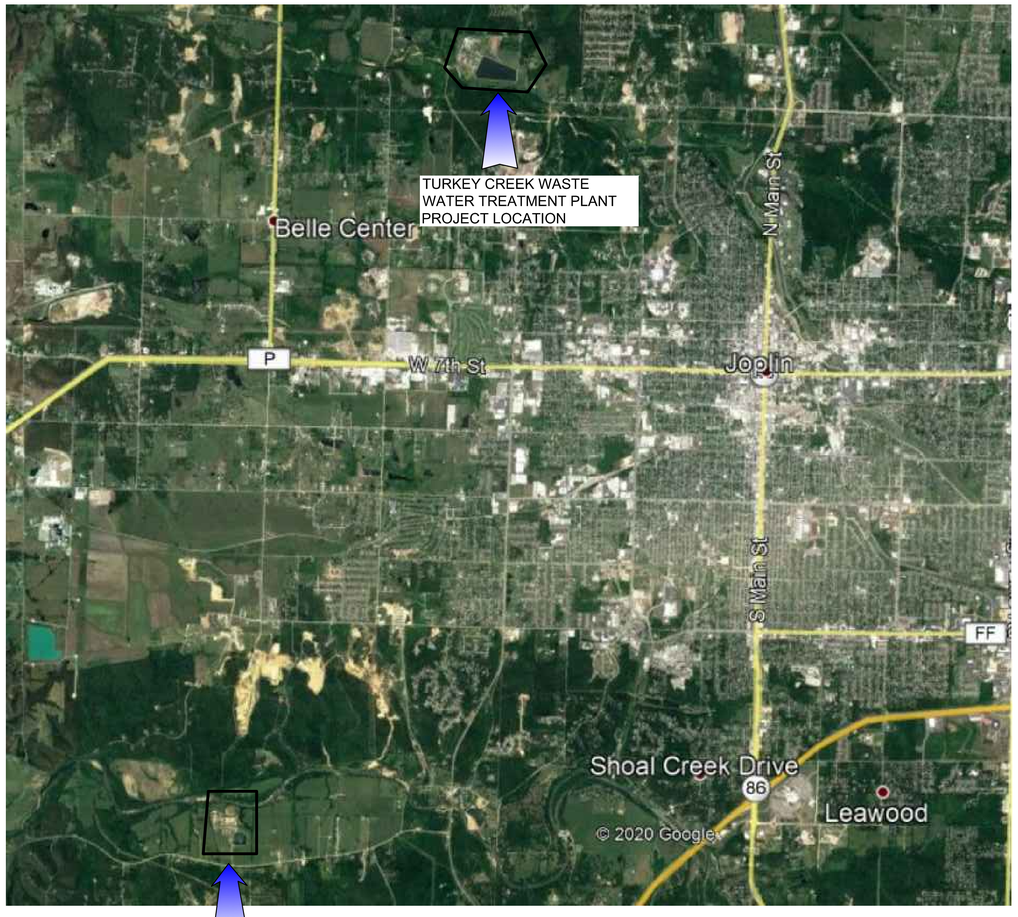
G17-0642 TURKEY CREEK WASTEWATER TREATMENT FACILITIES
G17-0642 SHOAL CREEK WASTEWATER TREATMENT FACILITIES
DIGESTER BUILDING ROOF MODIFICATIONS

JOPLIN, MISSOURI
MARCH 2021



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G0.02	GENERAL NOTES
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DS1.02	EXISTING SECOND FLOOR AND PENTHOUSE PLANS
DS1.03	EXISTING BUILDING SECTION
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E3.02	EXISTING SECOND FLOOR PLAN
M3.01	EXISTING FIRST FLOOR PLAN
M3.02	EXISTING SECOND FLOOR PLAN

N

STATE OF MISSOURI
LARRY C. HARDIN
NUMBER PE-2019000022
PROFESSIONAL ENGINEER
03/16/2021

LARRY C. HARDIN
MISSOURI REGISTERED PROFESSIONAL ENGINEER NO. 2019000022

olsson
Olsson - Civil Engineering
Missouri Certificate of Authority #001592
702 S. Main Street
Joplin, MO 64801
TEL 417.781.0643
www.olsson.com

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

TITLE SHEET, PROJECT LOCATION, SHEET INDEX

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

drawn by:	CJK
checked by:	LCH
approved by:	LCH
QA/QC by:	LCH
project no.:	G17-0642
drawing no.:	G_TTL_0170642
date:	3/16/2021

SHEET
G0.01

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GENERAL NOTES:

1. OLSSON SHALL NOT BE RESPONSIBLE FOR, NOR HAVE CHARGE OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES FOR THE SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS PROJECT AND SHALL NOT BE RESPONSIBLE FOR CONTRACTOR'S FAILURE TO CARRY OUT HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

2. OLSSON SHALL NOT BE RESPONSIBLE FOR, NOR HAVE CONTROL OVER, THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, ANY OF THEIR AGENTS OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

3. THE CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT. ALL SHORING AND BRACING MEMBERS AND CONNECTIONS SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT THE IMPOSED LOADS.

4. NO FIELD MODIFICATIONS TO ANY STRUCTURAL COMPONENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE STRUCTURAL ENGINEER.

5. MATERIALS AND EQUIPMENT SHALL BE STORED AND TRANSPORTED IN A MANNER SO AS NOT TO EXCEED THE ALLOWABLE CAPACITY OF THE EXISTING STRUCTURE.

6. THE CONTRACTOR SHALL FOLLOW WRITTEN DIMENSIONS ONLY. DO NOT SCALE DRAWINGS.

7. EXISTING DIMENSIONS AND MATERIALS OF CONSTRUCTION SHOWN OR OTHERWISE INDICATED ON THE PLANS ARE BASED ON THE AVAILABLE RECORD PLANS

   A. TITLED "JOPLIN, MISSOURI – EPA PROJECT NO. C290868, DATED 5/16/81 BY ALLGEIER, MARTIN & ASSOCIATES, INC. FOR ORIGINAL CONSTRUCTION OF THE EXISTING DIGESTER BUILDING.
   B. TITLED "TURKEY CREEK WASTEWATER TREATMENT FACILITIES EXPANSION, JOPLIN, MISSOURI, DATED MARCH, 1995 BY ALLGEIER, MARTIN & ASSOCIATES, INC. FOR MODIFICATIONS TO THE EXISITNG DIGESTER BUILDING.
   C. TITLED "SHOAL CREEK WASTEWATER TREATMENT FACILITIES, JOPLIN, MISSOURI, DATED AUGUST, 1983 BY ALLGEIER, MARTIN & ASSOCIATES FOR ORIGINAL CONSTRUCTION OF THE EXISTING DIGESTER BUILDING.

8. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION AND THROUGHOUT THE ENTIRETY OF THE PROJECT UNTIL COMPLETION.

9. CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AS REQUIRED TO PERFORM THE WORK SHOWN ON THE PLANS PRIOR TO START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES OR CONFLICTS FOUND IN THE CONTRACT DOCUMENTS AND FIELD CONDITIONS.

10. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION AND DIMENSIONS OF EXISTING HVAC DUCT WORK, PROCESS PIPING, AND EQUIPMENT TO BE REMOVED, STORED, AND RE-INSTALLED PRIOR TO THE START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES OR CONFLICTS FOUND IN THE CONTRACT DOCUMENTS AND FIELD CONDITIONS.

11. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION AND DIMENSIONS OF EXISTING PLUMBING AND GAS LINES TO REMAIN IN-PLACE PRIOR TO THE START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES OR CONFLICTS FOUND IN THE CONTRACT DOCUMENTS AND FIELD CONDITIONS. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT OF EXISTING PLUMBING AND GAS LINES TO REMAIN THAT ARE SUPPORTED BY ROOF TRUSSES.

12. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES OR CONFLICTS FOUND IN EXISTING CONDITIONS DURING THE PROJECT.

13. PROJECT CONDITIONS:
   A. TRAFFIC: DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM OWNER.

   B. PROTECTION OF EXISTING IMPROVEMENTS: PROVIDE PROTECTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED TO REMAIN IN PLACE, RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PROPERTY OWNERS.

14. CONTRACTOR SHALL DISPOSE OF ALL CONSTRUCTION DEBRIS, TRASH, ORGANICS, AND WASTE MATERIAL OFF SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

15. CONTRACTOR SHALL PROTECT EXISTING CONDUIT, PIPING, DUCTWORK, EQUIPMENT, MASONRY, AND OTHER EXISTING ITEMS OF CONSTRUCTION, TO REMAIN DURING DEMOLITION AND RE-CONSTRUCTION.

16. CONTRACTOR SHALL PROTECT THE EXISTING STRUCTURE AND OCCUPIED SPACE ADJACENT TO THE IMMEDIATE WORK AREA FROM WIND AND MOISTURE INTRUSION DURING DEMOLITION AND CONSTRUCTION ACTIVITIES. PROTECTIVE COVERINGS SHALL BE SECURED IN PLACE DURING NON-WORK HOURS DAILY AND MAINTAINED DURING NON-WORK HOURS AS REQUIRED TO PROTECT EXISTING STRUCTURE AND OCCUPIED SPACE.

17. CONTRACTOR SHALL COORDINATE WITH ENGINEER AND OWNER TO SET ACCEPTABLE WORK SCHEDULES WHEN THE WORK WILL BE PERFORMED. SET WORK HOURS AND DAYS OF THE WEEK IT IS ACCEPTABLE TO PERFORM THE DIFFERENT PARTS OF THE WORK.

18. CONTRACTOR SHALL COORDINATE WITH ENGINEER AND OWNER AN ACCEPTABLE LAY DOWN AREA FOR CONSTRUCTION USE AND ONSITE STORAGE OF MATERIALS.

19. CONTRACTOR SHALL REMOVE, PROTECT, AND STORE EXISTING EQUIPMENT AND MATERIALS UNDAMAGED FOR REUSE AND RE-INSTALLATION AS INDICATED ON THE PLANS.

20. CONTRACTOR SHALL CORRECT AND DEFICIENCIES IN THE WORK.

DESIGN CRITERIA:

1. THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE INCLUDING APPENDIX CHAPTERS ADOPTED AND AMENDED BY THE CITY OF JOPLIN.

2. THE 2018 EDITION OF THE INTERNATIONAL MECHANICAL CODE INCLUDING APPENDIX CHAPTERS ADOPTED AND AMENDED BY THE CITY OF JOPLIN.

3. THE 2018 EDITION OF THE INTERNATIONAL FUEL GAS CODE INCLUDING APPENDIX CHAPTERS ADOPTED AND AMENDED BY THE CITY OF JOPLIN.

4. THE 2018 EDITION OF THE INTERNATIONAL PLUMBING CODE INCLUDING APPENDIX CHAPTERS ADOPTED AND AMENDED BY THE CITY OF JOPLIN.

5. THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE AS ADOPTED BY THE CITY OF JOPLIN.

STRUCTURAL LOADS:

1. DEAD LOADS:

A. BUILDING MATERIALS	SEE DRAWINGS
B. MECHANICAL/ELECTRICAL/PLUMBING	5 PSF
C. COLLATERAL LOAD	5 PSF

2. ROOF LIVE LOADS: 20 PSF (NON-REDUCIBLE)

3. WIND:

A. BASIS FOR WIND LOADS	2018 IBC,ASCE 7-10
B. DESIGN WIND VELOCITY	120 MPH
C. EXPOSURE CATEGORY	C
D. BUILDING RISK CATEGORY	III
E. BUILDING ENCLOSURE CLASSIFICATION	ENCLOSED
F. INTERNAL PRESSURE COEFFICIENT	+0.18/-0.18
G. COMPONENTS AND CLADDING	ASCE 7-10

4. SNOW:

A. GROUND SNOW LOAD Pg:	30 PSF
B. BUILDING RISK CATEGORY	III
C. IMPORTANCE FACTOR Is:	1.10
D. EXPOSURE FACTOR Ce:	1.0
E. THERMAL FACTOR Ct:	1.0
F. ROOF SLOPE FACTOR Cs:	0.8
G. MINIMUM DESIGN ROOF SNOW LOAD:	30 PSF

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702 S. Main Street
Joplin, MO 64801
TEL 417.781.0643
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LARRY C. HARDIN
NUMBER PE-2019000022
PROFESSIONAL ENGINEER
03/16/2021

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GENERAL NOTES

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

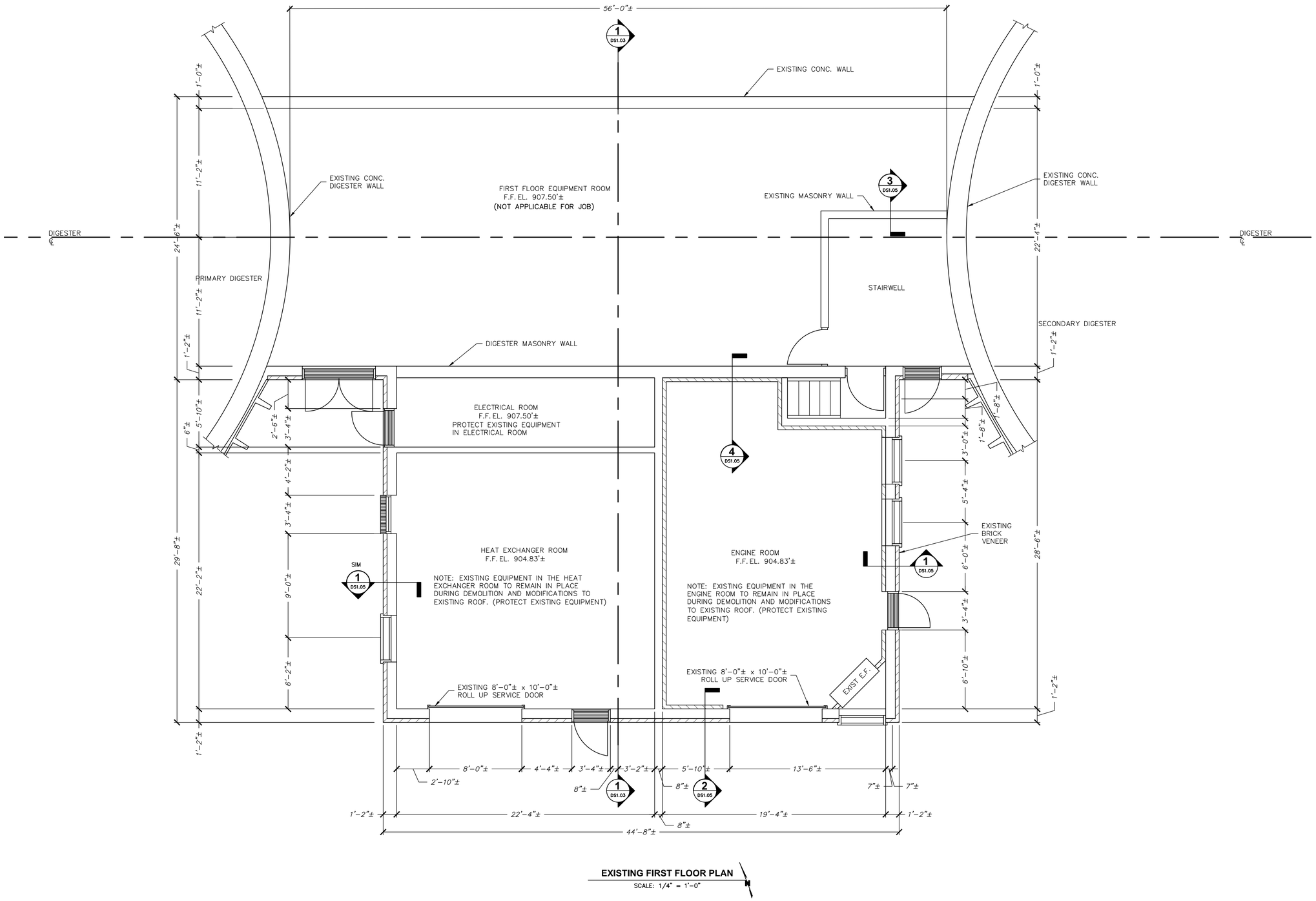
JOPLIN, MO

2021

drawn by: CJK
checked by: LCH
approved by: LCH
QA/QC by: LCH
project no.: G17-0642
drawing no.: G_NOTE_0170642.dwg
date: 3/16/2021

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EXISTING FIRST FLOOR PLAN

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

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Joplin, MO 64801

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LARRY C. HARDIN
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03/16/2021

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EXISTING FIRST FLOOR PLAN
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

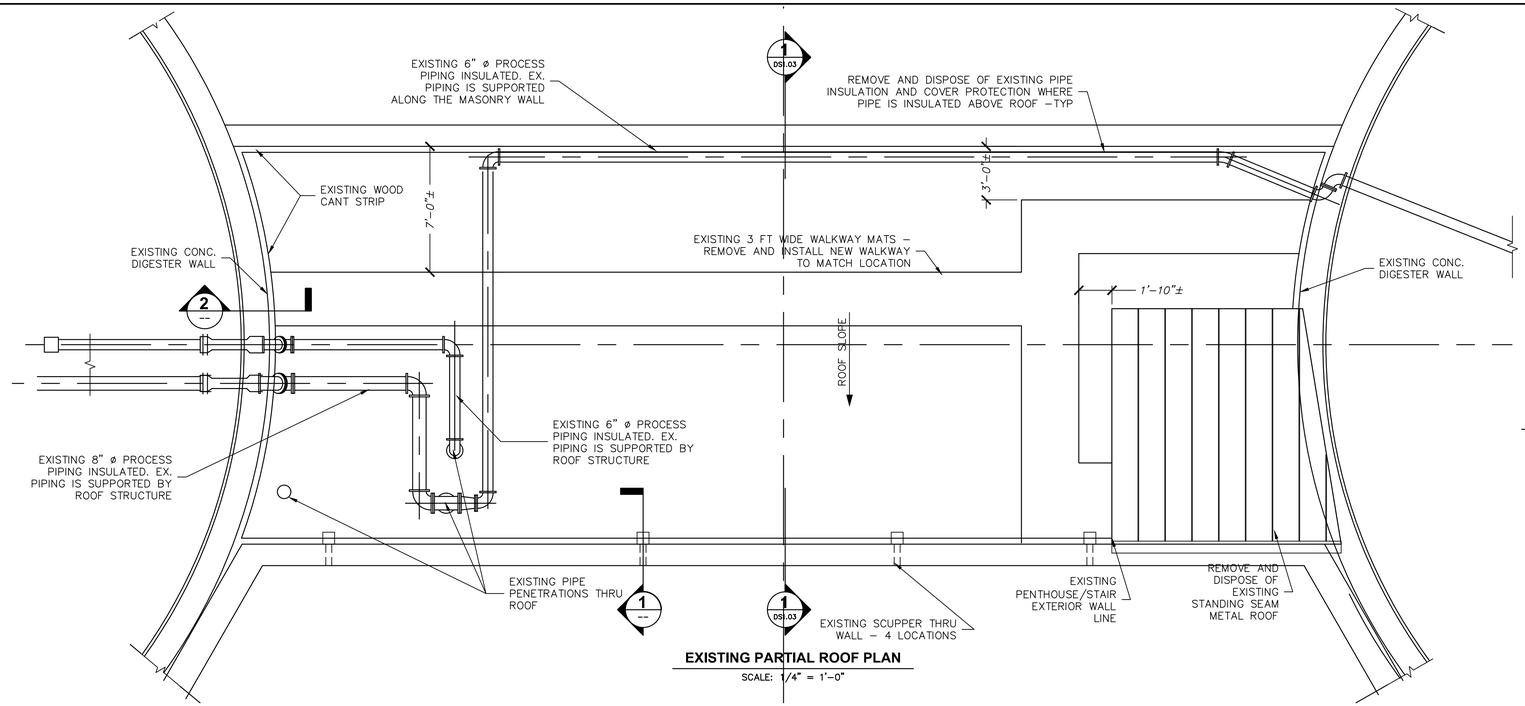
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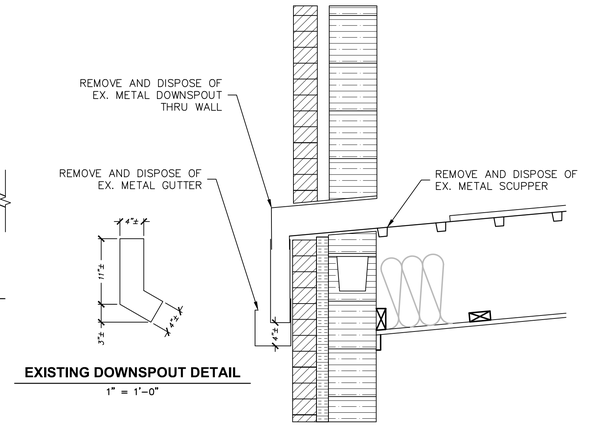
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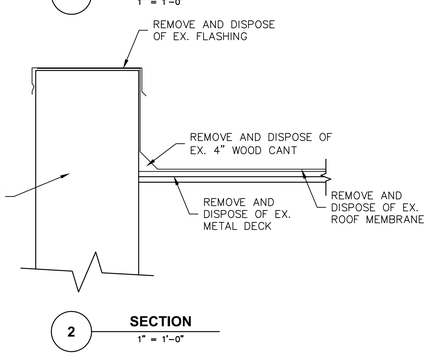
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approved by:	LCH
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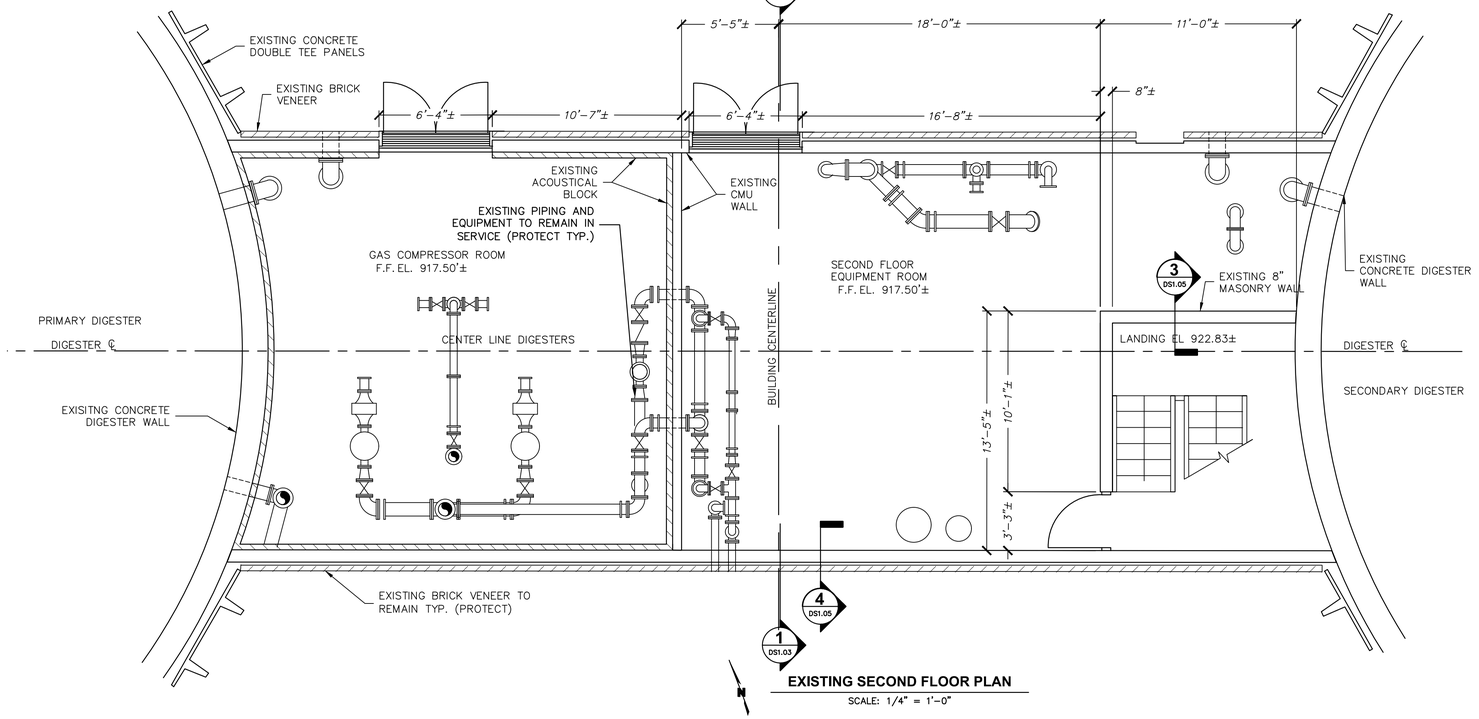
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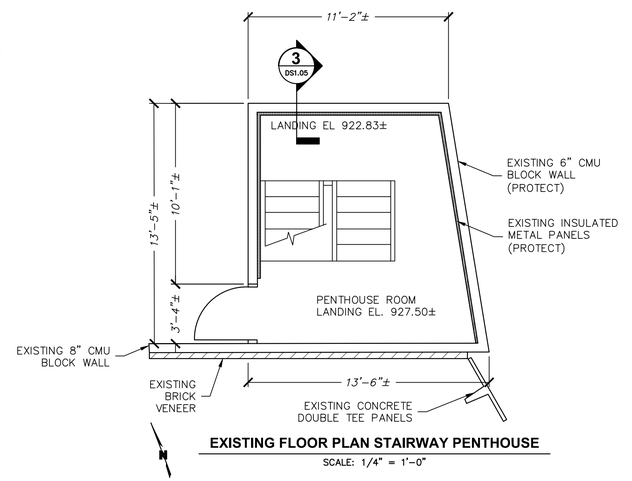
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03/16/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

EXISTING SECOND FLOOR AND PENTHOUSE PLANS
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

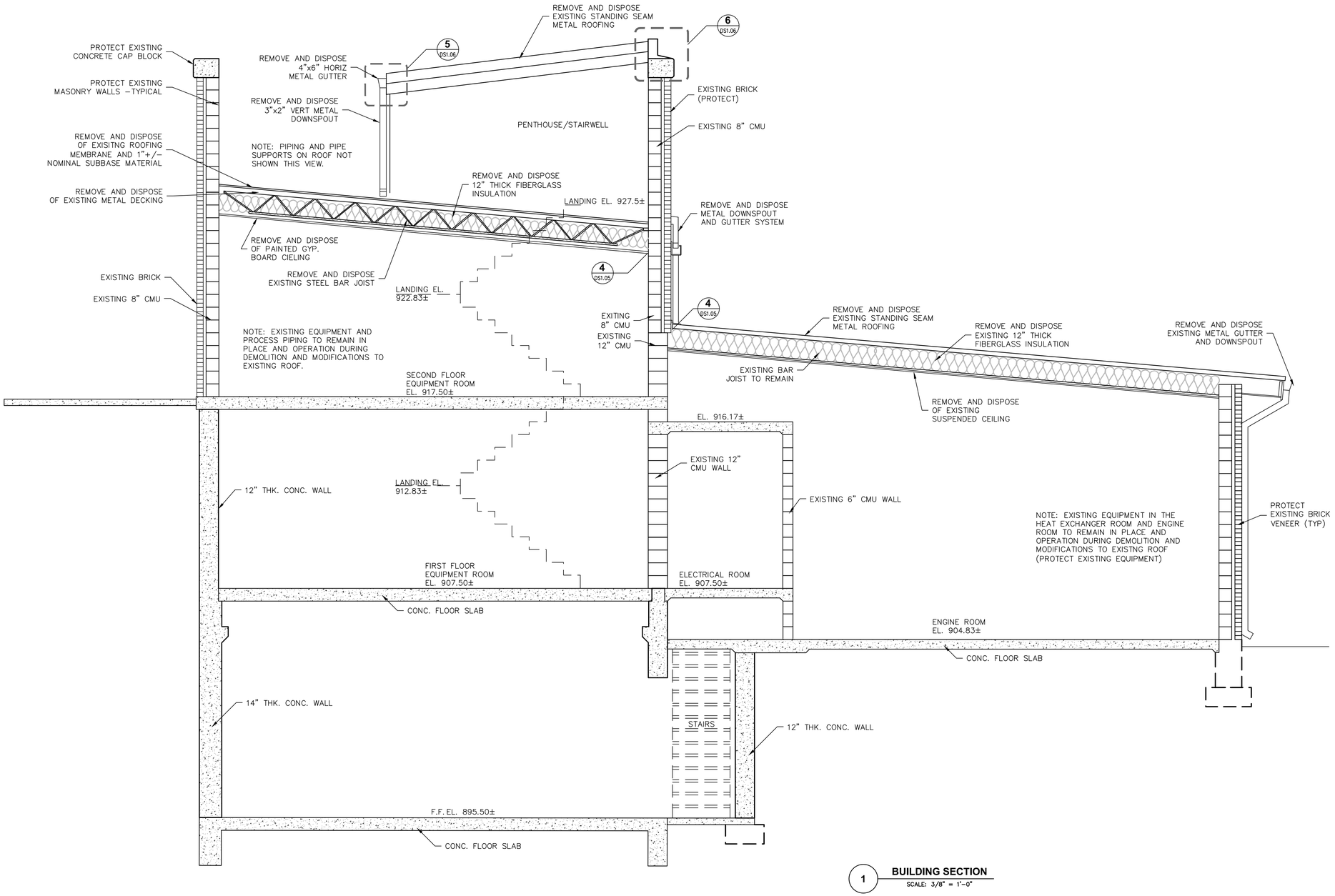
JOPLIN, MO

2021

drawn by: CJK
checked by: LCH
approved by: LCH
QA/QC by: LCH
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1 BUILDING SECTION
SCALE: 3/8" = 1'–0"

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03/16/2021

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EXISTING BUILDING SECTION
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

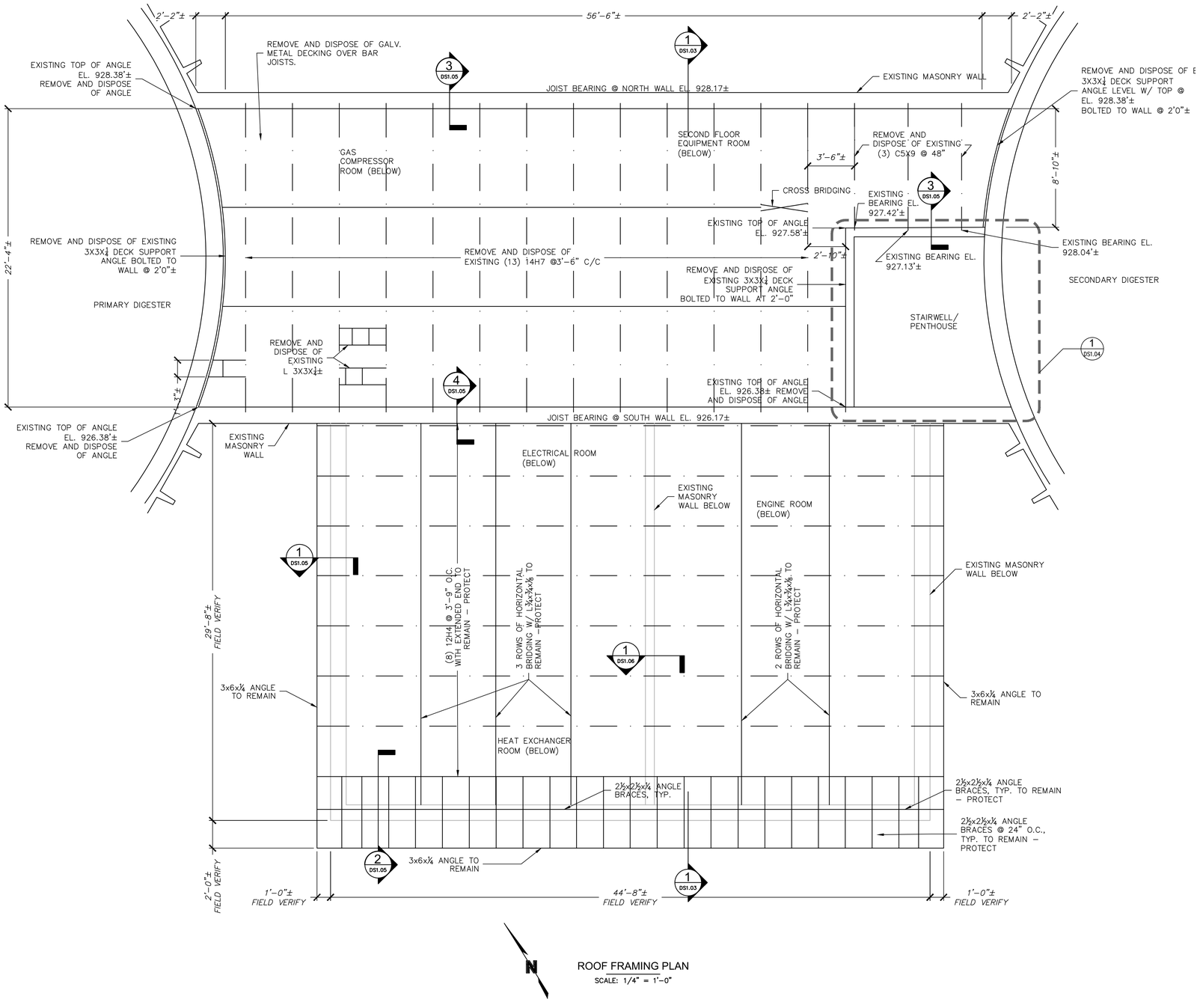
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2021

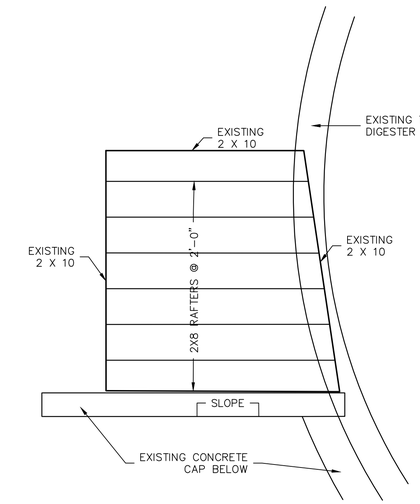
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ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"



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

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Joplin, MO 64801
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LARRY C. HARDIN NUMBER PE-2019000222 STATE OF MISSOURI PROFESSIONAL ENGINEER
03/16/2021

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REVISIONS

EXISTING ROOF FRAMING PLAN
TURKEY CREEK NORTH DIGESTER BUILDING

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CITY OF JOPLIN

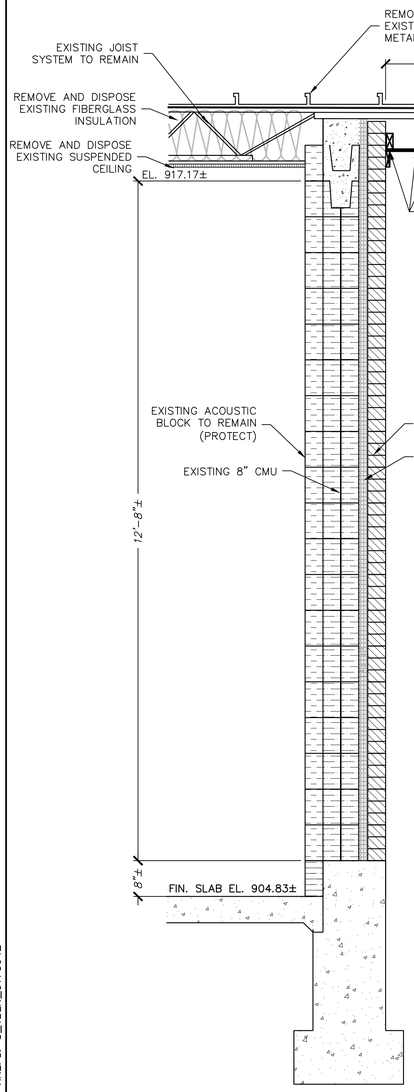
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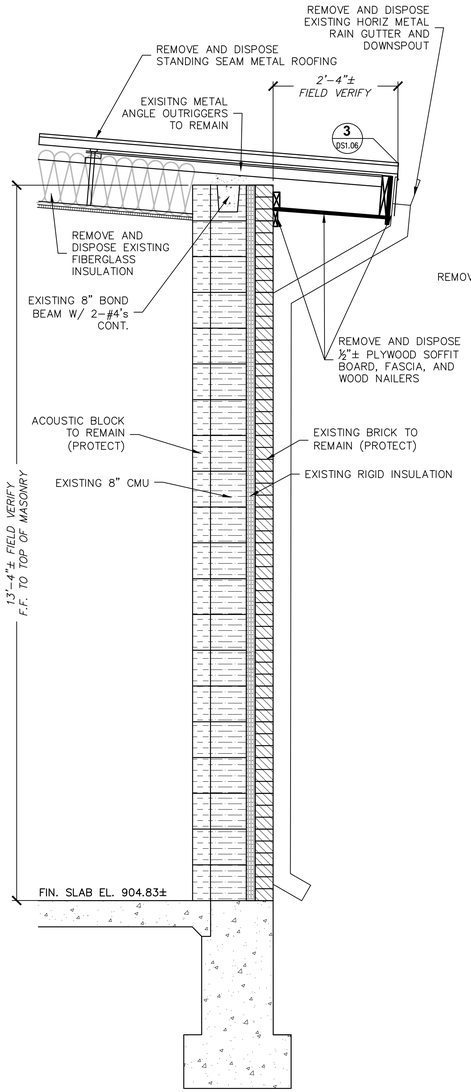
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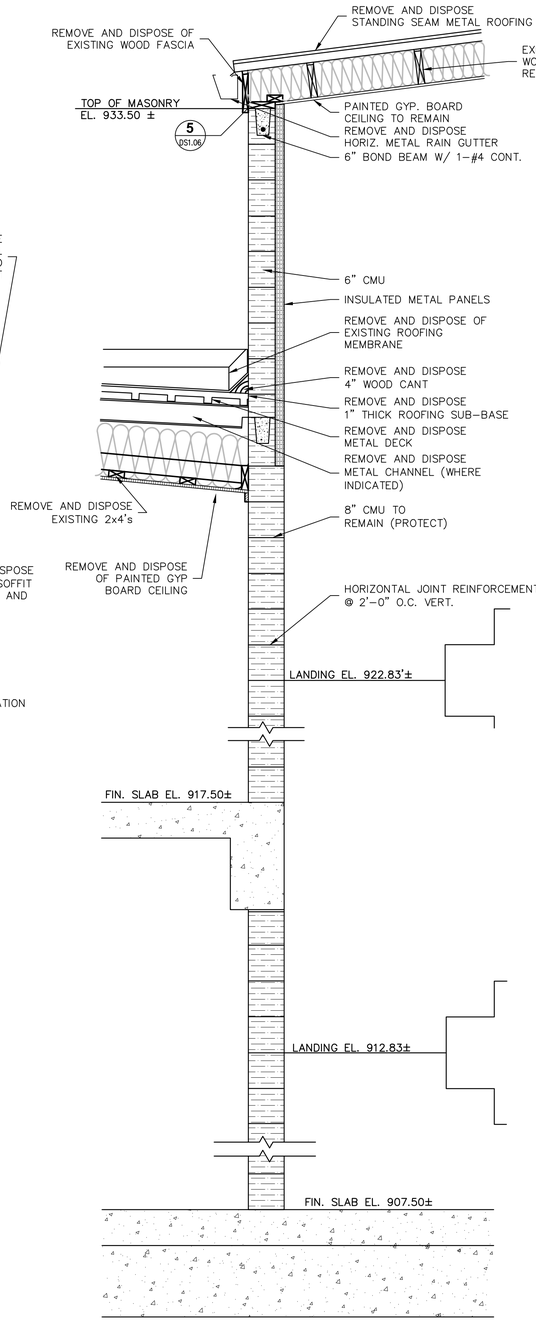
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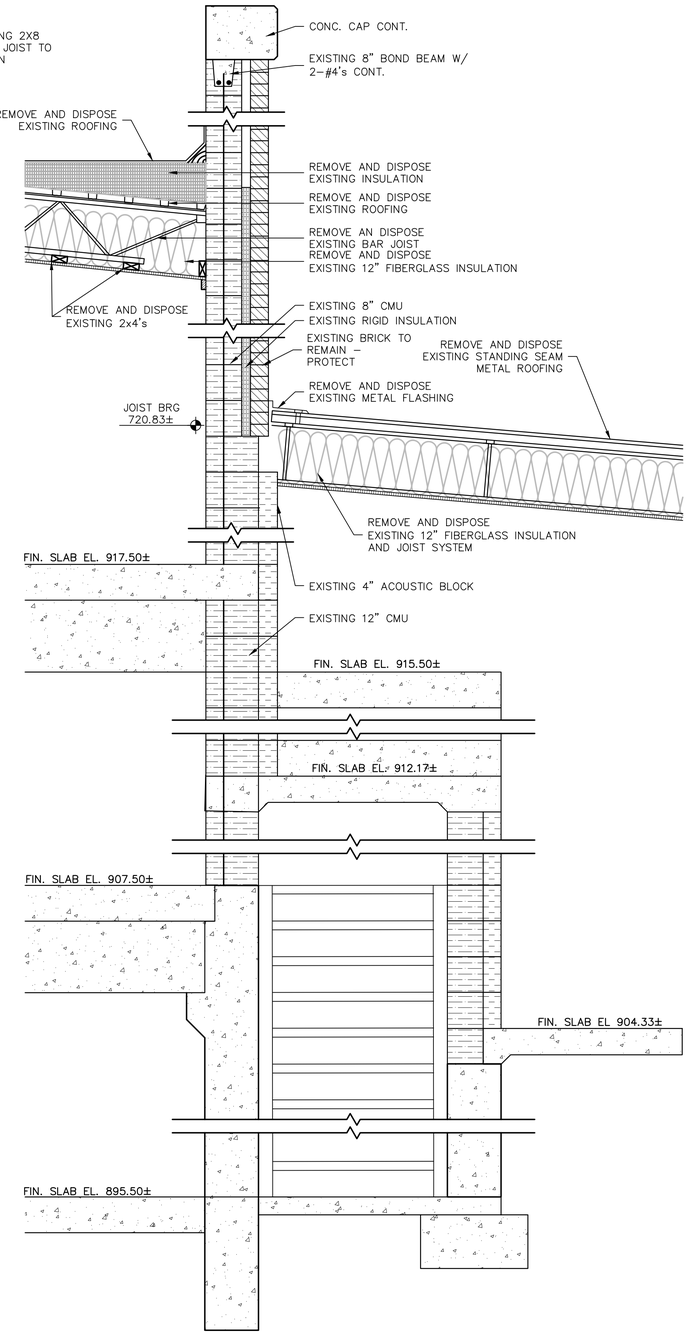
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2 **EXISTING WALL SECTION**
SCALE: 3/4" = 1'-0"



3 **EXISTING WALL SECTION**
SCALE: 3/4" = 1'-0"



4 **EXISTING WALL SECTION**
SCALE: 3/4" = 1'-0"

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REVISIONS

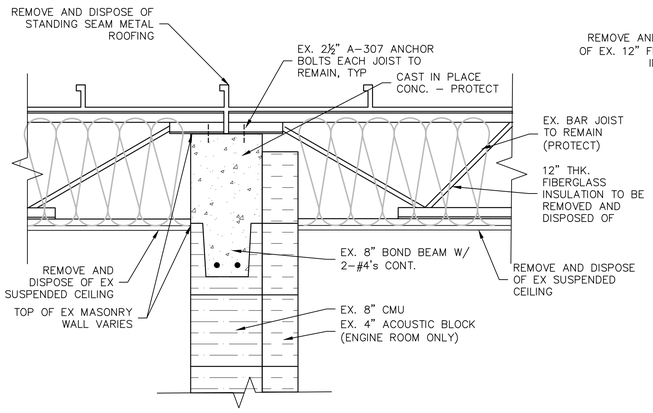
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EXISTING WALL SECTIONS
TURKEY CREEK NORTH DIGESTER BUILDING
TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN
JOPLIN, MO
2021

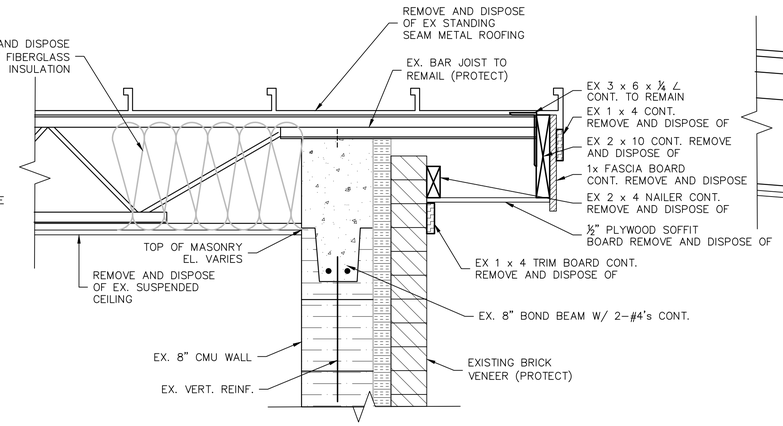
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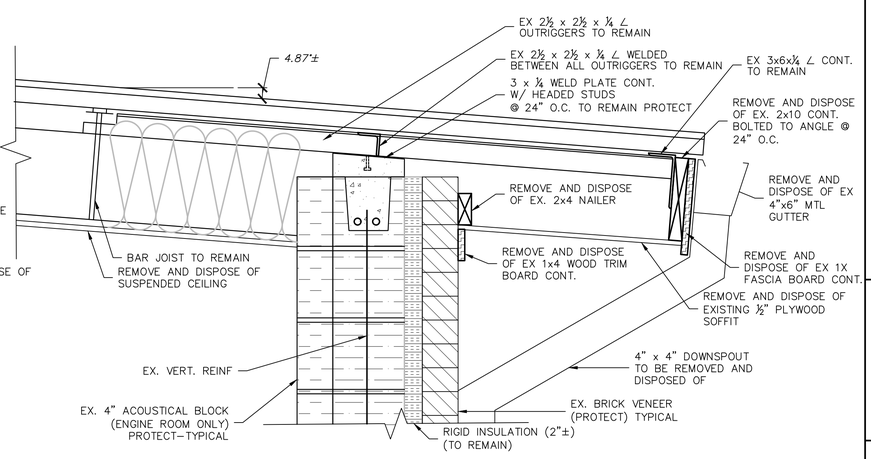
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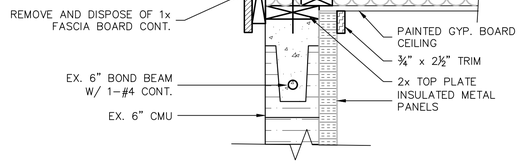
1 EXISTING JOIST BEARING DETAIL
SCALE: 1 1/2" = 1'-0"



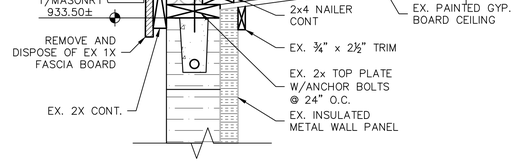
2 EXISTING RAKE DETAIL
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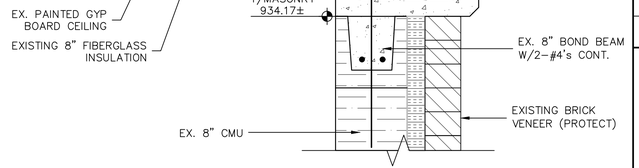
3 EXISTING SOFFIT DETAIL
SCALE: 1 1/2" = 1'-0"



4 EXISTING WALL DETAIL
SCALE: 1 1/2" = 1'-0"



5 EXISTING WALL DETAIL
SCALE: 1 1/2" = 1'-0"



6 EXISTING WALL DETAIL
SCALE: 1 1/2" = 1'-0"

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03/16/2021

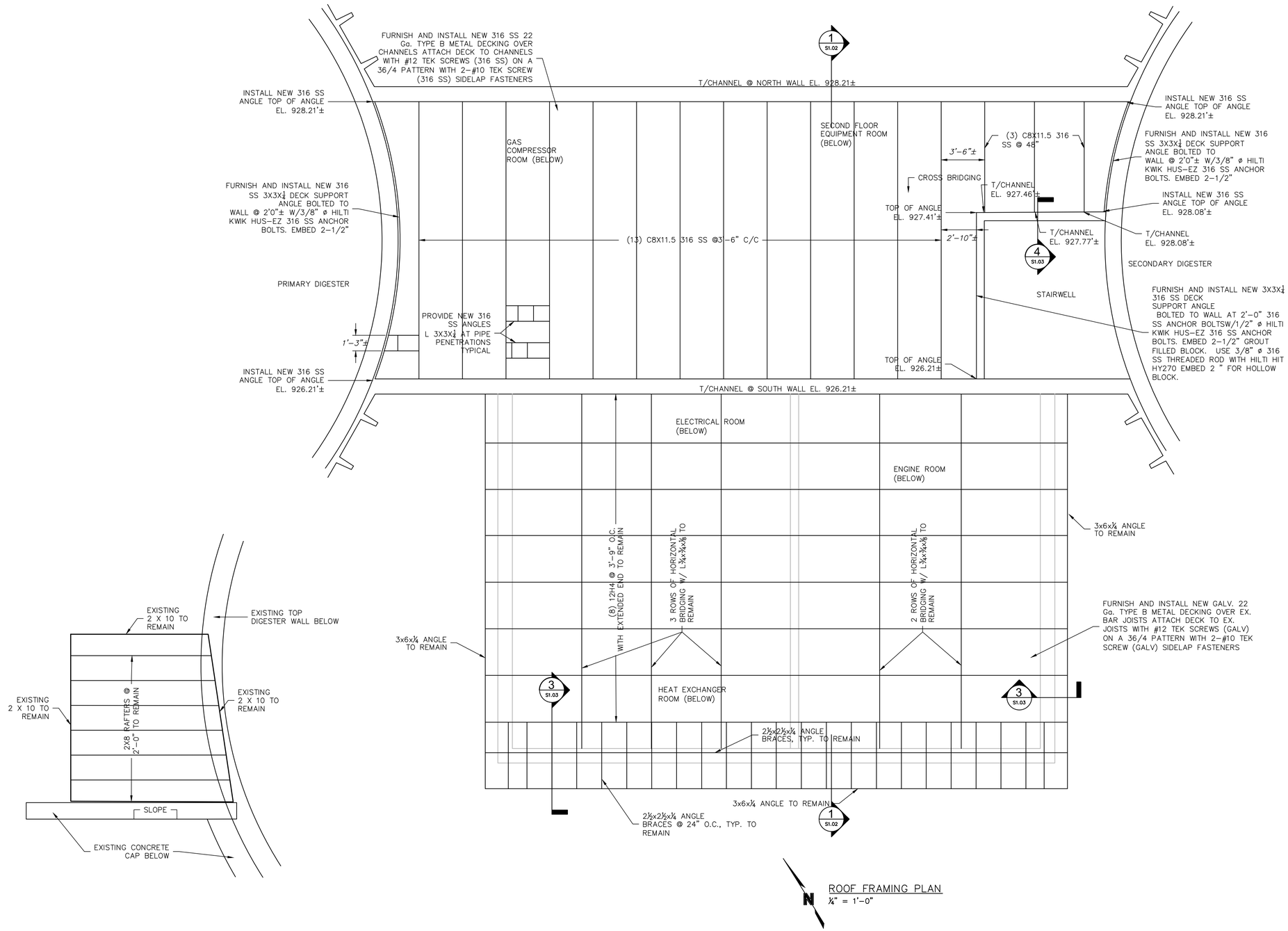
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

EXISTING WALL DETAILS
TURKEY CREEK NORTH DIGESTER BUILDING
TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN
JOPLIN, MO
2021

drawn by: CJK
checked by: LCH
approved by: LCH
QA/QC by: LCH
project no.: G17-0642
drawing no.: S_EPA_DS1.02_0170642.dwg
date: 3/16/2021

SHEET
DS1.06

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DATE: Mar 16, 2021 10:45am XREFS: S_TBLK_0170642



ROOF FRAMING PLAN
¼" = 1'–0"

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03/16/2021

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

ROOF FRAMING PLAN MODIFICATIONS
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

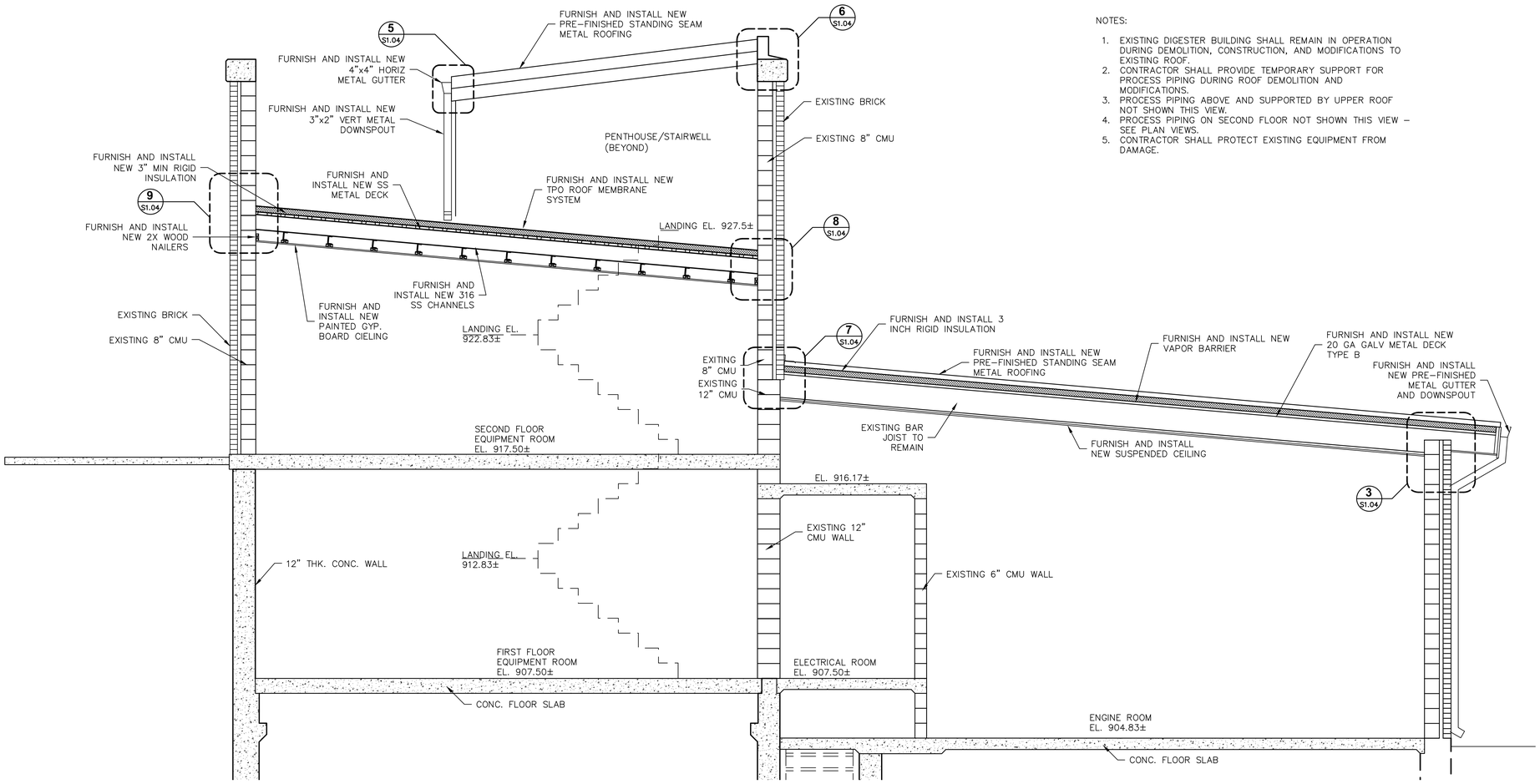
JOPLIN, MO

2021

drawn by:	MS/CJK
checked by:	LCH
approved by:	LCH
QA/QC by:	LCH
project no.:	G17-0642
drawing no.:	
date:	3/16/2021

SHEET
S1.01

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DATE: Mar 16, 2021 10:45am XREFS: S_TBLK_01170642



1 **BUILDING SECTION**
3/8" = 1'-0"

NOTES:

1. EXISTING DIGESTER BUILDING SHALL REMAIN IN OPERATION DURING DEMOLITION, CONSTRUCTION, AND MODIFICATIONS TO EXISTING ROOF.
2. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR PROCESS PIPING DURING ROOF DEMOLITION AND MODIFICATIONS.
3. PROCESS PIPING ABOVE AND SUPPORTED BY UPPER ROOF NOT SHOWN THIS VIEW.
4. PROCESS PIPING ON SECOND FLOOR NOT SHOWN THIS VIEW – SEE PLAN VIEWS.
5. CONTRACTOR SHALL PROTECT EXISTING EQUIPMENT FROM DAMAGE.

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REVISIONS

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BUILDING SECTION - ROOF MODIFICATIONS
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

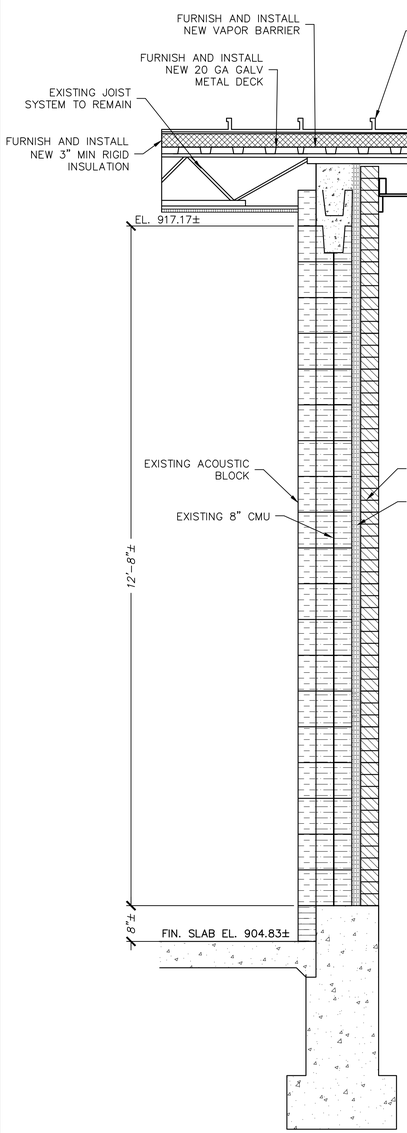
JOPLIN, MO

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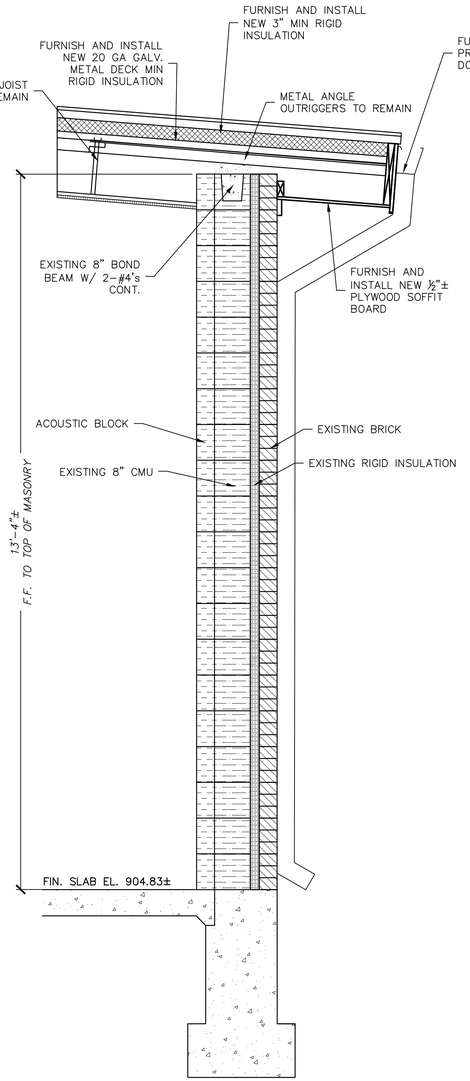
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checked by:	LCH
approved by:	LCH
QA/QC by:	LCH
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date:	3/16/2021

SHEET
S1.02

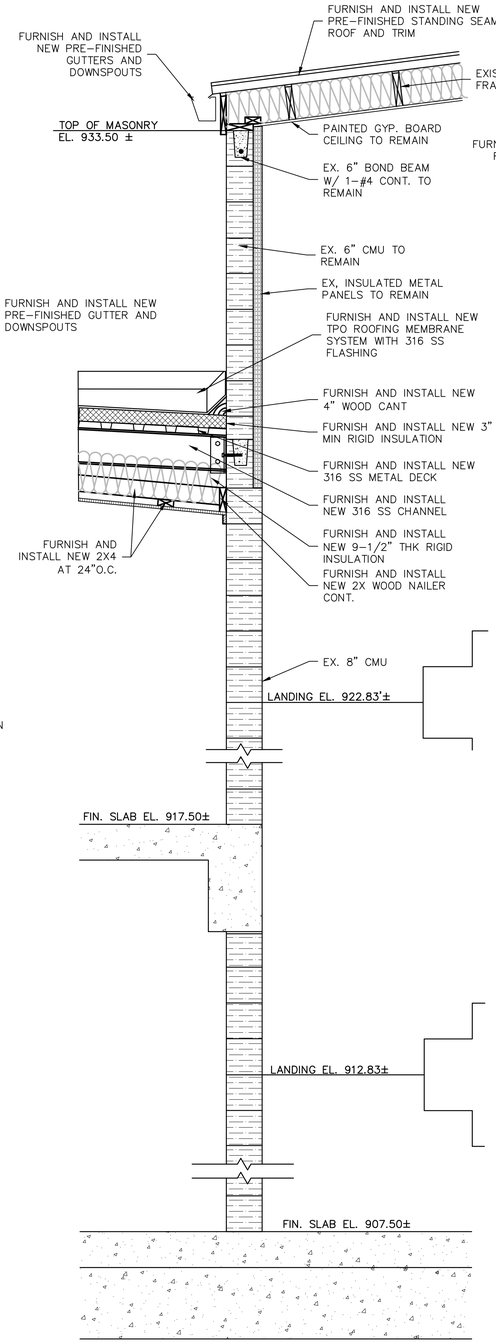
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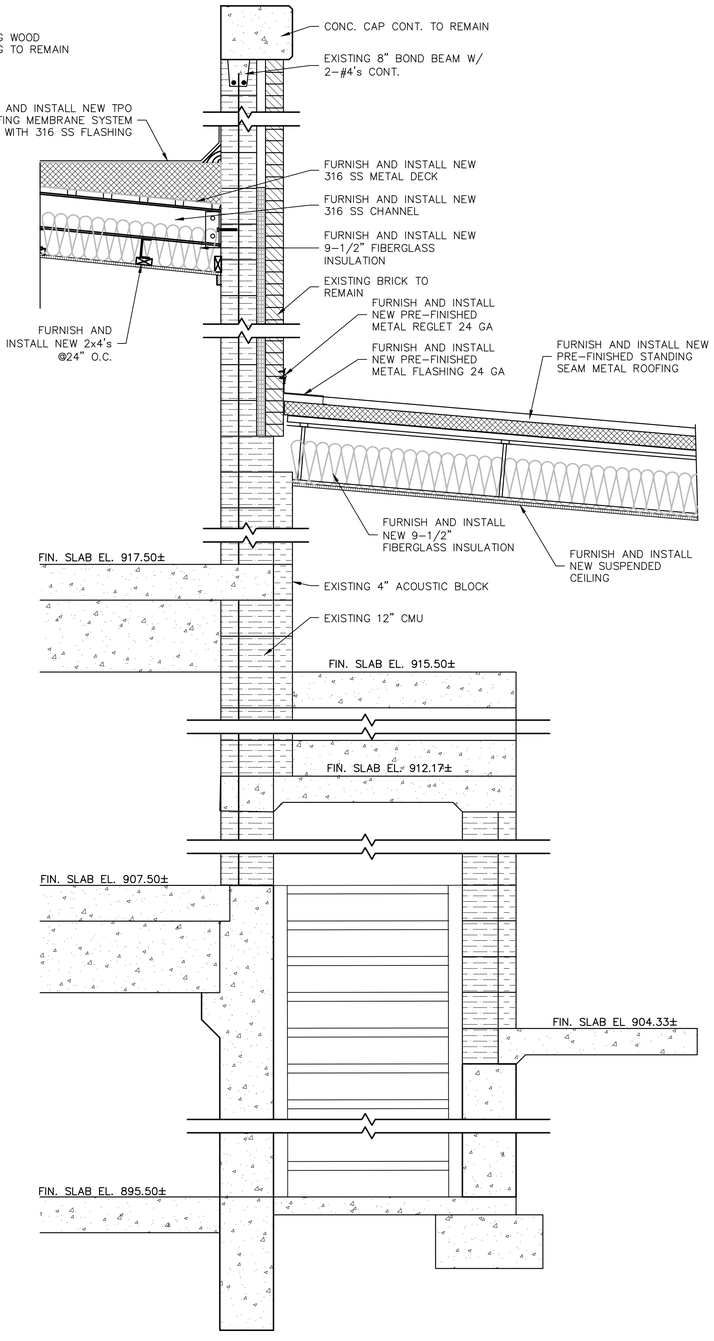
1 **WALL SECTION**
3/4" = 1'-0"



2 **WALL SECTION**
3/4" = 1'-0"



3 **WALL SECTION**
3/4" = 1'-0"



4 **WALL SECTION**
3/4" = 1'-0"

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03/16/2021

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

WALL SECTIONS -MODIFICATIONS
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

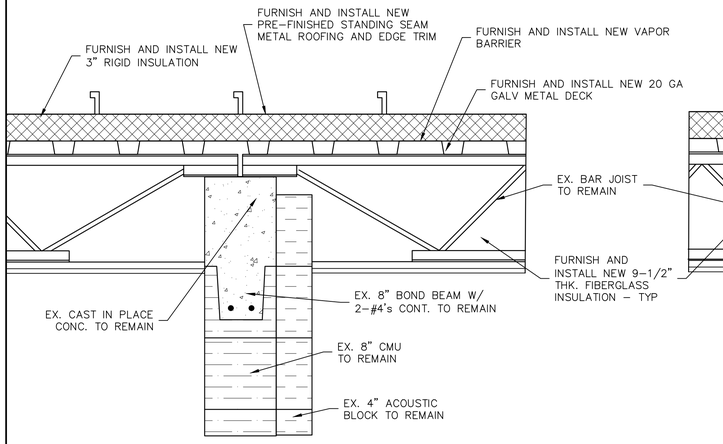
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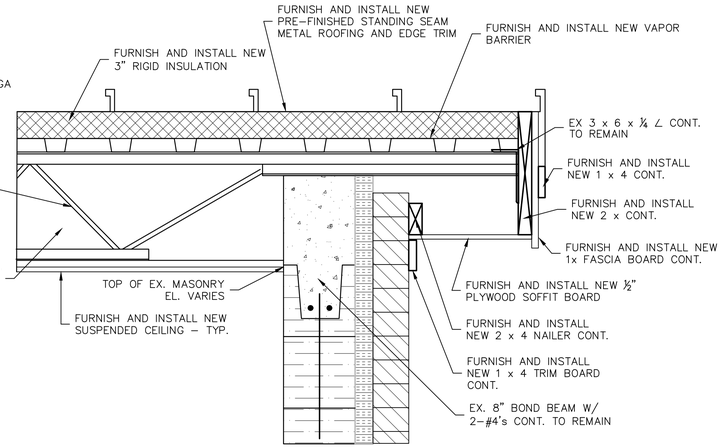
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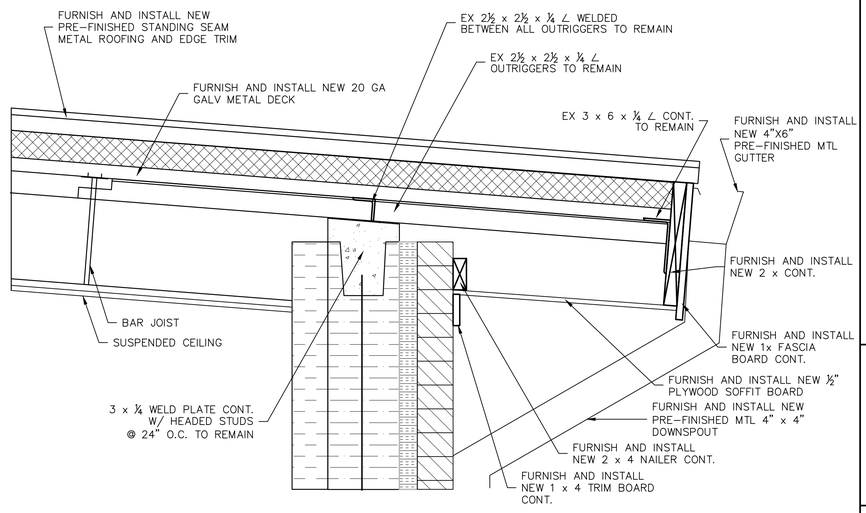
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SHEET
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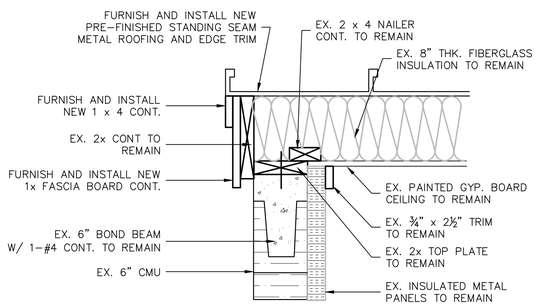
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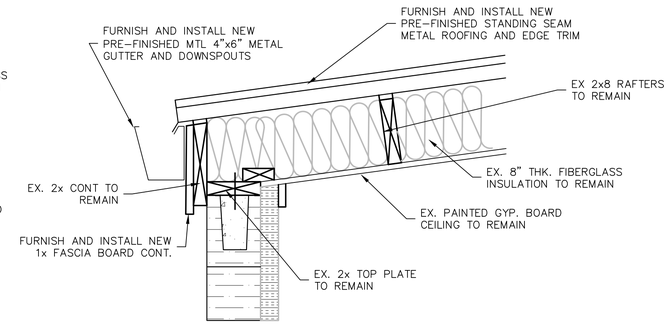




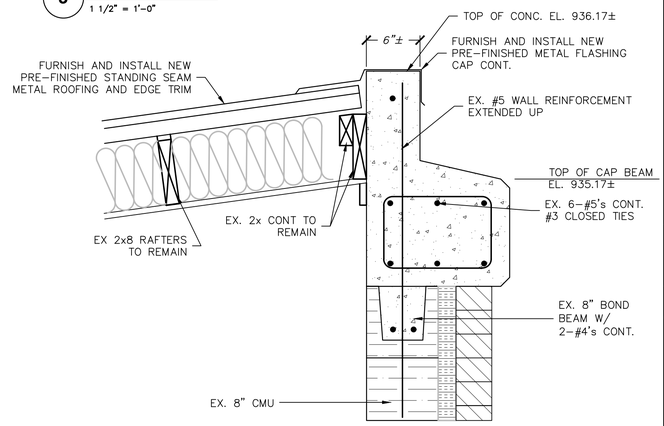
1 JOIST BEARING DETAIL
1 1/2" = 1'-0"



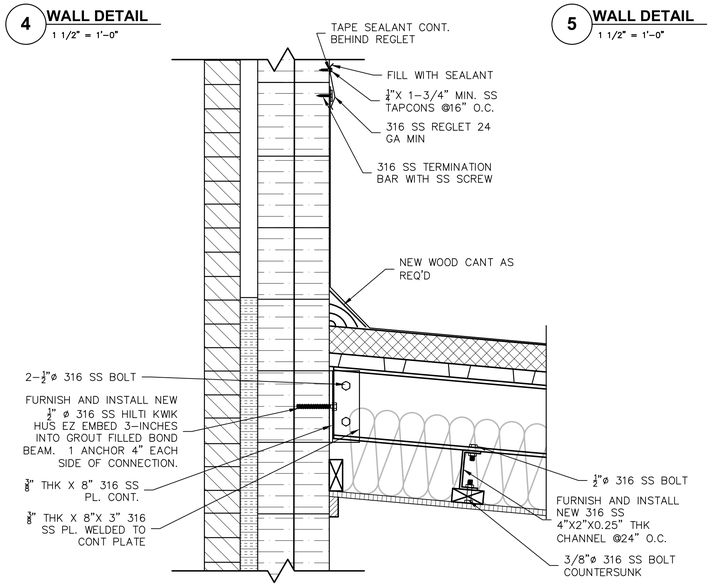
2 RAKE DETAIL
1 1/2" = 1'-0"



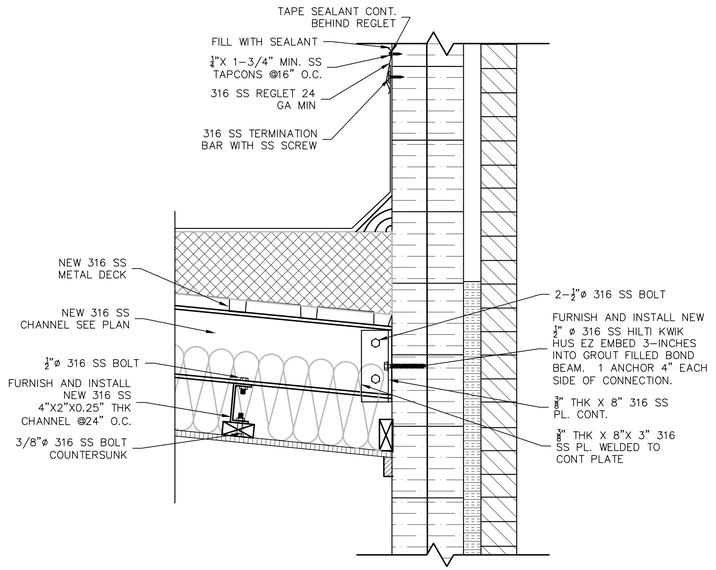
3 SOFFIT DETAIL
1 1/2" = 1'-0"



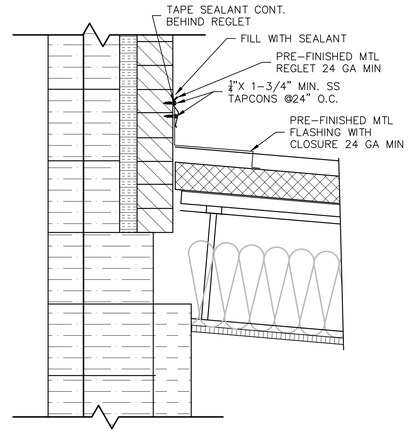
4 WALL DETAIL
1 1/2" = 1'-0"



5 WALL DETAIL
1 1/2" = 1'-0"



6 WALL DETAIL
1 1/2" = 1'-0"



7 WALL DETAIL
1 1/2" = 1'-0"

8 WALL DETAIL
1 1/2" = 1'-0"

9 WALL DETAIL
1 1/2" = 1'-0"

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LARRY C. HARDIN
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PROFESSIONAL ENGINEER
03/16/2021

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

WALL DETAILS - MODIFICATIONS
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

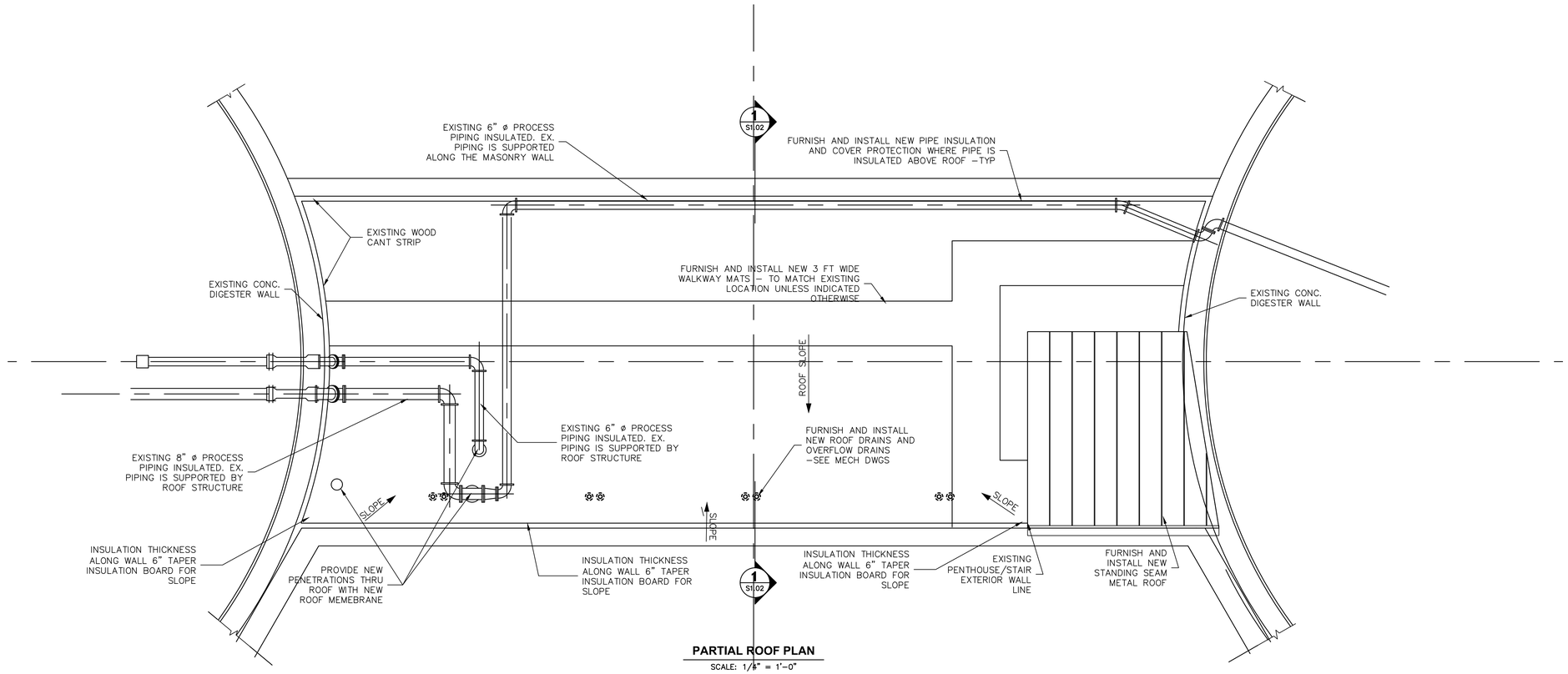
JOPLIN, MO

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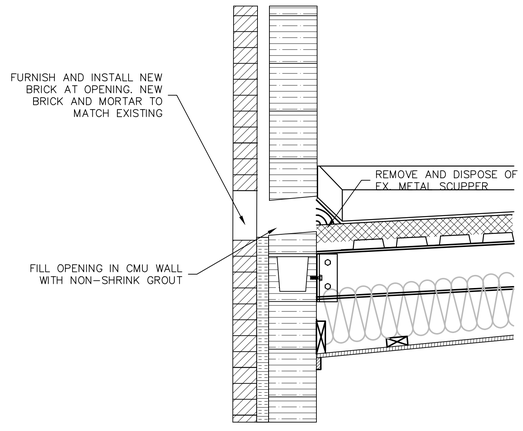
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checked by:	LCH
approved by:	LCH
QA/QC by:	LCH
project no.:	G17-0642
drawing no.:	S_EPA_S1.02_0170642.dwg
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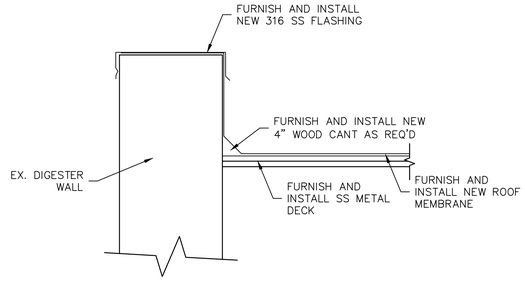
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USER: jkutter



PARTIAL ROOF PLAN
SCALE: 1/8" = 1'–0"



1 **WALL DETAIL**
1" = 1'–0"



2 **SECTION**
1" = 1'–0"

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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

PARTIAL ROOF PLAN - ROOF MODIFICATIONS
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

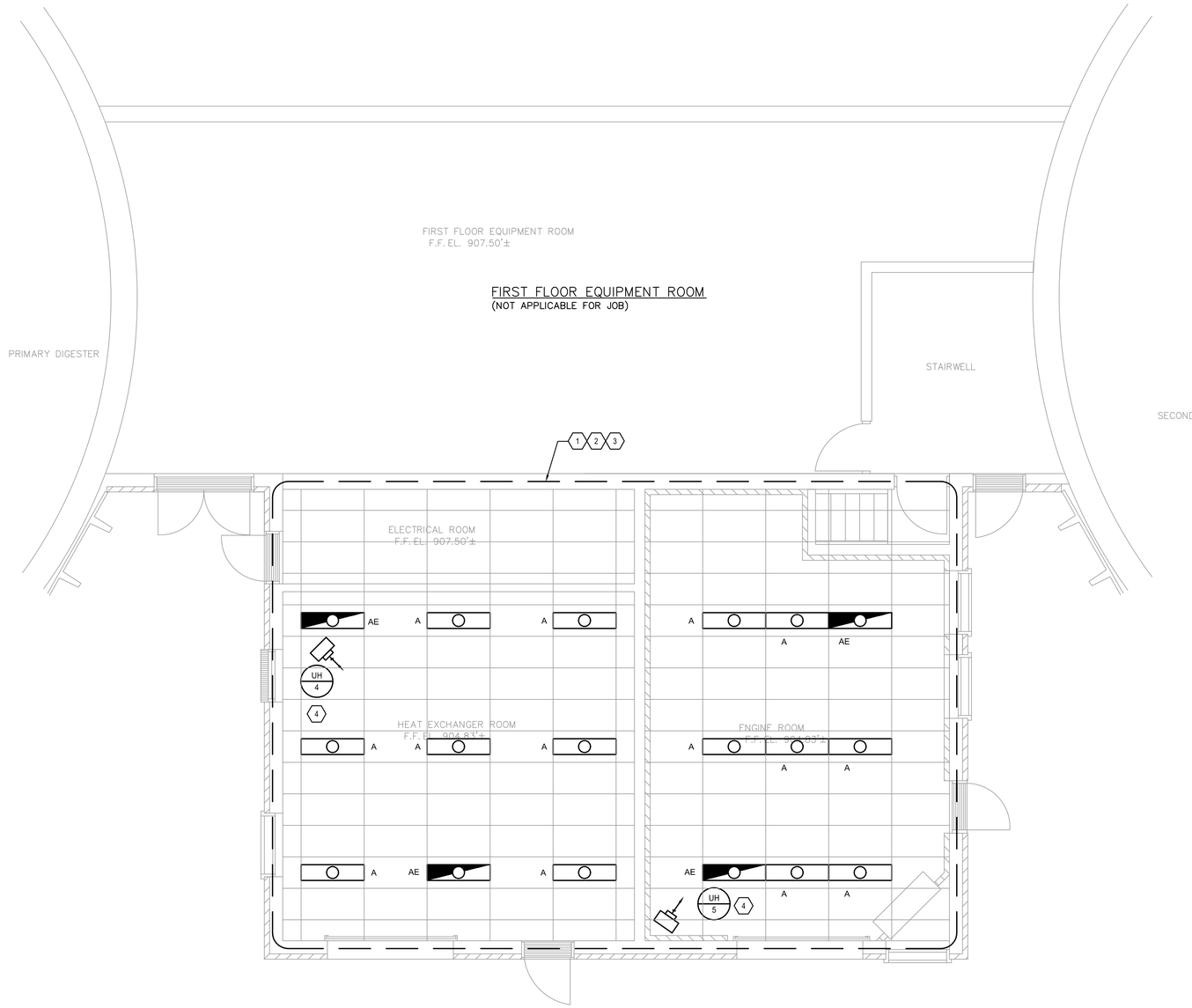
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2021

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checked by: LCH
approved by: LCH
QA/QC by: LCH
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drawing no.:
date: 3/16/2021

SHEET
S1.05

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FIRST FLOOR EQUIPMENT ROOM
(NOT APPLICABLE FOR JOB)

EXISTING FIRST FLOOR PLAN
¼" = 1'-0"

GENERAL NOTES

A. ALL SYMBOLS & ABBREVIATIONS ARE TYPICAL AND MAY NOT APPLY TO THIS PROJECT.

B. CIRCUITING SHOWN IS DIAGRAMMATIC ONLY. EXACT ROUTING MAY VARY AND MAY REQUIRE ADDITIONAL J-BOXES AND/OR SPECIAL FITTINGS.

C. FIELD VERIFY EXISTING CONDITIONS.

D. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AS REQUIRED BY LOCAL JURISDICTION.

E. CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, ACCESSORIES, AND MATERIAL FURNISHED BY HIM FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE AGAINST ALL DEFECTS.

F. ALL WIRING SHALL BE INSTALLED IN CONDUIT AND BE CONCEALED. REFER TO CONDUIT APPLICATION SCHEDULE.

G. ALL POWER CIRCUITS SHALL HAVE AN EQUIPMENT GROUND CONDUCTOR.

H. VERIFY ALL EXISTING CONSTRUCTION PRIOR TO SUBMITTING BID. NO ADDITIONAL FEES WILL BE PAID DUE TO UNANTICIPATED EXISTING CONDITIONS.

I. COORDINATE ALL SCHEDULING, ELEVATIONS, SIZES, QUANTITIES, AND ROUTING OF WORK WITH OWNER AND OTHER TRADES.

J. FIELD VERIFY SIZE, LOCATION, ELEVATION AND QUANTITY OF ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PIPING EQUIPMENT AND COMPONENTS THAT MAY IMPACT IMPLEMENTATION OF THIS WORK.

K. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY HP RATED SAFETY SWITCHES WITH NEMA RATINGS AS SHOWN IN THE DRAWINGS OR SPECIFICATIONS. EQUAL BY CUTLER-HAMMER, GENERAL ELECTRIC, ITE/SIEMENS, SQUARE D.

L. ALL CONDUIT STUBS SHALL BE TERMINATED WITH BUSHINGS.

⬡ SHEET KEYNOTES

1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES. ALSO REMOVE ANY CONDUIT AND WIRING INSTALLED ON THE CEILING. MAINTAIN CIRCUITING FOR NEW LIGHT INSTALLATION.
2. INSTALL NEW LIGHTS REUSING EXISTING CIRCUIT. PROVIDE NEW CONDUIT AND WIRE AS NEEDED FOR NEW INSTALLATION.
3. CONDUIT AND WIRING INSTALLATION SHALL MEET OR EXCEED THE REQUIREMENTS FOR CLASS 1/DIV 1.
4. DISCONNECT ELECTRICAL CONNECTION TO EXISTING UNIT HEATER AND MAINTAIN FOR CONNECTION TO NEW HEATER.

LIGHTING FIXTURE SCHEDULE

SYMBOL	TYPE	DESCRIPTION	MANUFACTURER AND MODEL	LAMPS	LUMENS	COLOR TEMP / CRI	DRIVER / BALLAST	VOLTAGE / WATTAGE	LOCATION
▭○	A	HEAVY-DUTY, EXPLOSION-PROOF LED	HOLOPHANE HXPL 5L 4 2T AS	LED	5000	4000K	DRIVER	120/277	
▬○	AE	HEAVY-DUTY, EXPLOSION-PROOF LED, EMERGENCY BATTERY BACKUP	HOLOPHANE HXPL 5L 4 2T AS EM	LED	5000	4000K	DRIVER	120/277	

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Joplin, MO 64801
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STATE OF MISSOURI
TIMOTHY DANNER
NUMBER PE-2019031265
PROFESSIONAL ENGINEER
3/9/21

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

EXISTING FIRST FLOOR PLAN
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

drawn by: CJK
checked by:
approved by:
QA/QC by:
project no.: 017-0642
drawing no.: E_1EBLD_E1.01_G170642.dwg
date: 3/9/2021

SHEET
E1.01

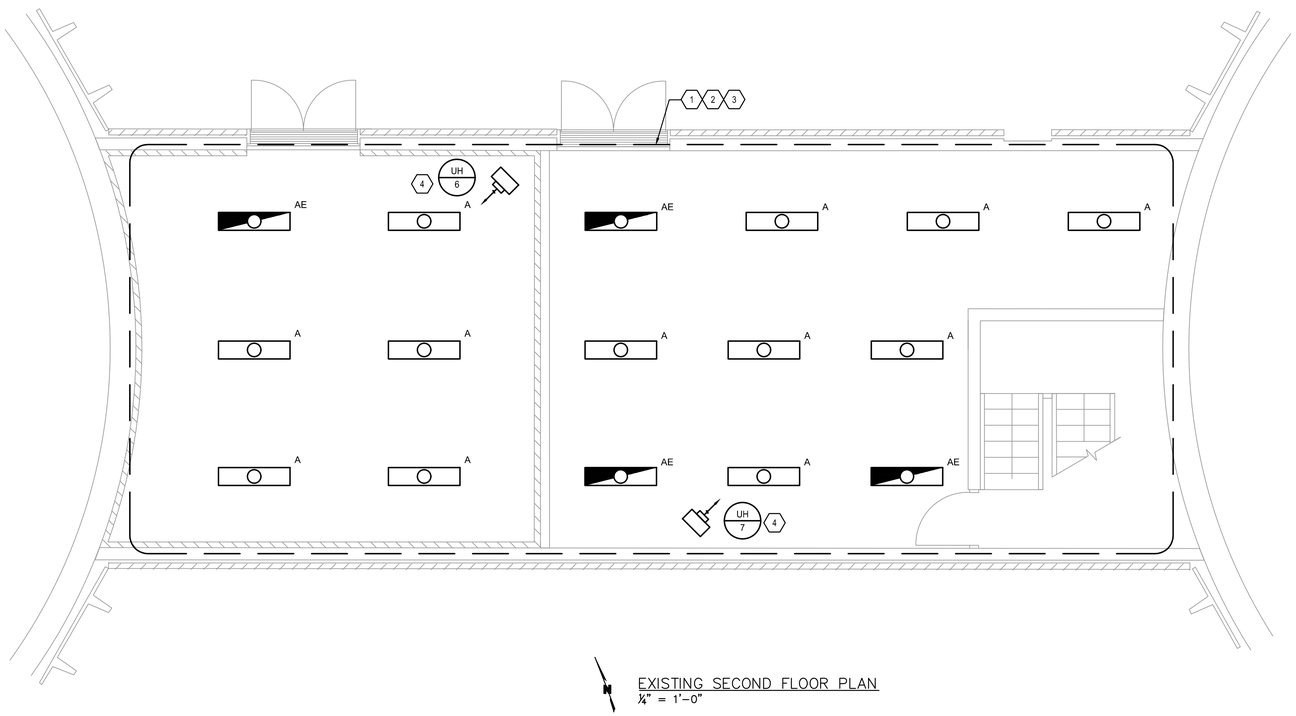
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USER: tsmead

GENERAL NOTES

A. REFER TO E1.01 FOR GENERAL NOTES.

⬡ SHEET KEYNOTES

1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES. ALSO REMOVE ANY CONDUIT AND WIRING INSTALLED ON THE CEILING. MAINTAIN CIRCUITING FOR NEW LIGHT INSTALLATION.
2. INSTALL NEW LIGHTS REUSING EXISTING CIRCUIT. PROVIDE NEW CONDUIT AND WIRE AS NEEDED FOR NEW INSTALLATION.
3. CONDUIT AND WIRING INSTALLATION SHALL MEET OR EXCEED THE REQUIREMENTS FOR CLASS 1/DIV 1.
4. DISCONNECT ELECTRICAL CONNECTION TO EXISTING UNIT HEATER AND MAINTAIN FOR CONNECTION TO NEW HEATER.



EXISTING SECOND FLOOR PLAN
¼" = 1'-0"

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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

EXISTING SECOND FLOOR PLAN
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

drawn by: CJK
checked by:
approved by:
QA/QC by:
project no.: 017-0642
drawing no.: E_1EBLD_E1.01_G170642.dwg
date: 3/9/2021

SHEET
E1.02

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SECTION 260000 ELECTRICAL

1. GENERAL CONDITIONS:

A. INSPECT THE SITE WHERE THIS WORK IS TO BE PERFORMED AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS RELATED TO THIS PROJECT.

B. OBTAIN AND PAY FOR ALL PERMANENT AND TEMPORARY PERMITS AND LICENSES AND SHALL MAKE ALL DEPOSITS AND PAY ALL FEES REQUIRED FOR THE PERFORMANCE OF WORK UNDER THIS SECTION OTHER THAN THOSE DEPOSITS OR FEES WHICH ARE FULLY REFUNDABLE TO THE OWNER.

C. DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. WHERE LOCAL CONDITIONS NECESSITATE A REARRANGEMENT, PREPARE, AND SUBMIT FOR APPROVAL, DRAWINGS OF THE PROPOSED REARRANGEMENT. THIS CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING ALL OF HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, FURNISHING SUCH FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.

D. VERIFY ALL DIMENSIONS. DRAWINGS SHALL NOT BE SCALED TO DETERMINE DIMENSIONS.

E. SPECIFICATIONS AND DRAWINGS ARE COMPLEMENTARY AND WHAT IS CALLED FOR IN ONE SHALL BE AS BINDING AS IF CALLED FOR BY BOTH.

F. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED AS SHOWN ON THE DRAWINGS AND SPECIFIED IN DIVISION 15.

G. ALL WORK SHALL BE COMPLETE AND SHALL BE LEFT IN OPERATING CONDITION.

H. INCLUDE ALL PARTS AND LABOR WHICH ARE INCIDENTAL AND NECESSARY FOR A COMPLETE AND OPERABLE INSTALLATION EVEN THOUGH NOT SPECIFICALLY MENTIONED IN THE CONTRACT DOCUMENTS.

I. ARRANGE WITH APPROPRIATE UTILITY COMPANIES TO PROVIDE TEMPORARY AND PERMANENT UTILITY SERVICES AS REQUIRED AND COORDINATE THEIR INSTALLATION WITH CONSTRUCTION PROGRESS OF THIS PROJECT. PAY ALL FEES AND COSTS CHARGED BY UTILITY COMPANIES FOR UTILITY SERVICES.

J. REQUEST INSPECTIONS AS REQUIRED BY REGULATING AGENCIES AND/OR REGULATIONS. PAY ALL CHARGES FOR INSPECTIONS BY REGULATING AGENCIES OF INSTALLATIONS OF PLANS SPECIFICATIONS.

K. PROVIDE THE OWNER WITH A CERTIFICATE OF FINAL INSPECTION AND APPROVAL BY ENFORCEMENT AUTHORITIES.

L. FURNISH: TO OBTAIN, COORDINATE, SUBMIT THE NECESSARY DRAWINGS, DELIVER TO THE JOB SITE IN NEW CONDITION READY FOR INSTALLATION, UNLOAD AND UNPACK, AND GUARANTEE.

M. INSTALL: TO RECEIVE AT THE JOB SITE, STORE, ASSEMBLE, ERECT, SET IN PLACE, ANCHOR, APPLY, FINISH, PROTECT, CLEAN, TEST, START-UP, AND MAKE READY FOR OWNER'S USE.

N. PROVIDE: TO FURNISH AND INSTALL.

O. PROVIDE NEW MATERIAL AND EQUIPMENT, UNLESS NOTED OTHERWISE. PROTECT EQUIPMENT AND MATERIAL FROM DAMAGE, DIRT AND THE WEATHER.

P. THE ENGINEER RESERVES THE RIGHT TO REJECT MATERIAL OR WORKMANSHIP NOT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, BEFORE OR AFTER INSTALLATION, AT NO ADDITIONAL COST TO THE OWNER.

Q. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS THAT MOST CONDUIT BE CONCEALED. WHERE EXPOSED, RUN TIGHT TO STRUCTURE AND/OR WITHIN WALLS AS POSSIBLE PARALLEL WITH ADJACENT STRUCTURAL OR ARCHITECTURAL ELEMENTS.

R. REPLACE ALL CEILING TILES DAMAGED DURING INSTALLATION OF WORK, WITH NEW TILE.

S. REFINISH ALL ELECTRICAL EQUIPMENT DAMAGED DURING SHIPPING, INSTALLATION AND/OR PRIOR TO FINAL ACCEPTANCE TO ITS ORIGINAL CONDITION. REMOVE ALL RUST; PRIME, AND PAINT PER MANUFACTURER'S RECOMMENDATIONS FOR FINISH EQUAL TO ORIGINAL.

T. PROTECT OPENINGS AND EQUIPMENT FROM OBSTRUCTION, BREAKAGE, MISUSE, DAMAGE OR BLEMISHES. PROTECT MATERIALS AND EQUIPMENT IMMEDIATELY UPON RECEIPT AT THE JOB SITE OR IMMEDIATELY AFTER THEY HAVE BEEN REMOVED FROM THEIR SHIPPING CONTAINERS. UNLESS NOTED OTHERWISE, KEEP THEM CLEAN AND UNDAMAGED UNTIL FINAL ACCEPTANCE OF THE ENTIRE PROJECT BY THE OWNER. WHEN A PORTION OF THE BUILDING IS OCCUPIED BY THE OWNER BEFORE SUBSTANTIAL COMPLETION OF THE ENTIRE PROJECT, MAKE ARRANGEMENTS TO TRANSFER RESPONSIBILITY FOR PROTECTION AND HOUSEKEEPING FOR THE OCCUPIED PORTION.

U. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ELECTRICAL EQUIPMENT, MATERIALS OR WORK UNTIL FINAL ACCEPTANCE OF THE ENTIRE PROJECT BY THE OWNER.

V. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH, CAUSED BY HIS EMPLOYEES OR WORK, AT ALL TIMES. REMOVE RUBBISH, TOOLS, SCAFFOLDING, AND SURPLUS MATERIALS FROM AND ABOUT THE BUILDING, AND LEAVE WORK AREAS "BROOM CLEAN" OR ITS EQUIVALENT DAILY. CLEAN ELECTRICAL EQUIPMENT AND REMOVE TEMPORARY IDENTIFICATION.

W. OPERATE EQUIPMENT AND SYSTEMS IN ALL THEIR OPERATING MODES, TO VERIFY PROPER OPERATION, PRIOR TO FINAL FIELD OBSERVATION AND OWNER INSTRUCTIONS. PREPARE A PRE-INSPECTION REPORT AND SUBMIT TO THE ENGINEER AND OWNER FOR REVIEW.

X. TEST ALL INSTALLED ELECTRICAL EQUIPMENT AND CABLES REQUIRED BY CONSTRUCTION DOCUMENTS ACCORDING TO THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE INTERNATIONAL ELECTRICAL TESTING ASSOCIATION, INC. (NETA). IF ACCEPTABLE PERFORMANCE OF ANY TEST IS NOT ACHIEVED, MAKE THE NECESSARY CORRECTIONS AND THE TEST SHALL BE REPEATED UNTIL ACCEPTABLE PERFORMANCE IS ACHIEVED. PROVIDE WRITTEN REPORTS OF ALL TESTS, WITH FAILURES IDENTIFIED, TO ENGINEER.

Y. FULLY INSTRUCT THE OWNER'S DESIGNATED PERSONNEL IN THE OPERATION OF EACH ELECTRICAL SYSTEM AT THE TIME IT IS PUT INTO SERVICE, PROVIDE INSTRUCTION USING COMPETENT INSTRUCTORS AND FACTORY TRAINED PERSONNEL.

Z. ALL MATERIALS AND EQUIPMENT AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND/OR RECOMMENDATIONS.

AA. PROVIDE SHOP DRAWINGS FOR ALL EQUIPMENT INDICATED AND/OR REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. A FORM INDICATING ALL SHOP DRAWINGS TO BE PROVIDED AS PART OF THE PROJECT SHALL BE SUBMITTED FOR REVIEW BY THE ENGINEER PRIOR TO ANY SHOP DRAWING SUBMITTAL REVIEW.

AB. THIS SPECIFICATION SHALL INCORPORATE ALL PROJECT REQUIREMENTS AND RESPONSIBILITIES INDICATED WITHIN THE FRONT-END OF THE PROJECT MANUAL.

2. LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES:

A. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, THE NATIONAL FIRE PROTECTION ASSOCIATION CODES, THE NATIONAL ELECTRICAL SAFETY CODE, LOCAL BUILDING CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES. SHOULD ANY WORK SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN BE OF LOWER STANDARD, THE CONTRACTOR SHALL REFER THE POINTS IN QUESTION TO THE ENGINEER FOR APPROVAL.

3. SCOPE OF WORK:

A. WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL AND ASSOCIATED SERVICES REQUIRED TO COMPLETELY CONSTRUCT AND LEAVE ALL SYSTEMS OPERATIONAL AS SHOWN ON THE DRAWINGS AND HEREIN DESCRIBED.

B. ALL WORK PERFORMED UNDER THIS SECTION SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER.

4. MATERIALS AND EQUIPMENT REVIEW:

A. AS SOON AS POSSIBLE AFTER THE AWARD OF THE CONTRACT, SUBMIT FOR REVIEW OF SHOP DRAWINGS FOR ALL EQUIPMENT TO BE FURNISHED FOR THIS PROJECT. SUBMITTALS SHALL HIGHLIGHT THE MANUFACTURER'S NAME, MODEL NUMBER, DESCRIPTIVE ENGINEERING DATA AND ALL NECESSARY INFORMATION AS TO FINISH, MATERIAL GAUGES AND ACCESSORIES.

B. ALL PORTIONS OF THE SHOP DRAWINGS THAT ARE INTENDED TO BE REVIEWED SHALL BE HIGHLIGHTED. ANY PORTION NOT CALLED OUT SHALL BE ASSUMED TO BE EXCLUDED FROM THE JOB.

5. GUARANTEE:

A. THIS CONTRACTOR SHALL GUARANTEE COMPLETE SYSTEM OPERATION AND THAT THE APPARATUS FURNISHED AND INSTALLED WILL BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS AND WILL GIVE SATISFACTORY SERVICE. THE CONTRACTOR AGREES TO REPLACE, WITHOUT EXPENSE TO THE OWNER, ANY PART OF THE INSTALLATION WHICH PROVES OR BECOMES DEFECTIVE WITHIN ONE YEAR AFTER THE SYSTEM IS ACCEPTED.

6. COORDINATION:

A. THIS CONTRACTOR SHALL EXAMINE ALL ARCHITECTURAL, MECHANICAL, STRUCTURAL AND OTHER DRAWINGS RELATED TO THIS PROJECT, AND IT SHALL BE HIS RESPONSIBILITY TO COORDINATE THE ELECTRICAL WORK WITH OTHER TRADES.

7. AS-BUILT DRAWINGS:

A. PREPARE COMPLETE AS-BUILT DRAWINGS OF ALL ELECTRICAL SYSTEMS AND TURN OVER TO THE ENGINEER REVISED ELECTRONIC CAD FILES.

B. PREPARE AND SUBMIT TO THE OWNER'S REPRESENTATIVE FIVE BOUND SETS OF MANUFACTURER'S LITERATURE FOR ALL EQUIPMENT TO BE INSTALLED ON THIS PROJECT SHOWING ALL DETAILS OF EQUIPMENT, REPLACEMENT PART DATA AND MAINTENANCE INSTRUCTIONS.

8. GROUNDING:

H. ALL FEEDERS AND BRANCH CIRCUITS SHALL CONTAIN GROUND WIRES.

I. ALL CONDUCTORS, MOTOR FRAMES, RACEWAYS, CABINETS, ETC., THAT REQUIRE GROUNDING SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE. THOSE OF THE SERVING UTILITY AND LOCAL AUTHORITIES HAVING JURISDICTION.

9. SAFETY SWITCHES:

A. SAFETY SWITCHES, AS MANUFACTURED BY: CUTLER-HAMMER, SQUARE D, OR SIEMENS, SHALL BE FURNISHED AND INSTALLED (WHERE NOT FURNISHED BY OTHERS) WHEREVER SHOWN ON THE DRAWINGS SPECIFIED, OR REQUIRED BY THE NATIONAL ELECTRICAL CODE.

B. SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE, UNDERWRITERS' LABORATORIES SHORT CIRCUIT LABELED FOR AT LEAST 100,000 AMPERES WITH CLASS J REJECTION FUSEHOLDERS SO AS TO COMPLY WITH NEC 100-9. SWITCHES INSIDE OF BUILDING SHALL BE FURNISHED IN NEMA 1 GENERAL PURPOSE ENCLOSURES. SWITCHES OUTSIDE OF BUILDING SHALL BE FURNISHED IN NEMA 3R ENCLOSURES UNLESS OTHERWISE SPECIFIED.

C. EACH PIECE OF HVAC EQUIPMENT SHALL BE PROVIDED WITH A DISCONNECTING MEANS IN ACCORDANCE WITH REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.

10. CONDUIT:

P. ALL ELECTRICAL POWER WIRING, INCLUDING LOW VOLTAGE WIRING, SHALL BE INSTALLED IN CONDUIT AS HEREIN SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH NOMINAL SIZE SHALL BE USED.

Q. CONDUIT INSTALLED ABOVE GROUND EXTERIOR SHALL BE GALVANIZED RIGID STEEL AS MANUFACTURED BY THE ALLIED TUBE AND CONDUIT CORPORATION OR APPROVED EQUAL. CONDUIT SHALL BE SHERARDIZED OR HOT-DIP GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.

R. RACEWAYS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND FITTING TO FITTING. A RUN OF CONDUIT BETWEEN OUTLETS OR FITTINGS SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER-BENDS INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE OUTLET OR FITTING. THE RADIUS OF BENDS SHALL NEVER BE SHORTER THAN THAT OF THE CORRESPONDING TRADE ELBOW. THE SYS- TEM SHALL BE COMPLETE WITH OUTLETS, DISTRIBUTION BOXES, ETC., SMOOTH INSIDE AND MECHANICALLY SECURE IN PLACE. APPROVED STRAPS, HANGERS, OR SUPPORTS SHALL BE USED TO SECURE CONDUITS IN PLACE. CONDUITS SHALL, IN GENERAL, BE SUPPORTED AT INTERVALS NOT EXCEEDING 10'-0" AND WITHIN 3'-0" OF EACH OUTLET BOX, JUNCTION BOX, CABINET OR FITTING.

S. CONDUITS SHALL BE PROTECTED DURING CONSTRUCTION; PLUG AND KEEP CLEAN AND DRY. CONDUIT ENDS SHALL BE BUTTED IN CENTERS OF COUPLINGS. NO CRACKS OR FLATTENED SECTIONS WILL BE PERMITTED AT BENDS OR ELSEWHERE. ALL ENDS OF CONDUIT SHALL BE REAMED TO REMOVE ROUGH EDGES. RUNNING THREADS WILL NOT BE PERMITTED.

T. CONDUITS SHALL BE CONCEALED WITHIN THE WALLS, CEILINGS, AND FLOORS WHERE POSSIBLE AND UNLESS OTHERWISE NOTED. EXPOSED CONDUIT SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE BUILD- ING LINES.

11. WIRE AND CABLE:

A. WIRE AND CABLE SHALL BE AMERICAN INSULATED WIRE CORP., GENERAL CABLE CORP., SENATOR WIRE AND CABLE CORP, SOUTHWIRE OR APPROVED EQUAL, OF SIZES AS SHOWN ON THE DRAWINGS OR HEREIN SPECIFIED.

B. ALL CONDUCTORS SHALL BE COPPER.

C. NO. 10 AWG AND SMALLER CONDUCTORS SHALL BE SOLID WITH INSULATION AND NO. 8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED WITH TYPE THHN/THWN INSULATION EXCEPT THAT CONDUCTORS WITHIN 3 INCHES OF LIGHT FIXTURE BALLASTS SHALL HAVE RHH, THHN, OR EQUAL INSULATION RATED FOR 90 DEGREES C. APPLICATION.

12. LIGHTING FIXTURES:

A. PROVIDE ALL LIGHTING FIXTURES AND LAMPS (IF APPLICABLE) AS INDICATED ON THE DRAWINGS AND HEREIN DESCRIBED. MATERIAL, EQUIPMENT, OR SERVICES NECESSARY TO COMPLETE THE INSTALLATION OF THESE FIXTURES, BUT NOT SPECIFICALLY MENTIONED, SHALL BE FURNISHED AS THOUGH SPECIFIED. ALL FIXTURES AND LAMPS SHALL BE PROPERLY CLEANED AND ADJUSTED AFTER INSTALLATION.

B. DRIVERS SHALL BE AS NOTED IN FIXTURE SCHEDULE. DRIVERS IN FIXTURES DESIGNATED FOR EMERGENCY LIGHTING MUST BE COMPATIBLE WITH THE EMERGENCY UNIT USED WITH MINIMUM LEAKAGE.

C. PROVIDE FIXTURES HEREIN SPECIFIED OR AS SHOWN ON THE DRAWINGS.

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Olsson - Engineering
Missouri Certificate of Authority #001592
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Joplin, MO 64801
TEL 417.781.0643

STATE OF MISSOURI
TIMOTHY DANNER
NUMBER PE-2019031265
PROFESSIONAL ENGINEER

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

ELECTRICAL SPECIFICATIONS

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

drawn by: CAD
checked by: ENG
approved by: ENG
QA/QC by: ENG
project no.: 017-0642
drawing no.:
date: 12/14/2020

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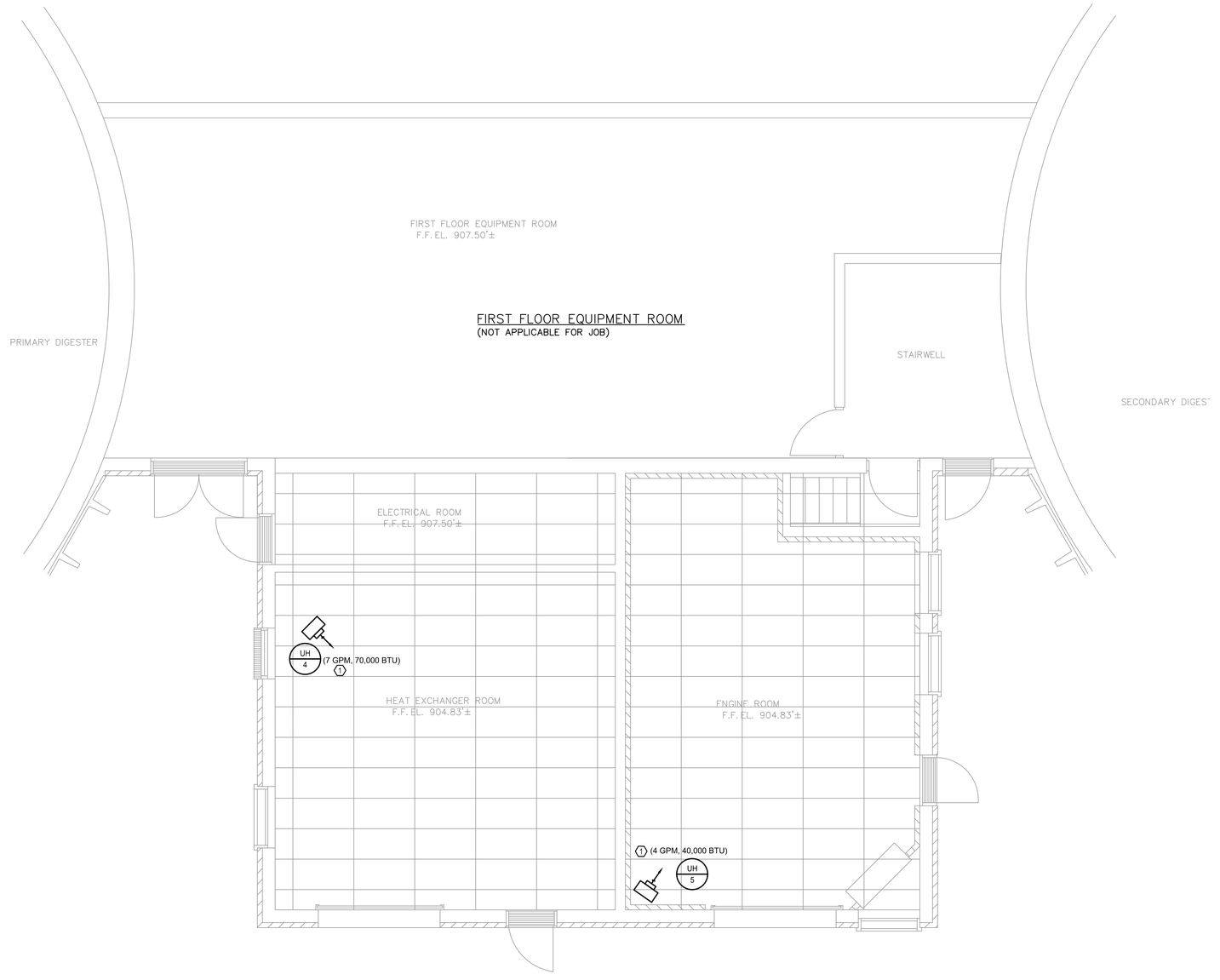
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GENERAL NOTES

A. VISIT SITE TO REVIEW EXISTING HEATERS MARKED TO BE REPLACED AND TO EXAMINE EXISTING PIPING INSTALLATION. NOTE ANY MODIFICATIONS AND CORRECTIONS THAT WILL BE REQUIRED FOR NEW HEATER INSTALLATION.

⬡ SHEET KEYNOTES

1. PROVIDE UNIT HEATER EQUAL TO MODINE, TRANE, MCQUAY/DIAKIN, OR REZNOR. INFORMATION IS BASED ON LIMITED INFORMATION ON AS-BUILT DRAWINGS. VERIFY EXISTING EQUIPMENT FOR LIKE-FOR-LIKE REPLACEMENT. EXTEND PIPING WITH INSULATION AS NECESSARY TO NEW PIPE CONNECTIONS. FURNISH WITH HANGER BRACKETS AND VIBRATION ISOLATION PADS, 3-WAY MODULATING CONTROL VALVE, STANDARD VALVE PACKAGE WITH SHUTOFF, UNION, BALANCE VALVE. HEATER SHALL BE CORROSION RESISTANT HOUSING AND SHALL HAVE 5-YEAR MINIMUM WARRANTY.



FIRST FLOOR EQUIPMENT ROOM
(NOT APPLICABLE FOR JOB)

EXISTING FIRST FLOOR PLAN
¼" = 1'-0"

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Joplin, MO 64801
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TIMOTHY DANNER
NUMBER PE-2019031265
PROFESSIONAL ENGINEER
5/12/21

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

EXISTING FIRST FLOOR PLAN
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

2021

JOPLIN, MO

drawn by: CJK
checked by:
approved by:
QA/QC by:
project no.: 017-0642
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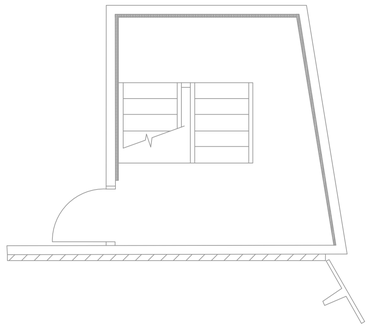
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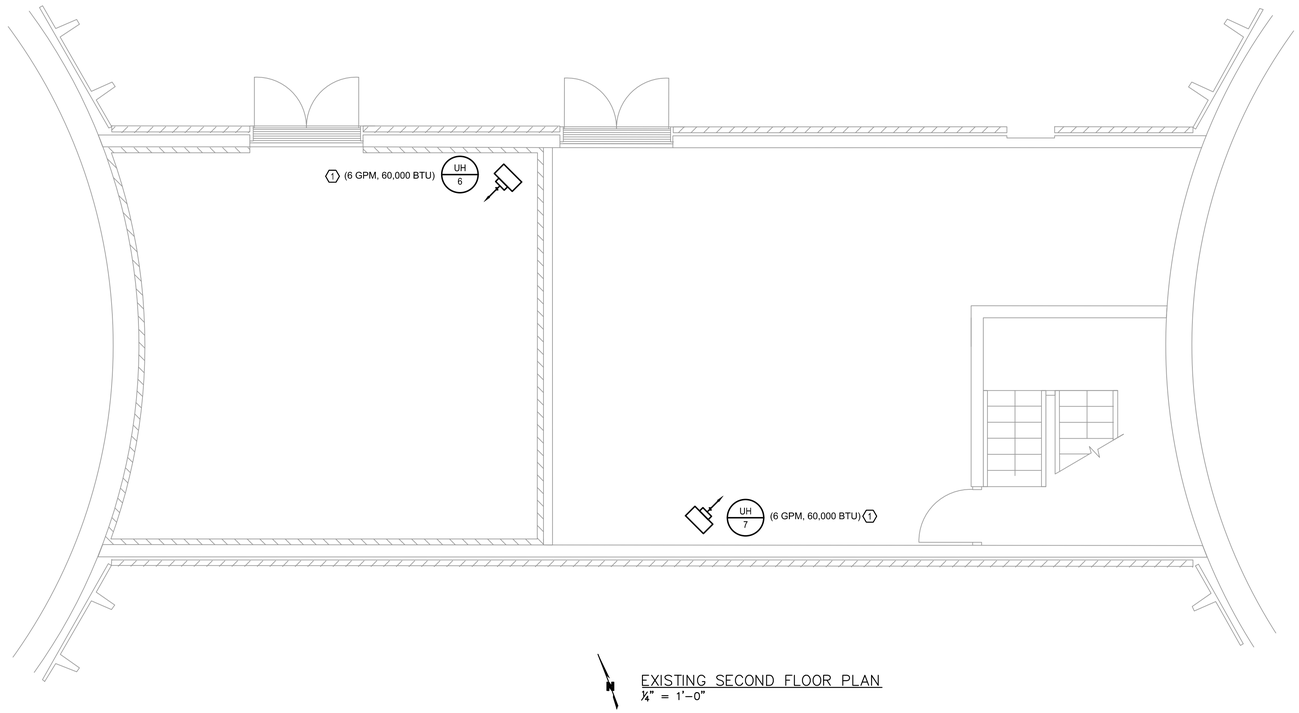
GENERAL NOTES

A. VISIT SITE TO REVIEW EXISTING HEATERS MARKED TO BE REPLACED AND TO EXAMINE EXISTING PIPING INSTALLATION. NOTE ANY MODIFICATIONS AND CORRECTIONS THAT WILL BE REQUIRED FOR NEW HEATER INSTALLATION.

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1. PROVIDE UNIT HEATER EQUAL TO MODINE, TRANE, MCQUAY/DIAKIN, OR REZNOR. INFORMATION IS BASED ON LIMITED INFORMATION ON AS-BUILT DRAWINGS. VERIFY EXISTING EQUIPMENT FOR LIKE-FOR-LIKE REPLACEMENT. EXTEND PIPING WITH INSULATION AS NECESSARY TO NEW PIPE CONNECTIONS. FURNISH WITH HANGER BRACKETS AND VIBRATION ISOLATION PADS, 3-WAY MODULATING CONTROL VALVE, STANDARD VALVE PACKAGE WITH SHUTOFF, UNION, BALANCE VALVE. HEATER SHALL BE CORROSION RESISTANT HOUSING AND SHALL HAVE 5-YEAR MINIMUM WARRANTY.





EXISTING SECOND FLOOR PLAN
¼" = 1'-0"

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NUMBER PE-2019031265
PROFESSIONAL ENGINEER

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REVISIONS

EXISTING SECOND FLOOR PLAN
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

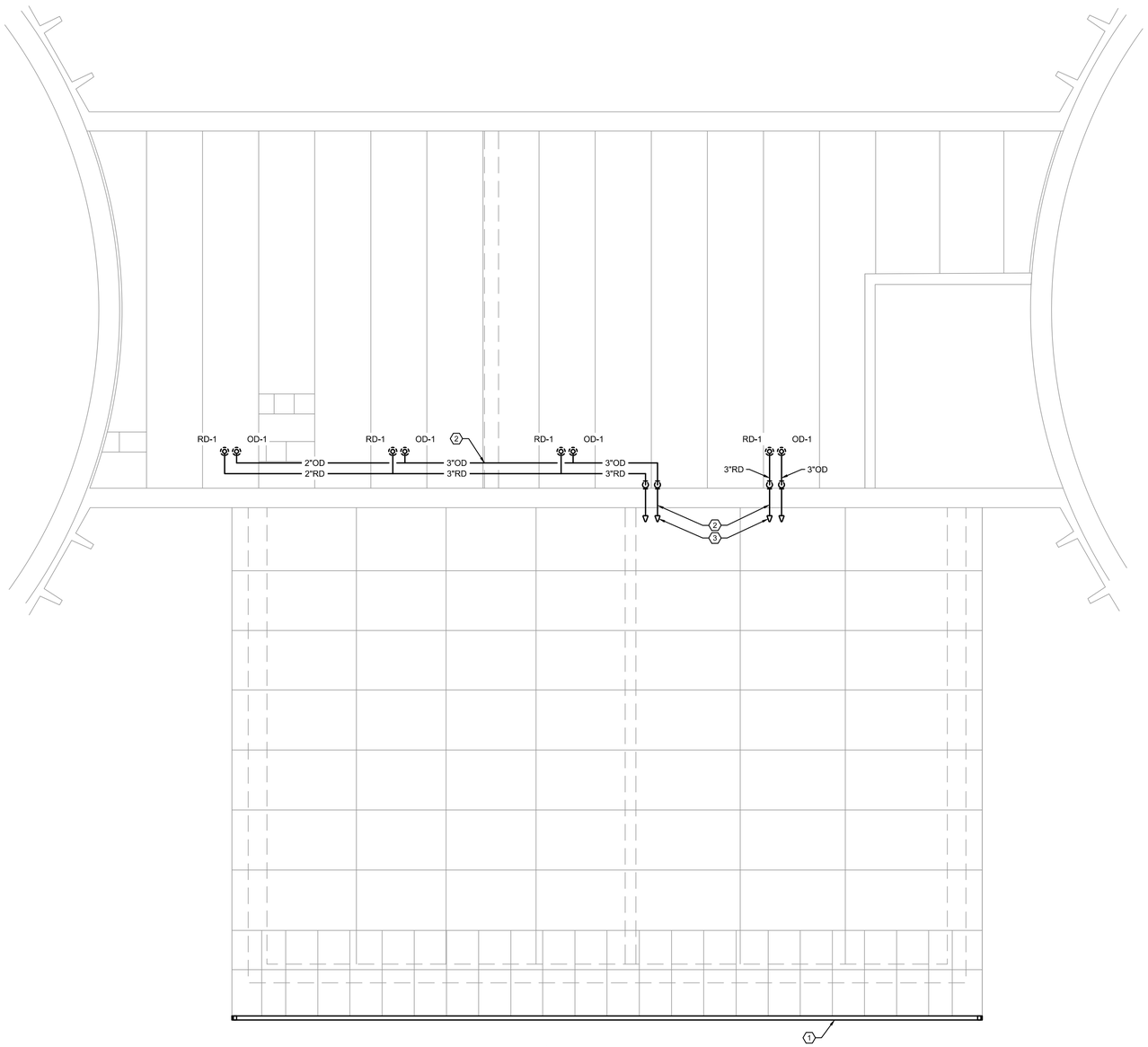
JOPLIN, MO

2021

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ROOF PLAN
1/4" = 1'-0"

GENERAL NOTES

A. DO NOT ROUTE ITEMS OVER ELECTRICAL PANELS. PROVIDE 3'-6" CLEARANCE IN FRONT OF ELECTRICAL PANELS AND DEVICES FROM FLOOR TO 6'-6" OR TOP OF PANEL AS PER CODE REQUIREMENTS.

B. UNLESS NOTED/SHOWN OTHERWISE, ALL PIPING SHALL BE RUN AS HIGH AS POSSIBLE, TIGHT TO STRUCTURE WHERE FEASIBLE. RUN PIPES UP IN JOIST SPACE WHERE INDICATED AND AS REQUIRED. COORDINATE WITH ELECTRICAL, FIRE SPRINKLER, AND HVAC CONTRACTORS PRIOR TO INSTALLATION. VALVES AND OTHER MAINTENANCE ITEMS SHALL NOT BE INSTALLED HIGHER THAN 2 FEET ABOVE CEILINGS.

C. LOCATE EQUIPMENT TO ALLOW ACCESS FOR ADJUSTMENT AND SERVICING. REFER TO INSTALLATION MANUALS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THESE DRAWINGS. LOCATE HANGING EQUIPMENT WITHIN THE SPACE SO THAT MAINTENANCE ACCESS IS PROVIDED FROM BELOW AND MAINTENANCE AREA AROUND AND ACCESS AREA BELOW IS FREE OF OBSTRUCTIONS INCLUDING PIPING, DUCTWORK, CONDUIT OR OTHER BUILDING ELEMENTS.

D. SEAL ALL PENETRATIONS THROUGH FIRE RATED AND/OR SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE AND SMOKE RATED SEALANTS.

E. COORDINATE ROOF PENETRATIONS WITH ROOFING CONTRACTOR.

⬡ SHEET KEYNOTES

1. PROVIDE 3"X5" GUTTER SLOPED AT 1/4 INCH PER FOOT WITH 3"X2-1/2" DOWNSPOUTS AT EACH END.
2. SEAL PIPE SLEEVES THROUGH WALL.
3. DISCHARGE ROOF DRAINS 1' ABOVE LOWER ROOF.

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REVISIONS

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ROOF PLAN
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

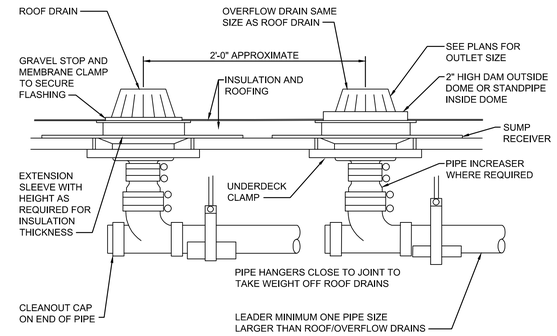
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USER: tsnead
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PLUMBING FIXTURE SCHEDULE

TAG	TYPE	MANUFACTURER[3]	MODEL[3]	DESCRIPTION
RD-1	ROOF DRAIN	ZURN	ZC100	DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/GRAVEL GUARD AND CAST IRON DOME. BOTTOM OUTLET, ADJUSTABLE UNDER DECK CLAMP AND ADJUSTABLE EXTENSION SLEEVE FOR ROOF INSULATION.
OD-1	OVERFLOW DRAIN	ZURN	ZC100	DURA-COATED CAST IRON BODY WITH COMBINATION MEMBRANE FLASHING CLAMP/GRAVEL GUARD AND CAST IRON DOME. BOTTOM OUTLET, ADJUSTABLE UNDER DECK CLAMP AND ADJUSTABLE EXTENSION SLEEVE FOR ROOF INSULATION.



NOTES:

1. USE HUBLESS CAST IRON PIPE, FITTINGS AND CONNECTORS. INSULATE ROOF DRAIN BODIES AND PIPE PER SPECIFICATIONS. LOCATE DRAINS WHERE SHOWN ON ARCHITECTURAL PLANS. VERIFY WITH STRUCTURAL PLANS FOR ROOF LOW POINTS. COORDINATE WITH ROOFING CONTRACTOR. REFER TO STRUCTURAL DRAWINGS AND COORDINATE THEREWITH IF REQUIRED FOR SUPPLEMENTARY STEEL AROUND ROOF OPENING. ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT ACTUAL CONDITIONS.
2. INSTALL ROOF DRAINS PER MANUFACTURER'S RECOMMENDATIONS.

3 ROOF DRAIN AND OVERFLOW
SCALE: NTS

2 PIPE HANGER SUPPORT
SCALE: NTS

NOTES:

1. SLEEVES ARE NOT REQUIRED FOR CORE-DRILLED HOLES OR STUD WALLS.

1 PIPE SLEEVE THRU RATED INTERIOR WALL
SCALE: NTS

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Missouri Certificate of Authority #001592
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TEL 417.781.0643
www.olsson.com

STATE OF MISSOURI
TIMOTHY DANNER
NUMBER PE-2019031265
PROFESSIONAL ENGINEER
12/22/20

REVISIONS			
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

PLUMBING DETAILS
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

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approved by:
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project no.: 017-0642
drawing no.: P_DET_G170642.dwg
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SECTION 220500/230500 - COMMON WORK RESULTS

PIPE SLEEVES AND FIRE STOPPING:
FURNISH, SET, AND PROPERLY LOCATE ALL SLEEVES REQUIRED FOR PLUMBING WORK. ALL SLEEVES SHALL BE OF SUFFICIENT SIZE TO PERMIT PIPE MOVEMENT OF EXPANSION AND CONTRACTION, AND TO ACCOMMODATE PIPE INSULATION.

HOLES FOR PIPING THROUGH CONCRETE FLOORS AND WALLS SHALL BE SCHEDULE 40 STEEL PIPE, SECURED TO WALL. SLEEVES ARE NOT REQUIRED FOR CORE-DRILLED OPENINGS.

PIPES SHALL NOT BE INSTALLED THROUGH FOOTINGS, BEAMS, OR COLUMNS EXCEPT AS APPROVED BY STRUCTURAL ENGINEER.

FIRESTOPPING IS DEFINED HEREIN AS THE PROCESS OF PROVIDING MATERIAL, OR COMBINATION OF MATERIALS, IN VARIOUS CONSTRUCTION TO MAINTAIN AN EFFECTIVE BARRIER AGAINST THE SPREAD OF FLAME, SMOKE, AND GASES AND TO RETAIN THE INTEGRITY OF TIME-RATED CONSTRUCTION. INSTALL FIRESTOP FOR ALL PIPING AND DUCT PENETRATIONS THROUGH FLOOR SLAB, THROUGH FIRE-RATED PARTITIONS, OR FIRE WALLS.

SECTION 220529/230529 - HANGERS AND SUPPORT

ALL FERROUS PIPING SHALL BE HUNG WITH ADJUSTABLE SWIVEL RING AND HANGERS. MASON FIG. 400 OR EQUAL.

ALL COPPER PIPING SHALL BE HUNG WITH ADJUSTABLE SWIVEL RING, COPPER PLATED HANGERS FOR NOMINAL TUBING AS REQUIRED. MASON FIG. 500 OR EQUAL.

PROVIDE HANGER RODS OF THE PROPER LENGTH AND SIZE FOR ALL HANGERS.

UTILIZE WALL BRACKETS, BEAMS, OR OTHER CONSTRUCTION TO SUPPORT HANGER RODS WITH APPROPRIATE BEAM CLAMPS OR OTHER STRUCTURAL ATTACHMENTS, AS APPROVED BY THE ARCHITECT. SHOT-IN ANCHORS WILL NOT BE ACCEPTED.

PROVIDE MISCELLANEOUS MEMBERS FOR SUPPORT OF PIPING WHERE REQUIRED.

ALL PIPES SHALL BE SUPPORTED AT EACH FLOOR LEVEL AND ELSEWHERE AS REQUIRED TO ELIMINATE VIBRATION WITH MASON FIG. 395 OR EQUAL RISER CLAMPS.

HANGERS FOR STEEL AND COPPER LINES SHALL BE SPACED NOT OVER 10'-0" ON CENTERS AND CLOSER WHERE REQUIRED TO ACCOMMODATE CONCENTRATED LOADS AND TO LIMIT DEFLECTION TO 1/4". HANGERS SHALL BE INSTALLED AT ALL CHANGES IN DIRECTION OF PIPING.

FIXTURES, FIXTURE SUPPORTS, FIXTURE TRIMMINGS, ETC., SHALL BE SECURED WITH 1/2" BRASS THROUGH BOLTS, EXPANSION BOLTS OR TOGGLE BOLTS IN ACCORDANCE WITH WALL MATERIAL AND AS REQUIRED TO SECURELY ANCHOR FIXTURE TO WALL. EXPOSED HEADS AND CAP NUTS SHALL BE CHROMIUM PLATED.

HANGERS FOR PIPE SHALL BE SIZED TO ACCOMMODATE INSULATION AND SHALL BE INSTALLED WITH SHEET METAL SHIELDS.

PROVIDE SUPPLEMENTAL STEEL BRACING TO PREVENT PIPE SWAY (HORIZONTAL MOVEMENT). INSTALL IN SUCH A MANNER TO ALLOW PIPE EXPANSION AND CONTRACTION (LATERAL MOVEMENT). SEISMIC BRACING SHALL BE PER CODE AND SMACNA STANDARDS.

SECTION 220548/230548 - VIBRATION ISOLATORS

PROVIDE ISOLATION SYSTEMS SO THAT OBJECTIONABLE NOISES OR VIBRATIONS WILL NOT BE TRANSMITTED THROUGH FOUNDATIONS, FLOORS, WALLS, COLUMNS, PIPING AND DUCTS, ETC. ALL ISOLATION SYSTEMS PROPOSED SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

SECTION 220700/230700 - PIPE INSULATION

AS MANUFACTURED BY OWENS-CORNING, JOHNS-MANVILLE, OR ARMSTRONG. ALL INSULATION SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS, AS TESTED BY PROCEDURE ASTM E-84, NFPA 255, & UL 723, NOT EXCEEDING A FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPED RATING OF 50. INSULATION SHALL BE CONTINUOUS THROUGH WALLS, INCLUDING WHERE INSTALLED INSIDE OF WALL CAVITIES.

INSERTS SHALL BE INSTALLED AT ALL HANGERS OR SUPPORTS FOR PIPING 1-1/2" AND LARGER. INSERTS SHALL CONSIST OF RIGID PIPE INSULATION OF EQUAL THICKNESS TO THE ADJOINING INSULATION, CORROSION RESISTANT RIGID SHIELD OR SADDLE, AND SHALL BE PROVIDED WITH VAPOR BARRIER WHERE REQUIRED. ELGEN, INSULCOUSTIC, OR EQUAL.

PRE-FORMED, FIBERGLASS PIPE INSULATION WITH SELF-SERVICE JACKET, INCLUDING SELF-SEALING LAPS, AND VAPOR BARRIER SHALL BE PROVIDED FOR THE FOLLOWING SYSTEMS:
- ROOF DRAIN PIPING: 1" THICK.

SECTION 221000/231000 - PIPING MATERIALS

ALL PIPE AND FITTINGS SHALL BE SMOOTH INSIDE, STRAIGHT, FREE FROM WELD OR SOLDER FLAWS, BLISTERS, OR OTHER DEFECTS. EACH LENGTH OF PIPE AND EACH FITTING SHALL HAVE CAST, STAMPED, OR INDELIBLY MARKED ON IT, THE MAKER'S MARK OR NAME AND THE WEIGHT AND QUALITY OF THE PRODUCT WHERE SUCH MARKING IS REQUIRED BY THE APPROVED STANDARD THAT APPLIES. ALL SIZES SHOWN ON PLANS ARE I.D. REFERENCES TO ANSI AND OTHER STANDARDS SHALL BE LATEST EDITIONS.

PIPING:
ALL SANITARY WASTE, ROOF DRAIN, AND CONDENSATE DRAIN PIPES IN BUILDING ABOVE GROUND AND VENTS ABOVE GROUND SHALL BE PVC PLASTIC PIPE OR CAST IRON PIPE (BELL & SPIGOT OR HUBLESS WITH 304 STAINLESS STEEL COUPLING). PLASTIC PIPE AND FITTINGS SHALL NOT BE INSTALLED IN THE CEILING SPACES USED FOR RETURN AIR PLENUMS UNLESS COVERED WITH A MINIMUM OF 1" FIBERGLASS INSULATION AS SPECIFIED IN SECTION 220700/230700.

HORIZONTAL SOIL, WASTE, AND DRAIN PIPE SHALL BE SLOPED AT 1/4" PER FOOT EXCEPT WHEN THE PIPE IS LARGER THAN 3" WHICH MAY BE INSTALLED WITH A SLOPE OF NOT LESS THAN 1/8" PER FOOT UNLESS OTHERWISE NOTED.

FITTINGS:
FITTINGS FOR CAST IRON SOIL PIPE, BELL AND SPIGOT, SHALL BE CAST IRON CONFORMING TO ANSI B16-12 AND CS-188, STANDARD WEIGHT, COATED INSIDE AND OUT WITH HEAVY COAL TAR VARNISH. JOINTS SHALL BE MADE WITH VULCANIZED RUBBER OR NEOPRENE CONFORMING TO ASTM C-564.

PVC FITTINGS FOR PVC PIPING.

FITTINGS FOR CAST IRON SOIL PIPE (HUBLESS) SHALL BE MADE WITH 304 STAINLESS STEEL COUPLINGS. GASKETS TO CONFORM TO CISPI 301.

JOINTS:
SCREWED PIPE JOINTS SHALL HAVE FULL CLEAN CUT THREADS CONFORMING TO ANSI B2.1, WITH ENDS OF PIPE REAMED, FILED AND ALL BURRS REMOVED. JOINTS SHALL BE MADE WITH GRAPHITE BASE PIPE JOINT COMPOUND OR APPROVED EQUAL COMPOUND. NOT MORE THAN THREE EXPOSED THREADS WILL BE PERMITTED. PACKING THREADS WITH LAMP WICK OR OTHER MATERIAL WILL NOT BE PERMITTED. FITTINGS AND PIPE SHALL BE FREE FROM OIL AND GREASE.

PVC PIPE JOINTS SHALL BE SOLVENT WELD WITH SOLVENT CEMENT CONFORMING TO ASTM D2855 AND D2564.

UNIONS ARE REQUIRED FOR CONNECTING ALL EQUIPMENT. UNIONS 2" OR SMALLER SHALL BE SCREWED OR SOLDER TYPE, WITH SPHERICAL GROUND JOINT. UNIONS 2-1/2" AND LARGER SHALL BE OF THE BOLTED FLANGED TYPE.

INSTALL INSULATING TYPE DIELECTRIC UNIONS FOR CONNECTING DISSIMILAR PIPE.

PIPE LABELS:
ATTACHED SELF-ADHESIVE, PRINTED PLASTIC, PIPE LABELS TO ALL NEW DOMESTIC AND HYDRONIC PIPING IN CONCEALED AREAS. SPACING SHALL BE EVERY 20' AND NEXT TO EACH WALL PENETRATION, ACCESS DOOR, OR MAJOR EQUIPMENT. LABEL SHALL INCLUDE A MINIMUM OF 1/2" HIGH LETTERS AND FLOW ARROWS.

SECTION 224000 - PLUMBING FIXTURES

PLUMBING FIXTURES SHALL BE PROVIDED IN A WORKMANLIKE MANNER WITH PROPER CONNECTIONS TO SUPPLY AND DRAINAGE PIPING. ALL FIXTURES SHALL BE FREE OF DEFECTS AND FLAWS AND SHALL OPERATE PERFECTLY WHEN INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.

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TEL 417.781.0643 www.olsson.com

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NUMBER PE-2019031265
PROFESSIONAL ENGINEER
3/19/21

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PLUMBING SPECIFICATIONS
TURKEY CREEK NORTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

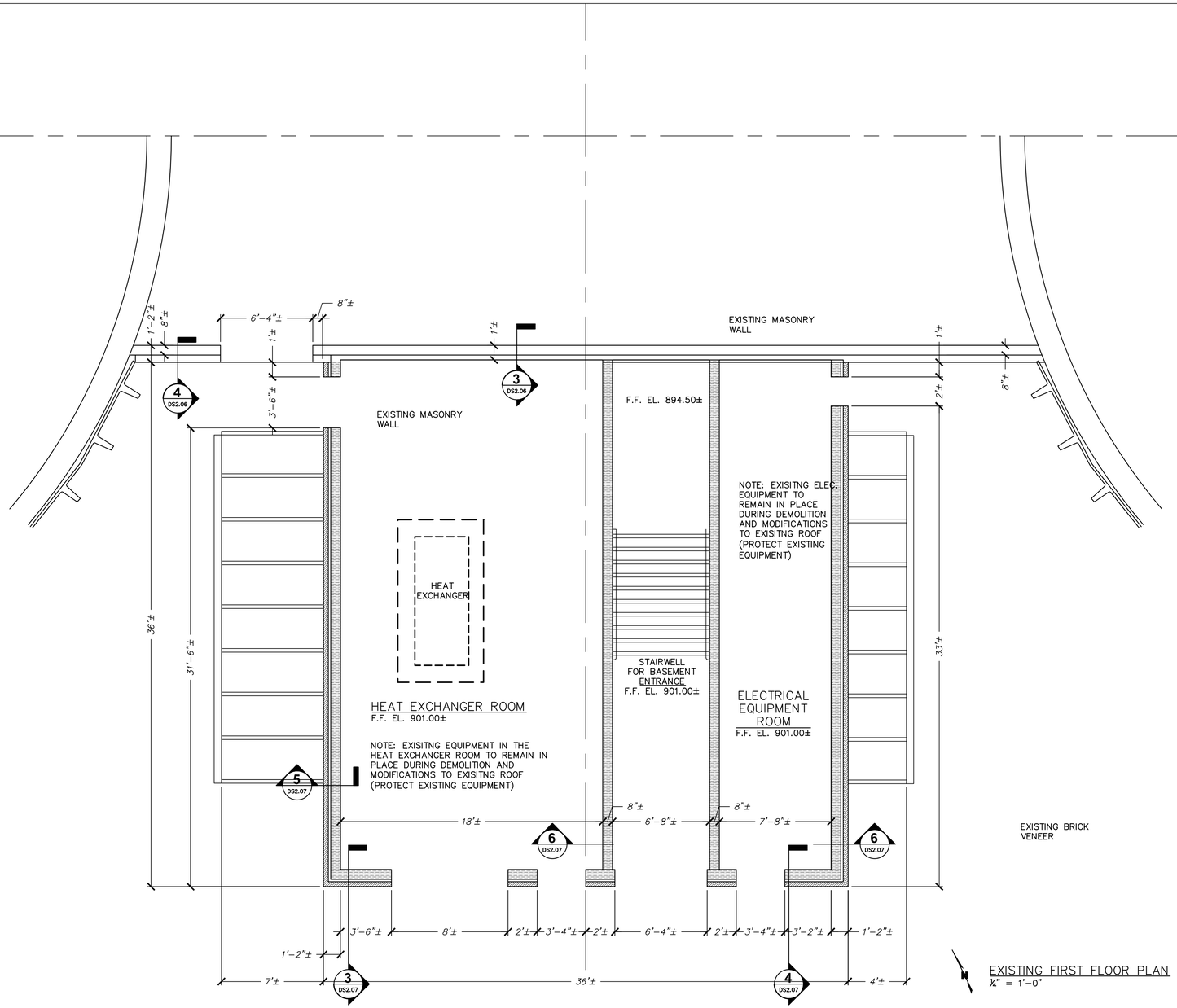
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2021

drawn by: NB
checked by:
approved by:
QA/QC by:
project no.: 017-0642
drawing no.: P_SPEC_G1706.dwg
date: 12/22/2020

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EXISTING FIRST FLOOR PLAN
¼" = 1'-0"

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TEL 417.781.0643
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NUMBER PE-2019000022
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EXISTING FIRST FLOOR PLAN
TURKEY CREEK SOUTH DIGESTER BUILDING

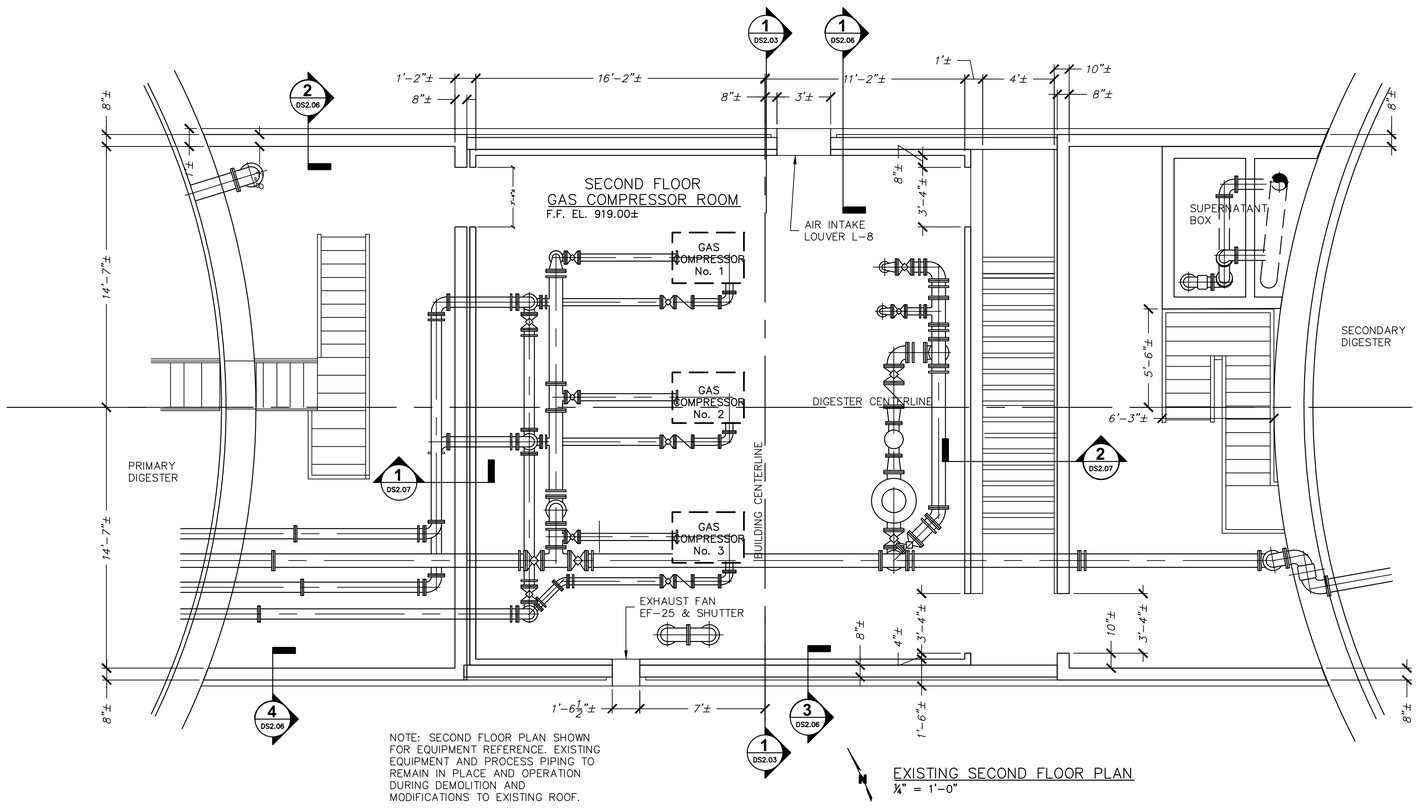
TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

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checked by: LCH
approved by: LCH
QA/QC by: LCH
project no.: G17-0642
drawing no.: S_XBLDG_PLAN_DS2.01-DS2.02_01706642.dwg
date: 3/16/2021

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NOTE: SECOND FLOOR PLAN SHOWN FOR EQUIPMENT REFERENCE. EXISTING EQUIPMENT AND PROCESS PIPING TO REMAIN IN PLACE AND OPERATION DURING DEMOLITION AND MODIFICATIONS TO EXISTING ROOF.

EXISTING SECOND FLOOR PLAN
¼" = 1'-0"

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Joplin, MO 64801
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LARRY C. HARDIN
NUMBER PE-2019000022
PROFESSIONAL ENGINEER
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EXISTING SECOND FLOOR PLAN
TURKEY CREEK SOUTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

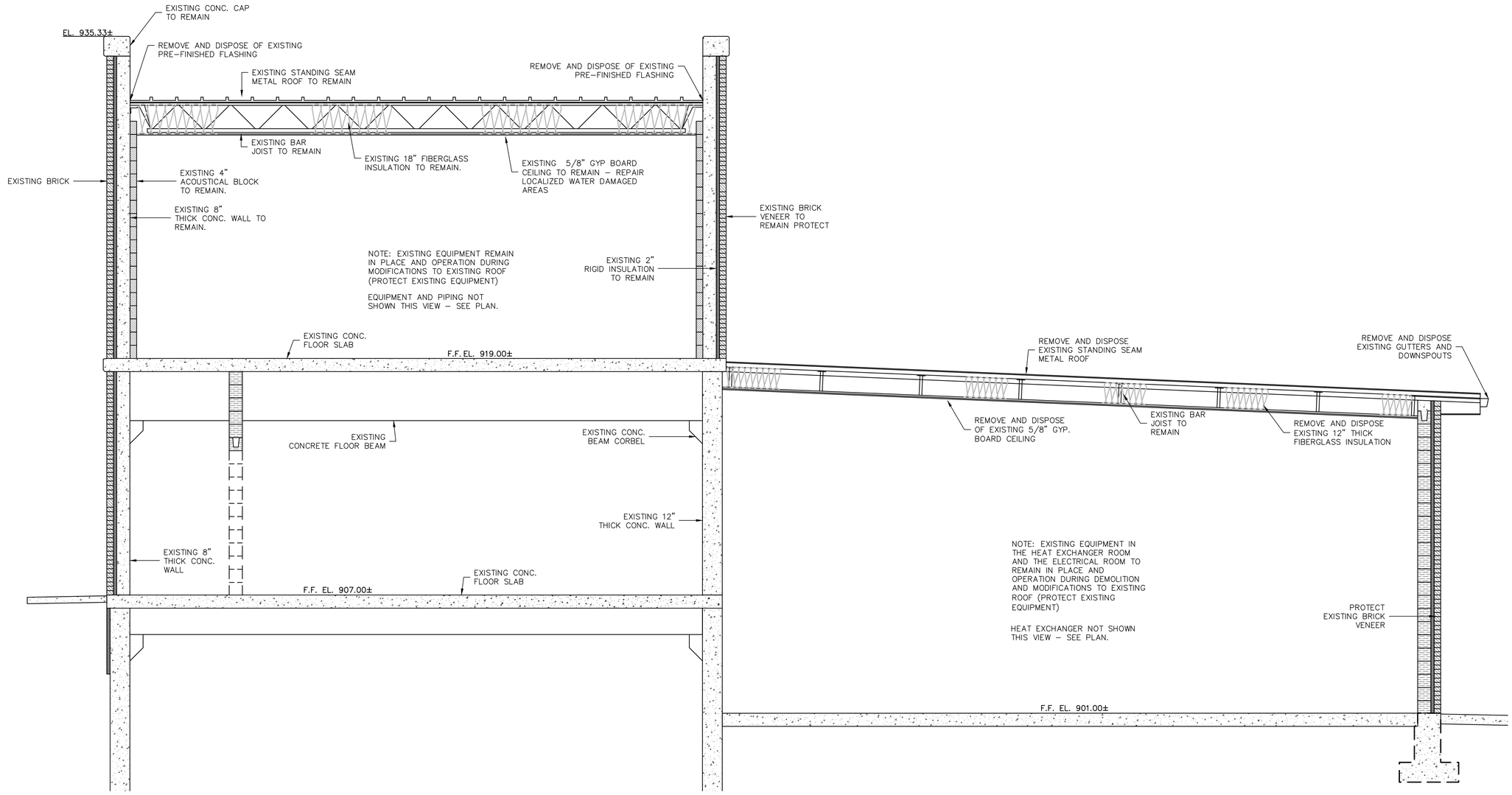
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QA/QC by: LCH
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1 BUILDING SECTION
3/8" = 1'-0"

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NUMBER PE-2019000222
PROFESSIONAL ENGINEER
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EXISTING BUILDING SECTION
TURKEY CREEK SOUTH DIGESTER BUILDING

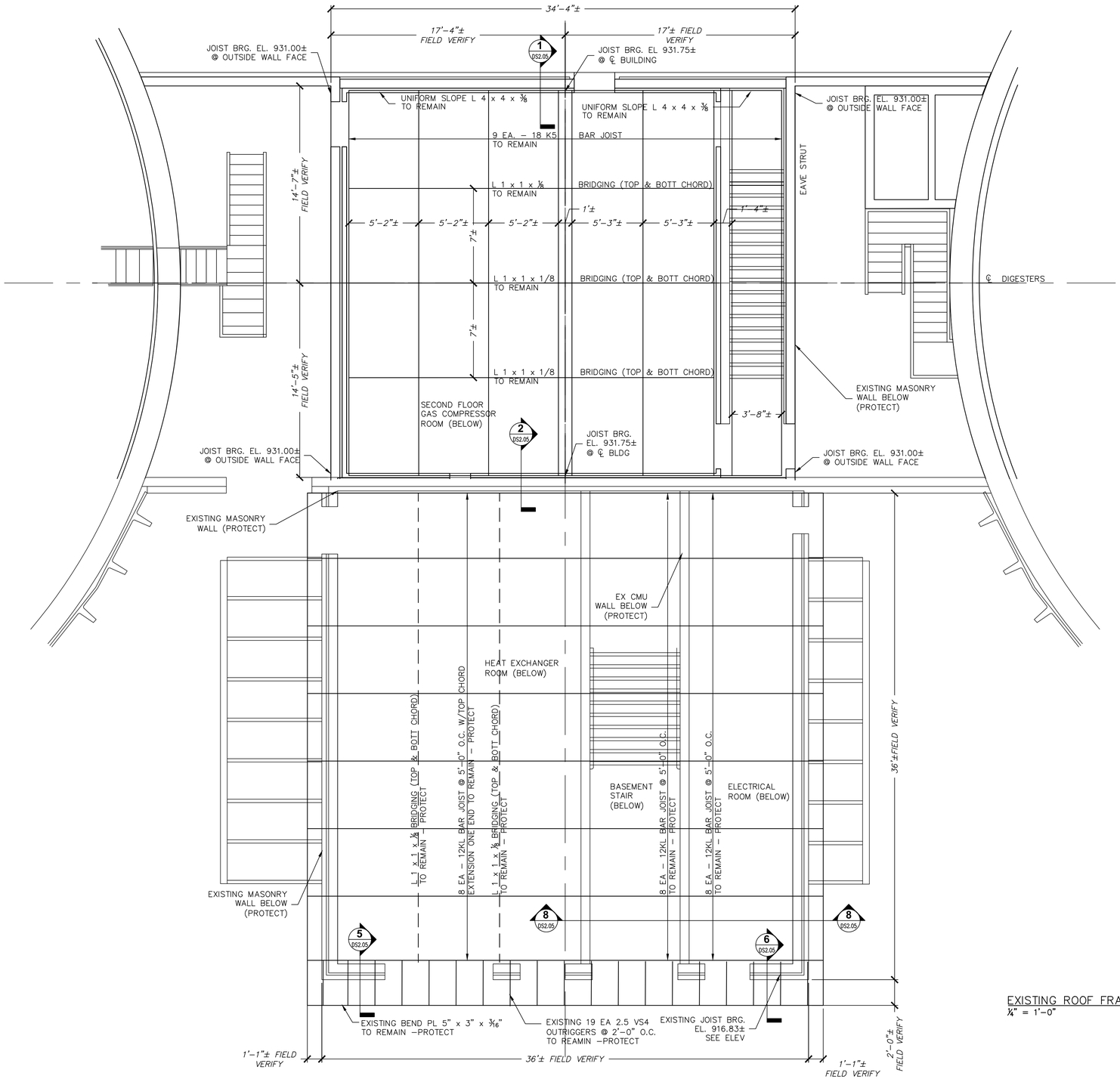
TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

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approved by: LCH
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EXISTING ROOF FRAMING PLAN
1/4" = 1'-0"

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EXISTING ROOF FRAMING PLAN
TURKEY CREEK SOUTH DIGESTER BUILDING

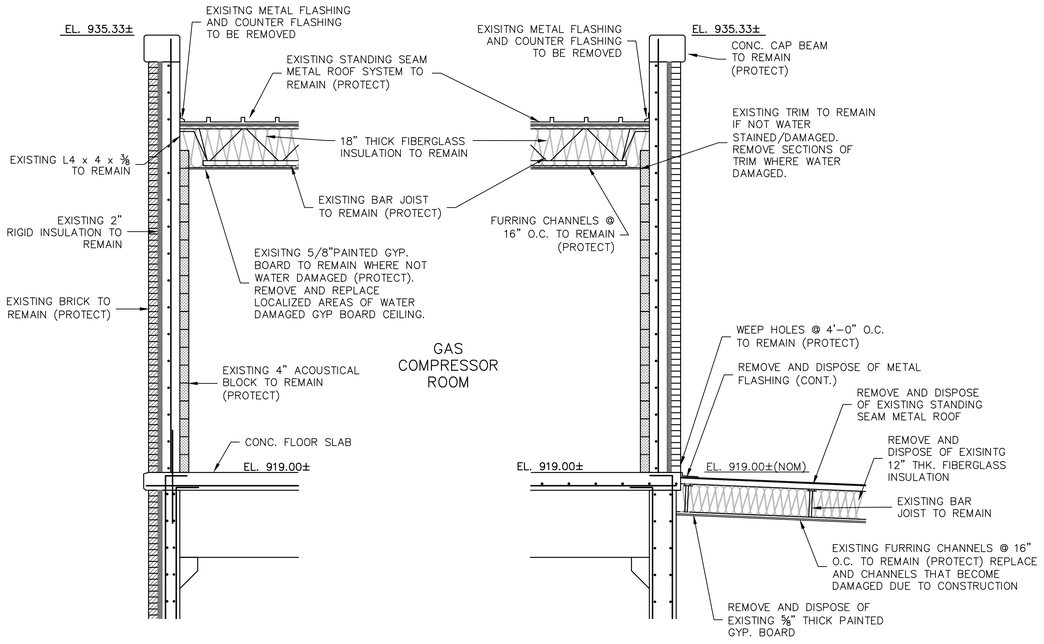
TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
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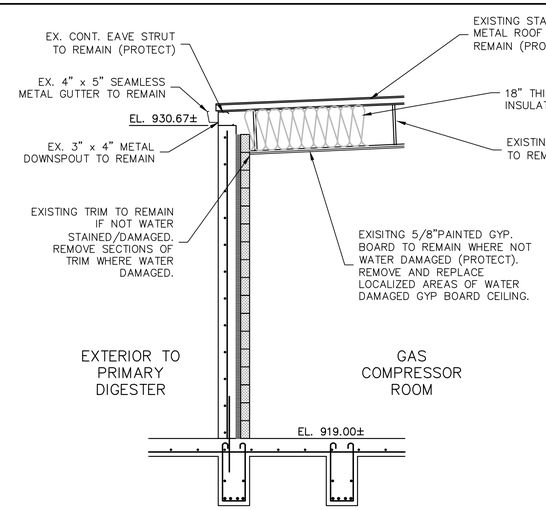
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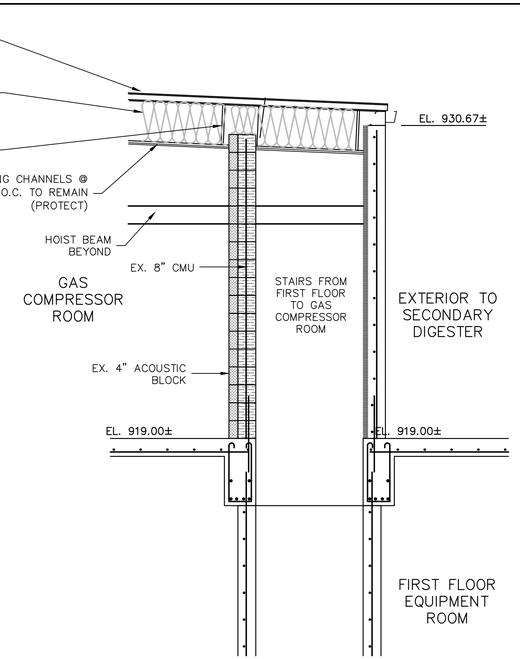


1 **WALL SECTION**
3/8" = 1'-0"

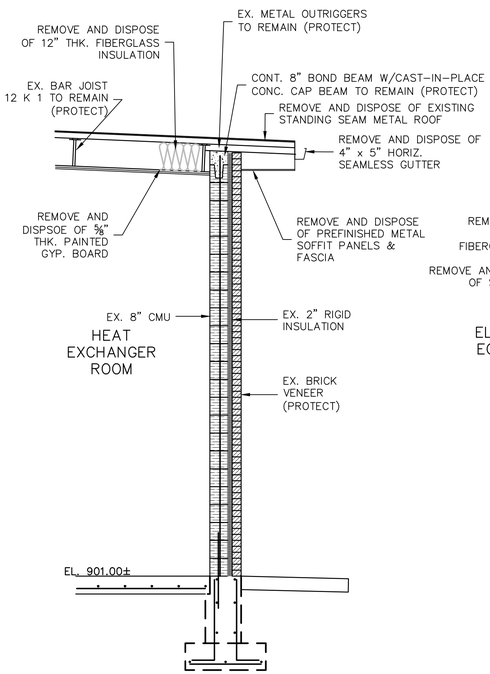
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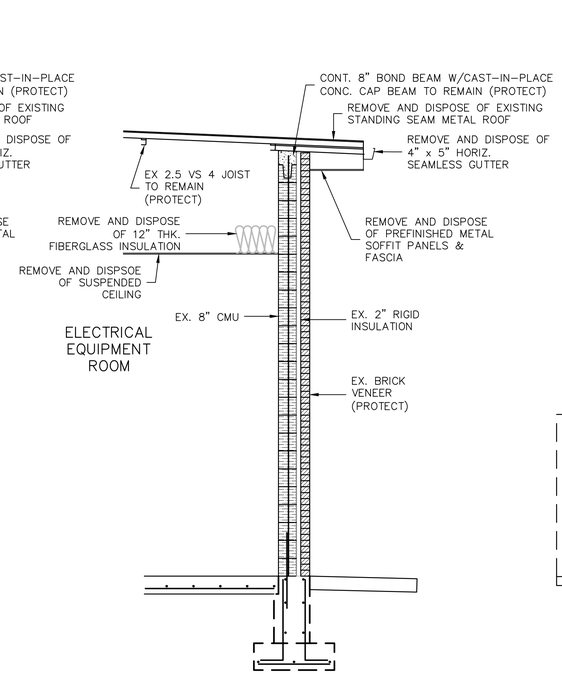
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3/8" = 1'-0"



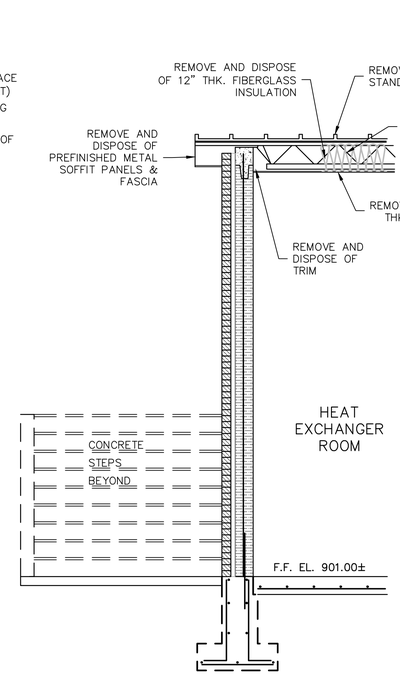
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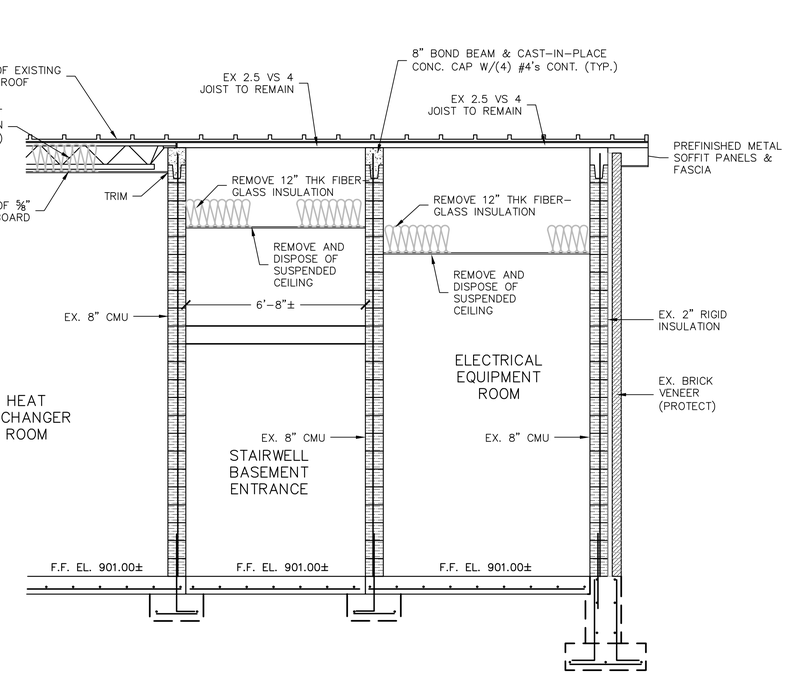
5 **WALL SECTION**
3/8" = 1'-0"



6 **WALL SECTION**
3/8" = 1'-0"



7 **WALL SECTION**
3/8" = 1'-0"



8 **WALL SECTION**
3/8" = 1'-0"

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EXISTING WALL SECTIONS
TURKEY CREEK SOUTH DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

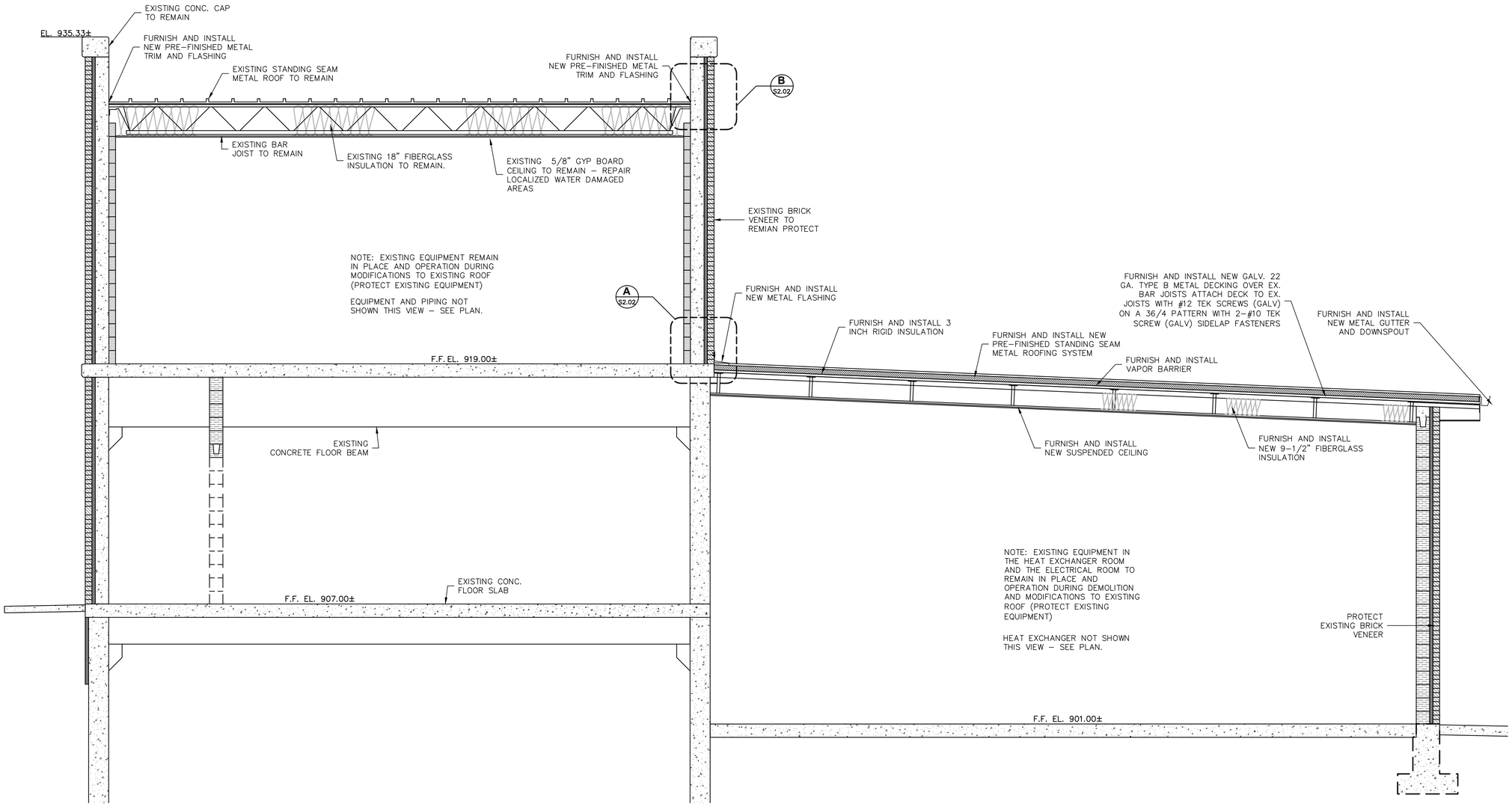
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1 **BUILDING SECTION**
3/8" = 1'-0"

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TURKEY CREEK SOUTH DIGESTER BUILDING

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CITY OF JOPLIN

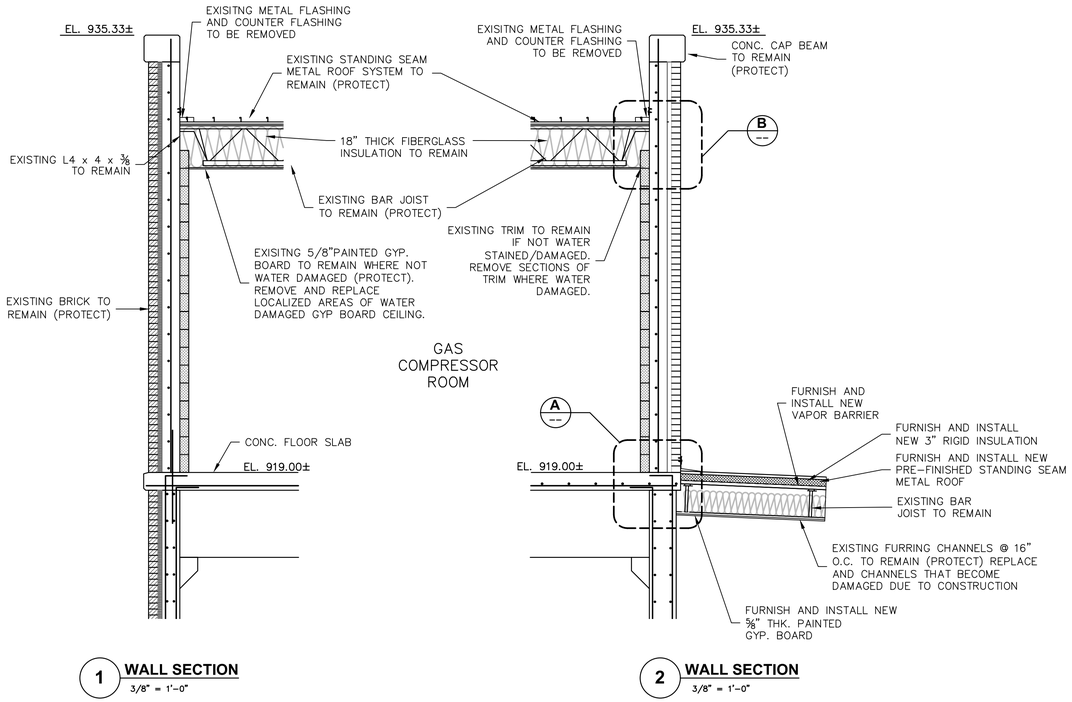
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project no.: G17-0642
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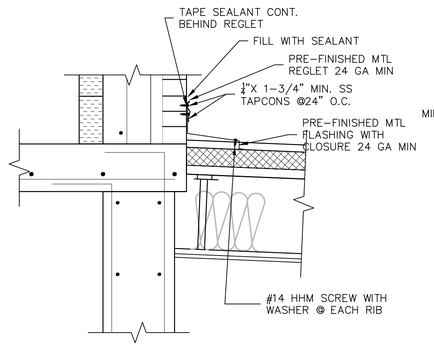
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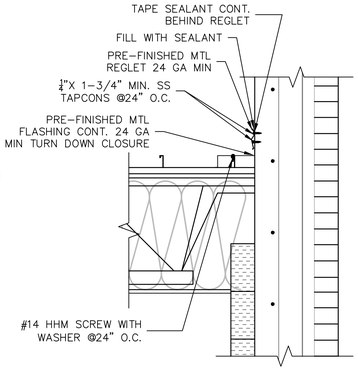


1 **WALL SECTION**
3/8" = 1'-0"

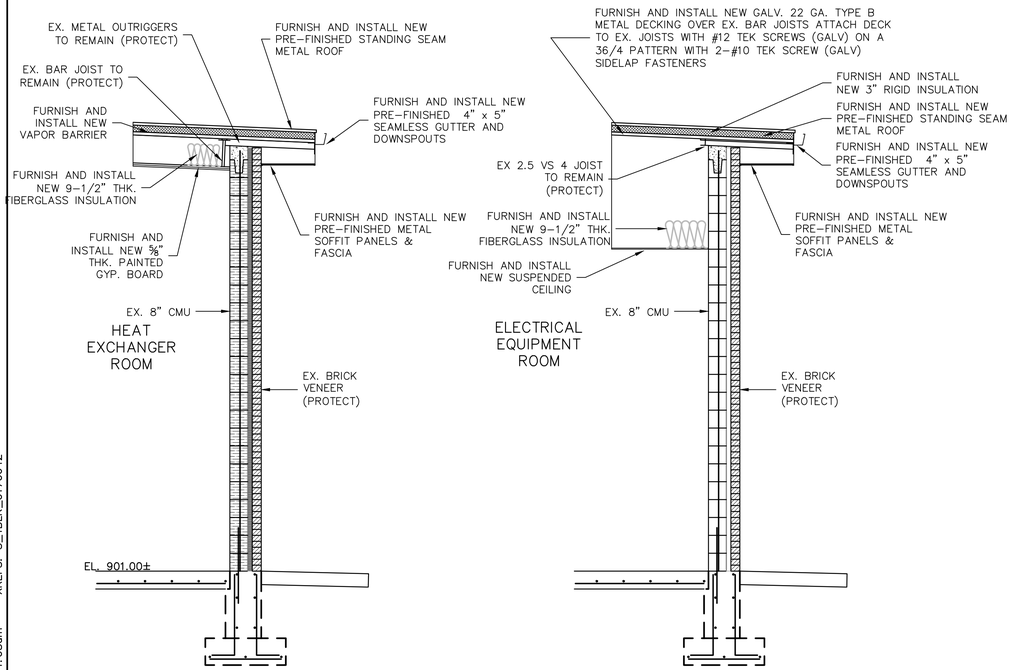
2 **WALL SECTION**
3/8" = 1'-0"



A **WALL DETAIL**
1" = 1'-0"

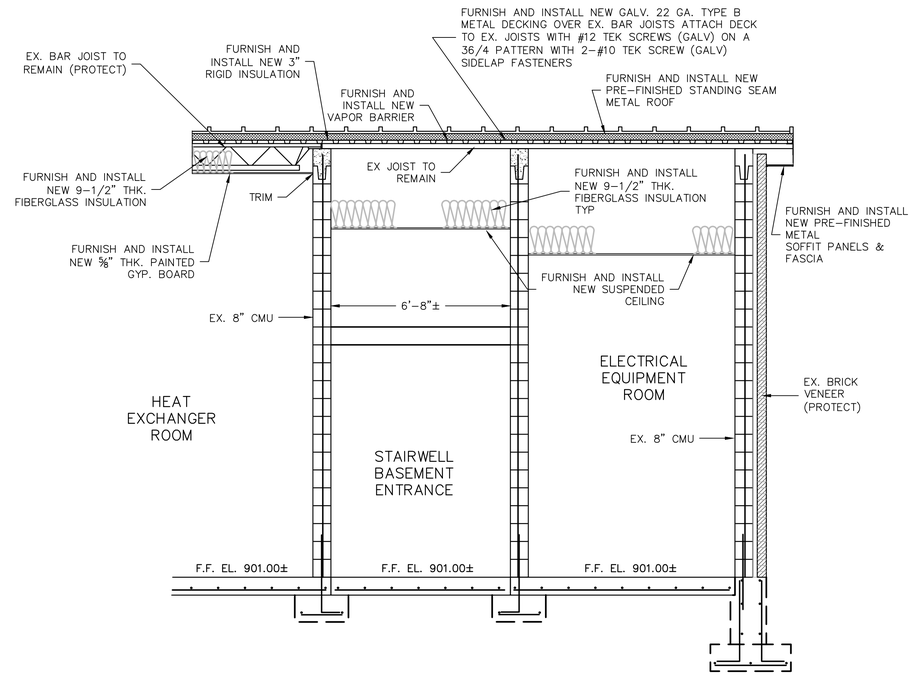


B **WALL DETAIL**
1" = 1'-0"



5 **WALL SECTION**
3/8" = 1'-0"

6 **WALL SECTION**
3/8" = 1'-0"



8 **WALL SECTION**
3/8" = 1'-0"

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WALL SECTION - ROOF MODIFICATIONS
TURKEY CREEK SOUTH DIGESTER BUILDING

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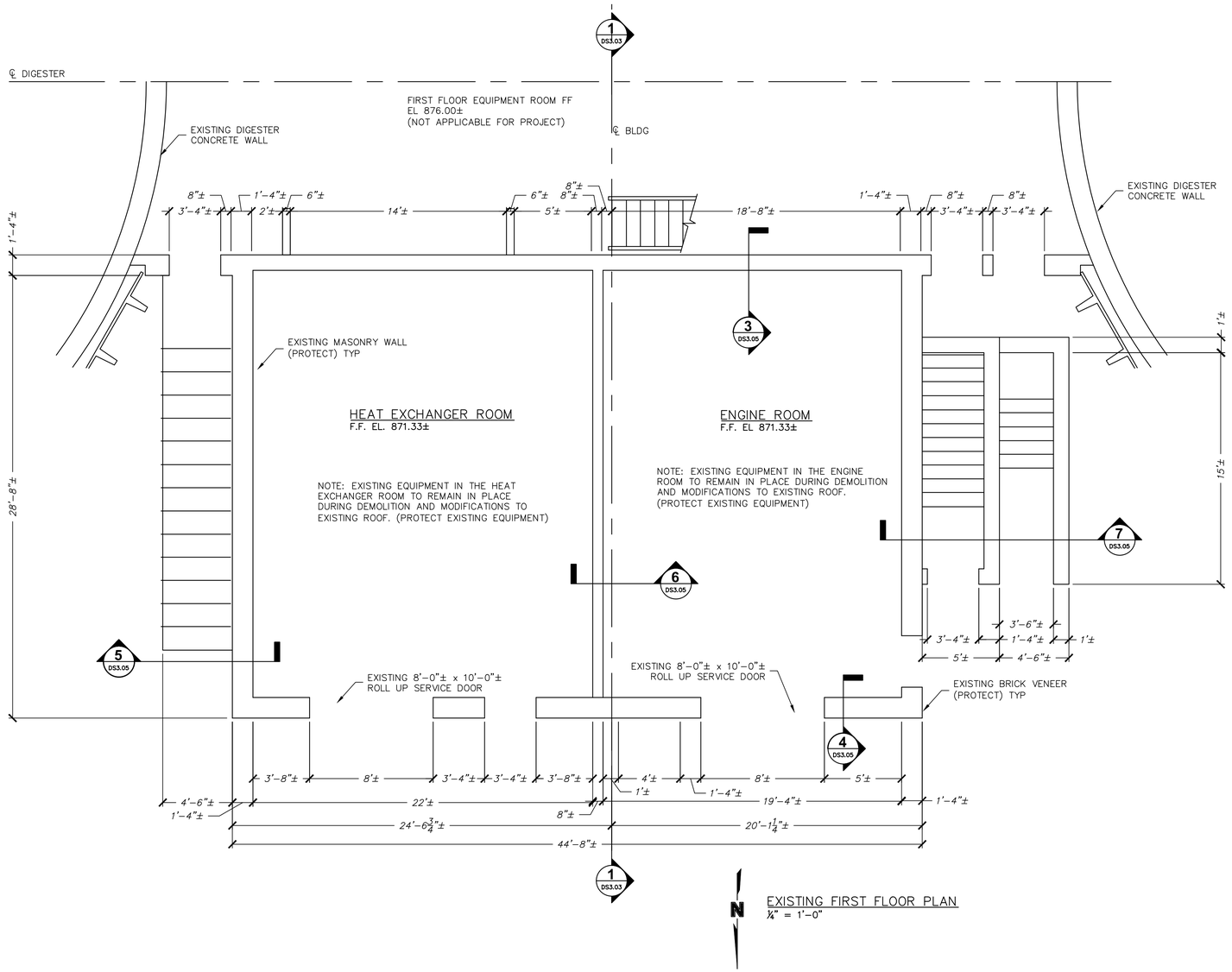
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checked by: LCH
approved by: LCH
QA/QC by: LCH
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STATE OF MISSOURI
LARRY C. HARDIN
NUMBER PE-2019000022
PROFESSIONAL ENGINEER
03/16/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

EXISTING FIRST FLOOR PLAN
SHOAL CREEK DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

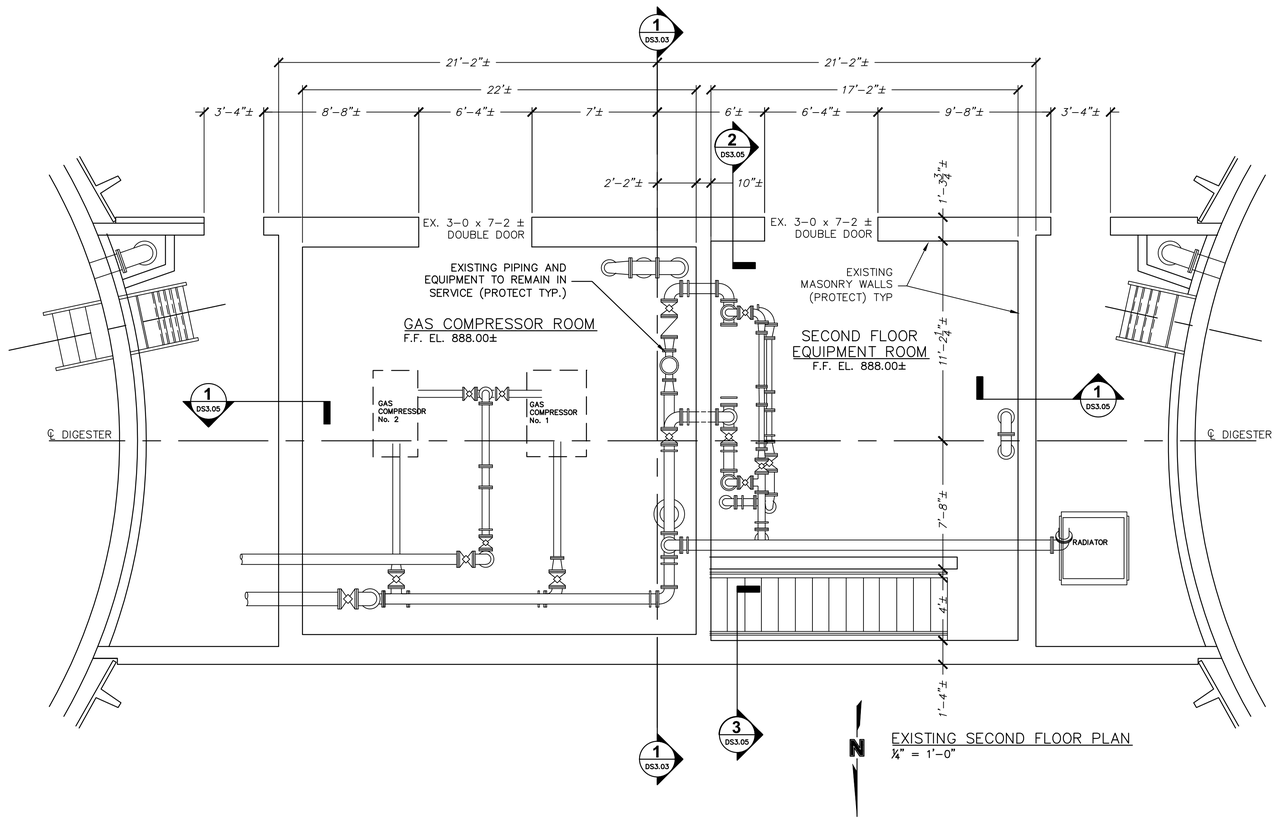
JOPLIN, MO

2021

drawn by: CJK
checked by: LCH
approved by: LCH
QA/QC by: LCH
project no.: G17-0642
drawing no.: SPLN_DS3.01-DS3.02_0170642.dwg
date: 3/16/2021

SHEET
DS3.01

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03/16/2021

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EXISTING SECOND FLOOR PLAN
SHOAL CREEK DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

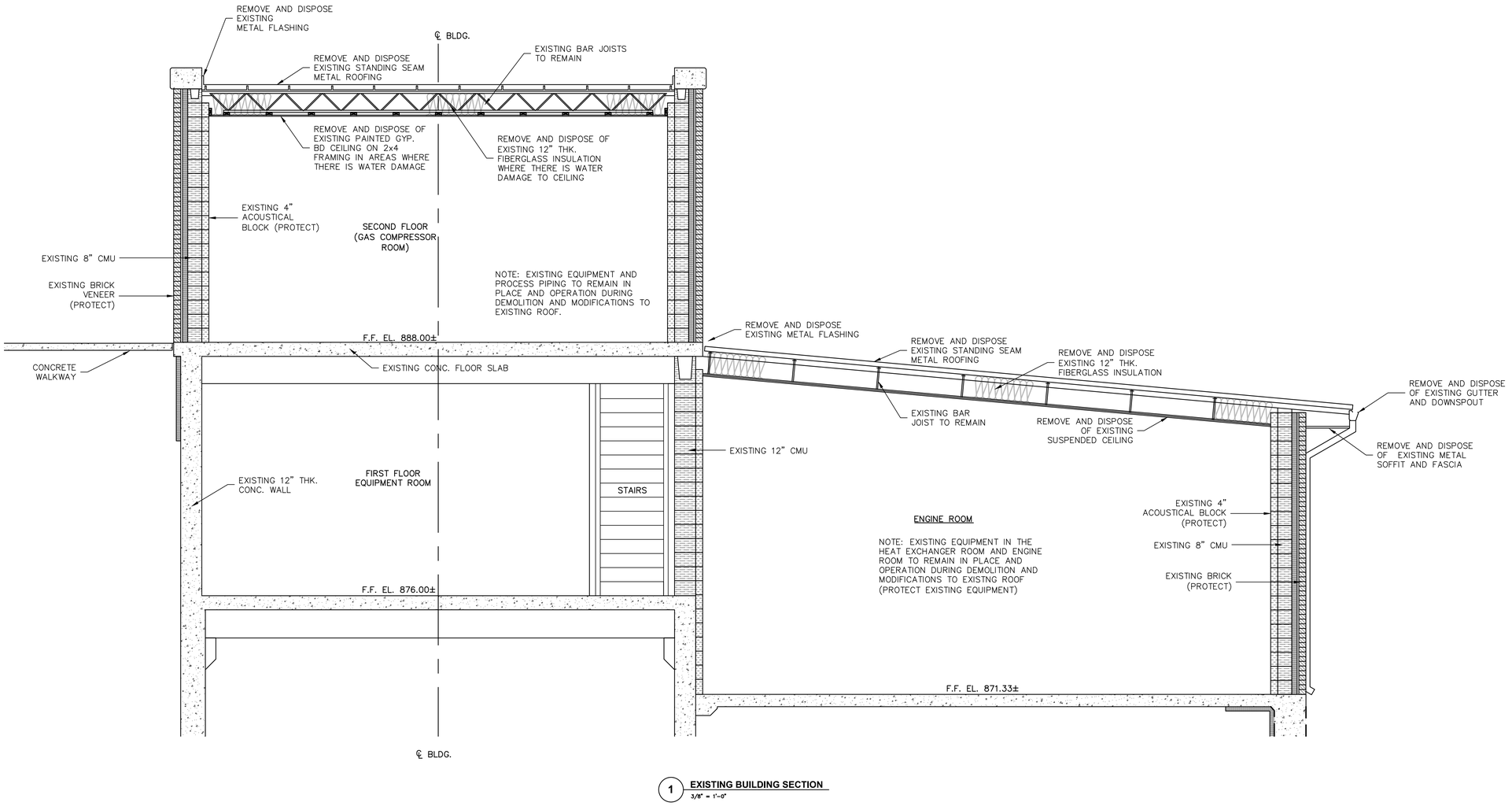
JOPLIN, MO

2021

drawn by: CJK
checked by: LCH
approved by: LCH
QA/QC by: LCH
project no.: G17-0642
drawing no: S_SPLN_DS3.01-DS3.02_0170642.dwg
date: 3/16/2021

SHEET
DS3.02

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1 **EXISTING BUILDING SECTION**
3/8" = 1'-0"

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EXISTING BUILDING SECTION
SHOAL CREEK DIGESTER BUILDING

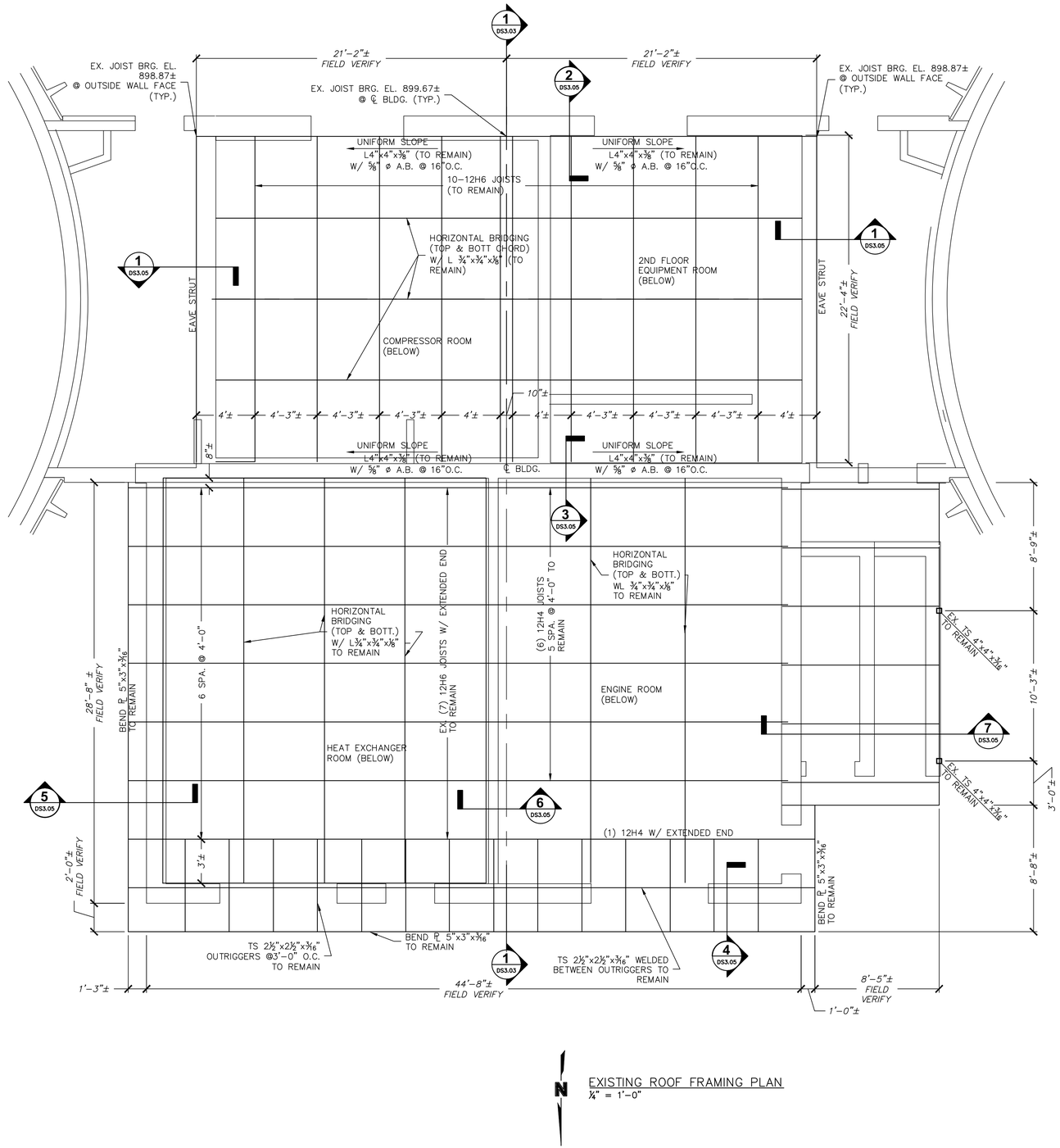
TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

drawn by: CJK
checked by: LCH
approved by: LCH
QA/QC by: LCH
project no.: G17-0642
drawing no.: S_SSEC_DS3.03_0170642.dwg
date: 3/16/2021

SHEET
DS3.03



N

EXISTING ROOF FRAMING PLAN
¼" = 1'-0"

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EXISTING FRAMING PLAN
SHOAL CREEK DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

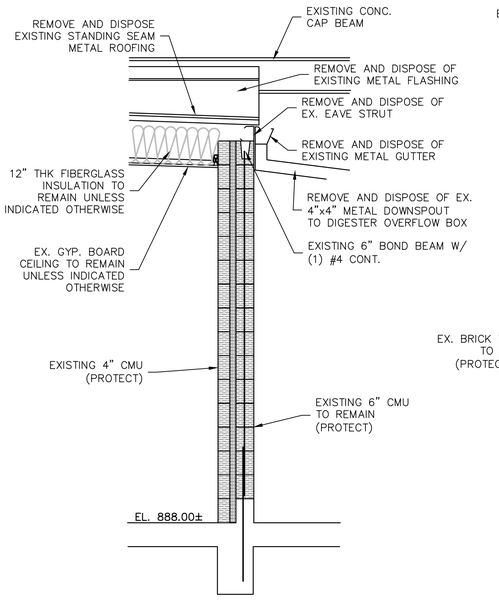
JOPLIN, MO

2021

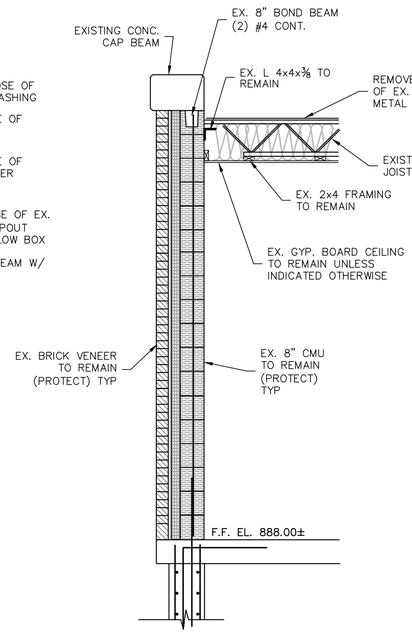
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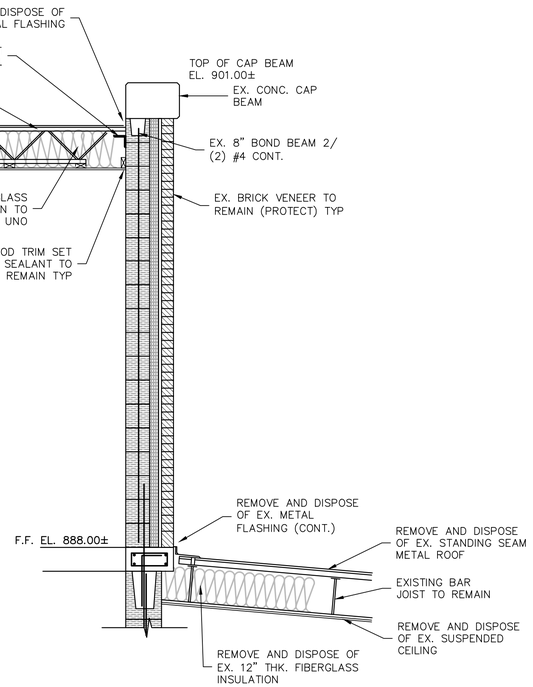
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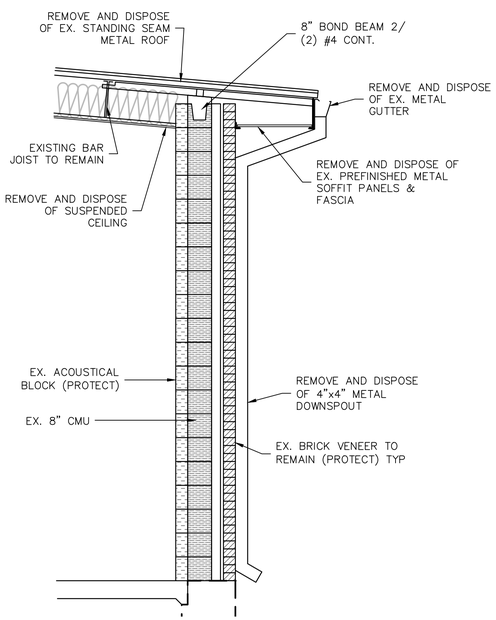
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1/2" = 1'-0"



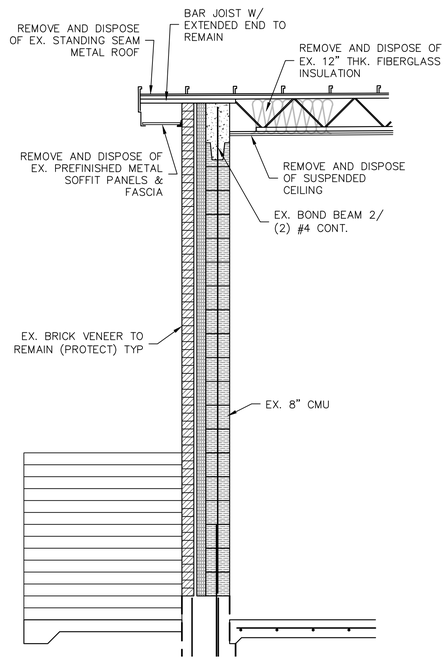
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1/2" = 1'-0"



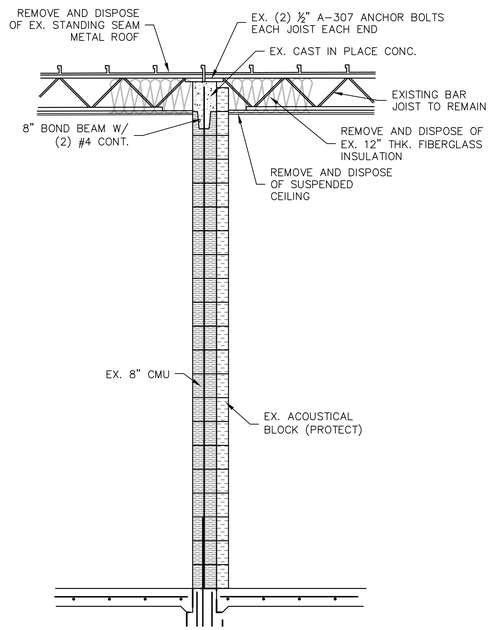
3 WALL SECTION
1/2" = 1'-0"



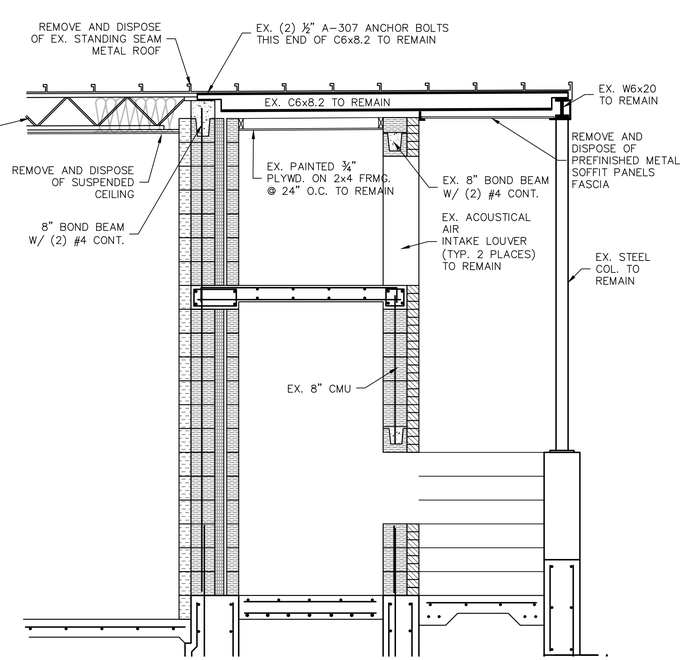
4 WALL SECTION
1/2" = 1'-0"



5 WALL SECTION
1/2" = 1'-0"



6 WALL SECTION
1/2" = 1'-0"



7 WALL SECTION
1/2" = 1'-0"

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03/16/2021

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REVISIONS

EXISTING WALL SECTIONS
SHOAL CREEK DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

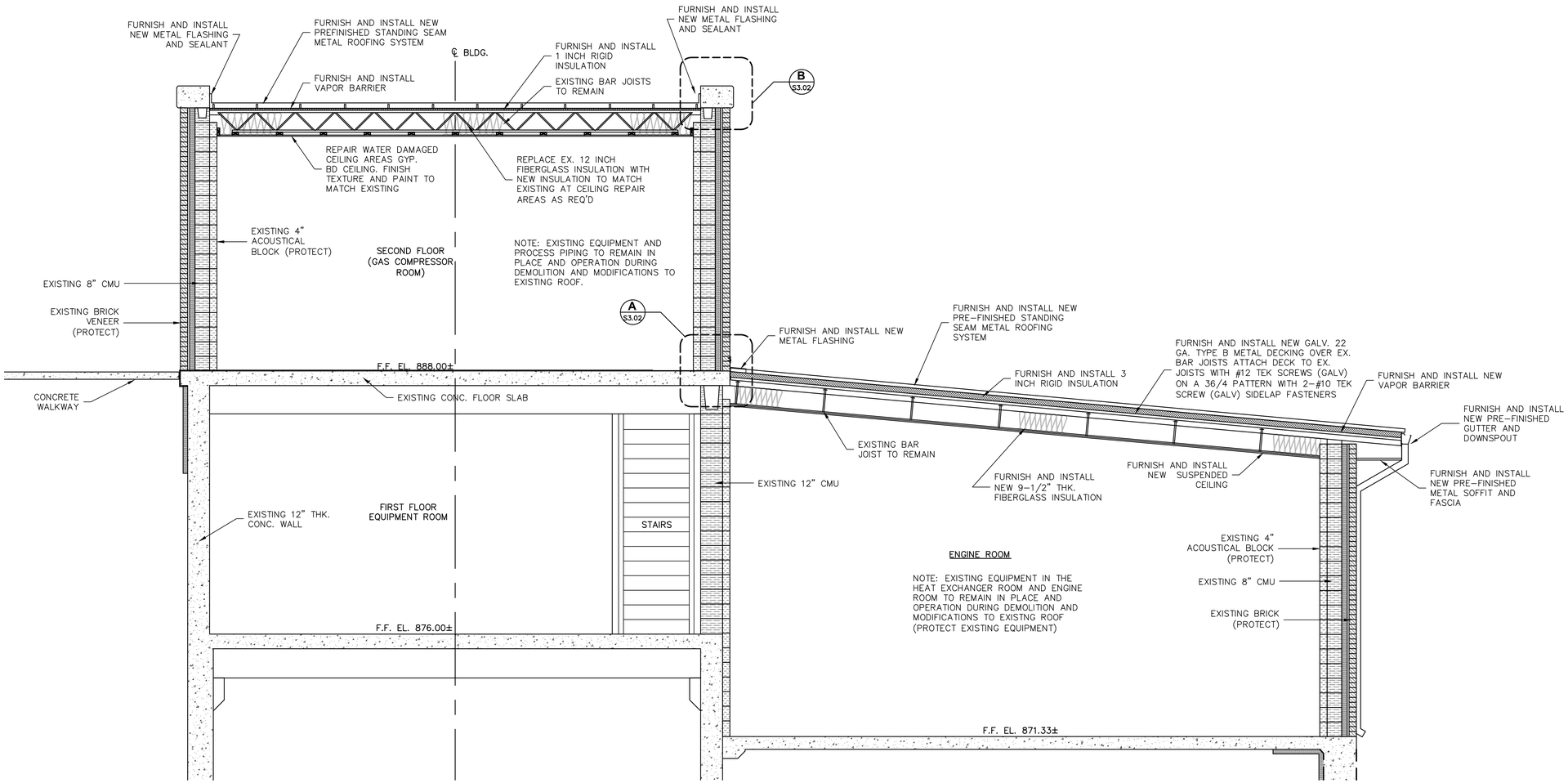
JOPLIN, MO

2021

drawn by:	CJK
checked by:	LCH
approved by:	LCH
QA/QC by:	LCH
project no.:	G17-0642
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SHEET
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1 **EXISTING BUILDING SECTION**
3/8" = 1'-0"

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BUILDING SECTION ROOF MODIFICATIONS
SHOAL CREEK DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

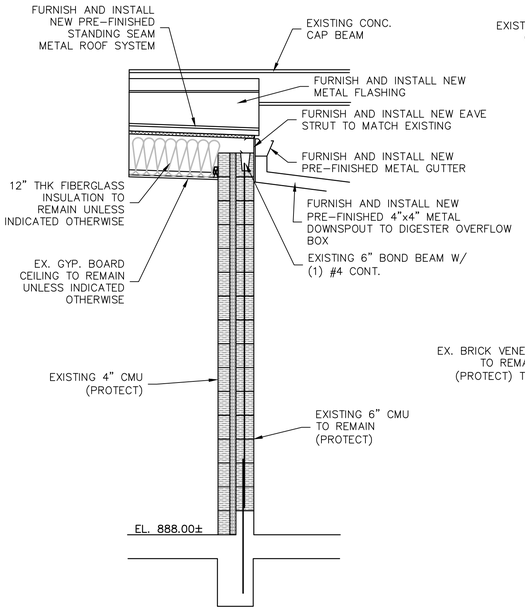
JOPLIN, MO

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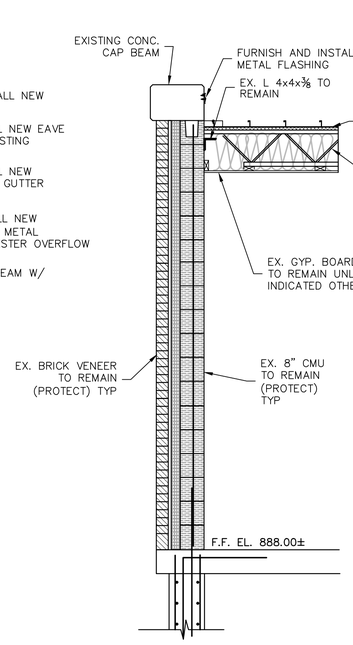
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checked by: LCH
approved by: LCH
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date: 3/16/2021

SHEET
S3.01

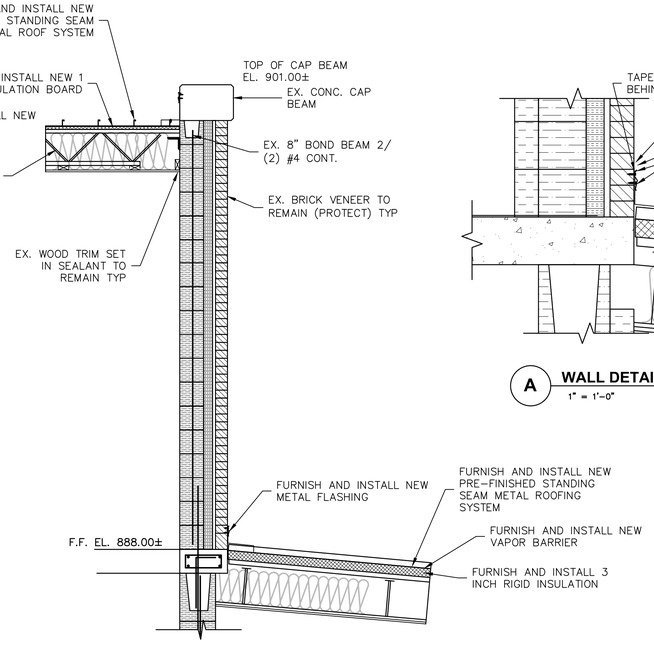
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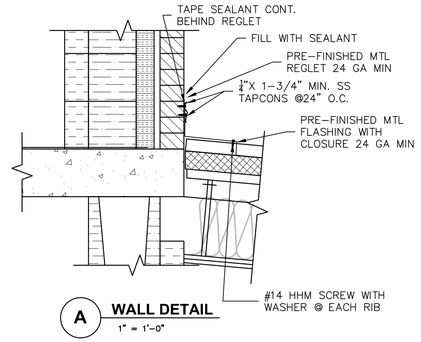
1 **WALL SECTION**
1/2" = 1'-0"



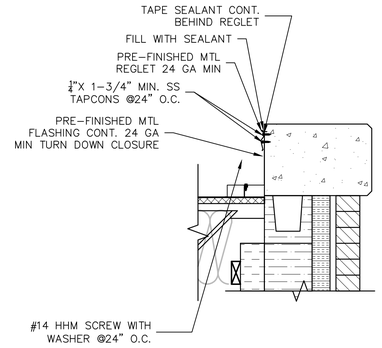
2 **WALL SECTION**
1/2" = 1'-0"



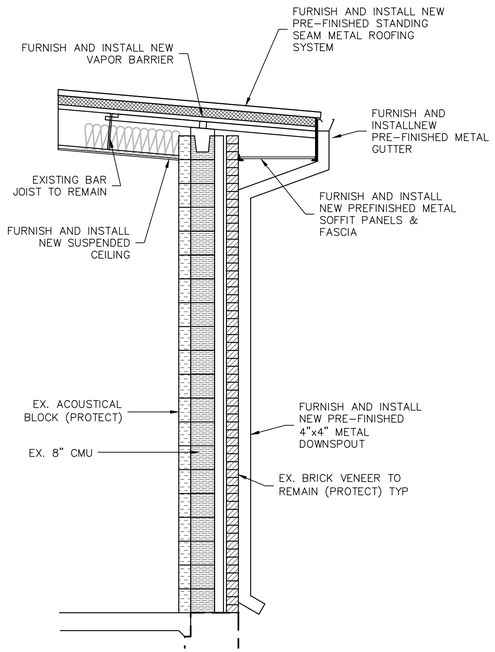
3 **WALL SECTION**
1/2" = 1'-0"



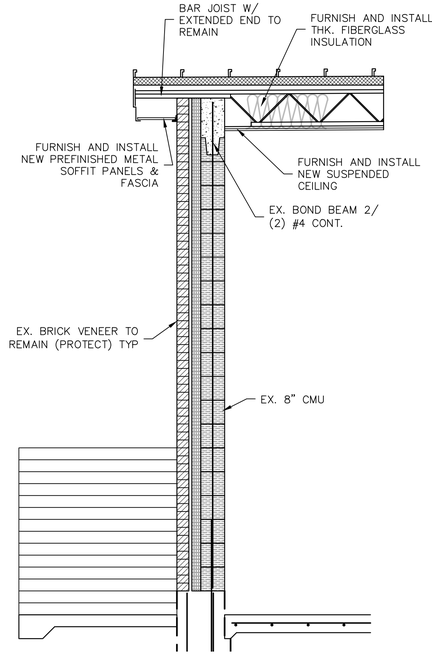
A **WALL DETAIL**
1" = 1'-0"



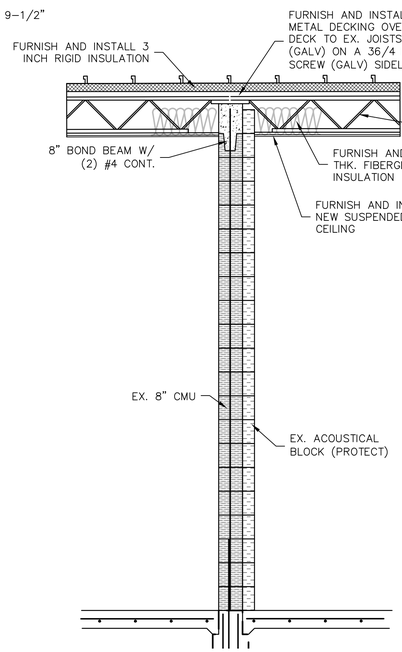
B **WALL DETAIL**
1" = 1'-0"



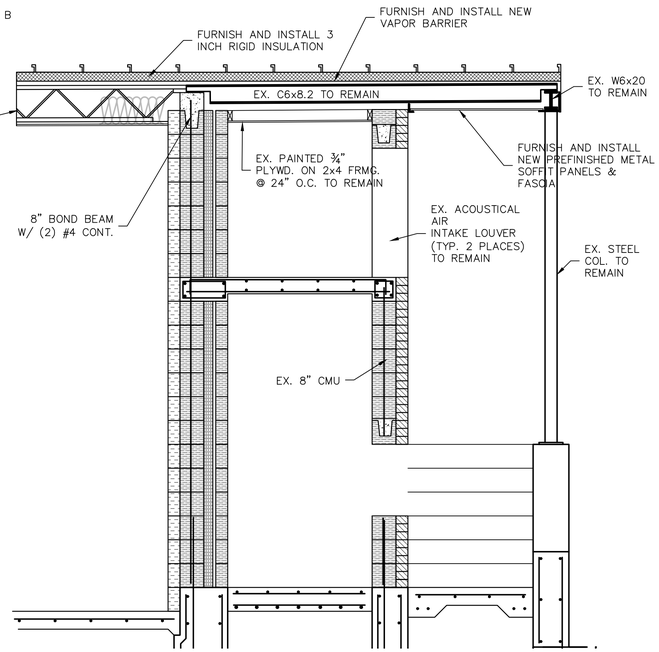
4 **WALL SECTION**
1/2" = 1'-0"



5 **WALL SECTION**
1/2" = 1'-0"



6 **WALL SECTION**
1/2" = 1'-0"



7 **WALL SECTION**
1/2" = 1'-0"

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NUMBER PE-2019000022
PROFESSIONAL ENGINEER
03/16/2021

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

WALL SECTIONS - MODIFICATIONS
SHOAL CREEK DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

drawn by: CJK
checked by: LCH
approved by: LCH
QA/QC by: LCH
project no.: G17-0642
drawing no.: S_SWAL_S3.02_0170642.dwg
date: 3/16/2021

SHEET
S3.02

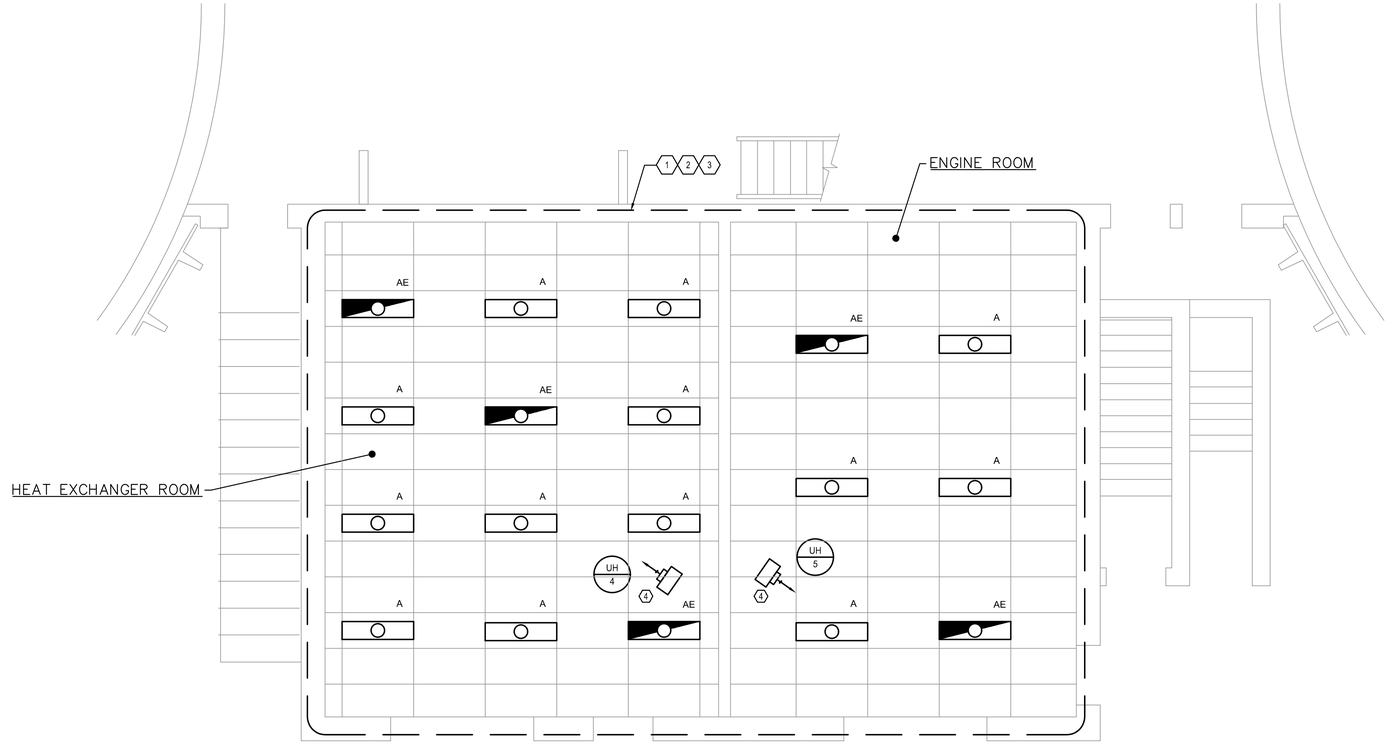
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DATE: Mar 16, 2021 10:57am XREFS: S_TBLK_0170642

GENERAL NOTES

A. REFER TO E1.01 FOR GENERAL NOTES.

⬡ SHEET KEYNOTES

1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES. ALSO REMOVE ANY CONDUIT AND WIRING INSTALLED ON THE CEILING. MAINTAIN CIRCUITING FOR NEW LIGHT INSTALLATION.
2. INSTALL NEW LIGHTS REUSING EXISTING CIRCUIT. PROVIDE NEW CONDUIT AND WIRE AS NEEDED FOR NEW INSTALLATION.
3. CONDUIT AND WIRING INSTALLATION SHALL MEET OR EXCEED THE REQUIREMENTS FOR CLASS 1/DIV 1.
4. DISCONNECT ELECTRICAL CONNECTION TO EXISTING UNIT HEATER AND MAINTAIN FOR CONNECTION TO NEW HEATER.



EXISTING FIRST FLOOR PLAN
¼" = 1'-0"

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EXISTING FIRST FLOOR PLAN
SHOAL CREEK DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

drawn by: CJK
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QA/QC by:
project no.: 017-0642
drawing no.: E_SPLN_E3.01_G170642.dwg
date: 3/9/2021

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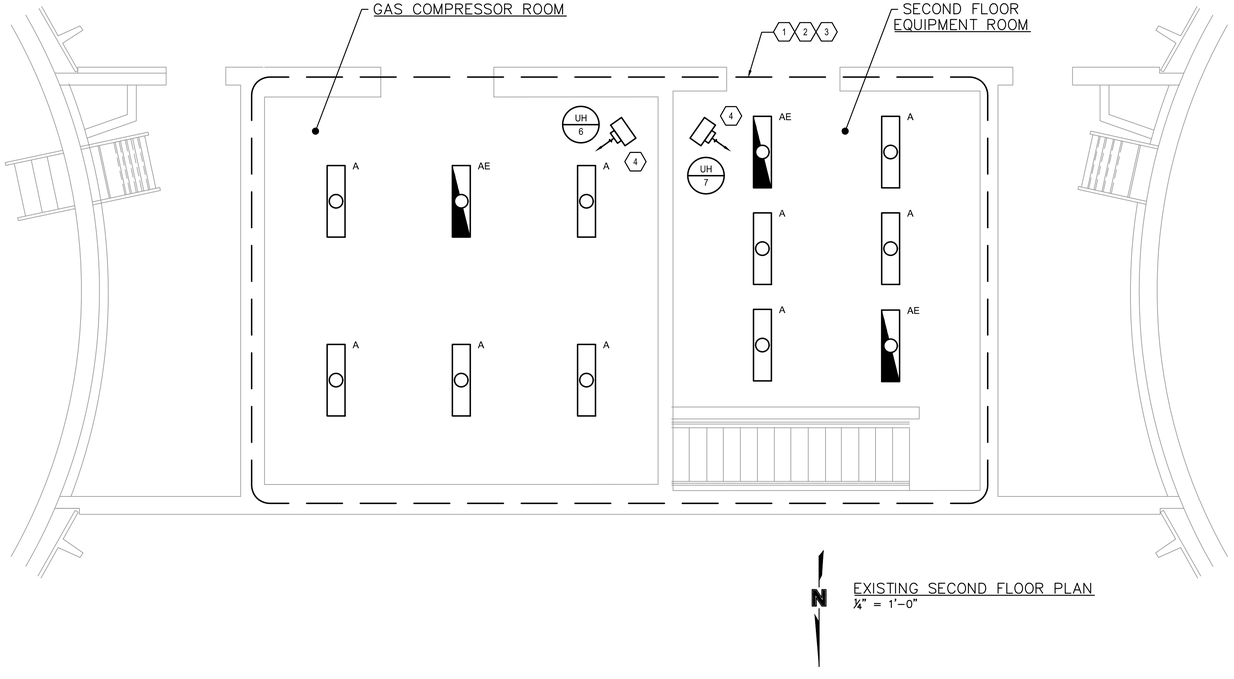
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GENERAL NOTES

A. REFER TO E1.01 FOR GENERAL NOTES.

⬡ SHEET KEYNOTES

1. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES. ALSO REMOVE ANY CONDUIT AND WIRING INSTALLED ON THE CEILING. MAINTAIN CIRCUITING FOR NEW LIGHT INSTALLATION.
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EXISTING SECOND FLOOR PLAN
¼" = 1'-0"

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EXISTING SECOND FLOOR PLAN
SHOAL CREEK DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

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checked by:
approved by:
QA/QC by:
project no.: 017-0842
drawing no.: E_SPLN_E3.01_G1706642.dwg
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E3.02

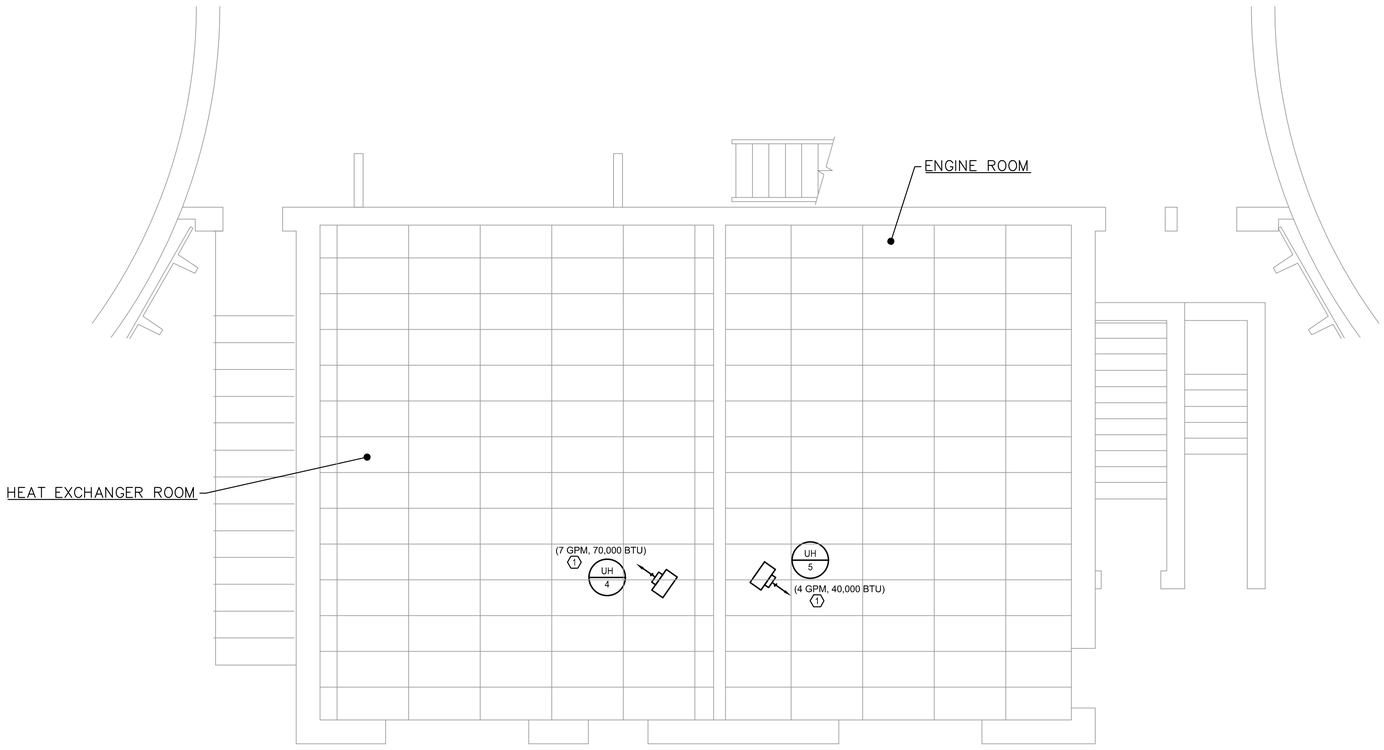
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GENERAL NOTES

A. VISIT SITE TO REVIEW EXISTING HEATERS MARKED TO BE REPLACED AND TO EXAMINE EXISTING PIPING INSTALLATION. NOTE ANY MODIFICATIONS AND CORRECTIONS THAT WILL BE REQUIRED FOR NEW HEATER INSTALLATION.

⬡ SHEET KEYNOTES

1. PROVIDE UNIT HEATER EQUAL TO MODINE, TRANE, MCQUAY/DIAKIN, OR REZNOR. INFORMATION IS BASED ON LIMITED INFORMATION ON AS-BUILT DRAWINGS. VERIFY EXISTING EQUIPMENT FOR LIKE-FOR-LIKE REPLACEMENT. EXTEND PIPING WITH INSULATION AS NECESSARY TO NEW PIPE CONNECTIONS. FURNISH WITH HANGER BRACKETS AND VIBRATION ISOLATION PADS, 3-WAY MODULATING CONTROL VALVE, STANDARD VALVE PACKAGE WITH SHUTOFF, UNION, BALANCE VALVE. HEATER SHALL BE CORROSION RESISTANT HOUSING AND SHALL HAVE 5-YEAR MINIMUM WARRANTY.



N

EXISTING FIRST FLOOR PLAN
¼" = 1'-0"

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CITY OF JOPLIN

2021

JOPLIN, MO

drawn by: CJK
checked by:
approved by:
QA/QC by:
project no.: 017-0642
drawing no.: M_SPLN_E3.01_G170642.dwg
date: 3/12/2021

SHEET
M3.01

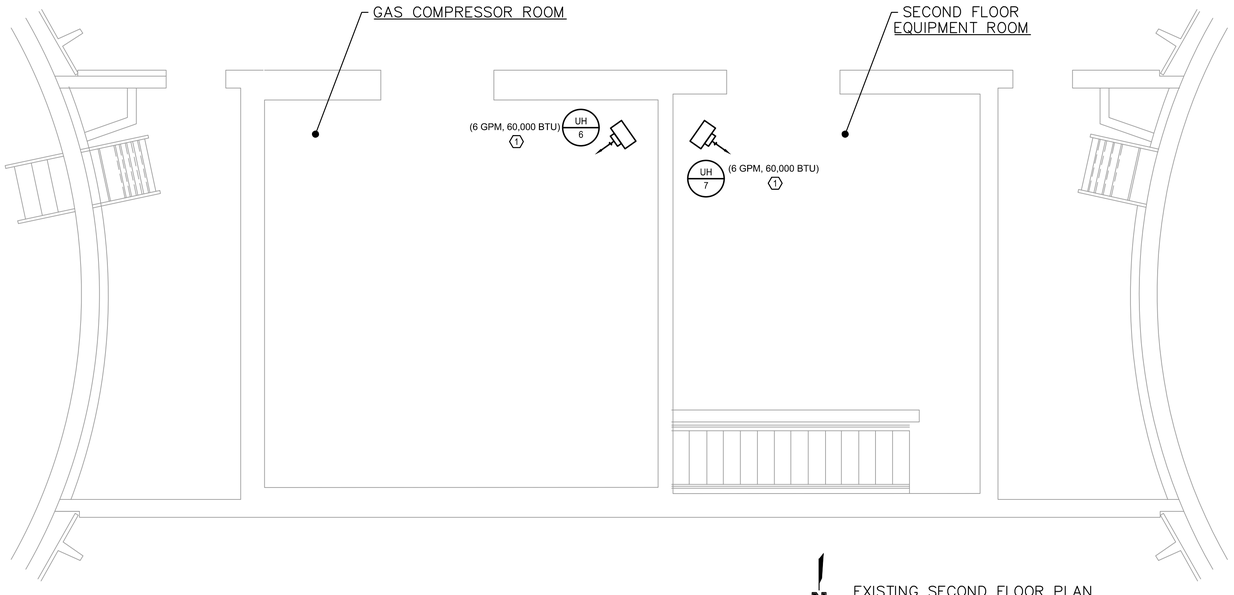
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GENERAL NOTES

A. VISIT SITE TO REVIEW EXISTING HEATERS MARKED TO BE REPLACED AND TO EXAMINE EXISTING PIPING INSTALLATION. NOTE ANY MODIFICATIONS AND CORRECTIONS THAT WILL BE REQUIRED FOR NEW HEATER INSTALLATION.

⬡ SHEET KEYNOTES

1. PROVIDE UNIT HEATER EQUAL TO MODINE, TRANE, MCQUAY/DIAKIN, OR REZNOR. INFORMATION IS BASED ON LIMITED INFORMATION ON AS-BUILT DRAWINGS. VERIFY EXISTING EQUIPMENT FOR LIKE-FOR-LIKE REPLACEMENT. EXTEND PIPING WITH INSULATION AS NECESSARY TO NEW PIPE CONNECTIONS. FURNISH WITH HANGER BRACKETS AND VIBRATION ISOLATION PADS, 3-WAY MODULATING CONTROL VALVE, STANDARD VALVE PACKAGE WITH SHUTOFF, UNION, BALANCE VALVE. HEATER SHALL BE CORROSION RESISTANT HOUSING AND SHALL HAVE 5-YEAR MINIMUM WARRANTY.



EXISTING SECOND FLOOR PLAN
¼" = 1'-0"

olsson

Olsson - Engineering
Missouri Certificate of Authority #001592
702 S. Main Street
Joplin, MO 64801
TEL 417.781.0643
www.olsson.com

STATE OF MISSOURI
TIMOTHY DANNER
NUMBER PE-2019031265
PROFESSIONAL ENGINEER
3/12/21

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

EXISTING SECOND FLOOR PLAN
SHOAL CREEK DIGESTER BUILDING

TURKEY/SHOAL CREEK DIGESTER ROOF MODIFICATIONS
CITY OF JOPLIN

JOPLIN, MO

2021

drawn by: CJK
checked by:
approved by:
QA/QC by:
project no.: 017-0642
drawing no.: M_SPLN_E3.01_G170642.dwg
date: 3/12/2021

SHEET
M3.02

DWG: \\co.ad.cocnsulting.com\Ite-nst1\projects-direct\2017\0501-1000\017-0642-g\40-design\AutoCAD\final plans\Sheets\MEP\M_SPLN_E3.01_G170642.dwg USER: tsmead
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