



DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
1835 ASSEMBLY STREET, ROOM 865B-1
COLUMBIA, SOUTH CAROLINA 29201

COPY

RECEIVED

SEP 22 2016

SEP 23 2016

Regulatory Division

Ms. Cristie Neller
Dominion Resources Services, Inc.
707 East Main Street, 19th Floor
Richmond, Virginia 23219

BUREAU OF WATER
WATER QUALITY DIVISION

Dear Ms. Neller:

This letter is in response to a Pre-Construction Notification (PCN) (SAC-2015-00709) which we received on August 25, 2016 and was considered complete on August 31, 2016. By submittal of the PCN, you requested verification that the proposed project is authorized by a Department of the Army (DA) Nationwide Permit (NWP).

The PCN contains the following identifying information for this project. The work affecting waters of the United States is part of an overall project known as Moore to Chappells Pipeline Project, for the construction of a 12-inch natural gas pipeline. The activities in waters of the US include the open cut method for 41 stream crossings and the construction of two new culverts on access roads. All open cut trenches are temporary and the areas will be restored to pre-construction conditions. The project involves permanent impacts to not more 54 linear feet of intermittent/perennial streams, including wetlands and temporary impacts to not more 520 linear feet of intermittent/perennial streams, including wetlands. The project is located in Spartanburg, Laurens, Newberry, and Greenwood Counties, Laurens County, South Carolina (Latitude: 34.5326 °N, Longitude: 81.9341 °W). The PCN also includes the following supplemental information:

- a. Drawing sheets 1-51 of 51 titled "SAC-2015-00709, Moore to Chappells Pipeline, Spartanburg, Newberry, Laurens, and Greenwood Counties" and dated September 15, 2016;
- b. A delineation of wetlands, other special aquatic sites, and other waters.

Based on a review of the PCN, including the supplemental information indicated above, it has been determined that the proposed activity will result in minimal individual and cumulative adverse environmental effects and is not contrary to the public interest. Furthermore, the activity meets the terms and conditions of NWP 12 Utility Line Activities.

For this authorization to remain valid, the project must comply with the enclosed Nationwide Permit General Conditions, Charleston District Regional Conditions, and the following special conditions:

1. That prior to beginning the authorized work the permittee must obtain and provide the Corps with a copy of all appropriate state certifications and/or authorizations (i.e. 401 Water Quality Certification, Coastal Zone Management Consistency Determination, State Navigable Waters Permit). If the permittee

fails to obtain the necessary state certifications and/or authorizations prior to beginning work, this will be considered a willful and knowing violation of the Clean Water Act and appropriate enforcement action will be taken.

- 2. That impacts to aquatic areas do not exceed those specified in the above mentioned PCN, including any supplemental information or revised permit drawings that were submitted to the Corps by the permittee;**
- 3. That the construction, use, and maintenance of the authorized activity is in accordance with the information given in the PCN, including the supplemental information listed above, and is subject to any conditions or restrictions imposed by this letter;**
- 4. That the permittee shall submit the attached signed compliance certification to the Corps within 30 days following completion of the authorized work.**
- 5. That the permittee agrees they will follow the Horizontal Directional Drill Contingency and Inadvertent Release Plan dated March 2016 if there are any inadvertent releases during construction.**

This verification is valid until March 18, 2017, unless the district engineer modifies, suspends, or revokes the nationwide permit authorization in accordance with 33 CFR 330.5(d). If prior to this date, the NWP authorization is reissued without modification or the activity complies with any subsequent modification of the NWP authorization, the verification continues to remain valid until March 18, 2017. If you commence, or are under contract to commence, this activity before the nationwide permit expires, or the nationwide permit is modified, suspended, or revoked by the Chief of Engineers or division engineer in accordance with 33 CFR 330.5(b) or (c), respectively, so that the activity would no longer comply with the terms and conditions of the nationwide permit, you will have 12 months after the date the nationwide permit expires or is modified, suspended, or revoked, to complete the activity under the present terms and conditions of this nationwide permit.

This Nationwide permit is being verified based on the information you have provided. It is your responsibility to read the attached Nationwide Permits(s) along with the General, Regional, and Special Conditions before you begin work. If you determine that your project will not be able to meet the Nationwide Permit and the conditions, you must contact the Corps before you proceed.

Your cooperation in the protection and preservation of our navigable waters and natural resources is appreciated. In all future correspondence concerning this matter, please refer to our file number SAC-2015-00709. A copy of this letter is being forwarded to certain State and/or Federal agencies for their information. If you have any questions concerning this matter, please contact me at 803-253-3903.

Sincerely,

Kristin B. Andrade
Watershed Manager

Enclosures

Permit Drawings
NWP 12 Utility Line Activities.
Nationwide Permit General Conditions
Nationwide Permit Regional Conditions
Compliance Certification Form

Copies Furnished:

Elizabeth Hester
Dominion Resources Services, Inc.
5000 Dominion Blvd.
Glen Allen, Virginia 23060

Mr. Chuck Hightower
South Carolina Department of
Health and Environmental Control
Bureau of Water
2600 Bull Street
Columbia, South Carolina 29201

Joint Federal and State Application Form For Activities Affecting Waters of the United States Or Critical Areas of the State of South Carolina		This Space for Official Use Only	
		Application No. _____	
		Date Received _____	
		Project Manager _____	
		Watershed # _____	
<p><i>Authorities:</i> 33 USC 401, 33 USC 403, 33 USC 407, 33 USC 408, 33 USC 1341, 33 USC 1344, 33 USC 1413 and Section 48-39-10 et. Seq of the South Carolina Code of Laws. These laws require permits for activities in, or affecting, navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. The Corps of Engineers and the State of South Carolina have established a joint application process for activities requiring both Federal and State review or approval. Under this joint process, you may use this form, together with the required drawings and supporting information, to apply for both the Federal and/or State permit(s).</p> <p><i>Drawings and Supplemental Information Requirements:</i> In addition to the information on this form, you must submit a set of drawings and, in some cases, additional information. A completed application form together with all required drawings and supplemental information is required before an application can be considered complete. See the attached instruction sheets for details regarding these requirements. You may attach additional sheets if necessary to provide complete information.</p>			
1. Applicant Last Name: Neller		11. Agent Last Name (agent is not required): Hester	
2. Applicant First Name: Cristle		12. Agent First Name: Elizabeth (Tibby)	
3. Applicant Company Name: Dominion Resources Services, Inc.		13. Agent Company Name: Dominion Resources Services, Inc.	
4. Applicant Mailing Address: 707 East Main Street, 19th Floor		14. Agent Mailing Address: 5000 Dominion Blvd.	
5. Applicant City: Richmond		15. Agent City: Glen Allen	
6. Applicant State: Virginia	7. Applicant Zip: 23219	16. Agent State: Virginia	17. Agent Zip: 23060
8. Applicant Area Code and Phone No.: 804-771-4190		18. Agent Area Code and Phone No.: 804-273-3573	
9. Applicant Fax No.:		19. Agent Fax No.: 804-273-2964	
10. Applicant E-mail: Cristle.D.Neller@dom.com		20. Agent E-mail: Elizabeth.L.Hester@dom.com	
21. Project Name: Moore to Chappells Pipeline Project		22. Project Street Address: No official address	
23. Project City: Moore to Chappells	24. Project County: Spartanburg, Laurens, Newberry, and Greenwood	25. Project Zip Code: N/A	26. Nearest Waterbody: See Attached
27. Tax Parcel ID: Various		28. Property Size (acres): Permit Area 1344.17 acres; FERC Corridor 2050.07 acres	
29. Latitude: Start: 34.8459186N End: 34.156875N		30. Longitude: Start: -82.00863W End: -81.9064776W	
31. Directions to Project Site (Include Street Numbers, Street Names, and Landmarks and attach additional sheet if necessary): See attached sheet.			
32. Description of the Overall Project and of Each Activity in or Affecting U.S. Waters or State Critical Areas (attach additional sheets if needed) See attached sheet.			
33. Overall Project Purpose and the Basic Purpose of Each Activity In or Affecting U.S. Waters (attach additional sheets if needed): See attached sheet.			
34. Type and quantity of Materials to Be Discharged		35. Type and Quantity of Impacts to U.S. Waters (including wetlands).	
Dirt or Topsoil: _____ <input type="checkbox"/> cubic yards Clean Sand: _____ <input type="checkbox"/> cubic yards Mud: _____ <input type="checkbox"/> cubic yards Clay: _____ <input type="checkbox"/> cubic yards Gravel, Rock, or Stone: _____ <input type="checkbox"/> cubic yards Concrete: _____ <input type="checkbox"/> cubic yards Other (describe): _____ <input type="checkbox"/> cubic yards TOTAL: <u>See attached sheet</u> cubic yards		Filling: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq. ft. _____ <input type="checkbox"/> cubic yards Backfill & Bedding: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq. ft. _____ <input type="checkbox"/> cubic yards Landclearing: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq. ft. _____ <input type="checkbox"/> cubic yards Dredging: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq. ft. _____ <input type="checkbox"/> cubic yards Flooding: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq. ft. _____ <input type="checkbox"/> cubic yards Draining/Excavation: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq. ft. _____ <input type="checkbox"/> cubic yards Shading: _____ <input type="checkbox"/> acres <input type="checkbox"/> sq. ft. _____ <input type="checkbox"/> cubic yards TOTALS: <u>See attached sheet</u> acres _____ sq. ft. _____ cubic yards	

36. Individually list wetland impacts including mechanized clearing, fill, excavation, flooding, draining, shading, etc. and attach a site map with location of each impact (attach additional sheets if needed).

Impact No.	Wetland Type	Distance to Receiving Water body (LF)	Purpose of Impact (road crossing, impoundment, flooding, etc)	Impact Size (acres)
None				
Total Wetland Impacts (acres)				0

37. Individually list all seasonal and perennial stream impacts and attach a site map with location of each impact (attach additional sheets)

Impact No.	Seasonal or Perennial Flow	Average Stream Width (LF)	Impact Type (road crossing, impoundment, flooding, etc)	Impact Length (LF)
See attached sheet				
Total Stream Impacts (Linear Feet)				

38. Have you commenced work on the project site? YES NO If yes, describe all work that has occurred and provide dates.

39. Describe measures taken to avoid and minimize impacts to Waters of the United States:

See attached sheet.

40. Provide a brief description of the proposed mitigation plan to compensate for impacts to aquatic resources or provide justification as to why mitigation should not be required (Attach a copy of the proposed mitigation plan for review).

Permanent impact will not exceed mitigation threshold.

41. See the attached sheet to list the names and addresses of adjacent property owners.

42. List all Corps Permit Authorizations and other Federal, State, or Local Certifications, Approvals, Denials received for work described in this application.

No permit authorizations, certifications, approvals, or denials have been received.

43. Authorization of Agent. I hereby authorize the agent whose name is given on page one of this application to act in my behalf in the processing of this application and to furnish supplemental information in support of this application.

[Signature]
Applicant's Signature

8-24-16
Date

44. Certification. Application is hereby made for a permit or permits to authorize the work and uses of the work as described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent for the applicant.¹

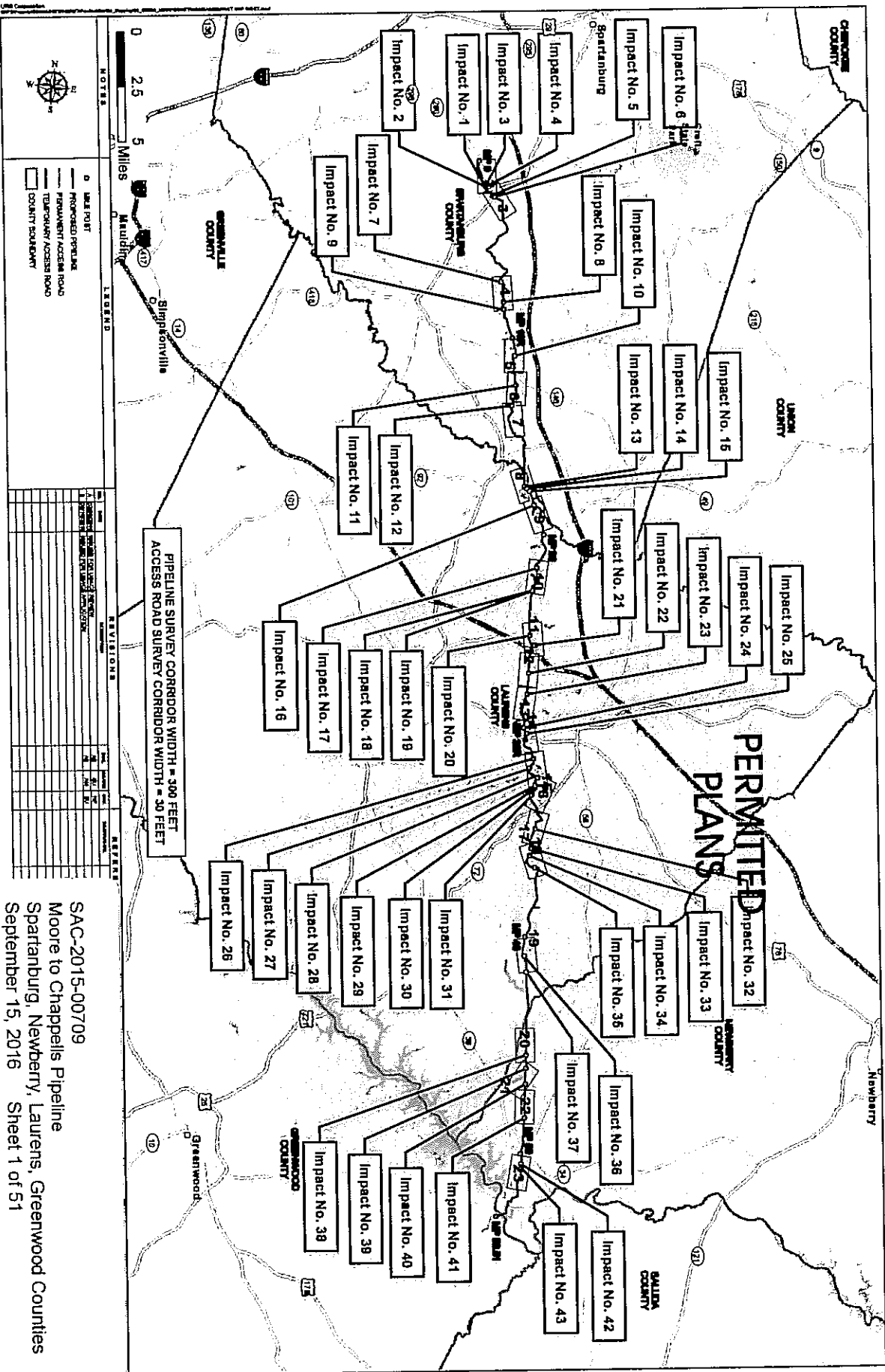
[Signature]
Applicant's Signature

8-24-16
Date

[Signature]
Agent's Signature

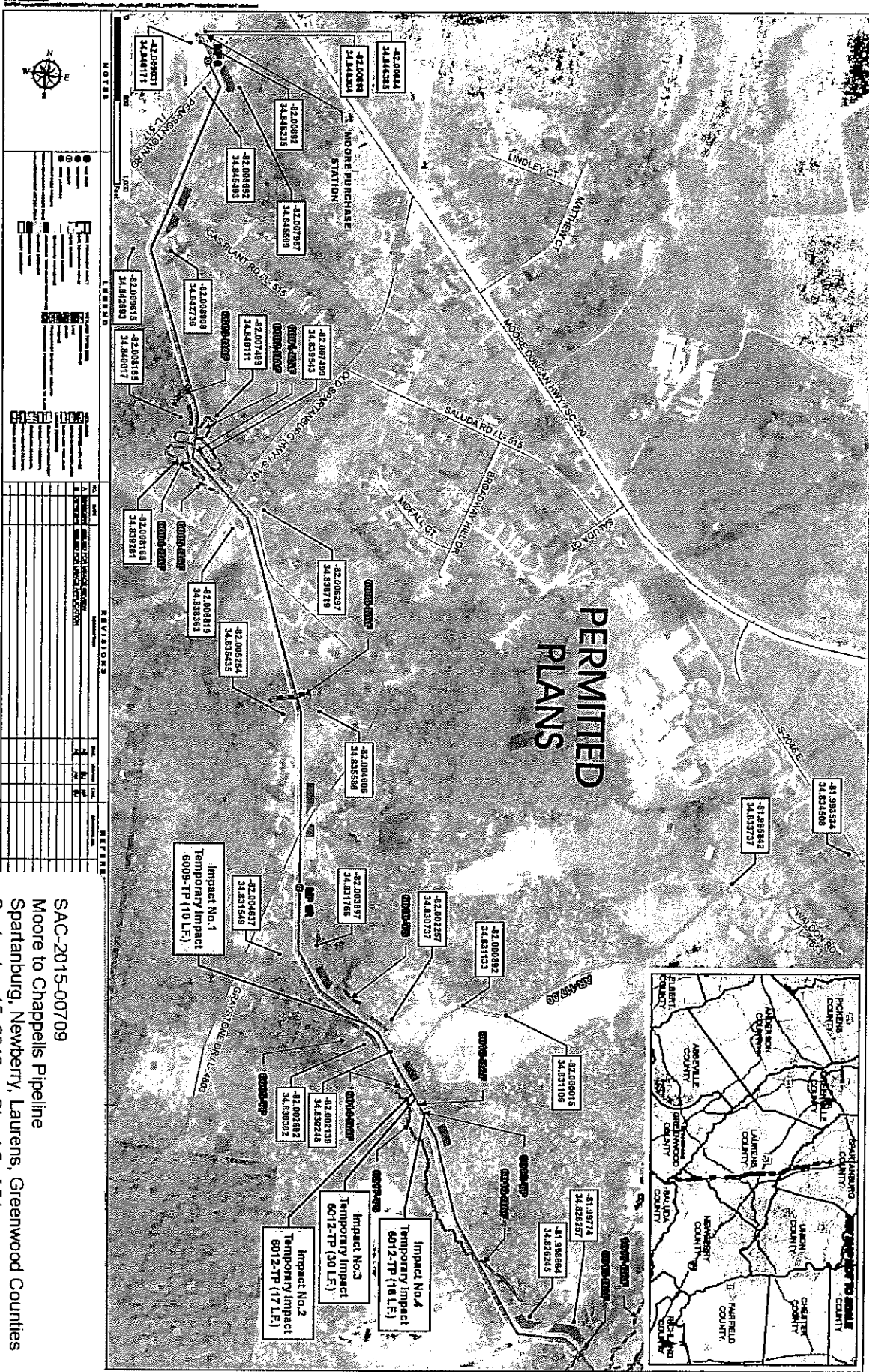
8-24-16
Date

¹The application must be signed by the person who desires to undertake the proposed activity or it may be signed by a duly authorized agent if the authorization statement in blocks 11 and 43 have been completed and signed. 18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.



SAC-2015-00709
 Moore to Chappells Pipeline
 Spartanburg, Newberry, Laurens, Greenwood Counties
 September 15, 2016 Sheet 1 of 51

PERMITTED PLANS



NOTES

1. All work shall be in accordance with the approved plans.
2. All work shall be completed within the specified time frame.
3. All work shall be done in accordance with all applicable codes and regulations.
4. All work shall be done in accordance with the approved impact studies.
5. All work shall be done in accordance with the approved environmental plans.
6. All work shall be done in accordance with the approved safety plans.
7. All work shall be done in accordance with the approved quality control plans.
8. All work shall be done in accordance with the approved record keeping plans.
9. All work shall be done in accordance with the approved communication plans.
10. All work shall be done in accordance with the approved public relations plans.

LEGEND

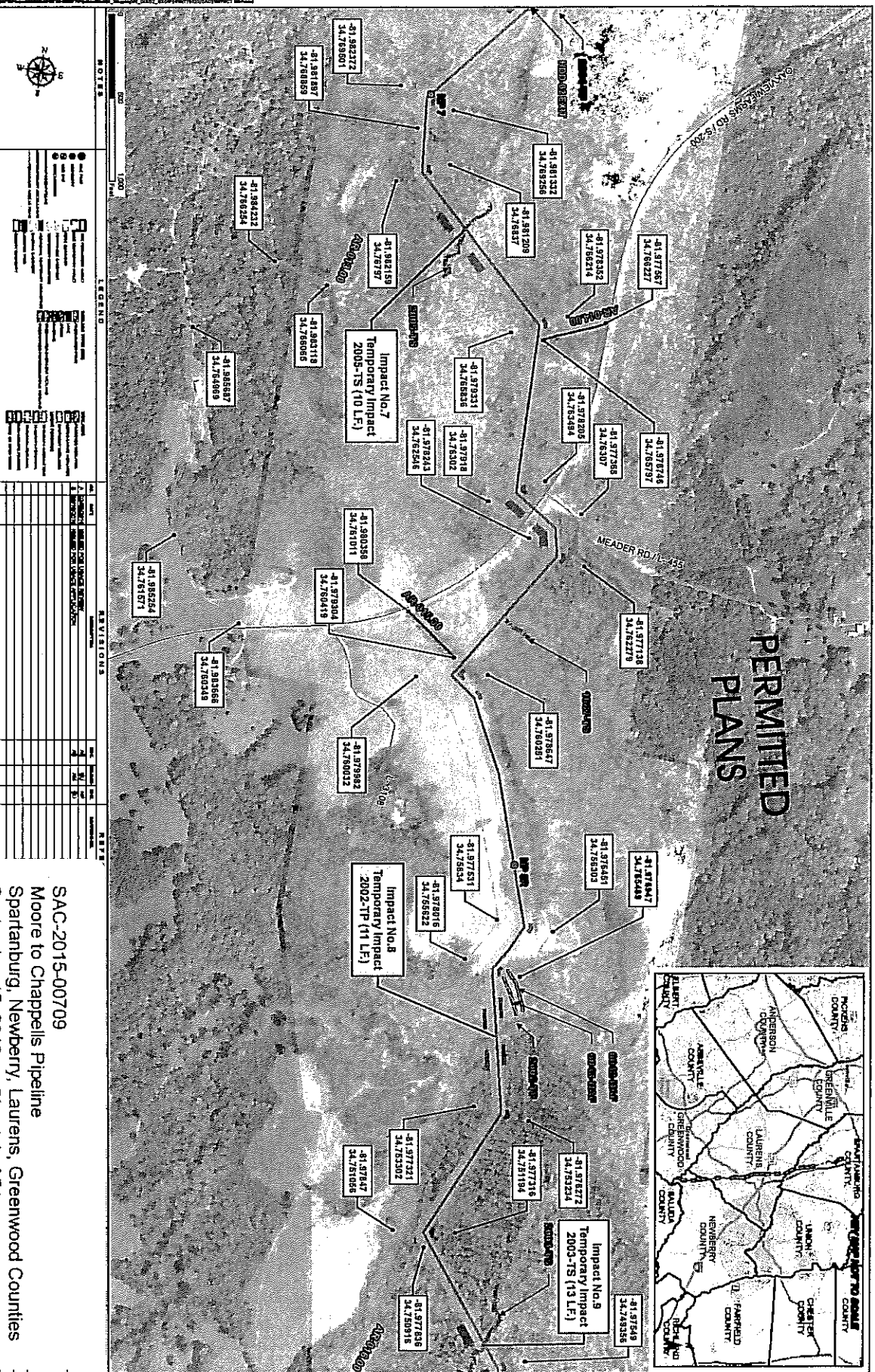
- Approved Plans
- Pending Plans
- Rejected Plans
- Other Plans

REVISIONS

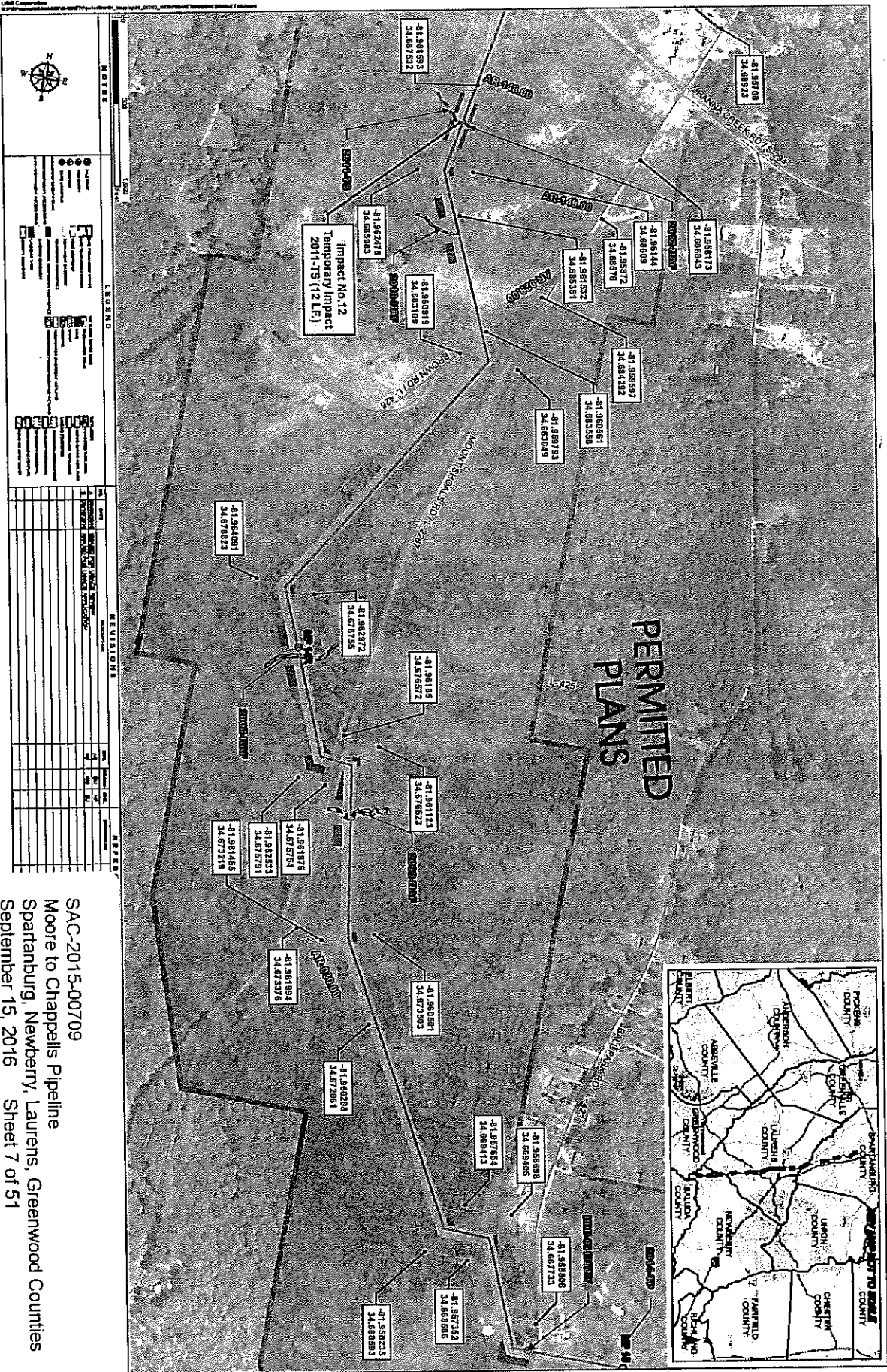
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1	Initial Issue	09/15/16	J. Smith	M. Jones
2	Minor Revisions	09/20/16	J. Smith	M. Jones
3	Major Revisions	10/01/16	J. Smith	M. Jones
4	Final Approval	10/15/16	J. Smith	M. Jones

SAC-2015-007/09
 Moore to Chappells Pipeline
 Spartanburg, Newberry, Laurens, Greenwood Counties
 September 15, 2016 Sheet 2 of 51

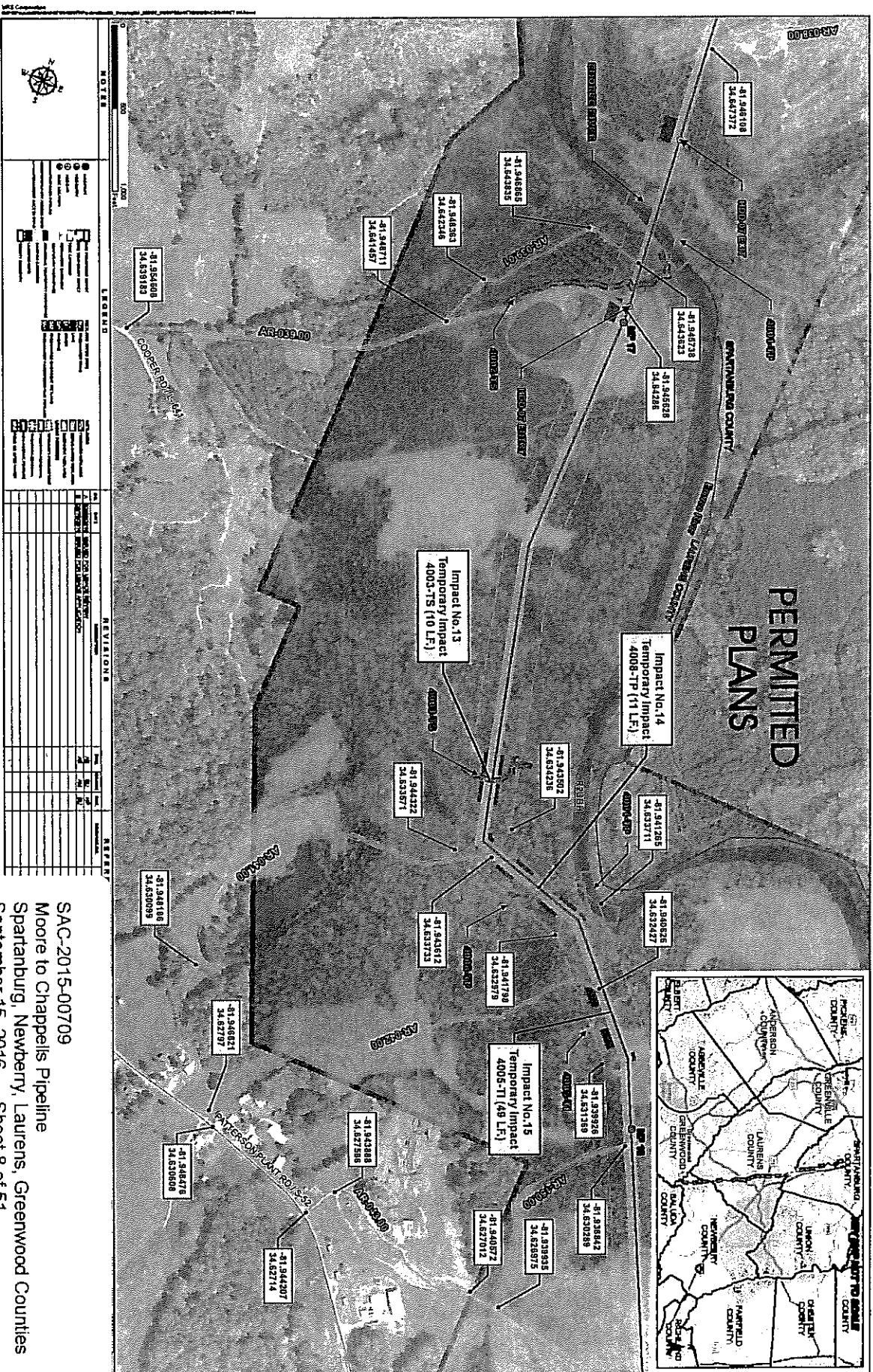
PERMITTED PLANS



SAC-2015-00709
 Moore to Chappells Pipeline
 Spartanburg, Newberry, Laurens, Greenwood Counties
 September 15, 2016 Sheet 4 of 51



SAC-2015-00709
 Moore to Chappells Pipeline
 Spartanburg, Newberry, Laurens, Greenwood Counties
 September 15, 2016 Sheet 7 of 51



NOTES

- 1. All impacted parcels are shown in yellow.
- 2. All impacted parcels are shown in yellow.
- 3. All impacted parcels are shown in yellow.
- 4. All impacted parcels are shown in yellow.
- 5. All impacted parcels are shown in yellow.
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- 16. All impacted parcels are shown in yellow.
- 17. All impacted parcels are shown in yellow.
- 18. All impacted parcels are shown in yellow.
- 19. All impacted parcels are shown in yellow.
- 20. All impacted parcels are shown in yellow.

LEGEND

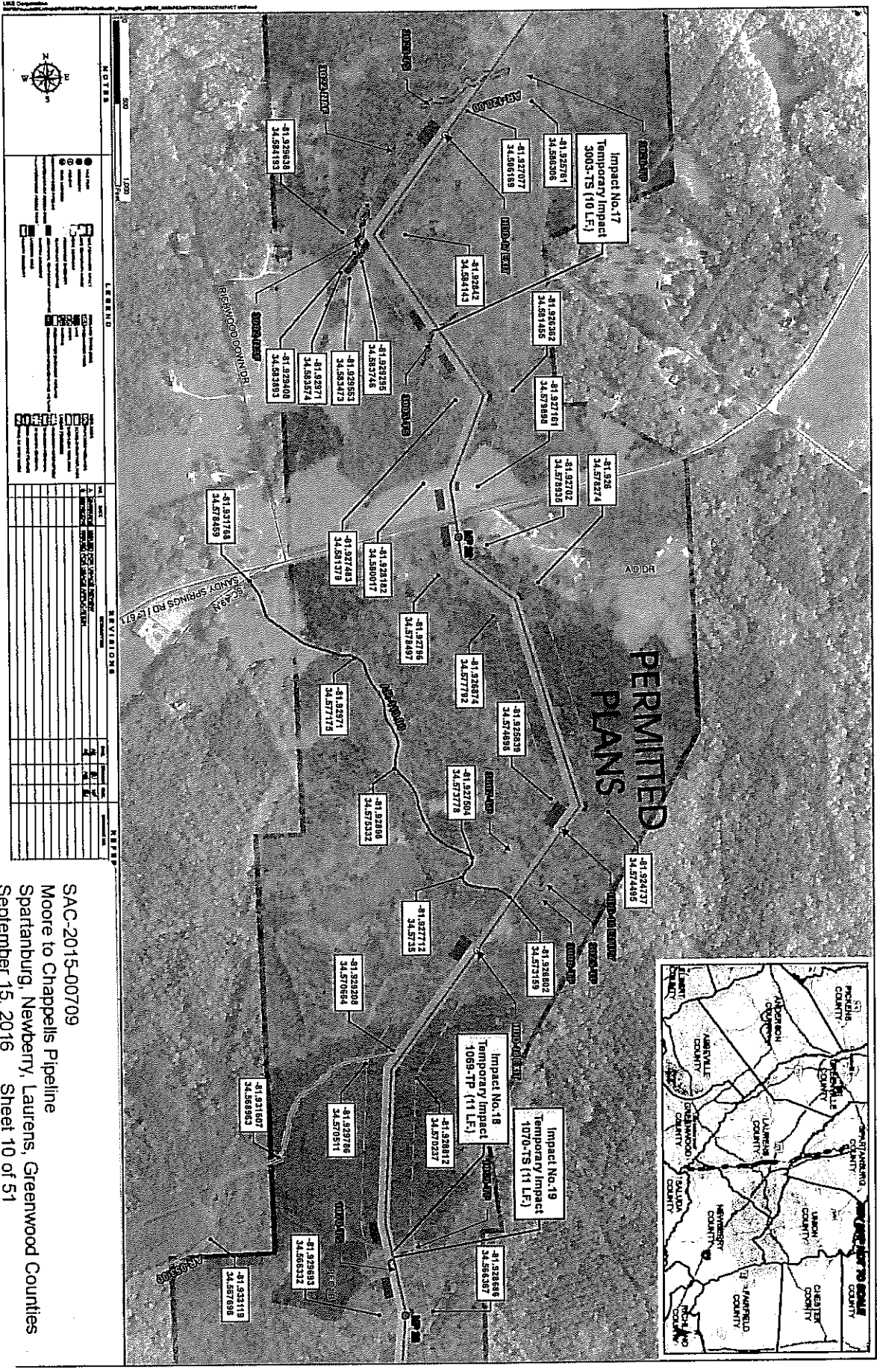
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REVISIONS

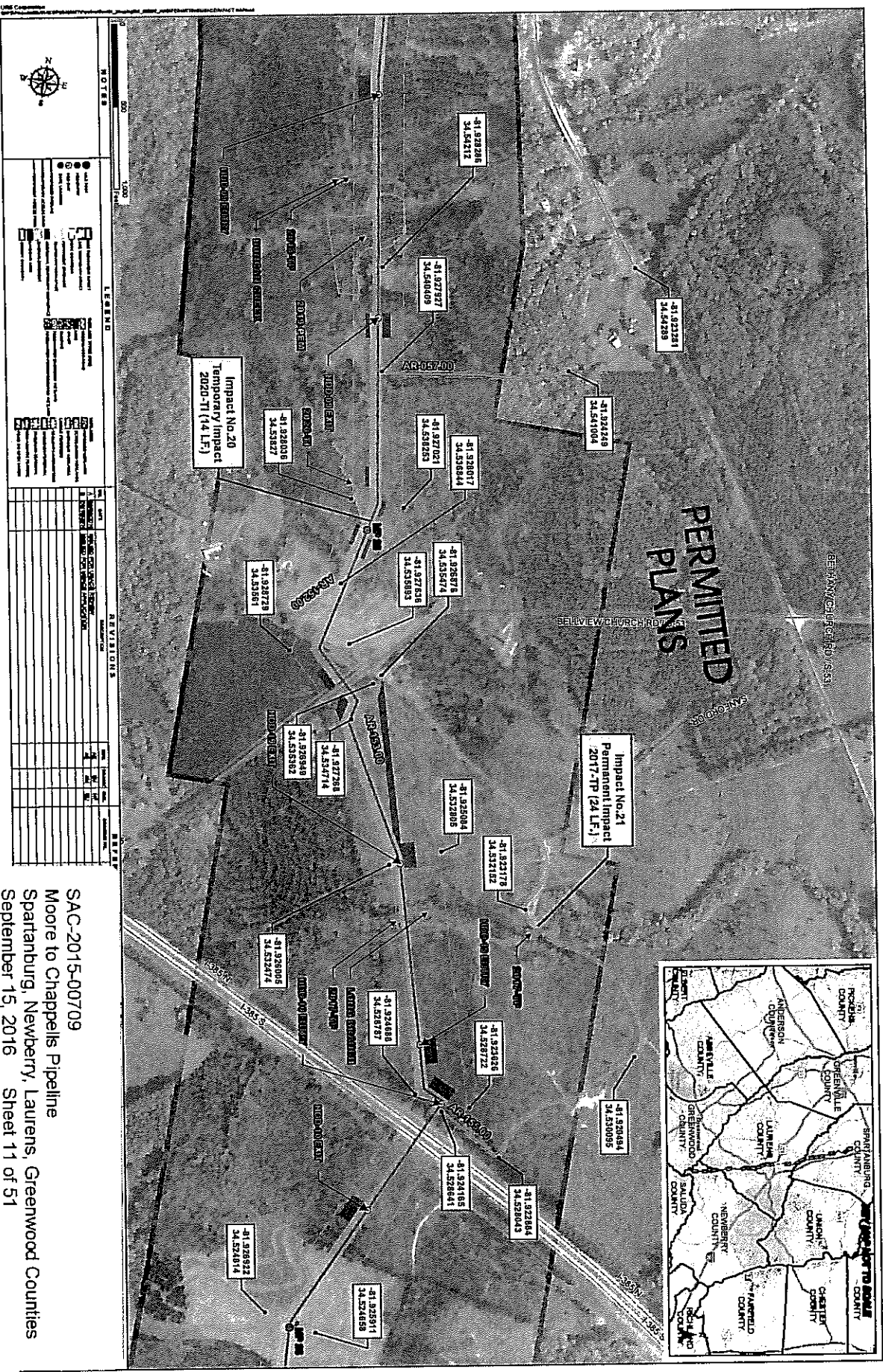
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REVISIONS

SAC-2015-00709
 Moore to Chappells Pipeline
 Spartanburg, Laurens, Greenwood Counties
 September 15, 2016 Sheet 8 of 51



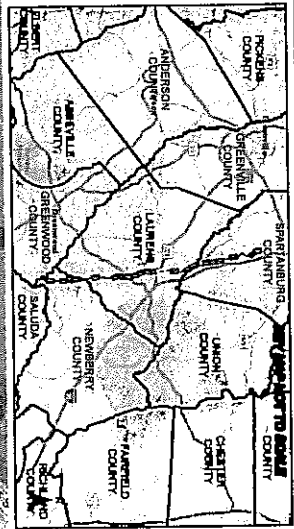
SAC-2015-00709
 Moore to Chappells Pipeline
 Spartanburg, Newberry, Laurens, Greenwood Counties
 September 15, 2016 Sheet 10 of 51



**PERMITTED
PLANS**

Impact No. 21
Permanent Impact
2017-PI (24 LF.)

Impact No. 20
Temporary Impact
2020-TI (14 LF.)



NOTES

1. All impact areas shown on this map are based on the latest available data and are subject to change without notice.

2. The impact areas shown on this map are for informational purposes only and do not constitute a guarantee of accuracy.

3. The impact areas shown on this map are for informational purposes only and do not constitute a guarantee of accuracy.

4. The impact areas shown on this map are for informational purposes only and do not constitute a guarantee of accuracy.

5. The impact areas shown on this map are for informational purposes only and do not constitute a guarantee of accuracy.

6. The impact areas shown on this map are for informational purposes only and do not constitute a guarantee of accuracy.

7. The impact areas shown on this map are for informational purposes only and do not constitute a guarantee of accuracy.

8. The impact areas shown on this map are for informational purposes only and do not constitute a guarantee of accuracy.

9. The impact areas shown on this map are for informational purposes only and do not constitute a guarantee of accuracy.

10. The impact areas shown on this map are for informational purposes only and do not constitute a guarantee of accuracy.

LEGEND

Impact Area

Right-of-Way

Proposed Pipeline

Existing Pipeline

Property Line

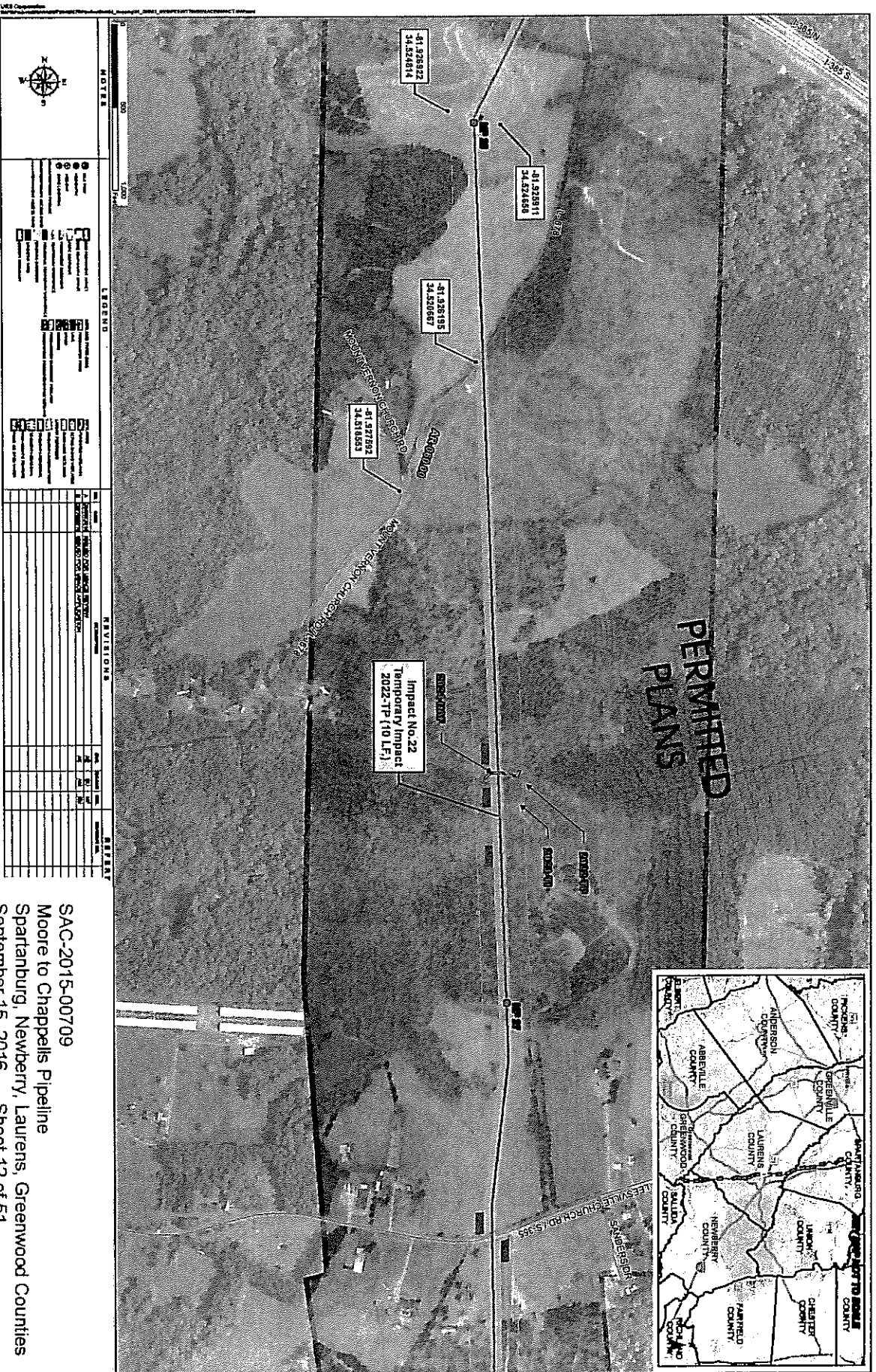
Water Feature

Topography

REVISIONS

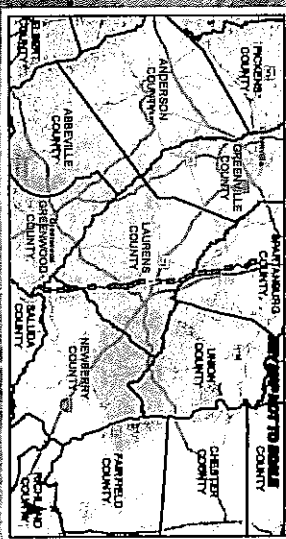
No.	Date	By	Checked By	Description
1	09/15/2016	JL	ML	Initial Issue
2	09/15/2016	JL	ML	Revised Impact Areas
3	09/15/2016	JL	ML	Added Stationing
4	09/15/2016	JL	ML	Final Review

SAC-2015-00709
 Moore to Chappells Pipeline
 Spartanburg, Newberry, Laurens, Greenwood Counties
 September 15, 2016 Sheet 11 of 51



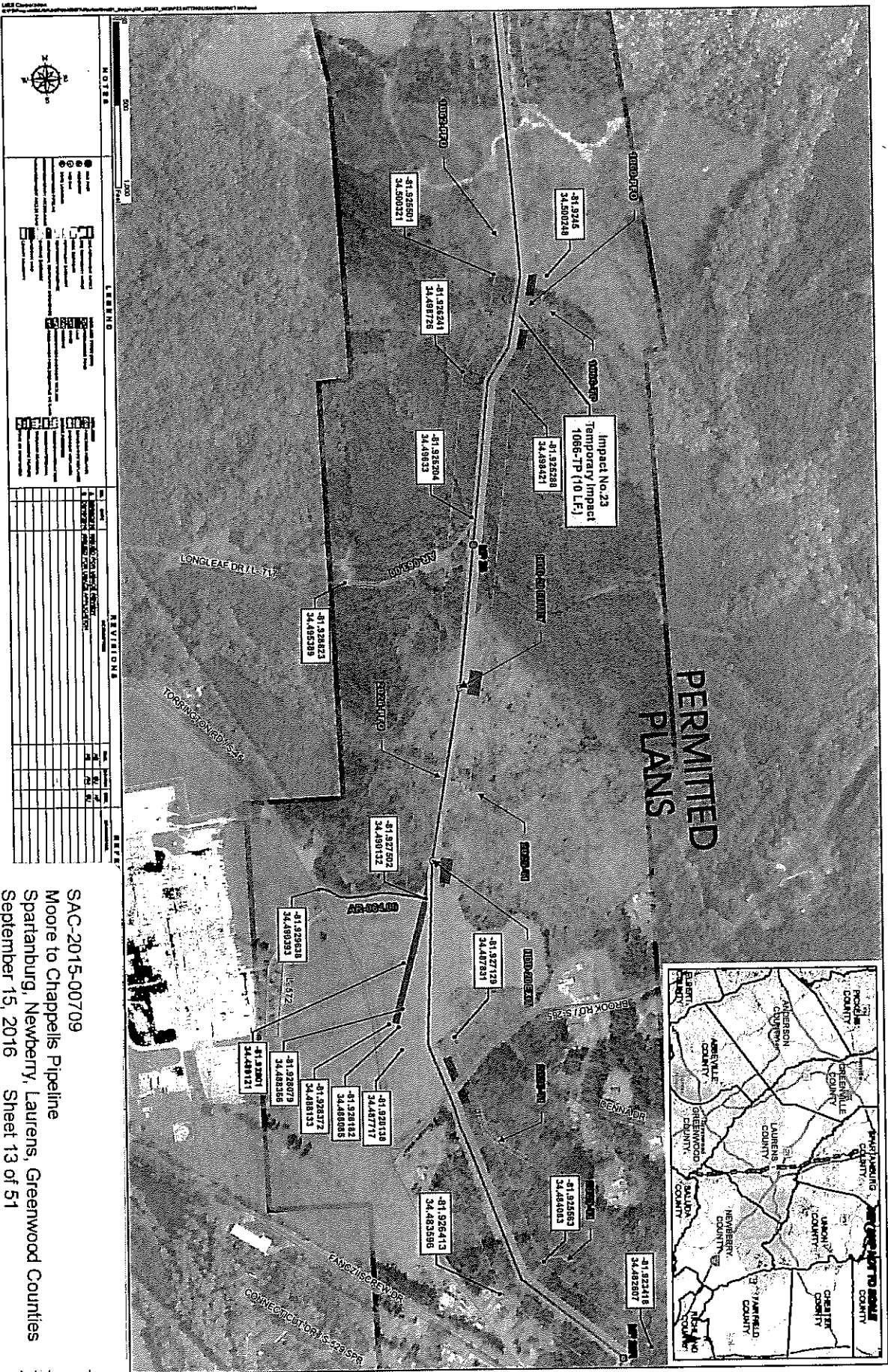
Impact No. 22
 Temporary Impact
 2022-TP (10 LF)

PERMITTED
 PLANS

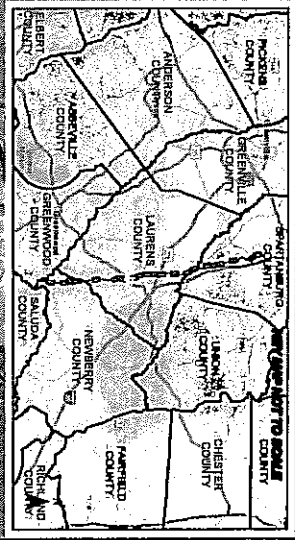
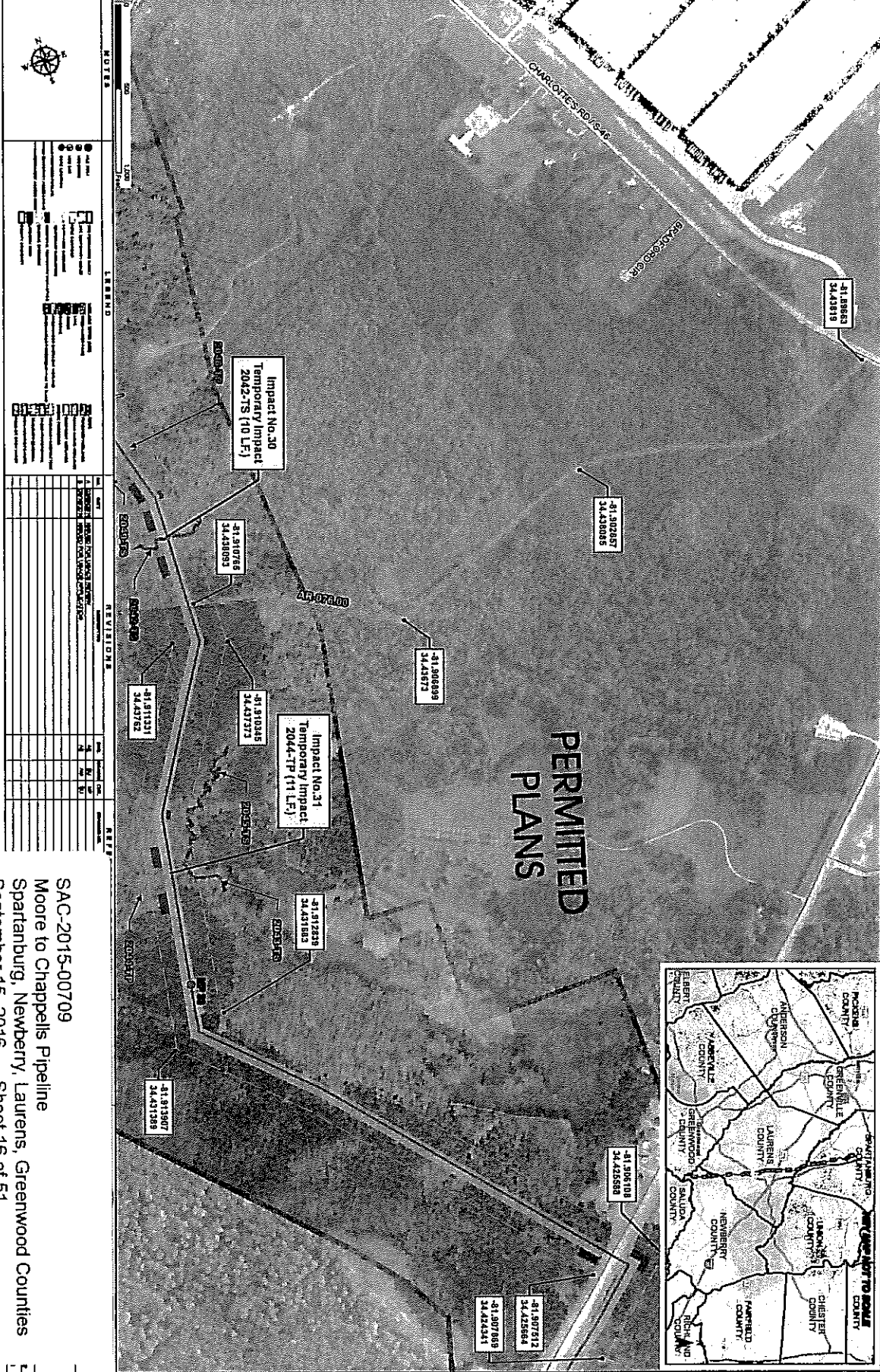


NOTES		REVISIONS	
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3	Final Issue	3	12/15/2022
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5	Final Issue	5	02/15/2023
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7	Final Issue	7	04/15/2023
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9	Final Issue	9	06/15/2023
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SAC-2015-00709
 Moore to Chappells Pipeline
 Spartanburg, Newberry, Laurens, Greenwood Counties
 September 15, 2016 Sheet 12 of 51

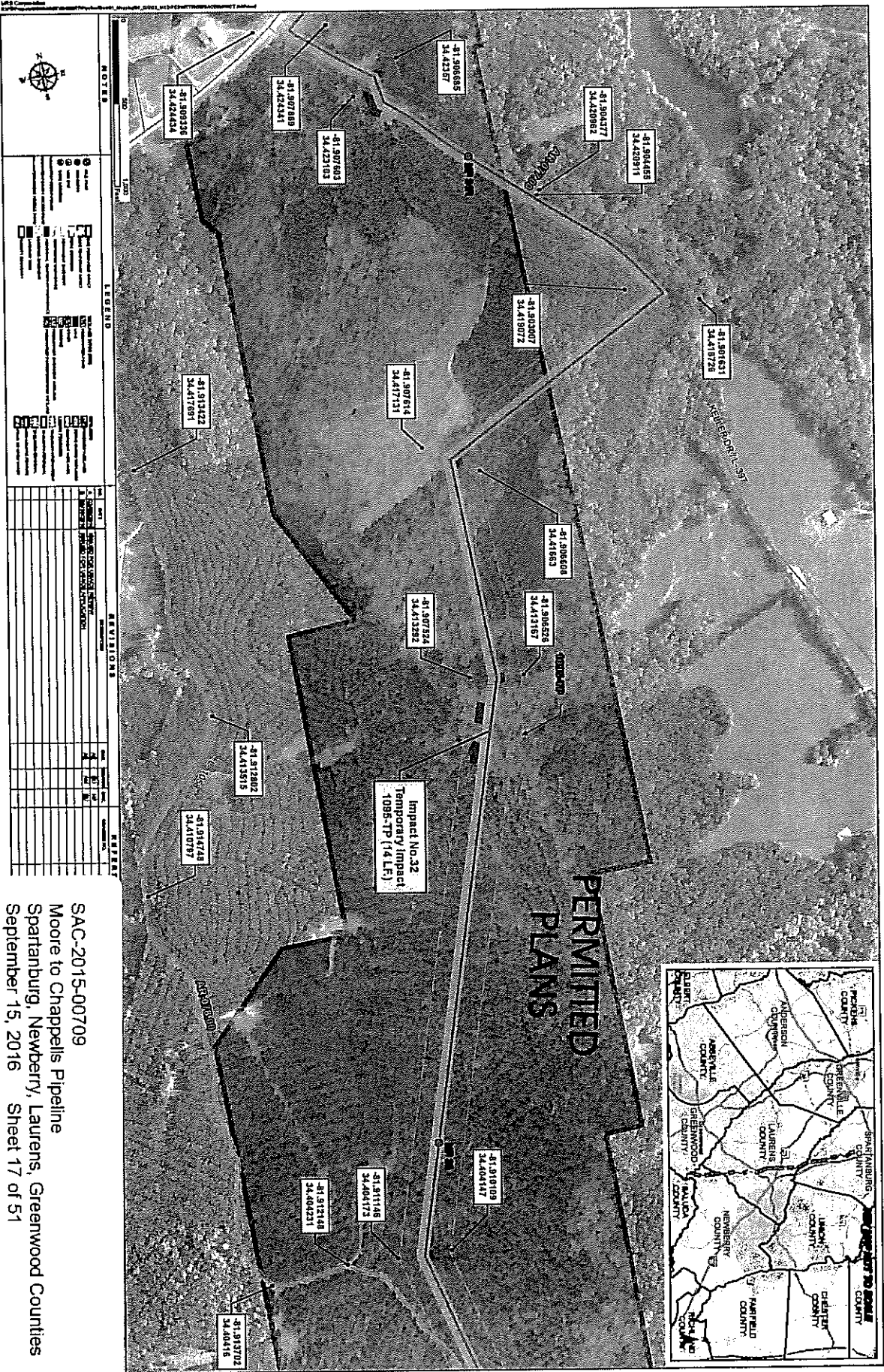


SAC-2015-00709
 Moore to Chappells Pipeline
 Spartanburg, Newberry, Laurens, Greenwood Counties
 September 15, 2016 Sheet 13 of 51



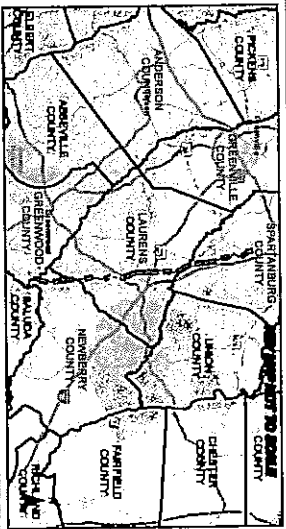
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4	08/15/16	ISSUED FOR PERMITTING
5	08/15/16	ISSUED FOR PERMITTING
6	08/15/16	ISSUED FOR PERMITTING
7	08/15/16	ISSUED FOR PERMITTING
8	08/15/16	ISSUED FOR PERMITTING
9	08/15/16	ISSUED FOR PERMITTING
10	08/15/16	ISSUED FOR PERMITTING

SAC-2015-00709
 Moore to Chappells Pipeline
 Spartanburg, Newberry, Laurens, Greenwood Counties
 September 15, 2016 Sheet 16 of 51



Impact No. 32
Temporary Impact
1095-TP (1.4 LF)

PERMITTED
PLANS



NOTES

1. All work shall be in accordance with the approved plans and specifications.

2. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities.

3. The contractor shall maintain access to all adjacent properties at all times.

4. The contractor shall be responsible for the protection and preservation of all existing utilities and structures.

5. The contractor shall be responsible for the removal and disposal of all debris and waste.

6. The contractor shall be responsible for the regrading and stabilization of all disturbed areas.

7. The contractor shall be responsible for the installation and maintenance of all erosion control measures.

8. The contractor shall be responsible for the installation and maintenance of all sediment control measures.

9. The contractor shall be responsible for the installation and maintenance of all water control measures.

10. The contractor shall be responsible for the installation and maintenance of all drainage measures.

11. The contractor shall be responsible for the installation and maintenance of all utility measures.

12. The contractor shall be responsible for the installation and maintenance of all other measures.

LEGEND

1. Permitted Plans

2. Temporary Impact

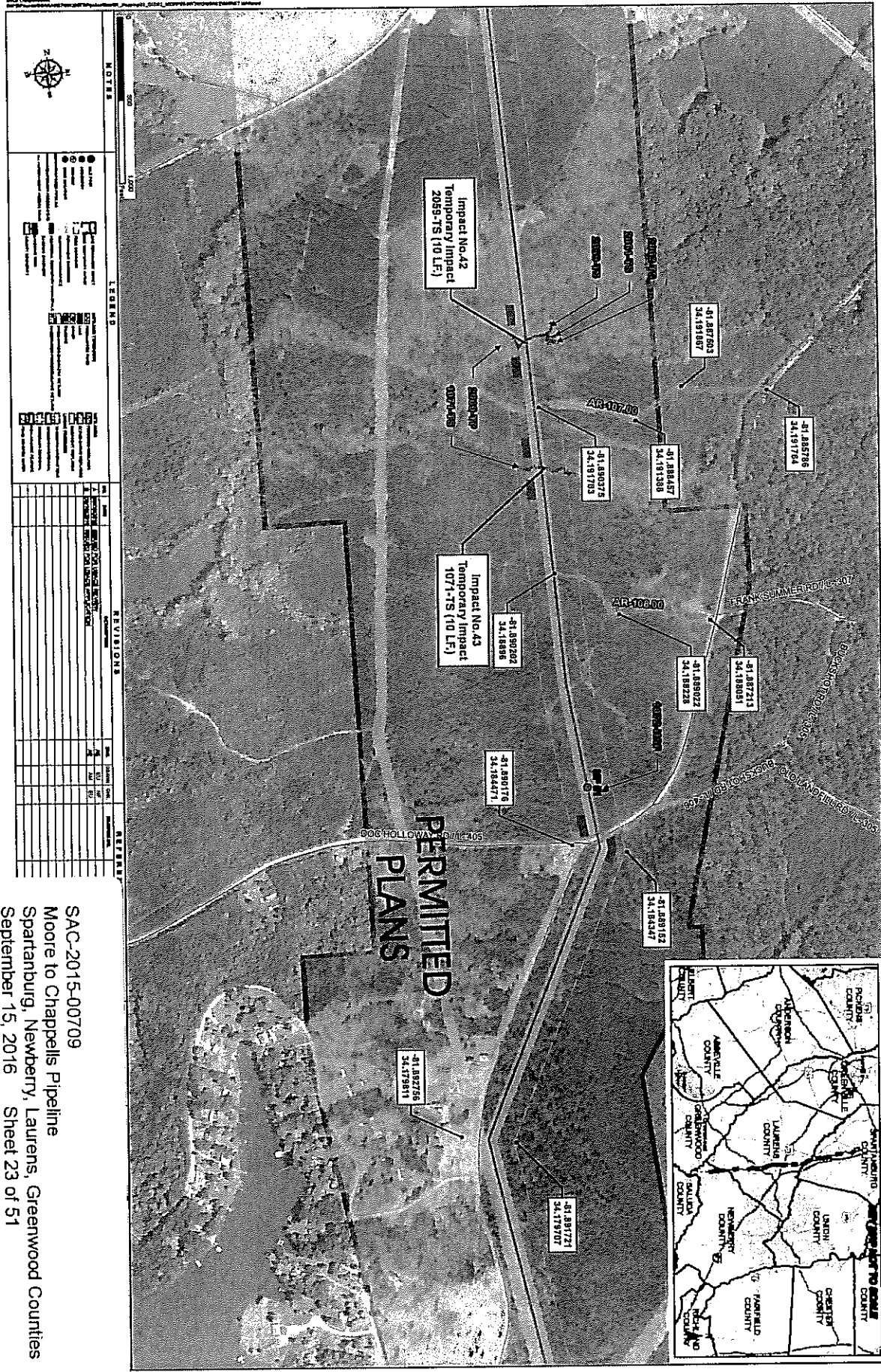
3. Impact No. 32

4. Other

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHKD.
1	09/15/16	ISSUED FOR PERMITTING		
2	09/15/16	ISSUED FOR PERMITTING		
3	09/15/16	ISSUED FOR PERMITTING		
4	09/15/16	ISSUED FOR PERMITTING		
5	09/15/16	ISSUED FOR PERMITTING		
6	09/15/16	ISSUED FOR PERMITTING		
7	09/15/16	ISSUED FOR PERMITTING		
8	09/15/16	ISSUED FOR PERMITTING		
9	09/15/16	ISSUED FOR PERMITTING		
10	09/15/16	ISSUED FOR PERMITTING		
11	09/15/16	ISSUED FOR PERMITTING		
12	09/15/16	ISSUED FOR PERMITTING		
13	09/15/16	ISSUED FOR PERMITTING		
14	09/15/16	ISSUED FOR PERMITTING		
15	09/15/16	ISSUED FOR PERMITTING		
16	09/15/16	ISSUED FOR PERMITTING		
17	09/15/16	ISSUED FOR PERMITTING		
18	09/15/16	ISSUED FOR PERMITTING		
19	09/15/16	ISSUED FOR PERMITTING		
20	09/15/16	ISSUED FOR PERMITTING		

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NOTES

LEGEND

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHKD.
1	09/15/2015	ISSUED FOR PERMITTING	JL	ML
2	09/15/2015	REVISIONS	JL	ML
3	09/15/2015	REVISIONS	JL	ML
4	09/15/2015	REVISIONS	JL	ML
5	09/15/2015	REVISIONS	JL	ML
6	09/15/2015	REVISIONS	JL	ML
7	09/15/2015	REVISIONS	JL	ML
8	09/15/2015	REVISIONS	JL	ML
9	09/15/2015	REVISIONS	JL	ML
10	09/15/2015	REVISIONS	JL	ML
11	09/15/2015	REVISIONS	JL	ML
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13	09/15/2015	REVISIONS	JL	ML
14	09/15/2015	REVISIONS	JL	ML
15	09/15/2015	REVISIONS	JL	ML
16	09/15/2015	REVISIONS	JL	ML
17	09/15/2015	REVISIONS	JL	ML
18	09/15/2015	REVISIONS	JL	ML
19	09/15/2015	REVISIONS	JL	ML
20	09/15/2015	REVISIONS	JL	ML

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHKD.
1	09/15/2015	ISSUED FOR PERMITTING	JL	ML
2	09/15/2015	REVISIONS	JL	ML
3	09/15/2015	REVISIONS	JL	ML
4	09/15/2015	REVISIONS	JL	ML
5	09/15/2015	REVISIONS	JL	ML
6	09/15/2015	REVISIONS	JL	ML
7	09/15/2015	REVISIONS	JL	ML
8	09/15/2015	REVISIONS	JL	ML
9	09/15/2015	REVISIONS	JL	ML
10	09/15/2015	REVISIONS	JL	ML
11	09/15/2015	REVISIONS	JL	ML
12	09/15/2015	REVISIONS	JL	ML
13	09/15/2015	REVISIONS	JL	ML
14	09/15/2015	REVISIONS	JL	ML
15	09/15/2015	REVISIONS	JL	ML
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17	09/15/2015	REVISIONS	JL	ML
18	09/15/2015	REVISIONS	JL	ML
19	09/15/2015	REVISIONS	JL	ML
20	09/15/2015	REVISIONS	JL	ML

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Block 35. Type and Quantity of Impacts to U.S. Waters (including wetlands)

Type	Description	Permanent (linear feet)	Temporary (linear feet)
Temporary Construction	Trench Box	0	520
New Culverts	Culverts (AR-155, AR-156)	24, 30	0
TOTAL		54	520

**PERMITTED
 PLANS**

Block 37. Individually list all seasonal and perennial stream impacts and attach a site map with location of each impact (attach additional sheets)

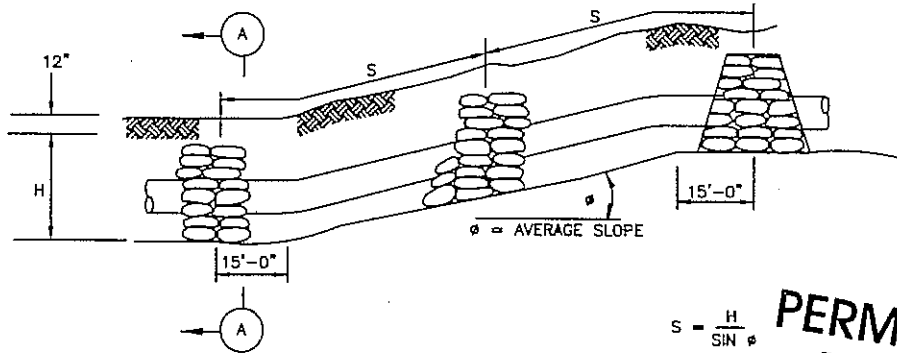
Impact No.	Feature Name	Flow	Average Stream Width (LF)	Impact Type (road crossing, impoundment, flooding, etc.)	Impact Length (LF)
1	6009-TP	Perennial	15	Temporary Construction: 10 ft. Trench Box	10
2	6012-TP	Perennial	15	Temporary Construction: 10 ft. Trench Box	17
3	6012-TP	Perennial	15	Temporary Construction: 10 ft. Trench Box	30
4	6012-TP	Perennial	15	Temporary Construction: 10 ft. Trench Box	16
5	1016-TS	Seasonal	3	Temporary Construction: 10 ft. Trench Box	12
6	5021-TS	Seasonal	10	Temporary Construction: 10 ft. Trench Box	10
7	2005-TS	Seasonal	10	Temporary Construction: 10 ft. Trench Box	10
8	2002-TP	Perennial	15	Temporary Construction: 10 ft. Trench Box	11
9	2003-TS	Seasonal	10	Temporary Construction: 10 ft. Trench Box	13
10	1089-TP	Perennial	10	Temporary Construction: 10 ft. Trench Box	11
11	2001-TP	Perennial	10	Temporary Construction: 10 ft. Trench Box	13
12	2011-TS	Seasonal	5	Temporary Construction: 10 ft. Trench Box	12
13	4003-TS	Seasonal	20	Temporary Construction: 10 ft. Trench Box	10
14	4008-TP	Perennial	35	Temporary Construction: 10 ft. Trench Box	11

Impact No.	Feature Name	Flow	Average Stream Width (LF)	Impact Type (road crossing, impoundment, flooding, etc.)	Impact Length (LF)
15	4005-TI	Intermittent	6	Temporary Construction: 10 ft. Trench Box	49
16	9040 -TP	Perennial	15	Temporary Construction: 10 ft. Trench Box	11
17	3003-TS	Seasonal	15	Temporary Construction: 10 ft. Trench Box	10
18	1069-TP	Perennial	10	Temporary Construction: 10 ft. Trench Box	11
19	1070-TS	Seasonal	3	Temporary Construction: 10 ft. Trench Box	11
20	2020-TI	Intermittent	5	Temporary Construction: 10 ft. Trench Box	14
21	2022-TP	Perennial	8	Temporary Construction: 10 ft. Trench Box	10
22	2017-TP	Perennial	7	Permanent Culvert on Access Road 155 (AR-155)	24
23	1066-TP	Perennial	12	Temporary Construction: 10 ft. Trench Box	10
24	2031-TI	Intermittent	3	Temporary Construction: 10 ft. Trench Box	11
25	2032-TS	Seasonal	6	Temporary Construction: 10 ft. Trench Box	10
26	1080-TS	Seasonal	9	Temporary Construction: 10 ft. Trench Box	10
27	9010-TS	Seasonal	6	Temporary Construction: 10 ft. Trench Box	10
28	9068-TS	Seasonal	6	Permanent Culvert on Access Road 156 (AR-156)	30
29	2048-TP	Perennial	6	Temporary Construction: 10 ft. Trench Box	12
30	2042-TS	Seasonal	10	Temporary Construction: 10 ft. Trench Box	10
31	2044-TP	Perennial	10	Temporary Construction: 10 ft. Trench Box	11
32	1095-TP	Perennial	10	Temporary Construction: 10 ft. Trench Box	14
33	6020-TP	Perennial	40	Temporary Construction: 10 ft. Trench Box	13
34	9001-TP	Perennial	10	Temporary Construction: 10 ft. Trench Box	10
35	2055-TS	Seasonal	8	Temporary Construction: 10 ft. Trench Box	10

**PERMITTED
PLANS**

Impact No.	Feature Name	Flow	Average Stream Width (LF)	Impact Type (road crossing, impoundment, flooding, etc.)	Impact Length (LF)
36	3033-TS	Seasonal	6	Temporary Construction: 10 ft. Trench Box	13
37	9033-TI	Intermittent	8	Temporary Construction: 10 ft. Trench Box	13
38	2065-TS	Seasonal	10	Temporary Construction: 10 ft. Trench Box	10
39	8013-TS	Seasonal	15	Temporary Construction: 10 ft. Trench Box	10
40	2066-TP	Perennial	20	Temporary Construction: 10 ft. Trench Box	10
41	2051-TP Pages Creek	Perennial	6	Temporary Construction: 10 ft. Trench Box	11
42	2059-TS	Seasonal	6	Temporary Construction: 10 ft. Trench Box	10
43	1071-TS	Seasonal	8	Temporary Construction: 10 ft. Trench Box	10

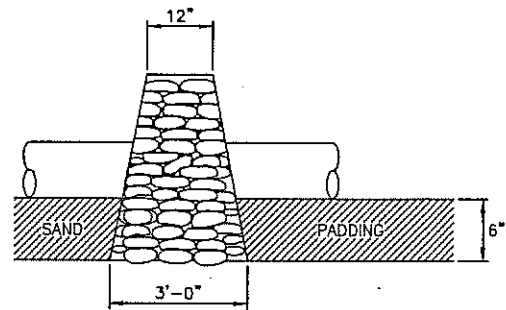
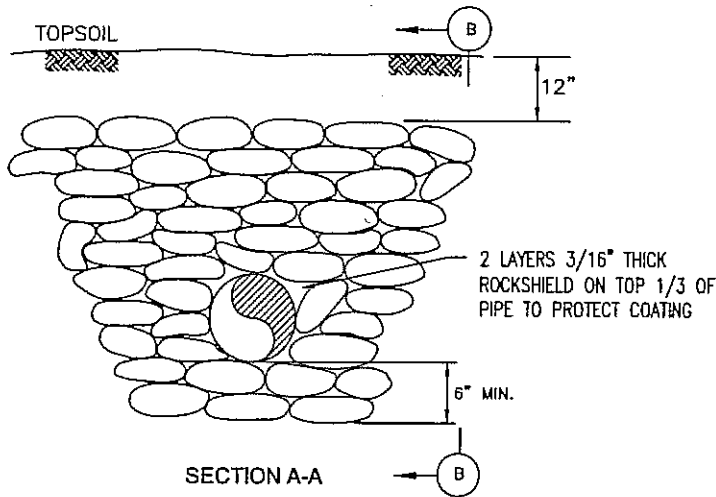
**PERMITTED
PLANS**



PERMITTED PLANS

$$S = \frac{H}{\sin \phi}$$

EXAMPLE: 20 SLOPE WOULD REQUIRE SPACING OF 18' IF HEIGHT OF BREAKERS IS 6'.

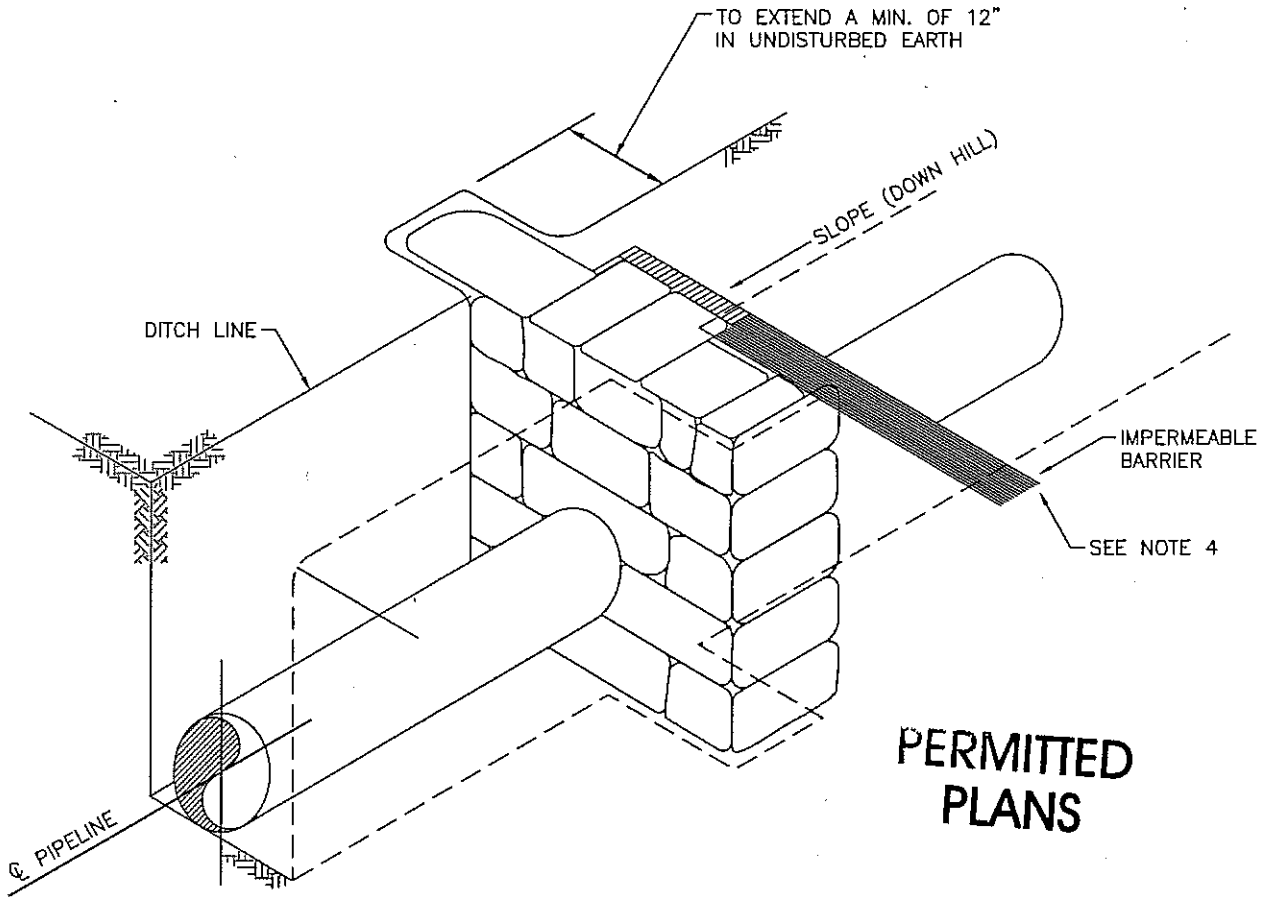


NOTES:

1. BREAKERS SHALL BE INSTALLED AT SHARP CHANGES OF SLOPE WHERE THE NATURAL DRAINAGE PATTERN, PROFILE WILL CAUSE THE TRENCH TO ACT AS A DRAIN.
2. ADJUST SPACING OF BREAKERS SO TOP OF BREAKER IS APPROXIMATELY THE SAME ELEVATION AS BOTTOM OF UPHILL BREAKER, OR AS INDICATED IN TABLE SAME ELEVATION AS BOTTOM OF TO RIGHT (MORE STRINGENT SHALL APPLY)
3. COMPANY MAY SPECIFY POLYURETHANE FOAM BREAKERS OR OTHER MATERIALS AS REQUIRED
4. WHERE PIPELINE TRENCH MAY DRAIN A WETLAND, CONSTRUCT TRENCH BREAKER AND/OR SEAL TRENCH BOTTOM AS NECESSARY TO MAINTAIN ORIGINAL WETLAND HYDROLOGY.
5. FOR EACH WATERBODY CROSSED, INSTALL PERMANENT TRENCH BREAKER AT THE BASE OF SLOPES NEAR THE WATERBODY. LOCATE TRENCH BREAKER UPSLOPE OF THE SLOPE BREAKER.

SLOPE	SPACING
LESS THAN 5%	NO STRUCTURE
5 TO 10%	100 TO 150 FEET
11 TO 15%	80 TO 100 FEET
16 TO 20%	70 TO 80 FEET
21 TO 30%	50 TO 70 FEET
GREATER THAN 30%	25 TO 50 FEET

SACK (TRENCH) BREAKERS REQUIREMENTS



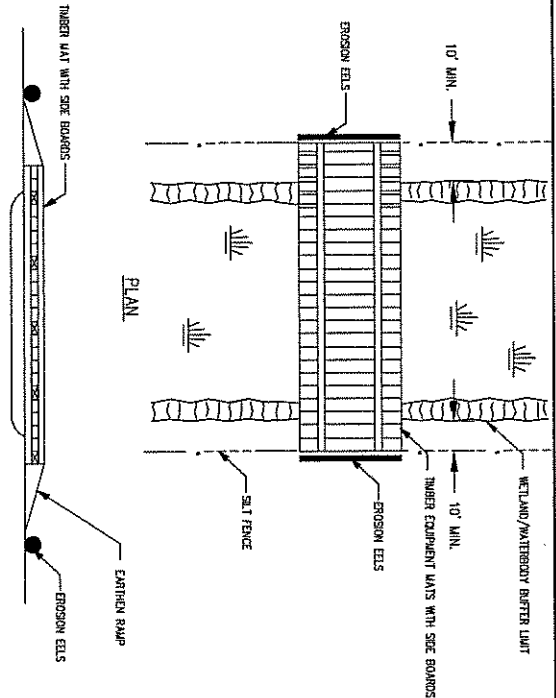
NOTES:

1. FILL BAGS WITH EARTH OR CLAY AND FIT TOGETHER TO FORM WATERTIGHT BARRIER, WITH BREAKER'S LEADING EDGE TAPERED TO FORCE WATER TO SURFACE.
2. INSTALL BREAKER IN AREAS PRONE TO BACKFILL MATERIAL EROSION.
3. CONSTRUCT IMPERMEABLE BARRIER USING 6 MIL POLYETHYLENE SHEET OR MINIMUM 4" THICKNESS OF BENTONITE OR EQUIVALENT.
4. EXTEND IMPERMEABLE BARRIER A MINIMUM 12" BELOW DITCH BOTTOM AND 8" BEYOND DITCH WALLS.

TYPICAL SACK DITCH BREAKER

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- NOTES**
1. PERIODICALLY CHECK INSTALLATION AND REMOVE BUILD-UP OF SEDIMENT OR DEBRIS.
 2. MATS ARE PLACED IN WETLANDS SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP. REMOVAL OF THIS STRUCTURE IS NOT CONTINGENT UPON ESTABLISHMENT OF PERMANENT VEGETATION.
 3. IF A WATERBODY IS LOCATED WITHIN A WETLAND SYSTEM, EXTEND TIMBER EQUIPMENT MATS TO THE BRIDGE EQUIPMENT CROSSING USED TO CROSS THE WATERBODY IN ORDER TO ALLOW FOR CONTINUOUS TIMBER EQUIPMENT MAT COVERAGE THROUGHOUT THE WETLAND AND WATERBODY AREA.
 4. USE ADDITIONAL TIMBER MAT LAYERS TO RAISE CROSSING ABOVE GRADE WHERE POOR SOIL CONDITIONS EXIST.
 5. TIMBER EQUIPMENT MATS SHALL EXTEND A MINIMUM OF 10 FEET OUTSIDE OF THE WETLAND/WATERBODY BOUNDARIES.
 6. INSTALL EARTHEN RAMP APPROACHES TO TIMBER EQUIPMENT MATS. EARTHEN RAMPS TO BE CONSTRUCTED OF UPLAND MATERIAL. TOP SOIL SHALL NOT BE USED TO CONSTRUCT EARTHEN RAMPS.
 7. INSTALL GEOTEXTILE FABRIC UNDER ALL BRIDGES AND TEMPORARY TIMBER MATS IN ORDER TO PREVENT SEDIMENT FROM ENTERING ADJACENT WATERBODIES AND WETLANDS.
 8. ALL TIMBER MATS SHALL HAVE SIDE BOARDS/CURBS TO CONTAIN SEDIMENT AND/OR DEBRIS FROM ENTERING ADJACENT WATERBODIES AND WETLANDS.

TEMPORARY TIMBER EQUIPMENT MAT

NOTES		WETLAND EQUIPMENT MAT		REFERENCE DRAWING	
NO.	DESCRIPTION	OR (EAS)	SHOWN AS	NO.	DATE
1	10/17/16			1	10/17/16
2	10/17/16			2	10/17/16
3	10/17/16			3	10/17/16
4	10/17/16			4	10/17/16
5	10/17/16			5	10/17/16
6	10/17/16			6	10/17/16
7	10/17/16			7	10/17/16
8	10/17/16			8	10/17/16
9	10/17/16			9	10/17/16
10	10/17/16			10	10/17/16

STATION	DESCRIPTION	STATION	EXTENSION
528+00	HOOD ENTRY POINT	529+00	100'
530+00	PROPERTY LINE	531+00	100'
533+00	WATERBODY	534+00	100'
535+00	PROPOSED 12" CHAPPELLS PIPELINE	536+00	100'
537+00	WATERBODY	538+00	100'
541+00	HOOD ENTRY POINT	542+00	100'
544+00	HOOD ENTRY POINT	545+00	100'

NO.	DATE	BY	DESCRIPTION
1	09/15/2016	J. LAURENS	ISSUED FOR PERMIT
2	09/15/2016	J. LAURENS	REVISED PER COMMENTS
3	09/15/2016	J. LAURENS	REVISED PER COMMENTS
4	09/15/2016	J. LAURENS	REVISED PER COMMENTS
5	09/15/2016	J. LAURENS	REVISED PER COMMENTS

NO.	DATE	BY	DESCRIPTION
1	09/15/2016	J. LAURENS	ISSUED FOR PERMIT
2	09/15/2016	J. LAURENS	REVISED PER COMMENTS
3	09/15/2016	J. LAURENS	REVISED PER COMMENTS
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1	09/15/2016	J. LAURENS	ISSUED FOR PERMIT
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3	09/15/2016	J. LAURENS	REVISED PER COMMENTS
4	09/15/2016	J. LAURENS	REVISED PER COMMENTS
5	09/15/2016	J. LAURENS	REVISED PER COMMENTS

PERMITTED PLANS

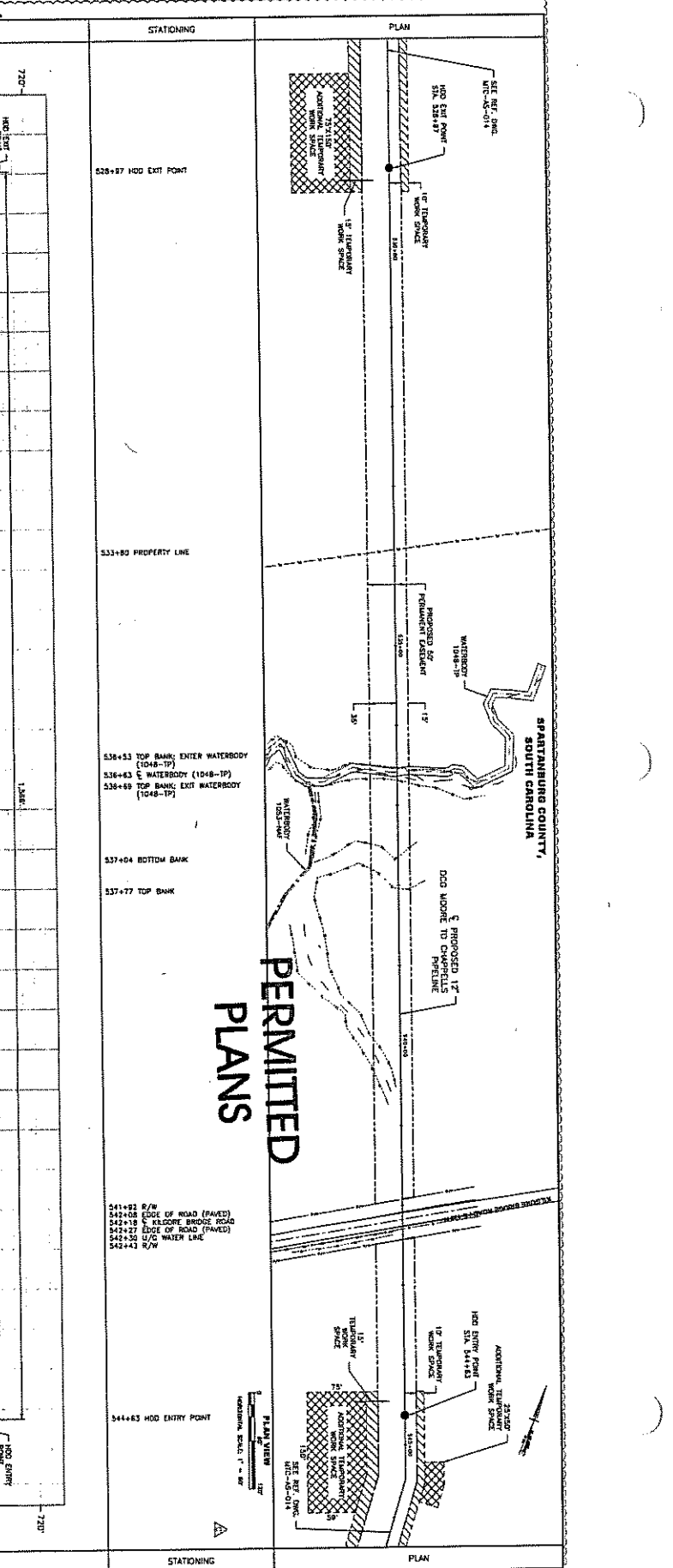
SPARTANBURG COUNTY, SOUTH CAROLINA

536+53 TOP BANK; ENTER WATERBODY (1048-TP)
 536+85 C WATERBODY (1048-TP)
 538+88 TOP BANK; EXIT WATERBODY (1048-TP)

537+04 BOTTOM BANK
 537+77 TOP BANK

541+82 R/W
 542+08 EDGE OF ROAD (PAVED)
 542+18 C KILGORE BRIDGE ROAD
 542+27 EDGE OF ROAD (PAVED)
 542+30 R/W
 542+42 R/W

544+65 HOOD ENTRY POINT



PERMITTED PLANS

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NOTES:

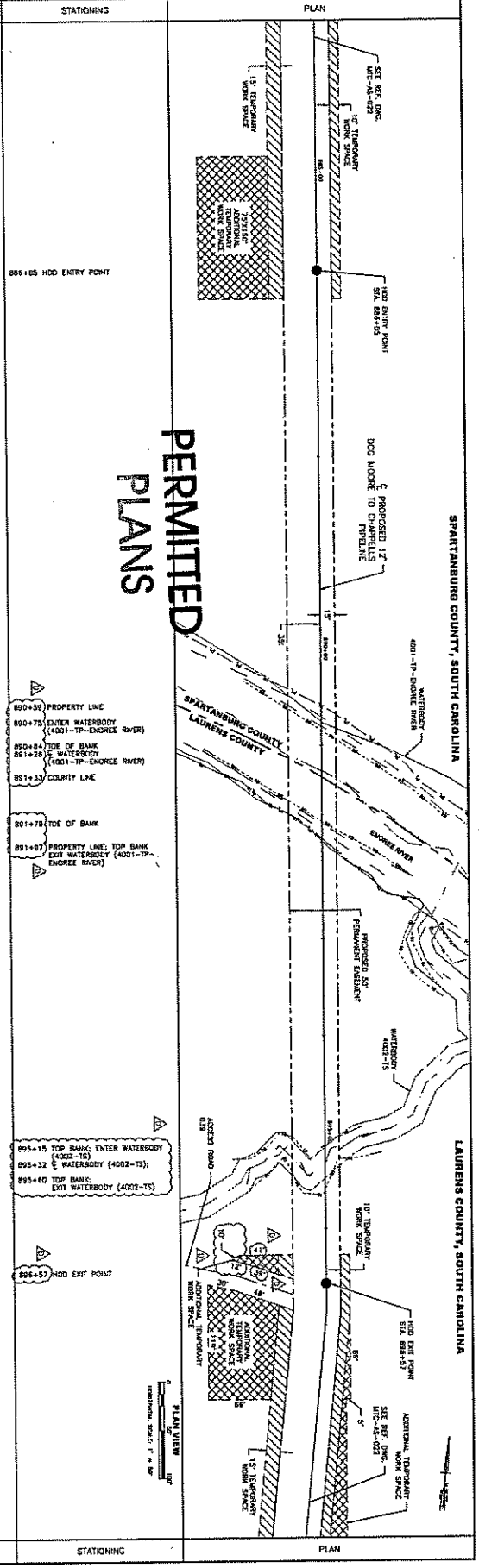
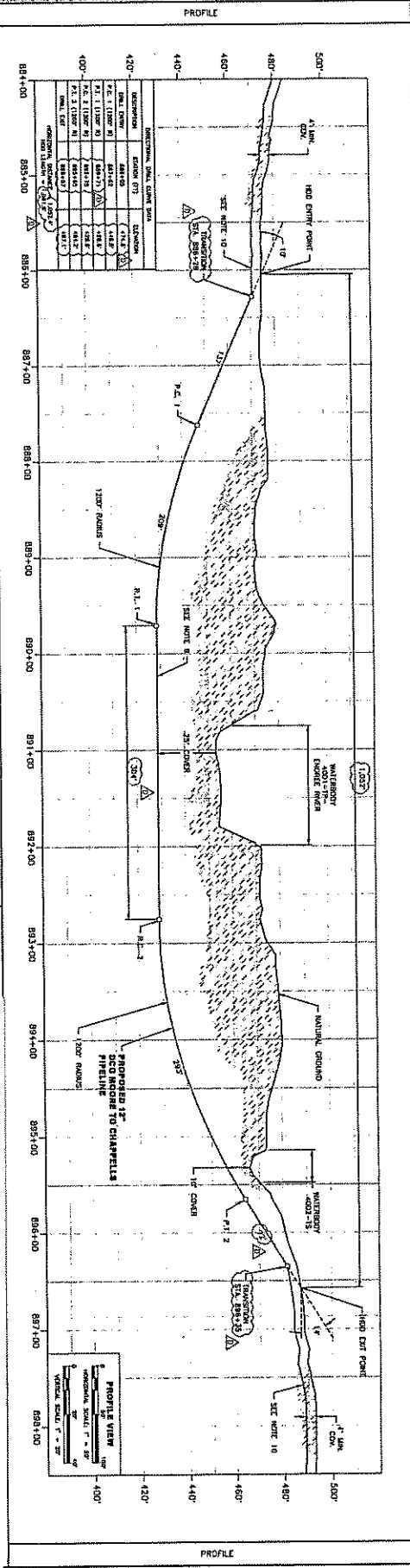
1. THE PROPOSED PIPELINE IS SHOWN IN RED.
2. THE PROPOSED PIPELINE IS 12" DIAMETER AND 12" DEEP.
3. THE PROPOSED PIPELINE IS TO BE INSTALLED IN A 12" DIAMETER TRENCH.
4. THE PROPOSED PIPELINE IS TO BE INSTALLED IN A 12" DIAMETER TRENCH.
5. THE PROPOSED PIPELINE IS TO BE INSTALLED IN A 12" DIAMETER TRENCH.
6. THE PROPOSED PIPELINE IS TO BE INSTALLED IN A 12" DIAMETER TRENCH.
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8. THE PROPOSED PIPELINE IS TO BE INSTALLED IN A 12" DIAMETER TRENCH.
9. THE PROPOSED PIPELINE IS TO BE INSTALLED IN A 12" DIAMETER TRENCH.
10. THE PROPOSED PIPELINE IS TO BE INSTALLED IN A 12" DIAMETER TRENCH.

LEGEND:

PROPOSED PIPELINE	12" DIA. PIPE
PROPOSED TRENCH	12" DIA. TRENCH
PROPOSED WORK SPACE	12" DIA. WORK SPACE
PROPOSED TRENCH	12" DIA. TRENCH
PROPOSED WORK SPACE	12" DIA. WORK SPACE

REFERENCE ORAINS:

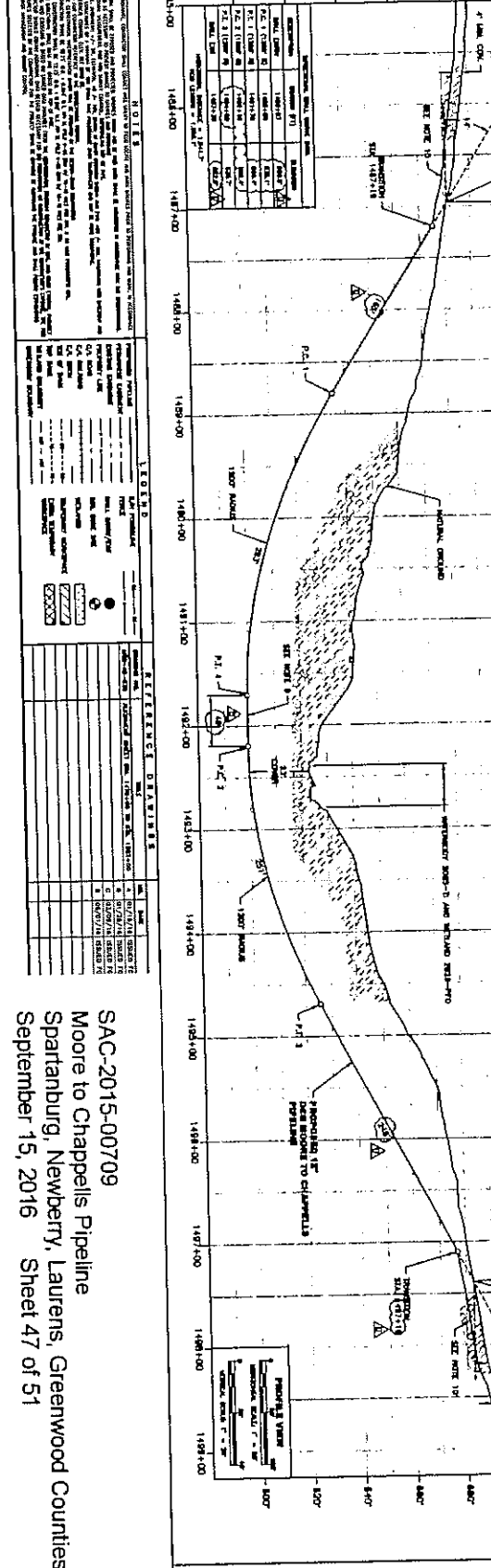
NO.	DATE	DESCRIPTION
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2	09/15/2016	ISSUED FOR PERMITTING
3	09/15/2016	ISSUED FOR PERMITTING
4	09/15/2016	ISSUED FOR PERMITTING
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9	09/15/2016	ISSUED FOR PERMITTING
10	09/15/2016	ISSUED FOR PERMITTING



PERMITTED PLANS

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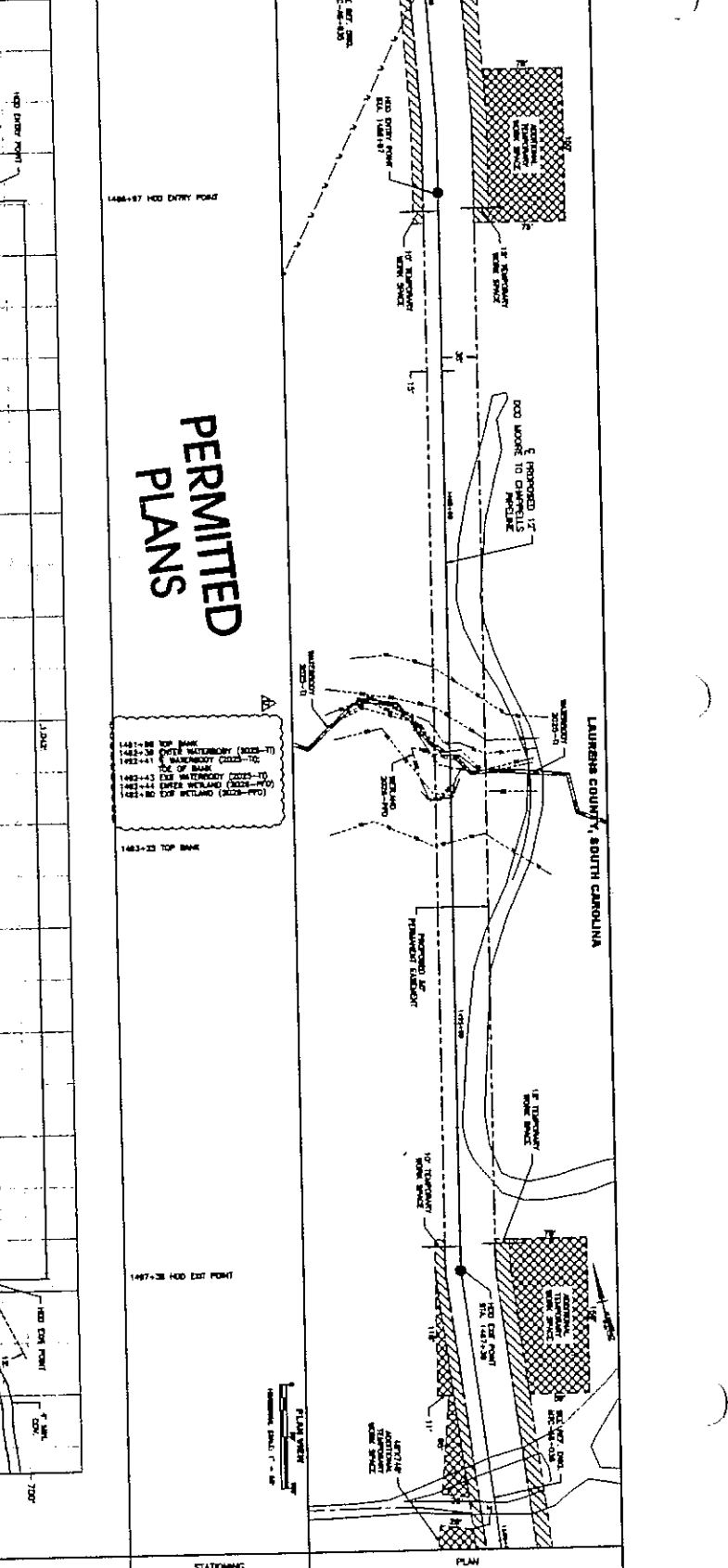
PERMITTED PLANS



LAURENS COUNTY, SOUTH CAROLINA

1483+00 1483+100 1483+200 1483+300 1483+400 1483+500 1483+600 1483+700 1483+800 1483+900 1484+00 1484+100 1484+200 1484+300 1484+400 1484+500 1484+600 1484+700 1484+800 1484+900 1485+00 1485+100 1485+200 1485+300 1485+400 1485+500 1485+600 1485+700 1485+800 1485+900 1486+00 1486+100 1486+200 1486+300 1486+400 1486+500 1486+600 1486+700 1486+800 1486+900 1487+00 1487+100 1487+200 1487+300 1487+400 1487+500 1487+600 1487+700 1487+800 1487+900 1488+00 1488+100 1488+200 1488+300 1488+400 1488+500 1488+600 1488+700 1488+800 1488+900 1489+00 1489+100 1489+200 1489+300 1489+400 1489+500 1489+600 1489+700 1489+800 1489+900 1490+00 1490+100 1490+200 1490+300 1490+400 1490+500 1490+600 1490+700 1490+800 1490+900 1491+00 1491+100 1491+200 1491+300 1491+400 1491+500 1491+600 1491+700 1491+800 1491+900 1492+00 1492+100 1492+200 1492+300 1492+400 1492+500 1492+600 1492+700 1492+800 1492+900 1493+00 1493+100 1493+200 1493+300 1493+400 1493+500 1493+600 1493+700 1493+800 1493+900 1494+00 1494+100 1494+200 1494+300 1494+400 1494+500 1494+600 1494+700 1494+800 1494+900 1495+00 1495+100 1495+200 1495+300 1495+400 1495+500 1495+600 1495+700 1495+800 1495+900 1496+00 1496+100 1496+200 1496+300 1496+400 1496+500 1496+600 1496+700 1496+800 1496+900 1497+00 1497+100 1497+200 1497+300 1497+400 1497+500 1497+600 1497+700 1497+800 1497+900 1498+00 1498+100 1498+200 1498+300 1498+400 1498+500 1498+600 1498+700 1498+800 1498+900 1499+00 1499+100 1499+200 1499+300 1499+400 1499+500 1499+600 1499+700 1499+800 1499+900 1500+00 1500+100 1500+200 1500+300 1500+400 1500+500 1500+600 1500+700 1500+800 1500+900

PROFILING



PROFILING

1483+00 1483+100 1483+200 1483+300 1483+400 1483+500 1483+600 1483+700 1483+800 1483+900 1484+00 1484+100 1484+200 1484+300 1484+400 1484+500 1484+600 1484+700 1484+800 1484+900 1485+00 1485+100 1485+200 1485+300 1485+400 1485+500 1485+600 1485+700 1485+800 1485+900 1486+00 1486+100 1486+200 1486+300 1486+400 1486+500 1486+600 1486+700 1486+800 1486+900 1487+00 1487+100 1487+200 1487+300 1487+400 1487+500 1487+600 1487+700 1487+800 1487+900 1488+00 1488+100 1488+200 1488+300 1488+400 1488+500 1488+600 1488+700 1488+800 1488+900 1489+00 1489+100 1489+200 1489+300 1489+400 1489+500 1489+600 1489+700 1489+800 1489+900 1490+00 1490+100 1490+200 1490+300 1490+400 1490+500 1490+600 1490+700 1490+800 1490+900 1491+00 1491+100 1491+200 1491+300 1491+400 1491+500 1491+600 1491+700 1491+800 1491+900 1492+00 1492+100 1492+200 1492+300 1492+400 1492+500 1492+600 1492+700 1492+800 1492+900 1493+00 1493+100 1493+200 1493+300 1493+400 1493+500 1493+600 1493+700 1493+800 1493+900 1494+00 1494+100 1494+200 1494+300 1494+400 1494+500 1494+600 1494+700 1494+800 1494+900 1495+00 1495+100 1495+200 1495+300 1495+400 1495+500 1495+600 1495+700 1495+800 1495+900 1496+00 1496+100 1496+200 1496+300 1496+400 1496+500 1496+600 1496+700 1496+800 1496+900 1497+00 1497+100 1497+200 1497+300 1497+400 1497+500 1497+600 1497+700 1497+800 1497+900 1498+00 1498+100 1498+200 1498+300 1498+400 1498+500 1498+600 1498+700 1498+800 1498+900 1499+00 1499+100 1499+200 1499+300 1499+400 1499+500 1499+600 1499+700 1499+800 1499+900 1500+00 1500+100 1500+200 1500+300 1500+400 1500+500 1500+600 1500+700 1500+800 1500+900

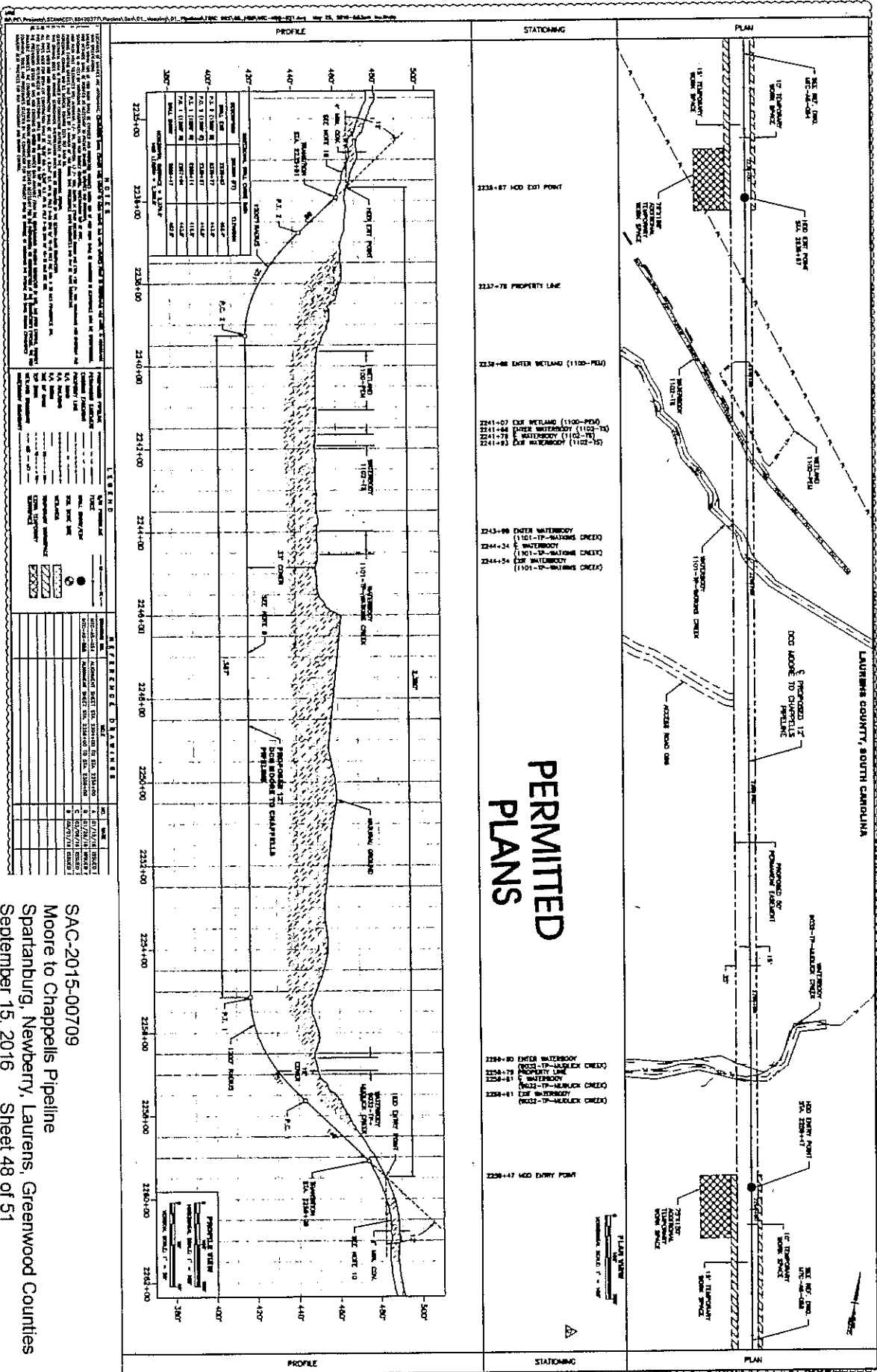
LEGEND

PROPOSED PIPELINE	PROPOSED 12" DIA. PIPE
EXISTING PIPELINE	EXISTING 12" DIA. PIPE
PROPOSED TRENCH	PROPOSED TRENCH
EXISTING TRENCH	EXISTING TRENCH
PROPOSED VALVE	PROPOSED VALVE
EXISTING VALVE	EXISTING VALVE
PROPOSED HYDRANT	PROPOSED HYDRANT
EXISTING HYDRANT	EXISTING HYDRANT
PROPOSED MANHOLE	PROPOSED MANHOLE
EXISTING MANHOLE	EXISTING MANHOLE
PROPOSED UTILITY	PROPOSED UTILITY
EXISTING UTILITY	EXISTING UTILITY
PROPOSED ROAD	PROPOSED ROAD
EXISTING ROAD	EXISTING ROAD
PROPOSED FENCE	PROPOSED FENCE
EXISTING FENCE	EXISTING FENCE
PROPOSED EROSION CONTROL	PROPOSED EROSION CONTROL
EXISTING EROSION CONTROL	EXISTING EROSION CONTROL
PROPOSED SIGN	PROPOSED SIGN
EXISTING SIGN	EXISTING SIGN
PROPOSED LIGHTING	PROPOSED LIGHTING
EXISTING LIGHTING	EXISTING LIGHTING
PROPOSED LANDSCAPING	PROPOSED LANDSCAPING
EXISTING LANDSCAPING	EXISTING LANDSCAPING
PROPOSED MAINTENANCE	PROPOSED MAINTENANCE
EXISTING MAINTENANCE	EXISTING MAINTENANCE
PROPOSED SAFETY	PROPOSED SAFETY
EXISTING SAFETY	EXISTING SAFETY

REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION
1	10/07/15	PROPOSED 12" DIA. PIPE
2	10/07/15	PROPOSED TRENCH
3	10/07/15	PROPOSED VALVE
4	10/07/15	PROPOSED HYDRANT
5	10/07/15	PROPOSED MANHOLE
6	10/07/15	PROPOSED UTILITY
7	10/07/15	PROPOSED ROAD
8	10/07/15	PROPOSED FENCE
9	10/07/15	PROPOSED EROSION CONTROL
10	10/07/15	PROPOSED SIGN
11	10/07/15	PROPOSED LIGHTING
12	10/07/15	PROPOSED LANDSCAPING
13	10/07/15	PROPOSED MAINTENANCE
14	10/07/15	PROPOSED SAFETY

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 Spartanburg, Newberry, Laurens, Greenwood Counties
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PERMITTED PLANS

NOTES

1. THE PROPOSED PIPELINE IS SHOWN IN THE PROFILE VIEW.
2. THE PROPOSED PIPELINE IS SHOWN IN THE PLAN VIEW.
3. THE PROPOSED PIPELINE IS SHOWN IN THE PLAN VIEW.
4. THE PROPOSED PIPELINE IS SHOWN IN THE PLAN VIEW.
5. THE PROPOSED PIPELINE IS SHOWN IN THE PLAN VIEW.
6. THE PROPOSED PIPELINE IS SHOWN IN THE PLAN VIEW.
7. THE PROPOSED PIPELINE IS SHOWN IN THE PLAN VIEW.
8. THE PROPOSED PIPELINE IS SHOWN IN THE PLAN VIEW.
9. THE PROPOSED PIPELINE IS SHOWN IN THE PLAN VIEW.
10. THE PROPOSED PIPELINE IS SHOWN IN THE PLAN VIEW.

LEGEND

PROPOSED PIPELINE	---
EXISTING PIPELINE	---
PROPOSED EASEMENT	---
EXISTING EASEMENT	---
PROPOSED WETLAND	---
EXISTING WETLAND	---
PROPOSED CREEK	---
EXISTING CREEK	---
PROPOSED ROAD	---
EXISTING ROAD	---
PROPOSED FENCE	---
EXISTING FENCE	---
PROPOSED UTILITY	---
EXISTING UTILITY	---

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
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10		

PROFILES

NO.	DATE	DESCRIPTION
1		
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PROFILES

NO.	DATE	DESCRIPTION
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PROFILES

NO.	DATE	DESCRIPTION
1		
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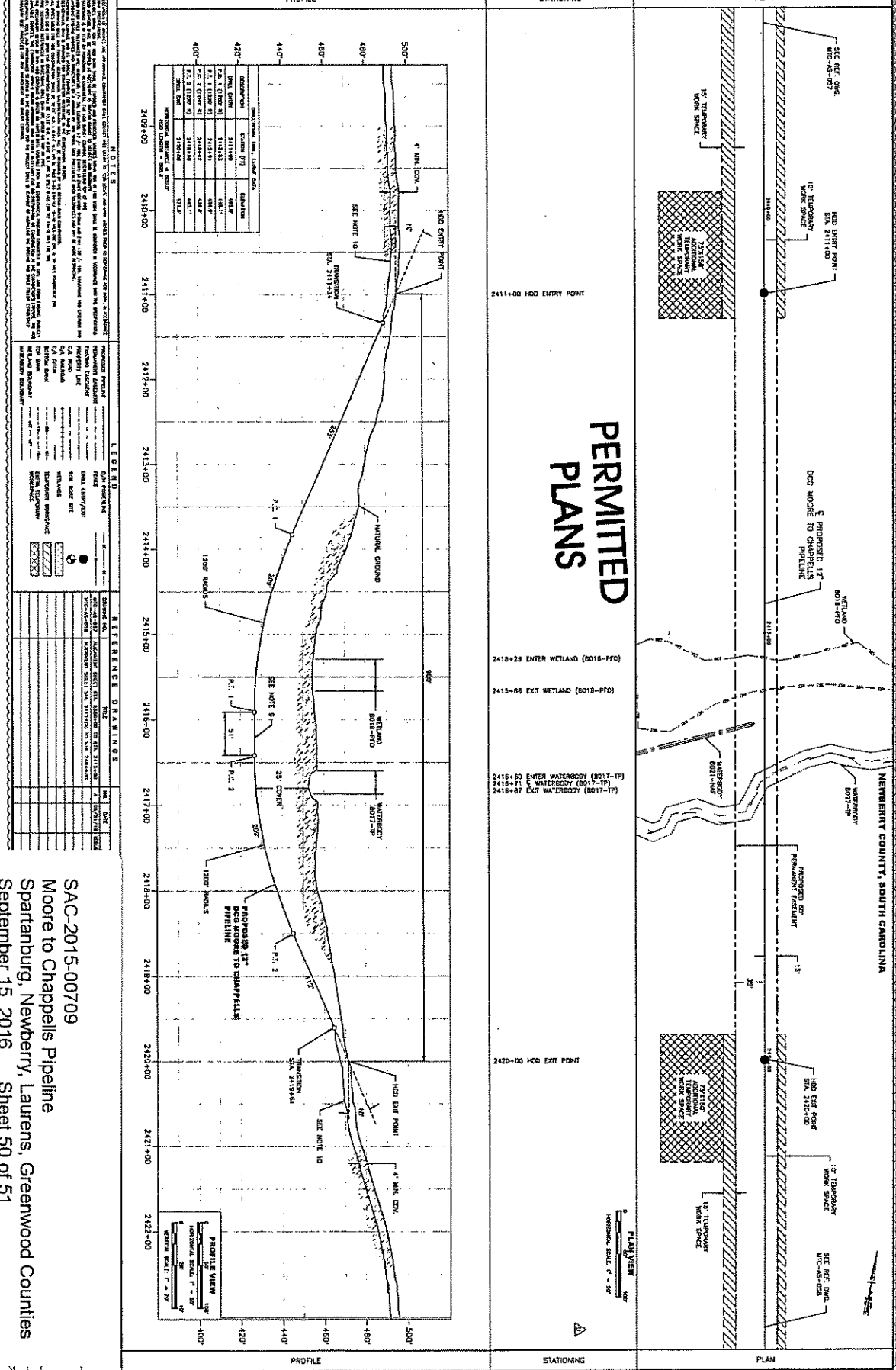
PROFILES

NO.	DATE	DESCRIPTION
1		
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PROFILES

NO.	DATE	DESCRIPTION
1		
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PROPOSED PIPELINE DATA

STATION	PIPE SIZE	PIPE TYPE	PIPE WALL THICKNESS	PIPE WEIGHT
2109+00	15"	TURBULAR IRON PIPE	0.1875"	12.5 LBS/FT
2110+00	12"	CHAMPELLE PIPE	0.1875"	12.5 LBS/FT
2111+00	15"	TURBULAR IRON PIPE	0.1875"	12.5 LBS/FT
2112+00	12"	CHAMPELLE PIPE	0.1875"	12.5 LBS/FT
2113+00	15"	TURBULAR IRON PIPE	0.1875"	12.5 LBS/FT
2114+00	12"	CHAMPELLE PIPE	0.1875"	12.5 LBS/FT
2115+00	15"	TURBULAR IRON PIPE	0.1875"	12.5 LBS/FT
2116+00	12"	CHAMPELLE PIPE	0.1875"	12.5 LBS/FT
2117+00	15"	TURBULAR IRON PIPE	0.1875"	12.5 LBS/FT
2118+00	12"	CHAMPELLE PIPE	0.1875"	12.5 LBS/FT
2119+00	15"	TURBULAR IRON PIPE	0.1875"	12.5 LBS/FT
2120+00	12"	CHAMPELLE PIPE	0.1875"	12.5 LBS/FT
2121+00	15"	TURBULAR IRON PIPE	0.1875"	12.5 LBS/FT
2122+00	12"	CHAMPELLE PIPE	0.1875"	12.5 LBS/FT

LEGEND

SYMBOL	DESCRIPTION
(Solid line)	PROPOSED PIPELINE
(Dashed line)	EXISTING PIPELINE
(Dotted line)	PROPOSED TRENCH
(Hatched area)	WETLAND
(Wavy line)	WATERBODY
(Cross-hatched area)	PROPOSED 15\"/>

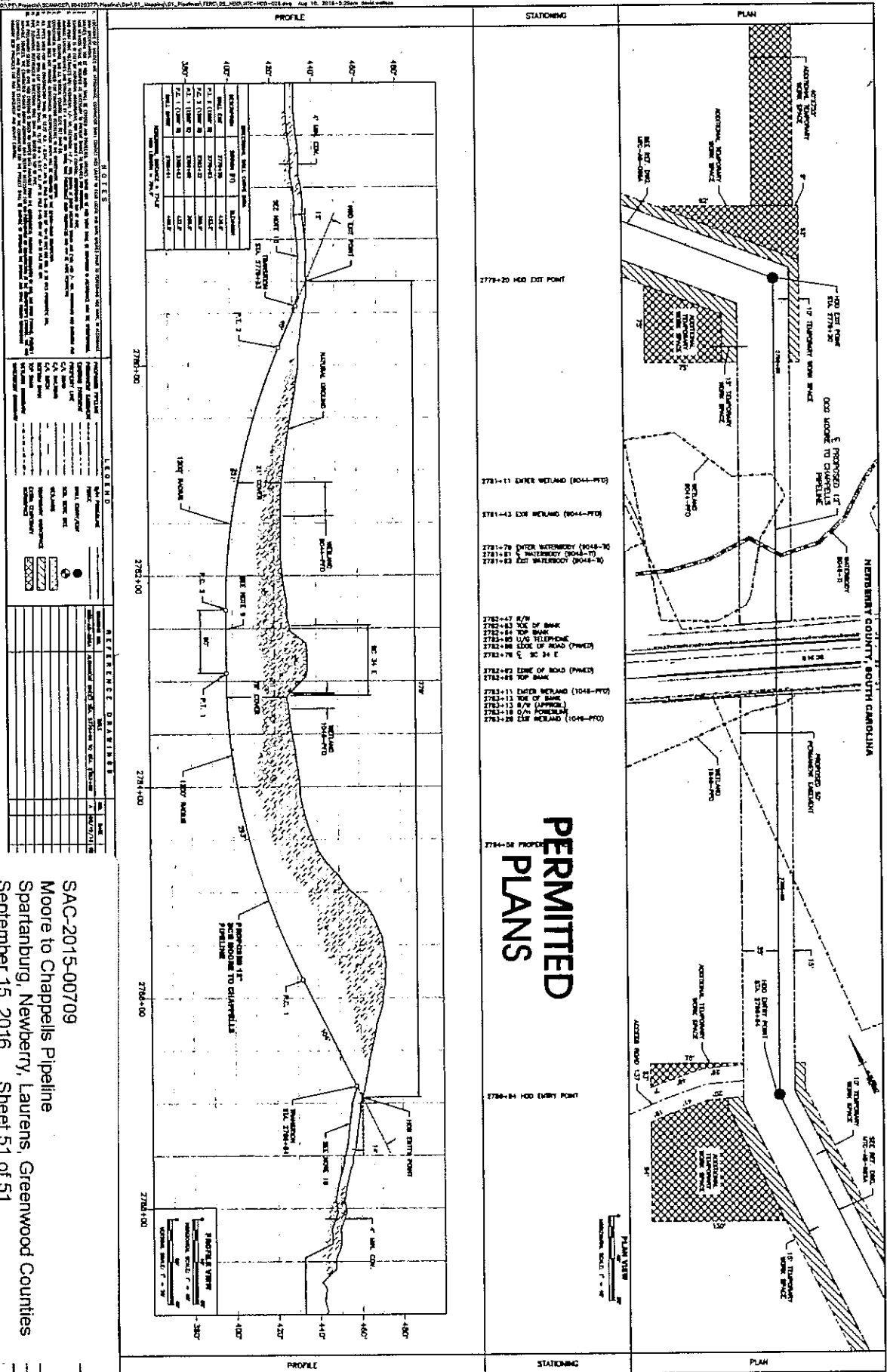
REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION
1	09/15/2016	PROPOSED PIPELINE DATA
2	09/15/2016	PROPOSED TRENCH DATA
3	09/15/2016	PROPOSED 15\"/>

NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SOUTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURE (SCEM) REGULATIONS.
- THE PROPOSED PIPELINE SHALL BE INSTALLED IN ACCORDANCE WITH THE SOUTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURE (SCEM) REGULATIONS.
- THE PROPOSED TRENCH SHALL BE INSTALLED IN ACCORDANCE WITH THE SOUTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURE (SCEM) REGULATIONS.
- THE PROPOSED 15\"/>

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NOTES

1. THE PROPOSED PIPELINE ROUTE IS SHOWN IN RED. THE EXISTING PIPELINE ROUTE IS SHOWN IN BLACK. THE PROPOSED PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375". THE EXISTING PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375".

2. THE PROPOSED PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375". THE EXISTING PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375".

3. THE PROPOSED PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375". THE EXISTING PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375".

4. THE PROPOSED PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375". THE EXISTING PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375".

5. THE PROPOSED PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375". THE EXISTING PIPELINE ROUTE IS 12" DIA. HDPE PIPE WITH A WALL THICKNESS OF 0.375".

LEGEND

PROPOSED PIPELINE	RED LINE
EXISTING PIPELINE	BLACK LINE
PROPOSED RIGHT-OF-WAY	RED DASHED LINE
EXISTING RIGHT-OF-WAY	BLACK DASHED LINE
PROPOSED EASEMENT	RED HATCH
EXISTING EASEMENT	BLACK HATCH
PROPOSED WETLAND	RED HATCH
EXISTING WETLAND	BLACK HATCH
PROPOSED WATERWAY	RED HATCH
EXISTING WATERWAY	BLACK HATCH
PROPOSED ROAD	RED HATCH
EXISTING ROAD	BLACK HATCH
PROPOSED FENCE	RED HATCH
EXISTING FENCE	BLACK HATCH
PROPOSED UTILITY	RED HATCH
EXISTING UTILITY	BLACK HATCH

REFERENCE DRAWINGS

NO.	DATE	DESCRIPTION
1	7/15/15	PROPOSED PIPELINE ROUTE
2	7/15/15	EXISTING PIPELINE ROUTE
3	7/15/15	PROPOSED RIGHT-OF-WAY
4	7/15/15	EXISTING RIGHT-OF-WAY
5	7/15/15	PROPOSED EASEMENT
6	7/15/15	EXISTING EASEMENT
7	7/15/15	PROPOSED WETLAND
8	7/15/15	EXISTING WETLAND
9	7/15/15	PROPOSED WATERWAY
10	7/15/15	EXISTING WATERWAY
11	7/15/15	PROPOSED ROAD
12	7/15/15	EXISTING ROAD
13	7/15/15	PROPOSED FENCE
14	7/15/15	EXISTING FENCE
15	7/15/15	PROPOSED UTILITY
16	7/15/15	EXISTING UTILITY

PERMITTED PLANS

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