



**STAFF REPORT**  
**WEST ALLIS PLAN COMMISSION**  
**Wednesday, May 29, 2024**

**6:00 PM**

**Room 128 – City Hall – 7525 W. Greenfield Ave.**

- 2. Site, Landscaping, and Architectural Design Review for Novonesis (formerly CHR Hansen), an existing light industrial use, at 9015 W. Maple St. (Tax Key No. 451-1535-000).**

**Overview and Zoning**

Novonesis (formerly Chr. Hansen) is a global bioscience company that focuses on delivering natural innovative solution that address global challenges by advancing food, health, and productivity. Novonesis develops and produces cultures, enzymes, and probiotics for a variety of foods, confectionery, beverages, dietary supplements, animal feed, and plant protection.



Chr. Hansen, Inc. previously completed an expansion of its headquarters in West Allis in 2021 (Project Mighty – phase 1), a 20,000-sf production expansion on the west side of the campus. More recent in 2023 (Project THOR-phase 2) expansion/construction of a new 2-story, 40,250-sf/floor (81,000-sf total) expansion (within this total area contains a 27,000 sq. ft. - 55°C freezer for product storage, plus space for future labs). The third phase, also part of project THOR, is planned expansion on the northeast side of the campus.

The plans for the project, are pending corporate approval, include construction of a new 2-story, 50,000 sq. ft. expansion building for new production equipment. The site expansion will increase Novonesis’

production capacity at the West Allis site by approximately 60%. THOR stands for "Thunderously Higher Output Reached."

Existing building area: 164,000-sf

Proposed (w/THOR): 216,000-sf

Project and Operational info:

- Phase 2 construction approved by Plan Commission last April (Project THOR) began June of 2023, and will be complete August of 2024.
- Phase 3 construction (Project THOR-planned) expected to begin July 2024 with substantial completion in June 2026.
- Employment - The existing facility employs approximately 280 people.
- Hours of operation – The facility operates 3 shifts daily. Hours of operation will remain unchanged.
- Trucking to the site will increase from 7 to 12 trucks per day. The business currently receives about 7 trucks per day. All trucking, employee and visitor access comes in and out on S. 92 St. and will continue in this manner.
- A sound barrier was previously constructed on the north side of Chr. Hansen building surrounding Liquid Nitrogen tanks. This barrier was installed to reduce noise impacts on the neighborhood while unloading Liquid Nitrogen into the existing storage tanks. An additional four (4) liquid nitrogen tanks area planned, and sound wall adjustments are planned/shown on the site plan. The new building addition will also serve as an additional barrier. Liquid Nitrogen deliveries are expected between 7AM and 7PM. The trucks have pumps on their trailers to pump the liquid nitrogen into the tanks and some trailers can be louder than others. Novonesis is following up with the two liquid nitrogen suppliers to discuss further.
- This expansion will further strengthen Chr. Hansen's position as an industry leader in the Americas. The trajectory of the current business and future growth plans leave the company well positioned to invest in further expansions to the West Allis site. The estimated cost of development is about \$75 million.

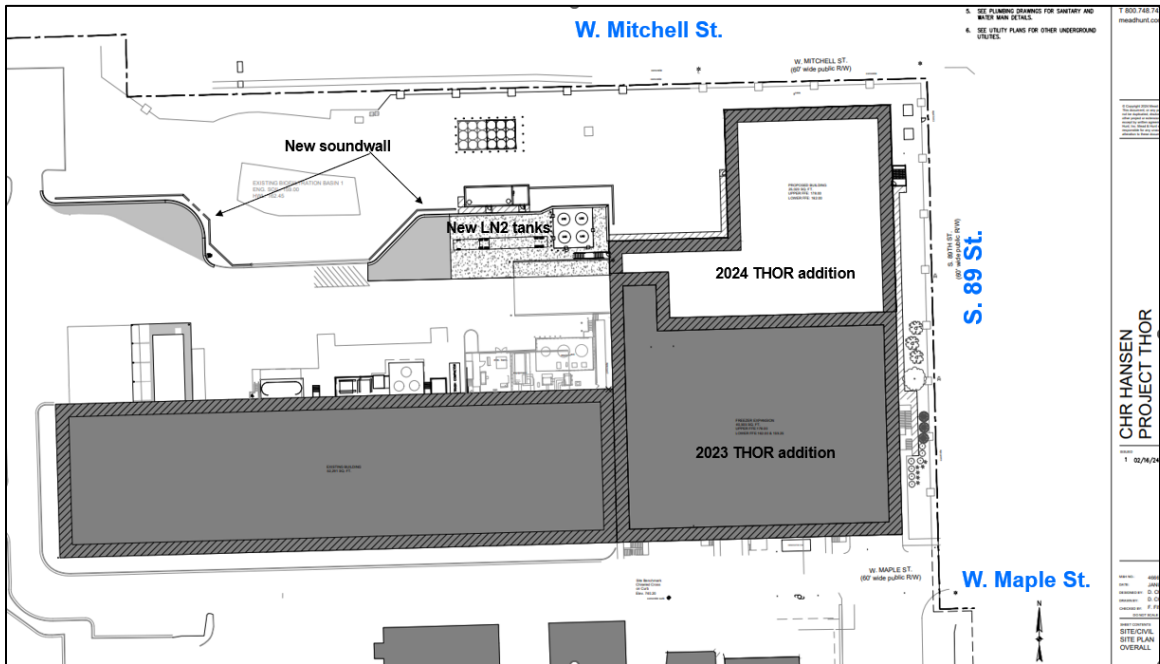


Zoning I-1, light industrial

The Chr Hansen bio-science operation is considered light industrial and permitted as a limited use.

Neighborhood outreach: Novonosis completed an Open House for the public on April 25th. The existing operations and proposed expansion project was discussed. The company also explained their ongoing construction project, and has/will continue to working with the City and the neighbors to minimize any disturbances. Any neighbor concerns, or for general information, please contact [usinfo@chr-hansen.com](mailto:usinfo@chr-hansen.com).

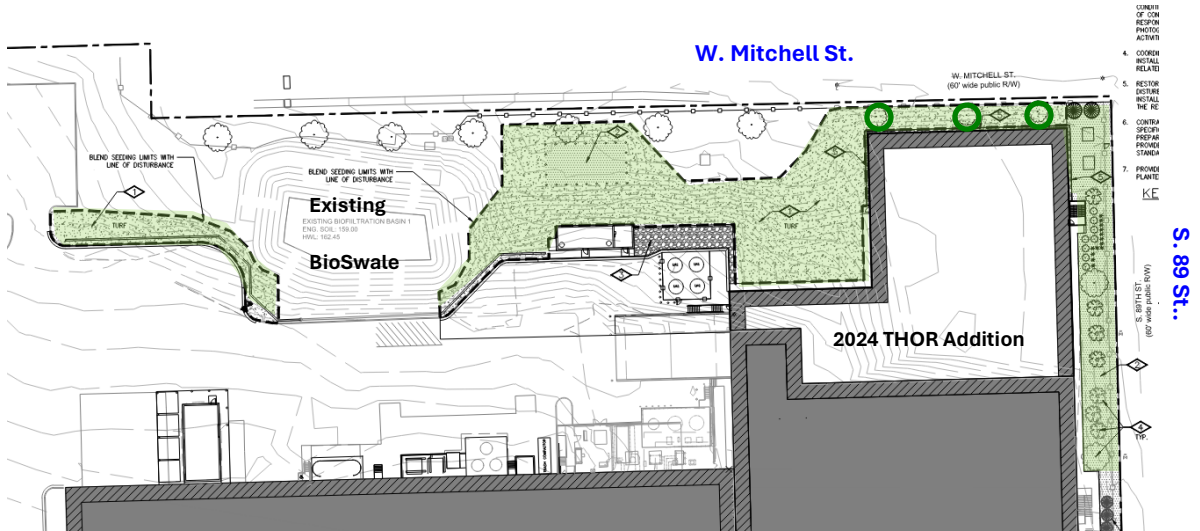
Plan Commission's role will include Site, Landscaping and Architectural design review consideration of the proposed addition for a 50,000-sf building addition on the northeast side of the campus.







BUILDING AREAS PER FREEZER ADDITION DRAWINGS:	ADMIN BUILDING	46,255 S.F.
	COLOR BUILDING	23,128 S.F.
	MAINTENANCE BUILDING	7,121 S.F.
	1976 CULTURE BUILDING	32,094 S.F.
	2003 EAST ADDITION	27,680 S.F.
	2020 MIGHTY BUILDING	22,916 S.F.
	2023 FREEZER ADDITION	81,541 S.F.
	2024 THOR ADDITION	50,204 S.F.
	2024 BULK CHEMICAL BUILDING	608 S.F.
	2024 BLOWER ADDITION	1,274 S.F.
TOTAL PARKING REQUIRED:		

## Site, Landscaping and Architectural Plans

The plans submitted show the new 50,000-sf THOR building addition located on the north side of the recently completed (2023) freezer building addition. New landscaping will be installed between the new building addition and the existing fence/property line (east and north sides of the site). The existing ornamental fence will remain and/or be replaced after construction.



Three existing deciduous street trees exist today within the terrace area between the sidewalk and curb line with W. Mithcell St. Additionally, three new Norway Spruce trees and two arborvitae (6-ft at time of planting) will be installed on the Novonesis site on the north side of the new building addition. The existing and new trees will help soften the vertical appearance of the new building. Any existing landscaping damaged during construction will be replaced. The existing W. Mitchell St. driveway on the north side of the site near S. 89 St. will be removed and replaced with street curb and greenspace. The north end of the site will be re-graded to better slope existing grades and increase greenspace between buildings and the 12-ft tall soundwall. The overall campus greenspace percentage is about 25%.

PLANT SCHEDULE					
TREES	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY.
	PD	PICEA GLAUCA 'DENSATA' / BLACK HILLS WHITE SPRUCE	6' HT.	B&B	5
	TP	THURJA OCCIDENTALIS 'HETZ WINTERGREEN' / HETZ WINTERGREEN ARBORVITAE	5' HT.	CONT.	3
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY.
	PA	PICEA ABIES / NORWAY SPRUCE	6' HT.	CONT.	13
DECIDUOUS SHRUBS	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY.
	AL	ARONIA MELANOCARPA 'UCONNAM165' / LOW SCRAPE MOUND® BLACK CHOCKBERRY	3 GAL.	CONT.	3
ORNAMENTAL GRASSES	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY.
*	PN2	PANICUM VIRGATUM 'NORTHWIND' / NORTHWIND SWITCH GRASS	1 GAL.	CONT.	3

### Architectural Plans

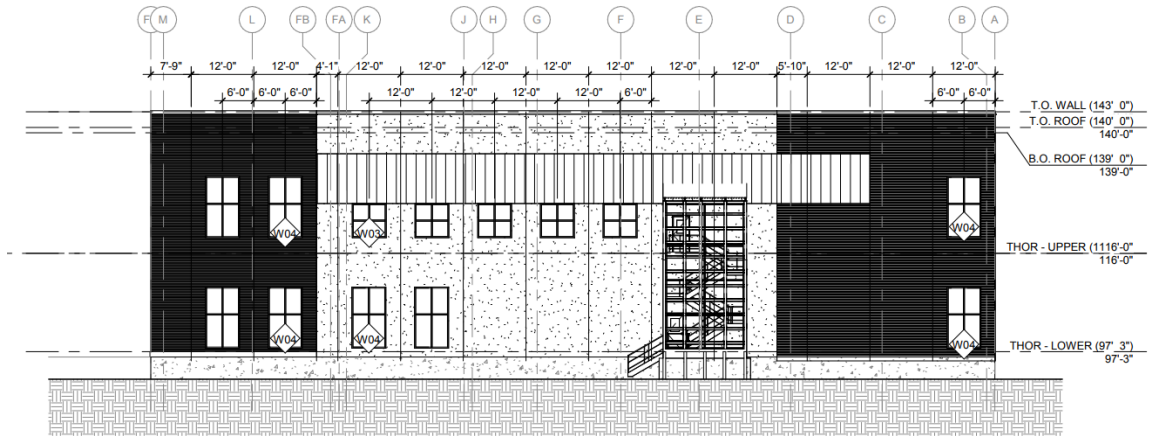
Exterior materials for the new addition will predominantly include precast concrete panels in a light brown color to match the existing building. There are also other complementary materials including brown pre-cast concrete panels with horizontal reveals and a precast ribbed green band. Window openings are introduced on all three sides of the THOR addition (east, north, and west) One new covered exterior switchback staircase is shown on the east side of the new building addition. The new exterior staircase will feature a screen wall for some transparency, but with the primary purpose of offering shelter and softening the look of an exterior staircase.

The new building addition height is about 46-ft above grade.

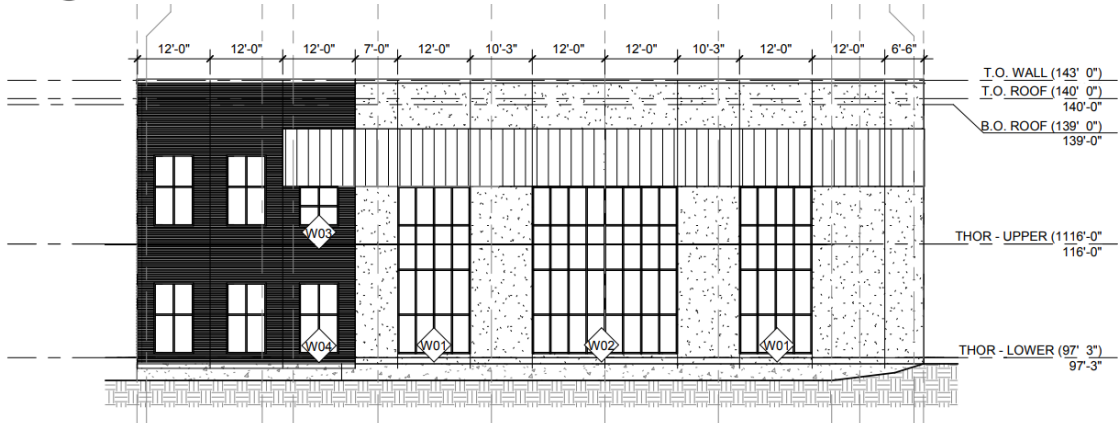


*Views: Looking SW from the corner of S. 89<sup>th</sup> and Mitchell St.*

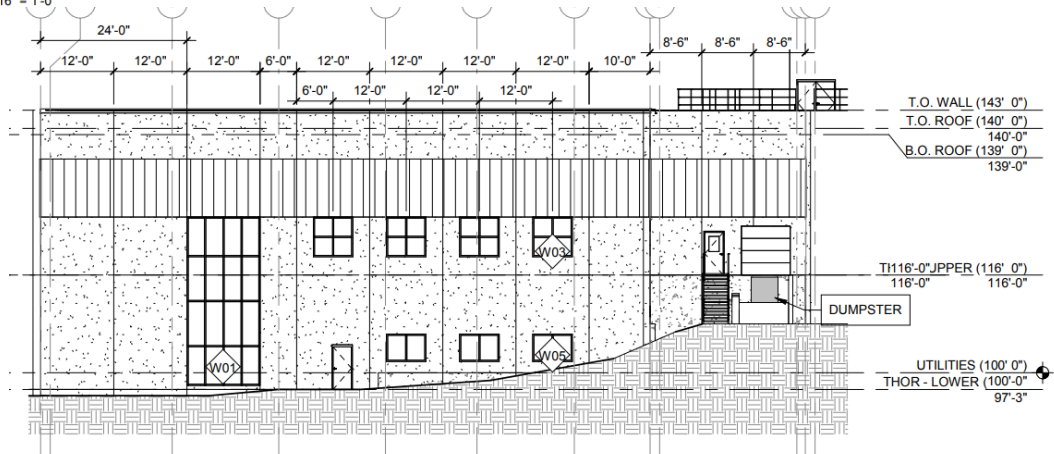
Roof top units will be adequately screened on the new building.



**1 THOR - EAST ELEVATION**  
1/16" = 1'-0"



**2 THOR - NORTH ELEVATION**  
1/16" = 1'-0"



**3 THOR - WEST ELEVATION**  
1/16" = 1'-0"

### Storm water Management

A storm water management plan has been submitted for review. An existing bio-filtration basin was installed previously within the north yard area. There is also an existing underground retention system that was added previously on the northwest side of the site under the newer parking areas. Storm water plans are reviewed by AECOM for compliance with MMSD (Milwaukee Metro Sewerage District) regulations.

The development project consists of the construction of an approximate 50,000-sf expansion building. The added impervious area of the site improvements (building expansion) will accommodate stormwater runoff within the existing storm water detention system to meet the storm water requirements for the project. Under the developed conditions, storm water from the development area will be conveyed by proposed storm sewer to proposed storm water biofiltration basins. The proposed biofiltration basin was also sized with foresight that another expansion building will be built to the north of the proposed expansion in the future. The biofiltration basin has been designed to accommodate the THOR expansion.

### Off-street Parking

A new parking lot was developed leading up to the last phase of expansion and is located near 92nd Street. Existing parking = 299 stalls (9 ADA). Employee, visitor and all trucking trips will continue to use S. 92 St. to access the CHR Hansen site.

**Recommendation:** Approval of the Site, Landscaping, and Architectural Design Review for Novonosis (formerly CHR Hansen), an existing light industrial use, at 9015 W. Maple St. (Tax Key No. 451-1535-000), subject to the following conditions:

(Items 1 through 4 are required to be satisfied prior to any work being done that is associated with the proposal reviewed by Plan Commission. Contractors applying for permits should be advised accordingly.)

1. Revised Site, Landscaping, and Architectural Plans being submitted to the Department of Development to show the following: (a) coordination with Engineering Department on location of water lines with respect to location of electrical transformers, relocating of sanitary line away from staircase foundation, and water and sanitary capacity (b) landscaping plan revisions per City Forestry recommendations, (c) public relations/coordination with neighborhood on upcoming construction process and progress updates. Contact Steven Schaer, Manager of Planning and Zoning at 414-302-8466.

2. A Street excavation permit being applied for in OpenGov prior to work beginning. Any concrete work in the right of way needs to be completed by a licensed and pre-qualified contractor within the City of West Allis. Contact Greg Bartelme at (414) 302-8367.
  
3. Documentation and approval showing compliance with the City of West Allis Storm water Management Ordinance, to be submitted to the Building Inspections and Neighborhood Services Department by a registered Civil Engineer. A storm water permit must be obtained from the City. Contact Mike Romans, Plumbing Inspector at 414-302-8413.

(Remaining conditions of approval to be satisfied by the property owner within one year of Plan Commission approval)

4. Compliance with Section 2814 of the City's Policy and Procedures Manual relative to that policy as it relates to the replacement and repair to City walkways of damaged or defective (if any) abutting sidewalk.



### Novonesis Plan Commission Summary

Novonesis (formerly Chr. Hansen) is a global bioscience company that focuses on delivering natural innovative solutions that address global challenges by advancing food, health, and productivity. Novonesis develops and produces cultures, enzymes, and probiotics for a variety of foods, confectionery, beverages, dietary supplements, animal feed, and plant protection.

Novonesis previously completed an expansion of its site at 9015 W. Maple St. in 2021 and is currently constructing a further building expansion, approved by the City of West Allis in 2023. Novonesis is now bringing its plans for a subsequent expansion of its West Allis site to the City of West Allis Plan Commission for site, landscaping, and architectural review.

The plans for the project, pending corporate approval, include construction of a new 2-story, 50,000 sq. ft. expansion building for new production equipment. The site expansion will increase Novonesis' production capacity at the West Allis site by approximately 60%.

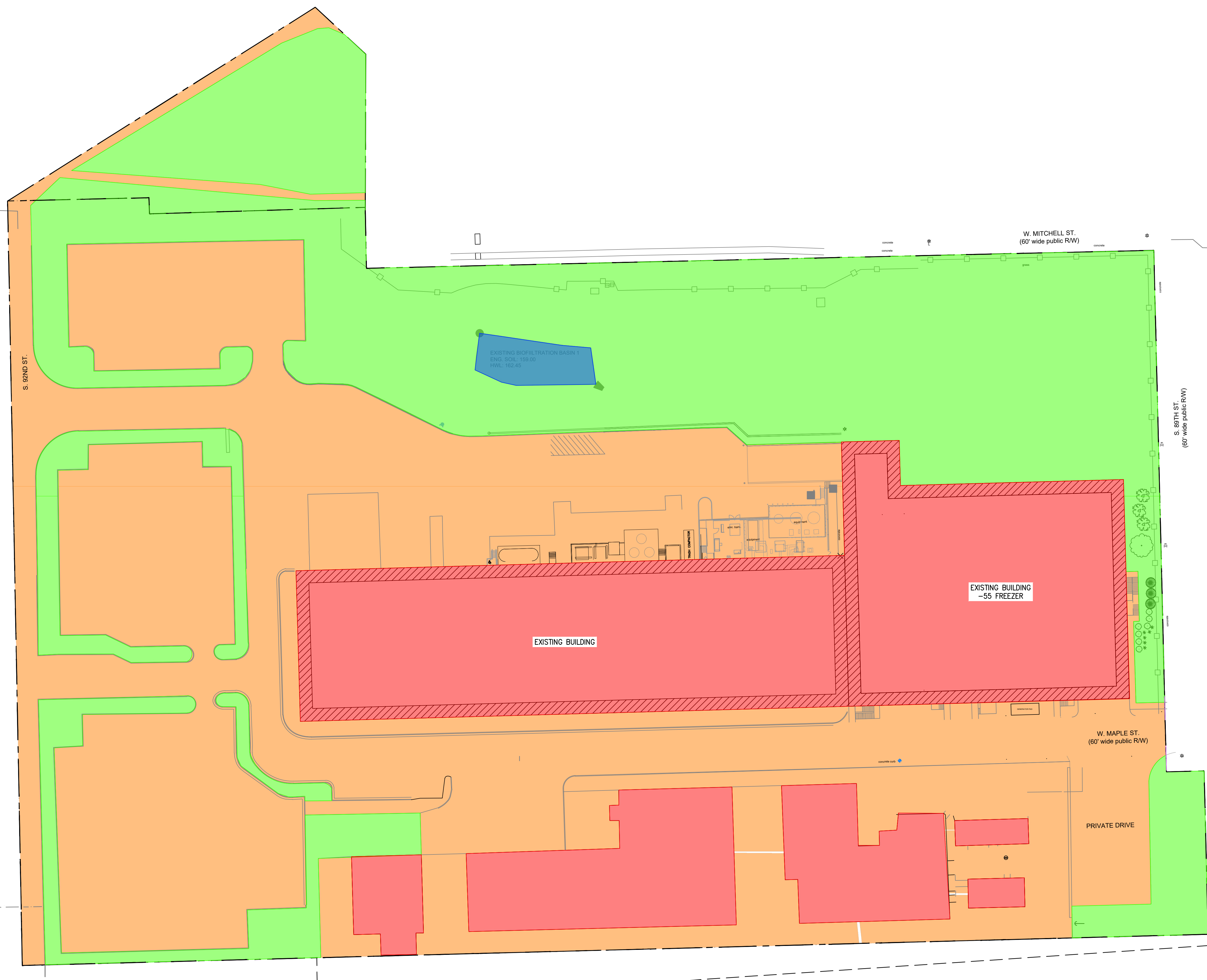
The existing noise barrier on the north side of Novonesis' property will be modified to enclose installations as part of this project. A stormwater detention system installed as part of Novonesis' 55°C Freezer project, currently in construction, was sized for stormwater from this expansion project. Green space north of the site's existing parking lots will be utilized for construction trailers and material staging areas.

Construction will be executed in a single phase beginning at the end of July 2024 with substantial completion in June 2026.

Hours of operation will remain unchanged.

This expansion will further strengthen Novonesis' position as an industry leader in the Americas. The trajectory of the current business and future growth plans leave the company well positioned to invest in further projects at the West Allis site.

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### LEGEND

- RED ROOF AREA
- ORANGE IMPERVIOUS AREA
- GREEN PERVIOUS AREA
- BLUE POND AREA

### EXISTING CONDITIONS

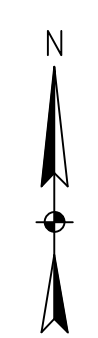
TOTAL AREA =	541,429 SF / 12.43 AC
PERVIOUS AREA =	164,439 SF / 3.78 AC
ROOF AREA =	128,074 SF / 2.94 AC
IMPERVIOUS AREA =	245,849 SF / 5.64 AC
POND AREA =	3,067 SF / 0.07 AC

### PROPOSED CONDITIONS

TOTAL AREA =	541,429 SF / 12.43 AC
PERVIOUS AREA =	127,430 SF / 2.93 AC
ROOF AREA =	154,309 SF / 3.54 AC
IMPERVIOUS AREA =	256,623 SF / 5.89 AC
POND AREA =	3,067 SF / 0.07 AC

### INCREASE/DECREASE

TOTAL AREA =	NO CHANGE
PERVIOUS AREA =	-37,009 SF / 0.85 AC
ROOF AREA =	+10,774 SF / 0.25 AC
IMPERVIOUS AREA =	+26,235 SF / 0.60 AC
POND AREA =	NO CHANGE



SCALE: 1" = 40'-0"

**Mead & Hunt**  
 Mead & Hunt, Inc.  
 6737 West Washington St.,  
 Suite 3500  
 Milwaukee, WI 53214-5648  
 T 800.748.7423  
 meadhunt.com

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**CHR HANSEN**  
**PROJECT THOR**

Chr. Hansen Inc.  
 9015 W. Maple West Allis, WI 53214  
 www.chr-hansen.com



ISSUED

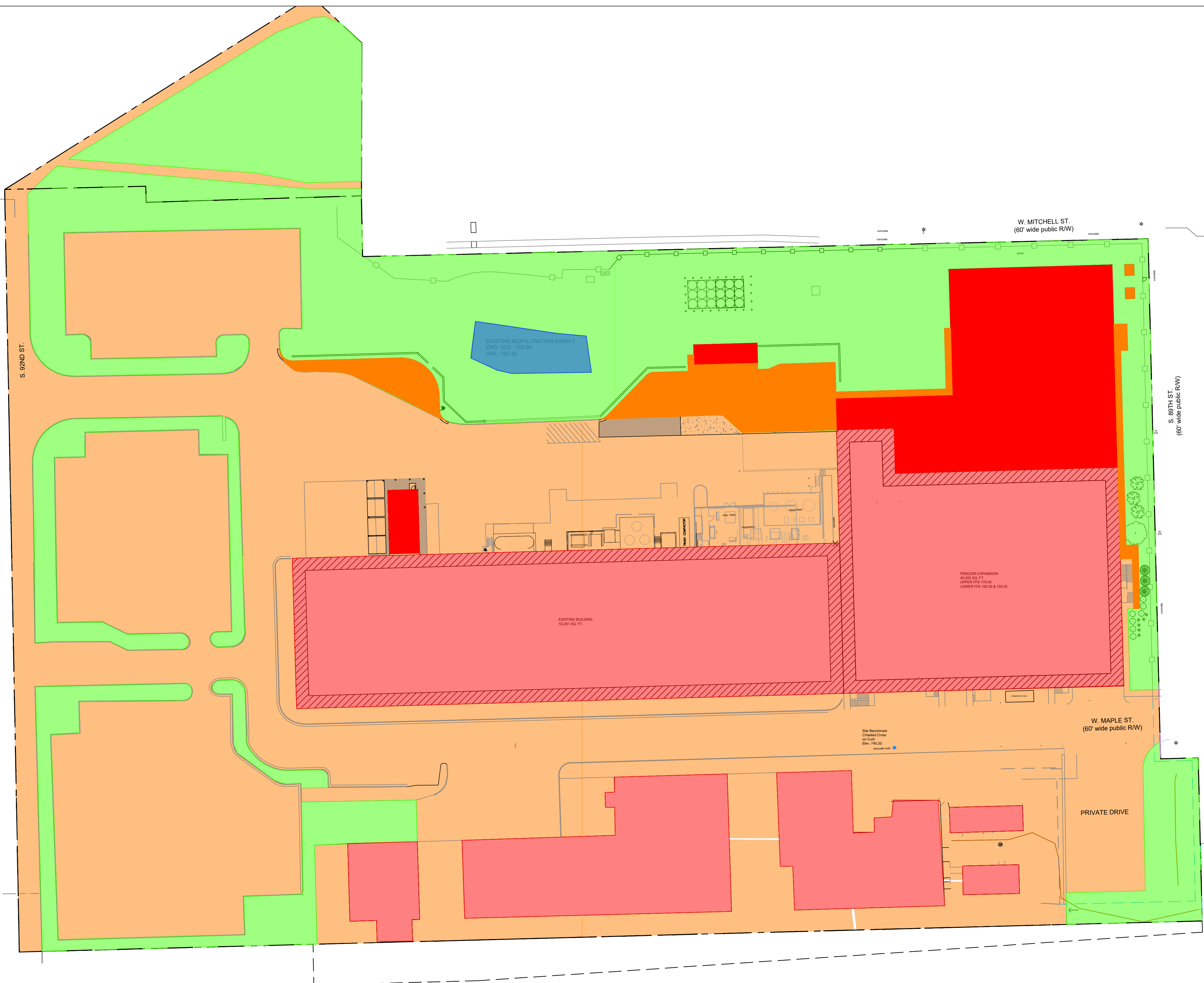
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 DATE: MARCH 2024  
 DESIGNED BY: D. CHAPMAN  
 DRAWN BY: D. CHAPMAN  
 CHECKED BY: A. ANDERSON  
 DO NOT SCALE DRAWINGS

SHEET CONTENTS  
 SITE/CIVIL  
 AREAS EXHIBIT  
 EXISTING

SHEET NO:

# EX-01

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**LEGEND**

- RED ROOF AREA
- ORANGE IMPERVIOUS AREA
- GREEN PERVIOUS AREA
- BLUE POND AREA

**EXISTING CONDITIONS**

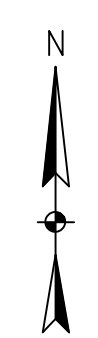
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**CHR HANSEN PROJECT THOR**

Chr. Hansen Inc.  
 9015 W. Maple West Allis, WI 53214  
 www.chr-hansen.com



ISSUED

M&H NO: 4666672-222049.01  
 DATE: MARCH 2024  
 DESIGNED BY: D. CHAPMAN  
 DRAWN BY: D. CHAPMAN  
 CHECKED BY: A. ANDERSON  
DO NOT SCALE DRAWINGS

SHEET CONTENTS  
 SITE/CIVIL  
 AREAS EXHIBIT  
 PROPOSED

SHEET NO:

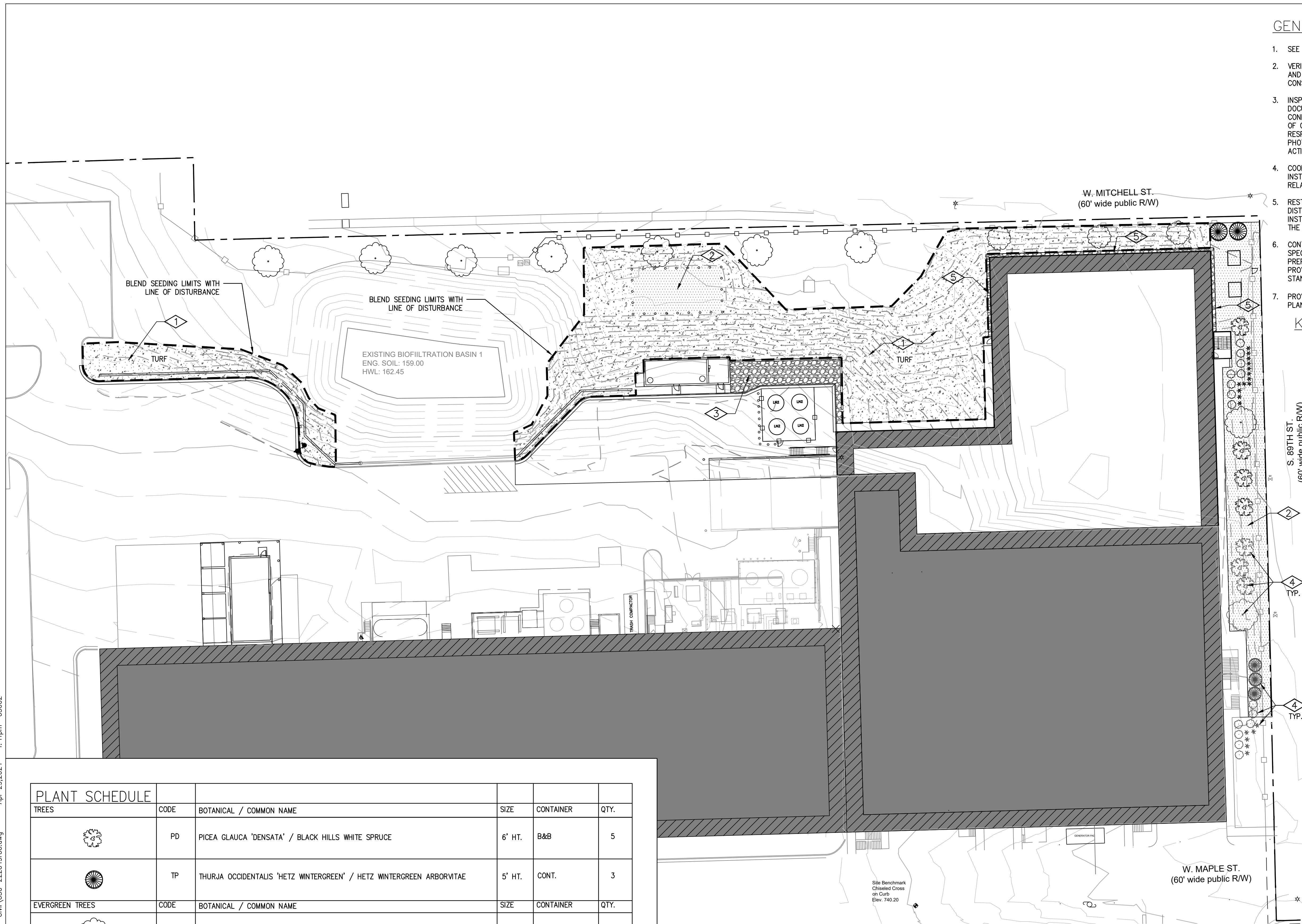
**EX-02**

### GENERAL NOTES:

- SEE DWG L-02 FOR LANDSCAPE DETAILS
- VERIFY EXISTING AND PROPOSED CONDITIONS, UTILITIES, PIPES AND STRUCTURES, ETC. PRIOR TO BIDDING AND CONSTRUCTION.
- INSPECT AND THE SITE PRIOR TO COMMENCING WORK. DOCUMENT IN WRITING AND PHOTOGRAPH EXISTING CONDITIONS WITH, AND IN AREAS ADJACENT TO THE LIMITS OF CONSTRUCTIONS. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES NOT DOCUMENTED IN THE PHOTOGRAPHS PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES.
- COORDINATE THE INSTALLATION OF PLANT MATERIAL WITH INSTALLATION OF ADJACENT PAVEMENTS, DRAINAGE, CURB RELATED STRUCTURES WITH OTHER TRADES.
- RESTORE AREA F THE SITE, OR A ADJACENT AREA, WHERE DISTURBED, DAMAGE CAUSED DURING LANDSCAPE INSTALLATION TO EXISTING CONDITIONS AND IMPROVEMENTS IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- CONTRACTOR SHALL THOROUGHLY REVIEW ALL SPECIFICATIONS RELATED TO TREE PROTECTION, SOIL PREPARATION, TURF, GRASSES AND PLANTS. THESE SECTIONS PROVIDE ADDITIONAL INFORMATION ON MATERIALS AND SET STANDARDS FOR QUALITY AND INSTALLATION REQUIREMENTS.
- PROVIDE 3" DOUBLE SHREDDED PARK MULCH FOR ALL PLANTED TREES, SHRUBS AND LANDSCAPE BEDS.

### KEYED NOTES:

- ◆ TURFGRASS SEED
- ◆ HARDWOOD BARK MULCH
- ◆ STONE MULCH
- ◆ PROTECT EXISTING PLANTING. REPLACE IF REMOVED OR DAMAGED DURING CONSTRUCTION
- ◆ INSTALL 2-FOOT STONE MULCH BUFFER AROUND EXTERIOR WALLS



### PLANT SCHEDULE

TREES	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY.
	PD	PICEA GLAUCA 'DENSATA' / BLACK HILLS WHITE SPRUCE	6' HT.	B&B	5
	TP	THURJA OCCIDENTALIS 'HETZ WINTERGREEN' / HETZ WINTERGREEN ARBORVITAE	5' HT.	CONT.	3
EVERGREEN TREES	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY.
	PA	PICEA ABIES / NORWAY SPRUCE	6' HT.	CONT.	13
DECIDUOUS SHRUBS	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY.
	AL	ARONIA MELANOCARPA 'UCONNAM165' / LOW SCRAPE MOUND® BLACK CHOCKBERRY	3 GAL.	CONT.	3
ORNAMENTAL GRASSES	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY.
*	PN2	PANICUM VIRGATUM 'NORTHWIND' / NORTHWIND SWITCH GRASS	1 GAL.	CONT.	3

## CHR HANSEN PROJECT THOR

Chr. Hansen Inc.  
9015 W. Maple West Allis, WI 53214  
www.chr-hansen.com



- ISSUED
- 02/16/24 PERMIT ISSUE
  - 04/30/24 PERMIT ISSUE REV.1

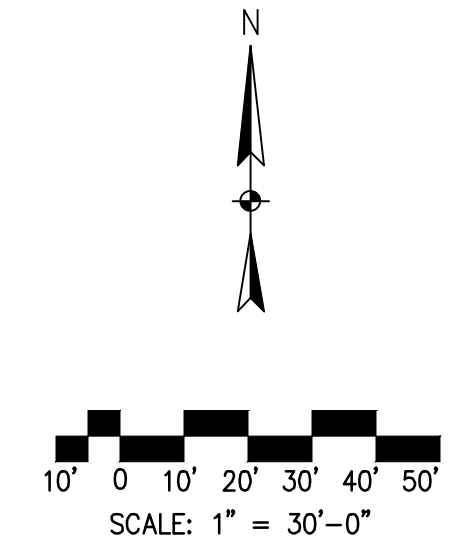
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DATE: MARCH 2024  
DESIGNED BY: D. CHAPMAN  
DRAWN BY: D. CHAPMAN  
CHECKED BY: A. ANDERSON  
DO NOT SCALE DRAWINGS

SHEET CONTENTS  
LANDSCAPE PLAN  
OVERALL

SHEET NO.:

# L-01

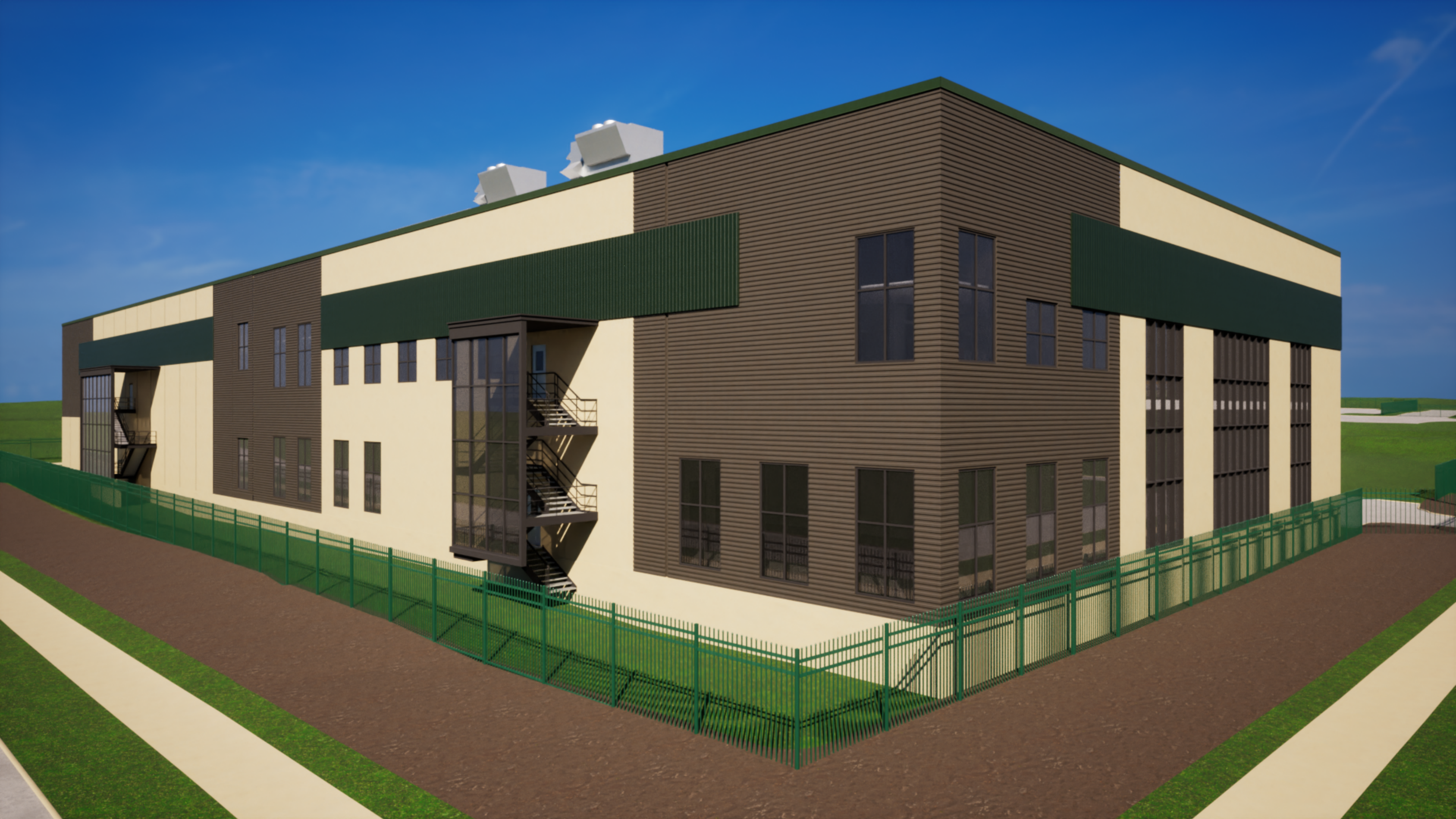
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# novonesis

CHR. HANSEN, PART OF NOVONESIS GROUP,  
INVITES YOU TO JOIN US FOR AN

# Open House

THURSDAY, APRIL 25TH

5:00pm - 6:30pm

9015 W. Maple St | Milwaukee, WI 53214

Come and ask questions about our expansion project(s),  
our recent merger with Novozymes to create Novonesis  
and how we are contributing to the growth of West Allis.

*We hope to see you there!*

*Please RSVP to Anna Stuckart at*

**ANSTU@NOVONESIS.COM**

Food samples with our products will be served along with refreshments

# PROJECT THOR

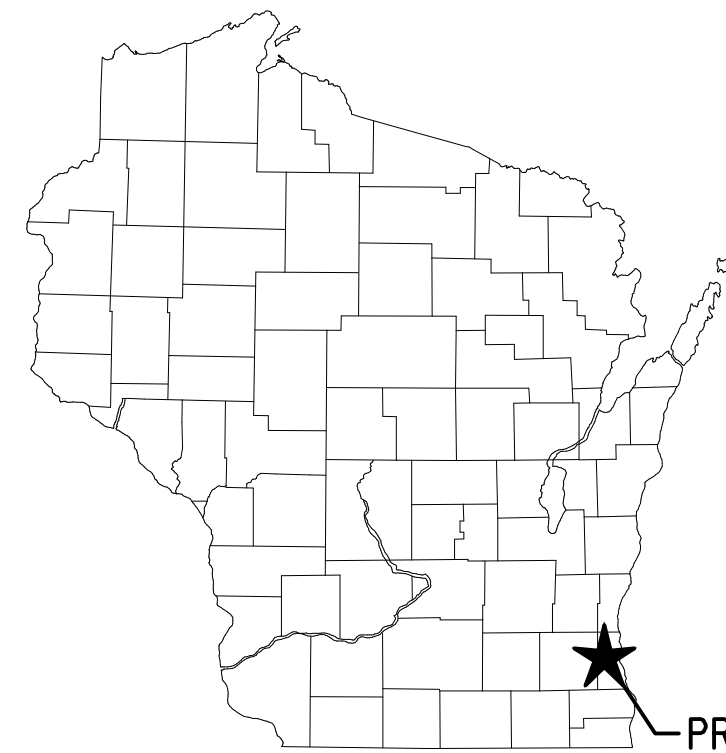
FOR

## CHR HANSEN

# WEST ALLIS, WISCONSIN

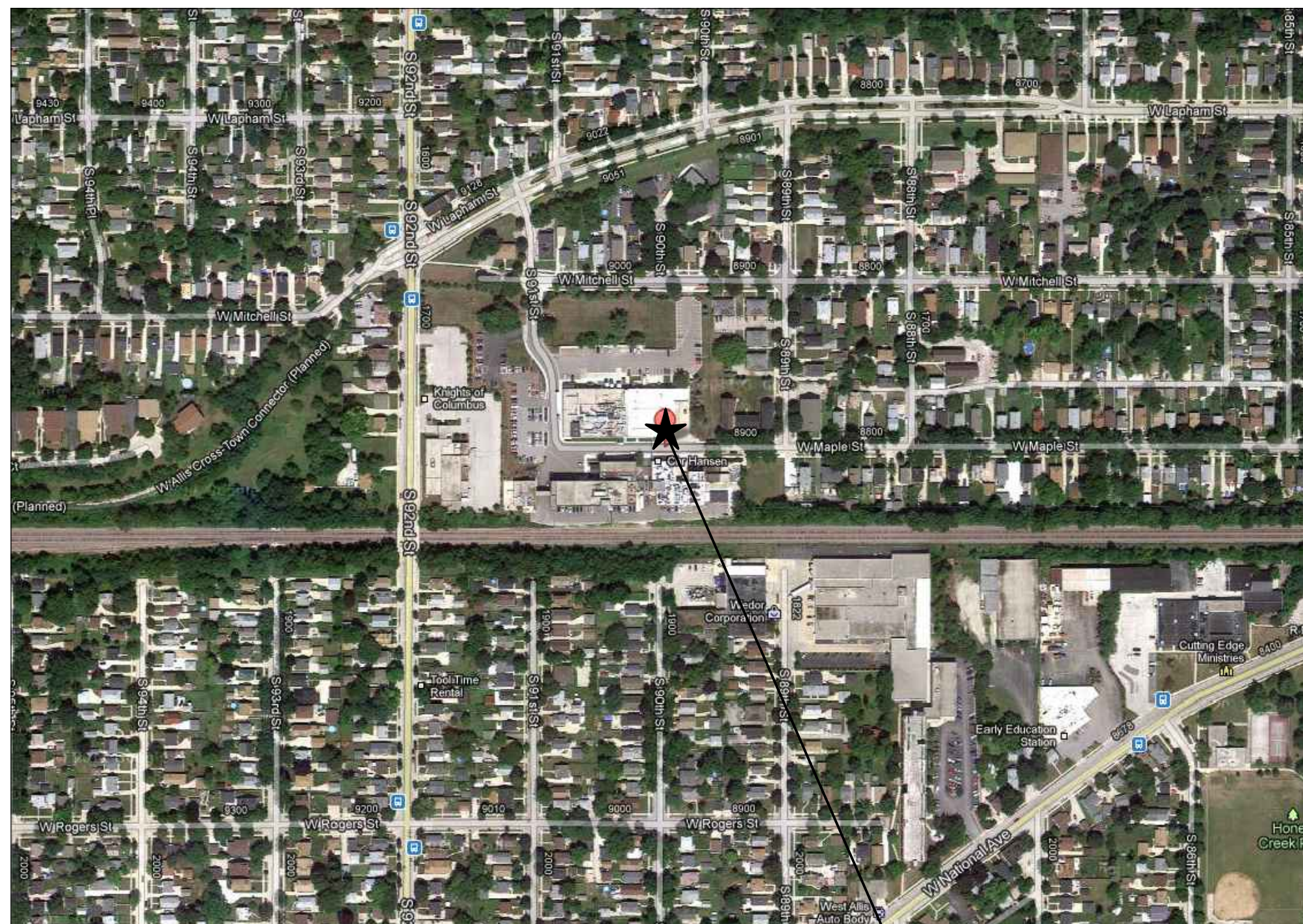
## CHR HANSEN PROJECT # MKE-037

PROJECT LOCATION



PROJECT LOCATION

VICINITY MAP



LOCATION MAP

PROJECT LOCATION

DRAWINGS PREPARED BY



6737 West Washington Street, Suite 3500  
Milwaukee, WI 53214-5648  
T 800.748.7423 | meadhunt.com

PROJECT ADDRESS

CHR. HANSEN  
9015 W. MAPLE  
WEST ALLIS, WI 53214

SITE PARKING INFORMATION

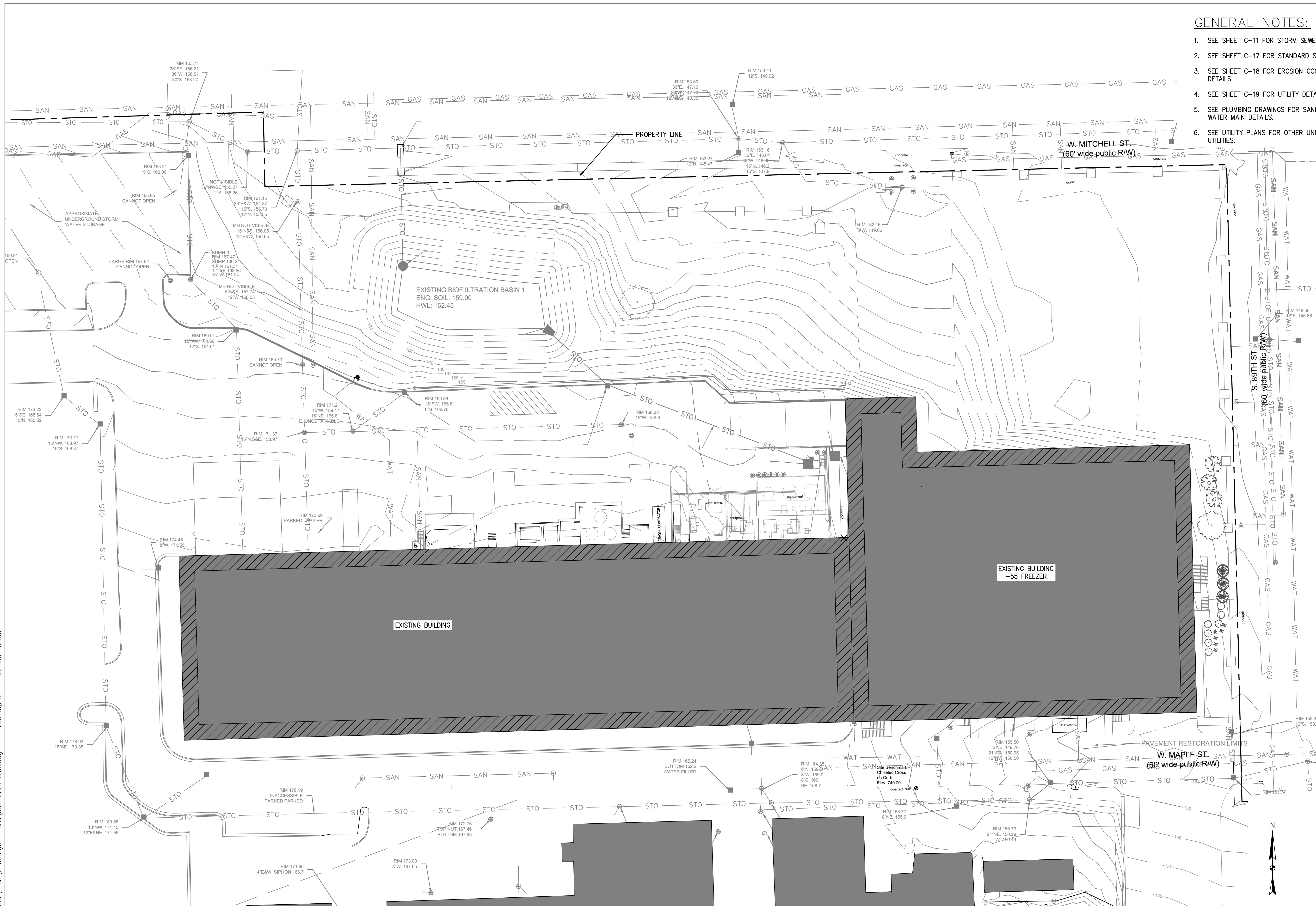
BUILDING AREAS PER FREEZER ADDITION DRAWINGS:			PARKING @ 1/1500 S.F.	
ADMIN BUILDING	46,255 S.F.	31	-	
COLOR BUILDING	23,128 S.F.	0		STORAGE OCCUPANCY
MAINTENANCE BUILDING	7,121 S.F.	0		STORAGE OCCUPANCY
1976 CULTURE BUILDING	32,094 S.F.	22	-	
2003 EAST ADDITION	27,680 S.F.	19	-	
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2024 THOR ADDITION	50,204 S.F.	34	-	
2024 BULK CHEMICAL BUILDING	608 S.F.	0		STORAGE OCCUPANCY
2024 BLOWER ADDITION	1,274 S.F.	0		STORAGE OCCUPANCY
TOTAL PARKING REQUIRED:			122	

DRAWINGS COVERED UNDER THIS SEAL: CIVIL/SITWORK	DRAWINGS COVERED UNDER THIS SEAL: ARCHITECTURAL	DRAWINGS COVERED UNDER THIS SEAL: STRUCTURAL	DRAWINGS COVERED UNDER THIS SEAL: STRUCTURAL	DRAWINGS COVERED UNDER THIS SEAL: HVAC	DRAWINGS COVERED UNDER THIS SEAL: PLUMBING	DRAWINGS COVERED UNDER THIS SEAL: BUILDING ELECTRICAL

PERMIT ISSUE  
MARCH 2024

### GENERAL NOTES:

1. SEE SHEET C-11 FOR STORM SEWER SECTIONS.
2. SEE SHEET C-17 FOR STANDARD SITE DETAILS.
3. SEE SHEET C-18 FOR EROSION CONTROL DETAILS
4. SEE SHEET C-19 FOR UTILITY DETAILS
5. SEE PLUMBING DRAWINGS FOR SANITARY AND WATER MAIN DETAILS.
6. SEE UTILITY PLANS FOR OTHER UNDERGROUND UTILITIES.



Feb 16, 2024 - 9:27am 03002

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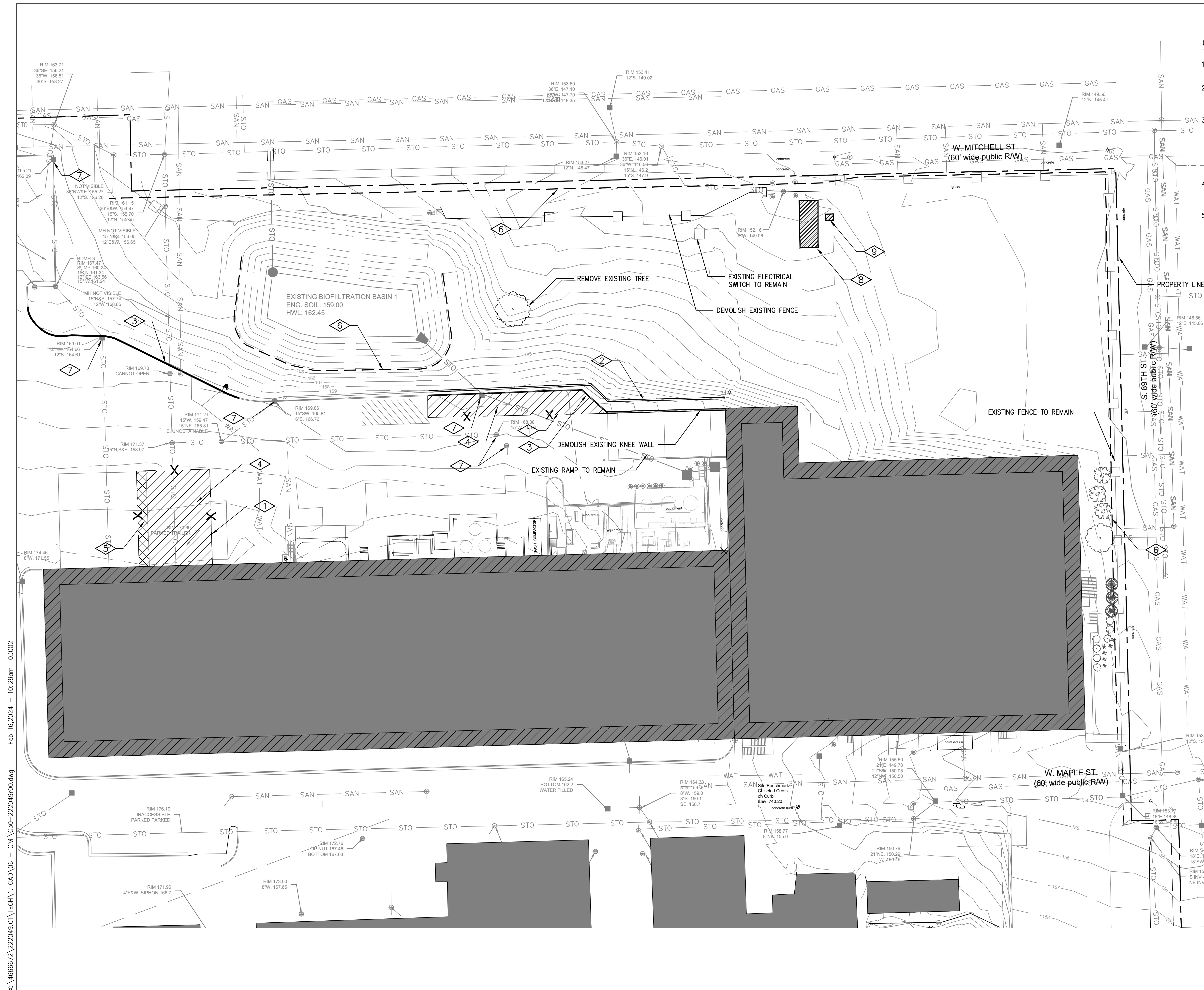
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**GENERAL NOTES:**

- SEE DWG C-17 FOR STANDARD SITE DETAILS AND DWG C-18 FOR EROSION CONTROL DETAILS.
- ALL WORK SHALL CONFORM WITH CHR HANSEN SPECIFICATIONS, STANDARDS AND GOOD MANUFACTURING PRACTICES (GMP'S).
- CONTROLLING SEDIMENT TRANSPORT AND PREVENTING AND/OR CORRECTING PROBLEMS ASSOCIATED WITH THE EROSION AND RUNOFF PROCESSES WHICH COULD OCCUR BOTH DURING AND AFTER PROJECT CONSTRUCTION WILL BE CLOSELY MONITORED. PERIODIC MAINTENANCE AND INSPECTION OF SEDIMENT CONTROL DEVICES WILL BE SCHEDULED.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT PIT LOCATIONS WITH THE ENGINEER AND OWNER.
- EXCAVATION AND EMBANKMENT OPERATIONS SHALL PROCEED IN SUCH A MANNER SO THAT FINISHING OF SLOPES, INCLUDING REVEGETATION, SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER ROUGH GRADING. ALL SLOPES 2:1 OR FLATTER SHALL BE SCARIFIED WITH HEAVY EQUIPMENT, LEAVING TRACKS PERPENDICULAR TO THE SLOPE. THE TOPS OF ALL CUT SLOPES IN SOIL SHALL BE ROUNDED FOR A HORIZONTAL DISTANCE OF THREE FEET BEYOND THE CATCH POINT. SLOPE ROUNDING SHALL OCCUR AS THE SLOPE IS BEING BROUGHT DOWN. THE OVERALL SHAPE, HEIGHT AND GRADE OF ANY CUT AND/OR FILL SLOPE SHALL BE DEVELOPED IN CONCERT WITH THE EXISTING NATURAL CONTOURS, SCALE AND VEGETATION OF NATURAL TERRAIN.

**KEYED NOTES:**

- ① SAWCUT EXISTING PAVEMENT
- ② REMOVE EXISTING SOUND WALL
- ③ REMOVE EXISTING CURB AND GUTTER
- ④ REMOVE EXISTING ASPHALT PAVEMENT
- ⑤ REMOVE EXISTING CONCRETE PAVEMENT
- ⑥ INSTALL SILT FENCE PER @2100
- ⑦ INSTALL STORM INLET PROTECTION PER @2150
- ⑧ INSTALL CONSTRUCTION ENTRANCE PER @2160
- ⑨ INSTALL CONCRETE WASHOUT PIT PER @2170

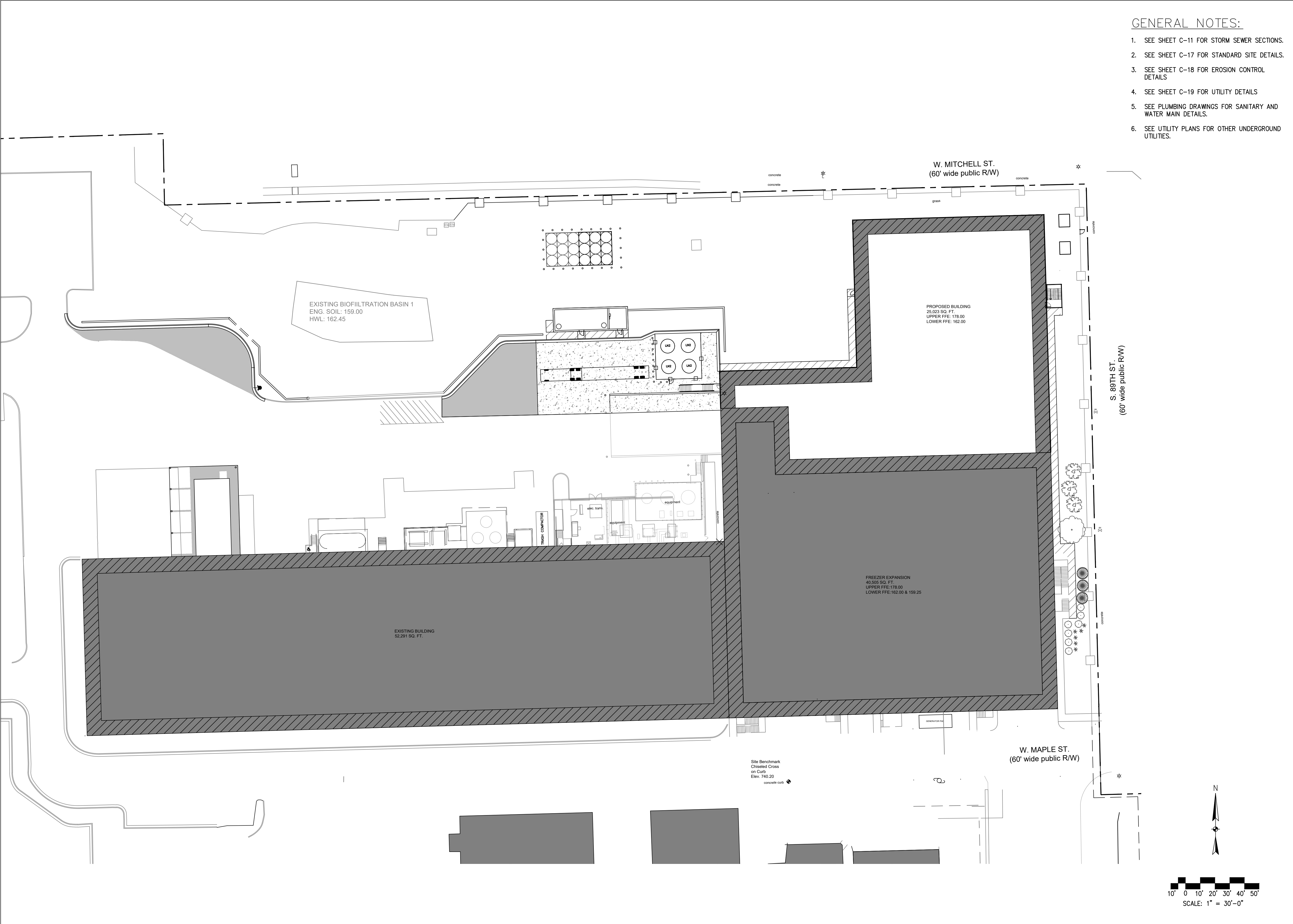


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GENERAL NOTES:

1. SEE SHEET C-11 FOR STORM SEWER SECTIONS.
2. SEE SHEET C-17 FOR STANDARD SITE DETAILS.
3. SEE SHEET C-18 FOR EROSION CONTROL DETAILS
4. SEE SHEET C-19 FOR UTILITY DETAILS
5. SEE PLUMBING DRAWINGS FOR SANITARY AND WATER MAIN DETAILS.
6. SEE UTILITY PLANS FOR OTHER UNDERGROUND UTILITIES.

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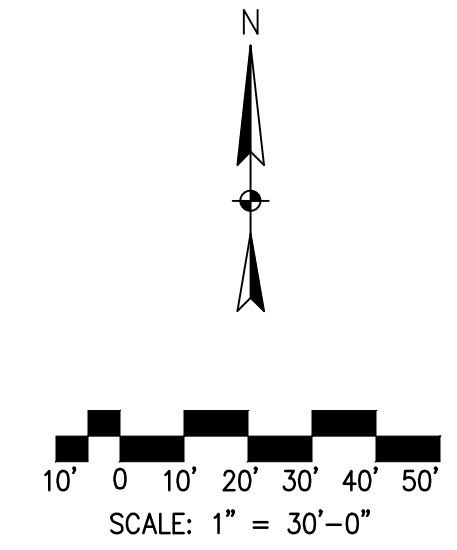
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SHEET CONTENTS  
 SITE/CIVIL  
 SITE PLAN  
 OVERALL

SHEET NO.:

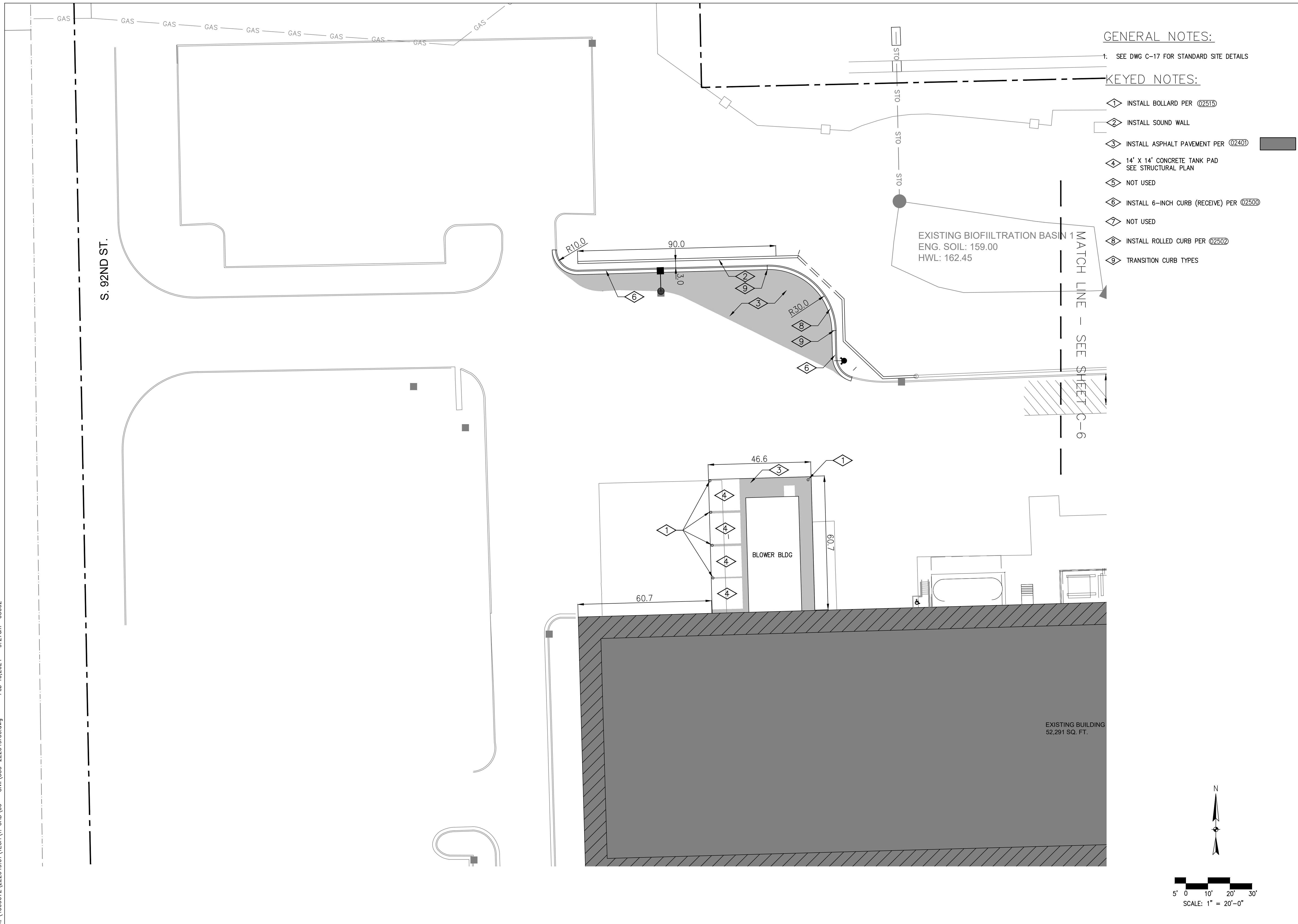
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**GENERAL NOTES:**

1. SEE DWG C-17 FOR STANDARD SITE DETAILS

**KEYED NOTES:**

- 1. INSTALL BOLLARD PER 02515
- 2. INSTALL SOUND WALL
- 3. INSTALL ASPHALT PAVEMENT PER 02401
- 4. 14' X 14' CONCRETE TANK PAD SEE STRUCTURAL PLAN
- 5. NOT USED
- 6. INSTALL 6-INCH CURB (RECEIVE) PER 02500
- 7. NOT USED
- 8. INSTALL ROLLED CURB PER 02502
- 9. TRANSITION CURB TYPES



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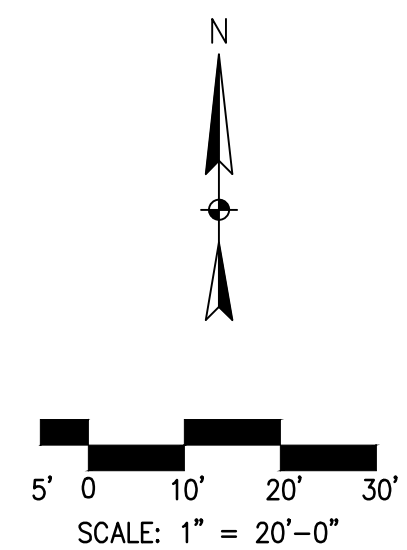
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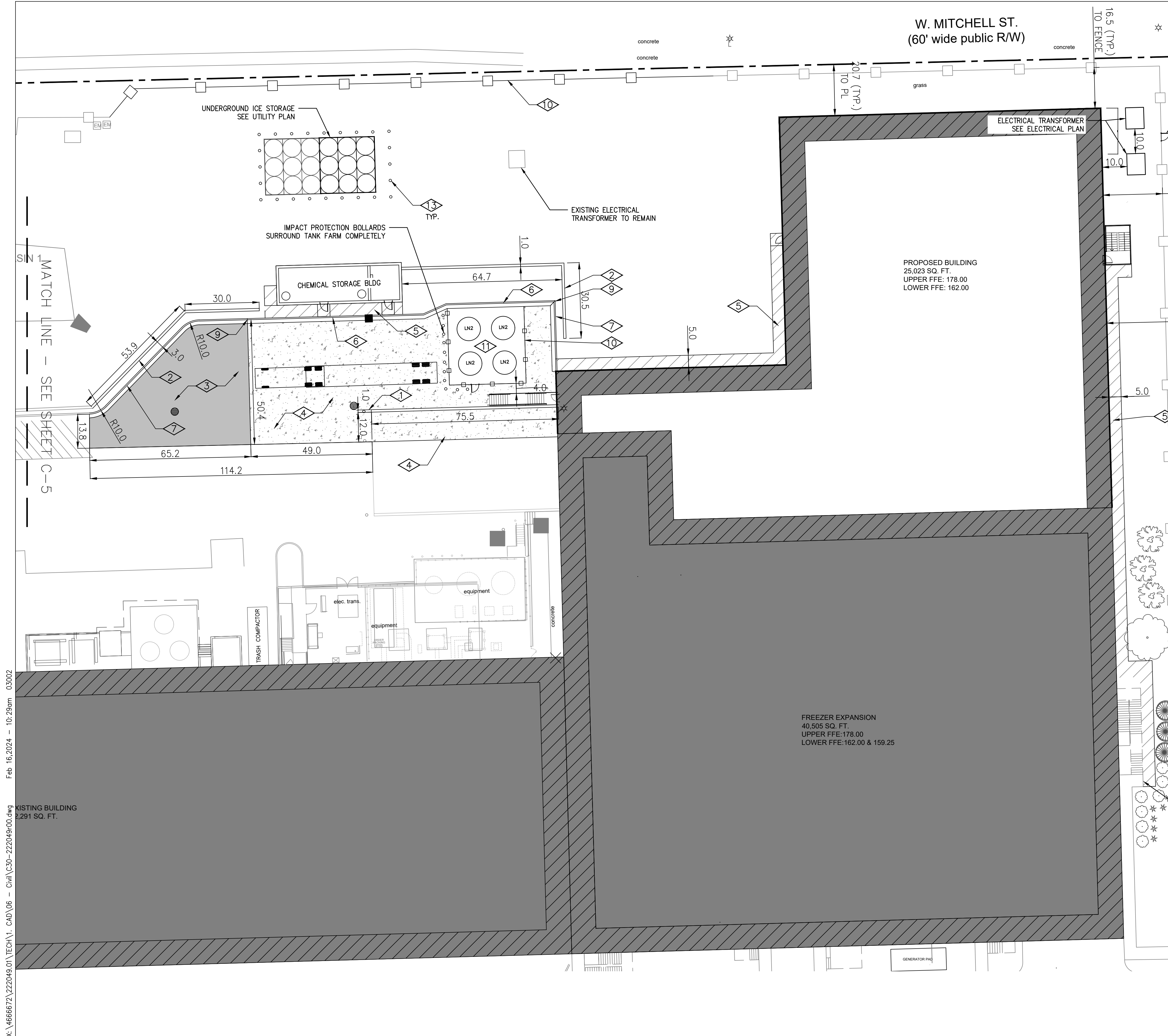
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SHEET CONTENTS  
SITE/CIVIL  
SITE PLAN  
WEST

SHEET NO:

**C-05**





W. MITCHELL ST.  
(60' wide public R/W)

**GENERAL NOTES:**

1. SEE DWG C-17 FOR STANDARD SITE DETAILS

**KEYED NOTES:**

- 1 INSTALL BOLLARD PER 02515
- 2 INSTALL SOUND WALL SEE DETAIL SHEET C-12
- 3 INSTALL ASPHALT PAVEMENT PER 02401
- 4 INSTALL CONCRETE PAVEMENT PER 02402
- 5 INSTALL CONCRETE SIDEWALK PER 02403
- 6 INSTALL 6-INCH CURB (RECEIVE) PER 02500
- 7 INSTALL 6-INCH CURB (REJECT) PER 02501
- 8 NOT USED
- 9 TRANSITION CURB TYPES
- 10 INSTALL FENCE AND GATE PER 03000
- 11 31' X 31' CONCRETE TANK PAD SEE STRUCTURAL PLAN
- 12 INSTALL GATE IN EXISTING FENCE PER 03000
- 13 INSTALL BOLLARD WITH CHAIN PER 02515



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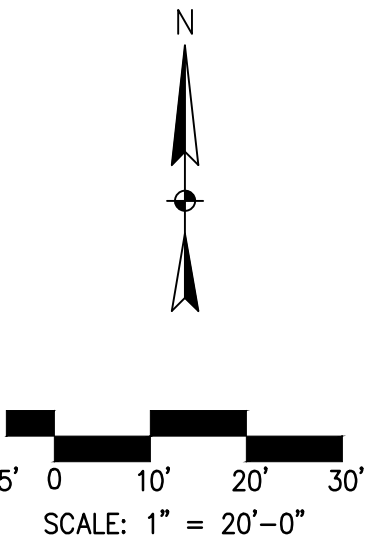
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SHEET CONTENTS  
SITE/CIVIL  
SITE PLAN  
EAST

SHEET NO:

**C-06**



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EXISTING BUILDING  
2,291 SQ. FT.

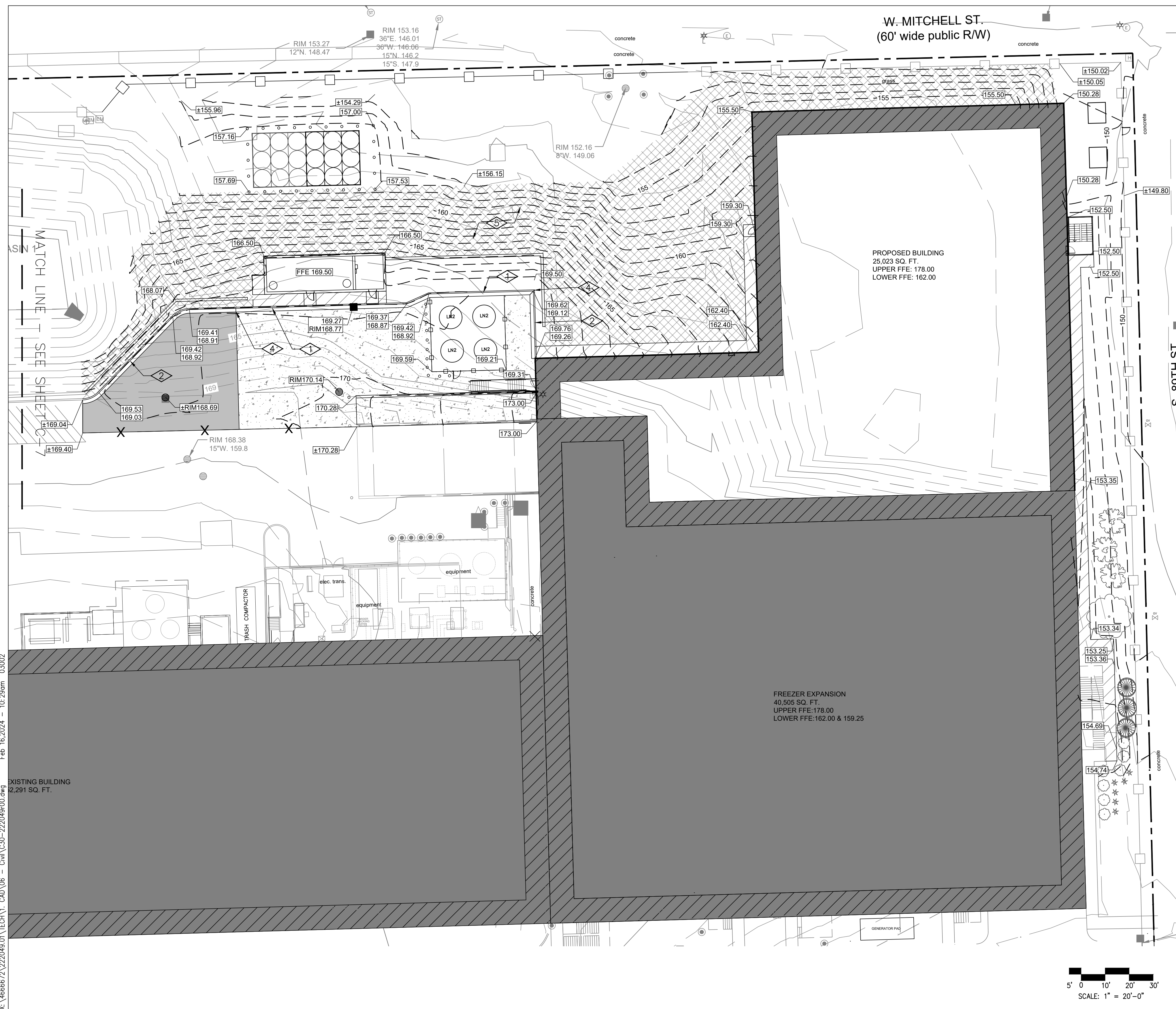
FREEZER EXPANSION  
40,505 SQ. FT.  
UPPER FFE: 178.00  
LOWER FFE: 162.00 & 159.25

PROPOSED BUILDING  
25,023 SQ. FT.  
UPPER FFE: 178.00  
LOWER FFE: 162.00

S. 89TH ST.  
(60' wide public R/W)

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**KEYED NOTES:**

- ① INSTALL 6-INCH CURB (RECEIVE) PER @2500
- ② INSTALL 6-INCH CURB (REJECT) PER @2500
- ③ NOTE USED
- ④ TRANSITION CURB TYPES
- ⑤ INSTALL EROSION CONTROL MATTING PER @2155

**GENERAL NOTES:**

1. ALL WORK SHALL CONFORM WITH CHR HANSEN SPECIFICATIONS, STANDARDS AND GOOD MANUFACTURING PRACTICES (GMP'S).
2. ALL WORK SHALL CONFORM TO OSHA, FEDERAL, STATE AND LOCAL CODES.
3. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO DETERMINE THE EXTENT OF THE WORK TO BE PERFORMED.
4. THE CONTRACTOR SHALL ESTABLISH HIS OWN CONTROL AND BENCH MARKS BASED ON THE CONTROL GIVEN. THOSE MONUMENTS SHALL BE PROTECTED FROM DISTURBANCE THROUGHOUT THE DURATION OF CONSTRUCTION AND IF DISPLACED IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE THEM AT HIS COST.
5. A GRADING AND DRAINAGE PLAN SHALL BE ON THE JOBSITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
6. ALL FILLS SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY PER ASTM D-1557.
7. THE CONTRACTOR SHALL VERIFY THAT NO EXISTING UNDERGROUND UTILITIES EXIST IN THE CONSTRUCTION AREA & ROAD RIGHT-OF-WAY PRIOR TO STARTING CONSTRUCTION ACTIVITIES.
8. EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES PER THE CITY OF WEST ALLIS AND THE STATE OF WISCONSIN SHALL BE INSTALLED PRIOR TO AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
9. CONTRACTOR SHALL RETAIN AND PROTECT EXISTING CURB & GUTTER AND ASPHALT PARKING LOT AS SHOWN ON DEMOLITION PLAN. IF CONTRACTOR DAMAGES EXISTING FACILITIES, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SAWCUT CURB & GUTTER AND/OR ASPHALT BEYOND DAMAGED AREA AND DISPOSE OF PROPERLY. CONTRACTOR SHALL THEN INSTALL NEW CURB & GUTTER AND OR ASPHALT TO MATCH EXISTING GRADES, MAINTAINING THE EXISTING STRUCTURAL SECTION. THIS WORK SHALL BE COMPLETED AT NO ADDITIONAL COST TO THE OWNER, AND MUST BE COMPLETED AS PART OF FINAL PUNCHLIST.
10. CONTRACTOR SHALL VERIFY LAYOUT INFORMATION SHOWN ON THE DRAWINGS, IN RELATION TO THE PROPERTY SURVEY AND EXISTING BENCHMARKS, BEFORE PROCEEDING TO LAYOUT THE WORK. CONTRACTOR SHALL LOCATE AND PROTECT EXISTING BENCHMARKS AND CONTROL POINTS. ALL PERMANENT REFERENCE POINTS SHALL BE PROTECTED DURING CONSTRUCTION.
11. CONTRACTOR SHALL PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST CUTTING, BREAKING OR SKINNING OF ROOTS, OR SKINNING OR BRUISING OF BARK. CONTRACTOR TO LIMIT CONSTRUCTION TO BEYOND THE DRIPLINE OF PROTECTED TREES.
12. CLEARING AND GRUBBING SHALL NOT BEGIN UNTIL SILT FENCES AND DANDY BAGS IN THE SEDIMENTATION CONTROL PLAN ARE IN PLACE.
13. ALL CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO PLANS AND SPECIFICATIONS FOR THIS JOB.
14. DITCHES SHALL HAVE A MINIMUM 0.5% SLOPE IN THE DRAINAGE DIRECTION IF NOT INDICATED ON THE PLAN.
15. WHERE POSSIBLE, NATURAL VEGETATION SHALL BE MAINTAINED FOR SILT CONTROL BEYOND THE FENCE LINE.
16. EXCAVATING CONTRACTOR SHALL GIVE LOCATION FOR WASTING EXCESS EXCAVATION AND A LETTER FROM OWNER GIVING PERMISSION FOR DUMPING PRIOR TO STARTING ON-SITE CONSTRUCTION.
17. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND OF INGRESS AND EGRESS TO CONSTRUCTION SITE.
18. IN SOME AREAS OF THE SITE THERE MAY BE SOIL TYPES NOT SUITABLE FOR STRUCTURAL FILL. AT THE DIRECTION OF THE ENGINEER, THE FILL SHALL BE REMOVED AND STOCKPILED FOR USE AS NON-STRUCTURAL FILL.
19. ALL STRIP MATERIAL AND SOIL NOT SUITABLE AS FILL MATERIAL SHALL BE REMOVED AND DISPOSED AT THE CONTRACTOR'S EXPENSE.
20. SATISFACTORY FILL MATERIALS SHALL BE PER WDOT 305.
21. REFER TO "GEOTECHNICAL REPORT" BY CGC, INC. DATED MAY, 24 2023.

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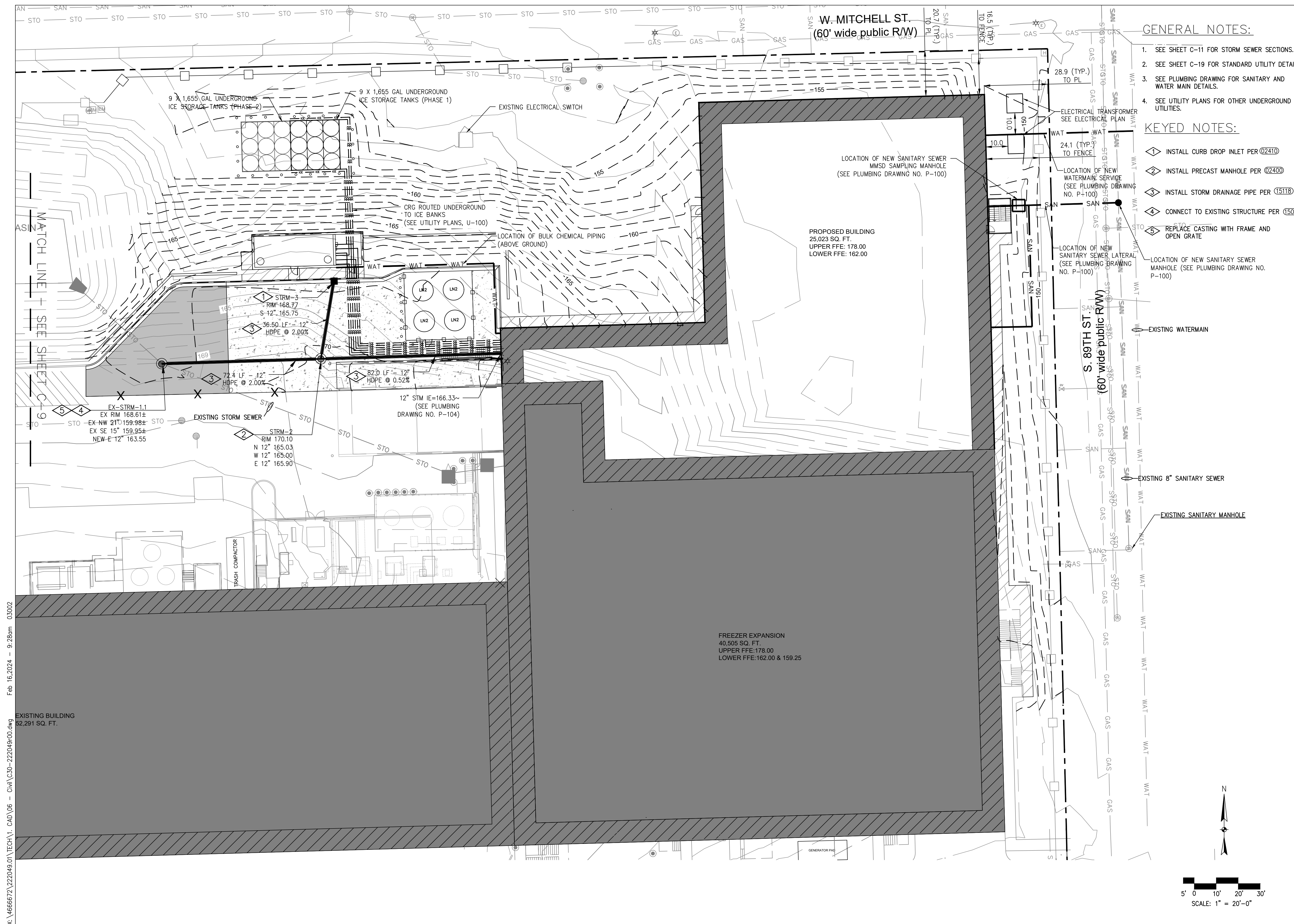
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SHEET CONTENTS  
SITE/CIVIL  
GRADING PLAN  
EAST

SHEET NO:

**C-08**





**GENERAL NOTES:**

1. SEE SHEET C-11 FOR STORM SEWER SECTIONS.
2. SEE SHEET C-19 FOR STANDARD UTILITY DETAILS.
3. SEE PLUMBING DRAWING FOR SANITARY AND WATER MAIN DETAILS.
4. SEE UTILITY PLANS FOR OTHER UNDERGROUND UTILITIES.

**KEYED NOTES:**

1. INSTALL CURB DROP INLET PER (02410)
2. INSTALL PRECAST MANHOLE PER (02400)
3. INSTALL STORM DRAINAGE PIPE PER (15118)
4. CONNECT TO EXISTING STRUCTURE PER (15054)
5. REPLACE CASTING WITH FRAME AND OPEN GRATE

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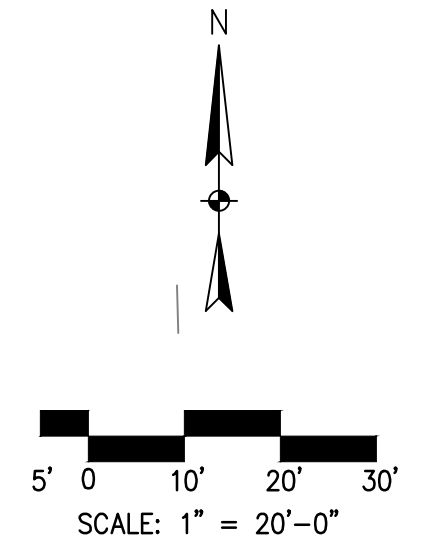
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SHEET CONTENTS  
SITE/CIVIL  
UTILITY PLAN  
EAST

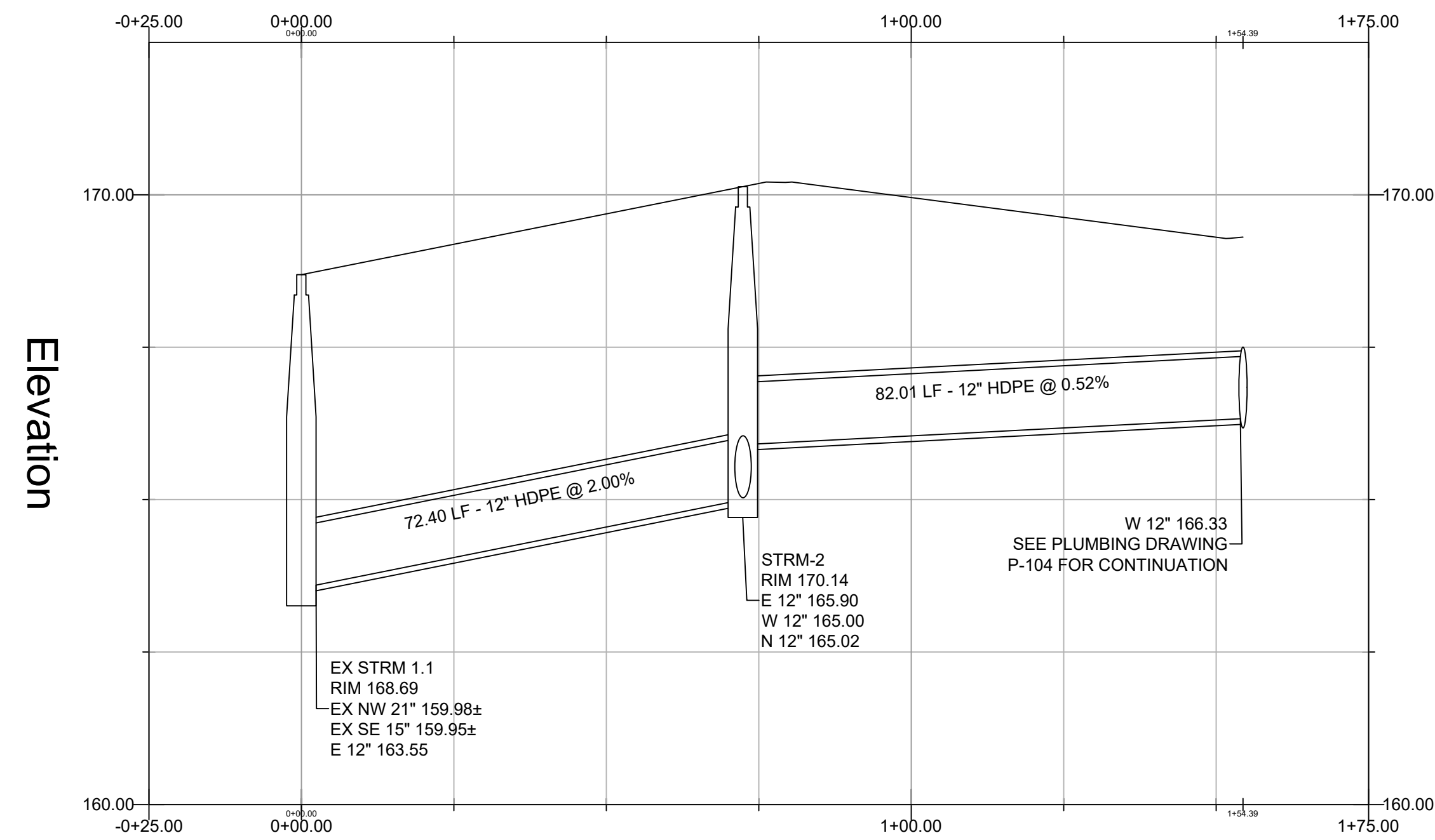
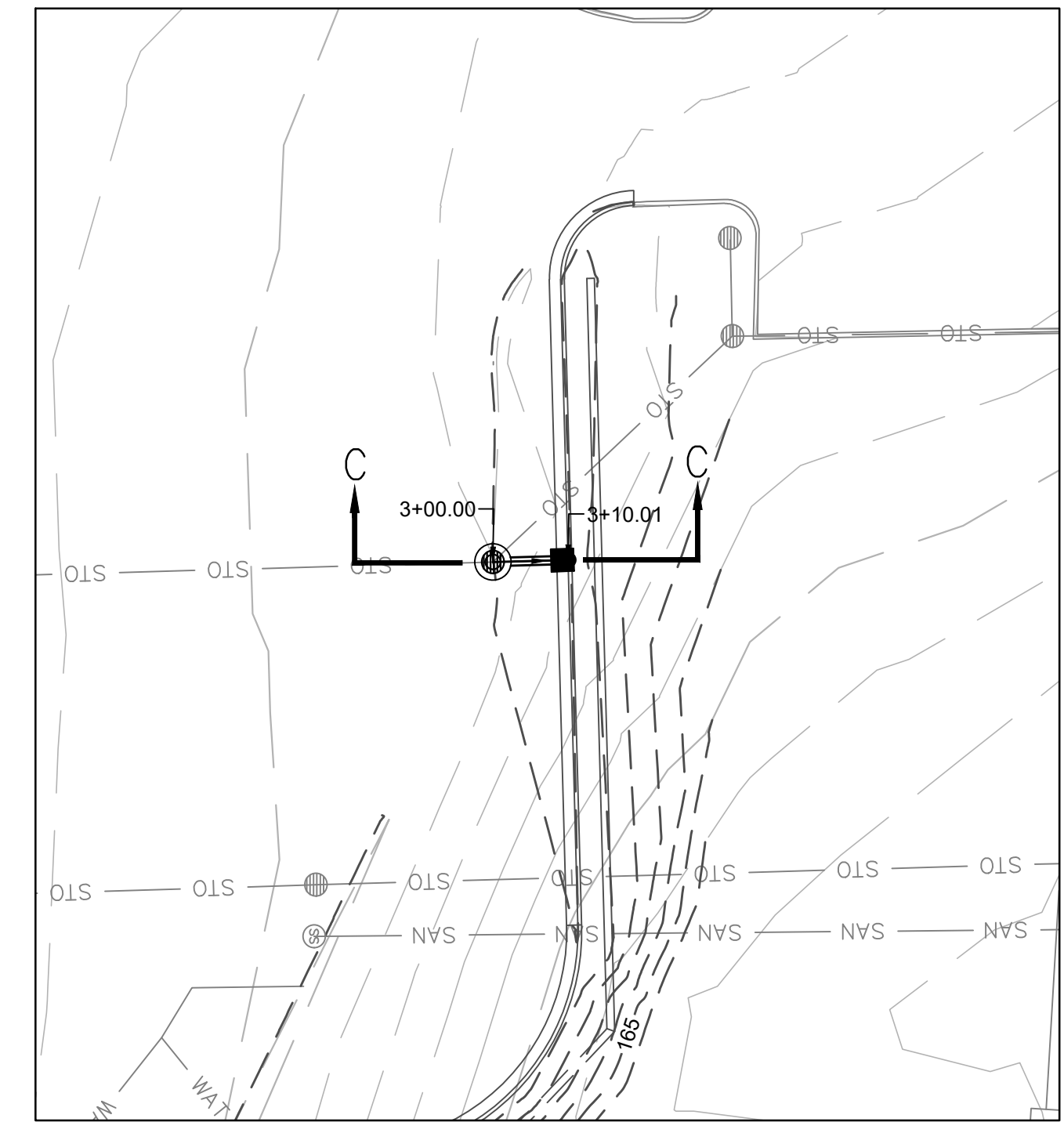
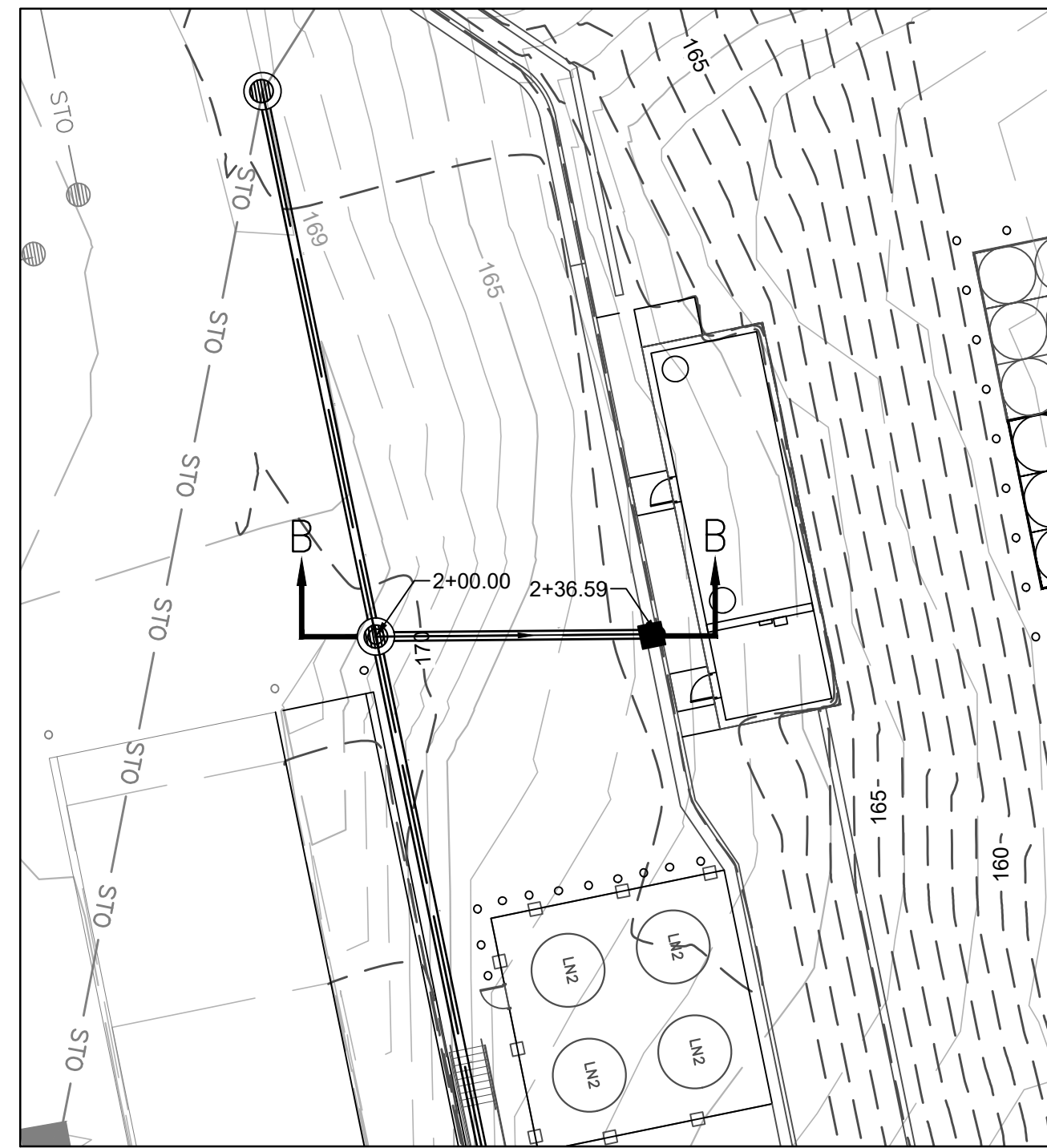
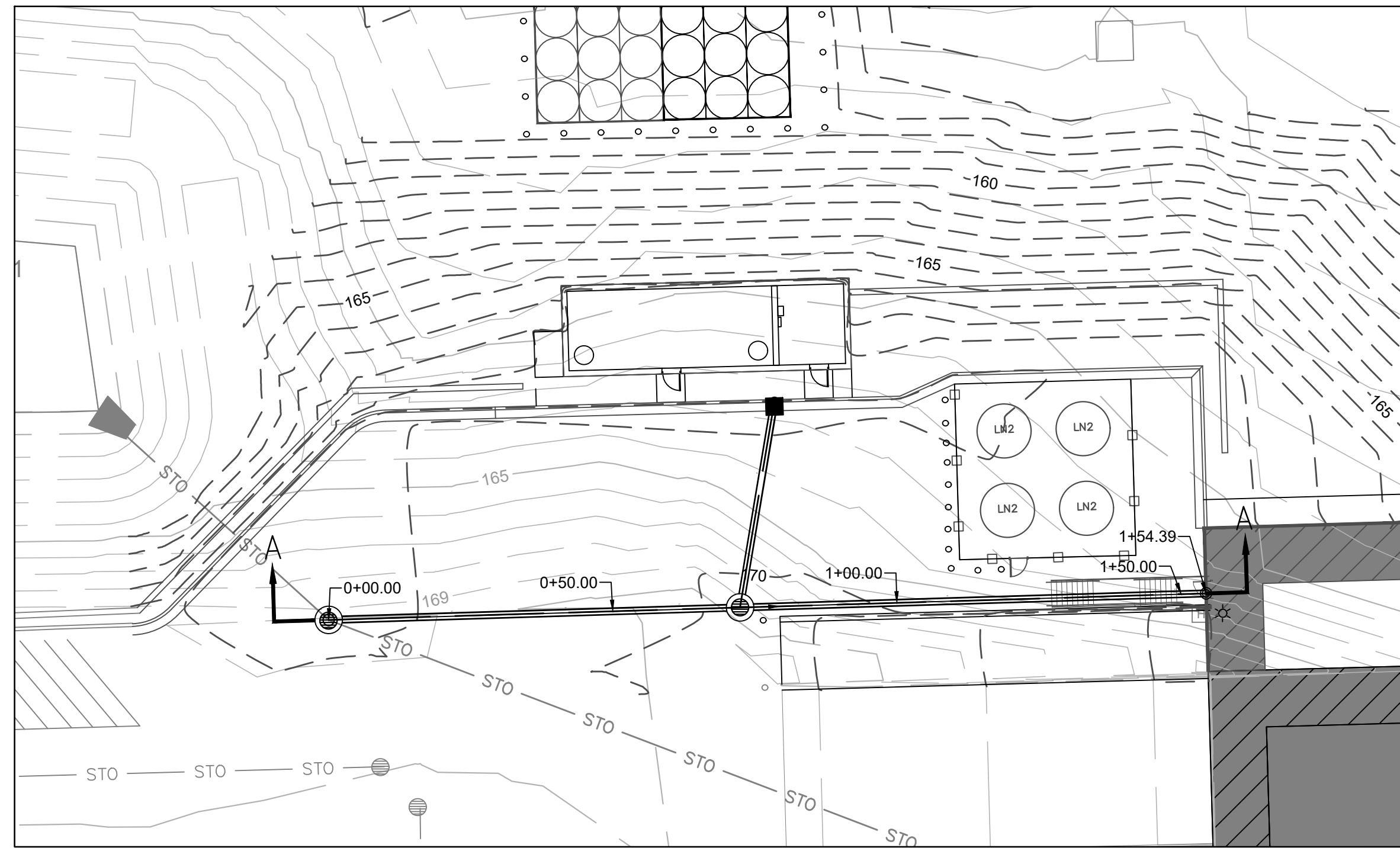
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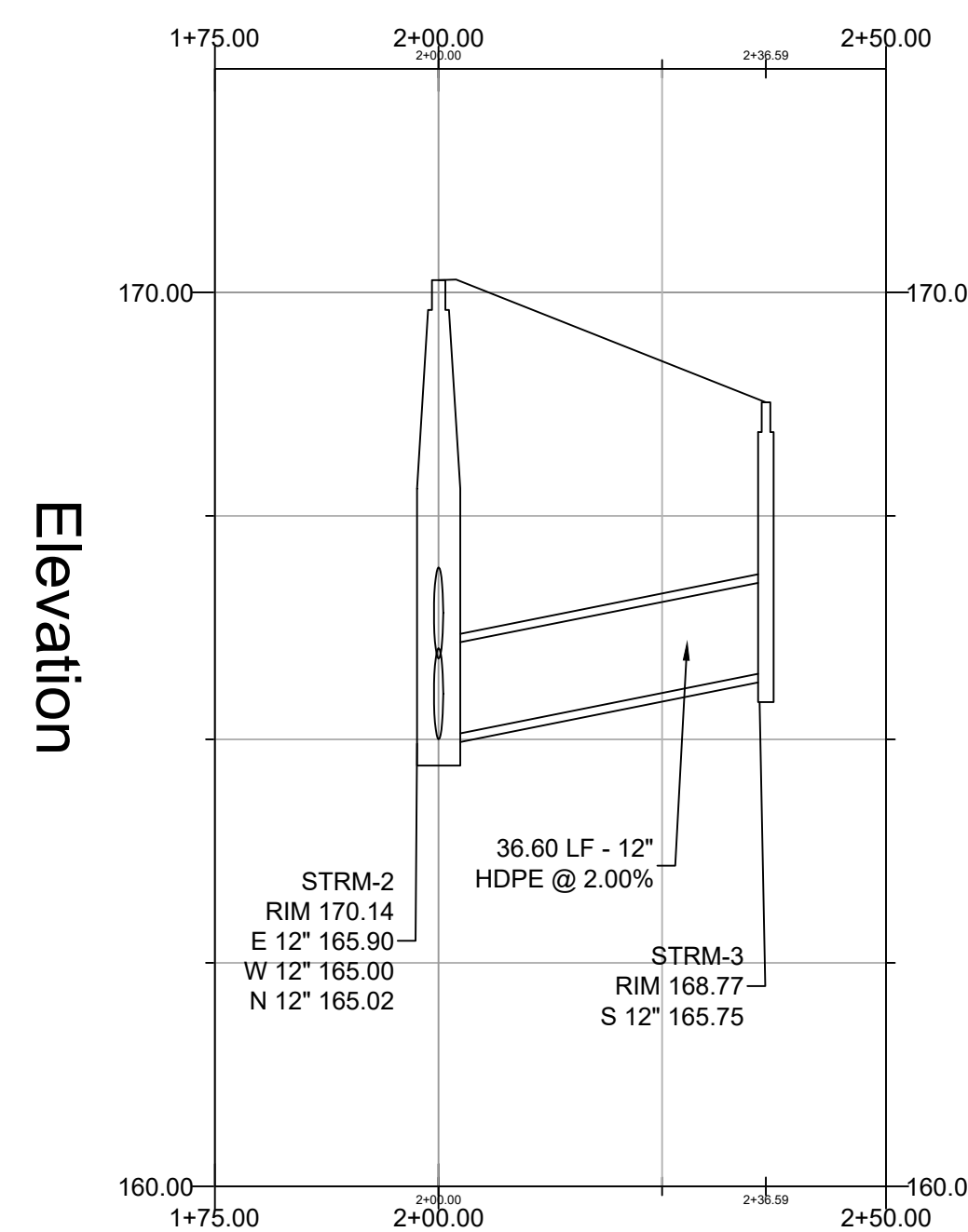


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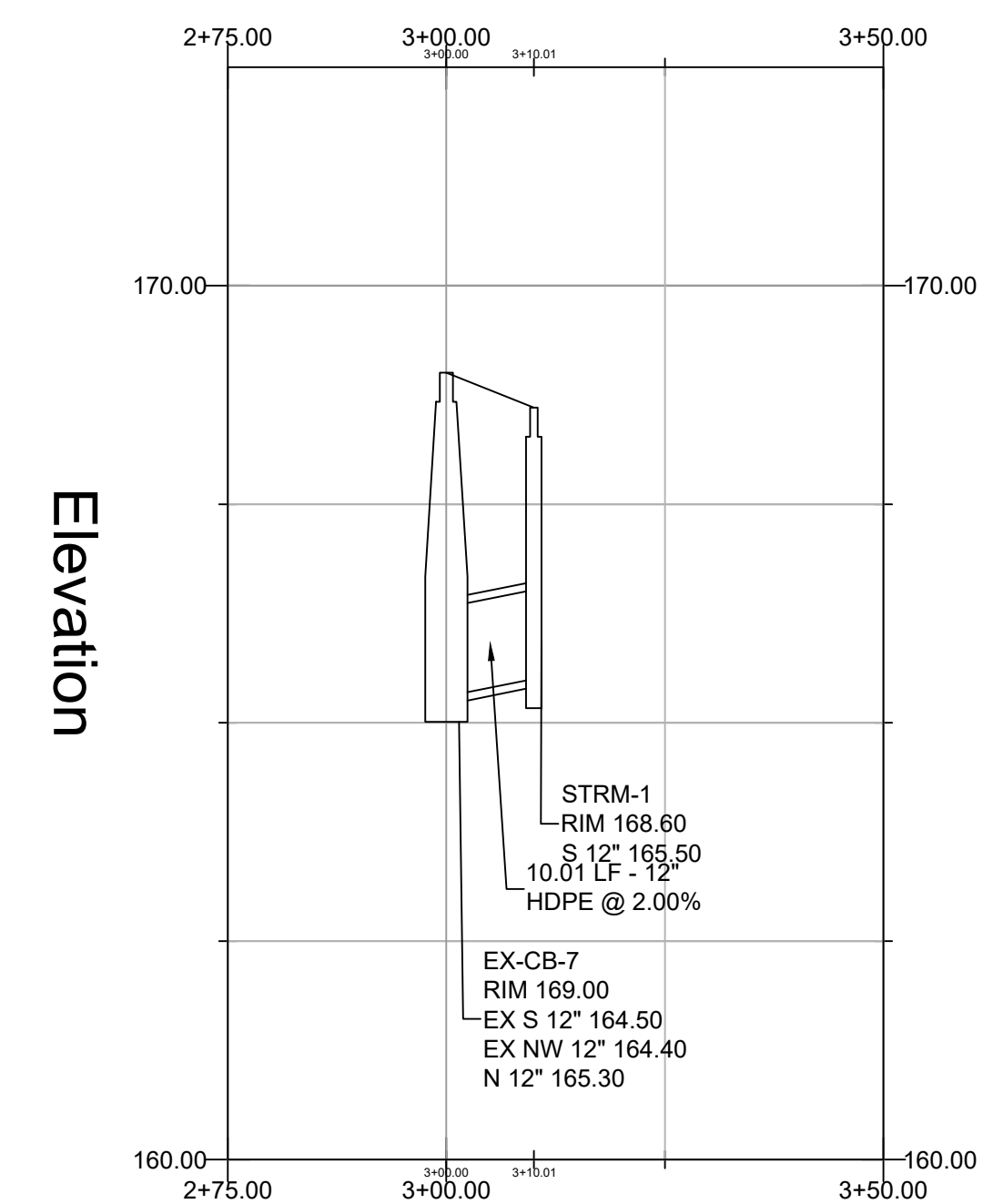
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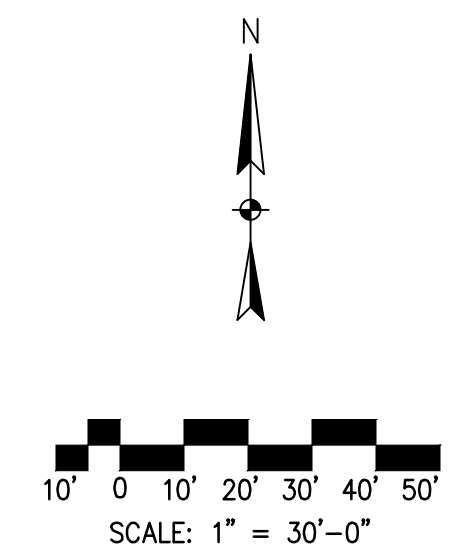
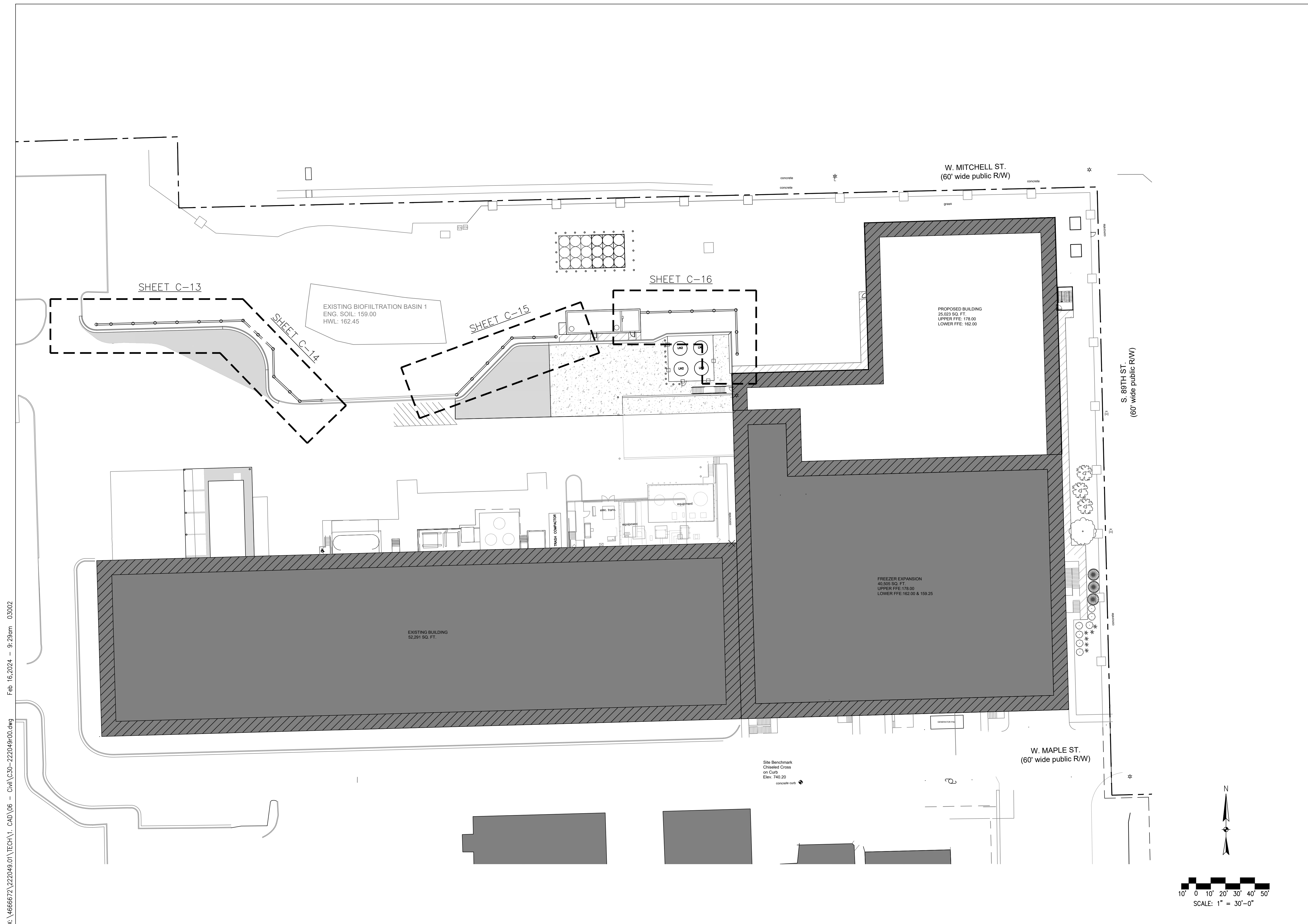
STORM SECTION A-A



STORM SECTION B-B

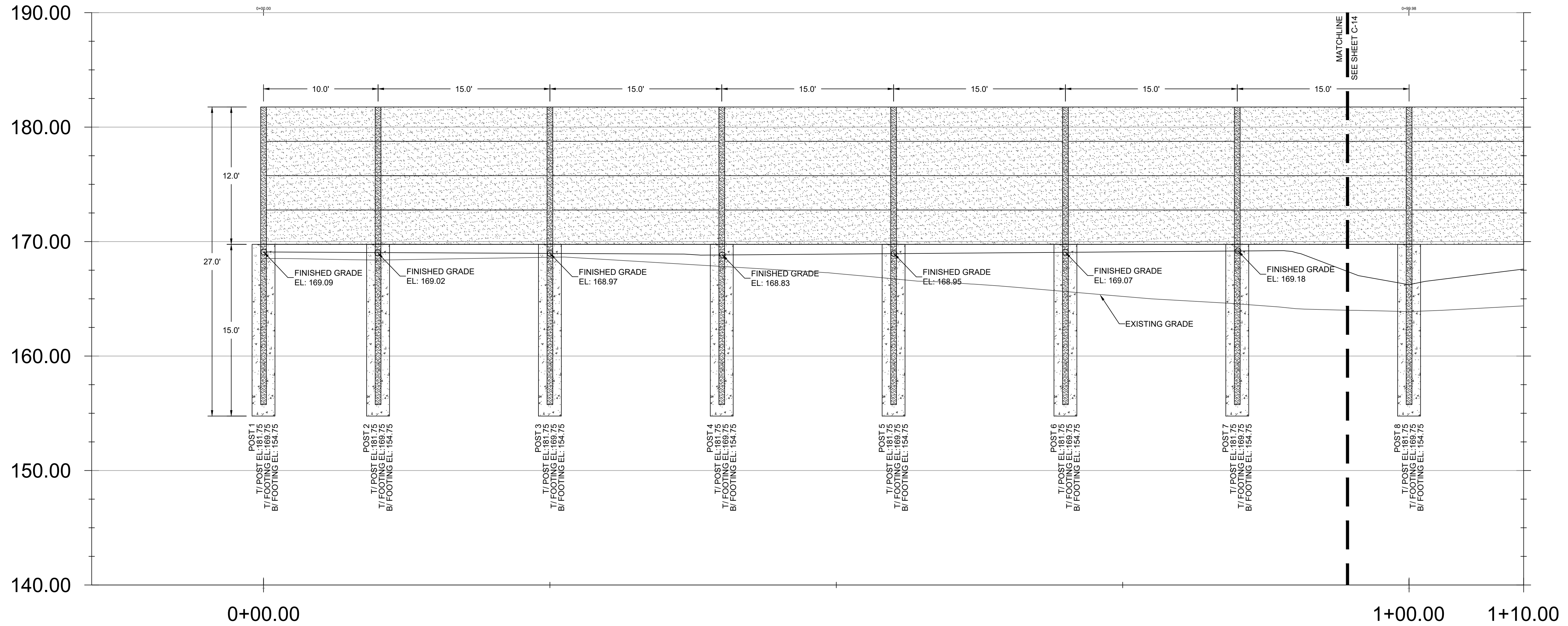
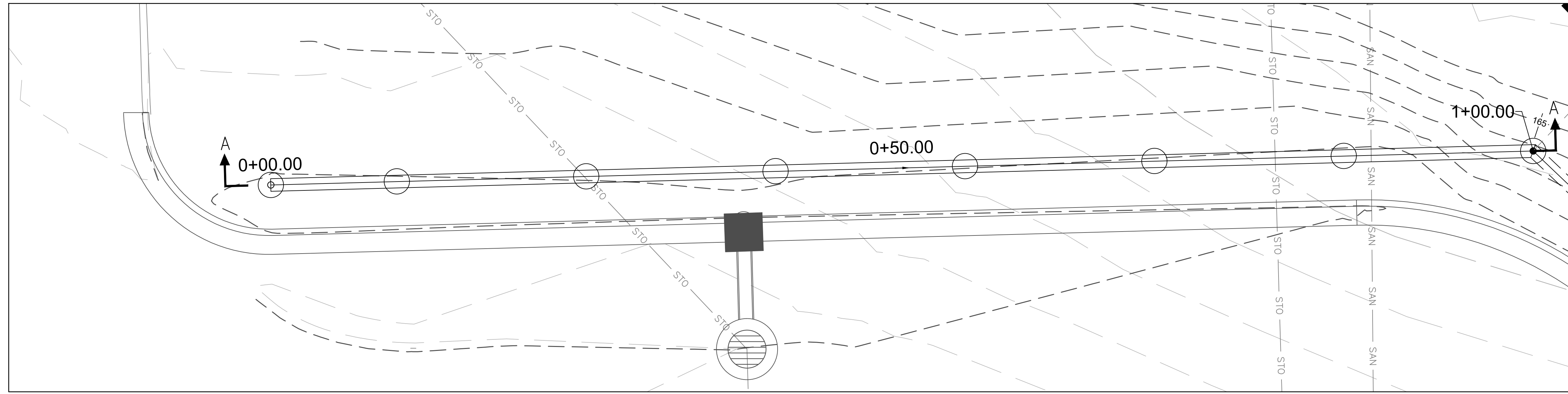


STORM SECTION C-C



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WALL SECTION A-A

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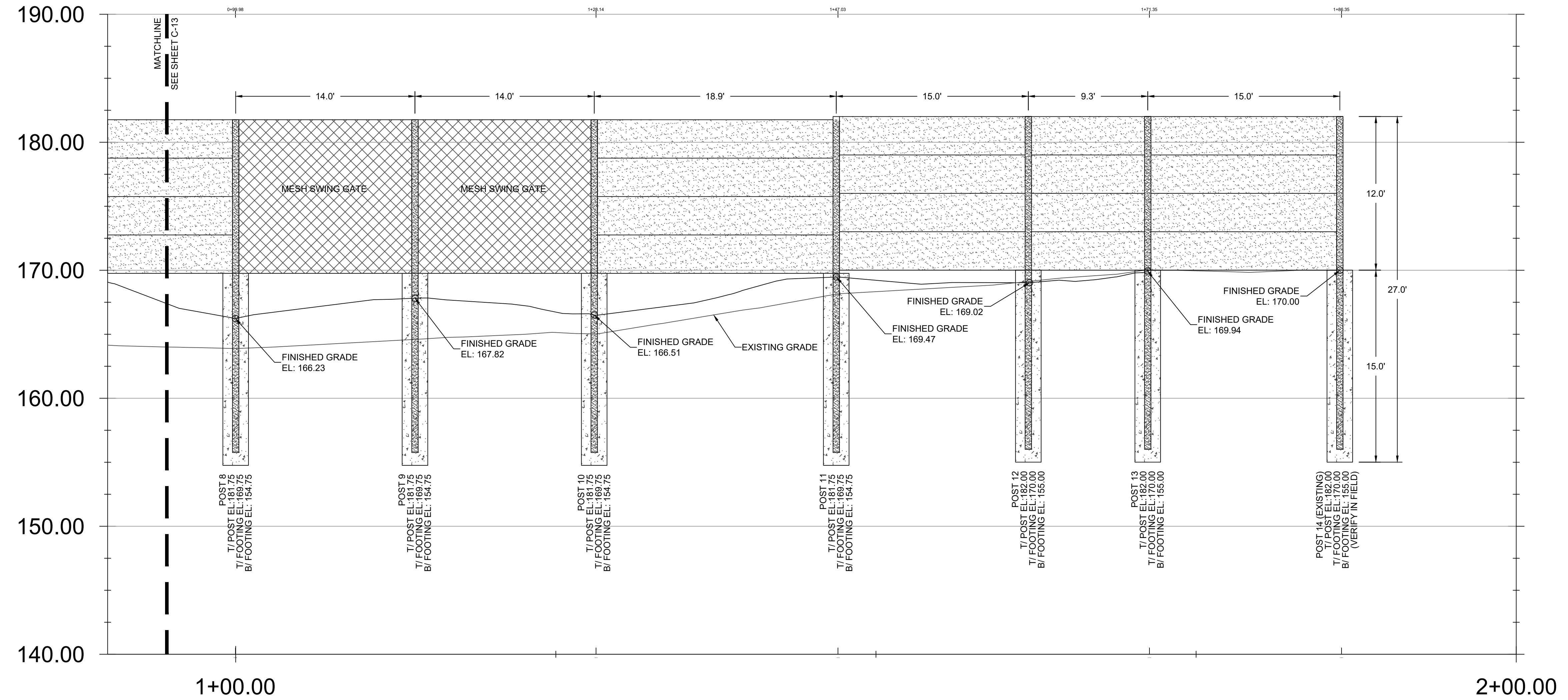
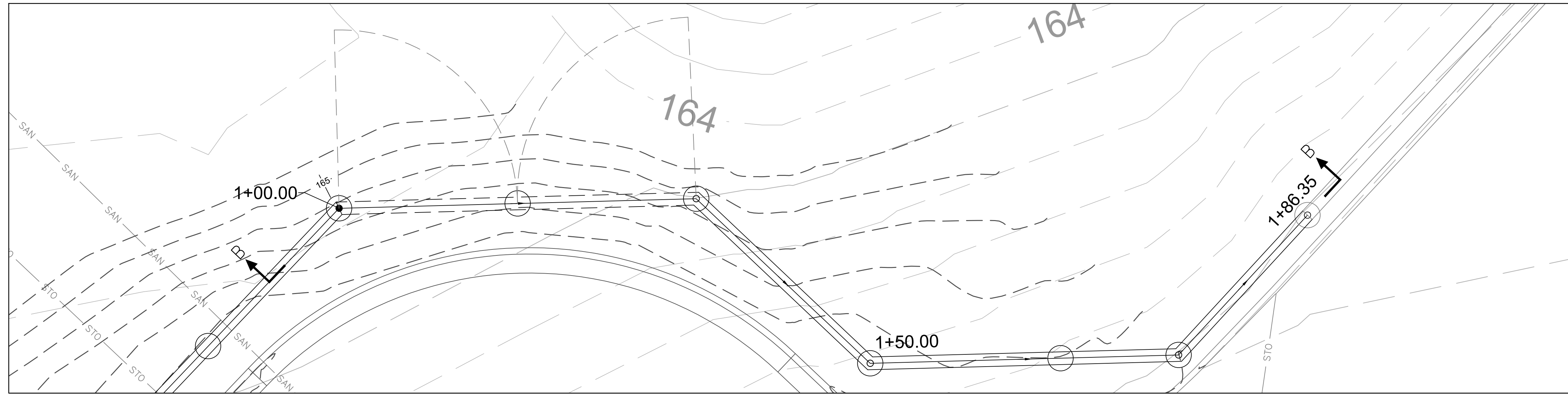
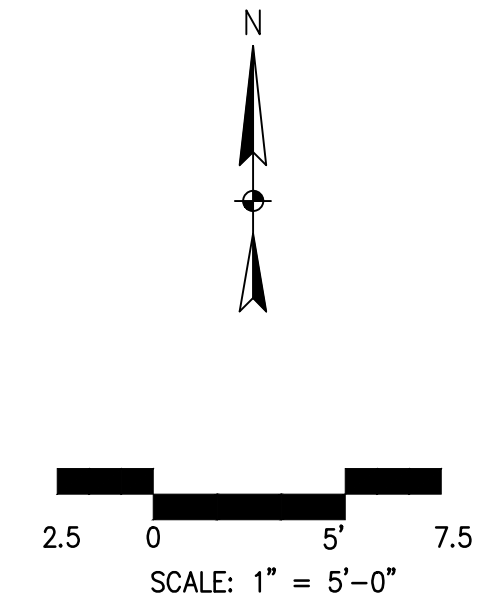
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SHEET CONTENTS  
SITE/CIVIL  
WALL PLAN  
SECTION A-A

SHEET NO.:

C-13



WALL SECTION B-B

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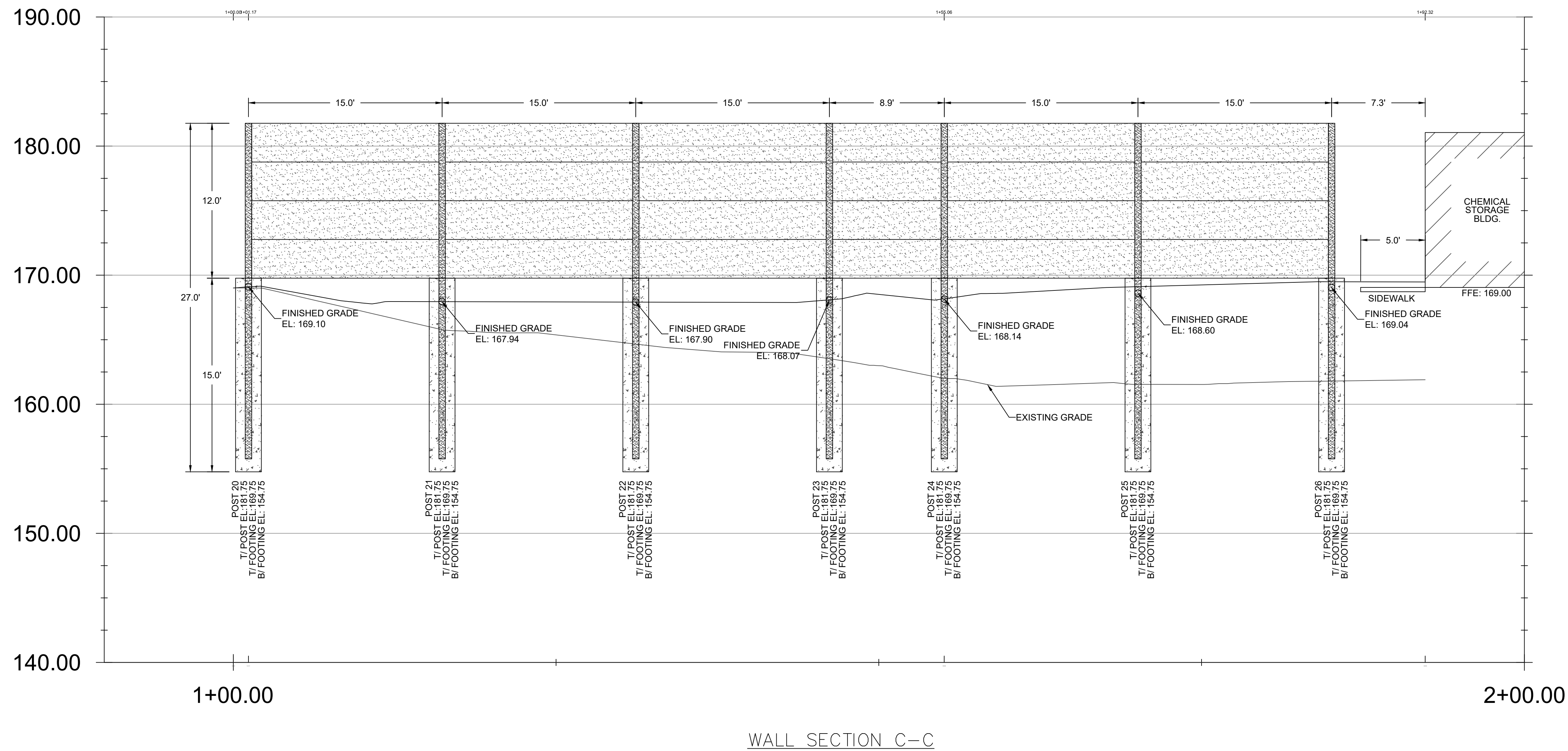
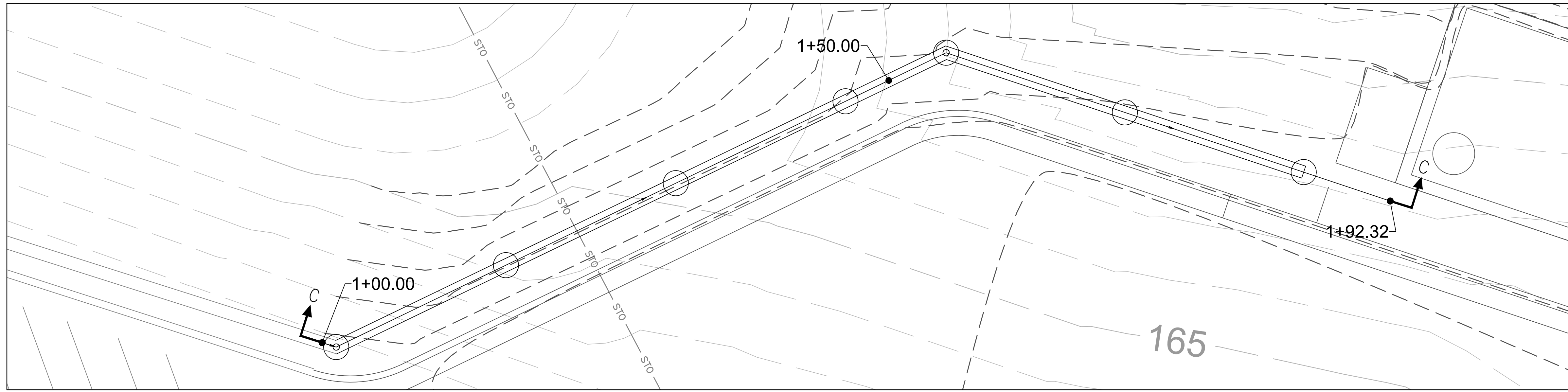
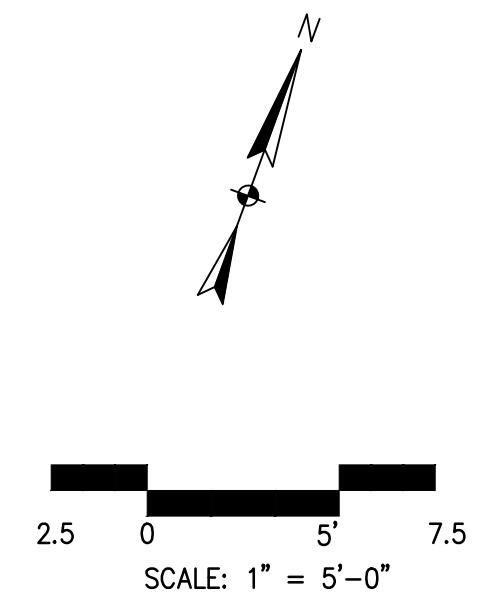
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SHEET CONTENTS  
SITE/CIVIL  
WALL PLAN  
SECTION B-B

SHEET NO:

C-14



WALL SECTION C-C

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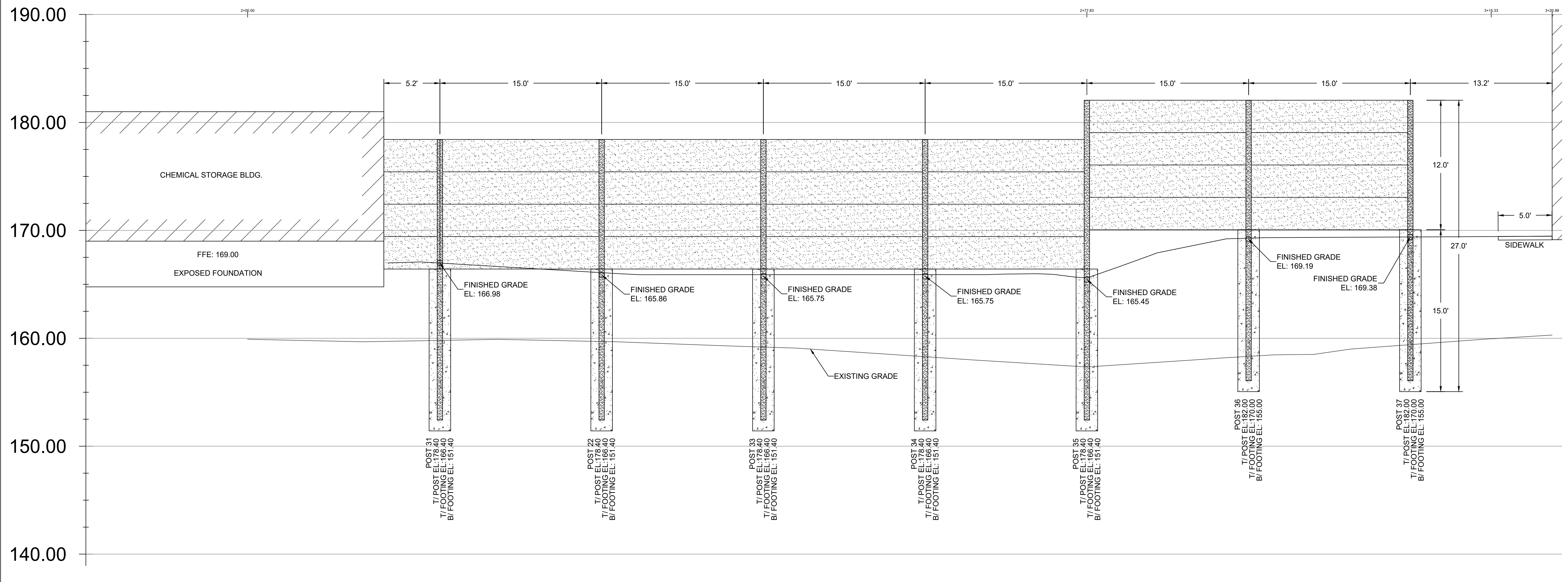
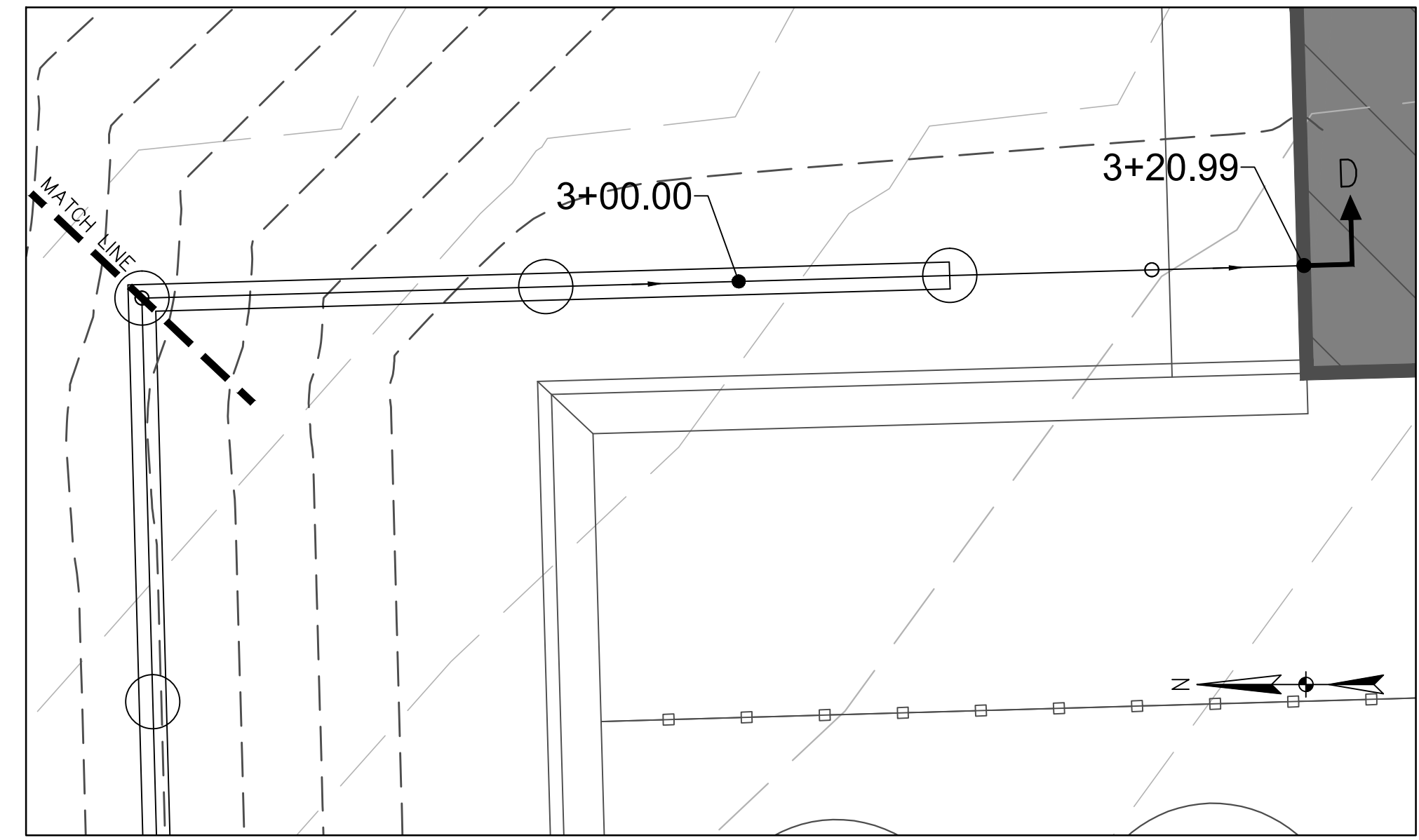
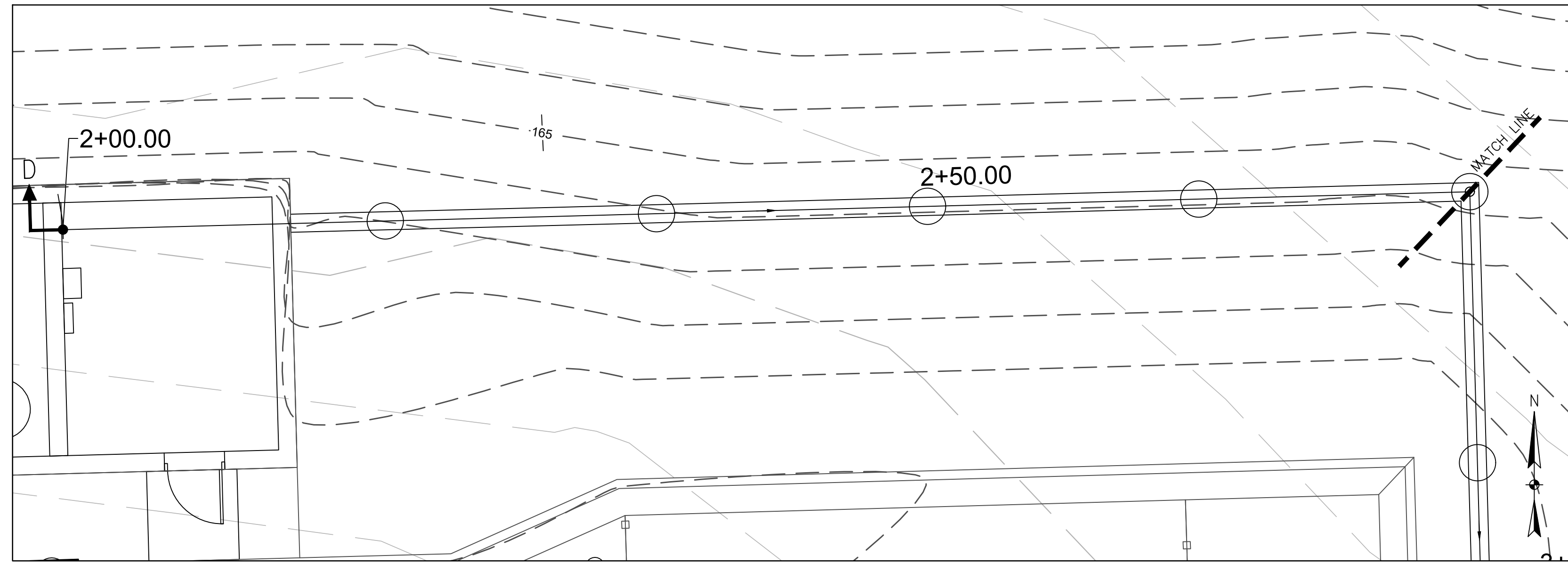
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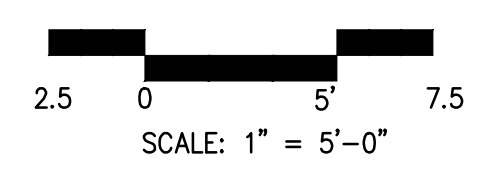
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SITE/CIVIL  
WALL PLAN  
SECTION C-C

SHEET NO:

C-15



WALL SECTION D-D



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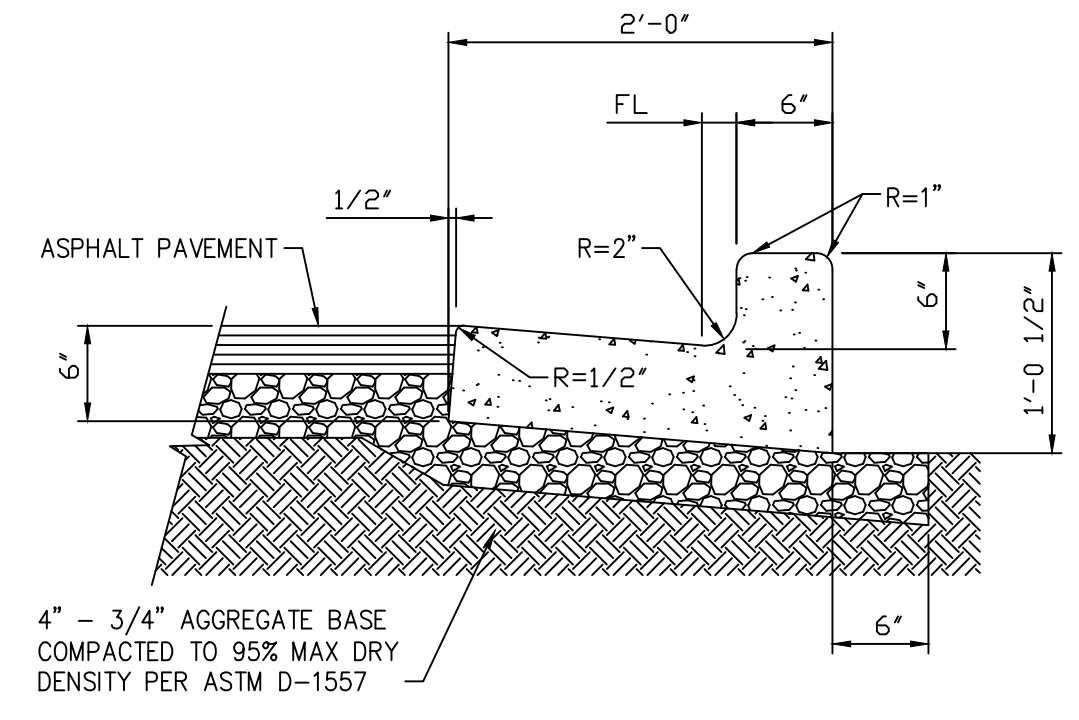
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DESIGNED BY: D. CHAPMAN  
DRAWN BY: D. CHAPMAN  
CHECKED BY: F. FINUCANE  
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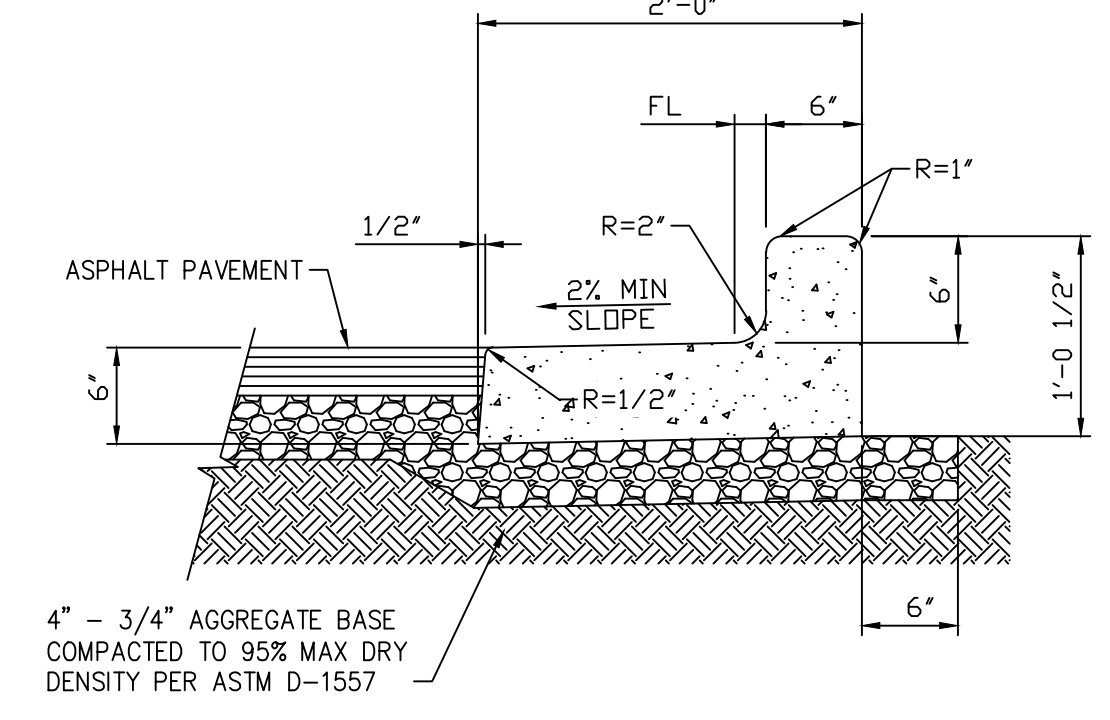
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SITE/CIVIL  
WALL PLAN  
SECTION D-D

SHEET NO.:

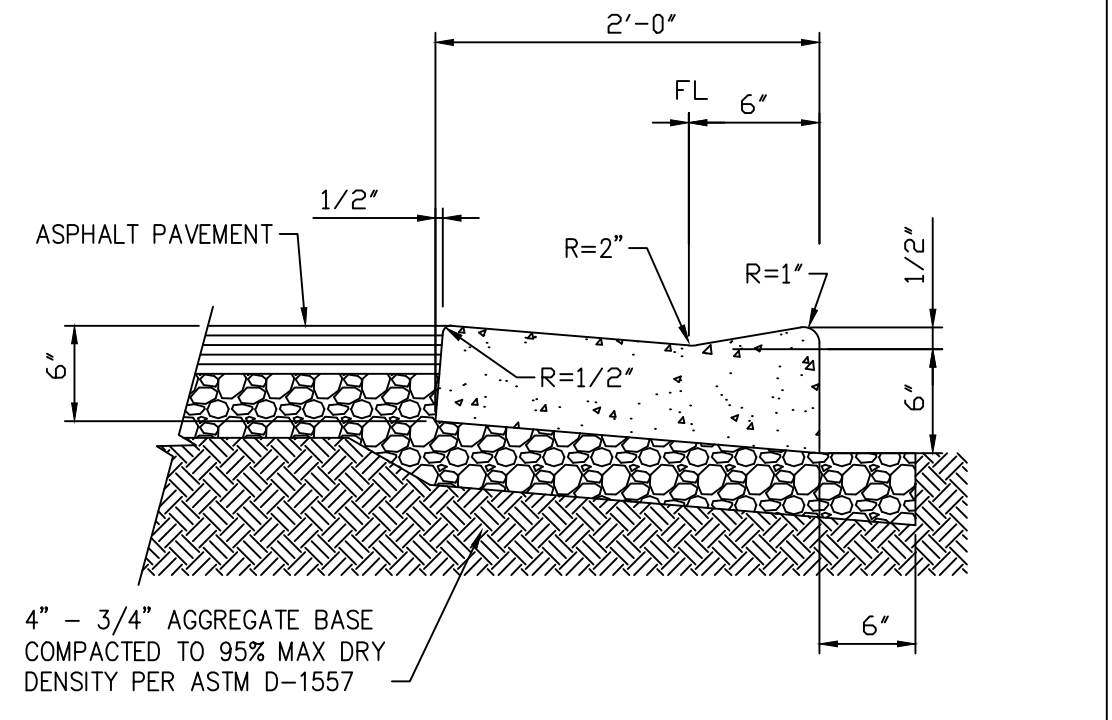
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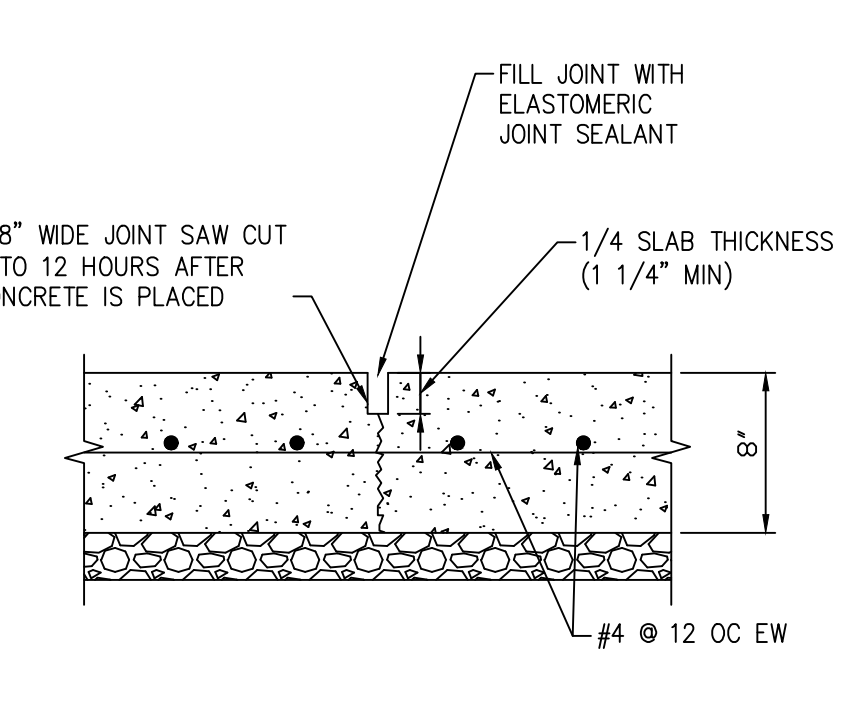
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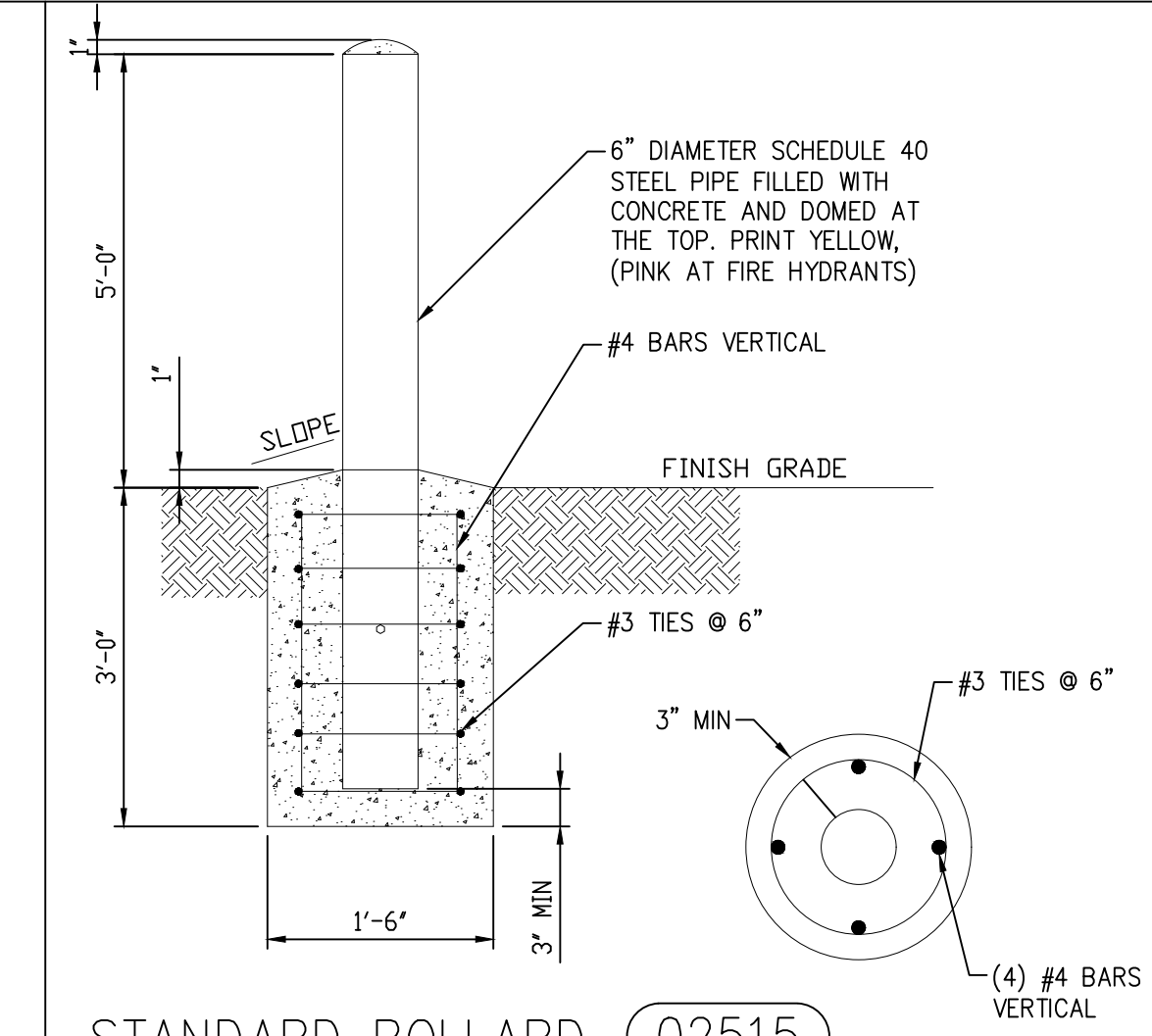
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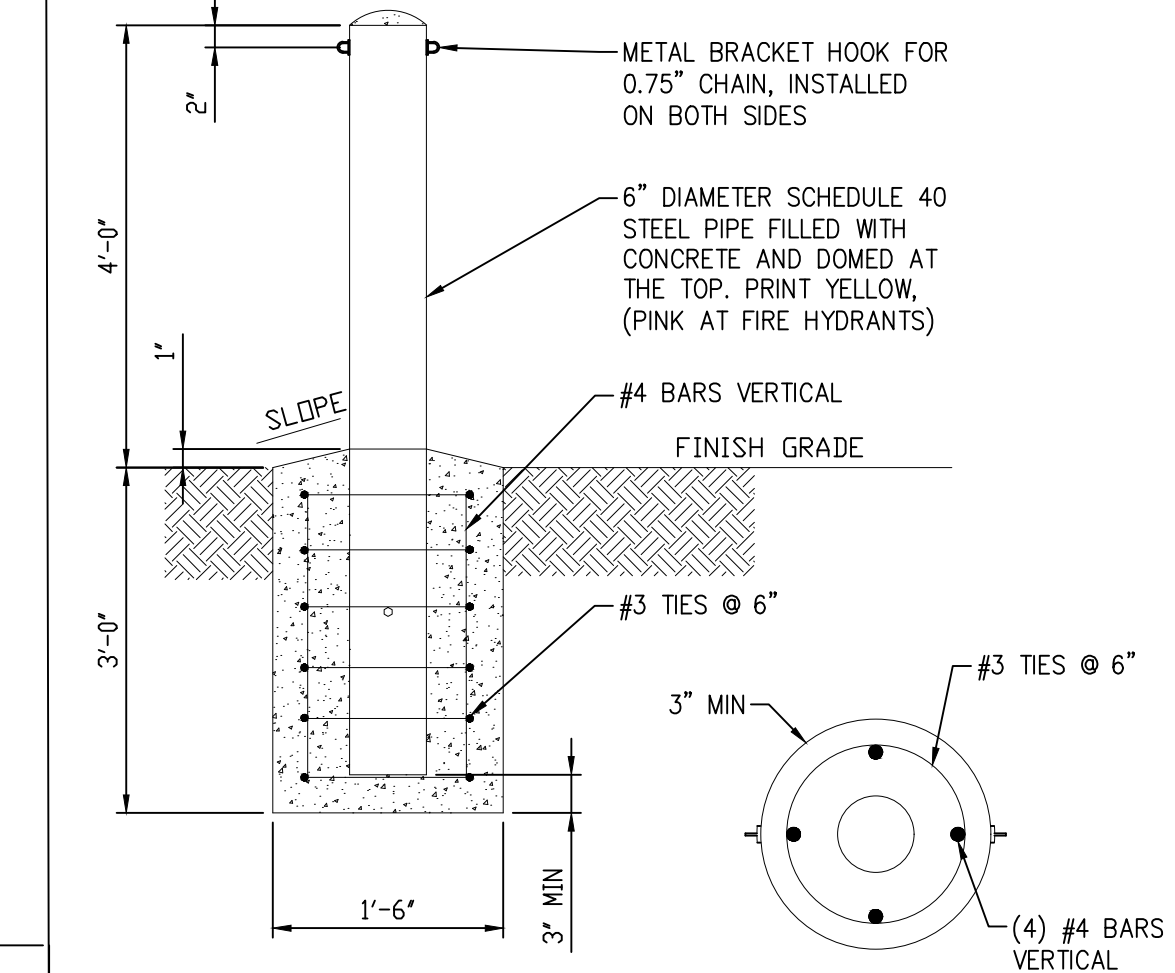
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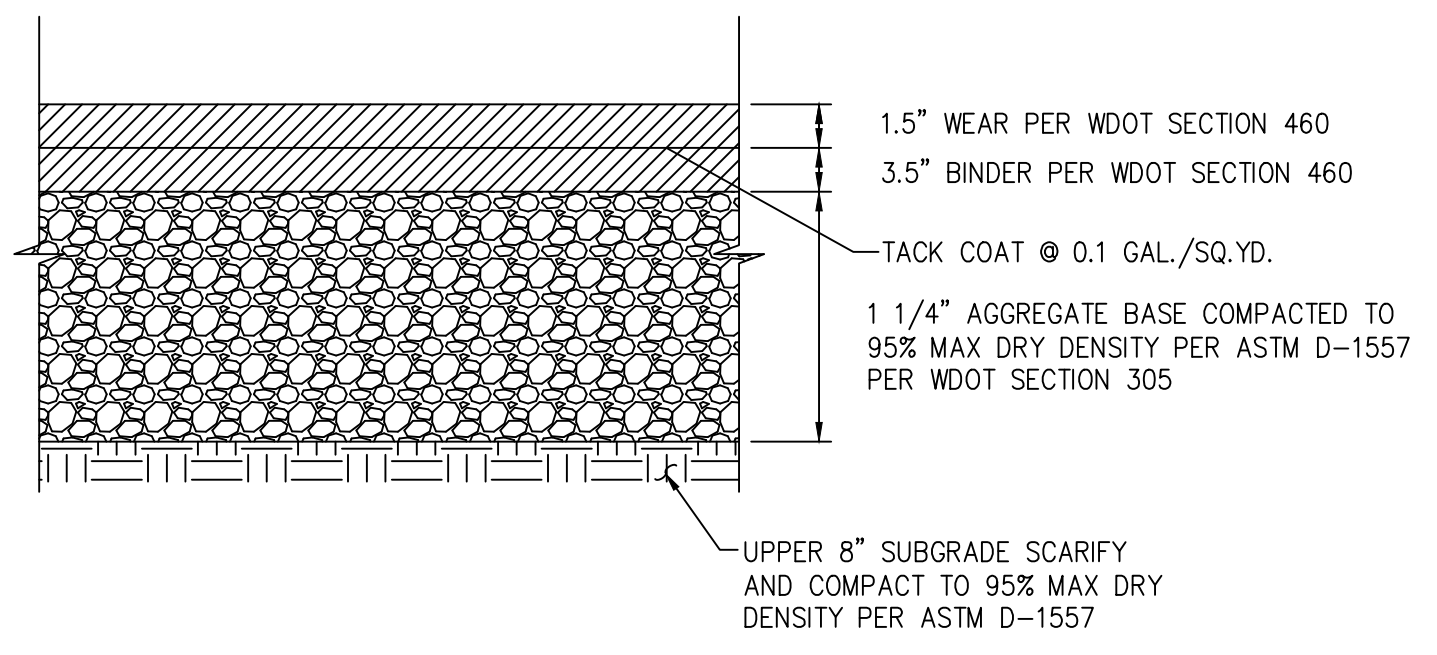
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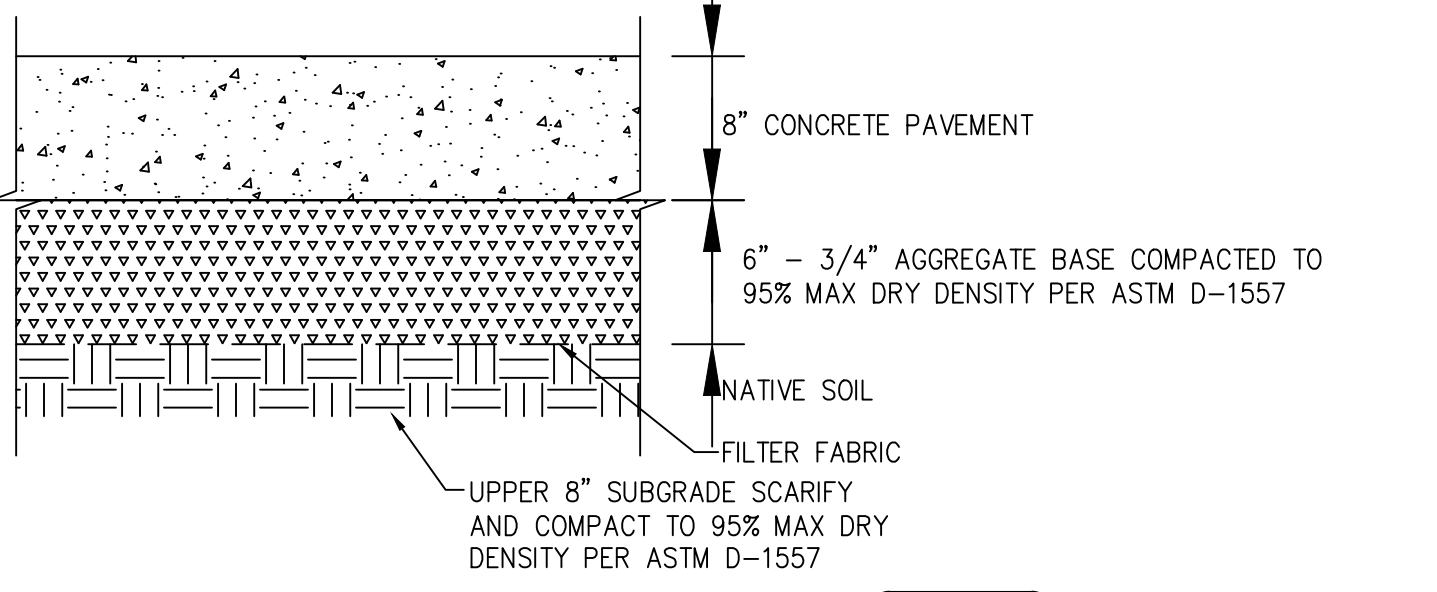
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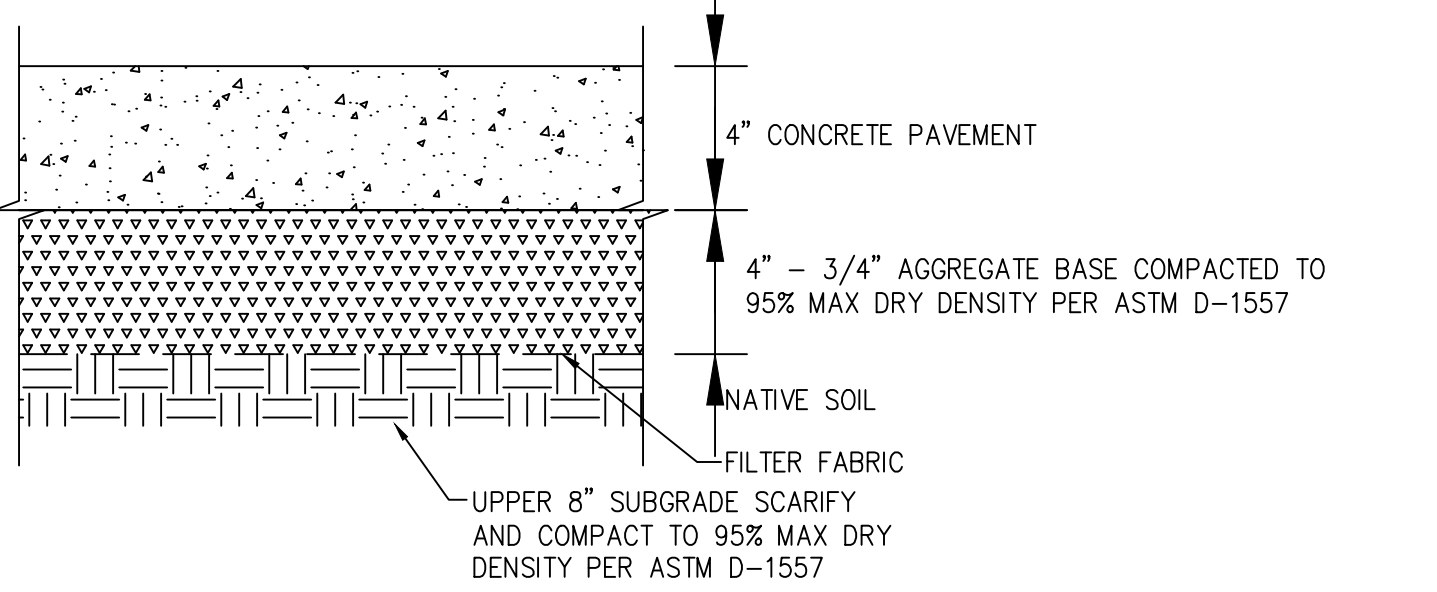
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SCALE: NONE



CONCRETE PAVEMENT DETAIL 02402  
SCALE: NONE



CONCRETE SIDEWALK DETAIL 02403  
SCALE: NONE

9390 Davis Ave.  
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93" Face to Face

Mortised

3 15/16" Air Gap

3/4" sq tube

"B"

1" Mortised

Commercial Rail 1.120"

0.055"

0.050"

"A" Heights	"B" Post	Wall
36 inch	2"	Sq. Tube x 0.080"
42 inch	2"	Sq. Tube x 0.125"
48 inch	2 1/2"	Sq. Tube x 0.080"
54 inch	2 1/2"	Sq. Tube x 0.125"
60 inch	3"	Sq. Tube x 0.125"
72 inch	3"	Sq. Tube x 0.125"

**MAVERICK ULTRA PLUS COMMERCIAL ALUMINUM**

Panel width 8' Barcelona Traditional Bottom 3 Rail Standard

NOTE: ASSOCIATED GATE SHALL BE "BARCELONA SWING GATE 3 RAIL STANDARD" FROM IRON WORLD FENCING

EXTERIOR FENCE & GATE 03000  
SCALE: NONE

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SHEET CONTENTS  
SITE/CIVIL  
GENERAL DETAILS

SHEET NO:

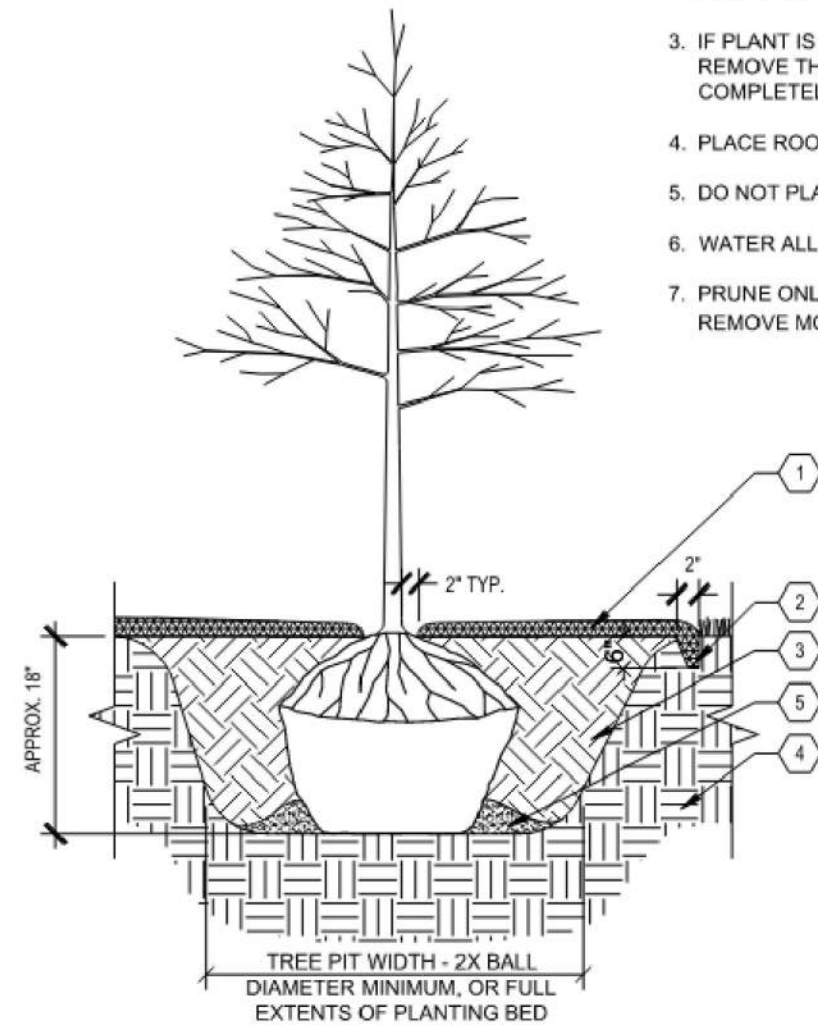
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Feb 16, 2024 - 10:30am 03002



**NOTES:**

1. PLANT EACH TREE SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
2. DEPTH OF THE PLANTING HOLE SHOULD BE DETERMINED AND DUG AFTER THE ROOT FLARE IS LOCATED. PLANTING HOLE MUST BE NO DEEPER THAN THE HEIGHT OF THE ROOT BALL.
3. IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT AND REMOVE THE WIRE BASKET ENTIRELY. REMOVE ALL TWINE, ROPE, AND BURLAP COMPLETELY FROM ALL ROOT BALLS.
4. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
5. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN 1/3 OF THE ORIGINAL PLANT MASS.



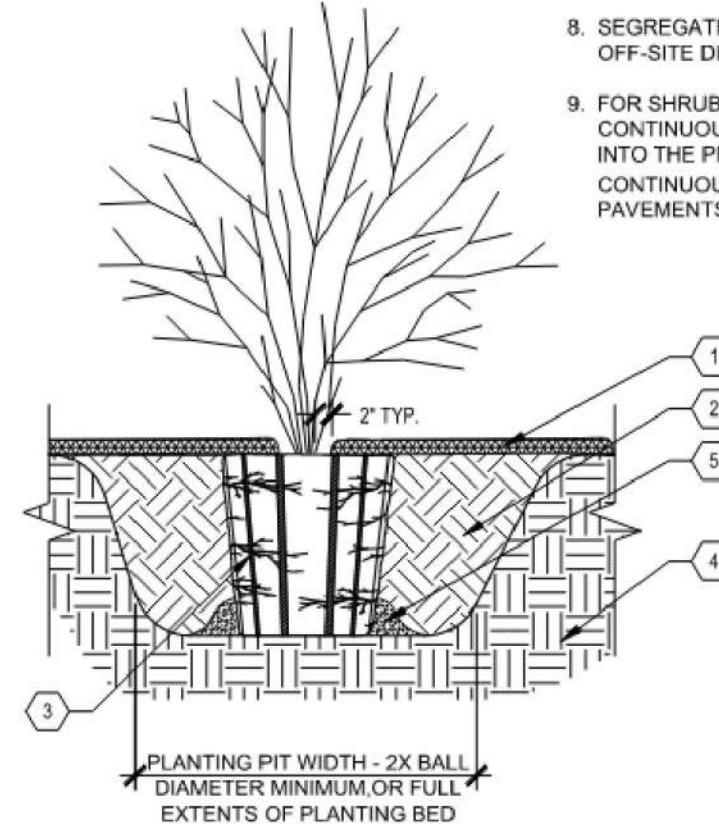
**KEYED LEGEND**

- 1 3" DEPTH SHREDDED HARDWOOD BARK MULCH, PROVIDE 4" DIAMETER MULCH RINGS AT THE BASE OF ANY TREES PLANTED IN LAWN.
- 2 PROVIDE SPADED EDGE, 2" WIDE, 6" DEEP FOR ENTIRE PERIMETER OF BARK MULCH RINGS AT BASE OF TREES PLANTED IN LAWNS
- 3 PLANTING SOIL. PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED.
- 4 PREPARED SUBGRADE
- 5 TAMP SOIL AROUND BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT BALL DOES NOT SHIFT

**A** TYPICAL TREE PLANTING  
SCALE: 1" = 1'

**NOTES:**

1. MAKE 1" TO 2" DEEP VERTICAL CUTS EVERY 6" AROUND THE CIRCUMFERENCE OF THE ROOT BALL BEFORE PLANTING TO LOOSEN POT-BOUND ROOTS.
2. PLANT EACH SHRUB SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
3. PLANTING HOLE MUST NOT BE DEEPER THAN THE HEIGHT OF THE ROOT BALL.
4. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
5. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN 1/3 OF THE ORIGINAL PLANT MASS.
8. SEGREGATE ANY SOIL FROM BELOW WARNING LAYER EXCAVATED DURING PLANTING FOR OFF-SITE DISPOSAL. COORDINATE DISPOSAL WITH ENVIRONMENTAL CONSULTANT.
9. FOR SHRUBS PLANTED WITHIN PLANTING BEDS, CONTRACTOR SHALL PROVIDE PLANTING SOIL CONTINUOUSLY FOR THE ENTIRE PLANTING BED AND INDIVIDUAL SHRUBS SHALL BE PLANTED INTO THE PREPARED PLANTING SOIL. MULCH SURFACE FOR PLANTING BEDS SHALL ALSO BE CONTINUOUS ACROSS THE ENTIRE SURFACE AND HELD 1/2" MIN. TO 1" MAX. BELOW ADJACENT PAVEMENTS.



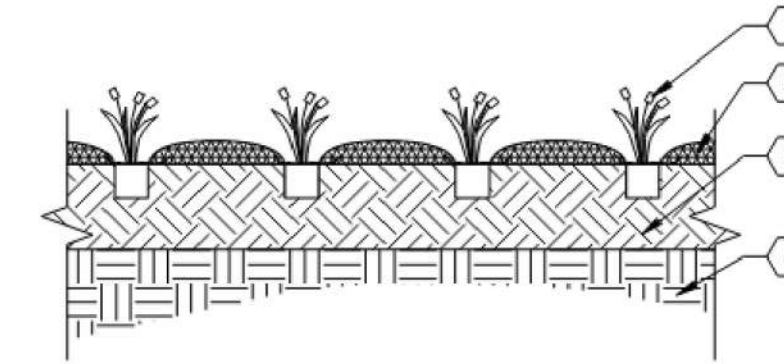
**KEYED LEGEND**

- 1 3" DEPTH TWICE-SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE INDICATED, KEEP 2" CLEAR OF STEMS
- 2 PLANTING SOIL AS SPECIFIED. PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED
- 3 1" TO 2" DEEP VERTICAL CUTS EVERY 6" AROUND PERIMETER
- 4 PREPARED SUBGRADE
- 5 TAMP SOIL AROUND BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT BALL DOES NOT SHIFT

**B** TYPICAL SHRUB PLANTING  
SCALE: 1" = 1'

**NOTES:**

1. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
2. PLANTING HOLE MUST NOT BE DEEPER THAN THE HEIGHT OF THE ROOT BALL.
3. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
4. WATER ALL PLANTS THOROUGHLY WITHIN 2 HOURS OF INSTALLATION.
5. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY OR DEAD PLANT PARTS. DO NOT REMOVE MORE THAN 1/3 OF THE ORIGINAL PLANT MASS.
6. FOR PLANTS PLANTED WITHIN PLANTING BEDS, CONTRACTOR SHALL PROVIDE PLANTING SOIL CONTINUOUSLY FOR THE ENTIRE PLANTING BED AND INDIVIDUAL SHRUBS SHALL BE PLANTED INTO THE PREPARED PLANTING SOIL. MULCH SURFACE FOR PLANTING BEDS SHALL ALSO BE CONTINUOUS ACROSS THE ENTIRE SURFACE AND HELD 1/2" MIN. TO 1" MAX. BELOW ADJACENT PAVEMENTS.



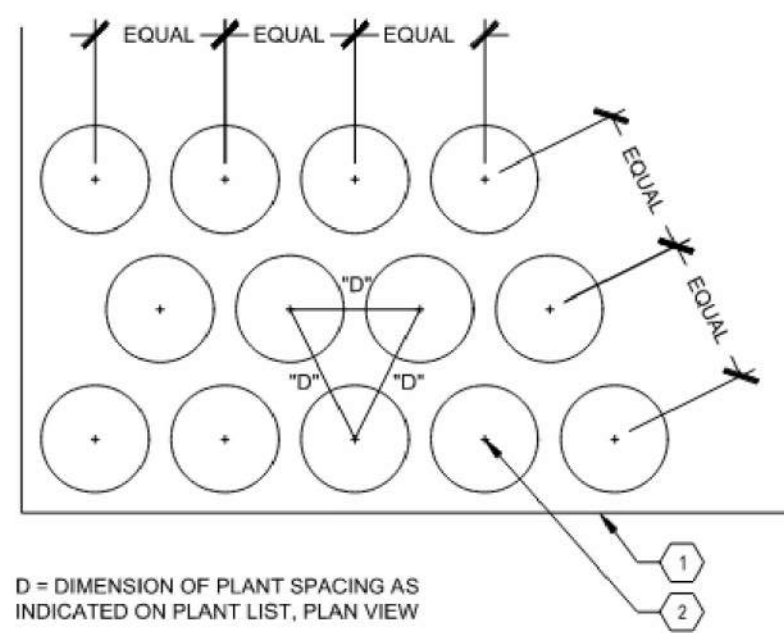
**KEYED LEGEND**

- 1 PERENNIAL, ORNAMENTAL GRASS, OR GROUNDCOVER PLUG, SEE LANDSCAPE PLAN SHEETS L101 - L109
- 2 3" DEPTH TWICE-SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE INDICATED, KEEP 3" CLEAR OF STEMS
- 3 PLANTING SOIL. PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED
- 4 PREPARED SUBGRADE

**C** TYPICAL ORNAMENTAL GRASS & PERENNIALS  
SCALE: 1" = 1'

**NOTES:**

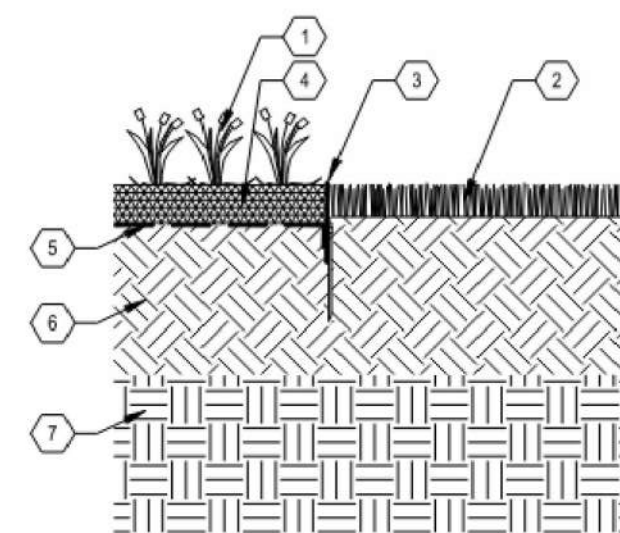
1. SET FINISH GRADE OF PLANTING AREA 2" BELOW FINISH SURFACE OF PAVING, CURB, OR HEADER
2. SEE PLANTING SCHEDULE FOR SPACING OF ALL SHRUBS AND GROUNDCOVERS
3. ALL SHRUBS / GROUNDCOVER TO BE PLANTED AT EQUAL SPACING (TRIANGULAR) UNLESS OTHERWISE INDICATED ON PLANS.
4. TO DETERMINE APPROPRIATE PLANT QUANTITIES REFER TO THE PLANTING SCHEDULE OR PLAN.



**KEYED LEGEND**

- 1 EDGE OF ADJACENT PAVEMENT
- 2 SHRUB, PERENNIAL OR ORNAMENTAL GRASS PLANT CENTER LOCATION

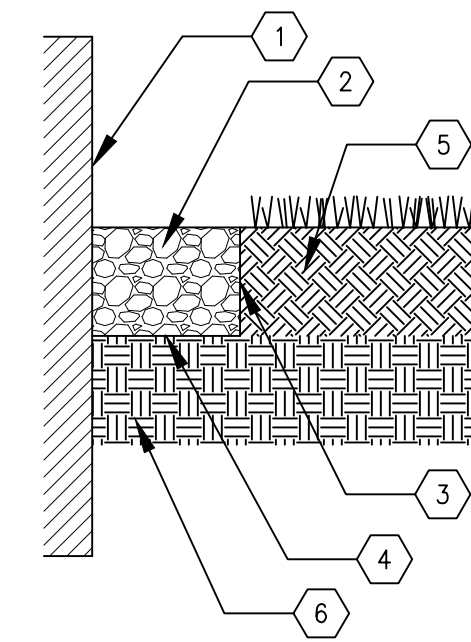
**D** TYPICAL PLANT SPACING  
SCALE: 1" = 1'



**KEYED LEGEND**

- 1 PLANTING BED
- 2 TURF ADJACENT TO PLANTING BED
- 3 STEEL ALUMINUM PLANT EDGING, TOP OF EDGING 2" ABOVE FINISH GRADE OF SOIL.
- 4 3" DEPTH BARK MULCH
- 5 WOVEN GEOTEXTILE FILTER FABRIC
- 6 PLANTING TOPSOIL
- 7 PREPARED SUBGRADE

**E** STEEL PLANT EDGING  
SCALE: 1" = 1'



- 1 BUILDING EXTERIOR WALL
- 2 2-FT STONE MULCH BUFFER STRIP
- 3 STEEL ALUMINUM PLANT EDGING
- 4 WOVEN GEOTEXTILE FILTER FABRIC
- 5 PLANTING TOPSOIL
- 6 PREPARED SUBGRADE

**F** STONE BUFFER STRIP  
SCALE: NONE

**CHR HANSEN  
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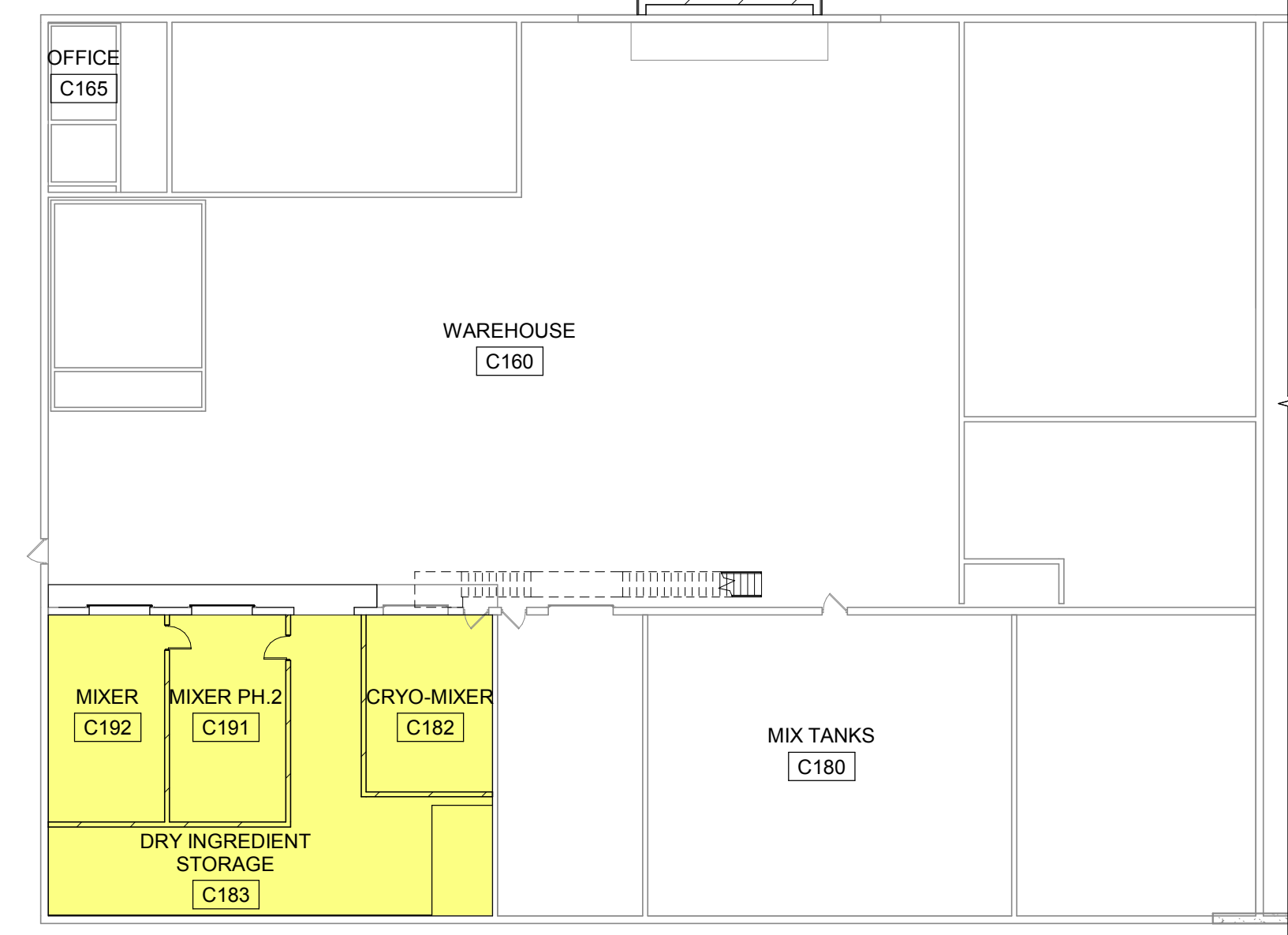
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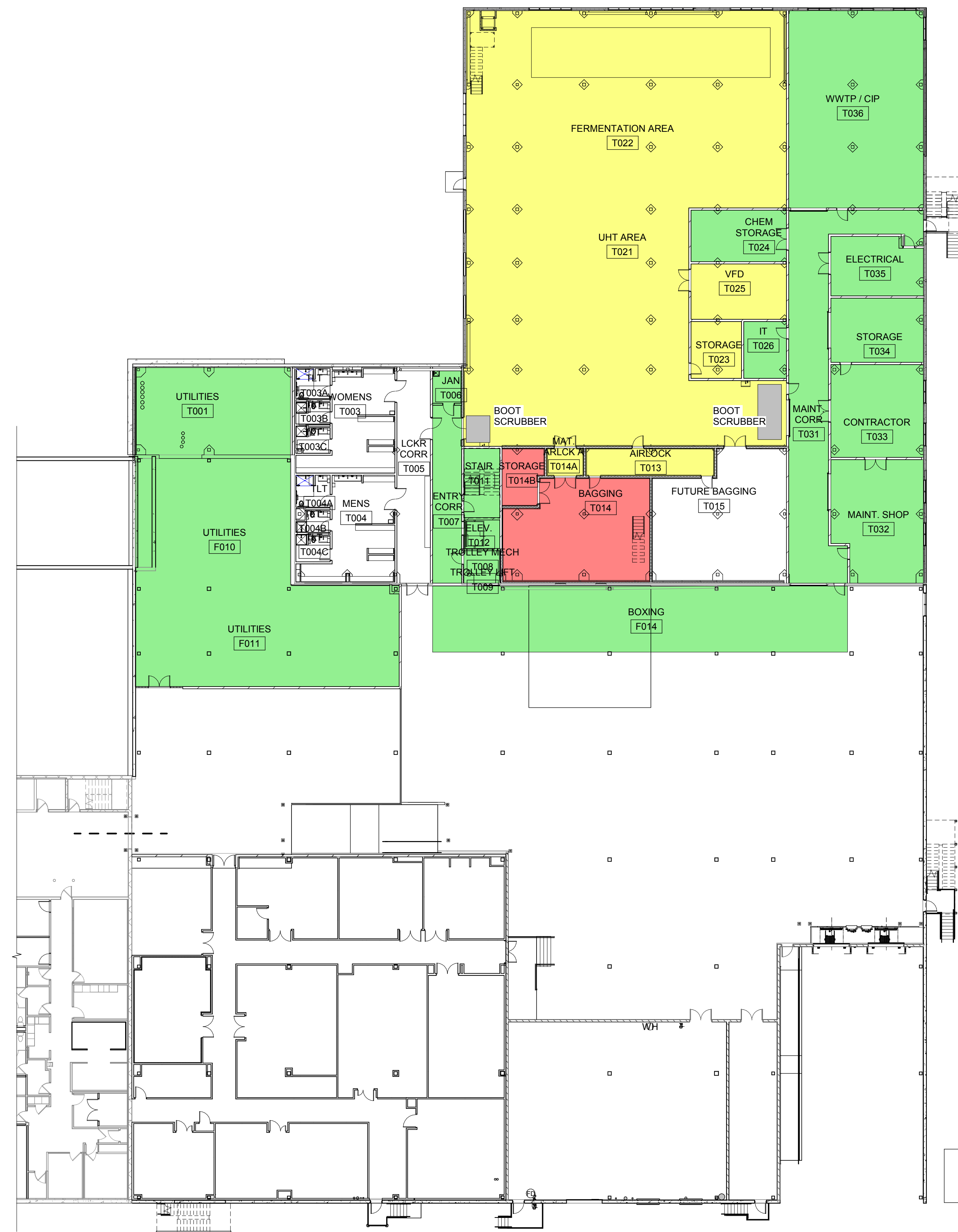
SHEET CONTENTS  
 HYGIENIC PLAN - LOWER LEVEL

SHEET NO.:  
**G-005**

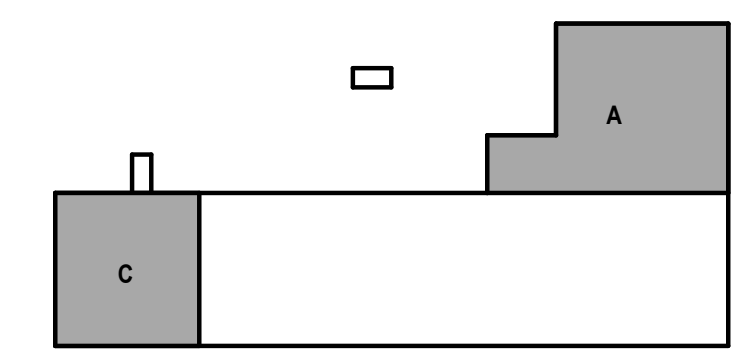
SEE SHEET A-603A FOR HYGIENIC ROOM TABLE



**2 HYGIENIC ZONES LOWER LEVEL**  
 1" = 20'-0"



**1 HYGIENIC ZONES LOWER LEVEL**  
 1" = 20'-0"



KEY PLAN

**CHR HANSEN  
PROJECT THOR**

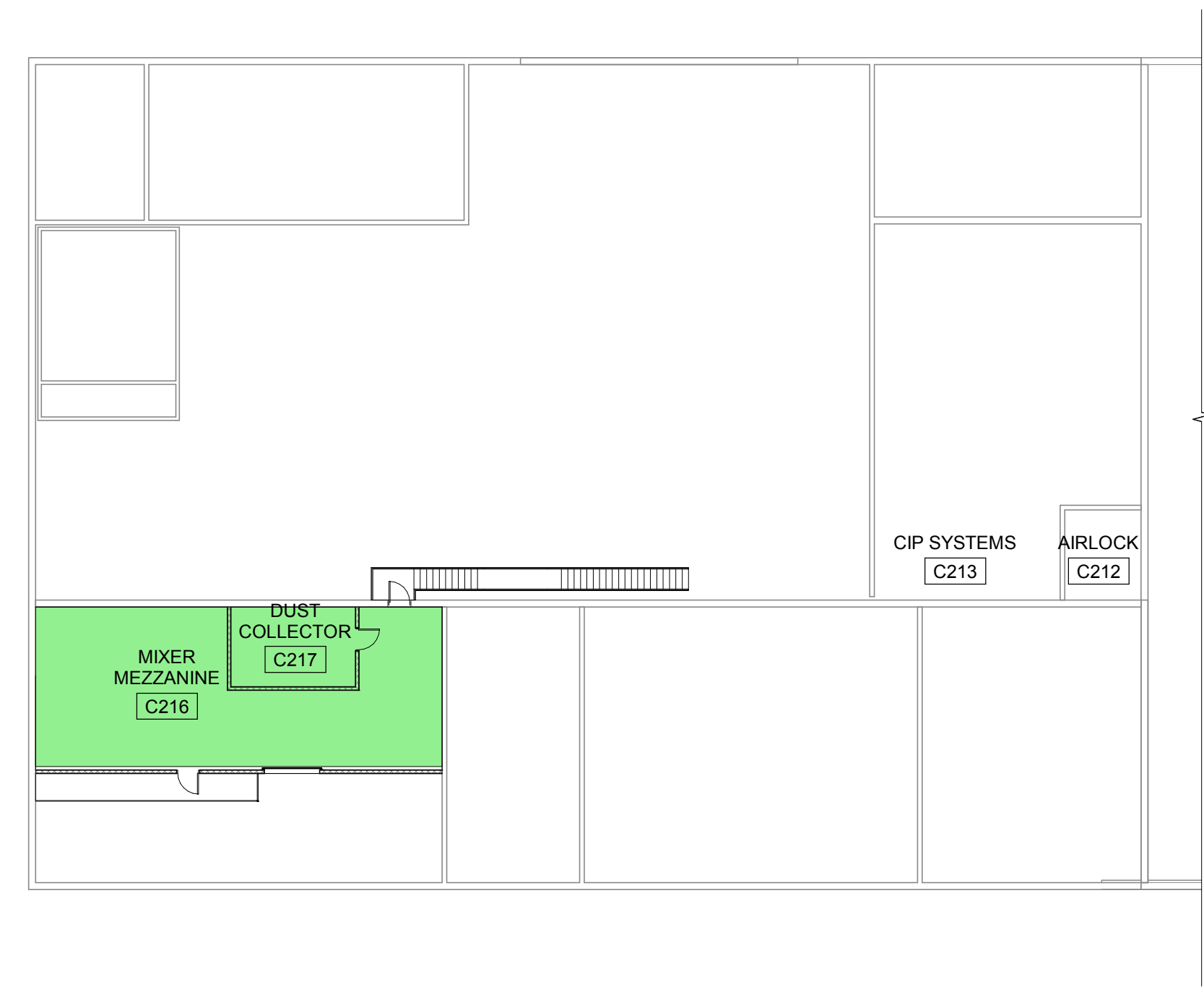


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SHEET CONTENTS  
HYGIENIC PLAN - UPPER LEVEL

SHEET NO.:  
**G-006**

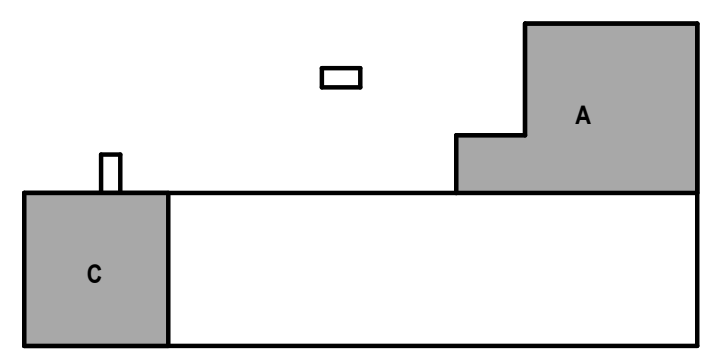


**2 HYGIENIC ZONES UPPER LEVEL**  
1" = 20'-0"



**1 HYGIENIC ZONES UPPER LEVEL**  
1" = 20'-0"

SEE SHEET A-603A FOR HYGIENIC ROOM TABLE

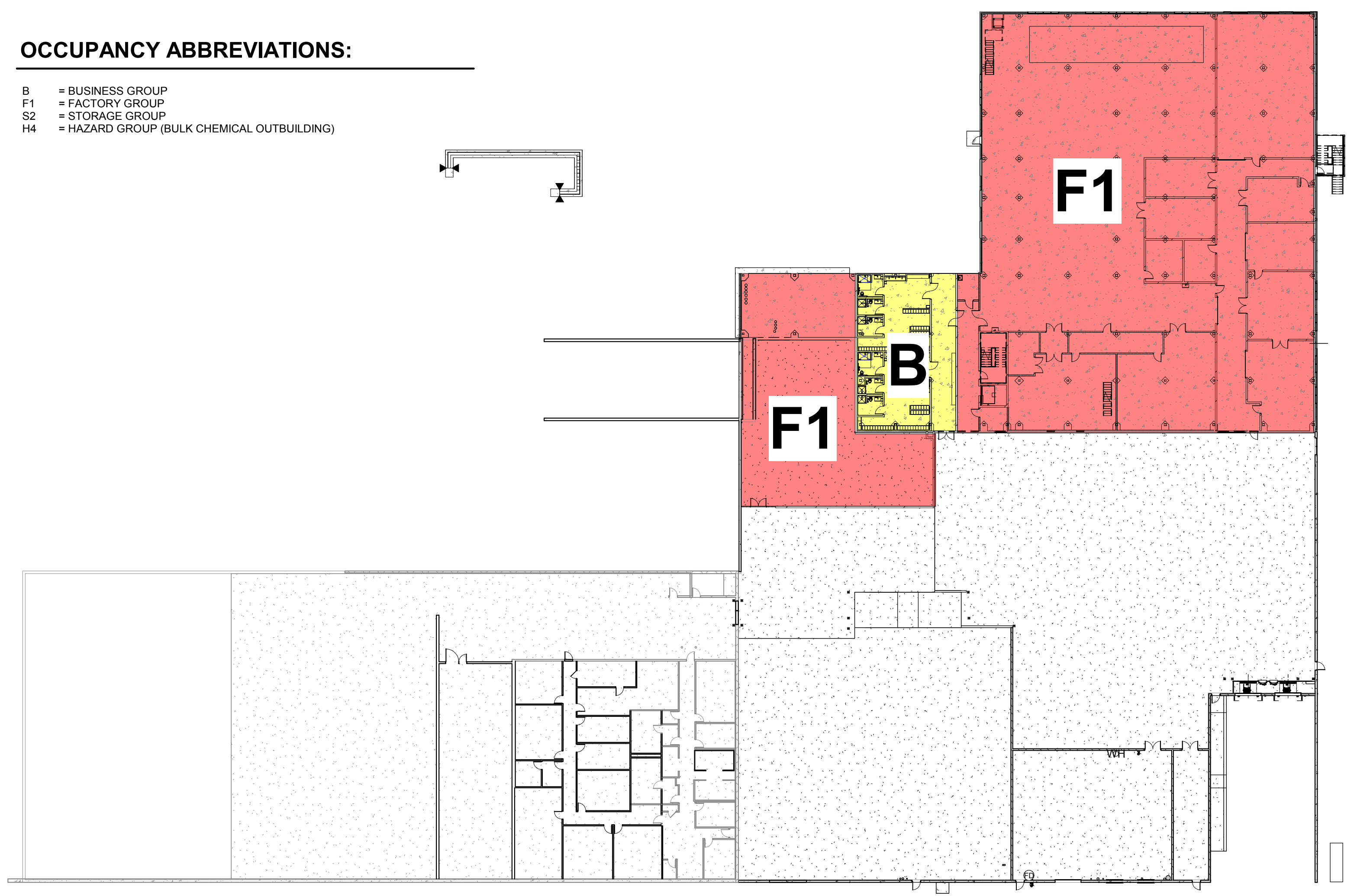


KEY PLAN



**OCCUPANCY ABBREVIATIONS:**

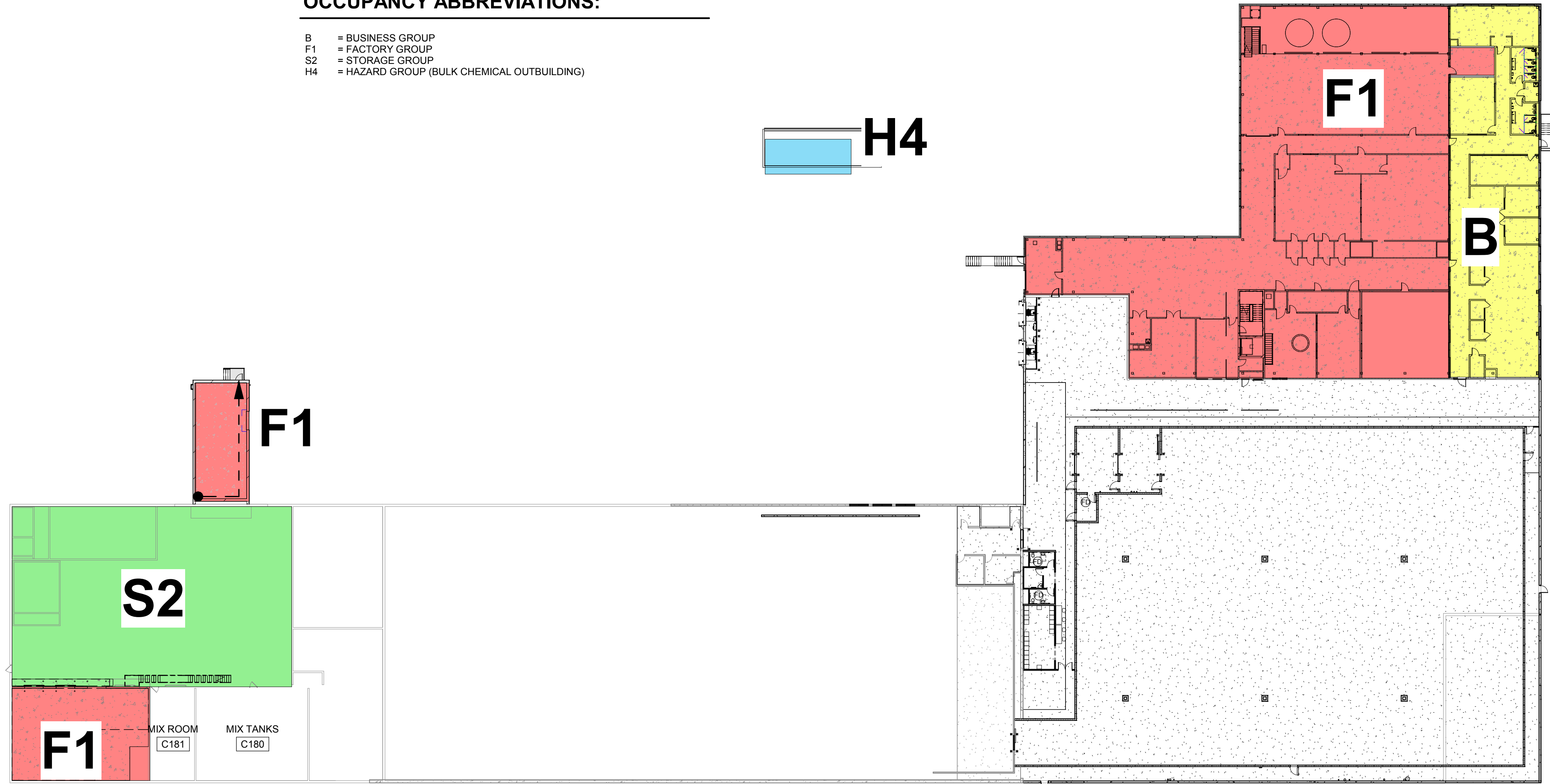
- B = BUSINESS GROUP
- F1 = FACTORY GROUP
- S2 = STORAGE GROUP
- H4 = HAZARD GROUP (BULK CHEMICAL OUTBUILDING)



**1 THOR - LOWER LEVEL OCCUPANCY PLAN**  
1/32" = 1'-0"

**OCCUPANCY ABBREVIATIONS:**

- B = BUSINESS GROUP
- F1 = FACTORY GROUP
- S2 = STORAGE GROUP
- H4 = HAZARD GROUP (BULK CHEMICAL OUTBUILDING)

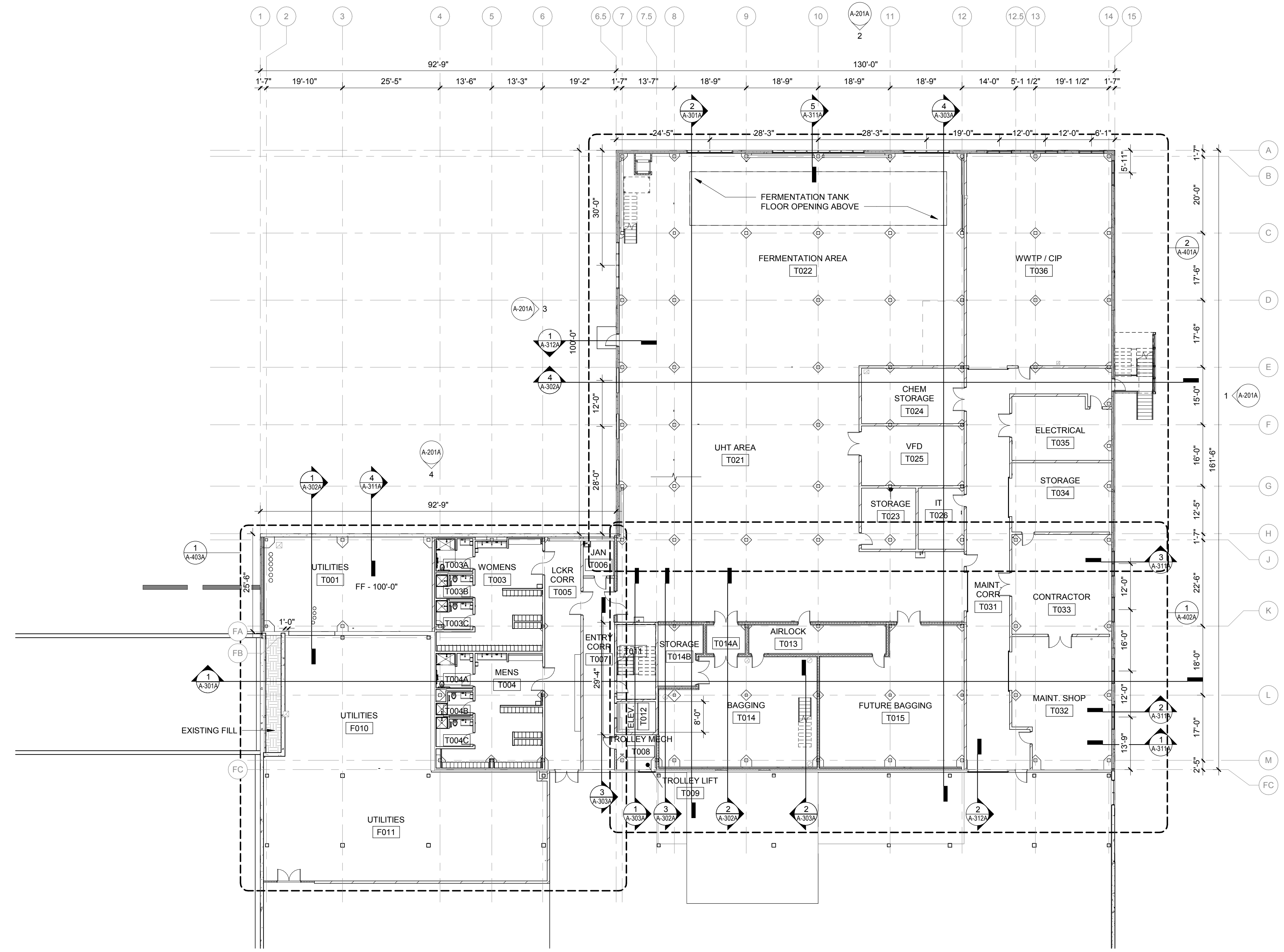


**1 THOR - UPPER LEVEL OCCUPANCY PLAN**  
1/32" = 1'-0"

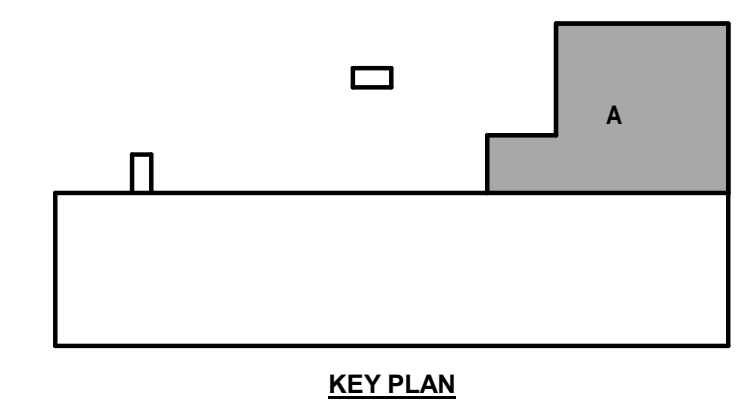
**FLOOR PLAN GENERAL NOTES:**

- SITE DATUM OF FINISHED FIRST FLOOR INDICATED ON SITE PLAN = 100'-0" ON ARCHITECTURAL DRAWINGS.
- FIELD VERIFY DIMENSIONS. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR FINAL DECISION.
- INTERIOR DIMENSIONS ARE FROM FINISH FACE OF WALLS (I.E. GYPSUM WALLBOARD OR CMU), UNLESS NOTED OTHERWISE.
- FINISH FLOOR ELEVATIONS ARE TO THE TOP OF CONCRETE, UNLESS NOTED OTHERWISE.
- REFERENCE SHEET G-011 THRU G-015 FOR CODE, FIRE RATING, AND SEPARATION REQUIREMENTS.
- PATCH AND REPAIR EXISTING CONSTRUCTION (WALLS, DOORS, CEILINGS, FLOORS, ETC.) AS REQUIRED FROM DEMOLITION OR CONSTRUCTION TO ALLOW FOR THE PREP WORK AND NEW OR COMPLETION OF EXISTING FINISHES. REPAIRS OR REPLACEMENTS MUST BE DURABLE, SEAMLESS, AND MATCH THE EXISTING MATERIAL.
- PATCH FLOOR AND WALL PENETRATIONS CAUSED BY DEMOLITION OF MECHANICAL, ELECTRICAL, TECHNOLOGY, AND PLUMBING, INCLUDING BUT NOT LIMITED TO PIPING AND CONDUIT RUNS, IN A MANNER THAT IS CONSISTENT WITH THE EXISTING FLOOR AND WALL CONSTRUCTION AND FINISH. PENETRATIONS SHALL MEET REQUIRED FIRE RATINGS.
- COORDINATE THE INSTALLATION OF OWNER-SUPPLIED EQUIPMENT. REFERENCE PLANS, SPECS, AND INTERIOR ELEVATIONS FOR SPECIFIC EQUIPMENT AND ITS INSTALLATION REQUIREMENTS.
- PROVIDE BLOCKING, STIFFENERS, BRACINGS, BACKING PLATES, SUPPORTING BRACKETS, AND NECESSARY SELECTIVE DEMOLITION REQUIRED FOR THE PROPER INSTALLATION OF CASEWORK, TOILET ROOM ACCESSORIES, TOILET PARTITIONS AND MISCELLANEOUS EQUIPMENT.
- RECESSED CABINETS, PANELS, BOXES, ETC. LOCATED IN FIRE-RATED PARTITIONS SHALL BE INSTALLED IN A MANNER WHICH MAINTAINS THE FIRE RATED CONSTRUCTION.
- SEE ENLARGED PLANS FOR NOTES, DIMENSIONS, AND WALL TYPES WITHIN THE DETAIL CALLOUT BOUNDARIES.
- REFERENCE SHEET A-002 FOR INTERIOR PARTITION TYPES. INTERIOR PARTITION TAGS NOTED ENCOMPASS THE ENTIRE LENGTH OF WALL SHOWN TO CORNERS OF ROOM, OVER AND AROUND DOORWAYS SHOWN.
- REFERENCE INTERIOR DRAWINGS FOR FINISHES, DETAILS, SCHEDULES, CASEWORK AND FURNITURE PLANS
- WALL CURBS ARE SHOWN IN THE STRUCTURAL SET

**KEYED NOTES**



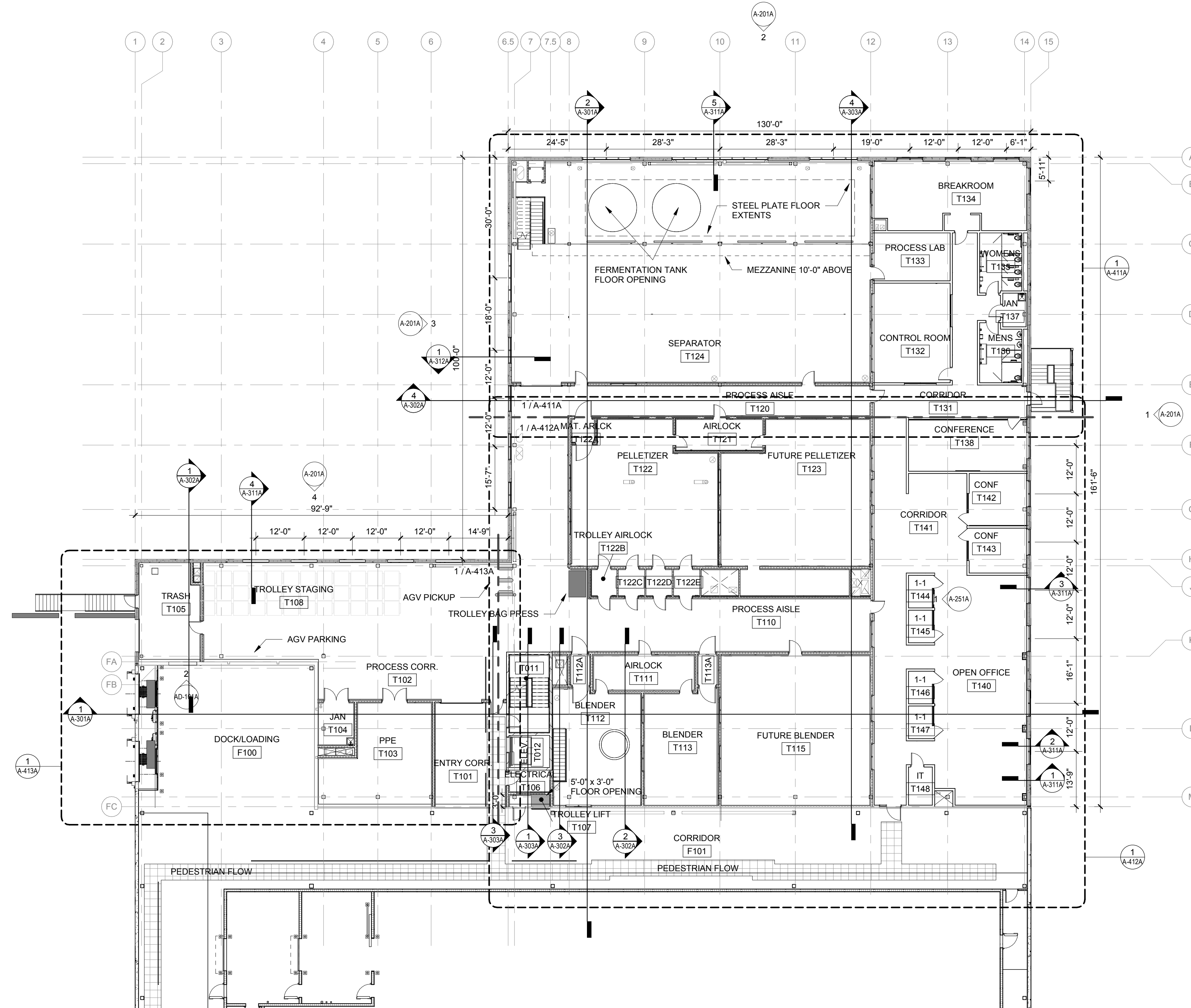
**1 FLOOR PLAN - THOR LOWER LEVEL**  
1/16" = 1'-0"



**FLOOR PLAN GENERAL NOTES:**

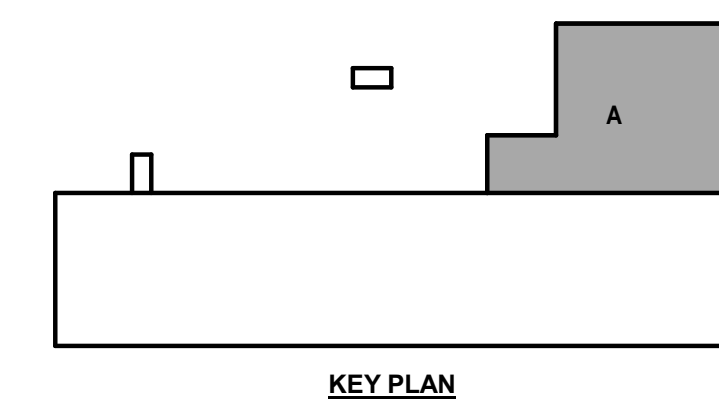
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6. PATCH AND REPAIR EXISTING CONSTRUCTION (WALLS, DOORS, CEILINGS, FLOORS, ETC.) AS REQUIRED FROM DEMOLITION OR CONSTRUCTION TO ALLOW FOR THE PREP WORK AND NEW OR COMPLETION OF EXISTING FINISHES. REPAIRS OR REPLACEMENTS MUST BE DURABLE, SEAMLESS, AND MATCH THE EXISTING MATERIAL.
7. PATCH FLOOR AND WALL PENETRATIONS CAUSED BY DEMOLITION OF MECHANICAL, ELECTRICAL, TECHNOLOGY, AND PLUMBING, INCLUDING BUT NOT LIMITED TO PIPING AND CONDUIT RUNS, IN A MANNER THAT IS CONSISTENT WITH THE EXISTING FLOOR AND WALL CONSTRUCTION AND FINISH. PENETRATIONS SHALL MEET REQUIRED FIRE RATINGS.
8. COORDINATE THE INSTALLATION OF OWNER-SUPPLIED EQUIPMENT. REFERENCE PLANS, SPECS, AND INTERIOR ELEVATIONS FOR SPECIFIC EQUIPMENT AND ITS INSTALLATION REQUIREMENTS.
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11. SEE ENLARGED PLANS FOR NOTES, DIMENSIONS, AND WALL TYPES WITHIN THE DETAIL CALLOUT BOUNDARIES.
12. REFERENCE SHEET A-002 FOR INTERIOR PARTITION TYPES. INTERIOR PARTITION TAGS NOTED ENCOMPASS THE ENTIRE LENGTH OF WALL SHOWN TO CORNERS OF ROOM, OVER AND AROUND DOORWAYS SHOWN.
13. REFERENCE INTERIOR DRAWINGS FOR FINISHES, DETAILS, SCHEDULES, CASEWORK AND FURNITURE PLANS
14. WALL CURBS ARE SHOWN IN THE STRUCTURAL SET

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**KEYED NOTES**

**1 FLOOR PLAN - THOR UPPER LEVEL**  
1/16" = 1'-0"



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SHEET CONTENTS  
UPPER LEVEL FLOOR PLAN

SHEET NO.:  
**A-102A**

**GENERAL NOTES - ROOF PLAN**

- 1 ROOF INSULATION TO BE A MINIMUM OF (2) LAYERS 2.6" POLYISO, UNLESS NOTED OTHERWISE.
- 2 PROVIDE MIN. 1/4" PER FOOT AT TAPERED ROOF INSULATION LOCATION UNLESS NOTED OTHERWISE.
- 3 SEE MECHANICAL, PLUMBING, TECHNOLOGY, AND ELECTRICAL DRAWINGS FOR ADDITIONAL ROOF PENETRATIONS NOT SHOWN.
- 4 SEE S-001 FOR ROOF LOADING REQUIREMENTS.

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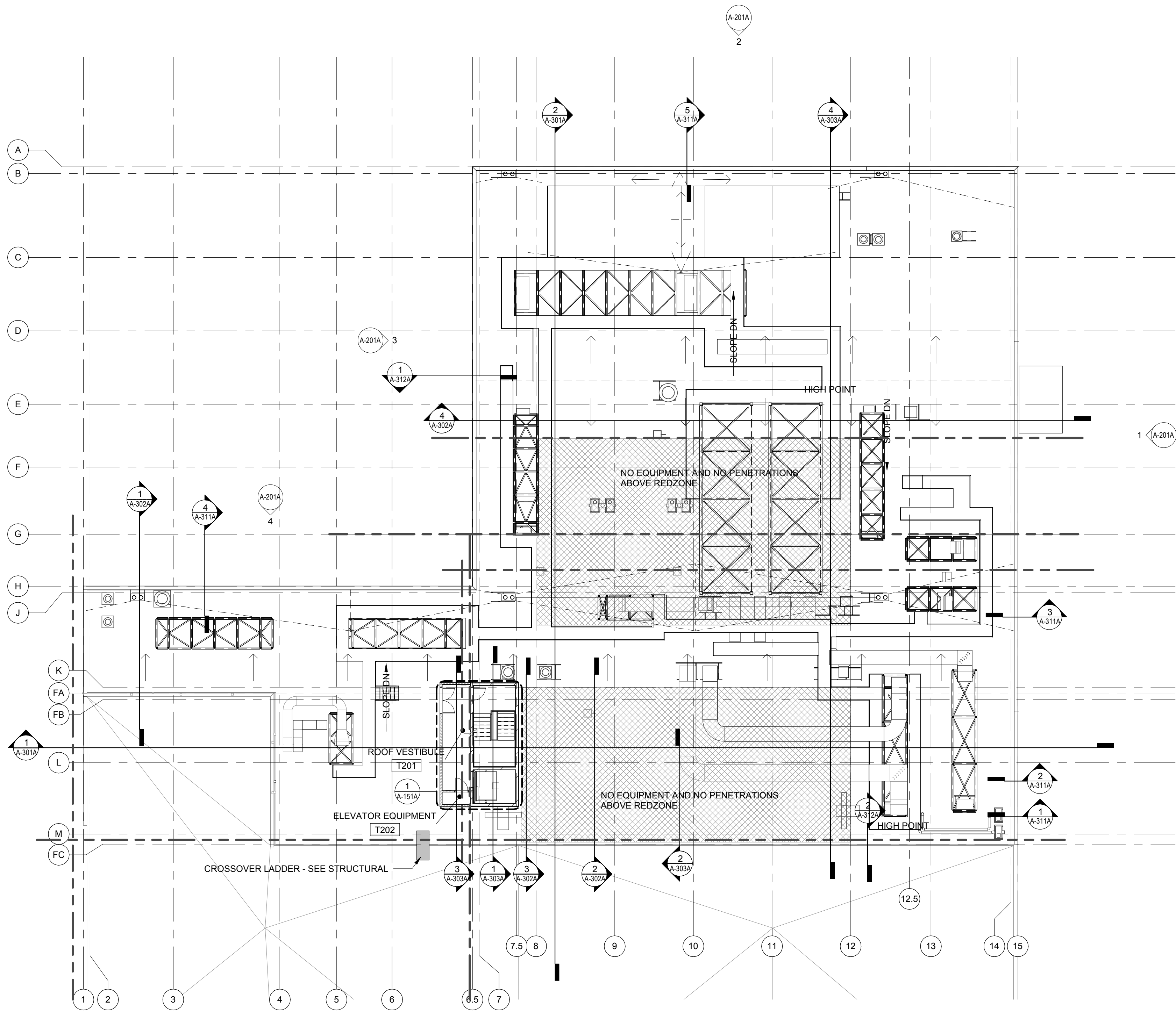


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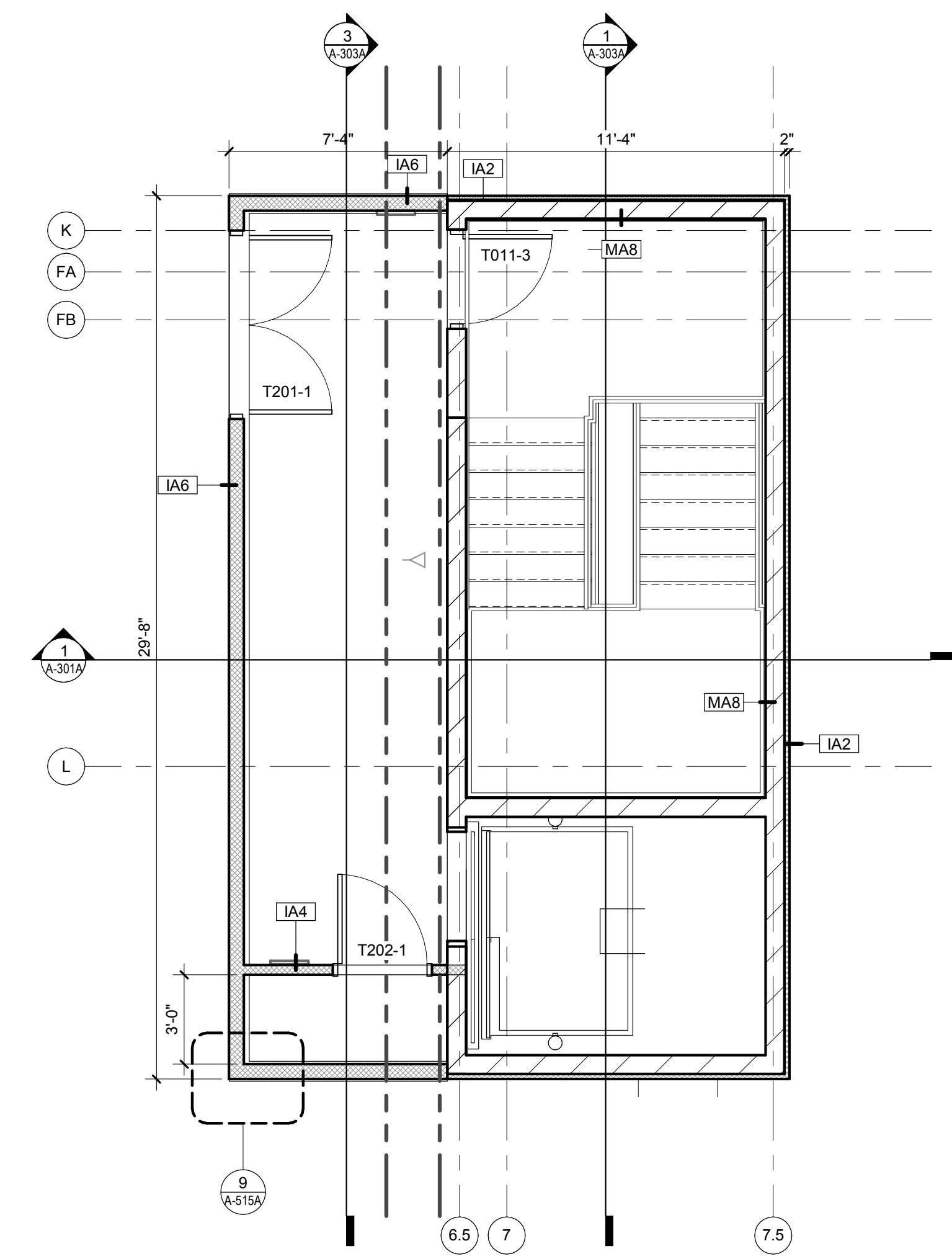
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SHEET CONTENTS  
ROOF PLAN

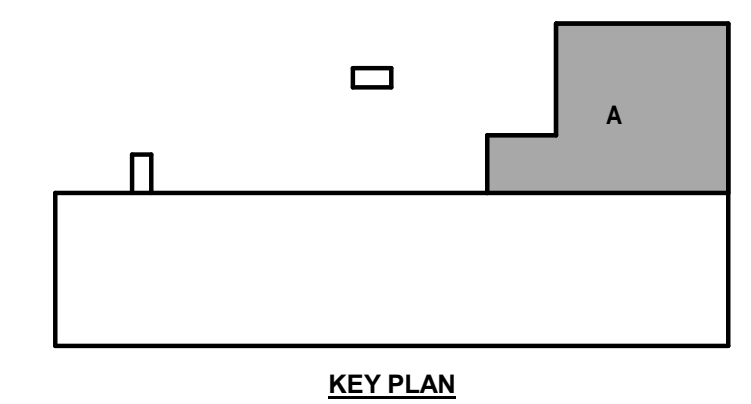
SHEET NO.:  
**A-151A**



**2 ROOF PLAN**  
1/16" = 1'-0"

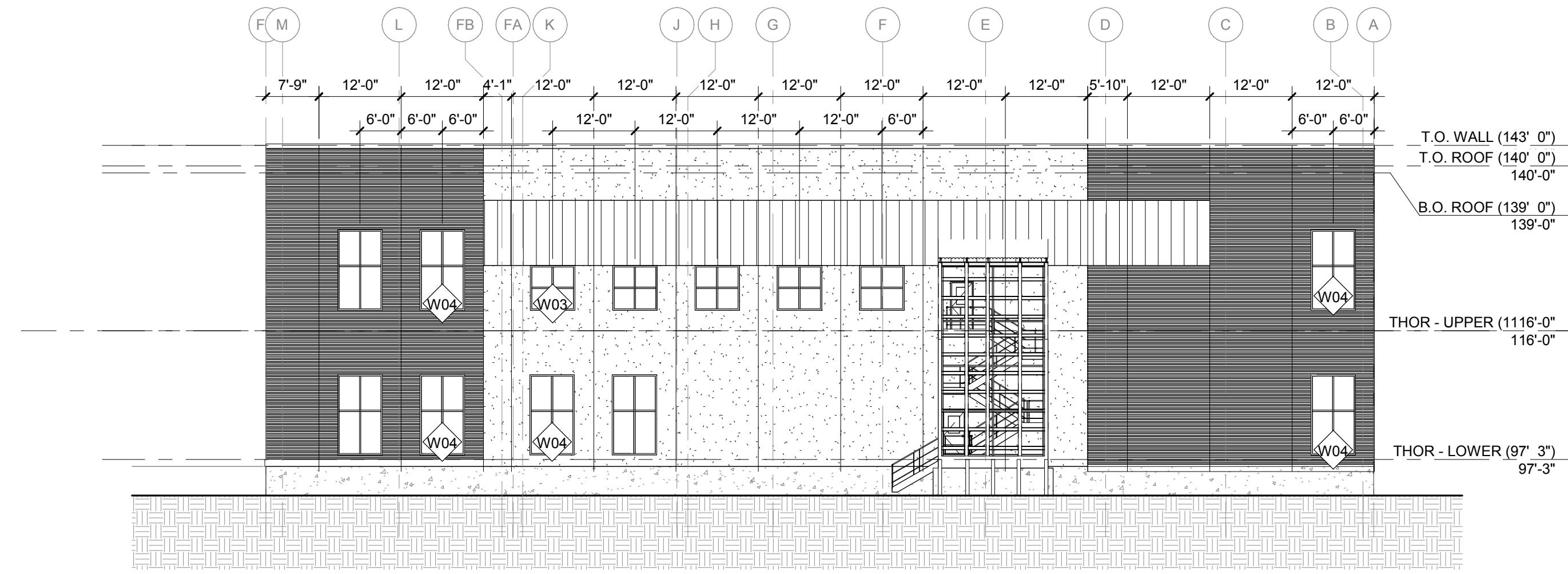


**1 VESTIBULE ROOF PLAN**  
1/4" = 1'-0"

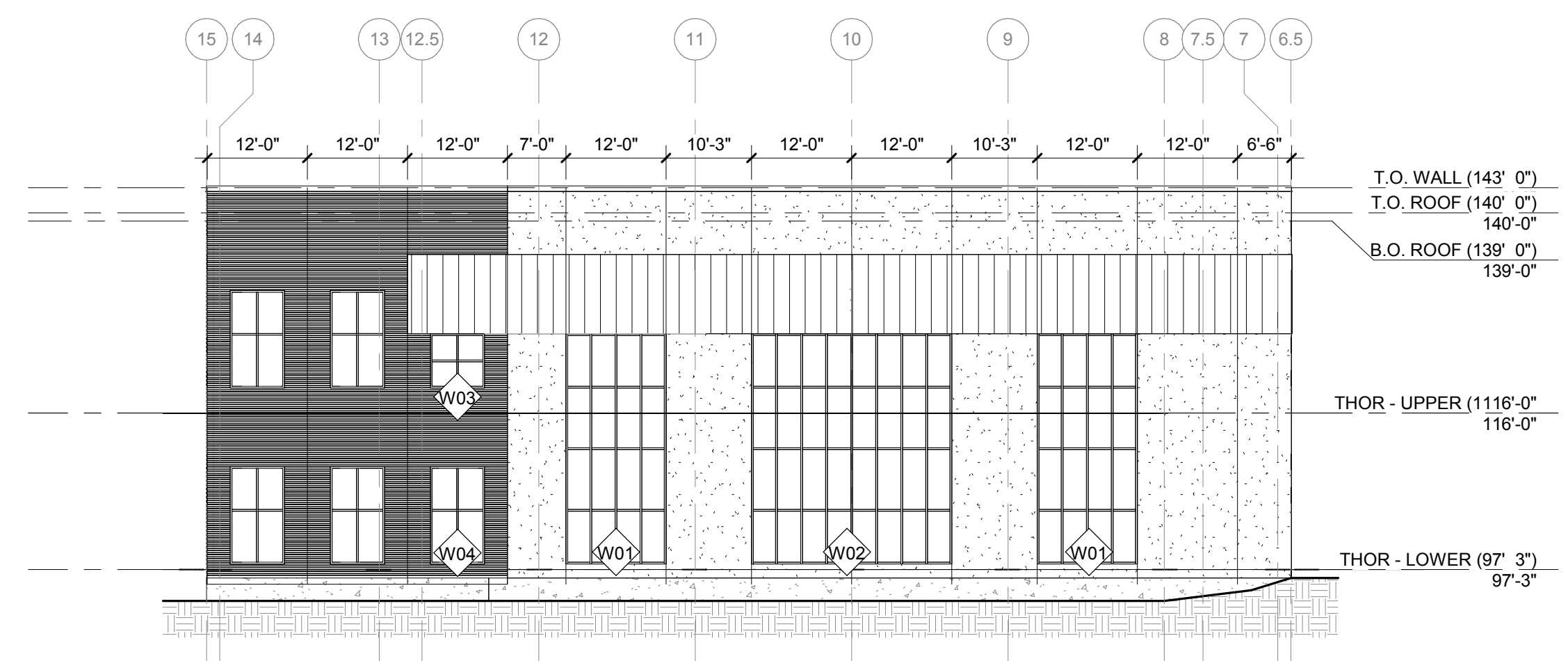


KEY PLAN

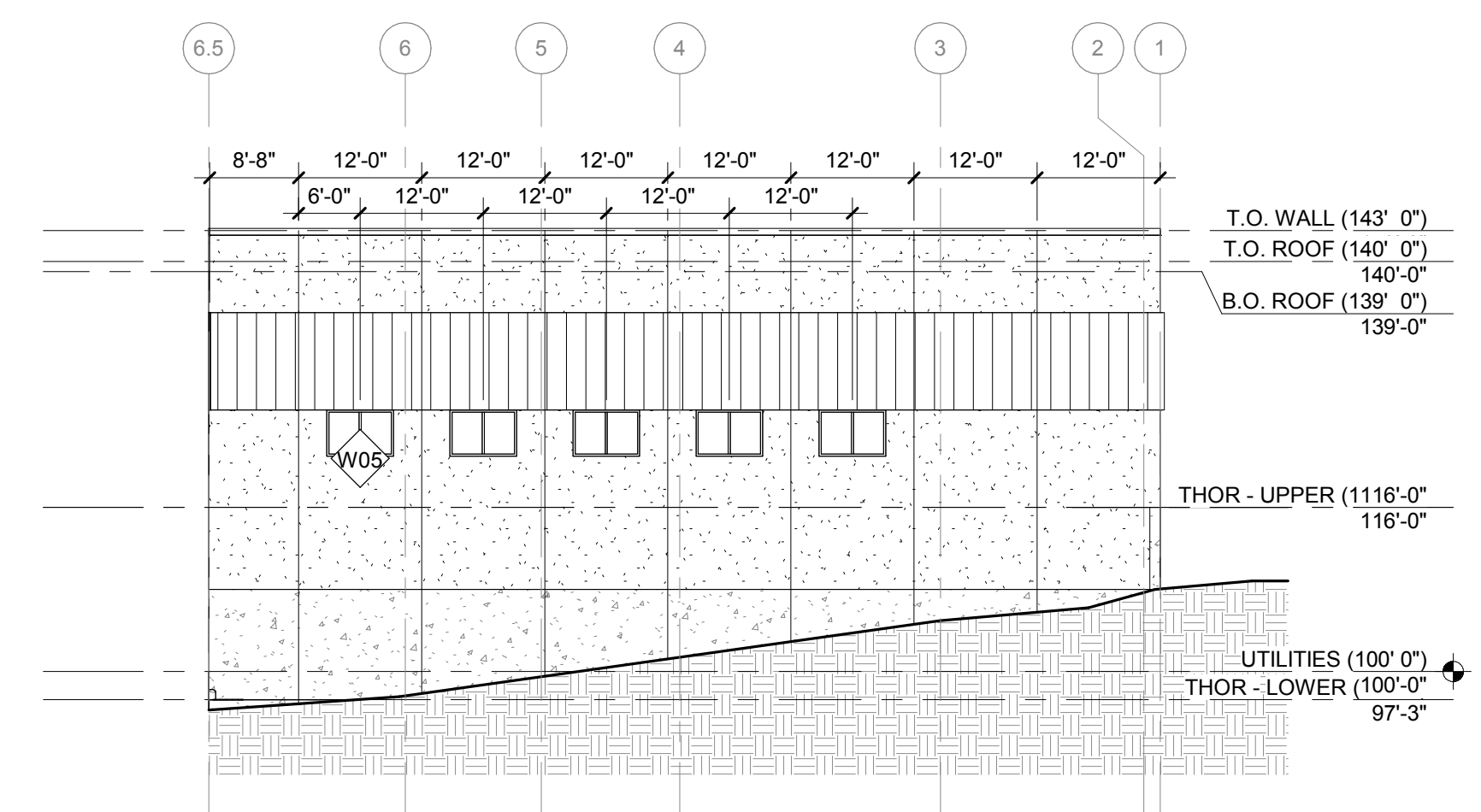




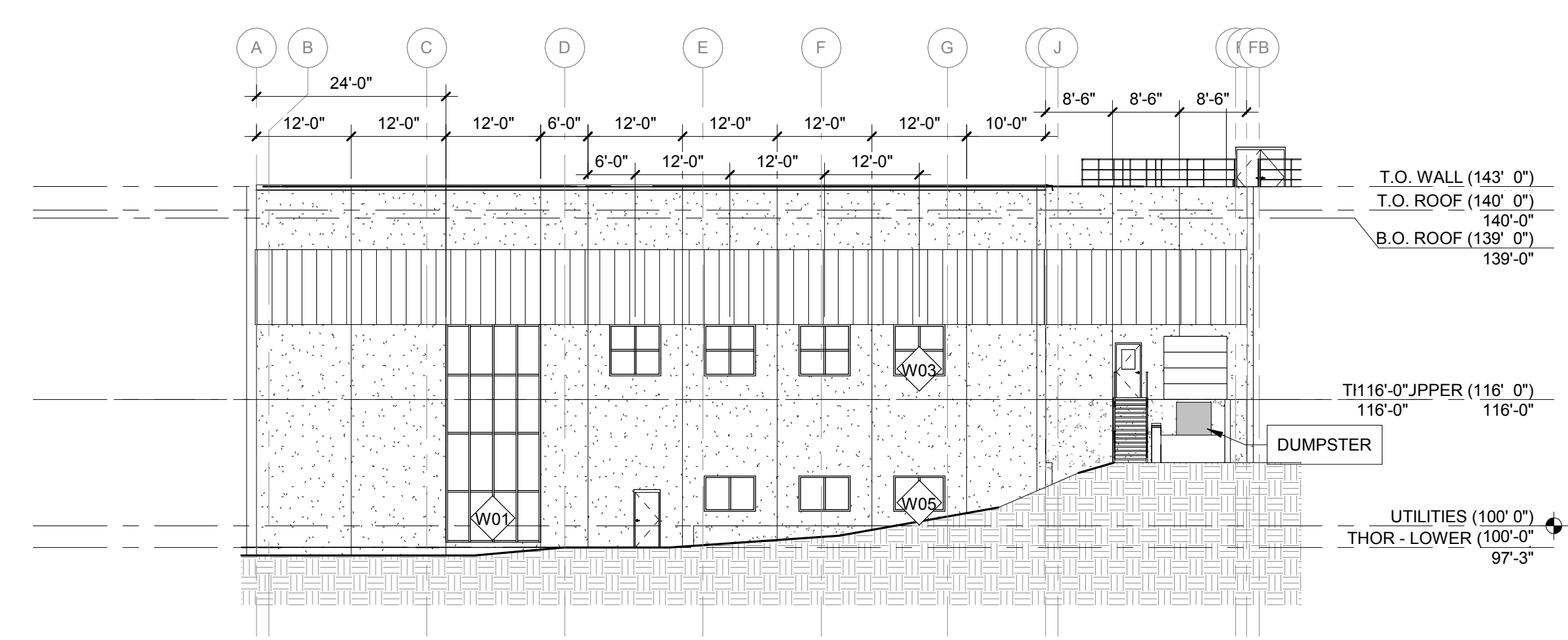
**1 THOR - EAST ELEVATION**  
1/16" = 1'-0"



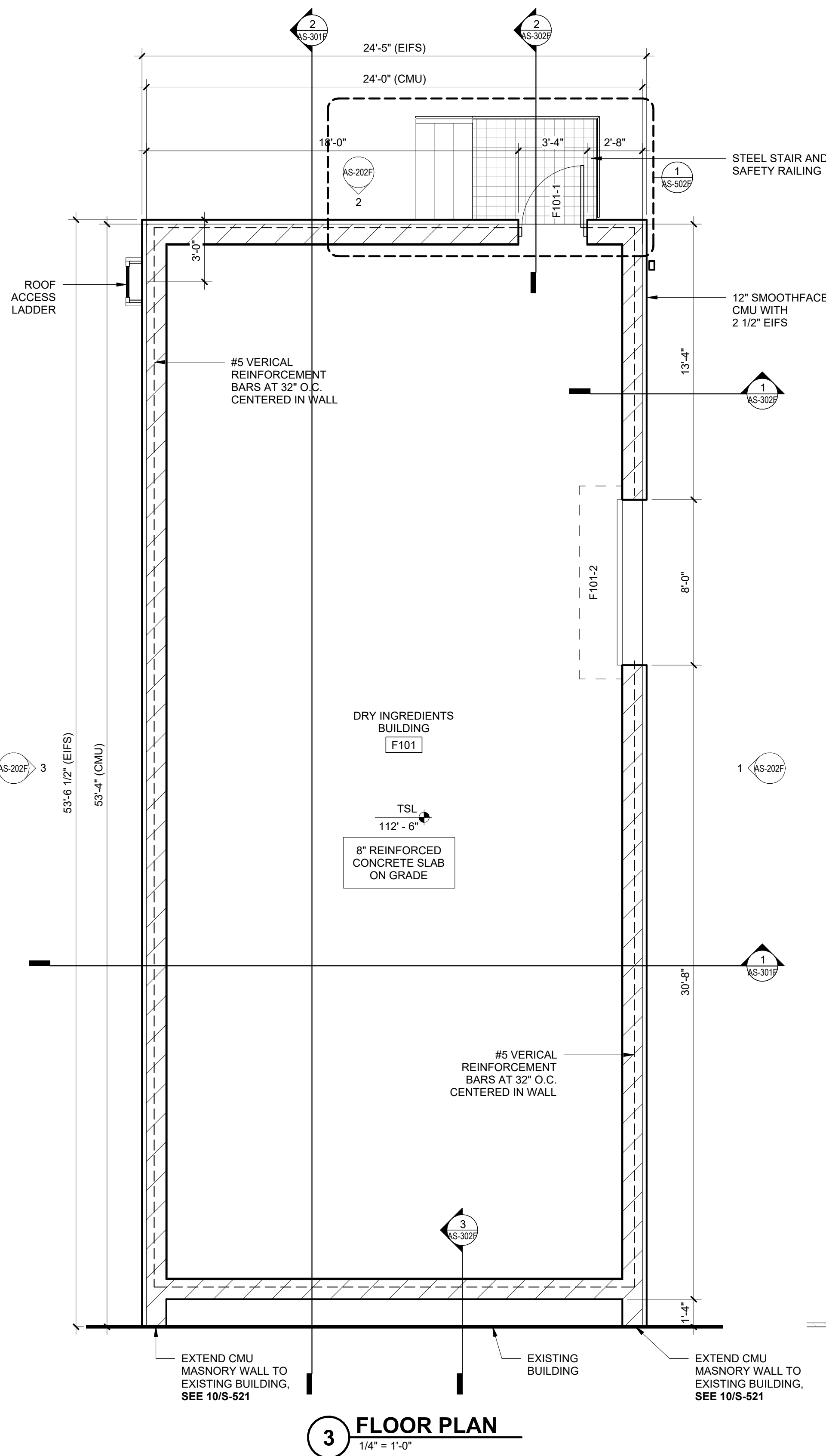
**2 THOR - NORTH ELEVATION**  
1/16" = 1'-0"



**4 THOR - NORTH ELEVATION BEYOND**  
1/16" = 1'-0"



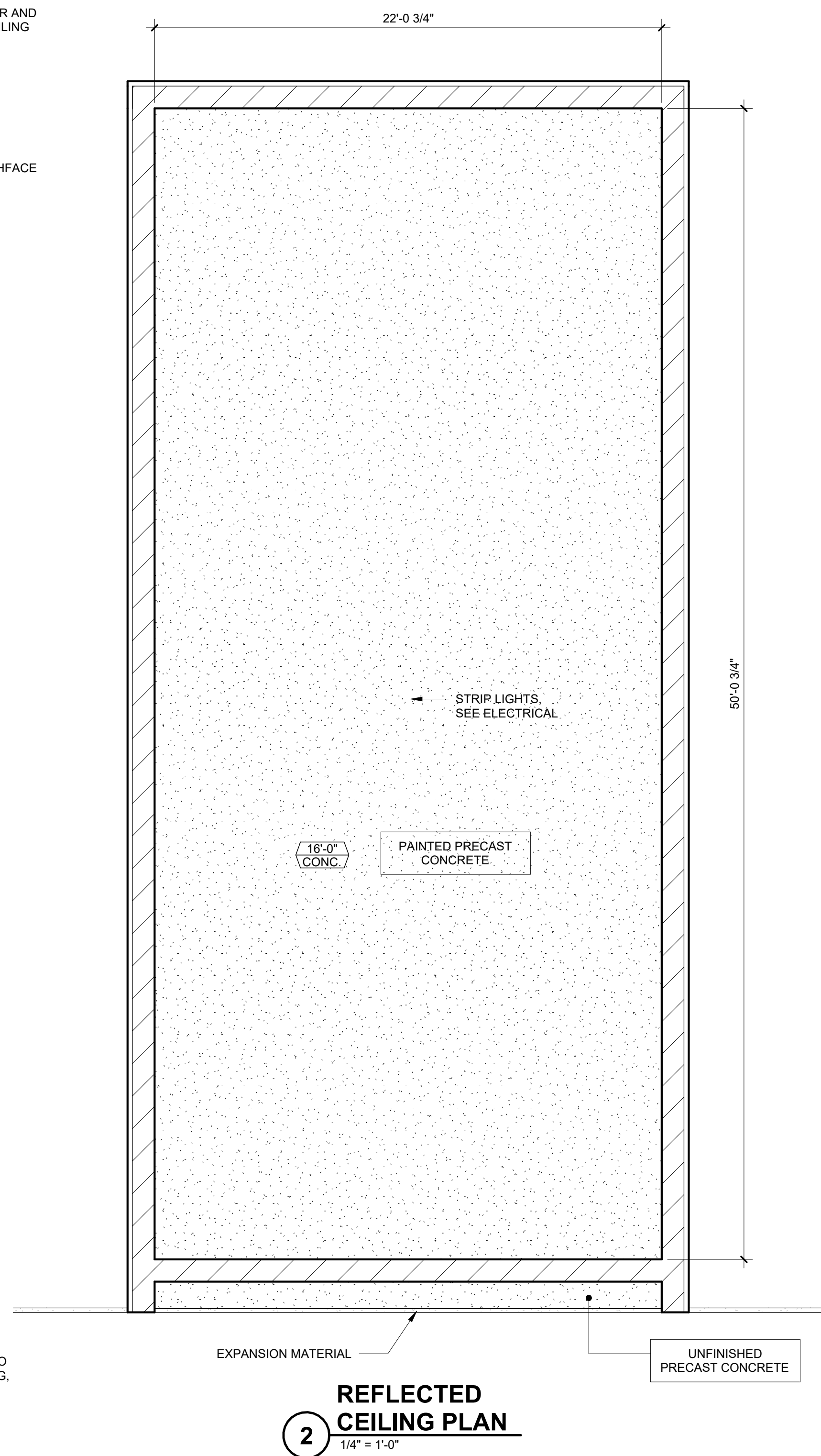
**3 THOR - WEST ELEVATION**  
1/16" = 1'-0"



**3 FLOOR PLAN**  
1/4" = 1'-0"

**GENERAL NOTES - FLOOR PLAN**

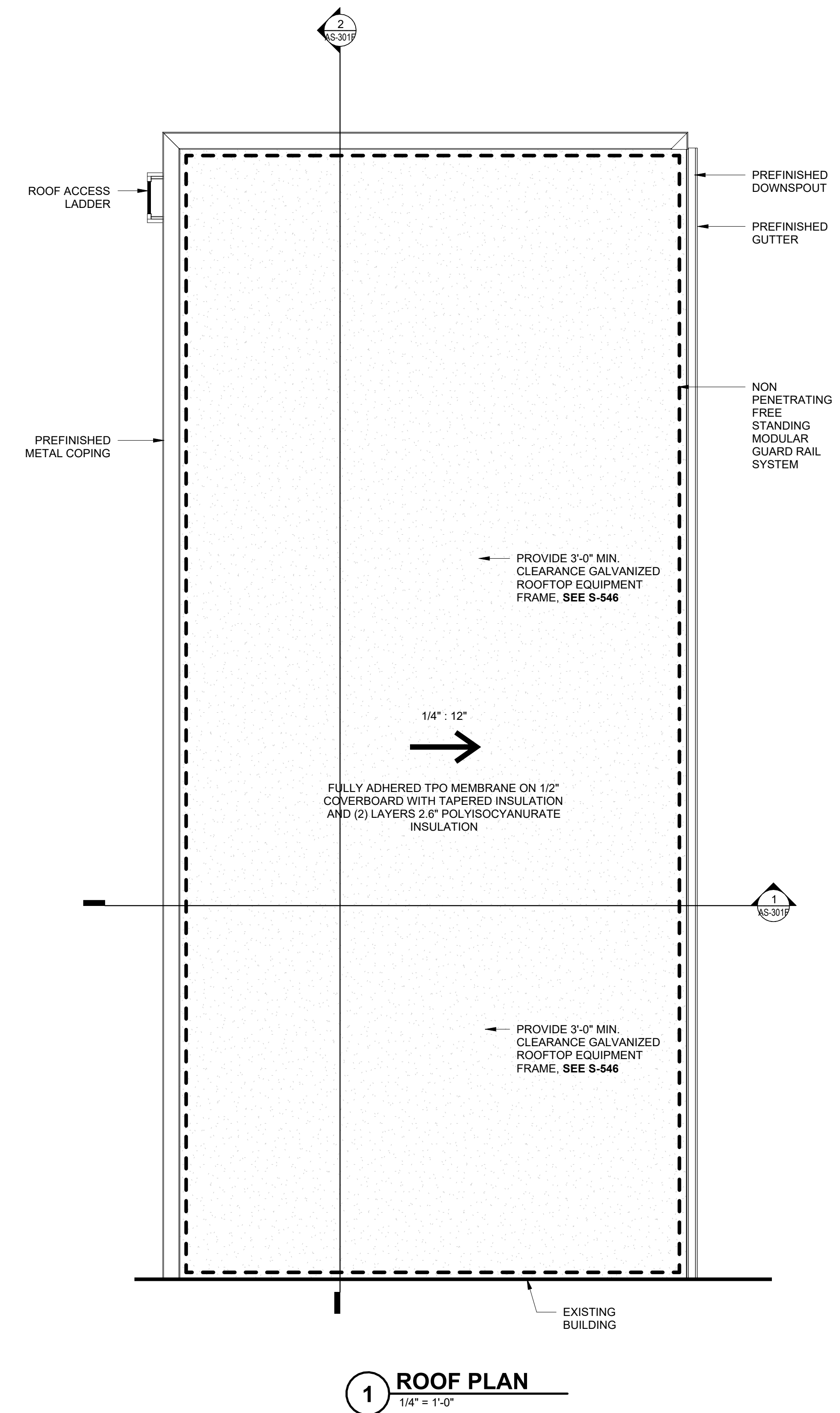
- SITE DATUM OF FINISHED FIRST FLOOR INDICATED ON SITE PLAN 162'-0" = 100'-0" ON ARCHITECTURAL DRAWINGS.
- FIELD VERIFY DIMENSIONS, BRING DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR FINAL DECISION.
- INTERIOR AND EXTERIOR DIMENSIONS ARE FROM FINISH FACE OF WALLS, UNLESS NOTED OTHERWISE.
- REFERENCE SHEET SERIES G-011 FOR ALL CODE, FIRE RATING, AND SEPARATION REQUIREMENTS.
- COORDINATE INSTALLATION OF OWNER-SUPPLIED EQUIPMENT. REFERENCE PLANS, SPECS, AND INTERIOR ELEVATIONS FOR SPECIFIC EQUIPMENT AND ITS INSTALLATION REQUIREMENTS.
- SEE ENLARGED PLANS FOR NOTES, DIMENSIONS, AND WALL TYPES WITHIN THE DETAIL CALLOUT BOUNDARIES.
- FINISHED FLOOR ELEVATION 169.00' GLOBAL OR 107'-0" LOCAL.
- SEE S-521 FOR MASONRY WALL STANDARD DETAILS.



**2 REFLECTED CEILING PLAN**  
1/4" = 1'-0"

**GENERAL NOTES - CEILING PLAN**

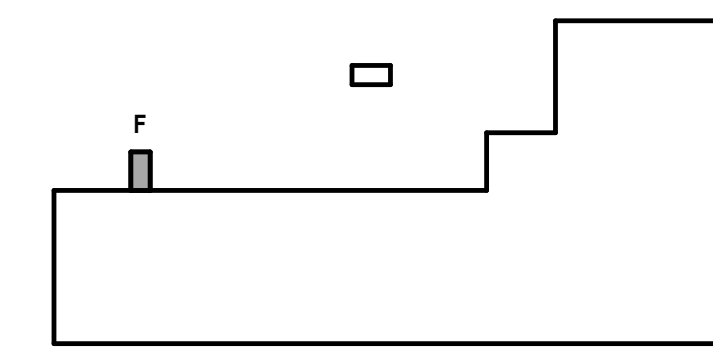
- SEE ROOM FINISH SCHEDULE FOR FLOOR, WALL AND CEILING FINISHES.
- CENTER LIGHTS, SPRINKLERS, FIRE DETECTION EQUIPMENT, OCCUPANCY SENSORS OR OTHER CEILING EQUIPMENT OR APPURTENANCES IN ACOUSTICAL PANELS, GYPSUM BOARD SOFFITS, AND BETWEEN OTHER CEILING MOUNTED FIXTURES.
- REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR FIXTURE TYPES AND COMPLETE CONSTRUCTION REQUIREMENTS.
- EXPOSED, UNFINISHED STRUCTURE, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION AND TECHNOLOGY SYSTEMS TO BE PAINTED TO MATCH CEILING.



**1 ROOF PLAN**  
1/4" = 1'-0"

**GENERAL NOTES - ROOF PLAN**

- ROOF INSULATION TO BE A MINIMUM OF (2) LAYERS 2.6" POLYISO, UNLESS NOTED OTHERWISE.
- PROVIDE MIN. 1/4" PER FOOT AT TAPERED ROOF INSULATION LOCATION UNLESS NOTED OTHERWISE.
- SEE MECHANICAL, PLUMBING, TECHNOLOGY, AND ELECTRICAL DRAWINGS FOR ADDITIONAL ROOF PENETRATIONS NOT SHOWN.
- SEE S-001 FOR ROOF LOADING REQUIREMENTS.



KEY PLAN

## CHR HANSEN PROJECT THOR

ISSUED

1 2/16/24 PERMIT ISSUE

MSH NO.: 4666672-222049.01

DATE: 2/16/24

DESIGNED BY: REK

DRAWN BY: JTR

CHECKED BY: LW

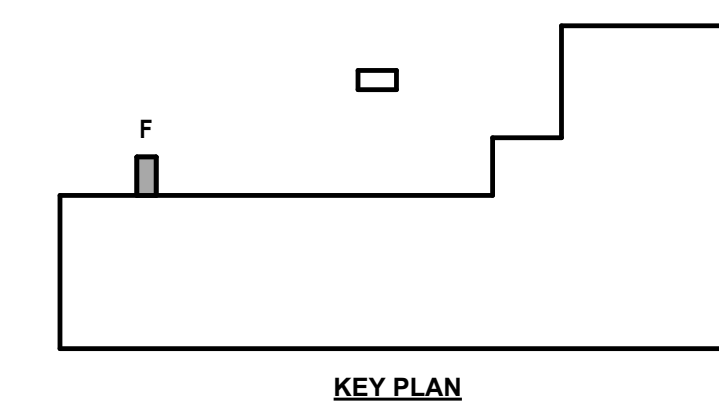
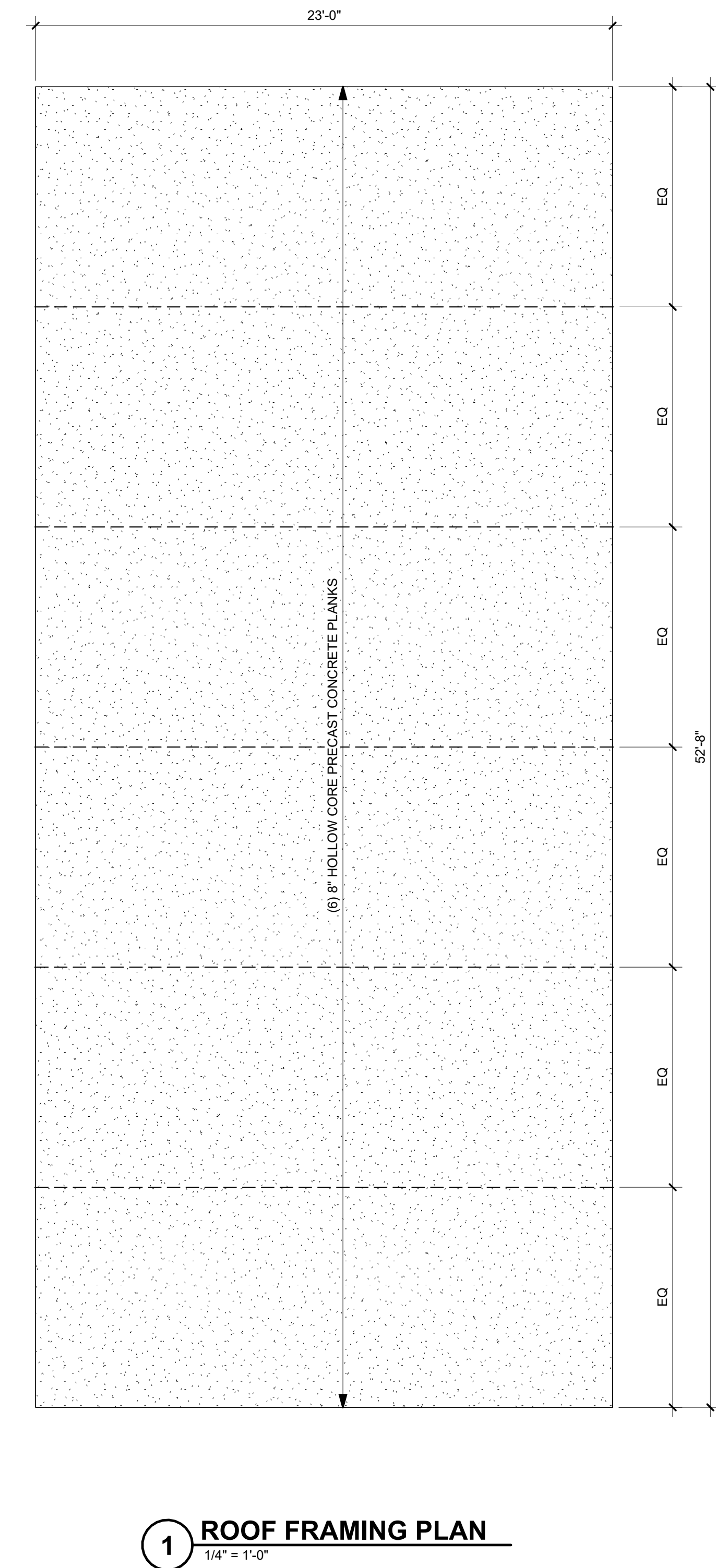
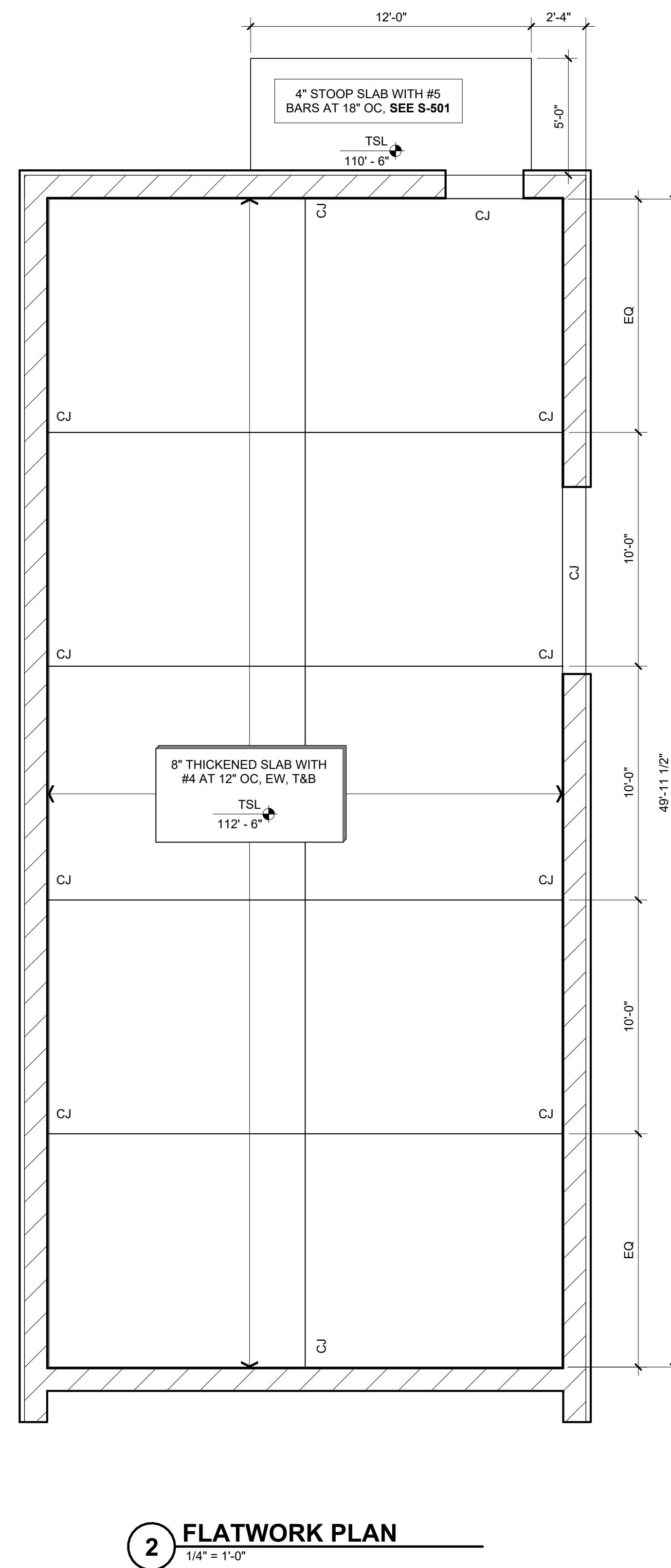
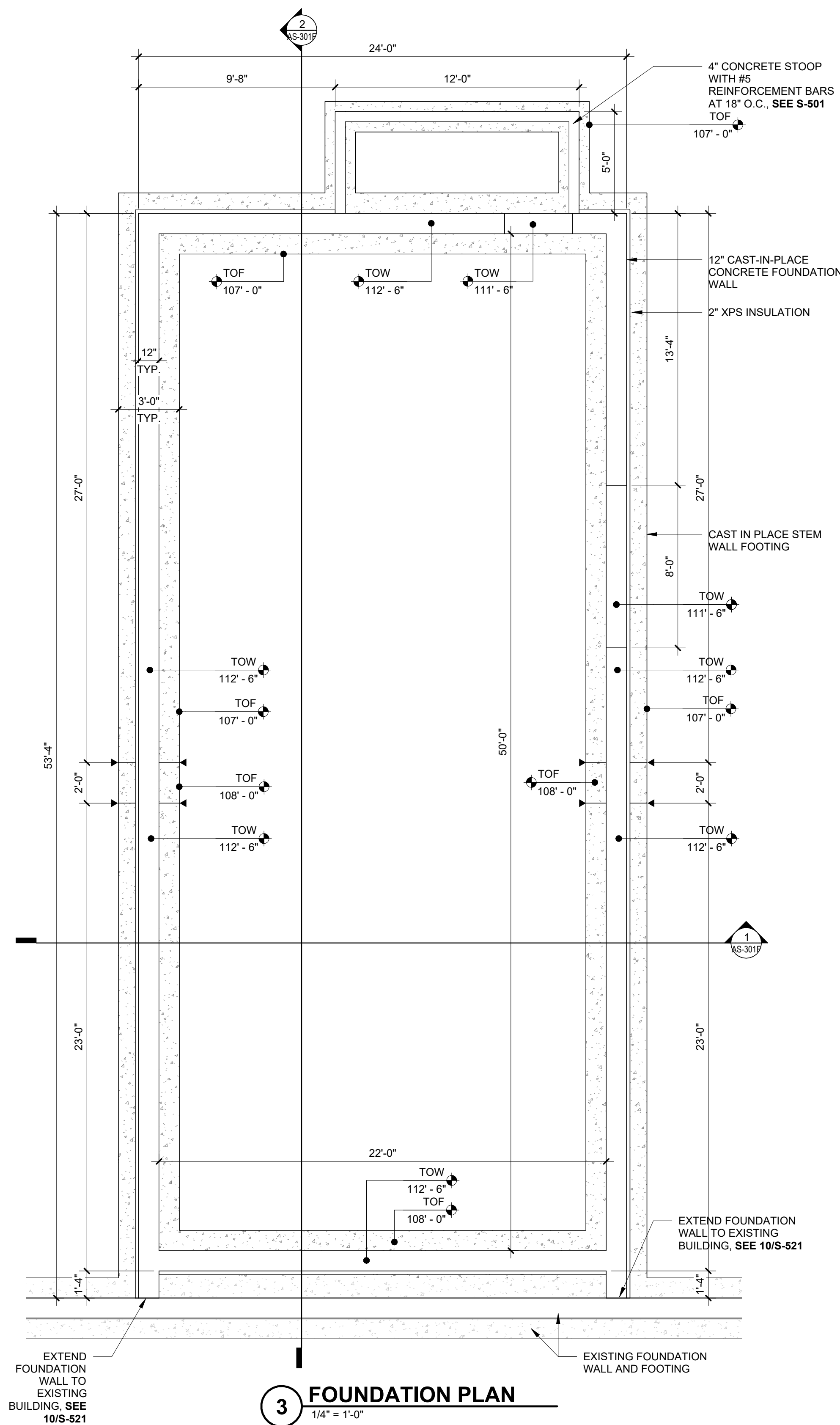
DO NOT SCALE DRAWINGS

SHEET CONTENTS

FOUNDATION,  
FLATWORK AND ROOF  
FRAMING PLANS

SHEET NO.:

# AS-111F

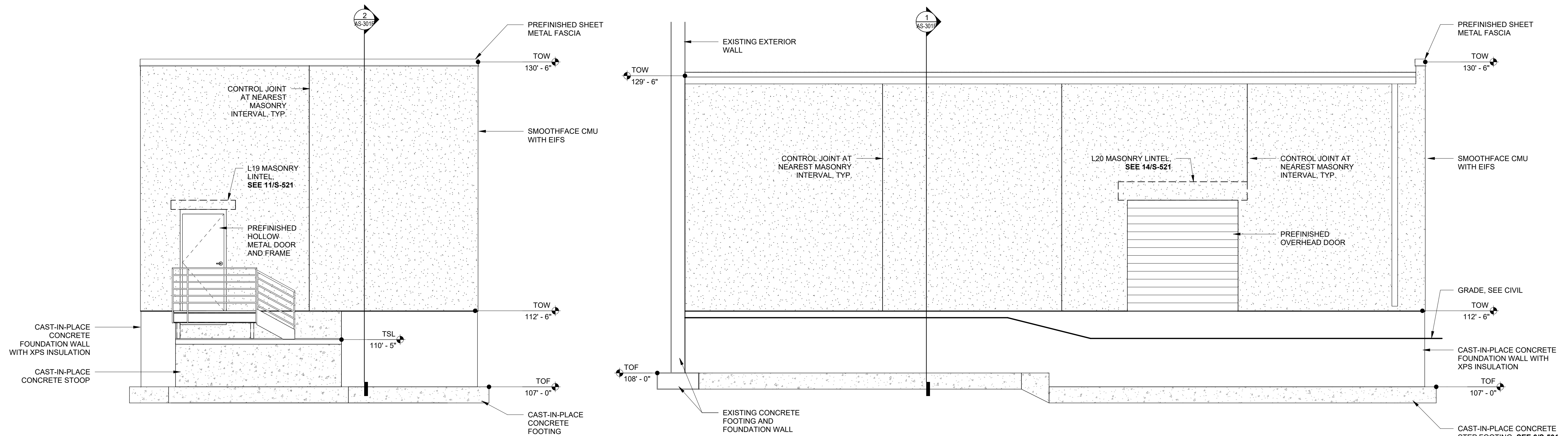


### GENERAL NOTES - FOUNDATION PLAN

- 1 FLOAT AND TROWEL FLOOR SLABS PER REQUIREMENTS OF FLOOR FINISH SYSTEM.
- 2 NOT ALL FOUNDATION PENETRATIONS ARE SHOWN, REFER TO OTHER DISCIPLINE DRAWINGS FOR ADDITIONAL INFORMATION.
- 3 STRIP FOOTINGS SHALL BE CENTERED UNDER WALLS UNLESS NOTED OTHERWISE.
- 4 SOIL IMPROVEMENTS NOT REQUIRED AT DRY INGREDIENTS BLOWER BUILDING. PROVIDE ON SITE GEOTECHNICAL SERVICES DURING EXCAVATION TO VERIFY 2000 PSI MIN. BEARING CAPACITY OF NATIVE SOILS

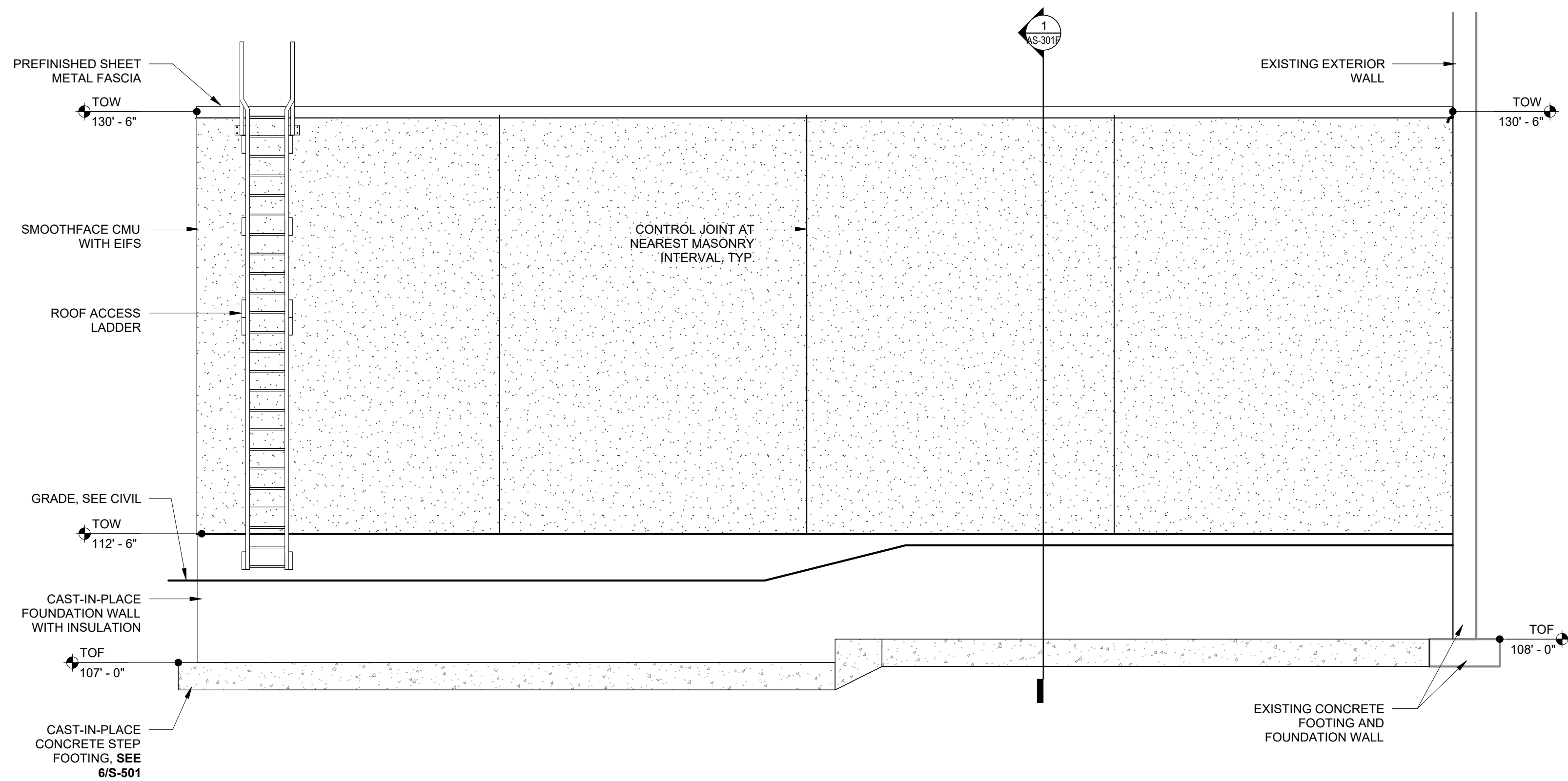
### GENERAL NOTES - FLATWORK PLAN

- 1 SITE DATUM OF FINISHED FIRST FLOOR INDICATED ON SITE PLAN 162'-0" = 100'-0" ON ARCHITECTURAL DRAWINGS.
- 2 FIELD VERIFY ALL DIMENSIONS, BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR FINAL DECISION.
- 3 ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE CONTRACT DOCUMENTS AND THE SPECIFICATIONS ON S-001.
- 4 ALL INTERIOR AND EXTERIOR DIMENSIONS ARE FROM FINISH FACE OF WALLS, UNLESS NOTED OTHERWISE.
- 5 REFER TO SHEET S-001 FOR STRUCTURAL LEGENDS, ABBREVIATIONS AND SYMBOLOLOGY.
- 6 REFER TO SHEET S-501 FOR TYPICAL DETAILS NOT REFERENCED ON THIS SHEET.
- 7 REFER TO SHEET S-601 FOR STRUCTURAL SCHEDULES.
- 8 FLOAT AND TROWEL FLOOR SLABS PER REQUIREMENTS OF FLOOR FINISH SYSTEM.
- 9 SEE 6/S-511 FOR EQUIPMENT PADS. COORDINATE FINAL LOCATION WITH MECHANICAL CONTRACTOR.
- 10 SEE 9/S-511 FOR TYPICAL CONTROL JOINT DETAIL.



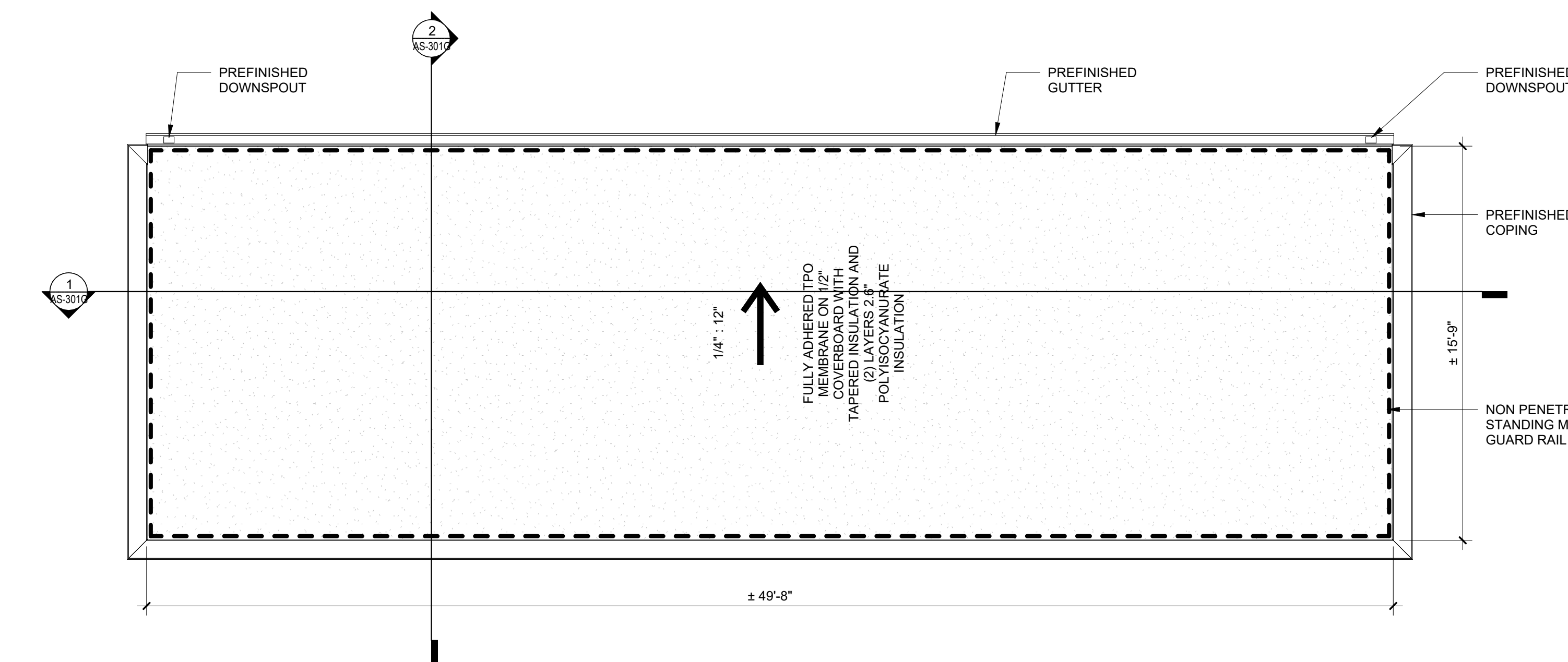
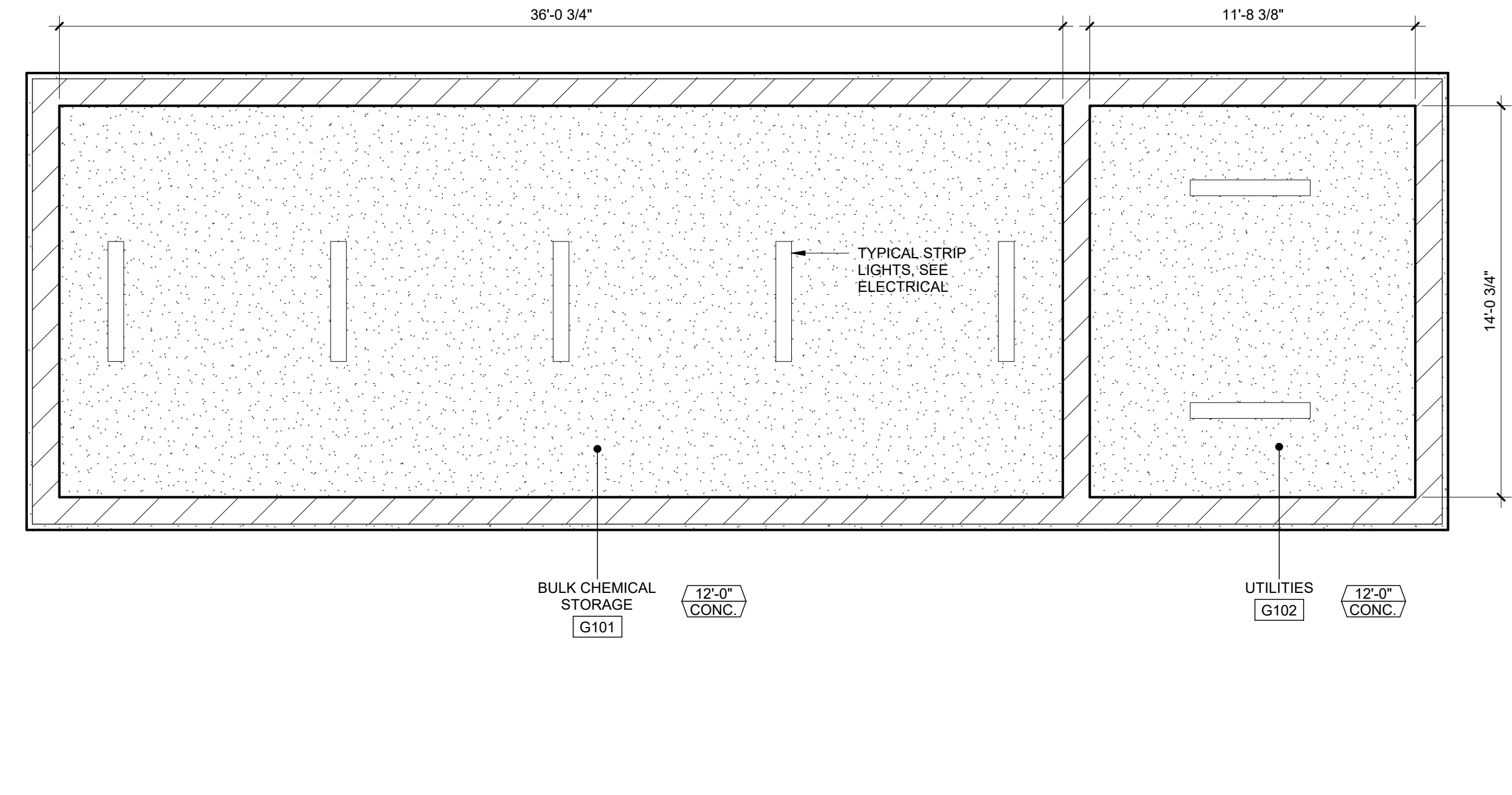
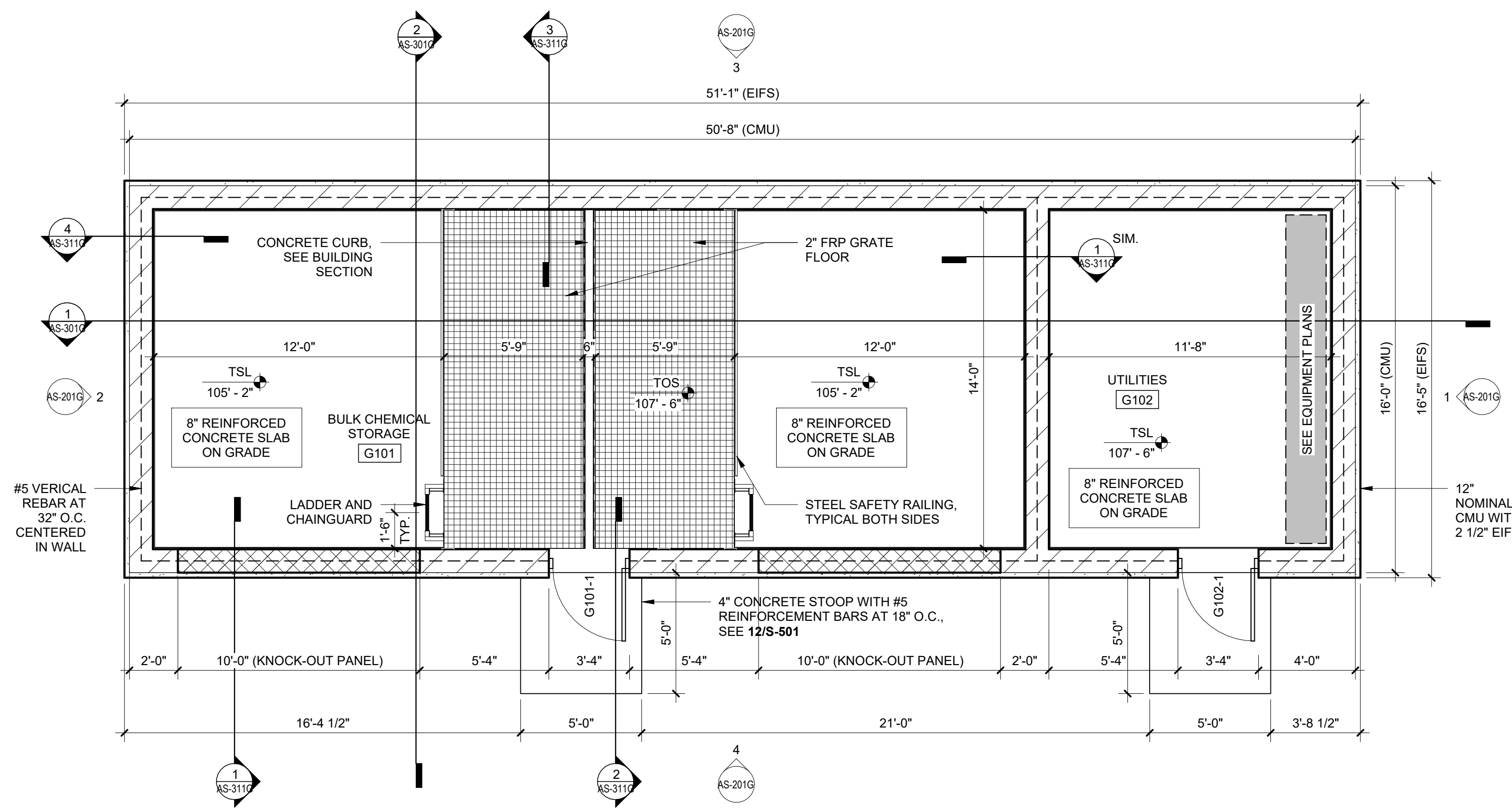
**2 ELEVATION - NORTH**  
1/4" = 1'-0"

**1 ELEVATION - EAST**  
1/4" = 1'-0"



**3 ELEVATION - WEST**  
1/4" = 1'-0"

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**GENERAL NOTES - FLOOR PLAN**

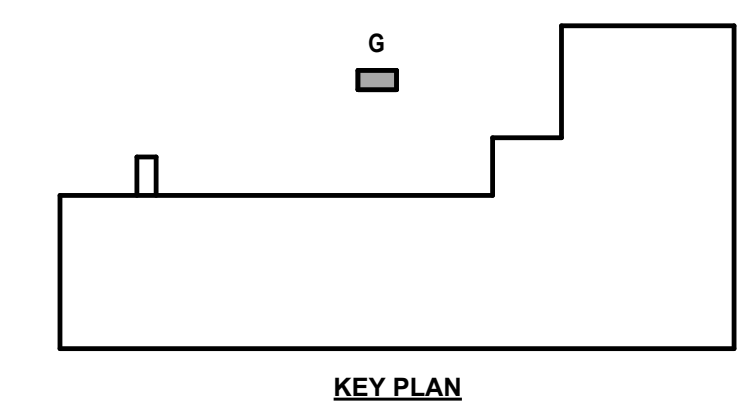
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- 7 FINISHED FLOOR ELEVATION 169.00' GLOBAL OR 107'-0" LOCAL.
- 8 SEE S-521 FOR MASONRY WALL STANDARD DETAILS.

**GENERAL NOTES - CEILING PLAN**

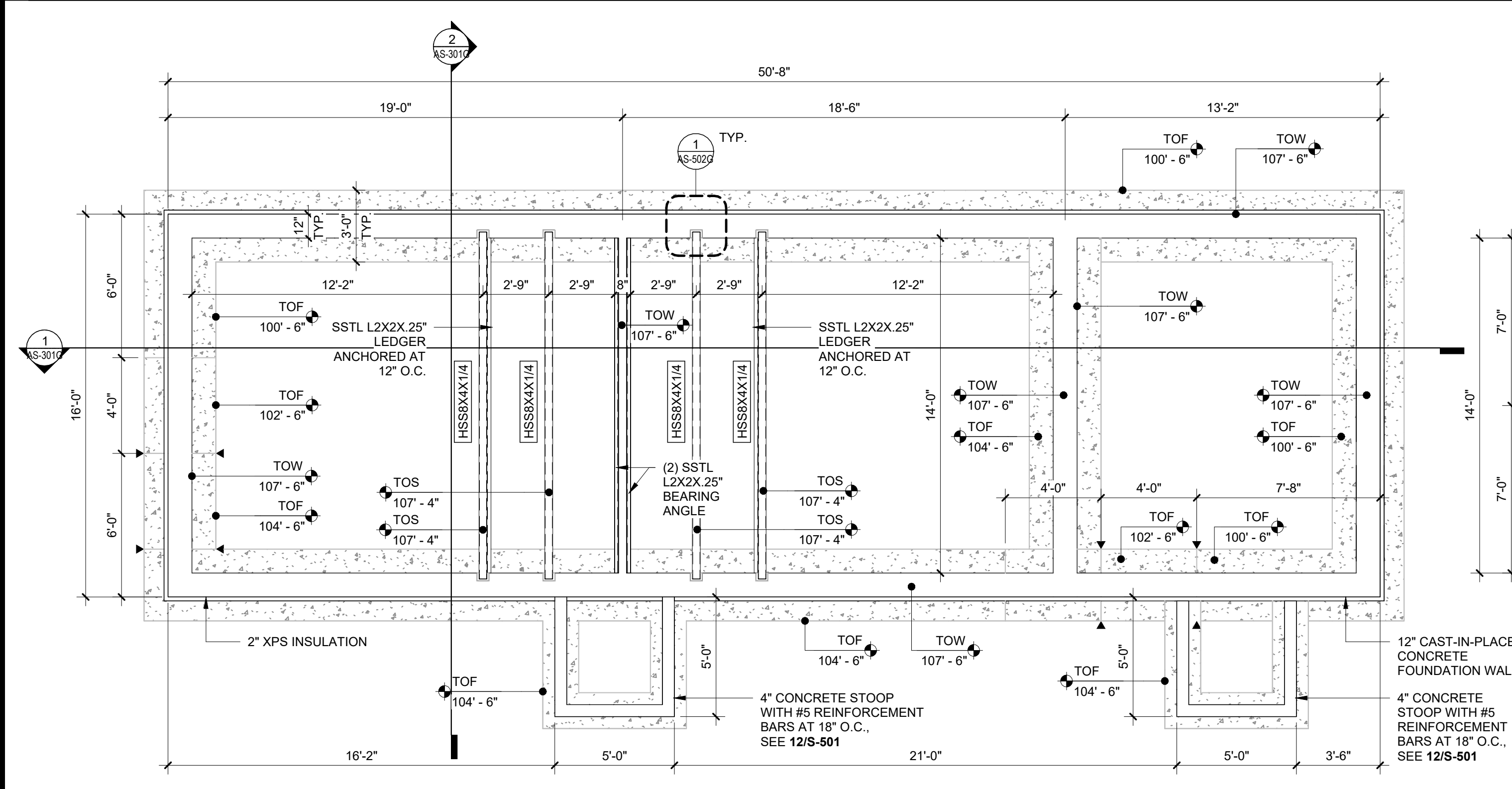
- 1 SEE ROOM FINISH SCHEDULE FOR FLOOR, WALL AND CEILING FINISHES.
- 2 CENTER LIGHTS, SPRINKLERS, FIRE DETECTION EQUIPMENT, OCCUPANCY SENSORS OR OTHER CEILING EQUIPMENT OR APPURTENANCES IN ACOUSTICAL PANELS, GYPSUM BOARD SOFFITS, AND BETWEEN OTHER CEILING MOUNTED FIXTURES.
- 3 REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR FIXTURE TYPES AND COMPLETE CONSTRUCTION REQUIREMENTS.
- 4 EXPOSED, UNFINISHED STRUCTURE, MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION AND TECHNOLOGY SYSTEMS TO BE PAINTED TO MATCH CEILING.

**GENERAL NOTES - ROOF PLAN**

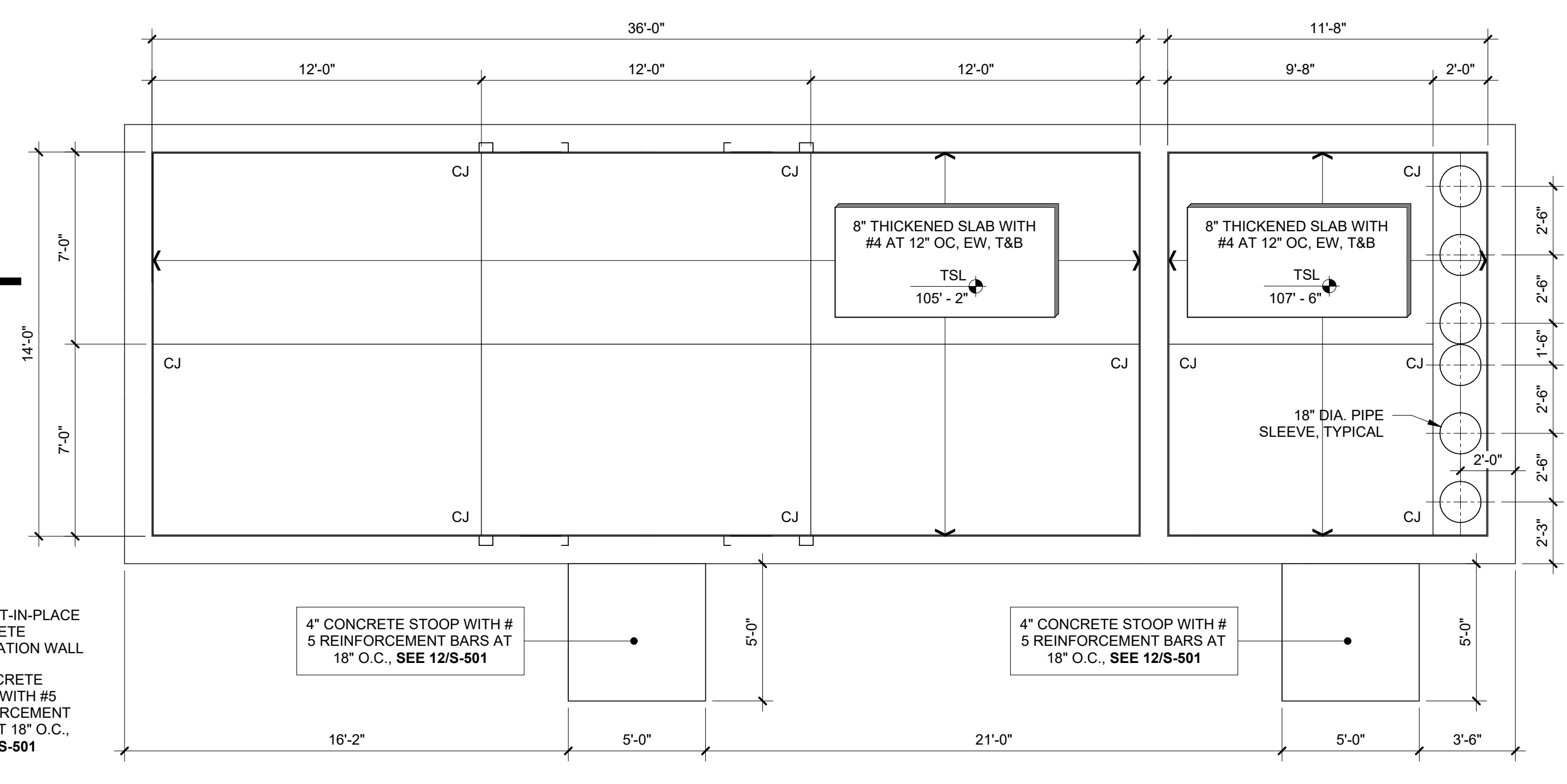
- 1 ROOF INSULATION TO BE A MINIMUM OF (2) LAYERS 2.6" POLYISO, UNLESS NOTED OTHERWISE.
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- 3 SEE MECHANICAL, PLUMBING, TECHNOLOGY, AND ELECTRICAL DRAWINGS FOR ADDITIONAL ROOF PENETRATIONS NOT SHOWN.
- 4 SEE S-001 FOR ROOF LOADING REQUIREMENTS.



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**2 FOUNDATION PLAN**  
1/4" = 1'-0"



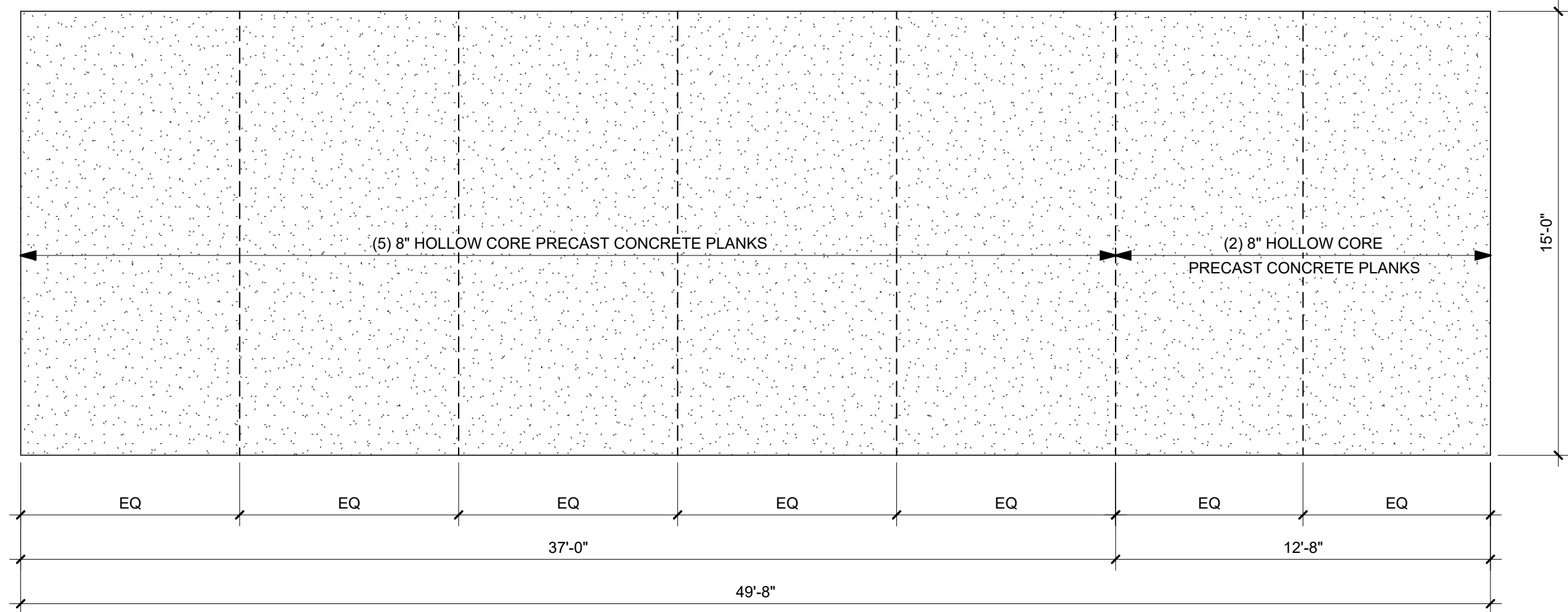
**1 FLATWORK PLAN**  
1/4" = 1'-0"

**GENERAL NOTES - FOUNDATION PLAN**

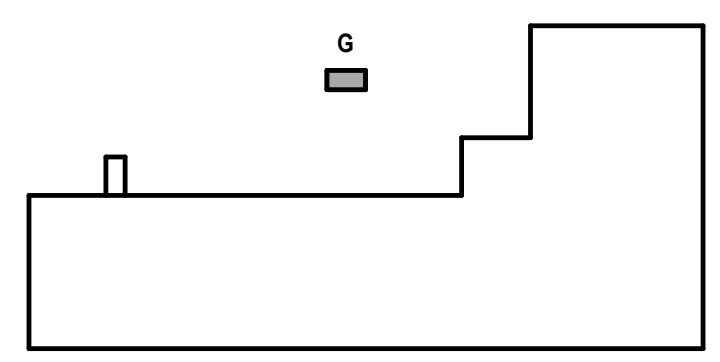
- 1 FLOAT AND TROWEL FLOOR SLABS PER REQUIREMENTS OF FLOOR FINISH SYSTEM.
- 2 NOT ALL FOUNDATION PENETRATIONS ARE SHOWN, REFER TO OTHER DISCIPLINE DRAWINGS FOR ADDITIONAL INFORMATION.
- 3 STRIP FOOTINGS SHALL BE CENTERED UNDER WALLS UNLESS NOTED OTHERWISE.
- 4 NATIVE SOILS AT SITE ARE NOT SUITABLE FOR USE OF SHALLOW SPREAD FOOTING FOUNDATIONS (SEE CGC INC. GEOTECHNICAL INVESTIGATION CONDUCTED MAY 24, 2023). THE DESIGN SHOWN ASSUMES SOILS IMPROVEMENT WILL BE PERFORMED BY CONTRACTOR TO ATTAIN MINIMUM ALLOWABLE BEARING PRESSURE OF 1500 PSF UNDER FOOTINGS AND 1500 PSF UNDER SLABS ON GRADE.

**GENERAL NOTES - FLATWORK PLAN**

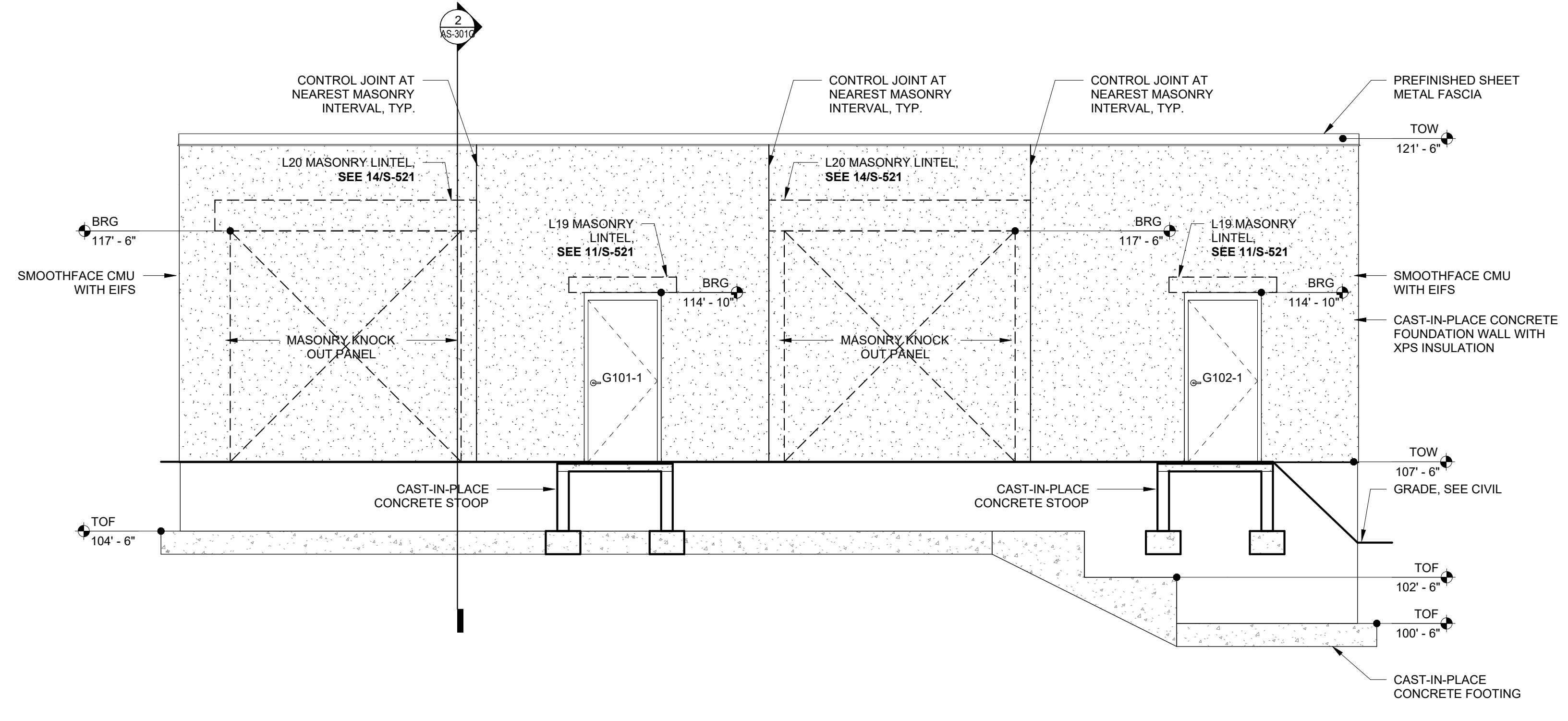
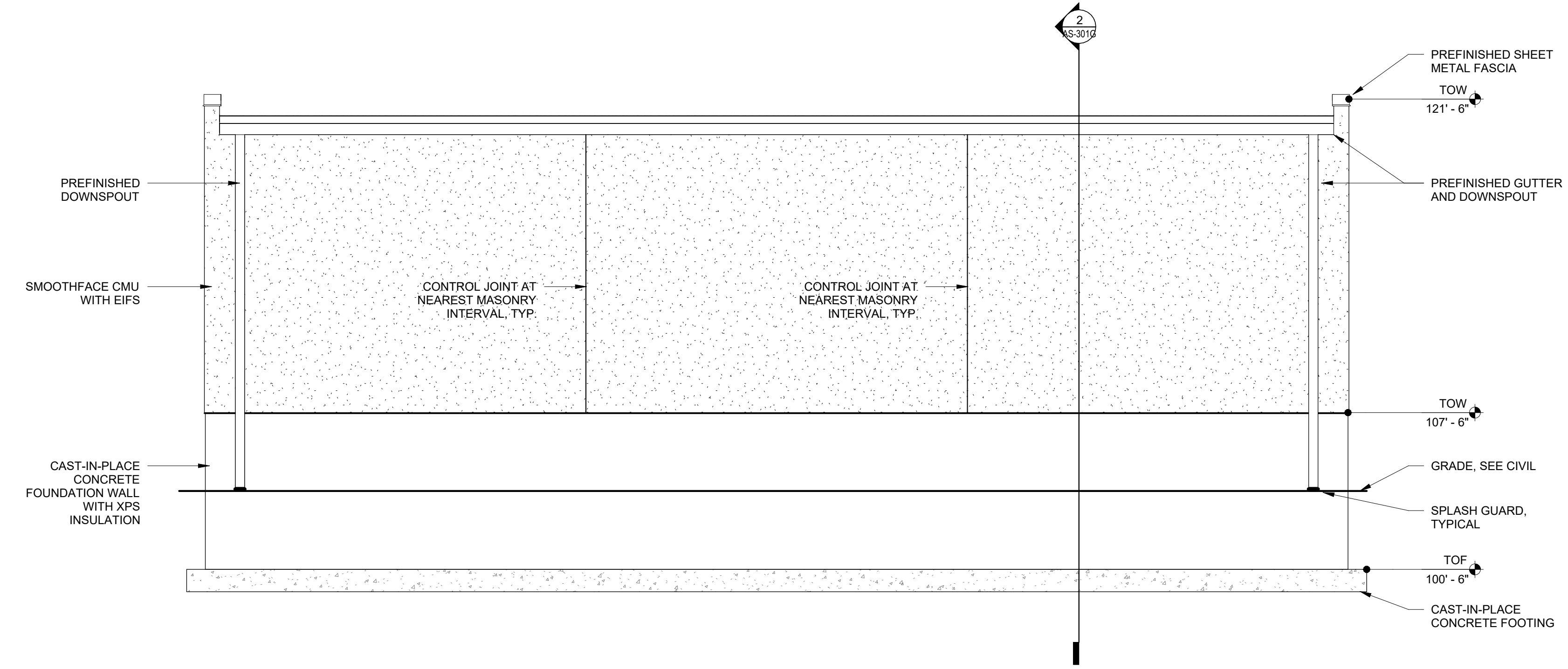
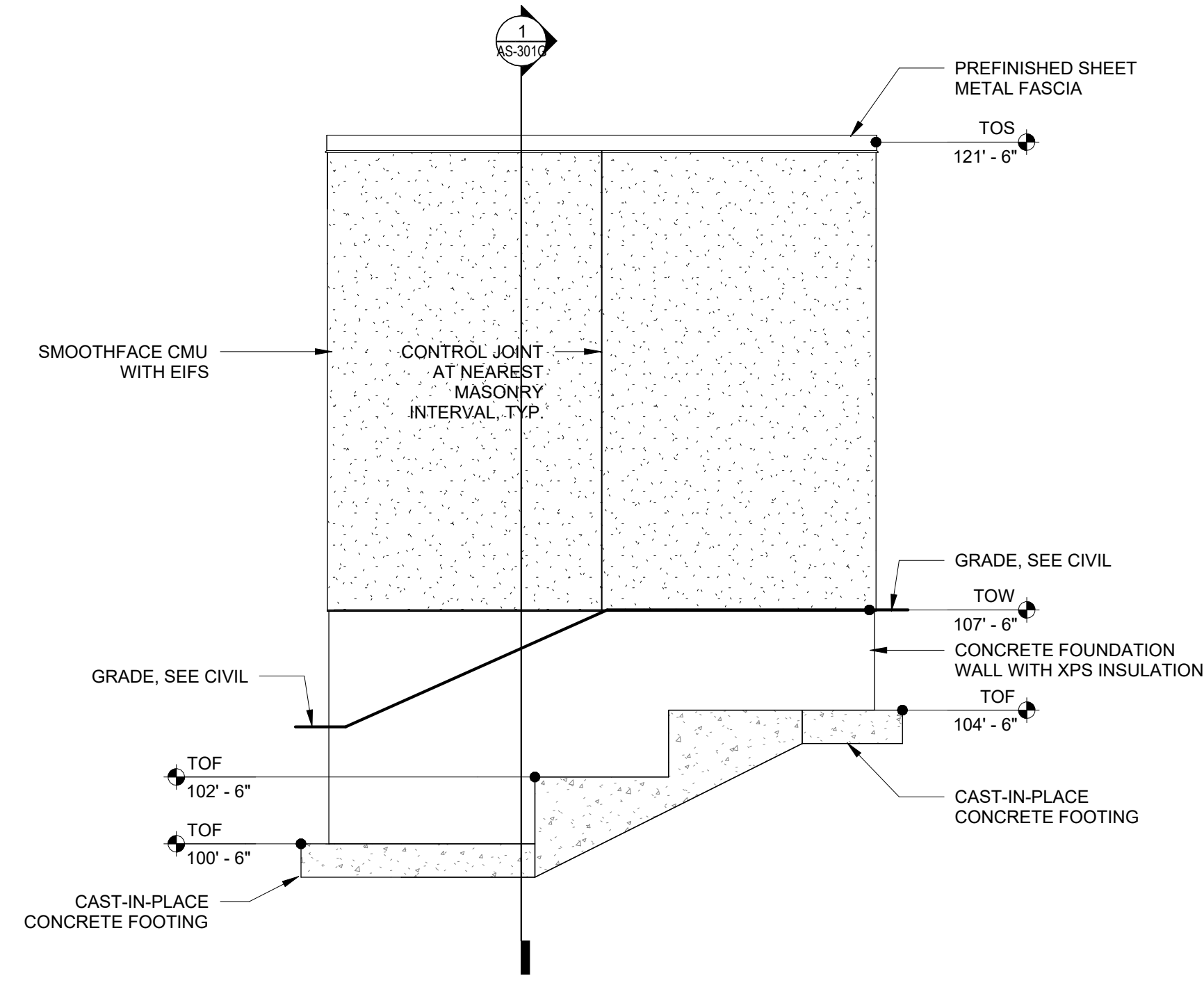
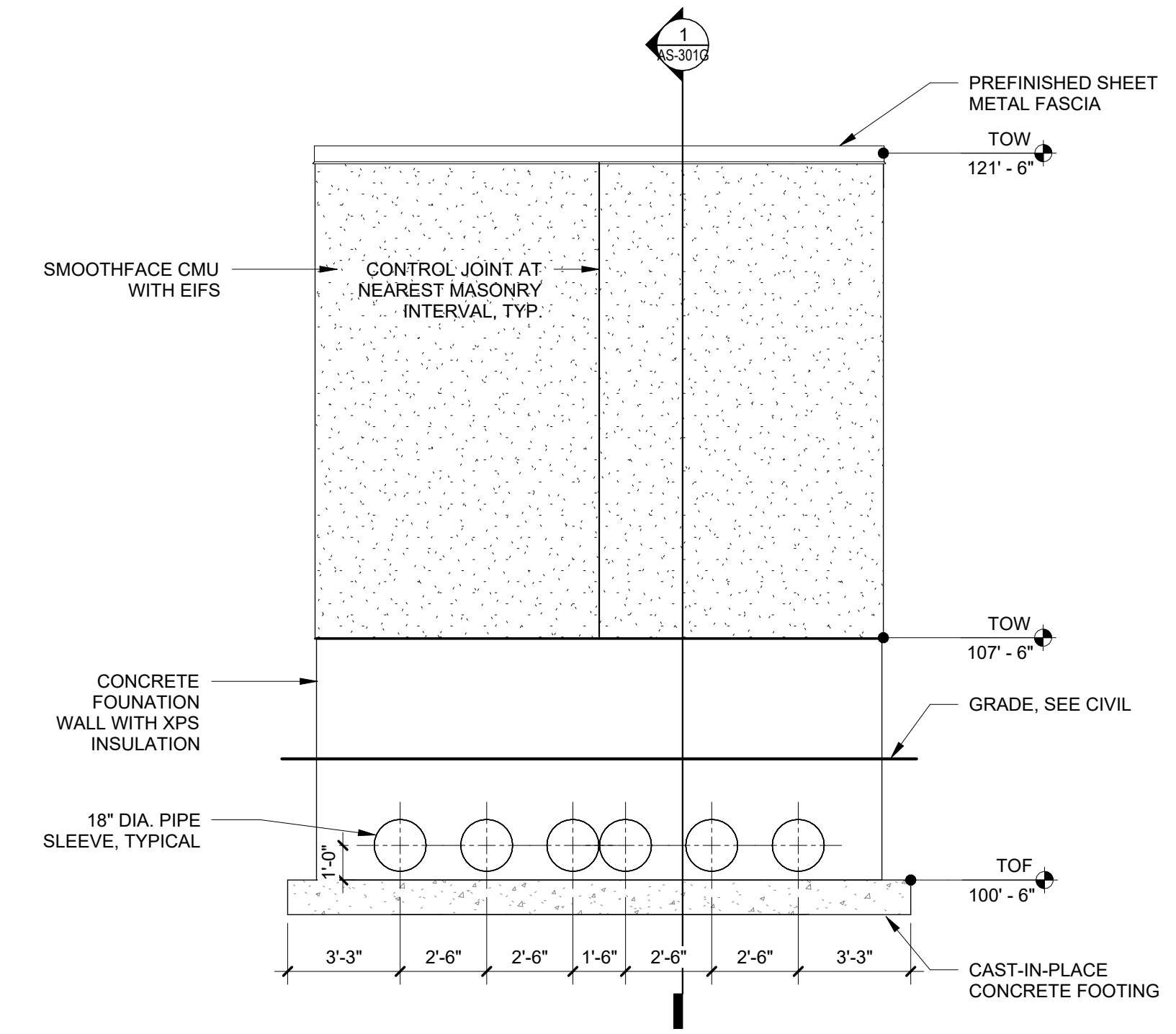
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- 7 REFER TO SHEET S-601 FOR STRUCTURAL SCHEDULES.
- 8 FLOAT AND TROWEL FLOOR SLABS PER REQUIREMENTS OF FLOOR FINISH SYSTEM.



**3 ROOF FRAMING PLAN**  
1/4" = 1'-0"



KEY PLAN



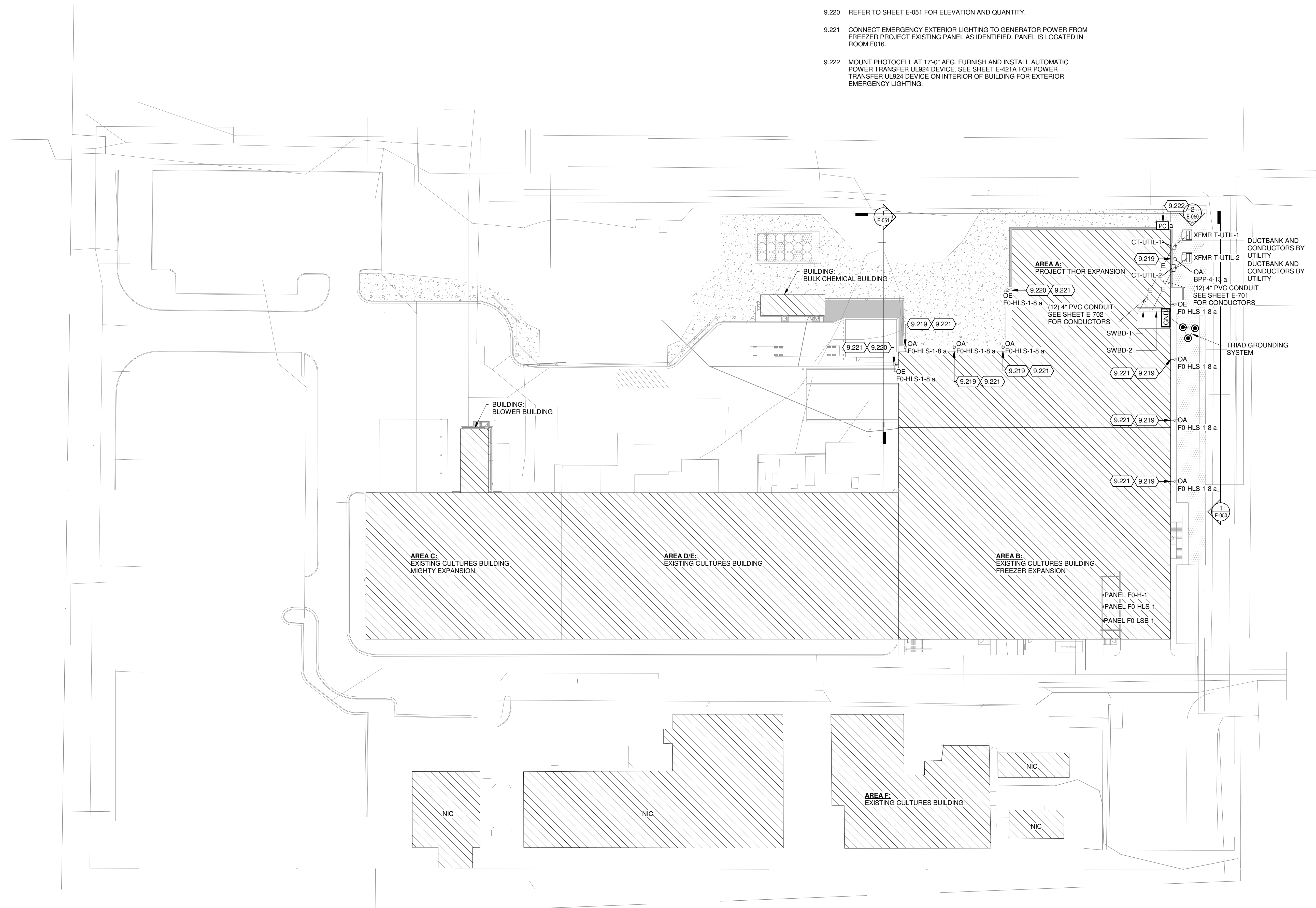
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**KEYED NOTES**

- 9.219 REFER TO SHEET E-050 FOR ELEVATION AND QUANTITY
- 9.220 REFER TO SHEET E-051 FOR ELEVATION AND QUANTITY.
- 9.221 CONNECT EMERGENCY EXTERIOR LIGHTING TO GENERATOR POWER FROM FREEZER PROJECT EXISTING PANEL AS IDENTIFIED. PANEL IS LOCATED IN ROOM F016.
- 9.222 MOUNT PHOTOCELL AT 17'-0" AFG. FURNISH AND INSTALL AUTOMATIC POWER TRANSFER UL924 DEVICE. SEE SHEET E-421A FOR POWER TRANSFER UL924 DEVICE ON INTERIOR OF BUILDING FOR EXTERIOR EMERGENCY LIGHTING.

**GENERAL NOTES:**

- 1. REFER TO "EP" SHEETS FOR ALL PROCESS ELECTRICAL WORK.

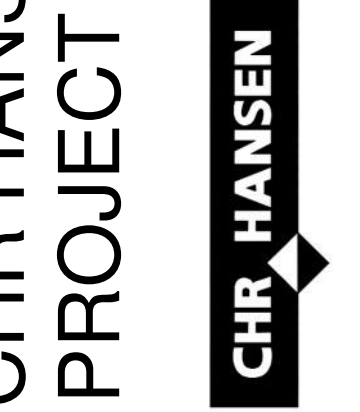


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meadhunt.com

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Chr. Hansen Inc.  
9015 W. Maple West Allis, WI 53214  
www.chr-hansen.com

**CHR HANSEN**  
**PROJECT THOR**



ISSUED  
1 2/16/24 PERMIT SET

MSH NO.: 4666672-222049.01  
DATE: FEB 16, 2024  
DESIGNED BY: ZMD  
DRAWN BY: ZMD  
CHECKED BY: ARG  
DO NOT SCALE DRAWINGS

SHEET CONTENTS  
**ELECTRICAL SITE PLAN**

SHEET NO.:

**E-011**

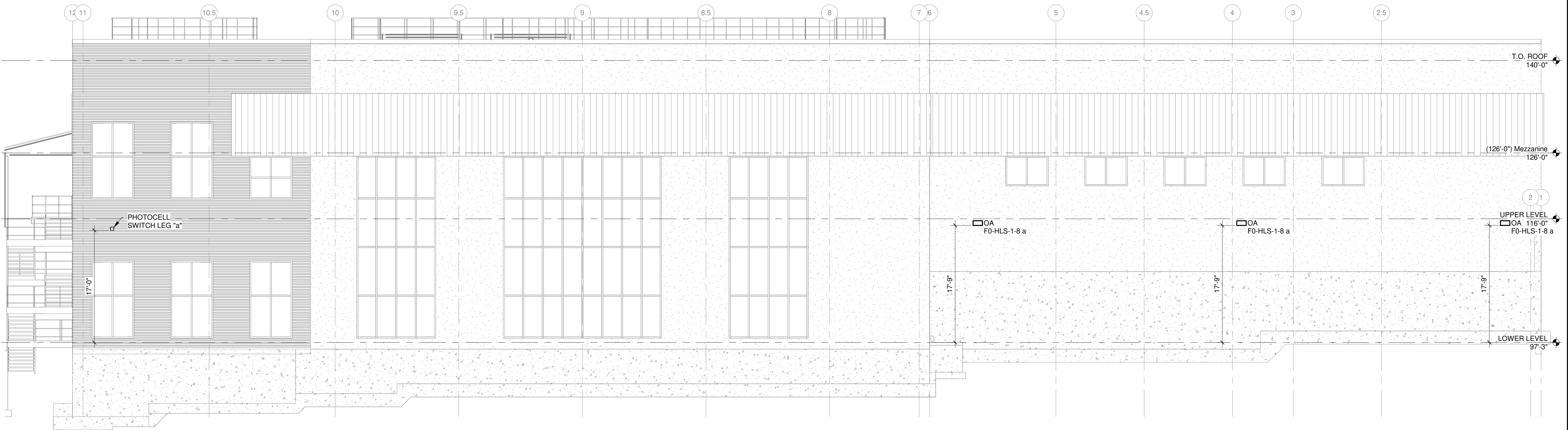
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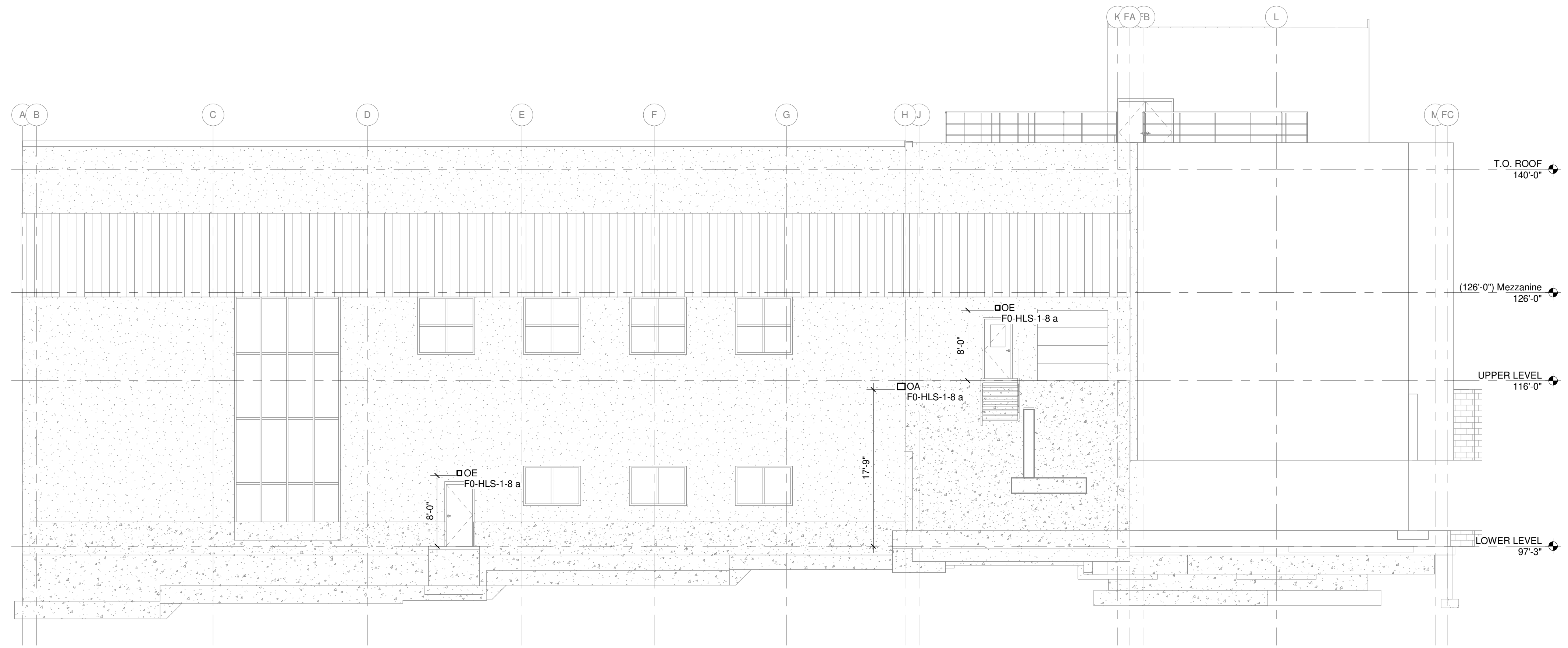
**1 EXTERIOR LIGHTING ELEVATIONS - EAST**

1/8" = 1'-0"



**2 EXTERIOR LIGHTING ELEVATIONS - NORTH**

1/8" = 1'-0"



**1 EXTERIOR LIGHTING ELEVATIONS - WEST**  
1/8" = 1'-0"