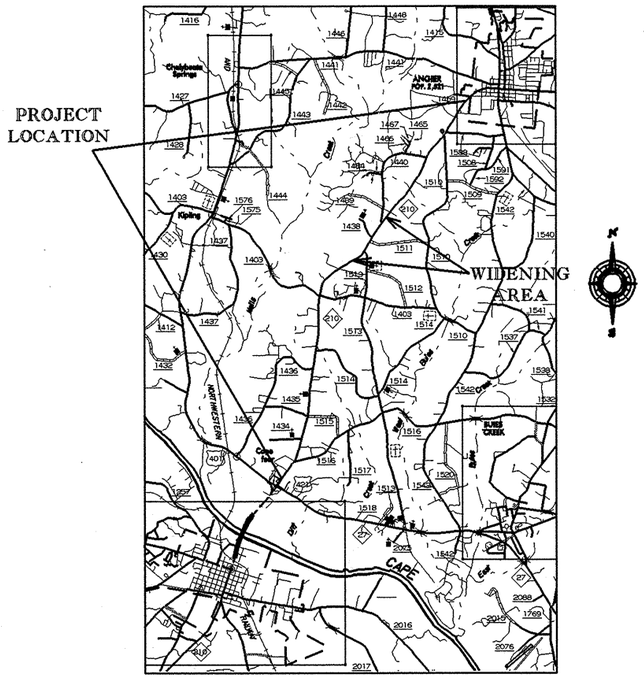
09/08/99

PROJECT: 37983

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	37983	1

VICINITY MAP

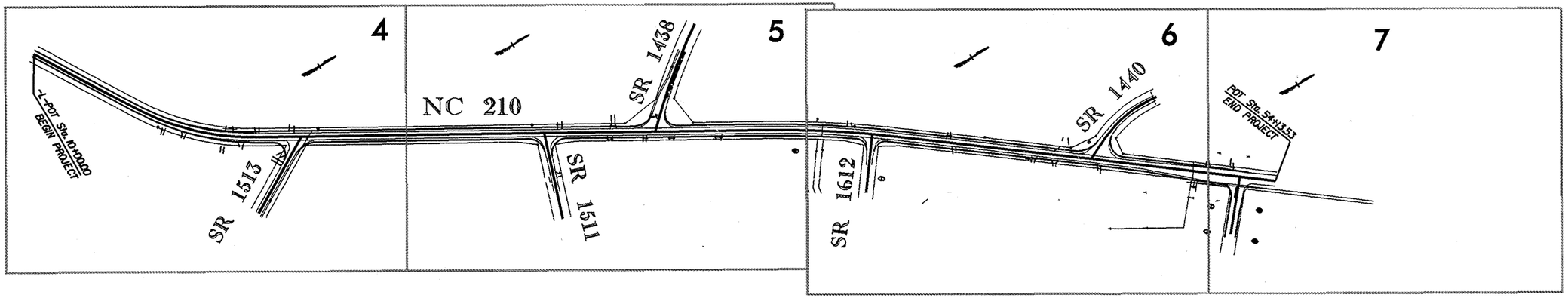


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HARNETT COUNTY

LOCATION: NC 210 FROM LILLINGTON TO ANGIER

TYPE OF WORK: WIDENING, GRADING, BASE, PAVING, AND DRAINAGE



GRAPHIC SCALES

50 25 0 50 100

PLANS

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT 37983 = 6.88 MILES

TOTAL LENGTH OF STATE PROJECT 37983 = 6.88 MILES

DIVISION OF HIGHWAYS * DIVISION SIX * STATE OF NORTH CAROLINA * DEPARTMENT OF TRANSPORTATION * DESIGN/CONSTRUCT UNIT

Prepared in the Office of:

DIVISION SIX, DIVISION DESIGN

2002 STANDARD SPECIFICATIONS

R/W DATE: 8/04

LETTING DATE: 6/2006

G.W. BURNS, P.E.
PROJECT ENGINEER

DEBBIE UNDERWOOD
PROJECT DESIGN ENGINEER

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
37983	1-A

INDEX OF SHEETS

ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated Janurary 15, 2002 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation - Two Lane Pavement
225.06	Method of Grading Sight Distance at Intersections
225.09	Guide for Shoulder and Ditch Transition at Grade Separations
DIVISION 3 - PIPE CULVERTS	
300.02	Method of Pipe Installation - Method 'B'
310.10	Driveway Pipe Construction
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 6 - ASPHALT BASES AND PAVEMENTS	
654.01	Pavement Repairs
DIVISION 8 - INCIDENTALS	
840.15	Brick Drop Inlet - 12" thru 30" Pipe
840.16	Drop Inlet Frame and Grates - for use with Std. Dwg. 840.14 and 840.15
840.34	Traffic Bearing Junction Box - for use with Pipes 42" and under
840.54	Manhole Frame and Cover
840.72	Pipe Collar
DIVISION 11 - WORK ZONE TRAFFIC CONTROL	
1101.01	Work Zone Advance Warning Signs
1101.02	Temporary Lane Closures
1101.04	Temporary Shoulder Closures
1101.05	Work Zone Vehicle Accesses
1101.11	Traffic Control Design Tables
1110.01	Stationary Work Zone Sign - Monting Height & Lateral Clearance
1110.02	Portable Work Zone Signs - Mounting Height & Lateral Clearance
1115.01	Flashing Arrow Panels
1130.01	Drums (Special Detail in Lieu of Standard)
1135.01	Cones
1150.01	Flaggers
1160.01	Temporary Crash Cushion - Relective End Treatment
DIVISION 12 - PAVEMENT MARKINGS, MARKERS AND DELINEATION	
1205.01	Pavement Markings - Line Types and Offsets
1205.02	Pavement Markings - Divided and Undivided Roadways
1205.04	Pavement Markings - Intersections
1205.05	Pavement Markings - Turn Lanes
1205.06	Pavement Markings - Thru Lane Drops
1205.07	Pavement Markings - Pedestrian Crosswalks
1205.08	Pavement Markings - Symbols and Word Messages
1205.09	Pavement Markings - Painted Islands
1205.10	Pavement Markings - School Areas
1205.11	Pavement Markings - Railroad Crossings
1250.01	Pavement Marker Spacing
1251.01	Raised Pavement Markers - Permanent and Temporary
DIVISION 16 - EROSION CONTROL AND ROADSIDE DEVELOPMENT	
1605.01	Temporary Silt Fence
1630.03	Temporary Silt Ditch
1633.02	Temporary Rock Silt Check Type 'B'

GENERAL NOTES: 2002 SPECIFICATIONS

GRADE LINE:
GRADING AND SURFACING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

THE CONTRACTORS ATTENTION SHALL BE DIRECTED TO THE AREAS IN THE PLANS DESIGNATED SAFETY CLEARING. THE LIMITS ARE AS SHOWN AND THE CLEARING AND GRUBBING IS CONSIDERED A PART OF THE LUMP SUM ITEM FOR "CLEARING AND GRUBBING".

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 OR 225.05 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT AND EARTH SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01 OR 560.02.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS IN PLANS AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII NOTED ON PLANS.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC CONTROL WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

UTILITIES:

UTILITY AGENT ON THIS PROJECT IS JOHN STEWART.

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

$$$$USERNAME$$$$ $$$$DGN$$$$ $$$$SYSTM$$$$

PROJECT REFERENCE NO.	SHEET NO.
37983	1B

Note: Not to Scale

****S.U.E. = Subsurface Utility Engineering***

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin — EIP
- Property Corner
- Property Monument — ECM
- Parcel/Sequence Number — 123
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary — WLB
- Proposed Wetland Boundary — WLB
- Existing High Quality Wetland Boundary — HQ WLB
- Existing Endangered Animal Boundary — EAB
- Existing Endangered Plant Boundary — EPB

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign — S
- Well — W
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- River Basin Buffer — RBB
- Flow Arrow
- Disappearing Stream
- Spring
- Swamp Marsh
- Proposed Lateral, Tail, Head Ditch — FLOW
- False Sump

RAILROADS:

- Standard Guage — CSX TRANSPORTATION
- RR Signal Milepost — MILEPOST 35
- Switch — SWITCH
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line — RW
- Proposed Right of Way Line with Iron Pin and Cap Marker — RW
- Proposed Right of Way Line with Concrete or Granite Marker — RW
- Existing Control of Access — CA
- Proposed Control of Access — CA
- Existing Easement Line — E
- Proposed Temporary Construction Easement — TCE
- Proposed Temporary Drainage Easement — TDE
- Proposed Permanent Drainage Easement — PDE
- Proposed Permanent Utility Easement — PUE

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut — C
- Proposed Slope Stakes Fill — F
- Proposed Wheel Chair Ramp — WCR
- Curb Cut for Future Wheel Chair Ramp — CCFR
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equaility Symbol
- Pavement Removal

VEGETATION:

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

EXISTING STRUCTURES:

MAJOR:

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

MINOR:

- Head and End Wall — CONC HW
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB — CB
- Paved Ditch Gutter
- Storm Sewer Manhole — S
- Storm Sewer — S

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole — P
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole — HH
- H-Frame Pole
- Recorded U/G Power Line — P
- Designated U/G Power Line (S.U.E.*) — P

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole — T
- Telephone Booth
- Telephone Pedestal — T
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole — HH
- Recorded U/G Telephone Cable — T
- Designated U/G Telephone Cable (S.U.E.*) — T
- Recorded U/G Telephone Conduit — TC
- Designated U/G Telephone Conduit (S.U.E.*) — TC
- Recorded U/G Fiber Optics Cable — T FO
- Designated U/G Fiber Optics Cable (S.U.E.*) — T FO

WATER:

- Water Manhole — W
- Water Meter
- Water Valve
- Water Hydrant
- Recorded U/G Water Line — W
- Designated U/G Water Line (S.U.E.*) — W
- Above Ground Water Line — A/G Water

TV:

- TV Satellite Dish
- TV Pedestal — C
- TV Tower
- U/G TV Cable Hand Hole — HH
- Recorded U/G TV Cable — TV
- Designated U/G TV Cable (S.U.E.*) — TV
- Recorded U/G Fiber Optic Cable — TV FO
- Designated U/G Fiber Optic Cable (S.U.E.*) — TV FO

GAS:

- Gas Valve
- Gas Meter
- Recorded U/G Gas Line — G
- Designated U/G Gas Line (S.U.E.*) — G
- Above Ground Gas Line — A/G Gas

SANITARY SEWER:

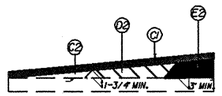
- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line — SS
- Above Ground Sanitary Sewer — A/G Sanitary Sewer
- Recorded SS Forced Main Line — FSS
- Designated SS Forced Main Line (S.U.E.*) — FSS

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box — S
- Utility Unknown U/G Line — ?U/L
- U/G Tank; Water, Gas, Oil
- A/G Tank; Water, Gas, Oil
- U/G Test Hole (S.U.E.*)
- Abandoned According to Utility Records — AATUR
- End of Information — E.O.I.

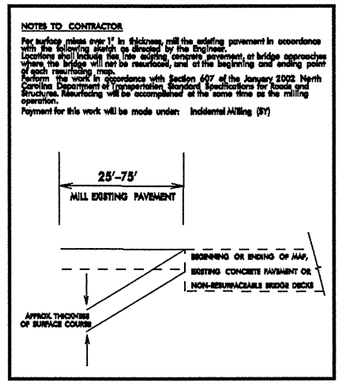
PROJ. REFERENCE NO.	SHEET NO.
37983	2

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B. AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 1½" IN DEPTH.
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 2¼" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.



WEDGING DETAIL FOR RESURFACING

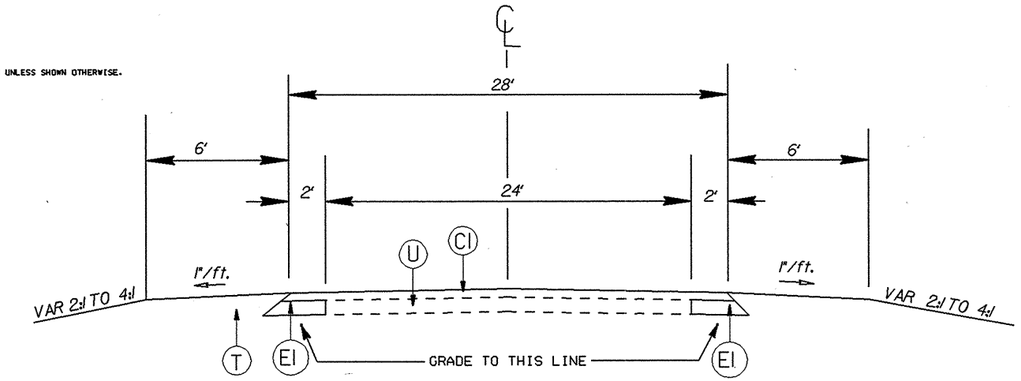
MILLING AT PAVEMENT TIE-INS



PROJECT NOTES

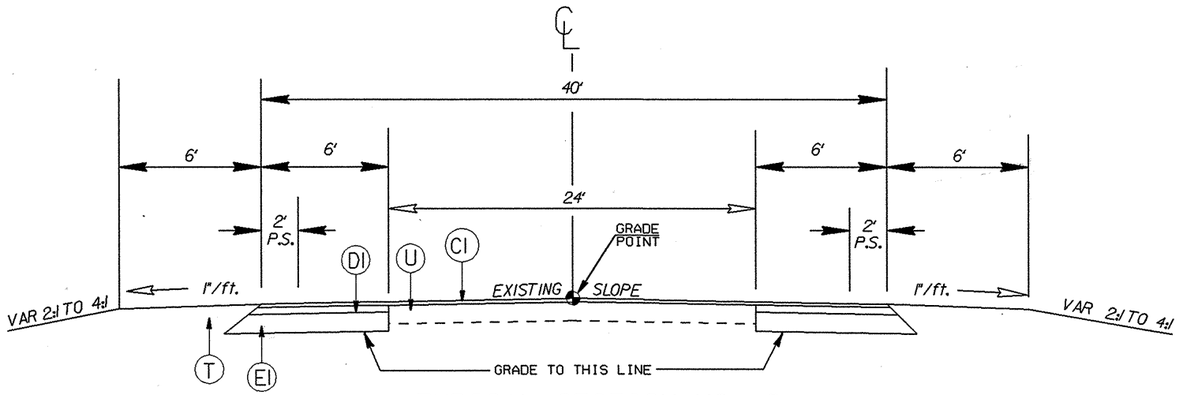
1. The Contractor shall not work on both sides of the road simultaneously within the same area.
2. Ingress and egress shall be maintained to all businesses and dwellings on the project.
3. At the end of each workday, the Contractor shall be required to backfill any area adjacent to existing travelway that has been graded but no base material placed.
4. A minimum of two-way, two-lane traffic (plus all existing left and right turn lanes) shall be maintained during periods of construction inactivity.
5. The Contractor shall not be allowed to stop traffic for more than 5 minutes at a time in any one direction.
6. During periods of construction inactivity, the difference in elevation between lanes shall not exceed 1-1/2 inch.
7. Access to police and fire station, fire hydrants, and hospitals shall be maintained at all times.
8. During periods of construction inactivity, place cones/drums 3' from existing edge of pavement (travelway) as directed by the Engineer.
9. Channelizing devices in work areas shall be spaced not greater than 100' on center in tangent areas, 45' on center in tapers, and 10' on center in radii, and shall be set 3' off the edge of travelway, unless otherwise indicated on plans.
10. Contractor to install Erosion Control devices as directed by the Engineer.

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.



TYPICAL SECTION NO. 1

FROM PAVEMENT JOINT AT US 401 INTERSECTION TO STA.15+00 +/-
FROM STA.49+50 +/- TO PAVEMENT JOINT AT SCL ANGIER
PAVEMENT MARKINGS SHALL BE PLACED TO REFLECT 12' LANES WITH A 2' PAVED SHOULDER



TYPICAL SECTION NO. 2

FROM STA.15+00+/- TO STA.49+50+/-
PAVEMENT MARKINGS SHALL BE PLACED TO REFLECT 12' LANES WITH 2' PAVED SHOULDER

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/21/00

COMPUTED BY: CLH DATE: 4/1/06
CHECKED BY: DJU DATE: 4/1/06

PROJECT REFERENCE NO.	SHEET NO.
37983	3

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48" & UNDER)

STATION	LOCATION (LT,RT, OR CL)	STRUCTURE NO. FROM	STRUCTURE NO. TO	TOP ELEVATION	INVERT ELEVATION	INVERT ELEVATION	SLOPE CRITICAL	CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE)							
SIZE								12"	15"	18"	24"	30"	36"	42"	48"
THICKNESS OR GAUGE															
17+30 -L-	LT														
29+00 -L-	LT														
30+80 -L-	RT														
30+90 -L-	LT														
32+00 -L-	RT														
33+00 -L-	RT														
34+55 -L-	RT														
38+22 -L-	RT/LT										68				
39+20 -L-	LT														
42+60 -L-	LT														
42+80 -L-	RT														
45+65 -L-	RT														
46+41 -L-	RT														
48+00 -L-	RT														
51+25 -L-	RT/LT												76		
51+75 -L-	LT														
52+60 -L-	LT														
TOTAL											68		76		

STATION	BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHRWISE)													CLASS III R.C. PIPE OR C.S. PIPE, TYPE IR ALUMINIZED OR HDPE PIPE, TYPE S OR D						
SIZE	12"	15"	18"	24"		30"		36"		42"		48"		12"	15"	18"	24"	30"	36"	42"
THICKNESS OR GAUGE	.064	.064	.064	.064		.079		.079		.109		.109								
17+30 -L-																				
29+00 -L-															28					
30+80 -L-															24					
30+90 -L-															24					
32+00 -L-																				
33+00 -L-																				
34+55 -L-															32					
38+22 -L-																				
39+20 -L-															28					
42+60 -L-															20					
42+80 -L-															24					
45+65 -L-															24					
46+41 -L-															24					
48+00 -L-															24					
51+25 -L-																				
51+75 -L-															20					
52+60 -L-															24					
TOTAL															296					

STATION	15" SIDE DRAIN PIPE	18" SIDE DRAIN PIPE	24" SIDE DRAIN PIPE	ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P.	C.S.P.	QUANTITIES FOR DRAINAGE STRUCTURES PER EACH (0' THRU 5.0')	* TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. "A" + (1.3 X COL."B") LIN. *FT. A 5.0' THRU 10.0'	B 10.0' AND ABOVE	D.I. STD. 840.14 OR STD. 840.15	D.I. FRAME & GRATE STD. 840.16	M.D.I. TYPE "A" STD. 840.17 OR 840.26	M.D.I. TYPE "B" STD. 840.18 OR 840.27	M.D.I. TYPE "D" STD. 840.19 OR 840.28	M.D.I. FRAME WITH GRATE STD. 840.22	M.D.I. FRAME WITH TWO GRATES STD. 840.22	M.D.I. (N.S.) FRAME WITH GRATE STD. 840.24	M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24	T. B. J.B. STD. 840.34	MANHOLE FRAME & COVER STD. 840.54						CORR. STEEL ELBOWS NO. & SIZE	CONC. COLLARS CL "B" C.Y. STD 840.72	CONC. & BRICK PIPE PLUG, C.Y. STD. 840.71	PIPE REMOVAL LIN.FT.	REMARKS
17+30 -L-																												52	
29+00 -L-																												24	
30+80 -L-																												20	
30+90 -L-																												20	
32+00 -L-																												20	
33+00 -L-																												20	
34+55 -L-																												20	
38+22 -L-																													
39+20 -L-																													
42+60 -L-																												20	
42+80 -L-																												20	
45+65 -L-																												20	
46+41 -L-																													
48+00 -L-																													
51+25 -L-									1	1								1	1										
51+75 -L-																												20	
52+60 -L-																												20	
TOTAL						2			1	1								1	1									276	

ABBREVIATIONS

C.B.	CATCH BASIN
N.D.I.	NARROW DROP INLET
D.I.	DROP INLET
M.D.I.	MEDIAN DROP INLET
M.D.I. (N.S.)	MEDIAN DROP INLET (NARROW SLOT)
J.B.	JUNCTION BOX
M.H.	MANHOLE
T.B.D.I.	TRAFFIC BEARING DROP INLET
T.B.J.B.	TRAFFIC BEARING JUCTION BOX

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/4/99

COMPUTED BY: CLH DATE: 12-23-04
CHECKED BY: DJU DATE:

PROJECT REFERENCE NO.	SHEET NO.
37983	3A

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SUMMARY OF EARTHWORK

IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT	EMBT + %	BORROW	WASTE
RT OF -L-					
STA.10+00 TO 54+00 -L-	771		1094	323	-0-
SUBTOTAL	771		1094	323	-0-
LT OF -L-					
STA.10+00 TO 54+00 -L-	1003		1116	13	-0-
SUBTOTAL	1003		1116	13	-0-
GRANDTOTAL	1774		2210	336	-0-
LOSS DUE TO C & G	-250			250	
SUBTOTAL	1524		2210	586	-0-
WASTE TO REPLACE BORROW				-0-	-0-
5% TO REPLACE TOPSOIL ON BORROW PITT				17	
PROJECT TOTAL	1524		2210	603	-0-
SAY	1550			650	-0-
EST.UNDERCUT		250			

PROJECT NO.	SHEET NO.	TOTAL NO.
37983	3-B	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH MI	WIDTH FT	CONSTRUCT. SURVEY LS	CLEARING & GRUBBING LS	SUPPL. CLEARING & GRUBBING AC	UNCLASS. EXCAV. CY	BORROW CY	UNDERCUT EXCAV. CY	FINE GRADING LS	SEAL EXIST. PAVEMENT CRACKS LB	INCIDENTAL STONE BASE TONS	SHOULDER RECON. SMI	BASE COURSE, B25.0B TONS	INTERMED COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	PG 64-22 PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	INCINDENT. MILLING SY	MOBILIZA-TION LS
37983	Harnett	1	NC 210	FROM LILLINGTON TO ANGIER	1 & 2	6.88	24.5	1	1	1	1,550	650	250	1	14,500	200	11.72	6,800	850	11,265	1,008	1,000	3,800	1
TOTAL FOR PROJ NO. 37983						**6.88**		**1**	**1**	**1**	**1,550**	**650**	**250**	**1**	**14,500**	**200**	**11.72**	**6,800**	**850**	**11,265**	**1,008**	**1,000**	**3,800**	**1**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	24" RC PIPE CULVERT CLASS III LF	36" RC PIPE CULVERT CLASS III LF	PIPE REMOVAL LF	FOUND. CONDITION MATERIAL TONS	MASONRY DRAINAGE STRUCTURES EA	FRAME WITH GRATE STD. 840.16 EA	MANHOLE FRAME & COVER STD. 840.54 EA	ASPHALT PLANT MIX, PAVEMENT REPAIR TONS	6" DRIVEWAYS SY	MANHOLES EA	METER OR VALVE BOX EA	SILT FENCE LF	STONE FOR EROSION CONTROL TONS	SEDIMENT CONTROL STONE TONS	1/4" HARDWARE CLOTH LF	SEED & MULCHING AC	SEED FOR REPAIR SEEDING LBS	FERTILIZER FOR REPAIR SEEDING TONS
37983	Harnett	1	NC 210	FROM LILLINGTON TO ANGIER	1 & 2	68	76	276	47	2	1	1	50	309	3	5	400	40	40	30	18.48	25.00	0.13
TOTAL FOR PROJ NO. 37983						**68**	**76**	**276**	**47**	**2**	**1**	**1**	**50**	**309**	**3**	**5**	**400**	**40**	**40**	**30**	**18.48**	**25.00**	**0.13**

PIPE ALTERNATES

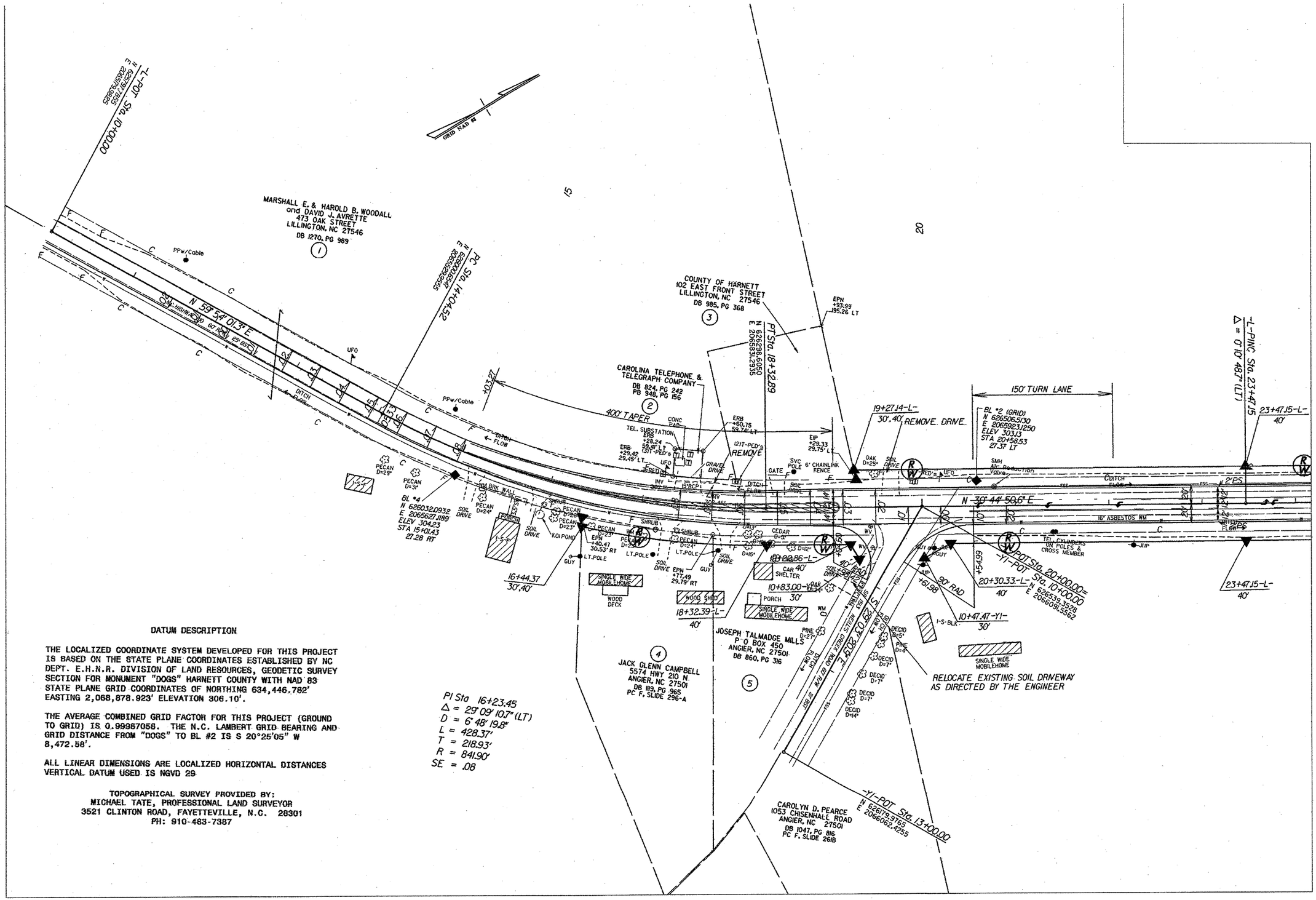
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	ALTERNATE 1: 15" RC PIPE CULVERTS, CLASS III FT	ALTERNATE 2: 15" HDPE PIPE CULVERTS FT	ALTERNATE 3: 15" ALUMINIZED CORRUGATED STEEL PIPE CULVERTS, 0.064" THICK FT
37983	Harnett	1	NC 210	FROM LILLINGTON TO ANGIER	1 & 2	296	296	296
TOTAL FOR PROJ NO. 37983						**296**	**296**	**296**

PROJECT NO.	SHEET NO.	TOTAL NO.
37983	3-C	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4685000000-E 4" X 90 M WHITE THERMO LF	4686000000-E 4" X 120 M WHITE THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4697000000-E 8" X 120 M YELLOW THERMO LF	4710000000-E 24" X 120 M WHITE THERMO LF	4721000000-E THERMO MSG SCHOOL 120 M EA	4725000000-E THERMO LT ARROW 90 M EA	4725000000-E THERMO RT ARROW 90 M EA	4725000000-E THERMO STR & RT ARROW 90 M EA	4725000000-E THERMO STR ARROW 90 M EA	4900000000-N YELLOW & YELLOW MARKERS EA	4900000000-N CYAN & RED MARKERS EA
37983	Harnett	1	NC 210	FROM LILLINGTON TO ANGIER	72,680	1,263	58,533	550	200	12	29	3	3	2	720	50
TOTAL FOR PROJ NO. 37983					**72,680**	**1,263**	**58,533**	**550**	**200**	**12**	**29**	**3**	**3**	**2**	**720**	**50**
						59,796					**37**				**770**	

PROJECT REFERENCE NO.	SHEET NO.
37983	4



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NC DEPT. E.H.N.R. DIVISION OF LAND RESOURCES, GEODETIC SURVEY SECTION FOR MONUMENT "DOGS" HARNETT COUNTY WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING 634,446.782' EASTING 2,068,878.923' ELEVATION 306.10'.

THE AVERAGE COMBINED GRID FACTOR FOR THIS PROJECT (GROUND TO GRID) IS 0.99987058. THE N.C. LAMBERT GRID BEARING AND GRID DISTANCE FROM "DOGS" TO BL #2 IS S 20°25'05" W 8,472.58'.

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NGVD 29

TOPOGRAPHICAL SURVEY PROVIDED BY:
MICHAEL TATE, PROFESSIONAL LAND SURVEYOR
3521 CLINTON ROAD, FAYETTEVILLE, N.C. 28301
PH: 910-483-7387

PROJECT REFERENCE NO.	SHEET NO.
37983	5

25

30

35

GRID ROAD 68

RANDOLPH COLON COLLINS
510 MCIVER STREET
ANGIER, NC 27501
DB 900, PG 251
DB 441, PG 065
(6)

RANDOLPH C. COLLINS
N/F
C. R. COLLINS, ET UX
DB 461, PG 14
(9)

1-S-BRK

BROOKIE H. COTTON
105 N. HARNETT SCHOOL ROAD
ANGIER, NC 27501
DB 1332, PG 914
PB 98, PG 338
(10)

ROBERT P. & SU LOU O. WELLONS
P O BOX 730
DUNN, NC 28334
DB 1344, PG 312
(14)

15

PC Sta. 36+02.10
N 627282.4258
E 2066132.4120

BL #5
N 627152.6769
E 2066304.3104
ELEV 296.37
STA 28+08.83
28.67' LT

N 627113.2340
E 2066349.7503

-L-POT Sta. 28+49.64=

-L-POT Sta. 10+00.00

-Y2-POT Sta. 13+00.00
N 627076.1940
E 2066633.6223

-Y3-POT Sta. 20+00.00
N 627505.8095
E 2065467.755

-Y3-POT Sta. 32+35.89=

N 30° 34' 01.9" E

S 77° 07' 38.3" E

S 47° 13' 58.7" E

100' TURN LANE

31+44.78-L-
40'

33+62.11-L-
40'

36+02.10-L-
40'

27+98.47-L-
40'

29+16.91-L-
40'

10+63.31-Y2-
30'

10+75.49-Y2-
30'

+63.06
70' RAD

+39.99

+22.31

+83.88
50' RAD

+26.76

+49.75
60' RAD

+165.70

+49.18

EPN
+85.52
21.33' RT

EX. RWM
+87.58
30.65' LT

EPN
+91.67
27.31' RT

EPN
+45.49
30.05' RT

EPN
+49.18
29.15' RT

SR 1811 NATHAN MATTHEWS ROAD
60' R/W

SCHOOL ROAD 60' R/W

HARNETT SCHOOL ROAD SLOW

SCHOOL SIGN

DITCH FLOW →

REMOVE

15" RCP

16" ASBESTOS WM

2"PS

PAINTED SCHOOL ZONE

UFO

TRANSFORMER

T-PED

JUP

GUY

SOIL DRIVE

CONC DRIVE

1 1/2-S-F

2-S-F

(12) FOUAD & LINDA R BAHAI
5850 NC 210 N
ANGIER, NC 27501
DB 1278, PG 227
PC F, SLIDE 278C

(13) DORIS H. TERRILL
PC D, SLIDE 88B

(15) PHILLIP C. & GAYLE SMITH
P O BOX 1148
ANGIER, NC 27501
DB 1274, PG 976
PC F, SLIDE 95D

(16) RONALD G. & TAMMIR. STEPHENSON
40 PINE CROFT ROAD
ANGIER, NC 27501
DB 1186, PG 127
PC F, SLIDE 382C

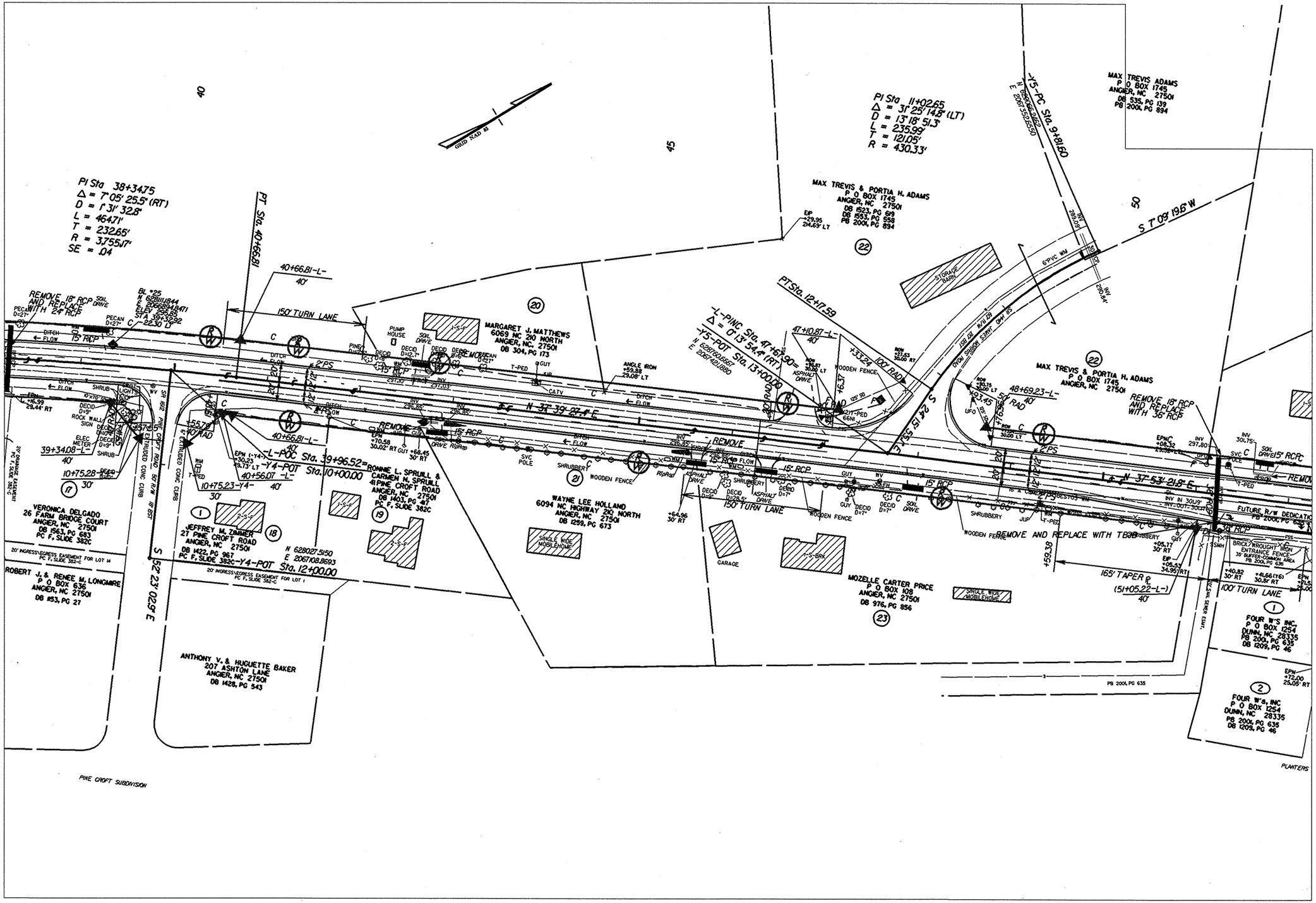
(7) MARSHALL GLENN GILBERT
28 NATHAN MATTHEWS ROAD
ANGIER, NC 27501
DB 1420, PG 983
PB 2000, PG 333

GRADY MARSHALL GILBERT
28 NATHAN MATTHEWS ROAD
ANGIER, NC 27501
DB 441, PG [illegible]

(11) ROBERT D. & W. A. GRAVITT
P O BOX 515
ANGIER, NC 27501
DB 1103, PG 594
PC F, SLIDE 278

30' DRAINAGE EASEMENT

PROJECT REFERENCE NO.	SHEET NO.
37983	6



PROJECT REFERENCE NO.	SHEET NO.
37983	7