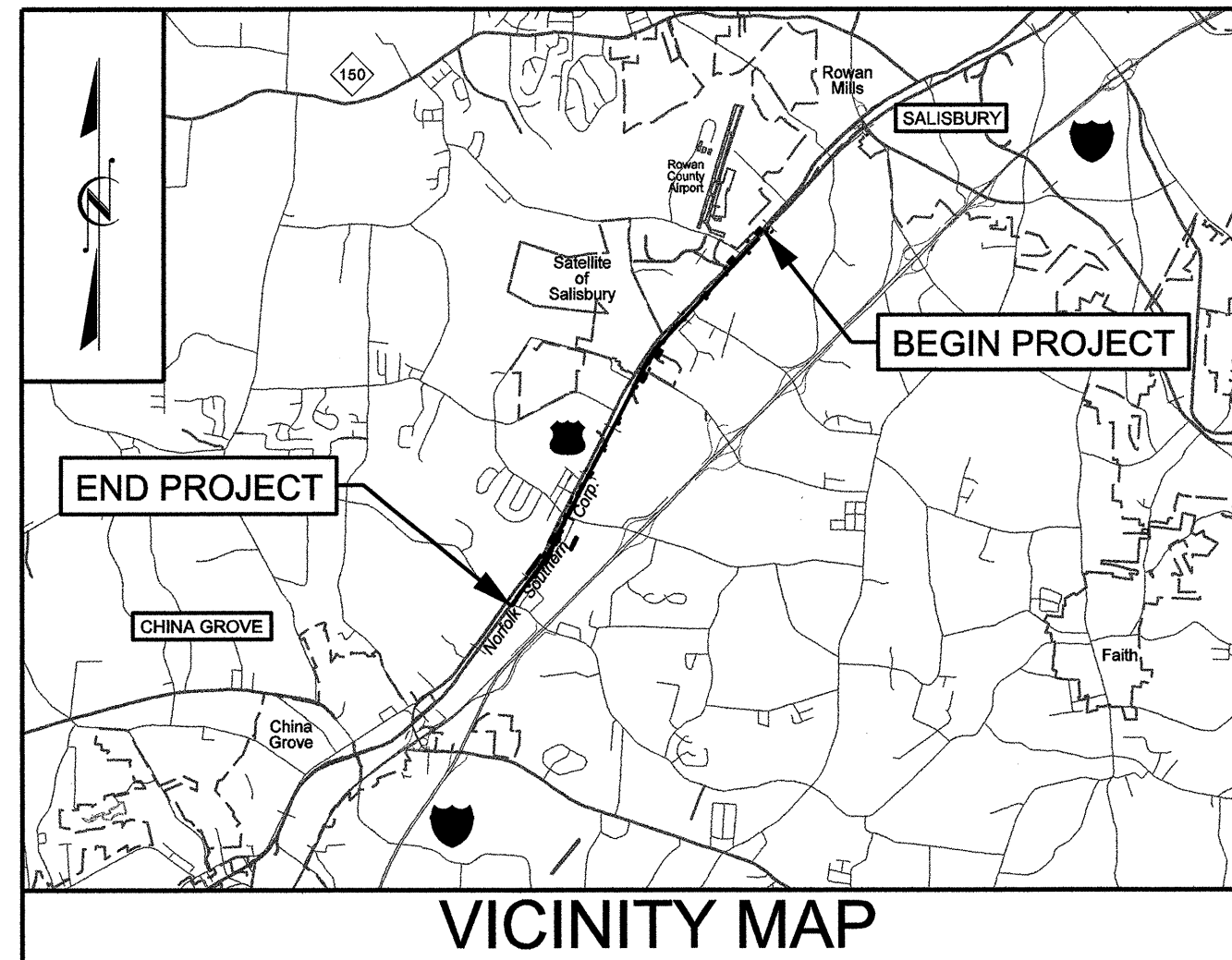


TIP PROJECT: P-5206B

CONTRACT: C203207

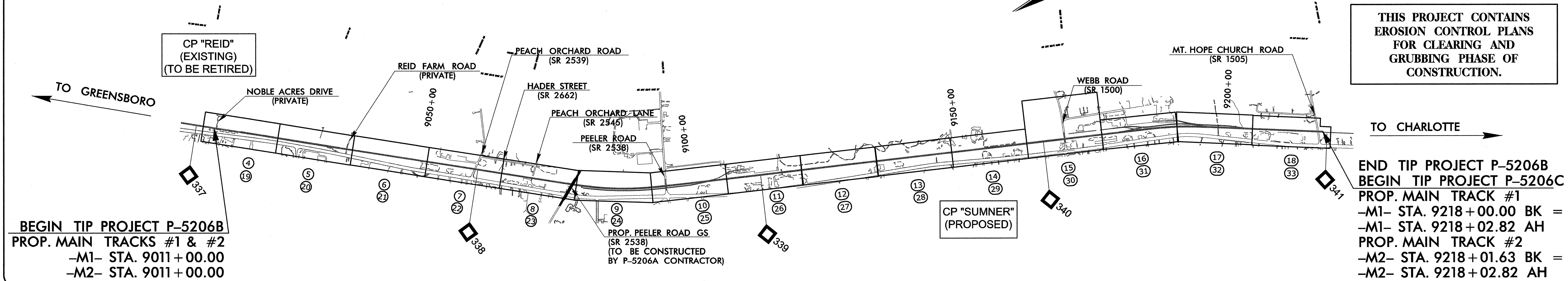


Index of Sheets	
EC-1	Title Sheet
EC-2A - EC-2C	Erosion Control Details
EC-3A	Stabilization Timeframes
EC-3B	Drainage Detail Sheet
EC-3C	Soil Stabilization Summary
EC-4 - EC-18	Clearing and Grubbing Plans
EC-19 - EC-33	Final Grade Plans

2012 STANDARD SPECIFICATIONS
 THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

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

LOCATION: CP "REID" (MP 337.1) TO SOUTH OF MT. HOPE CHURCH ROAD (MP 340.9) ON THE NCRN MAINLINE



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

BEGIN TIP PROJECT P-5206B
 PROP. MAIN TRACKS #1 & #2
 -M1- STA. 9011+00.00
 -M2- STA. 9011+00.00

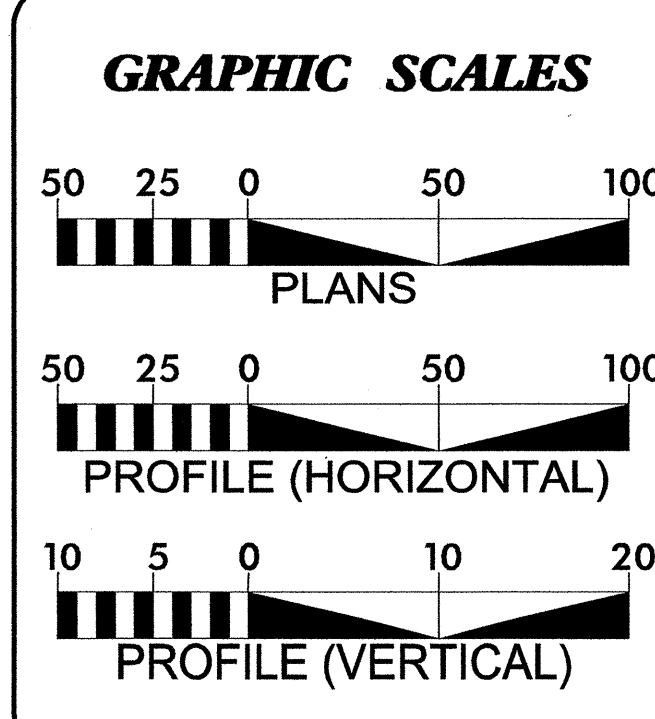
END TIP PROJECT P-5206B
 BEGIN TIP PROJECT P-5206C
 PROP. MAIN TRACK #1
 -M1- STA. 9218+00.00 BK =
 -M1- STA. 9218+02.82 AH
 PROP. MAIN TRACK #2
 -M2- STA. 9218+01.63 BK =
 -M2- STA. 9218+02.82 AH



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	P-5206B	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
52000.1.STR05T1B		PE, UTL PE	
52000.1.STR06T3		PE, UTL PE	
43219.2.STR08P5206		ROW	
52000.3.STR02T4D	FRA-FR-HSR-0006-10-01-00	UTL CONST., CONST.	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.05	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III III III
1606.01	Special Sediment Control Fence	III III III
1622.01	Temporary Berms and Slope Drains	TBD
1630.02	Silt Basin Type B	[Symbol]
1633.01	Temporary Rock Silt Check Type-A	[Symbol]
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	[Symbol]
1633.02	Temporary Rock Silt Check Type-B	[Symbol]
	Wattle/Coir Fiber Wattle	[Symbol]
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	[Symbol]
1634.01	Temporary Rock Sediment Dam Type-A	[Symbol]
1634.02	Temporary Rock Sediment Dam Type-B	[Symbol]
1635.01	Rock Pipe Inlet Sediment Trap Type-A	[Symbol]
1635.02	Rock Pipe Inlet Sediment Trap Type-B	[Symbol]
1630.04	Stilling Basin	[Symbol]
1630.06	Special Stilling Basin	[Symbol]
	Rock Inlet Sediment Trap:	
1632.01	Type A	A [Symbol]
1632.02	Type B	B [Symbol]
1632.03	Type C	C [Symbol]
	Skimmer Basin	[Symbol]
	Tiered Skimmer Basin	[Symbol]
	Infiltration Basin	[Symbol]



Prepared in the Office of:
SUNGATE DESIGN GROUP, P.A.
 915 JONES FRANKLIN ROAD
 RALEIGH, NORTH CAROLINA 27606
 TEL (919) 859-2242 FAX (919) 859-4258
 ENG FIRM LICENSE NO. C-890

JOSHUA G. DALTON
 LEVEL IIIA NAME
 307
 LEVEL IIIA CERTIFICATION NO.

2012 STANDARD SPECIFICATIONS

LETTING DATE:
 JULY 2013

RIGHT OF WAY DATE:
 SEPTEMBER 2012

HYDRAULICS ENGINEER

4/30/13
 Signature: *Josh Dalton* P.E.

NC DEPARTMENT OF TRANSPORTATION
RAIL DIVISION
 PLANNING AND DEVELOPMENT

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"-- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

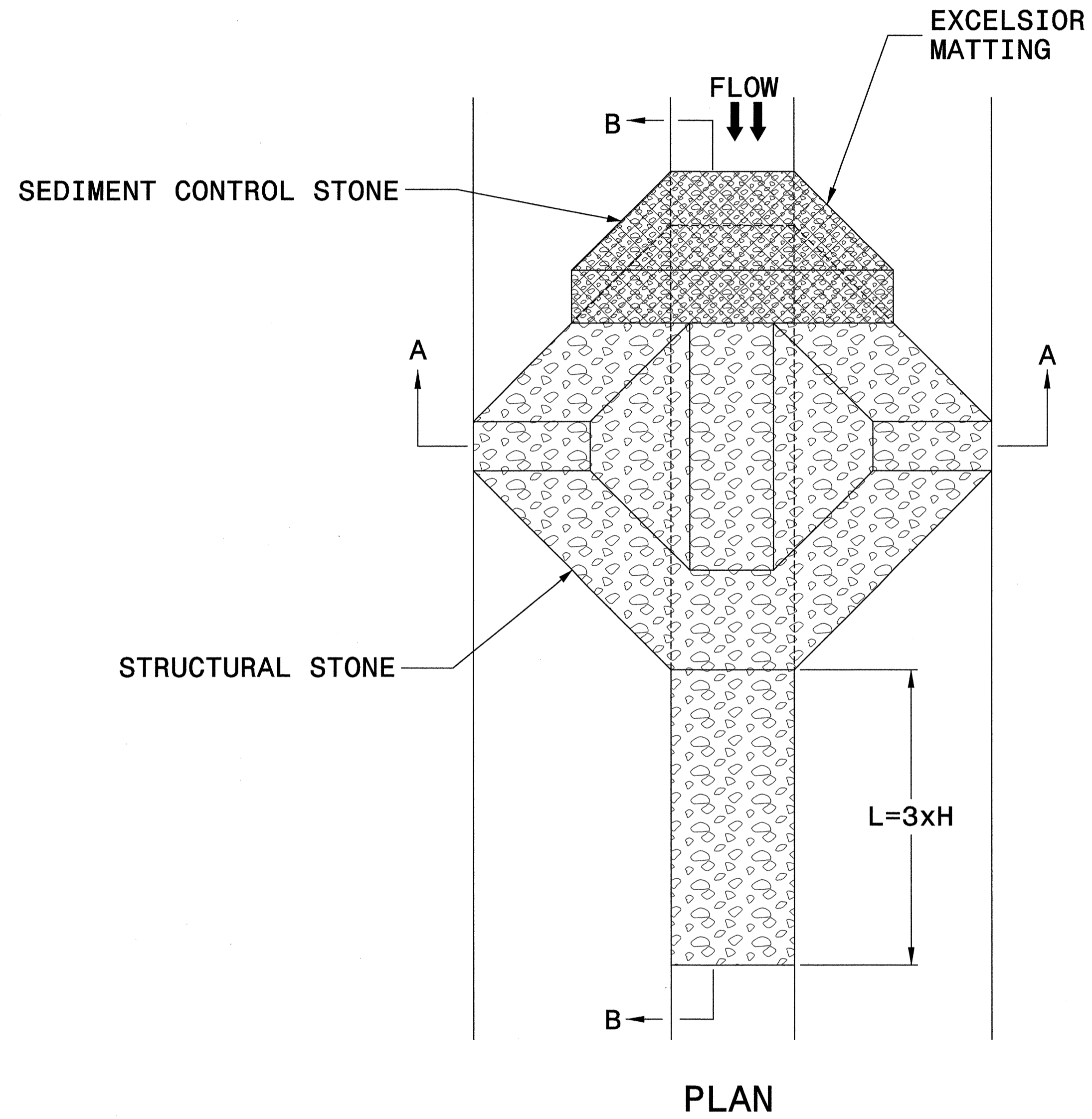
1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

DCN

0164DEL_P10b2

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)

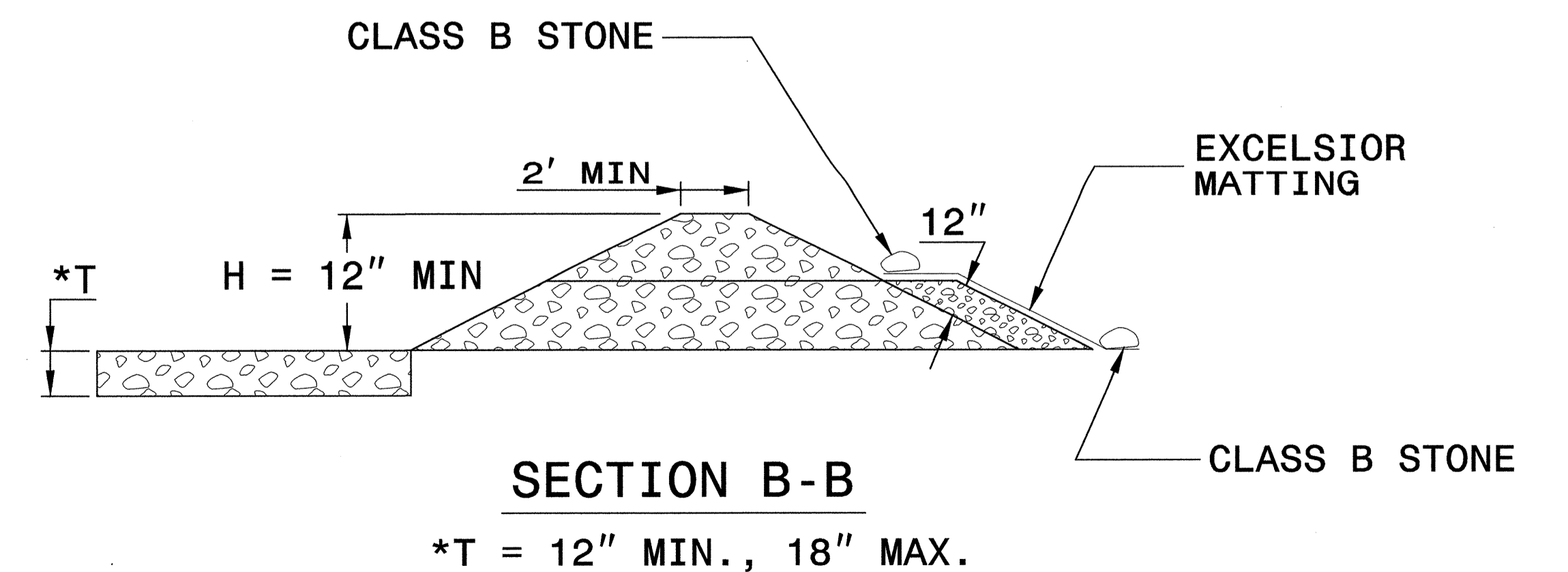
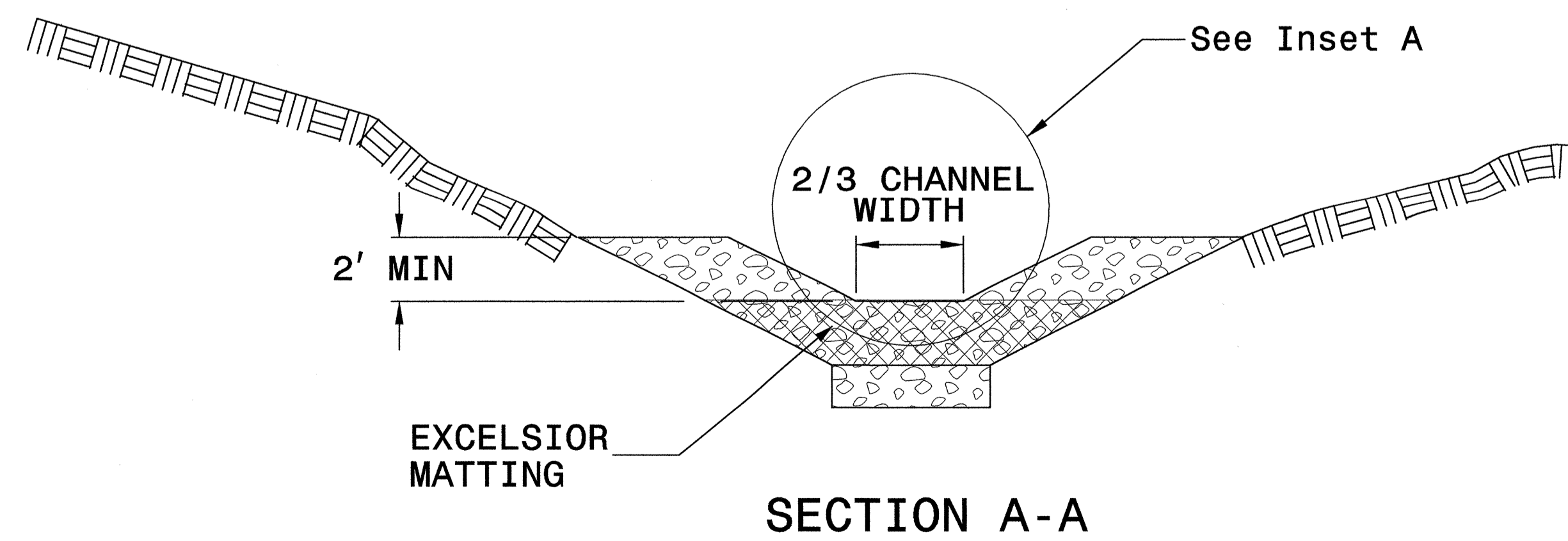
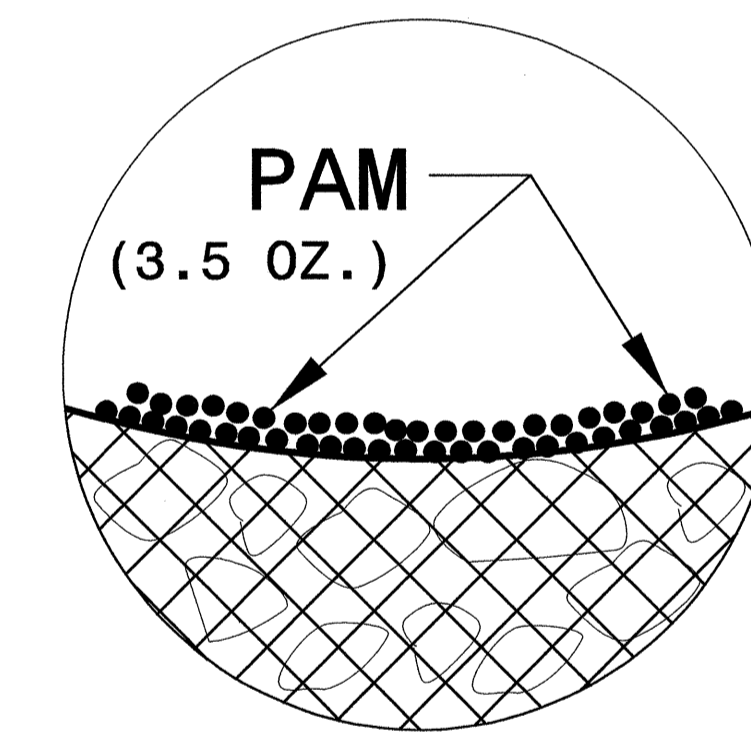


NOTES

USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

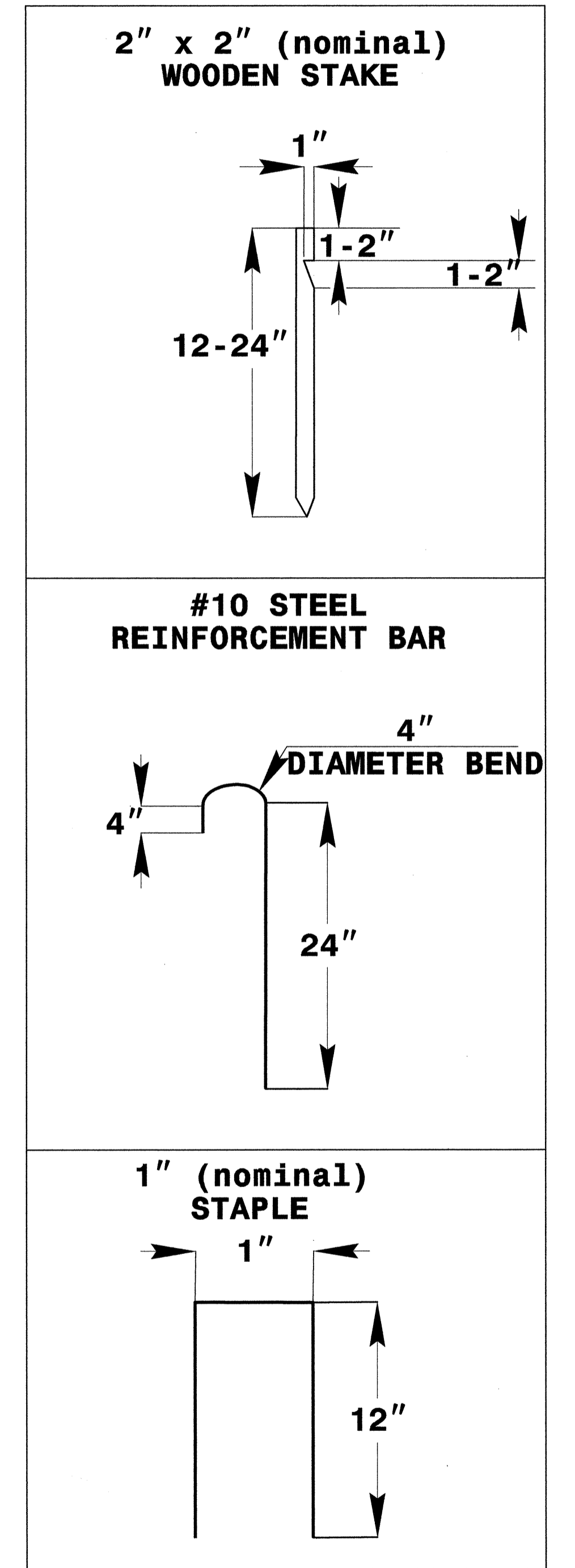
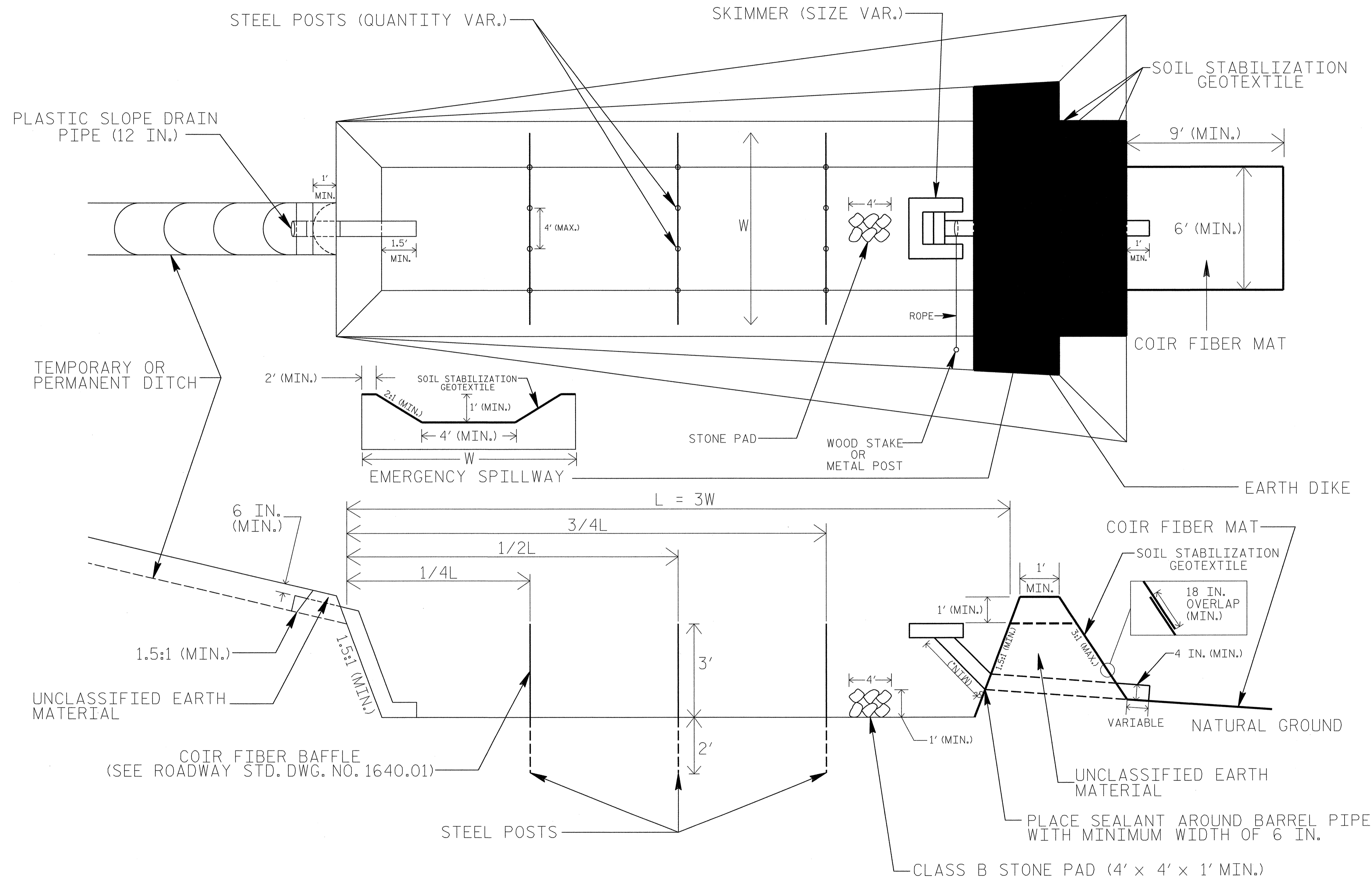
INITIALLY APPLY 3.5 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



NOT TO SCALE

SKIMMER BASIN WITH BAFFLES DETAIL

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



COIR FIBER MAT ANCHOR OPTIONS

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY WEIR LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO. <i>P-5206B</i>		SHEET NO. <i>EC-2C</i>	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

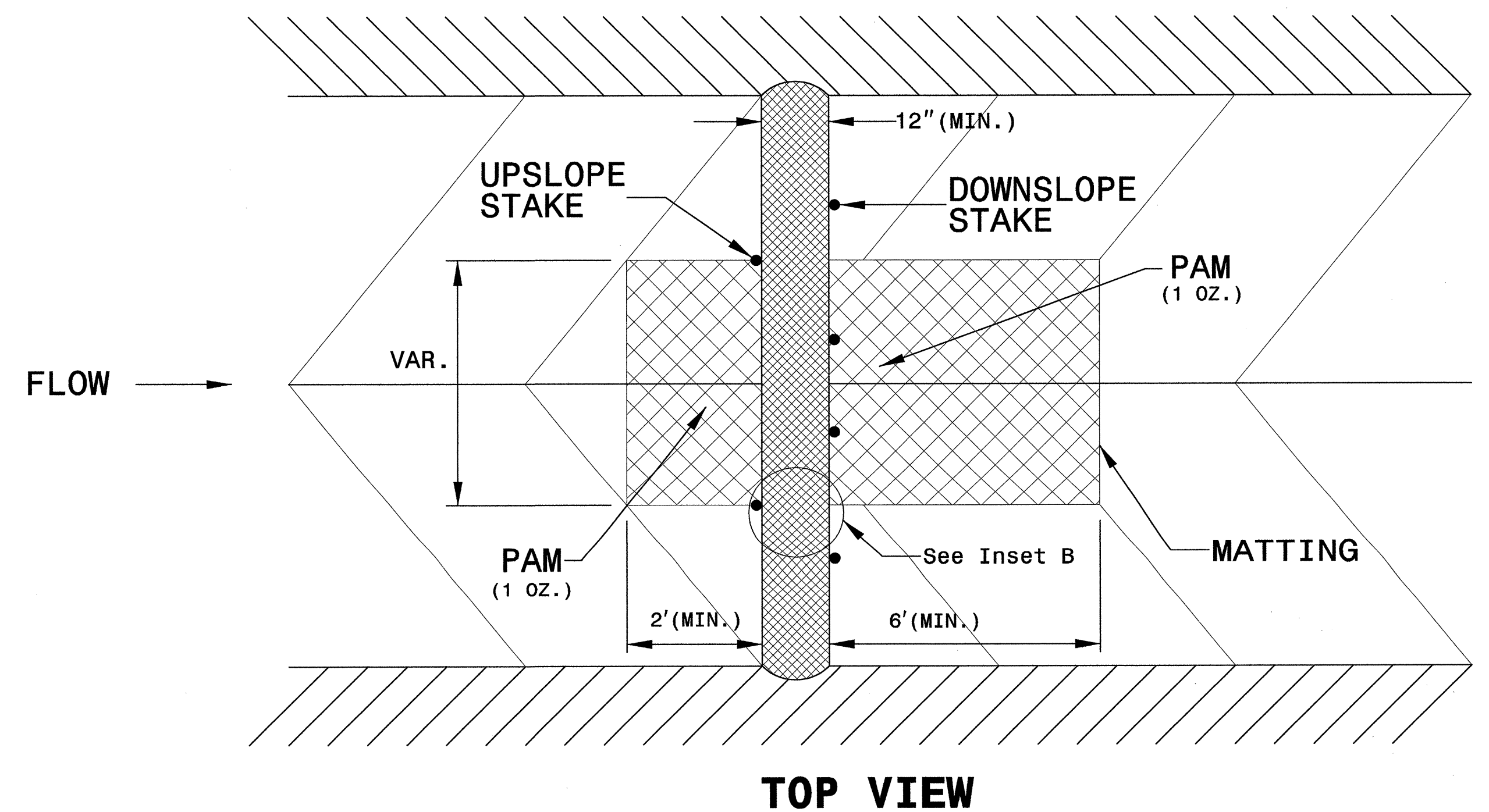
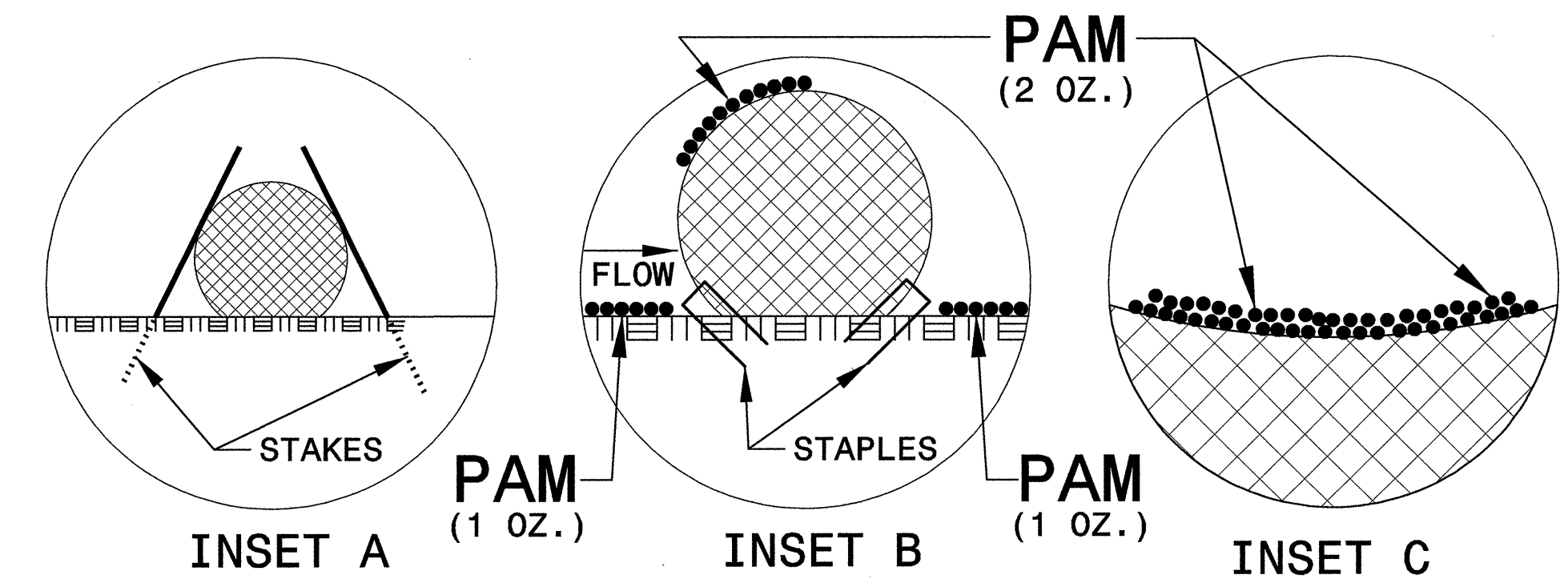
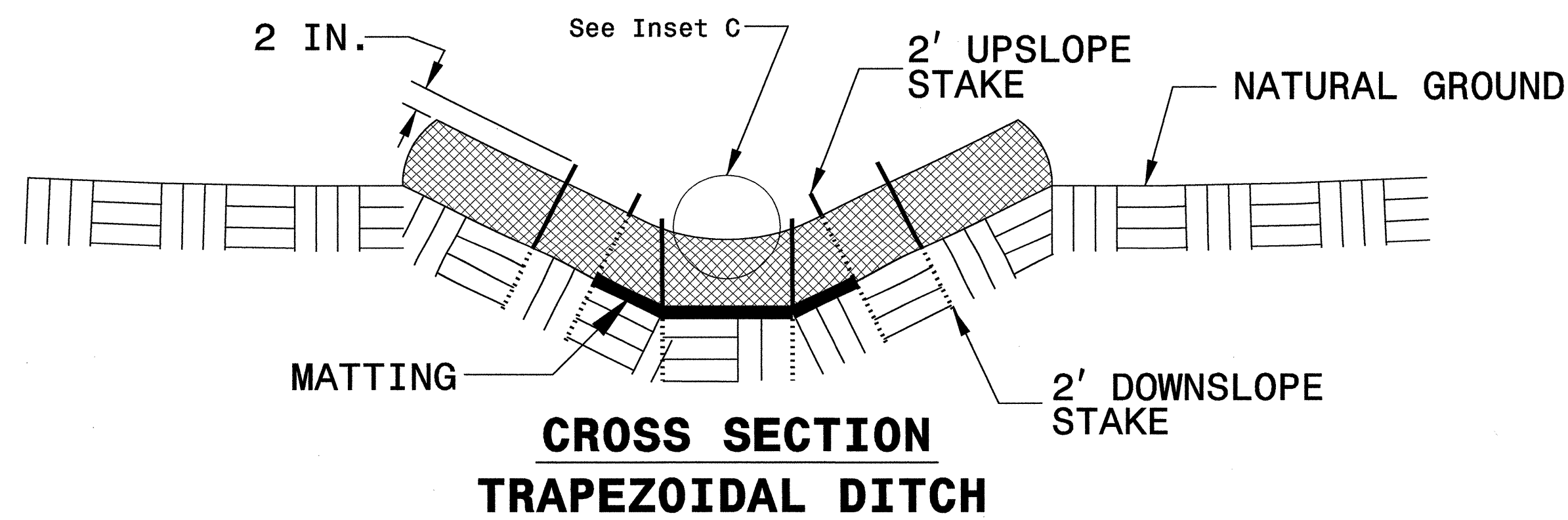
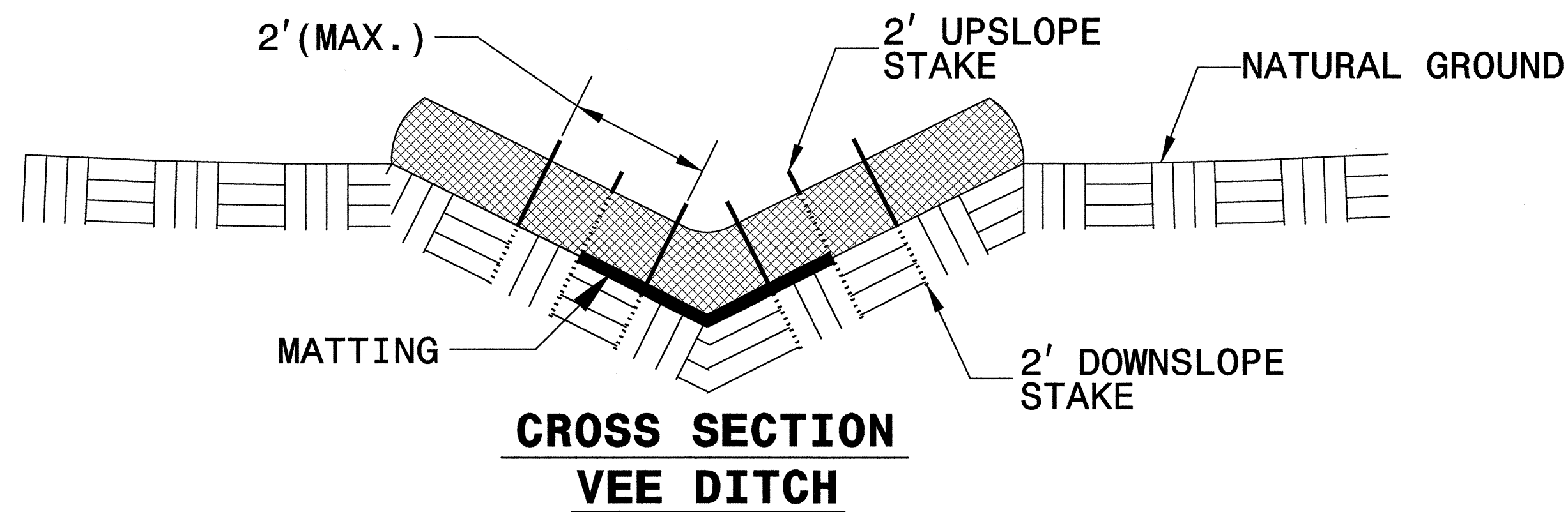
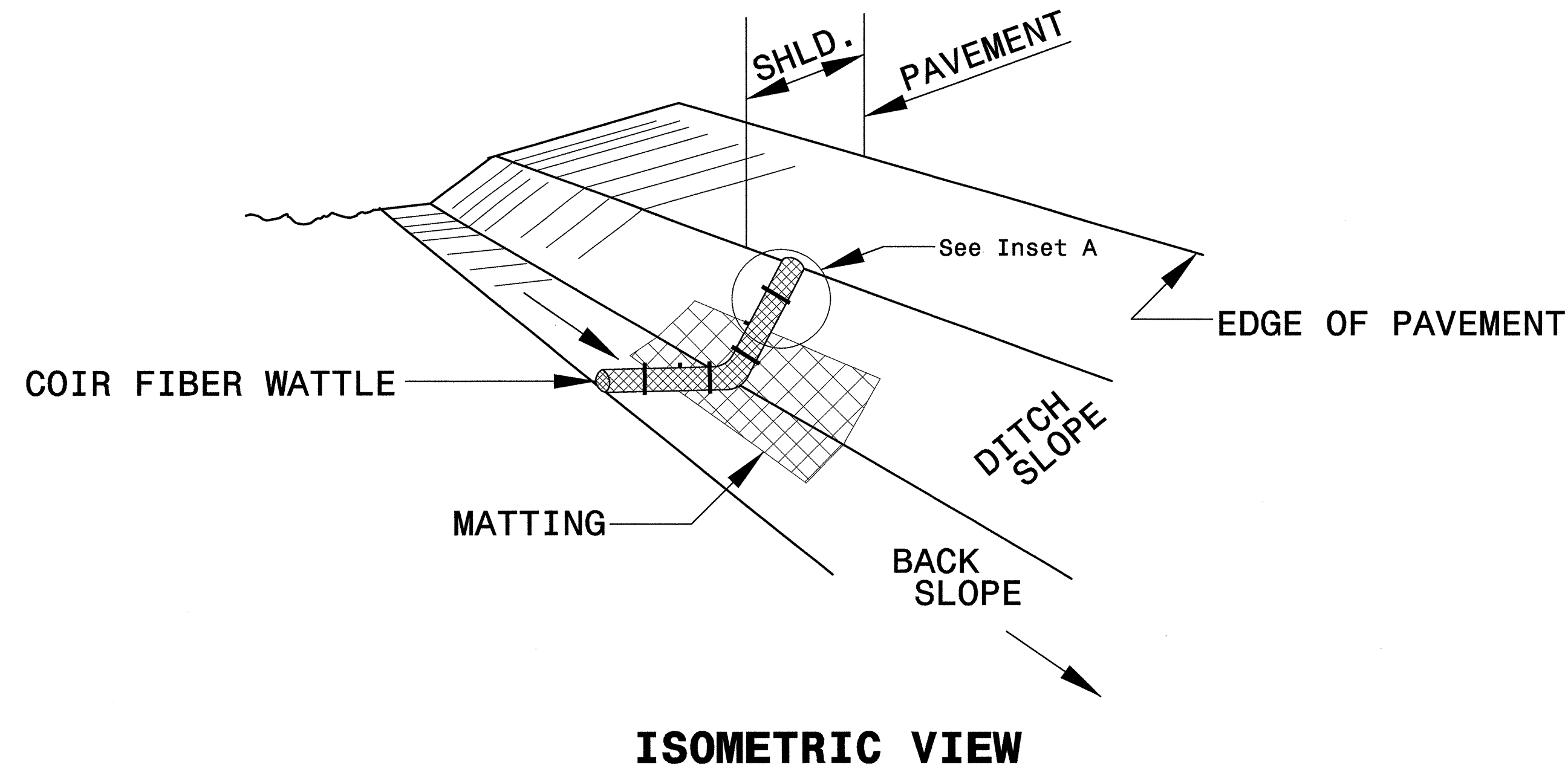
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



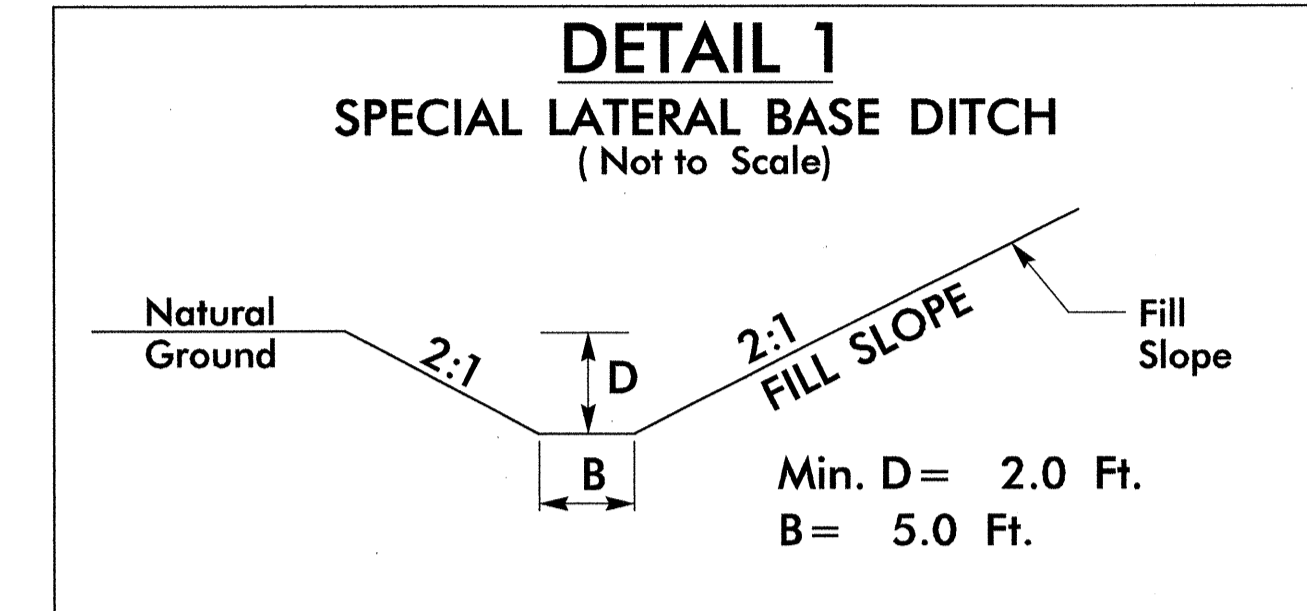
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>P-5206B</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

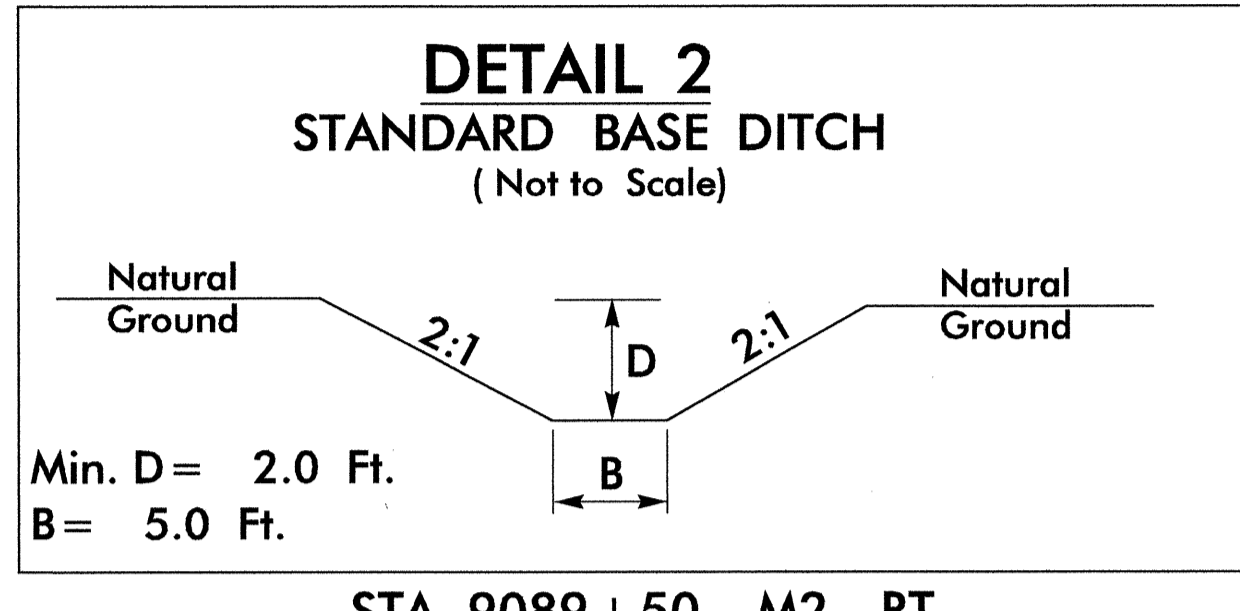
SOIL STABILIZATION TIMEFRAMES

<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 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

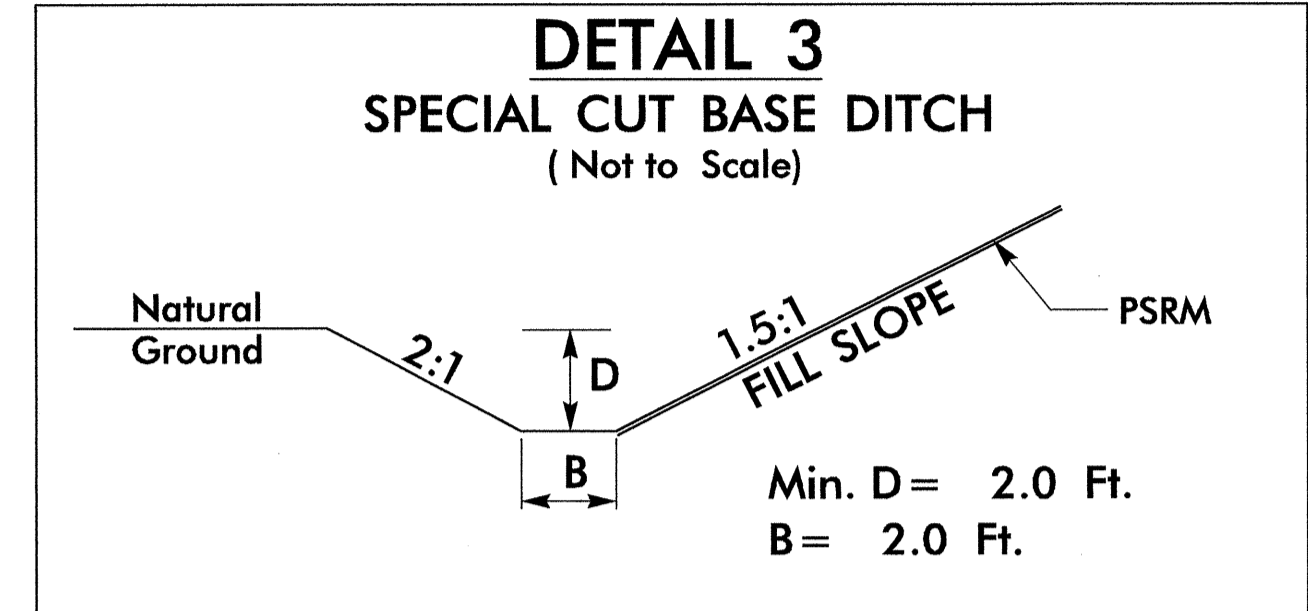
DRAINAGE DETAILS



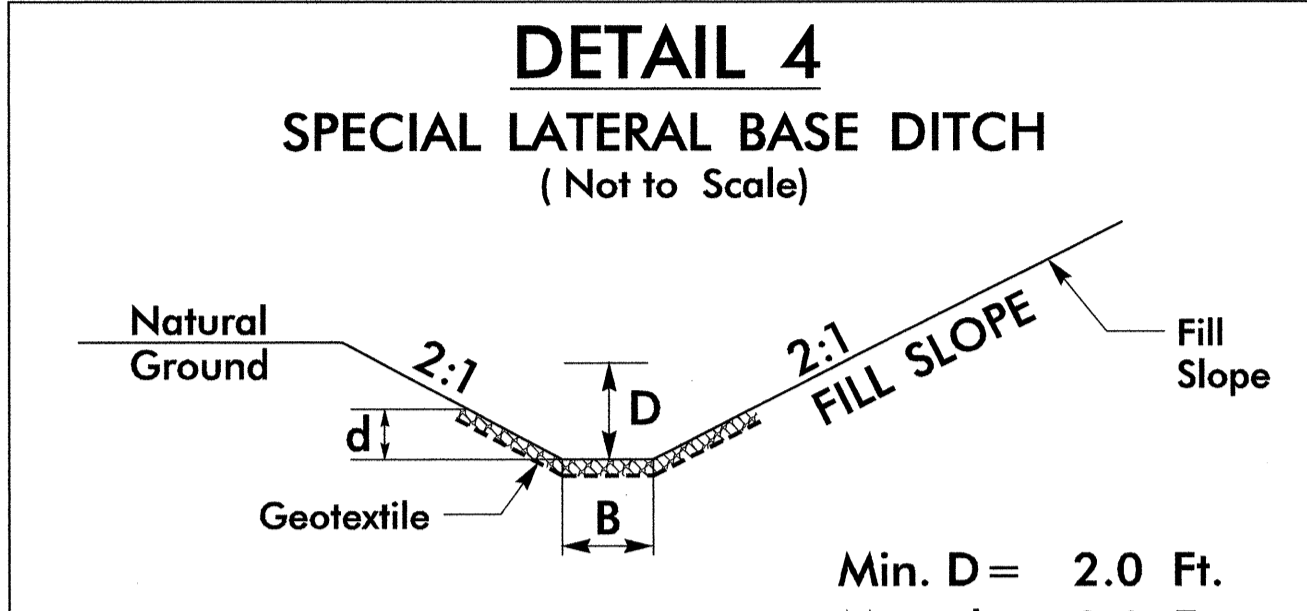
- FROM STA. 9011+00 TO STA. 9020+00 -M2- LT
- FROM STA. 9020+00 TO STA. 9029+00 -M2- LT
- FROM STA. 9029+00 TO STA. 9044+85 -M2- RT
- FROM STA. 9050+00 TO STA. 9059+50 -M2- RT
- FROM STA. 9060+00 TO STA. 9064+52 -M2- RT
- FROM STA. 9064+52 TO STA. 9069+00 -M2- RT
- FROM STA. 9070+50 TO STA. 9080+00 -M2- RT
- FROM STA. 9080+50 TO STA. 9089+50 -M2- RT
- FROM STA. 9089+50 TO STA. 9095+40 -M2- RT
- FROM STA. 9096+00 TO STA. 9104+00 -M2- RT
- FROM STA. 9105+30 TO STA. 9113+00 -M2- RT
- FROM STA. 9113+00 TO STA. 9116+00 -M2- RT
- FROM STA. 9131+00 TO STA. 9142+60 -M2- RT
- FROM STA. 9142+60 TO STA. 9155+00 -M2- RT
- FROM STA. 9155+00 TO STA. 9169+50 -M2- RT
- FROM STA. 9157+50 TO STA. 9169+50 -M2- LT
- FROM STA. 9170+60 TO STA. 9176+05 -M2- RT
- FROM STA. 9176+05 TO STA. 9183+00 -M2- RT
- FROM STA. 9171+50 TO STA. 9176+05 -M2- LT
- FROM STA. 9176+05 TO STA. 9182+00 -M2- LT
- FROM STA. 9181+00 TO STA. 9186+00 -A3- LT
- FROM STA. 9186+00 TO STA. 9191+00 -M2- LT
- FROM STA. 9183+00 TO STA. 9189+40 -M2- RT
- FROM STA. 9189+42 TO STA. 9195+00 -M2- RT
- FROM STA. 9191+00 TO STA. 9195+00 -A4- LT
- FROM STA. 9195+00 TO STA. 9201+50 -M2- LT
- FROM STA. 9203+70 TO STA. 9209+50 -M2- LT
- FROM STA. 9209+50 TO STA. 9211+00 -M2- LT
- FROM STA. 9212+85 TO STA. 9217+00 -M2- LT



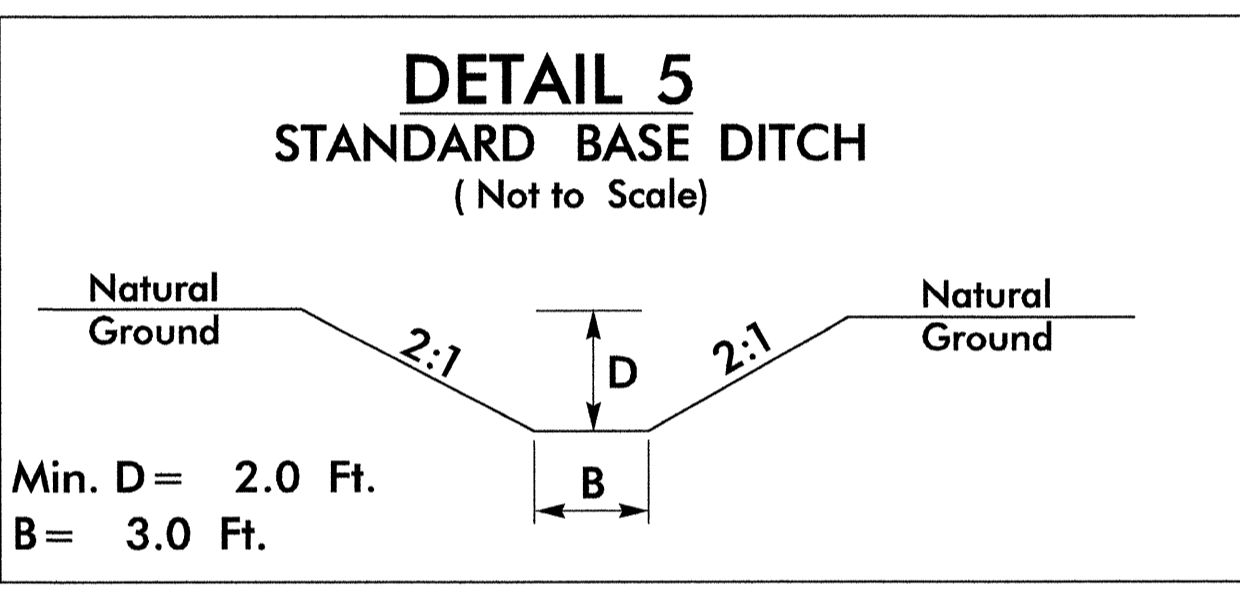
- STA. 9089+50 -M2- RT
- FROM STA. 9105+00 TO STA. 9105+30 -M2- RT
- STA. 9142+60 -M2- RT



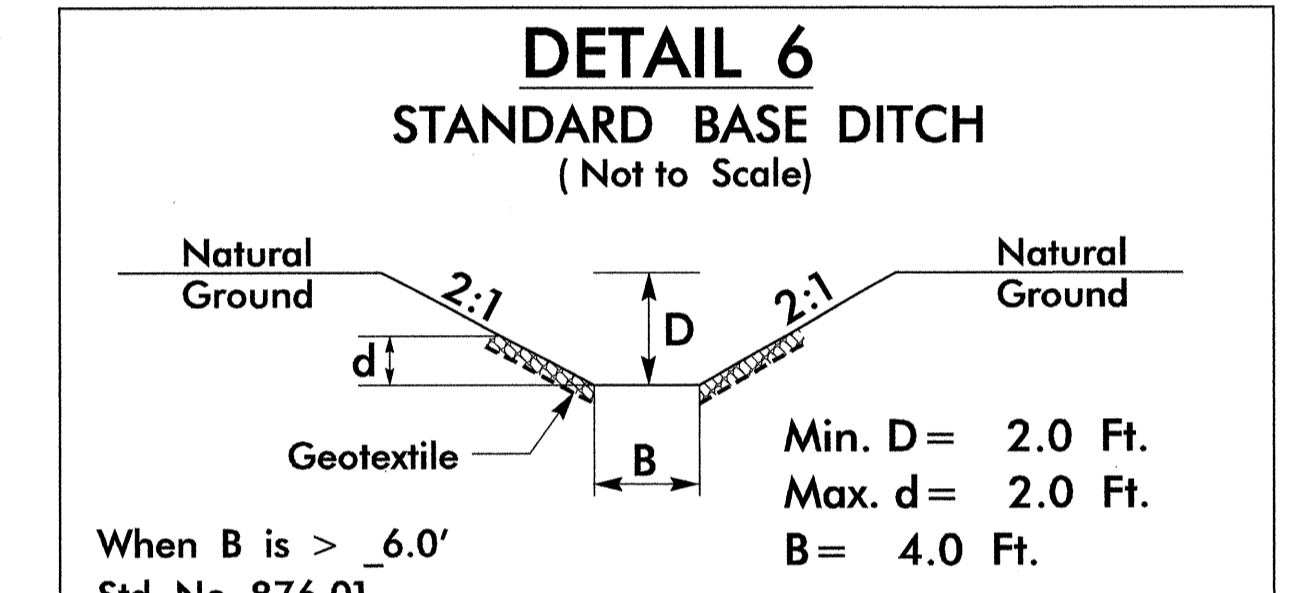
- FROM STA. 9020+00 TO STA. 9029+00 -M2- RT



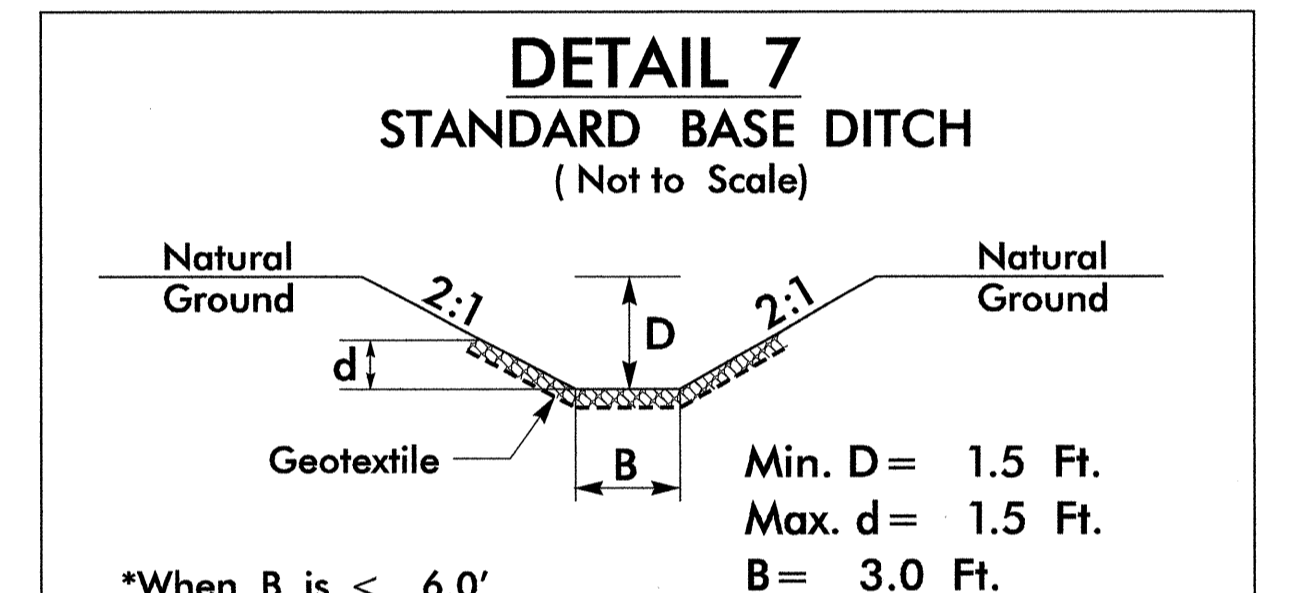
- Type of Liner = Class 'B' Rip-Rap
- FROM STA. 9044+85 TO STA. 9050+00 -M2- RT



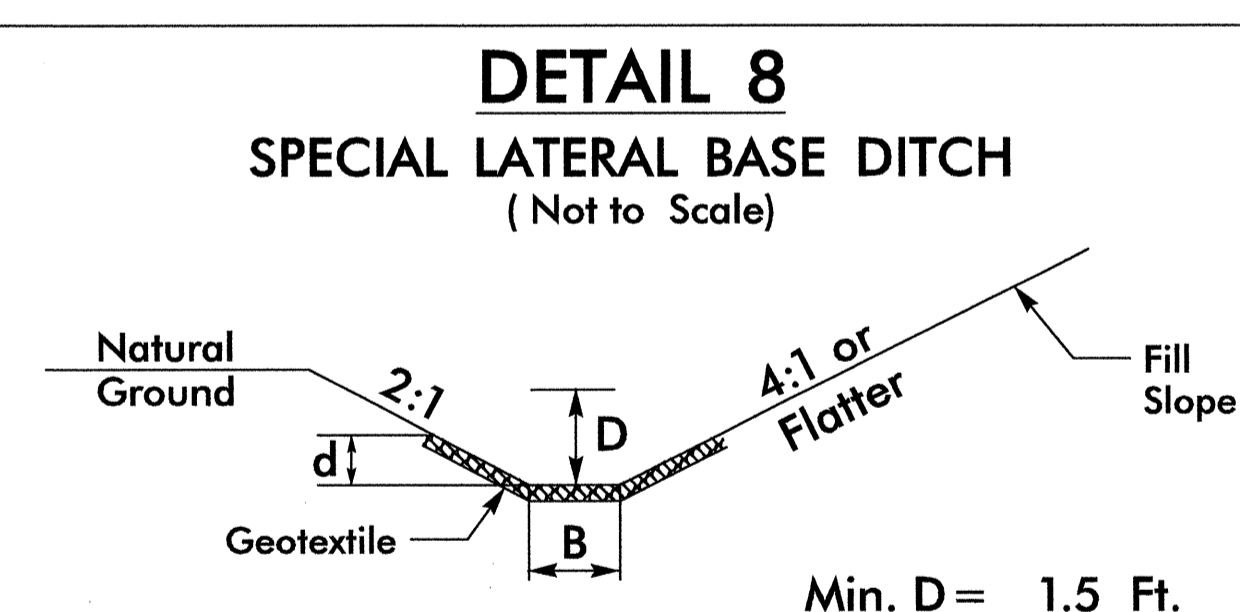
- STA. 9070+90 -M2- RT
- STA. 9181+60 -A3- LT



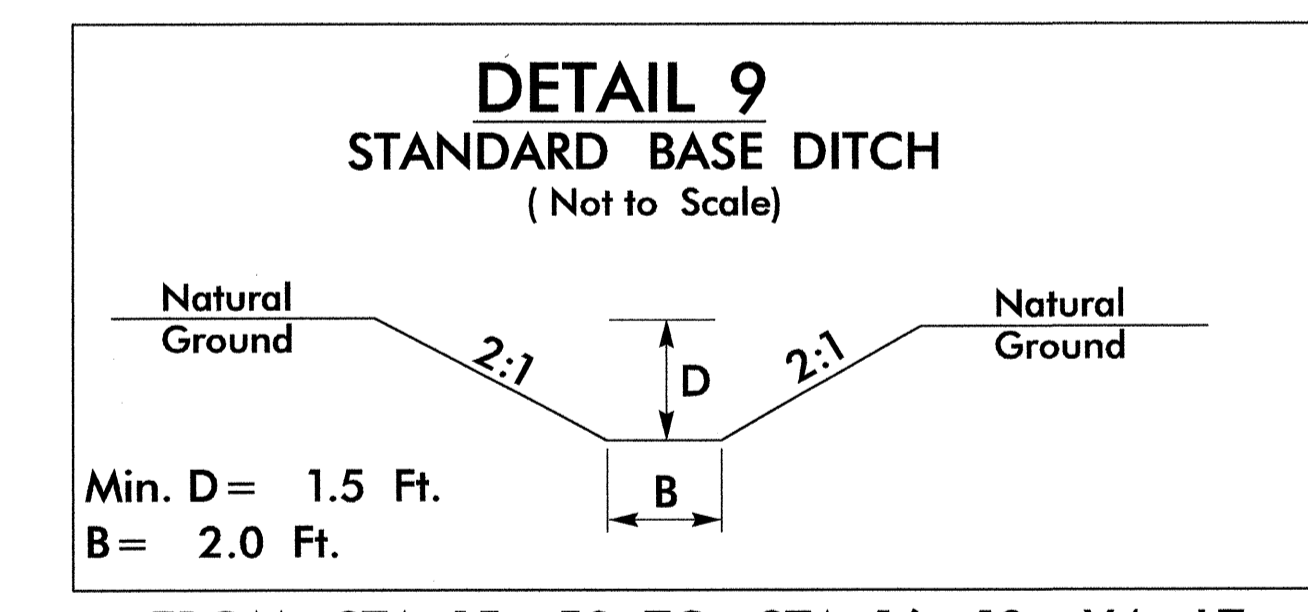
- When B is > .6.0'
- Std. No. 876.01
- Type of Liner = Class 'I' Rip-Rap
- STA. 9044+80 -M2- RT



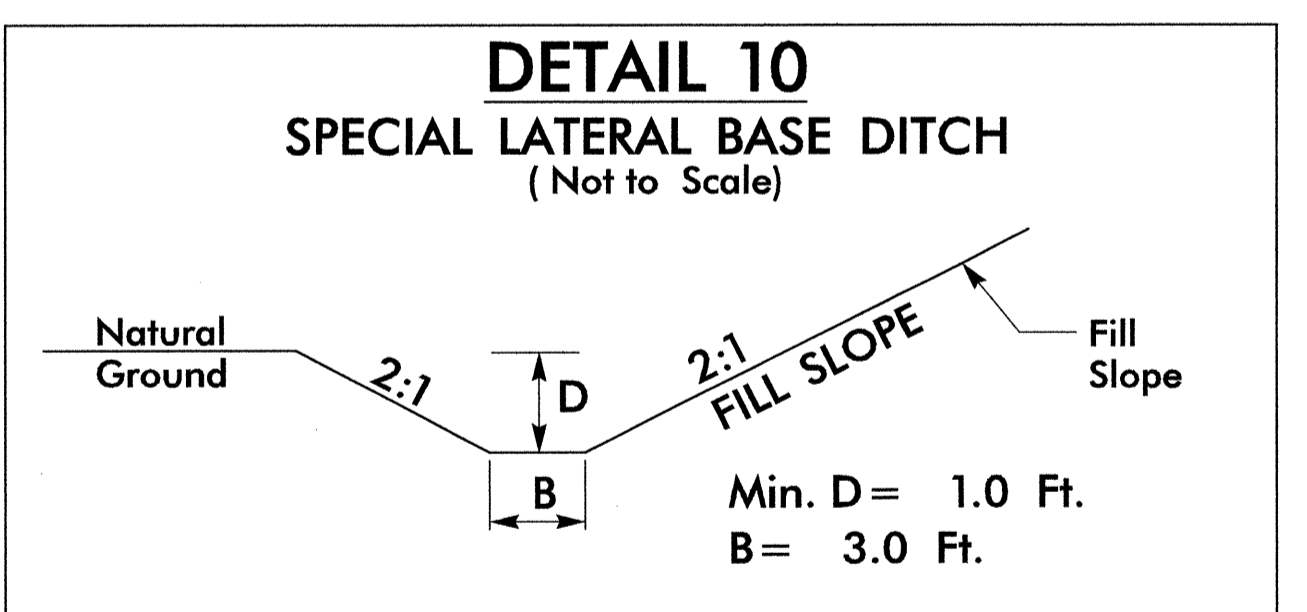
- *When B is < .6.0'
- Type of Liner = Class 'I' Rip-Rap
- STA. 9064+52 -M2- LT
- STA. 9189+40 -M2- RT



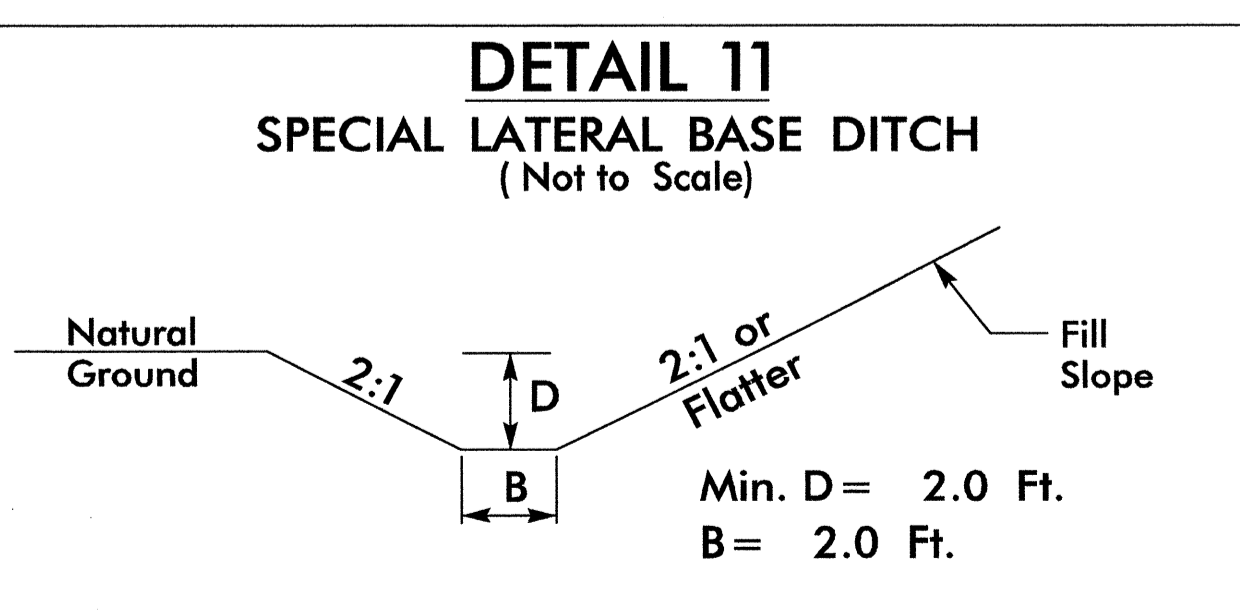
- Type of Liner = Class 'B' Rip-Rap
- FROM STA. 12+95 TO STA. 15+50 -Y4- LT



- FROM STA. 15+50 TO STA. 16+12 -Y4- LT

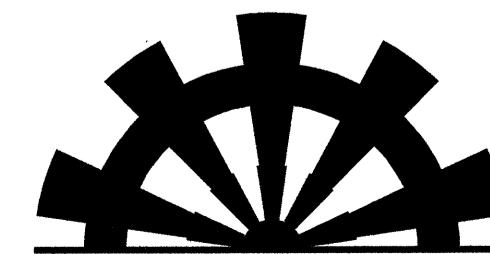


- FROM STA. 9211+00 TO STA. 9212+50 -M2- RT



- FROM STA. 9182+00 TO STA. 9183+00 -M2- LT
- FROM STA. 9191+00 TO STA. 9192+00 -M2- LT

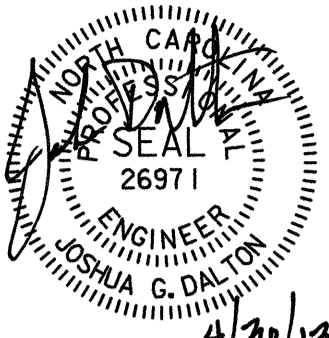
SUNGATE DESIGN GROUP, P.A.



915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6258
ENG FIRM LICENSE NO. C-890

EROSION CONTROL PLAN

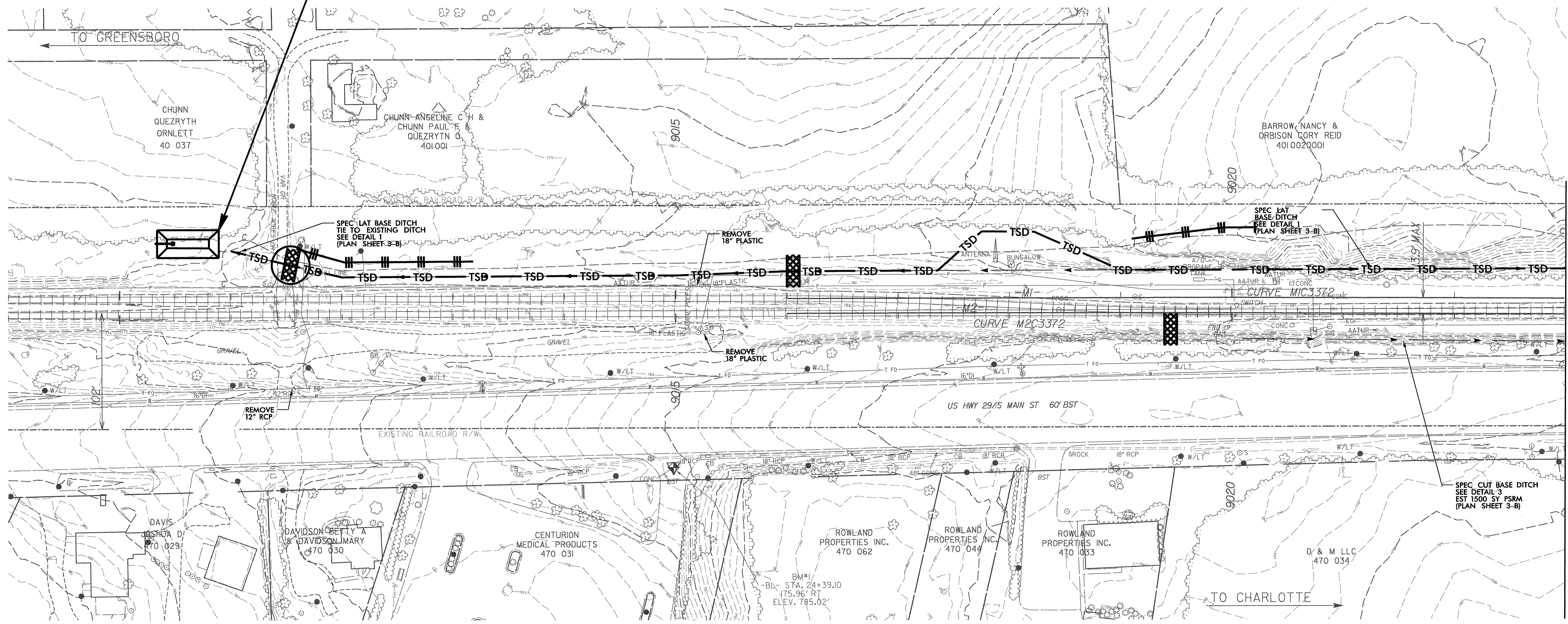
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 04

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-04/CONST.04
RAW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27608
TEL: (919) 859-2245 FAX: (919) 859-4258
ENG. FIRM LICENSE NO. C-880

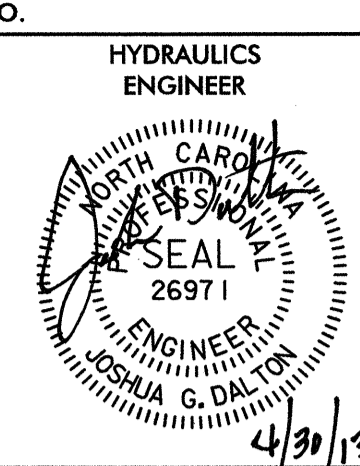

46 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
15 ft. weir
ID 0401



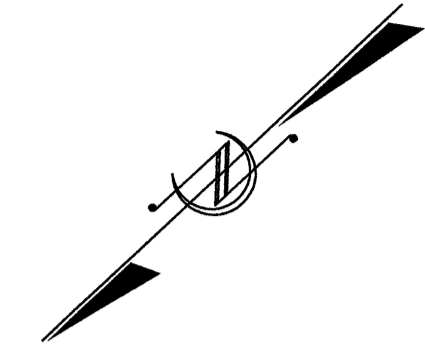
MATCHLINE PROP. TRACK # 2 STA. 9023+00
SEE SHEET EC-05

EROSION CONTROL PLAN

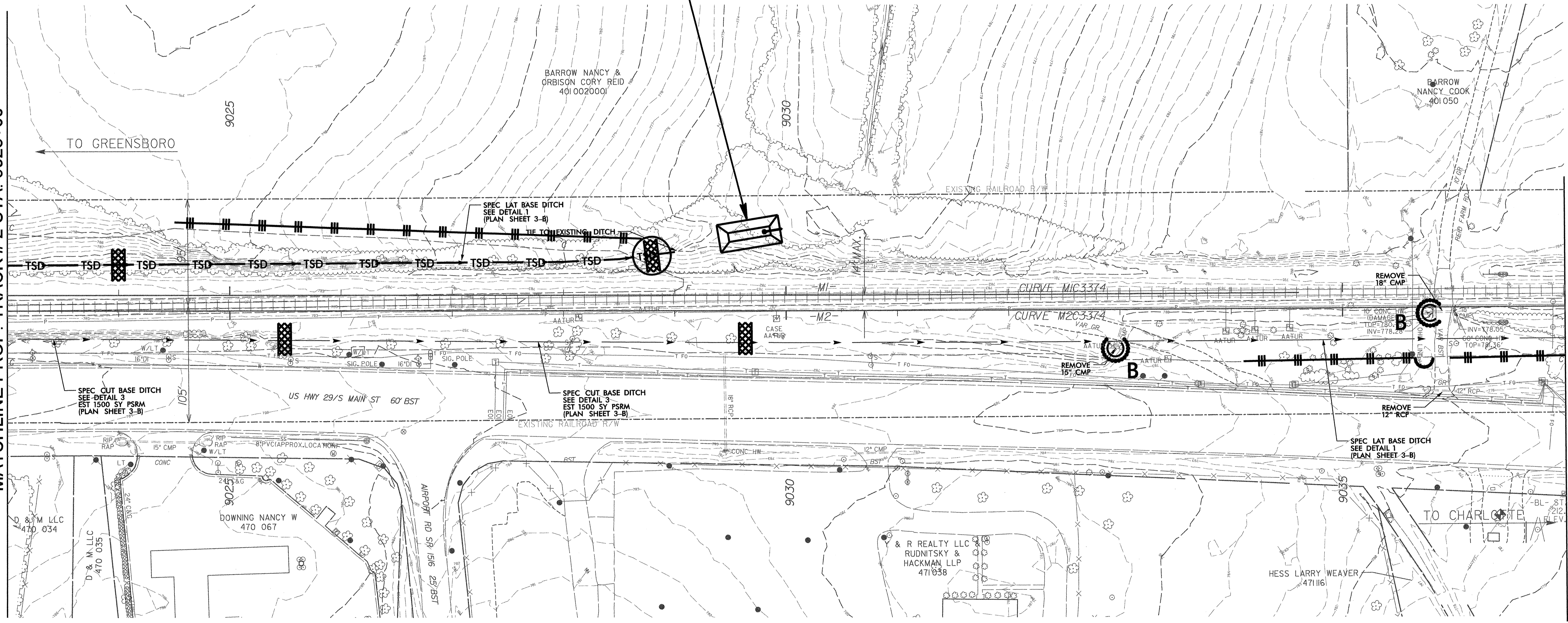
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-05/CONST.05
RAW SHEET NO.	
HYDRAULICS ENGINEER	
	
	
915 JONES FRANKLIN ROAD RALEIGH, NORTH CAROLINA 27608 TEL (919) 859-2243 FAX (919) 859-6258 ENG FIRM LICENSE NO. C-890	

54 x 27 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
19 ft. weir
ID 0501



SEE SHEET EC-04
MATCHLINE PROP. TRACK # 2 STA. 9023+00



MATCHLINE PROP. TRACK # 2 STA. 9037+00
SEE SHEET EC-06

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 06

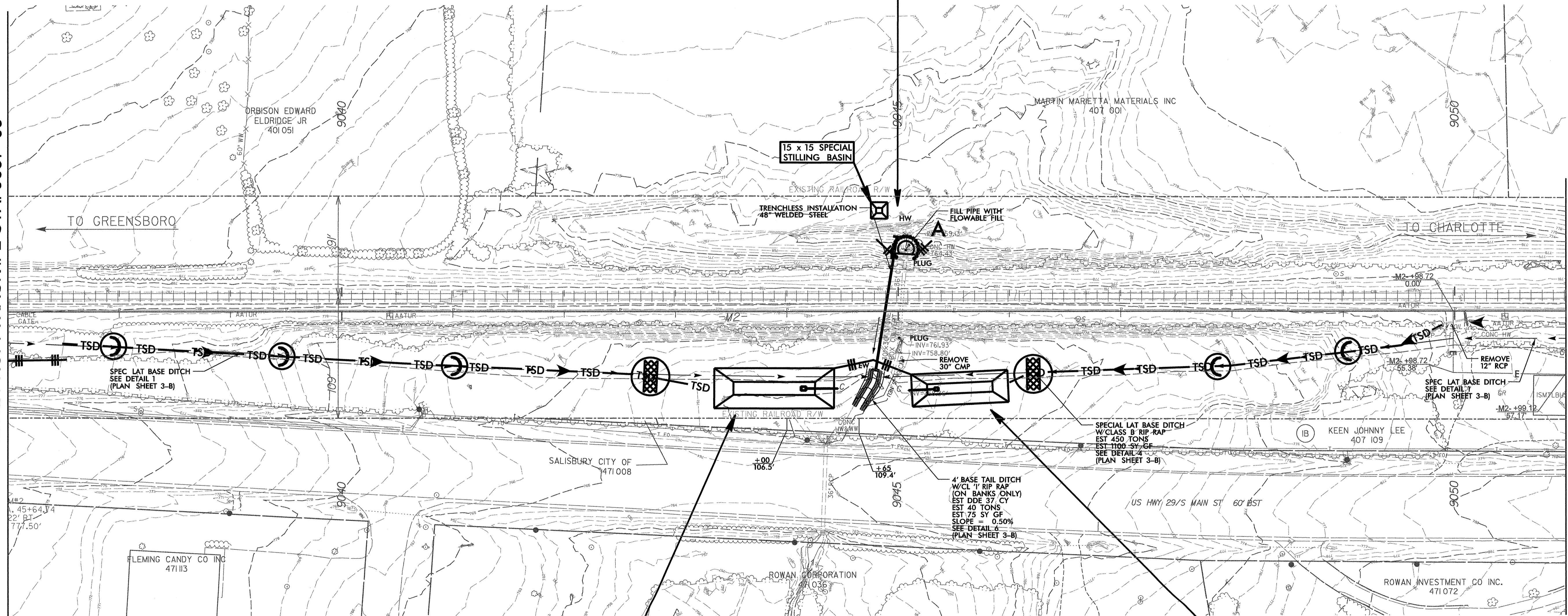
PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-06/CONST.06
RW SHEET NO.	
HYDRAULICS ENGINEER	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6258
ENG FROM LICENSE NO. C-360

INSTALL PIPE(S) IN JURISDICTIONAL AREAS ACCORDING TO
NCDOT BEST MANAGEMENT PRACTICES FOR
CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

SEE SHEET EC-05
MATCHLINE PROP. TRACK # 2 STA. 9037+00



MATCHLINE PROP. TRACK # 2 STA. 9051+00
SEE SHEET EC-07

108 x 36 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
28 ft. weir
ID 0601

70 x 35 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
27 ft. weir
ID 0602

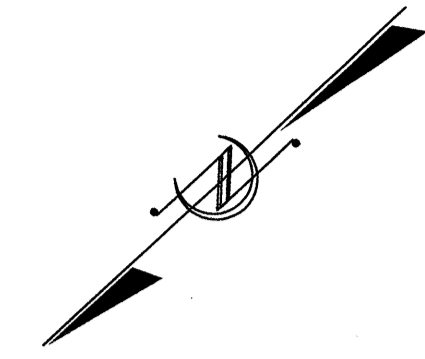
EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 07

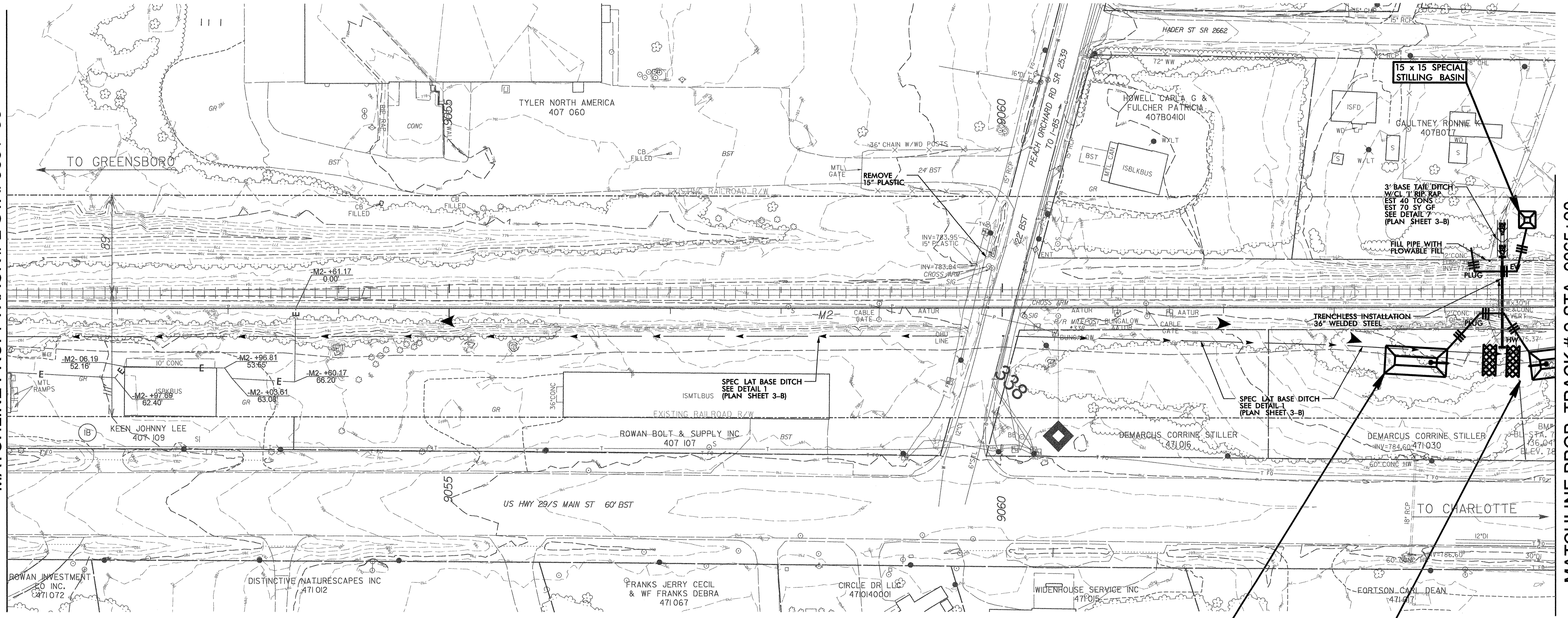
PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-07/CONST.07
RW SHEET NO.	
HYDRAULICS ENGINEER	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2245 FAX (919) 859-4268
ENG FIRM LICENSE NO. C-850



SEE SHEET EC-06
MATCHLINE PROP. TRACK # 2 STA. 9051+00



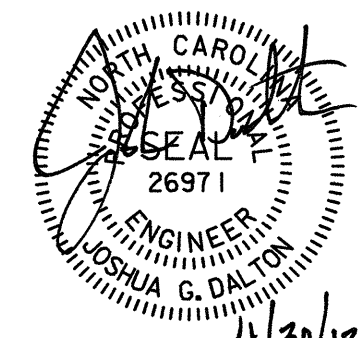
MATCHLINE PROP. TRACK # 2 STA. 9065+00
SEE SHEET EC-08

56 x 28 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
20 ft. weir
ID 0701

58 x 29 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
21 ft. weir
ID 0702

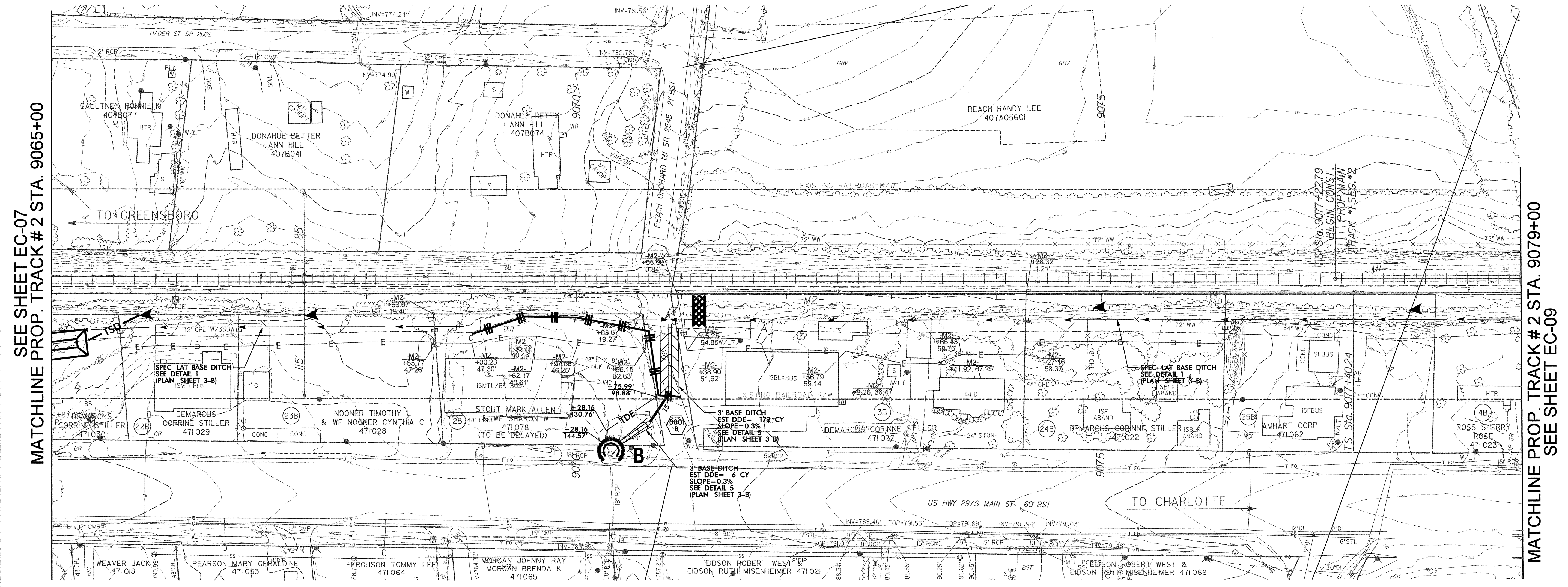
EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 08

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-08/CONST.08
R/W SHEET NO.	HYDRAULICS ENGINEER
	 J. DALTON ENGINEER JOSHUA C. DALTON 4/30/13

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-4258
ENG FIRM LICENSE NO. C-890



SEE SHEET EC-07
MATCHLINE PROP. TRACK # 2 STA. 9065+00

MATCHLINE PROP. TRACK # 2 STA. 9079+00
SEE SHEET EC-09

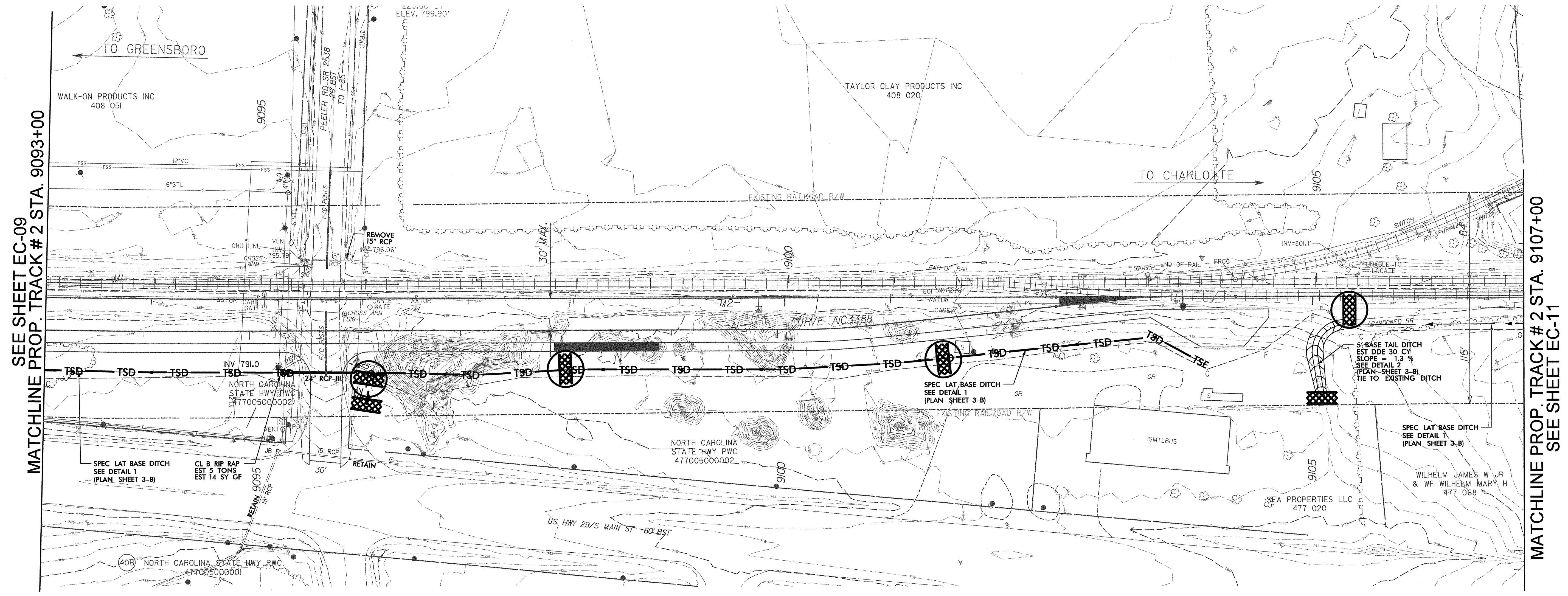
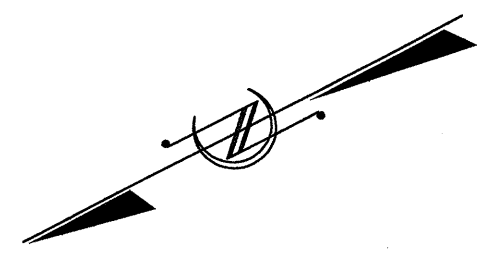
EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-10/CONST.10
RW SHEET NO.	
HYDRAULICS ENGINEER	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2248 FAX (919) 859-9258
ENG FIRM LICENSE NO. C-880

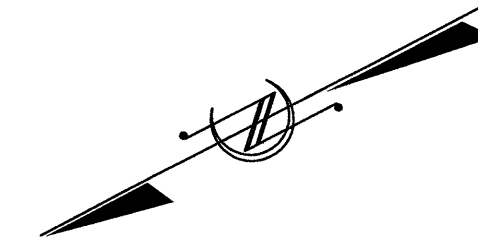


SEE SHEET EC-09
MATCHLINE PROP. TRACK # 2 STA. 9093+00

MATCHLINE PROP. TRACK # 2 STA. 9107+00
SEE SHEET EC-11

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11

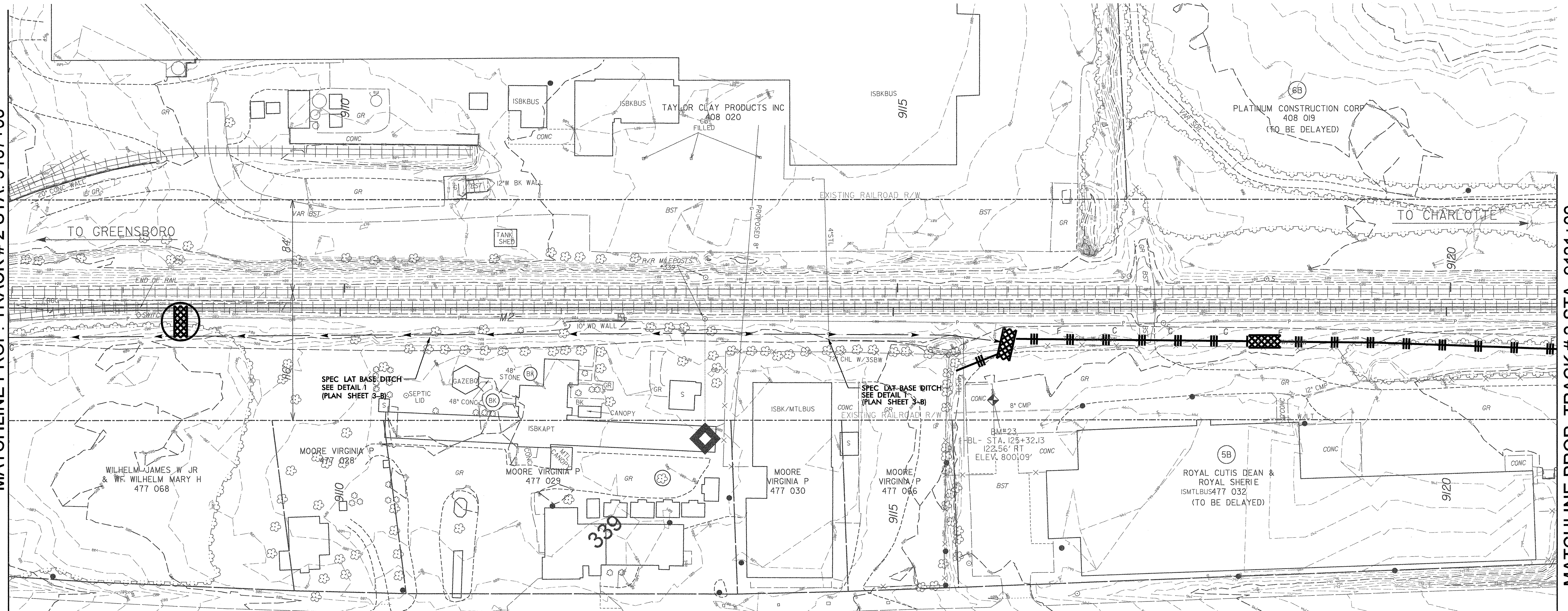


PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-II/CONST II
RW SHEET NO.	
HYDRAULICS ENGINEER	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL. (919) 869-2243 FAX (919) 869-6288
ENG. FIRM LICENSE NO. 5-890

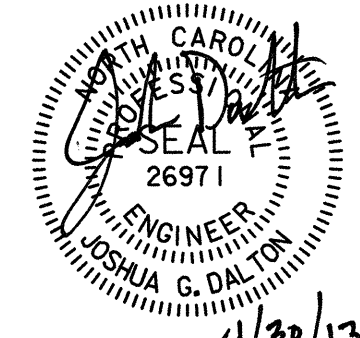
SEE SHEET EC-10
MATCHLINE PROP. TRACK # 2 STA. 9107+00



MATCHLINE PROP. TRACK # 2 STA. 9121+00
SEE SHEET EC-12

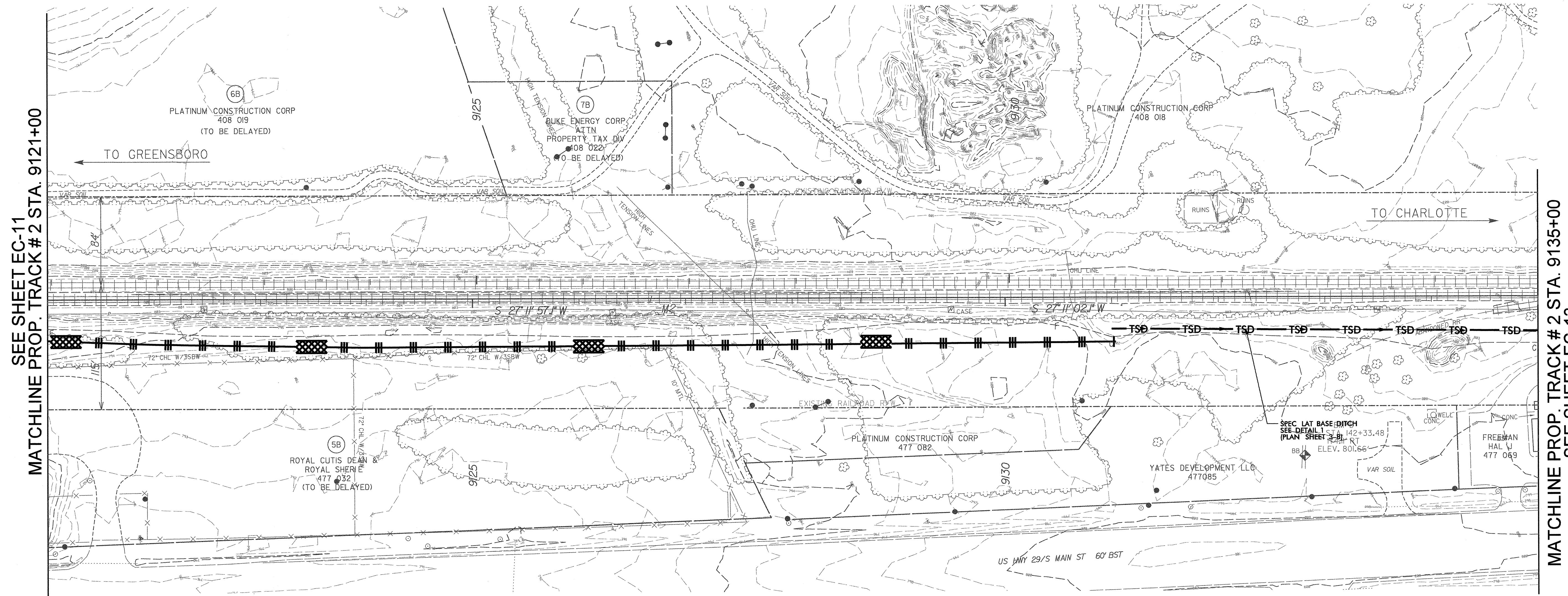
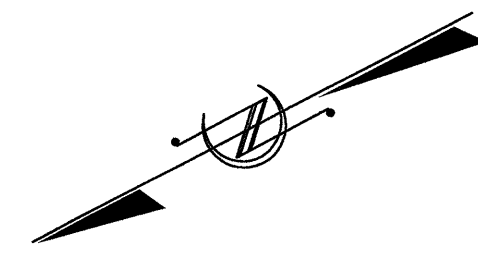
EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 12

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-12/CONST.12
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27666
TEL (919) 859-2245 FAX (919) 859-6258
ENG FIRM LICENSE NO. C-890



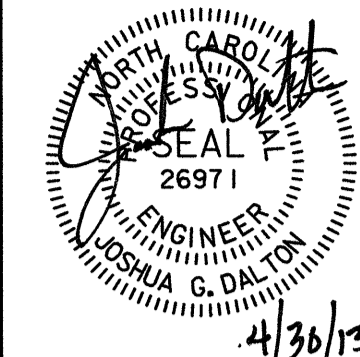
SEE SHEET EC-11
MATCHLINE PROP. TRACK # 2 STA. 9121+00

MATCHLINE PROP. TRACK # 2 STA. 9135+00
SEE SHEET EC-13

0164DEL_P10b2

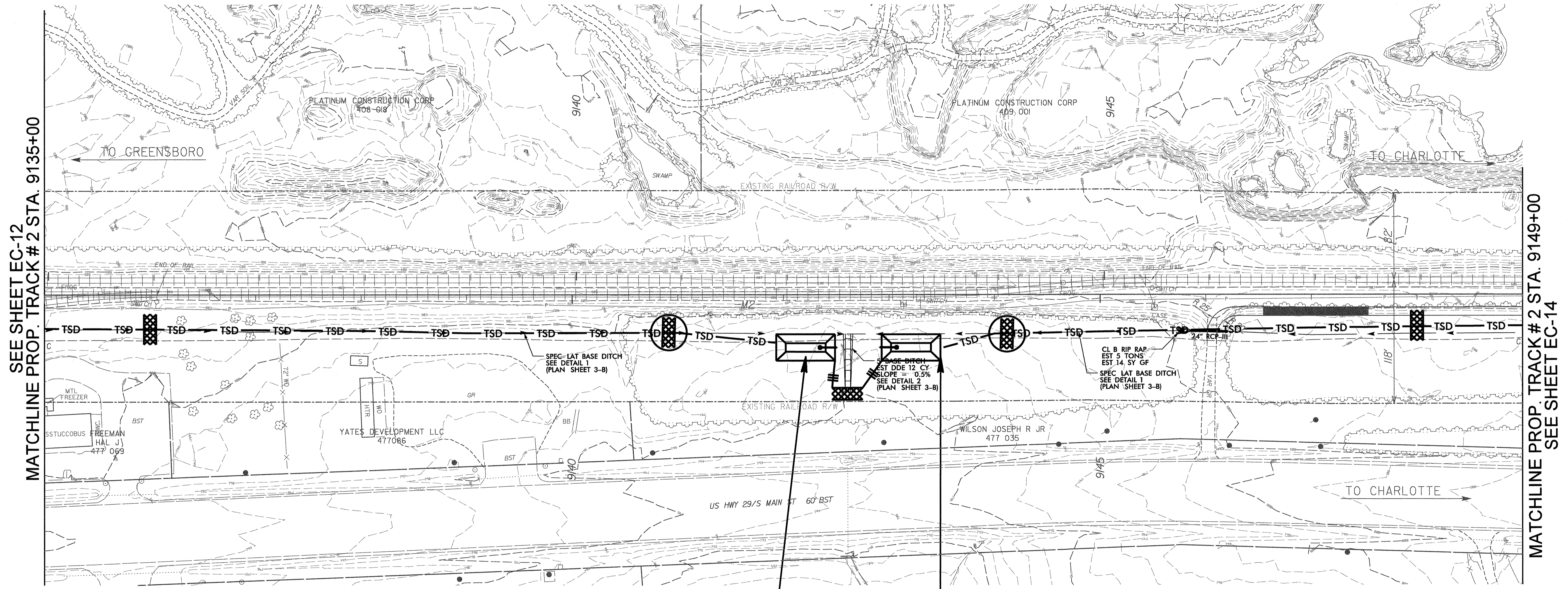
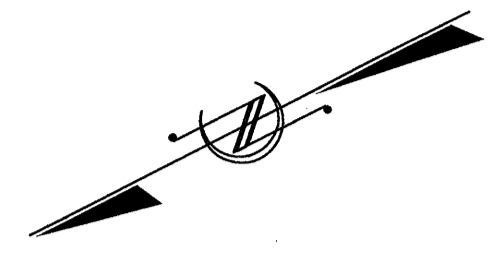
EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 13

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-13/CONST 13
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL: (919) 859-2243 FAX: (919) 859-4268
ENG FIRM LICENSE NO. C-880

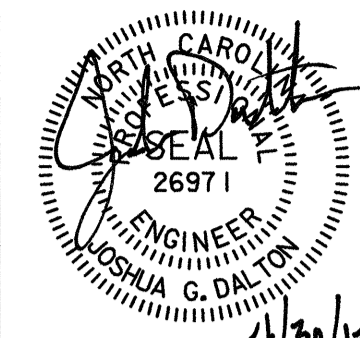


46 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
15 ft. weir
ID 1301


52 x 26 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
18 ft. weir
ID 1302

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 14

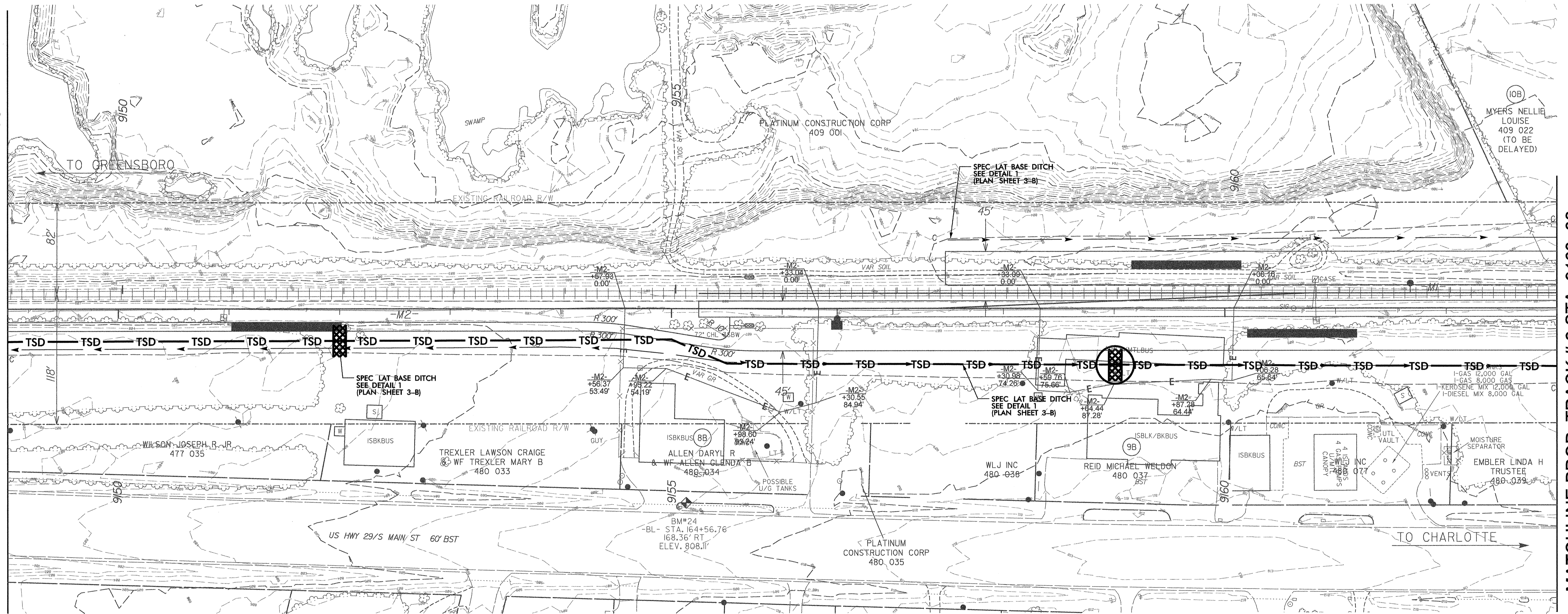
PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-14/CONST 14
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.



915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6256
ENG FIRM LICENSE NO. C-990

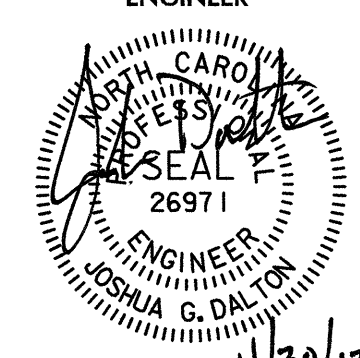
SEE SHEET EC-13
MATCHLINE PROP. TRACK # 2 STA. 9149+00



MATCHLINE PROP. TRACK # 2 STA. 9163+00
SEE SHEET EC-15

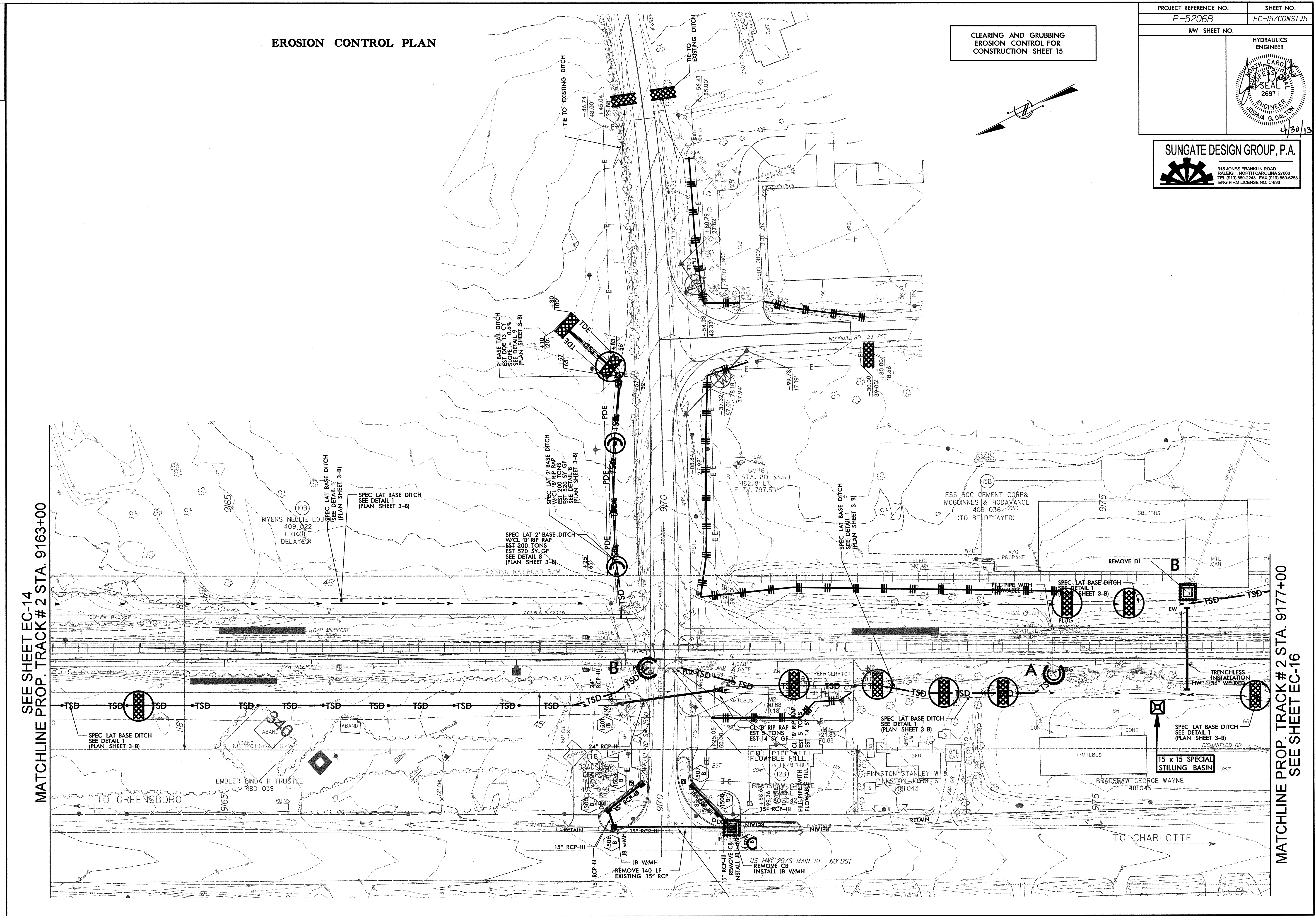
EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 15

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-15/CONST15
RAW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2245 FAX (919) 859-6268
ENG FIRM LICENSE NO. C-860



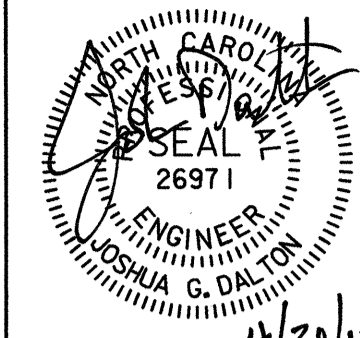
SEE SHEET EC-14
MATCHLINE PROP. TRACK # 2 STA. 9163+00

MATCHLINE PROP. TRACK # 2 STA. 9177+00
SEE SHEET EC-16

0164DEL_P10b2

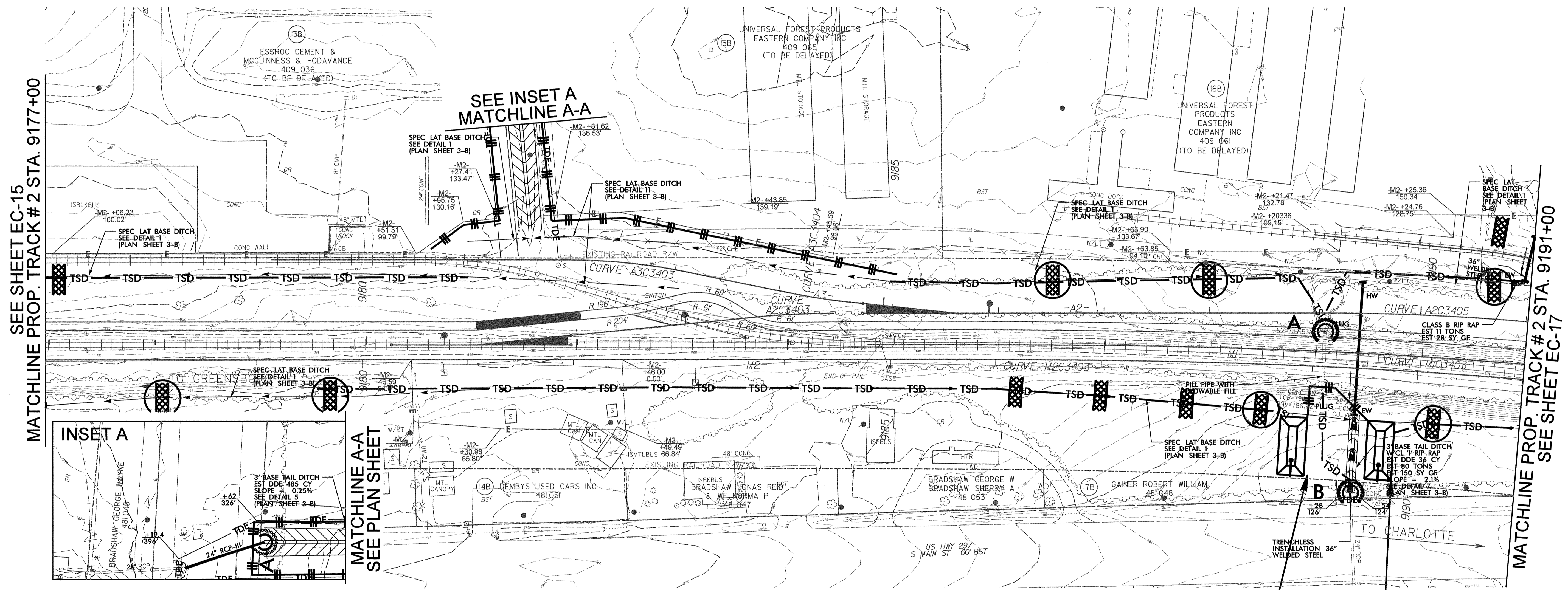
EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 16

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-16/CONST J6
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

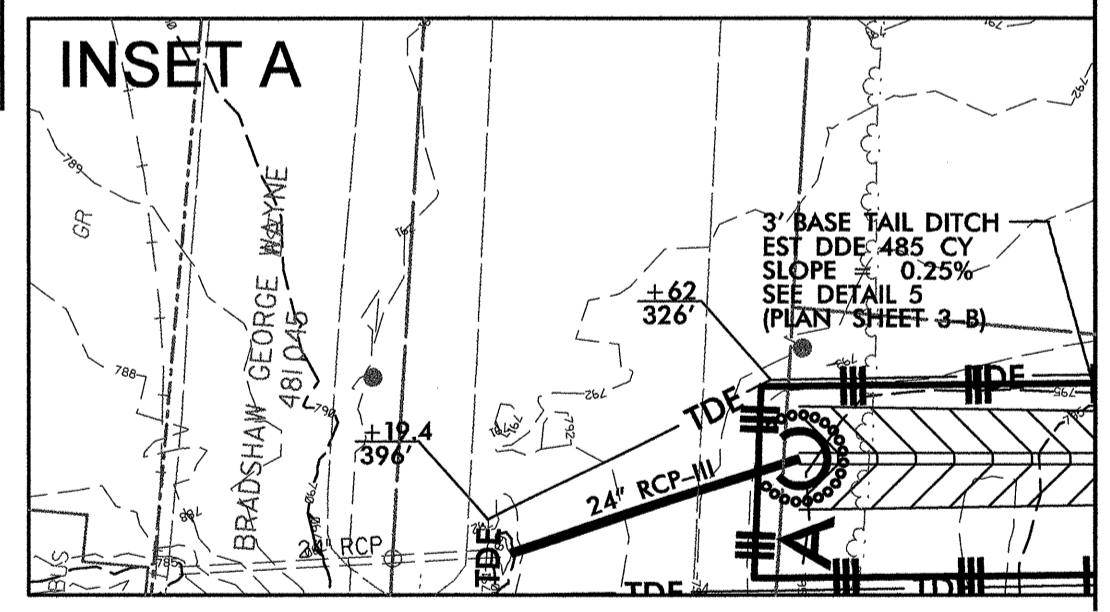
SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-4258
ENG FIRM LICENSE NO. C-890



SEE SHEET EC-15
MATCHLINE PROP. TRACK # 2 STA. 9177+00

MATCHLINE PROP. TRACK # 2 STA. 9191+00
SEE SHEET EC-17



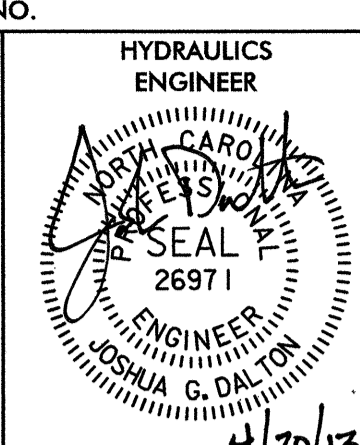
MATCHLINE A-A
SEE PLAN SHEET

38 x 19 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
11 ft. weir
ID 1601

50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
17 ft. weir
ID 1602

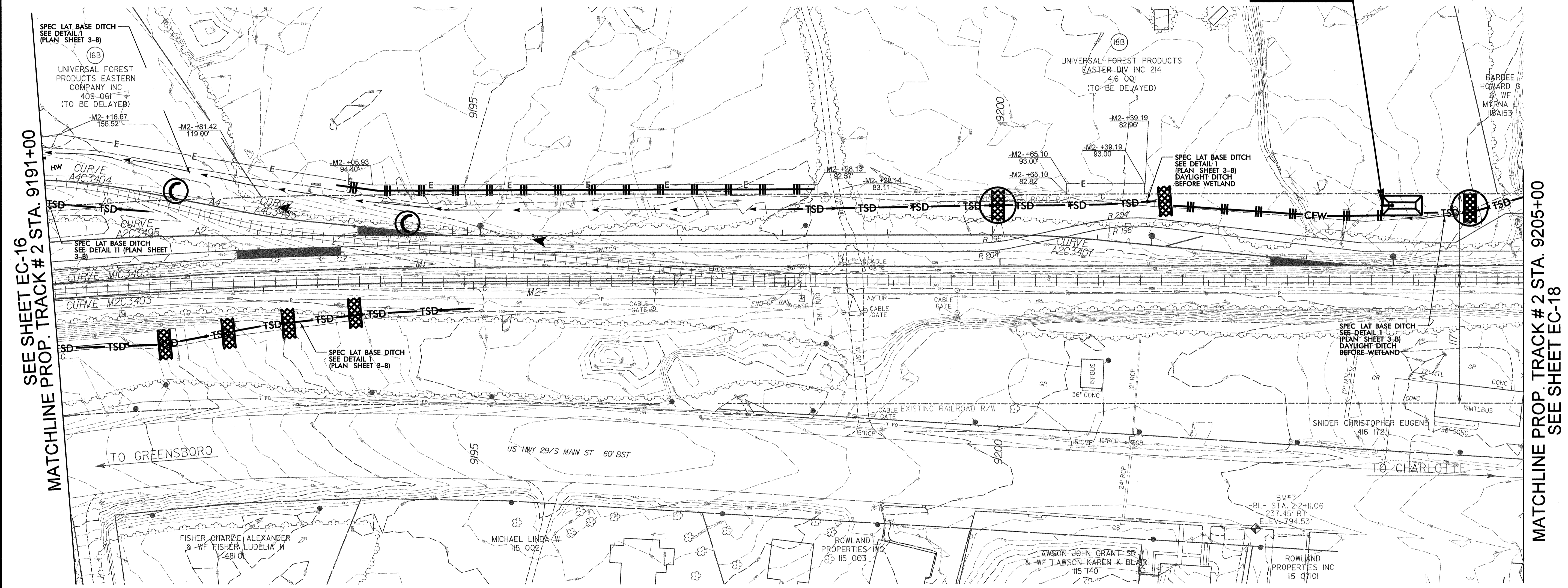
EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 17

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-17/CONST-17
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.
 915 JONES FRANKLIN ROAD
 RALEIGH, NORTH CAROLINA 27606
 TEL (919) 859-2243 FAX (919) 859-6258
 ENG FIRM LICENSE NO. C-890

38 x 19 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
11 ft. weir
ID 1701



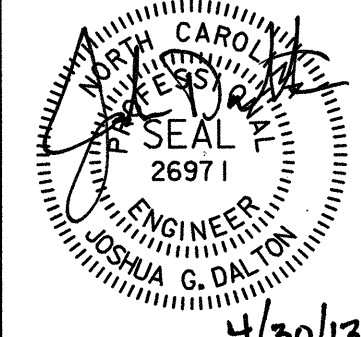
SEE SHEET EC-16
MATCHLINE PROP. TRACK # 2 STA. 9191+00

MATCHLINE PROP. TRACK # 2 STA. 9205+00
SEE SHEET EC-18

0164DEL_P10b2

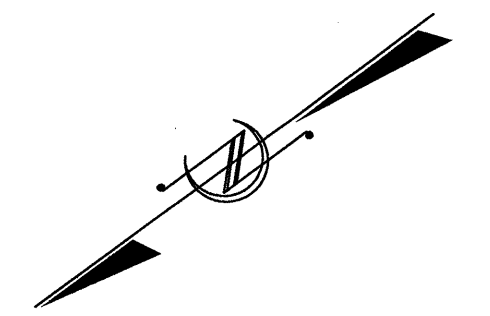
EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 18

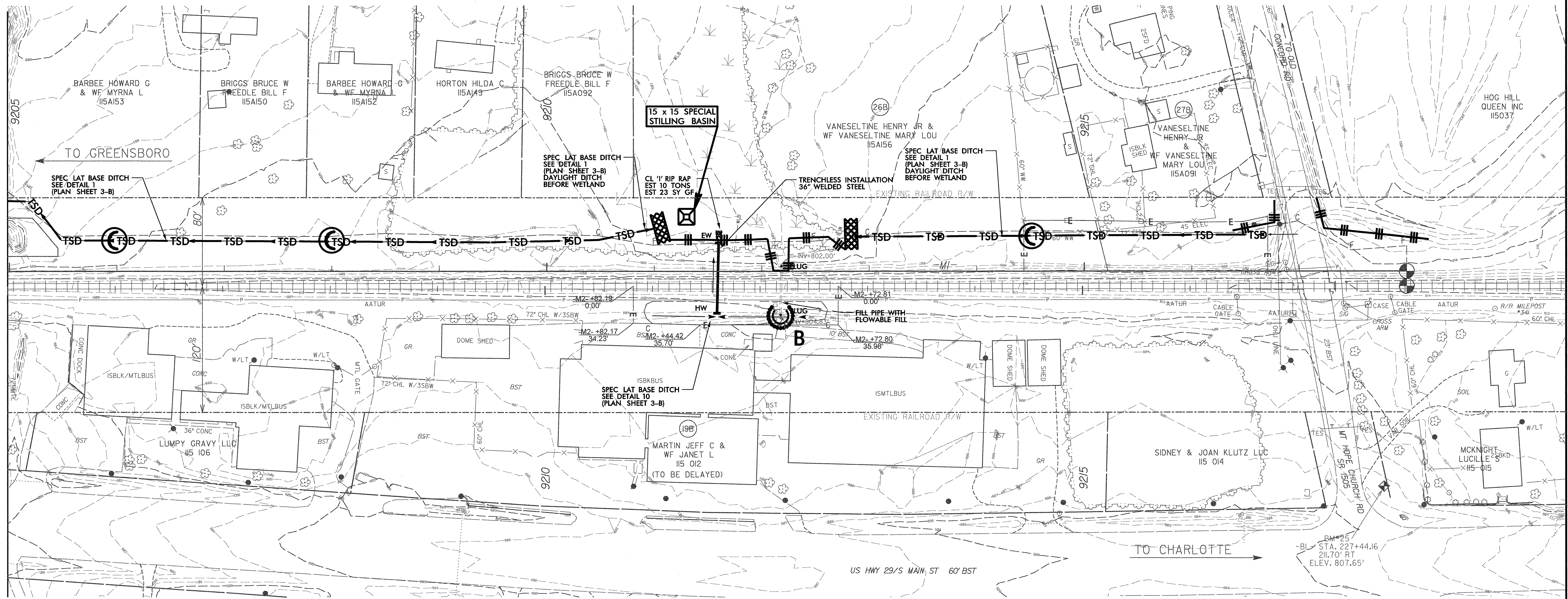
PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-18/CONST JB
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 869-2243 FAX (919) 869-6288
ENG FIRM LICENSE NO. C-800



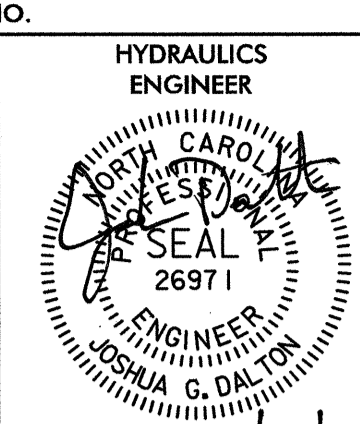
SEE SHEET EC-17
MATCHLINE PROP. TRACK # 2 STA. 9205+00



0164DEL_P10b2

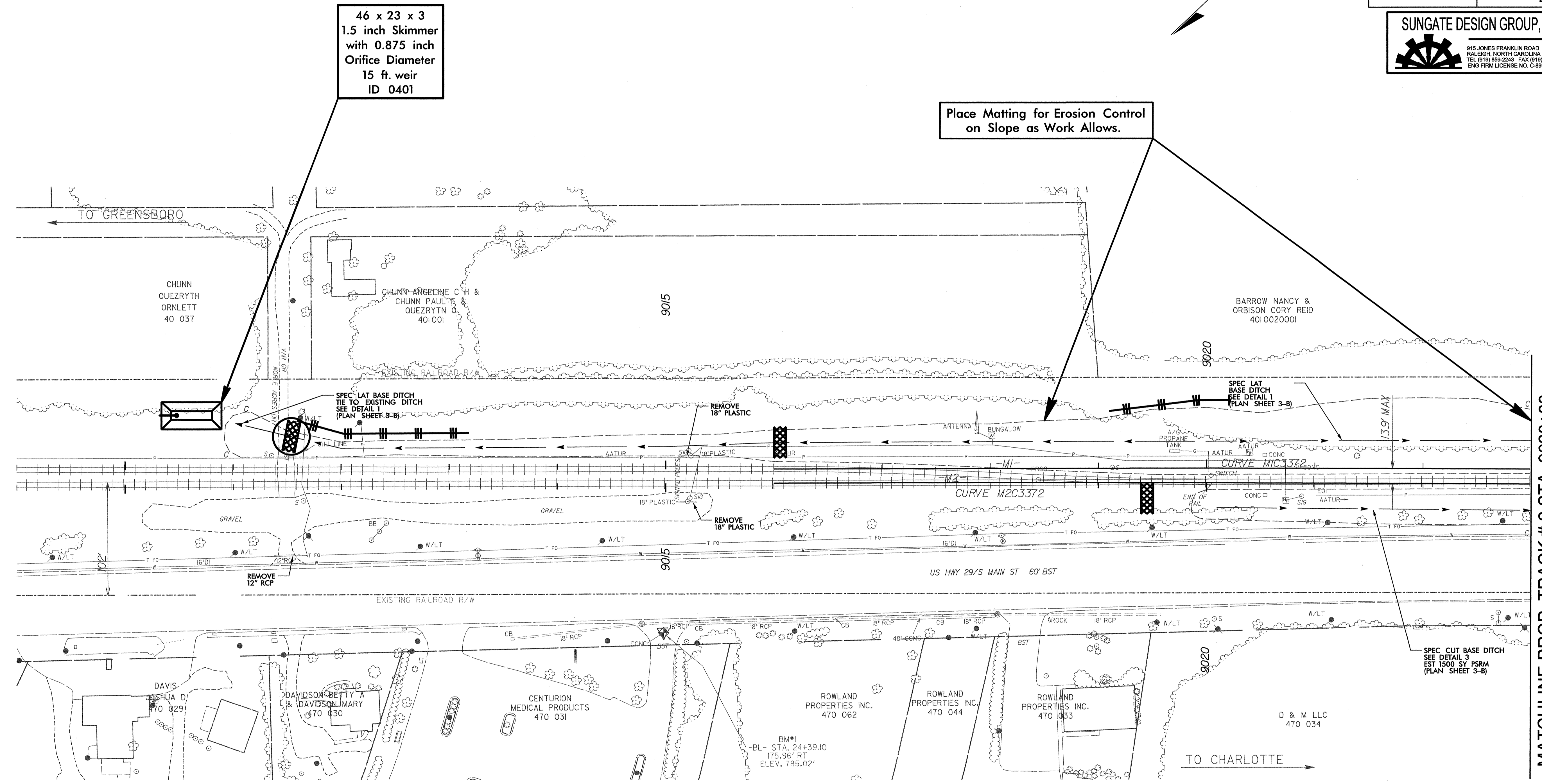
EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 04

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-19/CONST.04
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL. (919) 859-2243 FAX (919) 859-4268
ENG FIRM LICENSE NO. C-880



Place Matting for Erosion Control
on Slope as Work Allows.

46 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
15 ft. weir
ID 0401

MATCHLINE PROP. TRACK # 2 STA. 9023+00
SEE SHEET EC-20

0164DEL_P10b2

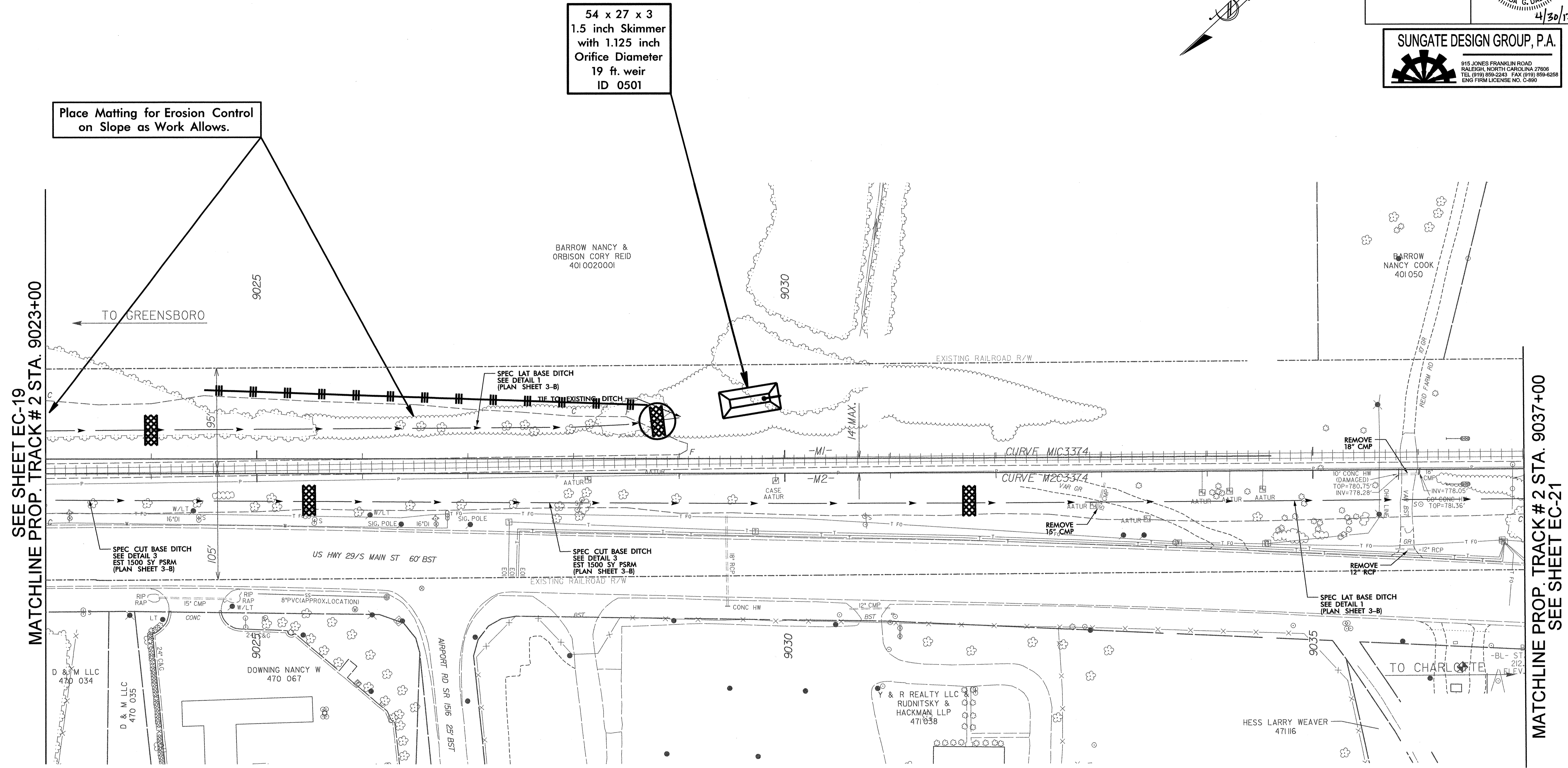
EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 05

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-20/CONST.05
RW SHEET NO.	
HYDRAULICS ENGINEER	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27605
TEL (919) 859-2243 FAX (919) 859-4258
ENG FIRM LICENSE NO. C-890



SEE SHEET EC-19
MATCHLINE PROP. TRACK # 2 STA. 9023+00

MATCHLINE PROP. TRACK # 2 STA. 9037+00
SEE SHEET EC-21

0164DEL_P10b2

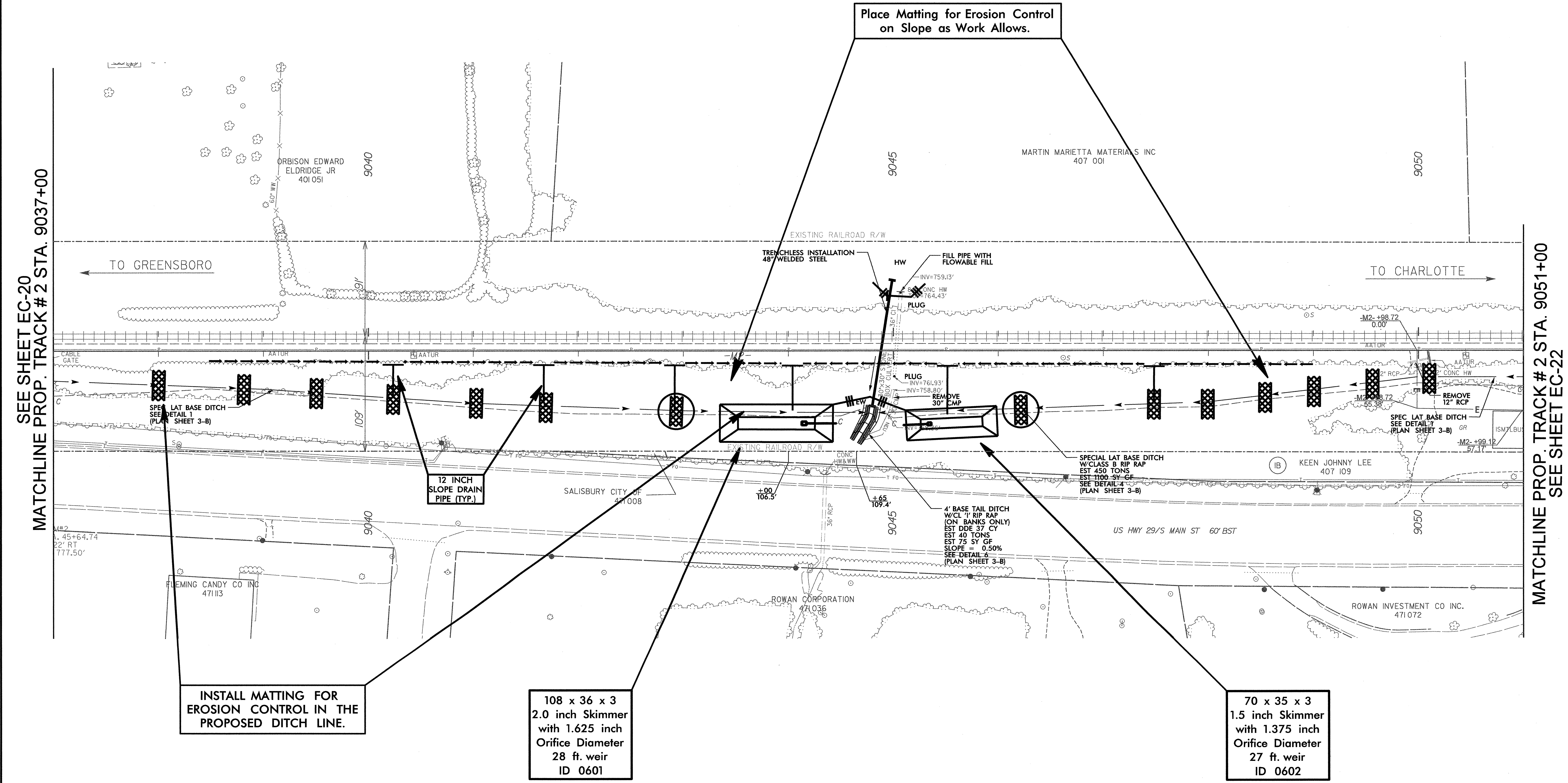
EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 06

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-21/CONST.06
RW SHEET NO.	
HYDRAULICS ENGINEER	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2241 FAX (919) 859-6258
ENG FIRM LICENSE NO. C-880



SEE SHEET EC-20
MATCHLINE PROP. TRACK # 2 STA. 9037+00

MATCHLINE PROP. TRACK # 2 STA. 9051+00
SEE SHEET EC-22

INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

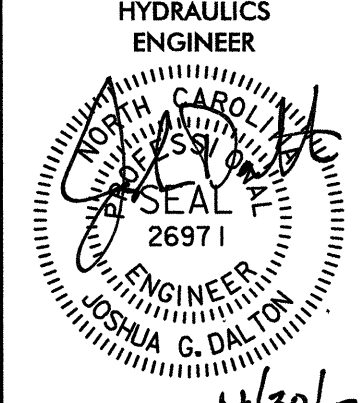
108 x 36 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
28 ft. weir
ID 0601

70 x 35 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
27 ft. weir
ID 0602

Place Matting for Erosion Control
on Slope as Work Allows.

EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 07

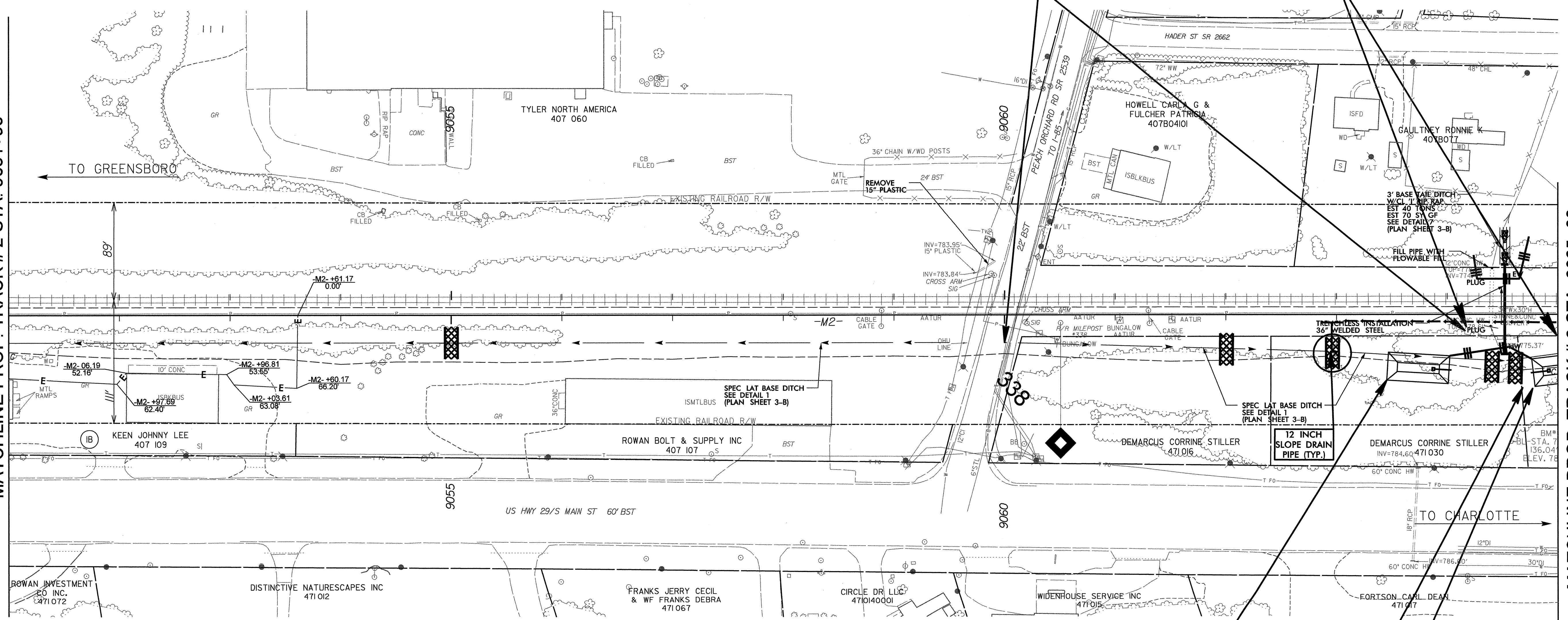
PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-22/CONST.07
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2249 FAX (919) 859-6258
ENG FIRM LICENSE NO. C-890

SEE SHEET EC-21
MATCHLINE PROP. TRACK #2 STA. 9051+00

MATCHLINE PROP. TRACK #2 STA. 9065+00
SEE SHEET EC-23



INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

Place Matting for Erosion Control
on Slope as Work Allows.

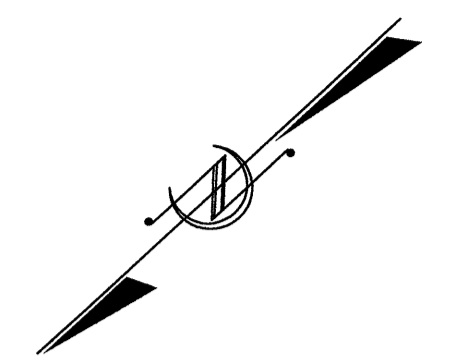
56 x 28 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
20 ft. weir
ID 0701

58 x 29 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
21 ft. weir
ID 0702

INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

EROSION CONTROL PLAN

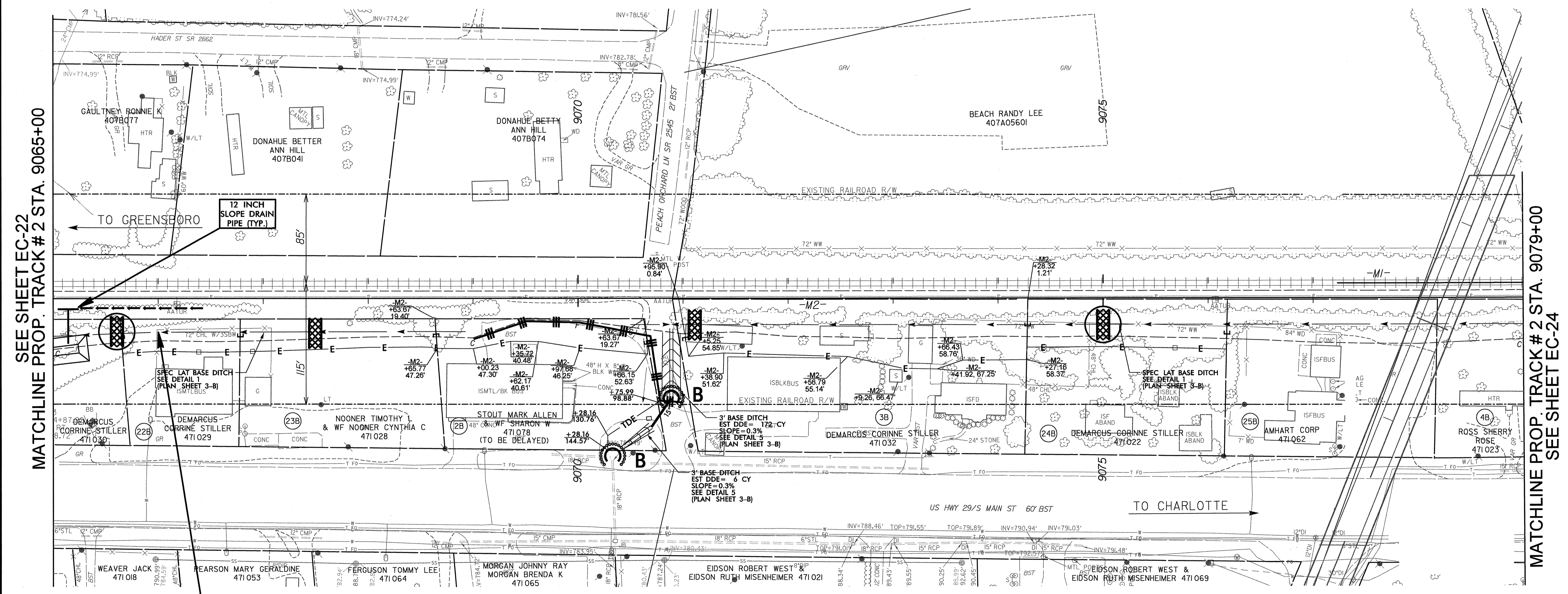
FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 08



PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-23/CONST.08
RW SHEET NO.	
HYDRAULICS ENGINEER	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 889-2243 FAX (919) 889-4258
ENG FIRM LICENSE NO. C-890



MATCHLINE PROP. TRACK # 2 STA. 9079+00
SEE SHEET EC-24

INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

0164DEL_P10b2

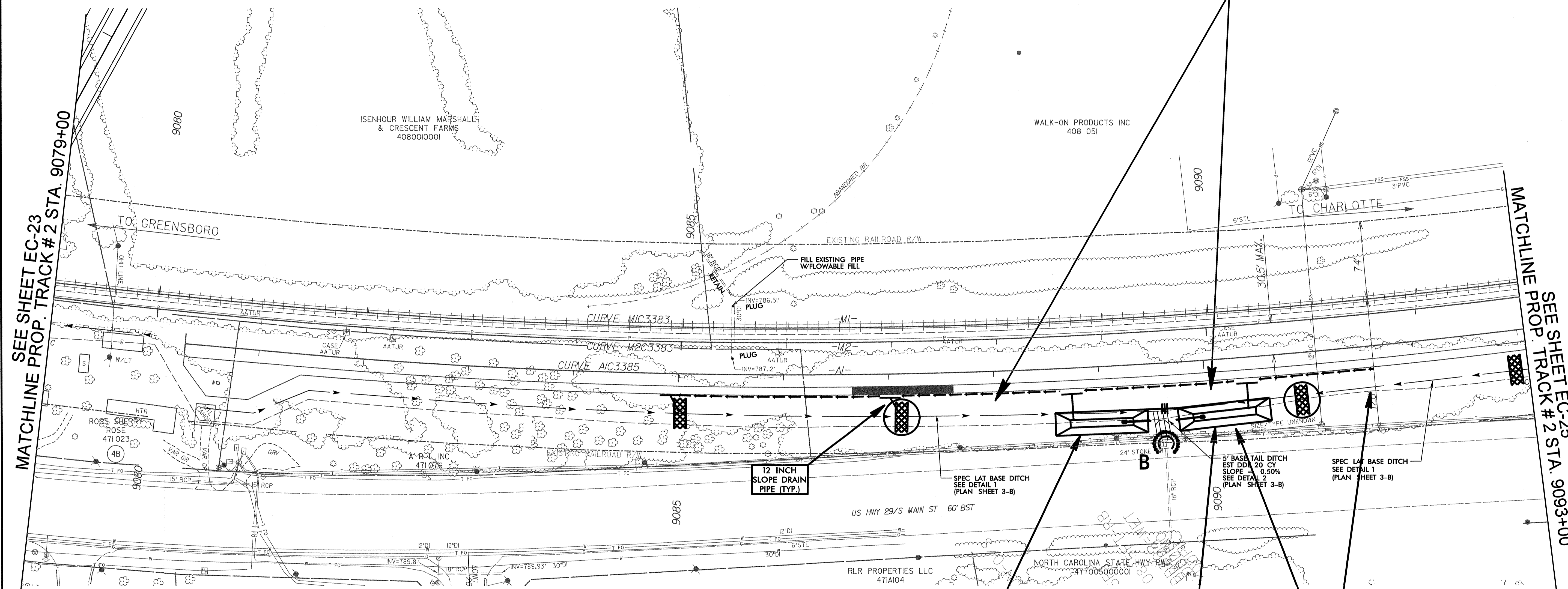
EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 09

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-24/CONST.09
RAW SHEET NO.	HYDRAULICS ENGINEER
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27608
TEL (919) 859-2243 FAX (919) 859-6266
ENG FIRM LICENSE NO. C-890



Place Matting for Erosion Control on Slope as Work Allows.

88 x 22 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
14 ft. weir
ID 0901

88 x 22 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
14 ft. weir
ID 0902

INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

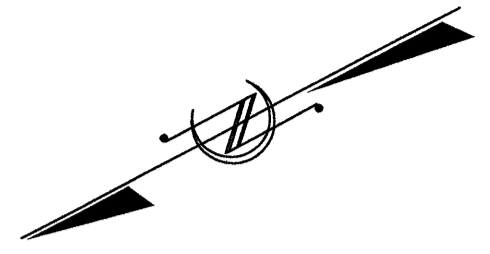
SEE SHEET EC-23
MATCHLINE PROP. TRACK # 2 STA. 9079+00

SEE SHEET EC-25
MATCHLINE PROP. TRACK # 2 STA. 9093+00

0164DEL_P10b2

EROSION CONTROL PLAN

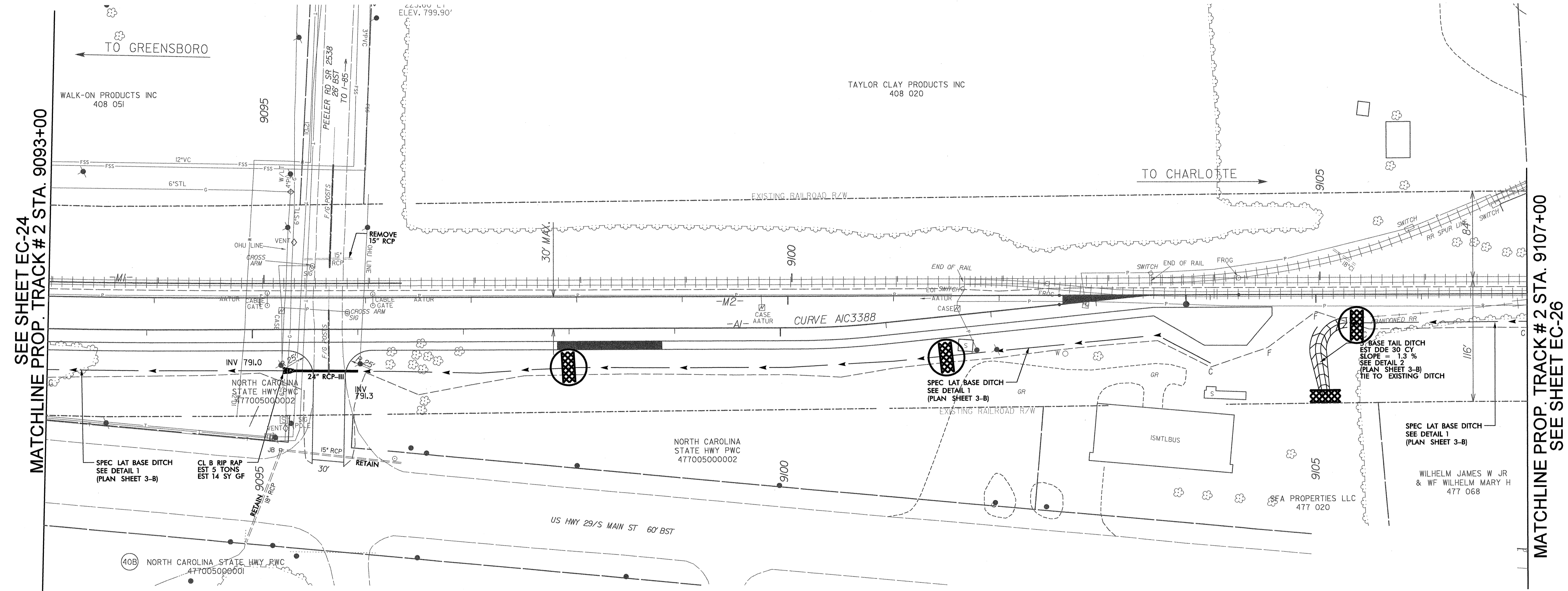
FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 10



PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-25/CONST.10
RW SHEET NO.	
HYDRAULICS ENGINEER	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27608
TEL: (919) 859-2245 FAX: (919) 859-9258
ENG FIRM LICENSE NO. C-890

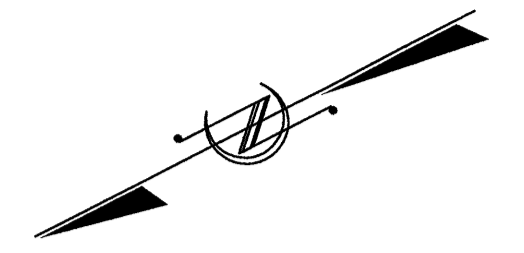


SEE SHEET EC-24
MATCHLINE PROP. TRACK # 2 STA. 9093+00

MATCHLINE PROP. TRACK # 2 STA. 9107+00
SEE SHEET EC-26

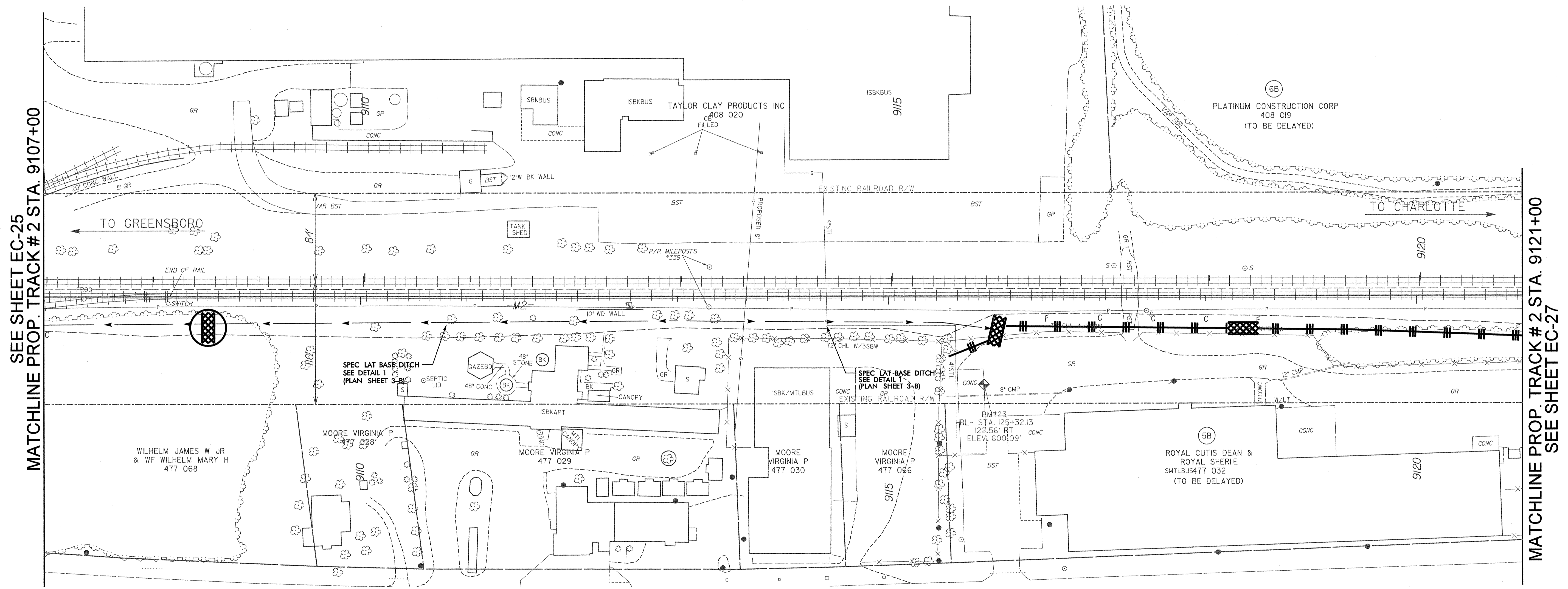
EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 11



PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-26/CONST.II
RW SHEET NO.	
HYDRAULICS ENGINEER	
4/30/13	

SUNGATE DESIGN GROUP, P.A.
 915 JONES FRANKLIN ROAD
 RALEIGH, NORTH CAROLINA 27606
 TEL (919) 859-2243 FAX (919) 859-6268
 ENG FIRM LICENSE NO. C-890



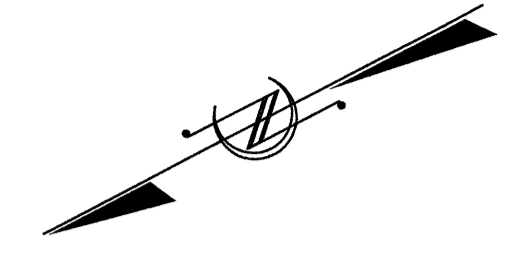
SEE SHEET EC-25
MATCHLINE PROP. TRACK # 2 STA. 9107+00

MATCHLINE PROP. TRACK # 2 STA. 9121+00
SEE SHEET EC-27

0164DEL_P10b2

EROSION CONTROL PLAN

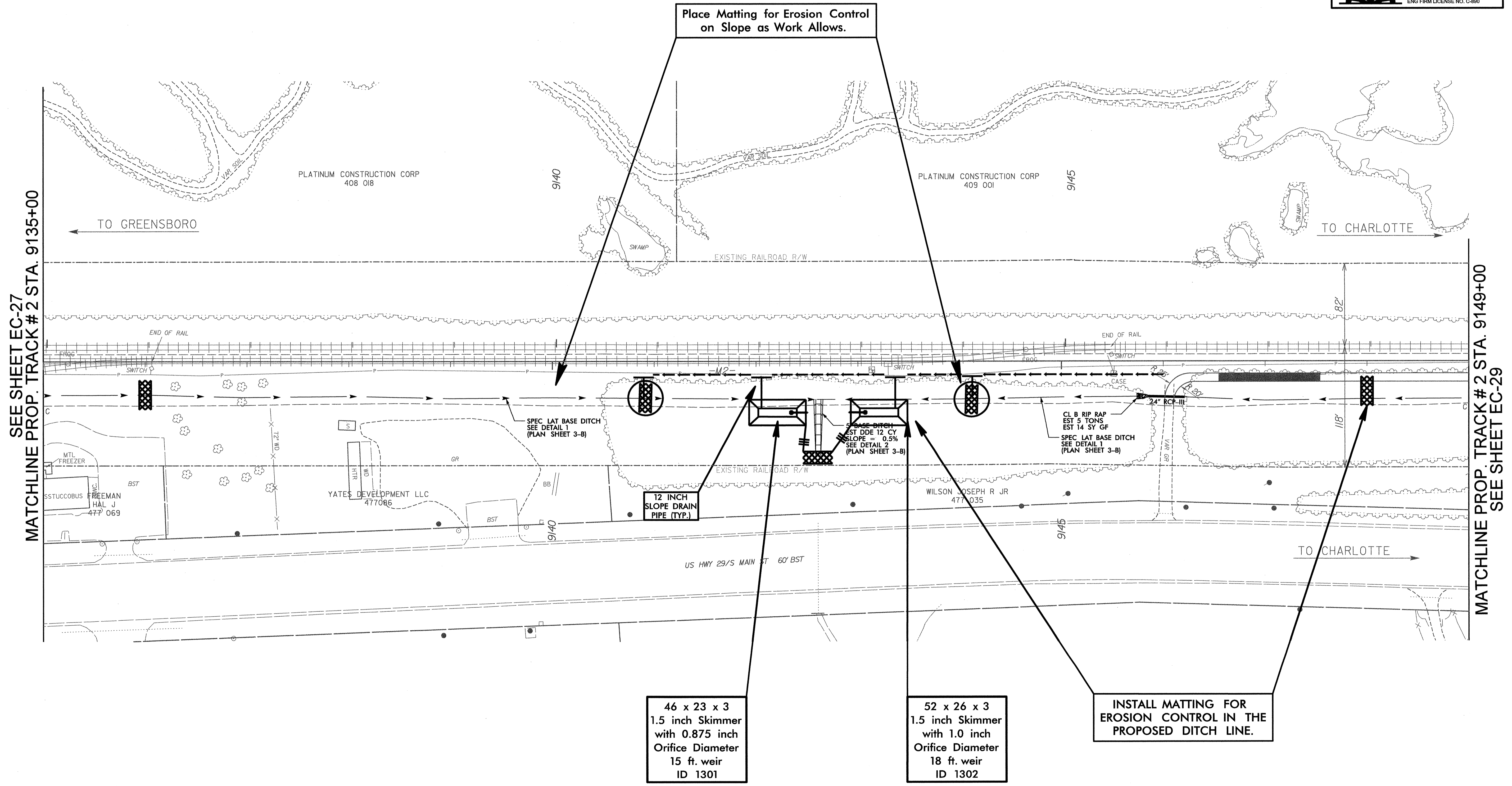
FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 13



PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-28/CONST.13
RW SHEET NO.	
HYDRAULICS ENGINEER	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2240 FAX (919) 859-6288
ENG FIRM LICENSE NO. C-880



46 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
15 ft. weir
ID 1301

52 x 26 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
18 ft. weir
ID 1302

INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

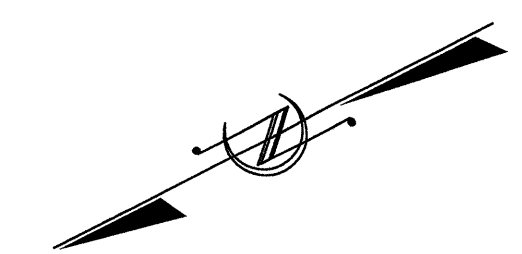
SEE SHEET EC-27
MATCHLINE PROP. TRACK # 2 STA. 9135+00

MATCHLINE PROP. TRACK # 2 STA. 9149+00
SEE SHEET EC-29

0164DEL_P10b2

EROSION CONTROL PLAN

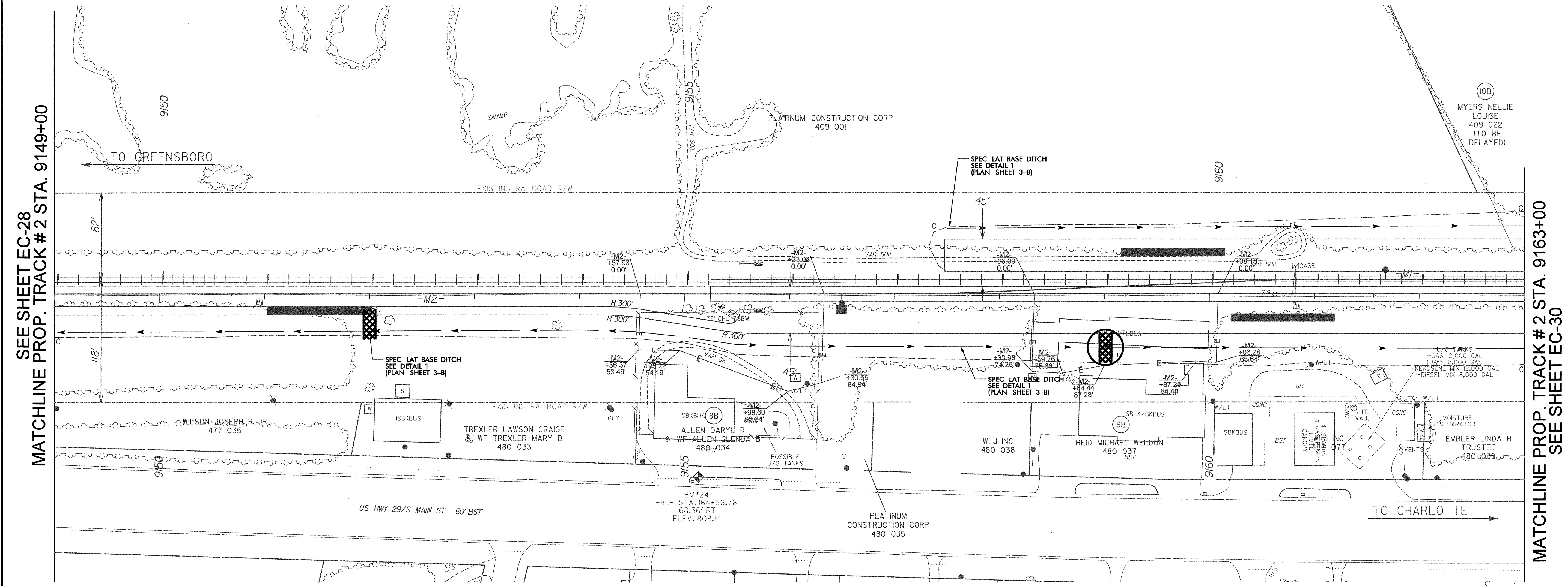
FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 14



PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-29/CONST.14
R/W SHEET NO.	HYDRAULICS ENGINEER

SUNGATE DESIGN GROUP, P.A.

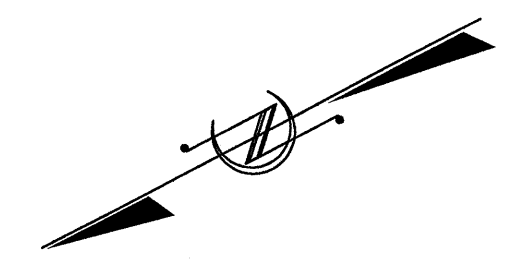
915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6258
ENG FRM LICENSE NO. C-880



EROSION CONTROL PLAN

206

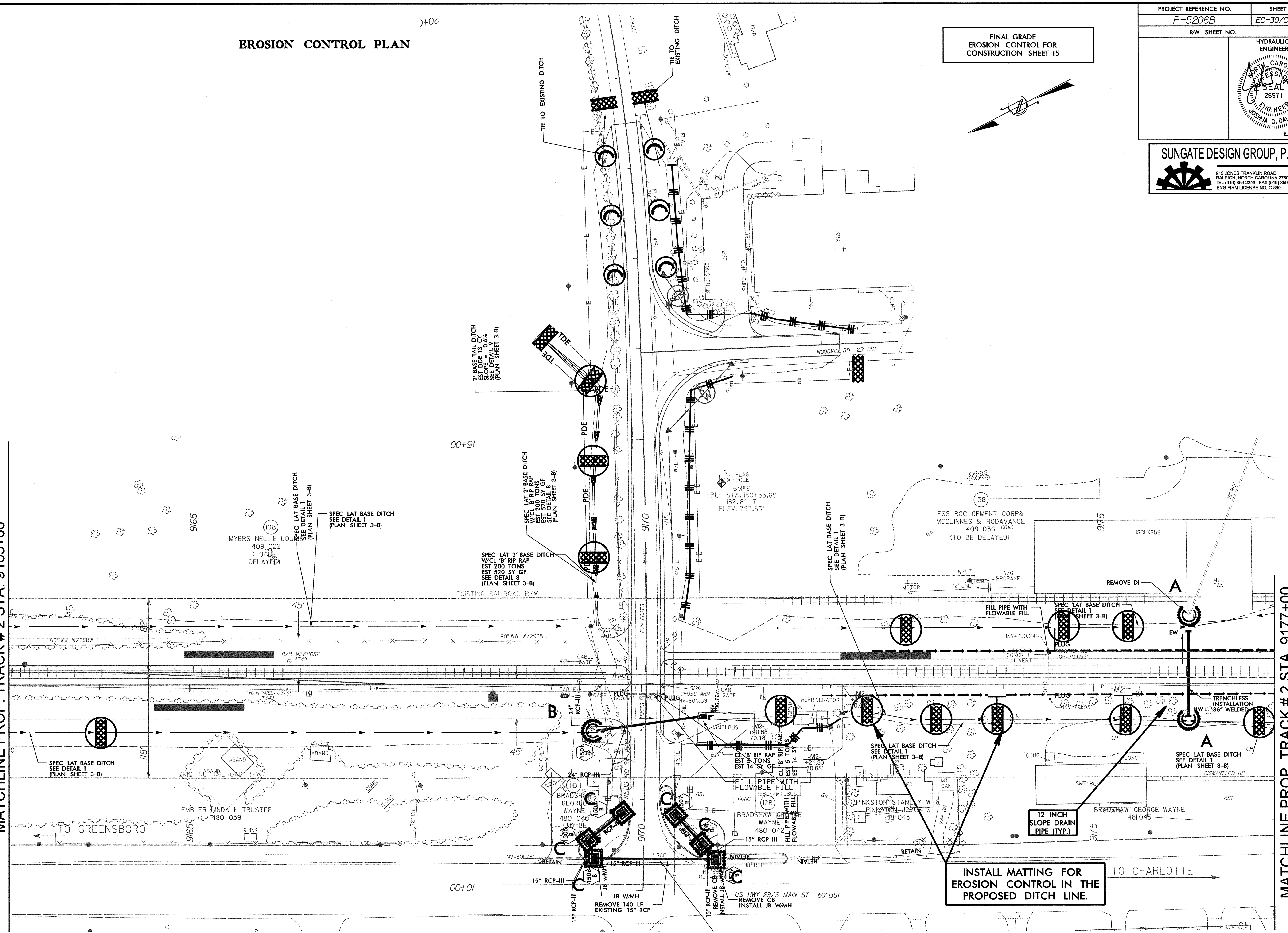
FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 15



PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-30/CONST.15
RW SHEET NO.	
HYDRAULICS ENGINEER	
SUNGATE DESIGN GROUP, P.A. <small>915 JONES FRANKLIN ROAD RALEIGH, NORTH CAROLINA 27608 TEL (919) 859-2243 FAX (919) 859-6258 ENG FIRM LICENSE NO. C-890</small>	

SEE SHEET EC-29
MATCHLINE PROP. TRACK # 2 STA. 9163+00

MATCHLINE PROP. TRACK # 2 STA. 9177+00
SEE SHEET EC-31

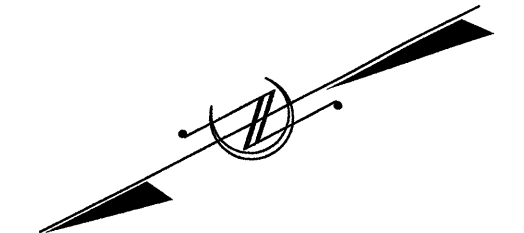


INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

0164DEL_P10b2

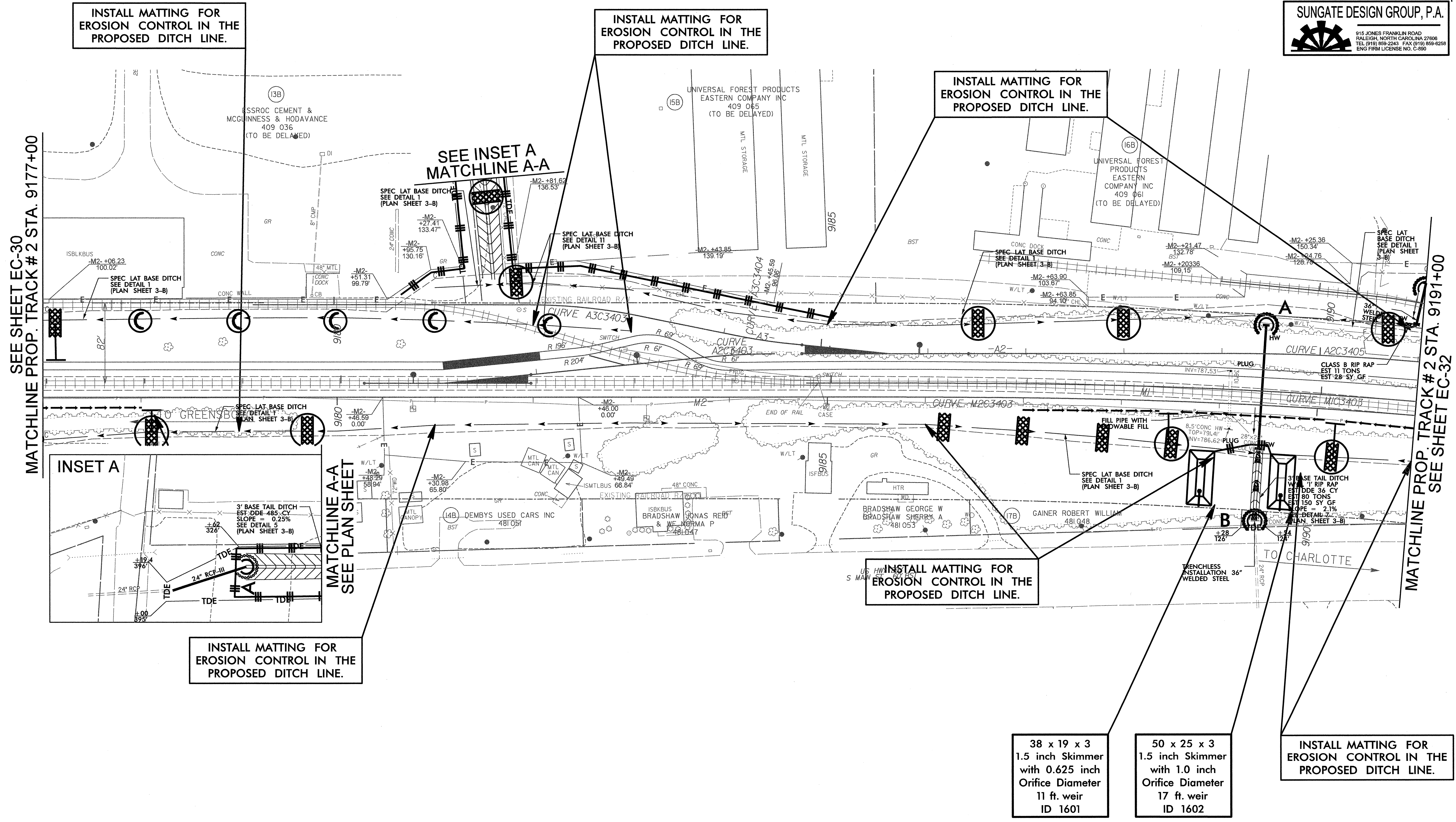
EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 16



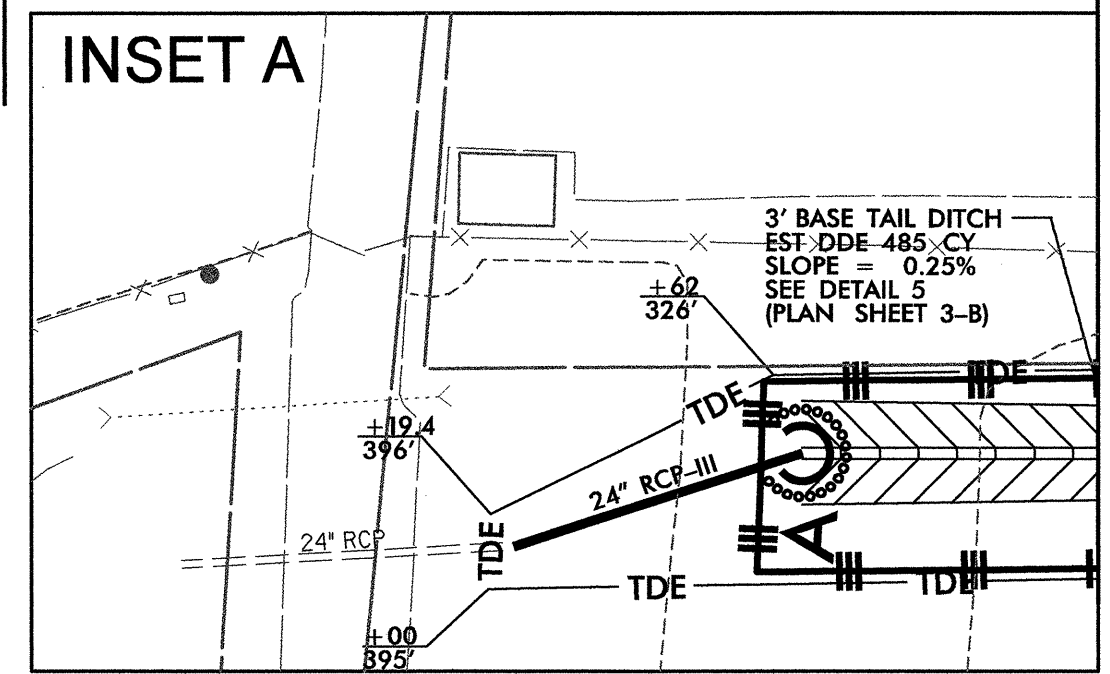
PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-31/CONST16
RW SHEET NO.	HYDRAULICS ENGINEER

SUNGATE DESIGN GROUP, P.A.
 915 JONES FRANKLIN ROAD
 RALEIGH, NORTH CAROLINA 27608
 TEL (919) 859-2243 FAX (919) 859-6256
 ENG FIRM LICENSE NO. C-890



SEE SHEET EC-30
MATCHLINE PROP. TRACK # 2 STA. 9177+00

MATCHLINE PROP. TRACK # 2 STA. 9191+00
SEE SHEET EC-32



INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

38 x 19 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
11 ft. weir
ID 1601

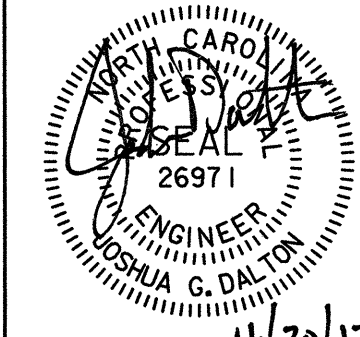
50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
17 ft. weir
ID 1602

INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

0164DEL_P10b2

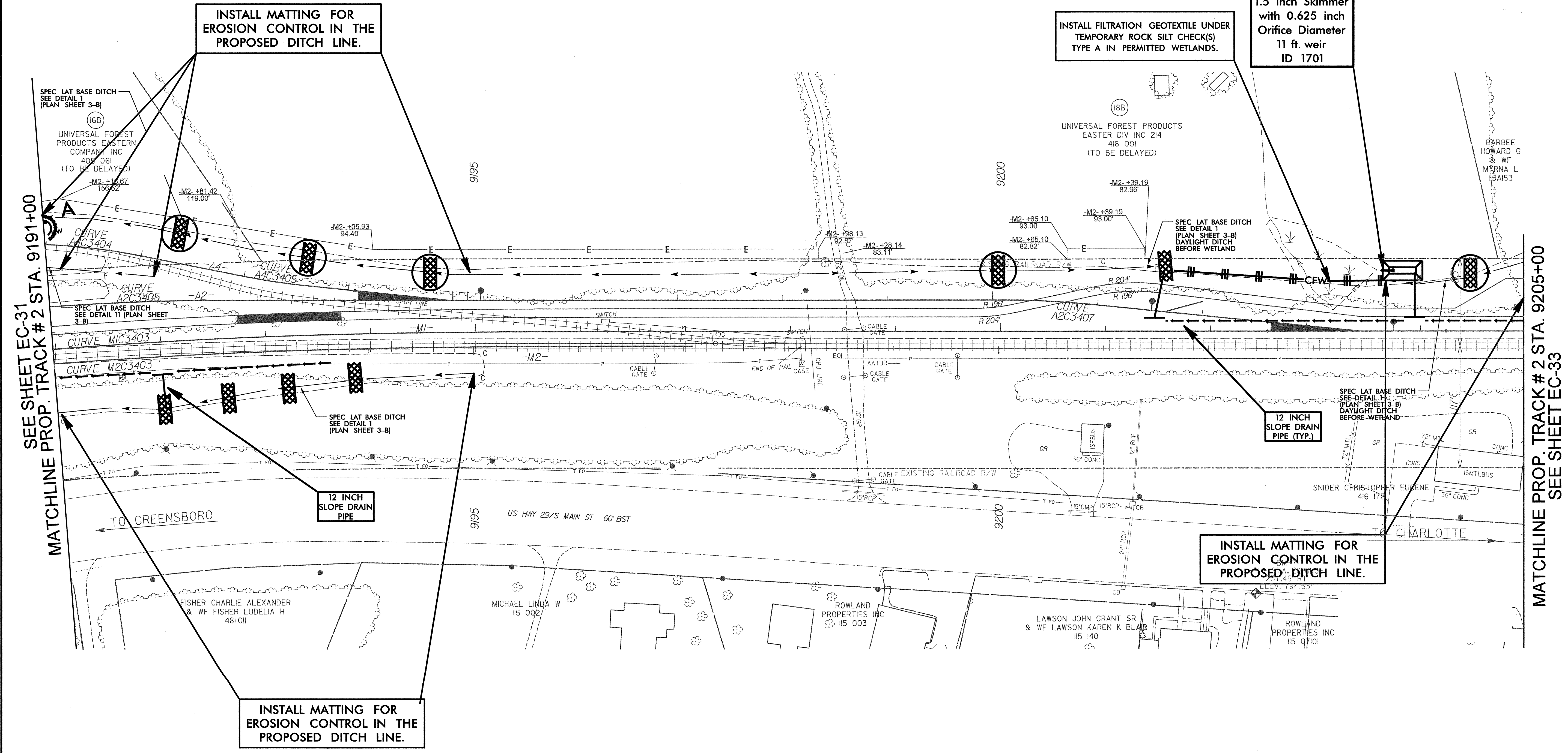
EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 17

PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-32/CONST.17
RW SHEET NO.	
HYDRAULICS ENGINEER	
	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2240 FAX (919) 859-6288
ENG FIRM LICENSE NO. C-880



INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

INSTALL FILTRATION GEOTEXTILE UNDER
TEMPORARY ROCK SILT CHECK(S)
TYPE A IN PERMITTED WETLANDS.

38 x 19 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
11 ft. weir
ID 1701

SEE SHEET EC-31
MATCHLINE PROP. TRACK # 2 STA. 9191+00

MATCHLINE PROP. TRACK # 2 STA. 9205+00
SEE SHEET EC-33

INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

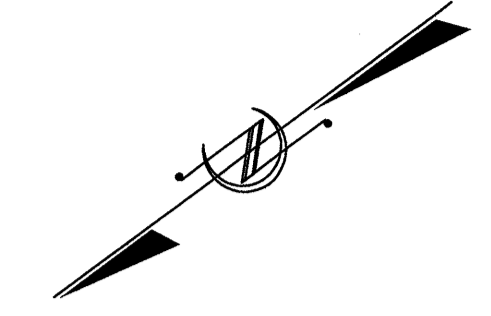
INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

12 INCH
SLOPE DRAIN
PIPE

12 INCH
SLOPE DRAIN
PIPE (TYP.)

EROSION CONTROL PLAN

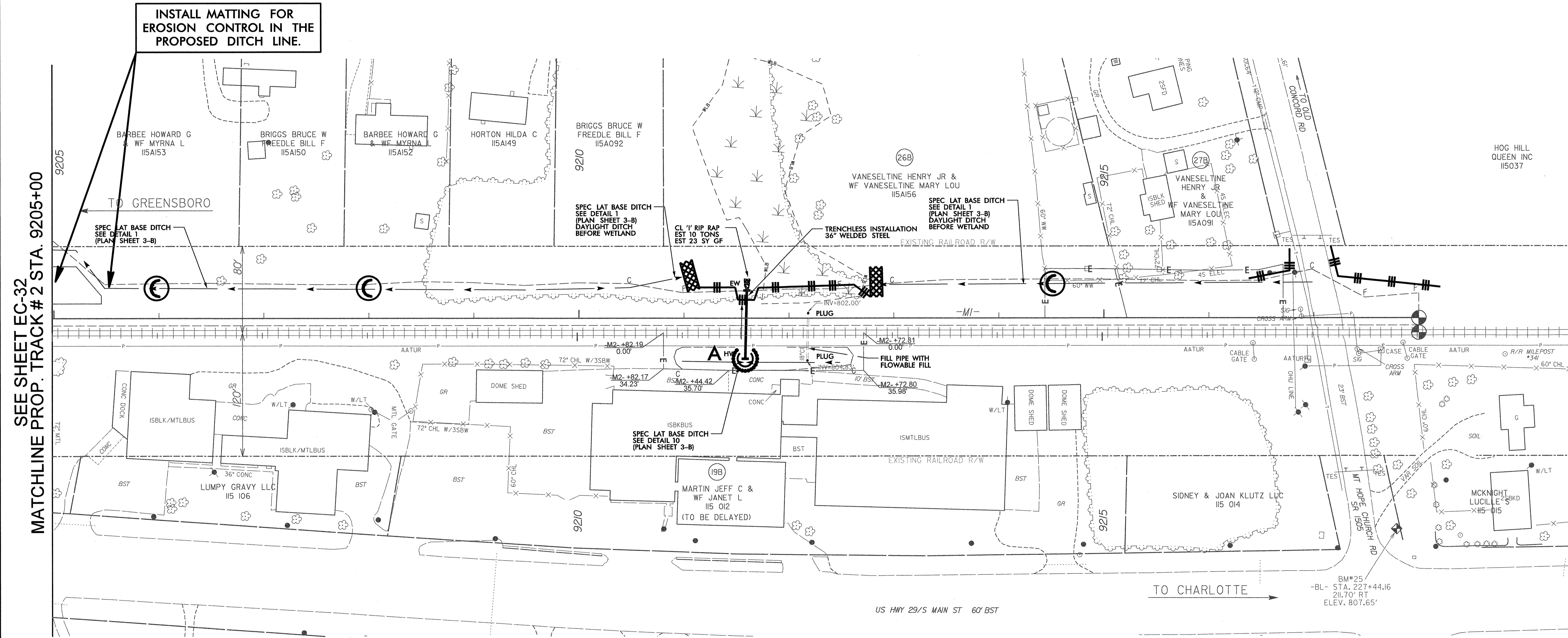
FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET 18



PROJECT REFERENCE NO. P-5206B	SHEET NO. EC-33/CONST.18
RW SHEET NO.	
HYDRAULICS ENGINEER	
4/30/13	

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27608
TEL (919) 858-2245 FAX (919) 858-8288
ENG FIRM LICENSE NO. C-890



SEE SHEET EC-32
MATCHLINE PROP. TRACK # 2 STA. 9205+00

INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.

BARBEE HOWARD G
& WIFE MYRNA L
115A153

BRIGGS BRUCE W
& WIFE BILL F
115A150

BARBEE HOWARD G
& WIFE MYRNA L
115A152

HORTON HILDA C
115A149

BRIGGS BRUCE W
& WIFE BILL F
115A092

VANESLITINE HENRY JR &
WIFE VANESLITINE MARY LOU
115A156

VANESLITINE HENRY JR
& WIFE VANESLITINE
MARY LOU
115A091

HOG HILL
QUEEN INC
115037

LUMPY GRAVY LLC
115 106

MARTIN JEFF C &
WIFE JANET L
115 012
(TO BE DELAYED)

SIDNEY & JOAN KLUTZ LLC
115 014

MCKNIGHT
LUCILLE S
115 015

BM#25
-BL- STA. 227+44.16
211.70' RT
ELEV. 807.65'