



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

September 10, 2007

U. S. Army Corps of Engineers
Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

ATTENTION: Mr. David Baker
NCDOT Coordinator

SUBJECT: **Regional General Permit 198200031 and Section 401 Water Quality Certification** Application for the proposed improvements of SR1323 (Riverview Street) from the intersection of Iotla Street to NC28 in Macon County. NCDOT Division 14, Federal Project No. STP-28(1), State Project No. 8.1970801, TIP No. R-2408A. \$240.00 Debit work order 8.1970801, WBS Element 34427.1.1.

Dear Sir:

The North Carolina Department of Transportation (NCDOT) proposes improvements of SR 1323 (Riverview Street) from the intersection of Iotla Street to NC 28 in Macon County. The existing cross section is a two-lane road with travel lane width of 11 feet and variable width shoulders. The road has substandard geometrics and an inadequate typical section. Travel lanes and shoulders are narrow and the vertical and horizontal alignments are deficient according to the current NCDOT design standards. Because of the mountainous terrain, the road has steep drop-offs and large inclines on opposite sides of the road. This makes it difficult to travel along this road with narrow lanes and sharp curves that limit a driver's sight distance. The corridor is also a preferred route for tractor trailer trucks. The proposed improvements consist of widening the current two-lane road to two 12-foot travel lanes with 8-foot shoulders (4-foot paved for bicycles). The total length of the project is approximately 0.9 mile long. There will be a total of 143 feet of

permanent impacts to two jurisdictional streams on this project. There are no wetlands in the project study area. Please find enclosed a copy of the permit drawings, roadway design plans and Rapanos jurisdictional determination forms for the subject project.

IMPACTS TO WATERS OF THE UNITED STATES

General Description: The project is located in the Little Tennessee River Basin within HUC 06010202. There are two jurisdictional water resources within the project area for R-2408A. These are UT1 and UT2 to the Little Tennessee River. The North Carolina Department of Environment and Natural Resources classifies Little Tennessee River and its tributaries as “C”. The DWQ Index number for the portion of the Little Tennessee River and the UTs flow is 2-(1). UT1 is a perennial stream with an average baseflow of 2 feet and an average depth of 1 – 4 inches. UT2 is a perennial stream with a an average baseflow of 3 feet, with an average depth of 2 – 6 inches.

Jurisdictional Delineations: All streams were deemed to be perennial and jurisdictional during a site visit by NCDOT staff on November 20, 2006. There are no jurisdictional wetlands in the project study area. For impacts to individual sites, refer to Impact Summary Table (Permit Sheet 2 of 12).

Permanent Impacts: Permanent impacts for this project total 143 feet.

- Site 1: located at station 28+5 -L- Rt. There will be 3 linear feet of permanent impacts to UT1 to Little Tennessee River due to the installation of a headwall to the upstream side. The current 24-inch pipe will be replaced with a 64-inch metal arch pipe of the same 43 feet in length. The pipe will be 43 feet in length and will replace the older structure without causing any permanent impacts. There is an 18-inch metal pipe that is currently tied into the 24-inch pipe by the landowner at a junction box on the downstream side. The junction box and 18-inch pipe will be removed and the stream daylighted. NCDOT proposes to use mitigation credit from this site for the B section, which is a separate permit application.
- Site 2: located at station 41+58 –L-Rt. There will be 40 linear feet of permanent impacts to UT2 to Little Tennessee River due to extension of the new pipe to accommodate the widening of the roadway. The current 76-inch x 55-inch metal arch pipe will be replaced with a 142-inch x 91-inch metal arch pipe. The new pipe will be extended from 52 feet to 92 feet.
- Site 3: located at station 13+23 –Y1-. There will be 100 linear feet of permanent impacts to UT2 to Little Tennessee River due to pipe extension and addition of a headwall to the upstream side. The current 30-inch pipe is perched on the downstream side will be replaced by a 75-inch x 55-inch metal arch pipe. The new pipe will be 126 feet in length. The new pipe will be shifted to the south to allow better hydrologic conveyance and to allow for aquatic species passage.

Temporary Impacts: Temporary impacts for this project total 0.01 acres.

- Site 1: located at station 28+5 –L-Rt. There will be <0.01 acre of temporary impacts on the upstream side due to stream management during pipe installation.
- Site 2: located at station 41+58-L-Rt. There will be <0.01 acre of temporary impacts on both sides due to stream management during pipe installation.
- Site 3: located at station 13+23 –Y1-. There will be <0.01 acre of temporary impacts on both sides due to stream management during pipe installation.

Utility Impacts: There will be no utility impacts associated with this project.

Project Schedule: **This project has a proposed let date of February 19, 2008 with a date of availability of April 2, 2008. The review date for this project is January 1, 2008.**

NEPA DOCUMENT STATUS

An Environmental Assessment (EA) was submitted by the NCDOT in compliance with the National Environmental Policy Act (NEPA). The EA was approved on April 30, 2004 and covered both sections of the project. A Finding of No Significant Impact (FONSI) was approved on August 31, 2005. The EA explains the purpose and need for the project; provides a complete description of the alternatives considered; and characterizes the social, economic and environmental effects. After the EA was approved, it was circulated to the federal and local agencies. Copies of the EA and FONSI have been provided to regulatory review agencies involved in the approval process. Additional copies will be provided upon request. Per conversation with David Baker (USACE) on June 21, 2007, as long as the A and B sections have independent utility, this project can be permitted as two separate projects.

The subject project, R-2408A, is in compliance with 23 CFR Part 771.111(f) which lists the Federal Highway Administration (FHWA) characteristics of independent utility of a project:

1. The project connects logical termini and is of sufficient length to address environmental matters on a broad scope. The proposed project continues improvements along Riverview Street from the intersection of Iotla Street to NC 28.
2. The project is usable and a reasonable expenditure, even if no additional transportation improvements are made in the area. The proposed improvements redirects traffic away from the section of NC 28 through downtown Franklin, alleviating traffic congestion in Franklin and assists local traffic movement.
3. The project does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements, including minimal widening on the existing alignment.

FEDERALLY PROTECTED SPECIES

Plants and animals with federal classifications of Endangered, Threatened, Proposed Endangered, and Proposed Threatened are protected under provisions of Section 7 and Section 9 of the Endangered Species Act of 1973, as amended. As of May 10, 2007, the United States Fish and Wildlife Service (USFWS) lists eight federally protected species for Macon County. Table 1 lists the species, their status and biological conclusion.

Spotfin chub, Appalachian elktoe, and oyster mussel received a biological conclusion of Unresolved in the Environmental Assessment (EA) for R-2408 (dated September 2005). Surveys for the species have shown that the biological conclusion for spotfin chub, Appalachian elktoe, and oyster mussel is No Effect for the A section. It was determined that the largest UT on the A section was “very shallow and a high sediment load” and did not provide habitat to support these species. The Indiana bat received a biological conclusion of May Effect/Not Likely to Adversely Affect in the EA for R-2408. A subsequent survey of the A section was conducted on July 27, 2007 by Mary Frazer. It was determined that there was no good roosting habitat consisting of shaggy, sloughing bark trees or large snags in the project area that bats would use. A biological conclusion of No Effect was rendered for Indiana bat for R-2408A.

The Rock gnome lichen has been added to the list for Macon County since the original EA was prepared. The proposed project is not expected to affect rock gnome lichen since elevations within the project study area range between 2000 to 2200 feet above MSL, below the reported minimum elevation of 5,000 feet above MSL for this species. Suitable habitat, consisting of vertical rock faces with a high humidity regime, was not identified within the project study area. A review of the North Carolina Natural Heritage Program (NCNHP) database on February 27, 2007 showed no known occurrence of rock gnome lichen within three miles of the project study area.

Table 1. Federally Protected Species for Macon County

Common Name	Scientific Name	Status	Habitat Analysis	Biological Conclusion
Bog turtle	<i>Clemmys muhlenbergii</i>	T (S/A)	No habitat	Not applicable
Spotfin chub	<i>Hybopsis monacha</i>	T	No habitat	No Effect
Appalachian elktoe	<i>Alasmidonta raveneliana</i>	E	No habitat	No Effect
Littlewing pearl mussel	<i>Pegias fabula</i>	E	No habitat	No Effect
Small whorled pogonia	<i>Isotria medeoloides</i>	T	No habitat	No Effect
Virginia spiraea	<i>Spiraea virginiana</i>	T	No habitat	No Effect
Indiana bat	<i>Myotis sodalis</i>	E	No habitat	No Effect
Rock gnome lichen	<i>Gymnoderma lineare</i>	E	No habitat	No Effect

CULTURAL RESOURCES

Archaeology & Historical Structures: There are no known archaeological or historical resources within the project area. The State Historic Preservation Office (SHPO) reviewed the project area and, based on those photos commented (in a memo dated June 25, 2002) that the structures over fifty years of age “are not eligible for listing in the National Register of Historic Places.” This memo is found in Appendix 3 of the EA. There are no known archaeological sites within the proposed project area.

AVOIDANCE, MINIMIZATION, AND MITIGATION

Avoidance and Minimization: Avoidance examines all appropriate and practicable possibilities of averting impacts to “Waters of the United States”. The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize jurisdictional impacts, and to provide full compensatory mitigation of all remaining, unavoidable jurisdictional stages; minimization measures were incorporated as part of the project design.

- Best Management Practices will be followed for this project as outlined in “NCDOT’s Best Management Practices for Construction and Maintenance Activities”.
- Currently piped streams will be improved to allow better hydrologic conveyance.
- Due to the close proximity of the project to the Little Tennessee River, NCDOT will implement erosion and sedimentation control measures, as specified by NCDOT’s “Design Standards in Sensitive Watersheds”.
- New pipes will be buried approximately 12 inches below the stream bottom to allow natural stream bottom materials to become established following installation and to provide aquatic life passage during periods of low flow.
- Site 1 will have an 18 inch pipe tied to the junction box on the downstream side removed and the stream daylighted

Mitigation: There will be a total of 143 linear feet of permanent stream impacts associated with this project. There are no wetlands in the project area. No compensatory mitigation is proposed as the project impacts total less than 150 feet and will not impact HQW waters.

REGULATORY APPROVALS

Section 404 Permit: It is anticipated that the permanent impacts to UT1 and UT2 to Little Tennessee River will be authorized under a Section 404 Regional General Permit 198200031 (NCDOT Bridges). Application is hereby made for Department of the Army Regional General Permit 198200031 for the above-described activities.

Section 401 Certification: In compliance with Section 143-215.3D(e) of the NCAC we will provide \$240.00 to act as payment for processing the Section 401 (General Certification Number 3627) permit application previously noted in this application (see Subject line). We are providing five copies of this application to the North Carolina Department of Environment and Natural Resources, Division of Water Quality, for their review and approval.

This project is located in a trout county, therefore comments from the North Carolina Wildlife Resources Commission (NCWRC) will be required prior to authorization by the Corps of Engineers. By copy of this letter and attachment, NCDOT hereby requests NCWRC review. NCDOT requests that NCWRC forward their comments to the Corps of Engineers and the NCDOT within 30 calendar days of receipt of this application.

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Jason Dilday at jldilday@dot.state.nc.us or (919) 715-5535. The application will be posted at <http://207.4.62.65/PDEA/PermApps/>.

Sincerely,



for

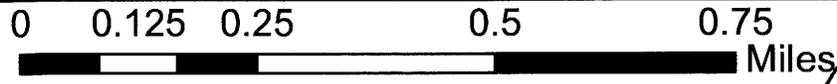
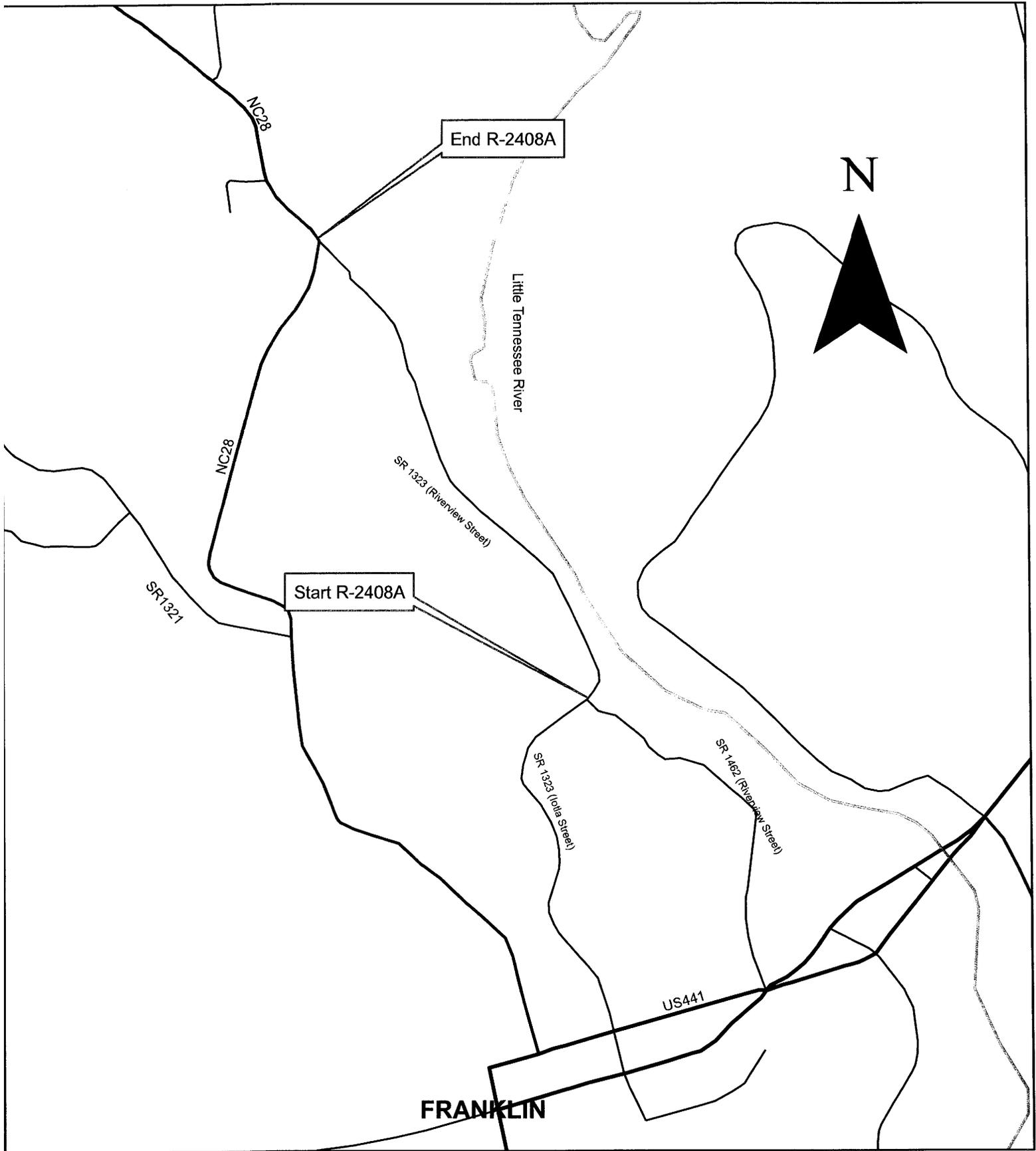
Gregory J. Thorpe, Ph.D.,
Environmental Management Director
Project Development and Environmental Analysis Branch

W/attachment

Mr. John Hennessy, NCDWQ (5 Copies)
Ms. Marella Buncick, USFWS
Ms. Marla Chambers, NCWRC
Mr. Harold Draper, TVA
Dr. David Chang, P.E., Hydraulics
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Greg Perfetti, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. J. B. Setzer, P.E. (Div. 14), Division Engineer
Mr. Mark Davis (Div. 14), DEO

W/o attachment

Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Scott McLendon, USACE, Wilmington
Mr. Steven Brown, P.E., PDEA Project Planning Engineer



R-2408A Macon County

Improvements of SR 1323 (Riverview St) from
US441 to NC28

Permit Drawing
Sheet 1 of 3

PROPERTY OWNERS

North Carolina Dept. of Transportation
Attn: Frankie Dill Jr.
Sylva, NC 28779

William Martin
28 Guffie Rd. Franklin NC 28734

J & A Investments of Sarasota Inc.
1715 Ray Cove Rd. Franklin NC 28734

Melonie C Downs
140 Shadow Branch Rd. Franklin NC 28734

Harley Carpenter Jr.
Box 394 Franklin NC 28734

NCDOT

**DIVISION OF HIGHWAYS
BEAUFORT/PITT COUNTY
PROJECT: 33389.1.1 (B-4022)
PERMIT DRAWINGS FOR
BRIDGE #90 ON SR1414
OVER TRANTER'S CREEK**

SHEET

2 OF 13

8/12/06

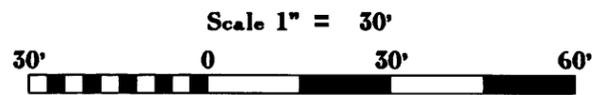
R-2408A

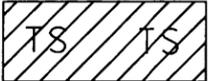
Site 1 Station 28+05

KATHRINE E. PENNINGTON ET. AL.

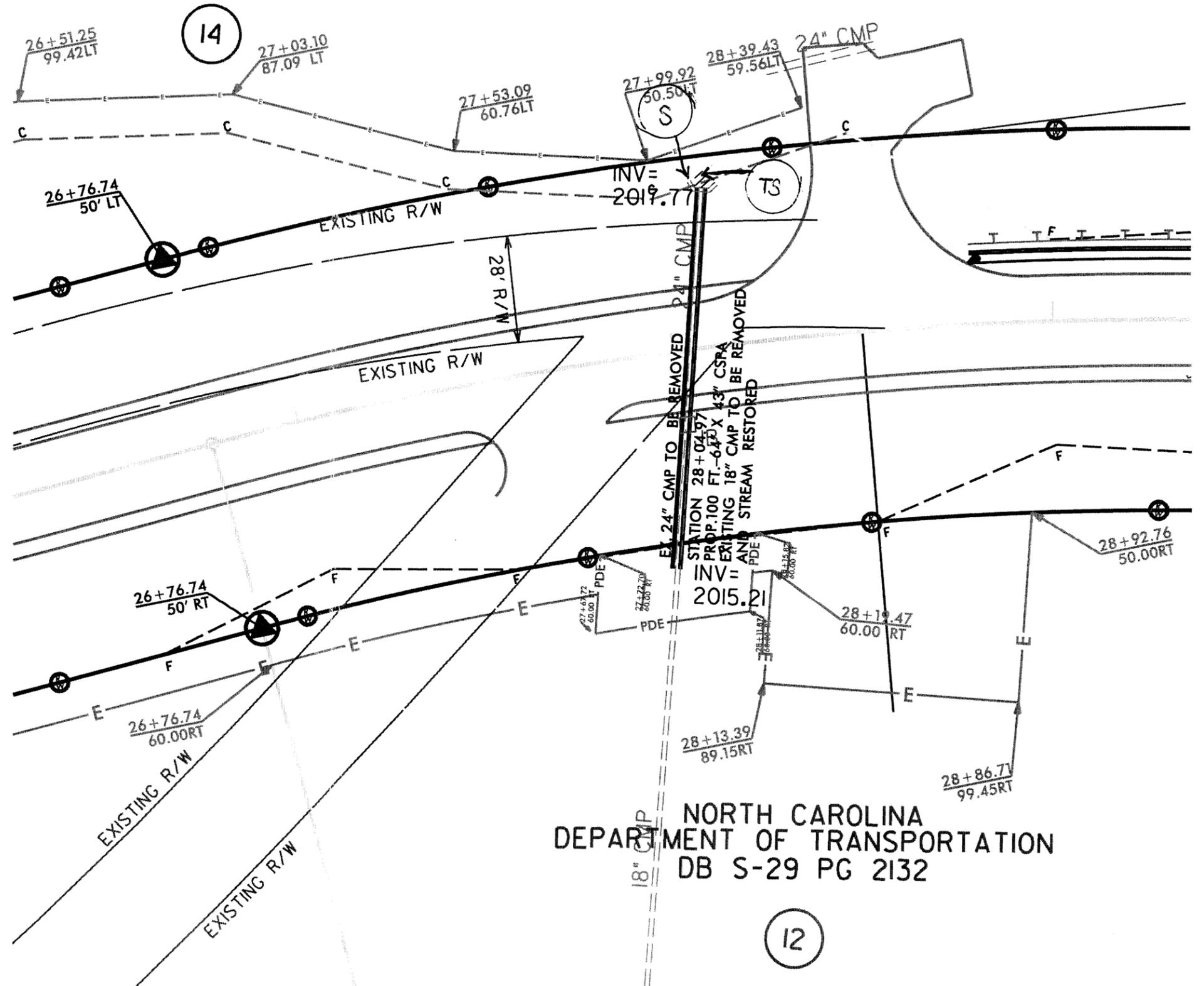
Place coir fiber matting below bankfull elevation at the pipe inlet and outlet.
Establish vegetation above bankfull elevation.

5 13
Permit Drawing
of Sheet



 DENOTES TEMPORARY FILL IN SURFACE WATER

 DENOTES FILL IN SURFACE WATER



NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DB S-29 PG 2132

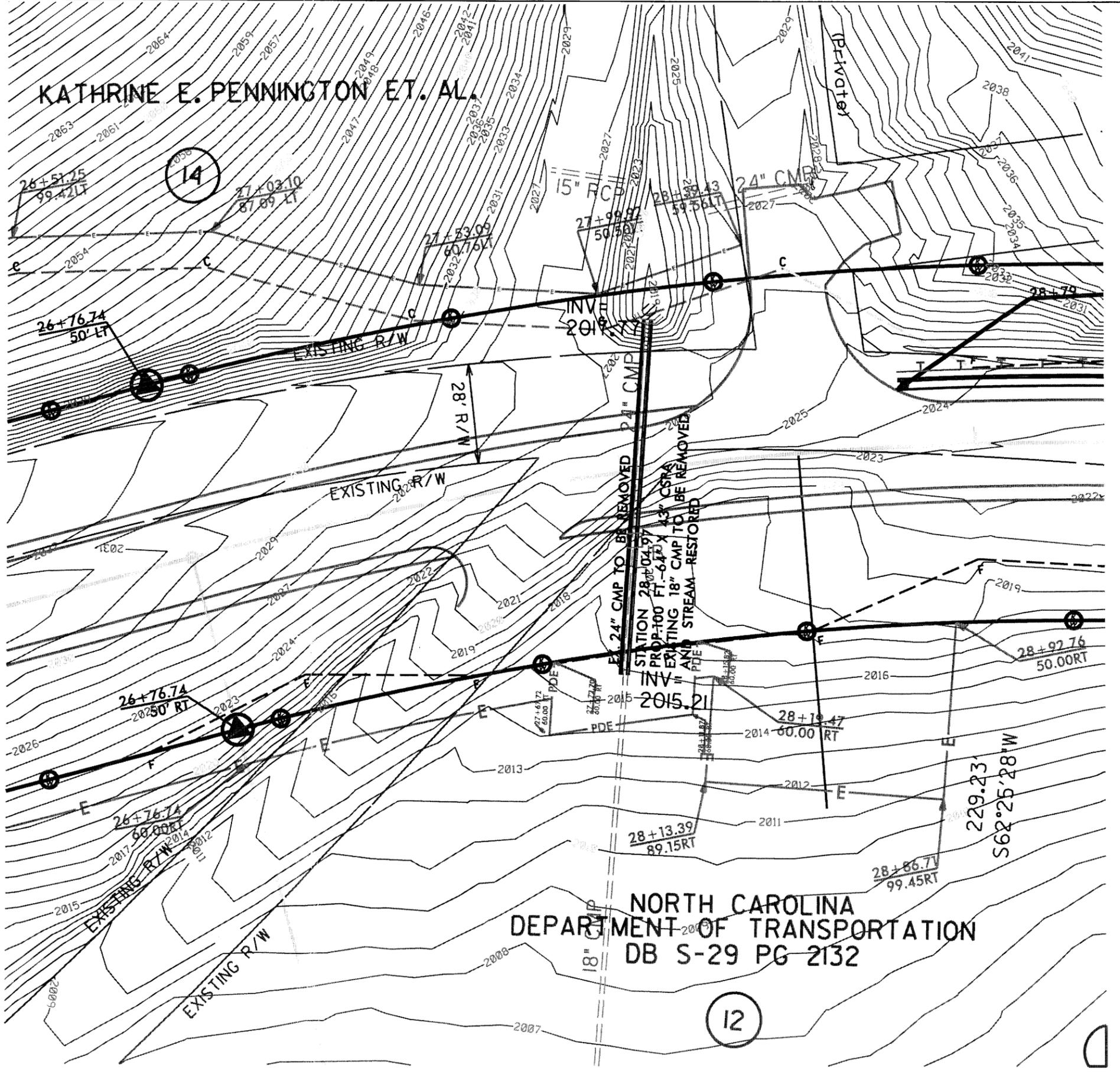
12

R-2408A

Site 1 Station 28+05

Place coir fiber matting below bankfull elevation at the pipe inlet and outlet.
Establish vegetation above bankfull elevation.

Permit Drawing
Sheet 6 of 13



Scale 1" = 30'



 DENOTES TEMPORARY FILL IN SURFACE WATER

 DENOTES FILL IN SURFACE WATER

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DB S-29 PG 2132

14

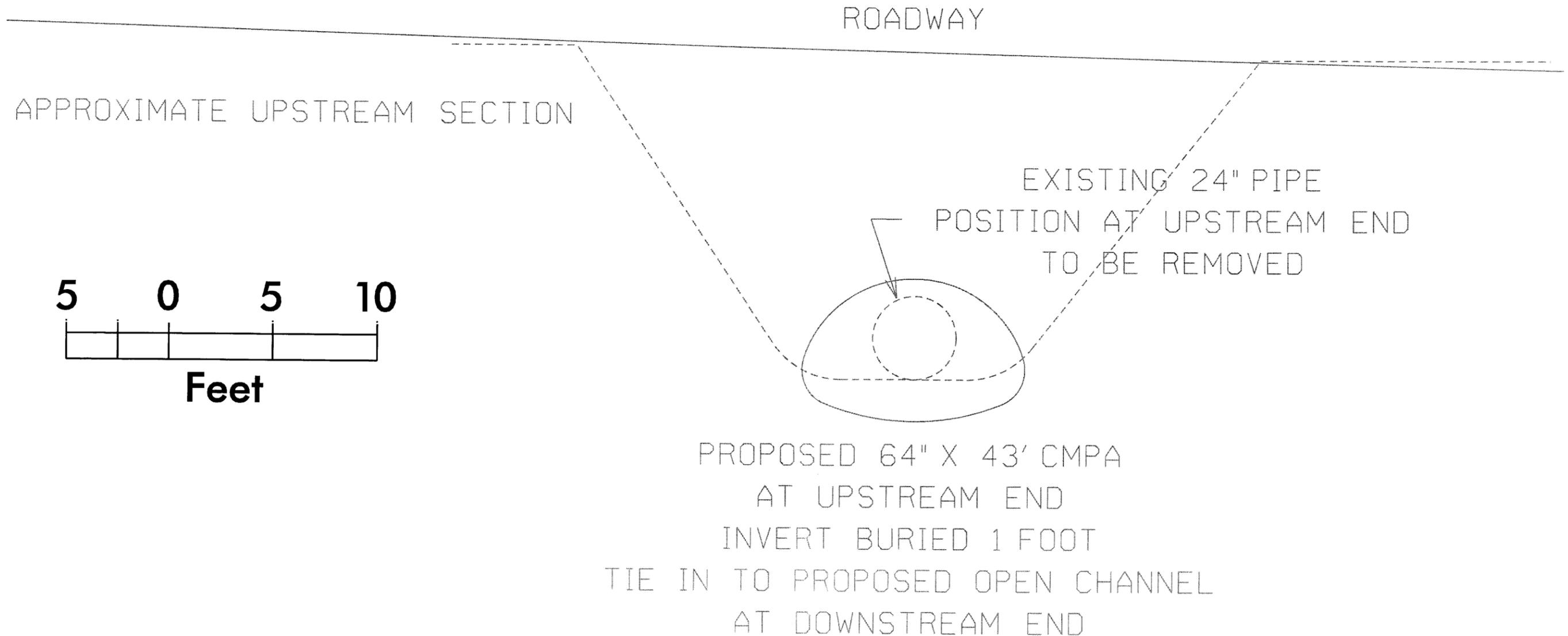
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R-2408A

Site 1 Station 28+05

Permit Drawing
Sheet 7 of 13

STATION 28 + 04.97

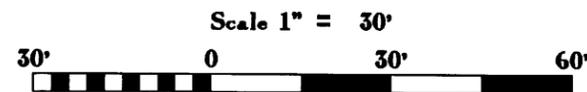
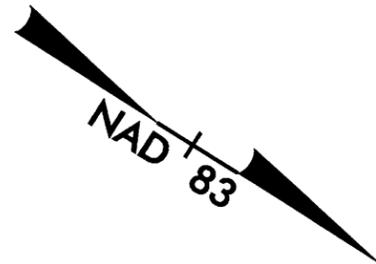


R-2408A

Site 2 Station 41+58

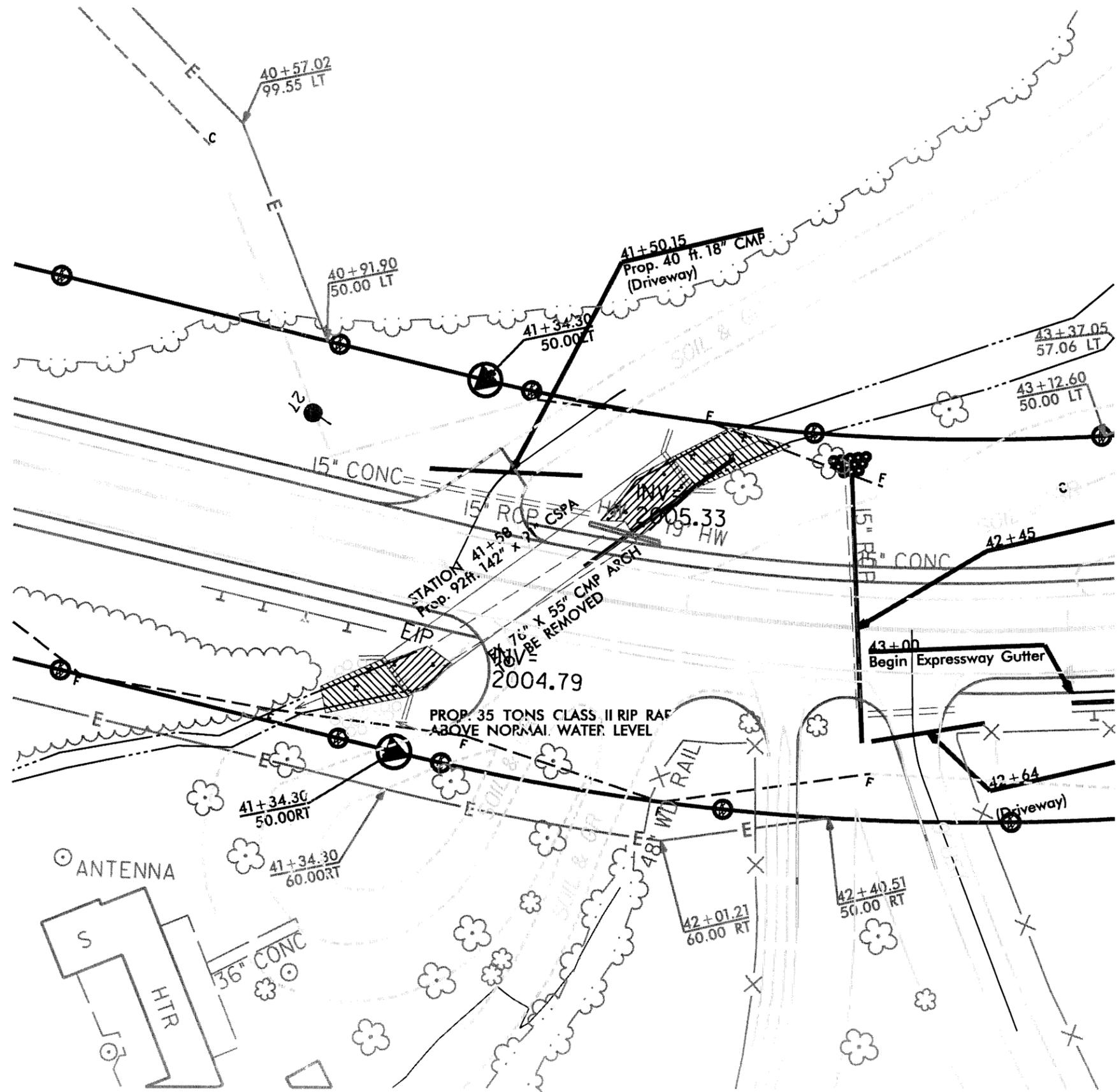
Place coir fiber matting below bankfull elevation at the pipe inlet and outlet.
Establish vegetation above bankfull elevation.

Permit Drawing
Sheet 8 of 13



 DENOTES TEMPORARY
FILL IN SURFACE
WATER

 DENOTES FILL IN
SURFACE WATER

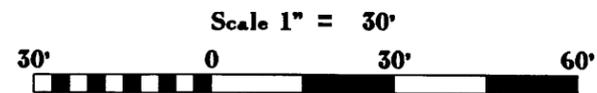


R-2408A

Site 2 Station 41+58

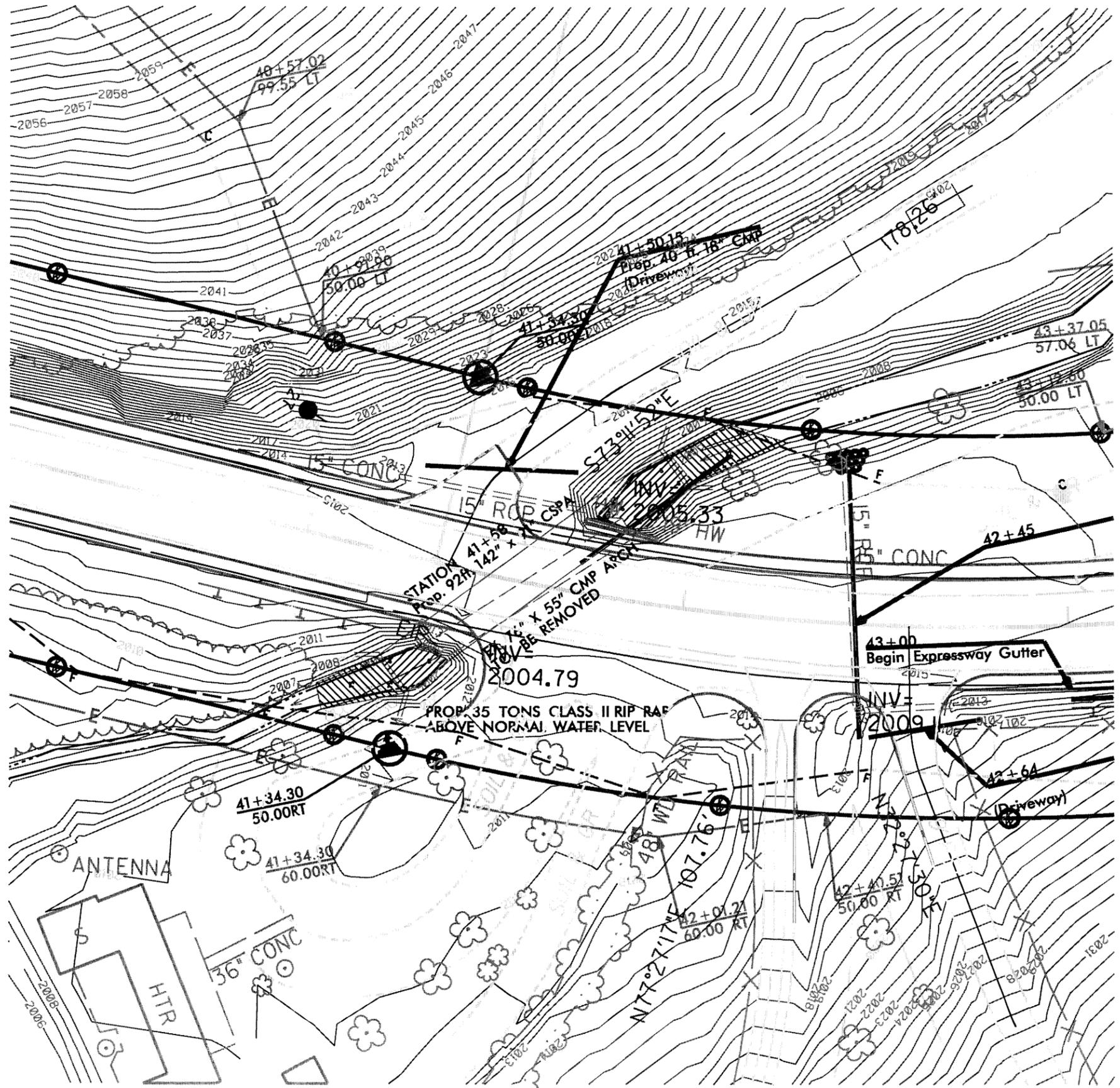
Place coir fiber matting below bankfull elevation at the pipe inlet and outlet.
Establish vegetation above bankfull elevation.

Permit Drawing
Sheet 9 of 13



 DENOTES TEMPORARY
FILL IN SURFACE
WATER

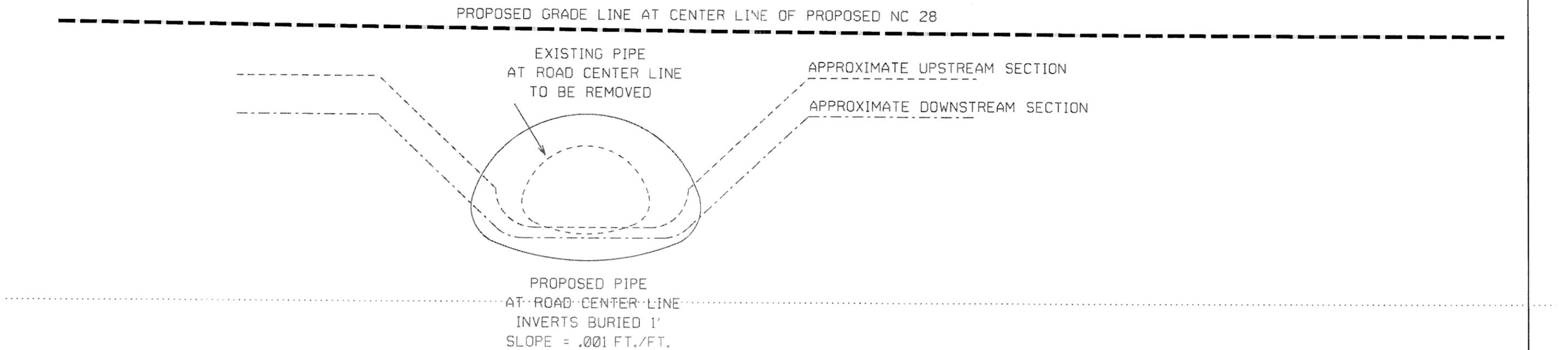
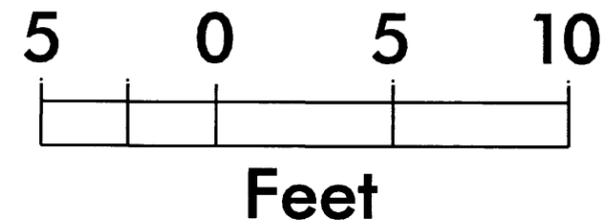
 DENOTES FILL IN
SURFACE WATER



R-2408A

Site 2 Station 41+58
Proposed 92' 142" x 91" CSPA

Permit Drawing
Sheet 10 of 13

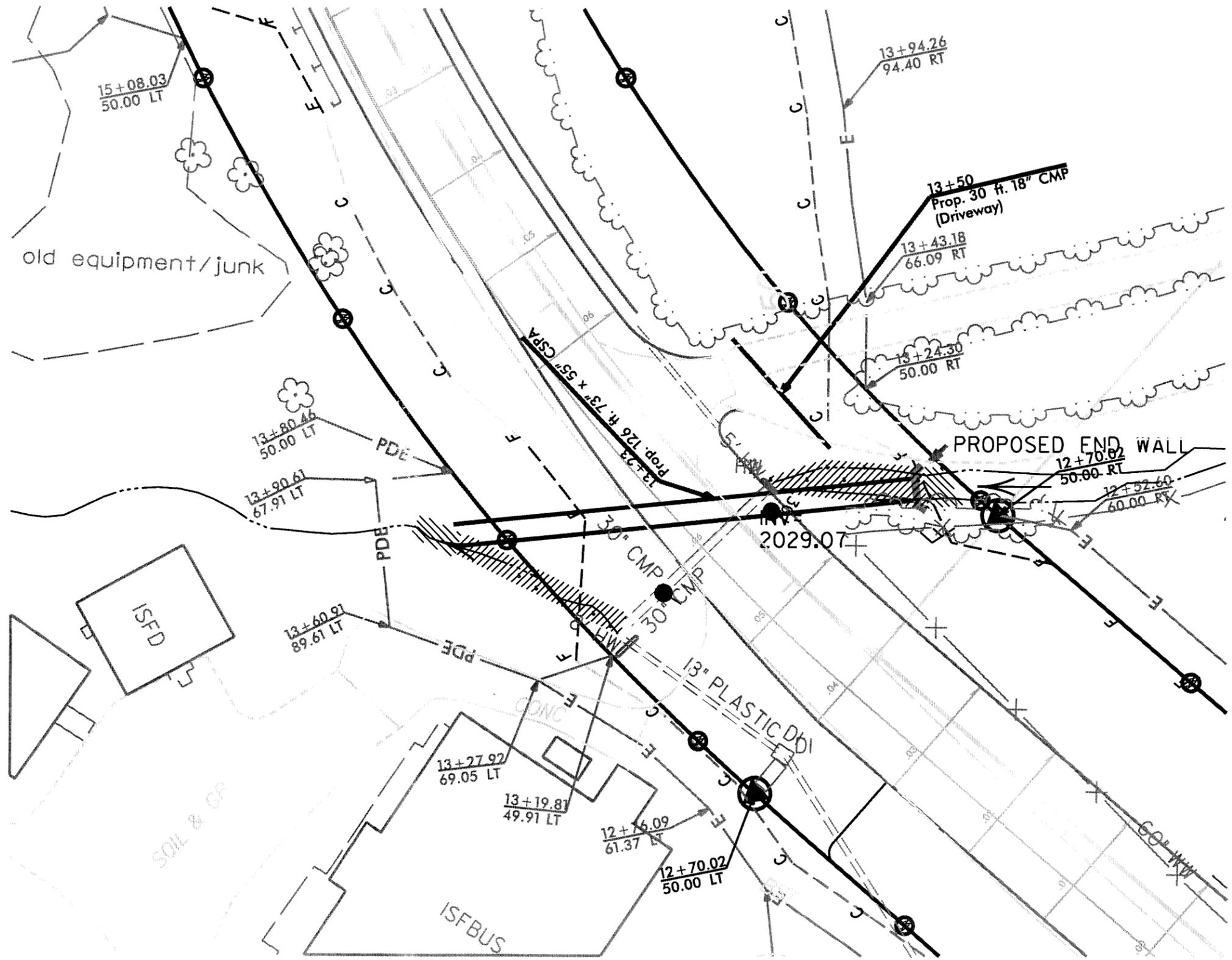


R-2408A

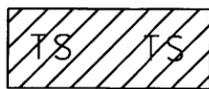
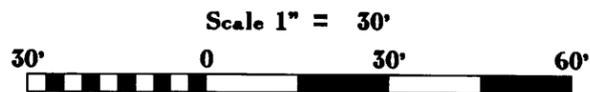
Site 3 Station 13+23 -Y1-

Place coir fiber matting below bankfull elevation at the pipe inlet and outlet.
Establish vegetation above bankfull elevation.

Permit Drawing
Sheet 11 of 13



NAD 83



DENOTES TEMPORARY
FILL IN SURFACE
WATER



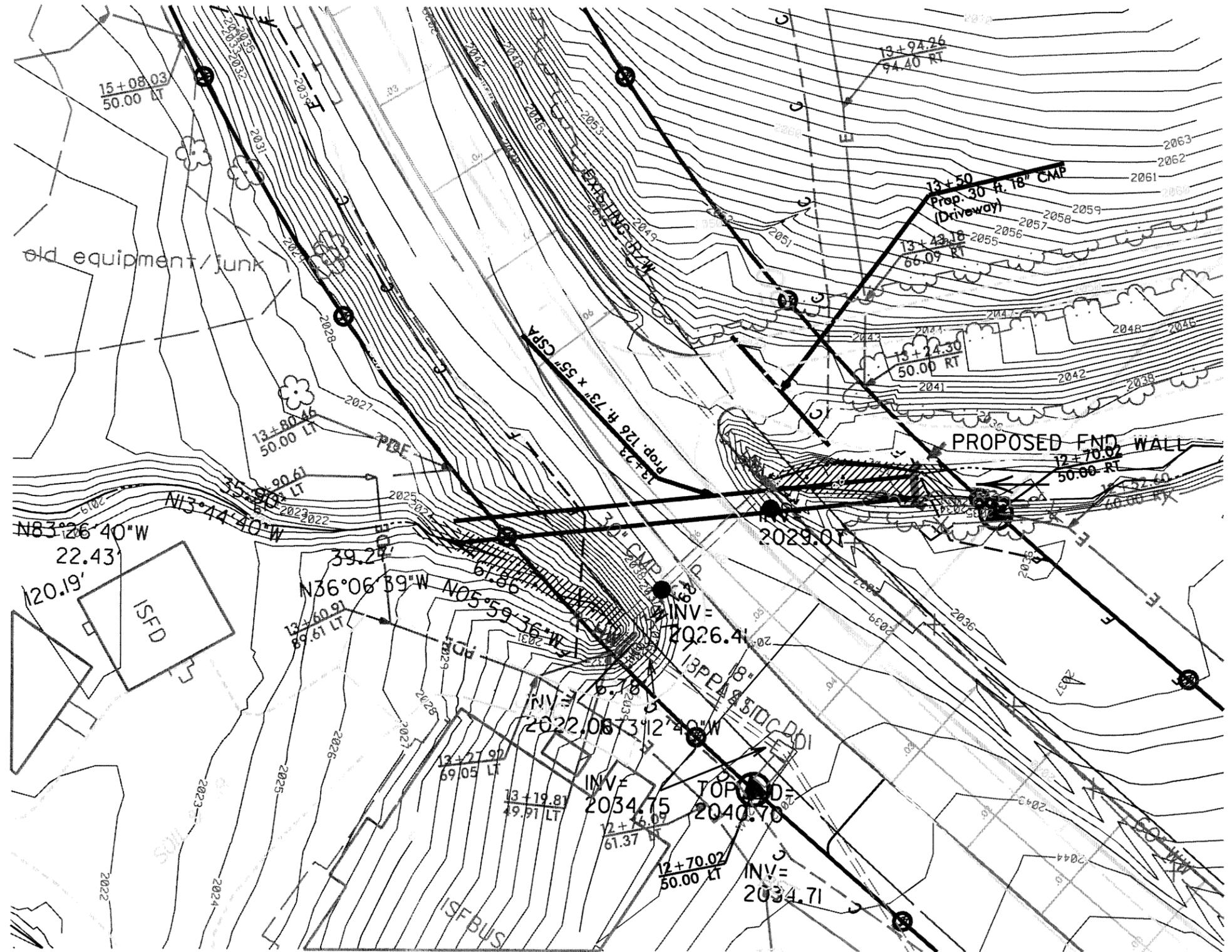
DENOTES FILL IN
SURFACE WATER

R-2408A

Site 1 Station 28+05

Place coir fiber matting below bankfull elevation at the pipe inlet and outlet.
Establish vegetation above bankfull elevation.

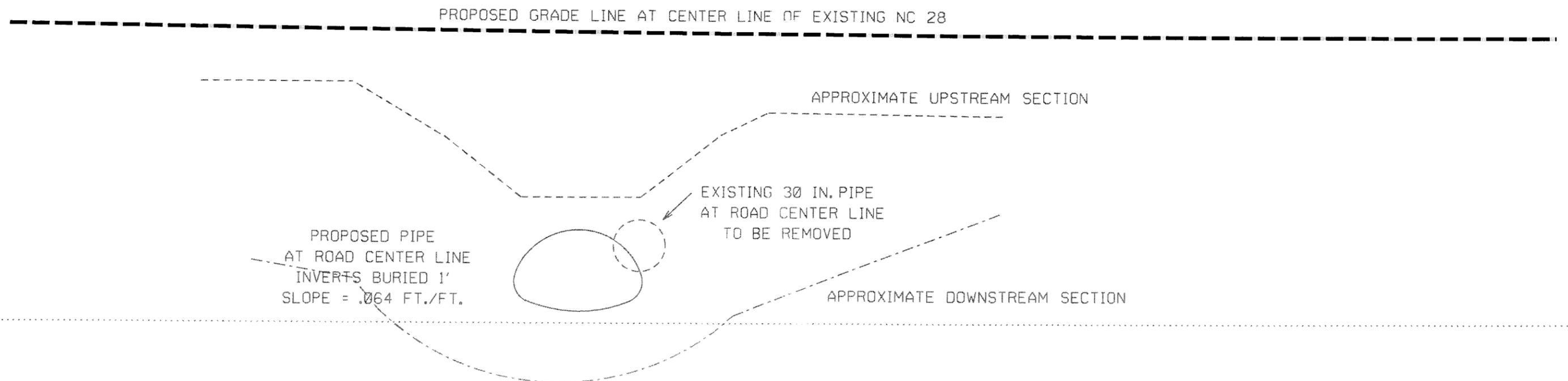
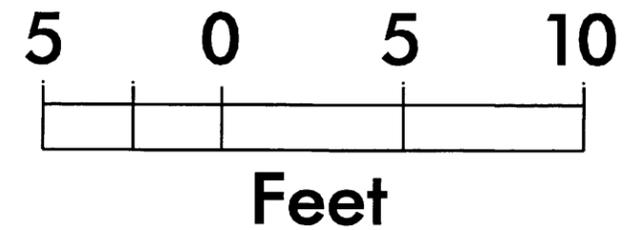
Permit Drawing
Sheet 12 of 13



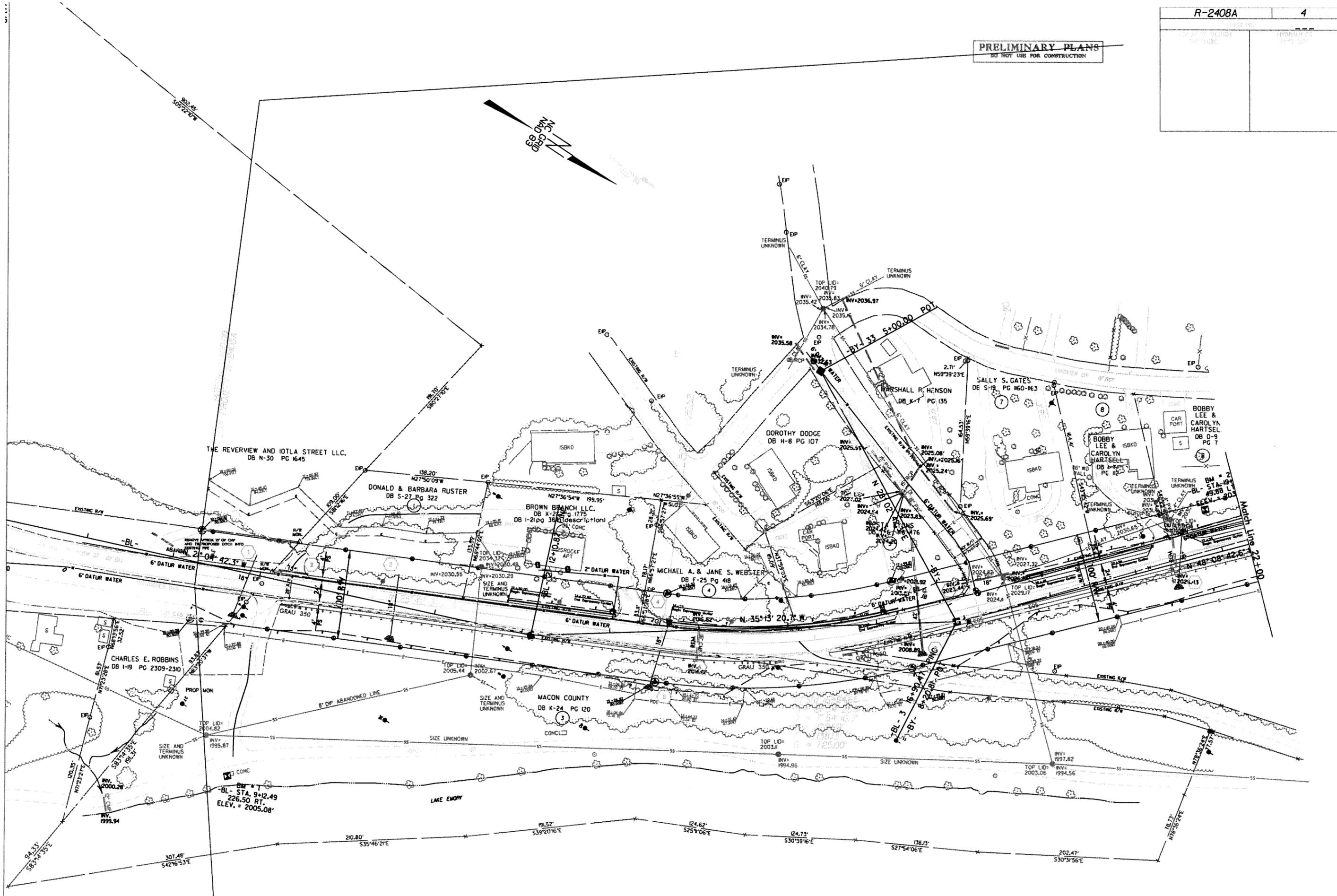
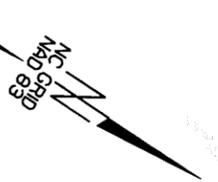
R-2408A

Site 3 Station 13+23 Y1
Proposed 126' 73" x 55" CSPA

Permit Drawing
Sheet 13 of 13

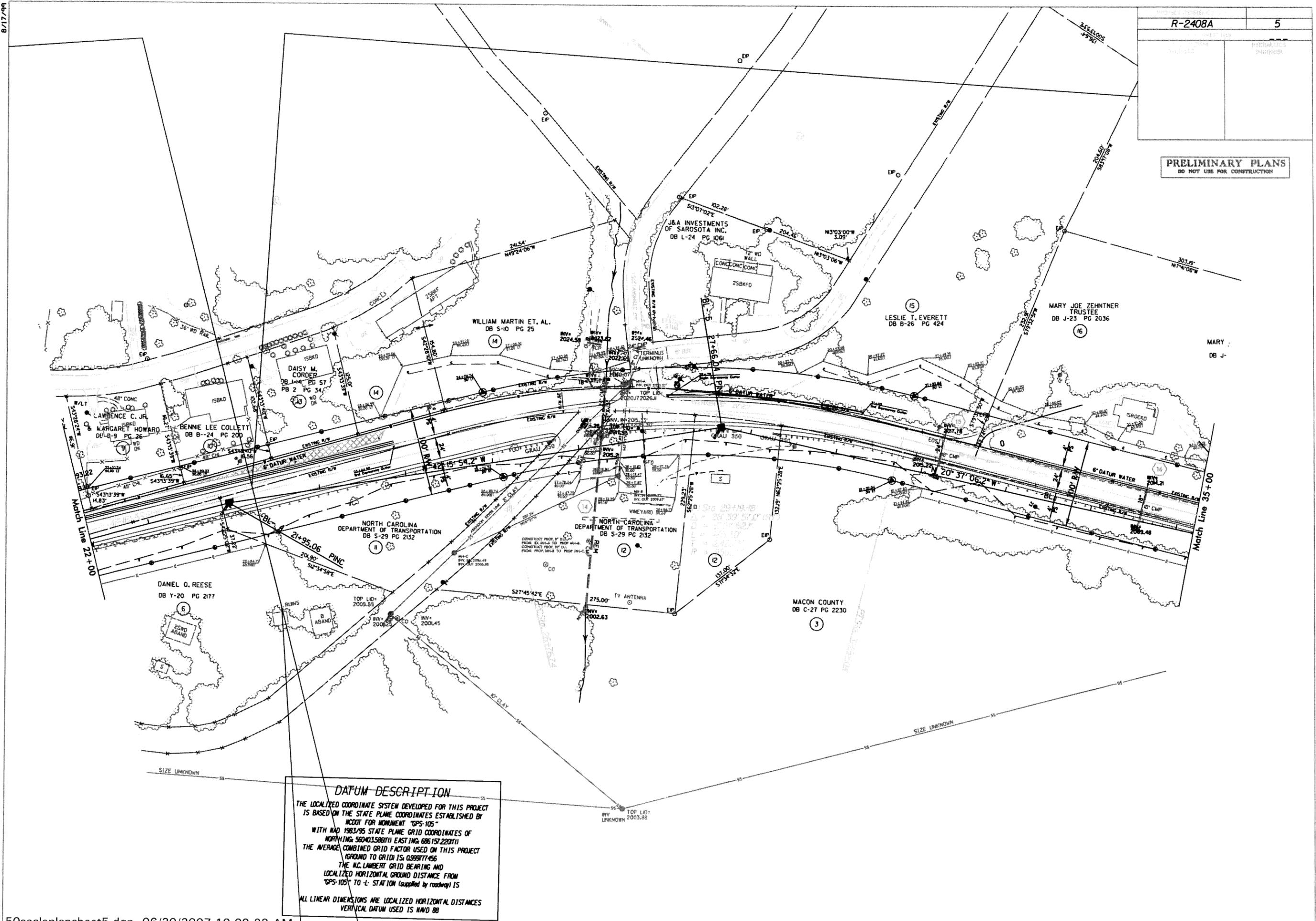


PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



PROJECT NUMBER	
R-2408A	5
DATE	
06/20/07	
DRAWN BY	
CHECKED BY	
HYDRAULICS ENGINEER	

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION



DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "GPS-105" WITH NAD 1983/95 STATE PLANE GRID COORDINATES OF NORTHING: 560403358(11) EASTING: 686157220(11) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99977456 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS-105" TO "L" STATION (supplied by roadway) IS

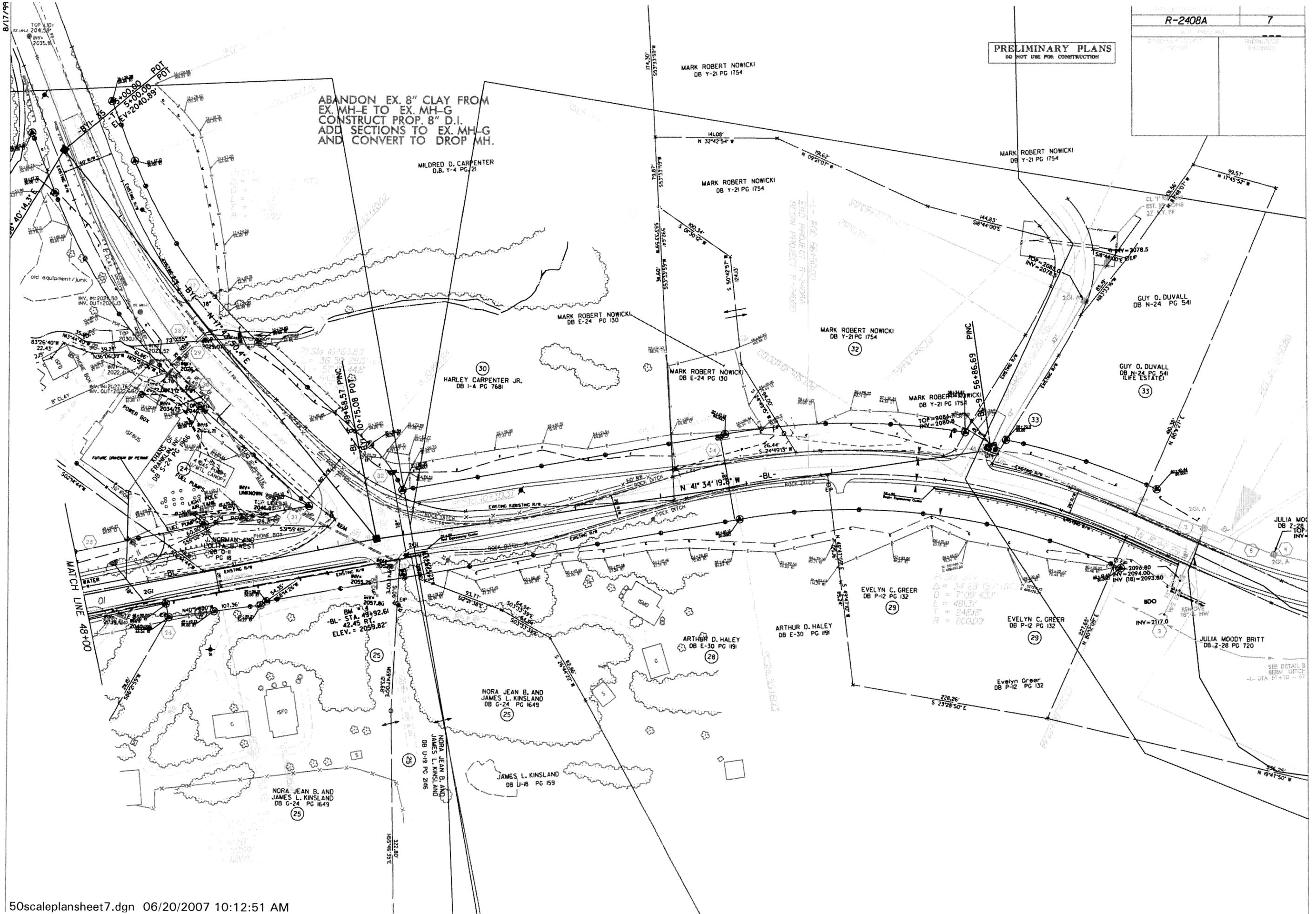
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAD 88

8/17/99

R-2408A		7
PROJECT NO.		
DATE		
DRAWN BY		
CHECKED BY		
HYDRA. ENG.		
ELECTRICAL		

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

ABANDON EX. 8" CLAY FROM EX. MH-E TO EX. MH-G
CONSTRUCT PROP. 8" D.I.
ADD SECTIONS TO EX. MH-G
AND CONVERT TO DROP MH.



UT1

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: R-2408A (Improvements of SR1323 (Riverview Street) from the intersection of Iotla Street to NC28

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: NC County/parish/borough: Macon City: Franklin
Center coordinates of site (lat/long in degree decimal format): Lat. 35°11'40" N Long. 83°23'10" W
Universal Transverse Mercator:

Name of nearest waterbody: Little Tennessee River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Little Tennessee River
Name of watershed or Hydrologic Unit Code (HUC): 06010202
[X] Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
[] Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

[] Office (Desk) Determination. Date:
[] Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There appear to be no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

[] Waters subject to the ebb and flow of the tide.
[] Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply): 1

- [] TNWs, including territorial seas
[] Wetlands adjacent to TNWs
[X] Relatively permanent waters2 (RPWs) that flow directly or indirectly into TNWs
[] Non-RPWs that flow directly or indirectly into TNWs
[X] Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
[] Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
[] Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
[] Impoundments of jurisdictional waters
[] Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 500 linear feet: 2 width (ft) and/or acres.
Wetlands: 0.5 acres.

c. Limits (boundaries) of jurisdiction based on: Established by OHWM.

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):3

[] Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain:

1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.
2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
3 Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent": Wetlands associated with UT1 is outside the study area of the project.

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 839 square miles
Drainage area: 0.04 square miles
Average annual rainfall: 54.4 inches
Average annual snowfall: 15.2 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
 Tributary flows through 10 (or more) tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.
Project waters are 1 (or less) river miles from RPW.
Project waters are 30 (or more) aerial (straight) miles from TNW.
Project waters are 1 (or less) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: .

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: 2 feet
Average depth: 0.25 feet
Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: stable bank.

Presence of run/riffle/pool complexes. Explain: riffle pools present.

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): 7 %

(c) Flow:

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: Perennial flow.

Other information on duration and volume: fairly consistent flow.

Surface flow is: **Discrete and confined**. Characteristics:

Subsurface flow: **Unknown**. Explain findings:

Dye (or other) test performed:

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: water clear.

Identify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): 30-50' wide wooded riparian fringe.
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain:

Surface flow is: **Discrete and confined**

Characteristics:

Subsurface flow: **Unknown**. Explain findings:

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **30 (or more)** river miles from TNW.

Project waters are **30 (or more)** aerial (straight) miles from TNW.

Flow is from: **Wetland to/from navigable waters**.

Estimate approximate location of wetland as within the **500-year or greater** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **1**

Approximately (0.5) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Y			0.5

Summarize overall biological, chemical and physical functions being performed: The wetland located below the RPW provides adequate habitat for various species of fauna and flora. The wetland also provides adequate storage potential for various high rainfall events eliminating or at least providing a sort of water storage during storm events. This storage potential helps reduce both point and non-point source pollutants and increasing water quality.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: NCDWQ stream form score over 30.

- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

Tributary waters: 500 linear feet 2 width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters:

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

Tributary waters: linear feet width (ft).

Other non-wetland waters: acres.

Identify type(s) of waters:

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **RPW flows directly into wetland.**

- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: 0.5 acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

Demonstrate that impoundment was created from “waters of the U.S.,” or

Demonstrate that water meets the criteria for one of the categories presented above (1-6), or

Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

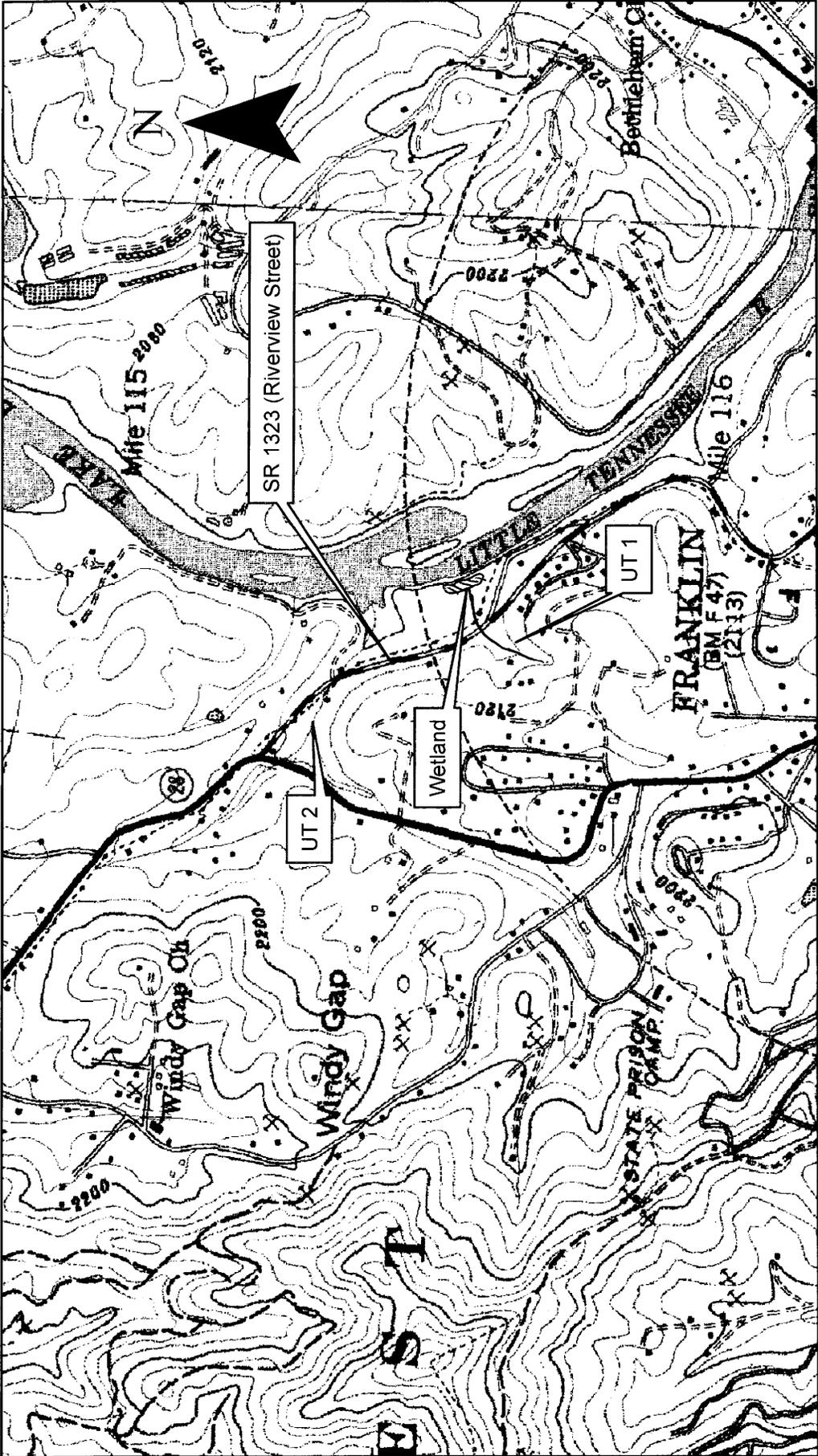
- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:
- Corps navigable waters' study:
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps:
- 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD:



Jurisdictional features associated with R-2408A

UTZ

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: R-2408A (Improvements of SR1323 (Riverview Street) from the intersection of Iotla Street to NC28

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: NC County/parish/borough: Macon City: Franklin
Center coordinates of site (lat/long in degree decimal format): Lat. 35°11'52" N, Long. 83°23'17" W
Universal Transverse Mercator:

Name of nearest waterbody: Little Tennessee River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Little Tennessee River
Name of watershed or Hydrologic Unit Code (HUC): 06010202

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date:
Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There appear to be no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply): 1

- TNWs, including territorial seas
Wetlands adjacent to TNWs
Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs
Non-RPWs that flow directly or indirectly into TNWs
Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
Impoundments of jurisdictional waters
Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 1000 linear feet: 3 width (ft) and/or acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Established by OHWM.

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable): 3

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain:

1 Boxes checked below shall be supported by completing the appropriate sections in Section III below.

2 For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

3 Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: square miles

Drainage area: square miles

Average annual rainfall: inches

Average annual snowfall: inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 10 (or more) tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 30 (or more) aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵:

Tributary stream order, if known:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

- Tributary is:** Natural
 Artificial (man-made). Explain:
 Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: feet
Average depth: feet
Average side slopes: **Vertical (1:1 or less).**

Primary tributary substrate composition (check all that apply):

- | | | |
|--|--|-----------------------------------|
| <input type="checkbox"/> Silts | <input type="checkbox"/> Sands | <input type="checkbox"/> Concrete |
| <input type="checkbox"/> Cobbles | <input type="checkbox"/> Gravel | <input type="checkbox"/> Muck |
| <input type="checkbox"/> Bedrock | <input type="checkbox"/> Vegetation. Type/% cover: | |
| <input type="checkbox"/> Other. Explain: | | |

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Intermittent but not seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Discrete and confined.** Characteristics:

Subsurface flow: **Unknown.** Explain findings:

- Dye (or other) test performed:

Tributary has (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Bed and banks | |
| <input type="checkbox"/> OHWM ⁶ (check all indicators that apply): | |
| <input type="checkbox"/> clear, natural line impressed on the bank | <input type="checkbox"/> the presence of litter and debris |
| <input type="checkbox"/> changes in the character of soil | <input type="checkbox"/> destruction of terrestrial vegetation |
| <input type="checkbox"/> shelving | <input type="checkbox"/> the presence of wrack line |
| <input type="checkbox"/> vegetation matted down, bent, or absent | <input type="checkbox"/> sediment sorting |
| <input type="checkbox"/> leaf litter disturbed or washed away | <input type="checkbox"/> scour |
| <input type="checkbox"/> sediment deposition | <input type="checkbox"/> multiple observed or predicted flow events |
| <input type="checkbox"/> water staining | <input type="checkbox"/> abrupt change in plant community |
| <input type="checkbox"/> other (list): | |
| <input type="checkbox"/> Discontinuous OHWM. ⁷ Explain: | |

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> High Tide Line indicated by: | <input checked="" type="checkbox"/> Mean High Water Mark indicated by: |
| <input type="checkbox"/> oil or scum line along shore objects | <input type="checkbox"/> survey to available datum; |
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings; |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types. |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (list): | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain:

Identify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain:

Surface flow is: **Discrete and confined**

Characteristics:

Subsurface flow: **Unknown**. Explain findings:

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. Explain:
 - Ecological connection. Explain:
 - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **30 (or more)** river miles from TNW.

Project waters are **30 (or more)** aerial (straight) miles from TNW.

Flow is from: **Wetland to/from navigable waters**.

Estimate approximate location of wetland as within the **500-year or greater** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **30 (or more)**

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

TNWs: linear feet width (ft), Or, acres.

Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: NCDWQ stream form score over 30.

Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: 1000 linear feet 3 width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
- Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

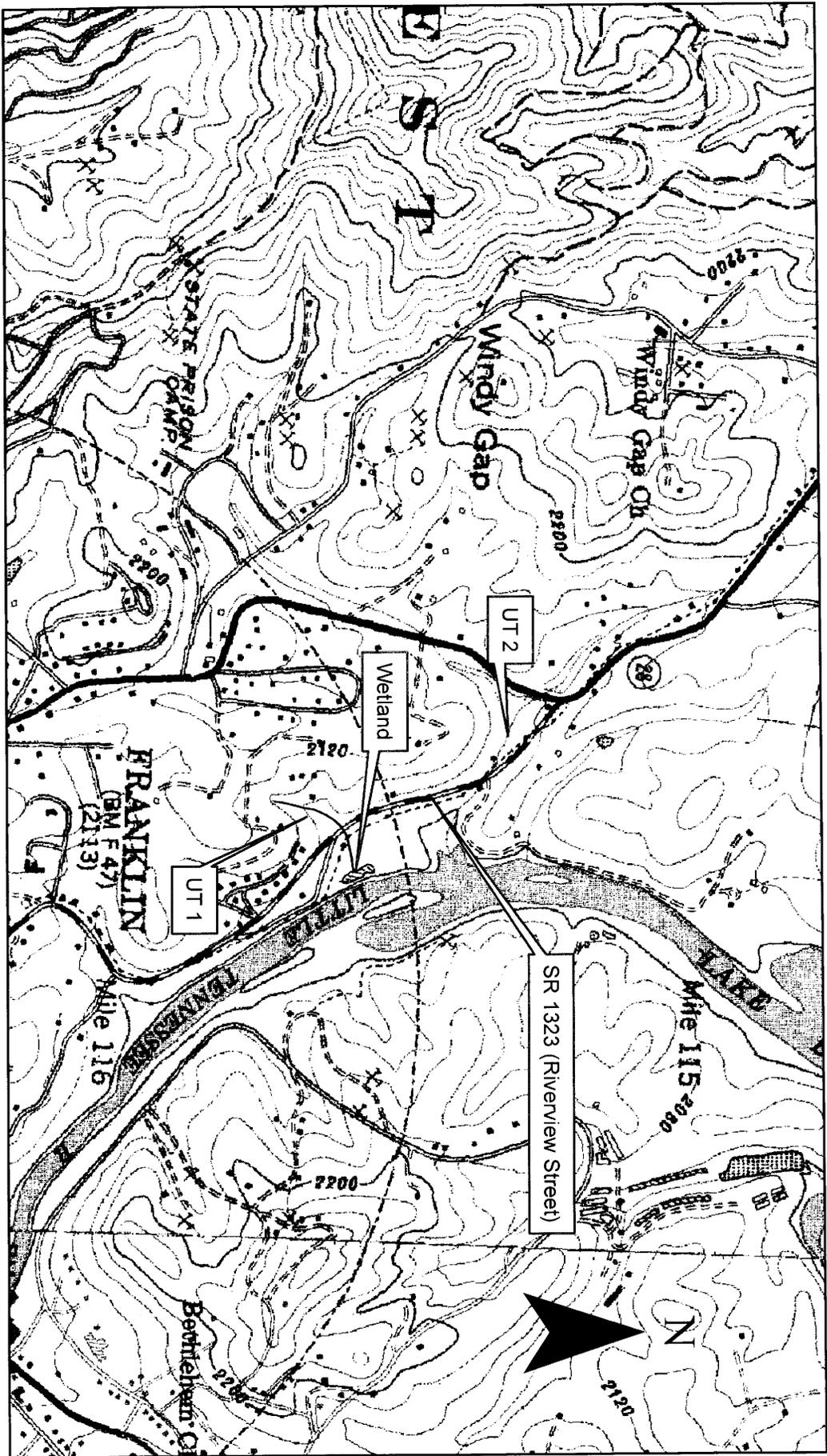
- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD:



Jurisdictional features associated with R-2408A