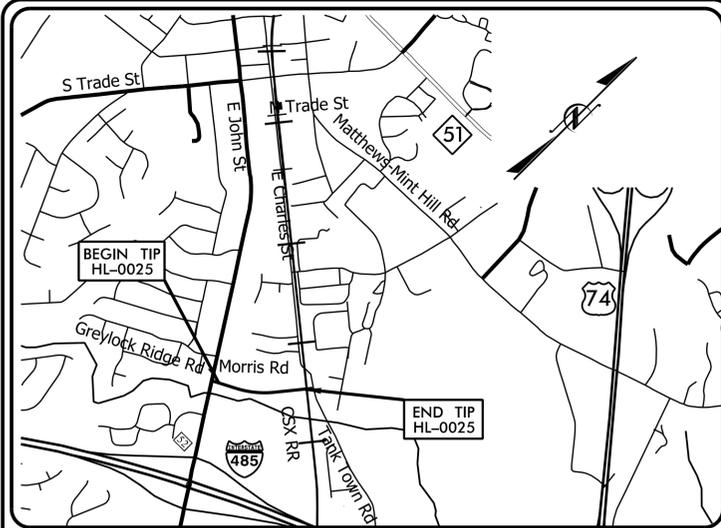


TIP PROJECT: HL-0025



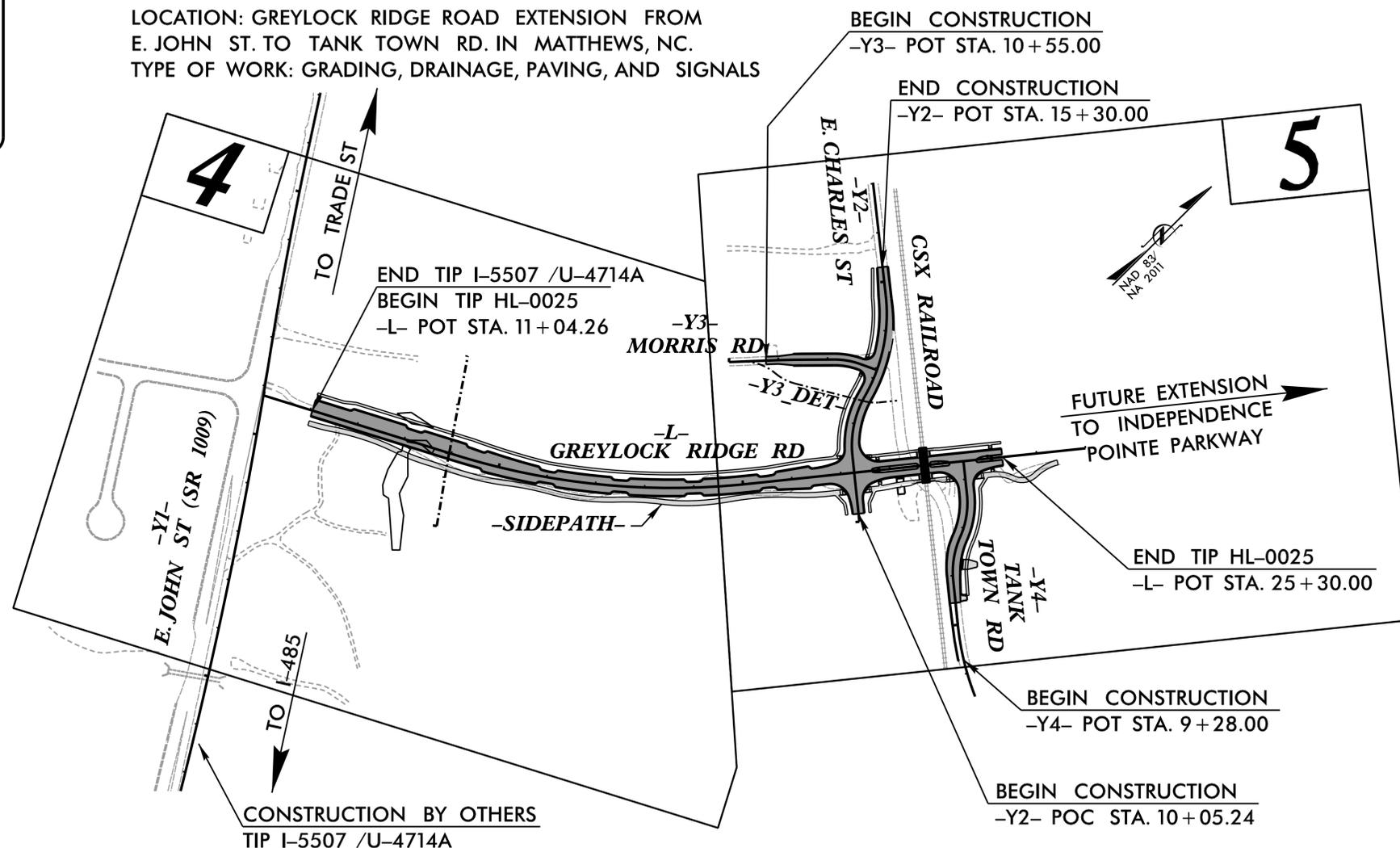
VICINITY MAP
NOT TO SCALE

THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.

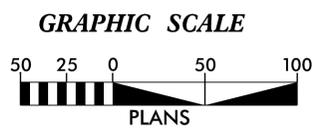
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
**PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL**

MECKLENBURG COUNTY

LOCATION: GREYLOCK RIDGE ROAD EXTENSION FROM
E. JOHN ST. TO TANK TOWN RD. IN MATTHEWS, NC.
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND SIGNALS



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HL-0025	EC-1	9
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
49491.1.1		PE	
49491.2.1		ROW	
49491.2.2		UTL	
49491.3.1		CONSTR.	



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.



2024 STANDARD SPECIFICATIONS

Designed by:
B. Gregory Adolph 4578
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings
The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. HL-0025	SHEET NO. EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION & SEDIMENT CONTROL LEGEND

<u>Std. #</u>	<u>Description</u>	<u>Symbol</u>	<u>Std. #</u>	<u>Description</u>	<u>Symbol</u>
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

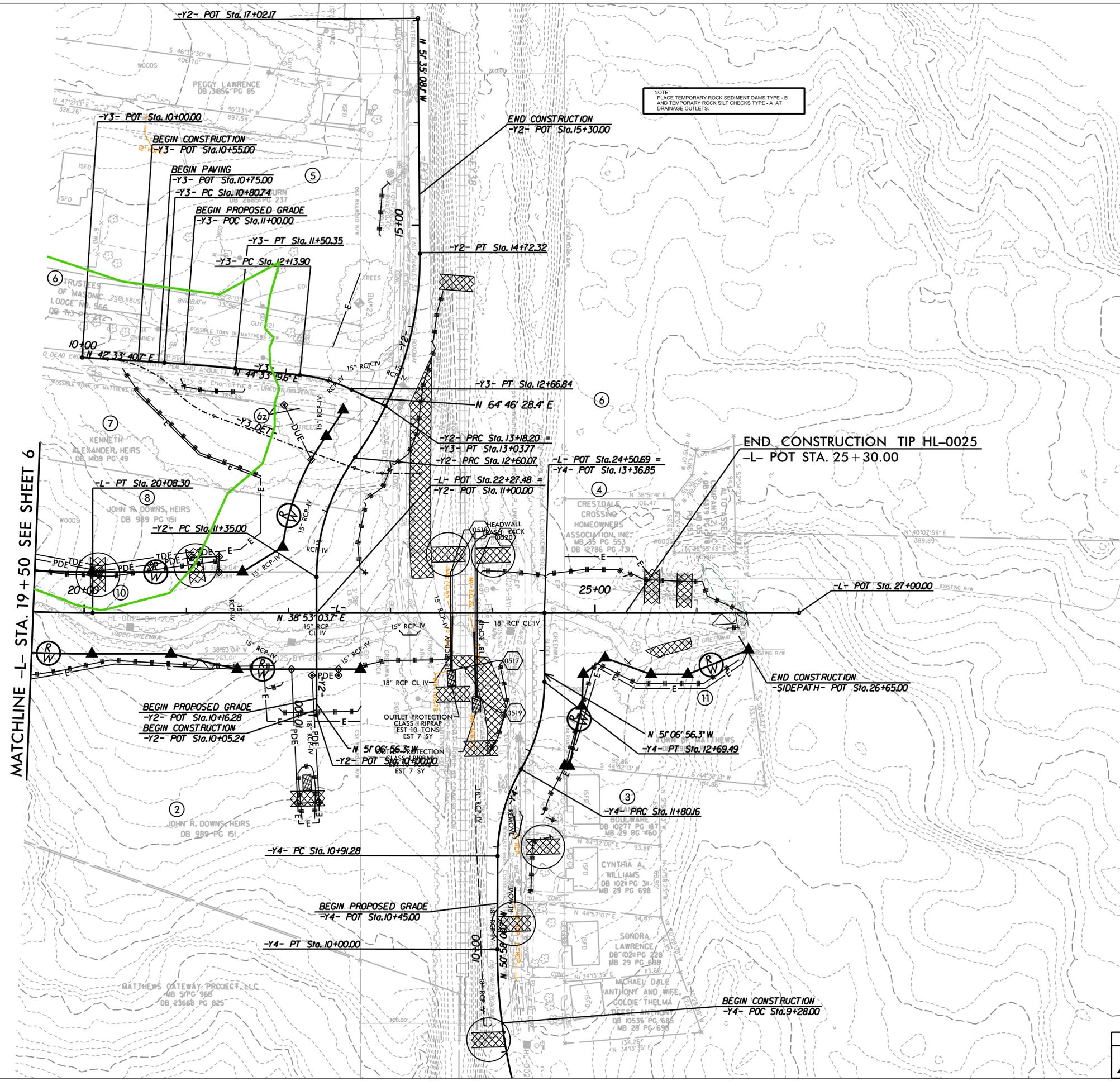
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>HL-0025</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

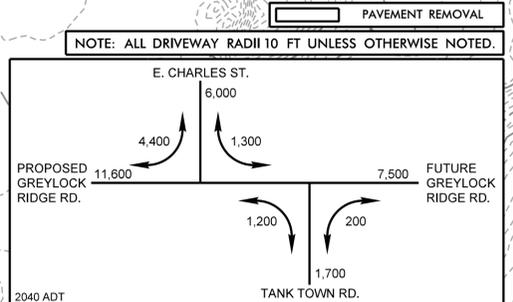
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PROJECT REFERENCE NO. HL-0025	SHEET NO. EC-5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L-	-Y2-	-Y2-
PI Sta 17+13.57 Δ = 23°13'14.4" (LT) D = 3°53'04.4" L = 597.78' T = 303.05' R = 1,475.00' e = NC (10.02) V = 30 mph	PI Sta 11+99.66 Δ = 35°49'51.8" (RT) D = 28°38'52.4" L = 125.07' T = 64.66' R = 200.00' e = NC (10.02) V = 25 mph	PI Sta 13+69.90 Δ = 36°18'03.6" (LT) D = 17°06'11.6" L = 212.25' T = 109.82' R = 335.00' e = NC (10.02) V = 30 mph
-Y4-		
PI Sta 9+25.47 Δ = 15°37'34.0" (RT) D = 10°25'02.7" L = 150.00' T = 75.47' R = 550.00'	PI Sta 11+36.76 Δ = 29°57'25.0" (RT) D = 33°42'12.2" L = 88.88' T = 45.48' R = 170.00' e = NC (10.02) V = 25 mph	PI Sta 12+25.88 Δ = 30°06'20.6" (LT) D = 33°42'12.2" L = 89.33' T = 45.72' R = 170.00' e = NC (10.02) V = 25 mph
-Y3-		
PI Sta 11+15.54 Δ = 1°59'38.9" (RT) D = 2°51'53.2" L = 69.61' T = 34.81' R = 2,000.00'	PI Sta 12+40.65 Δ = 20°13'08.7" (RT) D = 38°11'49.9" L = 52.93' T = 26.74' R = 150.00' e = RC (10.02) V = 20 mph	

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5



FOR -L- PROFILE SEE SHEET 6.
 FOR -Y2- PROFILE SEE SHEET 7.
 FOR -Y3- PROFILE SEE SHEET 7.
 FOR -Y4- PROFILE SEE SHEET 7.
 FOR -SIDEPATH- ALIGNMENT DETAIL SEE SHEETS 2B-1 & 2B-2.
 FOR -SIDEPATH- PROFILE SEE SHEET 8.
 FOR -Y3 DET- SEE SHEET 2B-3.

ROADWAY DESIGN

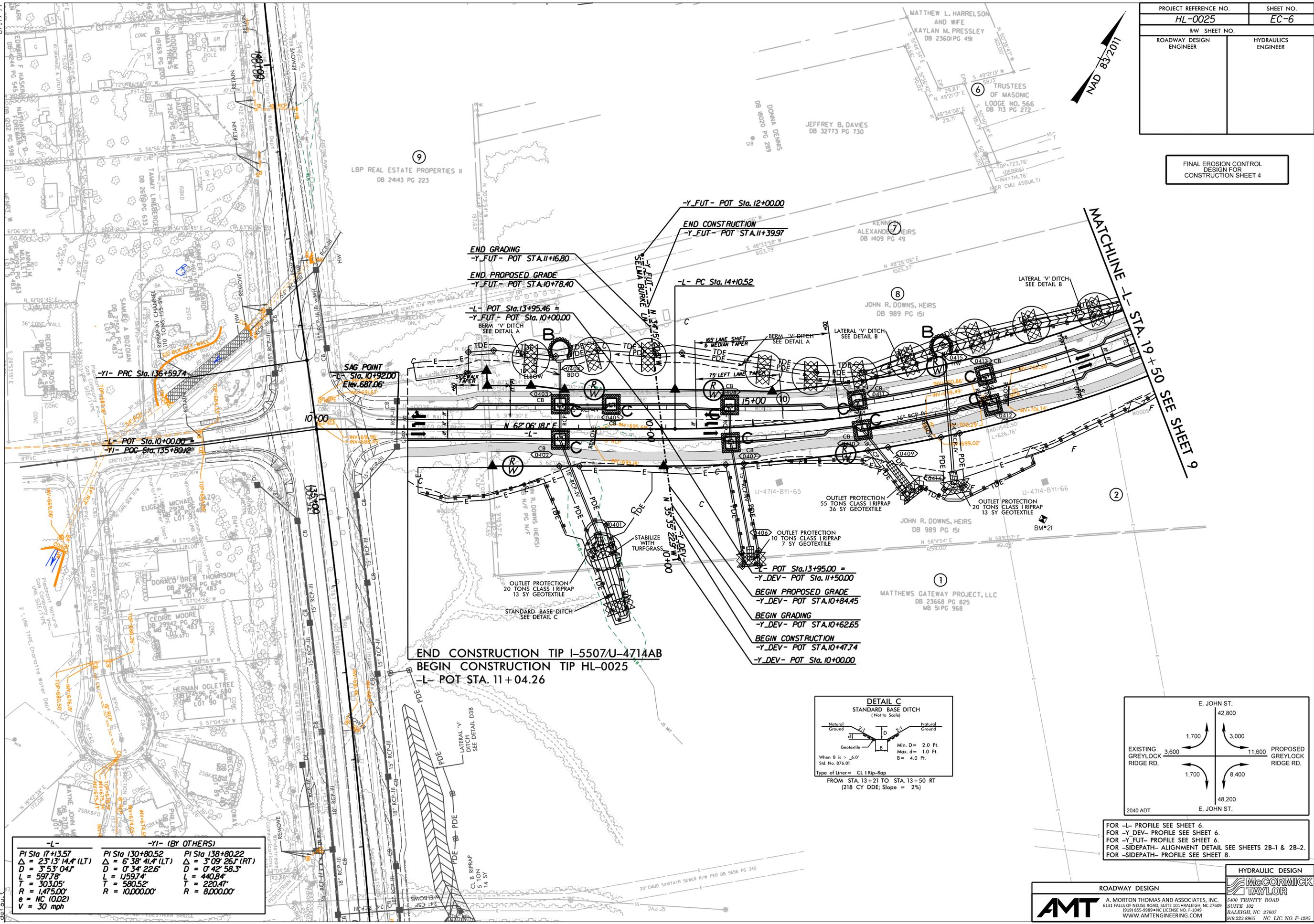
AMT

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 (919) 855-9989 • NC LICENSE NO. F-1049
 WWW.AMTEngineering.COM

HYDRAULIC DESIGN
McCORMICK TAYLOR
 6400 TRINITY ROAD
 SUITE 102
 RALEIGH, NC 27607
 919.223.8965 NC LIC. NO. F-1285

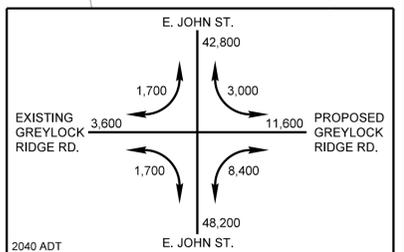
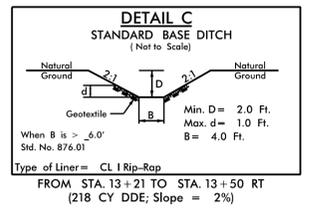
PROJECT REFERENCE NO. HL-0025	SHEET NO. EC-6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL EROSION CONTROL
DESIGN FOR
CONSTRUCTION SHEET 4



-L-		-YI- (BY OTHERS)	
PI Sta 17+13.57	PI Sta 130+80.52	PI Sta 138+80.22	
$\Delta = 23' 13" 14.4" (LT)$	$\Delta = 6' 38" 41.4" (LT)$	$\Delta = 3' 09" 26.7" (RT)$	
$D = 3' 53" 04.7"$	$D = 0' 34" 22.6"$	$D = 0' 42" 58.3"$	
$L = 597.78'$	$L = 1159.74'$	$L = 440.84'$	
$T = 303.05'$	$T = 580.52'$	$T = 220.47'$	
$R = 1,475.00'$	$R = 10,000.00'$	$R = 8,000.00'$	
$e = NC (0.02)$			
$v = 30 \text{ mph}$			

END CONSTRUCTION TIP I-5507/U-4714AB
 BEGIN CONSTRUCTION TIP HL-0025
 -L- POT STA. 11+04.26



FOR -L- PROFILE SEE SHEET 6.
 FOR -Y DEV- PROFILE SEE SHEET 6.
 FOR -Y FUT- PROFILE SEE SHEET 6.
 FOR -SIDEPATH- ALIGNMENT DETAIL SEE SHEETS 2B-1 & 2B-2.
 FOR -SIDEPATH- PROFILE SEE SHEET 8.

ROADWAY DESIGN

AMT

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HYDRAULIC DESIGN

McCormick Taylor

6400 TRINITY ROAD
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 919.223.8965 NC LIC. NO. F-1285

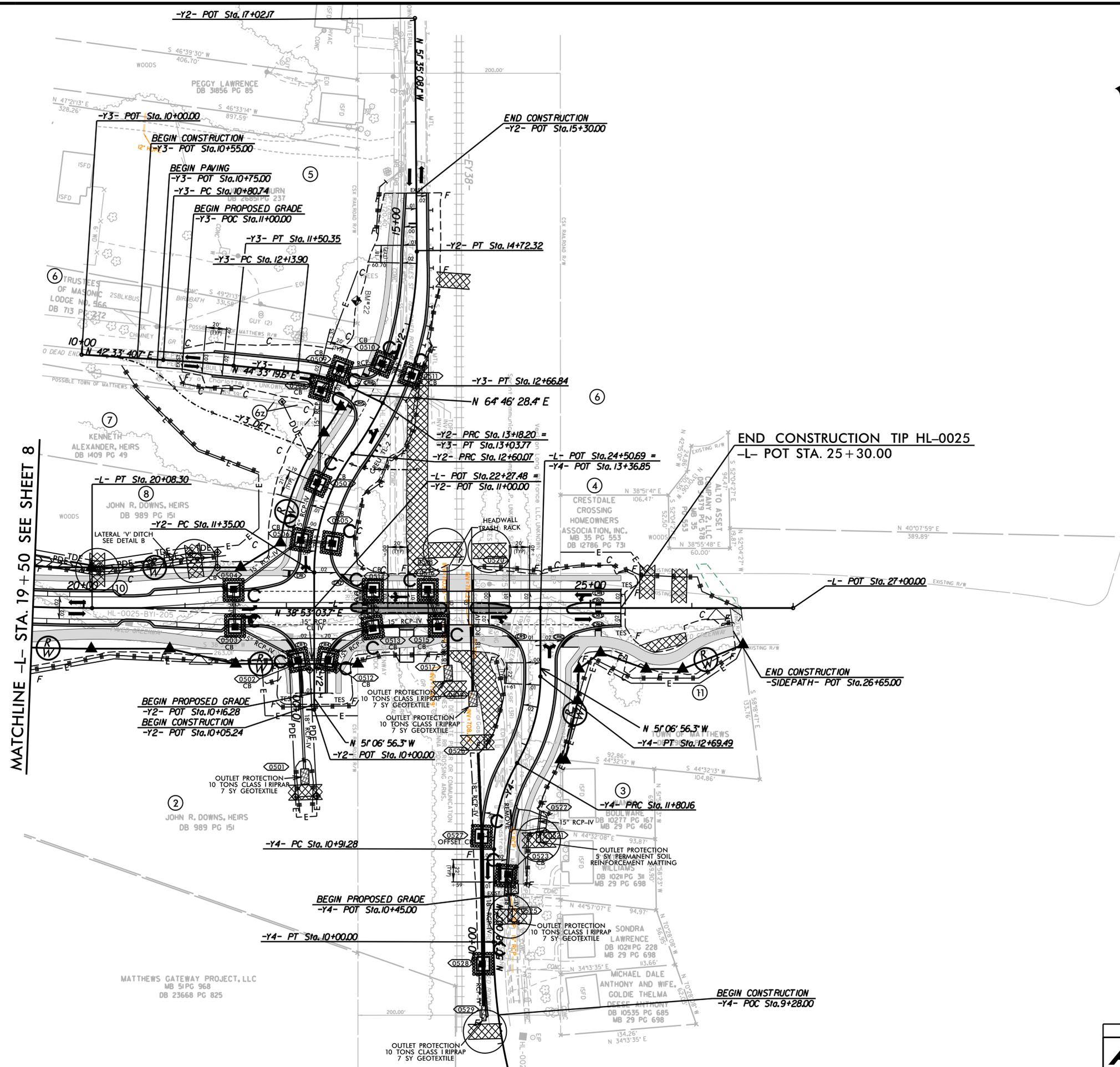
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 10/24/2025

PROJECT REFERENCE NO.	SHEET NO.
HL-0025	EC-7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

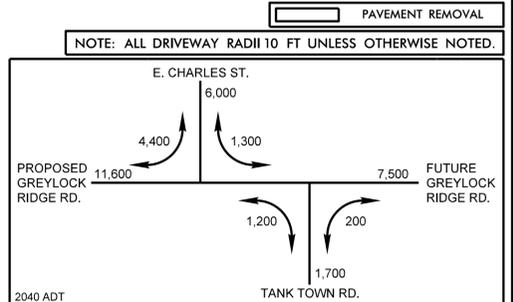


-L-	-Y2-	-Y3-
PI Sta 17+13.57 $\Delta = 23' 13" 14.4" (LT)$ $D = 3' 53" 04.4"$ $L = 597.78'$ $T = 303.05'$ $R = 1,475.00'$ $e = NC (0.02)$ $V = 30 \text{ mph}$	PI Sta 11+99.66 $\Delta = 35' 49" 51.8" (RT)$ $D = 28' 38" 52.4"$ $L = 125.07'$ $T = 64.66'$ $R = 200.00'$ $e = NC (0.02)$ $V = 25 \text{ mph}$	PI Sta 13+69.90 $\Delta = 36' 18" 03.6" (LT)$ $D = 17' 06" 11.6"$ $L = 212.25'$ $T = 109.82'$ $R = 335.00'$ $e = NC (0.02)$ $V = 30 \text{ mph}$
PI Sta 9+25.47 $\Delta = 15' 37" 34.0" (RT)$ $D = 10' 25" 02.7"$ $L = 150.00'$ $T = 75.47'$ $R = 550.00'$	PI Sta 11+36.76 $\Delta = 29' 57" 25.0" (RT)$ $D = 33' 42" 12.2"$ $L = 88.88'$ $T = 45.48'$ $R = 170.00'$ $e = NC (0.02)$ $V = 25 \text{ mph}$	PI Sta 12+25.88 $\Delta = 30' 06" 20.6" (LT)$ $D = 33' 42" 12.2"$ $L = 89.33'$ $T = 45.72'$ $R = 170.00'$ $e = NC (0.02)$ $V = 25 \text{ mph}$
		PI Sta 11+5.54 $\Delta = 1' 59" 38.9" (RT)$ $D = 2' 51" 53.2"$ $L = 69.61'$ $T = 34.81'$ $R = 2,000.00'$
		PI Sta 12+40.65 $\Delta = 20' 13" 08.7" (RT)$ $D = 38' 11" 49.9"$ $L = 52.93'$ $T = 26.74'$ $R = 150.00'$ $e = RC (0.02)$ $V = 20 \text{ mph}$

FINAL EROSION CONTROL DESIGN FOR CONSTRUCTION SHEET 5



MATCHLINE -L- STA. 19 + 50 SEE SHEET 8



FOR -L- PROFILE SEE SHEET 6.
 FOR -Y2- PROFILE SEE SHEET 7.
 FOR -Y3- PROFILE SEE SHEET 7.
 FOR -Y4- PROFILE SEE SHEET 7.
 FOR -SIDEPATH- ALIGNMENT DETAIL SEE SHEETS 2B-1 & 2B-2.
 FOR -SIDEPATH- PROFILE SEE SHEET 8.
 FOR -Y3 DET- SEE SHEET 2B-3.

ROADWAY DESIGN

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