

**JOINT**  
**PUBLIC NOTICE**

**CHARLESTON AND SAVANNAH DISTRICTS- US ARMY CORPS OF ENGINEERS**  
**69A Hagood Avenue**  
**Charleston, South Carolina 29403-5107**

and

**S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL**  
**Office of Ocean and Coastal Resource Management**  
**1362 McMillan Avenue, Suite 400**  
**Charleston, South Carolina 29405**

and

**GEORGIA DEPARTMENT OF NATURAL RESOURCES- ENVIRONMENTAL PROTECTION**  
**DIVISION**  
**4220 International Parkway Suite 101**  
**Atlanta, Georgia 30354**

REGULATORY DIVISION

Refer to: P/N SAC 2015-1627 (Charleston District)  
SAS 2007-1163 (Savannah District)

November 6, 2017

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), the South Carolina Coastal Zone Management Act (48-39-10 et.seq.), the S.C. Construction in Navigable Waters Permit Program (R. 19-450, et. seq., 1976 S.C. Code of Laws, as amended), the State of Georgia Coastal Management Program, and the Coastal Marshlands Protection Act (Georgia Laws), an application has been submitted by

**South Carolina Department of Transportation**  
**Post Office Box 191**  
**Columbia, South Carolina 20202-0191**  
and  
**Georgia Department of Transportation**  
**600 W. Peachtree Street, NW**  
**Atlanta, Georgia 30308**

for a permit to place fill material in wetland and other waters of the US to facilitate the widening an existing highway and the construction of an additional bridge within wetlands adjacent to and in

**THE BACK RIVER**

located along the existing US 17 beginning on Hutchinson Island, Chatham County, Georgia at the intersection of US 17 and Savannah Harbor Parkway and ending approximately 1500 feet from South Okatie Highway, Jasper County, South Carolina. (from: Latitude 32.096965, Longitude - 81.092564, to: Latitude: 32.119084, Longitude: -81.072446). The Back River is a Section 10 navigable waterway and is a Federal Project maintained by the Savannah District, US Army Corps of Engineers.

In order to give all interested parties an opportunity to express their views

## NOTICE

is hereby given that written statements regarding the proposed work will be received by the above mentioned offices until

### 30 DAYS FROM THE DATE OF THIS NOTICE

from those interested in the activity and whose interests may be affected by the proposed work.

## BACKGROUND

This Joint Public Notice announces a request for authorizations from the US Army Corps of Engineers, the SC Department of Health and Environmental Control and the State of Georgia. The applicant's proposed work may also require local governmental approval.

The authority of the Secretary of the Army and Chief of Engineers with respect to permitting bridges was transferred to the Secretary of Transportation under the Department of Transportation Act of October 15, 1966, therefore the US Coast Guard (USCG) has the authority and responsibility for permitting bridge. Be advised that the approval of bridges, including temporary structures such as trestles, rests with the U. S. Coast Guard (USCG) per Section 9 of the Rivers and Harbors Act (33 U.S.C 401). Based on this, the USACE permitting authority for this project would be limited to the placement of fill material in jurisdictional wetlands and waters of the US for the road widening and bridge approaches.

## STATE OF SOUTH CAROLINA

Water Quality Certification and South Carolina Coastal Zone Management Program: The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions the Coastal Zone Management Program (15 CFR 930). This activity may also require evaluation for compliance with the S. C. Construction in Navigable Waters Permit Program. State review, permitting and certification is conducted by the S. C. Department of Health and Environmental Control. The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review. The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

SCDHEC will receive written statements regarding the proposed work. Comments concerning these actions should be submitted to:

**South Carolina Department of Health and Environmental Control  
Office of Ocean and Coastal Resources Management  
1362 McMillan Avenue, Suite 400  
Charleston, South Carolina 29405.**

## STATE OF GEORGIA

Water Quality Certification: The Georgia Department of Natural Resources, Environmental Protection Division, intends to certify this project at the end of 30 days in accordance with the provisions of Section 401 of the Clean Water Act, which is required for a Federal Permit to conduct activity in, on, or adjacent to the waters of the State of Georgia. Copies of the application and supporting documents relative to a specific application will be available for review and copying at the office of the Georgia Department of Natural Resources, Environmental Protection Division, Water Protection Branch, 4220 International Parkway, Suite 101, Atlanta, Georgia 30354, during regular office hours. A copier machine is available for public use at a charge of 25 cents per page. Any person who desires to comment, object, or request a public hearing relative to State Water Quality Certification must do so within 30 days of the State's receipt of application in writing and state the reasons or basis of objections or request for a hearing. The application can be reviewed in the Savannah District, US Army Corps of Engineers, Regulatory Division, 100 W. Oglethorpe Avenue Savannah, Georgia 31401-3640.

State-owned Property and Resources: The applicant may also require assent from the State of Georgia, which may be in the form of a license, easement, lease, permit or other appropriate instrument.

Marshland Protection: This notice also serves as notification of a request to alter coastal marshlands (under the provision of the Coastal Marshlands Protection Act, Georgia Laws, 1970, p. 939 and as amended), if required. Comments concerning this action should be submitted to the Ecological Services Section, Coastal Resources Division, Georgia Department of Natural Resources, 1 Conservation Way, Brunswick, Georgia 31523-8600 (Telephone 912-264-7218).

Georgia Coastal Management Program: Prior to the Corps of Engineers making a final permit decision on this application, the project must be certified by the Georgia Department of Natural Resources, Coastal Resources Division, to be consistent with applicable provisions of the State of Georgia Coastal Management Program (15 CFR 930). Anyone wishing to comment on Coastal Management Program certification of this project should submit comments in writing within 30 days of the date of this notice to the Federal Consistency Coordinator, Ecological Services Section, Coastal Resources Division, Georgia Department of Natural Resources, One Conservation Way, Brunswick, Georgia 31523-8600 (Telephone 912-264-7218).

## DESCRIPTION OF PROPOSED WORK

The proposed work consists of conducting improvements to U.S. Highway 17 (U.S. 17) from the Interstate 16 (I-16) Spur on Hutchinson Island in Savannah, Chatham County, Georgia, and construction of a new bridge over the Back River crossing into South Carolina and continuing along U.S. 17 for a distance of 4.2-miles north to S.C. 315 (South Okatie Highway), in Hardeeville, Jasper County, South Carolina. Proposed work will include the widening of U.S. 17 in both South Carolina and Georgia from two to four travel lanes, a 36-foot wide depressed grass median, inside and outside shoulders, 2:1 and 4:1 side slopes, and a 6-foot wide paved bicycle lane. Travel lanes will be widened from 11-feet to 12-feet with 10-foot wide inside and outside shoulders in each direction; the bicycle lane will be incorporated into the outside shoulder. Intersection improvements will occur in South Carolina at U.S. 17 and S.C. 315 and in Georgia at U.S. 17 and I-16 Spur. A

new bridge will also be constructed over the Back River to accommodate the new travel lanes and will include bridge abutments in waters of the US to support the new bridge. The new bridge will be 3,289-feet long and 58.5-feet wide and will feature two 12-foot wide travel lanes, two 10-foot wide shoulders, one 10-foot wide multi-use path, three 1.5-foot parapets, and 47 support bents. The new road will be located generally west of the existing road alignment, while the new bridge will be located east of the existing bridge over the Back River. The proposed project will impact a total of approximately 21.693-acres of wetlands, which includes 19.399-acres of permanent fill and 2.294-acres of clearing impacts. Of these wetland impacts, approximately 13.547-acres (11.97-acres of fill, 1.577-acres of clearing) will be to tidal wetlands and 8.146-acres (7.429-acres of fill, 0.717-acre of clearing) will be to freshwater wetlands. Most of these impacts will occur in South Carolina, with 21.643 acres of impact, while the impacts in Georgia involve 0.05 acre of fill in tidal marsh and 0.01 acre of clearing of tidal marsh. For additional details regarding specific impact quantities and locations, please see the attached drawings.

**Purpose and Need:** As stated by the applicant: “The primary purpose of the proposed project is to increase roadway capacity on U.S. Highway 17 between I-16 Spur and S.C. 315, and provide a bicycle lane to improve safety for alternative modes of transportation. The project is needed to accommodate existing and future traffic volumes on U.S. Highway 17.”

**Avoidance and Minimization:** As stated by the applicant, in summary: During the design phase, avoidance and minimization measures resulted in a reduction of impacts by 9.27-acres. Relocation of utilities on the west side of the project are not necessary, while utility relocation on the east side of the road has reduced the utility corridor from 12-feet to 4-feet and some utilities will be installed using jack-and-bore methods in conjunction with open-cut trenching. In areas where it is physically possible, a 2:1 side slope with guardrail will be utilized, while a 4:1 side slope will be constructed in all other areas to create a recoverable area for vehicles that may leave the road. Reduction of the grassed median from 48-feet to 36-feet will avoid further impacts while also allowing for the necessary water quality treatment of stormwater. The 6-foot wide bike path was shifted higher into the slope design in an effort to tighten fill slopes to minimize impacts. The original disturbance/construction access area was proposed for both sides of the road, but was removed from the west side and reduced from 12-foot wide to 4-feet wide on the east side to further minimize impacts. Appropriate Best Management Practices, such as silt fences, blaze orange barrier fence, turbidity curtains, etc., will be utilized during construction to ensure that impacts remain within the disturbance corridor. In addition, any area of temporary impact will be restored to previous ground elevations so the area can naturally re-vegetate.

**Compensatory Mitigation:** The applicant has proposed to mitigate for impacts to jurisdictional waters of the U.S., including wetlands, by purchasing 184.5 tidal wetland credits from Clydesdale Mitigation Bank for impacts to tidal waters within South Carolina and 1.0 credits from the Salt Creek Mitigation Bank for impacts to tidal waters in Georgia. Also, 0.8 tidal credits will be purchased from Clydesdale Mitigation Bank to offset additional impacts to Essential Fish Habitat due to shading of the bridge within South Carolina. In addition, 98.5 wetland credits will be purchased from the Sweetleaf Swamp Mitigation Bank for non-tidal wetland impacts in South Carolina.

**NOTE: This public notice and associated plans are available on the Corps' website at:**  
<http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices> .

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 13.547 acres of estuarine substrates and emergent wetlands

utilized by various life stages of species comprising the shrimp, and snapper-grouper management complexes. The District Engineer's initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). The District Engineer's final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Pursuant to Section 7(c) of the Endangered Species Act of 1973 (as amended), the applicant has provided information associated with the activity described above. Additionally, South Carolina Department of Transportation and Georgia Department of Transportation conducted consultation on behalf of the Federal Highway Administration with the United States Fish and Wildlife Service and received concurrence on August 2007, December 2009, and December 2010, indicating that the proposed project may affect, but is not likely to adversely effect the following listed species: wood stork, West Indian manatee, pondberry, red-cockaded woodpecker, American chaffseed, bald eagle, and eastern indigo snake. In addition, South Carolina Department of Transportation and Georgia Department of Transportation conducted consultation on behalf of the Federal Highway Administration with the National Marine Fisheries Service and received a consultation dated January 2009, that the project may effect, but is not likely to adversely effect the shortnose sturgeon.

The District Engineer is aware that additional species and critical habitat have been listed after concurrence was received by South Carolina Department of Transportation and Georgia Department of Transportation, as described above. This public notice serves as a request to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for any additional information they may have on whether any Federally listed or proposed to be listed endangered or threatened species and/or designated or proposed critical habitat may be present in the area which would be affected by the activity.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

The applicant coordinated with the South Carolina and Georgia State Historic Preservation Offices early in the planning process. In response to this coordination, the State Historic Preservation Office of Georgia concurred that no historic properties will be affected for impacts resulting from the project in Georgia, and the State Historic Preservation Office of South Carolina concurred that no historic properties will be affected for impacts resulting from the project in South Carolina. In accordance with Section 106 of the NHPA, the District Engineer has reviewed the provided cultural resource information provided by the applicant, and has determined that no historic properties are present; therefore, there will be no effect on historic properties. To ensure that other historic properties that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office and any other interested parties to provide any information they may have with regard to historic properties within 30 days from the SHPO (and/or Tribal Historic Preservation Officer).

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

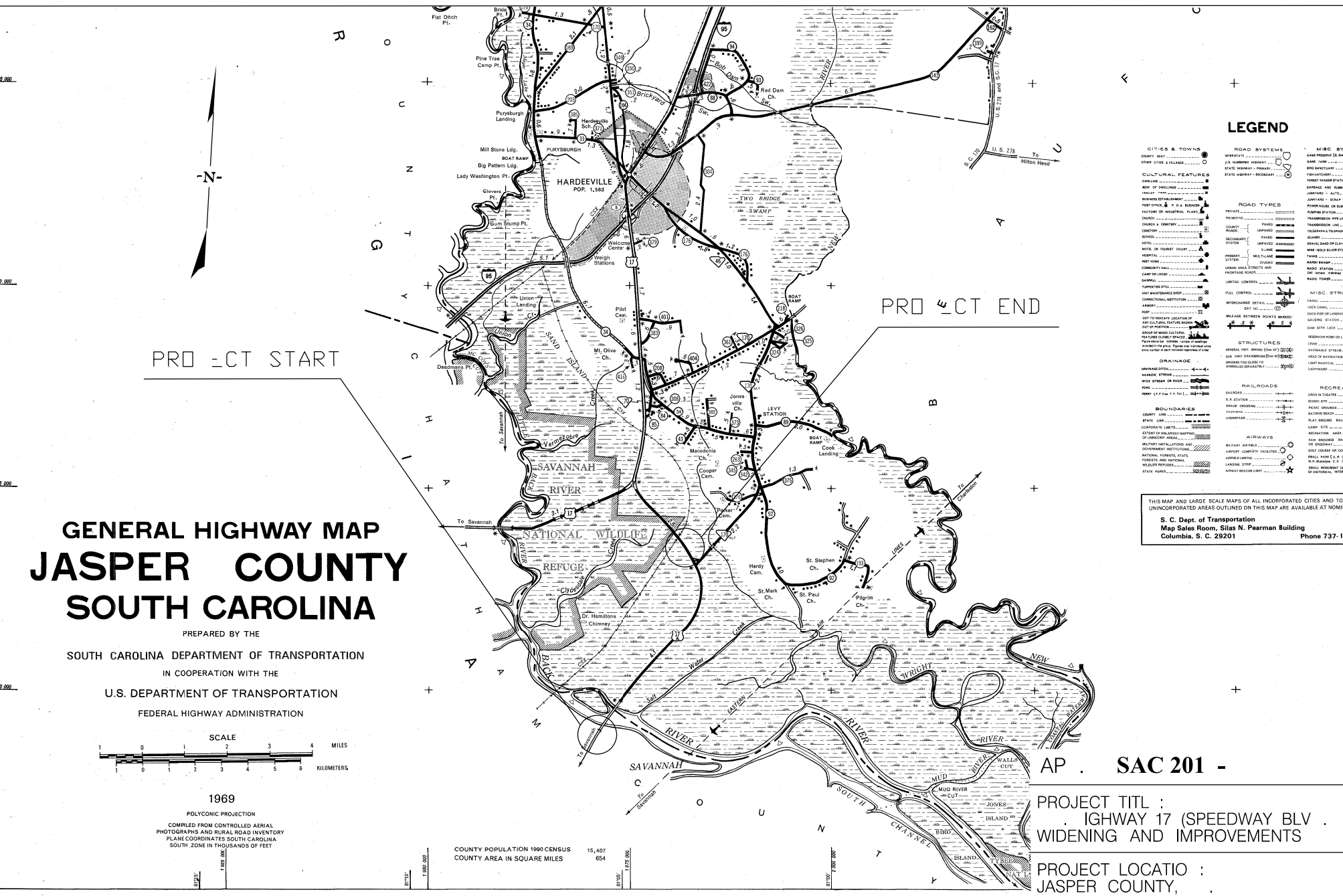
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps cannot undertake to adjudicate rival claims.

The Corps is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity. **Please submit comments in writing, identifying the project of interest by public notice number, to the following address:**

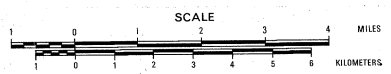
**Charleston District, US Army Corps of Engineers,  
69A Hagood Avenue  
Charleston, South Carolina 29403-5107**

If there are any questions concerning this public notice, please contact Christopher Mims at 843-329-8044 or toll free at 1-866-329-8187.



# GENERAL HIGHWAY MAP JASPER COUNTY SOUTH CAROLINA

PREPARED BY THE  
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION  
IN COOPERATION WITH THE  
U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION



1969

POLYCONIC PROJECTION  
COMPILED FROM CONTROLLED AERIAL  
PHOTOGRAPHS AND RURAL ROAD INVENTORY  
PLANE COORDINATES SOUTH CAROLINA  
SOUTH ZONE IN THOUSANDS OF FEET

COUNTY POPULATION 1990 CENSUS 15,487  
COUNTY AREA IN SQUARE MILES 654

## LEGEND

- |                           |                     |                 |
|---------------------------|---------------------|-----------------|
| <b>CITIES &amp; TOWNS</b> | <b>ROAD SYSTEMS</b> | <b>MISC. BY</b> |
| COUNTY SEAT               | PRIMARY             | RAILROAD        |
| OTHER CITIES & TOWNS      | SECONDARY           | RAILROAD        |
| STATE HIGHWAY - PRIMARY   | UNPAVED             | RAILROAD        |
| STATE HIGHWAY - SECONDARY | UNPAVED             | RAILROAD        |
| <b>CULTURAL FEATURES</b>  | <b>ROAD TYPES</b>   | <b>MISC. BY</b> |
| PARISH                    | PRIVATE             | RAILROAD        |
| ROW OF BUILDINGS          | PRIVATE             | RAILROAD        |
| TRAIL                     | PRIVATE             | RAILROAD        |
| INDUSTRIAL PLANT          | PRIVATE             | RAILROAD        |
| INDUSTRIAL PLANT          | PRIVATE             | RAILROAD        |
| INDUSTRIAL PLANT          | PRIVATE             | RAILROAD        |
| <b>BOUNDARIES</b>         | <b>RAILROADS</b>    | <b>RECREA</b>   |
| COUNTY LINE               | RAILROAD            | RECREA          |
| CORPORATE LIMITS          | RAILROAD            | RECREA          |
| <b>BOUNDARIES</b>         | <b>RAILROADS</b>    | <b>RECREA</b>   |
| COUNTY LINE               | RAILROAD            | RECREA          |
| CORPORATE LIMITS          | RAILROAD            | RECREA          |
| <b>BOUNDARIES</b>         | <b>RAILROADS</b>    | <b>RECREA</b>   |
| COUNTY LINE               | RAILROAD            | RECREA          |
| CORPORATE LIMITS          | RAILROAD            | RECREA          |

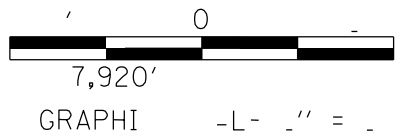
THIS MAP AND LARGE SCALE MAPS OF ALL INCORPORATED CITIES AND TOWNS UNINCORPORATED AREAS OUTLINED ON THIS MAP ARE AVAILABLE AT NO CHARGE TO THE PUBLIC.  
S. C. Dept. of Transportation  
Map Sales Room, Siles N. Pearman Building  
Columbia, S. C. 29201 Phone 737-1511

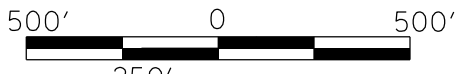
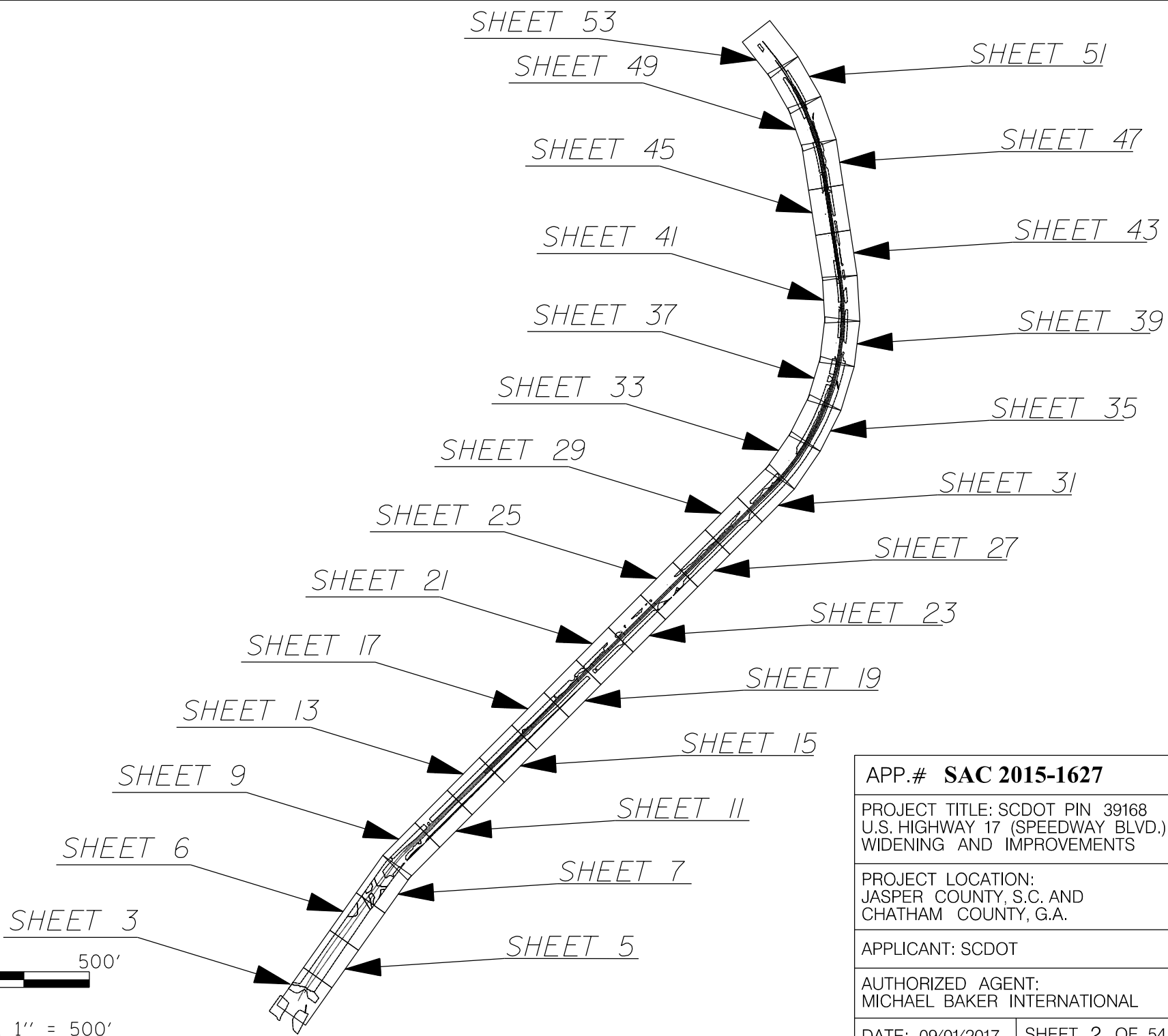
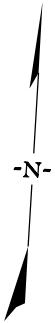
AP . SAC 201 -  
PROJECT TITLE :  
HIGHWAY 17 (SPEEDWAY BLV .  
WIDENING AND IMPROVEMENTS

PROJECT LOCATION :  
JASPER COUNTY,  
CHATHAM COUNTY,

APPLICANT :  
AUTHORIZED AGENT :  
MICHAEL BAKER INTERNATIONAL

DATE : /01/2017 SHEET 1 OF 54

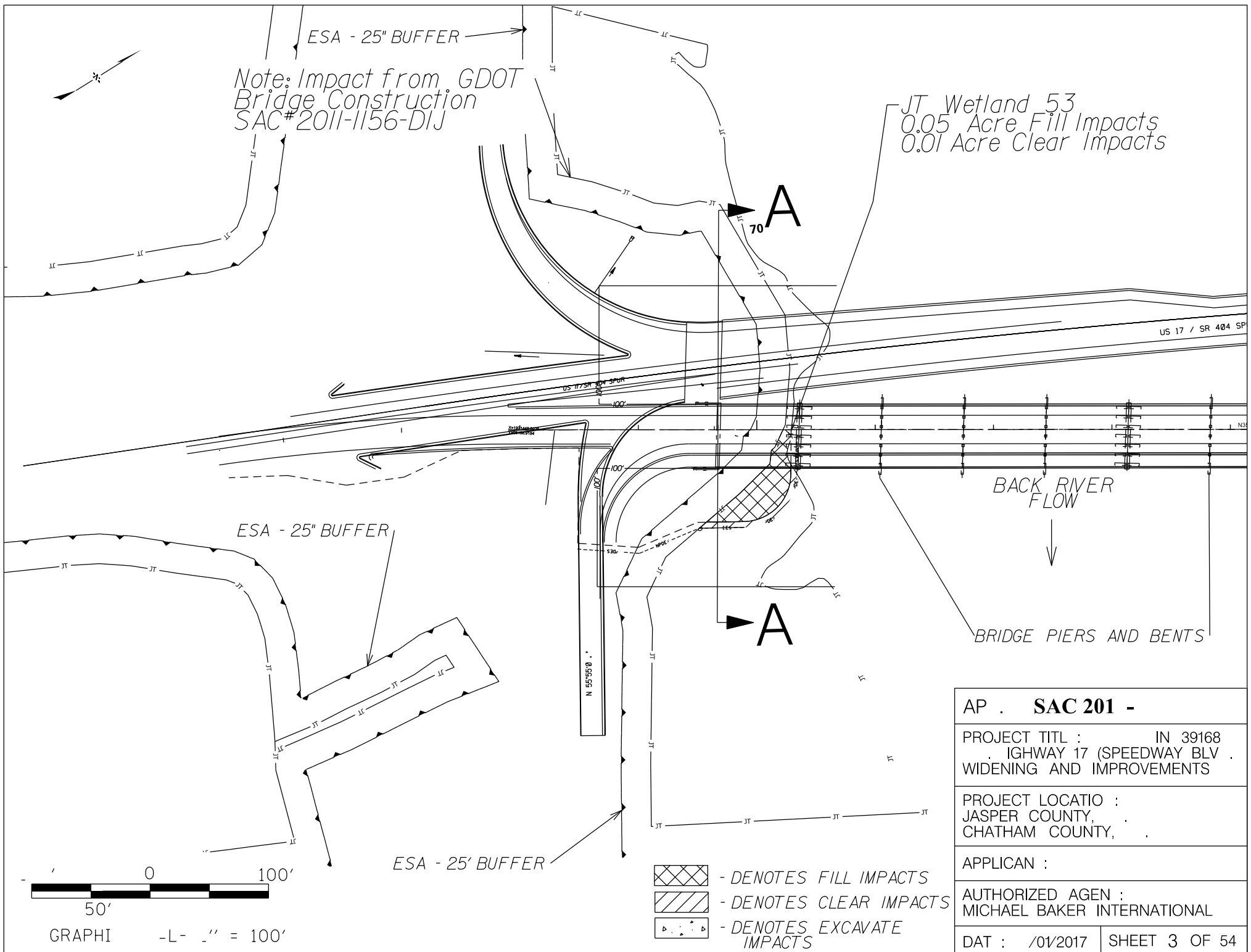




GRAPHIC SCALE 1" = 500'

APP.# <b>SAC 2015-1627</b>	
PROJECT TITLE: SCDOT PIN 39168 U.S. HIGHWAY 17 (SPEEDWAY BLVD.) WIDENING AND IMPROVEMENTS	
PROJECT LOCATION: JASPER COUNTY, S.C. AND CHATHAM COUNTY, G.A.	
APPLICANT: SCDOT	
AUTHORIZED AGENT: MICHAEL BAKER INTERNATIONAL	
DATE: 09/01/2017	SHEET 2 OF 54

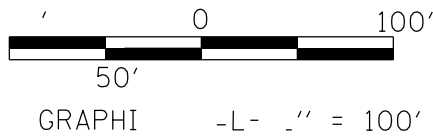







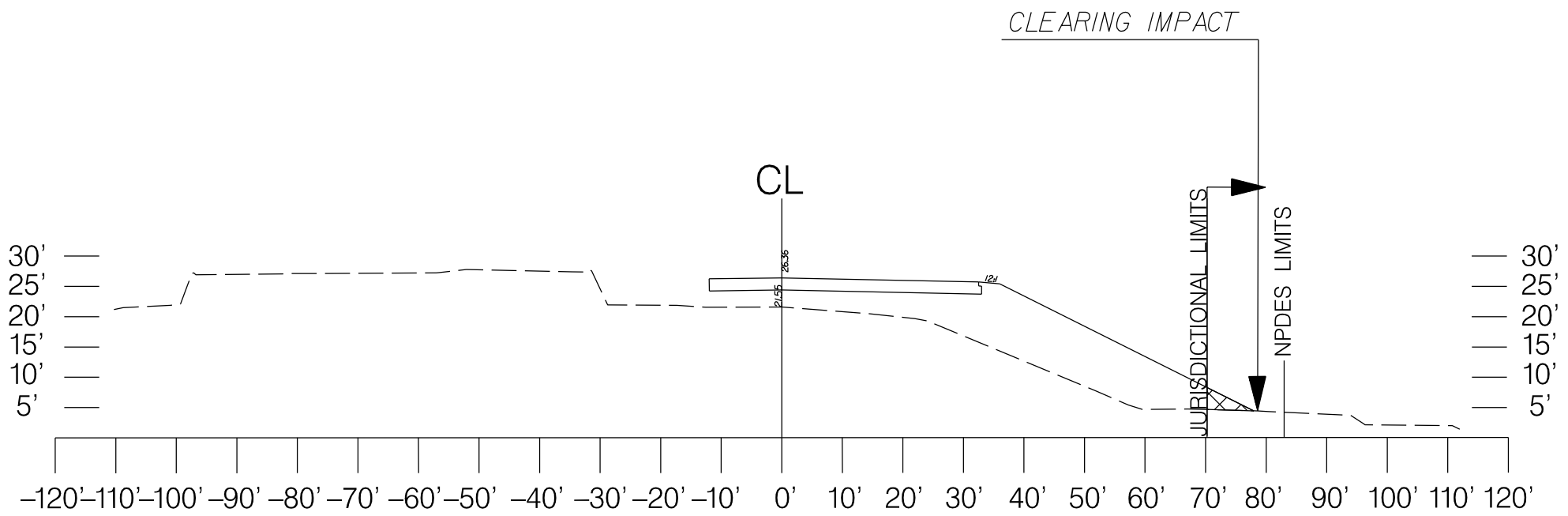
Note: Impact from GDOT  
Bridge Construction  
SAC#2011-1156-DIJ

JT Wetland 53  
0.05 Acre Fill Impacts  
0.01 Acre Clear Impacts

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 3 OF 54

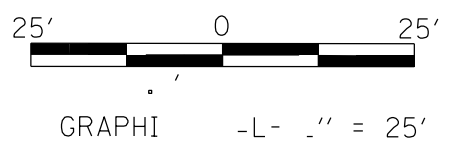





-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

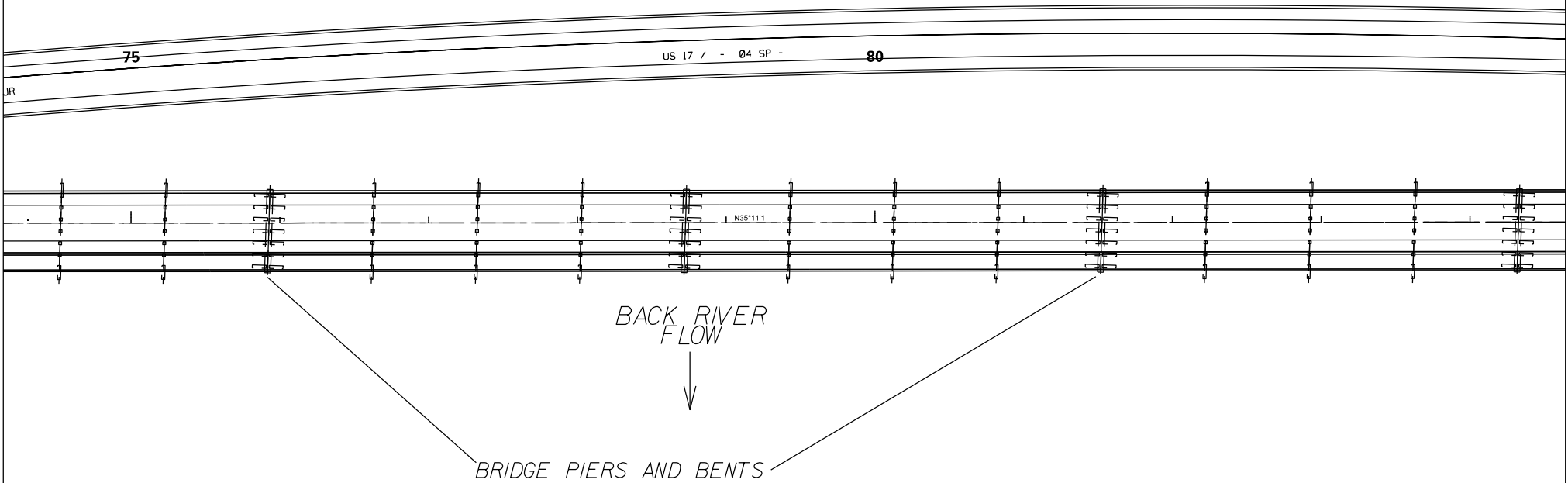
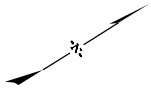


A - A  
STATION 69 + 6 .

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, . CHATHAM COUNTY, .	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 4 OF 54






-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

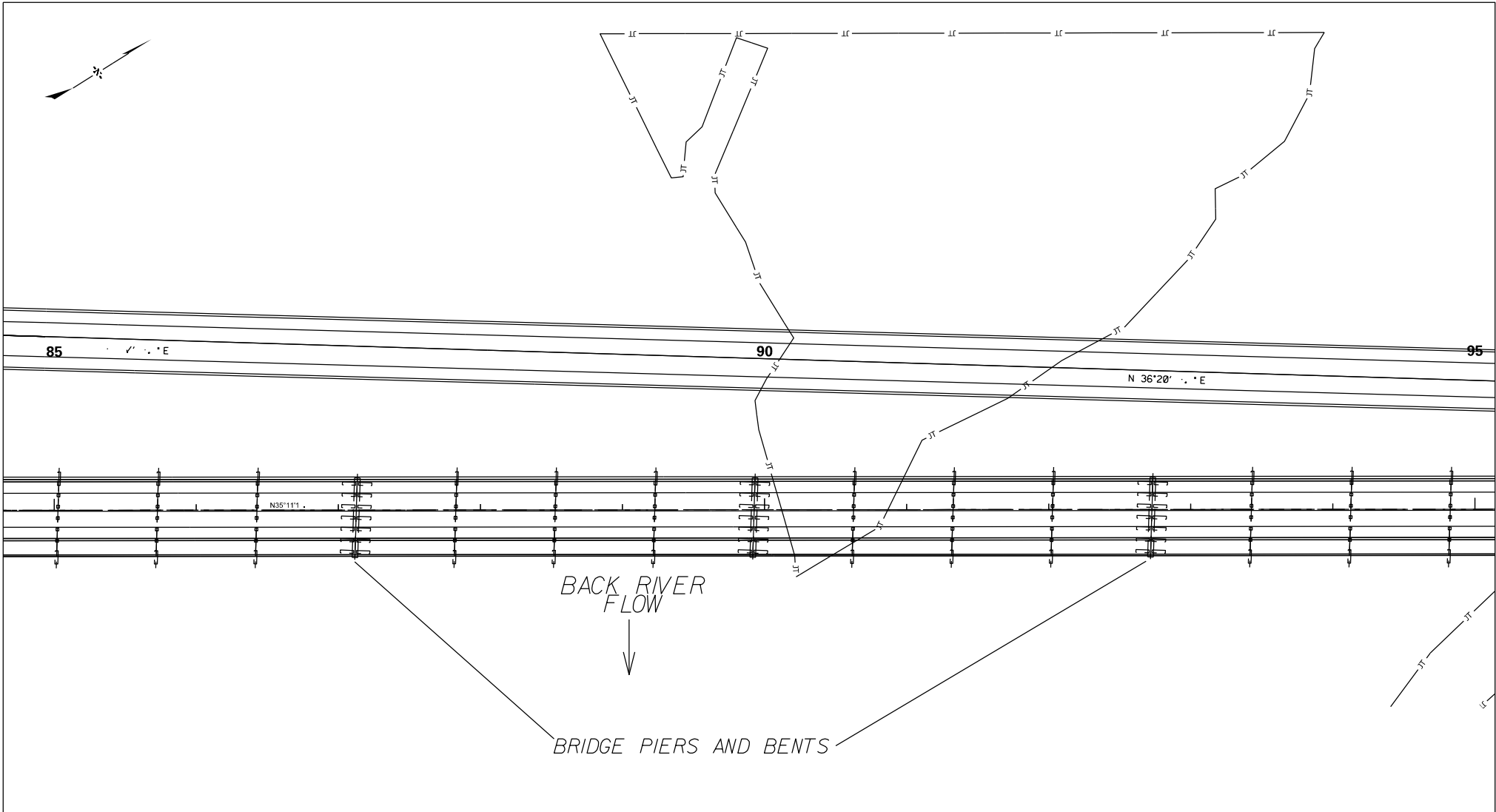


AP <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, . CHATHAM COUNTY, .	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 5 OF 54



GRAPHIC SCALE - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS



85

90

95

N 36° 20' . . . E

N 35° 11' 1 . . .




BACK RIVER  
FLOW

BRIDGE PIERS AND BENTS

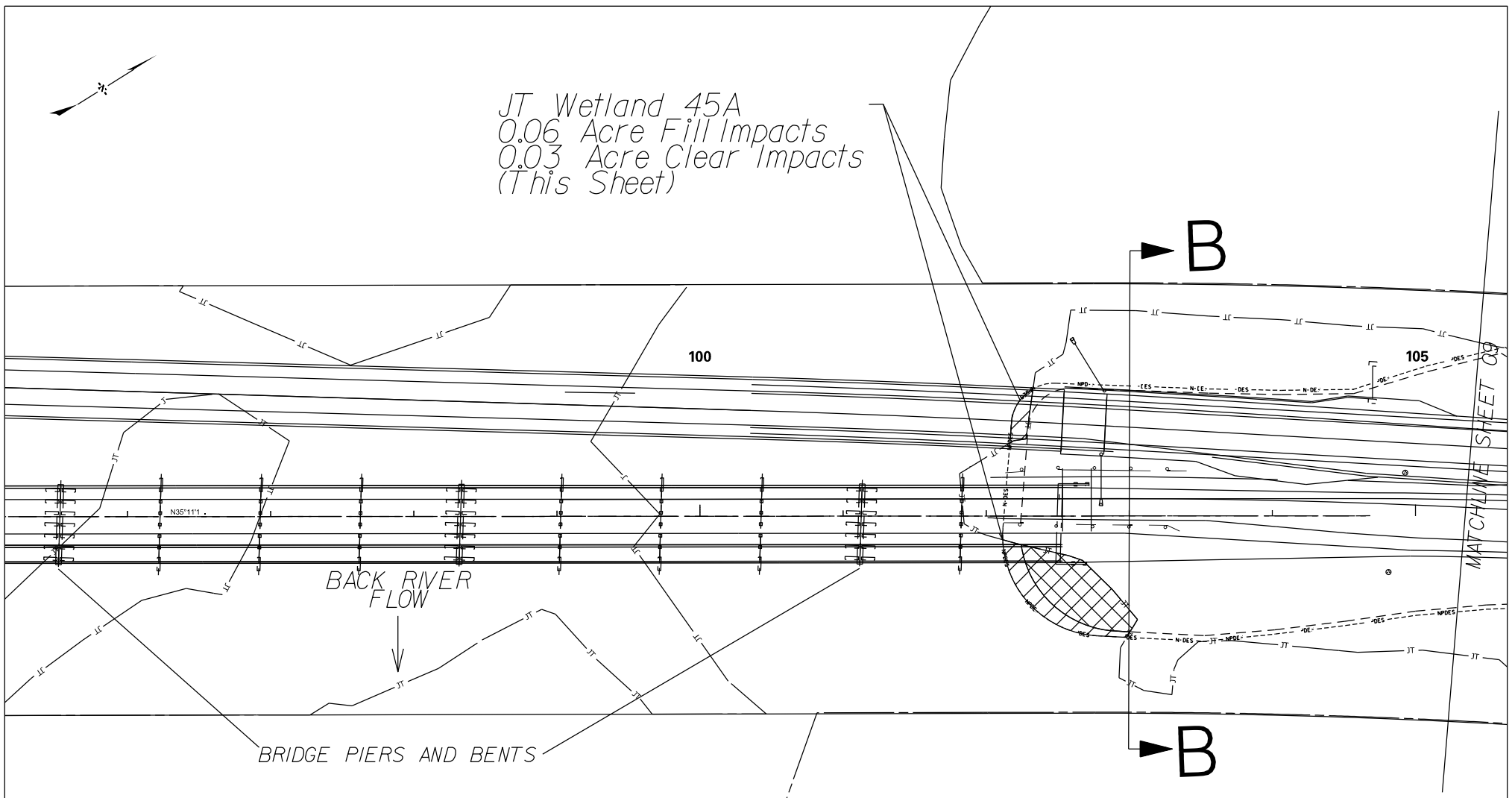
AP <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, . CHATHAM COUNTY, .	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 6 OF 54



GRAPHIC - L - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

JT Wetland 45A  
 0.06 Acre Fill Impacts  
 0.03 Acre Clear Impacts  
 (This Sheet)



BACK RIVER  
 FLOW

BRIDGE PIERS AND BENTS

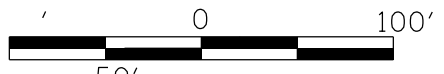
100

105




MATCHLINE SHEET 09

▶ B

▶ B

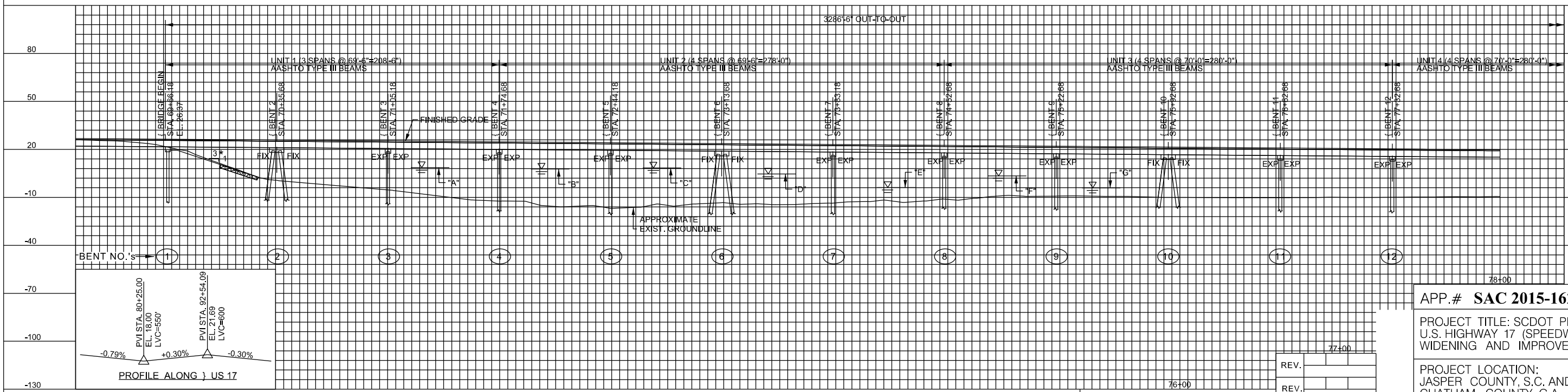
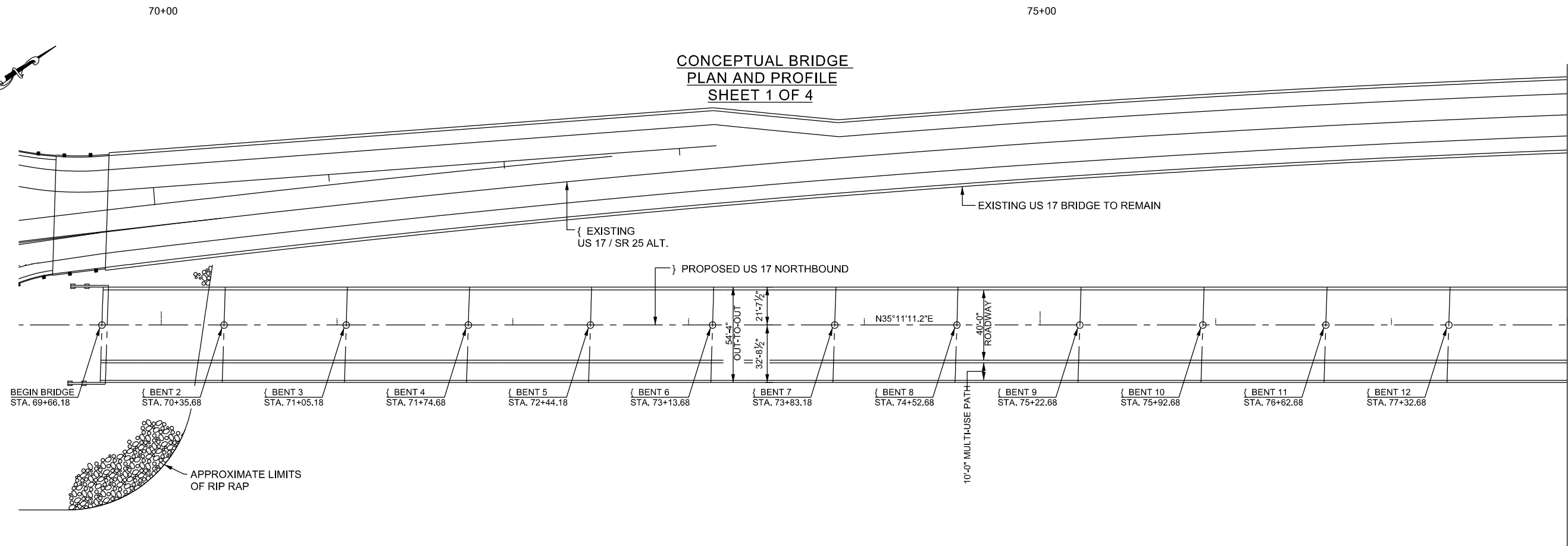


GRAPHIC - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 7 OF 54

CONCEPTUAL BRIDGE  
PLAN AND PROFILE  
SHEET 1 OF 4



NOTES:  
APPROXIMATE EXISTING GROUND LINE FROM GDOT PROJECT NUMBER NH000-0009-02(093)

IT IS ANTICIPATED CONFLICTS MAY ARISE FROM THE PREVIOUSLY DEMOLISHED BRIDGE, GDOT ID NUMBER 051-00404P-002.60N. PILE LOCATION SURVEYS SHOULD BE PERFORMED TO IDENTIFY PILE CONFLICTS PRIOR TO FINAL DESIGN.

\*SLOPE NORMAL TO END BENTS. MINIMUM BERM WIDTH OF 2 FT.

SECTION ALONG U.S. 17  
SCALE: 1"=30'-0"

- \*A" - 25 YR STORM SURGE ELEV. (MAX) = 8.62\*\*
- \*B" - 25 YR STORM SURGE ELEV. (@ MAX DISCHARGE) = 7.70\*\*
- \*C" - OVERTOPPING STORM SURGE ELEV. (@ MAX DISCHARGE) = 8.44\*\*
- \*D" - SPRING HIGH TIDE = 4.6\*\*
- \*E" - SPRING LOW TIDE = -3.8\*\*
- \*F" - MEAN HIGHER - HIGH WATER = 3.45
- \*G" - MEAN LOWER - LOW WATER = -4.05
- \*\*HYDRAULIC INFORMATION FROM GDOT PROJECT NO. NH000-0009-02(093)

REV.	
REV.	
REV.	
REVIEWED	
QUAN.	
DR.	PS JRM 4-17
DES.	BAM SHR 4-17
BY	CHK, DATE

APP.# SAC 2015-1627

PROJECT TITLE: SCDOT PIN 39168  
U.S. HIGHWAY 17 (SPEEDWAY BLVD.)  
WIDENING AND IMPROVEMENTS

PROJECT LOCATION:  
JASPER COUNTY, S.C. AND  
CHATHAM COUNTY, G.A.

APPLICANT: SCDOT

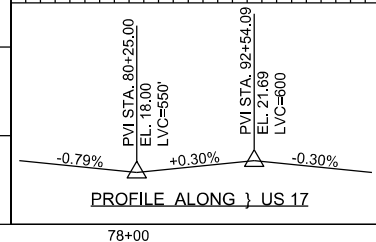
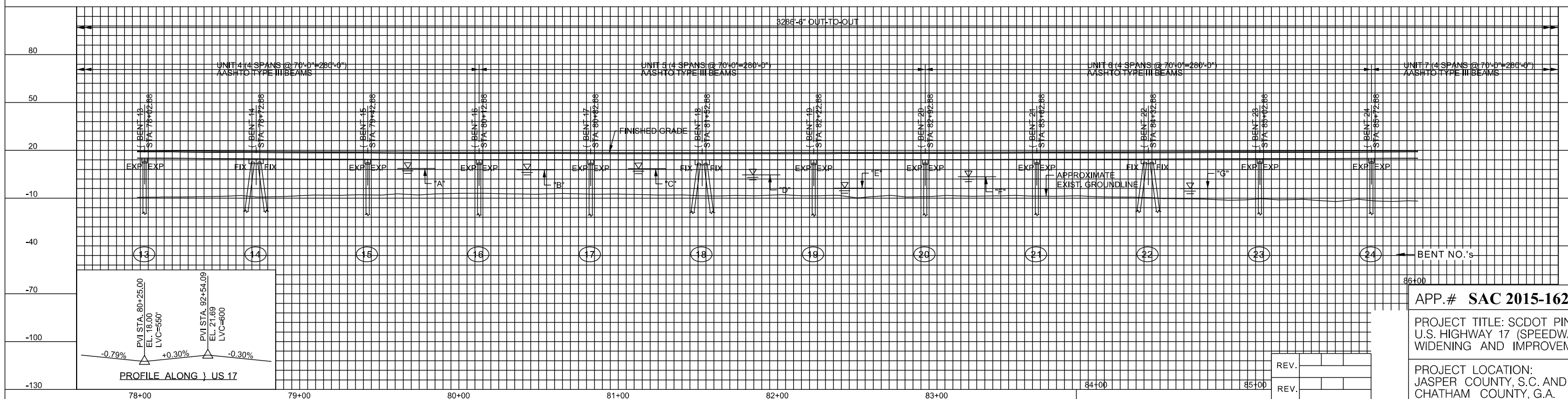
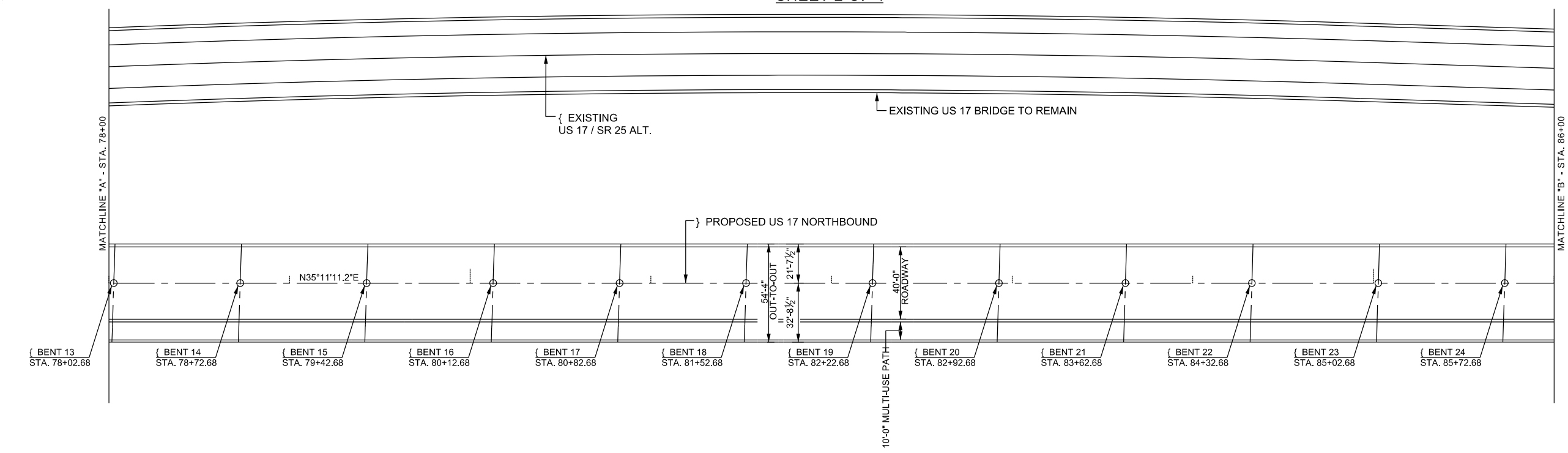
AUTHORIZED AGENT:  
MICHAEL BAKER INTERNATIONAL

DATE: 10/24/2017 SHEET 7A OF 54

80+00

85+00

### CONCEPTUAL BRIDGE PLAN AND PROFILE SHEET 2 OF 4



**NOTES:**  
APPROXIMATE EXISTING GROUND LINE FROM GDOT PROJECT NUMBER NH000-0009-02(093)

IT IS ANTICIPATED CONFLICTS MAY ARISE FROM THE PREVIOUSLY DEMOLISHED BRIDGE, GDOT ID NUMBER 051-00404P-002.60N. PILE LOCATION SURVEYS SHOULD BE PERFORMED TO IDENTIFY PILE CONFLICTS PRIOR TO FINAL DESIGN.

**SECTION ALONG U.S. 17**  
SCALE: 1"=30'-0"

- "A" - 25 YR STORM SURGE ELEV. (MAX) = 8.62"
- "B" - 25 YR STORM SURGE ELEV. (@ MAX DISCHARGE) = 7.70"
- "C" - OVERTOPPING STORM SURGE ELEV. (@ MAX DISCHARGE) = 8.44"
- "D" - SPRING HIGH TIDE = 4.6"
- "E" - SPRING LOW TIDE = -3.8"
- "F" - MEAN HIGHER - HIGH WATER = 3.45
- "G" - MEAN LOWER - LOW WATER = -4.05
- \*\*HYDRAULIC INFORMATION FROM GDOT PROJECT NO. NH000-0009-02(093)

REV.			
REV.			
REV.			
REV.			
QUAN.			
DR.	PS	JRM	4-17
DES.	BAM	SHR	4-17
BY	CHK	DATE	

APP.# SAC 2015-1627

PROJECT TITLE: SCDOT PIN 39168  
U.S. HIGHWAY 17 (SPEEDWAY BLVD.)  
WIDENING AND IMPROVEMENTS

PROJECT LOCATION:  
JASPER COUNTY, S.C. AND  
CHATHAM COUNTY, G.A.

APPLICANT: SCDOT

AUTHORIZED AGENT:  
MICHAEL BAKER INTERNATIONAL

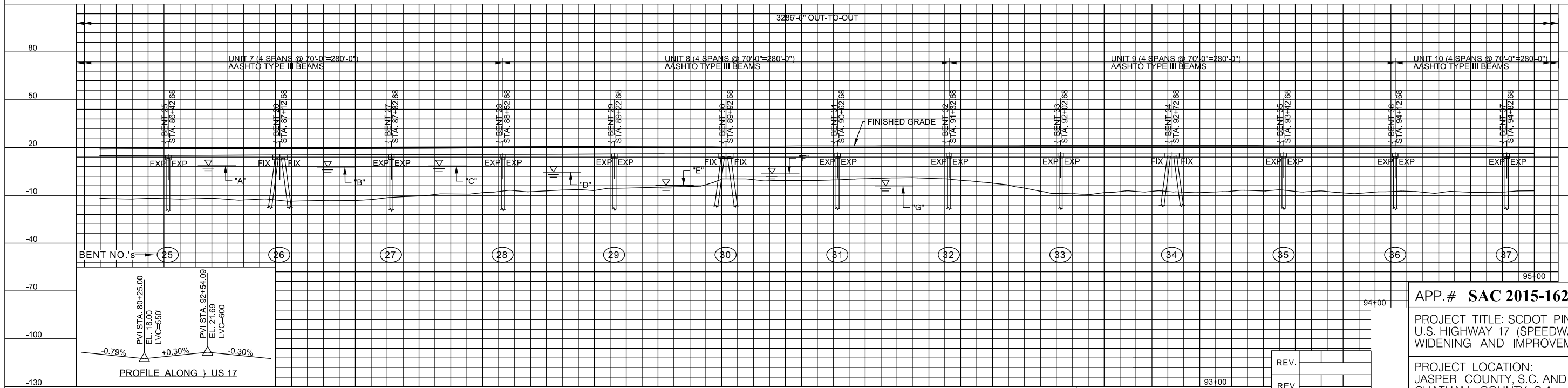
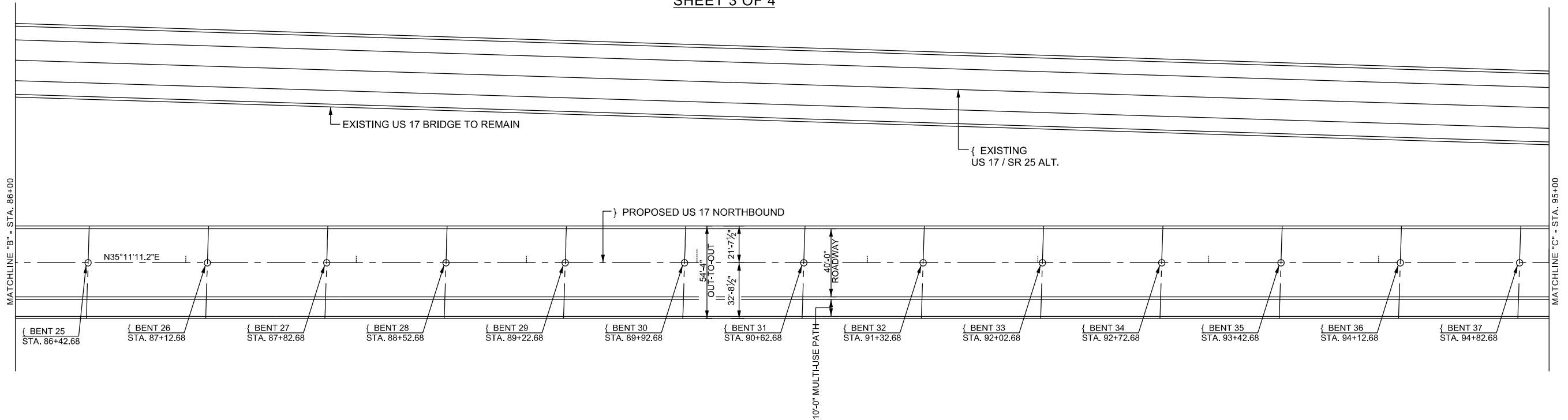
DATE: 10/24/2017

SHEET 7B OF 54

90+00

95+00

### CONCEPTUAL BRIDGE PLAN AND PROFILE SHEET 3 OF 4



NOTES:  
APPROXIMATE EXISTING GROUND LINE FROM GDOT PROJECT NUMBER NH000-0009-02(093)

IT IS ANTICIPATED CONFLICTS MAY ARISE FROM THE PREVIOUSLY DEMOLISHED BRIDGE, GDOT ID NUMBER 051-00404P-002.60N. PILE LOCATION SURVEYS SHOULD BE PERFORMED TO IDENTIFY PILE CONFLICTS PRIOR TO FINAL DESIGN.

#### SECTION ALONG U.S. 17 SCALE: 1"=30'-0"

- "A" - 25 YR STORM SURGE ELEV. (MAX) = 8.62"
- "B" - 25 YR STORM SURGE ELEV. (@ MAX DISCHARGE) = 7.70"
- "C" - OVERTOPPING STORM SURGE ELEV. (@ MAX DISCHARGE) = 8.44"
- "D" - SPRING HIGH TIDE = 4.6"
- "E" - SPRING LOW TIDE = -3.8"
- "F" - MEAN HIGHER - HIGH WATER = 3.45
- "G" - MEAN LOWER - LOW WATER = -4.05
- \*\*HYDRAULIC INFORMATION FROM GDOT PROJECT NO. NH000-0009-02(093)

REV.			
REV.			
REV.			
REVIEWED			
QUAN			
DR.	PS	JRM	4-17
DES.	BAM	SHR	4-17
BY	CHK	DATE	

APP.# SAC 2015-1627

PROJECT TITLE: SCDOT PIN 39168  
U.S. HIGHWAY 17 (SPEEDWAY BLVD.)  
WIDENING AND IMPROVEMENTS

PROJECT LOCATION:  
JASPER COUNTY, S.C. AND  
CHATHAM COUNTY, G.A.

APPLICANT: SCDOT

AUTHORIZED AGENT:  
MICHAEL BAKER INTERNATIONAL

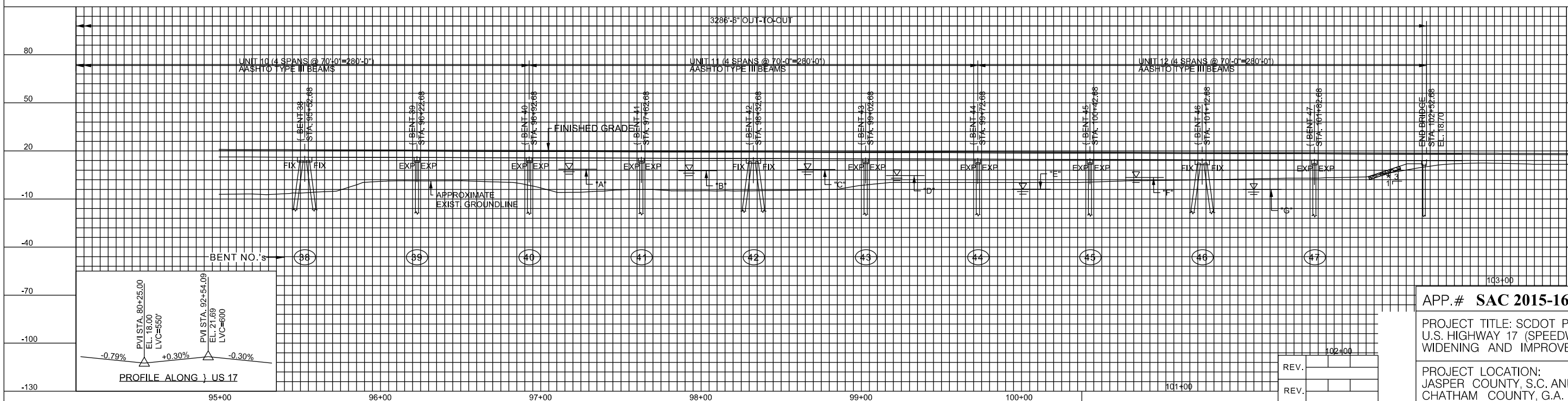
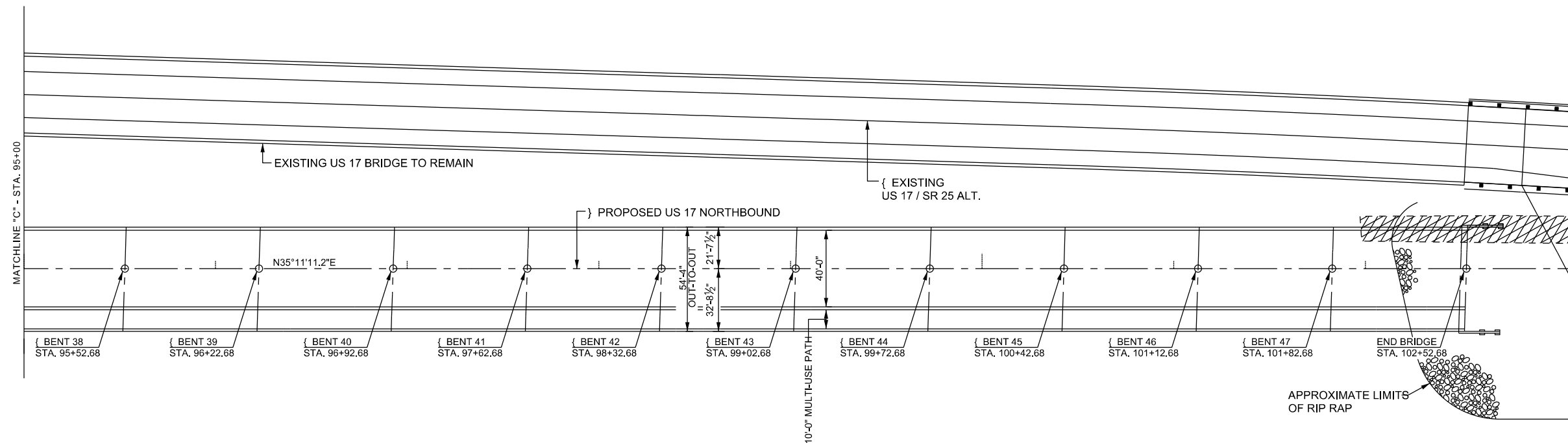
DATE: 10/24/2017 SHEET 7C OF 54



95+00

100+00

### CONCEPTUAL BRIDGE PLAN AND PROFILE SHEET 4 OF 4



NOTES:  
 APPROXIMATE EXISTING GROUND LINE FROM GDOT PROJECT NUMBER NH000-0009-02(093)  
 IT IS ANTICIPATED CONFLICTS MAY ARISE FROM THE PREVIOUSLY DEMOLISHED BRIDGE, GDOT ID NUMBER 051-00404P-002.60N. PILE LOCATION SURVEYS SHOULD BE PERFORMED TO IDENTIFY PILE CONFLICTS PRIOR TO FINAL DESIGN.

SECTION ALONG U.S. 17  
 SCALE: 1"=30'-0"

"A" - 25 YR STORM SURGE ELEV. (MAX) = 8.62\*\*  
 "B" - 25 YR STORM SURGE ELEV. (@ MAX DISCHARGE) = 7.70\*\*  
 "C" - OVERTOPPING STORM SURGE ELEV. (@ MAX DISCHARGE) = 8.44\*\*  
 "D" - SPRING HIGH TIDE = 4.6\*\*  
 "E" - SPRING LOW TIDE = -3.8\*\*  
 "F" - MEAN HIGHER - HIGH WATER = 3.45  
 "G" - MEAN LOWER - LOW WATER = -4.05  
 \*\*HYDRAULIC INFORMATION FROM GDOT PROJECT NO. NH000-0009-02(093)

\*SLOPE NORMAL TO END BENTS. MINIMUM BERM WIDTH OF 2 FT.

REV.				
REV.				
REV.				
QUAN				
DR.	PS	JRM	4-17	
DES.	BAM	SHR	4-17	
BY	CHK.	DATE		

APP.# SAC 2015-1627

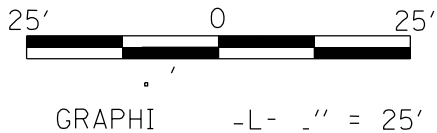
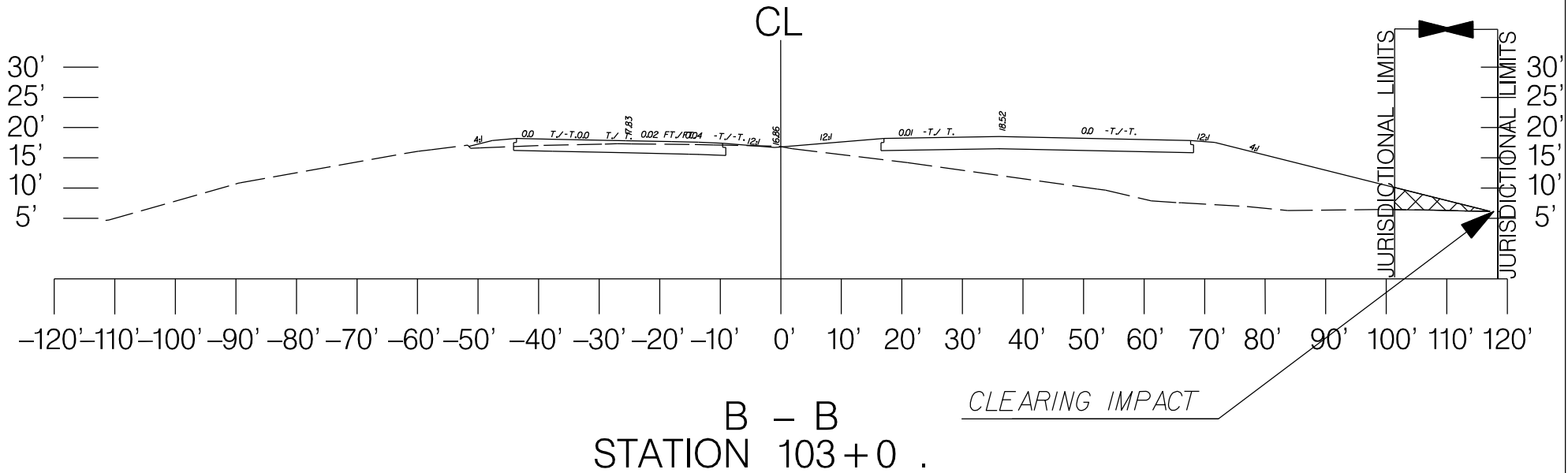
PROJECT TITLE: SCDOT PIN 39168 U.S. HIGHWAY 17 (SPEEDWAY BLVD.) WIDENING AND IMPROVEMENTS

PROJECT LOCATION: JASPER COUNTY, S.C. AND CHATHAM COUNTY, G.A.

APPLICANT: SCDOT

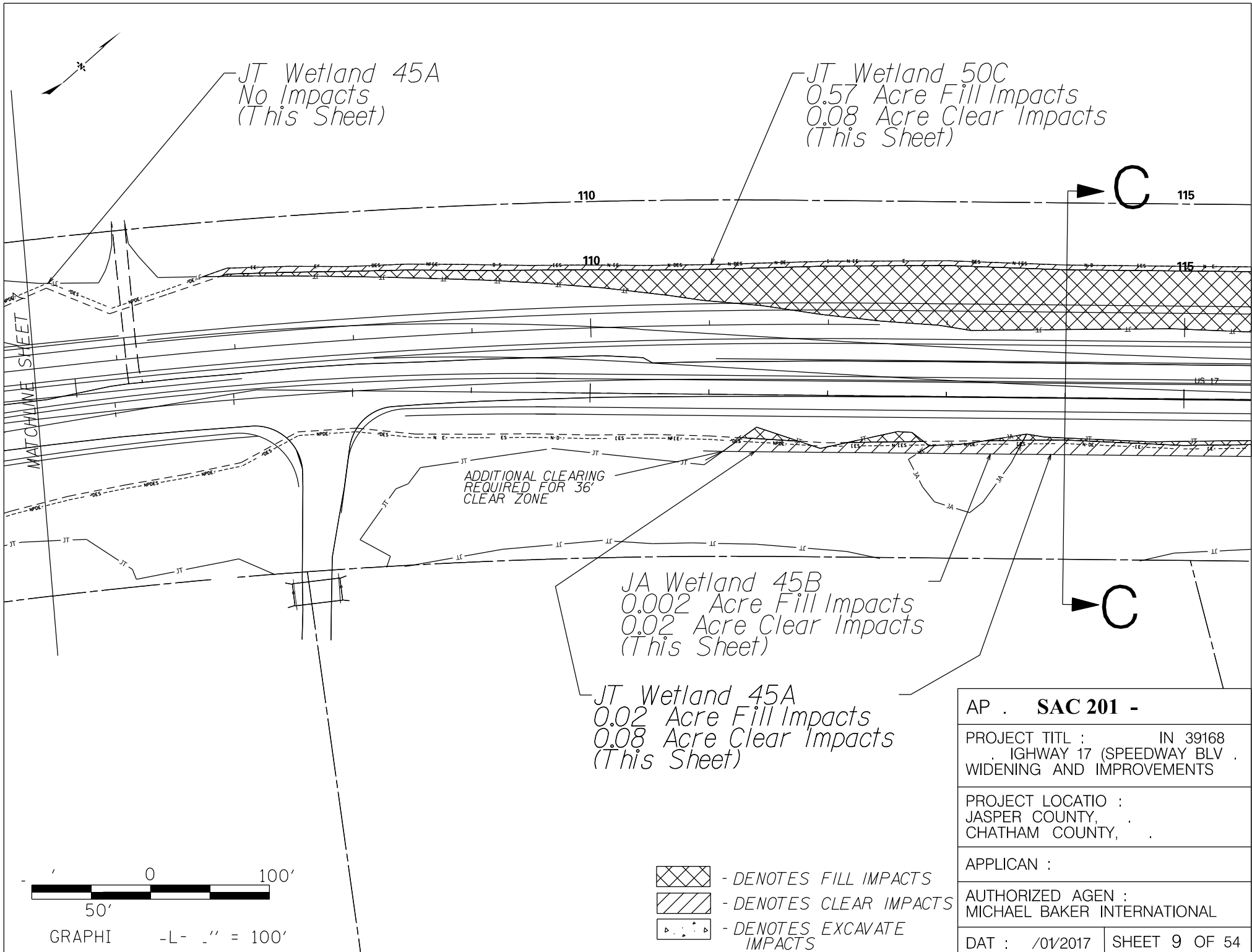
AUTHORIZED AGENT: MICHAEL BAKER INTERNATIONAL

DATE: 10/24/2017 SHEET 7D OF 54

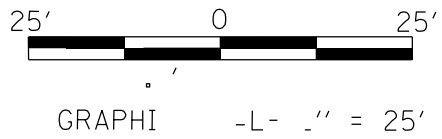
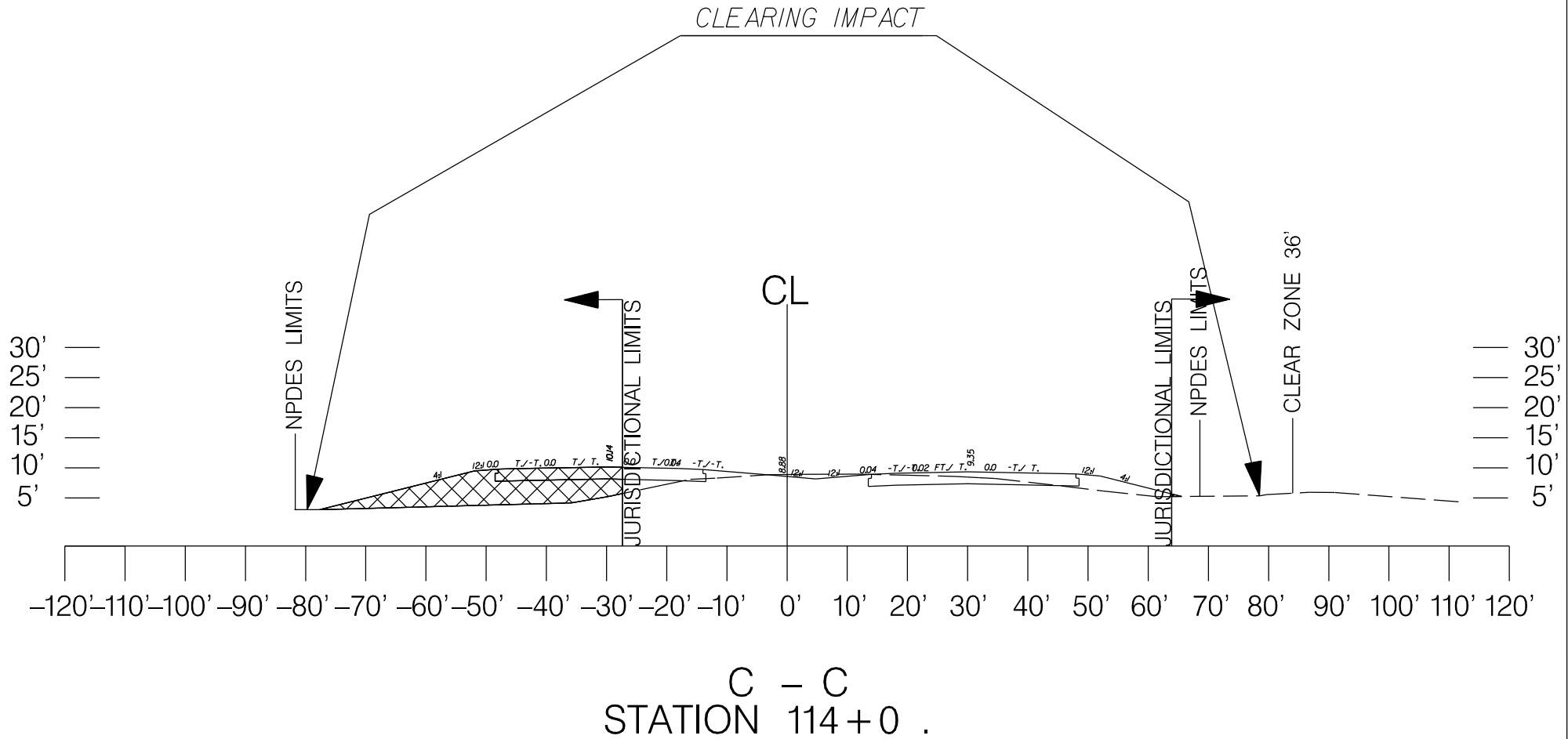


- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS

AP . <b>SAC 201 -</b>	
PROJECT TITLE : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATION : JASPER COUNTY, . CHATHAM COUNTY, .	
APPLICANT :	
AUTHORIZED AGENT : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 8 OF 54

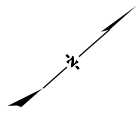


AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY , CHATHAM COUNTY ,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 9 OF 54



- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS

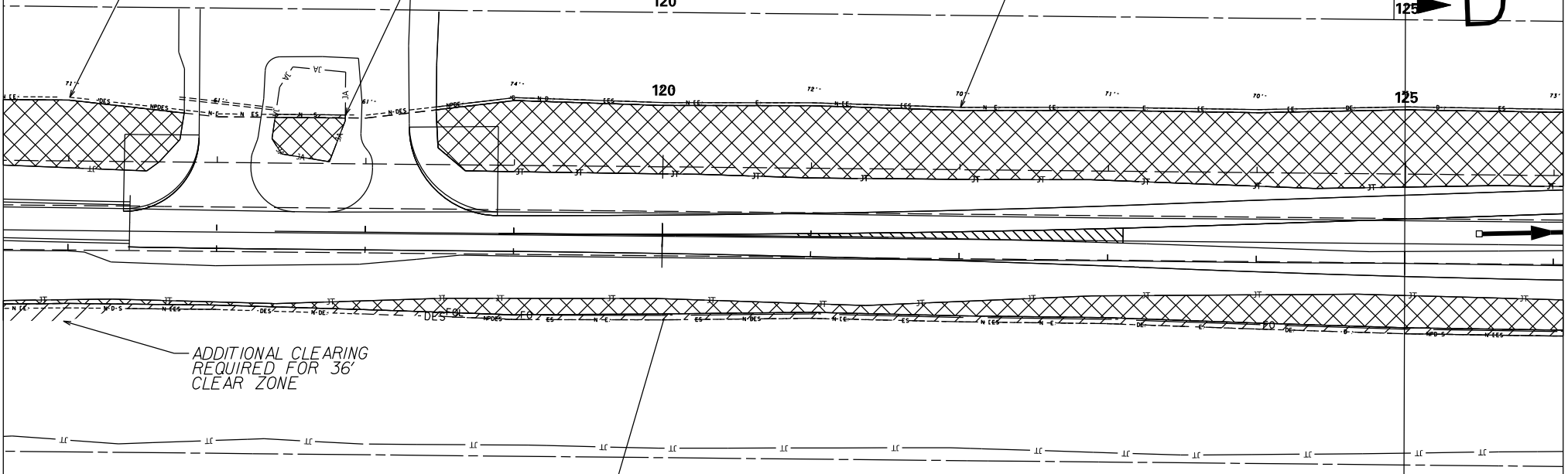
AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, . CHATHAM COUNTY, .	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 10 OF 54



JT Wetland 50C  
 0.11 Acre Fill Impacts  
 0.01 Acre Clear Impacts  
 (This Sheet)

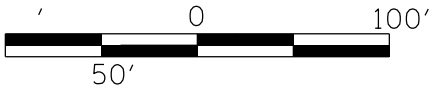
JA Wetland 51  
 0.03 Acre Fill Impacts  
 0.002 Acre Clear Impacts  
 (This Sheet)

JT Wetland 50B  
 0.83 Acre Fill Impacts  
 0.03 Acre Clear Impacts  
 (This Sheet)

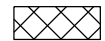

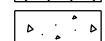


ADDITIONAL CLEARING  
 REQUIRED FOR 36'  
 CLEAR ZONE

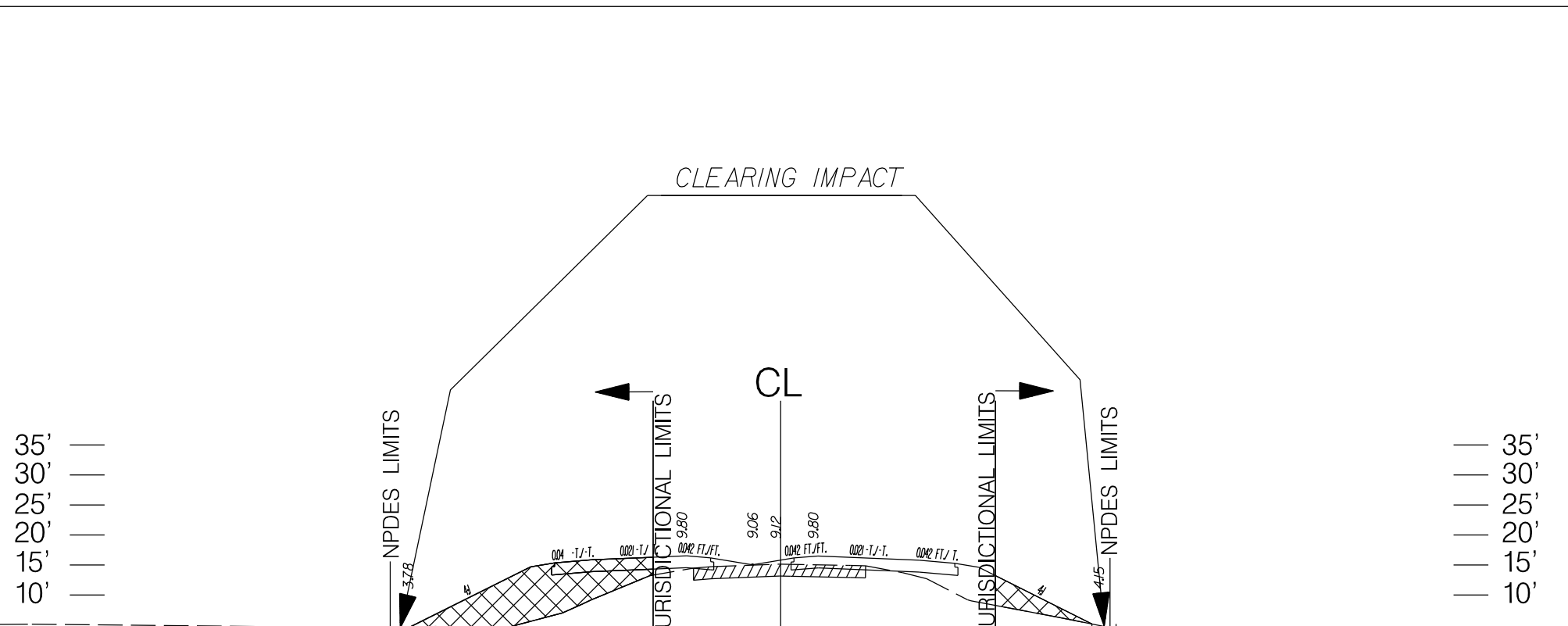
JT Wetland 45A  
 0.26 Acre Fill Impacts  
 0.10 Acre Clear Impacts  
 (This Sheet)



GRAPHIC - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

AP . <b>SAC 201</b> -	
PROJECT TITLE : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 11 OF 54



35'  
30'  
25'  
20'  
15'  
10'

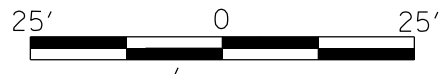
35'  
30'  
25'  
20'  
15'  
10'

-120' -110' -100' -90' -80' -70' -60' -50' -40' -30' -20' -10' 0' 10' 20' 30' 40' 50' 60' 70' 80' 90' 100' 110' 120'




D - D  
STATION 125 + 0 .

*Communication Line  
Relocation Trench*

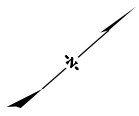
*Utility  
Easement*



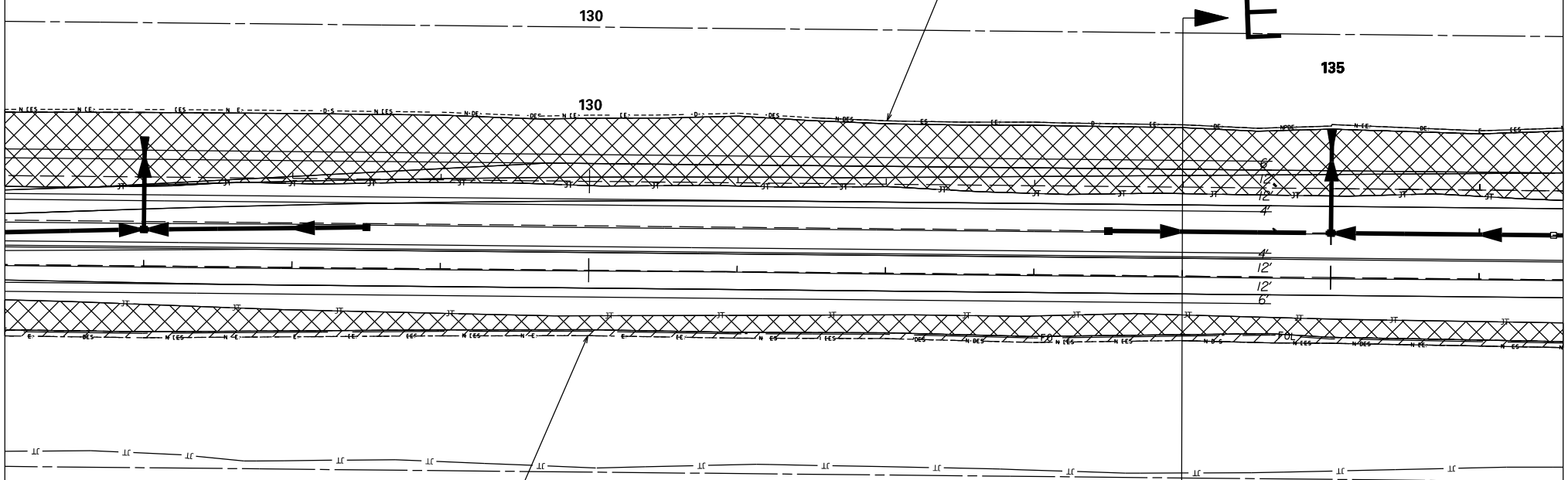
GRAPHIC - 1" = 25'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 12 OF 54

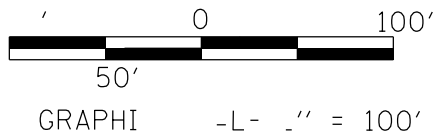





JT Wetland 50B  
 1.10 Acre Fill Impacts  
 0.05 Acre Clear Impacts  
 (This Sheet)

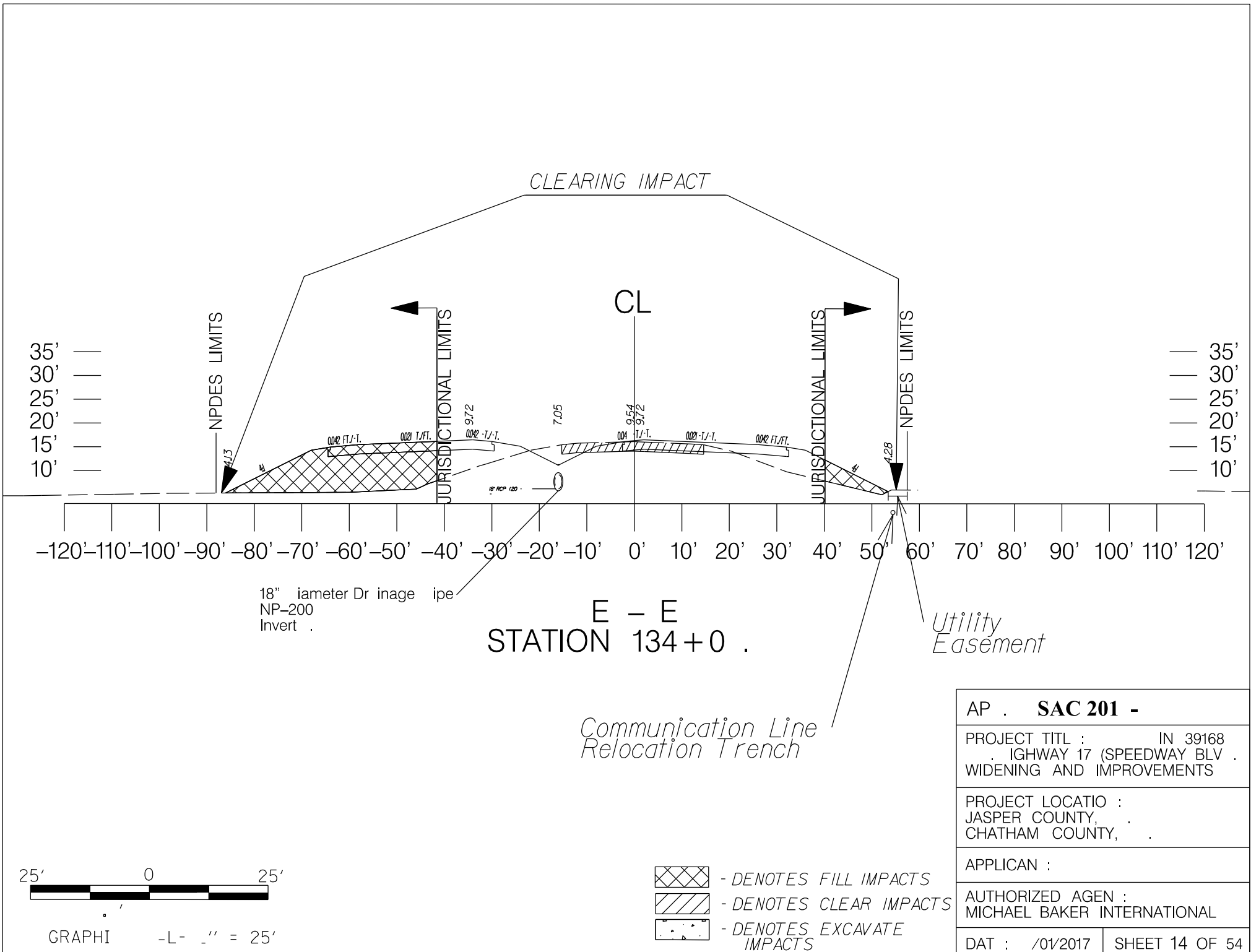


JT Wetland 45 -  
 0.32 Acre Fill Impacts  
 0.10 Acre Clear Impacts  
 (This Sheet)

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY , CHATHAM COUNTY ,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 13 OF 54

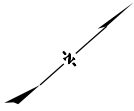


-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS



AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, . CHATHAM COUNTY, .	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 14 OF 54



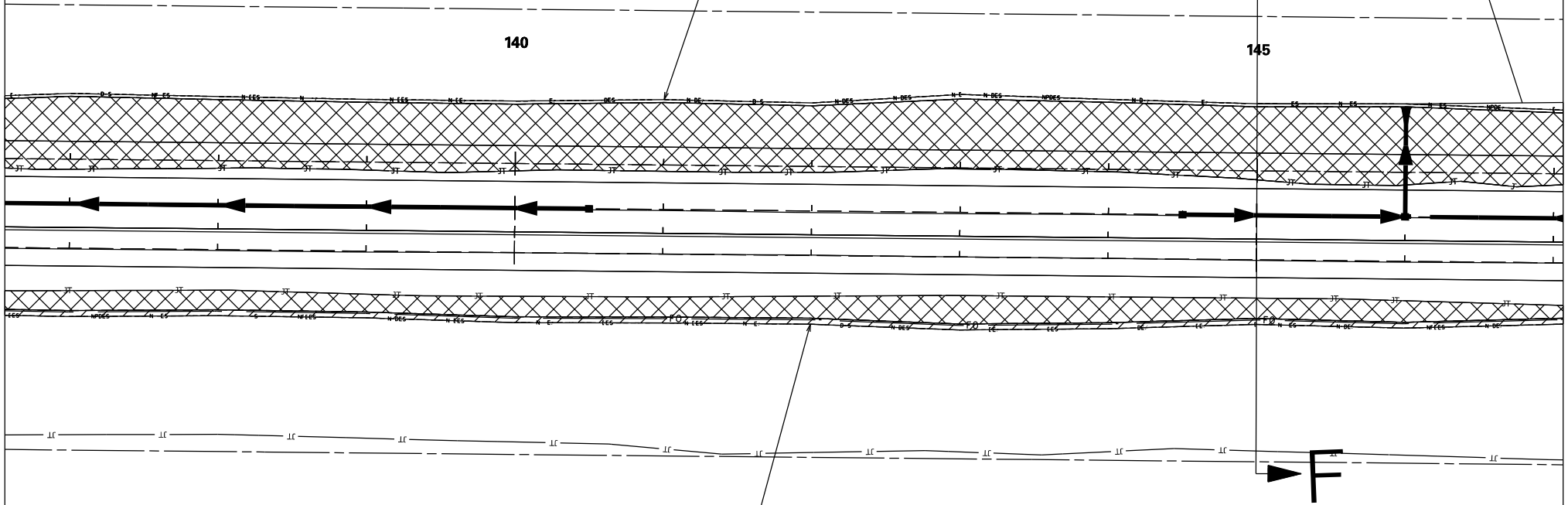


*JT Wetland 50B  
1.14 Acre Fill Impacts  
0.06 Acre Clear Impacts  
(This Sheet)*

ADDITIONAL CLEARIN  
REQUIRED FOR 36'  
CLEAR ZONE

140

145



*JT Wetland 45A  
0.34 Acre Fill Impacts  
0.10 Acre Clear Impacts  
(This Sheet)*

AP . **SAC 201 -**

PROJECT TITL : IN 39168  
. IGHWAY 17 (SPEEDWAY BLV .  
WIDENING AND IMPROVEMENTS

PROJECT LOCATIO :  
JASPER COUNTY, .  
CHATHAM COUNTY, .

APPLICAN :

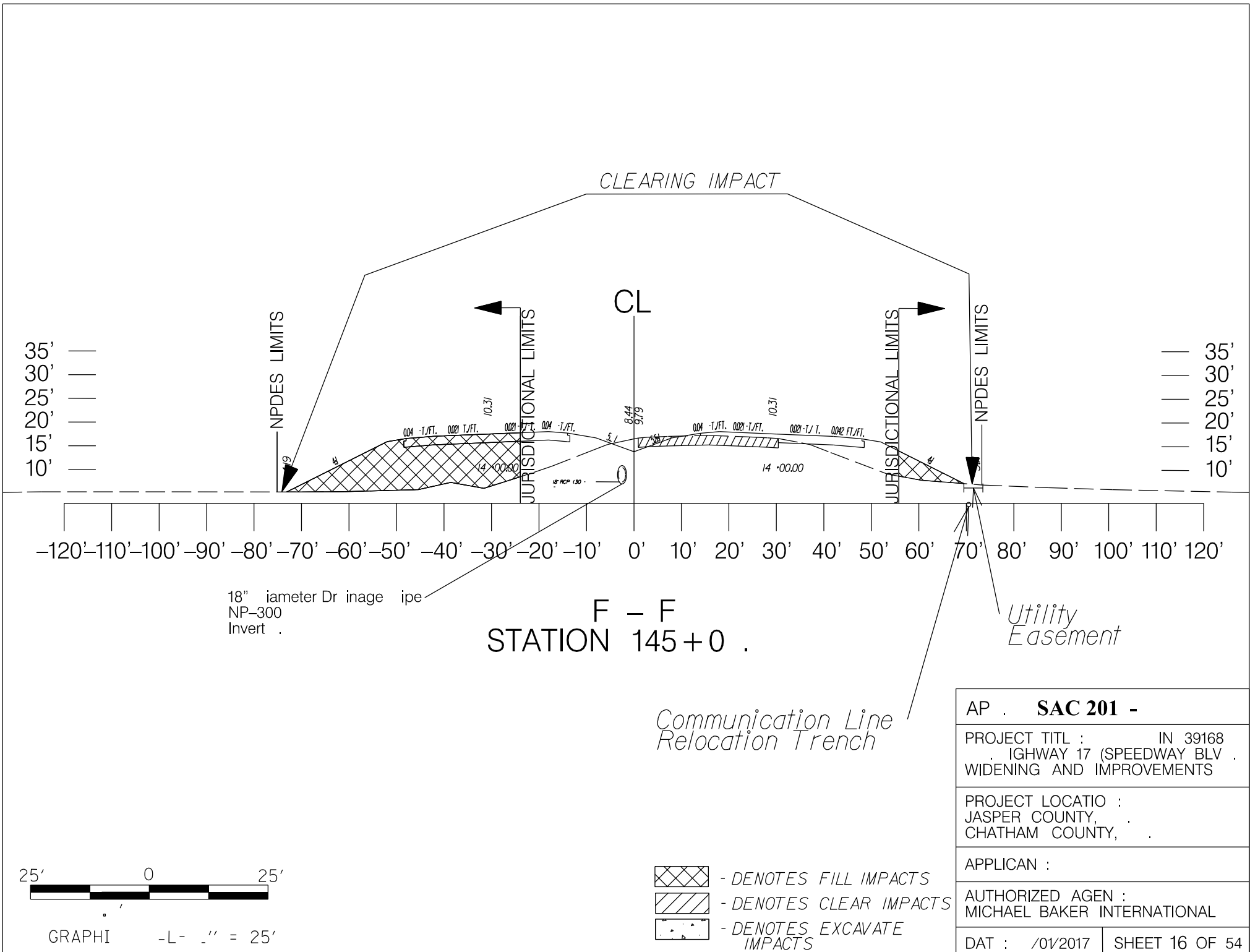
AUTHORIZED AGEN :  
MICHAEL BAKER INTERNATIONAL

DAT : /01/2017 SHEET 15 OF 54



GRAPHI -L- 1" = 100'

- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS

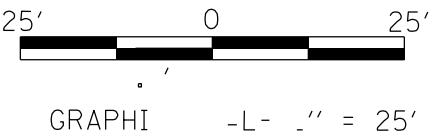





F - F  
STATION 145 + 0 .

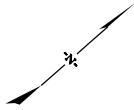
*Utility Easement*

*Communication Line Relocation Trench*

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 16 OF 54



-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

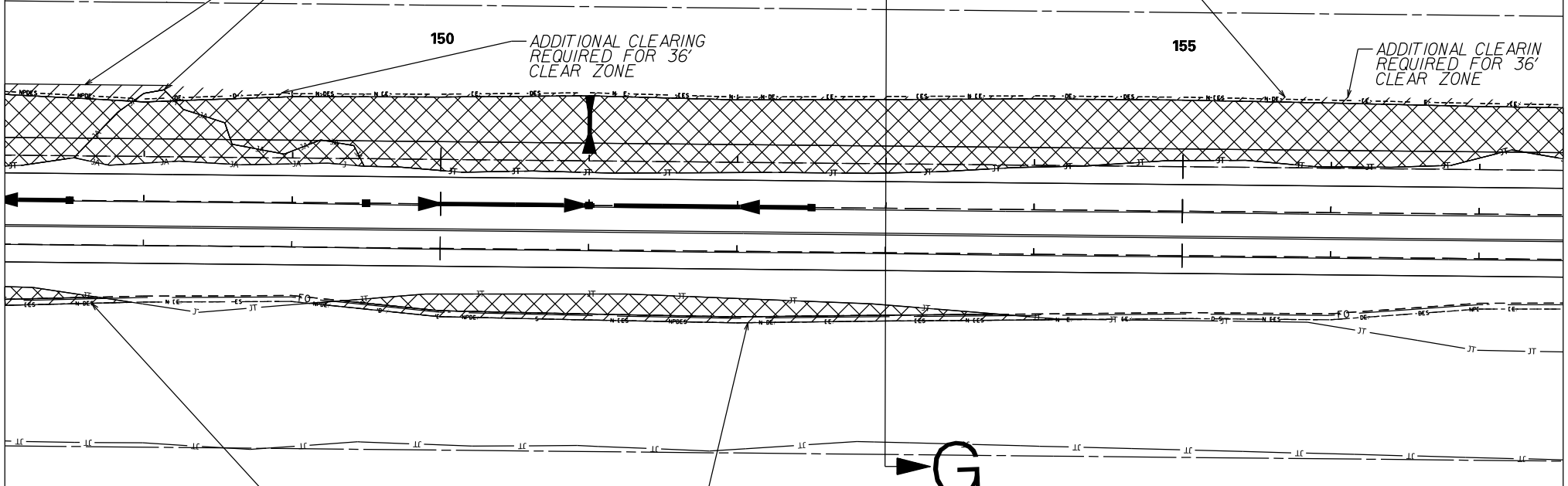


JT Wetland 50B  
 0.99 Acre Fill Impacts  
 0.08 Acre Clear Impacts  
 (This Sheet)

JA Wetland 50A  
 0.10 Acre Fill Impacts  
 0.003 Acre Clear Impacts

150  
 ADDITIONAL CLEARING  
 REQUIRED FOR 36'  
 CLEAR ZONE

155  
 ADDITIONAL CLEARIN  
 REQUIRED FOR 36'  
 CLEAR ZONE



JT Wetland 45A  
 0.10 Acre Fill Impacts  
 0.05 Acre Clear Impacts  
 (This Sheet)

AP . SAC 201 -

PROJECT TITL : IN 39168  
 HIGHWAY 17 (SPEEDWAY BLV .  
 WIDENING AND IMPROVEMENTS

PROJECT LOCATIO :  
 JASPER COUNTY,  
 CHATHAM COUNTY,

APPLICAN :

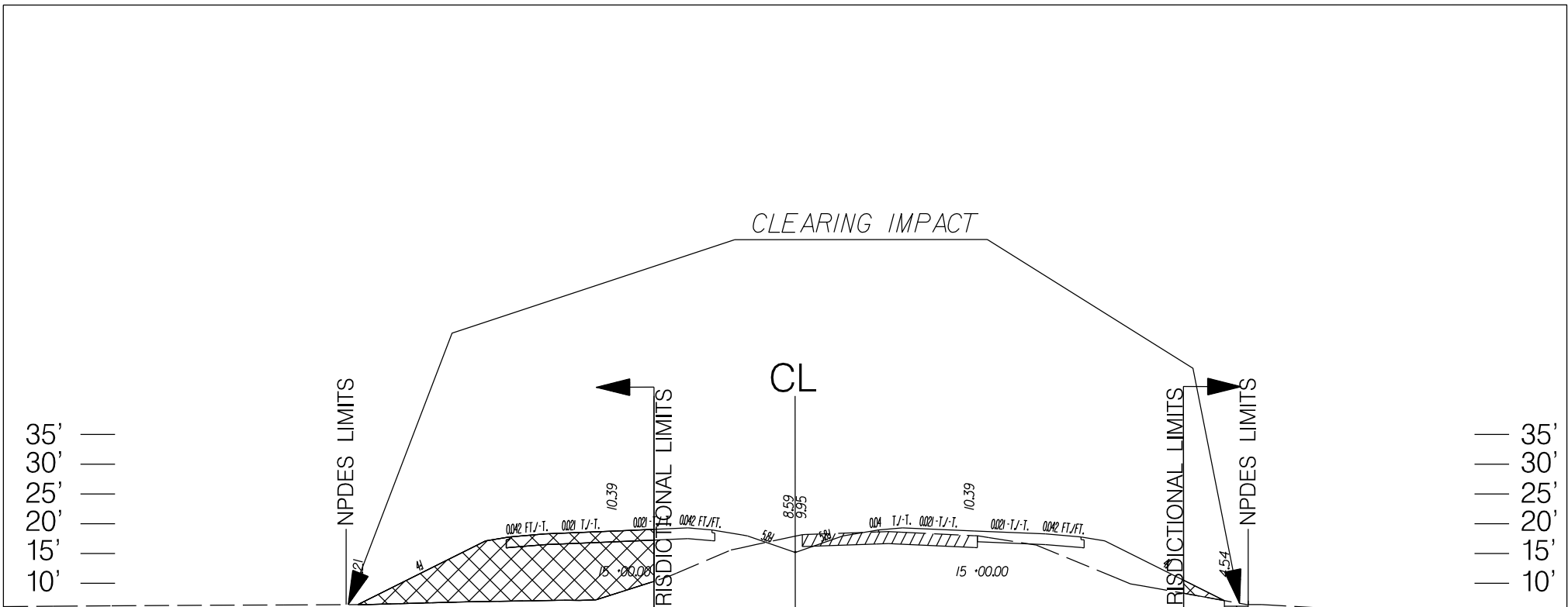
AUTHORIZED AGEN :  
 MICHAEL BAKER INTERNATIONAL

DAT : /01/2017 SHEET 17 OF 54



GRAPHIC - L - 1" = 100'

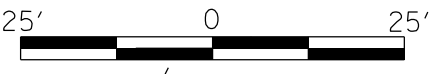
-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS






G - G  
STATION 153+0 .

*Communication Line  
Relocation Trench*

*Utility  
Easement*



GRAPHIC SCALE - 1" = 25'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

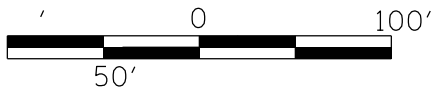
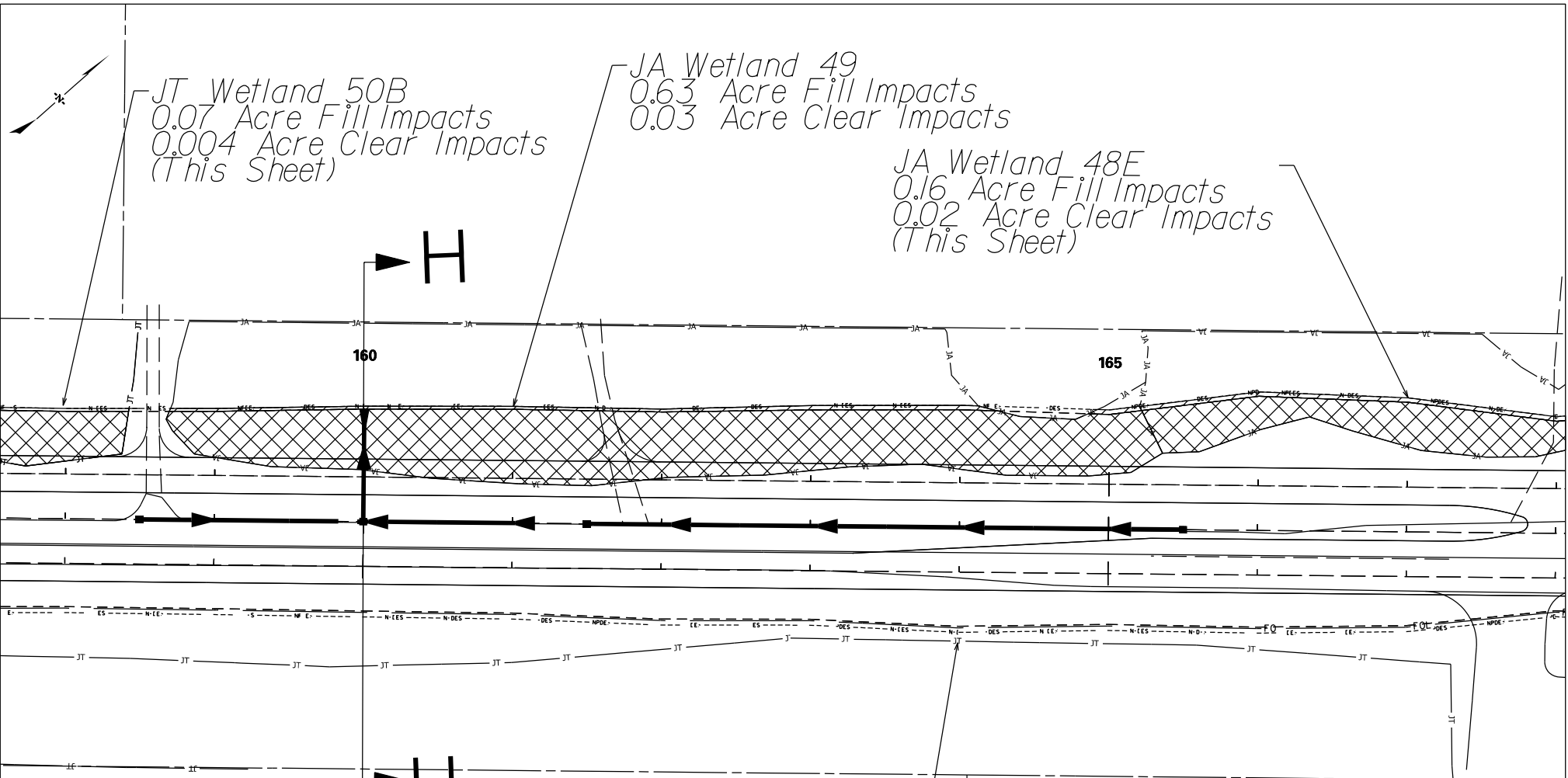
AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 18 OF 54

JT Wetland 50B  
 0.07 Acre Fill Impacts  
 0.004 Acre Clear Impacts  
 (This Sheet)

JA Wetland 49  
 0.63 Acre Fill Impacts  
 0.03 Acre Clear Impacts

JA Wetland 48E  
 0.16 Acre Fill Impacts  
 0.02 Acre Clear Impacts  
 (This Sheet)

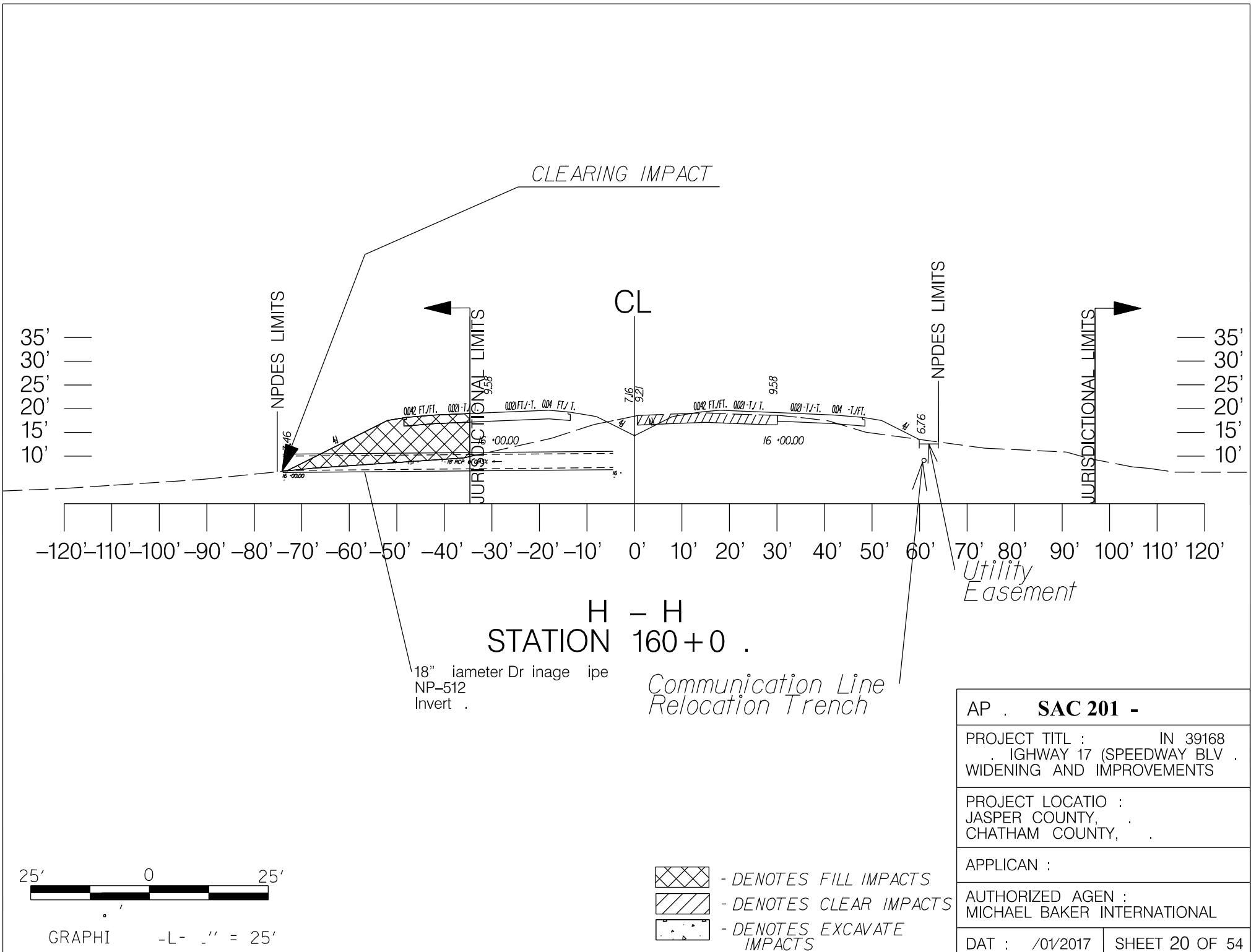
JT Wetland 45A  
 No Impacts  
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GRAPHIC - 1" = 100'

- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS

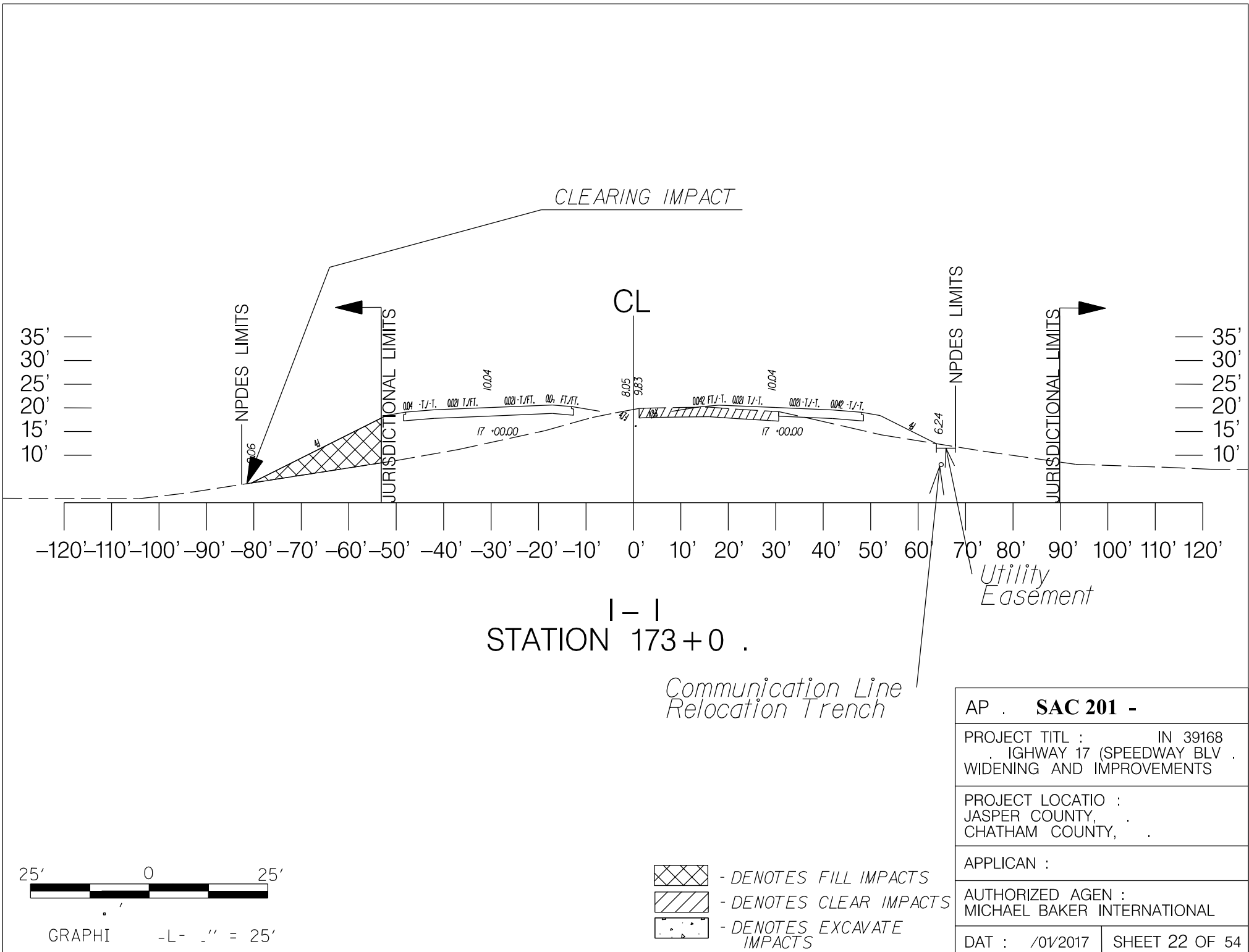
AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 19 OF 54



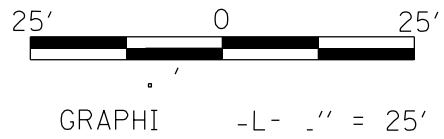
GRAPHIC SCALE - 1" = 25'

- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS



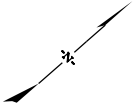


AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 22 OF 54



- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS



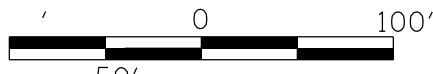
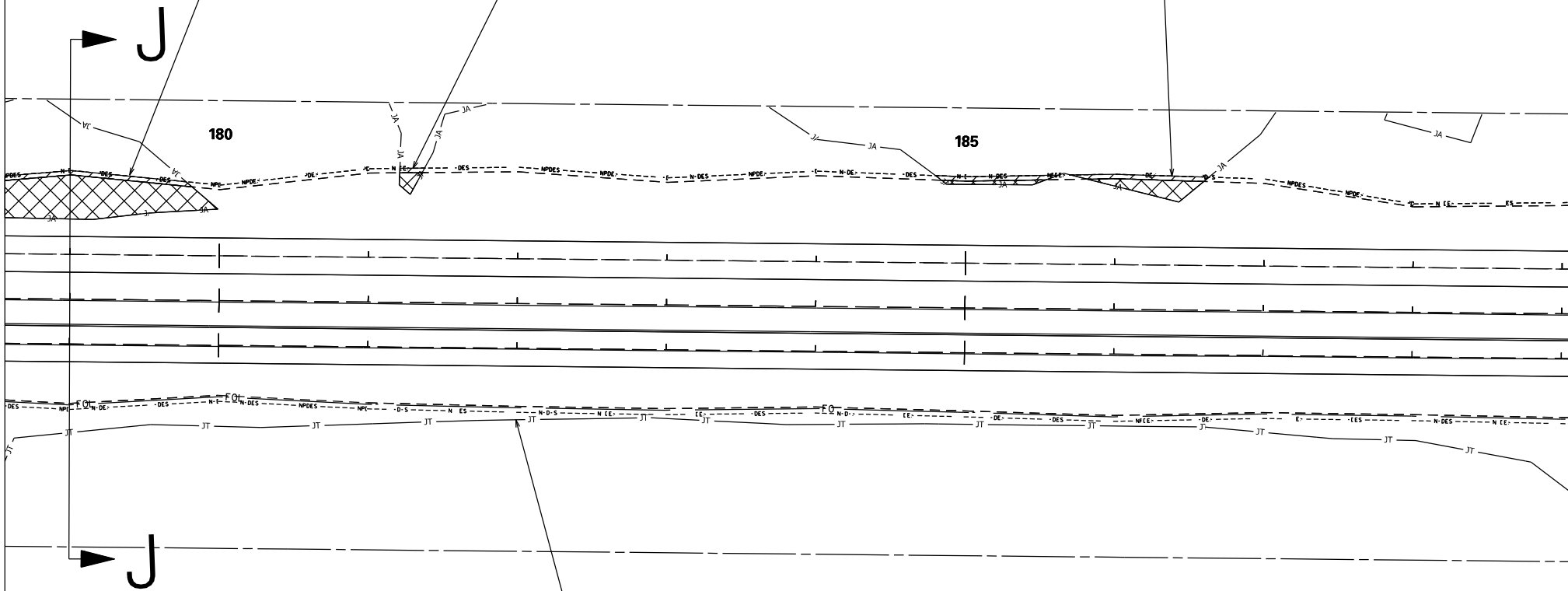


JA Wetland 48D  
 0.07 Acre Fill Impacts  
 0.01 Acre Clear Impacts  
*(This Sheet)*

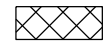

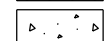
JA Wetland 48B  
 0.02 Acre Fill Impacts  
 0.01 Acre Clear Impacts

JA Wetland 48C  
 0.003 Acre Fill Impacts  
 0.001 Acre Clear Impacts

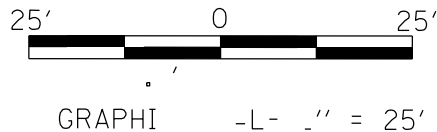
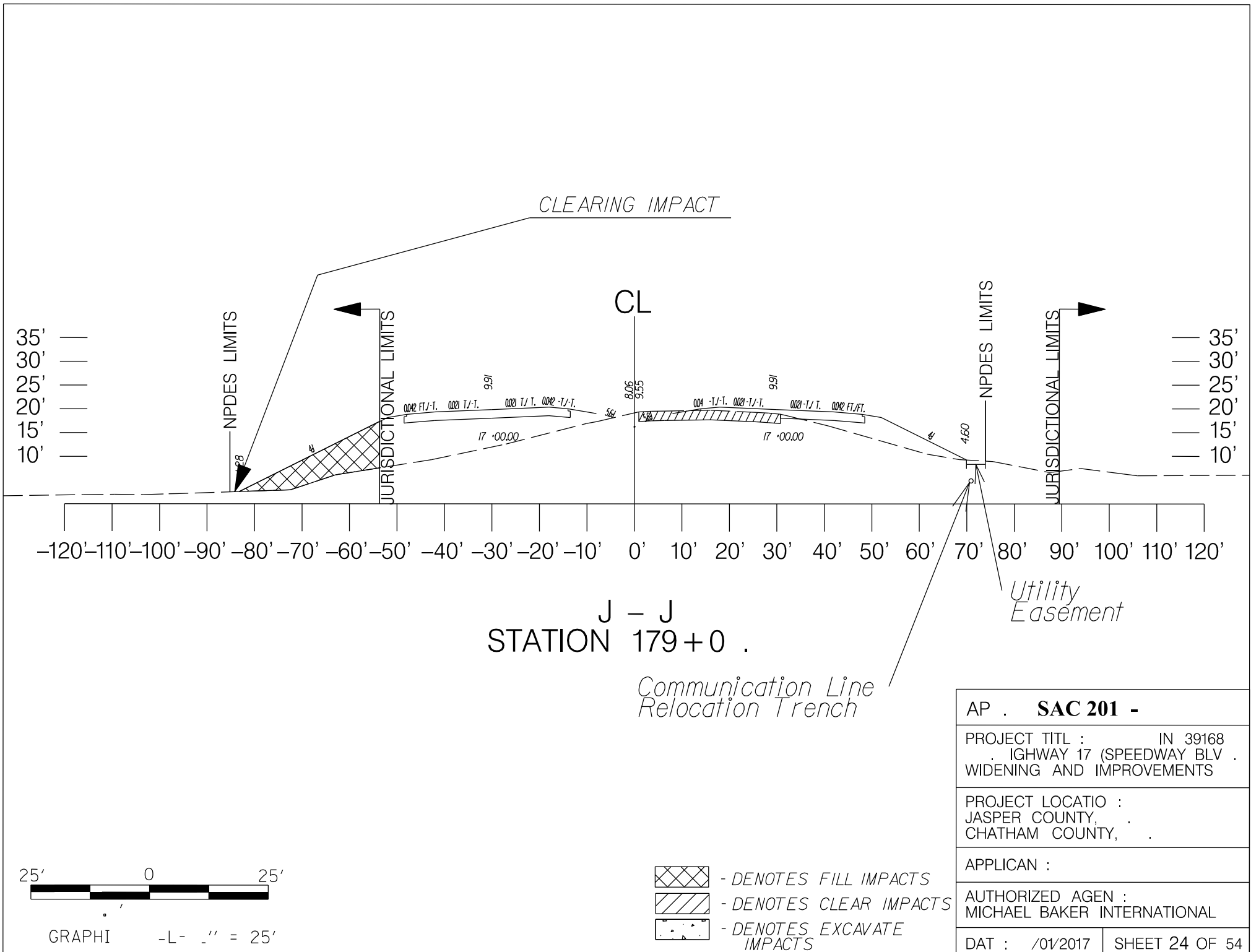
JT Wetland 38/43-  
 No Impacts  
*(This Sheet)*



GRAPHIC - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY , CHATHAM COUNTY ,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 23 OF 54



- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS

JA Wetland 41B  
0.002 Acre Clear Impacts  
(This Sheet)

K

190

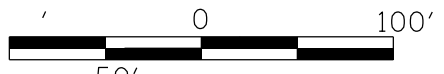
195

K




JA Wetland 38/43E  
No Impacts

JA Wetland 38/43  
No Impacts  
(This Sheet)

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 25 OF 54

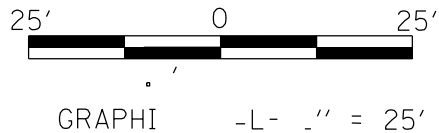
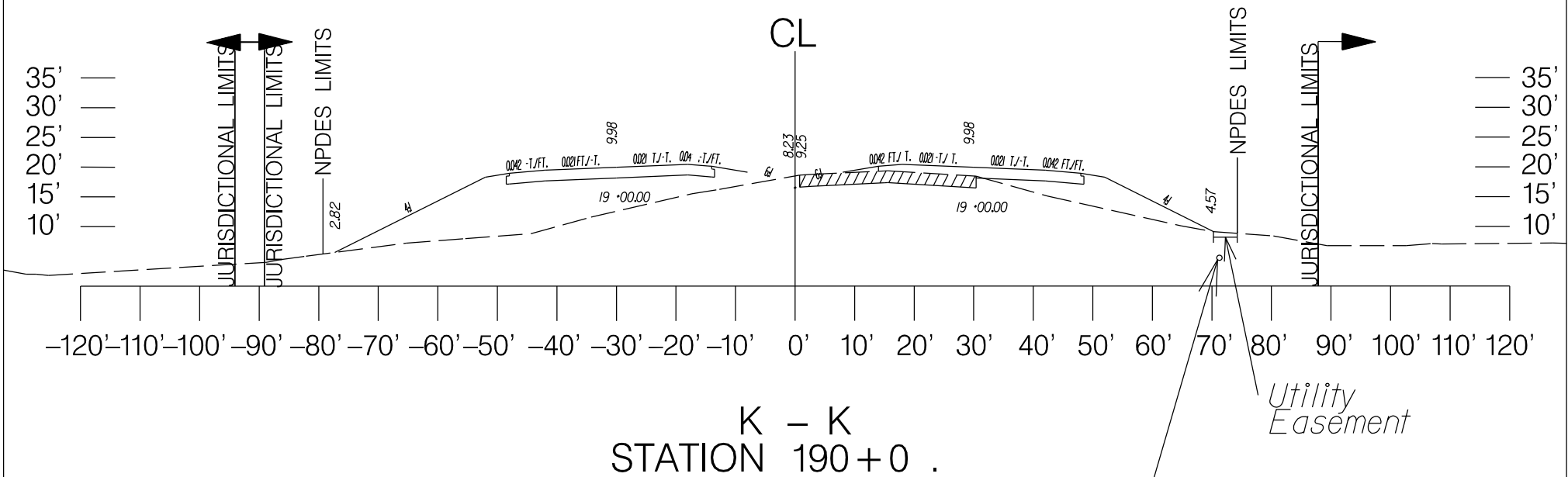




GRAPHIC - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

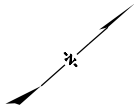
NOT :

IMPACTS THIS SHEET

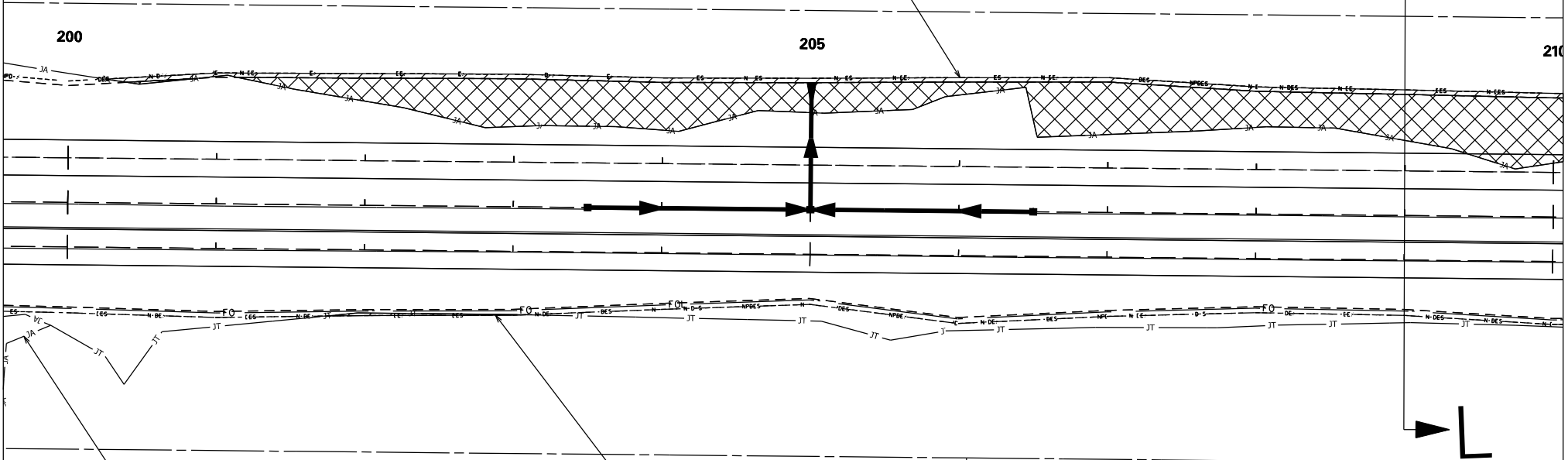


-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 26 OF 54



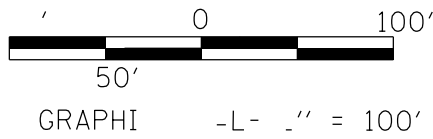
JA Wetland 41B  
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 0.07 Acre Clear Impacts  
 (This Sheet)



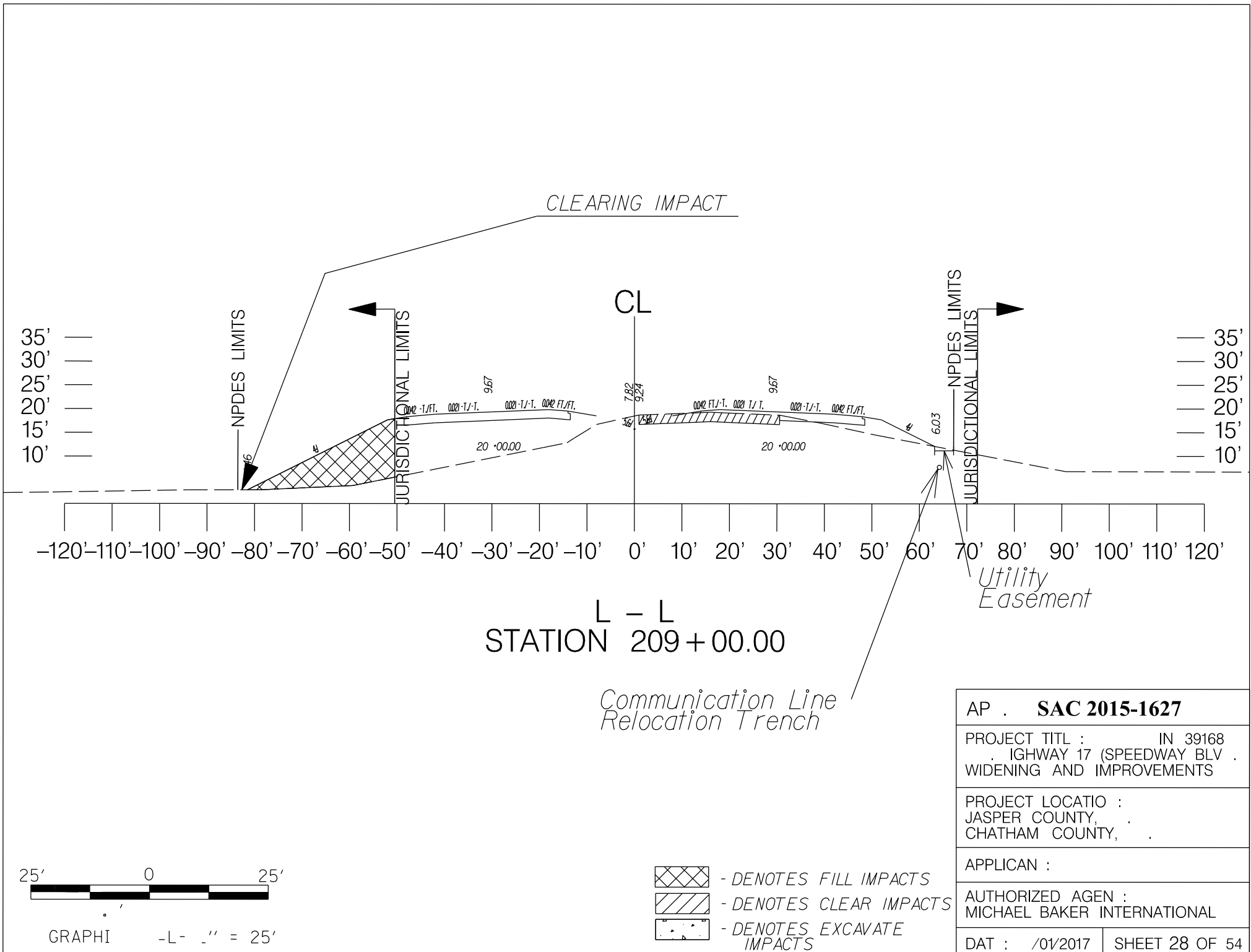
JA Wetland 38/43B  
 No Impacts  
 (This Sheet)

JT Wetland 38/43A  
 0.003 Acre Clear Impacts  
 (This Sheet)

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 27 OF 54



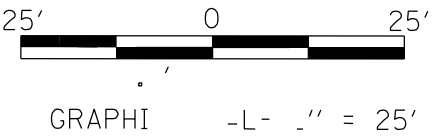
- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS



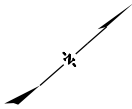
L - L  
STATION 209 + 00.00

*Communication Line Relocation Trench*

AP . <b>SAC 2015-1627</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, . CHATHAM COUNTY, .	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 28 OF 54



- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS

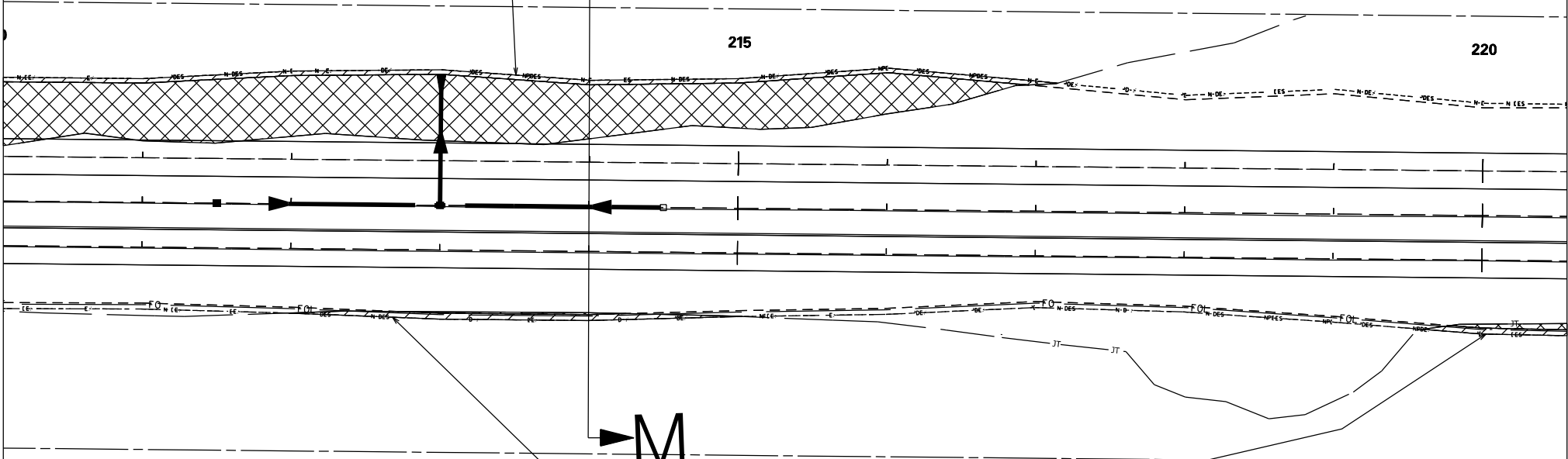


JA Wetland 4/B  
 0.54 Acre Fill Impacts  
 0.05 Acre Clear Impacts  
 (This Sheet)

▶ M

215

220






▶ M

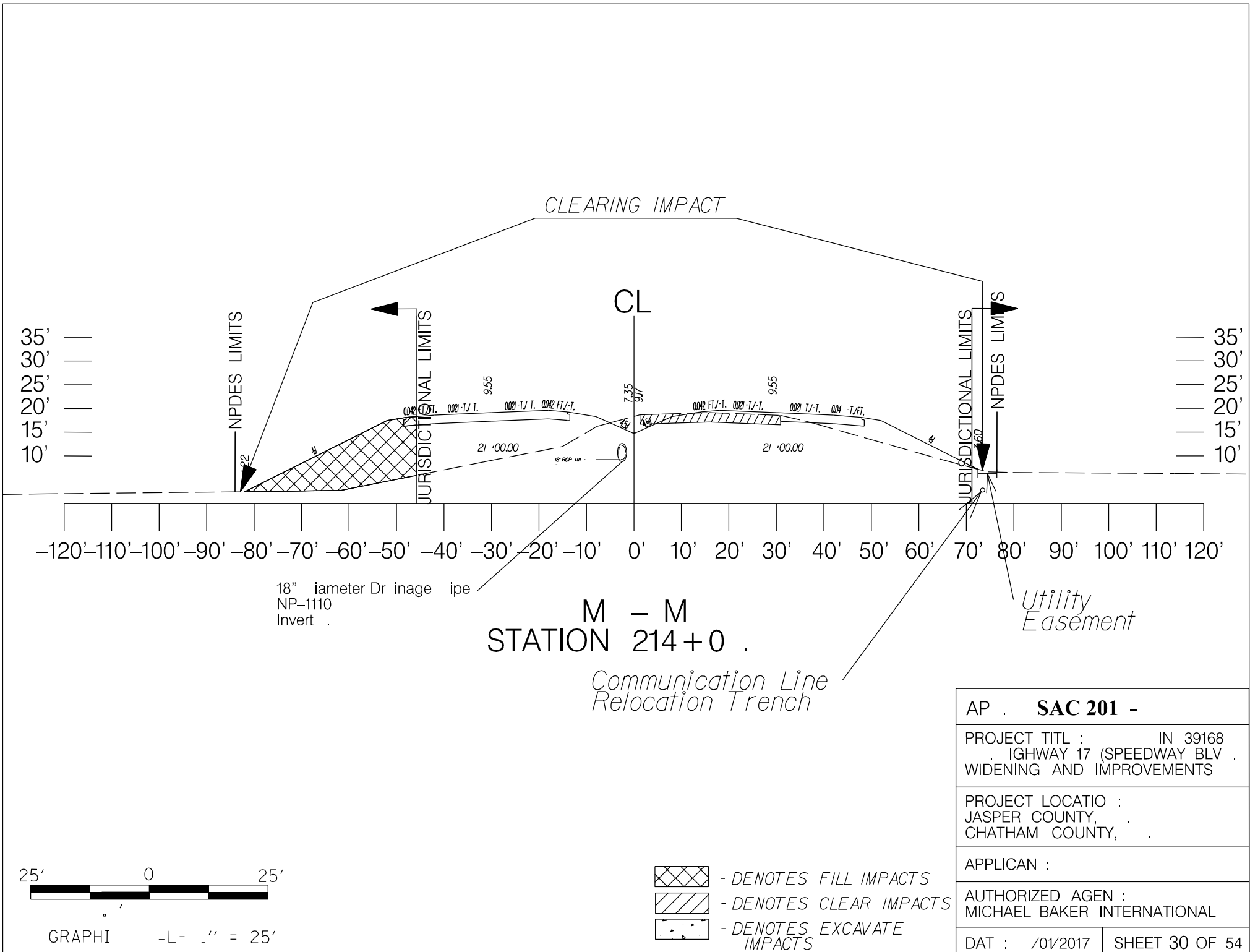
JT Wetland 38/43A  
 0.01 Acre Fill Impacts  
 0.03 Acre Clear Impacts  
 (This Sheet)

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 29 OF 54



-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

GRAPHIC - L - 1" = 100'

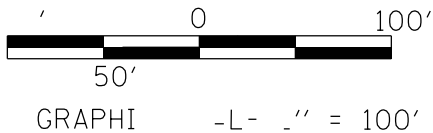


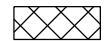

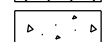


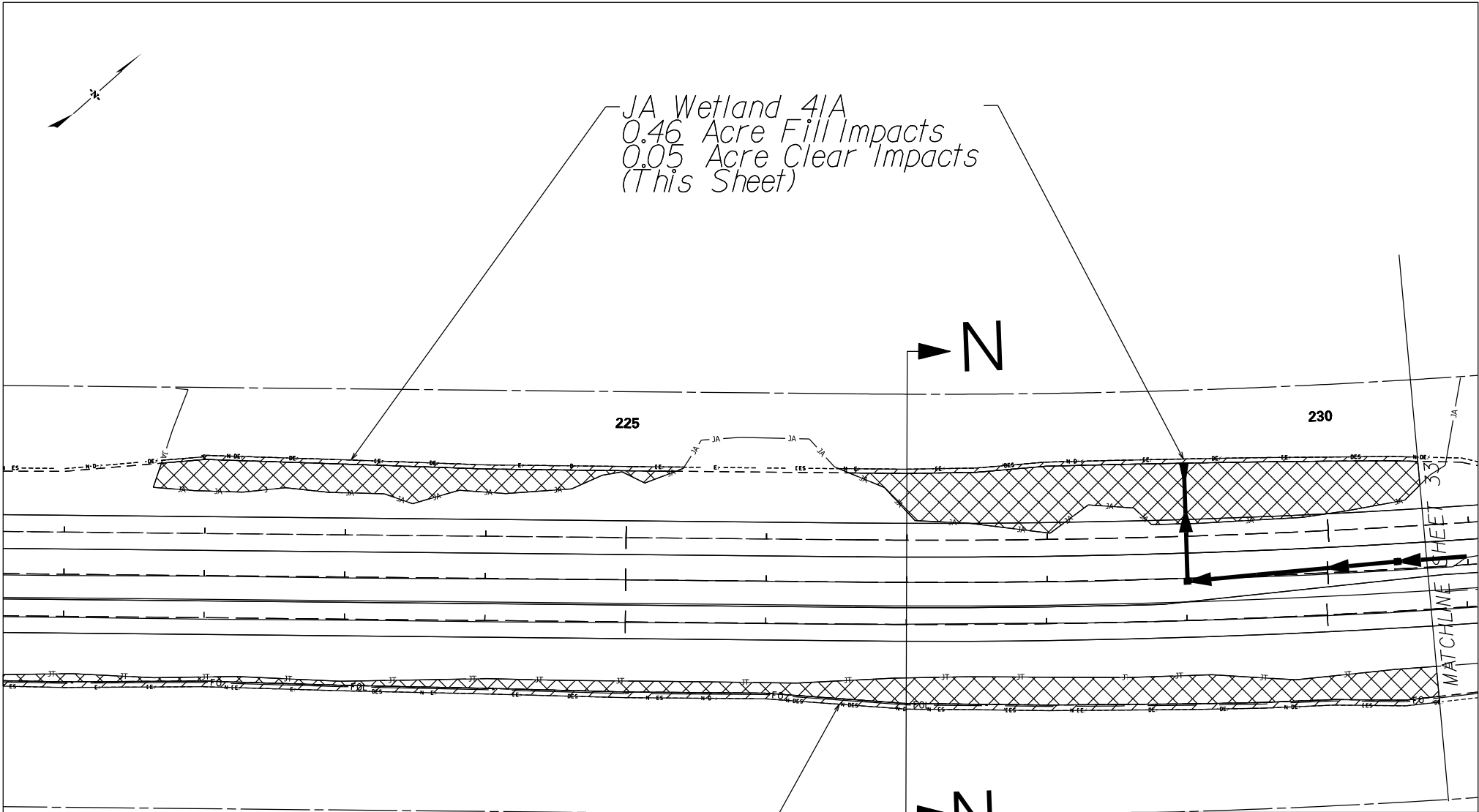
JA Wetland 41A  
 0.46 Acre Fill Impacts  
 0.05 Acre Clear Impacts  
 (This Sheet)

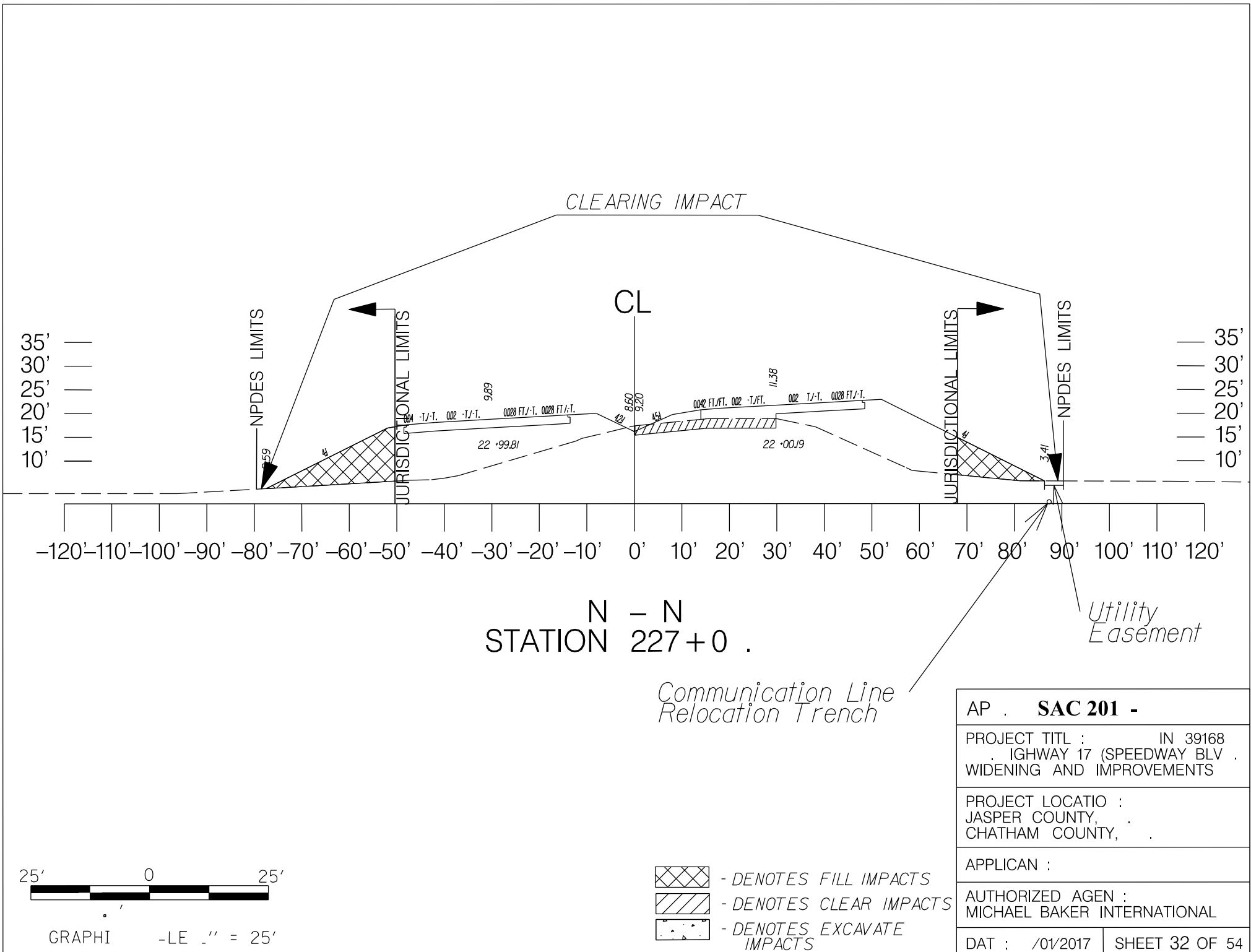
JT Wetland 38/43A  
 0.26 Acre Fill Impacts  
 0.09 Acre Clear Impacts  
 (This Sheet)

AP . SAC 201 -	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 31 OF 54



-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS



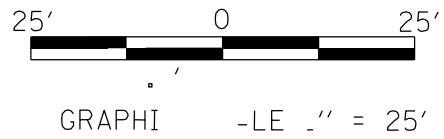


N - N  
STATION 227 + 0 .

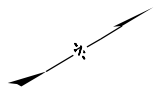
*Communication Line  
Relocation Trench*

*Utility  
Easement*

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 32 OF 54



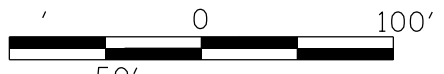
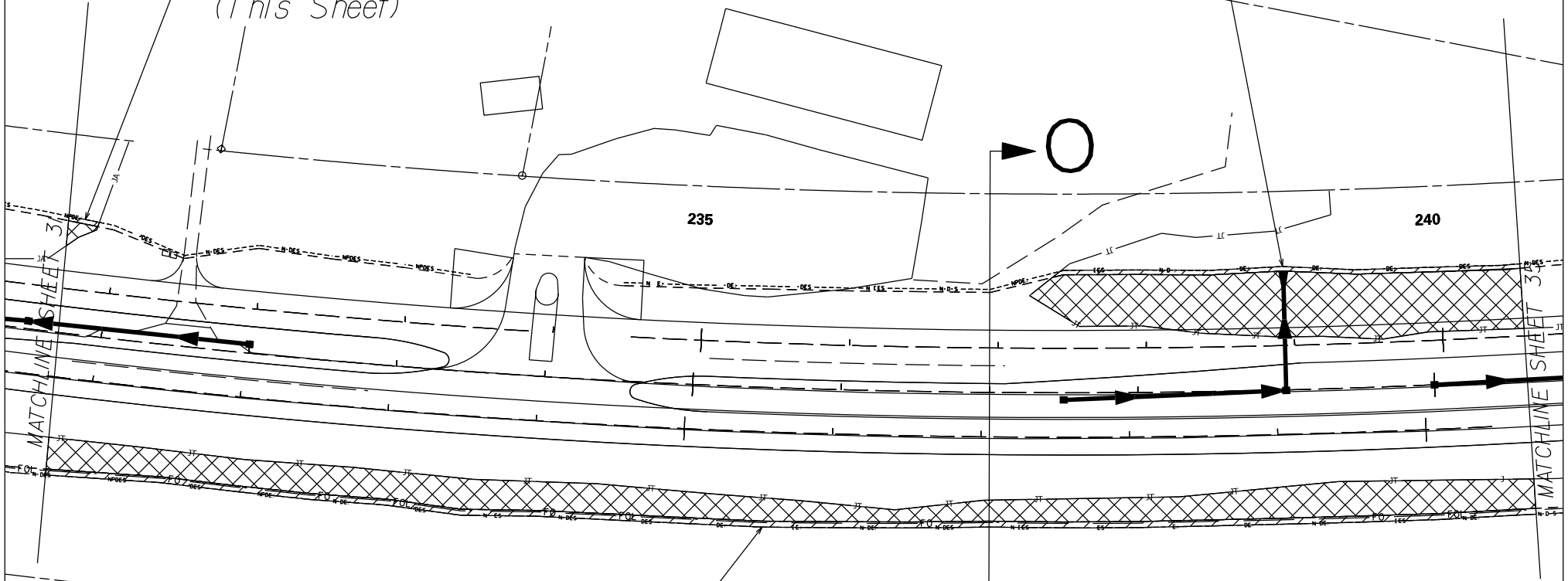
- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS






JT Wetland 39/40  
 0.29 Acre Fill Impacts  
 0.02 Acre Clear Impacts  
 (This Sheet)

JA Wetland 41A  
 0.004 Acre Fill Impacts  
 0.001 Acre Clear Impacts  
 (This Sheet)

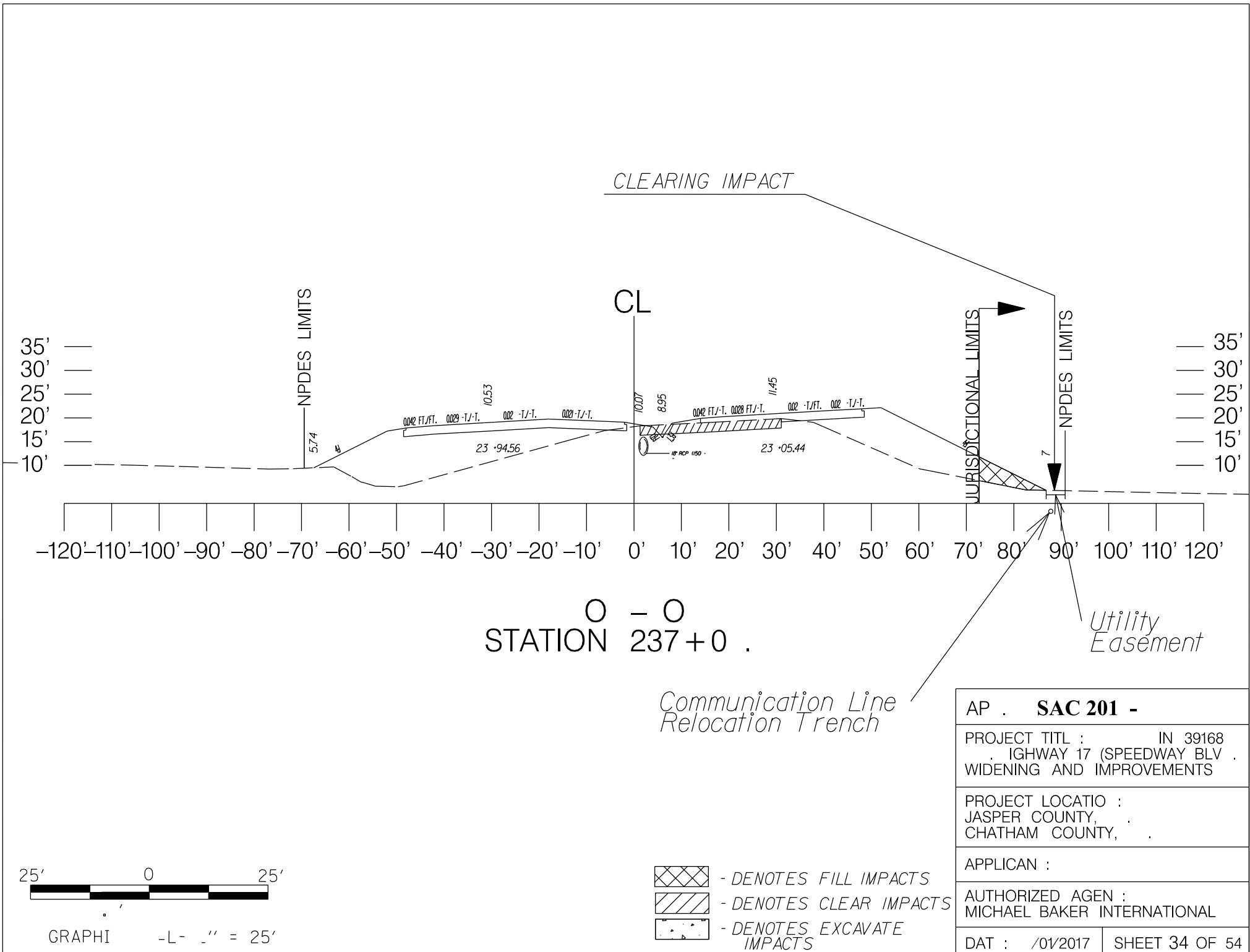
JT Wetland 38/43A  
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 0.09 Acre Clear Impacts  
 (This Sheet)

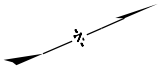


GRAPHIC - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

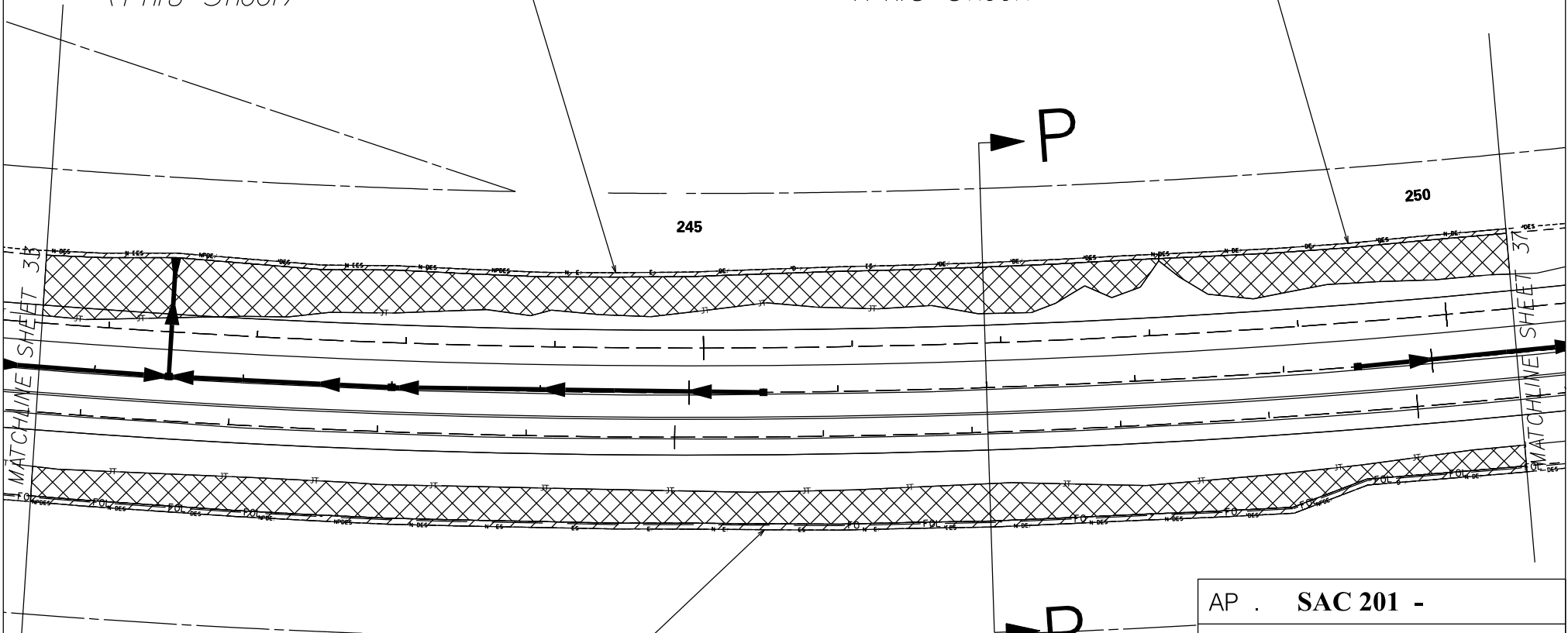
AP . <b>SAC 201 -</b>	
PROJECT TITLE : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATION : JASPER COUNTY, CHATHAM COUNTY,	
APPLICANT :	
AUTHORIZED AGENT : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 33 OF 54





JT Wetland 39/40C  
 0.49 Acre Fill Impacts  
 0.05 Acre Clear Impacts  
 (This Sheet)

JT Wetland 39/40B  
 0.13 Acre Fill Impacts  
 0.02 Acre Clear Impacts  
 (This Sheet)



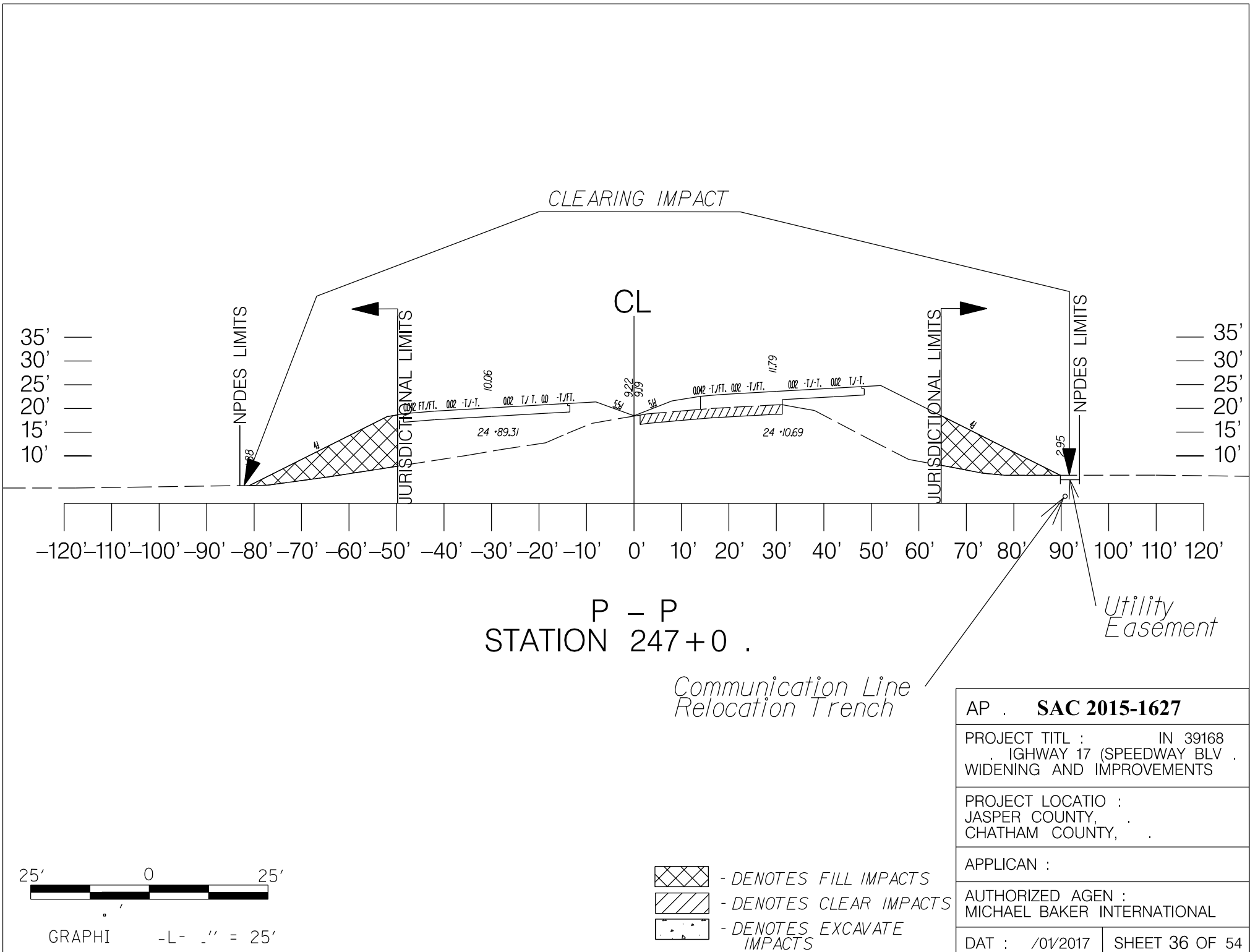
JT Wetland 38/43A  
 0.48 Acre Fill Impacts  
 0.09 Acre Clear Impacts  
 (This Sheet)



GRAPHIC - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

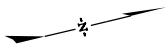
AP . <b>SAC 201 -</b>	
PROJECT TITLE : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATION : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 35 OF 54



GRAPHIC - L - 1" = 25'

- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS

AP . <b>SAC 2015-1627</b>	
PROJECT TITLE : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATION : JASPER COUNTY, . CHATHAM COUNTY, .	
APPLICANT :	
AUTHORIZED AGENT : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 36 OF 54



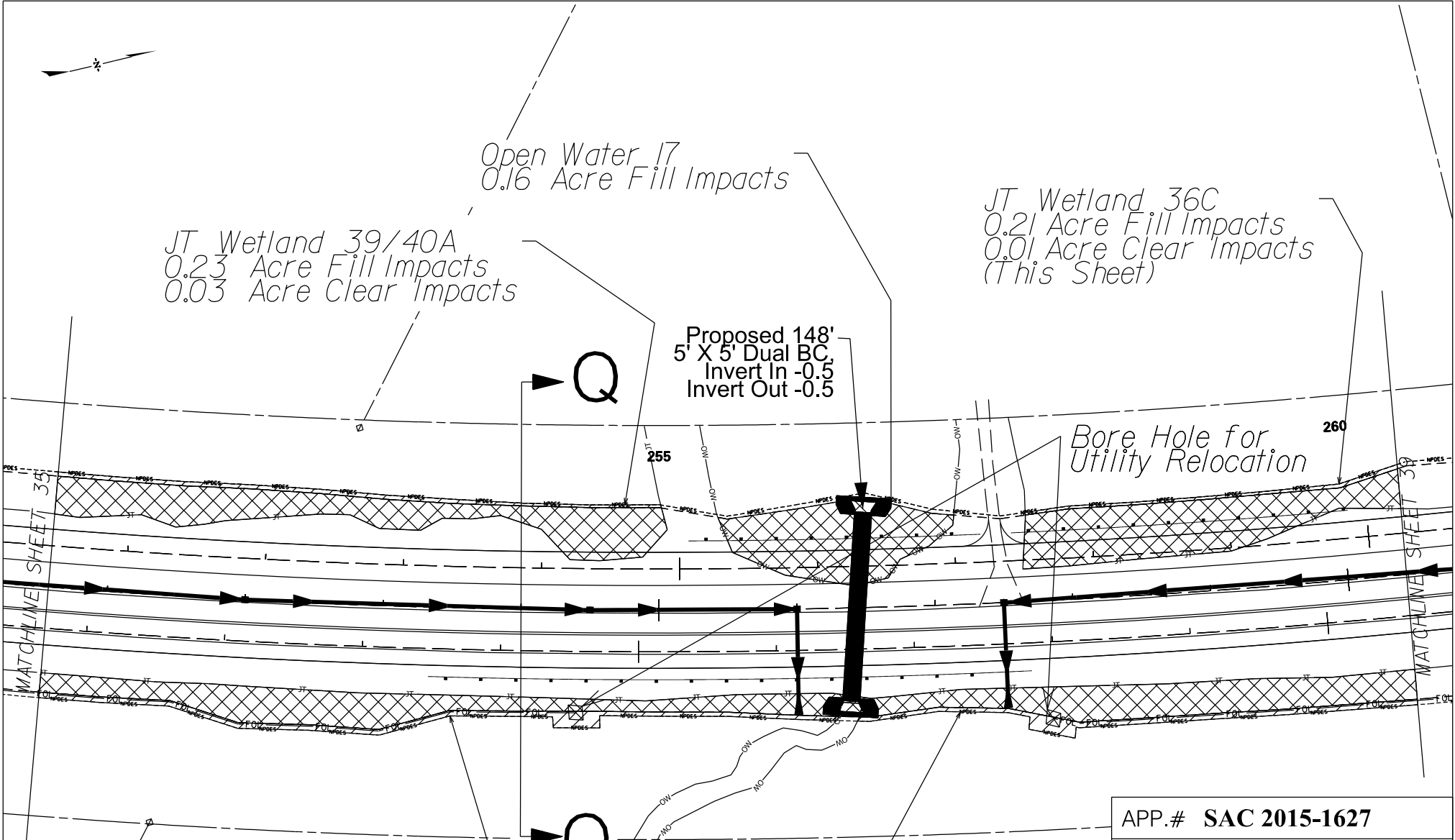
Open Water 17  
0.16 Acre Fill Impacts

JT Wetland 39/40A  
0.23 Acre Fill Impacts  
0.03 Acre Clear Impacts

JT Wetland 36C  
0.21 Acre Fill Impacts  
0.01 Acre Clear Impacts  
(This Sheet)

Proposed 148'  
5' X 5' Dual BC,  
Invert In -0.5  
Invert Out -0.5

Bore Hole for  
Utility Relocation



JT Wetland 38/43A  
0.39 Acre Fill Impacts  
0.10 Acre Clear Impacts  
(This Sheet)

APP.# SAC 2015-1627

PROJECT TITLE: SCDOT PIN 39168  
U.S. HIGHWAY 17 (SPEEDWAY BLVD.)  
WIDENING AND IMPROVEMENTS

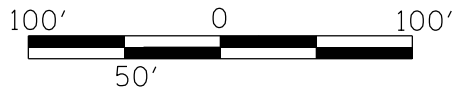
PROJECT LOCATION:  
JASPER COUNTY, S.C. AND  
CHATHAM COUNTY, G.A.

APPLICANT: SCDOT

AUTHORIZED AGENT:  
MICHAEL BAKER INTERNATIONAL

DATE: 09/01/2017

SHEET 37 OF 54



GRAPHIC SCALE 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	NO.	SHEET NO.
3	S.C.	JASPER	0039168	US-17	S-1

**SUMMARY OF ESTIMATED QUANTITIES**

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
2047000	TEMPORARY SHORING WALL	L.F.	60
2103000	FLOWABLE FILL	C.Y.	11
7011402	CONC./STRUC-CL.4000(CULVERT)	C.Y.	15
7031100	REINF STEEL FOR STRUCT (RDWAY)	LB	1826
7222356	5'x5' PCBOX CULVIM-259IFH=7'	L.F.	274
8011400	AGGR. UNDERDRAIN(AGGR.NO.57)	C.Y.	124
8041020	RIP-RAP (CLASS B)	TON	75
8048205	GEOTEX/EROS.CONT(CLASS2)TYPE B	S.Y.	90

**PRECAST CONCRETE BOX CULVERT DESIGN CRITERIA**

BOX CULVERT SIZE : SINGLE 5'x5'  
 DESIGN STANDARD : ASTM C1433 LATEST EDITION (PAID FOR AS AASHTO M-259)  
 DESIGN EARTH COVER : 7'  
 DESIGN LIVE LOAD : HS-20 / INTERSTATE LOADING

**NOTES:**

FOR ADDITIONAL NOTES AND DETAILS, INCLUDING CONSTRUCTION JOINT, PRECAST JOINT, RESIN ANCHOR, PIPE HOLE(IF REQUIRED) AND WEEP HOLE, SEE STD. DRAWING 722-105-01 & 722-105-02, BOX CULVERT (MISCELLANEOUS DATA), AND DRAWING 722-305-00, BOX CULVERT (PRECAST).

THE COST OF ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO CONSTRUCT WEEP HOLES AND FRENCH DRAINS, # 57 STONE AND FILTER FABRIC AT WEEP HOLES SHALL BE INCLUDED IN THE 5'x5' PCBOX CULVIM-259IFH=7' PAY ITEM.

ALL COSTS OF REMOVE AND DISPOSE THE EXISTING 10" DIAMETER CONCRETE PIPE SHALL BE INCLUDED IN UNIT PRICE BID FOR 5'x5' PCBOX CULVIM-259IFH=7'.

STRUCTURE EXCAVATION IS INCLUDED IN MUCK EXCAVATION.

IF DEWATER METHOD IS NOT SPECIFIED IN THE CULVERT PLANS, CONTRACTOR SHOULD ACCORDING TO EXISTING FIELD CONDITION PROVIDE DEWATER METHOD. ALL COSTS OF DEWATER SYSTEM MATERIAL AND INSTALLATION SHALL BE INCLUDED IN UNIT PRICE BID FOR 5'x5' PCBOX CULVIM-259IFH=7'.

IF GUARDRAIL POSTS REQUIRE TO BE MOUNTED ON THE TOP OF CULVERT, SEE STANDARD DRAWING 805-120-00 FOR DETAILS.

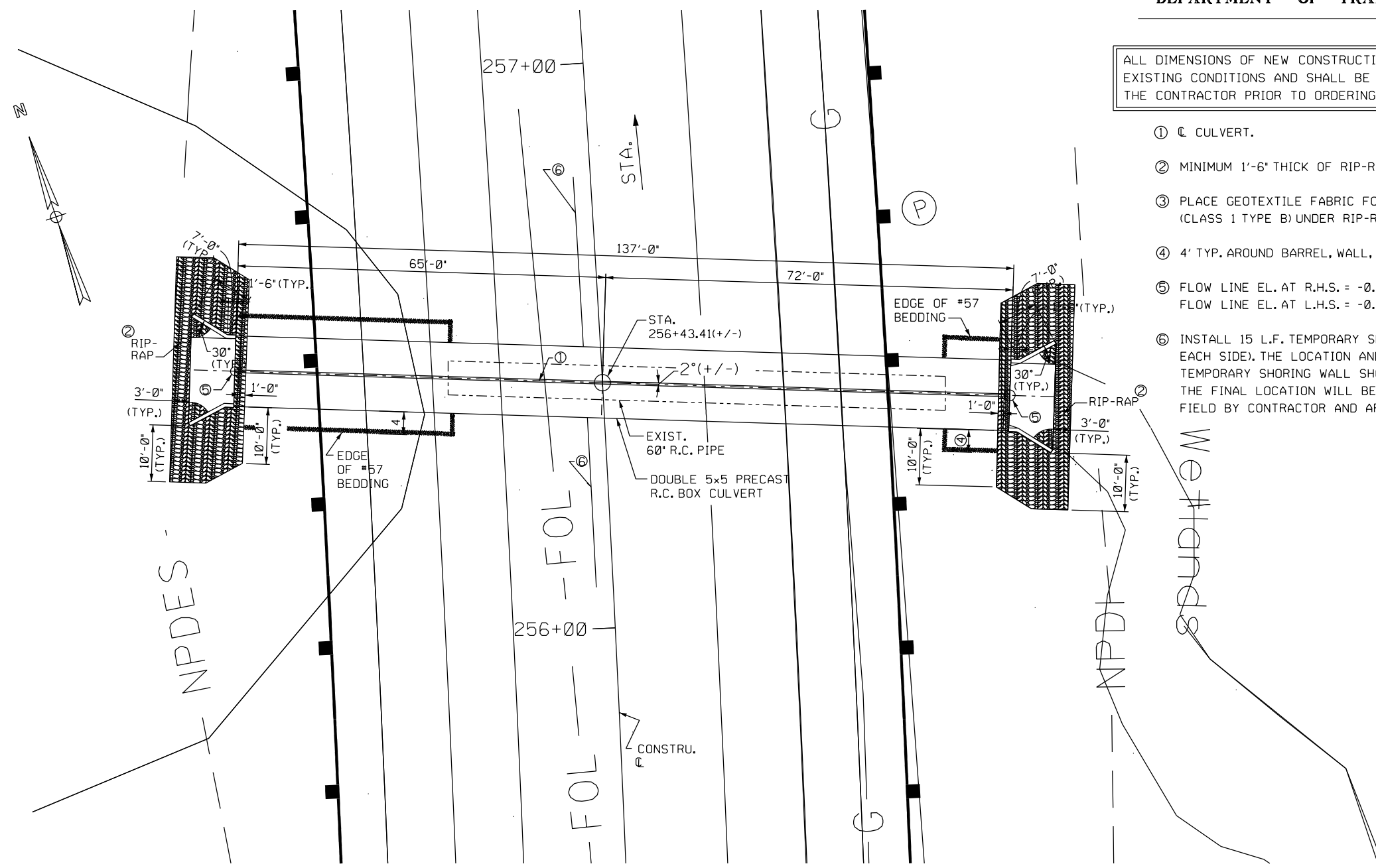
F.L. : FLOW LINE  
 L.H.S. : LEFT HAND SIDE  
 R.H.S. : RIGHT HAND SIDE

THE CONTRACTOR SHALL PROVIDE A STATEMENT CERTIFYING COMPLIANCE WITH THE DESIGN CRITERIA SPECIFIED AND SEVEN (7) SETS OF (22"X36" OR 11"X17") SHOP DRAWINGS TO THE PRECONSTRUCTION SUPPORT ENGINEER FOR REVIEW. THE DRAWINGS SHALL INDICATE PROJECT FILE NUMBER OR PIN, DESIGN CRITERIA, FILL HEIGHT, REINFORCING STEEL DETAILS, MATERIAL SPECIFICATIONS, AND SHOW ADEQUATE DIMENSIONING SUCH AS CULVERT DIMENSIONS (SPAN X HEIGHT) ETC. TO MANUFACTURE AND INSPECT THE BOX CULVERT. A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF SOUTH CAROLINA SHALL CERTIFY THE SHOP DRAWINGS. DRAWINGS SHALL BE SUBMITTED TO THE FOLLOWING ADDRESS WITH A COPY OF THE TRANSMITTAL LETTER TO THE RESIDENT CONSTRUCTION ENGINEER:  
 SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION  
 PRECONSTRUCTION SUPPORT ENGINEER  
 955 PARK STREET - ROOM 409  
 COLUMBIA, SOUTH CAROLINA  
 ATTENTION: LOGISTIC COORDINATOR

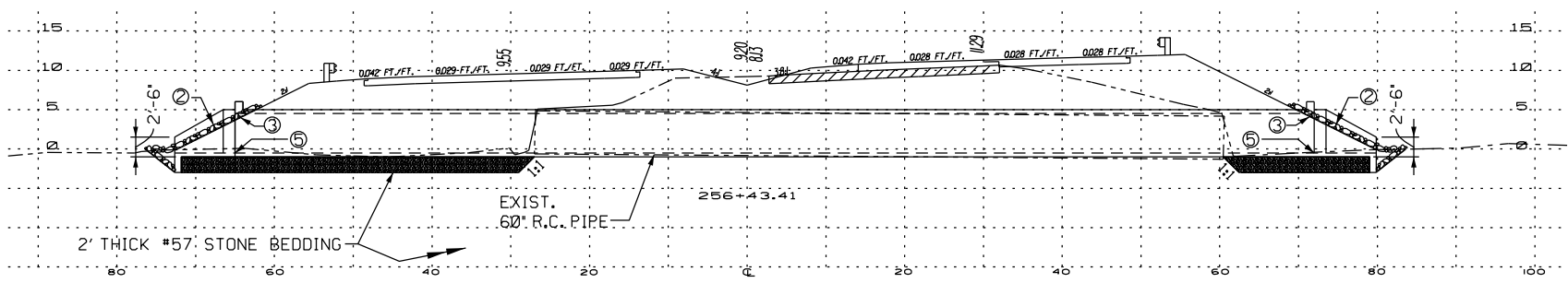
DURING THE REVIEW PROCESS, ALL SUBSEQUENT SETS OF DRAWINGS AND CALCULATIONS SHALL BE SENT TO THE PRECONSTRUCTION SUPPORT ENGINEER AT THE ADDRESS ABOVE. FAXES OR ELECTRONIC TRANSMITTALS WILL BE ACCEPTED DURING THE REVIEW PROCESS.

ALL DIMENSIONS OF NEW CONSTRUCTION ARE SUBJECT TO EXISTING CONDITIONS AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING ANY MATERIALS.

- ① CULVERT.
- ② MINIMUM 1'-6" THICK OF RIP-RAP (CLASS B).
- ③ PLACE GEOTEXTILE FABRIC FOR EROSION CONTROL (CLASS 1 TYPE B) UNDER RIP-RAP.
- ④ 4' TYP. AROUND BARREL, WALL, AND APRON.
- ⑤ FLOW LINE EL. AT R.H.S. = -0.50  
FLOW LINE EL. AT L.H.S. = -0.50
- ⑥ INSTALL 15 L.F. TEMPORARY SHORING WALL (TYP. EACH SIDE). THE LOCATION AND LENGTHS OF TEMPORARY SHORING WALL SHOWN IS APPROXIMATE. THE FINAL LOCATION WILL BE DETERMINED IN THE FIELD BY CONTRACTOR AND APPROVED BY THE RCE.

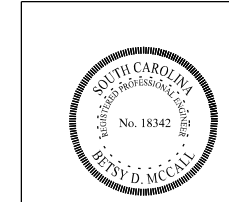


PLAN



**ELEVATION  
CULVERT NO. 1  
DOUBLE 5'x5' R.C. PRECAST BOX CULVERT**

**NOT FOR CONSTRUCTION**



REV.			
REV.			
REV.			
REVIEWED			
QUAN.	WU	VNDC	03-17
DR.	WU	VNDC	03-17
DES.			
BY	CHK.	DATE	

**APP.# SAC 2015-1627**

PROJECT TITLE: SCDOT PIN 39168  
 U.S. HIGHWAY 17 (SPEEDWAY BLVD.)  
 WIDENING AND IMPROVEMENTS

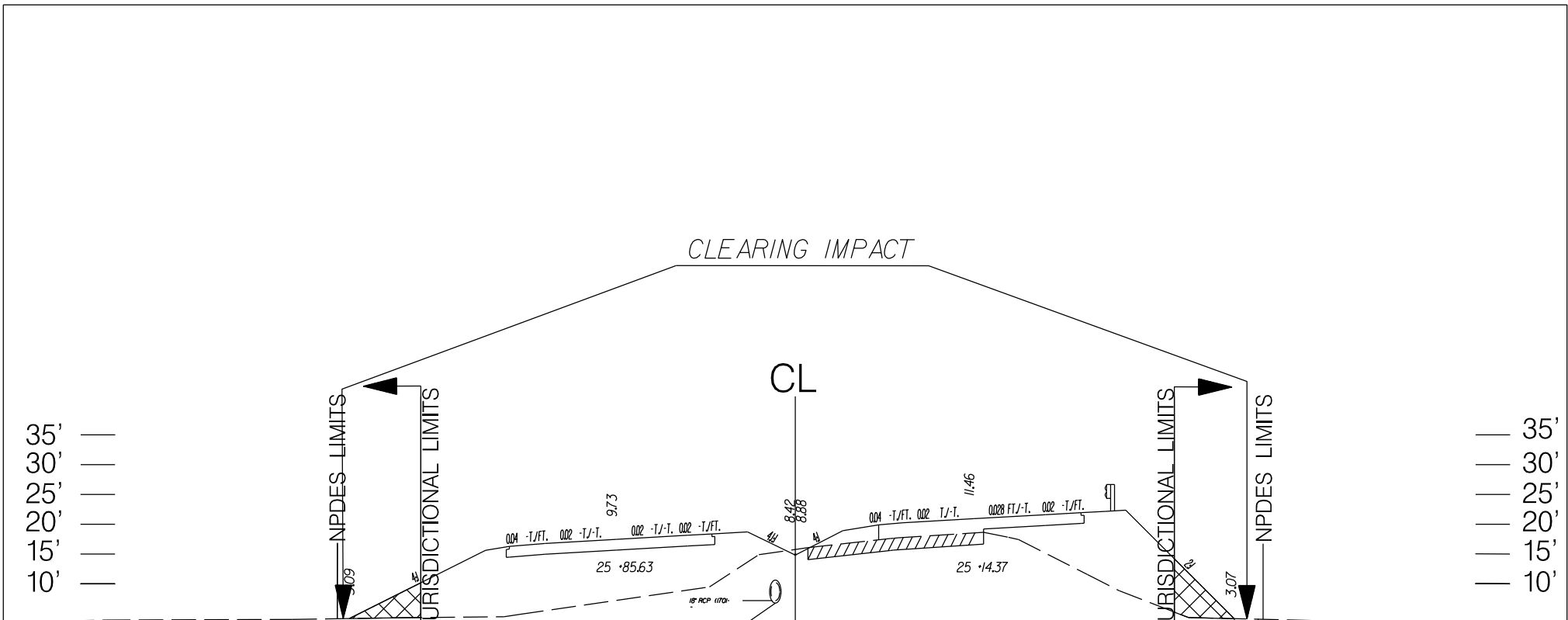
PROJECT LOCATION:  
 JASPER COUNTY, S.C. AND  
 CHATHAM COUNTY, G.A.

APPLICANT: SCDOT

AUTHORIZED AGENT:  
 MICHAEL BAKER INTERNATIONAL

DATE: 10/24/2017 | SHEET 37A OF 54





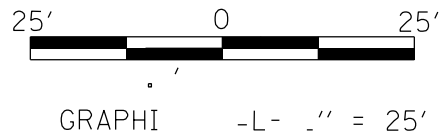
STATION Q - Q  
254 + 0 .




Communication Line  
Relocation Trench

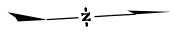
Utility  
Easement

18" diameter Dr image pipe  
NP-1701  
Invert .

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 38 OF 54



-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS



JT Wetland 36C  
 0.06 Acre Fill Impacts  
 0.01 Acre Clear Impacts  
 (This Sheet)

JT Wetland 36B  
 0.41 Acre Fill Impacts  
 0.03 Acre Clear Impacts  
 (This Sheet)

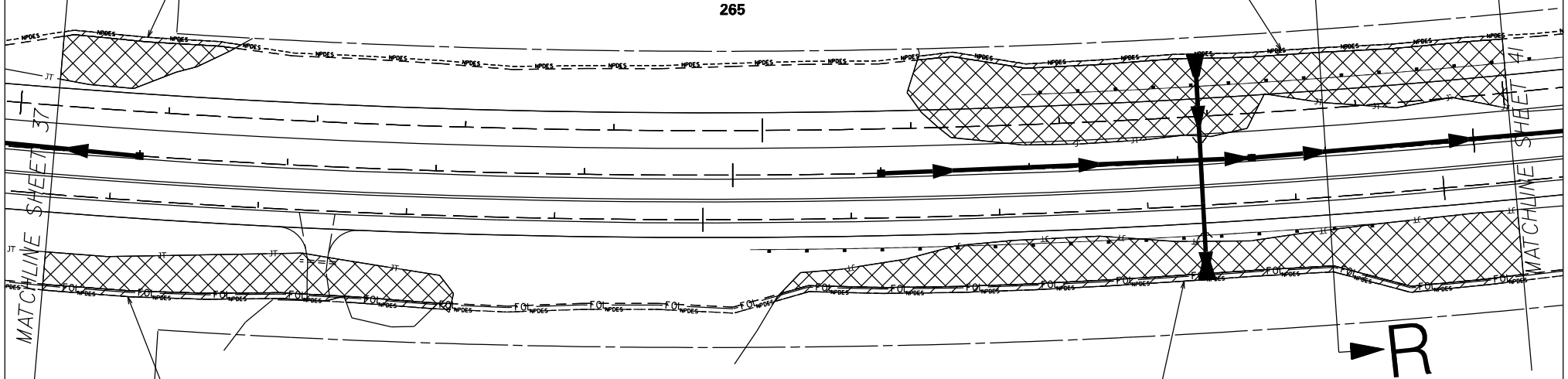
JT Wetland 38/43A  
 0.15 Acre Fill Impacts  
 0.02 Acre Clear Impacts  
 (This Sheet)

JT Wetland 37  
 0.31 Acre Fill Impacts  
 0.05 Acre Clear Impacts  
 (This Sheet)

50

265

270



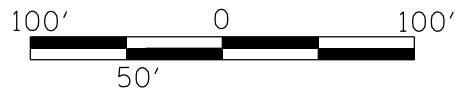
▶ R

▶ R

MATCHLINE SHEET 37

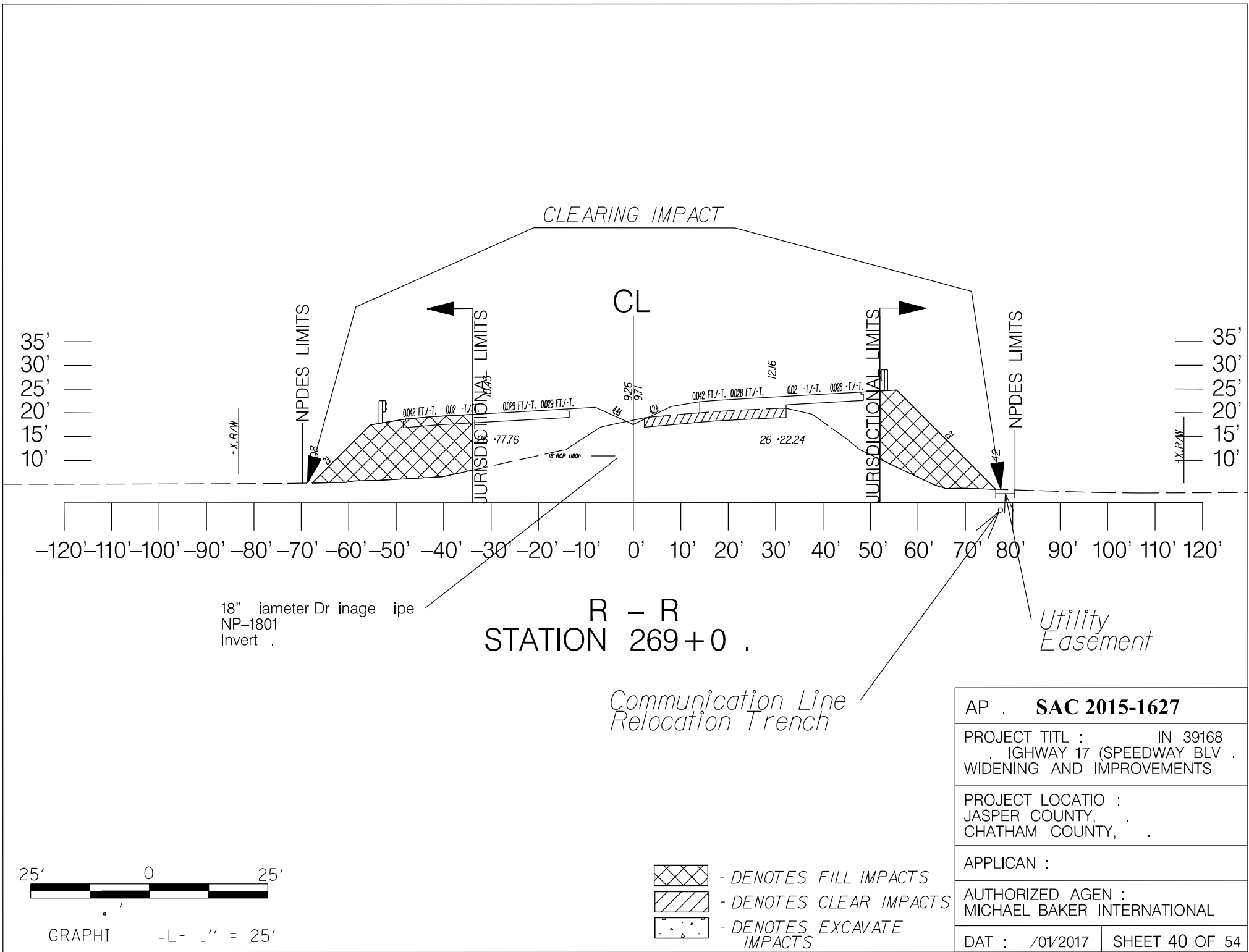
MATCHLINE SHEET 41

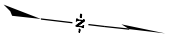
APP.# <b>SAC 2015-1627</b>	
PROJECT TITLE: SCDOT PIN 39168 U.S. HIGHWAY 17 (SPEEDWAY BLVD.) WIDENING AND IMPROVEMENTS	
PROJECT LOCATION: JASPER COUNTY, S.C. AND CHATHAM COUNTY, G.A.	
APPLICANT: SCDOT	
AUTHORIZED AGENT: MICHAEL BAKER INTERNATIONAL	
DATE: 09/01/2017	SHEET 39 OF 54



GRAPHIC SCALE 1" = 100'

- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS

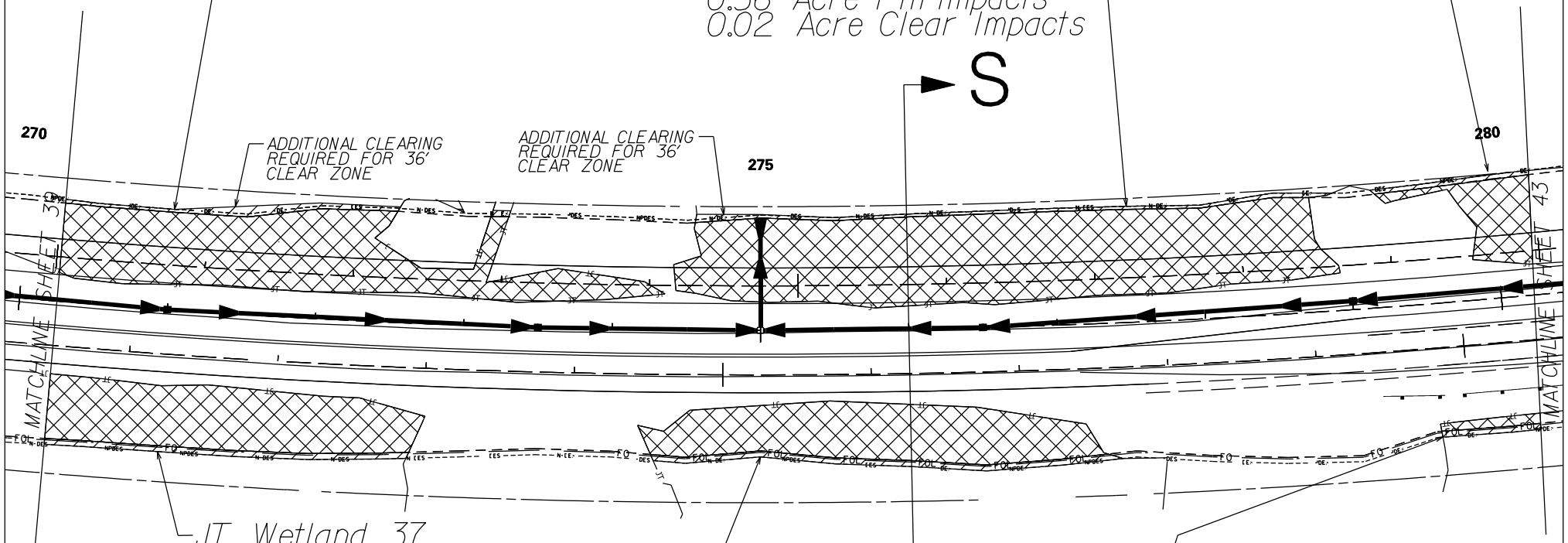




JT Wetland 36B  
 0.34 Acre Fill Impacts  
 0.02 Acre Clear Impacts  
 (This Sheet)

JT Wetland 34A  
 0.06 Acre Fill Impacts  
 0.01 Acre Clear Impacts  
 (This Sheet)

JT Wetland 34B  
 0.56 Acre Fill Impacts  
 0.02 Acre Clear Impacts

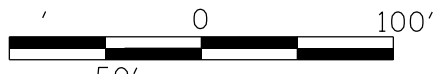


JT Wetland 37  
 0.23 Acre Fill Impacts  
 0.02 Acre Clear Impacts  
 (This Sheet)

JT Wetland 35B  
 0.23 Acre Fill Impacts  
 0.03 Acre Clear Impacts

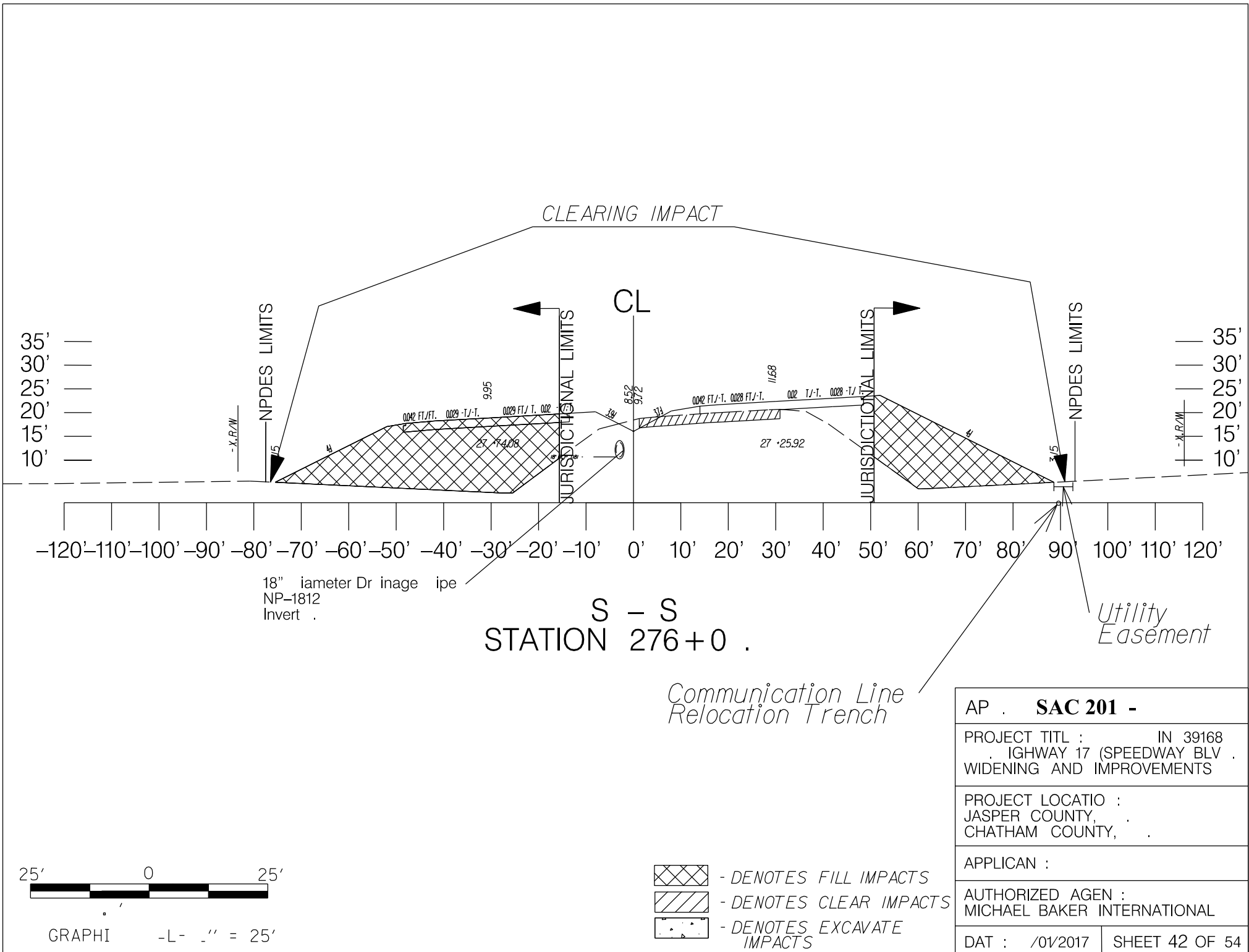
JT Wetland 35A  
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 0.01 Acre Clear Impacts  
 (This Sheet)

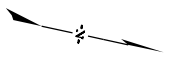
AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV) WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 41 OF 54



GRAPHIC - 1" = 100'

- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS

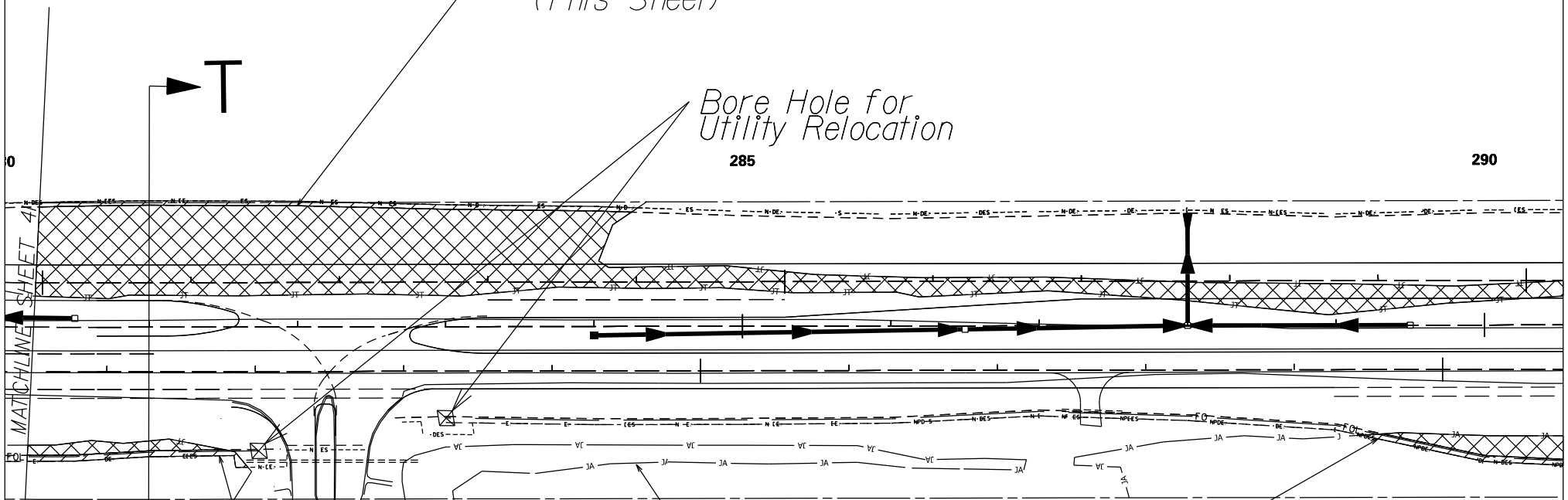




JT Wetland 34A  
 0.71 Acre Fill Impacts  
 0.03 Acre Clear Impacts  
 (This Sheet)

Bore Hole for  
 Utility Relocation  
 285

290

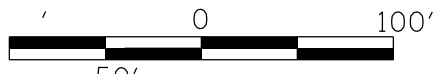


JT Wetland 35A  
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 0.01 Acre Clear Impacts  
 (This Sheet)




JA Wetland 31A  
 0.03 Acre Fill Impacts  
 0.01 Acre Clear Impacts  
 (This Sheet)

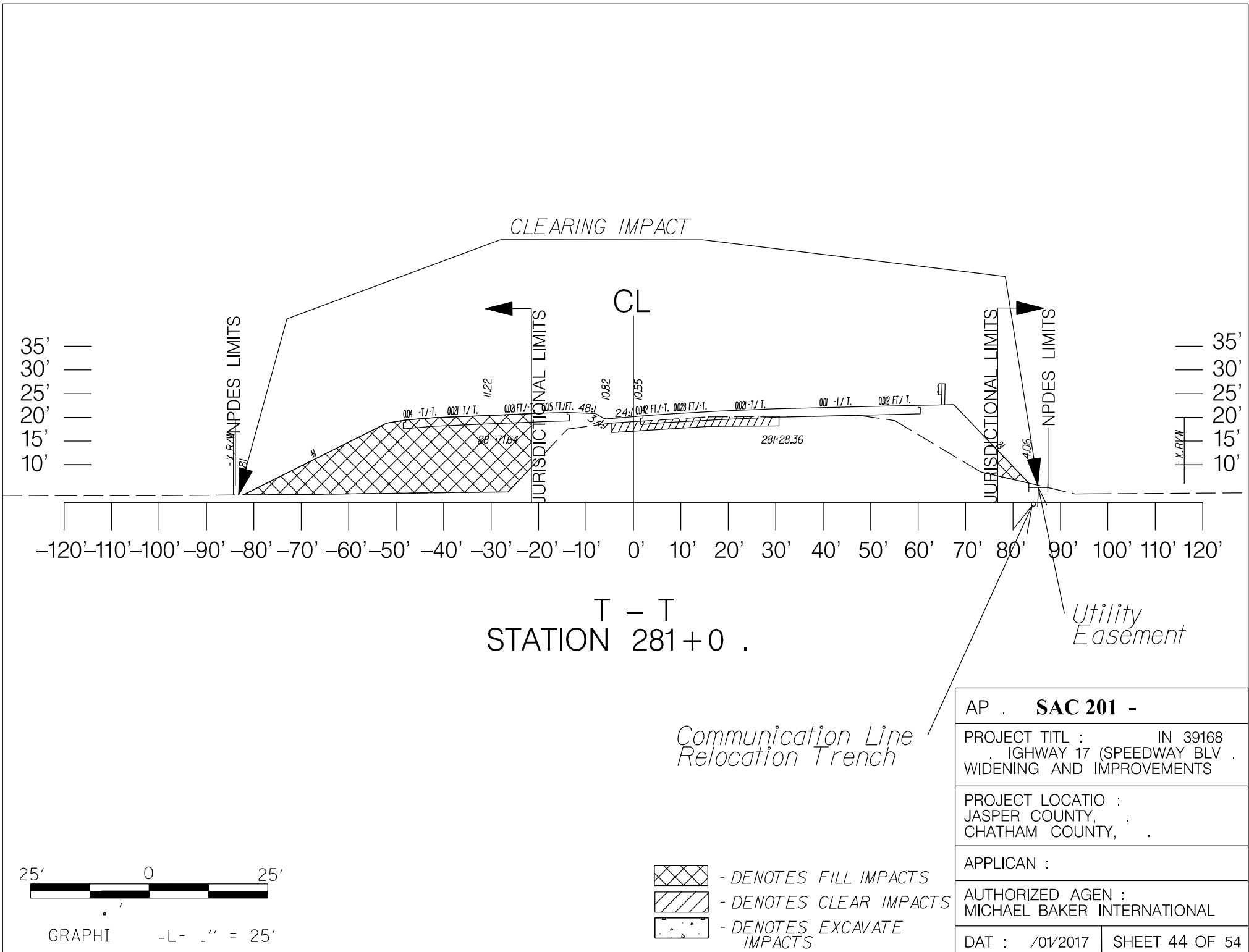
JA Wetland 31B  
 No Impact

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 43 OF 54



GRAPHIC - L - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS



JA Wetland 27C  
 0.05 Acre Fill Impacts  
 0.01 Acre Clear Impacts  
 (This Sheet)

JA Wetland 30A  
 0.01 Acre Fill Impacts  
 0.01 Acre Clear Impacts  
 (This Sheet)

JT Wetland 34A  
 0.01 Acre Fill Impacts  
 (This Sheet)

Bore Hole for  
 Utility Relocation

ADDITIONAL CLEARIN  
 REQUIRED FOR 36'  
 CLEAR ZONE

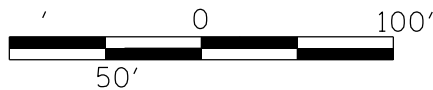
295

300




JA Wetland 31A  
 0.10 Acre Fill Impacts  
 0.03 Acre Clear Impacts  
 (This Sheet)

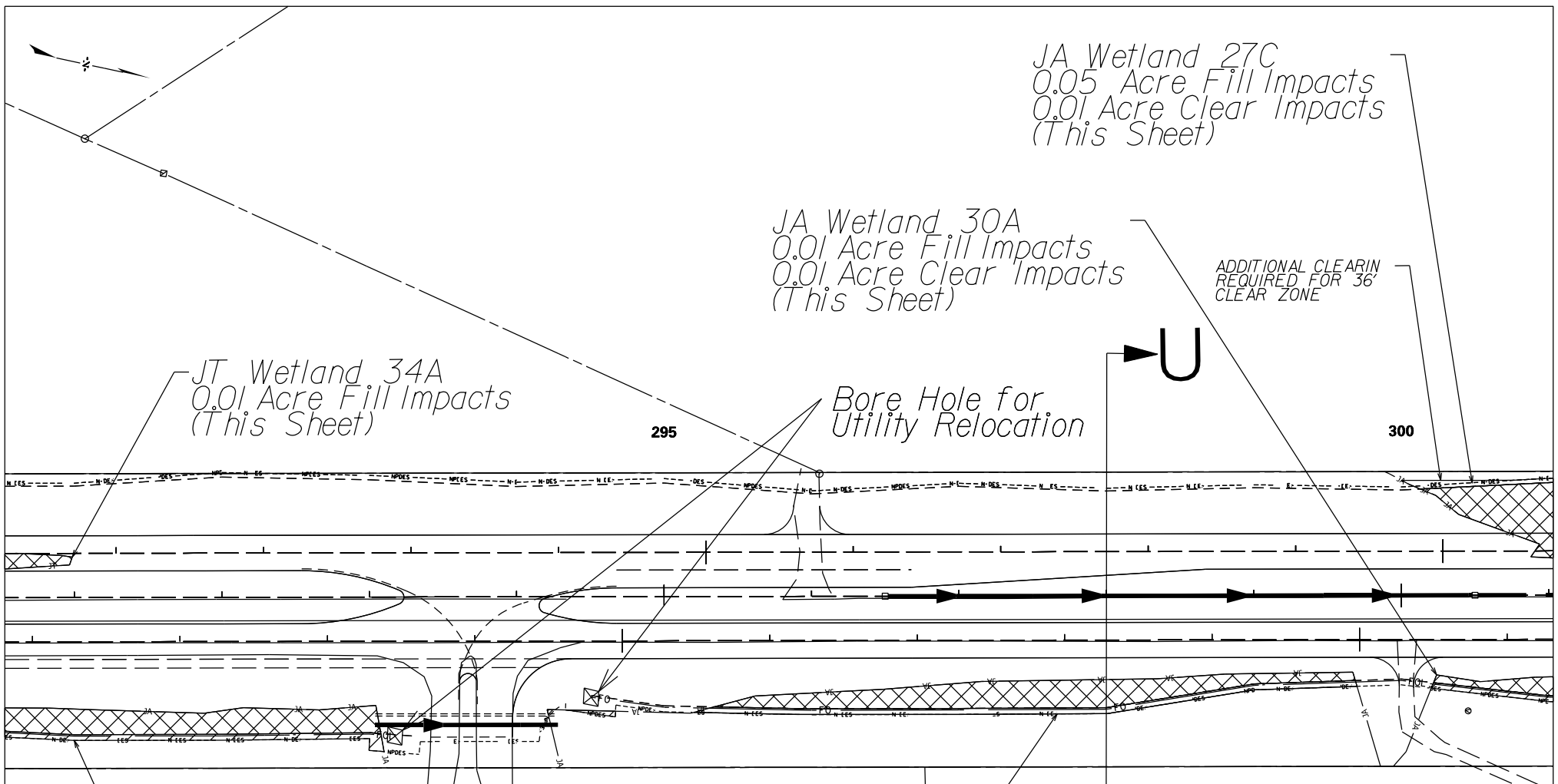
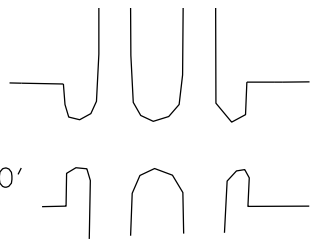
JA Wetland 30B  
 0.12 Acre Fill Impacts  
 0.04 Acre Clear Impacts

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 45 OF 54

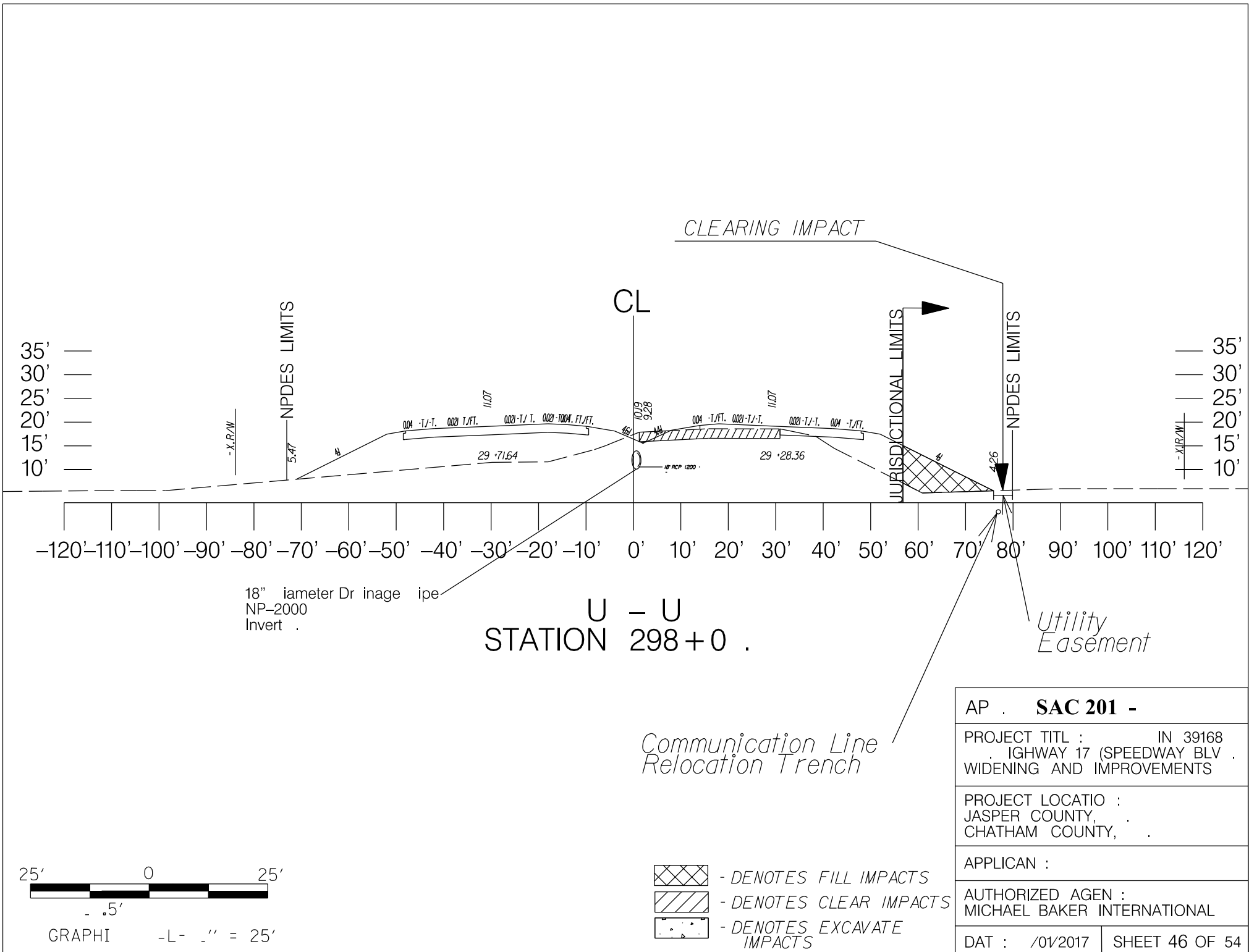


GRAPHIC - L - 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

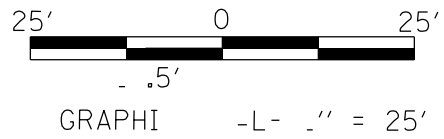




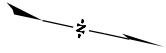


U - U  
STATION 298 + 0 .

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 HIGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 46 OF 54



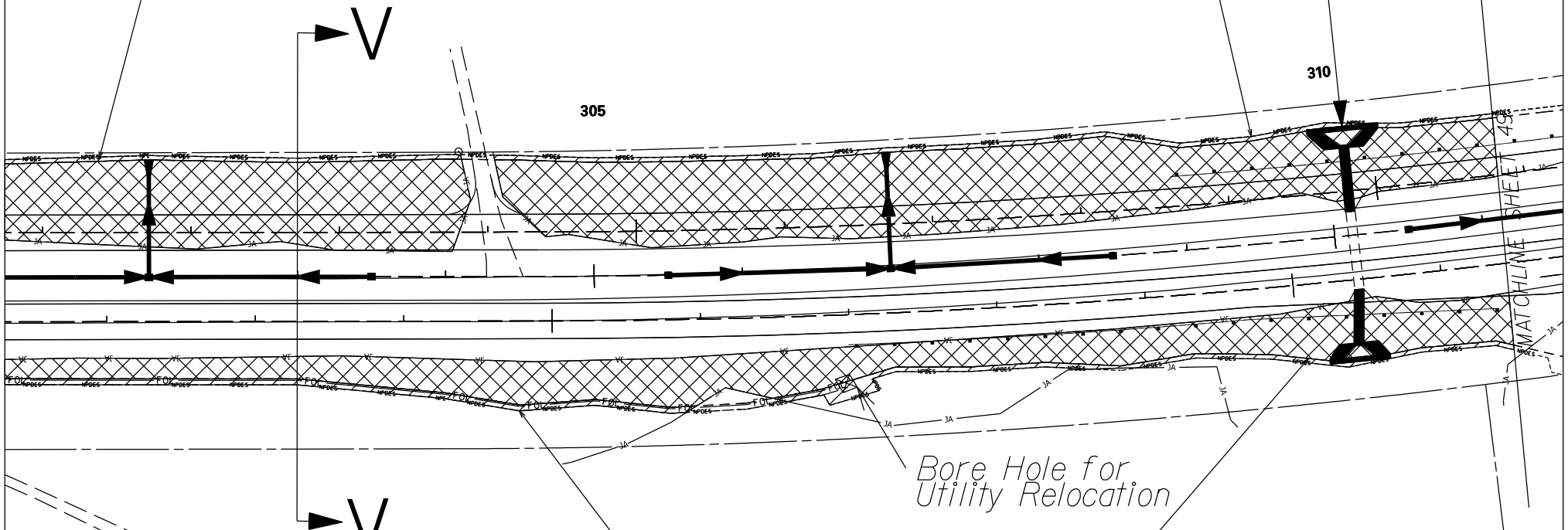
- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS



JA Wetland 27C  
 0.41 Acre Fill Impacts  
 0.02 Acre Clear Impacts  
 (This Sheet)

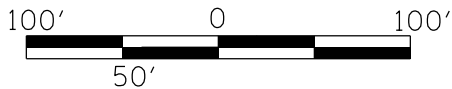
JA Wetland 27B  
 0.77 Acre Fill Impacts  
 0.05 Acre Clear Impacts  
 (This Sheet)

Proposed 2 X 40'  
 5' X 6' BC,  
 Invert In 1.4  
 Invert Out 1.4



Bore Hole for  
 Utility Relocation

JA Wetland 30A  
 0.55 Acre Fill Impacts  
 0.08 Acre Clear Impacts  
 (This Sheet)



GRAPHIC SCALE 1" = 100'

-  - DENOTES FILL IMPACTS
-  - DENOTES CLEAR IMPACTS
-  - DENOTES EXCAVATE IMPACTS

APP.# <b>SAC 2015-1627</b>	
PROJECT TITLE: SCDOT PIN 39168 U.S. HIGHWAY 17 (SPEEDWAY BLVD.) WIDENING AND IMPROVEMENTS	
PROJECT LOCATION: JASPER COUNTY, S.C. AND CHATHAM COUNTY, G.A.	
APPLICANT: SCDOT	
AUTHORIZED AGENT: MICHAEL BAKER INTERNATIONAL	
DATE: 09/01/2017	SHEET 47 OF 54

**SOUTH CAROLINA  
DEPARTMENT OF TRANSPORTATION**

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	NO.	SHEET NO.
3	S.C.	JASPER	0039168	US-17	S-3

**SUMMARY OF ESTIMATED QUANTITIES**

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
2028605	CULVERT EXTENSION PREPARATION	E.A.	2
2045000	COFFERDAM	E.A.	2
2047000	TEMPORARY SHORING WALL	L.F.	120
7011402	CONC. /STRUC-CL.4000(CULVERT)	C.Y.	66
7031100	REINF STEEL FOR STRUCT (RDWAY)	LB	18915
8011400	AGGR.UNDERDRAIN(AGGR.NO.57)	C.Y.	111
8041020	RIP-RAP (CLASS B)	TON	81
8048105	GEOTEX/EROS.CONT(CLASS1)TYPE B	S.Y.	95

ALL DIMENSIONS OF NEW CONSTRUCTION ARE SUBJECT TO EXISTING CONDITIONS AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING ANY MATERIALS.

DESIGN SPECIFICATION :  
LATEST EDITION OF THE AASHTO STANDARD  
SPECIFICATIONS FOR HIGHWAY BRIDGES

DESIGN DATA :  
DESIGN METHOD : LOAD FACTOR DESIGN (LFD METHOD)  
DESIGN OVER FILL : LESS THAN 2 ft  
CONCRETE : f'c = 4 ksi  
REINFORCING : fy = 60 ksi  
LIVE LOAD : AASHTO HS-20 OR AN ALTERNATE MILITARY  
LOADING OF 2 AXLES 4 FEET APART WITH EACH AXLE WEIGHT  
24 kips WHICH EVER PRODUCES THE GREATEST STRESS.

NOTES:

ALL BOX CULVERT EXTENSIONS SHALL BE CONSTRUCTED OF CAST-IN-PLACE CONCRETE.

STRUCTURE EXCAVATION IS INCLUDED IN MUCK EXCAVATION.

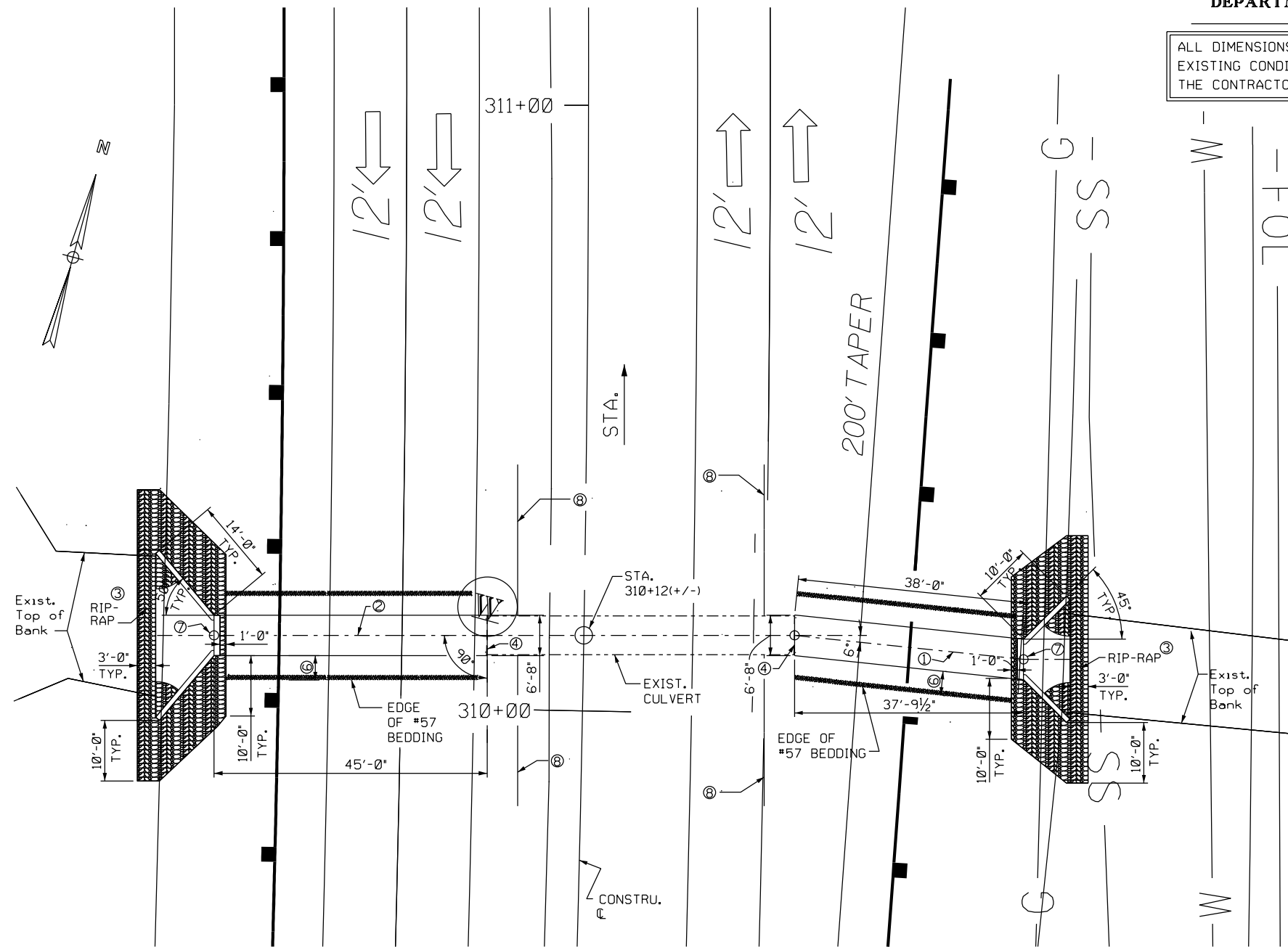
QUANTITY OF STRUCTURE EXCAVATION FOR CULVERTS INCLUDED IN MUCK EXCAVATION, SEE SPECIAL PROVISION FOR MUCK EXCAVATION FOR DETAILS.

FOR REINFORCING BENDING DETAILS, SEE SCDOT STD. DRAWING 703-105-00. FOR ADDITIONAL NOTES AND DETAILS, INCLUDING CONSTRUCTION JOINT, ADHESIVELY BONDED ANCHOR, PIPE HOLE (IF REQUIRED) AND WEEP HOLE, SEE STD. DRAWING 722-105-01 & 722-105-02, BOX CULVERT (MISCELLANEOUS DATA).

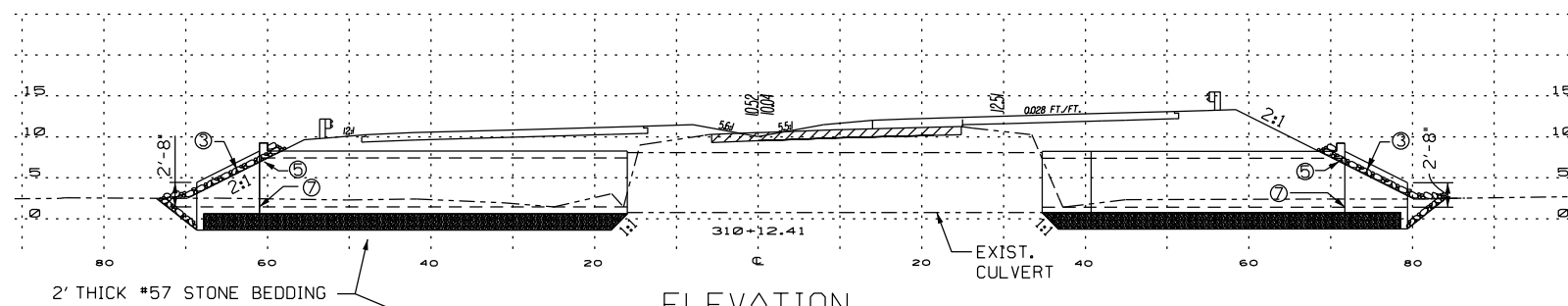
THE COST OF ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO CONSTRUCT WEEP HOLES AND FRENCH DRAINS (#57 STONE WRAP W/ GEOTEXTILE FILTER FABRIC) SHALL BE INCLUDED IN THE CONC. FOR STRUC. - CLASS 4000 (CULVERT) PAY ITEM.

L.H.S. : LEFT HAND SIDE  
R.H.S. : RIGHT HAND SIDE

- ① CULVERT RIGHT EXTENSION.
- ② CULVERT LEFT EXTENSION.
- ③ MINIMUM 1'-6" THICK OF RIP-RAP (CLASS B).
- ④ JUNCTION OF NEW & EXISTING BARREL.
- ⑤ PLACE GEOTEXTILE FABRIC FOR EROSION CONTROL (CLASS 1 TYPE B) UNDER RIP-RAP.
- ⑥ 4' TYP. AROUND BARREL & WING WALL.
- ⑦ FLOW LINE EL. AT R.H.S. = 1.4  
FLOW LINE EL. AT L.H.S. = 1.4



PLAN

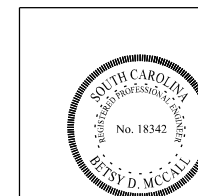


ELEVATION

**CULVERT NO. 2  
SINGLE 5'x6' R.C. BOX CULVERT EXTENSION**

⑧ INSTALL 30 L.F. TEMPORARY SHORING WALL (TYP. EACH SIDE). THE LOCATION AND LENGTHS OF TEMPORARY SHORING WALL SHOWN IS APPROXIMATE. THE FINAL LOCATION WILL BE DETERMINED IN THE FIELD BY CONTRACTOR AND APPROVED BY THE RCE.

**NOT FOR CONSTRUCTION**



REV.			
REV.			
REV.			
REVIEWED			
QUAN.	MLW	VNDC	11-16
DR.	MLW	VNDC	11-16
DES.			
BY	CHK.	DATE	

APP.# SAC 2015-1627

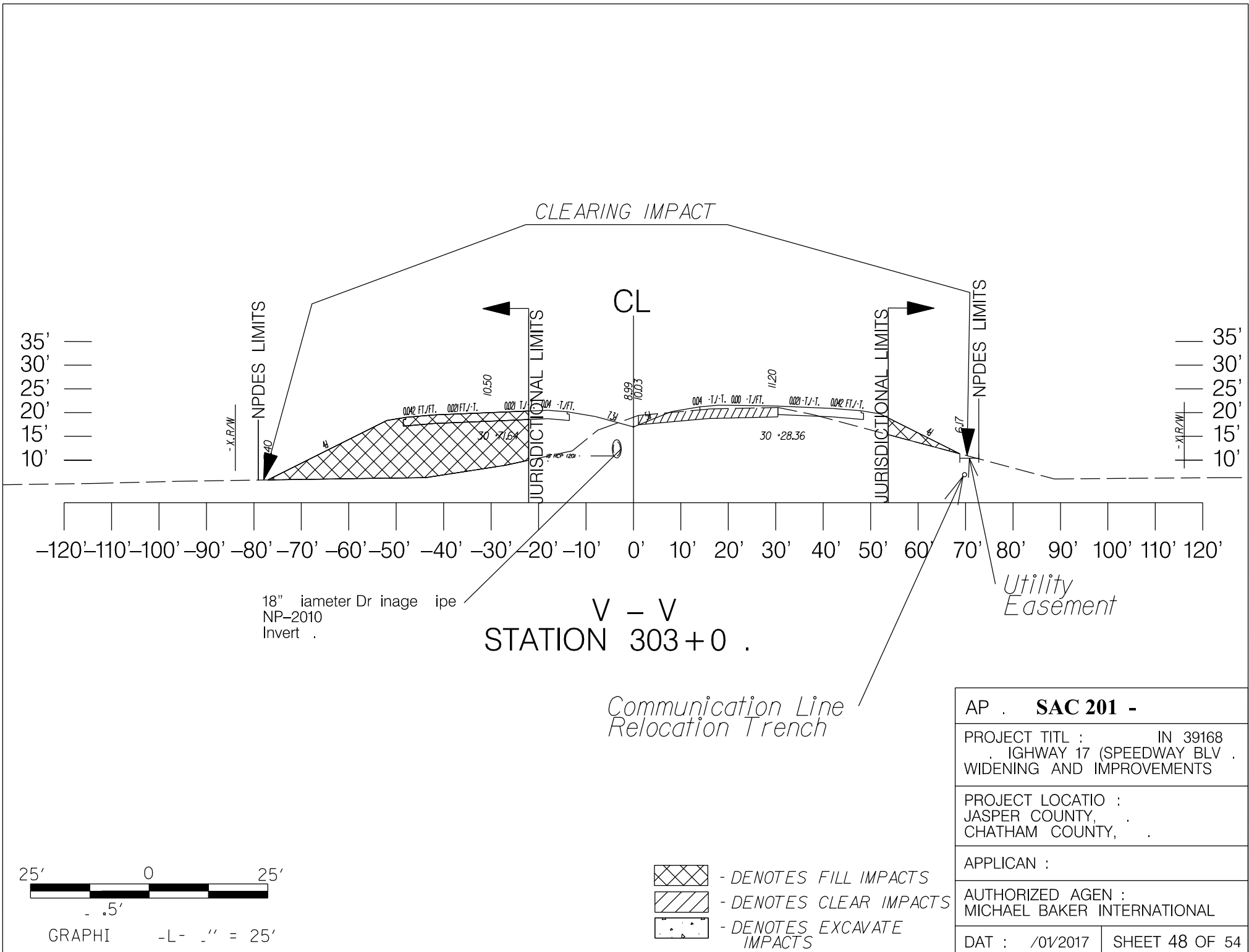
PROJECT TITLE: SCDOT PIN 39168  
U.S. HIGHWAY 17 (SPEEDWAY BLVD.)  
WIDENING AND IMPROVEMENTS

PROJECT LOCATION:  
JASPER COUNTY, S.C. AND  
CHATHAM COUNTY, G.A.

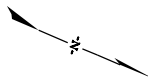
APPLICANT: SCDOT

AUTHORIZED AGENT:  
MICHAEL BAKER INTERNATIONAL

DATE: 10/24/2017 SHEET 47A OF 54



AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 48 OF 54



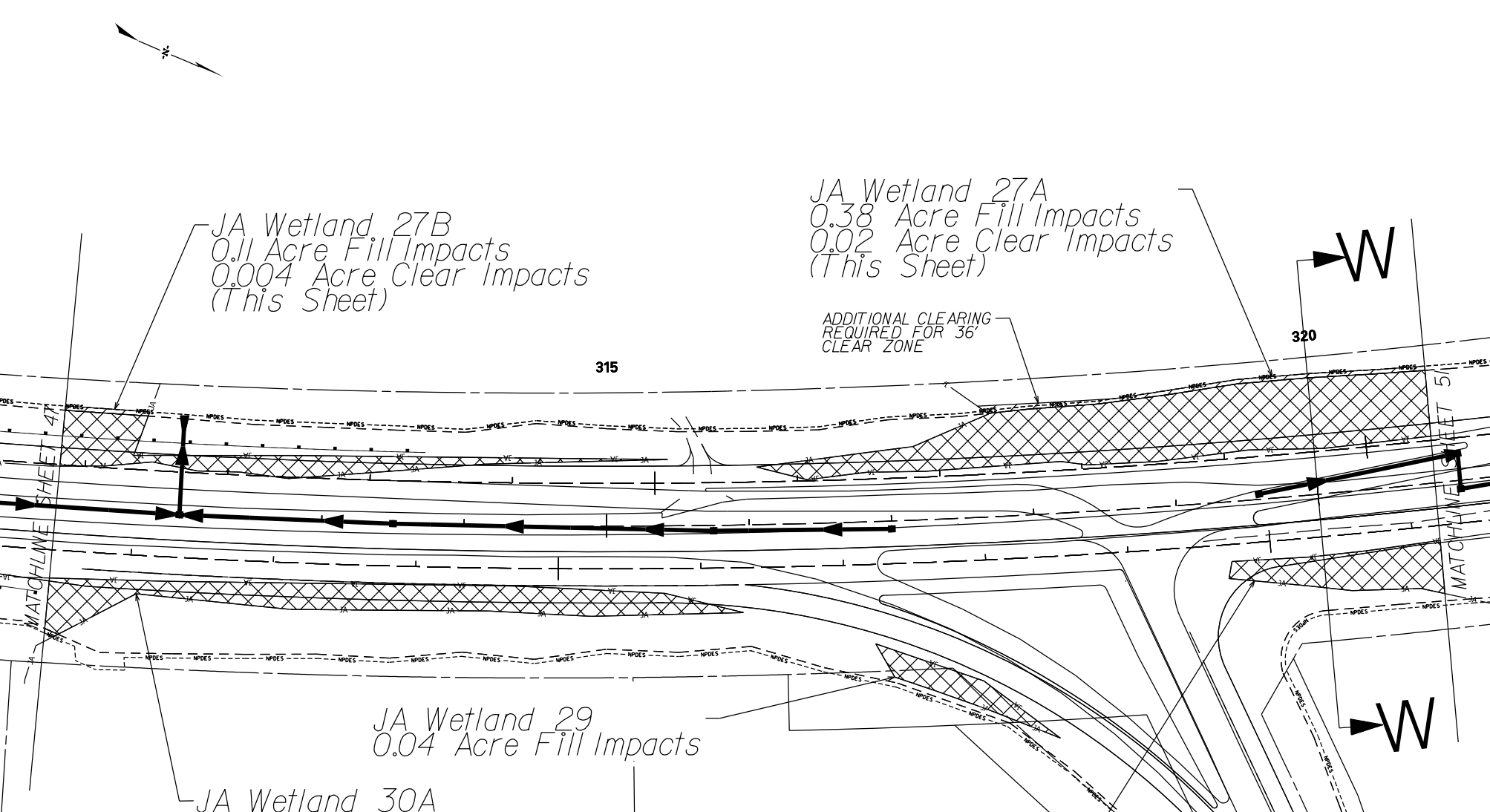
JA Wetland 27B  
 0.11 Acre Fill Impacts  
 0.004 Acre Clear Impacts  
 (This Sheet)

JA Wetland 27A  
 0.38 Acre Fill Impacts  
 0.02 Acre Clear Impacts  
 (This Sheet)

ADDITIONAL CLEARING  
 REQUIRED FOR 36'  
 CLEAR ZONE

320

315

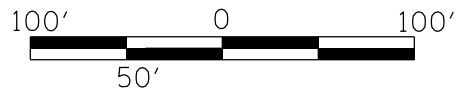


JA Wetland 29  
 0.04 Acre Fill Impacts

JA Wetland 30A  
 0.19 Acre Fill Impacts  
 0.001 Acre Clear Impacts  
 (This Sheet)

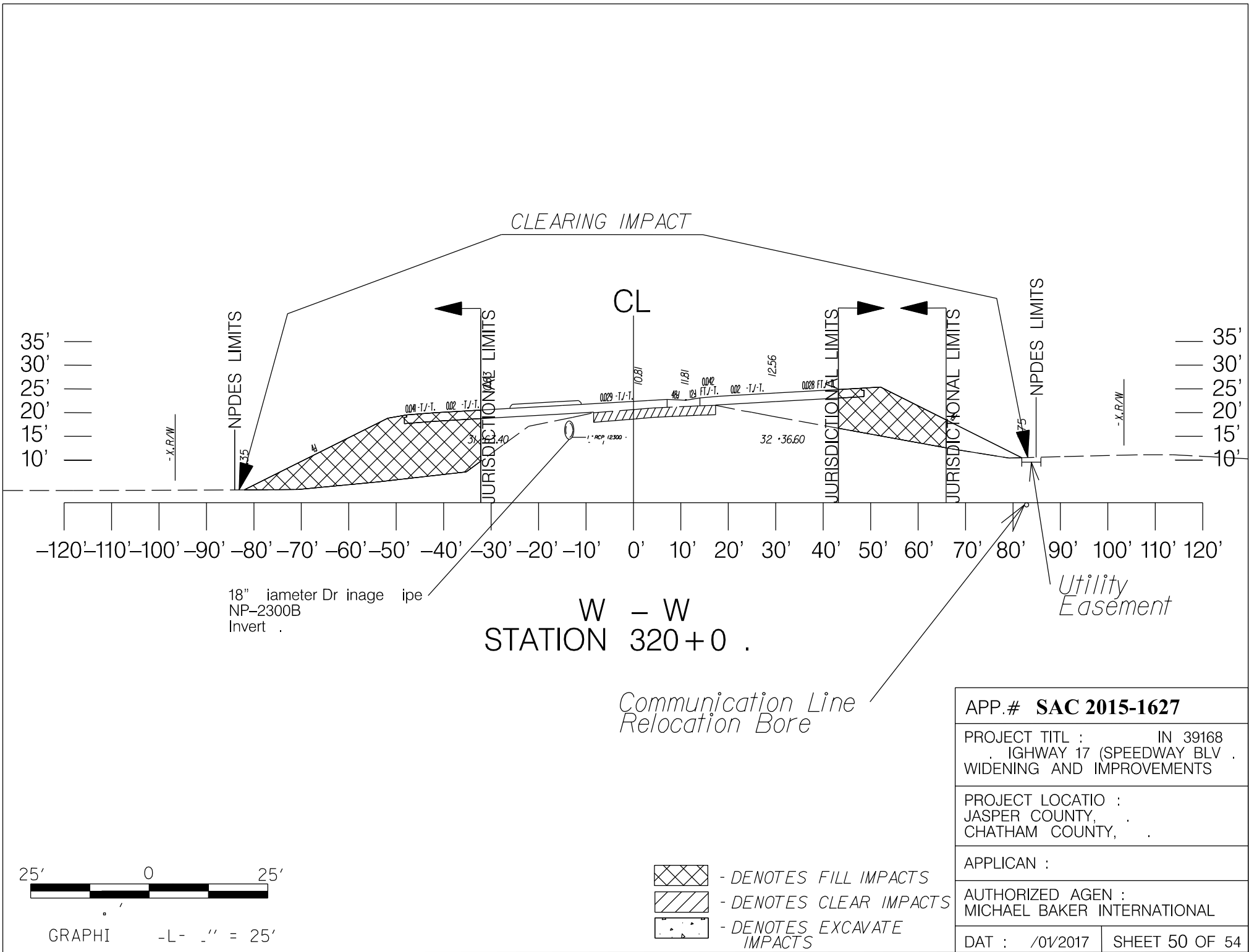
JA Wetland 24  
 0.08 Acre Fill Impacts  
 (This Sheet)

<b>APP.# SAC 2015-1627</b>	
PROJECT TITLE: SCDOT PIN 39168 U.S. HIGHWAY 17 (SPEEDWAY BLVD.) WIDENING AND IMPROVEMENTS	
PROJECT LOCATION: JASPER COUNTY, S.C. AND CHATHAM COUNTY, G.A.	
APPLICANT: SCDOT	
AUTHORIZED AGENT: MICHAEL BAKER INTERNATIONAL	
DATE: 09/01/2017	SHEET 49 OF 54

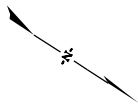


GRAPHIC SCALE 1" = 100'

- DENOTES FILL IMPACTS
- DENOTES CLEAR IMPACTS
- DENOTES EXCAVATE IMPACTS



APP.# <b>SAC 2015-1627</b>	
PROJECT TITLE : IN 39168 HIGHWAY 17 (SPEEDWAY BLV) WIDENING AND IMPROVEMENTS	
PROJECT LOCATION : JASPER COUNTY, CHATHAM COUNTY,	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DATE : /01/2017	SHEET 50 OF 54

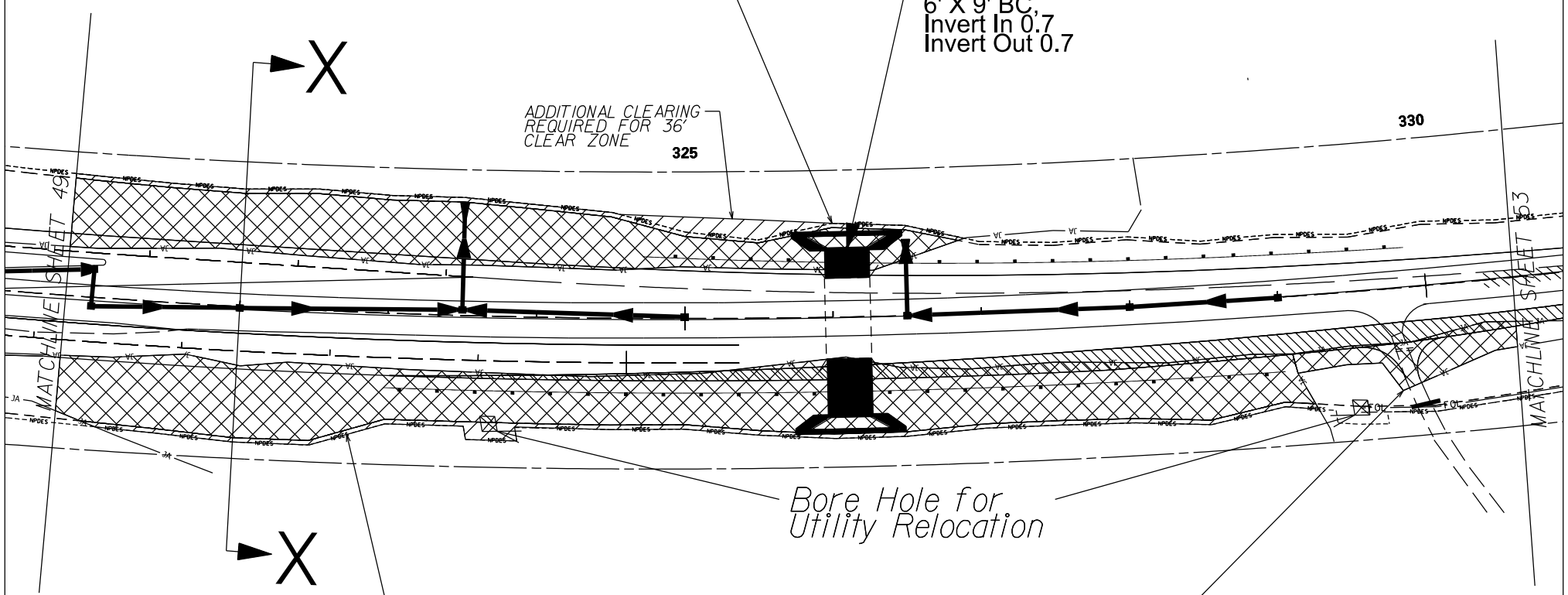


JA Wetland 27A  
 0.46 Acre Fill Impacts  
 0.07 Acre Clear Impacts  
 (This Sheet)

Proposed 20' & 35'  
 6' X 9' BC,  
 Invert In 0.7  
 Invert Out 0.7

ADDITIONAL CLEARING  
 REQUIRED FOR 36'  
 CLEAR ZONE  
 325

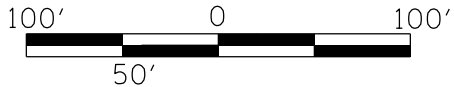
330



Bore Hole for  
 Utility Relocation

JA Wetland 24  
 0.78 Acre Fill Impacts  
 0.06 Acre Clear Impacts  
 (This Sheet)

JA Wetland II  
 0.07 Acre Fill Impacts  
 (This Sheet)



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APPLICANT: SCDOT	
AUTHORIZED AGENT: MICHAEL BAKER INTERNATIONAL	
DATE: 09/01/2017	SHEET 51 OF 54

**SOUTH CAROLINA  
DEPARTMENT OF TRANSPORTATION**

FED. RD. DIV. NO.	STATE	COUNTY	PROJECT ID	NO.	SHEET NO.
3	S.C.	JASPER	0039168	US-17	S-7

**SUMMARY OF ESTIMATED QUANTITIES**

ITEM NO.	PAY ITEM	PAY UNIT	QUANTITY
2028605	CULVERT EXTENSION PREPARATION	E.A.	2
2045000	COFFERDAM	E.A.	2
2047000	TEMPORARY SHORING WALL	L.F.	120
7011402	CONC. /STRUC-CL.4000(CULVERT)	C.Y.	211.5
7031100	REINF STEEL FOR STRUC (RDWAY)	LB	34659
8011400	AGGR.UNDERDRAIN(AGGR.NO.57)	C.Y.	145
8041030	RIP-RAP (CLASS C)	TON	194
8048105	GEOTEX/EROS.CONT(CLASS1)TYPE B	S.Y.	132

DESIGN SPECIFICATION :  
LATEST EDITION OF THE AASHTO STANDARD  
SPECIFICATIONS FOR HIGHWAY BRIDGES

DESIGN DATA :  
DESIGN METHOD : LOAD FACTOR DESIGN (LFD METHOD)  
DESIGN OVER FILL : 5 ft  
CONCRETE :  $f'_c = 4 \text{ ksi}$   
REINFORCING :  $f_y = 60 \text{ ksi}$   
LIVE LOAD : AASHTO HS-20 OR AN ALTERNATE MILITARY  
LOADING OF 2 AXLES 4 FEET APART WITH EACH AXLE WEIGHT  
24 kips WHICH EVER PRODUCES THE GREATEST STRESS.

NOTES:

ALL BOX CULVERT EXTENSIONS SHALL BE CONSTRUCTED OF CAST-IN-PLACE  
CONCRETE.

STRUCTURE EXCAVATION IS INCLUDED IN MUCK EXCAVATION.

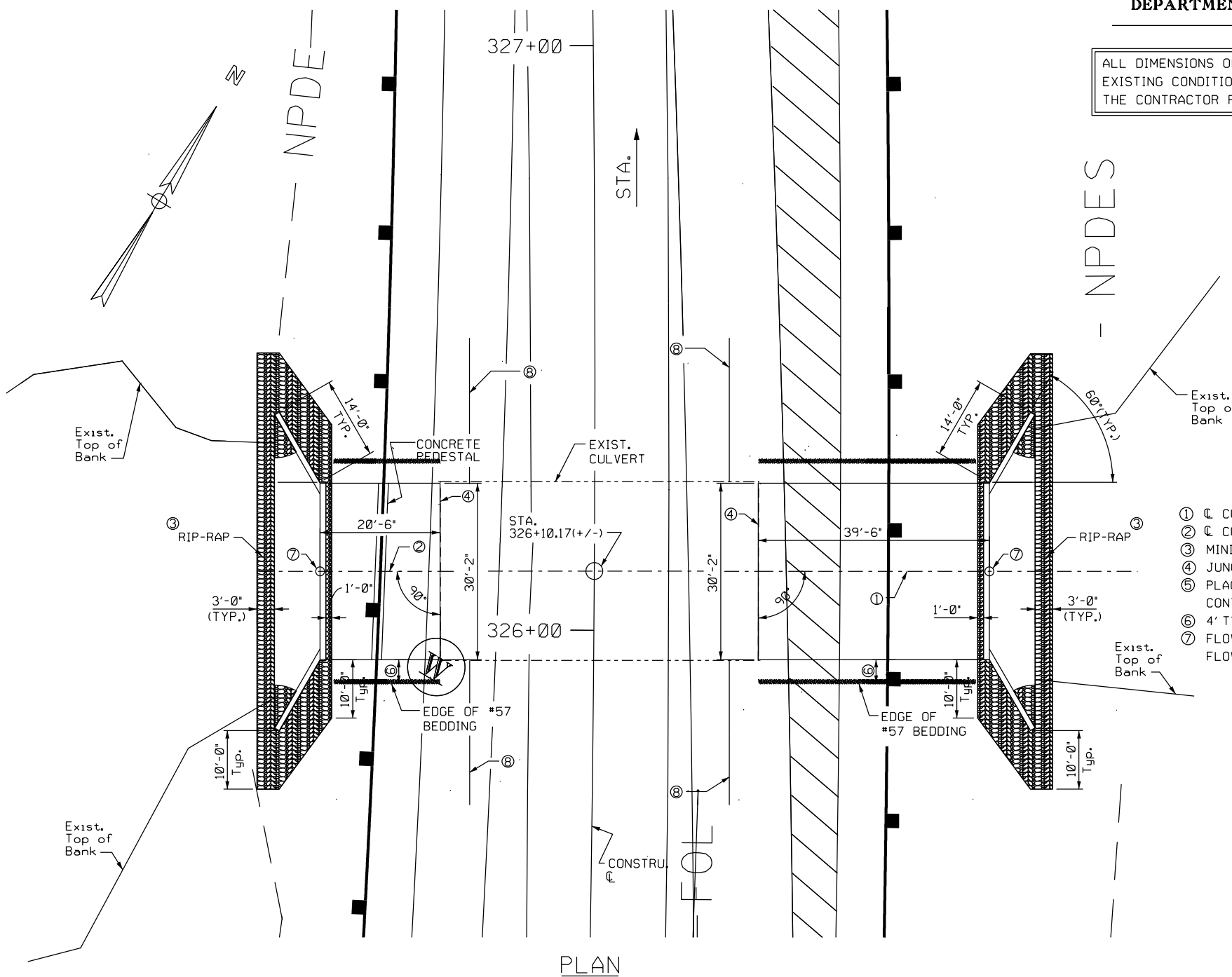
QUANTITY OF STRUCTURE EXCAVATION FOR CULVERTS INCLUDED IN MUCK  
EXCAVATION,  
SEE SPECIAL PROVISION FOR MUCK EXCAVATION FOR DETAILS.

FOR REINFORCING BENDING DETAILS, SEE SCDOT STD. DRAWING 703-105-00. FOR  
ADDITIONAL NOTES AND DETAILS, INCLUDING CONSTRUCTION JOINT,  
ADHESIVELY BONDED ANCHOR, PIPE HOLE (IF REQUIRED) AND WEEP HOLE, SEE STD.  
DRAWING 722-105-01 & 722-105-02, BOX CULVERT (MISCELLANEOUS DATA).

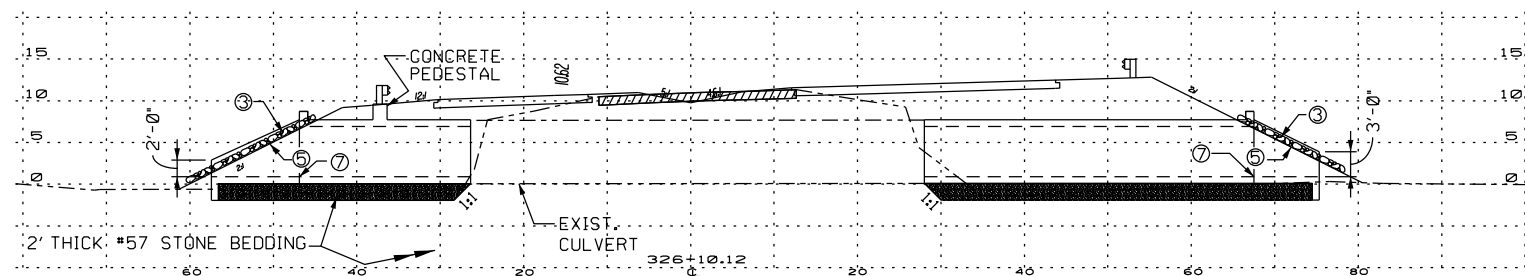
THE COST OF ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED TO CONSTRUCT  
WEEP HOLES AND FRENCH DRAINS (#57 STONE WRAP W/ GEOTEXTILE FILTER  
FABRIC) SHALL BE INCLUDED IN THE CONC. FOR STRUC. - CLASS 4000 (CULVERT)  
PAY ITEM.

F.L. : FLOW LINE  
L.H.S. : LEFT HAND SIDE  
R.H.S. : RIGHT HAND SIDE

ALL DIMENSIONS OF NEW CONSTRUCTION ARE SUBJECT TO  
EXISTING CONDITIONS AND SHALL BE FIELD VERIFIED BY  
THE CONTRACTOR PRIOR TO ORDERING ANY MATERIALS.



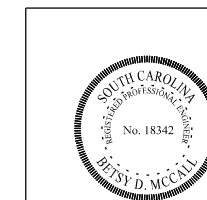
- ① CULVERT RIGHT EXTENSION.
- ② CULVERT LEFT EXTENSION.
- ③ MINIMUM 2'-7\"
- ④ JUNCTION OF NEW & EXISTING BARREL.
- ⑤ PLACE GEOTEXTILE FABRIC FOR EROSION CONTROL (CLASS 1 TYPE B) UNDER RIP-RAP.
- ⑥ 4\"
- ⑦ FLOW LINE EL. AT R.H.S. = 0.9  
FLOW LINE EL. AT L.H.S. = 0.9



**ELEVATION  
CULVERT NO. 3  
TRIPLE 9'x6' R.C. BOX CULVERT EXTENSION**

⑧ INSTALL 30 L.F. TEMPORARY SHORING WALL (TYP. EACH SIDE).  
THE LOCATION AND LENGTHS OF TEMPORARY SHORING WALL  
SHOWN IS APPROXIMATE. THE FINAL LOCATION WILL BE  
DETERMINED IN THE FIELD BY CONTRACTOR AND APPROVED  
BY THE RCE.

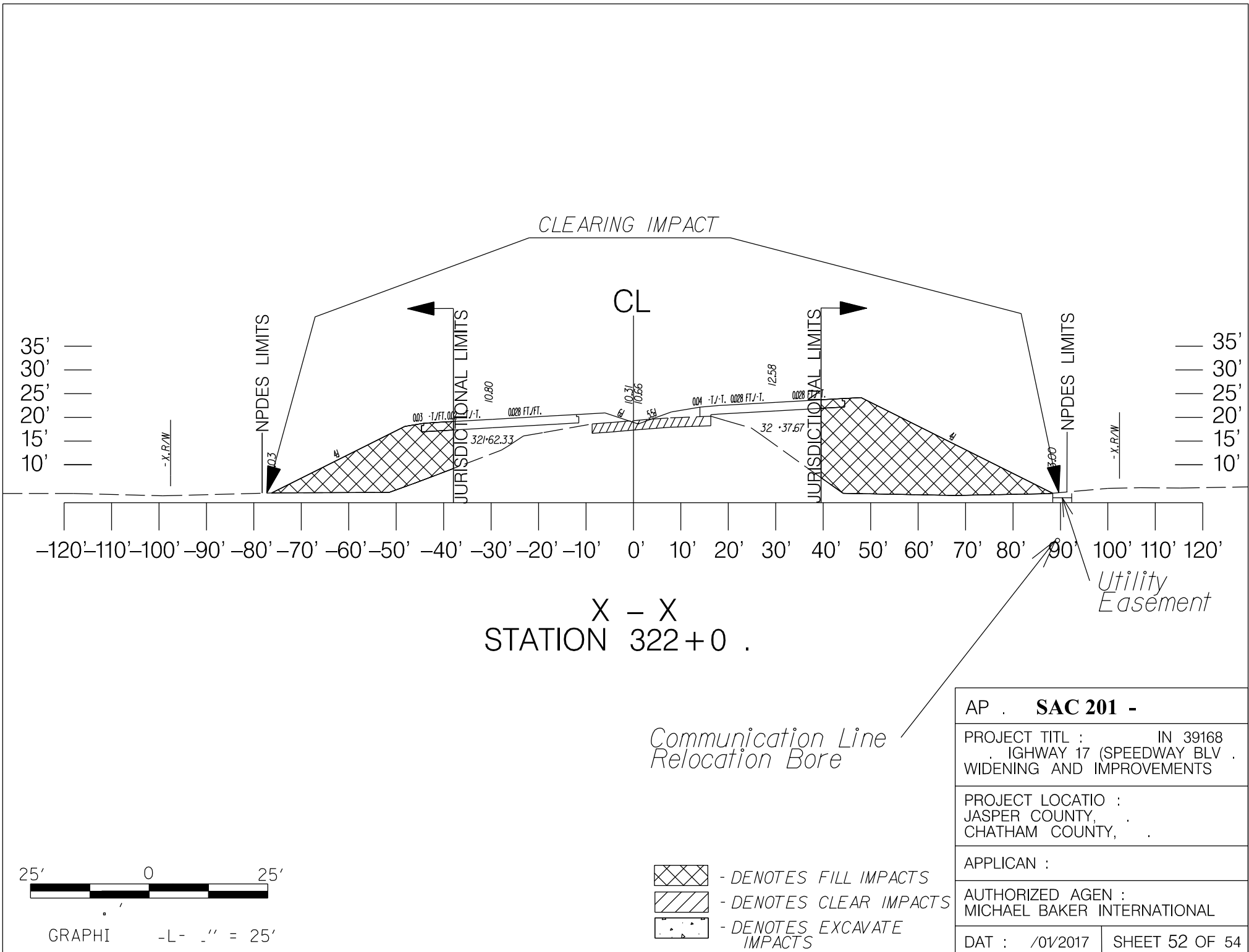
**NOT FOR CONSTRUCTION**



REV.	BY	CHK.	DATE
<b>REVIEWED</b>			
QUAN.	WU		11-16
DR.			
DBS.			

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PROJECT LOCATION: JASPER COUNTY, S.C. AND CHATHAM COUNTY, G.A.
APPLICANT: SCDOT
AUTHORIZED AGENT: MICHAEL BAKER INTERNATIONAL
DATE: 10/24/2017
SHEET 51A OF 54

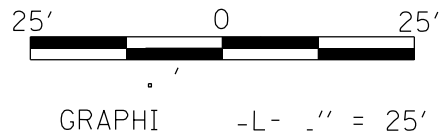







X - X  
STATION 322 + 0 .

*Communication Line  
Relocation Bore*

AP . <b>SAC 201 -</b>	
PROJECT TITL : IN 39168 . IGHWAY 17 (SPEEDWAY BLV . WIDENING AND IMPROVEMENTS	
PROJECT LOCATIO : JASPER COUNTY, . CHATHAM COUNTY, .	
APPLICAN :	
AUTHORIZED AGEN : MICHAEL BAKER INTERNATIONAL	
DAT : /01/2017	SHEET 52 OF 54

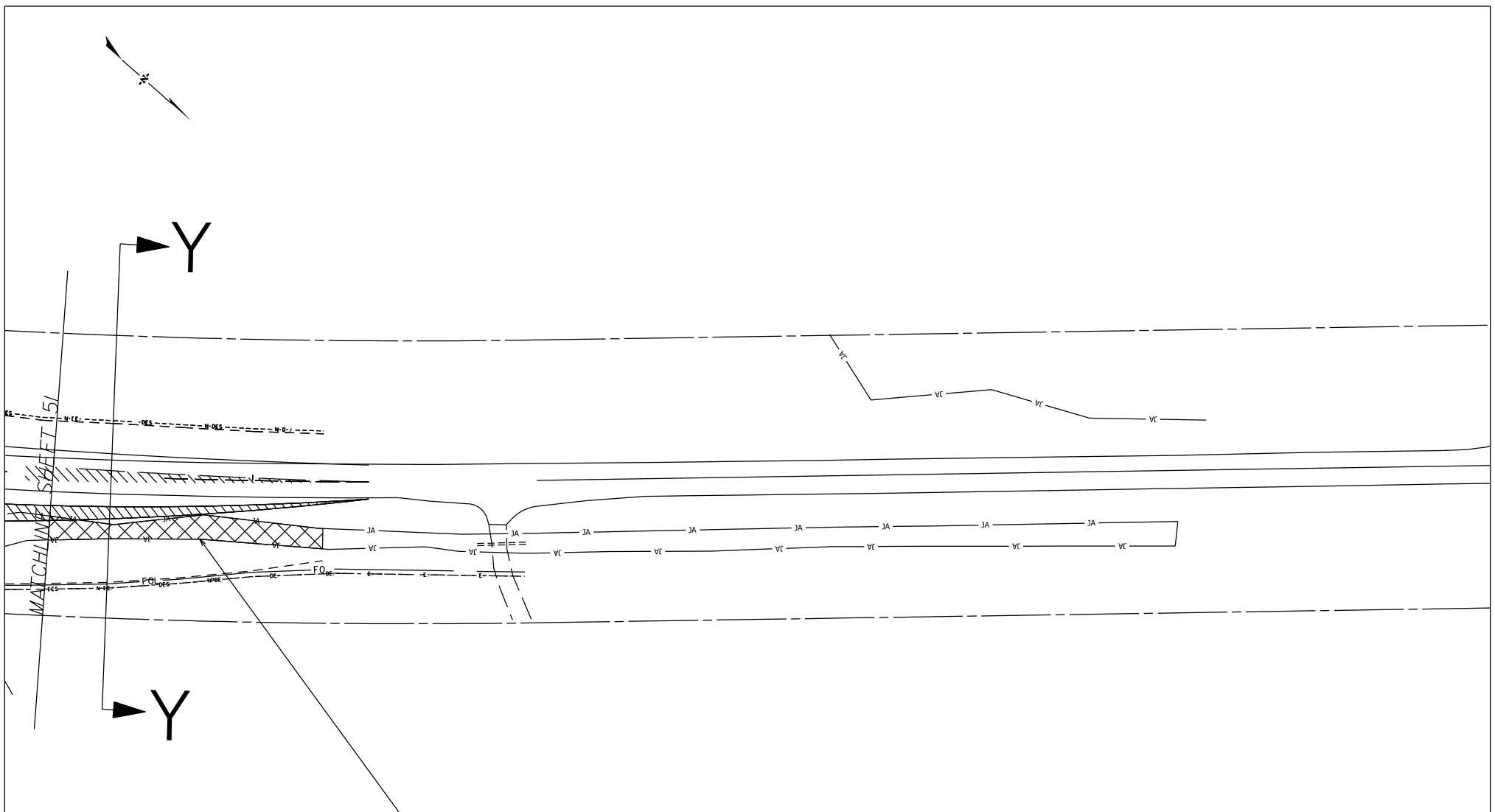


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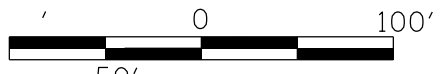


▶ Y




▶ Y



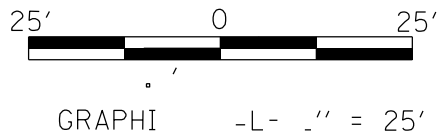
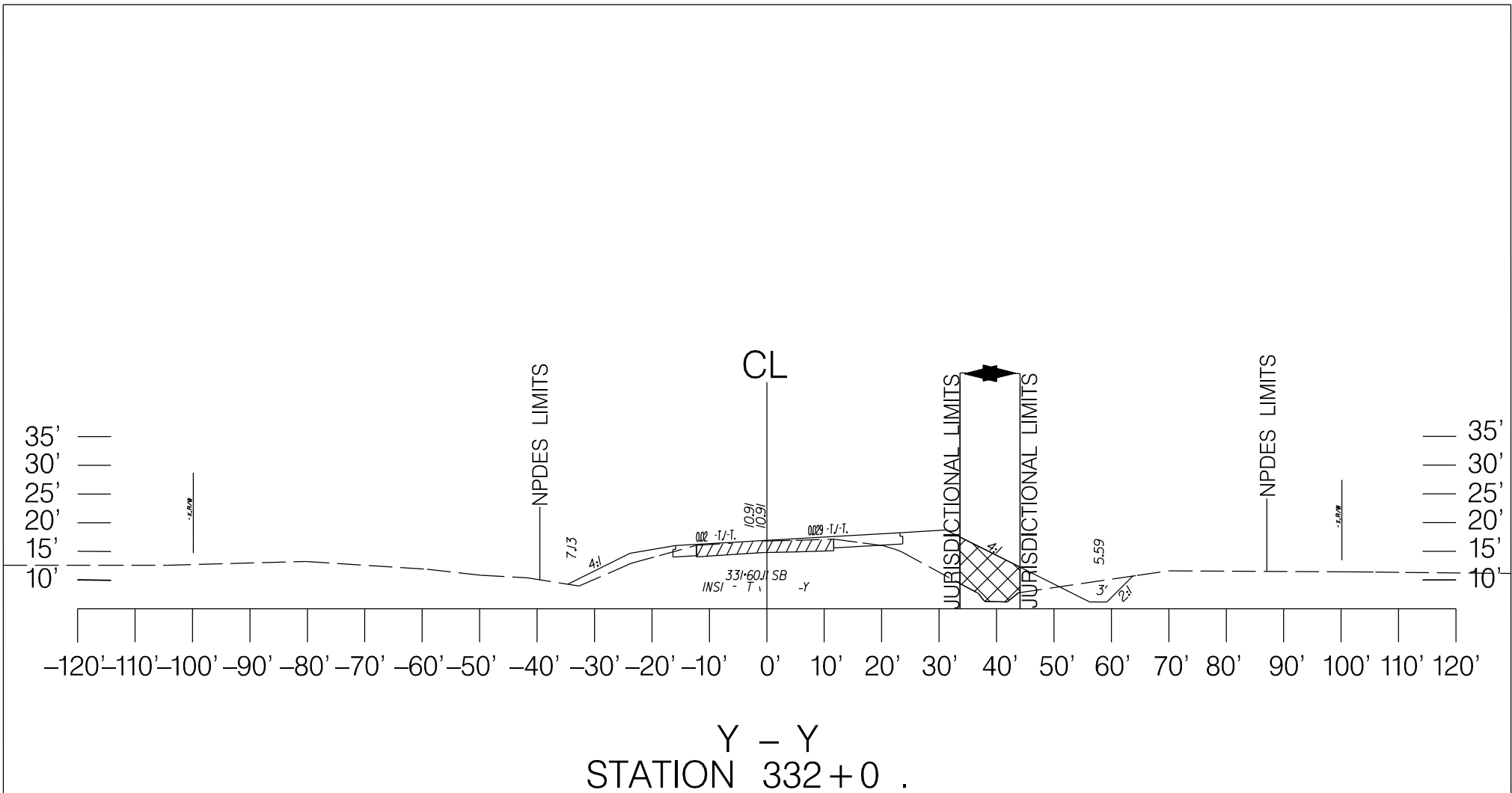
*JA Wetland II  
0.06 Acre Fill Impacts  
(This Sheet)*



GRAPHIC - 1" = 100'

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