

PROJECT SPECIAL PROVISION

(10-18-95)

Z-1

PERMITS

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

<u>PERMIT</u>	<u>AUTHORITY GRANTING THE PERMIT</u>
Dredge and Fill and/or Work in Navigable Waters (404)	U. S. Army Corps of Engineers
Water Quality (401)	Division of Environmental Management, DENR State of North Carolina

The Contractor shall comply with all applicable permit conditions during construction of this project. Those conditions marked by * are the responsibility of the department and the Contractor has no responsibility in accomplishing those conditions.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

The Contractor's attention is also directed to Articles 107-10 and 107-14 of the *Standard Specifications* and the following:

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

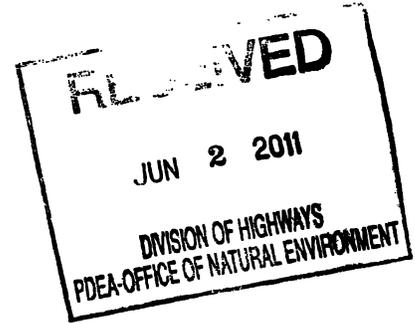
Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the waters or wetlands provided that activities outside those areas is done in such a manner as to not affect the waters or wetlands.



REPLY TO
ATTENTION OF:

396

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1343



May 27, 2011

Regulatory Division

Action ID: SAW-2002-31262; TIP No. R-2237C

Dr. Gregory J. Thorpe, PhD, Manager
Project Development and Environmental Analysis Branch
N.C. Department of Transportation
Division of Highways
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Dear Dr. Thorpe:

Enclosed is a Department of the Army permit to authorize the proposed permanent placement of fill material into 1,646 linear feet of streams and 0.19 acres of wetlands. Additional temporary impacts to 283 linear feet of streams are also proposed to facilitate the widening and improving of US 321 (TIP R-2237C) between SR 1500, Blackberry Road, and US 221 at Blowing Rock in Watauga and Caldwell Counties, North Carolina.

Any deviation in the authorized work will likely require modification of this permit. If a change in the authorized work is necessary, you should promptly submit revised plans to the Corps showing the proposed changes. You may not undertake the proposed changes until the Corps notifies you that your permit has been modified.

Carefully read your permit. The general and special conditions are important. Your failure to comply with these conditions could result in a violation of Federal law. Certain significant conditions require that:

- a. You must complete construction before December 31, 2016. *2018 per Monte Matthews -cu*
- b. You must allow representatives from this office to make periodic visits to your worksite as deemed necessary to assure compliance with permit plans and conditions.

You must notify this office in advance as to when you intend to commence and complete work.

You should address all questions regarding this authorization to Mr. Monte Matthews, Raleigh Regulatory Field Office, at telephone (919) 554-4884, extension 30.

Sincerely,

Henry Wicker

for

Jefferson M. Ryscavage
Colonel, U.S. Army
District Commander

Enclosures

Copy Furnished (with enclosures):

Chief, Source Data Unit
NOAA/National Ocean Service
ATTN: Sharon Tear N/CS261
1315 East-West Hwy., Rm 7316
Silver Spring, Maryland 20910-3282

Copies Furnished (with special conditions and plans):

Mr. Ronald J. Mikulak, Chief
Wetlands Regulatory Section
61 Forsyth Street
Atlanta, Georgia 30303

Mr. Pete Benjamin
U.S. Fish and Wildlife Service
Fish and Wildlife Enhancement
Post Office Box 33726
Raleigh, North Carolina 27636-3726

Mr. Ron Sechler
National Marine Fisheries Service, NOAA
Habitat Conservation Division
Pivers Island
Beaufort, North Carolina 28516

Mr. Doug Huggett
Division of Coastal Management
N.C. Department of Environment
and Natural Resources
400 Commerce Avenue
Morehead City, North Carolina 28557

Mr. David Rackley
National Marine Fisheries Service
219 Fort Johnson Road
Charleston, South Carolina 29412-9110

DEPARTMENT OF THE ARMY PERMIT

Permittee: NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

RECEIVED

Permit No: SAW-2002-31262

MAY 16 2011

Issuing Office: USAED, WILMINGTON

REG. WILM. FLD. OFC.

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of the office acting under the authority of the commanding officer.

You are authorized to perform work in the accordance with the terms and conditions specified below.

Project Description: The North Carolina Department of Transportation (NCDOT) has identified this project as TIP R-2237C, which involves the widening and improving of US 321 between SR 1500 (Blackberry Road) and US 221 at Blowing Rock in Watauga and Caldwell Counties, North Carolina. Specifically, the project includes widening and/or improving the existing road by: 1) curves would be eased south of Blowing Rock and in the Country Club Drive and Norwood Circle area of Blowing Rock; 2) a four-lane section with shoulders south of Gideon Ridge and the Blowing Rock town limits; 3) a four-lane section with curb and gutter and some turn lanes in Blowing Rock south of US 321 Business; 4) a four-lane section with a landscaped median north of US 321 Business; and 5) improving several intersections. The project would permanently impact a total of 1,646 linear feet of perennial streams of which 975 linear feet occur in the Yadkin-Pee Dee River Basin and 671 linear feet in the New River Basin. In addition, 0.13-acre of wetland is proposed for impact in the Yadkin Pee-Dee Basin and 0.06-acre within the New River Basin for a total of 0.19-acre of total wetland impact. Additional temporary impacts to 283 linear feet of streams are also proposed to facilitate the construction of this project. To mitigate for all unavoidable permanent impacts to jurisdictional features, the applicant has proposed payment into the North Carolina Ecosystem Enhancement Program (NCEEP) in the amount to provide 1,910 linear feet of restoration equivalent cold water stream channel and 0.26 acre of riparian wetland restoration equivalent in the Yadkin River basin (Hydrologic Cataloging Unit 03040101); and 1,250 linear feet of restoration equivalent cold water stream channel and 0.12 acre of riparian wetland restoration equivalent in the New River Basin (Hydrologic Cataloging Unit 05050001). By letter dated November 23, 2010, the NCEEP has agreed to provide the stream restoration stated above.

Project Location: The project, known as TIP R-2237C, is a 4.0 mile length along the existing US 321, from SR 1500 (Blackberry Road) in Caldwell County to US 221 at Blowing Rock, Watauga County, North Carolina. The project crosses Bailey Camp Creek, the Middle Fork of the South Fork of the New River, and unnamed tributaries (approximate center of project at 36.12° N., -81.66° W). The site is located within the Yadkin and New River Basins, Hydrologic Unit 03040101 and 05050001, respectively.

Permit Conditions:**General Conditions:**

1. The time limit for completing the work authorized ends on December 31, 2018. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Conditions 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

*SEE ATTACHED SPECIAL CONDITIONS

Further Information:

1. **Congressional Authorities:** You have been authorized to undertake the activity described above pursuant to:
 - () Section 10 of the Rivers and Harbors Act of 1899 (33 U.S. C. 403).
 - (X) Section 404 of the clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
2. **Limits of this authorization.**
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measure by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

E. L. Luok for Gregory J. Thorpe, PhD May 13, 2011
(PERMITTEE) NORTH CAROLINA DEPARTMENT OF (DATE)
TRANSPORTATION

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Henry Wick 5-26-2011
(DISTRICT Engineer) JEFFERSON M. RYSCAVAGE, COLONEL (DATE)
For RD

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(Transferee) (Date)

SPECIAL CONDITIONS
Action ID. SAW-2002-31262
North Carolina Department of Transportation - TIP R-2237C

Failure to institute and carry out the details of the following special conditions below (listed as a-y) will result in a directive to cease all ongoing and permitted work within waters of the United States, including wetlands, associated with the permitted project, or such other remedies and/or fines as the U.S. Army Corps of Engineers District Commander or his authorized representatives may seek.

- a) The North Carolina Division of Water Quality (DWQ) permit/certification number WQC003852 was issued for this project on March 9, 2011. Special conditions were issued associated with this water quality permit/certification and a copy of these conditions is attached as Exhibit A. These referenced conditions are hereby incorporated as special conditions of this permit.
- b) All work authorized by this permit must be performed in strict compliance with the attached revised plans which were received on October 18, 2010. These plans are a part of this permit and identified as Exhibit B. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.
- * c) The permittee shall schedule a preconstruction meeting between its representatives, the contractor's representatives, and the Corps of Engineers, Raleigh Regulatory Field Office, NCDOT Regulatory Project Manager, prior to any work within jurisdictional waters and wetlands to ensure that there is a mutual understanding of all of the terms and conditions contained within this Department of the Army Permit. The permittee shall provide the USACE, Raleigh Regulatory Field Office, NCDOT Regulatory Project Manager, with a copy of the final plans at least two weeks prior to the preconstruction meeting along with a description of any changes that have been made to the project's design, construction methodology or construction timeframe. The permittee shall schedule the preconstruction meeting for a time when the USACE and North Carolina Division of Water Quality (NCDWQ) Project Managers can attend. The permittee shall invite the Corps and NCDWQ Project Managers a minimum of thirty (30) days in advance of the scheduled meeting in order to provide those individuals with ample opportunity to schedule and participate in the required meeting.
- d) Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

SPECIAL CONDITIONS
Action ID. SAW-2002-31262
North Carolina Department of Transportation - TIP R-2237C

- e) Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.
- * f) Compensatory mitigation for the unavoidable impacts to 1,646 linear feet of stream and 0.19 acre of riparian wetland impact associated with the proposed project shall be provided by the Ecosystem Enhancement Program (EEP), as outlined in the letter dated November 23, 2010, from William D. Gilmore, EEP Director. Pursuant to the In-Lieu-Fee Instrument signed July 28, 2010, between the State of North Carolina, Ecosystem Enhancement Program and the US Army Corps of Engineers the EEP will provide 1,910 linear feet of restoration equivalent cold water stream channel and 0.26 acre of riparian wetland restoration equivalent in the Yadkin River basin (Hydrologic Cataloging Unit 03040101); and 1,250 linear feet of restoration equivalent cold water stream channel and 0.12 acre of riparian wetland restoration equivalent in the New River Basin (Hydrologic Cataloging Unit 05050001) in accordance with Section F of the instrument. For wetlands, a minimum of 1:1 (impact to mitigation) must be in the form of wetland restoration.
- g) All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at 1 (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.
- * h) The permittee shall advise the Corps in writing prior to beginning the work authorized by this permit and again upon completion of the work authorized by this permit.
- i) Unless otherwise authorized by this permit, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities. Metal products, organic materials (including debris from land clearing activities), or unsightly debris will not be used.
- j) The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project

SPECIAL CONDITIONS
Action ID. SAW-2002-31262
North Carolina Department of Transportation - TIP R-2237C

k) The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

l) The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.

m) During the clearing phase of the project, heavy equipment must not be operated in surface waters or stream channels. Temporary stream crossings will be used to access the opposite sides of stream channels. All temporary diversion channels and stream crossings will be constructed of non-erodable materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.

n) No fill or excavation for the purposes of sedimentation and erosion control shall occur within jurisdictional waters, including wetlands, unless it is included on the plan drawings and specifically authorized by this permit.

o) The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

p) Violations of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permittee's discovery of the violation.

* q) The permittee will ensure that the construction design plans for this project do not deviate from the permit plans attached to this authorization. Written verification shall be provided that the final construction drawings comply with the attached permit drawings prior to any active construction in waters of the United States, including wetlands. Any deviation in the construction design plans will be brought to the attention of the Corps of

SPECIAL CONDITIONS
Action ID. SAW-2002-31262
North Carolina Department of Transportation - TIP R-2237C

Engineers, Raleigh Regulatory Field Office prior to any active construction in waters or wetlands.

- * r) Prior to commencing construction within jurisdictional waters of the United States for any portion of the proposed project, the permittee shall forward the latest version of project construction drawings to the Corps of Engineers, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings will be acceptable.
- s) The permittee shall take measures to prevent live or fresh concrete from coming into contact with any surface waters until the concrete has hardened.
- t) Measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed opening should be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gauge data, if available. In the absence of such data, bankfull flow can be used as a comparable level.
- u) Culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter or less shall be buried or placed on the stream bed as practicable and appropriate to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The bottom of the culvert must be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions. Destabilizing the channel and head cutting upstream should be considered in the placement of the culvert. A waiver from the depth specifications in this condition may be requested in writing. The waiver will be issued if it can be demonstrated that the proposal would result in the least impacts to the aquatic environment.
- v) To ensure that all borrow and waste activities occur on high ground and do not result in the degradation of adjacent wetlands and streams, except as authorized by this permit, the permittee shall require its contractors and/or agents to identify all areas to be used to borrow material, or to dispose of dredged, fill, or waste material. The permittee shall provide the USACE with appropriate maps indicating the locations of proposed borrow or waste sites as soon as the permittee has that information. The permittee will coordinate with the USACE before approving any borrow or waste sites that are within 400 feet of any streams or wetlands.

SPECIAL CONDITIONS
Action ID. SAW-2002-31262
North Carolina Department of Transportation - TIP R-2237C

w) NCDOT shall abide by all stipulations identified in the Memorandum of Agreement between the United States Army Corps of Engineers and the North Carolina State Historic Preservation Officer, executed 15 November 2004, copy attached and identified as Exhibit C.

x) If the permittee discovers any previously unknown historic or archaeological sites while accomplishing the authorized work, he shall immediately stop work and notify the Corps of Engineers, Raleigh Regulatory Field Office NCDOT Regulatory Project Manager who will initiate the required State/Federal coordination.

y) All recommendations in the letter from the North Carolina Wildlife Resources Commission, dated October 18, 2010, are hereby incorporated as special conditions of this permit. This letter is attached as Exhibit D.



RECEIVED

North Carolina Department of Environment and Natural Resources MAR 14 2011

Division of Water Quality
Coleen H. Sullins
Director

Beverly Eaves Perdue
Governor

RALEIGH REGULATORY FIELD OFFICE
Dee Freeman
Secretary

March 9, 2011

Dr. Greg Thorpe, PhD., Manager
Project Development and Environmental Analysis
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina, 27699-1548

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with
ADDITIONAL CONDITIONS for Proposed widening of US 321 from SR 1500 (Blackberry Road) to US
221 at Blowing Rock in Watauga and Caldwell Counties, State Project No. 6.739001T, TIP R-2237 C.
NCDWQ Project No. 20100752

Dear Dr. Thorpe:

Attached hereto is a copy of Certification No. WQC003852 issued to The North Carolina Department of
Transportation (NCDOT) dated March 9, 2011.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,

Coleen H. Sullins
Director

Attachments

cc: Monte Matthews, US Army Corps of Engineers, Raleigh Field Office
Heath Slaughter, Division 11 Environmental Officer
Chris Militscher, Environmental Protection Agency (electronic copy only)
Marla Chambers, NC Wildlife Resources Commission (electronic copy only)
Beth Harmon, Ecosystem Enhancement Program
Wetlands/401 Transportation Permitting Unit
File Copy

EXHIBIT A

Transportation Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1650
Location: 2321 Crabtree Blvd., Raleigh, North Carolina 27604
Phone: 919-733-1786 | FAX: 919-733-6893
Internet: <http://h2o.enr.state.nc.us/ncwetlands/>

One
North Carolina
Naturally

**401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act
with ADDITIONAL CONDITIONS**

THIS CERTIFICATION is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality (NCDWQ) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact 0.19 acres of jurisdictional wetlands and 1,929 linear feet of jurisdictional streams in Watauga and Caldwell Counties. The project shall be constructed pursuant to the application dated received September 9, 2010 with additional information dated received March 1, 2011. The authorized impacts are as described below:

Stream Impacts in the Yadkin-Pee Dee River Basin

Site	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1	294	36	330	294
2	119	33	152	0
3a	53	0	53	0
3b	160	43	203	160
4	317	46	363	317
5	32	6	38	32
Total	975	164	1,139	803

Stream Impacts in the New River Basin

Site	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (linear ft)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
6	294	0	294	294
7	160	26	186	160
9	133	10	143	0
10a	59	19	78	0
10b	25	19	44	0
12	0	45	45	0
Total	671	119	790	454

Total Stream Impact for Project: 1,929 linear feet

Wetland Impacts in the Yadkin-Pee Dee River Basin (Riverine)

Site	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Area under Bridge (ac)	Total Wetland Impact (ac)
3	0.01	0	0	0.02	0	0	0.03
4	0.07	0	0.02	0.01	0	0	0.10
Total	0.08	0	0.02	0.03	0	0	0.13

Wetland Impacts in the New River Basin (Riverine)

Site	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Area under Bridge (ac)	Total Wetland Impact (ac)
6	0.01	0	0	0	0	0	0.01
7	0	0	0.01	0	0	0	0.01
11	0.04	0	0	0	0	0	0.04
Total	0.05	0	0.01	0	0	0	0.06

Total Wetland Impact for Project: 0.19 acres.

The application provides adequate assurance that the discharge of fill material into the waters of the Yadkin Pee Dee and the New River Basins in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your application dated received September 9, 2010 with additional information dated received March 1, 2011. Should your project change, you are required to notify the NCDWQ and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed one acre or 150 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

Condition(s) of Certification:

- * 1. The NCDOT Division Environmental Officer or Environmental Assistant will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the potential issues with stream and pipe alignment at the permitted site. NCDWQ staff shall be invited to the pre-construction meeting.
- 2. In-stream work and land disturbance within the 25-foot buffer zone are prohibited during the trout-spawning season of October 15 through April 15 to protect the egg and fry stages of trout.
- 3. The permittee shall use Design Standards in Sensitive Watersheds/[15A NCAC 4B.0124(a)-(e)] in areas draining to Tr waters. However, due to the size of the project, NC DOT shall not be required to meet 15A NCAC 4B .0124(a) regarding the maximum amount of uncovered acres. Temporary cover (wheat, millet, or similar annual grain) or permanent herbaceous cover shall be planted on all bare soil within 15 business days of ground disturbing activities to provide erosion control.
- 4. Tall fescue shall not be used in the establishment of temporary or permanent groundcover within riparian areas. For the establishment of permanent herbaceous cover, erosion control matting shall be used in conjunction with an appropriate native seed mix on disturbed soils within the riparian area and on disturbed steep slopes with the following exception. Erosion control matting is not necessary if the area is contained by perimeter erosion control devices such as silt fence, temporary sediment ditches, basins, etc. Matting should be secured in place with staples, stakes, or wherever possible, live stakes of native trees. Erosion control matting placed in riparian areas shall not contain a nylon mesh grid, which can impinge and entrap small animals. For the establishment of temporary groundcover within riparian areas, hydroseeding along with wood or cellulose based hydro mulch applied from a fertilizer- and limestone-free tank is allowable at the appropriate rate in conjunction with the erosion control measures. Discharging hydroseed mixtures and wood or cellulose mulch into surface waters is prohibited. Riparian areas are defined as a distance 25 feet landward from top of stream bank.
- * 5. Compensatory mitigation for 803 linear feet of impact to streams in the Yadkin-Pee Dee River Basin and 454 linear feet in the New River Basin is required. We understand that you have chosen to perform compensatory mitigation for impacts to streams through the North Carolina Ecosystem Enhancement Program (EEP), and that the EEP has agreed to implement the mitigation for the project. EEP has indicated in a letter dated August 30, 2010 that they will assume responsibility for satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the Tri-Party MOA signed on July 22, 2003 and the Dual-Party MOA signed on April 12, 2004.
- 6. All channel relocations will be constructed in a dry work area and stabilized before stream flows are diverted. Channel relocations will be completed and stabilized, and must be approved on site by NCDWQ staff, prior to diverting water into the new channel. Whenever possible, channel relocations shall be allowed to stabilize for an entire growing season. Vegetation used for bank stabilization shall be limited to native woody species, and should include establishment of a 30 foot wide wooded and an adjacent 20 foot wide vegetated buffer on both sides of the relocated channel to the maximum extent practical. All stream banks shall be matted with coir fiber matting. Also, rip-rap may be allowed if it is necessary to maintain the physical integrity of the stream, but the applicant must provide written justification and any calculations used to determine the extent of rip-rap coverage requested.
- 7. If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate.

Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.

8. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Any riprap placed in the channel bottom shall be keyed into the stream bed and banks below the normal high water mark. Bioengineering boulders or structures should be properly designed, sized and installed.
9. For the 283 linear feet of streams being impacted due to site dewatering activities, the site shall be graded to its preconstruction contours and revegetated with appropriate native species.
10. The stream channel shall be excavated no deeper than the natural bed material of the stream, to the maximum extent practicable. Efforts must be made to minimize impacts to the stream banks, as well as to vegetation responsible for maintaining the stream bank stability.
11. At sites 1, 2, 6, 10, and 11, pipe burial is not required. For all other sites, placement of culverts and other structures in open waters and streams shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by NCDWQ. **If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact NCDWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.**
12. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.
13. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
14. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions.
- * 15. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval.
16. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.
17. Heavy equipment shall be operated from the banks rather than in the stream channel in order to minimize sedimentation and reduce the introduction of other pollutants into the stream.
18. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
19. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
20. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
21. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager.
22. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification.
23. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
24. The Permittee shall report any violations of this certification to the Division of Water Quality within 24 hours of discovery.
- * 25. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify NCDWQ when all work included in the 401 Certification has been completed.
26. Native riparian vegetation must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction.

27. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities.
28. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards:
 - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
 - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
 - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
29. Sediment and erosion control measures shall not be placed in wetlands or waters unless otherwise approved by this Certification.
30. Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

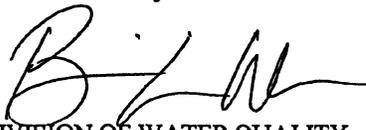
The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings
6714 Mail Service Center
Raleigh, NC 27699-6714
Telephone: (919)-733-2698, Facsimile: (919)-733-3478

A copy of the petition must also be served on DENR as follows:

Ms. Mary Penny Thompson, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601

This the 9th day of March 2011


DIVISION OF WATER QUALITY
for Coleen H. Sullins
Director

Barrett, William A

From: Euliss, Amy
Sent: Friday, March 18, 2011 12:44 PM
To: Dagnino, Carla S; Barrett, William A
Cc: Wrenn, Brian
Subject: RE: R-2237C

50 foot buffer are not a requirement on the stream relocations for R-2237C. Let me know if you have anymore issues.

Amy

From: Wrenn, Brian
Sent: Thursday, March 17, 2011 3:17 PM
To: Dagnino, Carla S
Cc: Euliss, Amy
Subject: RE: R-2237C

I guess I'm missing the issue. The condition states "should" establish a buffer. In regulatory language that is not a requirement but a suggestion. As part of the green sheet commitments, it carries no more regulatory authority than the 401. I expect the contractor will construct the relocation per the approved plans. If those plans don't show a buffer and we approved them, then essentially we are not requiring a 50 ft buffer. We can also address this in the precon meeting. If I'm missing something else, let me know. Thanks.

Brian

Brian Wrenn
 Transportation Permitting Unit, Supervisor
 NC Division of Water Quality
brian.wrenn@ncdenr.gov

585 Waughtown Street
 Winston-Salem, NC 27107-2241
 336-771-4952 (Winston-Salem no.)
 336-771-4631 (Fax)
 or
 1650 Mail Service Center
 Raleigh, NC 27699-1650
 919-807-6432
 919-807-6494 (Fax)

From: Dagnino, Carla S
Sent: Thursday, March 17, 2011 2:59 PM
To: Wrenn, Brian
Cc: Barrett, William A; Lusk, Elizabeth L; Euliss, Amy
Subject: R-2237C

Hi Brian,

I have attached a 401 that includes language for a relocated channel (see condition number 6). The relocated channel on this project does not have natural stream design. The language in condition number 6 seems appropriate when we are relocating into natural stream design and getting credit for onsite mitigation. But it does not seem appropriate when

we are mitigating off site for the loss of the channel. We checked with Amy and she responded that this is standard language for relocated channels and if it is not practicable to establish the 50 foot buffer, it is OK. The issue here is that conditions 1 – 11 are specific project conditions that will be included on the Green Sheet with the permit. It is concerning that there would be any language that includes establishing a 50 foot buffer for a stream where we are paying for mitigation. I checked another WQC that had a relocated channel and the language was different (see DWQ Project 20090838, Bridge 134, B-4034 – condition number 8). Is it possible to have the B-4034 language in WQ Certifications for projects where channel relocations are occurring without natural stream design?

I looked at the WQC General Conditions to be used in every permit (you sent us last September) and did not see a condition for relocated channels.

If you would like to discuss further, please call.

Thanks.

Carla

*Carla Dagnino
Project Management Group
Natural Environment Unit
NCDOT-Project Development and Environmental Analysis
Voicemail 919-707-6110
FAX 919-212-5785*

Email correspondence to and from this sender is subject to the N.C. Public Records Law and may be disclosed to third parties.

**MEMORANDUM OF AGREEMENT
AMONG
THE UNITED STATES ARMY CORPS OF ENGINEERS,
WILMINGTON DISTRICT,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
US 321 IMPROVEMENTS
FROM SR 1500 (BLACKBERRY ROAD)
TO SR 1632 (POSSUM HOLLOW ROAD)
TOWN OF BLOWING ROCK, NORTH CAROLINA
WATAUGA AND CALDWELL COUNTIES
TIP PROJECT R-2237C**

WHEREAS, the Regulatory Division of the United States Army Corps of Engineers (USACE), Wilmington District, is considering the issuance of a permit to the North Carolina Department of Transportation (NCDOT), pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), for the widening of US 321 from SR 1500 (Blackberry Road) to SR 1632 (Possum Hollow Road) within Blowing Rock, North Carolina (the Undertaking), which is NCDOT's Preferred Alternative; and

WHEREAS, this Memorandum of Agreement (Agreement) applies only if NCDOT decides to construct the Preferred Alternative (that is, proceed with the Undertaking); and

WHEREAS, the duration for the Undertaking from Right-of-Way acquisition to completion of construction is likely to take up to ten years during which time traffic management will be required; and

WHEREAS, the terrain in the area of the Undertaking is mountainous and requires blasting during construction and constrains the options for minimization of impacts; and

WHEREAS, the Town of Blowing Rock is a unique destination community with rural mountain resort character, and the Green Park Inn, the State's second oldest surviving resort hotel, is a element within of the National Register-listed Green Park Historic District and considered a local landmark; and

WHEREAS, NCDOT has determined that the Undertaking will have an adverse effect upon the National Register-listed Green Park Historic District; and

WHEREAS, the USACE and NCDOT have consulted with the North Carolina State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the Town of Blowing Rock (Town), Concerned Citizens of Blowing Rock, Blowing Rock Historical Society, Caldwell County Commissioners, and owners of historic properties within the Green Park Historic District have participated in the consultation and have been invited to concur in this Agreement; and

WHEREAS, NCDOT and the Town of Blowing Rock have entered into a Memorandum of Understanding (MOU) to implement measures related to the design, implementation, and mitigation of the Undertaking outside of the Green Park Historic District and it is understood that no stipulation in the MOU can override any stipulation of this Agreement;

NOW, THEREFORE, the USACE, NCDOT, and SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties.

STIPULATIONS

The USACE will include the following stipulations as part of any permit issued to NCDOT for the Undertaking:

I. DOCUMENTATION

- A. **Green Park Historic District**: Prior to the initiation of construction activities, NCDOT shall record the existing conditions of the Green Park Historic District and its surroundings in accordance with the attached Historic Structures and Landscape Recordation Plan (Appendix A). This will include a video to document US 321 and the surrounding landscape and structures within the historic district as well as keying the locations of the filming to an aerial photograph of the historic district adjacent to US 321.
- B. **Individual Structures**: Prior to the initiation of construction activities, NCDOT shall record the existing conditions of the following structures and their immediate surroundings in accordance with Appendix A. The structures are:
 - Green Park Inn
 - Cottage No. 21 (as referred to in the 1994 National Register Nomination)
 - A.G. Jonas Cottage
- C. **Existing Stone Walls**: Prior to the initiation of construction activities, NCDOT shall record the existing stone walls along US 321 within the historic district in accordance with Appendix A.
- D. **Blowing Rock Country Club Golf Course Hole Number 4**: Prior to the initiation of construction activities, NCDOT shall record the existing conditions of Hole No. 4 in accordance with Appendix A.

II. BASELINE STUDIES AND VIBRATION MONITORING

- A. **Development of Vibration Monitoring Plan**: NCDOT's Geotechnical Engineering Unit, in consultation with NCDOT Division 11, shall develop a

vibration monitoring plan for the project, to include on-site research during final design as well as monitoring during construction. The recommendations of the plan shall be provided to the USACE, SHPO, Town, and other concurring parties for their comments prior to adoption of the plan.

- B. Baseline Studies: On-site research, done prior to construction, will measure existing vibration exposure, determine sensitivity of nearby structures, and assign thresholds accordingly.
- C. Vibration Monitoring: Vibration monitoring will be conducted on key structures within the historic district (to be recommended in the aforementioned vibration-monitoring plan). When a reading exceeds an established threshold, the alarm will sound and anyone who hears it, e.g., property owners/staff or contractor personnel, shall immediately contact the Resident Engineer.
- D. Pre-construction Surveys: NCDOT will conduct pre-construction surveys of all structures adjacent to US 321 within the historic district to record a "before" condition so that any construction-related damage can be accurately identified.

III. COMMUNITY COMMUNICATIONS

- A. Public Information Plan: NCDOT's Construction Unit IMPACT Public Information Program will work with the Town of Blowing Rock to develop an appropriate public information plan (PIP).
- B. "Kick-Off" Meeting: As part of the PIP, NCDOT will hold a pre-construction "kick-off" meeting to introduce the contractor and the construction process to area residents.
- C. Project Website: NCDOT will develop, maintain, and consistently update a project website to provide current information about the schedule and development of the project, project progress, project contact information, and notification of any anticipated delays based on scheduled construction activities.
- D. Contact with Resident Engineer: NCDOT's construction project manager shall be the Resident Engineer. He or she is the only individual with the authority to stop construction. Citizens may directly contact the Resident Engineer (and assistants) with questions or concerns so that the Resident Engineer can immediately address any project concerns.

IV. PROJECT DESIGN

- A. Review of Plans: To insure that the Town of Blowing Rock, and the SHPO are consulted and the Residents of the Green Park Historic District are given an opportunity for review, NCDOT will provide the following plans for comment. Plans will be provided to the Blowing Rock Town Board, the SHPO, and available for review at the Blowing Rock Town Library.
 - Roadway Design Plans at 25%, 50%, and 80% of completion
 - Preliminary Post-Construction Landscape Design Plans
 - Preliminary Traffic Control Plans
 - Preliminary Pavement Marking Plans

- Preliminary Signing Plans
 - Preliminary Sedimentation and Erosion Control Plans
- B. Guardrail: Where guardrail is required, NCDOT shall install approved wooden-faced guardrail where it can be installed and meet safety requirements. If, during final design, locations are identified where wooden-faced guardrail cannot be installed, or where, in order to meet safety requirements, installation would cause an undesirable increase in project right of way to provide necessary roadside clear areas, NCDOT will coordinate with the Town and SHPO to find an acceptable guardrail alternative prior to finalizing the plans.
- C. Lane Width: The width of lanes within the boundary of the Green Park Historic District will be limited to 11-feet.
- D. Goforth Road: NCDOT shall terminate Goforth Road just east of US 321 rather than rebuild its intersection with US 321.
- E. Median: NCDOT will not construct a median within the limits of the Green Park Historic District.
- F. Highway Lighting: NCDOT will not install highway lighting within the limits of the Green Park Historic District.
- G. Signal Poles: NCDOT shall use standard mast-arm signal poles for traffic signals, including the one(s) proposed in the Green Park Historic District. If the Town chooses a decorative mast arm pole that exceeds the cost of the NCDOT-standard mast-arm pole, the Town will pay the incremental cost difference.
- H. Utilities: NCDOT will place existing overhead utility lines (electrical, telephone, and cable television) underground between Green Hill Road and Possum Hollow Road.
- I. Stone Walls: NCDOT will replace all existing stone walls in the Town limits (including the Green Park Historic District) removed by the Undertaking with new in-kind stone walls. All other retaining walls along the Undertaking within the Town limits will be formed concrete walls with simulated masonry surface treatment. The surface treatment will be designed to resemble the existing stone walls in the historic district (e.g., the low wall in front of the Green Park Inn). The appearance of the surface treatment will be coordinated with the Town of Blowing Rock, and a sample of the surface treatment shall be fabricated for the Town's and SHPO's review and comment and the Department's approval prior to permanent installation on the project.
- J. Sidewalks: NCDOT will provide a sidewalk, five feet in width, on the east side of US 321 from Green Hill road to US 321 Business (which includes the part of the project within the historic district), so that the west side berm may be used for more concentrated landscaping. Pedestrian crossings (crosswalks and/or pedestrian signals) may be provided at signalized intersections.
- K. Decorative Pedestrian Lights: NCDOT shall include, as a part of the post-construction landscape plan, decorative pedestrian lights, the style of which is to be agreed upon by the Town, SHPO, and NCDOT, at selected locations within the Town limits. Any decorative pedestrian light locations within NCDOT right-of-way (e.g., in areas of more concentrated landscaping) must

be approved by the Special Design Section of NCDOT's Roadway Design Unit. NCDOT will pay for the lighting equipment and installation, and NCDOT will install the lights as part of the landscape plan implementation. The Town will assume ownership of the lights and will pay all utility (electricity) costs.

- L. Landscaping: Plantings will be planned in accordance with NCDOT's Guidelines for Planting within Highway Right-of-Way. Broader areas of more concentrated landscaping will be included where right-of-way, roadway elements, terrain, and safety conditions allow. Design and landscape characteristics will be developed through discussions with the Town Board, SHPO and Residents of the Green Park Historic District to maintain the rural mountain resort character of the district.
- M. Coordinated Signal System: NCDOT will design and install a coordinated traffic signal system as part of the Undertaking.
- N. Speed Limit: The speed limit within the historic district shall be posted 35 mph after construction.
- O. Fog Safety Study: NCDOT will evaluate flashing warning lights, pavement markers, rumble strips and/or stripes, delineation, warning signs, and/or lighting that would be appropriate to increase safety and improve driver behavior during fog occurrences. The plans submitted by NCDOT to SHPO and the Town for review and comment (Item IV.A) will show the results of NCDOT's evaluation and the resulting recommendations.

V. CONSTRUCTION ACTIVITIES

- A. Blasting: NCDOT and the contractor shall limit blasting to specific times. Those times will be posted on the aforementioned project website. In addition, blasting activities will be announced to the media as outlined in the PIP.
- B. Dust Minimization: NCDOT and the contractor shall utilize a truck to periodically spray water on dry, exposed soil to control dust to the greatest extent possible.
- C. Reseeding Exposed Dirt: In accordance with NCDOT's Best Management Practices for Protection of Surface Waters, NCDOT and the contractor shall seed exposed soil with grass in order to control run-off, erosion, and dust.
- D. Covered Truck Beds: NCDOT shall require all construction trucks traveling at speeds greater than 25 mph to cover their truck beds in order to reduce the amount of dust and debris.
- E. Staging Areas: NCDOT shall not permit staging areas within the Green Park Historic District. NCDOT may permit overnight parking of equipment and storage of materials, associated with current construction needs, within the construction right-of-way limits along any part of the project corridor.
- F. Waste Sites, Borrow Pits, and Construction Offices: NCDOT shall not permit waste deposits, borrow pits, or construction offices within the Green Park Historic District.
- G. "Smart Zone" Techniques: NCDOT shall use "Smart Zone" techniques in the maintenance of traffic during construction. These techniques may include

methods such as advance notification of delays, lane closures, real time monitoring, and the use of Digital Message Systems. In addition, NCDOT shall maintain a website that will provide information on anticipated delays based on scheduled construction activities.

VI. GREEN PARK INN

NCDOT, in consultation with SHPO and the property owners, shall develop measures to reduce the adverse effect of the Undertaking on the Green Park Inn. These measures may include, but are not limited to, the following:

- Replacement of the existing stone walls;
- Replacement of the existing sidewalk;
- Reconfiguration of the existing parking lot;
- Sound abatement/buffering; and/or
- Landscaping.

VII. A.G. JONAS COTTAGE

NCDOT, in consultation with SHPO and the property owners, shall develop measures to reduce the adverse effect of the Undertaking on the A.G. Jonas Cottage. These measures may include, but are not limited to, the following:

- Construction of a retaining wall;
- Construction of a privacy fence;
- Sound abatement/buffering; and/or
- Landscaping.

VIII. COTTAGE NO.21 (as referred to in the 1994 National Register Nomination)

In the event that this property is not determined to be a relocation in the final design, NCDOT, in consultation with SHPO and the property owners, shall develop measures to reduce the adverse effect of the Undertaking on Cottage No.21. These measures may include, but are not limited to, the following:

- Providing alternative access to the property;
- Construction of a retaining wall; and/or
- Landscaping.

IX. BLOWING ROCK COUNTRY CLUB GOLF COURSE

NCDOT will construct a retaining wall on the east side of US 321 at the Blowing Rock Country Club Golf Course (Hole No. 4) in order to minimize impacts to the course.

IX. UNANTICIPATED DISCOVERY

In accordance with 36 CFR 800.11(a), and prior to initiation of construction activities, NCDOT shall ensure preparation of a plan of action should archaeological or architectural resources be inadvertently or accidentally discovered during the construction phase of the project. The plan shall provide for an assessment of the significance of the discovery in consultation amongst NCDOT, USACE, and the SHPO. Inadvertent or accidental discovery of human remains will be handled in accordance with North Carolina General Statutes 65 and 70.

X. DISPUTE RESOLUTION

Should the North Carolina SHPO or any parties to this agreement object within (30) days to any plans or documentation provided for review pursuant to this agreement, NCDOT shall consult with the North Carolina SHPO to resolve the objection. If the USACE or the North Carolina SHPO determines that the objection cannot be resolved, USACE will forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council). Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

- A. Provide USACE with recommendations which USACE will take into account in reaching a final decision regarding the dispute, or
- B. Notify USACE that it will comment pursuant to 36 CFR Section 800.7(c) and proceed to comment. Any Council comment provided in response to such a request will be taken into account by USACE in accordance with 36 CFR Section 800.7 (c) (4) with reference to the subject of the dispute.

Any recommendation or comment provided by the Council will be understood to pertain only to the subject of the dispute; USACE's responsibility to carry out all the actions under this agreement that are not the subject of the dispute will remain unchanged.

Execution of this Memorandum of Agreement by USACE, the NCDOT, and the North Carolina SHPO, its subsequent filing with the Advisory Council on Historic Preservation, and implementation of its terms evidence that USACE has afforded the Council an opportunity to comment on the US 321 improvements from SR 1500 to SR 1632 in the Town of Blowing Rock, and its effects on the Green Park Historic District and that USACE has taken into account the effects of the Undertaking on this National Register-listed historic district.

AGREE:

Charles K. Alford, Jr. 11/15/04

 UNITED STATES ARMY CORPS OF ENGINEERS, WILMINGTON DISTRICT DATE
Cole, USA

Gregory Phelps 4 Nov 04

 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DATE

Jeffrey Brown 10/25/04

 NORTH CAROLINA HISTORIC PRESERVATION OFFICER DATE

421

FILED BY:

ADVISORY COUNCIL ON HISTORIC PRESERVATION

DATE

APPENDIX

Historic Structures and Landscape Recordation Plan
For the widening of US 321 from SR 1500 (Blackberry Road) to
SR 1632 (Possum Hollow Road) within Blowing Rock, North Carolina

Photographic Requirements

- A. **Green Park Historic District**: Prior to the initiation of construction activities, NCDOT shall record the existing conditions of the Green Park Historic District and its surroundings in a video documenting US 321 and the surrounding landscape and structures within the historic district and keying the locations of the filming on an aerial photograph.
- B. **Individual Structures**: Prior to the initiation of construction activities, NCDOT shall photographically record the existing conditions of the Green Park Inn, Cottage No. 21, and A.G. Jonas Cottage and their immediate surroundings. For each structure NCDOT shall collect selected views of each building including, but not limited to:
- Overall views of each building (elevations and oblique views)
 - Interior views of the main areas and noted interior architectural elements
 - Overall views of the project area, showing the relationship of each building to its setting
- C. **Existing Stone Walls**: Prior to the initiation of construction activities, NCDOT shall photographically record the conditions of existing stone walls along US 321 within the historic district. For each NCDOT shall collect selected views of each stone wall including, but not limited to:
- Overall views of each wall (elevations and oblique views)
 - Overall views of the project area, showing the relationship of each wall to its setting

Photographic Format

- ◆ Digital video transferred to a CD-ROM
- ◆ Color slides (all views)
- ◆ 35 mm or larger black and white negatives (all views)
- ◆ Two Black and white contact sheets (all views)
- ◆ All processing to be done to archival standards
- ◆ All photographs and negatives to be labeled according to Division of Archives and History standards

Copies and Curation

One (1) set of all photographic documentation will be deposited with the North Carolina Division of Archives and History/State Historic Preservation Office to be made a permanent part of the statewide survey and iconographic collection.



North Carolina Department of Cultural Resources
State Historic Preservation Office
Peter B. Sandbeck, Administrator

Michael F. Easley, Governor
Lisbeth C. Evans, Secretary
Jeffrey J. Crow, Deputy Secretary

Office of Archives and History
Division of Historical Resources
David Brook, Director

October 20, 2004

MEMORANDUM

TO: Gregory G. Thorpe, PhD
Project Development & Environmental Analysis
Department of Transportation

FROM: Jeffrey J. Crow *JJC*
State Historic Preservation Officer

SUBJECT: MOA for improvements for US 321 from SR 1500 to SR 1632, Blowing Rock,
R-2237C, Caldwell and Watauga Counties, ER92-7799

As requested by Missy Dickens, project engineer, we have printed and signed the Memorandum of Agreement (MOA) for the above referenced project, and provide it to you for signature by the agreeing and concurring parties. The signature pages for the concurring parties have been printed separately so that you may provide the appropriate page to each party with instructions on how to go about signing the MOA or providing you with confirmation that they do not wish to sign the agreement.

While this has proven to be a particularly complex project, requiring extensive and protracted consultation among the many parties, we trust the MOA and the implementation of its stipulations by the Department of Transportation will help mitigate the adverse effect of the proposed improvements on the Green Park Historic District. The agreement should provide guidance for all the parties during the many years the project will be under right-of-way negotiations and construction.

We look forward to receipt of the recordation materials specified in Appendix A and to further consultation as outlined in the stipulations. Once a fully executed copy of the agreement is available, we would appreciate a copy for our files. Thank you.

Attachment

cc: Missy Dickens, NCDOT
Steve Lund, ACOE

	Location	Mailing Address	Telephone/Fax
ADMINISTRATION	507 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-4763/733-8653
RESTORATION	515 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6547/715-4801
SURVEY & PLANNING	515 N. Blount Street, Raleigh NC	4617 Mail Service Center, Raleigh NC 27699-4617	(919)733-6545/715-4801

Commissioners
Timothy E. Sanders, Chairman
Faye R. Higgins, Vice Chairman
Herbert H. Greene
Alden E. Starnes
Dr. John W. Thuss



424

County Manager
Bobby White
bwhite@co.caldwell.nc.us
Clerk to the Board
Kathy T. Myers, CMC
kmyers@co.caldwell.nc.us

COUNTY OF CALDWELL

Post Office Box 2200
Lenoir, North Carolina 28645-2200
Phone (828) 757-1300 Fax (828) 757-1295

December 9, 2004

Ms. Missy Dickens, PE, Project Manager
Project Development and Environmental Analysis Branch
NC Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Ms. Dickens:

During the meeting of the Caldwell County Board of Commissioners on December 6, 2004, the enclosed signatory page was officially approved and executed as documented support of the stipulations outlined in the memorandum of agreement.

The Board of Commissioners appreciates your work as well as that of the U.S. Army Corps of Engineers in bringing about this apparent successful negotiated agreement dealing with the highway construction.

Should the Board of Commissioners be of additional assistance for this project, please don't hesitate to contact us.

Sincerely,

Bobby White
County Manager

/ktm

c: Steve Lund, U.S. Army Corps of Engineers
Renee Gledhill-Earley, State Historic Preservation Office

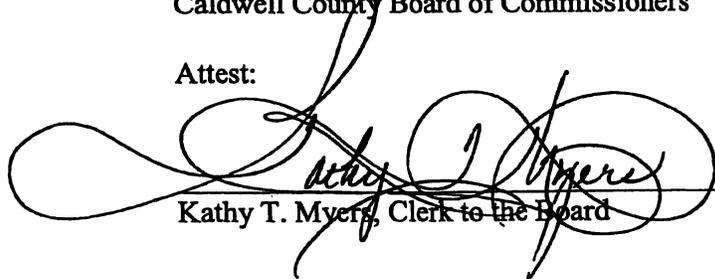
MEMORANDUM OF AGREEMENT
AMONG
THE UNITED STATES ARMY CORPS OF ENGINEERS,
WILMINGTON DISTRICT,
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
US 321 IMPROVEMENTS
FROM SR 1500 (BLACKBERRY ROAD)
TO SR 1632 (POSSUM HOLLOW ROAD)
TOWN OF BLOWING ROCK, NORTH CAROLINA
WATAUGA AND CALDWELL COUNTIES
TIP PROJECT R-2237C

Execution of this Memorandum of Agreement by USACE, the NCDOT, and the North Carolina SHPO, its subsequent filing with the Advisory Council on Historic Preservation, and implementation of its terms evidence that USACE has afforded the Council an opportunity to comment on the US 321 improvements from SR 1500 to SR 1632 in the Town of Blowing Rock, and its effects on the Green Park Historic District and that USACE has taken into account the effects of the Undertaking on this National Register-listed historic district.

Adopted this the 6th day of December, 2004.


Chairman
Caldwell County Board of Commissioners

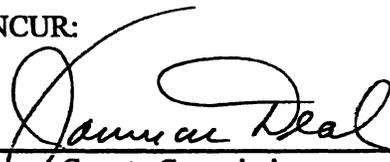
Attest:


Kathy T. Myers, Clerk to the Board

MEMORANDUM OF AGREEMENT
 AMONG
 THE UNITED STATES ARMY CORPS OF ENGINEERS,
 WILMINGTON DISTRICT,
 THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
 AND
 THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
 FOR
 US 321 IMPROVEMENTS
 FROM SR 1500 (BLACKBERRY ROAD)
 TO SR 1632 (POSSUM HOLLOW ROAD)
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CONCUR:



 Watauga County Commissioners 12-6-04
Date

James Deal

 Watauga County Commissioners (PLEASE PRINT)

**MEMORANDUM OF AGREEMENT
AMONG
THE UNITED STATES ARMY CORPS OF ENGINEERS,
WILMINGTON DISTRICT,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR
US 321 IMPROVEMENTS
FROM SR 1500 (BLACKBERRY ROAD)
TO SR 1632 (POSSUM HOLLOW ROAD)
TOWN OF BLOWING ROCK, NORTH CAROLINA
WATAUGA AND CALDWELL COUNTIES
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CONCUR:


TOWN OF BLOWING ROCK

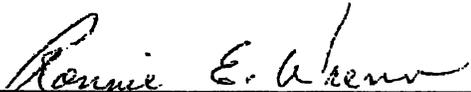
11/24/04

DATE

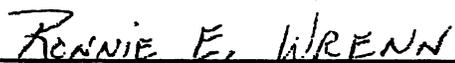
MEMORANDUM OF AGREEMENT
AMONG
THE UNITED STATES ARMY CORPS OF ENGINEERS,
WILMINGTON DISTRICT,
THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
AND
THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
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CONCUR:



 Owner(s) of Green Park Inn 12-9-04
Date

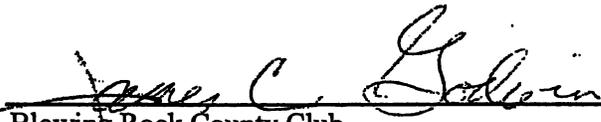


 Owner(s) of Green Park Inn (PLEASE PRINT)

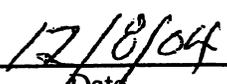
MEMORANDUM OF AGREEMENT
 AMONG
 THE UNITED STATES ARMY CORPS OF ENGINEERS,
 WILMINGTON DISTRICT,
 THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION,
 AND
 THE NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
 FOR
 US 321 IMPROVEMENTS
 FROM SR 1500 (BLACKBERRY ROAD)
 TO SR 1632 (POSSUM HOLLOW ROAD)
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CONCUR:



 Blowing Rock County Club



 Date



 Blowing Rock County Club (PLEASE PRINT)

431



North Carolina Wildlife Resources Commission

TO: Monte Matthews, NCDOT Coordinator
Raleigh Regulatory Field Office, USACE

FROM: Marla Chambers, Western NCDOT Permit Coordinator *Marla Chambers*
Habitat Conservation Program, NCWRC

DATE: October 18, 2010

SUBJECT: Review of NCDOT's application for Individual Section 404 and 401 Permits for the widening of US 321 from SR 1500 (Blackberry Road) to US 221 at Blowing Rock, Watauga and Caldwell Counties. TIP No. R-2237C.

North Carolina Department of Transportation (NCDOT) has submitted an application to obtain a Section 404 Permit from the U.S. Army Corps of Engineers (USACE) and a 401 Water Quality Certification from the Division of Water Quality (NCDWQ). Staff biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the information provided and have participated in the Merger process for the development of this state-funded project. These comments are provided in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d) and the Clean Water Act of 1977 (33 U.S.C. 466 et seq.).

NCDOT proposes to widen and improve a four-mile section of US 321 from SR 1500 (Blackberry Road) to US 221 at Blowing Rock to a four-lane facility. There will be 1,636 linear feet of permanent impacts to perennial streams and 0.19 acres of permanent impacts to wetlands. All streams impacted by the project are expected to support trout reproduction. We are pleased that NCDOT has committed to implementing the trout moratorium and erosion control measures that adhere to the Design Standards in Sensitive Watersheds.

NCWRC can concur with the issuance of Section 404 and 401 permits provided that the following conditions are implemented:

1. Sediment and erosion control measures shall adhere to the Design Standards for Sensitive Watersheds and be strictly maintained until project completion.

2. In-stream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning seasons of October 15 through April 15 to protect the egg and fry stages of trout.
3. Herbaceous vegetation shall be planted on all bare soil as soon as possible following the completion of permanent or temporary ground disturbing activities to provide appropriate long-term erosion control.
4. Tall fescue should not be used in riparian areas. We encourage NCDOT to utilize onsite vegetation and materials for bank stabilization when practicable. Erosion control matting should be used on banks and steep slopes, instead of straw mulch and well anchored with 12" staples, wooden survey stakes or live stakes.
5. Stormwater should be directed to buffer areas or retention basins and should not be routed directly into the waterways.
6. The natural dimension, pattern, and profile of the streams above and below the crossing should not be modified by widening the stream channels or changing the depth of the waterway.
7. Removal of vegetation in riparian areas should be minimized. Native trees and shrubs should be planted along the banks, as appropriate to the setting, to reestablish the riparian zone and to provide long-term erosion control.
8. Grading and backfilling should be minimized, and tree and shrub growth should be retained if possible to ensure long term availability of shoreline cover for fish and wildlife. Backfill materials should be obtained from upland sites.
9. Riprap should be minimized and installed in a manner so as not to interfere with aquatic life passage during low flow conditions. Riprap placed for bank stabilization should be limited to the banks below the high water mark, and vegetation should be used for stabilization above the high water elevation.
10. If concrete will be used during construction, work must be accomplished so that wet (uncured) concrete does not contact surface waters. This will lessen the chance of altering the water chemistry and causing a fish kill.
11. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is strictly prohibited.
12. Heavy equipment should be operated from the banks rather than in the stream channels whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the waterway. All mechanized equipment operated near surface waters should be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids or other toxic materials.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at (704) 485-8291.

cc: Marella Buncick, USFWS
Amy Euliss, NCDWQ
Carla Dagnino, NCDOT
Elizabeth Lusk, NCDOT

434
EXHIBIT E

The following factors and determinations are used to determine the appropriate scope of analysis within the NEPA framework.

- (i) **“Whether or not the regulated activity comprises “merely a link” in a corridor type project.”** The Corps regulatory control over this project (TIP R-2237 C) involves the discharge of fill within 1,929 linear feet of streams and 0.19-acre of wetland over a 4.0 mile roadway proposal. As such, the regulatory activity provides more than a link in the overall project and encompasses substantial portions of roadway spread evenly throughout the total length of the project.
- (ii) **“Whether there are aspects of the upland facility in the immediate vicinity of the regulated activity which affect the location and configuration of the regulated activity.”** Aspects of upland facilities such as topography, other roadways, human alterations, etc., are common in the general vicinity of each regulated activity. Because of this, they affect the location and aspect of each activity subject to Corps jurisdiction.
- (iii) **“The extent to which the entire project will be within the Corps jurisdiction.”** Due to the large number of regulated activities spread fairly uniformly throughout the project, the entire project is dictated by these activities. Therefore, the entire project should be within Corps jurisdiction.
- (iv) **“The extent of cumulative Federal control and responsibility.”** There are a total of 12 different regulated impact sites throughout the project, which extends a total of 4.0 miles. The portions of the roadway project for which a Corps permit is required are essential for the development of the project as a whole, especially considering the linear nature of this proposal.

PROJECT NUMBER	34402.1.1	DATE	PE
REVISED PROJECT NUMBER	34402.2.6	DATE	R/W

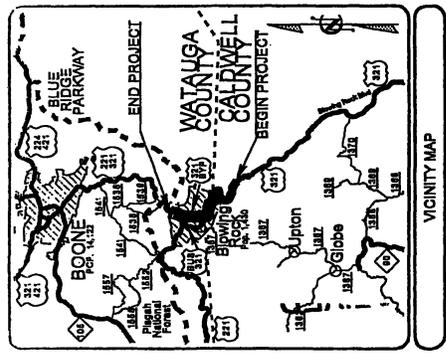
DIVISION OF HIGHWAYS

CALDWELL & WATAUGA COUNTIES

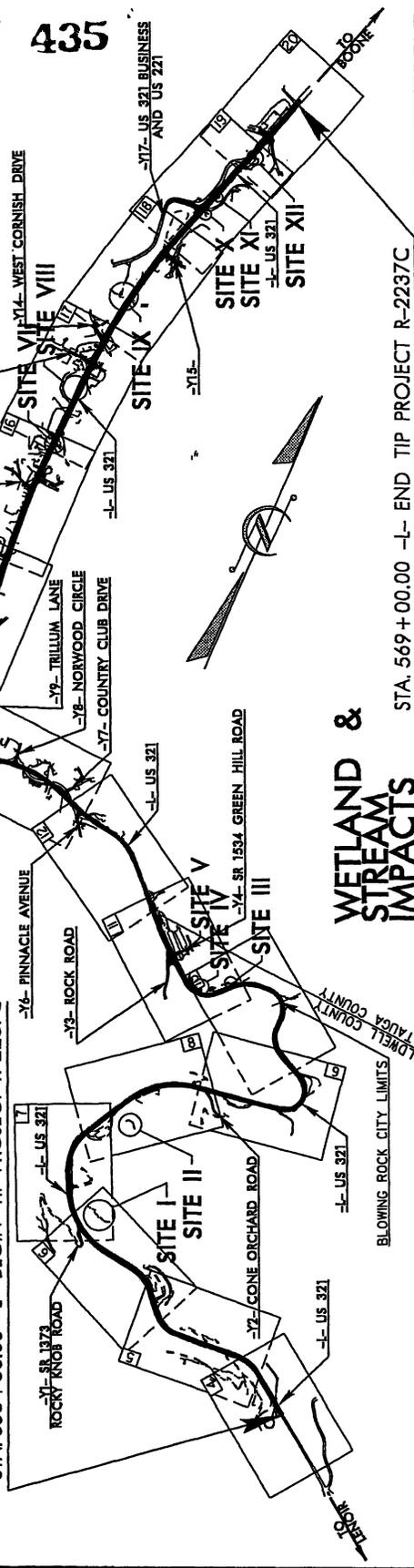
LOCATION: US 321 FROM SR 1500 (BLACKBERRY ROAD) TO US 221 AT BLOWING ROCK

TYPE OF WORK: GRADING, DRAINAGE, PAVING, CULVERT, RETAINING WALLS, AND SIGNALS

RECEIVED
OCT 18 2010
Regulatory Branch
EXHIBIT B



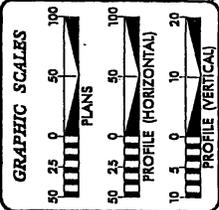
STA. 356+50.00 -L- BEGIN TIP PROJECT R-2237C



WETLAND & STREAM IMPACTS

STA. 569+00.00 -L- END TIP PROJECT R-2237C

A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF BLOWING ROCK. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II



DESIGN DATA

ADT 2006	= 18,935
ADT 2025	= 27,450
DHV	= 7 %
D	= 60 %
T	= 8 %
V	= 50 MPH

* TTST 3% + DUAL 5%

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2237C	= 4.025 MILES
TOTAL LENGTH OF TIP PROJECT R-2237C	= 4.025 MILES

Prepared in the Office of
DIVISION OF HIGHWAYS
1000 Stock Bldg Dr., Raleigh NC, 27611

RIGHT OF WAY DATE: JUNE 27, 2008
LETTING DATE: OCTOBER 19, 2010

PROJECT ENGINEER: G. E. BREV, PE
PROJECT MANAGER: W. T. BEST

HYDRAULICS ENGINEER: _____
ROADWAY DESIGN ENGINEER: _____



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

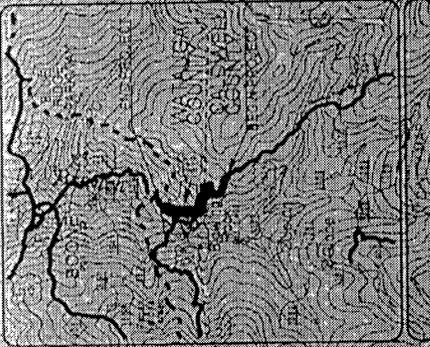
TIP PROJECT: R-2237C

CONTRACT: _____

*****SYTIME*****
*****DGN*****
*****NAME*****

CALDWELL & WATAUGA COUNTIES

LOCATION: US 27 FROM SR 5618 (BL CHERY ROAD) TO US 27 AT BLOWING ROCK
TYPE OF WORK: GRADING, DRAINAGE, PAVING, UTILITIES, RETAINING WALLS, AND SIGNS



TIP PROJECT R-2237C

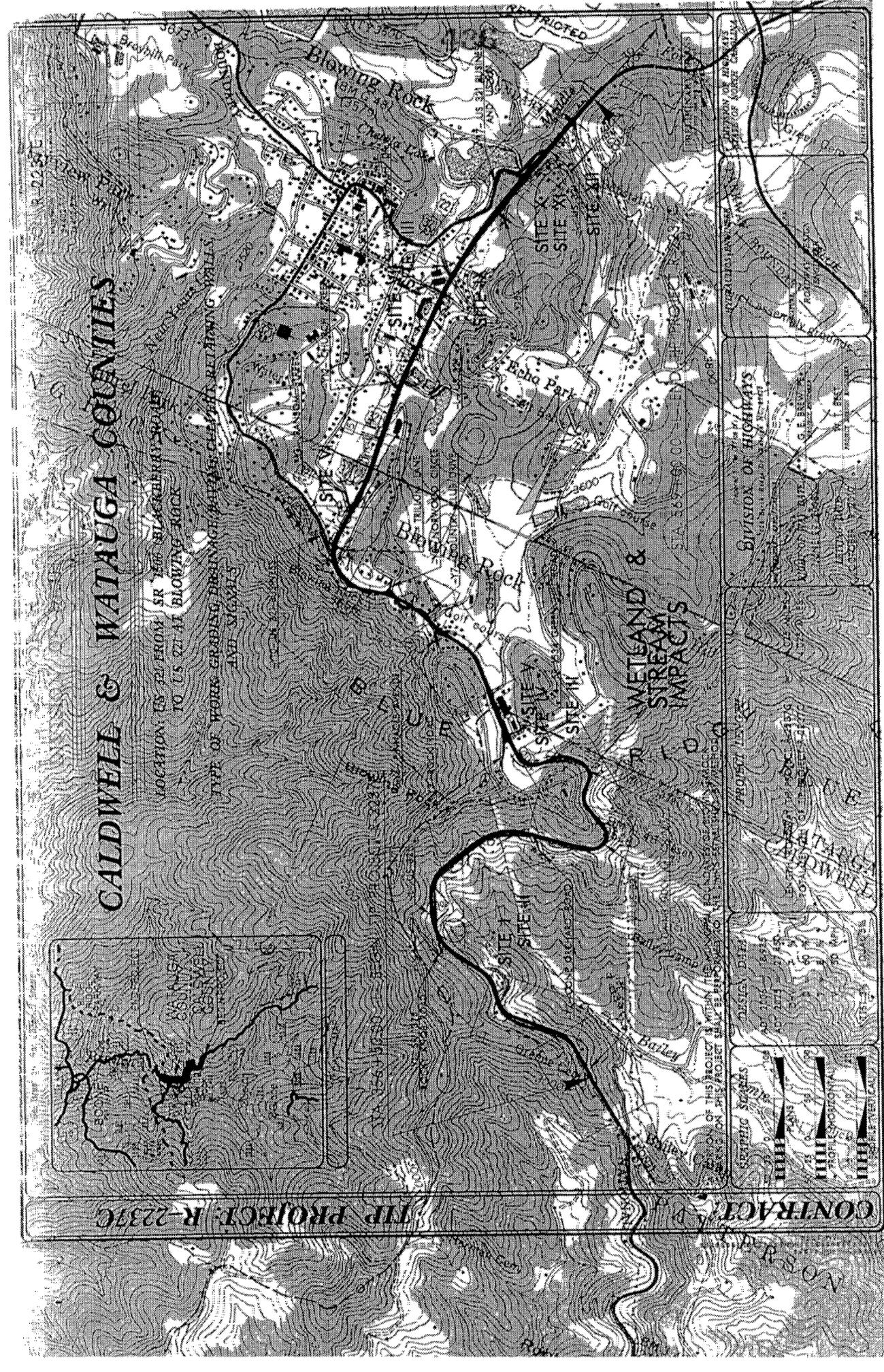
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
CARRIAGE ROAD DISTRICT

DESIGN DATE
APR 1957
US 27
PROJECT NO. 100-100-100

GRAPHIC SCALES
1" = 100' HORIZONTAL
1" = 20' VERTICAL

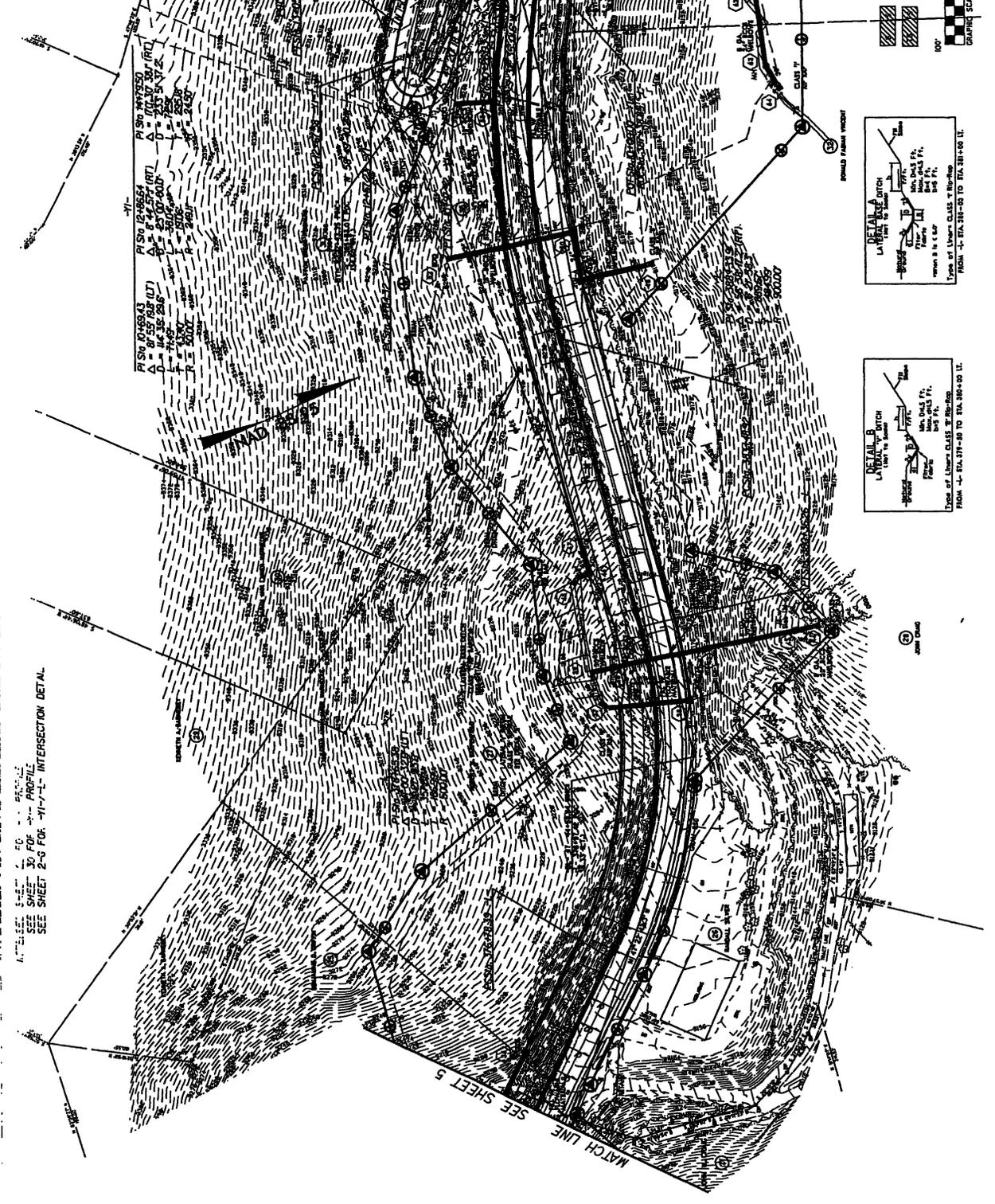
CONTRACT NO. 100-100-100

PERSON



438

PRELIMINARY PLANS
FOR THE
CONSTRUCTION OF
THE
NEW
WATER
TREATMENT
PLANT



SEE SHEET 5-2 FOR PROFILE
SEE SHEET 3-3 FOR PROFILE
SEE SHEET 2-3 FOR -11-7-L INTERSECTION DETAIL

PI STATIONING (RT)
D = 2510.00
L = 100.00
P = 500.00

PI STATIONING (LT)
D = 2510.00
L = 100.00
P = 500.00

DETAIL A BENCH DITCH
Type of Linear Class - B
FROM -4- STA 517+00 TO STA 517+00 II.

DETAIL B BENCH DITCH
Type of Linear Class - B
FROM -4- STA 517+00 TO STA 517+00 II.

DENOTES IMPACTS IN SURFACE WATER
TEMPORARY IMPACTS IN SURFACE WATER

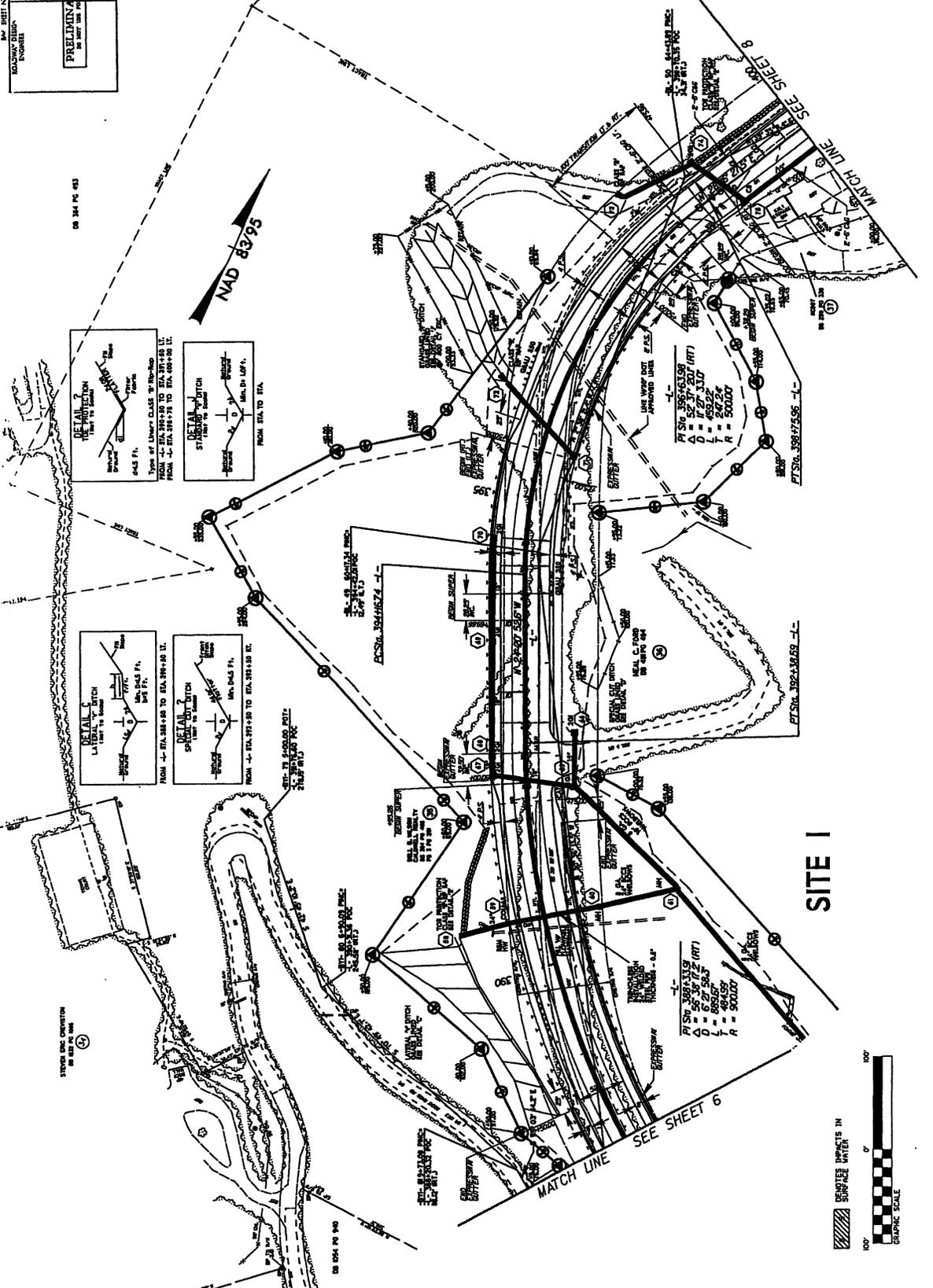
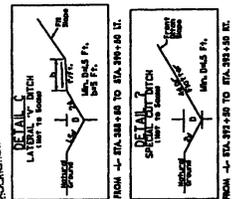
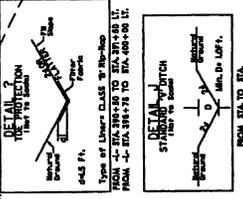
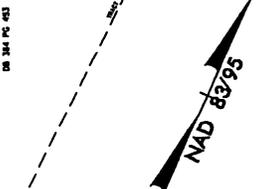
GRAPHIC SCALE
100' 0' 100'

SITE I

MATCH LINE SEE SHEET 7

MATCH LINE SEE SHEET 5

PROJECT NO. _____
 SHEET NO. _____
 ROADWAY DESIGN: _____
 PRELIMINARY PLANS
 FOR THE _____
 CONSTRUCTION



SITE I

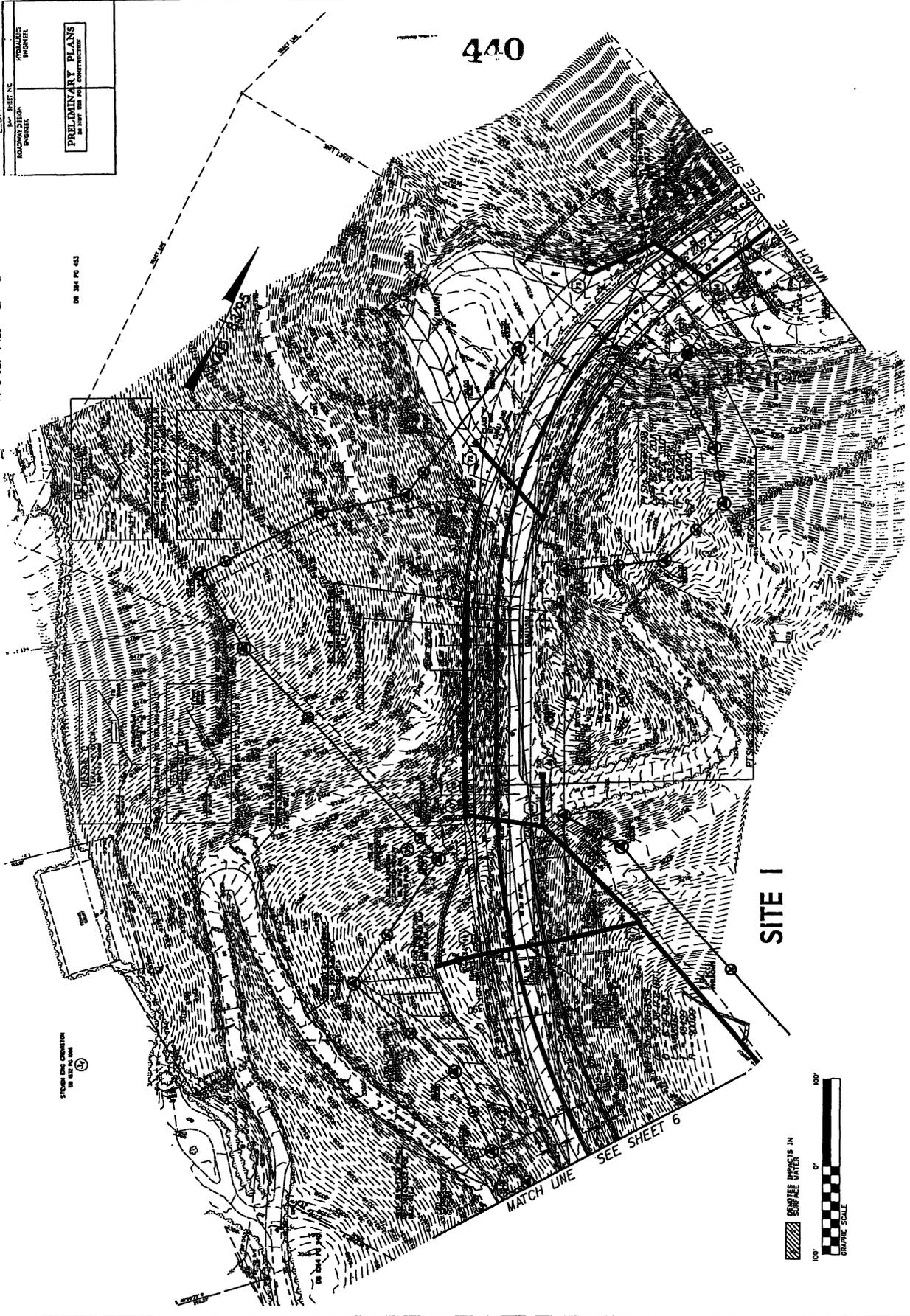


Right of Way: This revision consists of adding temporary construction easement to Parcel 37.

REVISIONS

PRELIMINARY PLANS IN PART FOR THE CONSTRUCTION	REGISTERED PROFESSIONAL ENGINEER RICHARD J. BROWN, INC. ENGINEER
--	--

440



SITE I



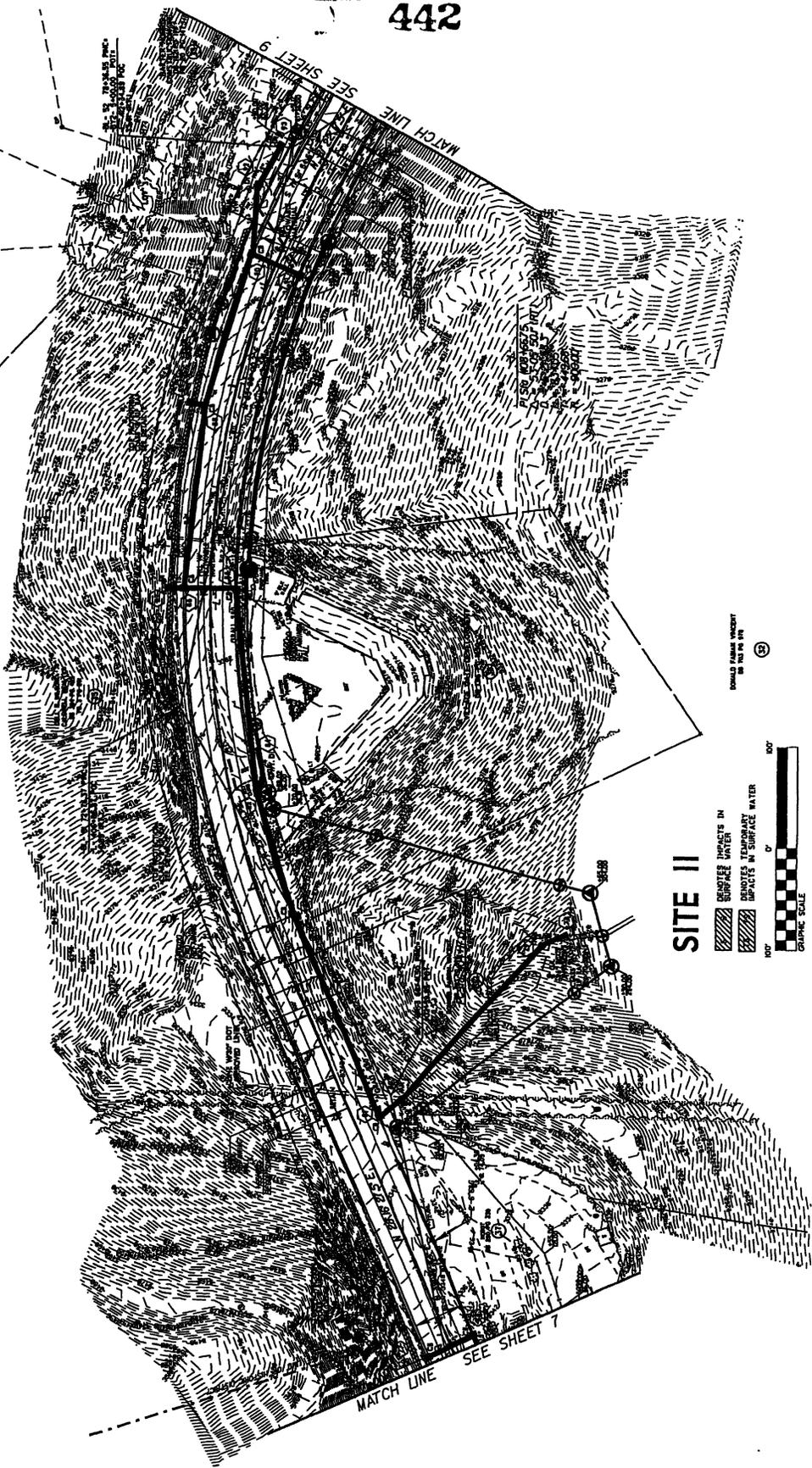
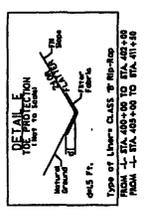
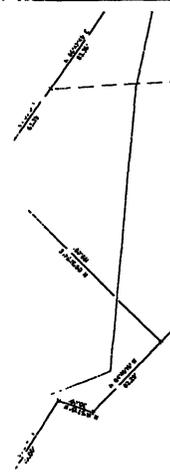
STREET END ORIGINATOR
 ON 10/15/1968

ON 10/15/1968

REVISIONS
 Right of Way: The revision consists of adding temporary construction easement to Ford St.

442

PRELIMINARY PLANS FOR THE CONSTRUCTION OF THE PROJECT	HYDRAULIC ENGINEER
ROADWAY DESIGN ENGINEER	CIVIL ENGINEER



SITE II

BRITTLE IMPACTS IN
 SURFACE WATER
 IMPACTS IN SURFACE WATER
 GRAPHIC SCALE
 0' 10' 20'

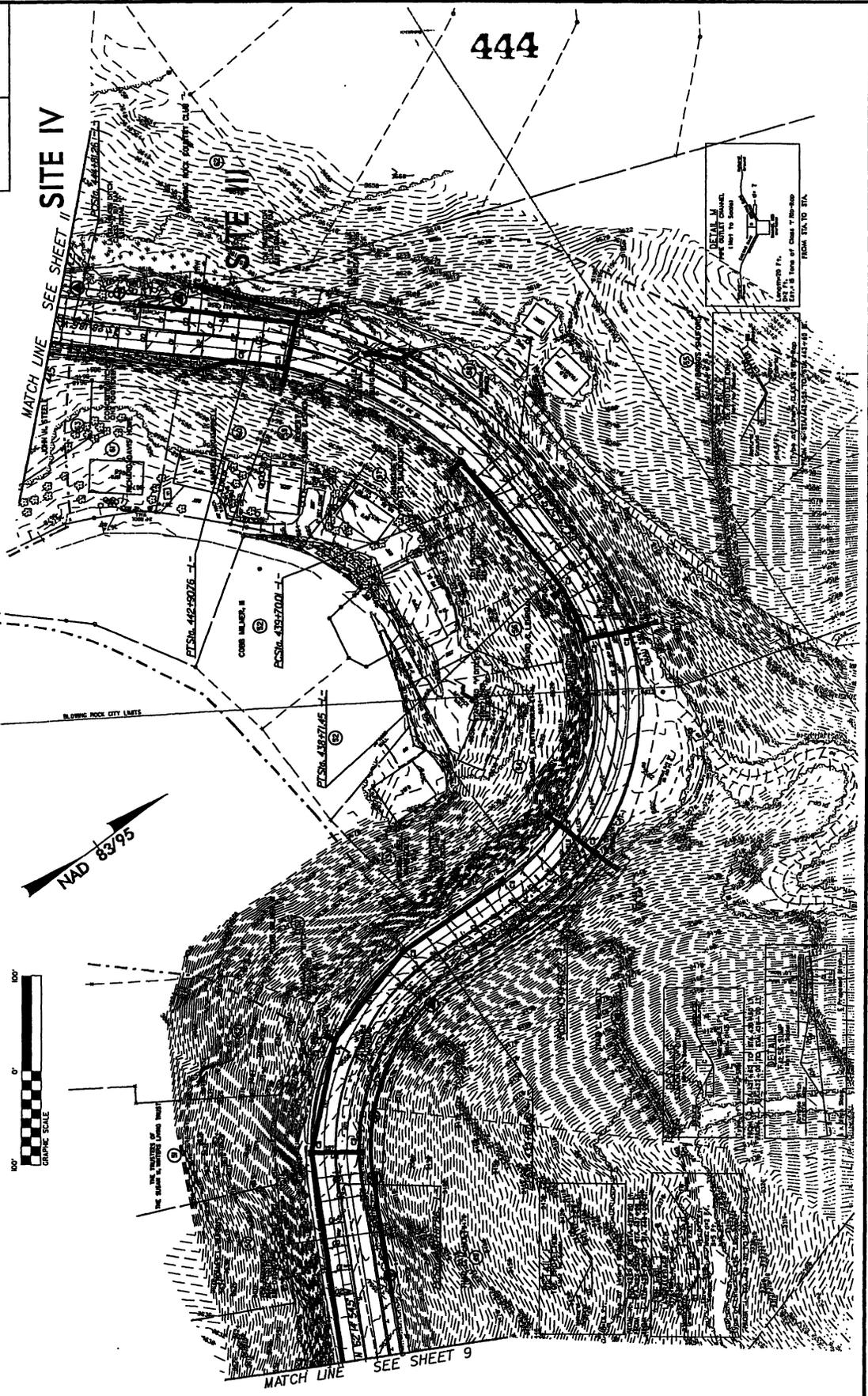
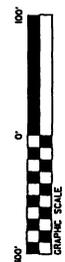
REVISIONS

Right of Way: This relation consists of adding temporary construction easement to Parcel 27.

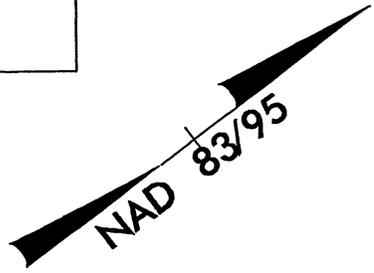
DATE: 11/11/11	BY: J. J. J.
PROJECT: 11-11-11	NO. SHEET: 4
DATE: 11/11/11	BY: J. J. J.
PROJECT: 11-11-11	NO. SHEET: 4
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

NOTE: SEE SHEETS 3 & 5 FOR PROFILE

-  DENOTES FALL IN WETLAND
-  DENOTES EXCAVATION
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER

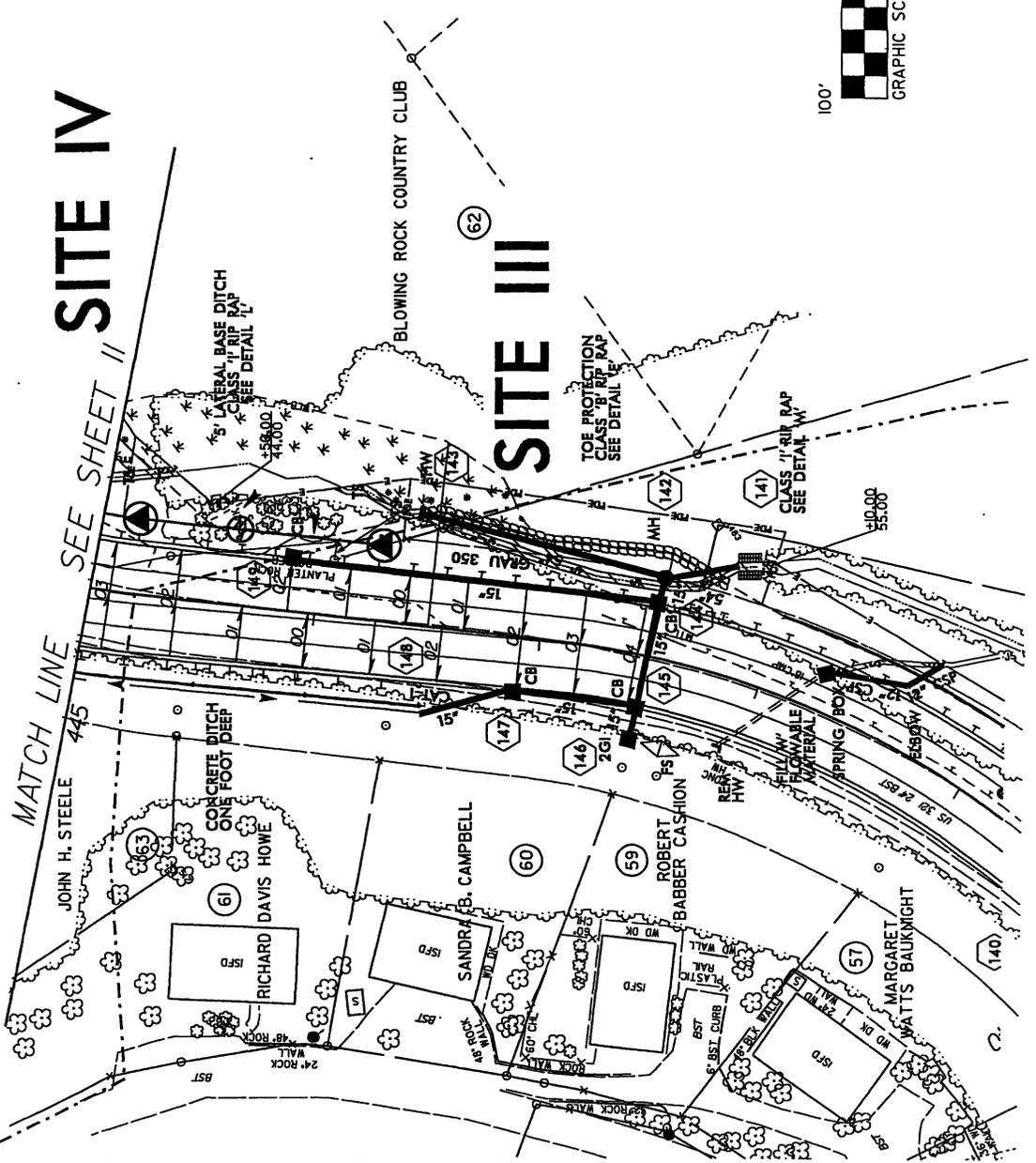


PROJECT NO.	445
SHEET NO.	1
DATE	8/83
DESIGNED BY	PROFESSIONAL ENGINEER
CHECKED BY	



445

-  DENOTES MECHANIZED CLEARING
-  DENOTES EXCAVATION IN WETLAND
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES FILL IN WETLAND



SITE IV

SITE III

MATCH LINE SEE SHEET II

BLOWING ROCK COUNTRY CLUB

JOHN H. STEELE

CONCRETE DITCH ONE FOOT DEEP

RICHARD DAVIS HOWE

SANDRA B. CAMPBELL

ROBERT CASHION

BABBER CASHION

MARGARET MATTS BAUKNIGHT

GENERAL BASE DITCH CLASS 7 1/2 RIP RAP SEE DETAIL 'A'

TOE PROTECTION CLASS 7 1/2 RIP RAP SEE DETAIL 'E'

CLASS 7 1/2 RIP RAP SEE DETAIL 'A'

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55.00

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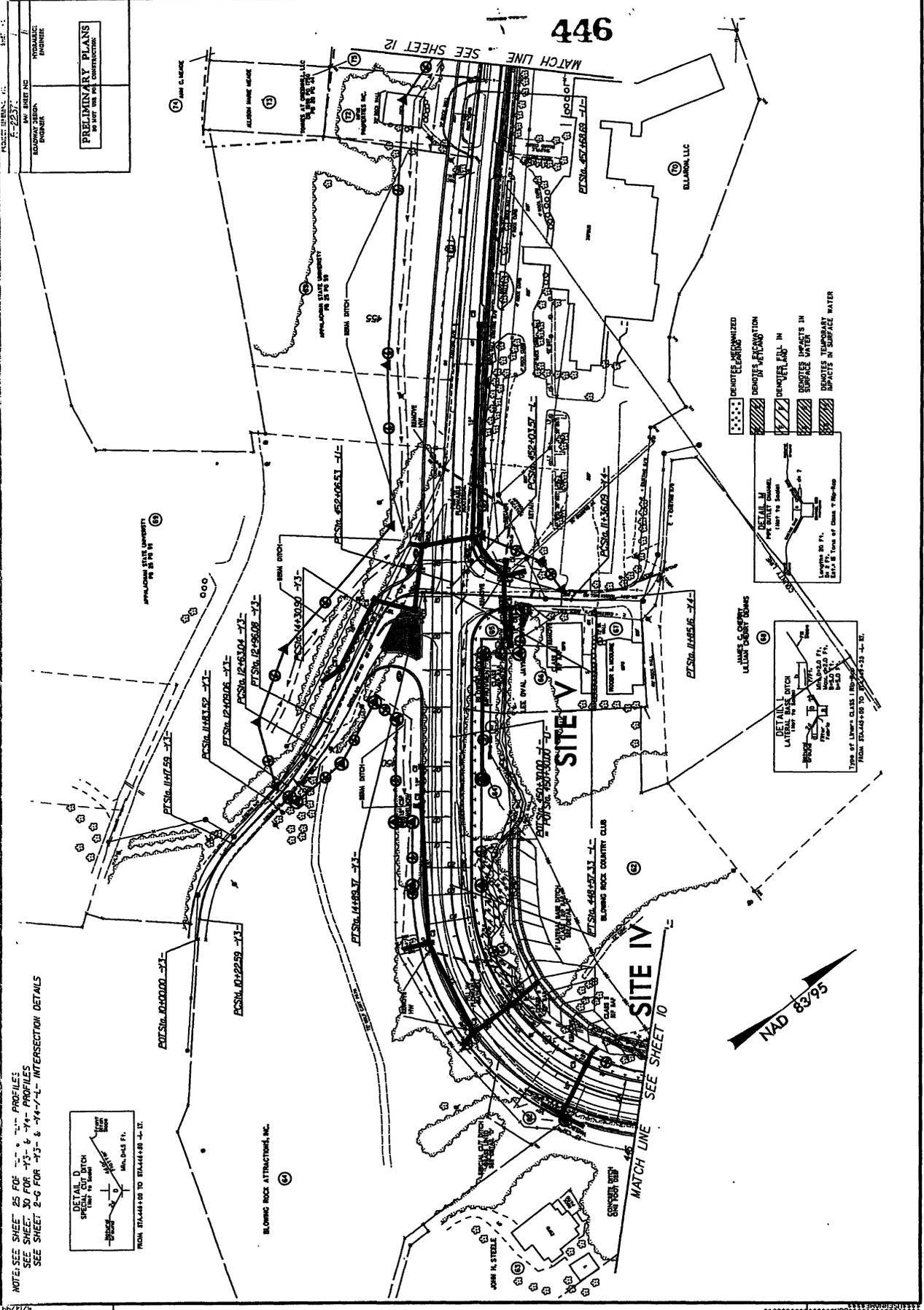
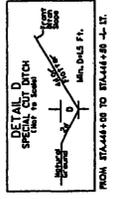
15.00

15.00

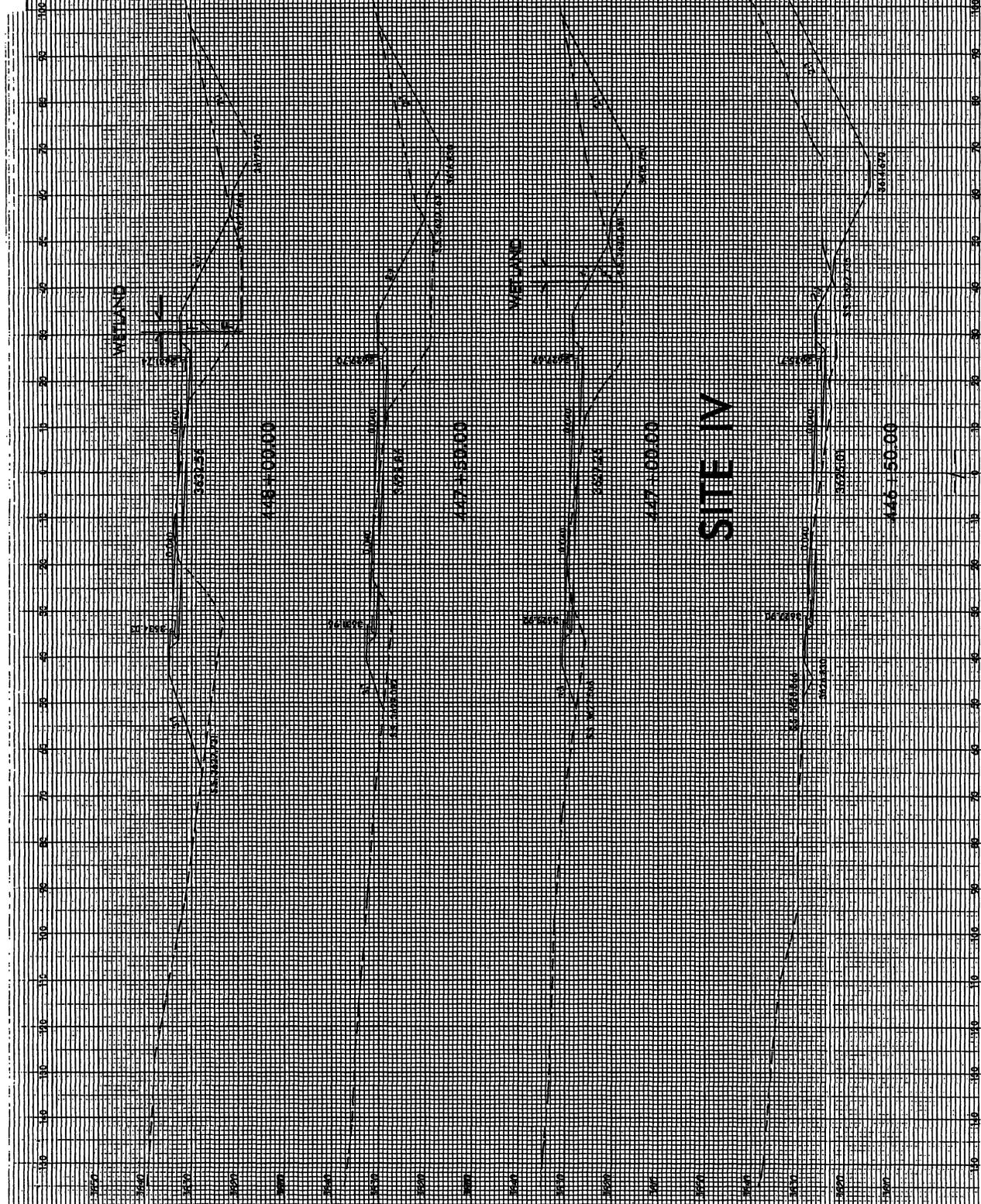
15.00

PROJECT: BLENKIN, INC.
 SHEET NO. 446
 DATE: 11/11/11
 DRAWN BY: J. W. HARRIS
 CHECKED BY: J. W. HARRIS
 PRELIMINARY PLANS
 FOR THE PROPOSED
 CONSTRUCTION

NOTE: SEE SHEET 25 FOR -13- PROFILES
 SEE SHEET 30 FOR -13- & -14- PROFILES
 SEE SHEET 2-G FOR -13- & -14- INTERSECTION DETAILS



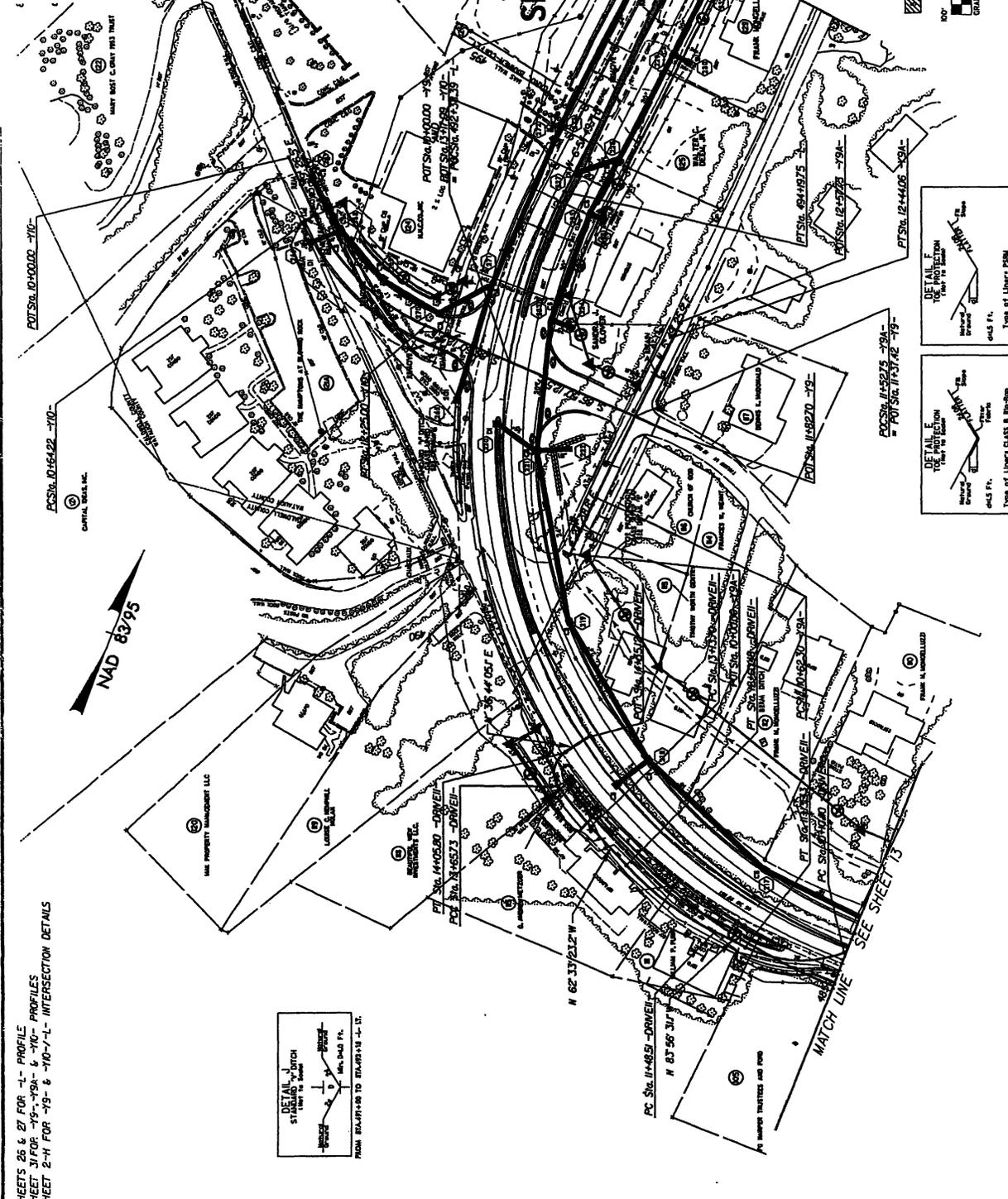
REVISIONS
 THE REVISION CONSISTS OF CHANGING THE RIGHT OF WAY ON PARCEL 62.



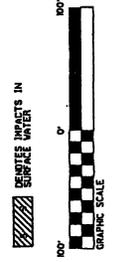
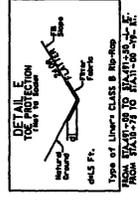
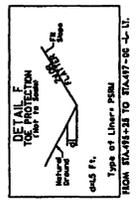
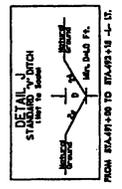
SITE IV

450

PROJECT: BERKING, NC
 SHEET NO.: 451
 DATE: 12-22-17
 DRAWN BY: J. HARRIS
 CHECKED BY: J. HARRIS
 PRELIMINARY PLANS
 FOR THE BERKING COMMUNITY CENTER
 100 WEST C. GRAY ROAD TRUST



NOTE: SEE SHEETS 26 & 27 FOR -L- PROFILE
 SEE SHEET 31 FOR -Y9-, -Y9A-, & -Y10- PROFILES
 SEE SHEET 2-H FOR -Y9- & -Y10-/-L- INTERSECTION DETAILS



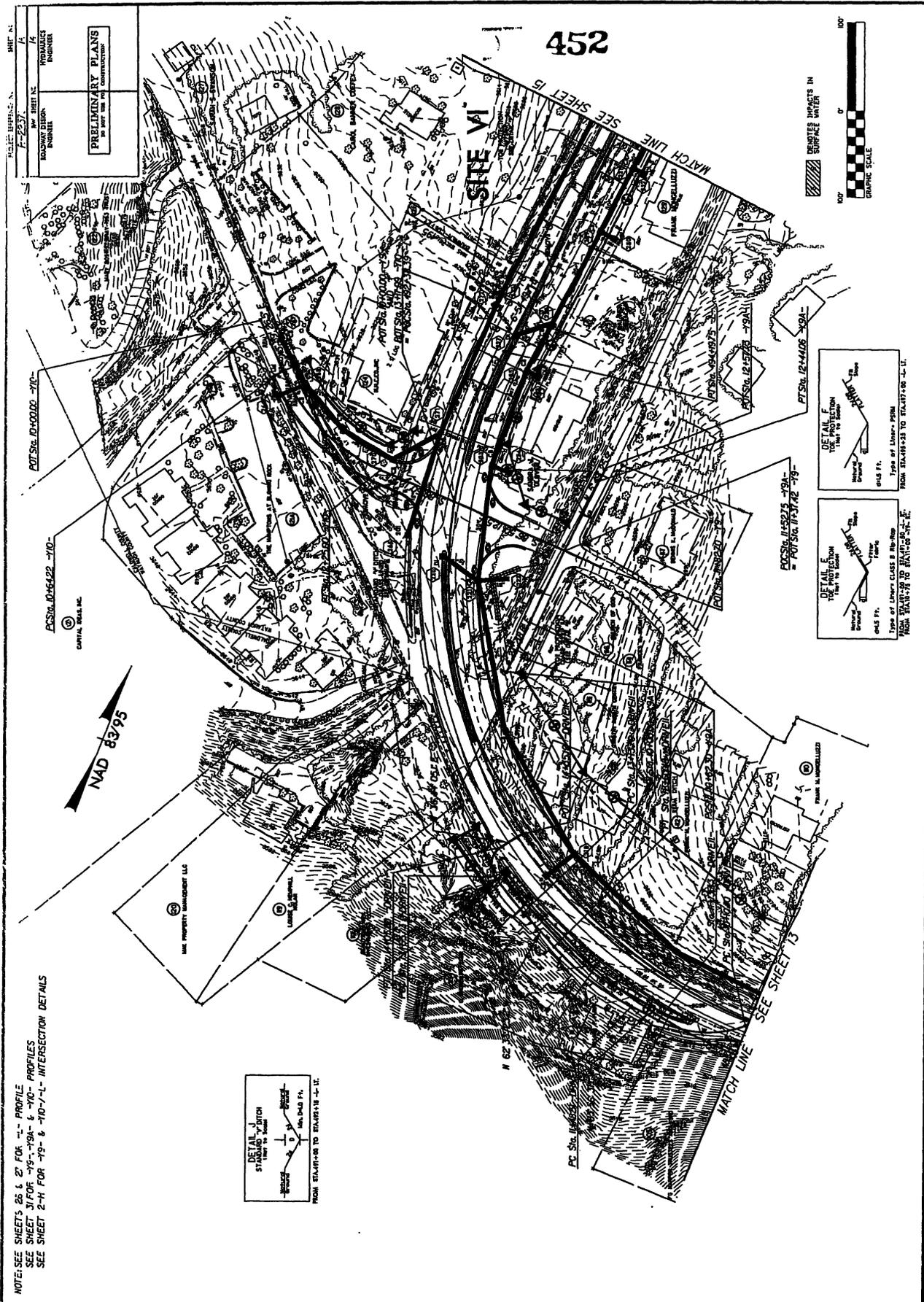
REVISIONS

DATE: 11/15/11
PROJECT: 11-11-11-11

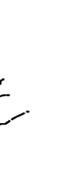
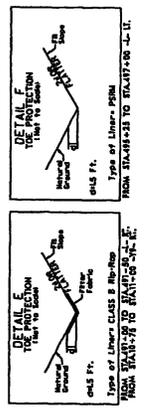
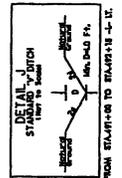
BY: J. J. J. J.
CHECKED BY: J. J. J. J.
APPROVED BY: J. J. J. J.

PRELIMINARY PLANS
FOR THE
CONSTRUCTION OF

452



NOTE: SEE SHEETS 25 & 27 FOR "L" PROFILE
SEE SHEET 31 FOR "S" & "H" PROFILES
SEE SHEET 2-H FOR "S" & "H" INTERSECTION DETAILS



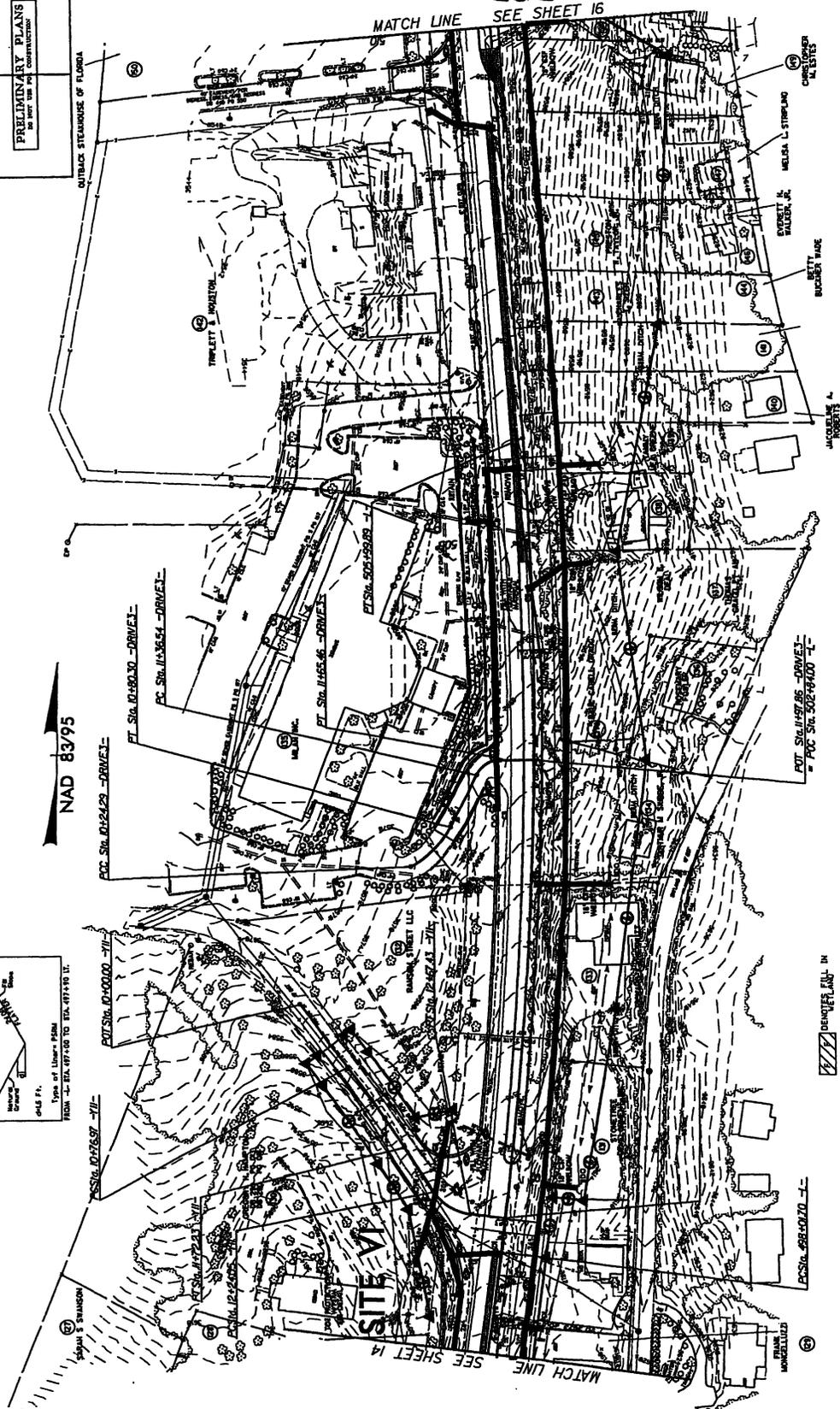
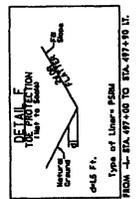
REVISIONS

PROJECT: WINDMILL, INC.
 SHEET NO. 455
 DATE: 11/15/11
 DRAWN BY: J. B. HARRIS
 CHECKED BY: J. B. HARRIS
 ENGINEER: J. B. HARRIS

PRELIMINARY PLANS
 AS PART OF THE SUBMITTALS

NOTE: SEE SHEET 27 FOR "A" PROFILE
 SEE SHEET 31 FOR "B" PROFILE
 SEE SHEET 32 FOR "C" PROFILE
 SEE SHEET 33 FOR "D" PROFILE

NAD 83/95



PROJECT NUMBER: 1-2-2017

DATE: 1/2/17

DESIGNED BY: HYDRAULICS ENGINEER

CHECKED BY: ENGINEER

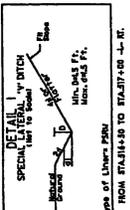
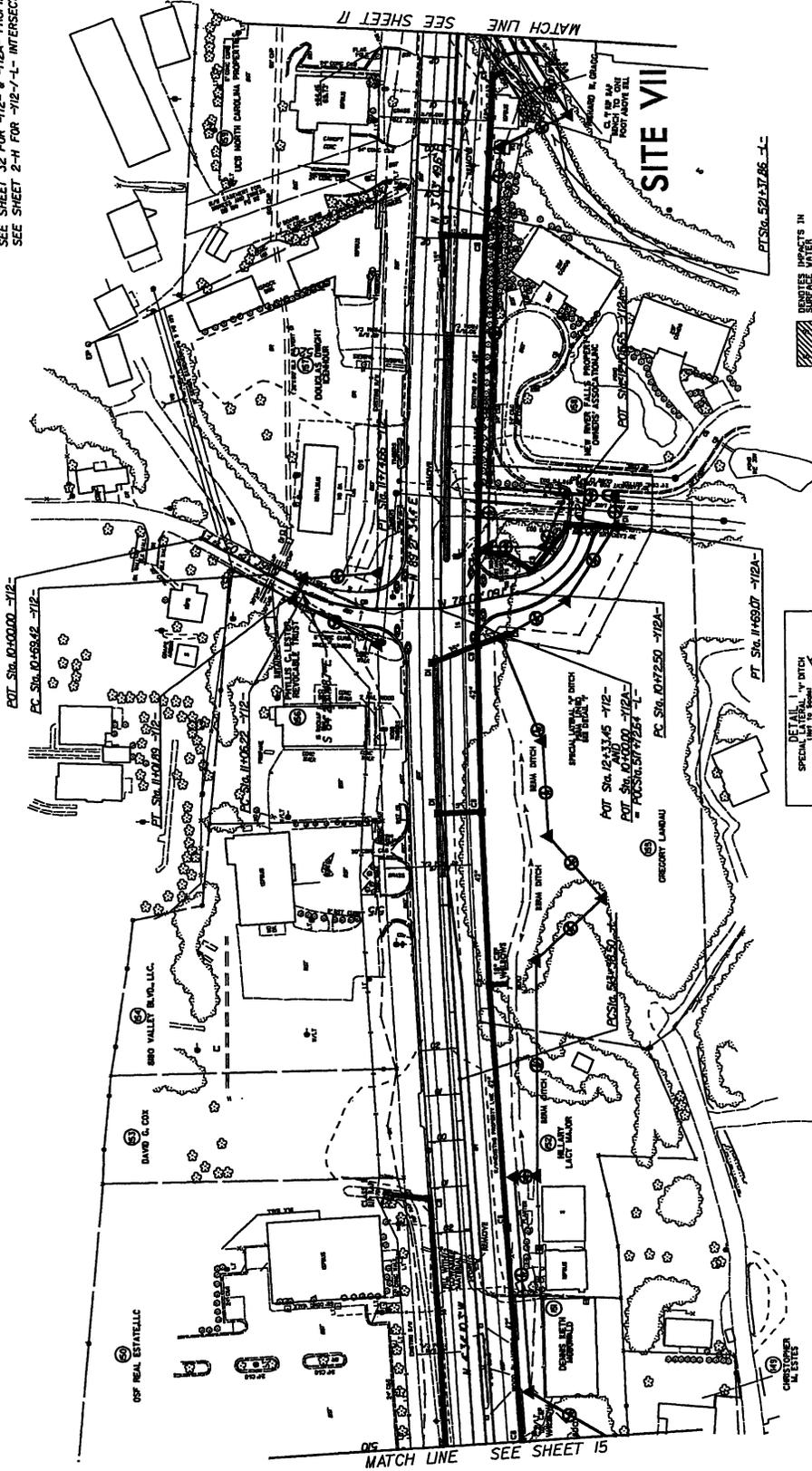
PRELIMINARY PLANS

NO. 1000

NOTE: SEE SHEETS 27 & 28 FOR 1- PROFILE
SEE SHEET 32 FOR -112- & -112A- PROFILE.
SEE SHEET 2-H FOR -112-1-1- INTERSECTION DETAIL

458

NAD 83/95



MATCH LINE SEE SHEET 15

MATCH LINE SEE SHEET 17

SITE VII

PT. STA. 52+37.26 -1-

PT. STA. 11+69.07 -112A-

PC STA. 12+59.42 -112-

PT. STA. 12+37.65 -112-

PT. STA. 12+00.00 -112A-

PC STA. 11+69.07 -112-

OSF REAL ESTATE LLC

DAVID L. COX

SNO VALLEY REALTY, LLC

LUCY WALKER

CREDIT LUMINA

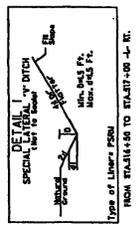
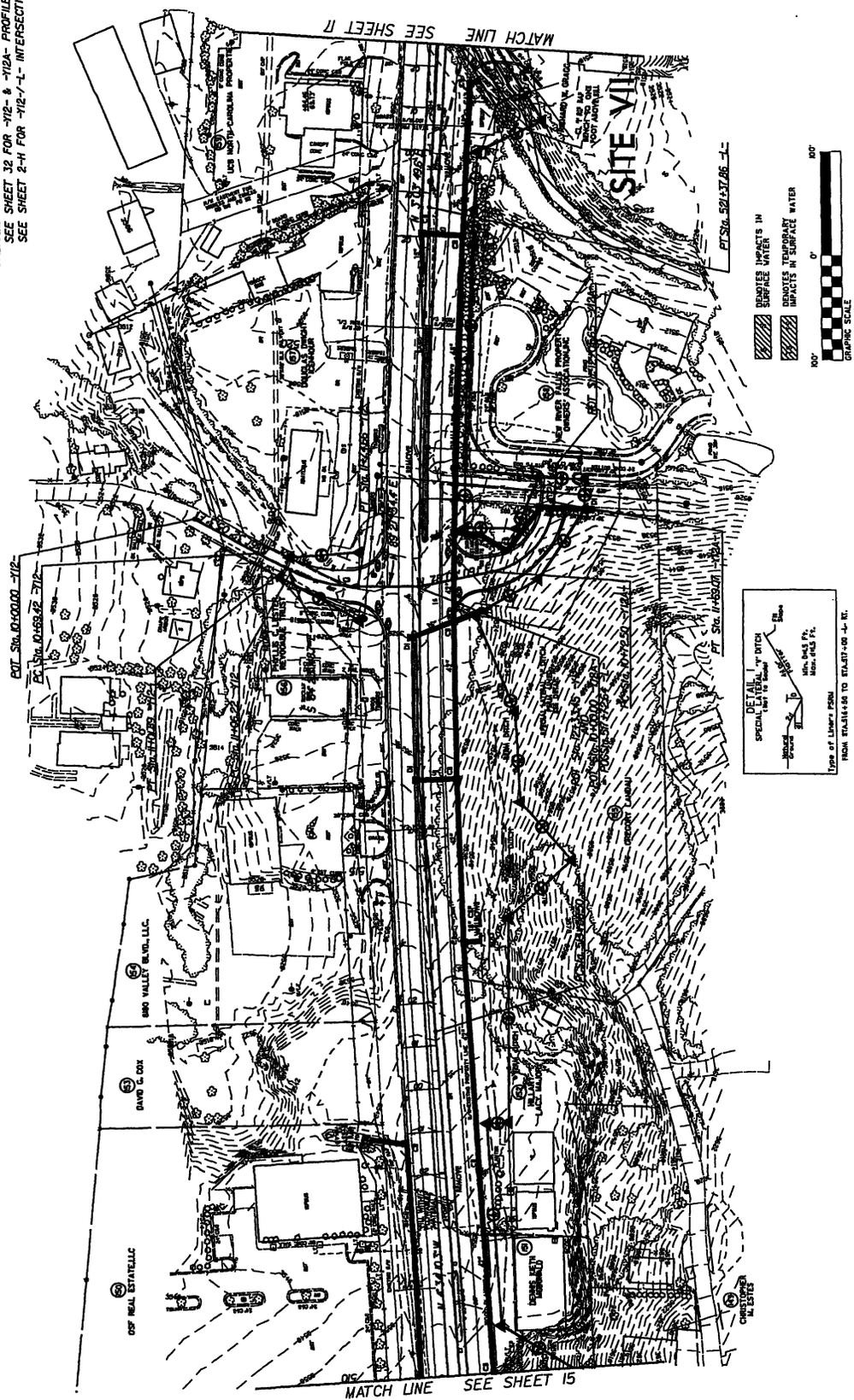
COURTESY REAL ESTATE

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
F-2237C	16
DATE	1/15
PROJECT NAME	ROCKWELL CENTER
PRELIMINARY PLANS	NO NOT BE FOR CONSTRUCTION

NOTE: SEE SHEETS 37 & 38 FOR -1- PROFILE
 SEE SHEET 39 FOR -1/2- & -1/2A- PROFILE
 SEE SHEET 2-1 FOR -1/2-1- INTERSECTION DETAIL

NAD 83/95



MATCH LINE SEE SHEET 15

MATCH LINE SEE SHEET 17

MATCH LINE SEE SHEET 18

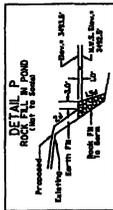
PROJECT: BERRING INC.
SHEET NO: 461

DATE: 11/11/95
DRAWN BY: [Name]
CHECKED BY: [Name]

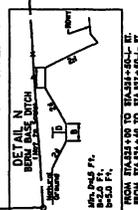
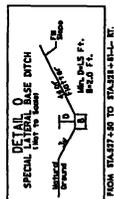
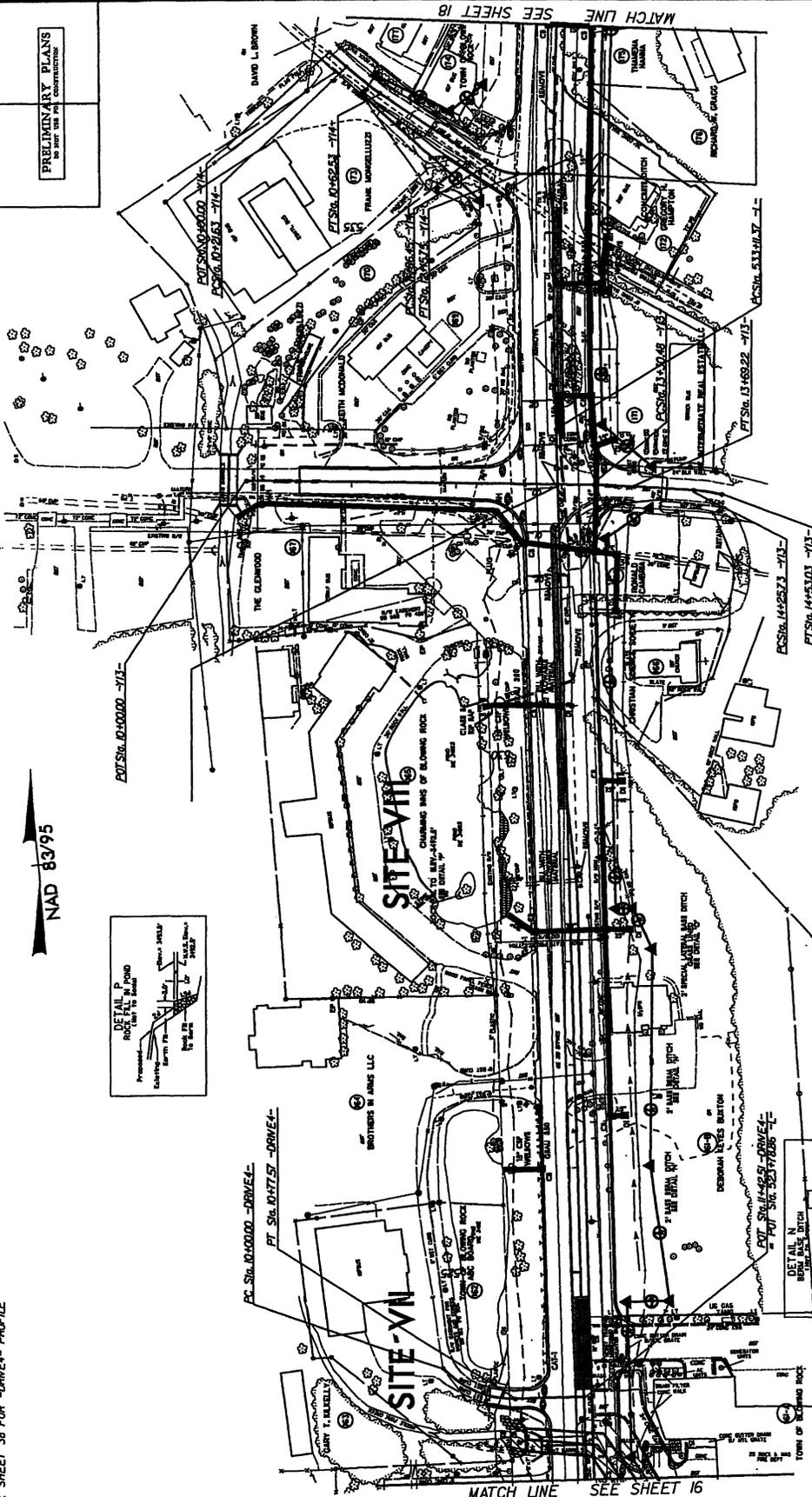
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

NOTE: SEE SHEET 28 FOR "L" PROFILE
SEE SHEET 32 FOR "113" & "114" PROFILE
SEE SHEET 2-1 FOR "113" & "114" INTERSECTION DETAILS
SEE SHEET 38 FOR "DRIVE4" PROFILE

NAD 83/95



- DIAGONAL HATCHING: DENOTES ELEVATION
- DIAGONAL HATCHING: DENOTES IMPACTS IN SURFACE WATER
- DIAGONAL HATCHING: DENOTES TEMPORARY IMPACTS IN SURFACE WATER



MATCH LINE SEE SHEET 16

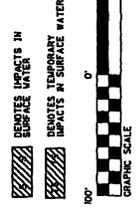
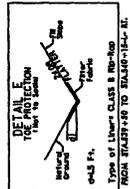
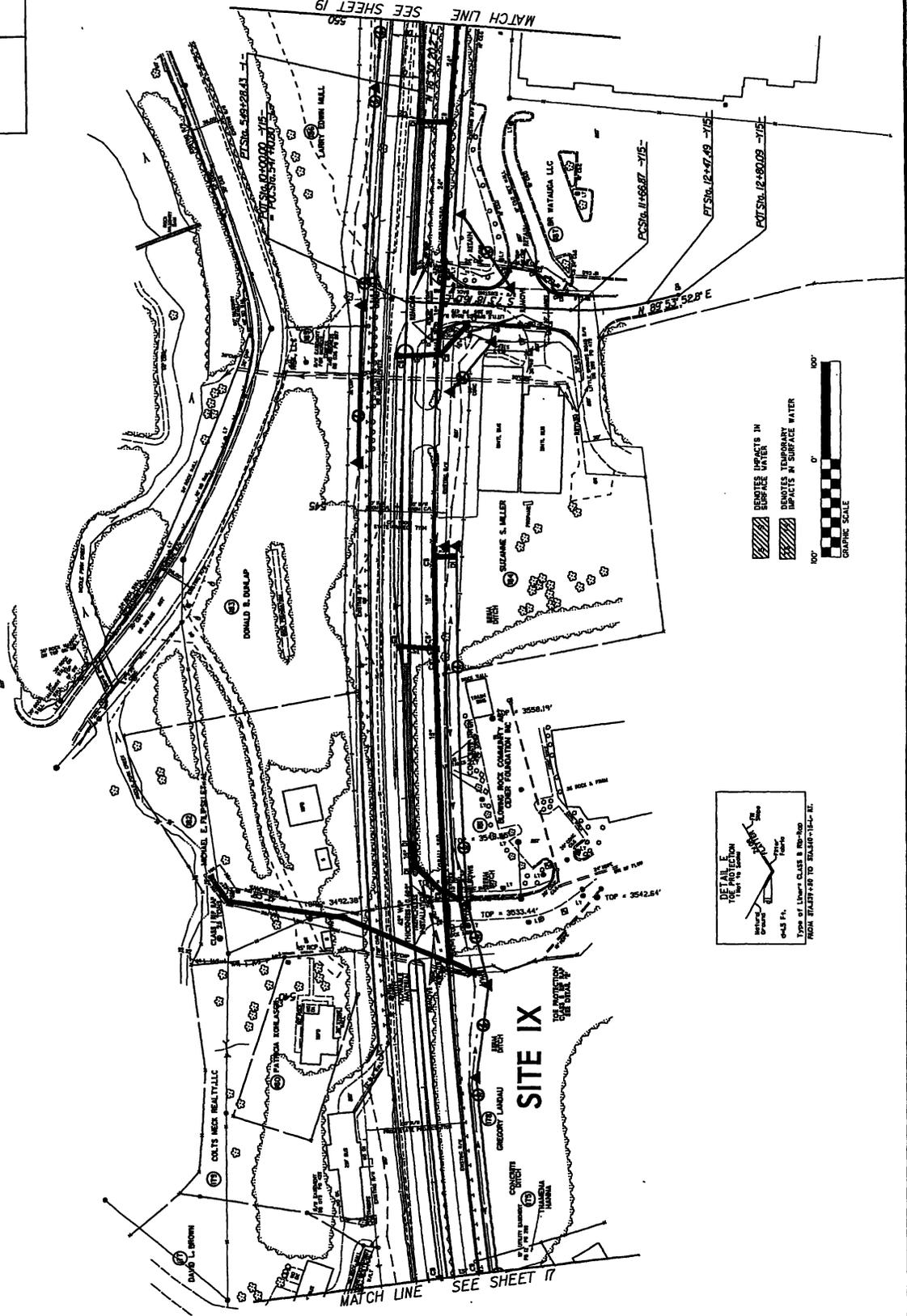
REVISIONS

PROJECT: URBAN INC.	SHEET: NC
F-227C	18
DATE: 08/11/09	HYDRAULICS
DESIGNER: BISHOP	ENGINEER
PRELIMINARY PLANS NO. 107, 108 AND 109	

NOTE: SEE SHEETS 28 & 29 FOR -1- PROFILE
 SEE SHEET 34 FOR -4S- PROFILE
 SEE SHEET 2-1 FOR -1S-1- INTERSECTION DETAIL

NAD 83/95

464



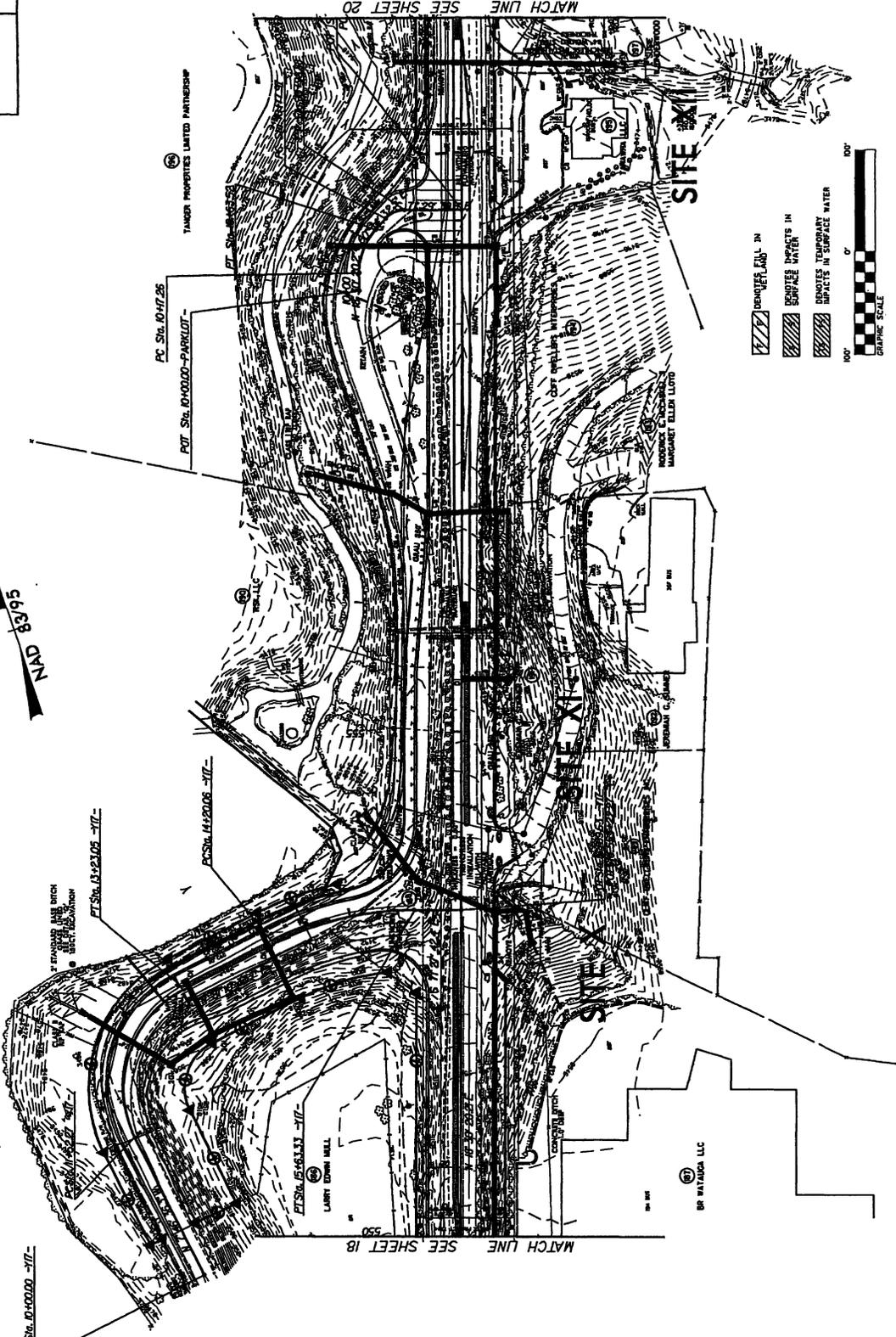
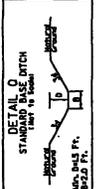
MATCH LINE SEE SHEET 20

MATCH LINE SEE SHEET 18

PROJECT REFERENCE NO.	SHEET NO.
6-22-17-C	12
DATE	DATE
12/14/17	12/14/17
BY	BY
HYDRAULICS	HYDRAULICS
ENGINEER	ENGINEER

PRELIMINARY PLANS
FOR THE SITE AND
CONSTRUCTION

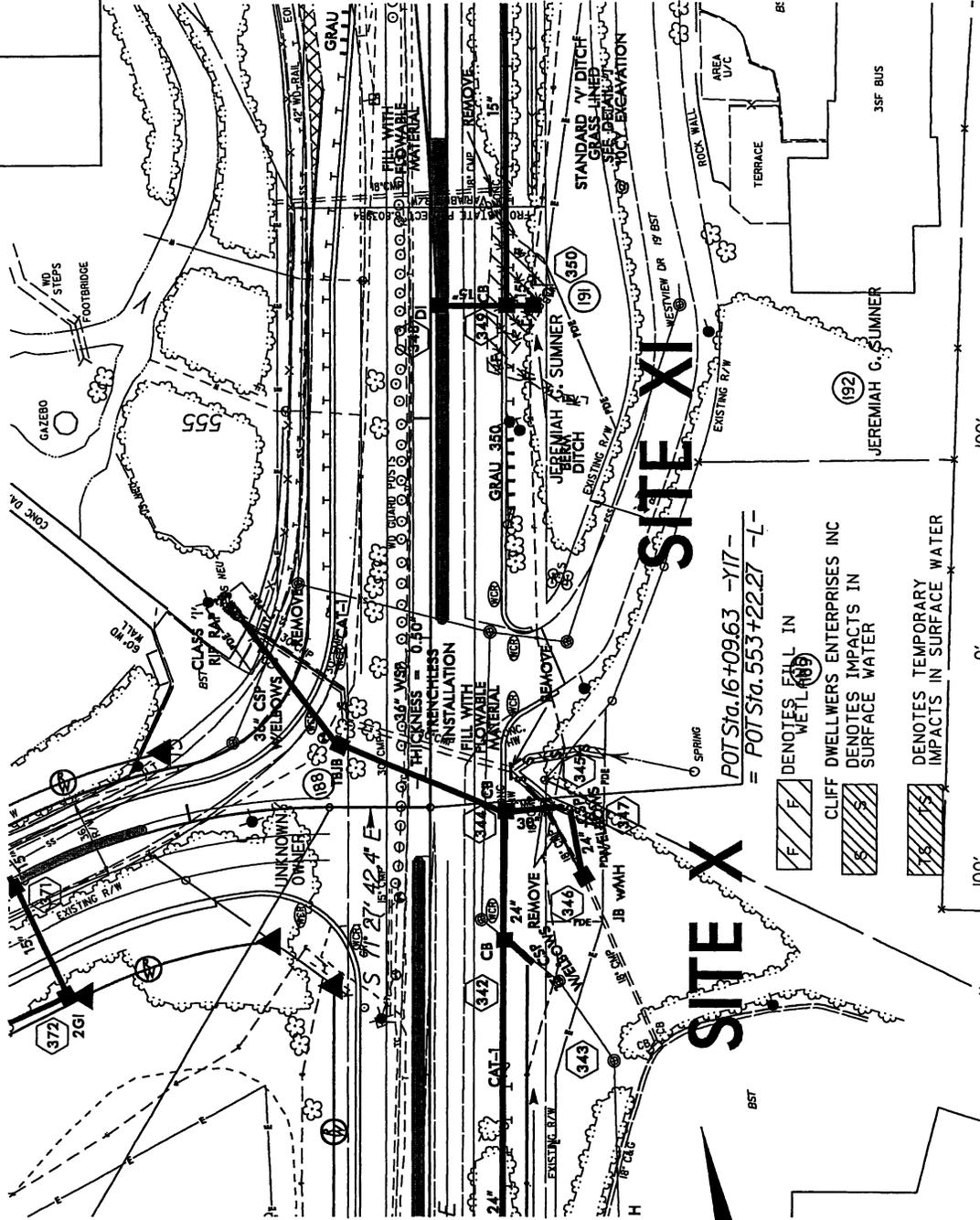
NOTE: SEE SHEET 20 FOR -1- PROFILE
SEE SHEET 13 FOR -7/1- PROFILE
SEE SHEET 2-1 FOR -7/1-1- INTERSECTION DETAIL



DENOTES EAVS IN
 DENOTES IMPACTS IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 GRAPHIC SCALE
 0' 10' 20' 30' 40' 50' 60' 70' 80' 90' 100'

PROJECT: BIRKBECK, N.C.
 SHEET NO.: P-227/C
 DATE: 1/2/95
 DRAWN BY: J. W. HARRIS
 CHECKED BY: J. W. HARRIS

469



POT Sta. 16+09.63 -Y17 -
 = POT Sta. 553+22.27 -L-

DENOTES FALL IN
 CLIFF DWELLERS ENTERPRISES INC
 DENOTES IMPACTS IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER



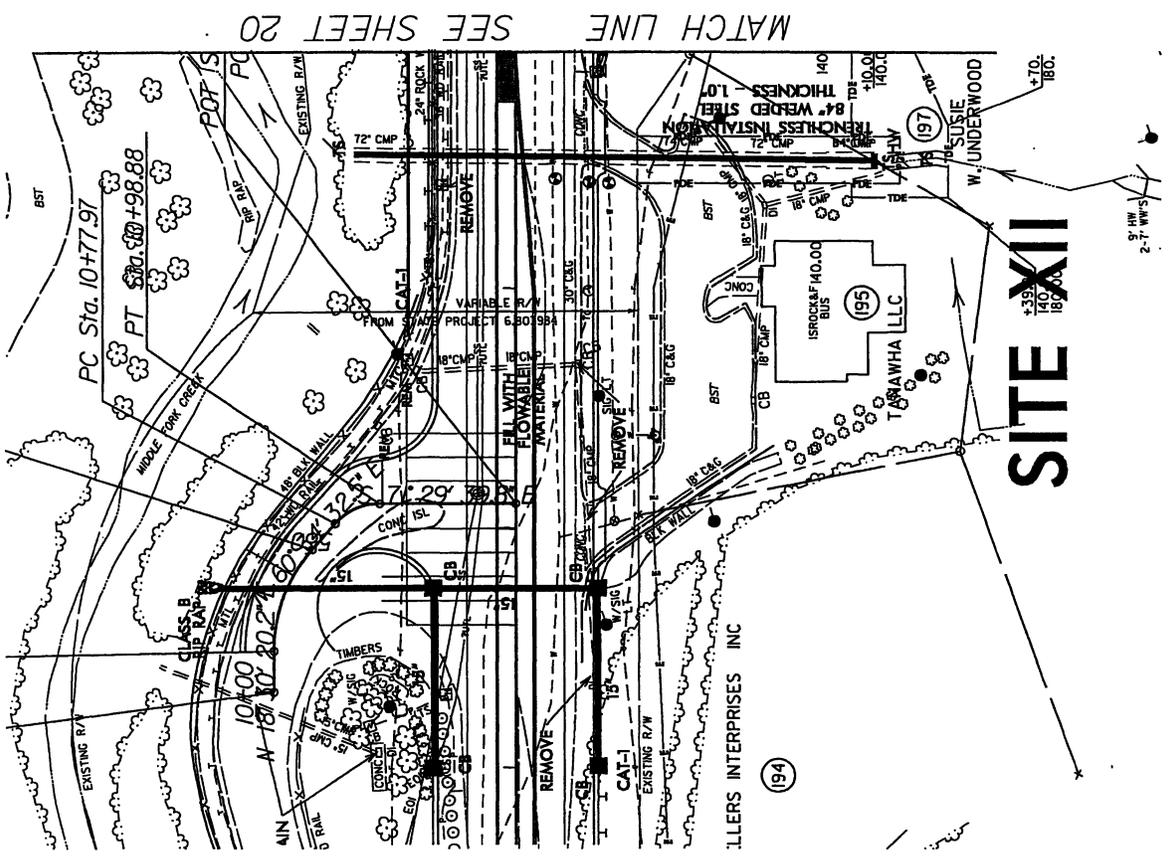
NAD 83/95

MATCH LINE SEE SHEET 18

PROJECT REFERENCE NO.	SHEET NO.
R-2237C	19
DATE	ISSUED
10/20/18	11/15/18
DESIGNED BY	CHECKED BY
ENGINEER	REGISTERED PROFESSIONAL ENGINEER

NAD 83/95

 DENOTES IMPACTS IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 GRAPHIC SCALE
 100' 0' 100'



MATCH LINE SEE SHEET 20

SITE XII

9' HW
2'-7" WWS

PROPERTY OWNERS
NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
32	DONALD FABIAN VINCENT	315 CAMELTOWN HILL RD. DANVILLE, PA 17821
36	NEAL C. FORD	4708 BILLS LANE LENOIR, NC 28645
62	BLOWING ROCK COUNTRY CLUB	P.O. BOX 628 BLOWING ROCK, NC 28605
65	BLOWING ROCK IMPROVEMENT CO.	P.O. BOX 905 BLOWING ROCK, NC 28605
66	LEE OVAL JAYNES	314 HUFFMAN ST. MORGANTON, NC 28655
	NCDOT	P.O. BOX 250 NORTH WILKESBORO, NC 28659
130	GEORGE H. HAMPTON	P.O. BOX 1849 BLOWING ROCK, NC 28605
160	RICHARD W. GRAGG	P.O. BOX 12 BLOWING ROCK, NC 28605
161-A	TOWN OF BLOWING ROCK	1036 MAIN ST. BLOWING ROCK, NC 28605
162	TOWN OF BLOWING ROCK ABC BOARD	7960 VALLEY BLVD. BLOWING ROCK, NC 28605
164	BROTHERS IN ARMS LLC	226 MULBERRY ST. NW LENOIR, NC 28645
165	CHARMING INNS OF BLOWING ROCK	18 BROAD ST. (SUITE 400) CHARLESTON, SC 29401
178	GREGORY LANDAU	16425 COLLINS AVE. (APT. 291) NORTH MIAMI BEACH, FL 33160
181	BLOWING ROCK COMMUNITY ART CENTER FOUNDATION INC.	P.O. BOX 1009 BLOWING ROCK, NC 28605

NCDOT

DIVISION OF HIGHWAYS
CALDWELL/ WATAUGA CO.
PROJECT: 34402.L1 (R-2237C)
US 321 FROM SR 1500
TO US 221 AT
BLOWING ROCK

PROPERTY OWNERS
NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
182	MICHAEL FILIPSKI	7890 EVERSFIELD RD. STOKESDALE, NC 27357
187	BR WATAUGA LLC	600 GREEN VALLEY RD. (SUITE 202) GREENSBORO, NC 27404
189	CLIFF DWELLERS ENTERPRISES INC.	5885 N. ROSE BARK WAY BEVERLY HILLS, FL 33465
191	JEREMIAH G. SUMNER	P.O. BOX 2125 BLOWING ROCK, NC 28605
195	TANAWHA LLC	P.O. BOX 2701 BLOWING ROCK, NC 28605
197	SUSIE W. UNDERWOOD	148 POSSUM HOLLOW RD. BLOWING ROCK, NC 28605

NCDOT

DIVISION OF HIGHWAYS
CALDWELL / WATAUGA CO.

PROJECT: 34402.1.1 (R-2237C)

US 321 FROM SR 1500

TO US 221 AT

BLOWING ROCK

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER 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)	Permanent SW Impacts (ac)	Temp. SW Impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)	
I	385+70 TO 389+45 -L-	24" CSP							0.02	<0.01	294	36	
II	403+30 -L-	36" CSP						0.01	<0.01	119	33		
III	442+00 TO 444+00 -L-	54" RCP	0.01		0.02			0.01	0.01	150	43		
		BANK STABILIZATION						<.01		10			
		FILL IN STREAM								53			
IV	444+65 TO 449+50 -L-		0.07			0.01		0.03	0.01	317	46		
V	451+40 -L-	BANK STABILIZATION						<0.01	<0.01	22	6		
										10			
VI	495+20 TO 498+15 -L-		0.01					0.03		294			
VII	523+33.5 -L-	2 @ 11'X8' RCBC			0.01			0.04	0.01	128	26		
		BANK STABILIZATION								32			
VIII	528+40 TO 530+50 -L-	30" RCP 15" CSP	NON-JURISDICTIONAL						0.04	0.04	1429	190	
TOTALS:			0.09		0.03	0.03		0.15	0.04	1429	190		

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 CALDWELL/WATAUGA COUNTIES
 WRS - 34402.1.1 (R-2237C)

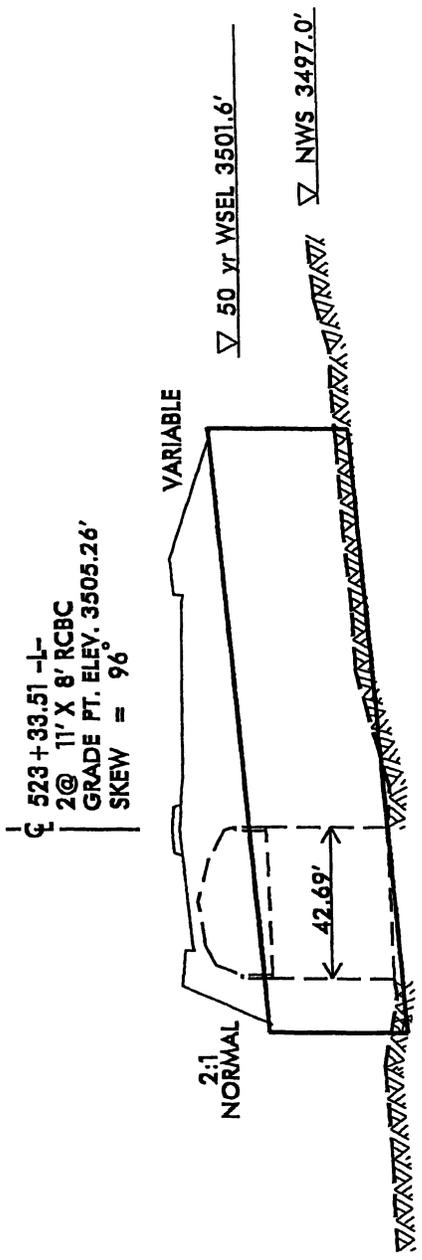
10/5/2010

SHEET

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER 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)	Permanent SW Impacts (ac)	Temp. SW Impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)	
IX	540+20 -L-	42" WELDED STEEL PIPE							0.01	<0.01	133	10	
X	553+50 -L-	30" RCP							0.01	<0.01	59	19	
XI	555+50 -L-	15" RCP	0.04						<0.01	<0.01	25	19	
XII	561+56 -L-	84" WELDED STEEL PIPE								0.01		45	
TOTALS:			0.04						0.02	0.02	217	93	
GRAND TOTALS			0.13		0.03	0.03		0.17	0.05	1646	283		

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 CALDWELL/WATAUGA COUNTIES
 WBS - 34402.1.1 (R-22371)
 SHEET 10/5/2010



523 + 33.51 -L-
 2 @ 11' X 8' RCBC
 GRADE FT. ELEV. 3505.26'
 SKEW = 96

VARIABLE

2:1
NORMAL

42.69'

▽ 50 yr WSEL 3501.6'

▽ NWS 3497.0'

CL INV. ELEV. 3493.41
 SLOPE 0.018 FT./FT.

NOTE: BURY INLET
 AND OUTLET ONE FOOT. PLACE
 SILLS IN INLET AND OUTLET
 ACROSS BOTH BARRELS.

476

3510

3500

3490

3480

200 150 100 50 0 50 100 150 200

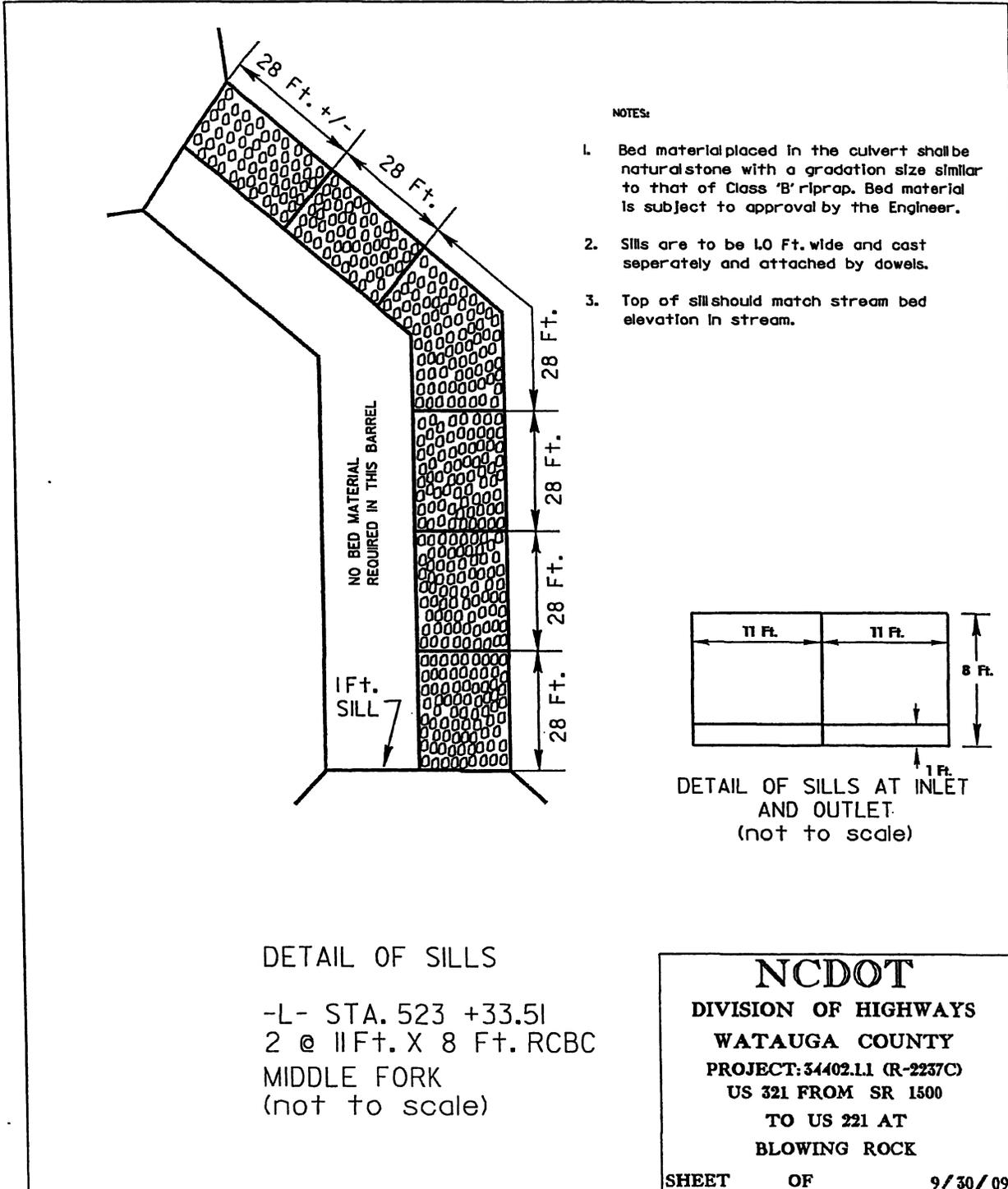
PROFILE

SITE VII

NCDOT
 DIVISION OF HIGHWAYS
 CALDWELL/WATAUGA CO.
 PROJECT: 34402.1.1 (R-2237C)
 US 321 FROM SR 1500 TO
 US 221 AT BLOWING ROCK

SHEET 1 OF 10

477



NOTES:

- 1. Bed material placed in the culvert shall be natural stone with a gradation size similar to that of Class 'B' riprap. Bed material is subject to approval by the Engineer.
- 2. Sills are to be 10 Ft. wide and cast separately and attached by dowels.
- 3. Top of sill should match stream bed elevation in stream.

478

STA. 561+56.5 -L-
PROP. 84" WELDED STEEL PIPE
SKEW 91
ELEV. 3476.54'

RETAINING
WALL

EXISTING
JB

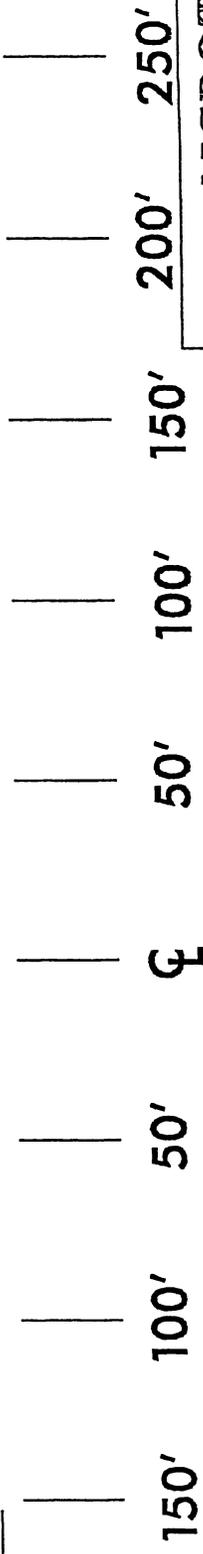
OHW - 3453.4'
BED

3470'

3460'

3450'

3440'



SITE XII PROFILE

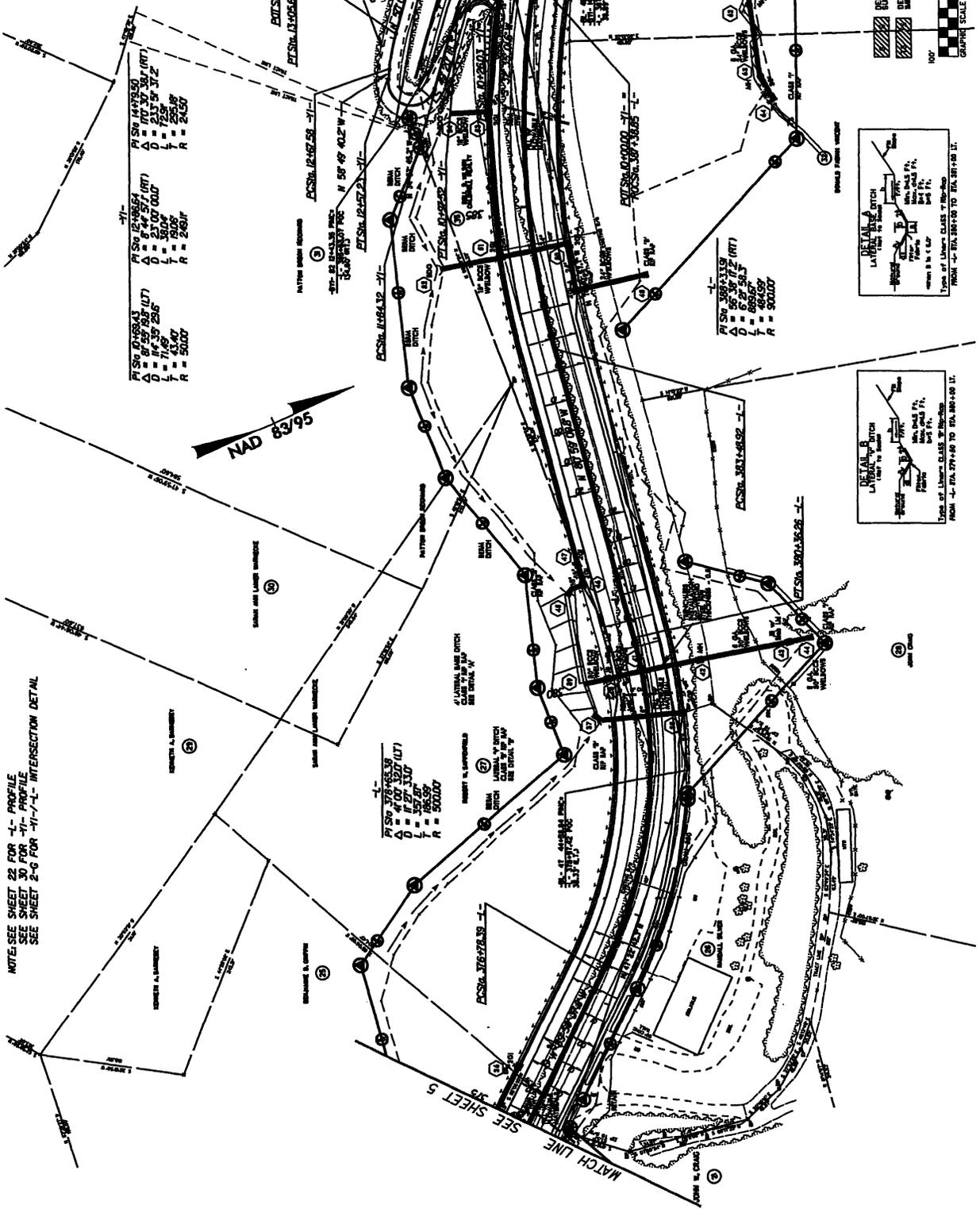
NCDOT
 DIVISION OF HIGHWAYS
 CALDWELL/WATAUGA CO.
 PROJECT: 34402.11 (R-2237C)
 US 321 FROM SR 1500
 TO US 221 AT
 BLOWING ROCK

481

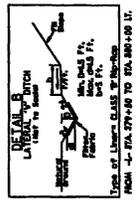
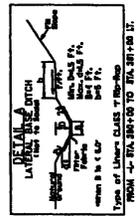
PROJECT NO. **R-2247**
 SHEET NO. **6**
 PROJECT NAME
 CONTRACT NUMBER
 DRAWN BY
 CHECKED BY
 DATE

PRELIMINARY PLANS
 TO BE USED FOR PERMITS

Permit Drawing
Sheet 3 of 6



SITE 1

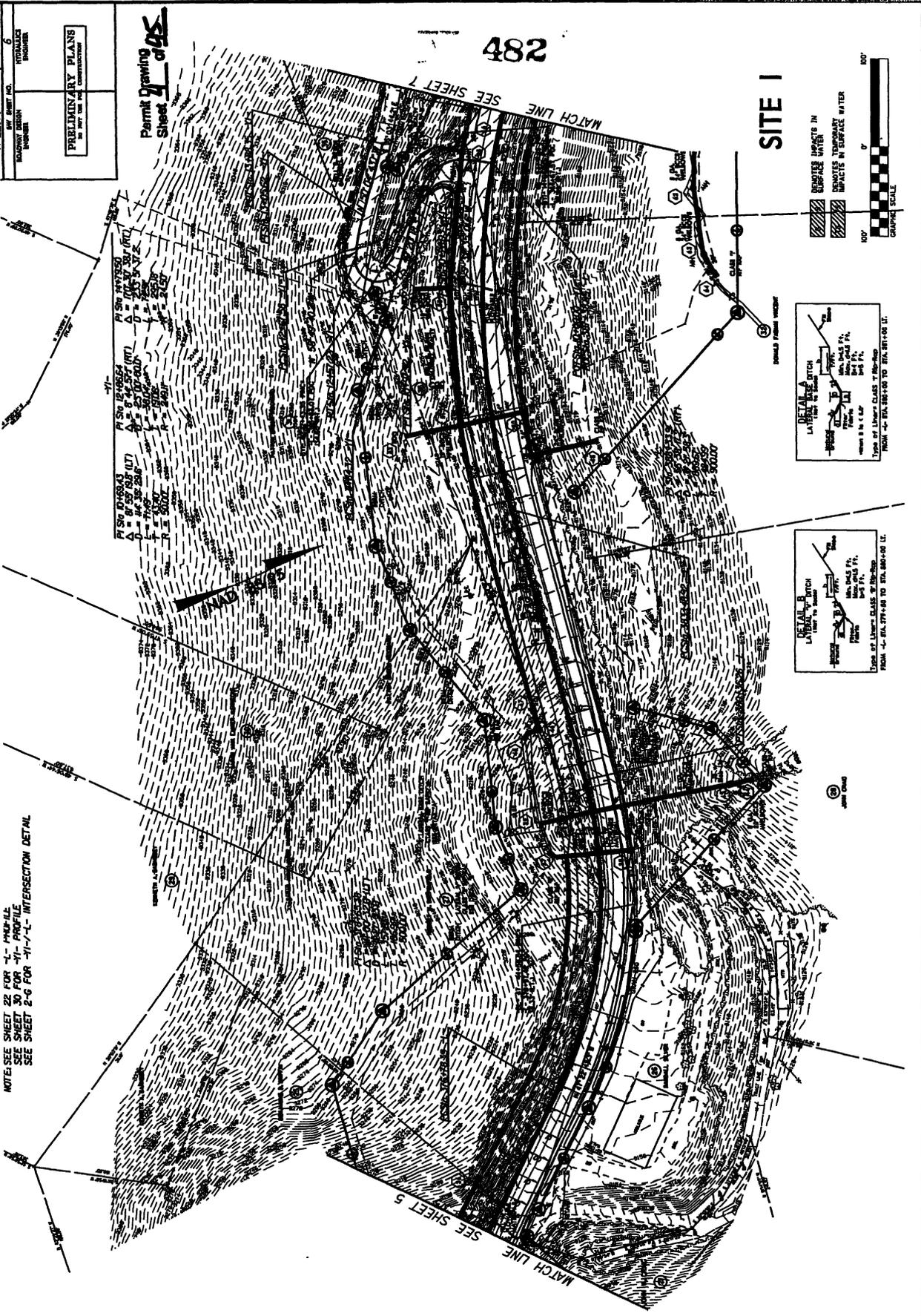


B/44

REVISIONS

DATE: 08/20/2013
 TIME: 11:17 AM
 USER: j...
 PROJECT: ...

NOTE: SEE SHEET 28 FOR "L" PROFILE
 SEE SHEET 30 FOR "M" PROFILE
 SEE SHEET 2-6 FOR "N" INTERSECTION DETAIL



DATE: 6/14/00	BY: J. M. [unreadable]
NO. OF SHEETS: 6	TOTAL SHEETS: 10
PRELIMINARY PLANS IN ACCORDANCE WITH THE PERMITTING AGENCIES	

Permit Drawing
 Sheet 4 of 10

482

SITE I

LEGEND

- [Symbol] SURFACE WATER IMPACTS
- [Symbol] REMOVES TEMPORARY IMPACTS IN SURFACE WATER

100' 0 100' DRAWING SCALE

DETAIL A
 Utility Structure
 Type of Utility: [unreadable]
 From [unreadable] to [unreadable]

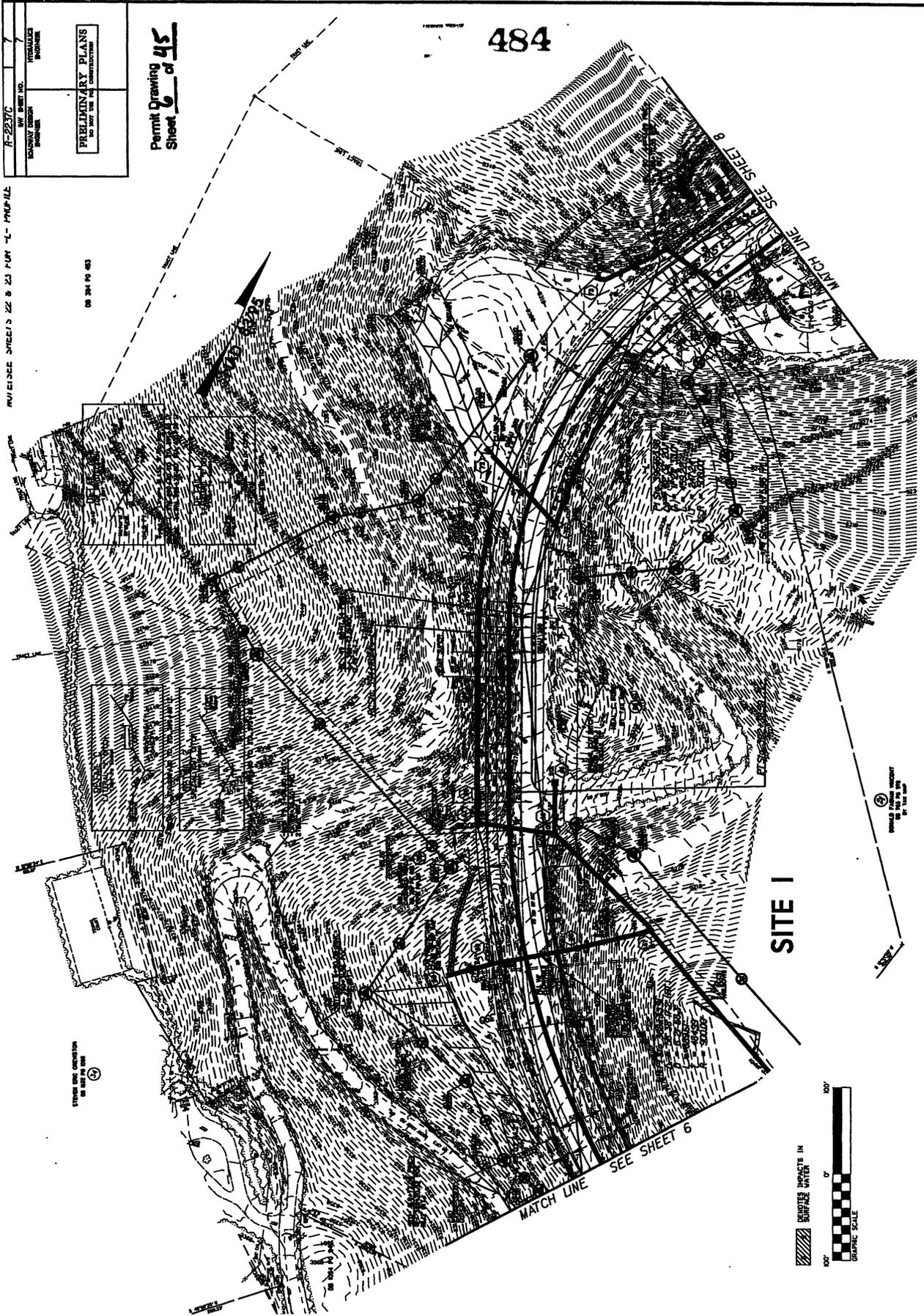
DETAIL B
 Utility Structure
 Type of Utility: [unreadable]
 From [unreadable] to [unreadable]

PROJECT NO.	7
DATE	11-23-70
DESIGNED BY	W. J. HARRIS
CHECKED BY	W. J. HARRIS
APPROVED BY	W. J. HARRIS
PRELIMINARY PLANS NO 2007 THE USE OF CONSTRUCTION	

Permit Drawing
Sheet **6** of **45**

484

PROVIDE SHEETS 22 & 23 FOR "L" PROFILE



REVISIONS

Right of Way: This revision consists of adding temporary construction easement to Parcel 37.

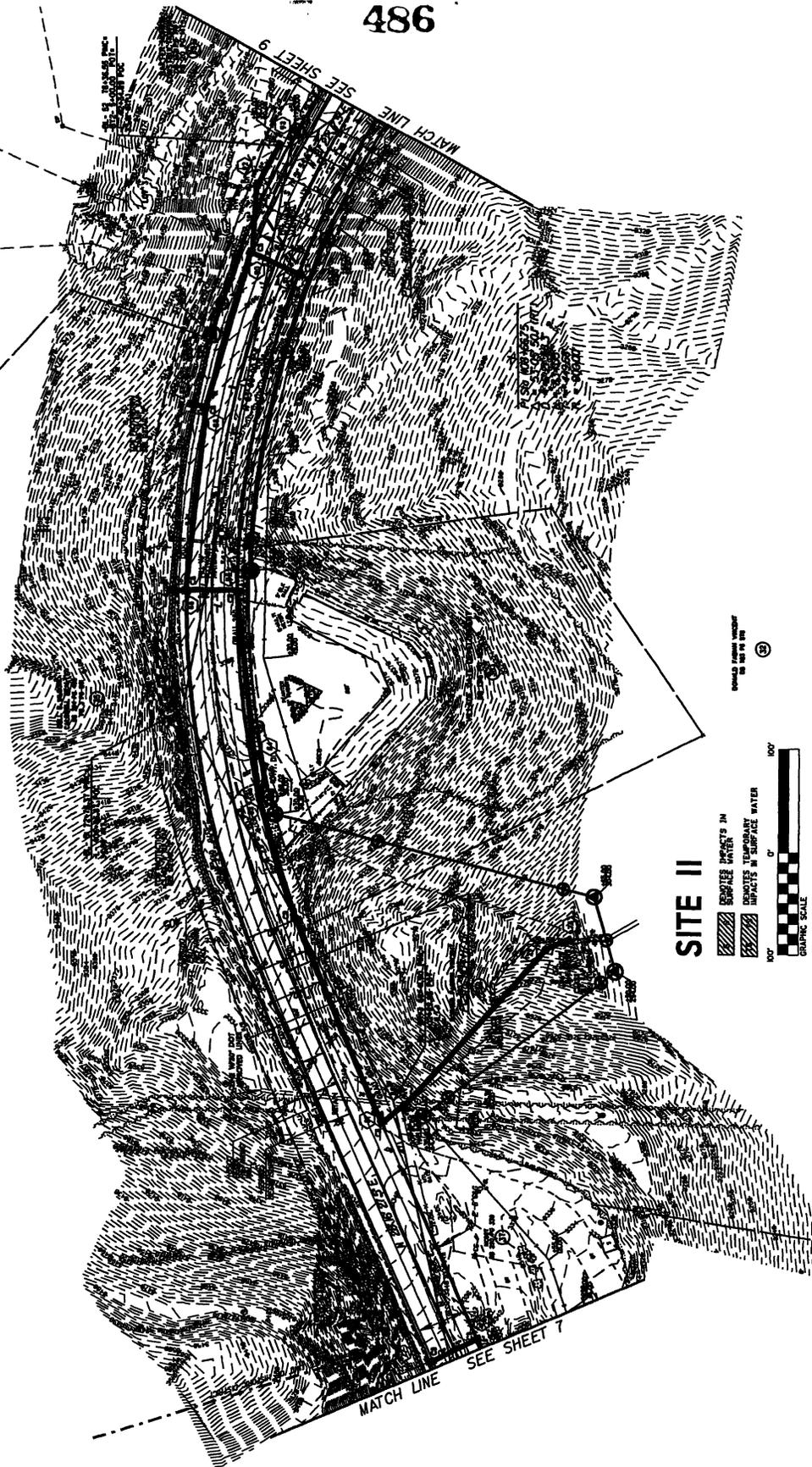
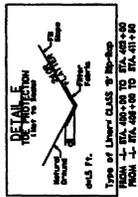
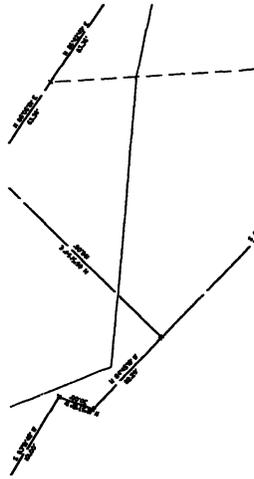
05-14M-2010 0845
 11-23-70 W. J. HARRIS
 11-23-70 W. J. HARRIS

NOTE: SEE SHEET 23 FOR 4- PROFILE

B-227C

PRELIMINARY PLANS
FOR THE
CONSTRUCTION

Permit Drawing of MS
Sheet 8 of 15



SITE II

LEGEND

- PROPOSED IMPROVEMENTS IN SURFACE WATER
- TEMPORARY IMPROVEMENTS IN SURFACE WATER
- EXISTING IMPROVEMENTS IN SURFACE WATER

GRAPHIC SCALE

100' 0' 100'

486

SEE SHEET 9

SEE SHEET 7

5/14

Right of Way: This revision consists of adding temporary construction easement to Form 37.

REVISED

DATE: 02/04/2014

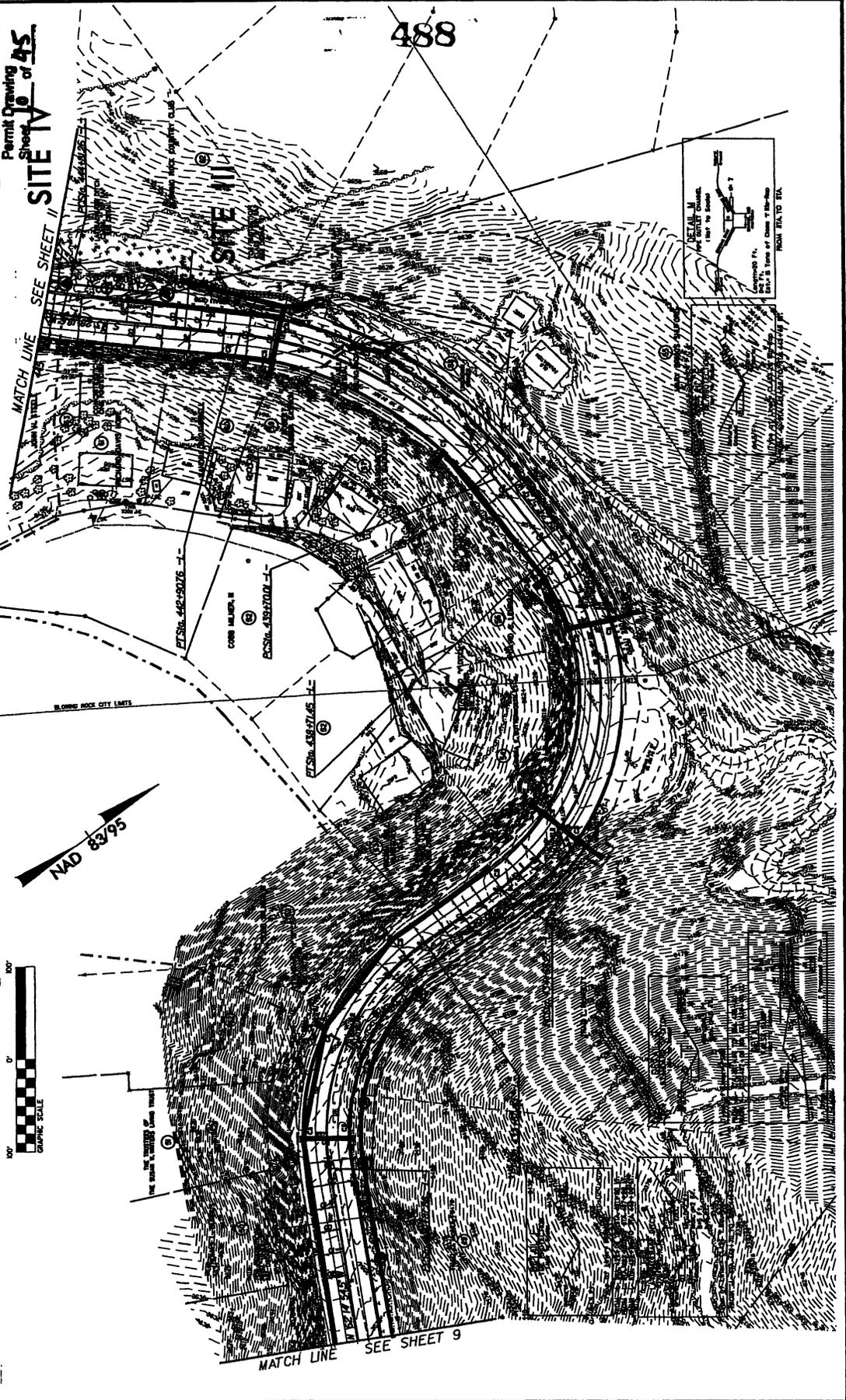
BY: [Signature]

PROJECT: [Project Name]

PROJECT REFERENCE NO.	HEET NO.
R-2237C	10
DESIGNER	DATE
HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

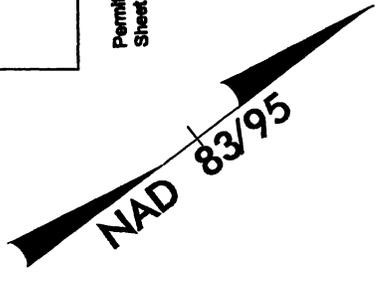
NOTE: SEE SHEETS 24 & 25 FOR "L" PROFILE

Permit Drawing
 Sheet 10 of 45
SITE IV

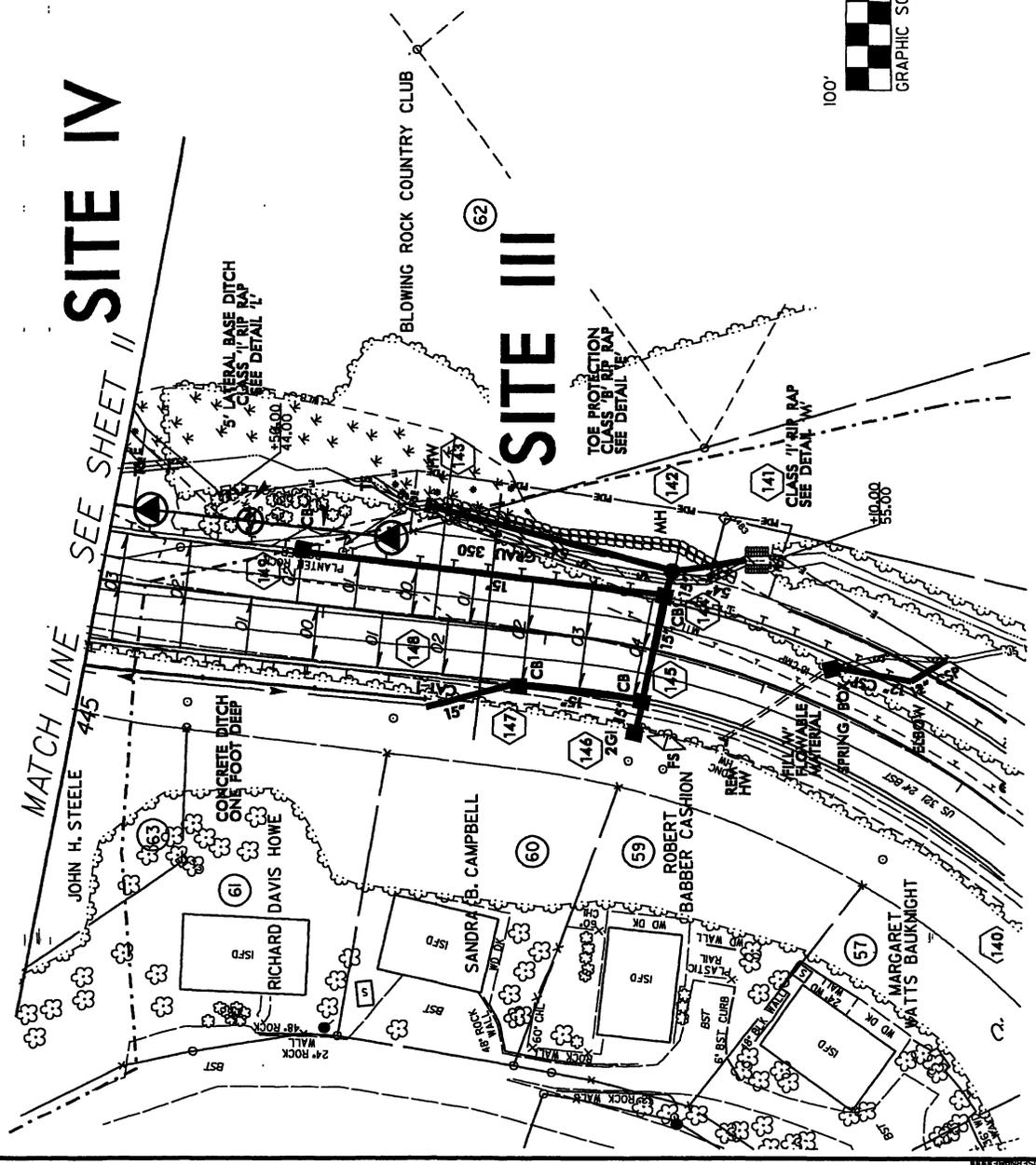


PROJECT REFERENCE NO.	0
DATE	0
BY	0
CHECKED BY	0
DESIGNED BY	0
ENGINEER	0

Permit Drawing
Sheet II of 45



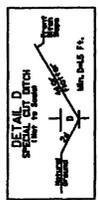
-  DENOTES MECHANIZED CLEARING
-  DENOTES EXCAVATION IN WETLAND
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER
-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES FILL IN WETLAND



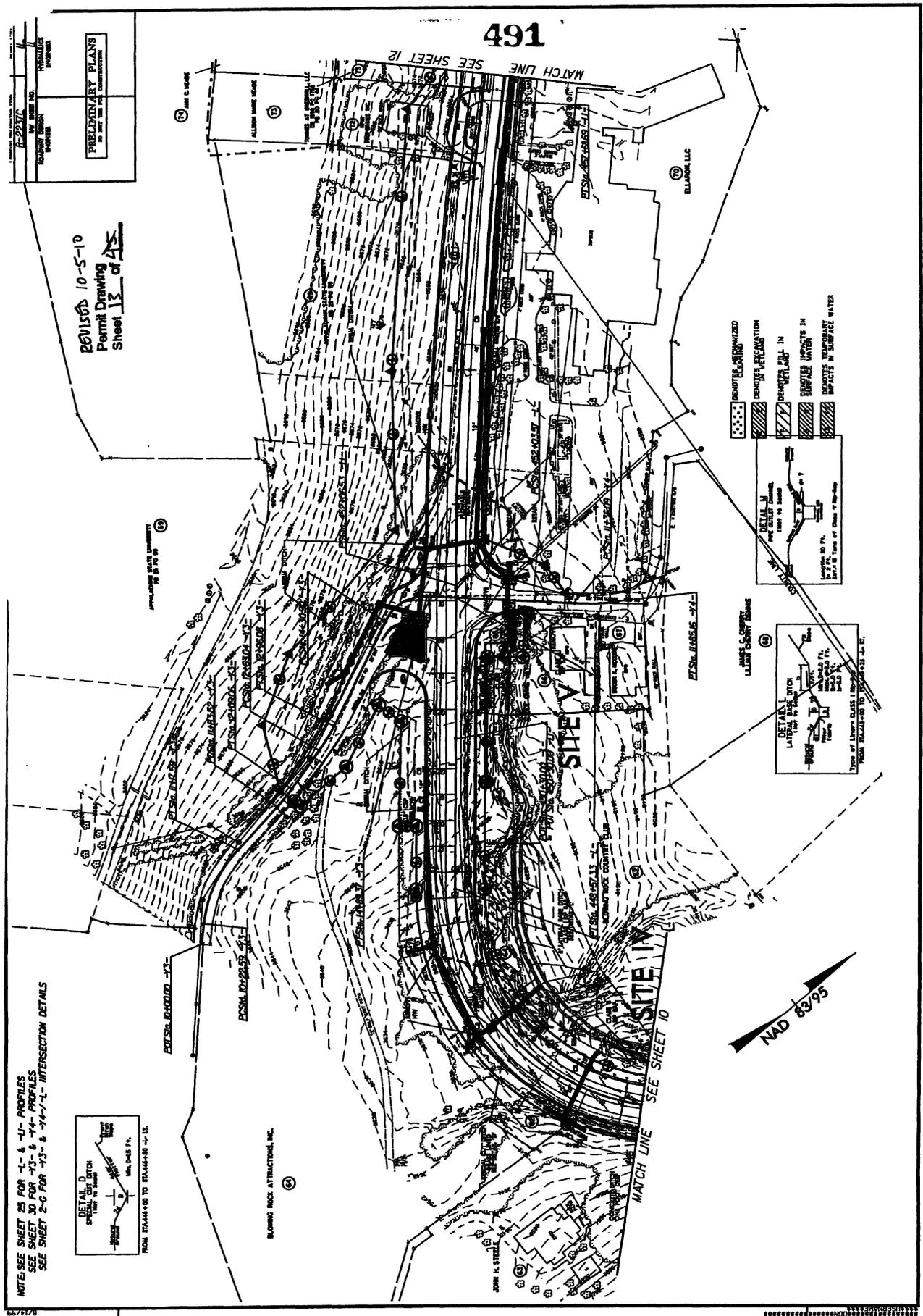
PRELIMINARY PLANS
 IN PART FOR THE
 CONSTRUCTION OF
 A
 PROJECT

REVISED 10-5-10
 Permit Drawing
 Sheet 13 of 45

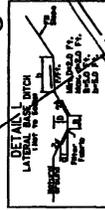
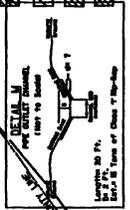
NOTE: SEE SHEET 25 FOR T-1 & T-1-1 PROFILES
 SEE SHEET 30 FOR T-3 & T-4 PROFILES
 SEE SHEET 2-G FOR T-3 & T-4 INTERSECTION DETAILS



FROM 10-11-10 TO 10-11-10



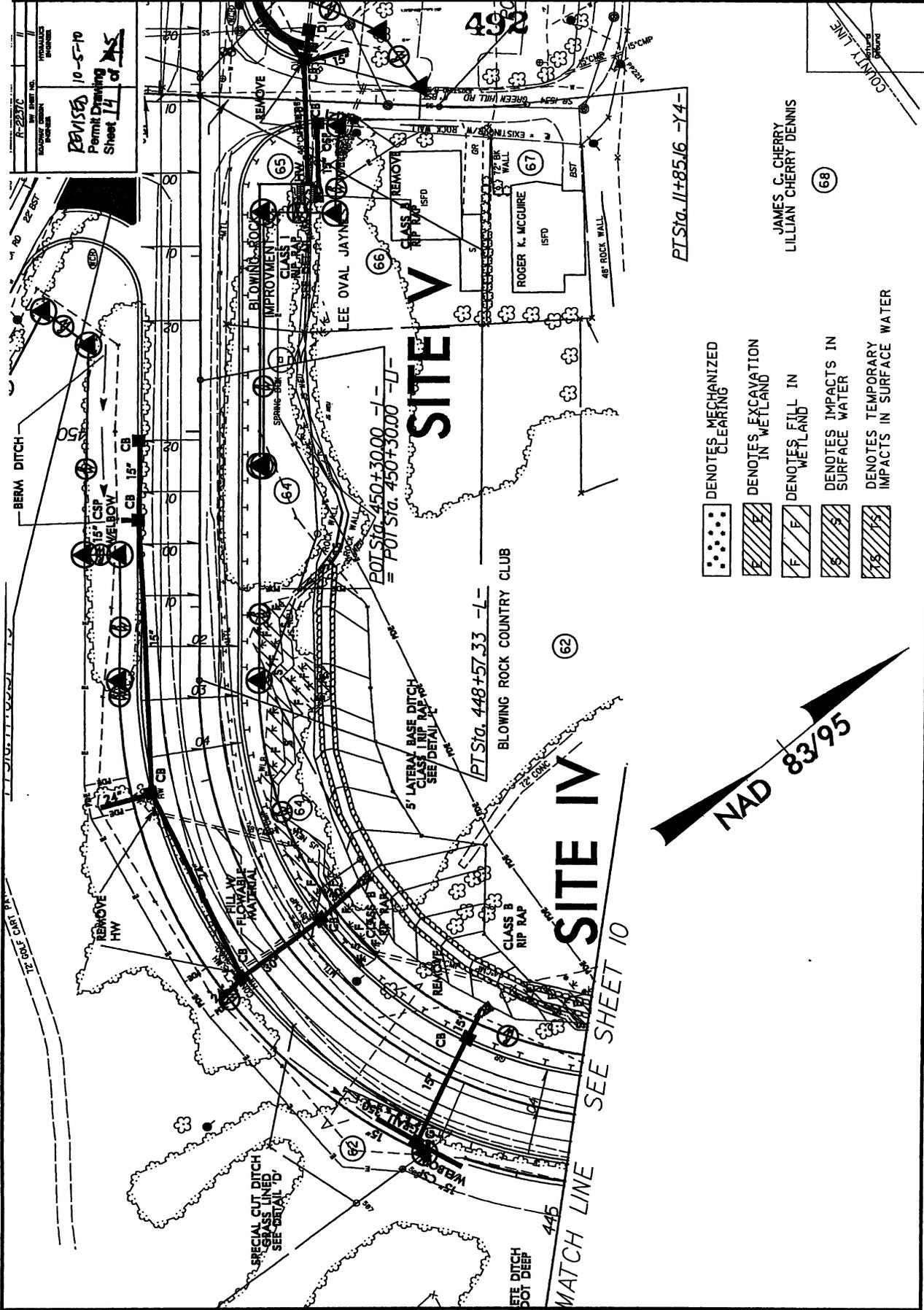
- REMOVED/REMOVED
- REMOVED/REMOVED
- REMOVED/REMOVED
- REMOVED/REMOVED
- REMOVED/REMOVED



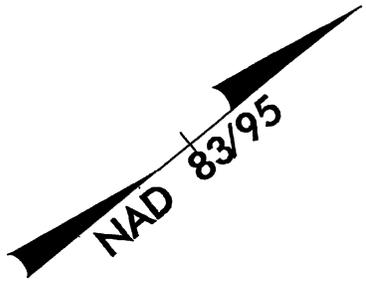
THE REVISION CONSISTS OF CHANGING THE RIGHT OF WAY ON PARCEL 69.

REVISIONS

F-227C
 SHEET NO.
 PROJECT
 DRAWING
 DATE
 REVISIONS
 10-5-10
 Permit Drawing
 Sheet 14 of 15



- DENOTES MECHANIZED CLEARING
- DENOTES EXCAVATION IN WETLAND
- DENOTES FILL IN WETLAND
- DENOTES IMPACTS IN SURFACE WATER
- DENOTES TEMPORARY IMPACTS IN SURFACE WATER



JAMES C. CHERRY
 LILLIAN CHERRY DENNIS

(68)

PT Sta. 11+85.16 -Y4-

SITE IV

SITE V

SEE SHEET 10

MATCH LINE

SEE DITCH DETAIL 'D'

PT Sta. 448+57.33 -L-

POT Sta. 450+30.00 -I-
PT Sta. 450+30.00 -I-

SPECIAL CUT DITCH GRASS LINED SEE DETAIL 'D'

FILL W/ FLOWABLE MATERIAL

REMOVE HW

REMOVE 15' CSF VELBOW

BERM DITCH

BLOWING ROCK COUNTRY CLUB

LEE OVAL JAYNE

ROGER K. MCGUIRE

JAMES C. CHERRY
LILLIAN CHERRY DENNIS

492

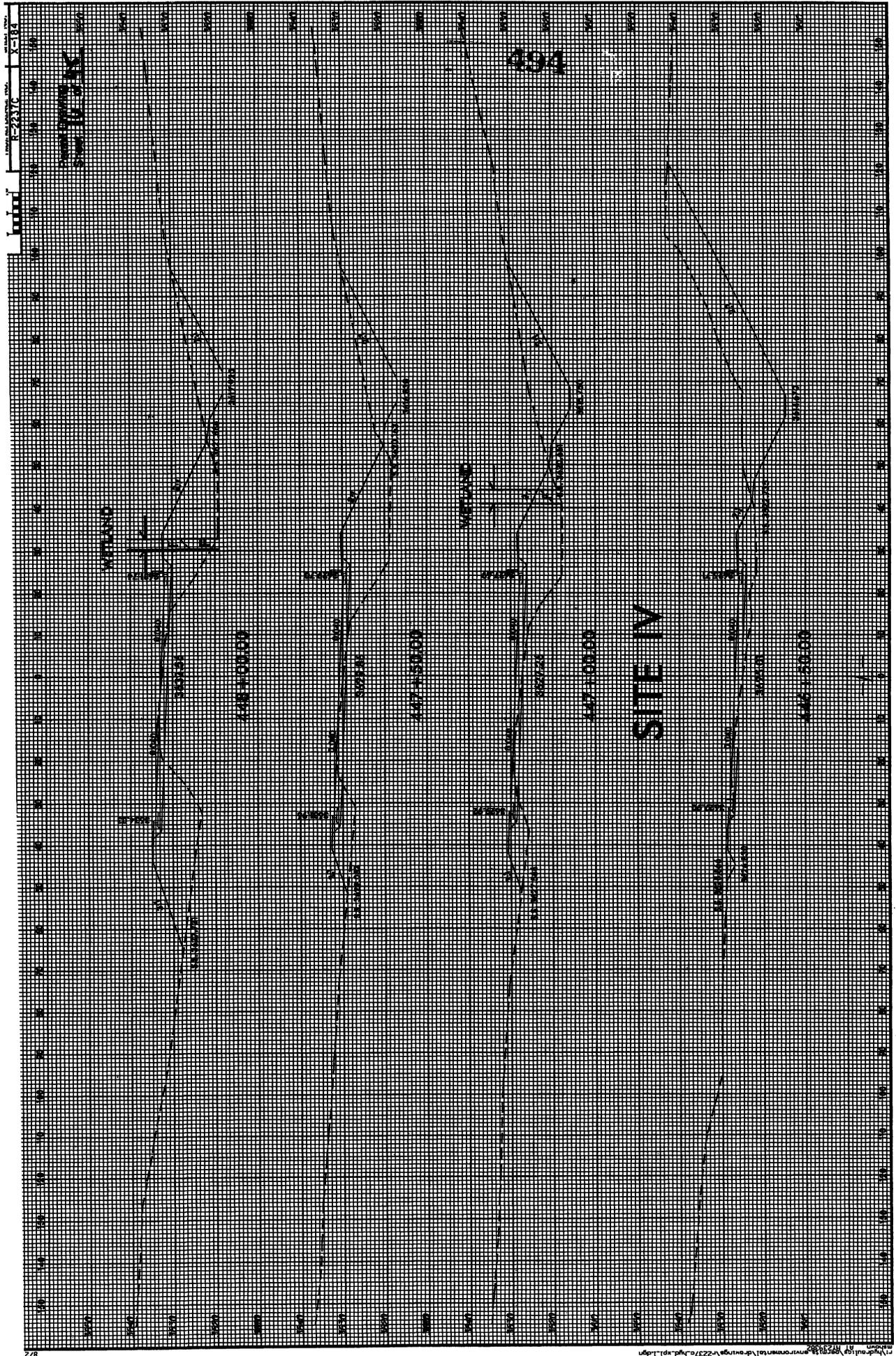
445

445

445

445

445



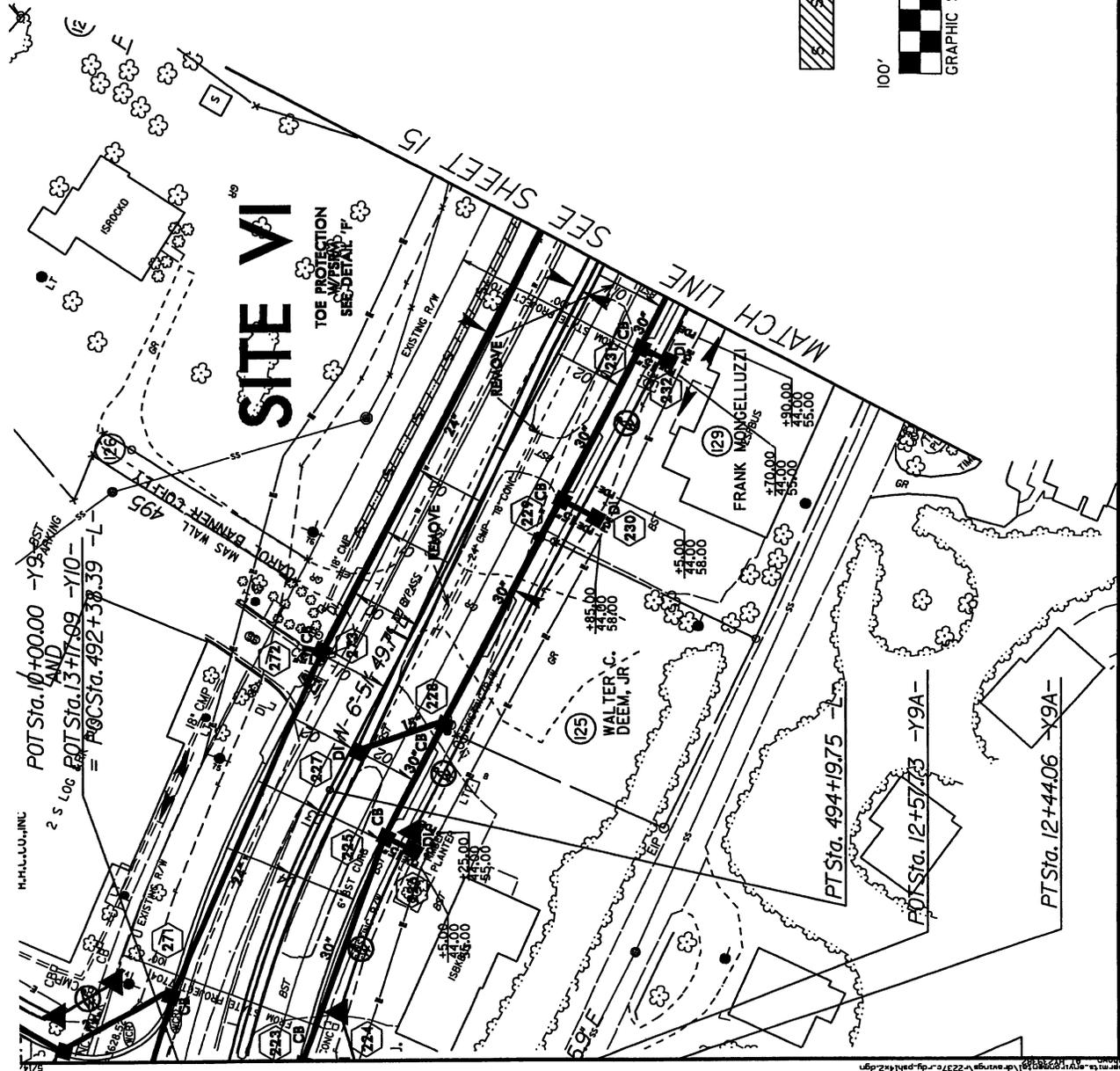
PROJECT NO.	14
SHEET NO.	4
DATE	1/14
BY	HYDRAULIC ENGINEER
CHECKED BY	HYDRAULIC ENGINEER
APPROVED BY	HYDRAULIC ENGINEER

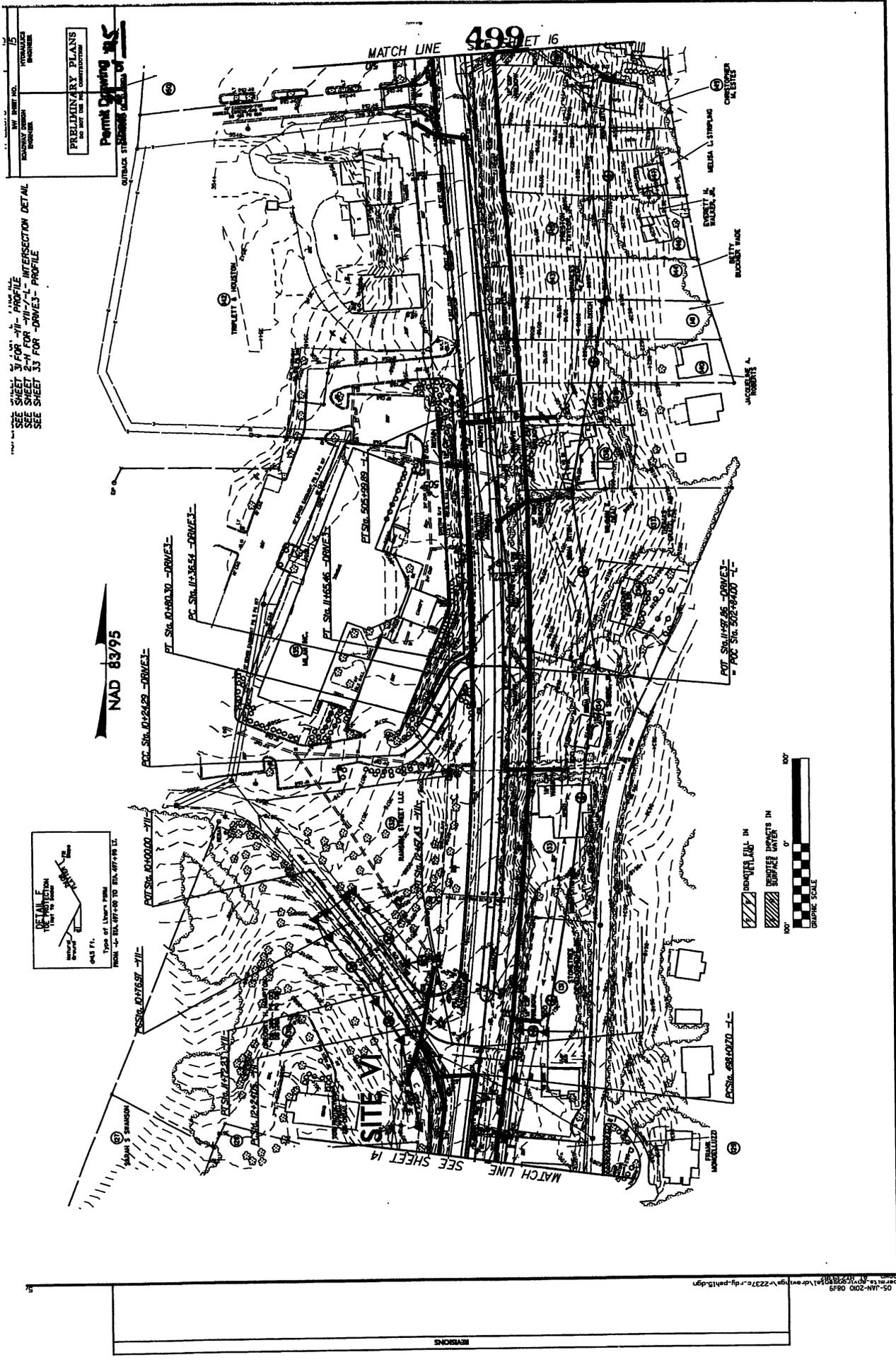
Permit Drawing
Sheet 14 of 45

497



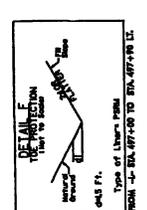
DENOTES IMPACTS IN
SURFACE WATER





SEE SHEET 31 FOR -VI- PROFILE
 SEE SHEET 2-H FOR -VI-7-1- INTERSECTION DETAIL
 SEE SHEET 33 FOR -DRIVE-3- PROFILE

Permit Drawing INC
 PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

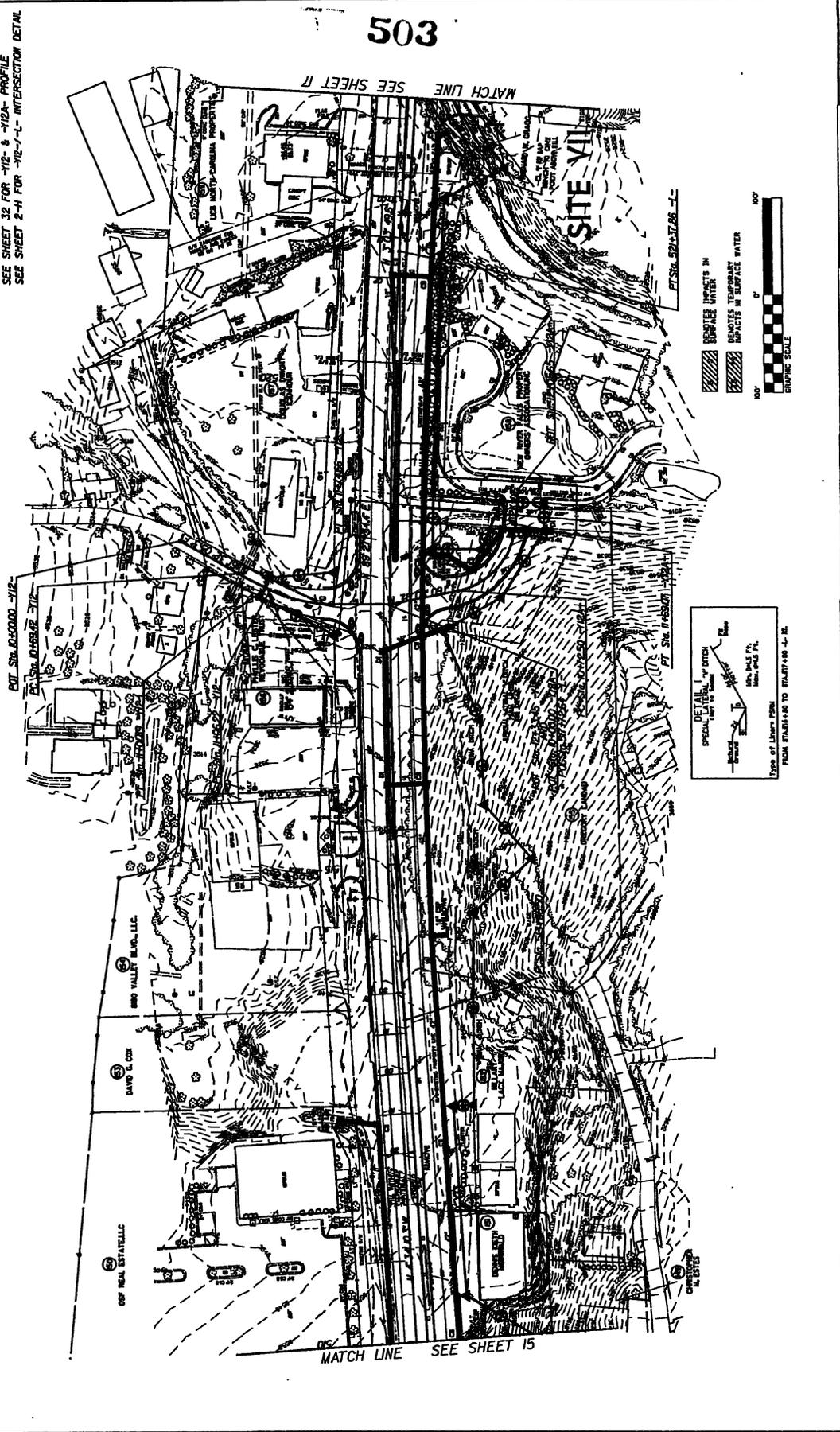


PROJECT NO.	10-5-10
DATE	8/3/95
DESIGNER	DAVID G. COE
CHECKER	DAVID G. COE
DATE	8/3/95
PROJECT NO.	10-5-10
DATE	8/3/95
DESIGNER	DAVID G. COE
CHECKER	DAVID G. COE
DATE	8/3/95

REVISED 10-5-10
 Permit Drawing
 Sheet 25 of 45

NAD 83/95

NOTE: SEE SHEETS 27 & 28 FOR "L" PROFILE
 SEE SHEET 32 FOR "1/2" & "1/2A" PROFILE
 SEE SHEET 2-11 FOR "1/2-1/2" INTERSECTION DETAIL

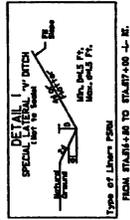


503

MATCH LINE SEE SHEET 11

SITE VII

PT. STA. 62+12.86 -L-



FROM STAIRCASE TO STAIRCASE -L- 82.

MATCH LINE SEE SHEET 15

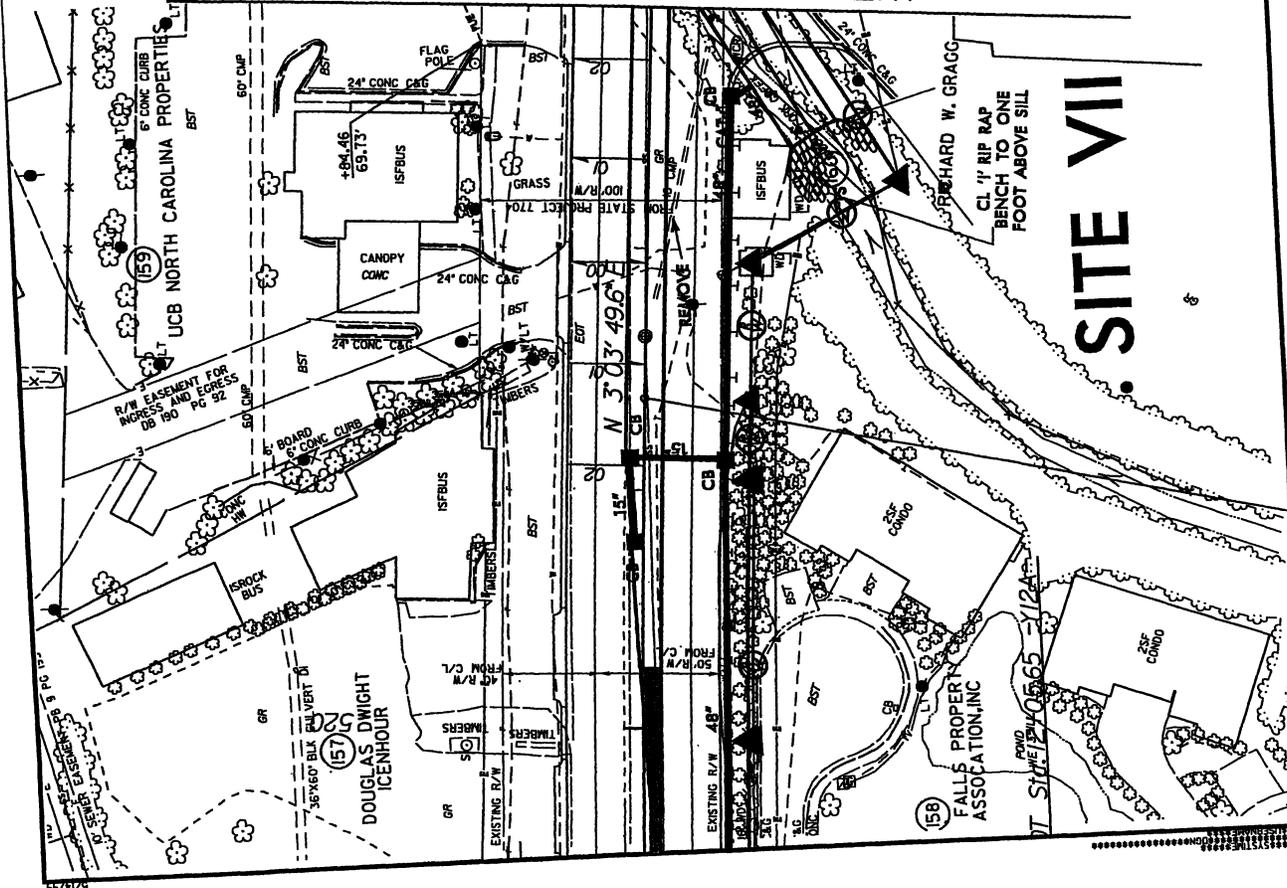
REVISIONS

17-2237C	16
DATE	16
BY	16
CHECKED	16
APPROVED	16
PROJECT NUMBER	

REVISED 10-5-10
 Permit Drawing
 Sheet 26 of 43



MATCH LINE SEE SHEET 17

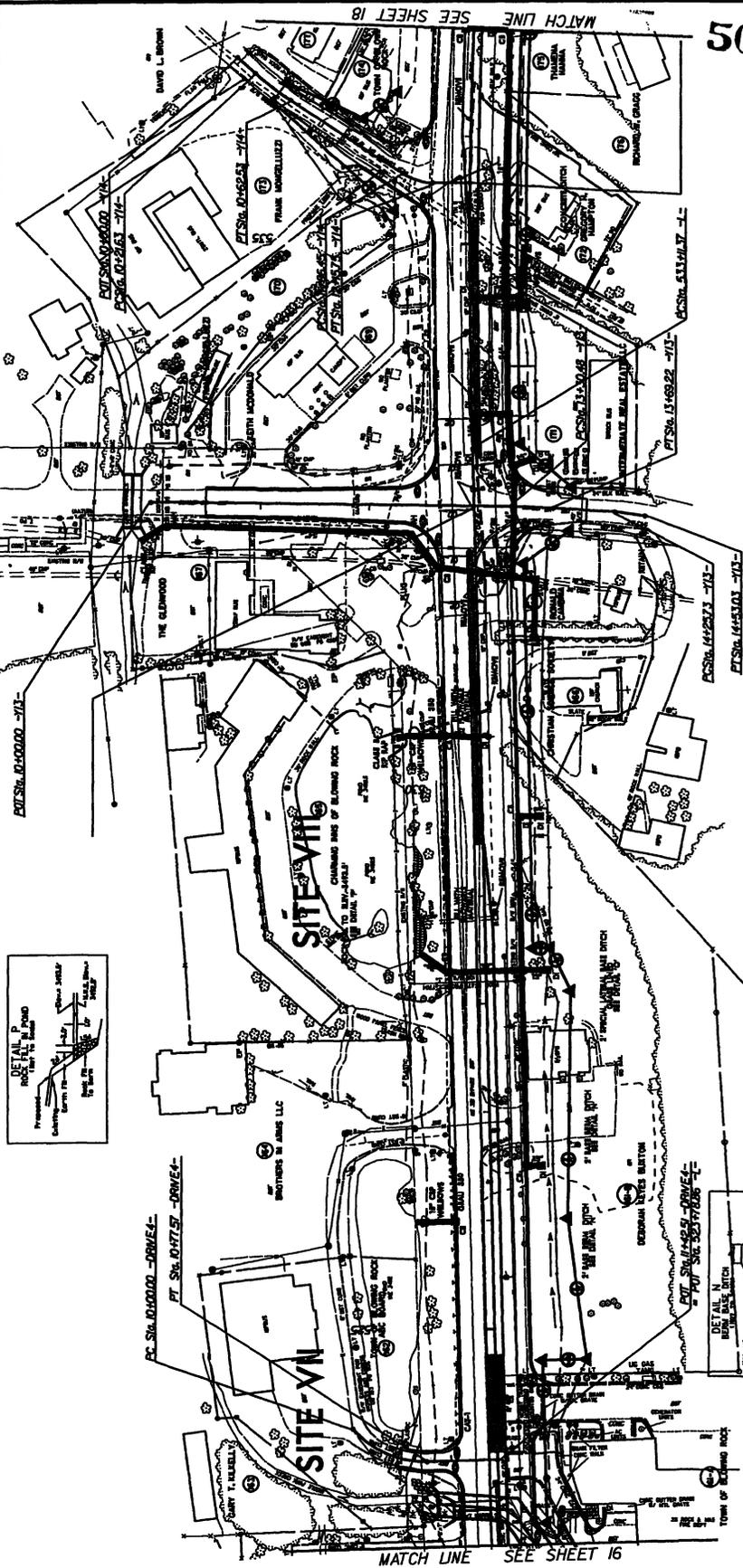


SITE VII

PROJECT NUMBER NO.	12-22-17
DATE	12-22-17
BY	DAVID L. BROWN
CHECKED BY	DAVID L. BROWN
APPROVED BY	DAVID L. BROWN
PRELIMINARY PLANS FOR THE CITY OF CHICAGO	

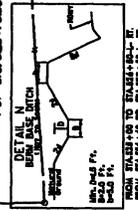
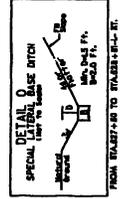
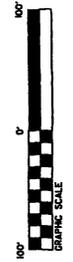
REVISED
Paving Drawing
Sheet 27 of 45

NAD 83/95



505

- REMOTE EXCAVATION
- REMOTE IMPACTS IN SURFACE WATER
- IMPACTS IN SURFACE WATER



NOTE: SEE SHEET 28 FOR -L- PROFILE
SEE SHEET 32 FOR -Y13- & -Y14- PROFILE
SEE SHEET 2-1 FOR -Y13- & -Y14-/-L- INTERSECTION DETAILS
SEE SHEET 38 FOR -DRIVE 4- PROFILE

MATCH LINE SEE SHEET 16

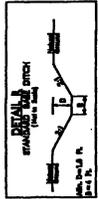
MATCH LINE SEE SHEET 18

NOT TO SCALE
 SEE SHEET 19 FOR 415-10 PROFILE
 SEE SHEET 21 FOR 415-11 INTERSECTION DETAIL

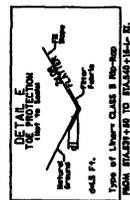
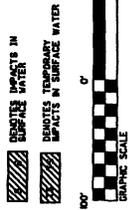
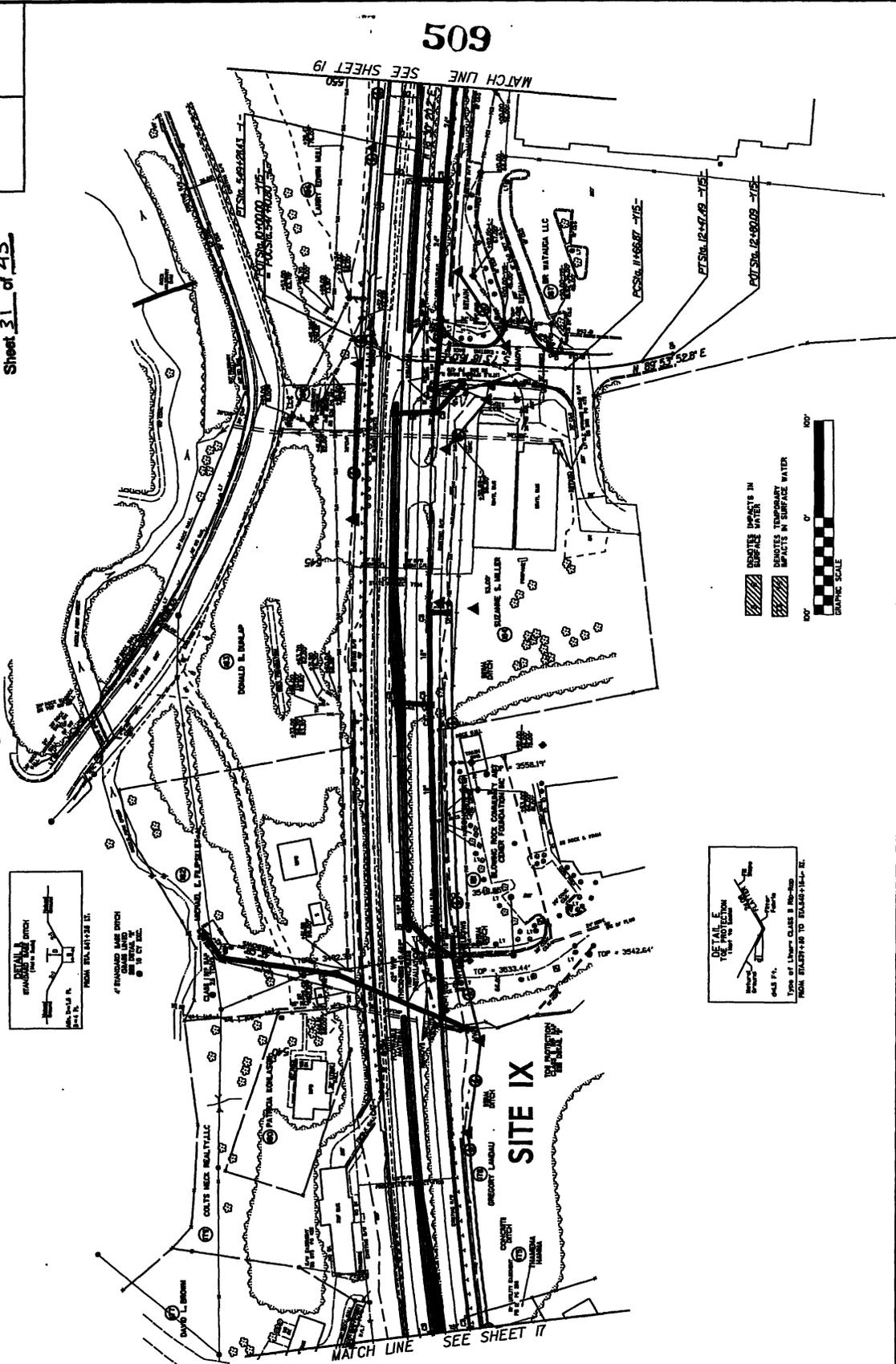
PROJECT NO. 10-5-10	DATE 10/15/95
DESIGNER HYDRAULICS ENGINEER	PROJECT NO. 10-5-10
PRELIMINARY PLANS TO BE USED FOR CONSTRUCTION	

REVISIONS 10-5-10
 Permit Drawing
 Sheet 31 of 415

NAD 83/95



FRONT LANE DITCH
 FROM EXISTING TO NEW DITCH
 @ 10 FT WIDE



509

MATCH LINE SEE SHEET 19

MATCH LINE SEE SHEET 17

SITE IX

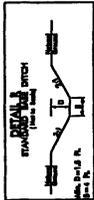
R-2237C	18
REV SHEET NO.	18
PROJECT NO.	10-5-10
DATE	10/5/10
DESIGNED BY	CONSTRUCTION
CHECKED BY	
APPROVED BY	

PRELIMINARY PLANS
IN ACCORDANCE WITH
CONSTRUCTION

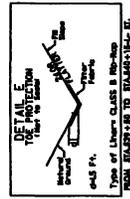
NOTE: SEE SHEETS 28 & 29 FOR -L- PROFILE
SEE SHEET 32 FOR -Y5- PROFILE
SEE SHEET 2-1 FOR -Y5-/-L- INTERSECTION DETAIL

DESIGNED 10-5-10
Permit Drawing
Sheet 32 of 45

NAD 83/95

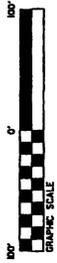


4' REINFORCED BASE DITCH
CONCRETE LINED
18" x 18" BLOCKS
18' WIDE AT TOP
18' DEEP



DETAIL E
THE PROTECTION
FOR THE SLOPE
4' REINFORCED BASE DITCH
CONCRETE LINED
18" x 18" BLOCKS
18' WIDE AT TOP
18' DEEP
Type of Liner: CLASS B 180-200
FROM 8/27/10 TO 10/14/10, E.T.

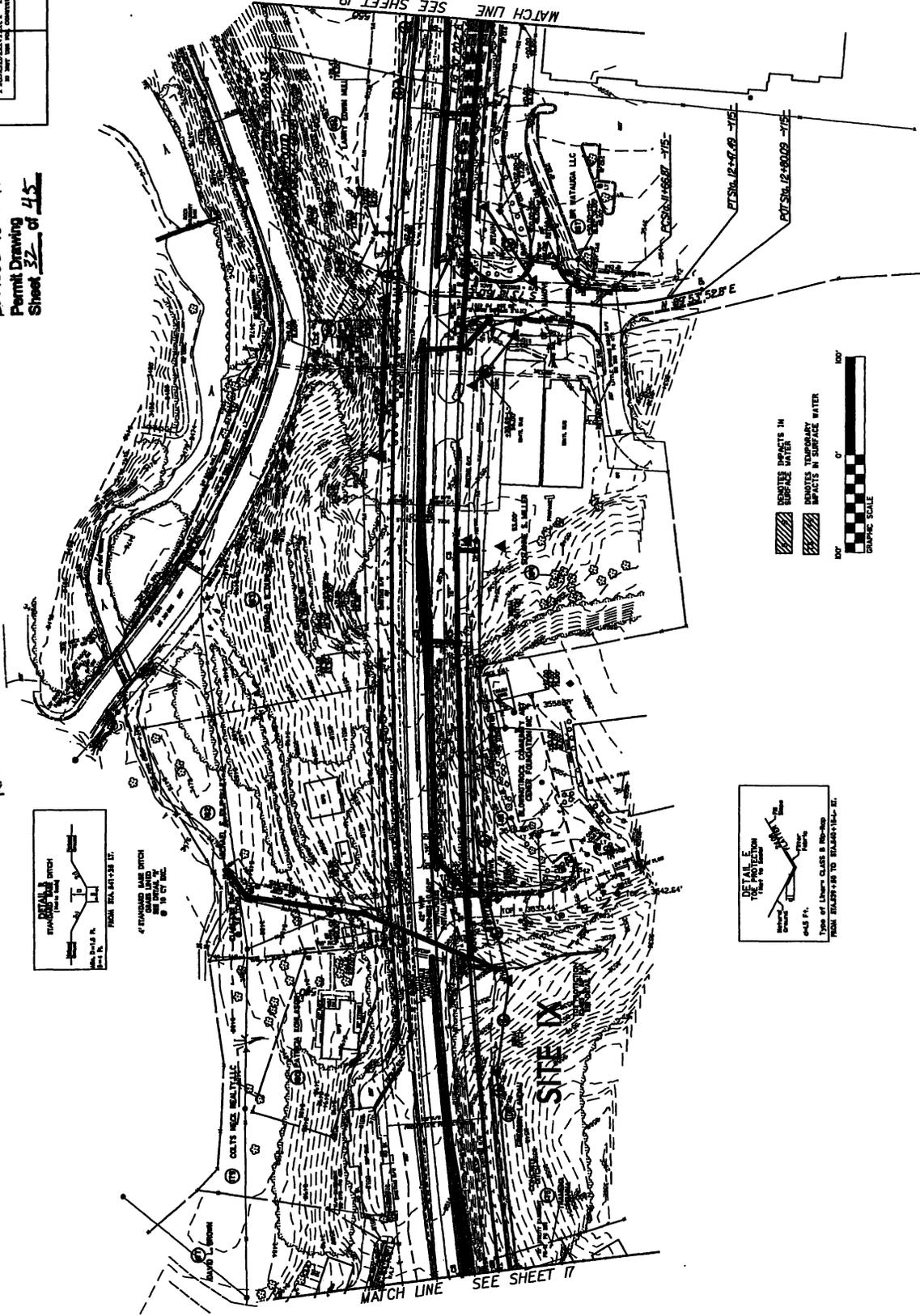
IMPACTS IN SURFACE WATER
IMPACTS IN SURFACE WATER



510

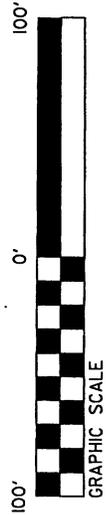
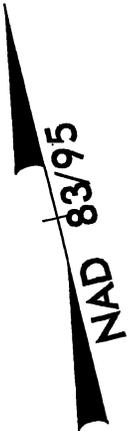
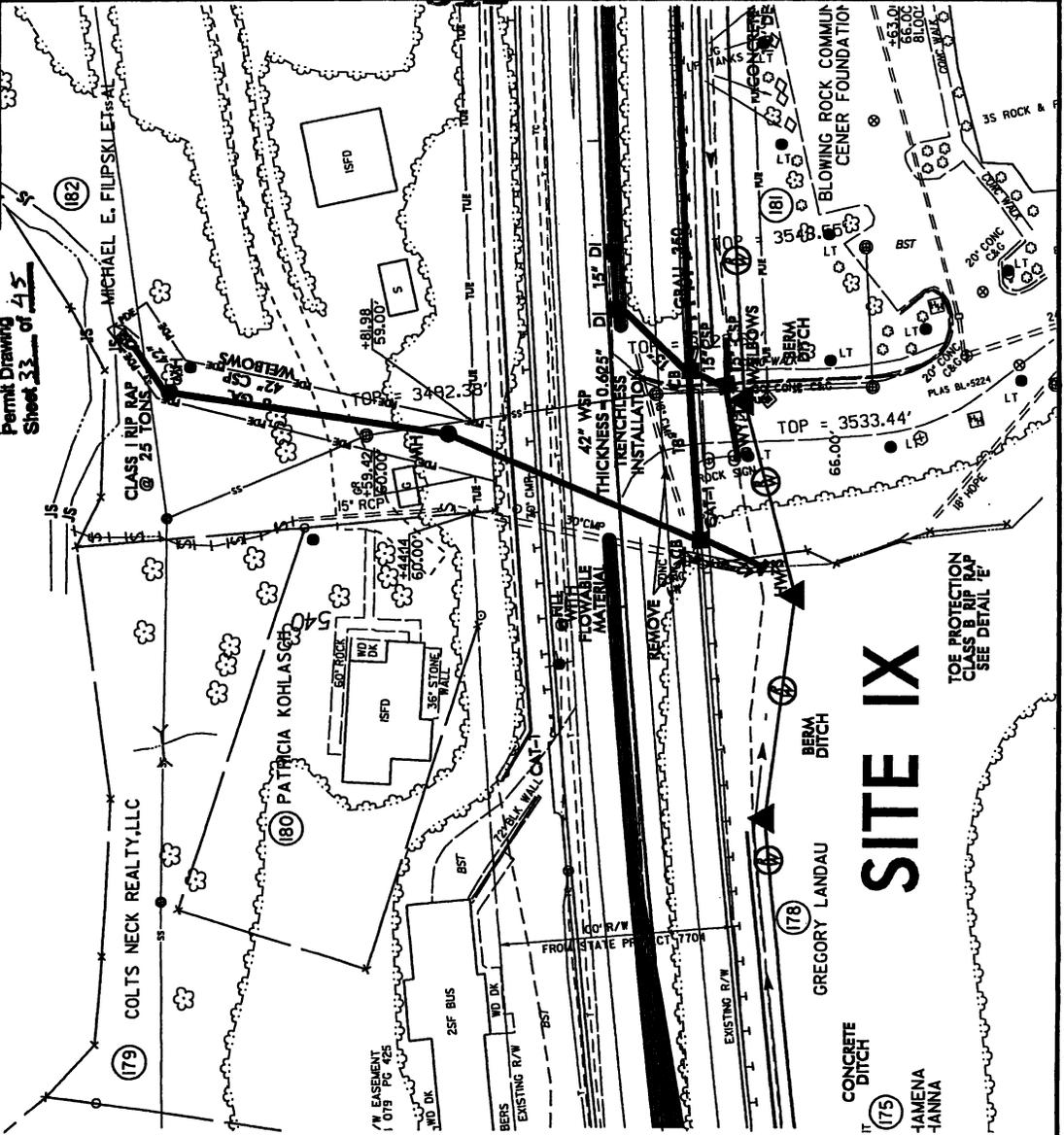
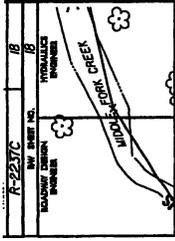
MATCH LINE SEE SHEET 19

MATCH LINE SEE SHEET 17



FROM STA. 541+25 LT.

4' STANDARD BASE DITCH
GRASS LINED
SEE DETAIL 'R'
@ 10 CY EXC.
REVISED 10-5-10
Permit Drawing
Sheet 33 of 45



SITE IX

CONCRETE DITCH (175)
JAMENA
-JANNA

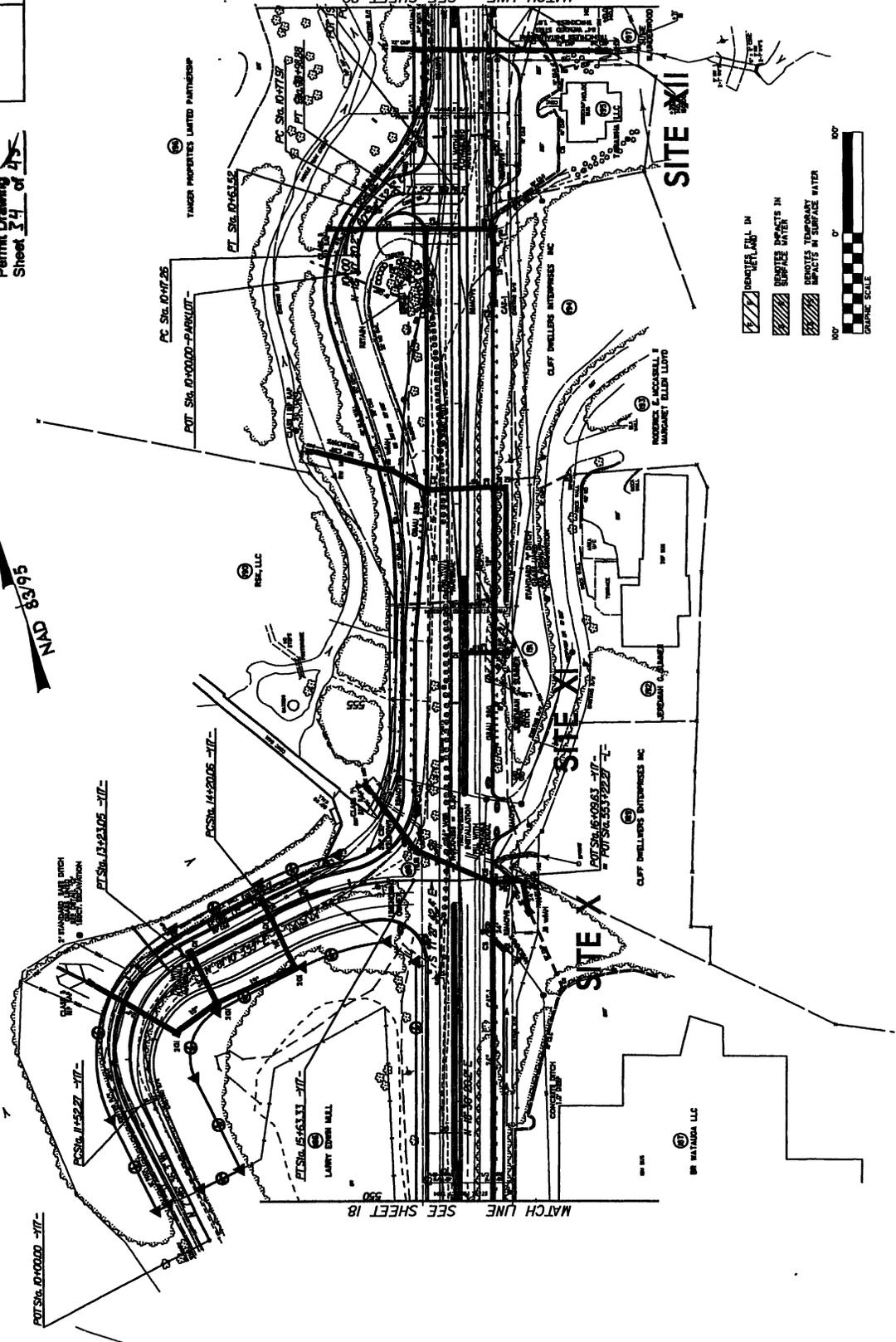
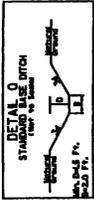
TOE PROTECTION
CLASS B RIP RAP
SEE DETAIL 'E'

512

PROJECT NO.	19
DATE	12/19
BY	HYDRAULICS
CHECKED BY	HYDRAULICS
SCALE	AS SHOWN
PRELIMINARY PLANS DO NOT CONSIDER FOR CONSTRUCTION	

NOTE: SEE SHEET 20 FOR 1'- PROFILE
SEE SHEET 33 FOR 1/4" - PROFILE
SEE SHEET 2-1 FOR 1/4" - 1/2" INTERSECTION DETAIL

REVISED 10-5-10
Permit Drawing
Sheet 34 of 45



REMOVED CAN. IN
 REMOVED IMPACTS IN SURFACE WATER
 REMOVED TEMPORARY IMPACTS IN SURFACE WATER
 0' 10' 20' 30' 40' 50' 60' 70' 80' 90' 100'
 GRAPHIC SCALE

MATCH LINE SEE SHEET 20

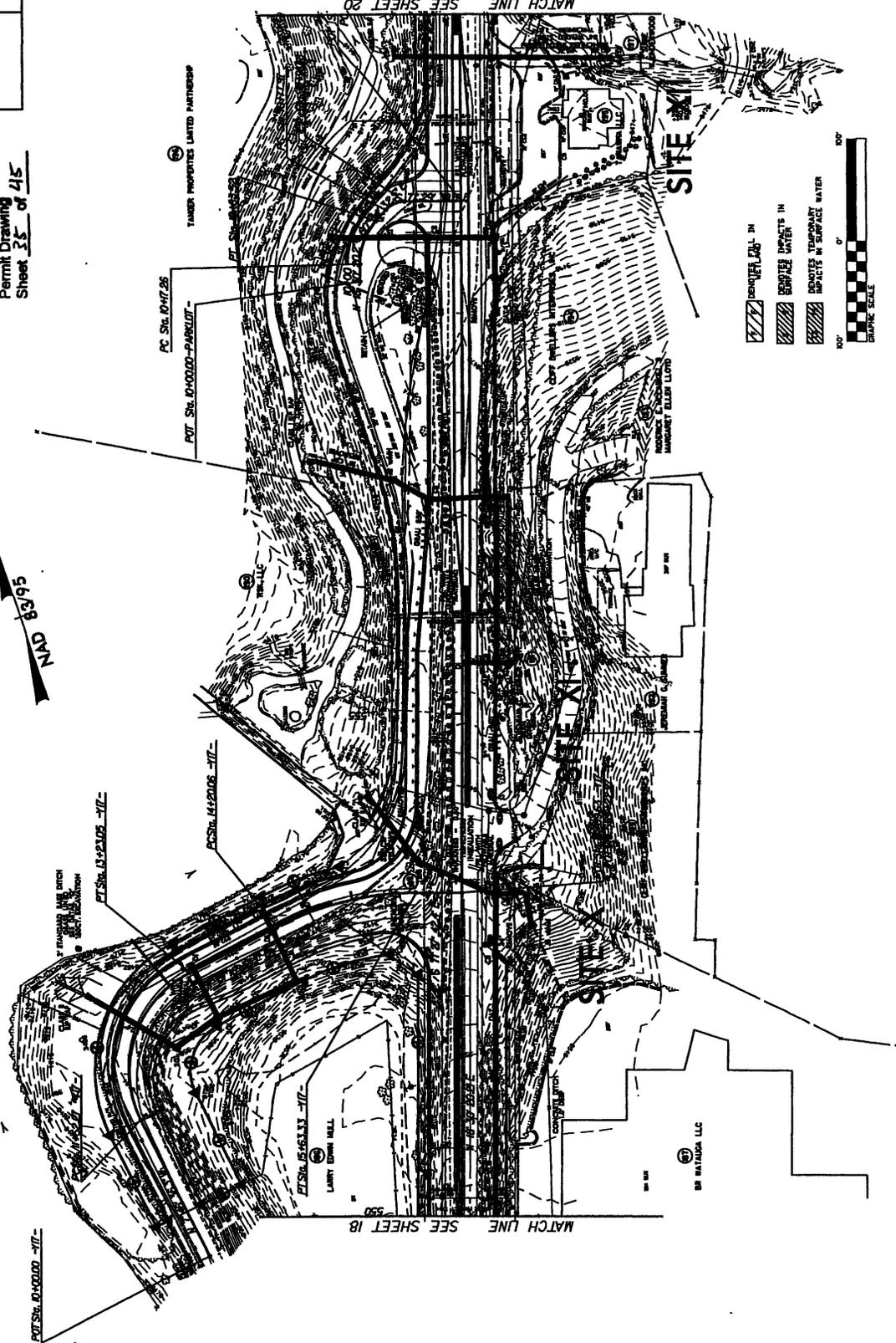
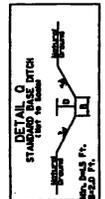
MATCH LINE SEE SHEET 18

PROJECT NO.	10
DATE	10
DESIGNER	WALSH
OWNER	WALSH

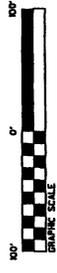
PRELIMINARY PLANS
IN ACCORDANCE WITH

NOTE: SEE SHEET 29 FOR L- PROFILE
SEE SHEET 33 FOR -117- PROFILE
SEE SHEET 2-1 FOR -117-/-L- INTERSECTION DETAIL

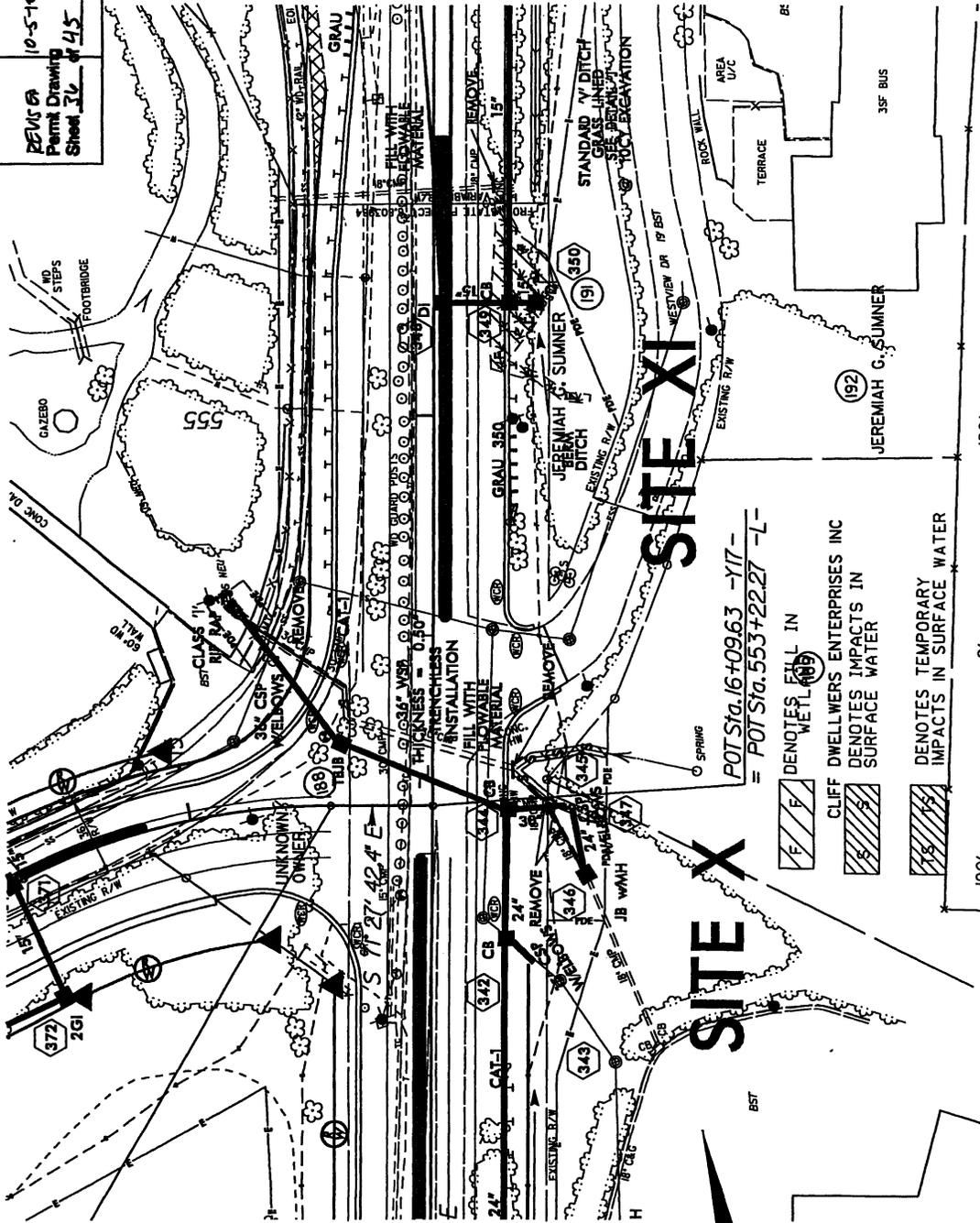
REVISED 10-5-10
Permit Drawing
Sheet 35 of 45



- WETLAND IN
- WETLAND OUT
- TEMPORARY IMPACTS IN
- TEMPORARY IMPACTS OUT



PROJECT NAME	514
DATE	10-5-10
BY	PERMIT DRAWING
CHECKED BY	SHEET NO. 24
DESIGNED BY	PROJECT NO. 415
APPROVED BY	

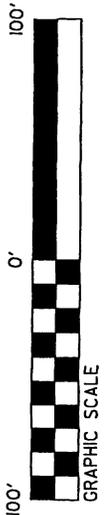


SITE XI

SITE X

POT Sta. 16+09.63 -Y17-
= POT Sta. 553+22.27 -L-

-  DENOTES FILL IN WETLAND
-  CLIFF DWELLERS ENTERPRISES INC DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER



NAD 83/95

MATCH LINE SEE SHEET 18

R-2237C	19
Permit Drawing Sheet 11 of 11	19

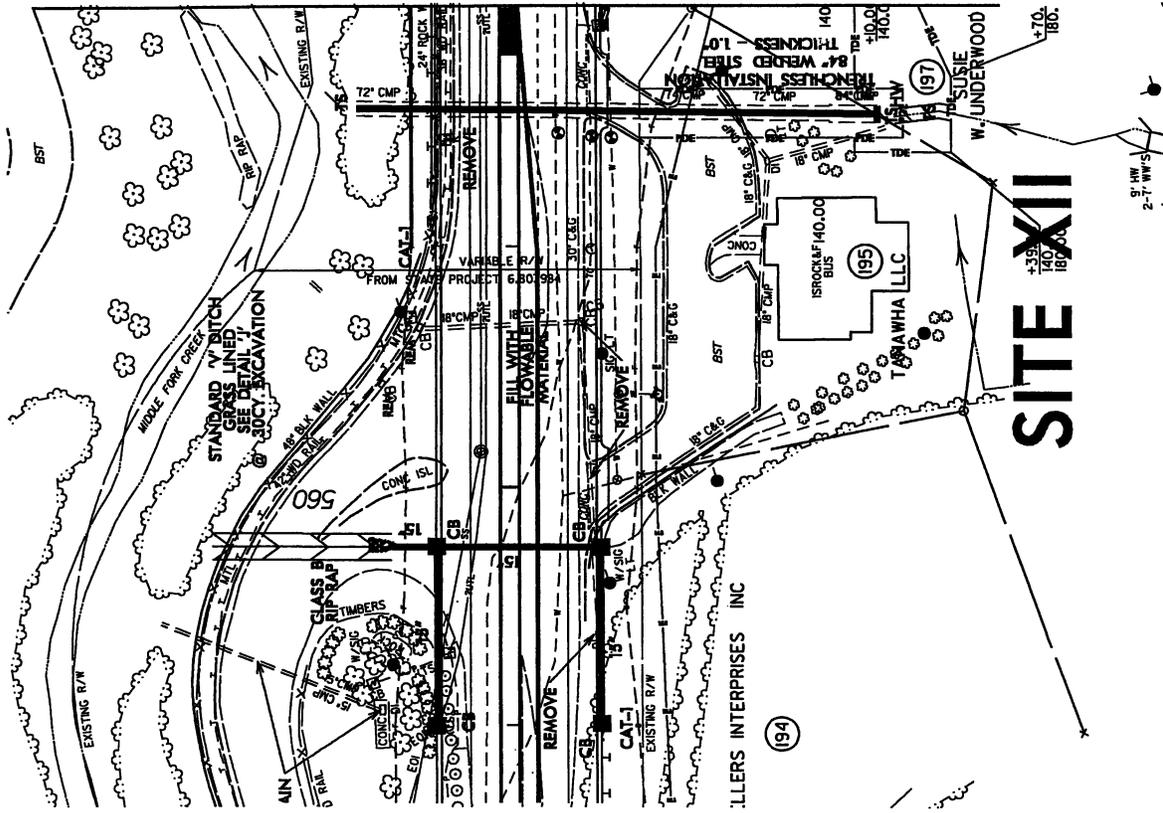
515

NAD 83/95

-  DENOTES IMPACTS IN SURFACE WATER
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER



MATCH LINE SEE SHEET 20



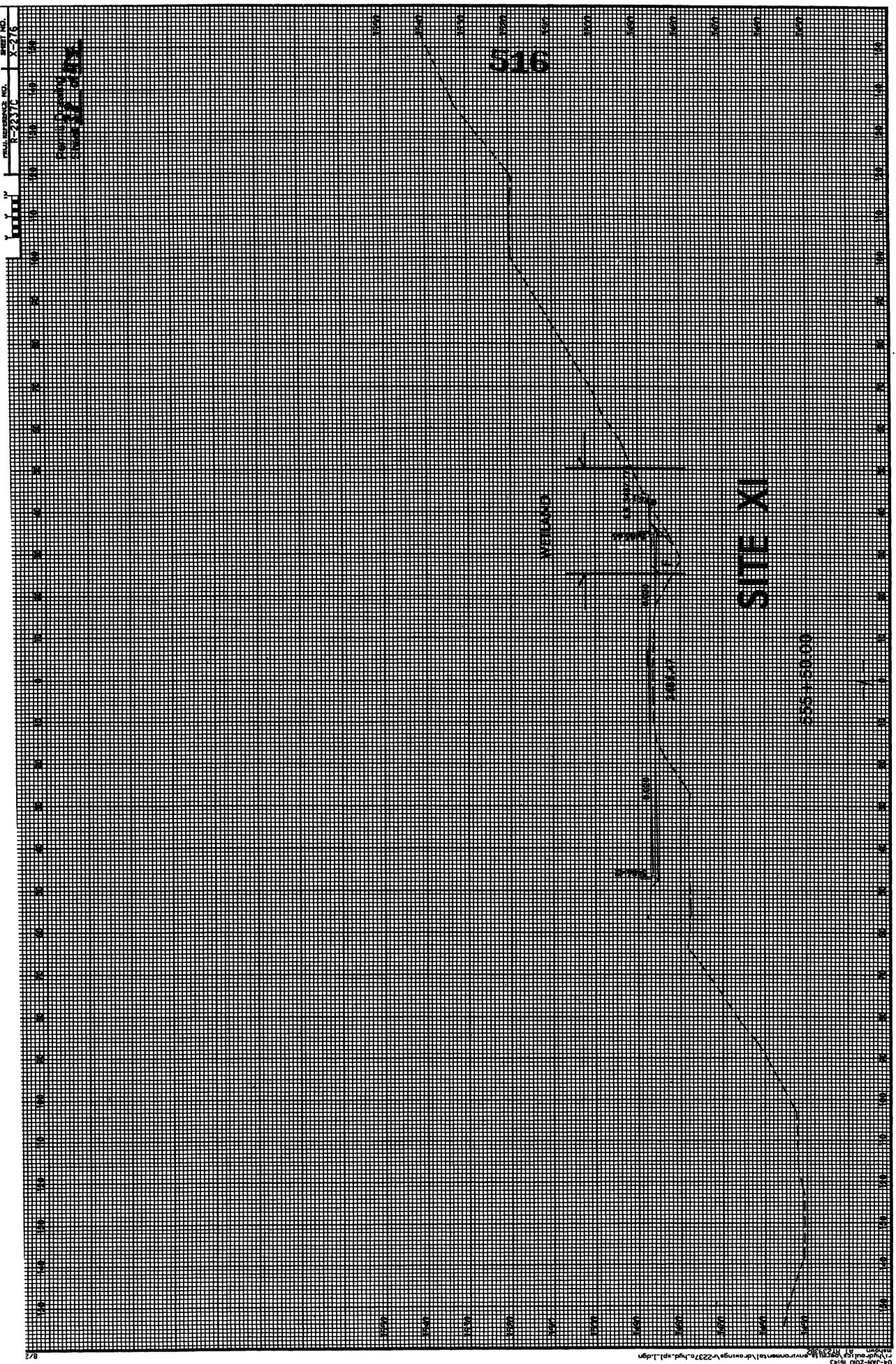
SITE XII

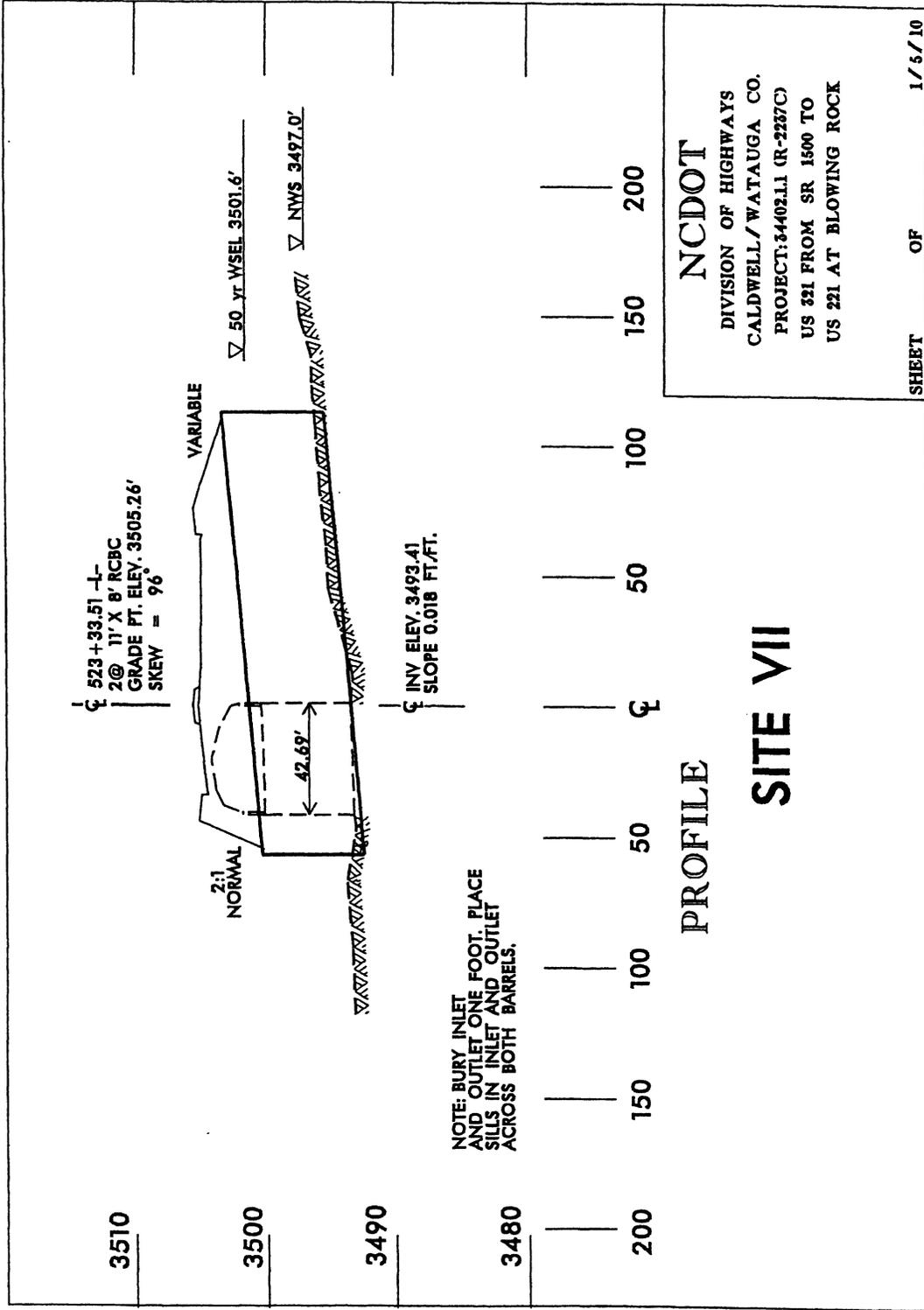
516

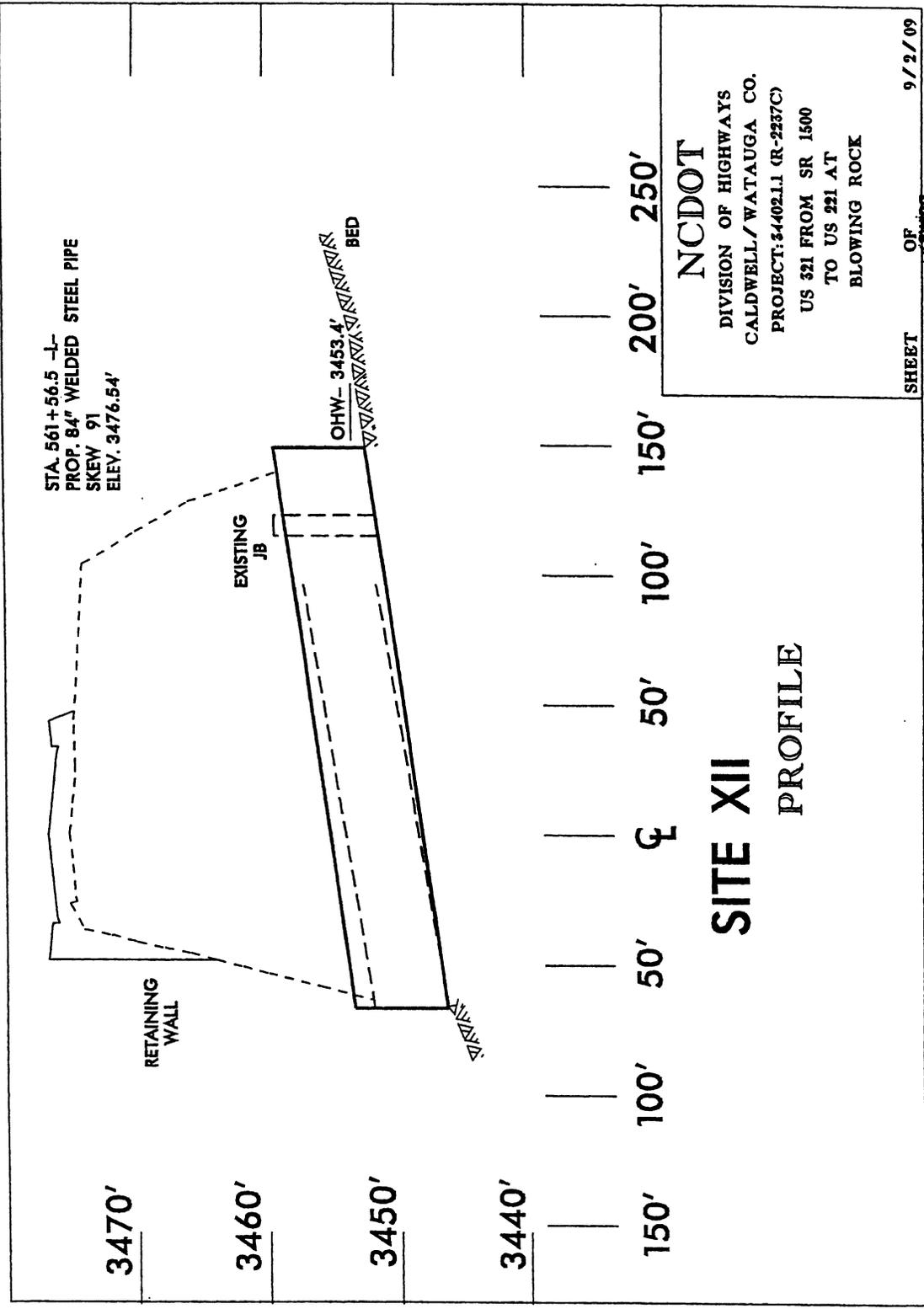
516

SITE XI

00000000







NCDOT
 DIVISION OF HIGHWAYS
 CALDWELL/WATAUGA CO.
 PROJECT: 4402.L1 (R-2237C)
 US 321 FROM SR 1500
 TO US 221 AT
 BLOWING ROCK

SHEET 41 OF 95 OF DRAWING 9/2/09

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
32	DONALD FABIAN VINCENT	315 CAMELTOWN HILL RD. DANVILLE, PA 17821
36	NEAL C. FORD	4708 BILLS LANE LENOIR, NC 28645
62	BLOWING ROCK COUNTRY CLUB	P.O. BOX 628 BLOWING ROCK, NC 28605
65	BLOWING ROCK IMPROVEMENT CO.	P.O. BOX 905 BLOWING ROCK, NC 28605
66	LEE OVAL JAYNES	314 HUFFMAN ST. MORGANTON, NC 28655
	NCDOT	P.O. BOX 250 NORTH WILKESBORO, NC 28659
130	GEORGE H. HAMPTON	P.O. BOX 1849 BLOWING ROCK, NC 28605
160	RICHARD W. GRAGG	P.O. BOX 12 BLOWING ROCK, NC 28605
161-A	TOWN OF BLOWING ROCK	1036 MAIN ST. BLOWING ROCK, NC 28605
162	TOWN OF BLOWING ROCK ABC BOARD	7960 VALLEY BLVD. BLOWING ROCK, NC 28605
164	BROTHERS IN ARMS LLC	226 MULBERRY ST. NW LENOIR, NC 28645
165	CHARMING INNS OF BLOWING ROCK	18 BROAD ST. (SUITE 400) CHARLESTON, SC 29401
178	GREGORY LANDAU	16425 COLLINS AVE. (APT. 291) NORTH MIAMI BEACH, FL 33160
181	BLOWING ROCK COMMUNITY ART CENTER FOUNDATION INC.	P.O. BOX 1009 BLOWING ROCK, NC 28605

NCDOT

DIVISION OF HIGHWAYS
CALDWELL/ WATAUGA CO.

PROJECT: 34402.11 (R-2237C)

US 321 FROM SR 1500

TO US 221 AT

BLOWING ROCK

SHEET

OF

1/24/09

Final Drawing
Sheet 42 of 45

PROPERTY OWNERS
NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
182	MICHAEL FILIPSKI	7890 EVERSFIELD RD. STOKESDALE, NC 27357
187	BR WATAUGA LLC	600 GREEN VALLEY RD. (SUITE 202) GREENSBORO, NC 27404
189	CLIFF DWELLERS ENTERPRISES INC.	5885 N. ROSE BARK WAY BEVERLY HILLS, FL 33465
191	JEREMIAH G. SUMNER	P.O. BOX 2125 BLOWING ROCK, NC 28605
195	TANAWHA LLC	P.O. BOX 2701 BLOWING ROCK, NC 28605
197	SUSIE W. UNDERWOOD	148 POSSUM HOLLOW RD. BLOWING ROCK, NC 28605

NCDOT
 DIVISION OF HIGHWAYS
 CALDWELL/ WATAUGA CO.
 PROJECT: 34402.L1 (R-2227C)
 US 321 FROM SR 1500
 TO US 221 AT
 BLOWING ROCK

SHEET OF 11/24/09

with Drawing
 sheet 43 of 45

WETLAND PERMIT IMPACT SUMMARY															
Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS							
			Permanent Fill In Wetlands (ec)	Temp. Fill In Wetlands (ec)	Excavation In Wetlands (ac)	Mechanized Clearing In Wetlands (ac)	Hand Clearing In Wetlands (ac)	Permanent SW Impacts (ac)	Temp. SW Impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)			
I	385+70 TO 389+45 -L-	24" CSP									0.02	<0.01	294	36	
II	403+30 -L-	36" CSP									0.01	<0.01	119	33	
III	442+00 TO 444+00 -L-	54" RCP BANK STABILIZATION FILL IN STREAM	0.01			0.02					0.01	0.01	150	43	
IV	444+65 TO 449+50 -L-		0.07		0.02	0.01					0.03	0.01	317	46	
V	451+40 -L-	BANK STABILIZATION									<0.01	<0.01	22	6	
VI	495+20 TO 498+15 -L-		0.01								0.03		294		
VII	523+33.5 -L-	2 @ 11'x8' RCBC BANK STABILIZATION			0.01						0.04	0.01	128	26	
VIII	528+40 TO 530+50 -L-	30" RCP 15" CSP											32		
TOTALS:			0.09		0.03	0.03					0.15	0.04	1429	190	

REVISED 10-5-10
Permit Drawing Sheet 44 of 45

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
CALDWELL/WATAUGA COUNTIES
WBS - 34402.1.1 (R-2237C)

10/5/2010

SHEET

ATTN: Revised 2010

WETLAND PERMIT IMPACT SUMMARY												
WETLAND IMPACTS						SURFACE WATER IMPACTS						
Site No.	Station (From/To)	Structure Size / Type	Permanent Fill in Wetlands (ac)	Temp. Fill in Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW Impacts (ac)	Temp. SW Impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
IX	540+20+	42" WELDED STEEL PIPE						0.01	<0.01	133	10	
X	553+50-L-	30" RCP						0.01	<0.01	59	19	
XI	555+50-L-	15" RCP	0.04					<0.01	<0.01	25	19	
XII	561+56-L-	84" WELDED STEEL PIPE							0.01		45	
TOTALS:			0.04					0.02	0.02	217	93	
GRAND TOTALS			0.13	0.03	0.03	0.03	0.17	0.05	1646	283		

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 CALDWELL/WATAUGA COUNTIES
 WBS - 34402.1.1 (R-2237C)

REVISED 10-5-10
 Permit Drawing
 Sheet 45 of 45

10/5/2010

SHEET

ATN Road 30108