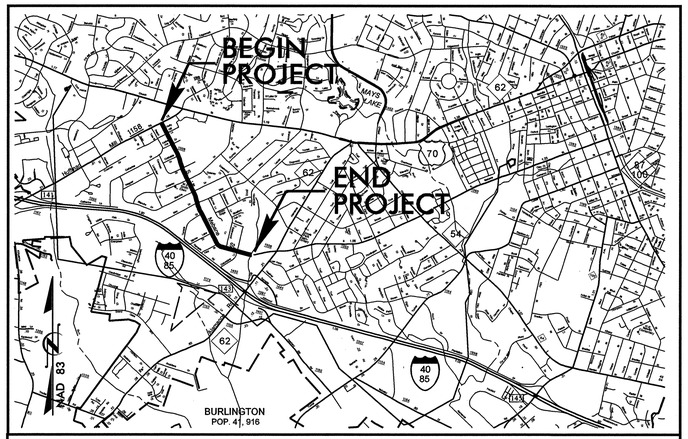
TIP PROJECT: U-3303A

See Sheet UC-2 For Index of Sheets



VICINITY MAP

T.I.P. NO.	SHEET NO.
U-3303A	UC-1

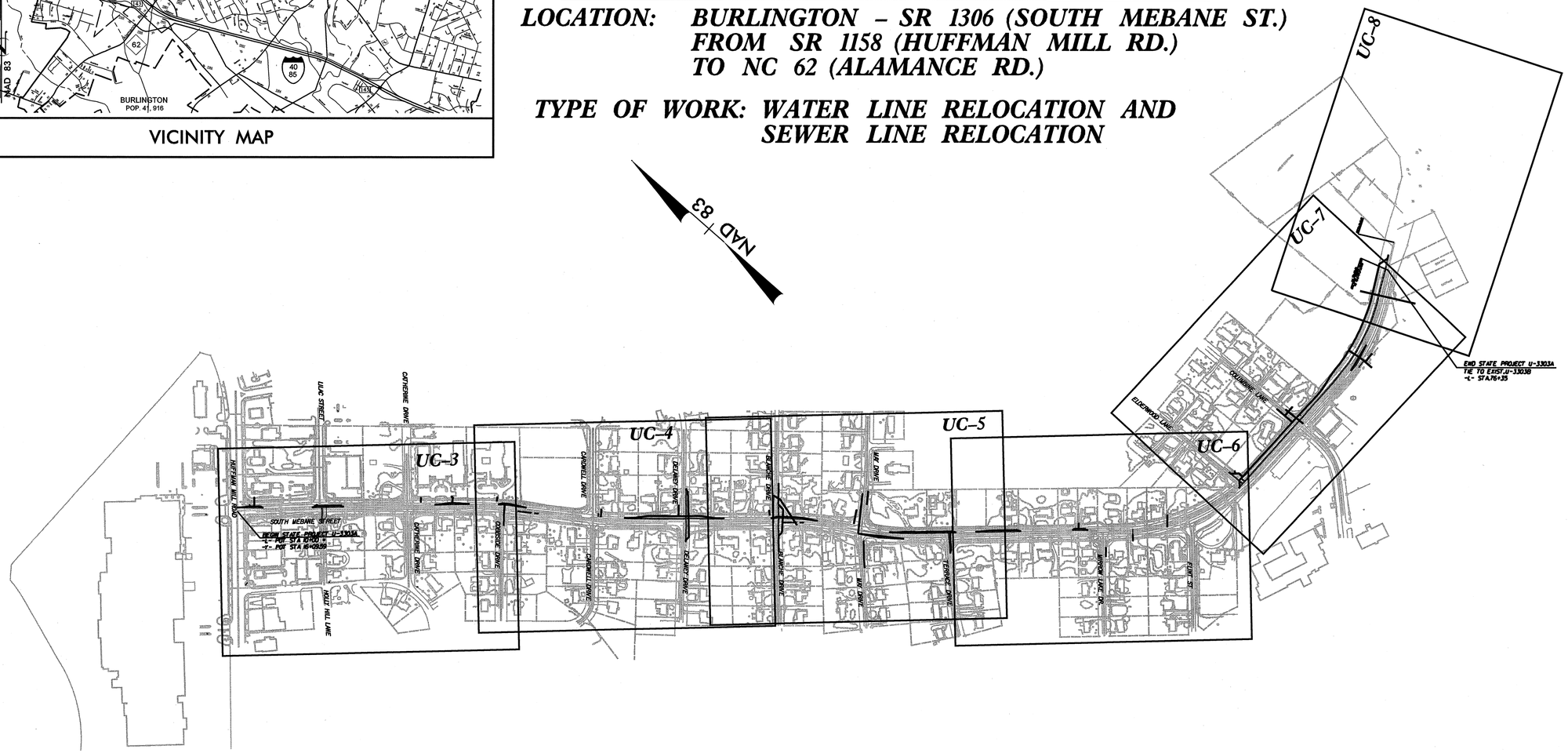
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITY CONSTRUCTION PLANS
ALAMANCE COUNTY

LOCATION: *BURLINGTON – SR 1306 (SOUTH MEBANE ST.) FROM SR 1158 (HUFFMAN MILL RD.) TO NC 62 (ALAMANCE RD.)*

TYPE OF WORK: *WATER LINE RELOCATION AND SEWER LINE RELOCATION*

NAD 83



GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

5 2.5 0 5 10
PROFILE (VERTICAL)

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
UC-1	TITLE SHEET
UC-2	GENERAL NOTES
UC-3 THRU UC-8	UTILITY CONSTRUCTION PLAN SHEETS
UC-9	PROFILE SHEET
UC-10 THRU UC-13	DETAILS SHEETS

WATER AND SEWER OWNERS ON PROJECT

(1) CITY OF BURLINGTON – WATER AND SEWER

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 030001 ENGINEER JERRY A. RIVENBARK 12/19/07

DIVISION OF HIGHWAYS
UTILITIES ENGINEERING SECTION

1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 250-4128
FAX (919) 250-4119

PREPARED IN THE OFFICE OF:
Kimley-Horn and Associates, Inc.
P.O. BOX 33068 - RALEIGH, NORTH CAROLINA 27636-3068
PHONE: (919) 677-2000 FAX: (919) 677-2050

7/2/99

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-2
R/W SHEET NO.	

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NORTH CAROLINA PROFESSIONAL SEAL 030001 ENGINEER JEREMY A. RIVENBARK 3/4/09

UTILITY CONSTRUCTION

INDEX TO SHEETS

SHEET NO.	DESCRIPTION
UC-1	COVER SHEET
UC-2	INDEX, PROJECT NOTES, AND LEGEND
UC-3	PLAN SHEET, STA. 10+00.00 TO STA. 23+00.00
UC-4	PLAN SHEET, STA. 23+00.00 TO STA. 36+75.00
UC-5	PLAN SHEET, STA. 36+75.00 TO STA. 46+50.00
UC-6	PLAN SHEET, STA. 46+50.00 TO STA. 60+00.00
UC-7	PLAN SHEET, STA. 60+00.00 TO STA. 75+00.00
UC-8	PLAN SHEET, STA. 75+00.00 TO STA. 76+35.00
UC-9	PROFILE SHEET
UC-10	STANDARD DETAILS
UC-11	STANDARD DETAILS
UC-12	STANDARD DETAILS
UC-13	STANDARD DETAILS

PROJECT NOTES:

1. ELEVATIONS SHOWN ARE IN FEET ABOVE MEAN SEA LEVEL.
2. TYPICAL DEPTH OF COVER FOR BURIED PIPELINE SHALL BE 4 ft UNLESS OTHERWISE SHOWN OR SPECIFIED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE CITY OF BURLINGTON FOR ANY ADDITIONAL INFORMATION ON EXISTING WATER AND SEWER UTILITIES.
4. LOCATIONS OF EXISTING SHOWN UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXACT LOCATION, ORIENTATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO EXCAVATION FOR THE PIPELINE.
5. COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON THE NCDOT LOCALIZED PLANE COORDINATE SYSTEM FOR THIS PROJECT.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SHOULD ANY FIELD CONDITIONS BE ENCOUNTERED THAT VARY FROM THE INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS.
7. UNLESS OTHERWISE SHOWN OR SPECIFIED, ALL FORCE MAIN AND WATER PIPELINE TRENCH BEDDING SHALL BE IN ACCORDANCE WITH DETAIL 0222100. ALL GRAVITY SEWER PIPELINE TRENCH BEDDING SHALL BE TYPE BE IN ACCORDANCE WITH DETAIL 0222102.
8. THE MINIMUM TRENCH WIDTHS SHALL BE IN STRICT ACCORDANCE WITH THE 'TRENCH EXCAVATION LIMITS' AS SHOWN ON THE DRAWINGS.
9. UNLESS OTHERWISE INDICATED, ALL GRADE ELEVATIONS SHOWN ARE ALONG THE PIPELINE ALIGNMENT.
10. THE CONTRACTOR SHALL PLACE 3 TO 4-INCHES OF SAND OR SCREENINGS ON ALL ASPHALT SURFACES THAT ARE AFFECTED BY THE INSTALLATION OF THE PIPELINE.
11. THE CONTRACTOR SHALL REINSTALL ALL SIGNS AS REQUIRED BY NCDOT ALONG STATE ROADWAYS AND CITY STREETS AS REQUIRED BY THE CITY OF BURLINGTON.
12. THE CONTRACTOR SHALL REMOVE AND REINSTALL ALL EXISTING FENCE AS REQUIRED FOR PIPE INSTALLATION. ANY ADDITIONAL FENCE MATERIALS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
13. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SHEETING REQUIRED FOR THE INSTALLATION OF THE PIPELINE, ALL EXCAVATIONS SHALL BE KEPT WITHIN THE DESIGNATED EASEMENT/RW WIDTHS. EXCAVATION WITHIN PAVED AREAS SHALL BE KEPT TO A MINIMUM. SHEETING SHALL BE INSTALLED AS REQUIRED TO PROTECT EXISTING UTILITIES.
14. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CITY OF BURLINGTON CURRENT DESIGN GUIDELINES UNDER THE INSPECTION OF THE CITY OF BURLINGTON AND BY A LICENSED N.C. UTILITY CONTRACTOR.
15. PLACED RIP-RAP SHALL HAVE A MINIMUM DEPTH OF 24" AND SHALL HAVE A LAYER OF TYPE II GEOTEXTILE SEPARATOR PLACED BETWEEN THE SOIL AND STONE.
16. CITY OF BURLINGTON WILL FURNISH DESCRIPTION OF EASEMENTS UPON REQUEST.
17. PIPELINE ALIGNMENT SHOWN IS BASED ON STANDARD FITTINGS AVAILABLE FOR DUCTILE IRON PIPE. JOINT DEFLECTIONS SHALL NOT EXCEED 75 PERCENT OF MANUFACTURERS RECOMMENDED DEFLECTION.
18. DETECTOR TAPE IS REQUIRED FOR ALL BURIED PIPELINE.
19. THE CONTRACTOR SHALL PROVIDE A MEANS TO KEEP ALL NEW PIPING COMPLETELY ISOLATED FROM EXISTING PIPING UNTIL ALL NEW PIPING HAS BEEN TESTED, DISINFECTED AND ACCEPTED FOR SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE MEANS FOR FLUSHING NEW PIPELINES.
20. RESTRAINED PIPE JOINTS SHALL BE INSTALLED BETWEEN THE STATIONS INDICATED ON THE DRAWINGS. IF A BEND OR FITTING IS RELOCATED BY THE CONTRACTOR FOR HIS CONVENIENCE THEN THE REQUIRED LENGTH OF RESTRAINED JOINTS SHALL BE MAINTAINED, AT-NO ADDITIONAL COST TO THE OWNER. IF ADDITIONAL BENDS OR FITTINGS ARE INSTALLED BY THE CONTRACTOR FOR HIS CONVENIENCE, THEN THE CONTRACTOR SHALL INSTALL THE REQUIRED LENGTH OF RESTRAINING JOINTS AS DETERMINED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER.
21. A THRUST RESTRAINT DESIGN PRESSURE OF 350 PSI SHALL BE USED FOR THIS PROJECT.
22. ALL MANHOLE COVERS FOR WATER LINE SHALL READ "WATER" AND SEWER SHALL READ "SEWER" WITH APPROPRIATE LOGOS.
23. THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE, AND MATERIALS OF ALL EXISTING WATERLINES AND SEWERS TO BE CONNECTED TO THE PROPOSED PIPELINES PRIOR TO EXCAVATION FOR THE PIPELINE OR ORDERING MATERIALS.
24. THE CONTRACTOR SHALL ROTATE THE ECCENTRIC CONE SECTION IN LOCATIONS THAT THE MH LID CONFLICTS WITH THE PROPOSED CURB. IF THE EXISTING MH IS A BRICK CONE THEN THE BRICK SHALL BE REMOVED SUCH THAT A PRECAST ECCENTRIC CONE SECTION CAN BE ADDED.
25. THE PROPOSED WATER AND SEWER RELOCATES ARE BASED ON LIMITED SUE AND WATER VALVE INFORMATION FROM NCDOT. IT IS THE CONTRACTOR'S RESPONISBILITY TO LOCATE THE EXISTING WATER FOR POTENTIAL CONFLICTS PRIOR TO RELOCATING THE WATER OR THE SEWER OR INSTALLING THE STORM DRAIN SYSTEM. FIELD ADJUSTMENTS TO THE PROPOSED WATER AND SEWER ARE EXPECTED AND MUST BE APPROVED BY THE ENGINEER.
26. THE CONTRACTOR SHALL RELOCATE WATER SERVICES TO THE PROPOSED WATER MAIN AS REQUIRED TO MAINTAIN SERVICE. SECTIONS OF EXISTING MAINS TO BE ABANDONED SHALL REQUIRE RELOCATED SERVICES CONFORMING TO NCDOT STANDARD SPECIFICATIONS. ALL RELOCATIONS SHALL BE ANTICIPATED AND PERFORMED AS PART OF THE PROJECT CONSTRUCTION CONTRACTOR TO VERIFY EXISTING SERVICE LOCATION AND SIZE PRIOR TO INSTALLATION/RELOCATION.
27. THE CONTRACTOR SHALL RELOCATE SEWER SERVICES TO THE PROPOSED SEWER MAIN AS REQUIRED TO MAINTAIN SERVICE. SECTIONS OF EXISTING MAINS TO BE ABANDONED SHALL REQUIRE RELOCATED SERVICES CONFORMING TO NCDOT STANDARD SPECIFICATIONS. ALL RELOCATIONS SHALL BE ANTICIPATED AND PERFORMED AS PART OF THE PROJECT. THE CONSTRUCTION CONTRACTOR SHALL VERIFY THE EXISTING SERVICE LOCATION AND SIZE PRIOR TO INSTALLATION/RELOCATION OF THE PROPOSED UTILITIES AND/OR STORM DRAIN IMPROVEMENTS. IF THERE ARE POTENTIAL CONFLICTS WITH THE PROPOSED UTILITIES AND/OR STORM DRAIN IMPROVEMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER 72 HOURS (MAX).
28. ALL UTILITIES SHALL BE CONSTRUCTED WITH MINIMUM SEPARATION REQUIREMENTS AS SPECIFIED IN NCDOT STANDARD SPECIFICATIONS AND APPLICABLE STATE AND LOCAL GUIDELINES.
29. ALL DUCTILE IRON SEWER PIPE SHALL BE LINED WITH PROTECTO 401.

LEGEND

MATERIALS

- GRADE OR EARTH
- ASPHALT PAVING
- SAND
- GRAVEL
- CONCRETE
- CONC. FILL OR GROUT
- CONC. MASONRY UNIT
- BRICK
- ROCK
- STEEL
- INSULATION
- WATER SURFACE
- GRATING
- CHECKERED PLATE
- GLASS
- WOOD BLOCKING

SYMBOLS

- W — EXIST. WATER LINE
- SS — EXIST. SANITARY SEWER
- EXIST. STORM DRAIN
- P — EXIST. ELECTRICAL
- T — EXIST. TELEPHONE
- G — EXIST. GAS
- FH — EXIST FIRE HYDRANT
- EXIST SAN SEWER MH
- EXIST. BUTTERFLY VALVE
- EXIST. GATE VALVE
- WM — EXIST. WATER METER
- PP — EXIST POWER POLE
- CO — EXIST. SS CLEANOUT
- PROPOSED PIPELINE
- SANITARY SEWER MANHOLE
- PROPOSED BUTTERFLY VALVE ASSEMBLY
- PROPOSED GATE VALVE ASSEMBLY
- PROPOSED AIR RELEASE VALVE ASSEMBLY
- STORM DRAINAGE STRUCTURE
- REDUCER
- BLOWOFF ASSEMBLY
- BACKFLOW PREVENTER
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- AP — SOIL BORING/AUGER PROBE
- SR — SEISMIC LINE

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

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-3
R/W SHEET NO.	

25 0 50
HORIZONTAL

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UTILITY CONSTRUCTION

MATCHLINE -Y- STA. 13+25.00 SEE INSERT A

MATCHLINE SEE INSERT A1

MATCHLINE -L- STA. 23+00.00 SEE SHEET UC-4

REFER TO PROJECT NOTE 25

CONNECT TO EXISTING 12" WATER LINE WITH 12" DI MJ SOLID SLEEVE -L- STA 10+00.00 OFFSET 17.00 FT LT

RELOCATE EXISTING FIRE HYDRANT

PROPOSED 138 LF OF 12" DI RJ WATER LINE PC 350

PROPOSED THRUST COLLAR

PROPOSED 12" 45° DI RJ BEND -L- STA 11+20.72 OFFSET 17.34 FT LT

PROPOSED 12" 45° DI RJ BEND -L- STA 11+26.43 OFFSET 11.07 FT LT

CONNECT TO EXISTING 12" WATER LINE WITH 12" DI MJ SOLID SLEEVE -L- STA 11+33.42 OFFSET 10.75 FT LT

PROPOSED 12" 45° DI RJ BEND -L- STA 13+93.26 OFFSET 9.21 FT LT

PROPOSED 12" 45° DI RJ BEND -L- STA 13+87.35 OFFSET 3.02 FT LT

CONNECT TO EXISTING 12" WATER LINE WITH 12" DI MJ SOLID SLEEVE -L- STA 13+79.35 OFFSET 2.99 FT LT

PROPOSED 12"x8" DI RJ TEE -L- STA 14+03.60 OFFSET 9.38 FT LT
1-8" GATE VALVE AND VALVE BOX, 200 PSI

ADJUST MANHOLE RING AND COVER

PROPOSED 12"x6" DI RJ TEE -L- STA 14+51.04 OFFSET 10.15 FT LT
1-6" GATE VALVE AND VALVE BOX, 200 PSI

PROPOSED 12" GATE VALVE AND VALVE BOX, 200 PSI -L- STA 14+57.04 OFFSET 10.25 FT LT

ABANDON 160 LF OF 12" DIP WATER LINE

PROPOSED 165 LF OF 12" DI RJ WATER LINE PC 350

PROPOSED THRUST COLLAR (2 PLACES)

DEFLECT WATER LINE (12" MIN. CLEARANCE) UNDER PROPOSED DRAIN

PROPOSED 12" 45° DI RJ BEND -L- STA 15+25.25 OFFSET 11.36 FT LT

CONNECT TO EXISTING 12" WATER LINE WITH 12" DI MJ SOLID SLEEVE -L- STA 15+39.34 OFFSET 5.59 FT LT

ADJUST VALVE BOX

PROPOSED 12" 45° DI MJ BEND -L- STA 15+31.34 OFFSET 5.46 FT LT

VERIFY EXISTING WATER ELEVATION AND NOTIFY ENGINEER 72 HOURS (MAX) IF 12" MIN SEPARATION CAN BE PROVIDED.

VERIFY EXISTING WATER ELEVATION AND NOTIFY ENGINEER 72 HOURS (MAX) IF 12" MIN SEPARATION CAN BE PROVIDED.

DEFLECT WATER LINE (12" MIN. CLEARANCE) UNDER PROPOSED DRAIN

ABANDON 70 LF OF 6" DIP WATER LINE

PROPOSED 98 LF OF 6" DI WATER LINE PC 350

DEFLECT WATER LINE (12" MIN. CLEARANCE) UNDER PROPOSED DRAIN

VERIFY EXISTING WATER ELEVATION AND NOTIFY ENGINEER 72 HOURS (MAX) IF 12" MIN SEPARATION CAN BE PROVIDED.

ABANDON 135 LF OF 12" DIP WATER LINE

ADJUST MANHOLE RING AND COVER

PROPOSED 6" 45° DI MJ BEND -L- STA 14+51.94 OFFSET 45.24 FT RT

VERIFY LID ORIENTATION AFTER THE CURB HAS BEEN STAKED. ROTATE ECCENTRIC CONE SECTION AS NECESSARY. ADJUST MANHOLE RING AND COVER.

PROPOSED 6" 45° DI MJ BEND -L- STA 14+27.60 OFFSET 70.84 FT RT

CONNECT TO EXISTING 6" WATER LINE WITH 6" DI MJ SOLID SLEEVE -L- STA 14+27.48 OFFSET 77.84 FT RT

ADJUST MANHOLE RING AND COVER

VERIFY LID ORIENTATION AFTER THE CURB HAS BEEN STAKED. ROTATE ECCENTRIC CONE SECTION AS NECESSARY. ADJUST MANHOLE RING AND COVER.

RELOCATE EXISTING FIRE HYDRANT

CONNECT TO EXISTING 16" WATER LINE WITH 16" DI MJ SOLID SLEEVE -L- STA 20+00.54 OFFSET 11.81 FT LT

RELOCATE AND RECONNECT EXISTING 6" WATER METER

DEFLECT WATER LINE (12" MIN. CLEARANCE) UNDER PROPOSED DRAIN

PROPOSED AIR RELEASE VALVE -L- STA 21+57.00 OFFSET 14.53 FT LT SEE DET. AL W-6 SHEET UC-10

CONNECT TO EXISTING 16" WATER LINE WITH 16" DI MJ SOLID SLEEVE -L- STA 21+75.43 OFFSET 13.95 FT LT

ADJUST MANHOLE RING AND COVER

ABANDON 177 LF OF 16" DIP WATER LINE

PROPOSED 177 LF OF 16" DI MJ WATER LINE PC 350

PROPOSED 1-6" GATE VALVE AND VALVE BOX, 200 PSI -L- STA 20+89.42 OFFSET 25.76 FT LT

BEGIN CONSTRUCTION -Y1- STA 13+02

END CONSTRUCTION -Y3- STA 15+03.98

BEGIN -Y- TURN LANE / RESURFACING STA 20+00.00

-Y- POT STA 23+00.28

-Y- STA. 20+57.99 (38.5932' LT.)

-Y3- POT STA 16+79.99

-Y2- POT STA 13+91.93

-BY1-32 POT 16+04.60

-BY3-52 POT

-BL-12 POT 8+56.47

-BY4- POT 14+43.34

-BY2- POT 11+00.47

-EY1-

-EY2-

-EY3-

-EY4-

-L-

PI Sta 13+56.21
Δ = 2° 02' 42.0" (RT)
D = 6° 01' 52.1"
L = 33.91'
T = 16.96'
R = 950.00'
SE = RC
RO = 124'

PI Sta 22+73.65
Δ = 7° 16' 49.1" (RT)
D = 6° 01' 52.1"
L = 120.71'
T = 60.44'
R = 950.00'
SE = 0.04 FT/FT
RO = 124'

2005/2025 ADT
24900/27400
2375/3400
3875/4000
7275/12000
13475/17600 MEBANE ROAD
1450/2400
6150/7400
26250/29800 HUFFMAN MILL ROAD

INSERT A

INSERT A1

NAD 83

SEE SHEET 10 FOR -L- PROFILE
SEE SHEET 13 FOR -Y3- PROFILE
SEE SHEET 28 FOR -Y3- INTERSECTION DETAIL

REVISIONS

REVISED TCE TO REFLECT PUE ON PARCELS 1AZ, 2Z, AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDB 7-16-08

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-4
R/W SHEET NO.	

25 0 50
HORIZONTAL

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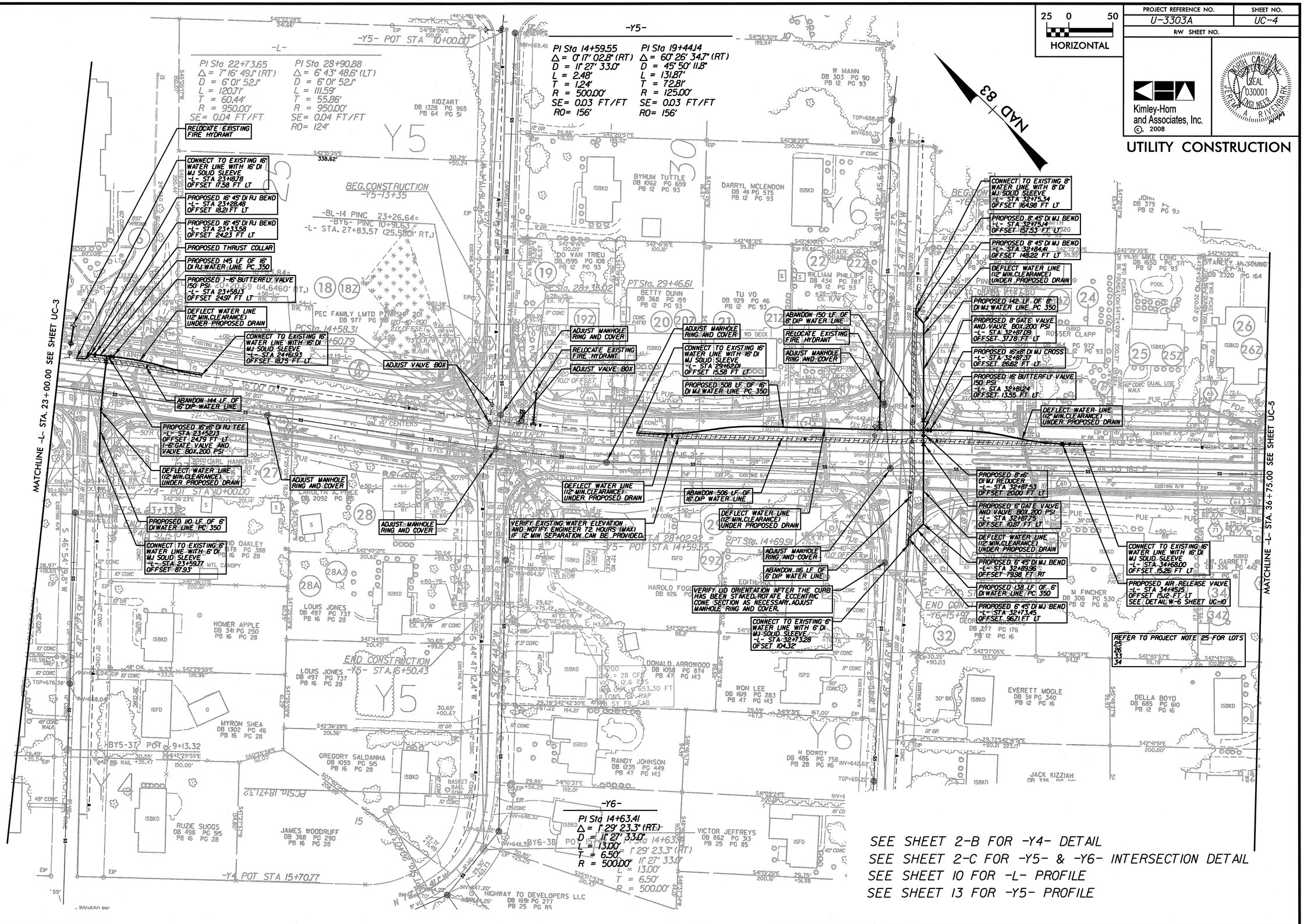
UTILITY CONSTRUCTION



REVISIONS

8/17/99 REVISED TOE TO REFLECT PUE ON PARCELS 1AZ, 27, AND 32. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 32.
TDG 7-16-08

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-5
R/W SHEET NO.	

25 0 50
HORIZONTAL

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UTILITY CONSTRUCTION

-Y8-

PI Sta 13+68.46
Δ = 7° 15' 12.6" (RT)
D = 2° 51' 53.2"
L = 253.20'
T = 126.77'
R = 2,000.00'
SE= 0.04 FT/FT
RO= 191'

PI Sta 16+04.59
Δ = 12° 00' 32.1" (LT)
D = 5° 43' 46.5"
L = 209.60'
T = 105.18'
R = 1,000.00'
SE= 0.04 FT/FT
RO= 191'

-L-

PI Sta 39+00.17
Δ = 9° 44' 29.1" (RT)
D = 6° 01' 52.1"
L = 161.52'
T = 80.95'
R = 950.00'
SE= 0.04 FT/FT
RO= 124'

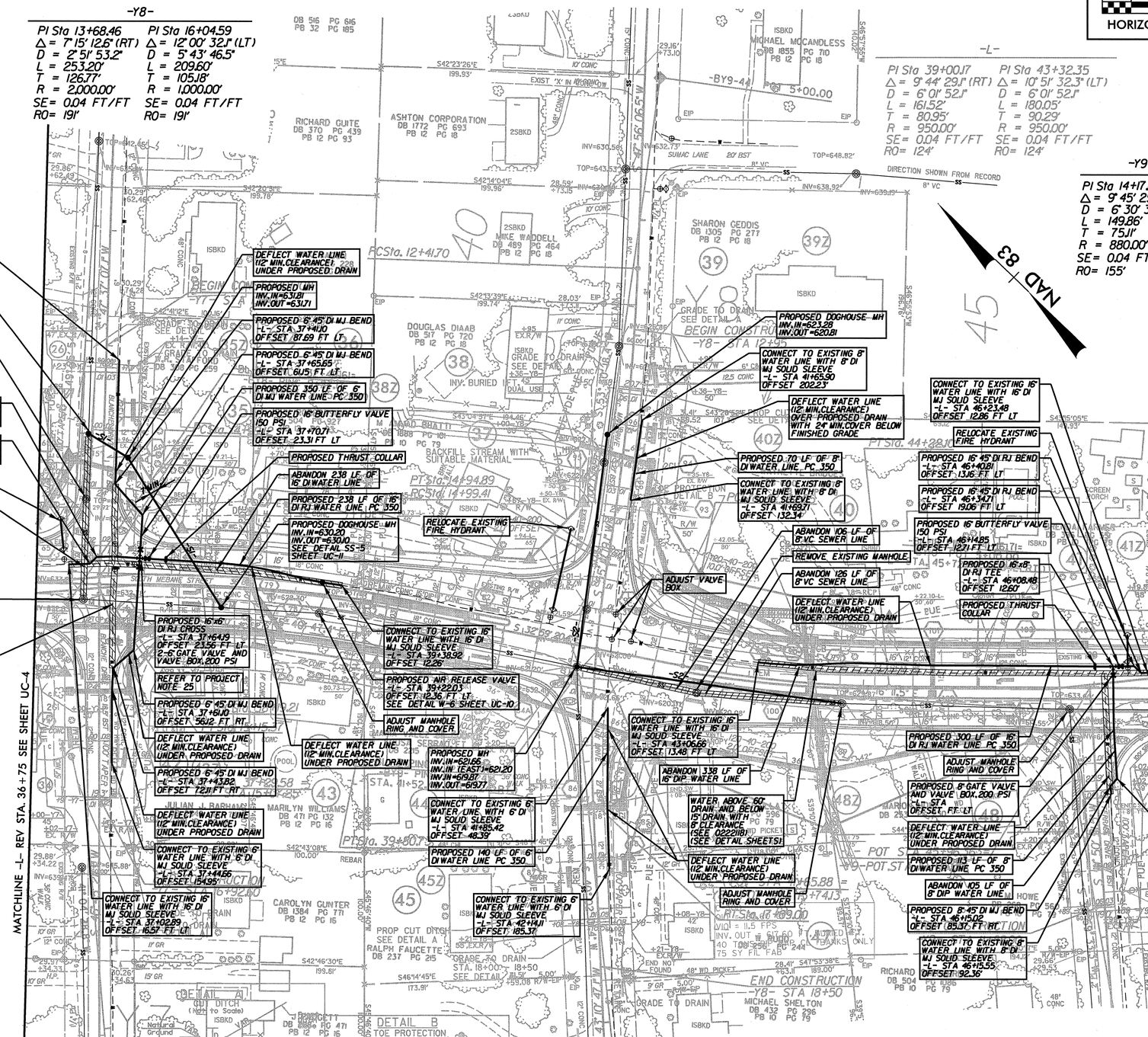
PI Sta 43+32.35
Δ = 10° 51' 32.3" (LT)
D = 6° 01' 52.1"
L = 180.05'
T = 90.29'
R = 950.00'
SE= 0.04 FT/FT
RO= 124'

-Y9-

PI Sta 14+17.64
Δ = 9° 45' 25.3" (LT)
D = 6° 30' 39.2"
L = 149.86'
T = 75.11'
R = 880.00'
SE= 0.04 FT/FT
RO= 155'

-Y7-

PI Sta 15+07.25
Δ = 1° 51' 45.8" (LT)
D = 11° 27' 33.0"
L = 16.26'
T = 8.13'
R = 500.00'
SE= 0.02 FT/FT
RO= 152'



SEE SHEET 2-D FOR -Y7- & -Y8- INTERSECTION DETAIL
SEE SHEET 2-E FOR -Y9- INTERSECTION DETAIL
SEE SHEET 11 FOR -L- PROFILE
SEE SHEET 14 FOR -Y8- PROFILE
SEE SHEET 14 FOR -Y9- PROFILE

SEE SHEET UC-9 FOR -S1- AND -S2- PROFILES

REVISIONS

REVISED TOE TO REFLECT PUE ON PARCELS 1A2, 2Z, AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDB 7-16-08

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-6
R/W SHEET NO.	

25 0 50
HORIZONTAL

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UTILITY CONSTRUCTION

-L-
PI Sta 58+83.20
Δ = 46° 28' 14.3" (LT)
D = 5° 43' 46.5"
L = 811.07'
T = 429.33'
R = 1,000.00'
SE = 0.04 FT/FT
RO = 124'

-Y11-
PI Sta 10+63.54
Δ = 20° 44' 29.8" (RT)
D = 19° 05' 54.9"
L = 108.60'
T = 54.90'
R = 300.00'
SE = 0.02 FT/FT
RO = 218'

NAD 83

MATCHLINE -L- STA. 46+50 SEE SHEET UC-5

MATCHLINE -L- STA. 60+00 SEE SHEET UC-7

VERIFY EXISTING WATER ELEVATION AND NOTIFY ENGINEER 72 HOURS (MAX) IF 12" MIN SEPARATION CAN BE PROVIDED.

PROPOSED THRUST COLLAR

PROPOSED 16" 45° DI RJ BEND -L- STA 49+58.85 OFFSET 20.06 FT LT

PROPOSED 16" 45° DI RJ BEND -L- STA 49+64.84 OFFSET 14.06 FT LT

CONNECT TO EXISTING 16" WATER LINE WITH 16" DI MJ SOLID SLEEVE -L- STA 49+74.50 OFFSET 13.97 FT LT

RELOCATE EXISTING FIRE HYDRANT

PROPOSED 16" 45° DI RJ BEND -L- STA 52+44.11 OFFSET 21.46 FT LT

PROPOSED 16" 45° DI RJ BEND -L- STA 52+37.59 OFFSET 15.49 FT LT

CONNECT TO EXISTING 16" WATER LINE WITH 16" DI MJ SOLID SLEEVE -L- STA 52+38.38 OFFSET 15.57 FT LT

VERIFY EXISTING WATER ELEVATION AND NOTIFY ENGINEER 72 HOURS (MAX) IF 12" MIN SEPARATION CAN BE PROVIDED.

DEFLECT WATER LINE (12" MIN. CLEARANCE) UNDER PROPOSED DRAIN

PROPOSED THRUST COLLAR (2 PLACES)

PROPOSED 16" 45° DI RJ BEND -L- STA 52+99.13 OFFSET 20.43 FT LT

PROPOSED 16" 45° DI RJ BEND -L- STA 53+05.02 OFFSET 14.32 FT LT

CONNECT TO EXISTING 16" WATER LINE WITH 16" DI MJ SOLID SLEEVE -L- STA 53+13.50 OFFSET 14.17 FT LT

RELOCATE EXISTING FIRE HYDRANT

DEFLECT WATER LINE (12" MIN. CLEARANCE) UNDER PROPOSED DRAIN

DEFLECT WATER LINE (12" MIN. CLEARANCE) UNDER PROPOSED DRAIN

ADJUST MANHOLE RING AND COVER

ABANDON 230 LF OF 16" DIP WATER LINE

PROPOSED 233 LF OF 16" DI RJ WATER LINE PC 350

CONNECT TO EXISTING 16" WATER LINE WITH 16" DI MJ SOLID SLEEVE -L- STA 47+44.30 OFFSET 14.94 FT LT

ADJUST MANHOLE RING AND COVER

ABANDON 75 LF 16" DIP WATER LINE

PROPOSED 84 LF OF 16" DI RJ WATER LINE PC 350

ADJUST MANHOLE RING AND COVER

CONNECT TO EXISTING 6" WATER LINE WITH 6" DI MJ SOLID SLEEVE -L- STA 54+03.44 OFFSET 75.37'

CONNECT TO EXISTING 6" WATER LINE WITH 6" DI MJ SOLID SLEEVE -L- STA 54+02.49 OFFSET 125.36'

RELOCATE EXISTING FIRE HYDRANT

DEFLECT WATER LINE (12" MIN. CLEARANCE) UNDER PROPOSED DRAIN

PROPOSED 50 LF OF 6" DI RJ WATER LINE PC 350

VERIFY VALVE LOCATION AFTER THE CURB HAS BEEN STAKED AND NOTIFY ENGINEER IF THERE IS A CONFLICT.

ADJUST MANHOLE RING AND COVER

-BL-20 PINC 53+60.70= -BY12- POT 5+00.00 STA. 57+95.67 (80.60 RT.)

-Y11- POT STA 10+00.00

PCSta. 10+08.64

-Y10- POT STA 10+00.00

END CONSTRUCTION -Y10- STA 11+73

END CONSTRUCTION -Y11- STA 12+52.17

PCSta. 13+42.53

PTSta. 14+92.39

-Y9- POT STA 15+20.82

-BY10-46 POT 14+20.79

-BY11-47 POT 8+97.28

-BY12-48 POT 5+38.88

-Y10- POT STA 15+25.51

-Y11- POT STA 1:

SHOWN ON PREVIOUS SHEET

SEE SHEET 2-E FOR -Y10-INTERSECTION DETAIL
SEE SHEET 2-F FOR -Y11-INTERSECTION DETAIL
SEE SHEET 11 FOR -L- PROFILE
SEE SHEET 14 FOR -Y11- PROFILE

REVISIONS

REVISED TOE TO REFLECT PUE ON PARCELS 1A2, 2Z2, AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDG 7-16-08

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-7
R/W SHEET NO.	

25 0 50
HORIZONTAL

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NORTH CAROLINA PROFESSIONAL SEAL 030001 ENGINEER JERRY M. REVELL PARK

UTILITY CONSTRUCTION

NAD 83

-L-

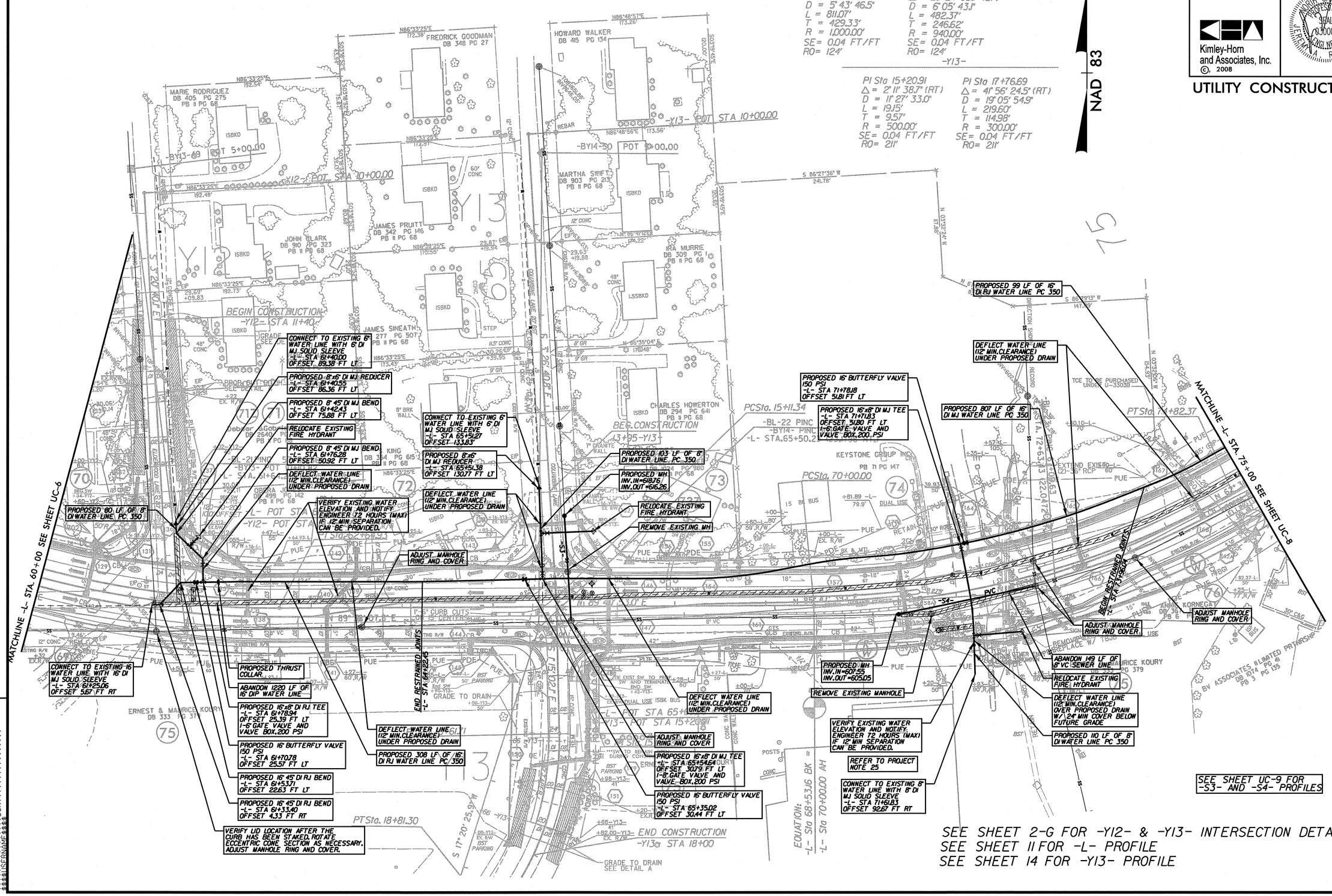
PI Sta 58+83.20
Δ = 46° 28' 14.3" (LT)
D = 5° 43' 46.5"
L = 811.07'
T = 429.33'
R = 1,000.00'
SE = 0.04 FT/FT
RO = 124'

PI Sta 72+46.62
Δ = 29° 24' 05.7" (LT)
D = 6° 05' 43.1"
L = 482.37'
T = 246.62'
R = 940.00'
SE = 0.04 FT/FT
RO = 124'

-Y13-

PI Sta 15+20.91
Δ = 2° 11' 38.7" (RT)
D = 11° 27' 33.0"
L = 19.15'
T = 9.57'
R = 500.00'
SE = 0.04 FT/FT
RO = 211'

PI Sta 17+76.69
Δ = 41° 56' 24.5" (RT)
D = 19° 05' 54.9"
L = 219.60'
T = 114.98'
R = 300.00'
SE = 0.04 FT/FT
RO = 211'



REVISIONS

REVISED TCE TO REFLECT PUE ON PARCELS 1A2, 2Z, AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDB 7-16-08

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-8
R/W SHEET NO.	

25 0 50
HORIZONTAL

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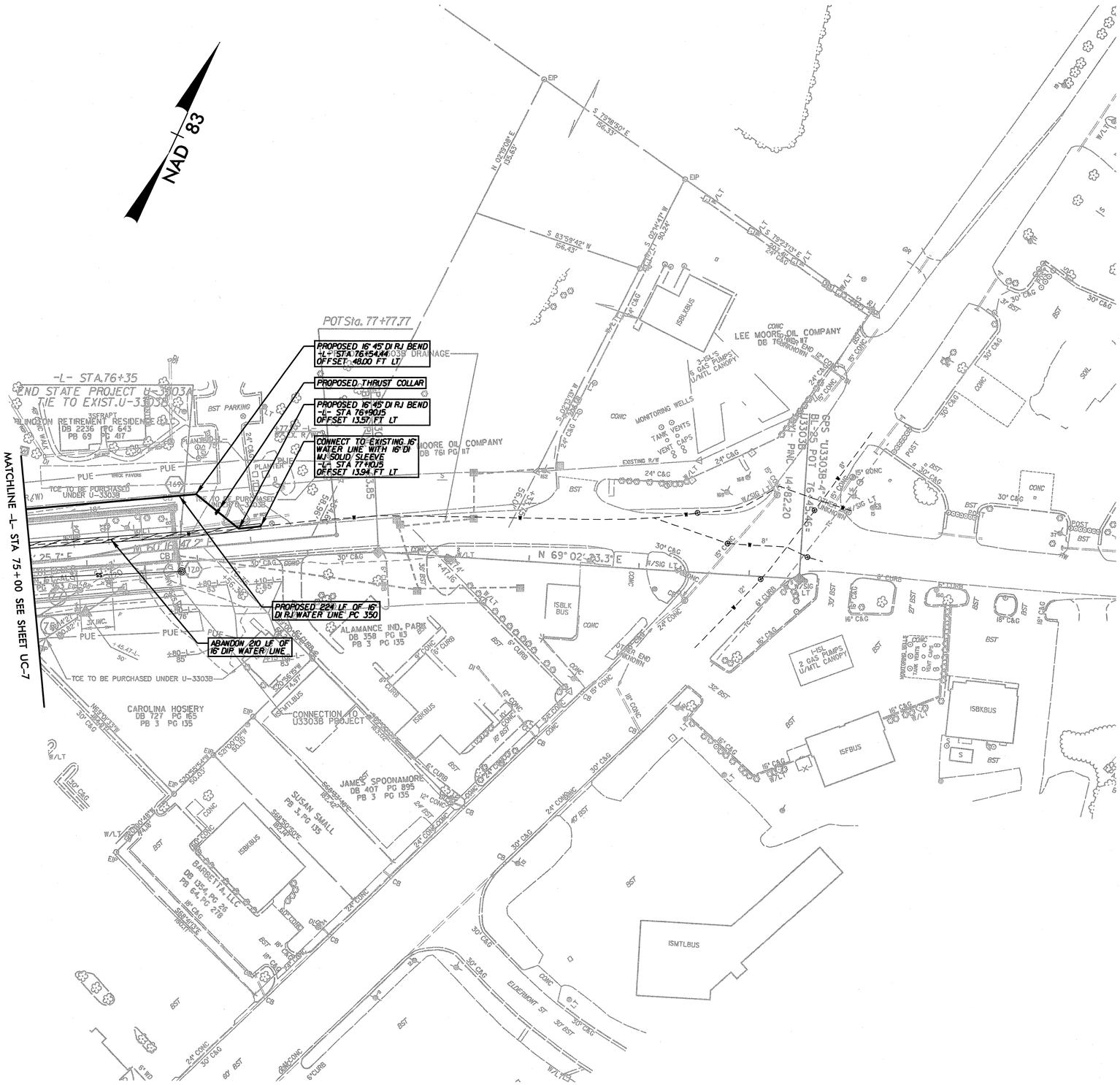
NORTH CAROLINA PROFESSIONAL SEAL 030001 ENGINEER JEREMY R. IVENSA

UTILITY CONSTRUCTION



REVISIONS

REVISED TCE TO REFLECT PUE ON PARCELS 1A2, 2Z, AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDB 7-16-08

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-9

25 0 50
HORIZONTAL

5 0 10
VERTICAL

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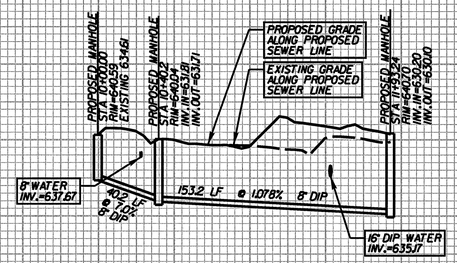
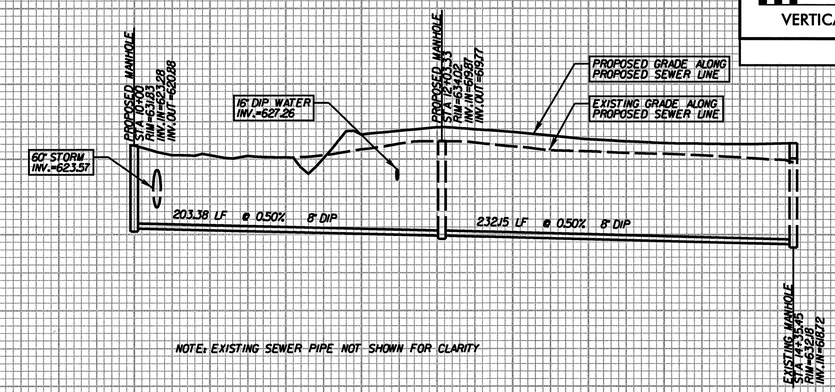
P.O. BOX 33068
RALEIGH, N.C. 27636-3068

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030001 JEREMY A. RIVENBARK



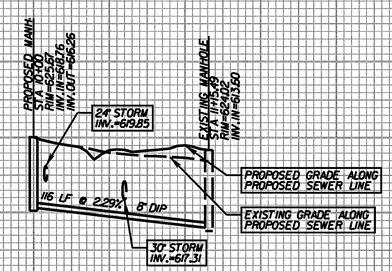
SEE SHEET UC-5 -S1- PLAN

-S1- Sewerline Profile



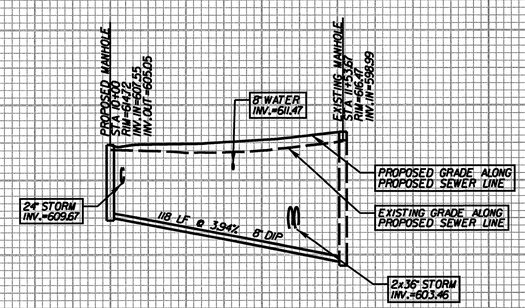
SEE SHEET UC-5 -S2- PLAN

-S2- Sewerline Profile



SEE SHEET UC-7 -S3- PLAN

-S3- Sewerline Profile



SEE SHEET UC-7 -S4- PLAN

-S4- Sewerline Profile

$FILE1$

10/24/2008

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-10
R/W SHEET NO.	

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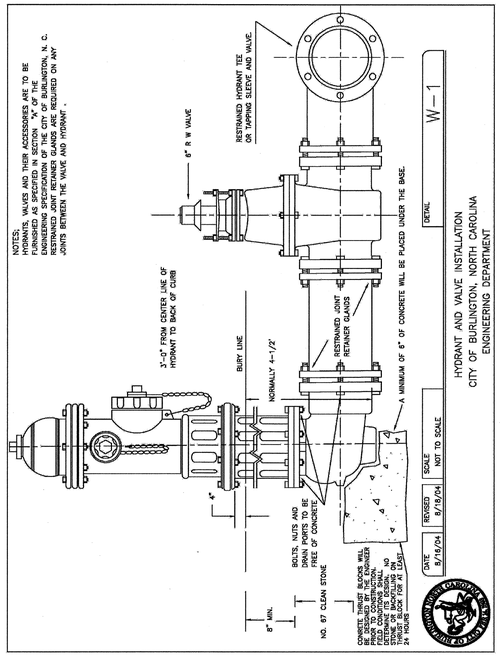
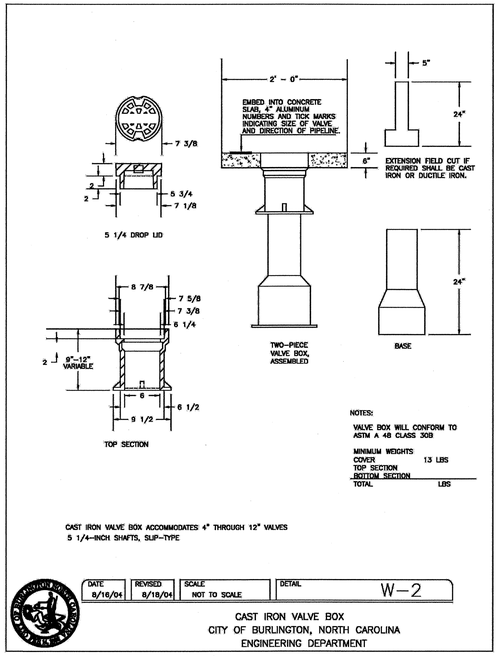
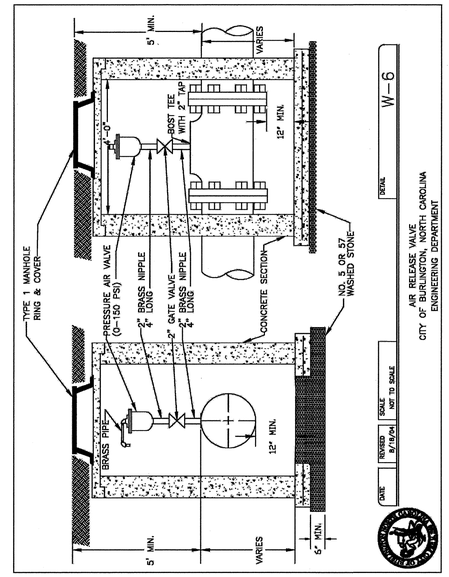
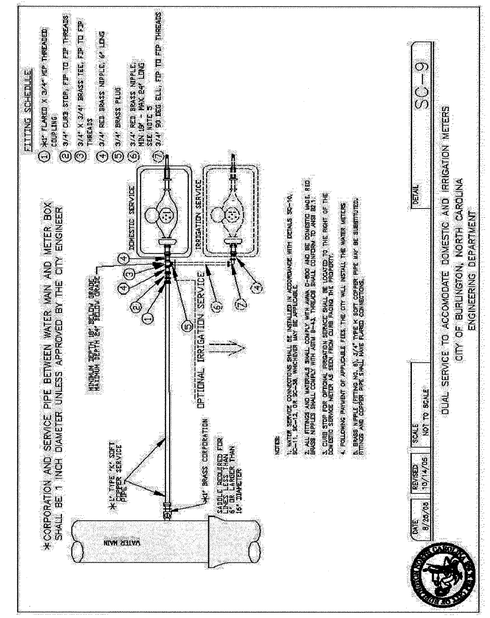
NORTH CAROLINA PROFESSIONAL SEAL 030001 ENGINEER JERMAIL A. KUGLMEIER

UTILITY CONSTRUCTION









REVISIONS

REVISED TCE TO REFLECT PUE ON PARCELS 1A2,22,AND 32. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDC 7-16-08

8/17/99

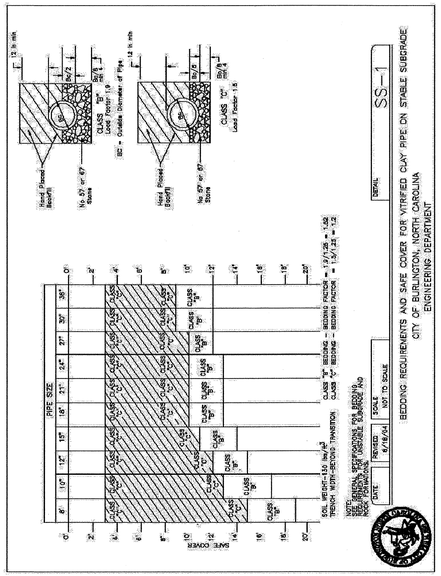
REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS

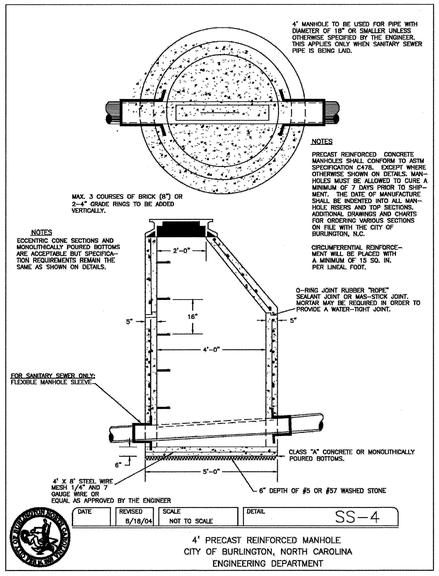
BASED ON TEST PRESSURE OF 200 P.S.I. (ALL AREA IN SQUARE FEET)

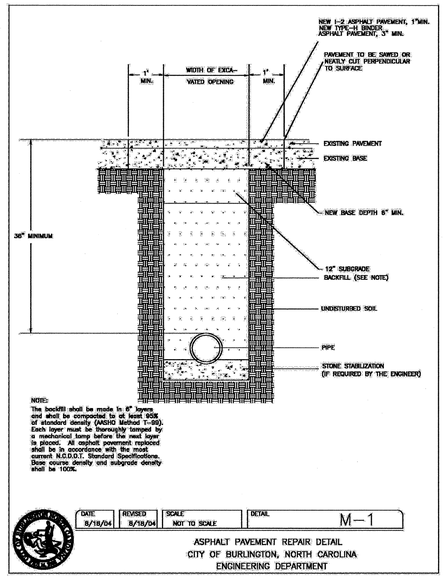
SIZE AND DEGREE OF BEND	STATIC THRUST IN POUNDS	SOFT CLAY 1000 LBS/FT Sq.	SOFT CLAY 2000 LBS/FT Sq.	GRAVEL, COARSE SAND 1000 LBS/FT Sq.	GRAVEL, COARSE SAND 2000 LBS/FT Sq.	DRY CLAY-LOAMS DRY-SAND 1000 LBS/FT Sq.	DRY CLAY-LOAMS DRY-SAND 2000 LBS/FT Sq.	SAND, COMPACT, FIRM 1000 LBS/FT Sq.	SAND, COMPACT, FIRM 2000 LBS/FT Sq.	SAND-CLAY, DRY MUD 1000 LBS/FT Sq.	SAND-CLAY, DRY MUD 2000 LBS/FT Sq.	CHOCOLATE, VERY POOR SOIL 1000 LBS/FT Sq.	CHOCOLATE, VERY POOR SOIL 2000 LBS/FT Sq.
11 1/4"	1,108	1	1	1	1	1	1	1	1	2	2	1	
22 1/2"	2,202	1	2	2	1	1	1	1	2	3	5	1	
45"	4,336	2	3	3	1	1	1	2	3	6	9	1	
90"	7,668	3	4	5	1	1	2	3	4	11	17	1	
PLUG	5,655	2	3	4	1	1	1	2	3	8	1		
8"													
11 1/4"	1,920	1	1	2	1	1	1	1	1	2	1		
22 1/2"	3,922	1	2	3	1	1	1	1	2	4	1		
45"	7,684	2	4	5	1	1	1	2	3	8	1		
90"	14,215	5	8	9	2	2	2	4	6	15	2		
PLUG	10,053	3	5	6	2	2	2	3	4	10	1		
12"													
11 1/4"	4,433	2	3	3	1	1	1	2	2	5	1		
22 1/2"	8,826	3	5	6	2	2	2	3	5	8	1		
45"	17,312	5	9	11	3	3	3	5	8	18	2		
90"	31,883	8	16	19	4	4	4	8	12	32	4		
PLUG	22,619	6	12	14	3	3	3	6	8	23	3		
16"													
11 1/4"	7,881	3	4	5	1	1	2	3	4	8	1		
22 1/2"	15,691	5	8	10	2	2	3	5	8	16	2		
45"	30,769	9	18	19	4	4	5	9	13	31	4		
90"	56,693	15	29	32	6	6	8	15	22	57	8		
PLUG	40,213	10	21	25	5	5	10	41	5				

NOTES:
REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.
USE 8"-90° BEND VALUE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR

DATE 8/18/04 REVISED 8/18/04 SCALE NOT TO SCALE DETAIL W-10
THRUST BLOCKING DESIGN QUANTITY TABLE (SH 1 OF 3)
CITY OF BURLINGTON, NORTH CAROLINA
ENGINEERING DEPARTMENT







PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-11
R/W SHEET NO.	

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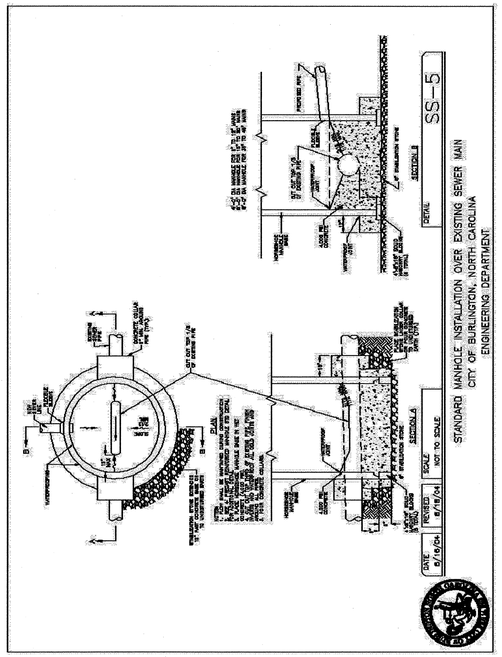
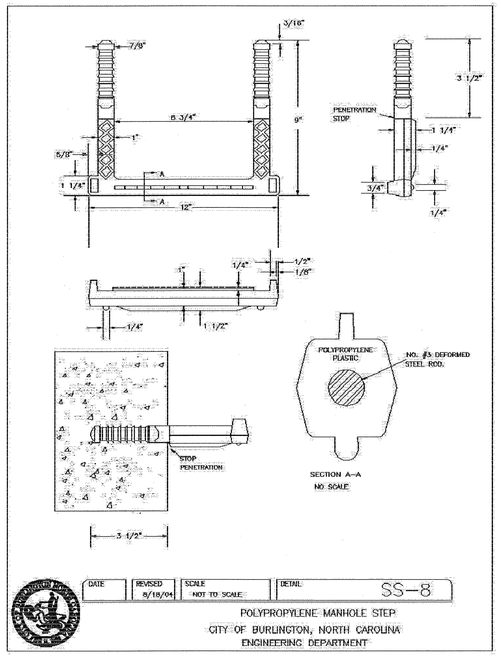
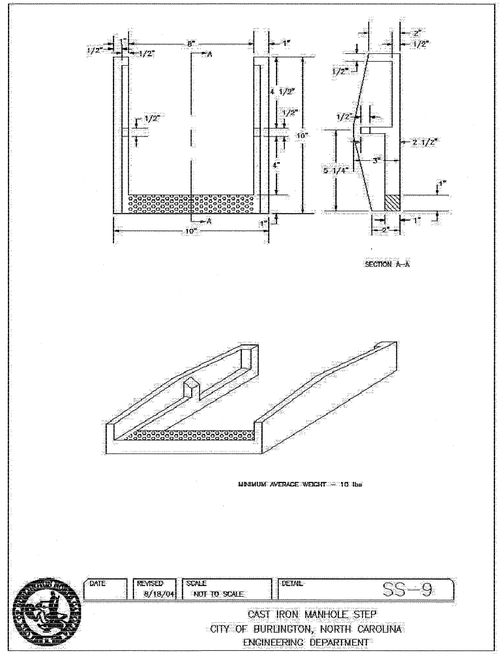
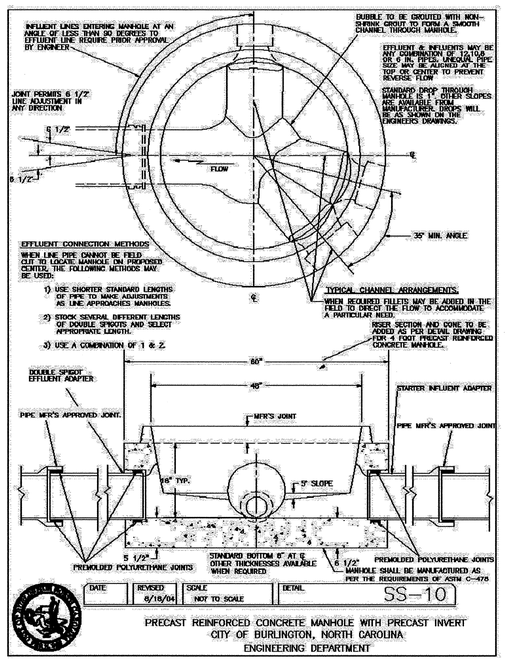
NORTH CAROLINA PROFESSIONAL SEAL 030001 ENGINEER RICHARD VENSKA JR. 8/24/09

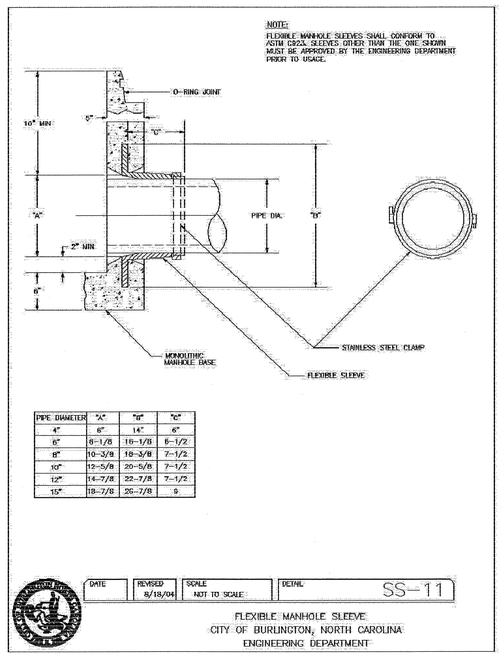
UTILITY CONSTRUCTION

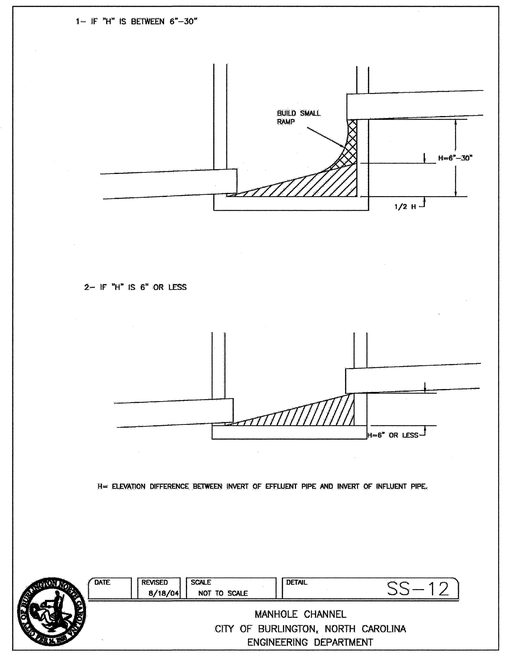












REVISIONS

REVISED TCE TO REFLECT PUE ON PARCELS 1AZ,2Z,AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDB 7-16-08

8/17/99

SYSTEM TIME 8/25/2009 2:19:21 PM

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

8/17/99

REVISIONS

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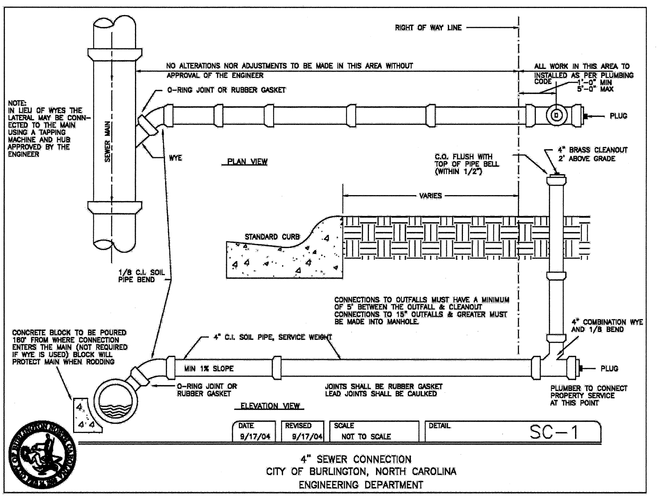
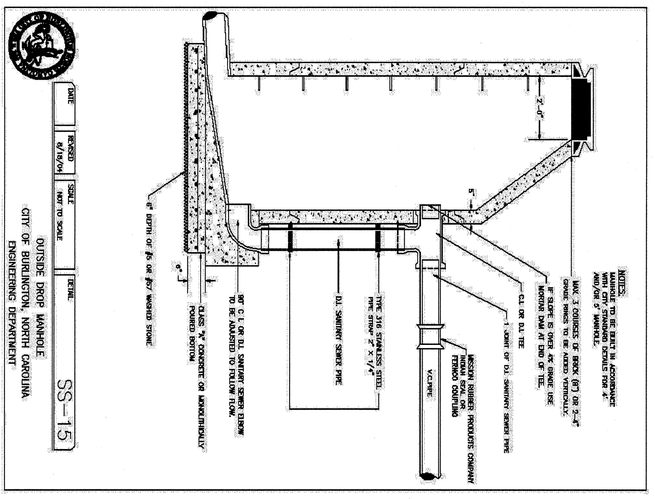
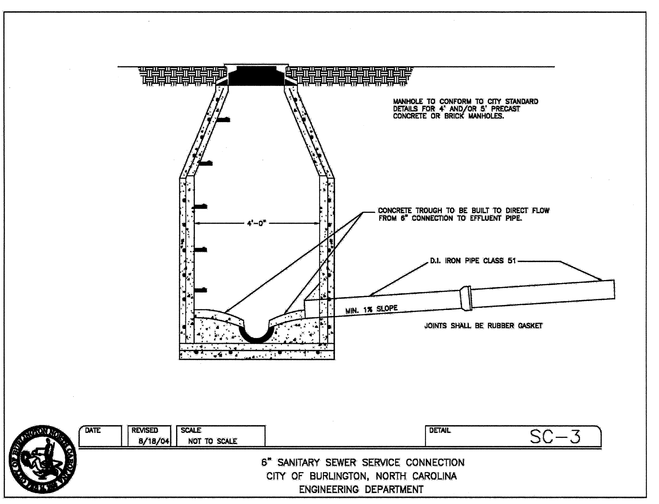
TDG 7-16-08

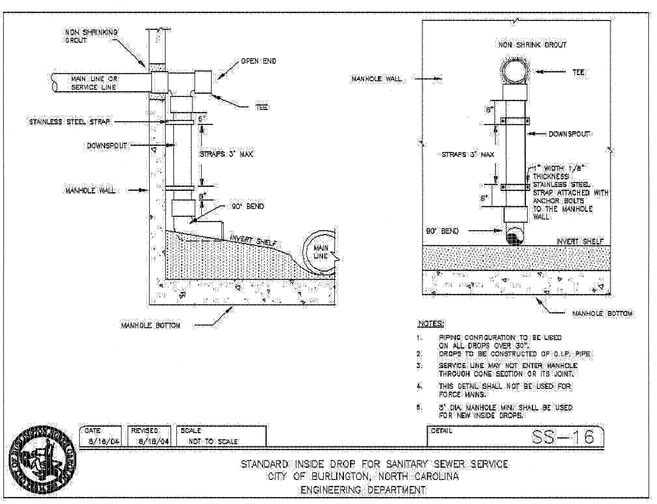


4" SEWER CONNECTION
CITY OF BURLINGTON, NORTH CAROLINA
ENGINEERING DEPARTMENT

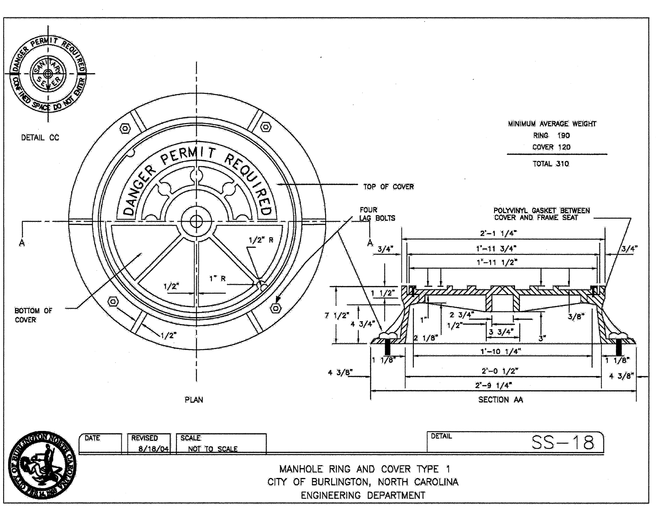




6" SANITARY SEWER SERVICE CONNECTION
CITY OF BURLINGTON, NORTH CAROLINA
ENGINEERING DEPARTMENT



STANDARD INSIDE DROP FOR SANITARY SEWER SERVICE
CITY OF BURLINGTON, NORTH CAROLINA
ENGINEERING DEPARTMENT



MANHOLE RING AND COVER TYPE 1
CITY OF BURLINGTON, NORTH CAROLINA
ENGINEERING DEPARTMENT

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UTILITY CONSTRUCTION

PROJECT REFERENCE NO. U-3303A
SHEET NO. UC-12
R/W SHEET NO.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030001 JEREMY R. VENTRARK

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UC-13
R/W SHEET NO.	

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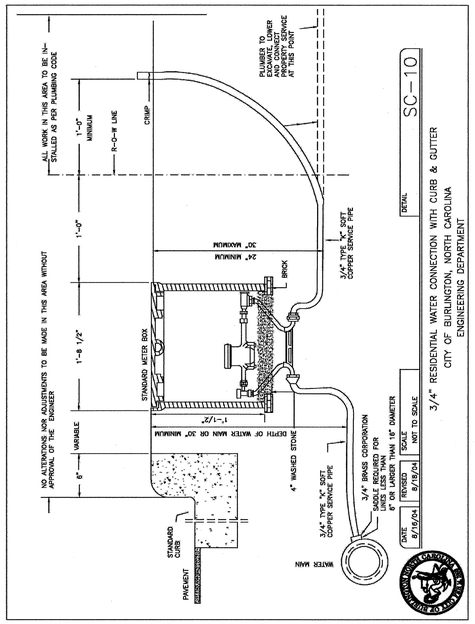
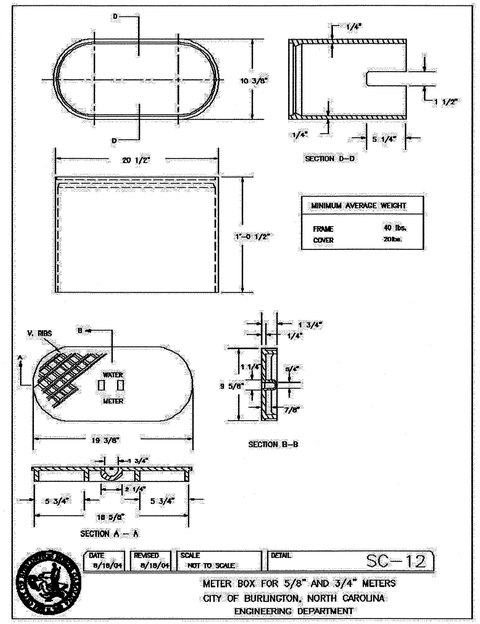
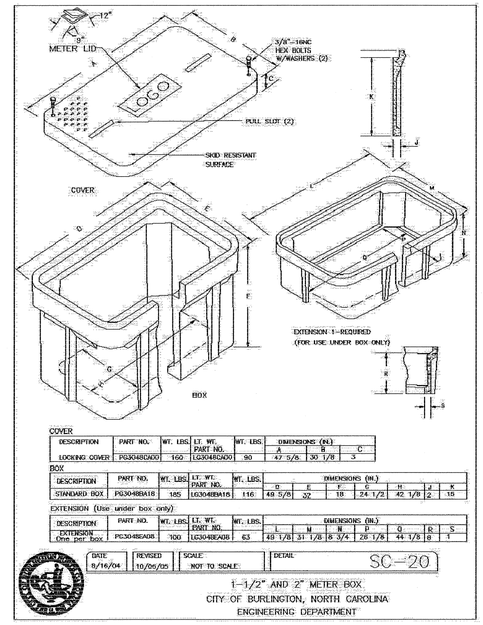
NORTH CAROLINA PROFESSIONAL SEAL 030001 ENGINEER JERRY A. RIVENBARK

UTILITY CONSTRUCTION



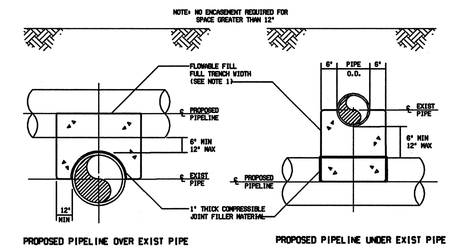




COVER DESCRIPTION	PART NO.	WT. LBS.	LT. WT. PART NO.	WT. LBS.	DIMENSIONS (IN.) A	B	C
LOCKING COVER	PG3048GA00	160	LG3048GA00	90	47 5/8	30 1/8	3

BOX DESCRIPTION	PART NO.	WT. LBS.	LT. WT. PART NO.	WT. LBS.	DIMENSIONS (IN.) D	E	F	G	H	J	K
STANDARD BOX	PG3048BA18	185	LG3048BA16	116	48 5/8	32	18	24 1/2	42 1/8	2	15

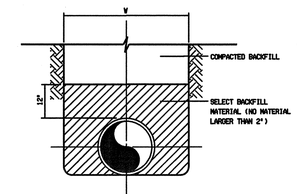
EXTENSION (Use under box only) DESCRIPTION	PART NO.	WT. LBS.	LT. WT. PART NO.	WT. LBS.	DIMENSIONS (IN.) L	M	N	P	Q	R	S
EXTENSION One per box	PG3048EA08	100	LG3048EA08	63	48 1/8	31 1/8	8 3/4	26 1/8	44 1/8	8	1



PROPOSED PIPELINE OVER EXIST PIPE

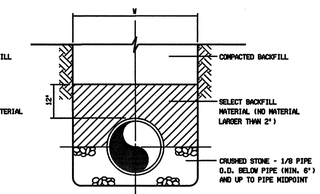
PROPOSED PIPELINE UNDER EXIST PIPE

0222118



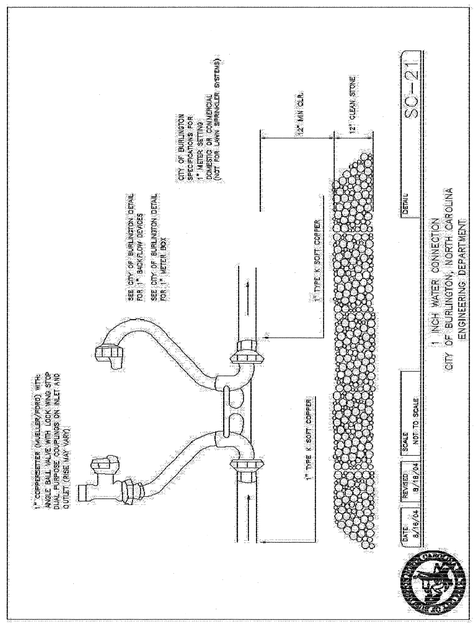
TYPE A
IN EARTH

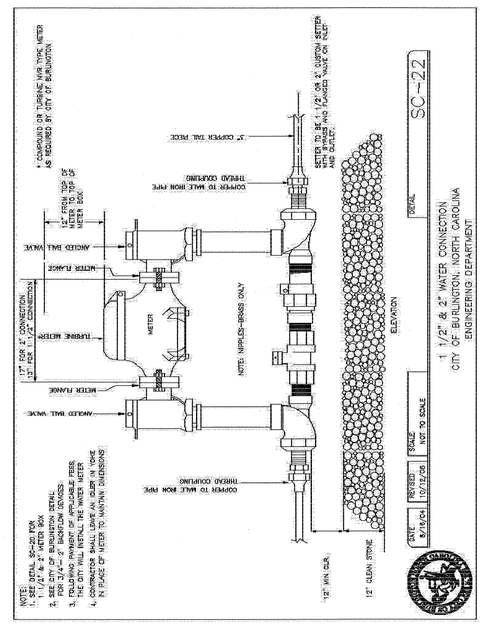
0222100

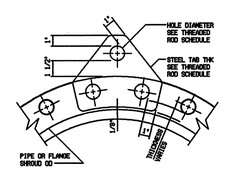


TYPE B

0222102

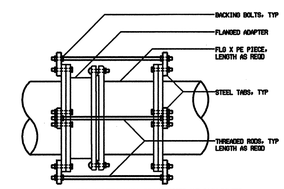






STEEL TAB

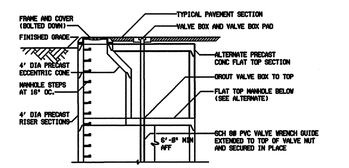
1516401



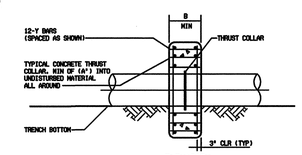
NOTE: ALL FLANGED ADAPTERS SHALL BE HARNESSED AND BACK BOLTED TO PREVENT MOVEMENT IN EITHER DIRECTION. SEE THREADED ROD SCHEDULE FOR ROD DIAMETER, MATERIAL AND STEEL TAB THICKNESS.

HARNESSED FLANGED ADAPTER

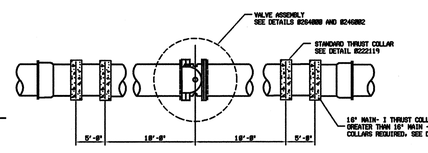
1516402



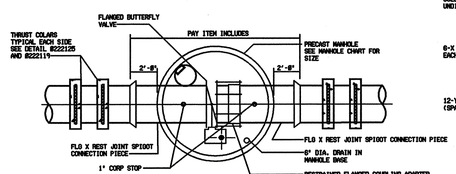
FLAT TOP / ECCENTRIC CONE SECTION



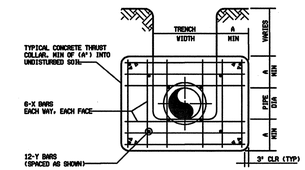
ELEVATION



THRUST COLLARS AT VALVES 16" AND LARGER



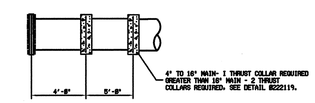
PLAN



THRUST COLLAR

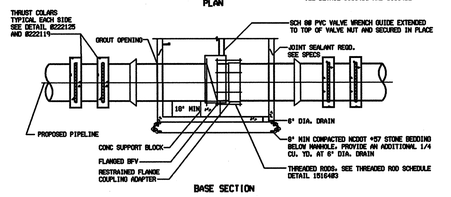
PIPE SIZE	X BARS	Y BARS	A	B
6"-36"	+5	+5	1'-4"	1'-7"
42"& >	+6	+6	1'-6"	1'-9"

0222119



THRUST COLLARS AT BLOW-OFF

0222125



BASE SECTION

TYPICAL BUTTERFLY VALVE ASSEMBLY

0264002

THREADED ROD SCHEDULE

DESIGN PRESSURE (DIMENSIONS IN INCHES)

PIPE SIZE	50 PSI BOLTS NO-DIA	50 PSI TAB THK	100 PSI BOLTS NO-DIA	100 PSI TAB THK	150 PSI BOLTS NO-DIA	150 PSI TAB THK	200 PSI BOLTS NO-DIA	200 PSI TAB THK	250 PSI BOLTS NO-DIA	250 PSI TAB THK	300 PSI BOLTS NO-DIA	300 PSI TAB THK	350 PSI BOLTS NO-DIA	350 PSI TAB THK
4&6	2-3/4	1	2-3/4	1	2-3/4	1	2-3/4	1	2-3/4	1	2-3/4	1	2-3/4	1
8	2-3/4	1 1/4	2-3/4	1 1/4	2-3/4	1 1/4	2-3/4	1 1/4	2-3/4	1 1/4	4-3/4	1 1/4	4-3/4	1 1/4
10	2-3/4	1 1/4	2-3/4	1 1/4	2-3/4	1 1/4	4-3/4	1 1/4	4-3/4	1 1/4	4-3/4	1 1/4	6-3/4	1 1/4
12	2-3/4	1 1/4	2-3/4	1 1/4	4-3/4	1 1/4	4-3/4	1 1/4	6-3/4	1 1/4	6-3/4	1 1/4	8-3/4	1 1/4
14	2-3/4	1 1/2	4-3/4	1 1/2	4-3/4	1 1/2	4-3/4	1 1/2	6-3/4	1 1/2	6-3/4	1 1/2	8-3/4	1 1/2
16	2-3/4	1 1/2	4-3/4	1 1/2	6-3/4	1 1/2	4-3/4	1 1/2	6-3/4	1 1/2	6-3/4	1 1/2	8-3/4	1 1/2
18	2-3/4	1 3/4	4-3/4	1 3/4	6-3/4	1 3/4	4-3/4	1 3/4	8-3/4	1 3/4	8-3/4	1 3/4	8-3/4	1 3/4
20	4-3/4	1 3/4	4-3/4	1 3/4	4-3/4	1 3/4	4-3/4	1 3/4	6-3/4	1 3/4	6-3/4	1 3/4	8-3/4	1 3/4
24	4-3/4	2	4-3/4	2	6-3/4	2	6-3/4	2	8-3/4	2	10-3/4	2	10-3/4	2
30	4-1	2 1/4	4-1	2 1/4	4-1	2 1/4	8-1	2 1/4	8-1	2 1/4	10-1	2 1/4	10-1	2 1/4
36	4-1	2 1/2	4-1	2 1/2	8-1	2 1/2	8-1	2 1/2	10-1	2 1/2	12-1	2 1/2	14-1	2 1/2
42	4-1 1/4	2 3/4	4-1 1/4	2 3/4	8-1 1/4	2 3/4	8-1 1/4	2 3/4	10-1 1/4	2 3/4	12-1 1/4	2 3/4	12-1 1/4	2 3/4
48	8-1 1/4	2 3/4	8-1 1/4	2 3/4	8-1 1/4	2 3/4	8-1 1/4	2 3/4	12-1 1/4	2 3/4	12-1 1/4	2 3/4	14-1 1/4	2 3/4
54	8-1 1/4	3	8-1 1/4	3	8-1 1/4	3	12-1 1/4	3	14-1 1/4	3	16-1 1/4	3	18-1 1/4	3

1. THREADED RODS FOR ALL PIPE DIAMETERS IN THE SHADED AREA SHALL BE ASTM A193 (GRADE B7).
2. ALL OTHER THREADED RODS SHALL BE ASTM A36. ALL TABS SHALL BE ASTM A572 GR50.
3. ASTM A193 (GRADE B7) RODS SHALL BE LABELED AND BUNDLED SEPARATELY.
4. THIS SCHEDULE SHALL APPLY FOR HARNESSED FLANGED ADAPTERS. HARNESSED FLEXIBLE COUPLINGS AND ALL MECHANICAL JOINT COUPLINGS. SLEEVES ETC. THAT ARE REQUIRED TO BE HARNESSED.
5. RODS THREADED AT ENDS (INCLUDING NUTS) SHALL BE EQUALLY SPACED AROUND PIPE BETWEEN ALL MECHANICAL JOINT FITTINGS (TEE, VALVES, BEND, PLUG, ETC.) OR AS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS. THREADED RODS SHALL BE AS SHOWN IN THE THREADED ROD SCHEDULE. SEE NOTE 6.
6. RODS, NUTS, ETC., IN CONTACT WITH SOIL SHALL BE PAINTED WITH TWO COATS COAL TAR (MIN 20 DRY MIL THICKNESS) THEMEC 46-465 HI-BUILD OR EQUAL.

1516403

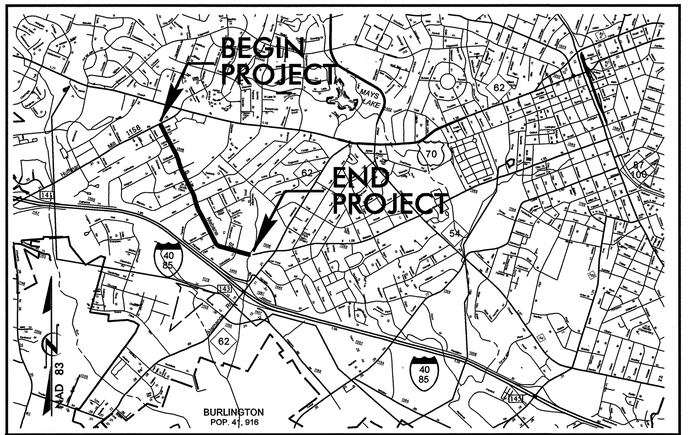
REVISIONS

REVISED TOE TO REFLECT PUE ON PARCELS 1A2,2T,AND 3Z.THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDG 7-16-08

8/17/99

TIP PROJECT: U-3303A

See Sheet UC-2 For Index of Sheets



VICINITY MAP

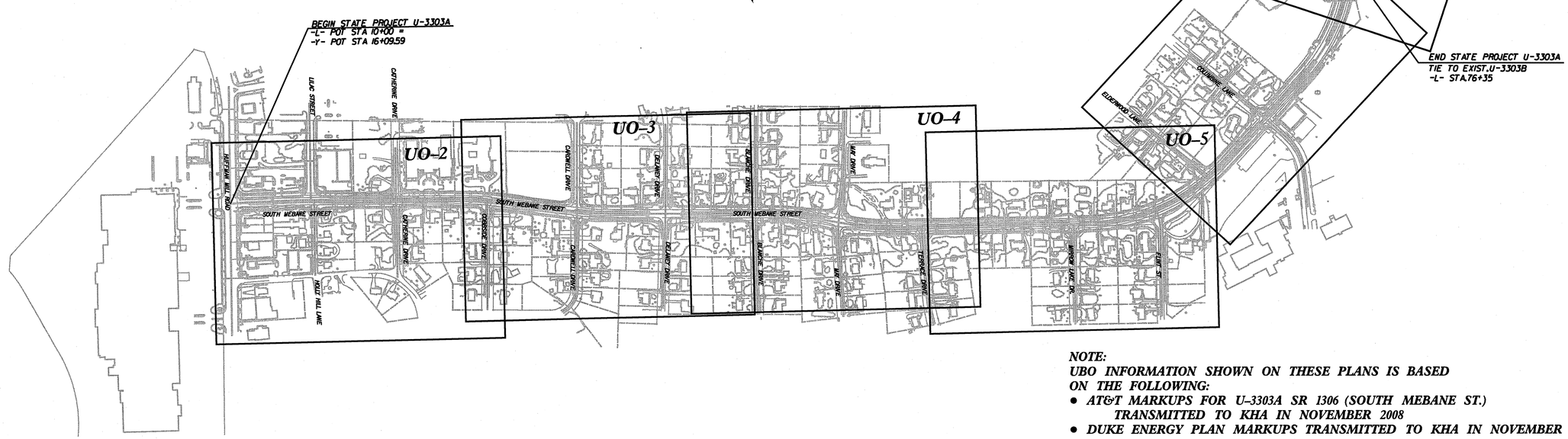
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

T.I.P. NO.	SHEET NO.
U-3303A	UO-1

UTILITY BY OTHERS PLANS
ALAMANCE COUNTY

LOCATION: ***BURLINGTON – SR 1306 (SOUTH MEBANE ST.)***
FROM SR 1158 (HUFFMAN MILL RD.)
TO NC 62 (ALAMANCE RD.)

TYPE OF WORK: UTILITIES RELOCATION



NOTE:
UBO INFORMATION SHOWN ON THESE PLANS IS BASED ON THE FOLLOWING:

- ***AT&T MARKUPS FOR U-3303A SR 1306 (SOUTH MEBANE ST.) TRANSMITTED TO KHA IN NOVEMBER 2008***
- ***DUKE ENERGY PLAN MARKUPS TRANSMITTED TO KHA IN NOVEMBER 2008***

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

5 2.5 0 5 10
PROFILE (VERTICAL)

INDEX OF SHEETS

SHEET NO.	*DESCRIPTION*
UO-1	*TITLE SHEET*
UO-2 THRU UO-7	*UTILITY BY OTHERS PLAN SHEETS*

UTILITY OWNERS ON PROJECT

(1) DUKE ENERGY (POWER)
(2) AT&T (TELEPHONE)
(3) TIME WARNER CABLE (CATV)
(4) PIEDMONT NATURAL GAS (GAS)

DIVISION OF HIGHWAYS
UTILITIES ENGINEERING SECTION

1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 250-4128
FAX (919) 250-4119

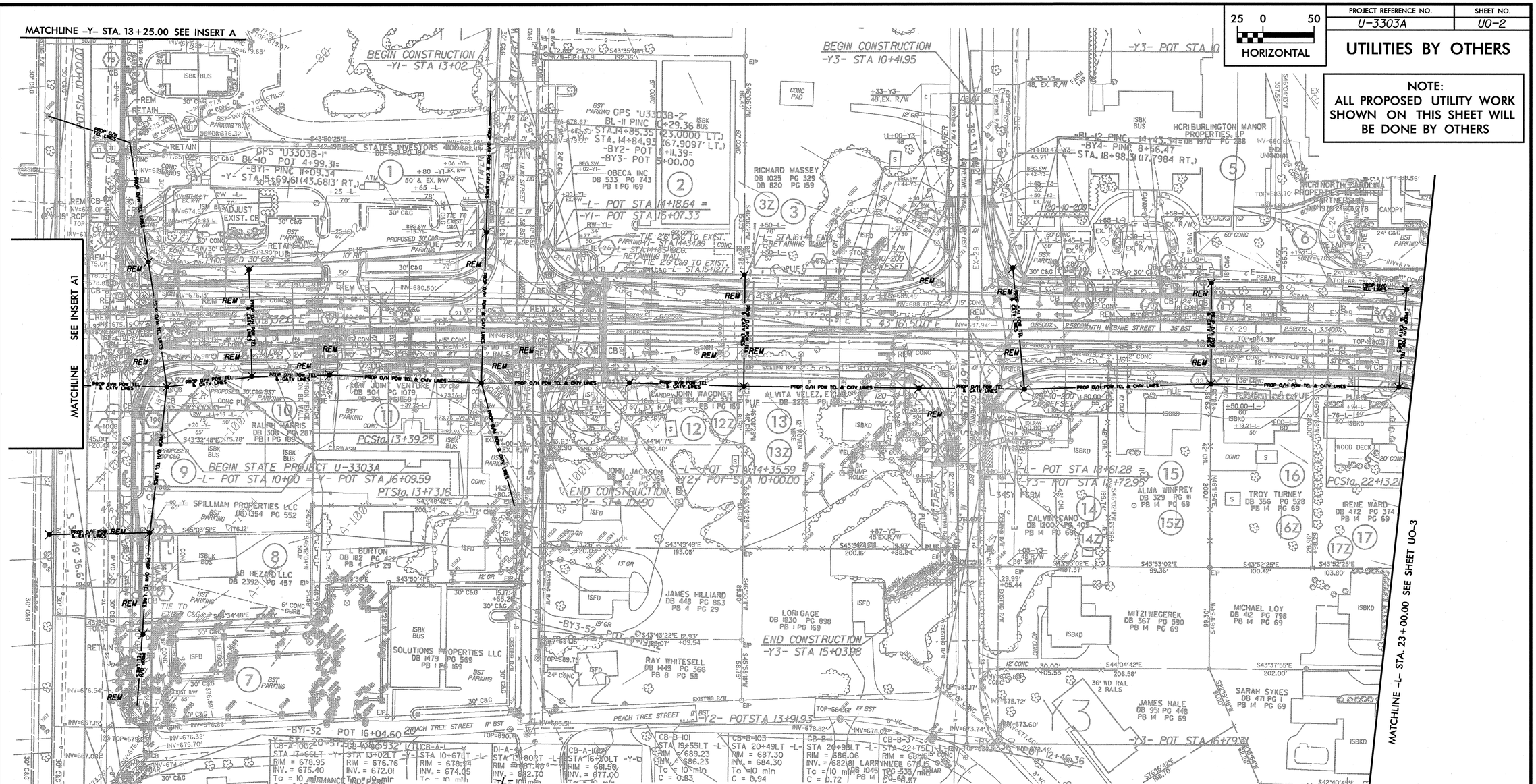
PREPARED IN THE OFFICE OF:
Kimley-Horn and Associates, Inc.
P.O. BOX 33068 - RALEIGH, NORTH CAROLINA 27636-3068
PHONE: (919) 677-2000 FAX: (919) 677-2050

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	U0-2

UTILITIES BY OTHERS

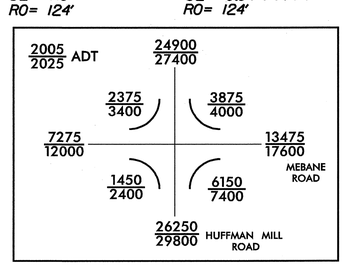
25 0 50
HORIZONTAL

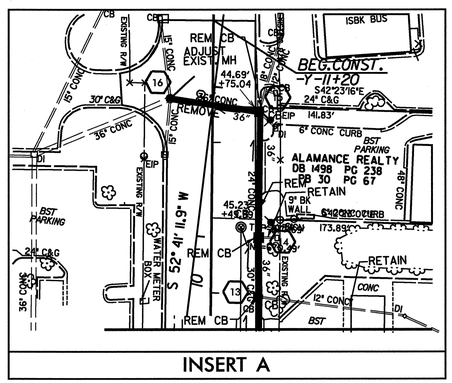
NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS



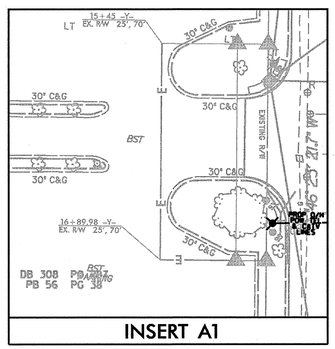
PI Sta 13+56.21
Δ = 2° 02' 42.0" (RT)
D = 6° 01' 52.1"
L = 33.91'
T = 16.96'
R = 950.00'
SE = RC
RO = 124'

PI Sta 22+73.65
Δ = 7° 16' 49.1" (RT)
D = 6° 01' 52.1"
L = 120.71'
T = 60.44'
R = 950.00'
SE = 0.04 FT/FT
RO = 124'





INSERT A



INSERT A1

SEE SHEET 10 FOR -L- PROFILE
SEE SHEET 13 FOR -Y3- PROFILE
SEE SHEET 28 FOR -Y3- INTERSECTION DETAIL

REVISIONS

8/17/99 REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.

7-16-08 REVISED TOE TO REFLECT PUE ON PARCELS 1AZ, 2Z, AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08.

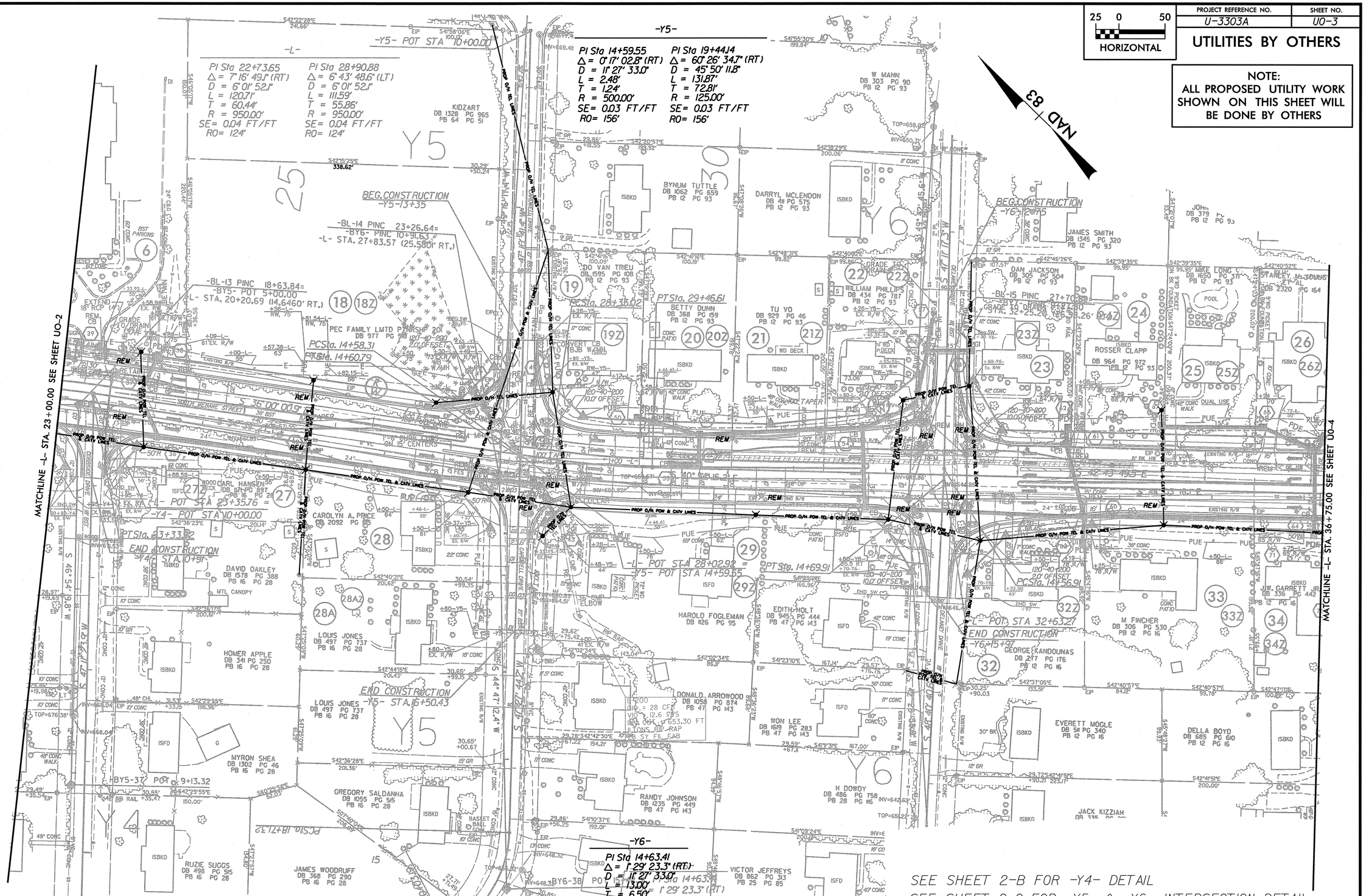
PROJECT REFERENCE NO.	SHEET NO.
U-3303A	U0-3

25 0 50
HORIZONTAL

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

NAD 83



SEE SHEET 2-B FOR -Y4- DETAIL
SEE SHEET 2-C FOR -Y5- & -Y6- INTERSECTION DETAIL
SEE SHEET 10 FOR -L- PROFILE
SEE SHEET 13 FOR -Y5- PROFILE

REVISIONS

REVISED TCE TO REFLECT PUE ON PARCELS 1AZ, 2Z, AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDB 7-16-08

8/17/99

8/17/99

REVISIONS

REVISED TCE TO REFLECT PUE ON PARCELS 1AZ, 2Z, AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDG 7-16-08

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	UO-4

25 0 50
HORIZONTAL

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

-Y8-

PI Sta 13+68.46	PI Sta 16+04.59
Δ = 7° 15′ 12.6″ (RT)	Δ = 12° 00′ 32.1″ (LT)
D = 2° 51′ 53.2″	D = 5° 43′ 46.5″
L = 253.20′	L = 209.60′
T = 126.77′	T = 105.18′
R = 2,000.00′	R = 1,000.00′
SE = 0.04 FT/FT	SE = 0.04 FT/FT
RO = 191′	RO = 191′

-L-

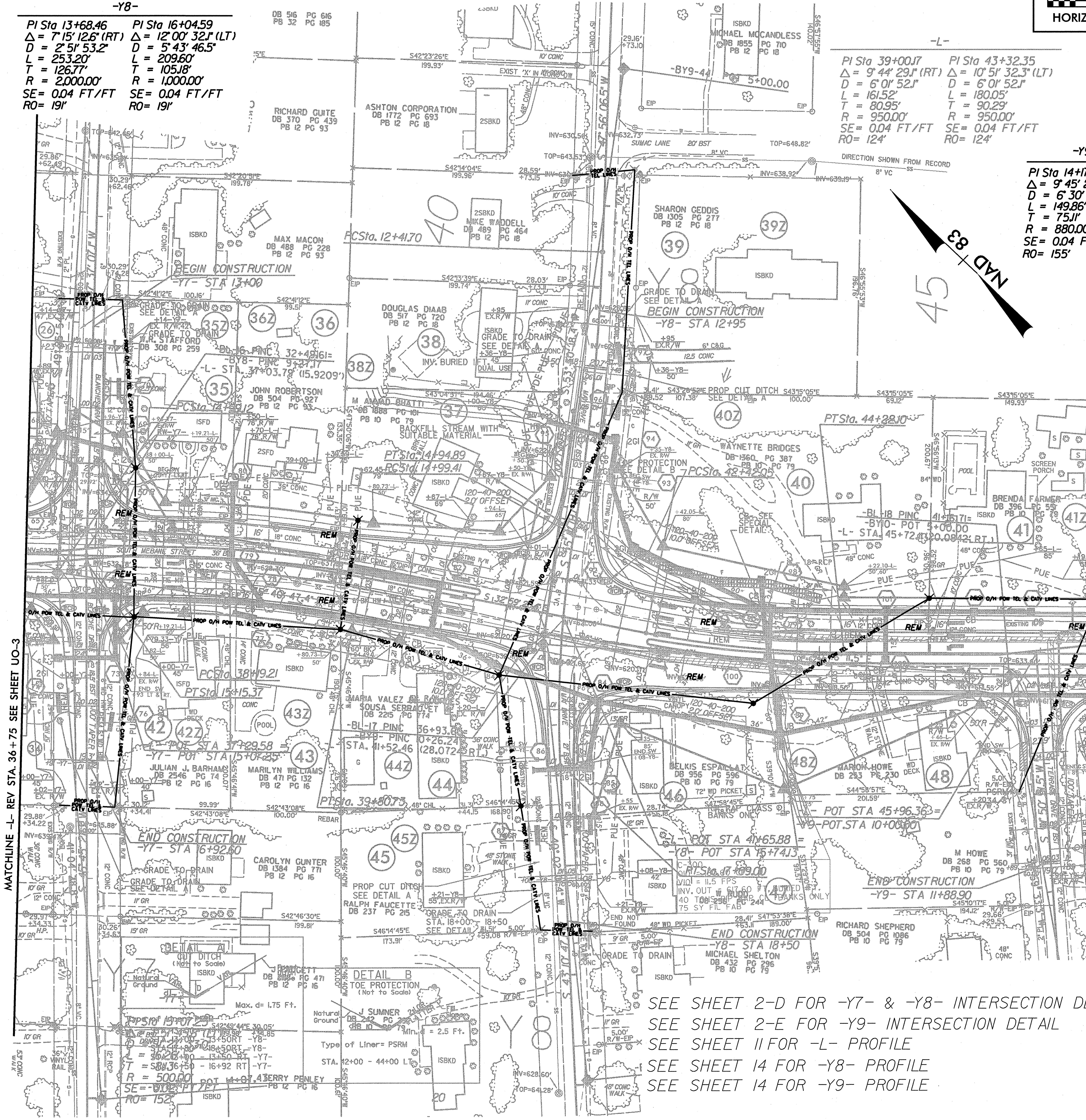
PI Sta 39+00.17	PI Sta 43+32.35
Δ = 9° 44′ 29.1″ (RT)	Δ = 10° 51′ 32.3″ (LT)
D = 6° 01′ 52.1″	D = 6° 01′ 52.1″
L = 161.52′	L = 180.05′
T = 80.95′	T = 90.29′
R = 950.00′	R = 950.00′
SE = 0.04 FT/FT	SE = 0.04 FT/FT
RO = 124′	RO = 124′

-Y9-

PI Sta 14+17.64
Δ = 9° 45′ 25.3″ (LT)
D = 6° 30′ 39.2″
L = 149.86′
T = 75.11′
R = 880.00′
SE = 0.04 FT/FT
RO = 155′

-Y7-

PI Sta 15+07.25
Δ = 1° 51′ 45.8″ (LT)
D = 11° 27′ 33.0″
L = 16.26′
T = 8.13′
R = 500.00′
SE = 0.02 FT/FT
RO = 152′



SEE SHEET 2-D FOR -Y7- & -Y8- INTERSECTION DETAIL
SEE SHEET 2-E FOR -Y9- INTERSECTION DETAIL
SEE SHEET 11 FOR -L- PROFILE
SEE SHEET 14 FOR -Y8- PROFILE
SEE SHEET 14 FOR -Y9- PROFILE

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

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	U0-5

25 0 50
HORIZONTAL

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

-L-
PI Sta 58+83.20
Δ = 46° 28' 14.3" (LT)
D = 5° 43' 46.5"
L = 811.07'
T = 429.33'
R = 1,000.00'
SE= 0.04 FT/FT
RO= 124'

-Y11-
PI Sta 10+63.54
Δ = 20° 44' 29.8" (RT)
D = 19° 05' 54.9"
L = 108.60'
T = 54.90'
R = 300.00'
SE= 0.02 FT/FT
RO= 218'

NAD 83

MATCHLINE -L- STA. 46+50 SEE SHEET U0-4

MATCHLINE -L- STA. 60+00 SEE SHEET U0-6

REVISIONS

REVISED TCE TO REFLECT PUE ON PARCELS 1AZ, 22, AND 32. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 32.
TDG 7-16-08

8/17/99

SEE SHEET 2-E FOR -Y10-INTERSECTION DETAIL
SEE SHEET 2-F FOR -Y11-INTERSECTION DETAIL
SEE SHEET 11 FOR -L- PROFILE
SEE SHEET 14 FOR -Y11- PROFILE

PROJECT REFERENCE NO.	SHEET NO.
U-3303A	U0-6

25 0 50
HORIZONTAL

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

NAD 83

-L-

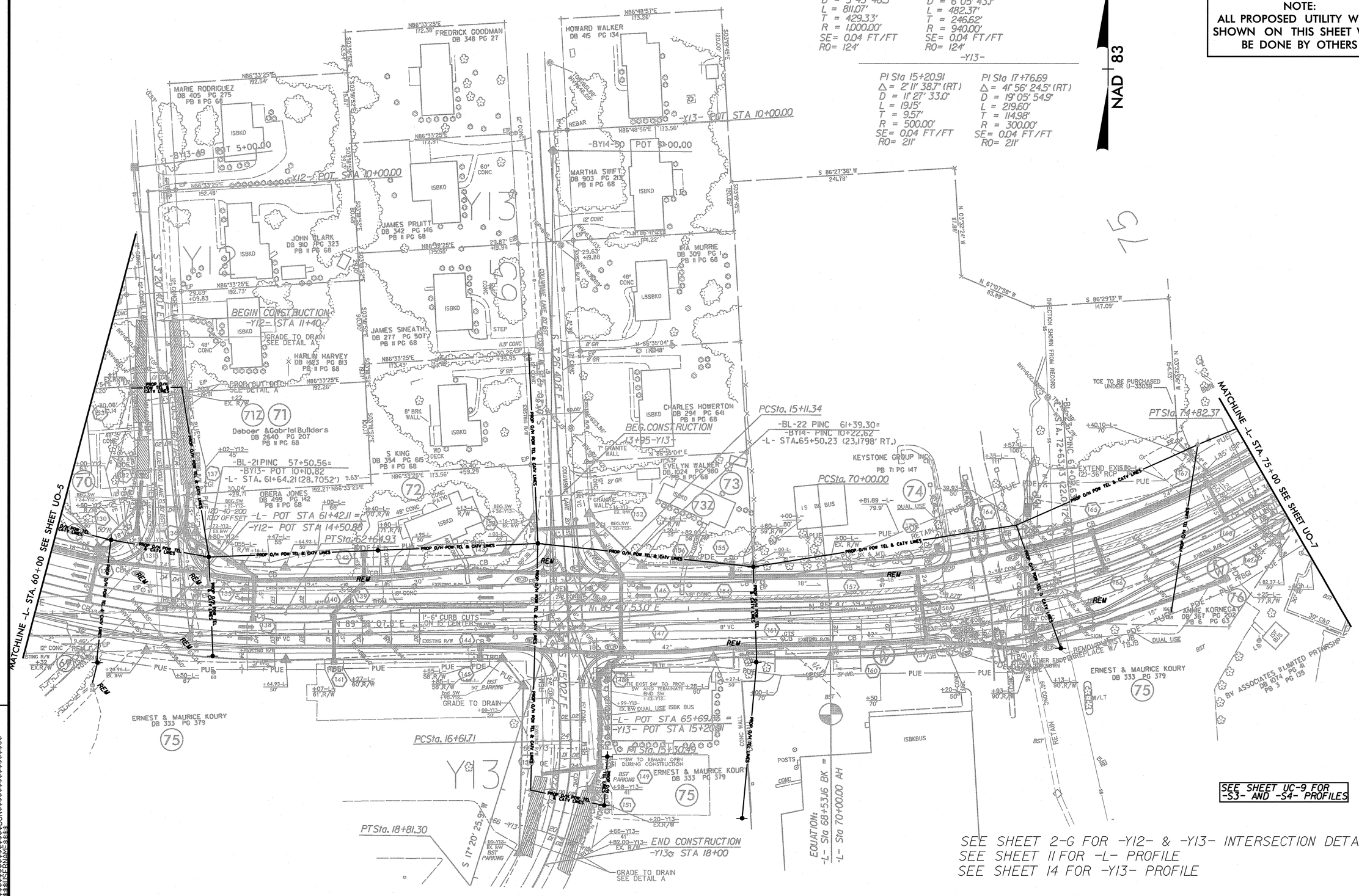
PI Sta 58+83.20
Δ = 46° 28' 14.3" (LT)
D = 5° 43' 46.5"
L = 811.07'
T = 429.33'
R = 1,000.00'
SE = 0.04 FT/FT
RO = 124'

PI Sta 72+46.62
Δ = 29° 24' 05.7" (LT)
D = 6° 05' 43.1"
L = 482.37'
T = 246.62'
R = 940.00'
SE = 0.04 FT/FT
RO = 124'

-Y13-

PI Sta 15+20.91
Δ = 2° 11' 38.7" (RT)
D = 11° 27' 33.0"
L = 19.15'
T = 9.57'
R = 500.00'
SE = 0.04 FT/FT
RO = 211'

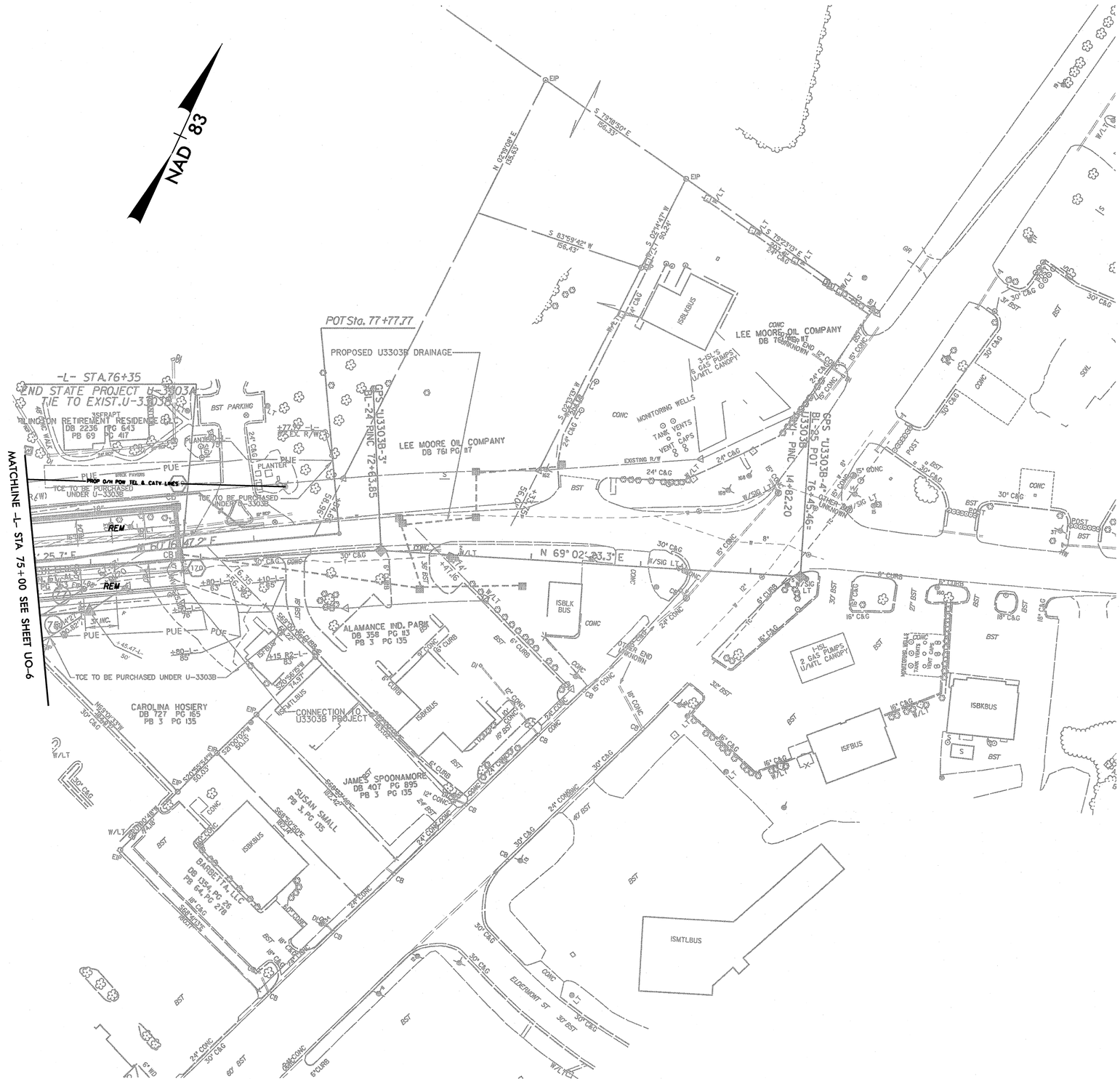
PI Sta 17+76.69
Δ = 41° 56' 24.5" (RT)
D = 19° 05' 54.9"
L = 219.60'
T = 114.98'
R = 300.00'
SE = 0.04 FT/FT
RO = 211'



25 0 50 HORIZONTAL	PROJECT REFERENCE NO.	SHEET NO.
	U-3303A	U0-7

UTILITIES BY OTHERS

NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS



REVISIONS

REVISED TCE TO REFLECT PUE ON PARCELS 1A2,2,AND 3Z. THIS WAS REVISED PER UTILITIES REQUEST DATED 4-11-08. PROPERTY NAME WAS REVISED ON PARCEL 3Z.
TDB 7-16-08

8/17/99