

15-DEC-2021 11:16  
 S:\Contracts\6) Proposed Resurfacing\DA00505-AST-Chowan, Cates & Perquimans\Design Files\DA00505\_Di\_shl.dgn  
 \$\$\$USERNAME\$\$\$

**CONTRACT: DA00505 WBS ELEMENT: 2022CPT.01.08.20212.1, ETC.**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**CHOWAN COUNTY**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2022CPT.01.08.20212.1, ETC.	1
STATE PROJ. NO.	DESCRIPTION	
2022CPT.01.08.20212.1	PE, CONST	

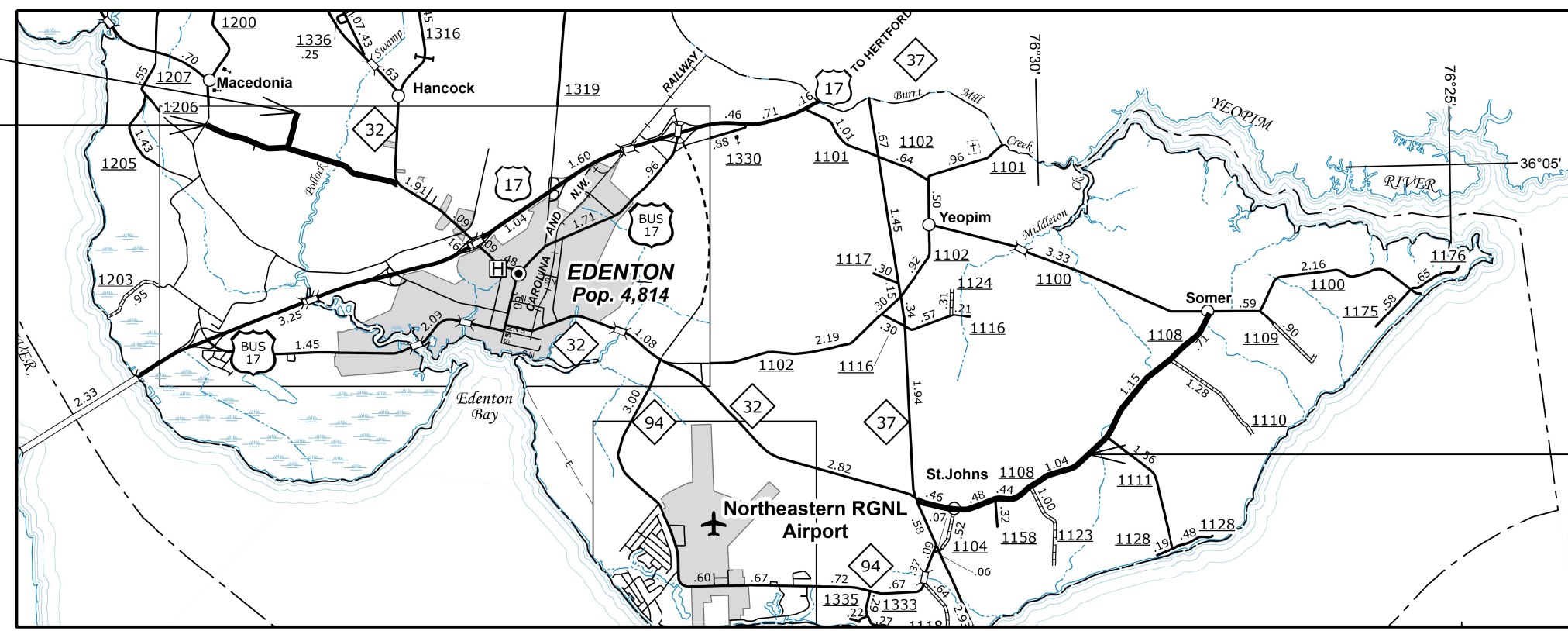
**LOCATION:**

- MAP 1 - SR 1108 FROM NC 37 TO SR 1100
- MAP 2 - SR 1208 FROM SR 1200 TO NC 32
- MAP 3 - SR 1209 FROM DEAD END TO SR 1208

**TYPE OF WORK:**

ASPHALT SURFACE TREATMENT (DOUBLE SEAL) & (MAT AND DOUBLE SEAL)

MAP 3  
MAP 2



MAP 1

**GRAPHIC SCALES**

NTS

**PROJECT LENGTH**

- MAP 1 - SR 1108 = 4.28 MILES
- MAP 2 - SR 1208 = 2.32 MILES
- MAP 3 - SR 1209 = 0.46 MILES

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**

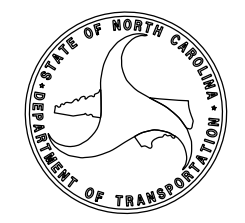
113 Airport Dr., Edenton NC, 27932

2018 STANDARD SPECIFICATIONS

W. B. HOBBS, PE  
DIVISION PROJECT TEAM LEAD

C. E. SLACHTA  
DIVISION CONTRACT ENGINEER

S. P. FENWICK, PLS  
DIVISION DESIGN ENGINEER



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**CONTRACT: DA00505 WBS ELEMENT: 2022CPT.01.08.20212.1, ETC.**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**GATES COUNTY**

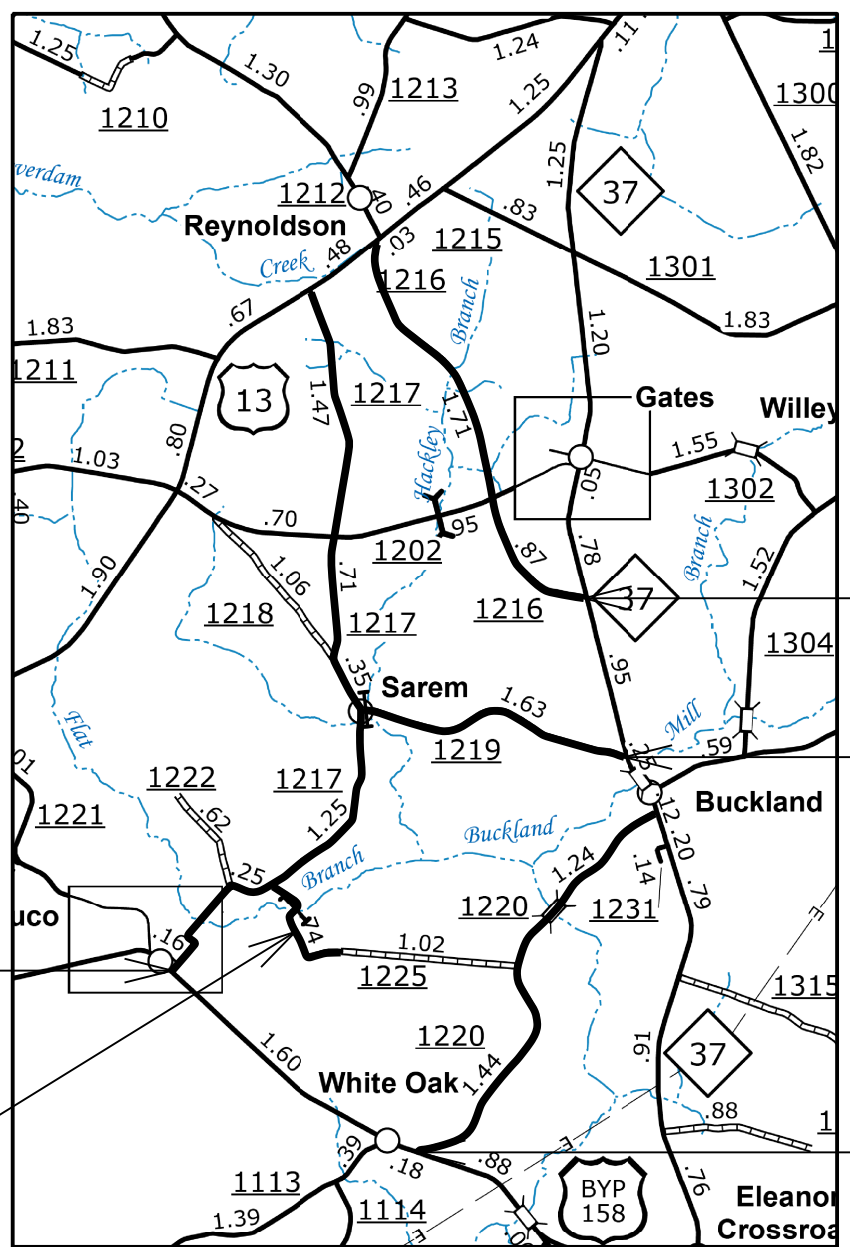
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2022CPT.01.08.20212.1, ETC.	2
STATE PROJ. NO.		DESCRIPTION
2022CPT.01.08.20372.1		PE, CONST

**LOCATION:**

- MAP 4 - SR 1216 FROM NC 37 TO US 13
- MAP 5 - SR 1217 FROM US 158 TO US 13
- MAP 6 - SR 1219 FROM SR 1217 TO NC 37
- MAP 7 - SR 1220 FROM US 158 TO NC 37
- MAP 8 - SR 1225 FROM SR 1217 TO SR 1220

**TYPE OF WORK:**

ASPHALT SURFACE TREATMENT (DOUBLE SEAL)



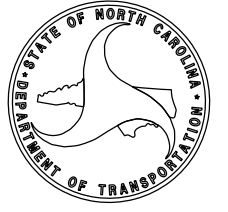
MAP 4

MAP 6

MAP 5

MAP 8

MAP 7

<p>GRAPHIC SCALES</p> <p style="font-size: 2em;">NTS</p>	<p><b>PROJECT LENGTH</b></p> <p>MAP 4 - SR 1216 = 2.58 MILES</p> <p>MAP 5 - SR 1217 = 4.62 MILES</p> <p>MAP 6 - SR 1219 = 1.63 MILES</p> <p>MAP 7 - SR 1220 = 2.64 MILES</p> <p>MAP 8 - SR 1225 = 0.69 MILES</p>	<p>Prepared in the Office of:</p> <p><b>DIVISION OF HIGHWAYS</b></p> <p>113 Airport Dr., Edenton NC, 27932</p> <p>2018 STANDARD SPECIFICATIONS</p> <hr/> <p><u>W. B. HOBBS, PE</u></p> <p>DIVISION PROJECT TEAM LEAD</p> <hr/> <p><u>C. E. SLACHTA</u></p> <p>DIVISION CONTRACT ENGINEER</p>	<p><u>S. P. FENWICK, PLS</u></p> <p>DIVISION DESIGN ENGINEER</p>	
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**CONTRACT: DA00505 WBS ELEMENT: 2022CPT.01.08.20212.1, ETC.**

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2022CPT.01.08.20212.1, ETC.	3
STATE PROJ. NO.		DESCRIPTION
2022CPT.01.08.20722.1		PE, CONST

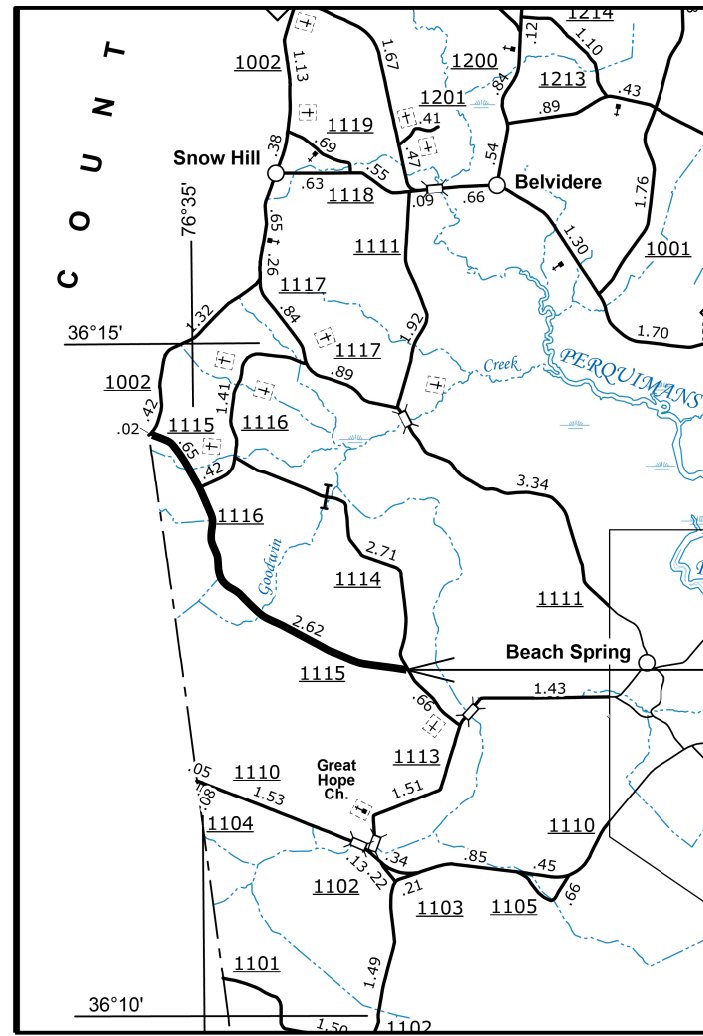
**PERQUIMANS COUNTY**

**LOCATION:**

MAP 9 - SR 1115 (SHEPHERD LANE) FROM SR 1114 (CHINQUAPIN RD TO SR 1220 (HACKLEY RD)

**TYPE OF WORK:**

ASPHALT SURFACE TREATMENT (DOUBLE SEAL)



MAP 9

GRAPHIC SCALES  
  
NTS

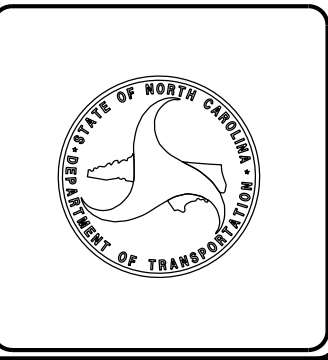
PROJECT LENGTH  
  
MAP 9 - SR 1115 = 3.23 MILES

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
113 Airport Dr., Edenton NC, 27932  
2018 STANDARD SPECIFICATIONS

W. B. HOBBS, PE  
DIVISION PROJECT TEAM LEAD

C. E. SLACHTA  
DIVISION CONTRACT ENGINEER

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DIVISION DESIGN ENGINEER

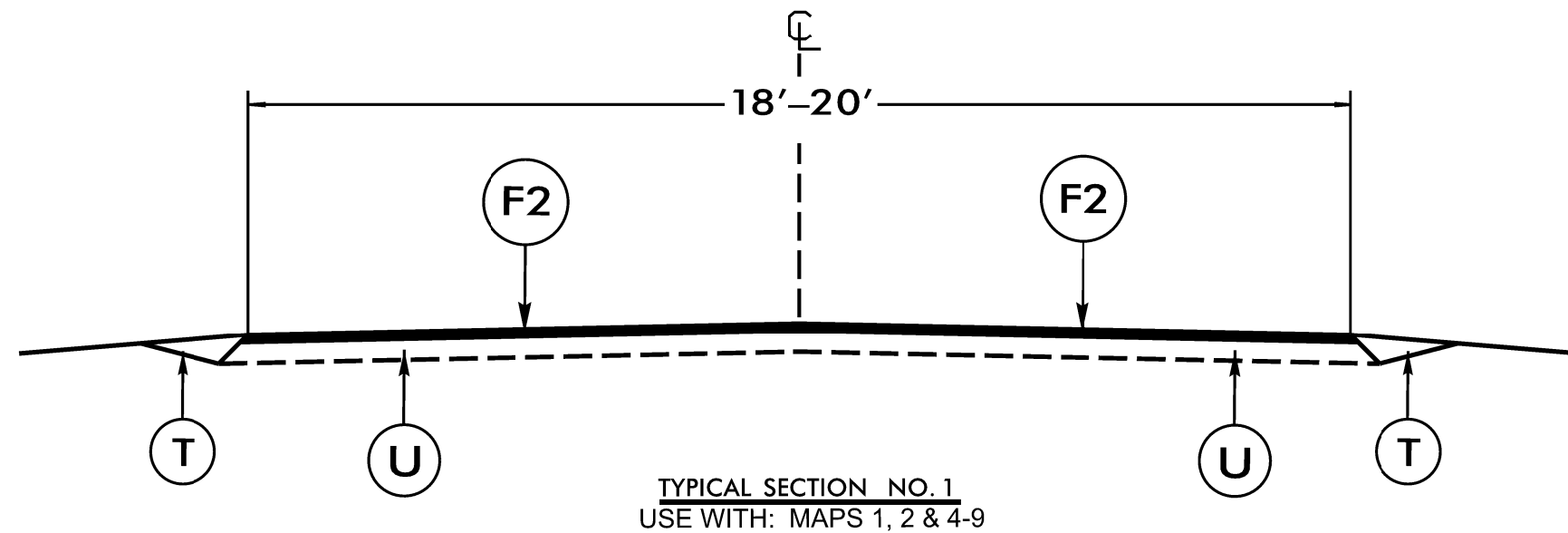
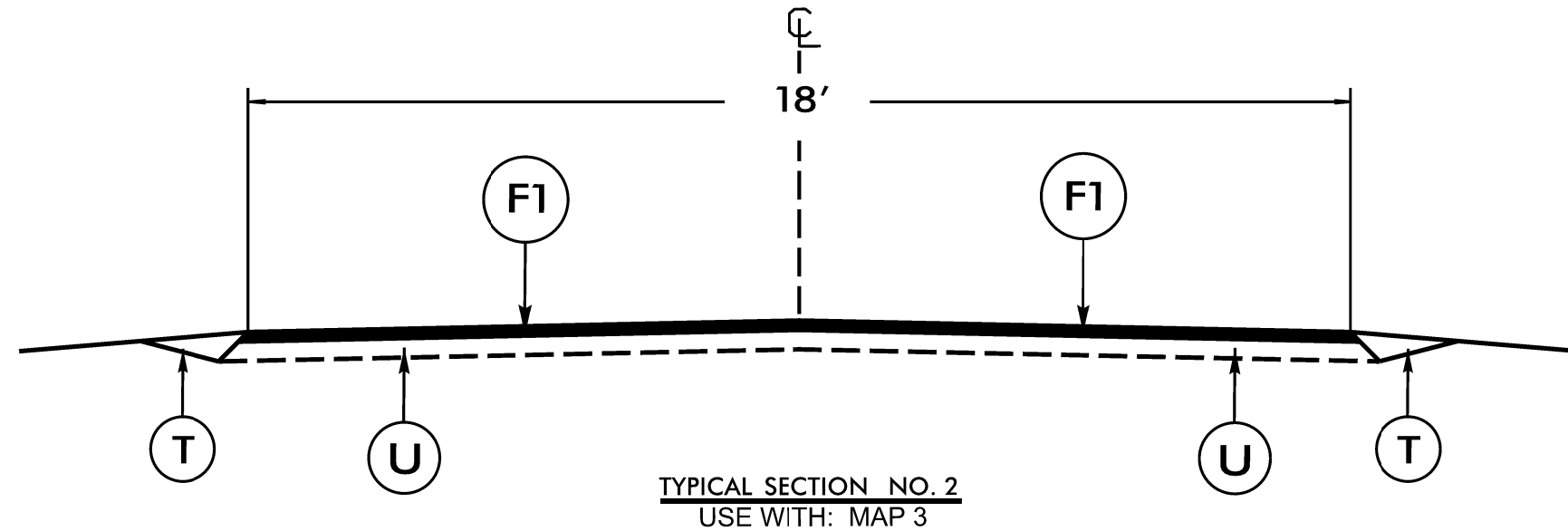


PAVEMENT SCHEDULE

F1	ASPHALT SURFACE TREATMENT, MAT AND DOUBLE SEAL
F2	ASPHALT SURFACE TREATMENT, DOUBLE SEAL
T	EARTH MATERIAL
U	EXISTING PAVEMENT.

NOTES:

- \* EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES
- \* ASPHALT SURFACE TREATMENT (MAT & DOUBLE SEAL) CONSISTS OF THREE LAYERS OF TREATMENT: BOTTOM LAYER OR MAT CONSISTS OF EMULSIFIED ASPHALT, GRADE CRS-2L AT A RATE OF APPROX. 0.40± GAL/SY AND A LAYER OF #67 AGGREGATE AT A RATE OF APPROX. 38± LBS/SY. MIDDLE LAYER CONSISTS OF EMULSIFIED ASPHALT, GRADE CRS-2L AT A RATE OF APPROX. 0.30± GAL/SY AND A LAYER OF 78M AGGREGATE AT A RATE OF APPROX. 18± LBS/SY. TOP LAYER CONSISTS OF EMULSIFIED ASPHALT, GRADE CRS-2L AT A RATE OF APPROX. 0.25 ± GAL/SY AND A LAYER OF :5/16" LIGHTWEIGHT AGGREGATE AT A RATE OF APPROX. 9± LBS/SY.
- \* ASPHALT SURFACE TREATMENT (DOUBLE SEAL) CONSISTS OF TWO LAYERS OF TREATMENT: BOTTOM LAYER CONSISTS OF EMULSIFIED ASPHALT, GRADE CRS-2L AT A RATE OF APPROX. 0.30 ± GAL/SY AND A LAYER OF 78M AGGREGATE AT A RATE OF APPROX. 18± LBS/SY. TOP LAYER CONSISTS OF EMULSIFIED ASPHALT, GRADE CRS-2L AT A RATE OF APPROX. 0.25 ± GAL/SY AND A LAYER OF :5/16" LIGHTWEIGHT AGGREGATE AT A RATE OF APPROX. 9± LBS/SY.
- \* ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.



SYSTEMS  
 CONSULTANTS

PROJECT NO.	SHEET NO.
2022CPT.01.08.20212.1, ETC.	5

### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	MOBILIZATION	ASPHALT SURFACE TREATMENT, MAT & DOUBLE SEAL	ASPHALT SURFACE TREATMENT, DOUBLE SEAL	EMULSION FOR ASPHALT SURFACE TREATMENT
										MI	FT	LS	SY	SY	GAL
2022CPT.01.08.20212.1	Chowan	1	SR 1108 INDIAN TRAIL RD	NC 37 TO SR 1100 DRUMMONDS POINT RD	1	2	2WU	NO	NO	4.28	20	1		52,109	31,300
2022CPT.01.08.20212.1	Chowan	2	SR 1208 WILDCAT RD	SR 1200 MACEDONIA RD TO NC 32	1	2	2WU	NO	NO	2.32	20	*		28,806	17,300
2022CPT.01.08.20212.1	Chowan	3	SR 1209 RYANS GROVE RD	DEAD END TO SR 1208 WILDCAT RD	2	2	2WU	NO	NO	0.46	18	*	4,858		4,800
<b>TOTAL FOR PROJ NO. 2022CPT.01.08.20212.1</b>										<b>7.06</b>			<b>4,858</b>	<b>80,915</b>	<b>53,400</b>
2022CPT.01.08.20372.1	Gates	4	SR 1216 WATER PLANT RD	NC 37 TO US 13	1	2	2WU	NO	NO	2.58	20	*		30,322	18,200
2022CPT.01.08.20372.1	Gates	5	SR 1216 WATER PLANT RDSR 1217 ROOKS RD	US 158 TO US 13	1	2	2WU	NO	NO	4.62	20	*		55,738	33,500
2022CPT.01.08.20372.1	Gates	6	SR 1219 SAREM RD	SR 1217 ROOKS RD TO NC 37	1	2	2WU	NO	NO	1.63	20	*		19,175	11,510
2022CPT.01.08.20372.1	Gates	7	SR 1220 HACKLEY RD	US 158 TO NC 37	1	2	2WU	NO	NO	2.64	20	*		32,001	19,200
2022CPT.01.08.20372.1	Gates	8	SR 1225 SHEPHERD LANE	SR 1217 ROOKS RD TO SR 1220 HACKLEY RD	1	2	2WU	NO	NO	0.69	20	*		8,146	4,900
<b>TOTAL FOR PROJ NO. 2022CPT.01.08.20372.1</b>										<b>12.16</b>				<b>145,382</b>	<b>87,310</b>
2022CPT.01.08.20722.1	Perquimans	9	SR 1115 POPLAR NECK RD	SR 1114 CHINQUAPIN RD TO SR 1002 COUNTY LINE RD	1	2	2WU	NO	NO	3.23	18	*		35,029	21,020
<b>TOTAL FOR PROJ NO. 2022CPT.01.08.20722.1</b>										<b>3.23</b>				<b>35,029</b>	<b>21,020</b>
<b>GRAND TOTAL</b>										<b>22.45</b>		<b>1</b>	<b>4,858</b>	<b>261,326</b>	<b>161,730</b>

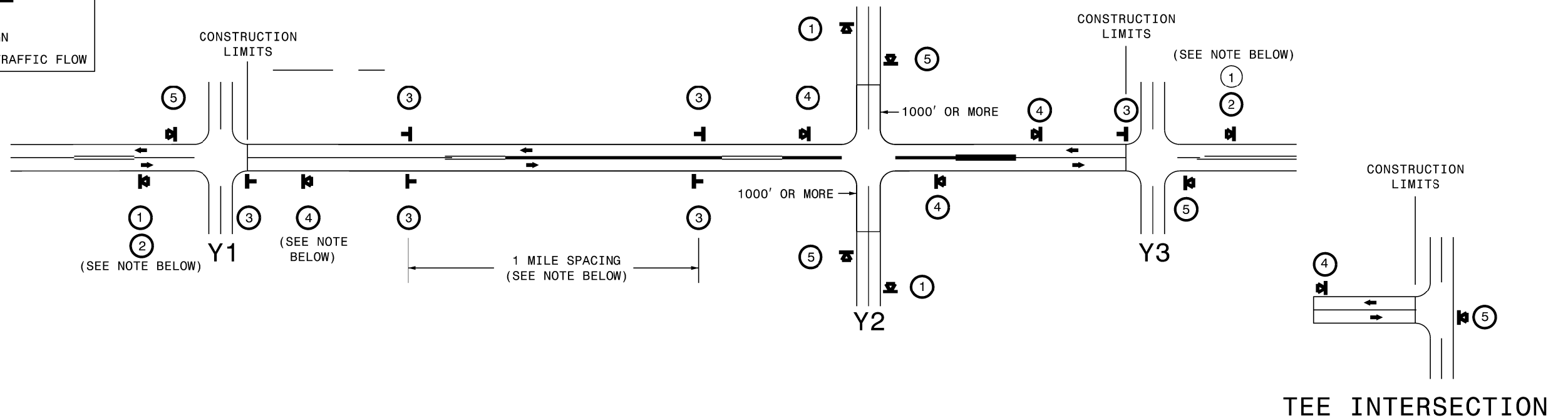
### THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	WORK ZONE ADV/GEN WARNING SIGNING	TEMPORARY TRAFFIC CONTROL
										MI	FT	SF	LS
2022CPT.01.08.20212.1	Chowan	1	SR 1108 INDIAN TRAIL RD	NC 37 TO SR 1100 DRUMMONDS POINT RD	1	2	2WU	NO	NO	4.28	20	570	1
2022CPT.01.08.20212.1	Chowan	2	SR 1208 WILDCAT RD	SR 1200 MACEDONIA RD TO NC 32	1	2	2WU	NO	NO	2.32	20	392	*
2022CPT.01.08.20212.1	Chowan	3	SR 1209 RYANS GROVE RD	DEAD END TO SR 1208 WILDCAT RD	2	2	2WU	NO	NO	0.46	18	80	*
<b>TOTAL FOR PROJ NO. 2022CPT.01.08.20212.1</b>										<b>7.06</b>		<b>1,042</b>	
2022CPT.01.08.20372.1	Gates	4	SR 1216 WATER PLANT RD	NC 37 TO US 13	1	2	2WU	NO	NO	2.58	20	512	*
2022CPT.01.08.20372.1	Gates	5	SR 1216 WATER PLANT RDSR 1217 ROOKS RD	US 158 TO US 13	1	2	2WU	NO	NO	4.62	20	784	*
2022CPT.01.08.20372.1	Gates	6	SR 1219 SAREM RD	SR 1217 ROOKS RD TO NC 37	1	2	2WU	NO	NO	1.63	20	80	*
2022CPT.01.08.20372.1	Gates	7	SR 1220 HACKLEY RD	US 158 TO NC 37	1	2	2WU	NO	NO	2.64	20	368	*
2022CPT.01.08.20372.1	Gates	8	SR 1225 SHEPHERD LANE	SR 1217 ROOKS RD TO SR 1220 HACKLEY RD	1	2	2WU			0.69	20	80	*
<b>TOTAL FOR PROJ NO. 2022CPT.01.08.20372.1</b>										<b>12.16</b>		<b>1,824</b>	
2022CPT.01.08.20722.1	Perquimans	9	SR 1115 POPLAR NECK RD	SR 1114 CHINQUAPIN RD TO SR 1002 COUNTY LINE RD	1	2	2WU	NO	NO	3.23	18	432	*
<b>TOTAL FOR PROJ NO. 2022CPT.01.08.20722.1</b>										<b>3.23</b>		<b>432</b>	
<b>GRAND TOTAL</b>										<b>22.45</b>		<b>3,298</b>	<b>1</b>

# SIGNING FOR ASPHALT SURFACE TREATMENT

**LEGEND**

- PORTABLE SIGN
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW



## MAINLINE (-L-) SIGNING

## -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	①		<ul style="list-style-type: none"> <li>- PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</li> </ul>	<p><b>STATIONARY SIGNING NOT REQUIRED FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">   <small>W20-1 48" X 48"</small>              PLACED 500' IN ADVANCE OF FLAGGER.         </div> <div style="text-align: center;">   <small>W20-7 A 48" X 48"</small>              PLACED 250' IN ADVANCE OF FLAGGER.         </div> </div>
	②		<ul style="list-style-type: none"> <li>- SIGN #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE NEAREST WHOLE NUMBER. DO NOT USE FRACTIONAL OR DECIMAL NUMBERS.</li> </ul>	
	③	 <small>W8-7 48" X 48"</small>  <small>SP 48" X 48"</small>	<ul style="list-style-type: none"> <li>- ALTERNATE THE FOLLOWING TWO SIGNS:</li> <li>- STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT".</li> <li>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER.</li> <li>- AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</li> </ul>	
	④	 <small>SP 13106 48" X 48"</small>	<ul style="list-style-type: none"> <li>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</li> <li>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</li> <li>- FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH.</li> <li>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</li> </ul>	
	⑤	 <small>G20-2 A 48" X 24"</small>	<ul style="list-style-type: none"> <li>- PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</li> </ul>	
<p>THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.</p>				
<p>FOR AST RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, USE A STATIONARY "LOOSE GRAVEL" SIGN AT THE BEGINNING CONSTRUCTION LIMIT FOLLOWED BY AN "UNMARKED PAVEMENT" SIGN MIDWAY THROUGH AND AN "END ROAD WORK" SIGN AT THE END CONSTRUCTION LIMIT.</p>				

MAPS LESS THAN 2 MILES



ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT

\*\*\*\*\*SYSTEM\*\*\*\*\*  
 \*\*\*\*\*DONOR\*\*\*\*\*  
 \*\*\*\*\*USER NAME\*\*\*\*\*