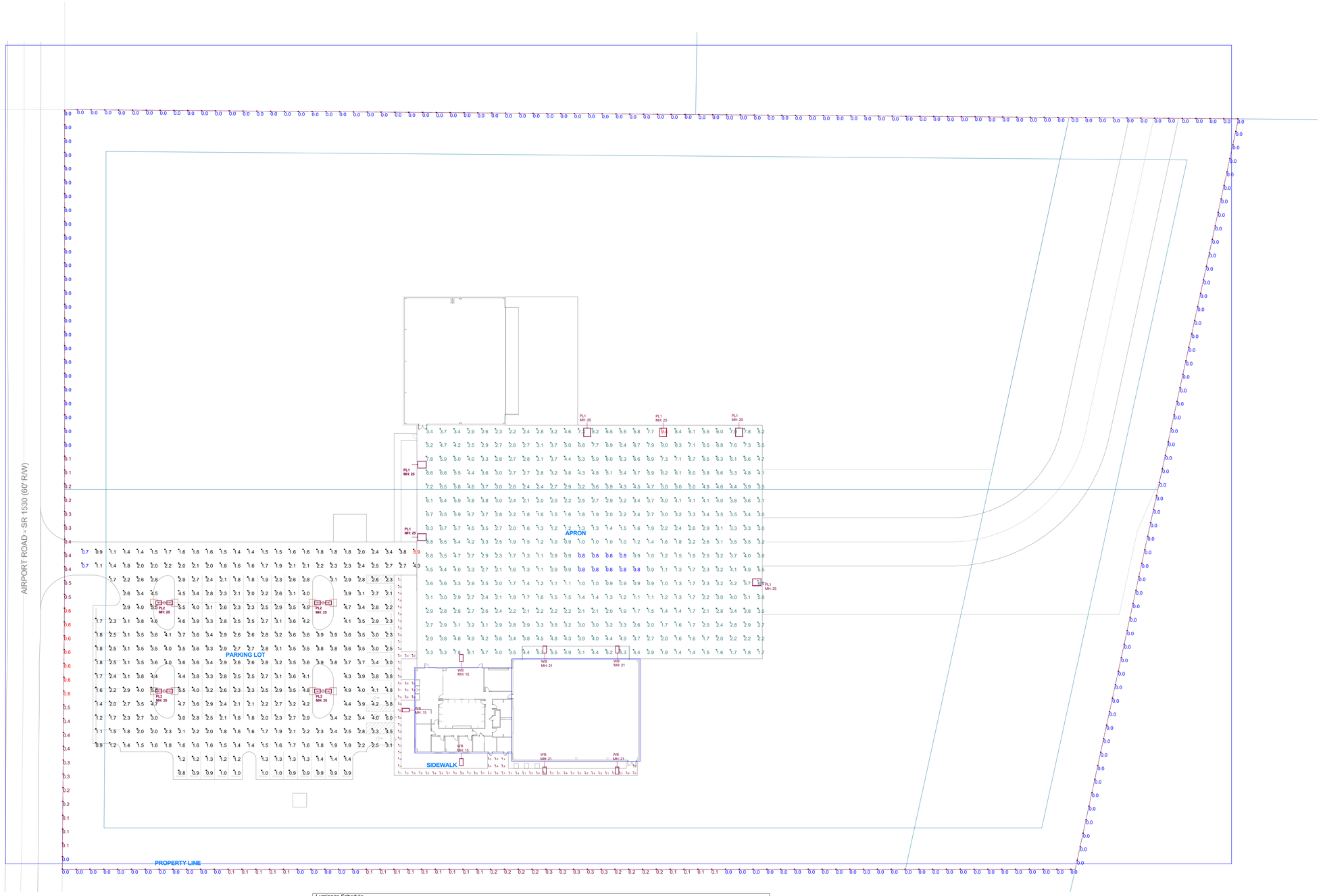


PHOTOMETRY - SITE
Scale: 1 inch= 35 Ft.

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Lum. Lumens	LLF	Luminaire Watts	Total Watts	Description
	7	WB	Single	12316	0.900	74.41	520.87	OPF-M-A08-840-T4M
	4	PL2	Back-Back	15719	0.954	106	848	ATB0 P303 R4 4K
	6	PL1	Single	32447	0.954	264	1584	ATB2 P604 R4 4K

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Grid Z
APRON	Illuminance	Fc	3.46	9.4	0.8	4.33	11.75	0
PARKING LOT	Illuminance	Fc	2.68	6.9	0.7	3.83	9.86	0
PROPERTY LINE	Illuminance	Fc	0.06	0.6	0.0	N.A.	N.A.	N.A.
SIDEWALK	Illuminance	Fc	4.15	10.2	1.1	3.77	9.27	0

TARGETING:
PARKING (IES):
- 0.2 FC MIN
- 20:1 MAX/MIN

APRON (CLIENT)
- 2.0 FC AVERAGE
- 4:1 AVG/MIN

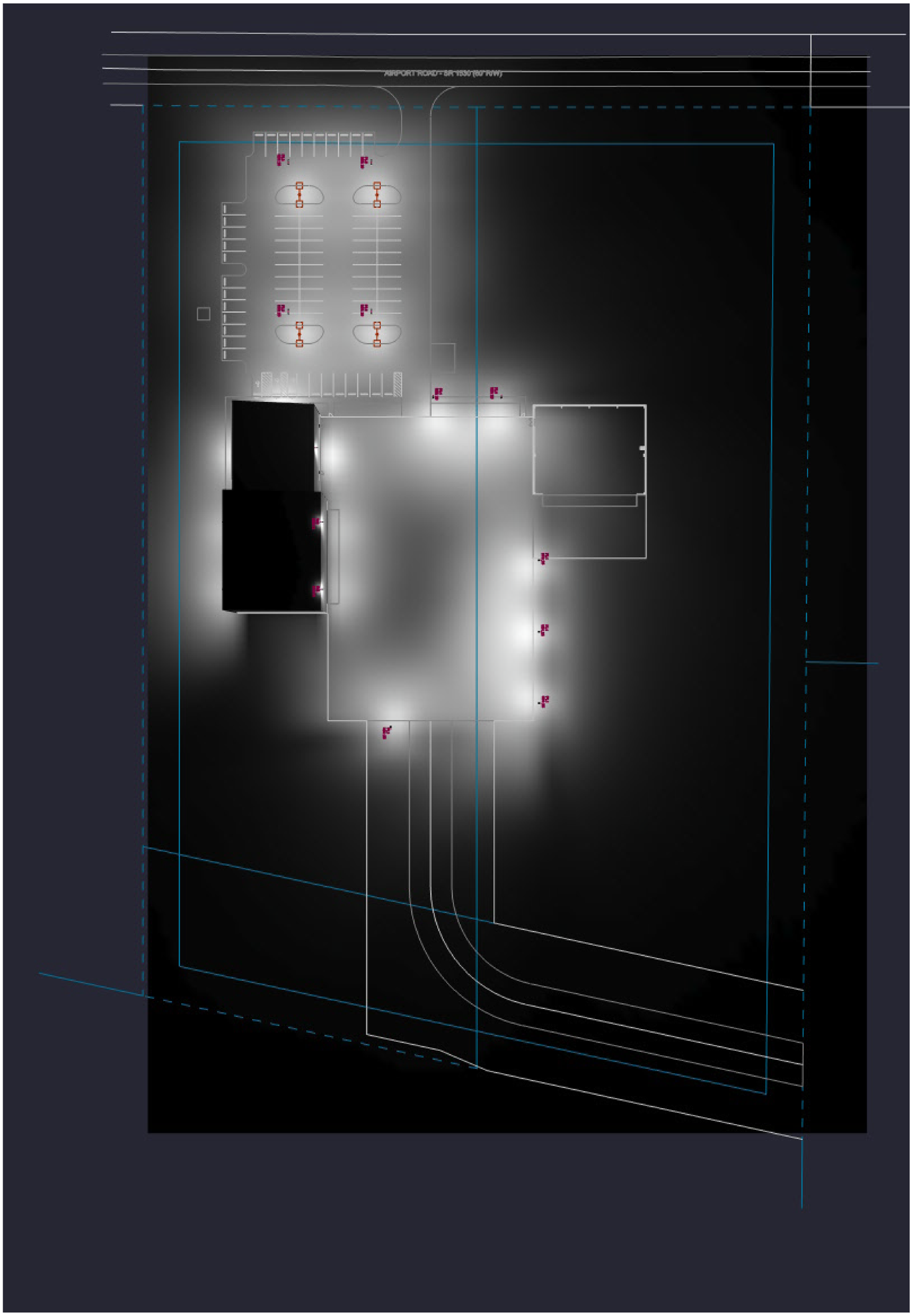
NOTES:
- WHEN THE LLF IS NOT .9 OR 1.0 THE WATTAGE INFORMATION WILL NOT BE CORRECT
- LUMINAIRES WERE DEFINED AS SPECIFIED
- LUMINAIRES PLACED AT PROPOSED LOCATIONS
- LUMINAIRE SYMBOLS MAGNIFIED FOR LEGIBILITY PURPOSES
- LUMINAIRE TYPES "PL1" AND "PL2" IES FILE PROVIDED BY MANUFACTURER FOR 80 CRI, 3000 K FIXTURE. LLF MODIFIED TO EMULATE A 80 CRI, 4000 K FIXTURE. LLF = .9 X 1.06 = .954 LLF
- MH:25 = LIGHTING FIXTURE MOUNTING HEIGHT IS 25'-0" ABOVE FINISHED GRADE/FLOOR TO LUMINAIRE, TYPICAL

SESCO LIGHTING

Sales Rep: LAURA GRAYSON
Office: CHARLOTTE
Contact No: 980-220-9286
Processed By: FIVGAS, J.
Filename: 06-21-24 ECSU CURRITUCK SITE.AGI

ECSU HANGAR FACILITY
CURRITUCK COUNTY REGIONAL AIRPORT
SITE LIGHTING

Date:6/21/2024



Page 2 of 2

Date:6/21/2024

ECSU HANGAR FACILITY

CURRITUCK COUNTY REGIONAL AIRPORT

SITE LIGHTING

Sales Rep: LAURA GRAYSON

Office: CHARLOTTE

Contact No: 980-220-9286

Processed By: FIVGAS, J.

Filename: 06-21-24 ECSU CURRITUCK SITE.AGI

SESCO LIGHTING

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH WHEN PLOTTED ON ORIGINAL PAPER SIZE

PLANTING NOTES - APPLIES TO ALL L16X SHEET

1. EXISTING UTILITIES SHOWN ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD PRIOR TO BEGINNING WORK. IDENTIFY LOCATION OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING AROUND EXISTING UTILITIES TO REMAIN.

2. AFTER THE SITE IS STABILIZED AND FREE OF SEDIMENTATION, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES, SILT, RIP RAP, AND TEMPORARY STONE STAGING AREAS FOR REPLACEMENT WITH PLANTING SOIL. PROVIDE PLANTING ACCORDING TO THE LANDSCAPE PLAN.

3. TEMPORARY EROSION CONTROL SEED MUST BE FULLY REMOVED PRIOR TO PREPARATION OF PERMANENT SEED, SOD OR LANDSCAPE BEDS.

4. UNLESS OTHERWISE NOTED IN THE PLANT LIST, OWNER SHALL OBTAIN AND INSTALL ONLY PLANT MATERIAL THAT IS GROWN ON ITS OWN ROOT - GRAFTED OR BUDDED PLANT MATERIAL WILL BE REJECTED.

5. ALL TREES SHALL BE OBTAINED FROM THE NURSERY WITH EXPOSED ROOT CROWNS. B&B MATERIAL DELIVERED TO SITE WITH BURIED OR RECENTLY BURIED ROOT CROWNS WILL BE REJECTED.

6. CONTRACTOR WILL NOTIFY LANDSCAPE ARCHITECT OF PLANT SUBSTITUTIONS IN ANY MEASUREMENT OR SPECIES INDICATED. SEE SPECIFICATIONS FOR FULL NOTIFICATION REQUIREMENTS.

7. CONTRACTOR SHALL STAKE ALL PLANT LOCATIONS IN THE FIELD. OBTAIN APPROVAL FROM LARCH PRIOR TO STARTING PLANT INSTALLATIONS

8. DO NOT PLANT IN STORM WATER CONVEYANCE SWALES OR PROVIDE FINE GRADING THAT DISRUPTS FLOW OR CHANGES LONGITUDINAL SLOPES.

9. PLANT THE OUTER EDGES OF EACH PLANTING GROUP FOLLOWING THE BED OUTLINE ACCORDING TO THE PLAN. ONCE A SATISFACTORY MATCHED OUTER SHAPE IS OBTAINED, FILL THE CENTER OF EACH AREA WITH PLANTS ACCORDING TO THE PLAN AND SPACING NOTES.

10. THE PLANTING LAYOUT WITHIN PLANTING BEDS SHOULD BE SHIFTED TO MINIMIZE CONFLICTS WITH EXISTING TREE ROOTS AND OTHER STRUCTURES.

11. DISTURBED EARTH AREAS BEYOND PROJECT LIMITS THAT ARE DIRECTLY CAUSED BY CONTRACTOR MEANS AND METHODS SHALL BE RESTORED WITH FESCUE SOD UNLESS OTHERWISE NOTED.

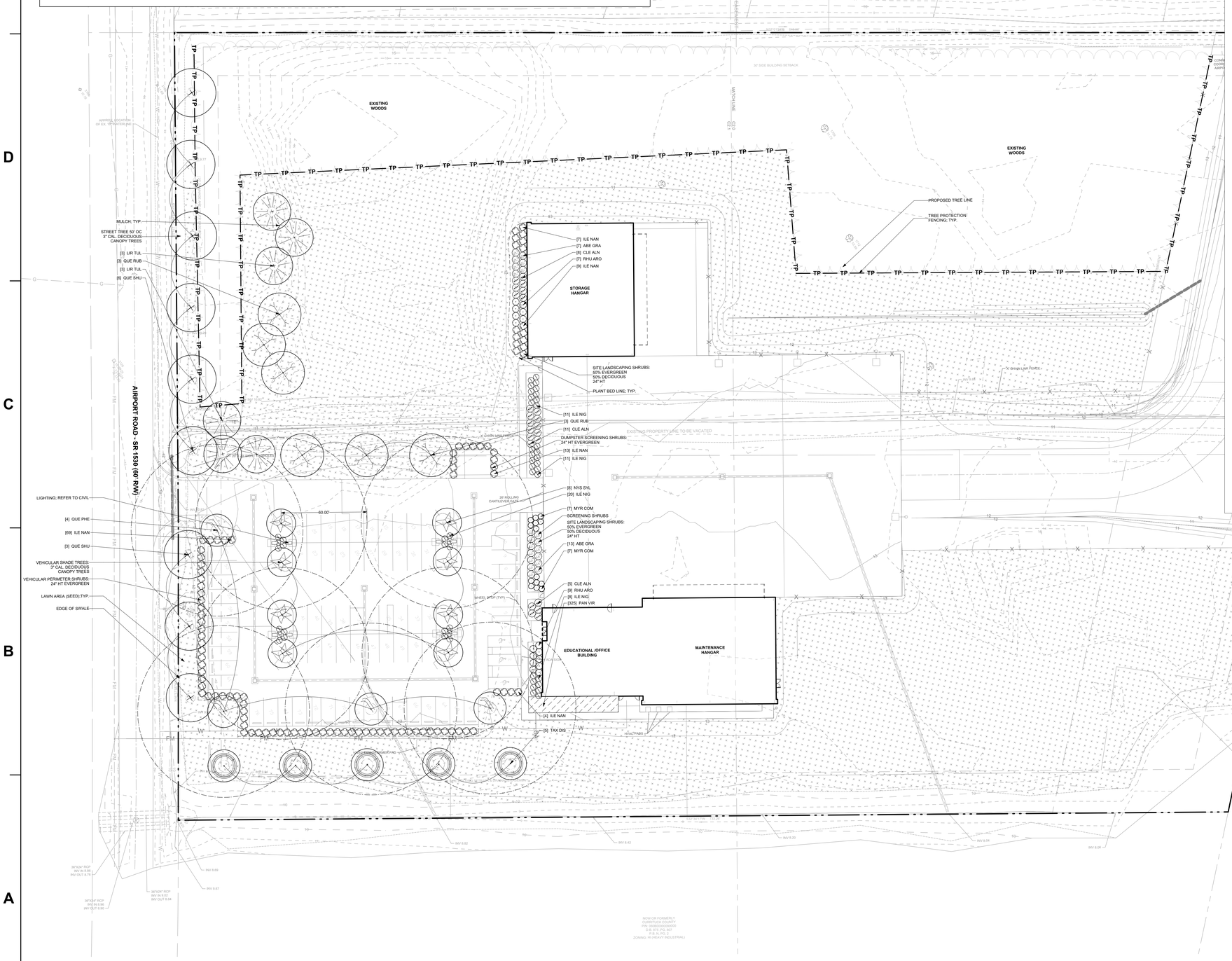
12. ALL PLANTINGS AND TURF TO BE PERMANENTLY IRRIGATED.

13. CONTRACTOR IS TO INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES FOR THE DURATION OF THE PROJECT.

14. CONTRACTOR IS TO INSTALL ALL PLANTING SOILS, PERFORM ALL PLANTING SOIL PREPARATIONS AND AMENDMENTS, AND IRRIGATION INSTALLATION. THE CONTRACTOR IS TO INSTALL ALL SOD ON THE PROJECT.

PLANT SCHEDULE - CONTRACTOR SHALL SATISFY ALL MEASUREMENTS NOTED - EXCEED SIZES UPON APPROVAL

KEY	QTY	LATIN NAME	COMMON NAME	CONTAINER | SIZE | HT | W | SPACING	COMMENTS
DECIDUOUS TREES					
LIR TUL	6	LIRIODENDRON TULIPIFERA	TULIP POPLAR	B&B | 3" CAL. | 16' HT. | 8' W. | AS SHOWN	STRONG CENTRAL LEADER; EVENLY BRANCHED; FULL
NYS SYL	8	NYSSA SYLVATICA	BLACK GUM	B&B | 3" CAL. | 12' HT. | 6' W. | AS SHOWN	STRONG CENTRAL LEADER; EVENLY BRANCHED; FULL
QUE PHE	4	QUERCUS PHELLOS	WILLOW OAK	B&B | 3" CAL. | 16' HT. | 8' W. | AS SHOWN	STRONG CENTRAL LEADER; EVENLY BRANCHED; FULL
QUE RUB	6	QUERCUS RUBRA	RED OAK	B&B | 3" CAL. | 16' HT. | 8' W. | AS SHOWN	STRONG CENTRAL LEADER; EVENLY BRANCHED; FULL
QUE SHU	9	QUERCUS SHUMARDII	SHUMARD RED OAK	B&B | 3" CAL. | 16' HT. | 8' W. | AS SHOWN	STRONG CENTRAL LEADER; EVENLY BRANCHED; FULL
TAX DIS	5	TAXODIUM DISTICHUM	BALD CYPRESS	B&B | 3" CAL. | 16' HT. | 8' W. | AS SHOWN	STRONG CENTRAL LEADER; EVENLY BRANCHED; FULL
DECIDUOUS SHRUBS					
ABE GRA	20	ABELIA X GRANDIFLORA	GLOSSY ABELIA	CONT. | 3 GAL | 12" HT. | 12" W. | AS SHOWN	FULL; DENSE; MATCHING
CLE ALN	24	CLETHRA ALNIFOLIA	SUMMERSWEET	CONT. | 3 GAL | 12" HT. | 12" W. | 3' O.C.	FULL; DENSE; MATCHING
RHU ARO	16	RHUS AROMATICA 'GRO-LOW'	FRAGRANT SUMAC	3 GAL / – / – / 6' O.C.	
EVERGREEN SHRUBS					
ILE NG	50	ILEX GLABRA 'NIGRA'	NIGRA INKBERRY	CONT. | 5 GAL | 24" HT. | 18" W. | AS SHOWN	FULL; DENSE; MATCHING
ILE NAN	102	ILEX VOMITORIA 'NANA'	DWARF YAUPON HOLLY	CONT. | 3 GAL | 24" HT. | 18" W. | AS SHOWN	FULL; DENSE; MATCHING
MYR COM	14	MYRICA CERIFERA 'COMPACTA'	WAX MYRTLE	CONT. | 7 GAL | 36" HT. | 24" W. | AS SHOWN	FULL; DENSE; MATCHING
PAN VIR	325	PANICUM VIRGATUM	SWITCHGRASS	CONT. | 1 GAL | 12" HT | 6" W | 18" O.C.	



PLANT LEGEND	
	TREES
	SHRUBS
	LAWN (SEED)
	MULCH

1 PLANTING PLAN
Scale: 1" = 30'-0"

0' 15' 30' 60'

LANDSCAPE CALCULATIONS

ZONING: HI
ADJACENT ZONING: HI
ZONING OVERLAYS: AP OVERLAY
TOTAL ACREAGE: 4.81 + 5.11 = 9.92 AC

PLANTING ISLANDS IN VEHICULAR AREAS (SEC. 5.2.3.E)
AREA: 360 SF MIN.

SITE LANDSCAPING (SEC 5.2.4)
TYPE OF USE: INSTITUTIONAL
4 CAL. INCH OF CANOPY TREES PER ACRE +
1 SHRUB PER 5' OF BUILDING FAÇADE FACING STREET
SHRUBS: 50% MIN. EVERGREEN
LOCATION: SHRUBS PLANTED CONTINUOUS ALONG BUILDING FACADES
CREDIT FOR EXISTING TREES: 1.25 PER CAL. INCH

TOTAL ACREAGE: 9.92
TREES REQUIRED; CAL. INCHES: 4(9.92) = 39.68 CAL INCHES REQUIRED,
TREES PROVIDED: 40 CAL. INCHES PROVIDED (CREDIT FOR EXISTING VEGETATION)

TOTAL FRONTAGE: 96'
SHRUBS REQUIRED: 96/5 = 19.2 SHRUBS REQUIRED
SHRUBS PROVIDED = 20

VEHICULAR USE AREA LANDSCAPE PERIMETER LANDSCAPE (SEC 5.2.5.C)
36" MIN HEIGHT WITHIN 3 YEARS OF PLANTING
SCREEN OFF-SITE VIEWS
LANDSCAPE STRIP MIN WIDTH 5'
EVERGREEN SHRUBS OR BEACH GRASSES
5' O.C. OR 8' O.C. (ADJACENT TO VACANT LAND)

VEHICULAR USE AREA LANDSCAPE SHADING (SEC 5.2.5.D)
NO PARKING SPACE SHALL BE SEPARATED FROM THE TRUNK OF A CANOPY TREE BY MORE THAN 60'.
OTHER REQUIRED LANDSCAPING OR EXISTING VEGETATION MAY BE USED TO MEET THIS REQUIREMENT.

PERIMETER LANDSCAPE BUFFERS (SEC 5.2.6)
ZONING: HI
ADJACENT ZONING: HI
NO BUFFER REQUIRED.

SCREENING (SEC 5.2.7)
REFUSE COLLECTION, LOADING AREAS, OUTDOOR STORAGE, GROUND MOUNTED MECHANICAL & UTILITY EQUIPMENT.
BUFFER TYPE D: OPAQUE SCREEN, 6' HT MIN. (18 ACI OR CANOPY TREES + 20 ACI OF UNDERSTORY TREES, + 35 SHRUBS PER 100 LF)

STREETSCAPE (SEC 5.2.8)
NOT REQUIRED FOR THIS SITE. STREET TREES PROVIDED AT 50' ON CENTER FOR CONFORMITY WITH EXISTING DEVELOPMENT AND COUNTY SUBDIVISION REGULATIONS.

STREET TREES PROVIDED:
9 CANOPY TREES (3" EACH) = 27 ACI

REPLACEMENT OF HERITAGE TREES (SEC 7.2.E)
EACH HEALTHY HERITAGE TREE REMOVED SHALL BE REPLACED WITH A CUMULATIVE CALIPER MEASUREMENT THAT EQUALS OR EXCEEDS ONE-HALF THE DIAMETER OF THE HERITAGE TREE(S) REMOVED.

REPLACEMENT TREES SHALL BE AT LEAST 2" CAL.
50% OF CUMULATIVE CALIPER INCHES OF REPLACEMENT TREES SHALL BE OF THE SAME SPECIES AS THE HERITAGES TREES REMOVED

HERITAGE TREES REMOVED:
24" POPLAR
26" POPLAR
26" WATER OAK
24" RED OAK
TOTAL REPLACEMENT TREE CALIPER INCHES REQUIRED = 100 X 0.5 = 50 CAL INCHES REPLACEMENT TREES PROVIDED =
(6) 3" RED OAKS = 18 CAL INCHES
(6) 3" POPLAR = 18 CAL INCHES
(5) 3" BALD CYPRESS = 15 CAL INCHES

Elizabeth City State University

LS3P
227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

Surface
Surface 678, P.A.
215 Morris Street, Suite 150
Durham, NC 27701
www.surface678.com
p : 919-419-1199
f : 919-419-1669

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

Airport Road, Maple NC 27956,
SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350A

DATE	DESCRIPTION
06/18/24	DD CHECK SET
06/24/24	SITE PLAN REVIEW

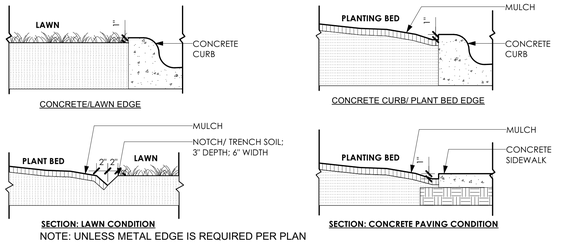
SHEET NAME: PLANTING PLAN

ORIG SUBMISSION: 06.18.24

SHEET: L-161

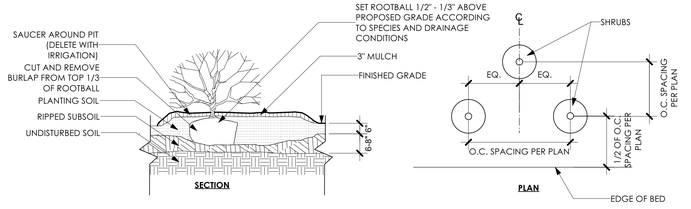
2024 JUNE 24 - SITE PLAN REVIEW

THE LINE BROWN ABOVE IS EXACTLY ONE INCH LONG ON ARCH E SHEETS ORIGINAL PAPER SIZE

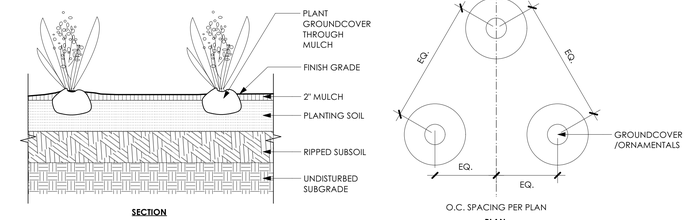


NOTE: UNLESS METAL EDGE IS REQUIRED PER PLAN

E1 PLANTING BED EDGE
1" = 1'-0"

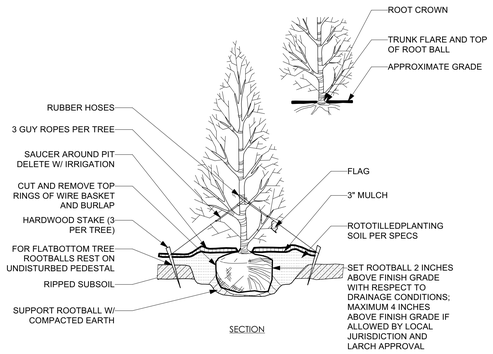


E3 RAISED SHRUB PLANTING
N.T.S.

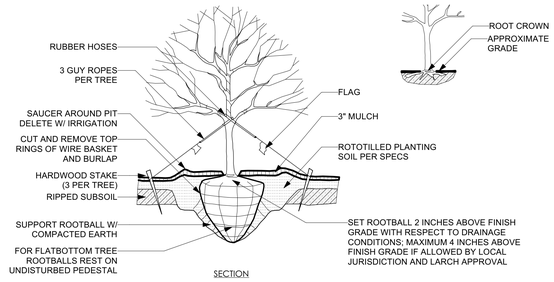


E5 GROUNDCOVER PLANTING
1" = 1'-0"

D



C1 EVERGREEN TREE PLANTING
SCALE: NTS



NOTES

1. CONTRACTOR SHALL PROVIDE SAMPLE TREE PLANTING FOR REVIEW AND APPROVAL BY LARCH PRIOR TO INSTALLATION
2. PER SPECIFICATIONS, CONTRACTOR SHALL NOTIFY LARCH IN WRITING OF ENVIRONMENTAL OR DETRIMENTAL SITE CONDITIONS AFFECTING THE SURVIVAL OF PROPOSED PLANTING MATERIAL PRIOR TO THE INSTALLATION OF PLANT MATERIAL. PROCEEDING WITH PLANTING INSTALLATIONS AT THE DETRIMENT OF PLANTING SURVIVABILITY WITHOUT NOTIFYING LARCH OF HARMFUL SITE CONDITIONS MAY RESULT IN REJECTION OF PLANT MATERIAL AT THE DISCRETION OF LARCH. CONTRACTOR SHALL REPLACE ANY REJECTIONS AT NO COST TO OWNER

C2 RAISED TREE PLANTING
SCALE: NTS

C

B

A

1 2 3 4 5 6

Elizabeth City State University

LS3P

227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

Surface

Surface 678, P.A.
215 Morris Street, Suite 150
Durham, NC 27701
www.surface678.com
p : 919-419-1199
f : 919-419-1669

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

Airport Road, Maple NC 27956,
SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350A

DATE	DESCRIPTION
06/18/24	DD CHECK SET
06/24/24	SITE PLAN REVIEW

SHEET NAME: DETAILS

ORIG SUBMISSION: 06.18.24

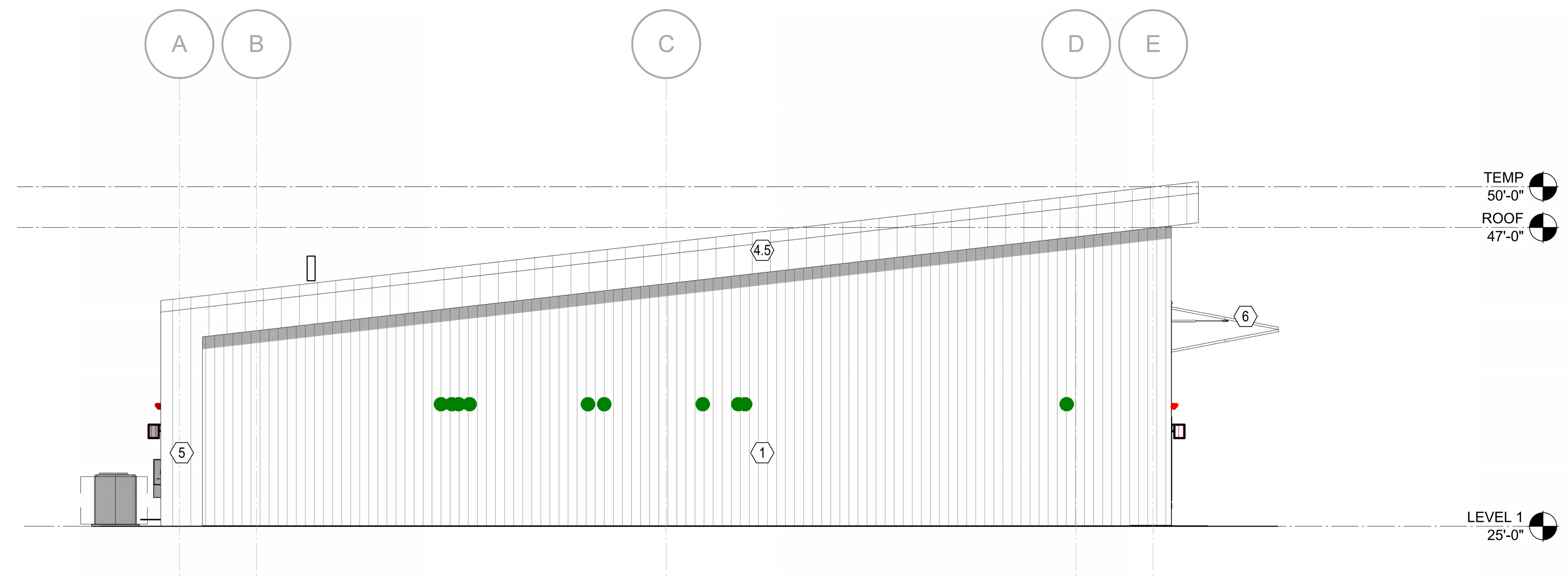
SHEET: L-501

2024 JUNE 24 - SITE PLAN REVIEW

#	ELEVATION NOTES BY NUMBER
NUMBER	NOTE
1	CORRUGATED METAL PANEL (VERTICAL INSTALLATION)
2	ALUMINUM STOREFRONT SYSTEM WITH INSULATED GLAZING
3	INSULATED HOLLOW METAL DOOR AND FRAME
4	STANDING SEAM METAL ROOF ASSEMBLY ON SLOPING STRUCTURE
4.5	STANDING SEAM METAL FASCIA
5	STANDING SEAM METAL WALL ASSEMBLY
6	SINGLE OVERHEAD VERTICAL BIPARTING HANGAR DOOR

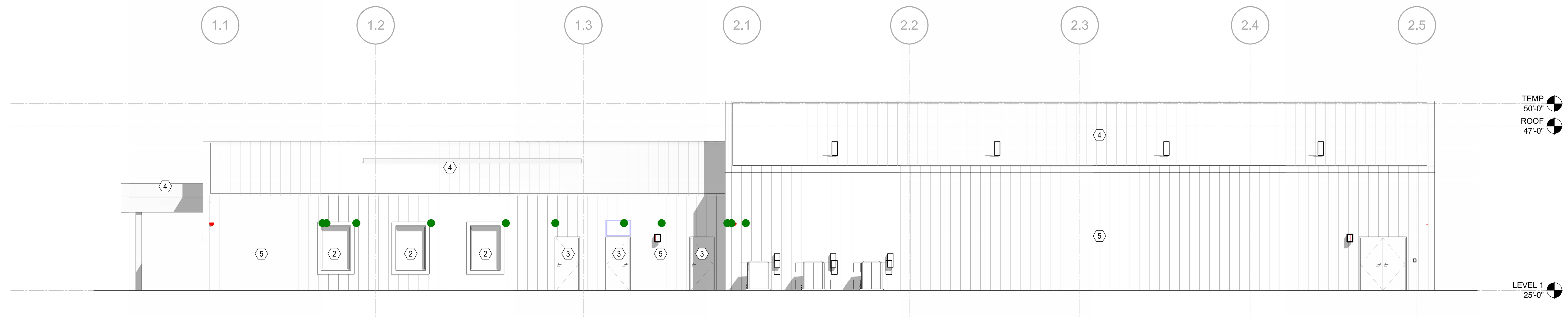
D1 ELEVATION- EXTERIOR- PLAN-NORTH

1/8" = 1'-0"



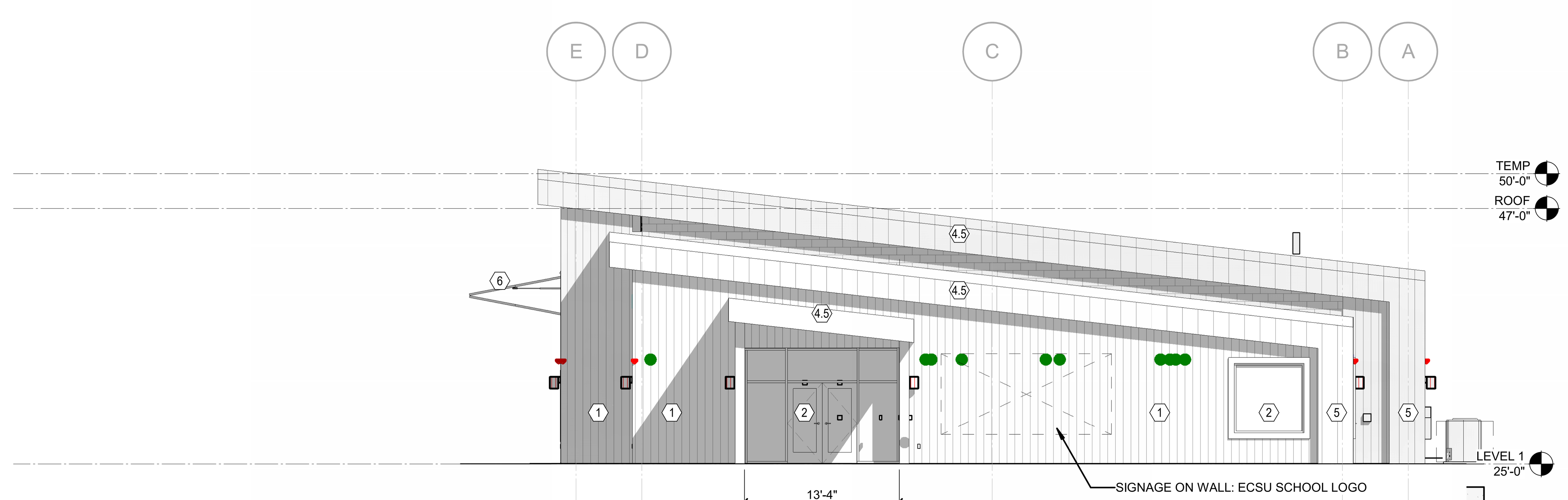
C1 ELEVATION- EXTERIOR- PLAN-EAST

1/8" = 1'-0"



B1 ELEVATION- EXTERIOR- PLAN-SOUTH

1/8" = 1'-0"



A1 ELEVATION- EXTERIOR- PLAN-WEST

1/8" = 1'-0"

Elizabeth City State University

227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

Airport Road, Maple NC 27956.
SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350A

Δ	DATE	DESCRIPTION

SHEET NAME: BUILDING ELEVATIONS - MAINTENANCE HANGAR & OFFICE

ORIG SUBMISSION:

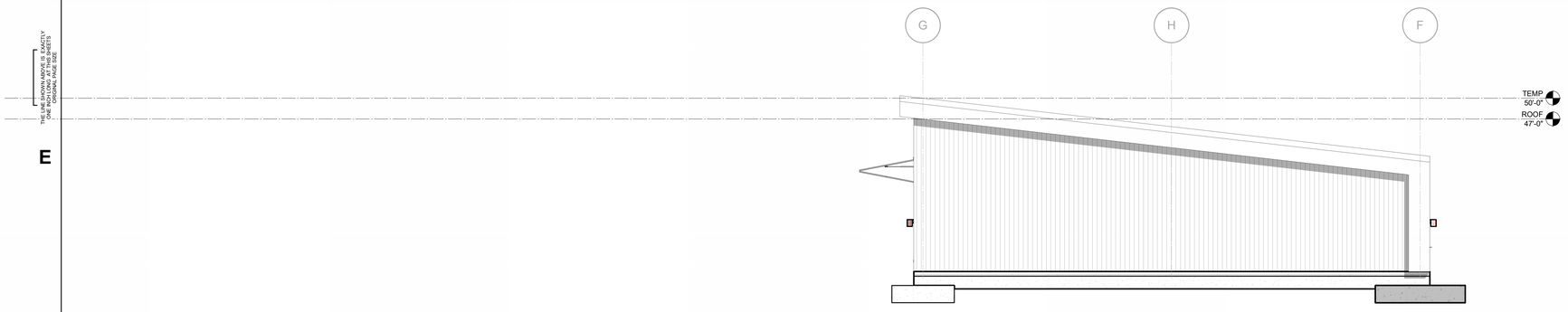
SHEET: A-201

18 JUNE 2024 - PROGRESS PRINT

6/19/2024 9:39:45 AM

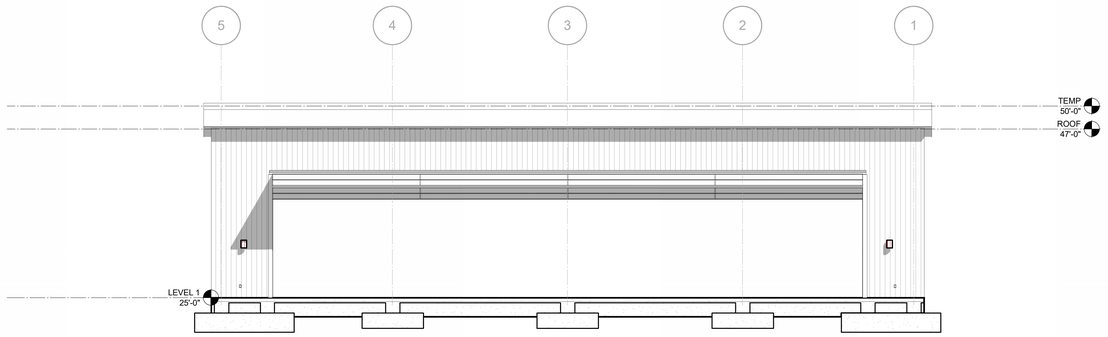
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ORIGINAL PAPER SIZE

#	ELEVATION NOTES BY NUMBER
NUMBER	NOTE
1	CORRUGATED METAL PANEL (VERTICAL INSTALLATION)
2	ALUMINUM STOREFRONT SYSTEM WITH INSULATED GLAZING
3	INSULATED HOLLOW METAL DOOR AND FRAME
4	STANDING SEAM METAL ROOF ASSEMBLY ON SLOPING STRUCTURE
4.5	STANDING SEAM METAL FASCIA
5	STANDING SEAM METAL WALL ASSEMBLY
6	SINGLE OVERHEAD VERTICAL BIPARTING HANGAR DOOR



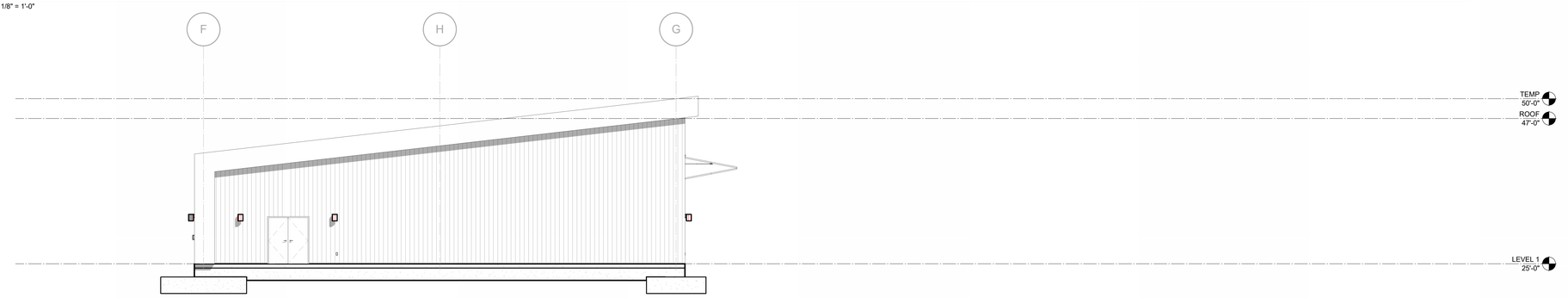
D1 ELEVATION- EXTERIOR- PLAN-NORTH

1/8" = 1'-0"



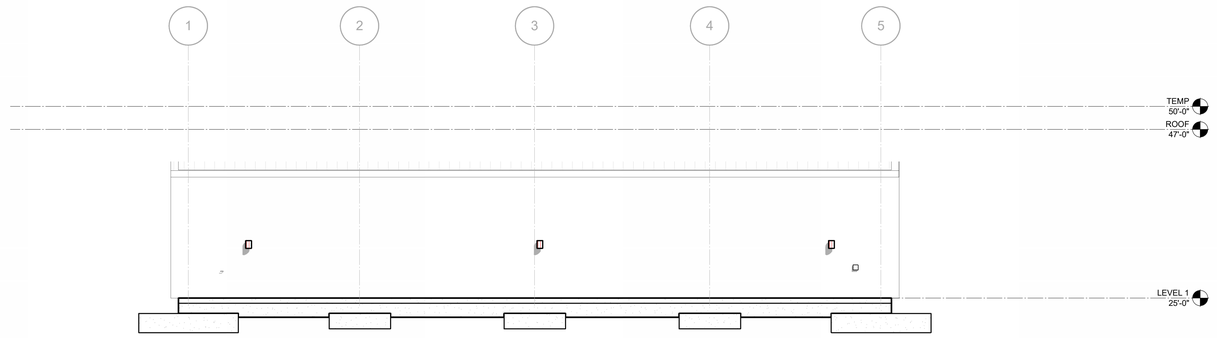
C1 EXTERIOR- ELEVATION- PLAN EAST

1/8" = 1'-0"



B1 ELEVATION- EXTERIOR- PLAN-SOUTH

1/8" = 1'-0"



A1 ELEVATION- EXTERIOR- PLAN-WEST

1/8" = 1'-0"

6/19/2024 9:39:49 AM

Elizabeth City State University

LS3P

227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

Airport Road, Maple NC 27956.
SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350A

Δ	DATE	DESCRIPTION

SHEET NAME:
BUILDING ELEVATIONS - STORAGE HANGAR

ORIG SUBMISSION:

SHEET:
A-202

18 JUNE 2024 - PROGRESS PRINT

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ORIGINAL PLAT SHEETS

SITE DATA:

1. OWNER:
   BOARD OF TRUSTEES OF THE ENDOWMENT FUND OF
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASST VICE CHANCELLOR
   OF DESIGN AND CONSTRUCTION

   (252) 567-8606

2. DEVELOPER:
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASSISTANT VICE CHANCELLOR
   OF DESIGN AND CONSTRUCTION

   (252) 567-8606

3. SITE INFORMATION:
   PIN: 060B000010A0000
   PARCEL AREA: 9.92 AC
   ZONING: HI (HEAVY INDUSTRIAL)
   D.B. 1774, PG. 696
   P.C. S, SLIDE 159

4. SITE IS LOCATED IN FLOOD ZONE 'X' ACCORDING TO FIRM PANEL 3720898600K, DATED DECEMBER 21, 2018.

5. PARKING REQUIREMENTS:
   EDUCATION FACILITIES: 1 PER 100 SF
   @ 4,340 SF = 43 PARKING SPACES
   VOCATIONAL TRADE SCHOOL: 1 PER 300 SF
   @ 6,915 SF = 23 PARKING SPACES
   CORPORATE AIRPORT HANGAR: 2 PER AIRCRAFT STORED
   @ 4 AIRCRAFT = 8 PARKING SPACES

   TOTAL REQUIRED: 74 PARKING SPACES
   TOTAL ALLOWED: 74 X 125% = 93 PARKING SPACES

   PARKING PROVIDED: 76 SPACES (INCLUDING 3 ADA SPACES)

6. SITE COVERAGE:

   BUILDINGS: 18,123 SF
   ASPHALT: 100,115 SF
   CONCRETE: 3,564 SF
   TOTAL: 121,802 SF (28.16%)

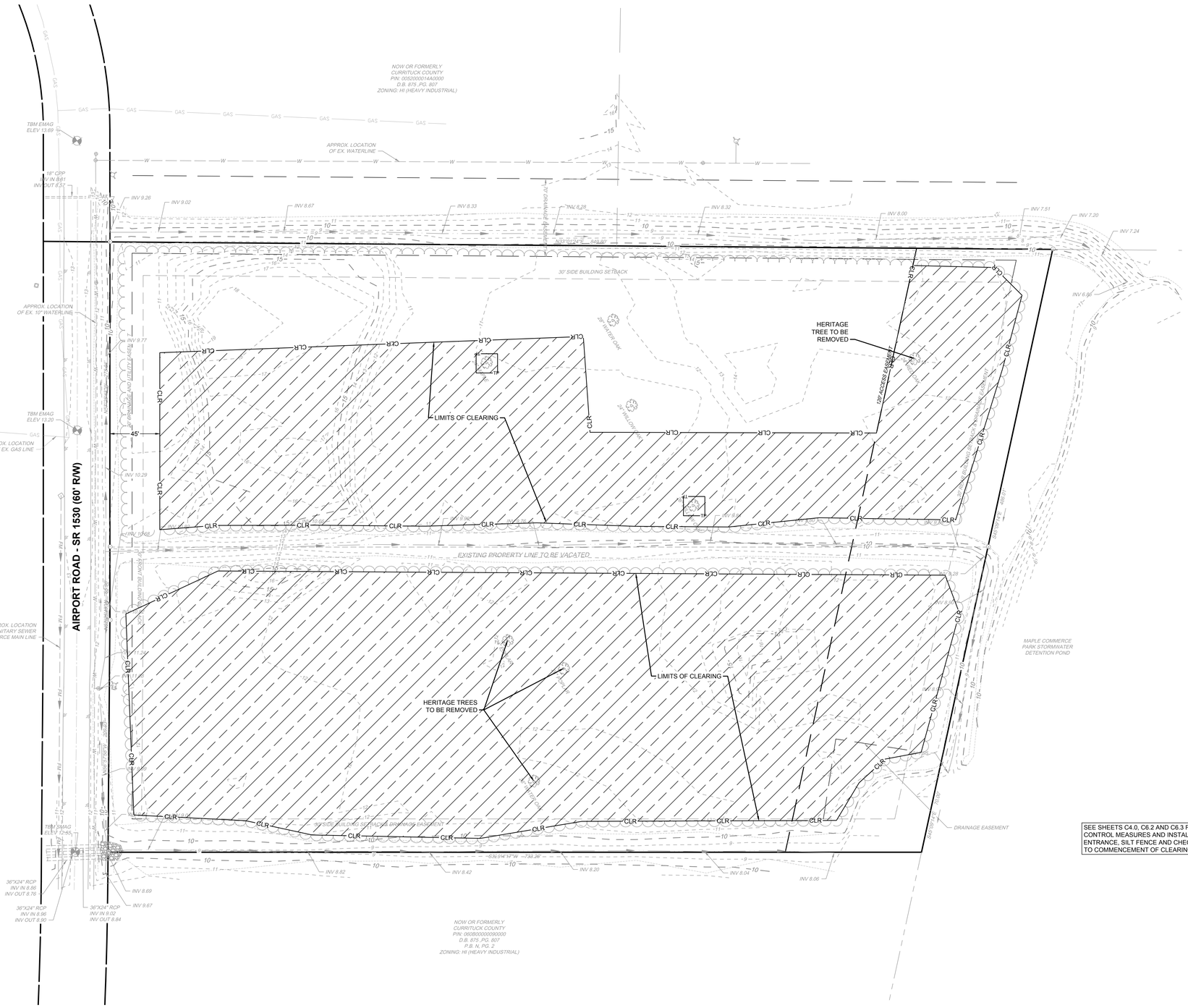
   SITE IS PERMITTED FOR 65% OF COVERAGE PER STORMWATER PERMIT NO. SW7100602 FOR MAPLE COMMERCE PARK.

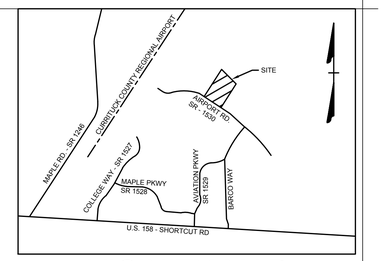
7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP EROSION CONTROL DEVICES IN GOOD WORKING ORDER MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER.

8. ANY FILL BROUGHT ON SITE SHALL BE FROM AN APPROVED SITE/MINE. ANY MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A SINGLE APPROVED LOCATION.

9. TOPOGRAPHIC SURVEY PERFORMED BY TIMMONS GROUP IN MARCH AND APRIL OF 2024. ELEVATIONS ARE TIED TO NAVD 88.

10. DISTURBED AREA SHALL NOT EXCEED 8.36 ACRES.





VICINITY MAP
NO SCALE

NAD 83

LEGEND

- BENCHMARK
- EXISTING IRON REBAR (EIR)
- CALCULATED POINT
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX HERITAGE TREE
- PROP SIGN
- PROP DROP INLET
- PROP SEWER CLEANOUT
- PROP SEWER MANHOLE
- PROP WATER VALVE
- PROP RPZ
- PROP WATER METER
- PROP LIGHT POLE
- PROPERTY BOUNDARY
- RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- PROP LOT LINES
- EASEMENT
- EX EDGE OF PAVEMENT
- EX ROAD CENTERLINE
- EX NATURAL GAS LINE
- EX SEWER FORCE MAIN
- EX WATER LINE
- EX CENTER OF DITCH
- EX TOP OF BANK
- EX MAJOR CONTOUR
- EX MINOR CONTOUR
- EX STORM PIPE
- EX EDGE OF TREE LINE
- PROP LIGHT DUTY PAVEMENT
- PROP CONCRETE
- PROP HEAVY DUTY PAVEMENT
- PROP FENCE
- PROP MAJOR CONTOUR
- PROP MINOR CONTOUR
- PROP STORM PIPE
- PROP WATER LINE
- PROP SEWER LINE
- PROP FORCE MAIN
- PROP EDGE OF TREE LINE
- PROP SWALE
- PROP TOP OF BANK
- PROP SPOT GRADE

SEE SHEETS C4.0, C6.2 AND C6.3 FOR EROSION CONTROL MEASURES AND INSTALL CONSTRUCTION ENTRANCE, SILT FENCE AND CHECK DAMS PRIOR TO COMMENCEMENT OF CLEARING ACTIVITIES.

SCALE 1"=40'
0 40' 80'

811 Know what's below. Call before you dig.

Elizabeth City State University

LS3P
227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
EXISTING CONDITIONS

ORIG SUBMISSION: 06/26/2024

SHEET:
C1.0

TRC SUBMITTAL

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH ON ALL PLAN SHEETS ORIGINAL PAGE SIZE

SITE DATA:

1. OWNER:
   BOARD OF TRUSTEES OF THE ENDOWMENT FUND OF
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASST VICE CHANCELLOR
   OF DESIGN AND CONSTRUCTION

   (252) 567-8606

2. DEVELOPER:
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASSISTANT VICE CHANCELLOR
   OF DESIGN AND CONSTRUCTION

   (252) 567-8606

3. SITE INFORMATION:
   PIN: 060B000010A0000
   PARCEL AREA: 9.92 AC
   ZONING: HI (HEAVY INDUSTRIAL)
   D.B. 1774, PG. 696
   P.C. 5, SLIDE 159

4. SITE IS LOCATED IN FLOOD ZONE 'X' ACCORDING TO FIRM PANEL 3720898600K, DATED DECEMBER 21, 2018.

5. PARKING REQUIREMENTS:
   EDUCATION FACILITIES: 1 PER 100 SF
   @ 4,340 SF = 43 PARKING SPACES
   VOCATIONAL TRADE SCHOOL: 1 PER 300 SF
   @ 6,915 SF = 23 PARKING SPACES
   CORPORATE AIRPORT HANGAR: 2 PER AIRCRAFT STORED
   @ 4 AIRCRAFT = 8 PARKING SPACES

   TOTAL REQUIRED: 74 PARKING SPACES
   TOTAL ALLOWED: 74 X 125% = 93 PARKING SPACES

   PARKING PROVIDED: 76 SPACES (INCLUDING 3 ADA SPACES)

6. SITE COVERAGE:

BUILDINGS:	18,123 SF
ASPHALT:	100,115 SF
CONCRETE:	3,564 SF
TOTAL:	121,802 SF (28.16%)

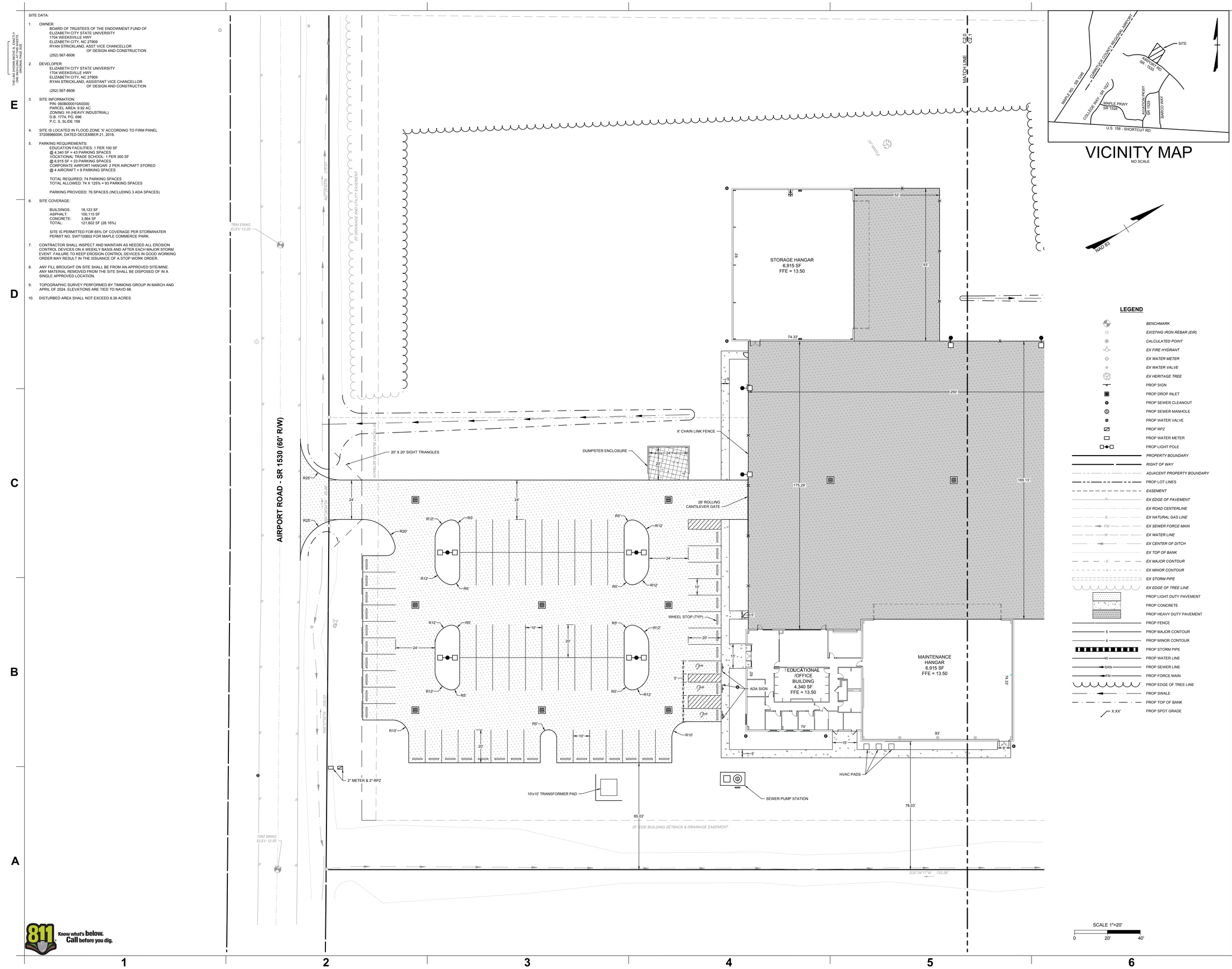
   SITE IS PERMITTED FOR 65% OF COVERAGE PER STORMWATER PERMIT NO. SW7100602 FOR MAPLE COMMERCE PARK.

7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP EROSION CONTROL DEVICES IN GOOD WORKING ORDER MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER.

8. ANY FILL BROUGHT ON SITE SHALL BE FROM AN APPROVED SITE/MINE. ANY MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A SINGLE APPROVED LOCATION.

9. TOPOGRAPHIC SURVEY PERFORMED BY TIMMONS GROUP IN MARCH AND APRIL OF 2024. ELEVATIONS ARE TIED TO NAVD 88.

10. DISTURBED AREA SHALL NOT EXCEED 8.36 ACRES.



VICINITY MAP
NO SCALE

NAD 83

LEGEND

- BENCHMARK
- EXISTING IRON REBAR (EIR)
- CALCULATED POINT
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX HERITAGE TREE
- PROP SIGN
- PROP DROP INLET
- PROP SEWER CLEANOUT
- PROP SEWER MANHOLE
- PROP WATER VALVE
- PROP RPZ
- PROP WATER METER
- PROP LIGHT POLE
- PROPERTY BOUNDARY
- RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- PROP LOT LINES
- EASEMENT
- EX EDGE OF PAVEMENT
- EX ROAD CENTERLINE
- EX NATURAL GAS LINE
- EX SEWER FORCE MAIN
- EX WATER LINE
- EX CENTER OF DITCH
- EX TOP OF BANK
- EX MAJOR CONTOUR
- EX MINOR CONTOUR
- EX STORM PIPE
- EX EDGE OF TREE LINE
- PROP LIGHT DUTY PAVEMENT
- PROP CONCRETE
- PROP HEAVY DUTY PAVEMENT
- PROP FENCE
- PROP MAJOR CONTOUR
- PROP MINOR CONTOUR
- PROP STORM PIPE
- PROP WATER LINE
- PROP SEWER LINE
- PROP FORCE MAIN
- PROP EDGE OF TREE LINE
- PROP SWALE
- PROP TOP OF BANK
- PROP SPOT GRADE

SCALE 1"=20'
0 20' 40'

811 Know what's below. Call before you dig.

Elizabeth City State University

LS3P
227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
SITE PLAN

ORIG SUBMISSION: 06/26/2024

SHEET:
C2.0

TRC SUBMITTAL

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ORIGINAL PLOT SHEETS

SITE DATA:

1. OWNER:
   BOARD OF TRUSTEES OF THE ENDOWMENT FUND OF ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASST VICE CHANCELLOR OF DESIGN AND CONSTRUCTION
   (252) 567-8606

2. DEVELOPER:
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASSISTANT VICE CHANCELLOR OF DESIGN AND CONSTRUCTION
   (252) 567-8606

3. SITE INFORMATION:
   PIN: 0608000010A0000
   PARCEL AREA: 9.92 AC
   ZONING: HI (HEAVY INDUSTRIAL)
   D.B. 1774, PG. 696
   P.C. S, SLIDE 159

4. SITE IS LOCATED IN FLOOD ZONE 'X' ACCORDING TO FIRM PANEL 3720898600K, DATED DECEMBER 21, 2018.

5. PARKING REQUIREMENTS:
   EDUCATION FACILITIES: 1 PER 100 SF
   @ 4,340 SF = 43 PARKING SPACES
   VOCATIONAL TRADE SCHOOL: 1 PER 300 SF
   @ 6,915 SF = 23 PARKING SPACES
   CORPORATE AIRPORT HANGAR: 2 PER AIRCRAFT STORED
   @ 4 AIRCRAFT = 8 PARKING SPACES

   TOTAL REQUIRED: 74 PARKING SPACES
   TOTAL ALLOWED: 74 X 125% = 93 PARKING SPACES

   PARKING PROVIDED: 76 SPACES (INCLUDING 3 ADA SPACES)

6. SITE COVERAGE:

BUILDINGS:	18,123 SF
ASPHALT:	100,115 SF
CONCRETE:	3,564 SF
TOTAL:	121,802 SF (28.16%)

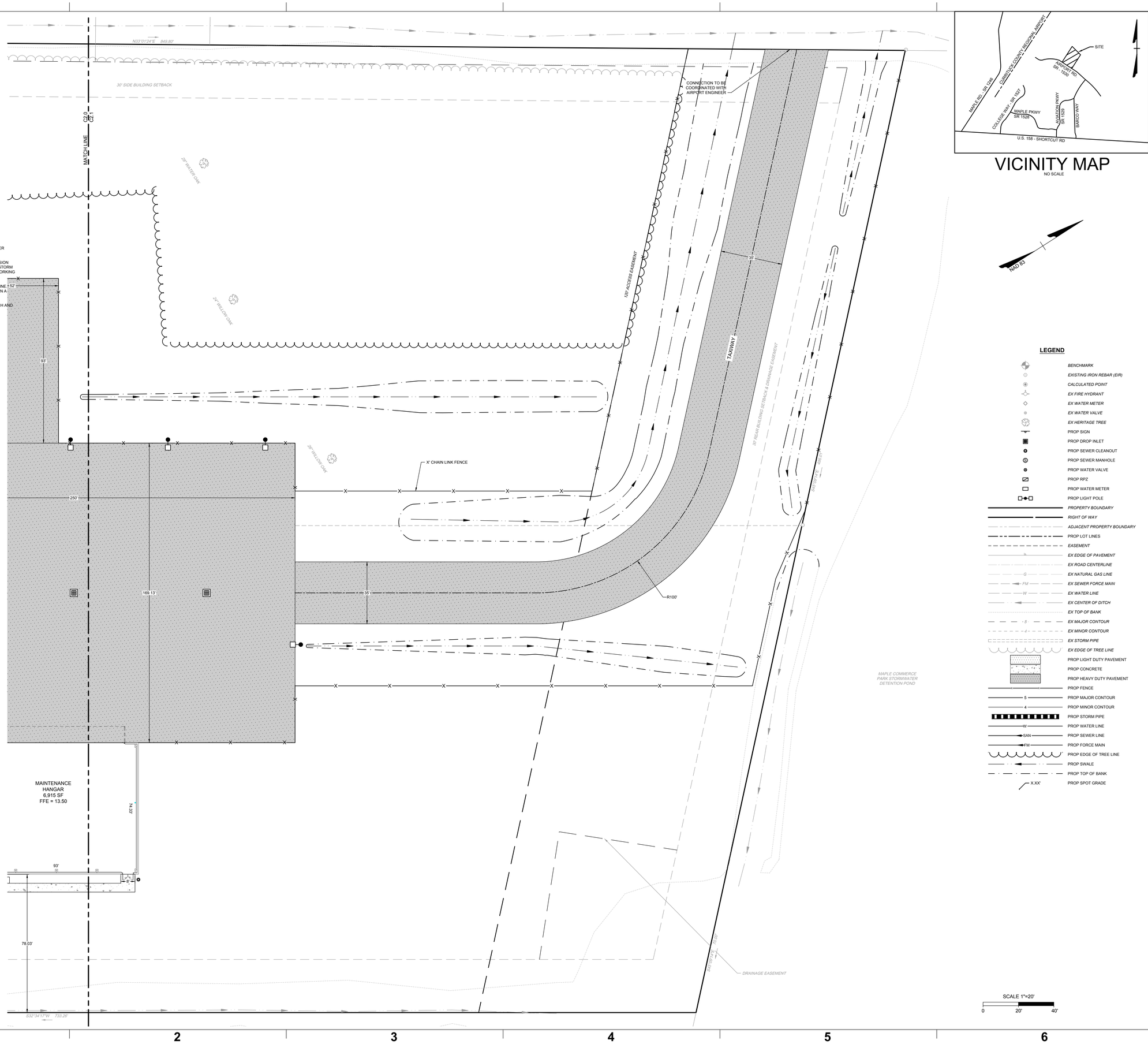
   SITE IS PERMITTED FOR 65% OF COVERAGE PER STORMWATER PERMIT NO. SW7100602 FOR MAPLE COMMERCE PARK.

7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP EROSION CONTROL DEVICES IN GOOD WORKING ORDER MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER.

8. ANY FILL BROUGHT ON SITE SHALL BE FROM AN APPROVED SITE/MINE. ANY MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A SINGLE APPROVED LOCATION.

9. TOPOGRAPHIC SURVEY PERFORMED BY TIMMONS GROUP IN MARCH AND APRIL OF 2024. ELEVATIONS ARE TIED TO NAVD 88.

10. DISTURBED AREA SHALL NOT EXCEED 8.36 ACRES.



VICINITY MAP
NO SCALE

NAD 83

LEGEND

- BENCHMARK
- EXISTING IRON REBAR (EIR)
- CALCULATED POINT
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX HERITAGE TREE
- PROP SIGN
- PROP DROP INLET
- PROP SEWER CLEANOUT
- PROP SEWER MANHOLE
- PROP WATER VALVE
- PROP RPZ
- PROP WATER METER
- PROP LIGHT POLE
- PROPERTY BOUNDARY
- RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- PROP LOT LINES
- EASEMENT
- EX EDGE OF PAVEMENT
- EX ROAD CENTERLINE
- EX NATURAL GAS LINE
- EX SEWER FORCE MAIN
- EX WATER LINE
- EX CENTER OF DITCH
- EX TOP OF BANK
- EX MAJOR CONTOUR
- EX MINOR CONTOUR
- EX STORM PIPE
- EX EDGE OF TREE LINE
- PROP LIGHT DUTY PAVEMENT
- PROP CONCRETE
- PROP HEAVY DUTY PAVEMENT
- PROP FENCE
- PROP MAJOR CONTOUR
- PROP MINOR CONTOUR
- PROP STORM PIPE
- PROP WATER LINE
- PROP SEWER LINE
- PROP FORCE MAIN
- PROP EDGE OF TREE LINE
- PROP SWALE
- PROP TOP OF BANK
- PROP SPOT GRADE

SCALE 1"=20'
0 20' 40'

811 Know what's below. Call before you dig.

Elizabeth City State University

LS3P
227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
SITE PLAN

ORIG SUBMISSION: 06/26/2024

SHEET:
C2.1

TRC SUBMITTAL

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ALL SHEETS ORIGINAL PAPER SIZE

SITE DATA:

1. OWNER:
   BOARD OF TRUSTEES OF THE ENDOWMENT FUND OF
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASST VICE CHANCELLOR
   OF DESIGN AND CONSTRUCTION

   (252) 567-8606

2. DEVELOPER:
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASSISTANT VICE CHANCELLOR
   OF DESIGN AND CONSTRUCTION

   (252) 567-8606

3. SITE INFORMATION:
   PIN: 0008000010A0000
   PARCEL AREA: 9.92 AC
   ZONING: HI (HEAVY INDUSTRIAL)
   D.B. 1774, PG. 696
   P.C. S, SLIDE 159

4. SITE IS LOCATED IN FLOOD ZONE "X" ACCORDING TO FIRM PANEL 3720899600K, DATED DECEMBER 21, 2018.

5. PARKING REQUIREMENTS:
   EDUCATION FACILITIES: 1 PER 100 SF
   @ 4,340 SF = 43 PARKING SPACES
   VOCATIONAL TRADE SCHOOL: 1 PER 300 SF
   @ 6,915 SF = 23 PARKING SPACES
   CORPORATE AIRPORT HANGAR: 2 PER AIRCRAFT STORED
   @ 4 AIRCRAFT = 8 PARKING SPACES

   TOTAL REQUIRED: 74 PARKING SPACES
   TOTAL ALLOWED: 74 X 125% = 93 PARKING SPACES

   PARKING PROVIDED: 76 SPACES (INCLUDING 3 ADA SPACES)

6. SITE COVERAGE:

BUILDINGS:	18,123 SF
ASPHALT:	100,115 SF
CONCRETE:	3,564 SF
TOTAL:	121,802 SF (28.16%)

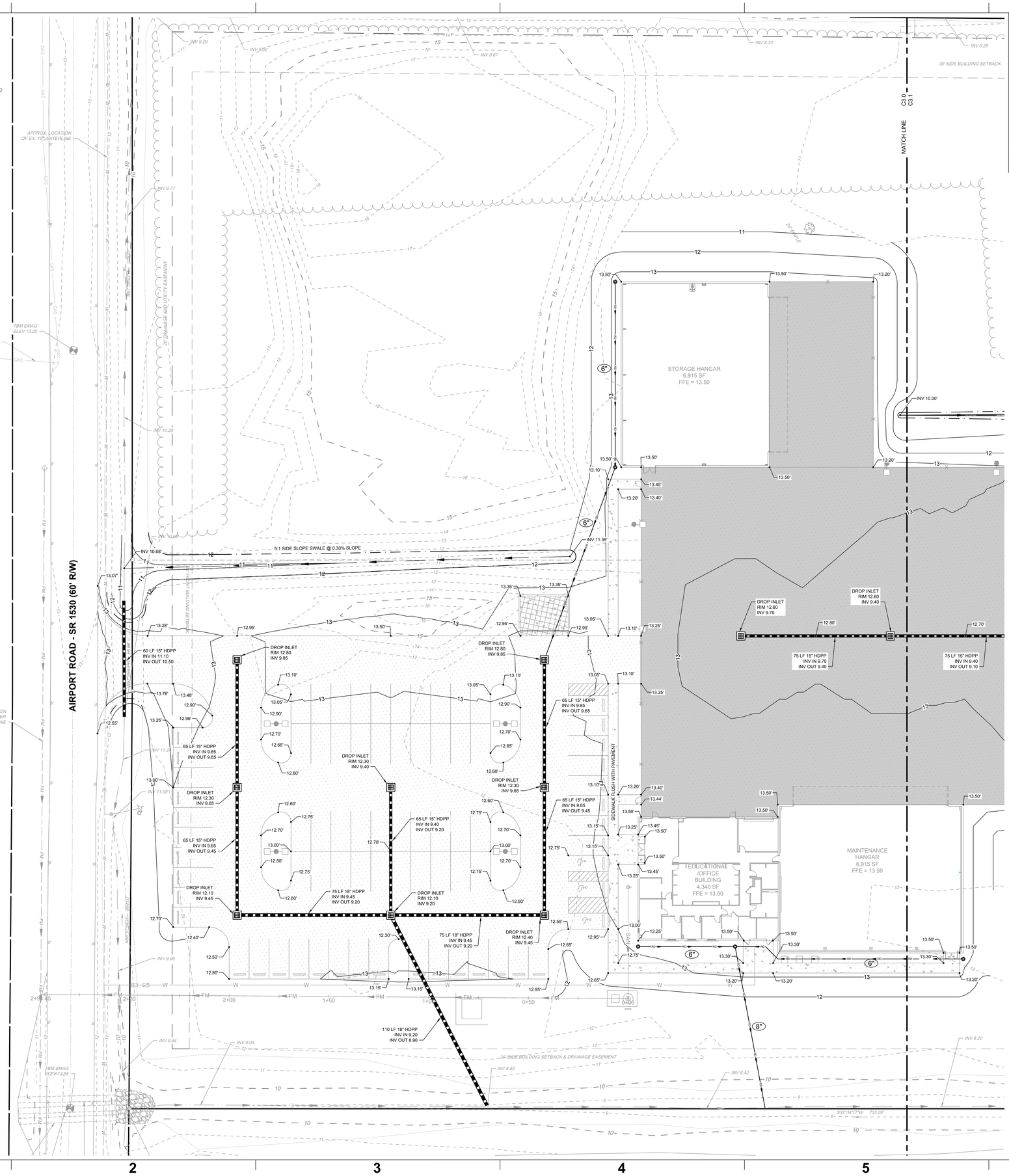
   SITE IS PERMITTED FOR 65% OF COVERAGE PER STORMWATER PERMIT NO. SW7100602 FOR MAPLE COMMERCE PARK.

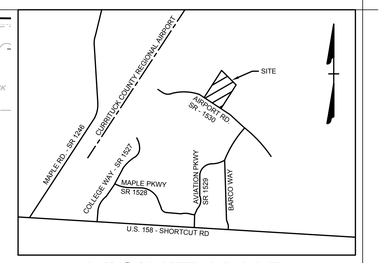
7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP EROSION CONTROL DEVICES IN GOOD WORKING ORDER MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER.

8. ANY FILL BROUGHT ON SITE SHALL BE FROM AN APPROVED SITE/MINE. ANY MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A SINGLE APPROVED LOCATION.

9. TOPOGRAPHIC SURVEY PERFORMED BY TIMMONS GROUP IN MARCH AND APRIL OF 2024. ELEVATIONS ARE TIED TO NAVD 88.

10. DISTURBED AREA SHALL NOT EXCEED 8.36 ACRES.





VICINITY MAP
NO SCALE

NAD 83

LEGEND

- BENCHMARK
- EXISTING IRON REBAR (EIR)
- CALCULATED POINT
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX HERITAGE TREE
- PROP SIGN
- PROP DROP INLET
- PROP SEWER CLEANOUT
- PROP SEWER MANHOLE
- PROP WATER VALVE
- PROP RPZ
- PROP WATER METER
- PROP LIGHT POLE
- PROPERTY BOUNDARY
- RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- PROP LOT LINES
- EASEMENT
- EX EDGE OF PAVEMENT
- EX ROAD CENTERLINE
- EX NATURAL GAS LINE
- EX SEWER FORCE MAIN
- EX WATER LINE
- EX CENTER OF DITCH
- EX TOP OF BANK
- EX MAJOR CONTOUR
- EX MINOR CONTOUR
- EX STORM PIPE
- EX EDGE OF TREE LINE
- PROP LIGHT DUTY PAVEMENT
- PROP CONCRETE
- PROP HEAVY DUTY PAVEMENT
- PROP FENCE
- PROP MAJOR CONTOUR
- PROP MINOR CONTOUR
- PROP STORM PIPE
- PROP WATER LINE
- PROP SEWER LINE
- PROP FORCE MAIN
- PROP EDGE OF TREE LINE
- PROP SWALE
- PROP TOP OF BANK
- PROP SPOT GRADE

SCALE 1"=20'
0 20' 40'

811 Know what's below. Call before you dig.

Elizabeth City State University

LS3P
227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
GRADING & DRAINAGE PLAN

ORIG SUBMISSION: 06/26/2024

SHEET:
C3.0

TRC SUBMITTAL

SITE DATA:

1. OWNER:
   BOARD OF TRUSTEES OF THE ENDOWMENT FUND OF ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASST VICE CHANCELLOR OF DESIGN AND CONSTRUCTION

   (252) 567-8606

2. DEVELOPER:
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASSISTANT VICE CHANCELLOR OF DESIGN AND CONSTRUCTION

   (252) 567-8606

3. SITE INFORMATION:
   PIN: 060B000010A0000
   PARCEL AREA: 9.92 AC
   ZONING: HI (HEAVY INDUSTRIAL)
   D.B. 1774, PG. 696
   P.C. S, SLIDE 159

4. SITE IS LOCATED IN FLOOD ZONE 'X' ACCORDING TO FIRM PANEL 3720986900K, DATED DECEMBER 21, 2018.

5. PARKING REQUIREMENTS:
   EDUCATION FACILITIES: 1 PER 100 SF
   @ 4,340 SF = 43 PARKING SPACES
   VOCATIONAL TRADE SCHOOL: 1 PER 300 SF
   @ 6,915 SF = 23 PARKING SPACES
   CORPORATE AIRPORT HANGAR: 2 PER AIRCRAFT STORED
   @ 4 AIRCRAFT = 8 PARKING SPACES

   TOTAL REQUIRED: 74 PARKING SPACES
   TOTAL ALLOWED: 74 X 125% = 93 PARKING SPACES

   PARKING PROVIDED: 76 SPACES (INCLUDING 3 ADA SPACES)

6. SITE COVERAGE:

BUILDINGS:	18,123 SF
ASPHALT:	100,115 SF
CONCRETE:	3,564 SF
TOTAL:	121,802 SF (28.16%)

   SITE IS PERMITTED FOR 65% OF COVERAGE PER STORMWATER PERMIT NO. SW7100602 FOR MAPLE COMMERCE PARK.

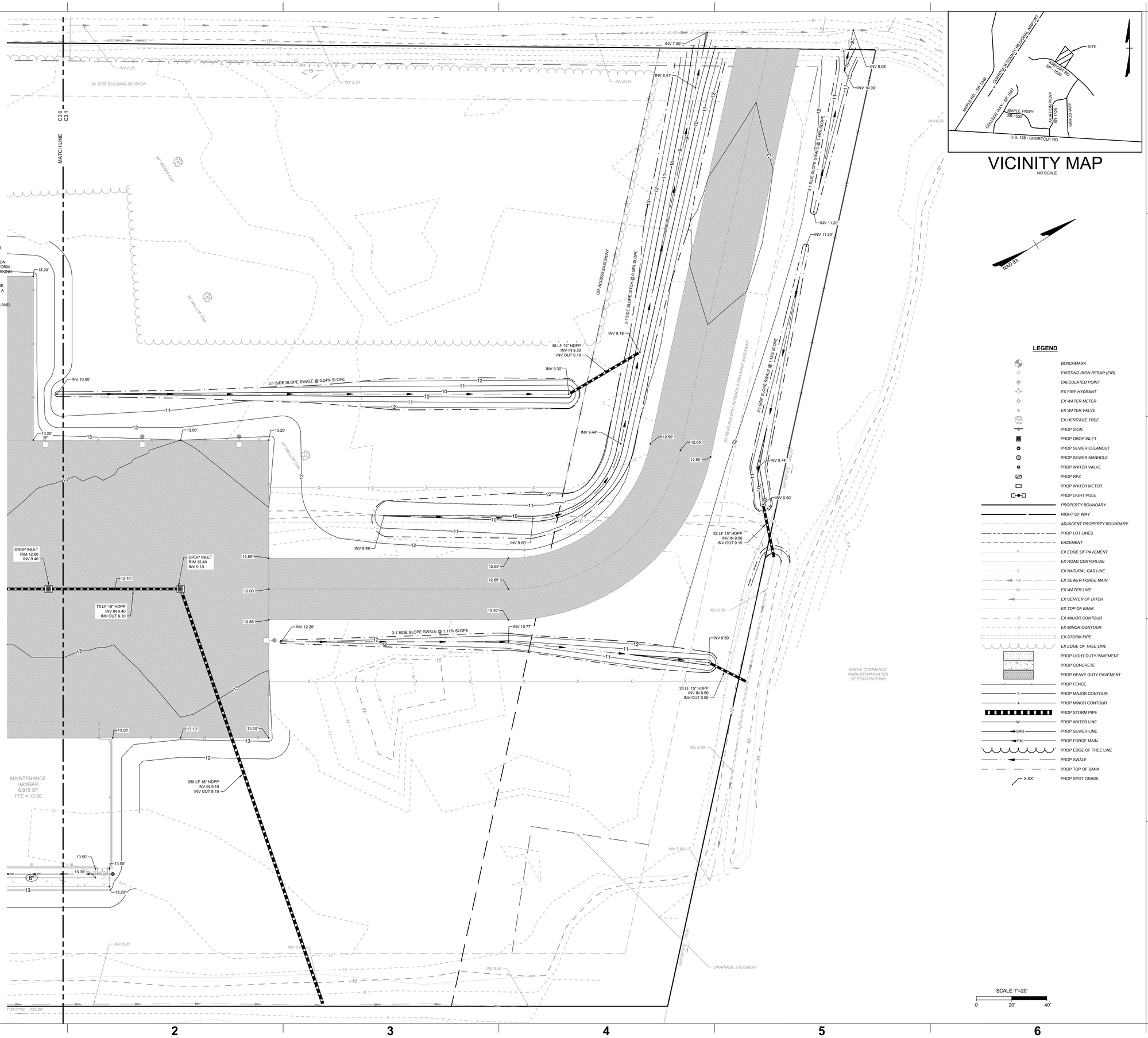
7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP EROSION CONTROL DEVICES IN GOOD WORKING ORDER MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER.

8. ANY FILL BROUGHT ON SITE SHALL BE FROM AN APPROVED SITE/MINE. ANY MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A SINGLE APPROVED LOCATION.

9. TOPOGRAPHIC SURVEY PERFORMED BY TIMMONS GROUP IN MARCH AND APRIL OF 2024. ELEVATIONS ARE TIED TO NAVD 88.

10. DISTURBED AREA SHALL NOT EXCEED 8.36 ACRES.

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ALL SHEETS ORIGINAL PAPER SIZE



VICINITY MAP

NO SCALE

NAD 83

LEGEND

- BENCHMARK
- EXISTING IRON REBAR (EIR)
- CALCULATED POINT
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX HERITAGE TREE
- PROP SIGN
- PROP DROP INLET
- PROP SEWER CLEANOUT
- PROP SEWER MANHOLE
- PROP WATER VALVE
- PROP RPZ
- PROP WATER METER
- PROP LIGHT POLE
- PROPERTY BOUNDARY
- RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- PROP LOT LINES
- EASEMENT
- EX EDGE OF PAVEMENT
- EX ROAD CENTERLINE
- G — EX NATURAL GAS LINE
- FM — EX SEWER FORCE MAIN
- W — EX WATER LINE
- EX CENTER OF DITCH
- EX TOP OF BANK
- 5 — EX MAJOR CONTOUR
- 4 — EX MINOR CONTOUR
- EX STORM PIPE
- EX EDGE OF TREE LINE
- PROP LIGHT DUTY PAVEMENT
- PROP CONCRETE
- PROP HEAVY DUTY PAVEMENT
- PROP FENCE
- 5 — PROP MAJOR CONTOUR
- 4 — PROP MINOR CONTOUR
- PROP STORM PIPE
- W — PROP WATER LINE
- SAN — PROP SEWER LINE
- FM — PROP FORCE MAIN
- PROP EDGE OF TREE LINE
- PROP SWALE
- PROP TOP OF BANK
- X.XX' — PROP SPOT GRADE

SCALE 1"=20'
0 20' 40'

811 Know what's below. Call before you dig.

Elizabeth City State University

LS3P
227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
GRADING & DRAINAGE PLAN

ORIG SUBMISSION: 06/26/2024

SHEET:
C3.1

TRC SUBMITTAL

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH WHEN PLOTTED AT 24"X36" ORIGINAL PAPER SIZE

SITE DATA:

1. OWNER:
   BOARD OF TRUSTEES OF THE ENDOWMENT FUND OF ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASST VICE CHANCELLOR OF DESIGN AND CONSTRUCTION

   (252) 567-8606

2. DEVELOPER:
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASSISTANT VICE CHANCELLOR OF DESIGN AND CONSTRUCTION

   (252) 567-8606

3. SITE INFORMATION:
   PIN: 0608D00010A0000
   PARCEL AREA: 9.92 AC
   ZONING: HI (HEAVY INDUSTRIAL)
   D.B. 1774, PG. 696
   P.C. S, SLIDE 159

4. SITE IS LOCATED IN FLOOD ZONE 'X' ACCORDING TO FIRM PANEL 3720898600K, DATED DECEMBER 21, 2018.

5. PARKING REQUIREMENTS:
   EDUCATION FACILITIES: 1 PER 100 SF
   @ 4,340 SF = 43 PARKING SPACES
   VOCATIONAL TRADE SCHOOL : 1 PER 300 SF
   @ 6,915 SF = 23 PARKING SPACES
   CORPORATE AIRPORT HANGAR: 2 PER AIRCRAFT STORED
   @ 4 AIRCRAFT = 8 PARKING SPACES

   TOTAL REQUIRED: 74 PARKING SPACES
   TOTAL ALLOWED: 74 X 125% = 93 PARKING SPACES

   PARKING PROVIDED: 76 SPACES (INCLUDING 3 ADA SPACES)

6. SITE COVERAGE:

BUILDINGS:	18,123 SF
ASPHALT:	100,115 SF
CONCRETE:	3,564 SF
TOTAL:	121,802 SF (28.16%)

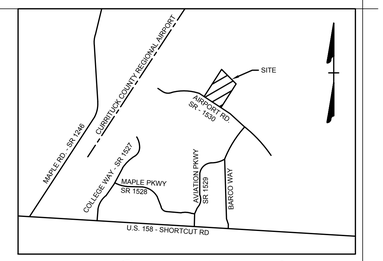
   SITE IS PERMITTED FOR 65% OF COVERAGE PER STORMWATER PERMIT NO. SW7100602 FOR MAPLE COMMERCE PARK.

7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP EROSION CONTROL DEVICES IN GOOD WORKING ORDER MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER.

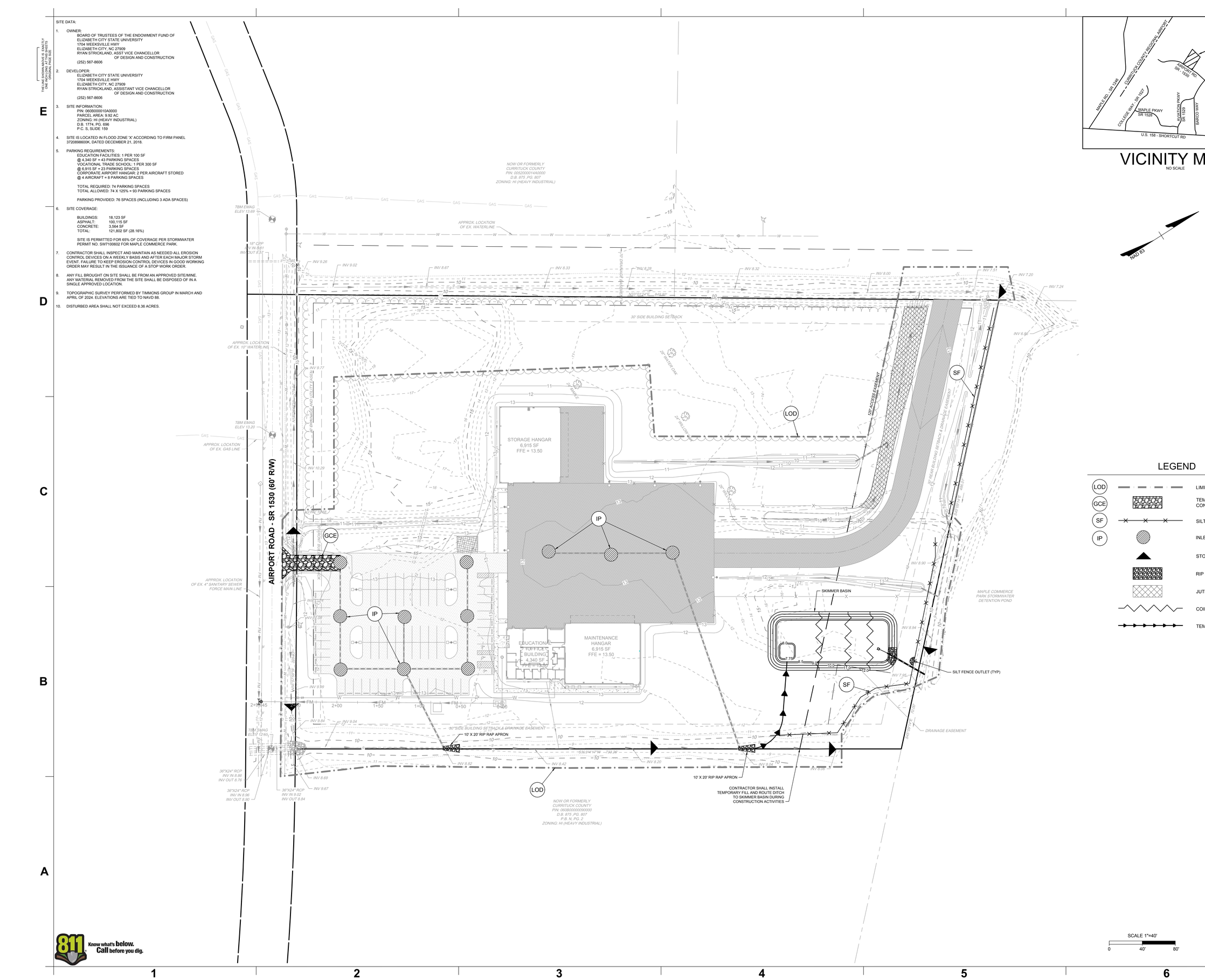
8. ANY FILL BROUGHT ON SITE SHALL BE FROM AN APPROVED SITE/MINE. ANY MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A SINGLE APPROVED LOCATION.

9. TOPOGRAPHIC SURVEY PERFORMED BY TIMMONS GROUP IN MARCH AND APRIL OF 2024. ELEVATIONS ARE TIED TO NAVD 88.

10. DISTURBED AREA SHALL NOT EXCEED 8.36 ACRES.



VICINITY MAP
NO SCALE



LEGEND

LOD	LIMIT OF DISTRUBANCE
GCE	TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
SF	SILT FENCE
IP	INLET PROTECTION
	STONE CHECK DAM
	RIP RAP
	JUTE MAT
	COIR BAFFLES
	TEMP DIVERSION SWALE

NAD 83

SCALE 1"=40'
0 40' 80'

811 Know what's below. Call before you dig.

Elizabeth City State University

LS3P
227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A

LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
EROSION & SEDIMENT CONTROL PLAN

ORIG SUBMISSION: 06/26/2024

SHEET: C4.0

TRC SUBMITTAL

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH WHEN PLOTTED ON ORIGINAL PAPER SIZE

SITE DATA:

1. OWNER
   BOARD OF TRUSTEES OF THE ENDOWMENT FUND OF
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASST VICE CHANCELLOR
   OF DESIGN AND CONSTRUCTION

   (252) 567-8606

2. DEVELOPER:
   ELIZABETH CITY STATE UNIVERSITY
   1704 WEEKSVILLE HWY
   ELIZABETH CITY, NC 27909
   RYAN STRICKLAND, ASSISTANT VICE CHANCELLOR
   OF DESIGN AND CONSTRUCTION

   (252) 567-8606

3. SITE INFORMATION:
   PIN: 0008000010A0000
   PARCEL AREA: 9.92 AC
   ZONING: HI (HEAVY INDUSTRIAL)
   D.B. 1774, PG. 696
   P.C. S, SLIDE 159

4. SITE IS LOCATED IN FLOOD ZONE "X" ACCORDING TO FIRM PANEL 3720899800K, DATED DECEMBER 21, 2018.

5. PARKING REQUIREMENTS:
   EDUCATION FACILITIES: 1 PER 100 SF
   @ 4,340 SF = 43 PARKING SPACES
   VOCATIONAL TRADE SCHOOL: 1 PER 300 SF
   @ 6,915 SF = 23 PARKING SPACES
   CORPORATE AIRPORT HANGAR: 2 PER AIRCRAFT STORED
   @ 4 AIRCRAFT = 8 PARKING SPACES

   TOTAL REQUIRED: 74 PARKING SPACES
   TOTAL ALLOWED: 74 X 125% = 93 PARKING SPACES

   PARKING PROVIDED: 76 SPACES (INCLUDING 3 ADA SPACES)

6. SITE COVERAGE:

BUILDINGS:	18,123 SF
ASPHALT:	100,115 SF
CONCRETE:	3,564 SF
TOTAL:	121,802 SF (28.16%)

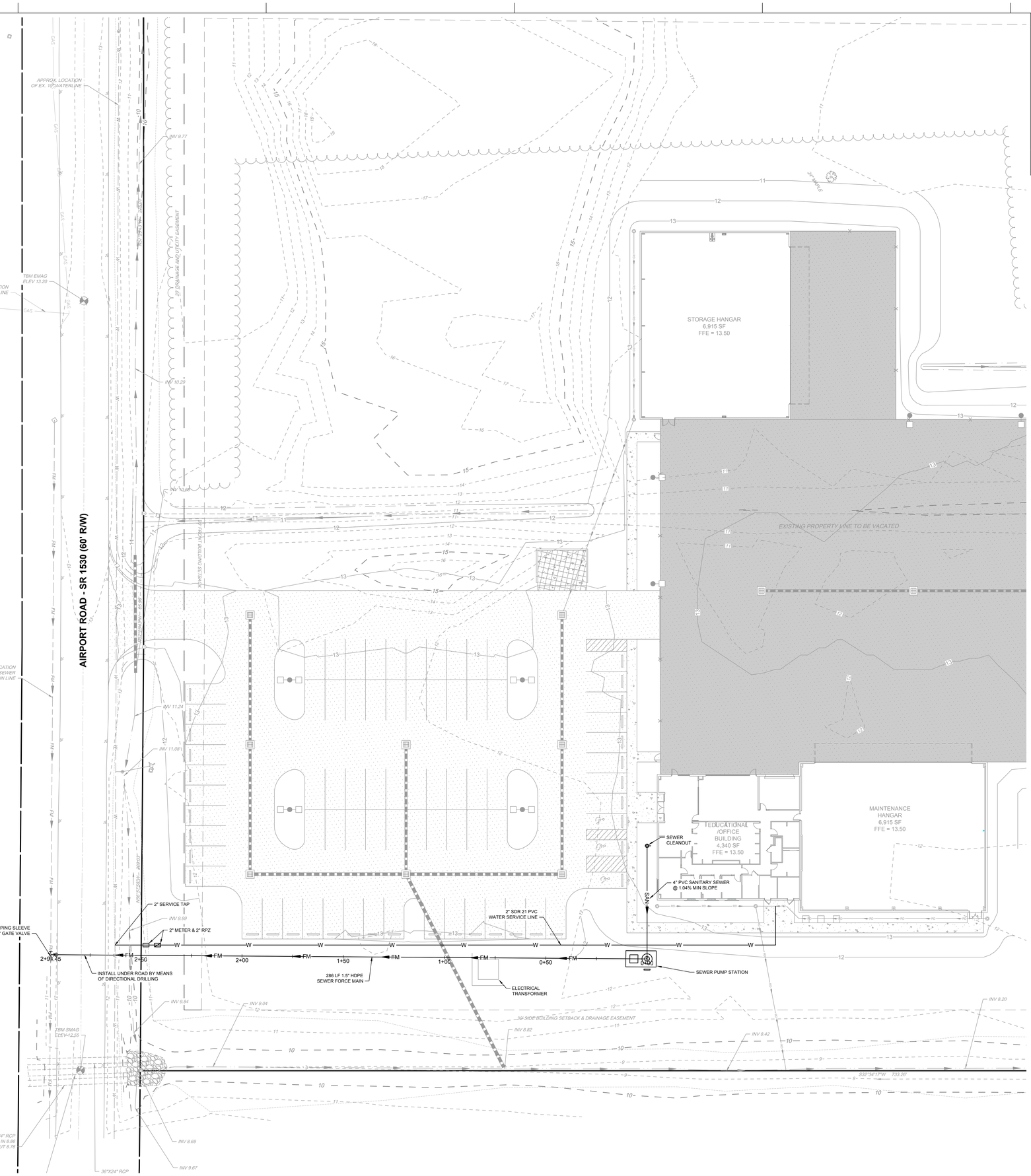
   SITE IS PERMITTED FOR 65% OF COVERAGE PER STORMWATER PERMIT NO. SW7100602 FOR MAPLE COMMERCE PARK.

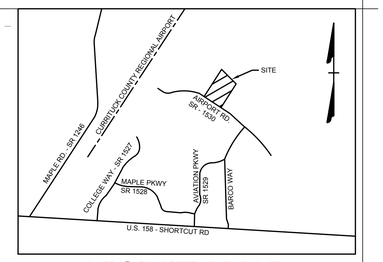
7. CONTRACTOR SHALL INSPECT AND MAINTAIN AS NEEDED ALL EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH MAJOR STORM EVENT. FAILURE TO KEEP EROSION CONTROL DEVICES IN GOOD WORKING ORDER MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER.

8. ANY FILL BROUGHT ON SITE SHALL BE FROM AN APPROVED SITE/MINE. ANY MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A SINGLE APPROVED LOCATION.

9. TOPOGRAPHIC SURVEY PERFORMED BY TIMMONS GROUP IN MARCH AND APRIL OF 2024. ELEVATIONS ARE TIED TO NAVD 88.

10. DISTURBED AREA SHALL NOT EXCEED 8.36 ACRES.





VICINITY MAP
NO SCALE

NAD 83

LEGEND

- BENCHMARK
- EXISTING IRON REBAR (EIR)
- CALCULATED POINT
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX HERITAGE TREE
- PROP SIGN
- PROP DROP INLET
- PROP SEWER CLEANOUT
- PROP SEWER MANHOLE
- PROP WATER VALVE
- PROP RPZ
- PROP WATER METER
- PROP LIGHT POLE
- PROPERTY BOUNDARY
- RIGHT OF WAY
- ADJACENT PROPERTY BOUNDARY
- PROP LOT LINES
- EASEMENT
- EX EDGE OF PAVEMENT
- EX ROAD CENTERLINE
- EX NATURAL GAS LINE
- EX SEWER FORCE MAIN
- EX WATER LINE
- EX CENTER OF DITCH
- EX TOP OF BANK
- EX MAJOR CONTOUR
- EX MINOR CONTOUR
- EX STORM PIPE
- EX EDGE OF TREE LINE
- PROP LIGHT DUTY PAVEMENT
- PROP CONCRETE
- PROP HEAVY DUTY PAVEMENT
- PROP FENCE
- PROP MAJOR CONTOUR
- PROP MINOR CONTOUR
- PROP STORM PIPE
- PROP WATER LINE
- PROP SEWER LINE
- PROP FORCE MAIN
- PROP EDGE OF TREE LINE
- PROP SWALE
- PROP TOP OF BANK
- PROP SPOT GRADE

SCALE 1"=20'
0 20' 40'

811 Know what's below. Call before you dig.

Elizabeth City State University

LS3P
227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-254794-02A

LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
UTILITY PLAN

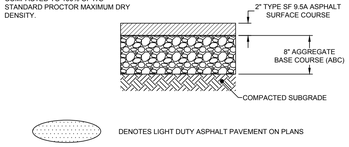
ORIG SUBMISSION: 06/26/2024

SHEET:
C5.0

TRC SUBMITTAL

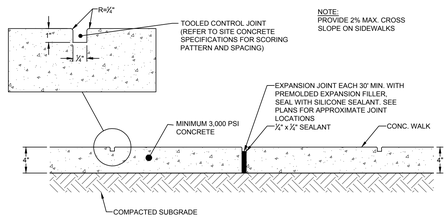
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT FULL SCALE ON ORIGINAL PAPER SHEETS

NOTE:
1. ABC STONE BASE COURSE TO BE COMPACTED TO 100% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY.



DENOTES LIGHT DUTY ASPHALT PAVEMENT ON PLANS

LIGHT DUTY PAVEMENT
NO SCALE



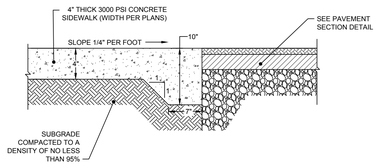
NOTE:
PROVIDE 2% MAX. CROSS SLOPE ON SIDEWALKS

DENOTES CONCRETE SIDEWALK ON PLANS

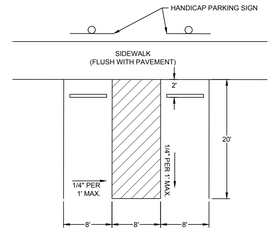
CONCRETE SIDEWALKS
NO SCALE

PLACE A TOOLED CONTROL JOINT 1" DEEP WITH 1/8" RADII IN THE SIDEWALK AT ±5' INTERVALS. INTERVALS SHALL BE ADJUSTED AS NECESSARY SUCH THAT NO SECTION IS MORE THAN 6' OR LESS THAN 4'.

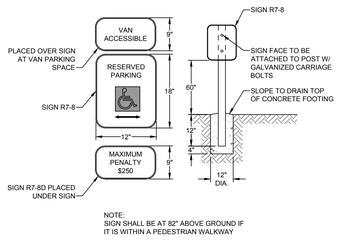
A 1/2" EXPANSION JOINT WILL BE REQUIRED AT 30' INTERVALS AND WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE, INCLUDING BUILDINGS. SIDEWALKS, STEPS, ETC.



FLUSH SIDEWALK
NO SCALE



HANDICAP PARKING DETAIL
NO SCALE

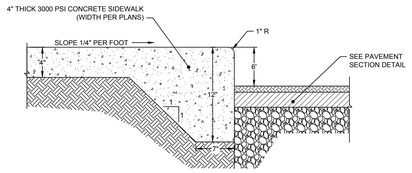


NOTE:
SIGN SHALL BE AT 82" ABOVE GROUND IF IT IS WITHIN A PEDESTRIAN WALKWAY

HANDICAP PARKING SIGN
NO SCALE

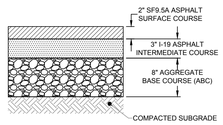
PLACE A TOOLED CONTROL JOINT 1" DEEP WITH 1/8" RADII IN THE SIDEWALK AT ±5' INTERVALS. INTERVALS SHALL BE ADJUSTED AS NECESSARY SUCH THAT NO SECTION IS MORE THAN 6' OR LESS THAN 4'.

A 1/2" EXPANSION JOINT WILL BE REQUIRED AT 30' INTERVALS AND WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE, INCLUDING BUILDINGS. SIDEWALKS, STEPS, ETC.



TURNDOWN SIDEWALK
NO SCALE

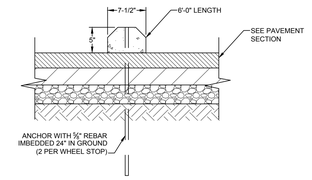
NOTE:
1. ABC STONE BASE COURSE TO BE COMPACTED TO 100% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY.



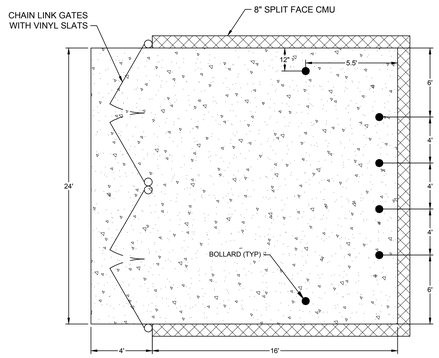
DENOTES HEAVY DUTY ASPHALT PAVEMENT ON PLANS

HEAVY DUTY PAVEMENT
NO SCALE

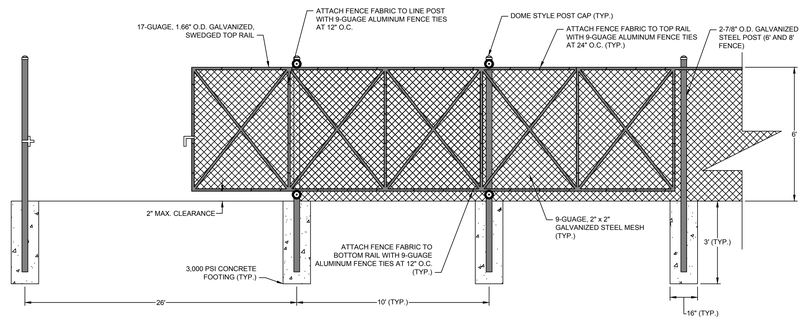
NOTE: PAVEMENT SECTION TO BE REVISED UPON RECEIPT OF GEOTECHNICAL RECOMMENDATIONS.



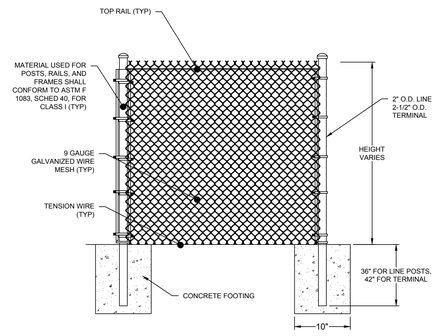
PRECAST BUMPER BLOCK (WHEEL STOP)
NO SCALE



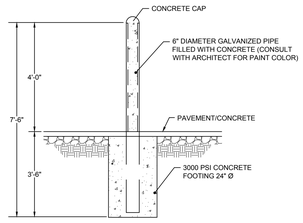
DUMPSTER PAD DETAIL
NO SCALE



26' CANTILEVER GATE
NO SCALE



CHAIN LINK FENCE
NO SCALE



BOLLARD
NO SCALE

Elizabeth City State University

LS3P

227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
SITE DETAILS

ORIG SUBMISSION: 06/26/2024

SHEET:
C6.0

TRC SUBMITTAL

E D C B A

1 2 3 4 5 6

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ORIGINAL PLOT SCALE

FLEXIBLE PIPE

Round Corrugated Steel Pipe
2 2/3 x ½ corrugation **

Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet) (Ga) 16	14	12	10	8
12	12		204	256		
15	12		162	204		
18	12		135	169	239	
21	12		115	145	204	
24	12		100	126	178	
30	12		79	100	142	
36	12		65	83	117	152
42	12		55	70	100	130
48	12		48	61	87	113
54	12			54	77	100
60	12				69	90
66	12					81
72	12					74
78	12					
84	12					

Diameter (inches)	Minimum cover (inches)	Maximum Height of Cover (feet) (Ga) 16	14	12	10	8
12	12	123	155	218	281	344
15	12	98	123	174	224	275
18	12	81	102	144	187	228
21	12	69	87	123	160	195
24	12	60	76	108	139	171
27	12		67	95	123	151
30	12		60	85	111	136
36	12		50	71	92	113
42	12			60	78	96
48	12			52	68	84
54	12			46	50	74
60	12				50	62
66	12					51
72	12					41

** FOR DIFFERENT CORRUGATIONS AND ARCH PIPES REFER TO ROADWAY DESIGN MANUAL OR MANUFACTURERS SPECIFICATION.

HDPE - * (Minimum fill) 2' for pipe diameters ≥ 12" and ≤ 60"
* (Maximum fill) 20' for pipe diameters ≤ 24"
17' for pipe diameters ≥ 30" and ≤ 60"

PVC - * (Minimum fill) 2' for pipe diameters ≥ 12" and ≤ 36"
* (Maximum fill) 30' for pipe diameters ≥ 12" and ≤ 36"

* FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

CSP - AASHTO M36
CAAP - AASHTO M196
HDPE - AASHTO M294
PVC - ASTM F949 or AASHTO M304

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

RIGID PIPE

RCP - * (Minimum fill) 1' for Class IV & CLASS V
2' for Class III & Class II

* (Maximum fill) 10' - Class II pipe
20' - Class III pipe
30' - Class IV pipe
40' - Class V pipe

(For fills > 40' & < 80' use LRFD Direct Design Method)

* FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

RCP - AASHTO M170

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

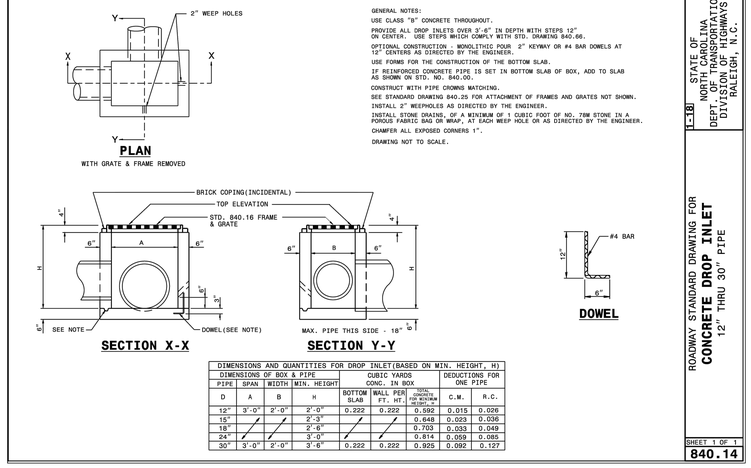
1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR
METHOD OF PIPE INSTALLATION
FILL HEIGHT TABLES

SHEET 3 OF 3
300.01



GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR 2" KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.60.
CONSTRUCT WITH PIPE CROWNS WATCHING.
SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.
INSTALL 2" WEEPHOLES AS DIRECTED BY THE ENGINEER.
INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 78M STONE IN A POROUS FABRIC BAG OR WRAP, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.

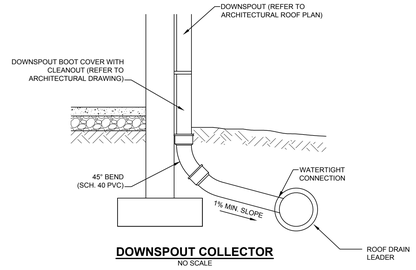
DIMENSIONS AND QUANTITIES FOR DROP INLET(BASED ON MIN. HEIGHT, H)								
DIMENSIONS OF BOX & PIPE				MIN. HEIGHT	CUBIC YARDS CONC. IN BOX		DEDUCTIONS FOR ONE PIPE	
PIPE	SPAN	WIDTH	H		BOTTOM SLAB	WALL PER FT. HT.	TOTAL CONCRETE FOR MINIMUM HEIGHT	C.Y.	R.C.
D	A	B							
12"	3'-0"	2'-0"	2'-0"		0.222	0.222	0.592	0.015	0.026
15"	〃	〃	2'-3"		〃	〃	0.648	0.023	0.036
18"	〃	〃	2'-6"		〃	〃	0.703	0.033	0.049
24"	〃	〃	3'-0"		〃	〃	0.814	0.059	0.085
30"	3'-0"	2'-0"	3'-6"		0.222	0.222	0.925	0.092	0.127

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

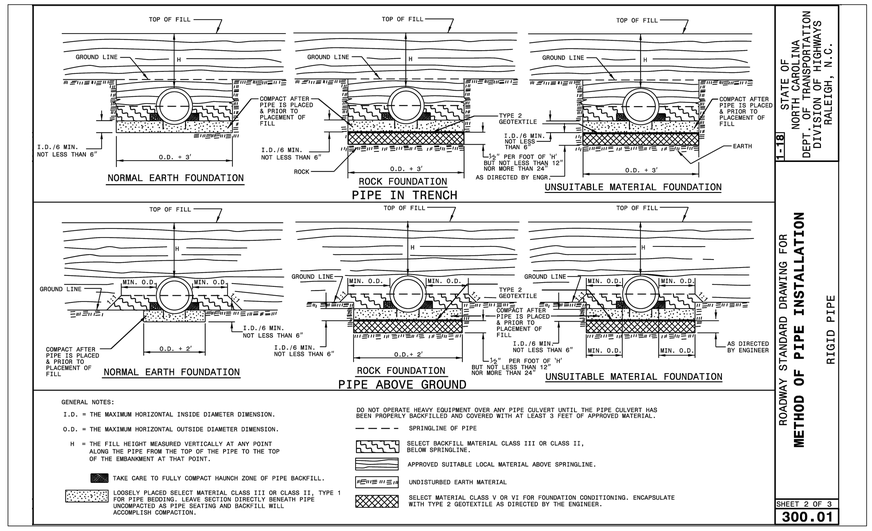
1-18

ROADWAY STANDARD DRAWING FOR
CONCRETE DROP INLET
12" THRU 30" PIPE

SHEET 1 OF 1
840.14



DOWNSPOUT COLLECTOR
NO SCALE



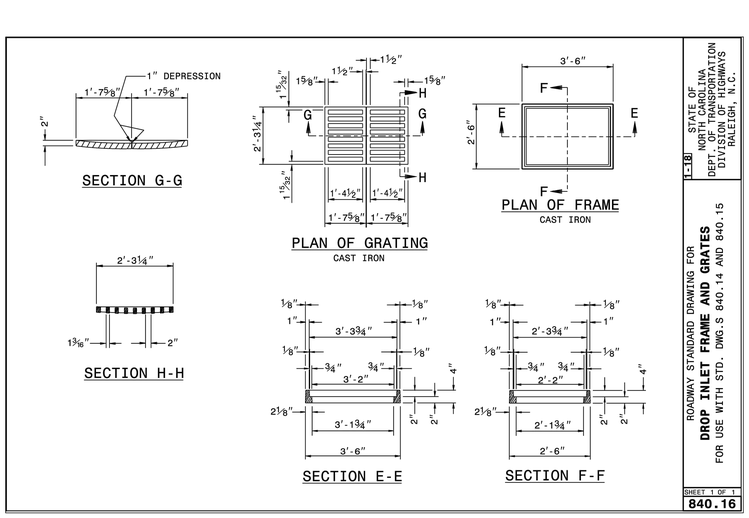
GENERAL NOTES:
I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.
O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.
H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.
TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.
LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.
DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.
SPRINGLINE OF PIPE
SELECT BACKFILL MATERIAL CLASS III OR CLASS II, BELOW SPRINGLINE.
APPROVED SUITABLE LOCAL MATERIAL ABOVE SPRINGLINE.
UNDISTURBED EARTH MATERIAL
SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE 2 GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR
METHOD OF PIPE INSTALLATION
RIGID PIPE

SHEET 2 OF 3
300.01

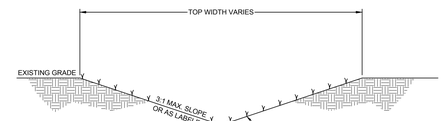


STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

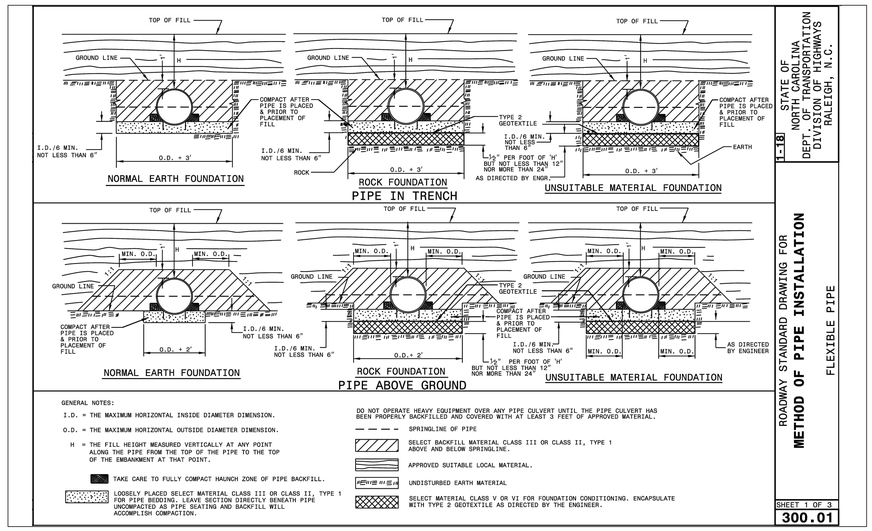
1-18

ROADWAY STANDARD DRAWING FOR
DROP INLET FRAME AND GRATES
FOR USE WITH STD. DWG.S 840.14 AND 840.15

SHEET 1 OF 1
840.16



TYPICAL DITCH/SWALE
NO SCALE



GENERAL NOTES:
I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.
O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.
H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.
TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.
LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.
DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.
SPRINGLINE OF PIPE
SELECT BACKFILL MATERIAL CLASS III OR CLASS II, TYPE 1 ABOVE AND BELOW SPRINGLINE.
APPROVED SUITABLE LOCAL MATERIAL.
UNDISTURBED EARTH MATERIAL
SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE 2 GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-18

ROADWAY STANDARD DRAWING FOR
METHOD OF PIPE INSTALLATION
FLEXIBLE PIPE

SHEET 1 OF 3
300.01

Elizabeth City State University

LS3P
227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
STORMWATER DETAILS

ORIG SUBMISSION: 06/26/2024

SHEET:
C6.1

TRC SUBMITTAL

1 2 3 4 5 6

A B C D E

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ORIGINAL PAPER SHEETS

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes		
Site Area Description	**Stabilize within this many calendar days after ceasing land disturbance**	**Timeframe variations**
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

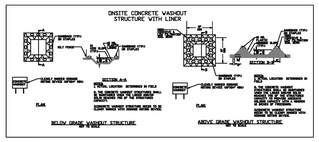
PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

NORTH CAROLINA Environmental Quality



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an Inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an Inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an Inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes [After Discovery] and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours***, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible.*** The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours,*** an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

NORTH CAROLINA Environmental Quality

PART III, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

CONSTRUCTION SEQUENCING

1. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE PADS. (SEE DETAIL)
2. INSTALL EROSION CONTROL DEVICES AT SITE DISCHARGE POINTS AND ALL SILT FENCE TO PREVENT OFF SITE SEDIMENTATION.
3. PERFORM CLEARING DEMOLITION WORK AND INSTALL SKIMMER BASIN.
4. PERFORM GRADING AND INSTALL STORM DRAINAGE.
5. INSTALL THE REMAINING SEDIMENT AND EROSION CONTROL PROTECTION.
6. INSTALL THE STONE BASE AND ASPHALT FOR THE PROPOSED PARKING.
7. PROVIDE GROUNDCOVER IN ACCORDANCE WITH DETAIL MARKED 'EROSION CONTROL MEASURES', THIS SHEET.
8. MONITOR AND MAINTAIN THE INSTALLED EROSION CONTROL MEASURES AND REPAIR AS NECESSARY.
9. ONCE SITE IS SUBSTANTIALLY STABILIZED, REMOVE SKIMMER BASIN COMPONENTS AND GRADE SKIMMER BASIN AREA ACCORDING TO FINISHED GRADES AND IMMEDIATELY SEED AND MULCH.
10. ONCE THE SKIMMER BASIN AREA IS VEGETATED AND THE REMAINDER OF THE SITE IS FULLY STABILIZED, REMOVE ANY REMAINING EROSION CONTROL DEVICES.

THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS OF THE DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES. SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PROVIDED ON ALL AREAS OF THE SITE WHICH ALL DISTURBED OR GRADED.

PROVIDE A GROUNDCOVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY FOR SLOPES 3:1 OR FLATTER AND LESS THAN 50' IN LENGTH, FOR SLOPES 4:1 OR FLATTER OF ANY LENGTH (EXCEPT FOR PERIMETERS AND HQW ZONES), AND SLOPES NO STEEPER THAN 2:1 AND LESS THAN 10' IN LENGTH.

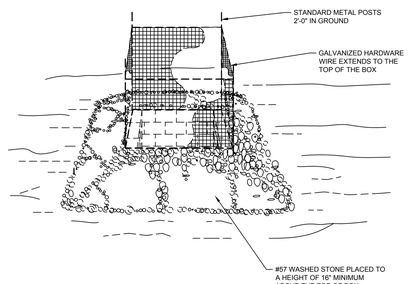
PROVIDE GROUNDCOVER (TEMPORARY OR PERMANENT) ON EXPOSED SLOPES WITHIN 7 CALENDAR DAYS FOR SLOPES STEEPER THAN 3:1 OR SLOPES 3:1 OR FLATTER GREATER THAN 50' IN LENGTH, FOR HIGH QUALITY WATER (HWQ) ZONES, AND PERIMETER DIKES, SWALES, DITCHES AND SLOPES.

PROVIDE GROUNDCOVER (TEMPORARY OR PERMANENT) ON ALL EXPOSED SLOPES WITH IN 21 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING, AND, A PERMANENT GROUNDCOVER FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT.

THE CONTROL MEASURES SHALL BEGIN PRIOR TO ANY LAND DISTURBING ACTIVITY INCLUDING CLEARING; SHALL CONTINUE DURING CONSTRUCTION AND SHALL CONTINUE WITH THE NECESSARY MAINTENANCE UNTIL THE DISTURBED LAND IS STABILIZED. COMPLIANCE WITH LOCAL AND/OR STATE SOIL EROSION AND SEDIMENTATION CONTROL LAWS SHALL BE THE ENTIRE RESPONSIBILITY OF THE CONTRACTOR. THIS PARAGRAPH IS INTENDED TO SERVE ONLY AS A GUIDE TO THE CONTRACTOR FOR COMPLIANCE WITH SUCH LAWS. ORDERS, RULES AND REGULATIONS CONCERNING EROSION AND SEDIMENTATION CONTROL PROTECTION OF EXISTING STRUCTURES AND FACILITIES FROM SEDIMENTATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ITEMS TO BE PROTECTED SHALL INCLUDE, BUT ARE NOT LIMITED TO, CATCH BASINS, NATURAL WATERWAYS, DRAINAGE DITCHES, WALKS, DRIVES, ROADS, LAWNS, AND STREAMS.

EROSION CONTROL MEASURES

NO SCALE

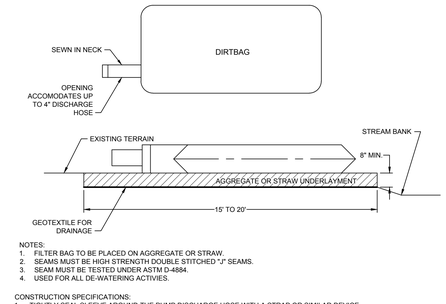


MAINTENANCE

INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

INLET PROTECTION

NO SCALE

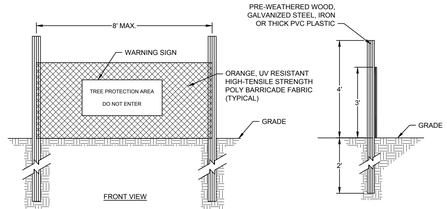


NOTES:
1. FILTER BAG TO BE PLACED ON AGGREGATE OR STRAW.
2. SEAMS MUST BE HIGH STRENGTH DOUBLE STITCHED "J" SEAMS.
3. SEAM MUST BE TESTED UNDER ASTM D-4884.
4. USED FOR ALL DE-WATERING ACTIVIES.

CONSTRUCTION SPECIFICATIONS:
1. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.
2. PLACE FILTER BAG ON SUITABLE BASE (STRAW OR #57 STONE) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPE SURFACE, DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.
3. CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS, AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.
4. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.
5. REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES
6. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT.
7. REPLACE BEDDING IF IT BECOMES DISPLACED.

DE-WATERING FILTER BAG

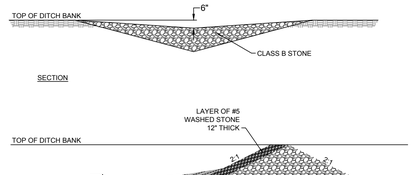
NO SCALE



NOTES:
1. TREE PROTECTION FENCING MUST BE INSTALLED AT A MINIMUM RADIUS OF THE CRITICAL ROOT ZONE
2. THE TREE PROTECTION FENCING MUST REMAIN IN PLACE FOR THE DURATION OF THE PROJECT UNLESS OTHERWISE APPROVED BY URBAN FORESTRY STAFF.
3. APPROVED IN PACT PROTECTION DEVICES MUST BE REMOVED AFTER CONSTRUCTION WHEN APPLICABLE.
4. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER FOR THE REMAINDER.
5. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTED AREA.
6. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
7. ADDITIONAL SIGNS MAY BE REQUIRED BY LOCAL MUNICIPALITY BASED ON FIELD CONDITIONS.
8. SIGNS ARE TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL WITH LETTERS A MINIMUM OF 3" HIGH, CLEARLY LEGIBLE AND SPACED AS SHOWN.

TREE PROTECTION FENCE

NO SCALE



CHECK DAM

NO SCALE

SEEDBED PREPARATION

CONSTRUCTION SPECIFICATIONS

1. PREPARE SOIL AS NECESSARY TO ESTABLISH AN ADEQUATE SEEDBED FOR RECEIVING SEED USING TILLAGE AND/OR REMOVAL OF DEBRIS (ROCKS, ROOTS, OBSTRUCTIONS). CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. SOIL SHALL RECEIVE LIME, FERTILIZER,AND/OR SUPERPHOSPHATE UNIFORMLY AS NEEDED PER RECOMMENDATIONS FROM NORTH CAROLINA DEPARTMENT OF AGRICULTURE OR OTHER COMMERCIAL LABORATORY.
3. SEED ON A FRESHLY PREPARED SEEDBED AND ENSURE SEED IS LIGHTLY COVERED FOLLOWING INSTALLATION.
4. MULCH IMMEDIATELY AFTER SEEDING.
5. CONTRACTOR SHALL SEED ALL AREAS THAT ARE DISTURBED WITHIN TWO DAYS. INSPECT ALL SEEDED AREAS AND MAKE SURE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON. IF POSSIBLE. AFTER ALL CONSTRUCTION ACTIVITIES ARE COMPLETE, AN INSPECTION WILL BE COMPLETED TO DETERMINE IF ADDITIONAL SEEDING WILL BE REQUIRED.

*APPLY:
FERTILIZER, LIME, AND MULCH SHALL BE APPLIED AT RATES RECOMMENDED BY NCDA (OR OTHERS). OTHERWISE, APPLY AS DESCRIBED BELOW.

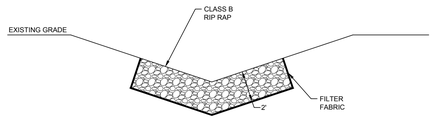
AGRICULTURAL LIMESTONE - 1-1.5 TONS/ACRE ON COURSE TEXTURED SOILS AND 2-3 TONS/ACRE IN FINE-TEXTURED SOILS.
SOILS WITH PH OF 6 OR HIGHER NEED NOT BE LIMED.
FERTILIZER - 700/1000 LBS/ACRE (10-10-10)
MULCH - 2 TONS/ACRE (SMALL GRAIN STRAW)
ANCHOR - ASPHALT EMULSION AT 450 GAL/ACRE

PERMANENT SEEDING SCHEDULE FOR COASTAL PLAIN

DATE	TYPE	BROADCAST SEEDING RATES
SEP 1 - MAR 31	COMMON BERMUDA 'SAHARA' (UNHULLED) REBEL II FESCUE	130 LBS/ACRE 175 LBS/ACRE
APR 1 - AUG 31	COMMON BERMUDA 'SAHARA' (HULLED) REBEL II FESCUE	90 LBS/ACRE 175 LBS/ACRE
AUG 15 - APR 30	PERENNIAL RYE (AS A NURSE PLANT)	40 LBS/ACRE IN ADDITION TO OTHER SEED TYPES

TEMPORARY SEEDING SCHEDULE

DATE	TYPE	PLANTING RATES
APR 15 - AUG 15	GERMAN MILLET	40 LBS/ACRE
AUG 15 - APR 15	RYE GRAIN	120 LBS/ACRE



NOTES:
INSTALL RIP RAP SO TOP OF STONE WILL MATCH DITCH INVERT.
EXTEND RIP RAP ALONG SIDE SLIDE AS SHOWN ON PLANS.

RIP RAP CHANNEL LINING

NO SCALE

Elizabeth City State University

227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

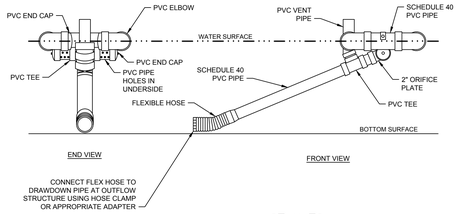
Δ	DATE	DESCRIPTION

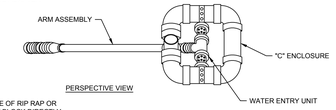
SHEET NAME:
EROSION CONTROL DETAILS

ORIG SUBMISSION: 06/26/2024

SHEET:
C6.2

TRC SUBMITTAL





NOTES:

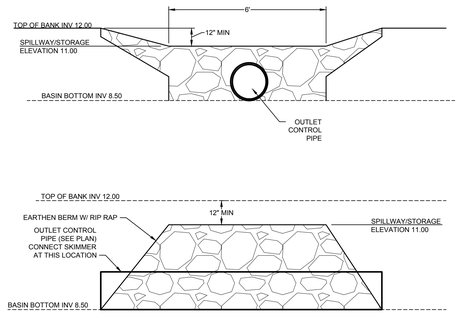
PROVIDE A SMALL PILE OF RIP RAP OR CONCRETE MASONRY BLOCK DIRECTLY BELOW SKIMMER TO PREVENT SKIMMER FROM RESTING ON SOIL.

ALL SCHEDULE 40 PVC PIPE & FITTINGS SHALL BE 3" MIN. DIA.

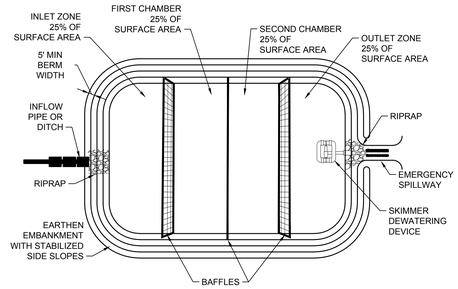
SKIMMER TO BE TETHERED

SEE N.C. DENR EROSION and SEDIMENT CONTROL PLANNING and DESIGN MANUAL FOR CONDITIONS WHERE PRACTICE APPLIES; PLANNING CONSIDERATION & DESIGN CRITERIA.

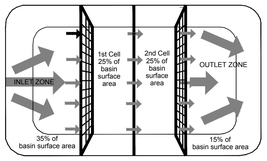
SKIMMER
NO SCALE



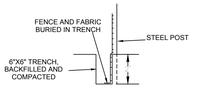
SEDIMENT BASIN EMERGENCY SPILLWAY
NO SCALE



SEDIMENT BASIN DETAIL
NO SCALE



PLAN VIEW

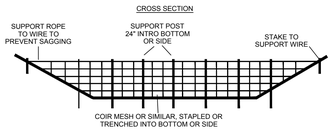


SECTION VIEW AT OPENING

NOTES:

1. BAFFLE MATERIAL SHOULD BE SECURED AT THE BOTTOM AND SIDES USING STAPLES OR BY TRENCHING AS FOR SILT FENCE.
2. MOST OF THE SEDIMENT WILL ACCUMULATE IN THE 1ST BAY, WHICH SHOULD BE READILY ACCESSIBLE FOR MAINTENANCE.
3. PROVIDE 3 BAFFLES (USE TWO IF LESS THAN 20 FEET IN LENGTH). PROVIDE 5 BAFFLES FOR DRAINAGE AREAS GREATER THAN 10 ACRES.
4. BAFFLE SHALL BE 700 G/M2 COIR EROSION BLANKET.
5. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS
6. INSPECT BAFFLES FOR REPAIR ONCE A WEEK AND AFTER EACH RAINFALL

CROSS SECTION



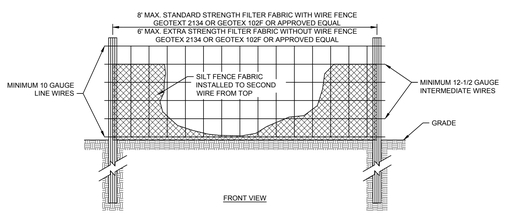
MAINTENANCE
INSPECT BAFFLES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.

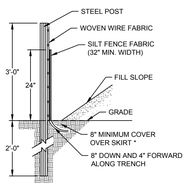
REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.

REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

COIR BAFFLES
NO SCALE



FRONT VIEW



SIDE VIEW

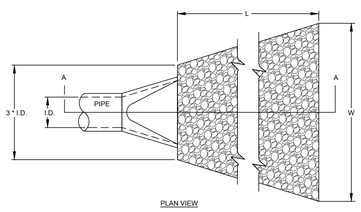
CONSTRUCTION SPECIFICATIONS

1. USE SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461.
2. SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0-120 DEGREES F.
3. ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.33 LB/LF STEEL WITH A MINIMUM LENGTH OF 5'. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
4. FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

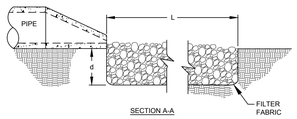
MAINTENANCE

1. INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
3. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
4. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

SILT FENCE
NO SCALE



PLAN VIEW



SECTION A-A

NOTES:

1. L = THE LENGTH OF THE RIPRAP APRON.
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (INCHES).
3. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

MAINTENANCE
INSPECT RIPRAP OUTLET STRUCTURES WEEKLY AND AFTER SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE. CONTROL OF WEED AND BRUSH GROWTH MAY BE NEEDED IN SOME LOCATIONS.

OUTLET PROTECTION
NO SCALE

Channel Installation Instructions EXCEL CS-3™

Step 1 - Site Preparation

Prepare site to design profile and grade. Remove debris, rocks, clods, etc.. Ground surface should be smooth prior to installation to ensure blanket remains in contact with slope.

Step 2 - Seeding

Seeding of site should be conducted to design requirements or to follow local or state seeding requirements as necessary.

Step 3 - Staple Selection

At a minimum, 6" long by 1" crown, 11 gauge staples are to be used to secure the blanket to the ground surface. Installation in rocky, sandy or other loose soil may require longer staples.

Step 4 - Excavate Anchor Trench and Secure Blanket

Excavate a trench along the top of the channel side slopes and the upstream terminal end of the channel to secure the edges of the blanket. The trench should run along the length and width of the installation, be 6" wide and 6" deep. Staple blanket along bottom of trench, fill with compacted soil, overlap blanket towards toe of slope and secure with row of staples (shown in Figures A, E and F).

Step 5 - Secure Body of Blanket

Roll blanket down slope from anchor trench. Staple body of blanket following the pattern shown in Figure D. Leave end of blanket unstapled to allow for overlap shown in Figure B. Place downstream blanket underneath upstream blanket to from shingle pattern. Staple seam as shown in Figure E. Secure downstream blanket with stapling pattern shown in Figure D. Stapling pattern shown in Figure D reflects minimum staples to be used. More staples may be required to ensure blanket is sufficiently secured to resist mowers and foot traffic and to ensure blanket is in contact with soil surface over the entire area of blanket. Further, critical points require additional staples. Critical points are identified in Figure G.

Step 6 - Continue Along Slope - Complete Installation

Overlap adjacent blankets as shown in Figure C and repeat Step 5. Secure toe of slope using stapling pattern shown in Figure E. Secure edges of installation by stapling at 1.5' intervals along the terminal edge.

Document # WE_EXCEL_CS3_CII

***Approximately 360 Staples per 7.5' Roll & 720 Staples per 15' Roll Required - Drawings Not to Scale 15' Wide Blanket Shown**

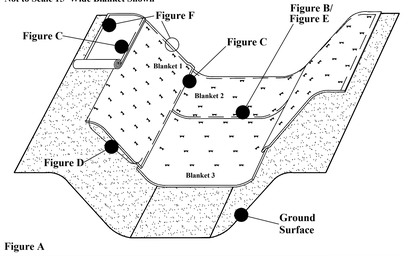


Figure A

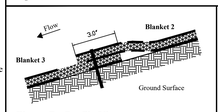


Figure B - Profile View

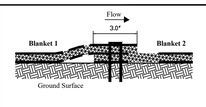


Figure C - Cross Section View

Product Application/Equivalency Specifications

Excel CS-3 is produced by Western Excelsior and consists of an extended term Rolled Erosion Control Product (RECP) comprised of a coconut/straw blend matrix mechanically (stitch) bound between two, UV stabilized, photodegradable synthetic nets (top and bottom). The expected longevity of Excel CS-3 is approximately 24 months (actual longevity dependent on field and climatic conditions). Excel CS-3 is manufactured to include physical properties sufficient to provide the intended longevity and performance. Product specifications may be found on document WE_EXCEL_CS3_SPEC and performance information may be found on document WE_EXCEL_CS3_PERF. All documents are available from Western Excelsior Technical Support or www.westernexcelsior.com. Additional to above, equivalent products to Excel CS-3 must meet identical criteria as Excel CS-3 as follows:

1. Consist of a coconut/straw blend matrix mechanically (stitch) bound between two, synthetic, UV stabilized photodegradable nets.
2. Sufficient tensile strength, thickness and coverage to maintain integrity during installation and ensure material performance.
3. Listing within AASHTO NTPEP database.

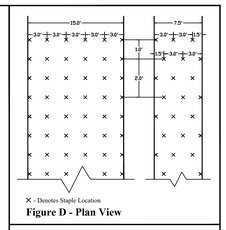


Figure D - Plan View

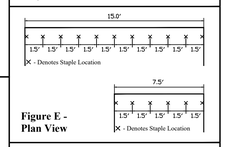


Figure E - Plan View

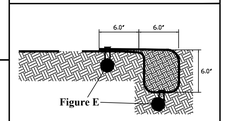


Figure F - Profile View

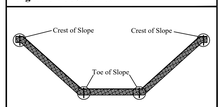
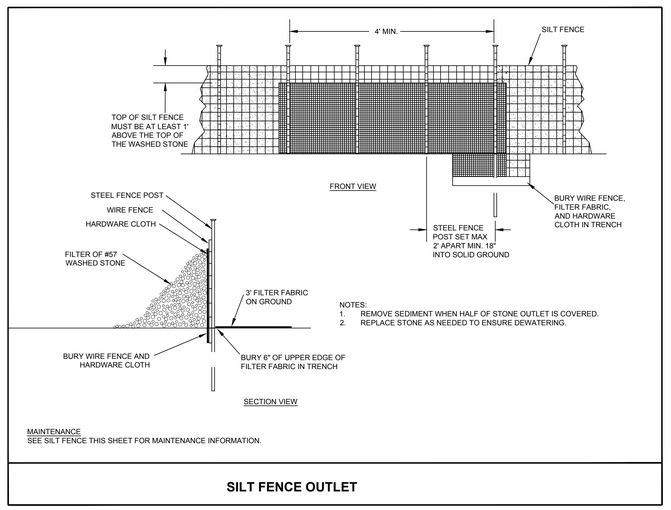


Figure G - Critical Points



NOTES:
1. REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED.
2. REPLACE STONE AS NEEDED TO ENSURE DEWATERING.

MAINTENANCE
SEE SILT FENCE THIS SHEET FOR MAINTENANCE INFORMATION.

SILT FENCE OUTLET

Elizabeth City State University

227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
EROSION CONTROL DETAILS

ORIG SUBMISSION: 06/26/2024

SHEET:
C6.3

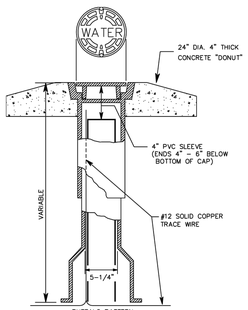
TRC SUBMITTAL

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH WHEN PLOTTED AT FULL SCALE. IF NOT, ADJUST SCALE ACCORDINGLY.

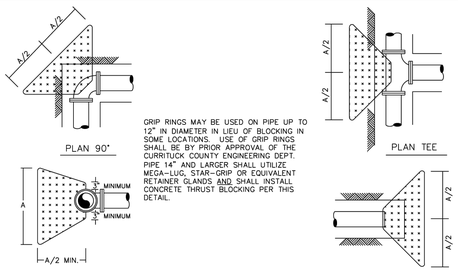
E D C B A

1 2 3 4 5 6

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH WHEN PLOTTED ON ORIGINAL PAPER SIZE



VALVE BOX
NTS



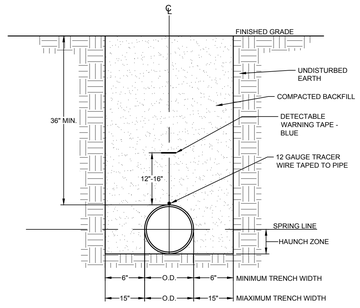
GRIP RINGS MAY BE USED ON PIPE UP TO 12" IN DIAMETER IN LIEU OF BLOCKING IN SOME LOCATIONS. USE OF GRIP RINGS SHALL BE BY PRIOR APPROVAL OF THE CURRITUCK COUNTY ENGINEERING DEPT. PIPE 14" AND LARGER SHALL UTILIZE MEGA-LUG, STAR-GRIP OR EQUIVALENT RETAINER GLANDS AND SHALL INSTALL CONCRETE THRUST BLOCKING PER THIS DETAIL.

CONCRETE THRUST BLOCK SCHEDULE

FITTING	PIPE SIZE (NOM. DIA. IN INCHES)									
	2"	4"	6"	8"	10"	12"	16"	18"	20"	24"
TEE	1.6	1.9	2.8	3.8	4.7	5.9	7.5	8.5	9.4	11.3
90° BEND	1.5	1.9	2.8	3.8	4.7	5.9	7.5	8.5	9.4	11.3
45° BEND	1.0	1.4	2.1	2.8	3.5	4.3	5.5	6.2	6.9	7.7
22 1/2° BEND	.8	1.0	1.5	2.0	2.5	3.1	4.0	4.5	4.9	5.5

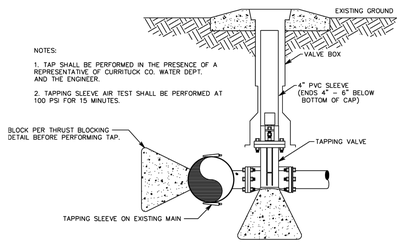
TABLE "A" DIMENSIONS (IN FEET)

THRUST BLOCK DETAIL
NTS



1. FOR TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND THE BRACING.
2. BACKFILL IN AREAS TO REMAIN GRASSED MAY BE NATIVE MATERIAL. BACKFILL IN AREAS TO RECEIVE PAVEMENT OR BUILDING FOUNDATIONS SHALL BE SUITABLE NATIVE MATERIAL OR SELECT OFF-SITE MATERIAL.
3. BACKFILL SHALL BE TAMPED IN 6" LAYERS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.
4. BEDDING MATERIAL BENEATH TYPICAL TRENCH SHALL BE INSTALLED ONLY AS NECESSARY WHEN NATIVE SOILS ARE UNSTABLE.

TYPICAL WATERLINE TRENCH DETAIL
NO SCALE



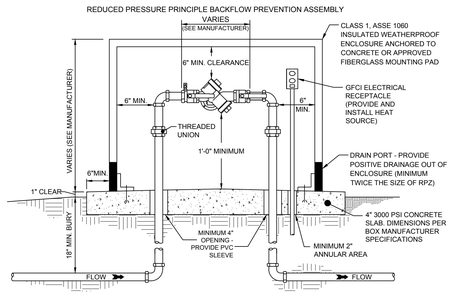
NOTES:

1. TAP SHALL BE PERFORMED IN THE PRESENCE OF A REPRESENTATIVE OF CURRITUCK CO. WATER DEPT. AND THE ENGINEER.
2. TAPPING SLEEVE AIR TEST SHALL BE PERFORMED AT 100 PSI FOR 15 MINUTES.

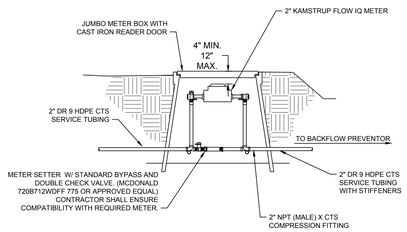
TAPPING DETAIL
NTS

NOTES:

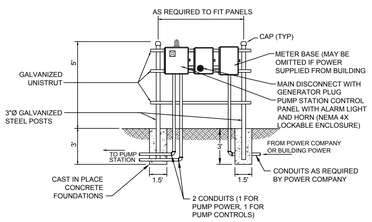
1) REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1013 & AWWA C511.
2) BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED WITHIN 5-FT OF THE METER BOX.
4) BACKFLOW PREVENTION ASSEMBLY SHALL BE CENTERED ON CONCRETE PAD AND CENTERED WITHIN ENCLOSURE.
5) MINIMUM INSULATED CLASS I, ASSE 1060 WEATHERPROOF HEATED ENCLOSURE REQUIRED.
6) 120V GFCI ELECTRICAL RECEPTACLE TO BE INSTALLED IN ACCORDANCE WITH THE N.C. ELECTRICAL CODE FOR OUTDOOR OPERATION.
7) PIPE MATERIAL WITHIN ENCLOSURE SHALL BE BRASS (ASTM B43).
8) INSTALLATION SHALL BE IN COMPLIANCE WITH THE N.C. PLUMBING CODE.



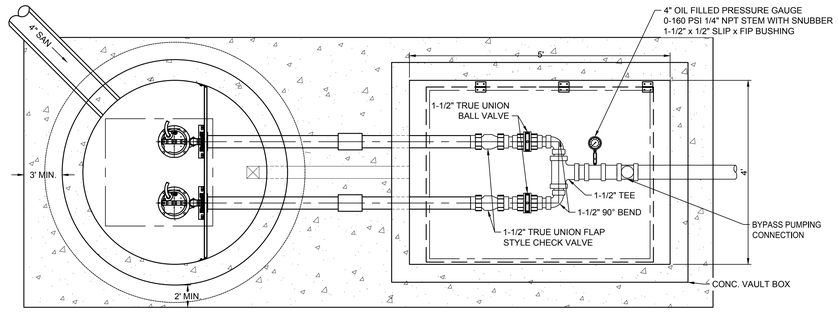
2" RPZ BACKFLOW PREVENTER
NO SCALE



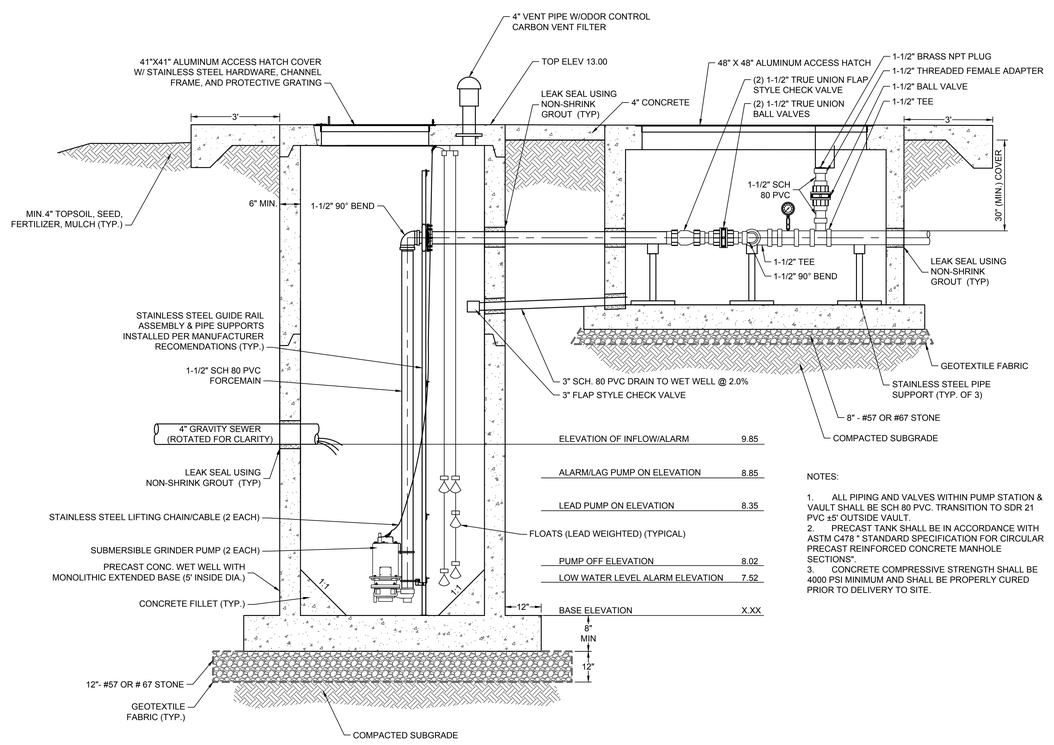
2" WATER SERVICE DETAIL
NO SCALE



PUMP STATION CONTROL STRUCTURE
NO SCALE



PUMP STATION PLAN VIEW
NTS



NOTES:

1. ALL PIPING AND VALVES WITHIN PUMP STATION & VAULT SHALL BE SCH 80 PVC. TRANSITION TO SDR 21 PVC ±5' OUTSIDE VAULT.
2. PRECAST TANK SHALL BE IN ACCORDANCE WITH ASTM C478 " STANDARD SPECIFICATION FOR CIRCULAR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
3. CONCRETE COMPRESSIVE STRENGTH SHALL BE 4000 PSI MINIMUM AND SHALL BE PROPERLY CURED PRIOR TO DELIVERY TO SITE.

PUMP STATION ELEVATION
NTS

Elizabeth City State University

227 WEST TRADE STREET, SUITE 700
CHARLOTTE, NORTH CAROLINA 28202
TEL. 704.333.6686 FAX. 704.333.2926
WWW.LS3P.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

NOT FOR CONSTRUCTION

ECSU HANGAR FACILITY AT CURRITUCK COUNTY REGIONAL AIRPORT

AIRPORT ROAD, MAPLE, NC 27956

SCO PROJECT: 22-25479-02A
LS3P PROJECT: 9202-230350B

Δ	DATE	DESCRIPTION

SHEET NAME:
UTILITY DETAILS

ORIG SUBMISSION: 06/26/2024

SHEET:
C6.4

TRC SUBMITTAL