

IF THIS SHEET IS NOT 30" x 42"
FULL SIZE, USE GRAPHIC SCALES

one inch = one foot
three-quarter inch = one foot
one-half inch = one foot

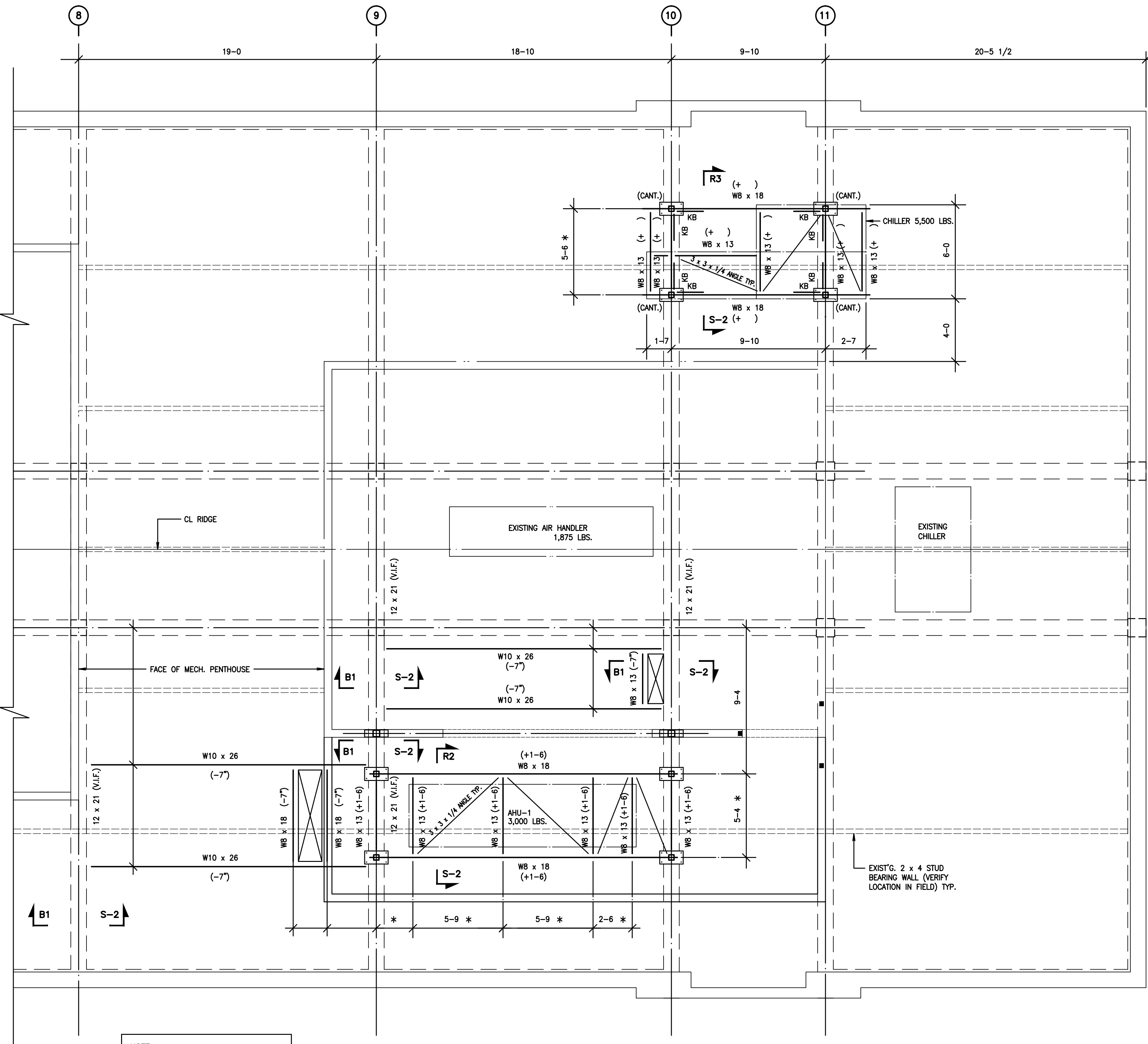
one-half inch = one foot
three-eighths inch = one foot
one-quarter inch = one foot

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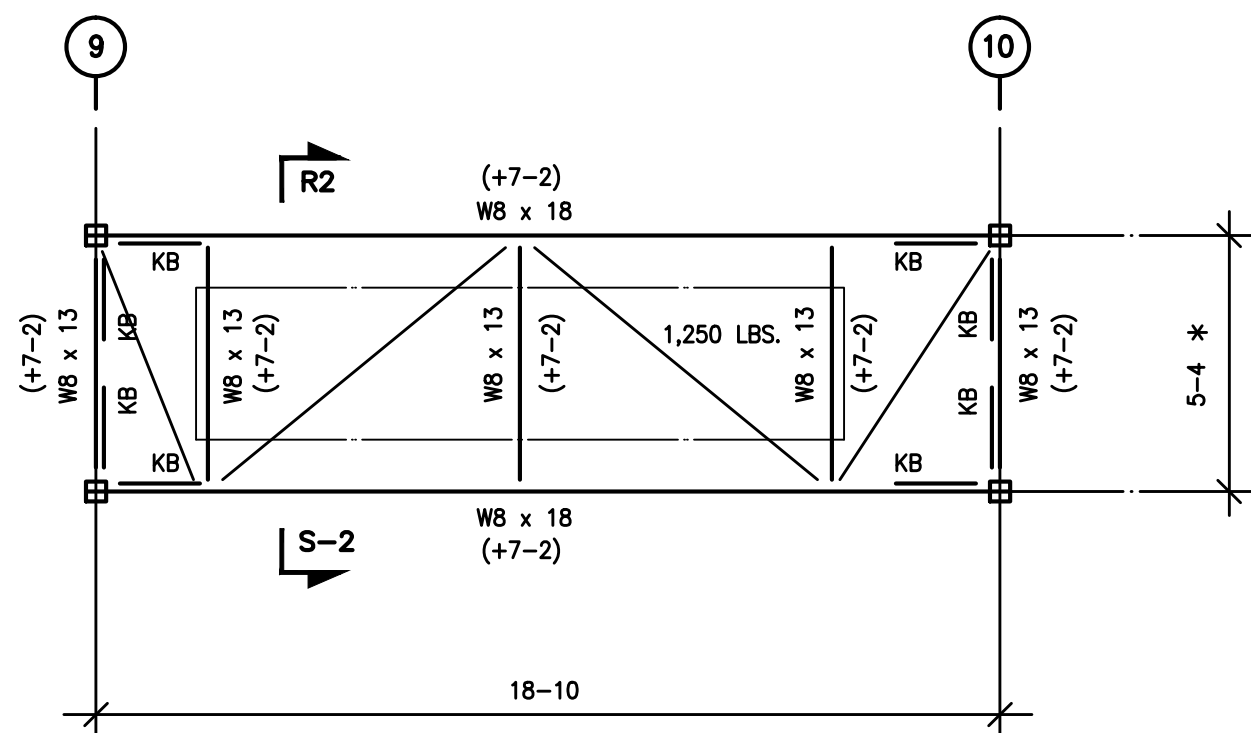
one-eighth inch = one foot
one-quarter inch = one foot
three-eighths inch = one foot



NOTE:
PROVIDE 2 HOUR RATED SPRAY-ON
FIREPROOFING ON NEW STRUCTURAL
STEEL AND ON AREAS DISTURBED BY
NEW WORK. SEE ARCHITECTURAL
DRAWINGS FOR ALL INFORMATION.

PART EXISTING ATTIC FLOOR FRAMING PLAN
SCALE 1/4" = 1'-0"

- NOTES:
- DATUM FOR ALL ELEVATIONS GIVEN ON THIS PLAN IS TOP OF EXISTING CONCRETE ATTIC SLAB ELEVATION ± 0 .
 - TOP OF ALL STRUCTURAL STEEL BEAMS NOTED THUS (+/-) ON PLAN. REFER ALSO TO SECTIONS AND DETAILS AND COORDINATE WITH ARCHITECTURAL / MECHANICAL DRAWINGS.
 - PROVIDE ADDITIONAL SUPPORT BEAMS AS REQ'D. AT ALL SHIPPING SECTIONS FOR AHU-1, AHU-2 AND CHILLER. ADJUST 3 x 3 x 1/4 DIAGONAL BRACES ACCORDINGLY.
 - SYMBOL * DENOTES DIMENSION TO BE VERIFIED AND COORDINATED W/ EQUIPMENT SUPPLIER.
 - NOTATION "V.I.F." DENOTES VERIFY IN FIELD.



AHU-2 SUPPORT FRAMING PLAN
SCALE 1/4" = 1'-0"

- NOTES:
- TOP OF ALL STEEL ELEVATIONS GIVEN ON THIS PLAN AND SHOWN IN SECTIONS ARE ESTIMATED AND MUST BE COORDINATED WITH THE ARCHITECTURAL / MECHANICAL DRAWINGS.
 - FOR REMAINDER OF NOTES SEE PART ATTIC FLOOR FRAMING PLAN NOTES ABOVE.

Grossfield Macri Engineering

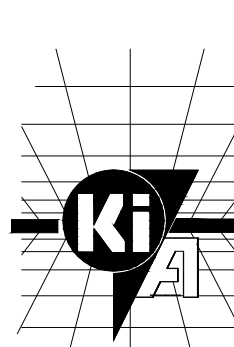
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GM# 11-101



Revisions
VA FORM 08-6231, DEC 1989

Date



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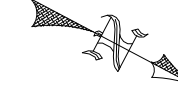
PHONE: (914) 747-0002 • E-MAIL: mandrago@klarch.com • FAX: (914) 747-9211

NOTE AND READ CAREFULLY:

The Contractor shall consult and study the requirements of each and every drawing and each specification section of this contract so that he/she may become acquainted with the project as a whole in order to determine how the work of his/hers subcontractor or vendor may affect the work required under this contract.

Written Specifications are part of this contract

KEY PLAN



AREA OF WORK

BUILDING #18

Drawing Title

EQUIPMENT SUPPORT
FRAMING PLANS & NOTES

Approved: Division Chief

Approved: Service Director

Project Title

Renovation to Dental Clinic
Building 18
Hudson Valley Healthcare System
Castle Point, New York

Building Number

18

Checked

BV

Drawn

BG

Location

Castle Point, New York

Date

04/23/2012

Project No.

620A4-09-110

DRAWING NO.

SF101

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GENERAL NOTES

- STRUCTURAL DRAWINGS SHALL BE USED WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS AND THE WORK REQUIRED BY EACH COORDINATED.
- STRUCTURAL DRAWINGS MAY NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND FLOOR FINISHES, DETAILS, FIRE PROOFING REQUIREMENTS, FLASHING AND OTHER INFORMATION NOT SHOWN ON STRUCTURAL DRAWINGS.

STRUCTURAL STEEL

- ALL STRUCTURAL STEEL WORK SHALL COMPLY WITH THE "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" OF THE AISI.
- ALL STRUCTURAL STEEL BEAMS AND COLUMNS SHALL CONFORM TO ASTM DESIGNATION ASTM A-992 WITH YIELD STRESS OF 50,000 PSI.
- STRUCTURAL STEEL TUBES SHALL CONFORM TO ASTM DESIGNATION A500, GR. B, WITH YIELD STRESS OF 46,000 PSI.
- BASE PLATES, CAP PLATES AND CONNECTION ANGLES SHALL BE A-36 STEEL.
- EXCEPT AS NOTED ON DRAWINGS, SHOP CONNECTIONS MAY BE WELDED OR HIGH STRENGTH BOLTED. FIELD CONNECTIONS SHALL BE BOLTED EXCEPT AS SHOWN ON PLANS OR SECTIONS.
- WELDING SHALL BE DONE ONLY BY QUALIFIED WELDERS. WELDERS CERTIFICATIONS SHALL BE FURNISHED TO THE OWNER PRIOR TO THE PERFORMANCE OF THE WORK. ALL FIELD WELDING SHALL BE INSPECTED AND APPROVED BY AN INDEPENDENT INSPECTION AGENCY.
- ALL BOLTS SHALL COMPLY WITH ASTM DESIGNATION A-325, SLIP CRITICAL. MINIMUM DIAMETER OF BOLTS IS 3/4 INCHES.
- WELDING ELECTRODES SHALL BE E-70 SERIES. MIN. WELD SIZE IS 1/4 INCH.
- ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE.

CONCRETE

- ALL CONCRETE WORK, MATERIALS, DETAILS AND CONSTRUCTION METHODS SHALL COMPLY WITH "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS," ACI 301, AND BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318, LATEST EDITIONS, OF THE AMERICAN CONCRETE INSTITUTE AND WITH THE REQUIREMENTS OF THE LOCAL BUILDING CODE.
- CONCRETE FOR FOUNDATIONS SHALL CONSIST OF A STONE AGGREGATE MIX ACHIEVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT AGE 28 DAYS.
- CONCRETE FOR STRUCTURAL MEMBERS SHALL BE PLACED TO THE FULL DEPTH OF THE MEMBER IN ONE OPERATION. HORIZONTAL JOINTS ARE NOT PERMITTED UNLESS SHOWN ON PLAN OR SECTION.
- REPAIR CONCRETE USED TO FORM EDGES OF NEW SLAB PENETRATIONS SHALL BE A POLYMER-MODIFIED CONCRETE EXTENDED WITH 3/8" STONE AGGREGATE.
- SHOOT 111, MANUFACTURED BY SIKKA CORPORATION OR ENGINEERS APPROVED EQUIVALENT, MIX AND INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.

REINFORCING STEEL

- REINFORCING BARS SHALL CONFORM TO ASTM STANDARD A-615 GRADE 60, FOR DEFORMED BILLET STEEL.
- WELDED WIRE MESH SHALL CONFORM TO ASTM STANDARD A-185. MINIMUM MESH SIZE IS 66-MIL-W1.4 UNLESS OTHERWISE NOTED ON DRAWINGS.
- REINFORCING SHALL BE ACCURATELY INSTALLED TO THE REQUIRED ELEVATION AND CHAINED OR SECURELY TIED IN PLACE SO AS TO PREVENT DISLOCATION DURING CONCRETE PLACEMENT. FABRICATION AND PLACEMENT SHALL COMPLY WITH "MANUAL OF STANDARD PRACTICE," CRSI MSP-1-B8 AND ACI 301.
- SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, CHAPTER 5.
- REINFORCING BARS NOTED CONTINUOUS (CONT.) SHALL BE LAPPED AT SPLICES AND WOOKED AT NON-CONTINUOUS ENDS UNLESS SHOWN OTHERWISE ON DRAWINGS. LAP SPLICES SHALL NOT BE LESS THAN 40 TIMES THE BAR DIAM.
- PROVIDE 2 # 5 BARS AT EACH SIDE OF AN OPENING IN WALL OR SLAB. BAR LENGTH SHALL EQUAL OPENING DIMENSION PLUS 4 FEET.

ADHESIVE TYPE ANCHOR BOLTS/REINFORCING BARS

- ALL ANCHOR BOLTS SHALL BE 5/8" DIAMETER, U.O.L., THREADED BARS SET WITH EPOXY TYPE ADHESIVE. ANCHOR RODS SHALL COMPLY WITH ASTM A 193 SUPPLIED WITH NUTS MEETING THE REQUIREMENTS OF ASTM A 563, GRADE 01 AND HARDENED WASHERS MEETING ASTM F 436.
- REINFORCING DOWELS SHALL BE DEFORMED BARS OF A-615 GRADE 60 STEEL SET WITH EPOXY ADHESIVE.
- THE ADHESIVE SHALL BE A TWO COMPONENT, STRUCTURAL GRADE EPOXY MATERIAL MEETING ASTM C-881 TYPES I, II, IV AND V, GRADE 1, CLASS 1, CLASS 2 AND C. ADHESIVE SHALL BE SUPPLIED IN A TWO COMPONENT DISPENSING SYSTEM WHICH KEEPS THE RESIN AND HARDENER SEPARATED UNTIL DISPERSED IN A MIXING RATION OF 1:1.

- INSTALLATION OF THE BOLTS AND REINFORCING STEEL DOWELS SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. DO NOT APPLY LOAD OR DISTURB THE ANCHORS UNTIL FULLY CURED.

EXPANSION TYPE ANCHOR BOLTS

- EXPANSION TYPE ANCHOR BOLTS SHALL COMPLY WITH FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS 1. INSTALLATION OF THE BOLTS SHALL BE IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

BONDING AGENT/DOWEL GROUT

- BONDING AGENT SHALL BE SIKKA 110 EPOXY-EPHONY-MODIFIED CEMENTITIOUS PRODUCT OR ENGINEER APPROVED EQUAL HAVING SIMILAR PROPERTIES AND EQUAL LONG OPEN-TIME LIFE.

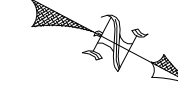
LIGHT GAGE STEEL

- ALL MEMBERS AND CONNECTIONS SHALL BE DESIGNED BY THE MANUFACTURER'S ENGINEER, IN ACCORDANCE WITH HIS CODE LOAD REQUIREMENTS. PROVIDE HIS PE SIGNED/SEALED CALCULATIONS.
- ALL STRUCTURAL FRAMING MEMBERS, STUD, JOIST, BRIDGING AND NON-LOAD BEARING STUDS SHALL BE OF THE TYPE AND SIZE SHOWN ON THE DRAWINGS AND/OR THE SPECIFICATIONS AND SHALL BE MANUFACTURED BY DITZCH METAL FRAMING OR ENGINEER'S APPROVED EQUAL.
- ALL 18 GAGE AND HEAVIER GALVANIZED STRUCTURAL MEMBERS SHALL BE FORMED FROM ASTM A-446, GRADE D STEEL WITH 50 KSI YIELD STRESS, MINIMUM.
- ALL 18 AND 20 GAGE MEMBERS SHALL BE FORMED FROM ASTM A-446, GRADE A STEEL WITH 33 KSI YIELD STRESS, MINIMUM.
- STRUCTURAL PROPERTIES SHALL BE COMPUTED IN ACCORDANCE WITH THE AISI "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS," LATEST EDITION.
- FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S FRAMING PRACTICES, INSTRUCTIONS AND RECOMMENDATIONS.
- CLIP ANGLE CONNECTIONS SHALL BE 12 GAGE STEEL, MINIMUM.
- CONNECTIONS OF 18 GAGE OR HEAVIER MATERIAL MAY BE WELDED OR SCREWED. LIGHTER MATERIAL MAY ONLY BE SCREWED.
- MINIMUM SIZE OF SCREWS SHALL BE NO. 10-16. SCREW SPACING AND EDGE DISTANCE SHALL NOT BE LESS THAN 3/4 INCH.
- WELDING RODS SHALL BE 3/32" DIAMETER, TYPE E-60 OR E-70.
- CONNECTIONS OF LIGHT GAGE STEEL TO CONCRETE OR STRUCTURAL STEEL MAY BE MADE USING HILTI POWDER ACTUATED FASTENERS (PAFs), 0.177" DIAMETER, MIN., UON. MINIMUM EMBEDMENT OF PAFs IN CONCRETE IS 1 1/8". POINT OF PAFs SHALL BE DRIVEN COMPLETELY THROUGH THE BACK SIDE OF HOT ROLLED STRUCTURAL STEEL MEMBERS.
- BUILT-UP LIGHT GAGE STEEL MEMBERS OR ASSEMBLIES SHALL HAVE EACH COMPONENT FASTENED AT SPACINGS NOT TO EXCEED 12 INCHES.
- PROVIDE TOP AND BOTTOM FLANGE BRIDGING AT MID SPAN FOR JOISTS SPANNING UP TO 16 FEET AND AT THIRD POINTS FOR LONGER SPANS.
- PROVIDE CONTINUOUS HORIZONTAL BRIDGING FOR STUDS IN BEARING AND EXTERIOR WALLS AT 4 FOOT MINIMUM VERTICAL SPACING. WELD OR CLIP TO EACH STUD.

MECHANICAL PENTHOUSE ROOF FRAMING PLAN
SCALE 1/4" = 1'-0"

- NOTES:
- DATUM FOR ALL ELEVATIONS GIVEN ON THIS PLAN IS FINISHED ATTIC FLOOR SLAB ELEVATION ± 0 .
 - TOP OF ALL NEW STEEL JOIST IS (+12'-7 1/4") UNLESS OTHERWISE NOTED THUS (+/-) ON PLAN. TOP OF NEW JOIST TO MATCH TOP OF EXISTING JOIST VERIFY ELEVATION IN FIELD.
 - ROOF DECK SHALL BE 1 1/2" DEEP TYPE 18" 22 GAGE GALVANIZED SCREWED TO EACH JOIST $\phi 12"$.
 - NEW EXTERIOR WALL CONSTRUCTION IS 3 5/8" STEEL STUDS (362S200-54) $F_y = 50 \phi 16"$.

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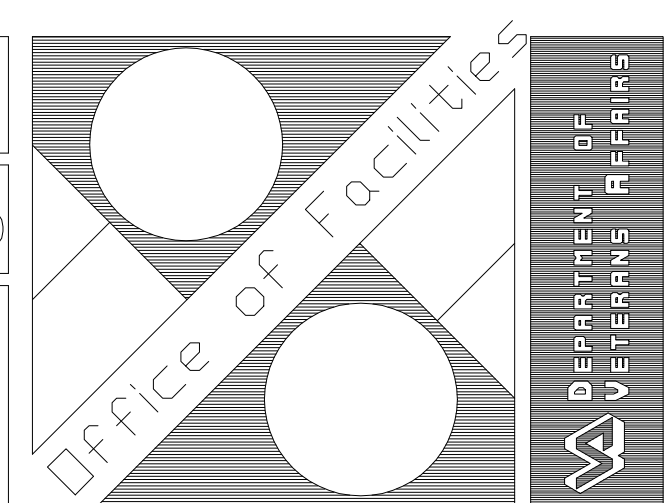
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