STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY PERDUE
GOVERNOR

EUGENE CONTI
SECRETARY

August 10, 2012

MEMORANDUM TO: Mr. Neil Lassiter, PE
Division 2 Engineer

FROM: Philip S. Harris, III, P.E., Unit Head
Natural Environment Unit
Project Development and Environmental Analysis Branch

SUBJECT: Carteret County, **Utility Work** associated with proposed improvements to US 70 from existing four-lane at Radio Island to north of Olga Road; Federal-Aid Project No. STPNHF-70(43)-0099(5); WBS Element 34528.1.1. **T.I.P Project No. R-3307**

Please find attached the NC Division of Coastal Management (DCM) CAMA General permit for the above referenced project. All environmental permits have been received for the relocations of utilities associated with this project.

Note that many of the permit drawings were revised after the permit was issued. DCM was notified and indicated that a permit modification was not required. The revised drawings are attached to this permit package for clarification and completeness.

A copy of this permit package will be posted on the NCDOT website at:
http://www.ncdot.gov/doh/preconstruct/pe/neu/permit.html

Cc:
Mr. Jay Johnson, Division Environ. Officer
Mr. Rob Hanson, P.E., PDEA Eastern Section Head

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6100
FAX: 919-212-5785

WEBSITE: WWW.NCDOT.ORG

LOCATION:
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610-4328

No 58373

☑CAMA / ☑DREDGE & FILL

GENERAL PERMIT

☑New ☐Modification ☐Complete Reissue ☐Partial Reissue

Previous permit # —

Date previous permit issued —

As authorized by the State of North Carolina, Department of Environment and Natural Resources and the Coastal Resources Commission in an area of environmental concern pursuant to 15A NCAC 07H .1600

☑Rules attached.

Applicant Name NCDOT

Address 1598 Mail Service Center

City Raleigh State NC ZIP 27699-1598

Phone # (919) 707-6000 Fax # (919) 250-4224

Authorized Agent Gregory Thorpe

Project Location: County Carteret

Street Address/ State Road/ Lot #(s) US 70 from Radio Island to US 70 north of SR1429 (Olga Road)

Subdivision —

City Beaufort, NC ZIP 28516

Phone # (___) — River Basin White Oak

Adj. Wtr. Body Gallants Channel and Town Creek (nat /man /unkn)

Closest Maj. Wtr. Body Newport River

Affected AEC(s): ☑CW ☑EW ☑PTA ☑ES ☐PTS ☐OEA ☐HHF ☐IH ☐UBA ☐N/A ☐PWS: ☐FC:

ORW: yes / (no) **PNA** yes / (no) **Crit.Hab.** yes / no

Type of Project/ Activity Relocate water, sewer, electric, telephone, and cable TV utilities in preparation for proposed improvements to US 70 (TIP R-3307). **(Scale:** N/A)

Pier (dock) length —

Platform(s) —

Finger pier(s) —

Groin length —

number —

Bulkhead/ Riprap length —

avg distance offshore —

max distance offshore —

Basin, channel —

—

cubic yards —

Boat ramp —

Boathouse/ Boatlift —

—

Beach Bulldozing —

Other Water line utilities
Sewer line utilities
Electric line utilities
Telephone line utilities
Cable TV line utilities

Utility Plans Attached

and Incorporated into Permit.

Shoreline Length ≥ 800'

SAV: not sure yes (no)

Sandbags: not sure yes (no)

Moratorium: n/a yes (no)

Photos: (yes) no

Waiver Attached: yes (no)

A building permit may be required by: Town of Beaufort.

☐ See note on back regarding River Basin rules.

Notes/ Special Conditions ① BMPs shall be implemented to prevent sediment from entering adjacent waters of the state.

Agent or Applicant Printed Name Gregory J. Thorpe, PhD
E. L. Rush Co

Signature ** Please read compliance statement on back of permit **

$400.00 WBS# 34528.1.1

Application Fee(s) Check #

Permit Officer's Signature Stephen Sanne

12-9-11

Issuing Date

No Expiration Date pursuant to G.S. 136-44.7B

Expiration Date

Town of Beaufort

Local Planning Jurisdiction

34° 43' 32"
76° 39' 39"

Rover File Name

SECTION .1600 - GENERAL PERMIT FOR THE INSTALLATION OF AERIAL AND SUBAQUEOUS UTILITY LINES WITH ATTENDANT STRUCTURES IN COASTAL WETLANDS: ESTUARINE WATERS: PUBLIC TRUST WATERS AND ESTUARINE SHORELINES

15A NCAC 07H .1601 PURPOSE

A permit under this Section shall allow for the installation of utility lines both aerially and subaqueously in the coastal wetland, estuarine water, public trust areas and estuarine and public trust shoreline AECs according to the authority provided in Subchapter 7J .1100 and according rules in this Section. This general permit shall not apply to the ocean hazard AECs.

History Note: *Authority G.S. 113-229(c1); 113A-107(a)(b); 113A-113(b); 113A-118.1;*
Eff. March 1, 1985;
Amended Eff. August 1, 2000; August 1, 1998.

15A NCAC 07H .1602 APPROVAL PROCEDURES

(a) The applicant must contact the Division of Coastal Management and complete an application form requesting approval for development. The applicant shall provide information on site location, dimensions of the project area, and his name and address.

(b) The applicant must provide:

(1) confirmation that a written statement has been obtained signed by the adjacent riparian property owners indicating that they have no objections to the proposed work; or

(2) confirmation that the adjacent riparian property owners have been notified by certified mail of the proposed work. Such notice should instruct adjacent property owners to provide any comments on the proposed development in writing for consideration by permitting officials to the Division of Coastal Management within ten days of receipt of the notice, and, indicate that no response will be interpreted as no objection. DCM staff will review all comments and determine, based on their relevance to the potential impacts of the proposed project, if the proposed project can be approved by a General Permit. If DCM staff finds that the comments are worthy of more in-depth review, the applicant will be notified that he must submit an application for a major development permit.

(c) No work shall begin until an on-site meeting is held with the applicant and appropriate Division of Coastal Management representative so that the utility line alignment can be appropriately marked. Written authorization to proceed with the proposed development will be issued during this visit. Construction on the utility line must begin within twelve months of this visit or the general authorization expires.

History Note: *Authority G.S. 113A-107(a)(b); 113A-113(b); 113A-118.1; 113A-229(cl);*
Eff. March 1, 1985;
Amended Eff. January 1, 1990.

15A NCAC 07H .1603 PERMIT FEE

The applicant shall pay a permit fee of four hundred dollars ($400.00) by check or money order payable to the Department.

History Note: *Authority G.S. 113-229(c1); 113A-107; 113A-113(b); 113A-118.1; 113A-119; 113A-119.1;*
Eff. March 1, 1985;
Amended Eff. September 1, 2006; August 1, 2000; March 1, 1991.

15A NCAC 07H .1604 GENERAL CONDITIONS

(a) Utility lines for the purpose of this general permit or any pipes or pipelines for the transportation of potable water, domestic sanitary sewage, natural gas, and any cable, line, or wire for the transmission, for any purpose, of electrical energy, telephone and telegraph messages, and radio and television communication.

(b) There must be no resultant change in preconstruction bottom contours. Authorized fill includes only that necessary to backfill or bed the utility line. Any excess material must be removed to an upland disposal area.

(c) The utility line crossing will not adversely affect a public water supply intake.

(d) The utility line route or construction method will not disrupt the movement of those species of aquatic life indigenous to the waterbody.
(e) Individuals shall allow authorized representatives of the Department of Environment, Health, and Natural Resources to make periodic inspections at any time necessary to ensure that the activity being performed under authority of this general permit is in accordance with the terms and conditions prescribed herein.
(f) This general permit will not be applicable to proposed construction where the Department has determined, based on an initial review of the application, that notice and review pursuant to G.S. 113A-119 is necessary because there are unresolved questions concerning the proposed activity=s impact on adjoining properties or on water quality; air quality; coastal wetlands; cultural or historic sites; wildlife; fisheries resources; or public trust rights.
(g) This permit does not eliminate the need to obtain any other required state, local, or federal authorization, nor, to abide by regulations adopted by any federal or other state agency.
(h) Development carried out under this permit must be consistent with all local requirements, AEC guidelines, and local Land Use Plans current at the time of authorization.

History Note: *Authority G.S. 113-229(c1); 113A-107(a)(b); 113A-113(b); 113A-118.1;*
Eff. March 1, 1985;
Amended Eff. May 1, 1990;
RRC Objection due to ambiguity Eff. May 19, 1994;
Amended Eff. August 1, 1998; July 1, 1994.

15A NCAC 07H .1605 SPECIFIC CONDITIONS

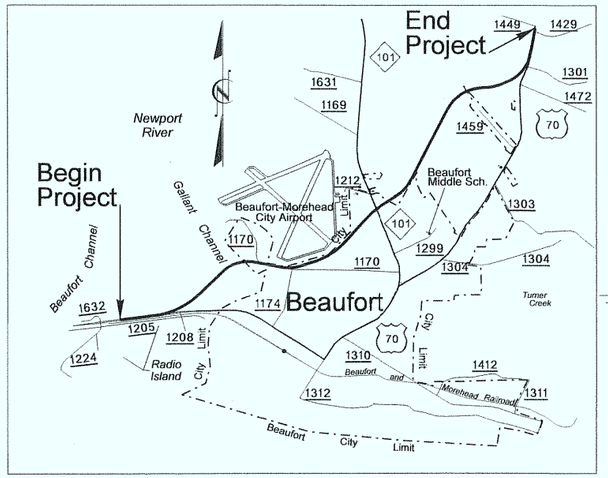
Proposed utility line installations must meet each of the following specific conditions to be eligible for authorization by this general permit:

(1) All domestic sanitary sewer line requests must be accompanied by a statement of prior approval from the NC Division Water Quality.
(2) All spoils which are permanently removed must be placed on a high ground disposal site and stabilized so as not to return to waters, marsh or other wetlands.
(3) Any additional backfill material required must be clean sand or rock free of organic matter.
(4) Cuts through wetlands must be minimized.
(5) Finished grades or subaqueous or wetland crossing must be returned to preproject contours.
(6) There can be no work within any productive shellfish beds.
(7) No excavation or filling activities will be permitted between April 1 and September 30 of any year within any designated primary nursery area.
(8) Subaqueous lines must be placed at a depth of six feet below the project depth of federal projects. In other areas they will be installed at a minimum depth of two feet below the bottom contour.
(9) The minimum clearance for aerial communication lines or any lines not transmitting electricity will be 10' above the clearance required for bridges in the vicinity.
(10) The minimum clearance for aerial electrical transmission lines shall be consistent with those established by the US Army Corps of Engineers and US Coast Guard.
(11) The installation of a utility line on pipe bents or otherwise above the elevation of mean high or mean ordinary water must be of sufficient height to allow for traditional navigation in the water body. Additionally the utility line must not interfere with the waterflow of normal or flood waters.
(12) Natural gas lines must not exceed 11 inches in diameter.

History Note: *Authority G.S. 113-229(c1); 113A-107(a)(b); 113A-113(b); 113A-118.1;*
Eff. March 1, 1985;
Amended Eff. August 1, 1998.

09/28/99

TIP PROJECT: R-3307



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

T.I.P. NO.	SHEET NO.
R-3307	UO-1

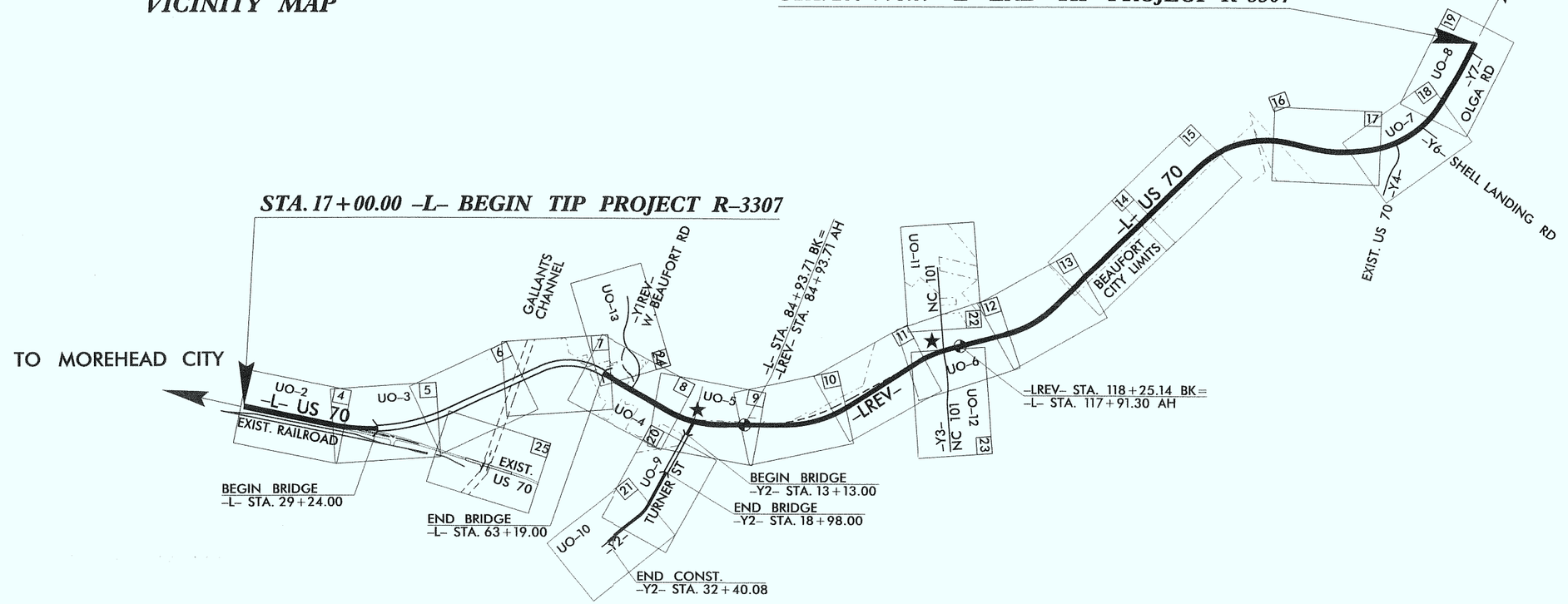
Utility Permit Drawing
Sheet 1 of 16

NEU PERMIT DRAWINGS
CARTERET COUNTY

LOCATION: US 70 FROM EXISTING FOUR LANES AT RADIO ISLAND TO US 70 NORTH OF SR 1429 (OLGA ROAD)

TYPE OF WORK: RELOCATE UTILITIES LINES

STA. 207+95.09 –L– END TIP PROJECT R-3307



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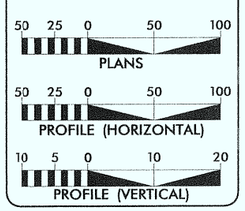
GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.	*DESCRIPTION*
UO-1	*TITLE SHEET*
UO-2 THRU UO-13	*UTILITY BY OTHERS PLAN SHEETS*

UTILITY OWNERS ON PROJECT

(1) CENTURY LINK
(2) PROGRESS ENERGY
(3) TIME WARNER CABLES

PREPARED IN THE OFFICE OF:
DIVISION OF HIGHWAYS
UTILITIES ENGINEERING SECTION
1591 MAIL SERVICES CENTER
RALEIGH NC 27699-1591
PHONE (919) 707-6690
FAX (919) 250-4151

Roger Worthington, P.E.	*UTILITIES SECTION ENGINEER*
Gorey Bousquet, P.E.	*UTILITIES SQUAD LEADER PROJECT ENGINEER*
Kifah Kamil	*UTILITIES PROJECT DESIGNER*

04-AUG-2011 2:09
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$$$$USERNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
R-3307	UO-2

UTILITIES BY OTHERS

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

NAD 83

-L-
PI Sta. 31+49.36
Δ = 36° 26' 02.2" (LT)
D = 2° 10' 42.8"
L = 1,672.40'
T = 865.56'
R = 2,630.00'
SE = .05

REVISED NEU PERMIT DRAWING
03/05/2012

Utility Permit Drawing
Sheet 2 of 16

BEGIN TIP PROJECT R-3307
-L- POT STA. 10+00.00

10+00 -L- POT Sta. 10+00.00

15+00

20+00

-L- PC Sta. 22+83.80

MATCH LINE -L- STA. 24+00 SEE SHEET UO-3

JOSEPH EUDY, et ux.
DB 1010 PG 122

TOWN OF MOREHEAD CITY
DB 910 PG 214
MB 30 PG 165

MOREHEAD CITY LIMITS

N 18°23'36" E 154.42'
S 87°39'15" E 184.38'
EIP
S 16°19'30" W 78.55'
N 16°24'45" W 109.22'

-L- 00 70.26
100' TAPER LT & RT
9'-7" SPECIAL LATERAL 'V' GRASS SWALE SEE DETAIL "A"
-L- 00 70.26 & 80' BEGIN C/A
BEGIN WW FENCE
SPECIAL LATERAL 'V' GRASS SWALE SEE DETAIL "A"
-L- 83.80 80'
PROP. WW FENCE
EXISTING R/W WIDTH VARIES

ABANDON
ABANDON

WBL 24 BST PROP. 2'-9" C&G US 70 N 8°31'00.4" E -L-
EBL 24 BST US 70
EXIST. 02 025 24' 10' 025 02 01 00 01 02 03 04 24' 05

EXISTING RR R/W
SWITCH BOX
100.00'
195' BST

SR 1205 OLD CAUSEWAY
SR 1205 OLD CAUSEWAY

56' WD
72" WD
48" CMP
48" CHL
ELECTRIC METER
ISFD
2SFD
BLK WALL
WALL
RAMP
PIER
DK
SOIL
CONC
BOGUE SOUND

PROP.U/G CATV CABLES

05-MAR-2012 11:00
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PROJECT REFERENCE NO.	SHEET NO.
R-3307	UO-3

UTILITIES BY OTHERS

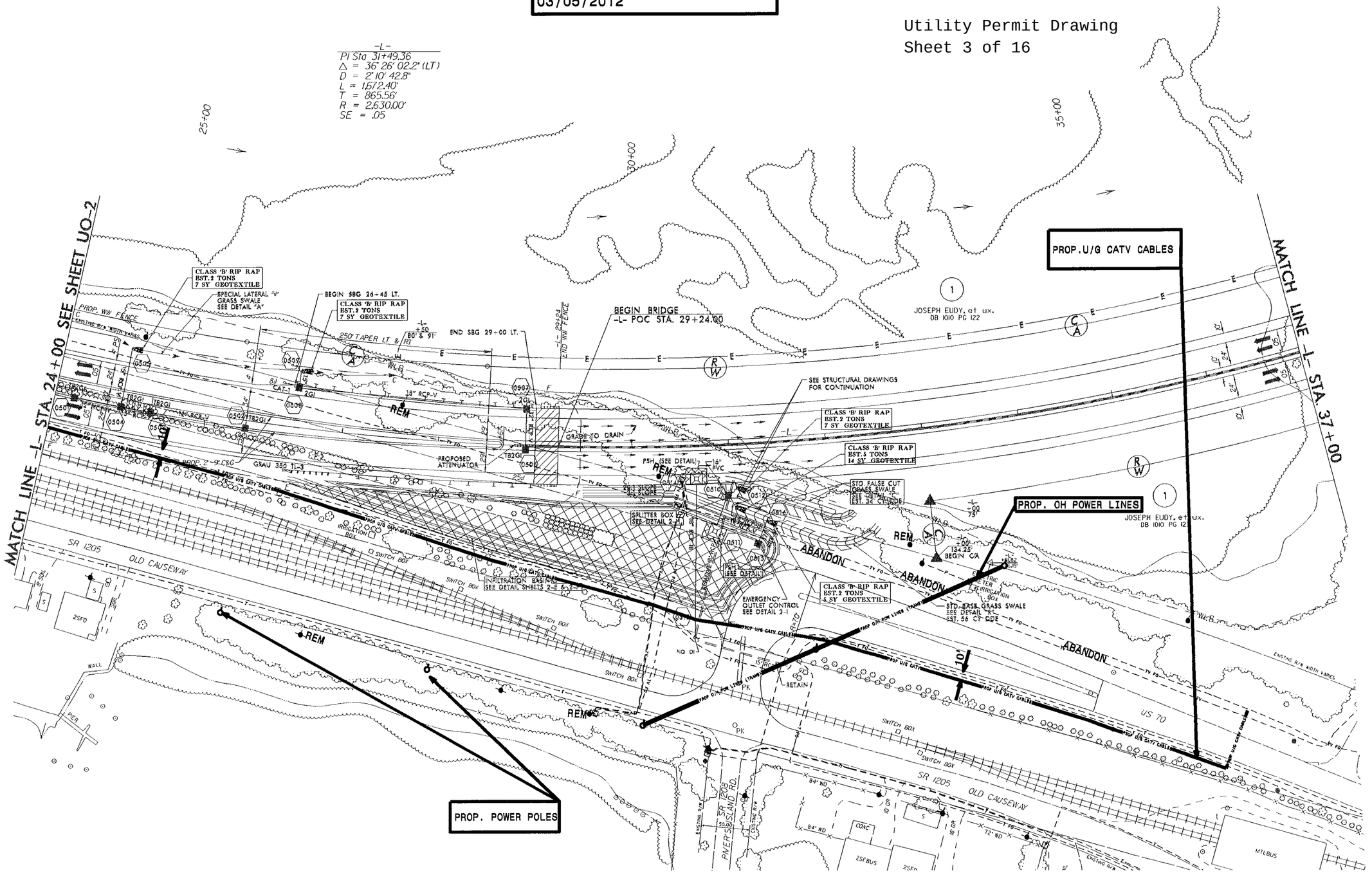
NAD 83

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

REVISED NEU PERMIT DRAWING
03/05/2012

Utility Permit Drawing
Sheet 3 of 16

-L-
PI Sta 31+49.36
Δ = 36° 26' 02.2" (LT)
D = 2° 10' 42.8"
L = 1,672.40'
T = 865.56'
R = 2,630.00'
SE = .05



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USER: ken
PSELECTION: default

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
R-3307	U0-4

REVISED NEU PERMIT DRAWING
03/05/2012

UTILITIES BY OTHERS

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

NAD 83

Utility Permit Drawing
Sheet 4 of 16

PROP. U/G TEL CABLES

U/G TELEPHONE CABLES WILL BE INSTALLED BY DIRECTIONAL BORE THRU WETLANDS

U/G POWER AND CATV CABLES WILL BE INSTALLED BY DIRECTIONAL BOR THRU THE WETLANDS

PROP. UG CATV CABLES

PROP. UG POWER CABLES

PROP. 8" SEWER LINE

PROP. 8" WATER LINE

PROP. UG TELEPHONE CABLES

PROP.U/G CATV CABLES

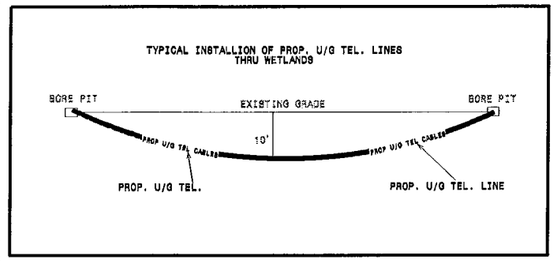
PROP. UG POWER CABLES

MATCH LINE -L- STA. 15+00 SHEET UO-13

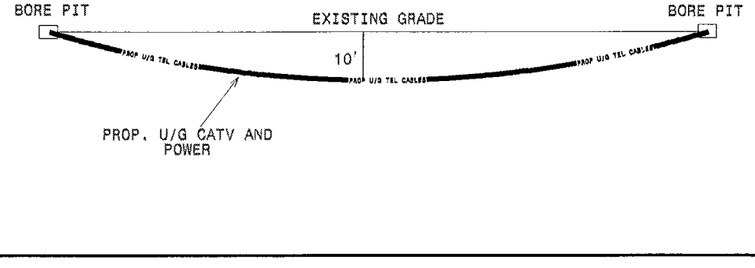
MATCH LINE -L- STA. 74+00 SEE SHEET UO-5

MATCH LINE -L- STA. 62+00

TYPICAL INSTALLION OF PROP. U/G TEL. LINES
THRU WETLANDS



TYPICAL INSTALLION OF PROP. U/G CATV/POWER
THRU WETLANDS



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PROJECT REFERENCE NO.	SHEET NO.
R-3307	UO-5

UTILITIES BY OTHERS

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

NAD 83

Utility Permit Drawing
Sheet 5 of 16

REVISED NEU PERMIT DRAWING
03/05/2012

-L-
Pls Sta 74+41.99
Θs = 6° 21' 58.3"
Ls = 300.00'
LT = 200.13'
ST = 100.12'

Pl Sta 77+44.33
Δ = 17° 03' 32.8" (LT)
D = 4° 14' 38.9"
L = 401.95'
T = 202.47'
R = 1,350.00'
SE = .04

Pls Sta 80+43.92
Θs = 6° 21' 58.3"
Ls = 300.00'
LT = 200.13'
ST = 100.12'

Pls Sta 86+60.40
Θs = 2° 42' 09.5"
Ls = 250.00'
LT = 166.69'
ST = 83.35'

910
BEAUFORT-MOREHEAD CITY AIRPORT AUTHORITY
DB 11PG 420
DB 15 PG 554
DB 100 PG 374
DB 100 PG 455
DB 100 PG 471
DB 101PG 231
DB 101PG 263
DB 101PG 265
DB 101PG 288
DB 101PG 296
DB 101PG 331-333
DB 409 PG 18
DB 517 PG 127
DB 524 PG 346
DB 583 PG 142
DB 688 PG 216
DB 734 PG 890
DB 808 PG 559
MB 1PG 201
MB 1PG 249
UNRECORDED MAP OF BEAUFORT-MOREHEAD CITY AIRPORT DATED 1986 BY POWELL SURVEYING CO.

PROP. UG POWER CABLES

PROP. 8" SEWER LINE

PROP. 8" WATER LINE AND 6" SEWER LINE BY DIRECTIONAL BORE

PROP.U/G CATV CABLES

PROP. U/G POWER, WATER AND SEWER LINES BY TRENCHLESS INSTALLATION

PROP. U/G TEL CABLES

PROP. O/H POWER LINES

PROP. POWER CONDUIT BY DIRECTIONAL BORE

MATCH LINE -L- STA. 74+00 SEE SHEET UO-4

MATCH LINE -L- STA. 86+00

MATCH LINE -Y2- STA. 13+50 SEE SHEET UO-9

BEAUFORT MOREHEAD CITY AIRPORT RUNWAY BST

-L- SC Sta. 75+41.86

-L- CS Sta. 79+43.80

-L- ST Sta. 82+43.80

IDENTITY:
-L- TS Sta. 84+93.71 LB=
-LREV- POT Sta. 84+93.71 LA

-Y2- POT Sta. 10+00.00

-Y2- POT Sta. 13+00.00

BEGIN CONSTRUCTION
-T Sta. 10+84.04

END CONSTRUCTION
-Y5- POT Sta. 12+12.33

-Y5- POT Sta. 13+10.00

CLASS 'B' RIP RAP
EST. 3 TONS
10 SY GEOTEXTILE

LATERAL BASE GRASS SWALE SEE DETAIL "F" EST. 905 CY DIG

FALSE SUMP SEE DETAIL "H"

BANK STABILIZATION SEE DETAIL "V" CLASS 'B' RIP RAP EST. 5 TONS 77 SY GEOTEXTILE

SPEC. LATERAL "V" DITCH SEE DETAIL "I"

BANK STABILIZATION SEE DETAIL "V" CLASS 'B' RIP RAP EST. 5 TONS 12 SY GEOTEXTILE

LOCATION OF SANITARY SEWER PUMPING STATION NO. 10

PROP. SANITARY SEWER PUMP STATION

SS MH SET NO UG LINES YET AREA U/C

MAINSAIL OF BEAUFORT, LLC TOWNHOME DEVELOPMENT U/C

MAINSAIL OF BEAUFORT, LLC

ADVANCED ACQUISITION

ABANDON

REM

RETAIN

PROP. WW FENCE

END WW FENCE

BEGIN WW FENCE

SEASONAL HAYFIELD

GRADE TO DRAIN

ABANDON TELEPHONE

SR 1170 WEST BEAUFORT RD. 18' BST

CARTERET COUNTY DB 112 PG 252

JOHN J. McCANN, SR. DB 601PG 327

GLENN ADAIR DB 301PG 243

C. M. VELLINES, ET UX. DB 141PG 581

CHARLES F. ELLIOTT, ET UX. DB 548 PG 194

KIM WILLIS

DOROTHY H. LEWIS DB 518 PG 172

ROCHELLE L. SIMON DB 518 PG 172

SPYGLASS PROPERTIES, INC. DB 1401PG 55

ATLANTIC VENEER CORP. DB 735 PG 638

RUTH R. MCLAIN, et al.

LARRY W. FULP, et ux. DB 902 PG 744

DB 945 PG 594

JAMES T. BOWLING, et ux. DB 532 PG 347

30' B&M RAILROAD R/W

C. M. VELLINES, BST DB 181PG 73

APPARENT PROPERTY OVERLAP

PROPERTY LINE ACCORDING TO AIRPORT SURVEY

Causeway Removal
(App. 1.4 acres)
Grade to Target Elevation -0.2'
Limits and Elevations May Be Adjusted by Engineer
See Mitigation Plan

05-MAR-2012 14:02
R-3307_UO_revised.NEU
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PROJECT REFERENCE NO.	SHEET NO.
R-3307	UO-6

UTILITIES BY OTHERS

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

NAD 83

Utility Permit Drawing
Sheet 6 of 16

Revised
5/1/12

MATCH LINE -Y3- STA. 18+00 SEE SHEET UO-11

MATCH LINE -L- STA. 111+50

MATCH LINE -Y3- STA. 26+00 SEE SHEET UO-12

MATCH LINE -L- STA. 124+50 SEE SHEET UO-6A

PROP. U/G TEL. CABLES

PROP. O/H POWER & CATV CABLE LINES

PROP. WATER LINE

PROP. SEWER LINE

HISTORIC PROPERTY

SEAN M. CONNER, et ux.
DB 1746 PG 117

STEVEN N. BERNARD
DB 527 PG 057

SERENA R. SULLIVAN

V.F.W. JONES-AUSTIN POST #2401
DB 167 PG 183
DB 271 PG 562
MB 7 PG 29
MB 3 PG 95

GUY D. LEWIS, JR., et ux.
DB 1133 PG 461

GUY D. LEWIS, JR., et ux.
DB 822 PG 076

TERRY O'PRAY, et ux.
DB 803 PG 321

BOBBIE G. WHITECOTTON
DB 1133 PG 460

CHARLES B. PARK, IV, et ux.

KENNY RIGGS
DB 953

STEVEN C. JARMAN
DB 562 PG 330

STEPHEN MAIER et ux.
DB 970 PG 472

DEBORAH F. GILKIN, ET VIR
DB 895 PG 452

DO NOT DISTURB WATER METER

GEORGE T. SPARKS, et ux.
DB 849 PG 183

DENISE G. WARREN
DB 1052 PG 309

BRENT R. MASEY
DB 436 PG 090
MB 029 PG 49

NCDOT
FORMERLY-TRADITIONAL FARMS LLC
DB 1235 PG 128

TRADITIONAL FARMS LLC
DB 843 PG 362

SARAH R. BROADMAN, et al.
DB 854 PG 273
MB 029 PG 49

THOMAS V. WOMACK, JR.
DB 312 PG 219

REBECCA S. NEWTON
DB 889 PG 403

TIMOTHY F. HOWLAND, et ux.
DB 450 PG 286
MB 1 PG 200

LOIS D. HOWLAND
DB 130 PG 523
DB 234 PG 042

Greg Frody, et ux
MB 1 PG 200
DB 795 PG 855

REBECCA L. TAYLOR, et ux.
DB 1068 PG 60

PEGGY McKAY, et al.
DB 1061 PG 455

CARTERET COUNTY
DB 947 PG 599
MB 1 PG 206
MB 1 PG 230

CLASS 'B' RIP RAP EST. 8 TONS 21 SY GEOTEXTILE

CLASS 'B' RIP RAP EST. 5 TONS 10 SY GEOTEXTILE

CLASS 'B' RIP RAP EST. 10 TONS 28 SY GEOTEXTILE

CLASS 'B' RIP RAP EST. 15 TONS 40 SY GEOTEXTILE EST. 10 CY DDE

LATERAL 'V' DITCH SEE DETAIL "O" CLASS 'B' RIP RAP EST. 15 TONS 40 SY GEOTEXTILE EST. 10 CY DDE

LATERAL 'V' DITCH SEE DETAIL "V" EST. 233 CY DDE

SPECIAL LATERAL 'V' GRASS SWALE SEE DETAIL "A"

SPECIAL LATERAL 'V' DITCH SEE DETAIL "I"

SPECIAL CUT DITCH SEE DETAIL "S"

-Y3- PC Sta. 21+34.00

-Y3- PT Sta. 24+91.82

-Y3- PI Sta. 22+47.82
Δ = 8° 40' 44.2" (LT)
D = 3° 49' 11.0"
L = 227.21'
T = 113.82'
R = 1,500.00'
SE = .06

-Y3- PI Sta. 24+26.64
Δ = 8° 48' 12.5" (RT)
D = 6° 44' 26.4"
L = 130.60'
T = 65.43'
R = 850.00'
SE = .06

-L- PIs Sta 112+19.96
Θs = 4° 38' 44.2"
Ls = 300.00'
LT = 200.07'

-L- PIs Sta 113+99.96
Δ = 4° 57' 23.2" (RT)
D = 3° 05' 49.4"
L = 180.04'

-L- PIs Sta 115+79.99
Θs = 4° 38' 44.2"
Ls = 300.00'
LT = 200.07'
ST = 100.06

-L- PIs Sta 125+21.24
Θs = 6° 08' 19.8"
Ls = 300.00'
LT = 200.12'
ST = 100.11'

-L- TS Sta. 123+21.12

-L- N 57° 01' 06.3" E

-LREV- SC Sta. 112+38.28

-LREV- CS Sta. 115+25.14

-LREV- POS Sta. 115+41.87

-Y3- POC Sta. 21+84.11

-Y3- PRC Sta. 23+61.21

-L- POT Sta. 117+91.03

-L- ST Sta. 117+03.03

EQUALITY: -LREV- ST Sta. 118+

-Y3- PT Sta. 24+91.82

BEARING WH = S 22° 34' 31.7" E

25+00

01-MAY-2012 15:12
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PROJECT REFERENCE NO.	SHEET NO.
R-3307	U0-7

UTILITIES BY OTHERS

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

Utility Permit Drawing
Sheet 7 of 16

NAD 83

MATCH LINE -L- STA. 186+00

MATCH LINE -L- STA. 197+50 SEE SHEET UO-8

MATCH LINE INSERT A

-L-
PI Sta 192+23.85
Δ = 54° 15' 09.2" (LT)
D = 4° 18' 28.6"
L = 1,259.36'
T = 681.37'
R = 1,330.00'
SE = .05

-L- POC Sta.194+56.75 =
-Y6- POT Sta. 10+00.00

-L- POC Sta.190+13.13
-Y4- POT Sta.10+00.00
BEARING AH = S 42° 46' 06" E 1886.87'

-YA- PC Sta. 10+51.07

-Y4- PRC Sta. 13+04.64

-Y4- POC Sta.13+40.00

-Y4- PT Sta. 15+88.44

-Y4- POT Sta. 17+83.44

-DR3- POT Sta. 10+00.00

-DR3- POT Sta. 13+50

-DR3- POT Sta. 14+64.78 =
-Y6- POT Sta.10+76.35

-DR3- N 24° 07' 17.0" E

PI Sta 11+89.97
Δ = 58° 06' 53.8" (RT)
D = 22° 55' 05.9'
L = 253.57'
T = 138.91'
R = 250.00'

PI Sta 14+47.73
Δ = 18° 04' 03.0" (LT)
D = 6° 21' 58.3"
L = 283.80'
T = 143.09'
R = 900.00'

PROP. U/G CATV CABLES

PROP. U/G TEL CABLES

72 CEDRIC D. BEACHEM
DB 415 PG 137

73 HOBERT M. KELLY, et ux
DB 470 PG 265
MB 21PG 11

74 CHRISTINA GOODING MATTHEWS
DB 868 PG 643
MB 21PG 11

75 FRANCIS WADE, et ux
DB 235 PG 313

76 FRANCIS WADE, et ux
DB 409 PG 457

77 JIMMY G. NOBLING
DB 943 PG 303

78 OWNER UNKNOWN

79 LARRY W. STYRON, et ux
DB 590 PG 316

80 DITCH CLEANOUT
SEE DETAIL W

81 TAMMY M. MURRELL
DB 915 PG 533

82 JOHN A. BENSON, et ux
DB 1026 PG 430

83 CECIL LEROY SWAIN, JR.
MB 11PG 35
DB 434 PG 450

85 CECIL LEROY SWAIN, JR.
MB 11PG 35
DB 434 PG 450

69 RICHARD LEE WARREN
DB 987 PG 73

GARY ALLEN WARREN
DB 987 PG 74

LINDA LOU WILLIS
DB 987 PG 71

LINDA LOU WILLIS
DB 958 PG 390

A LOU WILLIS
B 479 PG 81

RAYMOND A. TAYLOR
DB 130 PG 513
DB 236 PG 336
MB 28 PG 58

WALLACE W. GARNER, JR., ET UX
DB 351PG 451

WALLACE W. GARNER, JR.
DB 99 PG 595

WALLACE W. GARNER, JR.
DB 99 PG 595

OLD US 70

PYVER CHURCH RD

S 20° 03' 15.9" E

S 20° 39' 04.3" E

END CONST.
-Y6- POT Sta. 12+35.00

-Y6- POT Sta. 12+65.00

DO NOT DISTRUB FENCE

STD 'V' DITCH SEE DETAIL D

STD 'V' GRASS SWALE SEE DETAIL B

SPEC. LATERAL 'V' GRASS SWALE SEE DETAIL A

SPEC. LATERAL 'V' DITCH SEE DETAIL I

SPECIAL LATERAL BASE DITCH SEE DETAIL T

STANDARD BASE DITCH SEE DETAIL K

STD BASE DITCH SEE DETAIL K

EXIST R/W

5/14/99
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PROJECT REFERENCE NO.	SHEET NO.
R-3307	U0-8

UTILITIES BY OTHERS

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

Utility Permit Drawing
Sheet 8 of 16

NAD 83

-L-

PI Sta 192+23.85
Δ = 54° 15' 09.2" (LT)
D = 4° 18' 28.6"
L = 1,259.36'
T = 681.37'
R = 1,330.00'
SE = .05

PI Sta 203+82.50
Δ = 5° 46' 14.8" (LT)
D = 0° 41' 55.4"
L = 825.90'
T = 413.30'
R = 8,200.00'
SE = NC

STA. 207+95.09 -L- END TIP PROJECT R-3307

-L- PC Sta. 199+69.20

-L- PT Sta. 198+01.84

-L- POC Sta. 207+31.29=
-Y7- POT Sta. 10+00.00

-L- PT Sta. 207+95.09

-L- POT Sta. 208+76.12

-L- Sta. 207+00.00

-Y7- POT Sta. 12+00.00

END CONST.
-Y7- POT Sta. 11+60.29

MATCH LINE -L- STA. 197+50 SEE SHEET U0-7

-L- N 3° 55' 16.0" E

-L- N 8° 09' 01" E

-Y7- S 76° 04' 17" E

86 JOHNNY W. SOKOLOSKY, et ux DB 837 PG 410

87 JOHN SOKOLOSKY, et ux DB 213 PG 290

88 JAMES A. PINER DB 467 PG 359

89 THOMAS L. WILLIS, et al DB 958 PG 366 MB 21 PG 28

90 MILTON R. BROWN DB 759 PG 804 MB 21 PG 28

91 BRADLEY C. WILKES, et ux DB 537 PG 308 MB 11 PG 35

92 LARRY W. STYRON, et ux DB 425 PG 25 MB 11 PG 35

93 GINA P. GRIFFIN DB 3125 PG 429 MB 11 PG 35

94 MARGARET P. FOWLER LIFETIME ESTATE DB 802 PG 603

95 ROBERT K. SELLERS, et ux DB 348 PG 299

96 MILDRED BEACHAM, et al DB 940 PG 116 MB 29 PG 51

97 BRIDGE M. BEACHAM, JR. DB 886 PG 796 MB 29 PG 51

98 TYXH, INC. DB 1159 PG 499

99 UNKNOWN

100 JESSE H. CREECH, JR. DB 880 PG 276 DB 884 PG 232

101 H. DELANCE WILLIS DB 105 PG 471 MB 28 PG 91 MB 5 PG 050 MB 28 PG 551 MB 30 PG 214 MB 30 PG 216 MB 30 PG 588

STD 'V' DITCH SEE DETAIL D
CL B RIP RAP AT EMBANKMENT SEE DETAIL Y
STD 'V' DITCH SEE DETAIL D
SPECIAL LATERAL 'V' DITCH SEE DETAIL I
SPECIAL LATERAL 'V' GRASS SWALE SEE DETAIL A
SPEC. LATERAL 'V' GRASS SWALE SEE DETAIL A
CL B RIP RAP
+10 70' END C/A END WW FENCE
COLLAR AND EXTEND
REMOVE
RETAIN
STD BASE DITCH SEE DETAIL K
SPEC. LATERAL 'V' DITCH SEE DETAIL I
SPEC. LATERAL 'V' GRASS SWALE SEE DETAIL A
CL B RIP RAP
SPEC. LATERAL 'V' DITCH SEE DETAIL I
SPEC. LATERAL 'V' GRASS SWALE SEE DETAIL A
CL B RIP RAP
STD 'V' DITCH SEE DETAIL D
CL B RIP RAP
SPEC. LATERAL 'V' GRASS SWALE SEE DETAIL A
CL B RIP RAP
SPEC. LATERAL 'V' DITCH SEE DETAIL I
STD BASE DITCH SEE DETAIL K
GRADE TO DRAIN
PIPE CLEAN OUT
MIN DEPTH CB
100' TAPER RT
600' TAPER LT & RT
PROP. 2'-6" C&G
TDE
TDI
EIP
CB
RCP
ISFD
ISBKD
CONC
DK
POOL
GFD
SR 1409
US 70
BOL TO
ARTHU

PROJECT REFERENCE NO.	SHEET NO.
R-3307	U0-9

UTILITIES BY OTHERS

NAD 83

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

REVISED NEU PERMIT DRAWING 03/05/2012

Utility Permit Drawing
Sheet 9 of 16

Causeway Removal
(App. 1.4 acres)
Grade to Target Elevation -0.2'
Limits and Elevations May Be Adjusted by Engineer
See Mitigation Plan

APPROX. LOCATION OF BEAUFORT HISTORIC DISTRICT PER NATIONAL REGISTER OF HISTORIC PLACES DESCRIPTION

BEAUFORT CITY LIMITS

MATCH LINE -Y2- STA. 25+50 SEE SHEET U0-10

MATCH LINE -Y2- STA. 13+50 SEE SHEET U0-5

PROP. 8" GRAVITY SEWER LINE

PROP. 6" FORCE MAIN BY DIRECTIONAL BORE

PROP. 8" WATER LINE BY DIRECTIONAL BORE

PROP. POWER CONDUIT BY DIRECTIONAL BORE

PROP. O/H POWER LINES

CLASS 'B' RIP RAP
EST. 2 TONS
7 SY GEOTEXTILE

BANK STABILIZATION
SEE DETAIL 'Z'
CLASS 'B' RIP RAP
EST. 5 TONS
16 SY GEOTEXTILE

CLASS 'B' RIP RAP
EST. 3 TONS
10 SY GEOTEXTILE

FALSE CUT 'Y' GRASS SWALE
SEE DETAIL 'P'

END BRIDGE
-Y2- POT STA. 18+98.00

HARBOR OF REFUGE SIGN

WALLACE W. GARNER, et ux.
DB 267 PG 260
DB 267 PG 131
DB 766 PG 576

TAYLORS CREEK DEVELOPMENTS, INC.

TOWN OF BEAUFORT
DB 1052 PG 425

THE HOUSING AUTHORITY OF THE TOWN OF BEAUFORT
DB 291 PG 480
DB 305 PG 276

UNKNOWN OWNER

HUGHES DEVELOPMENT, LLC

MAINSAIL OF BEAUFORT, LLC

-Y2-
PI Sta 24+54.25
Δ = 22° 20' 26.6" (RT)
D = 10° 13' 53.0"
L = 218.35'
T = 110.58'
R = 560.00'
SE = .04
RUNOFF = 88'

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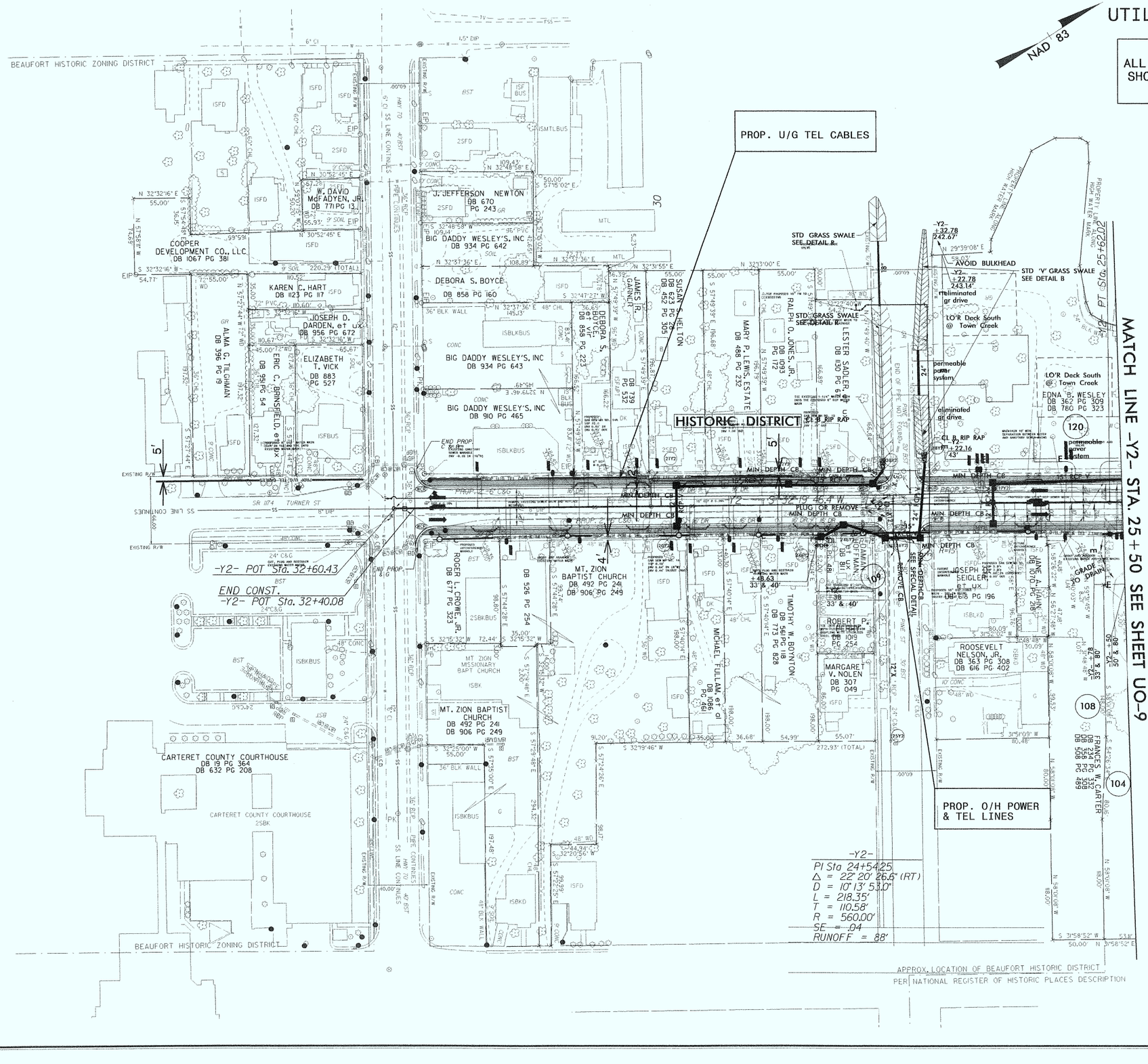
PROJECT REFERENCE NO.	SHEET NO.
R-3307	U0-10

UTILITIES BY OTHERS

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

Utility Permit Drawing
Sheet 10 of 16

NAD 83



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PROJECT REFERENCE NO.	SHEET NO.
R-3307	UO-11

UTILITIES BY OTHERS

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

Utility Permit Drawing
Sheet 11 of 16

NAD 83

MATCH LINE -Y3- STA. 18+00 SEE SHEET UO-6

BEGIN CONSTRUCTION
-Y3- POT Sta. 10+00.00

PROP. U/G TEL. CABLES

PROP. WATER LINE

PROP. FORCE MAIN

PROP. O/H POWER & CATV LINES

PROP. SEWER LINE

PROP. U/G TEL. CABLES

PROP. O/H POWER LINE

CLASS 'I' RIP RAP EST. 30 TONS

CLASS 'I' RIP RAP EST. 16 TONS
30 SY GEOTEXTILE

SPECIAL LATERAL GRASS 'V' SWALE SEE DETAIL 'A'

SPECIAL LATERAL 'V' GRASS SWALE SEE DETAIL 'A' 560' TAPER LT. & RT.

STD. BASE DITCH SEE DETAIL 'A' EST. 170 CY DDE

STD. BASE DITCH SEE DETAIL 'A' EST. 25 CY DDE

SPECIAL DITCH CUT SEE SHEET 2-N EST. 5 CY DDE

SPECIAL DITCH CUT SEE SHEET 2-N

CALVARY BAPTIST CHURCH OF BEAUFORT NC
A NC NON-PROFIT CORPORATION
DB 982 PG 335

CALVARY BAPTIST CHURCH OF BEAUFORT NC
A NC NON-PROFIT CORPORATION
DB 369 PG 133

STEVEN G. SPRINGLE, et ux.
DB 700 PG 143

B. J. LEONARD, ET VIR.
DB 913 PG 042

EDGAR E. COLE, et ux.
DB 2TIPG 555

GRAHAM M. FINCH, et ux.
DB 566 PG 220

CONSCIENCE BAY, LLC
DB 1028 PG 257
TRACT TWO

CONSCIENCE BAY, LLC
DB 1028 PG 257
TRACT ONE

LYDIA WARREN
DB 204 PG 042

KISEPH T. ROSE, III, ET UX.
DB 322 PG 345
DB 372 PG 187

SHARON CULPEPPER
DB 920 PG 238

FRANKLIN YARBOROUGH
DB 825 PG 101

FAITH TABERNACLE OF PRAISE, INC.
DB 742 PG 933

MARANATHA PENTECOSTAL HOLINESS CHURCH
DB 803 PG 086

PATRICIA J. RIVENBARK
DB 759 PG 140
DB 781 PG 702

POWER TOY PROPERTIES, LLC
DB 4643 PG 43

SEAN M. CONNER, et ux.
DB 742 PG 117

ALLEN W. ROSE, ET UX.
DB 466 PG 089

LOCATION OF SANITARY SEWER PUMPING STATION "M1"

BEAUFORT CITY LIMITS

AIRPORT RD.

JUNE BUG LN.

NC 101

ABANDON -Y3- Sta. 22+42.00 RT

REMOVE

CONSTRUCT 30" RCP-III

CONSTRUCT 18" RCP

CONSTRUCT 15" RCP

COLLAR AND EXTEND 30" RCP-III

EXISTING R/W

WITH R/W OF AIRPORT RD.

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PROJECT REFERENCE NO.	SHEET NO.
R-3307	UO-12

UTILITIES BY OTHERS

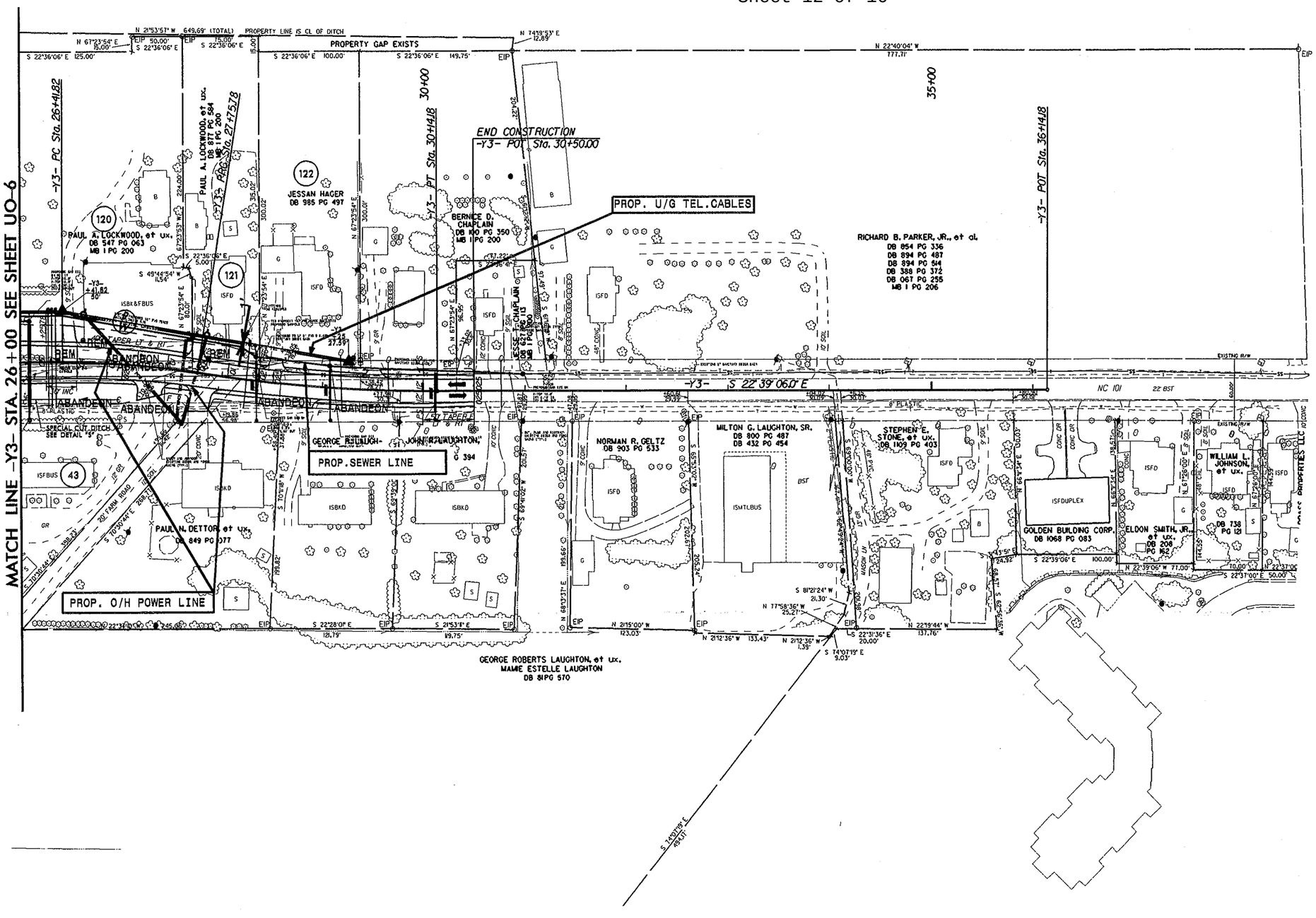
NOTE:
ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS

Utility Permit Drawing
Sheet 12 of 16

-Y3-

PI Sta 27+08.94
Δ = 9°01' 47.9" (RT)
D = 6°44' 26.4"
L = 133.96'
T = 67.12'
R = 850.00'
SE = .06

PI Sta 28+95.23
Δ = 9°06' 22.2" (LT)
D = 3°49' 11.0"
L = 238.40'
T = 119.45'
R = 1,500.00'
SE = .06



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PROJECT REFERENCE NO.	SHEET NO.
R-3307	U0-13

UTILITIES BY OTHERS

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

NAD 83

5/14/99

N 35°47'09" W
518.07'

-YIREV-

PI Sta 11+95.92
Δ = 37° 19' 43.5" (RT)
D = 9° 52' 42.9"
L = 377.88'
T = 195.92'
R = 580.00'
SE = EXISTING

PI Sta 15+43.96
Δ = 70° 29' 58.4" (LT)
D = 24° 22' 52.3"
L = 289.16'
T = 166.08'
R = 235.00'
SE = SEE PLANS

REVISED NEU PERMIT DRAWING
03/05/2012

N 73°34'29" W
330.18'

BEAUFORT CITY LIMITS

S 05°50' W
563.89'

PROP. U/G TEL CABLES

ECM

S 26°47'08" E
133.50'

N 54°47'16" E
135.72'

S 54°23'20" W
133.03'

ELMER G. SANDERSON, et ux.
DB 274 PG 226
DB 379 PG 39
MB 1 PG 201

PK

PROP U/G TEL CABLES

PROP U/G CATV CABLES

PROP U/G TEL CABLES

154

N 54°59'09" E
120.98'

JAMES S. BRICKHOUSE, JR.
DB 548 PG 403
DB 11 PG 420

S 54°59'09" W
120.84'

N 35°00'51" W
50.00'

HUBERT NOE
NDR
DB 11 PG 420

S 54°59'09" W
120.10'

ELISHA W. SANDERSON
DB 548 PG 403
DB 11 PG 420

S 54°59'09" W
120.56'

N 35°00'51" W
50.00'

N 54°59'09" E
104.85'

MICHEL T. CHANNEL, SR.
DB 792 PG 451
DB 16 PG 554

S 54°59'09" W
90.12'

N 35°00'51" W
50.00'

Sta. 10+00.00

PROP.U/G CATV CABLES

U/G POWER AND CATV CABLES WILL BE INSTALLED BY DIRECTIONAL BORE THRU THE WETLANDS

PROP. U/G POWER CABLES

N 73°04'E
528.32'

N 21°57'23" E
288.60'

FRIENDS OF THE MUSEUM,
N. C. MARITIME MUSEUM, INC.

2

BEGIN CONSTRUCTION
-YIREV- POC STA 13+27.88

5'

-YIREV- PT

SR 1170
WEST BEAUFORT RD.

SPECIAL LATERAL
'V' DITCH
SEE DETAIL "I"

-YIREV-
+00
28.88'

-YIREV-
+36.16
42.97'

10'

5'

15+00

ABANDON

907

N 09°03'16" E
275.86'

13+77.88

-YIREV- PT

16 GR

-YIREV- POC STA 10+77.92
BEARING AND DISTANCE TO
-YIREV- PC STA 10+77.92

MATCH LINE -YIREV- STA. 15+00 SHEET UO-4

FRIENDS OF THE MUSEUM,
N. C. MARITIME MUSEUM, INC.
DB 802 PG 480

2

Utility Permit Drawing
Sheet 13 of 16

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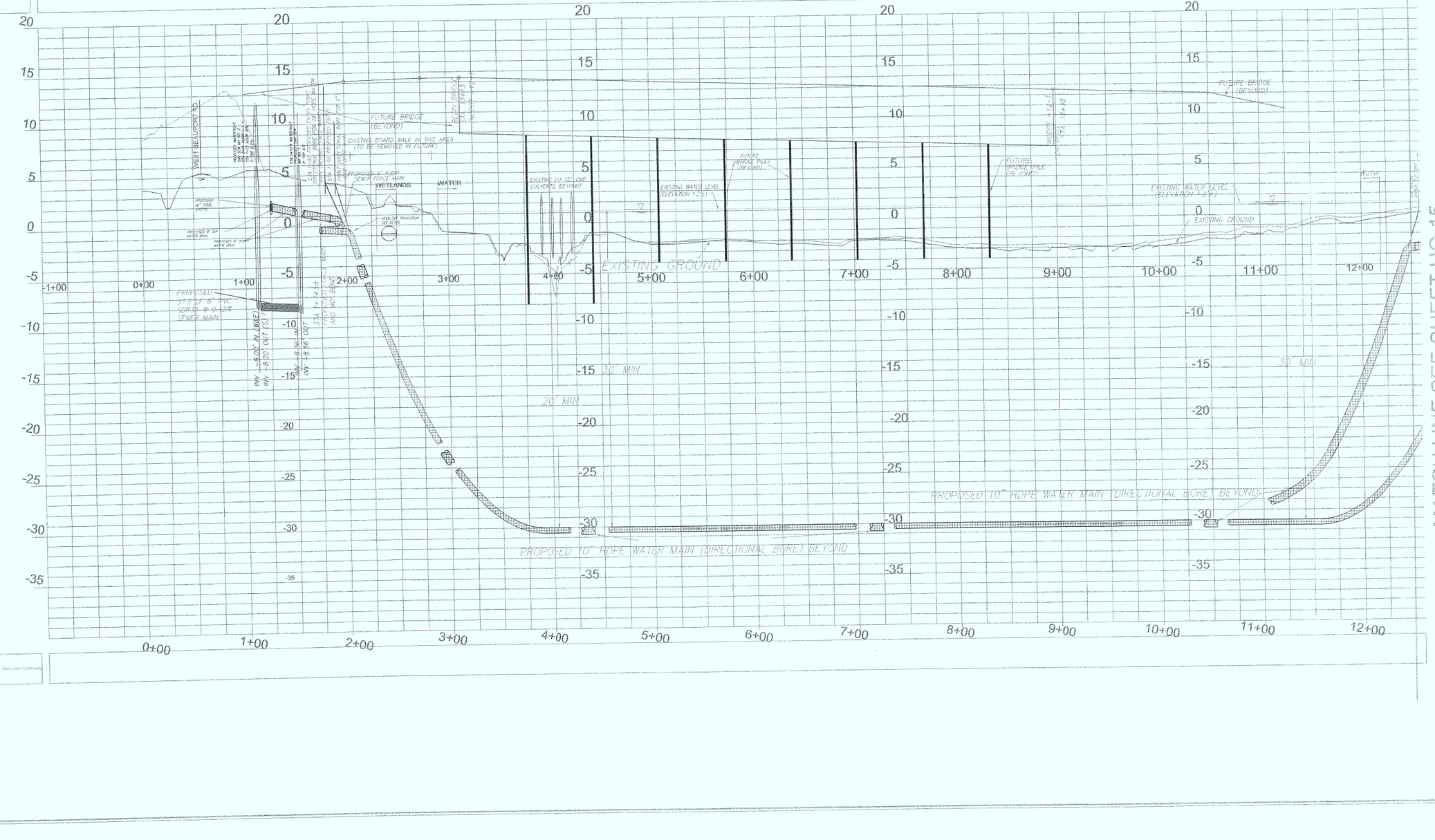
PROJECT REFERENCE NO.	SHEET NO.
B-3507	U0-14

UTILITIES BY OTHERS

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

Utility Permit Drawing
Sheet 14 of 16

PROP. 10" HDPE WATER MAIN & 6" SEWER LINE PROFILES



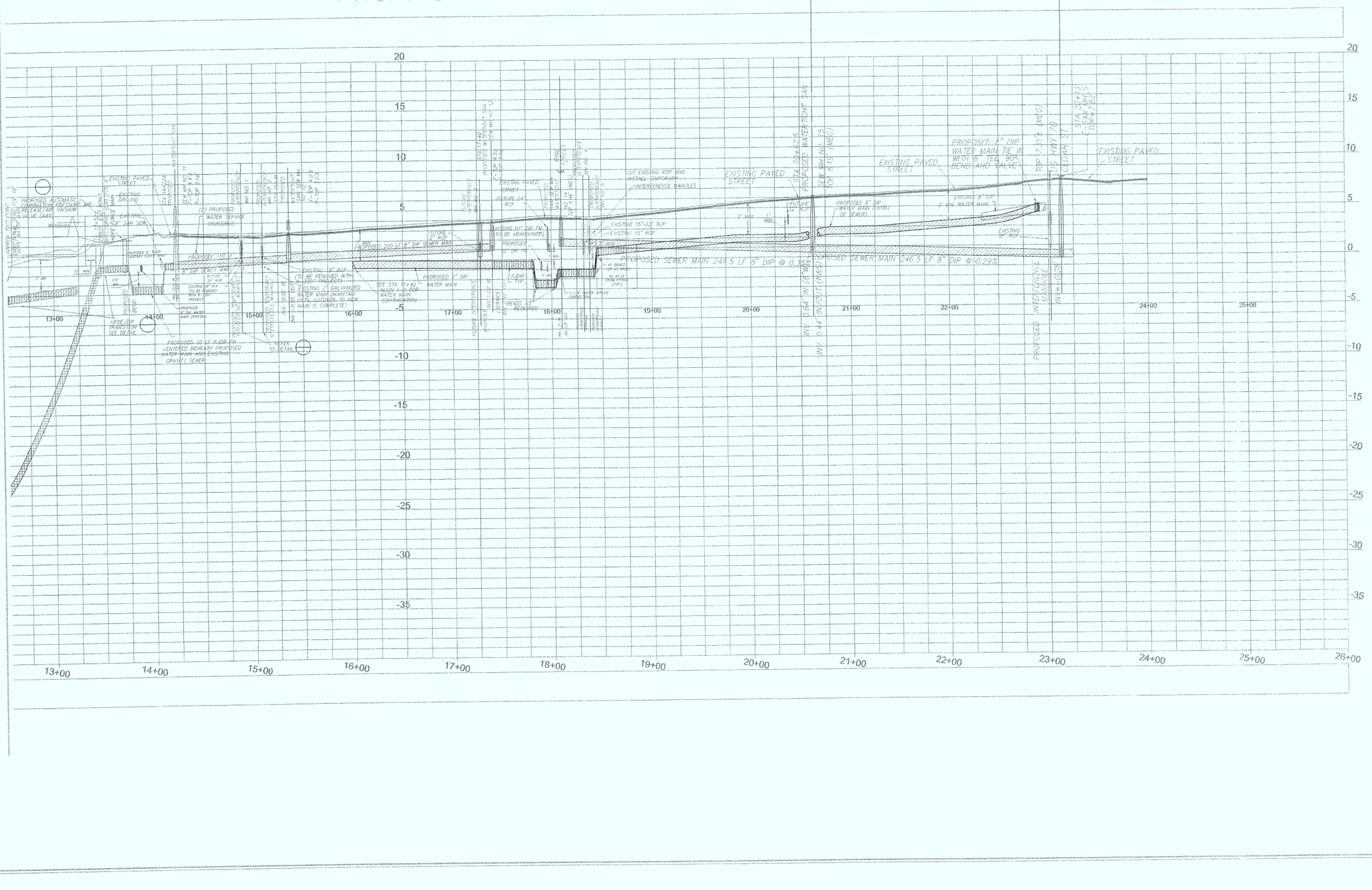
5/14/99

UTILITIES BY OTHERS

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

Utility Permit Drawing
Sheet 15 of 16

PROP. 8" WATER MAIN & PROP. 8" SEWER LINE PROFILES



MATCHLINE SEE SHEET 26

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS: Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	SURFACE WATER IMPACTS: Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
TOTALS:			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

All proposed underground utilities will be installed by trenchless installation thru the wetlands.

No hand clearing is proposed for aerial utilities thru the wetlands.

Utility Permit Drawing
Sheet 16 of 16

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
CARTERET COUNTY
TIP PROJECT (R-3307)

Revised 3/5/2012

ATN Revised 3/31/05