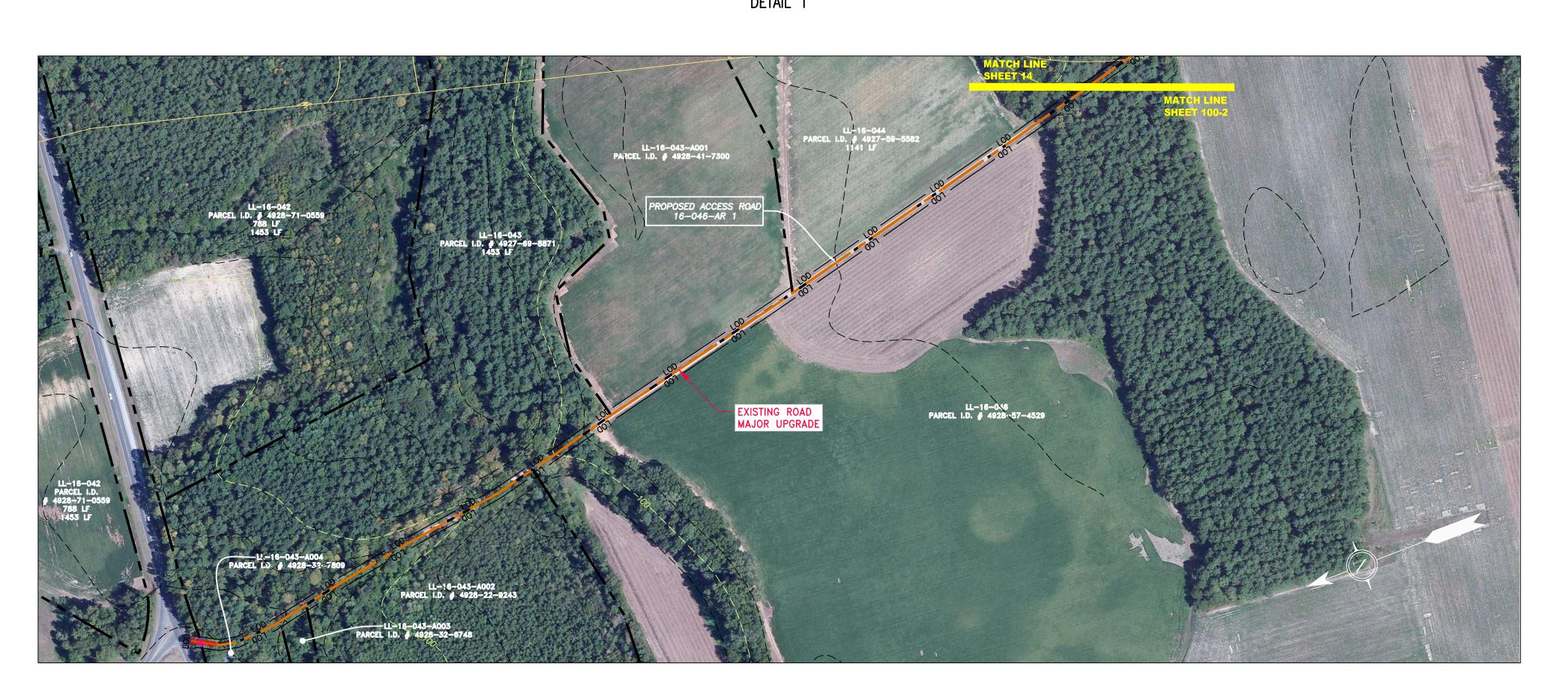
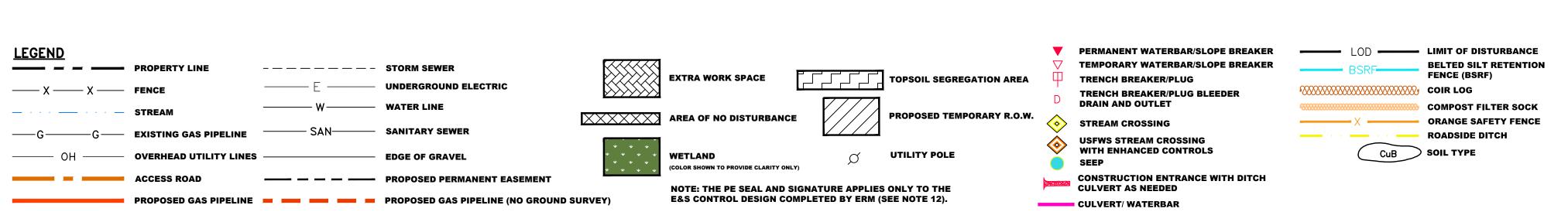


ACCESS ROAD DETAIL 1



ACCESS ROAD DETAIL 2



1. COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W.
2. CONTOURS AND TOPOGRAPHIC FEATURES WERE DERIVED FROM LIDAR DATA AND GPS SUB-METER GROUND SURVEY PERFORMED BY GAI CONSULTANTS, INC FROM 11-03-2014 THRU 11-07-2014.

FROM 11-03-2014 THRU 11-07-2014.

IMAGERY TAKEN FROM GOOGLE EARTH.

THE PROPERTY LINES SHOWN ARE BASED ON GIS & TAX ASSESSMENT RECORDS (PROVIDED BY OTHERS). GAI CONSULTANTS MAKE NO GUARANTEE EITHER EXPRESSED OR IMPLIED AS TO THE ACCURACY OF THE RECORDS AS SHOWN ON THESE DRAWINGS.

STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.

EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.

ALL STATIONING SHOWN IS SLOPE STATIONING.

SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL

ACCESS ROADS HAVE BEEN GROUPED INTO FOUR CATEGORIES - 1) EXISTING ROADS NO IMPROVEMENTS, 2) EXISTING ROADS MINOR IMPROVEMENTS, 3) EXISTING ROADS MAJOR IMPROVEMENTS AND 4) NEW ROADS. APPROPRIATE EROSION AND SEDIMENT CONTROLS WILL BE PROVIDED FOR ROADS IN CATEGORIES 2, 3 AND 4. ROADS IN CATEGORIES 1 AND 2 HAVE ADEQUATE EXISTING DRAINAGE; DRAINAGE FEATURES WILL BE PROVIDED FOR ROADS IN CATEGORIES 3 AND 4.

TERM IS SOLELY RESPONSIBLE FOR THE NATURE AND LOCATION OF THE DEPICTED BMPS AS OF THE DATE SIGNED AND SEALED BASED ON THE SOURCE DATA

10. *ERM IS SOLELY RESPONSIBLE FOR THE NATURE AND LOCATION OF THE DEPICTED BMPS AS OF THE DATE SIGNED AND SEALED BASED ON THE SOURCE DATA PROVIDED AND AS DESCRIBED IN THE NOTES SECTION OF THE INDEX SHEET OF THIS PLAN SET.

PROJECT NO./DASH NO 140468 TASK NO. SUB TASK NO 00 DRAWING NO.

SCALE: AS SHOWN

gai consultants - NC, inc.

GLEN ALLEN, VA 23060 804–270–9357 N.C. COL #F–0269

4198 COX ROAD SUITE 114

GROUP ID

E100

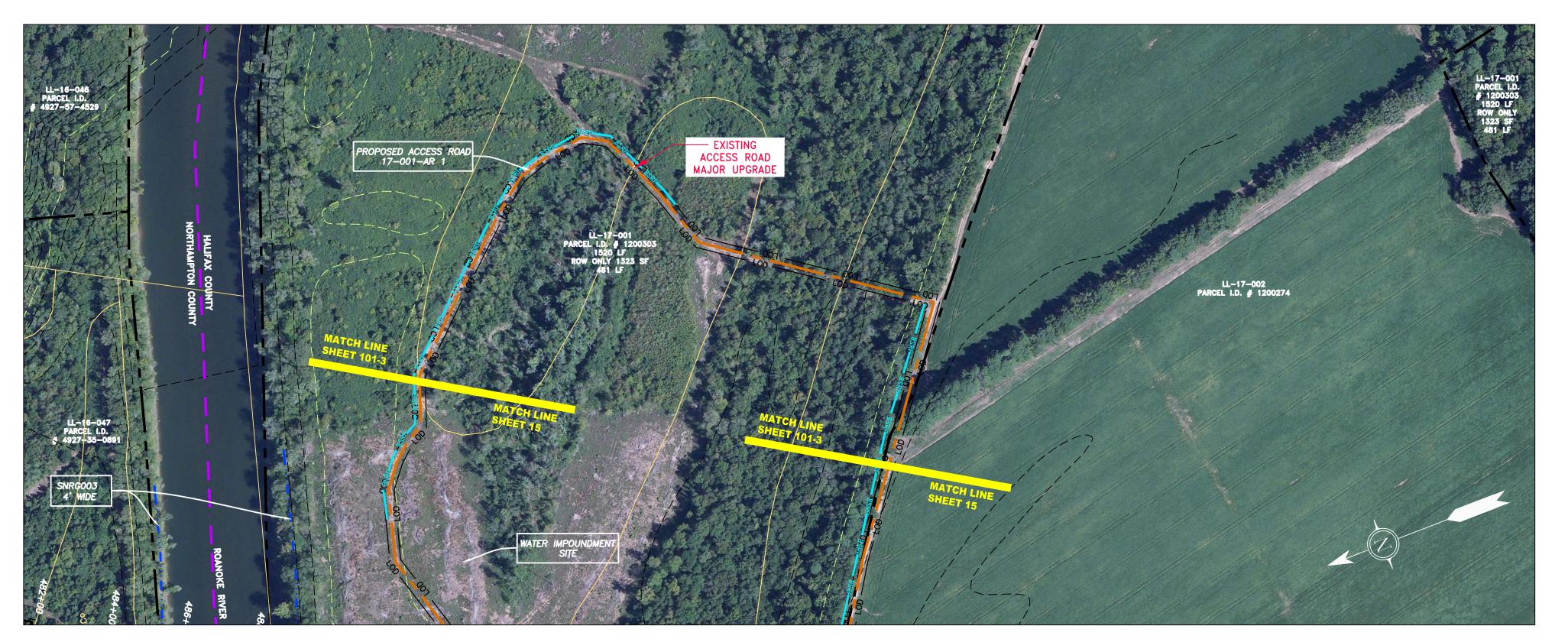
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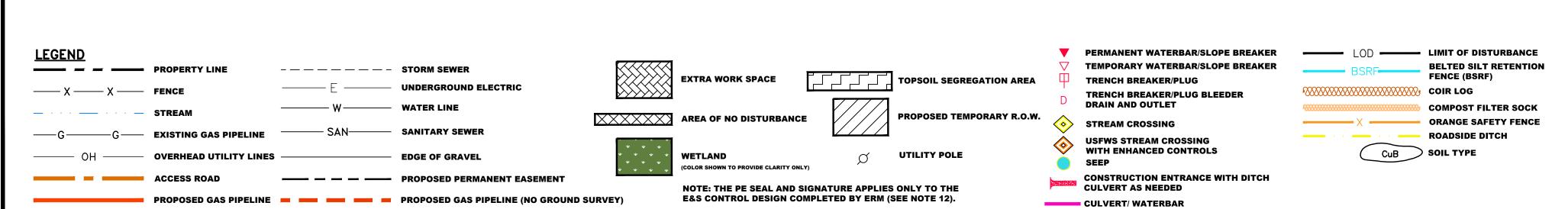
CHECKED: DLH APPROVED: **NET**

06/09/17

THIS DRAWING WAS PRODUCED WITH COMPUTER AIDED DRAFTING TECHNOLOGY AND IS SUPPORTED BY ELECTRONIC DRAWING FILES. DO NOT REVISE THIS DRAWING VIA MANUAL DRAFTING METHODS.



ACCESS ROAD DETAIL 3



1. COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W.
2. CONTOURS AND TOPOGRAPHIC FEATURES WERE DERIVED FROM LIDAR DATA AND GPS SUB-METER GROUND SURVEY PERFORMED BY GAI CONSULTANTS, INC FROM 11-03-2014 THRU 11-07-2014.

FROM 11-03-2014 THRU 11-07-2014.

3. IMAGERY TAKEN FROM GOOGLE EARTH.

4. THE PROPERTY LINES SHOWN ARE BASED ON GIS & TAX ASSESSMENT RECORDS (PROVIDED BY OTHERS). GAI CONSULTANTS MAKE NO GUARANTEE EITHER EXPRESSED OR IMPLIED AS TO THE ACCURACY OF THE RECORDS AS SHOWN ON THESE DRAWINGS.

5. STREAM AND WETLAND DATA SHOWN ON THE DRAWINGS WAS PROVIDED BY ERM.

6. EROSION AND SEDIMENTATION CONTROL ELEMENTS MAY BE SHOWN OUTSIDE OF THE WORK AREAS FOR CLARITY ONLY. ACTUAL INSTALLATION SHALL BE WITHIN THE WORK AREAS.

7. ALL STATIONING SHOWN IS SLOPE STATIONING.

8. SILT FENCE AND FILTER SOCK SHALL BE INSTALLED PARALLEL TO CONTOUR TO EXTENT PRACTICABLE IN ACCORDANCE WITH STANDARD DETAIL

9. ACCESS ROADS HAVE BEEN GROUPED INTO FOUR CATEGORIES - 1) EXISTING ROADS NO IMPROVEMENTS, 2) EXISTING ROADS MINOR IMPROVEMENTS, 3) EXISTING ROADS MAJOR IMPROVEMENTS AND 4) NEW ROADS. APPROPRIATE EROSION AND SEDIMENT CONTROLS WILL BE PROVIDED FOR ROADS IN CATEGORIES 2, 3 AND 4. ROADS IN CATEGORIES 1 AND 2 HAVE ADEQUATE EXISTING DRAINAGE; DRAINAGE FEATURES WILL BE PROVIDED FOR ROADS IN CATEGORIES 3 AND 4.

10. *ERM IS SOLELY RESPONSIBLE FOR THE NATURE AND LOCATION OF THE DEPICTED BMPS AS OF THE DATE SIGNED AND SEALED BASED ON THE SOURCE DATA PROVIDED AND AS DESCRIBED IN THE NOTES SECTION OF THE INDEX SHEET OF THIS PLAN SET.

SCALE: AS SHOWN 06/09/17 DRAWN: **GPT** CHECKED: DLH APPROVED: **NET** gai consultants - NC, inc. 4198 COX ROAD SUITE 114 GLEN ALLEN, VA 23060 804–270–9357 N.C. COL #F–0269 PROJECT NO./DASH NC 140468 TASK NO. SUB TASK NO 005 00 GROUP ID DRAWING NO. E101 AR-101

CONSTRUCTION ENTRANCE WITH DITCH

USFWS STREAM CROSSING WITH ENHANCED CONTROLS

CULVERT AS NEEDED

CULVERT/ WATERBAR

UTILITY POLE

(COLOR SHOWN TO PROVIDE CLARITY ONLY)

NOTE: THE PE SEAL AND SIGNATURE APPLIES ONLY TO THE

E&S CONTROL DESIGN COMPLETED BY ERM (SEE NOTE 12).

PROPOSED PERMANENT EASEMENT

PROPOSED GAS PIPELINE — PROPOSED GAS PIPELINE (NO GROUND SURVEY)

ROADSIDE DITCH

CuB SOIL TYPE

TASK NO. SUB TASK NO

AR-102

GROUP ID

10. *ERM IS SOLELY RESPONSIBLE FOR THE NATURE AND LOCATION OF THE DEPICTED BMPS AS OF THE DATE SIGNED AND SEALED BASED ON THE SOURCE DATA PROVIDED AND AS DESCRIBED IN THE NOTES SECTION OF THE INDEX SHEET OF THIS PLAN SET.

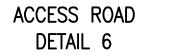
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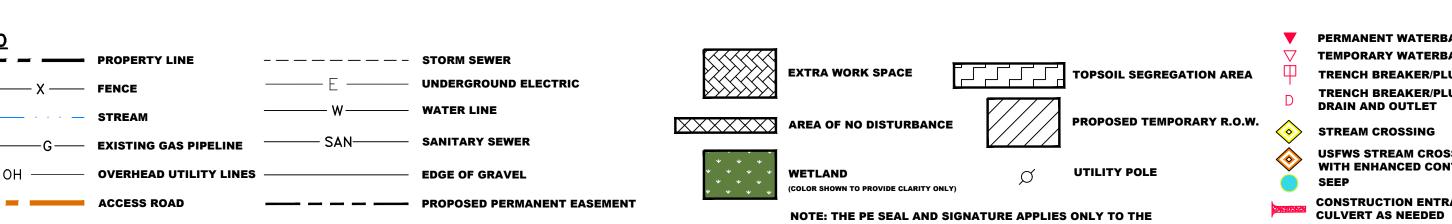
DRAWING NO.

E102

ACCESS ROAD DETAIL 5



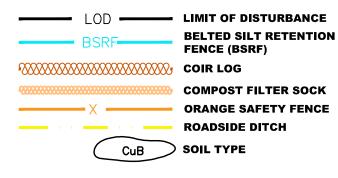




E&S CONTROL DESIGN COMPLETED BY ERM (SEE NOTE 12).

PROPOSED GAS PIPELINE PROPOSED GAS PIPELINE (NO GROUND SURVEY)

PERMANENT WATERBAR/SLOPE BREAKER TEMPORARY WATERBAR/SLOPE BREAKER TRENCH BREAKER/PLUG TRENCH BREAKER/PLUG BLEEDER DRAIN AND OUTLET STREAM CROSSING **USFWS STREAM CROSSING** WITH ENHANCED CONTROLS





1. COORDINATE SYSTEM USED FOR MAPPING AND TOPOGRAPHY - UTM WITH NAD83 DATUM, ZONE 17, US SURVEY FOOT, CENTRAL MERIDIAN 81° W.
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gai consultants - NC, inc.

4198 COX ROAD SUITE 114 GLEN ALLEN, VA 23060 804-270-9357 N.C. COL #F-0269

PROJECT NO./DASH NO 140468 TASK NO. SUB TASK NO 00 DRAWING NO. GROUP ID E103

AR-103

CULVERT/ WATERBAR

CONSTRUCTION ENTRANCE WITH DITCH