426(97) Production

SEN-23-(18.070)
970426
50PGS
06-04-97
DIST. 02

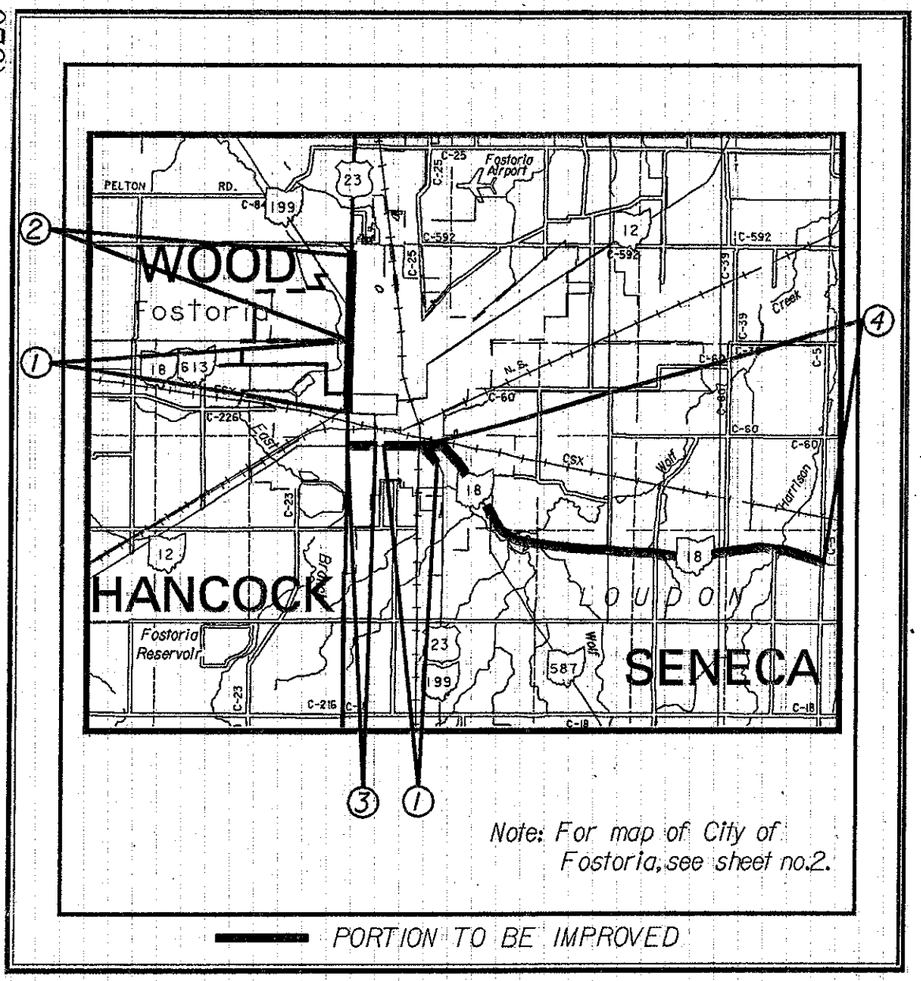
OHIO DEPARTMENT OF TRANSPORTATION

PLAN NO.

metric units

2 - LANE ~ RESURFACING

LOCATION MAP



Note: For map of City of Fostoria, see sheet no.2.

PORTION TO BE IMPROVED

N

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII BEGIN	PROJECT TERMINII END	NET LENGTH		
1	SEN	US 23	(18.070-18.652)	18+070	19+128	1.058		Fostoria
			(11.23-11.59)	11.23	11.89		English Units	
1	SEN	US 23	(20.284)	20+284	21+467	1.183		Fostoria
			(12.60)	12.60	13.34		English Units	
2	WOO	US 23	(0.000)	0+000	0+653	0.653		Fostoria
			(0.000)	0.00	0.41		English Units	
3	SEN	SR 12	(0.000)	0+000	0+420	0.420		Fostoria
			(0.00)	0.00	0.26		English Units	
4	SEN	SR 18	(2.148-3.959)4.748	2+148	9+920	7.772		Fostoria
			(1.31-2.46)2.95	1.33	6.16		English Units	

INDEX OF SHEETS:

1995 SPECIFICATIONS

THE STANDARD 1995 SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND PROPOSALS SHALL GOVERN THESE IMPROVEMENTS.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL REQUIRE THE CLOSING OF THE HIGHWAYS TO TRAFFIC ON PARTS NO. 1,2 & 4 AND THAT DETOURS WILL BE PROVIDED BY STATE FORCES. THE CLOSING TO TRAFFIC OF THE HIGHWAYS WILL NOT BE REQUIRED ON PARTS NO. 3 AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

DESCRIPTION OF WORK
PARTS - (1-4)

UPGRADING US 23, SR 12 & SR 18 BY PERFORMING PAVEMENT PLANING, JOINT REPAIR AND RESURFACING THE EXISTING PAVEMENT.

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS MUST BE CALLED DIRECTLY

PLAN PREPARED BY:
OHIO DEPARTMENT OF TRANSPORTATION
DISTRICT No. 2

DESIGNER: JUANITA HUSS
DESGIN TECHNICIANS: FRED JUDSON
ANDI SEARS

STANDARD DRAWINGS		STANDARD DRAWINGS		STANDARD DRAWINGS	
BP-2.5M	10/28/94	MT-97.11M	01/30/95	1055	12/30/96
BP-3.1M	10/28/94	MT-99.10M	01/30/95		
BP-5.1M	10/28/94	MT-99.20	01/30/95		
MT-95.31M	4/25/94	TC-65.10M	11/01/95		
MT-95.32M	04/25/94	TC-65.12M	11/01/95		
MT-97.10M	04/25/94	TC-71.10M	09/01/93		

SUPPLEMENTAL SPECIFICATIONS	

APPROVED James L. McCarty
DATE 2/22/97 DISTRICT DEPUTY DIRECTOR

APPROVED
DATE 3-10-97 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.

PID NO. 16628

CONSTRUCTION PROJECT NO.

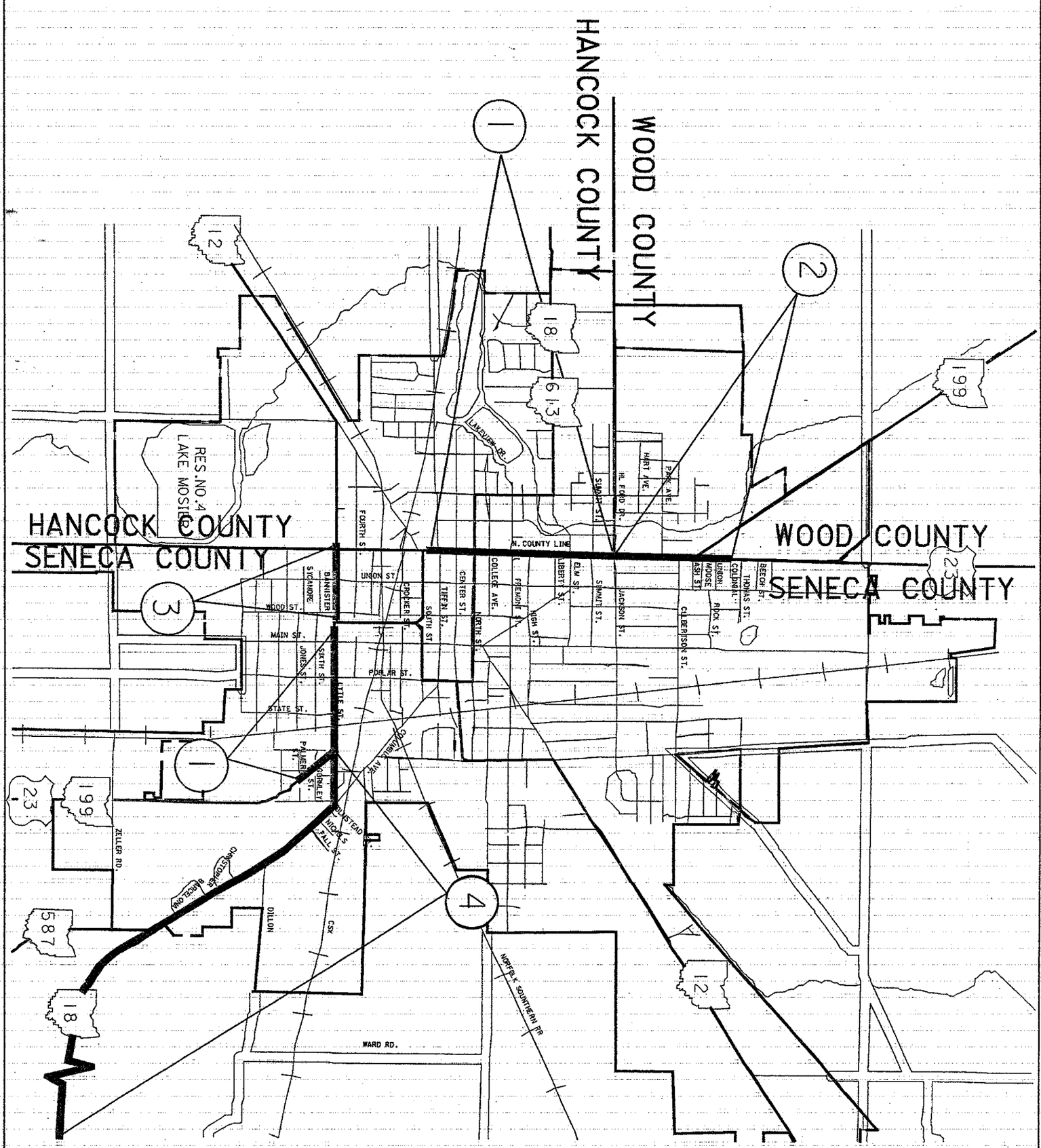
SEN-23-18.070(20.284)
WOO-23-0.000
SEN-12-0.000 SEN-18-2.108

TITLE SHEET

1/50

sewo23gf.dgn

sew023gt.dgn



12/50	SEN-23-(18.07 OX 20.284) W00-23-0.000 SEN-12-0.00 SEN-18-2.108	CITY OF FOSTORIA MAP	PLAN NO.	CALCULATED JEH CHECKED ALS

SCHEMATIC PLAN

PART I (SHEET 1 OF 3)

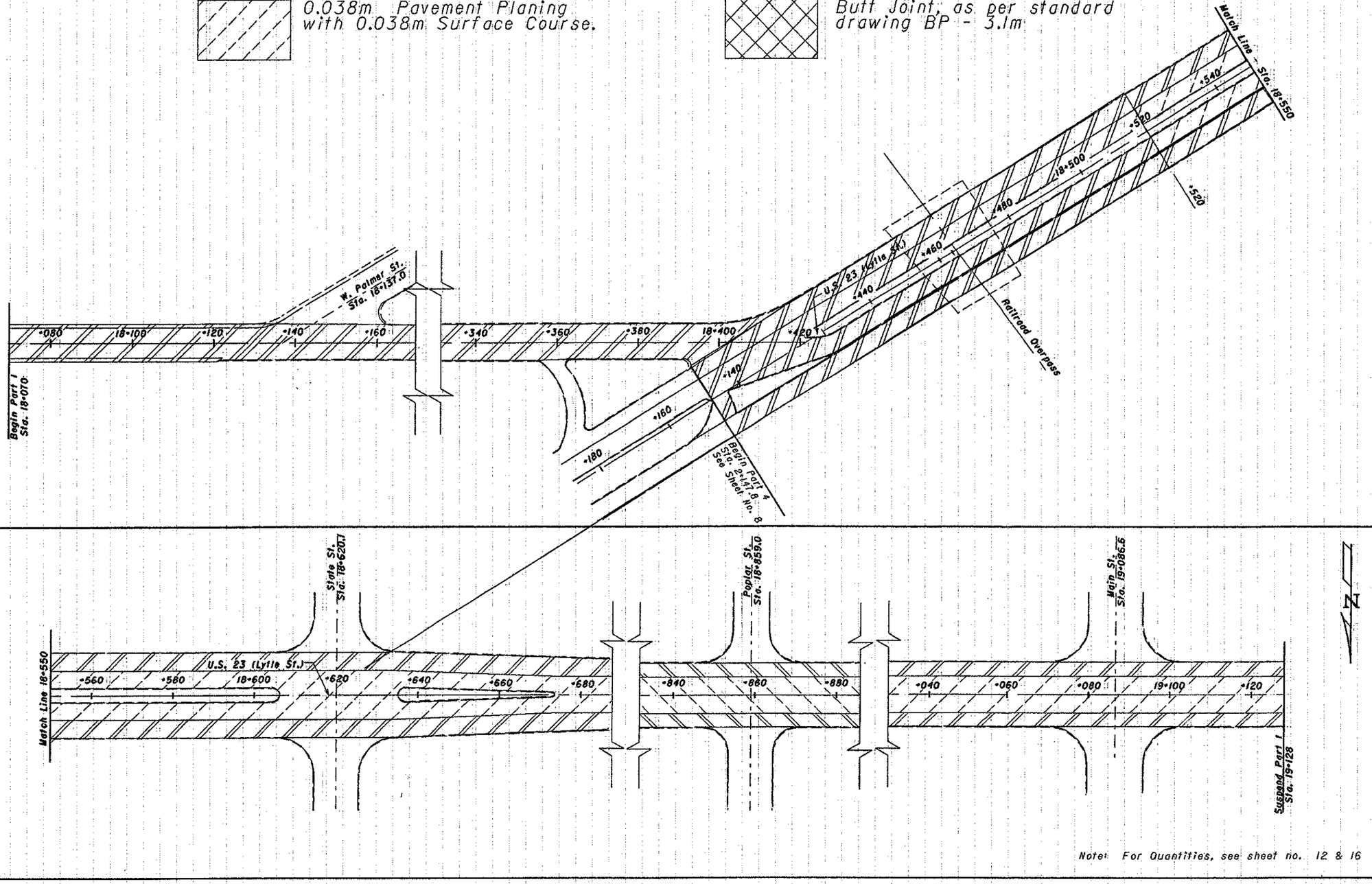
LEGEND

0.082m Pavement Planing with 0.038m Surface Course and 0.044m Intermediate Course.

0.038m Pavement Planing along curb to 0m, 1.52m from curb.

0.038m Pavement Planing with 0.038m Surface Course.

Butt Joint, as per standard drawing BP - 3.1m



Note: For Quantities, see sheet no. 12 & 16

sen2318m.dgn

CALCULATED JEH
CHECKED ALS

PLAN NO.

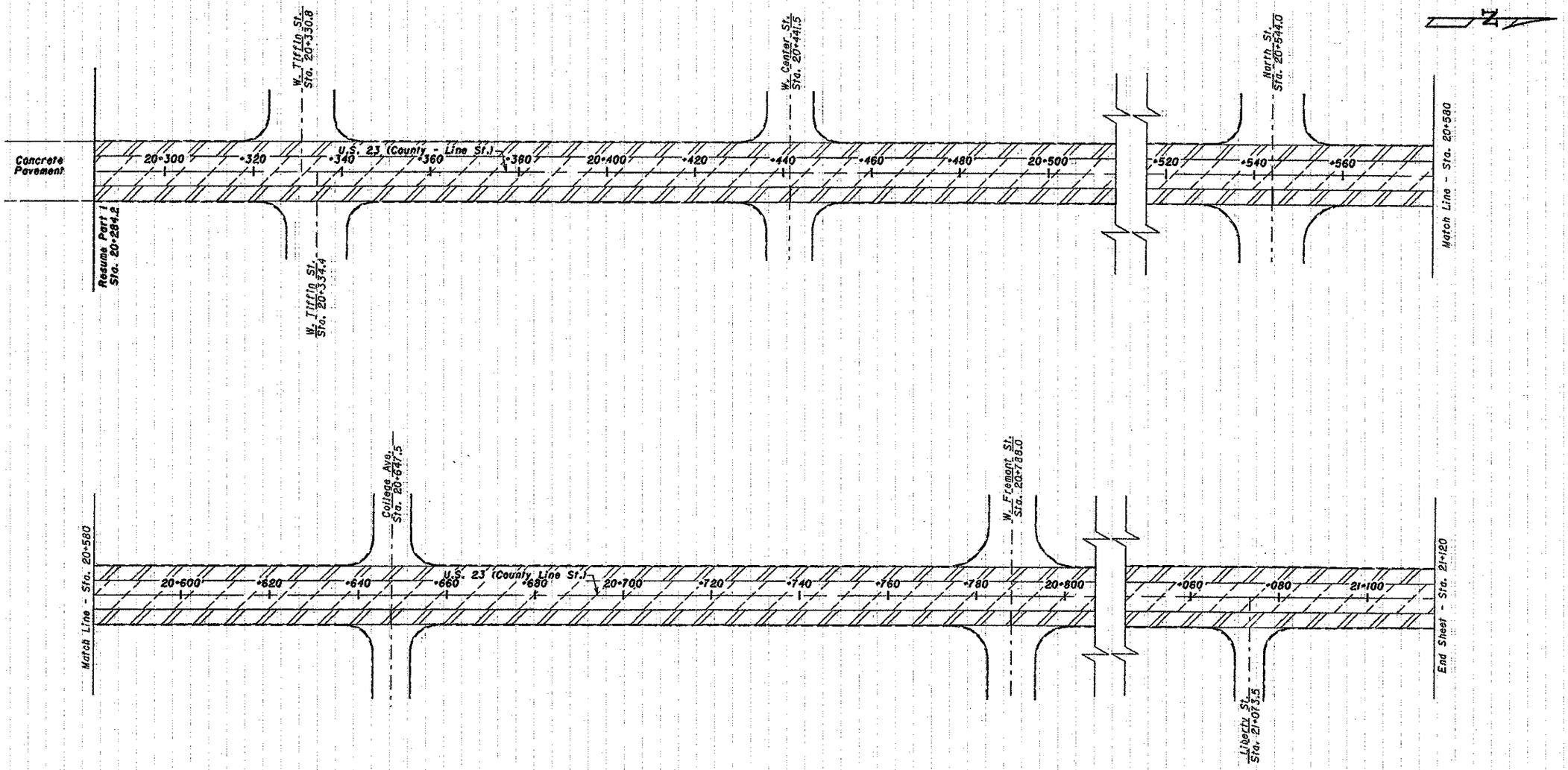
SCHEMATIC SHEET - PART 1

SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

3
50

SCHEMATIC PLAN

PART 1 (SHEET 2 OF 3)



Note: For Quantities, see sheet no. 12 & 16
See Legend, Sheet No. 3

CALCULATED JEH
CHECKED ALS

PLAN NO.

SCHEMATIC SHEET - PART 1

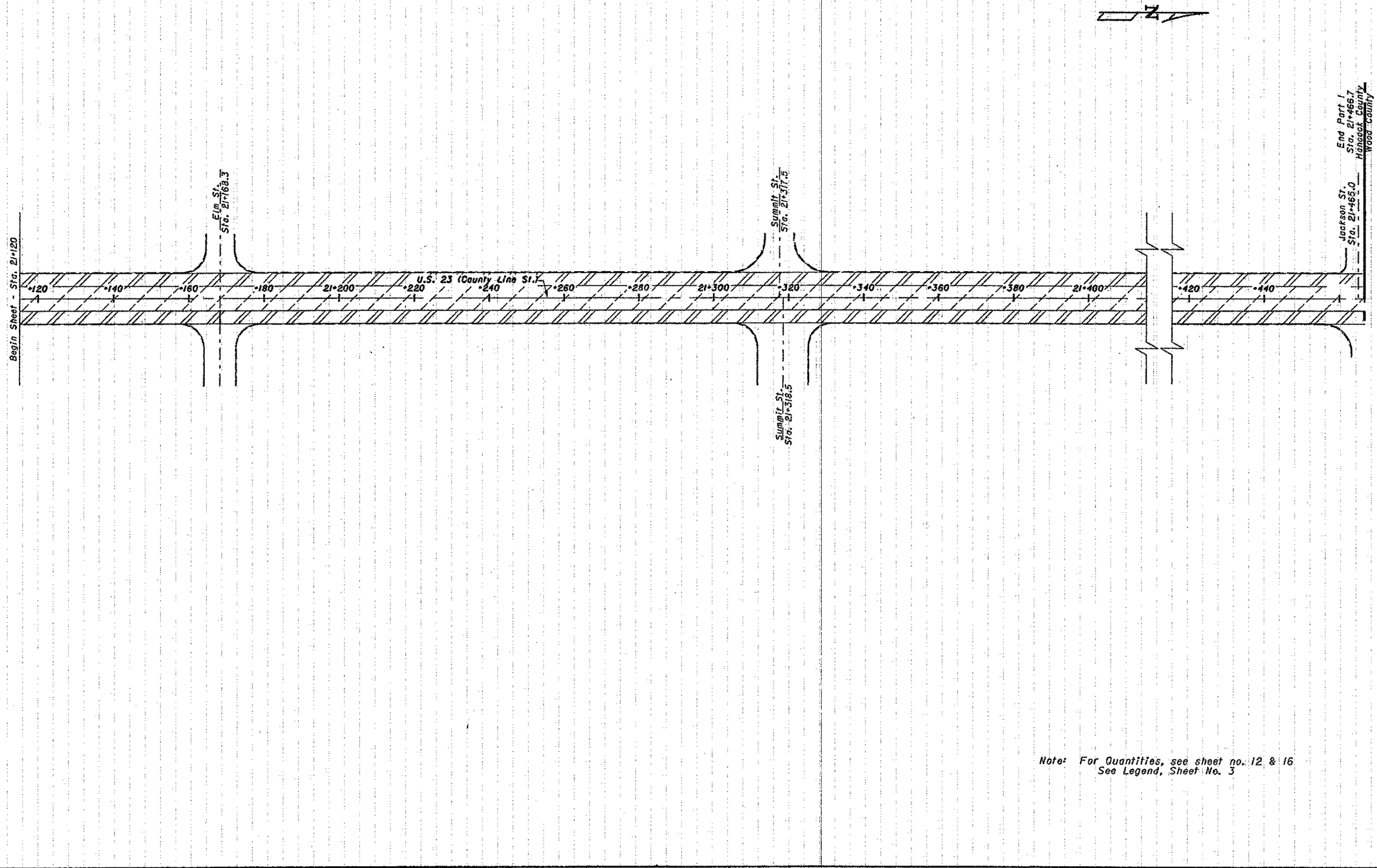
SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

4
50

sen23m.dgn

SCHEMATIC PLAN

PART I (SHEET 3 OF 3)



Note: For Quantities, see sheet no. 12 & 16
See Legend, Sheet No. 3

sen23m.dgn

CALCULATED JEH
CHECKED ALS

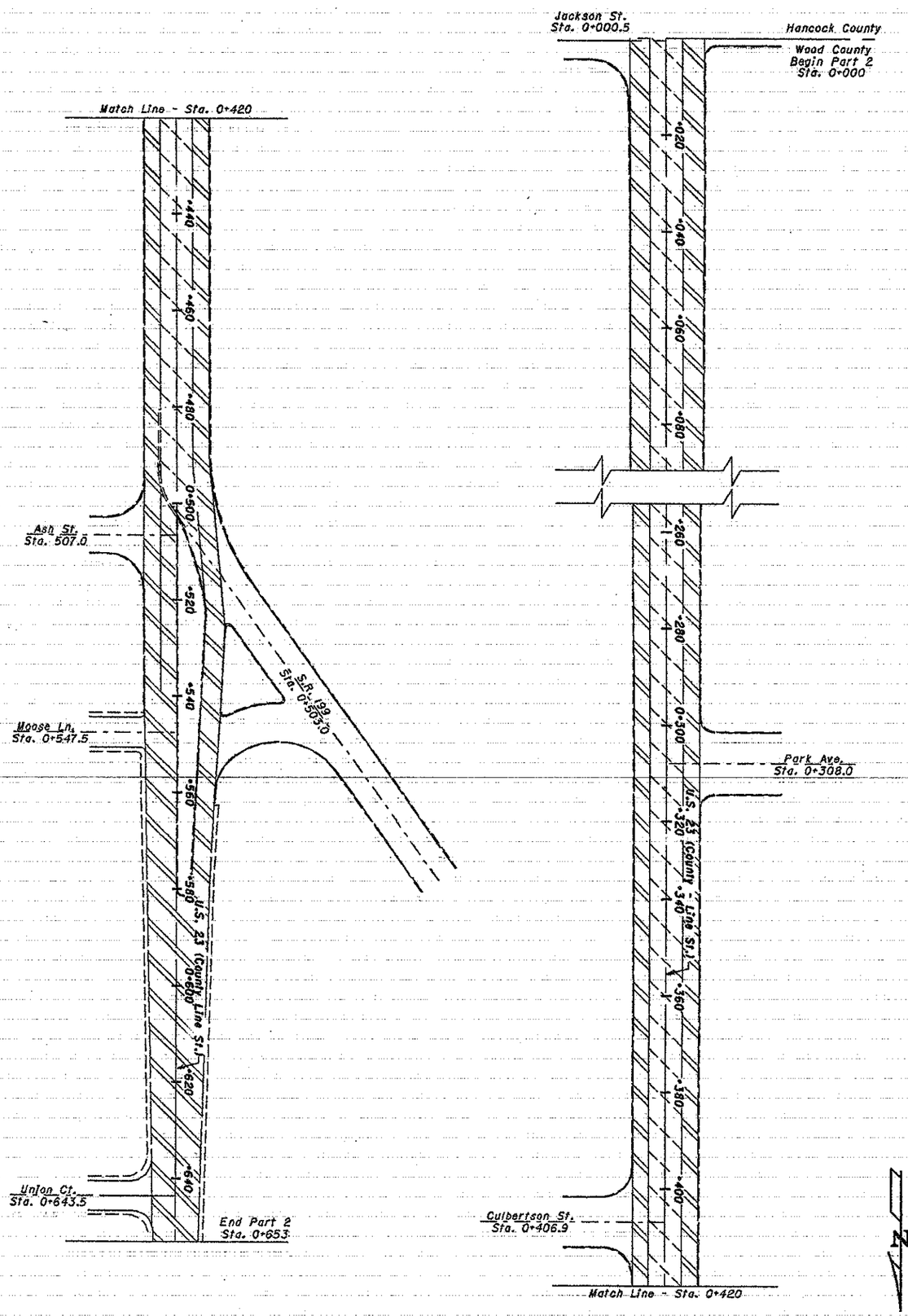
PLAN NO.

SCHEMATIC SHEET - PART 1

SEN-23-18.070X(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

5
50

sen23m.dgn



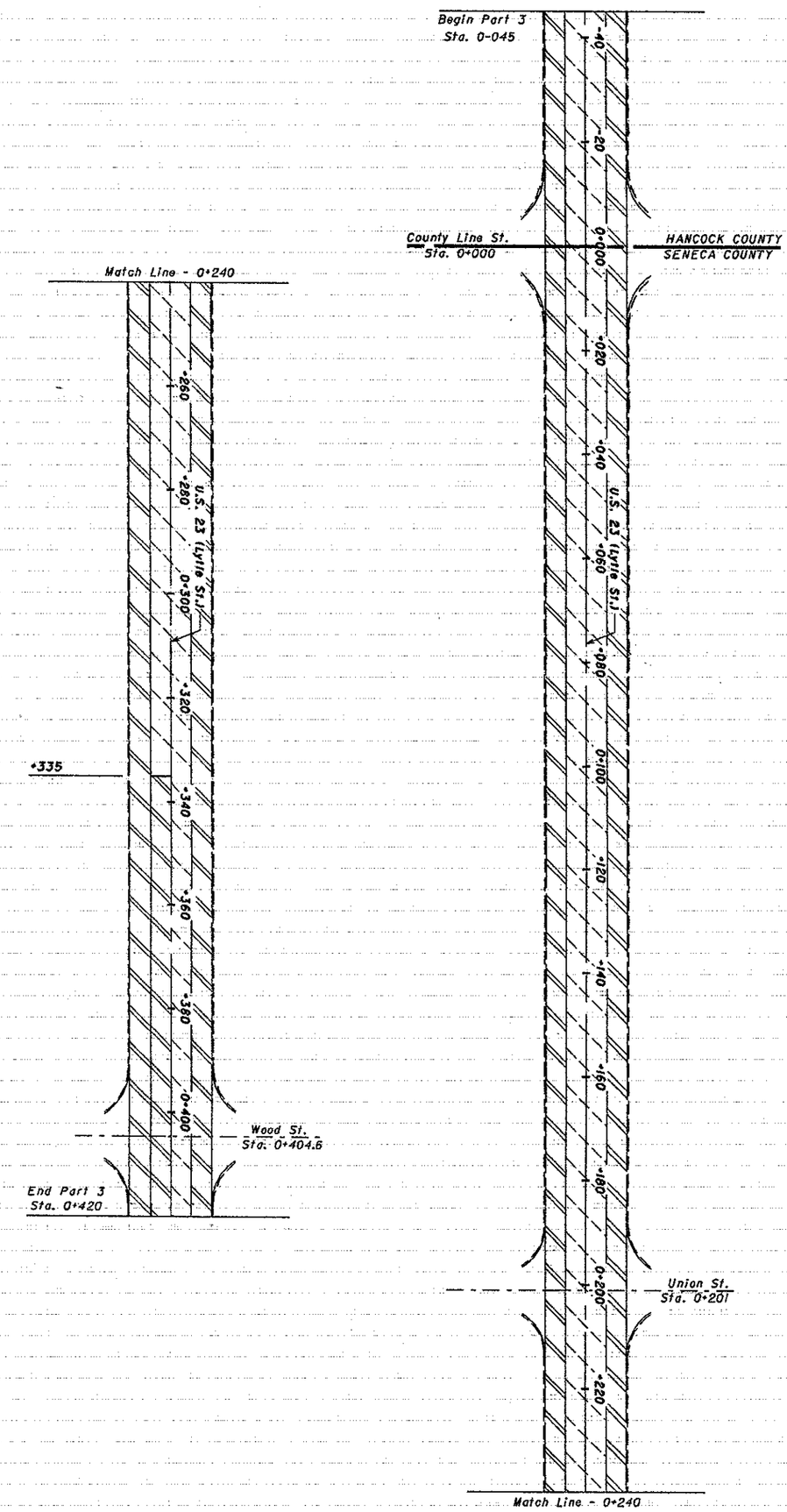
SCHEMATIC PLAN

PART 2 (SHEET 1 OF 1)

Note: For Quantities, see sheet no. 13 & 16
See Legend, Sheet No. 3

6 / 50	SEN-23-(18.070)(20.284) W00-23-0.000 SEN-12-0.000 SEN-18-2.108	SCHEMATIC SHEET - PART 2	PLAN NO.	CALCULATED JEH CHECKED ALS

sen2318m.dgn

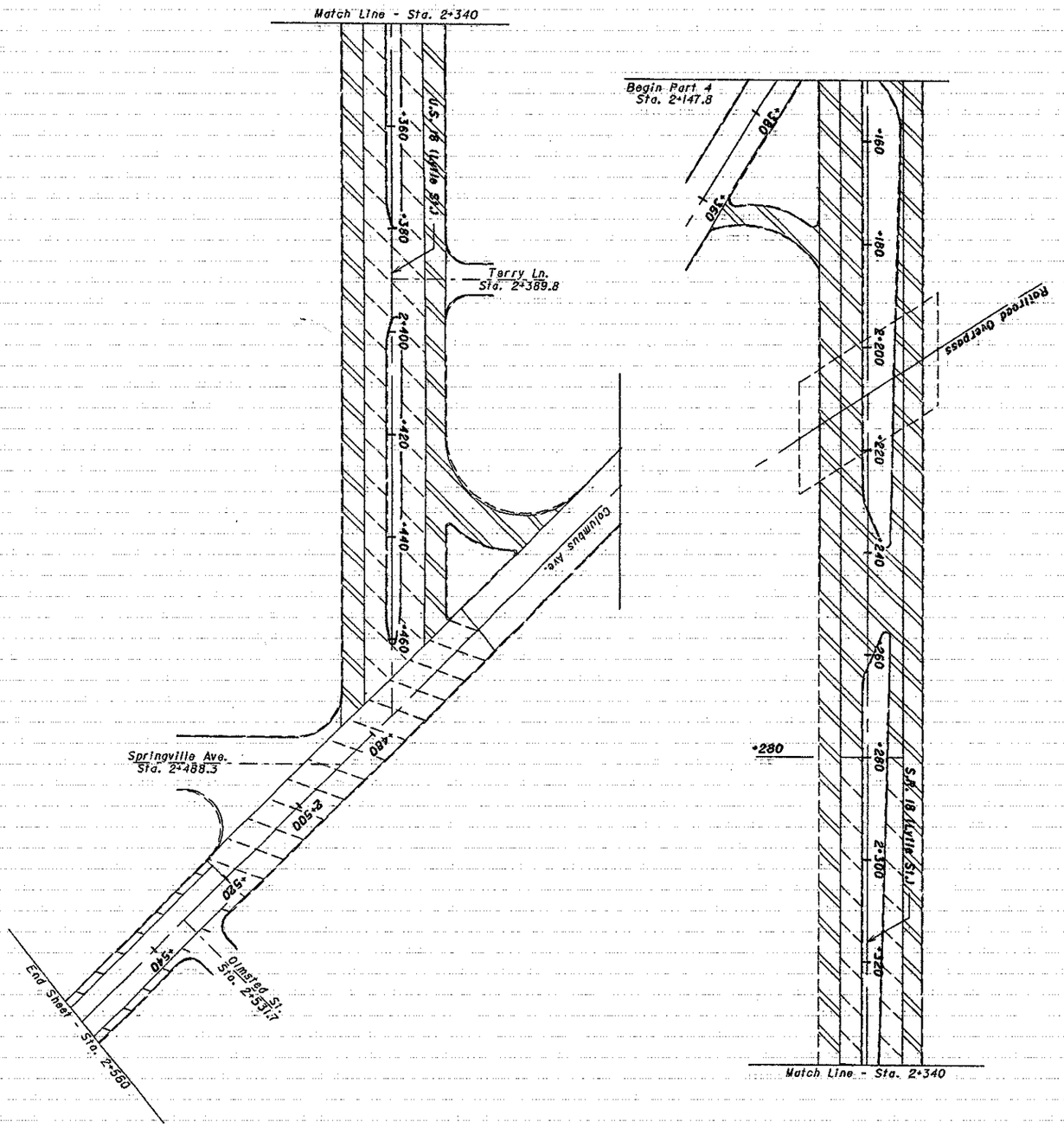


SCHEMATIC PLAN
PART 3 (SHEET 1 OF 1)

Note: For Quantities, see sheet no. 14
See Legend, Sheet No. 3.

7 / 50	SEN-23-(18.070)(20.284) W00-23-0.000 SEN-12-0.000 SEN-18-2J08	SCHEMATIC PLAN - PART 3	PLAN NO.	CALCULATED JEH CHECKED ALS

sen2318m.dgn



SCHEMATIC PLAN
PART 4 (SHEET 1 OF 4)

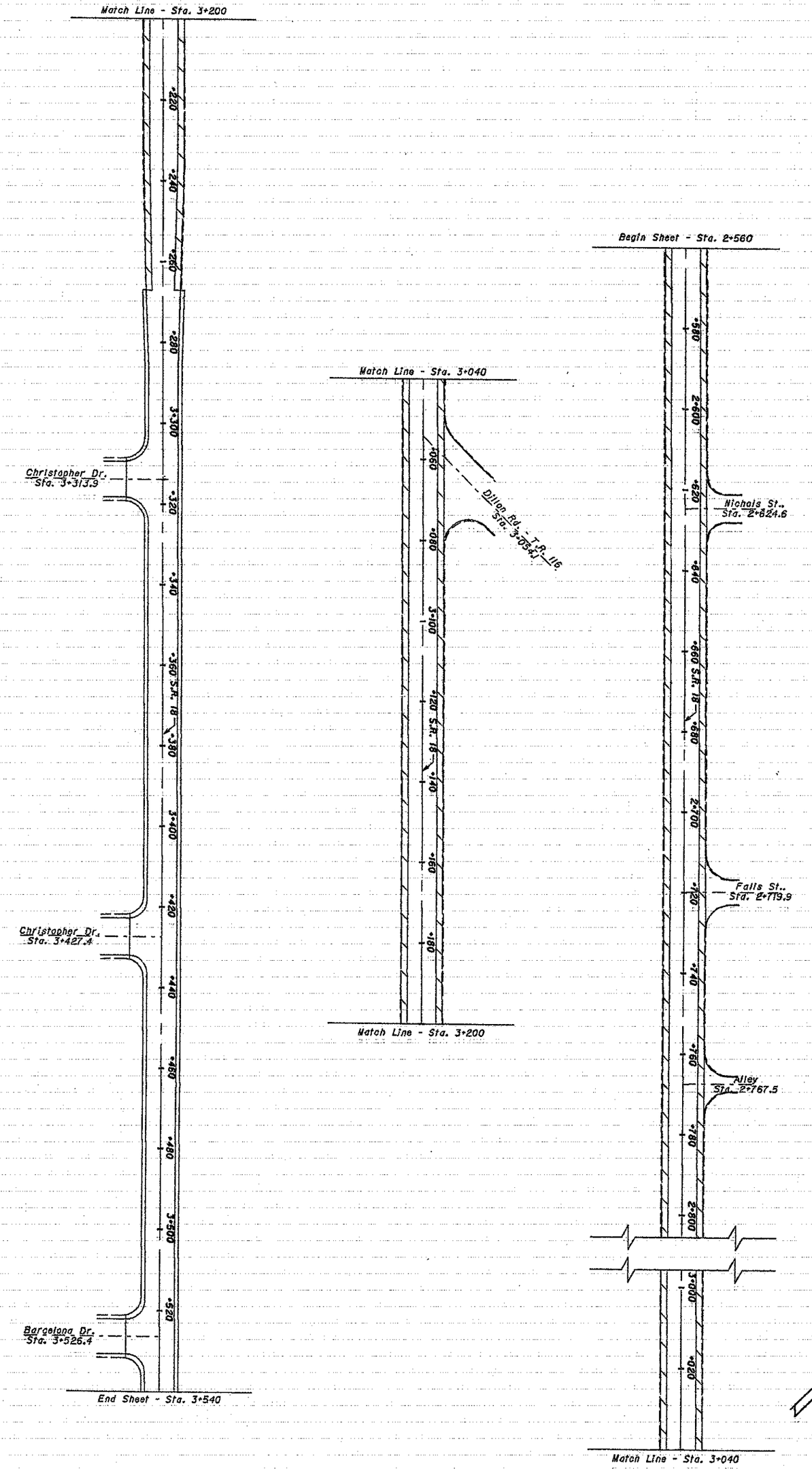
Note: For Quantities, see sheet no. 15 & 16
See Legend, Sheet No. 3

N

50 / 8	SEN-23-(18,07.0)(20.284) W00-23-0.000 SEN-12-0.000 SEN-18-2.108	SCHEMATIC SHEET - PART 4	PLAN NO.

CALCULATED JEH
CHECKED ALS

sen23m.dgn



SCHEMATIC PLAN

PART 4 (SHEET 2 OF 4)

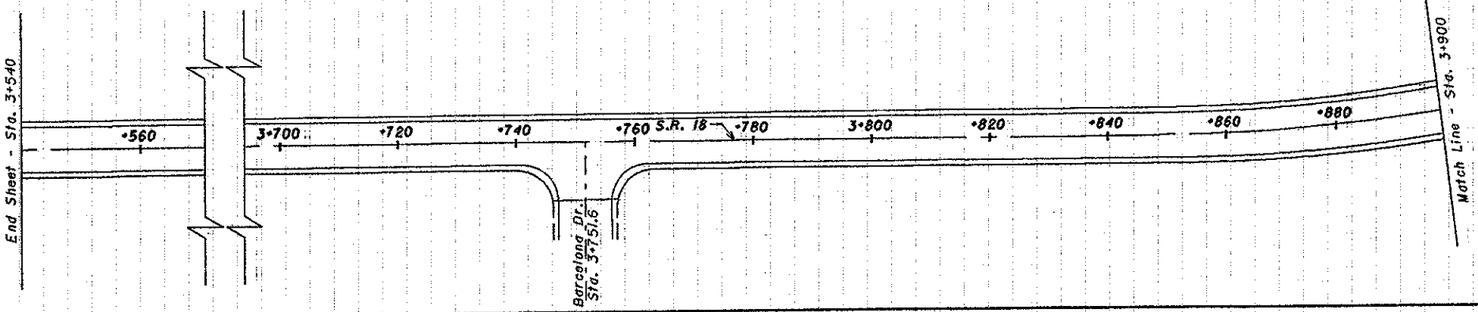
Note: For Quantities, see sheet No. 15 & 16

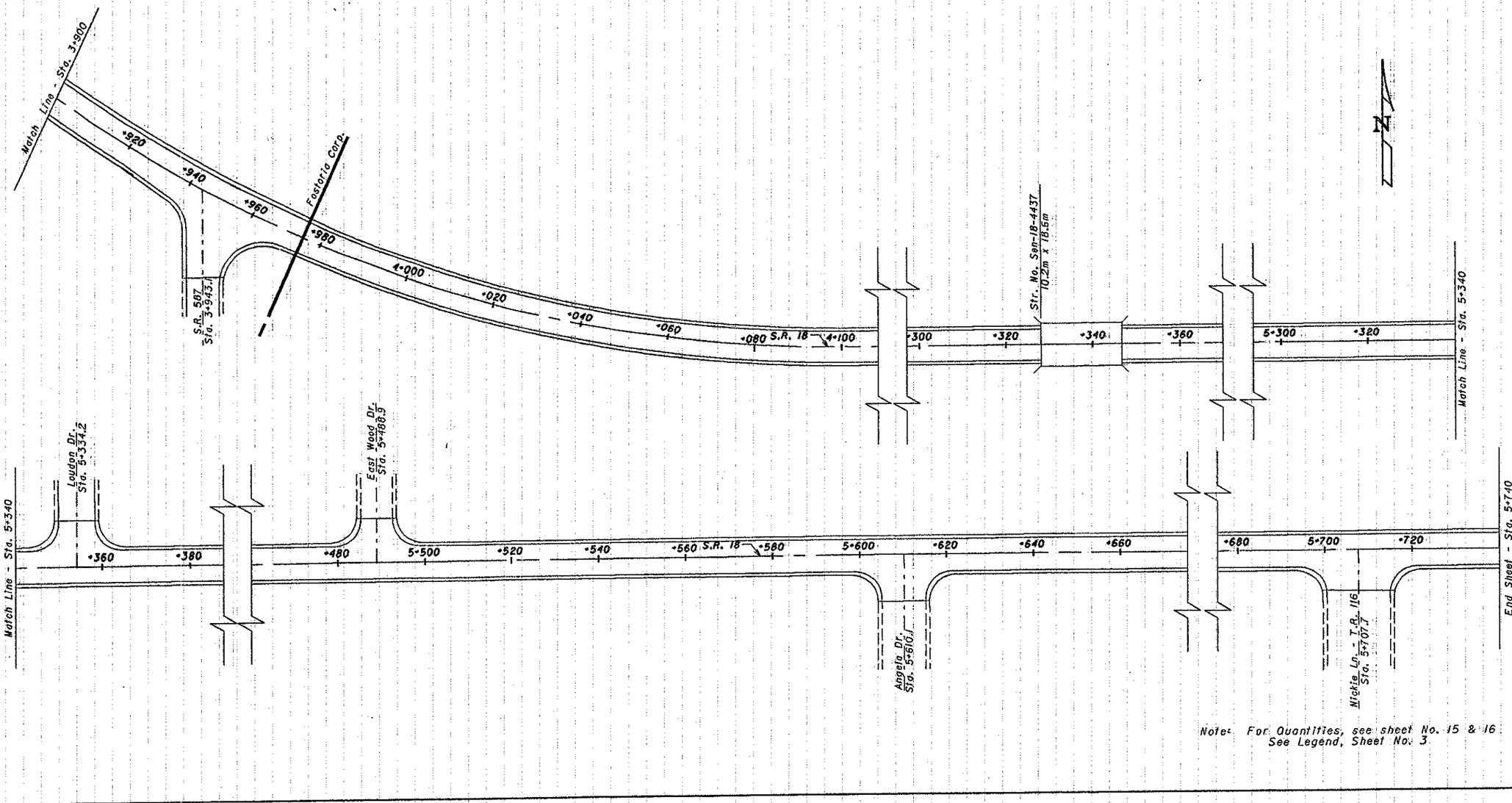
9/50	SEN-23-(18.070)(20.284) W00-23-0.000 SEN-12-0.000 SEN-18-2.108	SCHEMATIC SHEET - PART 4	PLAN NO.

CALCULATED JEH
CHECKED ALS

SCHEMATIC PLAN

PART 4 (SHEET 3 OF 4)





Note: For Quantities, see sheet No. 15 & 16
See Legend, Sheet No. 3

CALCULATED JEH
CHECKED ALS

PLAN NO.

SCHEMATIC SHEET - PART 4

SEN-23-18.07(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

10
50

sen2318m.dgn

SCHEMATIC PLAN

PART 4 (SHEET 4 OF 4)

Note: For Quantities, see sheet No. 15 & 16
See Legend, Sheet No. 3

sen23m.dgn

CALCULATED JEH
CHECKED ALS

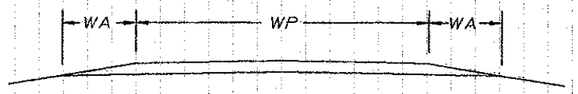
PLAN NO.

SCHEMATIC SHEET - PART 4

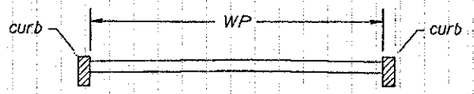
SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

11
50

TYPICAL 1



TYPICAL 2



▲ SMA with SBS Polymer

* 0.23 lit/sq.meter

⊛ Quantities include 0.23 lit./sq.meter prior to the first course and 0.08 lit./sq.meter prior to the second course.

☒ Note: Quantity determined using computer

See sheet no. 3-5 for Schematic Plan

See sheet no. 23-34 for Pavement Details

CALCULATED JEH CHECKED ALS

PLAN NO.

PAVEMENT DATA

SIDE	PART	ROUTE	STATION FROM	STATION TO	LENGTH METER	WP OUTSIDE METER	WP INSIDE METER	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA OUTSIDE SQ.METER	PAVEMENT AREA INSIDE SQ.METER	PROPOSED PAVEMENT 407 TACK COAT USING SS 924 ⊛ LITER	407 TACK COAT USING SS 924 * LITER	446 ASPHALT CONCRETE AVG. THICK METER	446 ASPHALT CONCRETE SURFACE COURSE ▲ CU. METER	446 ASPHALT CONCRETE AVG. THICK METER	446 ASPHALT CONCRETE INTERMEDIATE COURSE ▲ CU. METER	254 BITUMINOUS PAVEMENT PLANING SQ.METER	604 CATCH BASIN ADJUSTED TO GRADE EACH	604 MANHOLE ADJUSTED TO GRADE EACH	604 INLET ADJUSTED TO GRADE EACH	638 VALVE BOX ADJUSTED TO GRADE EACH
Rt. & Lt.	1	US 23	18+070	18+125.5	55.5	7.80 Avg.		1	ASPH. CONC.	433		134		0.038	16	0.044	19	433				
Rt. & Lt.	1	US 23	18+125.5	18+342	216.5	8.35 Avg.		2	ASPH. CONC.	1808		561		0.038	69	0.044	80	1808			6	
Rt. & Lt.	1	US 23	18+342	18+385	43	8.60 Avg.		2	ASPH. CONC.	370		115		0.038	14	0.044	16	370		1		
Rt. & Lt.	1	US 23	18+385	18+426	41	☒		2	ASPH. CONC.	724		224		0.038	28	0.044	32	724			2	
Rt. & Lt.	1	US 23	18+426	18+504.5	78.5	16.70		2	ASPH. CONC.	1311		406		0.038	50	0.044	58	1311				
Rt. & Lt.	1	US 23	18+504.5	18+520	15.5	17.20		2	ASPH. CONC.	267		83		0.038	10	0.044	12	267			2	
Rt. & Lt.	1	US 23	18+520	18+606.2	86.2	8.60	8.60	2	ASPH. CONC.	741	741	230	170	0.038	56	0.044	33	1482				
Rt. & Lt.	1	US 23	18+606.2	18+640	33.8	8.60	12.30	2	ASPH. CONC.	291	416	90	96	0.038	27	0.044	13	706				
Rt. & Lt.	1	US 23	18+640	18+673.6	33.6	8.60	9.15	2	ASPH. CONC.	289	307	90	71	0.038	23	0.044	13	596				
Rt. & Lt.	1	US 23	18+673.6	18+710	36.4	8.60	8.50	2	ASPH. CONC.	313	309	97	71	0.038	24	0.044	14	622				
Rt. & Lt.	1	US 23	18+710	18+790	80	8.00	8.00	2	ASPH. CONC.	640	640	198	147	0.038	48	0.044	28	1272	1		1	
Rt. & Lt.	1	US 23	18+790	18+880	90	8.00	8.00	2	ASPH. CONC.	720	720	223	166	0.038	55	0.044	32	1436		1	2	
Rt. & Lt.	1	US 23	18+880	19+128	248	8.00	8.00	2	ASPH. CONC.	1984	1984	615	456	0.038	151	0.044	87	3968				
Suspend Project																						
Rt.& Lt.	1	US 23	20+284.2	20+525	240.8	6.60	6.80	2	ASPH. CONC.	1589	1637	493	377	0.038	123	0.044	70	3227		1	5	1
Rt.& Lt.	1	US 23	20+525	20+981	456	6.80	6.80	2	ASPH. CONC.	3100	3100	961	713	0.038	236	0.044	136	6202		2	6	1
Rt.& Lt.	1	US 23	20+981	21+100	119	7.00	6.80	2	ASPH. CONC.	833	809	258	186	0.038	62	0.044	37	1642		1	2	
Rt.& Lt.	1	US 23	21+100	21+455	355	7.00	6.70	2	ASPH. CONC.	2485	2379	770	547	0.038	184	0.044	109	4846		2	6	
Rt.& Lt.	1	US 23	21+455	21+466.7	11.7	6.80	6.70	2	ASPH. CONC.	80	78	25	18	0.038	6	0.044	4	158				
Part I Totals - Carried to General Summary										31,098		8591			1182		793	31,070	1	8	32	2

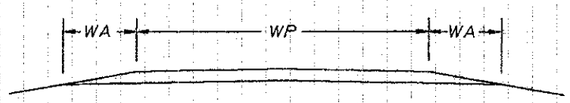
PAVEMENT DATA ~ PART I

SEN-23-1(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

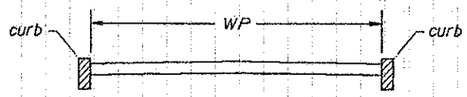
12
50

SEWOACS.dgn

TYPICAL 1



TYPICAL 2



▲ SMA with SBS Polymer

× 0.23 lit/sq.meter

⊗ Quantities Include 0.23 lit./sq.meter prior to the first course and 0.08 lit./sq.meter prior to the second course.

Note: See sheet no. 6 for Schematic Plan
See sheet no. 23-34 for Pavement Details

PAVEMENT DATA

SIDE	PART	ROUTE	STATION FROM	STATION TO	LENGTH METER	WP OUTSIDE METER	WP INSIDE METER	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA OUTSIDE SQ.METER	PAVEMENT AREA INSIDE SQ.METER	PROPOSED PAVEMENT 407 TACK COAT USING SS 924 ⊗ LITER	407 × LITER	446 ASPHALT CONCRETE AVG. THICK METER	446 SURFACE COURSE ▲ CU. METER	446 AVG. THICK METER	446 INTERMEDIATE COURSE ▲ CU. METER	254 BITUMINOUS PAVEMENT PLANING SQ.METER	604 MANHOLE ADJUSTED TO GRADE EACH	604 INLET ADJUSTED TO GRADE EACH
Rt. & Lt.	2	US 23	0+000	0+480.6	480.6	6.60	6.80	2	ASPH. CONC.	3172	3268	983	752	0.038	245	0.044	140	6440	1	8
Rt.	2	US 23	0+480.6	0+501.5	20.9	3.35 Avg.		2	ASPH. CONC.	70		22		0.038	3	0.044	3	70		1
Lt.	2	US 23	0+480.6	0+501.5	20.9	3.30	7.15	2	ASPH. CONC.	69	149	21	34	0.038	8	0.044	3	218		1
Rt.	2	US 23	0+501.5	0+527.3	25.8	5.15 Avg.		2	ASPH. CONC.	133		41		0.038	5	0.044	6	133		
Lt.	2	US 23	0+501.5	0+525.1	23.6	7.45 Avg.		2	ASPH. CONC.	176		55		0.038	7	0.044	8	176		
Rt.	2	US 23	0+527.3	0+562.7	35.4	6.80		2	ASPH. CONC.	241		75		0.038	9	0.044	11	241		
Lt.	2	US 23	0+525.1	0+562.7	37.6	3.80 Avg.		2	ASPH. CONC.	143		44		0.038	5	0.044	6	143		1
Rt. & Lt.	2	US 23	0+562.7	0+581.6	18.9	10.10 Avg.		1	ASPH. CONC.	191		59		0.038	7	0.044	8	191		
Rt. & Lt.	2	US 23	0+581.6	0+600	18.4	8.75 Avg.		1	ASPH. CONC.	161		50		0.038	6	0.044	7	161		
Rt. & Lt.	2	US 23	0+600	0+636	36.0	7.80 Avg.		1	ASPH. CONC.	281		87		0.038	11	0.044	12	281		
Rt. & Lt.	2	US 23	0+636	0+653	17.0	7.40 Avg.		1	ASPH. CONC.	126		39		0.038	5	0.044	6	126		
Part 2 Totals - Carried to General Summary										8180		2262			311		210	8180	1	11

CALCULATED JEH
CHECKED ALS

PLAN NO.

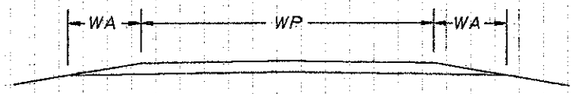
PAVEMENT DATA - PART 2

SEN-23-118.07(X(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

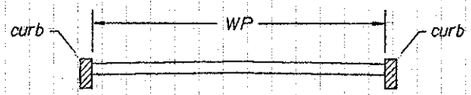
13
50

SEWOACS.dgn

TYPICAL 1



TYPICAL 2



▲ SMA with SBS Polymer

* 0.23 lit/sq.meter

⊛ Quantities include 0.23 lit./sq.meter prior to the first course and 0.08 lit./sq.meter prior to the second course.

Note: See sheet no. 7 for Schematic Plan

See sheet no. 23-34 for Pavement Details

PAVEMENT DATA

SIDE	PART	ROUTE	STATION FROM	STATION TO	LENGTH METER	WP OUTSIDE METER	WP INSIDE METER	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA OUTSIDE SQ.METER	PAVEMENT AREA INSIDE SQ.METER	PROPOSED PAVEMENT 407 TACK COAT USING SS 924 ⊛ LITER	407 TACK COAT USING SS 924 * LITER	446 ASPHALT CONCRETE AVG. THICK METER	446 ASPHALT CONCRETE SURFACE COURSE ▲ CU. METER	446 ASPHALT CONCRETE AVG. THICK METER	446 ASPHALT CONCRETE INTERMEDIATE COURSE ▲ CU. METER	254 BITUMINOUS PAVEMENT PLANING SQ.METER	604 MANHOLE ADJUSTED TO GRADE EACH	604 INLET ADJUSTED TO GRADE EACH
Rt. & Lt.	3	SR 12	0-045	0+335	380	8.00	8.00	2	ASPH. CONC.	3040	3040	942	699	0.038	231	0.044	134	6080	3	3
Lt.	3	SR 12	0+335	0+420	85	4.00	4.00	2	ASPH. CONC.	340	340	105	78	0.038	26	0.044	15	680		
Rt.	3	SR 12	0+335	0+420	85	8.00		2	ASPH. CONC.	680		211		0.038	26	0.044	30	680		
Part 3 Totals - Carried to General Summary										7440		2009			283		179	7440	3	3

CALCULATED JEH
CHECKED ALS

PLAN NO.

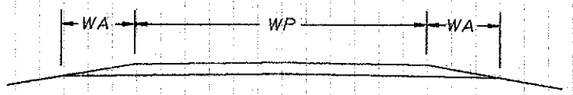
PAVEMENT DATA ~ PART 3

SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

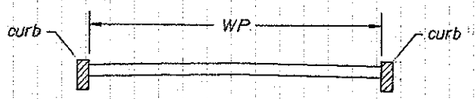
14
50

SEW0ACS.dgn

TYPICAL 1



TYPICAL 2



(C) = City
(R) = Rural

⊗ Quantities include 0.23 lit./sq.meter prior to the first course and 0.08 lit./sq.meter prior to the second course.

• Tack Coat not using SS 924 at a rate of 0.23 lit./sq.meter

[X] Note: Quantity determined using computer
Quantity includes shoulder area
See sheet no. 8-11 for Schematic Plan
See sheet no. 23-34 for Pavement Details
See sheet no. 17 for Extra Area and Deductions

× 0.23 lit/sq.meter

▲ SMA using SBS Polymer

+ PG64-22

CALCULATED JEH
CHECKED ALS

PLAN NO.

PAVEMENT DATA

SIDE	PART	ROUTE	STATION FROM	STATION TO	LENGTH METER	WP OUTSIDE METER	WP INSIDE METER	TYPICAL	EXISTING TYPE PAVEMENT	PAVEMENT AREA OUTSIDE SQ.METER	PAVEMENT AREA INSIDE SQ.METER	PROPOSED PAVEMENT 407 TACK COAT USING SS 924 ⊗ LITER	407 TACK COAT USING SS 924 × LITER	446 ASPHALT CONCRETE AVG. THICK METER	446 ASPHALT CONCRETE SURFACE COURSE ▲ CU. METER	446 ASPHALT CONCRETE AVG. THICK METER	446 ASPHALT CONCRETE INTERMEDIATE COURSE ▲ CU. METER	202 WEARING COURSE REMOVED × SQ.METER	254 BITUMINOUS PAVEMENT PLANING SQ.METER	604 CATCH BASIN ADJUSTED TO GRADE EACH	604 MANHOLE ADJUSTED TO GRADE EACH	604 INLET ADJUSTED TO GRADE EACH	638 VALVE BOX ADJUSTED TO GRADE EACH
Rt. & Lt.	4(C)	SR 18	2+147.8	2+160.0	12.2	[X]		2	ASPH. CONC.	180		56		0.038	7	0.044	8		180				
Rt.	4(C)	SR 18	2+160.0	2+202.4	42.4	8.75 Avg.		2	ASPH. CONC.	371		115		0.038	14	0.044	16		371				
Lt.	4(C)	SR 18	2+160.0	2+202.0	42.0	5.25 Avg.		2	ASPH. CONC.	221		69		0.038	8	0.044	10		221				
Rt.	4(C)	SR 18	2+202.4	2+240.0	37.6	8.45 Avg.		2	ASPH. CONC.	318		99		0.038	12	0.044	14		318				
Lt.	4(C)	SR 18	2+202.0	2+240.0	38.0	5.95 Avg.		2	ASPH. CONC.	226		70		0.038	9	0.044	10		226				
Rt.	4(C)	SR 18	2+240.0	2+256.0	16	8.50		2	ASPH. CONC.	136		42		0.038	5	0.044	6		136				
Lt.	4(C)	SR 18	2+240.0	2+256.0	16	6.70 Avg.		2	ASPH. CONC.	107		33		0.038	4	0.044	5		107				
Rt.	4(C)	SR 18	2+256.0	2+280.0	24	8.50		2	ASPH. CONC.	204		63		0.038	8	0.044	9		204				
Lt.	4(C)	SR 18	2+256.0	2+280.0	24	7.80		2	ASPH. CONC.	187		58		0.038	7	0.044	8		187				
Rt.	4(C)	SR 18	2+280.0	2+360.0	80	4.30	4.20	2	ASPH. CONC.	344	336	107	77	0.038	26	0.044	15		680				
Lt.	4(C)	SR 18	2+280.0	2+360.0	80	4.30	3.50	2	ASPH. CONC.	344	280	107	64	0.038	24	0.044	15		624				
Rt. & Lt.	4(C)	SR 18	2+360.0	2+468.0	108.0	[X]		2	ASPH. CONC.	1228	1050	361	242	0.038	87	0.044	100		2278				
Rt. & Lt.	4(C)	SR 18	2+468.0	2+520.0	52.0	[X]		2	ASPH. CONC.	720		• 166		0.038	+ 27				720			2	1
Rt. & Lt.	4(C)	SR 18	2+520.0	2+820.0	300.0	10.50		2	ASPH. CONC.	3150		• 725		0.038	+ 120				1121		2	3	2
Rt. & Lt.	4(C)	SR 18	2+820.0	3+267.0	447.0	9.60 Avg.		2	ASPH. CONC.	4291		• 987		0.038	+163					2	6	2	2
Rt. & Lt.	4(C)	SR 18	3+267.0	3+283.0	16.0	8.15 Avg.		1	ASPH. CONC.	130		• 30		0.038	+ 5						1		
Rt. & Lt.	4(C)	SR 18	3+283.0	3+325.8	42.8	7.60		1	ASPH. CONC.	325		• 75		0.038	+ 12								
Rt. & Lt.	4(C)	SR 18	3+325.8	3+900.0	574.2	7.55 Avg.		1	ASPH. CONC.	4335		• 997		0.038	+165						1		
Rt. & Lt.	4(C)	SR 18	3+900.0	3+976.3	76.3	7.40 Avg.		1	ASPH. CONC.	565		• 130		0.038	+ 21								
Extra area and deductions										481		29	• 89	Varies	+ 11		4		95				
												⊗ ×	•		▲	+							
City Totals										(19,529)		(1592)	(3199)		(211)	(524)		(220)		(7468)	(2)	(10)	(7)	(5)
Rt. & Lt.	4(R)	SR 18	3+976.3	4+821.5	845.2	7.35 Avg.		1	ASPH. CONC.	6212		• 1429		0.038	+236								
Rt. & Lt.	4(R)	SR 18	4+821.5	6+442.7	1621.2	7.40		1	ASPH. CONC.	11,997		• 2759		0.038	+456								
Rt. & Lt.	4(R)	SR 18	6+442.7	8+044.1	1601.4	7.35 Avg.		1	ASPH. CONC.	11,770		• 2707		0.038	+447								
Rt. & Lt.	4(R)	SR 18	8+044.1	9+708.1	1664.0	7.35 Avg.		1	ASPH. CONC.	12,230		• 2813		0.038	+465			204					
Rt. & Lt.	4(R)	SR 18	9+708.1	9+920.0	211.9	7.50 Avg.		1	ASPH. CONC.	1589		• 365		0.038	+60			104					
Extra area and deductions										646		• 149		Varies	+ 7								
Structures										410		• 94		0.038	+ 16								
Rural Totals										(44,854)		(10,316)			+ (1687)			(308)					
												⊗ ×	•		▲	+							
Part 4 Totals - Carried to General Summary										64,383		1592	13,515		211	2211		220	308	7468	2	10	7	5

PAVEMENT DATA ~ PART 4

SEN-23-118.07(1)(20,284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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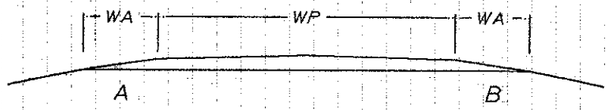
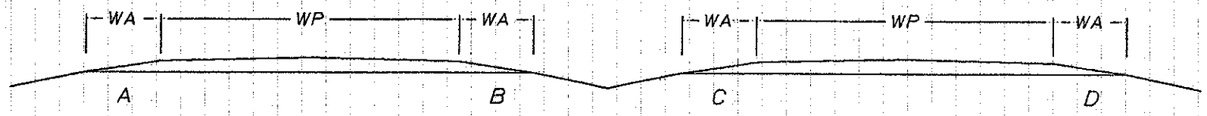
DESIGNED JEH
CHECKED ALS

PLAN NO.

TYPICAL 1



TYPICAL 2



▲ SMA using SBS Polymer

\+ PG64-22

• Tack Coat not using SS 924 at a rate of 0.23 lit./sq.meter

Ⓧ Quantities includes 0.23 lit./sq.meter prior to the first course and 0.08 lit./sq.meter prior to the second course.

* ITEM 617, COMPACTED AGGREGATE, TYPE A: An estimated quantity of Item 617, Compacted Aggregate, Type A shall be used as directed by the Engineer to shape the edge of the berms.

Note: For Extra Area and Deductions, see sheet no. 17.

PAVED SHOULDER DATA

SIDE	PART	ROUTE	STATION FROM	STATION TO	LENGTH METER	TYPICAL	PROPOSED WIDTH (METER) A	B	C	D	SHOULDER AREA SQ.METER	407 TACK COAT USING SS 924 Ⓧ LITER	446 ASPHALT CONCRETE AVG. THICK METER	SURFACE COURSE ▲ CU.METER	AVG. THICK METER	INTERMEDIATE COURSE ▲ CU.METER			254 BITUMINOUS PAVEMENT PLANING SQ.METER	617 COMPACTED AGGREGATE TYPE A * CU.METER
Rt.& Lt.	1	US 23	18+070	18+125.5	55.5	1	0.90	0.90			100	31	0.038	4	0.044	4			100	7
Part 1 Totals - Carried to General Summary											100	31		4		4			100	7
Rt.	2	US 23	0+543.3	0+562.7	19.4	1		0.90			17	5	0.038	1	0.044	1			17	1
Rt.& Lt.	2	US 23	0+562.7	0+653	90.3	1	0.90	0.90			163	51	0.038	6	0.044	7			163	12
Part 2 Totals - Carried to General Summary											180	56		7		8			180	13
Rt.& Lt.	4	SR 18	3+267.0	3+976.3	709.3	1	0.90	0.90			1277	• 294	0.038	+ 49						41
City Totals											(1277)	• (294)		+ (49)						(41)
Rt.& Lt.	4	SR 18	3+976.3	9+920.0	5943.7	1	0.80	0.80			9510	• 2187	0.038	+ 361						344
Deduct for Structures											(-) 59	• (-) 14	0.038	(-) 2						
Rural Totals											(9451)	• (2173)		+ (359)						(344)
Part 4 Totals - Carried to General Summary											10,728	• 2467		+ 408						385

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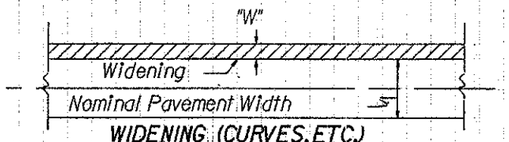
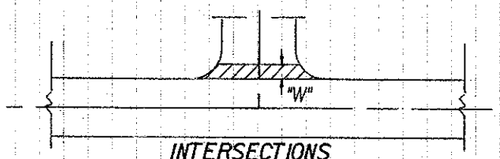
SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

PAVED SHOULDER DATA ~ PARTS 1, 2 & 4

DEPARTMENT OF TRANSPORTATION
M & R 709 REV.9-1-83



WIDENING (CURVES, ETC.)



INTERSECTIONS

▲ SMA using SBS Polymer
\+ PG64-22
• Tack Coat not using SS 924 at a rate of 0.23lit./sq.meter
Ⓧ Quantities Includes 0.23 lit./sq.meter prior to the first course and 0.08 lit./sq.meter prior to the second course.

CALCULATED JEH CHECKED ALS

PART	ROUTE	STATION FROM	STATION TO	SIDE	DESCRIPTION	LENGTH METER	WIDTH METER	AREA SQ.METER	446 ASPHALT CONCRETE: 407 TACK COAT USING SS 924 Ⓧ LITER	AVG. THICK. METER	SURFACE COURSE ▲ CU.METER	AVG. THICK. METER	INTERMEDIATE COURSE CU.METER			254 BITUMINOUS PAVEMENT PLANING SQ.METER
4(C)	SR 18	2+175	2+195	Rt.	Ramp from U.S. 23			95	29	0.038	4	0.044	4			95
4(C)	SR 18	3+267.0	3+976.3	Rt. & Lt.	Intersections			386	• 89	0.019 avg.	7					
									Ⓧ •							
City Pavement Totals								481	29 89	Varies	11		4			95
4(R)	SR 18	3+976.3	9+920.0	Rt. & Lt.	Intersections			916	• 211	0.019 avg.	17					
4(R)	SR 18	4+437.4	4+456.0	Rt. & Lt.	Str. No. Sen-18-0276			(-) 138	• (-) 32	0.038	(-) 5					
4(R)	SR 18	9+166.6	9+184.5	Rt. & Lt.	Str. No. Sen-18-0569			(-) 132	• (-) 30	0.038	(-) 5					
Rural Pavement Totals								646	• 149	Varies	7					
4(R)	SR 18	4+437.4	4+456.0	Rt. & Lt.	Str. No. Sen-18-0276			(-) 30	• (-) 7	0.038	(-) 1					
4(R)	SR 18	9+166.6	9+184.5	Rt. & Lt.	Str. No. Sen-18-0569			(-) 29	• (-) 7	0.038	(-) 1					
Rural Shoulder Totals								(-) 59	• (-) 14	0.038	(-) 2					

PLAN NO.

EXTRA AREA AND DEDUCTIONS - PART 4

SEN-23-18.07 01(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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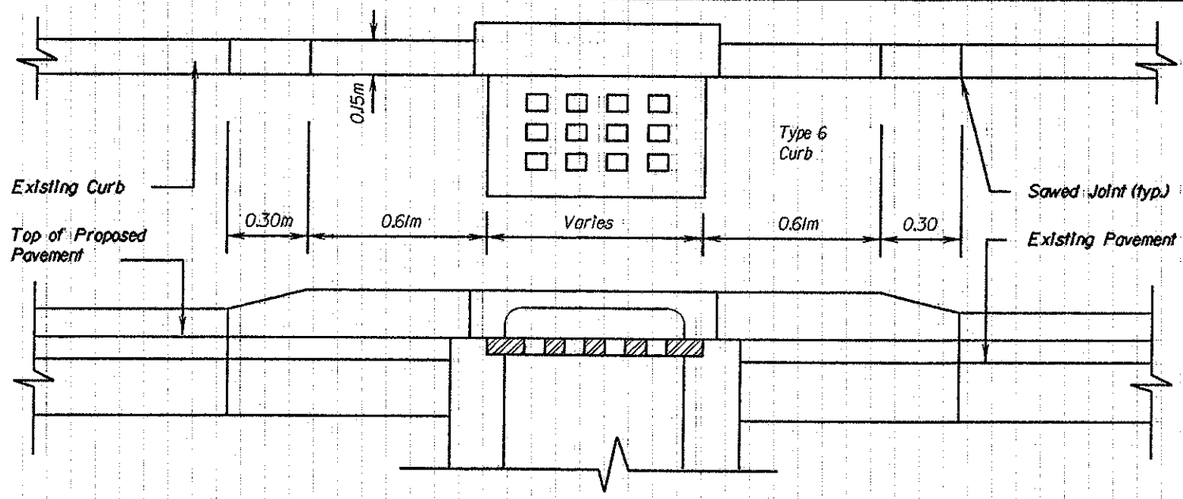
CATCH BASIN, INLET, MANHOLE, WATERVALVE BOX, MONUMENT BOX, ADJUSTED TO GRADE OR FEATHER TO CASTING AS NOTED.

PART	ROUTE	STATION	SIDE	ITEM TYPE (604)				638	WORK REQUIRED			REMARKS
				CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	WATER VALVE BOX	FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	
1	US 23	18+209.2	Lt.			X				X		
1	US 23	18+209.4	Rt.			X				X		
1	US 23	18+273.0	Lt.			X				X		
1	US 23	18+273.2	Rt.			X				X		
1	US 23	18+333.0	Rt.			X				X		
1	US 23	18+333.4	Lt.			X				X		
1	US 23	18+348.0	Lt.		X					X		
1	US 23	18+348.2	Lt.			X			X			
1	US 23	18+348.2	Lt.			X			X			
1	US 23	18+348.2	Rt.			X			X			
1	US 23	18+348.2	Rt.			X			X			
1	US 23	18+386.8	Rt.			X				X		
1	US 23	18+394.2	Lt.			X				X		
1	US 23	18+448.4	Lt.		X				X			
1	US 23	18+515.8	Lt.		X				X			
1	US 23	18+515.8	Lt.			X			X			
1	US 23	18+515.8	Lt.			X			X			
1	US 23	18+515.8	Rt.			X			X			
1	US 23	18+515.8	Rt.			X				X		
1	US 23	18+601.0	Lt.			X					X	
1	US 23	18+601.0	Lt.			X			X			
1	US 23	18+601.0	Rt.			X				X		
1	US 23	18+601.0	Rt.			X			X			
1	US 23	18+772.0	Rt.			X				X		
1	US 23	18+773.0	Lt.	X						X		
1	US 23	18+787.6	Lt.		X				X			
1	US 23	18+839.9	Rt.					X		X		
1	US 23	18+849.9	Lt.					X	X			
1	US 23	18+852.0	Rt.					X		X		
1	US 23	18+858.7	Rt.		X				X			
1	US 23	18+865.6	Lt.		X					X		
1	US 23	18+870.0	Lt.					X	X			
1	US 23	18+939.0	Rt.			X			X			

PART	ROUTE	STATION	SIDE	ITEM TYPE (604)				638	WORK REQUIRED			REMARKS
				CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	WATER VALVE BOX	FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	
1	US 23	18+939.5	Lt.			X			X			
1	US 23	19+016.0	Lt.		X				X			
1	US 23	19+076.4	Lt.					X	X			
1	US 23	19+086.6	Lt.		X				X			
1	US 23	19+086.6	Rt.		X				X			
1	US 23	19+097.0	Lt.					X	X			
Suspend Project												
1	US 23	20+293.5	Lt.					X		X		
1	US 23	20+297.0	Rt.		X				X			
1	US 23	20+330.0	Lt.					X	X			
1	US 23	20+345.3	Rt.		X				X			
1	US 23	20+374.5	Rt.			X				X		
1	US 23	20+374.5	Lt.			X				X		
1	US 23	20+374.5	Lt.			X				X		



INLET ADJUSTED TO GRADE

Inlet shall be adjusted prior to placing of the finish surface. The method of adjusting inlets may be determined by the Contractor with approval of the Engineer.
The finish surface shall be 0.006m higher than the top of the grate. The removal of the existing curb as required, and the replacement curb, as per Item 609 Curbing, shall be constructed typical of the curb removed, as directed by the Engineer.
Payment shall be included with the item 604, Inlet Adjusted to Grade.
Pavement shall be feathered to meet castings that are not to be adjusted, as directed by the Engineer.
Valve boxes and utility manholes shall be adjusted by their respective owners.

CALCULATED JEH CHECKED ALS

PLAN NO.

UTILITY ADJUSTMENTS - PART 1

SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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CATCH BASIN, INLET, MANHOLE, WATERVALVE BOX, MONUMENT BOX, ADJUSTED TO GRADE OR FEATHER TO CASTING AS NOTED

PART	ROUTE	STATION	SIDE	ITEM TYPE (604)				638	WORK REQUIRED			REMARKS
				CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	WATER VALVE BOX	FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	
1	US 23	20+426.5	Lt.			X				X		
1	US 23	20+426.5	Lt.		X					X		
1	US 23	20+427.0	Rt.			X				X		
1	US 23	20+441.4	Rt.		X				X			
1	US 23	20+453.5	Lt.					X	X			
1	US 23	20+525.0	Rt.			X				X		
1	US 23	20+526.9	Lt.			X				X		
1	US 23	20+544.3	Rt.		X				X			
1	US 23	20+555.0	Lt.					X	X			
1	US 23	20+578.9	Rt.					X	X			
1	US 23	20+635.0	Rt.			X				X		
1	US 23	20+635.0	Lt.			X				X		
1	US 23	20+635.0	Lt.		X				X			
1	US 23	20+647.4	Rt.		X				X			
1	US 23	20+656.4	Lt.					X	X			
1	US 23	20+736.0	Rt.			X				X		
1	US 23	20+736.0	Lt.			X				X		
1	US 23	20+777.7	Lt.					X	X			
1	US 23	20+781.3	Rt.		X				X			
1	US 23	20+787.0	Lt.		X					X		
1	US 23	20+787.8	Rt.		X				X			
1	US 23	20+884.6	Rt.		X				X			
1	US 23	20+911.5	Lt.		X					X		
1	US 23	20+913.8	Rt.		X				X			
1	US 23	20+918.4	Rt.		X				X			
1	US 23	20+918.8	Rt.						X			Gas Tap
1	US 23	20+918.8	Lt.			X				X		
1	US 23	20+919.2	Rt.						X			Gas Tap
1	US 23	20+924.6	Lt.					X		X		
1	US 23	20+979.1	Rt.		X				X			
1	US 23	20+983.4	Rt.			X				X		
1	US 23	21+039.5	Rt.		X				X			
1	US 23	21+057.0	Lt.			X			X			

PART	ROUTE	STATION	SIDE	ITEM TYPE (604)				638	WORK REQUIRED			REMARKS
				CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	WATER VALVE BOX	FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	
1	US 23	21+067.3	Lt.					X	X			
1	US 23	21+073.5	Rt.		X				X			
1	US 23	21+089.9	Lt.			X				X		
1	US 23	21+093.0	Rt.			X			X			
1	US 23	21+098.5	Lt.		X					X		
1	US 23	21+158.4	Lt.					X	X			
1	US 23	21+171.8	Lt.		X				X			
1	US 23	21+179.5	Lt.					X	X			
1	US 23	21+180.7	Lt.		X				X			
1	US 23	21+180.7	Lt.			X				X		
1	US 23	21+180.7	Rt.			X				X		
1	US 23	21+248.5	Lt.			X				X		
1	US 23	21+249.4	Ctr.		X				X			
1	US 23	21+253.6	Rt.			X				X		
1	US 23	21+305.3	Lt.					X	X			
1	US 23	21+318.0	Rt.		X				X			
1	US 23	21+326.9	Rt.		X				X			
1	US 23	21+329.3	Lt.		X					X		
1	US 23	21+331.6	Lt.			X				X		
1	US 23	21+405.0	Rt.			X				X		
1	US 23	21+413.0	Rt.		X					X		
1	US 23	21+453.9	Lt.					X	X			

CALCULATED JEH
CHECKED ALS

PLAN NO.

UTILITY ADJUSTMENTS - PART 1

SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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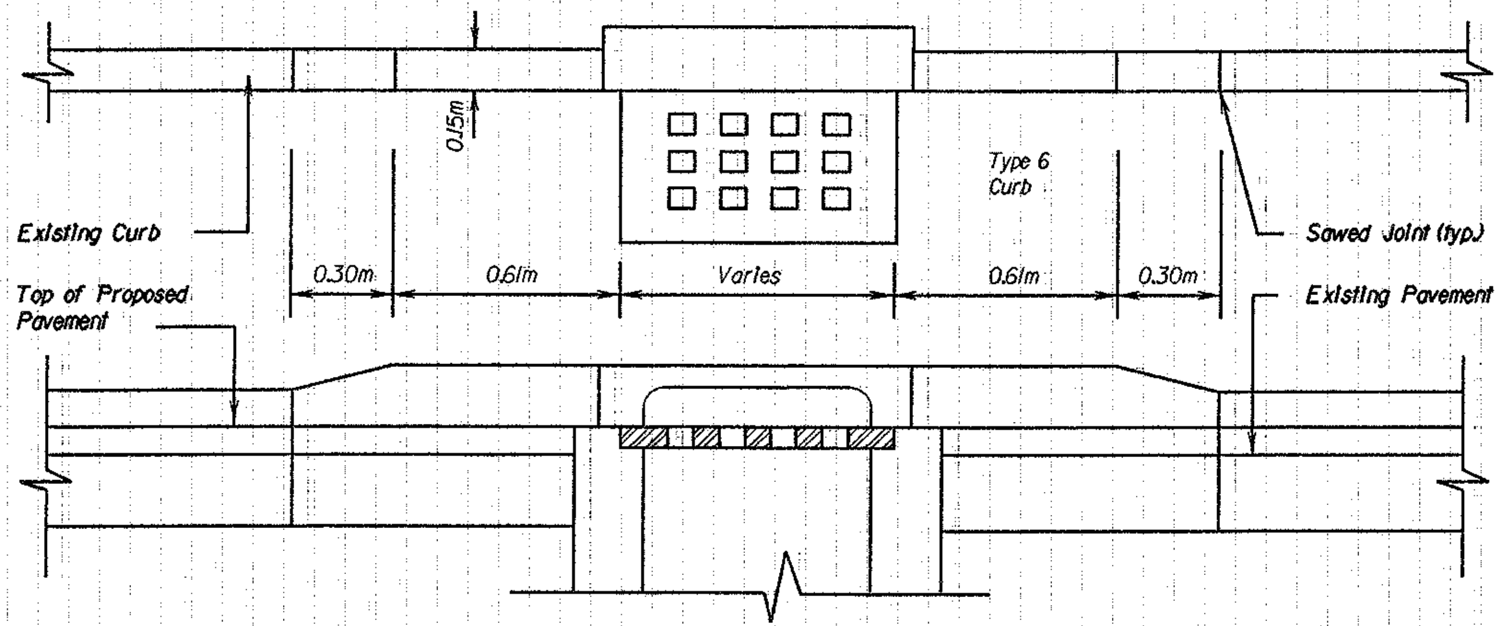
CATCH BASIN, INLET, MANHOLE, WATERVALVE BOX, MONUMENT BOX, ADJUSTED TO GRADE OR FEATHER TO CASTING AS NOTED

PART	ROUTE	STATION	SIDE	ITEM TYPE (604) CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	638 WATER VALVE BOX	WORK REQUIRED FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	REMARKS
2	US 23	0+005.6	Rt.		X				X			
2	US 23	0+009.4	Lt.					X	X			
2	US 23	0+013.1	Lt.		X					X		
2	US 23	0+013.1	Lt.			X				X		
2	US 23	0+013.1	Rt.			X				X		
2	US 23	0+090.3	Rt.			X				X		
2	US 23	0+090.7	Lt.			X				X		
2	US 23	0+154.6	Lt.					X	X			
2	US 23	0+241.9	Rt.		X				X			
2	US 23	0+260.1	Rt.			X				X		
2	US 23	0+260.1	Lt.			X				X		
2	US 23	0+324.6	Rt.		X				X			
2	US 23	0+326.5	Rt.			X				X		
2	US 23	0+331.9	Lt.			X				X		
2	US 23	0+364.3	Rt.		X				X			
2	US 23	0+395.2	Rt.		X				X			
2	US 23	0+400.0	Rt.					X	X			
2	US 23	0+403.0	Lt.			X			X			
2	US 23	0+410.2	Rt.					X	X			
2	US 23	0+411.2	Lt.					X	X			
2	US 23	0+493.7	Lt.			X				X		
2	US 23	0+493.7	Rt.			X				X		
2	US 23	0+503.5	Rt.		X				X			
2	US 23	0+506.6	Rt.					X	X			
2	US 23	0+528.0	Lt.			X			X			
2	US 23	0+541.4	Rt.			X				X		
2	US 23	0+647.0	Lt.		X				X			

PART	ROUTE	STATION	SIDE	ITEM TYPE (604) CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	638 WATER VALVE BOX	WORK REQUIRED FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	REMARKS



INLET ADJUSTED TO GRADE

Inlet shall be adjusted prior to placing of the finish surface. The method of adjusting inlets may be determined by the Contractor with approval of the Engineer.
The finish surface shall be 0.006m higher than the top of the grate. The removal of the existing curb as required, and the replacement curb, as per Item 609 Curbing, shall be constructed typical of the curb removed, as directed by the Engineer.
Payment shall be included with the Item 604, Inlet Adjusted to Grade.
Pavement shall be feathered to meet castings that are not to be adjusted, as directed by the Engineer.
Valve boxes and utility manholes shall be adjusted by their respective owners.

CALCULATED JEH CHECKED ALS

PLAN NO.

UTILITY ADJUSTMENTS - PART 2

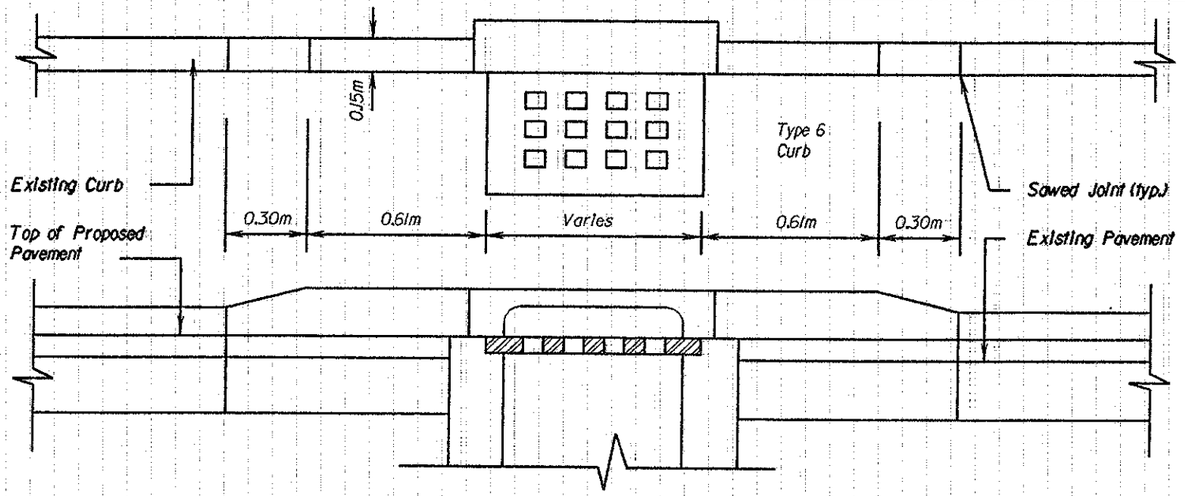
SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

SEWOUSAdgn

CATCH BASIN, INLET, MANHOLE, WATERVALVE BOX, MONUMENT BOX, ADJUSTED TO GRADE OR FEATHER TO CASTING AS NOTED

PART	ROUTE	STATION	SIDE	ITEM TYPE (604)				638	WORK REQUIRED			REMARKS
				CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	WATER VALVE BOX	FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	
3	SR 12	0+006.4	Rt.					X	X			
3	SR 12	0+005.1	Rt.		X				X			
3	SR 12	0+000.5	Ctr.		X				X			
3	SR 12	0+005.6	Rt.					X	X			
3	SR 12	0+060.4	Rt.			X				X		
3	SR 12	0+061.0	Lt.	X					X			
3	SR 12	0+100.2	Ctr.		X				X			
3	SR 12	0+152.6	Rt.			X			X			
3	SR 12	0+152.6	Lt.			X			X			
3	SR 12	0+191.7	Ctr.		X					X		
3	SR 12	0+192.0	Rt.					X	X			
3	SR 12	0+201.0	Lt.		X				X			
3	SR 12	0+208.7	Lt.		X					X		
3	SR 12	0+211.3	Rt.					X	X			
3	SR 12	0+270.8	Rt.			X				X		
3	SR 12	0+270.8	Lt.			X				X		
3	SR 12	0+307.9	Lt.		X				X			
3	SR 12	0+366.1	Rt.			X			X			
3	SR 12	0+366.1	Lt.			X			X			
3	SR 12	0+404.6	Ctr.		X					X		
3	SR 12	0+405.1	Rt.					X	X			

PART	ROUTE	STATION	SIDE	ITEM TYPE (604)				638	WORK REQUIRED			REMARKS
				CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	WATER VALVE BOX	FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	



INLET ADJUSTED TO GRADE

Inlet shall be adjusted prior to placing of the finish surface. The method of adjusting inlets may be determined by the Contractor with approval of the Engineer.
The finish surface shall be 0.006m higher than the top of the grate. The removal of the existing curb as required, and the replacement curb, as per Item 609 Curbing, shall be constructed typical of the curb removed, as directed by the Engineer.
Payment shall be included with the Item 604, Inlet Adjusted to Grade.
Pavement shall be feathered to meet castings that are not to be adjusted, as directed by the Engineer.
Valve boxes and utility manholes shall be adjusted by their respective owners.

CALCULATED JEH CHECKED ALS

PLAN NO.

UTILITY ADJUSTMENTS - PART 3

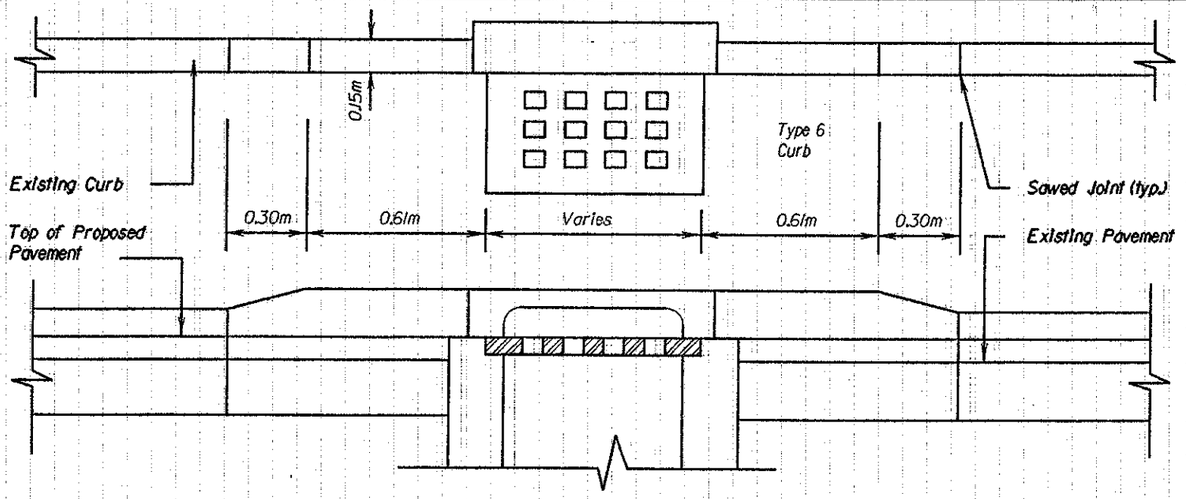
SEN-23-(18.07)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

SEWOUSA.dgn

CATCH BASIN, INLET, MANHOLE, WATERVALVE BOX, MONUMENT BOX, ADJUSTED TO GRADE OR FEATHER TO CASTING AS NOTED

PART	ROUTE	STATION	SIDE	ITEM TYPE (604)				638	WORK REQUIRED			REMARKS
				CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	WATER VALVE BOX	FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	
4	SR 18	2+177.8	Rt.	X					X			
4	SR 18	2+205.4	Lt.	X					X			
4	SR 18	2+205.4	Lt.	X					X			
4	SR 18	2+205.4	Rt.	X					X			
4	SR 18	2+206.0	Rt.	X					X			
4	SR 18	2+274.7	Lt.			X			X			
4	SR 18	2+274.7	Lt.			X			X			
4	SR 18	2+274.7	Rt.			X			X			
4	SR 18	2+274.7	Rt.			X			X			
4	SR 18	2+347.0	Rt.			X			X			
4	SR 18	2+347.3	Rt.			X			X			
4	SR 18	2+347.3	Lt.			X			X			
4	SR 18	2+347.3	Lt.			X			X			
4	SR 18	2+384.1	Ctr.	X					X			
4	SR 18	2+445.4	Lt.			X			X			
4	SR 18	2+468.5	Lt.					X		X		
4	SR 18	2+480.0	Rt.					X	X			
4	SR 18	2+489.1	Lt.		X				X			
4	SR 18	2+491.1	Lt.			X				X		
4	SR 18	2+501.2	Rt.					X	X			
4	SR 18	2+512.9	Rt.			X				X		
4	SR 18	2+531.7	Lt.		X					X		
4	SR 18	2+538.6	Lt.			X			X			
4	SR 18	2+624.6	Lt.					X		X		
4	SR 18	2+709.0	Lt.			X				X		
4	SR 18	2+719.2	Lt.		X					X		
4	SR 18	2+720.5	Rt.			X				X		
4	SR 18	2+728.4	Rt.					X		X		
4	SR 18	2+729.0	Lt.			X				X		
4	SR 18	2+821.1	Lt.		X					X		
4	SR 18	2+821.4	Rt.			X				X		
4	SR 18	2+823.5	Lt.			X				X		
4	SR 18	2+898.8	Lt.		X				X			

PART	ROUTE	STATION	SIDE	ITEM TYPE (604)				638	WORK REQUIRED			REMARKS
				CATCH BASIN	MAN-HOLE	INLET	MONU-MENT BOX	WATER VALVE BOX	FEATHER TO TOP OF CASTING	ADJUST TO GRADE	NO WORK	
4	SR 18	2+906.0	Rt.					X		X		
4	SR 18	2+910.0	Rt.					X	X			
4	SR 18	2+921.7	Rt.	X						X		
4	SR 18	2+960.5	Lt.		X					X		
4	SR 18	3+022.9	Lt.		X					X		
4	SR 18	3+047.5	Rt.		X					X		
4	SR 18	3+050.7	Lt.	X					X			
4	SR 18	3+145.6	Rt.	X					X			
4	SR 18	3+145.6	Lt.		X					X		
4	SR 18	3+146.5	Lt.	X						X		
4	SR 18	3+149.4	Rt.		X					X		
4	SR 18	3+185.5	Rt.					X		X		
4	SR 18	3+268.0	Rt.		X					X		
4	SR 18	3+526.4	Rt.		X					X		



INLET ADJUSTED TO GRADE

Inlet shall be adjusted prior to placing of the finish surface. The method of adjusting inlets may be determined by the Contractor with approval of the Engineer.
The finish surface shall be 0.006m higher than the top of the grate. The removal of the existing curb as required, and the replacement curb, as per Item 609 Curbing, shall be constructed typical of the curb removed, as directed by the Engineer.
Payment shall be included with the Item 604, Inlet Adjusted to Grade.
Pavement shall be feathered to meet castings that are not to be adjusted, as directed by the Engineer.
Valve boxes and utility manholes shall be adjusted by their respective owners.

CALCULATED JEH
CHECKED ALS

PLAN NO.

UTILITY ADJUSTMENTS - PART 4

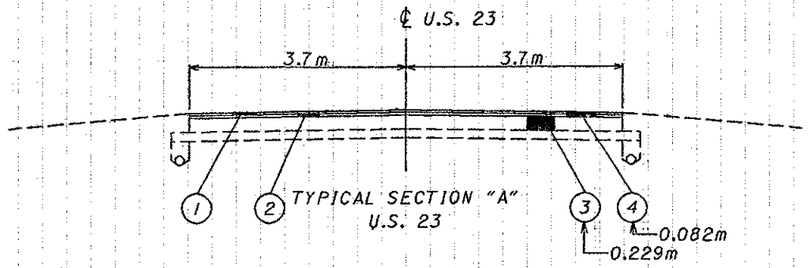
SEN-23-18.070(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

SEWOUSA.dgn

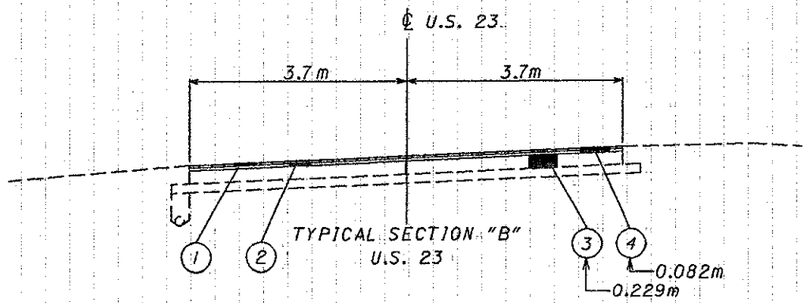
TYPICAL SECTIONS

(Sheet 1 of 3)

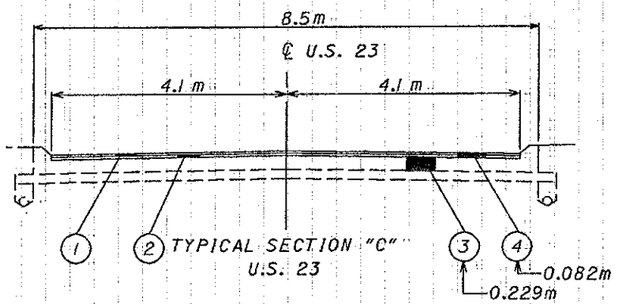
Existing Pavement:
Asphalt Concrete on 0.229m of concrete on a 0.152m blanket course.



Existing Pavement:
Asphalt Concrete on 0.229m of concrete on a 0.152m blanket course.



Existing Pavement:
Asphalt Concrete on 0.229m of concrete on a 0.152m blanket course.



(1) 0.038 meter - Item Special, Stone Mastic Asphalt Concrete Surface Course.
(2) 0.044 meter - Item Special, Stone Mastic Asphalt Concrete Intermediate Course.
(3) 0.203 meter or 0.229 meter - Item 255 Full Depth Pavement Removal and Rigid Replacement.
(4) Bituminous Pavement Planing

Note: The typical sections shown on these sheets are for the proper application of item 255, Full Depth Pavement Removal and Rigid Replacement. The locations and quantities are shown on sheets 23 to 34.

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DESIGNED ALS

PLAN NO.

TYPICAL SECTIONS

SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

23
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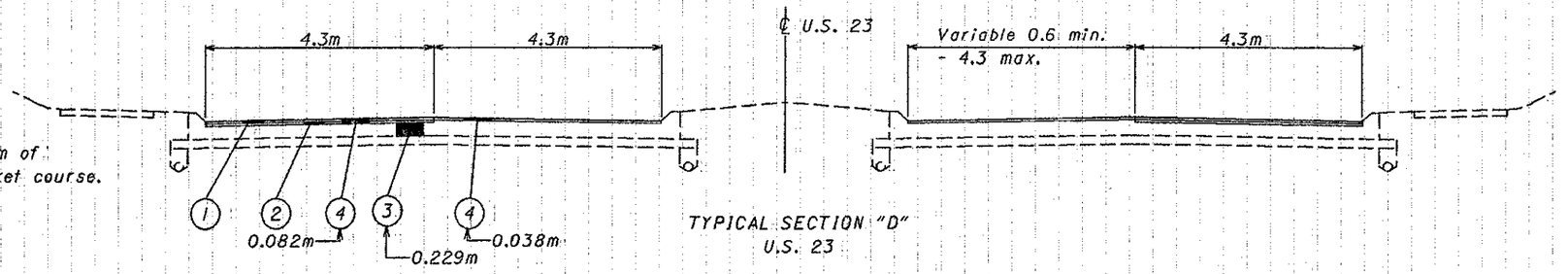
SEN23TYP.dgn

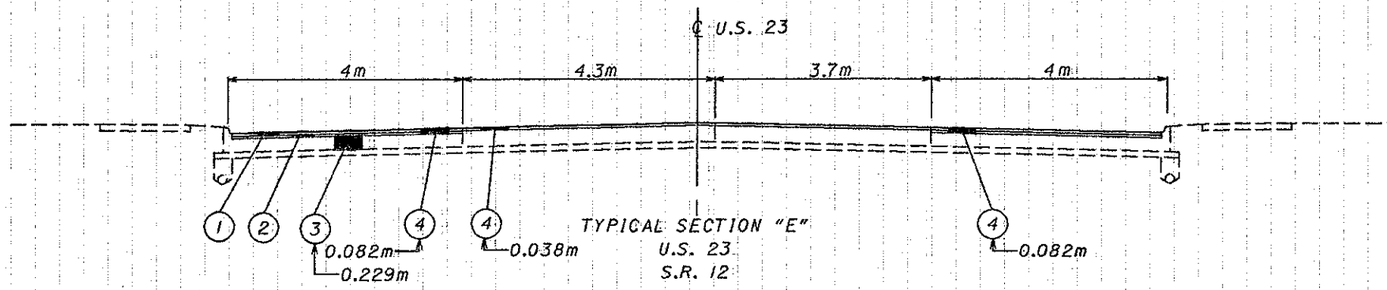
TYPICAL SECTIONS

(Sheet 2 of 3)



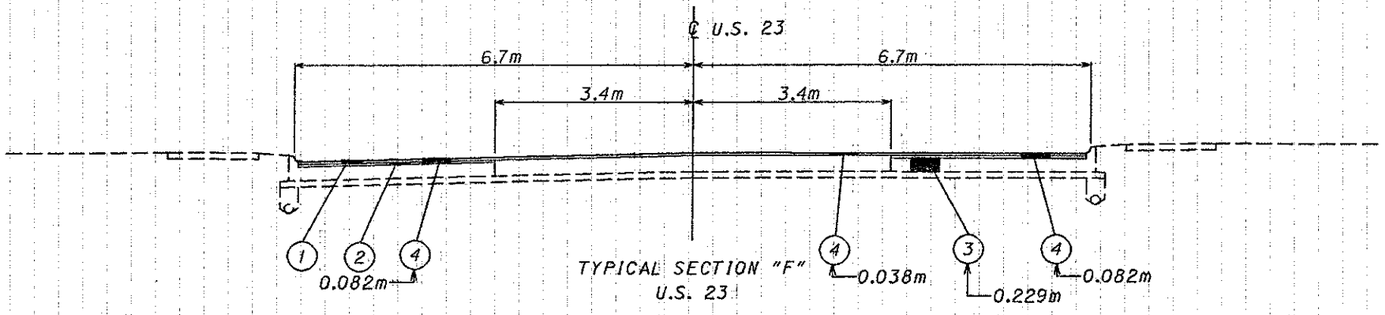
Existing Pavement:
Asphalt Concrete on 0.229m of concrete on a 0.152m blanket course.

TYPICAL SECTION "D"
U.S. 23



Existing Pavement:
Asphalt Concrete on 0.229m of concrete on a 0.152m blanket course.

TYPICAL SECTION "E"
U.S. 23
S.R. 12



Existing Pavement:
Asphalt Concrete on 0.229m of concrete on a 0.102m blanket course.

TYPICAL SECTION "F"
U.S. 23

CALCULATED JEH
CHECKED ALS

PLAN NO.

TYPICAL SECTIONS

SEN-23-18.070(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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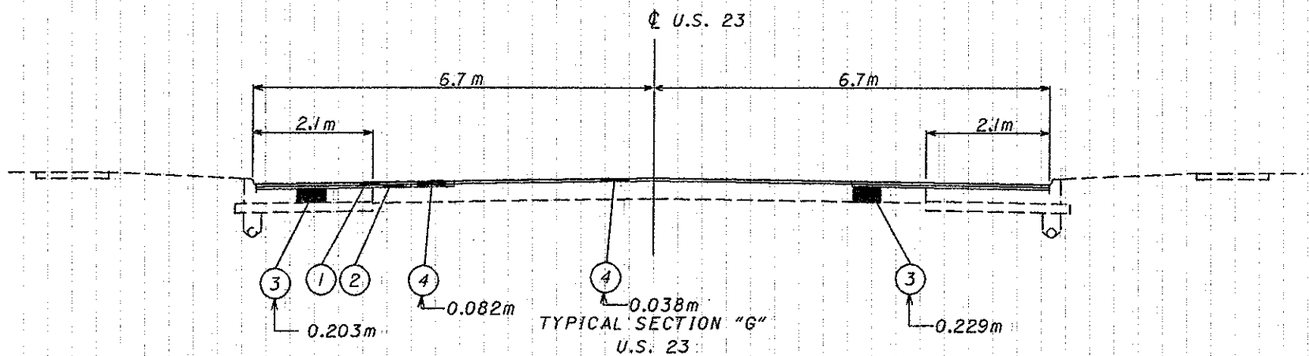
sen23typ.dgn

TYPICAL SECTIONS

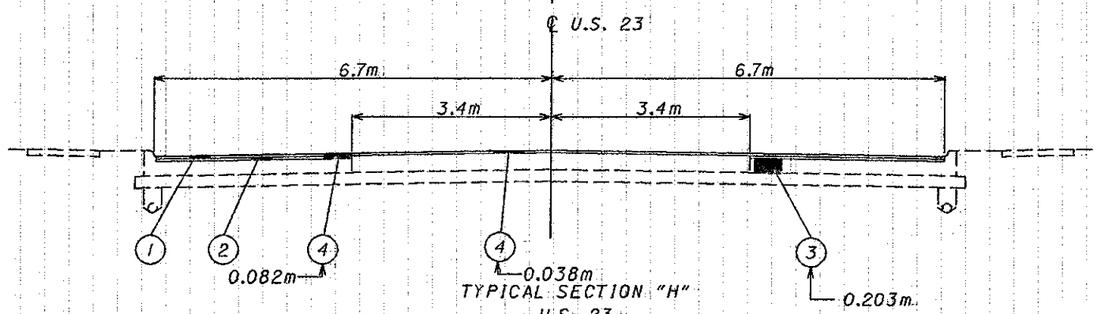
(Sheet 3 of 3)

Existing Pavement:
Outside (2.1m LT. & RT.)
Asphalt Concrete on 0.203m of concrete on a 0.102m blanket course.
Inside: Asphalt Concrete on 0.229m of concrete.



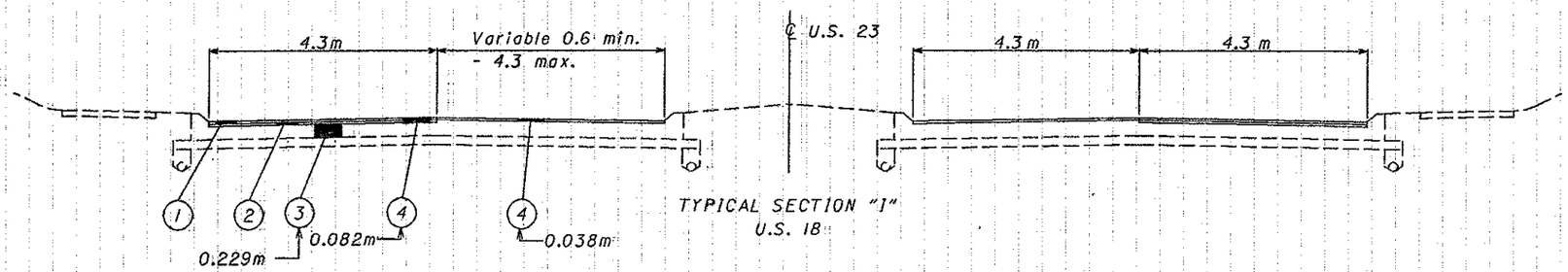
TYPICAL SECTION "G"
U.S. 23

Existing Pavement:
Asphalt Concrete on 0.203m of concrete on a 0.102m blanket course.



TYPICAL SECTION "H"
U.S. 23

Existing Pavement:
Asphalt Concrete on 0.229m of concrete on a 0.152m blanket course.



TYPICAL SECTION "I"
U.S. 18

sen23typ.dgn

CALCULATED JEH
CHECKED ALS

PLAN NO.

TYPICAL SECTIONS

SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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DEPARTMENT OF TRANSPORTATION

P - Pavement Width (Meter)

PART I ~ LOCATION TABLE (SHEET 1 OF 4)

PART	SIDE	STATION FROM or AT	STATION TO	LENGTH	WIDTH	LANE				202 CURB REMOVED	202 TRAFFIC ISLAND REMOVED	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.229 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS FS 0.229 M.	255 FULL DEPTH PAVEMENT SAWING	446 ASPHALT CONCRETE		609 CURB		612 TRAFFIC ISLAND	TYPICAL SECTION
															0.076 METER	0.102 METER	TYPE 2A	TYPE 3A		
				METER	P	L.D.	L.P.	R.P.	R.D.	METER	SQ. METER	SQ. METER	SQ. METER	METER	CU. METER		METER		SQ. METER	
1	Rt.&Lt.	18+072		1.8	7.3	X			X				13.1	20.0	1.0					A or B
1	Lt.	18+103		1.8	3.7	X							6.7	11.0	0.5					A or B
1	Rt.&Lt.	18+211		1.8	8.5	X			X	3.6			15.3	18.8	1.2			3.6		C
1	Lt.	18+284		1.8	4.3	X				1.8			7.7	10.4	0.6			1.8		C
1	Lt.	18+302		1.8	4.3	X				1.8			7.7	10.4	0.6			1.8		C
1	Lt.	18+335		1.8	4.3	X				1.8			7.7	10.4	0.6			1.8		C
1	Lt.	18+351		1.8	4.3	X				1.8			7.7	10.4	0.6		1.8			D
1	Lt.	18+390		1.8	4.3	X				1.8			7.7	10.4	0.6		1.8			D
1	Lt.	18+398		1.8	4.3	X				1.8			7.7	10.4	0.6		1.8			D
1	Lt.	18+414		1.8	4.3	X				1.8		7.7		10.4	0.6		1.8			D
1	Lt.	18+423		1.8	4.3	X						7.7		10.4	0.6					D
1	Rt.	18+428		1.8	4.3			X			0.4		7.7		0.6				0.4	D
1	Lt.	18+511		1.8	8.8	X	X					15.8		19.4	1.2					D
1	Rt.	18+521		1.8	4.4			X				7.9			0.6					D
1	Rt.	18+551		1.8	8.8			X	X	3.6		15.8		19.4	1.2		3.6			D
1	Rt.	18+564		1.8	8.8			X	X	3.6		15.8		19.4	1.2		3.6			D
1	Lt.	18+568		1.8	8.8	X	X			3.6		15.8		19.4	1.2		3.6			D
1	Lt.	18+599		1.8	8.8	X	X			3.6		15.8		19.4	1.2		3.6			D
1	Rt.	18+601		3.0	8.8			X	X	6.0		26.4		20.6	2.0		6.0			D
1	Rt.	18+612		1.8	4.4				X	1.8		7.9		10.6	0.6		1.8			
1	Rt.	18+624		1.8	8.8			X	X			15.8		23.0	1.2					
1	Rt.	18+653		1.8	8.8			X	X	3.6		15.8		19.4	1.2		3.6			
1	Lt.	18+663		1.8	8.8	X	X			3.6		15.8		19.4	1.2		3.6			
1	Rt.	18+687		1.8	8.8			X	X	1.8		15.8		21.2	1.2		1.8			
1	Rt.&Lt.	18+710		1.8	16.5	X	X	X	X	3.6		29.7		38.4	2.3		3.6			E
1	Rt.&Lt.	18+741		1.8	16.2	X	X	X	X	3.6		29.2		37.8	2.2		3.6			E
1	Lt.	18+750		1.8	4.1	X				1.8		7.4		10.0	0.6		1.8			E
1	Lt.	18+755		1.8	4.3		X					7.7		12.2	0.6					E
1	Rt.	18+763		1.8	7.8			X	X	1.8		14.0		17.4	1.1		1.8			E
1	Rt.&Lt.	18+772		1.8	16.2	X	X	X	X	3.6		29.2		37.8	2.2		3.6			E
1	Rt.&Lt.	18+786		1.8	8.2	X			X	3.6		14.8		20.0	1.1		3.6			E
1	Rt.&Lt.	18+820		1.8	16.2	X	X	X	X	3.6		29.2		37.8	2.2		3.6			E
1	Rt.	18+833		1.8	4.1				X	1.8		7.4		10.0	0.6		1.8			E
1	Lt.	18+843		1.8	4.1	X				1.8		7.4		10.0	0.6		1.8			E
1	Rt.&Lt.	18+908		1.8	16.2	X	X	X	X	3.6		29.2		37.8	2.2		3.6			E

SEWOPRT.dgn

CALCULATED JEH
CHECKED ALS

PLAN NO.

PAVEMENT REPAIRS - PART 1

SEN-23-1(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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DEPARTMENT OF TRANSPORTATION

P = Pavement Width (Meter)

PART 1 ~ LOCATION TABLE (SHEET 2 OF 4)

PART	SIDE	STATION FROM or AT	STATION TO	LENGTH	WIDTH	LANE L.D.	LANE L.P.	LANE R.P.	LANE R.D.	202 CURB REMOVED	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.229 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.203 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS FS 0.229 M.	255 FULL DEPTH PAVEMENT SAWING	446 ASPHALT CONCRETE 0.076 METER	446 ASPHALT CONCRETE 0.102 METER	609 CURB TYPE 2A	609 CURB TYPE 3A	612 CONCRETE MEDIAN	TYPICAL SECTION
				METER	P					METER	SQ. METER	SQ. METER	SQ. METER	METER	CU. METER		METER		SQ. METER	
1	Lt.	18+956		1.8	4.1	X				1.8	7.4			10.0	0.6		1.8			E
1	Lt.	19+017		1.8	4.1	X				1.8	7.4			10.0	0.6		1.8			E
1	Rt.&Lt.	19+038		1.8	16.2	X	X	X	X	3.6	29.2			37.8	2.2		3.6			E
1	Rt.	19+047		1.8	3.7			X			6.7			11.0	0.5					E
1	Rt.&Lt.	19+068		1.8	7.9		X	X			14.2			21.2	1.1					E
1	Rt.&Lt.	19+097		1.8	16.2	X	X	X	X	3.6	29.2			37.8	2.2		3.6			E
Suspend Part 1 - Sta. 19+128																				
Resume Part 1 - Sta. 20+284.2																				
1	Lt.	20+304		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
1	Rt.&Lt.	20+319		1.8	6.9	X		X		1.8	12.4			19.2	0.9		1.8			F
1	Lt.	20+339	20+378	39.0	3.5	X				39.0	136.5			46.0	10.4		39.0			F
1	Rt.	20+367		1.8	6.9			X	X	1.8	12.4			17.4	0.9		1.8			F
1	Lt.	20+375		1.8	3.4		X				6.1			10.4	0.5					F
1	Rt.	20+388		1.8	3.5				X	1.8	6.3			8.8	0.5		1.8			F
1	Rt.	20+397		1.8	6.9			X	X	1.8	12.4			17.4	0.9		1.8			F
1	Lt.	20+404		1.8	6.9	X	X			1.8	12.4			17.4	0.9		1.8			F
1	Lt.	20+413		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
1	Lt.	20+432		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
1	Lt.	20+474	20+511	37.0	3.5	X				37.0	129.5			44.0	9.8		37.0			F
1	Rt.	20+494		1.8	6.9			X	X	1.8	12.4			17.4	0.9		1.8			F
1	Rt.	20+529		1.8	6.9			X	X	1.8	12.4			17.4	0.9		1.8			F
1	Lt.	20+549		1.8	6.9	X	X			1.8	12.4			17.4	0.9		1.8			F
1	Lt.	20+555		1.8	3.4		X				6.1			10.4	0.5					F
1	Lt.	20+557		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
1	Rt.	20+565		1.8	6.9			X	X	1.8	12.4			17.4	0.9		1.8			F
1	Lt.	20+576		1.8	6.9	X	X			1.8	12.4			17.4	0.9		1.8			F
1	Rt.	20+592		1.8	3.5				X	1.8	6.3			8.8	0.5		1.8			F
1	Lt.	20+593		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
1	Rt.	20+611		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
1	Lt.	20+615		1.8	6.9	X	X			1.8	12.4			17.4	0.9		1.8			F
1	Rt.	20+619		1.8	3.5				X	1.8	6.3			8.8	0.5		1.8			F
1	Rt.	20+648		1.8	6.9			X	X		12.4			19.2	0.9					F
1	Rt.	20+664		1.8	3.5				X	1.8	6.3			8.8	0.5		1.8			F
1	Rt.	20+687	20+709	22.0	3.5				X	22.0	29.0			29.0	2.2		22.0			F

CALCULATED JEH
CHECKED ALS

PLAN NO.

PAVEMENT REPAIRS - PART 1

SEN-23-118.070(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

27
50

SEWOPRT.dgn

DEPARTMENT OF TRANSPORTATION

P = Pavement Width (Meter)

PART I ~ LOCATION TABLE (SHEET 3 OF 4)

▲ See Detail "B", Sheet No. 34

PART	SIDE	STATION FROM or AT	STATION TO	LENGTH	WIDTH	LANE L.D.	LANE L.P.	LANE R.P.	LANE R.D.	202 CURB REMOVED	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.229 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.203 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS FS 0.229 M.	255 FULL DEPTH PAVEMENT SAWING	446 ASPHALT CONCRETE 0.076 METER	446 ASPHALT CONCRETE 0.102 METER	609 CURB TYPE 2A	609 CURB TYPE 3A	612 CONCRETE MEDIAN	TYPICAL SECTION
				METER	P					METER	SQ. METER	SQ. METER	SQ. METER	METER	CU. METER		METER		SQ. METER	
I	Lt.	20+690		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
I	Rt.	20+730	20+745	15.0	3.5				X	15.0	52.5			22.0	4.0		15.0			F
I	Lt.	20+735		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
I	Lt.	20+790		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
I	Rt.	20+803		1.8	6.9			X	X	1.8	12.4			17.4	0.9		1.8			F
I	Lt.	20+811		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
I	Rt.	20+835	20+845	10.0	3.5				X	10.0	35.0			17.0	2.7		10.0			F
I	Rt.	20+843	20+845	2.0	3.4			X			6.8			8.8	0.5					F
I	Lt.	20+849		1.8	6.9	X	X			1.8	12.4			17.4	0.9		1.8			F
I	Lt.	20+881		1.8	3.4		X				6.1			10.4	0.5					F
I	Rt.	20+884		1.8	6.9			X	X	1.8	12.4			17.4	0.9		1.8			F
I	Rt.	20+900		1.8	3.5				X	1.8	6.3			8.8	0.5		1.8			F
I	Lt.	20+909	20+919	10.0	3.5	X				10.0	35.0			17.0	2.7		10.0			F
I	Rt.	20+917	20+934	17.0	6.9			X	X	17.0	117.3			47.8	8.9		17.0			F
I	Lt.	20+933		1.8	6.9	X	X			1.8	12.4			17.4	0.9		1.8			F
I	Lt.	20+967		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
I	Rt.	20+972	20+989	17.0	3.5				X	17.0	59.5			24.0	4.5		17.0			F
I	Lt.	20+984		1.8	3.5	X				1.8	6.3			8.8	0.5		1.8			F
I	Lt.	20+998	21+011	13.0	3.5	X				13.0	45.5			20.0	3.5		13.0			F
I	Rt.	21+002		1.8	3.5				X	1.8	6.3			8.8	0.5		1.8			F
I	Rt.	21+026	21+039	13.0	3.5				X	13.0	45.5			20.0	3.5		13.0			F
I	Lt.	21+052	21+079	27.0	3.5	X				27.0	94.5			34.0	7.2		27.0			F
I	Lt.	21+101		1.8	2.3	X				1.8		4.1		6.4		0.4	1.8			G
I	Lt.	21+124		1.8	2.3	X				1.8		4.1		6.4		0.4	1.8			G
I	Lt.	21+150		1.8	2.3	X				1.8		4.1		6.4		0.4	1.8			G
I	Rt.	21+182		1.8	2.3				X	1.8		4.1		6.4		0.4	1.8			G
I	Lt.	21+205		1.8	2.3	X				1.8		4.1		6.4		0.4	1.8			G
I	Lt.	21+247	21+251	4.0	2.3	X				4.0		9.2		8.6		0.9	4.0			G
I	Lt.	21+307		1.8	6.9			X	X	1.8	12.4 ▲			17.4		1.3	1.8			G
I	Rt.	21+330		1.8	6.9			X	X	1.8	12.4 ▲			17.4		1.3	1.8			G
I	Lt.	21+331		1.8	6.9	X	X			1.8	12.4 ▲			17.4		1.3	1.8			G
I	Rt.	21+356		1.8	2.3				X	1.8		4.1		6.4		0.4	1.8			G
I	Lt.	21+364		1.8	2.3	X				1.8		4.1		6.4		0.4	1.8			G
I	Rt.	21+373		1.8	2.3				X	1.8		4.1		6.4		0.4	1.8			G
I	Lt.	21+384		1.8	2.3	X				1.8		4.1		6.4		0.4	1.8			G

CALCULATED JEH CHECKED ALS

PLAN NO.

PAVEMENT REPAIRS - PART I

SEN-23-118.070(N20.284)
WO0-23-0.000
SEN-12-0.000 SEN-18-2.108

28
50

SEWOPRT.dgn

DEPARTMENT OF TRANSPORTATION

P = Pavement Width (Meter)

PART 1 ~ LOCATION TABLE (SHEET 4 OF 4)

▲ See Detail "B", Sheet No. 34

PART	SIDE	STATION FROM or AT	STATION TO	LENGTH	WIDTH	LANE LD.	LANE LP.	LANE RP.	LANE RD.	202 CURB REMOVED	202 TRAFFIC ISLAND REMOVED	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.229 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.203 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS FS 0.229 M.	255 FULL DEPTH PAVEMENT SAWING	446 ASPHALT CONCRETE 0.076 METER	446 ASPHALT CONCRETE 0.102 METER	609 CURB TYPE 2A	609 CURB TYPE 3A	612 TRAFFIC ISLAND	TYPICAL SECTION
				METER	P					METER	CU. METER	SQ. METER	SQ. METER	SQ. METER	METER	CU. METER		METER		SQ. METER	
1	Rt.	21+402		1.8	2.3				X	1.8			4.1		6.4		0.4	1.8			G
1	Rt.	21+409		1.8	2.3				X	1.8			4.1		6.4		0.4	1.8			G
1	Rt.	21+416		1.8	2.3				X	1.8			4.1		6.4		0.4	1.8			G
1	Lt.	21+419		1.8	6.9	X	X			1.8		12.4▲			17.4		1.3	1.8			G
1	Lt.	21+434		1.8	2.3	X				1.8			4.1		6.4		0.4	1.8			G
1	Rt.	21+435		1.8	2.3				X	1.8			4.1		6.4		0.4	1.8			G
1	Lt.	21+447		1.8	2.3	X				1.8			4.1		6.4		0.4	1.8			G
1	Rt.	21+463		1.8	6.9			X	X	1.8		12.4▲			17.4		1.3	1.8			G
Part 1 Totals - Carried to General Summary										404.6	0.4	1260.4	475.7	89.0	1716.6	128.9	13.4	404.6	9.0	0.4	

CALCULATED JEH
CHECKED ALS

PLAN NO.

PAVEMENT REPAIRS - PART 1

SEN-23-118.070(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

29
50

SEWOPRT.dgn

DEPARTMENT OF TRANSPORTATION

P = Pavement Width (Meter)

PART 2 ~ LOCATION TABLE (SHEET 1 OF 2)

PART	SIDE	STATION FROM or AT	STATION TO	LENGTH	WIDTH	LANE L.D.	LANE L.P.	LANE R.P.	LANE R.D.	202 CURB REMOVED	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.229 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.203 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS FS 0.203 M.	255 FULL DEPTH PAVEMENT SAWING	446 ASPHALT CONCRETE 0.076 METER	446 ASPHALT CONCRETE 0.102 METER	609 CURB, TYPE 2A	612 CONCRETE MEDIAN	TYPICAL SECTION
				METER	P					METER	SQ. METER	SQ. METER	SQ. METER	METER	CU. METER		METER	SQ. METER	
2	Lt.	0+11	0+17	6.0	3.5	X				6.0		21.0		13.0		2.1	6.0		H
2	Rt.	0+13		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Rt.	0+34		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Lt.	0+36		1.8	6.9	X	X			1.8		12.4		17.4		1.3	1.8		H
2	Lt.	0+52		1.8	6.9	X	X			1.8		12.4		17.4		1.3	1.8		H
2	Lt.	0+53		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Rt.&Lt.	0+77		1.8	10.4	X		X	X	3.6		18.7		26.2		1.9	3.6		H
2	Lt.	0+93		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+109		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+133		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+158		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Rt.	0+159		3.0	3.5				X	3.0		10.5		10.0		1.1	3.0		H
2	Lt.	0+168		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+186		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+236		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Rt.	0+275		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Rt.	0+307		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Lt.	0+323		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Rt.	0+330		1.8	3.5				X	1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+343		1.8	6.9	X	X			1.8		12.4		17.4		1.3	1.8		H
2	Rt.	0+346		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Lt.	0+353		1.8	6.9	X	X			1.8		12.4		17.4		1.3	1.8		H
2	Rt.	0+357		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Rt.	0+369		1.8	3.5				X	1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+380		1.8	6.9	X	X			1.8		12.4		17.4		1.3	1.8		H
2	Rt.	0+384		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Lt.	0+405		1.8	6.9	X	X			1.8		12.4		17.4		1.3	1.8		H
2	Lt.	0+420		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Rt.	0+425		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Lt.	0+430		1.8	6.9	X	X			1.8		12.4		17.4		1.3	1.8		H
2	Rt.	0+433		1.8	6.9			X	X	1.8		12.4		17.4		1.3	1.8		H
2	Lt.	0+444		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+457		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+476		1.8	3.5	X				1.8		6.3		8.8		0.6	1.8		H
2	Lt.	0+522		1.8	4.6	X				1.8			8.3	11.0		0.8	1.8		

CALCULATED JEH
CHECKED ALS

PLAN NO.

PAVEMENT REPAIRS - PART 2

SEN-23-118.070(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

30
50

SEWOPRT.dgn

DEPARTMENT OF TRANSPORTATION

P = Pavement Width (Meter)

PART 2 ~ LOCATION TABLE (SHEET 2 OF 2)

PART	SIDE	STATION FROM or AT	STATION TO	LENGTH METER	WIDTH P	LANE L.D.	LANE L.P.	LANE R.P.	LANE R.D.	202 CURB REMOVED METER	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.229 M. SQ. METER	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.203 M. SQ. METER	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS FS 0.203 M. SQ. METER	255 FULL DEPTH PAVEMENT SAWING METER	446 ASPHALT CONCRETE 0.076 METER CU. METER	446 ASPHALT CONCRETE 0.102 METER CU. METER	609 CURB, TYPE 2A METER	612 CONCRETE MEDIAN SQ. METER	TYPICAL SECTION
2	Rt.	0+524		1.8	7.9				X	3.6			14.2	15.8		1.4	3.6		
2	Rt.&Lt.	0+556		1.8	12.2	X			X	5.4			22.0	24.4		2.2	5.4		
2	Lt.	0+568		1.8	7.0	X							12.6	14.0		1.3			
Part 2 Totals - Carried to General Summary										79.2		349.2	57.1	54.2		41.3	79.2		

CHECKED JEH
CHECKED ALS

PLAN NO.

PAVEMENT REPAIRS - PART 2

SEN-23-118.070(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

31
50

SEWOPRT.dgn

DEPARTMENT OF TRANSPORTATION

P - Pavement Width (Meter) S - Shoulder Width

PART 3 ~ LOCATION TABLE (SHEET 1 OF 1)

PART	SIDE	STATION FROM or AT	STATION TO	LENGTH	WIDTH	LANE LD.	LANE LP.	LANE RP.	LANE RD.	202 CURB REMOVED	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.229 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.203 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS FS 0.229 M.	255 FULL DEPTH PAVEMENT SAWING	446 ASPHALT CONCRETE 0.076 METER	446 ASPHALT CONCRETE 0.102 METER	609 CURB, TYPE 2A	612 CONCRETE MEDIAN	TYPICAL SECTION
				METER	P					METER	SQ. METER	SQ. METER	SQ. METER	METER	CU. METER		METER	SQ. METER	
3	Rt.&Lt.	0-040		1.8	12.0	X	X	X		1.8	21.6			29.4	1.6		1.8		E
3	Rt.&Lt.	0-030		1.8	7.8	X		X		1.8	14.0			21.0	1.1		1.8		E
3	Rt.&Lt.	0-017		1.8	7.9		X	X			14.2			21.2	1.1				E
3	Rt.&Lt.	0+025		1.8	7.9		X	X			14.2			21.2	1.1				E
3	Rt.&Lt.	0+082		1.8	16.2	X	X	X	X	3.6	29.2			37.8	2.2		3.6		E
3	Rt.&Lt.	0+102		1.8	16.2	X	X	X	X	3.6	29.2			37.8	2.2		3.6		E
3	Rt.&Lt.	0+127		1.8	12.0	X	X	X		1.8	21.6			29.4	1.6		1.8		E
3	Rt.&Lt.	0+155		1.8	16.2	X	X	X	X	3.6	29.2			37.8	2.2		3.6		E
3	Rt.&Lt.	0+172		1.8	16.2	X	X	X	X	3.6	29.2			37.8	2.2		3.6		E
3	Rt.&Lt.	0+203		1.8	16.2	X	X	X	X	3.6	29.2			37.8	2.2		3.6		E
3	Rt.&Lt.	0+234		1.8	16.2	X	X	X	X	3.6	29.2			37.8	2.2		3.6		E
3	Rt.	0+273		1.8	7.8			X	X	1.8	14.0			19.2	1.1		1.8		E
3	Rt.	0+291		1.8	4.1				X	1.8	7.4			10.0	0.6		1.8		E
3	Rt.&Lt.	0+297		1.8	12.0	X	X	X		1.8	21.6			29.4	1.6		1.8		E
3	Rt.	0+339		3.0	7.8			X	X	3.0	23.4			21.6	1.8		3.0		E
3	Rt.&Lt.	0+369		3.7	16.2	X	X	X	X	7.4	59.9			43.5	4.6		7.4		E
3	Lt.	0+396		1.8	8.4	X	X			1.8	15.1			20.4	1.1		1.8		E
3	Rt.&Lt.	0+417		1.8	16.2	X	X	X	X	3.6	29.2			37.8	2.2		3.6		E
Part 3 Totals - Carried to General Summary										48.2	431.4			530.9	32.7		48.2		

SEWOPRT.dgn

CALCULATED JEH CHECKED ALS

PLAN NO.

PAVEMENT REPAIRS - PART 3

SEN-23-1(18.07)X(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

32
50

DEPARTMENT OF TRANSPORTATION

P = Pavement Width (Meter) S = Shoulder Width (Meter)

PART 4 ~ LOCATION TABLE (SHEET 1 OF 1)

PART	SIDE	STATION FROM or AT	STATION TO	LENGTH	WIDTH	LANE				202 CURB REMOVED	253 PAVEMENT REPAIR 0.152 M. SEE DETAIL "A" SHEET NO.34	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.229 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS C 0.203 M.	255 FULL DEPTH PAVT REMOVAL & RIGID REPLACEMENT CLASS FS 0.229 M.	255 FULL DEPTH PAVEMENT SAWING	446 ASPHALT CONCRETE		609 CURB, TYPE 2A	TYPICAL SECTION
																0.102M	0.076M		
				METER	P	L.D.	L.P.	R.P.	R.D.	METER	SQ. METER	SQ. METER	SQ. METER	SQ. METER	METER	CU. METER		METER	
4(C)	Lt.	2+158		1.8	5.2	X				3.6				9.4	10.4		0.7	3.6	1
4(C)	Lt.	2+209		1.8	5.9	X				3.6				10.6	11.8		0.8	3.6	1
4(C)	Lt.	2+223	2+227	4.0	6.4	X				8.0				25.6	12.8		1.9	8.0	1
4(C)	Lt.	2+257		1.8	4.4	X				3.6				7.9	8.8		0.6	3.6	1
4(C)	Lt.	2+279		1.8	4.4	X				3.6				7.9	8.8		0.6	3.6	1
4(C)	Rt.	2+286		1.8	4.4				X	1.8		7.9			10.6		0.6	1.8	1
4(C)	Lt.	2+298		1.8	4.4	X				1.8		7.9			10.6		0.6	1.8	1
4(C)	Rt.	2+338	2+347	9.0	8.8			X	X	18.0		15.8			26.6		1.2	18.0	1
4(C)	Lt.	2+347		1.8	8.7	X	X			3.6		15.7			21.0		1.2	3.6	1
4(C)	Rt.	2+367		1.8	4.4			X				7.9			12.4		0.6		1
4(C)	Rt.	2+392		1.8	8.8			X	X	3.6		15.8			21.2		1.2	3.6	1
4(C)	Lt.	2+412		1.8	8.8			X	X	3.6		15.8			21.2		1.2	3.6	1
4(C)	Lt.	2+426		1.8	4.4	X				1.8		7.9			10.6		0.6	1.8	1
4(C)	Lt.	2+431		1.8	8.8	X	X			3.6		15.8			21.2		1.2	3.6	1
4(C)	Rt.	2+439		1.8	4.4				X	1.8		7.9			10.6		0.6	1.8	1
4(C)	Lt.	2+462		1.8	8.8	X	X			3.6		15.8			21.2		1.2	3.6	1
Part 4 - City Totals										(65.6)		(134.2)		(61.4)	(239.8)		(14.8)	(65.6)	
					S	L.S.	L.P.	R.P.	R.S.										
4(R)	Rt.	6+700	6+850	150	0.8				X		18.2								
4(R)	Lt.	7+750	7+850	100	0.8	X					12.2								
4(R)	Rt.&Lt.	9+158	9+167	9	1.6	X			X		2.2								
4(R)	Rt.&Lt.	9+184.5	9+200	15.5	1.6	X			X		3.8								
4(R)	Lt.	9+880	9+920	40	0.8	X					4.9								
Part 4 - Rural Totals											(41.3)								
Part 4 Totals - Carried to General Summary										65.6	41.3	134.2		61.4	239.8		14.8	65.6	

Note: All locations are approximate. The engineer shall field verify all locations prior to the beginning of work. Any adjustments necessary shall be as directed by the engineer.

ENGINEER JEH CHECKED ALS

PLAN NO.

PAVEMENT REPAIRS - PART 4

SEN-23-1(18,070)(20,284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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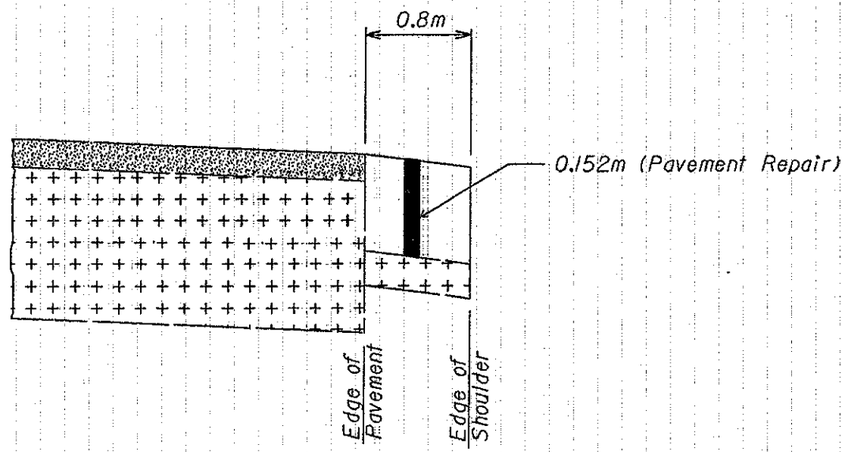
SEWOPRT.dgn

CALCULATED JEH
CHECKED ALS

PLAN NO.

PAVEMENT DETAILS

Detail "A" (Part 4)

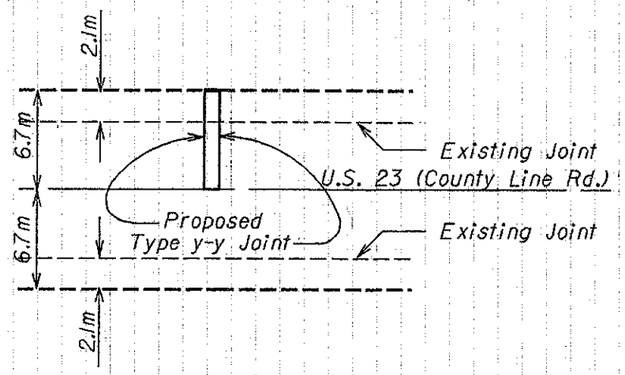


LEGEND

Asphalt

Existing base material

Detail "B" (Part 1)



See Typical Section "G"
Sheet No. 25

SEN-23-(18.070)X(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

SEWOPD.dgn

DEPARTMENT OF TRANSPORTATION

CALCULATED JEH
CHECKED ALS

DETAIL	
1	MAINLINE DIVIDED
1	TYPICAL SPACING

DETAIL	
2	TAPERED ACCELERATION LANE
3	DECELERATION LANE
4	PARALLEL ACCELERATION LANE
5	MULTILANE DIVIDED / EXPRESSWAY

DETAIL	
6	STOP APPROACH
7	ONE LANE APPROACH w/ LT.TURN LANE
8	THRU APPROACH
9	TWO LANE APPROACH w/ LT.TURN LANE

DETAIL	
10	4 LANE DIVIDE TO 2 LANE TRANSITION
11	4 LANE UNDIVIDE TO 2 LANE TRANSITION
12	2 LANE NARROW BRIDGE
13	TWO WAY LEFT TURN
14	ONE LANE BRIDGE
15	HORIZONTAL CURVE

16	HORIZONTAL CURVE ALTERNATE
17	STOP APPROACH ALTERNATE
GAP	CENTERLINE AT 24 M. TYPICAL

PART	LOCATION				DETAIL	RPM	PRISMATIC RETRO-REFLECTOR	RAISED PAVEMENT MARKER REMOVED FOR STORAGE EACH	INSTALLATION ONLY		PRISMATIC RETRO-REFLECTOR COLORS						REMARKS
	COUNTY	ROUTE	SLK SECTION FROM	SLK SECTION TO					RPM		ONE-WAY WHITE	ONE-WAY YELLOW	TWO-WAY WHITE/WHITE	TWO-WAY YELLOW/YELLOW	TWO-WAY WHITE/RED		
4	SEN	SR 18	3+976.3	9+920.0	Gap			226	248					248			Fostoria Corp. to Co. Rd. 5
Part 4-Totals Carried to General Summary								226	248					248			

PLAN NO.

RPM LOCATION SUB-SUMMARY

SEN-23-18.070\(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

CO.	ROUTE	STATION FROM	STATION TO	642 QUANTITIES CENTER LINE KILOMETERS TOTAL	DASHED	SOLID LEFT	SOLID DOUBLE	SOLID RIGHT	642 CENTER LINE
SEN	U.S. 23	18+070	18+394	0.324			0.648		PART 1
SEN	U.S. 23	18+674	19+128	0.454			0.908		PART 1
SEN	U.S. 23	20+284.2	21+466.7	1.183			2.365		PART 1
SEN	U.S. 23	0+000	0+497	0.497			0.994		PART 2
WOO	U.S. 23	0+582	0+605	0.023			0.092		PART 2
WOO	U.S. 23	0+605	0+653	0.048			0.096		PART 2
SEN	S.R. 12	0-045	0+420	0.465			0.930		PART 3
SEN	S.R. 18	2+540	3+946	1.406			2.812		PART 4 (CITY)
SEN	S.R. 18	3+946	3+976.3	0.030	0.030	0.030			PART 4 (CITY)
SEN	S.R. 18	3+976.3	4+281	0.305	0.305				PART 4 (RURAL)
SEN	S.R. 18	4+281	4+410	0.129	0.129			0.129	PART 4 (RURAL)
SEN	S.R. 18	4+410	4+456	0.046			0.092		PART 4 (RURAL)
SEN	S.R. 18	4+456	4+567	0.111	0.111	0.111			PART 4 (RURAL)
SEN	S.R. 18	4+567	9+748	5.181	5.181				PART 4 (RURAL)
SEN	S.R. 18	9+748	9+840	0.092	0.092			0.092	PART 4 (RURAL)
SEN	S.R. 18	9+840	9+854	0.014			0.028		PART 4 (RURAL)
SEN	S.R. 18	9+854	9+920	0.066	0.066	0.066			PART 4 (RURAL)
CENTER LINE TOTAL				10.374	5.914	0.207	8.965	0.221	

CO.	ROUTE	STATION FROM	STATION TO	WHITE EDGE LINE QUANTITIES TOTAL KILOMETERS	WHITE HWY. KILOMETERS	WHITE RAMP KILOMETERS	YELLOW EDGE LINE QUANTITIES TOTAL KILOMETERS	YELLOW HWY. KILOMETERS	YELLOW RAMP KILOMETERS	642 EDGE LINE
SEN	U.S. 23	18+070	18+125.5	0.111	0.056					PART 1, Rt.&Lt.
WOO	U.S. 23	0+543.3	0+562.7	0.019	0.019					PART 2, Rt.
WOO	U.S. 23	0+562.7	0+653	0.180	0.090					PART 2, Rt.&Lt.
SEN	S.R. 18	2+520	3+976.3	1.456	1.456					PART 4, Rt. (CITY)
SEN	S.R. 18	2+539	3+976.3	1.473	1.473					PART 4, Lt. (CITY)
SEN	S.R. 18	3+976.3	9+920	11.888	5.944					PART 4, Rt.&Lt. (RURAL)
EDGE LINE TOTAL				15.127	9.038					

CALCULATED JEH
CHECKED ALS

PLAN NO.

PAVEMENT MARKING

SEN-23-(18.070)(20.284)
WOO-23-0.000
SEN-12-0.000
SEN-18-2.108

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SEWOPM.dgn

ALL QUANTITIES CARRIED TO GENERAL SUMMARY

CO.	ROUTE	STATION FROM	STATION TO		642 QUANTITIES LANE LINE KILOMETERS TOTAL	DASHED	SOLID			642 LANE LINE REMARKS
SEN	U.S. 23	18+504.5	19+128		0.624	0.624				PART 1, Rt.
SEN	U.S. 23	18+564	19+128		0.564	0.564				PART 1, Lt.
SEN	U.S. 23	20+284.2	21+466.7		2.366	2.366				PART 1, Rt.&Lt.
WOO	U.S. 23	0+000	0+392		0.392	0.392				PART 2, Rt.
WOO	U.S. 23	0+000	0+491		0.491	0.491				PART 2, Lt.
SEN	S.R. 12	0+000	0+420		0.840	0.840				PART 3, Rt.&Lt.
SEN	S.R. 18	2+453.1	2+469		0.016		0.016			PART 4, Rt. (CITY)
LANE LINE TOTAL					5.293	5.277	0.016			

CO.	AUXILIARY MARKING ROUTE	STATION		644 0.610 m TRANSVERSE LINES WHITE METER	0.610 m TRANSVERSE LINES YELLOW METER	0.610 m STOP LINES METER	0.305 m CROSS-WALK LINES WHITE METER	WORD ON PAVEMENT ONLY 1.829 m EACH	WORD ON PAVEMENT SCHOOL 1.829 m EACH	LANE ARROWS TURN LEFT EACH	LANE ARROWS TURN RIGHT EACH	LANE ARROWS THRU EACH	LANE ARROWS COMB. EACH	R.R. SYMBOL ON PAV'T EACH	DOTTED LINES WHITE METER	DOTTED LINES YELLOW METER	REMARKS
SEN	U.S. 23	18+070	19+128				159		2		1	5					PART 1
SEN	U.S. 23	20+284.2	21+466.7			40	214		4	1			1				PART 1
WOO	U.S. 23	0+000	0+653			26	54										PART 2
SEN	S.R. 12	0-045	0+420			8	64		2	1		1					PART 3
SEN	S.R. 18	2+147.8	3+976.3		128	19	69			3	3						PART 4 (CITY)
AUXILIARY MARKING TOTALS					128	93	560		8	5	4	6	1				

CALCULATED JEH CHECKED ALS

PLAN NO.

PAVEMENT MARKING

SEN-23-18.070\20.284
WOO-23-0.000
SEN-12-0.000 SEN-18-2.108

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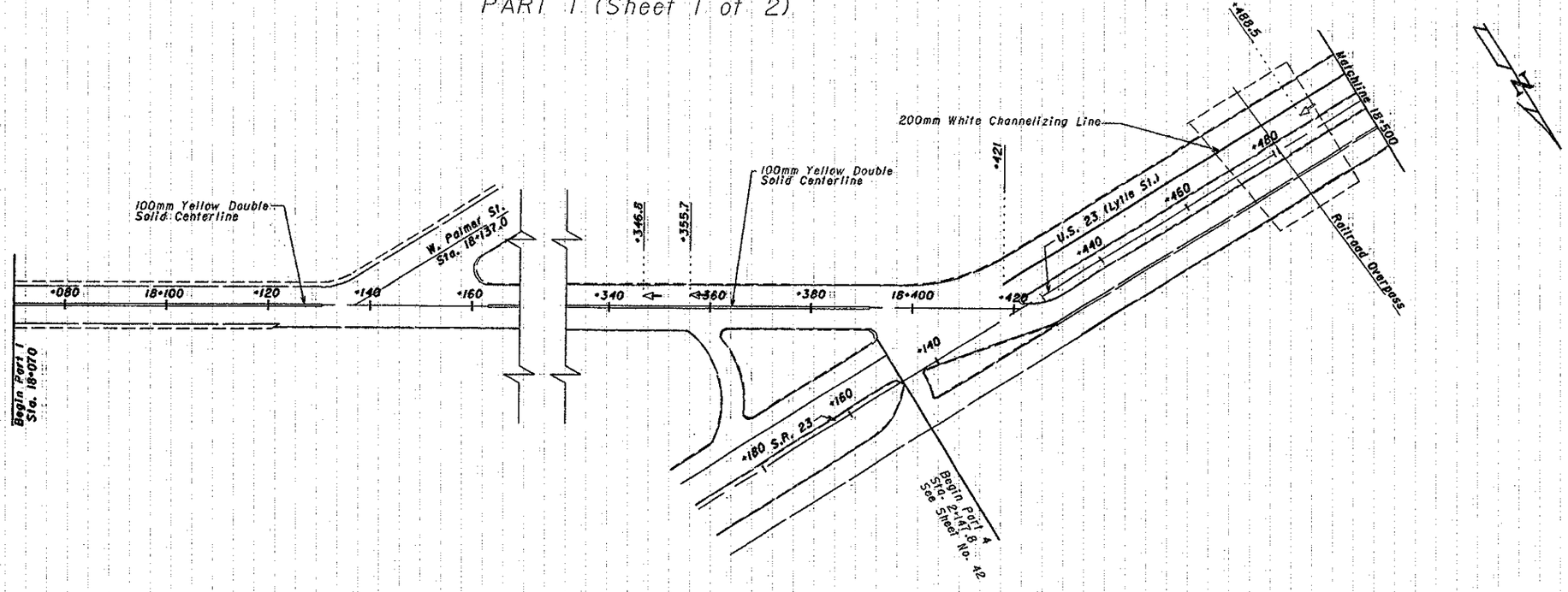
SEWOPM.dgn

PAVEMENT MARKING

PART 1 (Sheet 1 of 2)



CALCULATED JEH
CHECKED ALS

PLAN NO.

PAVEMENT MARKING - PART 1

SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

38
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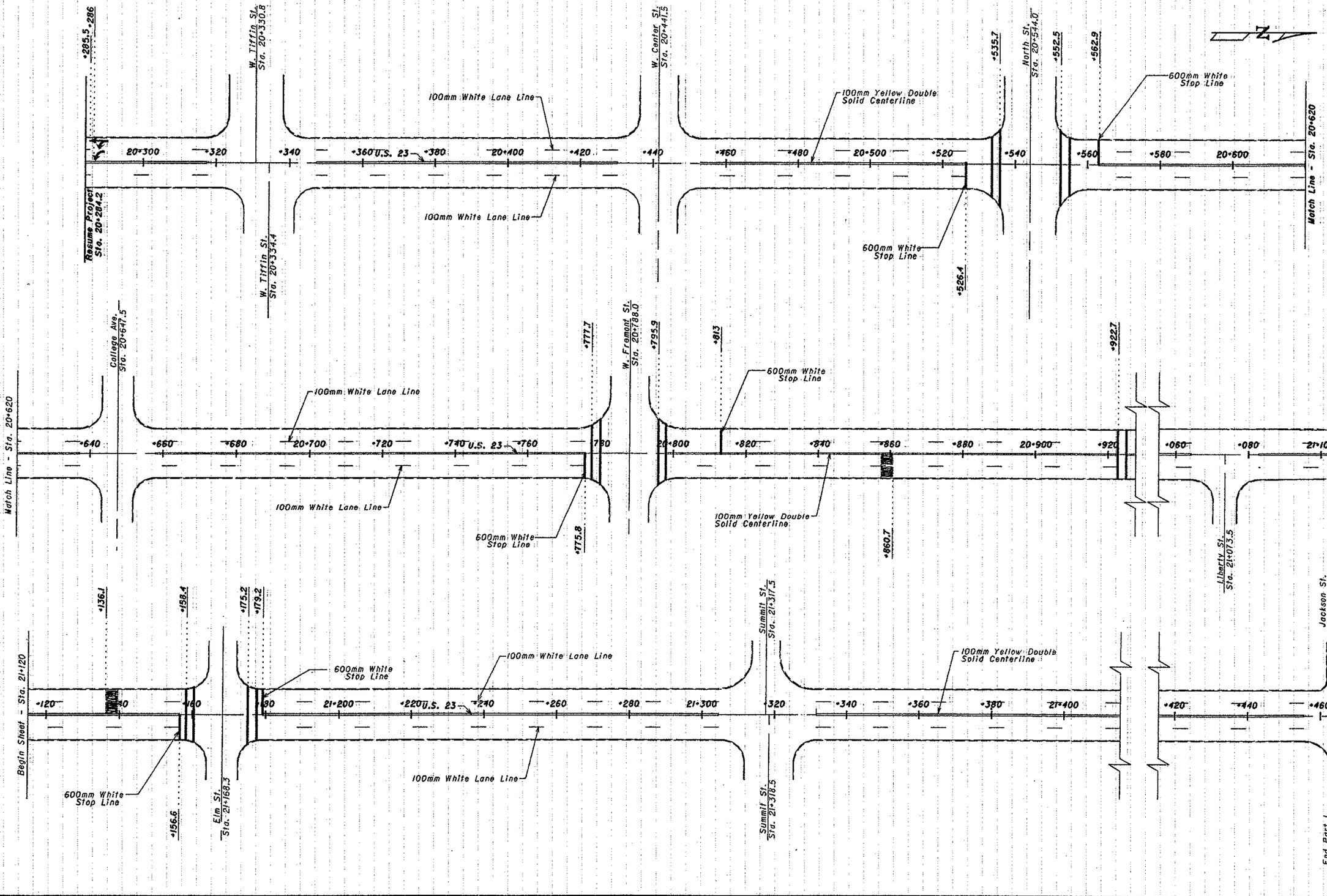
sen23pml.dgn

PAVEMENT MARKING

PART 1 (Sheet 2 of 2)



CHECKED JEH
DRAWN ALS

PLAN NO.

PAVEMENT MARKING - PART 1

SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

39
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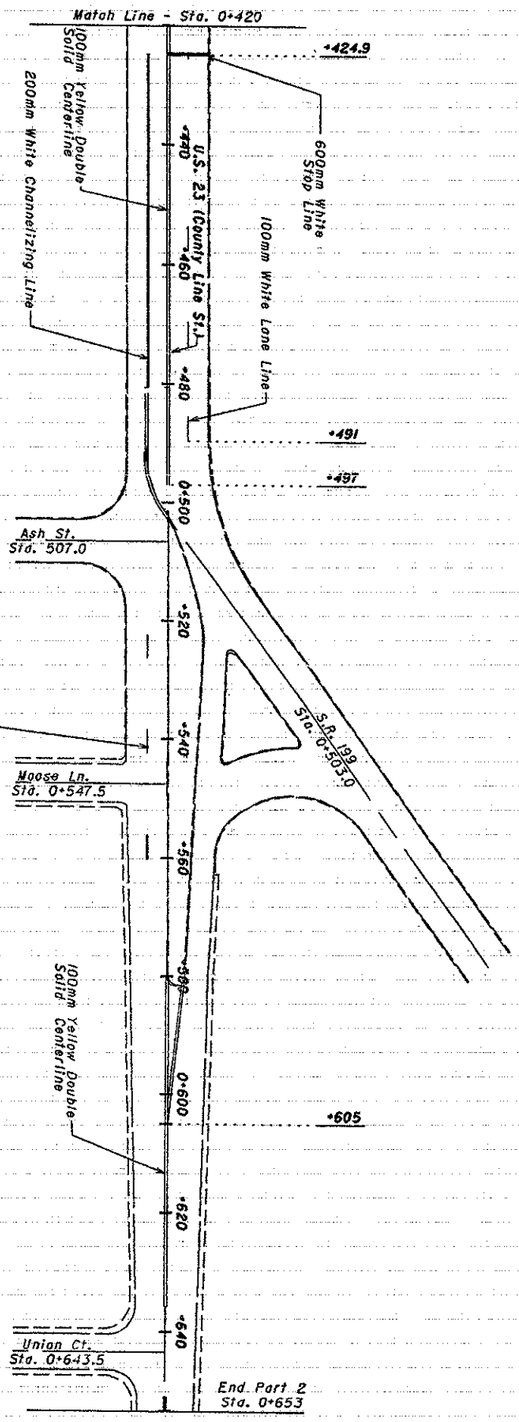
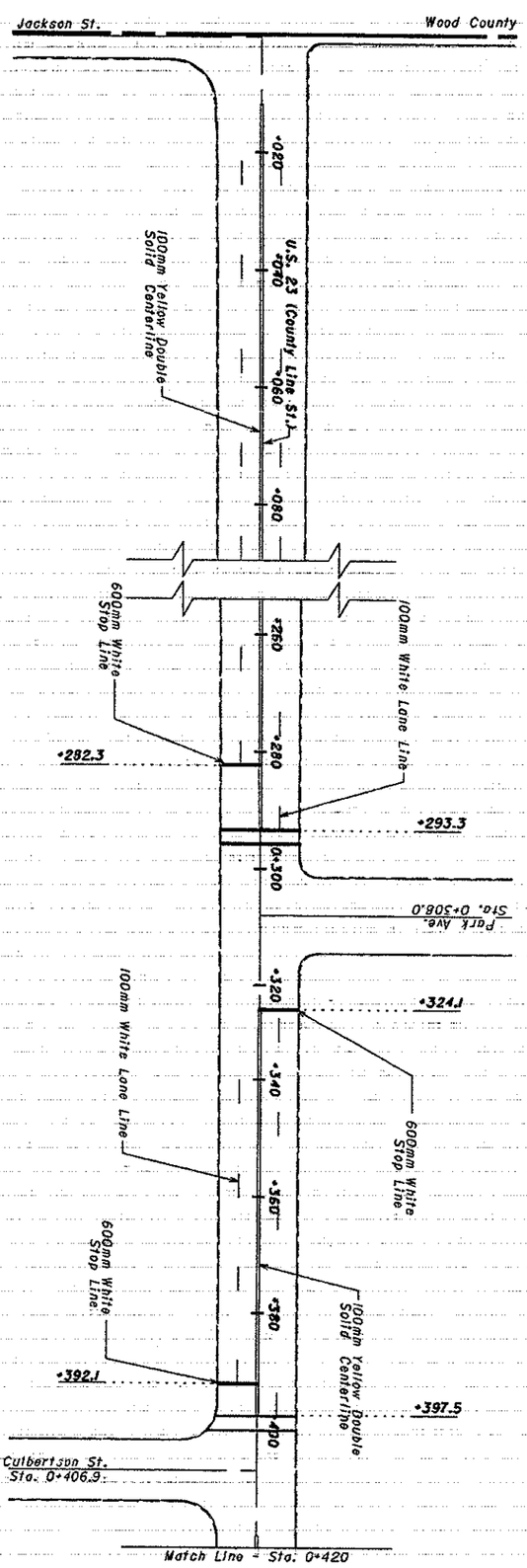
sen23pml.dgn

sen23typ.dgn



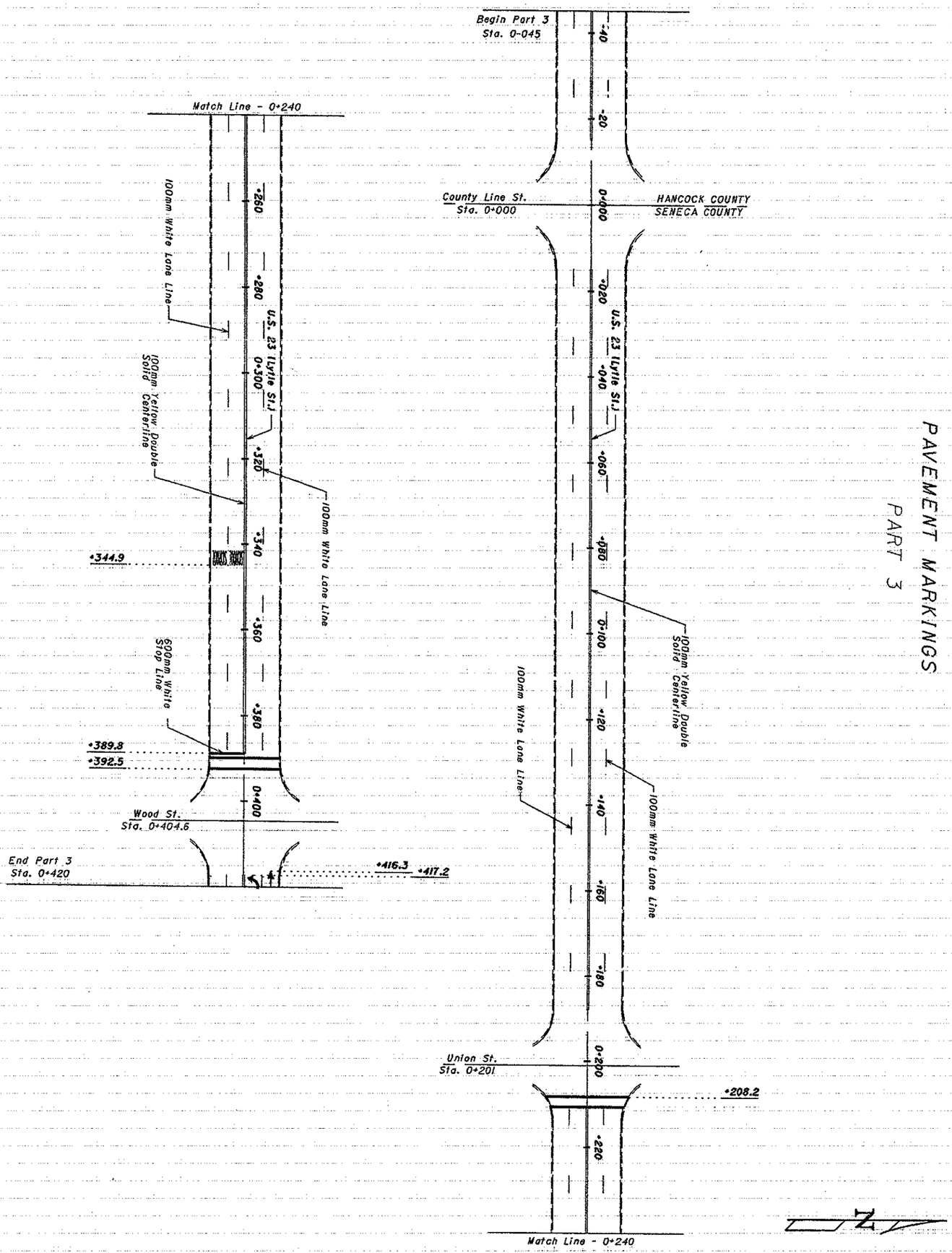


PAVEMENT MARKING PART 2

40 / 50	SEN-23-(18.070)(20.284) WOO-23-0.000 SEN-12-0.000 SEN-18-2.108	PAVEMENT MARKING - PART 2	PLAN NO.

CALCULATED JEH
CHECKED ALS

sen23pmi.dgn

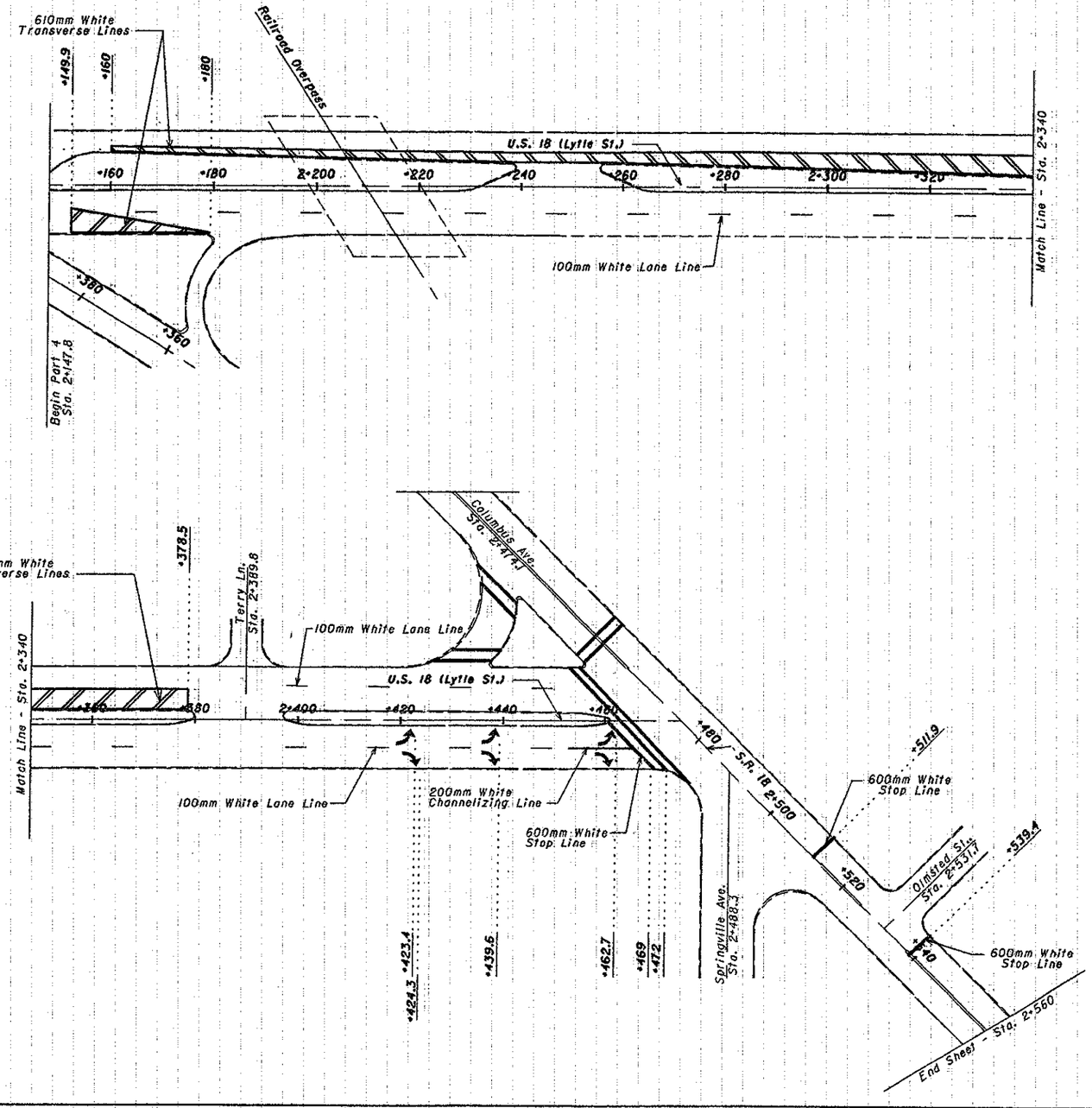


PAVEMENT MARKINGS
PART 3

41/50	SEN-23-(18.070)(20.284) W00-23-0.000 SEN-12-0.000 SEN-18-2.108	PAVEMENT MARKINGS - PART 3	PLAN NO.	CALCULATED JEH CHECKED ALS

PAVEMENT MARKING

PART 4



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CALCULATED JEH
CHECKED ALS

PLAN NO.

PAVEMENT MARKING - PART 4

SEM-23-18.070(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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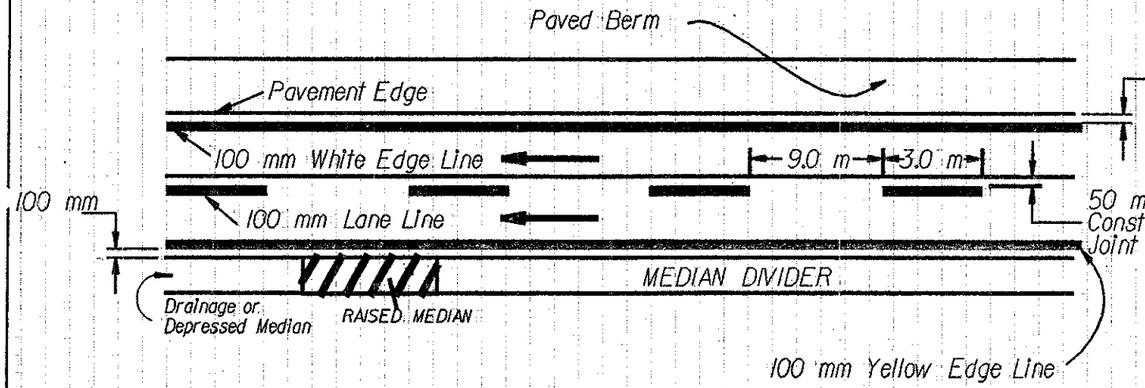
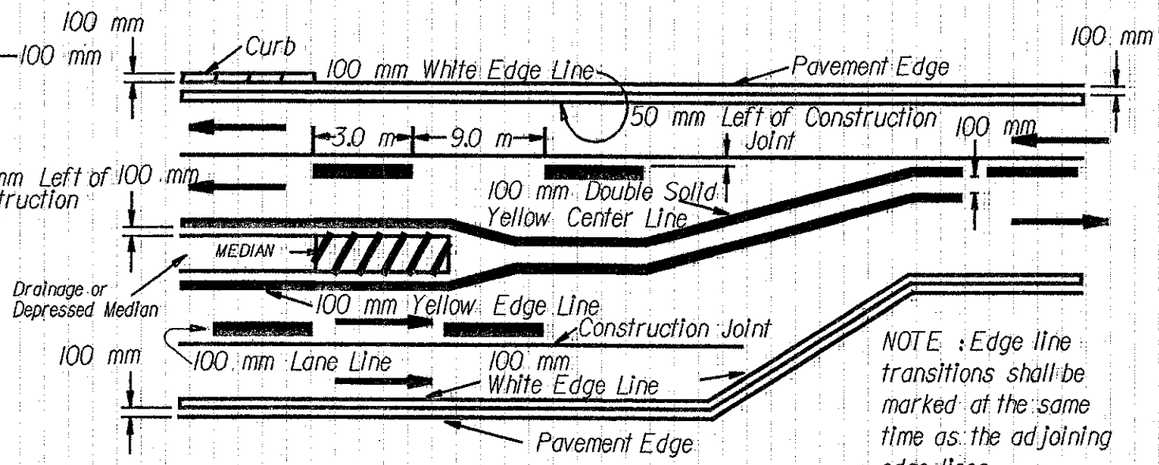
sen23pml.dgn

DEPARTMENT OF TRANSPORTATION

FREEWAY & EXPRESSWAY MAINLINE MARKINGS

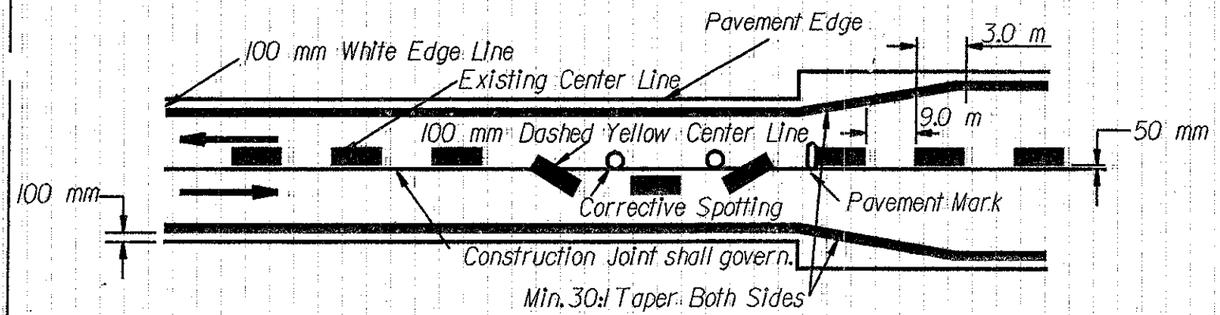


MULTILANE DIVIDED & UNDIVIDED HIGHWAY MARKINGS



NOTE : Edge line transitions shall be marked at the same time as the adjoining edge lines.

TWO LANE MARKINGS



Min. 30:1 Taper Both Sides At all locations where pavement widths change by construction plans.

NOTES:

1. The distance from the pavement edge to the nearside edge of the edgeline may be increased with the approval of the engineer in order to maintain uniform lane width.

2. See TC-72.20 for entrance and exit ramp markings.

3. The cycle length for dashed lines shall be 12 meters plus or minus 150 mm. The minimum length of dash shall be sufficiently long to maintain a 3:1 ratio between length of gap and length of dash.

Ohio Department of Transportation

Pavement Marking Typical Details

DATE 11-80 9-86 9-91

ENGINEERED JEH
CHECKED ALS

PLAN NO.

PAVEMENT MARKINGS TYPICAL DETAILS

SEN-23-18.07(0)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
SHEET (1 OF 2)

NOTE (PARTS 1,2 & 4):
THE 446 ON THE SHOULDERS MAY BE PLACED AT THE SAME TIME THAT THE 446 MATERIAL IS PLACED ON THE ADJACENT LANES OF PAVEMENT. HOWEVER, THE SHOULDERS SHALL BE PLACED IN A SEPARATE OPERATION IF THE CONTRACTOR'S EQUIPMENT DOES NOT HAVE THE CAPACITY TO PLACE THE MATERIAL PARALLEL TO THE EXISTING SHOULDER SLOPE OR THE SLOPE OF THE PROPOSED BASE COURSE AS SHOWN ON THE TYPICAL SECTION.

ALIGNMENT AND PROFILE:
THE WORK PROPOSED BY THIS PROJECT IS FOR THE RESURFACING OF THE EXISTING PAVEMENT. THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED, AND THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT EXCEPT THAT IT WILL BE RAISED AN AMOUNT EQUAL TO THE THICKNESS OF THE RESURFACING COURSE OR COURSES SPECIFIED IN THESE PLANS

INTERMEDIATE COURSE, SPOT LEVELING AND PATCHING:
THIS MATERIAL SHALL BE PLACED IN A SEPARATE OPERATION WHERE AND AS DIRECTED BY THE ENGINEER.

PLACING ASPHALT CONCRETE ON APPROACH BRIDGES:
SPECIAL CARE SHALL BE TAKEN WHEN PLACING THE ASPHALT CONCRETE AT STRUCTURES TO ASSURE A SMOOTH TRANSITION TO THE BRIDGE DECK.

INTERSECTIONS: (PART 4)
ALL HARD SURFACE INTERSECTIONS SHALL BE FEATHERED INCLUDING RADII FOR A LENGTH OF 4.57m, UNLESS OTHERWISE DIRECTED.

CURB NOTE:
FEATHER TO ALL CURB IN A MANNER SO AS TO PERPETUATE EXISTING DRAINAGE.

HAZARDOUS AND REGULATED MATERIALS
THE CONTRACTOR IS HEREBY GIVEN NOTICE THAT IF HE REVEALS, SAMPLES, TESTS, REMOVES OR DETERMINES IN ANY WAY THAT EXISTING SOILS OR EXCAVATED MATERIAL CONTAINING TRACE AMOUNTS OF SENSITIVE ELEMENTS, BUT DO NOT MEET OR EXCEED GOVERNMENT ESTABLISHED LIMITS OF HAZARDOUS OR REGULATED MATERIAL, THEN THE MATERIAL SHALL BE REMOVED AND DISPOSED OF IN WHATEVER MANNER HE CHOOSES AND IS WITHIN THE LIMITS OF THE LAW AND REGULATION, WITHOUT ADDITIONAL COST TO THE CONTRACT. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNDER EACH RESPECTIVE MATERIAL.

IF, AT ANY TIME, THE MATERIAL MEETS OR EXCEEDS THE ESTABLISHED LIMITS OF HAZARDOUS OR REGULATED MATERIAL, THE DEPARTMENT SHALL REIMBURSE THE CONTRACTOR ACCORDING TO THE PROCEDURES ESTABLISHED IN THE CONTRACT, FOR ONLY THAT MATERIAL WHICH MEETS THE DEFINITION OF HAZARDOUS OR REGULATED MATERIAL. IF THERE ARE NO PROCEDURES IN THE CONTRACT ADDRESSING HAZARDOUS OR REGULATED MATERIAL, THEN THE CONTRACTOR SHALL PROCEED AS NECESSARY TO PROPERLY DISPOSE OF THE HAZARDOUS OR REGULATED MATERIAL AND ALL ADDITIONAL COSTS SHALL BE REIMBURSED ACCORDING TO SECTION 109.04 OF THE CONSTRUCTION AND MATERIALS SPECIFICATION BOOK.

RAISED PAVEMENT MARKER NOTES (PART 4):

MATERIALS SUPPLIED BY THE DEPARTMENT:
ALL MATERIALS ARE TO BE CONTRACTOR FURNISHED, EXCEPT THAT THE DEPARTMENT SHALL SUPPLY TO THE CONTRACTOR RPM MATERIALS IN THE QUANTITIES SHOWN HEREIN. PAY ITEMS FOR DEPARTMENT SUPPLIED MATERIALS SHALL BE INDICATED AS "INSTALLATION ONLY". THE QUANTITY AND TYPE OF DEPARTMENT SUPPLIED MATERIALS ARE SHOWN ELSEWHERE IN THE PLAN.

THE CONTRACTOR WILL BE INFORMED AT THE PRE-CONSTRUCTION CONFERENCE OF THE LOCATION IN COLUMBUS OF THE DEPARTMENT SUPPLIED MATERIALS. WHEN SPECIFIED, ADDITIONAL RPM MATERIALS WILL BE STORED WITHIN THE DISTRICT FOR USE ON THIS PROJECT. THE CONTRACTOR SHALL PICK UP DEPARTMENT SUPPLIED RPM MATERIALS AT THE SPECIFIED LOCATION (S) FOR TRANSPORT TO THE WORK SITE OR TO THE CONTRACTOR'S STORAGE FACILITY. AN AUTHORIZATION FOR PICK UP FORM WILL BE FURNISHED BY THE DISTRICT CONSTRUCTION ENGINEER TO THE CONTRACTOR AT THE PRE-CONSTRUCTION CONFERENCE. THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND/OR THE PARTIES LISTED ON THE AUTHORIZATION FORM (DEPENDENT ON THE STORAGE LOCATIONS OF THE MATERIALS) IN WRITING AT LEAST 5 CALENDAR DAYS PRIOR TO PICK UP OF DEPARTMENT SUPPLIED MATERIALS. HE SHALL STORE THEM WITHOUT DAMAGE OR CONTAMINATION WITH FOREIGN MATTER. A DEDUCTION IN THE AMOUNT OF THE ACTUAL COST TO THE DEPARTMENT SHALL BE MADE FOR MATERIALS DAMAGED BY THE CONTRACTOR OR FOR FOR MATERIALS DAMAGED BY THE CONTRACTOR OR FOR CASTINGS RECEIVED BY THE CONTRACTOR WHICH WERE NOT INSTALLED AND WERE NOT RETURNED TO THE DEPARTMENT.

RAISED PAVEMENT MARKER INSTALLATION ONLY, AS PER PLAN:
IN ADDITION TO THE SPECIFICATIONS, THE FOLLOWING REQUIREMENTS ARE ADDED TO EACH OF THE ABOVE PAY ITEMS.

ALL CASTINGS SHALL BE PLACED THE SAME WORKING DAY THAT THE RPM SLOTS ARE CUT INTO THE PAVEMENT. THE ENGINEER MAY ALLOW RPM PLACEMENT FOR A RECENTLY RESURFACED ROADWAY TO BEGIN AS SOON AS THE PERMANENT PAVEMENT MARKING FOR THAT SECTION IS COMPLETED AND DRY.

RPM SHALL NOT BE INSTALLED WHEN THE AMBIENT AIR TEMPERATURE AND THE PAVEMENT SURFACE TEMPERATURE ARE LESS THAN 4°C (40°F). BOTH PARTS A AND B OF THE RPM CASTING EPOXY SHALL BE HEATED TO 38°C (100°F) + (-)12°C (10°F) DURING INSTALLATION BETWEEN 4°C (40°F) AND 10°C (50°F). RPMs INSTALLED WHEN TEMPERATURES ARE BELOW 10°C (50°F) SHALL BE PROTECTED FROM TRAFFIC A MINIMUM OF 60 MINUTES.

RPM INSTALLATION ONLY, AS PER PLAN QUANTITIES CONSISTS OF A TWO-WAY PLOWABLE RPM EQUIPPED WITH AN ATTACHED PRISMATIC RETRO-REFLECTOR AND WITH AN ATTACHED PRISMATIC RETRO-REFLECTOR AND SUPPLIED TO THE CONTRACTOR BY THE DEPARTMENT. ALL THE ABOVE SHALL BE PAID FOR UNDER ITEM 621, RAISED PAVEMENT MARKER, INSTALLATION ONLY, AS PER PLAN PER UNIT SPECIFIED.

CALCULATED JEH CHECKED MS

PLAN NO.

GENERAL NOTES

SEN-23-(18.07)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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ITEM 255 - FULL DEPTH PAVEMENT SAWING (PARTS 1,2 & 4)

THE FOLLOWING ESTIMATED QUANTITIES OF TRANSVERSE PAVEMENT SAWING HAVE BEEN ADDED TO THE GENERAL SUMMARY TO ENABLE THE CONTRACTOR TO UTILIZE THE LIFT OUT METHOD AS PER ITEM 255, FULL DEPTH RIGID PAVEMENT REMOVAL AND RIGID REPLACEMENT, SECTION 255.03. THIS ITEM SHALL BE AS DIRECTED BY THE ENGINEER BASED ON EXISTING PAVEMENT DETERIORATION.

PART 1 - 56 METERS
PART 2 - 1 METER
PART 4 - 6 METERS.

ITEM 255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS.

THIS TYPE OF CONCRETE HAS BEEN SET UP IN AREAS WHERE DETOURS ARE REQUIRED TO PERFORM THE NECESSARY JOINT WORK. THIS IS TO PROVIDE A MINIMUM TIME OF CLOSURE TO THE TRAVELING PUBLIC.

COORDINATION BETWEEN CONTRACTORS:

A SIGNAL PROJECT HAS BEEN SCHEDULED FOR CONSTRUCTION DURING THE SAME TIME PERIOD AS THIS PROJECT MAKING COORDINATION BETWEEN CONTRACTORS NECESSARY. THE INTENDED SEQUENCE OF THE TWO PROJECTS WILL BE TO HAVE THE LOOPS FROM THE SIGNAL PROJECT INSTALLED PRIOR TO THE PLACEMENT OF THE SURFACE COURSE OF THIS PROJECT.

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CALCULATED JEH
CHECKED ALS

PLAN NO.

GENERAL NOTES

SEN-23-118.07(120,284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC GENERAL NOTES

SHEET (1 OF 2)

PART 1: (JOINT REPAIR)

PHASE 1 - (EAST/WEST PORTION - LYTLE ST.) (STA.18+414 TO STA.19+128)

TRAFFIC SHALL BE MAINTAINED WITH A MINIMUM OF ONE LANE IN EACH DIRECTION. LANE CLOSURES SHALL BE PERMITTED FOR MINIMUM PERIODS OF TIME NECESSARY FOR FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE AND PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22.

PHASE 2 - (NORTH/SOUTH PORTION - COUNTY LINE RD.) (STA.20+284.2 TO STA.21+466.7)

TWO - WAY TRAFFIC SHALL BE MAINTAINED ON THE TWO OUTSIDE LANES WITH A MINIMUM OF 3 METERS FOR EACH LANE. DURING THIS TIME, FULL DEPTH PAVEMENT SAWING , REPLACEMENT OF THE CONCRETE AND PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22 SHALL BE PERFORMED ON THE TWO INSIDE LANES. SEE DETAIL "A" SHEET NO.48.

PHASE 3 - (NORTH/SOUTH PORTION - COUNTY LINE RD.) (STA.20+284.2 TO STA.21+466.7)

THE OUTSIDE, NORTHBOUND LANE SHALL BE CLOSED WITH TWO - WAY TRAFFIC MAINTAINED ON THE REMAINDER OF THE ROAD. DURING THIS TIME, FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE AND PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22 SHALL BE PERFORMED ON THE OUTSIDE, NORTHBOUND LANE. SEE DETAIL "B" SHEET NO.48.

PHASE 4 - (NORTH/SOUTH PORTION - COUNTY LINE RD.) (STA.20+284.2 TO STA.21+466.7)

THE OUTSIDE, SOUTHBOUND LANE SHALL BE CLOSED WITH TWO - WAY TRAFFIC MAINTAINED ON THE REMAINDER OF THE ROAD. DURING THIS TIME, FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE AND PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22 SHALL BE PERFORMED ON THE OUTSIDE, SOUTHBOUND LANE. SEE DETAIL "B" SHEET NO.48.

PHASE 5 - (NORTH/SOUTH PORTION - @ BEGINNING OF PROJECT TO LYTLE ST.) (STA.18+070 TO STA.18+428)

A DETOUR SHALL BE ESTABLISHED FOR THE DURATION OF THE FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE, PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22 AND PLANING AND PROTECTION OF COMPLETED ASPHALT COURSES. A SINGLE DETOUR TO COMPLETE ALL OF THE ABOVE DESCRIBED WORK SHALL BE BETWEEN 8:00PM ON FRIDAY AND 5:00AM ON MONDAY.

PART 2: (JOINT REPAIR)

PHASE 1 - (COUNTY LINE RD.) (STA.0+000 TO STA.0+480)

TWO - WAY TRAFFIC SHALL BE MAINTAINED ON THE TWO OUTSIDE LANES WITH A MINIMUM OF 3 METERS FOR EACH LANE. DURING THIS TIME, FULL DEPTH PAVEMENT SAWING , REPLACEMENT OF THE CONCRETE AND PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22 SHALL BE PERFORMED ON THE TWO INSIDE LANES. SEE DETAIL "A" SHEET NO.48.

PHASE 2 - (NORTH/SOUTH PORTION - COUNTY LINE RD.) (STA.0+000 TO STA.0+480)

THE OUTSIDE, NORTHBOUND LANE SHALL BE CLOSED WITH TWO - WAY TRAFFIC MAINTAINED ON THE REMAINDER OF THE ROAD. DURING THIS TIME, FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE AND PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22 SHALL BE PERFORMED ON THE OUTSIDE, NORTHBOUND LANE. SEE DETAIL "B" SHEET NO.48.

PHASE 3 - (NORTH/SOUTH PORTION - COUNTY LINE RD.) (STA.0+000 TO STA.0+480)

THE OUTSIDE, SOUTHBOUND LANE SHALL BE CLOSED WITH TWO - WAY TRAFFIC MAINTAINED ON THE REMAINDER OF THE ROAD. DURING THIS TIME, FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE AND PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22 SHALL BE PERFORMED ON THE OUTSIDE, SOUTHBOUND LANE. SEE DETAIL "B" SHEET NO.48.

PHASE 4 - (NORTH/SOUTH PORTION - @ SR 199 INTERSECTION & NORTH OF INTERSECTION) (STA.0+480 TO STA.0+653)

A DETOUR SHALL BE ESTABLISHED FOR THE DURATION OF THE FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE, PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22 AND PLANING AND PROTECTION OF COMPLETED ASPHALT COURSES. A SINGLE DETOUR TO COMPLETE ALL OF THE ABOVE DESCRIBED WORK SHALL BE BETWEEN 8:00PM ON FRIDAY AND 5:00AM ON MONDAY.

PART 3: (JOINT REPAIR)

PHASE 1 - LYTLE ST. (STA.0-045 TO STA.0+420)

TRAFFIC SHALL BE MAINTAINED WITH A MINIMUM OF ONE LANE IN EACH DIRECTION. LANE CLOSURES SHALL BE PERMITTED FOR MINIMUM PERIODS OF TIME NECESSARY FOR FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE AND PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22.

PART 4: (JOINT REPAIR)

PHASE 1 - LYTLE ST. (STA.2+280 TO STA.2+462)

TRAFFIC SHALL BE MAINTAINED WITH A MINIMUM OF ONE LANE IN EACH DIRECTION. LANE CLOSURES SHALL BE PERMITTED FOR MINIMUM PERIODS OF TIME NECESSARY FOR FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE AND PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22.

PHASE 2 - LYTLE ST. (STA.2+340 TO STA.2+280)

A DETOUR SHALL BE ESTABLISHED FOR THE DURATION OF THE FULL DEPTH PAVEMENT SAWING, REPLACEMENT OF THE CONCRETE, PLACEMENT OF ITEM 446, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22 AND PLANING AND PROTECTION OF COMPLETED ASPHALT COURSES. A SINGLE DETOUR TO COMPLETE ALL OF THE ABOVE DESCRIBED WORK SHALL BE BETWEEN 8:00PM ON FRIDAY AND 5:00AM ON MONDAY.

CALCULATED JEH CHECKED ALS

PLAN NO.

TRAFFIC GENERAL NOTES

MAINTENANCE OF TRAFFIC GENERAL NOTES

SEN-23-(18.07OX/20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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PARTS 1,2,3 & 4:(BITUMINOUS PAVEMENT PLANING)

THIS ITEM IS INTENDED TO REMOVE ALL EXISTING ASPHALT CONCRETE PAVEMENT ON THE OUTSIDE LANES AND SCARIFY THE EXISTING CONCRETE PAVEMENT TO A MINIMUM OF 6mm IN DEPTH. THE DEPTH OF BITUMINOUS PLANING ON THE INSIDE LANES MAY NEED TO BE ADJUSTED ACCORDINGLY. THIS WORK SHALL BE AS DIRECTED BY THE ENGINEER TO MAINTAIN ADEQUATE CROSS SLOPE.

THE CONTRACTOR SHALL ARRANGE HIS OPERATIONS SO THAT TRAFFIC IS RETURNED TO AN AREA WHEN THE PLANING IS COMPLETE. ALL REQUIRED TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED PRIOR TO OPENING THE AREA TO TRAFFIC. NO PLANED SURFACE SHALL REMAIN OPEN TO TRAFFIC MORE THAN (3) THREE DAYS BEFORE BEING COVERED WITH AN ASPHALT COURSE. IF THIS IS NOT DONE, LIQUIDATED DAMAGES WILL BE LEVIED AS PER SECTION 108.07 OF THE ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS BOOK. THIS NOTE APPLIES TO ALL AREAS EXCEPT THOSE DESIGNATED ABOVE TO BE WITHIN A DETOUR ROUTE.

PARTS 1,2,3 & 4:(RESURFACING)

TRAFFIC SHALL BE MAINTAINED WITH A MINIMUM OF ONE LANE IN EACH DIRECTION. LANE CLOSURES SHALL BE PERMITTED FOR MINIMUM PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR PROTECTION OF COMPLETED ASPHALT CONCRETE COURSES. THIS NOTE APPLIES TO ALL AREAS EXCEPT THOSE DESIGNATED ABOVE TO BE WITHIN A DETOUR ROUTE.

ALTERNATE METHODS:

IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR MAINTENANCE OF TRAFFIC PROVIDED THE INTENT OF THE ABOVE PROVISIONS ARE FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS FROM THESE CHANGES. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED, IN WRITING, BY THE DIRECTOR OF TRANSPORTATION.

ITEM 614 - PAVEMENT MARKINGS REMOVED:

THE EXISTING PAVEMENT MARKINGS AND/OR THE TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER TO PROVIDE CLARITY FOR THE TRAFFIC CONTROL AS SET FORTH IN THESE PLANS. PAYMENT FOR THE ABOVE DESCRIBED WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC.

ESTABLISHING DETOURS:

THE CITY OF FOSTORIA SHALL ERECT AND MAINTAIN DETOURS THAT ARE REQUIRED FOR THIS PROJECT. THE CONTRACTOR SHALL NOTIFY THE SAFETY SERVICE DIRECTOR OF THE CITY OF FOSTORIA AND THE PROJECT ENGINEER AT LEAST 14 CALENDAR DAYS PRIOR TO HIS ANTICIPATED DATE OF CLOSURE IN ORDER TO ESTABLISH THE DETOUR AND INFORM THE PUBLIC. THESE CLOSURES SHALL TAKE PLACE ON WEEKENDS BETWEEN 8:00PM ON FRIDAY AND 5:00AM ON MONDAY.

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CALCULATED JEH CHECKED ALS

PLAN NO.

MAINTENANCE OF TRAFFIC GENERAL NOTES

SEN-23-(18.070)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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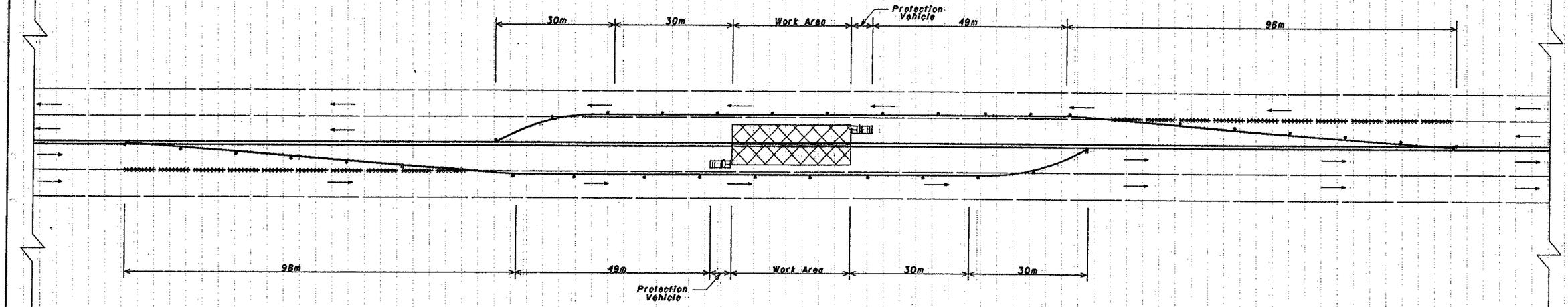
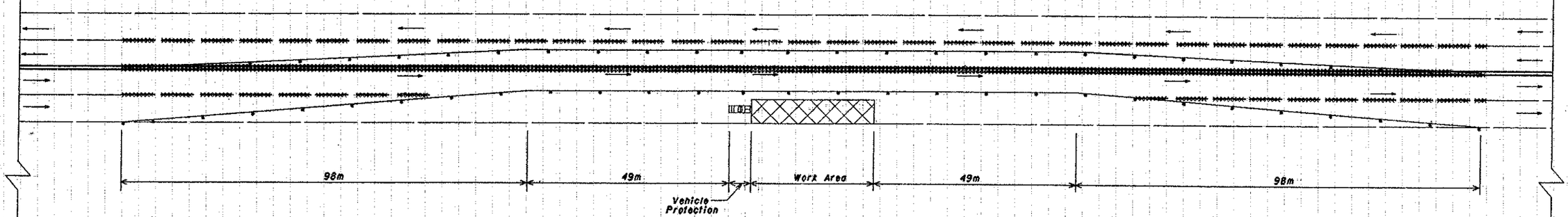
DETAIL "A"

Closing inside two lanes of a multi - lane undivided highway with drums



DETAIL "B"

Closing outside lane of a multi - lane undivided highway with drums



Note: Detail only shows temporary pavement marking layout and drum locations. See MT-95.32 for advance warning signs and other details.

CALCULATED JEH
CHECKED ALS

PLAN NO.

MAINTENANCE OF TRAFFIC DETAILS

SEN-23-(18.07)(20.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108

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PART 1	PART 2	PART 3	PART 4 CITY	PART 4 RURAL	PART 4 TOTAL		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION
											ROADWAY
				308	308		202	23500	308	SQ.METER	WEARING COURSE REMOVED
0.4							202	30800	0.4	SQ.METER	TRAFFIC ISLAND REMOVED
405	79	48	66		66		202	32000	598	METER	CURB REMOVED
				226	226		202	54100	226	EACH	RAISED PAVEMENT MARKER REMOVED FOR STORAGE
405	79	48	66		66		609	14000	598	METER	CURB, TYPE 2A
9.0							609	20000	9.0	METER	CURB, TYPE 3A
0.4							612	10000	0.4	SQ.METER	100 MM CONCRETE TRAFFIC ISLAND
											PAVEMENT
				41	41		253	02000	41	CU.METER	PAVEMENT REPAIR
31,170	8360	7440	7442		7442		254	01000	54,412	SQ.METER	PAVEMENT PLANING, BITUMINOUS
1736	349	431	134		134		255	10000	2650	SQ.METER	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS C
89	57		61		61		255	10100	207	SQ.METER	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS
1717	54	531	240		240		255	20000	2542	METER	FULL DEPTH PAVEMENT SAWING
			3493	12489	15982		407	10000	15982	LITER	TACK COAT
8622	2318	2009	1592		1592		407	13900	14541	LITER	TACK COAT, USING SS 924
1186	318	283	211		211		SPECIAL	44620000	1998	CU.METER	STONE MASTIC ASPHALT CONCRETE SURFACE COURSE (SBS POLYMER)
797	218	179	220		220		SPECIAL	44620004	1414	CU.METER	STONE MASTIC ASPHALT CONCRETE INTERMEDIATE COURSE (SBS POLYMER)
142	41	33	15		15		446	46050	231	CU.METER	ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, PG64-22
			573	2046	2619		446	47020	2619	CU.METER	ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, PG64-22
7	13		41	344	385		617	10100	405	CU.METER	COMPACTED AGGREGATE, TYPE A
											DRAINAGE
1			2		2		604	09000	3	EACH	CATCH BASIN ADJUSTED TO GRADE
32	11	3	7		7		604	20600	53	EACH	INLET ADJUSTED TO GRADE
8	1	3	10		10		604	34500	22	EACH	MANHOLE ADJUSTED TO GRADE
2			5		5		638	10800	7	EACH	VALVE BOX ADJUSTED TO GRADE

CALCULATED JEH
CHECKED ALS

PLAN NO.

GENERAL SUMMARY

SEN-23-18.07(20.284)
W00-23-0.000 SEN-18-2.108
SEN-12-0.000

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PART 1	PART 2	PART 3	PART 4 CITY	PART 4 RURAL	PART 4 TOTAL	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION
										TRAFFIC CONTROL
				248	248	621	00201	248	EACH	RAISED PAVEMENT MARKER, INSTALLATION ONLY, AS PER PLAN (SEE SHEET NO. 44)
0.111	0.199		2.929	11.888	14.817	642	00100	15.127	KILOMETER	EDGE LINE, TYPE 1
3.554	0.883	0.840	0.016		0.016	642	00200	5.293	KILOMETER	LANE LINE, TYPE 1
1.961	0.568	0.465	1.436	5.944	7.380	642	00300	10.374	KILOMETER	CENTER LINE, TYPE 1
40	26	8	19		19	644	00500	93	METER	STOP LINE
373	54	64	69		69	644	00600	560	METER	CROSSWALK LINE
			128		128	644	00700	128	METER	TRANSVERSE LINE
6		2				644	01100	8	EACH	SCHOOL SYMBOL MARKING, 1800 MM
8		2	6		6	644	01300	16	EACH	LANE ARROW
										MAINTENANCE OF TRAFFIC
LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	614	11000	LUMP	LUMP	MAINTAINING TRAFFIC
22	10	8	10	26	36	614	12460	76	EACH	WORK ZONE MARKING SIGN
0.662	2.649	2.520	0.048		0.048	614	20400	15.879	KILOMETER	TEMPORARY LANE LINE, CLASS II
5.883	1.704	1.395	4.308	17.832	22.140	614	21400	31.122	KILOMETER	TEMPORARY CENTER LINE, CLASS II
LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	624	10000	LUMP	LUMP	MOBILIZATION

CALCULATED JEH
CHECKED ALS

PLAN NO.

GENERAL SUMMARY

SEN-23-1(18.07)(120.284)
W00-23-0.000
SEN-12-0.000 SEN-18-2.108