

DIVISION of HIGHWAYS DIVISION ELEVEN REVIEWED BY:



		PROJECT	REFERENCE NO.	SHEET NO.
	I	Dr	(00411	02
PAVI	EMENT SCHE	DULE		
PROP. APPROX. 1½" ASPHAI AN AVERAGE RATE OF 168 L	LT CONCRETE SURF .BS. PER SQ. YD.	ACE COURS	E, TYPE S9.5C,	
SHOULDER RECONSTRUC	TION			
EXISTING PAVEMENT				
MILLING OF EXISTING ASI	PHALT PAVEMENT	AT VAR. DE	EPTH OF 1" - 1¼	."
MILLING OF EXISTING AS	PHALT PAVEMENT	AT DEPTH	OF 1½"	
INCIDENTAL MILLING (Se	e Tie in Detail)			
		A;	MILL MIN. 5 S DIRECTED BY	0' OR ENGINEER
		50' (V3)		
	ASPHALT F	ROADWAY	EXISTING ASP	
	BEGIN & TIE ASPHAL PAVEMENT DIR	END MA	AP TIE IN I TO EXISTING ASP END OF MAPS O HE ENGINEER	DETAIL PHALT R AS
	INCLUDES INCIDEN SMOOTH TIE-INS AS NEEDED		MILL TO END OF G NEAREST JOINT, DIRECTED BY THE -Y- THE ENDS OF SECTION D STREET INTERSEC ED BY THE ENGINEEI	C&G, DR AS E ENGINEER. ONS FOR TTIONS, R ECTIONS
	NOTE: TYI	PICALS A	ARE NOT T	O SCALE
WATAUGA PRIMARY & SECO 2025 ASPHALT R REVISIONS	COUNTY NDARY RO ESURFACIN	ADS NG	S OVER	TRANSPORT
			scale: N/A d	NATE: 1/21/2025
N.C. DEPARTMENT of	TRANSPORTATI	ON	PREPARED BY: REVIEWED BY:	DLH
DIVISION of 1	HIGHWAYS		REVIEWED BY:	
DIVISION I	ELEVEN			



		PROJECT REFERENCE NO.	SHEET NO.
		DK00411	03
PAVI	EMENT SCHE	DULE	
PROP. APPROX. 1½" ASPHA AN AVERAGE RATE OF 168 L	LT CONCRETE SUR .BS. PER SQ. YD.	FACE COURSE, TYPE S9.5C,	
SHOULDER RECONSTRUC	CTION		
EXISTING PAVEMENT			
MILLING OF EXISTING AS	PHALT PAVEMENT	- AT VAR. DEPTH OF 1" - 1½	ļ"
MILLING OF EXISTING AS	PHALT PAVEMEN	AT DEPTH OF 1½"	
INCIDENTAL MILLING (Se	e Tie in Detail)		
	ASPHALT BEGIN & TIE ASPHAL PAVEMEN DII	MILL MIN. 5 AS DIRECTED BY 50' V3 ROADWAY EXISTING ASF END MAP TIE IN T OVERLAY TO EXISTING ASF T AT BEGIN & END OF MAPS O RECTED BY THE ENGINEER	0' OR ENGINEER
	L SHOUL	DER POINT	
	RESU	SPHALT DITCH DETAIL	
		IAFE OR AS DIRECTED BY THE ENGI	

NOTE: TYPICALS ARE NOT TO SCALE

WATAUGA COUNTY PRIMARY & SECONDARY RC 2025 ASPHALT RESURFACI	5		NSIDN 4100				
REVISIONS	INIT.	DATE		A A A A A A A A A A A A A A A A A A A			
				OP TRAND			
			SCALE: N/A	DATE: 1/21/2025			
	ION		PREPARED BY:	DLH			
N.C. DEPARTMENT OF TRANSPORTAT	ION		REVIEWED BY:				
DIVISION of HIGHWAYS	DIVISION of HIGHWAYS						
DIVISION ELEVEN							







																											PROJECT NO.	SHEET NO.
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													SUMM	ARY (ΔΝΤΙΤ	IFS											
																											T	
					-						122	20000000-E	1245000000-E	126000000-E	1297000000-E	1308000000-E	1330000000-E	1523000000-E	1524000000-E	1575000000-E	1880000000-E	1704000000-E	2473000000-N	2815000000-N	283000000-N	2845000000-N	7324000000-N	7444000000-E
PROJECT NO	COUN	IY MAP NO	ROUIE	DESCRIPTION	TYPNC		SLANE	LENGI		BEGI	END IN	NCIDENTAL	SHOULDER	AGGREGATE	1½" MILLING	1" 10 1.25"	INCIDENTAL	SURFACE	LEVELING	ASPHALI	GENERIC	PAICHING	GENERIC	ADJUST DROP	ADJUST	ADJUST METER	JUNCTION BOX	X INDUCTIVE
							TYPE			N MP	MP SI	IONE BASE	RECONSTRUCTION	SHOULDER		MILLING	MILLING	COURSE, S9.5C	COURSE, TYPE	BINDER FOR	PAVINGTIEM,	EXISTING	DRAINAGETTEM	I, INLEI	MANHOLES	OR VALVE BOX	(STANDARD	LOOP SAWCUT
														BORROW					\$9.5C	PLANT MIX	RESURFACE	PAVEMENT	OVERSIZED				SIZE)	
																					PAVED DITCH		MANHOLE					
								мі	FT			TONS	SMI	TON	sv	sv	sv	TONS	TON	TONS	TONS	TONS	FΔ	FΔ	FΔ	FΔ	FA	IF
				EBOM GREEN ST (NS) TO US		1			+			10110	0111	1011	01			10110	TON	10110	10110	10110						
2025CPT 11 08 1095	1 Watau	ga 1	US 221/YONAHLOSSEE BD	221/US321 MAINST	1	2	2WU	0 11	30	7 91	8.02	15			2 288		500	303		18					4	4		
					-	1 -									_,												<u> </u>	-
2025CPT.11.08.1095	51 Watau	ga 2	US 221 N / MAIN ST	FROM US 321 BUS TO US 221/US 321	1	2	2WU	0.69	30	8.02	8.71	20			10,930		3,000	1,061		63				4	20	12	1	300
2025CPT.11.08.1095	51 Watau	ga 3	US 321 BUS N / MAIN ST	FROM US 321 TO US 221	1	2	2WU	1.27	30	0	1.27	25			22,352		1,667	2,168		136	160		2	10	22	34		
	TOTAL F	OR PROJ NO	0. 2025CPT.11.08.10951			1		2.07				60			35,570		5,167	3,532		217	160		2	14	46	50	1	300
2025CPT.11.08.2095	51 Watau	ga 4	SR-1107 / NC HWY 105 BYP	US 321/US 421 TO NC 105	2	2	2WU	1.9	30	0	1.9	38	1.9	523			600	3,244		231		818				2		
2025CPT.11.08.2095	51 Watau	ga 5	SR-1180 / POPLAR GROVE CONNECTOR RD	FROM US 321/US 421 TO SR 1185	3	2	2WU	0.08	31	0	0.08		0.1	22	1,455		500	135		8					2	4		
2025CPT.11.08.2095	51 Watau	ga 6	SR-1513 / BROWNS CHAPEL RD	FROM SR 1672 TO SR 1514	2	2	2WU	2.16	20	0	2.16	43	2.2	594			222	2,464	1,068	208								
				FROM US 321 BUS/MAIN ST TO END																								
2025CPT.11.08.2095	51 Watau	ga 7	SR-1537 / GLOBE RD	OF PAVEMENT	4	2	2WU	0.1	16	0	0.1					939		149		10	3			2				
	TOTAL F	OR PROJ NO	D. 2025CPT.11.08.20951					4.24				81	4.2	1,139	1,455	939	1,322	5,992	1,068	457	3	818		2	2	6		
		GRA	ND TOTAL					6.31				141	4.2	1,139	37,025	939	6,489	9,524	1,068	674	163	818	2	16	48	56	1	300
			Mile Posting Man																									

Mile Posting Map

																							PROJECT NO.	SHEET NO.
																							DK00411	7
									тμ	EDN		0172410		ΔΑΙΝΤ		TITIES								
									111			LASIIC	AND	FAINI	VUAN	THES								
												4413000000-E	451000000-N	470900000-E				4725000000-E				489000	00000-E	489200000-N
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANE	S LANE	LENGTH	WIDTH	BEGIN MP	END MP	WORK ZONE	LAW	THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC	THERMOPLASTIC	HOT SPRAY	HOT SPRAY	GENERIC PAVEMENT
							TYPE					ADVANCE/GENERAL	ENFORCEMENT	PAVEMENT MARKING	SHARED LANE 90	BICYCLE &	LEFT ARROW 90	STRAIGHT &	RIGHT ARROW 90	STRAIGHT	LEFT ARROW 90	THERMOPLASTIC	THERMOPLASTIC	MARKING ITEM,
												WARNING SIGNING		LINES 24", 90 MIL	MIL	STRAIGHT 90 MIL	MIL	LEFTT ARROW 90	MIL	ARROW 90 MIL	MIL	PAVEMENT	PAVEMENT	POLYCARBONATE H-
																		MIL				MARKING LINES,	MARKING LINES,	SHAPED MARKERS
																						4", 65 MIL	8", 65 MIL	
								MI	FT			SF	HR	LF	EA	EA	EA	EA	EA	EA	EA	LF	LF	EA
				FROM GREEN ST (NS) TO US																				
2025CPT.11.08.10951	Watauga	1	US 221/YONAHLOSSEE RD	221/US321 MAINST	1	2	2WU	0.11	30	7.91	8.02	56	40	40	2	4						5,000	300	
2025CPT.11.08.10951	Watauga	2	US 221 N / MAIN ST	FROM US 321 BUS TO US 221/US 321	1	2	2WU	0.69	30	8.02	8.71	112		200			3	2	2	2		14,849	500	
2025CPT.11.08.10951	Watauga	3	US 321 BUS N / MAIN ST	FROM US 321 TO US 221	1	2	2WU	1.27	30	0	1.27	176		75			2			2		27,330	700	
	TOTAL FO	R PROJ NO. 2	025CPT.11.08.10951					2.07				344	40	315	2	4	5	2	2	4		47,179	1,500	
																		19				48,	,679	
		<u> </u>		· · · · · · · · · · · · · · · · · · ·											1	1	1	1	1	1				
2025CPT.11.08.20951	Watauga	4	SR-1107 / NC HWY 105 BYP	US 321/US 421 TO NC 105	2	2	2WU	1.9	30	0	1.9	176		16							2	40,888	500	125
2025CPT.11.08.20951	Watauga	5 5	SR-1180 / POPLAR GROVE CONNECTOR RD	FROM US 321/US 421 TO SR 1185	3	2	2WU	0.08	31	0	0.08	112							-			1,722		
2025CP1.11.08.20951	Watauga	6	SR-1513 / BROWNS CHAPEL RD	FROM SR 1672 TO SR 1514	2	2	2WU	2.16	20	0	2.16	208										46,483		
		_		FROM US 321 BUS/MAIN ST TO END OF																				
2025CP1.11.08.20951	Watauga	/	SR-15377 GLOBE RD	PAVEMENT	4	2	2WU	0.1	16	0	0.1	56												
	TOTAL FO	R PROJ NO. 2	025CPT.11.08.20951			-	-	4.24				552		16							2	89,093	500	125
																		2				89,	,593	
				1	r –	1	1	0.00	т <u> </u>	r –	r –	000	40	004								400.070	0.000	405
		GRAND	TOTAL			-		6.31				896	40	331	2	4	5	2	2	4	2	136,272	2,000	125
L		M	ile Destine Man		1				1						1			21				138	, <i>212</i>	
		M	THE POSITINE MAD																					





TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES TYPICAL DETAIL OF F UNSIGNALIZE

	ADDITIONAL INTERSECTIONS (NON-TYPICAL)									
Extend paving limits to back of radius or loop on the following intersections:										
MAP#	STREET NAME	COMMENTS								

	PROJECT REFERENCE NO.	SHEET NO.
	DK00411	9
	EXTEND LIMITS TO BACK OF RADIUS ON STATE MAINTAINED ROADS AS DIRECTED BY THE ENGINEER	
PR ED	OJECT LIMITS AT Y LINES	





<u> </u>	G DIAGR/	AM			TABLE OF	OPERATIO
				F		PHASE
	/				SIGNAL	
	>	\downarrow			FACE	+ + 4
				-		J D
			0 4	-	21	GR
°		\square	04	-	22	GGR
	/	/		-	41,42	RRG
$\langle \rangle$					61,62	RGR
					P41,P42	DW DW W
Y	\boldsymbol{X}			L	P61,P62	DW W DW
PHASING DIAGE DETEC UNDETE UNDETE PEDES	AM DETECTION RAM DETECTION FED MOVEMEN ECTED MOVEMINALIZED MOVEMIN TRIAN MOVEMIN	+5 <u>ON LEGEND</u> T ENT (OVERI EMENT ENT	_AP)			
				<u>US 321</u>	-221 (Main	
					_	
						(
				2	0 MPH +1%	CA CA Grade
OASIS	\$ 2070	TIMIN	G CHAR	2	0 MPH +1%	a Grade
OASIS	\$ 2070	TIMIN(PF	G CHAR	2	0 MPH +1%	CA Grade
OASIS FEATURE	2070 2	TIMIN(PF 4	G CHAR	2 T 6	0 MPH +1%	a Grade
OASIS FEATURE Min Green 1 *	2070 2 10 7 0	TIMIN PF 4 7	G CHAR	2 T 6 10 7 0	0 MPH +1%	€A Grade
OASIS FEATURE Min Green 1 * Extension 1 *	2070 2 10 3.0	TIMIN PF 4 7 2.0	G CHAR	2 T 6 10 3.0	0 MPH +1%	€A Grade
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 *	2070 2 10 3.0 45 7.0	TIMIN 4 7 2.0 25 4 1	G CHAR ASE 7 2.0 15 7	2 T 6 10 3.0 45 7.1	0 MPH +1%	<pre>②A ()</pre>
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Pod Clearance	2070 2 10 3.0 45 3.0 2 5	TIMIN P⊢ 4 7 2.0 25 4.1 1.0	G CHAR ASE 5 7 2.0 15 3.0 2.5	2 A C C C C C C C C	0 MPH +1%	<pre>②A (</pre>
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Clearance	2070 2 10 3.0 45 3.0 2.5 5.0	TIMIN P⊢ 4 7 2.0 25 4.1 1.0 2.0	G CHAR ASE 7 2.0 15 3.0 2.5 2.0	2 T 6 10 3.0 45 3.1 1.7 2.0	0 MPH +1%	CA Grade
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Revert Walk 1 *	2070 2 10 3.0 45 3.0 2.5 5.0	TIMIN 4 7 2.0 25 4.1 1.0 2.0 7	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0	2 T 6 10 3.0 45 3.1 1.7 2.0 7	0 MPH +1%	€A (
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Revert Walk 1 * Don't Walk 1	2070 2 10 3.0 45 3.0 2.5 5.0 -	TIMIN 4 7 2.0 25 4.1 1.0 2.0 7 9	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0 -	2	0 MPH +1%	<pre>②A (</pre>
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Clearance Red Revert Walk 1 * Don't Walk 1 Seconds Par Actuation *	2070 2 10 3.0 45 3.0 2.5 5.0	TIMIN 4 7 2.0 25 4.1 1.0 2.0 7 9 -	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0 - - -	2	0 MPH +1%	€ Grade
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Revert Walk 1 * Don't Walk 1 Seconds Per Actuation *	2070 2 10 3.0 45 3.0 2.5 5.0 - - - -	TIMIN 4 7 2.0 25 4.1 1.0 2.0 7 9 - -	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0 - - - -	2	0 MPH +1%	a Grade
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Revert Walk 1 * Don't Walk 1 Seconds Per Actuation * Max Variable Initial *	2070 2 10 3.0 45 3.0 2.5 5.0 - - - - - -	TIMIN PF 4 7 2.0 25 4.1 1.0 2.0 7 9 - - - -	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0	2	0 MPH +1%	a Grade
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Clearance Red Revert Walk 1 * Don't Walk 1 Seconds Per Actuation * Max Variable Initial * Time Before Reduction *	2070 2 10 3.0 45 3.0 2.5 5.0	TIMIN 4 7 2.0 25 4.1 1.0 2.0 7 9 - - - - - - - -	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0 - - - - - - - - - - - -	ET 2 6 10 3.0 45 3.1 1.7 2.0 7 9 - - - - - - - -	0 MPH +1%	CA Grade
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Revert Walk 1 * Don't Walk 1 Seconds Per Actuation * Max Variable Initial * Time Before Reduction * Minimum Gap	2070 2 10 3.0 45 3.0 2.5 5.0 - - - - - - - - - - - - - - - -	TIMIN 4 7 2.0 25 4.1 1.0 25 4.1 1.0 2.0 7 9 - - - - - - - - -	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0 - - - - - - - - - - - - - - - - - -	2 	0 MPH +1%	€ Grade
OASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Clearance Red Revert Walk 1 * Don't Walk 1 Seconds Per Actuation * Max Variable Initial * Time Before Reduction * Time To Reduce * Minimum Gap Recall Mode	2070 2 10 3.0 45 3.0 2.5 5.0 2.5 5.0 - - - - - - - - - - - - - - - - - - -	TIMIN 4 7 2.0 25 4.1 1.0 25 4.1 1.0 2.0 7 9 - - - - - - - - - - - - -	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0 - - - - - - - - - - - - - - - - - - -	A 6 10 3.0 45 3.1 1.7 2.0 7 9 - - - - - - - -	0 MPH +1%	€ Grade
DASIS FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Clearance Red Revert Walk 1 * Don't Walk 1 Seconds Per Actuation * Max Variable Initial * Time Before Reduction * Minimum Gap Recall Mode Vehicle Call Memory	2070 2 10 3.0 45 3.0 45 3.0 2.5 5.0 2.5 5.0 - - - - - - - - - - - - - - - - - - -	TIMIN 4 7 2.0 25 4.1 1.0 25 4.1 1.0 2.0 7 9 - - - - - - - - - - - - -	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0 - - - - - - - - - - - - - - - - - - -	A 6 10 3.0 45 3.1 1.7 2.0 7 9 - 7 9 - - - - - - - -	0 MPH +1%	<pre>②A ()</pre> ₅ Grade
FEATURE FEATURE Min Green 1 * Extension 1 * Max Green 1 * Yellow Clearance Red Clearance Red Clearance Red Clearance Red Revert Walk 1 * Don't Walk 1 Seconds Per Actuation * Max Variable Initial * Time Before Reduction * Max Variable Initial * Time To Reduce * Minimum Gap Recall Mode Vehicle Call Memory Dual Entry	2070 2 10 3.0 45 3.0 2.5 5.0 2.5 5.0 - - - - - - - - - - - - - - - - - - -	TIMIN 4 7 2.0 25 4.1 1.0 25 4.1 1.0 2.0 7 9 - - - - - - - - - - - - -	G CHAR ASE 5 7 2.0 15 3.0 2.5 2.0 - - - - - - - - - - - - - - - - - - -	A 6 10 3 .0 4 5 3 .1 1 .7 2 .0 7 9 - 7 9 - - - - - - - -	0 MPH +1%	€ Grade



	Plan of	Rec	ord
PREPARED BY:	T.A. Kenion	DATE:	June 2023
REVIEWED BY:	M.F. Cowhig	DATE:	June 2023
SIGNATURE:	Matthem Cowhig	DATE:	06/29/2023
	COMME	INTS	
Replaced 6X40 loop	wireless puck).	detec	tion with
This plan of re by field persor	ecord reflects existing nnel. This plan may have tate.	field cor e been moc	nditions as submitted dified from

Plan



PROJECT	REFERENCE NO.	SHEET NO.
	POR	Sig. 1.0

ON CHART										
MMING										
1	DELAY TIME	SYSTEM LOOP	NEW CARD							
	-	I	I							
	5	-	1							
	15	-	-							
	_	-	-							
	_	-	-							

3 Phase Fully Actuated Isolated

<u>NOTES</u>

- 1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018, "Standard Specifications for Roads and Structures" dated January 2018, and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed at the following website: https://connect.ncdot.gov/resour ces/safety/Pages/ITS-Design-Reso urces.aspx
- 2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Enable Backup Protect for phase 2 to allow the controller to clear from phase 2+6 to phase 2+5 by progressing through an all red display.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 5. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 6. Pavement markings are existing.



n of Record			DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
Prepared For: Nobility and NORTH Card Division	US 321-221 (a US 221 (Yonal	Main Street) t hlassee Road)	Not a certified document. This document originally issued and sealed by W.J.Hamilton,PE, #032396
Not and the second second	Division 11 Watauga	County Blowing Rock	on 6/1/21.
Design Section	PLAN DATE: June 2021	REVIEWED BY: WJ Hamilton	This document shall not be
eenfield Pkwy,Garner,NC 27529	PREPARED BY: ZM Esposito	REVIEWED BY:	considered a certified
O 20	REVISIONS	INIT. DATE	document.
1"=20'			SIG. INVENTORY NO. 11-0892

