

CLARINDA CORRECTIONAL FACILITY

BOILER #1 REPLACEMENT

CLARINDA, IOWA

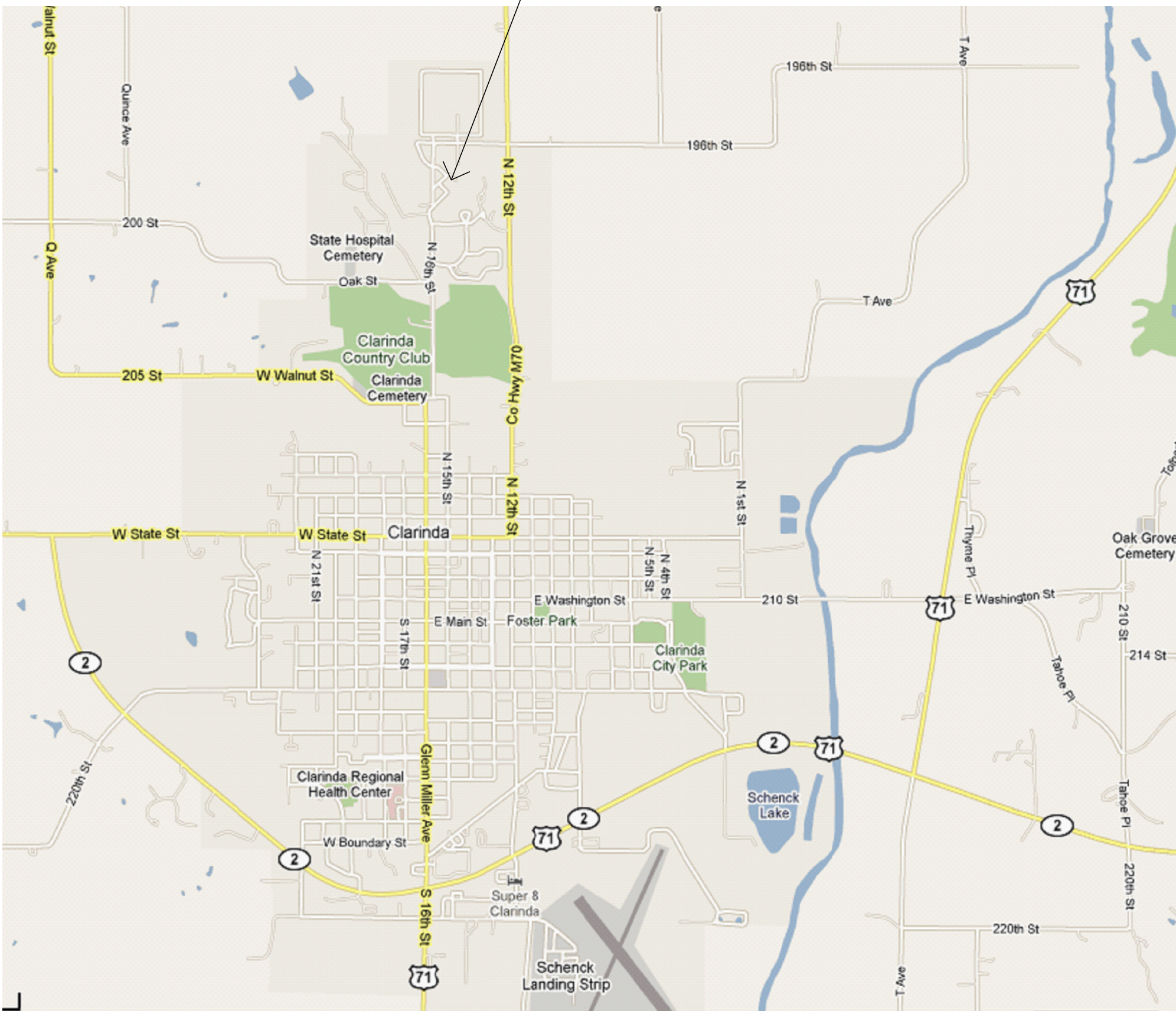
LOCATION OF
BOILER ROOM



CMHI CAMPUS PLAN



PROJECT LOCATION



VICINITY PLAN



SHEET INDEX

STRUCTURAL

S1.01 STRUCTURAL FRAMING PLAN, DETAILS, AND NOTES

MECHANICAL

MD.00 MECHANICAL DEMOLITION PLANS - BASEMENT
MD.01 MECHANICAL DEMOLITION PLAN - UPPER LEVEL
M1.00 MECHANICAL FLOOR PLAN - BASEMENT
M1.01 MECHANICAL AND ELECTRICAL FLOOR PLAN - UPPER LEVEL
M2.01 MECHANICAL SCHEDULES AND DETAILS

MECHANICAL ENGINEER

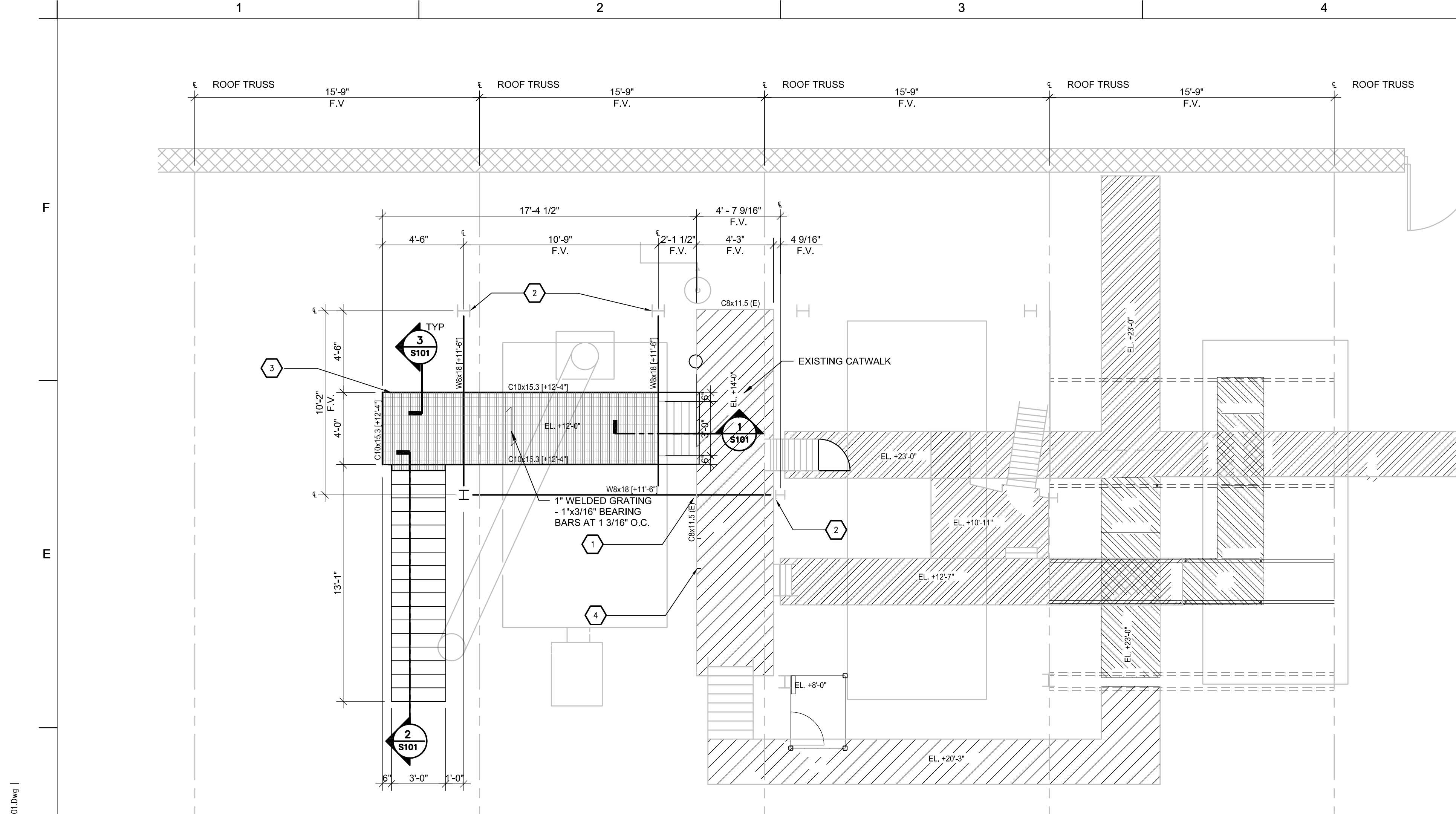
	I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.	
	Signature	6-15-17
	Printed or typed name	Douglas A. Sullivan
	License Number	15589
	My license renewal date is	12/31/2018
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL: MD.00, MD.01 (EXCEPT ELECTRICAL), M1.00, M1.01 (EXCEPT ELECTRICAL), M2.01		

ELECTRICAL ENGINEER

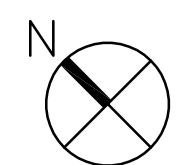
	I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.	
	Signature	6-15-17
	Printed or typed name	Norman E. Sutton
	License Number	16719
	My license renewal date is	December 31, 2018
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL: ELECTRICAL ON MD.01 and M1.01		

STRUCTURAL ENGINEER

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	Signature	6-15-17
	Printed or typed name	Steven W. Brase
	License Number	8890
	My license renewal date is	12/31/2017
PAGES, SHEETS OR DIVISIONS COVERED BY THIS SEAL: S1.01		



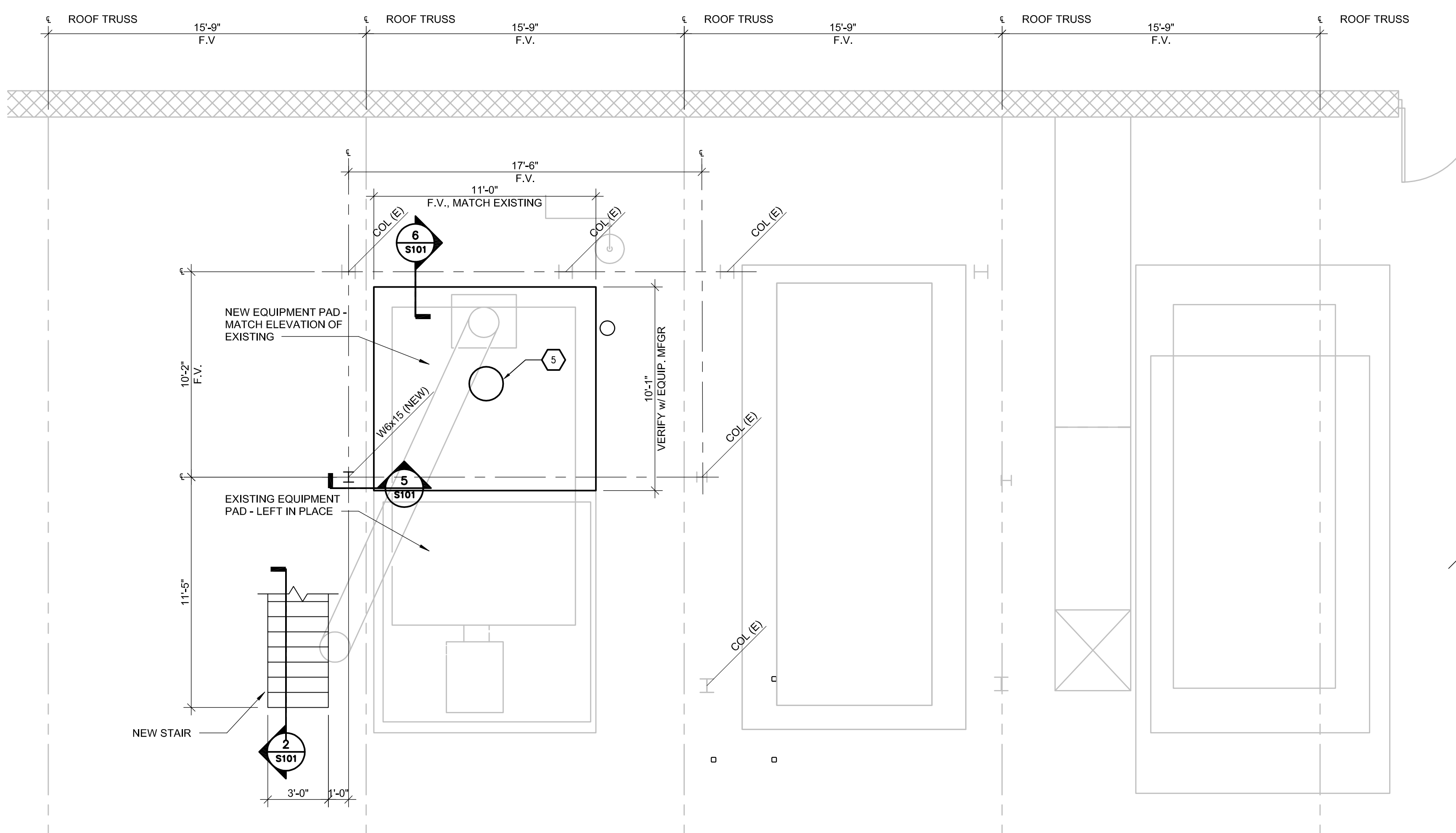
CATWALK FRAMING PLAN



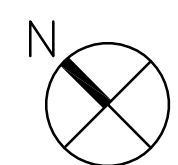
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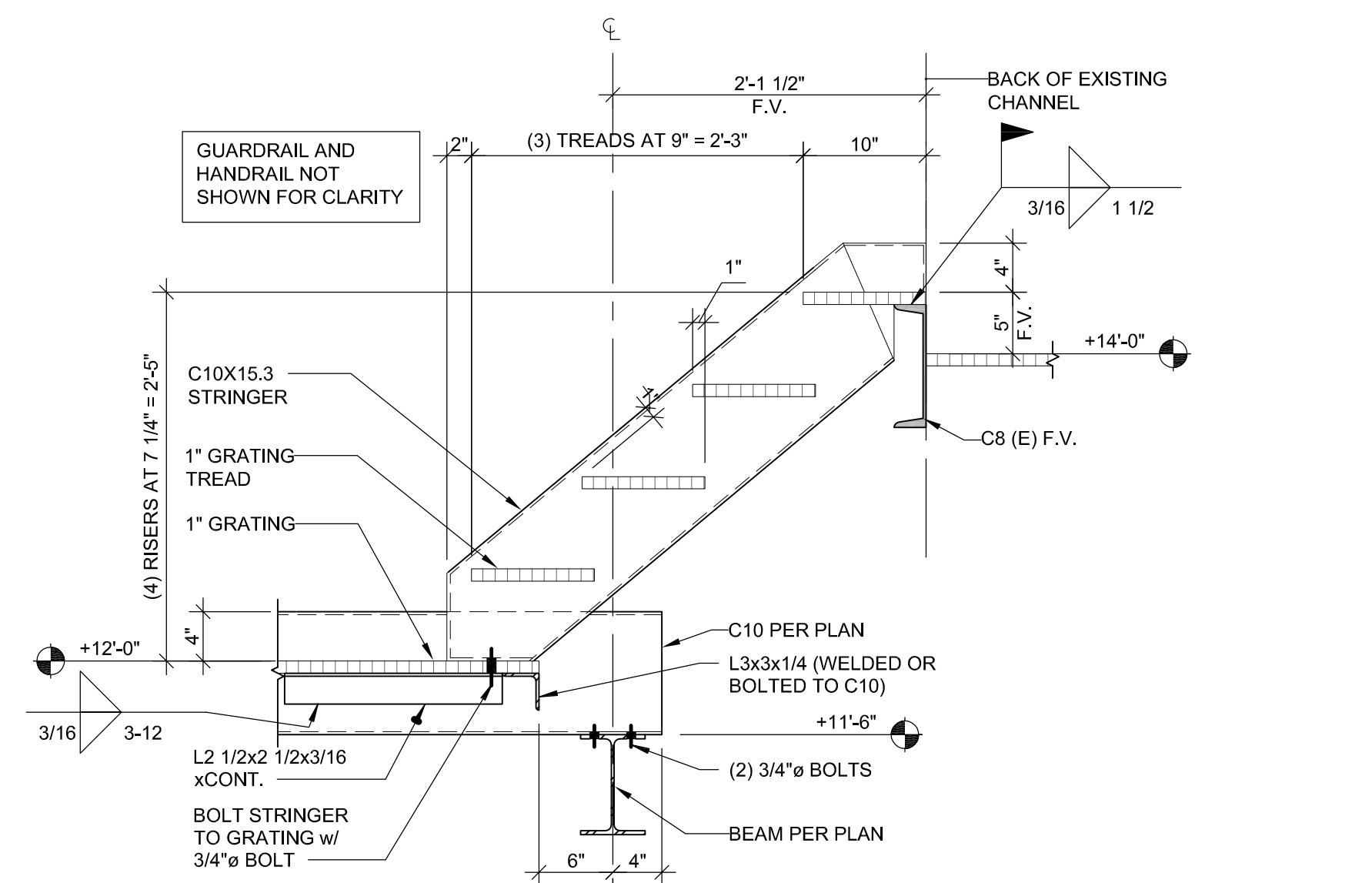
- ## KEY NOTES:
1. REPLACE KNEE BRACE SUPPORTING EXISTING PLATFORM FROM COLUMN WITH 3" Ø STD POST FROM NEW W6X18
 2. FIELD WELD NEW BEAMS TO EXISTING COLUMNS WITH $\frac{3}{4}$ " FILLET WELD ALL AROUND, (2) L20X4 L4X60-4" CLIP ANGLES.
 3. PROVIDE AND INSTALL GUARDRAIL AND STAIR HANDRAIL AT ALL NECESSARY LOCATIONS
 4. FIX SECTION OF EXISTING GUARDRAIL AT THIS LOCATION.
 5. INFILL HOLE IN EXISTING FLOOR SLAB WITH CONCRETE.



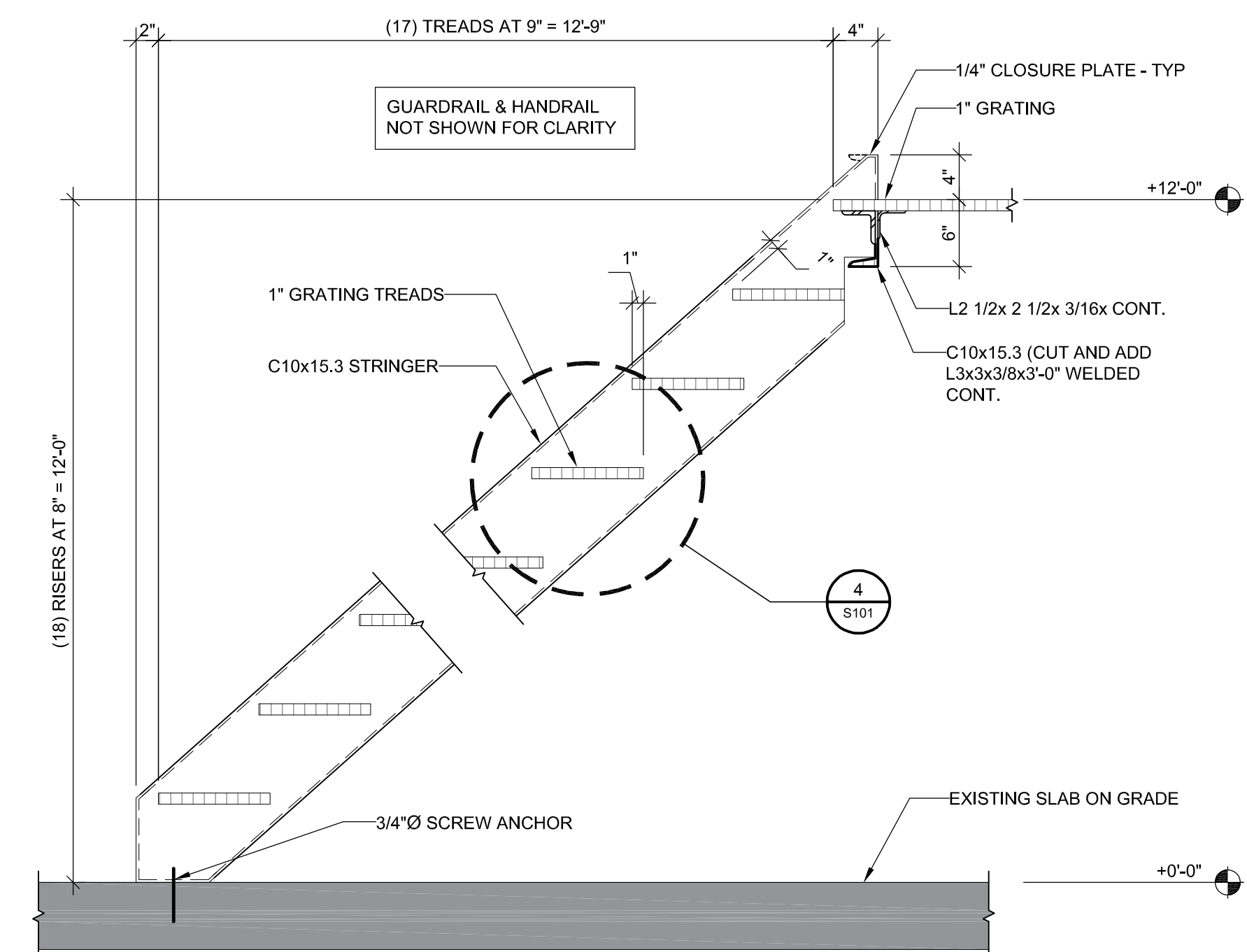
FLOOR PLAN



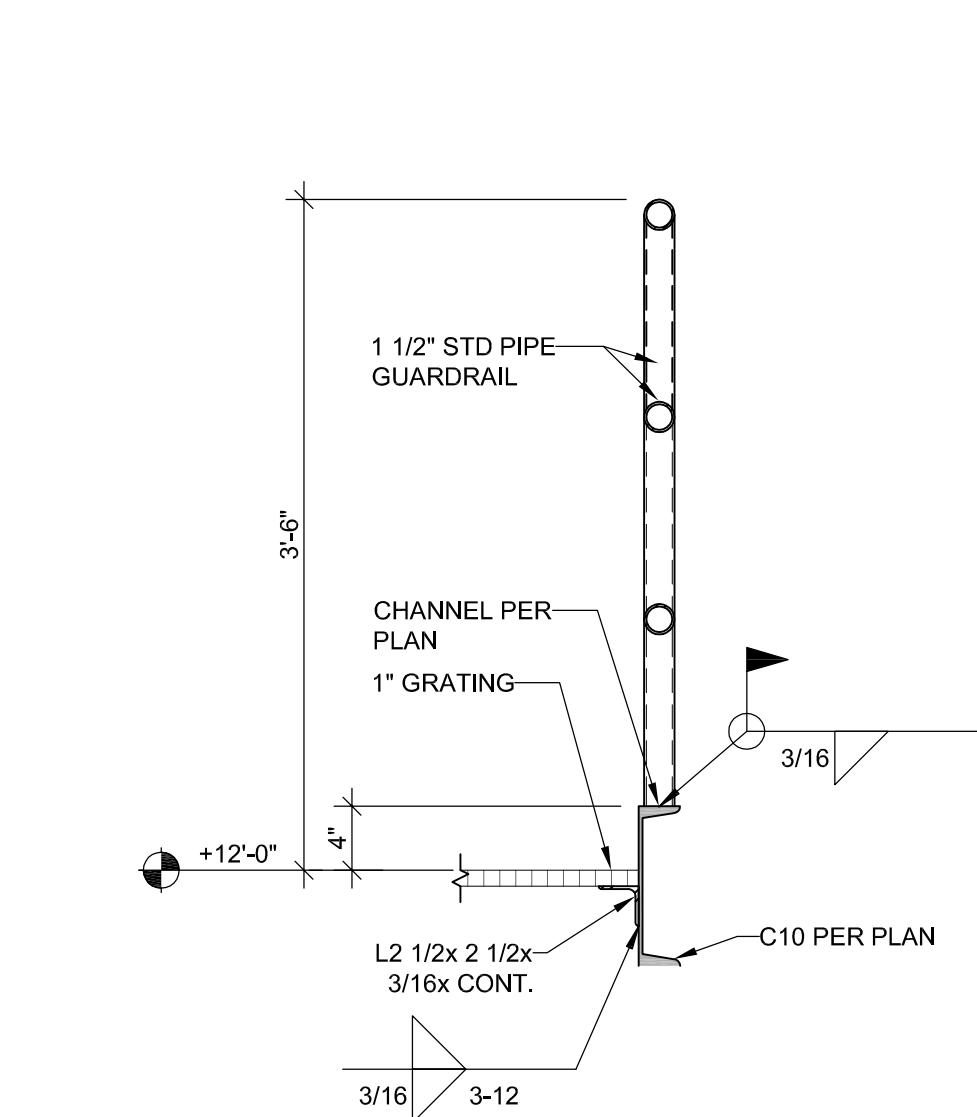
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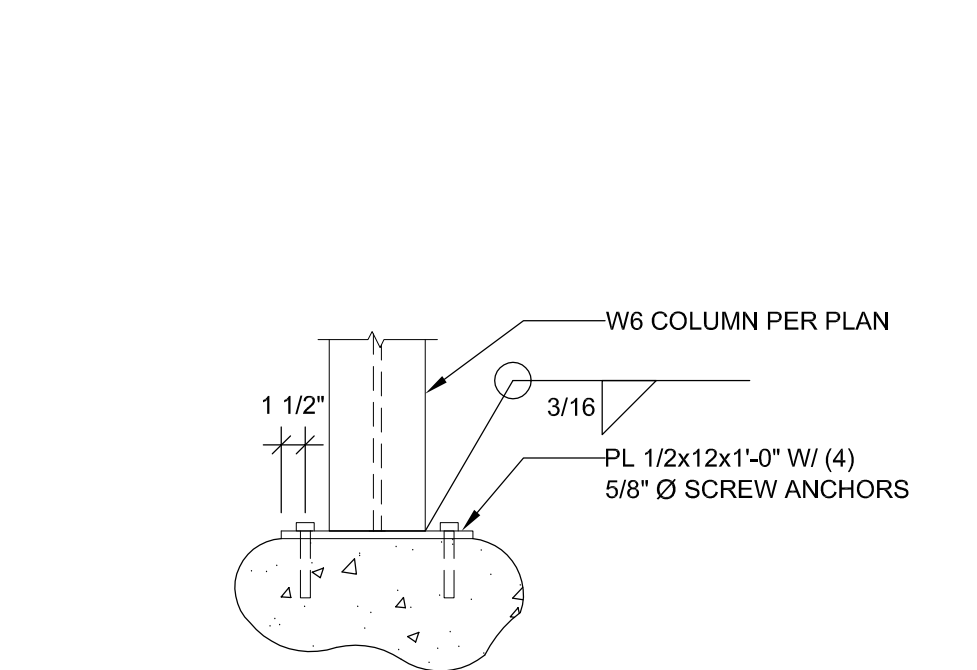
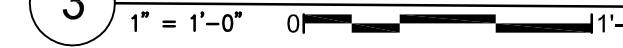
1 PLATFORM STAIR SECTION



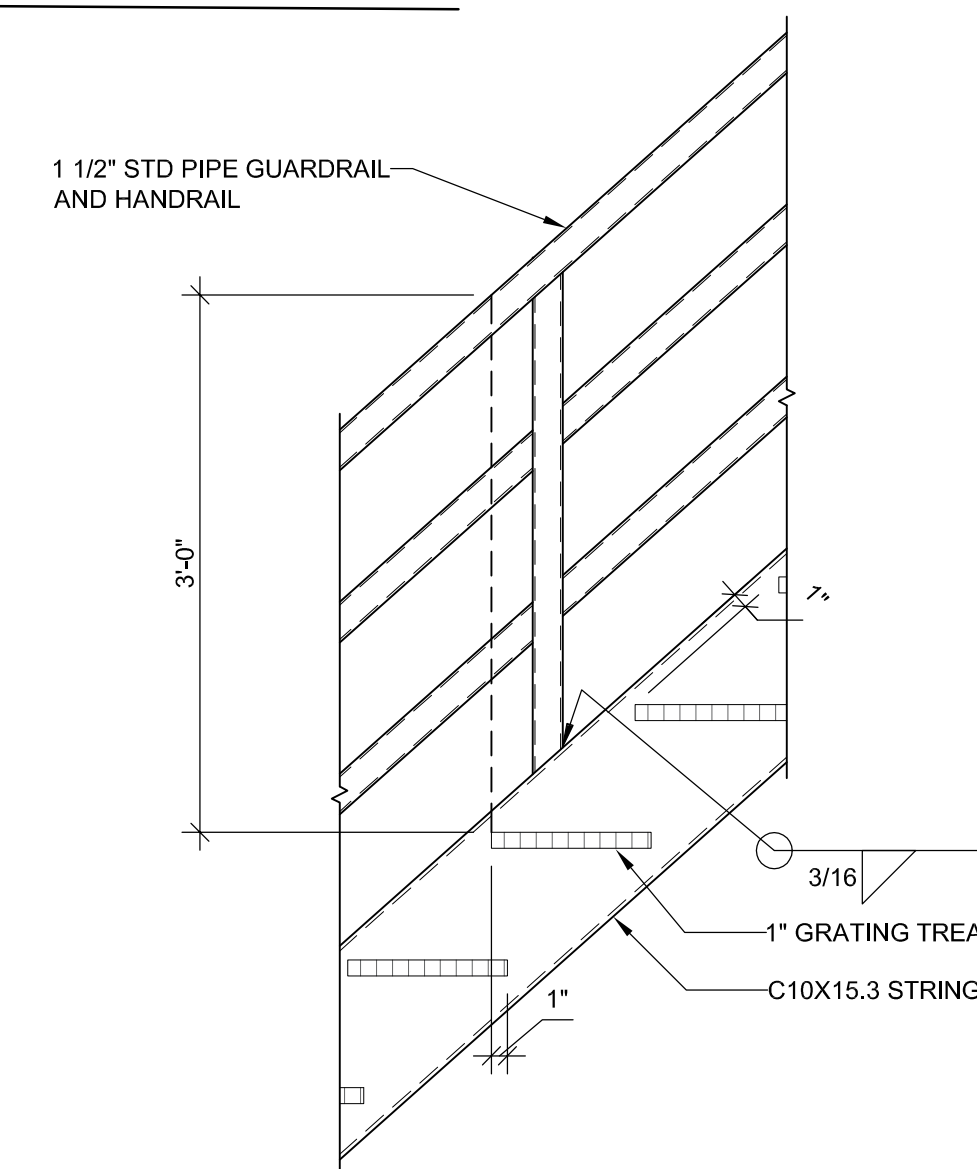
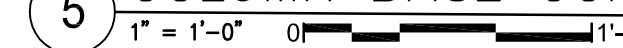
2 STAIR SECTION



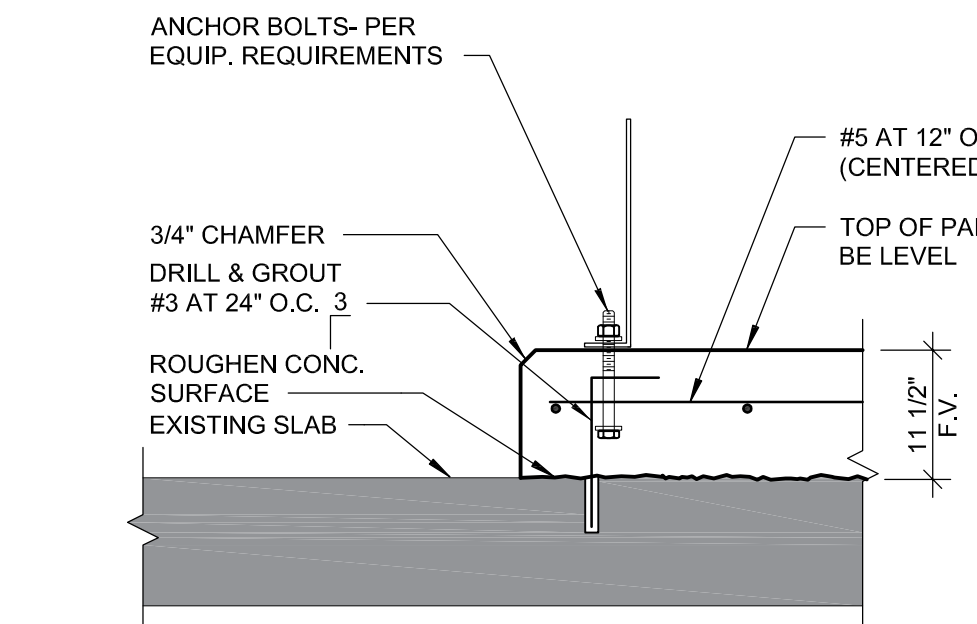
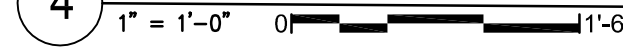
3 TYP EDGE GUARDRAIL



5 COLUMN BASE CONDITION

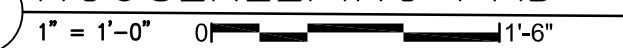


4 TYP STAIR HANDRAIL



- NOTES:**
1. COORDINATE SIZE AND LOCATION WITH CONTRACTOR.
 2. DRILL AND GROUT #3 BAR INTO CONCRETE SLAB 3" EMBED

HOUSEKEEPING PAD



SPECIFICATION NOTES:

1. STEEL PLATES, CHANNELS, ANGLES - ASTM A36.
2. STEEL W-SHAPES - ASTM A992
3. STEEL WELDED GRATING - 1"x3/16 BEARING BARS AT 1 3/16" O.C. WITH WELDED CROSS BARS AT 4" O.C.
4. WELDING - E70XX ELECTRODES.
5. BOLTS TO CONCRETE - HILTI 5/8" Ø HUS-H.
6. PAINTING - STANDARD SHOP PRIMER WITH (1) FINISH COAT TO MATCH EXISTING

GENERAL NOTES:

1. CONTRACTOR SHALL OBSERVE ALL PLANT RULES AND REGULATIONS. ACCESS TO WORK AREA SHALL BE AS DIRECTED BY THE OWNER.
2. AT THE TIME THE CONTRACTOR INTERFERE WITH THE NORMAL PLANT OPERATIONS, THE CONTRACTOR SHALL ADVISE THEIR OPERATIONS TO THE DESIGNATED AREA AND SHALL KEEP THE CONSTRUCTION AREA CLEAR, AND SHALL KEEP ALL ASLES AND PATHWAYS UNOBSTRUCTED.
3. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMISSION OF A BID TO ASCERTAIN THE EXISTING RESPONSIBILITY TO THE AREA AND OTHER RESTRICTIONS THAT MAY OCCUR IN THE AREA. VERY EXISTING MACHINES AND EQUIPMENT LOCATIONS SHOWN ON THE PLANS AND INVESTIGATE ADDITIONAL INTERFERENCES WHICH MAY NOT BE INDICATED ON PLANS.
4. CONTRACTOR SHALL VERIFY ALL EXISTING BUILDING DIMENSIONS AND/OR ELEVATIONS FOR CONFORMANCE TO THE DRAWINGS. NOTIFY THE OWNER OR OWNERS REPRESENTATIVE IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCY IN DIMENSIONS AND/OR ELEVATIONS FROM THOSE SHOWN ON THE DRAWINGS.
5. DAMAGE TO EXISTING BUILDING MATERIALS SHALL BE REPAIRED OR REPLACED TO OWNER'S SATISFACTION AT CONTRACTOR'S EXPENSE.
6. DURING DEMOLITION, DO NOT REMOVE ANY ITEMS WHICH JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING WITHOUT PERMISSION OF THE ENGINEER. IF HIDDEN ITEMS ARE FOUND IN THE AREA AND ARE IN AREAS TO BE DEMOLISHED, OR FRAMING IS IN QUESTION, STOP DEMOLITION AND NOTIFY THE ENGINEER IMMEDIATELY.
7. THE CONTRACTOR, IN COORDINATION WITH THE OWNER, SHALL LOCATE ALL UTILITIES BEFORE COMMENCING WORK.
8. ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF OFF SITE IN FULL COMPLIANCE WITH CURRENT CITY AND STATE REGULATIONS.

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CLARINDA CORRECTIONAL

BOILER #1 REPLACEMENT

IOWA DEPARTMENT OF
ADMINISTRATIVE SERVICES

CLARINDA, IOWA

DAS#8942.00

RFB0917335036

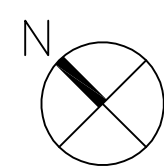
KEY PLAN

DRAWN	JRM
APPROVED	SWB
ISSUED FOR	BID
DATE	06/15/2017
FIELD BOOK	

PROJECT NO.: 417163-0

STRUCTURAL FRAMING PLAN, DETAILS, AND NOTES

S1.01

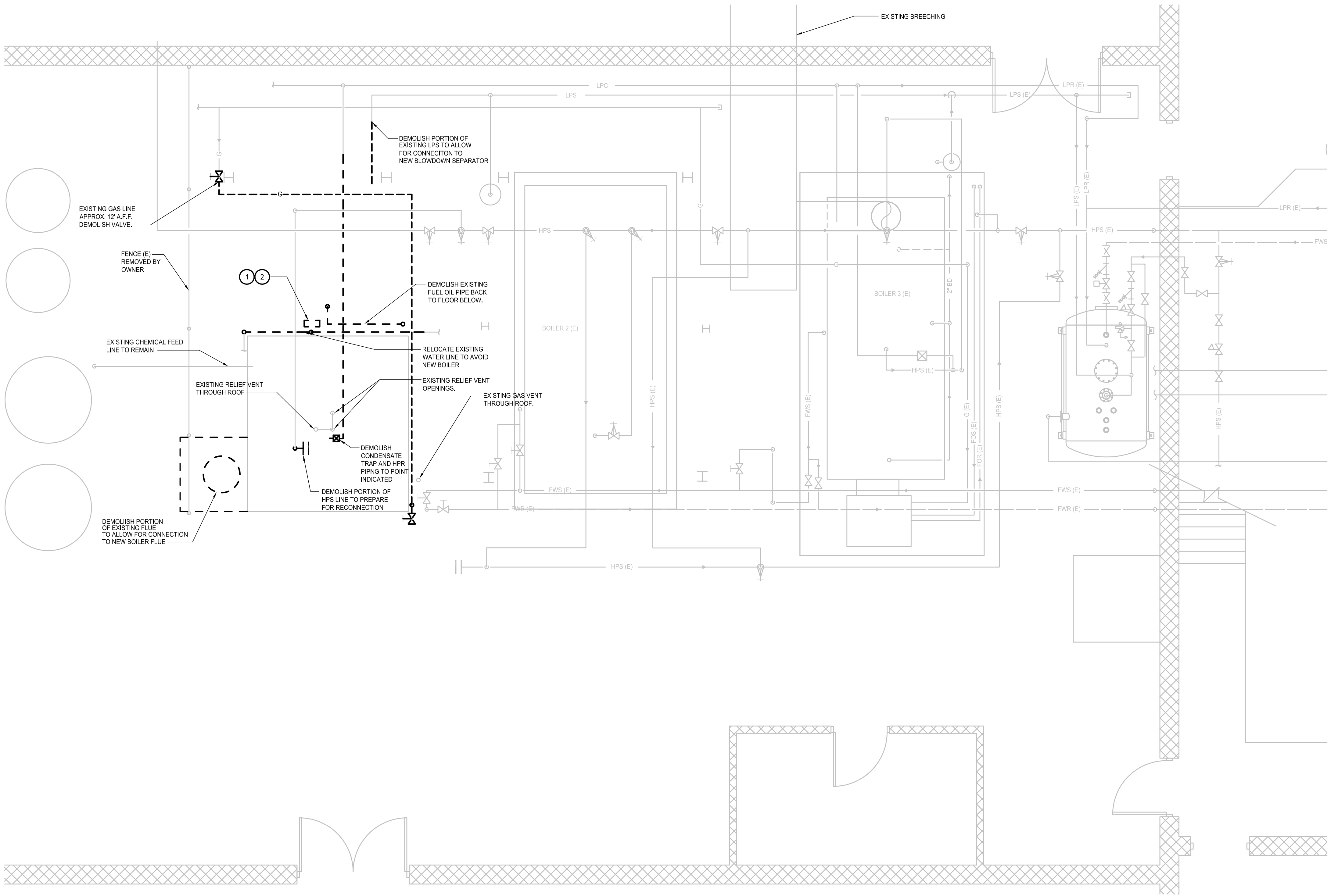


1/4"=1'-0" 0' 6'

1. DEMOLITION OF BOILERS, BOILER STACKS AND DISCONNECT OF PIPING, WIRING, ETC, SHALL BE DONE UNDER THIS CONTRACT. MAINTAIN EXISTING CONCRETE BOILER PAD FOR REUSE WITH NEW BOILER.
2. BOLD DASHED LINES INDICATE DEMOLITION WORK THIS CONTRACT. LIGHT LINES INDICATE EXISTING PIPING, DUCTWORK, EQUIPMENT, ETC, TO REMAIN.
3. DRAWINGS INDICATE APPROXIMATE ROUTING OF EXISTING SYSTEMS AND DO NOT INCLUDE ALL OFFSETS, FITTINGS, ETC.
4. REPAIR ANY INSULATION DAMAGED AS A RESULT OF DEMOLITION.
5. CONTRACTOR SHALL VERIFY ALL EXISTING PIPE SIZES. CONTRACTOR SHALL NOTIFY ENGINEER IF EXISTING CONDITIONS CONFLICT WITH DRAWINGS.

- 1 SEE FRONT END SPECIFICATIONS FOR PIPING SHUTDOWN DURATION LIMITATIONS.
- 2 COORDINATE DEMOLITION EXTENTS OF PIPING WITH LOCATION OF NEW FLOOR PENETRATION.
- 3 FUEL OIL SHALL REMAIN IN SERVICE FOR OTHER BOILERS.

MD.00



GENERAL DEMOLITION NOTES

- SOLID DASHED LINES INDICATE DEMOLITION WORK THIS CONTRACT. LIGHT LINES INDICATE EXISTING PIPING, DUCTWORK, EQUIPMENT, ETC. TO REMAIN.
- DRAWINGS INDICATE APPROXIMATE ROUTING OF EXISTING SYSTEMS AND DO NOT INCLUDE ALL OFFSETS, FITTINGS, ETC.
- REPAIR ANY INSULATION DAMAGED AS A RESULT OF DEMOLITION.

DEMOLITION REFERENCE NOTES

- SEE FRONT END SPECIFICATIONS FOR PIPING SHUTDOWN DURATION LIMITATIONS.
- THE TOP BLOWDOWNS FROM THE EXISTING BOILERS ARE CURRENTLY CONNECTED TOGETHER AND CONTROLLED BY ONE CONTROLLER TO DRAIN TO THE BASEMENT PIPING. PREPARE PIPING, CONTROLS, AND SOLENOID VALVES FOR RELOCATION OF CONTROLLER, DRAIN PIPING, AND CONNECTION TO NEW BLOWDOWN SEPARATOR.

ELECTRICAL DEMOLITION NOTES

- DISCONNECT EXISTING BOILER TO PERMIT REMOVAL. REMOVE EXISTING DISCONNECT SWITCH AND CONDUIT/PIPING BACK TO SERVING PANEL. MARK EXISTING BREAKER "SPARE".

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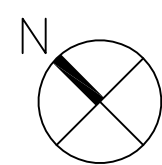
KEY PLAN

DRAWN JDB
APPROVED DAS
ISSUED FOR BID
DATE 06/15/2017
FIELD BOOK

PROJECT NO.: 417163-0

MECHANICAL
DEMOLITION PLAN -
UPPER LEVEL

MD.01



GENERAL MECHANICAL NOTES

- XRReference Files: BOILER ROOM > P:\PROJECTS\DM\410206\DWG\BOILER ROOM.Dwg | XR-TITLE > XR-TITLE.Dwg |
dasulli | P:\Projects\DM\410206\DWG\Rebid\CO-MD-01.DWG | DATE: 05/10/2011 | Time: 16:29



1. DRAWINGS INDICATE APPROXIMATE ROUTING OF DUCTWORK/PIPING AND DO NOT INCLUDE ALL OFFSETS AND FITTINGS ETC. CONTRACTOR SHALL VERIFY EXISTING CLEARANCES AND COORDINATE WITH THE INSTALLATION OF NEW DUCTWORK AND PIPING.
2. COORDINATE FINAL LOCATIONS OF DUCT, BOLLER STAKE AND MECHANICAL EQUIPMENT WITH LIGHTING, STRUCTURAL, PIPING, AND ALL OTHER TRADES. PROVIDE OFFSETS, EASEMENTS, OR RELOCATE DUCT AS REQUIRED TO AVOID CONFLICTS.
3. DRAWINGS INDICATE APPROXIMATE ROUTING OF EXISTING SYSTEMS AND DO NOT INCLUDE ALL OFFSETS, FITTINGS, ETC.
4. REPAIR ANY INSULATION DAMAGED AS A RESULT OF DEMOLITION.
5. WHERE ASBESTOS IS ENCOUNTERED CONTRACTOR OWNER TO VERIFY. OWNER RESPONSIBLE FOR REMOVAL.
6. CONTRACTOR SHALL VERIFY ALL EXISTING PIPE SIZES. CONTRACTOR SHALL NOTIFY ENGINEER IF EXISTING CONDITIONS CONFLICT WITH DRAWINGS.
7. ACCESS TO BUILDING TO INSTALL BOLLER IS THROUGH GARAGE DOOR AT NORTHWEST WALL.

- 1 EXISTING CONCRETE PAD IS 132" X 144" X 11 1/2". EXTEND PAD TO 132" X 265" X 11 1/2" FOR BASIS OF DESIGN BOILER. COORDINATE EXACT DIMENSIONS WITH SELECTED MANUFACTURER.
- 2 RECONNECT EXISTING TOP BLOWDOWN PIPING AND SOLENOID VALVES FROM TWO EXISTING BOILERS TO NEW BLOWDOWN PIPING. REVISE EXISTING PIPING AND WIRING TO RELOCATE BLOWDOWN CONTROLLER TO MOUNT ON COLUMN.

- 1 PROVIDE A 30A-3P 480V C/B TO BE INSTALLED IN THE EXISTING CHILLER SERVICE PANEL. EXTEND 3#10, #10 GN 3/4" C FROM NEW BREAKER TO THE BOILER.
- 2 PROVIDE A NEW NON-FUSED DISCONNECT SWITCH FOR THE BOILER.
- 3 LOCATION OF EXISTING BOILER EMERGENCY SHUTDOWN PUSHBUTTON, PUSHBUTTON TO REMAIN. MAKE CONNECTION FROM THE BOILER CONTROL CIRCUIT THROUGH THE LOAD CONTACTS OF A 30A-3P CONTACTOR. MAKE CONTACTOR, COIL, CONNECTION TO EACH OF THE EXISTING PUSHBUTTONS (SERIES CONNECTION) SUCH THAT THE BOILER WILL SHUT DOWN WHEN ANY ONE SWITCH IS PRESSED. COORDINATE FINAL ARRANGEMENTS WITH THE BOILER EQUIPMENT SUPPLIER.

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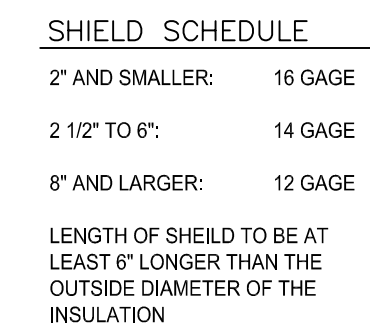
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M1.01

IOWA DEPARTMENT OF
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CLARINDA, IOWA

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MECHANICAL SYMBOLS

CONTROL POINT SCHEDULEBOILER SCHEDULE

ECONOMIZER SCHEDULE

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M2.01