

**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

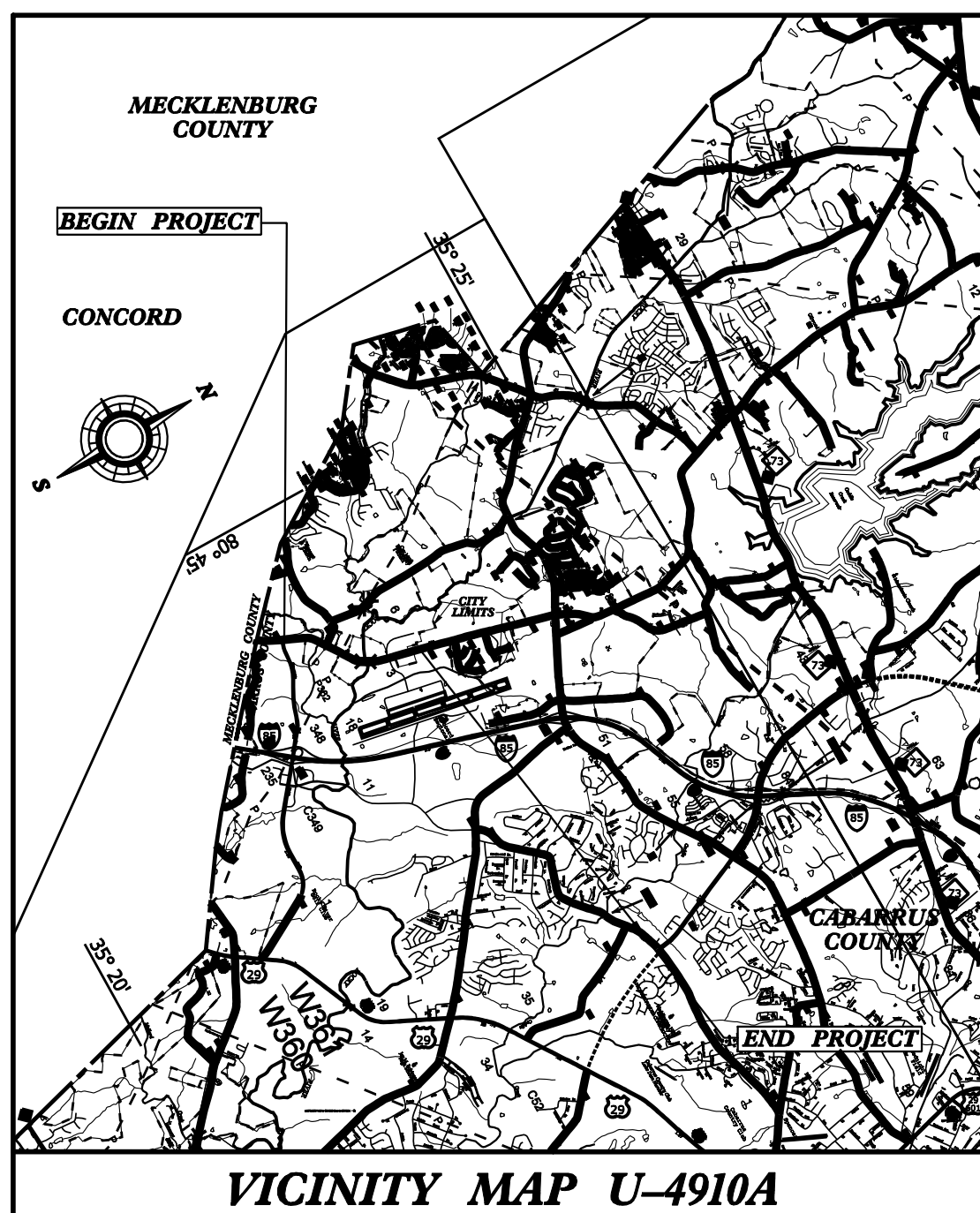
**This file or an individual page
shall not be considered a certified document.**

TIP PROJECT: U-4910A

CONTRACT NO:

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4910A	U0-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
40373.1.F3	STP-1445(4)	PE	
40373.2.F2	STP-1445(4)	R / W & UTIL	
40373.3.F2	STP-1445(4)	CONST	

NOTE:
 ALL UTILITY WORK SHOWN ON THESE SHEETS IS DONE BY OTHERS.
 NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THESE SHEETS.

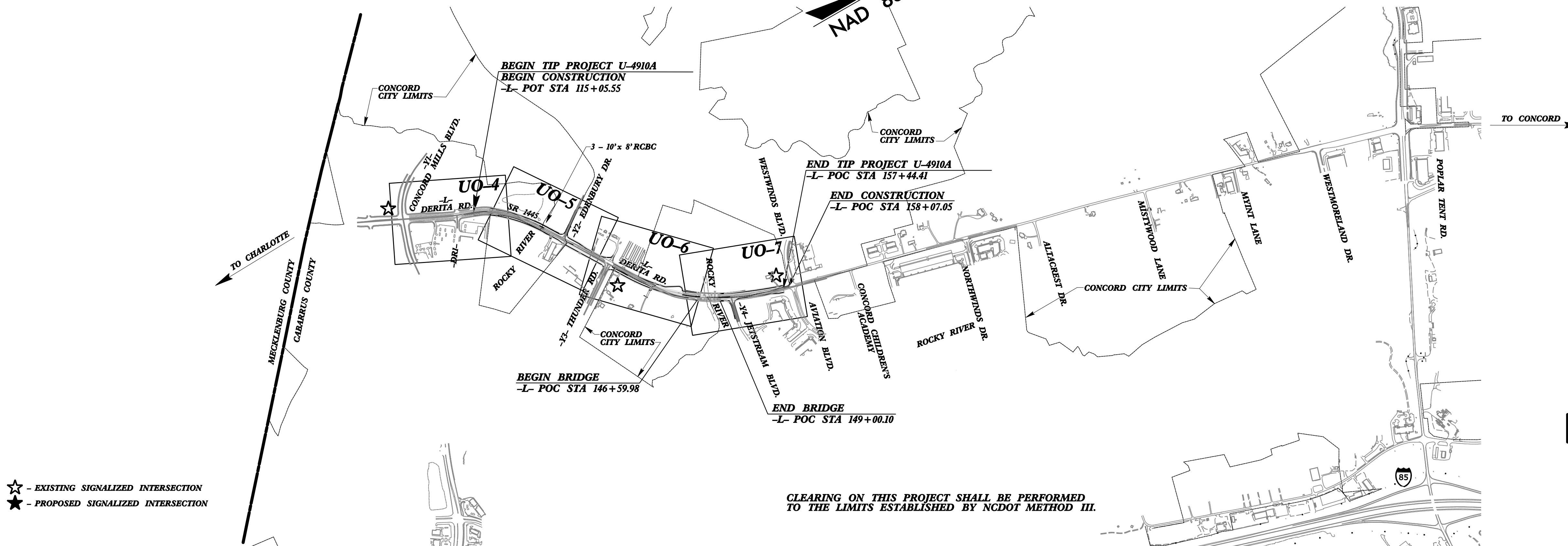
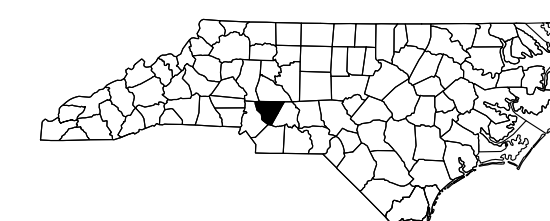


STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

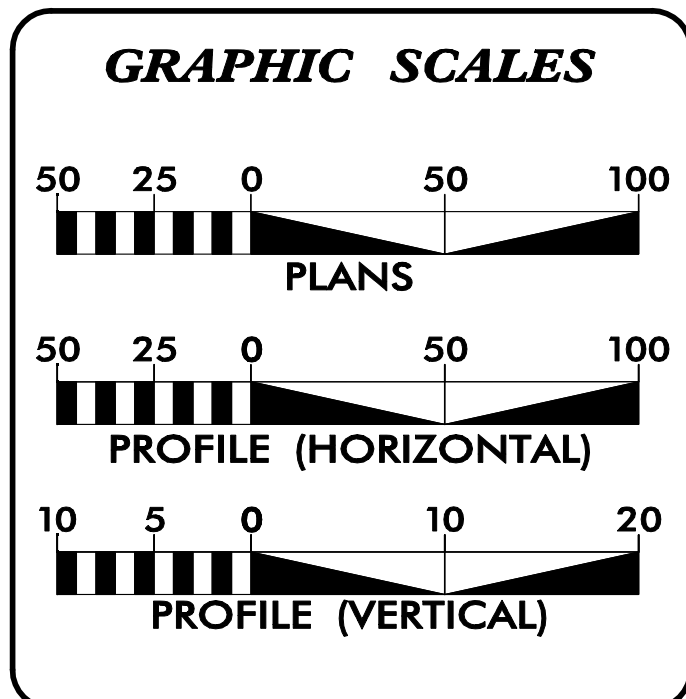
CABARRUS COUNTY

**LOCATION: NORTH OF SR 2894 CONCORD MILLS BOULEVARD
 TO AVIATION BOULEVARD.**

TYPE OF WORK: UTILITIES BY OTHERS



SUBMITTAL: 100% UBO PLANS
DATE: JANUARY 17, 2017



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UO-1	TITLE SHEET
UO-2	LEGEND OF SYMBOLS SHEET
UO-3	OMITTED
UO-4 to UO-7	UTILITIES BY OTHERS PLANS

- UTILITIES BY OTHERS OWNERS ON PROJECT**
- (1) POWER - CITY OF CONCORD, DUKE ENERGY
 - (2) TELECOMMUNICATIONS - WINDSTREAM, AT&T & DUKENET
 - (3) NATURAL GAS - PSNC (DISTRIBUTION)
 - (4) NATURAL GAS - PNG (TRANSMISSION)
 - (5) CATV - TWC

Prepared in the Office of:

AECOM

NC FIRM LICENSE No: F-0342
 701 Corporate Center Drive, Suite 475
 Raleigh, NC 27607
 (919) 854-6200 - (919) 854-6259(FAX)

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
 NOV. 25, 2014

LETTING DATE:
 FEB. 21, 2017

KEVIN J. VAN METRE, P.E.
 PROJECT ENGINEER

JOHN D. POETZSCH, P.E.
 PROJECT UTILITY DESIGN ENGINEER

DIVISION OF HIGHWAYS

STATE HIGHWAY DESIGN ENGINEER

USER: sw/m/song
 DATE: 1/17/2017
 TIME: 2:27:56 PM
 DSN: U4910_U0_1st2.dgn

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES PLAN SHEET SYMBOLS

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown)	
11¼ Degree Bend	
22½ Degree Bend	
45 Degree Bend	
90 Degree Bend	
Plug	
Tee	
Cross	
Reducer	
Gate Valve	
Butterfly Valve	
Tapping Valve	
Line Stop	
Line Stop with Bypass	
Blow Off	
Fire Hydrant	
Relocate Fire Hydrant	
Remove Fire Hydrant	REM FH
Water Meter	
Relocate Water Meter	
Remove Water Meter	REM WM
Water Pump Station	
RPZ Backflow Preventer	
DCV Backflow Preventer	
Relocate RPZ Backflow Preventer	
Relocate DCV Backflow Preventer	

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown)	
Force Main Sewer Line (Sized as Shown)	
Manhole (Sized per Note)	
Sewer Pump Station	

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole	
Telephone Pole	
Joint Use Pole	
Telephone Pedestal	
Utility Line by Others (Type as Shown)	
Trenchless Installation	
Encasement by Open Cut	
Encasement	

Thrust Block	
Air Release Valve	
Utility Vault	
Concrete Pier	
Steel Pier	
Plan Note	
Pay Item Note	

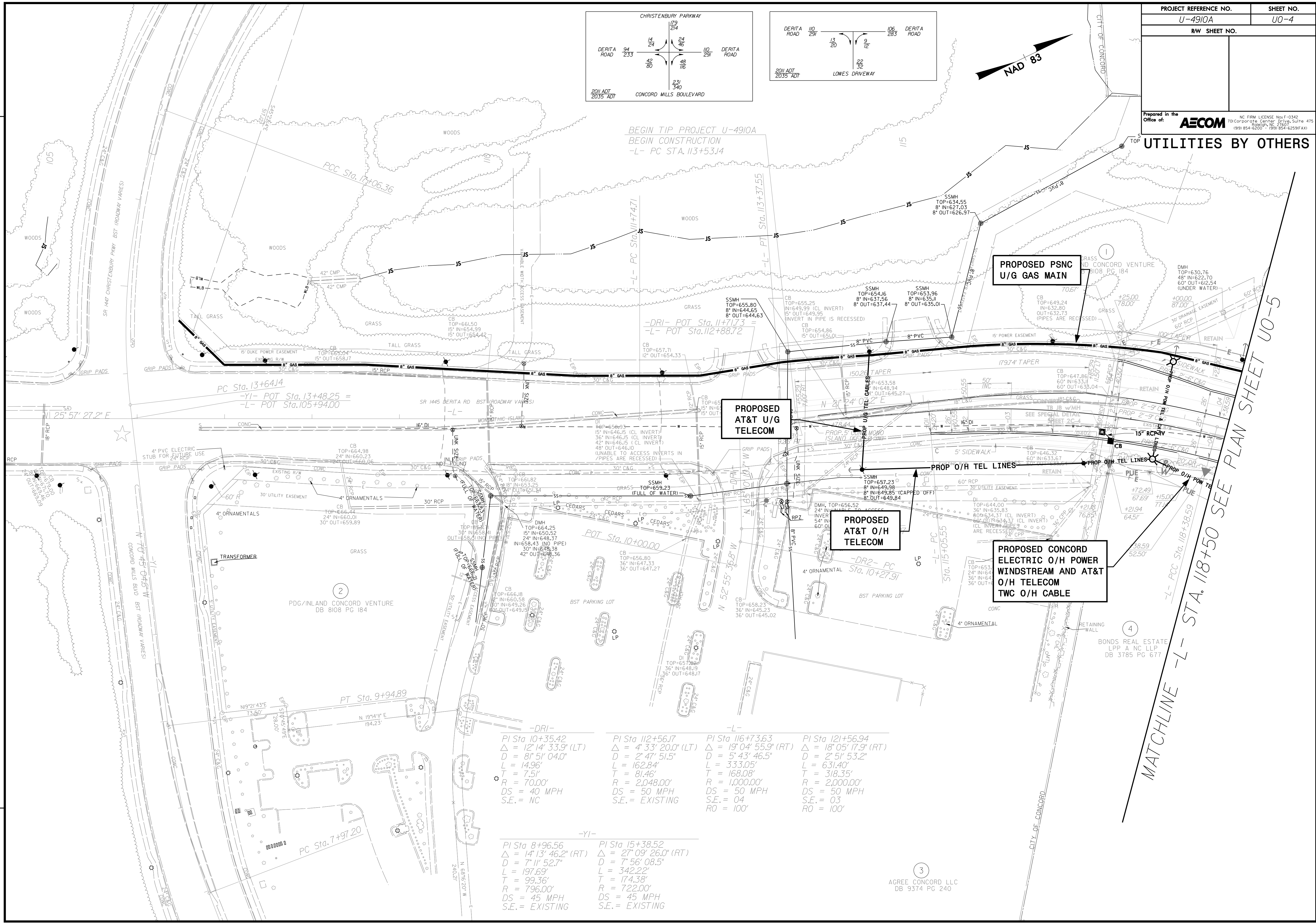
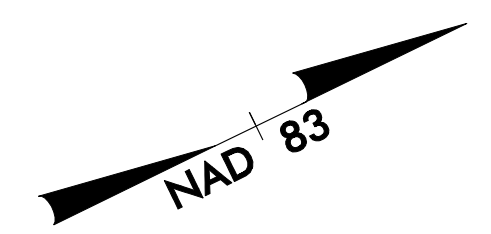
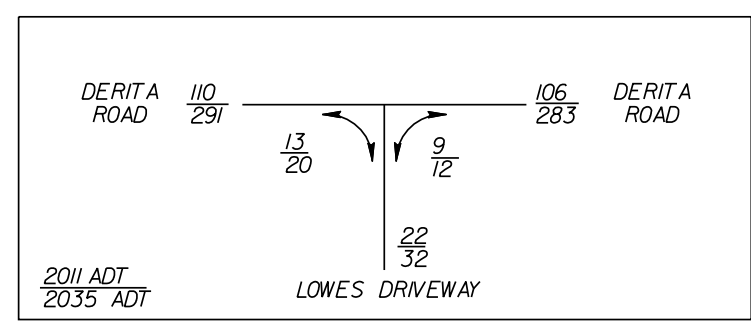
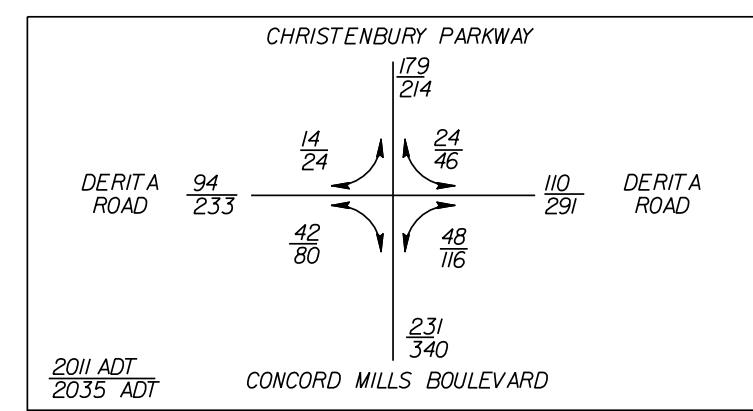
EXISTING UTILITIES SYMBOLS

Power Pole		*Underground Power Line	
Telephone Pole		*Underground Telephone Cable	
Joint Use Pole		*Underground Telephone Conduit	
Utility Pole		*Underground Fiber Optics Telephone Cable	
Utility Pole with Base		*Underground TV Cable	
H-Frame Pole		*Underground Fiber Optics TV Cable	
Power Transmission Line Tower		*Underground Gas Pipeline	
Water Manhole		Aboveground Gas Pipeline	
Power Manhole		*Underground Water Line	
Telephone Manhole		Aboveground Water Line	
Sanitary Sewer Manhole		*Underground Gravity Sanitary Sewer Line	
Hand Hole for Cable		Aboveground Gravity Sanitary Sewer Line	
Power Transformer		*Underground SS Forced Main Line	
Telephone Pedestal		Underground Unknown Utility Line	
CATV Pedestal		SUE Test Hole	
Gas Valve		Water Meter	
Gas Meter		Water Valve	
Located Miscellaneous Utility Object		Fire Hydrant	
Abandoned According to Utility Records	AATUR	Sanitary Sewer Cleanout	
End of Information	E.O.I.		

*For Existing Utilities
 Utility Line Drawn from Record (Type as Shown) ?UTL
 Designated Utility Line (Type as Shown) ?UTL

5/14/99

UTILITIES BY OTHERS

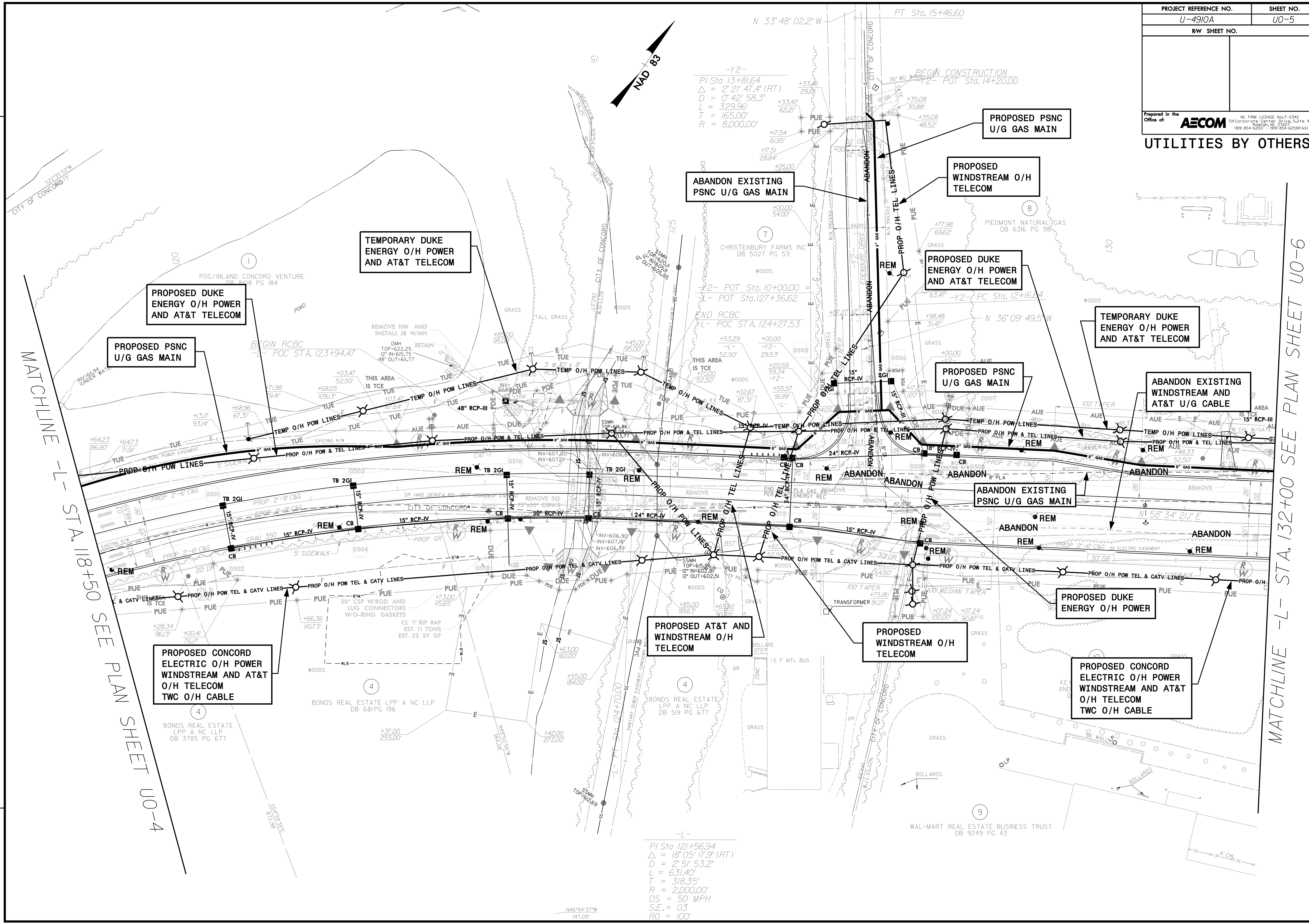


<p>-DRI-</p> <p>PI Sta 10+35.42 $\Delta = 12' 14" 33.9" (LT)$ $D = 81' 51" 04.0"$ $L = 14.96'$ $T = 7.51'$ $R = 70.00'$ $DS = 40 MPH$ $S.E. = NC$</p>	<p>-L-</p> <p>PI Sta 112+56.17 $\Delta = 4' 33" 20.0" (LT)$ $D = 2' 47' 51.5"$ $L = 162.84'$ $T = 81.46'$ $R = 2,048.00'$ $DS = 50 MPH$ $S.E. = EXISTING$</p>	<p>-L-</p> <p>PI Sta 116+73.63 $\Delta = 19' 04" 55.9" (RT)$ $D = 5' 43' 46.5"$ $L = 333.05'$ $T = 168.08'$ $R = 1,000.00'$ $DS = 50 MPH$ $S.E. = 04$ $RO = 100'$</p>	<p>-L-</p> <p>PI Sta 121+56.94 $\Delta = 18' 05" 17.9" (RT)$ $D = 2' 51' 53.2"$ $L = 631.40'$ $T = 318.35'$ $R = 2,000.00'$ $DS = 50 MPH$ $S.E. = 03$ $RO = 100'$</p>
---	---	---	---

<p>-YI-</p> <p>PI Sta 8+96.56 $\Delta = 14' 13" 46.2" (RT)$ $D = 7' 11" 52.7"$ $L = 197.69'$ $T = 99.36'$ $R = 796.00'$ $DS = 45 MPH$ $S.E. = EXISTING$</p>	<p>-YI-</p> <p>PI Sta 15+38.52 $\Delta = 27' 09" 26.0" (RT)$ $D = 7' 56' 08.5"$ $L = 342.22'$ $T = 174.38'$ $R = 722.00'$ $DS = 45 MPH$ $S.E. = EXISTING$</p>
---	---

Revisions:

MATCHLINE -L- STA. 118+150 SEE PLAN SHEET U0-5



REVISIONS

Revisions:

MATCHLINE -L- STA. 118+50 SEE PLAN SHEET U0-4

MATCHLINE -L- STA. 132+00 SEE PLAN SHEET U0-6

-Y2-
PI Sta. 13+81.64
Δ = 2' 21" 47.4" (RT)
D = 0' 42" 58.3"
L = 329.96'
T = 165.00'
R = 8,000.00'

-Y2- POT Sta. 10+00.00 =
L- POT Sta. 127+36.62
END RCBC
L- POC STA. 124+27.53

-L-
PI Sta. 121+56.94
Δ = 18' 05" 17.9" (RT)
D = 2' 51" 53.2"
L = 631.40'
T = 318.35'
R = 2,000.00'
DS = 50 MPH
S.E. = 03
RO = 100'

**PROPOSED CONCORD
ELECTRIC O/H POWER
WINDSTREAM AND AT&T
O/H TELECOM
TWC O/H CABLE**

**PROPOSED DUKE
ENERGY O/H POWER
AND AT&T TELECOM**

**PROPOSED PSNC
U/G GAS MAIN**

**TEMPORARY DUKE
ENERGY O/H POWER
AND AT&T TELECOM**

**ABANDON EXISTING
PSNC U/G GAS MAIN**

**PROPOSED
WINDSTREAM O/H
TELECOM**

**PROPOSED PSNC
U/G GAS MAIN**

**PROPOSED DUKE
ENERGY O/H POWER
AND AT&T TELECOM**

**TEMPORARY DUKE
ENERGY O/H POWER
AND AT&T TELECOM**

**PROPOSED PSNC
U/G GAS MAIN**

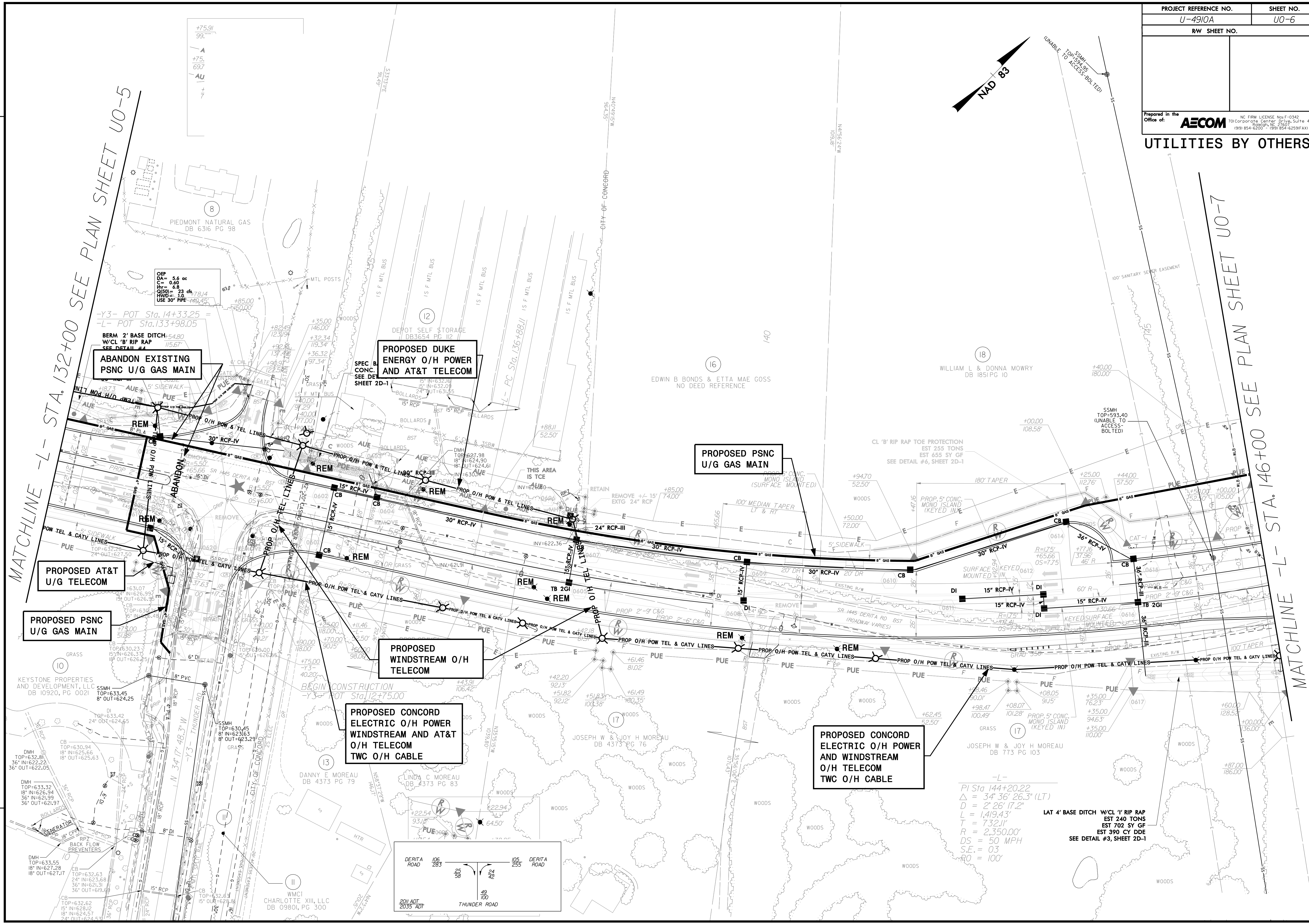
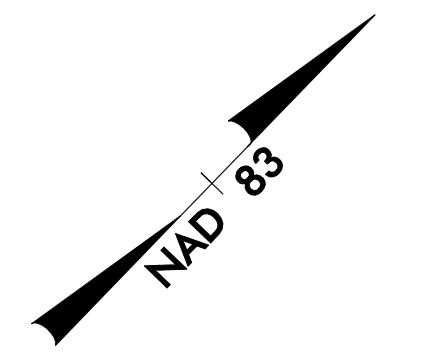
**ABANDON EXISTING
WINDSTREAM AND
AT&T U/G CABLE**

**ABANDON EXISTING
PSNC U/G GAS MAIN**

**PROPOSED DUKE
ENERGY O/H POWER**

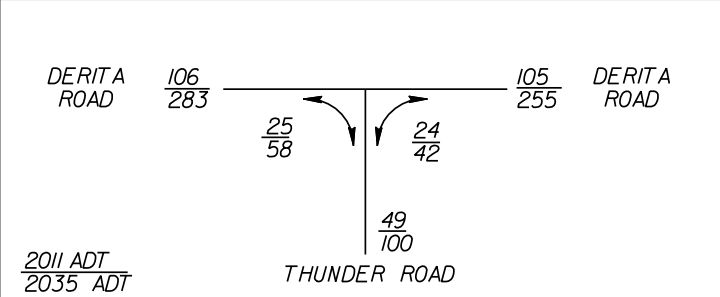
**PROPOSED
WINDSTREAM O/H
TELECOM**

**PROPOSED CONCORD
ELECTRIC O/H POWER
WINDSTREAM AND AT&T
O/H TELECOM
TWC O/H CABLE**



REVISIONS

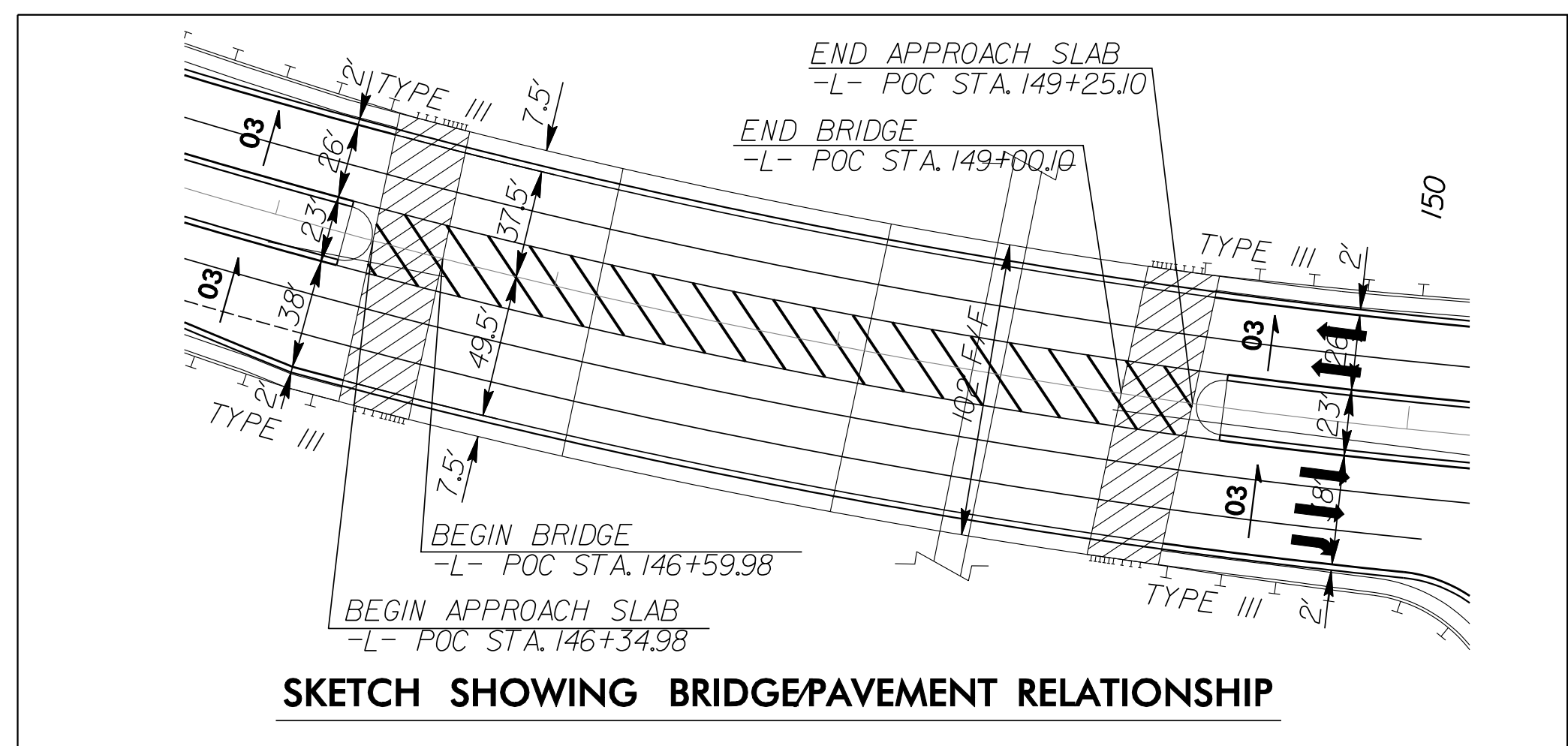
Revisions:



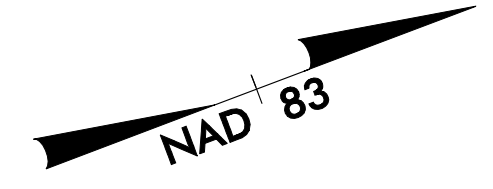
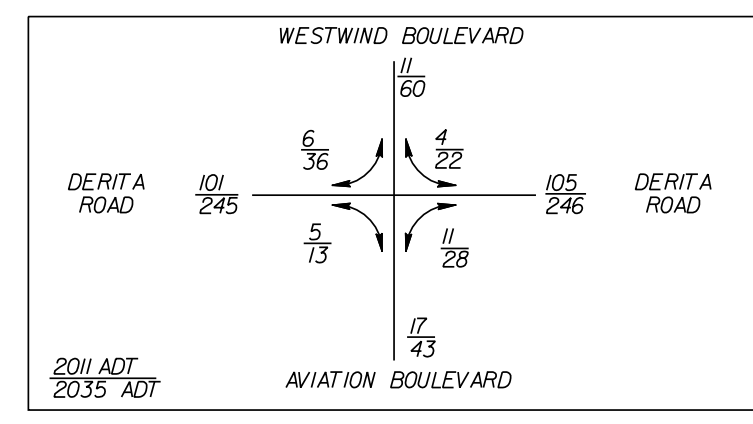
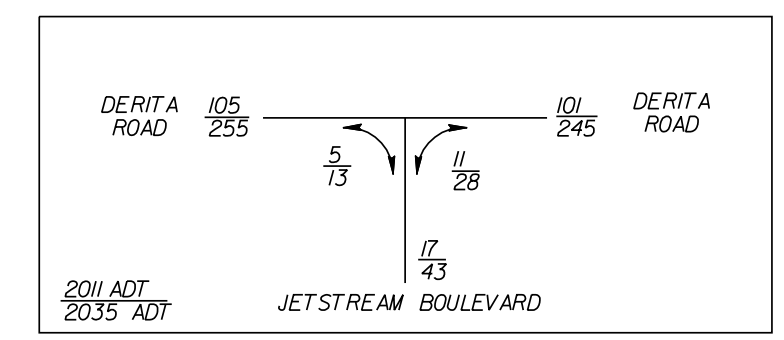
-L-
 PI Sta 144+20.22
 $\Delta = 34' 36" 26.3" (LT)$
 $D = 2' 26" 17.2"$
 $L = 149.43'$
 $T = 732.11'$
 $R = 2,350.00'$
 $DS = 50 MPH$
 $S.E. = 03$
 $RO = 100'$

LAT 4' BASE DITCH W/CL 1' RIP RAP
 EST 240 TONS
 EST 702 SY GF
 EST 390 CY DDE
 SEE DETAIL #3, SHEET 2D-1

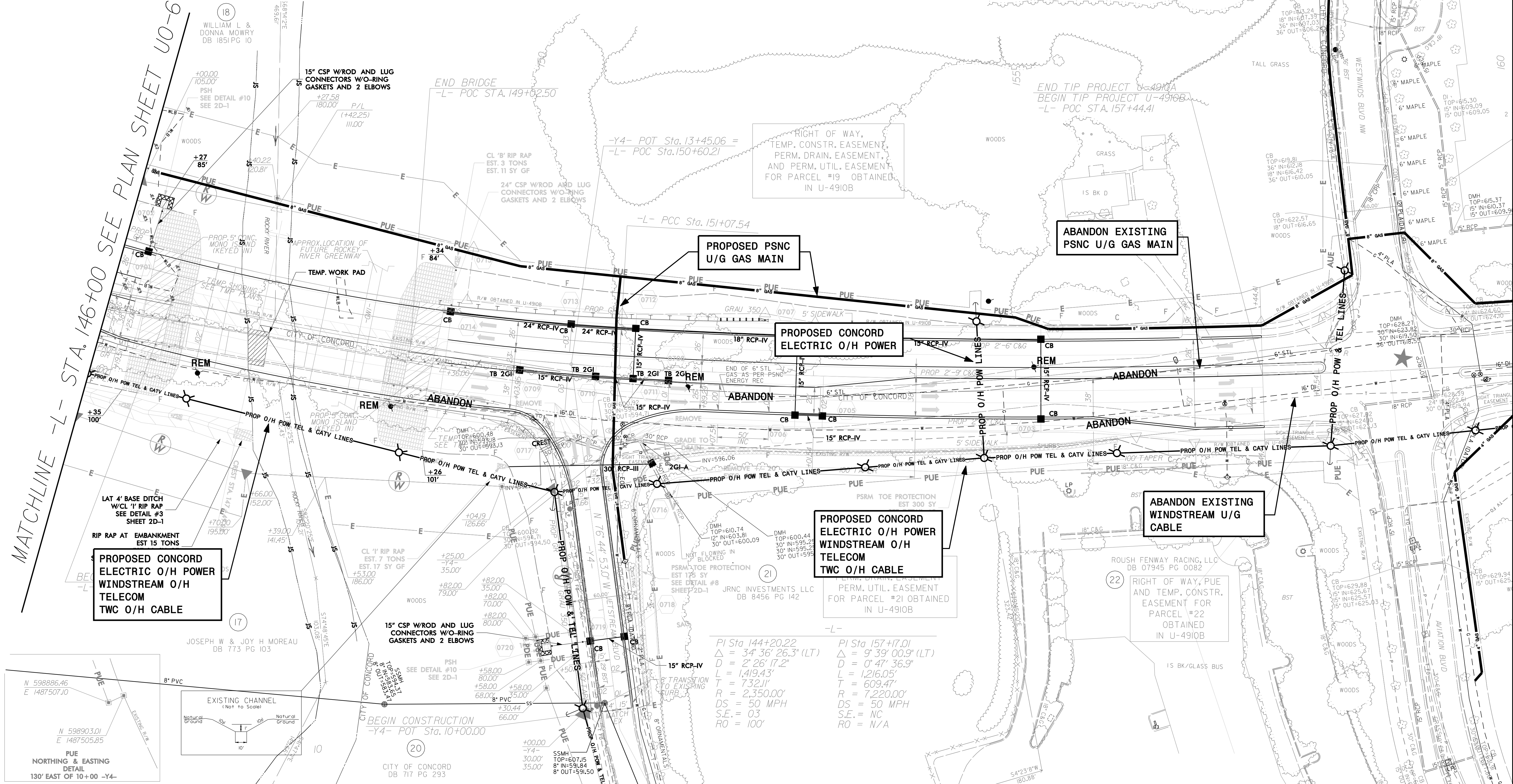
UTILITIES BY OTHERS



SKETCH SHOWING BRIDGE/PAVEMENT RELATIONSHIP

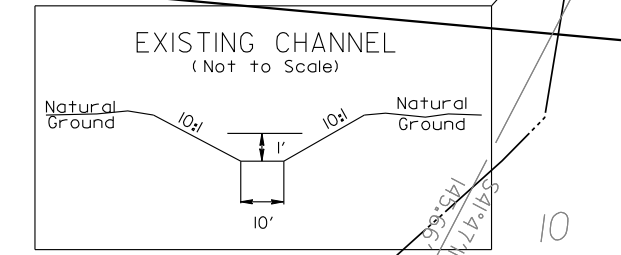
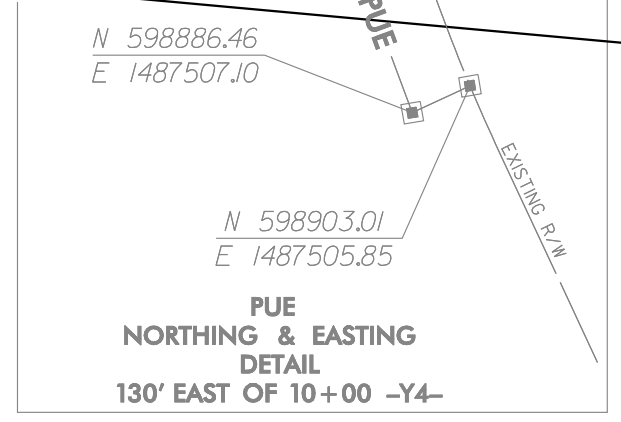


(19) JEFFERY C RILEY
 DB 9319 PG 200
 BACK PROPERTY LINE INFORMATION
 (NOT SHOWN ON PLAN SHEET)
 PLOTTED FROM GIS INFORMATION



REVISIONS

Revisions:



PI Sta 144+20.22
 $\Delta = 34' 36" 26.3" (LT)$
 $D = 2' 26" 17.2"$
 $L = 1,419.43'$
 $T = 732.11'$
 $RS = 2,350.00'$
 $DS = 50 MPH$
 $S.E. = 03$
 $RO = 100'$

PI Sta 157+17.01
 $\Delta = 9' 39" 00.9" (LT)$
 $D = 0' 47" 36.9"$
 $L = 1,216.05'$
 $T = 609.47'$
 $R = 7,220.00'$
 $DS = 50 MPH$
 $S.E. = NC$
 $RO = N/A$