

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols
See Sheet 1-C For Survey Control Sheet

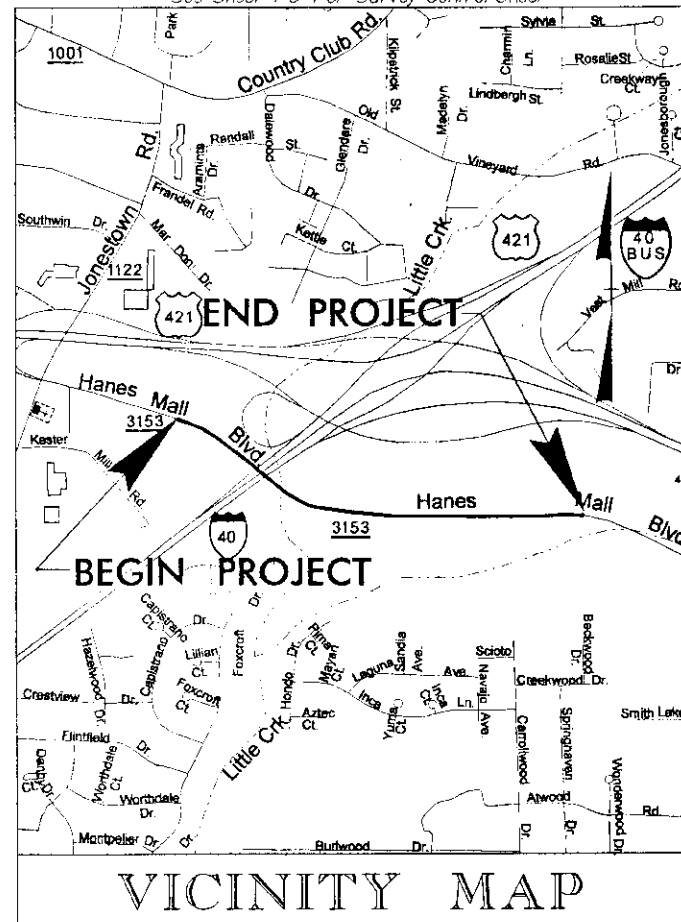
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

FORSYTH COUNTY

LOCATION: WINSTON-SALEM - BRIDGE NO. 436 OVER I-40 ON SR 3153
(HANES MALL BLVD.) FROM WEST OF KESTER MILL ROAD
TO WEST OF WESTGATE CENTER DRIVE

TYPE OF WORK: GRADING, DRAINAGE, PAVING, CURB AND
GUTTER, GUARDRAIL, RETAINING WALL,
STRUCTURE, AND CULVERT EXTENSION

PROJECT	34988.2.1
PRIMARY ROAD	SR-3153
CONNECTING ROADS	



STA. 10+00.00 -L- BEGIN TIP PROJECT U-3837

2005070499 0

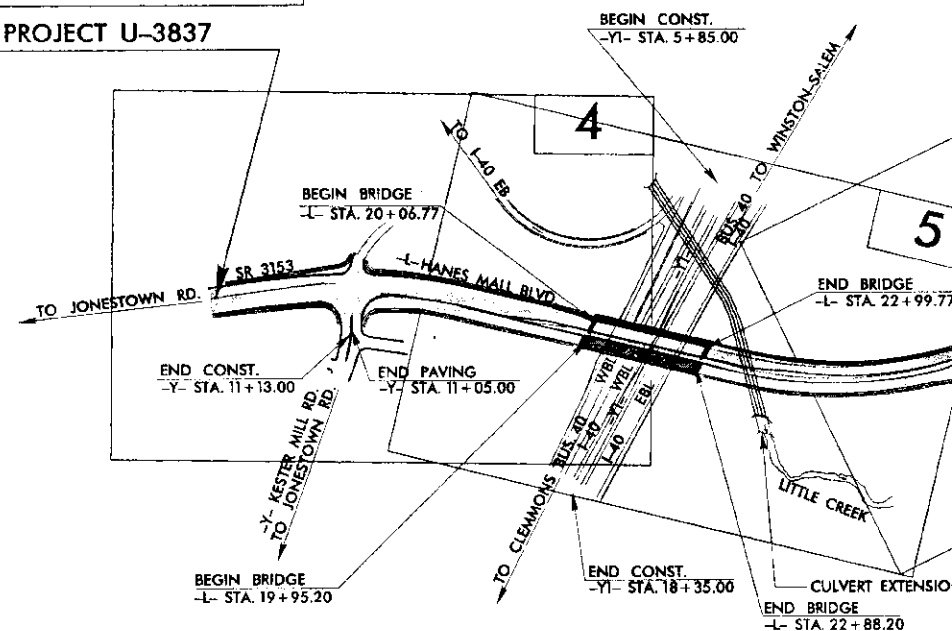
FORSYTH CO, NC FEE \$51.00
PRESENTED & RECORDED:

10-25-2005 09:34 AM

DICKIE C WOOD
REGISTER OF DEEDS
By: PATSY RUTH DAVIS DPTY

BK: H 2

PG: 23-29

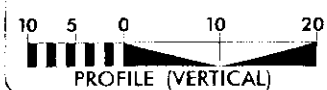


"STATE OF NORTH CAROLINA - COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 1 of the final plans for Project 34988.2.1 said plan sheet having been approved STA. 10+00.00 -L- END TIP PROJECT U-3837 as Addendum 1 to the minutes of the 6th day of Oct. 2005 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of October 2005

James A. Speer
Secretary to Board of Transportation

GRAPHIC SCALES



DESIGN DATA

ADT 2005 = 18740

ADT 2025 = 30900

DHV = 11 %

D = 60 %

T = 10 % *

V = 50 MPH

* TTST 4 % DUAL 6 %

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-3837 = 0.825 mi.

LENGTH STRUCTURE TIP PROJECT U-3837 = 0.055 mi.

TOTAL LENGTH OF TIP PROJECT U-3837 = 0.880 mi.

Prepared in the Office of: DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., NC, 27610

2002 STANDARD SPECIFICATIONS

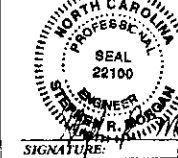
RIGHT OF WAY DATE:
OCTOBER 23, 2003

LETTING DATE:
SEPTEMBER 20, 2005

JAMES A. SPEER, PE
PROJECT ENGINEER

DANNY GARDNER
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER



SIGNATURE: *James A. Speer*

DATE: 8/8/2005

ROADWAY DESIGN ENGINEER



SIGNATURE: *Danny Gardner*

DATE: 8/8/2005

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

Pat Miller P.E.
STATE DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR

DATE

CONTRACT: C201505 TIP PROJECT: U-3837

*S.U.E. = SUBSURFACE UTILITY ENGINEER

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL SYMBOLS

ROADS & RELATED ITEMS

Edge of Pavement	---
Curb	---
Prop. Slope Stakes Cut	--- C ---
Prop. Slope Stakes Fill	--- F ---
Prop. Woven Wire Fence	--- ○ ---
Prop. Chain Link Fence	--- □ ---
Prop. Barbed Wire Fence	--- ◇ ---
Prop. Wheelchair Ramp	--- WCR ---
Curb Cut for Future Wheelchair Ramp	--- CCR ---
Exist. Guardrail	--- + ---
Prop. Guardrail	--- + ---
Equality Symbol	⊕
Pavement Removal	⊗

RIGHT OF WAY

Baseline Control Point	◆
Existing Right of Way Marker	△
Exist. Right of Way Line w/Marker	△
Prop. Right of Way Line with Proposed	---
RW Marker (Iron Pin & Cap)	▲
Prop. Right of Way Line with Proposed	---
(Concrete or Granite) RW Marker	⊙
Exist. Control of Access Line	⊙
Prop. Control of Access Line	⊙
Exist. Easement Line	--- E ---
Prop. Temp. Construction Easement Line	--- E ---
Prop. Temp. Drainage Easement Line	--- TOE ---
Prop. Perm. Drainage Easement Line	--- PDE ---

HYDROLOGY

Stream or Body of Water	---
River Basin Buffer	--- BZ ---
Flow Arrow	→
Disappearing Stream	---
Spring	⊙
Swamp Marsh	⊗
Shoreline	---
Falls, Rapids	---
Prop Lateral, Tail, Head Ditches	---

STRUCTURES

MAJOR	
Bridge, Tunnel, or Box Culvert	CONC
Bridge Wing Wall, Head Wall and End Wall	CONC WW

MINOR	
Head & End Wall	CONC HW
Pipe Culvert	---
Footbridge	---
Drainage Boxes	CB
Paved Ditch Gutter	---

UTILITIES

Exist. Pole	•
Exist. Power Pole	•
Prop. Power Pole	•
Exist. Telephone Pole	•
Prop. Telephone Pole	•
Exist. Joint Use Pole	•
Prop. Joint Use Pole	•
Telephone Pedestal	•
UG Telephone Cable Hand Hold	•
Cable TV Pedestal	•
UG TV Cable Hand Hold	•
UG Power Cable Hand Hold	•
Hydrant	•
Satellite Dish	•
Exist. Water Valve	•
Sewer Clean Out	•
Power Manhole	•
Telephone Booth	•
Cellular Telephone Tower	•
Water Manhole	•
Light Pole	•
H-Frame Pole	•
Power Line Tower	•
Pole with Base	•
Gas Valve	•
Gas Meter	•
Telephone Manhole	•
Power Transformer	•
Sanitary Sewer Manhole	•
Storm Sewer Manhole	•
Tank; Water, Gas, Oil	•
Water Tank With Legs	•
Traffic Signal Junction Box	•
Fiber Optic Splice Box	•
Television or Radio Tower	•
Utility Power Line Connects To Traffic	•
Signal Lines Cut Into the Pavement	•

Recorded Water Line	---
Designated Water Line (S.U.E.*)	---
Sanitary Sewer	---
Recorded Sanitary Sewer Force Main	---
Designated Sanitary Sewer Force Main(S.U.E.*)	---
Recorded Gas Line	---
Designated Gas Line (S.U.E.*)	---
Storm Sewer	---
Recorded Power Line	---
Designated Power Line (S.U.E.*)	---
Recorded Telephone Cable	---
Designated Telephone Cable (S.U.E.*)	---
Recorded UG Telephone Conduit	---
Designated UG Telephone Conduit (S.U.E.*)	---
Unknown Utility (S.U.E.*)	---
Recorded Television Cable	---
Designated Television Cable (S.U.E.*)	---
Recorded Fiber Optics Cable	---
Designated Fiber Optics Cable (S.U.E.*)	---
Exist. Water Meter	⊙
UG Test Hole (S.U.E.*)	⊙
Abandoned According to UG Record	ATTUR
End of Information	E.O.I.

BOUNDARIES & PROPERTIES

State Line	---
County Line	---
Township Line	---
City Line	---
Reservation Line	---
Property Line	---
Property Line Symbol	---
Exist. Iron Pin	⊙
Property Corner	+
Property Monument	ECM
Property Number	123
Parcel Number	6
Fence Line	---
Existing Wetland Boundaries	---
High Quality Wetland Boundary	HQ WLB
Medium Quality Wetland Boundaries	MQ WLB
Low Quality Wetland Boundaries	LO WLB
Proposed Wetland Boundaries	---
Existing Endangered Animal Boundaries	EAB
Existing Endangered Plant Boundaries	EPB

BUILDINGS & OTHER CULTURE

Buildings	---
Foundations	---
Area Outline	---
Gate	---
Gas Pump Vent or U/G Tank Cap	---
Church	---
School	---
Park	---
Cemetery	---
Dam	---
Sign	---
Well	---
Small Mine	---
Swimming Pool	---

TOPOGRAPHY

Loose Surface	---
Hard Surface	---
Change in Road Surface	---
Curb	---
Right of Way Symbol	R/W
Guard Post	⊙
Paved Walk	---
Bridge	---
Box Culvert or Tunnel	---
Ferry	---
Culvert	---
Footbridge	---
Trail, Footpath	---
Light House	---

VEGETATION

Single Tree	---
Single Shrub	---
Hedge	---
Woods Line	---
Orchard	---
Vineyard	---

RAILROADS

Standard Gauge	---
RR Signal Milepost	---
Switch	---

"STATE OF NORTH CAROLINA - COUNTY OF WAKE"

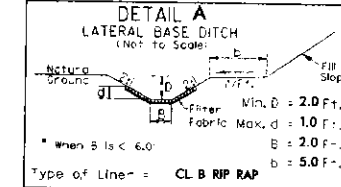
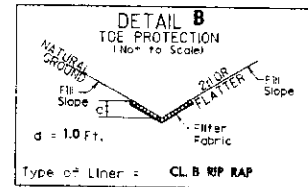
As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 1-B of the final plans for Project 34988-2-1.

Said plan sheet having been approved and adopted by the Board of Transportation and identified as meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this 11 day of October, 2005.

Cheryl Denison
Secretary to Board of Transportation

8/17/01

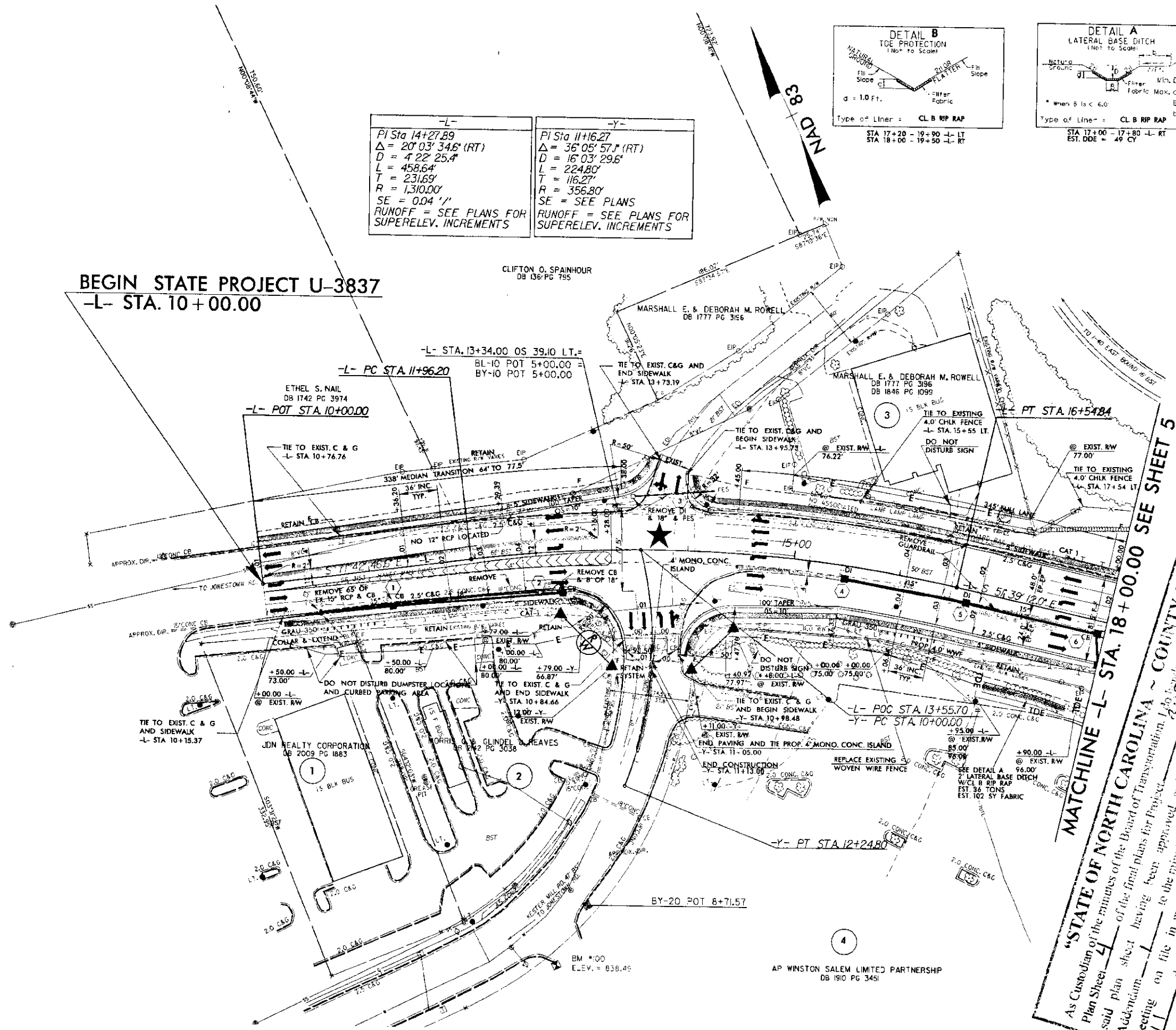
PROJECT REFERENCE NO.		SHEET NO.	
U-3837		4	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		SEAL	
NORTH CAROLINA PROFESSIONAL ENGINEER		NORTH CAROLINA PROFESSIONAL ENGINEER	
JAMES E. SPEER		JAMES E. SPEER	
1/14/2005		1/14/2005	



-L-	-Y-
PI Sta 14+27.89	PI Sta 11+16.27
$\Delta = 20^{\circ} 03' 34.6''$ (RT)	$\Delta = 36^{\circ} 05' 57.1''$ (RT)
D = 422' 25.4'	D = 16' 03' 29.6'
L = 458.64'	L = 224.80'
T = 231.69'	T = 116.27'
R = 1,310.00'	R = 356.80'
SE = 0.04 1/1'	SE = SEE PLANS
RUNOFF = SEE PLANS FOR SUPERELEV. INCREMENTS	RUNOFF = SEE PLANS FOR SUPERELEV. INCREMENTS

BEGIN STATE PROJECT U-3837
-L- STA. 10+00.00

12872 22700	216 300	332 500	2004 2025 ADT	18132 30900
	1912 2100			18132 30900
				18132 30900
				18132 30900



MATCHLINE -L- STA. 18+00.00 SEE SHEET 5

"STATE OF NORTH CAROLINA - COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of the minutes of the Board of Transportation, held on the 11th day of October, 2005, at the County Office in the City of Raleigh, North Carolina.

34988-2.1

day 12/1/2005

WHEREBY, I have hereunto set my hand this the 11th day of October, 2005.

Secretary to the Board of Transportation

★ DENOTES PAINTED ISLAND
(SEE PAVEMENT MARKING PLANS)

★ SIGNALIZED INTERSECTION

SEE SHEET 9 FOR -L- PROFILE
SEE SHEET 12 FOR -Y- PROFILE

DETAIL B
TOE PROTECTION
 (Not to Scale)

NATURAL GROUND
 FILL Slope
 d = 1.0 Ft.
 2:1 or FLATTER
 FILL Slope
 Filter Fabric

Type of Liner = **CL B RIP RAP**

Wm. A. Harris
Secretary to Board of Transportation

NOTE: SEE -YI- CROSS-SECTIONS AND ROADWAY
STANDARD DRAWINGS, STD. 862.01,
SHEET 1 FOR SPECIAL MEDIAN GRADING.

NOTE: -YI- STA. 12+50 OVERHEAD SIGN TO BE REMOVED
AND REPLACED. SEE SIGNING PLANS

SEE SHEETS 9 & 10 FOR -L- PROFILE
SEE SHEETS S-1 THRU S-78 FOR STRUCTURE PLANS
SEE SHEETS C-1 THRU C-6 FOR CULVERT PLANS

PROJECT REFERENCE NO.	SHEET NO.
U-3637	5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
1/14/2005	12-05

MARK A. & CATHERINE E. ENGLISH
DB 2026 PG 567
DB 1870 PG 1440

PI Sta 26+84.36
 $\Delta = 28^{\circ} 14' 07.6''$ (LT)
 $D = 5^{\circ} 21' 17.1''$
 $L = 527.30'$
 $T = 269.12'$
 $R = 1,070.00'$
 $SE = 0.04' /'$
 RUNOFF = SEE PLANS FOR
 SUPERELEV. INCREMENTS

[illegible]

DETAIL A

LATERAL BASE DITCH
(1"=10' Scale)

Natural Ground
Filter Fabric
Min. D = 2.0 Ft.
Max. c = 1.0 Ft.
3 - 2.0 ft.
b = 5.0 Ft.

* When E is less than 6.0

Type of Liner = CL B RIP RAP

STA 26+00 - 26+90 RT
EST. DDE = 64 CY

LOW FLOW BENCH DETAIL
@ CULVERT OUTLET
 (Not to Scale)

Min. D = 2.0 ft.
 C = water f.
 B = 5.0 ft.

3 @ 8' x 10' RCBC

Natural ground

2.0

1.5

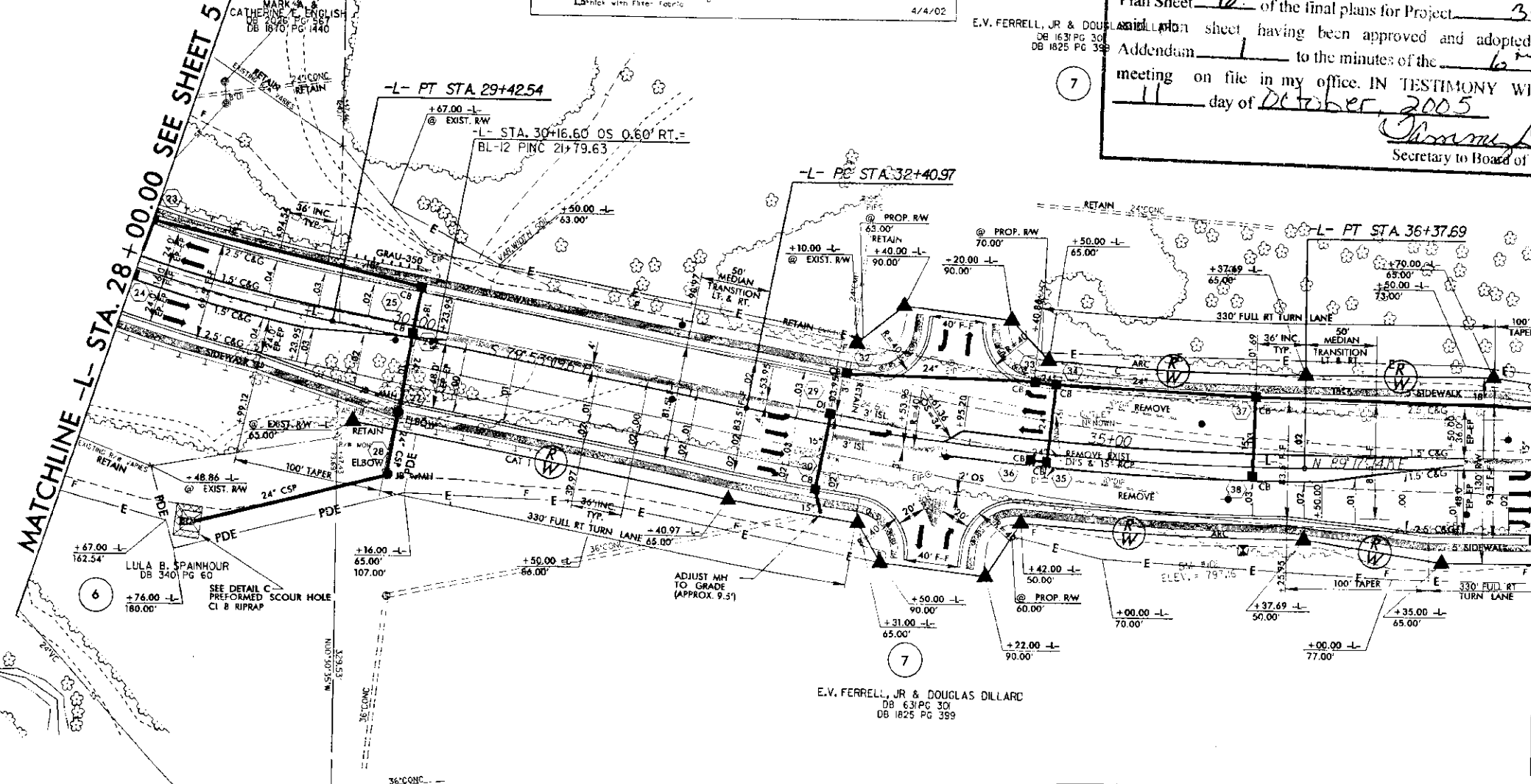
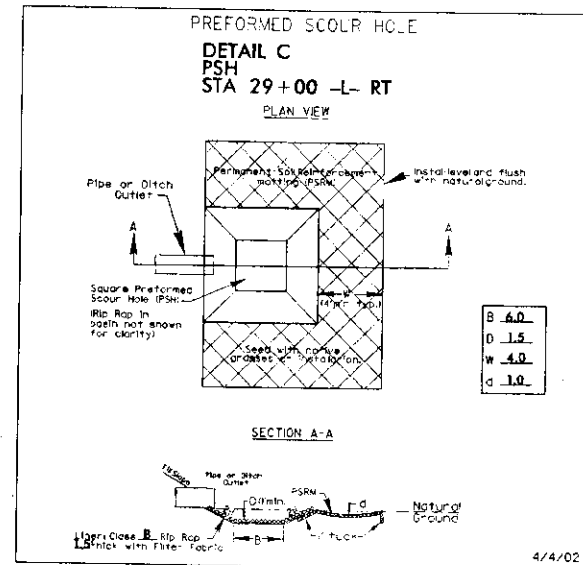
1.0

Filter Fabric

Water's Edge

Type of liner = CLASS I RIP RAP

PROJECT REFERENCE NO. U-3837		SHEET NO. 6	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 14571 JAMES A. SPEER 1/14/2005		HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 22100 JAMES P. MORON 1/14/2005	



"STATE OF NORTH CAROLINA - COUNTY OF WAKE"
As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of
Plan Sheet 6 of the final plans for Project 341988.2.1
Addendum 1 to the minutes of the 6th day of Oct. 2005 Board of Transportation
meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this
11 day of October, 2005
James P. Moron
Secretary to Board of Transportation

-L- PI Sta 26+84.36 $\Delta = 28' 14" 07.6" (LT)$ $D = 5' 21" 17.1"$ $L = 527.30'$ $T = 269.12'$ $R = 1070.00'$ $SE = 0.04 \text{ '/'}$ RUNOFF = SEE PLANS FOR SUPERELEV. INCREMENTS	-L- PI Sta 34+39.93 $\Delta = 10' 49' 26.3" (LT)$ $D = 2' 43' 42.1"$ $L = 396.72'$ $T = 198.95'$ $R = 2100.00'$ $SE = 0.03 \text{ '/'}$ RUNOFF = 108'
--	--

SEE SHEETS 10 & 11 FOR -L- PROFILE

12-JAN-2005 14:39
C:\WORK\2005\12-01-05\12-01-05.dwg
12-01-05.dwg

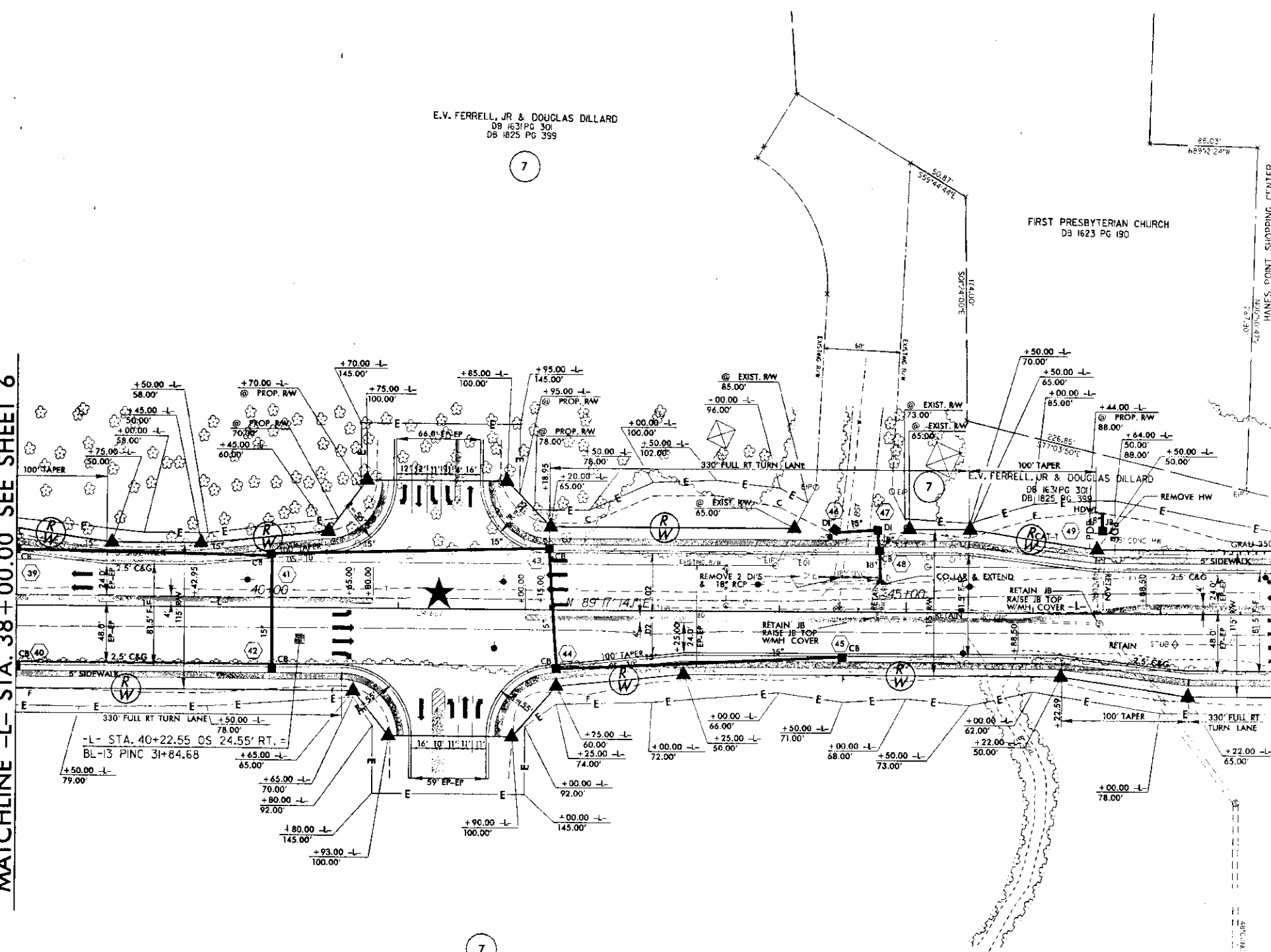
9/17/99

REVISIONS

PROJECT REFERENCE NO. U-5837		SHEET NO. 7
RW SHEET NO.		HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	NORTH CAROLINA PROFESSIONAL SEAL 22100 JAMES P. SPEER 11/14/2005	

MATCHLINE -L- STA. 38+00.00 SEE SHEET 6

MATCHLINE -L- STA. 48+00.00 SEE SHEET 8



E.V. FERRELL, JR & DOUGLAS DILLARD
DB 163 PG 301
DB 1825 PG 399

FIRST PRESBYTERIAN CHURCH
DB 1623 PG 190

HANES POINT SHOPPING CENTER
DB 1963 PG 327

NAD 83

E.V. FERRELL, JR & DOUGLAS DILLARD
DB 163 PG 301
DB 1825 PG 399

"STATE OF NORTH CAROLINA ~ COUNTY OF WAKE"
As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 7 of the final plans for Project 34988.2.1 said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 1 to the minutes of the 16th day of Oct. 2005 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of October, 2005
Charmy Denning
Secretary to Board of Transportation

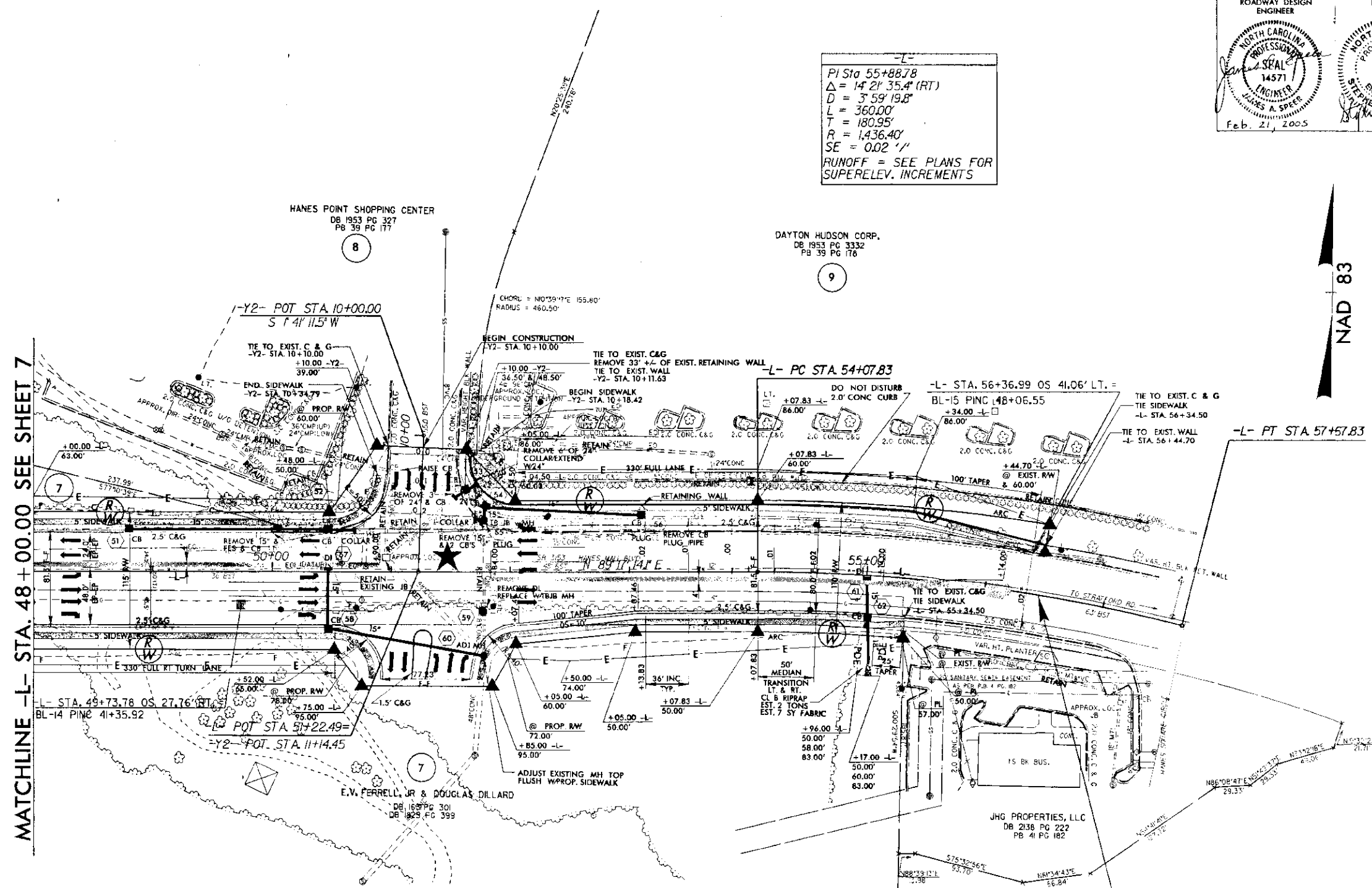
■ DENOTES PAINTED ISLAND (SEE PAVEMENT MARKING PLANS)

★ SIGNALIZED INTERSECTION
SEE SHEET 11 FOR -L- PROFILE

PLAN 2005 0854
11/14/2005

PROJECT REFERENCE NO. U-3837	SHEET NO. 8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

$P/Sta\ 55+88.78$
 $\Delta = 14' 21" 35.4" (RT)$
 $D = 3' 59' 19.8"$
 $L = 360.00'$
 $T = 180.95'$
 $R = 1,436.40'$
 $SE = 0.02\ %$
 RUNOFF = SEE PLANS FOR
 SUPERELEV. INCREMENTS



"STATE OF NORTH CAROLINA ~ COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 8 of the final plans for Project 34938.2.1 said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 1 to the minutes of the 6th day of Oct. 2005 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 11 day of October, 2005

Theresa Deising
Secretary to Board of Transportation

END STATE PROJECT U-3837
-L- STA. 56+45.00

SIGNALIZED INTERSECTION
 SEE SHEET 11 FOR -L- PROFILE
 SEE SHEET 12 FOR -Y2- PROFILE
 SEE SHEETS W-1 THRU W-2 FOR WALL PLANS

8/17/99

REVISIONS

10-FEB-2005 13:42
 D:\work\proj\...