

F-2 OCCUPANCY NOTES:
 MAXIMUM OCCUPANT LOAD IS 24 PERSONS.
 AN AUTOMATIC FIRE SPRINKLER SYSTEM
 WITH OCCUPANT NOTIFICATION IS TO BE
 INSTALLED THROUGHOUT THE BUILDING.
 NO MANUAL FIRE ALARM BOXES ARE REQUIRED.

**OFFICES
 BUSINESS OCCUPANCY**

B OCCUPANCY NOTES:
 MAXIMUM OCCUPANT LOAD IS 78 PERSONS.
 AN AUTOMATIC FIRE SPRINKLER SYSTEM
 WITH OCCUPANT NOTIFICATION IS TO BE
 INSTALLED THROUGHOUT THE BUILDING.
 NO MANUAL FIRE ALARM BOXES ARE REQUIRED.

FIRE/EMERGENCY LEGEND

LIGHTED EXIT SIGN	PULL STATION
EMERGENCY LIGHT	SMOKE DETECTOR
EXTERIOR LIGHTING WITH EMERGENCY POWER	CARBON MONOXIDE SENSOR
STROBE VISIBLE ALARM	FIRE EXTINGUISHER
AUDIBLE/VISIBLE ALARM	

UPPER LEVEL FLOOR PLAN

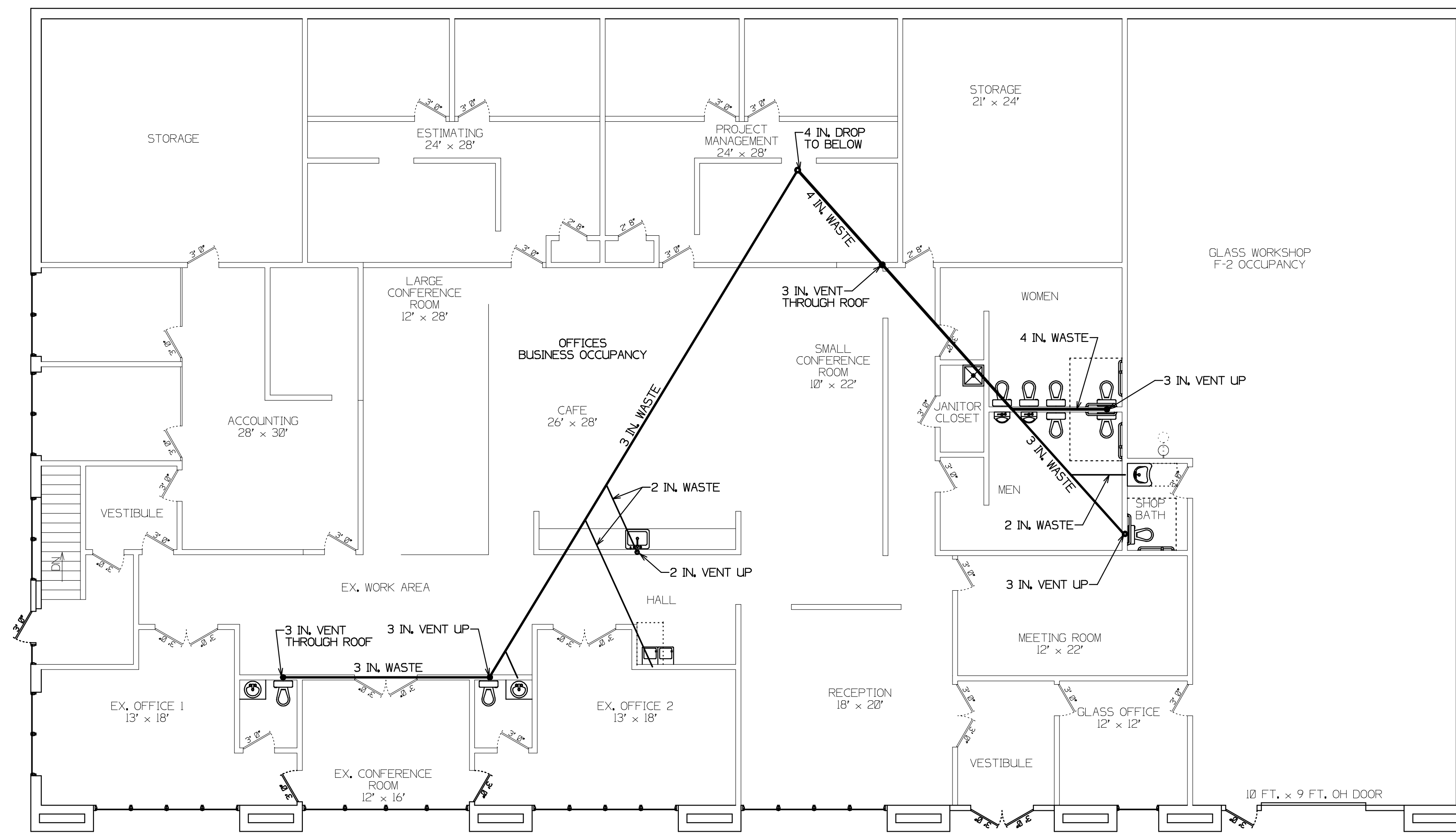
GENERAL NOTES

1. UNAUTHORIZED ALTERATION OR ADDITION TO A DRAWING BEARING A LICENSED ENGINEER'S SEAL IS A VIOLATION OF NYS EDUCATION LAW 145, SECTION 7209, SUBDIVISION 2.

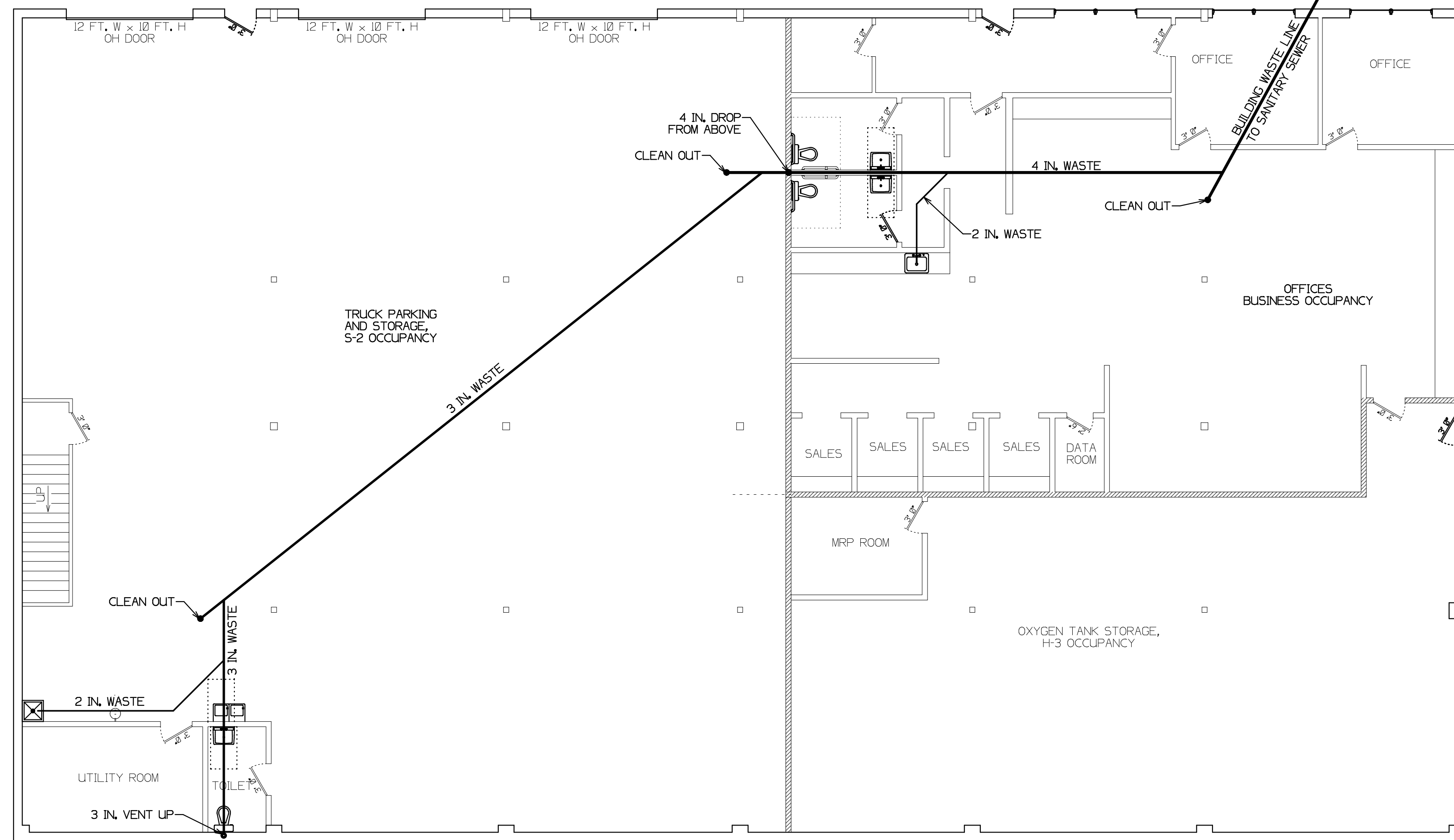
2. THIS DRAWING AND DESIGN ARE THE PROPERTY OF MCELWAIN ENGINEERING. THE STAMP AND/OR SIGNATURE MUST CONTRAST IN COLOR FROM THE DRAWING FOR THIS TO BE AN OFFICIAL DESIGN.

3. PLOTTING AND REPRODUCTION PROCESSES DO NOT ALWAYS MAINTAIN DIMENSIONAL ACCURACY. DO NOT ATTEMPT TO SCALE DIMENSIONS FROM THIS DRAWING.

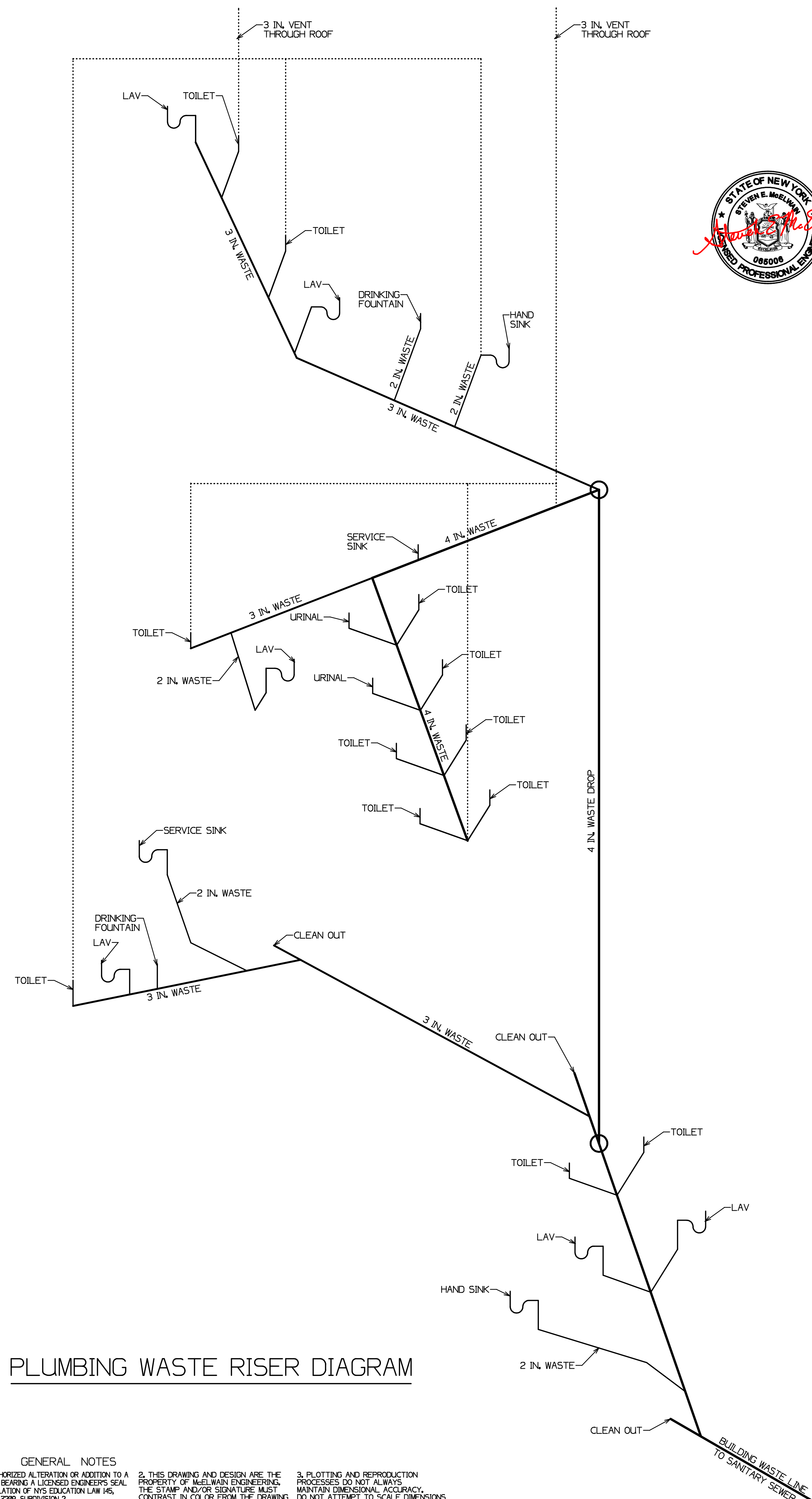




UPPER LEVEL WASTE & VENT PLAN



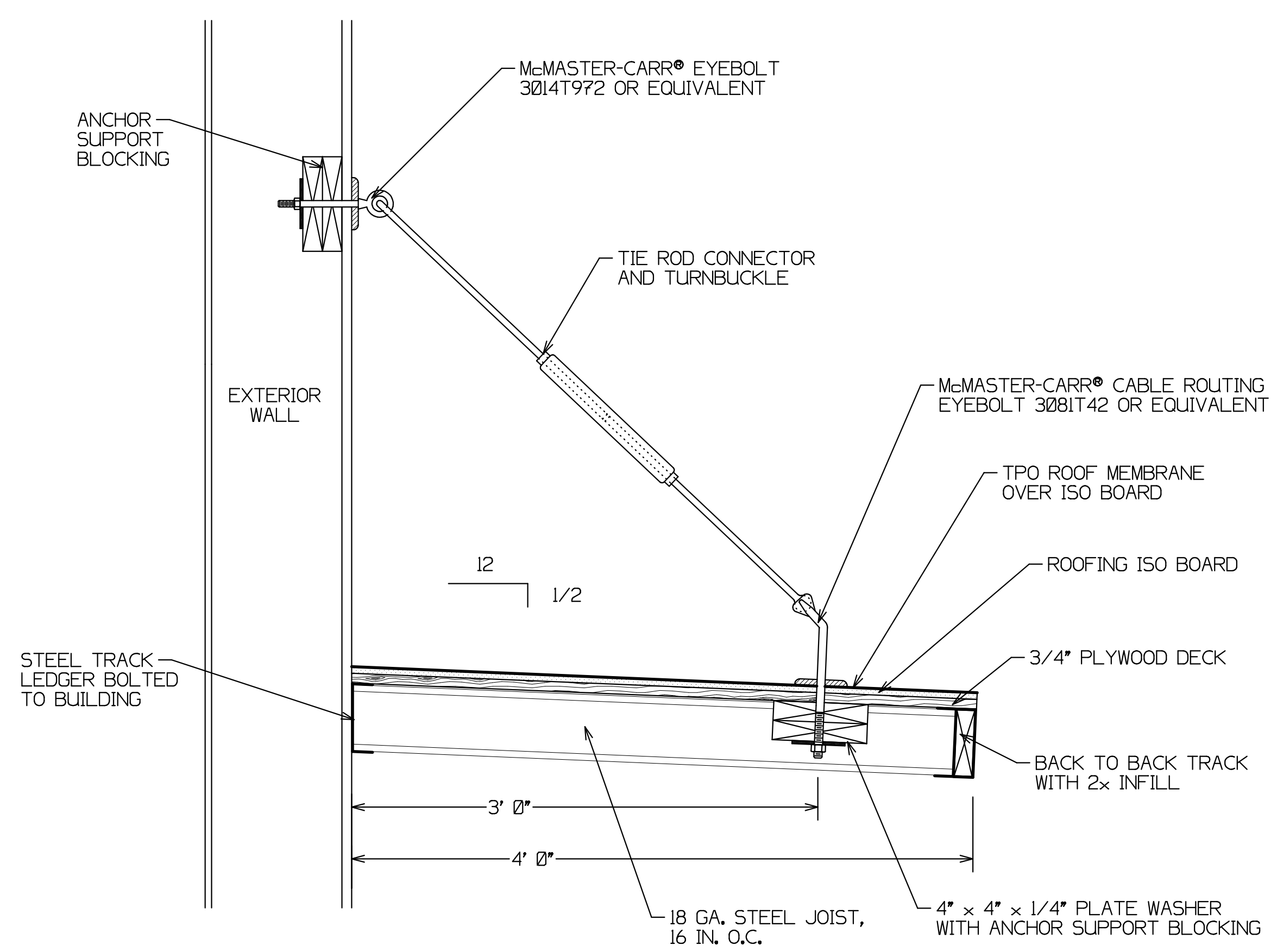
LOWER LEVEL WASTE & VENT PLAN



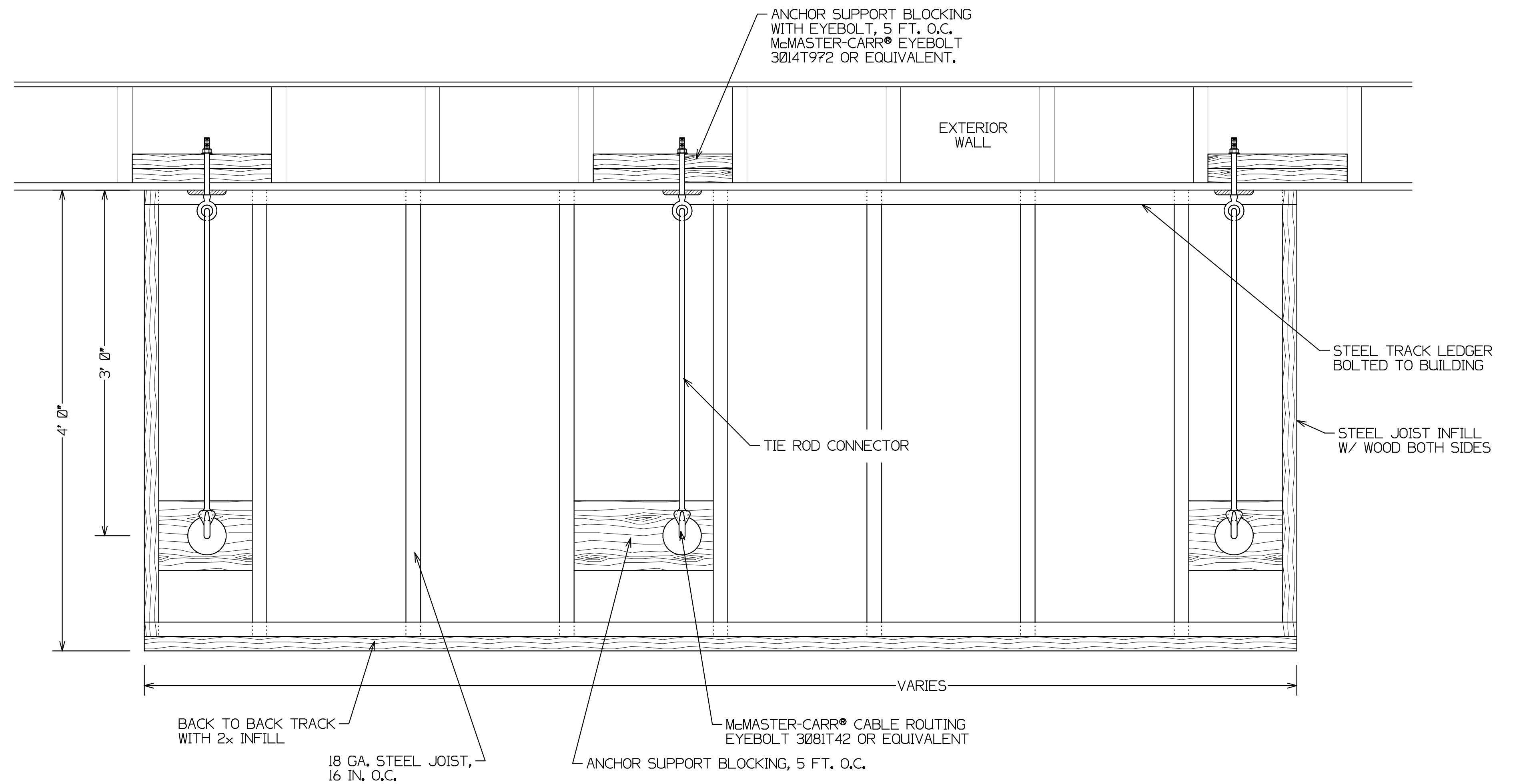
PLUMBING WASTE RISER DIAGRAM

GENERAL NOTES
 1. UNAUTHORIZED ALTERATION OR ADDITION TO A DRAWING BEARING A LICENSED ENGINEER'S SEAL IS A VIOLATION OF NYS EDUCATION LAW 46, SECTION 7209, SUBDIVISION 2.
 2. THIS DRAWING AND DESIGN ARE THE PROPERTY OF McILWAIN ENGINEERING. THE STAMP AND/OR SIGNATURE MUST CONTRAST IN COLOR FROM THE DRAWING FOR THIS TO BE AN OFFICIAL DESIGN.
 3. PLOTTING AND REPRODUCTION PROCESSES DO NOT ALWAYS MAINTAIN DIMENSIONAL ACCURACY. DO NOT ATTEMPT TO SCALE DIMENSIONS FROM THIS DRAWING.





CANOPY SECTION



CANOPY PLAN VIEW

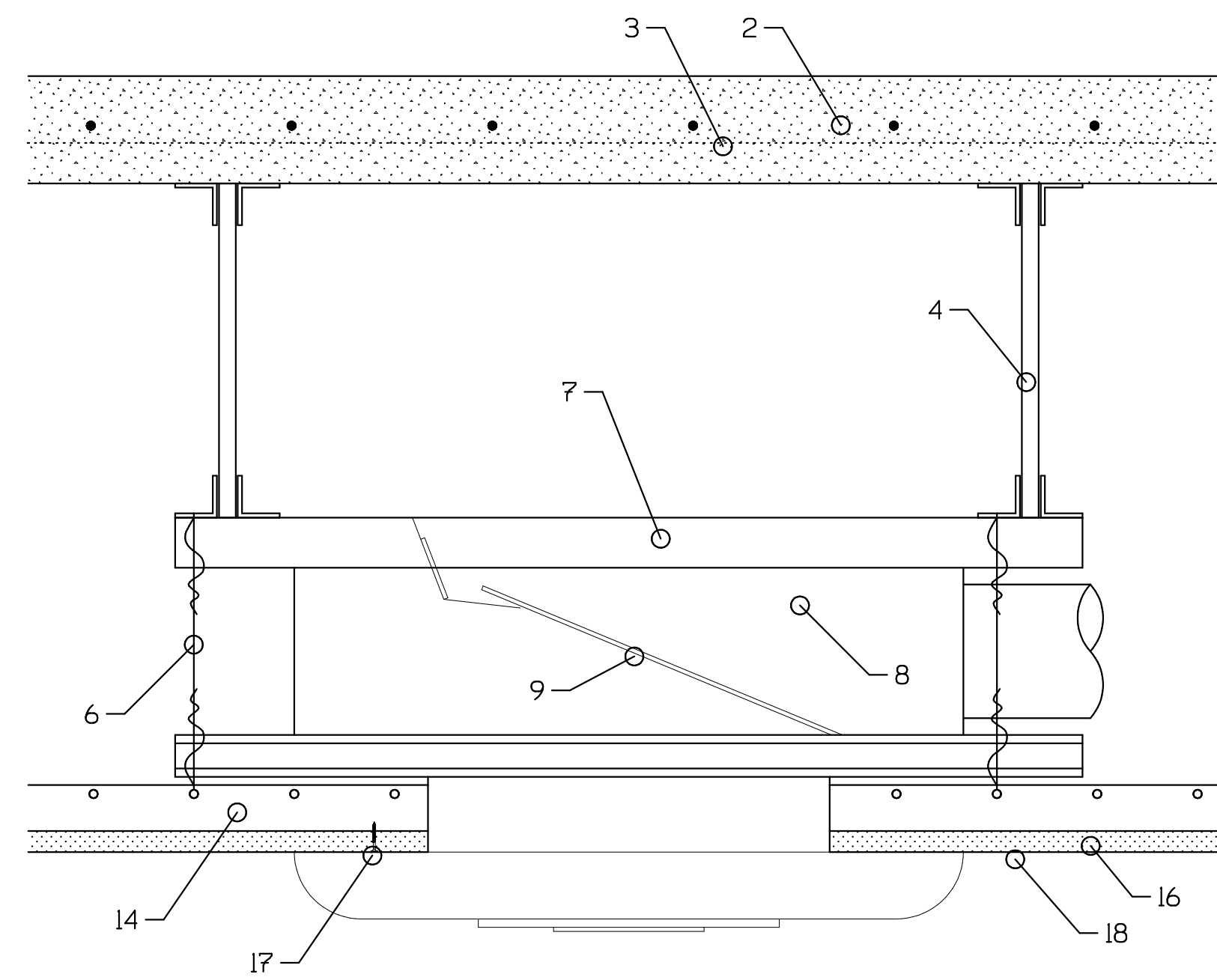


GENERAL NOTES
 1. UNAUTHORIZED ALTERATION OR ADDITION TO A DRAWING BEARING A LICENSED ENGINEER'S SEAL IS A VIOLATION OF NYS EDUCATION LAW 145, SECTION 7209, SUBSECTION 2.
 2. THIS DRAWING AND DESIGN ARE THE PROPERTY OF McELWAIN ENGINEERING. THE STAMP AND/OR SIGNATURE MUST CONTRAST IN COLOR FROM THE DRAWING FOR THIS TO BE AN OFFICIAL DESIGN.
 3. PLOTTING AND REPRODUCTION PROCESSES DO NOT ALWAYS MAINTAIN DIMENSIONAL ACCURACY. DO NOT ATTEMPT TO SCALE DIMENSIONS FROM THIS DRAWING.

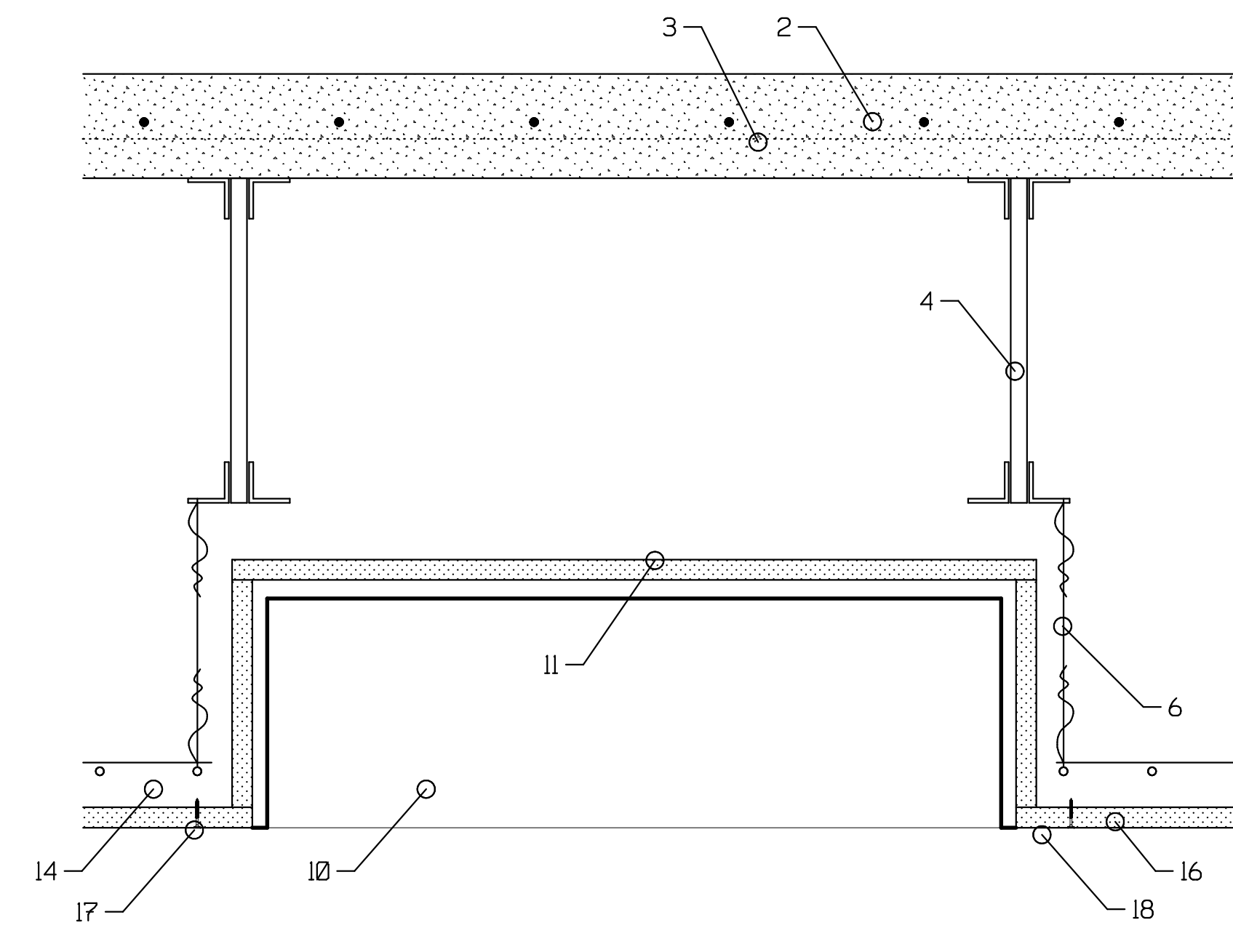
NEW BUSINESS OCCUPANCY
 MARGULIS BROTHERS CONSTRUCTION
 488 COMMENCE ROAD, TOWN OF VESTAL
 BROOME COUNTY, NEW YORK

McElwain Engineering
 PO BOX 127, 5 PARK STREET
 NEWARK VALLEY, NEW YORK 13811
 607-442-5500 MCELWAINENGINEERING.COM

- ① BEAM - W10x21 MIN. SIZE.
- ② NORMAL WEIGHT CONCRETE - CARBONATE AGGREGATE OR SILICEOUS AGGREGATE 152 + OR - 3 PCF UNIT WEIGHT, 3000 PSI COMPRESSIVE STRENGTH
- ③ CORRUGATED STEEL MIN. 9/16 IN. THICK (28 MSG) GALVANIZED STEEL, WELDED TO SUPPORTS 15 IN. O.C. WITH WELDING WASHERS AND 2 1/2 IN. CONCRETE SLAB MEASURED FROM TOP OF STEEL DECK CORRUGATIONS.
- ④ STEEL JOISTS - TYPE B,2 OR 10K1 MIN. SIZE; SPACED 24 IN. O.C., WELDED TO END SUPPORTS.
- ⑤ BRIDGING - STEEL BARS, 1/2 IN. DIAMETER, WELDED TO TOP AND BOTTOM CHORD OF EACH JOIST. (NOT SHOWN)
- ⑥ HANGER WIRE - NO. 12 SWG GALVANIZED STEEL WIRE, TWIST-TIED TO LOWER CHORD OF JOISTS, LOCATED 48 IN. O.C. ALONG MAIN RUNNERS; HANGER WIRES REQUIRED AT ALL FOUR CORNERS OF LIGHT FIXTURES, AND AT MIDSPAN OF CROSS TEES AT THE SIDES OF THE LIGHT FIXTURE.
- ⑦ COLD ROLLED CHANNELS - NO. 16 MSG COLD ROLLED STEEL CHANNELS, 1 1/2 IN. DEEP WITH 9/16 IN. LEGS.
- ⑧ AIR DUCT - NO. 24 MSG GALVANIZED STEEL, SUPPORTED ON 1 1/2 IN. 16 MSG COLD ROLLED STEEL CHANNELS SPACED 24 IN. O.C. DUCT OPENINGS NOT TO EXCEED 144 SQ. IN. PER EACH 100 SQ. FT. OF CEILING AREA WITH NO INDIVIDUAL OPENING GREATER THAN. AREA OF INDIVIDUAL DUCT OPENING NOT EXCEED 144 SQ. IN., MAX. LATERAL DIMENSION OF DUCT OUTLET 12 IN.
- ⑨ DAMPER - NO. 13 MSG GALVANIZED STEEL, HINGED ON ONE SIDE. PROTECTED ON BOTH SURFACES WITH 1/16 IN. THICK CERAMIC FIBER PAPER AND HELD OPEN WITH A 160F FUSIBLE LINK (BEARING UL LISTING MARK), DAMPER TO OVERLAP DUCT OUTLET BY 3 IN.
- ⑩ FIXTURES, RECESSED LIGHT - (BEARING UL LISTING MARK) RECESSED LIGHT FIXTURE WITH STEEL HOUSING WITH FOUR ADJUSTABLE MOUNTING BRACKETS, 2x4 FT. SIZE, WITH OR WITHOUT VENTED SIDES FOR AIR BOOTS. FIXTURES SPACED SO THEIR AREA DOES NOT EXCEED 24 SQ. FT. PER 100 SQ. FT. OF CEILING AREA. WIRE IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE.

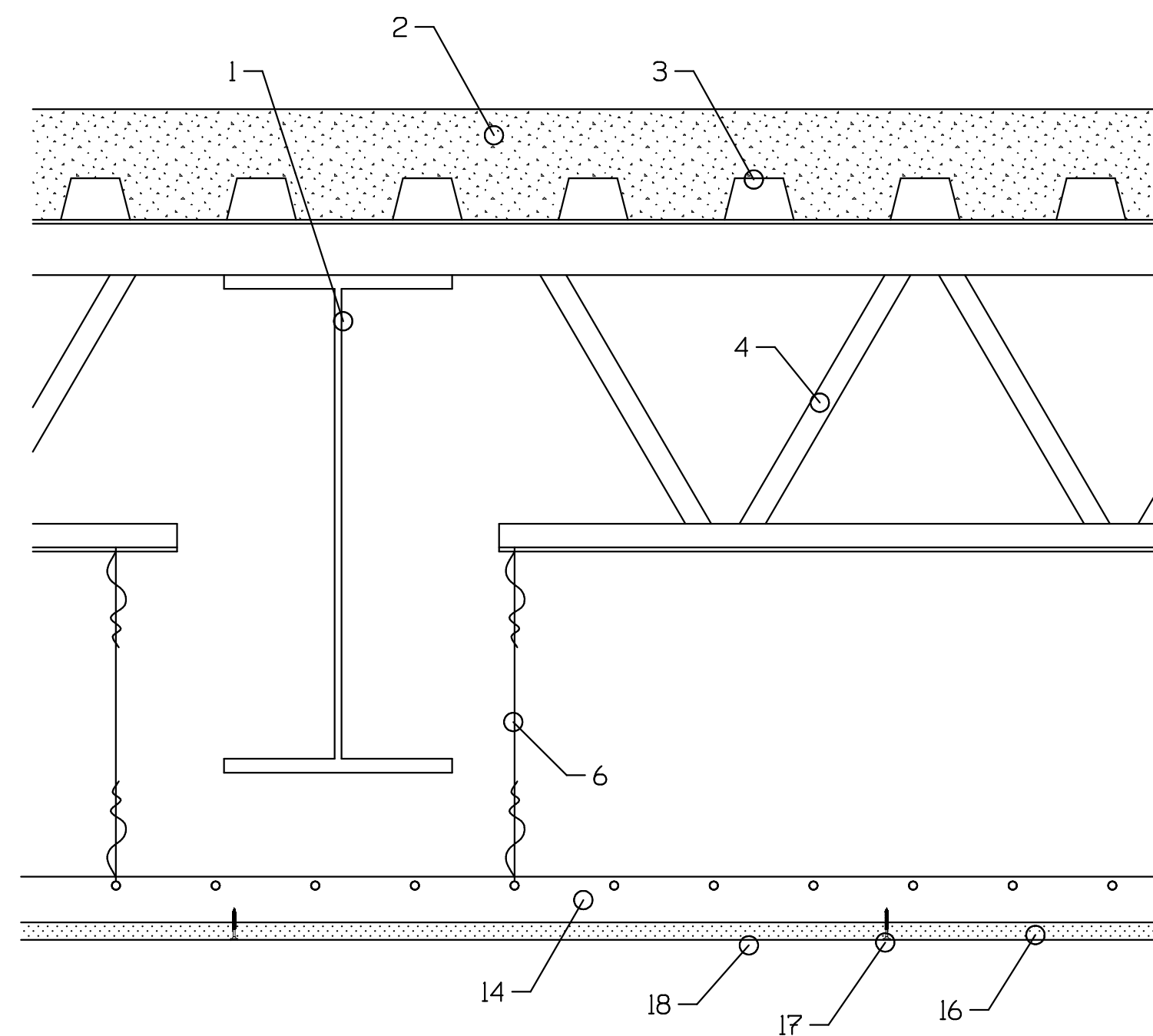


2 HOUR FIRE RATED DETAIL - AIR DUCT/DAMPER

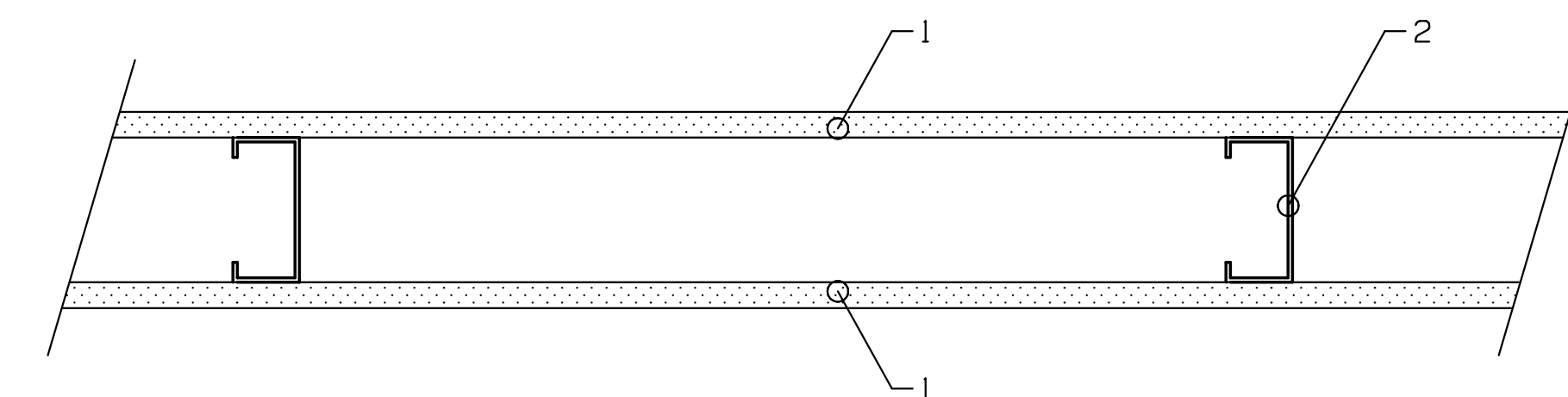


2 HOUR FIRE RATED DETAIL - LIGHT FIXTURE

- ⑪ FIXTURES PROTECTION - GYPSUM BOARD 1/2 OR 5/8 IN. THICK, CUT INTO PIECES TO FORM A BOX ASSEMBLY APPROX. 1/2 IN. LONGER AND WIDER THAN THE FIXTURE WITH SUFFICIENT DEPTH TO PROVIDE AT LEAST 5/8 IN. CLEARANCE BETWEEN THE FIXTURE AND THE PROTECTION ENCLOSURE. THE PIECES ARE HELD TOGETHER BY 6d NAILS AT EACH CORNER, OVERLAP ON ADJACENT LAY-IN PANELS.
- ⑫ FLEXIBLE AIR DUCT - CLASS I FLEXIBLE AIR DUCT MATERIAL * MAX. INSIDE DIAM. 6 IN. ATTACHED TO SUPPLY AIR DUCT AND AIR BOOTS WITH 2 IN. WIDE PRESSURE SENSITIVE FABRIC DUCT TAPE. (NOT SHOWN)
- ⑬ AIR BOOTS - NO. 24 MSG GALVANIZED STEEL AIR BOOTS TO BE INSTALLED IN NOT MORE THAN 67 PERCENT OF THE LIGHT FIXTURES. AIR BOOTS ARE INSTALLED IN PAIRS, ALONG BOTH SIDES OF LIGHT FIXTURES AND CONNECTED BY A NO. 24 MSG GALVANIZED TEE CROSSOVER DUCT. (NOT SHOWN)
- ⑭ STEEL FRAMING MEMBERS - MAIN RUNNERS NOM. 12 FT. LONG SPACED 4 FT. O.C. CROSS TEES NOM. 4 FT. LONG INSTALLED PERPENDICULAR TO MAIN RUNNERS, SPACED 2 FT. O.C. WITH ONE ADDITIONAL CROSS TEE LOCATED 8 IN. ON EACH SIDE OF EACH END JOINT OF GYPSUM BOARD. WHEN TYPES 654C OR 674C CROSS TEES ARE USED, ASSEMBLY AND BEAM RATINGS ARE LIMITED TO 2 HR.
- ⑭A ALTERNATE STEEL FRAMING MEMBERS -
 - A. MAIN RUNNERS NOM. 10 - 12 FT. LONG, 15 1/16 OR 1 1/2 IN. WIDE FACE, SPACED 4 FT. O.C. - USG TYPE DGL
 - B. CROSS TEES NOM. 4 FT. LONG, 1 1/2 OR 15 1/16 IN. WIDE FACE INSTALLED PERPENDICULAR TO MAIN RUNNERS, SPACED 2 FT. O.C. ADDITIONAL CROSS TEE OR CROSS CHANNEL LOCATED 8 IN. FROM EACH SIDE OF EACH OF BUTTED GYPSUM BOARD END JOINTS. THE CROSS TEES OR CROSS CHANNELS MAY BE RIVETED OR SCREW ATTACHED TO THE WALL. ANGLE OR CHANNEL TO FACILITATE THE CEILING INSTALLATION. WHEN 2x4 FT. NEMA TYPE F LIGHT FIXTURES ARE USED, NOM. 4 FT. LONG CROSS TEES, 1 1/2 IN. WIDE FACE, INSTALLED PERPENDICULAR TO MAIN RUNNERS AND SPACED NOM. 50 IN. O.C., TWO NOM. 50 IN. LONG CROSS TEES SPACED 26 IN. O.C. ADDITIONAL NOM. 4 FT. CROSS TEES ARE INSTALLED PERPENDICULAR TO THE MAIN RUNNERS OUTSIDE EACH END OF FIXTURE OPENING TO SUPPORT THE END PIECES OF DRYWALL FIXTURE PROTECTION. SMALL CUTOFF PIECES OF CROSS TEES ARE INSTALLED AT THE CENTER OF THE NOM. 50 IN. LONG CROSS TEES AND MAIN RUNNERS BY INSERTING THE DIP END INTO A CROSS TEE SLOT ON THE MAIN RUNNER AND SECURING THE OTHER END WITH A POP RIVET TO THE NOM 50 IN. LONG CROSS TEE.
- ⑮ WALL MOLDING - MIN. 0.019 IN. THICK STEEL CHANNEL, 1 11/16 IN. WITH 15/16 IN. LEGS, NAILED TO WALLS ALONG PERIMETER OF CEILING. (NOT SHOWN)
- ⑯ GYPSUM BOARD - 4 FT. WIDE, INSTALLED WITH LONG DIMENSION PERPENDICULAR TO CROSS TEES WITH END JOINTS CENTERED ALONG CROSS TEES AND WITH SIDE JOINTS CENTERED ALONG MAIN RUNNERS. GYPSUM BOARD FASTENED TO EACH CROSS TEE WITH FIVE DRYWALL SCREWS (NOTE 17) WITH ONE SCREW LOCATED AT THE MIDSPAN OF THE CROSS TEE, ONE SCREW LOCATED 12 IN. FROM AND ON EACH SIDE OF THE CROSS TEE MIDSPAN, AND ONE SCREW LOCATED 1 1/2 IN. FROM EACH GYPSUM BOARD SIDE JOINT, EXCEPT AT GYPSUM BOARD END JOINTS. DRYWALL SCREWS SHALL BE LOCATED ON ALTERNATING SIDES OF CROSS TEE FLANGE. AT GYPSUM BOARD END JOINTS, DRYWALL SCREWS SHALL BE LOCATED 1/2 IN. FROM THE JOINT, GYPSUM BOARD FASTENED TO MAIN RUNNERS WITH DRYWALL SCREWS, 3/8 TO 1/2 IN. FROM SIDE JOINTS, MIDWAY BETWEEN INTERSECTIONS WITH CROSS TEES (24 IN. O.C.). END JOINTS OF THE GYPSUM BOARD SHEETS SHALL BE STAGGERED WITH JOINTS IN ADJACENT GYPSUM BOARD COURSES NOT LESS THAN 4 FT. O.C. GYPSUM BOARD SHEETS SCREW ATTACHED TO FLANGE OF WALL CHANNEL WITH DRYWALL SCREWS SPACED 12 IN. O.C.
- ⑰ DRYWALL SCREW - NO. 6 PHILLIPS TYPE S SELF-DRILLING AND SELF-TAPPING, 1 IN. LONG. SCREW HEADS MAY BE EITHER EXPOSED OR COVERED WITH JOINT CEMENT.
- ⑱ DRYWALL FINISHING - GYPSUM BOARD JOINTS MAY BE EITHER EXPOSED OR COVERED WITH PAPER TAPE AND JOINT COMPOUND. ALTERNATELY A NOM. 3/32 IN. THICK GYPSUM VENEER PLASTER MAY BY APPLIED TO THE ENTIRE SURFACE OF THE GYPSUM BOARD.

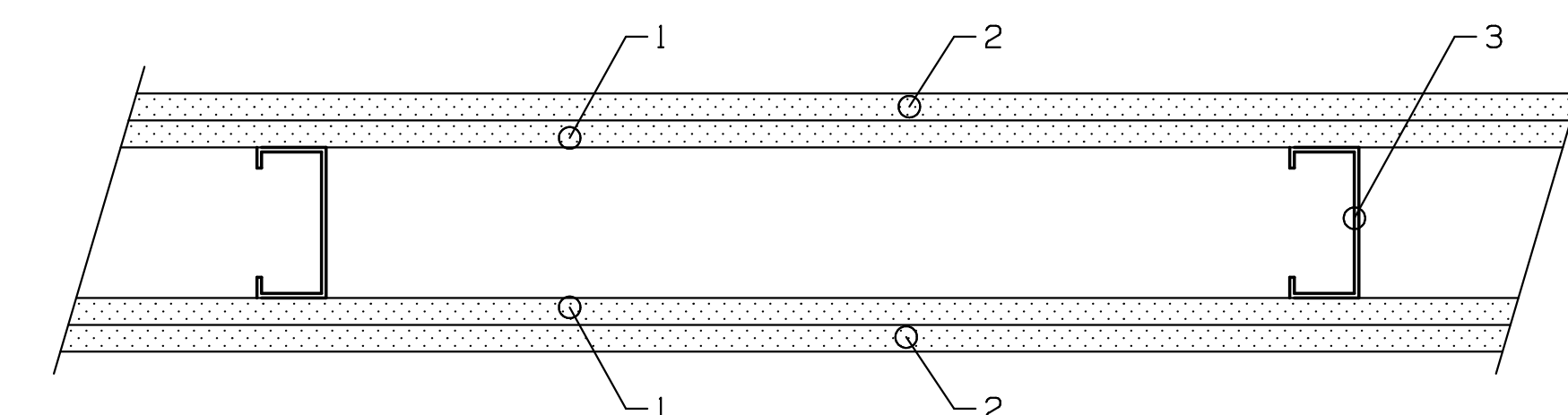


2 HOUR FIRE RATED DETAIL - PROTECTED BEAM



- ① ONE LAYER 5/8" TYPE "X" GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF 3 1/2 IN., 20 GA. STEEL STUDS, 24" O.C., WITH 1 IN. TYPE S DRYWALL SCREWS, 12" O.C. WHEN APPLIED PARALLEL TO FRAMING OR 8" O.C. WHEN APPLIED AT RIGHT ANGLES TO FRAMING. VERTICAL JOINTS CENTERED OVER STUDS AND STAGGERED ONE STUD CAVITY ON OPPOSITE SIDES. HORIZONTAL JOINTS ON OPPOSITE SIDES NEED NOT BE STAGGERED OR BACKED.
- ② 20 GA. 3 1/2" STEEL STUDS, 24" O.C.

1 HOUR FIRE RATED WALL
REF. UL DESIGN U423



- ① BASE LAYER 5/8" TYPE "X" GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF 3 1/2 IN., 20 GA STEEL STUDS, 24" O.C. WITH 1 IN. TYPE S DRYWALL SCREWS, 16" O.C.
- ② FACE LAYER 5/8" TYPE "X" GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE WITH 1 5/8 IN. TYPE S DRYWALL SCREWS 16" O.C. FACE LAYER HORIZONTAL JOINTS NEED NOT BE STAGGERED OR BACKED FROM BASE LAYER JOINTS, ON OPPOSITE SIDES.
- ③ 20 GA. 3 1/2" STEEL STUDS, 24" O.C.

2 HOUR FIRE RATED WALL
REF. UL DESIGN U423

2 HOUR FIRE RATED FLOOR-CEILING
REF. ANSI/UL DESIGN G523



GENERAL NOTES:
1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.
2. ALL DIMENSIONS AND DESIGN ARE THE PROPERTY OF MCLWAIN ENGINEERING, INC. AND/OR SHALL BE THE PROPERTY OF MCLWAIN ENGINEERING, INC. FOR THIS OFFICIAL DESIGN.
3. ALL DIMENSIONS AND DESIGN ARE THE PROPERTY OF MCLWAIN ENGINEERING, INC. AND/OR SHALL BE THE PROPERTY OF MCLWAIN ENGINEERING, INC. FOR THIS OFFICIAL DESIGN.
4. ALL DIMENSIONS AND DESIGN ARE THE PROPERTY OF MCLWAIN ENGINEERING, INC. AND/OR SHALL BE THE PROPERTY OF MCLWAIN ENGINEERING, INC. FOR THIS OFFICIAL DESIGN.

McIlwain Engineering
PO BOX 127, 5 PARK STREET
NEWARK VALLEY, NEW YORK 13811
607-442-5500 MCLWAINENGINEERING@AOL.COM

NEW BUSINESS OCCUPANCY
MARGUSKA BROTHERS CONSTRUCTION
488 COMMERCE ROAD, TOWN OF WESTAL
BROOME COUNTY, NEW YORK

FIRE PROTECTION DETAILS	REVISION	DATE
SCALE	NONE	DATE 23 OCT 19
DRAWN BY	WHW	SHEET 6 OF 9

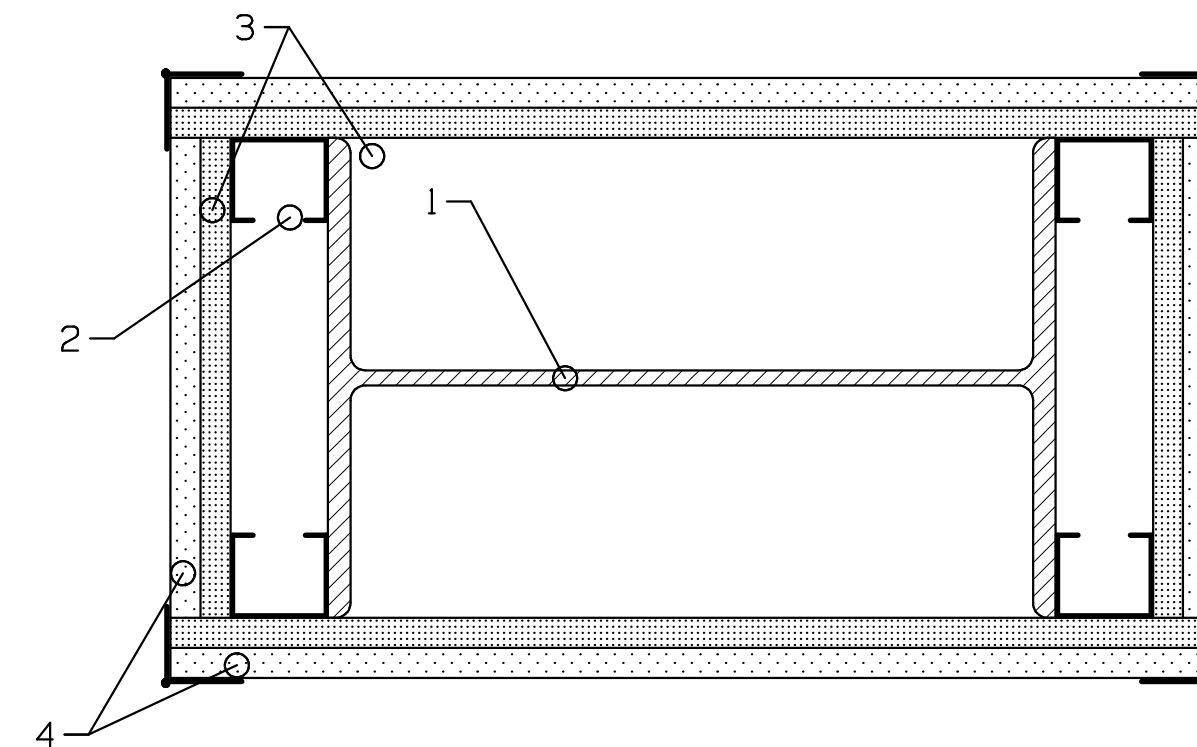
FIRE RATED STEEL COLUMNS

W SHAPED COLUMN MINIMUM COLUMN SIZE	RATING (HOUR)	
	1 HOUR	2 HOUR
W 6 x 15.5	2	3
W 10 x 49	1	2

LAYERS OF GYPSUM BOARD
1/2 IN. TYPE "X" OR 5/8 IN. TYPE "X"

FIRE RATED STEEL COLUMNS 10 IN. x 10 IN. TYPE W10x49 MINIMUM SIZE

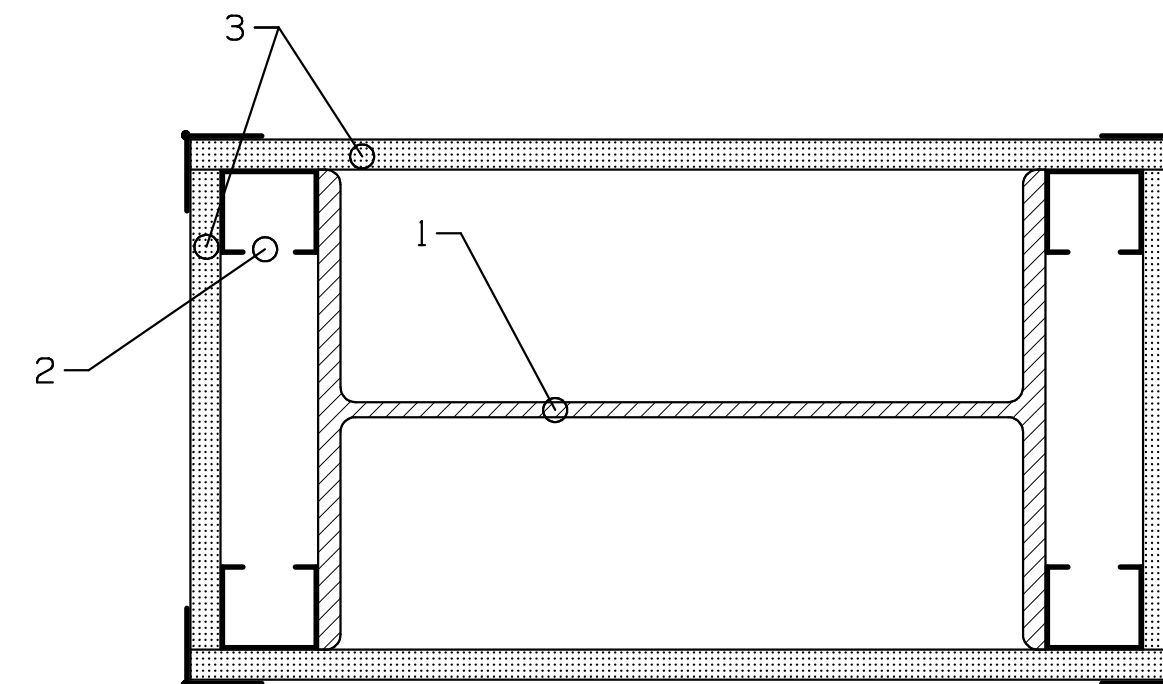
- TYPE W10x49 MIN. STEEL COLUMN
- 1 5/8 IN. STEEL STUD
- BASE LAYER - 1/2 IN. TYPE X GYPSUM WALLBOARD APPLIED WITHOUT HORIZONTAL JOINTS TO 1 5/8 IN. STEEL STUDS LOCATED AT EACH CORNER OF TYPE W6x15.5 MIN. STEEL COLUMN WITH 1 IN. TYPE S DRYWALL SCREWS, 24 IN. O.C.
- FACE LAYERS - 1/2 IN. TYPE X GYPSUM WALLBOARD APPLIED WITHOUT HORIZONTAL JOINTS TO STUDS WITH 1 3/4 IN. TYPE S DRYWALL SCREWS, 12 IN. O.C. METAL CORNERBEAD APPLIED TO ALL CORNERS WITH 1 IN. DRYWALL SCREWS, 12 IN. O.C. IN EACH FLANGE. JOINT COMPOUND 1/16 IN. THICK APPLIED OVER CORNERBEAD.



2 HOUR FIRE RATED COLUMNS NON-COMBUSTIBLE

REF. ANSI/UL DESIGN X528
TYPE W10x49 MIN. STEEL COLUMN

- TYPE W10x49 MIN. STEEL COLUMN
- 1 5/8 IN. STEEL STUD
- ONE LAYER - 1/2 IN. TYPE X GYPSUM WALLBOARD APPLIED WITHOUT HORIZONTAL JOINTS TO 1 5/8 IN. STEEL STUDS LOCATED AT EACH CORNER OF TYPE W10x49 MIN. STEEL COLUMN WITH 1 IN. TYPE S DRYWALL SCREWS, 12 IN. O.C. IN EACH FLANGE. JOINT COMPOUND 1/16 IN. THICK APPLIED OVER CORNERBEAD.



1 HOUR FIRE RATED COLUMNS NON-COMBUSTIBLE

REF. ANSI/UL DESIGN X528
TYPE W10x49 MIN. STEEL COLUMN

AS AN ALTERNATE TO 1 5/8 IN. STEEL STUD FRAMING MEMBERS GALV. STEEL CLIPS SPACED 4 FT O.C. AND 1-1/4 IN. FROM TOP AND BOTTOM OF COLUMN.

A NO. 28 MSG GALV STEEL SUPPORT ANGLE WITH 1-1/4 IN. LEGS SHALL BE PLACED OVER CLIPS AND SECURED WITH SCREWS ATTACHING THE WALLBOARD. THE SUPPORT ANGLE IS TO BE CUT 1 IN. LESS THAN ASSEMBLY HEIGHT. SPLICES IN ANGLE TO OCCUR OVER CLIPS.

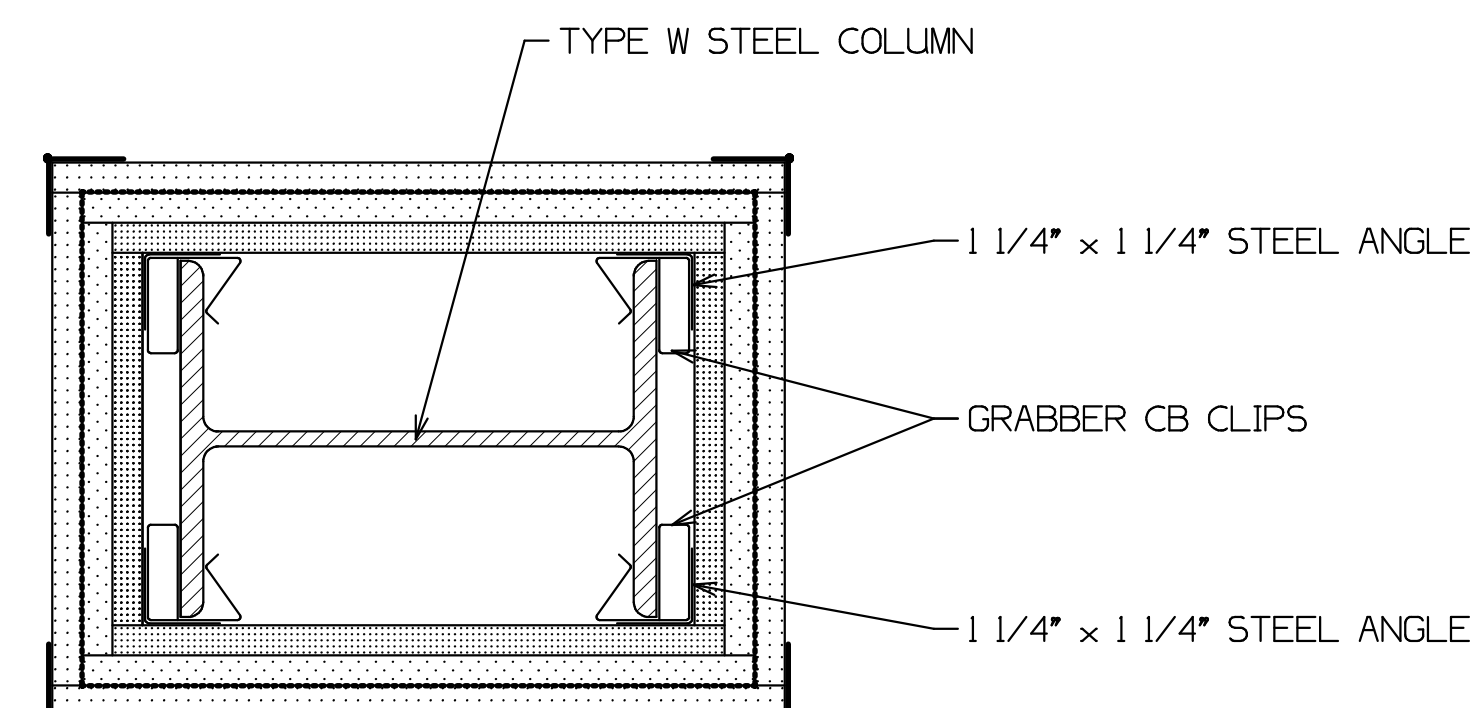
MINIMUM BEAM SIZE AND NUMBER OF LAYERS OF GYPSUM BOARD SAME AS DETAILS ABOVE.

FOR USE WITH WIDE FLANGE COLUMNS ONLY.

CLIPS ARE GRABBER CB CLIPS.

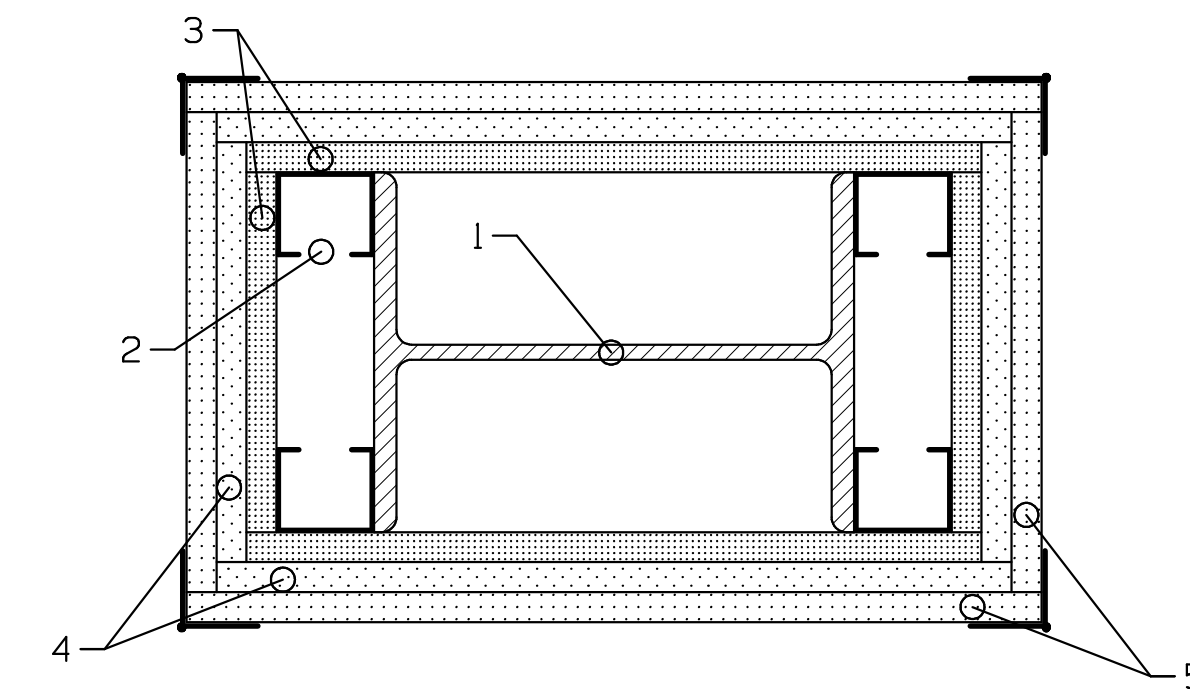
ALTERNATE ASSEMBLY USING CLIPS

REF. ANSI/UL DESIGN X528
TYPE W6x15.5 MIN. STEEL COLUMN
* ALTERNATE INSTALLATION MAY BE USED FOR BOTH SIZE COLUMNS



FIRE RATED STEEL COLUMNS 6 IN. x 6 IN. TYPE W6x15.5 MINIMUM SIZE

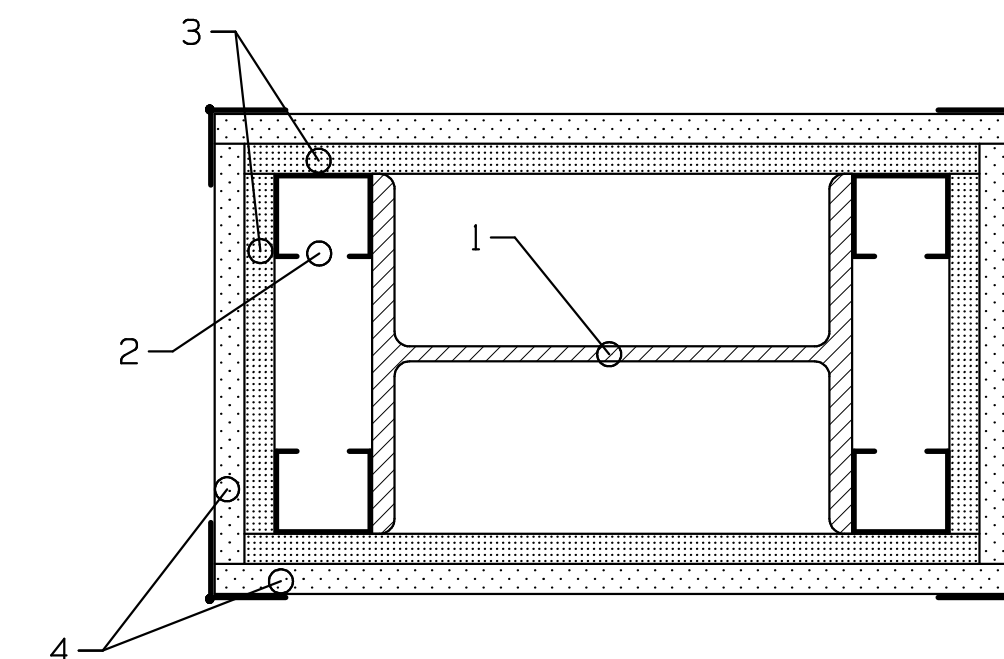
- TYPE W6x15.5 MIN. STEEL COLUMN
- 1 5/8 IN. STEEL STUD
- BASE LAYER - 1/2 IN. TYPE X GYPSUM WALLBOARD APPLIED WITHOUT HORIZONTAL JOINTS TO 1 5/8 IN. STEEL STUDS LOCATED AT EACH CORNER OF TYPE W6x15.5 MIN. STEEL COLUMN WITH 1 IN. TYPE S DRYWALL SCREWS, 24 IN. O.C.
- SECOND LAYER - 1/2 IN. TYPE X GYPSUM WALLBOARD APPLIED WITHOUT HORIZONTAL JOINTS WITH 1 3/4 IN. TYPE S DRYWALL SCREWS, 12 IN. O.C. AND TIED WITH 18 GAUGE WIRE 24 IN. O.C.
- FACE LAYERS - 1/2 IN. TYPE X GYPSUM WALLBOARD APPLIED WITHOUT HORIZONTAL JOINTS TO STUDS WITH 2 1/4 IN. TYPE S DRYWALL SCREWS, 12 IN. O.C. METAL CORNERBEAD APPLIED TO ALL CORNERS WITH 1 IN. DRYWALL SCREWS, 12 IN. O.C. IN EACH FLANGE. JOINT COMPOUND 1/16 IN. THICK APPLIED OVER CORNERBEAD.



2 HOUR FIRE RATED COLUMNS NON-COMBUSTIBLE

REF. ANSI/UL DESIGN X528
TYPE W6x15.5 MIN. STEEL COLUMN

- TYPE W6x15.5 MIN. STEEL COLUMN
- 1 5/8 IN. STEEL STUD
- BASE LAYER - 1/2 IN. TYPE X GYPSUM WALLBOARD APPLIED WITHOUT HORIZONTAL JOINTS TO 1 5/8 IN. STEEL STUDS LOCATED AT EACH CORNER OF TYPE W6x15.5 MIN. STEEL COLUMN WITH 1 IN. TYPE S DRYWALL SCREWS, 24 IN. O.C.
- FACE LAYERS - 1/2 IN. TYPE X GYPSUM WALLBOARD APPLIED WITHOUT HORIZONTAL JOINTS TO STUDS WITH 1 3/4 IN. TYPE S DRYWALL SCREWS, 12 IN. O.C. METAL CORNERBEAD APPLIED TO ALL CORNERS WITH 1 IN. DRYWALL SCREWS, 12 IN. O.C. IN EACH FLANGE. JOINT COMPOUND 1/16 IN. THICK APPLIED OVER CORNERBEAD.



1 HOUR FIRE RATED COLUMNS NON-COMBUSTIBLE

REF. ANSI/UL DESIGN X528
TYPE W6x15.5 MIN. STEEL COLUMN

GENERAL NOTES
1. UNAUTHORIZED ALTERATION OR ADDITION TO A DRAWING BEARING A LICENSED ENGINEER'S SEAL IS A VIOLATION OF NYS EDUCATION LAW 145, SECTION 7209, SUBDIVISION 2.
2. THIS DRAWING AND DESIGN ARE THE PROPERTY OF McILWAIN ENGINEERING. THE STAMP AND/OR SIGNATURE MUST CONTRAST IN COLOR FROM THE DRAWING FOR THIS TO BE AN OFFICIAL DESIGN.
3. PLOTTING AND REPRODUCTION PROCESSES DO NOT ALWAYS MAINTAIN DIMENSIONAL ACCURACY. DO NOT ATTEMPT TO SCALE DIMENSIONS FROM THIS DRAWING.



FIRE PROTECTION DETAILS
DRAWN BY: JH
SCALE: NONE
DATE: 23 OCT 19

NEW BUSINESS OCCUPANCY
MARGUSKA BROTHERS CONSTRUCTION
488 COMMERCE ROAD, TOWN OF VESTAL
BROOME COUNTY, NEW YORK

McIlwain Engineering
PO BOX 127, 5 PARK STREET
NEWARK VALLEY, NEW YORK 13811
607-462-5500 MCELWAINENGINEERING.COM

SHEET 7 OF 9

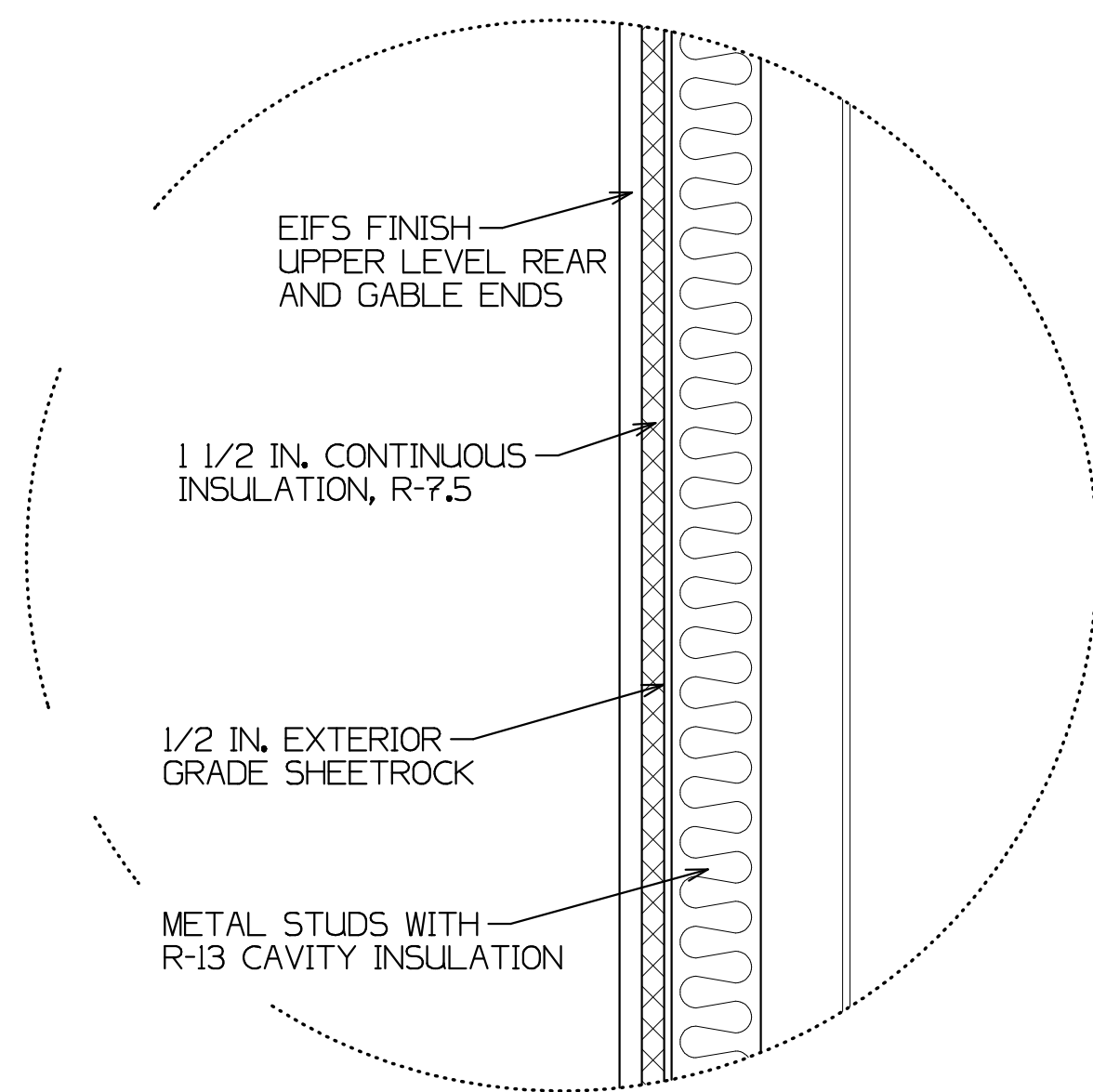
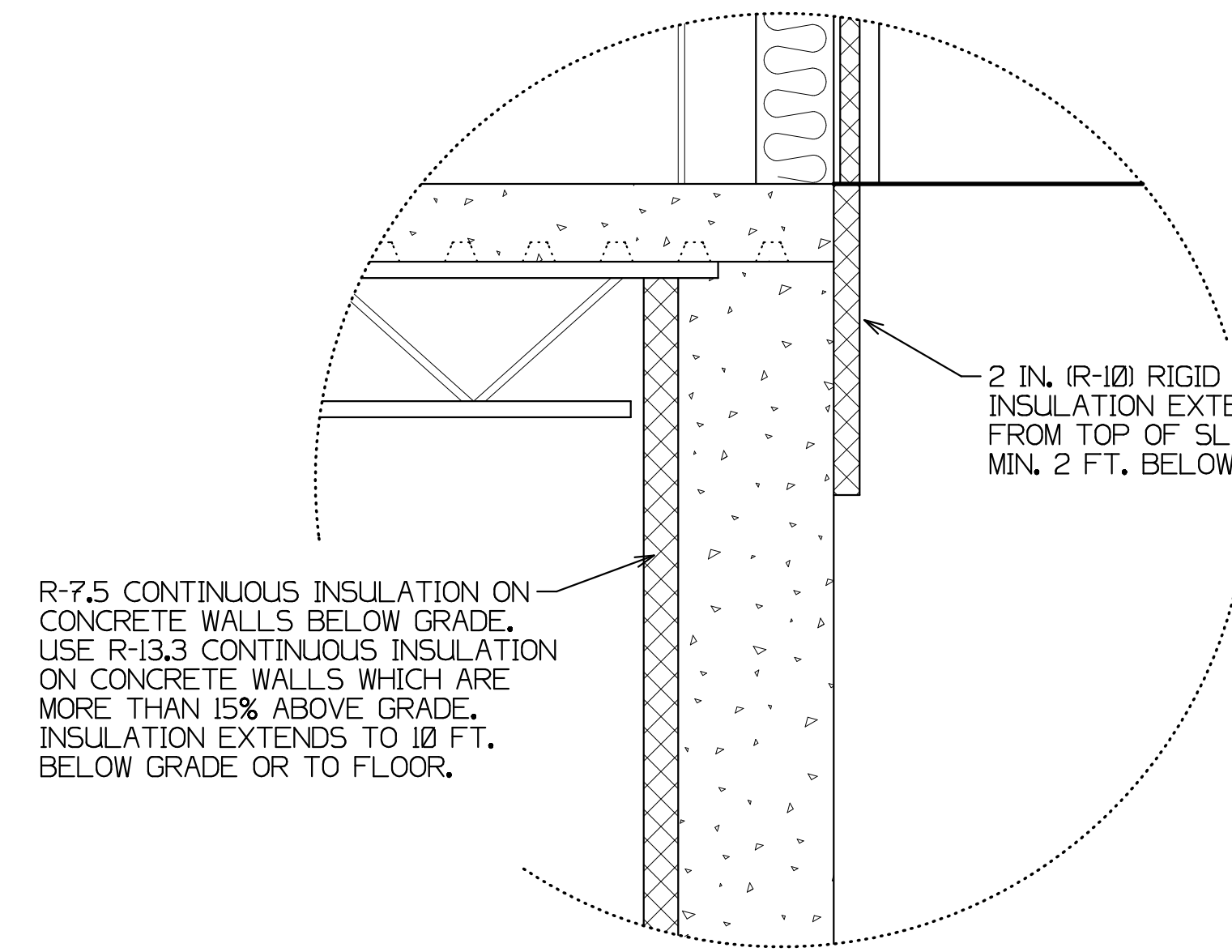
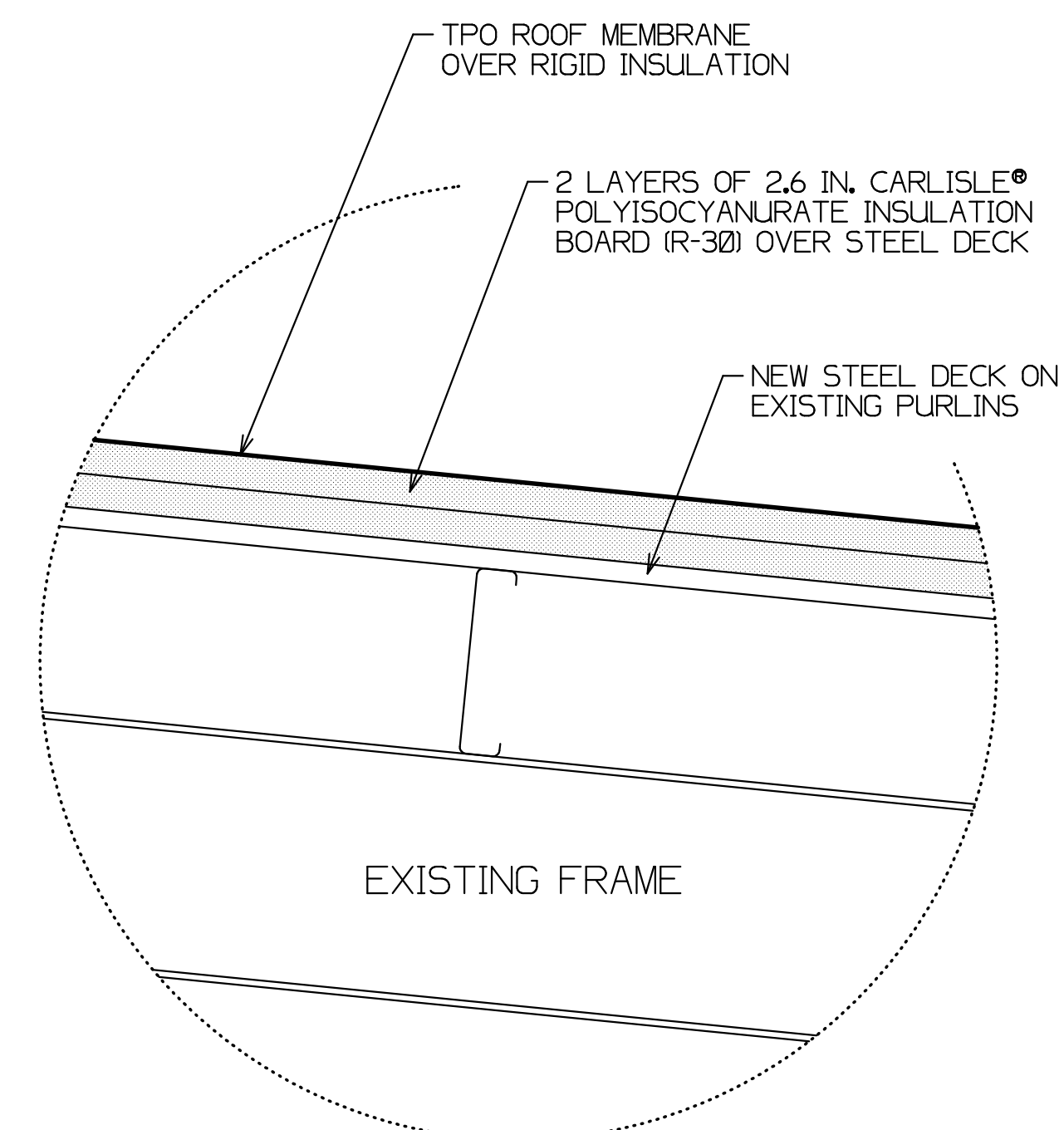
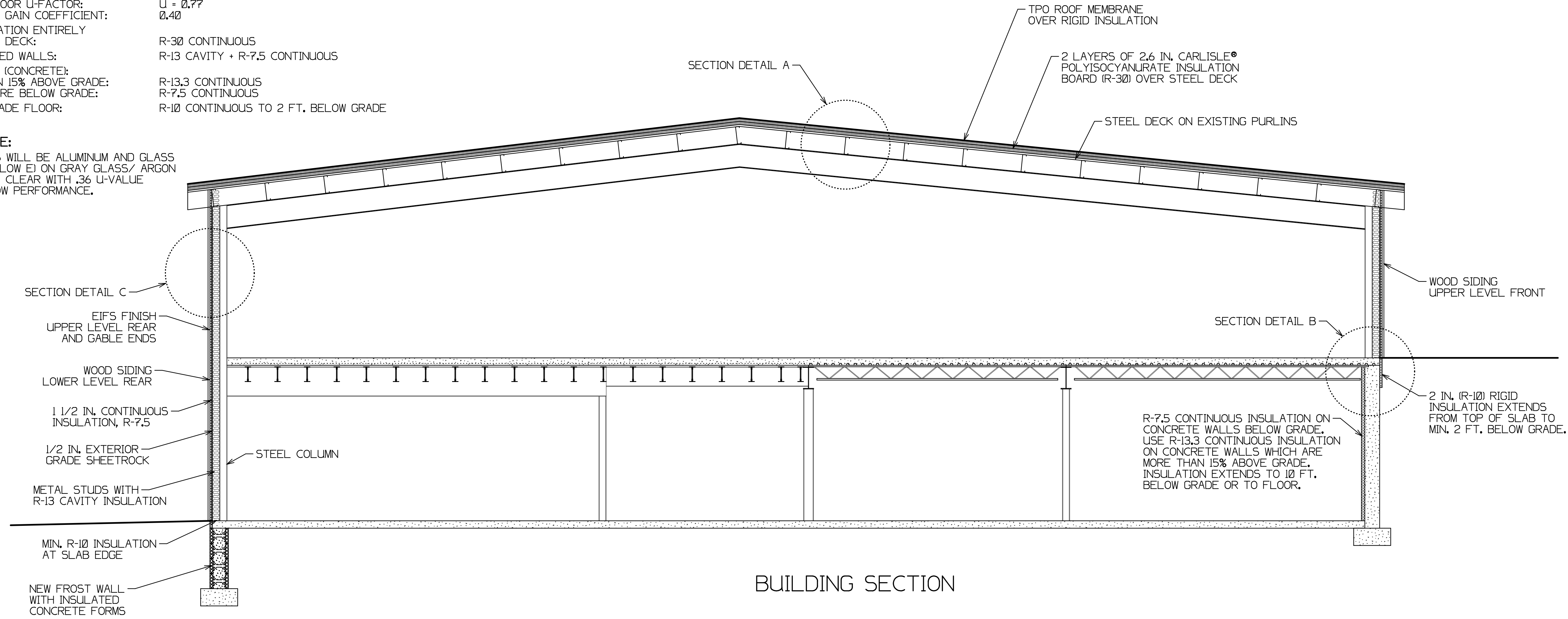
COMMERCIAL ENERGY CODE COMPLIANCE NOTE:

THE INSULATION SPECIFICATIONS AS DESCRIBED IN THE NOTES AND DRAWINGS FOR THIS BUILDING PROJECT COMPLY ACCORDING TO THE PRESCRIPTIVE METHOD WITH TABLE ECC402.1.3 OF THE 2015 INTERNATIONAL ENERGY CONSERVATION CODE AS FOLLOWS:

CLIMATE ZONE:	6
FIXED FENESTRATION U-FACTOR:	U = 0.36
OPERABLE FENESTRATION U-FACTOR:	U = 0.43
ENTRANCE DOOR U-FACTOR:	U = 0.77
SOLAR HEAT GAIN COEFFICIENT:	0.40
ROOF INSULATION ENTIRELY ABOVE ROOF DECK:	R-30 CONTINUOUS
METAL FRAMED WALLS:	R-13 CAVITY + R-7.5 CONTINUOUS
MASS WALLS (CONCRETE):	
MORE THAN 15% ABOVE GRADE:	R-13.3 CONTINUOUS
85% OR MORE BELOW GRADE:	R-7.5 CONTINUOUS
SLAB ON GRADE FLOOR:	R-10 CONTINUOUS TO 2 FT. BELOW GRADE

WINDOW NOTE:

THE WINDOWS WILL BE ALUMINUM AND GLASS USING 5N60 (LOW E) ON GRAY GLASS/ ARGON GAS FILLED/ CLEAR WITH .36 U-VALUE TOTAL WINDOW PERFORMANCE.



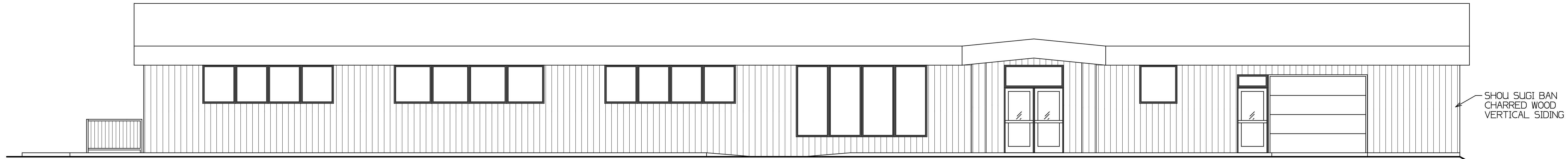
BUILDING INSULATION	DATE: 10 DEC 19	REVISION:	BY: WHW
DWG NO: 19172	SCALE: 1/4" = 1' 0"	DATE: 23 OCT 19	SHEET: 8 OF 9

NEW BUSINESS OCCUPANCY
 MARGULIS BROTHERS CONSTRUCTION
 488 COMMERCE ROAD, TOWN OF WESTAL
 BROOME COUNTY, NEW YORK

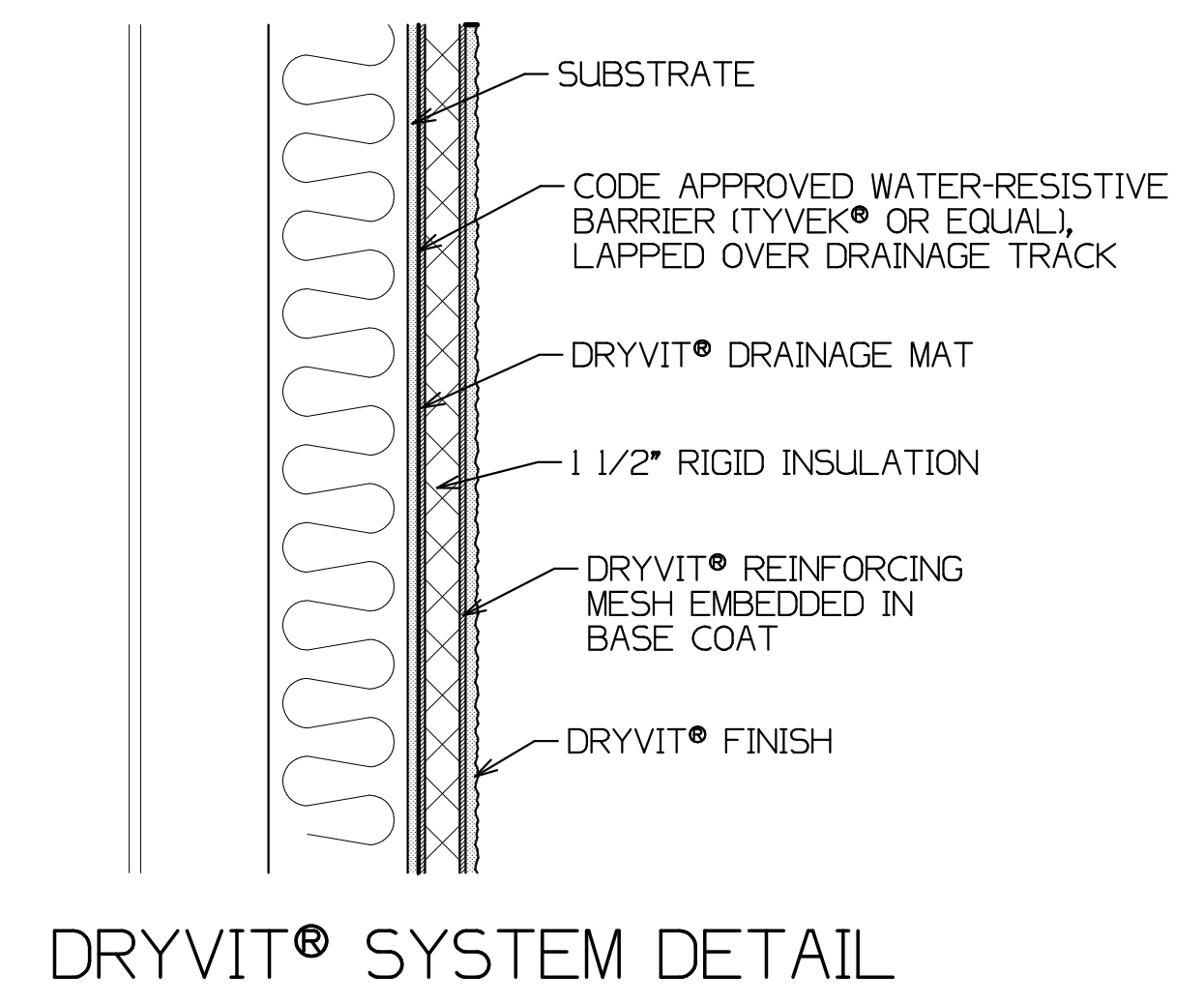
McIlwain Engineering
 PO BOX 127, 5 PARK STREET
 NEWARK VALLEY, NEW YORK 13811
 607-442-5500 MCELWAINENGINEERING@YAHOO.COM

GENERAL NOTES

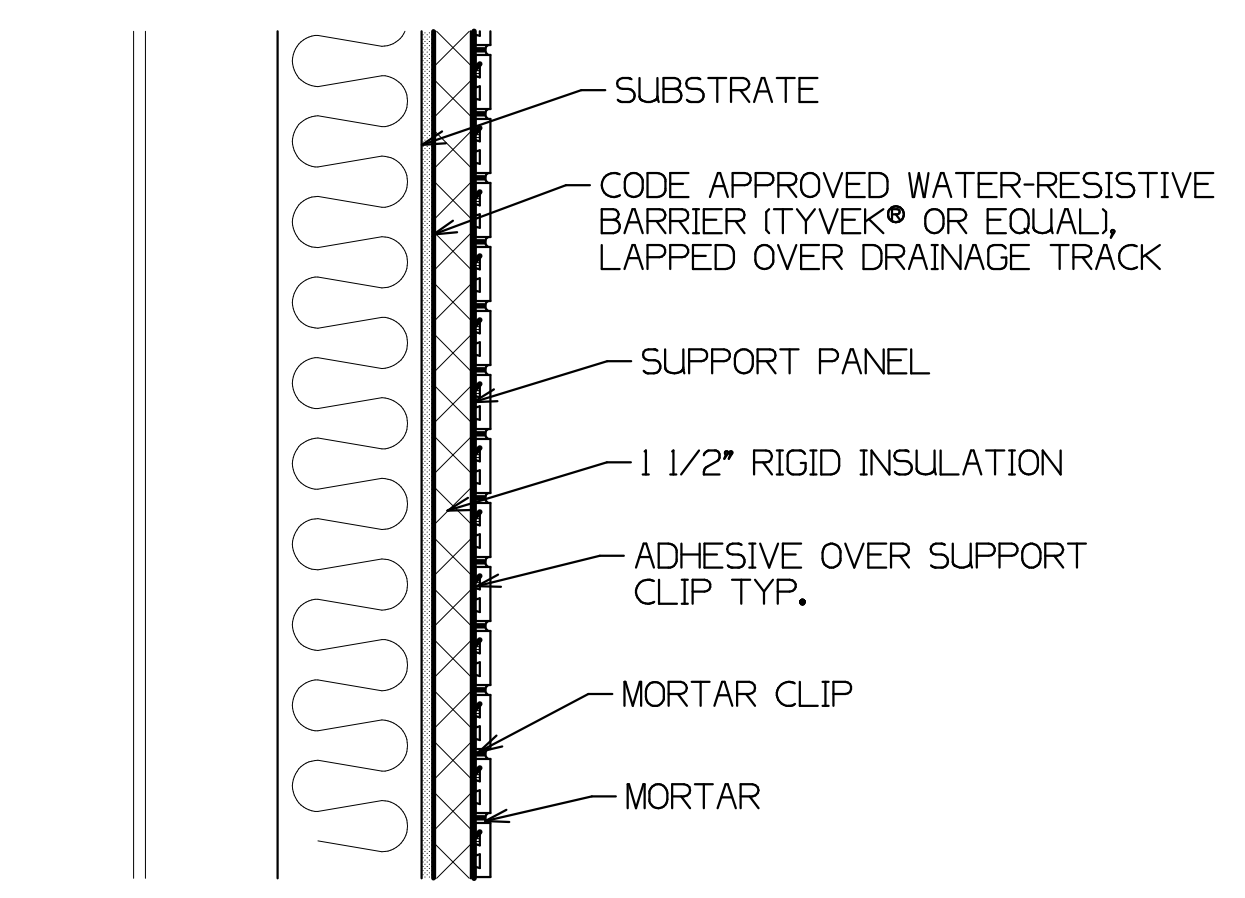
- UNAUTHORIZED ALTERATION OR ADDITION TO A DRAWING BEARING A LICENSED ENGINEER'S SEAL IS A VIOLATION OF NYS EDUCATION LAW 145, SECTION 7209, SUBDIVISION 2.
- THIS DRAWING AND DESIGN ARE THE PROPERTY OF MCELWAIN ENGINEERING. THE STAMP AND/OR SIGNATURE MUST CONTRAST IN COLOR FROM THE DRAWING FOR THIS TO BE AN OFFICIAL DESIGN.
- PLOTTING AND REPRODUCTION PROCESSES DO NOT ALWAYS MAINTAIN DIMENSIONAL ACCURACY. DO NOT ATTEMPT TO SCALE DIMENSIONS FROM THIS DRAWING.



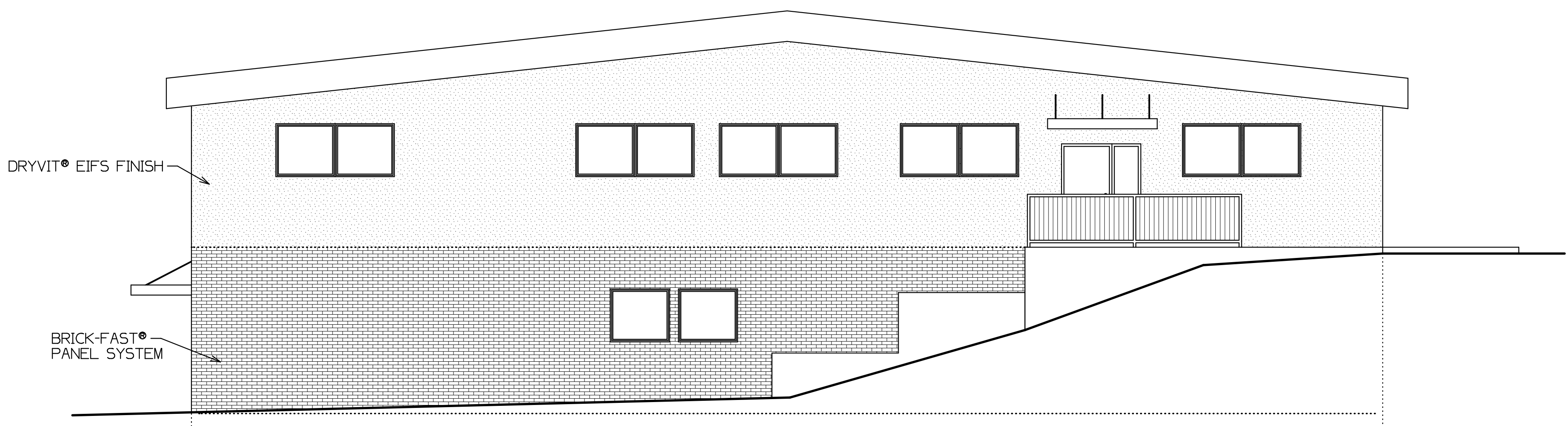
FRONT - EAST ELEVATION



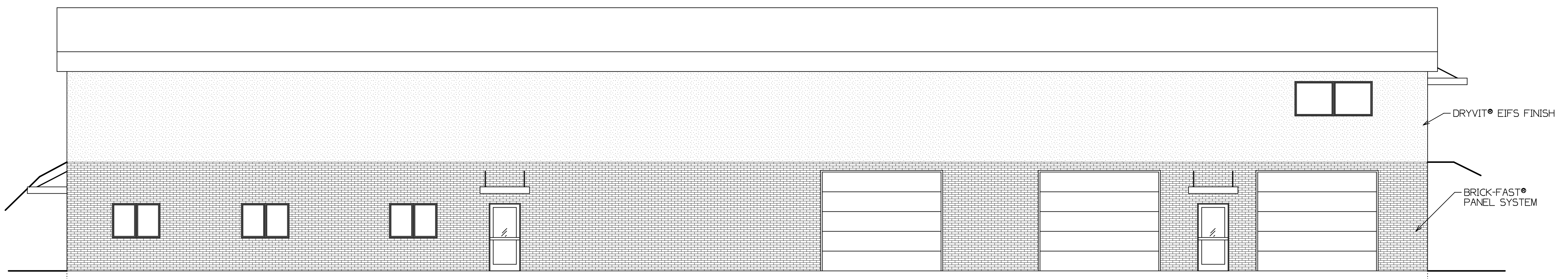
DRYVIT® SYSTEM DETAIL



BRICK-FAST® SYSTEM DETAIL



SOUTH ELEVATION



REAR - WEST ELEVATION



GENERAL NOTES
 1. UNAUTHORIZED ALTERATION OR ADDITION TO A DRAWING BEARING A LICENSED ENGINEER'S SEAL IS A VIOLATION OF NYS EDUCATION LAW 145, SECTION 7209, SUBDIVISION 2.
 2. THIS DRAWING AND DESIGN ARE THE PROPERTY OF McILWAIN ENGINEERING. THE STAMP AND/OR SIGNATURE MUST CONTRAST IN COLOR FROM THE DRAWING FOR THIS TO BE AN OFFICIAL DESIGN.
 3. PLOTTING AND REPRODUCTION PROCESSES DO NOT ALWAYS MAINTAIN DIMENSIONAL ACCURACY. DO NOT ATTEMPT TO SCALE DIMENSIONS FROM THIS DRAWING.

BUILDING ELEVATIONS	REVISION DATE	10 DEC 19
DWG NO 19172	DRAWN BY	WHW
SCALE	DATE	23 OCT 19
3/16" = 1' 0"		SHEET 9 OF 9

NEW BUSINESS OCCUPANCY
 MARCHUSKA BROTHERS CONSTRUCTION
 488 COMMERCE ROAD, TOWN OF VESTAL
 BROOME COUNTY, NEW YORK

McIlwain Engineering
 PO BOX 127, 5 PARK STREET
 NEWARK VALLEY, NEW YORK 13811
 607-442-5500 MCELWAINENGINEERING@YAHOO.COM