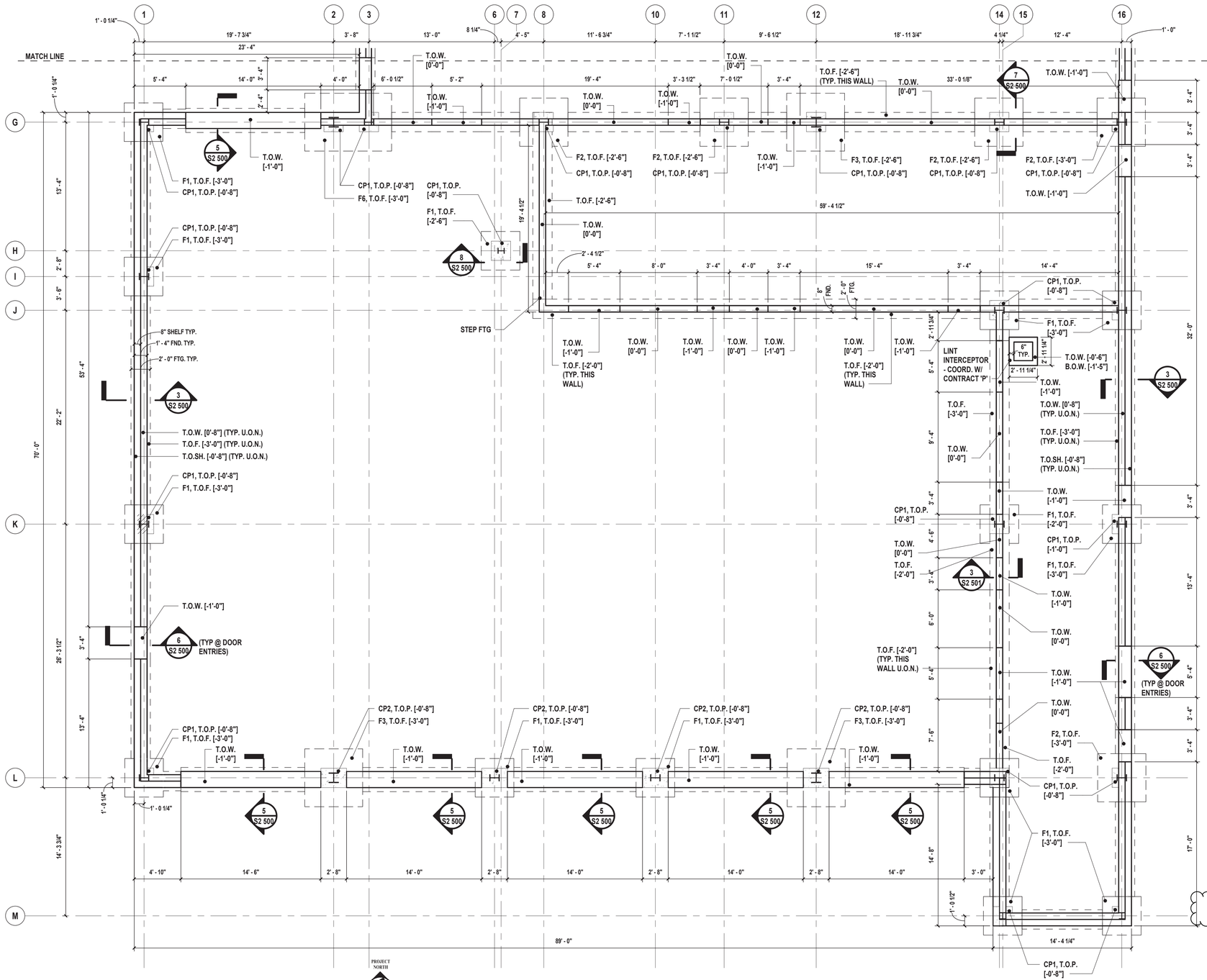


1 Partial Foundation Plan - South End

SCALE: 3/16" = 1'-0"

LEGEND:

U.O.N. =	UNLESS OTHERWISE NOTED
F# =	FOOTING DESIGNATION
T.O.F. =	TOP OF FOOTING
T.O.W. =	TOP OF WALL
T.O.B.S. =	TOP OF BRICK SHELF
T.O.P. =	TOP OF PEDESTAL

DESIGN LOADS:

ALL DESIGN LOADS ARE IN ACCORDANCE WITH 2020 BC-NYS AND ASCE 7-16
STRUCTURAL OCCUPANCY (RISK) CATEGORY IV

1. BUILDING DESIGN LOADS:
   - FIRST FLOOR LIVE LOAD = 100 PSF
   - FIRST FLOOR COLLATERAL DEAD LOAD = 10 PSF
   - MEZZANINE LIVE LOAD = 125 PSF
   - MEZZANINE DEAD LOAD = 60 PSF
   - SECOND FLOOR LIVE LOAD (OFFICES) = 50 PSF
   - SECOND FLOOR LIVE LOAD (CORRIDOR) = 80 PSF
   - SECOND FLOOR LIVE LOAD (CONFERENCE, COMPANY, TRAINING, & EXCERCISE ROOM)= 100 PSF
   - SECOND FLOOR DEAD LOAD = 60 PSF
   - FLAT ROOF LIVE LOAD = 20 PSF
   - FLAT ROOF DEAD LOAD = 20 PSF
   - ROOF T.C. LIVE LOAD = 20 PSF
   - ROOF T.C. DEAD LOAD = 15 PSF
   - ROOF B.C. LIVE LOAD = 20 PSF
   - ROOF B.C. DEAD LOAD = 15 PSF

2. SNOW LOADS:

GROUND SNOW LOAD,	Pg = 30 PSF
(EXPOSURE)	Ce = 1.0
(THERMAL)	Ct = 1.0
(IMPORTANCE)	Is = 1.20
FLAT ROOF SNOW LOAD	PF = 25.2

3. WIND LOADS:

BASIC WIND SPEED:	125 MPH
EXPOSURE:	C
EXPOSURE ADJUSTMENT FACTOR:	1.53
INTERNAL PRESSURE COEFFICIENT:	Gcpi = ±0.18

FLAT ROOF CONDITION	EXPOSURE B WIND LOADS		EXPOSURE ADJUSTMENT COEFFICIENT		DESIGN WIND LOADS
MWFRS WALL (END ZONE)	24.8 PSF	x	1.53	=	37.9 PSF
MWFRS WALL (INT. ZONE)	16.4 PSF	x	1.53	=	25.1 PSF
MWFRS ROOF (END ZONE)	-12.9 PSF	x	1.53	=	-19.7 PSF
MWFRS ROOF (INT. ZONE)	-7.6 PSF	x	1.53	=	-11.6 PSF
MWFRS ROOF (UPLIFT)	-29.8 PSF	x	1.53	=	-45.6 PSF
C&C (WALL END ZONE PRESSURE)	30.4 PSF	x	1.53	=	46.5 PSF
C&C (WALL END ZONE SUCTION)	-40.7 PSF	x	1.53	=	-62.3 PSF
C&C (WALL INT. ZONE PRESSURE)	30.4 PSF	x	1.53	=	46.5 PSF
C&C (WALL INT. ZONE SUCTION)	-33 PSF	x	1.53	=	-50.5 PSF
C&C (ROOF END ZONE PRESSURE)	12.4 PSF	x	1.53	=	19.0 PSF
C&C (ROOF END ZONE SUCTION)	-51 PSF	x	1.53	=	-78.0 PSF
C&C (ROOF INT. ZONE PRESSURE)	12.4 PSF	x	1.53	=	19.0 PSF
C&C (ROOF INT ZONE SUCTION)	-30.4 PSF	x	1.53	=	-46.5 PSF

8:12 ROOF CONDITION	EXPOSURE B WIND LOADS		EXPOSURE ADJUSTMENT COEFFICIENT		DESIGN WIND LOADS
MWFRS WALL (END ZONE)	27.9 PSF	x	1.53	=	42.7 PSF
MWFRS WALL (INT. ZONE)	22.2 PSF	x	1.53	=	34.0 PSF
MWFRS ROOF (END ZONE)	19.1 PSF	x	1.53	=	29.2 PSF
MWFRS ROOF (INT. ZONE)	15.2 PSF	x	1.53	=	23.3 PSF
MWFRS ROOF (UPLIFT)	-16.9 PSF	x	1.53	=	-25.9 PSF
C&C (WALL END ZONE PRESSURE)	30.4 PSF	x	1.53	=	46.5 PSF
C&C (WALL END ZONE SUCTION)	-40.7 PSF	x	1.53	=	-62.3 PSF
C&C (WALL INT. ZONE PRESSURE)	30.4 PSF	x	1.53	=	46.5 PSF
C&C (WALL INT. ZONE SUCTION)	-33 PSF	x	1.53	=	-50.5 PSF
C&C (ROOF END ZONE PRESSURE)	27.8 PSF	x	1.53	=	42.5 PSF
C&C (ROOF END ZONE SUCTION)	-68.9 PSF	x	1.53	=	-105.4 PSF
C&C (ROOF INT. ZONE PRESSURE)	27.8 PSF	x	1.53	=	42.5 PSF
C&C (ROOF INT ZONE SUCTION)	-51 PSF	x	1.53	=	-78.0 PSF

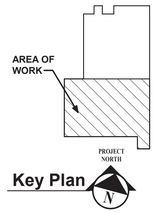
4. SEISMIC CRITERIA:
   - SITE CLASS: C
   - (IMPORTANCE) Ie = 1.50
   - Fa = 1.3 FV = 1.5
   - Ss = 0.242%g S1 = 0.058%g
   - Sms = 0.314 Sm1 = 0.086
   - Sds = 0.209 Sd1 = 0.058
   - SEISMIC DESIGN CATEGORY: C
   - EQUIVALENT LATERAL FORCE PROCEDURE:
   - STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
   - R = 3.0

5. SOIL BEARING CAPACITY: 2 TONS/S.F.
   AS REFERENCED BY SUB-SURFACE SOILS INVESTIGATION PERFORMED BY CARLIN-SIMPSON (04/12/2021)

6. AS PER FIGURE 1611.1 NYS BC, RAIN INTENSITY = 2.75 IN/HR

FOUNDATION PLAN NOTES:

1. ELEVATIONS SHOWN THUS [ ] ARE RELATIVE TO FINISHED FIRST FLOOR ELEVATION, TAKEN AS DATUM = [0'-0"] (EQUIVALENT TO 266.00' ON CIVIL DWGS)
2. PREPARE SUBGRADE AS RECOMMENDED IN SUB-SURFACE INVESTIGATION REPORT BY CARLIN-SIMPSON (4/12/2021)
3. ALL EXCAVATED EARTH AND UNSUITABLE SOILS SHALL BE REPLACED WITH CONTROLLED FILL AS PER SPECIFICATION SECTION 312323.13.
4. ALL CONCRETE PEDESTALS SHALL BE 2'-0"x2'-0" AND CONSTRUCTED AS PER DETAIL UNLESS OTHERWISE NOTED.
5. ALL CONCRETE PEDESTALS AND COLUMN FOOTINGS SHALL BE CENTERED ON THE COLUMN UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL COORDINATE SIZE AND LOCATIONS OF ALL REQUIRED PIPING AND CONDUIT PENETRATIONS THROUGH FOUNDATION WALL WITH ALL OTHER CONTRACTS. PROVIDE PIPE SLEEVES AND REINFORCEMENT AROUND PENETRATIONS AS PER DETAIL 8 ON SHEET S2 501.
7. REFER TO 'A' DWGS FOR WATERPROOFING REQUIREMENTS.
8. COORDINATE LOCATIONS OF REINFORCEMENT DOWELS INTO BUILDING WALLS WITH MASONRY TRADE.
9. EXISTING FILL IS PRESENT THROUGHOUT THE SITE OF DEPTHS RANGING FROM 5'-0" TO 8'-5" BELOW EXISTING GROUND SURFACE. THE EXISTING FILL IS NOT A SUITABLE BEARING MATERIAL FOR THE NEW BUILDING FOUNDATIONS AND FLOOR SLABS. WHERE EXISTING FILL IS ENCOUNTERED IN THE BUILDING AREAS, IT SHALL BE COMPLETELY REMOVED AND REPLACED WITH CONTROLLED FILL. EXCAVATION OF THE EXISTING FILL WILL LIKELY EXTEND 1 TO 2 FEET BELOW THE GROUNDWATER TABLE, THEREFORE DEWATERING WITH SUMPS AND PUMPS WILL BE NECESSARY. THE REMOVAL OF THE EXISTING FILL FROM THE BUILDING FOOTPRINT SHALL BE PERFORMED UNDER THE FULL TIME INSPECTION OF CARLIN-SIMPSON & ASSOCIATES OR A QUALIFIED GEOTECHINICAL ENGINEEER.



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CONSULTANTS:

MARK	DATE	DESCRIPTION
3	02/02/2023	REVS. PER TOWN COMMENTS

STATE OF NEW YORK · SCOTT D. LEHN · 087145 · LICENSED PROFESSIONAL ENGINEER

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
MDH	MDH		

PROJECT No:	DATE:	SCALE:
VGFD2001	JULY 2022	AS SHOWN

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VAILS GATE FIRE DISTRICT

New Storage Building (Phase I)
New Fire Station (Phase II)

872 Blooming Grove Turnpike
New Windsor, NY 12553

CONTRACT

CONTRACT G
GENERAL CONSTRUCTION

STATUS

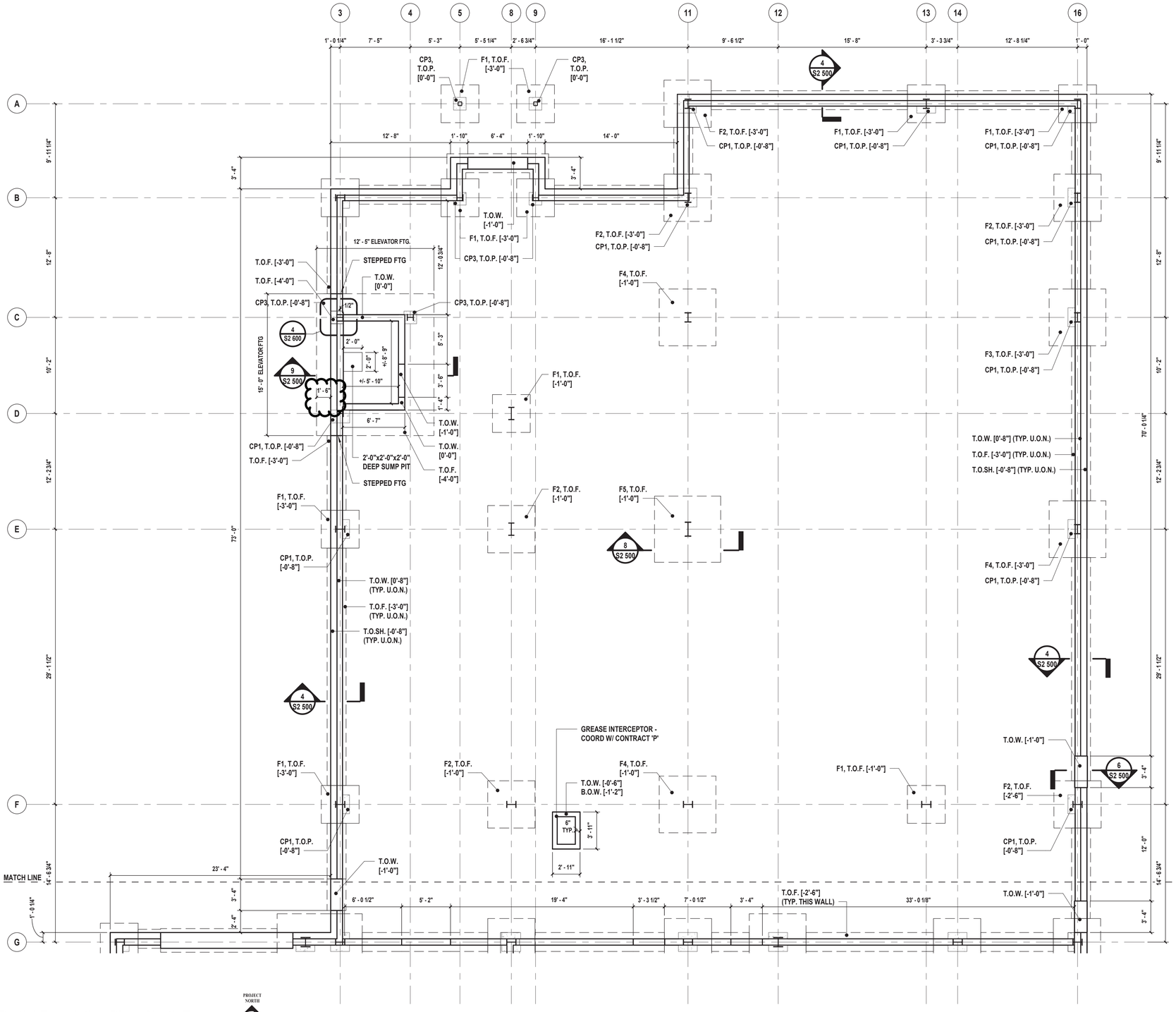
FINAL BID DOCUMENT

SHEET TITLE

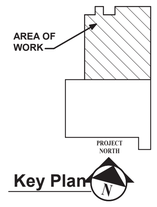
STRUCTURAL PARTIAL FOUNDATION PLAN AND DESIGN LOADS

DRAWING No.

S2 100.03



1 **Partial Foundation Plan - North End**
SCALE: 3/16" = 1'-0"



LEGEND:

U.O.N. =	UNLESS OTHERWISE NOTED
F# =	FOOTING DESIGNATION
T.O.F. =	TOP OF FOOTING
T.O.W. =	TOP OF WALL
T.O.B.S. =	TOP OF BRICK SHELF
T.O.P. =	TOP OF PEDESTAL

FOUNDATION PLAN NOTES:

1. ELEVATIONS SHOWN THUS [ ] ARE RELATIVE TO FINISHED FIRST FLOOR ELEVATION, TAKEN AS DATUM = [0'-0"] (EQUIVALENT TO 266.00' ON CIVIL DWGS)
2. PREPARE SUBGRADE AS RECOMMENDED IN SUB-SURFACE INVESTIGATION REPORT BY CARLIN-SIMPSON (4/12/2021)
3. ALL EXCAVATED EARTH AND UNSUITABLE SOILS SHALL BE REPLACED WITH CONTROLLED FILL AS PER SPECIFICATION SECTION 312323.13.
4. ALL CONCRETE PEDESTALS SHALL BE 2'-0"x2'-0" AND CONSTRUCTED AS PER DETAIL UNLESS OTHERWISE NOTED.
5. ALL CONCRETE PEDESTALS AND COLUMN FOOTINGS SHALL BE CENTERED ON THE COLUMN UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL COORDINATE SIZE AND LOCATIONS OF ALL REQUIRED PIPING AND CONDUIT PENETRATIONS THROUGH FOUNDATION WALL WITH ALL OTHER CONTRACTS. PROVIDE PIPE SLEEVES AND REINFORCEMENT AROUND PENETRATIONS AS PER DETAIL 8 ON SHEET S2 501.
7. REFER TO 'A' DWGS FOR WATERPROOFING REQUIREMENTS.
8. COORDINATE LOCATIONS OF REINFORCEMENT DOWELS INTO BUILDING WALLS WITH MASONRY TRADE.
9. EXISTING FILL IS PRESENT THROUGHOUT THE SITE OF DEPTHS RANGING FROM 5'-0" TO 8'-5" BELOW EXISTING GROUND SURFACE. THE EXISTING FILL IS NOT A SUITABLE BEARING MATERIAL FOR THE NEW BUILDING FOUNDATIONS AND FLOOR SLABS. WHERE EXISTING FILL IS ENCOUNTERED IN THE BUILDING AREAS, IT SHALL BE COMPLETELY REMOVED AND REPLACED WITH CONTROLLED FILL. EXCAVATION OF THE EXISTING FILL WILL LIKELY EXTEND 1 TO 2 FEET BELOW THE GROUNDWATER TABLE, THEREFORE DEWATERING WITH SUMPS AND PUMPS WILL BE NECESSARY. THE REMOVAL OF THE EXISTING FILL FROM THE BUILDING FOOTPRINT SHALL BE PERFORMED UNDER THE FULL TIME INSPECTION OF CARLIN-SIMPSON & ASSOCIATES OR A QUALIFIED GEOTECHINICAL ENGINEEER.
10. CONTRACTOR SHALL COORDINATE ELEVATOR SHAFT SIZE WITH APPROVED ELEVATOR FABRICATOR'S SHOP DRAWINGS AND INSTALLATION REQUIREMENT.

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Melville, NY 11747
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CONSULTANTS:

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STATE OF NEW YORK · SCOTT D. LEWIN · LICENSED PROFESSIONAL ENGINEER · 087145

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MDH	MDH		
PROJECT No:	DATE:	SCALE:	
VGFD2001	JULY 2022	AS SHOWN	

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VAILS GATE FIRE DISTRICT

New Storage Building (Phase I)
New Fire Station (Phase II)

872 Blooming Grove Turnpike
New Windsor, NY 12553

CONTRACT
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GENERAL CONSTRUCTION

STATUS
FINAL BID DOCUMENT

SHEET TITLE
STRUCTURAL
PARTIAL FOUNDATION PLAN - NORTH END

DRAWING No.
S2 101.03

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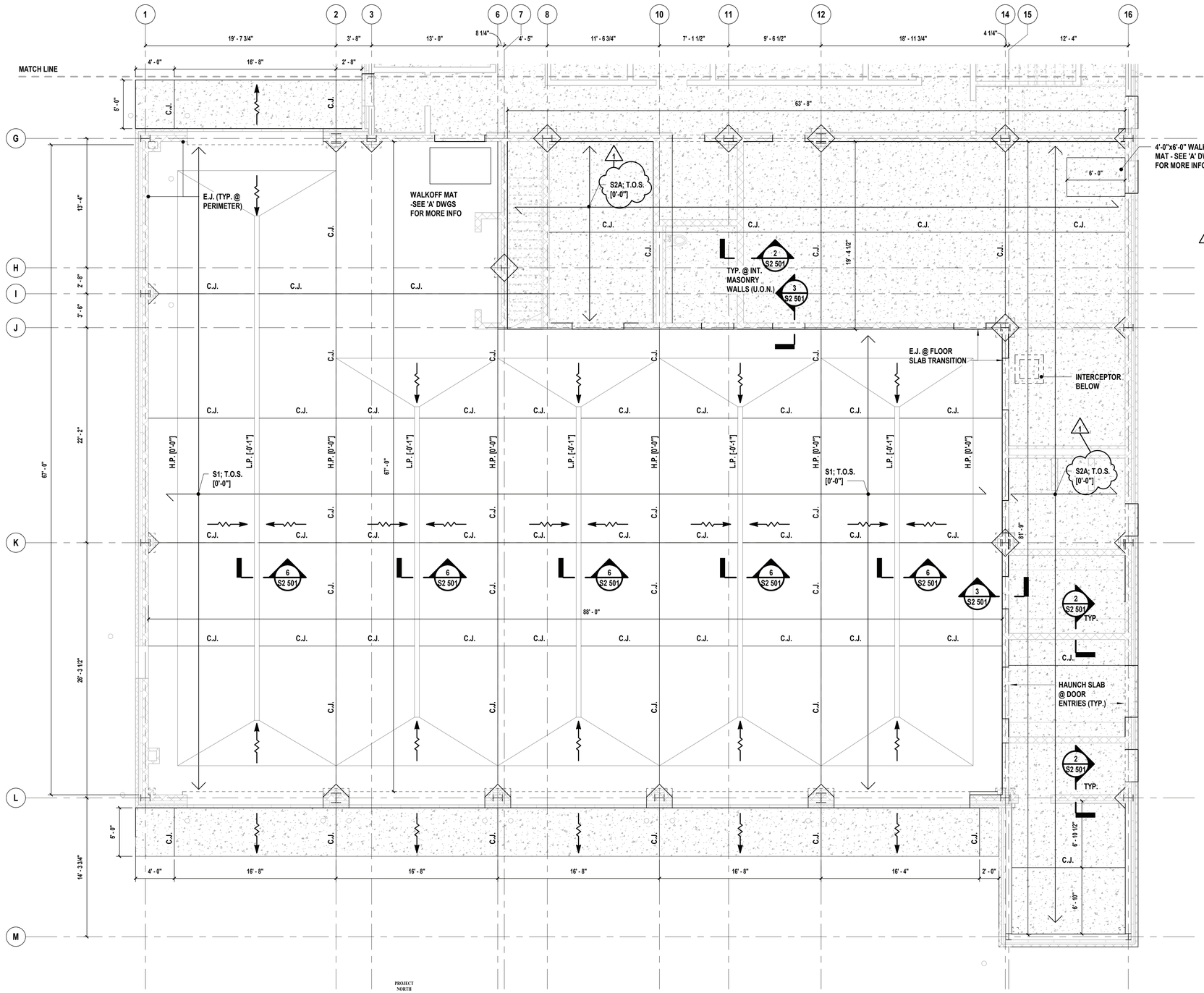


1 **Partial First Floor Slab Plan - South End**
SCALE: 3/16" = 1'-0"

PROJECT NORTH

LEGEND:

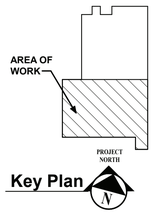
C.J. = CONTROL JOINT
E.J. = EXPANSION JOINT
E.O.S. = EDGE OF SLAB
T.O.S. = TOP OF SLAB
U.O.N. = UNLESS OTHERWISE NOTED
H.P. = HIGH POINT OF PITCHED SLAB
L.P. = LOW POINT OF PITCHED SLAB
INDICATES PITCH DIRECTION OF SLAB

SLAB NOTES:

1. ELEVATIONS SHOWN THUS [ ] ARE RELATIVE TO FINISHED FIRST FLOOR DATUM ELEVATION [0'-0"] (EQUIVALENT TO 266.00' ON CIVIL DWGS).
2. S1 — INDICATES SPAN ON 8" CONCRETE SLAB ON GRADE REINFORCED WITH (2) LAYERS OF 6x6-W4.0xW4.0 W.W.M. W/ RADIANT HEAT TUBES
3. S2A — INDICATES SPAN ON 6" CONCRETE SLAB ON GRADE REINFORCED WITH 6x6-W2.9xW2.9 W.W.M. W/ RADIANT HEAT TUBES
4. PROVIDE 1/2" PRE-MOLDED EXPANSION JOINT AROUND PERIMETER OF CONCRETE SLAB ON GRADE WHERE IT ABUTS THE FOUNDATION WALL OF THE BUILDING.

MASONRY NOTES:

1. ALL VERTICAL MASONRY WALL REINFORCEMENT SHALL BE #6 BARS SPACED AT MAXIMUM OF 32" O.C., TYP. UNLESS OTHERWISE NOTED. PROVIDE #5 @ 48" O.C. FOR NON-LOAD BEARING CMU PARTITIONS.
2. THE FIRST CELL ADJACENT TO MASONRY OPENINGS, AS WELL AS ALL CORNERS, SHALL CONTAIN (1) CONT. #5 BAR, TYP. AT EACH SIDE OF OPENING.
3. FILL ALL MASONRY CELLS CONTAINING REINFORCEMENT SOLID WITH MORTAR, TYP.
4. REFER TO 'A' DWGS AND SPECIFICATIONS FOR ADDITIONA REQUIREMENTS NOT OUTLINED HERE, INCLUDING HORIZONTAL REINFORCEMENT AND BRICK TIES.
5. ALL VERTICAL REINFORCEMENT INTERRUPTED BY STRUCTURAL STEEL SHALL BE WELDED TO TOP OF STEEL MEMBERS, TYP.
6. COORDINATE PLACEMENT OF VERTICAL WALL DOWELS EMBEDDED INTO FOUNDATION WALL WITH CELLS OF MASONRY WALL. DOWEL SPACING TO MATCH SPACING OF VERTICAL REINFORCEMENT IN WALLS, TYP.



Key Plan

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CONSULTANTS:

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1	8/24/2022	ADDENDUM #1

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VGFD2001	JULY 2022	AS SHOWN

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VAILS GATE FIRE DISTRICT

New Storage Building (Phase I)
New Fire Station (Phase II)

872 Blooming Grove Turnpike
New Windsor, NY 12553

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STATUS
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SHEET TITLE
STRUCTURAL
PARTIAL SLAB PLAN - SOUTH END

DRAWING No.
S2 110.01

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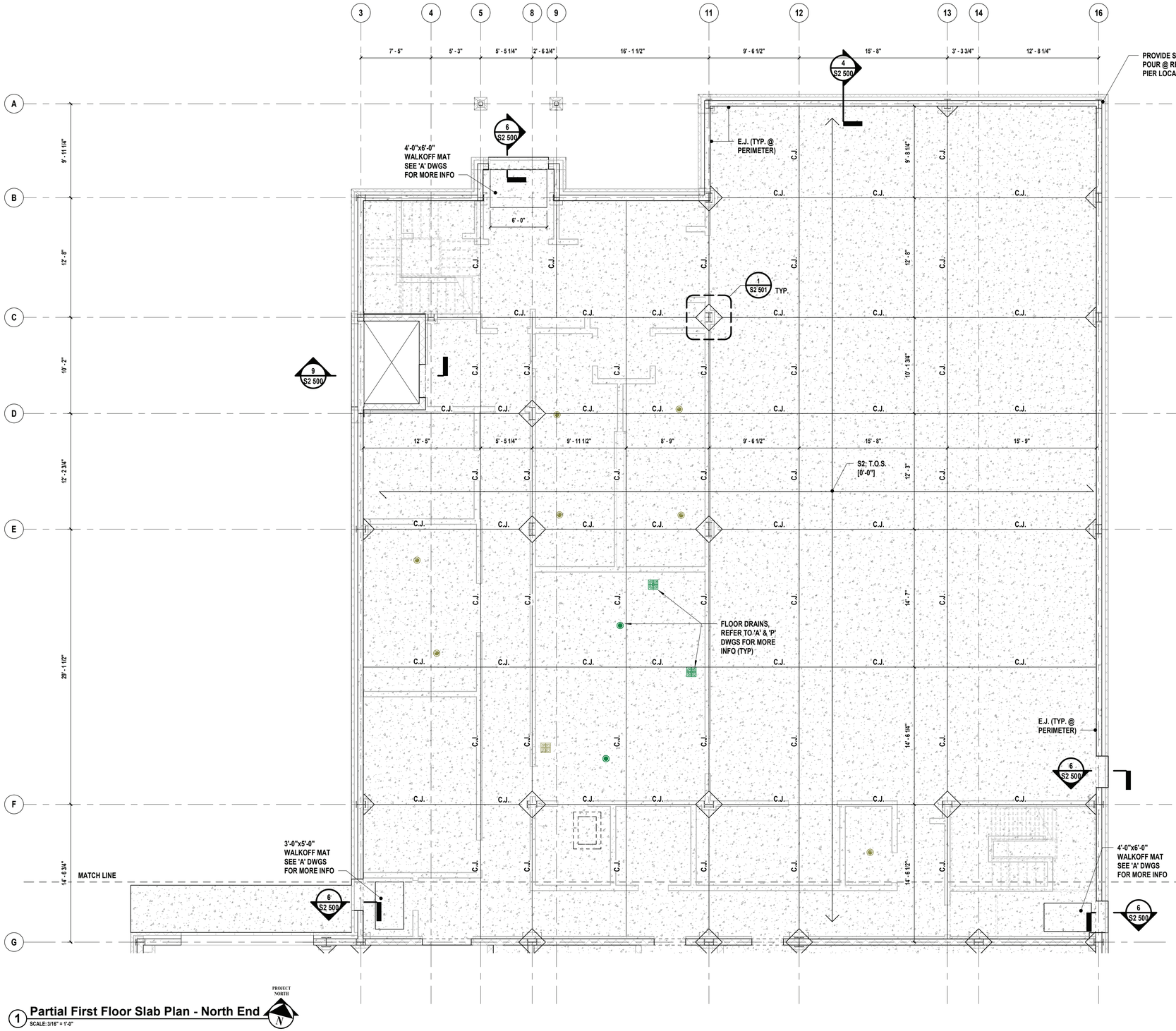
LEGEND:

C.J. = CONTROL JOINT
E.J. = EXPANSION JOINT
E.O.S. = EDGE OF SLAB
T.O.S. = TOP OF SLAB
U.O.N. = UNLESS OTHERWISE NOTED
H.P. = HIGH POINT OF PITCHED SLAB
L.P. = LOW POINT OF PITCHED SLAB



1 **Partial First Floor Slab Plan - North End**
SCALE: 3/16" = 1'-0"

PROJECT NORTH

SLAB NOTES:

1. ELEVATIONS SHOWN THUS [ ] ARE RELATIVE TO FINISHED FIRST FLOOR DATUM ELEVATION [0'-0"] (EQUIVALENT TO 266.00' ON CIVIL DWGS).
2. S1 — INDICATES SPAN ON 8" CONCRETE SLAB ON GRADE REINFORCED WITH (2) LAYERS OF 6x6-W4.0xW4.0 W.W.M. W/ RADIANT HEAT TUBES
3. S2 — INDICATES SPAN ON 6" CONCRETE SLAB ON GRADE REINFORCED WITH 6x6-W2.9xW2.9 W.W.M.
4. PROVIDE 1/2" PRE-MOLDED EXPANSION JOINT AROUND PERIMETER OF CONCRETE SLAB ON GRADE WHERE IT ABUTS THE FOUNDATION WALL OF THE BUILDING.
5. RECESS FLOOR SLAB AT ENTRANCE MAT LOCATIONS. COORDINATE SIZE & DEPTH WITH ARCHITECTURAL DRAWINGS.

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Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION

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SCOTT D LEIN
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LICENSED PROFESSIONAL ENGINEER

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MDH	MDH		

PROJECT No:	DATE:	SCALE:
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VAILS GATE FIRE DISTRICT

New Storage Building (Phase I)
New Fire Station (Phase II)

872 Blooming Grove Turnpike
New Windsor, NY 12553

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STATUS
FINAL BID DOCUMENT

SHEET TITLE
STRUCTURAL
PARTIAL SLAB PLAN - NORTH END

DRAWING No.
S2 111.00

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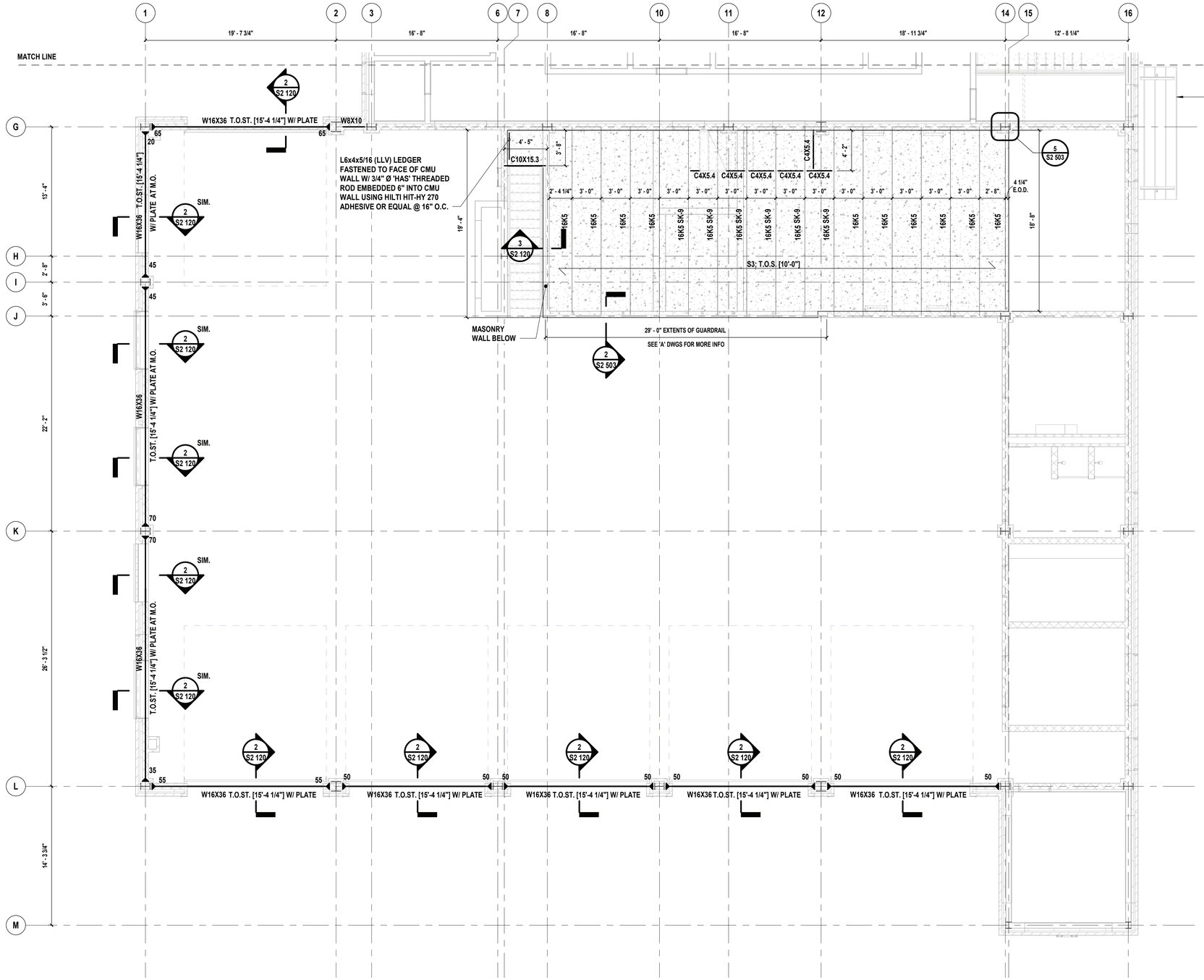


1 **Mezzanine Framing Plan**
SCALE: 3/16" = 1'-0"

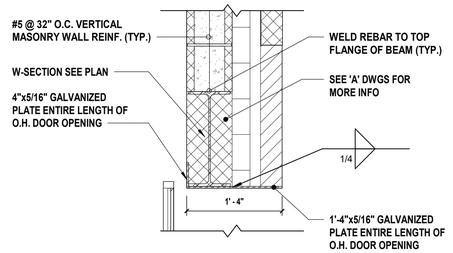
PROJECT NORTH

LEGEND:

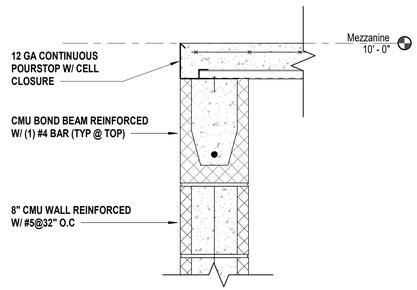
T.O.S.T. = TOP OF STEEL
T.O.S. = TOP OF SLAB
E.O.S. = EDGE OF SLAB
E.O.D. = EDGE OF DECK
U.O.N. = UNLESS OTHERWISE NOTED

MEZZANINE NOTES:

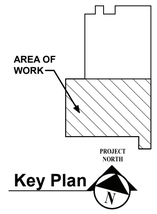
1. TOP OF STEEL SHALL BE SET AT [9'-8"] ABOVE FINISHED FIRST FLOOR ELEVATION, UNLESS OTHERWISE NOTED AS THUS [ ].
2. S3 — INDICATES SPAN OF 4" CONCRETE SLAB, REINFORCED WITH 6x6-W2.9xW2.9 W.W.F. AND 1.5C 20GA METAL FORM DECK AS MANUFACTURED BY VULCRAFT NUCOR OR APPROVED EQUAL
3. INSTALL BRIDGING FOR BAR JOISTS AS PER S.J.I. REQUIREMENTS.
4. EDGE OF ALL FLOOR SLABS SHALL BE INSTALLED WITH CONTINUOUS 12GA. POURSTOPS AND 20GA. CELL CLOSURES (WHERE APPLICABLE), UNLESS OTHERWISE SHOWN IN DETAIL.
5. INDICATES BEAM TO COLUMN MOMENT CONNECTION WITH THE NUMBER REPRESENTING THE ASD MOMENT CAPACITY IN FT-KIPS
6. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS NOT SHOWN ON THE DRAWINGS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE DETERMINED BY THE CONNECTION DESIGNER AS THE MAXIMUM REACTION RESULTING FROM THE INDICATED BEAM SECTION BEING FULLY LOADED WITH MAXIMUM ALLOWABLE UNIFORM LOADS AS SPECIFIED IN AISC SPECIFICATION. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 10KIPS ASD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOULSY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATION FOR ADDITIONAL LOADING DESIGN REQUIREMENTS.



2 **Section at Overhead Door**
SCALE: 1" = 1'-0"



3 **Section at Mezzanine**
SCALE: 1 1/2" = 1'-0"



Key Plan

H 2 M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK
SCOTT D LEHR
087145
LICENSED PROFESSIONAL ENGINEER

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DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
MDH	MDH		
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New Fire Station (Phase II)

872 Blooming Grove Turnpike
New Windsor, NY 12553

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SHEET TITLE
STRUCTURAL
MEZZANINE FRAMING PLAN - SOUTH END

DRAWING No.
S2 120.00

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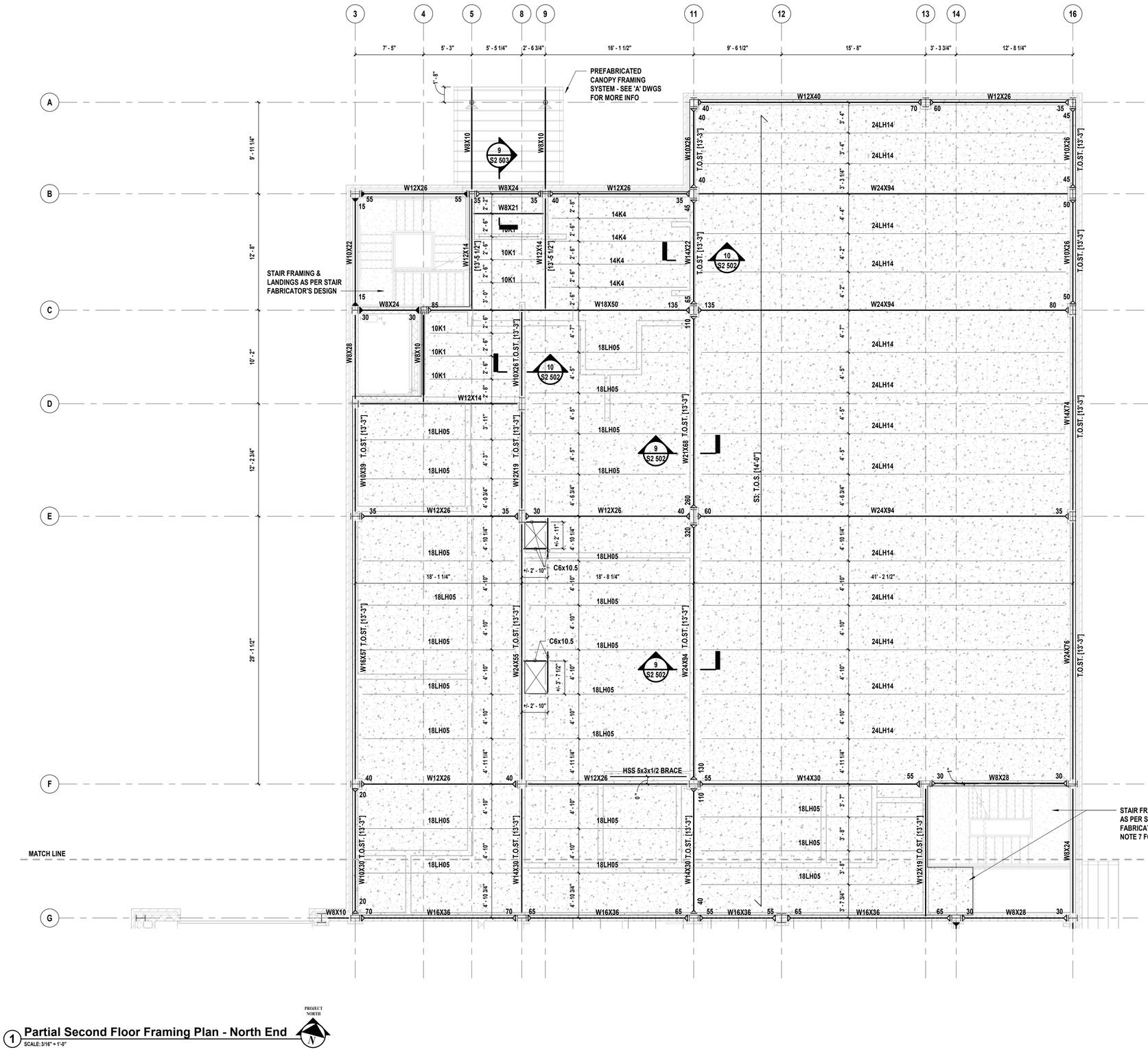

1 **Partial Second Floor Framing Plan - North End**
SCALE: 3/16" = 1'-0"

PROJECT NORTH

LEGEND:

T.O.ST. = TOP OF STEEL
T.O.S. = TOP OF SLAB
E.O.S. = EDGE OF SLAB
E.O.D. = EDGE OF DECK
U.O.N. = UNLESS OTHERWISE NOTED

2ND FLOOR FRAMING NOTES:

1. TOP OF STEEL SHALL BE SET AT [13'-8"] ABOVE FINISHED FIRST FLOOR ELEVATION, UNLESS OTHERWISE NOTED AS THUS [ ].
2. S3 — INDICATES SPAN OF 4" CONCRETE SLAB, REINFORCED WITH 6x6-W2.9xW2.9 W.W.F. AND 1.5C 20GA METAL FORM DECK AS MANUFACTURED BY VULCRAFT NUCOR OR APPROVED EQUAL
3. INSTALL BRIDGING FOR BAR JOISTS AS PER S.J.I. REQUIREMENTS.
4. EDGE OF ALL FLOOR SLABS SHALL BE INSTALLED WITH CONTINUOUS 12GA. POURSTOPS AND 20GA. CELL CLOSURES (WHERE APPLICABLE), UNLESS OTHERWISE SHOWN IN DETAIL.
5. INDICATES BEAM TO COLUMN MOMENT CONNECTION WITH THE NUMBER REPRESENTING THE ASD MOMENT CAPACITY IN FT-KIPS
6. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS NOT SHOWN ON THE DRAWINGS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE DETERMINED BY THE CONNECTION DESIGNER AS THE MAXIMUM REACTION RESULTING FROM THE INDICATED BEAM SECTION BEING FULLY LOADED WITH MAXIMUM ALLOWABLE UNIFORM LOADS AS SPECIFIED IN AISC SPECIFICATION. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 10KIPS ASD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOUSLY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATION FOR ADDITIONAL LOADING DESIGN REQUIREMENTS.
7. COORDINATE DIMENSIONS OF STAIR LANDING FRAMING WITH STAIR MANUFACTURER. SEE 'A' DWGS FOR ADDITIONAL INFORMATION.
8. ALL LIGHT GAUGE EXTERIOR STUD WALLS, BOX HEADERS, CANOPY CONNECTION POINTS, AND SILLS SHALL BE DESIGNED BY THE COLD FORMED STEEL FABRICATOR. THE FABRICATOR'S ENGINEER SHALL SUBMIT A FULL SET OF CALCULATIONS AFFIXED WITH A NEW YORK STATE P.E.'S SIGN & SEAL TO THE A/E OF RECORD TO REVIEW. DESIGN OF COLD-FORMED STEEL FRAMING SHALL INCLUDE CONSIDERATION FOR ALL APPLICABLE LOADS AS SHOWN ON SHEET S2 100.00 AND SHALL BE IN CONFORMANCE WITH THE BUILDING CODE OF NEW YORK STATE. EXTERIOR CLADDING SYSTEMS AND ANCILLARY STRUCTURES INCLUDING CANOPIES SUPPORTED BY THE COLD FORMED STEEL SYSTEM SHALL BE CONSIDERED ACCORDINGLY. REFER TO SPECIFICATION 054000 FOR ADDITIONAL REQUIREMENTS.
9. COORDINATE ALL FLOOR OPENINGS WITH ARCHITECTURAL AND MEP DRAWINGS

AREA OF WORK

PROJECT NORTH

Key Plan

H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK
SCOTT D LEHN
087145
LICENSED PROFESSIONAL ENGINEER

*ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL IS ILLEGAL

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
MDH	MDH		

PROJECT No:	DATE:	SCALE:
VGFD2001	JULY 2022	AS SHOWN

CLIENT
VAILS GATE FIRE DISTRICT

New Storage Building (Phase I)
New Fire Station (Phase II)

872 Blooming Grove Turnpike
New Windsor, NY 12553

CONTRACT
ALL CONTRACTS

STATUS
FINAL BID DOCUMENT

SHEET TITLE
STRUCTURAL
SECOND FLOOR FRAMING PLAN - NORTH END

DRAWING No.
S2 121.00

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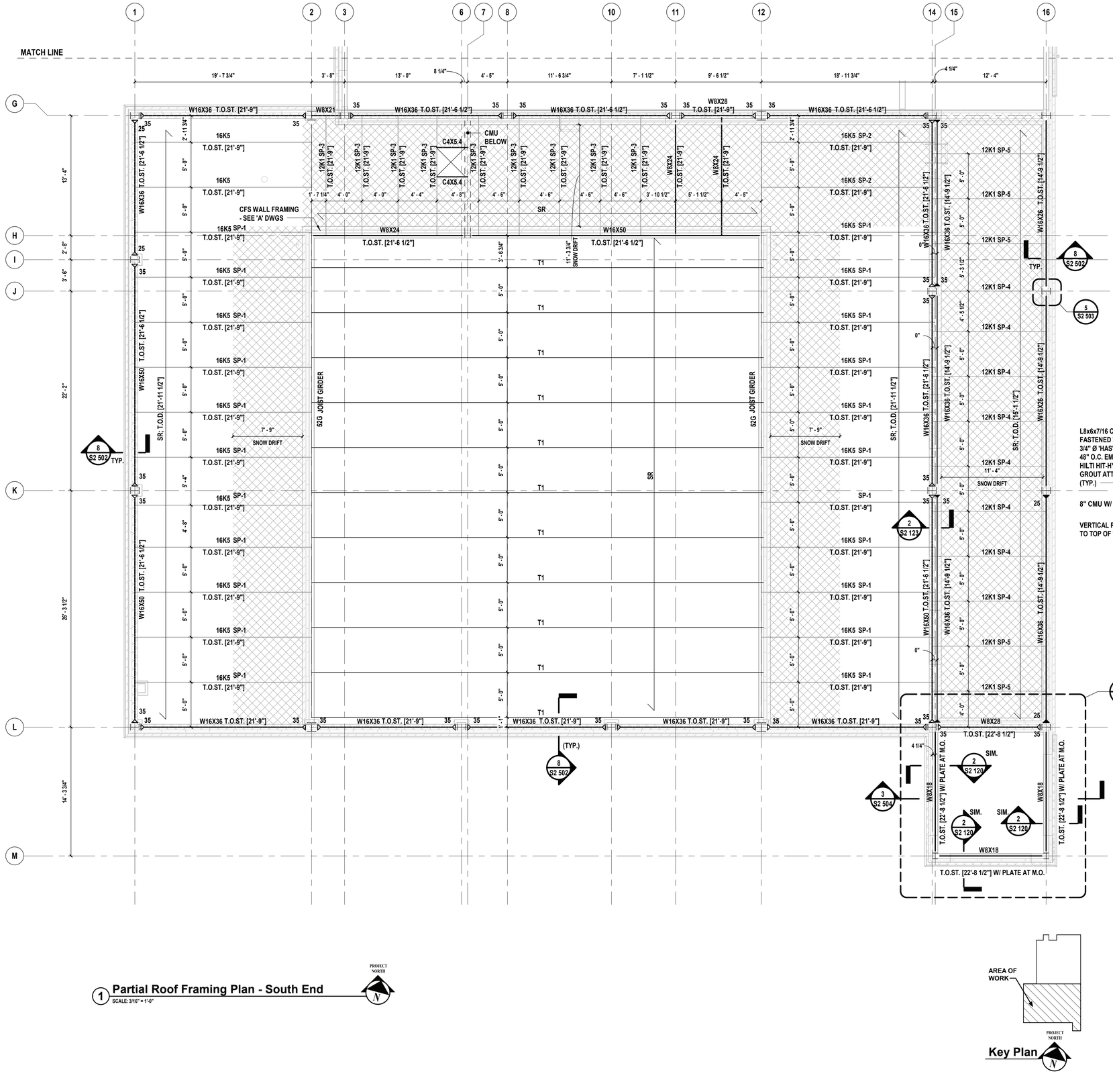
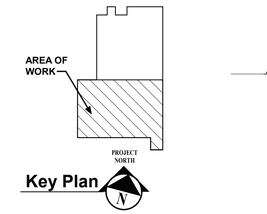


1 **Partial Roof Framing Plan - South End**
SCALE: 3/16" = 1'-0"



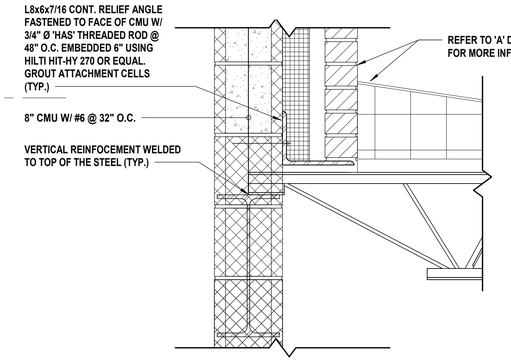
Key Plan

LEGEND:

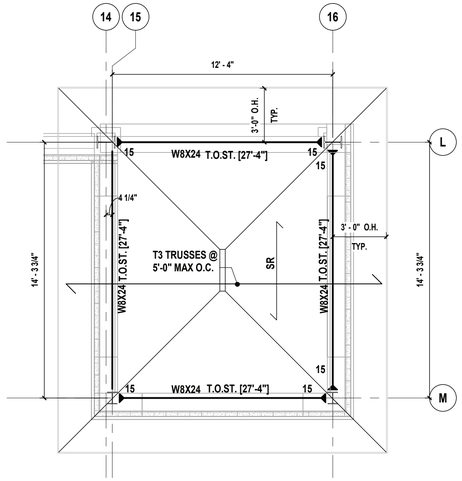
T.O.S.T. = TOP OF STEEL
E.O.D. = EDGE OF DECK
U.O.N. = UNLESS OTHERWISE NOTED

ROOF FRAMING NOTES:

1. TOP OF STEEL SHALL BE SET AT [15'-0"] ABOVE FINISHED FIRST FLOOR ELEVATION, UNLESS OTHERWISE NOTED AS THUS [ ].
2. SR — INDICATES SPAN OF 1.5B 20GA. METAL ROOF DECK AS MANUFACTURED BY VULCRAFT NUCOR OR APPROVED EQUAL.
3. INSTALL BRIDGING FOR BAR JOISTS AS PER S.J.I. REQUIREMENTS.
4. COORDINATE ALL ROOF TOP EQUIPMENT & OPENINGS WITH 'M' & 'A' DWGS, AS WELL AS WITH APPROVED SHOP DRAWINGS. LOCATIONS AND SIZES INDICATED ARE APPROXIMATE AND SHALL BE COORDINATED.
5. INDICATES BEAM TO COLUMN MOMENT CONNECTION WITH THE NUMBER REPRESENTING THE ASD MOMENT CAPACITY IN FT-KIPS
6. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS NOT SHOWN ON THE DRAWINGS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE DETERMINED BY THE CONNECTION DESIGNER AS THE MAXIMUM REACTION RESULTING FROM THE INDICATED BEAM SECTION BEING FULLY LOADED WITH MAXIMUM ALLOWABLE UNIFORM LOADS AS SPECIFIED IN AISC SPECIFICATION. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 10KIPS ASD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOUSLY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATION FOR ADDITIONAL LOADING DESIGN REQUIREMENTS.



2 **Relief Angle Section**
SCALE: 1 1/2" = 1'-0"



3 **Partial Roof Framing Plan**
SCALE: 1/4" = 1'-0"

H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK — SCOTT D LEHN — 087145 — LICENSED PROFESSIONAL ENGINEER

*ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL IS ILLEGAL

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
MDH	MDH		

PROJECT No:	DATE:	SCALE:
VGFD2001	JULY 2022	AS SHOWN

CLIENT

VAILS GATE FIRE DISTRICT

New Storage Building (Phase I)
New Fire Station (Phase II)

872 Blooming Grove Turnpike
New Windsor, NY 12553

CONTRACT

CONTRACT G
GENERAL CONSTRUCTION

STATUS

FINAL BID DOCUMENT

SHEET TITLE

STRUCTURAL
PARTIAL LOW & HIGH ROOF FRAMING PLAN - SOUTH END

DRAWING No.

S2 123.00

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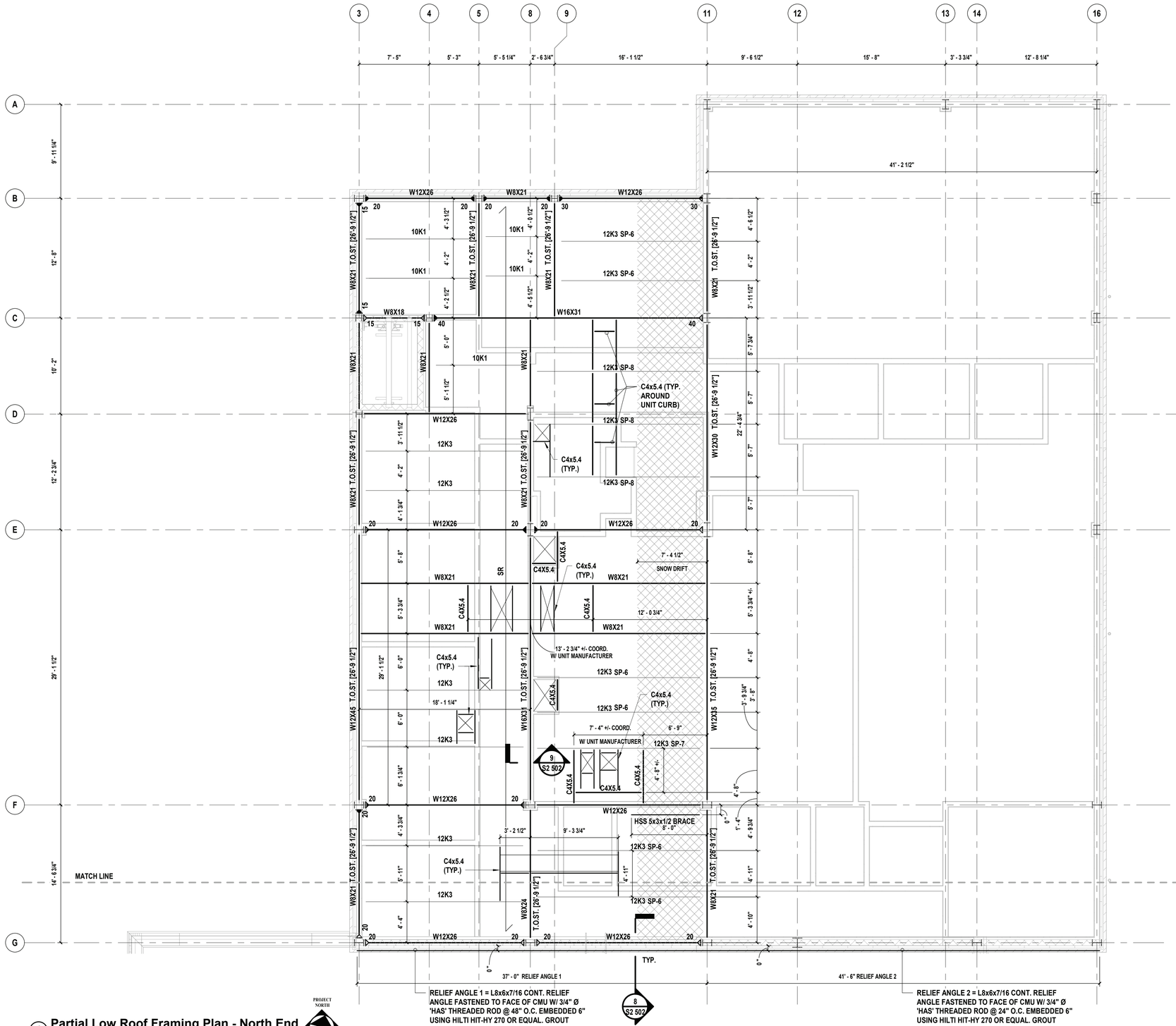
LEGEND:

T.O.ST. = TOP OF STEEL
E.O.D. = EDGE OF DECK
U.O.N. = UNLESS OTHERWISE NOTED


3
4
5
8
9
11
12
13
14
16
7' - 5"
5' - 3"
5' - 5 1/4"
2' - 6 3/4"
16' - 1 1/2"
9' - 6 1/2"
15' - 8"
3' - 3 3/4"
12' - 8 1/4"
A
B
C
D
E
F
G
9' - 11 1/4"
12' - 8"
10' - 2"
12' - 2 3/4"
29' - 1 1/2"
14' - 6 3/4"
41' - 2 1/2"
W12X26
W8X21
W12X26
W8X18
W16X31
W12X26
W12X26
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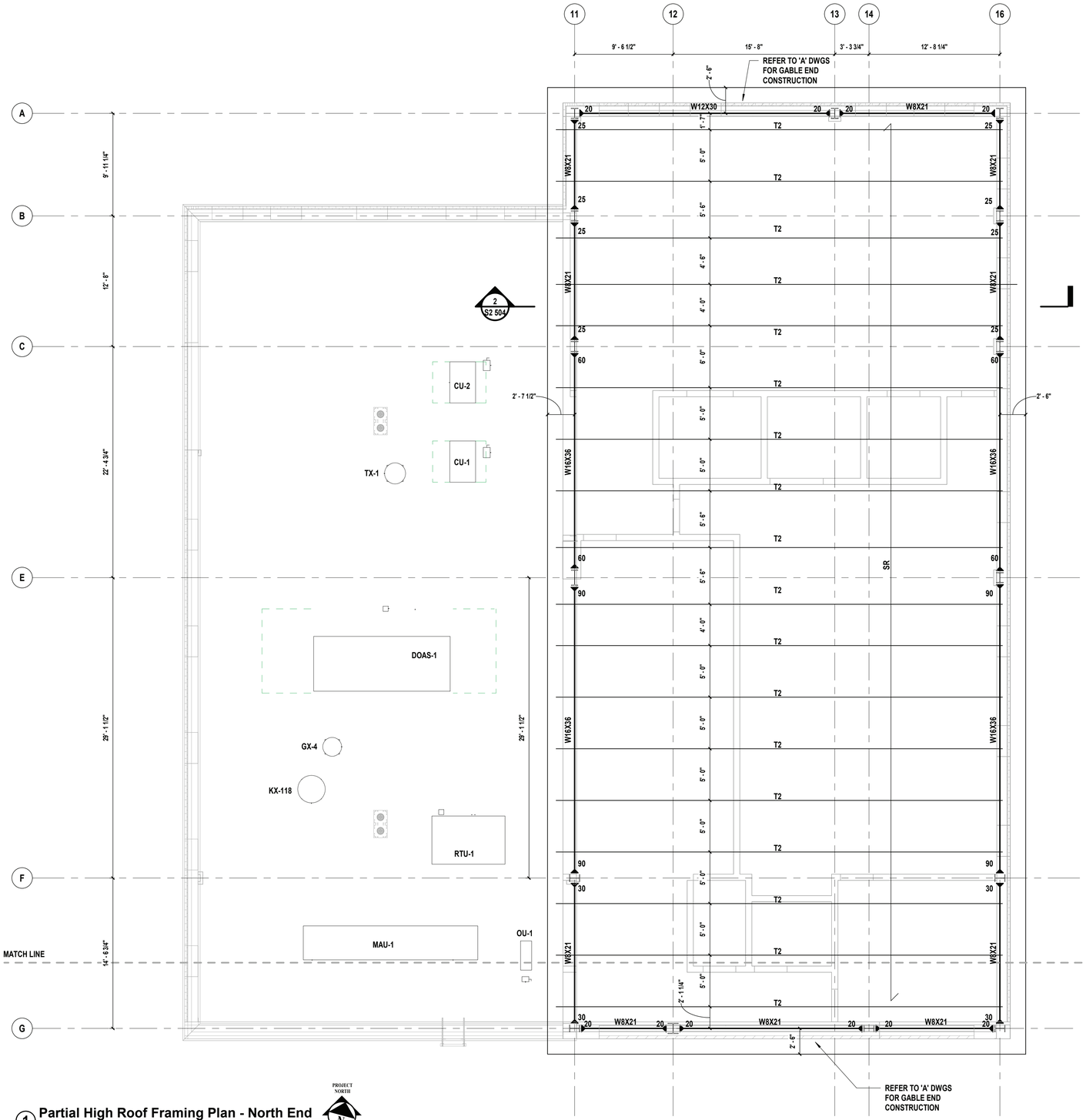


1 **Partial High Roof Framing Plan - North End**
SCALE: 3/16" = 1'-0"

PROJECT NORTH

ROOF FRAMING NOTES:

1. TOP OF STEEL SHALL BE SET AT [30'-0"] ABOVE FINISHED FIRST FLOOR ELEVATION, UNLESS OTHERWISE NOTED AS THUS [ ].
2. SR — INDICATES SPAN OF 1.5B 20GA. METAL ROOF DECK AS MANUFACTURED BY VULCRAFT NUCOR OR APPROVED EQUAL W/ 3/4" EXTERIOR GRADE PLYWOOD.
3. INSTALL BRIDGING FOR BAR JOISTS AS PER S.J.I. REQUIREMENTS.
4. COORDINATE ALL ROOF TOP EQUIPMENT & OPENINGS WITH 'M' & 'A' DWGS, AS WELL AS WITH APPROVED SHOP DRAWINGS. LOCATIONS AND SIZES INDICATED ARE APPROXIMATE AND SHALL BE COORDINATED.
5. INDICATES BEAM TO COLUMN MOMENT CONNECTION WITH THE NUMBER REPRESENTING THE ASD MOMENT CAPACITY IN FT-KIPS
6. STEEL CONNECTION PIECE DETAILS SHALL BE SUBMITTED WITH CALCULATIONS SIGNED AND SEALED BY A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. CONNECTION DESIGNER SHALL DESIGN ALL MOMENT CONNECTIONS AND SIMPLE SHEAR CONNECTIONS NOT SHOWN ON THE DRAWINGS. WHERE DESIGN SHEAR REACTION IS NOT LISTED ON DRAWINGS, IT SHALL BE DETERMINED BY THE CONNECTION DESIGNER AS THE MAXIMUM REACTION RESULTING FROM THE INDICATED BEAM SECTION BEING FULLY LOADED WITH MAXIMUM ALLOWABLE UNIFORM LOADS AS SPECIFIED IN AISC SPECIFICATION. WHERE AXIAL FORCE IN BEAMS IS NOT LISTED ON DRAWINGS, IT SHALL BE TAKEN AS 10KIPS ASD. ALL CONNECTIONS SHALL BE DESIGNED CONSIDERING AXIAL, SHEAR AND MOMENT FORCES SIMULTANEOULSY AS REQUIRED BY BUILDING CODE. SEE STRUCTURAL STEEL SPECIFICATION FOR ADDITIONAL LOADING DESIGN REQUIREMENTS.
6. REFER TO SHEET S2504 FOR TRUSS LOADING DIAGRAM & NOTES.
7. ALL LIGHT GAUGE EXTERIOR STUD WALLS, BOX HEADERS, CANOPY CONNECTION POINTS, AND SILLS SHALL BE DESIGNED BY THE COLD FORMED STEEL FABRICATOR. THE FABRICATOR'S ENGINEER SHALL SUBMIT A FULL SET OF CALCULATIONS AFFIXED WITH A NEW YORK STATE P.E.'S SIGN & SEAL TO THE A/E OF RECORD TO REVIEW. DESIGN OF COLD-FORMED STEEL FRAMING SHALL INCLUDE CONSIDERATION FOR ALL APPLICABLE LOADS AS SHOWN ON SHEET S2 100.00 AND SHALL BE IN CONFORMANCE WITH THE BUILDING CODE OF NEW YORK STATE. EXTERIOR CLADDING SYSTEMS AND ANCILLARY STRUCTURES INCLUDING CANOPIES SUPPORTED BY THE COLD FORMED STEEL SYSTEM SHALL BE CONSIDERED ACCORDINGLY. REFER TO SPECIFICATION 054000 FOR ADDITIONAL REQUIREMENTS.

H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK · SCOTT D LEHN · 087145 · LICENSED PROFESSIONAL ENGINEER

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
MDH	MDH		

PROJECT No:	DATE:	SCALE:
VGFD2001	JULY 2022	AS SHOWN

CLIENT
VAILS GATE FIRE DISTRICT

New Storage Building (Phase I)
New Fire Station (Phase II)

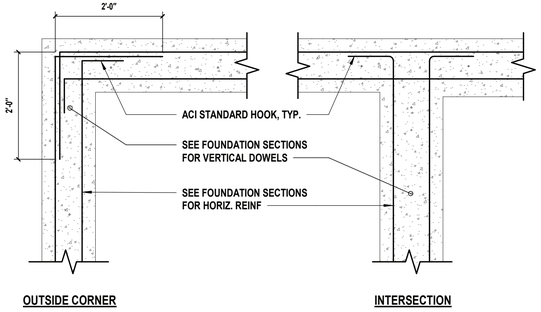
872 Blooming Grove Turnpike
New Windsor, NY 12553

CONTRACT
CONTRACT G
GENERAL CONSTRUCTION

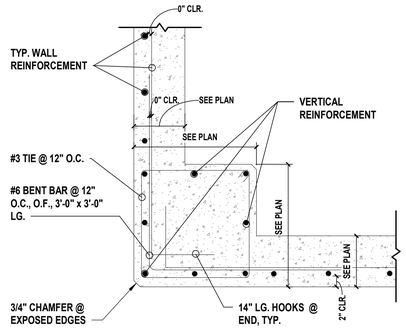
STATUS
FINAL BID DOCUMENT

SHEET TITLE
STRUCTURAL
PARTIAL HIGH ROOF FRAMING PLAN - NORTH END

DRAWING No.
S2 125.00



1 Typical Corner Reinforcement at Foundation Wall or Footing
SCALENTS

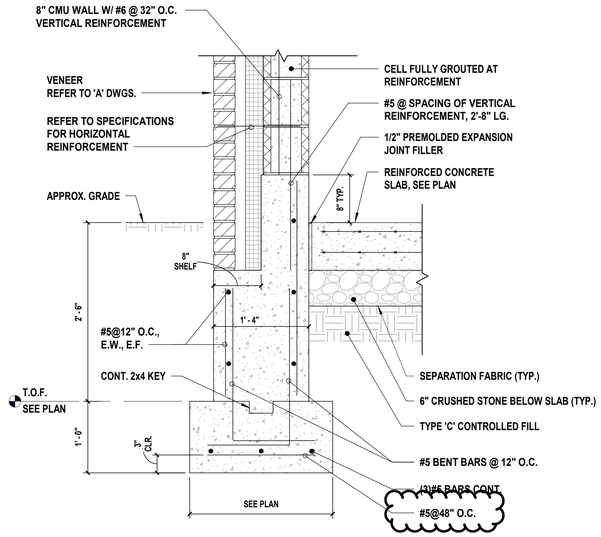


PLAN VIEW

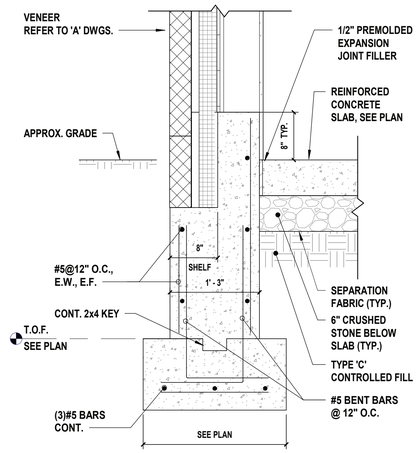
NOTE:

1. CONDITION AT SINGLE LAYER OF WALL REINFORCEMENT SHOWN. DOUBLE LAYER REINFORCEMENT CONDITION SIMILAR. 3'-0" x 3'-0" LONG BENT BARS REQUIRED AT OUTSIDE FACE ONLY.

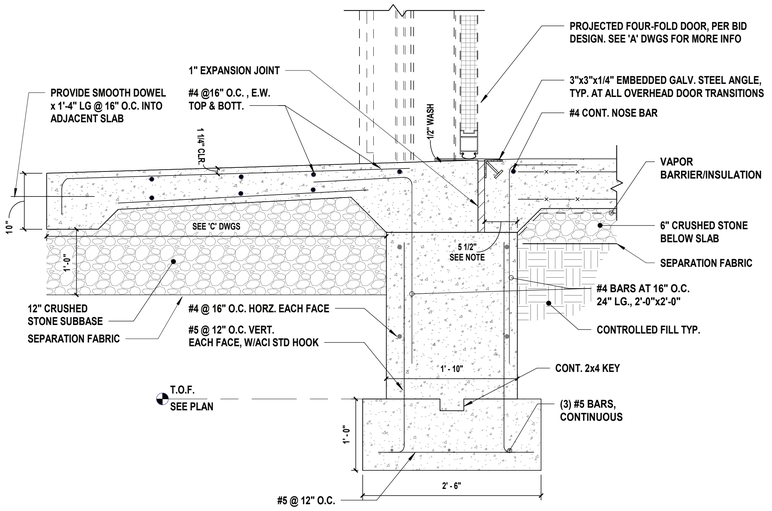
2 Typical Corner Pier/Foundation Wall Intersection
SCALEN T S



3 Typical Exterior Foundation Wall at CMU w/ Brick
SCALE: 1" = 1'-0"

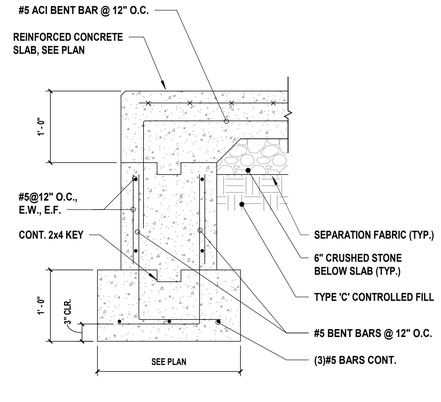


4 Typical Exterior Foundation Wall at CFS w/ Brick
SCALE: 1" = 1'-0"

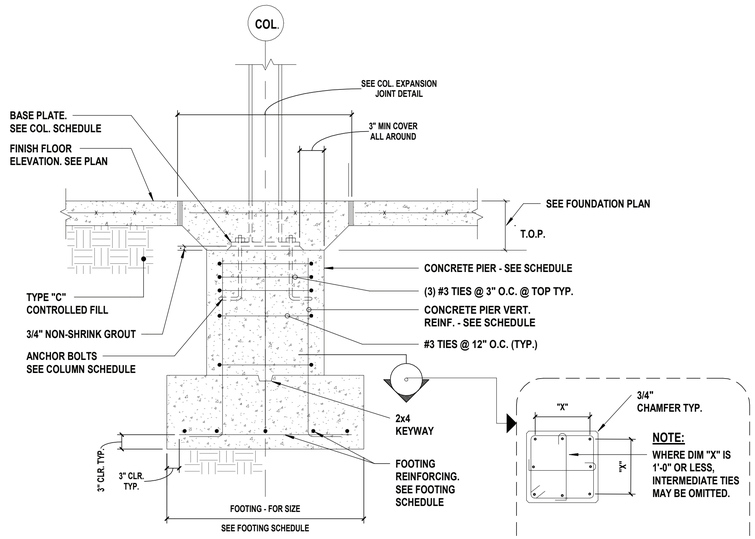


NOTE: THE LOCATIONS OF THE EDGE OF THE INTERIOR SLAB IS SUBJECT TO CHANGE BASED ON THE BID DOOR DESIGN. CONTRACTOR TO COORDINATE AND CONFIRM

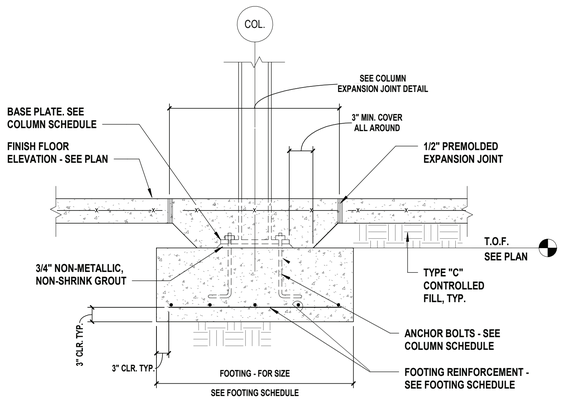
5 Section at Door Apron at Overhead Doors
SCALE:N.T.S.



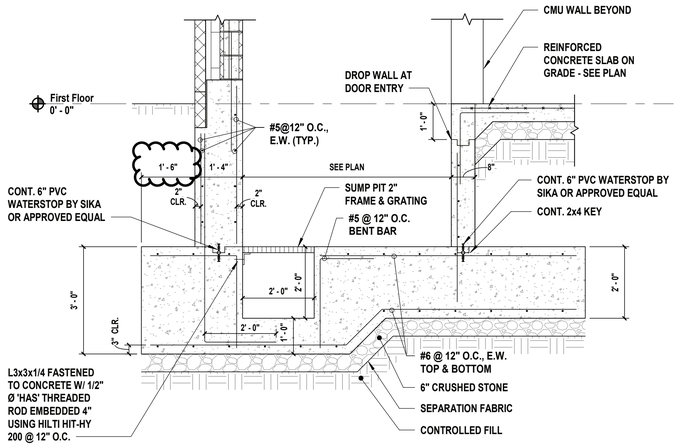
6 Typical Haunched Slab at Doorways
SCALE: 1" = 1'-0"



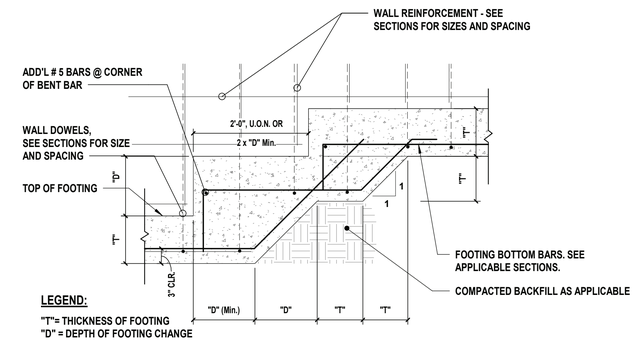
7 Typical Interior Column w/ Concrete Pier
SCALE:N.T.S.



8 Typical Interior Column Footing Detail
SCALENTS



9 Section at Elevator Foundation
SCALE: 1/2" = 1'-0"



LEGEND:

"T"= THICKNESS OF FOOTING
"D" = DEPTH OF FOOTING CHANGE

10 Typical Stepped Footing Detail
SCALE:N.T.S.

H 2 M architects + engineers

538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION
2	12/22/2022	REVS. PER TOWN COMMENTS

STATE OF NEW YORK · SCOTT D. LEHN · LICENSED PROFESSIONAL ENGINEER · 087145

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
MDH	MDH		

PROJECT No:	DATE:	SCALE:
VGFD2001	JULY 2022	AS SHOWN

CLIENT

VAILS GATE FIRE DISTRICT

New Storage Building (Phase I)
New Fire Station (Phase II)

872 Blooming Grove Turnpike
New Windsor, NY 12553

CONTRACT

CONTRACT G
GENERAL CONSTRUCTION

STATUS

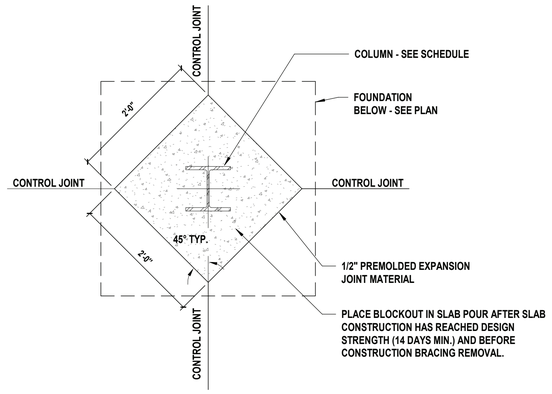
FINAL BID DOCUMENT

SHEET TITLE

STRUCTURAL DETAILS

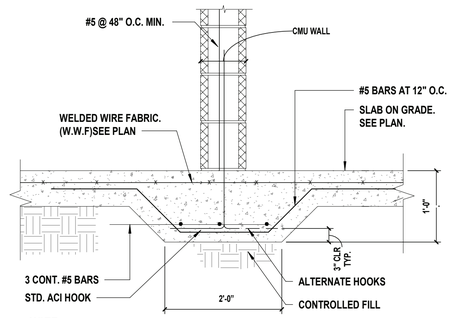
DRAWING No.

S2 500.02



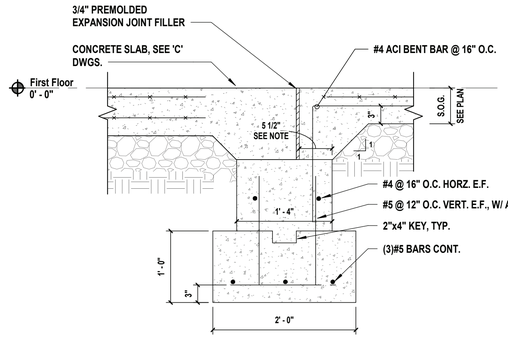
DIAMOND BLOCKOUT AROUND COLUMN

1 Typical Column Expansion Joint Detail
SCALENTS



NOTE
VAPOR BARRIER TO BE CONTINUOUS UNDER THICKENED SLAB.

2 Typical Haunched Slab at Masonry Partition
SCALENTS



NOTE:
THE LOCATION OF EDGE OF THE INTERIOR SLAB IS SUBJECT TO CHANGE BASED ON TH
EBUD DOOR DESIGN. CONTRACTOR TO COORDINATE AND CONFIRM.

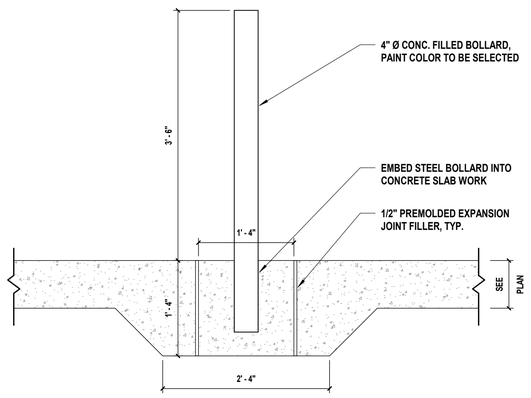
3 Typical Section at Slab Transition
SCALE: 1" = 1'-0"

4 Slab On-grade w/ Radiant Heating - Apparatus Bay Slab
SCALE:N.T.S.

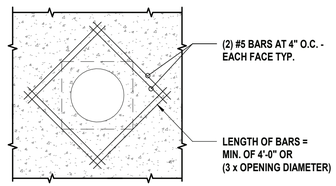
NOTE: THIS DETAIL IS APPLICABLE TO TRENCH DRAIN ENDS TOO

5 Typical Slab Re-Entrant Corner Reinforcement
SCALE:N.T.S.

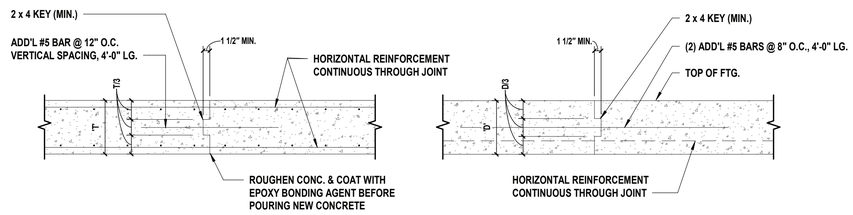
6 Trench Drain Detail
SCALE: N.T.S.



7 Interior Bollard Detail
SCALE: N.T.S.



8 Typical Pipe Penetration at Wall or Slab
SCALENTS



VERTICAL CONSTRUCTION JOINT IN WALL

VERTICAL CONSTRUCTION JOINT
IN CONTINUOUS FOOTING

NOTES:
1) KEY WIDTH NOT TO EXCEED 1/3 WIDTH OF WALL
2) VERTICAL CONSTRUCTION JOINT PERMITTED IN WALL AT ANY POINT 4'-0" MIN. AWAY FROM FACE OF SUPPORTING PIER OR WALL OPENING
3) PROVIDE ONE VERTICAL CONSTRUCTION JOINT FOR EVERY 40'-0" OF STRAIGHT RUN OF WALL
4) SUBMIT CONSTRUCTION JOINT LAYOUT FOR ALL CONCRETE STRUCTURES FOR ENGINEER'S REVIEW

9 Typical Construction Joint Details
SCALENTS

H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK
SCOTT D LEHN
087145
LICENSED PROFESSIONAL ENGINEER

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GENERAL CONSTRUCTION

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FINAL BID DOCUMENT

SHEET TITLE
STRUCTURAL
DETAILS

DRAWING No.
S2 501.00

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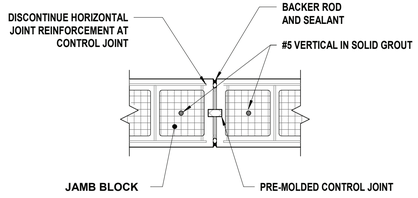
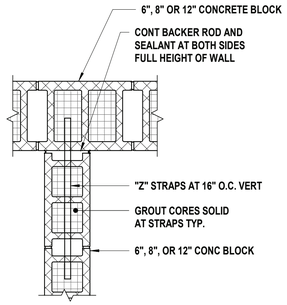
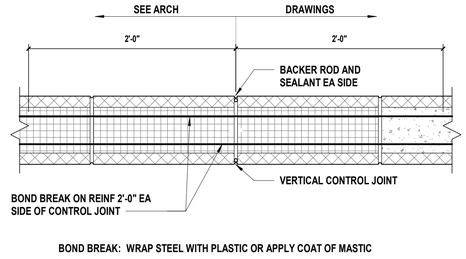


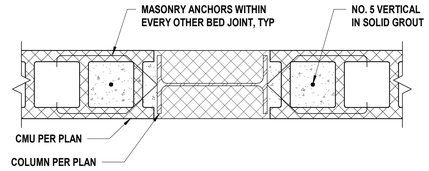
1 Typical CMU Wall Control Joint
SCALE:N.T.S.



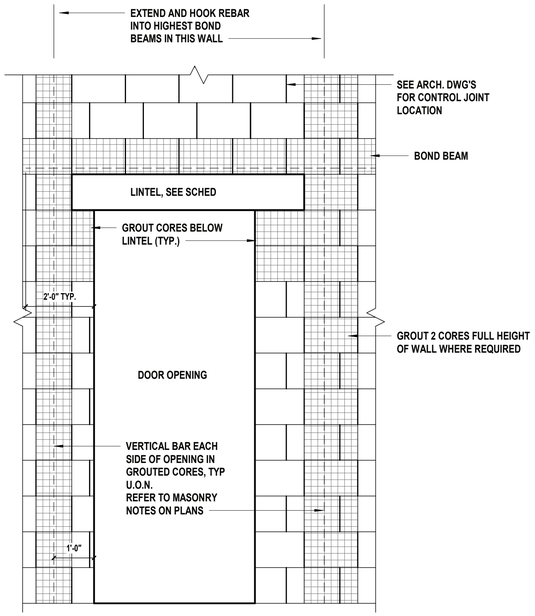
2 Typical CMU Block Intersection
SCALE:N.T.S.



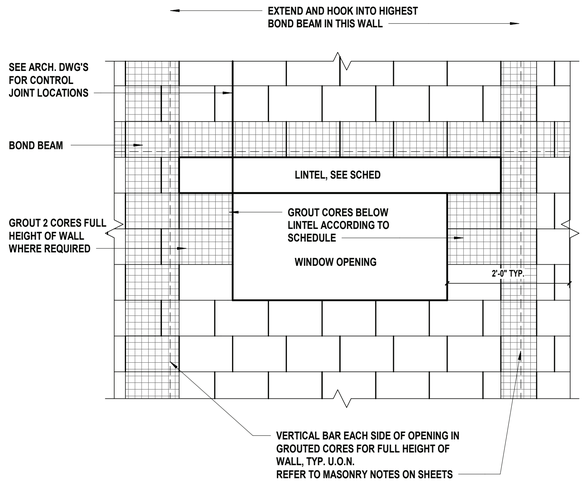
3 Typical CMU Bond Beam at Vertical Control Joint
SCALE:N.T.S.



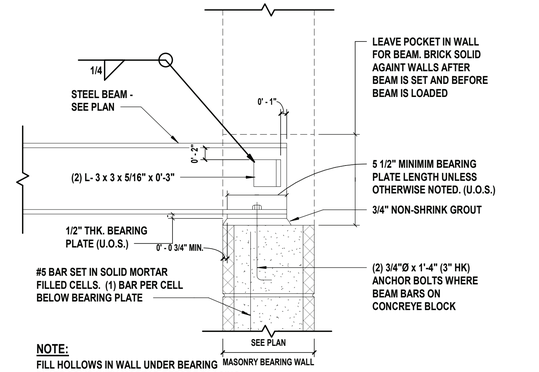
4 Typical CMU Detail at Columns
SCALE:N.T.S.



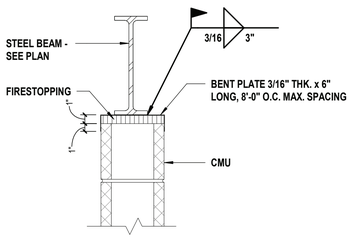
5 Typical CMU Reinforcing at Door Openings
SCALE:N.T.S.



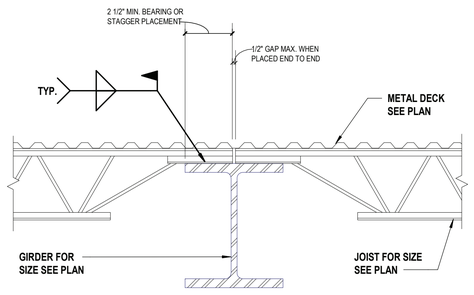
6 Typical CMU Reinforcing at Window or Louver Opening
SCALE:N.T.S.



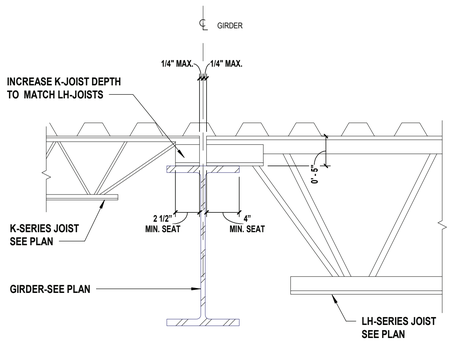
7 Typical Beam Bearing on CMU Wall
SCALE: 1" = 1'-0"



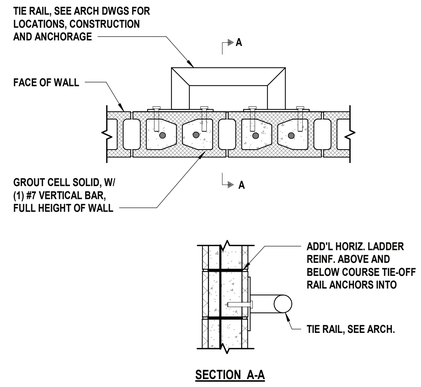
8 Typical Beam Bracing Top of CMU Wall
SCALE:NTS



9 Typical Joist Bearing On Steel Girder
SCALE:NTS



10 Typical K-Series and LH-Series Joists Bearing On Steel Girder
SCALE:NTS



11 Tie Off Rail at Mezzanine Wall
SCALE: 1" = 1'-0"

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Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK · SCOTT D LEHN · 087145 · LICENSED PROFESSIONAL ENGINEER

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
MDH	MDH		

PROJECT No:	DATE:	SCALE:
VGFD2001	JULY 2022	AS SHOWN

CLIENT

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New Fire Station (Phase II)

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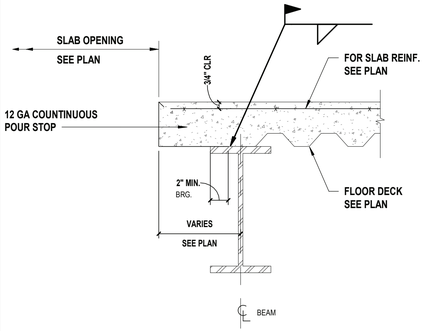
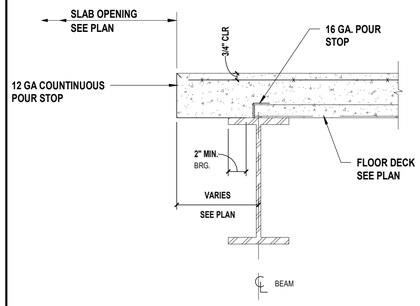
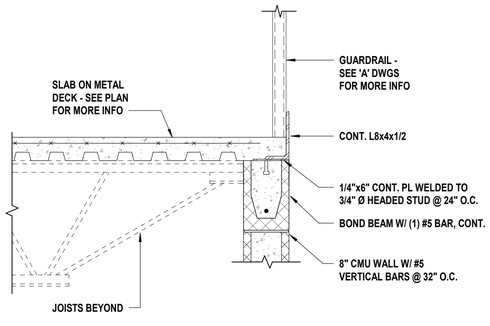


DECK SPAN PARALLEL TO BEAM

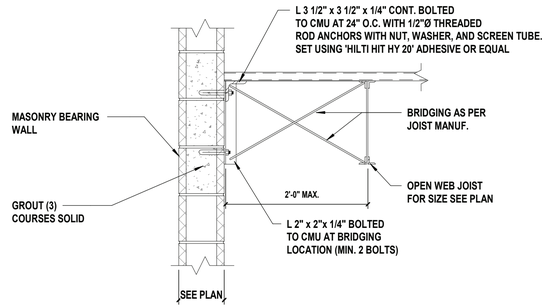


DECK SPAN PERPENDICULAR TO BEAM

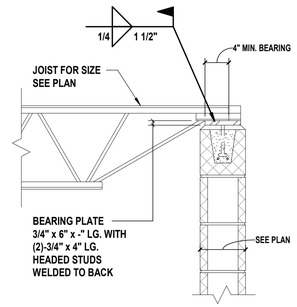
1 Typical Pour Stop Details At Slab Openings
SCALE: 1 1/2" = 1'-0"



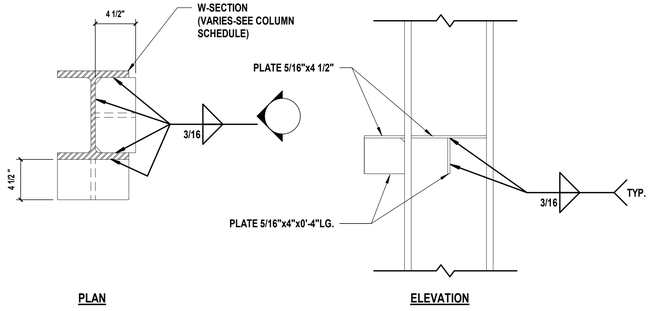
2 Typical Guardrail Attachment at Mezzanine
SCALEN T S



3 Typical Deck Support And Joist Bridging at CMU Wall
SCALE:N.T.S.

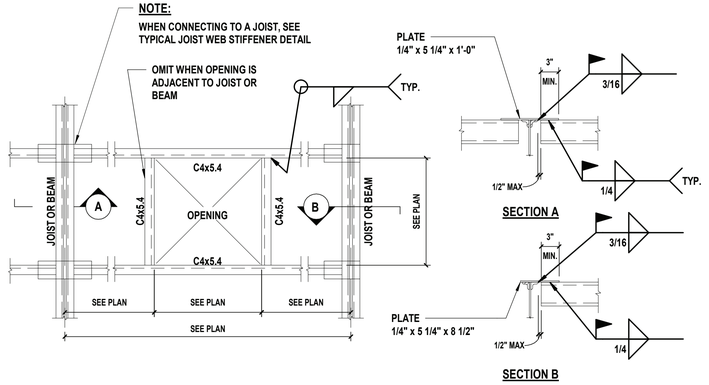


4 Typical Joist Bearing on CMU Wall
SCALENTS

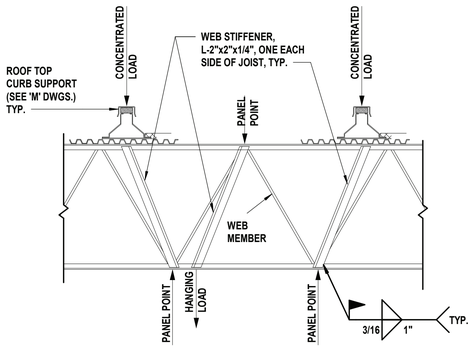


PLAN ELEVATION

5 Typical Joist Seat At Column Web or Flange
SCALENTS

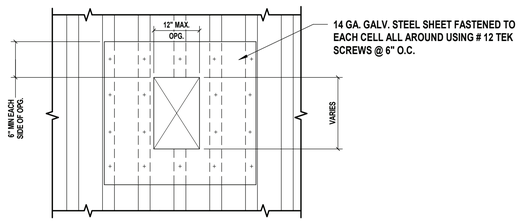


6 Typical Framed Roof Opening (Top Flange Tabs)
SCALENTS



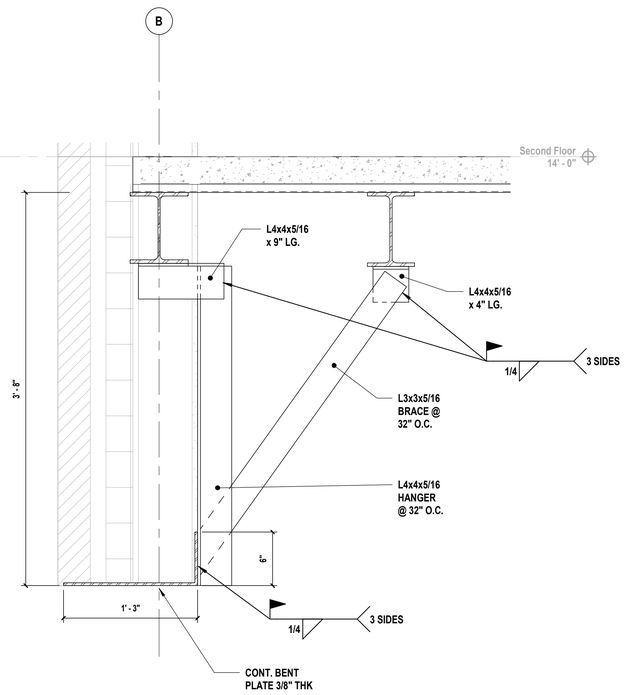
NOTE:
FIELD APPLIED WEB STIFFERNERS ARE TO BE INSTALLED AT ALL CONCENTRATED LOADS AND HUNG LOADS NOT OCCURING AT JOISTS PANEL POINTS.

7 Typical Joist Web Stiffeners
SCALE: NTS

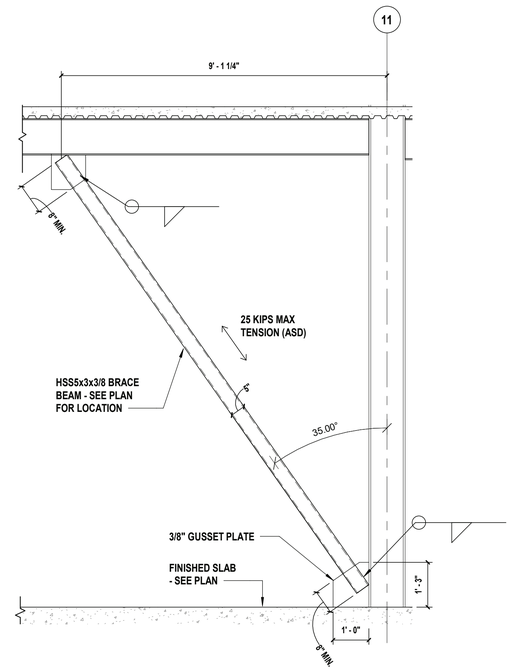


NOTE:
FOR HOLES 6"Ø OR LESS NO REINFORCEING IS REQUIRED UNLESS OTHERWISE INDICATED.

8 Typical Deck Support Openings To 12" Perpendicular To Flutes
SCALENTS



9 Section at Steel Hung System
SCALE:1 1/2" = 1'-0"



10 Typical Brace Framing Section
SCALE:N.T.S.

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STATE OF NEW YORK
SCOTT D LEHN
087145
LICENSED PROFESSIONAL ENGINEER

*ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL IS ILLEGAL

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MDH	MDH		

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New Fire Station (Phase II)

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New Windsor, NY 12553

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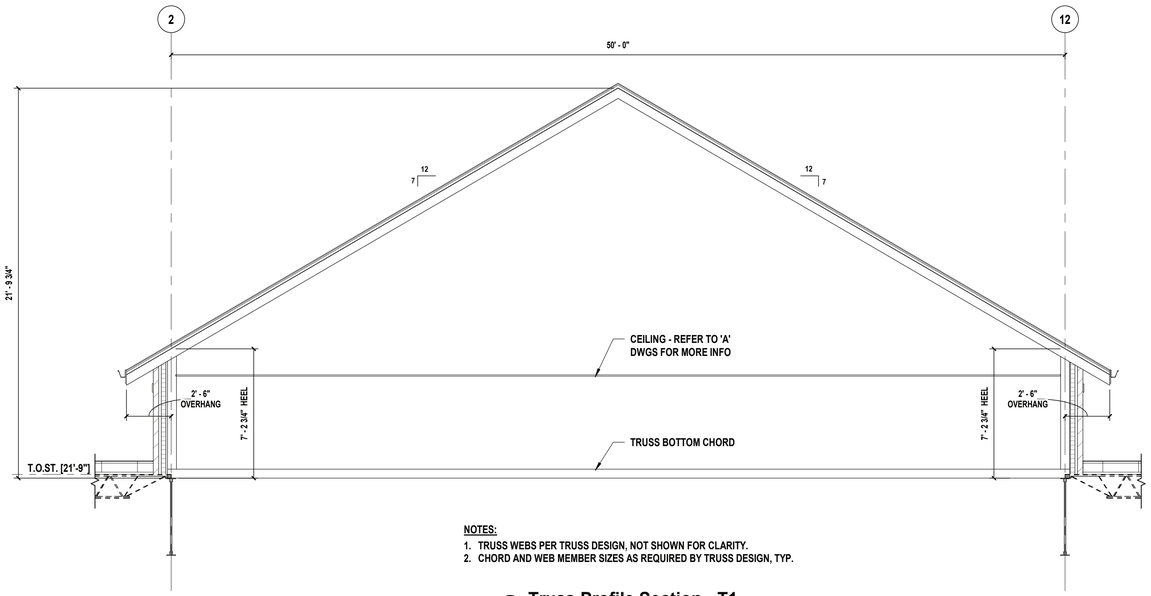
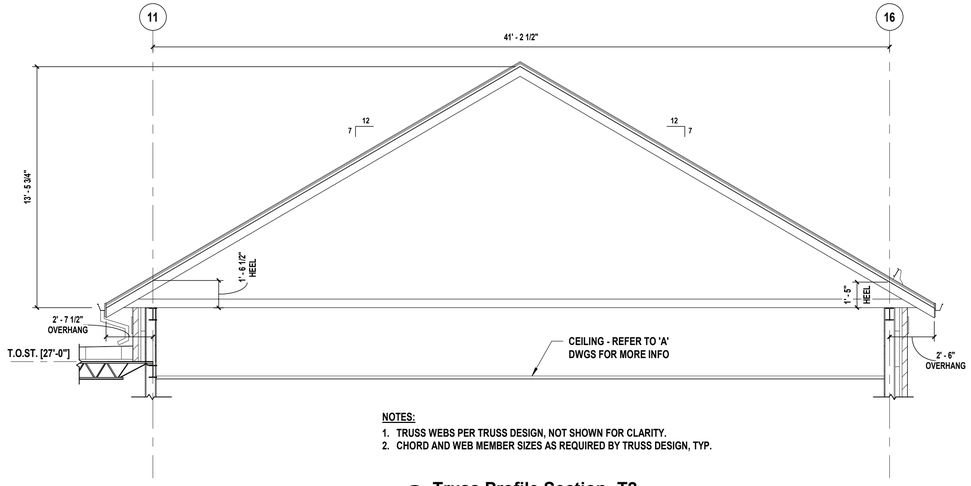


NOTES:
1. TRUSS WEBS PER TRUSS DESIGN, NOT SHOWN FOR CLARITY.
2. CHORD AND WEB MEMBER SIZES AS REQUIRED BY TRUSS DESIGN, TYP.

1 Truss Profile Section - T1
SCALE: 1/4" = 1'-0"



NOTES:
1. TRUSS WEBS PER TRUSS DESIGN, NOT SHOWN FOR CLARITY.
2. CHORD AND WEB MEMBER SIZES AS REQUIRED BY TRUSS DESIGN, TYP.

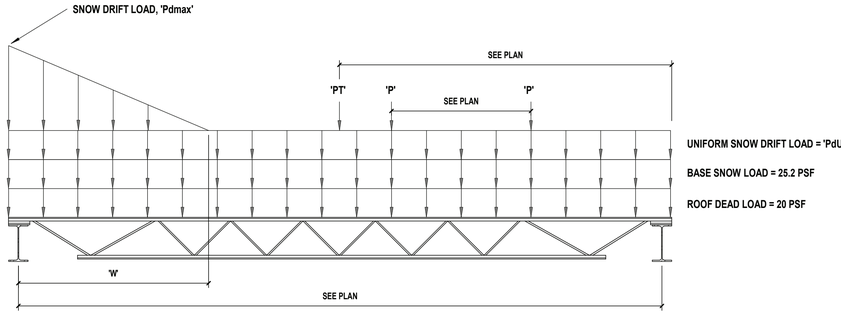
2 Truss Profile Section- T2
SCALE: 1/4" = 1'-0"

NOTES:
1. TRUSS WEBS PER TRUSS DESIGN, NOT SHOWN FOR CLARITY.
2. CHORD AND WEB MEMBER SIZES AS REQUIRED BY TRUSS DESIGN, TYP.

3 Truss Profile Section - T3
SCALE: 1/4" = 1'-0"

PRE-ENGINEERED TRUSS NOTES:

1. COLD FORMED STEEL ROOF TRUSSES SHALL BE DESIGNED AND FABRICATED BY A SHOP OR FABRICATOR SPECIALIZING IN THIS WORK, AND UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED IN NYS. DRAWINGS & CALCULATIONS SHALL BE SUBMITTED AFFIXED WITH A LICENSED NYS PE SIGN & SEAL.
2. TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN CONFORMANCE WITH AISI & BCNYS.
3. THE TRUSS DESIGN SHALL INCLUDE TRUSS FRAMING CONFIGURATION AS SHOWN INCLUDING TRUSS ANCHORAGE, BLOCKING, CURBING, MISC. FRAMING, AND ALL TEMPORARY AND PERMANENT BRACING.
4. THE CONTRACTOR SHALL RETAIN A LICENSED PROFESSIONAL ENGINEER FOR THE DESIGN OF ALL PORTIONS AND COMPONENTS OF THE ROOF FRAMING EXCLUDED BY THE TRUSS SUPPLIER. A COMPLETE DESIGN PACKAGE SHALL BE SUBMITTED FOR REVIEW AND COMMENT BEFORE FABRICATION BEGINS.
5. TRUSSES SHALL BE MANUFACTURED, HANDLED, AND ERECTED IN A MANNER TO PRECLUDE EXCESSIVE LATERAL BENDING STRESSES.
6. TRUSSES SHALL BE ANCHORED TO TOP WALL PLATES, GIRDER TRUSSES, AND OTHER BEARING SURFACES WITH APPROVED CONNECTIONS.
7. FIELD CUTTING AND/OR MODIFICATION OF TRUSSES IS PROHIBITED.
8. ANY AND ALL DAMAGED TRUSSES SHALL BE REPLACED WITH NEW TRUSSES OR SHALL BE REPAIRED ONLY BY DETAILS PREPARED BY THE TRUSS MANUFACTURER. REPAIR DETAILS SHALL BE SEALED BY THE PROFESSIONAL ENGINEER RESPONSIBLE FOR THE ORIGINAL TRUSS DESIGN, AND SHALL BE SUBMITTED FOR REVIEW AND COMMENT BEFORE ANY REPAIRS ARE UNDERTAKEN.
9. TEMPORARY BRACING IS THE FULL RESPONSIBILITY OF THE CONTRACTOR.
10. PERMANENT TRUSS BRACING SHALL BE DESIGNED BY THE TRUSS MANUFACTURER OR ANOTHER LICENSED PROFESSIONAL ENGINEER. THE DESIGN SHALL INDICATE MEMBER SIZES, PLACEMENT, AND CONNECTIONS. THE PACKAGE SHALL COMPLETELY DETAIL ALL COMPRESSION WEB BRACING, AS WELL AS MINIMUM PERMANENT BRACING CONSISTING OF:
    A. CONTINUOUS HORIZONTAL LONGITUDINAL BRACING ALONG BOTTOM CHORDS AT 10FT O.C. MAX.
    B. W-BRACING ASSEMBLIES AT BOTTOM CHORDS LATERALLY ALONG LENGTH OF TRUSSES; W-DIAGONALS
    C. DIAGONAL GABLE END BRACING AT 10FT O.C. MAX OVER THE WIDTH OF THE BUILDING.
    D. LONGITUDINAL CROSS BRACING ASSEMBLIES ALONG TRUSS WEBS AT 10FT O.C. MAX LATERALLY, AND 20FT O.C. MAX LONGITUDINALLY.
11. REFER TO SPEC 054400 FOR MORE INFO.



NOTES:
1. LOADS PRESENT ON ALL JOISTS, SEE ROOF FRAMING PLAN FOR LOCATIONS
2. REFER TO JOIST LOAD TABLE FOR THE SNOW DRIFT LOADING PRESENT AT EACH DESIGNATED JOIST.

SPECIAL JOIST LOADING INFO					
JOIST DESIGNATION	'W'	'Pdmax'	'PdU'	'P'	'PT'
SP-1	7.75 FT	30.55 PSF	-	-	-
SP-2	7.75 FT	30.55 PSF	67.03 PSF	-	-
SP-3	-	-	67.03 PSF	-	-
SP-4	10.11 FT	45.26 PSF	-	-	-
SP-5	10.11 FT	45.26 PSF	65.85 PSF	-	-
SP-6	6.90 FT	38.32 PSF	-	-	-
SP-7	6.90 FT	38.32 PSF	-	272 LBS	-
SP-8	6.90 FT	38.32 PSF	-	200 LBS	-
SP-9	N/A	N/A	-	DL = 320 LBS LL = 640 LBS	-
SP-10	N/A	N/A	-	-	400 LBS

4 Joist Loading Diagram
SCALE: N.T.S.

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Melville, NY 11747
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COLUMN SCHEDULE

COLUMN DESIGNATION	A					B					C				D		E				F					G							H	I	J		K			L							M	
	5	9	11	13	16	3	5	9	11	16	3	4	11	16	3	8	3	8	11	16	3	8	11	13	16	1	2	3	8	11	12	14	16	7	1	14	16	1	14	16	1	2	6	10	12	14	16	15	16
F.F. [0'-0"]	+9'-4" HSS5x5x3/8	+9'-4" HSS5x5x3/8	+30'-0" W12x50	+30'-0" W12x50	+30'-0" W12x50	+27'-0" W12x50	+27'-0" W8x40	+27'-0" W8x40	+30'-0" W12x50	+30'-0" W12x50	+27'-0" W8x40	+27'-0" W8x40	+30'-0" W12x50	+30'-0" W12x50	+27'-0" W8x40	+27'-0" W16x45	+27'-0" W12x50	+27'-0" W16X45	+30'-0" W18X65	+30'-0" W12X50	+27'-0" W12X50	+27'-0" W12X50	+27'-0" W12X50	+13'-9" W12X50	+30'-0" W12X50	+21'-9" W12X50	+21'-9" W12X72	+27'-0" W12X50	+27'-0" W12X50	+30'-0" W12X50	+30'-0" W12X72	+30'-0" W12x50	+30'-0" W12x50	+21'-9" W8x28	+21'-9" W12x50	+21'-9" W12x50	+15'-0" W12x50	+21'-9" W12x50	+21'-9" W12x50	+15'-0" W12x50	+21'-9" W12x50	+21'-9" W12x72	+21'-9" W12x50	+21'-9" W12x50	+21'-9" W12x72	+27'-4" W12x50	+27'-4" W12x50	+27'-4" W8x28	+27'-4" W8x28
	[0'-3/4"]	[0'-3/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-11 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-11 1/4"]	[0'-7 1/4"]	[0'-11 1/4"]	[0'-11 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-11 1/4"]	[0'-11 1/4"]	[0'-11 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-11 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]	[0'-7 1/4"]
BASE PLATE	BP1	BP1	BP2	BP2	BP2	BP2	BP1	BP1	BP2	BP2	4/S600	BP1	BP3	BP3	BP1	BP5	BP2	BP5	BP6	BP3	BP2	BP2	BP4	BP2	BP2	BP2	BP7	BP2	BP2	BP2	BP7	BP2	BP2	BP1	BP2	BP2	BP2	BP2	BP2	BP2	BP2	BP7	BP2	BP2	BP7	BP2	BP2	BP1	BP1
FOOTING	F1	F1	F2	F1	F1	F1	F1	F1	F2	F2	N/A	N/A	F4	F3	N/A	F1	F1	F2	F5	F4	F1	F2	F4	F1	F2	F1	F6	F6	F2	F2	F3	F2	F2	F1	F1	F1	F1	F1	F1	F1	F1	F3	F1	F1	F3	F1	F2	F1	F1
COLUMN PIER	CP3	CP3	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP3	CP3	CP1	CP1	CP1	N/A	CP1	N/A	N/A	CP1	CP1	N/A	N/A	N/A	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP1	CP2	CP2	CP2	CP2	CP1	CP1	CP1	CP1

NOTES:

1. INDICATES TOP OF COLUMN/TOP PLATE
2. INDICATES BOTTOM OF BASE PLATE
3. SEE BASE PLATE DETAIL AND SCHEDULE TO DETERMINE BOTTOM OF COLUMN ELEVATION.
4. SEE "FOOTING SCHEDULE" FOR FOOTING SIZE AND REINFORCING.
5. ALL BASE PLATES TO BEAR ON CONCRETE SHALL BE SHIMMED USING 3/4" NON-METALLIC, NON-SHRINK GROUT.

FOOTING SCHEDULE

FOOTING TYPE	SIZE	THICKNESS	REINFORCEMENT	COMMENTS
F1	4'-0"x4'-0	12"	(5) #5 BARS BOTT, E.W.	-
F2	5'-0"x5'-0	12"	(6) #5 BARS BOTT, E.W.	-
F3	6'-0"x6'-0	12"	(7) #5 BARS BOTT, E.W.	-
F4	6'-0"x6'-0	15"	(7) #5 BARS T & B, E.W.	-
F5	7'-0"x7'-0	15"	(7) #6 BARS T & B, E.W.	-
F6	6'-0"x9'-0	15"	#6 @ 12" O.C., T & B E.W.	-

COLUMN PIER SCHEDULE

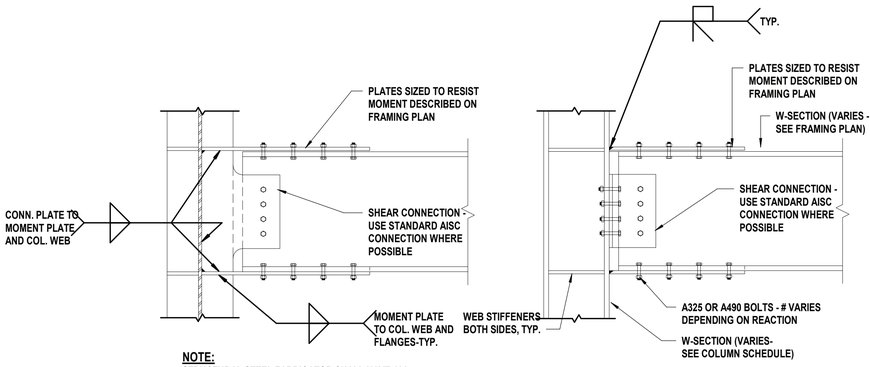
MARK	SIZE	REINFORCEMENT	TIES	ADD'L NOTES
CP1	24" x 24"	(3) #6 BARS E.F. - (6 BARS TOTAL)	#3 BARS @ 12" O.C.	
CP2	24" x 32"	(3) #6 BARS N-S (4) #6 BARS E-W (10 BARS TOTAL)	#3 BARS @ 12" O.C.	
CP3	16" x 16"	(2) #6 BARS E.F. - (4 BARS TOTAL)	#3 BARS @ 12" O.C.	

BASE PLATE SCHEDULE

MARK	WIDTH 'W'	LENGTH 'L'	THICKNESS	NOTES
BP1	10"	10"	1/2"	1&2
BP2	10"	14"	1/2"	1&2
BP3	10"	14"	5/8"	1&2
BP4	10"	18"	1"	1&2
BP5	10"	18"	1/2"	1&2
BP6	10"	22"	5/8"	1&2
BP7	14"	16"	5/8"	1&2

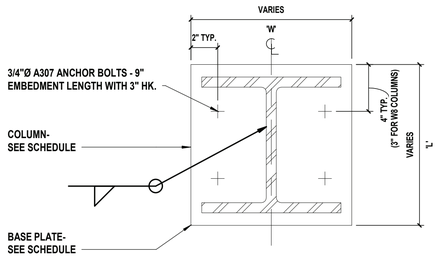
NOTES:

1. PROVIDE 3/4"Ø ASTM A307 ANCHOR BOLTS FOR NON-MOMENT BASE PLATE.
2. REFER TO BASE PLATE DETAIL FOR ANCHOR BOLT LOCATIONS.

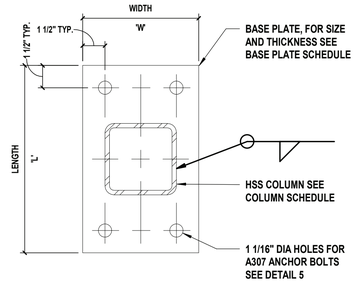


NOTE:
STRUCTURAL STEEL FABRICATOR SHALL HAVE ALL CONNECTIONS NOT DETAILED ON DRAWINGS DESIGNED BY A LICENSED STRUCTURAL ENGINEER. STEEL SHOP DRAWINGS SHALL BEAR SIGNATURE AND SEAL OF SAID ENGINEER.

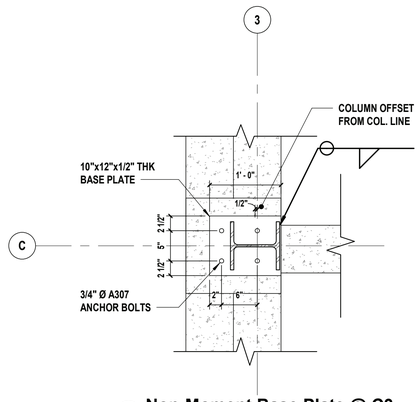
1 **Typical Beam to Column Moment Connection**
SCALE:N.T.S.



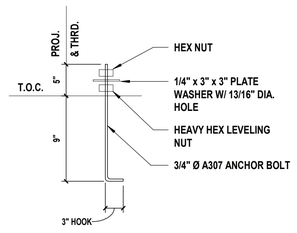
2 **Typical W-Section Non-Moment Base Plate**
SCALE:N.T.S.



3 **Typical HSS Non-Moment Base Plate**
SCALE:N.T.S.



4 **Non-Moment Base Plate @ C3**
SCALE: 1" = 1'-0"



5 **Typical Anchor Bolt Detail**
SCALE: N.T.S.

H 2 M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
631.756.8000 • www.h2m.com

CONSULTANTS:

MARK	DATE	DESCRIPTION

STATE OF NEW YORK · SCOTT D LEIN · 087145 · LICENSED PROFESSIONAL ENGINEER

*ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL IS ILLEGAL

DESIGNED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:
MDH	MDH		

PROJECT No:	DATE:	SCALE:
VGFD2001	JULY 2022	AS SHOWN

CLIENT

VAILS GATE FIRE DISTRICT

New Storage Building (Phase I)
New Fire Station (Phase II)

872 Blooming Grove Turnpike
New Windsor, NY 12553

CONTRACT

CONTRACT G
GENERAL CONSTRUCTION

STATUS

FINAL BID DOCUMENT

SHEET TITLE

STRUCTURAL
COLUMN SCHEDULE AND DETAILS

DRAWING No.

S2 600.00

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