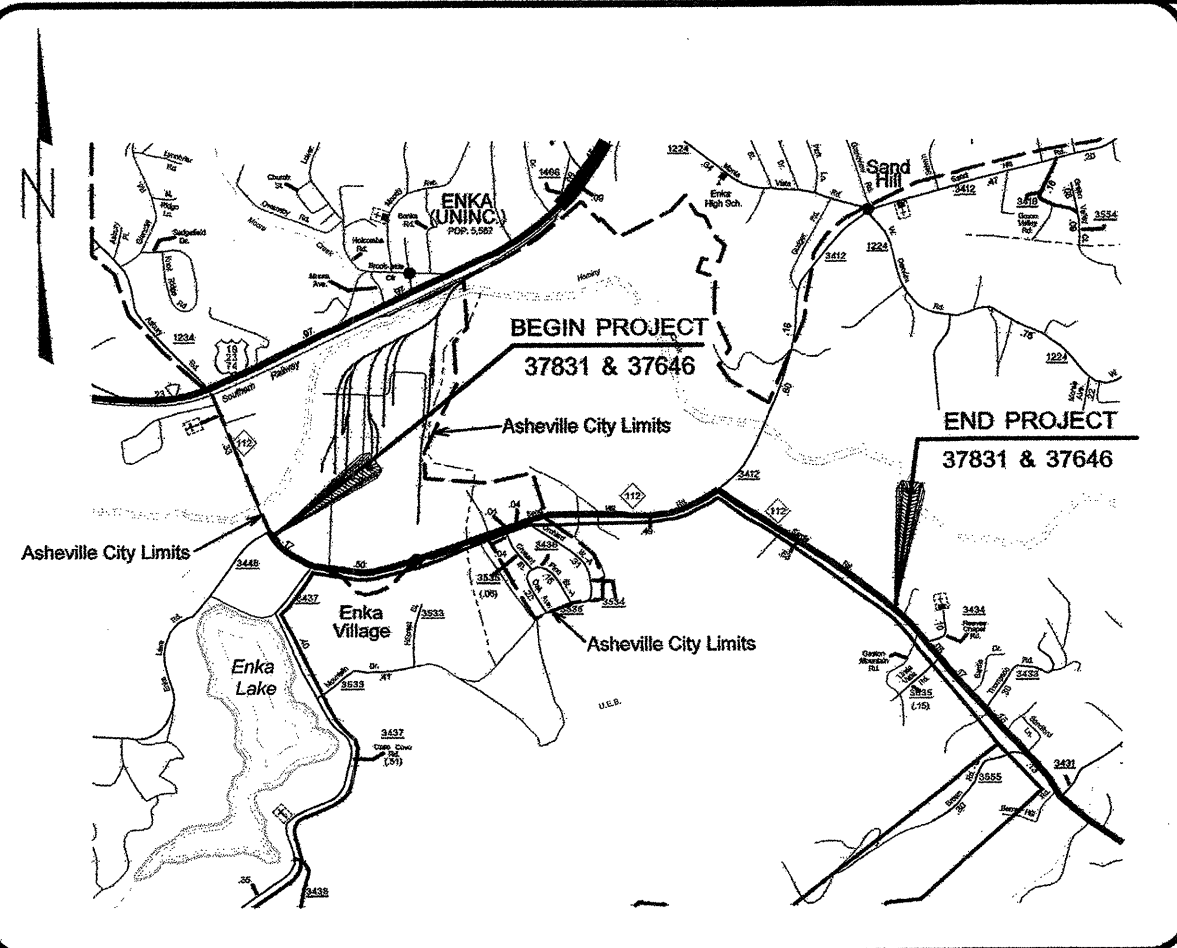


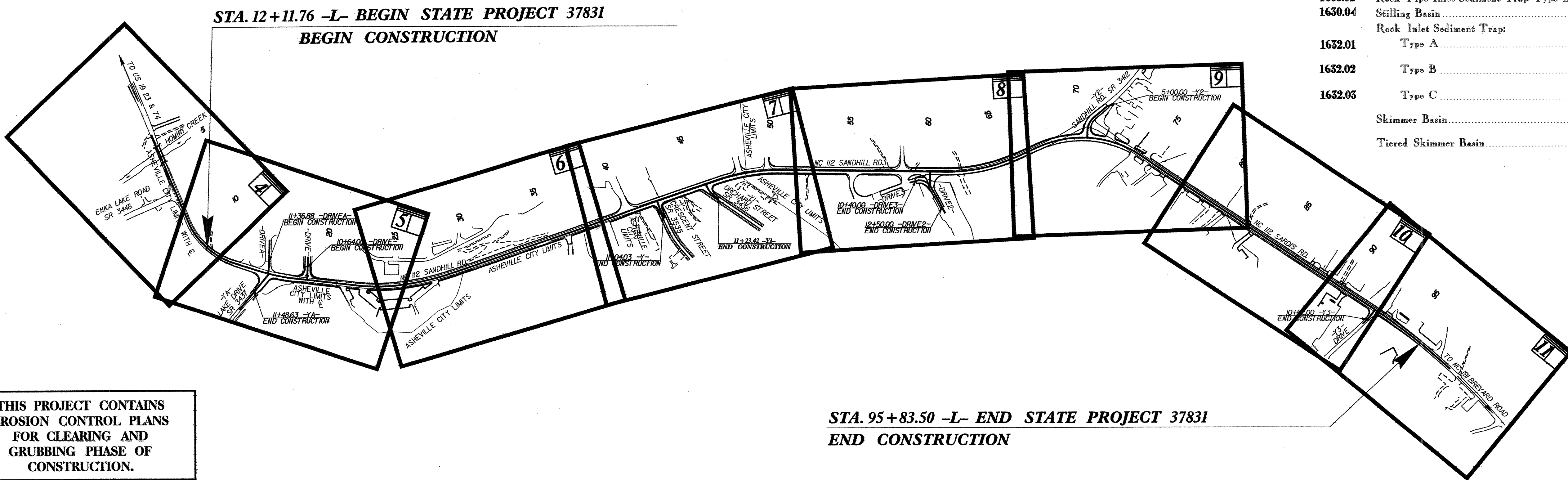
WBS 37831

PROJECT: MA13028R



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

LOCATION: NC 112 SAND HILL ROAD AND SARDIS ROAD FROM WEST OF SR 3437 LAKE DRIVE TO 2500' EAST OF INTERSECTION OF SAND HILL RD. SR 3412 WITH SARDIS RD NC 112

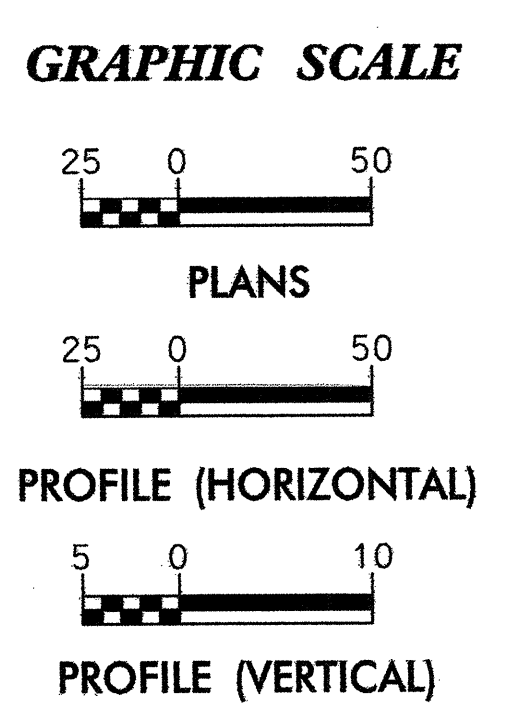


THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	37831	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
1630.05	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Riser Basin	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	



ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

MARK S. ACUFF, PE
 ROADSIDE ENVIRONMENTAL ENGINEER

W. HERBERT TURNER, JR., PE
 ROADSIDE ENVIRONMENTAL PROJECT ENGINEER

R. KEVIN WILLIAMS, PE, PLS, CPESC
 ROADSIDE ENVIRONMENTAL PROJECT DESIGN ENGINEER

Prepared In the Office of:

KO & ASSOCIATES, P.C.
 1011 Schaub Dr. Suite 202, Raleigh NC, 27606

2006 STANDARD SPECIFICATIONS

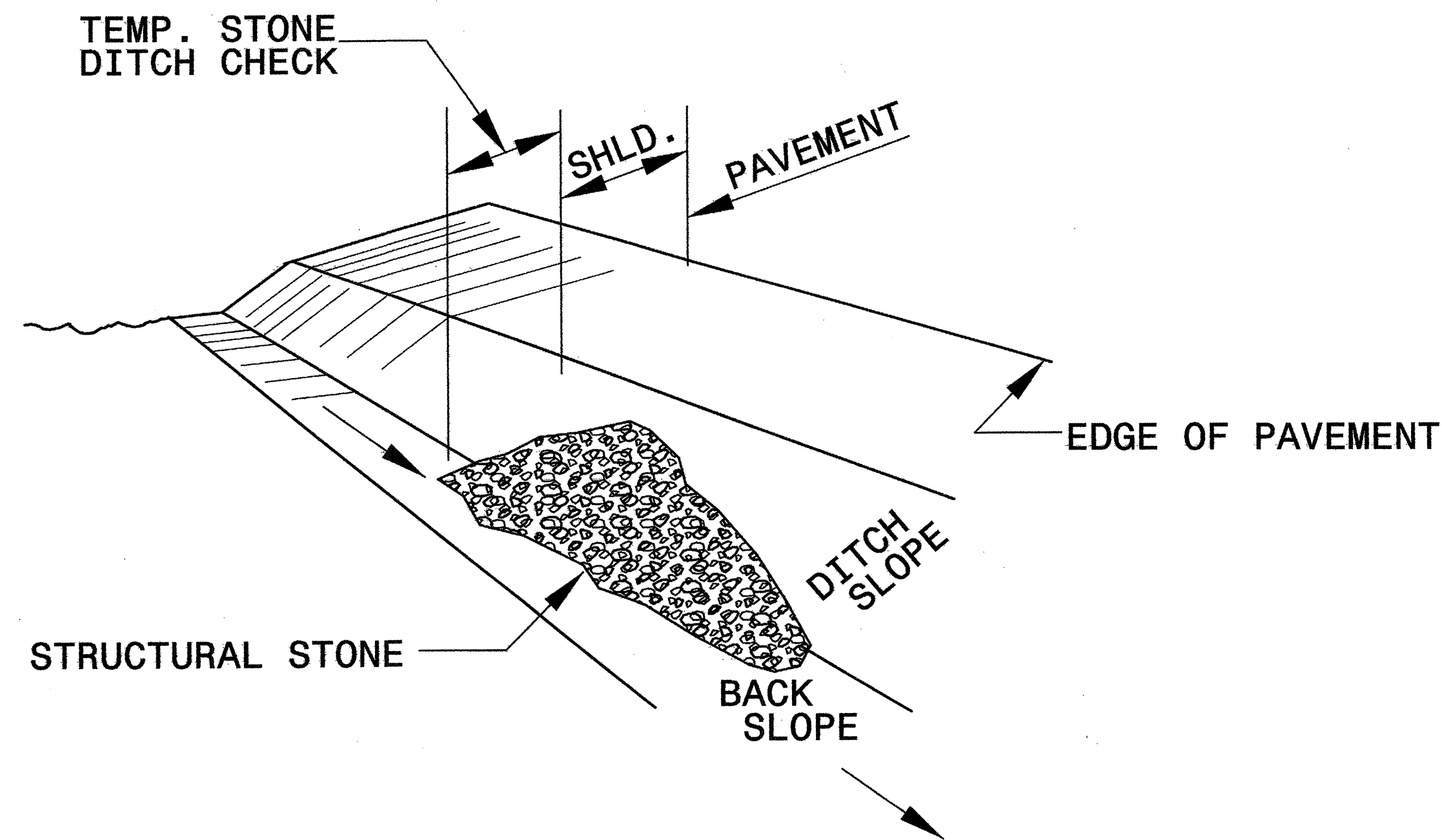
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1632.01 Rock Inlet Sediment Trap Type A
1607.01 Gravel Construction Entrance	1632.03 Rock Inlet Sediment Trap Type C
1630.02 Silt Basin Type B	1633.01 Temporary Rock Silt Check Type A
1630.03 Temporary Silt Ditch	1634.02 Temporary Rock Sediment Dam Type B
1630.05 Temporary Diversion	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.06 Special Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B

4/18/2007 1:28:26 PM ec_teh.dgn

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

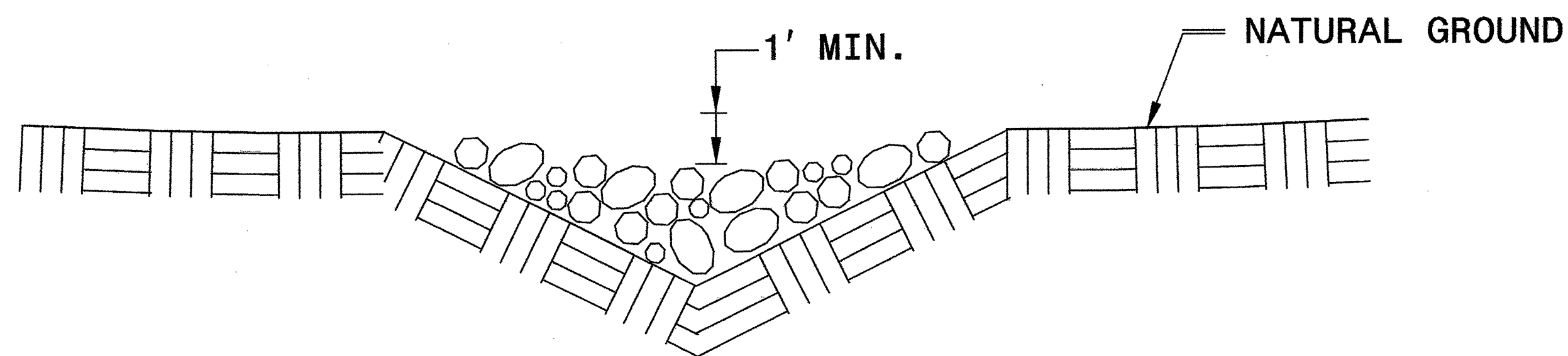


ISOMETRIC VIEW

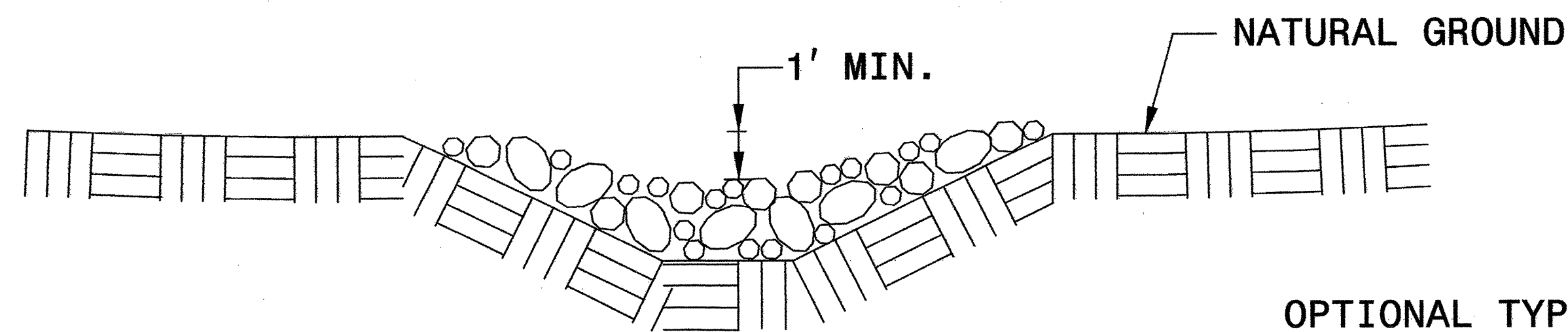
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

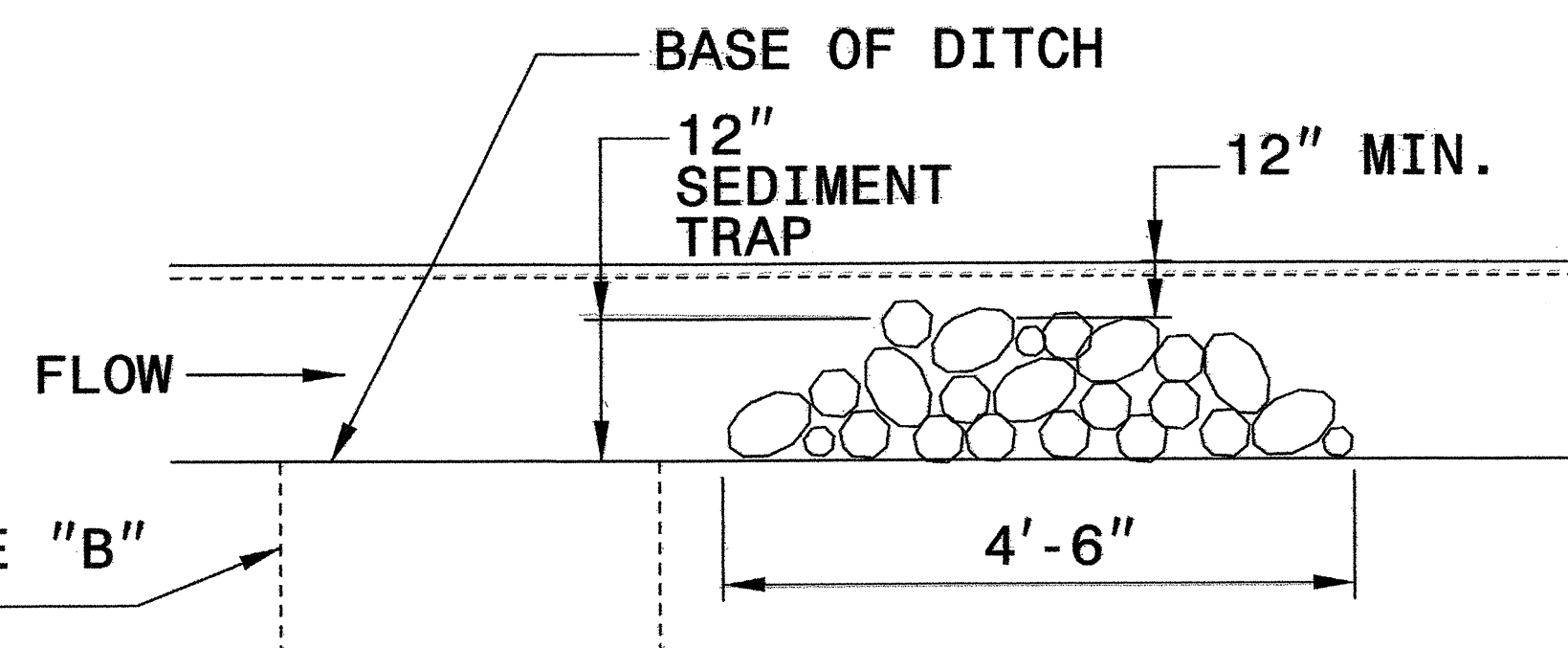
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



**CROSS SECTION
VEE DITCH**



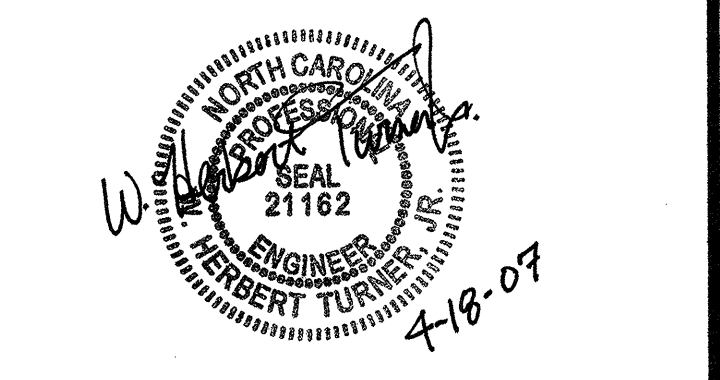
**CROSS SECTION
TRAPEZOIDAL DITCH**



ELEVATION VIEW

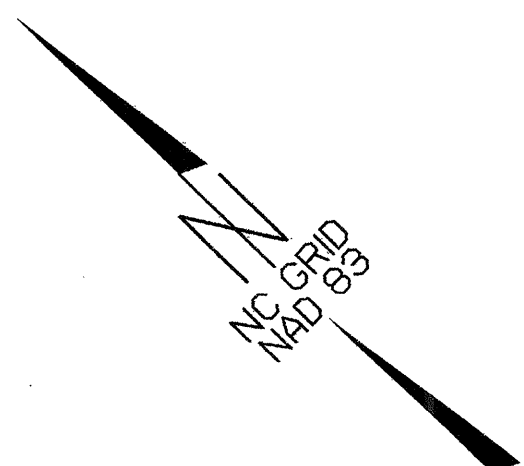
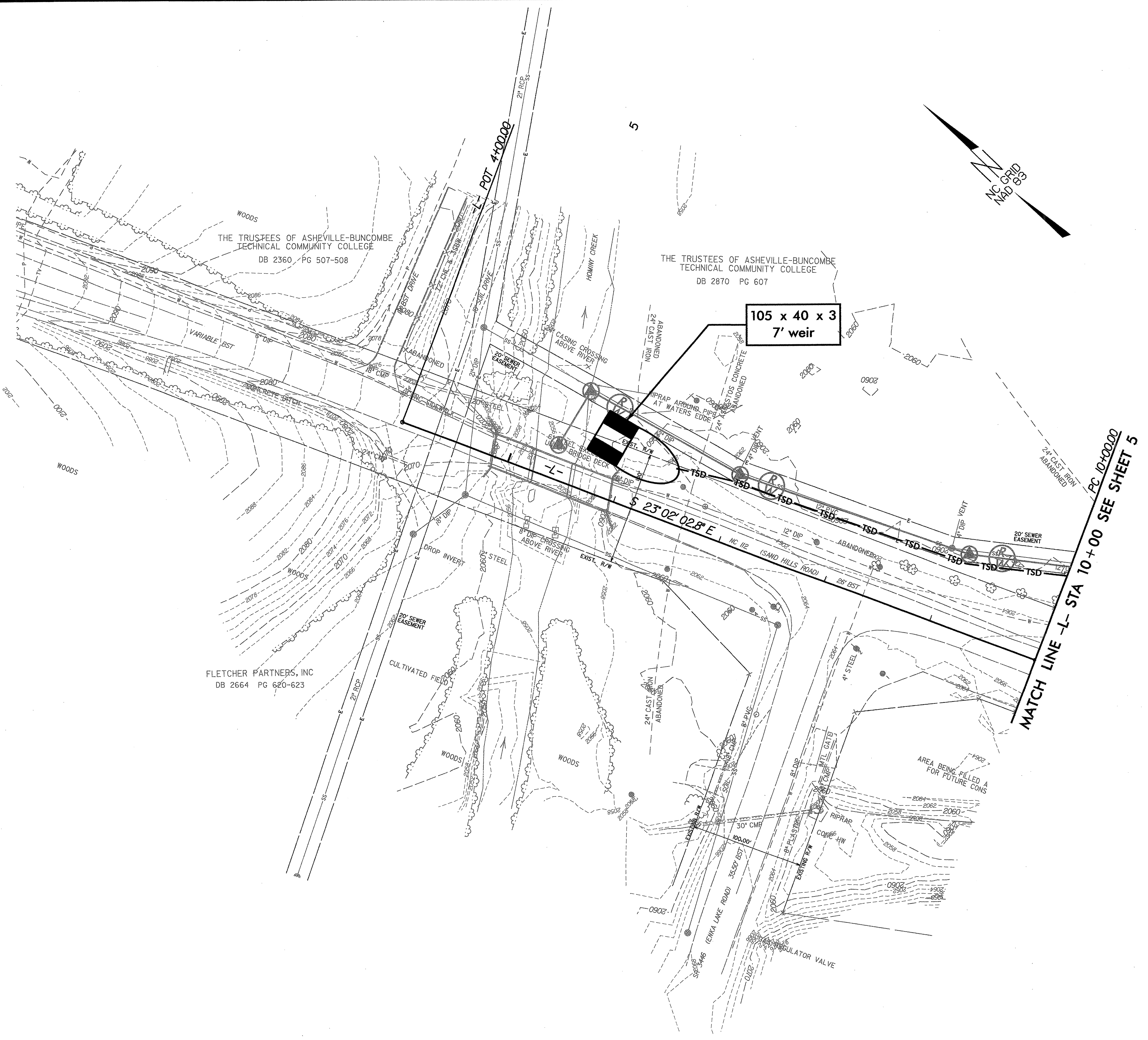
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4/18/2007
 13028-ec-o&g-s2.dgn
 KO & Associates, P.C.



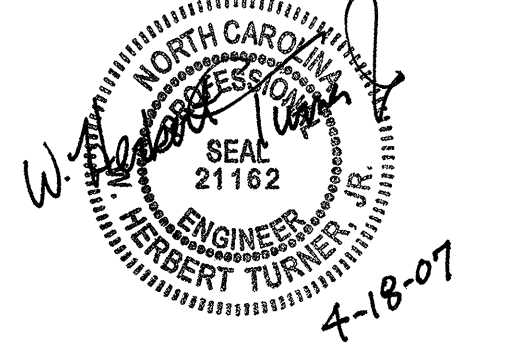
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

- NOTE:**
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
- NOTE:**
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.
- NOTE:**
CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.
- NOTE:**
CONTRACTOR SHALL ESTABLISH A SUFFICIENT BUFFER ZONE FROM WATER COURSE.
- NOTE:**
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.



MATCH LINE -L- STA 10+00 SEE SHEET 5
PC 10+00.00

8/17/99
4/17/2007
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CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 5

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.

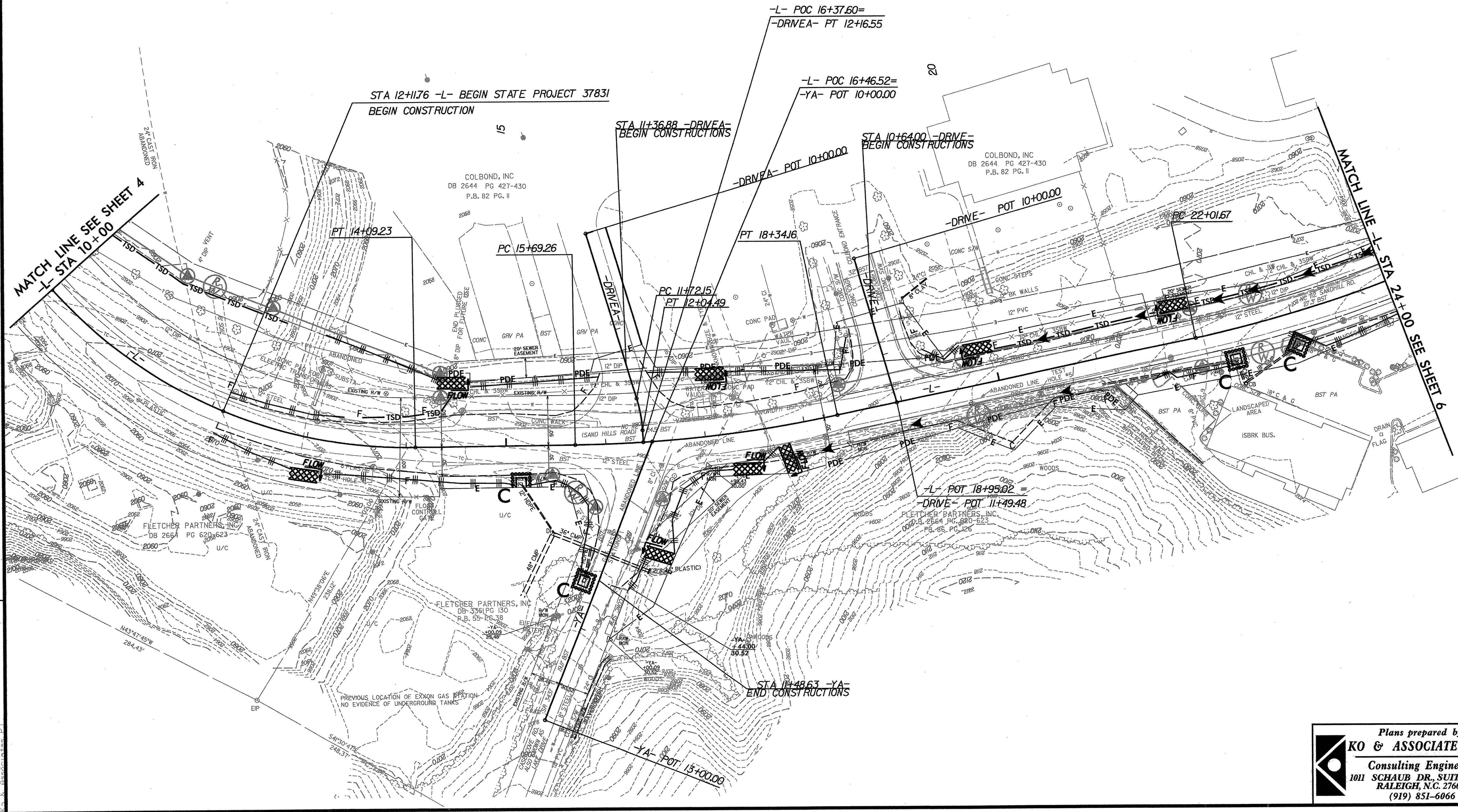
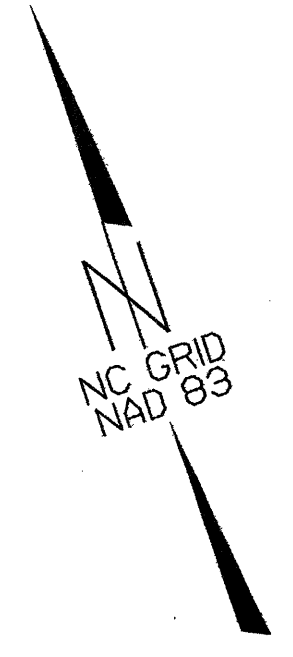
NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

-L-

PI Sta 12+18.14 Δ = 49° 06' 28.0" (LT) D = 12' 00' 00.0" L = 409.23' T = 218.14' R = 477.4648' SE = 0.06 RUNOFF = 165.00'	PI Sta 17+02.14 Δ = 11° 15' 29.2" (LT) D = 4' 15' 00.0" L = 264.90' T = 132.88' R = 1,348.1360' SE = 0.048 RUNOFF = 165.00'	PI Sta 23+79.56 Δ = 15° 54' 25.6" (LT) D = 4' 30' 00.0" L = 353.49' T = 177.89' R = 1,273.2395' SE = 0.049 RUNOFF = 165.00'
--	--	--

-DRIVEA-

PI Sta 11+88.39
Δ = 13° 25' 37.1" (RT)
D = 4' 31' 07.3"
L = 32.34'
T = 16.24'
R = 138.00'
SE = AS SHOWN ON PLANS
RUNOFF = AS SHOWN ON PLANS

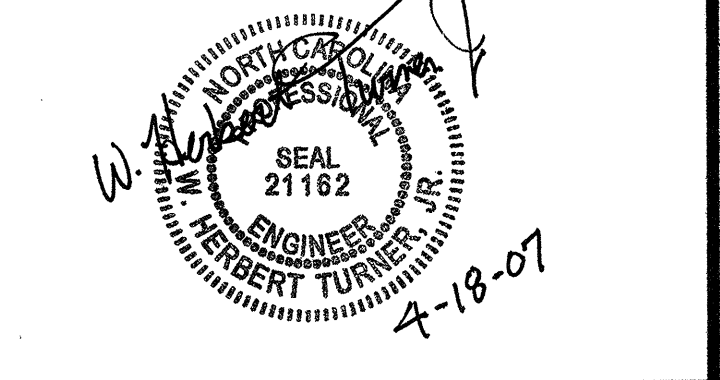


REVISIONS

8/17/99

4/18/2007
13028-ec-c&g-s4-dgr
KO & ASSOCIATES, P.C.

Plans prepared by:
KO & ASSOCIATES, P.C.
Consulting Engineers
1011 SCHAUB DR., SUITE #202
RALEIGH, N.C. 27606
(919) 851-6066

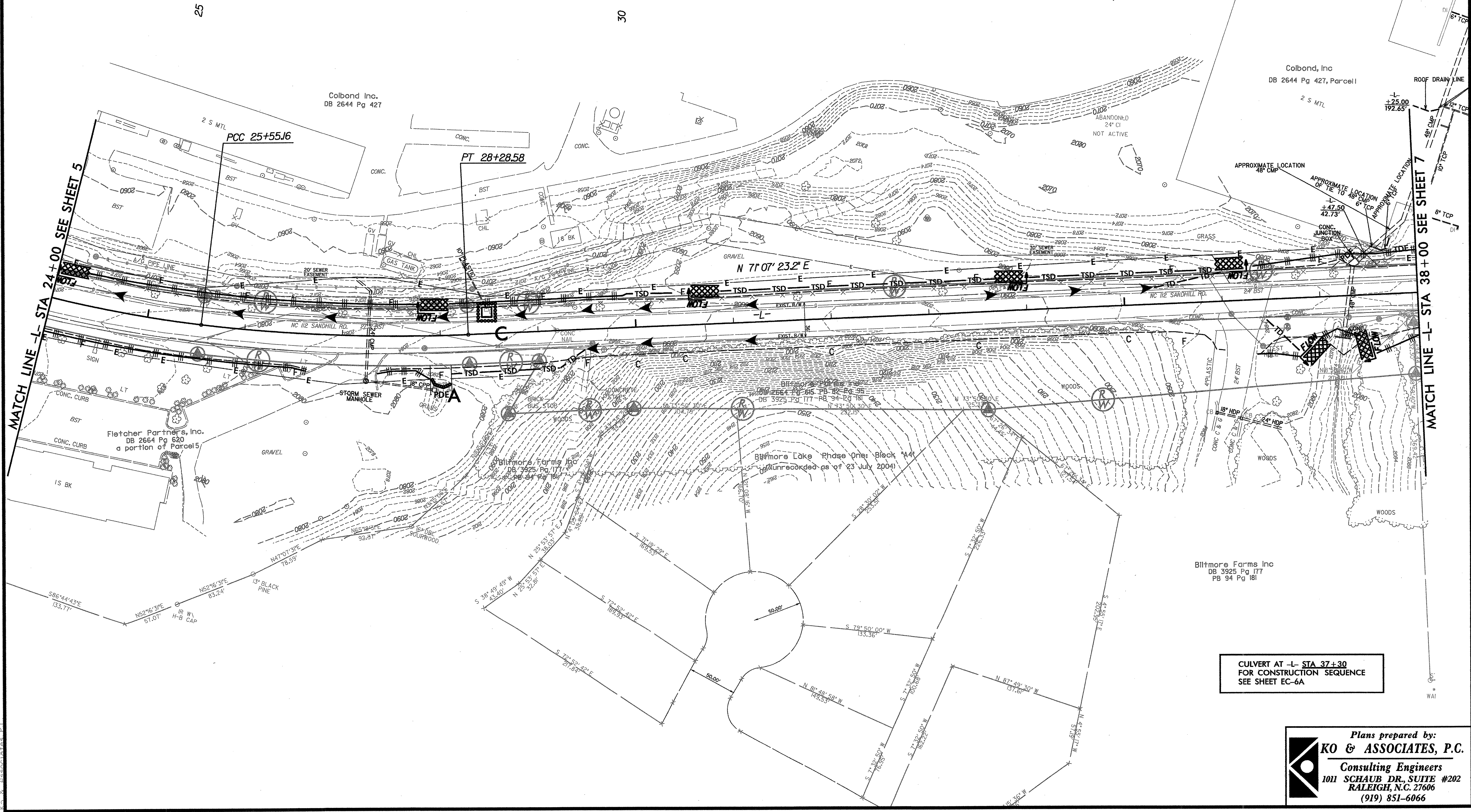


CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

- NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.
- NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE
INSTALLED DURING CLEARING AND GRUBBING PHASE.
- NOTE:
CONTRACTOR SHALL PROVIDE GROUND COVER ON
EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER
ANY PHASE OF GRADING.
- NOTE:
CONTRACTOR SHALL ESTABLISH A SUFFICIENT BUFFER
ZONE FROM WATER COURSE.
- NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE
LOCATED WITHIN EXISTING RW OR EASEMENT.

-L-

PJ Sta 26+92.19
 $\Delta = 9^{\circ} 34' 11.2''$ (LT)
 $D = 3^{\circ} 30' 00.0''$
 $L = 273.42'$
 $T = 137.03'$
 $R = 1637.0223'$
 $SE = 0.043$
 $RUNOFF = 165.00'$



CULVERT AT -L- STA 37+30
FOR CONSTRUCTION SEQUENCE
SEE SHEET EC-6A

Plans prepared by:
KO & ASSOCIATES, P.C.
 Consulting Engineers
 1011 SCHAUB DR, SUITE #202
 RALEIGH, N.C. 27606
 (919) 851-6066

8/17/99

4/18/2007

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(FOR MAINTENANCE OF TRAFFIC, REFER TO TRAFFIC CONTROL PLANS.)

CONSTRUCTION SEQUENCE (STA. 37+30 -L-)

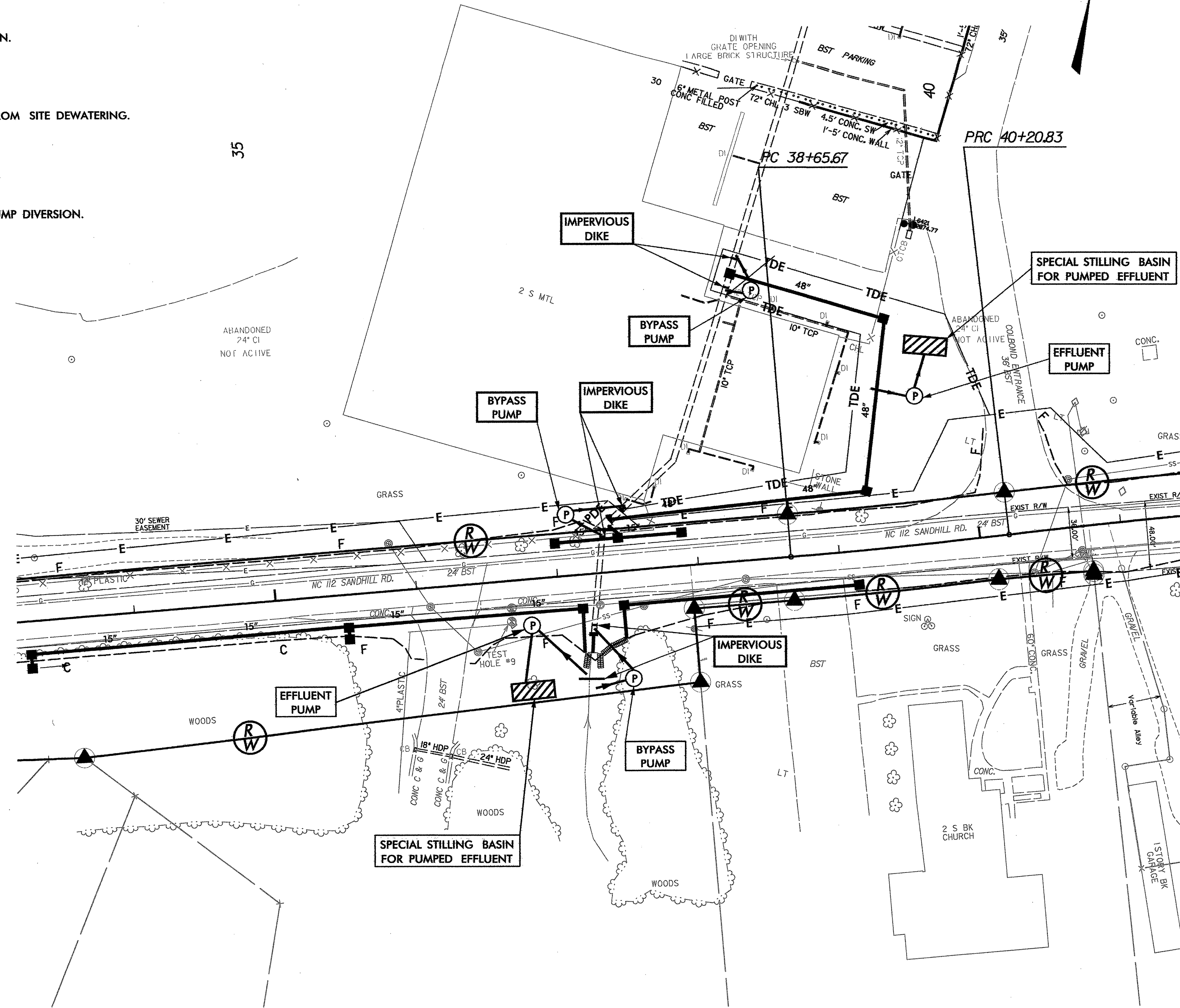
PHASE I - INLET EXTENSION

1. CONSTRUCT SPECIAL STILLING BASIN FOR PUMPED EFFLUENT (10' x 15') FROM SITE DEWATERING.
2. INSTALL IMPERVIOUS DIKES.
3. IMPOUND BASE FLOW. PUMP BASE FLOW THROUGH SITE AS REQUIRED.
4. REMOVE EXISTING HEADWALL AND EXTEND PIPE CULVERT.
5. BACKFILL CULVERT AND INSTALL HEADWALL.
6. REMOVE IMPERVIOUS DIKES, SPECIAL STILLING BASIN, AND PUMP DIVERSION.
7. STABILIZE CHANNEL BANKS.

PHASE II - OUTFALL RE-ROUTE

8. CONSTRUCT SPECIAL STILLING BASIN FOR PUMPED EFFLUENT (10' x 15') FROM SITE DEWATERING.
9. INSTALL IMPERVIOUS DIKES IN STAGES.
10. IMPOUND BASE FLOW. PUMP BASE FLOW THROUGH SITE AS REQUIRED.
11. INSTALL PIPE CULVERT AND DRAINAGE STRUCTURES FROM DOWNSTREAM.
12. BACKFILL CULVERT.
13. REMOVE IMPERVIOUS DIKES IN STAGES, SPECIAL STILLING BASIN, AND PUMP DIVERSION.
14. COMPLETE ROADWAY.

NOTE: THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM.



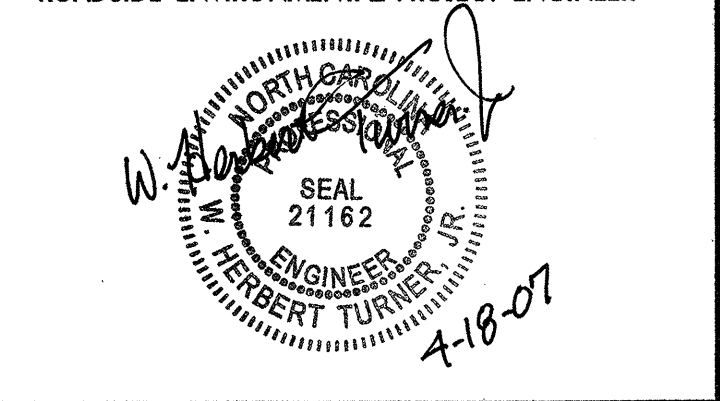
NC GRID
NAD 83

PROJECT REFERENCE NO. 37831	SHEET NO. EC-6A/CONST7
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

CONSTRUCTION SEQUENCE (STA. 37+30 -L-)

Plans prepared by:
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 Consulting Engineers
 1011 SCHaub DR., SUITE #202
 RALEIGH, N.C. 27606
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CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

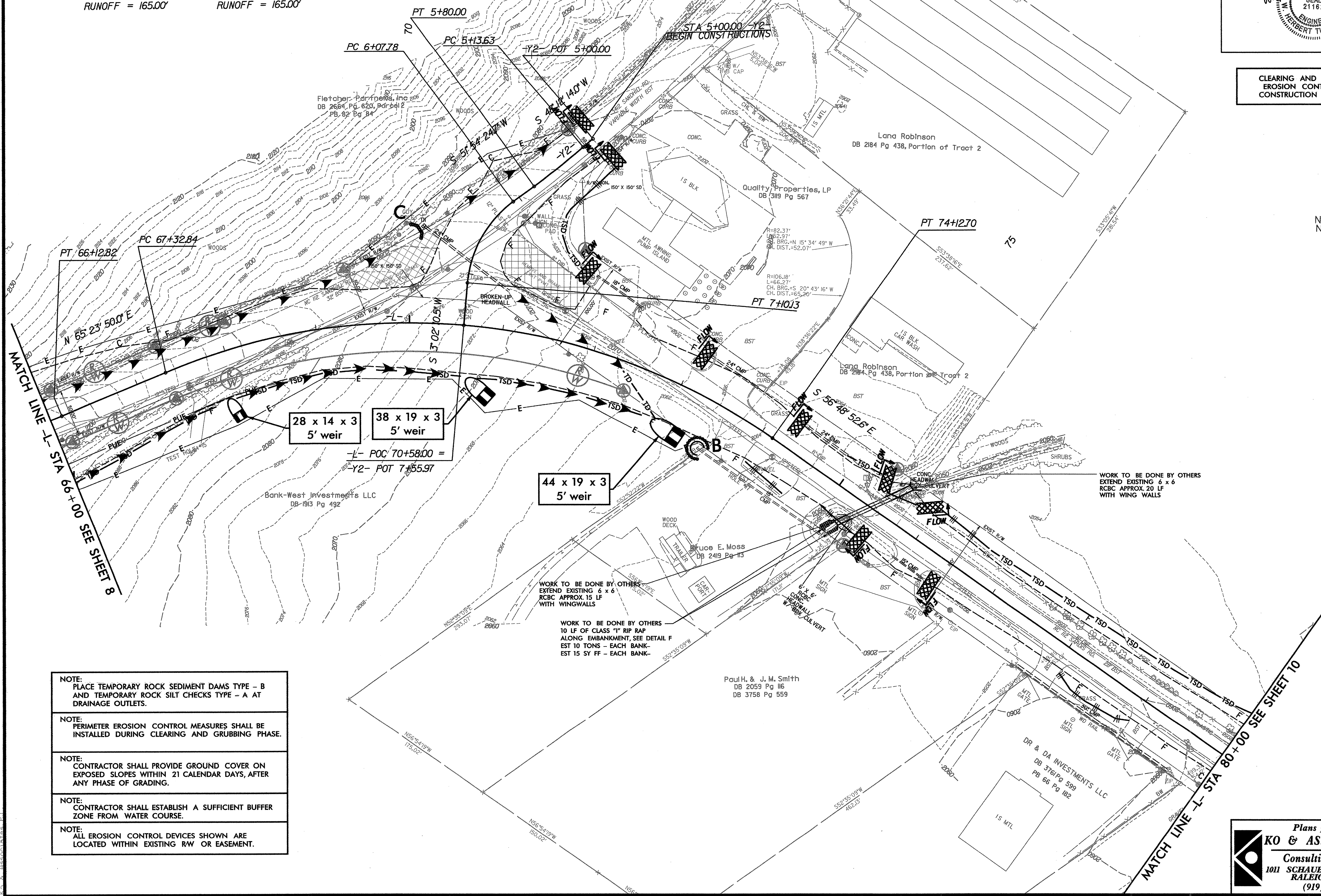


-L-
PI Sta 63+63.61
Δ = 25° 20' 30.0" (LT)
D = 5' 00' 00.0"
L = 506.83'
T = 257.63'
R = 1,145.9156'
SE = 0.051
RUNOFF = 165.00'

PI Sta 71+04.85
Δ = 57° 47' 17.4" (RT)
D = 8' 30' 00.0"
L = 679.86'
T = 372.01'
R = 674.0680'
SE = 0.06
RUNOFF = 165.00'

-Y2-
PI Sta 6+62.30
Δ = 48° 52' 14.2" (LT)
D = 47' 45' 00.0"
L = 102.35'
T = 54.52'
R = 119.99'

PI Sta 5+46.82
Δ = 3° 42' 10.6" (RT)
D = 5' 34' 44.2"
L = 66.37'
T = 33.20'
R = 1,027.00'



- NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
- NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.
- NOTE:
CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.
- NOTE:
CONTRACTOR SHALL ESTABLISH A SUFFICIENT BUFFER ZONE FROM WATER COURSE.
- NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

WORK TO BE DONE BY OTHERS
EXTEND EXISTING 6 x 6
RCBC APPROX. 15 LF
WITH WINGWALLS

WORK TO BE DONE BY OTHERS
10 LF OF CLASS "I" RIP RAP
ALONG EMBANKMENT, SEE DETAIL F
EST 10 TONS - EACH BANK-
EST 15 SY FF - EACH BANK-

WORK TO BE DONE BY OTHERS
EXTEND EXISTING 6 x 6
RCBC APPROX. 20 LF
WITH WING WALLS

MATCH LINE -L- STA 66+00 SEE SHEET 8

MATCH LINE -L- STA 80+00 SEE SHEET 10

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Consulting Engineers
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RALEIGH, N.C. 27606
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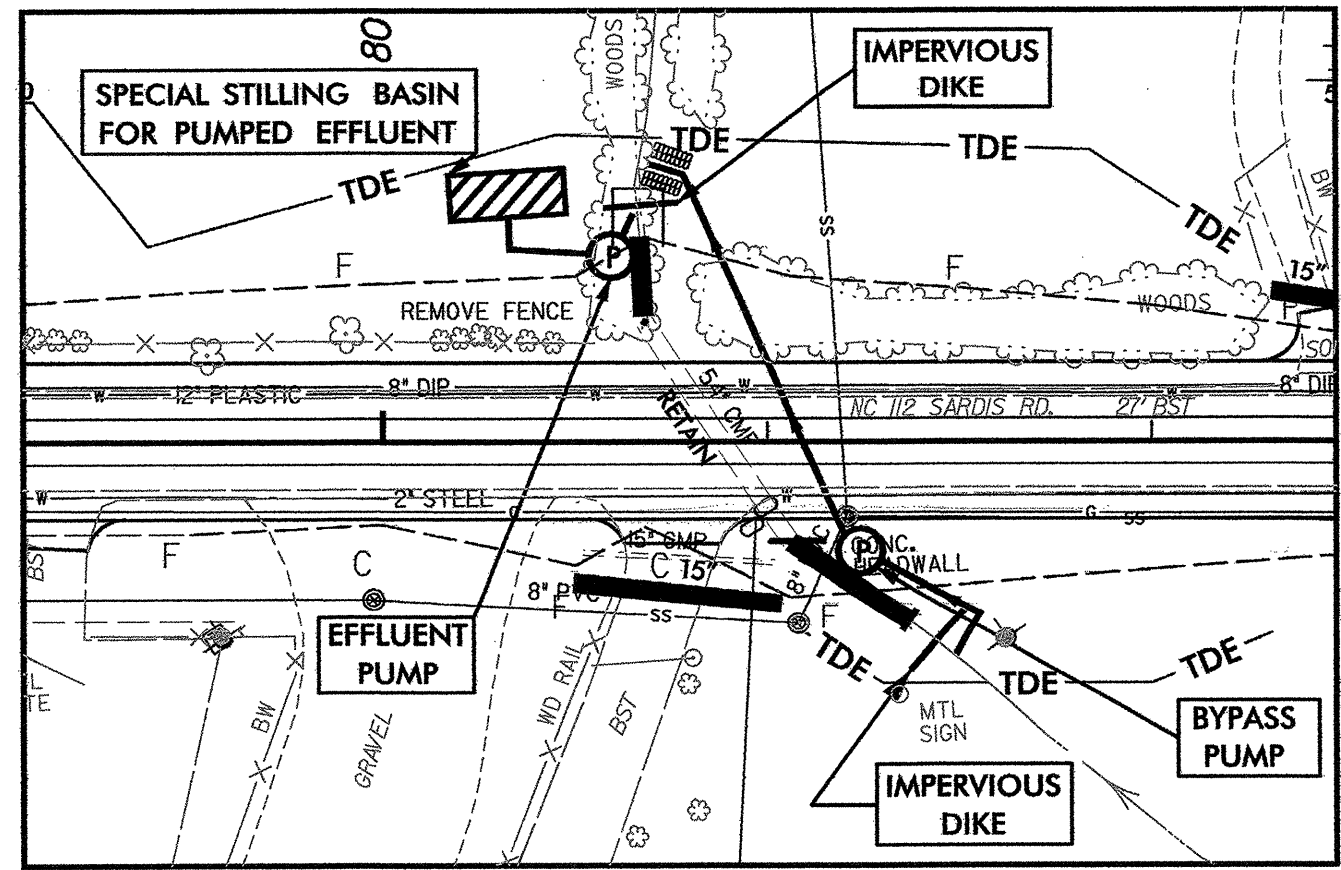
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.

NOTE:
CONTRACTOR SHALL ESTABLISH A SUFFICIENT BUFFER ZONE FROM WATER COURSE.

NOTE:
ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

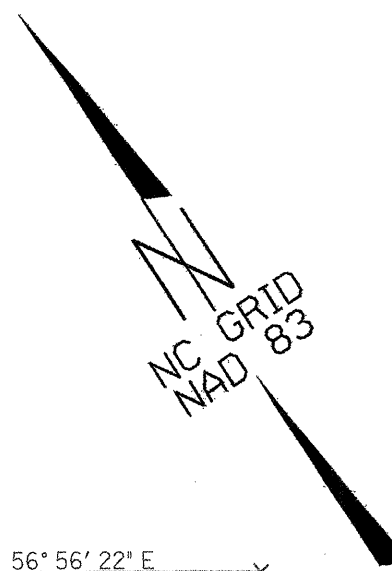


CONSTRUCTION SEQUENCE (STA. 80+88 -L-)

(FOR MAINTENANCE OF TRAFFIC, REFER TO TRAFFIC CONTROL PLANS.)

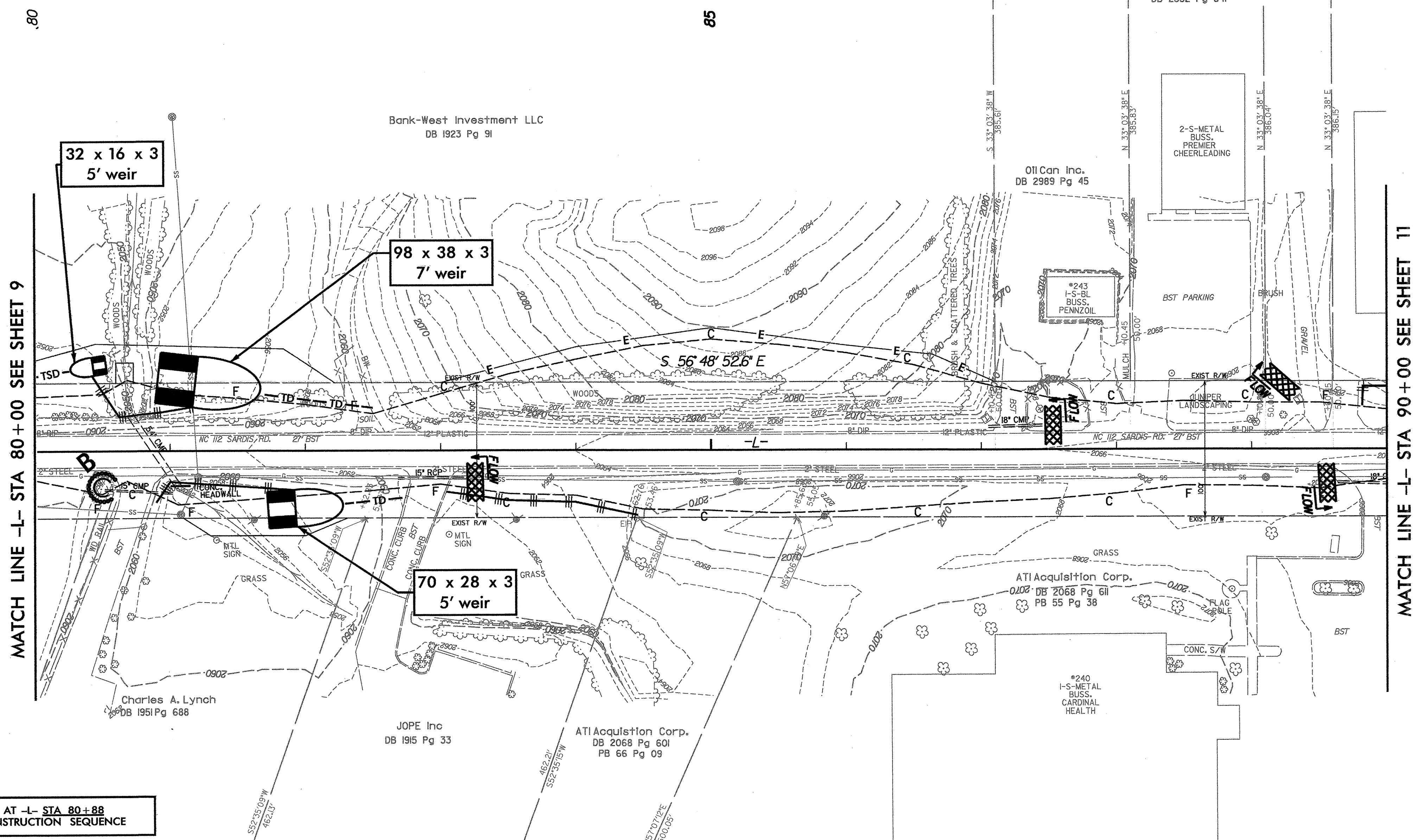
- CONSTRUCTION SEQUENCE (STA. 80+88 -L-)**
1. CONSTRUCT SPECIAL STILLING BASIN FOR PUMPED EFFLUENT (10' x 15') FROM SITE DEWATERING.
 2. INSTALL IMPERVIOUS DIKES.
 3. IMPOUND BASE FLOW. PUMP BASE FLOW THROUGH SITE AS REQUIRED.
 4. REMOVE EXISTING HEADWALL AND EXTEND PIPE CULVERT.
 5. BACKFILL CULVERT AND INSTALL HEADWALL.
 6. REMOVE IMPERVIOUS DIKES, SPECIAL STILLING BASIN, AND PUMP DIVERSION.
 7. STABILIZE CHANNEL BANKS.
 8. COMPLETE ROADWAY.

NOTE: THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM.



PROJECT REFERENCE NO. 37831	SHEET NO. EC-9/CONST10
R/W SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

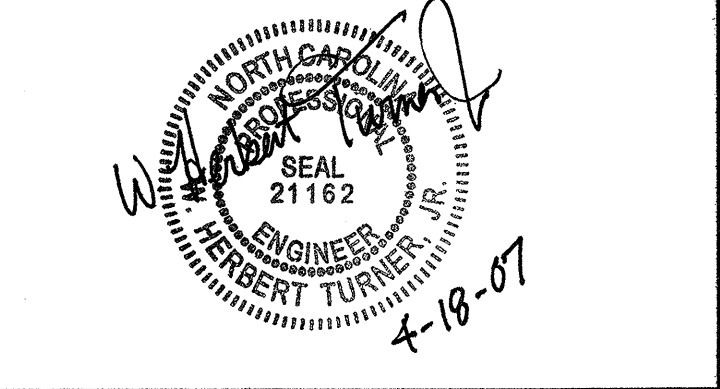
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 10



CULVERT AT -L- STA. 80+88
SEE CONSTRUCTION SEQUENCE

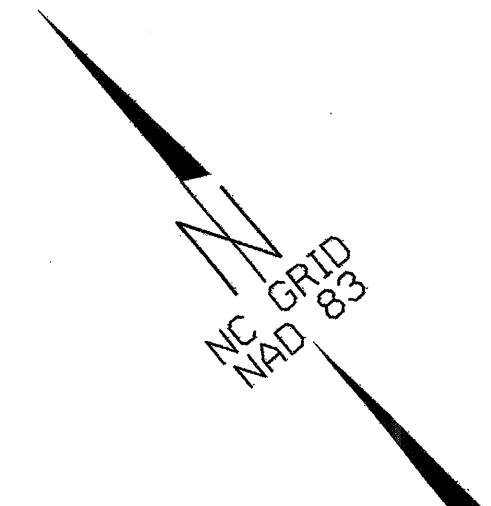
Plans prepared by:
KO & ASSOCIATES, P.C.
Consulting Engineers
1011 SCHAUH DR., SUITE #202
RALEIGH, N.C. 27606
(919) 851-6066

4/18/2007
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CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 11

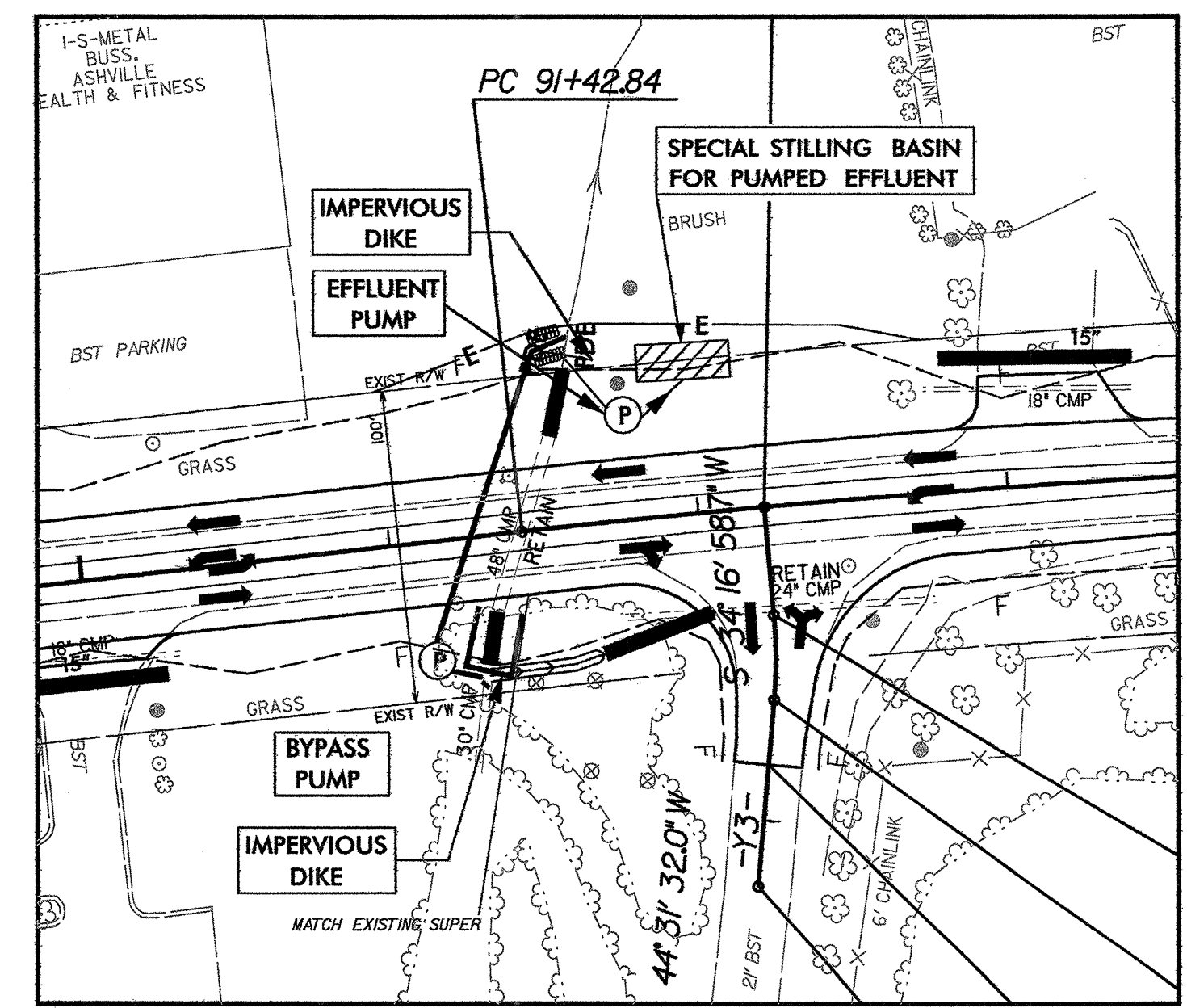
- NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
- NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.
- NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.
- NOTE: CONTRACTOR SHALL ESTABLISH A SUFFICIENT BUFFER ZONE FROM WATER COURSE.
- NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.



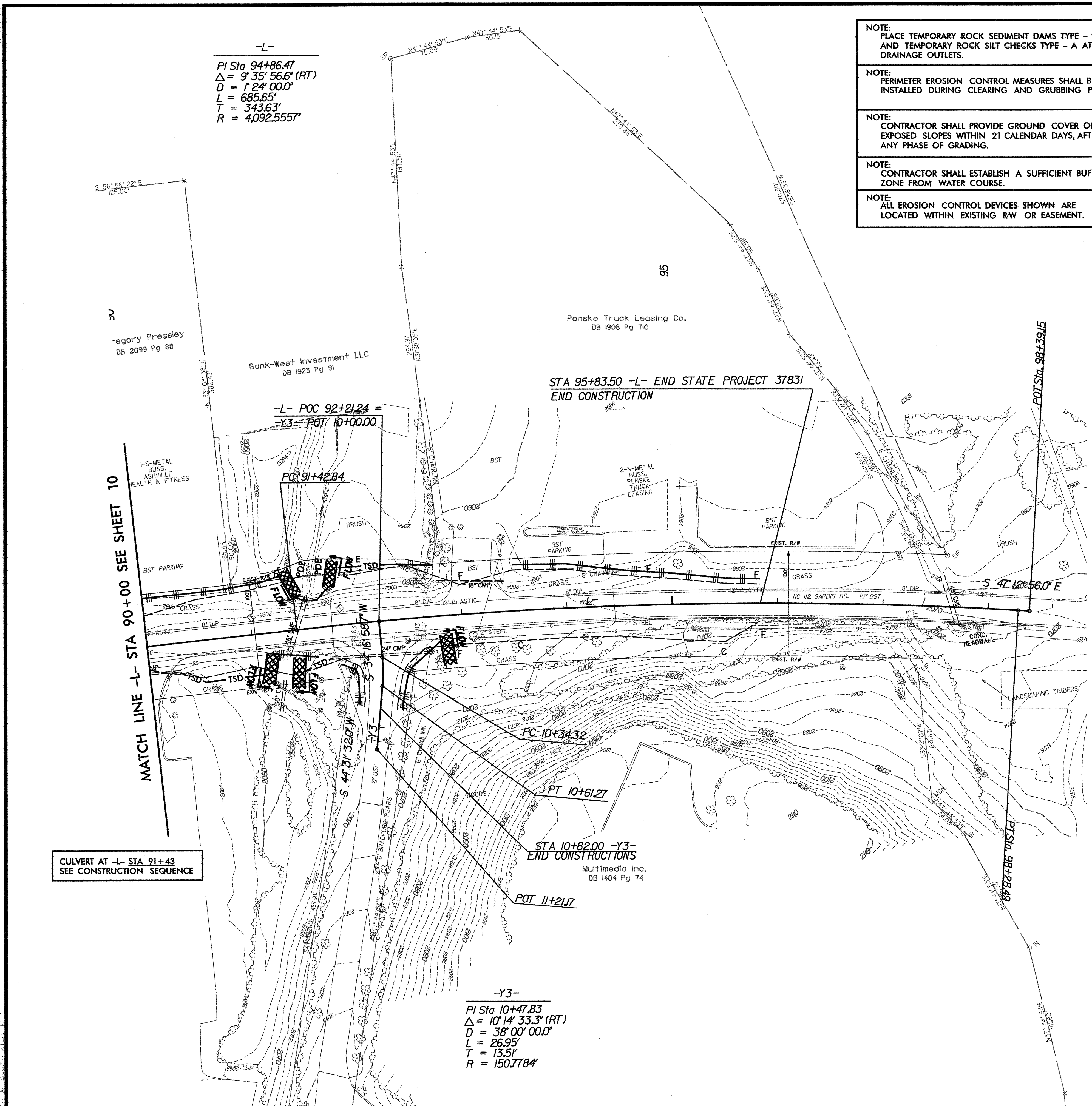
(FOR MAINTENANCE OF TRAFFIC, REFER TO TRAFFIC CONTROL PLANS.)

- CONSTRUCTION SEQUENCE (STA. 91+43 -L-)
1. CONSTRUCT SPECIAL STILLING BASIN FOR PUMPED EFFLUENT (10' x 15') FROM SITE DEWATERING.
 2. INSTALL IMPERVIOUS DIKES.
 3. IMPOUND BASE FLOW. PUMP BASE FLOW THROUGH SITE AS REQUIRED.
 4. REMOVE EXISTING HEADWALL AND EXTEND PIPE CULVERT.
 5. BACKFILL CULVERT AND INSTALL HEADWALL.
 6. REMOVE IMPERVIOUS DIKES, SPECIAL STILLING BASIN, AND PUMP DIVERSION.
 7. STABILIZE CHANNEL BANKS.
 8. COMPLETE ROADWAY.

NOTE: THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM.



CONSTRUCTION SEQUENCE (STA. 91+43 -L-)



-L-
 PI Sta 94+86.47
 $\Delta = 9^\circ 35' 56.6''$ (RT)
 $D = 1^\circ 24' 00.0''$
 $L = 685.65'$
 $T = 343.63'$
 $R = 4,092.5557'$

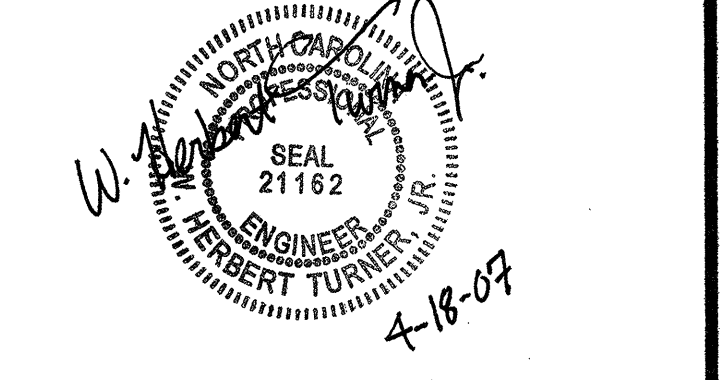
-Y3-
 PI Sta 10+47.83
 $\Delta = 10^\circ 14' 33.3''$ (RT)
 $D = 38^\circ 00' 00.0''$
 $L = 26.95'$
 $T = 13.5'$
 $R = 150.7784'$

CULVERT AT -L- STA 91+43
 SEE CONSTRUCTION SEQUENCE

MATCH LINE -L- STA 90+00 SEE SHEET 10

4/18/2007
 C:\Users\j30258r\ec.e&g.s10.dgn

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KO & ASSOCIATES, P.C.
 Consulting Engineers
 1011 SCHaub DR., SUITE #202
 RALEIGH, N.C. 27606
 (919) 851-6066



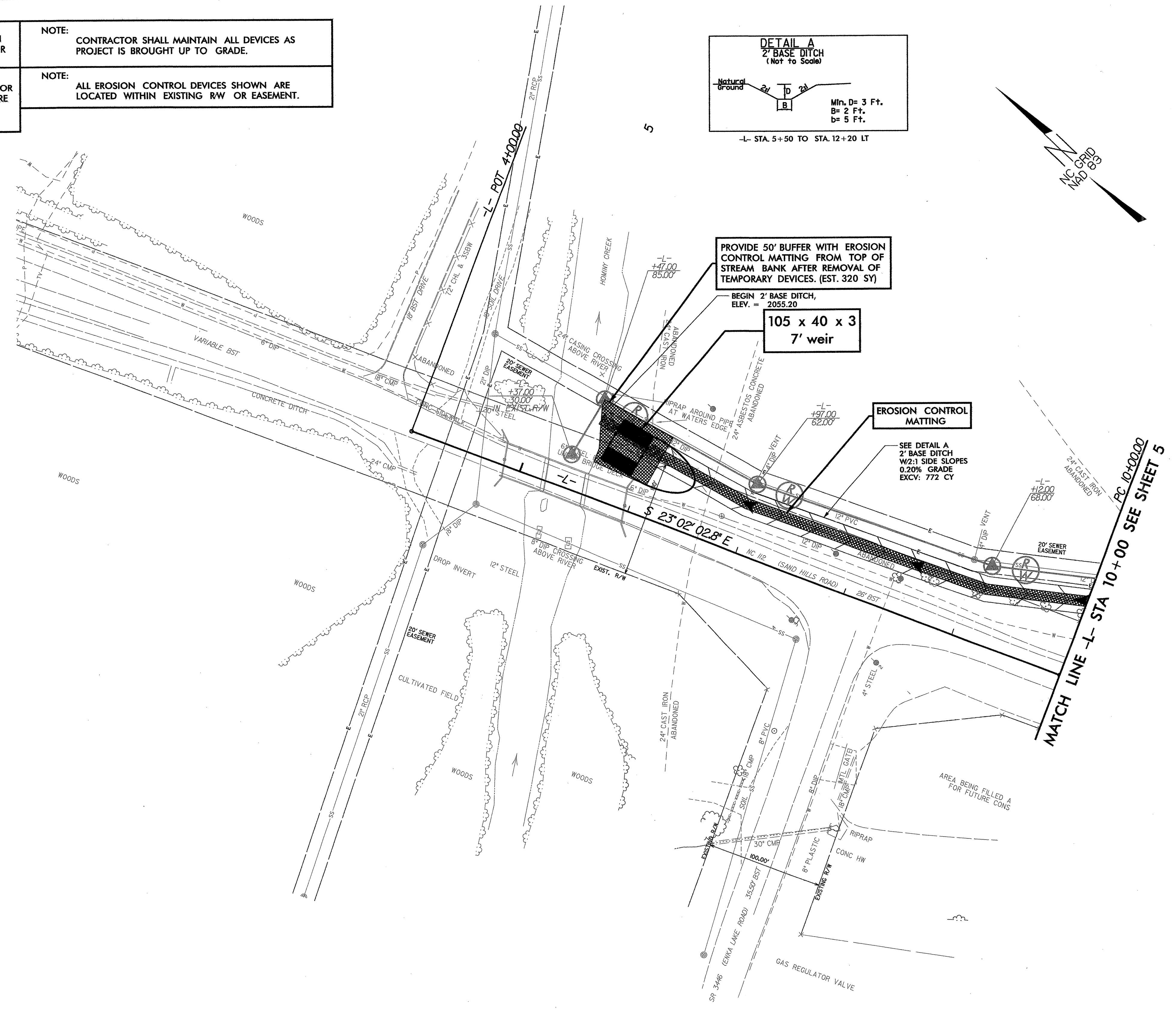
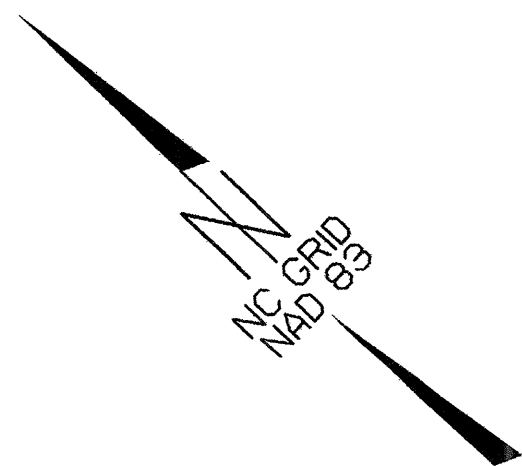
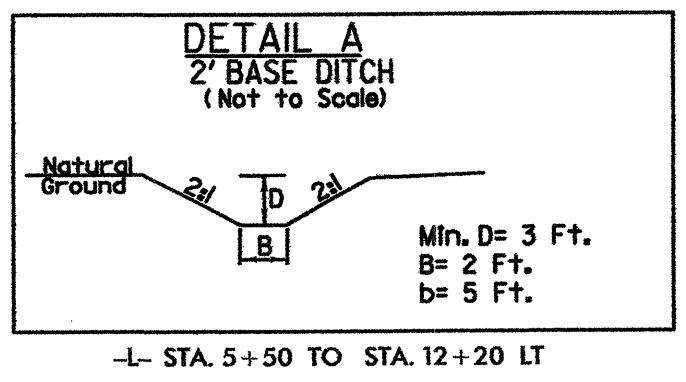
FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 4

NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.

NOTE: CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

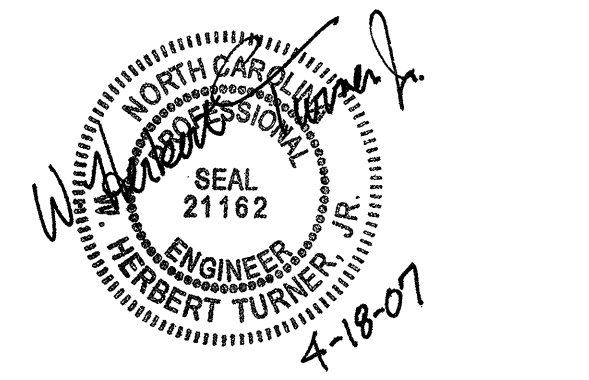
NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.



MATCH LINE -L- STA 10+00 SEE SHEET 5

8/7/99
4/18/2007
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FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 5

-L-

PI Sta 12+18.14 Δ = 49° 06' 28.0" (LT) D = 12' 00' 00.0" L = 409.23' T = 218.14' R = 477.4648' SE = 0.06 RUNOFF = 165.00'	PI Sta 17+02.14 Δ = 11° 15' 29.2" (LT) D = 4' 15' 00.0" L = 264.90' T = 132.88' R = 1,348.1360' SE = 0.048 RUNOFF = 165.00'	PI Sta 23+79.56 Δ = 15° 54' 25.6" (LT) D = 4' 30' 00.0" L = 353.49' T = 177.89' R = 1,273.2395' SE = 0.049 RUNOFF = 165.00'
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NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.

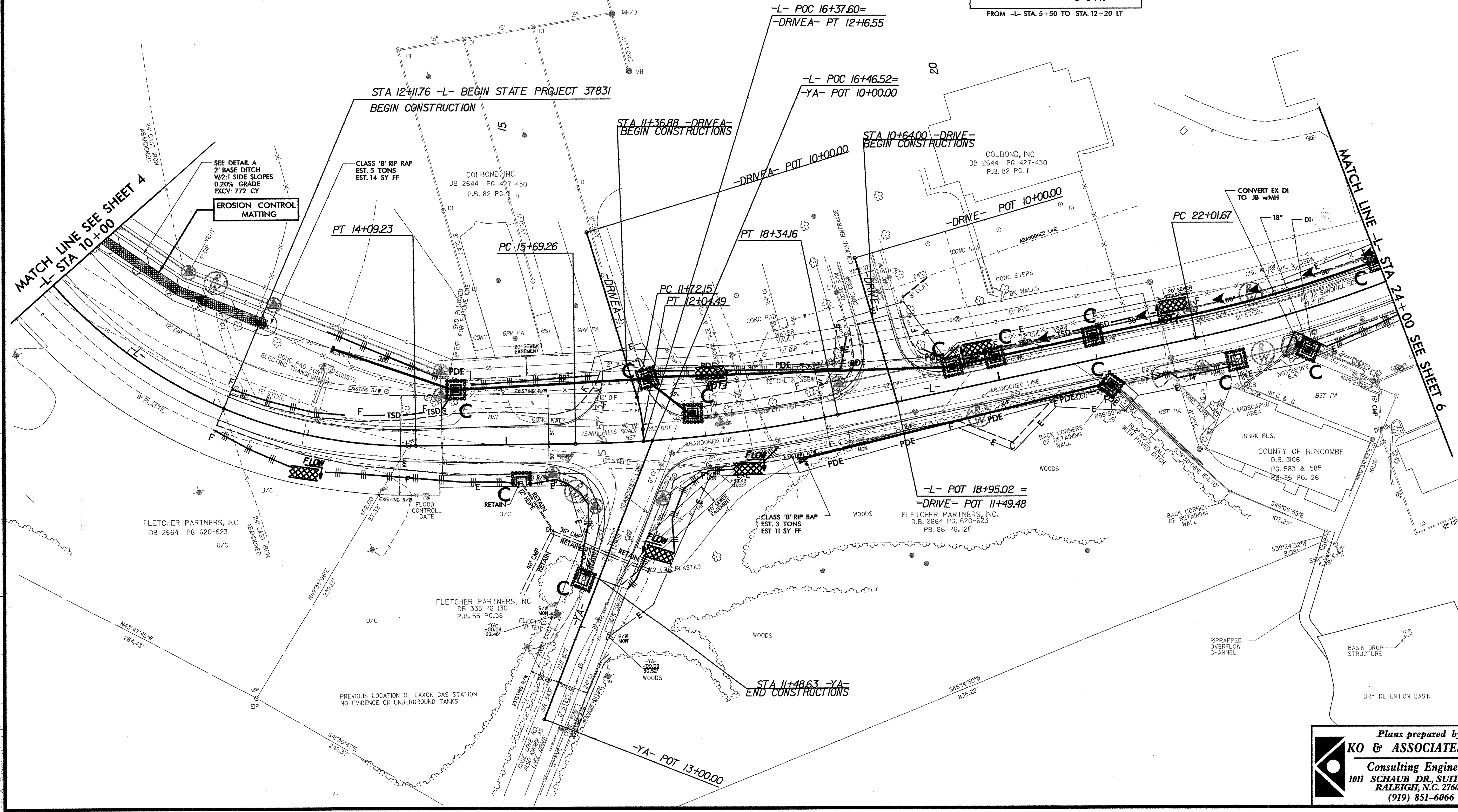
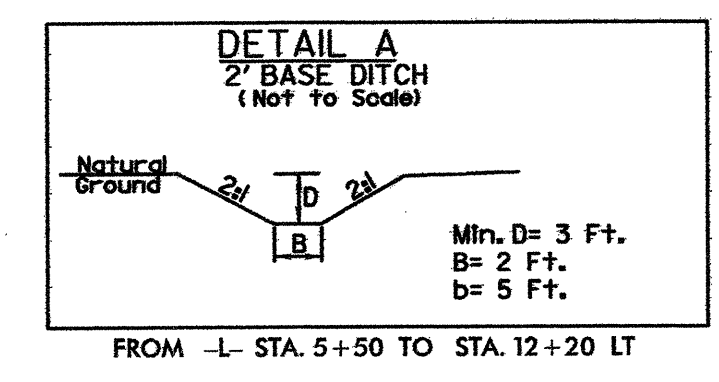
NOTE: CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

-DRIVEA-

PI Sta 11+88.39
Δ = 13° 25' 37.1" (RT)
D = 4' 31' 07.3"
L = 32.34'
T = 16.24'
R = 138.00'
SE = AS SHOWN ON PLANS
RUNOFF = AS SHOWN ON PLANS

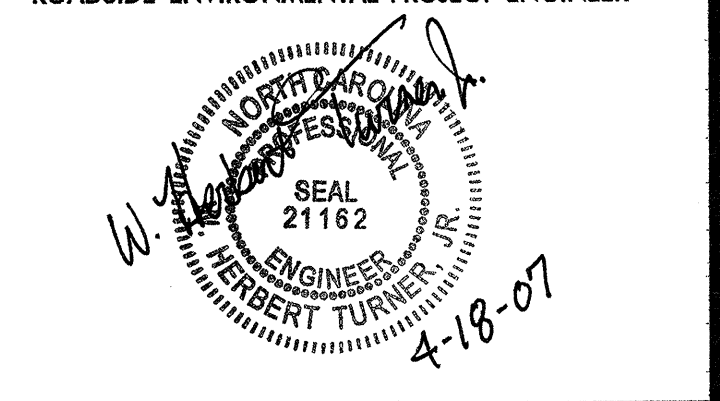


REVISIONS

8/17/99

4/18/2007
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Plans prepared by:
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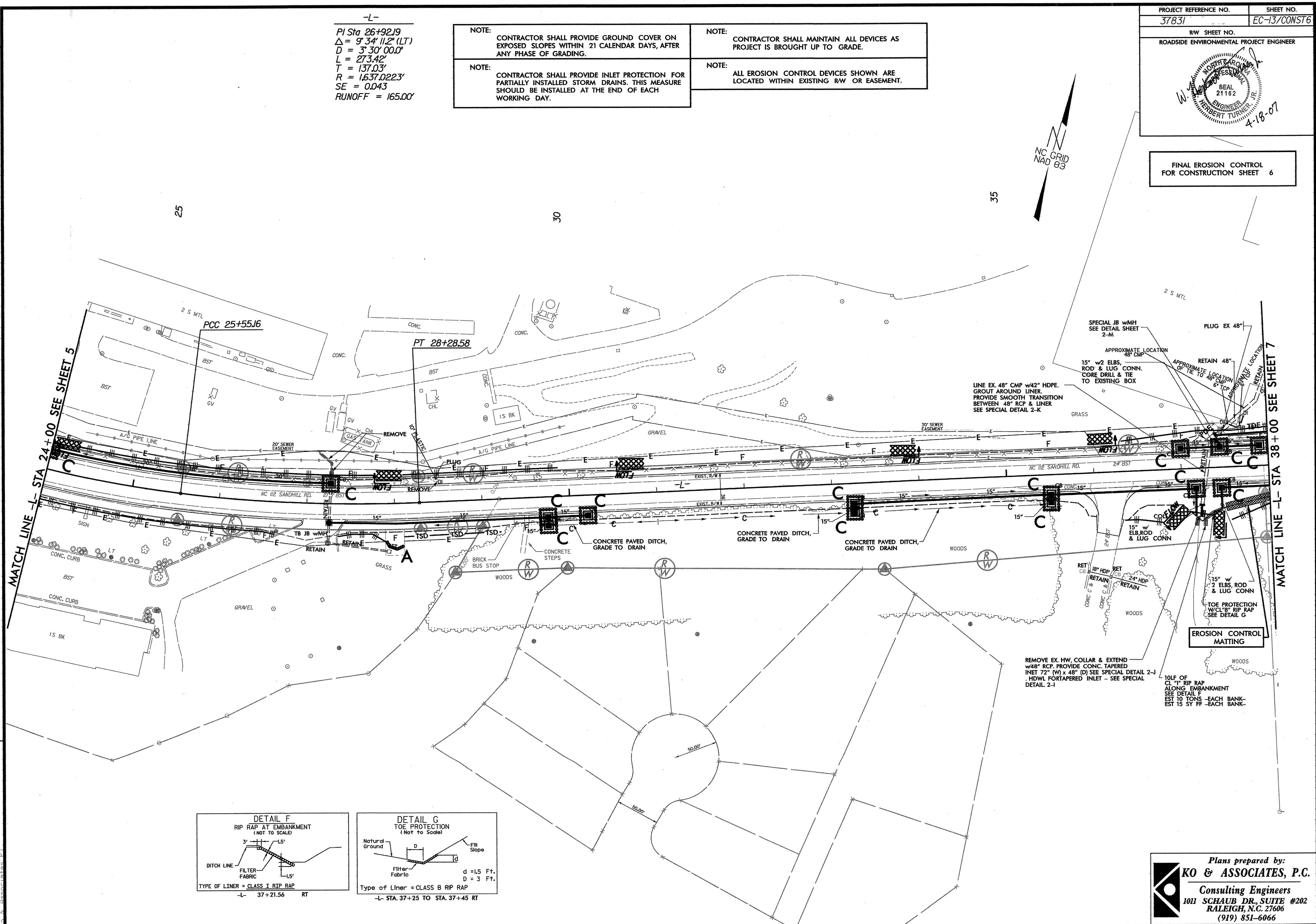
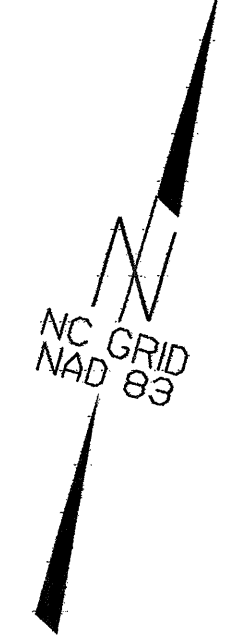


FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 6

-L-
 PI Sta 26+92.19
 $\Delta = 9' 34'' 11.2''$ (LT)
 $D = 3' 30'' 00.0''$
 $L = 273.42'$
 $T = 137.03'$
 $R = 1,637.0223'$
 $SE = 0.043$
 RUNOFF = 165.00'

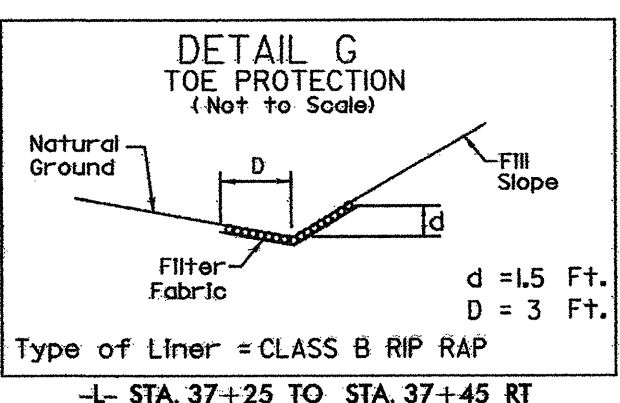
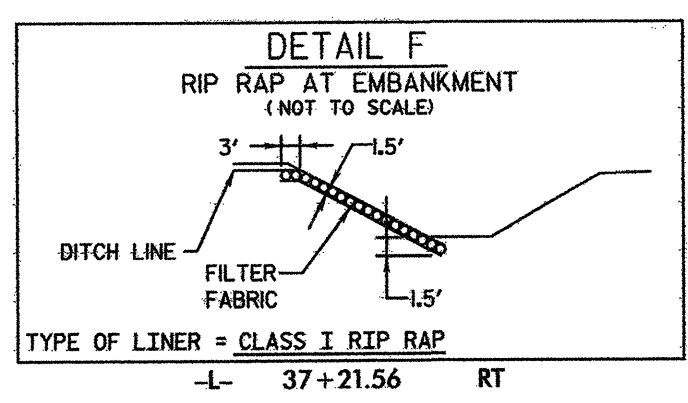
NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.
 NOTE: CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.

NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.
 NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING R/W OR EASEMENT.



MATCH LINE -L- STA 24+00 SEE SHEET 5

MATCH LINE -L- STA 38+00 SEE SHEET 7



REVISIONS

8/7/99

4/18/2007
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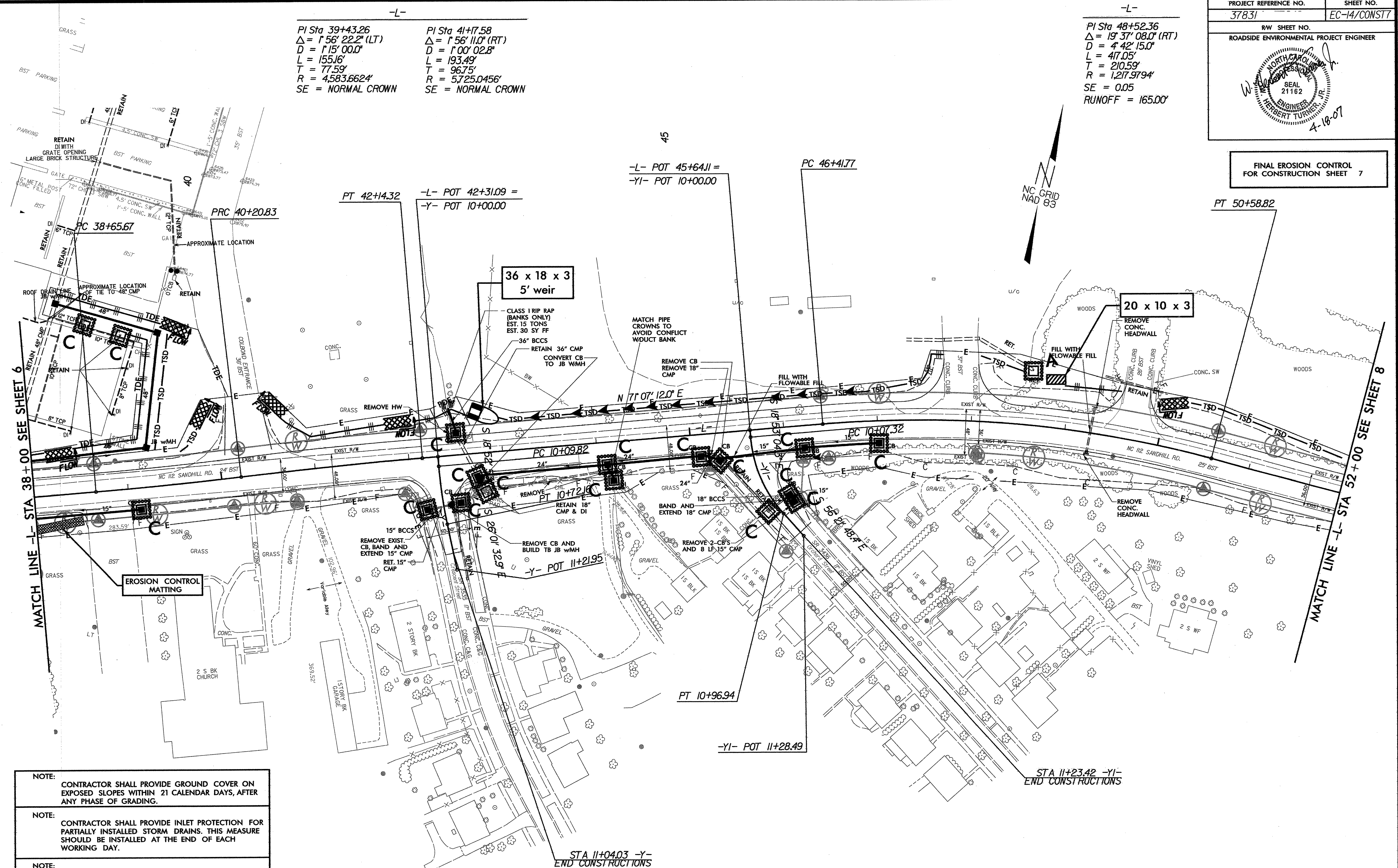
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FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 7

-L-
 PI Sta 39+43.26
 $\Delta = 1'56''22.2''$ (LT)
 $D = 1'15''00.0''$
 $L = 155.16'$
 $T = 77.59'$
 $R = 4,583.6624'$
 SE = NORMAL CROWN

PI Sta 41+17.58
 $\Delta = 1'56''11.0''$ (RT)
 $D = 1'00''02.8''$
 $L = 193.49'$
 $T = 96.75'$
 $R = 5,725.0456'$
 SE = NORMAL CROWN

-L-
 PI Sta 48+52.36
 $\Delta = 1'37''08.0''$ (RT)
 $D = 4'42''15.0''$
 $L = 417.05'$
 $T = 210.59'$
 $R = 1,217.9794'$
 SE = 0.05
 RUNOFF = 165.00'



- NOTE: CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 21 CALENDAR DAYS, AFTER ANY PHASE OF GRADING.
- NOTE: CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR PARTIALLY INSTALLED STORM DRAINS. THIS MEASURE SHOULD BE INSTALLED AT THE END OF EACH WORKING DAY.
- NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.
- NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

-Y-
 PI Sta 10+41.03
 $\Delta = 7'08''39.2''$ (LT)
 $D = 11'27''33.0''$
 $L = 62.35'$
 $T = 31.21'$
 $R = 500.0000'$

-YI-
 PI Sta 10+53.80
 $\Delta = 37'28''44.0''$ (LT)
 $D = 41'49''18.3''$
 $L = 89.62'$
 $T = 46.48'$
 $R = 137.0000'$

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NOTE: CONTRACTOR SHALL MAINTAIN ALL DEVICES AS PROJECT IS BROUGHT UP TO GRADE.

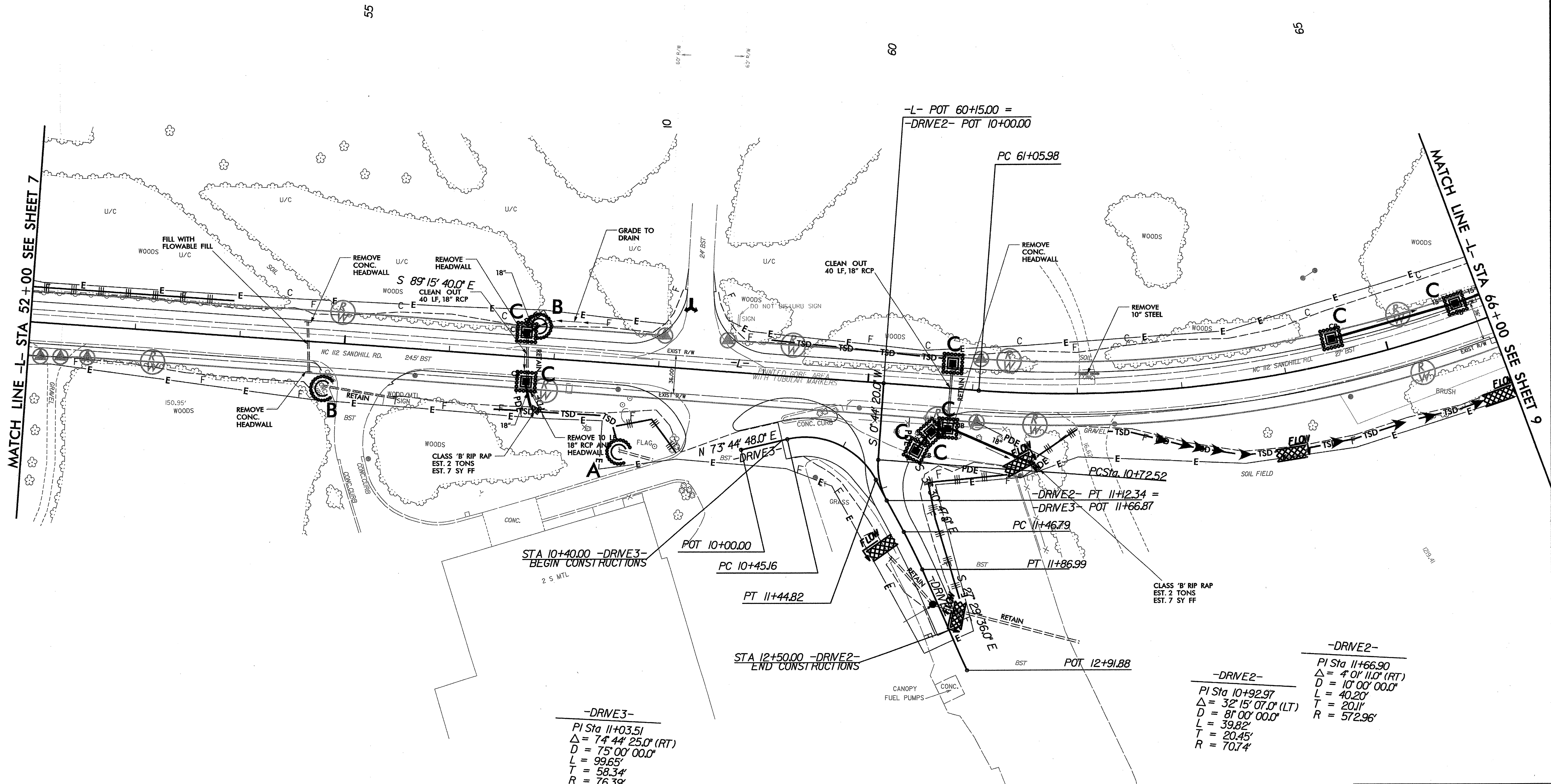
NOTE: ALL EROSION CONTROL DEVICES SHOWN ARE LOCATED WITHIN EXISTING RW OR EASEMENT.

-L-
 PI Sta 63+63.61
 $\Delta = 25^{\circ} 20' 30.0''$ (LT)
 $D = 5' 00' 00.0''$
 $L = 506.83'$
 $T = 257.63'$
 $R = 1,145.9156'$
 $SE = 0.051$
 $RUNOFF = 165.00'$

PROJECT REFERENCE NO. 37831	SHEET NO. EC-15/CONST B
RW SHEET NO.	
ROADSIDE ENVIRONMENTAL PROJECT ENGINEER	

FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 8

NC GRID NAD 83



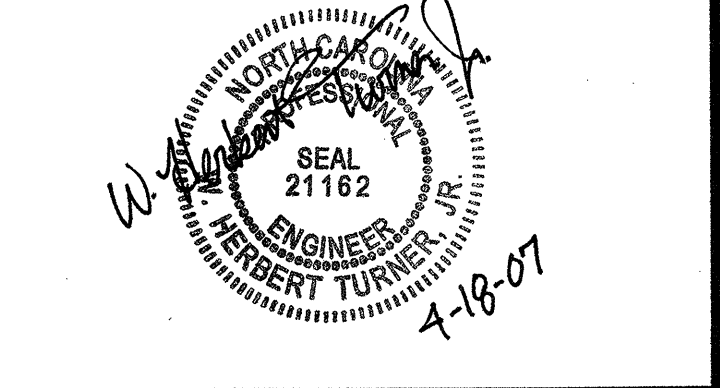
-DRIVE3-
 PI Sta 11+03.51
 $\Delta = 74^{\circ} 44' 25.0''$ (RT)
 $D = 75' 00' 00.0''$
 $L = 99.65'$
 $T = 58.34'$
 $R = 76.39'$

-DRIVE2-
 PI Sta 11+66.90
 $\Delta = 4^{\circ} 01' 11.0''$ (RT)
 $D = 10' 00' 00.0''$
 $L = 40.20'$
 $T = 20.11'$
 $R = 572.96'$

-DRIVE2-
 PI Sta 10+92.97
 $\Delta = 32^{\circ} 15' 07.0''$ (LT)
 $D = 81' 00' 00.0''$
 $L = 39.82'$
 $T = 20.45'$
 $R = 70.74'$

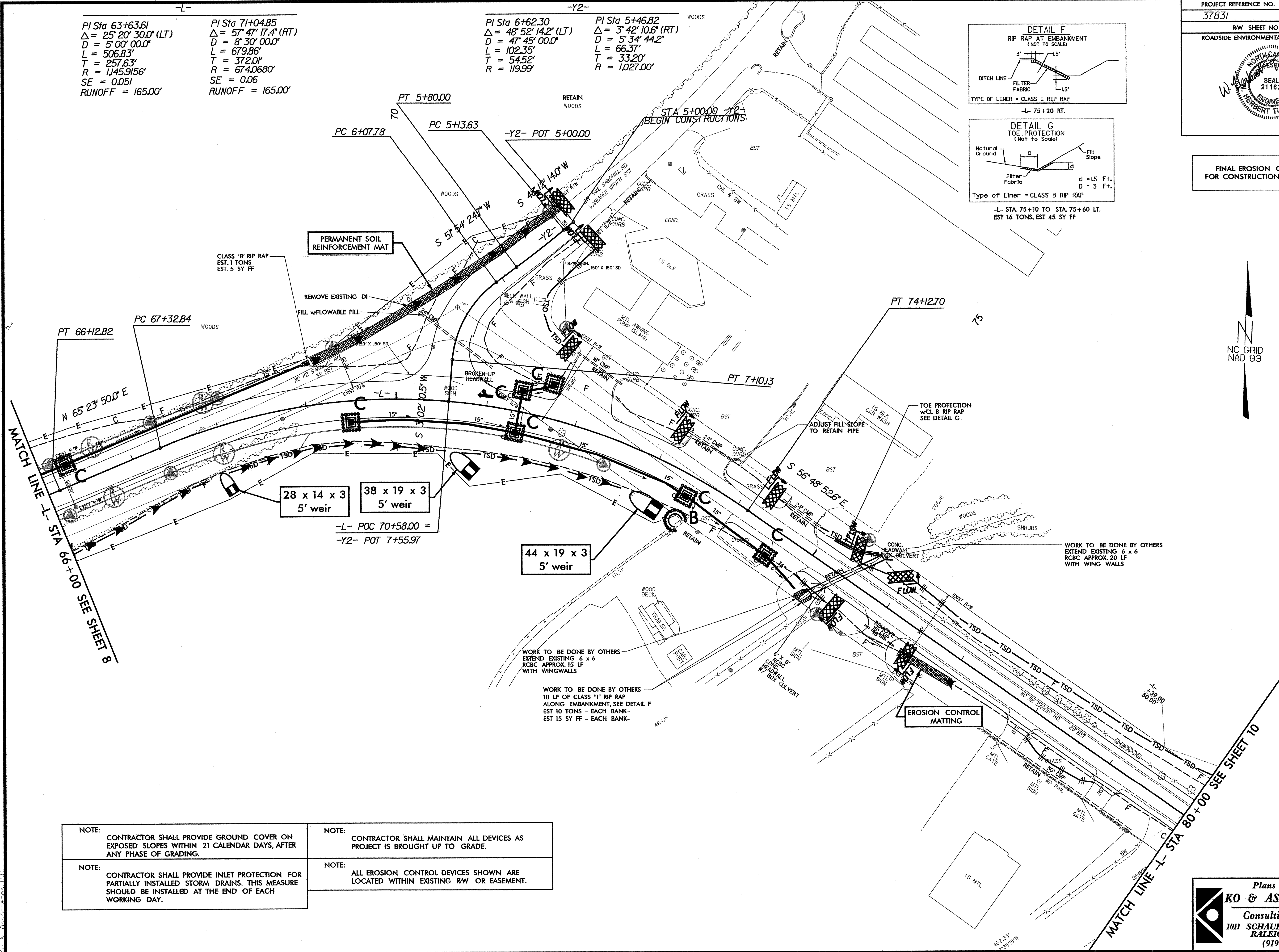
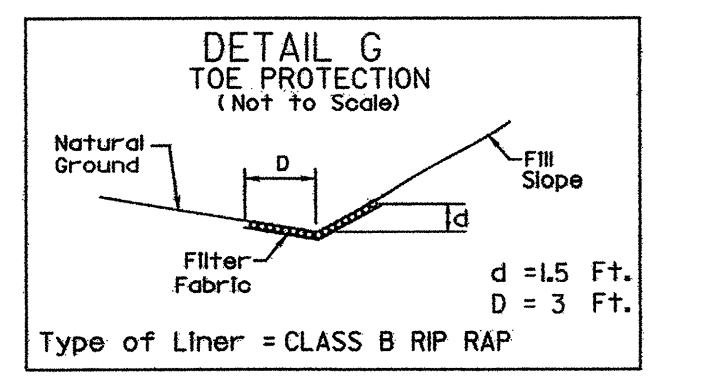
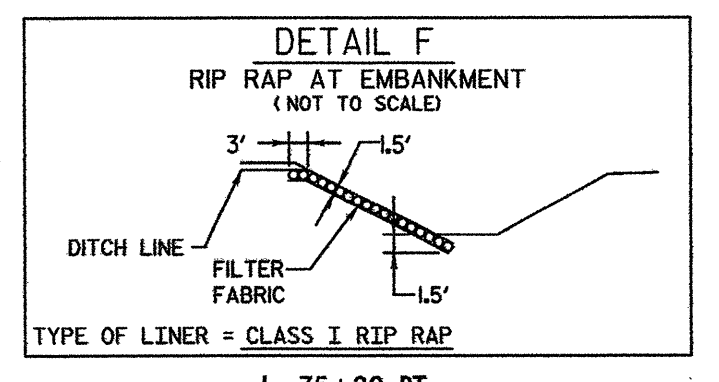
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FINAL EROSION CONTROL FOR CONSTRUCTION SHEET 9

-L-		-Y2-	
PI Sta 63+63.61	PI Sta 71+04.85	PI Sta 6+62.30	PI Sta 5+46.82
$\Delta = 25' 20' 30.0''$ (LT)	$\Delta = 57' 47' 17.4''$ (RT)	$\Delta = 48' 52' 14.2''$ (LT)	$\Delta = 3' 42' 10.6''$ (RT)
D = 5' 00' 00.0"	D = 8' 30' 00.0"	D = 47' 45' 00.0"	D = 5' 34' 44.2"
L = 506.83'	L = 679.86'	L = 102.35'	L = 66.37'
T = 257.63'	T = 372.01'	T = 54.52'	T = 33.20'
R = 1,145.9156'	R = 674.0680'	R = 119.99'	R = 1,027.00'
SE = 0.051	SE = 0.06		
RUNOFF = 165.00'	RUNOFF = 165.00'		



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