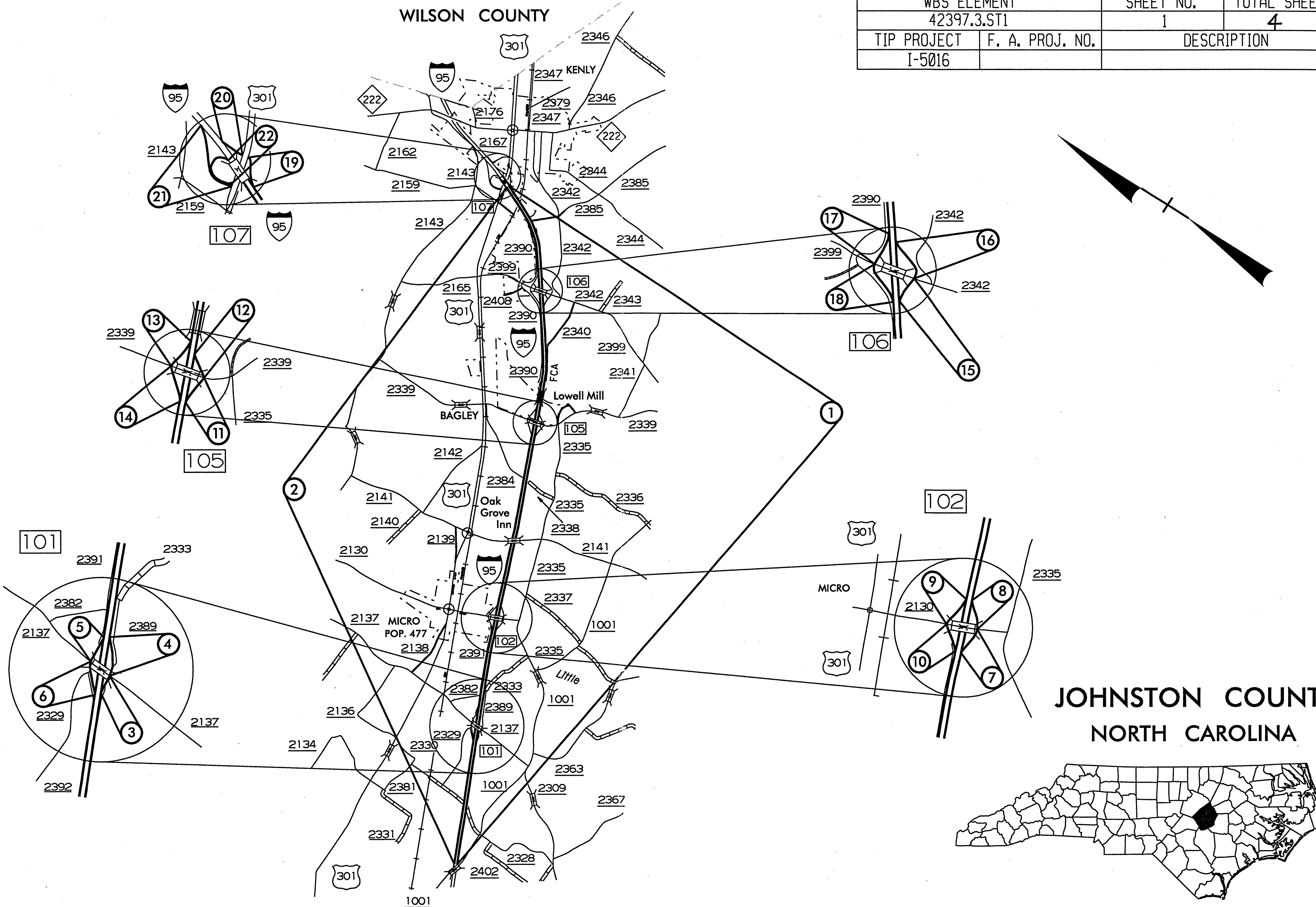
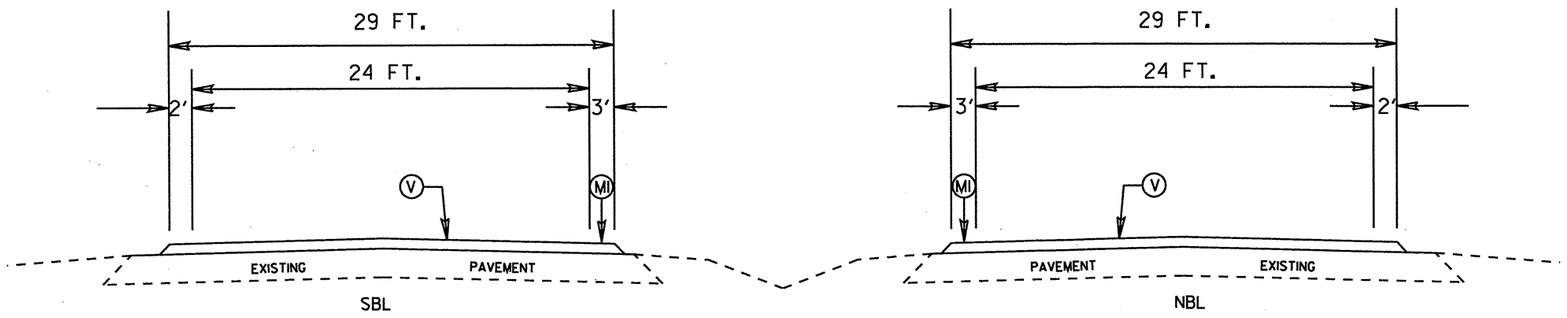
WBS ELEMENT		SHEET NO.	TOTAL SHEETS
42397.3.ST1		1	4
TIP PROJECT	F. A. PROJ. NO.	DESCRIPTION	
I-5016			

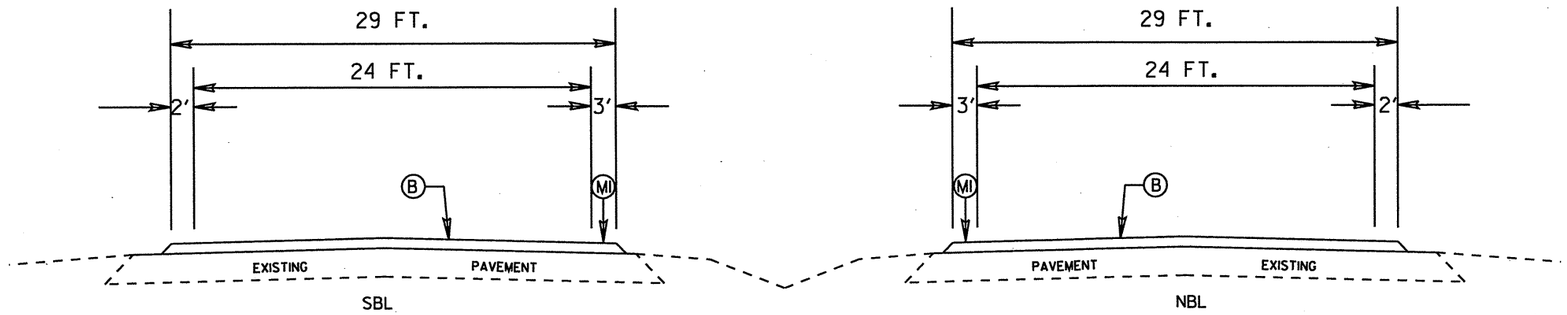


TYPICAL SECTIONS (SURFACING AND RESURFACING)

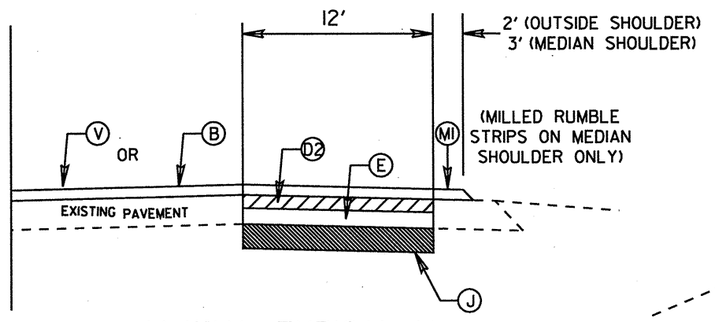
WBS ELEMENT	SHEET NO.	TOTAL SHEETS
42397.3.STI	2	4
TIP PROJECT	F. A. PROJ. NO.	DESCRIPTION
I-5016		



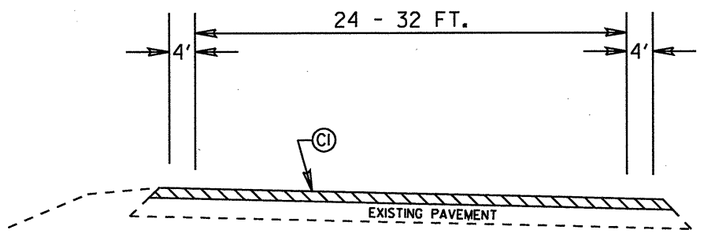
TYPICAL I - ALTERNATE I
I-95 NB & SB LANES



TYPICAL I - ALTERNATE 2
I-95 NB & SB LANES



PARTIAL TYPICAL IA
I-95 NB & SB AT LOCATIONS
AS DIRECTED BY THE ENGINEER
IN MEDIAN AND/OR OUTSIDE LANES



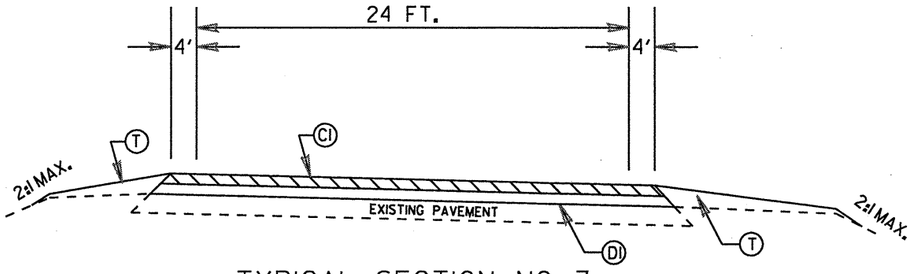
TYPICAL SECTION NO. 2
RAMPS AT EXITS 101, 102, & 107

PAVEMENT SCHEDULE	
V	PROP. APPROX. 5/8" ULTRA-THIN HOT MIX ASPHALT , TYPE B, AT AN AVERAGE RATE OF 70 LBS. PER SQ. YD.
B	PROP. OPEN-GRADED ASPHALT FRICTION COURSE, TYPE FC-2 MODIFIED, AT AN AVERAGE RATE OF 90 LBS. PER SQ. YD.
CI	PROP. APPROX. 1.5" ASP. CONC. SURFACE CO., TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASP. CONC. SURFACE CO., TYPE S9.5C AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
DI	PROP. APPROX. 3" ASP. CONC. INTERMEDIATE CO., TYPE 119.0C AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. APPROX. 4" ASP. CONC. INTERMEDIATE CO., TYPE 119.0C AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D3	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2 1/2" IN DEPTH OR GREATER THAN 4" IN DEPTH
E	PROP. APPROX. 5 1/2" ASP. CONC. BASE CO., TYPE B25.0C AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
J	PROP. 12" AGGREGATE BASE COURSE
MI	MILLED RUMBLE STRIPS
M2	MILLING ASPHALT PAVEMENT, 2 1/2" TO 4" DEPTH
T	SHOULDER CONSTRUCTION

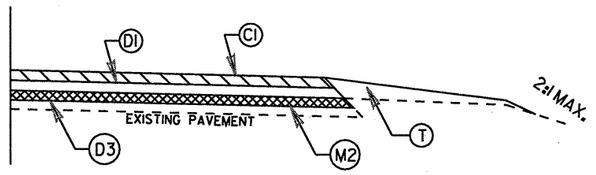
NOTE: ALL PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE

TYPICAL SECTIONS (SURFACING AND RESURFACING)

WBS ELEMENT	SHEET NO.	TOTAL SHEETS
42397.3.STI	3	4
TIP PROJECT	F. A. PROJ. NO.	DESCRIPTION
I-5016		



TYPICAL SECTION NO. 3
RAMPS AT EXIT 105



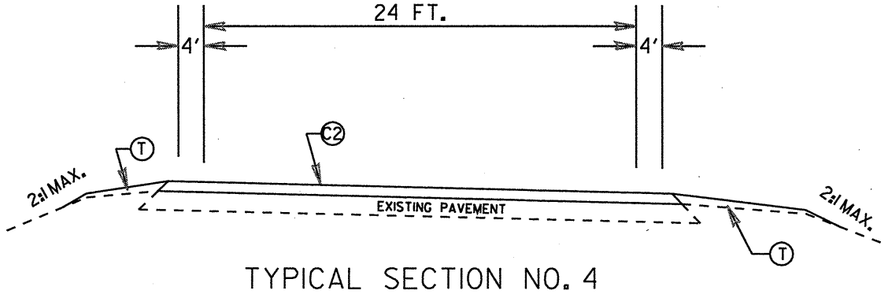
PARTIAL TYPICAL 3A
RAMPS AT EXIT 105 AT LOCATIONS
AS DIRECTED BY THE ENGINEER

PAVEMENT SCHEDULE	
V	PROP. APPROX. 5/8" ULTRA-THIN HOT MIX ASPHALT , TYPE B, AT AN AVERAGE RATE OF 70 LBS. PER SQ. YD.
C1	PROP. APPROX. 1.5" ASP. CONC. SURFACE CO., TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 2" ASP. CONC. SURFACE CO., TYPE S9.5C AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
D1	PROP. APPROX. 3" ASP. CONC. INTERMEDIATE CO., TYPE 119.0C AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. APPROX. 4" ASP. CONC. INTERMEDIATE CO., TYPE 119.0C AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D3	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2 1/2" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E	PROP. APPROX. 5 1/2" ASP. CONC. BASE CO., TYPE B25.0C AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
J	PROP. 12" AGGREGATE BASE COURSE
M1	MILLED RUMBLE STRIPS
M2	MILLING ASPHALT PAVEMENT, 2 1/2" TO 4" DEPTH
T	SHOULDER CONSTRUCTION
NOTES: ALL PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE	

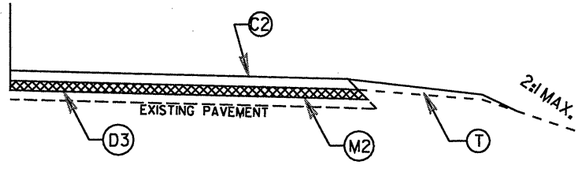
PAVED SHOULDER SLOPES

MATCH EXISTING SLOPES
0.06 MAX. ROLLOVER IN SUPERELEVATED SECTIONS

FOR SHOULDER CONSTRUCTION OPERATIONS, MAINTAIN DISTANCE TO EXISTING SHOULDER POINT. TIE TO EXISTING SHOULDER POINT WHEREVER POSSIBLE. TIE TO EXISTING SLOPE AT LOCATIONS AS DIRECTED BY THE ENGINEER



TYPICAL SECTION NO. 4
RAMPS AT EXIT 106



PARTIAL TYPICAL 4A
RAMPS AT EXIT 106 AT LOCATIONS
AS DIRECTED BY THE ENGINEER

PROJECT NO.	SHEET NO.	TOTAL NO.
I-5016 (42397.3.ST1)	4	4

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	UNDERCUT EXCAVATION CY	REMOVAL OF EXISTING CONCRETE PAVEMENT SLABS SY	FABRIC FOR SOIL STABIL-IZATION SY	AGGRE-GATE BASE COURSE TONS	SHOULDER CON-STRUCTION SMI	SEEDING & MULCHING ACR	2.5" TO 4" MILLING SY	BASE COURSE, B25.0C TONS	INTER-MEDIATE COURSE, I19.0C TONS	SURFACE COURSE, S9.5C TONS	PG 64-22 PLANT MIX TONS	PG 70-22 PLANT MIX TONS	SEALING EXISTING PAVEMENT CRACKS & JOINTS LB	MILLED RUMBLE STRIPS LF
I-5016 (42397.3.ST1)	Johnston	1	I-95 NB	FROM MILE POST 99.8 TO MILE POST 107.1	1	NO	7.3	38	40	120	120	100				40	30		3		20,000	38,544
TOTAL FOR MAP NO. 1							7.3		40	120	120	100				40	30		3		20,000	38,544
		2	I-95 SB	FROM MILE POST 99.8 TO MILE POST 107.1	1	NO	7.3	38	40	120	120	100				40	30		3		20,000	38,544
TOTAL FOR MAP NO. 2							7.3		40	120	120	100				40	30		3		20,000	38,544
		3,4,5,6	EXIT 101	RAMPS	2	NO	0.59	32										1,000		60		
TOTAL FOR MAP NO. 3456							0.59		0	0	0	0				0	0	1,000	0	60	0	0
		7,8,9,10	EXIT 102	RAMPS	2	NO	0.58	32										950		57		
TOTAL FOR MAP NO. 78910							0.58		0	0	0	0				0	0	950	0	57	0	0
		11,12,13,14	EXIT 105	RAMPS	3	NO	0.61	32					1	1	900		2,240	1,100	105	66		
TOTAL FOR MAP NO. 11121314							0.61		0	0	0	0	1	1	900	0	2,240	1,100	105	66	0	0
		15,16,17,18	EXIT 106	RAMPS	4	NO	0.87	32					2	1	2,500		600	2,000	28	120		
TOTAL FOR MAP NO. 15161718							0.87		0	0	0	0	2	1	2,500	0	600	2,000	28	120	0	0
		19,20,21,22	EXIT 107	RAMPS	2	NO	1.12	32										1,800		108		
TOTAL FOR MAP NO. 19202122							**1.12**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,800**	**0**	**108**	**0**	**0**
TOTAL FOR PROJ NO. I-5016 (42397.3.ST1)							**18.37**		**80**	**240**	**240**	**200**	**3**	**2**	**3,400**	**80**	**2,900**	**6,850**	**139**	**411**	**40,000**	**77,088**
GRAND TOTAL							**18.37**		**80**	**240**	**240**	**200**	**3**	**2**	**3,400**	**80**	**2,900**	**6,850**	**139**	**411**	**40,000**	**77,088**

ALTERNATE 1 - SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	PG 70-28 PLANT MIX TON	ULTRATHIN HOT MIX, TYPE B TONS	APP-LICATION OF ULTRATHIN HOT MIX SY
I-5016 (42397.3.ST1)	Johnston	1	I-95 NB	FROM MILE POST 99.8 TO MILE POST 107.1	1	NO	7.3	29	250	4,785	125,000
TOTAL FOR MAP NO. 1							7.3		250	4,785	125,000
		2	I-95 SB	FROM MILE POST 99.8 TO MILE POST 107.1	1	NO	7.3	29	250	4,785	125,000
TOTAL FOR MAP NO. 2							**7.3**		**250**	**4,785**	**125,000**
TOTAL FOR PROJ NO. I-5016 (42397.3.ST1)							**14.6**		**500**	**9,570**	**250,000**
GRAND TOTAL							**14.6**		**500**	**9,570**	**250,000**

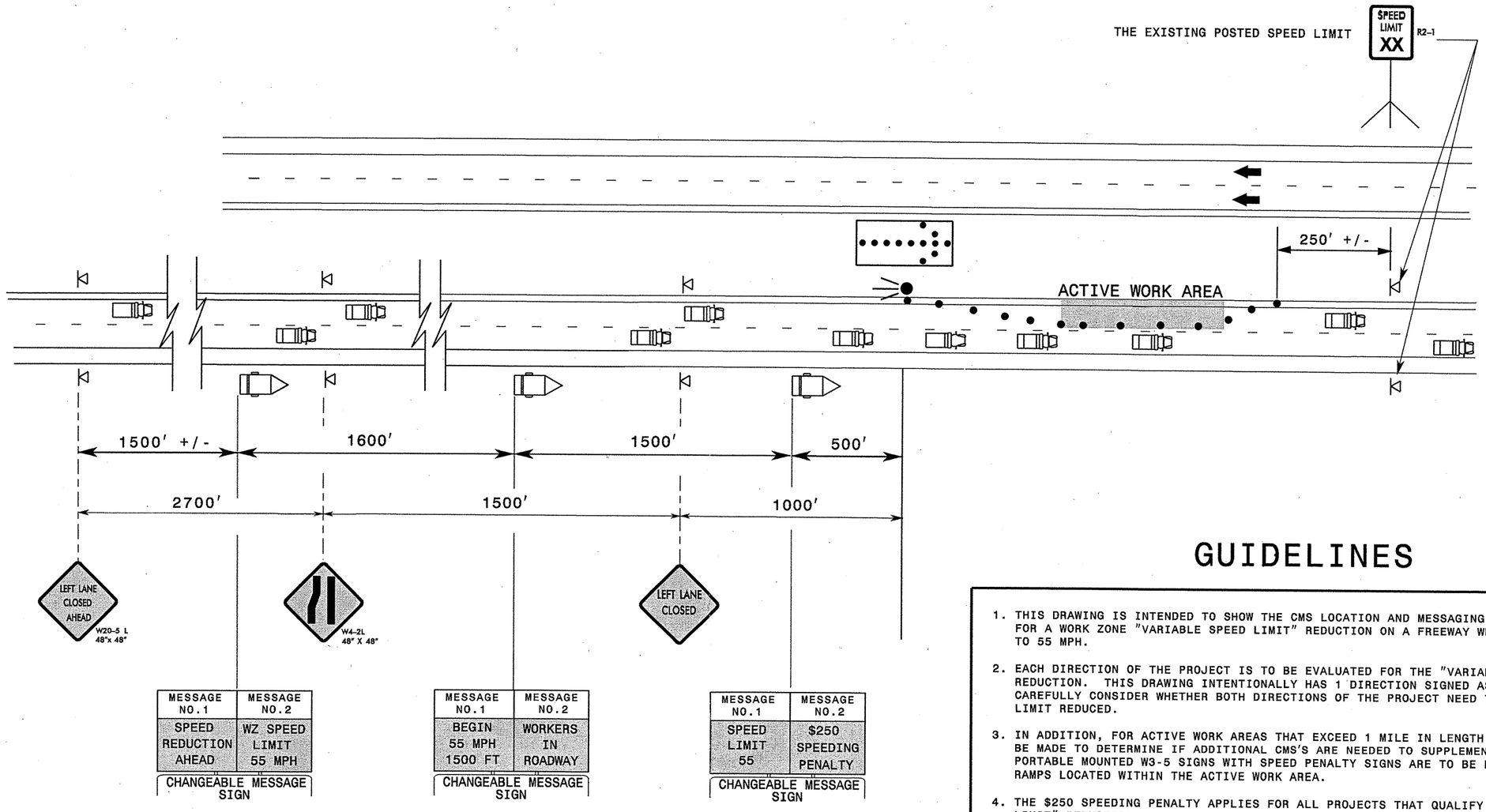
ALTERNATE 2 - SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DES-CRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	PG 76-22 PLANT MIX TONS	OGAFC, TYPE FC-2 MOD TONS
I-5016 (42397.3.ST1)	Johnston	1	I-95 NB	FROM MILE POST 99.8 TO MILE POST 107.1	1	NO	7.3	29	370	6,150
TOTAL FOR MAP NO. 1							7.3		370	6,150
		2	I-95 SB	FROM MILE POST 99.8 TO MILE POST 107.1	1	NO	7.3	29	370	6,150
TOTAL FOR MAP NO. 2							**7.3**		**370**	**6,150**
TOTAL FOR PROJ NO. I-5016 (42397.3.ST1)							**14.6**		**740**	**12,300**
GRAND TOTAL							**14.6**		**740**	**12,300**

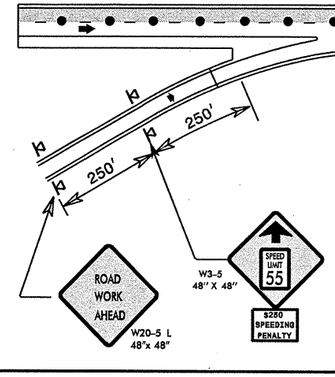
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4400000000-E STATIONARY WORK ZONE SIGN SF	4405000000-E PORTABLE WORK ZONE SIGN SF	4415000000-N FLASHING ARROW PANELS, TYPE C EA	4420000000-N CHANGABLE MESSAGE SIGN EA	4430000000-N DRUMS EA	4480000000-N TMIA EA	4725000000-E THERMO STR ARROW 90 M EA	4810000000-E 4" WHITE PAINT LF	4810000000-E 4" YELLOW PAINT LF	4847000000-E 4" WHITE POLYUREA LF	4847000000-E 4" YELLOW POLYUREA LF	4847100000-E 6" WHITE POLYUREA LF	4847100000-E 6" YELLOW POLYUREA LF	4847120000-E 12" WHITE POLYUREA LF	4847140000-E 24" WHITE POLYUREA LF	4905000000-N SNOW PLOWABLE MARKERS EA
I-5016 (42397.3.ST1)	Johnston	1	I-95 NB	FROM MILE POST 99.8 TO MILE POST 107.1	200	200	1	4	100	1	12					48,220	38,575	5,590		650
TOTAL FOR MAP NO. 1					200	200	1	4	100	1	12					48,220	38,575	5,590		650
		2	I-95 SB	FROM MILE POST 99.8 TO MILE POST 107.1	200	200	1	4	100	1	12					48,220	38,575	5,590		650
TOTAL FOR MAP NO. 2					200	200	1	4	100	1	12					48,220	38,575	5,590		650
		3,4,5,6	EXIT 101	RAMPS							8			3,150	6,235				100	
TOTAL FOR MAP NO. 3456											8			3,150	6,235				100	
		7,8,9,10	EXIT 102	RAMPS							8			3,095	3,980				100	
TOTAL FOR MAP NO. 78910											8			3,095	3,980				100	
		11,12,13,14	EXIT 105	RAMPS							8	3,200	3,200	3,165	3,165				100	
TOTAL FOR MAP NO. 11121314											8	3,200	3,200	3,165	3,165				100	
		15,16,17,18	EXIT 106	RAMPS							8	1,000	1,000	4,545	4,545				100	
TOTAL FOR MAP NO. 15161718											8	1,000	1,000	4,545	4,545				100	
		19,20,21,22	EXIT 107	RAMPS							8			5,570	5,570				100	
TOTAL FOR MAP NO. 19202122											**8**			**5,570**	**5,570**				**100**	
TOTAL FOR PROJ NO. I-5016 (42397.3.ST1)					**400**	**400**	**2**	**8**	**200**	**2**	**64**	**4,200**	**4,200**	**19,525**	**23,495**	**96,440**	**77,150**	**11,180**	**500**	**1,300**
												8,400		**43,020**		**173,590**				
GRAND TOTAL					**400**	**400**	**2**	**8**	**200**	**2**	**64**	**4,200**	**4,200**	**19,525**	**23,495**	**96,440**	**77,150**	**11,180**	**500**	**1,300**
												8,400		**43,020**		**173,590**				

PROJ. REFERENCE NO.	SHEET NO.
I-5016	TCP-1



ENTRANCE RAMPS



GUIDELINES

1. THIS DRAWING IS INTENDED TO SHOW THE CMS LOCATION AND MESSAGING REQUIRED FOR A WORK ZONE "VARIABLE SPEED LIMIT" REDUCTION ON A FREEWAY WHICH IS TO BE REDUCED TO 55 MPH.
2. EACH DIRECTION OF THE PROJECT IS TO BE EVALUATED FOR THE "VARIABLE SPEED LIMIT" REDUCTION. THIS DRAWING INTENTIONALLY HAS 1 DIRECTION SIGNED AS A REMINDER TO CAREFULLY CONSIDER WHETHER BOTH DIRECTIONS OF THE PROJECT NEED TO HAVE THE SPEED LIMIT REDUCED.
3. IN ADDITION, FOR ACTIVE WORK AREAS THAT EXCEED 1 MILE IN LENGTH, AN EVALUATION IS TO BE MADE TO DETERMINE IF ADDITIONAL CMS'S ARE NEEDED TO SUPPLEMENT THE INITIAL ONES. PORTABLE MOUNTED W3-5 SIGNS WITH SPEED PENALTY SIGNS ARE TO BE PLACED ALONG ENTRANCE RAMPS LOCATED WITHIN THE ACTIVE WORK AREA.
4. THE $250 SPEEDING PENALTY APPLIES FOR ALL PROJECTS THAT QUALIFY FOR A "VARIABLE SPEED LIMIT" REDUCTION.
5. THE "VARIABLE SPEED LIMIT" REDUCTION IS ONLY IN EFFECT WHEN WORKERS ARE PRESENT. THE SPEED LIMIT AND SPEED PENALTY MESSAGES ARE TO BE REMOVED AND THE SIGNS ARE TO BE TURNED OFF OR OTHER PERTINENT MESSAGING MAY BE DISPLAYED. AT THE COMPLETION OF THE ACTIVITY, THE REGIONAL TRAFFIC ENGINEER SHALL BE NOTIFIED BY THE RESIDENT ENGINEER TO RESCIND THE ORDINANCE.
6. WHEN "VARIABLE SPEED LIMIT" REDUCTIONS ARE IN EFFECT, THE CONTRACTOR IS TO COVER ANY ANY EXISTING SPEED LIMIT SIGNS LOCATED WITHIN THE ACTIVE WORK AREA THAT CONFLICT WITH THE "VARIABLE SPEED LIMIT" REDUCTION.

NOTE TO ALL:

THE ACTIVITY MUST FIRST BE EVALUATED BY THE REGIONAL TRAFFIC ENGINEER UTILIZING THE APPROVED GUIDELINES BEFORE ANY "VARIABLE SPEED LIMIT" REDUCTIONS AS SHOWN ON THIS DRAWING ARE INSTALLED.

THE "VARIABLE SPEED LIMIT" REDUCTION MUST ORDINANCED AND SIGNED BY THE STATE TRAFFIC ENGINEER BEFORE ANY CMS IS USED FOR REDUCING THE SPEED LIMIT.

APPROVED:_____ DATE:_____

SEAL

"VARIABLE SPEED LIMIT" REDUCTION WITH PORTABLE CMS'S

SCALE:	NONE
DATE:	09/04/09
DWG. BY:	SK
DESIGN BY:	SK
REVIEWED BY:	

REVISIONS

CADD FILE

09-SEP-2009 16:02
\\DOT\DFS\TOTL\GROUPS-WZTCCC\designgroup\wz variable speed limit\V-5016 I-95 Johnston\I-5016.dgn
rmgarrett AT WZTC24747