



307B SW Market St., Lee's Summit, MO 64063 | 816.249.2270 | www.collinsandwebb.com

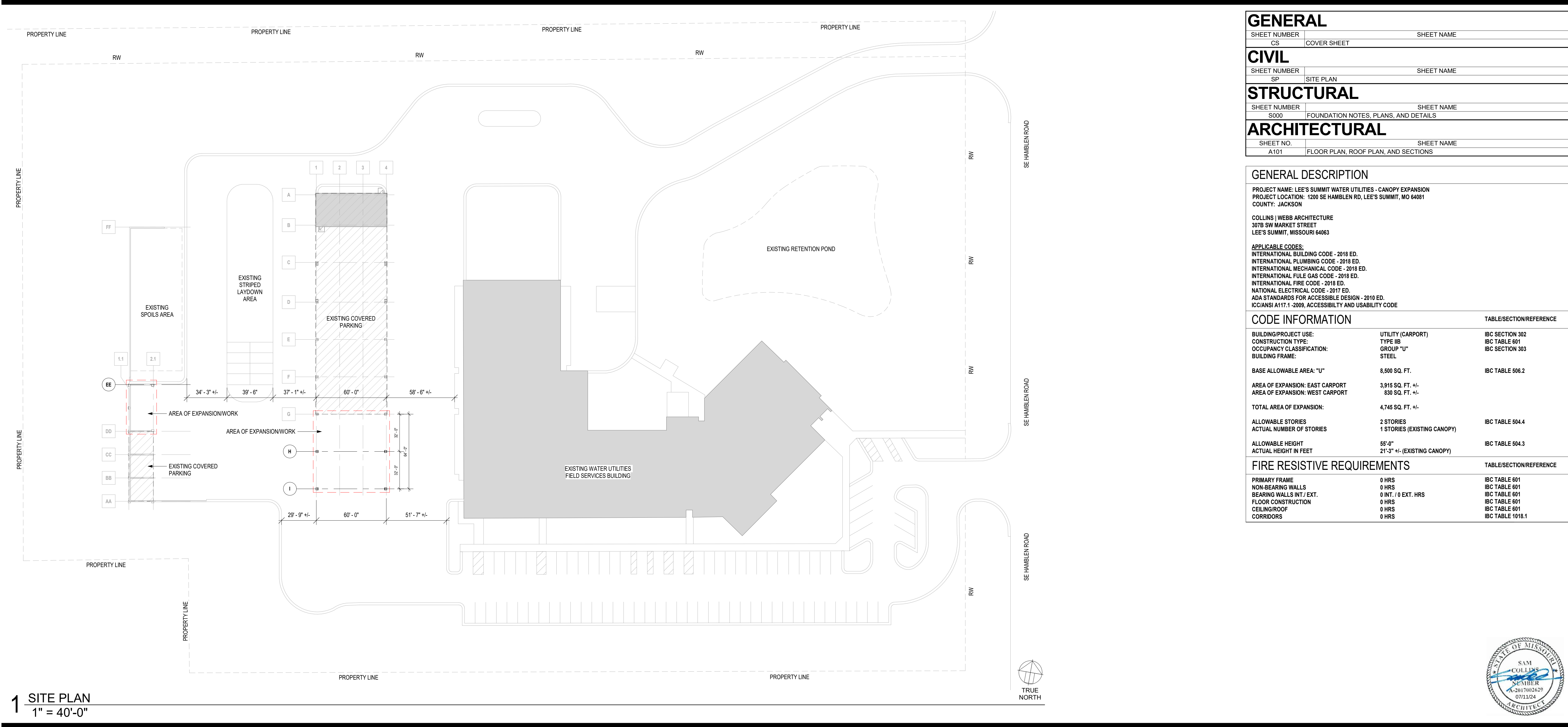
LSMO WATER UTILITIES - CANOPIES

1200 SE HAMBLÉN ROAD
LEE'S SUMMIT, MO 64081

PERMIT DRAWINGS

JULY 11 2024

COLLINS WEBB #: 24054



OWNER

DRIENIK INVESTMENTS LLC
202 NW SHAMROCK AVE
LEE'S SUMMIT, MO 64081

CONTRACTOR

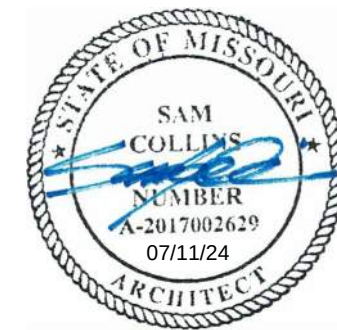
MAR BUILDING SOLUTIONS
1445 SE BROADWAY DR.
LEE'S SUMMIT, MO 64081
P: 816.272.5435
www.marbuildingsolutions.com

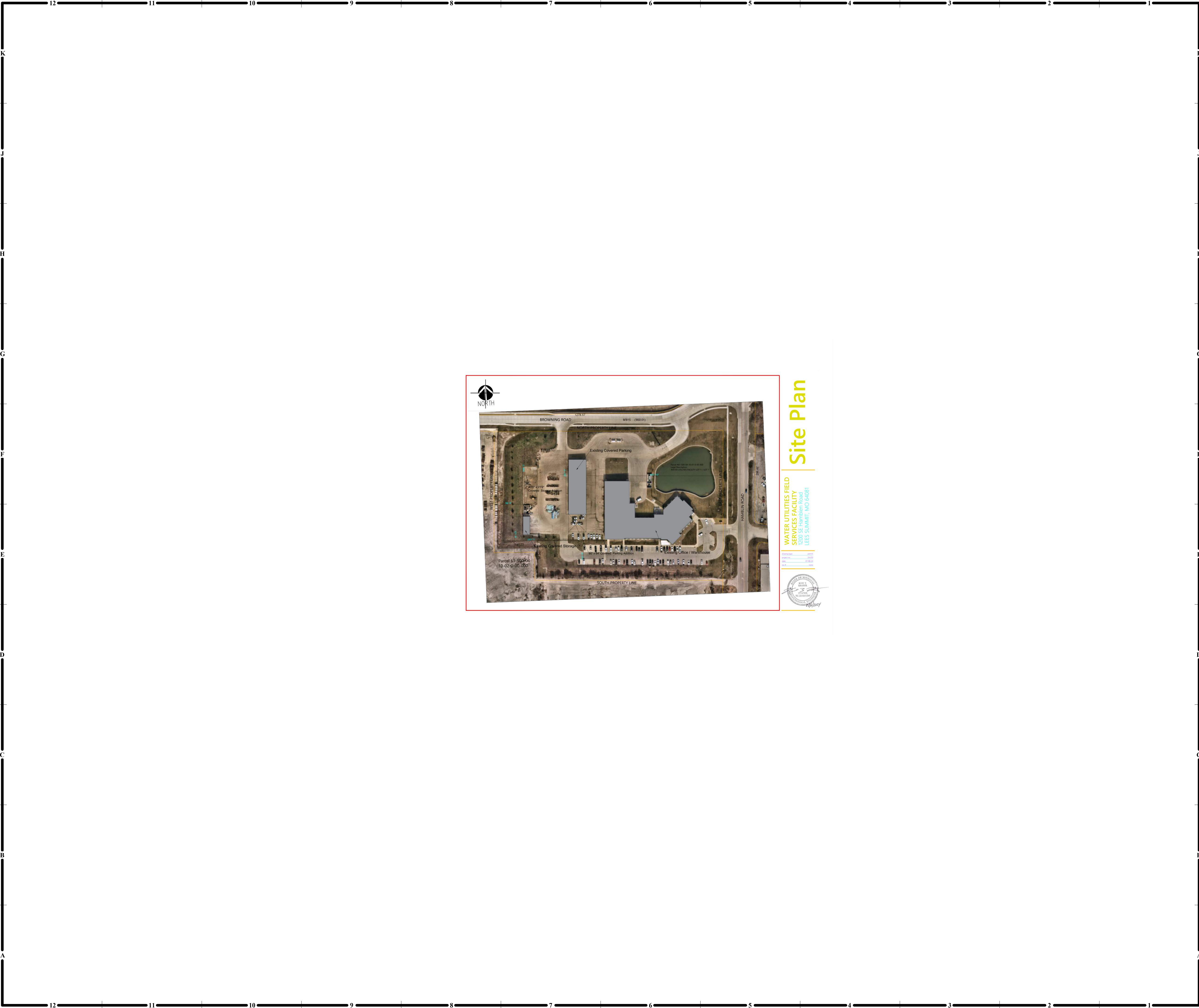
ARCHITECT

COLLINS | WEBB ARCHITECTURE
307B SW MARKET ST.
LEE'S SUMMIT, MO 640664
P: 816.249.2270
www.collinsandwebb.com

STRUCTURAL ENGINEER

S1 STRUCTURAL
7700 SHAWNEE MISSION PKWY. #104
OVERLAND PARK, KS 66202
P: 913.735.7006
www.s1structural.com





Site Plan

WATER UTILITIES FIELD SERVICES FACILITY
LEE'S SUMMIT, MO 64081

DATE	BY	REVISION
07/11/2024	SP	ISSUE
07/11/2024	SP	REVISION
07/11/2024	SP	REVISION



LSMO WATER UTILITIES - CANOPIES

1200 SE HAMBLE ROAD
LEE'S SUMMIT, MO 64081

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:

PROFESSIONAL SEAL

SP

ISSUE DATE: JULY 11 2024
COLLINS WEBB #: 24054

SITE PLAN

PERMIT DRAWINGS



307 SIV Market St., Lee's Summit, Missouri 64083 | 816.249.2270 | www.collinswebb.com

RELEASED FOR
CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
09/09/2024

4/30/2024 10:26:20 AM

STRUCTURAL NOTES:

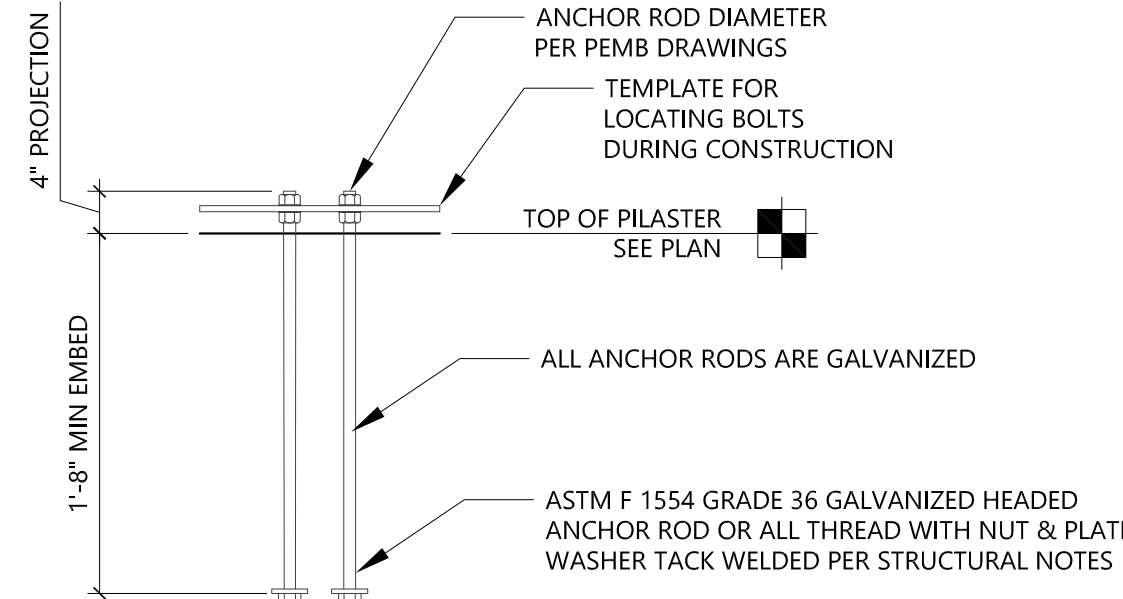
1. GENERAL NOTES
- 1.1. DESIGN AND CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE AS AMENDED BY THE CITY OF LEE'S SUMMIT, MISSOURI.
- 1.2. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE NEW AND EXISTING STRUCTURES DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO, BRACING, SHORING FOR CONSTRUCTION LOADS AND EQUIPMENT, ETC. THE ARCHITECT-ENGINEER IS NOT RESPONSIBLE FOR THE CONTRACTORS MEANS AND METHODS, SEQUENCES OF CONSTRUCTION, OR THE SAFETY PROGRAM. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT-ENGINEER WILL NOT INVOLVE REVIEW OF THESE ITEMS.
- 1.3. DETAILS THAT ARE NOTED AT "TYP" ON DETAIL TITLES ARE TO BE APPLIED TO THE PROJECT CONSTRUCTION AS GENERAL CONSTRUCTION METHODS UNLESS NOTES OTHERWISE. THESE DETAILS ARE NOT CUT AT ALL LOCATIONS THEY OCCUR AND MAY NOT BE CUT AT ALL.
2. DESIGN LOADS
- 2.1. FOUNDATION DESIGN BASED UPON PRELIMINARY COLUMN REACTIONS PROVIDED BY BUTLER MANUFACTURING DATED 5.1.24 AND 5.9.24.
- 2.2. NO PART OF THE FOUNDATION SYSTEM SHALL BE INSTALLED UNTILL S1 STRUCTURAL HAS BEEN PROVIDED WITH SEALED FINAL COLUMN REACTIONS FOR REVIEW.
- 2.3. THESE STRUCTURAL DRAWINGS REPRESENT THE FINISHED FOUNDATION SYSTEM ONLY, NOT THE METHOD OF CONSTRUCTION. THE PRE-ENGINEERED METAL BUILDING MANUFACTURER IS RESPONSIBLE FOR THE ENTIRE DESIGN OF THE STEEL SUPERSTRUCTURE, ROOF, DECK, FASCIAS, SUPPORT, BRACING, WALL PANELS, LATERAL SYSTEM AND RELATED WORK.
3. FOUNDATIONS
- 3.1. SHALLOW FOOTINGS ARE DESIGNED TO BEAR ON UNDISTURBED NATIVE SOILS OR STRUCTURAL FILL WITH A BEARING CAPACITY OF 2500 PSF.
- 3.2. ALL FOOTINGS ARE TO BEAR A MINIMUM OF 3'-0" BELOW FINISHED GRADE.
- 3.3. A REGISTERED SOILS ENGINEER SHALL INSPECT BEARING MATERIALS BEFORE CONCRETE IS POURED. BACKFILL AGAINST ANY WALLS OR CONSTRUCTION SHALL NOT BE PLACED UNLESS THE WALLS ARE ADEQUATELY BRACED TO WITHSTAND THE LOADS IMPOSED DUE TO BACKFILLING. ALL COMPACTED FILL INSTALLATION SHALL BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER.
- 3.4. LOW VOLUME CHANGE MATERIAL SHALL HAVE USCS SOIL CLASSIFICATION OF GM (MOODY TYPE V OR AN APPROVED ALTERNATE GRADATION OF CRUSHED LIMESTONE AGG) OR CL (LIQUID LIMIT < 45 AND PLASTIC INDEX < 23).
4. CONCRETE
- 4.4. ALL CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:
- 4.4.1. FOOTINGS 3000 PSI
- 4.4.2. SLAB 4000 PSI
- 4.5. ALL CONCRETE EXPOSED TO FREEZING SHALL HAVE BETWEEN 5% AND 7% AIR ENTRAINMENT. NO ALUMINUM ITEMS SHALL BE EMBEDDED IN ANY CONCRETE. CHLORIDES IN ANY FORM OR CONCENTRATION SHALL NOT BE ADDED TO ANY CONCRETE.
- 4.6. MAXIMUM WATER/CEMENT RATIOS:
- 4.6.1. AIR ENTRAINED CONCRETE = 0.48
- 4.6.2. NON AIR ENTRAINED CONCRETE = 0.50
- 4.7. CHEMICAL ADMIXTURES
- 4.7.1. WATER-REDUCING ADMIXTURE: ASTM C 494/C 494M, TYPE A.
- 4.7.2. HIGH-RANGE, WATER-REDUCING ADMIXTURE: ASTM C 494/C 494M, TYPE F.
- 4.8. ALL CONCRETE OPERATIONS, INCLUDING BUT NOT LIMITED TO MIX DESIGN, MIXING, TRANSPORTING, PLACING, REINFORCING DETAILING AND PLACING, CURING, AND TESTING SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST APPLICABLE RECOMMENDATIONS OF THE ACI MANUAL OF CONCRETE PRACTICE.
5. REINFORCING STEEL
- 5.1. ALL REINFORCING STEEL SHALL BE ASTM A 615, GRADE 60, DEFORMED.
- 5.2. ALL SMOOTH DOWELS SHALL BE ASTM A 615 GRADE 60, PLAIN-STEEL BARS.
- 5.3. UNLESS NOTED OTHERWISE, STANDARD COVERAGE OF BARS SHALL BE:
- 5.3.1. WHERE EARTH FORMED 3 INCHES
- 5.3.2. CONCRETE EXPOSED TO EARTH OR WEATHER
- 5.3.3.1. NO. 6 AND LARGER 2 INCHES
- 5.3.3.2. NO. 5 AND SMALLER 1 1/2 INCHES
- 5.3.4. CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR IN CONTACT WITH GROUND
- 5.3.4.1. NO. 14 AND NO. 18 1 1/2 INCHES
- 5.3.4.2. NO. 11 AND SMALLER 1 1/4 INCHES
- 5.4. BARS MARKED CONTINUOUS AND ALL VERTICAL STEEL SHALL BE LAPPED OR EMBEDDED TO DEVELOP THE FULL TENSILE CAPACITY OF THE BAR. REINFORCING SPICE LENGTHS SHALL BE PER THE SPICE LENGTH TABLE. UNLESS SHOWN OTHERWISE, SPICE TOP BARS NEAR MIDSPAN AND SPICE BOTTOM BARS OVER SUPPORTS.
- 5.5. AT CORNERS OF ALL WALLS AND FOOTINGS, SUPPLY CORNER BARS 4'-0" LONG MIN. (2'-0" IN EACH DIRECTION, OR 30 BAR DIAMETERS) IN OUTSIDE FACE OF WALL MATCHING SIZE AND SPACING OF HORIZONTAL BARS. WHERE THERE ARE NO VERTICAL BARS IN OUTSIDE FACE OF WALL, SUPPLY THREE #4 VERTICAL SUPPORT BARS FOR CORNER BARS.
- 5.6. ALL CONCRETE IS REINFORCED CONCRETE UNLESS SPECIFICALLY CALLED OUT AS UNREINFORCED. REINFORCE ALL CONCRETE NOT OTHERWISE SHOWN WITH THE SAME STEEL AS IN SIMILAR SECTIONS OR AREAS. REFER TO ACI 318-11 FOR ANY DETAILS NOT SHOWN.
- 5.7. ALL SLABS AND STAIRS NOT SHOWN OTHERWISE SHALL BE 8" THICK WITH #4 BARS AT 6" O.C. EACH WAY. ALL EXTERIOR PORCHES AND STAIRS NOT OTHERWISE DETAILED MAY BE CONSTRUCTED IN ANY STANDARD MANNER, SOLID OR HOLLOW, BUT MUST BE REINFORCED WITH #4 BARS AT 12" O.C. EACH WAY MIN. PORCHES SHALL BE DOWELED TO ADJACENT WALLS OR GRADE BEAMS WITH #4 BARS AT 12" O.C. HOOKED OR EMBEDDED 30 DIAMETERS INTO BOTH MEMBERS. SLOPE PORCHES 1/8" PER FOOT FOR DRAINAGE UNLESS NOTED OTHERWISE. ACCESSORIES SHALL BE AS SPECIFIED IN LATEST EDITION OF CRSI DESIGN HANDBOOK. MAXIMUM ACCESSORY SPACING SHALL BE 4'-0" O.C.
- 5.9. AT ALL HOLES IN CONCRETE WALLS AND SLABS, ADD TWO #5 BARS (OPENING DIMENSION PLUS 3'-0" LONG EACH WAY AT EACH OF FOUR SIDES AND ADD TWO #5 5'-0" DIAGONALLY AT EACH OF THE FOUR CORNERS OF THE HOLE. IN 8" WALL OPENINGS REINFORCE SAME, BUT ONE #5 INSTEAD OF TWO #5'S, RESPECTIVELY.
- 5.10. PROVIDE TWO #4x4'-0" LONG DIAGONAL BARS CENTERED IN SLAB AT ALL RE-ENTRANT CORNERS.
- 5.11. SUPPORT FOOTING AND SLAB REINF' W/ CONCRETE BRICKS PLACED ON SUBGRADE. DO NOT USE VERTICAL REBAR DRIVEN INTO GROUND.
- HEADED ANCHOR RODS
- 6.1. ANCHOR RODS SHALL BE EITHER HEADED OR ALL THREAD WITH A NUT TACK WELDED TO THE ROD AND A PLATE WASHER TACK WELDED TO THE NUT.
- 6.2. ANCHOR RODS SHALL BE ASTM F 1554 GRADE 36 STRAIGHT.
- 6.3. NUTS SHALL BE ASTM A 563 HEAVY HEX CARBON STEEL.
- 6.4. PLATE WASHERS SHALL BE ASTM A 36 CARBON STEEL 3X3X3/8".
- 6.5. WASHERS SHALL BE ASTM F 436 HARDENED CARBON STEEL.

ABBREVIATIONS

ASD	ALLOWABLE STRESS DESIGN	HSS	HOLLOW STRUCTURAL STEEL
ARCH	ARCHITECT	HORIZ	HORIZONTAL
BPL	BASEPLATE	I	ISOLATION JOINT
BTW	BETWEEN	JB	JOIST BEARING
BOTT	BOTTOM	LB	LONGITUDINAL
BOL	BOTTOM OF LINTEL	MAX	MAXIMUM
CP	CAST IN PLACE	MIN	MINIMUM
CL	CENTERLINE	OC	ON CENTER
CLR	CLEAR	PEMB	PRE-ENGINEERED METAL BUILDING
CMU	CONCRETE MASONRY UNIT	PL	PLATE
COL	COL	REINF	REINFORCEMENT
CONC	CONCRETE	REQ'D	REQUIRED
CONT	CONTINUOUS	SCHED	SCHEDULE
CJ	CONTROL JOINT	SPA	SPACE
DIM	DIMENSION	SQ	SQUARE
EA	EACH	STL	STEEL
EF	EACH FACE	T&B	TOP & BOTTOM
ELEV	ELEVATION	TO	TOP OF
EMBED	EMBEDMENT	TOP	TOP OF FOOTING ELEVATION
EQ	EQUAL	TOP	TOP OF PILASTER ELEVATION
EW	EACH WAY	TOS	TOP OF SLAB ELEVATION
EJ	EXPANSION JOINT	TOW	TOP OF WALL ELEVATION
FF	FINISHED FLOOR	TRANS	TRANSVERSE
FND	FOUNDATION	TS	TOP OF STEP
FTG	FOOTING	TYP	TYPICAL
		UNO	UNLESS NOTED OTHERWISE
		VERT	VERTICAL

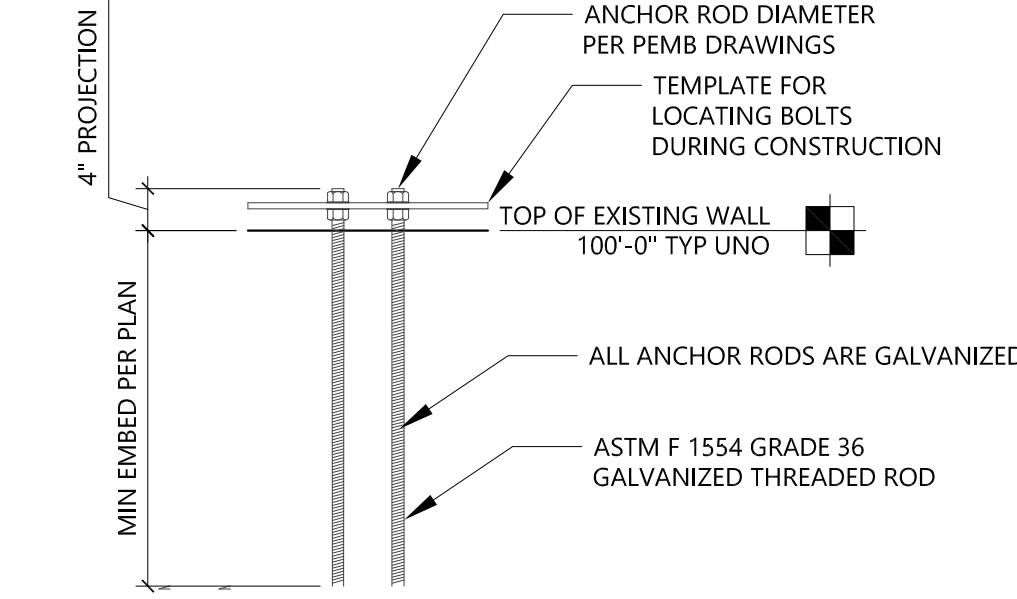
02 TYPICAL CAST IN PLACE ANCHOR BOLT DETAIL

S0 SCALE: NOT TO SCALE



03 TYPICAL EPOXIED ANCHOR BOLT DETAIL

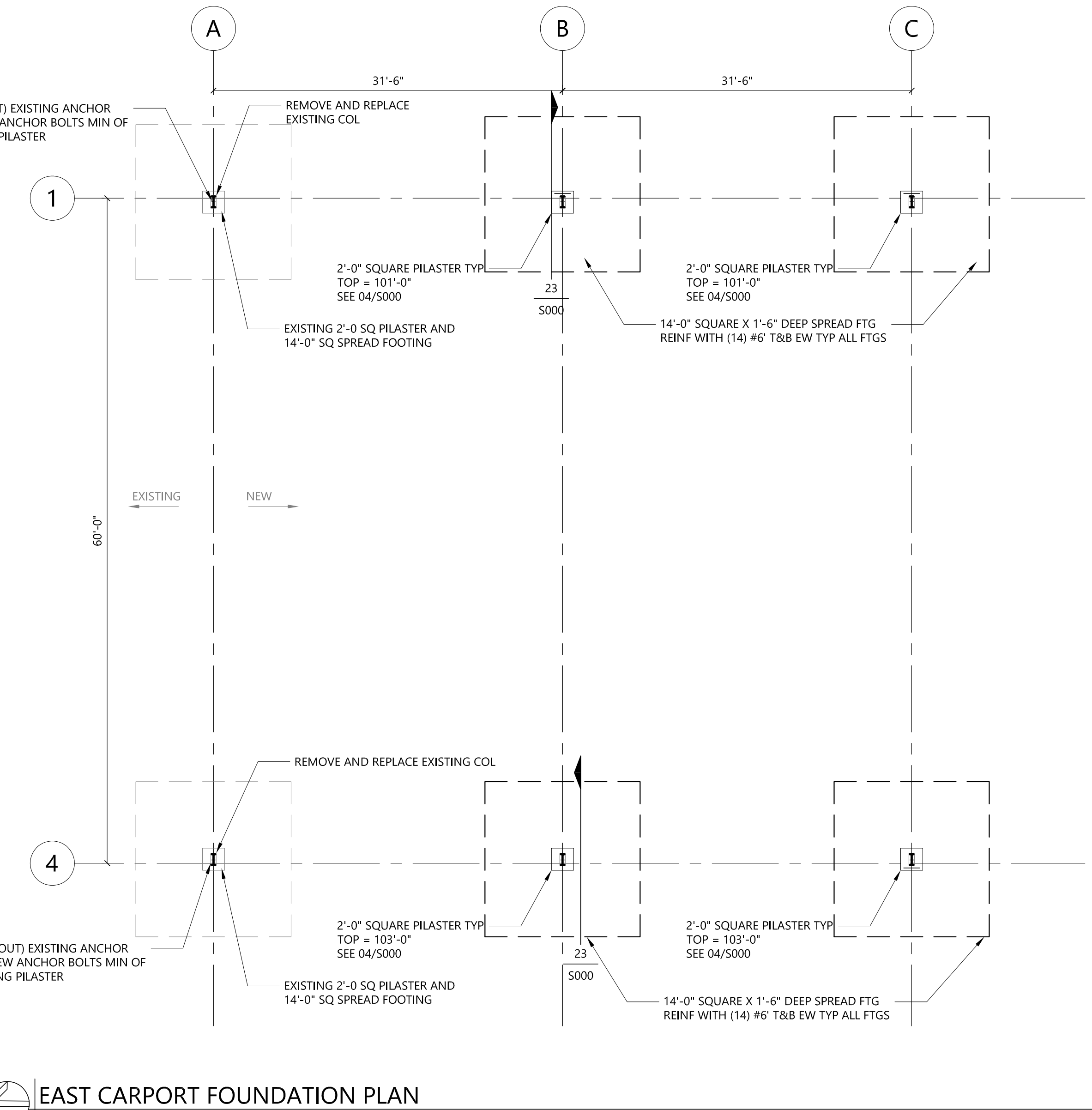
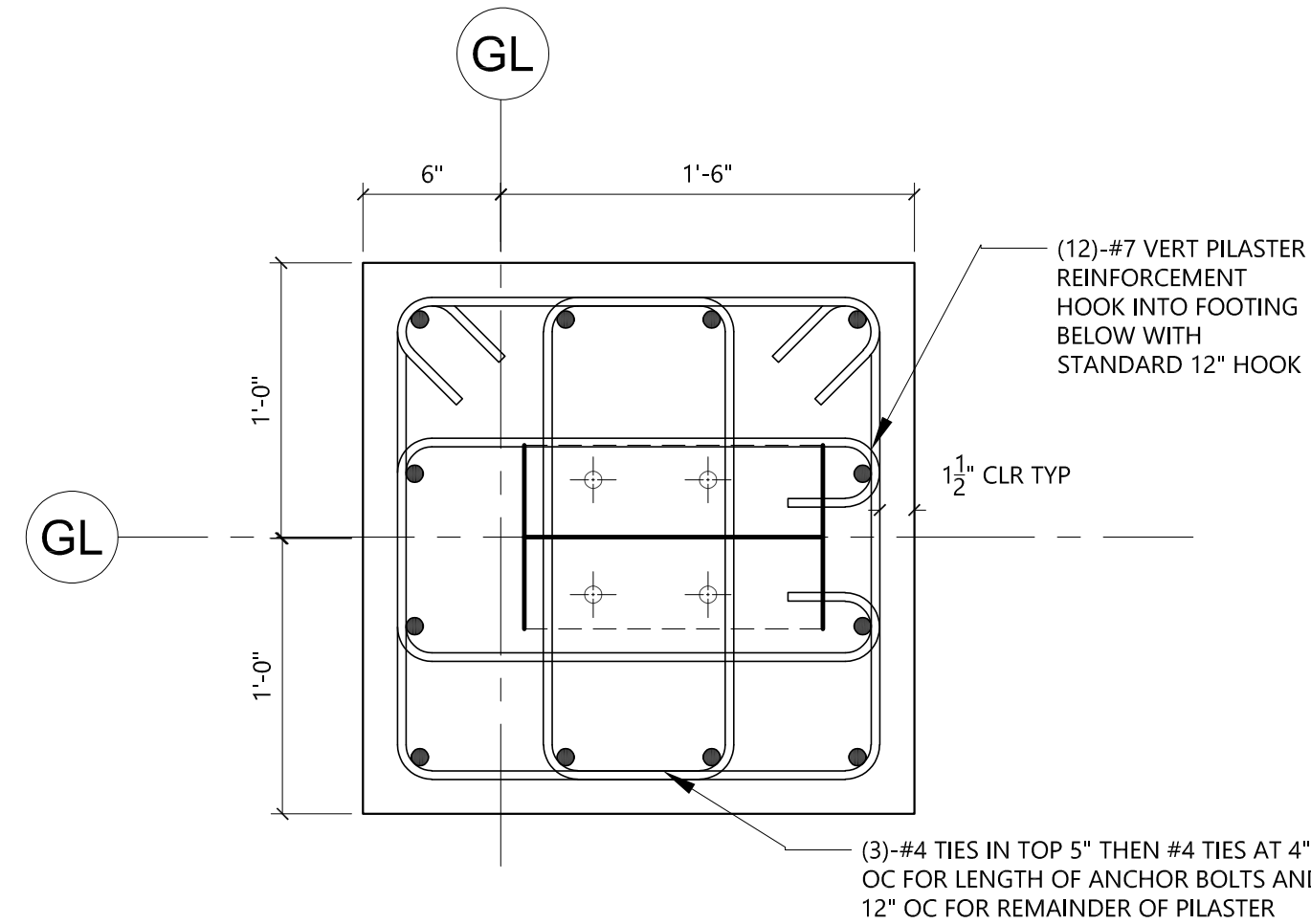
S0 SCALE: NOT TO SCALE



EPOXIED ANCHOR BOLTS SHALL BE EPOXIED WITH SIMPSON SET 3G, HILTI HY 200 OR APPROVED EQUAL. ALL MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS SHALL BE FOLLOWED.

04 TYPICAL PILASTER DETAIL

S0 SCALE: NOT TO SCALE

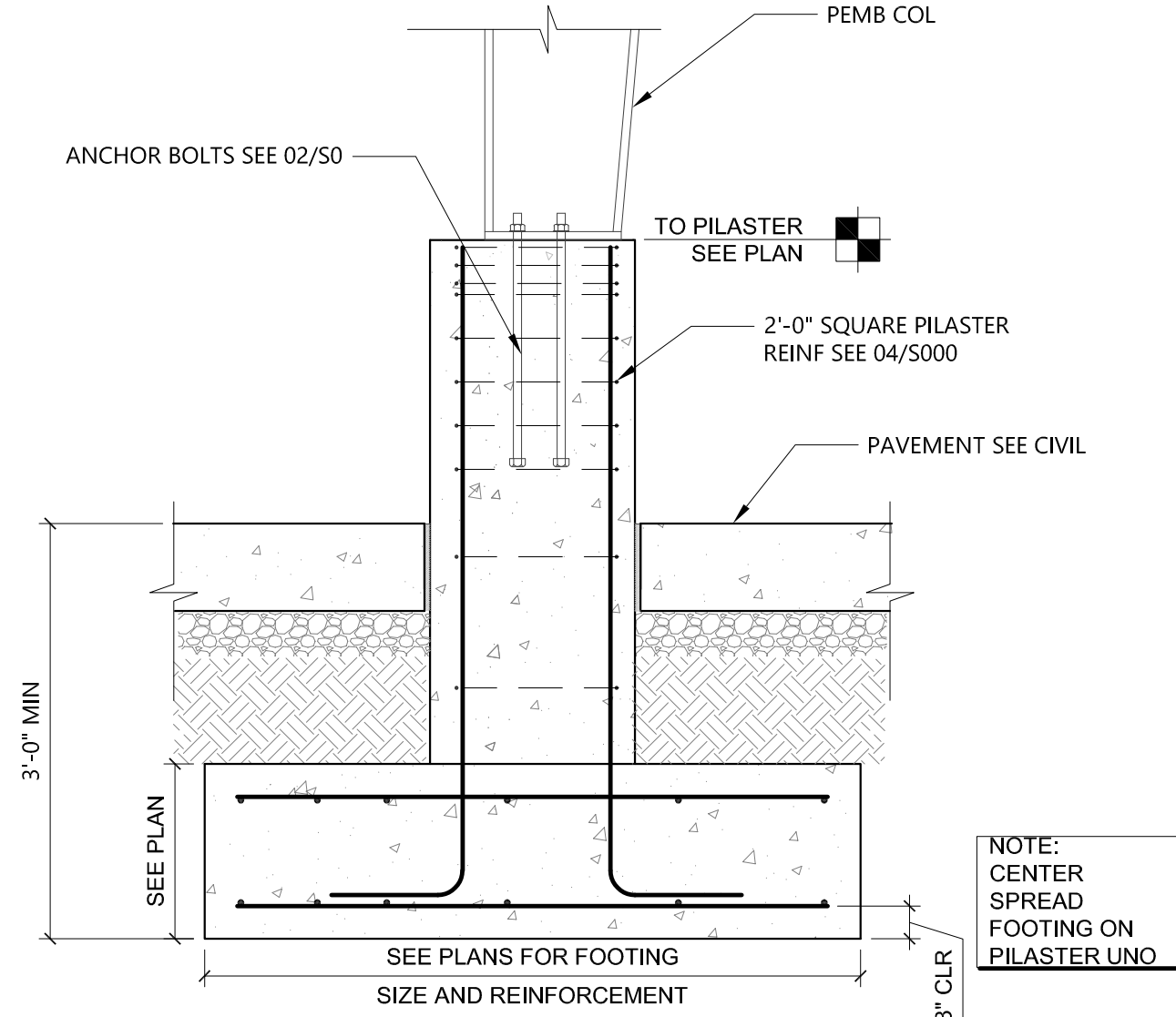


EAST CARPORT FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

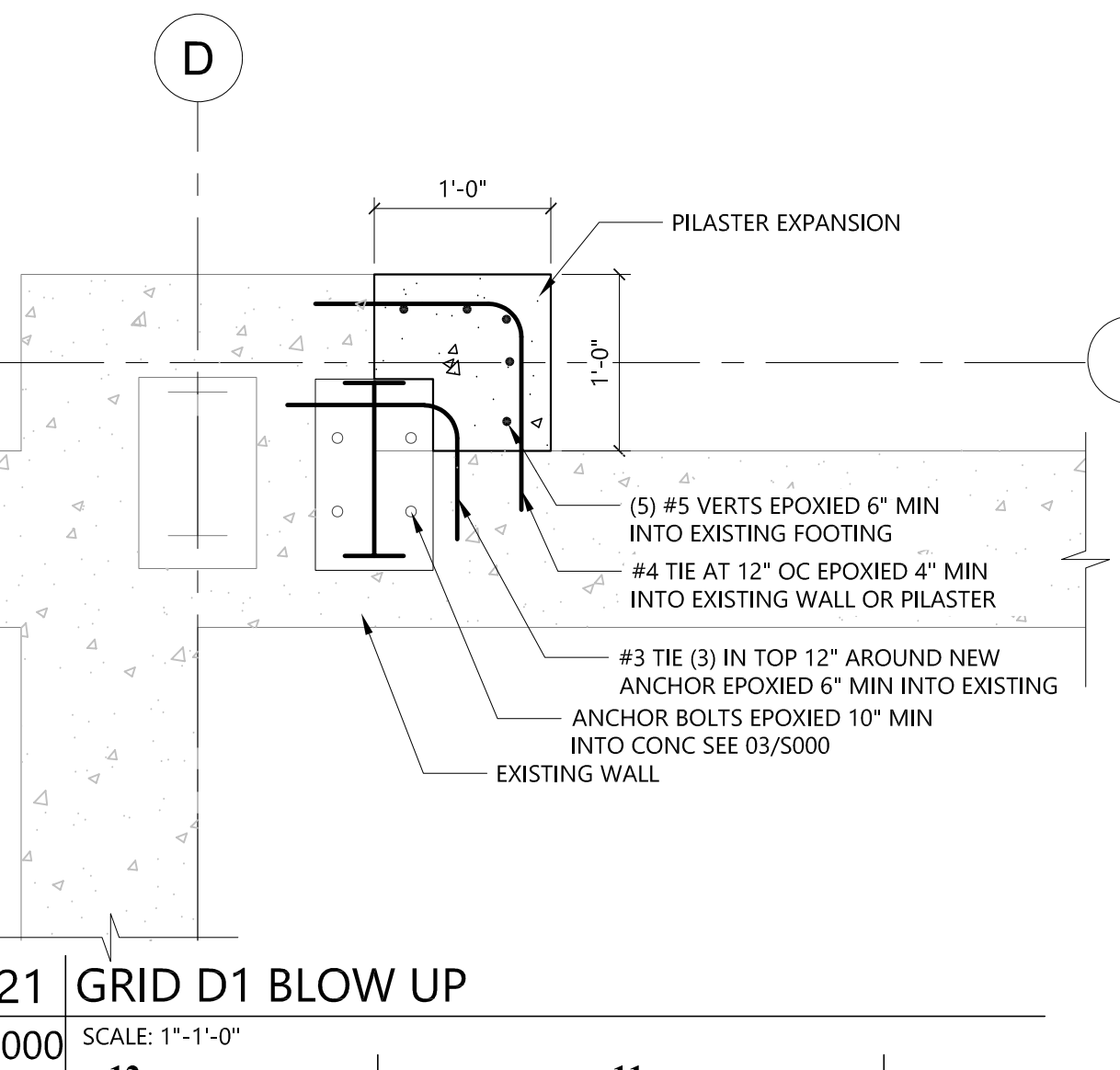
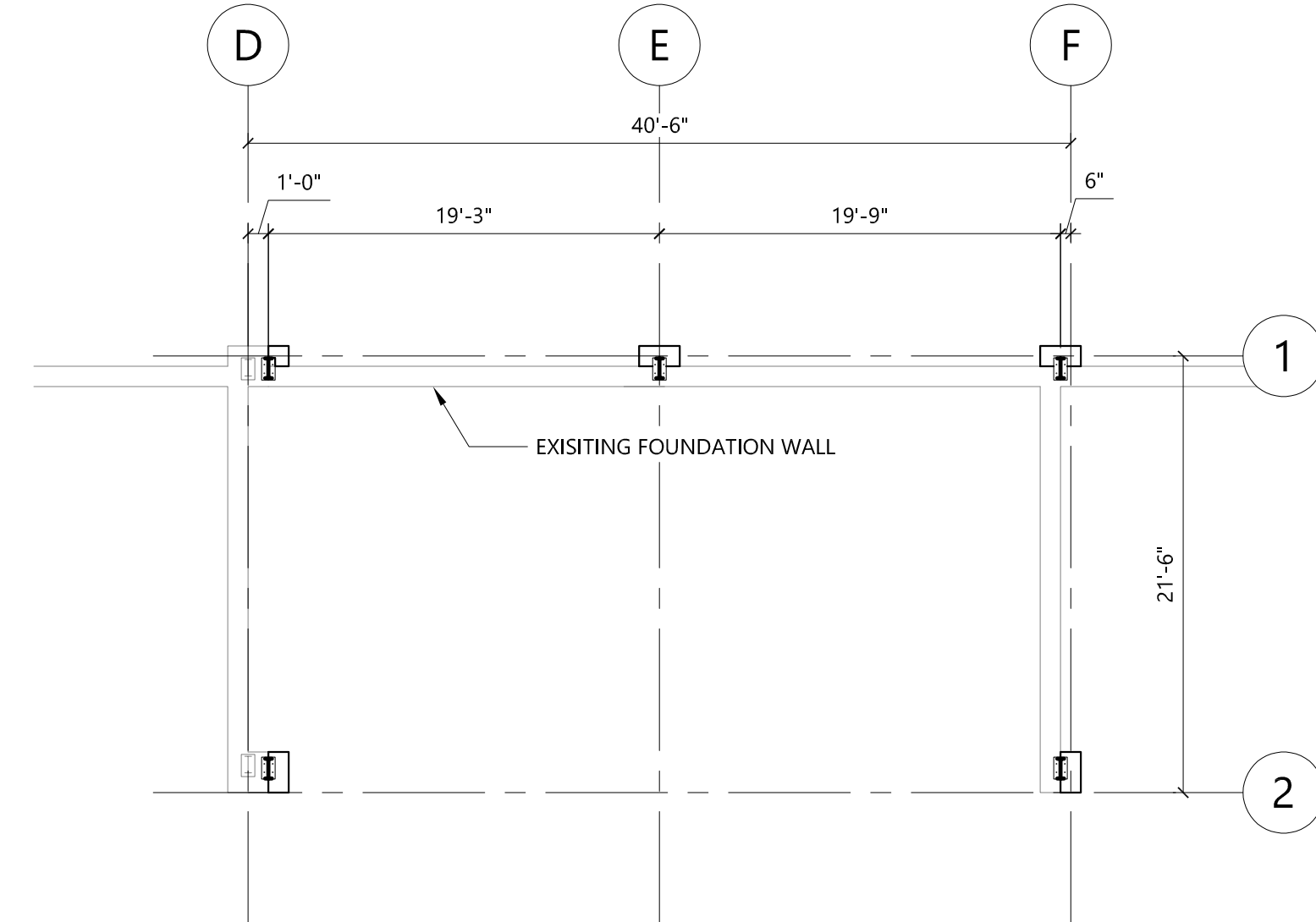
23 TYPICAL SPREAD FOOTING W/ PILASTER DETAIL

S0 SCALE: NOT TO SCALE



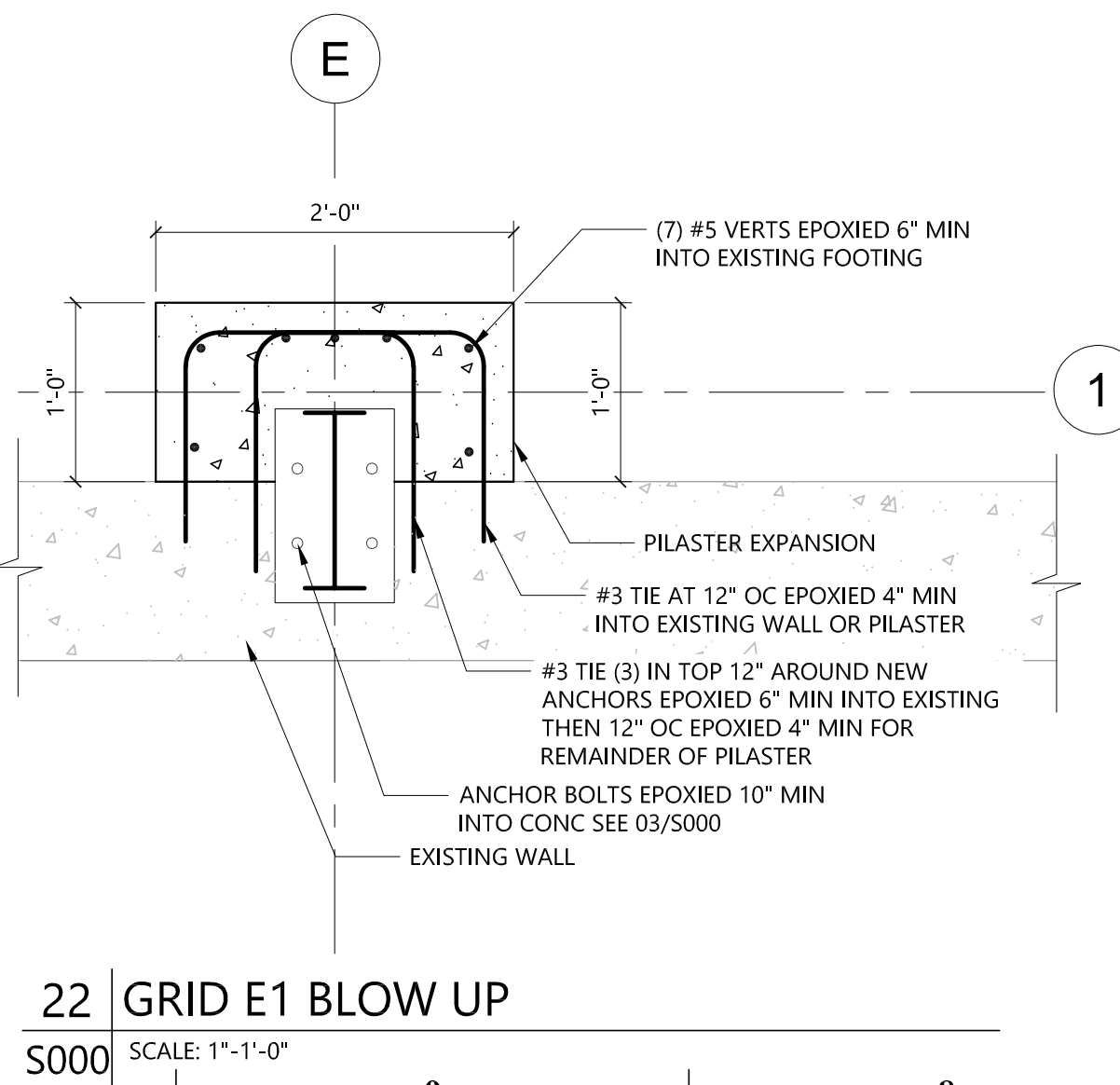
WEST- COVERED STORAGE BINS FOUNDATION PLAN

SCALE: 1/8" = 1'-0"



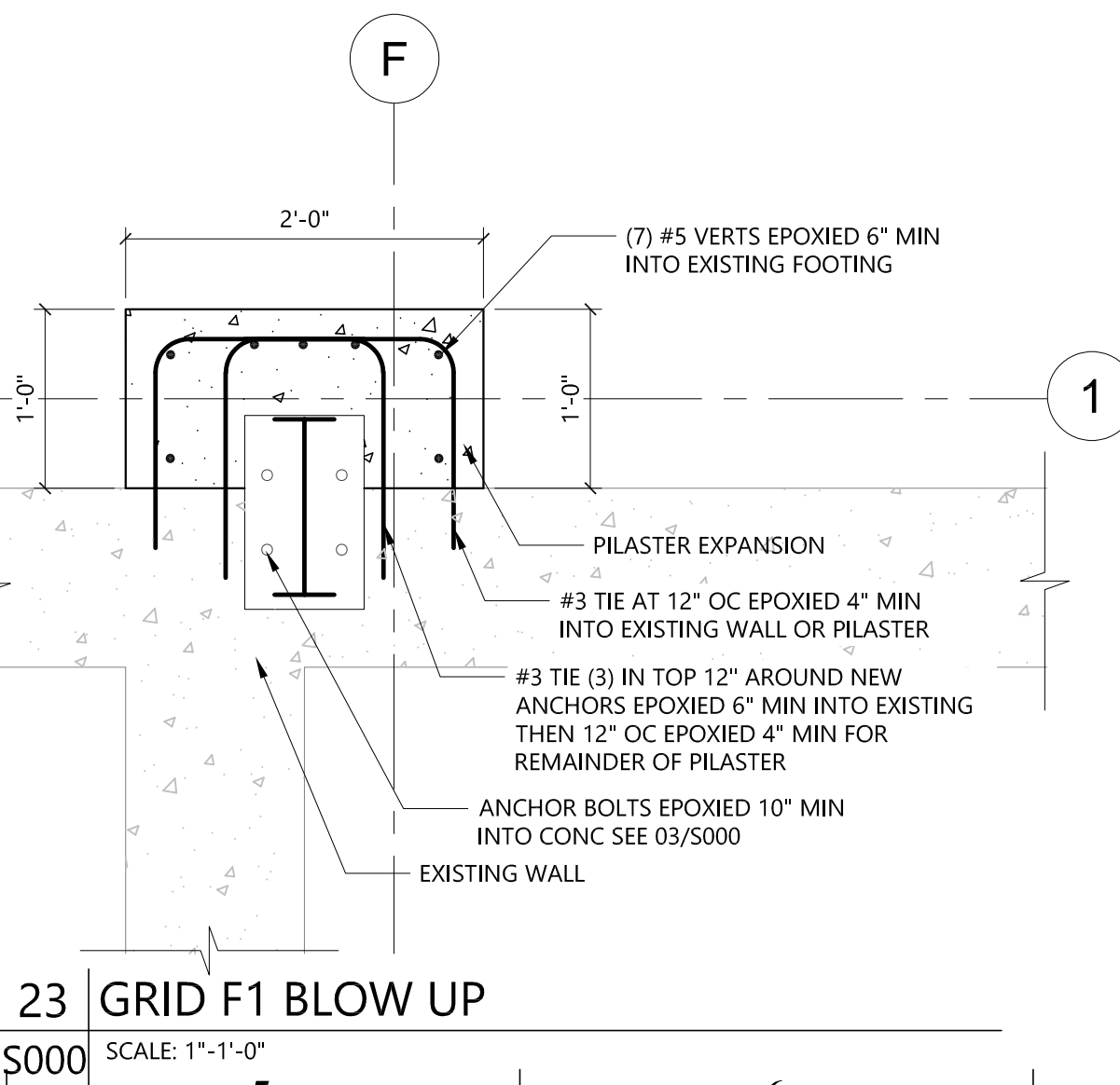
21 GRID D1 BLOW UP

S000 SCALE: 1\"/>



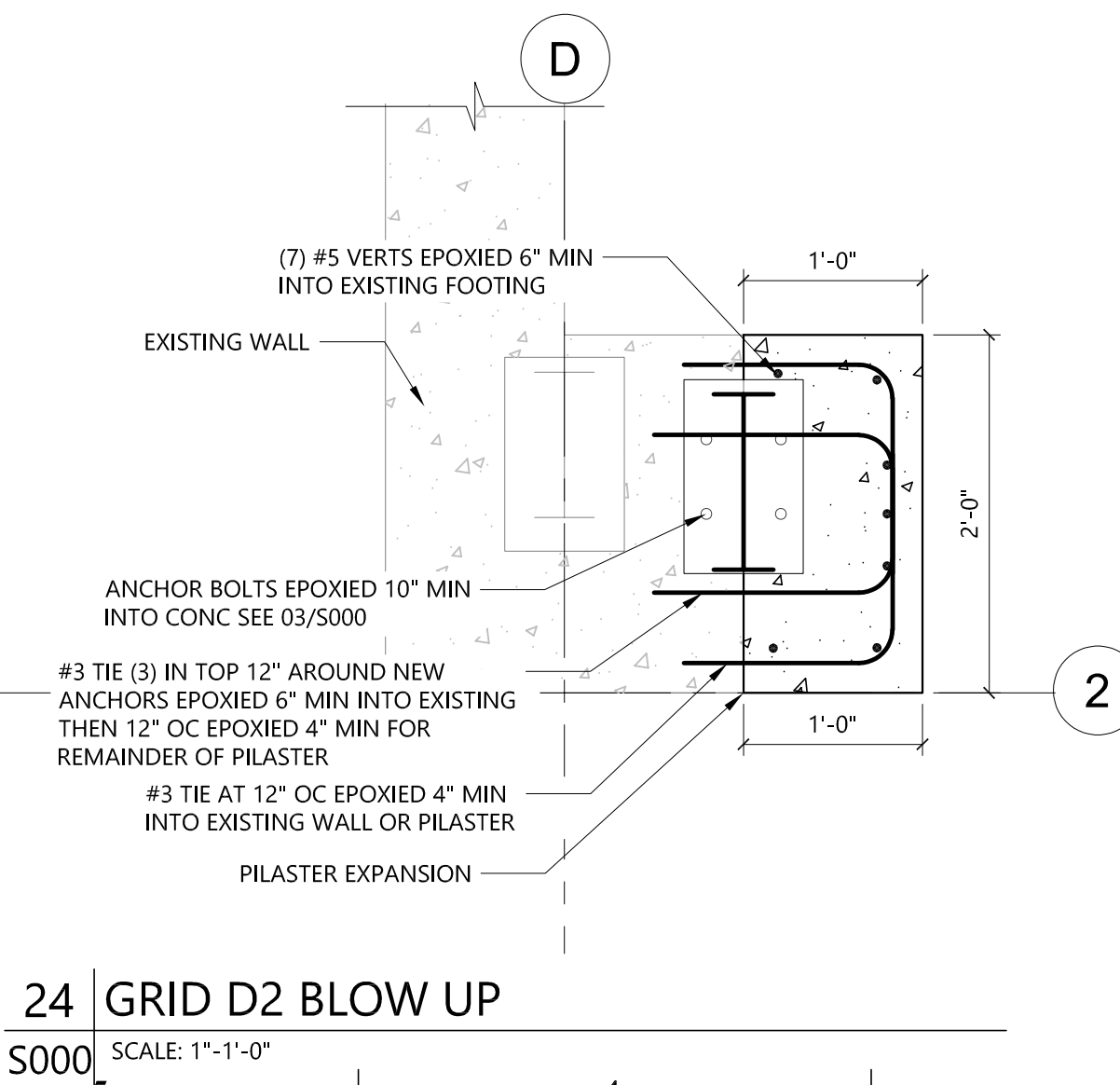
22 GRID E1 BLOW UP

S000 SCALE: 1\"/>



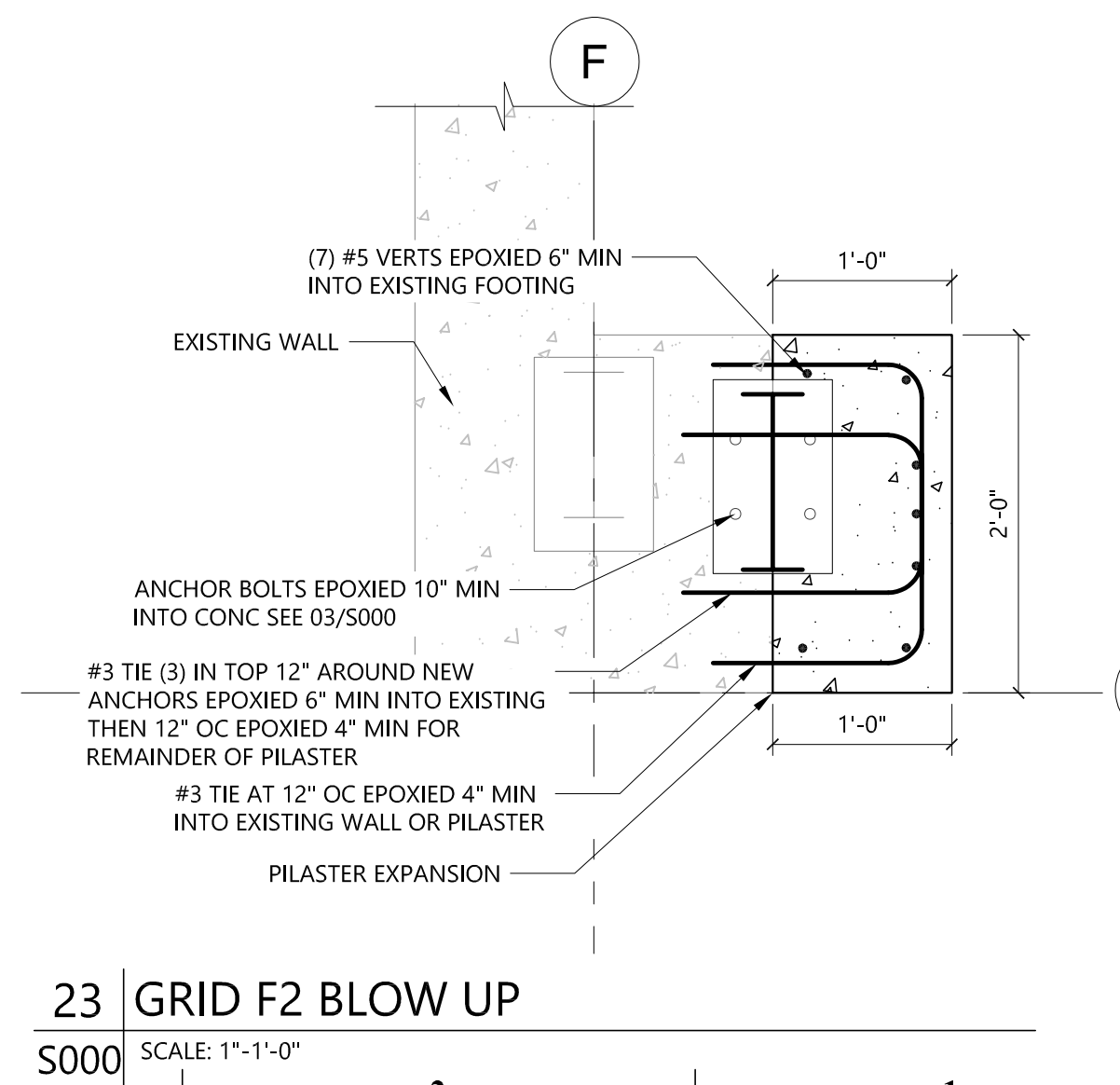
23 GRID F1 BLOW UP

S000 SCALE: 1\"/>



24 GRID D2 BLOW UP

S000 SCALE: 1\"/>



23 GRID F2 BLOW UP

S000 SCALE: 1\"/>



STRUCTURAL

7700 SHAWNEE MISSION PKWY
SUITE 104
OVERLAND PARK, KS 66202
913.735.7006
WWW.S1STRUCTURAL.COM
MO COA LICENSE # E-2017036669

S1 PROJECT #
124-040

LSMO WATER UTILITIES - CANOPIES

1200 SE HAMBLEN ROAD
LEE'S SUMMIT, MO 64081

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:



S000

ISSUE DATE: 21 MAY 2024
COLLINS WEBB #: 24054

FOUNDATION NOTES, PLANS, AND DETAILS

RELEASED FOR
CONSTRUCTION
As Noted on Plans Review
Development Services Department
Lee's Summit, Missouri
09/05/2024



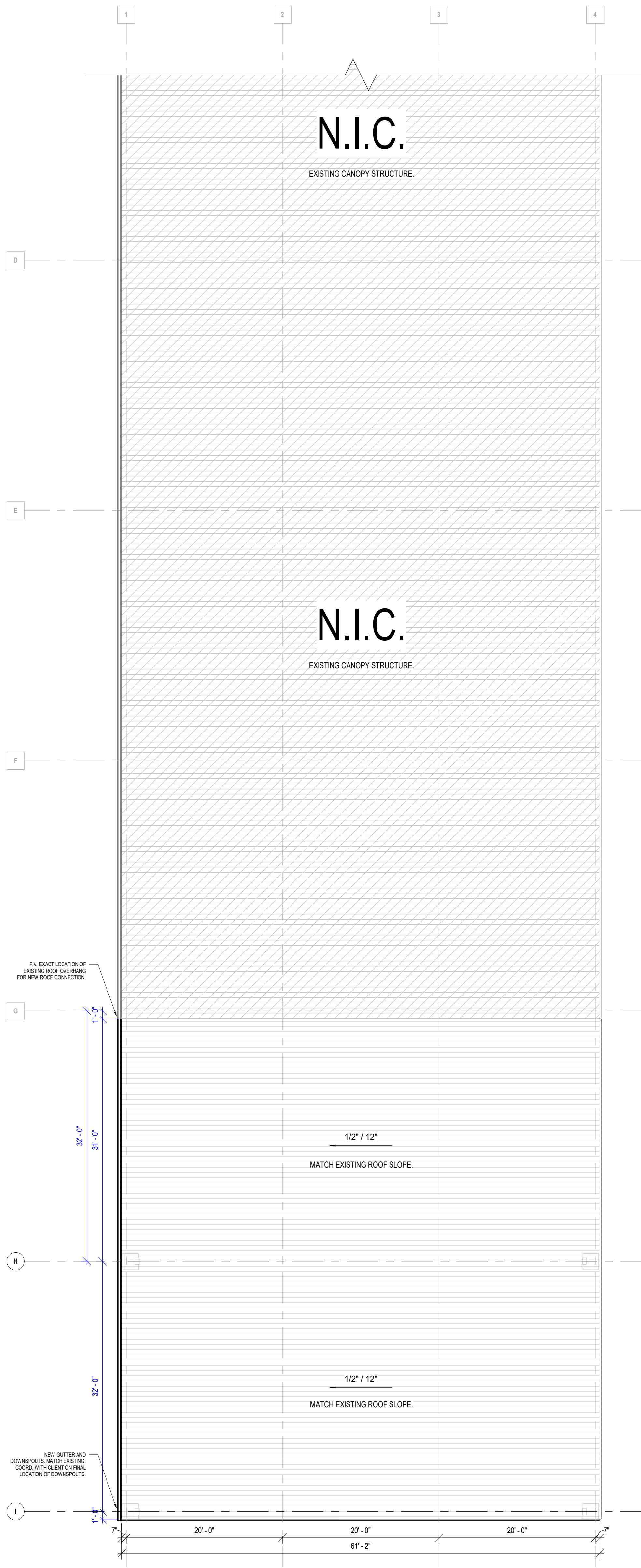
PERMIT DRAWINGS

307 SW Market St. Lee's Summit, Missouri 64083 | 816.249.2270 | www.collinswebb.com

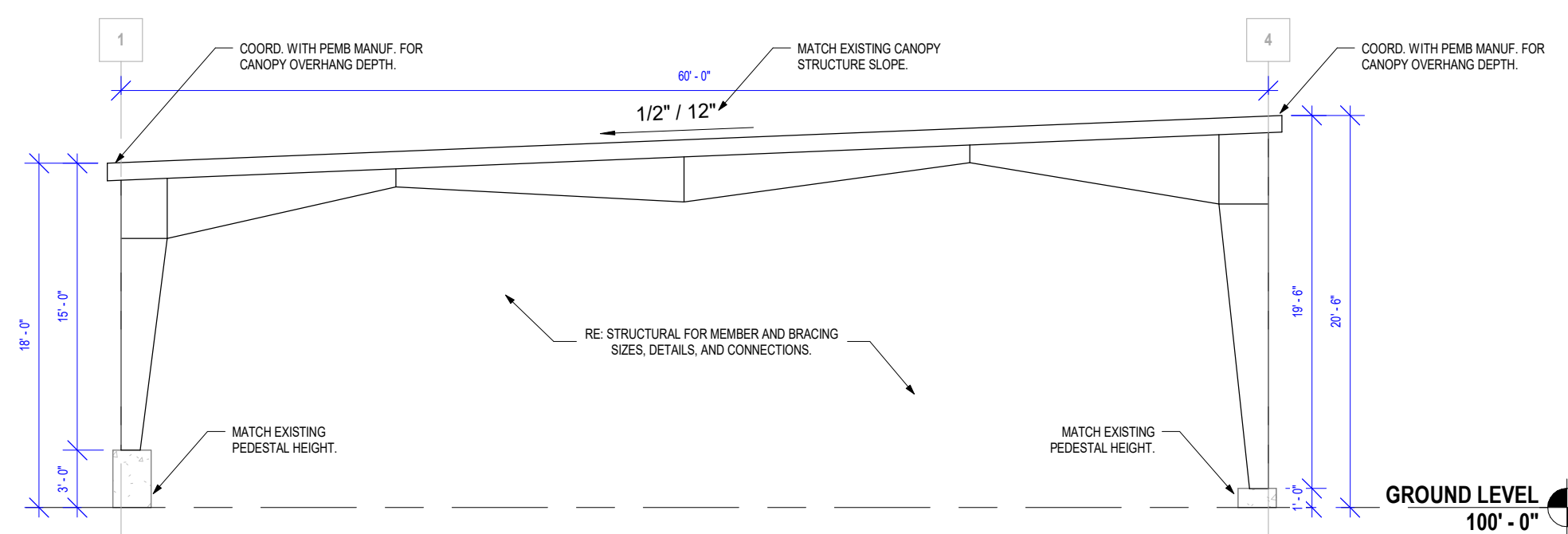
7/11/2024 4:53:56 PM



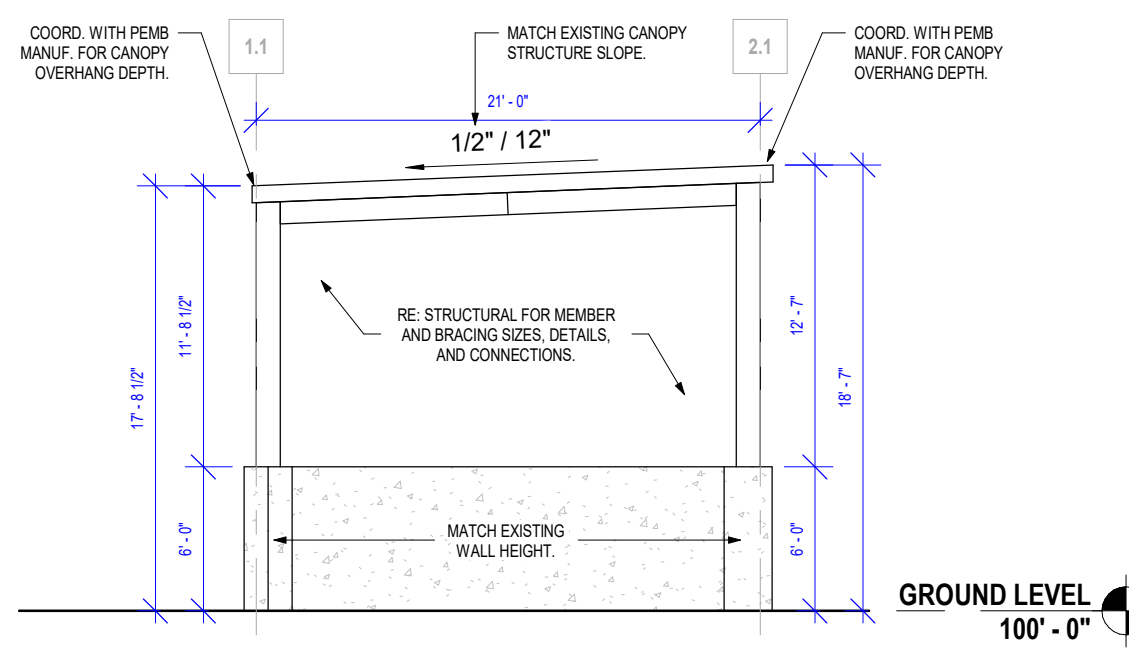
A12 FIRST LEVEL - EAST CARPORT
1/8" = 1'-0"



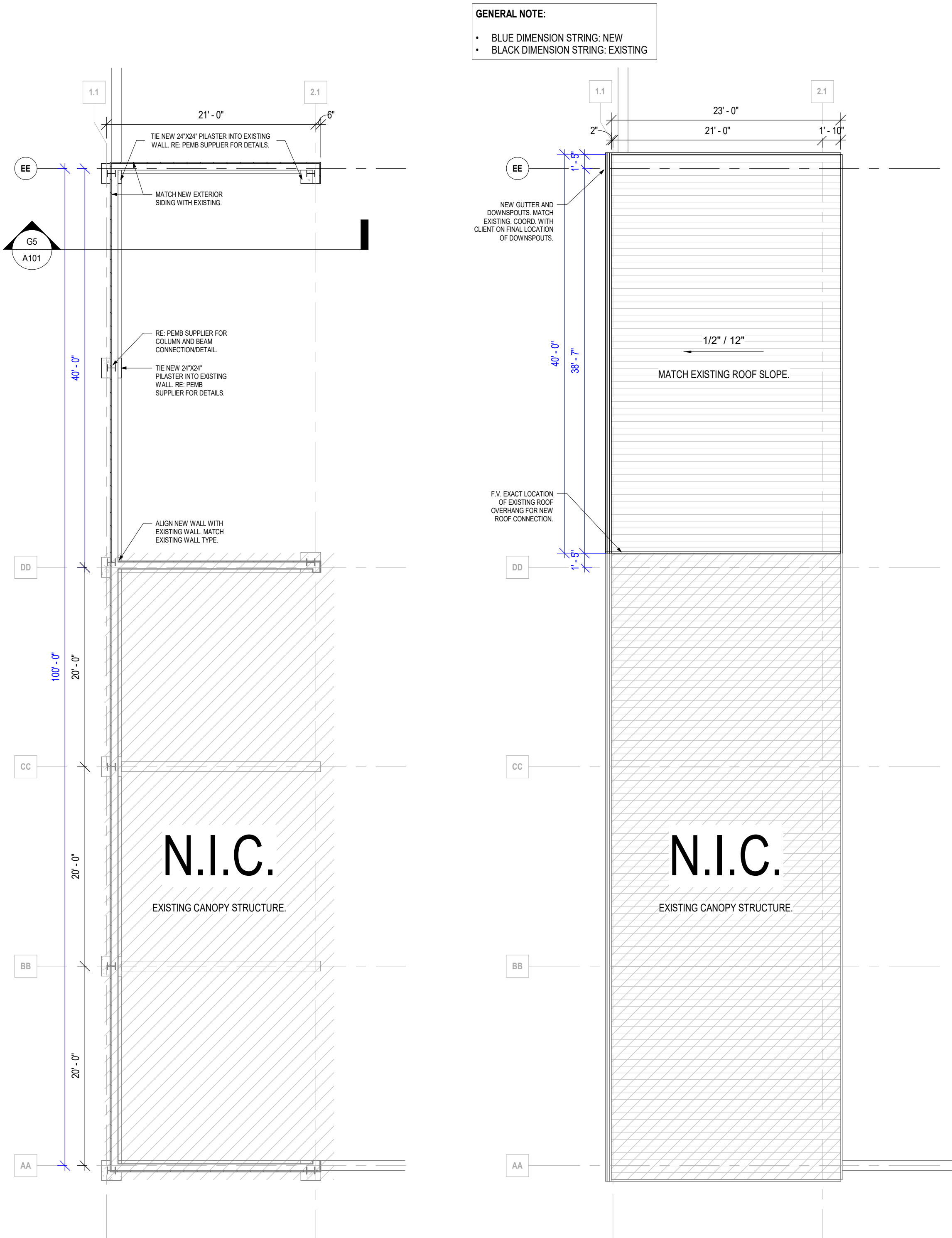
A9 ROOF LEVEL - EAST CARPORT
1/8" = 1'-0"



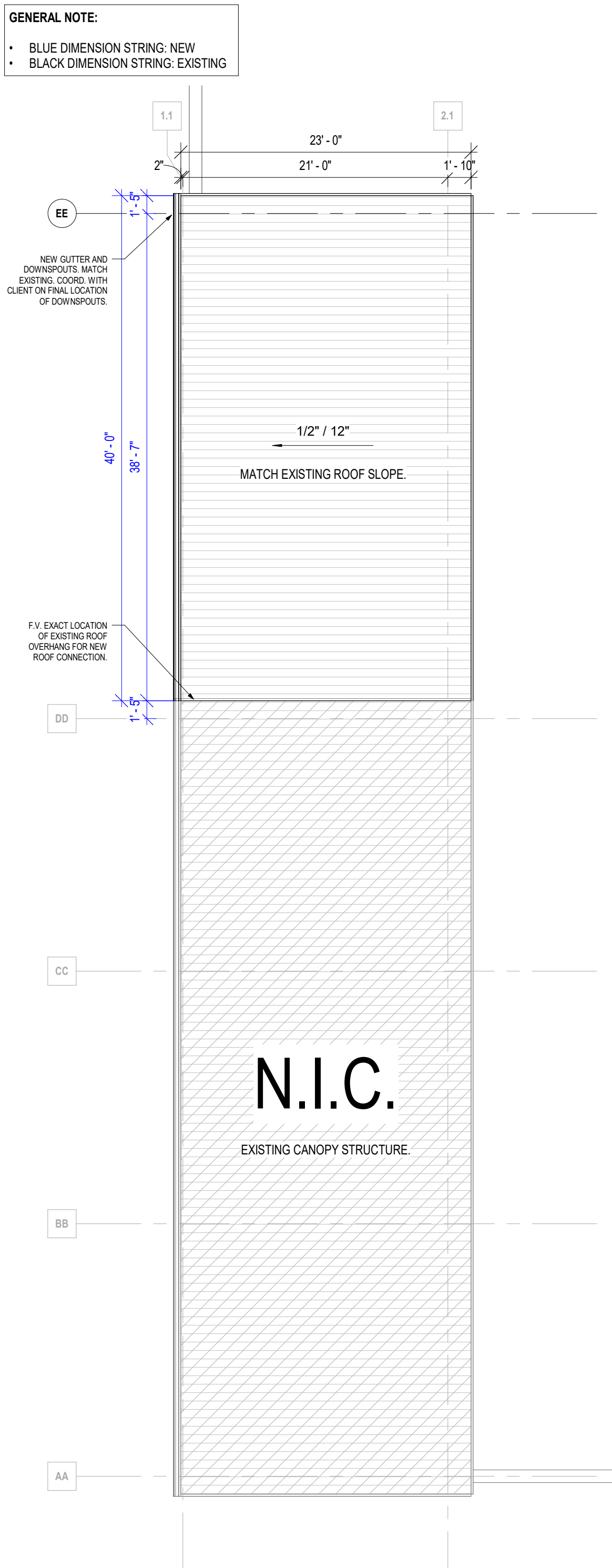
J5 SECTION - EAST CARPORT
1/8" = 1'-0"



G5 SECTION - WEST CARPORT
1/8" = 1'-0"



A5 FIRST LEVEL - WEST CARPORT
1/8" = 1'-0"



A3 ROOF LEVEL - WEST CARPORT
1/8" = 1'-0"

**GENERAL NOTES:
FLOOR PLANS**

1. SEE GENERAL ARCHITECTURAL SHEETS FOR ADDITIONAL NOTES AND DETAILS THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0"
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF STUD WALL (FOS), FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS AND PER WALL TYPES. SEE GENERAL SHEETS.
5. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO HINGE SIDE OF THE DOOR, ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL OR OTHER PROTRUDING OBJECTS.
6. MAINTAIN AND PROTECT EXISTING EXPANSION JOINTS DURING CONSTRUCTION. PATCH/REPAIR/REPLACE TO MATCH EXISTING RATINGS AS REQUIRED ON THE SHELL PORTION OF PROJECT.
7. ALL WOOD PRODUCTS TO BE FIRE-RETARDANT, INCLUDING BLOCKING AND PLYWOOD.
8. RE: STRUCTURAL/PEMB SUPPLIER FOR FINAL FOUNDATION AND STEEL MEMBER SIZES AND LOCATIONS.
9. RE: STRUCTURAL/PEMB SUPPLIER FOR FINAL CONNECTION AND DETAIL DRAWINGS OF STEEL MEMBERS AND CONCRETE FOOTING FOUNDATIONS.
10. COORDINATE ANY BRACING NEEDED WITH PEMB SUPPLIER.
11. COORDINATE ANY TIE BEAM CONNECTIONS WITH PEMB SUPPLIER.
12. RE: CIVIL DRAWINGS FOR GRADING AND PAVING INFORMATION/DETAILS.
13. COORDINATE ANY EXTERIOR LIGHTING FIXTURES WITH MEP OR CLIENT/GC.

**GENERAL NOTES:
ROOF PLANS**

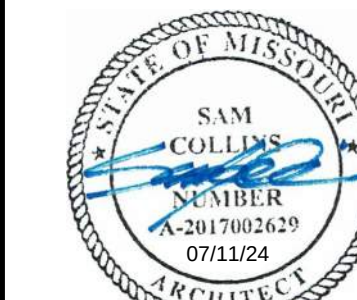
1. RE: SHEET G001 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: PEMB SUPPLIER FOR NEW ROOF CONNECTION DETAILS AND DRAWINGS.
3. NEW ROOF TYPE TO MATCH EXISTING. RE: PEMB SUPPLIER FOR DETAIL.
4. COORDINATE ROOF FASCIA TYPE WITH PEMB SUPPLIER.
5. PATCH, REPAIR, AND INFILL ANY DAMAGE TO EXISTING STRUCTURE DURING THE CONSTRUCTION PHASE.
6. COORDINATE ANY CANOPY FIXTURES WITH MEP OR CLIENT/GC.

LSMO WATER UTILITIES - CANOPIES

1200 SE HAMBLEN ROAD
LEE'S SUMMIT, MO 64081

COPYRIGHT © BY
COLLINS WEBB
ARCHITECTURE, LLC

REVISION DATES:



PROFESSIONAL SEAL

A101

ISSUE DATE: JULY 11 2024
COLLINS WEBB #: 24054

FLOOR PLAN, ROOF PLAN, AND
SECTIONS



PERMIT DRAWINGS