

Administrative Site Review Application

Planning and Development Customer Service Center • One Exchange Plaza, Suite 400 | Raleigh, NC 27601 | 919-996-2500



This form is required when submitting site plans as referenced in Unified Development Ordinance (UDO) Section 10.2.8. Please check the appropriate building types and include the plan checklist document when submitting.

Office Use Only: Case #: _____ Planner (print): _____

Please review UDO Section 10.2.8. as amended by text change case [TC-14-19](#) and [TC-11-21](#) to determine the site plan tier. If assistance determining a Site Plan Tier is needed a Site Plan Tier Verification request can be submitted online via the [Permit and Development Portal](#). (Note: There is a fee for this verification service.)

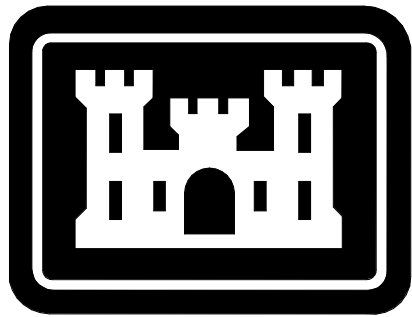
Site Plan Tier: Tier Two Site Plan <input type="checkbox"/>		Tier Three Site Plan <input checked="" type="checkbox"/>	
Building Type		Site Transaction History	
<input type="checkbox"/> Detached	<input type="checkbox"/> General	Subdivision case #: _____	
<input type="checkbox"/> Attached	<input type="checkbox"/> Mixed use	Scoping/sketch plan case #: _____	
<input type="checkbox"/> Apartment	<input type="checkbox"/> Open lot	Certificate of Appropriateness #: _____	
<input type="checkbox"/> Townhouse	<input checked="" type="checkbox"/> Civic	Board of Adjustment #: _____	
Zoning Case #: _____			
Administrative Alternate #: _____			
GENERAL INFORMATION			
Development name: USDA Plant Science Research Facility			
Inside City limits? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Property address(es): 3821 Inwood Drive, Raleigh, NC, 27603			
Site P.I.N.(s): 0791273988			
Please describe the scope of work. Include any additions, expansions, and change of use. The Plant Improvement Facility (PIF) project will provide the requirements to operate the collaborative plant science efforts of the USDA Agricultural Research Service and North Carolina State University. The project is located on a 11.88-acre open field site at the northeast corner of the intersection of Lake Wheeler Road and Inwood Road. Primary vehicular access will connect to Inwood Road. The primary driving and parking areas will be gravel, except where paving is needed for accessible parking and access. There is no domestic water or sewer infrastructure on site. A network of well, storage tank, rainwater harvesting, and retention ponds will be used to support domestic, systems, and fire protection water demand.			
Current Property Owner/Developer Contact Name: NC State University			
NOTE: please attach purchase agreement when submitting this form.			
Company: USACE		Title:	
Address: 69 Darlington Ave. Wilmington, NC, 28403			
Phone #: 910-231-4881		Email: Brian.Ballweg@usace.army.mil	
Applicant Name: Xiaohan Li			
Company: Clark Nexsen		Address: 421 North Harrington Street Suite 600, Raleigh, NC 27603	
Phone #: 919.576.2089		Email: Xiaohan.Li@clarknexsen.com	

DEVELOPMENT TYPE + SITE DATE TABLE (Applicable to all developments)	
SITE DATA	BUILDING DATA
Zoning district (if more than one, please provide the acreage of each): R-1	Existing gross floor area (not to be demolished): 0
	Existing gross floor area to be demolished: 0
Gross site acreage: 11.88AC	New gross floor area: 56786
Maximum # of parking spaces: 27	Total sf gross (to remain and new): 56786
# of parking spaces proposed: 27	Proposed # of buildings: 3
Overlay District (if applicable): SWPOD	Proposed # of stories for each: 1
Existing use (UDO 6.1.4): Civic	
Proposed use (UDO 6.1.4): Civic	

STORMWATER INFORMATION	
Existing Impervious Surface: Acres: <u>0.55</u> Square Feet: <u>24124</u>	Proposed Impervious Surface: Acres: <u>3.37</u> Square Feet: <u>146859</u>
Is this a flood hazard area? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, please provide: _____	
Alluvial soils: _____	
Flood study: _____	
FEMA Map Panel #: _____	
Neuse River Buffer Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Wetlands Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

RESIDENTIAL DEVELOPMENTS	
Total # of dwelling units:	Total # of hotel units:
# of bedroom units: 1br 2br 3br 4br or more	
# of lots:	Is your project a cottage court? Yes <input type="checkbox"/> No <input type="checkbox"/>

SIGNATURE BLOCK	
<p>The undersigned indicates that the property owner(s) is aware of this application and that the proposed project described in this application will be maintained in all respects in accordance with the plans and specifications submitted herewith, and in accordance with the provisions and regulations of the City of Raleigh Unified Development Ordinance.</p> <p>I, <u>Xiaohan Li</u> will serve as the agent regarding this application, and will receive and respond to administrative comments, resubmit plans and applicable documentation, and will represent the property owner(s) in any public meeting regarding this application.</p> <p>I/we have read, acknowledge, and affirm that this project is conforming to all application requirements applicable with the proposed development use. I acknowledge that this application is subject to the filing calendar and submittal policy, which states applications will expire after 180 days of inactivity.</p>	
Signature: <u>Xiaohan Li</u>	Date: <u>12/1/2022</u>
Printed Name: XIAOHAN LI	



US Army Corps
of Engineers®
WILMINGTON DISTRICT

CLARK NEXSEN

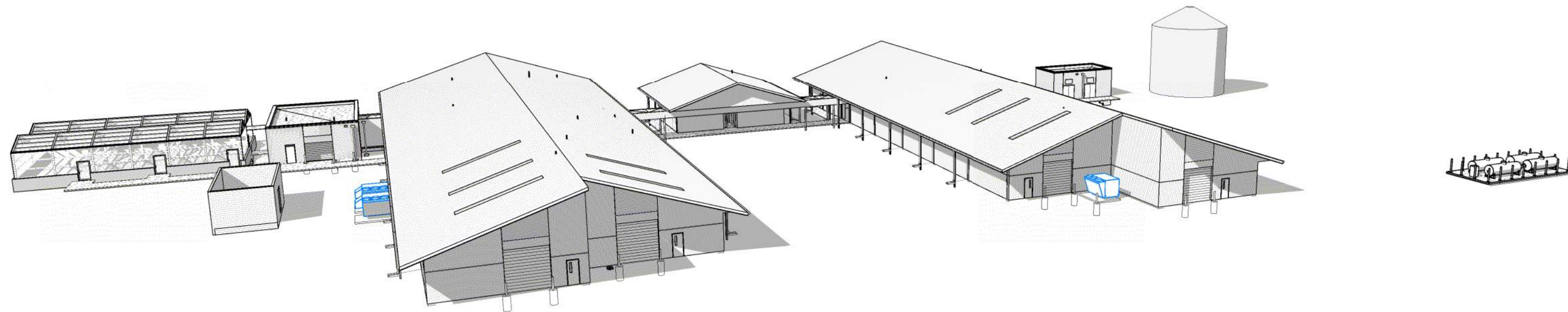


Use PIN number to locate parcel 0791273988, the address may not locate parcel in iMAPs.

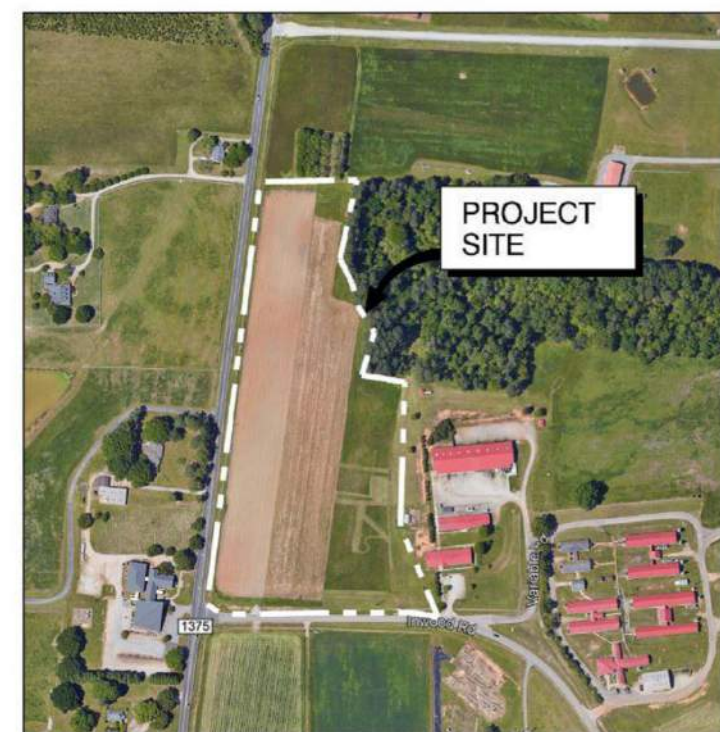
-Planning

PIN#	0791273988
Zoning	R-1
Overlay District(s)	SWPOD
Frontage Type	N/A
Current Use(s)	NC State University
Proposed Use(s)	US Department of Agriculture
Total Building Square Footage(s)	51,311
Total Building Square Footage(s)- BID OPTION 1	56,634
Residential Density	N/A
Unit Data	N/A
Existing Parking Space	0
Proposed Parking Space	27

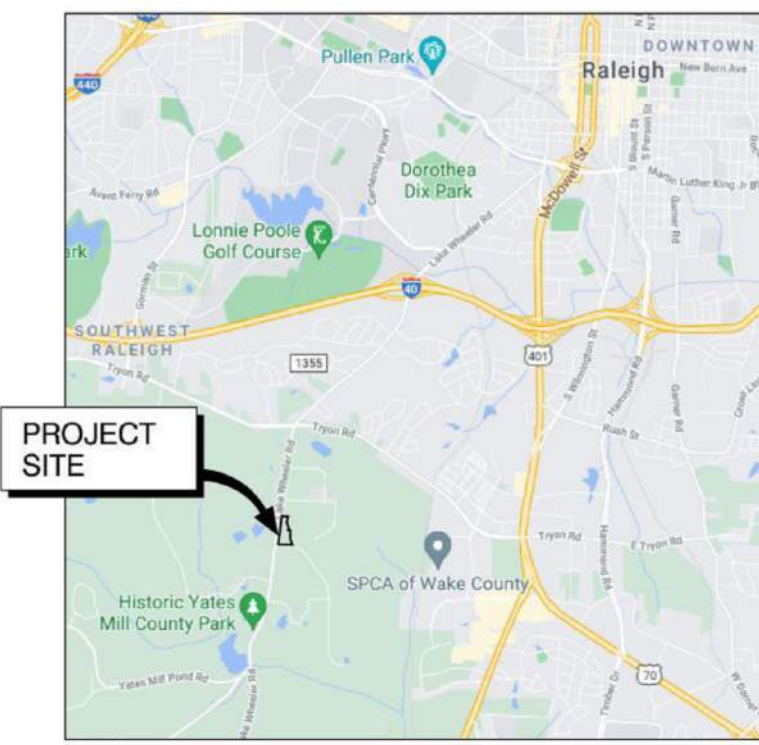
3821 INWOOD DRIVE, RALEIGH, NC USDA AGRICULTURE RESEARCH SERVICES PLANT IMPROVEMENT FACILITY 9208



Sheet List Table	
Sheet Number	Sheet Title
G-001	TITLE SHEET
C-001	LEGEND, ABBREVIATIONS AND NOTES
VF001	EXISTING CONDITIONS
VF101-VF105	EXISTING CONDITIONS
BB101	BORING LOCATIONS AND BORING LOGS
BB102-BB103	BORING LOGS
CD101-102	DEMOLITION PLAN
CE001	EROSION AND SEDIMENT CONTROL NOTES
CE002	USACE STANDARD SHEET
CE003	NCDEQ REQUIREMENT SHEET
CE004	NCDEQ STANDARD SHEET
CE101-CE104	EROSION AND SEDIMENT CONTROL PLAN - INITIAL
CE105-CE108	EROSION AND SEDIMENT CONTROL PLAN - INTERMEDIATE
CE109-CE110	EROSION AND SEDIMENT CONTROL PLAN - FINAL
CE501-CE504	EROSION AND SEDIMENT CONTROL DETAILS
CG101-CE102	GRADING AND DRAINAGE PLAN
CG201-CG202	STORM PROFILES
CG501-CG503	GRADING AND DRAINAGE DETAILS
CI101-CI102	SITE LAYOUT PLAN
CI501-CI502	SITE DETAILS
CU101-CU102	UTILITY PLAN
CU201-CU202	UTILITY PROFILES
CU501-CU503	UTILITY DETAILS
CU504-CU507	SANITARY SEWER TREATMENT SYSTEM
C-910	STORAGE BUILDING - BID OPTION 1
C-911	BID OPTION 1 - PROFILES
C-930	RAINWATER HARVESTING TANK - BID OPTION 3
C-931	BID OPTION 3 - DETAILS
C-932	BID OPTION 3 - PROFILES
LP101-LP102	LANDSCAPE PLAN
LP501	BID OPTION 3 - PROFILES
E-001	ELECTRICAL LEGEND, NOTES AND ABBREVIATIONS
ES103	SITE LIGHTING PLAN
EL503-EL504	LIGHTING FIXTURE DETAILS
EL601	LIGHTING FIXTURE SCHEDULE
EX910	BID OPTION 1
AE202-AE211	EXTERIOR ELEVATIONS
AE912	EXTERIOR ELEVATIONS - BID OPTION 1



VICINITY MAP
SCALE: 1" = 100'



LOCATION MAP
SCALE: 1" = 250'

There appears to be property line running west to east in the middle of the site. Verify property lines and setbacks.

Site is located in the Swift Creek Watershed per Comp Planning. Review UDO Section 9.5.3.

Planning will apply UDO Section 9.5.3.G Forestation of Lots Except as otherwise provided, every lot located within a -SWPOD must provide and maintain an area set aside for trees equal to at least 40% of the lot area in accordance with Sec. 9.1.9.

Review scope of work as a Tier 3.

-Planning comments

SOLICITATION NO.: W912PM-21-F-0015
CONTRACT NO.: W912PM-19-D-0002
ISSUE DATE: DECEMBER 1, 2022

SCO NO.: 21-23856-01A
NCSU PROJECT NO.: 202120010

100% DESIGN SUBMITTAL



US Army Corps of Engineers®

MARK	DESCRIPTION	DATE

ISSUE DATE:	DECEMBER 1, 2022
DESIGNED BY:	CLARK NEXSEN
AGE:	69 DARLINGTON AVENUE
DRAWN BY:	WILMINGTON, NORTH CAROLINA 28403-1943
NRS & AKE:	421 NORTH HARRINGTON STREET
CHECKED BY:	RALEIGH, NORTH CAROLINA 27603
BRG:	
SUBMITTED BY:	
SCO NO.:	21-23856-01A
NCSU PROJECT NO.:	202120010

3821 INWOOD DRIVE, RALEIGH, NC
USDA AGRICULTURE RESEARCH SERVICES
PLANT IMPROVEMENT FACILITY
9208
TITLE SHEET

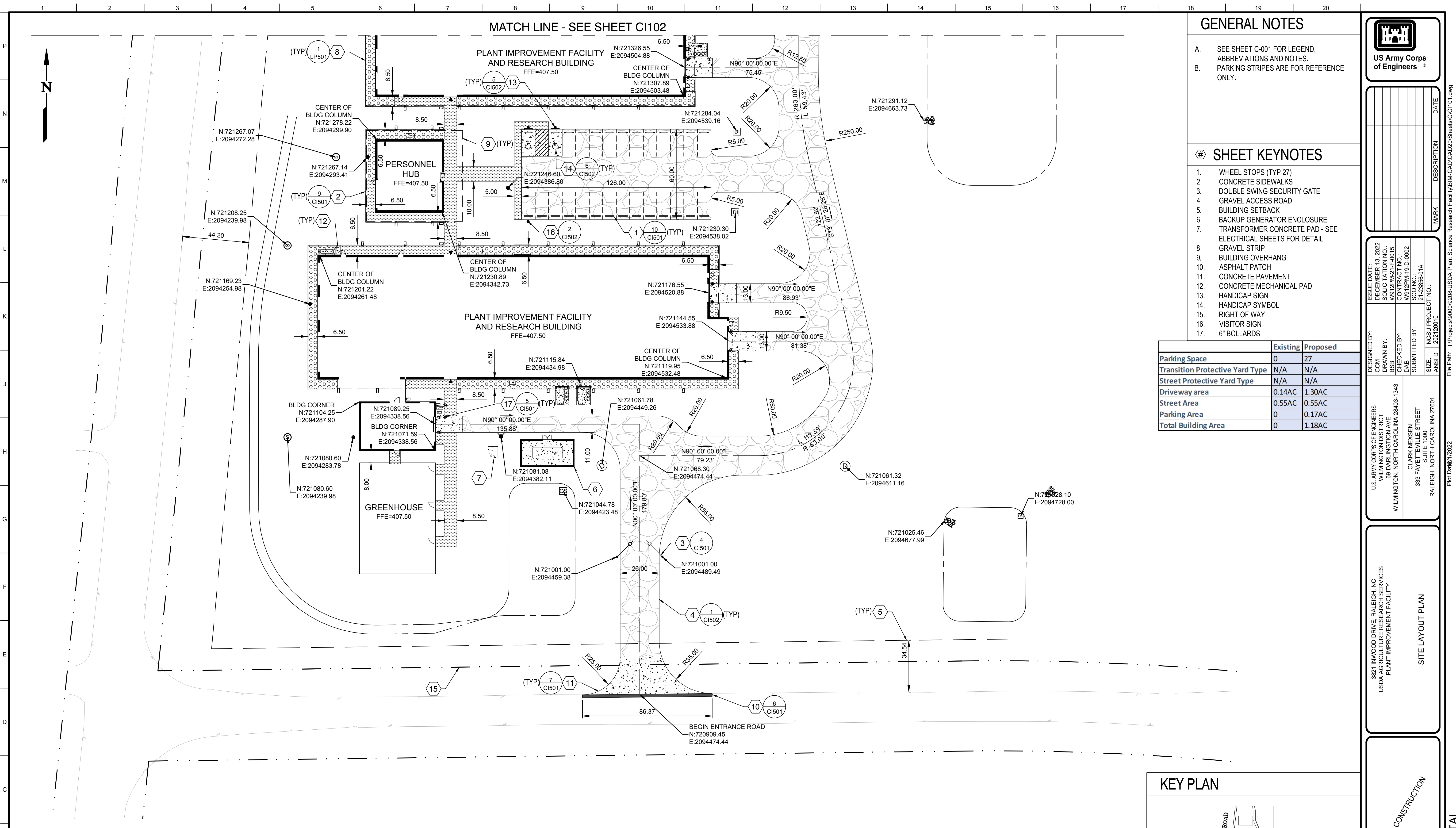
NOT FOR CONSTRUCTION

SEALS

SHEET ID

G-001

MATCH LINE - SEE SHEET C1102



GENERAL NOTES

- A. SEE SHEET C-001 FOR LEGEND, ABBREVIATIONS AND NOTES.
- B. PARKING STRIPES ARE FOR REFERENCE ONLY.

SHEET KEYNOTES

- 1. WHEEL STOPS (TYP 27)
- 2. CONCRETE SIDEWALKS
- 3. DOUBLE SWING SECURITY GATE
- 4. GRAVEL ACCESS ROAD
- 5. BUILDING SETBACK
- 6. BACKUP GENERATOR ENCLOSURE
- 7. TRANSFORMER CONCRETE PAD - SEE ELECTRICAL SHEETS FOR DETAIL
- 8. GRAVEL STRIP
- 9. BUILDING OVERHANG
- 10. ASPHALT PATCH
- 11. CONCRETE PAVEMENT
- 12. CONCRETE MECHANICAL PAD
- 13. HANDICAP SIGN
- 14. HANDICAP SYMBOL
- 15. RIGHT OF WAY
- 16. VISITOR SIGN
- 17. 6" BOLLARDS

	Existing	Proposed
Parking Space	0	27
Transition Protective Yard Type	N/A	N/A
Street Protective Yard Type	N/A	N/A
Driveway area	0.14AC	1.30AC
Street Area	0.55AC	0.55AC
Parking Area	0	0.17AC
Total Building Area	0	1.18AC



US Army Corps of Engineers

MARK	DESCRIPTION	DATE

ISSUE DATE: DECEMBER 13, 2022
 COPIES: 10
 DRAWN BY: RAYMOND J. HARRIS
 CHECKED BY: W912PM-19-D-002
 SUBMITTED BY: NCSU PROJECT NO.: 21-23856-01A
 ANSID: 202120010

DESIGNED BY: U.S. ARMY CORPS OF ENGINEERS
 WILMINGTON DISTRICT
 69 DARLINGTON AVE
 WILMINGTON, NORTH CAROLINA 28403-1343

CLARK NEXSEN
 SUITE 1000
 RALEIGH, NORTH CAROLINA 27601

3821 INWOOD DRIVE, RALEIGH, NC
 USDA AGRICULTURE RESEARCH SERVICES
 PLANT IMPROVEMENT FACILITY

SITE LAYOUT PLAN

NOT FOR CONSTRUCTION

SEALS

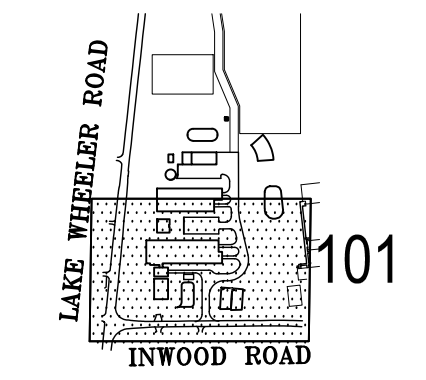
SHEET ID

100% DESIGN SUBMITTAL

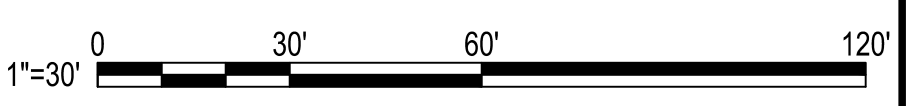
1 SITE LAYOUT PLAN

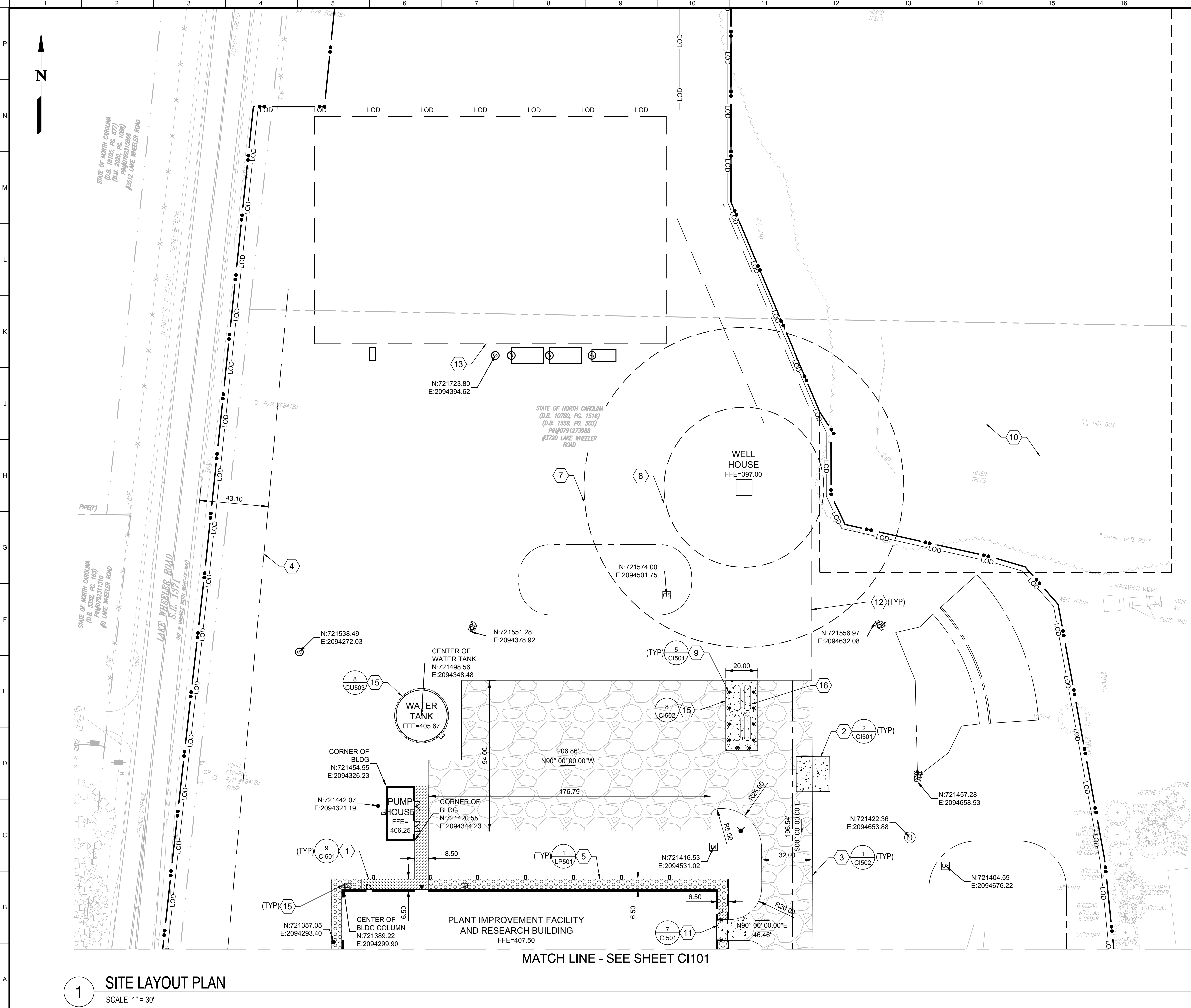
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KEY PLAN



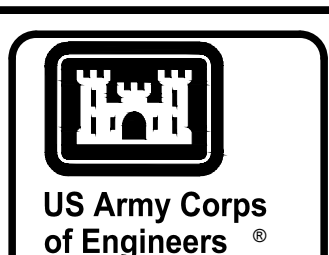
GRAPHIC SCALE(S)





GENERAL NOTES

- A. SEE SHEET C-001 FOR LEGEND, ABBREVIATIONS AND NOTES.

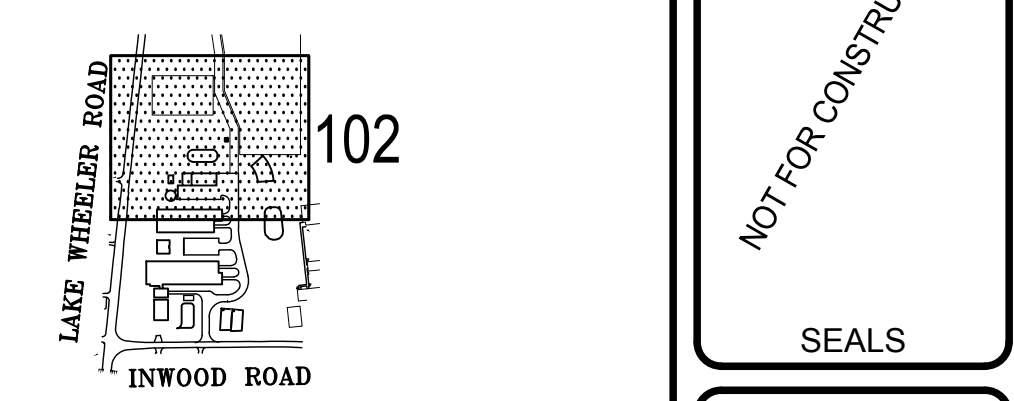


KEY SHEET KEYNOTES

- CONCRETE SIDEWALKS
- DUMPSTER PAD AND ENCLOSURE
- GRAVEL ACCESS ROAD
- BUILDING SETBACK
- GRAVEL STRIP
- BUILDING OVERHANG
- 100' BUILDING SETBACK FROM WELL
- 50' STORMWATER BASIN SETBACK FROM WELL
- 6" BOLLARD
- TREE PRESERVATION AREA
- CONCRETE PAVEMENT
- EASEMENT ROAD
- SEPTIC FIELD. SEE SANITARY SEWER TREATMENT SYSTEM SHEETS CU504-CU508
- 6" CONCRETE SIDEWALK
- CONCRETE EQUIPMENT PAD FOR MECHANICAL EQUIPMENT - SEE MECHANICAL SHEETS FOR DETAILS
- 1,000 GALLON LP TANK PROVIDED BY LOCAL VENDOR

DESIGNED BY:	U.S. ARMY CORPS OF ENGINEERS
COM:	WILMINGTON DISTRICT
DRAWN BY:	69 DARLINGTON AVE
CHECKED BY:	WILMINGTON, NORTH CAROLINA 28403-1343
DATE:	333 FAYETTEVILLE STREET
ISSUE DATE:	RALEIGH, NORTH CAROLINA 27601
PROJECT NO.:	ANSI D 102.1/20010
CONTRACT NO.:	
SCO NO.:	
DATE:	

KEY PLAN



GRAPHIC SCALE(S)



1 SITE LAYOUT PLAN

SCALE: 1" = 30'

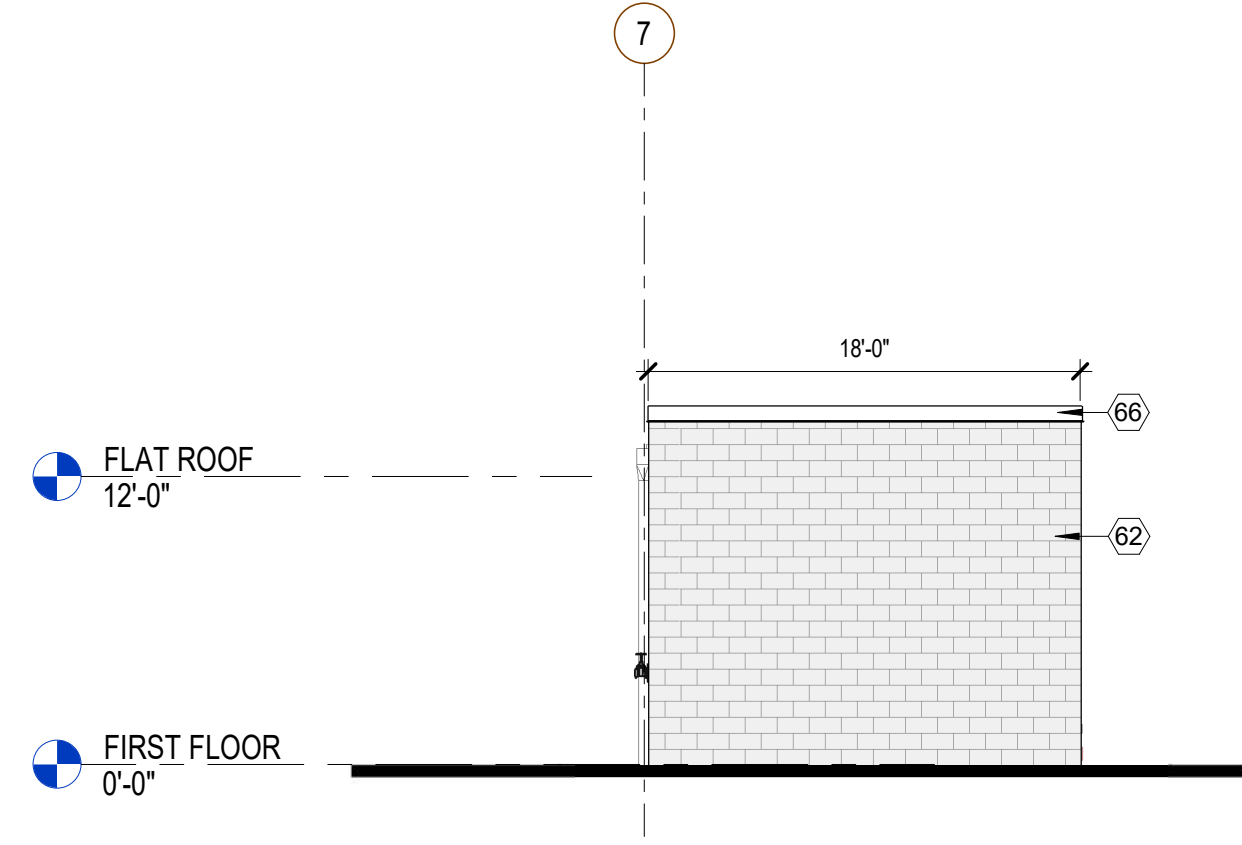
MATCH LINE - SEE SHEET CI101

3821 INWOOD DRIVE, RALEIGH, NC
USDA AGRICULTURE RESEARCH SERVICES
PLANT IMPROVEMENT FACILITY

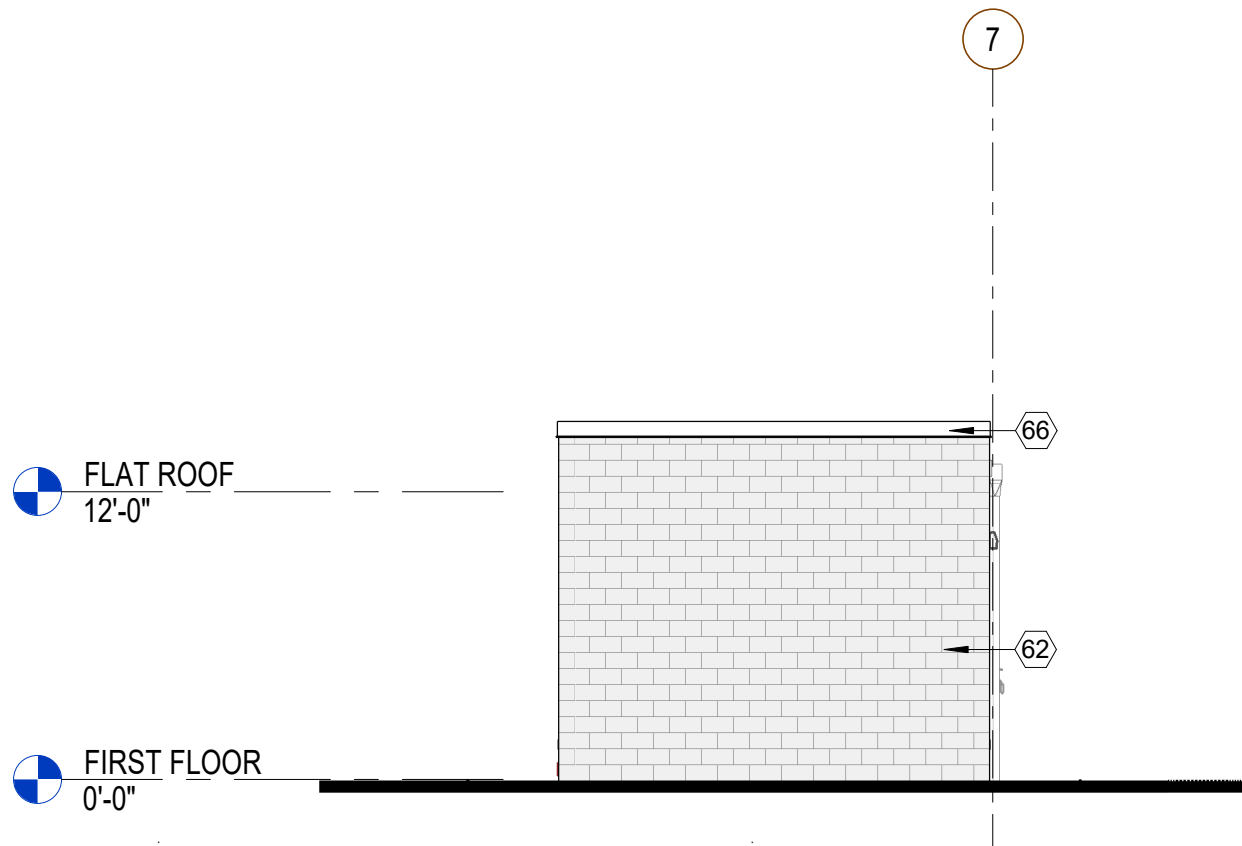
CLARK NEXSEN
SUITE 1000
RALEIGH, NORTH CAROLINA 27601

SEALS

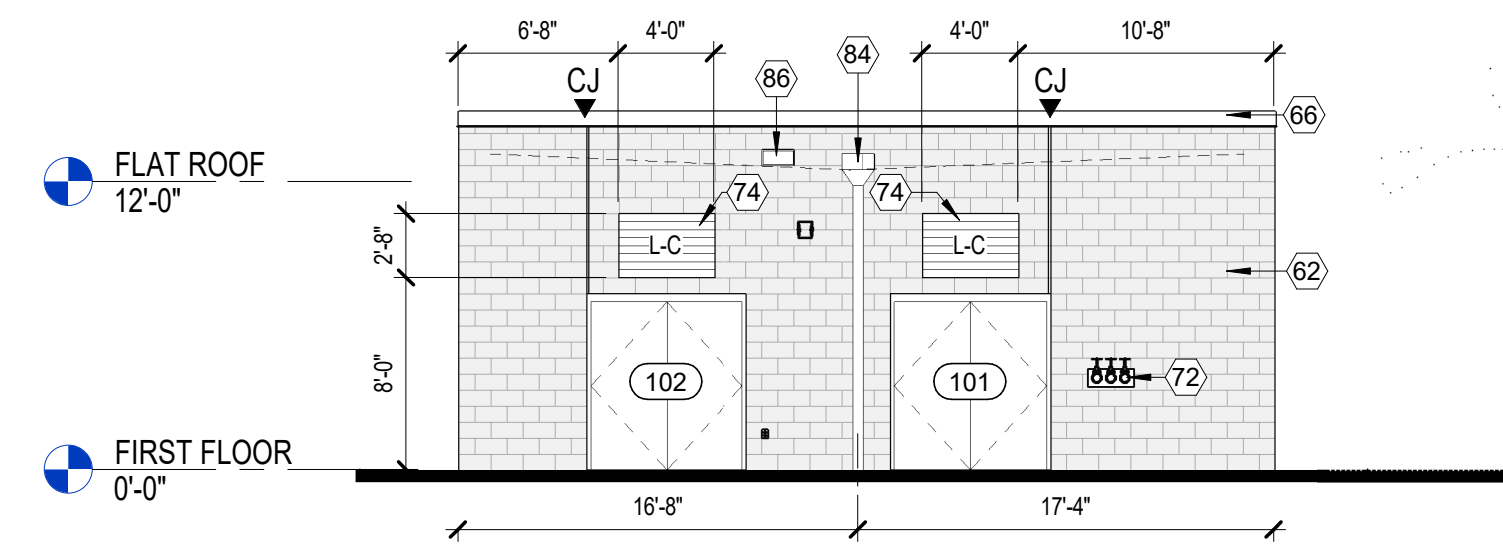
SHEET ID
CI102



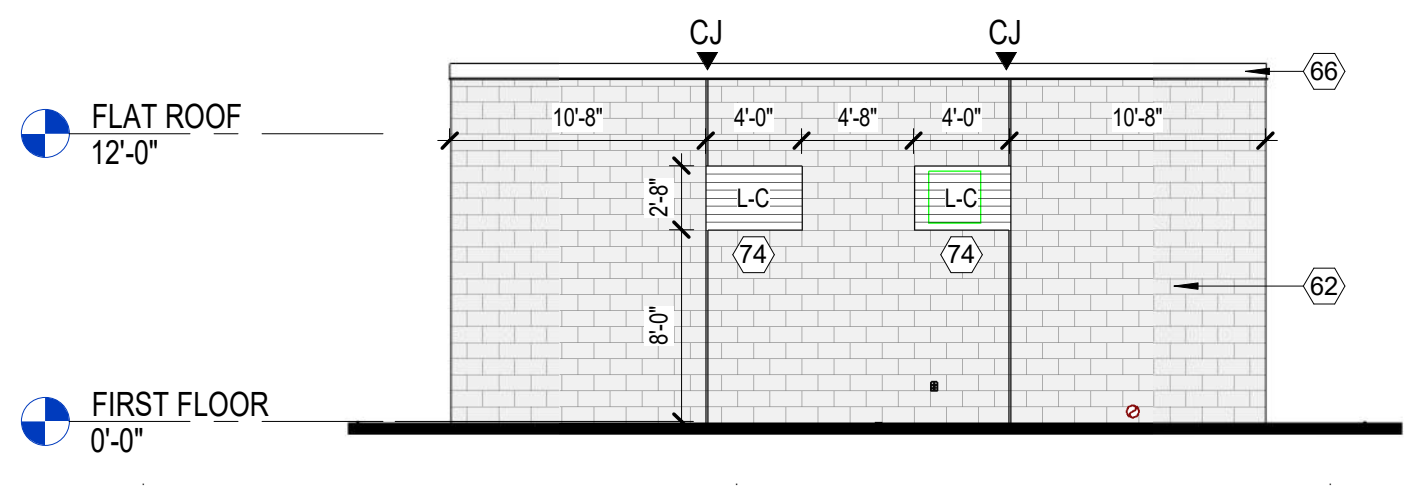
4 NORTH ELEVATION - PUMP HOUSE
1/8" = 1'-0"



3 SOUTH ELEVATION - PUMP HOUSE
1/8" = 1'-0"



2 EAST ELEVATION - PUMP HOUSE
1/8" = 1'-0"



1 WEST ELEVATION - PUMP HOUSE
1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO SHEET A-001 FOR LEGEND
2. TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O.
3. METAL PANEL TO BE VERTICAL UON.



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SHEET KEYNOTES

- 62 MASONRY VENEER
- 66 PREFINISHED METAL COPING
- 72 TEST HEADER - REFER FP DWGS
- 74 LOUVER, SEE SCHEDULE
- 84 ROOF SCUPPER AND DOWNSPOUT
- 86 OVERFLOW SCUPPER

MARK	DESCRIPTION	DATE

DESIGNED BY: AGE	ISSUE DATE: DECEMBER 1, 2022
DRAWN BY: NRS & AKE	SOLICITATION NO.: W912PM-21-F-0015
CHECKED BY: BRG	CONTRACT NO.: W912PM-19-D-0002
SUBMITTED BY: NCSU PROJECT NO.: 202120010	SCO NO.: 21-23856-01A

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1843

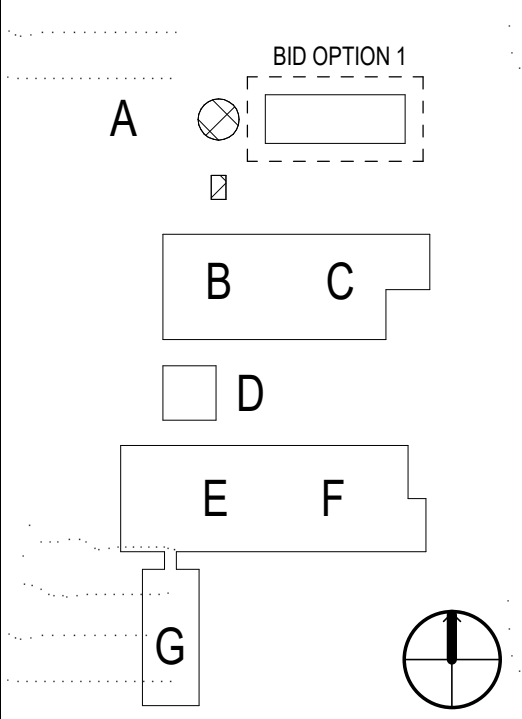
CLARK NIKSEN
421 NORTH HARRINGTON STREET
RALEIGH, NORTH CAROLINA 27603

LOUVER SCHEDULE

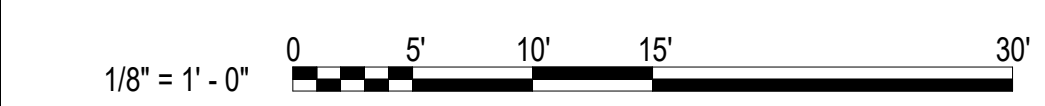
LOUVER SCHEDULE				
MARK	WIDTH	HEIGHT	AREA	COMMENTS
L-A	3'-0"	3'-0"	9 SF	RECTANGULAR
L-B	3'-2"	3'-0"	10 SF	RECTANGULAR
L-C	4'-0"	2'-8"	11 SF	RECTANGULAR
L-D	12'-0"		90 SF	TRAPEZOID, REF ELEVATIONS
L-E	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

1. LOUVERS SHALL HAVE MINIMUM 55% FREE AREA.
2. BEGINNING POINT OF WATER PENETRATION SHALL BE MINIMUM 1100 FPM.

KEY PLAN



GRAPHIC SCALE(S)



3821 INWOOD DRIVE, RALEIGH, NC
USDA AGRICULTURE RESEARCH SERVICES
PLANT IMPROVEMENT FACILITY
9208

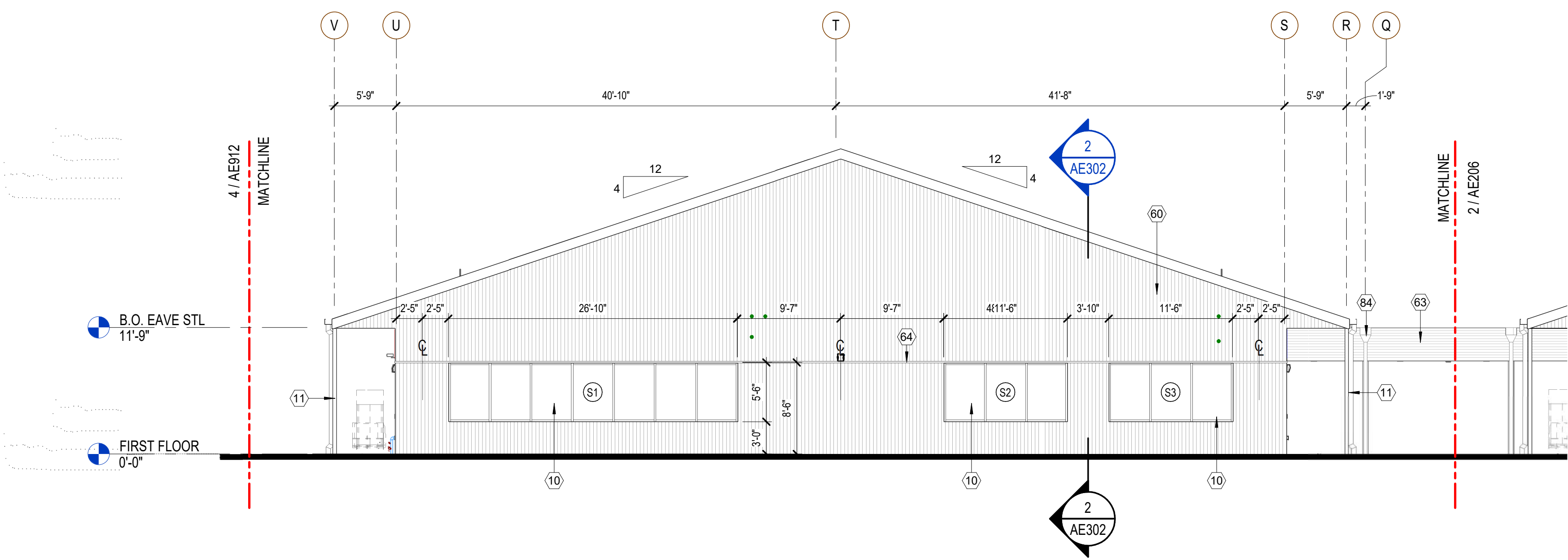
EXTERIOR ELEVATIONS

NOT FOR CONSTRUCTION

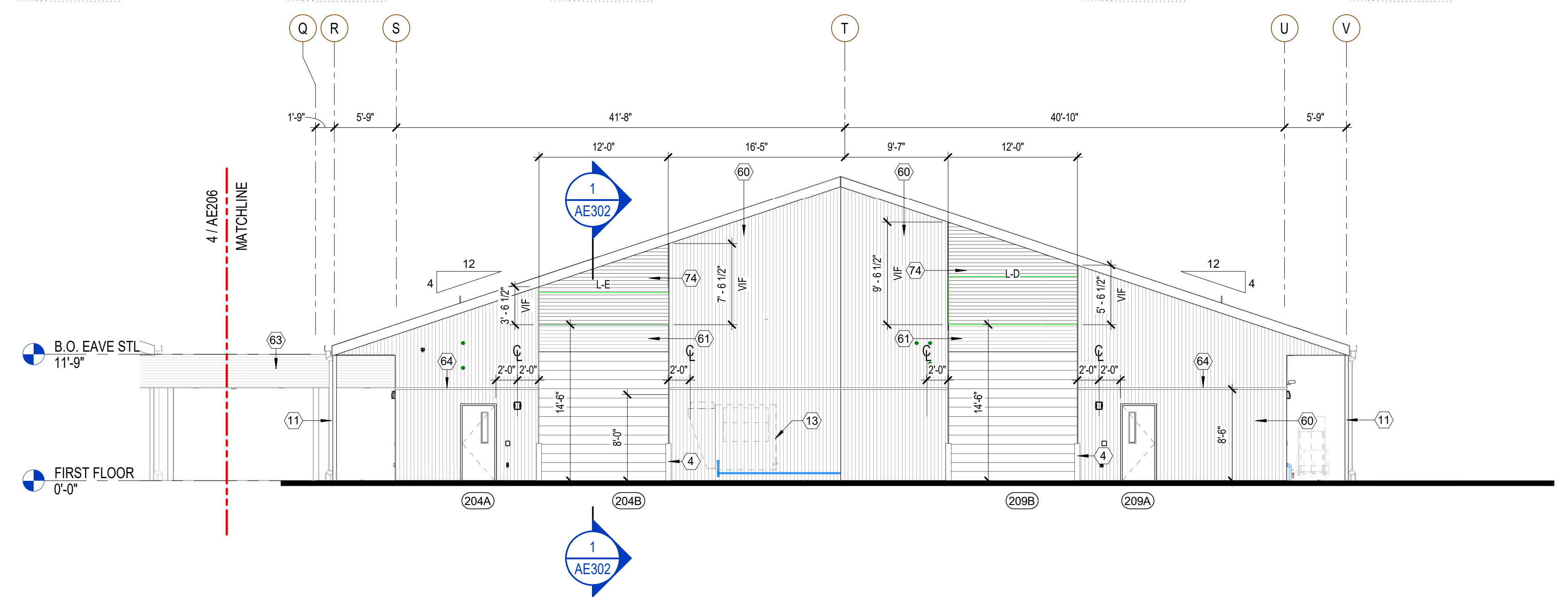
SEALS

SHEET ID

AE202



2 WEST ELEVATION - AREA B
1/8" = 1'-0"



1 EAST ELEVATION - AREA C
1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO SHEET A-001 FOR LEGEND
2. TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O..
3. METAL PANEL TO BE VERTICAL UON.



US Army Corps of Engineers®

SHEET KEYNOTES

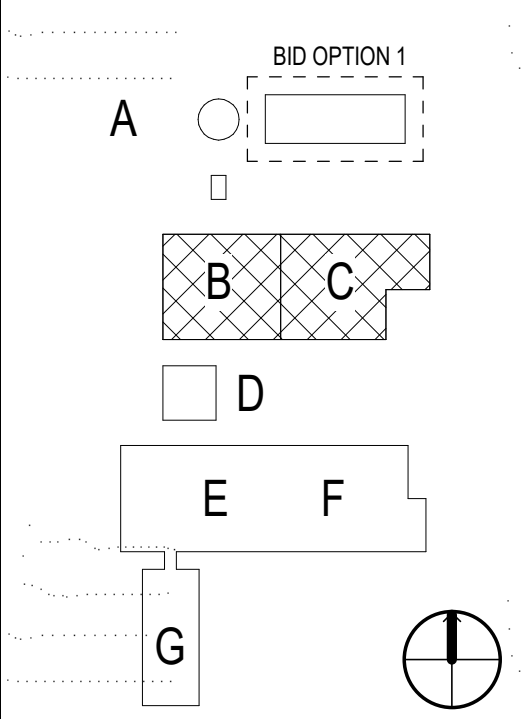
- 4 STEEL BOLLARD - REFER TO CIVIL
- 10 ALUM STOREFRONT SYSTEM
- 11 STL COLUMN W/ DOWNSPOUT MOUNTED TO WEB, TYP
- 13 DOAS MECHANICAL UNIT - REFER TO MECHANICAL
- 60 METAL WALL PANEL BY PEMB MFR
- 61 METAL WALL PANEL, HORIZONTAL, BY PEMB MFR
- 63 CORRUGATED METAL WALL PANEL
- 64 2" TRIM
- 74 LOUVER, SEE SCHEDULE
- 84 ROOF SCUPPER AND DOWNSPOUT

LOUVER SCHEDULE

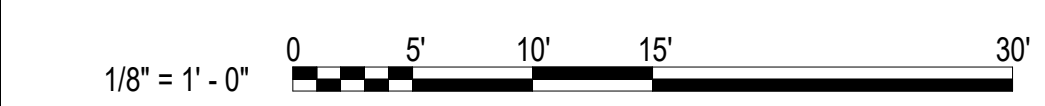
LOUVER SCHEDULE				
MARK	WIDTH	HEIGHT	AREA	COMMENTS
LA	3'-0"	3'-0"	9 SF	RECTANGULAR
LB	3'-2"	3'-0"	10 SF	RECTANGULAR
LC	4'-0"	2'-8"	11 SF	RECTANGULAR
LD	12'-0"		90 SF	TRAPEZOID, REF ELEVATIONS
LE	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

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KEY PLAN



GRAPHIC SCALE(S)



MARK	DESCRIPTION	DATE

ISSUE DATE: DECEMBER 1, 2022
 AGE: W912PM-21-F-0015
 SOLICITATION NO.: W912PM-21-F-0015
 CONTRACT NO.: W912PM-19-D-0002
 BRG: W912PM-19-D-0002
 SCO NO.: 21-23856-01/A
 NCSU PROJECT NO.: 202120010

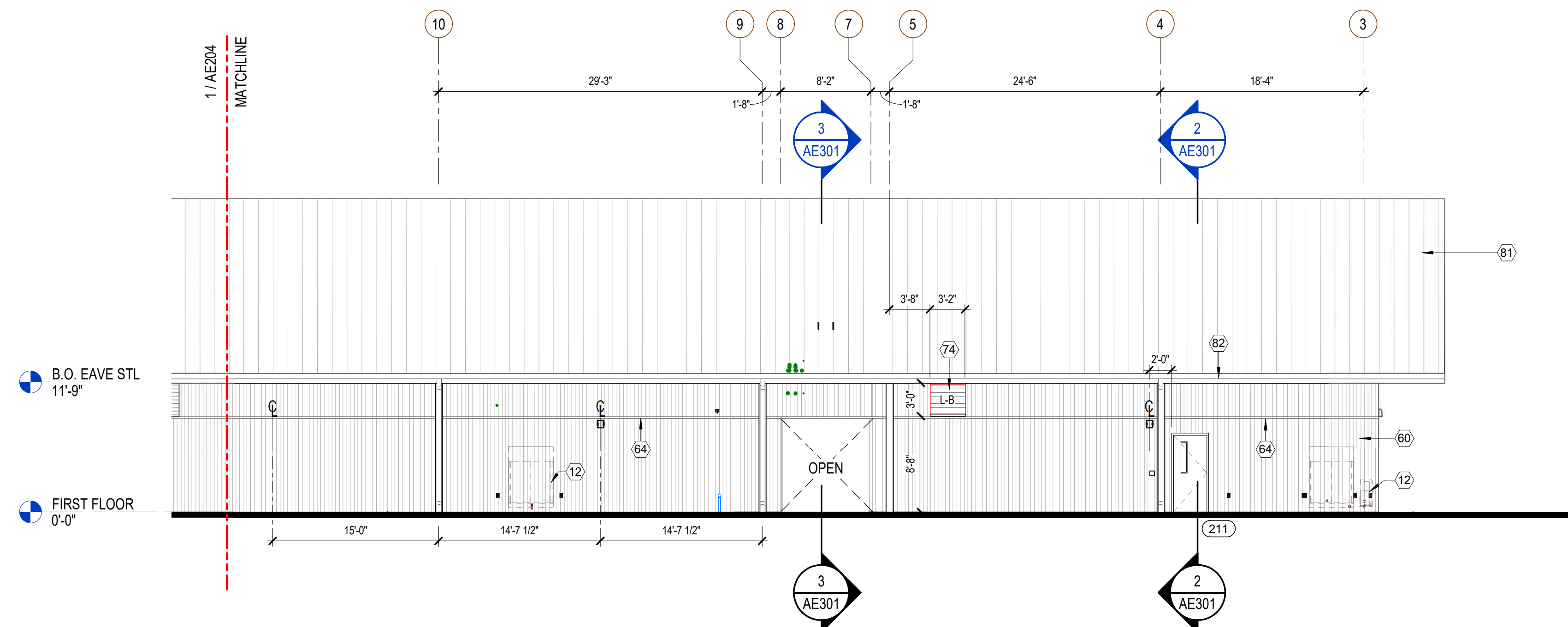
DESIGNED BY: US ARMY CORPS OF ENGINEERS
 DRAWN BY: WILMINGTON DISTRICT
 CHECKED BY: NRS & AKE
 SUBMITTED BY: CLARK NIKSEN
 SIZE: 421 NORTH HARBINGTON STREET
 ANS/D: SUITE 800
 DATE: 202120010
 RALEIGH, NORTH CAROLINA 27603

3821 INWOOD DRIVE, RALEIGH, NC
 USDA AGRICULTURE RESEARCH SERVICES
 PLANT IMPROVEMENT FACILITY
 9208
 EXTERIOR ELEVATIONS

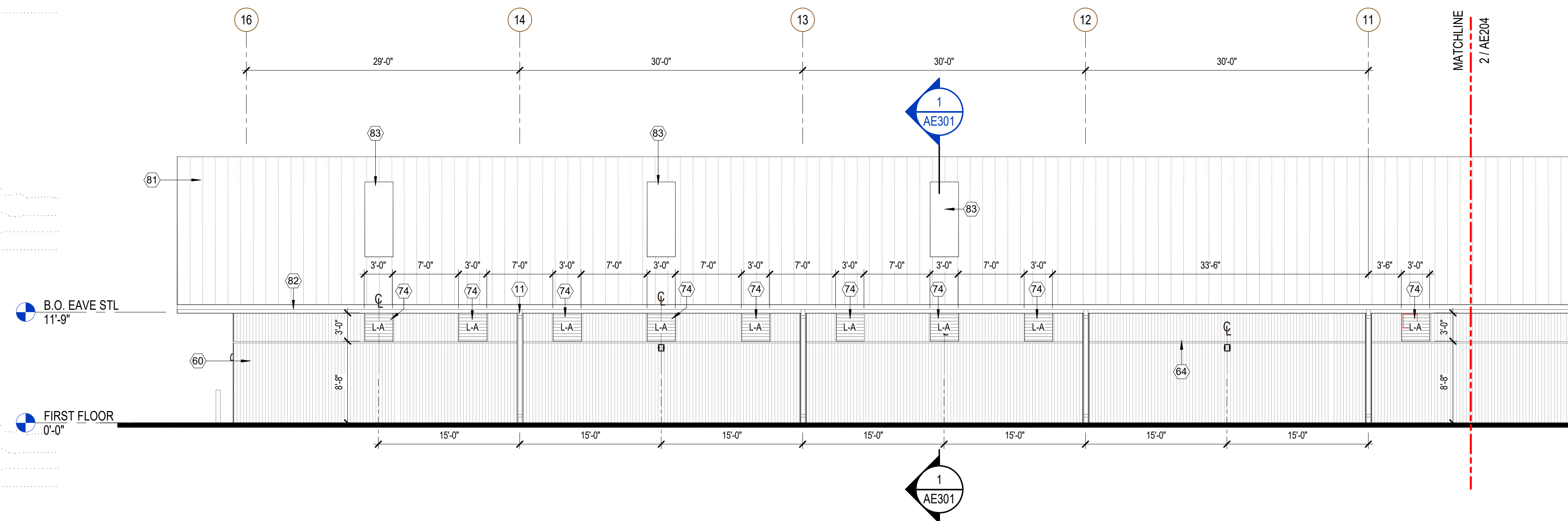
NOT FOR CONSTRUCTION

SEALS

SHEET ID
AE203



2 NORTH ELEVATION - AREA B
1/8" = 1'-0"



1 NORTH ELEVATION - AREA C
1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO SHEET A-001 FOR LEGEND
2. TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O..
3. METAL PANEL TO BE VERTICAL UON.



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SHEET KEYNOTES

- 11 STL COLUMN W/ DOWNSPOUT MOUNTED TO WEB, TYP
- 12 MECHANICAL UNIT - REFER TO MECHANICAL
- 60 METAL WALL PANEL BY PEMB MFR
- 64 2" TRIM
- 74 LOUVER, SEE SCHEDULE
- 81 STANDING SEAM METAL ROOF
- 82 PREFINISHED METAL GUTTER
- 83 TRANSLUCENT ROOF PANEL BY PEMB MFR

MARK	DESCRIPTION	DATE

ISSUE DATE: DECEMBER 1, 2022	SOLICITATION NO.: W912PM-21-F-0015	CONTRACT NO.: W912PM-19-D-0002	SCO NO.: 21-23856-01A
DESIGNED BY: AGE	DRAWN BY: NRS & AKE	CHECKED BY: BRG	SUBMITTED BY: NCSU PROJECT NO.: 202120010
ANSI D			

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1843

CLARK NIKSEN
421 NORTH HARRINGTON STREET
SUITE 800
RALEIGH, NORTH CAROLINA 27603

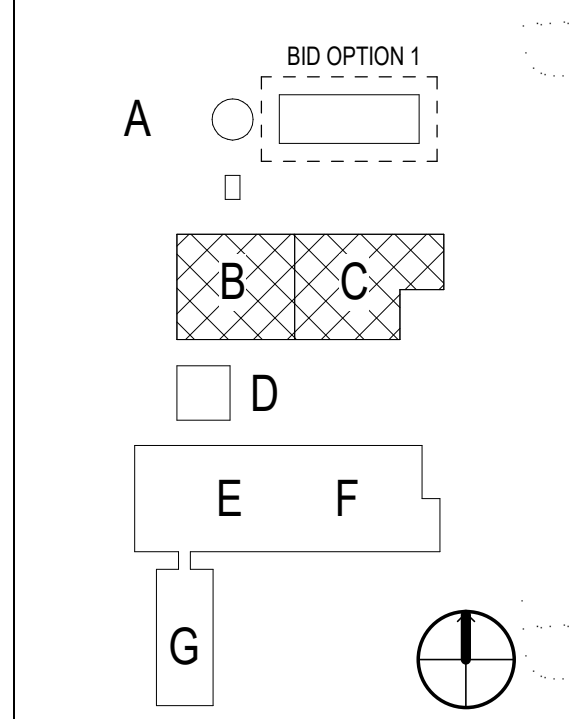
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LOUVER SCHEDULE

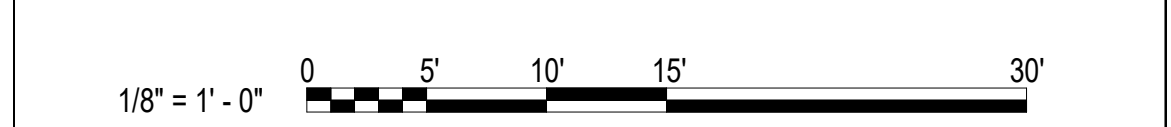
LOUVER SCHEDULE				
MARK	WIDTH	HEIGHT	AREA	COMMENTS
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L-E	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

1. LOUVERS SHALL HAVE MINIMUM 55% FREE AREA.
2. BEGINNING POINT OF WATER PENETRATION SHALL BE MINIMUM 1100 FPM.

KEY PLAN



GRAPHIC SCALE(S)

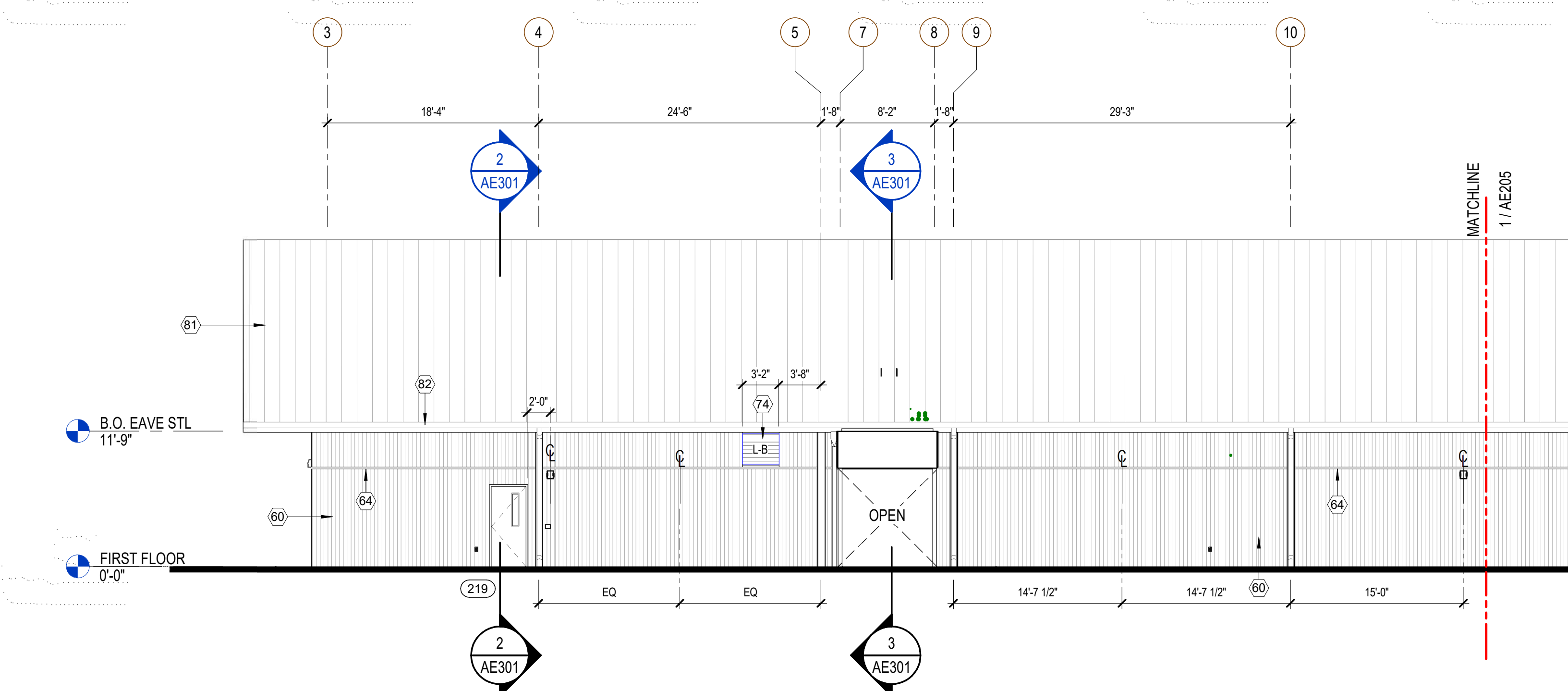


3821 INWOOD DRIVE, RALEIGH, NC
USDA AGRICULTURE RESEARCH SERVICES
PLANT IMPROVEMENT FACILITY
9208
EXTERIOR ELEVATIONS

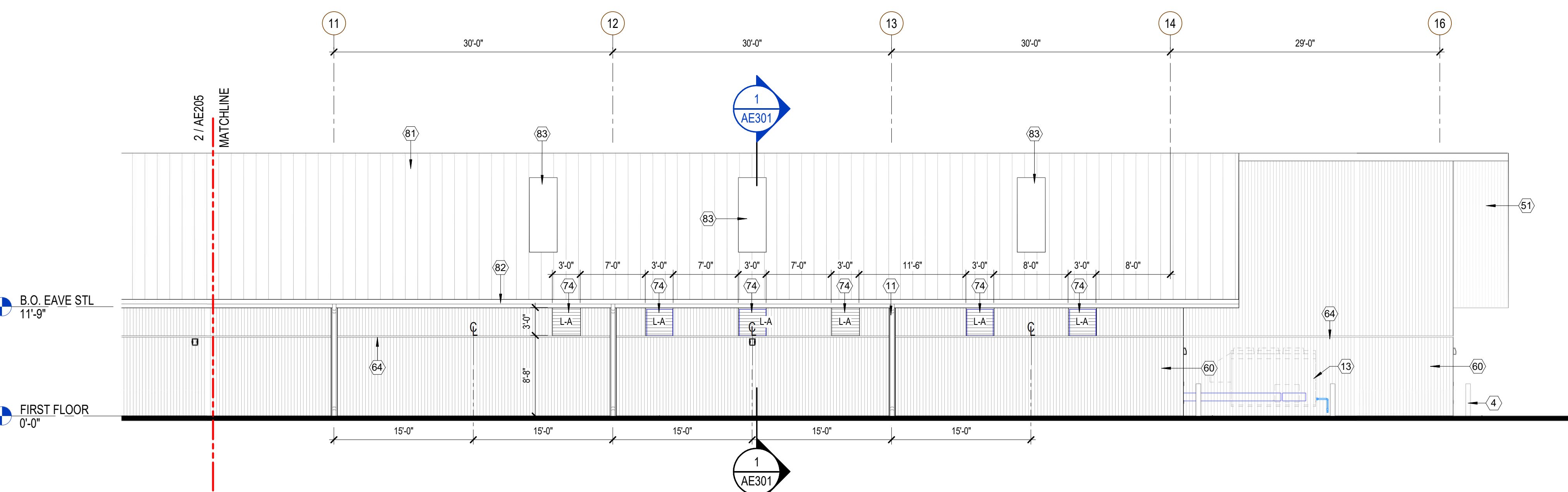
NOT FOR CONSTRUCTION

SEALS

SHEET ID
AE204



2 SOUTH ELEVATION - AREA B
1/8" = 1'-0"



1 SOUTH ELEVATION - AREA C
1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO SHEET A-001 FOR LEGEND
2. TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O.
3. METAL PANEL TO BE VERTICAL UON.



US Army Corps of Engineers®

SHEET KEYNOTES

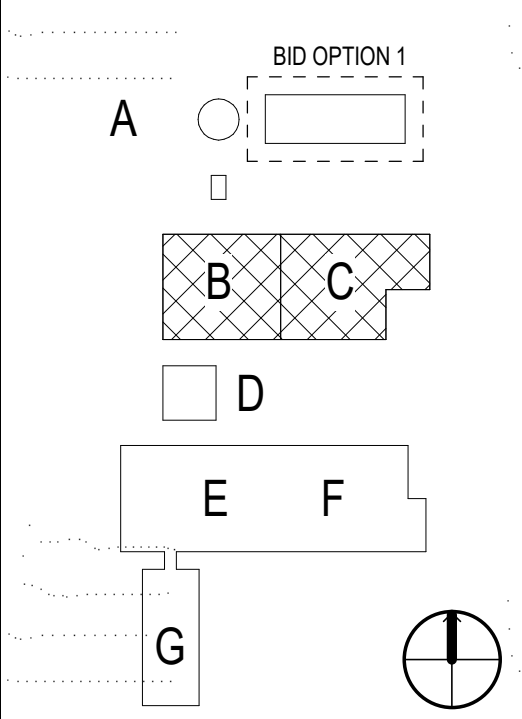
- 4 STEEL BOLLARD - REFER TO CIVIL
- 11 STL COLUMN W/ DOWNSPOUT MOUNTED TO WEB, TYP
- 13 DOAS MECHANICAL UNIT - REFER TO MECHANICAL
- 51 METAL SOFFIT PANEL BY PEMB MFR
- 60 METAL WALL PANEL BY PEMB MFR
- 64 2" TRIM
- 74 LOUVER, SEE SCHEDULE
- 81 STANDING SEAM METAL ROOF
- 82 PREFINISHED METAL GUTTER
- 83 TRANSLUCENT ROOF PANEL BY PEMB MFR

LOUVER SCHEDULE

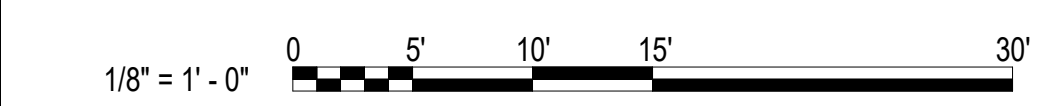
LOUVER SCHEDULE				
MARK	WIDTH	HEIGHT	AREA	COMMENTS
LA	3'-0"	3'-0"	9 SF	RECTANGULAR
LB	3'-2"	3'-0"	10 SF	RECTANGULAR
LC	4'-0"	2'-8"	11 SF	RECTANGULAR
LD	12'-0"		90 SF	TRAPEZOID, REF ELEVATIONS
LE	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

1. LOUVERS SHALL HAVE MINIMUM 55% FREE AREA.
2. BEGINNING POINT OF WATER PENETRATION SHALL BE MINIMUM 1100 FPM.

KEY PLAN



GRAPHIC SCALE(S)



MARK	DESCRIPTION	DATE

ISSUE DATE: DECEMBER 1, 2022	SOLICITATION NO.: W912PM-21-F-0015	CONTRACT NO.: W912PM-19-D-0002	SCO NO.: 21-23856-01A
DESIGNED BY: AGE	DRAWN BY: NRS & AKE	CHECKED BY: BRG	SUBMITTED BY: NCSU PROJECT NO.: 202120010

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1643

CLARK NIKSEN
421 NORTH HARRINGTON STREET
RALEIGH, NORTH CAROLINA 27603

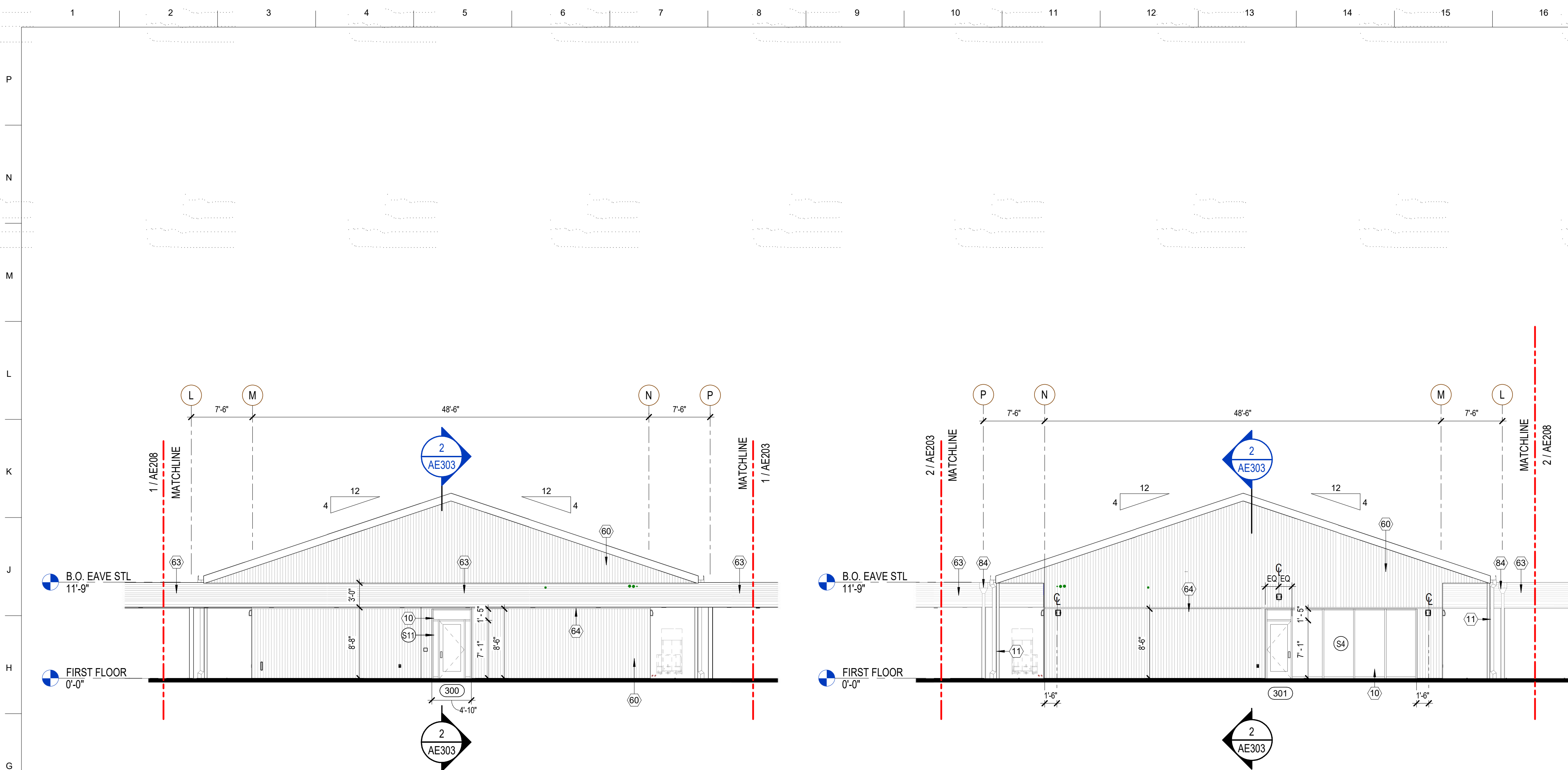
3821 INWOOD DRIVE, RALEIGH, NC
USDA AGRICULTURE RESEARCH SERVICES
PLANT IMPROVEMENT FACILITY
9208

EXTERIOR ELEVATIONS

NOT FOR CONSTRUCTION

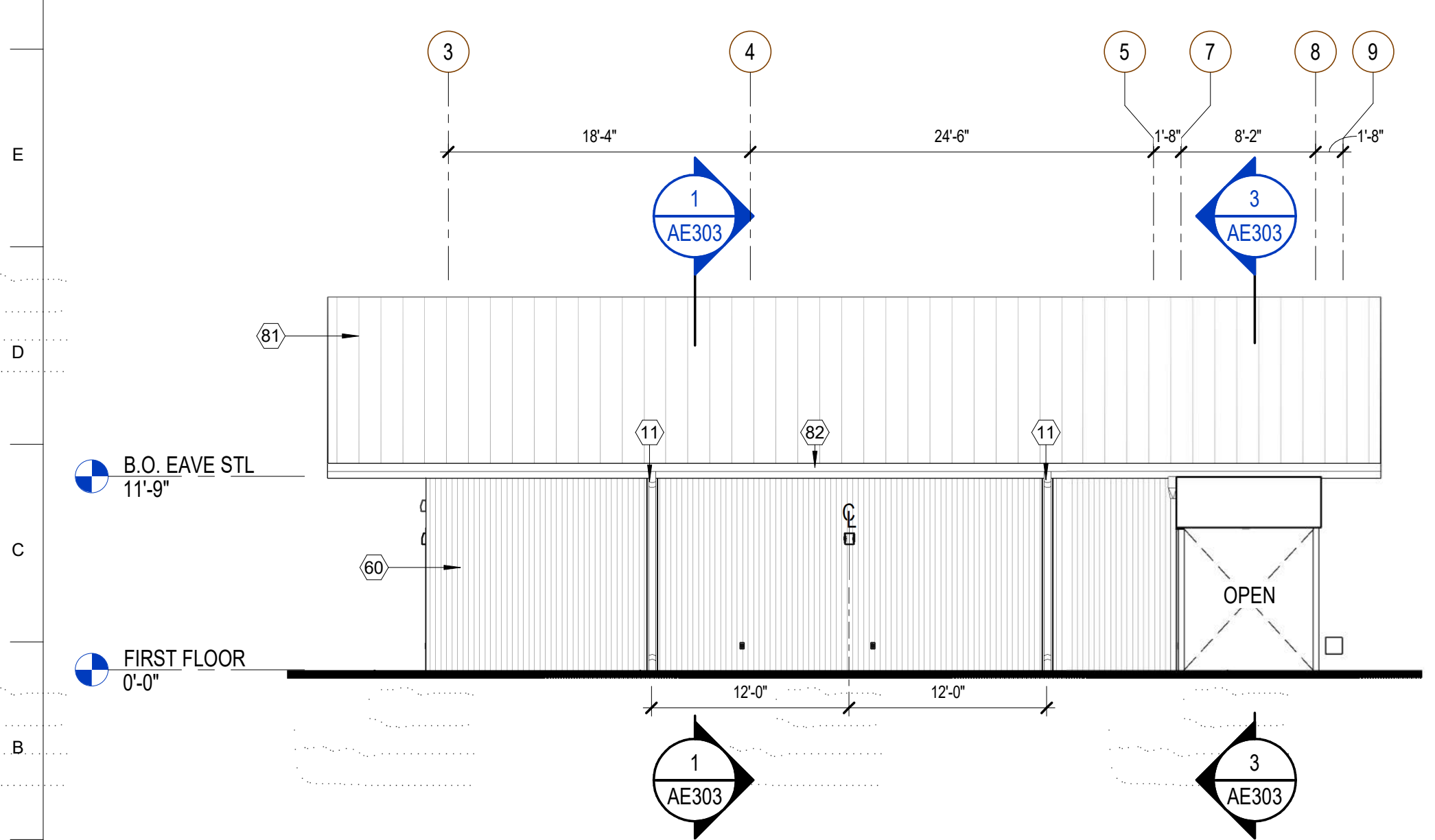
SEALS

SHEET ID
AE205

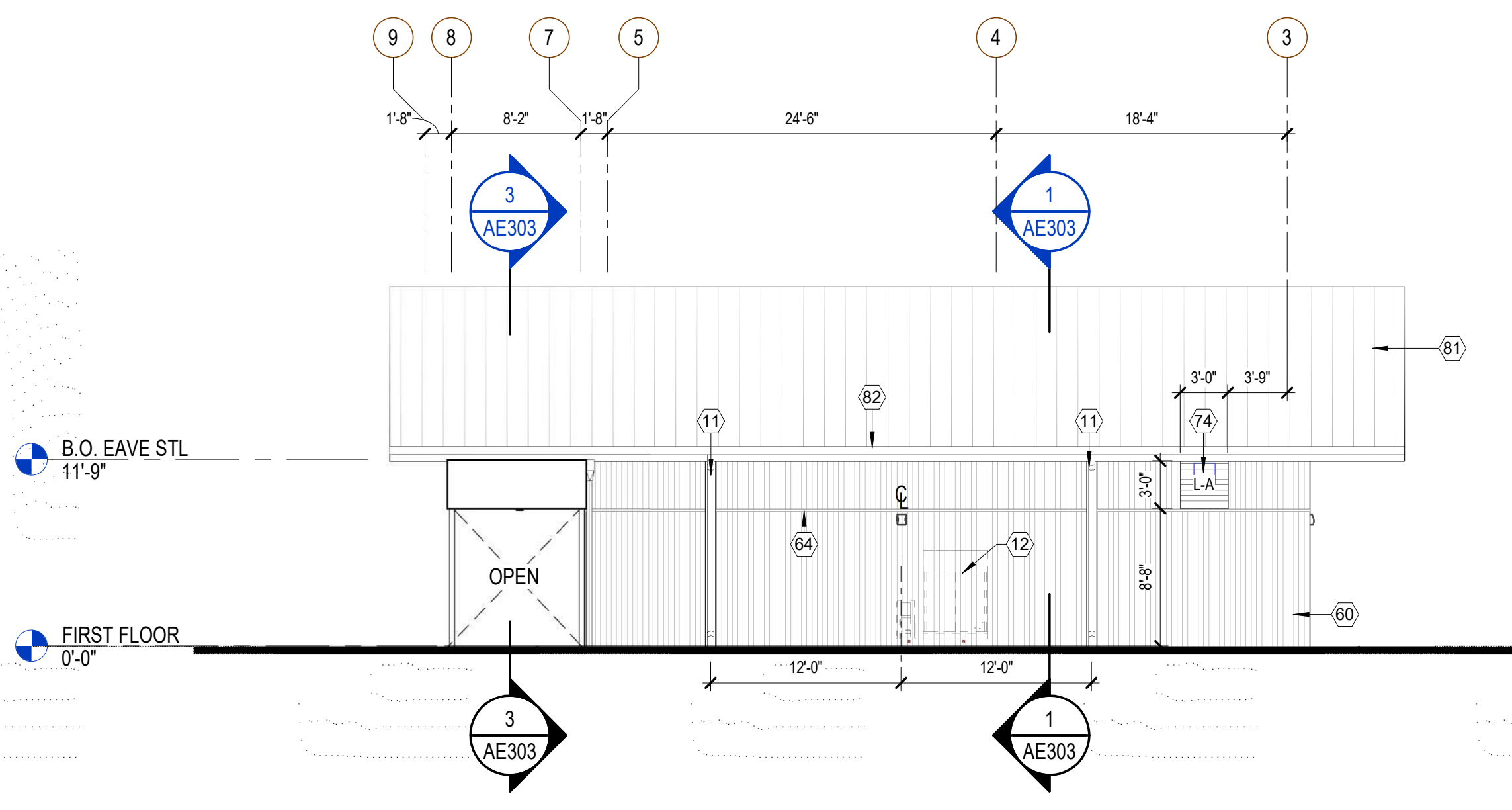


4 EAST ELEVATION - AREA D
1/8" = 1'-0"

2 WEST ELEVATION - AREA D
1/8" = 1'-0"



3 SOUTH ELEVATION - AREA D
1/8" = 1'-0"



1 NORTH ELEVATION - AREA D
1/8" = 1'-0"

GENERAL SHEET NOTES

- REFER TO SHEET A-001 FOR LEGEND
- TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O.
- METAL PANEL TO BE VERTICAL UON.



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SHEET KEYNOTES

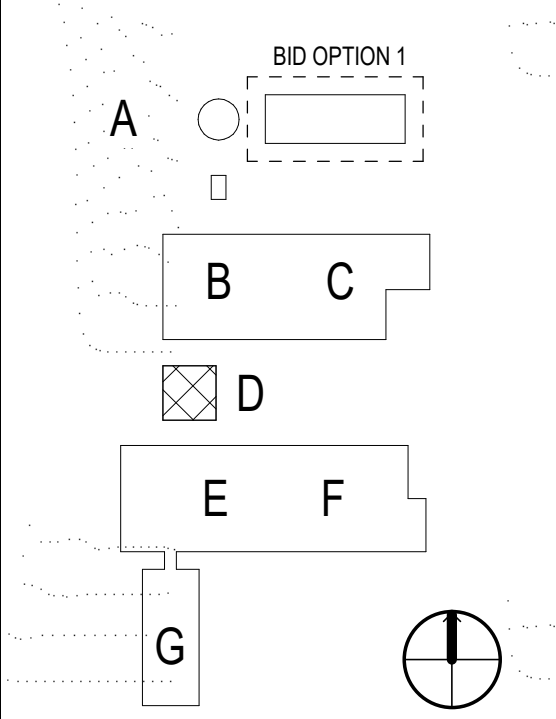
- 10 ALUM STOREFRONT SYSTEM
- 11 STL COLUMN W/ DOWNSPOUT MOUNTED TO WEB, TYP
- 12 MECHANICAL UNIT - REFER TO MECHANICAL
- 60 METAL WALL PANEL BY PEMB MFR
- 63 CORRUGATED METAL WALL PANEL
- 64 2" TRIM
- 74 LOUVER, SEE SCHEDULE
- 81 STANDING SEAM METAL ROOF
- 82 PREFINISHED METAL GUTTER
- 84 ROOF SCUPPER AND DOWNSPOUT

LOUVER SCHEDULE

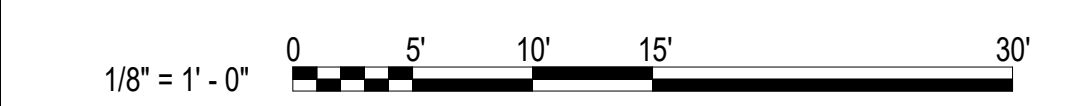
LOUVER SCHEDULE				
MARK	WIDTH	HEIGHT	AREA	COMMENTS
L-A	3'-0"	3'-0"	9 SF	RECTANGULAR
L-B	3'-2"	3'-0"	10 SF	RECTANGULAR
L-C	4'-0"	2'-8"	11 SF	RECTANGULAR
L-D	12'-0"		90 SF	TRAPEZOID, REF ELEVATIONS
L-E	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

- LOUVERS SHALL HAVE MINIMUM 55% FREE AREA.
- BEGINNING POINT OF WATER PENETRATION SHALL BE MINIMUM 1100 FPM.

KEY PLAN



GRAPHIC SCALE(S)



MARK	DESCRIPTION	DATE

ISSUE DATE: DECEMBER 1, 2022
 AGE: W912PM-21-F-0015
 SOLICITATION NO.: W912PM-21-F-0015
 DRAWN BY: NRS & AKE
 CHECKED BY: W912PM-19-D-0002
 BRG
 SUBMITTED BY: SCO NO.: 21-23856-01A
 SIZE: 202120010
 ANS/D

DESIGNED BY: US ARMY CORPS OF ENGINEERS
 WILMINGTON DISTRICT
 69 DARLINGTON AVENUE
 WILMINGTON, NORTH CAROLINA 28403-1643

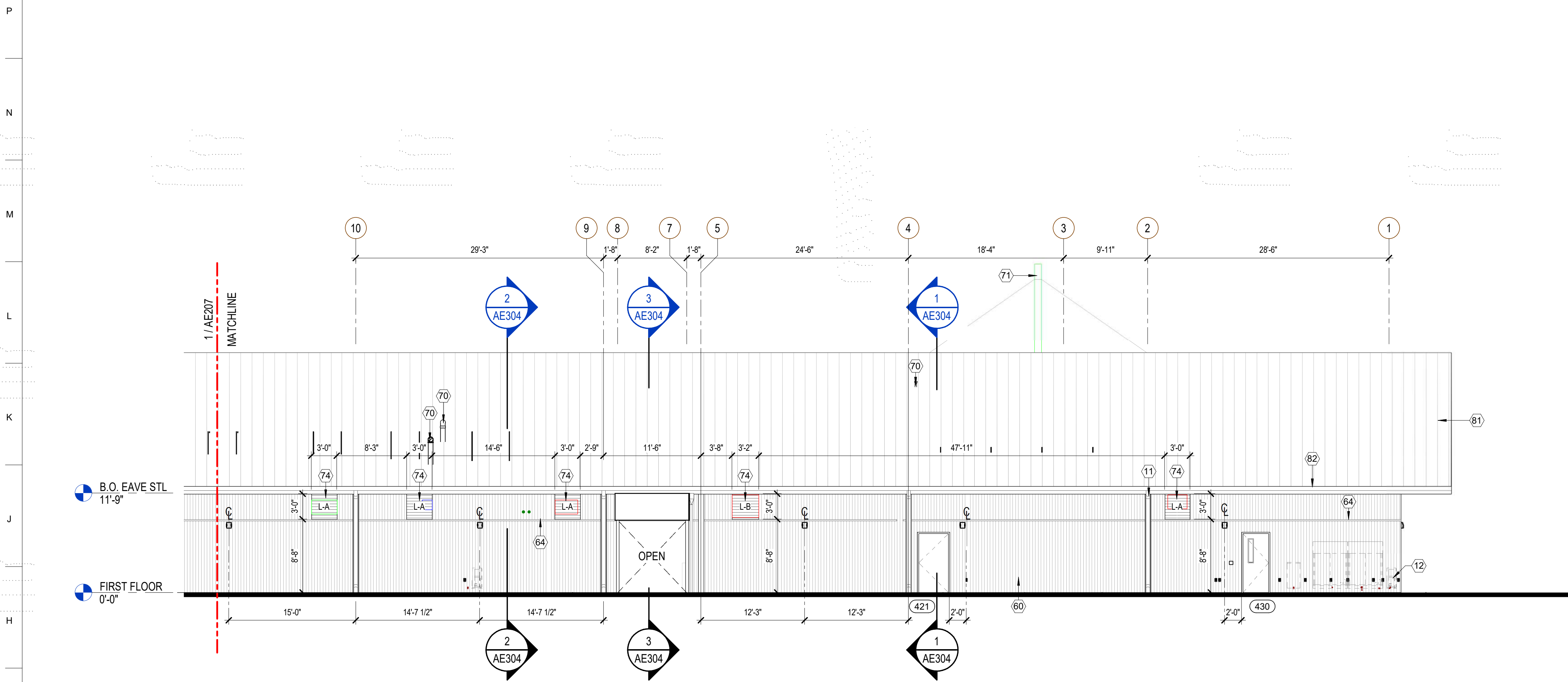
CLARK NIKSEN
 421 NORTH HARRINGTON STREET
 SUITE 800
 RALEIGH, NORTH CAROLINA 27603

3821 INWOOD DRIVE, RALEIGH, NC
 USDA AGRICULTURE RESEARCH SERVICES
 PLANT IMPROVEMENT FACILITY
 9208
 EXTERIOR ELEVATIONS

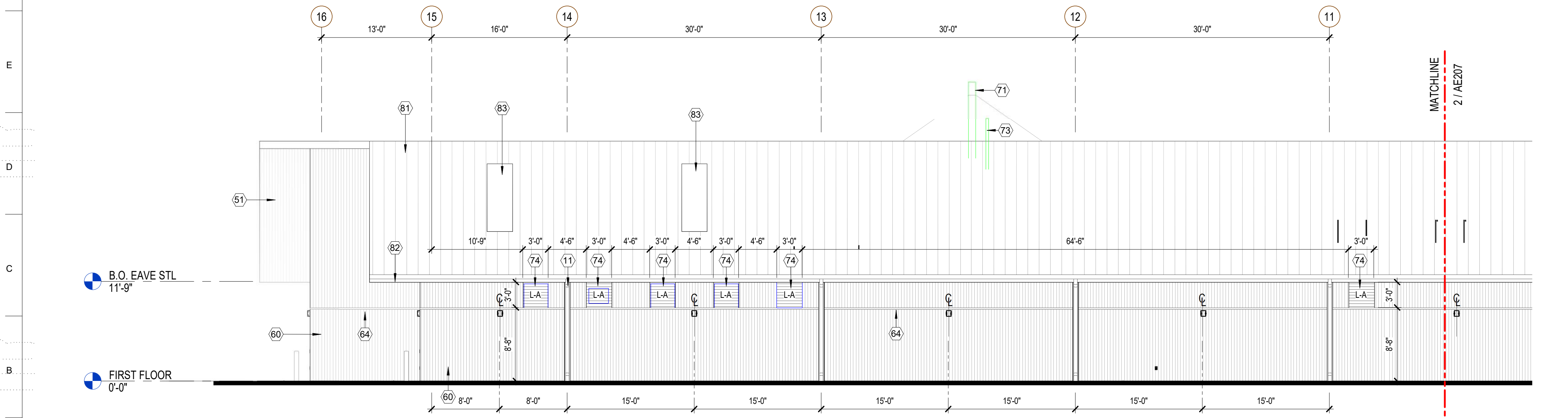
NOT FOR CONSTRUCTION

SEALS

SHEET ID
AE206



2 NORTH ELEVATION - AREA E
1/8" = 1'-0"



1 NORTH ELEVATION - AREA F
1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO SHEET A-001 FOR LEGEND
2. TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O.
3. METAL PANEL TO BE VERTICAL UON.



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SHEET KEYNOTES

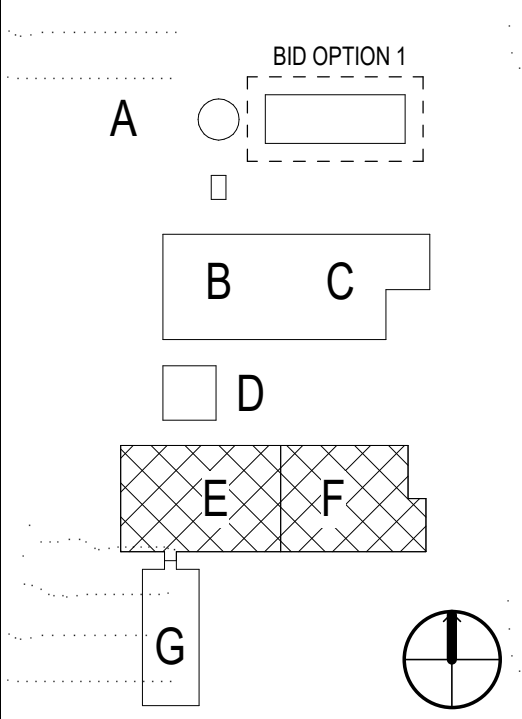
- 11 STL COLUMN W/ DOWNSPOUT MOUNTED TO WEB, TYP
- 12 MECHANICAL UNIT - REFER TO MECHANICAL
- 51 METAL SOFFIT PANEL BY PEMB MFR
- 60 METAL WALL PANEL BY PEMB MFR
- 64 2" TRIM
- 70 VENT - REF PLUMB DWGS
- 71 FUME HOOD FLUE - REFER TO MECH DWGS
- 73 VENT - REFER TO MECH DWGS
- 74 LOUVER, SEE SCHEDULE
- 81 STANDING SEAM METAL ROOF
- 82 PREFINISHED METAL GUTTER
- 83 TRANSLUCENT ROOF PANEL BY PEMB MFR

LOUVER SCHEDULE

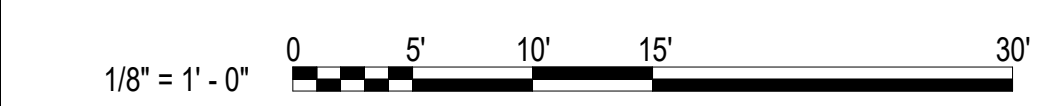
LOUVER SCHEDULE				
MARK	WIDTH	HEIGHT	AREA	COMMENTS
LA	3'-0"	3'-0"	9 SF	RECTANGULAR
LB	3'-2"	3'-0"	10 SF	RECTANGULAR
LC	4'-0"	2'-8"	11 SF	RECTANGULAR
LD	12'-0"		90 SF	TRAPEZOID, REF ELEVATIONS
LE	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

1. LOUVERS SHALL HAVE MINIMUM 55% FREE AREA.
2. BEGINNING POINT OF WATER PENETRATION SHALL BE MINIMUM 1100 FPM.

KEY PLAN



GRAPHIC SCALE(S)



MARK	DESCRIPTION	DATE

ISSUE DATE: DECEMBER 1, 2022
 AGE: 1
 SOLICITATION NO.: W912PM-21-F-0015
 DRAWN BY: NRS & AKE
 CONTRACT NO.: W912PM-19-D-0002
 CHECKED BY: BRG
 SUBMITTED BY: CLARK NIKSEN
 SCO NO.: 21-23856-01A
 NCSU PROJECT NO.: 202120010

DESIGNED BY: US ARMY CORPS OF ENGINEERS
 WILMINGTON DISTRICT
 69 DARLINGTON AVENUE
 WILMINGTON, NORTH CAROLINA 28403-1843

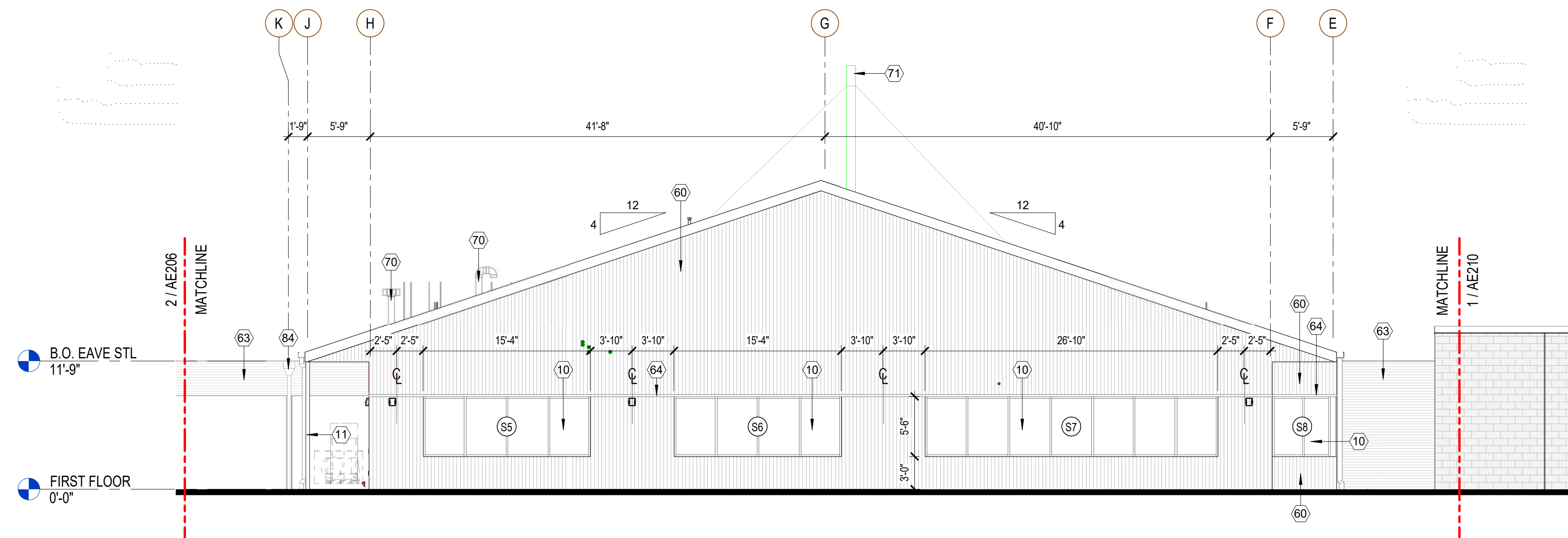
421 NORTH HARRINGTON STREET
 SUITE 800
 RALEIGH, NORTH CAROLINA 27603

3821 INWOOD DRIVE, RALEIGH, NC
 USDA AGRICULTURE RESEARCH SERVICES
 PLANT IMPROVEMENT FACILITY
 9208
 EXTERIOR ELEVATIONS

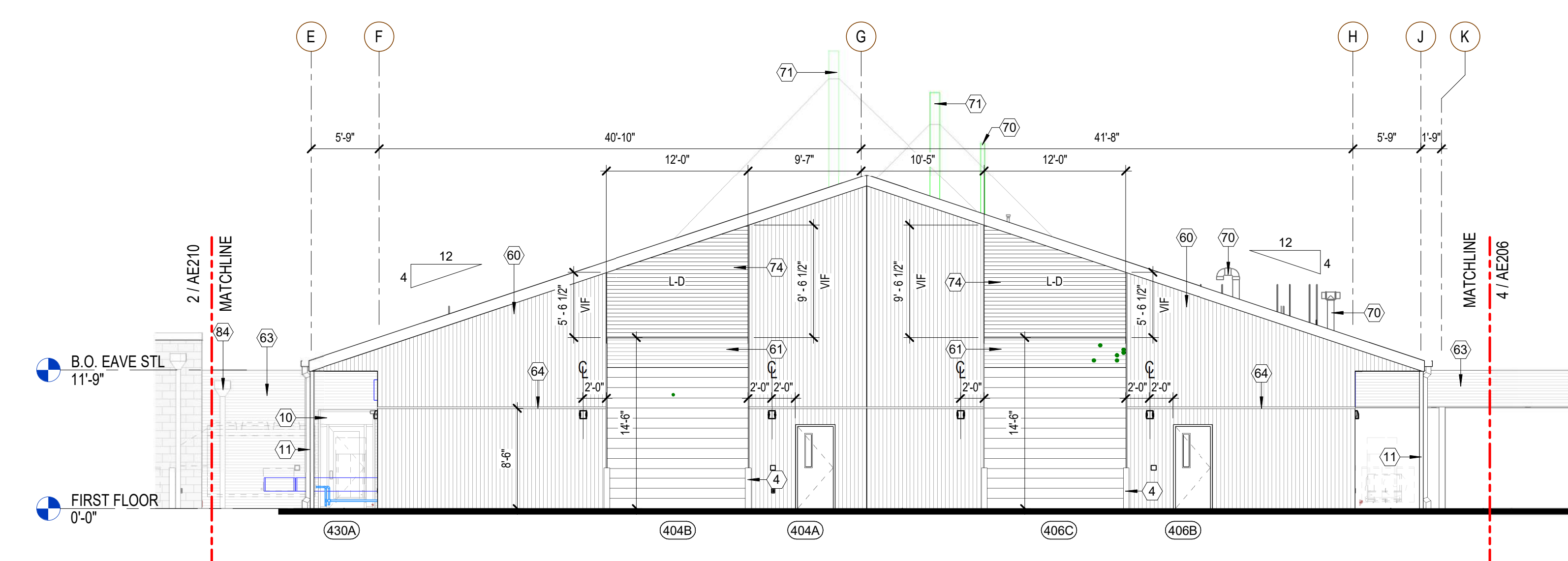
NOT FOR CONSTRUCTION

SHEET ID

AE207



2 WEST ELEVATION - AREA E
1/8" = 1'-0"



1 EAST ELEVATION - AREA F
1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO SHEET A-001 FOR LEGEND
2. TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O.
3. METAL PANEL TO BE VERTICAL UON.

SHEET KEYNOTES

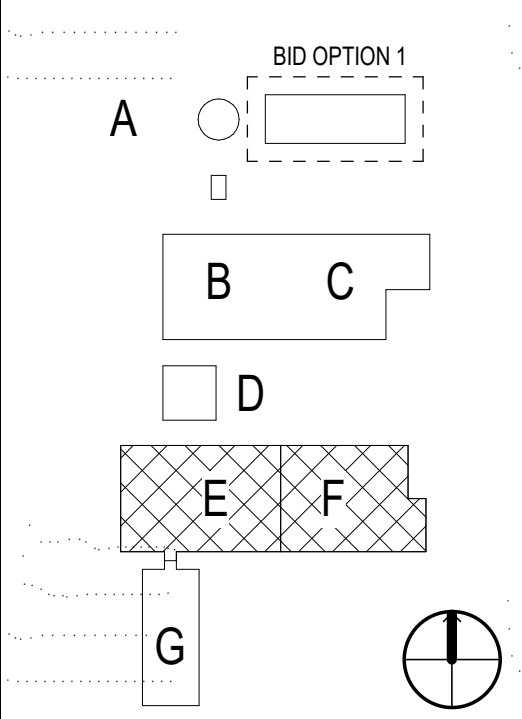
- 4 STEEL BOLLARD - REFER TO CIVIL
- 10 ALUM STOREFRONT SYSTEM
- 11 STL COLUMN W/ DOWNSPOUT MOUNTED TO WEB, TYP
- 60 METAL WALL PANEL BY PEMB MFR
- 61 METAL WALL PANEL, HORIZONTAL, BY PEMB MFR
- 63 CORRUGATED METAL WALL PANEL
- 64 2" TRIM
- 70 VENT - REF PLUMB DWGS
- 71 FUME HOOD FLUE - REFER TO MECH DWGS
- 74 LOUVER, SEE SCHEDULE
- 84 ROOF SCUPPER AND DOWNSPOUT

LOUVER SCHEDULE

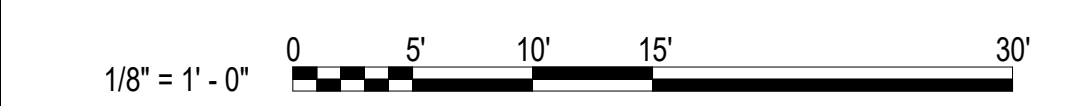
LOUVER SCHEDULE				
MARK	WIDTH	HEIGHT	AREA	COMMENTS
L-A	3'-0"	3'-0"	9 SF	RECTANGULAR
L-B	3'-2"	3'-0"	10 SF	RECTANGULAR
L-C	4'-0"	2'-8"	11 SF	RECTANGULAR
L-D	12'-0"		90 SF	TRAPEZOID, REF ELEVATIONS
L-E	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

1. LOUVERS SHALL HAVE MINIMUM 55% FREE AREA.
2. BEGINNING POINT OF WATER PENETRATION SHALL BE MINIMUM 1100 FPM.

KEY PLAN



GRAPHIC SCALE(S)



US Army Corps of Engineers

MARK	DESCRIPTION	DATE

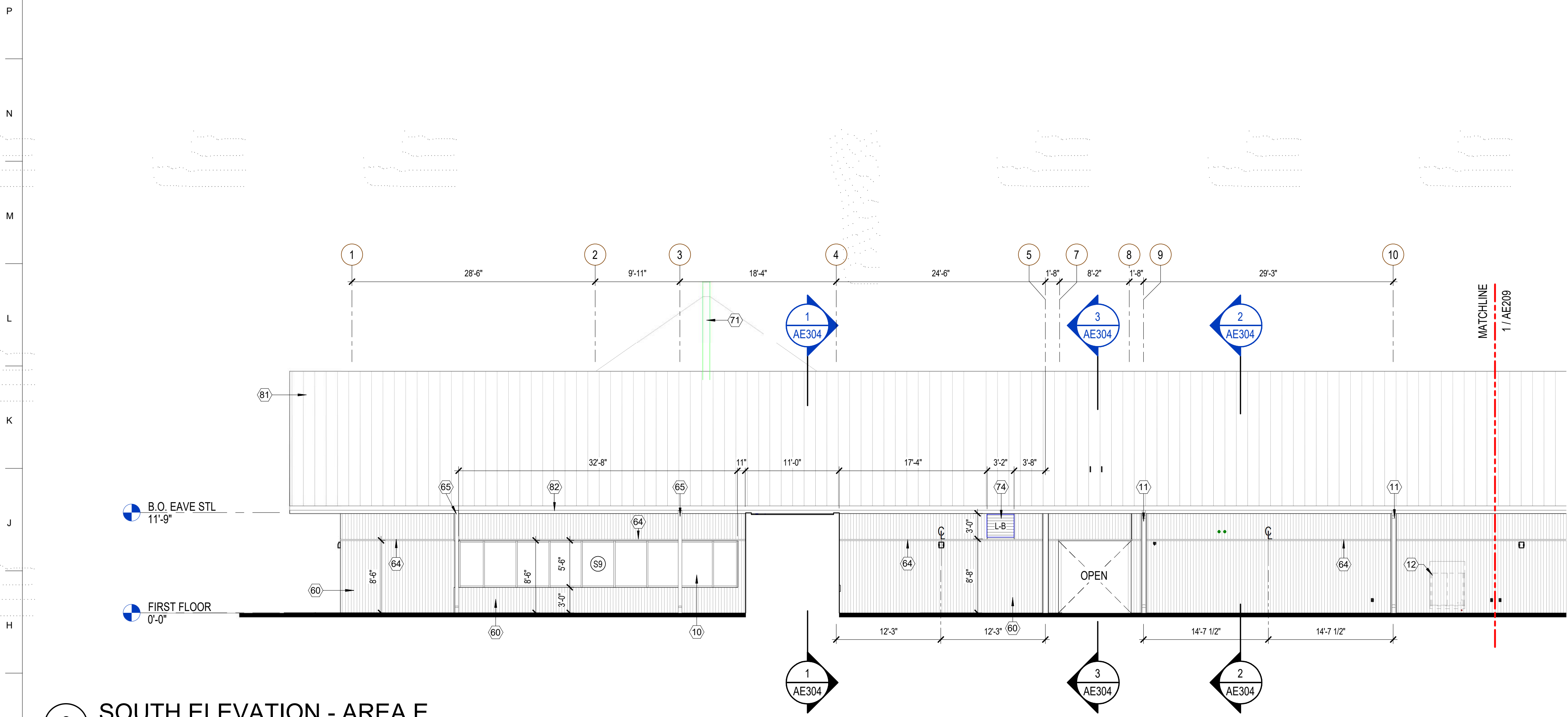
DESIGNED BY:	ISSUE DATE:
AGE:	DECEMBER 1, 2022
DRAWN BY:	SOLICITATION NO.:
NRS & AKE	W912PM-21-F-0015
CHECKED BY:	CONTRACT NO.:
BRG	W912PM-19-D-0002
SUBMITTED BY:	SCO NO.:
NCSU PROJECT NO.:	21-23856-01A
ANS/D:	202120010

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1943
CLARK NIKSEN
421 NORTH HARRINGTON STREET
RALEIGH, NORTH CAROLINA 27603

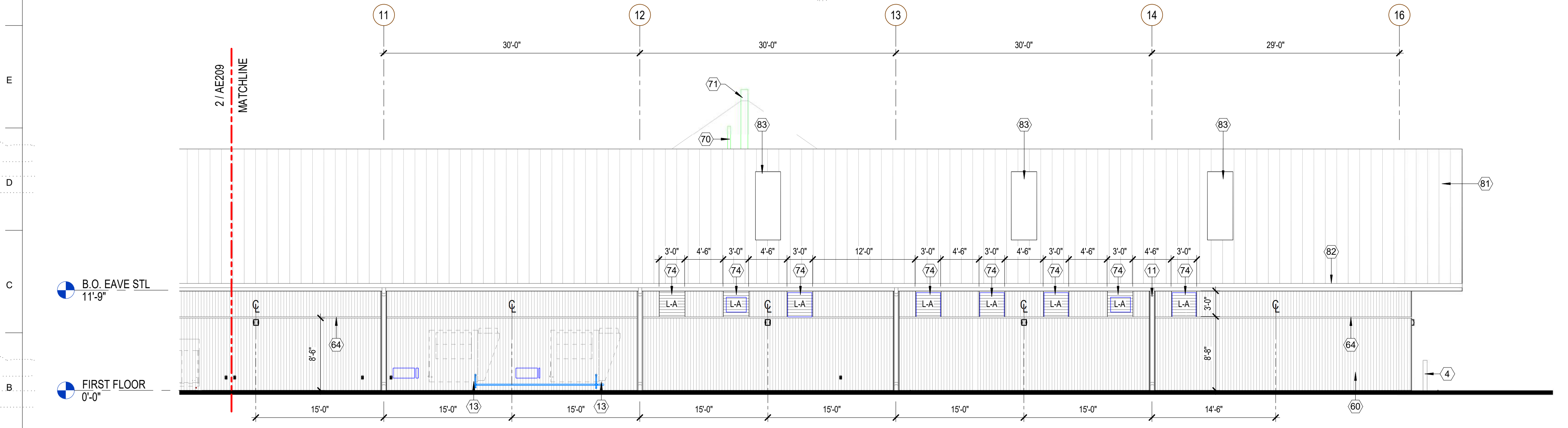
3821 INWOOD DRIVE, RALEIGH, NC
USDA AGRICULTURE RESEARCH SERVICES
PLANT IMPROVEMENT FACILITY
9208
EXTERIOR ELEVATIONS

NOT FOR CONSTRUCTION
SEALS

SHEET ID
AE208



2 SOUTH ELEVATION - AREA E
1/8" = 1'-0"



1 SOUTH ELEVATION - AREA F
1/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO SHEET A-001 FOR LEGEND
2. TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O.
3. METAL PANEL TO BE VERTICAL UON.



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SHEET KEYNOTES

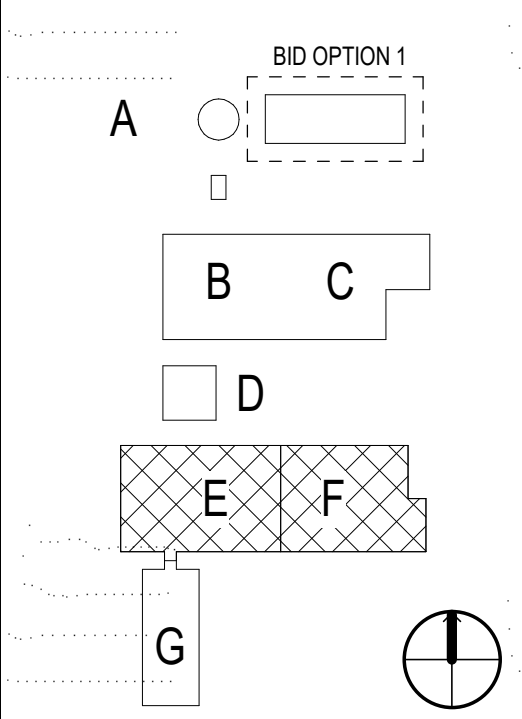
- 4 STEEL BOLLARD - REFER TO CIVIL
- 10 ALUM STOREFRONT SYSTEM
- 11 STL COLUMN W/ DOWNSPOUT MOUNTED TO WEB, TYP
- 12 MECHANICAL UNIT - REFER TO MECHANICAL
- 13 DOAS MECHANICAL UNIT - REFER TO MECHANICAL
- 60 METAL WALL PANEL BY PEMB MFR
- 64 2" TRIM
- 65 PREFINISHED METAL DOWNSPOUT
- 70 VENT - REF PLUMB DWGS
- 71 FUME HOOD FLUE - REFER TO MECH DWGS
- 74 LOUVER, SEE SCHEDULE
- 81 STANDING SEAM METAL ROOF
- 82 PREFINISHED METAL GUTTER
- 83 TRANSLUCENT ROOF PANEL BY PEMB MFR

LOUVER SCHEDULE

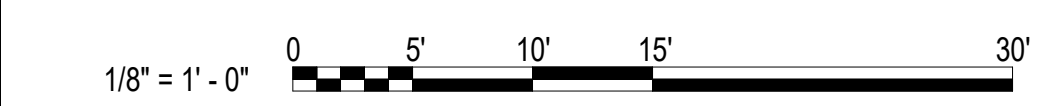
LOUVER SCHEDULE				
MARK	WIDTH	HEIGHT	AREA	COMMENTS
LA	3'-0"	3'-0"	9 SF	RECTANGULAR
LB	3'-2"	3'-0"	10 SF	RECTANGULAR
LC	4'-0"	2'-8"	11 SF	RECTANGULAR
LD	12'-0"		90 SF	TRAPEZOID, REF ELEVATIONS
LE	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

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KEY PLAN



GRAPHIC SCALE(S)



MARK	DESCRIPTION	DATE

ISSUE DATE: DECEMBER 1, 2022	SOLICITATION NO.: W912PM-21-F-0015	CONTRACT NO.: W912PM-19-D-0002	SCO NO.: 21-23856-01A
DESIGNED BY: AGE	DRAWN BY: NRS & AKE	CHECKED BY: BRG	SUBMITTED BY: NCSU PROJECT NO.: 202120010

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1843

CLARK NIELSEN
421 NORTH HARRINGTON STREET
RALEIGH, NORTH CAROLINA 27603

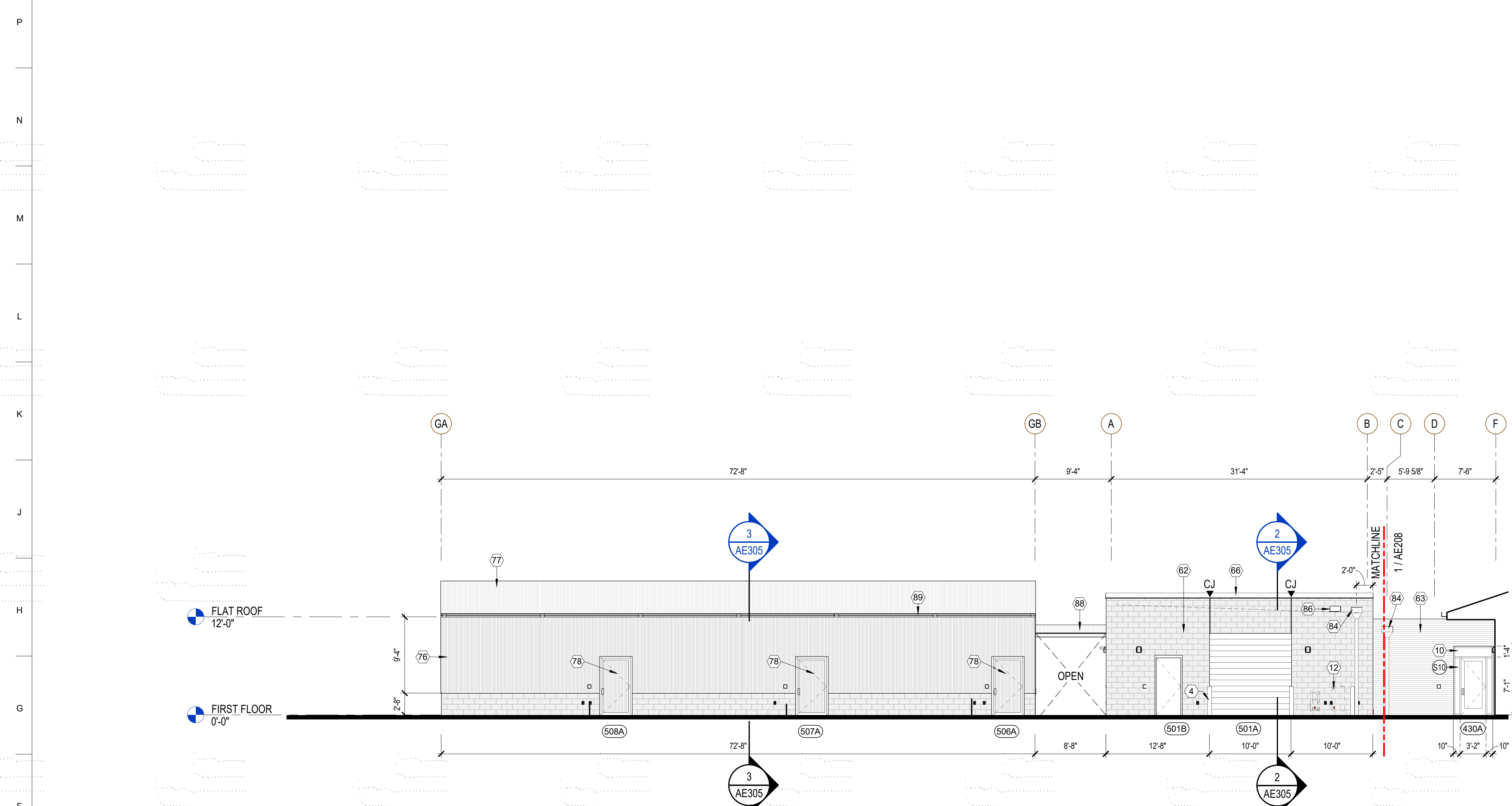
3821 INWOOD DRIVE, RALEIGH, NC
USDA AGRICULTURE RESEARCH SERVICES
PLANT IMPROVEMENT FACILITY
9208

EXTERIOR ELEVATIONS

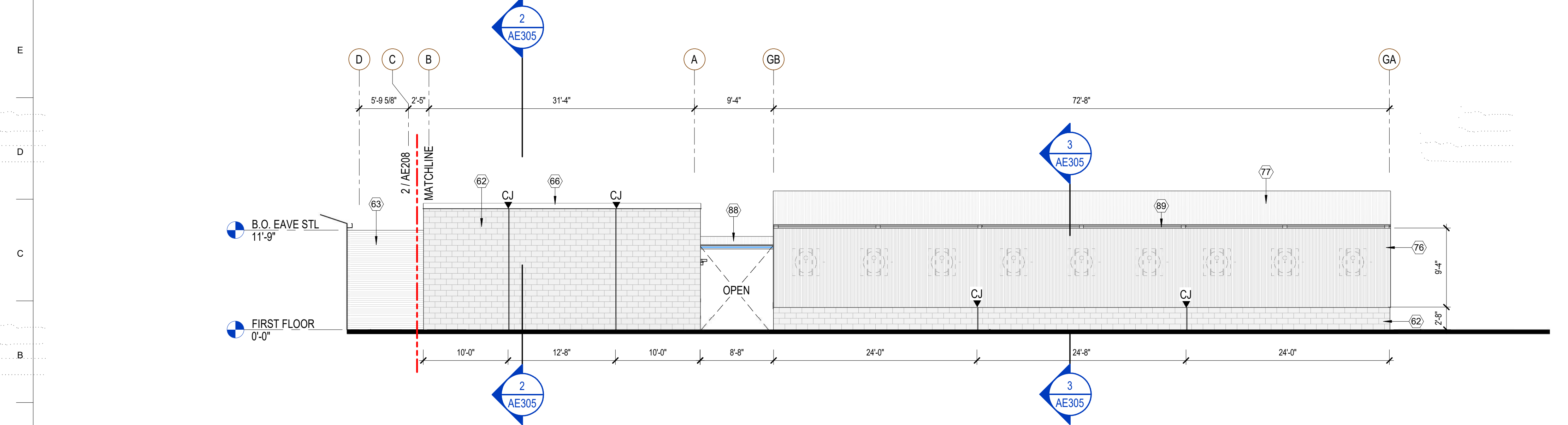
NOT FOR CONSTRUCTION

SEALS

SHEET ID
AE209



2 EAST ELEVATION - AREA G
1/8" = 1'-0"



1 WEST ELEVATION - AREA G
1/8" = 1'-0"

GENERAL SHEET NOTES

- REFER TO SHEET A-001 FOR LEGEND
- TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O.
- METAL PANEL TO BE VERTICAL UON.



US Army Corps of Engineers®

SHEET KEYNOTES

- 4 STEEL BOLLARD - REFER TO CIVIL
- 10 ALUM STOREFRONT SYSTEM
- 12 MECHANICAL UNIT - REFER TO MECHANICAL
- 62 MASONRY VENEER
- 63 CORRUGATED METAL WALL PANEL
- 66 PREFINISHED METAL COPING
- 76 POLYCARBONATE WALL PANEL
- 77 POLYCARBONATE ROOF PANEL
- 78 DOOR BY GREENHOUSE MFR
- 84 ROOF SCUPPER AND DOWNSPOUT
- 86 OVERFLOW SCUPPER
- 88 ROOF BY GREENHOUSE MFR
- 89 GUTTER BY GREENHOUSE MFR

MARK	DESCRIPTION	DATE

ISSUE DATE: DECEMBER 1, 2022	SOLICITATION NO.: W912PM-21-F-0015	CONTRACT NO.: W912PM-19-D-0002	SCO NO.: 21-23856-01A
DESIGNED BY: AGE	DRAWN BY: NRS & AKE	CHECKED BY: BRG	SUBMITTED BY: NCSU PROJECT NO.: 202120010

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
69 DARLINGTON AVENUE
WILMINGTON, NORTH CAROLINA 28403-1643

CLARK NIELSEN
421 NORTH HARRINGTON STREET
RALEIGH, NORTH CAROLINA 27603

3821 INWOOD DRIVE, RALEIGH, NC
USDA AGRICULTURE RESEARCH SERVICES
PLANT IMPROVEMENT FACILITY
9208

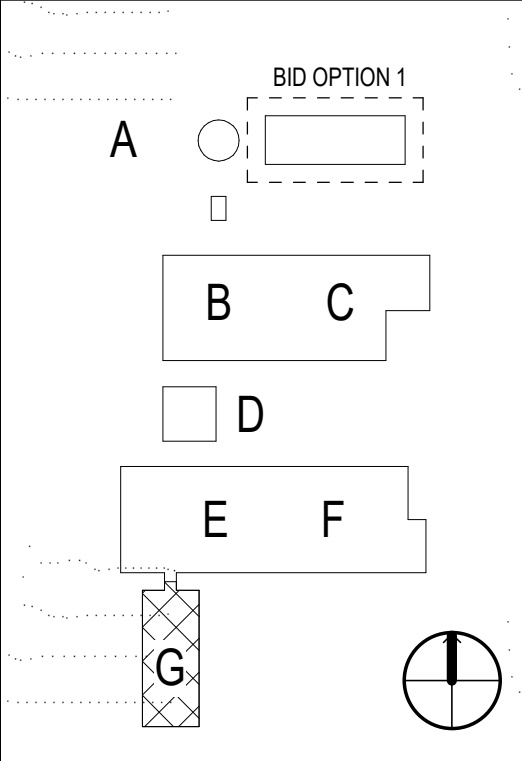
EXTERIOR ELEVATIONS

LOUVER SCHEDULE

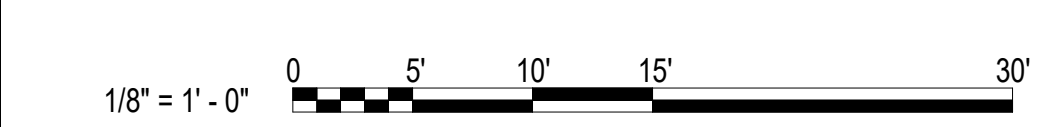
MARK	WIDTH	HEIGHT	AREA	COMMENTS
L-A	3'-0"	3'-0"	9 SF	RECTANGULAR
L-B	3'-2"	3'-0"	10 SF	RECTANGULAR
L-C	4'-0"	2'-8"	11 SF	RECTANGULAR
L-D	12'-0"		90 SF	TRAPEZOID, REF ELEVATIONS
L-E	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

- LOUVERS SHALL HAVE MINIMUM 55% FREE AREA.
- BEGINNING POINT OF WATER PENETRATION SHALL BE MINIMUM 1100 FPM.

KEY PLAN



GRAPHIC SCALE(S)



NOT FOR CONSTRUCTION

SEALS

SHEET ID
AE210

GENERAL SHEET NOTES

1. REFER TO SHEET A-001 FOR LEGEND
2. TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O.
3. METAL PANEL TO BE VERTICAL UON.



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SHEET KEYNOTES

- 62 MASONRY VENEER
- 66 PREFINISHED METAL COPING
- 76 POLYCARBONATE WALL PANEL
- 77 POLYCARBONATE ROOF PANEL
- 78 DOOR BY GREENHOUSE MFR
- 88 ROOF BY GREENHOUSE MFR
- 89 GUTTER BY GREENHOUSE MFR

MARK	DESCRIPTION	DATE

ISSUE DATE: DECEMBER 1, 2022
 DESIGNED BY: NRS & AKE
 DRAWN BY: BRG
 CHECKED BY: NCSU PROJECT NO.: 21-23856-01A
 SUBMITTED BY: ANS/D
 SIZE: 202120010

US ARMY CORPS OF ENGINEERS
 WILMINGTON DISTRICT
 69 DARLINGTON AVENUE
 WILMINGTON, NORTH CAROLINA 28403-1643

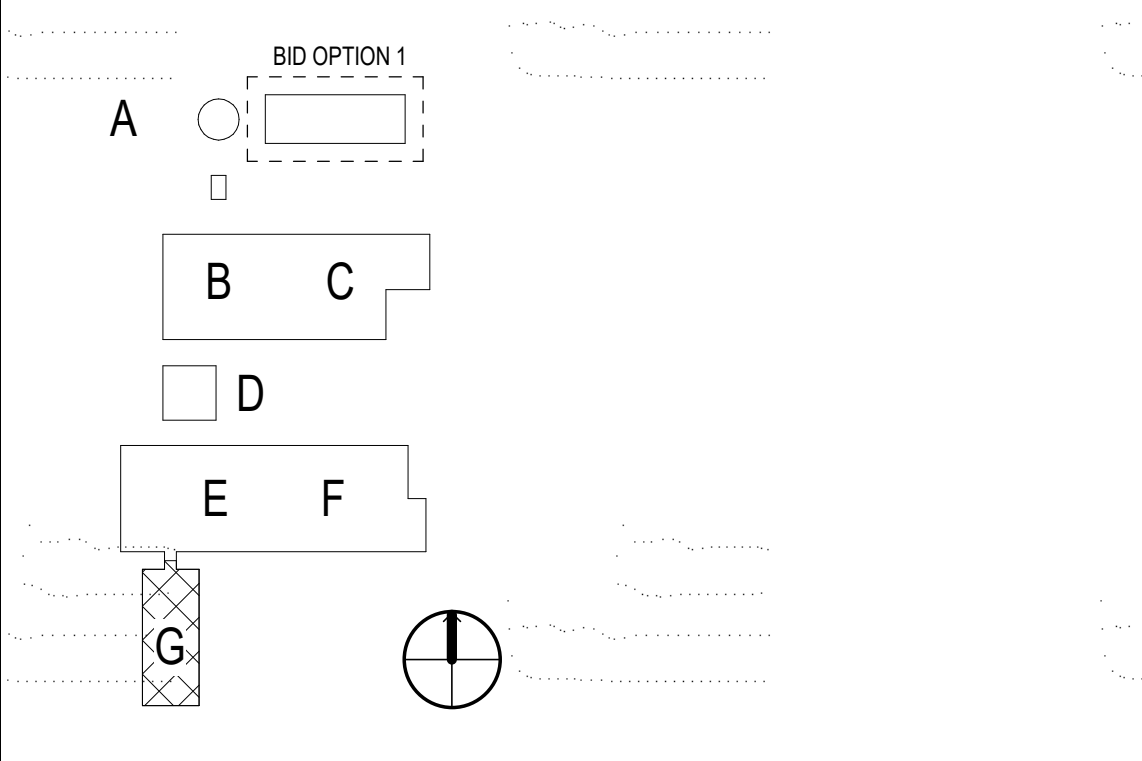
CLARK NIKSEN
 421 NORTH HARRINGTON STREET
 RALEIGH, NORTH CAROLINA 27603

LOUVER SCHEDULE

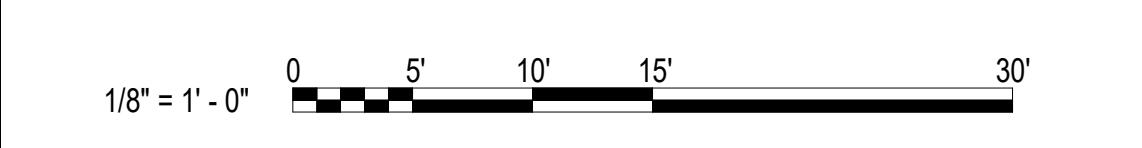
MARK	WIDTH	HEIGHT	AREA	COMMENTS
LA	3'-0"	3'-0"	9 SF	RECTANGULAR
LB	3'-2"	3'-0"	10 SF	RECTANGULAR
LC	4'-0"	2'-8"	11 SF	RECTANGULAR
LD	12'-0"		90 SF	TRAPEZOID, REF ELEVATIONS
LE	12'-0"		66 SF	TRAPEZOID, REF ELEVATIONS

1. LOUVERS SHALL HAVE MINIMUM 55% FREE AREA.
2. BEGINNING POINT OF WATER PENETRATION SHALL BE MINIMUM 1100 FPM.

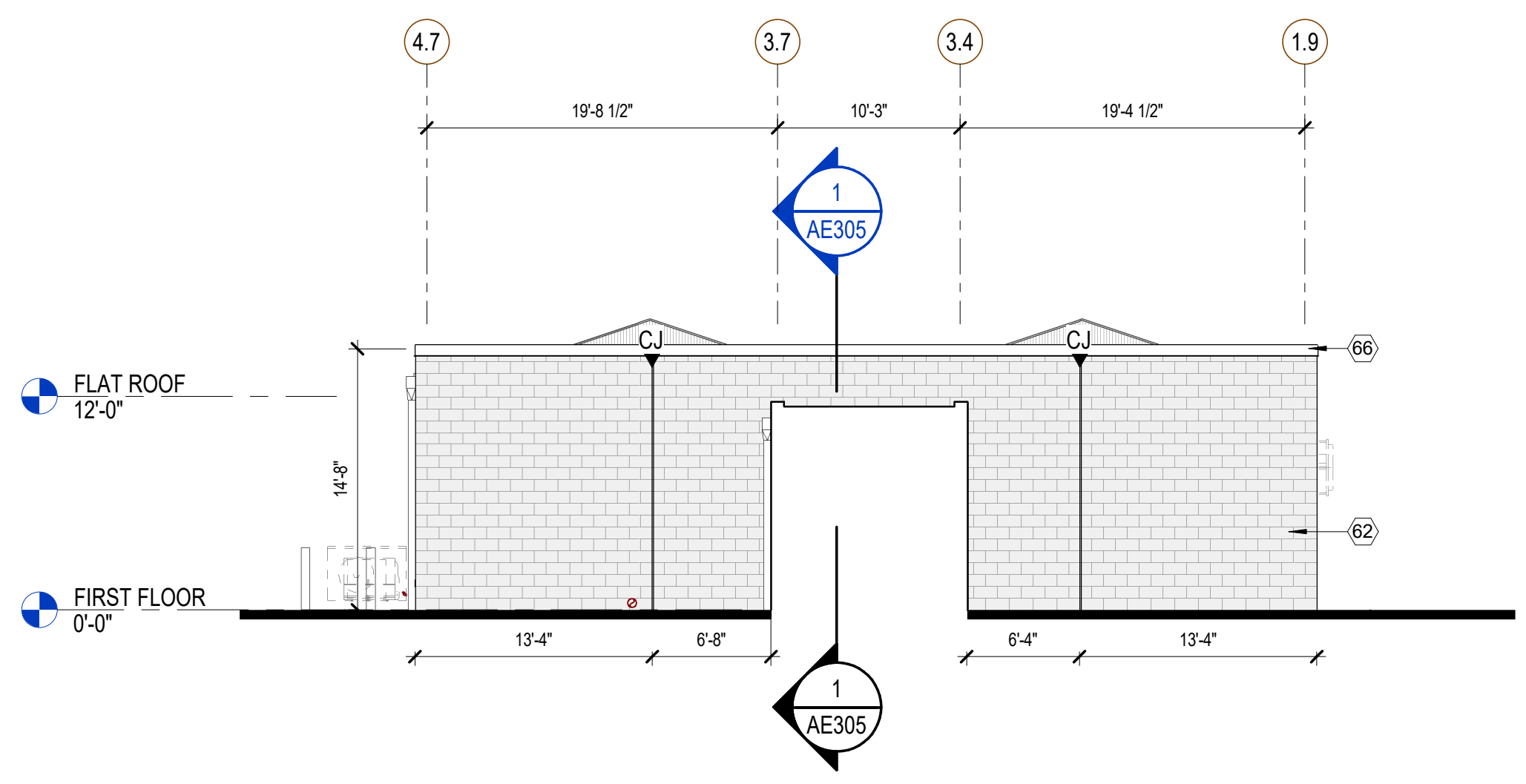
KEY PLAN



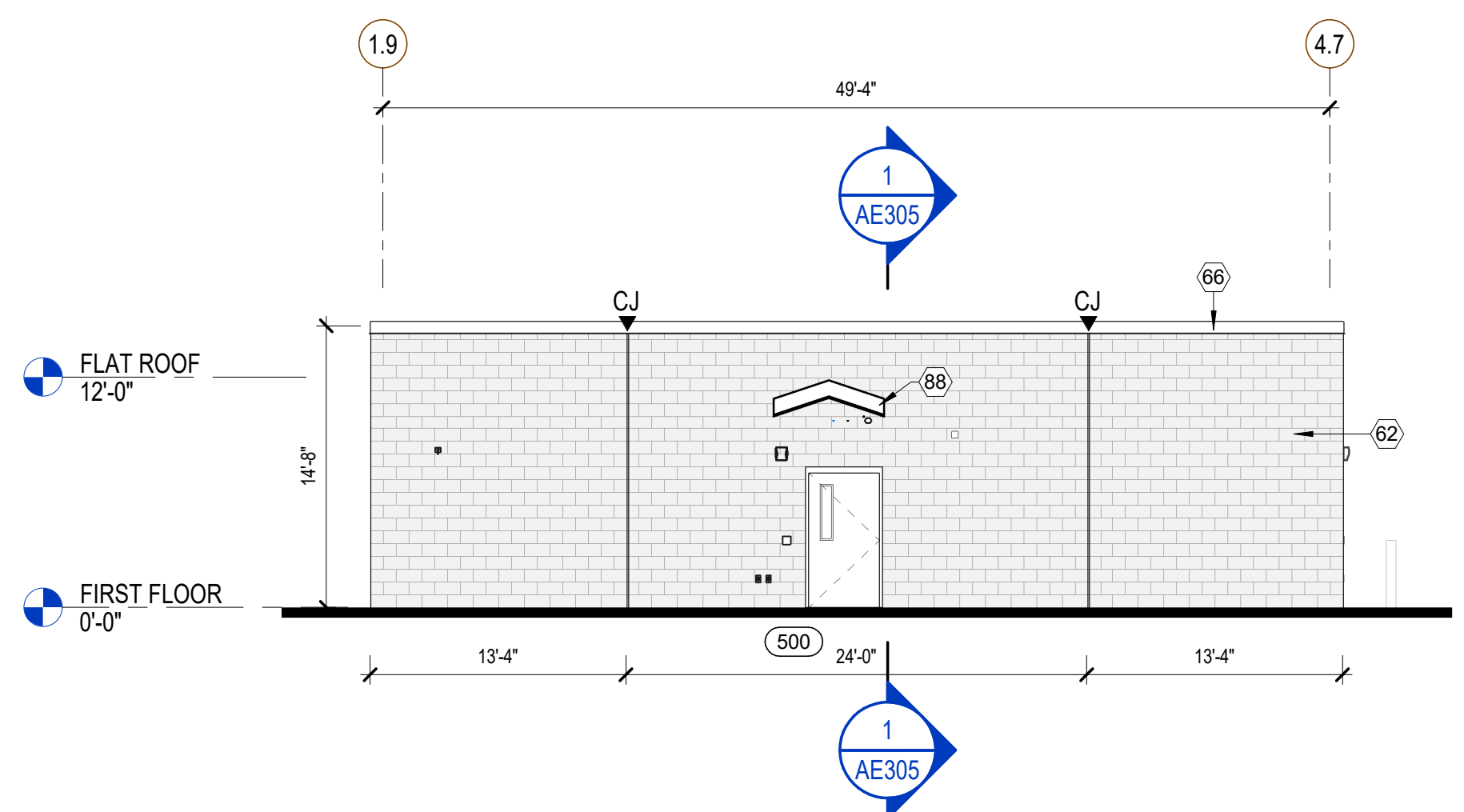
GRAPHIC SCALE(S)



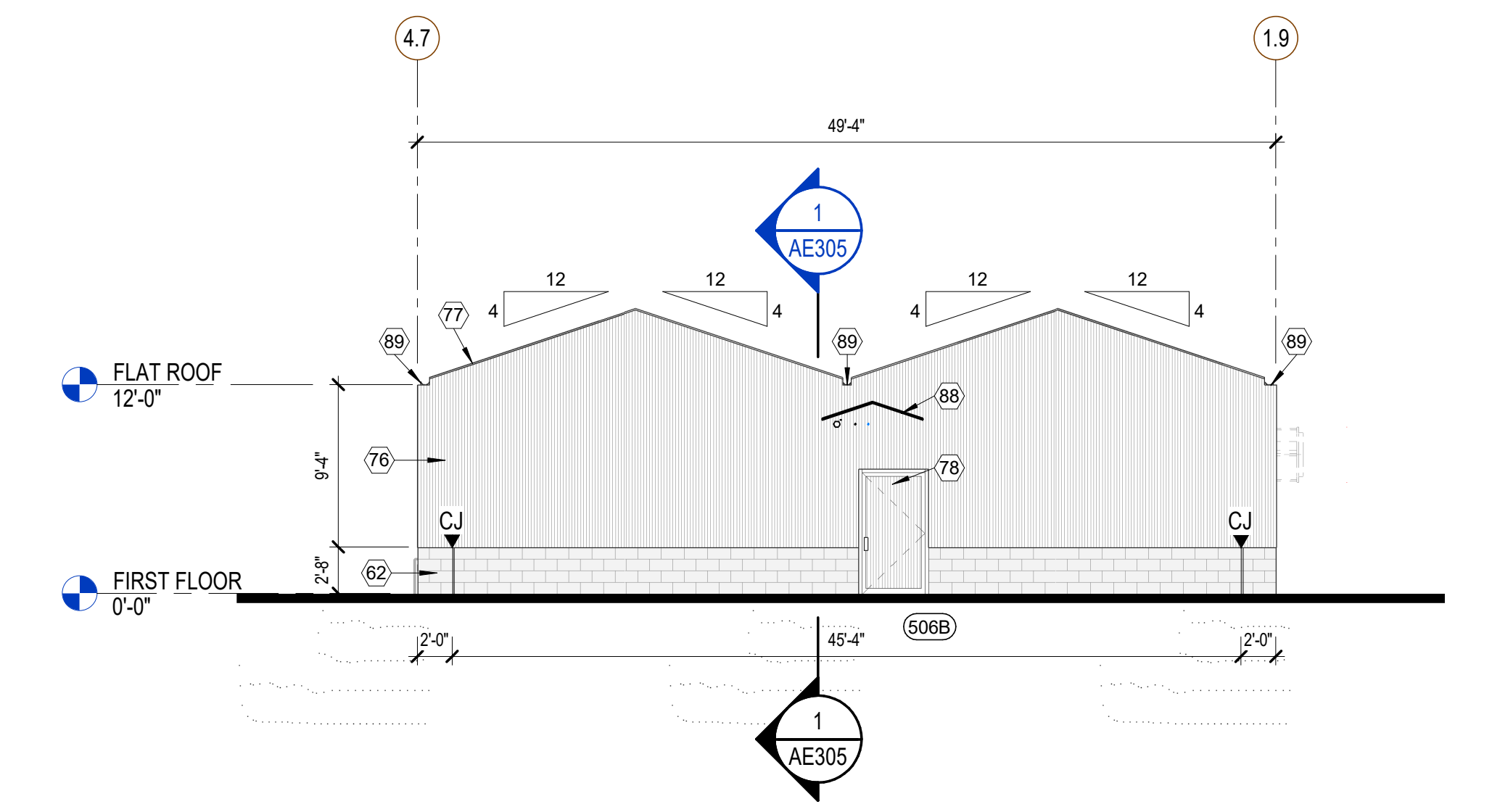
4 NORTH ELEVATION - AREA G - HEADHOUSE
 1/8" = 1'-0"



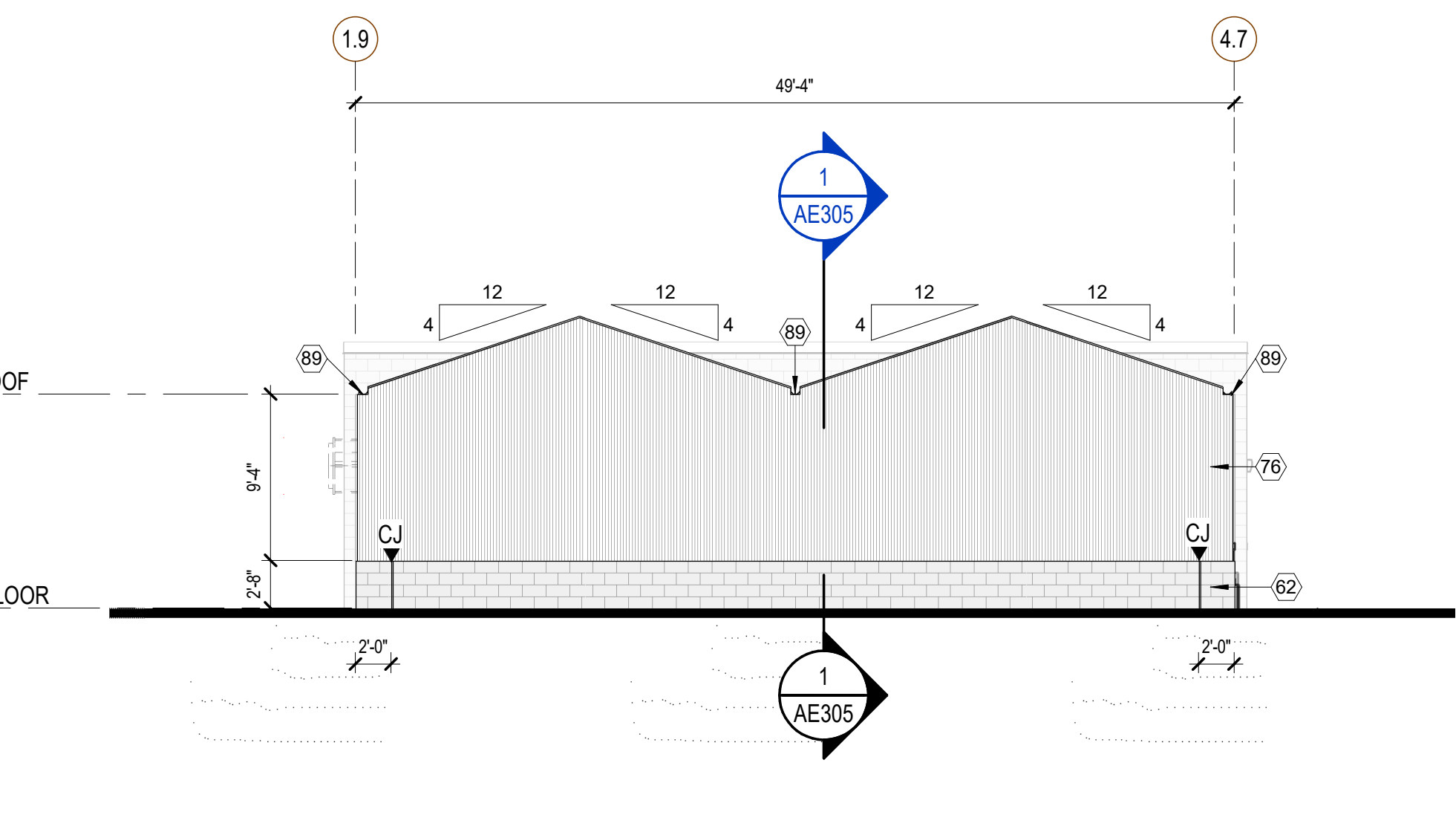
2 SOUTH ELEVATION - AREA G - HEADHOUSE
 1/8" = 1'-0"



3 NORTH ELEVATION - AREA G - GREENHOUSE
 1/8" = 1'-0"



1 SOUTH ELEVATION - AREA G - GREENHOUSE
 1/8" = 1'-0"



3821 INWOOD DRIVE, RALEIGH, NC
 USDA AGRICULTURE RESEARCH SERVICES
 PLANT IMPROVEMENT FACILITY
 9208
 EXTERIOR ELEVATIONS

NOT FOR CONSTRUCTION
 SEALS

SHEET ID
AE211

GENERAL SHEET NOTES

1. REFER TO SHEET A-001 FOR LEGEND
2. TOP OF LOUVER TO ALIGN WITH SOFFIT, BOTTOM OF LOUVER TO BE AT 8'-7" U.N.O.
3. METAL PANEL TO BE VERTICAL UON.



US Army Corps of Engineers
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SHEET KEYNOTES

- 1 STEEL RIGID FRAME BY PEMB MFR
- 4 STEEL BOLLARD - REFER TO CIVIL
- 14 CROSS BRACING - REFER TO STRUCTURAL
- 46 EQUIPMENT AND PIPING - REFER TO FIRE PROTECTION
- 51 METAL SOFFIT PANEL BY PEMB MFR
- 60 METAL WALL PANEL BY PEMB MFR
- 64 2" TRIM
- 65 PREFINISHED METAL DOWNSPOUT
- 74 LOUVER, SEE SCHEDULE
- 81 STANDING SEAM METAL ROOF
- 82 PREFINISHED METAL GUTTER
- 83 TRANSLUCENT ROOF PANEL BY PEMB MFR

MARK	DESCRIPTION	DATE

ISSUE DATE:	DESIGNED BY:	AGE:	PROJECT NO.:	CONTRACT NO.:	SCO NO.:	NCSU PROJECT NO.:
DECEMBER 1, 2022	WILMINGTON DISTRICT		W912PM-21-F-0015	W912PM-19-D-0002	21-23856-01A	202120010

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USDA AGRICULTURE RESEARCH SERVICES
PLANT IMPROVEMENT FACILITY
9208
BID OPTION 1

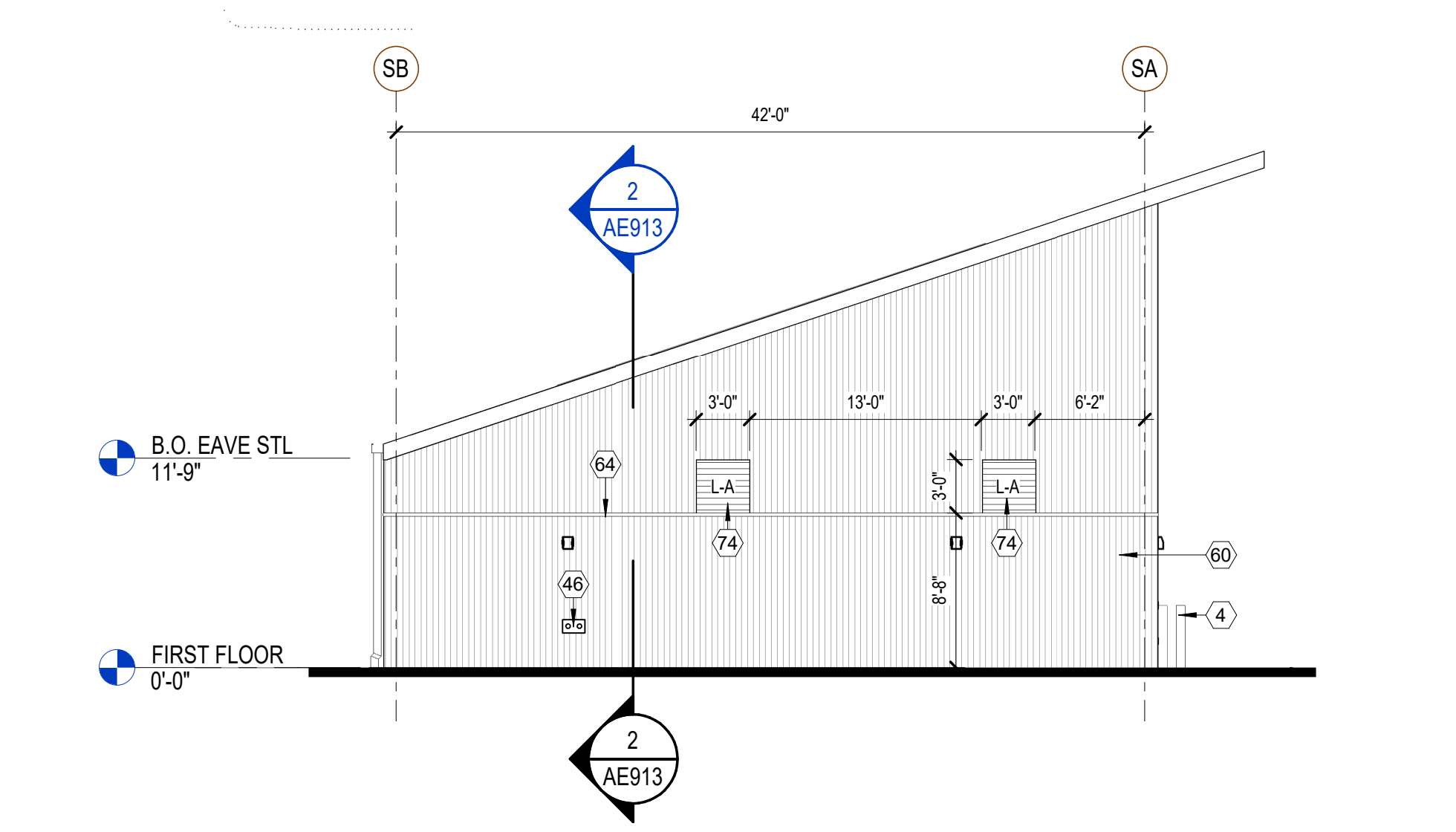
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SEALS

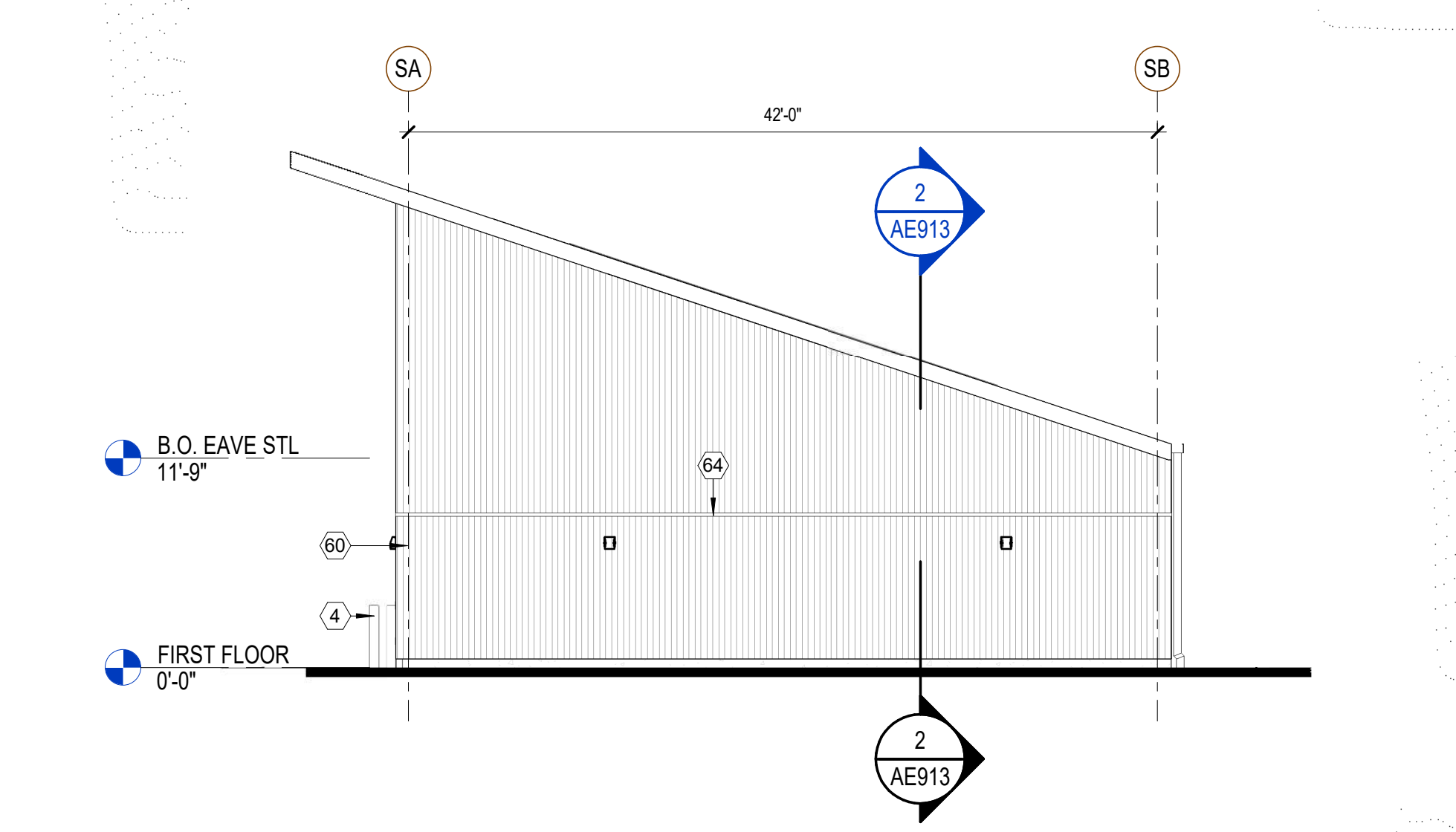
SHEET ID

AE912

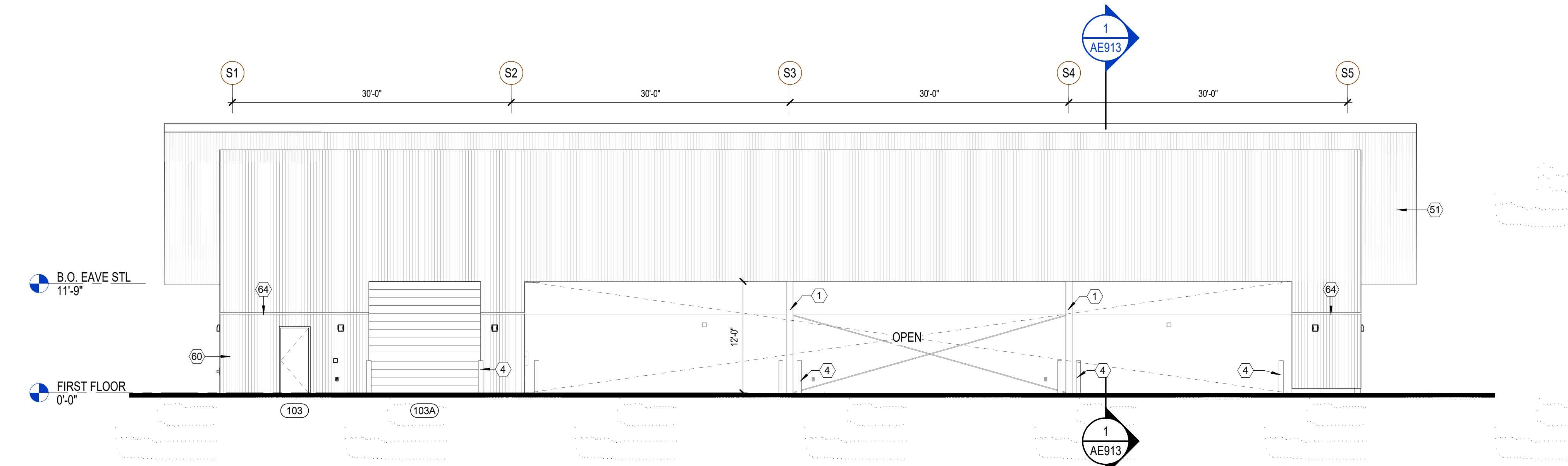
GRAPHIC SCALE(S)



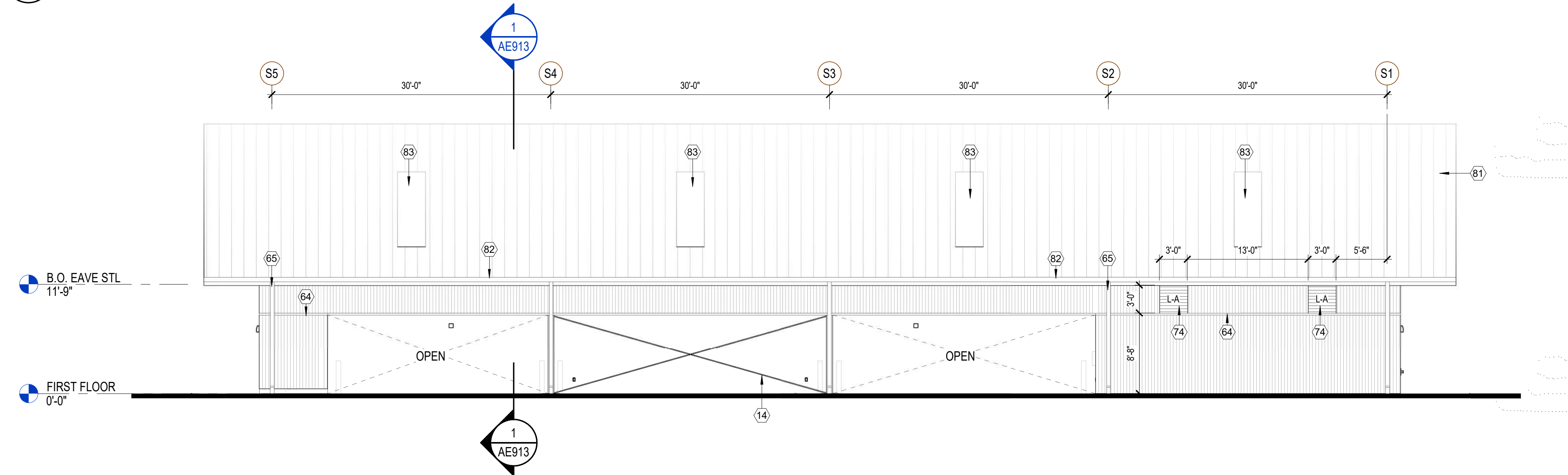
4 WEST ELEVATION - STORAGE BUILDING - BID OPTION 1
1/8" = 1'-0"



3 EAST ELEVATION - STORAGE BUILDING - BID OPTION 1
1/8" = 1'-0"



2 SOUTH ELEVATION - STORAGE BUILDING - BID OPTION 1
1/8" = 1'-0"



1 NORTH ELEVATION - STORAGE BUILDING - BID OPTION 1
1/8" = 1'-0"