

US Army Corps
of Engineers

Savannah District

FORT LIBERTY, NORTH CAROLINA

AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)

FY23, PN 96182

VOLUME 1 - SITE

SOLICITATION NO.: W912HN-23-B-3001

CONTRACT NO.: -

ISSUE DATE: JUNE 2023

SIGNATURES AFFIXED BELOW INDICATE OFFICIAL RECOMMENDATION AND APPROVAL OF ALL DRAWINGS IN THIS SET AS INDEXED ON THIS SHEET.

REVIEWED BY:*
DEACON.JENNIFER.HERRIG.1597032648
QUALITY CONTROL/PE/A

Digitally signed by DEACON.JENNIFER.HERRIG.1597032648
Date: 2023.06.09 15:20:02 -04'00'

6/9/23
DATE

APPROVAL RECOMMENDED:*
PHELPS.BRIAN.M.1239640075
DESIGN BRANCH, CHIEF

Digitally signed by PHELPS.BRIAN.M.1239640075
Date: 2023.06.09 16:53:54 -04'00'

6/9/23
DATE

APPROVED:*
HENDREN.TRACY.LEE.1229932868
ENGINEERING DIVISION, CHIEF

Digitally signed by HENDREN.TRACY.LEE.1229932868
Date: 2023.06.12 07:12:40 -04'00'

6/12/23
DATE

* THIS PROJECT WAS DESIGNED BY THE U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT. INDIVIDUALS WHOSE SIGNATURES AND REGISTRATION DESIGNATIONS APPEAR ON THESE DOCUMENTS ARE OPERATING WITHIN THE SCOPE OF THEIR EMPLOYMENT. SIGNATURES ARE REQUIRED BY ER 1110-1-8152.

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT
100 W. OGLETHORPE AVE.
SAVANNAH, GA 31401

DESIGNED BY:
J. HAIRE
DRAWN BY:
J. HAIRE
CHECKED BY:
J. MCILVERMAN
SUBMITTED BY:
J. DEACON
SIZE:
ANSI D

ISSUE DATE:
JUNE 2023
SOLICITATION NO.:
W912HN-23-B-3001
CONTRACT NO.:
-
CATEGORY CODE:
178-85-01
FILE NAME:
-

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE
COVER SHEET

SHEET ID
G-001

US Army Corps
of Engineers®

MARK

DESCRIPTION

DATE

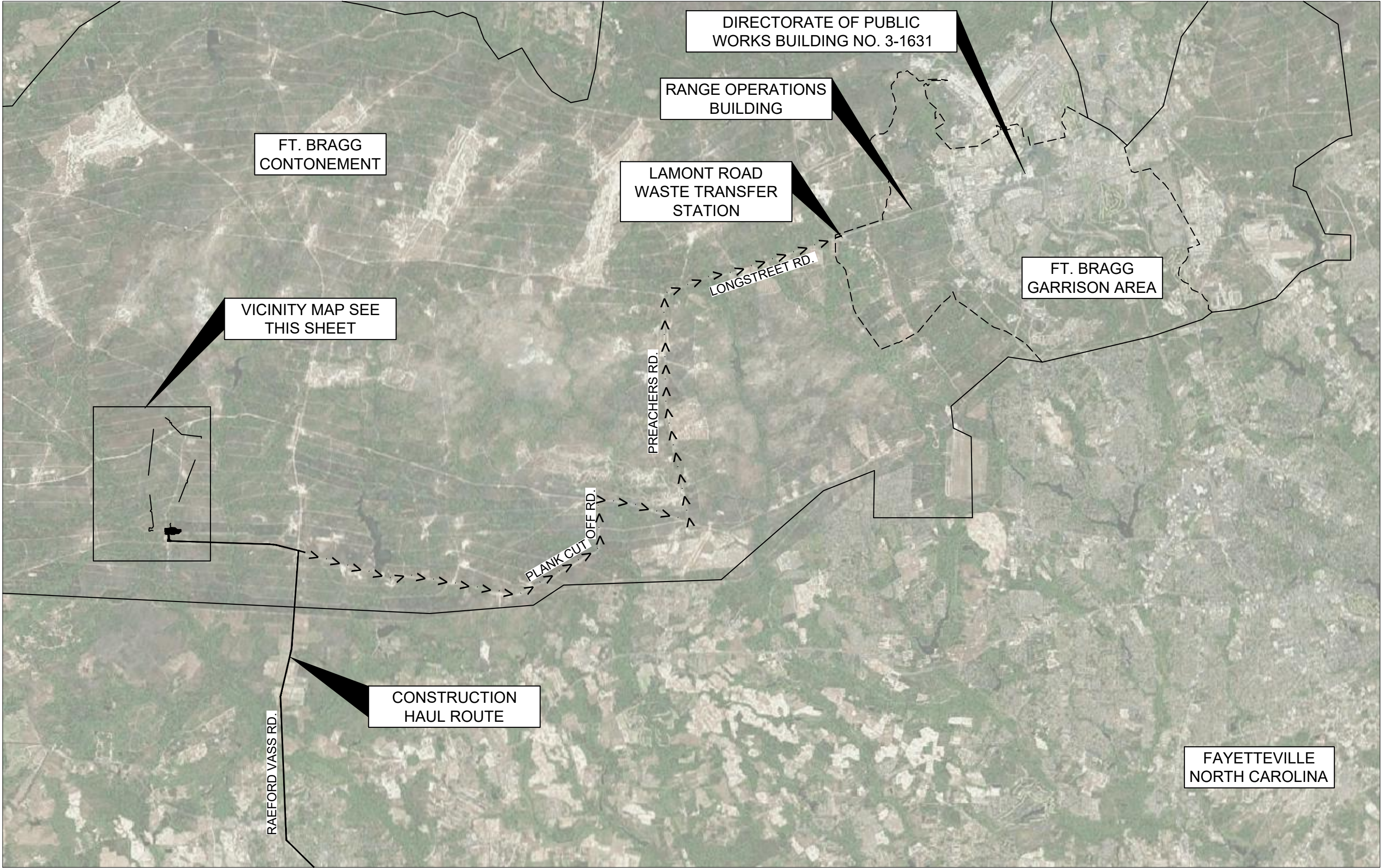
C:\USERS\K6ENX\JLH\DESKTOP\BRA1331\PDF\G-001.DWG
K6ENX\JLH

9:31:49 AM 6/9/2023

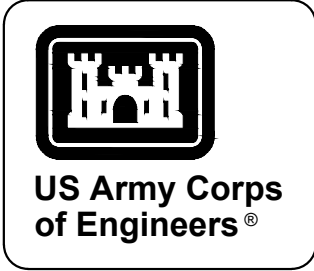
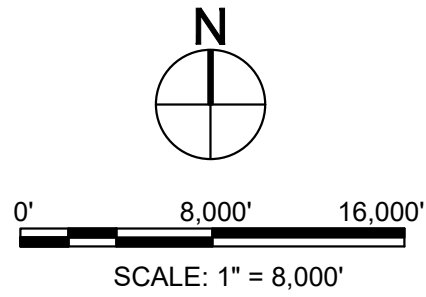
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LOCATION MAP



MARK	DESCRIPTION	DATE

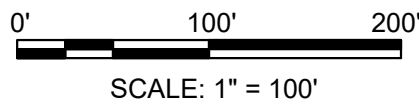
DESIGNED BY: G. OKEN	ISSUE DATE: JUNE 2023
DRAWN BY: M. BROWN	SOLICITATION NO.: 178-85-001
CHECKED BY: R. RADTKE	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-85-01
SIZE: ANSI D	

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	
---	--

FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	CIVIL SITE LOCATION AND VICINITY MAPS
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SHEET ID GC101

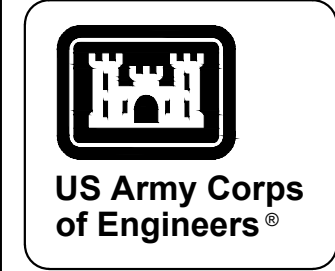
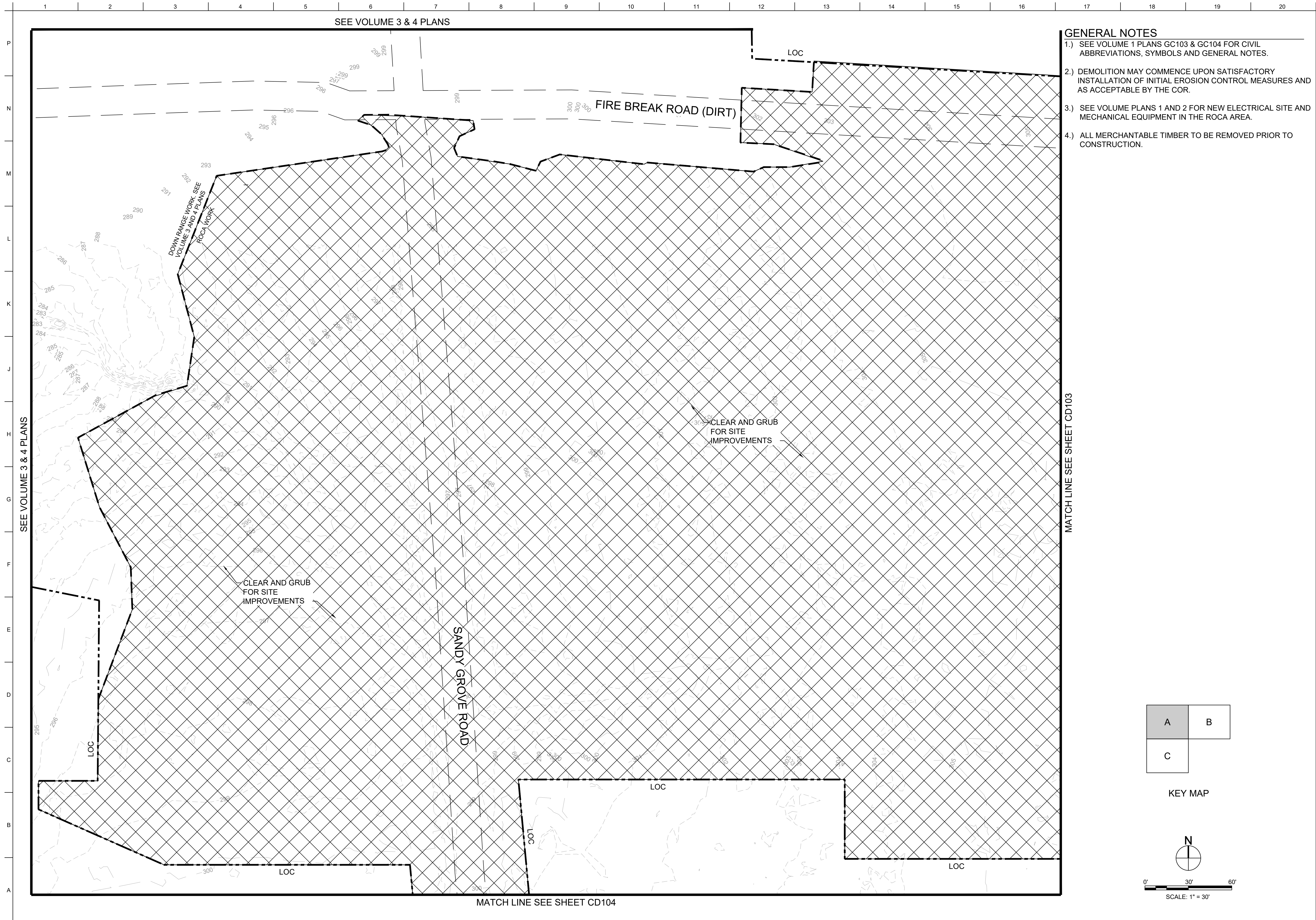
[illegible]



5.8. EQUIPMENT: TPHOTO MEASUREMENTS MADE IN MICROSTATION ENVIRONMENT USING AN INTEL® CORE™ I7-4790K CPU@ 4.00 GHZ AND A 64-BIT OPERATING SYSTEM.



VF101

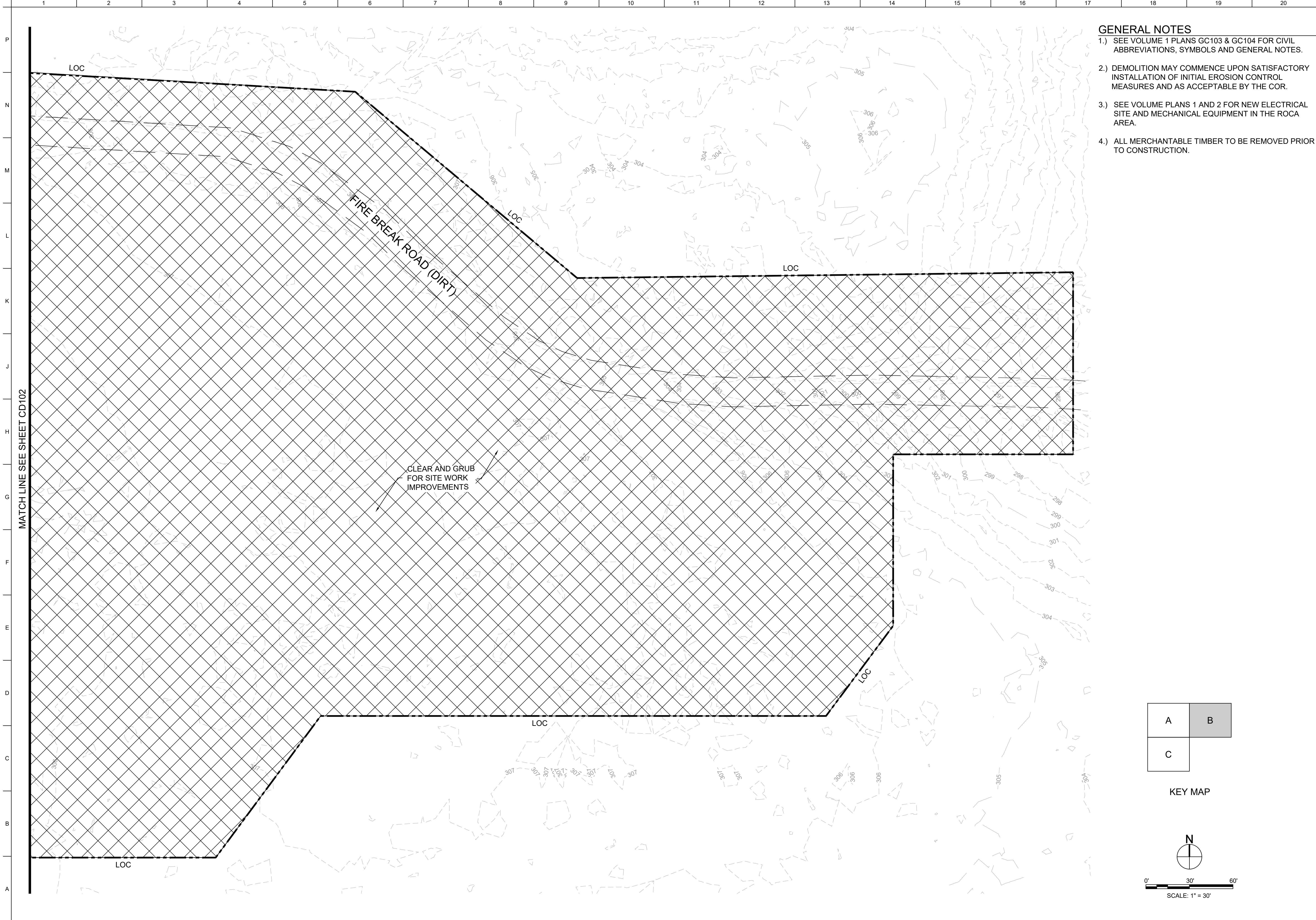
[illegible]

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY: G. OREN	ISSUE DATE: JUNE 2023
	DRAWN BY: W812R225-5301 CHECKED BY: R. RADTKE	SOLICITATION NO.: W812R225-5301 CONTRACT NO.:
	SUBMITTED BY: J. DEACON	CATEGORY CODE: 17A-65-01
SIZE:		
ANSI D		

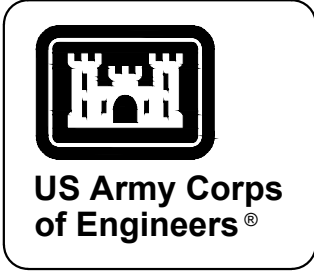
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE
CIVIL SITE
DEMOLITION PLAN - AREA 'A'

SHEET ID
CD102

READY TO ADVERTISE (RTA)



- GENERAL NOTES**
- 1.) SEE VOLUME 1 PLANS GC103 & GC104 FOR CIVIL ABBREVIATIONS, SYMBOLS AND GENERAL NOTES.
 - 2.) DEMOLITION MAY COMMENCE UPON SATISFACTORY INSTALLATION OF INITIAL EROSION CONTROL MEASURES AND AS ACCEPTABLE BY THE COR.
 - 3.) SEE VOLUME PLANS 1 AND 2 FOR NEW ELECTRICAL SITE AND MECHANICAL EQUIPMENT IN THE ROCA AREA.
 - 4.) ALL MERCHANTABLE TIMBER TO BE REMOVED PRIOR TO CONSTRUCTION.



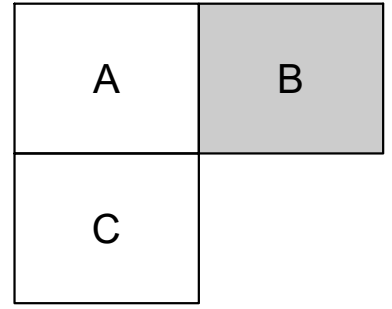
MARK	DESCRIPTION	DATE

DESIGNED BY: G. OKREN	ISSUE DATE: JUNE 2023
DRAWN BY: J. DEACON	SOLICITATION NO.: 178-85-001
CHECKED BY: R. RADTKE	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-85-01
SIZE: ANSI D	

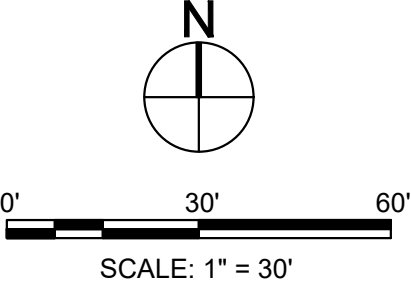
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401

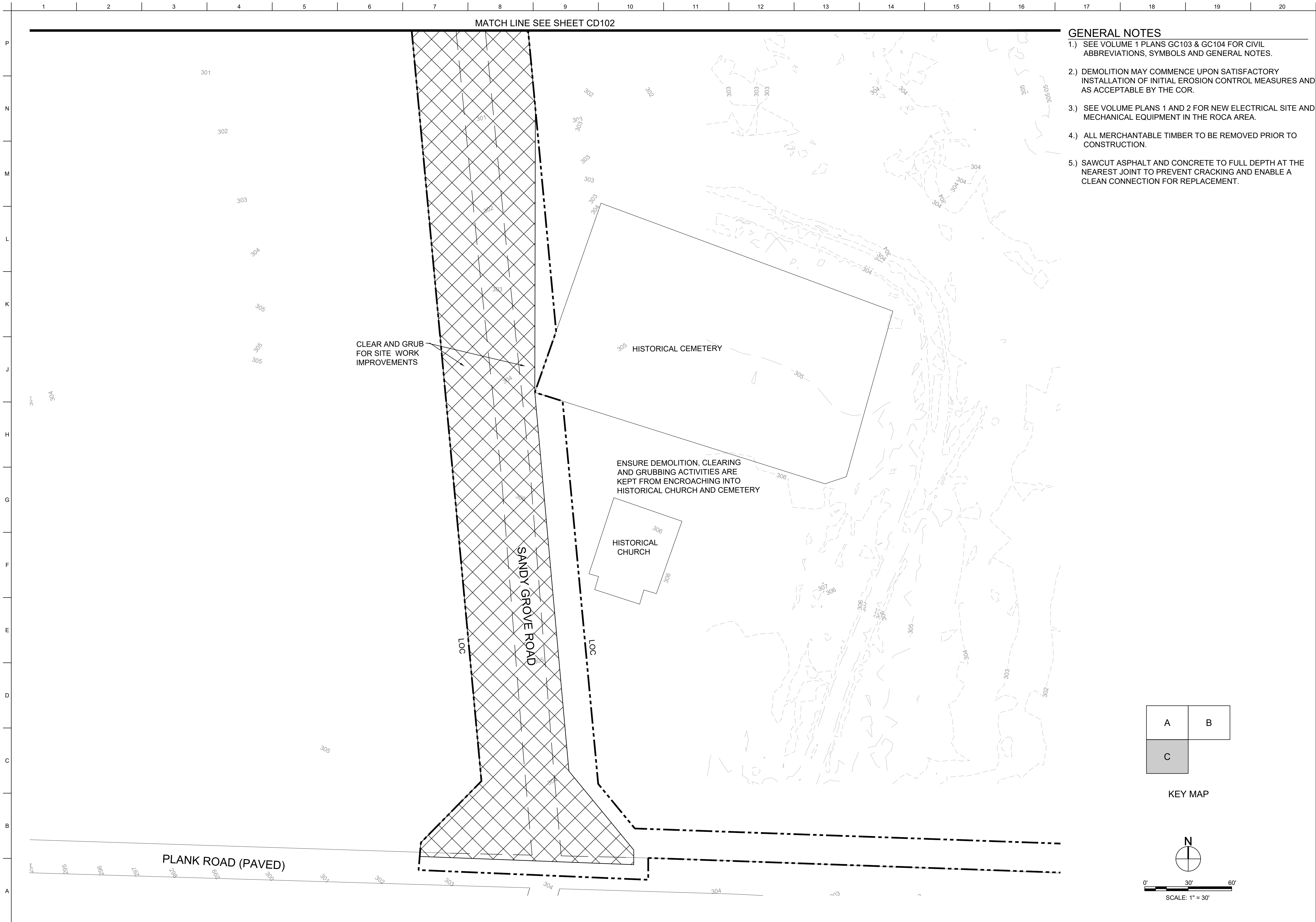
FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTF) FY23, PN 96182 VOLUME 1 - SITE	CIVIL SITE DEMOLITION PLAN - AREA 'B'
---	--

SHEET ID CD103



KEY MAP





GENERAL NOTES

- 1.) SEE VOLUME 1 PLANS GC103 & GC104 FOR CIVIL ABBREVIATIONS, SYMBOLS AND GENERAL NOTES.
- 2.) DEMOLITION MAY COMMENCE UPON SATISFACTORY INSTALLATION OF INITIAL EROSION CONTROL MEASURES AND AS ACCEPTABLE BY THE COR.
- 3.) SEE VOLUME PLANS 1 AND 2 FOR NEW ELECTRICAL SITE AND MECHANICAL EQUIPMENT IN THE ROCA AREA.
- 4.) ALL MERCHANTABLE TIMBER TO BE REMOVED PRIOR TO CONSTRUCTION.
- 5.) SAWCUT ASPHALT AND CONCRETE TO FULL DEPTH AT THE NEAREST JOINT TO PREVENT CRACKING AND ENABLE A CLEAN CONNECTION FOR REPLACEMENT.



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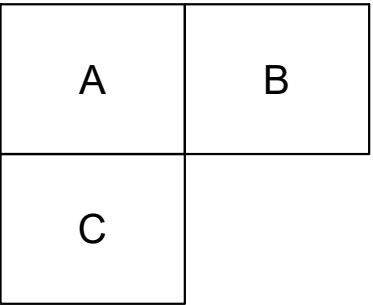
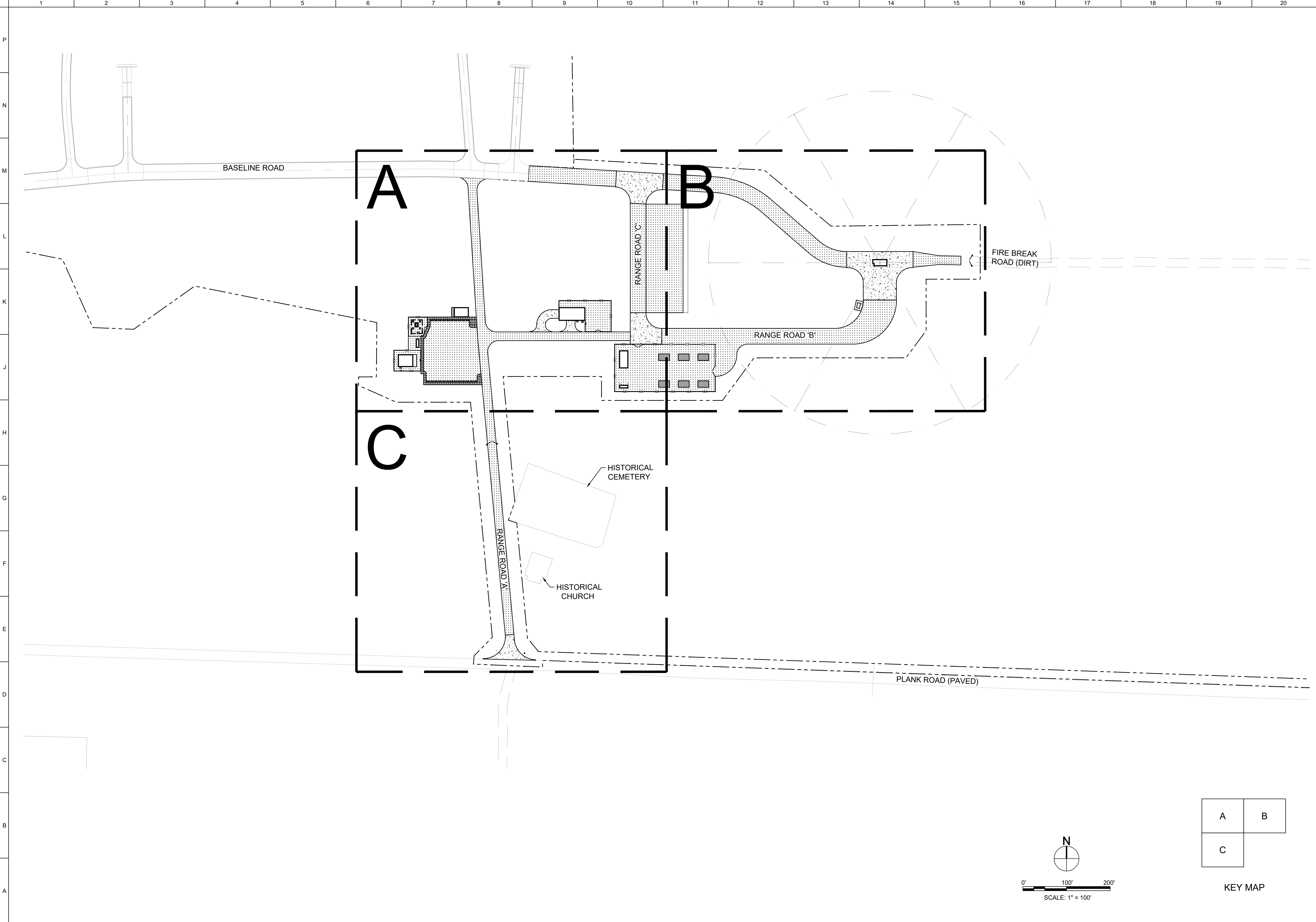
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U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY:	G. GORDEN	ISSUE DATE:	JUNE 2023
	CHECKED BY:	G. GORDEN	PROJECT NO.:	W912HN-23-B-3001
	R. RADTKE	CONTRACT NO.:	-	
	SUBMITTED BY:	178-8501	CATEGORY CODE:	178-8501
ANSI D				

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTF)
FY23 PN 96162
VOLUME 1 - SITE
CIVIL SITE
DEMOLITION PLAN - AREA 'C'

SHEET ID

CD104



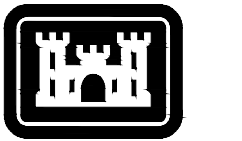
KEY MAP

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY: G. O'NEIL	ISSUE DATE: JUNE 2023
	DRAWN BY: C. GILBERT	SOLICITATION NO.: 178-85-001
	CHECKED BY: R. RADTKE	CONTRACT NO.: ~
	SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-85-01
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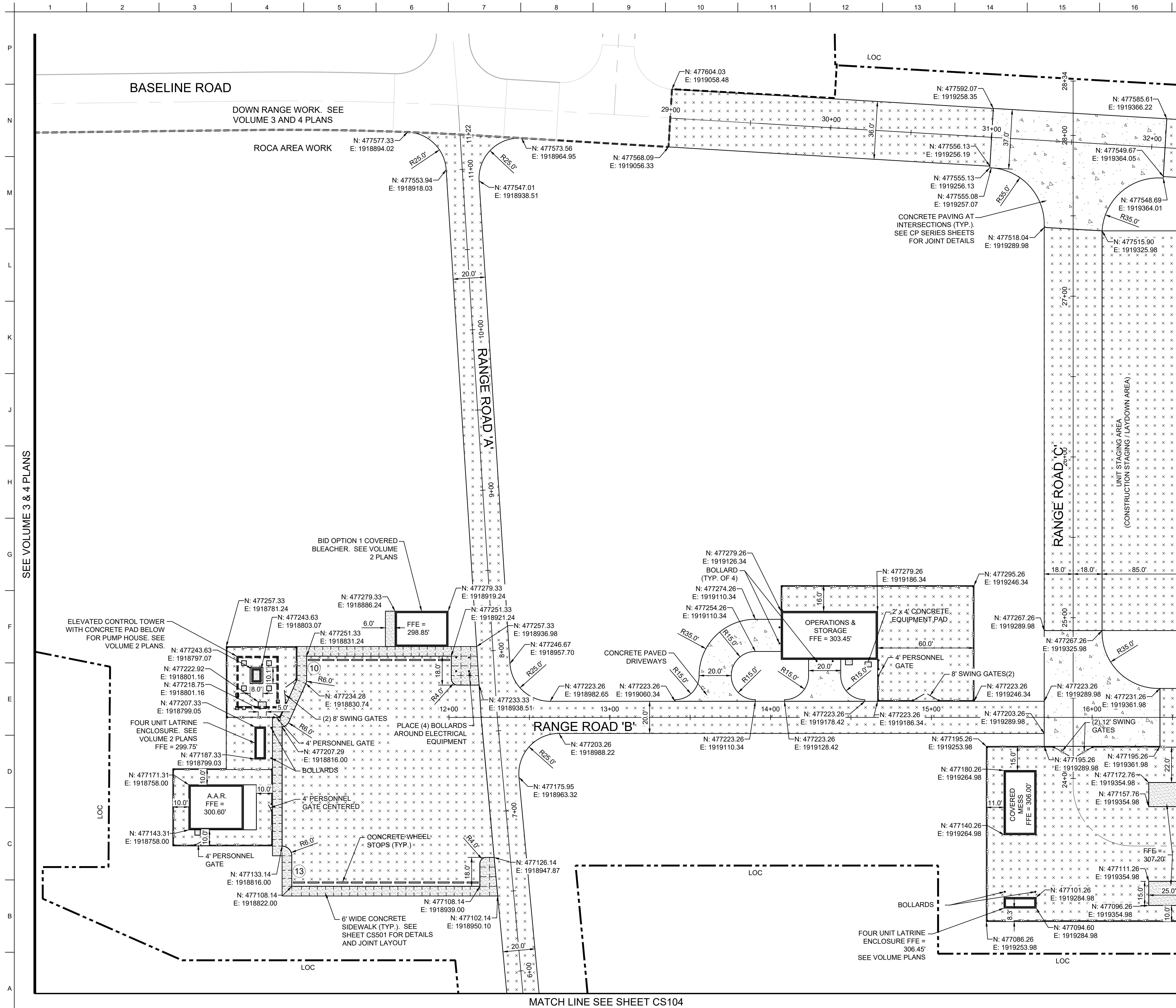
FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTA) FY23, PN 96182 VOLUME 1 - SITE	CIVIL SITE OVERALL LAYOUT PLAN
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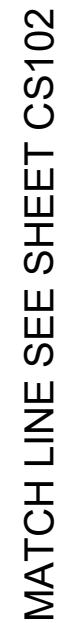
SHEET ID
CS101

MARK	DESCRIPTION	DATE



US Army Corps
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- 1.) SEE VOLUME 1 PLANS GC103 & GC104 FOR CIVIL ABBREVIATIONS, SYMBOLS AND GENERAL NOTES.
- 2.) SEE VOLUME 1 PLANS CS501 - CS503 FOR CONCRETE TRAFFIC, AND FENCING DETAILS.
- 3.) SEE VOLUME PLANS 1 AND 2 FOR NEW ELECTRICAL SITE AND MECHANICAL EQUIPMENT.

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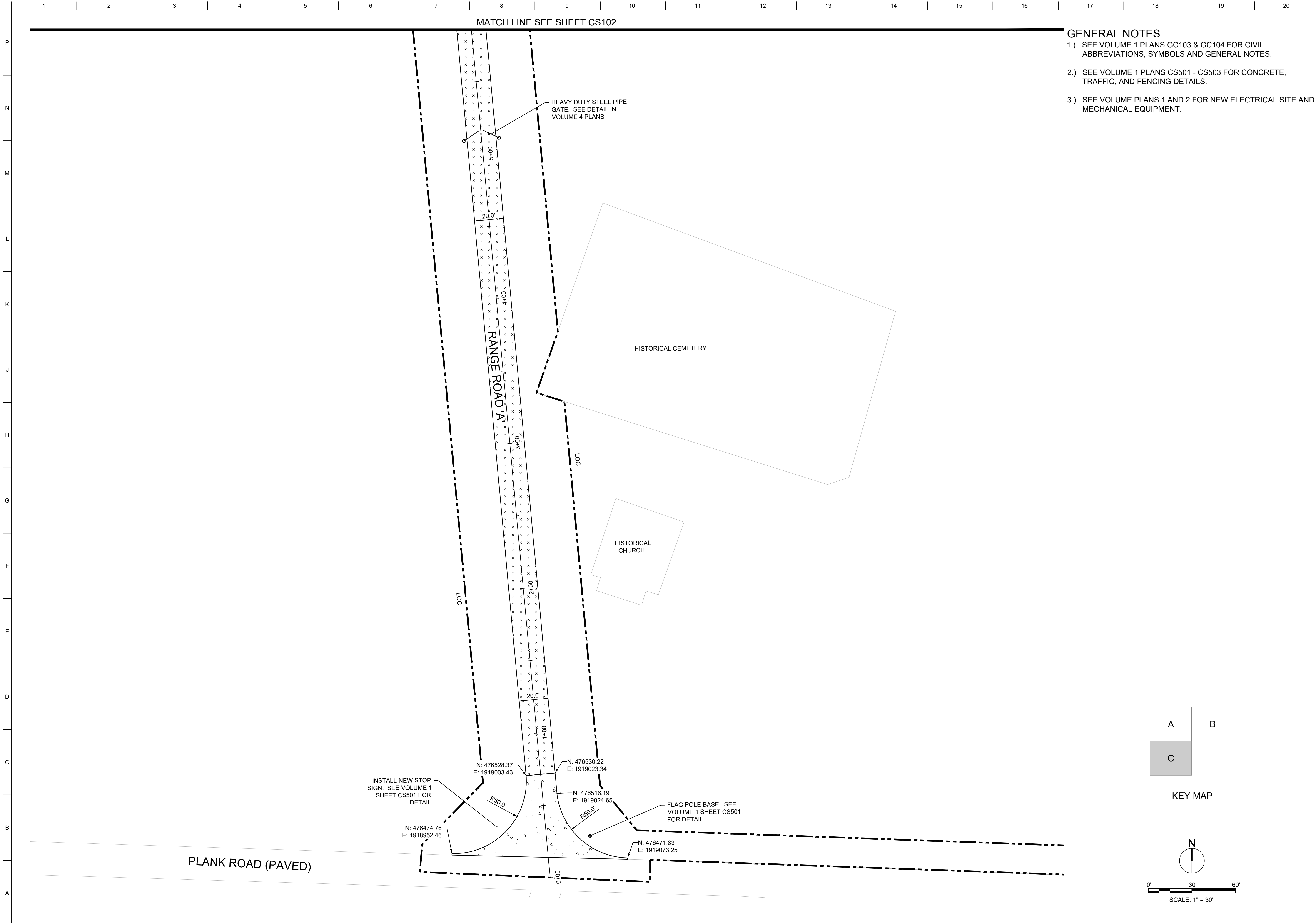
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY:	J. O'GREN, G. OREN	ISSUE DATE:	JUNE 2022
	CHECKED BY:	J. O'GREN, G. OREN	PROJECT NO.:	W912HN-23-B-3001
	CONTRACT NO.:	—		
	R/R DATE:	—		
	SUBMITTED BY:	—	CATEGORY CODE:	178-8501
	ISS. SCAON			
	SIZE			
	ANSI D			

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTfR)
FY23, PN 96182
VOLUME 1 - SITE
CIVIL SITE
LAYOUT - AREA 'B'

SHEET ID
CS103

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READY TO ADVERTISE (RTA)



GENERAL NOTES

- 1.) SEE VOLUME 1 PLANS GC103 & GC104 FOR CIVIL ABBREVIATIONS, SYMBOLS AND GENERAL NOTES.
- 2.) SEE VOLUME 1 PLANS CS501 - CS503 FOR CONCRETE, TRAFFIC, AND FENCING DETAILS.
- 3.) SEE VOLUME PLANS 1 AND 2 FOR NEW ELECTRICAL SITE AND MECHANICAL EQUIPMENT.



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[illegible]

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY:	ISSUE DATE:
	J. O'GREN, G. OREN	JUNE 2022
	PROJECT NO.:	PROJECT NO.:
	J. O'GREN, G. OREN	W912HN-23-B-3001
	CHECKED BY:	CONTRACT NO.:
R. RADTKE	—	
SUBMITTED BY:	CATEGORY CODE:	
J. S. SAGON	178-8501	
DATE:	SIZE:	
ANSI D		

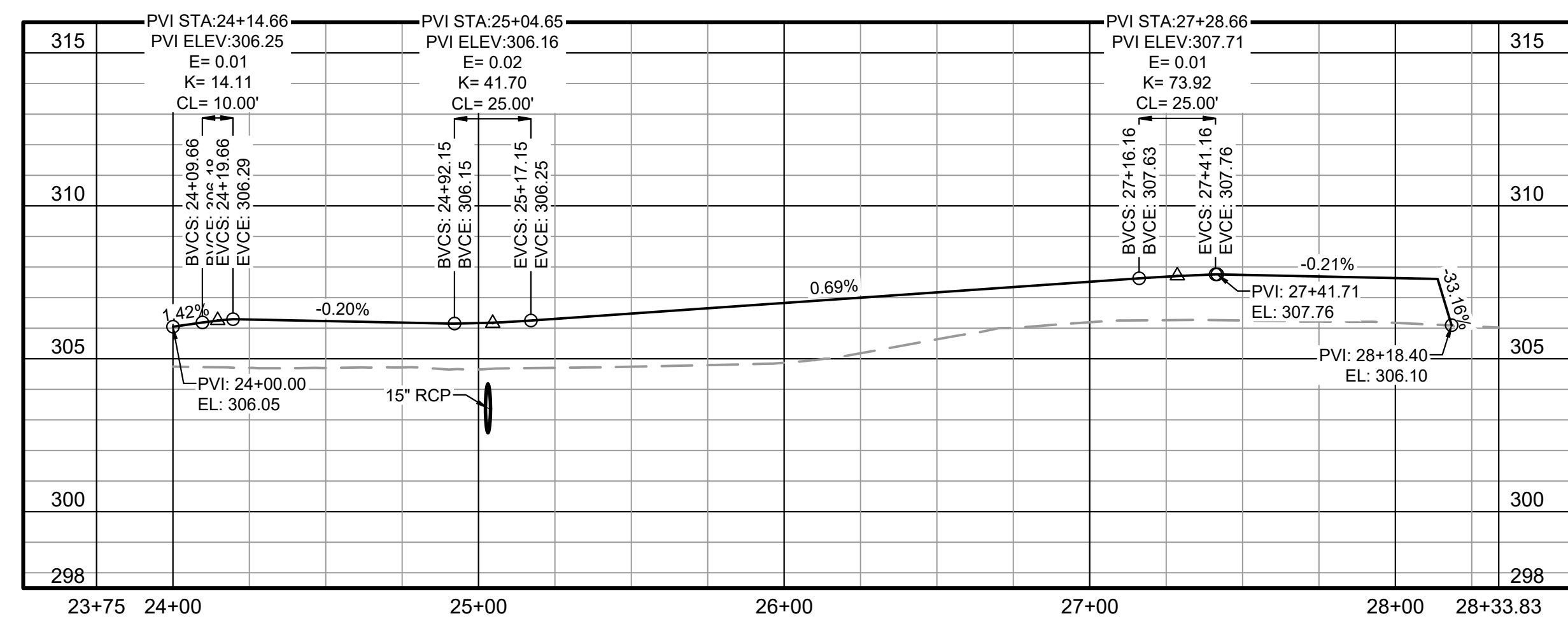
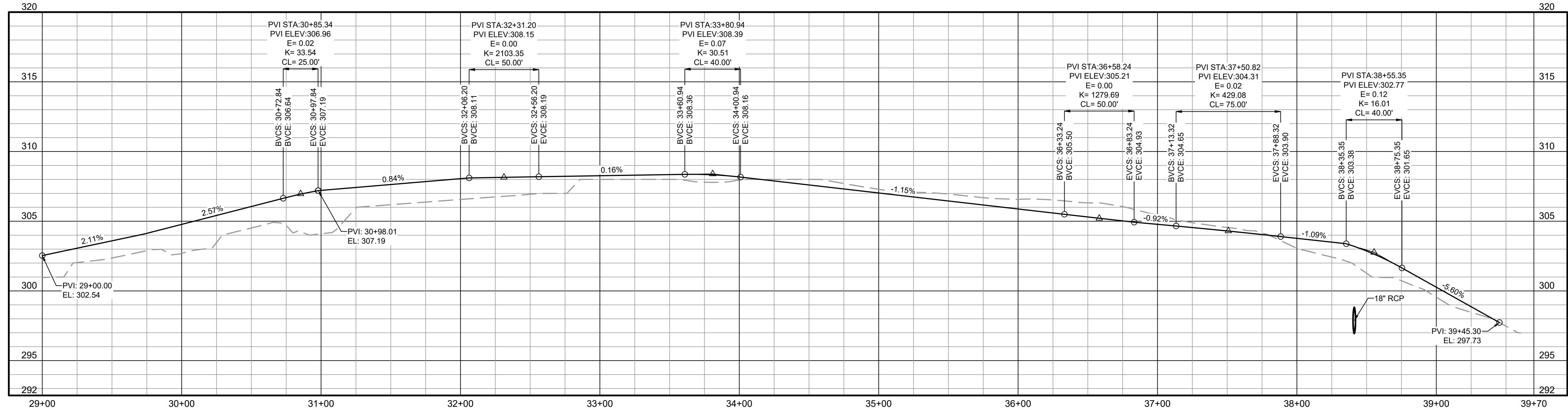
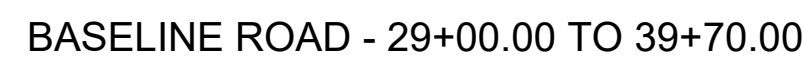
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTfR)
FY23, PN 96182
VOLUME 1 - SITE
CIVIL SITE
LAYOUT - AREA 'C'

SHEET ID
CS104

READY TO ADVERTISE (RTA)

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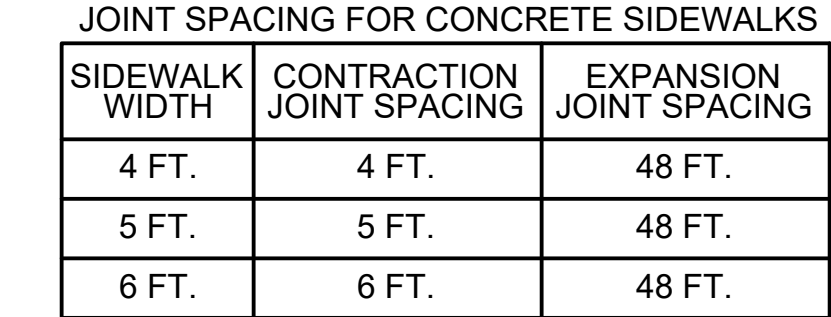
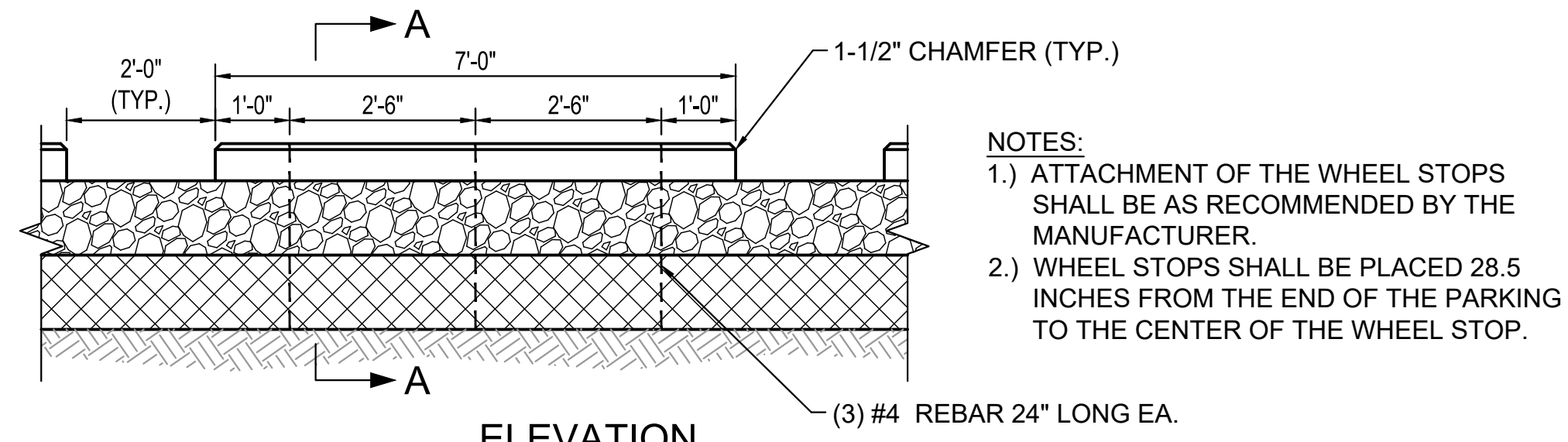
**US Army Corps
of Engineers®**

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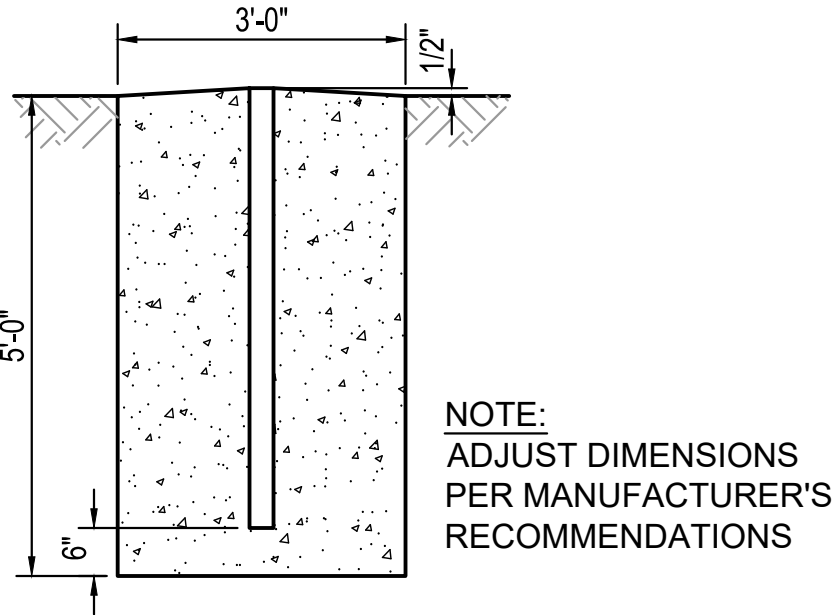
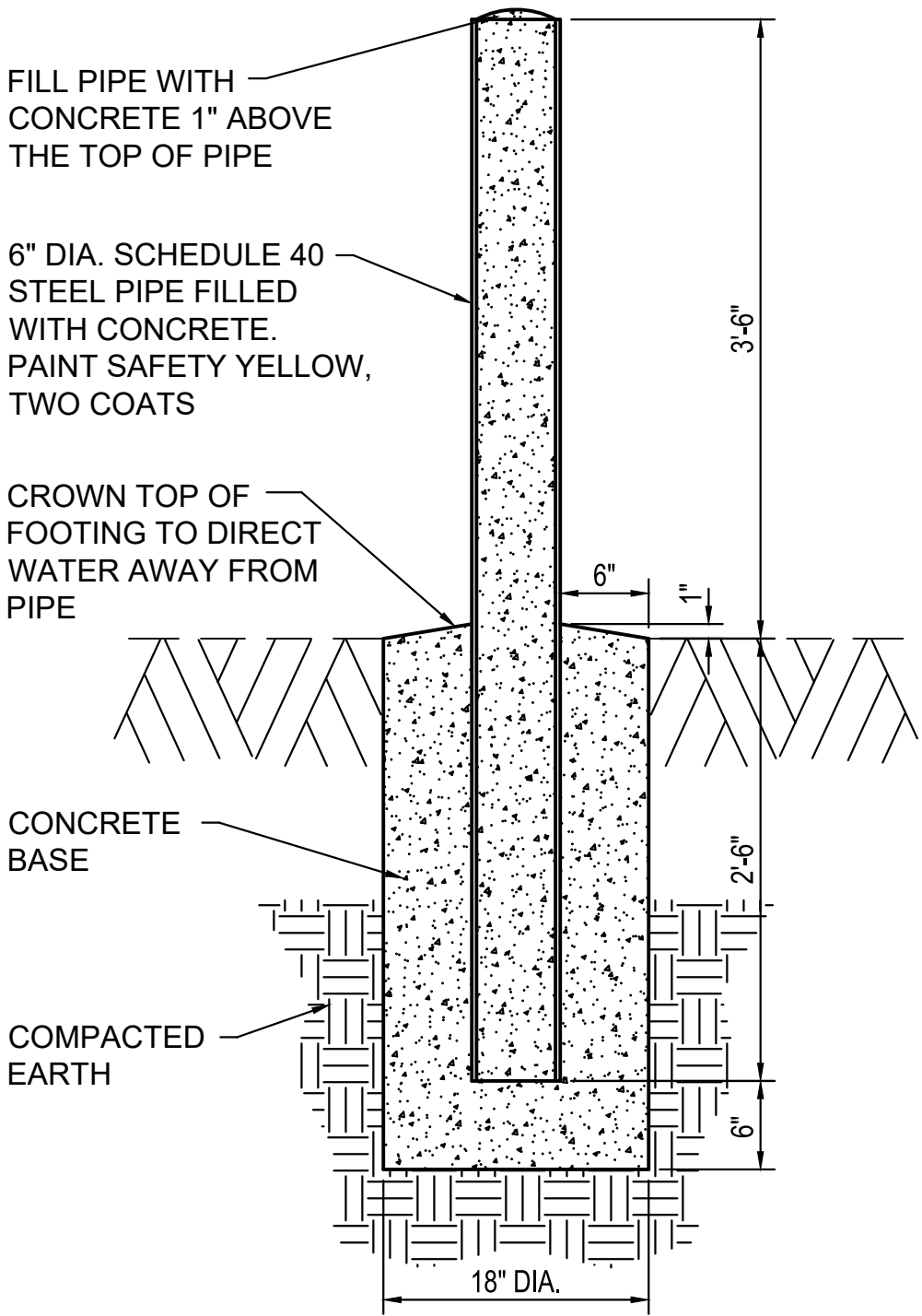
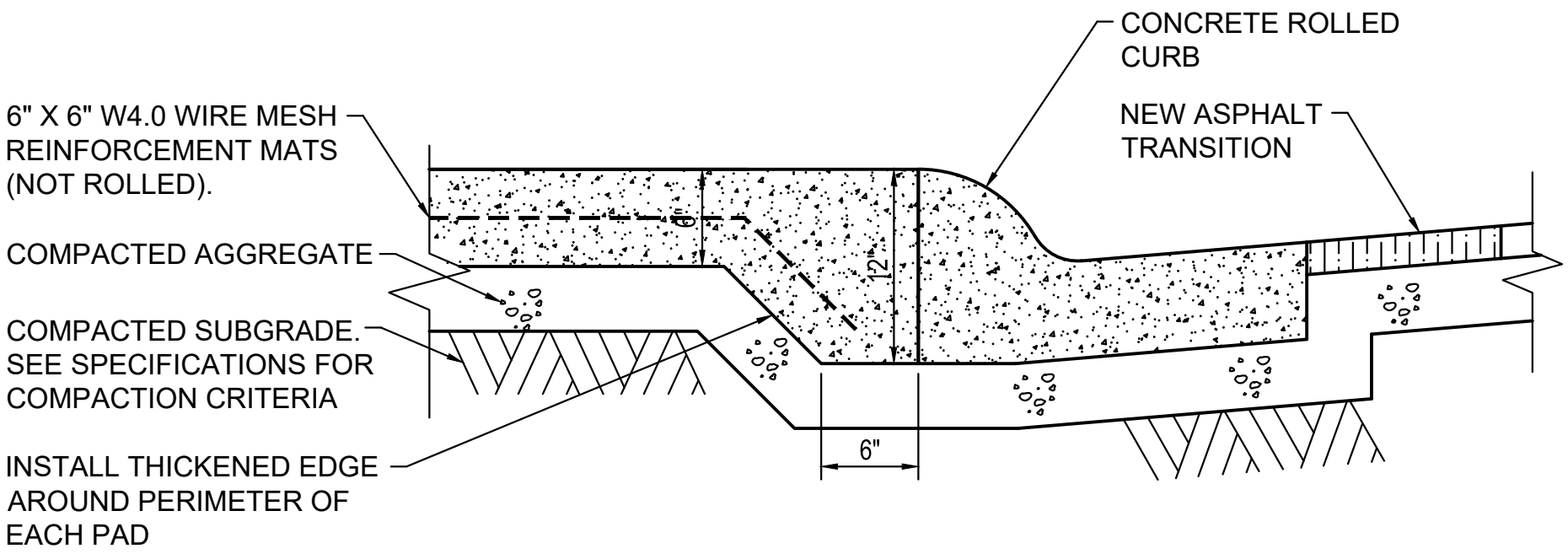
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH GA 31401	DESIGNED BY: G. OSGREN	ISSUE DATE: JUNE 2023
	DRAWN BY: SAVANNAH DISTRICT	SOLICITATION NO.: W9124E-03001
	CHECKED BY: R. RADTKE	CONTRACT NO.: --
	SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
	ANSL'D	

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23 PN 96182
VOLUME 1 - SITE
CIVIL SITE
ROADWAY PROFILES - 2

SHEET ID
CS202



- 1.) SIDEWALKS SHALL HAVE A MINIMUM THICKNESS OF 4".
- 2.) CONTRACTION JOINTS SHALL BE FORMED (OR SAWCUT) TO A DEPTH EQUAL TO 1/4 OF THE THICKNESS OF THE SIDEWALK AND EDGED WITH 1/8 RADIUS.
- 3.) 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 50 FEET AND WHERE WALKS ABOUT OTHER CONCRETE STRUCTURES SUCH AS: PARALLEL AND ABUTTING CURB AND GUTTER OR ADJACENT TO BITUMINOUS PAVEMENT.
- 4.) TRANSVERSE SLOPES ON SIDEWALKS SHALL BE 1/4" PER FT.
- 5.) CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI.

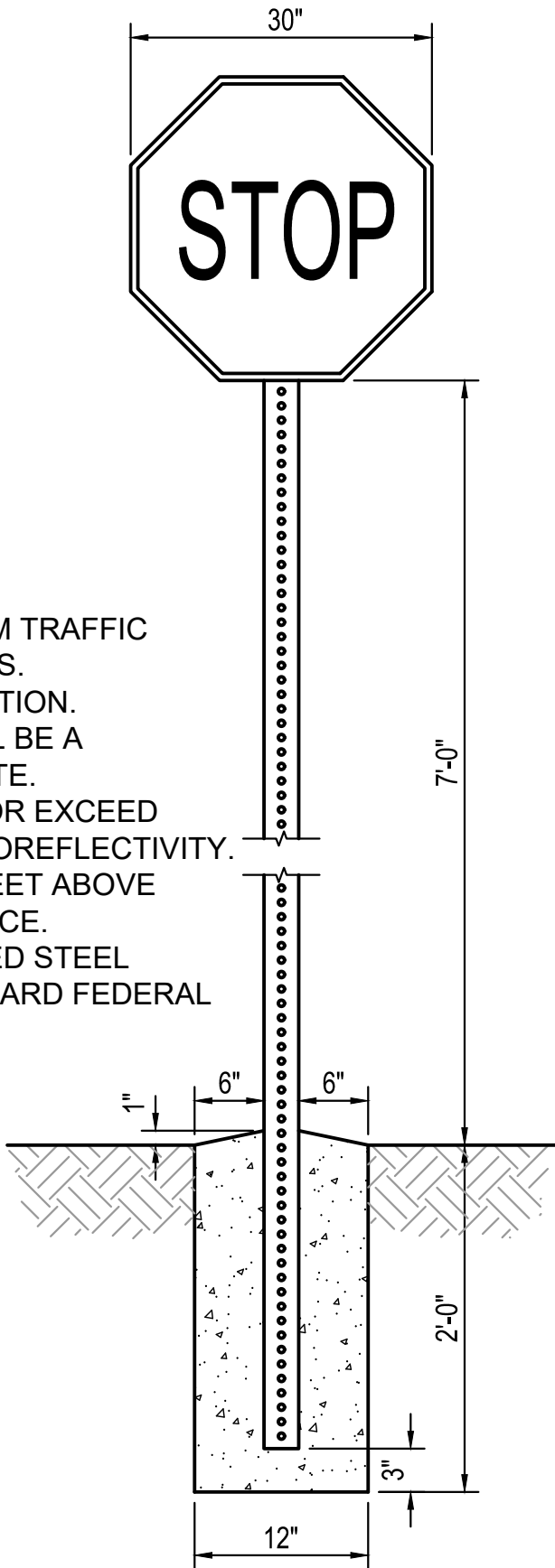


TYPICAL SECTION FOR GRAVEL AREAS AND ROADWAYS

NO SCALE

CONCRETE FLAG
POLE BASE
NO SCALE

BOLLARD
NO SCALE



R1-1 STOP SIGN

NO SCALE

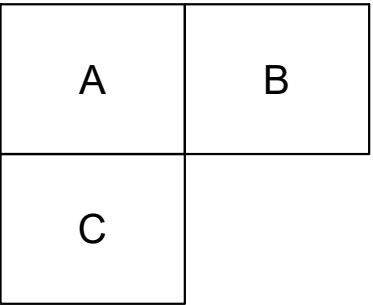
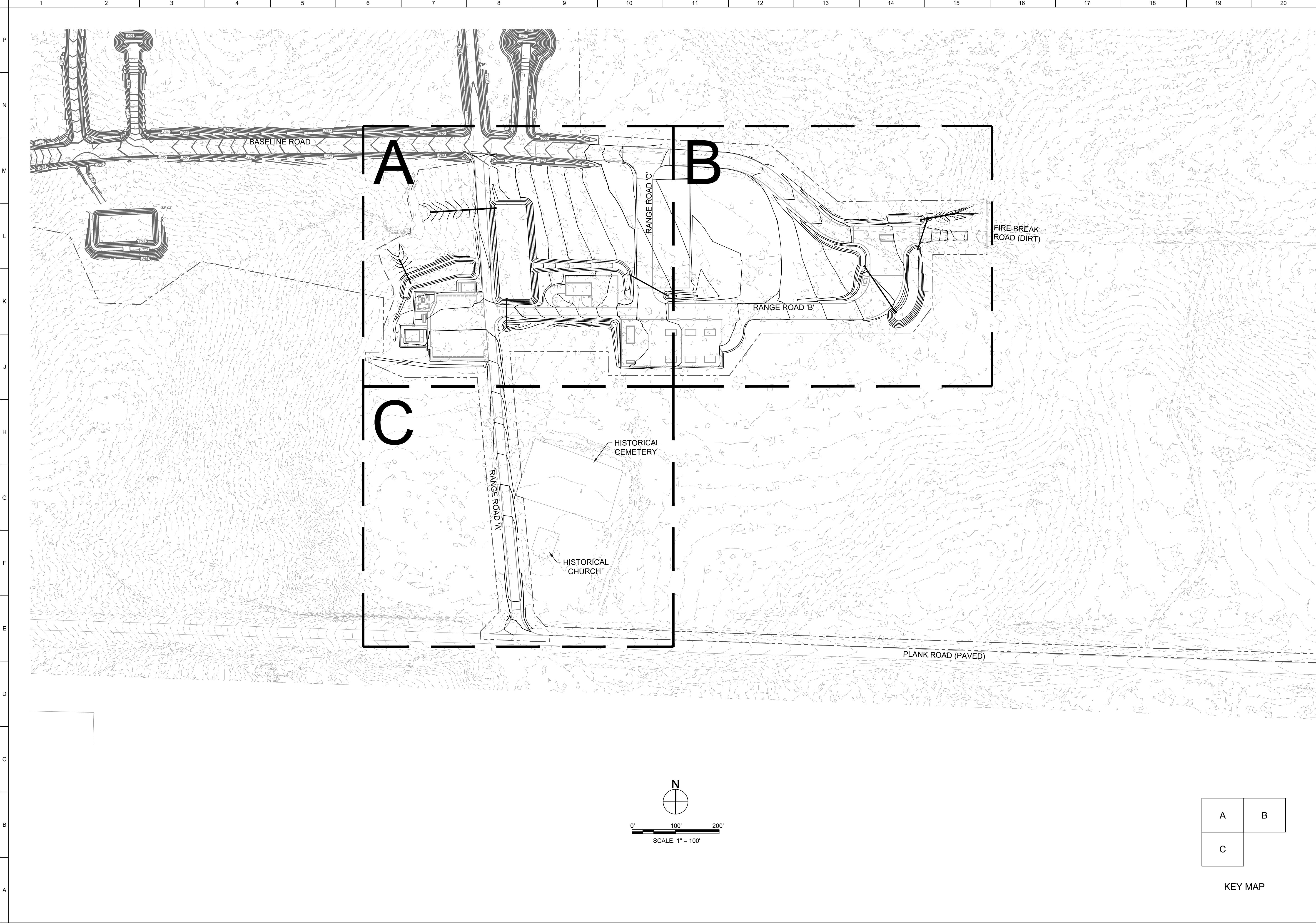
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U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY:	G. OGBURN	ISSUE DATE:	JUNE 2023
	CHECKED BY:	G. OGBURN	CONTRACT NO.:	W912HN23A8-3001
	CONTRACT NO.:			
	R. RADTKE			
	SUBMITTED BY:	U.S. ARMY CORPS OF ENGINEERS	CATEGORY CODE:	170-85501
	SIZE:	ANSI D		

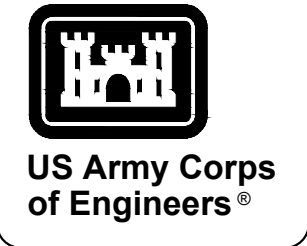
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, FN 95192
VOLUME 1 - SITE
CIVIL SITE
LAYOUT DETAILS

SHEET ID

CS501



KEY MAP

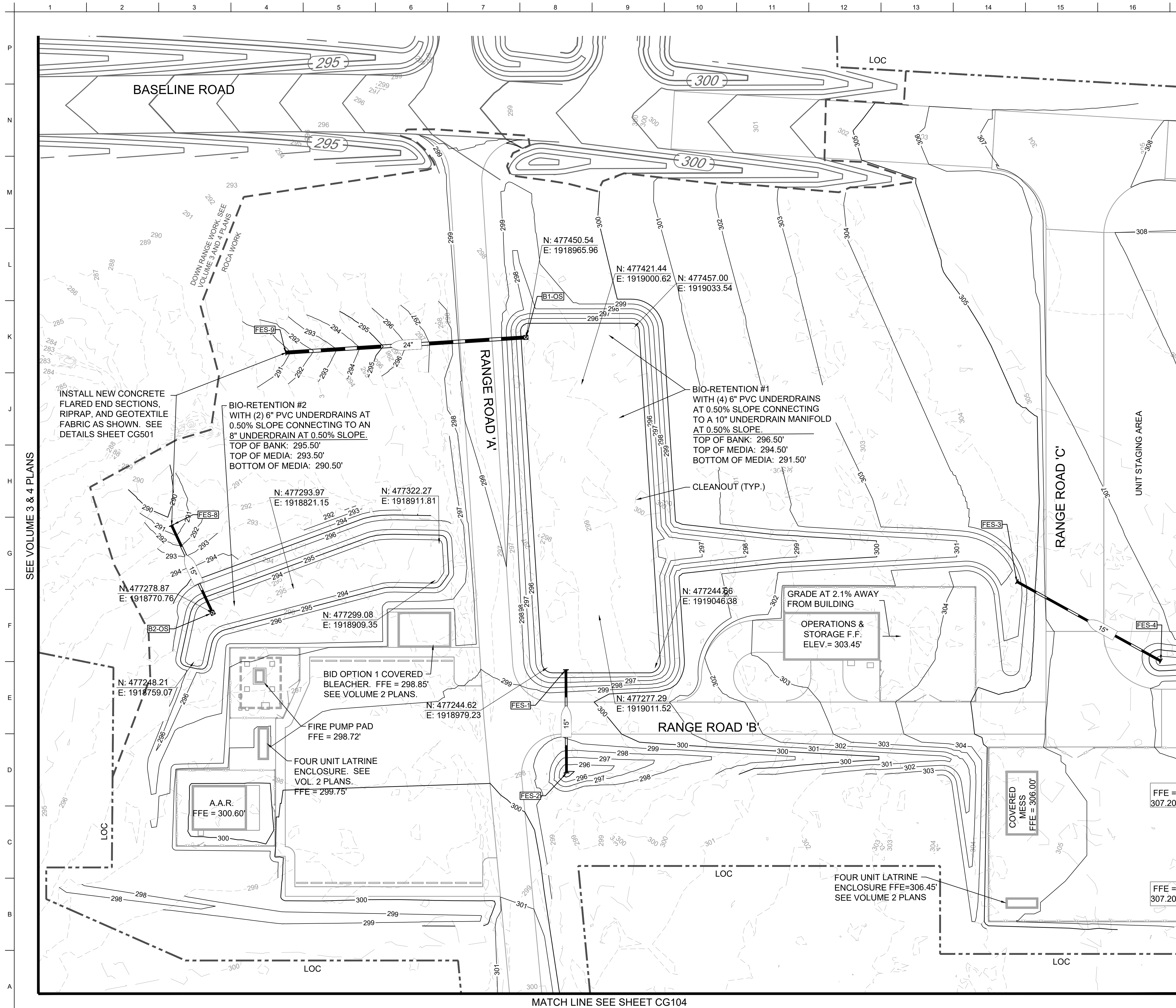


MARK	DESCRIPTION	DATE

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY: G. OSKIN	ISSUE DATE: JUNE 2023
	CHECKED BY: R. RADTKE	SOLICITATION NO.: W17A23-001
	SUBMITTED BY: J. DEACON	CONTRACT NO.: -
	SIZE: ANSI D	CATEGORY CODE: 178-85-01

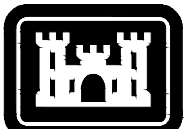
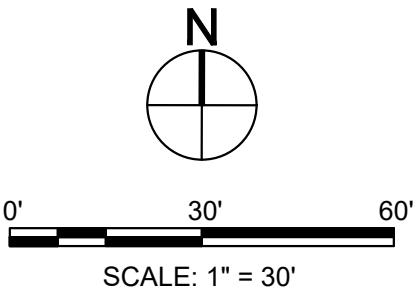
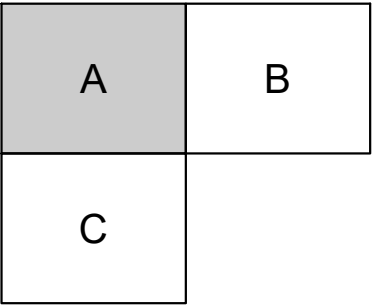
FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTA) FY23, PN 96182 VOLUME 1 - SITE	OVERALL GRADING PLAN
---	----------------------

SHEET ID
CG101



GENERAL NOTES

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
B1-OS	3' X 3' GRATED OUTLET N: 477450.54 E: 1918965.96 RIM: 295.50 INV OUT (FES-9): 291.41
B2-OS	2' X 2' GRATED OUTLET N: 477278.87 E: 1918770.76 RIM: 294.50 INV OUT (FES-8): 290.29
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
FES-1	FES N: 477243.47 E: 1918990.89 INV IN (FES-2): 294.40
FES-2	FES N: 477179.00 E: 1918991.24 INV OUT (FES-1): 294.80
FES-3	FES N: 477298.37 E: 1919271.72 INV IN (FES-4): 302.18
FES-4	FES N: 477248.76 E: 1919361.59 INV OUT (FES-3): 303.60
FES-8	FES N: 477333.43 E: 1918745.22 INV IN (B2-OS): 290.06
FES-9	FES N: 477441.05 E: 1918816.26 INV IN (B1-OS): 290.82

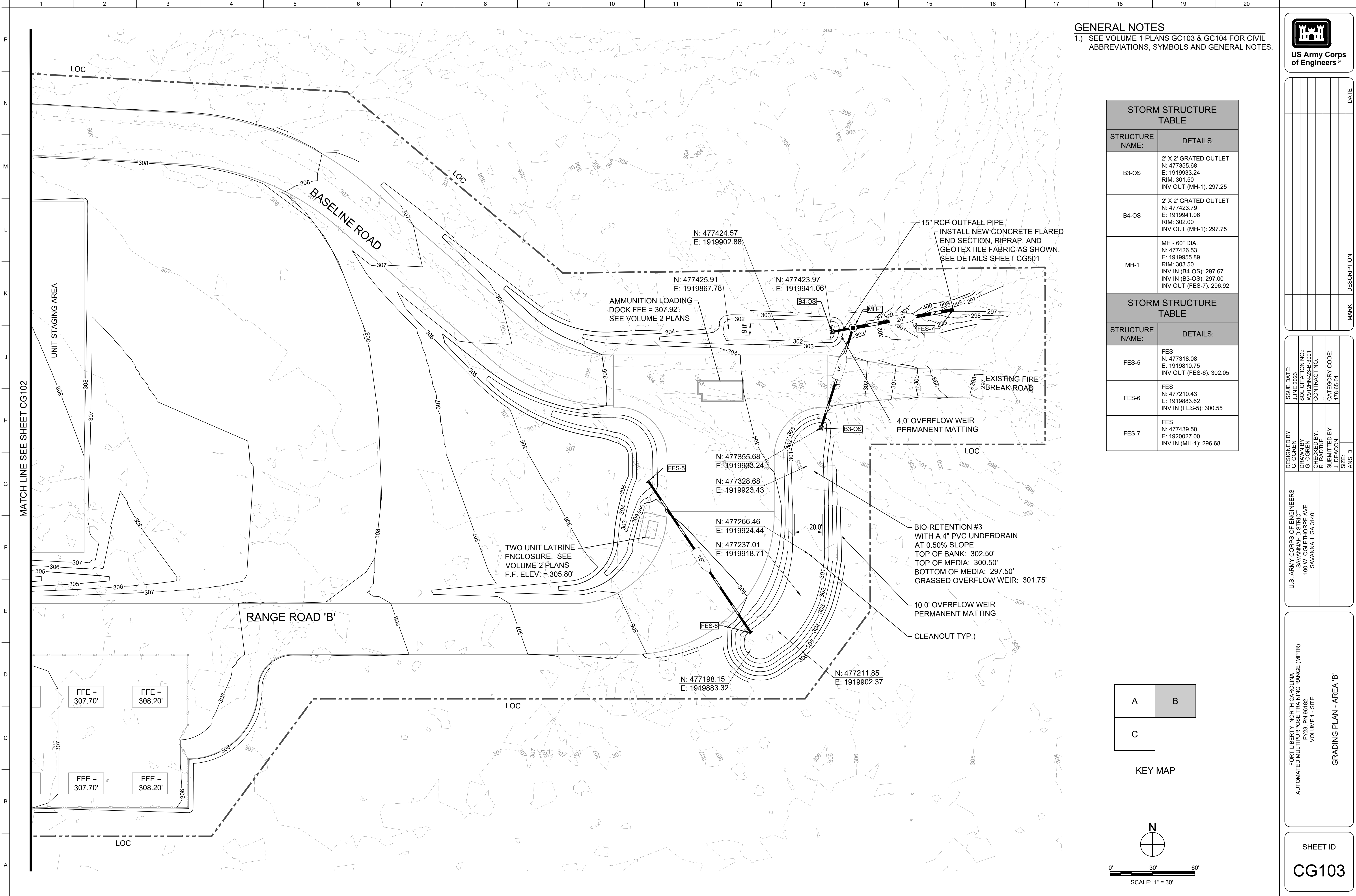
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U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY: SAVANNAH DISTRICT DRAWN BY: G. OGDEN CHECKED BY: R. RADTKE	ISSUE DATE: JUNE 2023 DRAWING NO.: W912HN-23-B-3001 CONTRACT NO.: -	CATEGORY CODE: 17A-B5501
	SUBMITTED BY: J. S. SACKON DATE: SIZE: ANSI D		

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTFR)
FY23, PN 96182
VOLUME 1 - SITE

SHEET ID

CG102

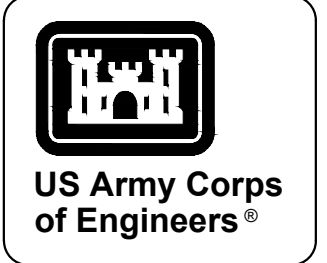
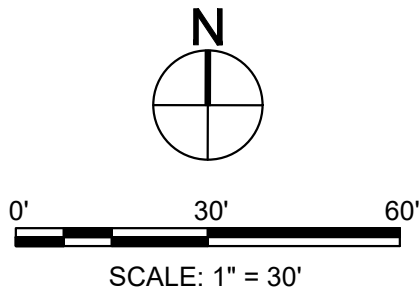


GENERAL NOTES
1.) SEE VOLUME 1 PLANS GC103 & GC104 FOR CIVIL ABBREVIATIONS, SYMBOLS AND GENERAL NOTES.

STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
B3-OS	2' X 2' GRATED OUTLET N: 477355.68 E: 1919933.24 RIM: 301.50 INV OUT (MH-1): 297.25
B4-OS	2' X 2' GRATED OUTLET N: 477423.79 E: 1919941.06 RIM: 302.00 INV OUT (MH-1): 297.75
MH-1	MH - 60" DIA. N: 477426.53 E: 1919955.89 RIM: 303.50 INV IN (B4-OS): 297.67 INV IN (B3-OS): 297.00 INV OUT (FES-7): 296.92
STORM STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:
FES-5	FES N: 477318.08 E: 1919810.75 INV OUT (FES-6): 302.05
FES-6	FES N: 477210.43 E: 1919883.62 INV IN (FES-5): 300.55
FES-7	FES N: 477439.50 E: 1920027.00 INV IN (MH-1): 296.68

A	B
C	

KEY MAP

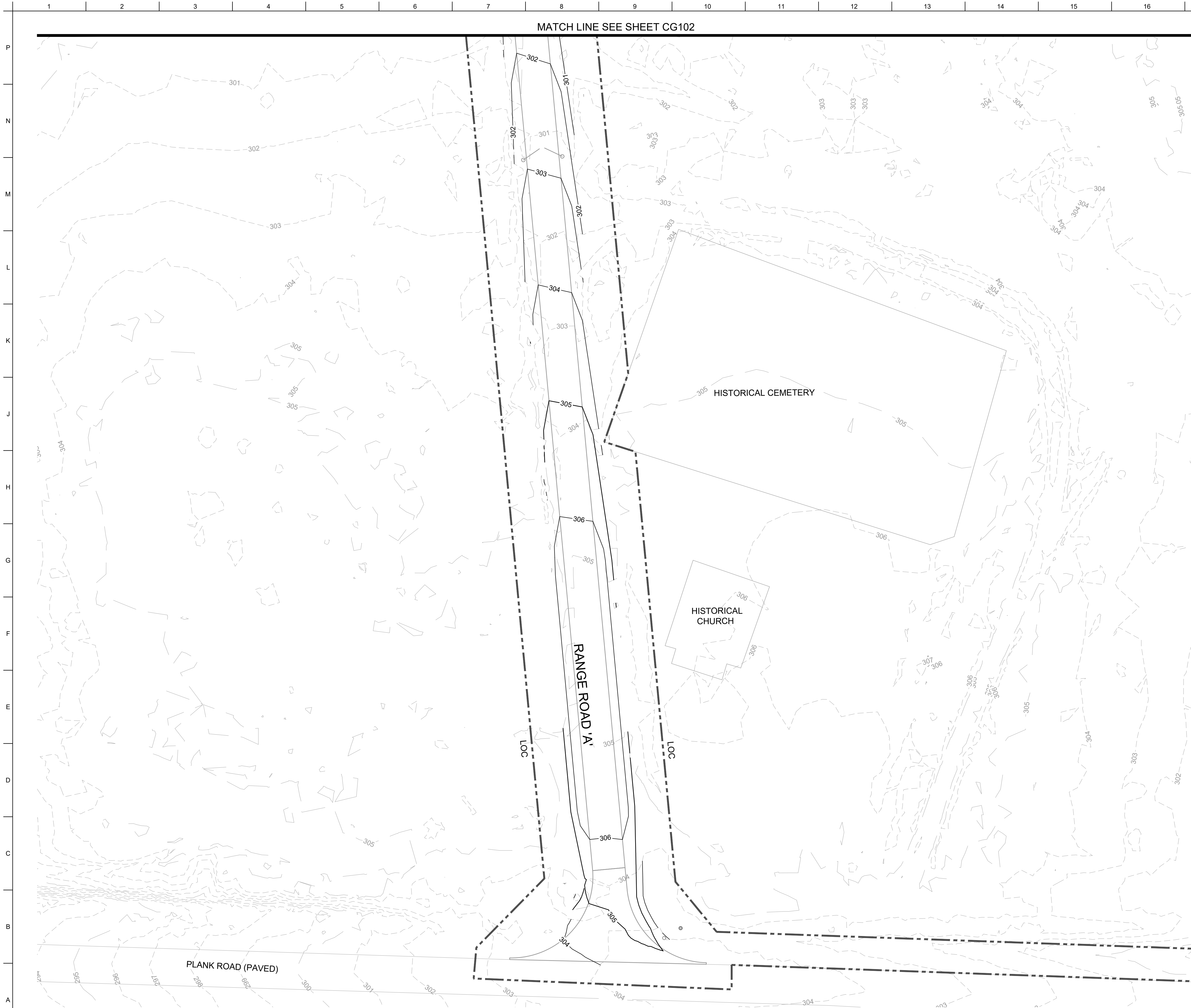


DATE	DESCRIPTION	MARK

DESIGNED BY: G. OSKIN G. OSKIN SOLICITATION NO.: SOLICITATION NO.: CONTRACT NO.: CONTRACT NO.: CHECKED BY: R. RADTKE SUBMITTED BY: J. DEACON SIZE: ANSI D	U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	ISSUE DATE: JUNE 2023 SOLICITATION NO.: SOLICITATION NO.: CONTRACT NO.: CONTRACT NO.: CATEGORY CODE: 178-85-01

FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	GRADING PLAN - AREA 'B'
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SHEET ID CG103



GENERAL NOTES

- 1.) SEE VOLUME 1 PLANS GC103 & GC104 FOR CIVIL ABBREVIATIONS, SYMBOLS AND GENERAL NOTES.



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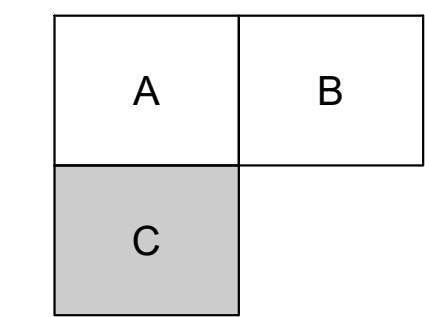
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U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY:	G. OGBEN	ISSUE DATE:	JUNE 2023
	DRAWN BY:	G. OGBEN	POLYGRAPH NO.:	W912H-23-B-3001
	CHECKED BY:	R. RADTKE	CONTRACT NO.:	--
	SUBMITTED BY:	J. DEACON	CATEGORY CODE:	178-65-01
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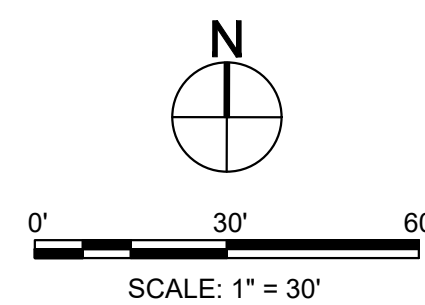
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23 PN 96182
VOLUME 1 - SITE

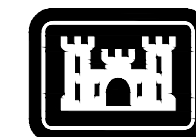
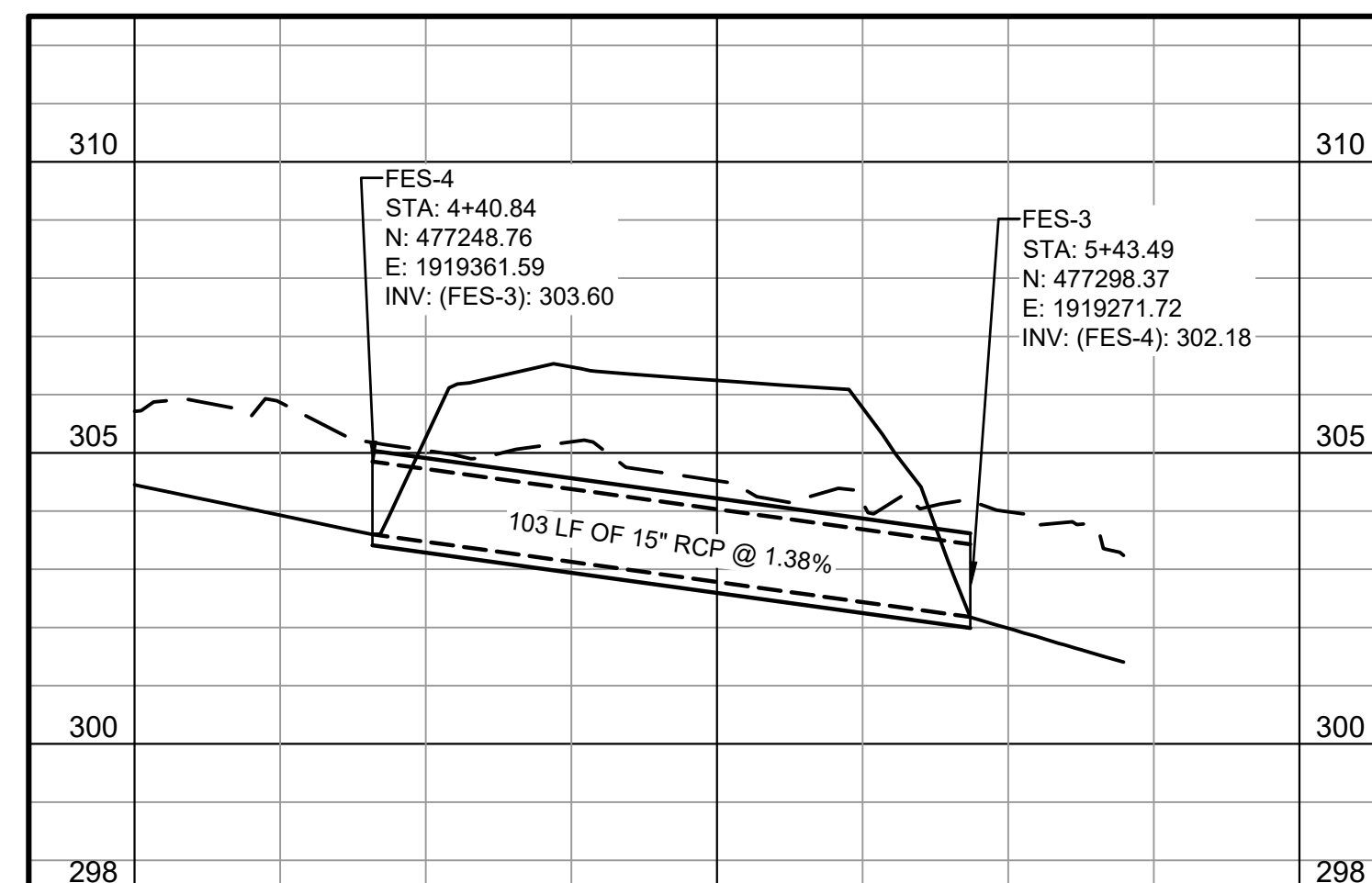
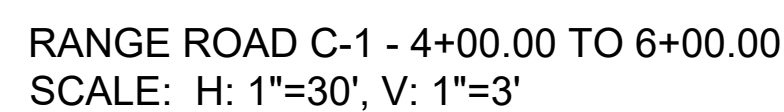
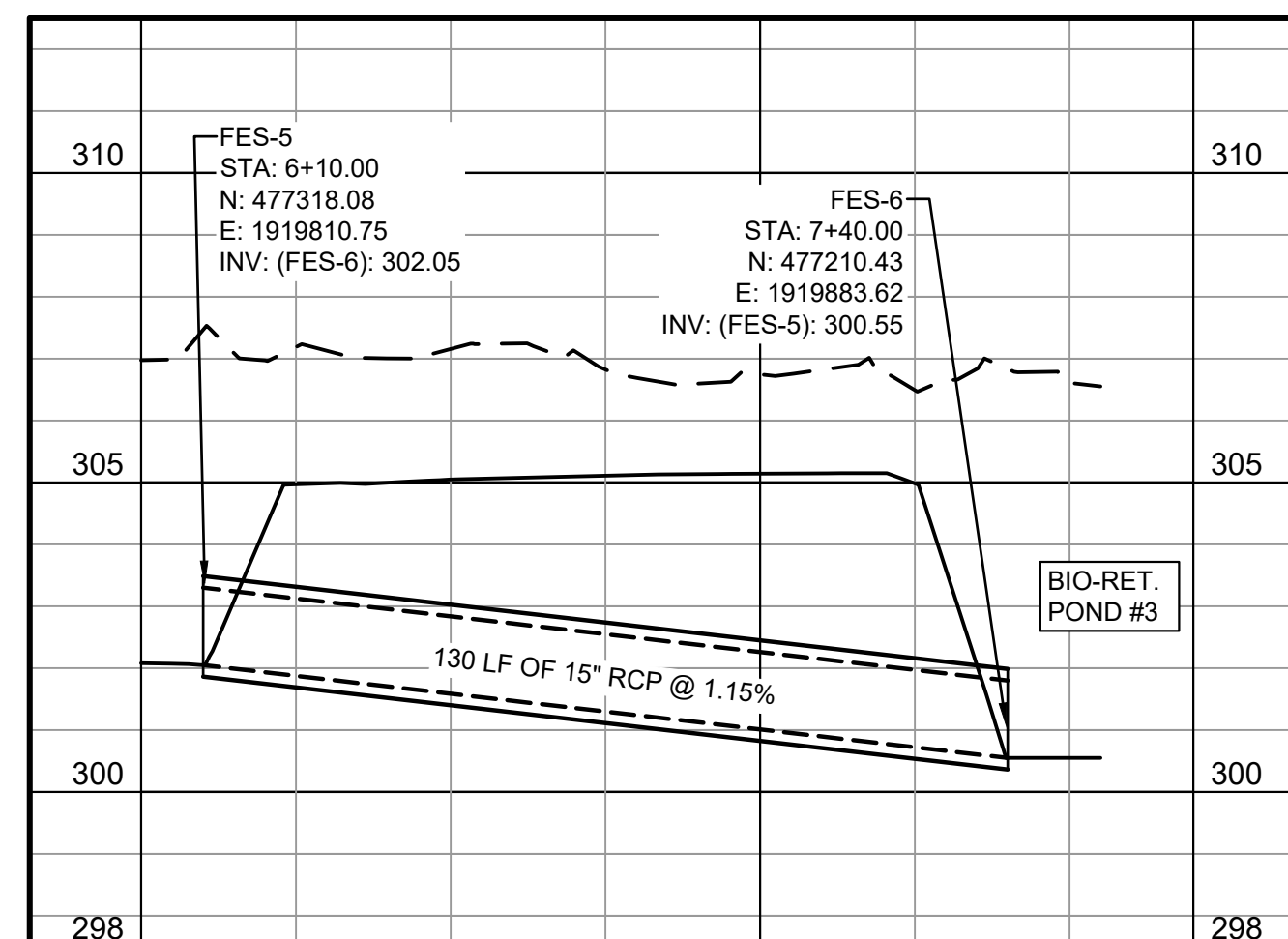
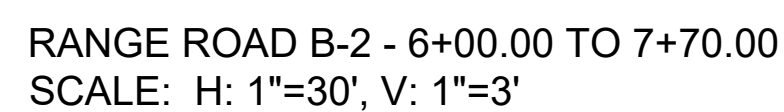
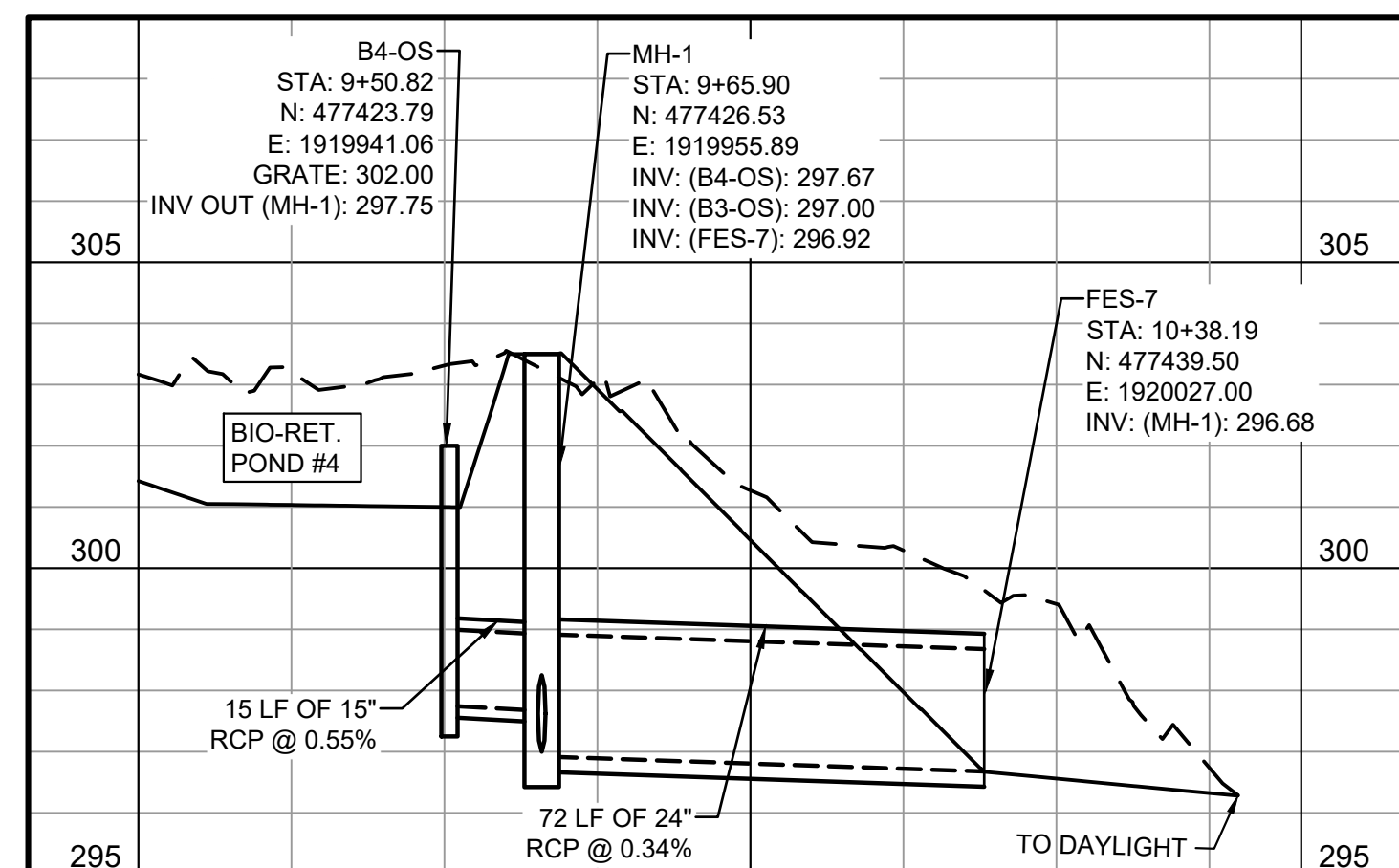
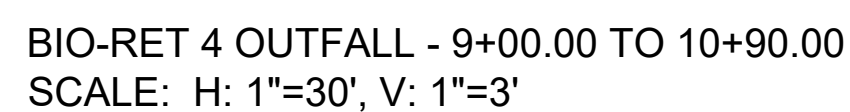
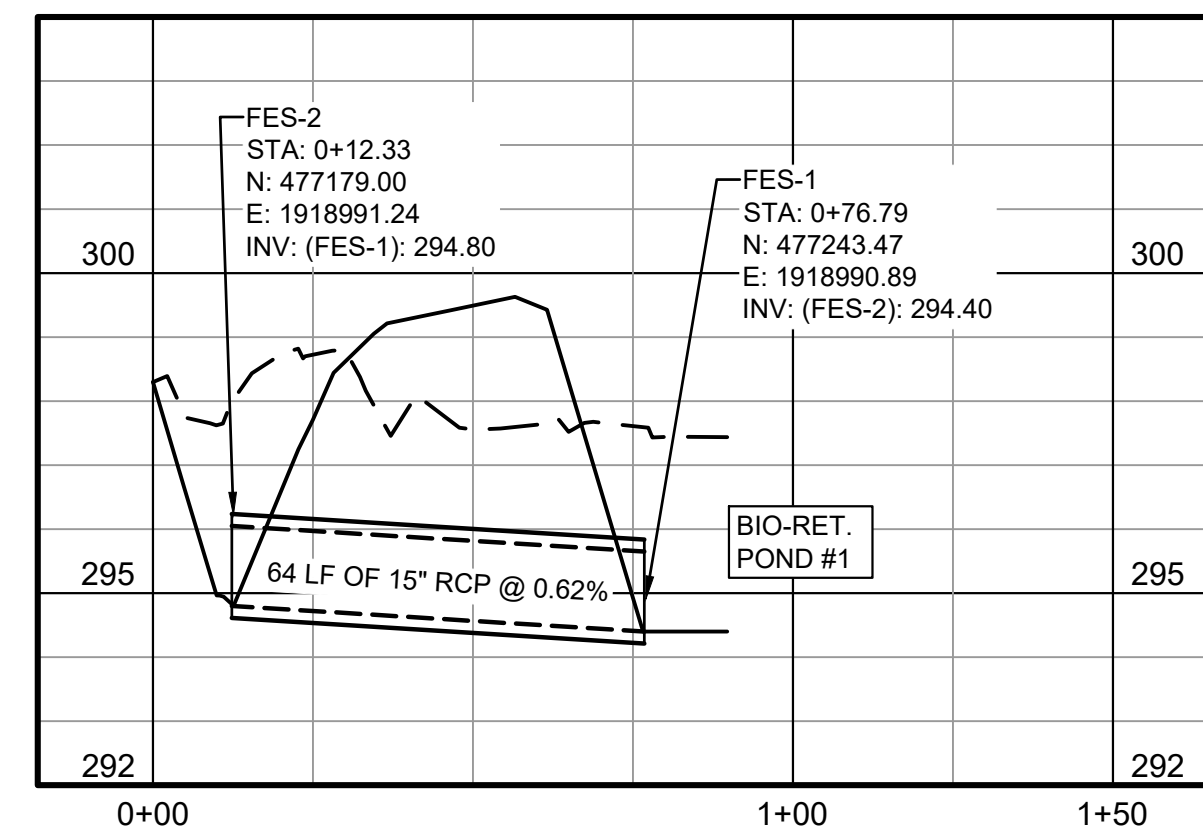
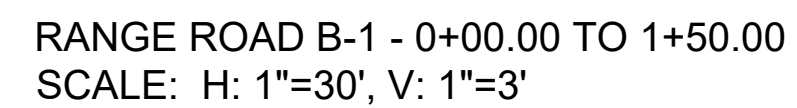
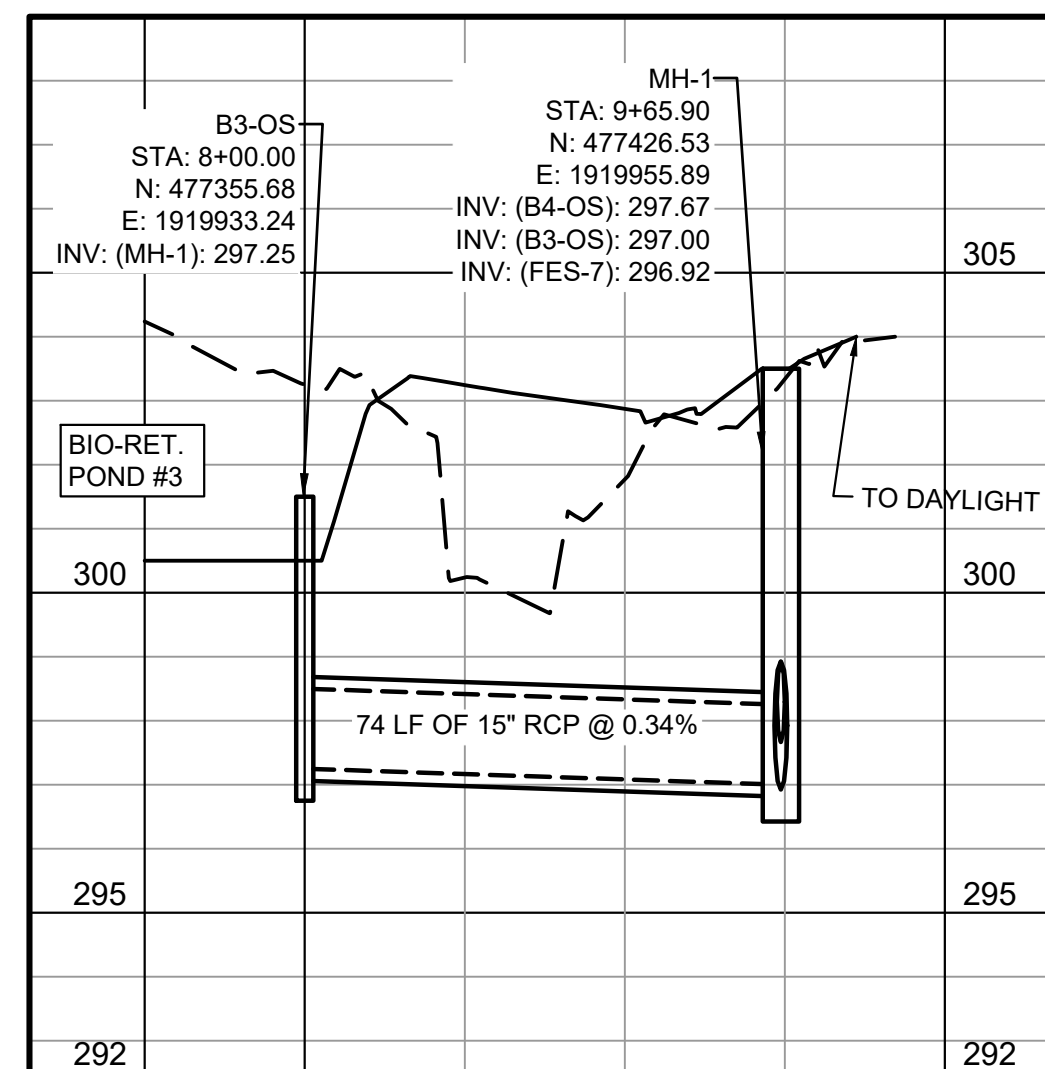
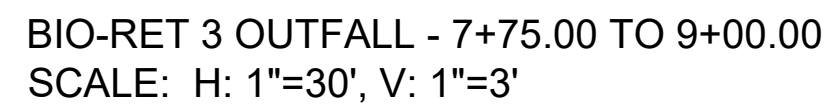
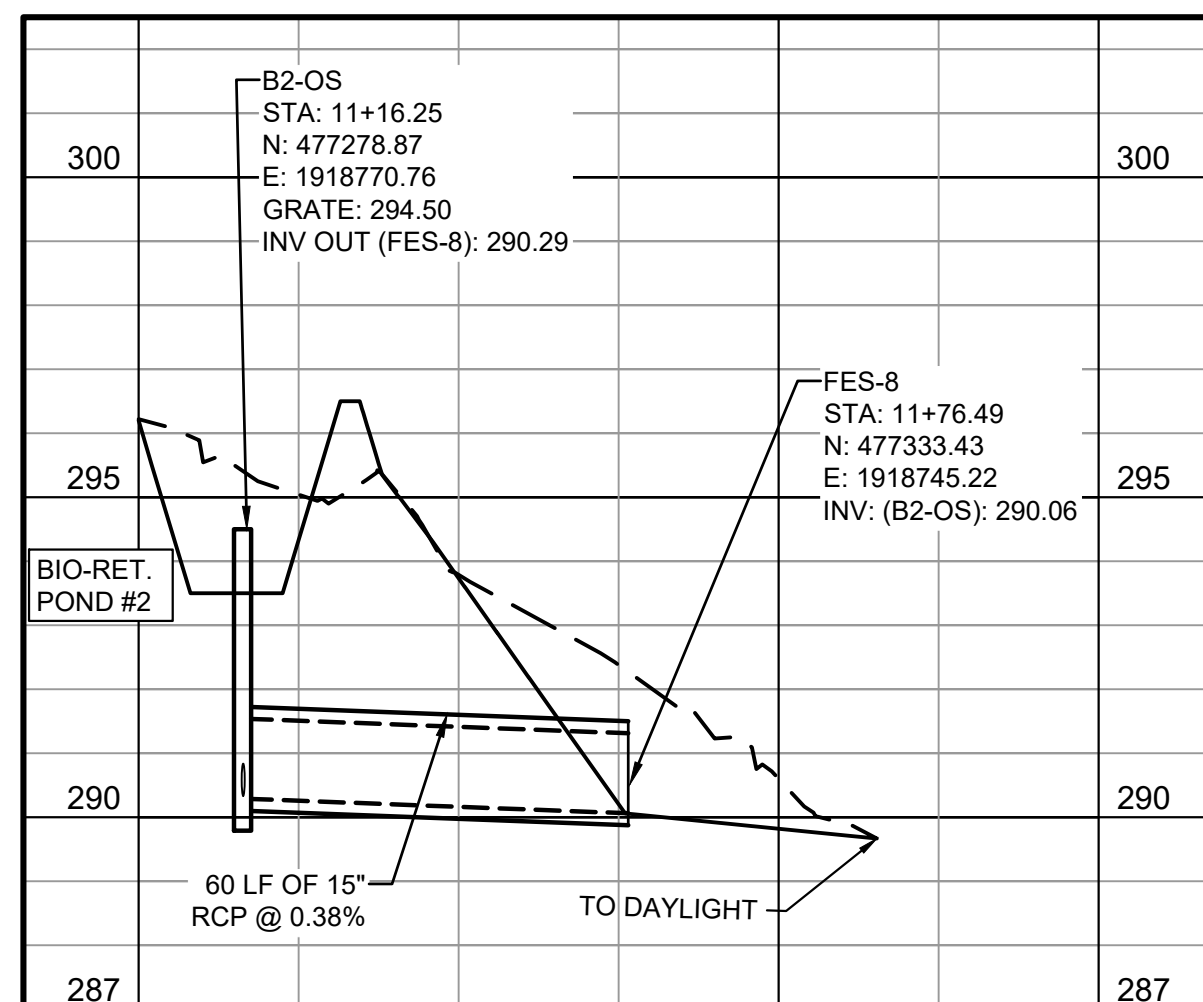
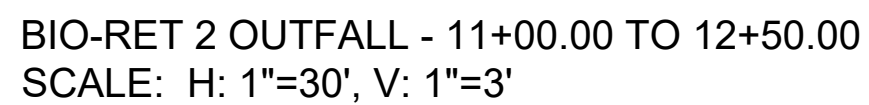
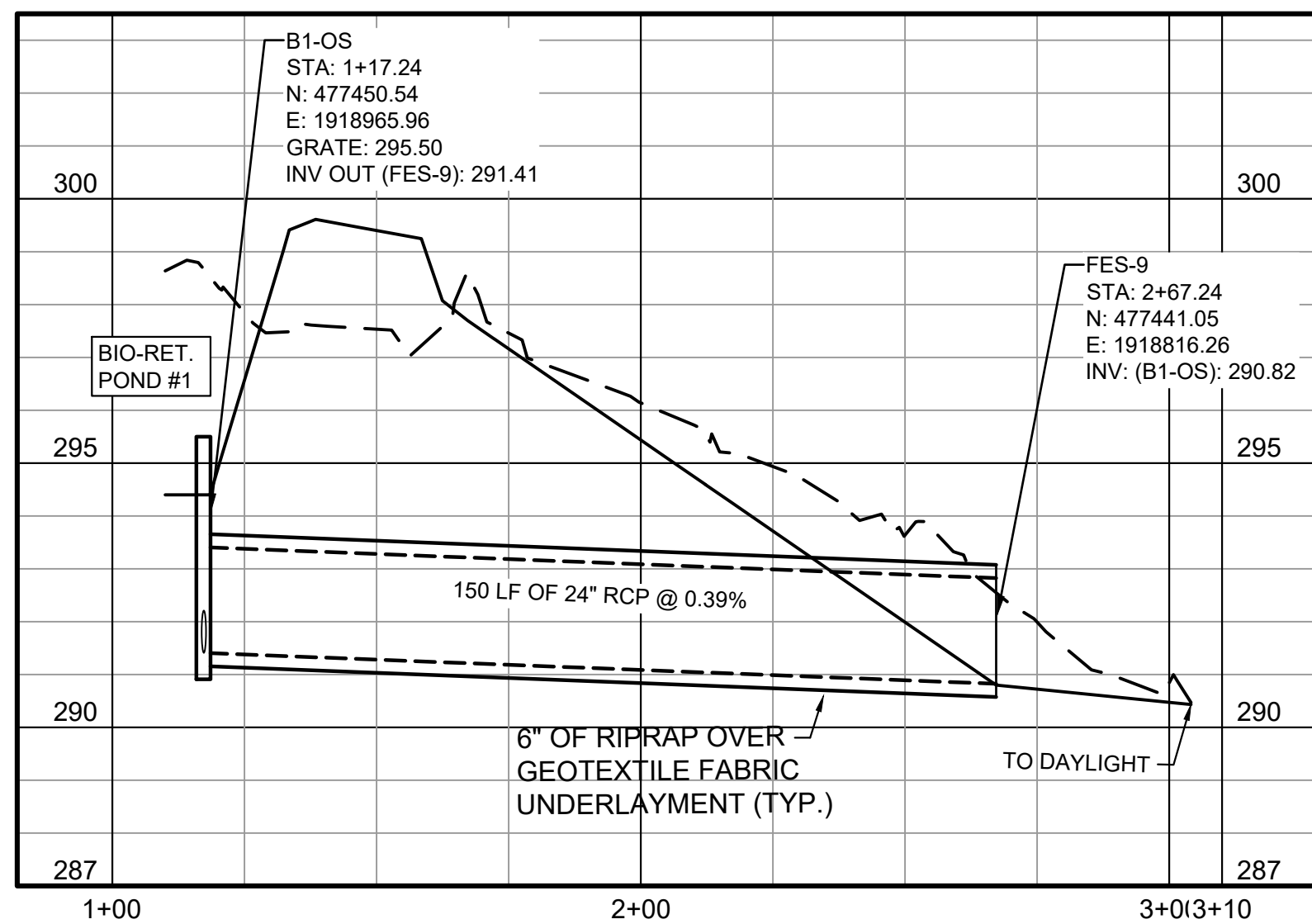
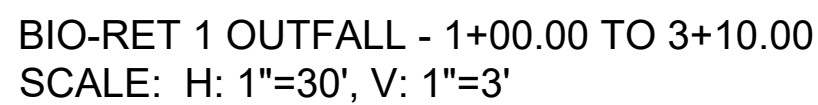
GRADING PLAN - AREA 'C'

SHEET ID
CG104



KEY MAP

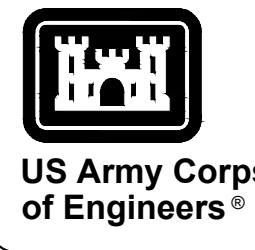
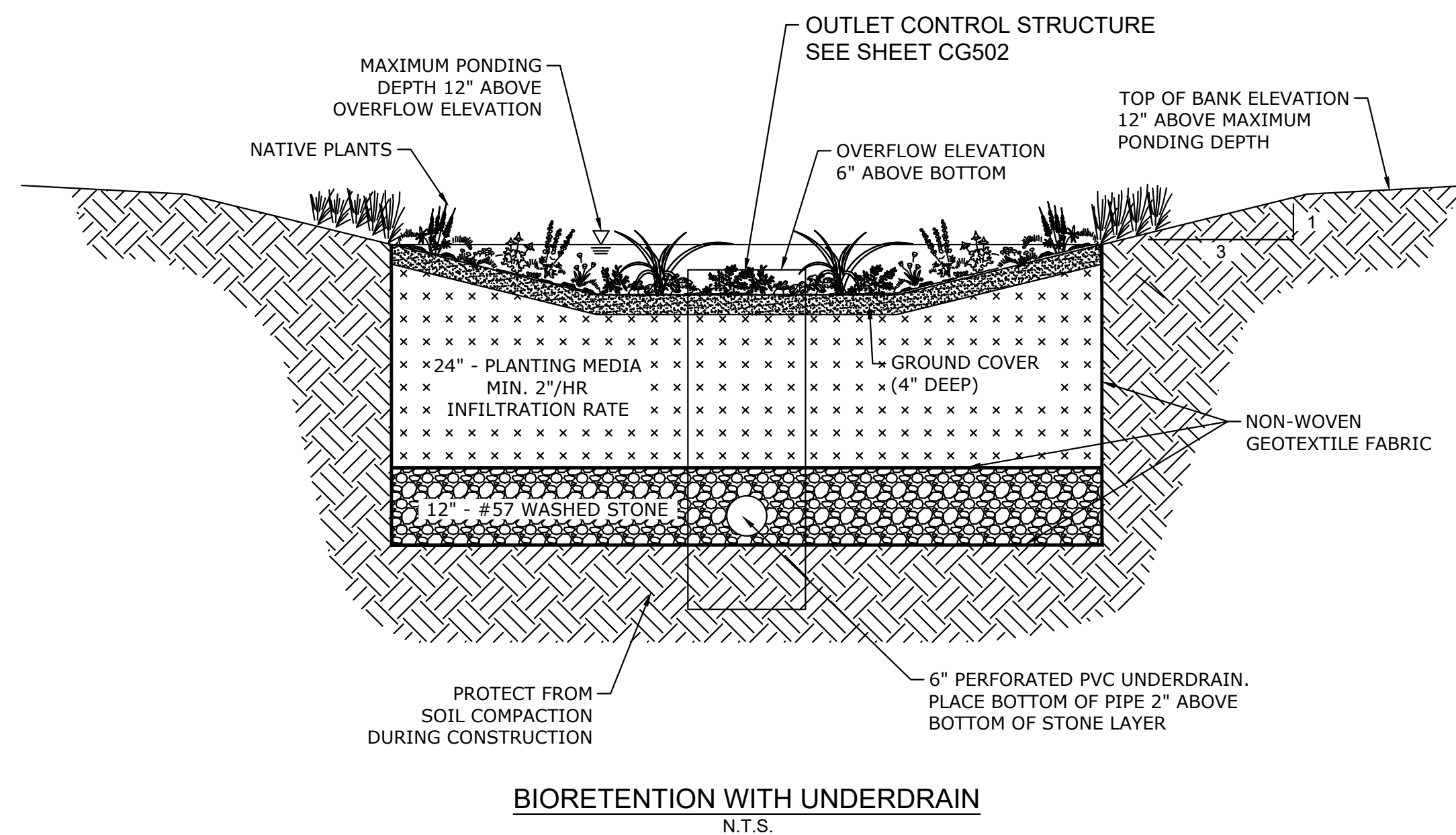
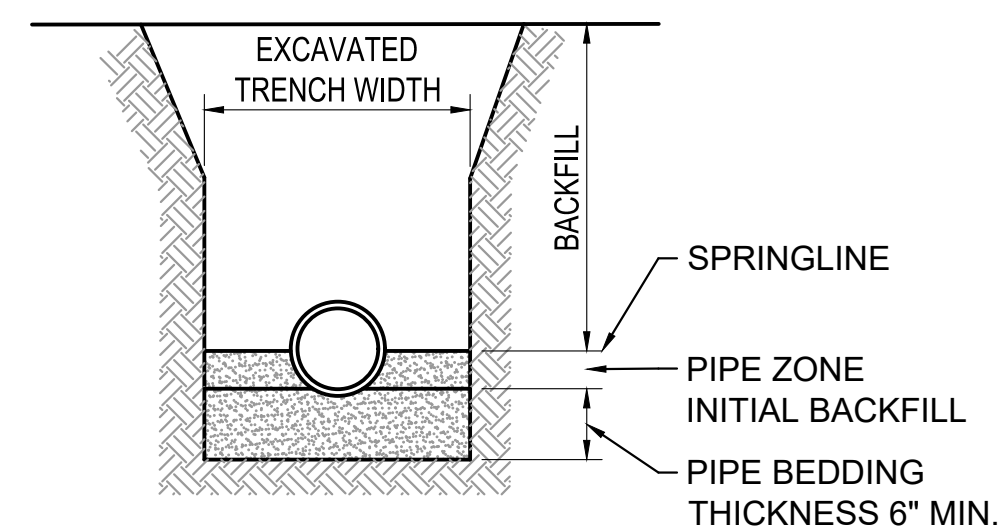
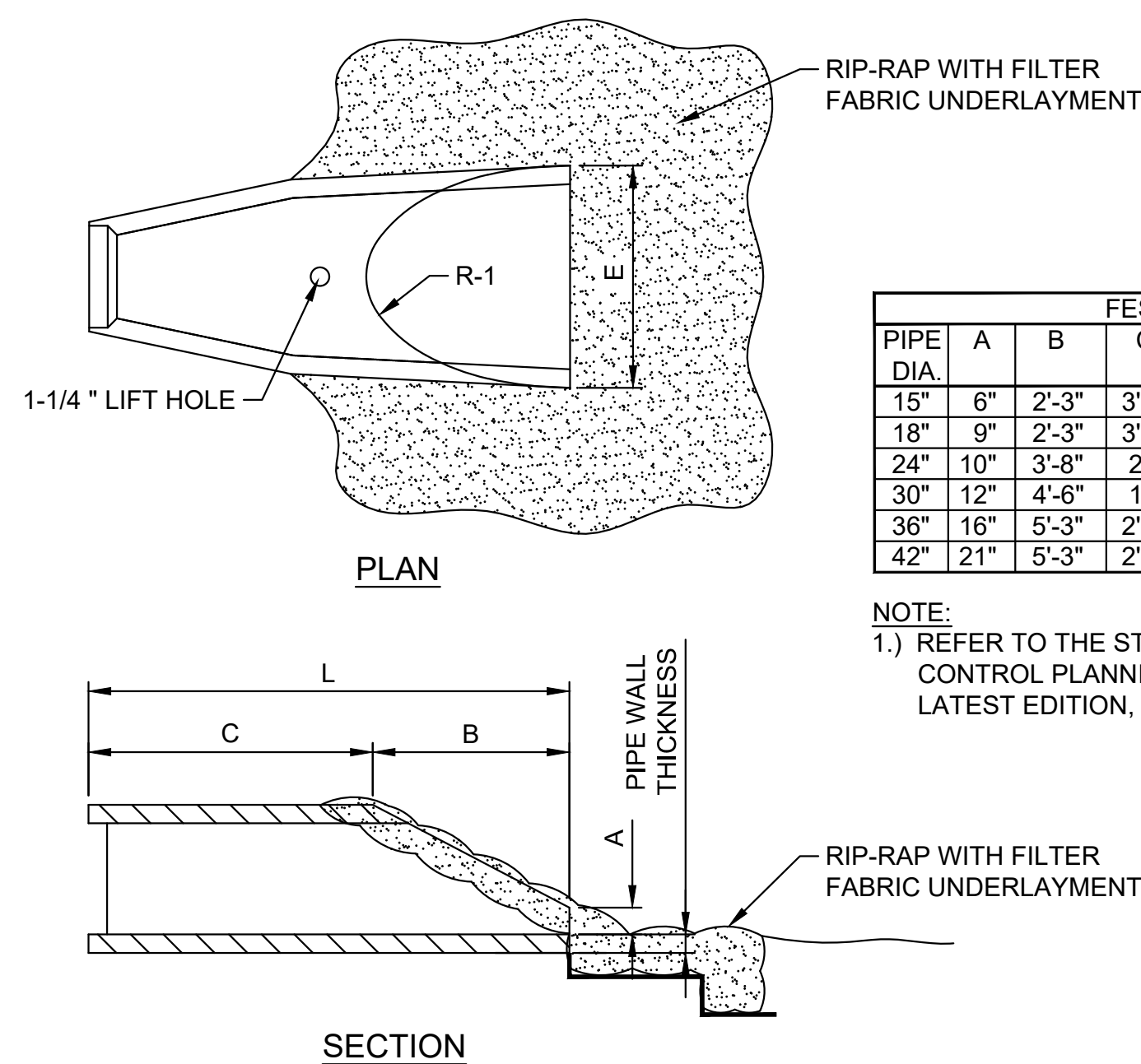
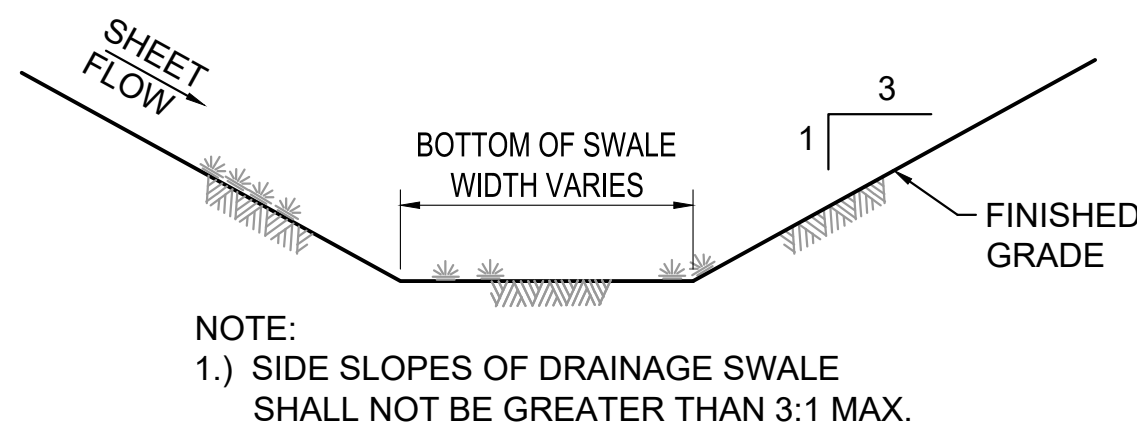
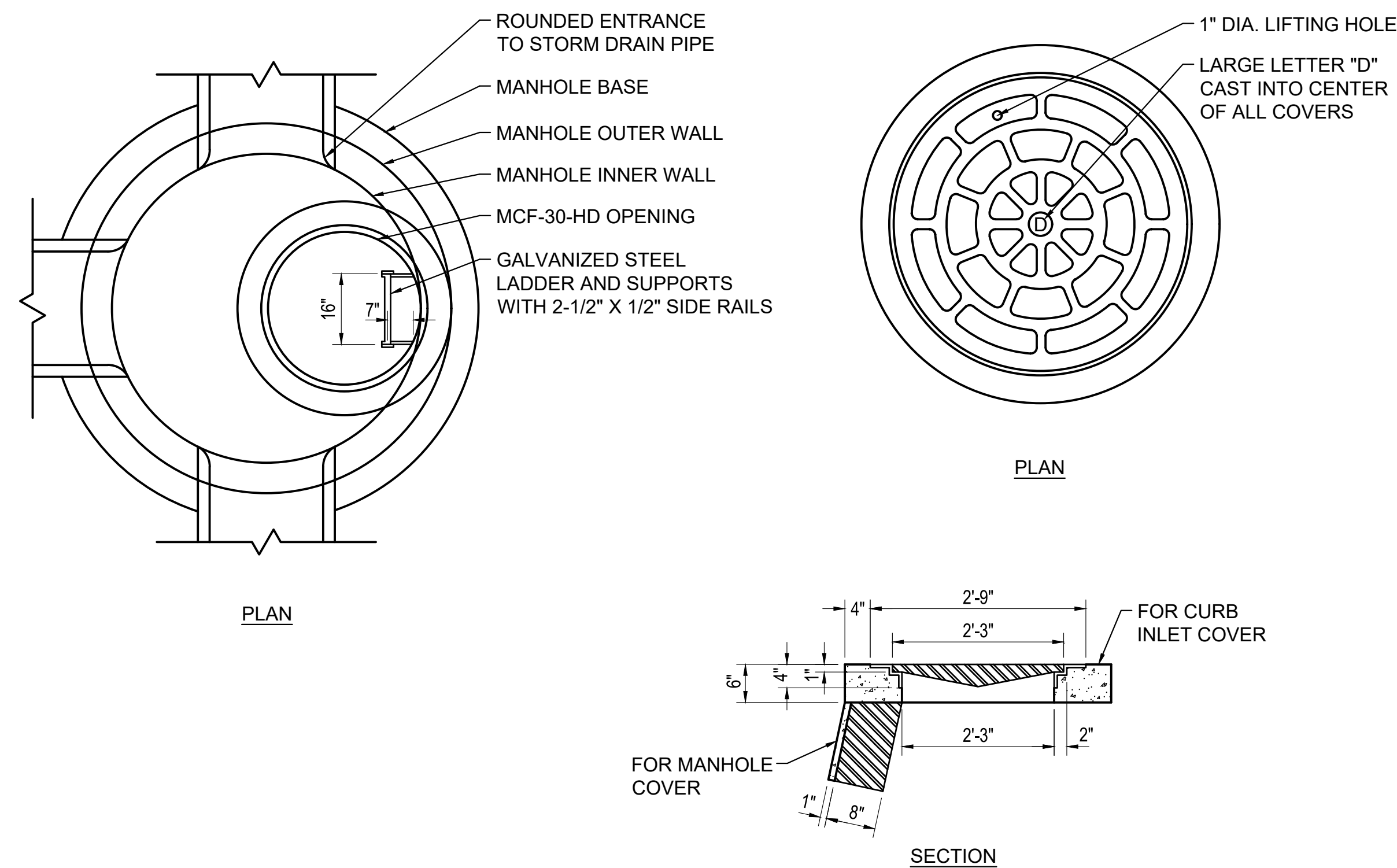
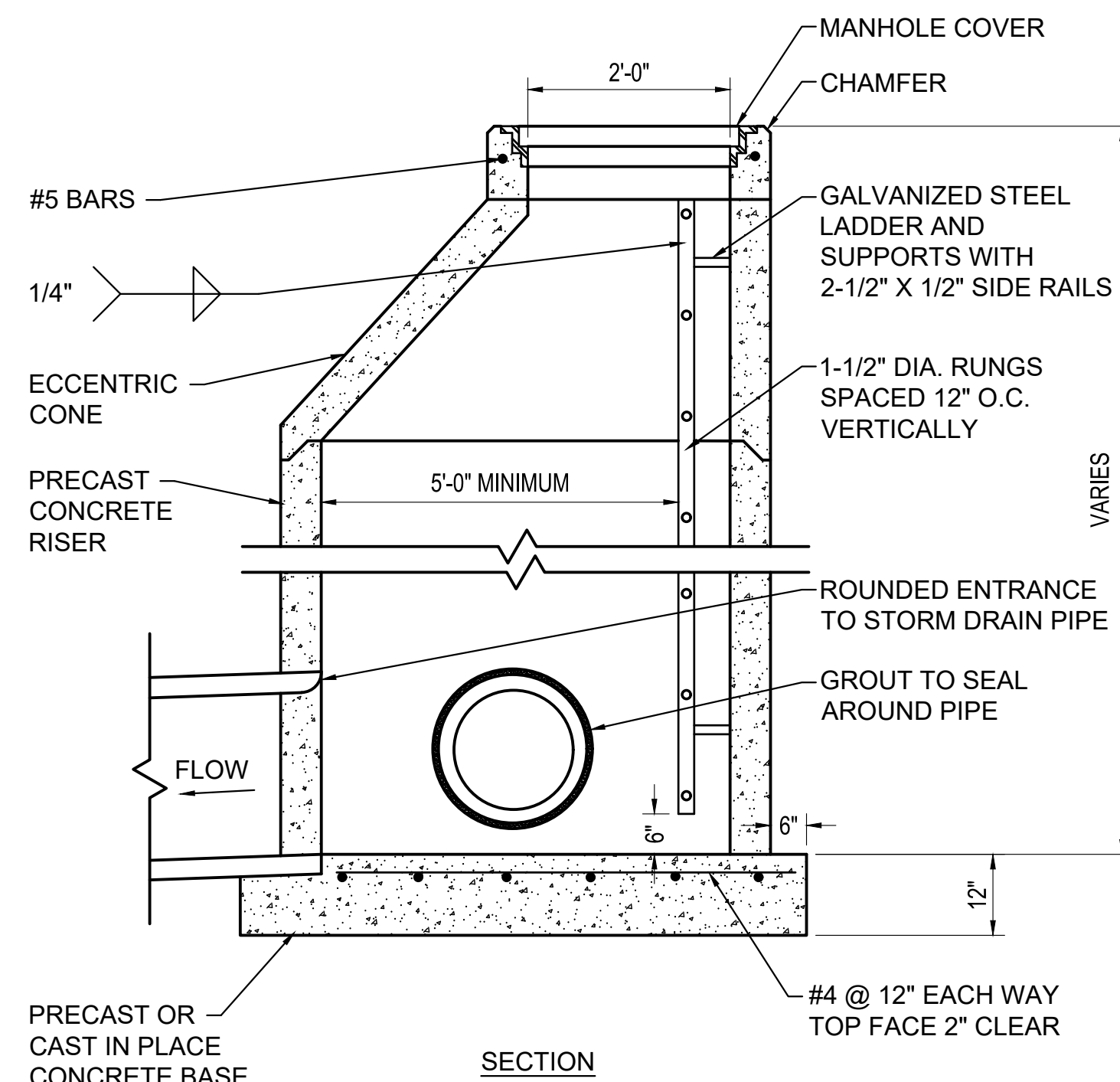
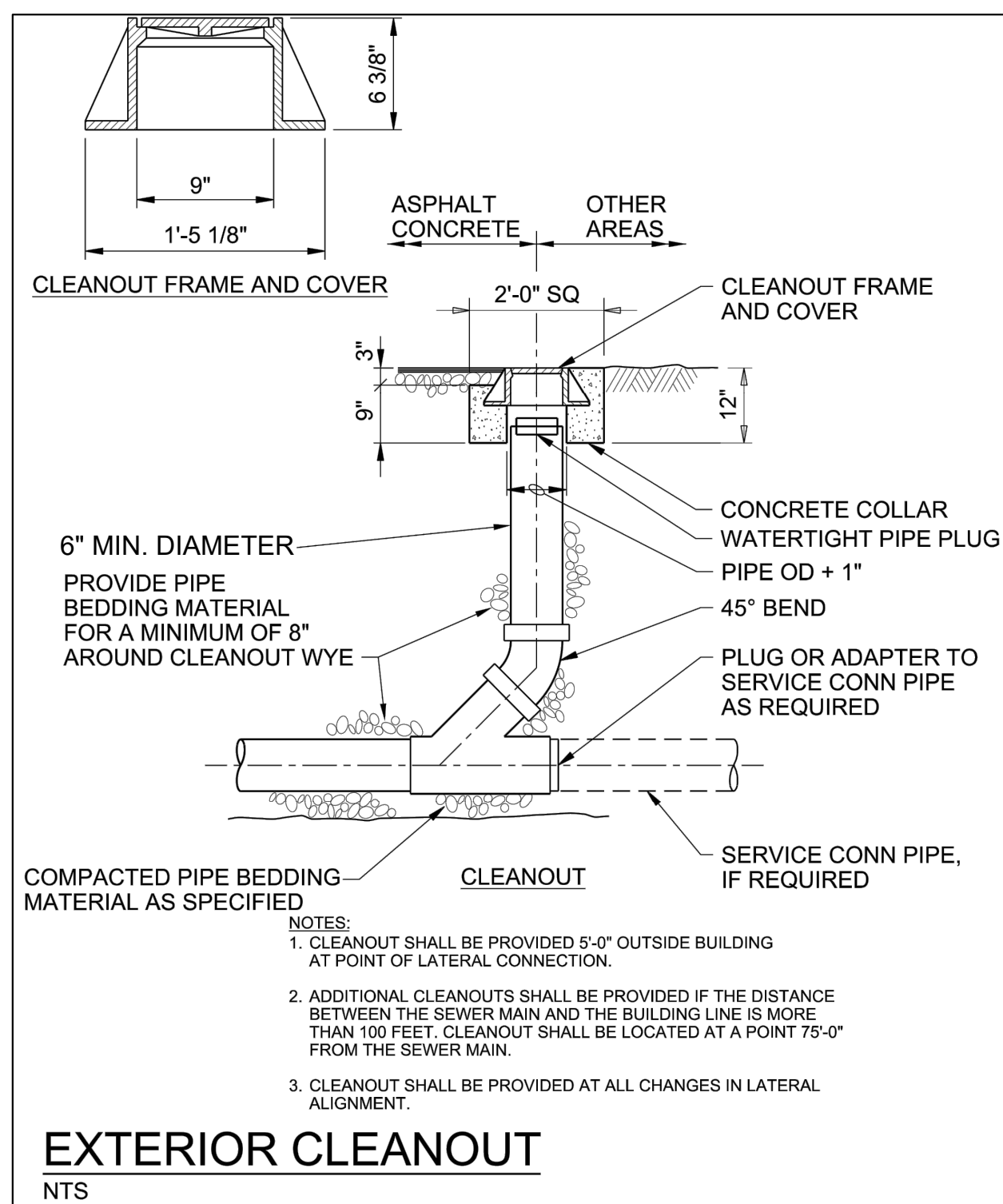


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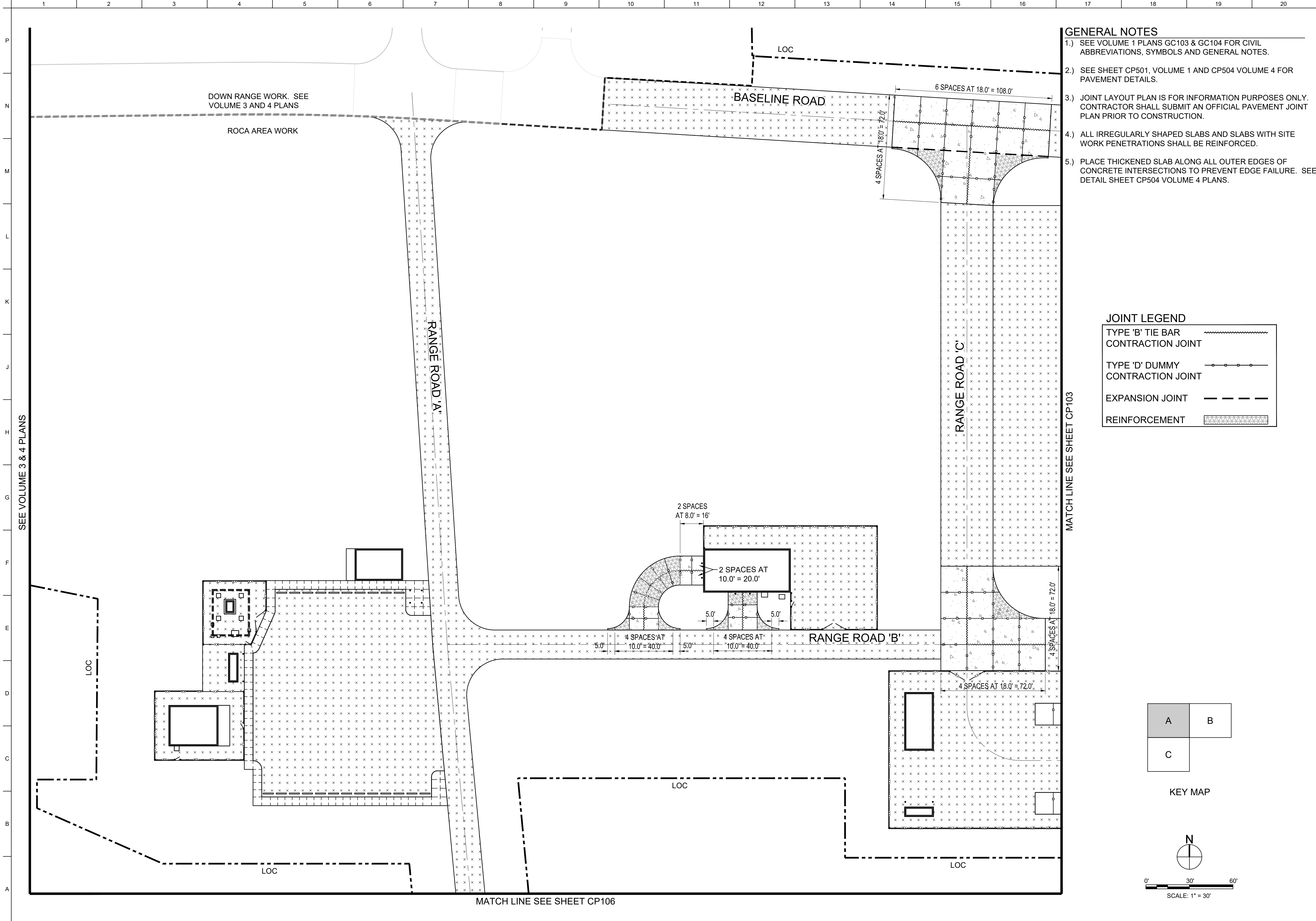
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 1000 SAVANNAH, GA. 31401	DESIGNED BY:	G. OGBURN	ISSUE DATE:	JUNE 2023
	DRAWN BY:	G. OGBURN	SOLICITATION NO.:	W812HN-23-B-3001
	CHECKED BY:	G. OGBURN	CONTRACT NO.:	
	SUBMITTED BY:	J. DEACON	CATEGORY CODE:	17B-05-01
	SIZE:			

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

SHEET ID
CG201







GENERAL NOTES

- 1.) SEE VOLUME 1 PLANS GC103 & GC104 FOR CIVIL ABBREVIATIONS, SYMBOLS AND GENERAL NOTES.
- 2.) SEE SHEET CP501, VOLUME 1 AND CP504 VOLUME 4 FOR PAVEMENT DETAILS.
- 3.) JOINT LAYOUT PLAN IS FOR INFORMATION PURPOSES ONLY. CONTRACTOR SHALL SUBMIT AN OFFICIAL PAVEMENT JOINT PLAN PRIOR TO CONSTRUCTION.
- 4.) ALL IRREGULARLY SHAPED SLABS AND SLABS WITH SITE WORK PENETRATIONS SHALL BE REINFORCED.
- 5.) PLACE THICKENED SLAB ALONG ALL OUTER EDGES OF CONCRETE INTERSECTIONS TO PREVENT EDGE FAILURE. SEE DETAIL SHEET CP504 VOLUME 4 PLANS.

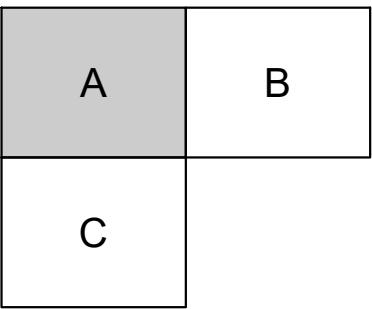
JOINT LEGEND

TYPE 'B' TIE BAR
CONTRACTION JOINT

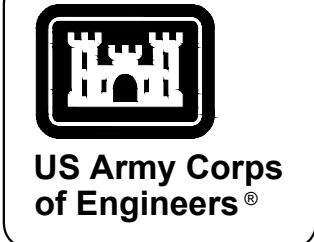
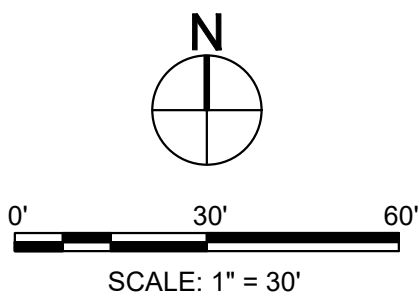
TYPE 'D' DUMMY
CONTRACTION JOINT

EXPANSION JOINT

REINFORCEMENT



KEY MAP



MARK	DESCRIPTION	DATE

DESIGNED BY: G. O'GREN	ISSUE DATE: JUNE 2023
DRAWN BY: S. HARRIS	SOLICITATION NO.: SOL178-85-001
CHECKED BY: R. RADTKE	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-85-01
SIZE: ANSI D	

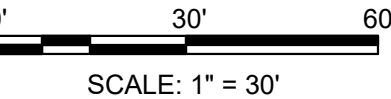
U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT
100 W. OGLETHORPE AVE.
SAVANNAH, GA 31401

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

CIVIL SITE
PAVEMENT JOINT PLAN - AREA 'A'

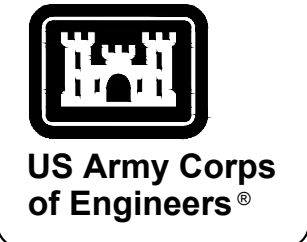
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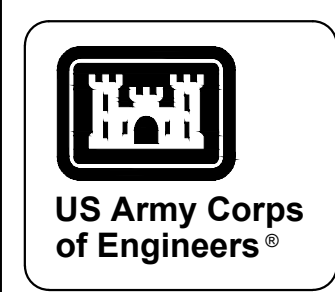
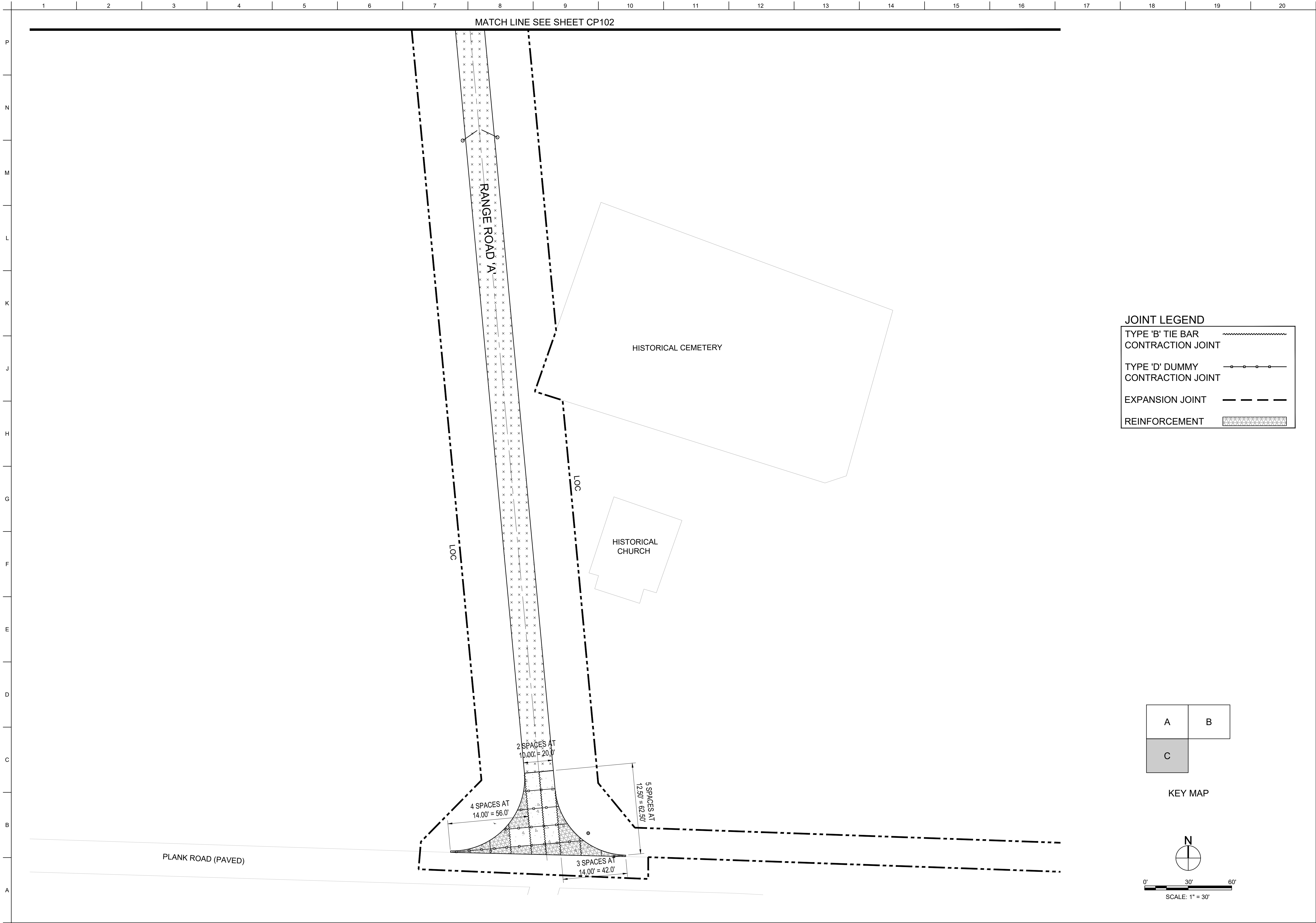
CP102



SHEET ID

CP103



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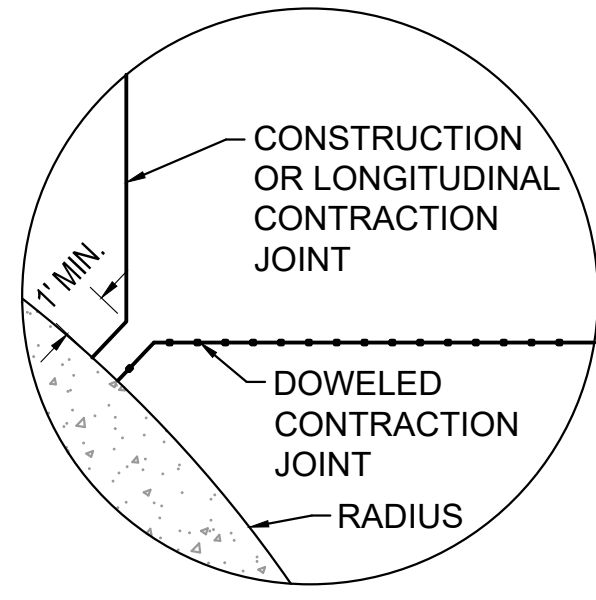
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY:		ISSUE DATE:	
	G. OGBEN		JUNE 2023	
	DRAWN BY:		SOLICITATION NO.:	
	W. JONES		WJ22-953001	
	CHECKED BY:		CONTRACT NO.:	
	R. BODTKE			
	SUBMITTED BY:		CATEGORY CODE:	
	J. DEACON		178-95-01	
	SIZE:			
	ANSI D			

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

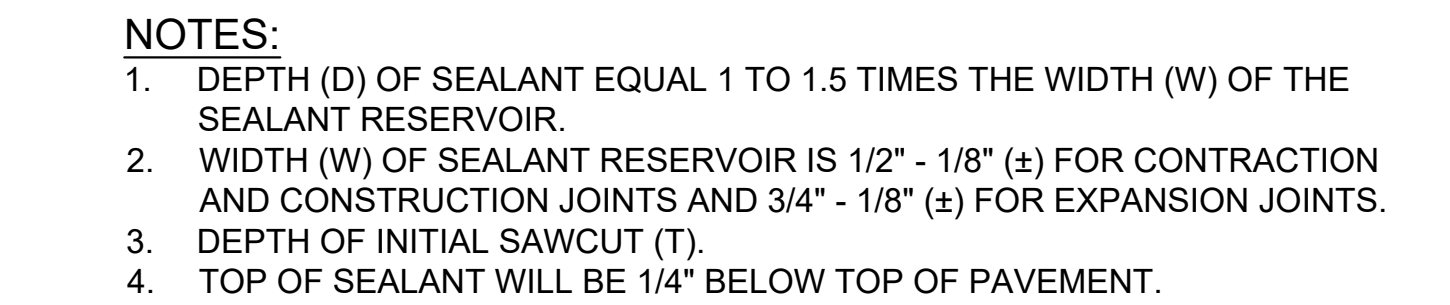
CIVIL SITE
PAVEMENT JOINT PLAN - AREA 'C'

SHEET ID

CP104



DETAIL B



POURED JOINT SEALANT DETAILS FOR RIGID PAVEMENT WITH BACKER MATERIAL



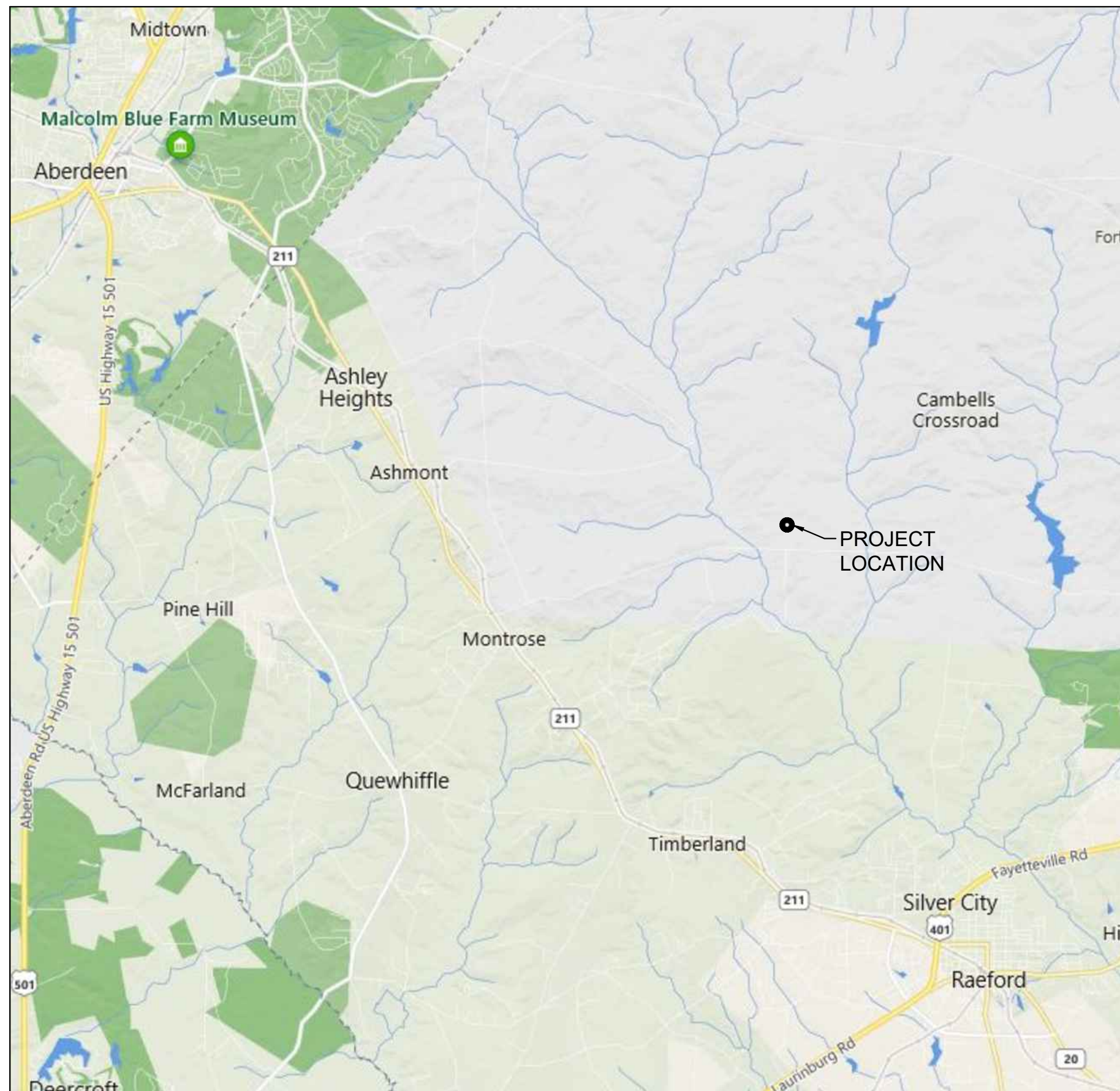
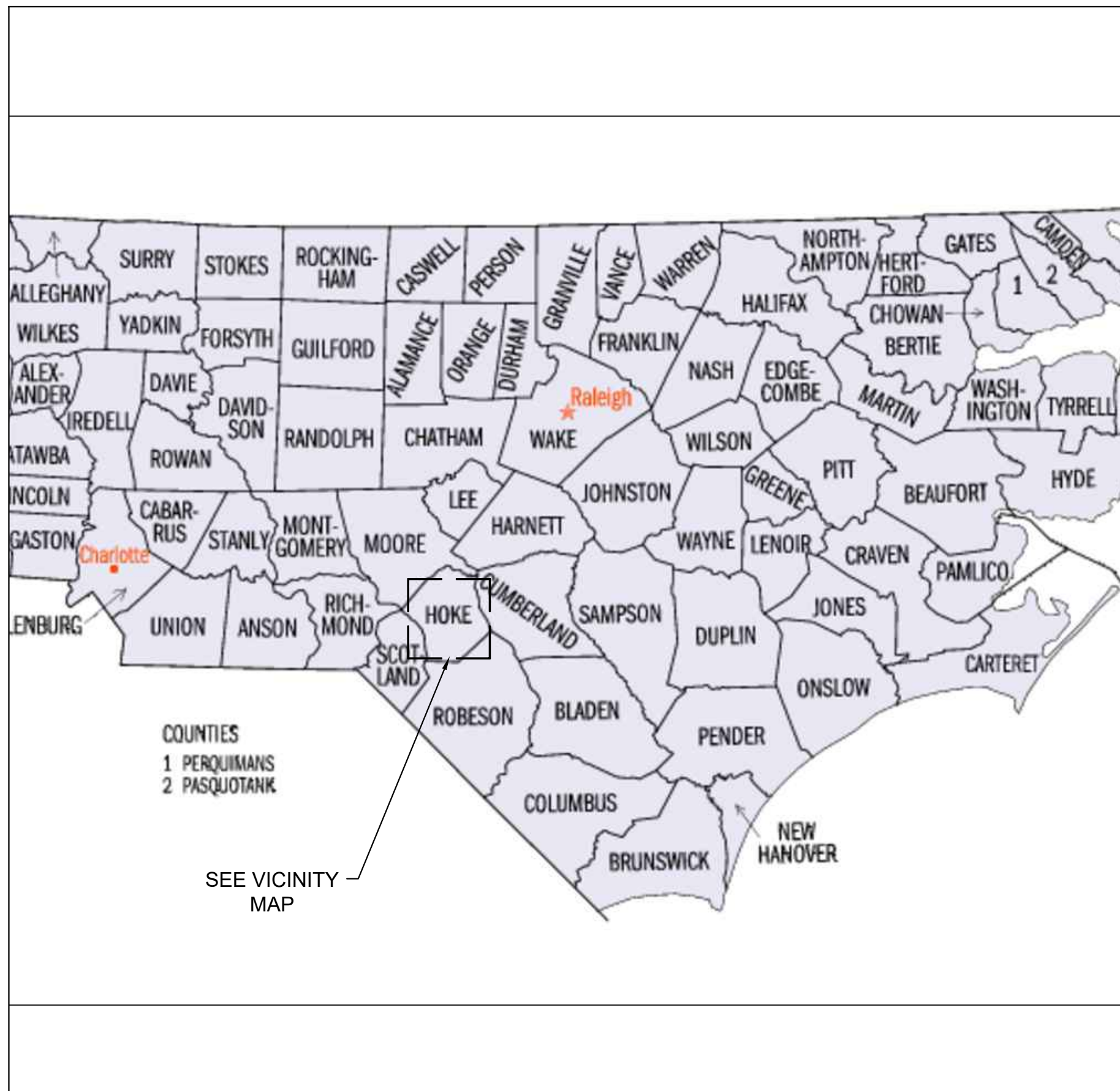
1.) SEE SHEET CP504 VOLUME 4 FOR PAVEMENT DETAILS NOT SHOWN HERE.



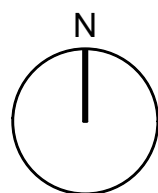
U.S. ARMY CORPS OF ENGINEERS 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DRAWN BY: G. OGBEN		SOLICITATION NO.: W12H2N29-4-3001		JUNE 2023	
	CHECKED BY: R. BOGGS		CONTRACT NO.:			
	SUBMITTED BY: J. DEACON		CATEGORY CODE: 178-85-01			
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SHEET ID

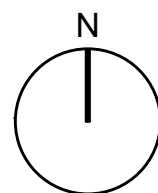
CP501



NC COUNTY MAP



VICINITY MAP



CONTACT INFORMATION

OWNER / DEVELOPER	OPERATOR	DESIGN PROFESSIONAL
OWNER	CONTRACTOR	PROJECT ENGINEER
DIRECTOR OF PUBLIC WORKS KENNETH V. MCMILAN (910) 907-5325	USACE RESIDENT ENGINEER	RACHEL RADTKE, P.E. (912) 652-5507 KENNETH SANDERS, P.E. POLY INC. (334) 793-4700

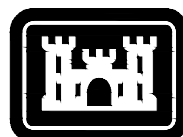
PROJECT INFORMATION AND DATA:

- | | |
|---|---|
| 1.) PROJECT DESCRIPTION | |
| THE PROJECT IS LOCATED IN HOKE COUNTY, NORTH CAROLINA.
CONSTRUCTION CONSISTS OF A NEW RANGE OPERATIONS AND CONTROL AREA (ROCA) | |
| 2.) TOTAL SITE AREA: | 702 ACRES |
| TOTAL DISTURBED AREA: | 194 ACRES |
| ROCA AREA (VOL. 1) | 21 ACRES |
| DOWN RANGE AREA (VOL. 3&4) | 173 ACRES |
| 3.) EXISTING CONDITIONS: | UNDEVELOPED |
| 4.) PREDOMINANT HYDROLOGIC SOIL GROUP: | B |
| 5.) STORM WATER MANAGEMENT CONSIDERATIONS: | ROCK BIO-RETENTION |
| 6.) EXISTING CONTOURS OBTAINED BY: | LIDAR SURVEY PROVIDED BY POLY INC. |
| 7.) DEBRIS DISPOSAL: | ALL CONSTRUCTION RELATED DEBRIS WILL BE
HAULED AWAY TO A STATE APPROVED LANDFILL. |
| 8.) FLOOD PLAIN ZONE: | THE PROPERTY DOES NOT LIE WITHIN A FLOOD
HAZARD ZONE PER US FIRM MAP# 3710940600J
& 3710942700J DATED 16 & 17 OCTOBER 2006. |
| 9.) FACILITY NAME: | AUTOMATED MULTIPURPOSE TRAINING RANGE
RANGE OPERATIONS AND CONTROL AREA (ROCA) |
| 10.) PROJECT NUMBER: | 96182 |

IDENTIFY THE PROJECT RECEIVING WATERS AND DESCRIBE ALL ADJACENT AREAS INCLUDING STREAMS, LAKES, RESIDENTIAL AREAS, WETLANDS, ETC. WHICH MAY BE AFFECTED.

ROCKFISH CREEK

EMD APPROVAL: REVIEWER CERTIFICATION No.



**US Army Corps
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[illegible]

U.S. ARMY CORPS OF ENGINEERS 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY: G. OGBEN	ISSUE DATE: JUNE 2023
	DRAWN BY: G. OGBEN	SOLICITATION NO.: W312HN-23-B-3001
	CHECKED BY: R. RADTKE	CONTRACT NO.: -
	SUBMITTED BY: J. DEACON	CATEGORY CODE: 17B-65-01
	APPROVED BY: ANSI/D	

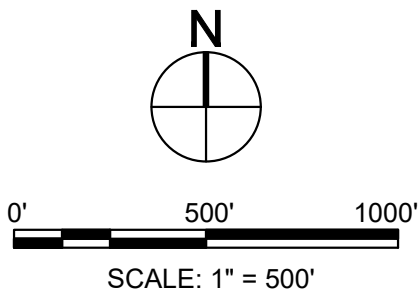
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

E&SC COVER

SHEET ID

CG700

OVERALL EROSION CONTROL PLAN VIEW
(INCLUDES OVERALL OF ONSITE AND OFFSITE TRENCHING AND DIRECTIONAL BORING UTILITY WORK)



GENERAL NOTES

- 1.) SEE SHEET CG719A FOR E&SC LEGEND.
- 2.) ALL DISTURBED AREAS SHALL BE STABILIZED TEMPORARILY AND PERMANENTLY USING APPROVED SEEDING MIXTURES LISTED IN SPECIFICATION SECTION 32 92 19. SEE ALSO THE GROUND STABILIZATION CHART ON SHEET CG742.

PROJECT LOCATION INFORMATION:

- 1.) SITE DRAINS TO ROCK FISH AND JUNIPER CREEKS WHICH FALL WITHIN THE CAPE FEAR RIVER BASIN.

OFFSITE COMMUNICATION LINE UTILITY WORK:

- 1.) OFFSITE COMMUNICATION LINE AND ASSOCIATED EQUIPMENT SHALL BE INSTALLED WITHIN THE LIMITS OF DISTURBANCE (LOD) SHOWN ON PLANS. SILT FENCE SHALL BE INSTALLED WITHIN LOD PARALLEL TO THE UTILITY LINE TRENCHES AT THE BASE OF THE SLOPE IF DISTURBED AREA (TRENCHES, HANDHOLD HOLES, AND OTHER EXPOSED EARTH) CAN NOT BE BACKFILLED TO FINISH GRADE WITHIN 24HRS. ALL TRENCHED AREAS SHALL BE GRASS SEEDDED AND MULCHED WITHIN 7 DAYS OF LAND DISTURBANCE ACTIVITY.

SEE EROSION CONTROL LEGEND ON SHEET CG700A.

OFFSITE COMMUNICATION UTILITY PLAN DETAIL

* USE FOR DIRECTIONAL BORING STREAM CROSSING EROSION CONTROL DETAILS AND OFFSITE UTILITY TRENCH TYPICAL DETAILS (INITIAL, INTERMEDIATE & FINAL PHASE)



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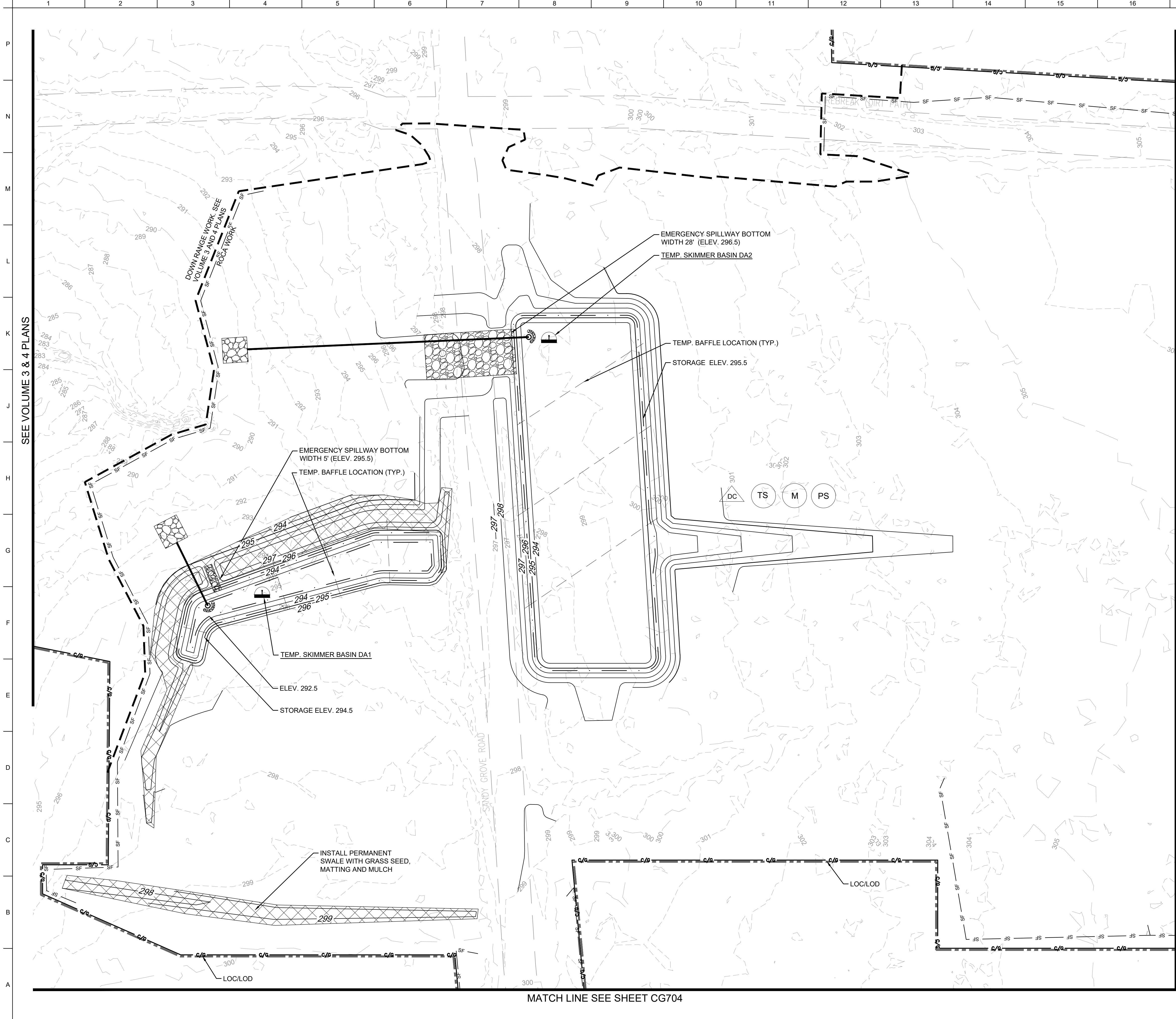
MARK	DESCRIPTION	DATE

DESIGNED BY: G. O'GREN	ISSUE DATE: JUNE 2023
DRAWN BY: J. RADTKE	SOLICITATION NO.: SOL178-85-001
CHECKED BY: R. RADTKE	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-85-01
SIZE: ANSI D	
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	

FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTA) FY23, PN 96182 VOLUME 1 - SITE	E&SC OVERALL
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SHEET ID

CG701

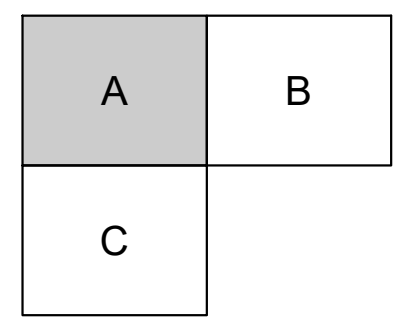


- NOTES**
- 1.) SEE SHEET CG719A FOR E&SC LEGEND.
- 2.) ALL DISTURBED AREAS SHALL BE STABILIZED TEMPORARILY AND PERMANENTLY USING APPROVED SEEDING MIXTURES LISTED IN SPECIFICATION SECTION 32 92 19. SEE ALSO THE GROUND STABILIZATION CHART ON SHEET CG742.
- 3.) SEE SHEETS CG712 & CG774-776, FOR TEMPORARY SEDIMENT SKIMMER BASIN DETAILS.

E&SC LEGEND:

	DUST CONTROL
	MULCHING
	TEMPORARY SEEDING
	PERMANENT SEEDING
	TEMP. SEDIMENT SKIMMER BASIN
	SEDIMENT FENCE
	MATTING
	GRAVEL OVERFLOW OR FILTER RING
	POROUS BAFFLES (SEE DETAIL SHEET CG754)

MATCH LINE SEE SHEET CG703



KEY MAP

SCALE: 1" = 30'

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DESIGNED BY: G. O'GREN	ISSUE DATE: JUNE 2023	U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	ANSI D	MARK	DATE
DRAWN BY: M. HARRIS	SOLICITATION NO.: W18M23-55001				
CHECKED BY: R. RADTKE	CONTRACT NO.: -				
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-85-01				

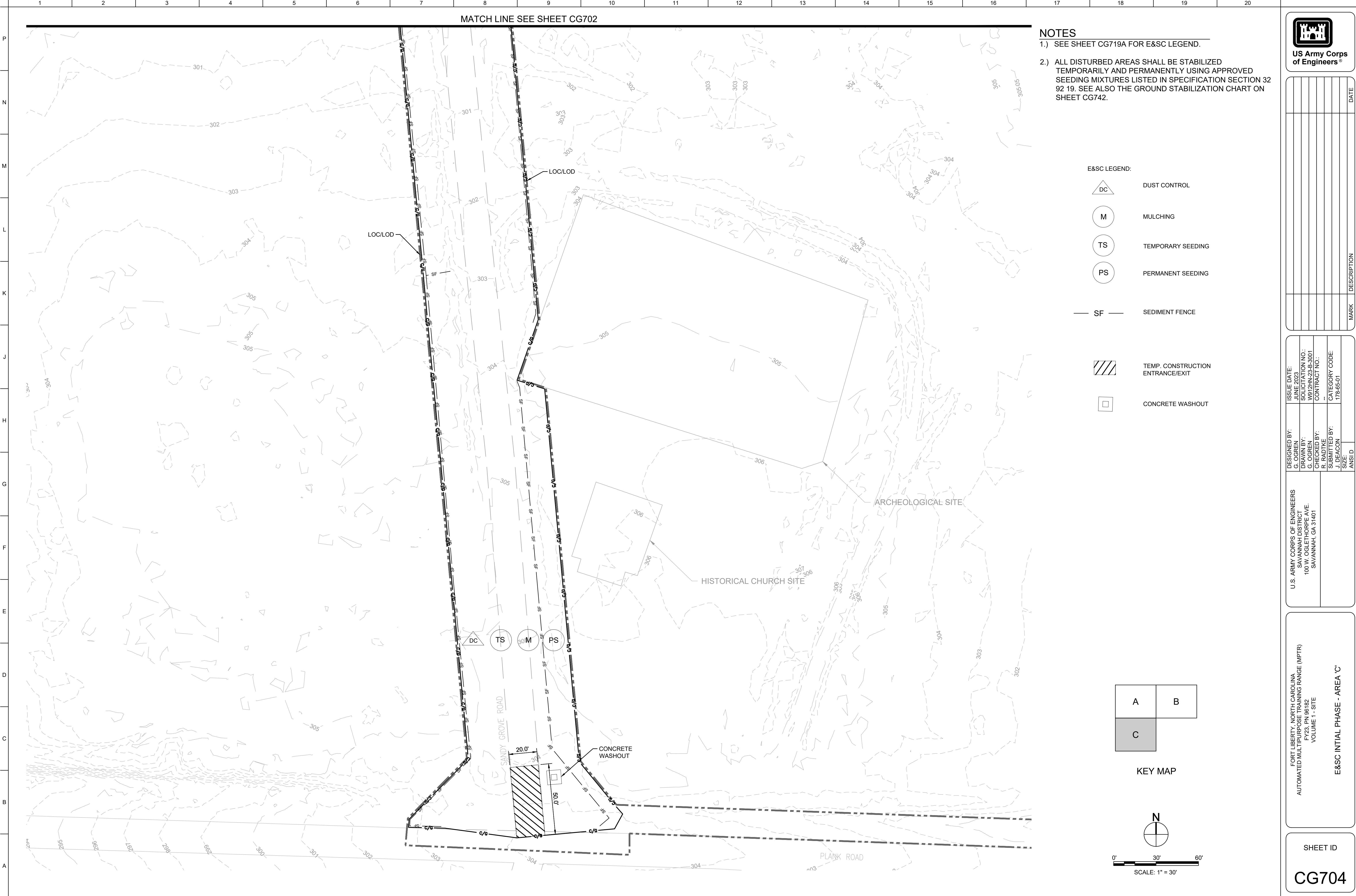
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

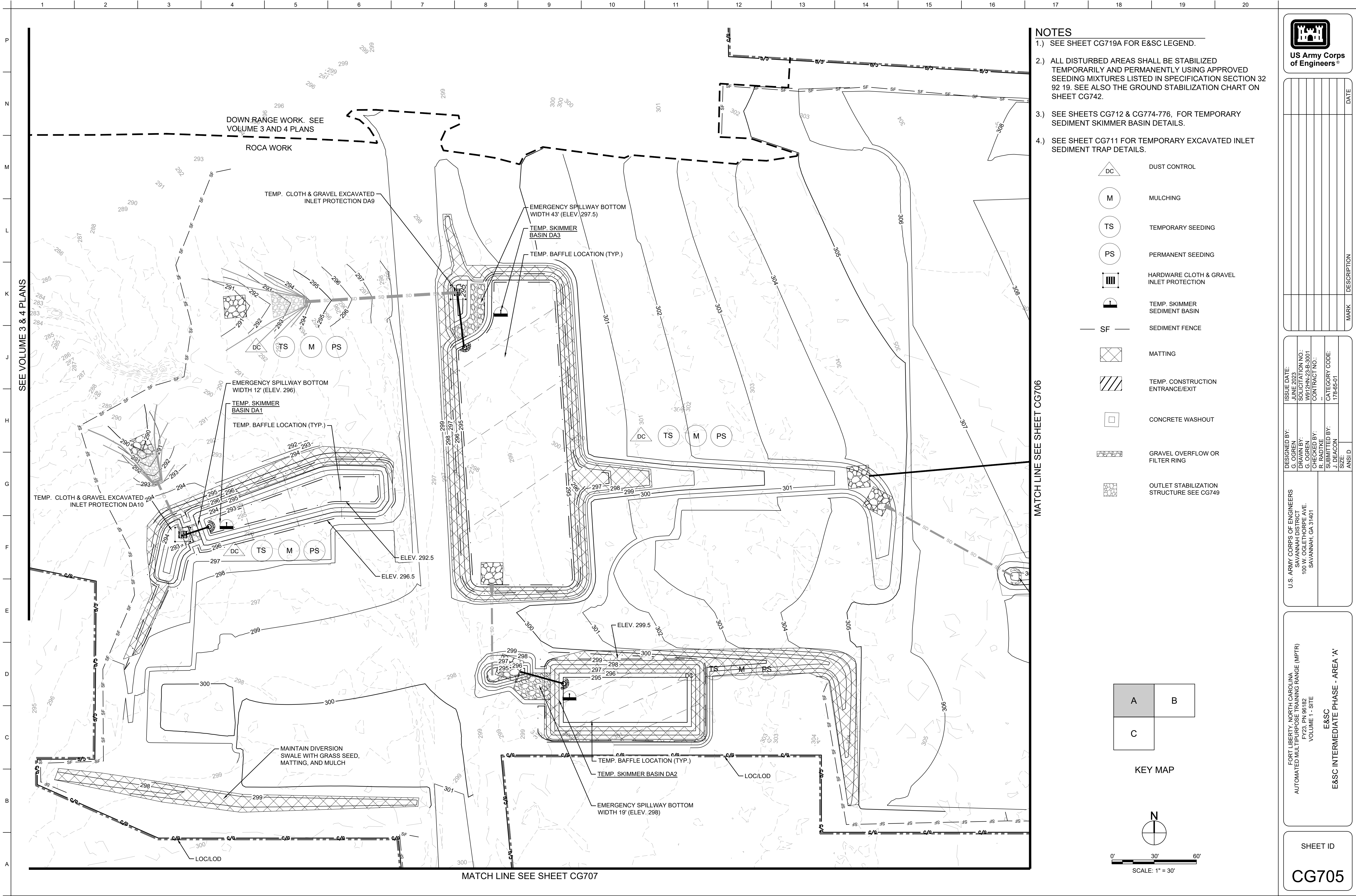
E&SC INTIAL PHASE - AREA A'

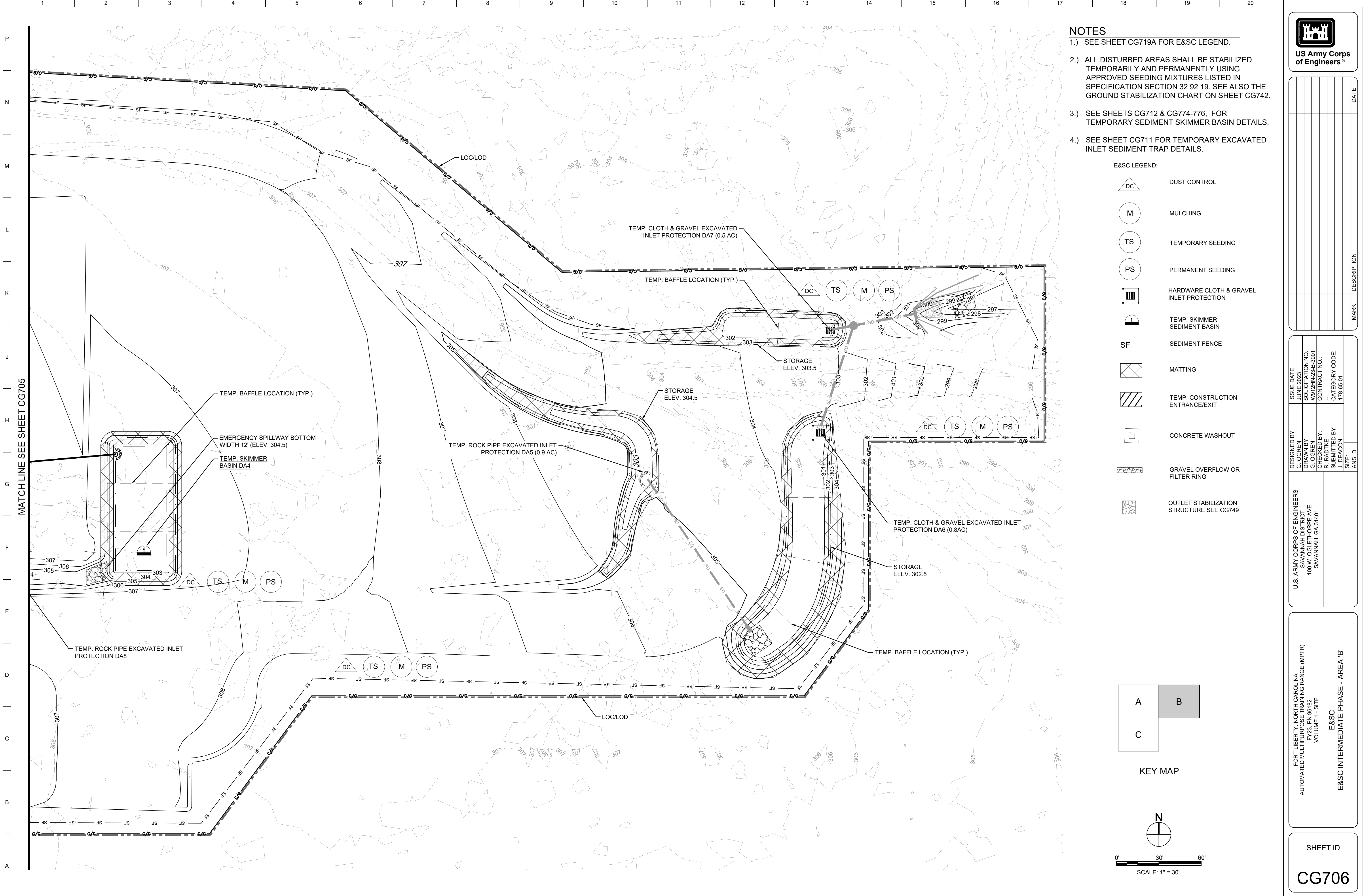
SHEET ID

CG702

READY TO ADVERTISE (RTA)





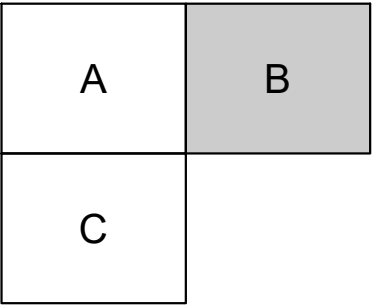


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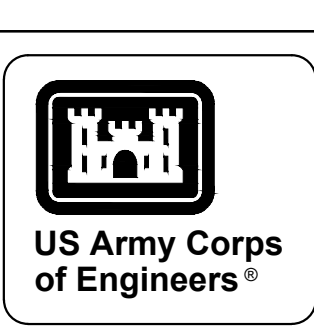
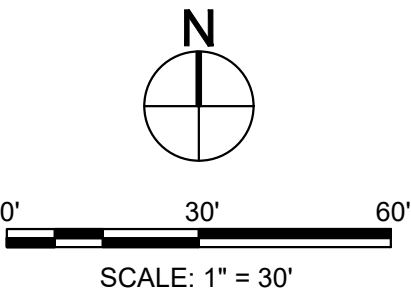
- 1.) SEE SHEET CG719A FOR E&SC LEGEND.
- 2.) ALL DISTURBED AREAS SHALL BE STABILIZED TEMPORARILY AND PERMANENTLY USING APPROVED SEEDING MIXTURES LISTED IN SPECIFICATION SECTION 32 92 19. SEE ALSO THE GROUND STABILIZATION CHART ON SHEET CG742.
- 3.) SEE SHEETS CG712 & CG774-776. FOR TEMPORARY SEDIMENT SKIMMER BASIN DETAILS.
- 4.) SEE SHEET CG711 FOR TEMPORARY EXCAVATED INLET SEDIMENT TRAP DETAILS.

E&SC LEGEND:

- DC DUST CONTROL
- M MULCHING
- TS TEMPORARY SEEDING
- PS PERMANENT SEEDING
- HARDWARE CLOTH & GRAVEL INLET PROTECTION
- TEMP. SKIMMER SEDIMENT BASIN
- SF SEDIMENT FENCE
- MATting
- TEMP. CONSTRUCTION ENTRANCE/EXIT
- CONCRETE WASHOUT
- GRAVEL OVERFLOW OR FILTER RING
- OUTLET STABILIZATION STRUCTURE SEE CG749



KEY MAP

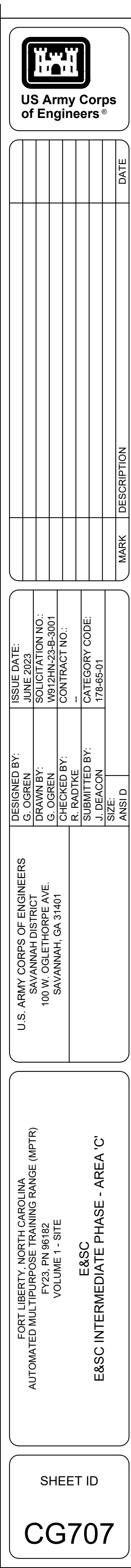
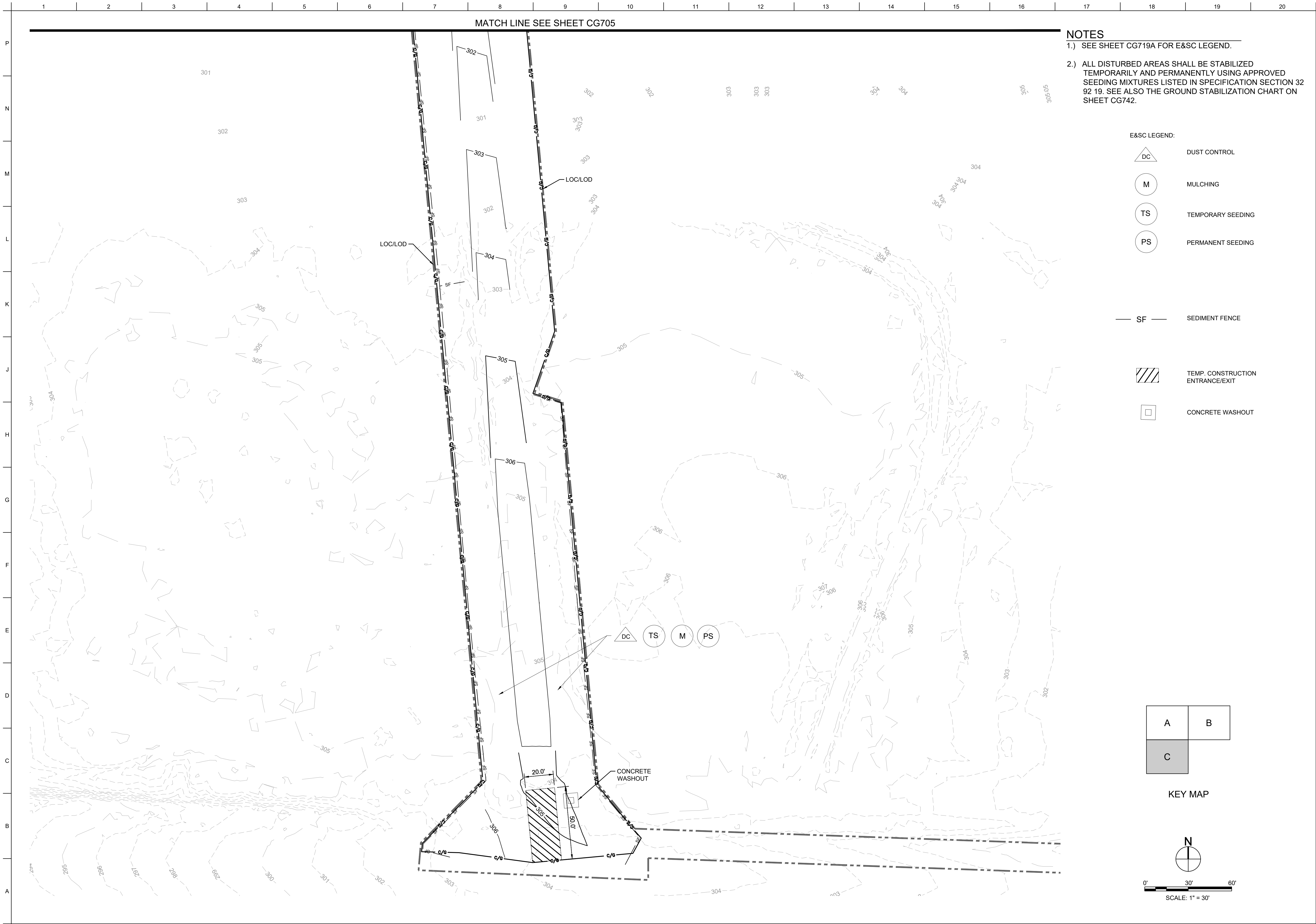


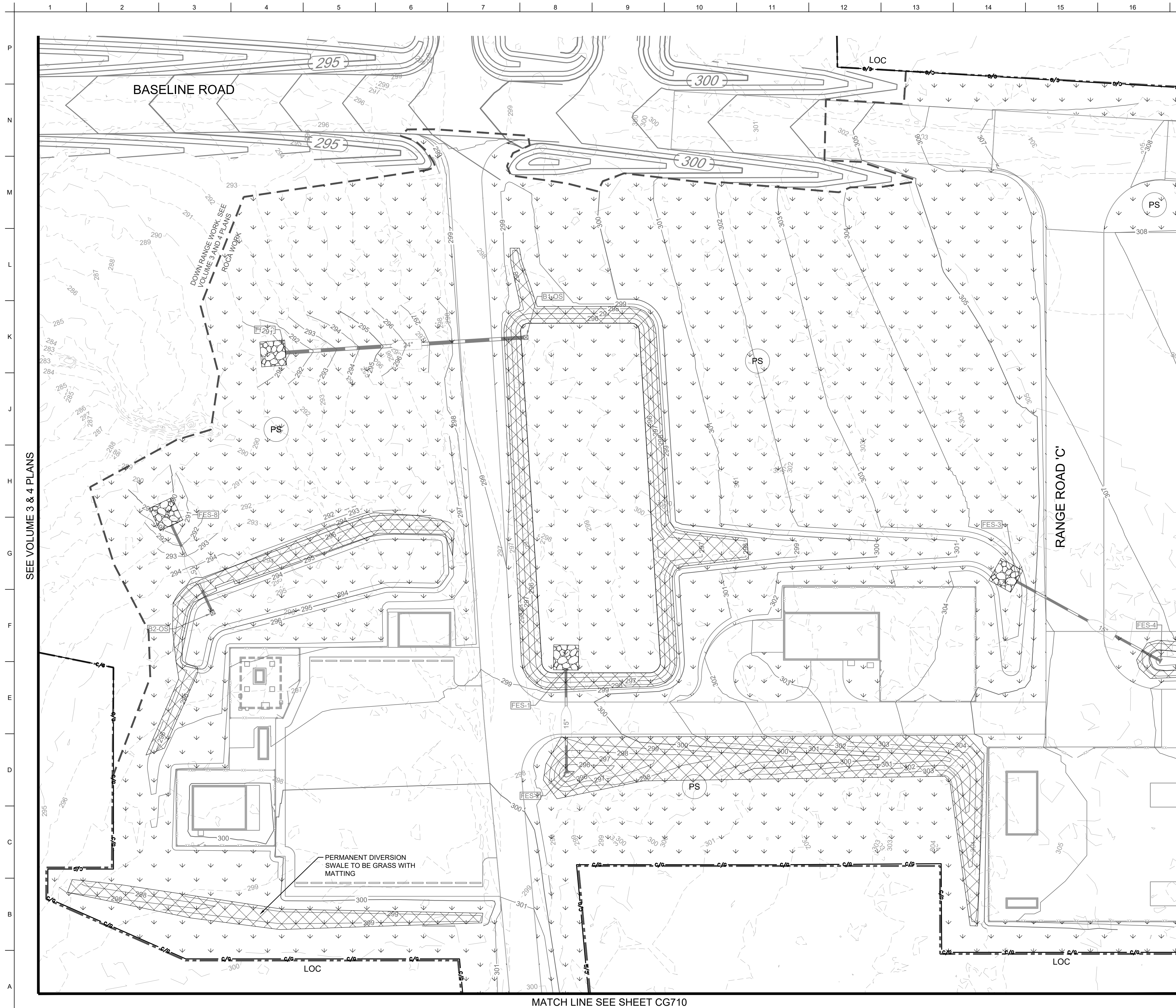
DATE	DESCRIPTION	MARK

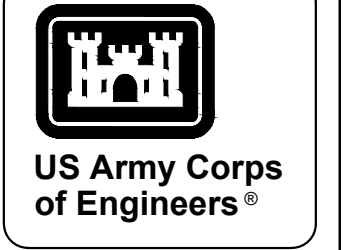
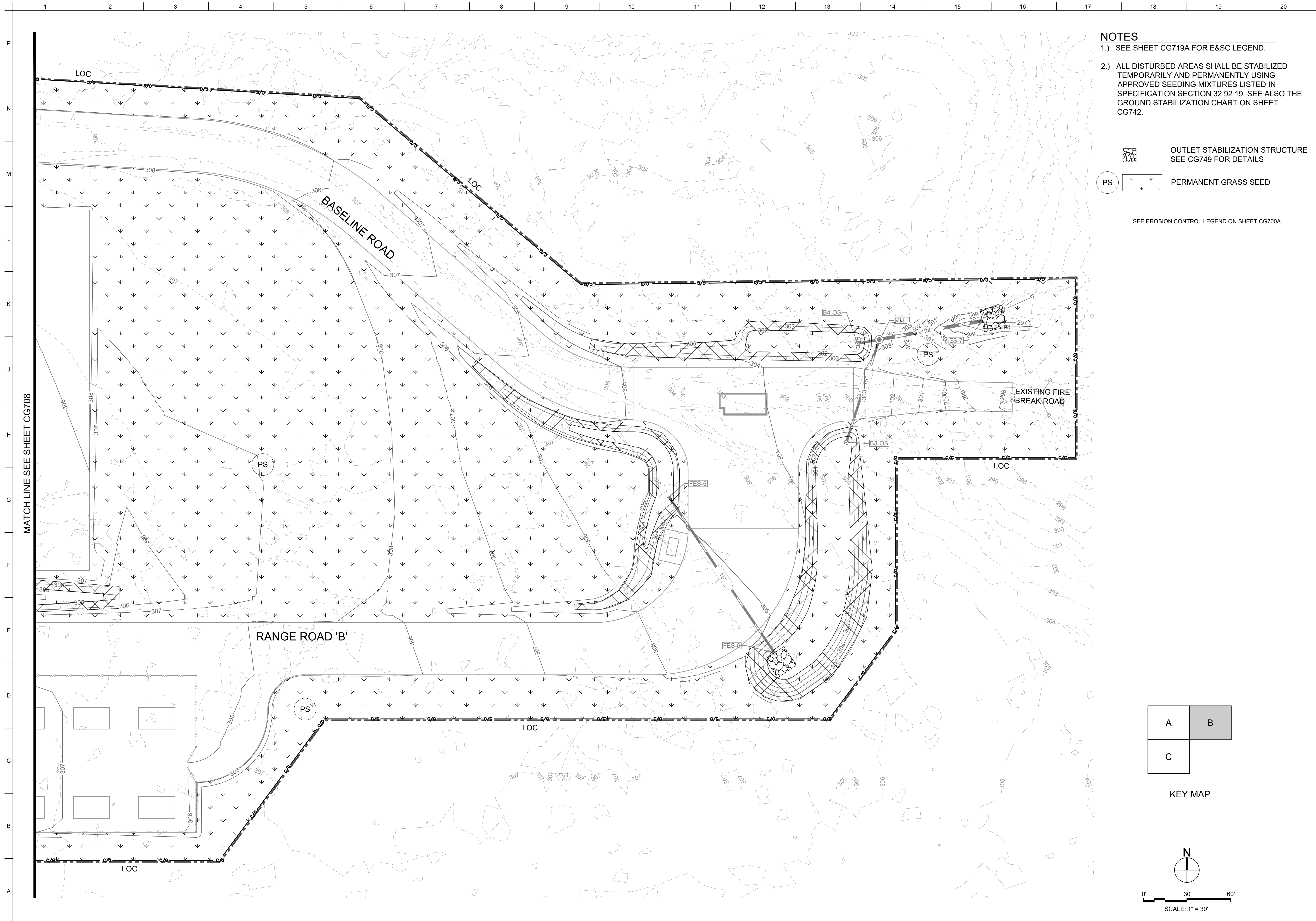
DESIGNED BY: G. O'GREN	ISSUE DATE: JUNE 2023
DRAWN BY: S. HARRIS	SOLICITATION NO.: S17-03-001
CHECKED BY: R. RADTKE	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-85-01
SIZE: ANSI D	
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	

FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	E&SC E&SC INTERMEDIATE PHASE - AREA 'B'
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SHEET ID
CG706





[illegible]

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. GLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY: G. MUSE	ISSUE DATE: JUNE 2023
	DRAWN BY: G. MUSE	SOLICITATION NO.: W912HN-23-B-3001
	CHECKED BY: J. DEACON	CONTRACT NO.:
	SUBMITTED BY: J. DEACON	CATEGORY CODE: 17R-65-01
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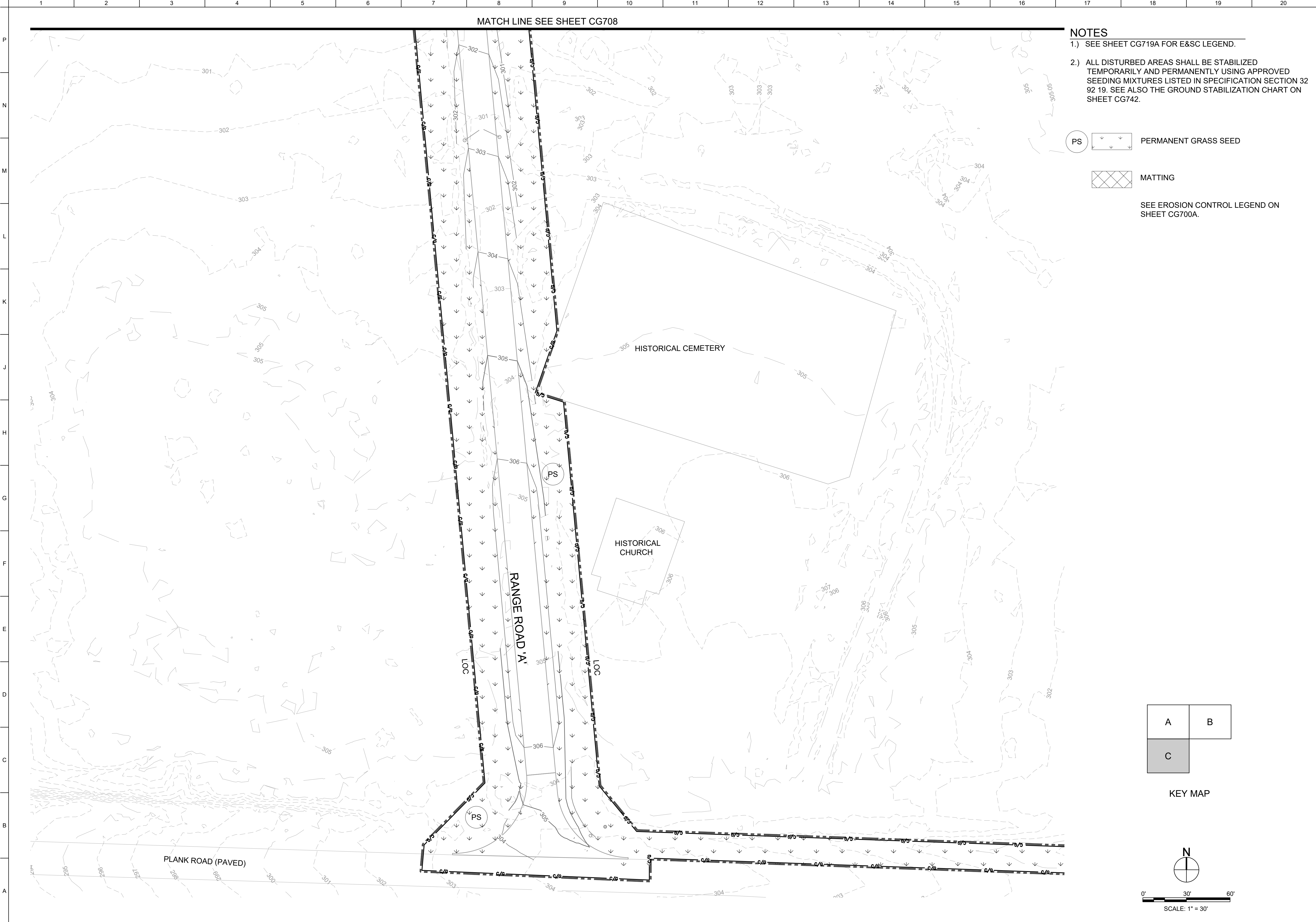
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

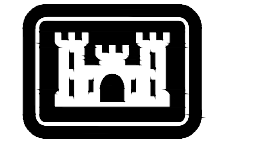
E&SC FINAL PHASE - AREA 'B'

SHEET ID
CG709

READY TO ADVERTISE (RTA)

READY TO ADVERTISE (RTA)





US Army Corps of Engineers®

MARK		DESCRIPTION	DATE

DESIGNED BY:	ISSUE DATE:
GR. MUSE	JUNE 2023
SAVANNAH DISTRICT	SOLICITATION NO.:
100 W. OGLETHORPE AVE.	811423-55001
SAVANNAH, GA 31401	CONTRACT NO.:
CHECKED BY:	CATEGORY CODE:
R. RADTKE	178-85-01
SUBMITTED BY:	
J. DEACON	
SIZE:	
ANSI D	

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT
100 W. OGLETHORPE AVE.
SAVANNAH, GA 31401

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

E&SC FINAL PHASE - AREA 'C'

SHEET ID

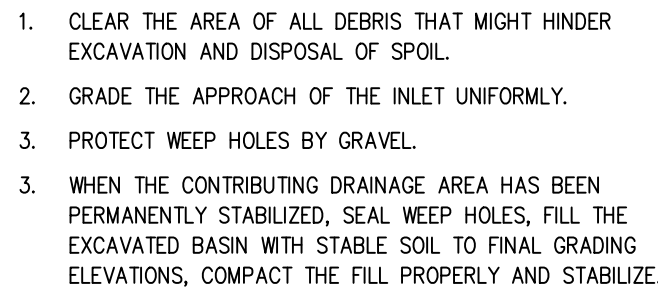
CG710

A B C D E F G H J K L M N P

Area ID: 515

Provided Storage:

A1	3155		
A2	1134	CF	CY
(A1+A2) x 0.5 x D=		3217	119.1



ROCK PIPE INLET PROTECTION DETAIL

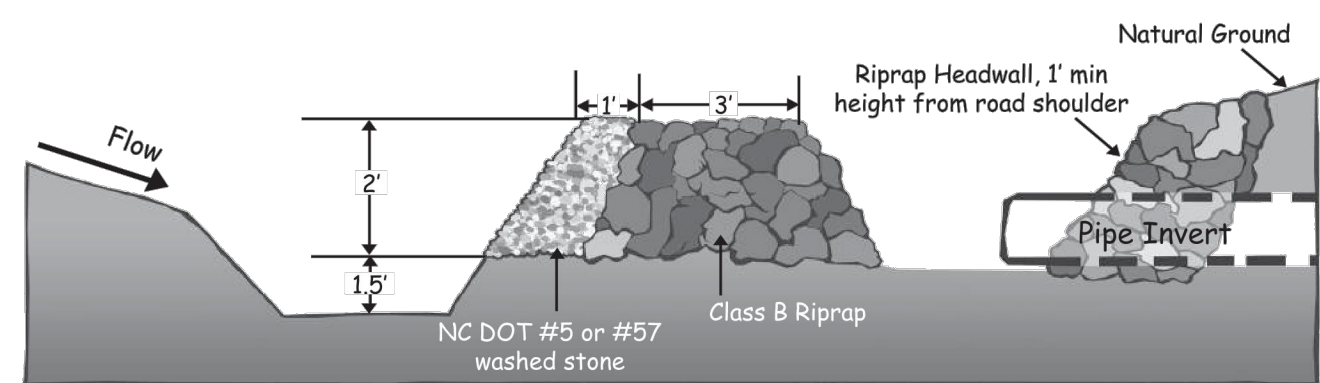


Figure 6.55a Rock pipe inlet protection plan view and cross-section view

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE CIRCUMFERENCE OF THE INLET, A MAXIMUM OF 4 FEET APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 2-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. PLACE CLEAN GRAVEL (NC DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUNDCOVER.



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[illegible]

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DRAWN BY: G. MUSE		SOLICITATION NO.: W912HN-23-B-3001	
	CHECKED BY: R. RADTKE		CONTRACT NO.: -	
	SUBMITTED BY: J. M. SCAON		CATEGORY CODE: 178-6501	
	ANSI D			

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE
E&SC DETAILS

SHEET ID

CG711

LEGEND

EXISTING	NEW	
	· \ · \ · \ · \ · \ · \ · \ · \	DEMOLITION
		POLE MOUNTED LUMINAIRE
— EPx —		PRIMARY POWER DISTRIBUTION, AERIAL
— EPx —	— EP —	PRIMARY POWER DISTRIBUTION, UNDERGROUND
— ESx —	— ES —	SECONDARY POWER DISTRIBUTION, UNDERGROUND
		PAD MOUNTED TRANSFORMER
		SECTIONALIZING TERMINAL CABINET
		PAD MOUNTED SWITCH
		PANELBOARD
○	●	UTILITY POLE
		UTILITY POLE WITH UNDERGROUND RISER
— COMx —	— COM —	UNDERGROUND COMMUNICATIONS LINE
		TELECOMMUNICATIONS MANHOLE
		TELECOMMUNICATIONS HANDHOLE
	— EG —	#1/0 ACSR, LIGHTNING PROTECTION CONDUCTOR, CATENARY TO POLE-MOUNTED AIR TERMINAL(S)
	— · EG — · EG —	CLASS I CONDUCTOR, COPPER, COUNTERPOISE
		POLE-MOUNTED AIR TERMINAL WITH #1/0 CU DOWN CONDUCTOR TO GROUND ROD
		GUY WIRE AND ANCHOR PIN

LUMINAIRE SCHEDULE						
LUMINAIRE MARK	SOURCE TYPE	LUMINAIRE VOLTAGE	LUMINAIRE WATTAGE	INITIAL LUMENS	DISTRIBUTION TYPE	REMARKS
S1	LED	240 V	122 W	15,300	TYPE IV	DARK BRONZE FINISH;
S2	RED LED	240 V	60 W	3,000	FLOOD	DARK BRONZE FINISH; PROVIDE POLE TWIN ARM MOUNT;

POLE SCHEDULE				
POLE MARK	MINIMUM POLE HEIGHT (FEET)	S1 LUMINAIRE QUANTITIES	S2 LUMINAIRE QUANTITIES	REMARKS
P1	40	1	2	
P2	40	0	0	PROVIDE CATENARY CONDUCTORS BETWEEN POLES AS INDICATED
P3	40	1	2	PROVIDE CATENARY CONDUCTORS BETWEEN POLES AS INDICATED

SITE GENERAL NOTES

1. ALL WORK SHALL BE COORDINATED WITH THE NEW AND EXISTING UTILITIES THAT ARE SHOWN ON THE CIVIL, LANDSCAPE, ENVIRONMENTAL, AND MECHANICAL SITE DRAWINGS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO POWER, COMMUNICATIONS, LIGHTING, STORM DRAINS, SANITARY SEWERS, WATER LINES, STEAM LINES, HIGH TEMP WATER LINES, CHILLED WATER LINES, AND GAS LINES.
2. THE LOCATIONS OF NEW AND EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
3. THE CONTRACTOR SHALL COORDINATE THE EXACT ROUTING OF THE ELECTRICAL AND COMMUNICATIONS SERVICE DUCTLINES INTO THE BUILDING WITH THE STRUCTURAL FOOTINGS TO AVOID CONFLICT. SEE THE INTERIOR ELECTRICAL POWER AND SIGNAL PLANS FOR THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE EQUIPMENT AND THE COMMUNICATION HEAD-END EQUIPMENT.
4. IDENTIFIED UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR IMMEDIATELY AND AT NO ADDITIONAL COST TO THE GOVERNMENT.

SITE TELECOM SCOPE OF WORK NOTES

1. ALL SITE TELECOMMUNICATIONS WORK SHALL BE PROVIDED BY THE CONTRACTOR, THIS INCLUDES, BUT IS NOT LIMITED TO: DEMOLITION, NEW WORK, SPLICES, AND TESTING.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE US ARMY INFORMATION SYSTEMS ENGINEERING COMMAND (USAISEC) OUTSIDE PLANT DESIGN AND PERFORMANCE REQUIREMENTS (OSPDPR), AND THE I3A CRITERIA.
3. THE CONTRACTOR SHALL STAKE THE ROUTE OF EACH LINE AND INDICATE THE EXACT LOCATION OF NEW DUCTS, DUCT TERMINATIONS, HANDHOLES, AND HANDHOLE ORIENTATIONS FOR APPROVAL BY THE FORT BRAGG NETWORK ENTERPRISE CENTER (NEC POC: KEITH ROGERS (910) 396-4475) AND THE CONTRACTING OFFICER'S REPRESENTATIVE (COR).
4. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE NEC AND THE COR PRIOR TO DEMOLISHING ANY EXISTING COMMUNICATIONS EQUIPMENT, DUCTLINES, OR CABLING AND PRIOR TO BACKFILLING COMMUNICATIONS DUCTLINE TRENCHES.
5. COMMUNICATIONS DUCTLINE SPARES SHALL BE CLEANED AND MANDRELLED. MANDRELLING SHALL BE WITNESSED BY REPRESENTATIVES OF THE COR AND NEC.
6. NEW COMMUNICATIONS DUCTLINE SPARES SHALL BE SEALED, CAPPED, AND TAGGED. SEALS SHALL BE MECHANICAL TYPE. SPARE DUCTLINES SHALL INCLUDE A PULL STRING.

SITE ELECTRICAL (ROCA) SCOPE OF WORK NOTES

1. THESE NOTES REFLECT THE SCOPE OF WORK FOR THE ROCA AND ALONG PLANK ROAD. SEE VOLUME 4, SHEET ES601 FOR SITE ELECTRICAL (DOWNRANGE) SCOPE OF WORK NOTES.
2. ALL WORK DONE BY SANDHILLS UTILITY SERVICES (SUS) SHALL BE PERFORMED UNDER A SEPARATE CONTRACT. UNLESS OTHERWISE INDICATED, SUS WILL PROVIDE UNDERGROUND DISTRIBUTION SUCH AS PRIMARY CABLING & CONDUIT, PAD MOUNTED TRANSFORMERS, SECTIONALIZING CABINETS, EQUIPMENT PADS, RISER ASSEMBLIES, PRIMARY CONNECTIONS, ETC. SANDHILLS UTILITY SERVICES (SUS) TO PROVIDE FINAL DETERMINATION OF TRANSFORMER SIZE.
3. THE CONTRACTOR SHALL PROVIDE ALL SERVICE ENTRANCE CABLE FROM THE TRANSFORMER(S) TO THE MAIN DISTRIBUTION PANEL(S) (SUS WILL MAKE THE CONNECTIONS AT THE TRANSFORMER). CURRENT RATED TRANSFORMER (CT) METERING WILL BE PROVIDED BY SUS AT THE TRANSFORMER LOCATION.

SITE LIGHTING SCOPE OF WORK NOTES

1. ALL SITE LIGHTING SHALL BE PROVIDED BY THE CONTRACTOR.

SITE LIGHTNING PROTECTION SCOPE OF WORK NOTES

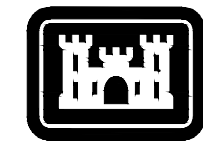
1. ALL SITE LIGHTNING PROTECTION SHALL BE PROVIDED BY THE CONTRACTOR.

ABBREVIATIONS

A	AMPERE	NO.	NUMBER
AFF	ABOVE FINISHED FLOOR	PH	PHASE
ATC	ASTRONOMICAL TIME CLOCK	R/W	RACEWAY
C	CONDUIT	SUS	SANDHILLS UTILITY SERVICES
CATV	CABLE TELEVISION	TV	TELEVISION
CB	CIRCUIT BREAKER	TVSS	TRANSIENT VOLTAGE
CKT	CIRCUIT		SURGE SUPPRESSOR
DTR	DATA TERMINATION RACK	TYP	TYPICAL
GFCI	GOVERNMENT FURNISHED	UL	UNDERWRITERS LABORATORY
	CONTRACTOR INSTALLED	UOI	UNLESS OTHERWISE
GFGI	GOVERNMENT FURNISHED		INDICATED
	GOVERNMENT INSTALLED	UON	UNLESS OTHERWISE NOTED
GFI	GROUND FAULT INTERRUPTER	V	VOLT
GFP	GROUND FAULT PROTECTION	WP	WEATHERPROOF
HACR	HEATING AIR CONDITIONING		
	REFRIGERATION		
HP	HORSEPOWER		
HPF	HIGH POWER FACTOR		
HT	HEIGHT		
HZ	HERTZ		
IDS	INTRUSION DETECTION SYSTEM		
KWH	KILOWATT HOUR		
LED	LIGHT EMITTING DIODE		
LVS	LOW VOLTAGE SWITCH		
MCB	MOLDED CASE CIRCUIT BREAKER		
MFR	MANUFACTURER		
MH	MOUNTING HEIGHT		
MLO	MAIN LUGS ONLY		
MMF	MULTI-MISSION FACILITY		
NEC	NETWORK ENTERPRISE CENTER		
NF	NON FUSED		
NIC	NOT IN CONTRACT		

SHEET INDEX

SITE POWER PLANS:	ES101-ES111
SITE TELECOM PLANS:	ES112-ES122
SITE LIGHTING PLANS:	ES123-ES128
SITE LIGHTNING PROTECTION PLANS:	ES129-ES134
SITE DETAILS:	ES501-ES504
SITE DIAGRAMS:	ES601-ES605



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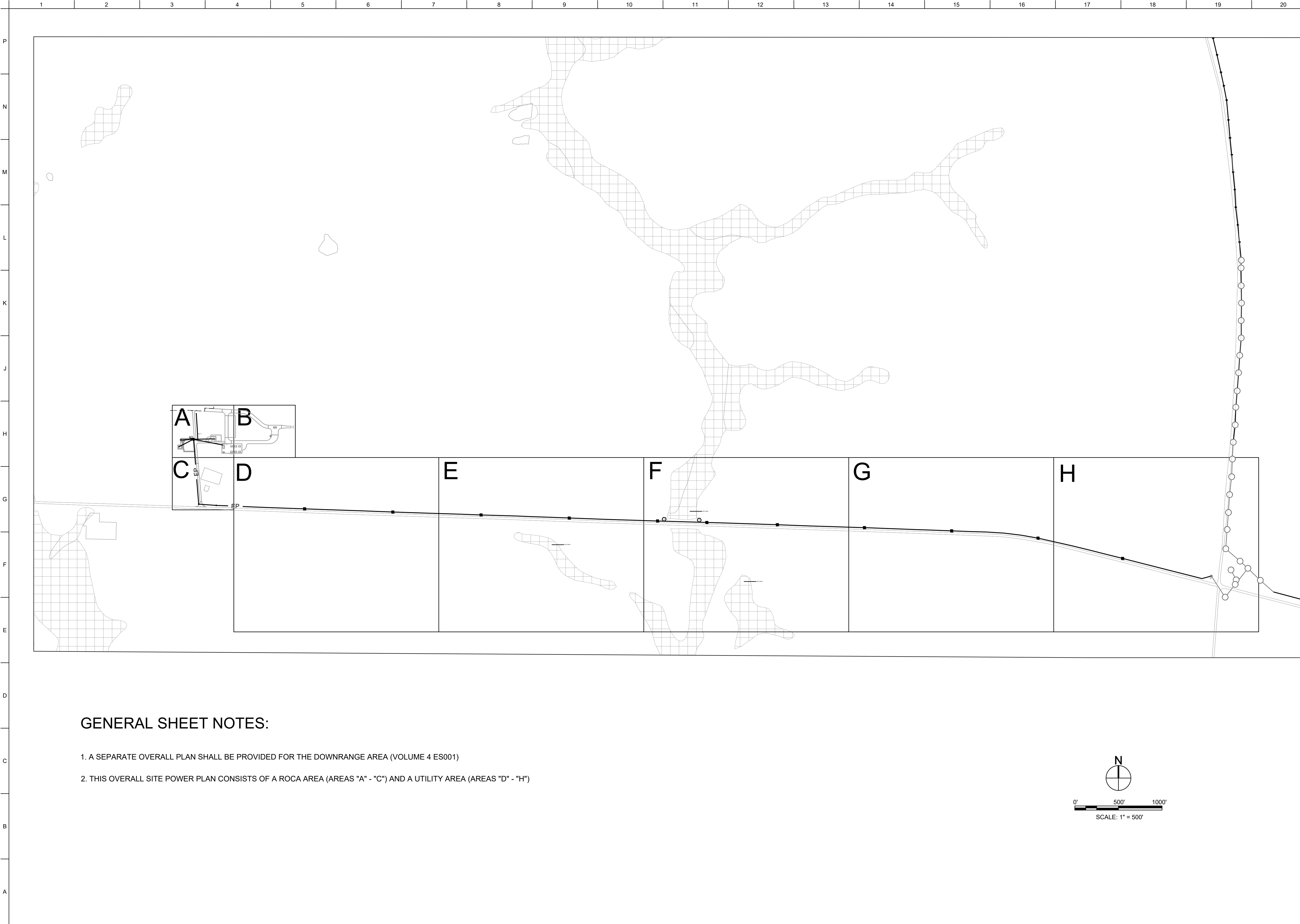
U.S. ARMY CORPS OF ENGINEERS 100 W. OGLETHORPE AVE. SAVANNAH GA 31401	DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
	DRAWN BY: W913HN23-B-3001	SOLICITATION NO.: W913HN23-B-3001
	CHECKED BY: R. DAVIS	CONTRACT NO.: --
	DESIGNED BY: J. DEACON	CATEGORY CODE: 175-85-01
	ANSI D.	

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTTR)
FY23: PN 96182
VOLUME 1 - SITE

ELECTRICAL SITE LEGEND AND NOTES

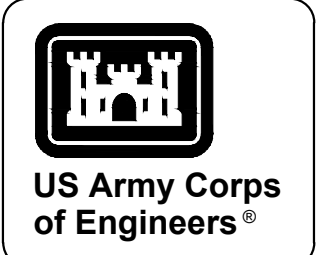
SHEET ID

ES001



GENERAL SHEET NOTES:

- 1. A SEPARATE OVERALL PLAN SHALL BE PROVIDED FOR THE DOWNRANGE AREA (VOLUME 4 ES001)
- 2. THIS OVERALL SITE POWER PLAN CONSISTS OF A ROCA AREA (AREAS "A" - "C") AND A UTILITY AREA (AREAS "D" - "H")



MARK	DESCRIPTION	DATE

DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: --
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
ANSI D SIZE:	

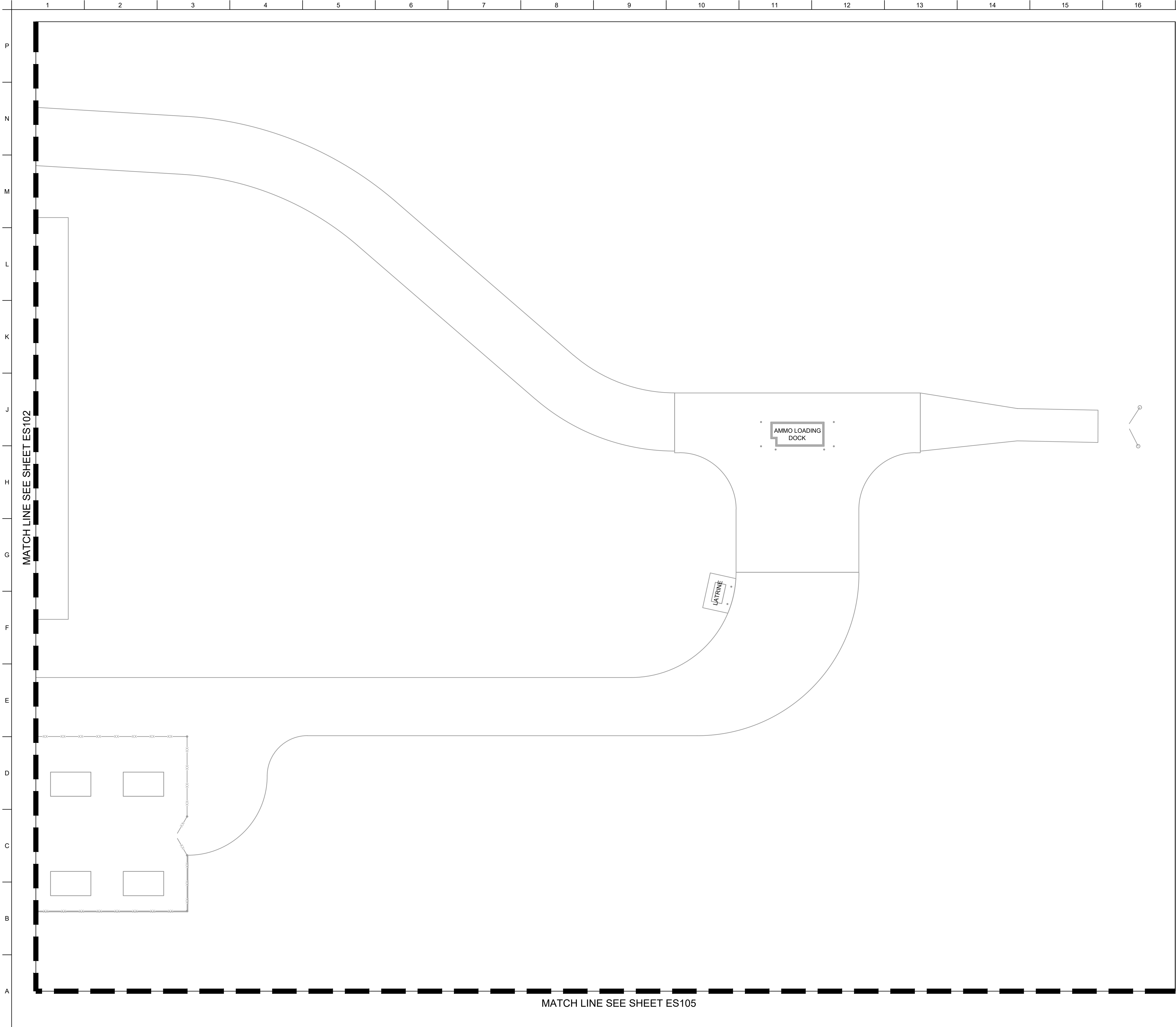
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	
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FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

SITE POWER PLAN - OVERALL

SHEET ID

ES101



GENERAL SHEET NOTES

KEY PLAN

KEY MAP

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H. TAYLOR	W912HN-23-B-3001
CHECKED BY:	CONTRACT NO.:
R. DAVIS	-
SUBMITTED BY:	CATEGORY CODE:
J. DEACON	178-85-01
SIZE:	ANSI D

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT
100 W. OGLETHORPE AVE.
SAVANNAH, GA 31401

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT
100 W. OGLETHORPE AVE.
SAVANNAH, GA 31401

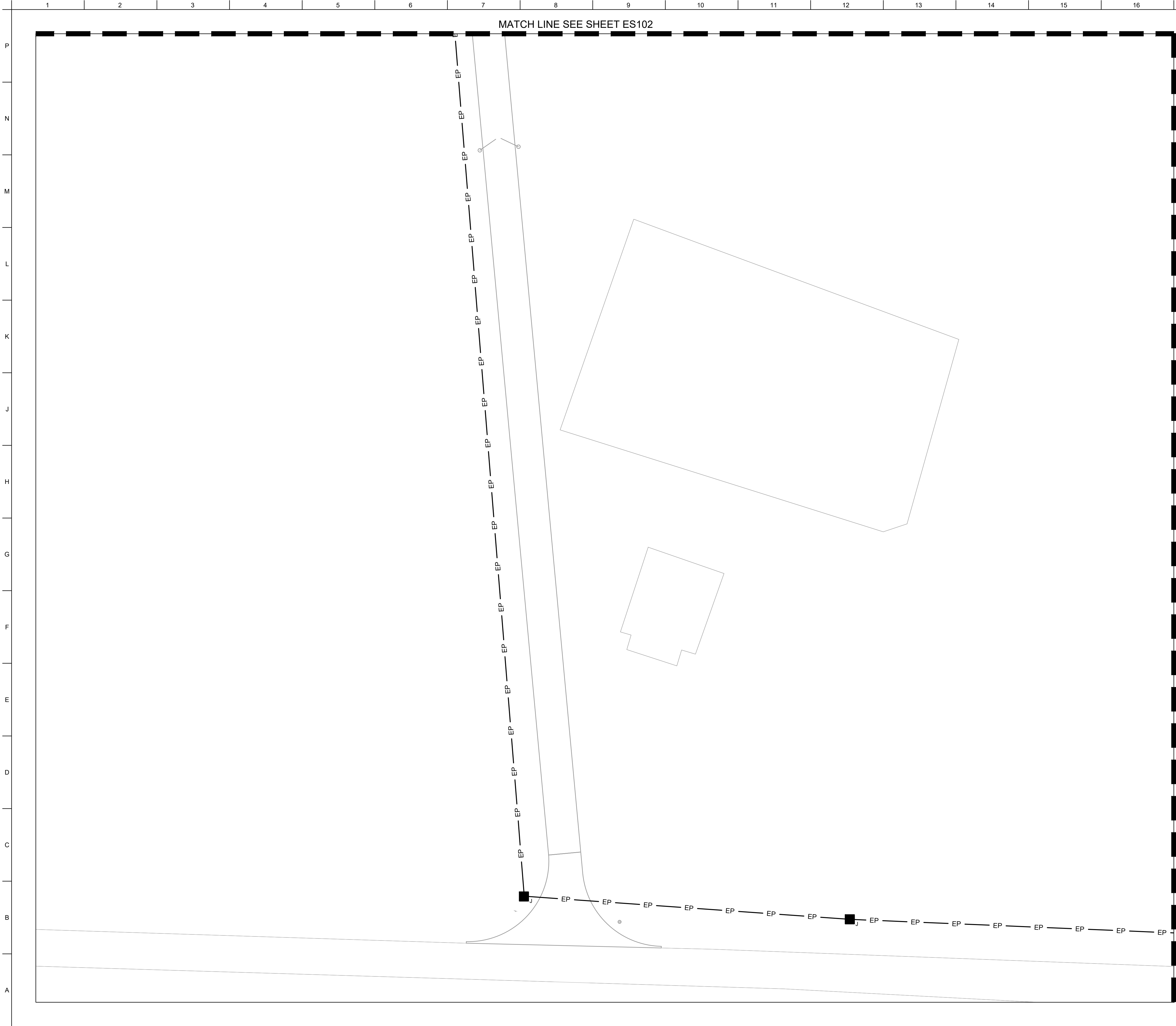
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H. TAYLOR	JUNE 2023
DRAWN BY:	SOLICITATION NO.:
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CHECKED BY:	CONTRACT NO.:
R. DAVIS	-
SUBMITTED BY:	CATEGORY CODE:
J. DEACON	178-85-01
SIZE:	ANSI D

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

SITE POWER PLAN - AREA B

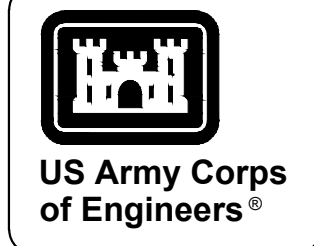
SHEET ID

ES103



GENERAL SHEET NOTES

- CONDUIT SHALL BE CONCRETE ENCASED UNDERNEATH PAVED AREAS, AND EXTENDING FIVE FEET ON EITHER SIDE OF PAVED AREAS.

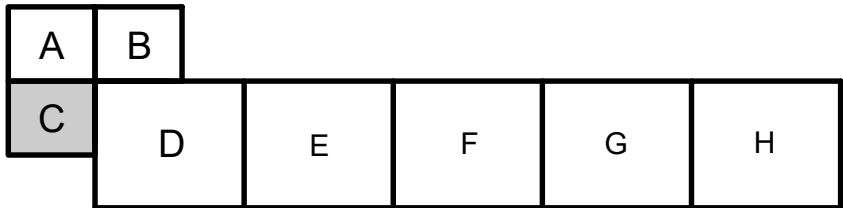


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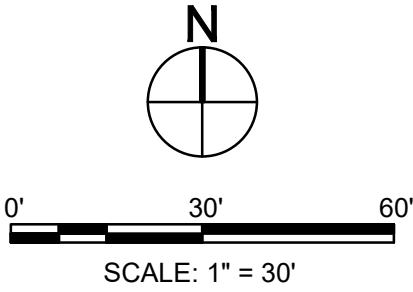
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DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: --
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
ANSI D	SIZE:

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401

KEY PLAN

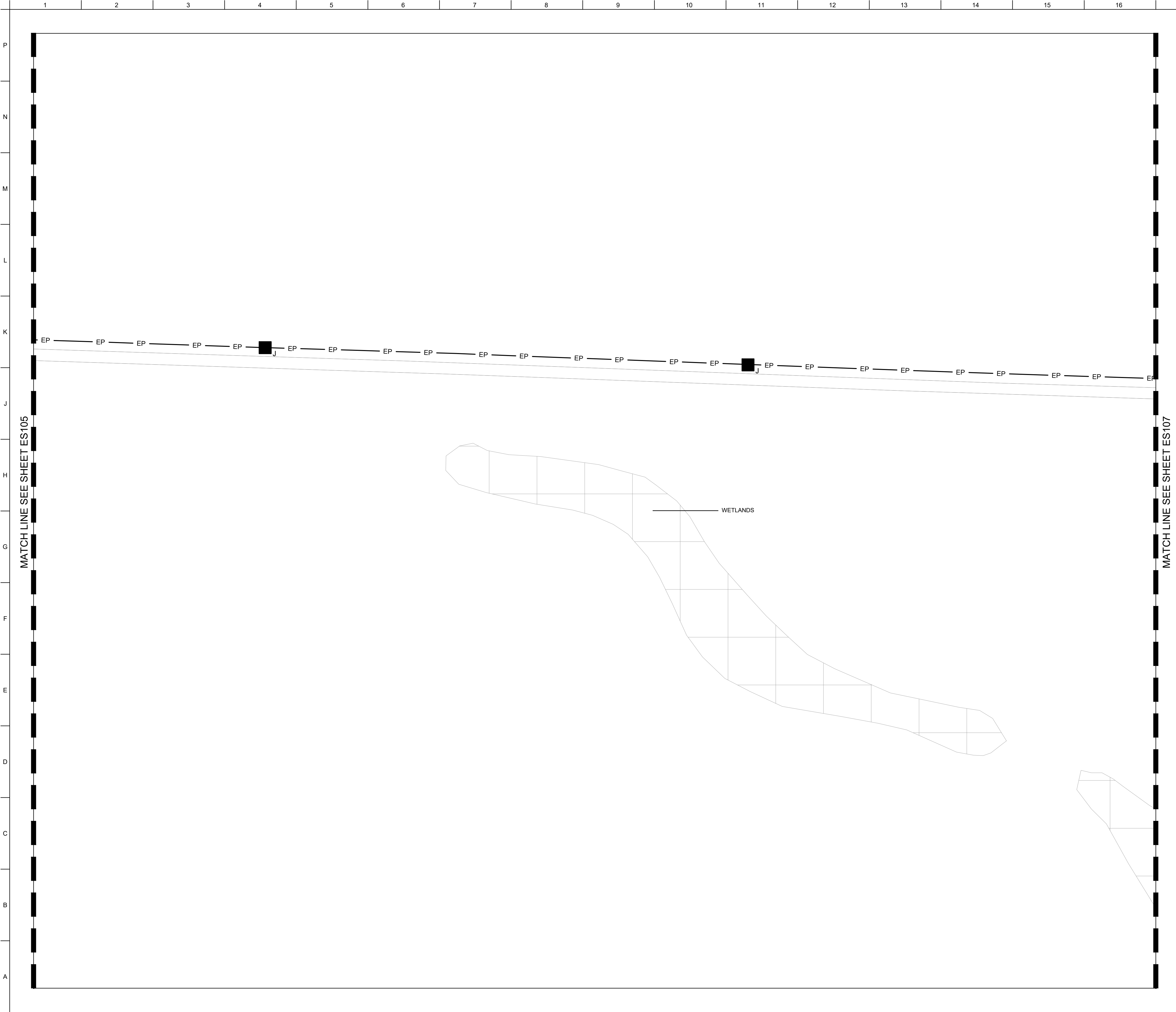


KEY MAP



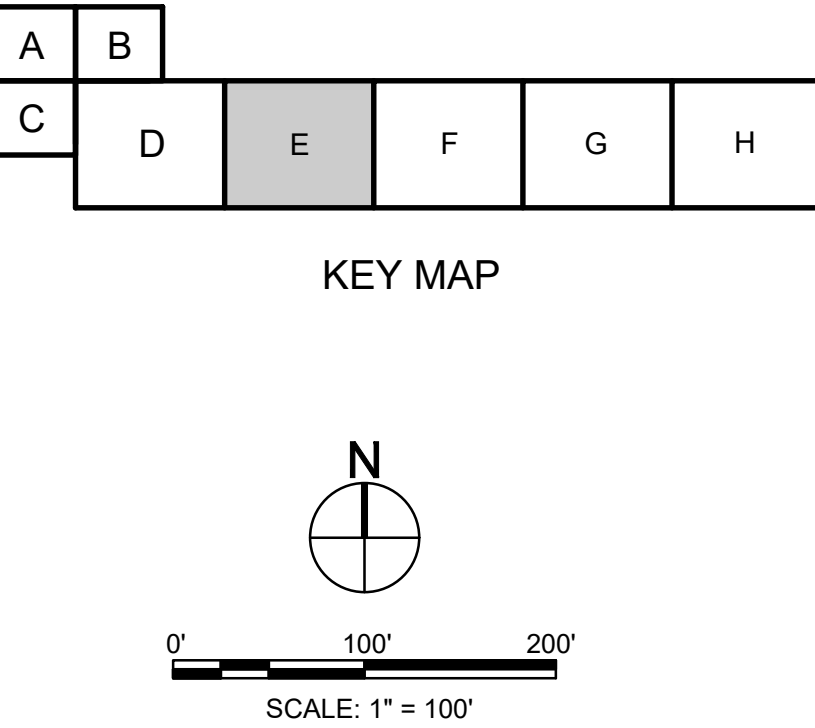
FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	SITE POWER PLAN - AREA C
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SHEET ID
ES104



GENERAL SHEET NOTES

KEY PLAN



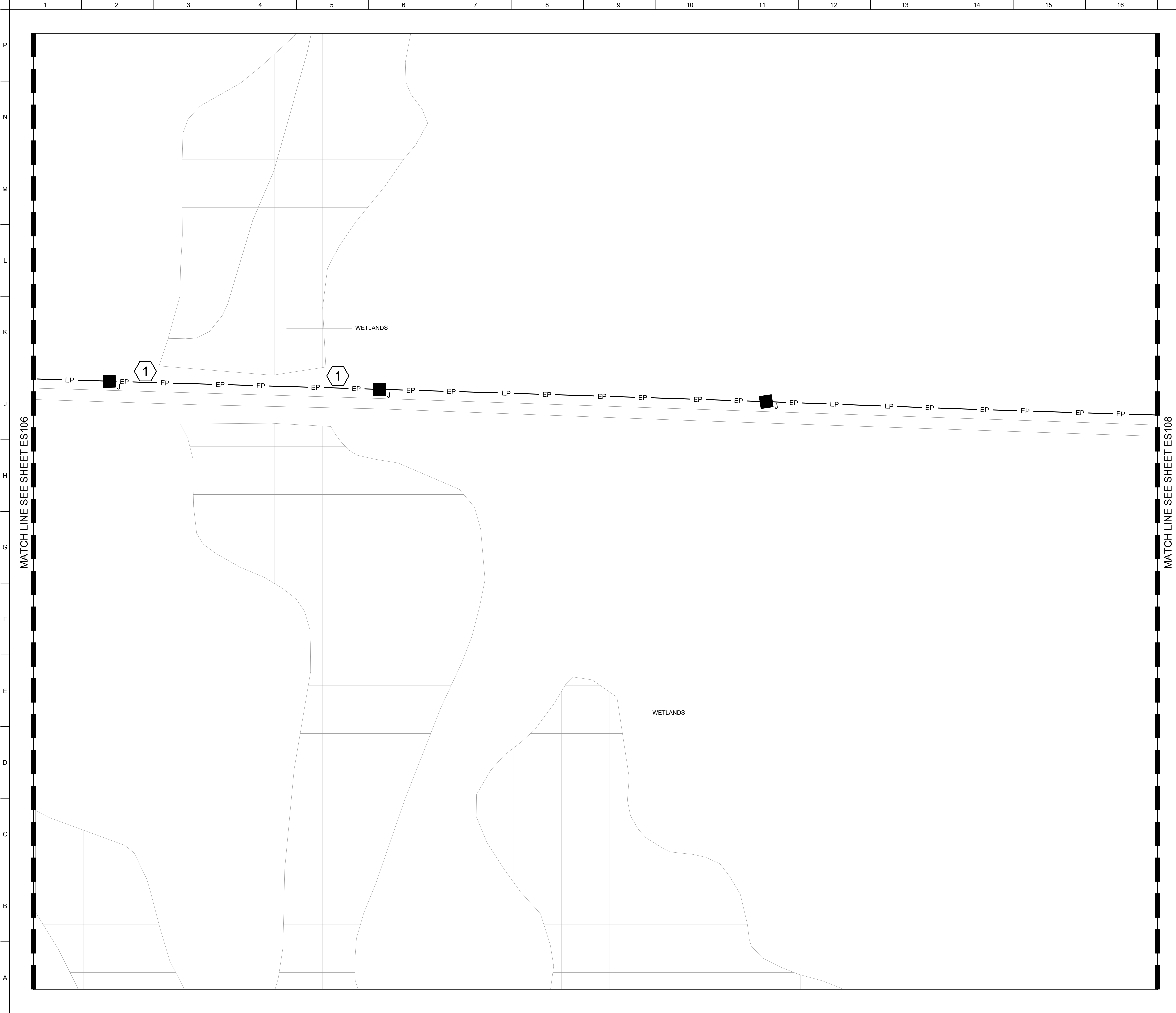
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DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
ANSI D	SIZE:

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FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	SITE POWER PLAN - AREA E
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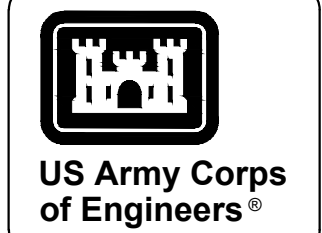
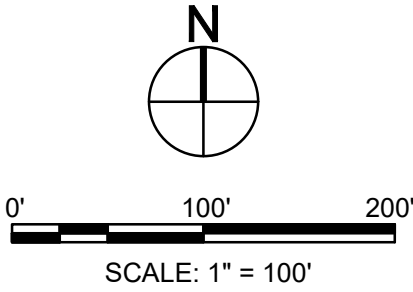
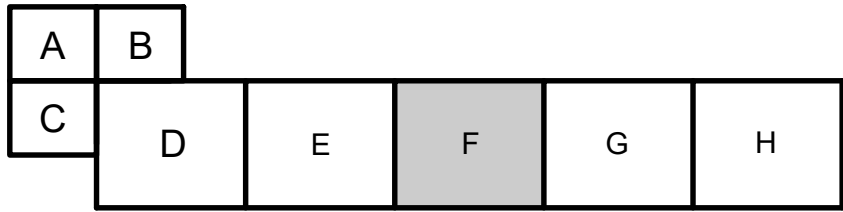
SHEET ID ES106



GENERAL SHEET NOTES

- ① CONDUIT SHALL TRAVERSE WETLANDS AREAS VIA DIRECTIONAL BORING. DIRECTIONAL BORING SHALL EXTEND 100' PAST WETLANDS AREAS ON EACH SIDE. THIS SHALL BE COORDINATED WITH SANDHILLS UTILITY SERVICES.

KEY PLAN

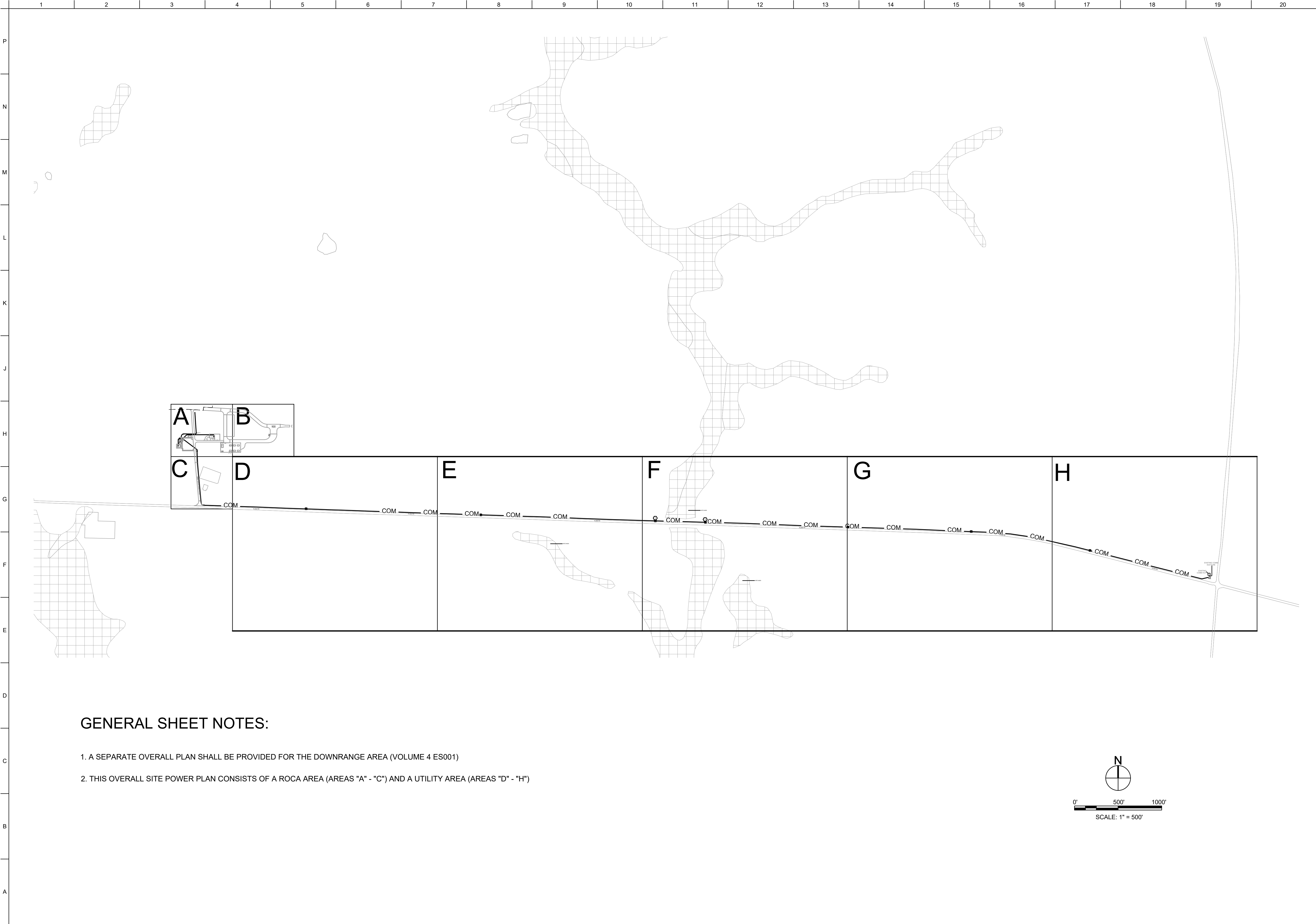


MARK	DESCRIPTION	DATE

DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-85-01
ANSI D	SIZE:
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	

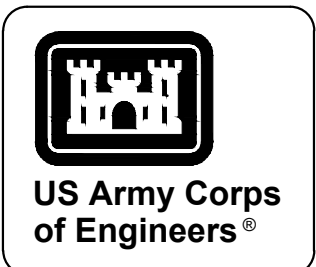
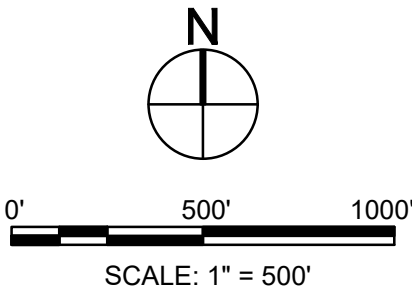
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SHEET ID
ES107



GENERAL SHEET NOTES:

1. A SEPARATE OVERALL PLAN SHALL BE PROVIDED FOR THE DOWNRANGE AREA (VOLUME 4 ES001)
2. THIS OVERALL SITE POWER PLAN CONSISTS OF A ROCA AREA (AREAS "A" - "C") AND A UTILITY AREA (AREAS "D" - "H")



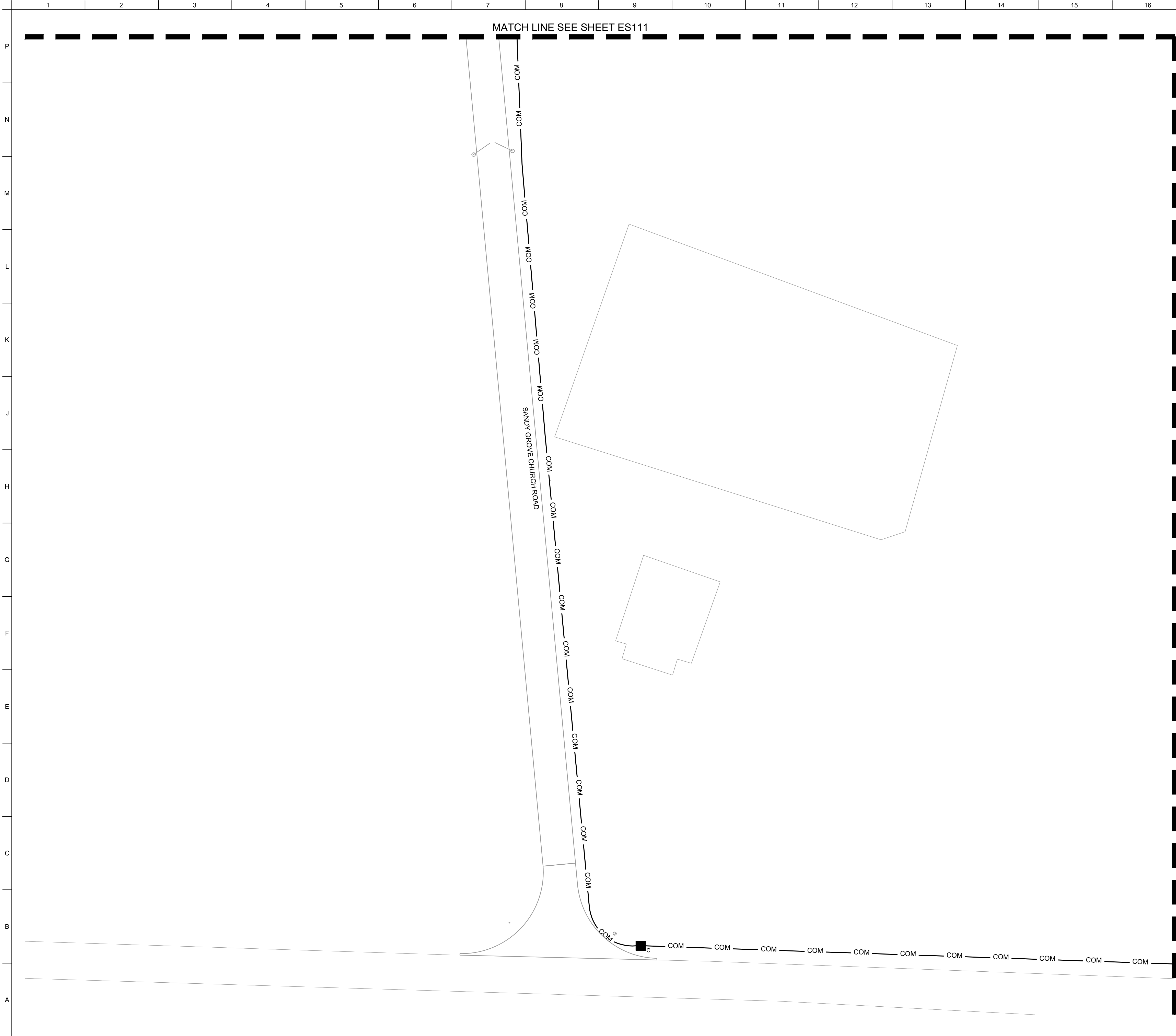
MARK	DESCRIPTION	DATE

DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
ANSI D SIZE:	

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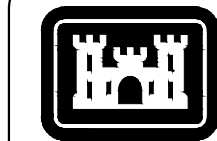
FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	SITE TELECOMMUNICATIONS PLAN - OVERALL
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SHEET ID
ES110



GENERAL SHEET NOTES

1. SEE SHEET ES603 FOR COPPER CABLING QUANTITIES, SEE SHEET ES604 FOR FOC QUANTITIES. SEE SHEET ES605 FOR DUCTBANK INFORMATION.



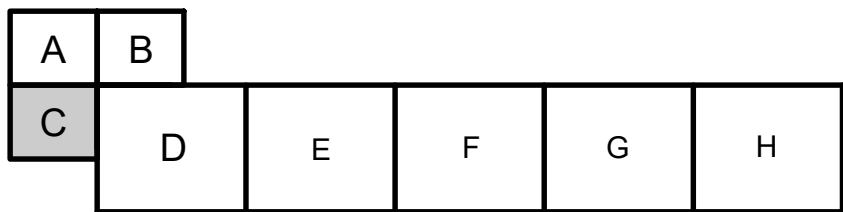
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MARK	DESCRIPTION	DATE

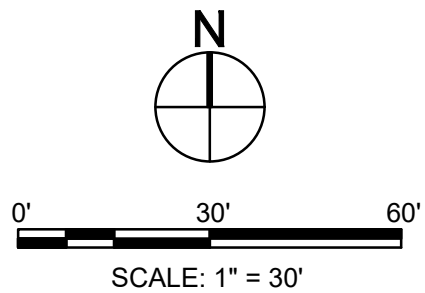
DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: --
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
ANSI D SIZE:	

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401

KEY PLAN

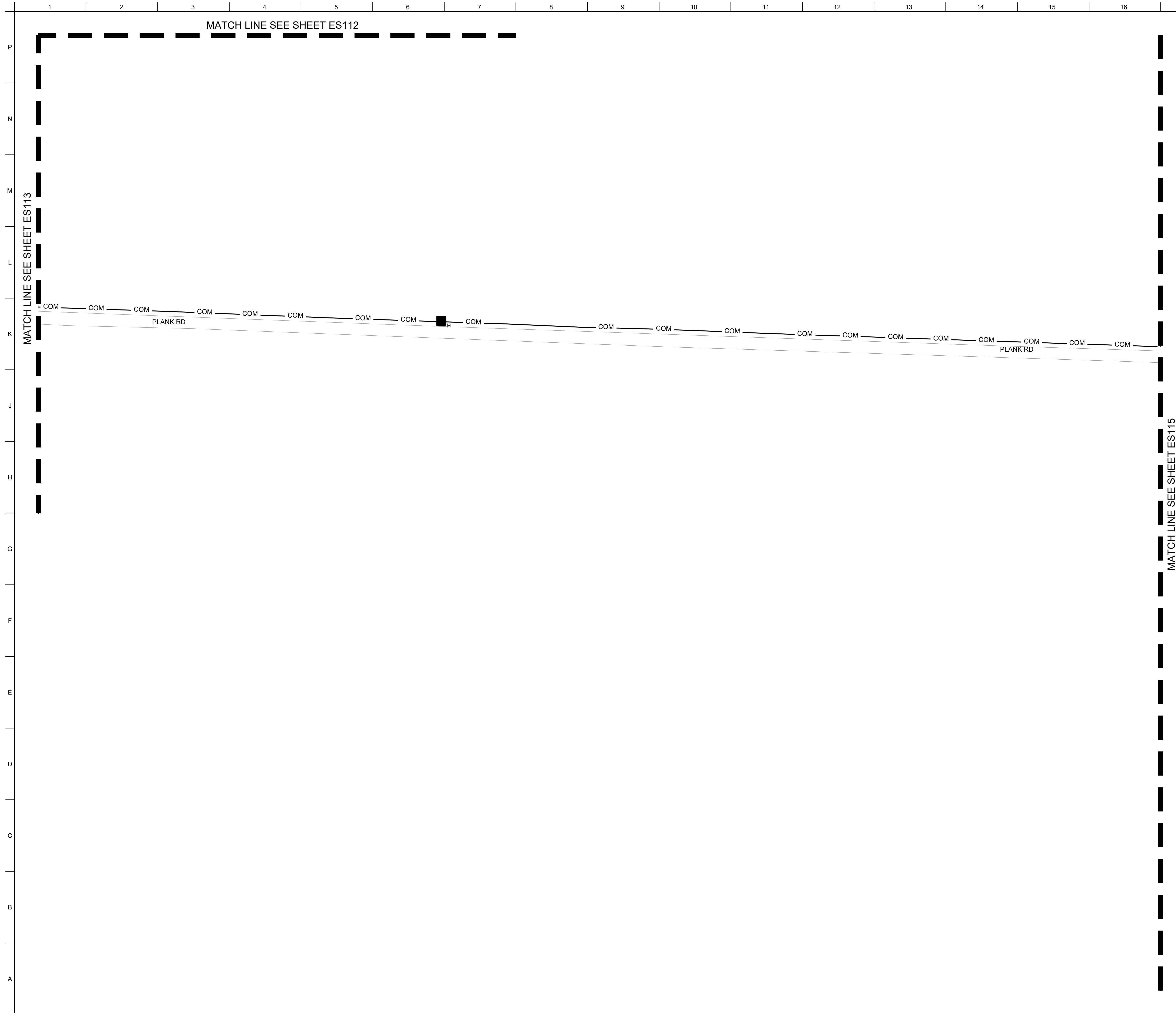


KEY MAP



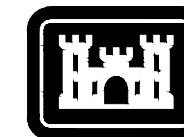
FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	SITE TELECOMMUNICATIONS PLAN - AREA C
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SHEET ID
ES113



GENERAL SHEET NOTES

1. SEE SHEET ES603 FOR COPPER CABLING QUANTITIES, SEE SHEET ES604 FOR FOC QUANTITIES. SEE SHEET ES605 FOR DUCTBANK INFORMATION.



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[illegible]

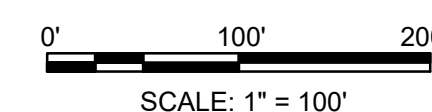
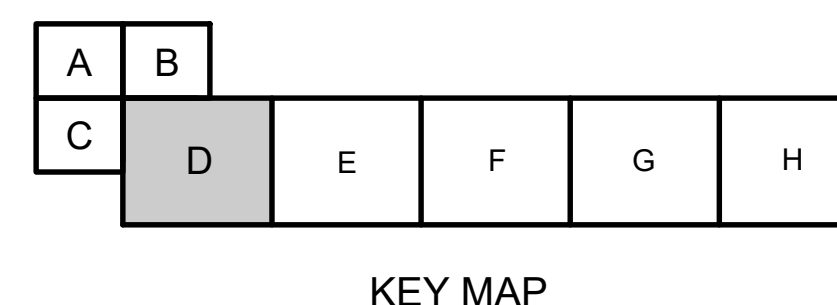
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 1001 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
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	CHECKED BY: R. DAVIS	CONTRACT NO.: --
	SUBMITTED BY: J. DEACON	CATEGORY CODE: 17B-65-01
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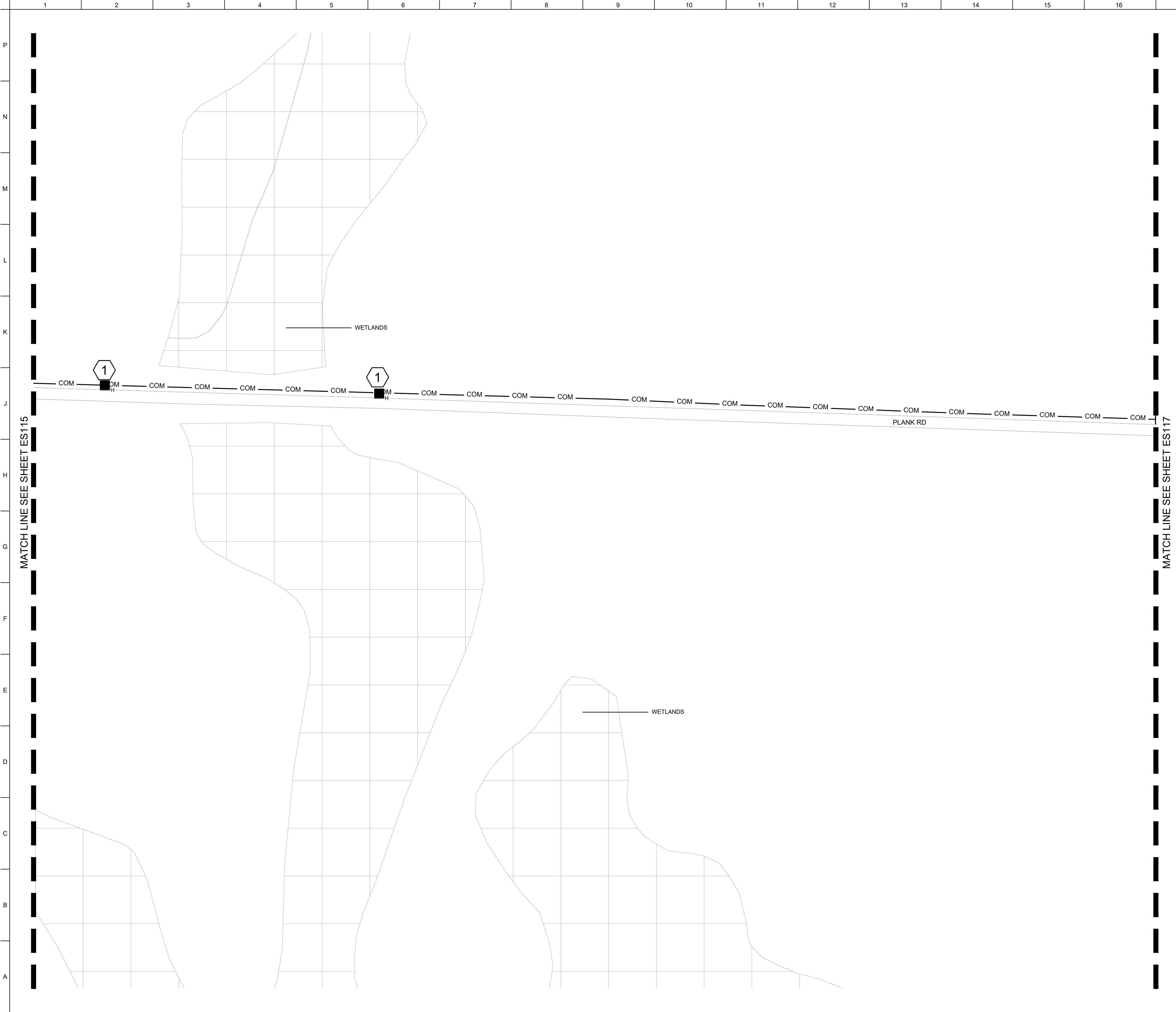
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

SITE TELECOMMUNICATIONS PLAN - AREA D

SHEET ID

ES114





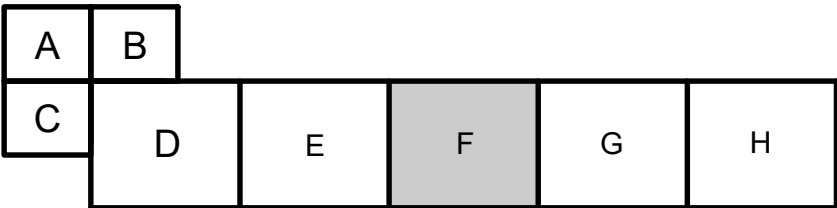
GENERAL SHEET NOTES

1. SEE SHEET ES603 FOR COPPER CABLING QUANTITIES, SEE SHEET ES604 FOR FOC QUANTITIES. SEE SHEET ES605 FOR DUCTBANK INFORMATION.

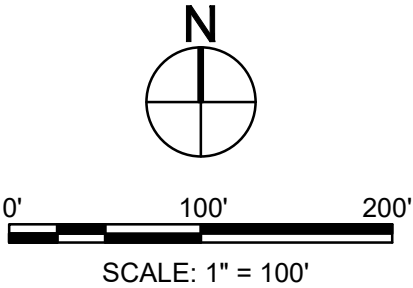
KEY NOTES

- ① CONDUIT SHALL TRAVERSE WETLANDS AREAS VIA DIRECTIONAL BORING. DIRECTIONAL BORING SHALL EXTEND 100' PAST WETLANDS AREAS TO HANDHOLES ON EACH SIDE

KEY PLAN



KEY MAP



US Army Corps of Engineers®

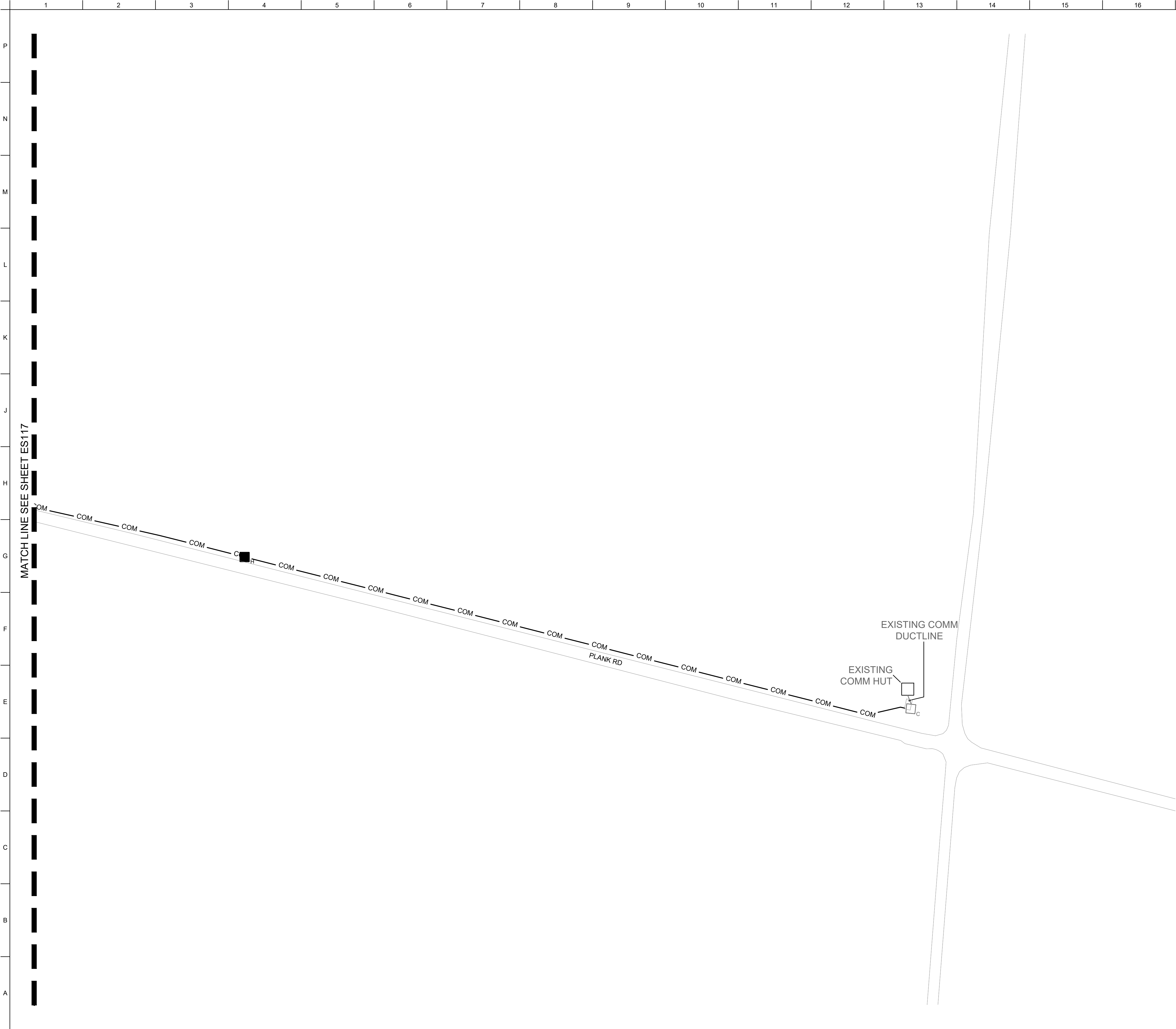
MARK	DESCRIPTION	DATE

DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
ANSI D SIZE:	

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401

FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	SITE TELECOMMUNICATIONS PLAN - AREA F
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SHEET ID
ES116



GENERAL SHEET NOTES

- 1. SEE SHEET ES603 FOR COPPER CABLING QUANTITIES, SEE SHEET ES604 FOR FOC QUANTITIES. SEE SHEET ES605 FOR DUCTBANK INFORMATION.

US Army Corps of Engineers

MARK		DESCRIPTION	DATE

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DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
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SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
ANSI D	SIZE:

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT
100 W. OGLETHORPE AVE.
SAVANNAH, GA 31401

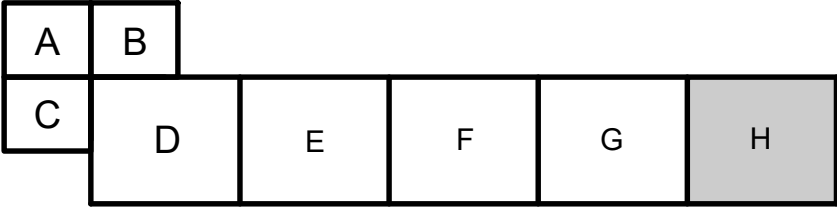
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

SITE TELECOMMUNICATIONS PLAN - AREA H

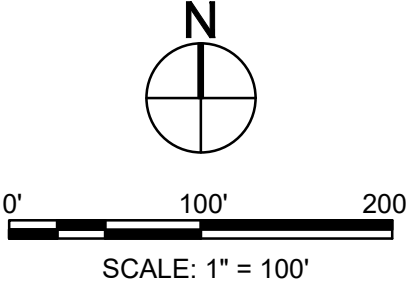
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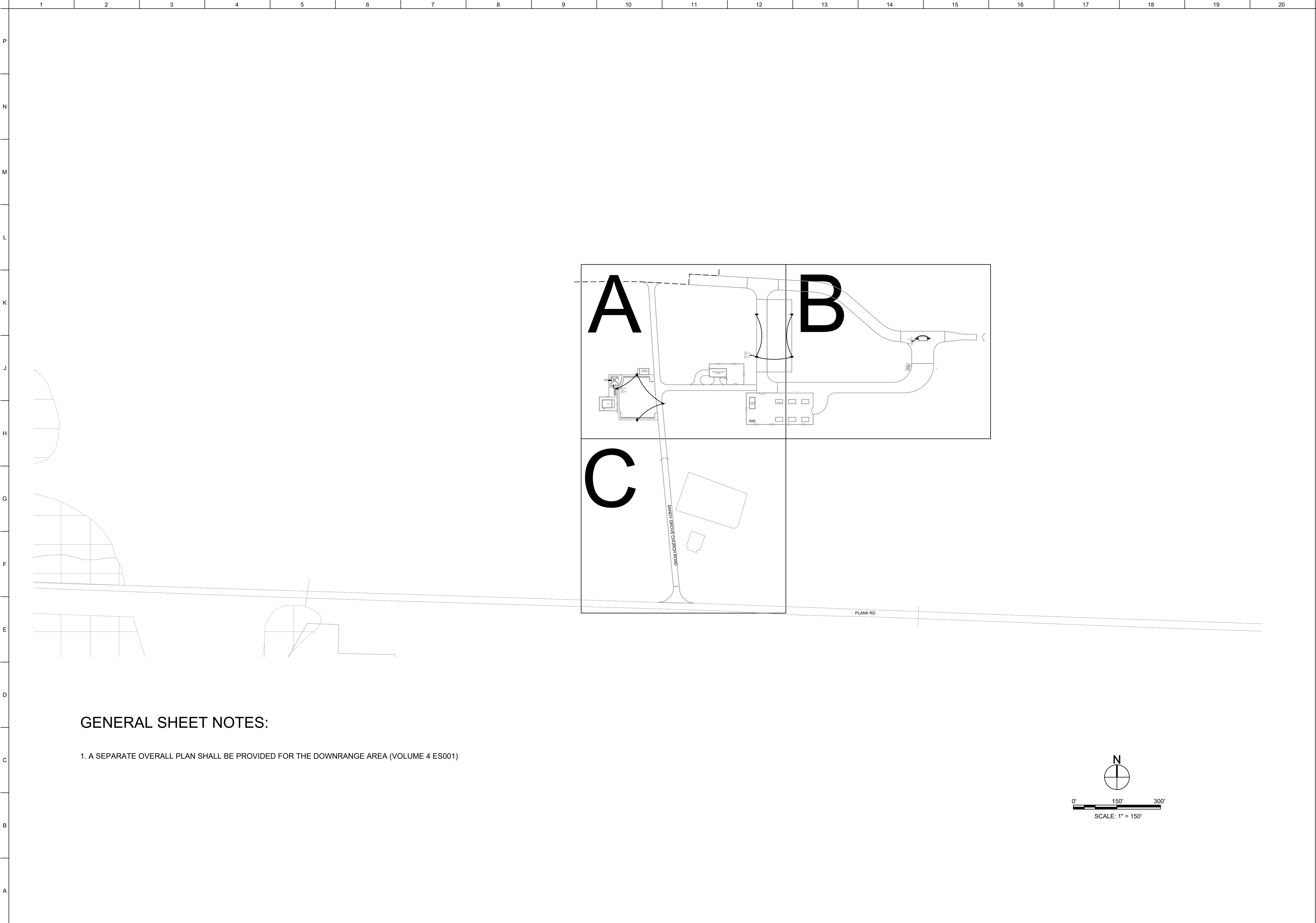
ES118

KEY PLAN



KEY MAP





GENERAL SHEET NOTES:

1. A SEPARATE OVERALL PLAN SHALL BE PROVIDED FOR THE DOWNRANGE AREA (VOLUME 4 ES001)



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MARK	DESCRIPTION	DATE

DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023	
	SOLICITATION NO.: W912HN-23-B-3001	
	CONTRACT NO.: --	
	CATEGORY CODE: 178-65-01	
	ANSI D	
DRAWN BY: H. TAYLOR	U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETTHORPE AVE. SAVANNAH, GA 31401	
		CHECKED BY: R. DAVIS
		SUBMITTED BY: J. DEACON
		SIZE:
		ANSI D

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

SITE LIGHTING PLAN - OVERALL

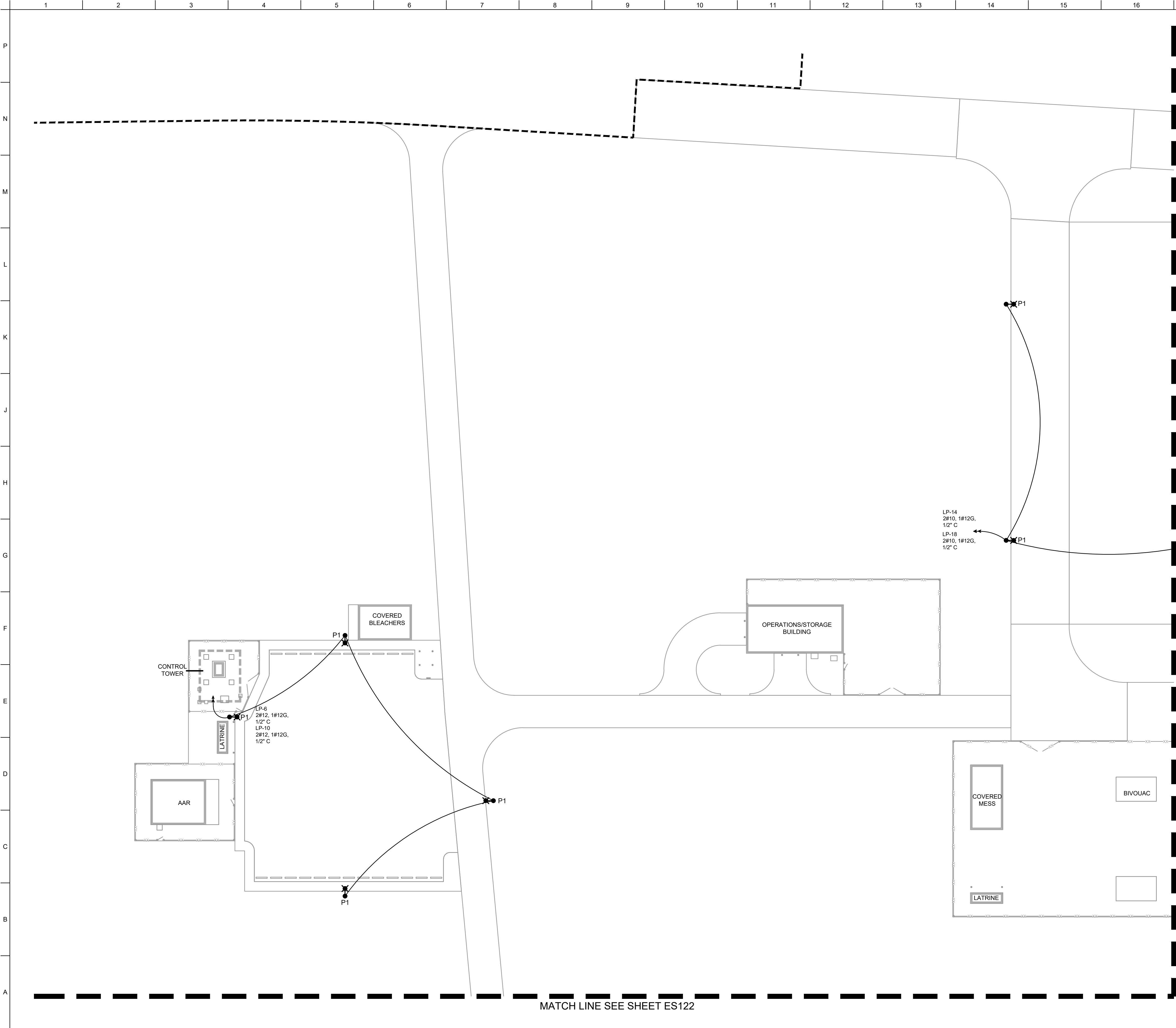
SHEET ID

ES119

READY TO ADVERTISE (RTA)

AEC_NCS_4_MONO.STB

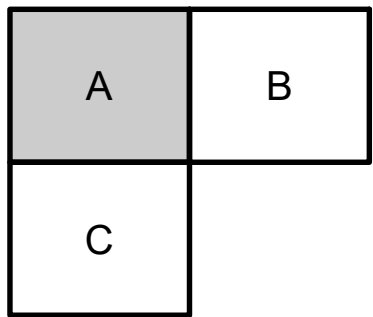
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06/2023 2:16:15 PM
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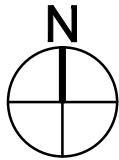
GENERAL SHEET NOTES

1. EACH LIGHTING POLE HAS BOTH RED LIGHTS AND WHITE LIGHTS. SEE VOLUME 2 CONTROL TOWER PANEL SCHEDULES FOR IDENTITY OF RED LIGHTING CIRCUITS AND WHITE LIGHTING CIRCUITS.

KEY PLAN



KEY MAP



0' 30' 60'
SCALE: 1" = 30'



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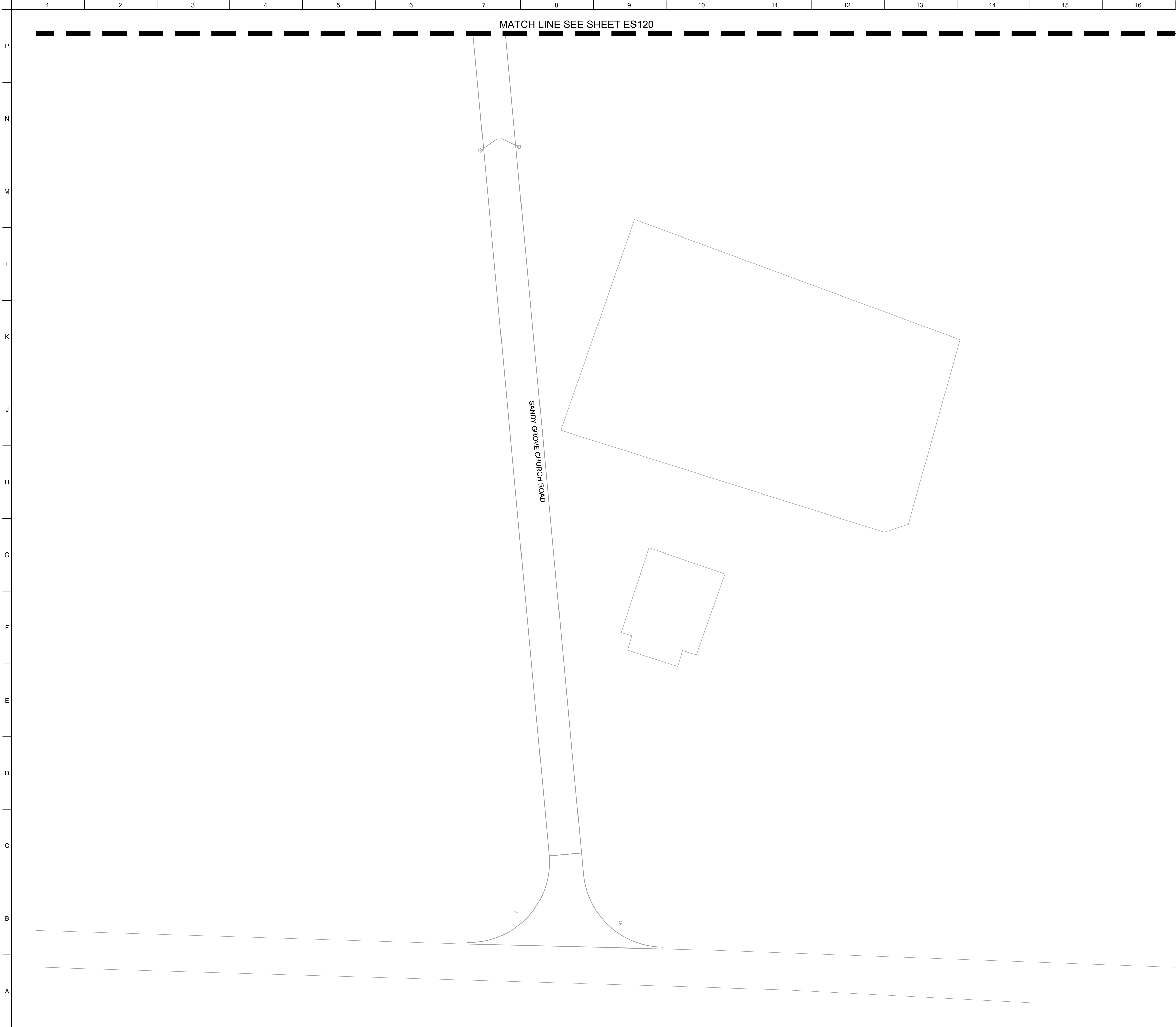
MARK	DESCRIPTION	DATE

DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
ANSI D SIZE:	

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETTHORPE AVE. SAVANNAH, GA 31401	
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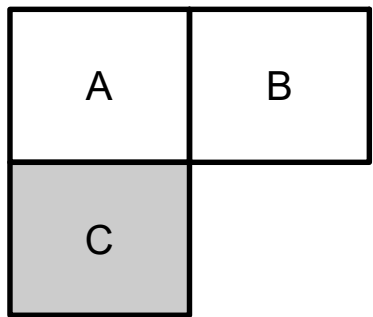
FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	SITE LIGHTING PLAN - AREA A
---	-----------------------------

SHEET ID ES120

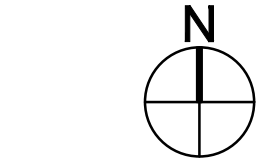


GENERAL SHEET NOTES

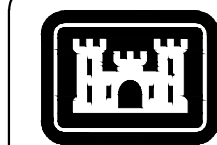
KEY PLAN



KEY MAP



0' 30' 60'
SCALE: 1" = 30'



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of Engineers®

MARK	DESCRIPTION	DATE

DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: --
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
SIZE: ANSI D	

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETTHORPE AVE. SAVANNAH, GA 31401
--

FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	SITE LIGHTING PLAN - AREA C
---	-----------------------------

SHEET ID ES122

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

P

N

M

L

K

J

H

G

F

E

D

C

B

A

A

B

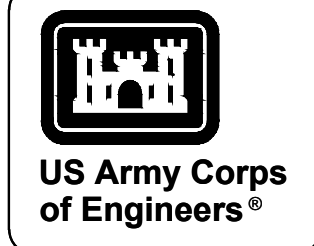
C

GENERAL SHEET NOTES:

1. A SEPARATE OVERALL PLAN SHALL BE PROVIDED FOR THE DOWNRANGE AREA (VOLUME 4 ES001)

0' 150' 300'

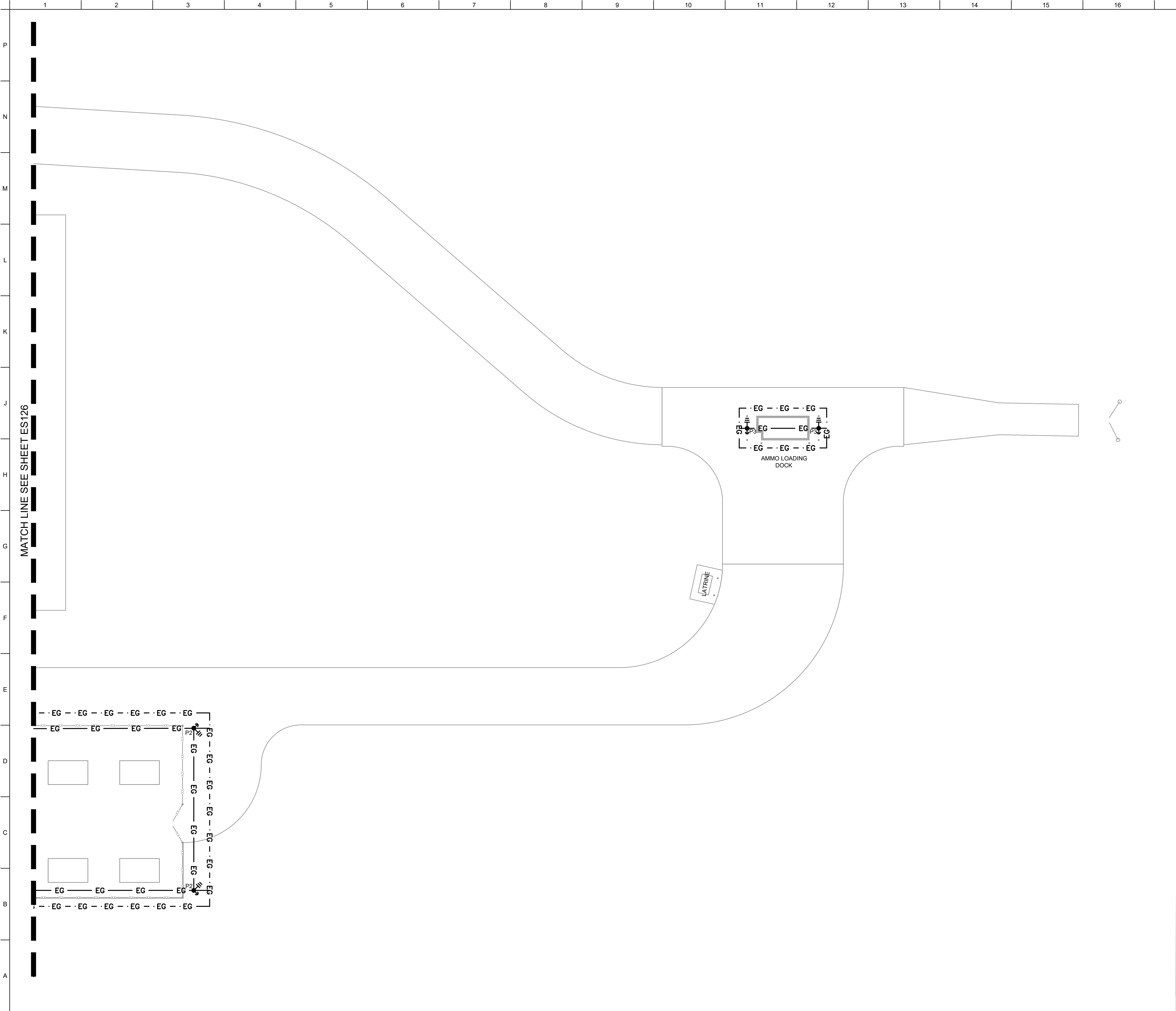
SCALE: 1" = 150'

[illegible]

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETTHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY:	H. TAYLOR	ISSUE DATE:	JUNE 2023
	DRAWN BY:	J. L. HARRIS	SOLICITATION NO.:	W955-23-001
	CHECKED BY:	R. DAVIS	CONTRACT NO.:	--
	SUBMITTED BY:	J. DEACON	CATEGORY CODE	178-65-01
	ANSI D.			

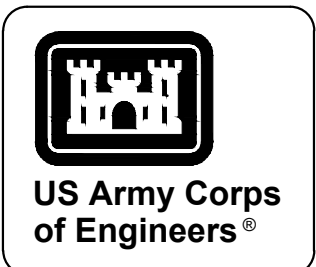
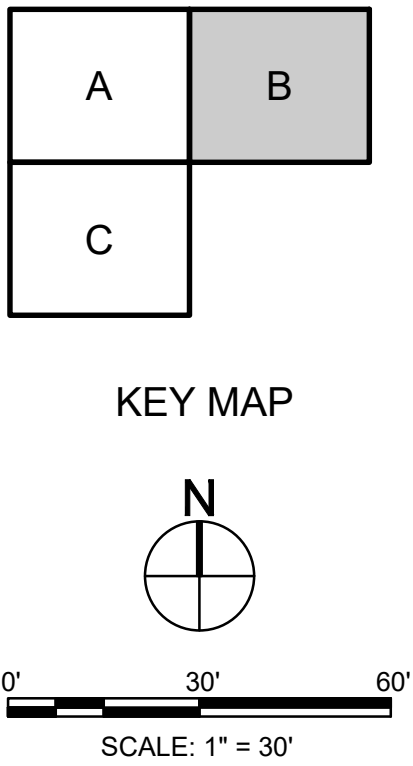
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

SHEET ID
ES123



GENERAL SHEET NOTES

KEY PLAN



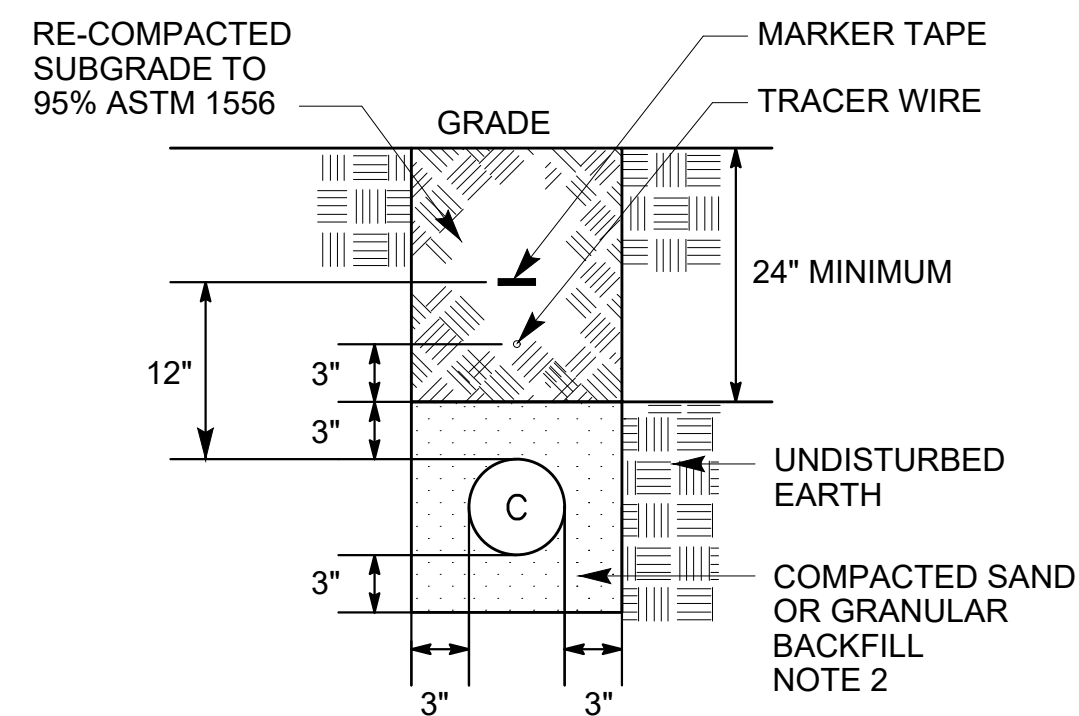
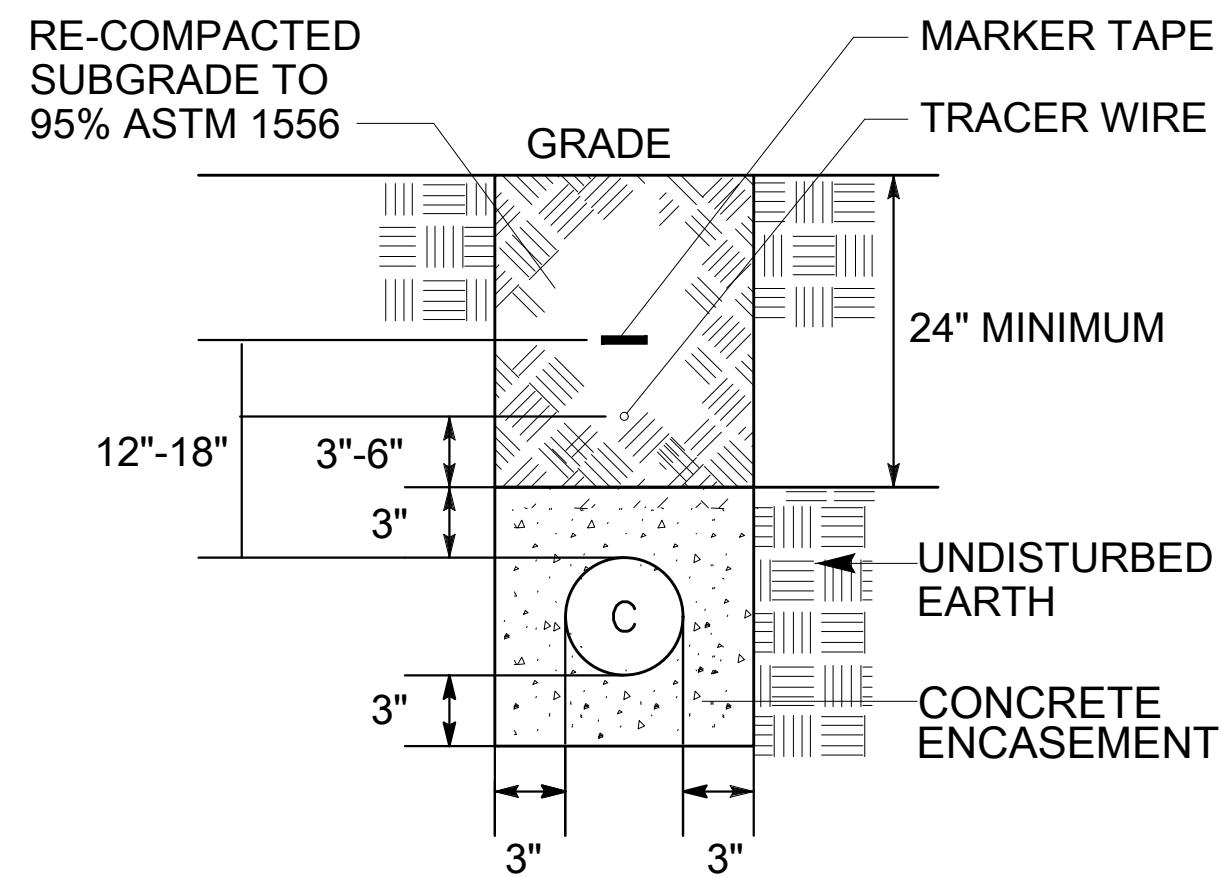
MARK	DESCRIPTION	DATE

DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-85-01
ANSI D SIZE:	

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	
---	--

FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	SITE LIGHTNING PROTECTION PLAN - AREA B
---	---

SHEET ID ES125



- POWER DUCT LINE DETAIL NOTES:

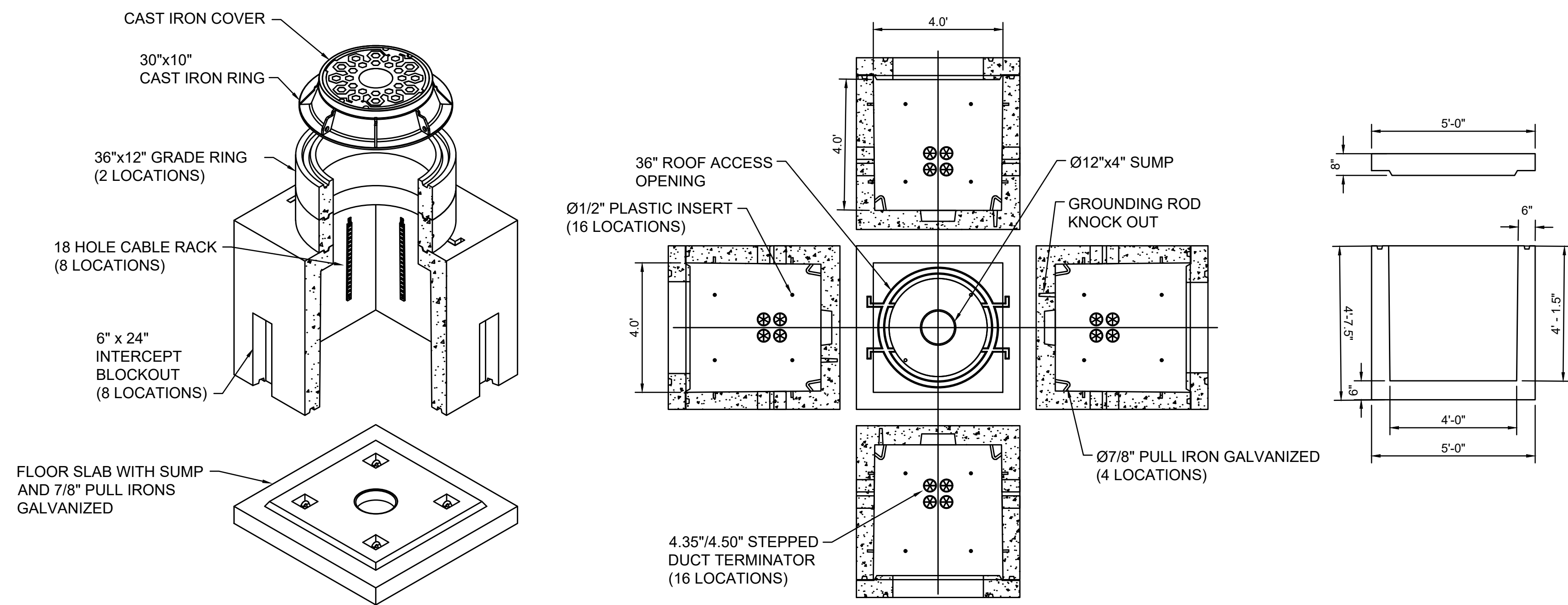
1. DEPTHS SHALL BE MEASURED TO FINISHED GRADE ELEVATIONS.
2. PROVIDE CONCRETE ENCASEMENT UNDER PAVEMENT.

- LIGHTING DUCT LINE DETAIL NOTES:

1. DEPTHS SHALL BE MEASURED TO FINISHED GRADE ELEVATIONS.
2. PROVIDE CONCRETE ENCASEMENT UNDER PAVEMENT.

1	SECONDARY POWER 1-WAY DUCTBANK
---	--------------------------------

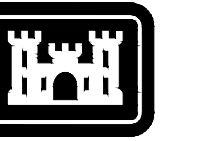
2	LIGHTING DUCT LINE DETAIL
---	---------------------------



MATERIAL LIST
DESCRIPTION
4'-0"x4'-0"x4'-0" BASE SECTION RACKED AND PAINTED
4'-0"x4'-0"x6.5" BASE SLAB
36" x 12" GRADE RINGS (2 QTY)

INSIDE FOLD OUT
DETAILED VIEW

3	POWER HAND HOLE
---	-----------------



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[illegible]

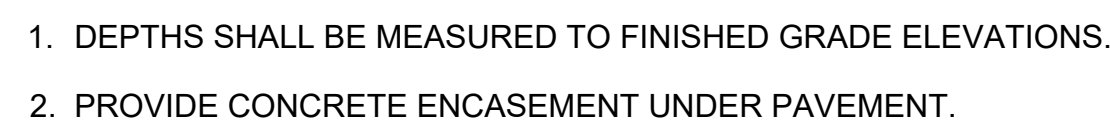
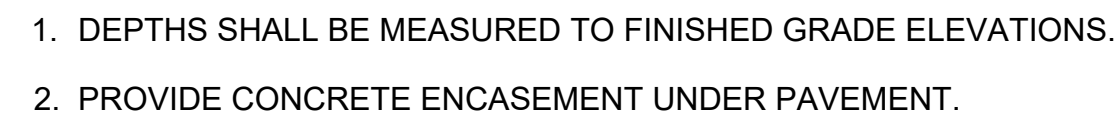
H. TAYLOR	JUNE 2023
DRAWN BY:	SOLICITATION NO.:
H. TAYLOR	W912HN-23-B-3001
CHECKED BY:	CONTRACT NO.:
R. DAVIS	--
SUBMITTED BY:	CATEGORY CODE:
J. DEACON	17R-65-01
SIZE:	
ANSI D	

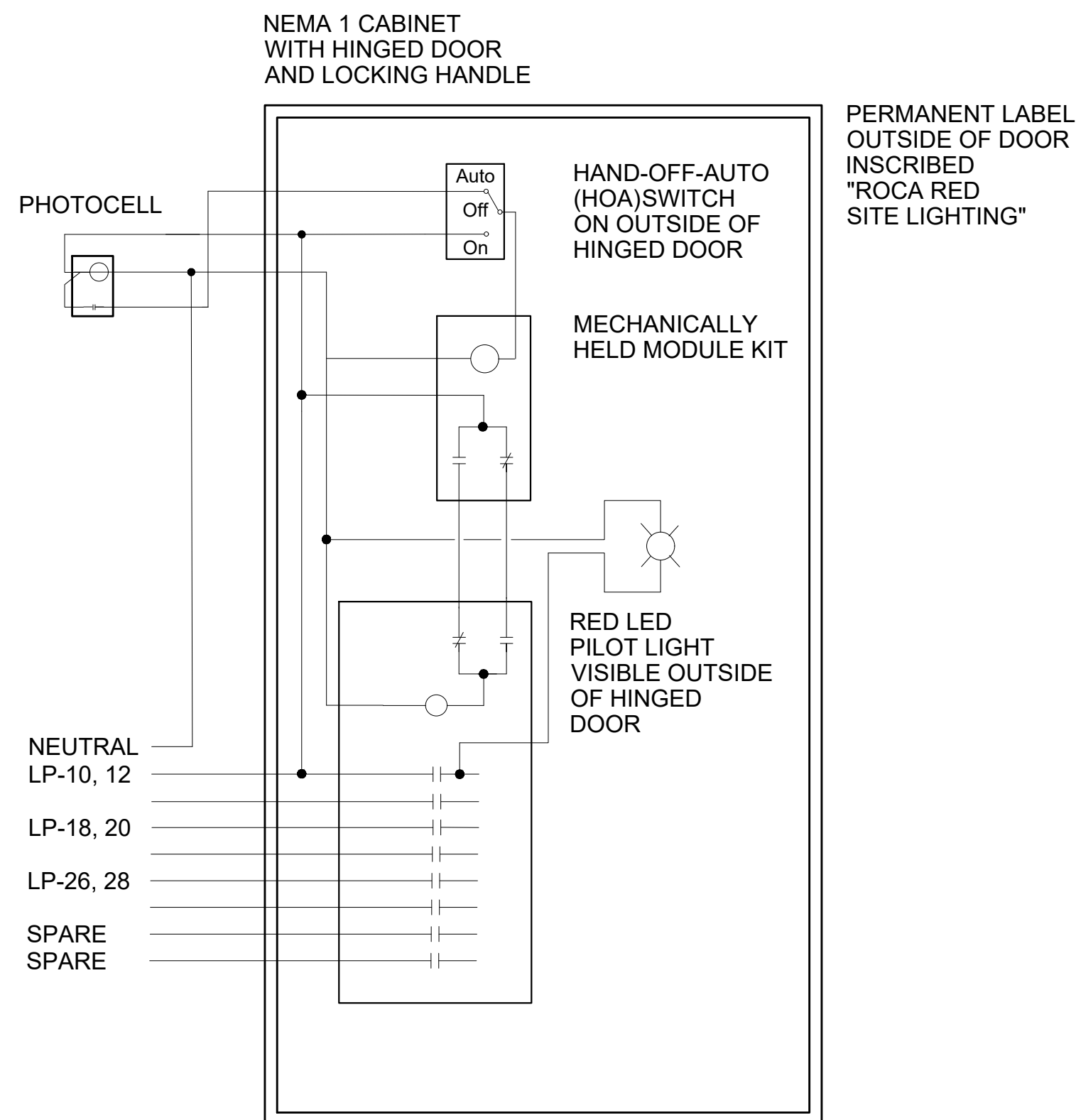
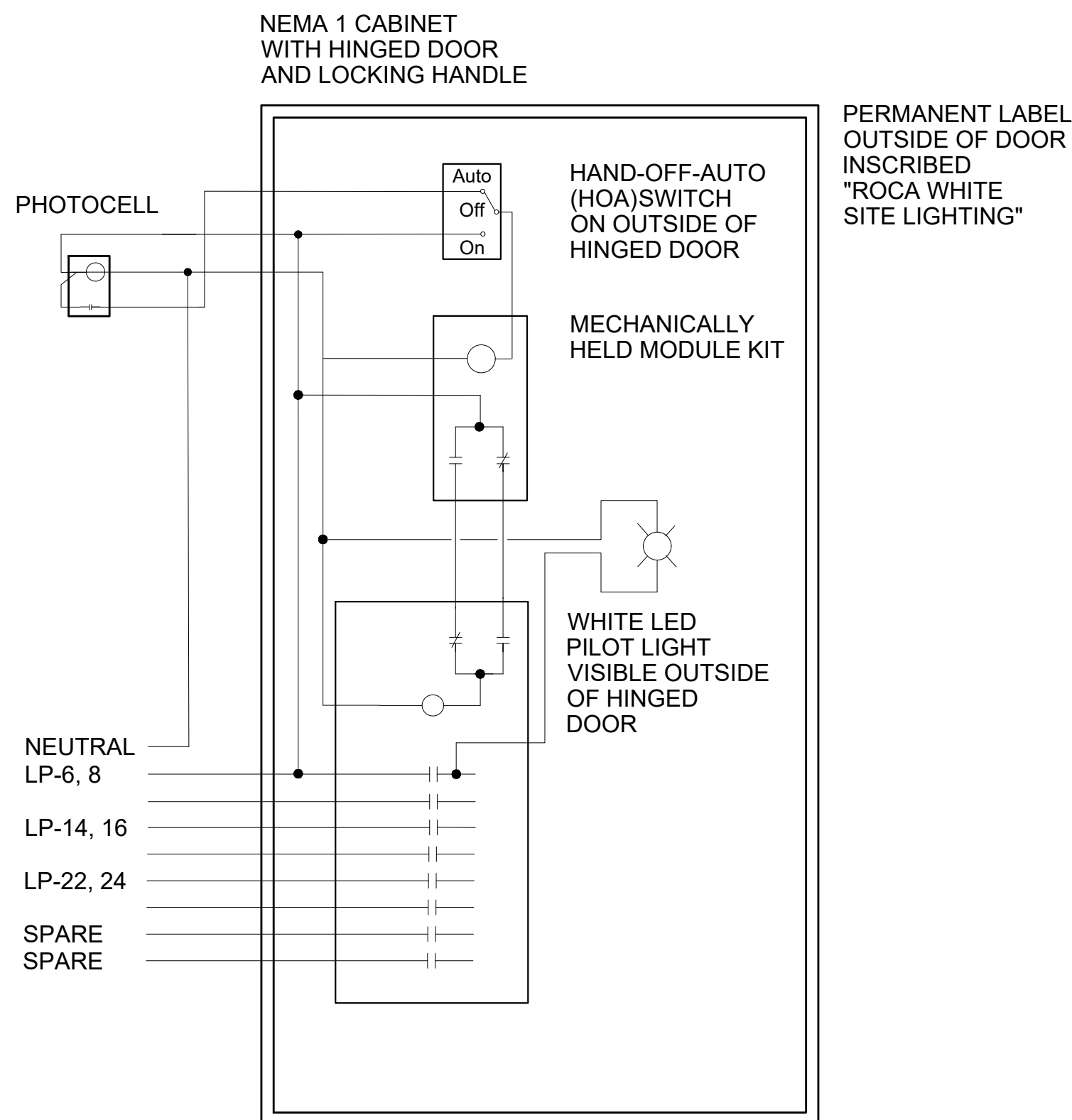
SAVANNAH DISTRICT
100 W. OGLETHORPE AVE.
SAVANNAH, GA 31401

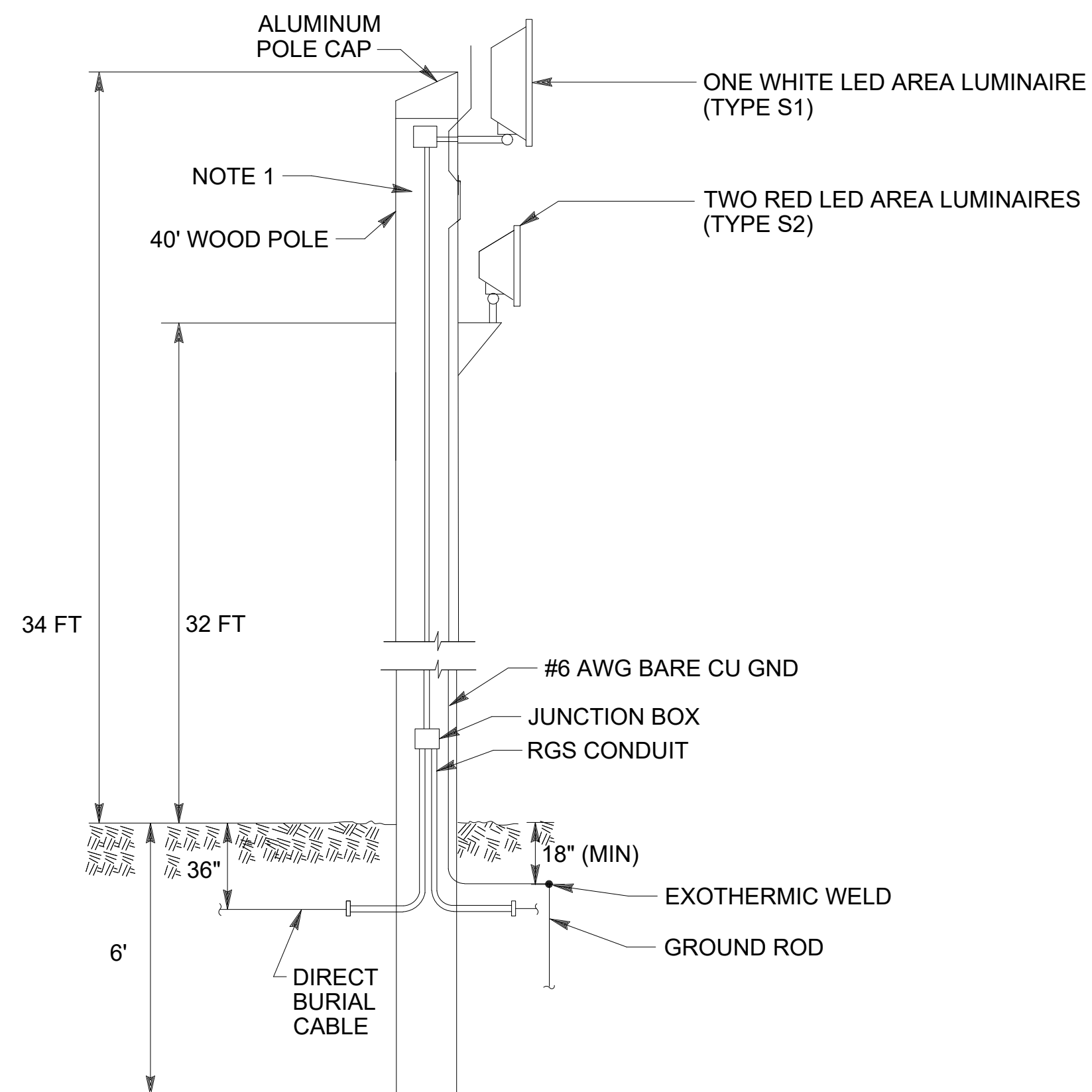
FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

HEET ID

ES501





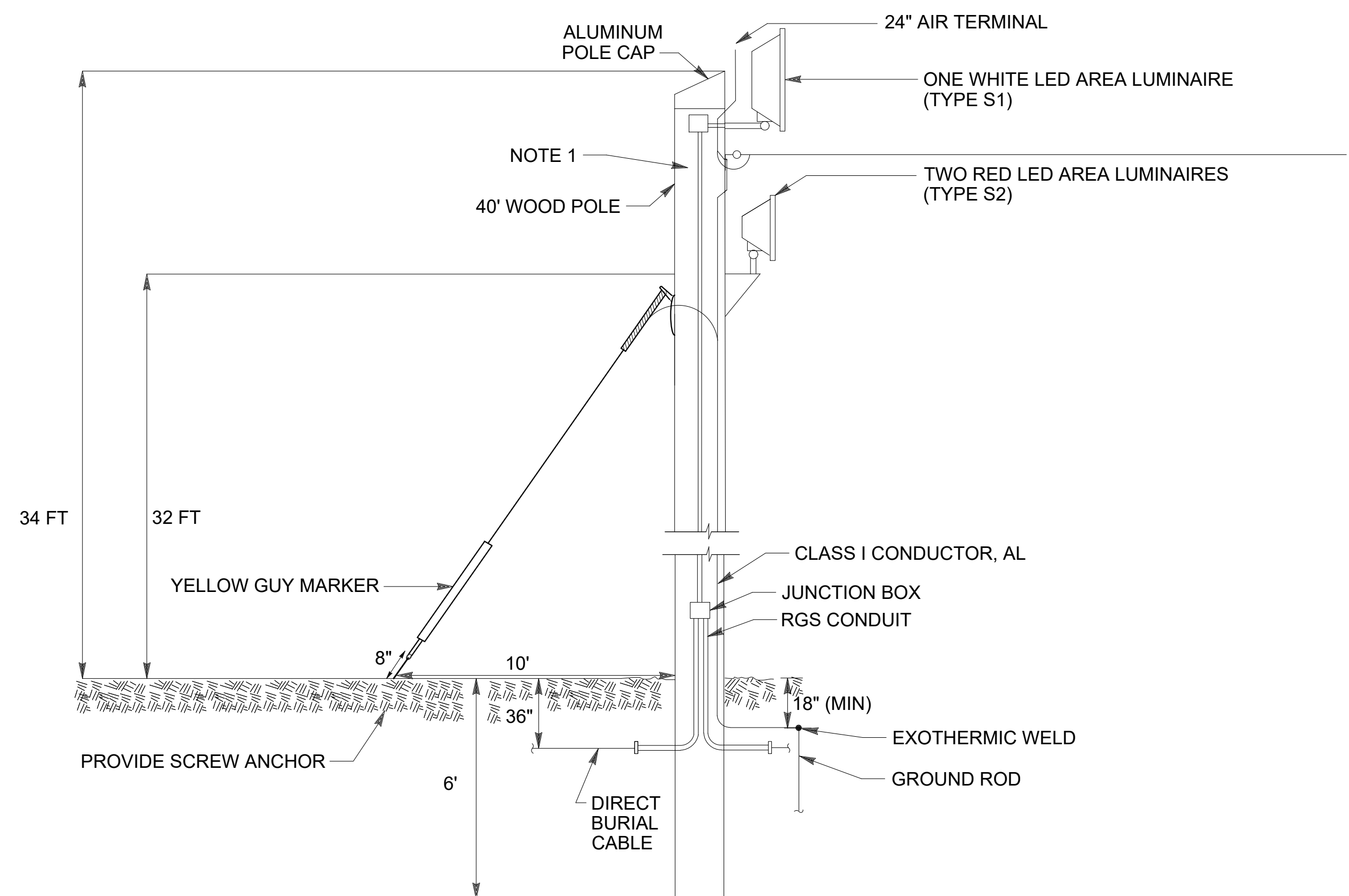


LIGHTING POLE DETAIL (P1)

NOT TO SCALE

NOTES:

1. SEE SITE LIGHTING PLANS FOR CONDUCTOR AND CONDUIT SIZES.
2. ALL MATERIALS AND EQUIPMENT SHALL BE PROVIDED BY THE CONTRACTOR UOI.

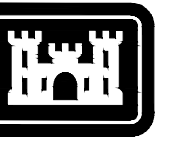


LIGHTING POLE DETAIL (P3)

NOT TO SCALE

NOTES:

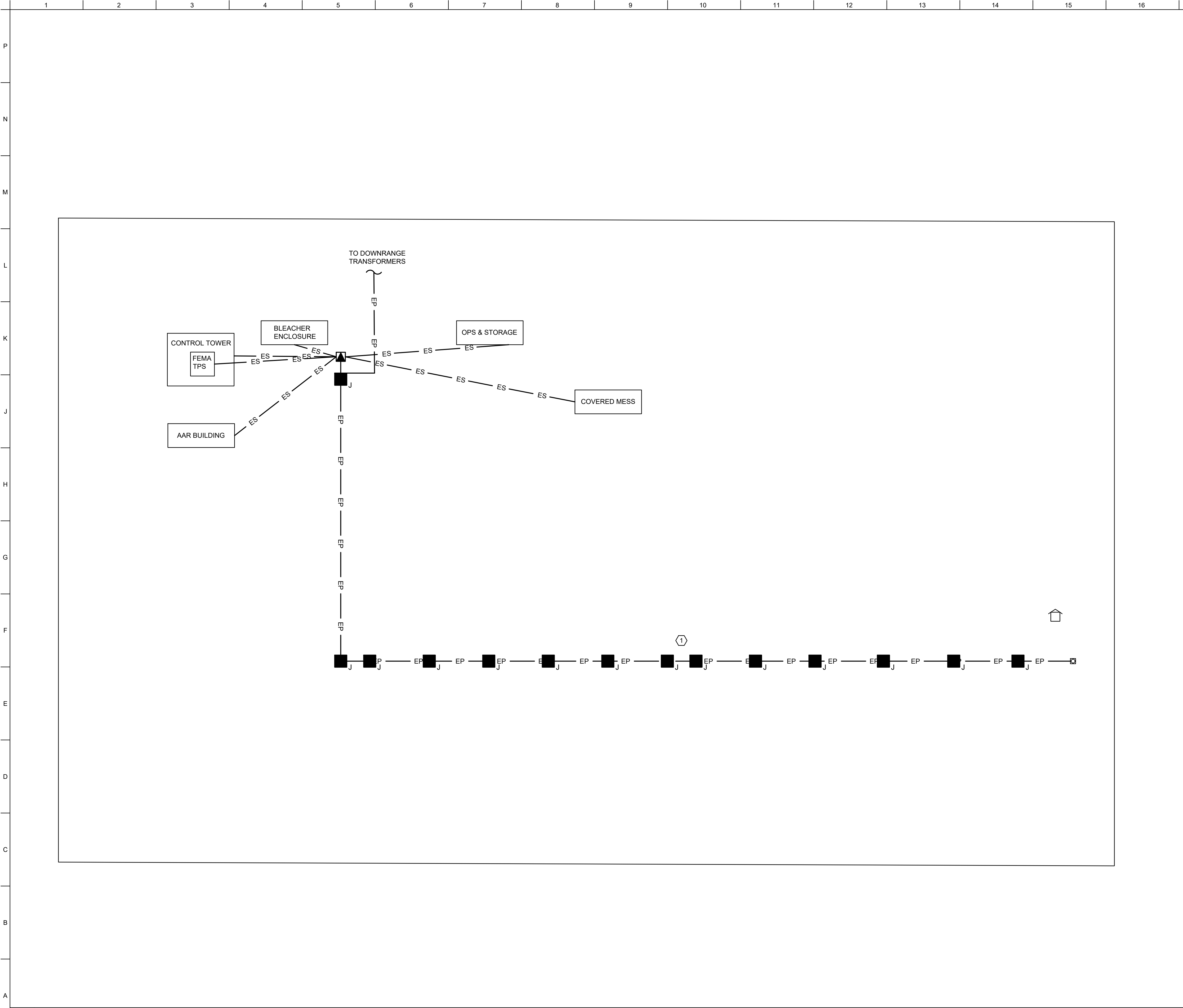
1. SEE SITE LIGHTING PLANS FOR CONDUCTOR AND CONDUIT SIZES.
2. ALL MATERIALS AND EQUIPMENT SHALL BE PROVIDED BY THE CONTRACTOR UOI.

[illegible]

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 1000 EAST FOREST AVE. SAVANNAH, GA 31401	DRAWN BY:	H. TAYLOR	JUNE 2023
	CHECKED BY:	R. TAYLOR	SOLICITATION NO.: W912H4-23-B-3001
	R. DAVIS	CONTRACT NO.:	
	R. THAMMACHUN	CATEGORY CODE:	178-95-01
	SIZE:		
	ANSI D		

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23 PN 96182
VOLUME 1 - SITE

SHEET ID
ES504

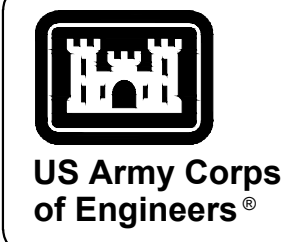


GENERAL NOTES

1. SEE SITE ELECTRICAL SCOPE OF WORK NOTES FOR RESPONSIBILITIES OF CONTRACTOR AND UTILITY.

KEY NOTES

① DIRECTIONAL BORING SHALL BE REQUIRED WHERE NEW LINES CROSS WETLAND AREAS. DIRECTIONAL BORING SHALL EXTEND 100' PAST THE EDGE OF ANY WETLANDS AREAS ON BOTH SIDES.



MARK	DESCRIPTION	DATE

DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
DRAWN BY: H. TAYLOR	SOLICITATION NO.: W912HN-23-B-3001
CHECKED BY: R. DAVIS	CONTRACT NO.: -
SUBMITTED BY: J. DEACON	CATEGORY CODE: 178-65-01
ANSI D SIZE:	

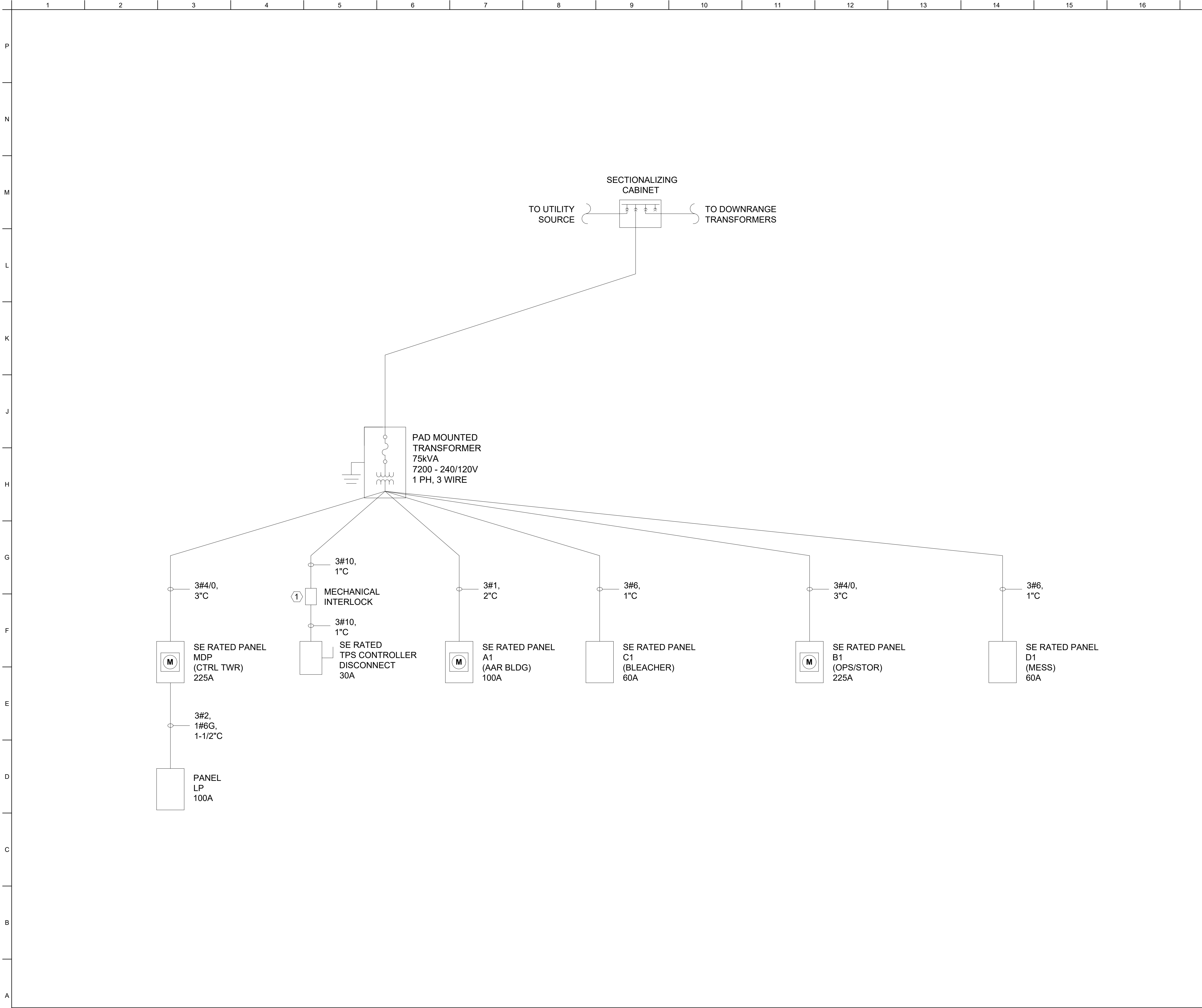
U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETTHORPE AVE. SAVANNAH, GA 31401
--

FORT LIBERTY, NORTH CAROLINA AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR) FY23, PN 96182 VOLUME 1 - SITE	SITE POWER RISER DIAGRAM
---	--------------------------

SHEET ID
ES601

1 SITE POWER RISER DIAGRAM

NOT TO SCALE



1. SEE SHEET ES001 FOR SITE ELECTRICAL SCOPE OF WORK.
2. PROVIDE METERS WHERE INDICATED (TYPICAL).

[illegible]

1 SEE VOLUME 2, BUILDING 1, EP101 AND EP601 FOR MORE INFORMATION ON MECHANICAL INTERLOCK.

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH, GA 31401	DESIGNED BY: H. TAYLOR	ISSUE DATE: JUNE 2023
	DRAWN BY: J. DEACON	SOLICITATION NO.: W95501-23-0001
	CHECKED BY: R. DAVIS	CONTRACT NO.: --
	SUBMITTED BY: J. DEACON	CATEGORY CODE 17R-65-01
	ANSI D	

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96162
VOLUME 1 - SITE

SITE POWER ONE-LINE DIAGRAM

ES602



GENERAL NOTES

- ## KEY NOTES

- 
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[illegible]

U.S. ARMY CORPS OF ENGINEERS SAVANNAH DISTRICT 100 W. OGLETHORPE AVE. SAVANNAH GA 31401	DESIGNED BY:	ISSUE DATE:
	DRAWN BY:	SOLICITATION NO.:
	CHECKED BY:	CONTRACT NO.:
	SUBMITTED BY:	CATEGORY CODE
	J. DEACON	178-85-01
ANSI/D		

FORT LIBERTY, NORTH CAROLINA
AUTOMATED MULTIPURPOSE TRAINING RANGE (MPTR)
FY23, PN 96182
VOLUME 1 - SITE

SHEET ID

ES604

READY TO ADVERTISE (RTA)

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AEC NCS 4 MONO.STB

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6/6/2023 2:20:12 PM
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