

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 107-13 of the *2012 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:

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
151 PATTON AVENUE
ROOM 208
ASHEVILLE, NORTH CAROLINA 28801-5006

March 12, 2013

Regulatory Division

Action ID: SAW-2012-01175/SAW-2009-1452 TIP no. R-2246 B

North Carolina Department of Transportation
Dr. Gregory J. Thorpe
1598 Mail Service Center
Raleigh, North Carolina 27699

Dear Dr. Thorpe:

In accordance with your written request of October 18, 2013 and the ensuing administrative record, enclosed are two copies of a permit to discharge fill material into jurisdictional waters of the U.S. in association with the construction of an NC DOT road project known as George Liles Parkway (TIP no. R-2246 B), in Cabarrus County, North Carolina.

Permanent impacts to jurisdictional streams, wetlands, and ponds will be the result of roadway fill, the installation and/or replacement of pipes and culverts, the creation of low-flow benches with associated bank stabilization at the inlet and outlets of culverts, and the placement of rip rap for bank stabilization. Total permanent impacts to jurisdictional waters of the U.S. are 1,377 linear feet of stream channels, 0.27 acre of wetlands, and 0.01 acre open water (pond). Temporary impacts include 209 linear feet of stream channel.

You should acknowledge that you accept the terms and conditions of the enclosed permit by signing and dating each copy in the spaces provided ("Permittee" on page 3). Your signature, as permittee, indicates that, as consideration for the issuance of this permit, you voluntarily accept and agree to comply with all of the terms and conditions of this permit. All pages of both copies of the signed permit with drawings should then be returned to this office for final authorization. A self-addressed envelope is enclosed for your convenience.

This correspondence contains a proffered permit for the above described site. If you object to this decision, you may request an administrative appeal under Corps regulations at 33 CFR part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this decision you must submit a completed RFA form to the following address:

District Engineer, Wilmington Regulatory Division
Attn: Ms. Liz Hair
69 Darlington Avenue
Wilmington, North Carolina 28403

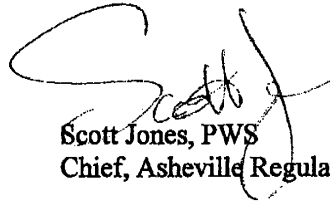
In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete; that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by May 13, 2013.

It is not necessary to submit an RFA form to the Division Office if you do not object to the decision in contained in this correspondence.

After the permit is authorized in this office, the original copy will be returned to you; the duplicate copy will be permanently retained in this office. If you have questions, please contact Ms. Liz Hair at the Asheville Regulatory Field Office, telephone 828-271-7980, extension 225.

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our website at <http://per2.nwp.usace.army.mil/survey.html> and completing the survey on-line. We value your comments and appreciate your taking the time to complete a survey each time you interact with our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Jones", is written over the typed name and title.

Scott Jones, PWS
Chief, Asheville Regulatory Field Office

Enclosures

Applicant: North Carolina Department of Transportation; Dr. Gregory J. Thorpe	File Number: SAW-2012-01175/SAW-2009-1452	Date: March 12, 2013
Attached is:	See Section below	
<input checked="" type="checkbox"/> INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
<input type="checkbox"/> PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
<input type="checkbox"/> PERMIT DENIAL	C	
<input type="checkbox"/> APPROVED JURISDICTIONAL DETERMINATION	D	
<input type="checkbox"/> PRELIMINARY JURISDICTIONAL DETERMINATION	E	

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the district engineer. This form must be received by the division engineer within 60 days of the date of this notice.

<p>E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.</p>		
<p>REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)</p>		
<p>ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.</p>		
<p>If you have questions regarding this decision and/or the appeal process you may contact:</p> <p>District Engineer, Wilmington Regulatory Division, Attn: Liz Hair Project Mgr USACE 151 Patton Avenue, Room 208 Asheville, NC 28801</p>	<p>If you only have questions regarding the appeal process you may also contact:</p> <p>Mr. Jason Steele, Administrative Appeal Review Officer CESAD-PDO U.S. Army Corps of Engineers, South Atlantic Division 60 Forsyth Street, Room 10M15 Atlanta, Georgia 30303-8801 Phone: (404) 562-5137</p>	
<p>RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.</p>		
<p>_____ Signature of appellant or agent.</p>	<p>Date:</p>	<p>Telephone number:</p>

For appeals on Initial Proffered Permits send this form to:

District Engineer, Wilmington Regulatory Division, Attn: Liz Hair Project Mgr, 69 Darlington Avenue, Wilmington, North Carolina 28403

For Permit denials, Proffered Permits and approved Jurisdictional Determinations send this form to:

**Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Jason Steele, Administrative Appeal Officer, CESAD-PDO, 60 Forsyth Street, Room 10M15, Atlanta, Georgia 30303-8801
Phone: (404) 562-5137**

**U.S. ARMY CORPS OF ENGINEERS
Wilmington District
Compensatory Mitigation Responsibility Transfer Form**

Permittee: North Carolina Department of Transportation
Project Name: R-2246 B George Liles Parkway

Action ID: SAW-2012-01175
County: Cabarrus

Instructions to Permittee: The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Ecosystem Enhancement Program (NCEEP), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

Instructions to Sponsor: The Sponsor must verify that the mitigation requirements shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the appropriate ledger and provide a copy of the signed form to the Permittee and to the USACE Bank/In-Lieu Fee Program Manager. The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

Permitted Impacts and Compensatory Mitigation Requirements:

Permitted Impacts Requiring Mitigation*			8-digit HUC and Basin: 03040105, Yadkin River Basin			
Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
1,285				0.27		

*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements:			8-digit HUC and Basin: 03040105, Yadkin River Basin			
Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-riverine	Non-Riparian	Coastal
2,570				0.54		

Mitigation Site Debited: NCEEP

(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCEEP, list NCEEP. If the NCEEP acceptance letter identifies a specific site, also list the specific site to be debited).

Section to be completed by the Mitigation Sponsor	
<p>Statement of Mitigation Liability Acceptance: I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCEEP), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.</p>	
Mitigation Sponsor Name: _____	
Name of Sponsor's Authorized Representative: _____	
Signature of Sponsor's Authorized Representative	Date of Signature

DEPARTMENT OF THE ARMY PERMIT

Permittee **North Carolina Department of Transportation**

Permit No. **SAW-2012-01175**

Issuing Office **CESAW-RG-A**

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 that office acting under the authority of the commanding officer.

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

Project Description: **In order to facilitate construction of George Liles Parkway TIP no. R-2246 B permanent impacts to jurisdictional streams, wetlands, and ponds will be the result of roadway fill, the installation and/or replacement of pipes and culverts, the creation of low-flow benches with associated bank stabilization at the inlet and outlets of culverts, and the placement of rip rap for bank stabilization. Total permanent impacts to jurisdictional waters of the U.S. are 1,377 linear feet of stream channels, 0.27 acre of wetlands, and 0.01 acre open water (pond). Temporary impacts include 209 linear feet of stream channel.**

Project Location: **Cabarrus County, North Carolina**

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 Condition 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 is 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.

SPECIAL CONDITIONS

Action ID: SAW-2012-01175/SAW-2009-1452

Work Limits

- a) All work authorized by this permit must be performed in strict compliance with the attached plans, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.
- * b) The permittee shall schedule a preconstruction meeting between its representatives, the contractor's representatives, and the Corps of Engineers, Asheville 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, Asheville 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.
- c) 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.
- d) 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.

Related Laws

- e) The North Carolina Division of Water Quality has issued a conditioned Water Quality Certification (Number 3947) on January 3, 2013, for your project, the conditions of that certification are hereby incorporated as special conditions of this permit. For your convenience, a copy of the certification is attached as Exhibit A. These referenced conditions are hereby incorporated as special conditions of this permit.
- f) 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 (919) 733-5083, Ext. 526 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

Project Maintenance

- * g) 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.
- h) 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.
- i) 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.
- j) 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).
- k) 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.
- l) 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-erodible materials. Grubbing of riparian vegetation will not occur until immediately before construction begins on a given segment of stream channel.
- m) 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.
- n) 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.

Enforcement

- o) 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.
- * p) 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 Engineers, Asheville Regulatory Field Office prior to any active construction in waters or wetlands.
- q) 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, Asheville Regulatory Field Office NCDOT Regulatory Project Manager. Half-size drawings will be acceptable.
- r) 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.
- s) 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.
- t) 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.

- u) The permittee shall take measures to prevent live or fresh concrete from coming into contact with any surface waters until the concrete has hardened.

Mitigation

v) In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization. Additional onsite mitigation: The NCDOT will remove a 72" Corrugated metal pipe (CMP) which carries an unnamed tributary to Coddle Creek at permit site 2. Pipe removal results in 54 linear feet of daylighted stream channel. NC DOT will match the stream and floodplain grades with the existing upstream and downstream conditions per Detail KK submitted with the Monitoring Plan for R-2246 B site 2 (Plan). NC DOT will replant the affected area with native vegetation in accordance with the streambank reforestation sheets 1 and 2 of the Plan. NC DOT will visually monitor the site for a minimum of 3 years, but not more than 5 years, to ensure channel stability and that the site successfully re-vegetates after planting. An as-built channel survey to document dimension, pattern, and profile shall be submitted to the USACE post construction at site 2 and the NC DOT shall submit to the USACE photographic documentation, plant survival and channel stability data annually for 3 years. (see attached Nov 13, 2013 email from Liz Hair, USACE)

Barrett, William A

From: Lancaster, Jamie J
Sent: Wednesday, March 13, 2013 12:19 PM
To: Barrett, William A
Subject: RE: R-2246B 404 draft Conditions (UNCLASSIFIED)

Sounds good to me.

Jamie J. Lancaster, PE
PDEA – Natural Environment Section
Natural Environment Engineering Group

NC Department of Transportation
PDEA – Natural Environment Section
1598 Mail Service Center
Century Center Building B
1020 Birch Ridge Drive
Raleigh, NC 27699-1598

919-707-6131 (office)
919-212-5785 (fax)

-----Original Message-----

From: Barrett, William A
Sent: Wednesday, March 13, 2013 12:18 PM
To: Lancaster, Jamie J
Subject: FW: R-2246B 404 draft Conditions (UNCLASSIFIED)

Jamie,

Can you review Liz's clarification to Condition V before I give to Elizabeth.

Thanks
Bill

-----Original Message-----

From: Hair, Sarah E SAW [mailto:Sarah.E.Hair@usace.army.mil]
Sent: Wednesday, March 13, 2013 12:15 PM
To: Barrett, William A
Subject: RE: R-2246B 404 draft Conditions (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Bill,

For clarification on R-2246 B Special Condition v. regarding the onsite mitigation monitoring requirement:

The NC DOT will submit an annual monitoring report which documents any issues with channel stability and vegetation survival along with photo documentation of the channel and any problem areas. No physical measurement of the channel or vegetation stem counts will be required. NCDOT as part of the as-built will complete a profile and cross-section of the channel. The profile and cross-section data can be used as a baseline if it is determined after the yearly monitoring report meeting that a problem has occurred and NC DOT will compare the cross-section and profile.

Please let me know if you need additional information or clarification on the above.

Thank you,

Liz Hair
Project Manager
Asheville Regulatory Field Office
U.S Army Corps of Engineers-Wilmington District
151 Patton Ave, Room 208
Asheville, NC 28805
828-271-7980 x.225
sarah.e.hair@usace.army.mil

The Wilmington District is committed to providing the highest level of public support. Please visit our website at: <http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram.aspx>

Please assist us in better serving you! Please complete the customer survey by clicking on the following link: <http://per2.nwp.usace.army.mil/survey.html>

-----Original Message-----

From: Barrett, William A [mailto:wabarrett@ncdot.gov]
Sent: Wednesday, March 13, 2013 10:53 AM
To: Hair, Sarah E SAW
Subject: FW: R-2246B 404 draft Conditions (UNCLASSIFIED)

Hi Liz,

Please see Jamie's e.mail below covering your recent discussion with him regarding clarification of condition V. As Elizabeth can't sign until we have clarification of the condition, we're hoping that you can provide an e.mail that provides the clarification, that we can attach to the permit. Is that something that you can provide expediently, or does that have to go through review on your end.

As you are aware of the time constraints, we're hoping that if you can send out the e.mail, that we can receive it today.

Thanks again for your help with this!

Bill

-----Original Message-----

From: Lancaster, Jamie J
Sent: Wednesday, March 13, 2013 10:43 AM

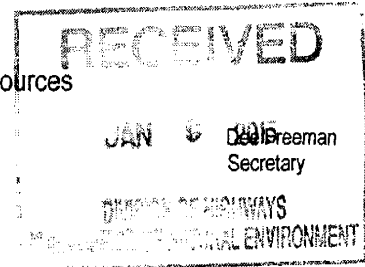
R-17



North Carolina Department of Environment and Natural Resources

Division of Water Quality
Charles Wakild, P.E.
Director

Beverly Eaves Perdue
Governor



January 3, 2012

Dr. Greg Thorpe, PhD., Manager
Project Development and Environmental Analysis
North Carolina Department of Transportation
1598 Mail Service Center
Raleigh, North Carolina, 27699-1598

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS for Proposed improvements to George Liles Parkway in Cabarrus County, TIP R-2246 B, NCDWQ Project No. 12-0969.

Dear Dr. Thorpe:

Attached hereto is a copy of Certification No. 3947 issued to The North Carolina Department of Transportation (NCDOT) dated January 3, 2012.

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

Sincerely,

A handwritten signature in black ink that appears to read "Charles Wakild".
Charles Wakild
Director

Attachments

cc: Liz Hair, US Army Corps of Engineers, Asheville Field Office (electronic copy only)
Chris Militscher, Environmental Protection Agency (electronic copy only)
Marella Buncick, NC Wildlife Resources Commission (electronic copy only)
Jason Elliott, NCDOT, Roadside Environmental Unit
Kelly Williams, Ecosystem Enhancement Program
Alan Johnson, NCDWQ, MRO Regional Office
File Copy

Transportation and Permitting Unit
1650 Mail Service Center, Raleigh, North Carolina 27699-1617
Location: 512 N. Salisbury St. Raleigh, North Carolina 27604
Phone: 919-807-6300 \ FAX: 919-807-6488
Internet: www.ncwaterquality.org

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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 and This certification authorizes the NCDOT to impact 0.27 acres of jurisdictional wetlands, 0.01 acre of open water, 1,377 linear feet of jurisdictional streams in Cabarrus County. The project shall be constructed pursuant to the application dated October 18, 2012. The authorized impacts are as described below:

Stream Impacts in the Yadkin-Pee Dee River Basin

Site	Permanent Fill in Intermittent Stream (linear ft)	Temporary Fill in Intermittent Stream (linear ft)	Permanent Fill in Perennial Stream (linear ft)	Temporary Fill in Perennial Stream (acre)	Total Stream Impact (linear ft)	Stream Impacts Requiring Mitigation (linear ft)
1			335	<0.01	335	335
2			38	<0.01	38	38
3			379	<0.01	339	339
4			416		416	416
5			209	<0.01	209	209
Total			1377	0.03	1377	1377

Total Stream Impact for Project: 1377 linear feet

Wetland Impacts in the Yadkin-Pee Dee River Basin

Site	Fill (ac)	Fill (temporary) (ac)	Excavation (ac)	Mechanized Clearing (ac)	Hand Clearing (ac)	Area under Bridge (ac)	Total Wetland Impact (ac)
1 (riparian)	0.04						0.04
4 (riparian)	0.12			0.01			0.13
5 (riparian)	0.09		0.02	0.02			0.13
Total	0.25		0.02	0.03			0.30

Total Wetland Impact for Project: 0.30 acres.

Open Water Impacts in the Yadkin-Pee Dee River Basin

Site	Permanent Fill in Open Waters (ac)	Temporary Fill in Open Waters (ac)	Total Fill in Open Waters (ac)
4	<< 0.01		<< 0.01
Total	<< 0.01		<< 0.01

The application provides adequate assurance that the discharge of fill material into the waters of the Yadkin-Pee Dee River Basin 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 October 18, 2012. 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 the impacts outlined above, 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. Unless otherwise approved in this certification, 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 downstream 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.
2. Pipes and culverts used exclusively to maintain equilibrium in wetlands, where aquatic life passage is not a concern, shall not be buried. These pipes shall be installed at natural ground elevation.
3. 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.
4. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification.
5. The use of rip-rap above the Normal High Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage.

6. 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.
7. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited.
8. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. In addition, all diversion ditches and fill slopes (> 3:1) shall be matted to prevent erosion and loss of sediment to Waters of the State.
9. All portions of the proposed project draining to 303(d) listed watersheds that are impaired due to turbidity shall be designed, constructed, and operated with sediment and erosion control measures that meet Design Standards in Sensitive Watersheds [15A NCAC 4B .0124]. 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.

All portions of the proposed project draining to 303(d) listed watersheds that are impaired due to biological criteria exceedances shall not discharge stormwater directly to surface waters. Stormwater shall be treated using appropriate best management practices (e.g., vegetated conveyances, constructed wetlands, detention ponds, etc.) prior to discharging to surface waters.

10. Compensatory mitigation for impacts to 1377 linear feet of streams at a replacement ratio of 1:1 is required by NCDWQ. Fifty-four (54) linear feet of compensatory mitigation for impacts to jurisdictional streams shall be provided by day lighting a stream at site #2 pursuant to the mitigation plan submitted in the application. The remaining mitigation requirements are to be conducted through the North Carolina Ecosystem Enhancement Program (EEP), and EEP has agreed to implement the mitigation for the project. EEP has indicated in a letter dated October 11, 2012 that they will assume responsibility for 1,339 linear of stream and 0.27 acres of wetland impacts satisfying the federal Clean Water Act compensatory mitigation requirements for the above-referenced project, in accordance with the EEP Mitigation Banking Instrument signed July 28, 2010 and in accordance with the Tri-Party MOA signed on July 22, 2003 and the Dual-Party MOA signed on April 12, 2004.
11. 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:
 - 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*.
 - 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.

- 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*.
 - The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
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. 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.
 14. During the construction of the project, no staging of equipment (or use of equipment) of any kind is permitted in waters of the U.S., or protected riparian buffers. In addition, 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.
 - * 15. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval.
 16. The Permittee shall report any violations of this certification to the Division of Water Quality within 24 hours of discovery.
 17. 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.
 - * 18. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer (or the authorized personnel) shall complete and return the enclosed "Certification of Completion Form" to notify NCDWQ when all work included in the 401 Certification has been completed.
 19. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If NCDWQ determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, NCDWQ may reevaluate and modify this certification.

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

R-22

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)431-3000, Facsimile: (919)431-3100

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

Mr. William Cary, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center

This the 3rd day of January 2012

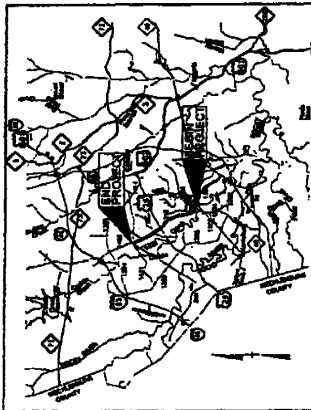
DIVISION OF WATER QUALITY



Charles Wakild
Director

WQC No.3947

See Sheet 1-A For Index of Sheets



VICINITY MAP

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
CABARRUS COUNTY

LOCATION: GEORGE LILES PARKWAY FROM SOUTH OF SR 1304 (ROBERTA ROAD) TO SR 1431 (WEDDINGTON ROAD)

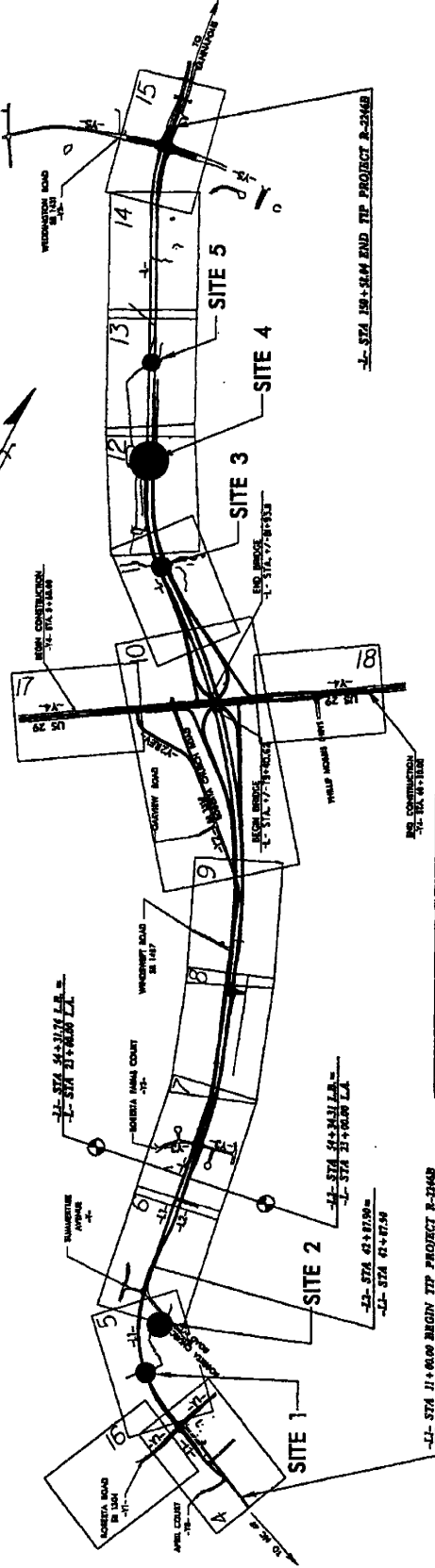
TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURES, AND SIGNALS



STATEWIDE TIER PROJECT

DATE	REVISED	BY	NO.
			1
N.C. R-2246B			
PROJECT NUMBER	DATE	BY	NO.
34408.1.1	03/03/14	PA	
34408.2.4	03/03/14	HW & UTIL	

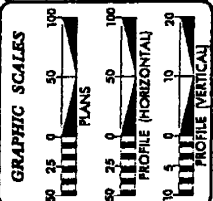
Permit Drawing
Sheet 1 of 27



NOTE: PART OF THIS PROJECT IS A PARTIAL CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS AS SHOWN ON THE PLANS AND THE OTHER PART IS A FULL CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.

CONTRACT SHALL BE PROVIDED BY PROPOSED

PRELIMINARY PLANS
DO NOT BE USED FOR CONSTRUCTION



DESIGN DATA

ADT 2013	= 22,852
ADT 2035	= 42,000
DIV	= 55 %
D	= 10 %
T	= 5 %
V	= 60 MPH
* TRST	1% DUAL 4% URBAN ARTERIAL

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2246B	= 3.189 MILES
LENGTH STRUCTURE TIP PROJECT R-2246B	= 0.048 MILES
TOTAL LENGTH TIP PROJECT R-2246B	= 3.237 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
1015 North Ridge Dr., Raleigh, NC, 27689

RIGHT OF WAY DATE	MARCH 18, 2011
LETTING DATE	APRIL 16, 2013

APPROVED BY:
G.E. BREW, PE
PROJECT ADDRESS
I.T. YOUNIS
PROPERTY DESIGN MANAGER

REGISTERED PROFESSIONAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER	J.E.
ROADWAY DESIGN ENGINEER	J.E.



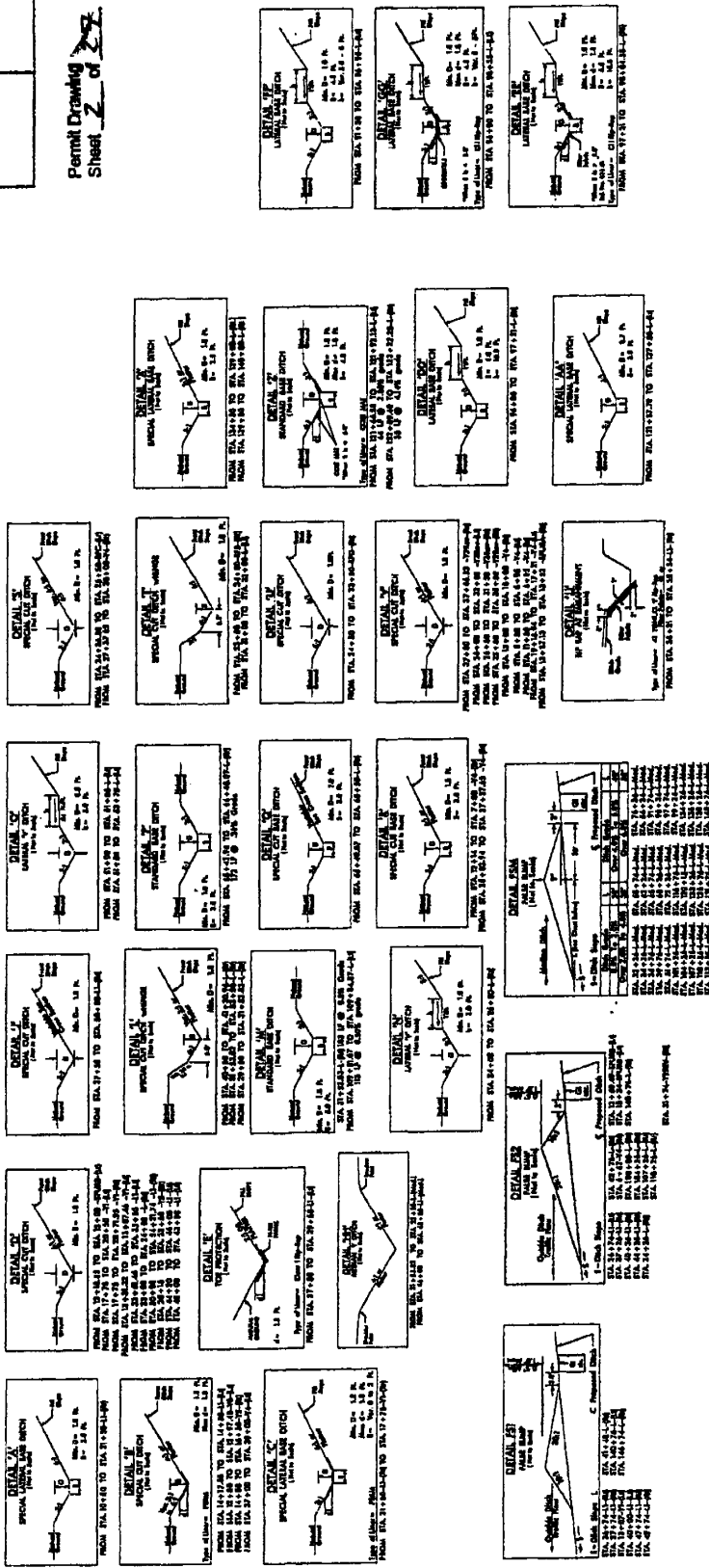
TIP PROJECT: R-2246B

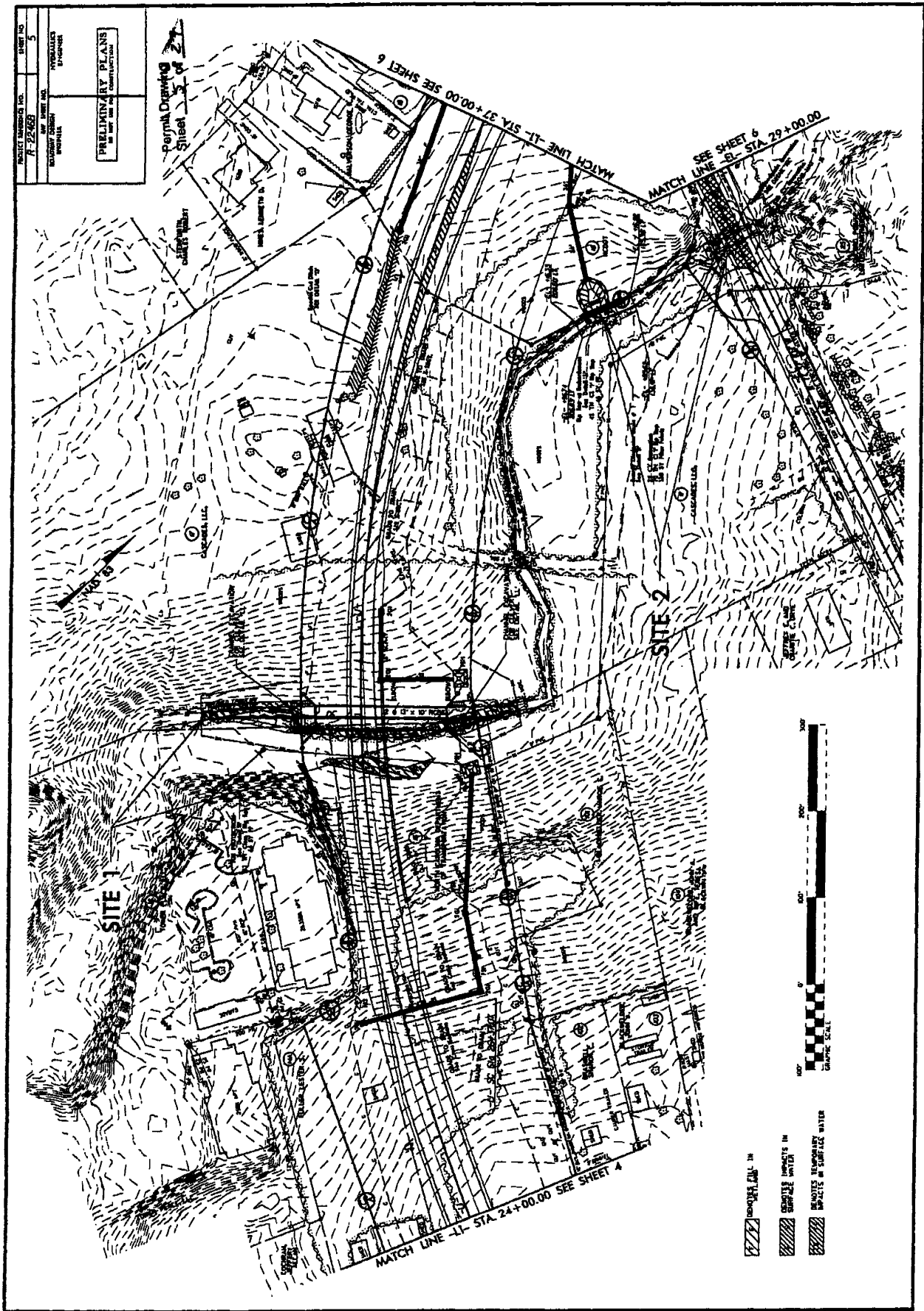
CONTRACT:

DRAINAGE DITCH DETAILS

PROJECT APPROVED FOR:	SHEET NO.
F-22623	F-71
DATE:	DATE:
BY:	BY:
CHECKED BY:	APPROVED BY:
DATE:	DATE:
PRELIMINARY PLANS IN ACCORDANCE WITH	

Permit Drawing
Sheet 2 of 22





6472798

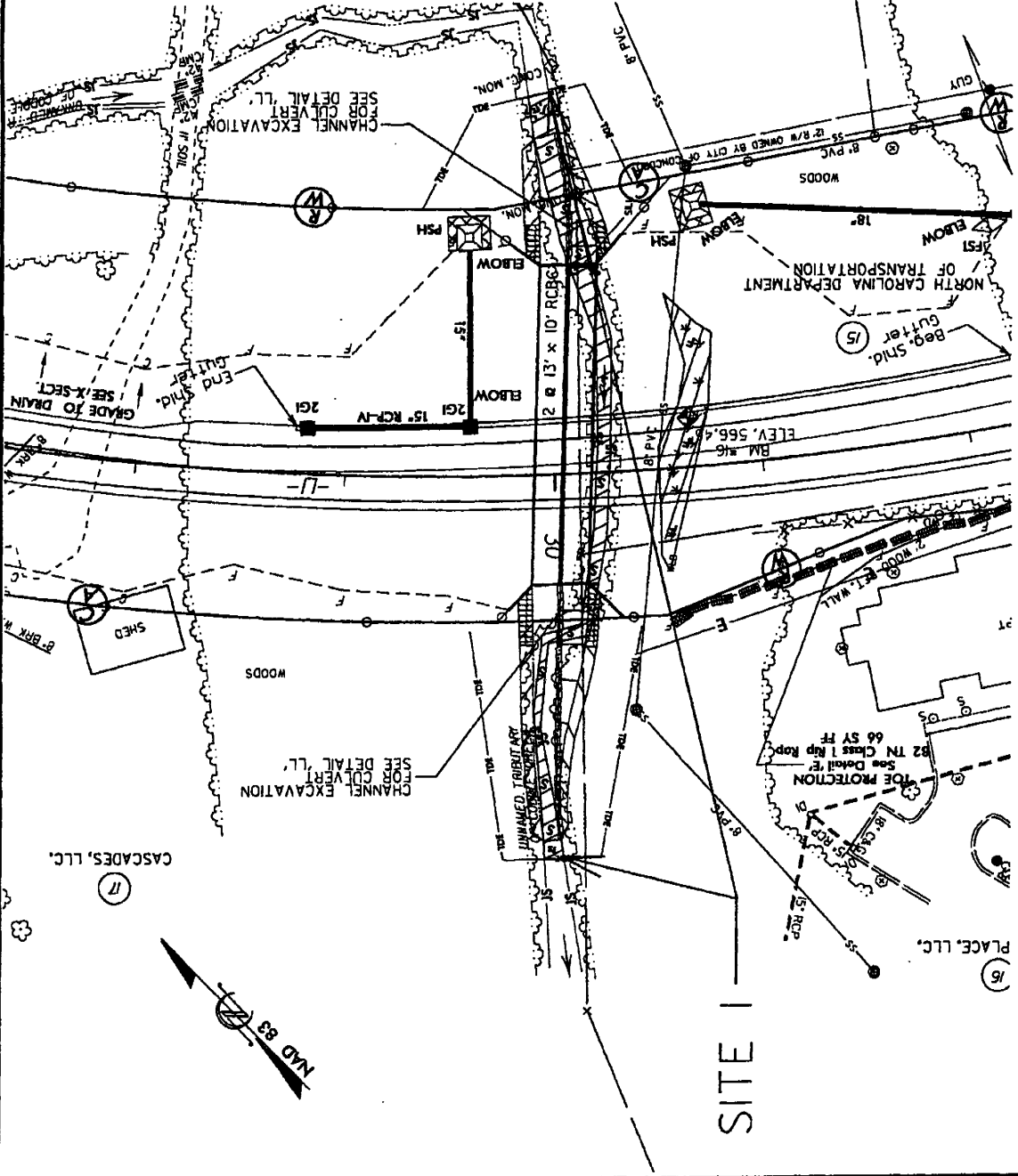
ENCLOSURE

PROJECT NUMBER: R-22468	SHEET NO. 5
DESIGNED BY: [Name]	CHECKED BY: [Name]
DRAWN BY: [Name]	DATE: [Date]

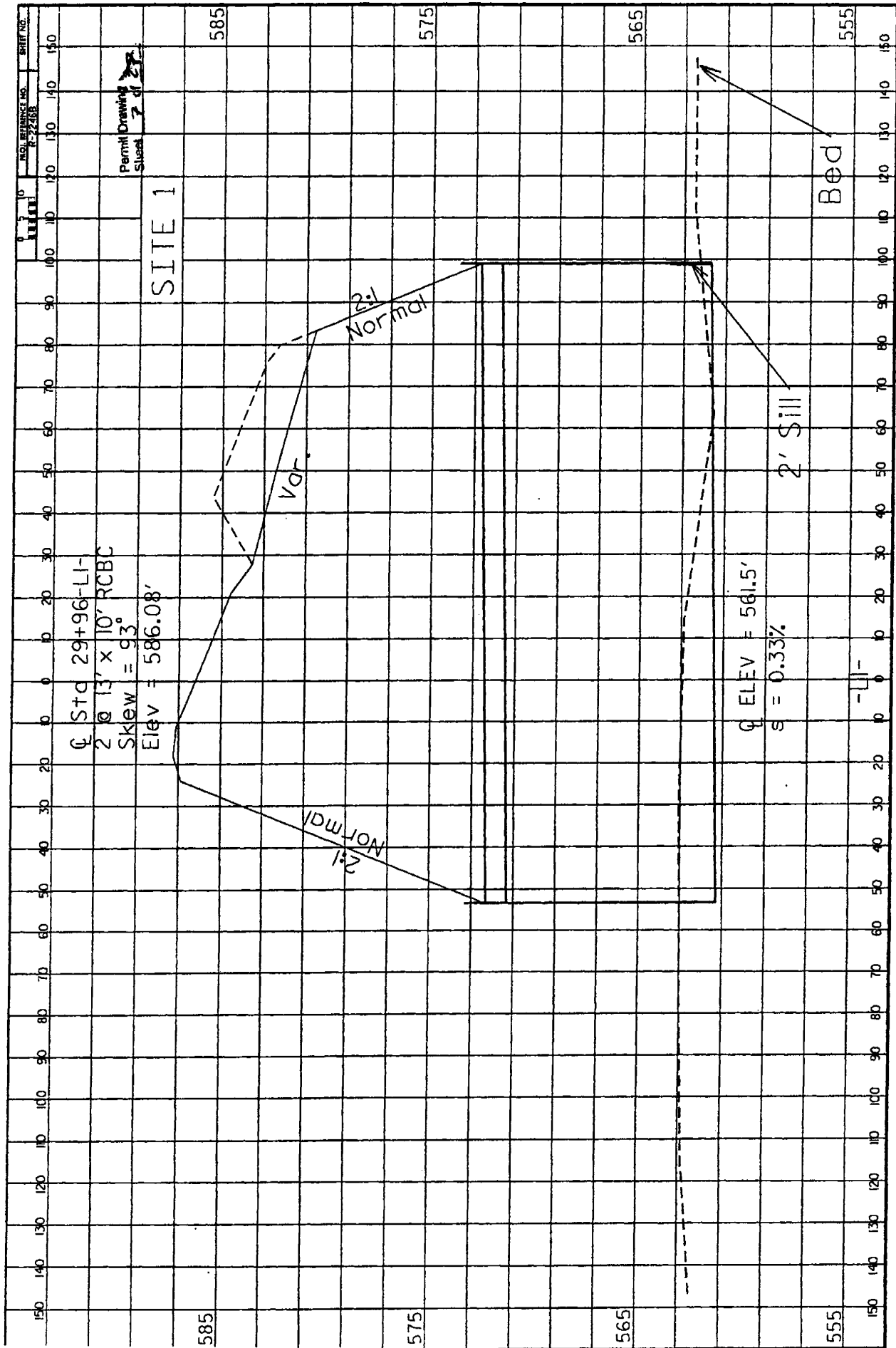
Permit Drawing
Sheet 6 of 6

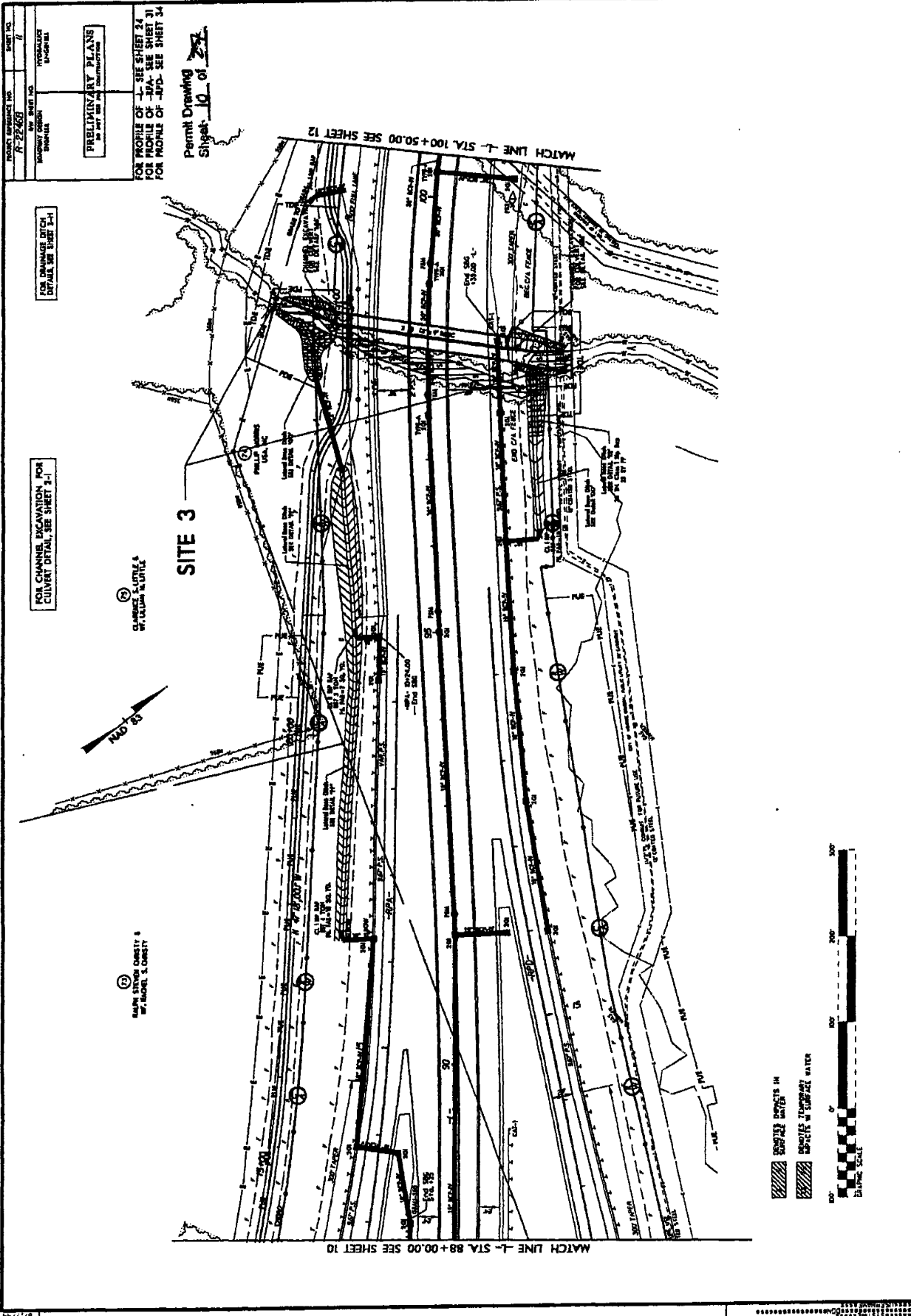
DENOTES FILL IN WETLAND
 DENOTES IMPACTS IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

50' 0' 50' 100' 150'
 GRAPHIC SCALE



SITE I





FOR CHANNEL EXCAVATION FOR
CULVERT DETAIL, SEE SHEET 3-1

②
CHANNEL EXCAVATION
OF EXISTING CHANNEL




②
MAIN CHANNEL EXCAVATION
OF EXISTING CHANNEL



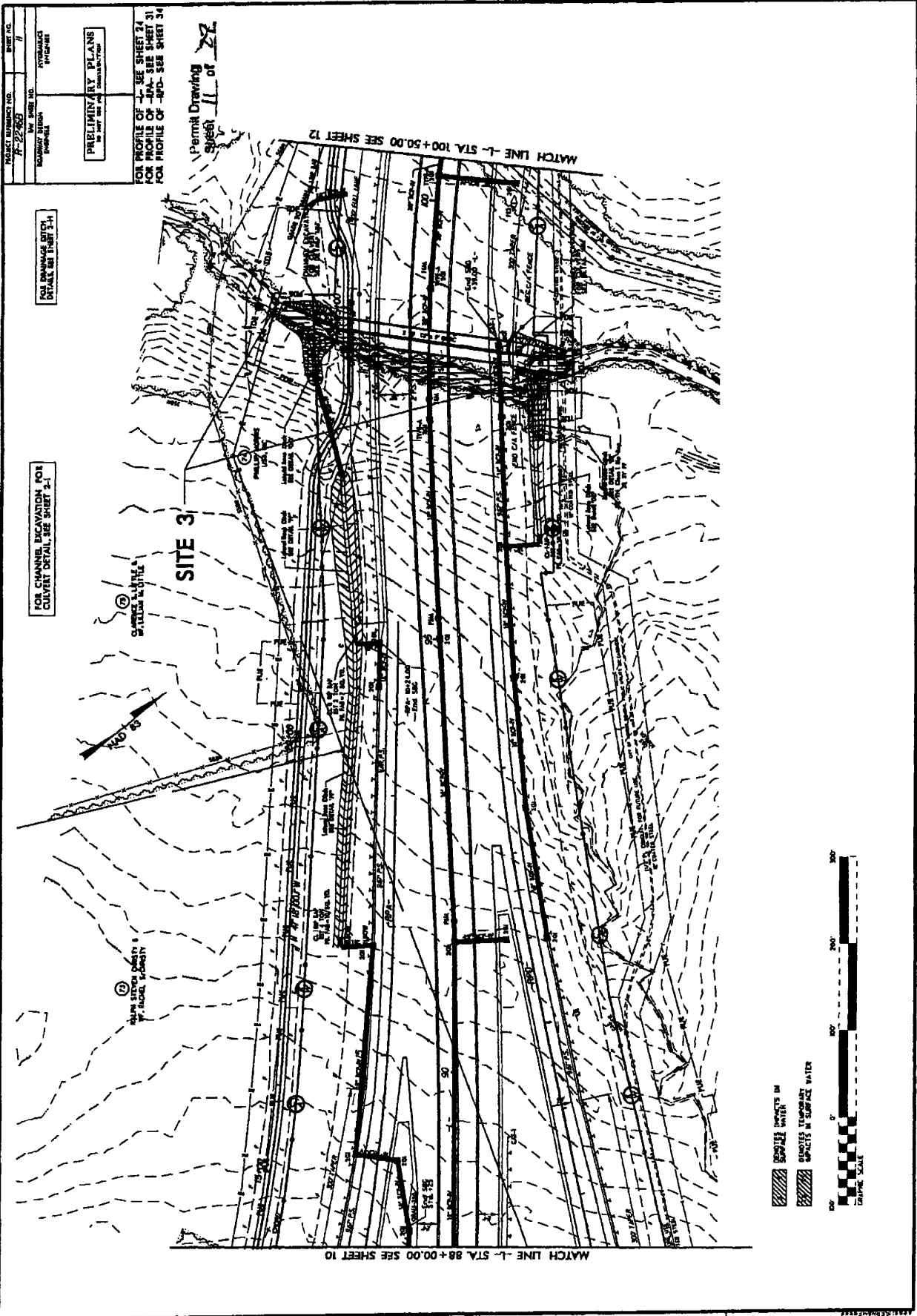
MATCH LINE L- STA. 88+00.00 SEE SHEET 10

MATCH LINE L- STA. 100+50.00 SEE SHEET 12

SITE 3

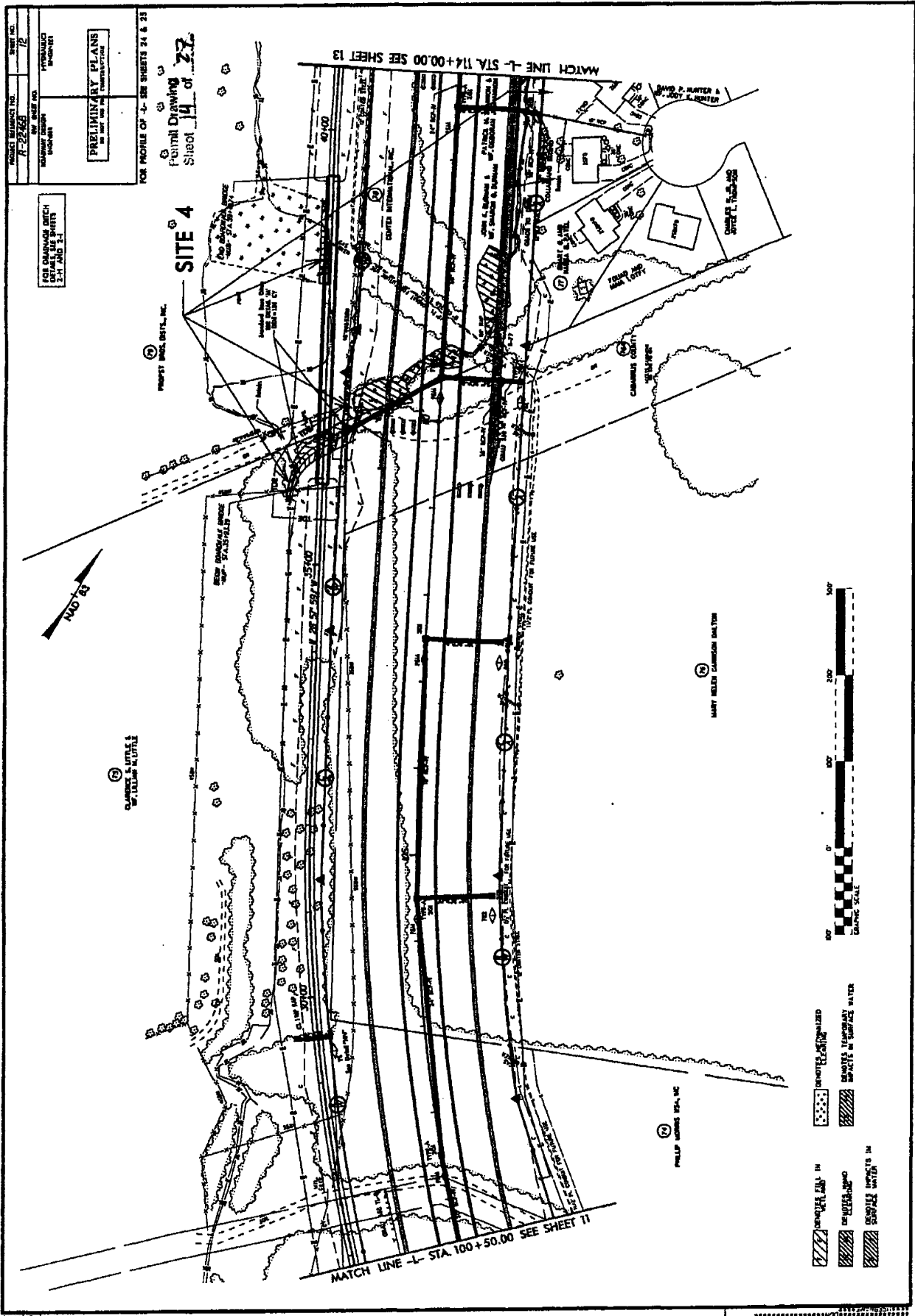
 EXISTING CHANNELS IN
 PROPOSED IMPROVEMENTS TO CHANNEL WATER
 1" = 100'

 GRAPHIC SCALE

PROJECT IMPROVEMENT NO. R-2269
 SHEET NO. 7
 DESIGNED BY: [blank]
 CHECKED BY: [blank]
 APPROVED BY: [blank]
 PRELIMINARY PLANS
 FOR PROFILE OF -L- SEE SHEET 24,
 FOR PROFILE OF -M- SEE SHEET 31,
 FOR PROFILE OF -D- SEE SHEET 34.
 Permit Drawing Sheet 10 of 27



8-17-65

REVISIONS



FOR CHANGING DITCH FROM SHEETS 11 AND 13

PRELIMINARY PLANS

FOR PROFILE OF -L- SEE SHEETS 24 & 25

Permit Drawing Sheet 14 of 22

MATCH LINE -L- STA. 100+50.00 SEE SHEET 11

MATCH LINE -L- STA. 114+00.00 SEE SHEET 13



- GRAVEL FILLING
- GRAVEL IN GRAVEL WATER
- GRAVEL WATER
- GRAVEL WATER IN
- GRAVEL FILLING
- GRAVEL IN GRAVEL WATER
- GRAVEL WATER
- GRAVEL WATER IN

CLARENCE & LITTLE & WILLIAM LITTLE

SITE 4

PROFIT INC. BURL, INC.

HARRY BELLE CAMERON INC. TYPE

PHILIP CAMERON INC. TYPE

CUTTING INTERNATIONAL, INC.

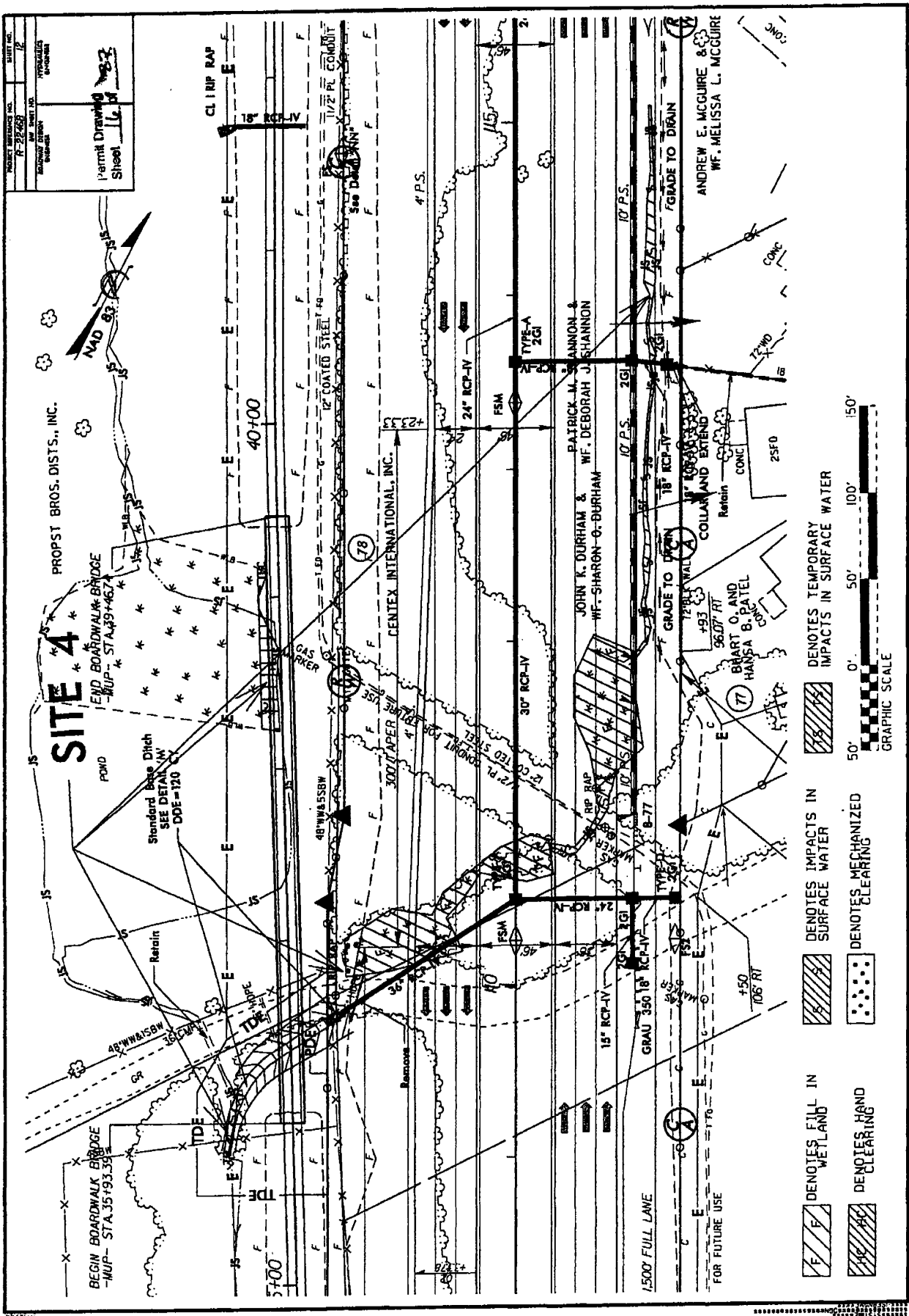
JOHN L. BROWN & PATRICK J. PATRICK, INC.

DAVID P. HUNTER & JOY E. HUNTER

SHIPLEY & BROWN

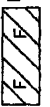

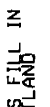



CAMBER COUNTY

REVISIONS

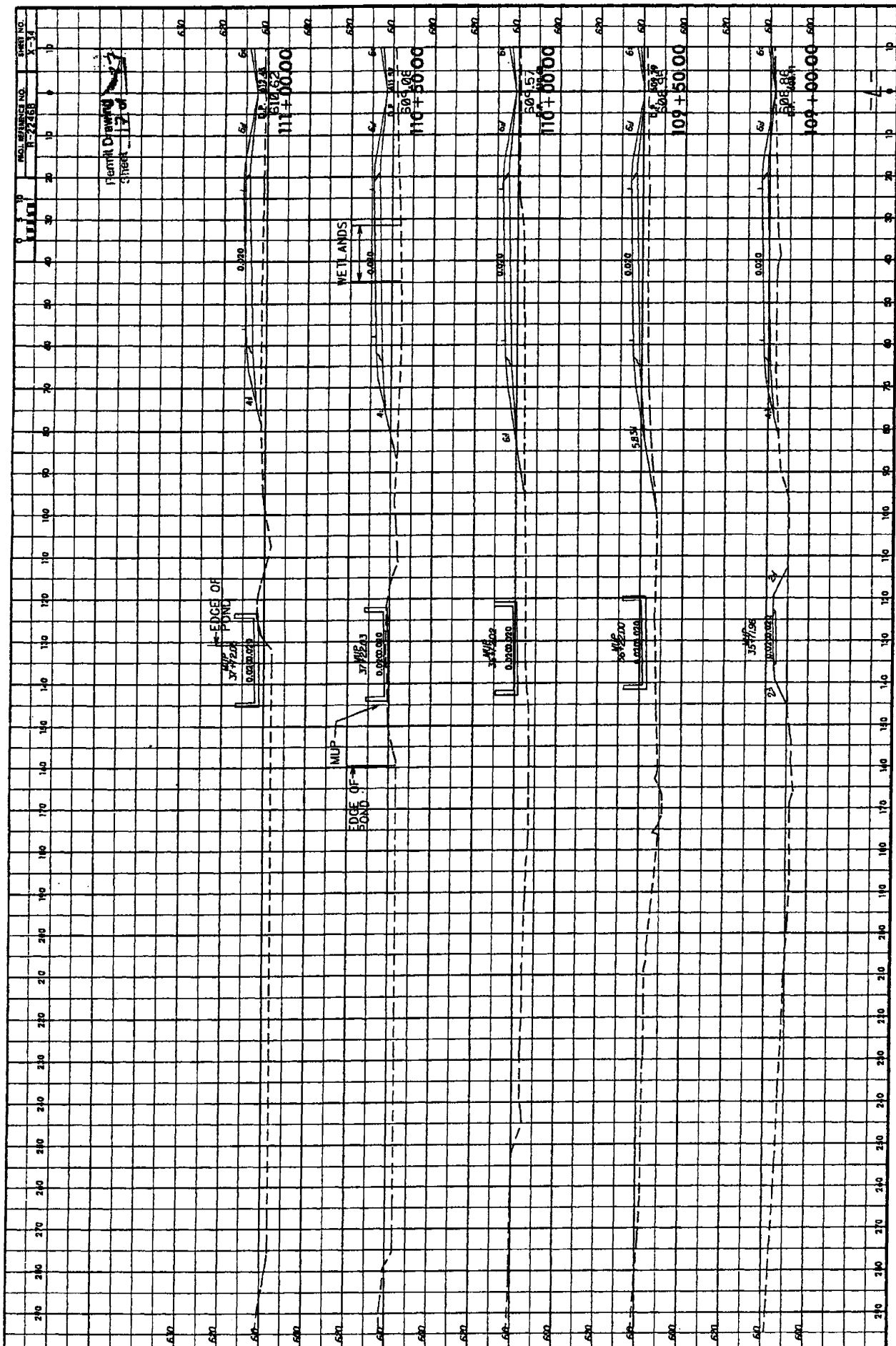


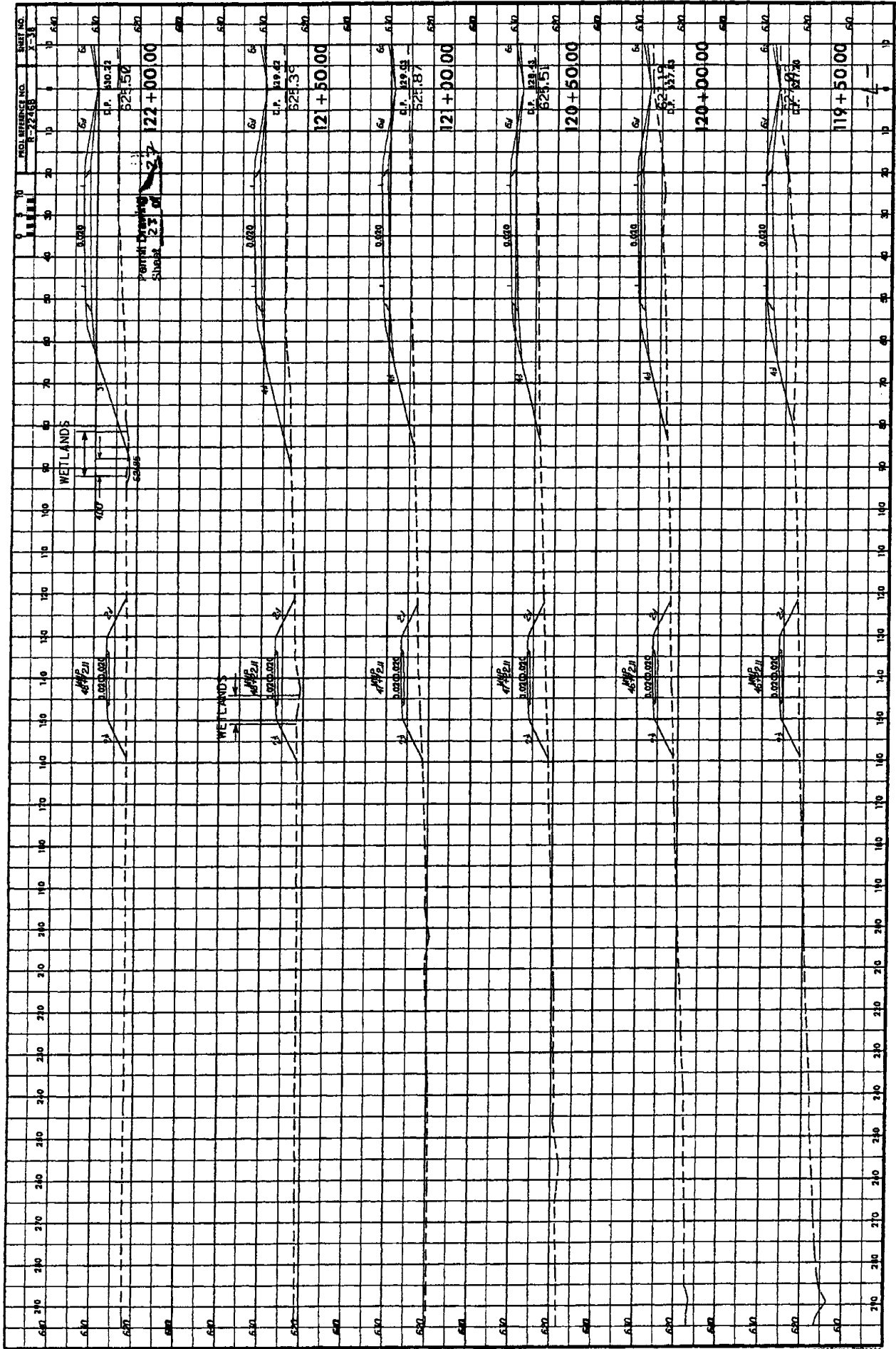
PROJECT: BRIDGEMAN INC.	SHEET NO.: 12
NO. 22-452	
DATE: 08/11/03	PERMANENT
DESIGNED BY: [Signature]	APPROVED BY: [Signature]
CHECKED BY: [Signature]	

Permit Drawing
Sheet 12 of 12

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







PROPERTY OWNERS
 NAMES AND ADDRESSES

SITE	PARCEL NO.	NAMES	ADDRESSES
1 & 2	15	NC DOT	
1	16	TOWER PLACE, LLC	1610 WAYBRIDGE LANE CHARLOTTE NC 28220
1 & 2	17	CASCADS, LLC	WAYBRIDGE LANE CHARLOTTE NC 28220
2	25	CONCORD POINTE LIMITED PARTNERSHIP	7800 EAST KAMPER ROAD CINCINNATI OH 45249
3	74	PHILLIP MORRIS USA, INC	PO BOX 26603 RICHMOND VA 23261
3 & 4	75	CLARENCE LITTLE	2555 CONCORD FARMS RD CONCORD NC 28027
4	76A	CABARRUS COUNTY	P.O. BOX 707 CONCORD NC 28026
4 & 5	78	CENTEX INTERNATIONAL	PO BOX 11231 CHARLOTTE NC 28220
4 & 5	79	PROPST BROS. DIST. INC.	829 DAVIDSON DR CONCORD NC 28027
5	83	GREG & CHRISTY SIMMONS	1563 REVOLUTIONARY DR CONCORD NC 28027

NCDOT
 DIVISION OF HIGHWAYS
 CABARRUS COUNTY
 PROJECT: 34408.L1 (R-2246B)
 CONCORD-KANNAPOLIS
 GEORGE LILES PARKWAY FROM
 SR 1304 TO SR 1431

SHEET OF 06 / 29 / 12

Partial Drawing
 Sheet 21 of 27

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)					
1	29+40 -L-	Fill	0.04														
1	29+77 -L-	2@13x10 RCBC									0.03	156					
1	29+80 -L-	Stream Fill/ Channel Excavation									0.03	179	30				
2	35+30 -L-	Bank Stabilization									0.01	38					
2	28+20 -EL-	Remove Roadway															*54
3	98+39 -L-																
3	98+39 -L-	2@13x9 RCBC									0.09	266					
		Channel Excavation									0.03	113	24				
4	109+05 to 112+00-L-	Fill/36" RCP	0.12								0.03	384					
4	110+25 to 112+85-L-	MUP Boardwalk															
4	109+17-L-	Channel Excavation															
5	122+00 to 123+00-L-	Fill/48" RCP	0.08								0.01	209	13				
5	121+52-L-	MUP Fill/54" RCP	0.01														
TOTALS:			0.25		0.01	0.01	0.02	0.03	0.23	1377	92	*54					

* Removal of existing pipe and roadway.

Site 4: 26 sets of 8"x8" MUP Boardwalk Piles = 12 SF of sw impacts (Pond)

Site 4: 12 sets of 8"x8" MUP Boardwalk Piles = 6 SF of wetland impacts

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CABARRUS COUNTY
WBS - 3440B.1.1 (R-2246B)

19/10/2012
SHEET

Permit Drawing
Sheet 27 of 27

ATN Revised 3/31/05