SYMBOL KEY/LEGEND

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

SECTION NUMBER
SECTION SHEET LOCATION

GENERAL INFORMATION

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. DESIGN LOADS AND CRITERIA USED IN THE DESIGN OF SPECIALTY STRUCTURAL SYSTEMS (i.e. CURTAIN-WALL, LIGHT GAGE STEEL STUDS, ARCHITECTURAL PRECAST CONCRETE, METAL PANELS, ETC.) TO BE DETERMINED BY A THIRD PARTY ENGINEER CONTRACTED BY THE SPECIALTY STRUCTURAL SYSTEM MANUFACTURER IN ACCORDANCE WITH CODE REQUIREMENTS OF GOVERNING JURISDICTION. SPECIALTY ENGINEER IS RESPONSIBLE FOR ALL CONNECTIONS OF THESE SYSTEMS TO THE SUPERSTRUCTURE, INCLUDING, BUT NOT LIMITED TO, ENGINEERING, DETAILING, AND INSTALLATION. IF ALTERATION TO THE SUPERSTRUCTURE ARE REQUIRED AS DETERMINED BY THE E.O.R. TO REINFORCE FOR HIGH CONCENTRATED FORCES APPLIED TO THE SPECIALTY SYSTEM CONNECTION, THE REINFORCEMENT AND COST SHALL BE BORNE BY THE SPECIALTY SUB-CONTRACTOR AND SHALL BE CONSIDERED A PART OF THE SPECIALTY CONNECTION.
2. ALL DETAILS MARKED "TYPICAL" IN THE SET OF STRUCTURAL DRAWINGS SHALL BE APPLIED THROUGHOUT THE PROJECT AS REQUIRED TO SATISFY THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL COORDINATE REQUIREMENTS FOR QUANTITY AND LOCATION WHERE THE "TYPICAL" DETAILS APPLY.
3. FAILURE ON THE PART OF THE CONTRACTOR TO REVIEW THE DRAWINGS OF OTHER DISCIPLINES (i.e. ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, ETC.) TOGETHER WITH THE FULL EXTENT OF THE PROJECT SPECIFICATIONS DOES NOT RELIEVE THEM OF THE RESPONSIBILITY TO FURNISH AND INSTALL ITEMS THAT ARE PART OF THEIR WORK AS INDICATED BY THE DRAWINGS AND SPECIFICATIONS OF OTHER TRADES. ALL STRUCTURAL TRADE CONTRACTORS AND SUB-CONTRACTORS ARE PROHIBITED FROM EXCLUDING STRUCTURAL WORK FROM THEIR CONTRACT NOT SHOWN IN THE STRUCTURAL DRAWINGS.
4. STRUCTURAL DRAWINGS ARE NOT ISSUED FOR BID OR CONSTRUCTION UNLESS THE INDIVIDUAL DRAWINGS ARE IDENTIFIED AS "ISSUED FOR BID" OR "ISSUED FOR CONSTRUCTION."

SHORING AND BRACING GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. CONTRACTOR SHALL PROVIDE LAYOUT DRAWINGS AND CALCULATIONS FOR SHORING AND BRACING AND OTHER DATA, AS REQUIRED, PREPARED AND SEALED BY A LICENSED REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK. SUBMIT TO ARCHITECT ONE WEEK PRIOR TO THE START OF WORK.
2. SHORING AND BRACING SHALL COMPLY WITH THE LOCAL BUILDING CODE AND ORDINANCES OF THE LOCAL GOVERNING AUTHORITIES.
3. SUBMIT WEEKLY FIELD OBSERVATION REPORTS TO ARCHITECT DURING THE DURATION OF THE SHORING OPERATION.
4. BENCHMARKS ARE TO BE ESTABLISHED BEFORE EXCAVATIONS AND RE-SURVEYED WEEKLY BY A LICENSED LAND SURVEYOR EMPLOYED BY THE CONTRACTOR.
5. BRACING SHALL BE LOCATED TO CLEAR NEW CONSTRUCTION AND OTHER PERMANENT WORK.
6. MAINTAIN SHORING AND BRACING UNTIL STRUCTURAL ELEMENTS ARE RE-BRACED BY OTHER BRACING OR UNTIL PERMANENT CONSTRUCTION IS IN PLACE.

EXISTING CONDITIONS GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. DIMENSIONS AND ELEVATIONS OF EXISTING CONDITIONS GIVEN ON STRUCTURAL DRAWINGS ARE BASED ON LIMITED FIELD OBSERVATIONS AND MEASUREMENTS.
2. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS BY ACTUAL MEASUREMENT. PRIOR TO BEGINNING WORK, AND WHEN FEASIBLE, PRIOR TO SHOP DRAWING SUBMITTALS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE SAID DISCREPANCIES WITH ALL SUB-CONTRACTORS AND MATERIAL SUPPLIERS.
3. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING/BRACING PER NOTES ON THIS DRAWING.
4. STRUCTURAL ELEMENTS WHICH ARE UNCOVERED DURING THE COURSE OF THE REHABILITATION, AND WHICH ARE FOUND TO BE UNSOUND OR DEFICIENT, SHALL BE REINFORCED, SUPPORTED OR REPLACED IN ACCORDANCE WITH THE STRUCTURAL DESIGN CRITERIA OF THE BUILDING SUBCODE.

CAST-IN-PLACE CONCRETE GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. CONCRETE WORK SHALL CONFORM WITH THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE ACI 318 (LATEST EDITION).
2. ALL CAST-IN-PLACE CONCRETE SHALL DEVELOP A 28-DAY STRENGTH OF 4,000 PSI AS SPECIFIED IN THE DRAWINGS HEREIN.
3. REINFORCEMENT SHALL BE DEFORMED BARS ASTM DESIGNATION A615, GRADE 60.
4. CONCRETE PROTECTION FOR REINFORCEMENT SHALL CONFORM TO LATEST A.C.I. SPECIFICATION.
5. TEMPERATURE REINFORCING SHALL BE SUFFICIENTLY EMBEDDED TO DEVELOP FULL STRENGTH IN CONCRETE WALLS AND SLABS.
6. PROVIDE ADEQUATE TIES FOR REINFORCEMENT IN SLABS, BEAMS, PIERS AND WALLS. REINFORCEMENT TO BE HELD AT CORRECT DISTANCE FROM FORMS AND EARTH BY STEEL CHAIRS OR TIES.
7. FOLLOW C.R.S.I. RULES FOR PLACING OF REINFORCING STEEL AND ACCESSORIES.
8. NO CONCRETE SHALL BE CAST UNTIL THE PRELIMINARY TESTS REQUIRED HAVE BEEN MADE, REPORTS THEREOF FILED WITH THE ENGINEER, AND APPROVED. THE CONTROLLED CONCRETE TO BE USED SHALL CONFORM TO THE APPROVED DESIGN MIX OBTAINED AS A RESULT OF THE PRELIMINARY TESTS. THE USE OF ANY ADDITIVES NOT PRESENT IN THE PRELIMINARY TEST MIX IS PROHIBITED.
9. REPRESENTATIVE TEST CYLINDERS WILL BE TAKEN FROM THE CONCRETE PLACED EACH DAY IN ACCORDANCE WITH CONCRETE SPECIFICATIONS.
10. WELDED WIRE FABRIC SHALL HAVE A MINIMUM ULTIMATE STRENGTH OF 70,000 PSI AND SHALL CONFORM TO ASTM A-185 AND A-497.
11. MESH SHALL BE SPLICED SO THAT THE OVERLAP BETWEEN OUTERMOST CROSS WIRES OF EACH SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRES PLUS TWO INCHES, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
12. THIS CONTRACTOR SHALL COOPERATE WITH OTHER TRADES AND WHERE REQUIRED INSTALL ALL BUILT-IN WORK, SLEEVES, INSERTS, ETC., AS REQUIRED FOR A COMPLETE JOB.
13. STRUCTURAL MEMBERS SHALL BE POURED FOR THEIR FULL DEPTHS IN ONE OPERATION. CONSTRUCTION JOINTS SUCH AS A DAY'S POUR JOINTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE SPAN, MAIN REINFORCING TO RUN THROUGH THE JOINT, KEY AND ROUGHEN JOINTS TO EXPOSE AGGREGATE FOR CHEMICAL BOND.
14. PROVIDE TWO #5 BARS AT REENTRANT CORNERS AND AROUND OPENINGS IN CONCRETE SLABS.
15. PROVIDE PRECAST CONCRETE LINTELS FOR ALL OPENINGS OR RECESSES IN BLOCK WALLS WHERE NO SPECIFIC LINTEL IS NOTED.
16. TOP ELEVATION OF SLABS SHALL VARY ACCORDING TO FINISH FLOOR MATERIAL. SEE ARCH'L DRAWINGS.
17. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF ALL OPENINGS IN ROOF, FLOORS AND WALLS NOT SHOWN ON STRUCTURAL DRAWINGS.

MASONRY GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. WALL DESIGN ALLOWABLE STRESSES ARE BASED ON "SPECIAL INSPECTION" REQUIREMENTS OF ACI 530.1/ ASCE 6 / TMS 602 LATEST EDITION. CONSTRUCTION OF WALLS MUST BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS FOR LEVEL 3 QUALITY ASSURANCE GUIDELINES DEFINED BY ACI 530.
2. CONCRETE MASONRY UNITS (CMU) SHALL BE TYPE II. GRADE N-1 AND SHALL CONFORM TO ASTM C90 FOR LOAD BEARING UNITS. CMU SHALL BE NORMAL WEIGHT.
3. CMU BLOCK SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1,900 PSI ON THE NET AREA OF THE BLOCK.
4. MINIMUM f'm SHALL BE 1,500 PSI.
5. COMPRESSIVE STRENGTH OF THE GROUT SHALL BE A MINIMUM OF 3,000 PSI WITH A 8" TO 11" SLUMP AND COMPLY WITH REQUIREMENTS FOR FINE GROUT PER ASTM 476.
6. MORTAR SHALL BE TYPE S HIGH STRENGTH MORTAR CONFORMING TO ASTM C270.
7. GROUTING PROCEDURES SHALL BE IN STRICT COMPLIANCE WITH RECOMMENDATIONS AS OUTLINED BY NCMA AND ACI.
8. CELLS RECEIVING REINFORCING SHALL BE FULLY GROUTED.
9. MASONRY UNITS SHALL BE LAID IN A RUNNING BOND PATTERN WITH FULL FACE SHELL MORTAR BEDS.
10. AREAS ADJACENT TO OPENINGS SHALL BE REINFORCED PER THE TYPICAL PILASTER DETAILS.
11. STARTING JOINT FOR ALL MASONRY SHALL BE LAID WITH FULL BED MORTAR COVERAGE.
12. MORTAR SHALL BE APPLIED TO CROSS WEBS OF CMU IN ADDITION TO HORIZONTAL AND VERTICAL EDGES OF AREAS OF BEAM BEARING AREAS.
13. UNLESS OTHERWISE NOTED, REINFORCE WALLS AS FOLLOWS:
    - PROVIDE A MINIMUM (1) #5 VERTICAL REBAR SPACED 32" ON CENTER, MAXIMUM, CONTINUOUSLY FROM SUPPORT TO SUPPORT. IN ADDITION PROVIDE (1) #5 REBAR EACH SIDE OF EACH OPENING AND AT ENDS OF WALLS. MAKE THESE BARS CONTINUOUS FROM SUPPORT TO SUPPORT.
    - INSTALL STANDARD WEIGHT (W1.7) TRUSS TYPE HORIZONTAL JOINT REINFORCING AT MAXIMUM SPACING OF 16" ON CENTER. WHERE TWO LONGITUDINAL WIRES ARE USED, THE SPACES BETWEEN THESE WIRES SHALL BE THE WIDEST THAT THE MORTAR JOINT WILL ACCOMMODATE. INSTALL JOINT REINFORCING CONTINUOUS IN ALL SUCH JOINTS. LAP ACCORDING TO MANUFACTURER SPECIFICATIONS. JOINT REINFORCING SHALL CONSIST OF AT LEAST (2) TWO LONGITUDINAL WIRES FOR WALLS GREATER THAN 4" IN WIDTH AND AT LEAST (1) ONE WIRE FOR WALLS NOT EXCEEDING 4 INCHES IN WIDTH.
    - AT ALL 8" AND 12" CMU WALLS PROVIDE A CONTINUOUS BOND BEAM CONTAINING (2) #5 LONGITUDINAL BARS AT THE TOP OF WALLS.
14. PROVIDE MECHANICAL ANCHORAGE BETWEEN ALL MASONRY ELEMENTS AND STRUCTURAL FRAMING AT ALL LOCATIONS WHERE MASONRY ELEMENTS ARE ADJACENT TO STRUCTURAL FRAMING AND SYSTEMS. PROVIDE ANCHORS AT A SPACING NOT TO EXCEED 16 INCHES ON CENTER (MAX). INDIVIDUAL ANCHORS SHALL BE CAPABLE TO WITHSTAND A HORIZONTAL LOAD OF 500 POUNDS (WITHOUT AN ALLOWABLE STRESS INCREASE FOR WIND/SEISMIC). WALLS ARE TO BE ANCHORED AT TOP, ALWAYS.
15. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A-615 GRADE 60. SHOP FABRICATE REINFORCING BARS WHICH ARE SHOWN TO BE HOOKED OR BENT. PROVIDE A MINIMUM LAP OF 48 X BAR DIAMETER AT ALL SPLICES, UNLESS OTHERWISE INDICATED.
16. PROVIDE ALL REQUIRED TEMPORARY BRACING DURING CONSTRUCTION.

STEEL DECK GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING SHALL APPLY)

1. METAL DECK, GAUGE AND TYPE ARE CALLED OUT AND INDICATED ON THE FRAMING PLANS AND THE GENERAL NOTES THAT ACCOMPANY THE FRAMING PLANS.
2. METAL DECK UNITS AND ACCESSORY ITEMS SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO ASTM SPECIFICATION A-611 WITH A MINIMUM YIELD STRENGTH OF 33,000 PSI. BEFORE FORMING, THE STEEL SHEET SHALL RECEIVE A PROTECTIVE METAL COATING OR ZINC CONFORMING TO ASTM SPECIFICATION A-653, G60.
3. METAL DECK SHALL BE COORDINATED WITH ALL ARCHITECTURAL AND ELECTRICAL/MECHANICAL REQUIREMENTS.
4. HANGING DIRECTLY FROM THE ROOF DECK USING PIERCING HANGER TABS OR OTHER SIMILAR METHODS IS STRICTLY PROHIBITED. ANYTHING TO BE HUNG WITHIN THE CEILING PLENUM SHALL BE HUNG FROM THE STEEL FRAMING AND/OR ALTERNATE SUB-FRAMING THAT IS DESIGNED AND PROVIDED BY THE CONTRACTOR INSTALLING THE ITEMS TO BE HUNG WITHIN THE PLENUM.
5. UNFRAMED OPENINGS IN ROOF DECK SHALL BE REINFORCED AS FOLLOWS:
   A. HOLES LESS THAN 8" IN DIAMETER OR OVERALL LENGTH AND WIDTH: PROVIDE 16 GAUGE FLAT SHEET EXTENDING 8" MINIMUM BEYOND THE HOLE/OPENING ON ALL DIRECTIONS.
   B. HOLES 8" TO 12" IN DIAMETER OR OVERALL LENGTH AND WIDTH: PROVIDE A 14 GAUGE FLAT SHEET EXTENDING 8" MINIMUM BEYOND THE HOLE/OPENING ON ALL DIRECTIONS.
   C. HOLES GREATER THAN 12" REQUIRE SUPPLEMENTAL FRAMING; COORDINATE WITH THE TYPICAL DROP-IN ANGLE OR TYPICAL DROP-IN FRAME DETAILS.

STRUCTURAL STEEL GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) STEEL CONSTRUCTION MANUAL FOURTEENTH EDITION.
2. UNLESS OTHERWISE NOTED, ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

MEMBER	ASTM	MINIMUM STRENGTH
ROLLED SHAPES	A992	50 KSI
OTHER ROLLED SHAPES/PLATES	A36	36 KSI
CONNECTION BOLTS	A325	92 KSI
ANCHOR RODS	F1554	----
THREADED RODS	A36	36 KSI
NON-SHRINK GROUT	C1107	8,000 PSI

3. CONNECTIONS SHALL BE SHEAR TYPE CONNECTIONS AND DESIGNED IN ACCORDANCE WITH THE AISC FOURTEENTH EDITION SPECIFICATIONS. MINIMUM BOLT DIAMETER SHALL BE 3/4" UNLESS OTHERWISE NOTED. BOLTS SHALL BE SHEAR/BEARING TYPE BOLTS AND BE "SNUG-TIGHT".
4. METAL DECK SHALL BE ATTACHED ACCORDING TO METAL DECK MANUFACTURER AND STEEL DECK INSTITUTE (SDI) STANDARDS.
5. WELDING SHALL BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY (AWS) SPECIFICATION D1.1 USING E70XX ELECTRODES. UNLESS OTHERWISE NOTED, PROVIDE CONTINUOUS MINIMUM SIZED FILLET WELDS PER AISC REQUIREMENTS. FILLER MATERIALS SHALL HAVE A MINIMUM YIELD STRENGTH OF 58 KSI.
6. HOLES IN STEEL BEAMS SHALL BE DRILLED OR PUNCHED. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND TORCH CUTTING AT THE SITE IS NOT PERMITTED.
7. UNLESS OTHERWISE NOTED, STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER, INCLUDING ALL BRICK SHELF ANGLES AND CMU LINTELS, SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. PROTECTIVE PROTECTIVE COATING DAMAGED DURING THE TRANSPORT, ERECTING AND FIELD WELDING PROCESS SHALL BE REPAIRED IN THE FIELD TO MATCH THE SHOP APPLIED COATING.
8. THE OWNER WILL HIRE AN INDEPENDENT TESTING AGENCY TO PROVIDE SPECIAL INSPECTIONS OF THE BOLTING, WELDING, AND OTHER ITEMS IN ACCORDANCE WITH THE LATEST BUILDING CODES HAVING JURISDICTION.
9. PROVIDE ANGLE FRAMES AT ALL ROOF OPENINGS AND MECHANICAL ROOFTOP UNITS PER TYPICAL DROP-IN FRAME DETAIL.
10. STEEL FABRICATOR TO SUPPLY 16 GAGE CLOSURE ANGLES AROUND ALL ROOF OPENINGS.
11. MISCELLANEOUS IRON CONTRACTOR TO PROVIDE MISCELLANEOUS STEEL SHOWN ON ARCHITECTURAL OR MEP DRAWINGS THAT IS NOT SHOWN ON STRUCTURAL DRAWINGS.
12. AT LOCATIONS ON THE ARCHITECTURAL DRAWINGS OR OTHER TRADES WHERE A STEEL ANGLE OR PLATE IS SHOWN DIAGRAMMATICALLY AND REFERENCE IS MADE TO THE STRUCTURAL DRAWINGS FOR SIZE, PROVIDE MINIMUM THICKNESS OF 3/8" MATERIAL AND PLATE WIDTH OR ANGLE SIZE AS SCALED FOR THE DRAWINGS. INSTALL THE PLATE OR ANGLE TO THE EXTENT REQUIRED TO ACCOMPLISH A COMPLETE JOB.
13. ANY STEEL SIZE DISCREPANCIES SHALL BE CONFIRMED BY ENGINEER VIA A REQUEST FOR INFORMATION (RFI) DURING THE BID PERIOD OR DURING THE SHOP DRAWING PHASE. CONTRACTOR SHALL NOT BE ENTITLED TO COSTS FOR REVISIONS TO THE MEMBER SIZE IF AN RFI IS NOT SUBMITTED IN A TIMELY MANNER.
14. STRUCTURAL STEEL SHALL BE PAINTED PER THE PROJECT SPECIFICATIONS.
15. STRUCTURAL STEEL FABRICATOR AND INSTALLER SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL FRAMED OPENINGS IN ROOF WITH APPROVED EQUIPMENT MANUFACTURER(S). OPENINGS SHALL INCLUDE, BUT ARE NOT LIMITED TO: MECHANICAL UNITS, EXHAUST FANS, CURB MOUNTED EQUIPMENT, ROOF DRAINS, SKYLIGHTS, STAIRS, SMOKE HATCHES, DUCT PENETRATIONS, EXPANSION JOINTS, ETC.

POST-INSTALLED ANCHOR GENERAL NOTES

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

1. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC. CONTACT HILTI AT (800) 879-8000 FOR PRODUCT RELATED QUESTIONS.
2. ANCHOR TYPES:
   2.1. ANCHORAGE TO CONCRETE:
   - ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
     - HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW HIT-Z ROD PER ICC ESR-3187
     - HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM WITH HAS-E THREADED ROD PER ICC ESR-3187
   - MEDIUM DUTY MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
     - HILTI KWIK HUS EZ AND KWIK HUS EX-I SCREW ANCHORS PER ICC ESR-3027.
     - HILTI KWIK BOLT-TZ EXPANSION ANCHORS PER ICC ESR-1917
     - HILTI KWIK BOLT 3 EXPANSION ANCHORS (UNCRACKED CONCRETE ONLY) PER ISS ESR-2302

   2.2 REBAR DOWELING INTO CONCRETE:
   - ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
     - HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT SYSTEM WITH CONTINUOUSLY DEFORMED REBAR PER ICC ESR-3187

   2.3 ANCHORAGE TO SOLID GROUTED MASONRY:
   - ADHESIVE ANCHORS USE:
     - HILTI HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM
     - STEEL ANCHOR ELEMENT SHALL BE HILTI HAS-E CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR
   - MECHANICAL ANCHORS USE:
     - HILTI KWIK BOLT-3 EXPANSION ANCHORS PER ICC ESR-1385

   2.4 ANCHORAGE TO HOLLOW / MULTI-WYTHE MASONRY:
   - ADHESIVE ANCHORS USE:
     - HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-3342
     - STEEL ANCHOR ELEMENT SHALL BE HILTI HAS-E CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR
     - THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S RECOMMENDATION.
3. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY HILTI OR EQUAL AS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED HILTI PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.
4. INSTALL ANCHORS PER THE MANUFACTURERS INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
5. OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING THE HILTI PROFIS SYSTEM.
6. THE CONTRACTOR SHALL ARRANGE ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO WILL INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.

SPECIAL INSPECTION REQUIREMENTS

(UNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHALL APPLY)

TESTING: OWNER SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM THE FOLLOWING SERVICES:

1. STRUCTURAL STEEL: SPECIAL INSPECTIONS AND NONDESTRUCTIVE TESTING OF STRUCTURAL STEEL ELEMENTS IN BUILDING, STRUCTURES
2. STEEL CONSTRUCTION: SPECIAL INSPECTIONS AND NONDESTRUCTIVE TESTING OF THE ON-SITE ERECTION OF STEEL CONSTRUCTION IN BUILDINGS, STRUCTURES AND PORTIONS THEREOF SHALL BE IN ACCORDANCE WITH SECTION 1705.2.
3. FABRICATION INSPECTION: SPECIAL INSPECTION OF FABRICATED STRUCTURAL MEMBERS SHALL BE PERFORMED UNLESS:
   3.1. FABRICATOR MAINTAINS APPROVED DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND 2020 BUILDING CODE OF NEW YORK STATE. APPROVAL SHALL BE BASED UPON REVIEW OF THE FABRICATION AND QUALITY CONTROL PROCEDURES AND PERIODIC INSPECTION OF FABRICATION PRACTICES BY THE BUILDING OFFICIAL.
   3.2. FABRICATOR IS REGISTERED AND APPROVED IN ACCORDANCE WITH 2020 BUILDING CODE OF NEW YORK STATE SECTION 1704.2.5.1.
4. WRITTEN REPORTS SHALL BE SUBMITTED TO THE ARCHITECT STATING COMPLIANCE OR NONCOMPLIANCE WITH THE DESIGN DOCUMENTS. ALL REPORTS SHALL BE SIGNED AND SEALED BY A LICENSED ENGINEER FROM THE STATE OF NEW YORK.
5. FAILURE TO RETAIN A TESTING AGENCY TO PERFORM THE REQUIRED SERVICES SPECIFIED ABOVE, OR FAILURE TO SUBMIT SIGNED AND SEALED REPORTS, INDICATES NONCOMPLIANCE WITH THE CONTRACT DOCUMENTS.
6. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING CONSTRUCTION DOCUMENTS FOR ADDITIONAL NON-STRUCTURAL SPECIAL INSPECTION ITEMS.

DESIGN INFORMATION

2020 BUILDING CODE OF NY STATE

EARTHQUAKE DESIGN DATA

- RISK CATEGORY = IV
- SEISMIC IMPORTANCE FACTOR I_e = 1.50
- SITE CLASS = D
- 0.2 SPECTRAL RESPONSE ACCELERATION S_s = 0.270
- 1.0 SPECTRAL RESPONSE ACCELERATION S_1 = 0.072
- DAMPED DESIGN SPECTRAL RESPONSE ACCELERATION (SHORT PERIOD) S_{ds} = 0.255
- DAMPED DESIGN SPECTRAL RESPONSE ACCELERATION (1-second PERIOD) S_{d1} = 0.115
- SEISMIC DESIGN CATEGORY = C

WIND DESIGN DATA

- BASIC WIND SPEED (V_{ss}) = 129 MPH
- STRUCTURAL OCCUPANCY CATEGORY = IV
- EXPOSURE CATEGORY = B

SNOW LOADS

- GROUND SNOW LOAD (P_g) = 30 PSF
- FLAT ROOF SNOW LOAD (P_f) = 21 PSF
- SNOW EXPOSURE FACTOR (C_e) = 1.0
- SNOW IMPORTANCE FACTOR (I_s) = 1.00
- SNOW THERMAL FACTOR (C_t) = 1.0

CD Submission 06/18/2021

Architect of Record:
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ARRAY-ARCHITECTS.COM
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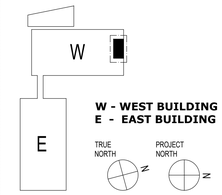
OWNER:
COLUMBIA DOCTOR'S TARRYTOWN

PROJECT:
NEW MRI
155 WHITE PLAINS ROAD
TARRYTOWN, NY 10591



KEY PLAN

NO.	DESCRIPTION	DATE
1		

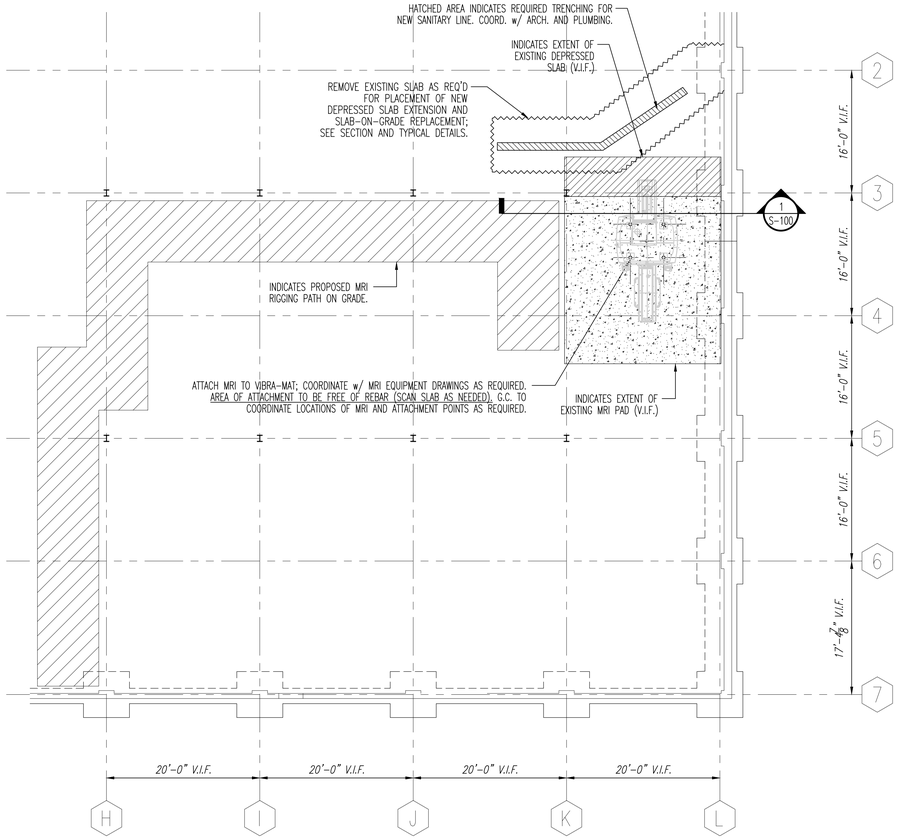
REVISIONS/ISSUES

SHEET TITLE:
GENERAL STRUCTURAL NOTES AND DESIGN CRITERIA

SEAL:

DATE: 06/18/2021
CON/REF No.
CONTRACT No.
SCALE: As indicated
PROJECT No. 6109
CHECKED: MB
DRAWN: MJS

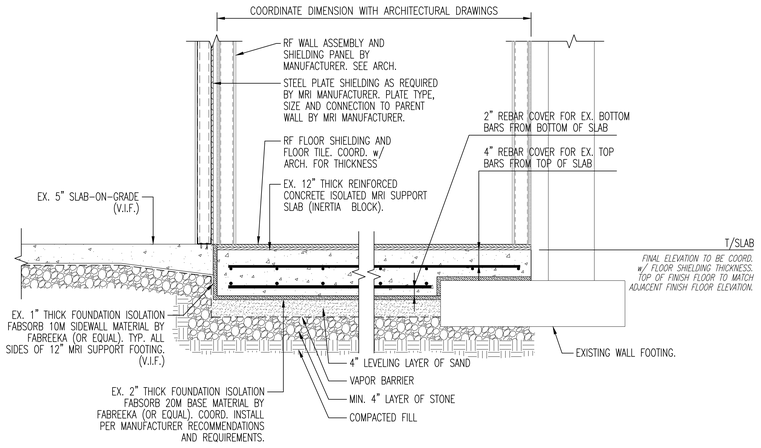
SHEET NO.
S-001
DWG OF



PARTIAL WEST BUILDING FOUNDATION PLAN

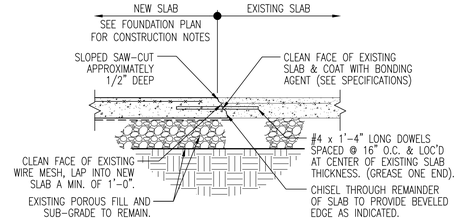
SCALE: 1/8" = 1'-0"

1. TOP OF EXISTING SLAB ELEVATION +0'-0" (DATUM) AT THE FIRST FLOOR UNLESS OTHERWISE NOTED.
2. ±X'-X" INDICATES TOP OF SLAB ELEVATION ABOVE OR BELOW THE DATUM ELEVATION.
3. VERIFY ALL EXISTING CONSTRUCTION IN FIELD.
4. NEW MRI SLAB EXTENSION CONSTRUCTION: 12" THICK CONCRETE SLAB ON GRADE [f'c = 4,000 PSI AT 28 DAYS, 150 PCF DESIGN WEIGHT] REINFORCED WITH #4 BARS SPACED AT 12" O.C. TOP AND BOTTOM EACH WAY. COORDINATE WITH SECTIONS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.
5. COORDINATE REQUIRED DIMENSIONS OF NEW MRI SLAB WITH ARCHITECTURAL ROOM DIMENSIONS,.
6. FOUNDATIONS HAVE BEEN DESIGNED FOR AN ASSUMED SOIL BEARING PRESSURE OF 2,000 PSF.
7. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL PLANS AND THE SPECIFIC CONTROL PLAN PREPARED FOR EACH LEVEL AND/OR REFER TO THE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
8. SEE DRAWINGS S001 FOR ADDITIONAL GENERAL STRUCTURAL NOTES AND CONSTRUCTION INFORMATION.



1 / S-100 SECTION THROUGH EXISTING MRI PAD

SCALE: 3/4" = 1'-0"



GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE WITH PLANS THE REQUIRED LOCATIONS OF WHERE THE EXISTING SLAB-ON-GRADE NEEDS TO BE SAW-CUT FOR THE INSTALLATION OF NEW WORK.
2. SEE PLANS FOR THE REQUIRED SLAB IN-FILL CONSTRUCTION. AT A MINIMUM INSTALL 4" THICK NORMAL WEIGHT CONCRETE (f'c = 4,000 PSI @ 28 DAYS) SLAB-ON-GRADE.
3. WHERE NEW CONSTRUCTION IS TO BE INSTALLED CONTRACTOR SHALL TAKE CARE TO CUT-BACK SLAB AT A SAFE DISTANCE TO PREVENT UNDERMINING OF THE EXISTING SLAB-ON-GRADE.

NEW TO EXISTING SLAB TRANSITION DETAIL

SCALE: N.T.S.

CD Submission 06/18/2021

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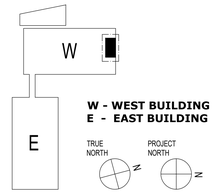
OWNER:

COLUMBIA DOCTOR'S TARRYTOWN

PROJECT:

NEW MRI

155 WHITE PLAINS ROAD
TARRYTOWN, NY 10591



KEY PLAN

NO.	DESCRIPTION	DATE
1		

REVISIONS/ISSUES

SHEET TITLE:

PARTIAL FOUNDATION PLAN AND DETAILS

SEAL:

DATE: 06/18/2021
CON/REF No.
CONTRACT No.
SCALE: As indicated
PROJECT No. 6109
CHECKED: MB
DRAWN: MJS

SHEET NO.

S-100

DWG OF

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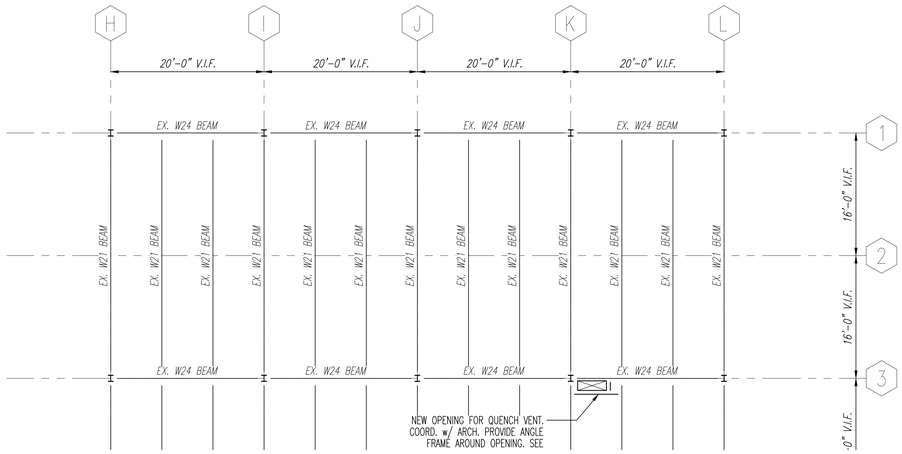
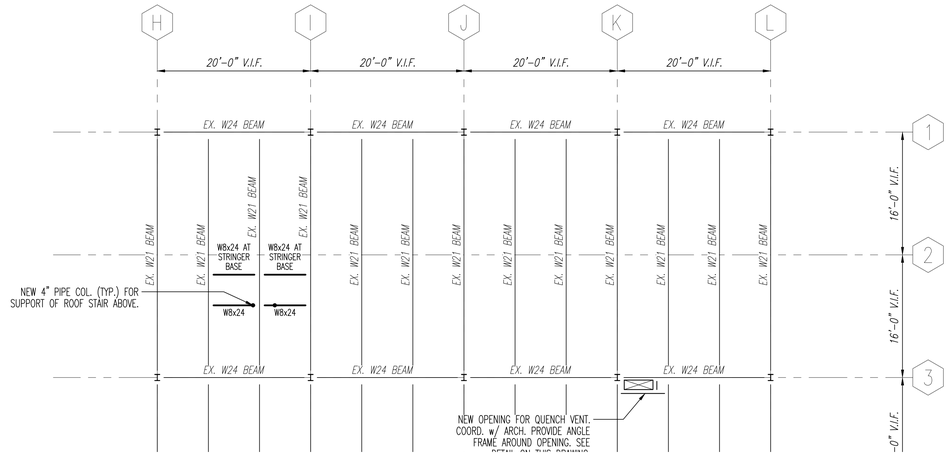
E



PARTIAL WEST BUILDING 2ND FLOOR FRAMING PLAN

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

1. ALL FRAMING SIZES/DEPTHS ARE BASED ON LIMITED FIELD SURVEY AND LIMITED EXISTING DOCUMENTATION. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF WORK.
2. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL PLANS AND THE SPECIFIC CONTROL PLAN PREPARED FOR EACH LEVEL AND/OR REFER TO THE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.



PARTIAL WEST BUILDING ROOF FRAMING PLAN

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

1. ALL FRAMING SIZES/DEPTHS ARE BASED ON LIMITED FIELD SURVEY AND LIMITED EXISTING DOCUMENTATION. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF WORK.
2. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL PLANS AND THE SPECIFIC CONTROL PLAN PREPARED FOR EACH LEVEL AND/OR REFER TO THE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.

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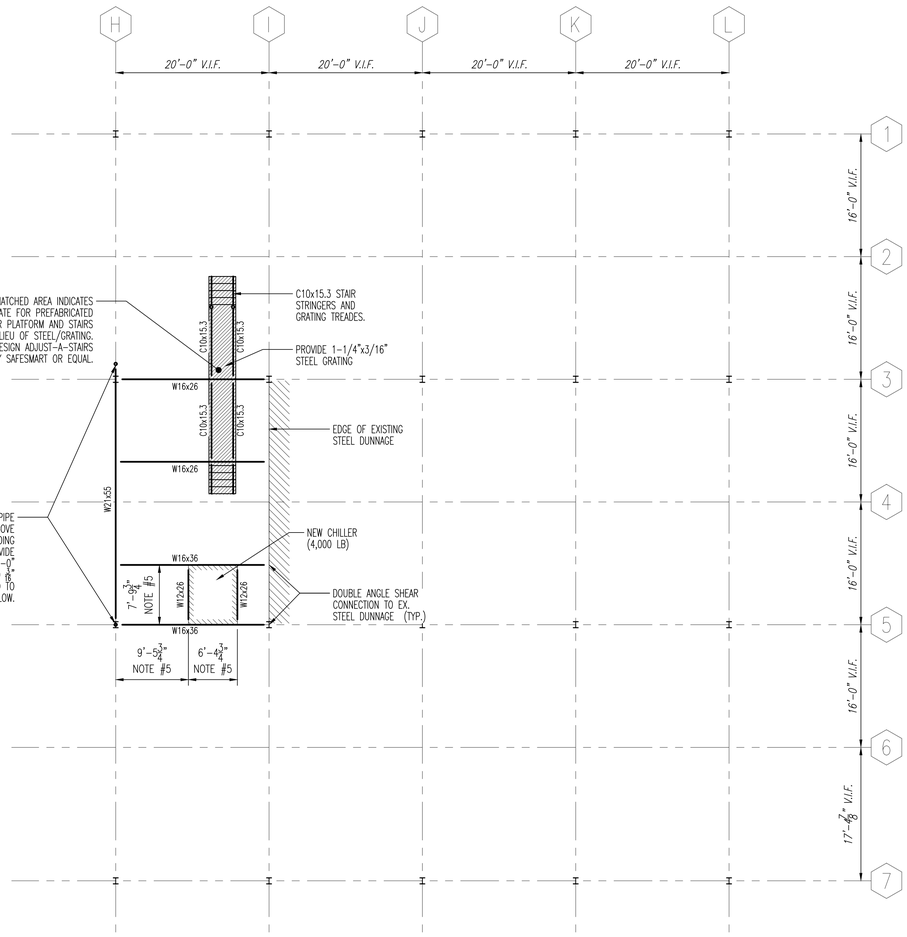

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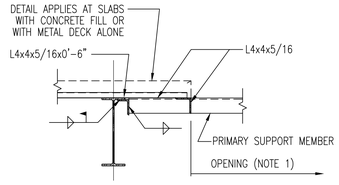
PARTIAL WEST BUILDING DUNNAGE PLAN

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

1. ALL EXISTING CONDITIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF WORK.
2. ALL STEEL TO BE ASTM A992 GRADE 50 U.O.N.
3. ALL EXTERIOR STEEL TO BE HOT-DIP GALVANIZED U.O.N.
4. COORDINATE ALL DIMENSIONS WITH THE ARCHITECTURAL PLANS AND THE SPECIFIC CONTROL PLAN PREPARED FOR EACH LEVEL AND/OR REFER TO THE ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
5. ALL DIMENSIONS FOR CHILLER SHALL BE COORDINATED w/ THE MEP DRAWINGS. PROVIDE PREFABRICATED ACCESS STAIR/PLATFORM AS/IF REQUIRED FOR EQUIPMENT MAINTENANCE.



GENERAL NOTES:

1. GENERAL CONTRACTOR SHALL COORDINATE NUMBER OF FRAMES, OPENING SIZES AND LOCATIONS WITH RESPECTIVE TRADE CONTRACTORS AND ARCHITECTURAL PLANS PRIOR TO SUBMITTAL OF STRUCTURAL STEEL SHOP DRAWINGS.
2. DECK CLOSURE REQUIRED AT SLABS WITH CONCRETE FILL AROUND EDGE OF OPENING.
3. CONSULT ENGINEER WHEN SPAN OF PRIMARY SUPPORT OR HEADER EXCEEDS 8'-0".

TYPICAL DROP-IN ANGLE FRAME DETAIL

SCALE: N.T.S.

CD Submission 06/18/2021

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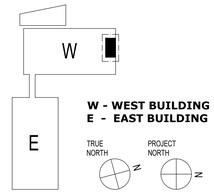

KEY PLAN

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S-101

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