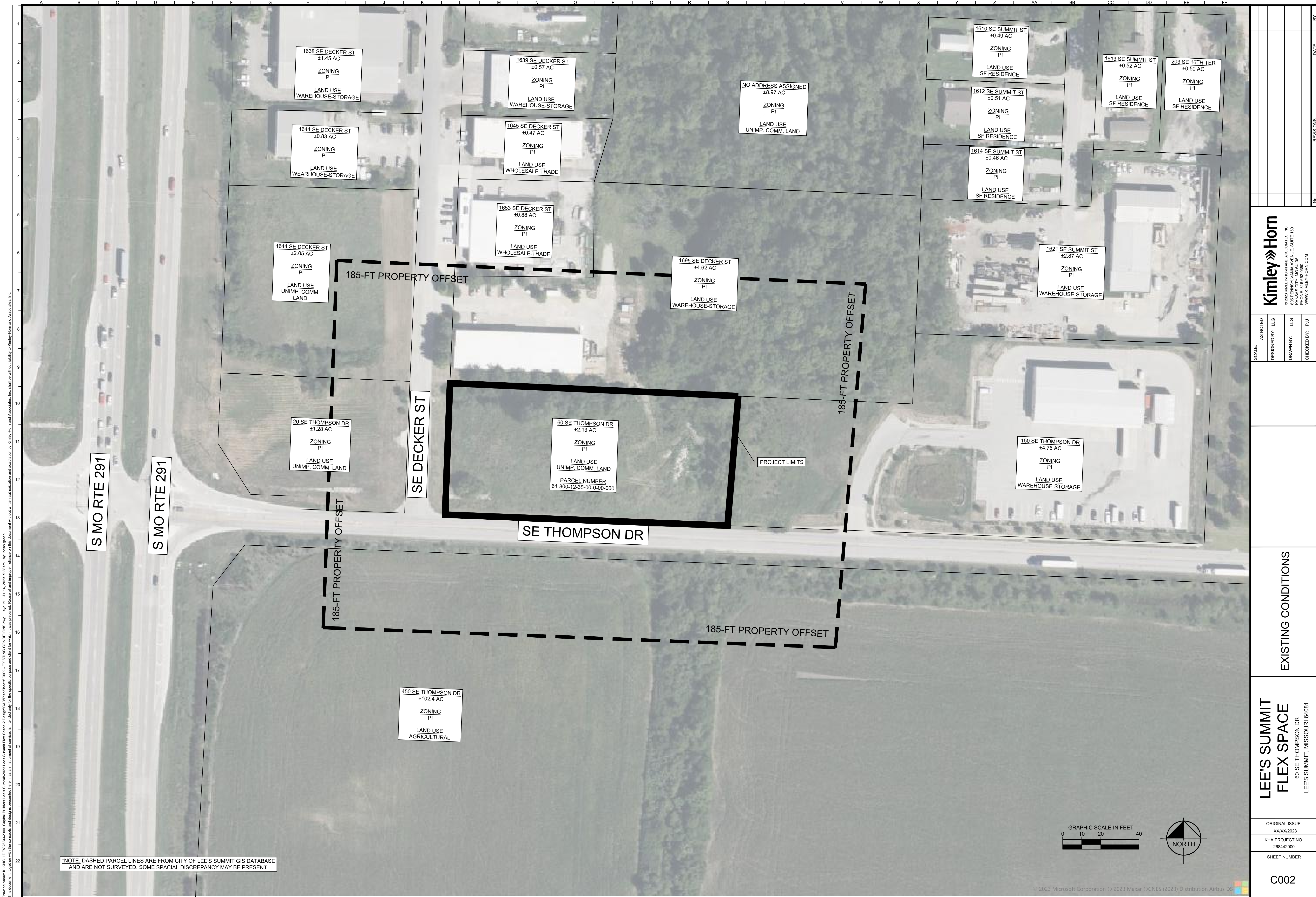
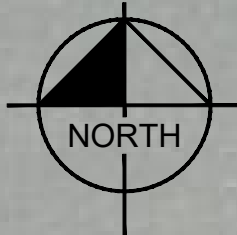
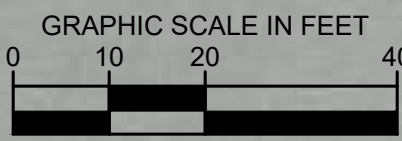


Drawing Name: K-KNC\_DLRV08442000\_Capital Builders\_Less Summit File\_Space2 Design\CD\PlanSheets\CD01 - COVER SHEET.dwg    Layout:    Jul 14, 2023    9:38am    by: jryan.green  
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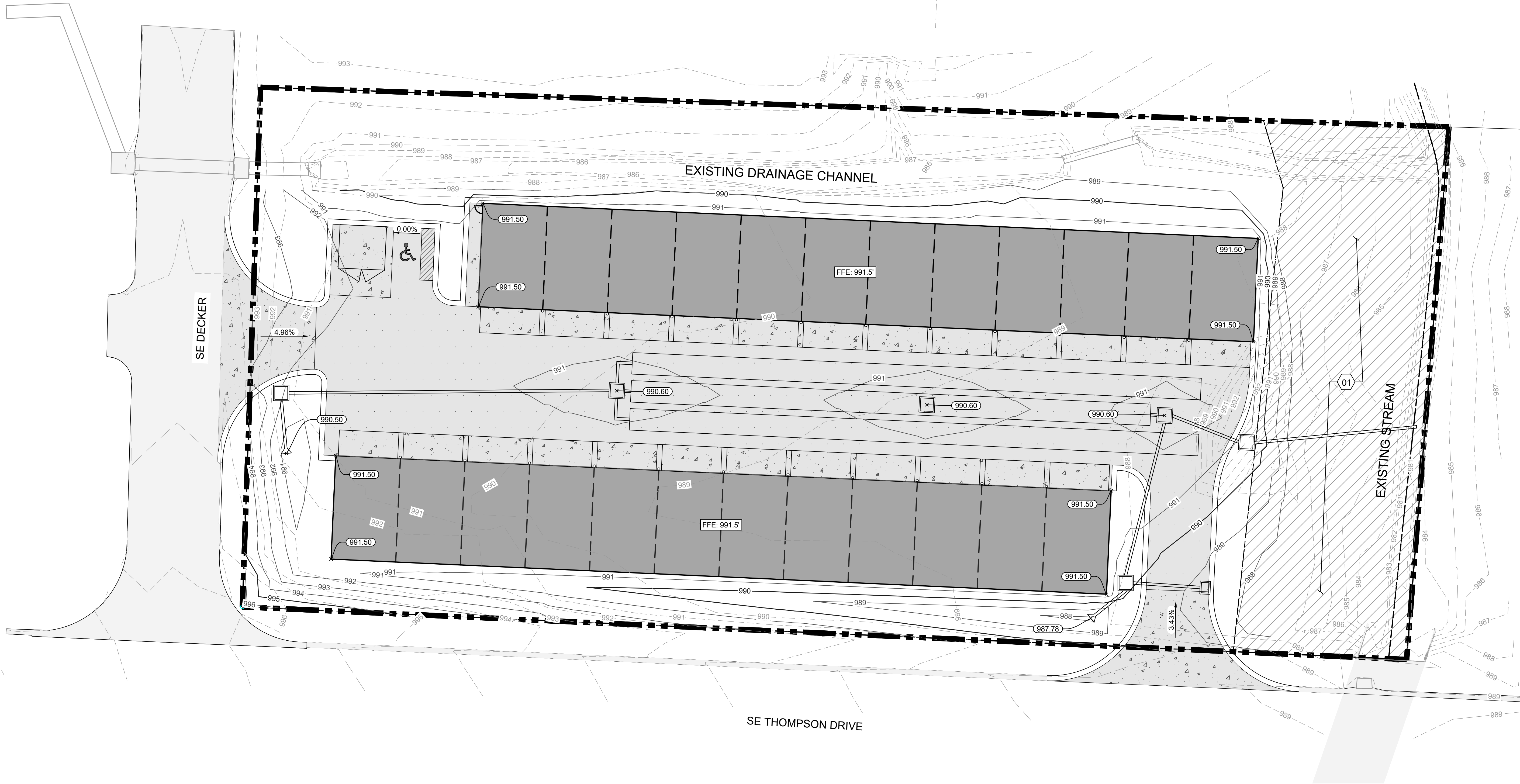
\*NOTE: DASHED PARCEL LINES ARE FROM CITY OF LEE'S SUMMIT GIS DATABASE AND ARE NOT SURVEYED. SOME SPACIAL DISCREPANCY MAY BE PRESENT.



LEE'S SUMMIT FLEX SPACE 60 SE THOMPSON DR LEE'S SUMMIT, MISSOURI 64081		EXISTING CONDITIONS		Kimley»Horn © 2023 KIMLEY-HORN AND ASSOCIATES, INC. 605 PENNSYLVANIA AVENUE, SUITE 150 KANSAS CITY, MO 64105 WWW.KIMLEY-HORN.COM		No. _____ DATE _____ BY _____	
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KHA PROJECT NO. 268442000		DRAWN BY: LLG		CHECKED BY: PUJ		No. _____	
SHEET NUMBER  C002							



Drawing name: K:\KHA\_C\LEE\268442000\_Capital Builders Lee's Summit\2023 Design\CAD\PlanSheets\C004 - GRADING PLAN.dwg    Layout: 1    Jul 14, 2023 9:38am    by: logan.green  
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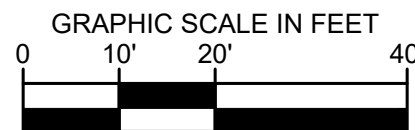
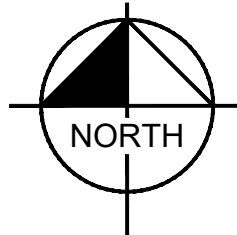
### GRADING LEGEND

- 1015 --- EXISTING CONTOUR
- 1015 — PROPOSED CONTOUR
- XXX.XX SPOT ELEVATION
- X.XX% SLOPE ARROW

### SITE PLAN KEY NOTES

- 01 EXISTING RUBBLE SHALL BE HAULED AND DISPOSED OF PROPERLY OFFSITE

LIMITS OF DISTURBANCE: 1.57 AC



### GRADING PLAN

**LEE'S SUMMIT  
FLEX SPACE**  
60 SE THOMPSON DR  
LEE'S SUMMIT, MISSOURI 64081

ORIGINAL ISSUE:  
XXXX/2023  
KHA PROJECT NO.  
268442000  
SHEET NUMBER

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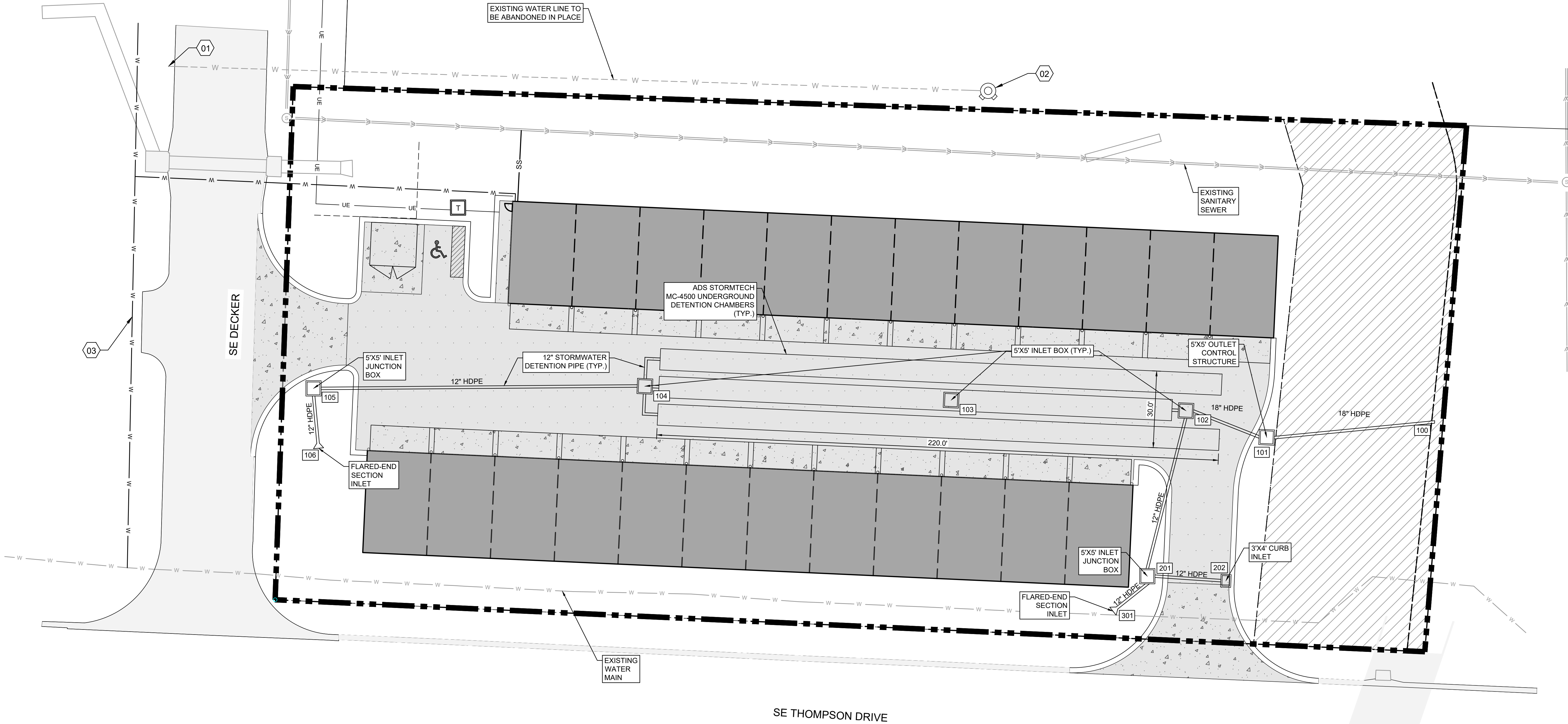
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DATE

BY

Drawing name: K:\K4C\_LUE\208442000\_Capital Builders Lee's Summit\2023\_Lee's Summit Flex Space\2 Design\CAD\Plan\Sheets\005 - UTILITY & STORMWATER PLAN.dwg Layout1 Jul 14, 2023 9:38am by: logan green  
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UTILITY LEGEND	
	PROPOSED UNDERGROUND ELECTRIC
	PROPOSED SANITARY SEWER
	PROPOSED WATER LINE
	PROPOSED TRANSFORMER PAD (FOR REFERENCE ONLY)

- | #  | SITE PLAN KEY NOTES  |
|----|--|
| 01 | INSTALL CONCRETE PLUG  |
| 02 | REMOVE EXISTING FIRE HYDRANT AND INSTALL CONCRETE PLUG   |
| 03 | WATER LINE TO BE INSTALLED BY ADJACENT PROJECT. IF NOT INSTALLED BY ADJACENT PROJECT, THIS DEVELOPMENT WILL INSTALL. |

SCALE:		AS NOTED	DESIGNED BY: LLG	Kimley»Horn		© 2023 KIMLEY-HORN AND ASSOCIATES, INC. 605 PENNSYLVANIA AVENUE, SUITE 150 KANSAS CITY, MO 64105 WWW.KIMLEY-HORN.COM		REVISIONS		DATE	BY		
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				ORIGINAL ISSUE: XXXXX/2023									
				KHA PROJECT NO. 268442000									
				SHEET NUMBER									
				C005									



### MC-4500 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-4500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT<sup>2</sup>%, THE ASD IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
  - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
  - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
  - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

### IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-4500 CHAMBER SYSTEM

- STORMTECH MC-4500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
  - STONESHOOTER LOCATED OFF THE CHAMBER BED.
  - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
  - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

### NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
  - THE USE OF EQUIPMENT OVER MC-4500 CHAMBERS IS LIMITED:
    - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
    - NO RUBBER TIERED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
    - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
  - FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

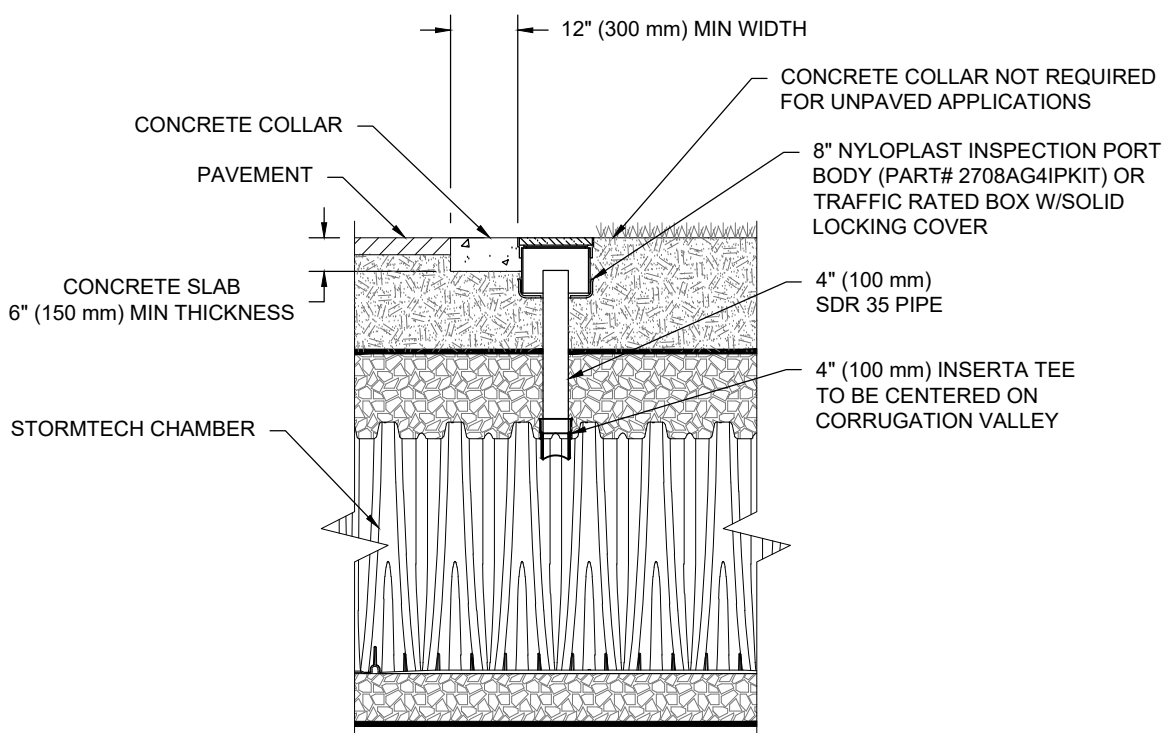
### INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
- i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

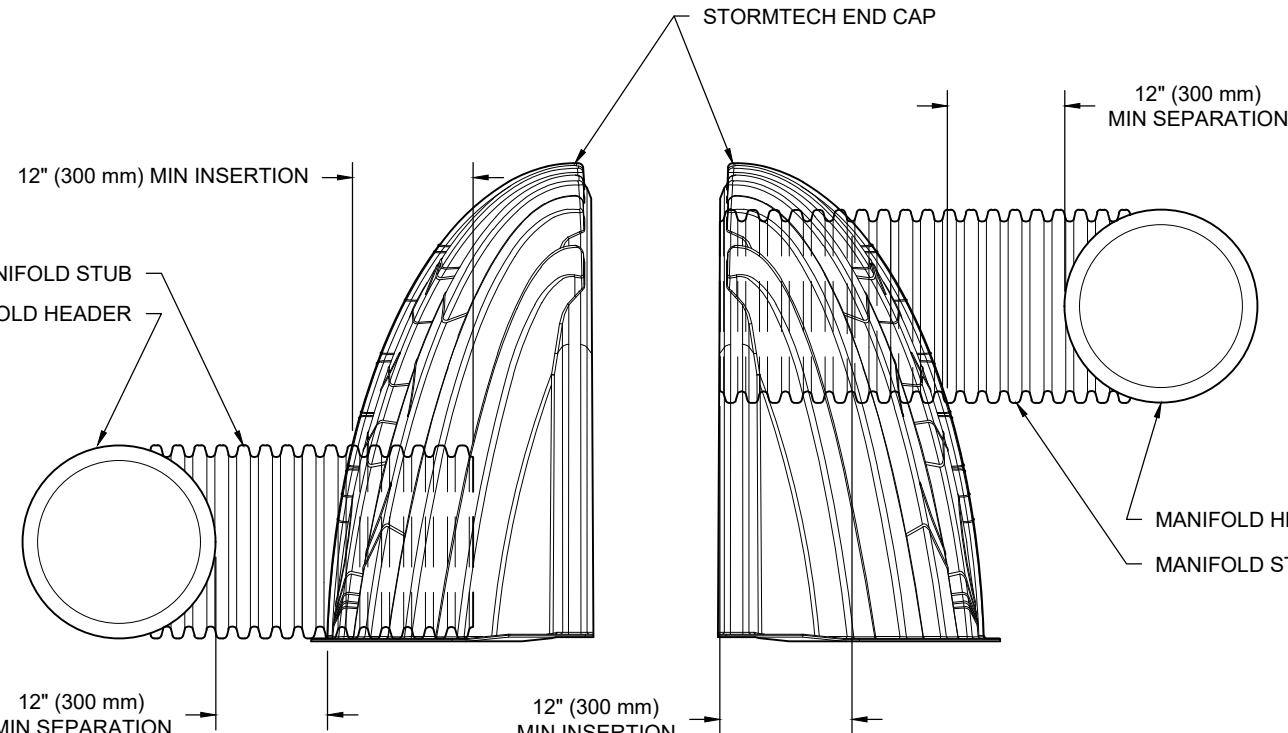
### NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

### MC-4500 ISOLATOR ROW PLUS DETAIL



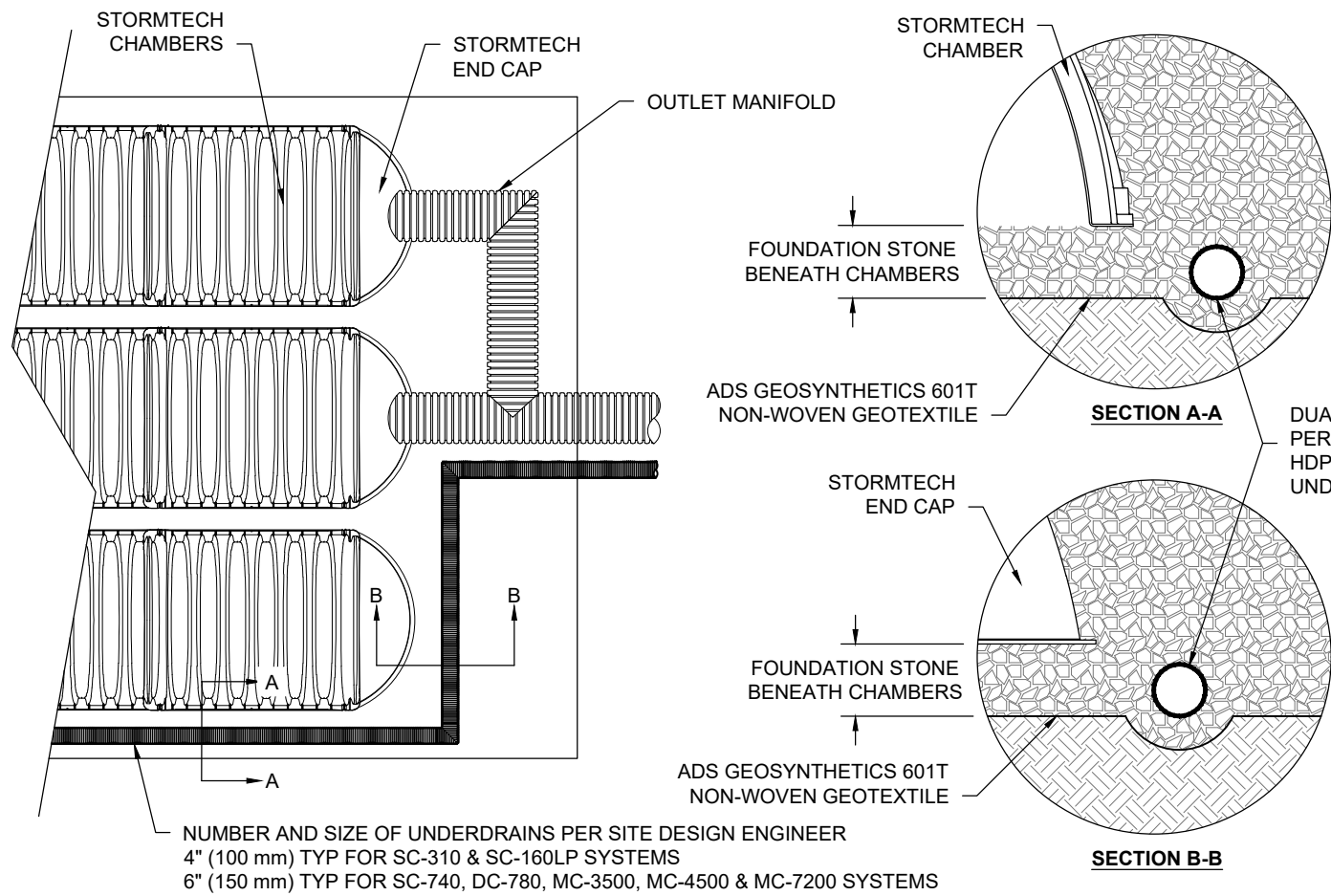
NOTE:  
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.



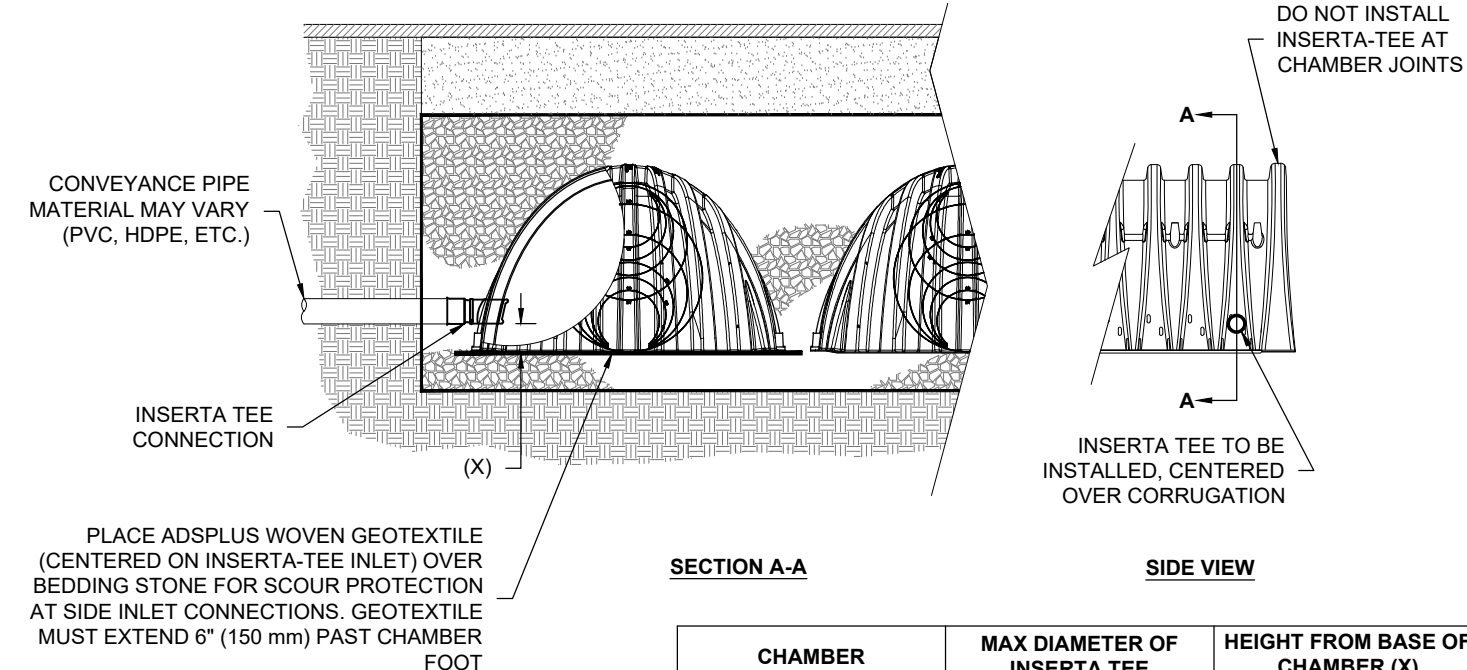
NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

### 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)

### MC-SERIES END CAP INSERTION DETAIL



### 5 UNDERDRAIN DETAIL



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)

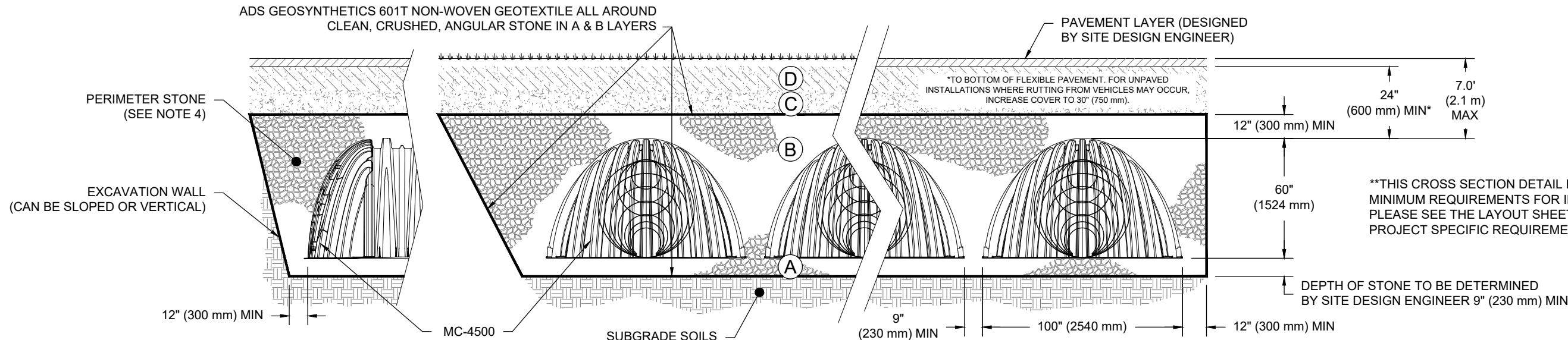
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON

### 6 INSERTA-TEE SIDE INLET DETAIL

### ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	<b>FINAL FILL:</b> FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	<b>INITIAL FILL:</b> FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2.4, A-3  OR  AASHTO M43 <sup>3</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	<b>EMBEDMENT STONE:</b> FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 <sup>3</sup> 3, 4	NO COMPACTION REQUIRED.
A	<b>FOUNDATION STONE:</b> FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 <sup>3</sup> 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

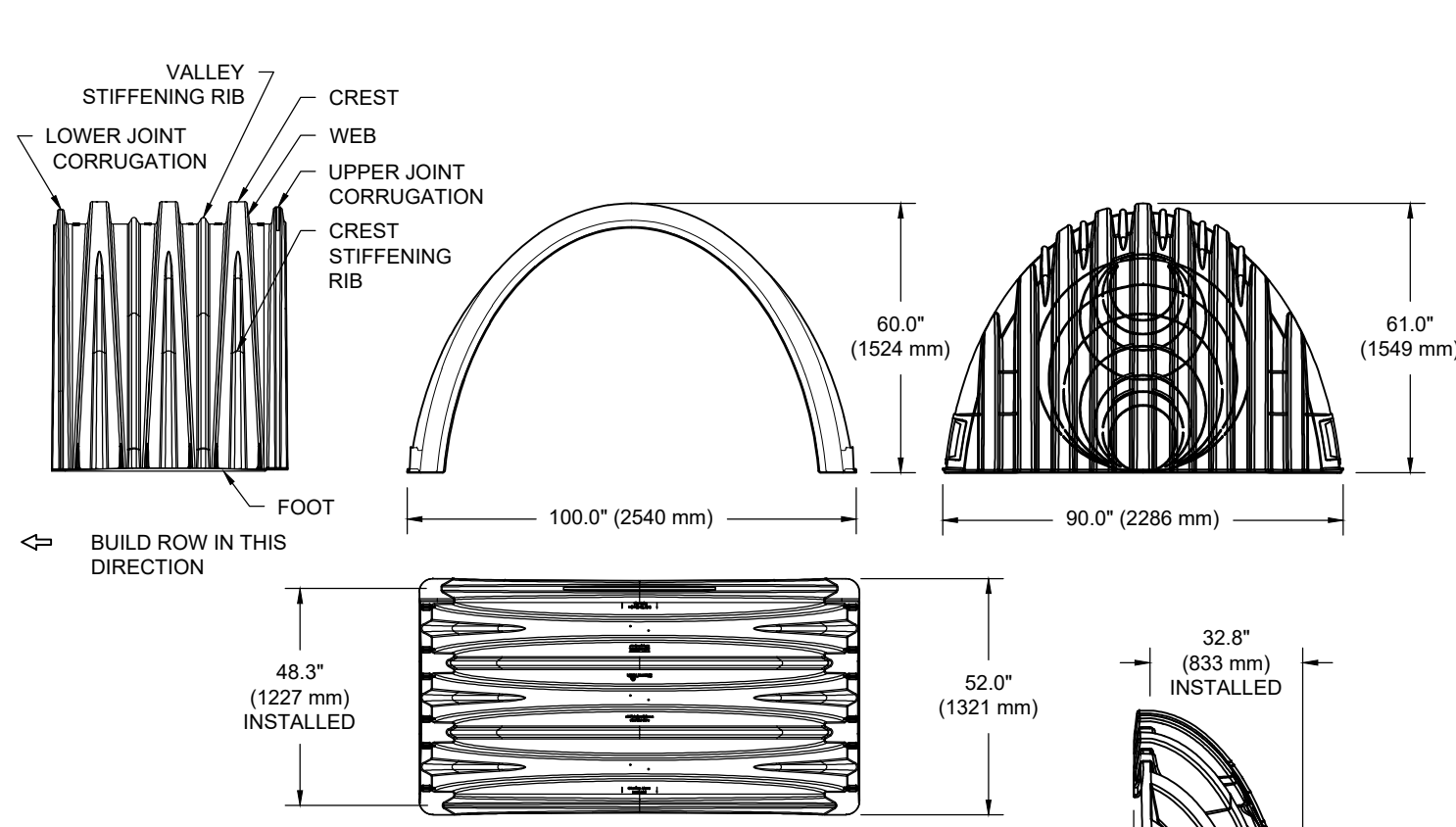
- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
  - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
  - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
  - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



### NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
- MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
  - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT<sup>2</sup>%, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

### MC-4500 CROSS SECTION DETAIL



#### NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	100.0" X 60.0" X 48.3"	(2540 mm X 1524 mm X 1227 mm)
CHAMBER STORAGE	106.5 CUBIC FEET	(3.01 m <sup>3</sup> )
MINIMUM INSTALLED STORAGE <sup>1</sup>	162.6 CUBIC FEET	(4.60 m <sup>3</sup> )
WEIGHT (NOMINAL)	125.0 lbs.	(56.7 kg)

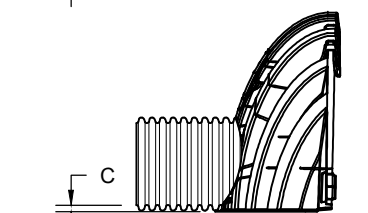
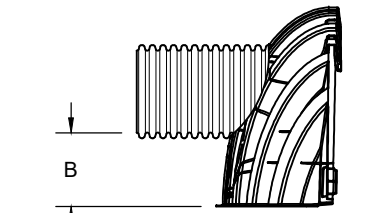
#### NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	90.0" X 61.0" X 32.8"	(2286 mm X 1549 mm X 833 mm)
END CAP STORAGE	39.5 CUBIC FEET	(1.12 m <sup>3</sup> )
MINIMUM INSTALLED STORAGE <sup>1</sup>	115.3 CUBIC FEET	(3.26 m <sup>3</sup> )
WEIGHT (NOMINAL)	90 lbs.	(40.8 kg)

<sup>1</sup>ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PART #	STUB	B	C
MC4500IEPP06T	6" (150 mm)	42.54" (1081 mm)	---
MC4500IEPP06B	---	---	0.86" (22 mm)
MC4500IEPP08T	8" (200 mm)	40.50" (1029 mm)	---
MC4500IEPP08B	---	---	1.01" (26 mm)
MC4500IEPP10T	10" (250 mm)	38.37" (975 mm)	---
MC4500IEPP10B	---	---	1.33" (34 mm)
MC4500IEPP12T	12" (300 mm)	35.69" (907 mm)	---
MC4500IEPP12B	---	---	1.55" (39 mm)
MC4500IEPP15T	15" (375 mm)	32.72" (831 mm)	---
MC4500IEPP15B	---	---	1.70" (43 mm)
MC4500IEPP18T	18" (450 mm)	29.36" (746 mm)	---
MC4500IEPP18B	---	---	1.97" (50 mm)
MC4500IEPP24T	24" (600 mm)	23.05" (585 mm)	---
MC4500IEPP24B	---	---	2.26" (57 mm)
MC4500IEPP30B	30" (750 mm)	---	2.95" (75 mm)
MC4500IEPP36B	36" (900 mm)	---	3.25" (83 mm)
MC4500IEPP42B	42" (1050 mm)	---	3.55" (90 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL



CUSTOM PREFABRICATED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-4500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

DATE:	PROJECT NO:
DRAWN:	REVIEWED:
	REV:

MC-4500	STANDARD DETAILS
---------	------------------

StormTech® Chamber System 888-892-2694   WWW.STORMTECH.COM
--

4840 TRUEMAN BLVD HILLIARD, OH 43026
---

ADS Advanced Drainage Systems, Inc.
--

SHEET
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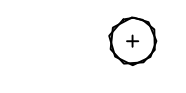



ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON REFERENCED STANDARDS. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT. NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. UNLESS THE PLANS ARE SIGNED AND SEALED BY THE SITE DESIGN ENGINEER, THE SITE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION AND SEALING THE DOCUMENT. IT IS THE SITE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEET OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

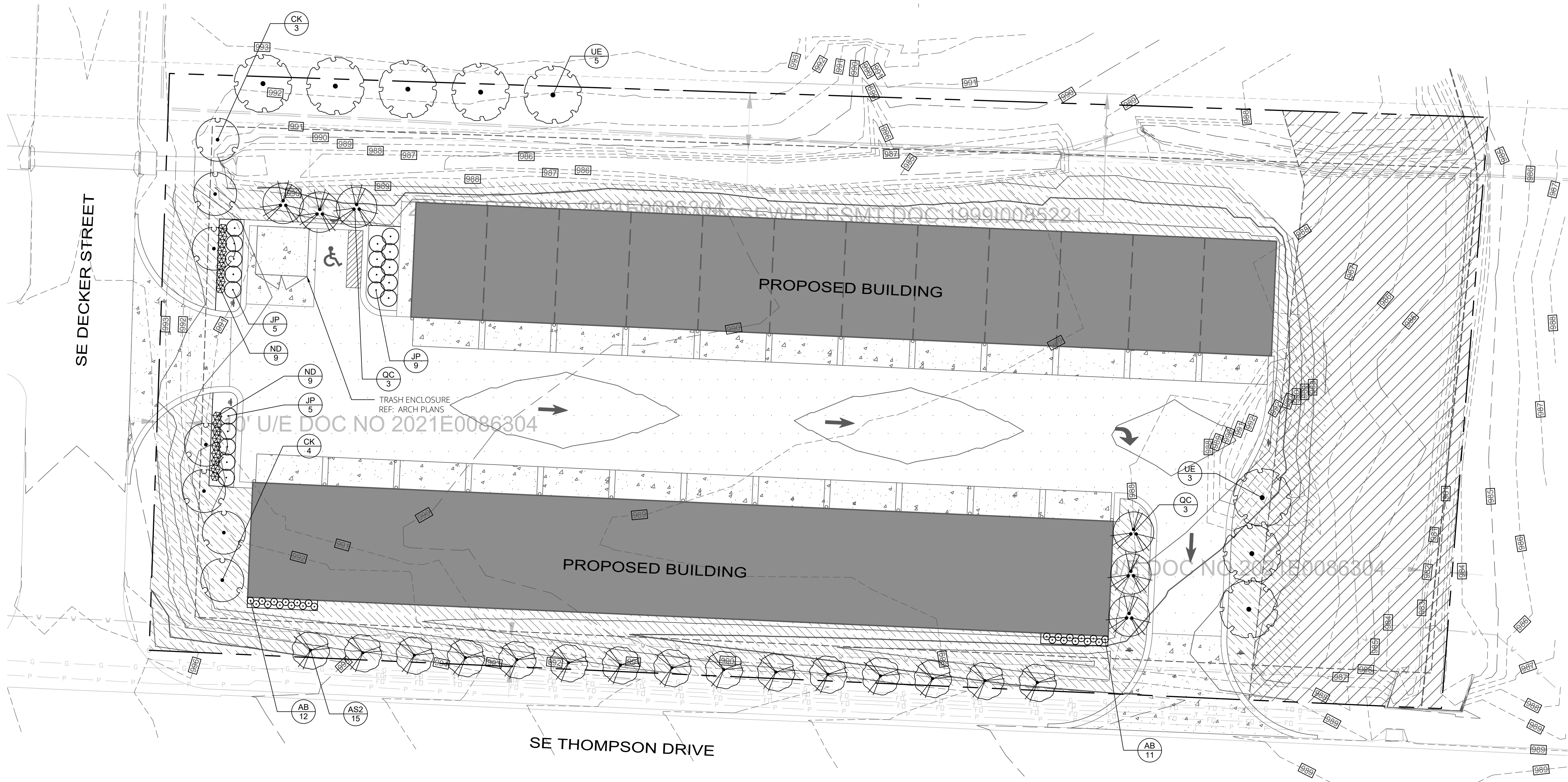
LANDSCAPE SUMMARY

STREET FRONTAGE  
REQUIRED: 1 TREE PER 30 FEET OF FRONTAGE AND 1 SHRUB PER 20 FEET OF FRONTAGE.  
THOMPSON DRIVE 452 FEET / 30 = 15 TREES AND 23 SHRUBS  
DECKER STREET 200 FEET / 30 = 7 TREES AND 10 SHRUBS  
PROVIDED:  
THOMPSON DRIVE 15 TREES AND 23 SHRUBS  
DECKER STREET 7 TREES AND 10 SHRUBS

OPEN YARD AREAS  
REQUIRED: 1 TREE AND 2 SHRUBS PER 5,000 SQUARE FEET OF TOTAL LOT AREA EXCLUDING BUILDING FOOTPRINT AREA  
92,667 SF - 24,000 SF = 68,667 SF / 5,000 = 14 TREES AND 27 SHRUBS  
PROVIDED: 14 TREES AND 27 SHRUBS

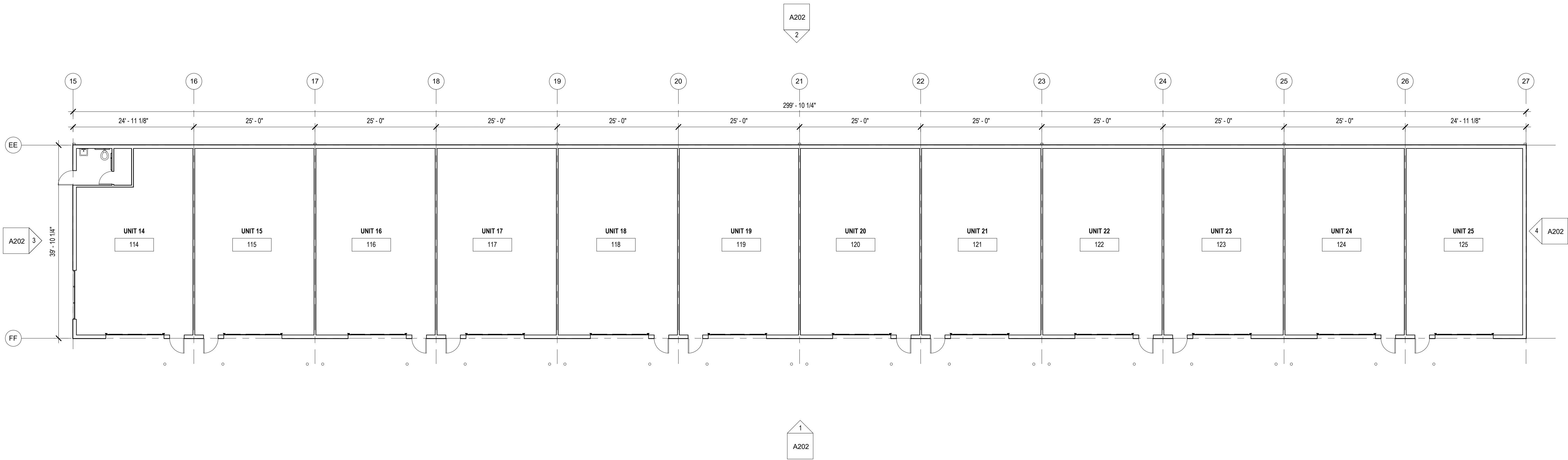
PLANT SCHEDULE

DECIDUOUS TREES	CODE	QTY	COMMON / BOTANICAL NAME	CONT	CAL
	AS2	15	SUGAR CONE SUGAR MAPLE / ACER SACCHARUM 'SUGAR CONE'	B & B	3" CAL
	QC	6	CRIMSON SPIRE™ OAK / QUERCUS ROBUR X ALBA 'CRIMSCHMIDT'	B & B	3" CAL
	UE	8	ALLEE LACEBARK ELM / ULMUS PARVIFOLIA 'EMER II'™	B & B	3" CAL
ORNAMENTAL TREE	CODE	QTY	COMMON / BOTANICAL NAME	CONT	CAL
	CK	7	KOUSA DOGWOOD / CORNUS KOUSA	B & B	3" CAL
DECIDUOUS SHRUBS	CODE	QTY	COMMON / BOTANICAL NAME	CONT	
	AB	23	LOW SCAPE HEDGER BLACK CHOKEBERRY / ARONIA MELANOCARPA 'UCONNAM166'™	2 GAL	
	ND	18	FIREPOWER DWARF NANDINA / NANDINA DOMESTICA 'FIREPOWER'	2 GAL	
EVERGREEN SHRUBS	CODE	QTY	COMMON / BOTANICAL NAME	CONT	
	JP	19	SEA GREEN JUNIPER / JUNIPERUS X PFITZERIANA 'SEA GREEN'	5 GAL	
GROUND COVERS	CODE	QTY	COMMON / BOTANICAL NAME	CONT	
	TTF	18,500 SF	TURF TYPE TALL FSCUE / DROUGHT TOLERANT FESCUE BLEND	SOD	

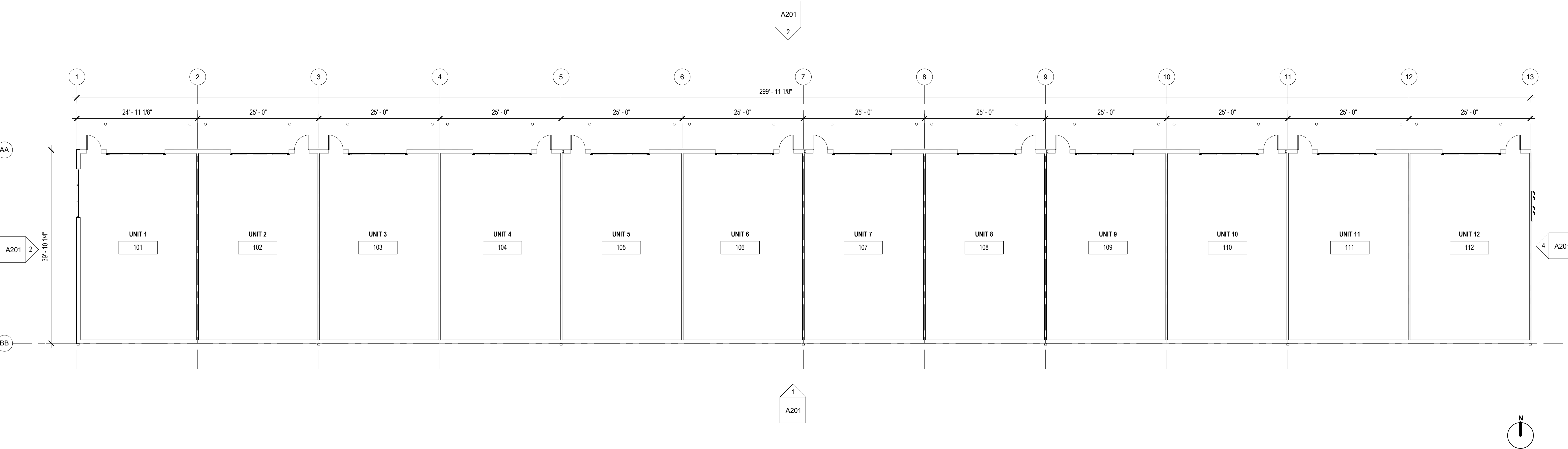


Date	No.

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2 FLOOR PLAN - BUILDING B  
3/32" = 1'-0"



1 FLOOR PLAN - BUILDING A  
3/32" = 1'-0"

## FLEX SPACES

60 SE Thompson Dr.  
PROJECT NUMBER: 23092  
CLIENT: Matt Hendrickson

## Schematic Design

07.14.2023

Architect -  
Client -

REV.	DATE	ISSUE

ARCHITECT:

six  
twenty  
one

SixTwentyOne  
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KANSAS CITY, MO 64108  
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www.sixtwentyone.com

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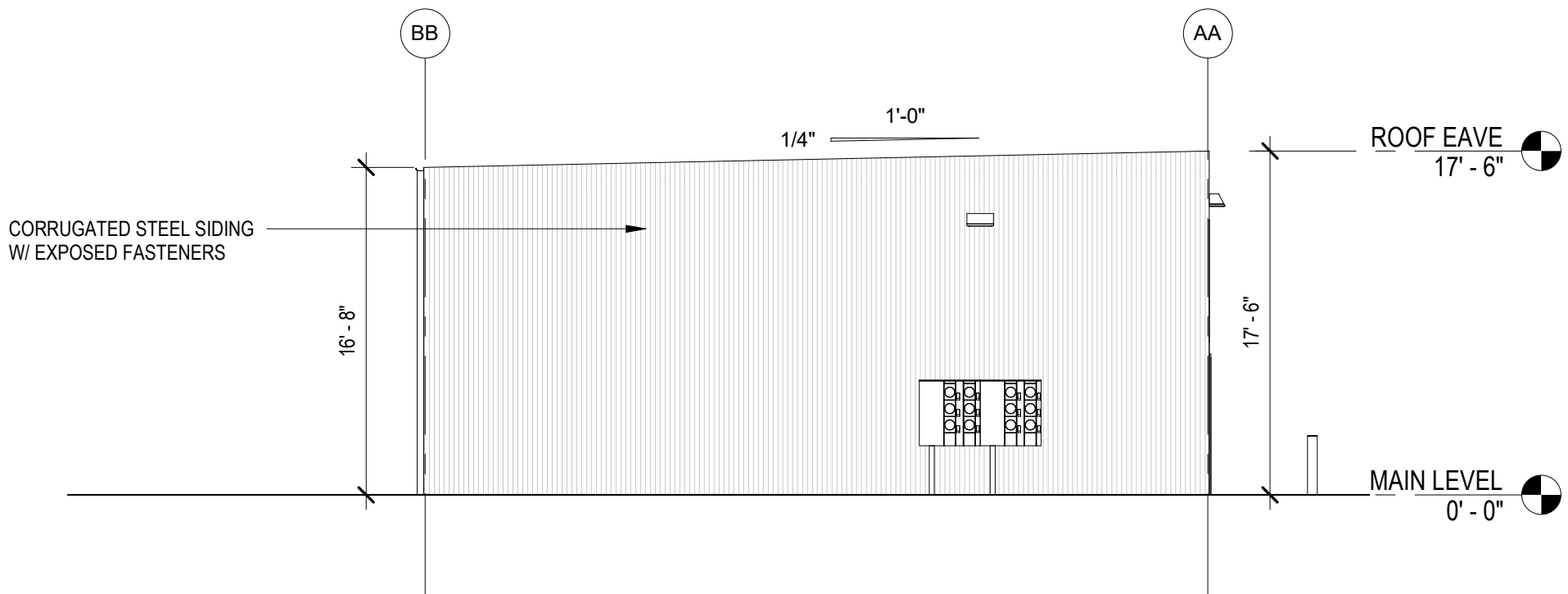
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## FLOOR PLANS

Sheet Revision no.

A101

- CORRUGATED STEEL SIDING
- COMPOSITE WOOD SIDING
- STEEL TRIM



④ ELEVATION - BUILDING A (EAST)  
1/8" = 1'-0"

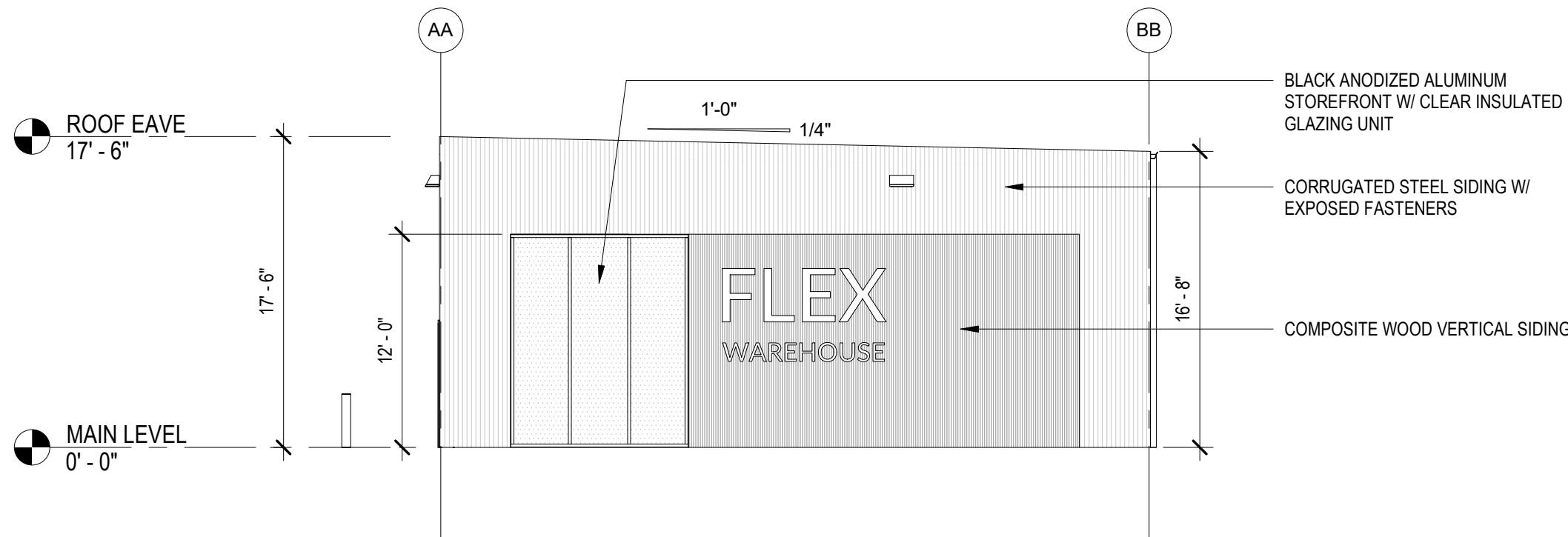
TOTAL WALL AREA: 683 SF

- CORRUGATED STEEL SIDING

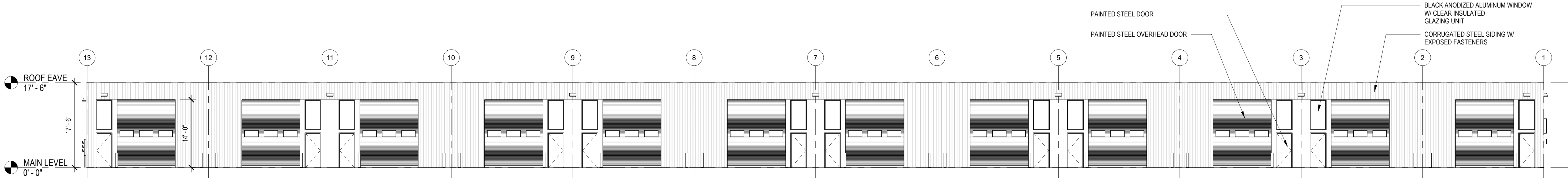
299 SF (44%)
- COMPOSITE WOOD SIDING

264 SF (39%)
- STOREFRONT GLASS

120 SF (17%)



③ ELEVATION - BUILDING A (WEST)  
1/8" = 1'-0"



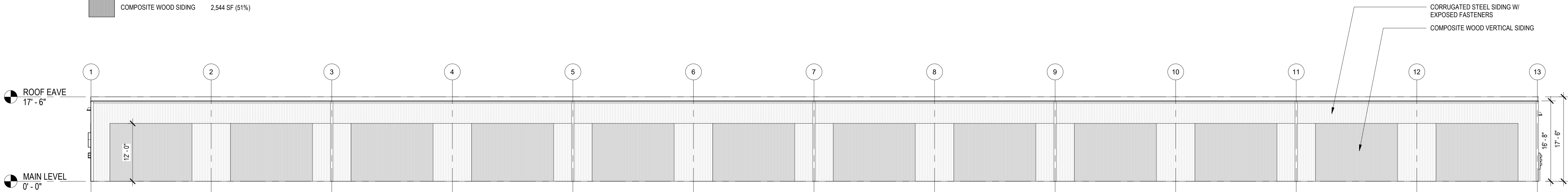
② ELEVATION - BUILDING A (NORTH)  
3/32" = 1'-0"

TOTAL WALL AREA: 5,044 SF

- CORRUGATED STEEL SIDING

2,500 SF (49%)
- COMPOSITE WOOD SIDING

2,544 SF (51%)



① ELEVATION - BUILDING A (SOUTH)  
3/32" = 1'-0"

## FLEX SPACES

60 SE Thompson Dr.  
PROJECT NUMBER: 23092  
CLIENT: Matt Hendrickson

## Schematic Design

07.14.2023

REV.	DATE	ISSUE

ARCHITECT:

six  
twenty  
one

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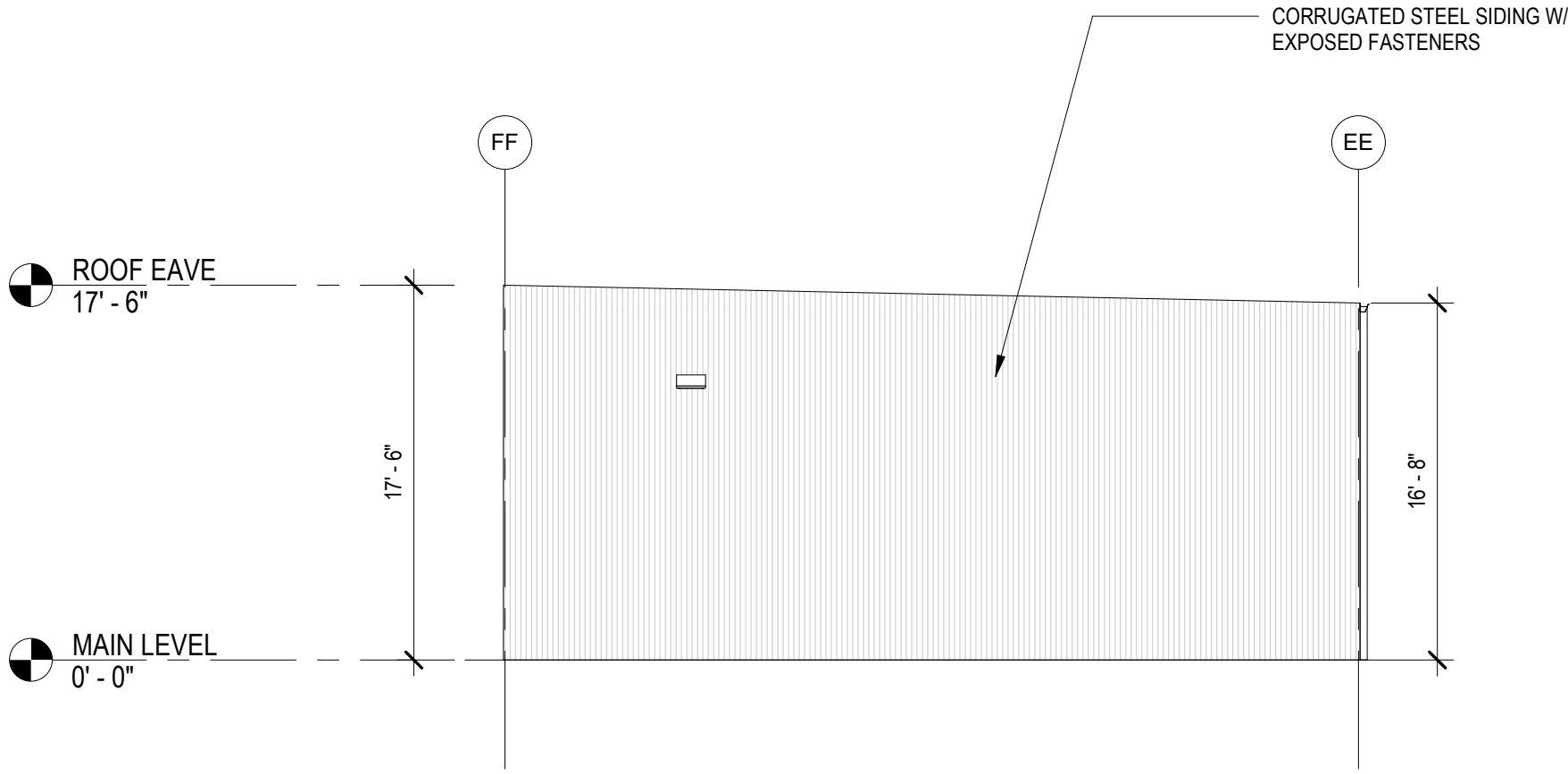
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## ELEVATIONS - BUILDING A

Sheet Revision no.

A201

- CORRUGATED STEEL SIDING
- COMPOSITE WOOD SIDING
- STEEL TRIM



4 ELEVATION - BUILDING B (EAST)  
1/8" = 1'-0"

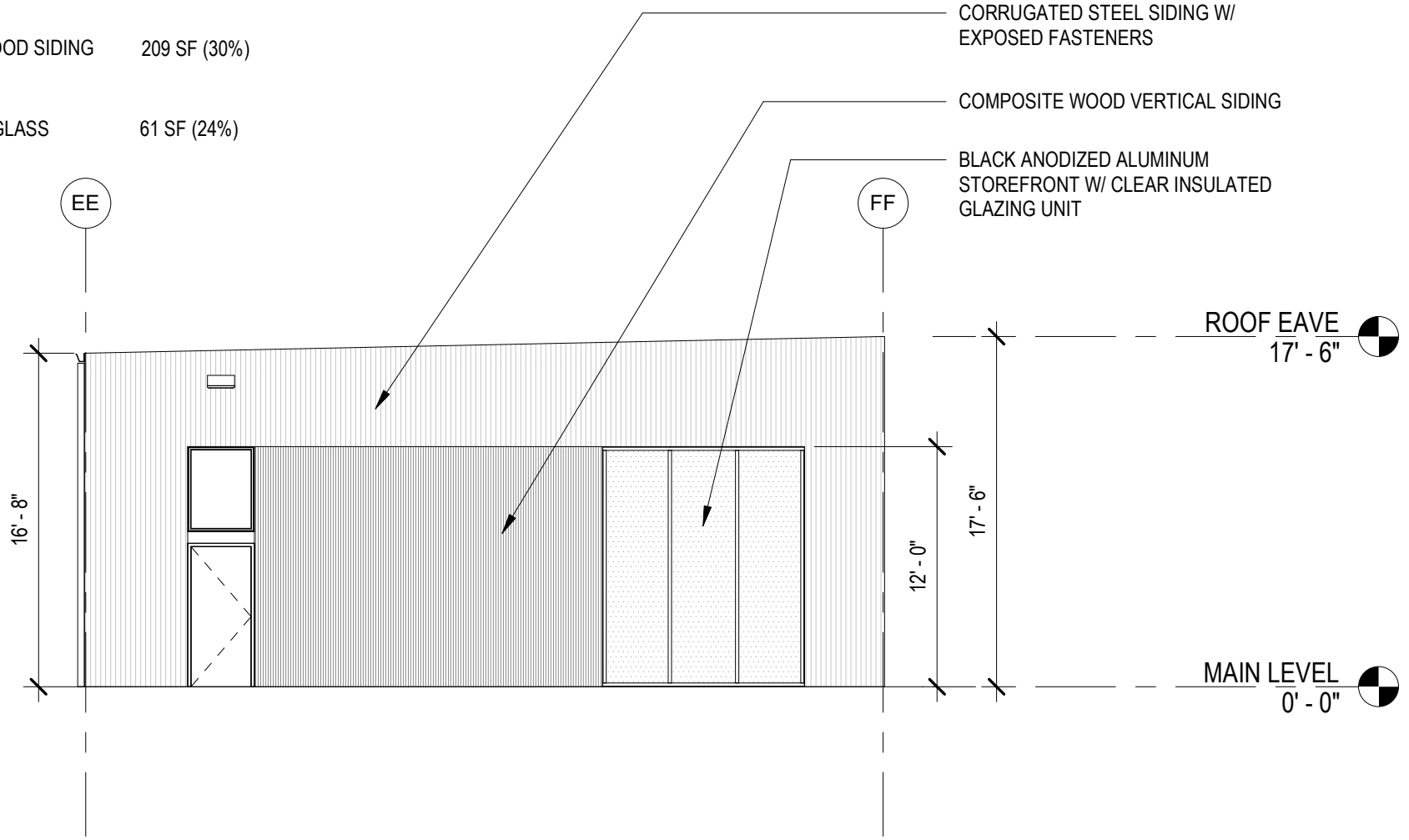
TOTAL WALL AREA: 683 SF

- CORRUGATED STEEL SIDING

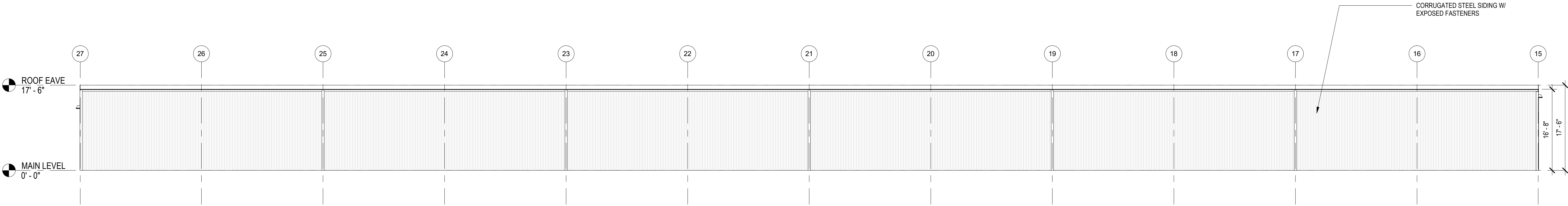
314 SF (46%)
- COMPOSITE WOOD SIDING

209 SF (30%)
- STOREFRONT GLASS

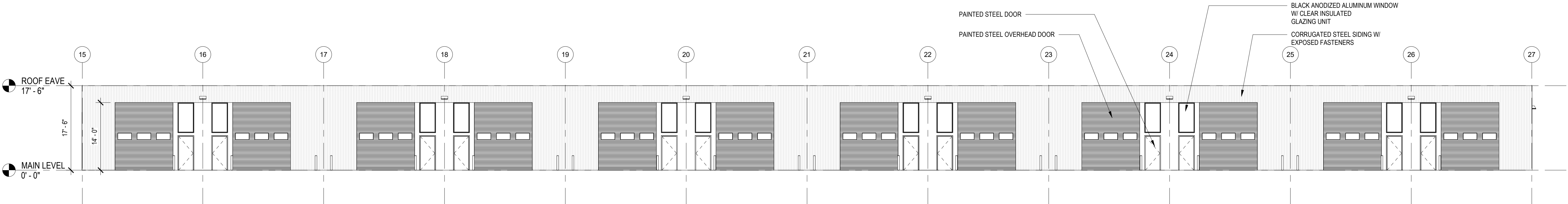
61 SF (24%)



3 ELEVATION - BUILDING B (WEST)  
1/8" = 1'-0"



2 ELEVATION - BUILDING B (NORTH)  
3/32" = 1'-0"



1 ELEVATION - BUILDING B (SOUTH)  
3/32" = 1'-0"

FLEX SPACES

60 SE Thompson Dr.  
PROJECT NUMBER: 23092  
client: Matt Hendrickson

Schematic Design

07.14.2023

Architect -  
Client -

REV.	DATE	ISSUE

ARCHITECT:

six  
twenty  
one

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ELEVATIONS - BUILDING B

Sheet Revision no.

A202