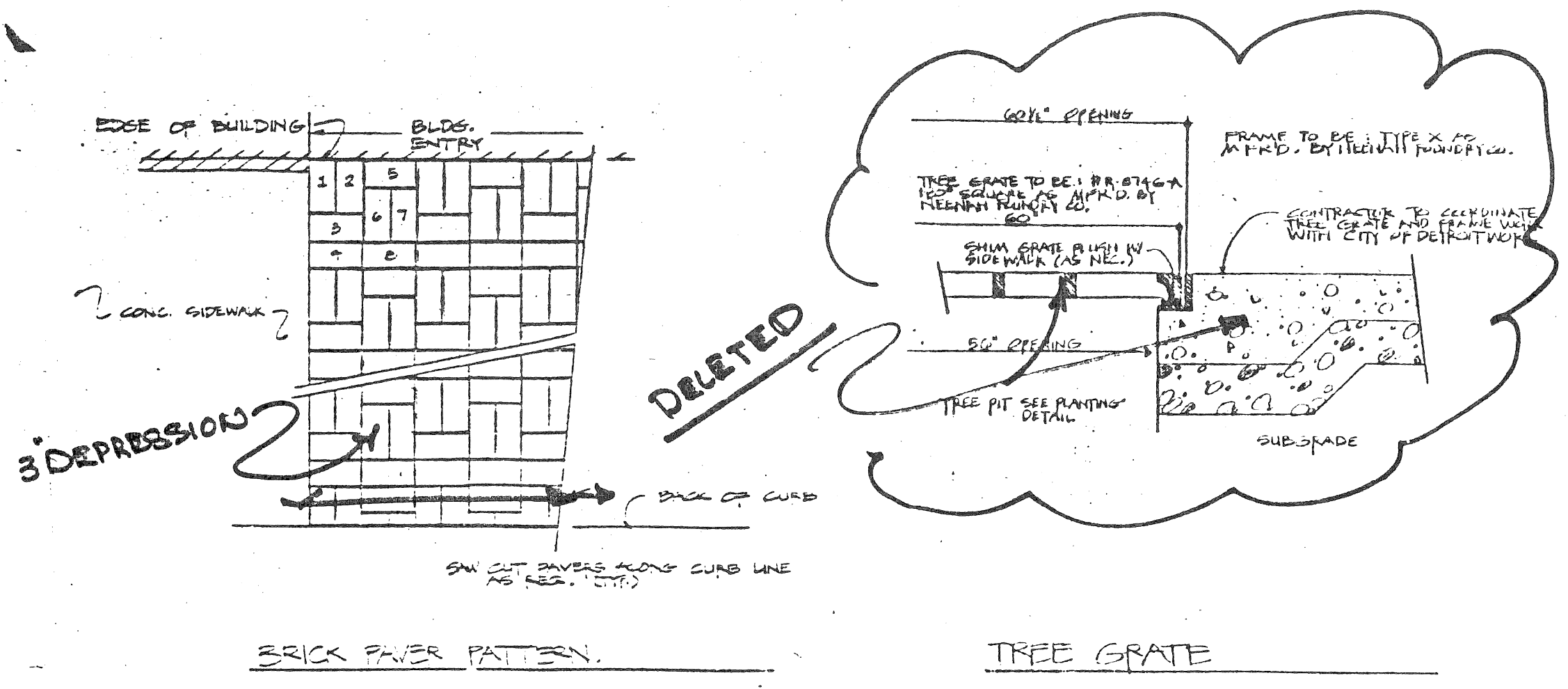
BOWNE Borne of Detroit, Inc. 808 Second Avenue, Detroit, Michigan 48226 Renovation

VAULT AREA SERVICE LOCATIONS

DATE: 1/26/88	Project Number
Drawn By: JNC	10781
Checked By:	
Approved By:	
Drawing Number	R-2




TREE IN GRATE PLANTING DETAIL NO SCALE



VAULT AREA PLAN SCALE: 1/4\"/>

Composite Drawing Audit	
Base Drawing Identification	
Base Drawing Date	

NO	DESCRIPTION	UNIT	SHT. NO. 2			SHT. NO. 3	SHT. NO. 4	SHT. NO. 6	SHT. NO. 7	SHT. NO. 11	SHT. NO. 1		SHT. NO. 12	SHT. NO. 13	SHT. NO. 14	SHT. NO. 15 AND 16	SHT. NO. 16	TOTAL
			THIRD	FIRST	CARS						SUPPORT	NO. OF FT.						
1	EXCAVATION	CYDS				200												200
2	FILL-(GRADE A)	CYDS				439					222							661
3	FILL-(22A)	CYDS					151											151
4	SIDEWALK REMOVAL	SFT				203		2,814		2,685								5,702
5	DRIVEWAY REMOVAL	SFT				234		1,068		630		400						2,332
6	STREET PAVEMENT REMOVAL	SYDS				1,202												1,202
7	REMOVE BITUMINOUS SURFACE	SYDS	256	871	184			2,883		1,497	447							6,138
8	REMOVE EXISTING CONCRETE BASE	SYDS	10	25	5			110		10	10							170
9	SEPERATE TYPE CURB REMOVAL	LFT								268	241							509
10	REINFORCED CONCRETE SLAB REMOVAL	SYDS					132				66							198
11	INTEGRAL CURB AND SIDEWALK REMOVAL - 2 FT. WIDE	LFT						164										164
12	INTEGRAL CURB AND SIDEWALK REMOVAL - 4 TO 6 FT WIDE	LFT						189										189
13	RESETTING MANHOLES	EACH	4	8	4			22		11	3							52
14	MANHOLE ADJUSTMENT	EACH		1			10	2		1	2							13
15	MANHOLE - RECONSTRUCT CONE	EACH																
16	DROP MANHOLE	EACH						1										1
17	RESET CATCH BASIN	EACH						4		3	2							9
18	CATCH BASIN ADJUSTMENT	EACH					1	2										3
19	RESET STOP BOXES	EACH		1	1			5		2								9
20	ADJUST STOP BOXES	EACH					2	1										3
21	CATCH BASIN "A"	EACH						2										2
22	CATCH BASIN "BT" ("B" WITH TRAP)	EACH						2										2
23	18" x 12" SPECIAL "Y" CATCH BASIN	EACH						2										2
24	CATCH BASIN "L"	EACH						1										1
25	12" CLASS III SEWER PIPE	LFT						370										370
26	12" CLASS IV SEWER PIPE	LFT						5										5
27	CLEANING STRUCTURES	EACH						7										7
28	4" SIDEWALK REPLACEMENT	SFT					2,303				1,045	224						3,572
29	SEPERATE TYPE CURB REPLACEMENT	LFT							165									165
30	MODIFIED CURB REPLACEMENT	LFT		10						15		416						441
31	INTEGRAL CURB AND 4" SIDEWALK REPLACEMENT - 4' WIDE	LFT										35						35
32	REPLACE CONCRETE BASE WITH GRADE A CONCRETE	SYDS	10	25	5			110	10	10	10							170
33	4" STANDARD SIDEWALK	SFT						7,793	1,085	693	320							9,891
34	6" STANDARD SIDEWALK	SFT						715	728	829	60	42						2,333
35	BITUMINOUS WALK	SFT						1,542	214									1,756
36	BASE PAVEMENT - 9" UNIFORM REINFORCED CONCRETE WITH INTEGRAL CURB	SYDS					1,292											1,292
37	INTEGRAL CURB AND 4" SIDEWALK - 2 - 2.5 FT. WIDE	LFT						789	192	235								1,216
38	INTEGRAL CURB AND 4" SIDEWALK - 6 FT. WIDE	LFT						15										15
39	INTEGRAL CURB AND 6" SIDEWALK - 2 FT. WIDE	LFT						93	78									171
40	INTEGRAL CURB AND 6" SIDEWALK - 6 FT WIDE	LFT						150										150
41	8" CONCRETE DRIVEWAY	SFT					549	1,087	630									2,326
42	TEST CORES	EACH					1											1
43	JOINT SAWING	LFT					10		10	10	10	92						132
44	PREFORMED WHITE THERMOPLASTIC PAVEMENT MARKINGS - 4"	LFT										439						439
45	PREFORMED YELLOW THERMOPLASTIC PAVEMENT MARKINGS - 4"	LFT										3,518						3,518
46	PREFORMED WHITE THERMOPLASTIC PAVEMENT MARKINGS - 6"	LFT										1,693						1,693
47	PREFORMED WHITE THERMOPLASTIC PAVEMENT MARKINGS - 18"	LFT										371						371
48	PREFORMED WHITE THERMOPLASTIC PAVEMENT MARKING LETTERS	EACH										4						4
49	PREFORMED WHITE THERMOPLASTIC PAVEMENT MARKING SYMBOLS	EACH										1						1
50	SIDEWALK RAMP	LUMP SUM															LUMP SUM	LUMP SUM
51	CONCRETE WALL - C1	LUMP SUM															LUMP SUM	LUMP SUM
52	CONCRETE WALL - C2	LUMP SUM															LUMP SUM	LUMP SUM
53	CONCRETE WALL - C3	LUMP SUM															LUMP SUM	LUMP SUM
54	ADJUST LIGHT FOUNDATION (SHEET 17)	EACH																1
55	CONDITIONING	SYDS	72	72	28						89							261
56	CLEANING	SYDS	650	257	28						846							1,731
57	STRIPPING	SYDS	24	20	11						19							74
58	SHEET ASPHALT WEARING SURFACE	TONS										33						33
59	WEARING SURFACE	TONS																
	a) 31A (CD) NATURAL 1" AVERAGE THICKNESS	TONS	54	77	28		146		159	82	72							618
	b) 31A (CD) SLAG 1" AVERAGE THICKNESS	TONS	51	73	26		138		150	78	63							584
60	BINDER COURSE MIXTURE	TONS																
	a) 25A (MOD) - NATURAL 1 1/2" AVERAGE THICKNESS	TONS	81	116	42		218		238	124	105							927
	b) 25A (MOD) - SLAG 1 1/2" AVERAGE THICKNESS	TONS	74	106	38		200		215	113	99							948
61	BITUMINOUS BOND COAT	GAL	147	211	76		397		432	225	196							1,684
62	MAINTAINING TRAFFIC	LUMP SUM																

REFERENCE DRAWINGS		DESIGNED BY	M. K.	APPROVED	<p style="text-align: center;">CITY OF DETROIT CITY ENGINEERING DEPARTMENT BUREAUS OF STREETS AND HIGHWAYS</p> <p style="text-align: center;">FOR DPW</p>			<p style="text-align: center;">COBO HALL AREA STREET IMPROVEMENTS</p> <p style="text-align: center;">QUANTITY SHEET</p>				SHEET 21 OF 21 SHEETS							
		DRAWN BY	M. K.	 N. W. HIGHWAY ENGINEER								CONTRACT NO.		PW-6789		ASSIGNMENT NO.		87-60-07	
		TRACED BY										DATE		MAY, 1989					
		CHECKED BY	N. W.																