

BUILDING ADDITION FOR

BEAUTIFUL SAVIOR LUTHERAN CHURCH

13145 S BLACKBOB

CIVIL ENGINEER

JUDD D. CLAUSSEN, PE

PHELPS ENGINEERING, INC.

1270 N. WINCHESTER, OLATHE, KC 66061
913-939-1155

M/E/P ENGINEER

JUSTIN SMOTHERS, P.E.

JSC ENGINEERS

1901 NW Blue Parkway
3rd Floor Village Tower
Unity Village, MO 64065
816-272-5289

STRUCTURAL ENGINEER

TIMOTHY BENGFORT, P.E.

NEEDHAM & ASSOC., ENGINEERING

15960 College Blvd., Lenexa KS 66219
913-385-5300

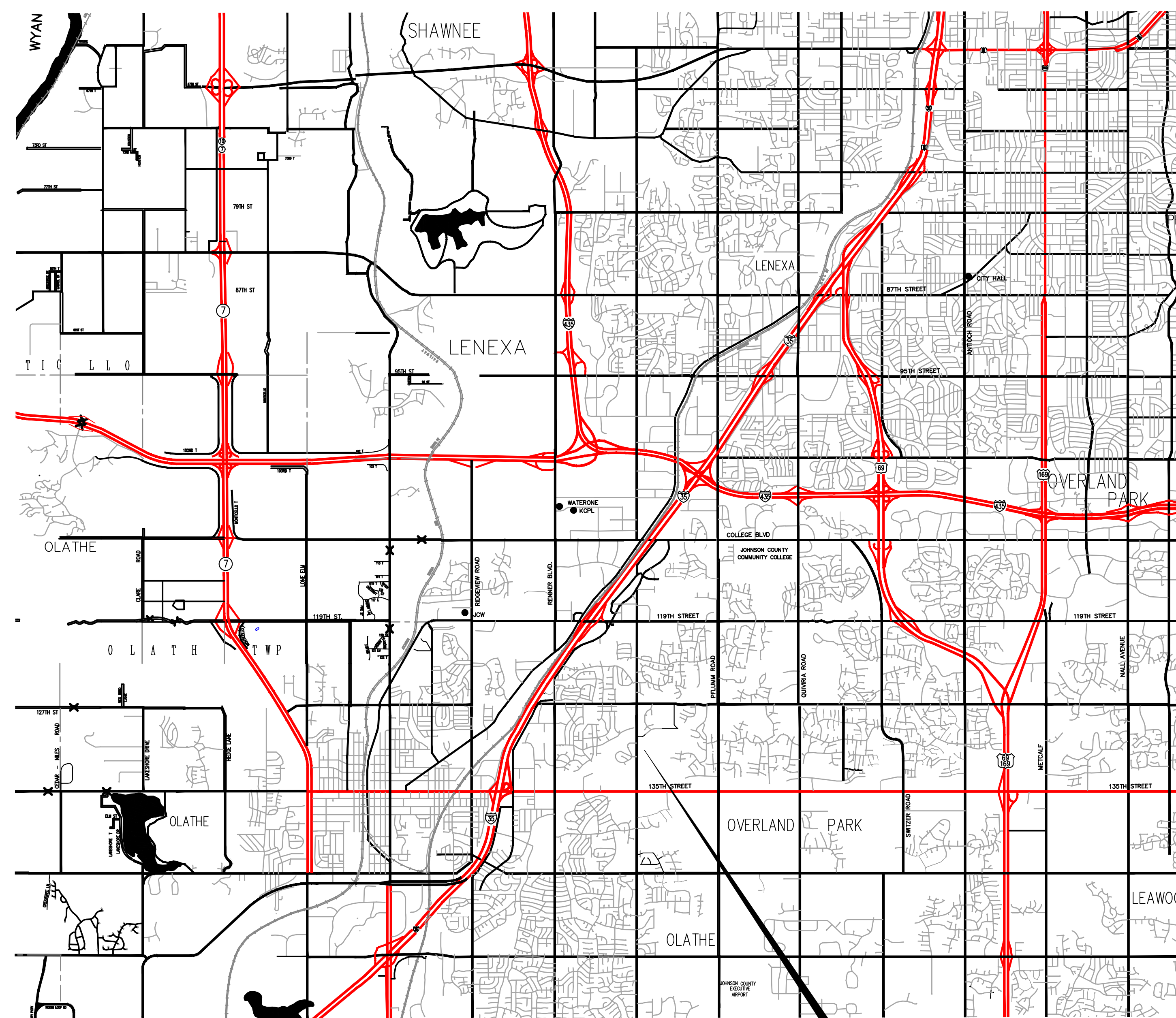


Herman A. Scharhag Architects

6247 Brookside Blvd. #204 Kansas City, MO 64113
816-656-5055 scharhagarch@gmail.com

\\PHELPS-SERVER\Projects\190550\Map\Permit Plans\COVER.dwg Layout:1 Jan 21, 2020 - 4:48pm Aaron Norris

SITE DEVELOPMENT PLANS
FOR
BEAUTIFUL SAVIOR LUTHERAN CHURCH
IN THE CITY OF OLATHE, JOHNSON COUNTY, KANSAS
PARKING LOT PERMIT NO. PUBD19-00xx



VICINITY MAP
NOT TO SCALE
PROJECT LOCATION

- UTILITY COMPANIES:**
- | | |
|--|----------------------------|
| EVERGY | (913) 894-3082 |
| JUSTIN AMBERSON (justin.amberson@evergy.com) | (913) 894-3086-FAX |
| 16215 W. 108TH STREET | |
| LENEXA, KANSAS 66219 | |
| | |
| ATMOS ENERGY | (913) 254-6342 |
| RICHARD YUNGHANS | (913) 768-4924 FAX |
| (richard.yunghans@atmosenergy.com) | |
| 25090 W. 110TH TERRACE | |
| OLATHE, KANSAS 66061 | |
| | |
| COMCAST CABLE CO. | (816) 795-2257 |
| JIM DUFF | (816) 795-0346 FAX |
| (james_duff@cable.comcast.com) | |
| 3400 W. DUNCAN ROAD | |
| BLUE SPRINGS, MISSOURI 64015 | |
| | |
| JOHNSON COUNTY WASTEWATER | (913) 715-8500-PHONE |
| 11811 S. SUNSET DRIVE, SUITE 2500 | (913) 715-8501-FAX |
| OLATHE, KANSAS 66061 | (913) 715-8520-INSPECTIONS |
| | |
| CITY OF OLATHE (PUBLIC WORKS) | (913) 971-9066 |
| BILL DAVIS | (913) 971-9099 FAX |
| 100 E. SANTA FE | |
| OLATHE, KS 66051 | |
| (bdavis@olatheks.org) | |
| | |
| CITY OF OLATHE (PUBLIC UTILITIES) | (913) 971-9066 |
| CHAD JONES | (913) 971-9099 FAX |
| 1385 S. ROBINSON DRIVE | |
| OLATHE, KS 66051 | |
| | |
| CONSOLIDATED COMMUNICATIONS | (913) 322-9622 |
| MELISSA STRINGER | |
| (melissa.stringer@consolidated.com) | |
| 14859 W. 95TH STREET | |
| LENEXA, KS 66215 | |
| | |
| AT&T | (913) 383-4929 |
| CLAYTON ANSPAUGH (ca4089@att.com) | (913) 383-4849 FAX |
| 9444 NALL AVENUE | |
| OVERLAND PARK, KANSAS 66207 | |
| | |
| SPECTRUM CABLE | (913) 440-4189 |
| 450 N. ROGERS RD. | |
| OLATHE KS. 66062 | |
| | |
| GOOGLE FIBER | |
| CRAIG YOUNG (craigyoung@google.com) | (870) 219-5630 |



UTILITY NOTES:
VISUAL INDICATIONS OF UTILITIES ARE SHOWN.
UNDERGROUND LOCATIONS SHOWN, AS FURNISHED
BY THEIR LESSORS, ARE APPROXIMATE AND
SHOULD BE VERIFIED IN THE FIELD AT THE TIME
OF CONSTRUCTION. FOR ACTUAL FIELD LOCATIONS
OF UNDERGROUND UTILITIES.

BENCHMARK:
JCBM #205 ELEVATION: 1026.02
2" ALUMINUM DISK ON EAST SIDE OF ISLAND BY SECTION CORNER JUST SOUTH OF ENTRANCE TO THIS PROPERTY.
BM #1 ELEVATION: 1050.26
1" CUT CENTER FACE OF CURB INLET ON THE SOUTH SIDE OF STREET/ENTRANCE ON 2ND CURB INLET ON DRIVE.

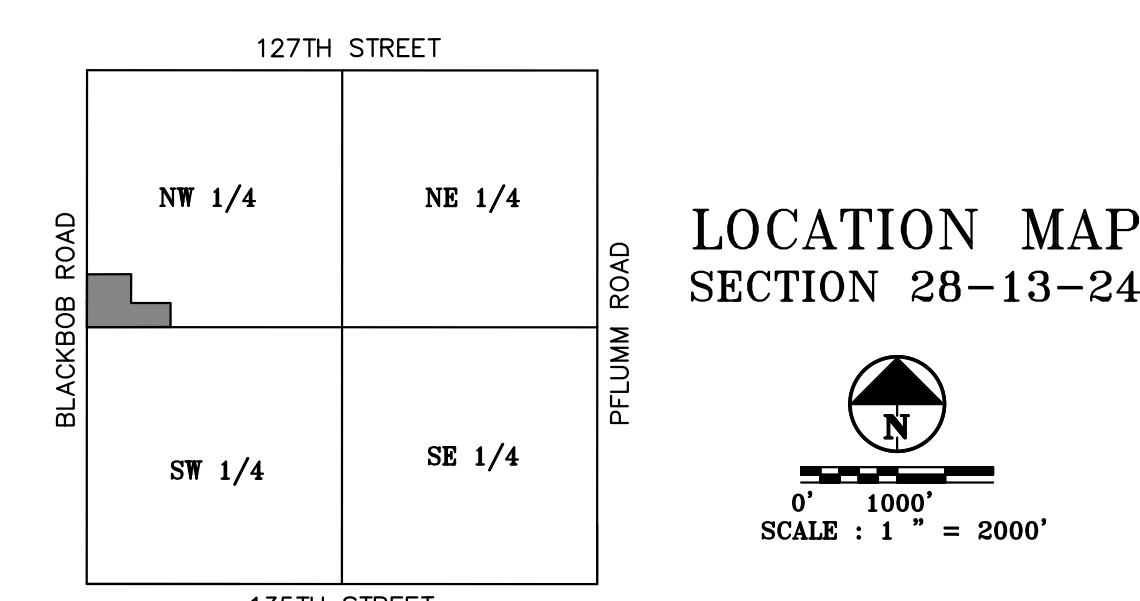
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ADDITIONAL PLANS REQUIRED FOR WORK
PUBLIC WATERLINE PLANS

OWNER:
BEAUTIFUL SAVIOR LUTHERAN
CHURCH OF OLATHE
13145 S BLACK BOB RD
OLATHE, KS 66062
913-780-6023 PHONE

PREPARED & SUBMITTED BY:
PHELPS ENGINEERING, INC.
1270 N. WINCHESTER
OLATHE, KS 66061
913-393-1155 OFFICE
913-393-1166 FAX
CONTACT: JUDD CLAUSSEN, P.E.

ARCHITECT:
HERMAN A. SCHARAG COMPANY
6247 BROOKSIDE BLVD #204
KANSAS CITY, MO 64113
816-656-5055
CONTACT: JEFF SHROEDER



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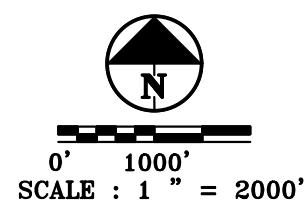
COVER SHEET
BEAUTIFUL SAVIOR LUTHERAN CHURCH
13145 S BLACKBOB ROAD, OLATHE
JOHNSON COUNTY, KANSAS

PROJECT NO. 190550	No.	Date	Revisions:	By	App.
DATE: 12/20/19					
DRAWN: JMO					
CHECKED: ALN					
CERTIFICATE OF AUTHORIZATION					
LAND SURVEYING - LS-82					
ENGINEERING - E-391					
DESIGNER: JMO					
PERMIT: 190550					
STATE OF AUTHORIZATION					
REGISTERED PROFESSIONAL ENGINEER					
NO. 190550					
EXPIRATION DATE: 12/20/25					

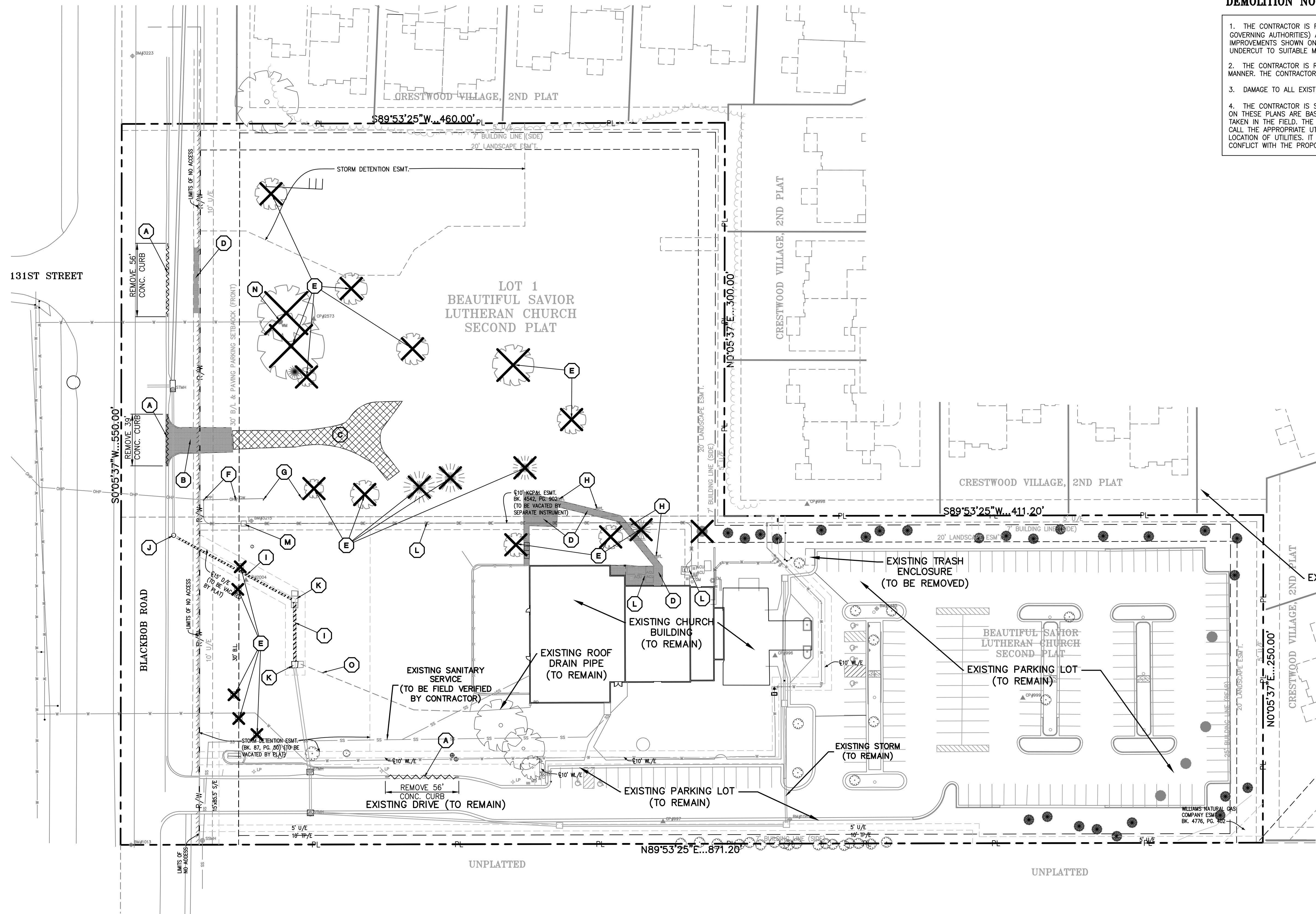
\\PHELPS-SERVER\Projects\190550\Drawings\Permit Plans\DEMOL.dwg Layout:1 Jan 21, 2020 4:18pm Aaron Norris



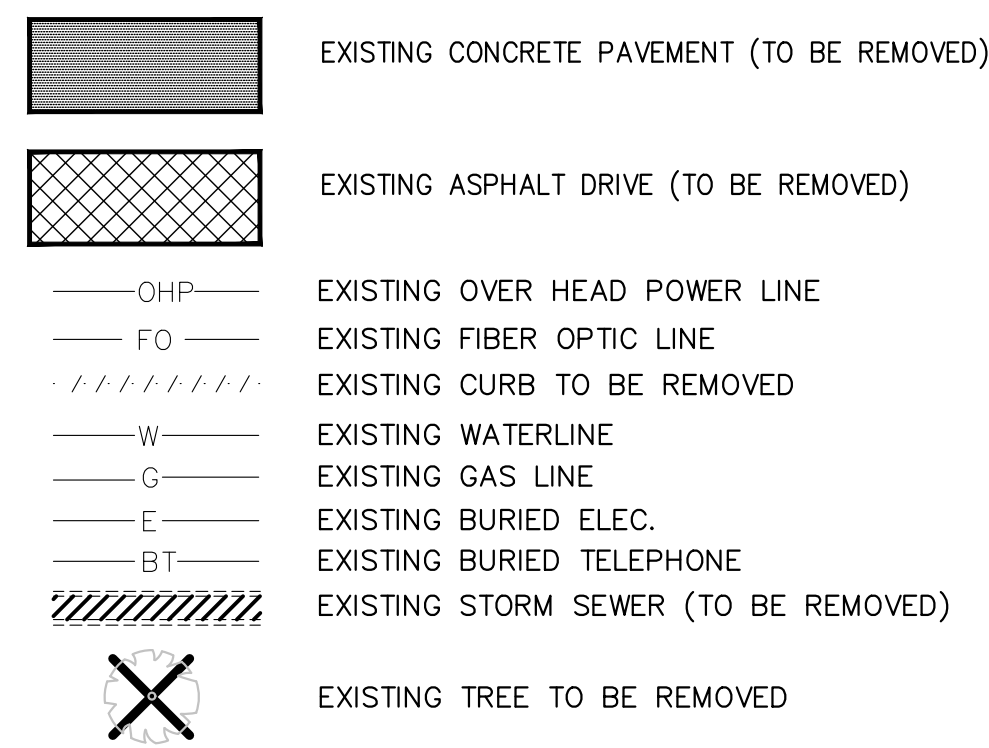
LOCATION MAP
SECTION 28-13-24



UTILITY NOTES:
VISUAL INDICATIONS OF UTILITIES ARE AS SHOWN.
UNDERGROUND LOCATIONS SHOWN, AS FURNISHED BY THEIR
LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN
THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL
FIELD LOCATIONS OF UNDERGROUND UTILITIES CALL 811.

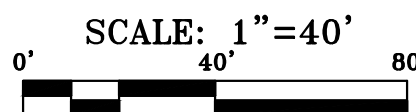
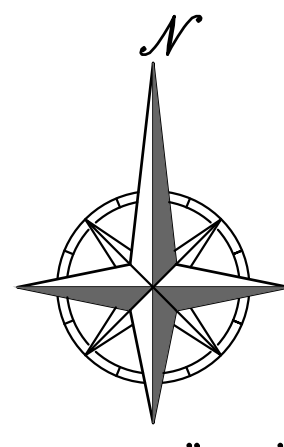


LEGEND:



OWNER:

BEAUTIFUL SAVIOR LUTHERAN
CHURCH OF OLATHE
13145 S BLACK BOB RD
OLATHE, KS 66062
780-6023



DEMOLITION NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL CURBS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL.
2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
3. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

KEY NOTES:

- (A) REMOVE EXISTING CURB
- (B) REMOVE EXISTING CONCRETE ENTRANCE
- (C) REMOVE EXISTING ASPHALT
- (D) REMOVE EXISTING CONCRETE SIDEWALK
- (E) REMOVE EXISTING TREES
- (F) EXISTING POWER POLE & GUY WIRE (TO REMAIN)
- (G) REMOVE EXISTING POWER POLE & GUY WIRE, CONTRACTOR TO COORDINATE ANY DISCONNECTS WITH EVERGY
- (H) REMOVE EXISTING YARD LIGHT
- (I) REMOVE EXISTING STORM PIPE (SEE STORM SEWER PLANS)
- (J) EXISTING STORM STRUCTURE (TO REMAIN) (SEE STORM SEWER PLANS)
- (K) REMOVE EXISTING STORM STRUCTURE (SEE STORM SEWER PLANS)
- (L) EXISTING UTILITIES TO BE RELOCATED (SEE UTILITY PLAN)
- (M) CONTRACTOR TO COORDINATE WITH EVERGY FOR THE REMOVAL OF THIS EXISTING SECTIONALIZER
- (N) RELOCATE EXISTING WATER METER (SEE UTILITY PLAN C05)
- (O) REMOVED EXISTING ROOF DRAIN PIPE

DEMOLITION/EXISTING CONDITIONS PLAN

BEAUTIFUL SAVIOR LUTHERAN CHURCH
13145 S BLACKBOB ROAD, OLATHE
JOHNSON COUNTY, KANSAS

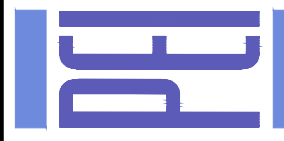
PROJECT NO.	190550	DATE	12/20/19	DRAWN	JMO	CHECKED	ALN	APPROVED	JDC	DATE OF AUTHORIZATION	12/20/19	DATE OF AUTHORIZATION	12/20/19	DATE OF AUTHORIZATION	12/20/19
LAND SURVEYING	LS-82	LAND SURVEYING	LS-82	LAND SURVEYING	LS-82	LAND SURVEYING	LS-82	LAND SURVEYING	LS-82	LAND SURVEYING	LS-82	LAND SURVEYING	LS-82	LAND SURVEYING	LS-82
ENGINEERING	ENG-0000000000	ENGINEERING	ENG-0000000000	ENGINEERING	ENG-0000000000	ENGINEERING	ENG-0000000000	ENGINEERING	ENG-0000000000	ENGINEERING	ENG-0000000000	ENGINEERING	ENG-0000000000	ENGINEERING	ENG-0000000000

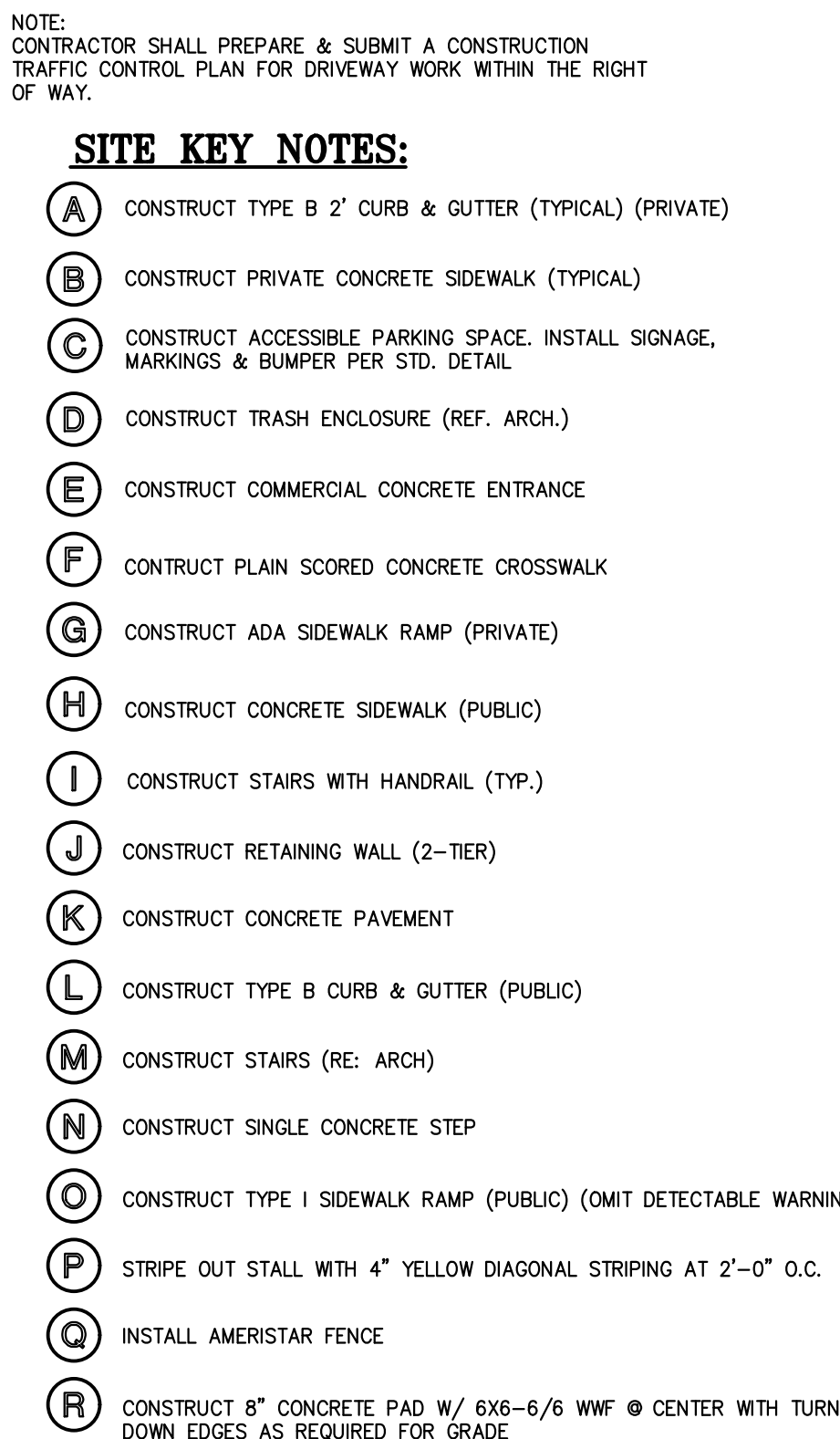
C02



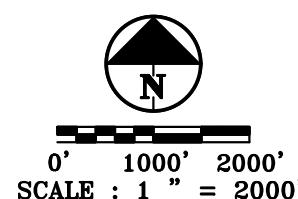
PHELPS ENGINEERING, INC.
1370 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
Fax (913) 393-1166
www.phelpsengineering.com

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





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BEAUTIFUL SAVIOR LUTHERAN
CHURCH OF OLATHE
13145 S BLACK BOB RD
OLATHE, KS 66062
780-6023

LOCATION MAP
SECTION 28-13-24

	PROPERTY LINE
	RIGHT-OF-WAY
	PROPOSED CURB & GUTTER
	PROPOSED ASPHALT PAVEMENT (STANDARD DUTY)
	PROPOSED ASPHALT PAVEMENT (HEAVY DUTY)
	PROPOSED CONCRETE SIDEWALK
	PROPOSED CONCRETE PAVEMENT
	PROPOSED BUILDING
	CURB PAINTED "NO PARKING-FIRE LANE"

BM #1 ELEVATION: 1050.26
"□" CUT CENTER FACE OF CURB INLET ON THE SOUTH
SIDE OF STREET/ENTRANCE ON 2ND CURB INLET ON DRIVE.

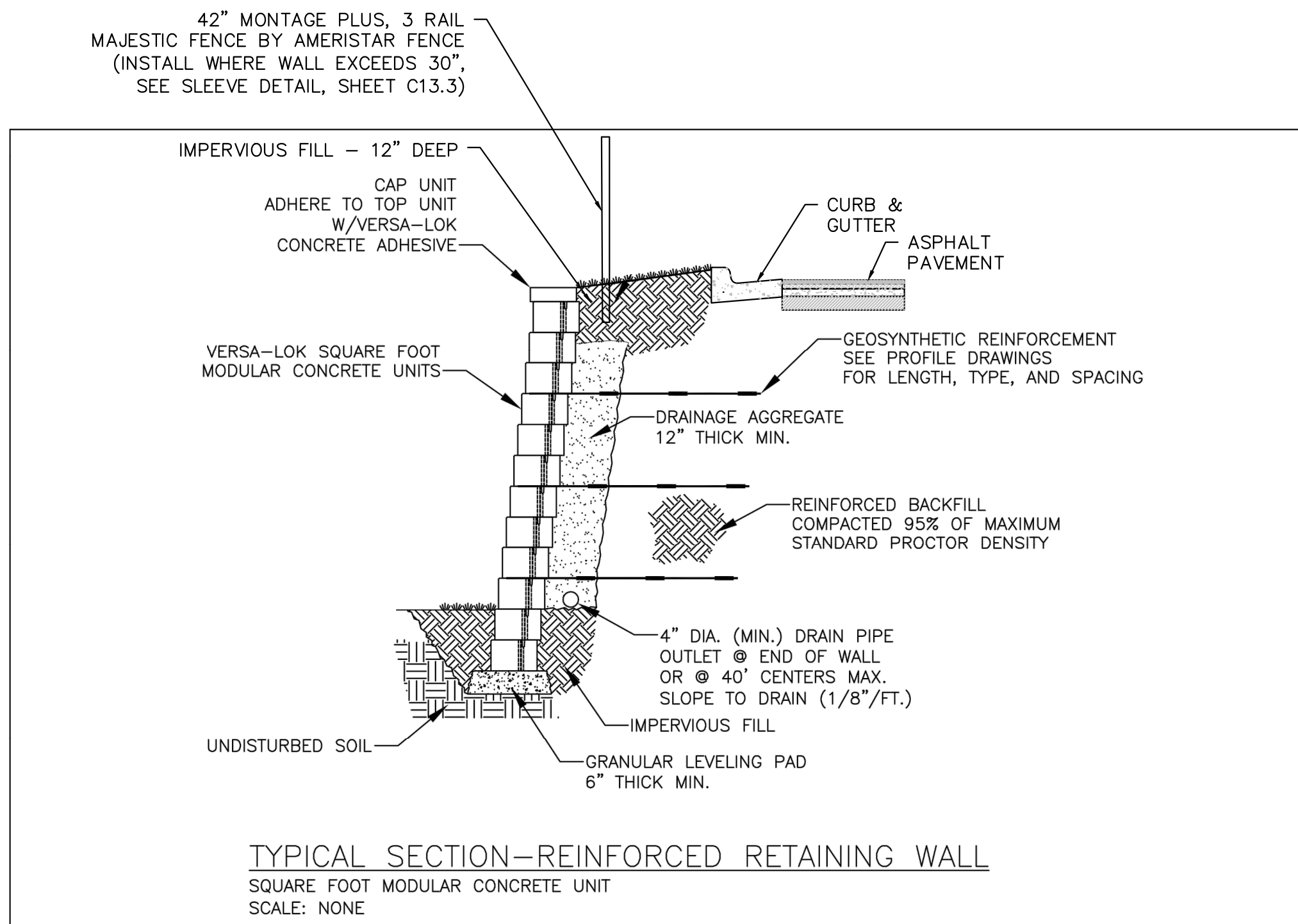
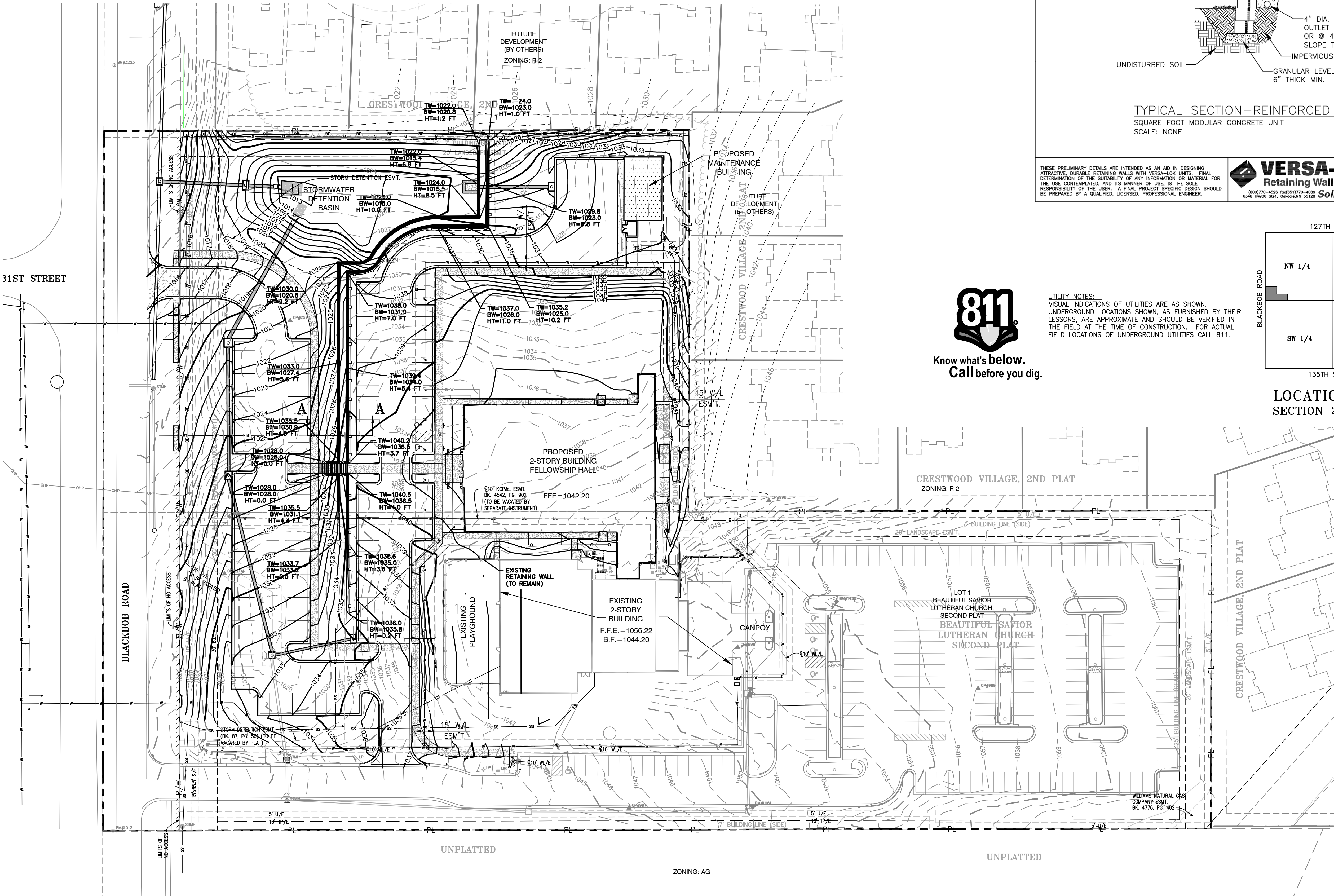
THIS PROPERTY LIES WITHIN ZONE X, DEFINED AS AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON THE FLOOD INSURANCE RATE MAP PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR THE CITY OF OLATHE, COMMUNITY NO. 200173, JOHNSON COUNTY KANSAS, PANEL NO. 20091C0080G, AND DATED AUGUST 3, 2009.

<u>PARKING DATA</u>	
REQUIRED PARKING	
LTIMATE (ALL PHASES) PARKING	
1 PER 4 SEATS (800 SEATS)	200
PROPOSED PARKING	
EAST LOT (EXISTING)	177
WEST LOT	105
TOTAL PRESENT & PROPOSED PARKING	282
PROPOSED ACCESSIBLE STALLS PROVIDED	2
EXISTING ACCESSIBLE STALLS PROVIDED	6
TOTAL ACCESSIBLE STALLS PROVIDED	8
REQUIRED ACCESSIBLE STALLS (201-300)	7

Earthwork Summary
Beautiful Savior Lutheran Church
10/30/2019

Raw Excavation	12,547 Cu. Yds.
In Place Compaction (+15%)	-16,805 Cu. Yds.
Pavement Adjustment	1,868 Cu. Yds. (assume 12" of additional excavation)
Building Adjustment	1,268 Cu. Yds. (assume 24" of additional excavation)
On Site Net	-1,123 Cu. Yds.

* EARTHWORK COMPUTATIONS BY PHELPS ENGINEERING, INC. ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND SHALL BE VERIFIED BY CONTRACTORS BY THEIR CHOSEN METHOD PRIOR TO PLACING BID. ALL EARTHWORK SHALL BE CONSIDERED UNCLASSIFIED. 15% WAS ADDED INTO RAW FILL QUANTITY TO ACCOUNT FOR SHRINKAGE.



THESE PRELIMINARY DETAILS ARE INTENDED AS AN AID IN DESIGNING ATTRACTIVE, DURABLE RETAINING WALLS WITH VERSA-LOK UNITS. FINAL DETERMINATION OF THE SUITABILITY OF ANY INFORMATION OR MATERIAL FOR THE USE CONTEMPLATED, AND ITS MANNER OF USE, IS THE SOLE RESPONSIBILITY OF THE USER. A FINAL PROJECT SPECIFIC DESIGN SHOULD BE PREPARED BY A QUALIFIED, LICENSED, PROFESSIONAL ENGINEER.

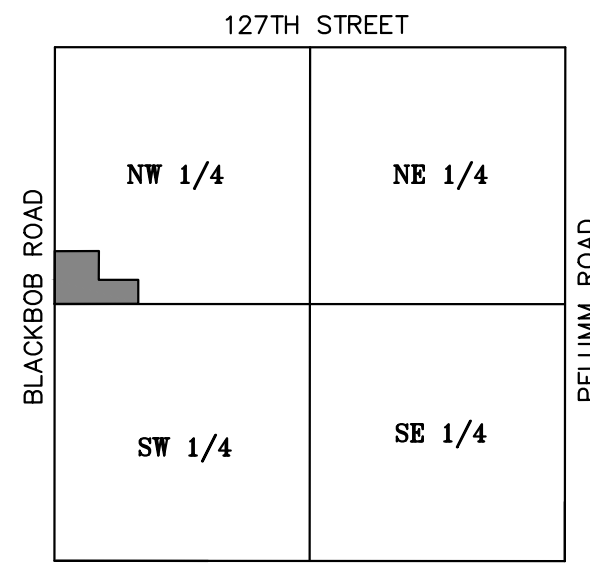
VERSA-LOK®
Retaining Wall Systems
Solid Solutions™
(800)770-4525 Fax (913)770-4088
6348 Hwy36 Ste1, Olathe, MO 64661

VERSA-LOK SQUARE FOOT DETAILS	
REINFORCED TYPICAL SECTION	

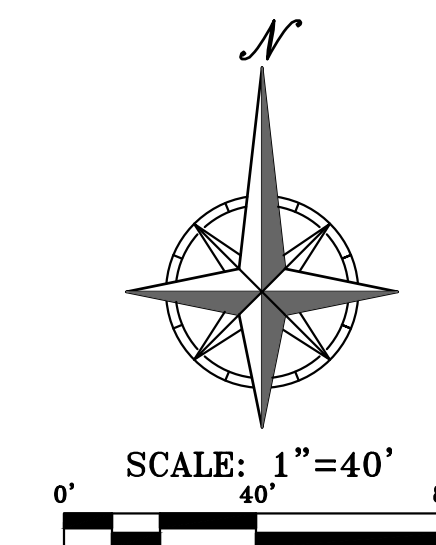
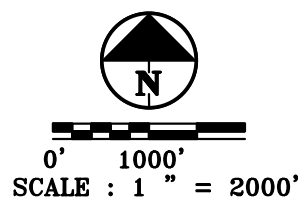


Know what's below.
Call before you dig.

UTILITY NOTES:
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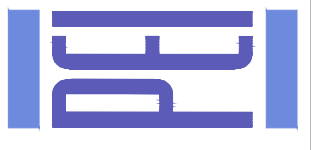


LOCATION MAP
SECTION 28-13-24



PHELPS ENGINEERING, INC.
1370 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
Fax (913) 393-1166
www.phelpsengineering.com

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IMPLEMENTATION

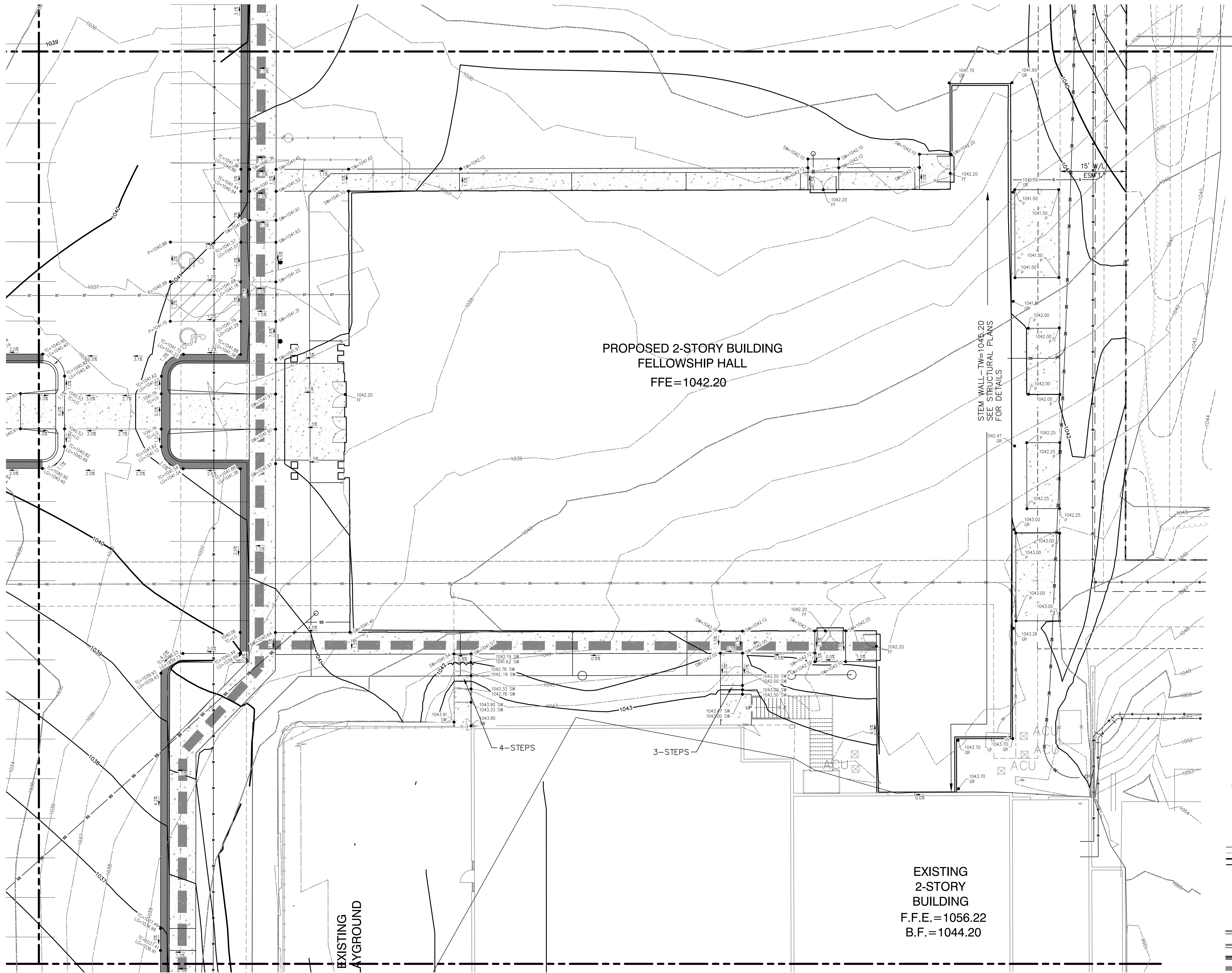


OVERALL GRADING PLAN
BEAUTIFUL SAVIOR LUTHERAN CHURCH
13145 S BLACKBOB ROAD, OLATHE
JOHNSON COUNTY, KANSAS

PROJECT NO.	190550	Date	By	Ap.	Revisions:
DATE: 12/20/19	DRAWN: JMO				
CHECKED: ALN	APPROVED: JDC				
CERTIFICATE OF AUTHORIZATION					
LAND SURVEYING - LS-82					
LAND SURVEYING - LS-82					
CERTIFICATE OF AUTHORIZATION					
MISSOURI ENGINEERING - JDC					
MISSOURI ENGINEERING - JDC					
MISSOURI ENGINEERING - JDC					

C04

\\PHELPS-SERVER\Projects\190550\Map\Permit Plans\SPOT GRADING PLAN.dwg Layout:5 Jun 22, 2020 - 8:39am Aaron Norris

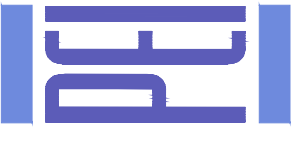


- LEGEND:
- EXISTING CONTOURS
 - PROPOSED CONTOURS
 - PROPOSED SPOT ELEVATION
 - LG LIP OF GUTTER
 - TC TOP OF CURB
 - SW SIDEWALK
 - ME MATCH EXISTING
 - TE TOP OF STRUCTURE
 - GR GROUND
 - TF TOP OF FOOTING
 - 2' CURB & GUTTER
 - PROPOSED WET CURB & GUTTER
 - PROPOSED DRY CURB & GUTTER
 - ADA PATH



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Olathe, Kansas 66061
(913) 393-1155
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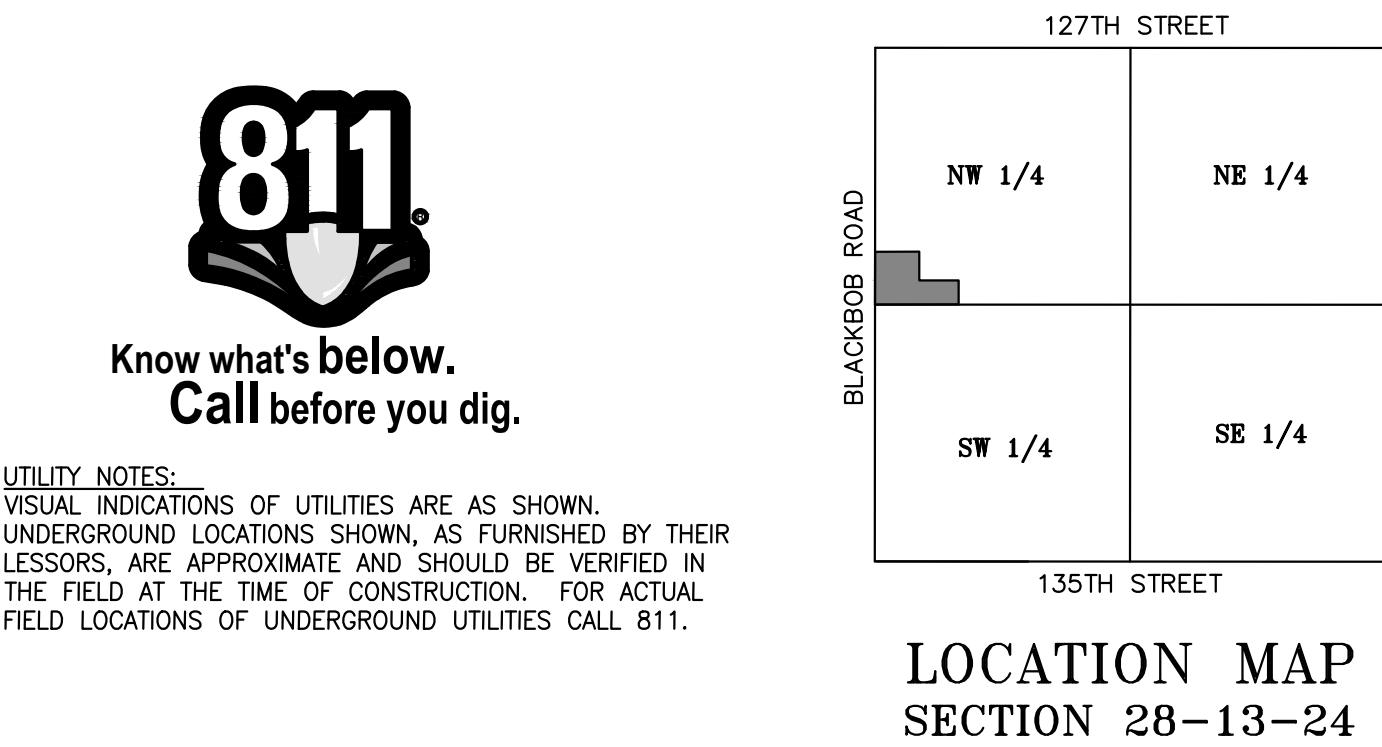
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SPOT GRADING PLAN
BEAUTIFUL SAVIOR LUTHERAN CHURCH
13145 S BLACKBOB ROAD, OLATHE
JOHNSON COUNTY, KANSAS

Revisions:	By	Date
PROJECT NO. 190550		
CHECKED: ALN APPROVED: JMO		
DATE: 12/20/19 DRAWN: JMO		
CANONICAL STATE OF AUTHORIZATION		
LAND SURVEYING - LS-82		
CERTIFICATE OF AUTHORIZATION		
MEASUREMENTS: 0000000000		
ENGINEERING: 0000000000		

C04.5



THE BACKFLOW PREVENTION DEVICE FOR THE BUILDING DOMESTIC WATER SUPPLY AND FIRE PROTECTION LINE SHALL BE LOCATED INSIDE THE BUILDING (RE: BUILDING PLANS) IN ACCORDANCE WITH CITY STANDARDS AND REQUIREMENTS.

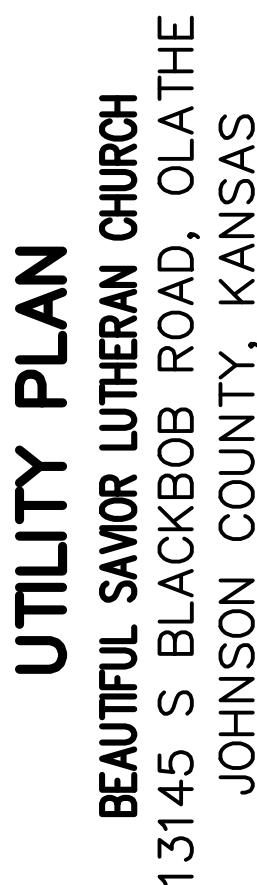
EVERGY justin.amberson@evergy.com 16215 W. 108TH STREET LENEXA, KANSAS 66219	(913) 894-3082 (913) 894-3086-FAX
ATMOS ENERGY (ATTN: RICHARD YOUNG) 25090 W. 110TH TERRACE OLAHATE, KS 66061 richard.young@atmosenergy.com	(913) 254-6355 (913) 768-4924-FAX
COMCAST CABLE CO. (ATTN: RON EGGER) 3400 W. DUNCAN ROAD BLUE SPRINGS, MO 64015 ron_egger@cable.comcast.com	(816) 795-8377 (816) 224-8455-FAX
CITY OF OLAHATE (WATER & SEWER) (ATTN: CHAD JONES) 100 E. SANTA FE OLAHATE, KS 66051 cjones@olatheks.org	(913) 971-9066 (913) 971-9099-FAX
CITY OF OLAHATE (PUBLIC WORKS) (ATTN: MR. BILL DAVIS) 100 E. SANTA FE OLAHATE, KS 66051 bdavis@olatheks.org	(913) 971-9066 (913) 971-9099-FAX
CONSOLIDATED COMMUNICATIONS MELISSA STRINGER (melissa.stringer@consolidated.com) 14859 W. 95TH STREET LENEXA, KANSAS 66215	(913) 322-9622
AT&T MR. JOHN HARPER (j2670a@att.com) 9444 NALL AVENUE OVERLAND PARK, KANSAS 66207	(913) 383-4919 (913) 383-4849-FAX
GOOGLE FIBER CRAIG YOUNG(CRAIGYOUNG@GOOGLE.COM)	(870) 219-5630

1. The contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies, and where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility companies at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to coordinate with and relocate &/or remove all existing utilities which conflict with the proposed improvements shown on the plans.
2. The construction of storm sewers on this project shall conform to the requirements of the City of Olathe, Kansas Technical Specifications and Design Criteria.
3. The contractor shall field verify the exact location and elevation of the existing storm sewer lines and the existing elevation at locations where the proposed storm sewer collects or releases to existing ground. If discrepancies are encountered from the information shown on the plans, the contractor shall contact the design engineer. No pipes shall be laid until direction is received from the design engineer.
4. It will be the contractors responsibility to field adjust the top of all manholes and boxes as necessary to match the grade of the adjacent area. If existing manholes or boxes are not as shown by fieldwork, the contractor shall be responsible for the necessary adjustments to the manholes and boxes. No separate or additional compensation will be allowed to the contractor for making final adjustments to the manholes and boxes.
5. Inlet locations, horizontal pipe information and vertical pipe information is shown to the center of the structure. Deflection angles shown for storm sewer pipes are measured from the center of curb inlets and manholes. The contractor shall adjust the horizontal location of the pipes to go to the face of the pipes. All roof drains shall be connected to storm sewer structures. Provide cleanouts on roof drain lines at 10' max. Spacing and at all end points. Do not connect roof drains directly to storm sewer pipe.
6. The contractor shall be responsible for furnishing and installing all fire and domestic water lines, manholes, backflow devices, valves and all other incidents required for a complete operable fire protection and domestic water system. All costs associated with the complete water system for the buildings shall be the responsibility of the contractor. All work shall conform to the requirements of City of Olathe, Kansas.
7. The contractor shall be responsible for furnishing and installing all sanitary sewer service lines from the buildings to the public line. The contractor shall refer to the architectural plans for specific locations and elevations of the service lines of the building construction. All work shall conform to the requirements of the City of Olathe, Kansas and the Johnson County Unified Wastewater District.
8. The contractor will be responsible for securing all permits, bonds and insurance required by the contract documents, City of Olathe, Kansas, and all other governmental agencies (environmental agencies) and/or other agencies involved in the work proposed by these construction documents. The cost for all permits bonds and insurance shall be the contractors responsibility and shall be included in the bid for the construction.
9. By the use of these construction documents the contractor hereby agrees that he/she shall be solely responsible for the safety of the construction workers and the public. The contractor agrees to hold the engineer and owner harmless for any and all injuries, claims, losses or damages related to the project.
10. The Contractor shall be responsible for furnishing all materials, tools and equipment and installation of electrical power, telephone and gas service from a point of connection from the public utility lines to the building structures. This will include all conduits, service lines, meters, concrete and other incidents required for a complete and operational system as required by the owner and the public utilities. Refer to building plans for exact tie-in locations at all utilities. Contractor shall verify connection points prior to installation of utility line.
11. All fill material to be in place, compacted, and consolidated before installation of proposed utilities. On-site geotechnical engineer shall provide written confirmation that this requirement has been met and that utilities may proceed in the fill areas. All utilities are to be placed in trench conditions.
12. Contractor shall notify the utility authorities inspectors 48 hours before connecting to any existing line.
13. Water lines shall be as follows (unless otherwise shown on plans):
 - Pipe sizes less than 3-inches that are installed below grade and outside building shall comply with the following:
 1. Seamless Copper Tubing: Type "K" soft copper, ASTM B88.
 2. Fittings: Wrought copper (95.5 Tin Antimony solder joint), ASME B 16.22.
 - Ductile Iron Water Pipe may be used for Pipe sizes 3-inches through 48-inches that are installed below grade and outside building shall comply with the following:
 1. Ductile Iron Water Pipe: AWWA C151, thickness class 50.
 - a. Fittings: Either mechanical joint or push-on joint, AWWA C110 or AWWA C111.
 - b. Elastomeric gaskets and lubricant: ASTM F477.
 - c. Gasket: Neoprene lining, AWWA C104
 2. Polyvinyl Chloride (PVC) Water Pipe may be used for Pipe sizes 3-inches through 12-inches that are installed below grade and outside building shall comply with the following:
 - 1 Polyvinyl Chloride (PVC) Water Pipe: AWWA C300, rated DR 18 (Class 150), continuously marked as required.
 - a. Elastomeric gaskets and lubricant: ASTM F477 for smaller pipes.
 - b. Pipe joints: Integrally molded bell ends, ASTM D3139.
 - c. Trace wire: Magnetic detectable conductor, (#12 Copper) brightly colored plastic covering imprinted with "Water Service" in large letters.
15. Minimum trench width shall be 2 feet.
16. Contractor shall maintain a minimum of 42" cover on all waterlines. All water line joints are to be mechanical joints with thrust blocking as called out in specifications and construction plans. Water mains and service lines shall be constructed in accordance to City of Olathe's specifications for commercial services.
17. All waterlines shall be kept min. ten (10') apart (parallel) from sanitary sewer lines or manholes. Or when crossing, on 24" vertical clearance (outside edge of pipe to outside edge of pipe) of the water line above the sewer line is required.
18. In the event of a vertical conflict between waterlines, sanitary lines, storm lines and gas lines (existing and proposed), the sanitary line shall be ductile iron pipe with mechanical joints at least 10 feet on both sides of crossing (or encased in concrete this same distance), the waterline shall have mechanical joints with appropriate thrust blocking as required to provide a minimum of 24" clearance. Meeting requirements of ANSI A21.10 or ANSI Z11.1 (AWWA C-151) (CLASS 50).
19. All underground storm, sanitary, water and other utility lines shall be installed, inspected and approved before backfilling. Failure to have inspection approval prior to backfill will constitute rejection of work.
20. All necessary inspections and/or certifications required by codes and/or utility service companies shall be performed prior to announced building possession and the final completion of service. Contractor shall coordinate with all utility companies for installation requirements and specifications.
21. Refer to building plans for site lighting electrical plan, irrigation, parking lot security system and associated conduit requirements. Coordinate with Owner that all required conduits are in place & tested prior to paving.
22. When a building utility connection from site utilities leading up to the building cannot be made immediately, temporarily mark all such site utility

D1	TYPICAL STORM WATER DRAIN LINE FROM ROOF, FOUNDATION DRAIN, OR LANDSCAPE DRAIN. SEE ARCH. PLANS FOR BUILDING CONNECTION LOCATIONS. DRAIN LINES SHALL BE 6" PVC SDR 35 OR HOPE (ST) UNLESS OTHERWISE NOTED ON PLANS. MINIMUM SLOPE SHALL BE 1.0%.	W3	2" DOMESTIC WATERLINE ENTRY TO BUILDING. CONTRACTOR SHALL USE TYPE K COPPER FROM THE MAIN TO 3 FEET OUTSIDE OF THE METER PIT. CONTRACTOR MAY TRANSITION TO HOPE FROM THE POINT 3 FEET OUTSIDE OF THE PRIMARY METER PIT TO THE BUILDING ENTRY. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ANY APPURTENANCES ON THE DOMESTIC LINE SUCH AS GATE VALVES, REDUCERS, BENDS, TEES, ETC., WHICH MAY BE REQUIRED. CONTRACTOR TO COORDINATE WITH WATER UTILITY.
D2	INSTALL 12" NYLOPLAST INLINE DRAIN W/ STANDARD GRATE. (SEE SHEET C06.2)		
D3	CONNECT ROOF DRAIN TO PRIVATE STORM SEWER STRUCTURE.	W4	CONTRACTOR TO PERFORM AND COORDINATE 8" x 6" TAP OF 8" WATER MAIN FOR PROPOSED 6" FIRE LINE (CLASS 350 D.I.P. WITH RESTRAINED JOINTS AND POLYWRAP) PER CITY OF OLATHE TAPPING REQUIREMENTS. CONTRACTOR TO PAY ALL FEES FOR WATER MAIN TAP. OWNER WILL REIMBURSE CONTRACTOR FOR TAP FEES BY CITY OF OLATHE.
D4	FOUNDATION DRAIN TO DAYLIGHT INTO DITCH		
W1	CONTRACTOR TO PERFORM AND COORDINATE 8"x 1-1/2" TAP ON WATER MAIN FOR PROPOSED DOMESTIC SERVICE LINE. CONTRACT CITY OF OLATHE FOR TAPPING REQUIREMENTS. CONTRACTOR TO PAY ALL FEES FOR WATER MAIN TAP. OWNER WILL REIMBURSE CONTRACTOR FOR TAP FEES ASSESSED BY CITY OF OLATHE.	W5	6" SPRINKLER ENTRY TO BUILDING. CONTRACTOR SHALL BE REQUIRED TO INSTALL ANY APPURTENANCES ON THE SPRINKLER LINE SUCH AS, BUT NOT LIMITED TO GATE VALVES, REDUCES, BENDS, TEES, ETC. (RE: BUILDING PLANS FOR DRAINING), WHICH MAY BE REQUIRED. CONTRACTOR TO COORDINATE WITH WATER UTILITY.
W2	PROVIDE AND INSTALL 1-1/2" WATER METER PER CITY OF OLATHE REQUIREMENTS. CONTRACTOR TO COORDINATE AND PAY ALL FEES. ALL LABOR AND MATERIALS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH CITY OF OLATHE STANDARDS. OWNER WILL REIMBURSE CONTRACTOR FOR ANY METER AND SYSTEM DEVELOPMENT FEES ASSESSED BY THE CITY OF OLATHE.	W6	8" D.I.P PUBLIC MAIN (RE: PUBLIC WATER MAIN EXTENSION PLANS).
		W7	PUBLIC FIRE HYDRANT ASSEMBLY (RE: PUBLIC WATER MAIN EXTENSION PLANS).

WB	FIRE DEPARTMENT CONNECTION
WB	RELOCATE EXISTING WATER METER FOR IRRIGATION SYSTEM PER CITY OF OLAHE REQUIREMENTS; ALL LABOR AND MATERIALS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR'S PLUMBER IN ACCORDANCE WITH THE CITY OF OLAHE STANDARDS
WYO	INSTALL IRRIGATION BACKFLOW PREVENTER (USC APPROVED RP2), CONNECTION TO BE MADE BY THE IRRIGATION CONTRACTOR.
S1	6" PVC (SDR-26) SANITARY SERVICE LINE EXIT FROM BUILDING. FL=1035.57
S2	CONTRACTOR TO INSTALL 6" PVC (SDR-26) W/ RUBBER GASKETED JOINTS SANITARY SEWER SERVICE LINE AND CONNECT TO EXISTING 6" SANITARY SERVICE LINE. CONTRACTOR TO FIELD VERIFY LOCATION AND FLOWLINE AND NOTIFY ENGINEER OF ANY DISCREPANCIES. FL=1026.5 (EX. 4" PVC)
S3	INSTALL SANITARY SERVICE LINE CLEANOUT.
S4	4" PVC (SDR-26) SANITARY SERVICE LINE EXIT FROM BUILDING. FL=1037.70
S5	INSTALL 4" SANITARY SERVICE LINE CLEANOUT AND CAP 4" PVC (SDR-26) SANITARY SERVICE LINE FOR FUTURE EXPANSION. (RE: P101)
E1	PROPOSED LOCATION OF CONCRETE TRANSFORMER PAD. CONTRACTOR TO VERIFY EXACT LOCATION AND SIZE WITH EVERY PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONCRETE PAD AND CONDUIT AS REQUIRED BY THE ELECTRIC COMPANY. CONTRACTOR SHALL COORDINATE SAID WORK WITH THE ELECTRIC COMPANY.

E2	ELECTRIC ENTRY INTO BUILDING FOLLOW EVERY REQUIREMENTS (RE: BUILDING ELECTRICAL PLANS).
E3	CONTRACTOR TO INSTALL CONDUIT FOR ELECTRICAL PRIMARY FOLLOW EVERY WORK ORDER & SPECIFICATIONS.
E4	RELOCATE AND RESET EXISTING AIR CONDITIONING UNITS
E5	INSTALL 4" PVC CONDUIT FOR SECONDARY POWER TO BUILDING
E6	PROPOSED LOCATION OF SECTIONALIZER PAD, CONTRACTOR TO VERIFY EXACT LOCATION AND SIZE WITH EVERY PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PAD AND CONDUIT AS REQUIRED BY THE ELECTRIC COMPANY. CONTRACTOR SHALL COORDINATE SAID WORK WITH THE ELECTRIC COMPANY.
E7	CONTRACTOR BE RESPONSIBLE FOR THE REMOVAL OF THE EXISTING SECTIONALIZER AND CONNECTION OF THE PROPOSED SECTIONALIZER WITH THE ELECTRIC COMPANY
T1	INSTALL 2-4" PVC CONDUITS FOR TELECOMMUNICATIONS.
G1	PROPOSED GAS CONNECTION TO GAS METER LOCATED AT BUILDING WALL. CONTRACTOR SHALL COORDINATE WITH GAS COMPANY FOR THE TYING OF INDIVIDUAL METER. SEE SHEET P201 FOR CONNECTION TO RTU'S AND BUILDING.
G2	INSTALL SERVICE LINE, CONTRACTOR TO COORDINATE WITH ATMOS ENERGY FOR TYPE, SIZE AND INSTALLATION OF GAS SERVICE LINE.
G3	CONNECT TO EXISTING GAS SERVICE.



App	Revisions:	Date	No.
			PROJECT NO. 190550
			DATE: 12/20/18 DRAWN: JMO
			CHECKED: ALN APPROVED: JDC
			CERTIFICATE OF AUTHORIZATION
			LAND SURVEYING - LS-82
			ENGINEERING - E-351
			REGISTERED PROFESSIONAL
			CERTIFICATE OF AUTHORIZATION
			LAND SURVEYING - LS-000001128
			ENGINEERING - E-000000000

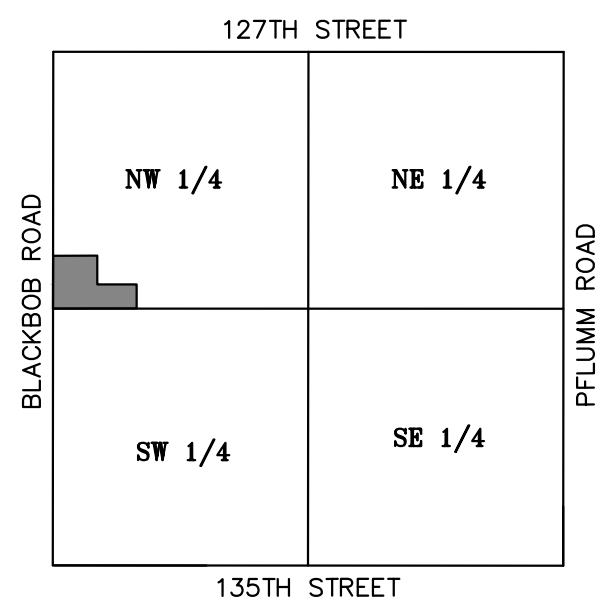
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\\PHELPS-SERVER\Projects\190550\Drawings\Permit Plans\Storm Service Plan.dwg Layout:1 Jan 21, 2020 - 5:01pm Aaron Norris

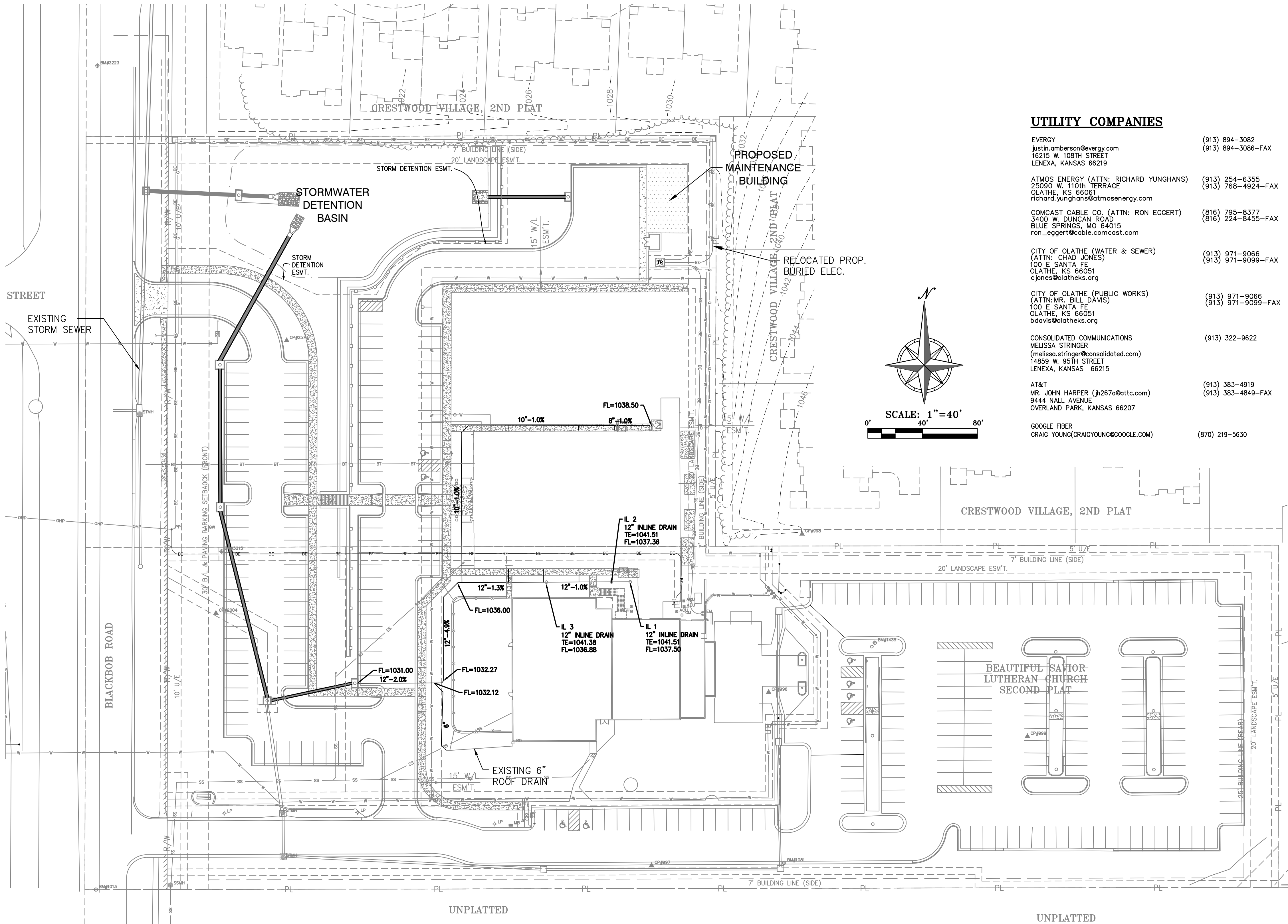
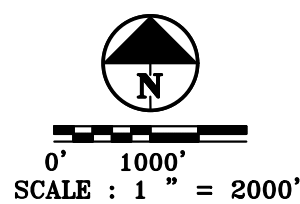


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UTILITY NOTES:
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FIELD LOCATIONS OF UNDERGROUND UTILITIES CALL 811.

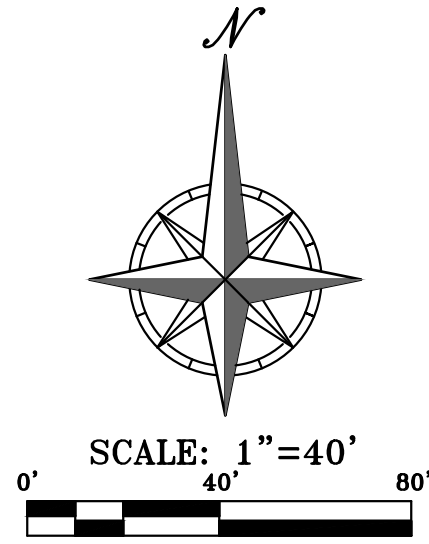


LOCATION MAP
SECTION 28-13-24



UTILITY COMPANIES

EVERGY justin.amberson@evergy.com 16215 W. 108TH STREET LENEXA, KANSAS 66219	(913) 894-3082 (913) 894-3086-FAX
ATMOS ENERGY (ATTN: RICHARD YUNGHANS) 25090 W. 110TH TERRACE OLATHE, KS 66061 richard.yunghans@atmosenergy.com	(913) 254-6355 (913) 768-4924-FAX
COMCAST CABLE CO. (ATTN: RON EGGERT) 3400 W. DUNCAN ROAD BLUE SPRINGS, MO 64015 ron_eggert@cable.comcast.com	(816) 795-8377 (816) 224-8455-FAX
CITY OF OLATHE (WATER & SEWER) (ATTN: CHAD JONES) 100 E. SANTA FE OLATHE, KS 66051 cjones@olatheks.org	(913) 971-9066 (913) 971-9099-FAX
CITY OF OLATHE (PUBLIC WORKS) (ATTN: MR. BILL DAVIS) 100 E. SANTA FE OLATHE, KS 66051 bdavis@olatheks.org	(913) 971-9066 (913) 971-9099-FAX
CONSOLIDATED COMMUNICATIONS MELISSA STRINGER (melissa.stringer@consolidated.com) 14859 W. 95TH STREET LENEXA, KANSAS 66215	(913) 322-9622
AT&T MR. JOHN HARPER (jh267o@att.com) 9444 WALL AVENUE OVERLAND PARK, KANSAS 66207	(913) 383-4919 (913) 383-4849-FAX
GOOGLE FIBER CRAIG YOUNG(CRAIGYOUNG@GOOGLE.COM)	(870) 219-5630



GENERAL NOTES:

- CONTRACTOR TO INSTALL ALL STORM SEWER PIPE ϕ 1% MINIMUM UNLESS OTHERWISE NOTED.
- ALL NYLOPLAST DRAIN BASINS AND INLINE DRAINS TO HAVE STANDARD GRATE EXCEPT WHERE NOTED.
- ALL PIPE CONNECTIONS TO BE MADE WITH MANUFACTURED JOINTS (TEES, WYES, ELBOWS, ETC.)
- ALL PIPE SHALL BE HDPE FOR STORM SEWER PIPES LESS THAN 24" UNLESS OTHERWISE NOTED.
- ALL 90° BENDS SHALL BE MADE WITH 2-45° BENDS.
- ALL DOWNSPOUT LEADERS SHALL BE 6" HDPE.

LEGEND

XX" PROPOSED STORM SEWER INSIDE DIAMETER
— STORM SEWER PIPE
(S) SOLID GRATE TOP



PHELPS ENGINEERING, INC.
1370 N. Winchester
Olathe, Kansas 66061
(913) 393-1155
Fax (913) 393-1166
www.phelpsengineering.com

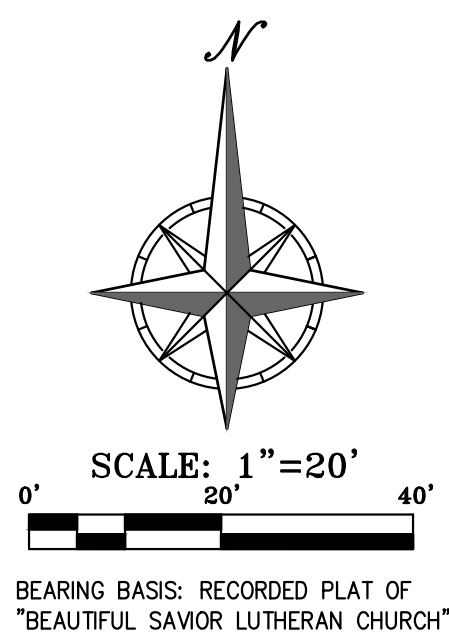
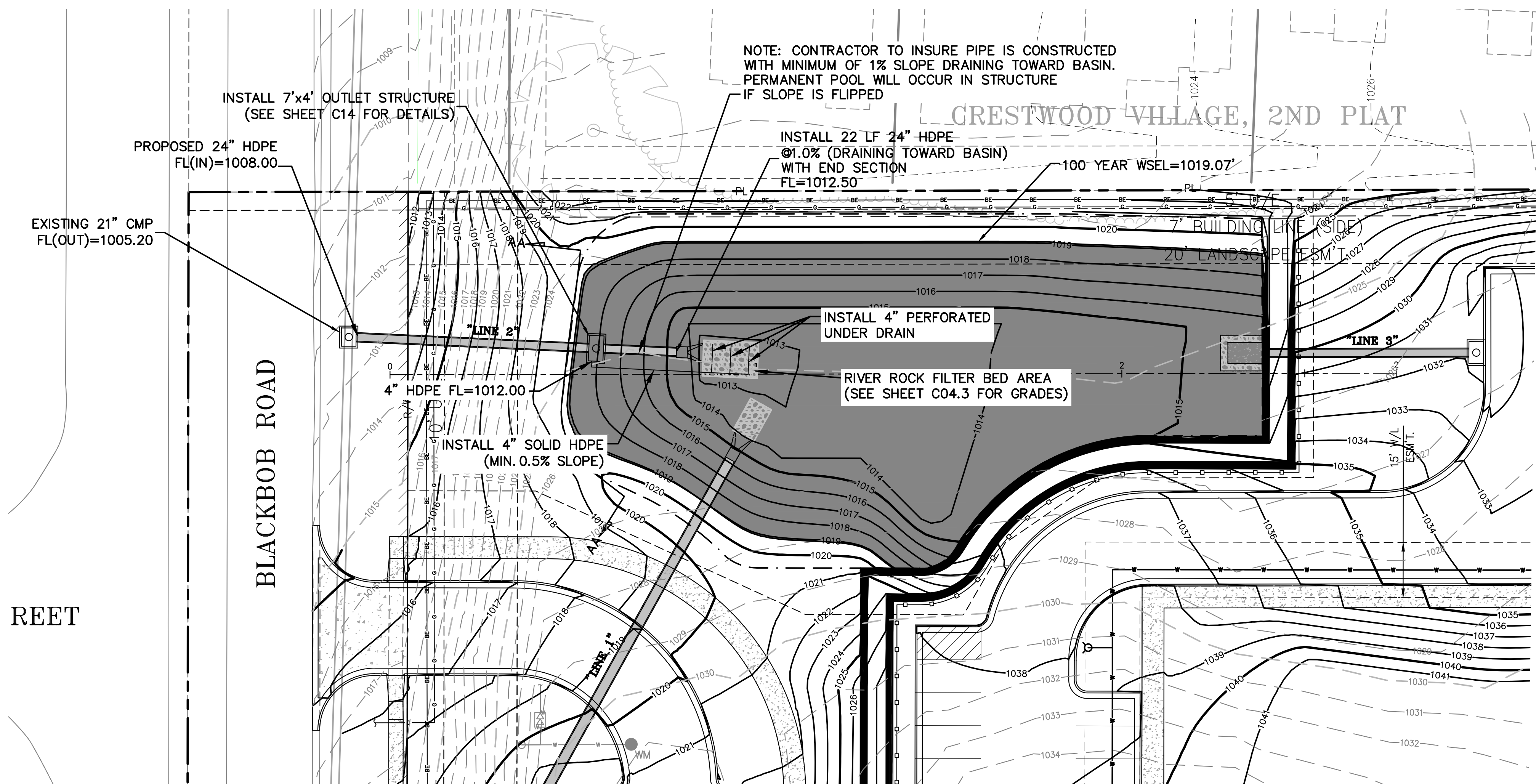


STORM SEWER SERVICE PLAN
BEAUTIFUL SAVIOR LUTHERAN CHURCH
13145 S BLACKBOB ROAD, OLATHE
JOHNSON COUNTY, KANSAS

Revisions:	By	App.
PROJECT NO. 190550		
DATE: 12/20/19		
CHECKED: ALN		
DRAWN: JMO		
PERMIT DATE OF AUTHORIZATION		
LAND SURVEYING - LS-82		
CERTIFICATE OF AUTHORIZATION		
REGISTERED PROFESSIONAL ENGINEER		

C06.2

\\PHELPS-SERVER\Projects\190550\Drawings\Permit Plans\DETENTION BASIN PLAN.dwg Layout:1 Jan 21, 2020 - 5:07pm Aaron Norris



BENCHMARK:

JCBM #205 ELEVATION: 1026.02
2" ALUMINUM DISK ON EAST SIDE OF ISLAND BY SECTION CORNER JUST SOUTH OF ENTRANCE TO THIS PROPERTY.

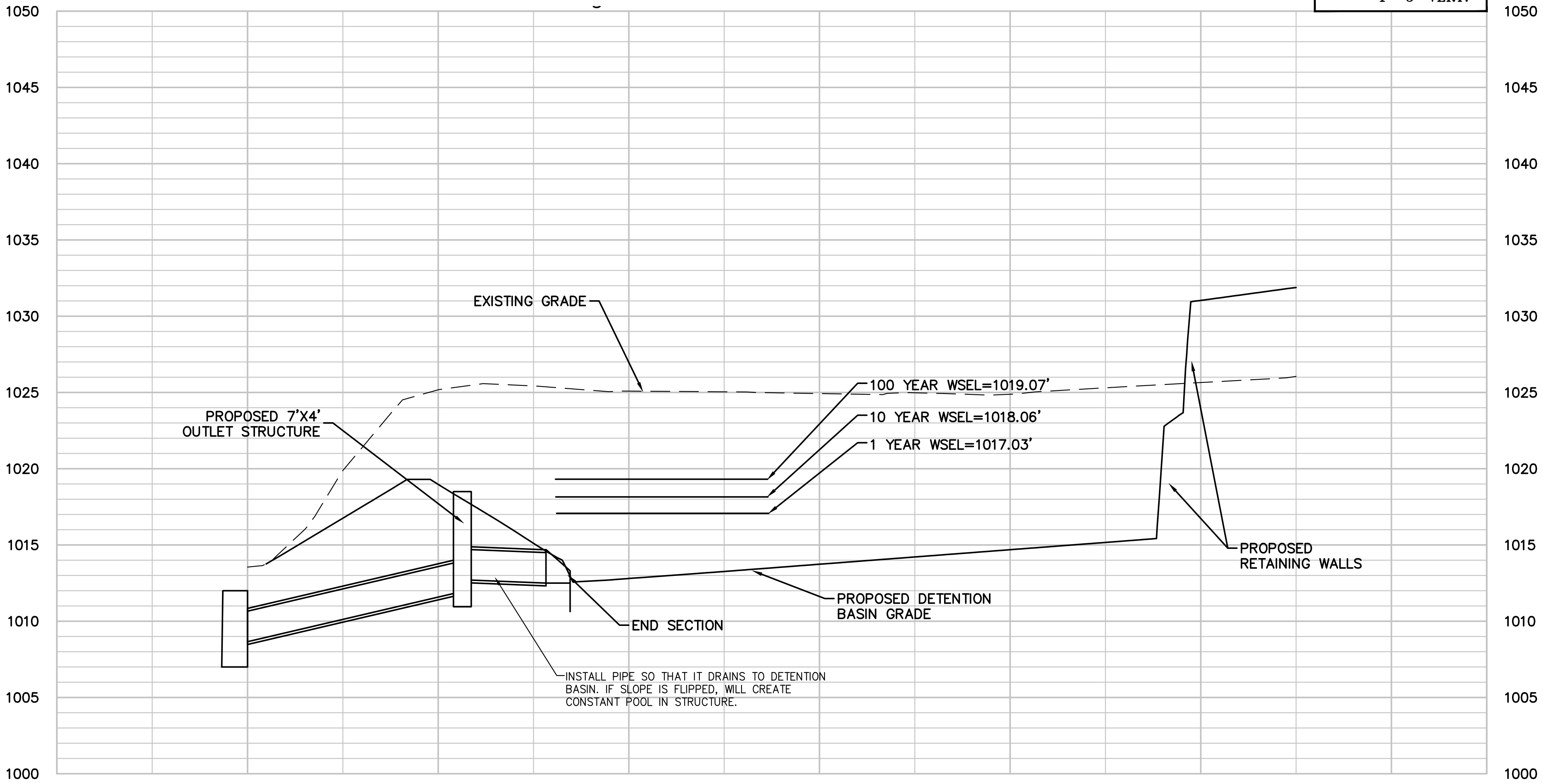
BM #1 ELEVATION: 1050.26
6" CUT CENTER FACE OF CURB INLET ON THE SOUTH SIDE OF STREET/ENTRANCE ON 2ND CURB INLET ON DRIVE.

LEGEND:

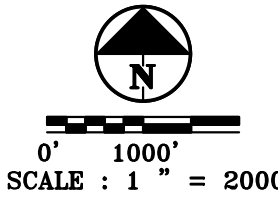
- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- PROPOSED CONCRETE PAVEMENT
- PROPOSED WAREHOUSE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED SEDIMENT BASIN CONTOURS
- PROPOSED CURB & GUTTER
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING BURIED ELECTRIC LINE
- EXISTING OVERHEAD POWER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING BURIED TELEPHONE LINE
- EXISTING FIBEROPTIC LINE
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- PROPOSED WATER LINE
- PROPOSED BURIED ELECTRIC LINE
- PROPOSED ROOF / UNDERDRAIN
- PROPOSED RIPRAP
- PROPOSED LIGHT POLE

DETENTION BASIN/SEDIMENTATION BASIN PROFILE

SCALE: 1"=20' HORIZ.
1"=5' VERT.

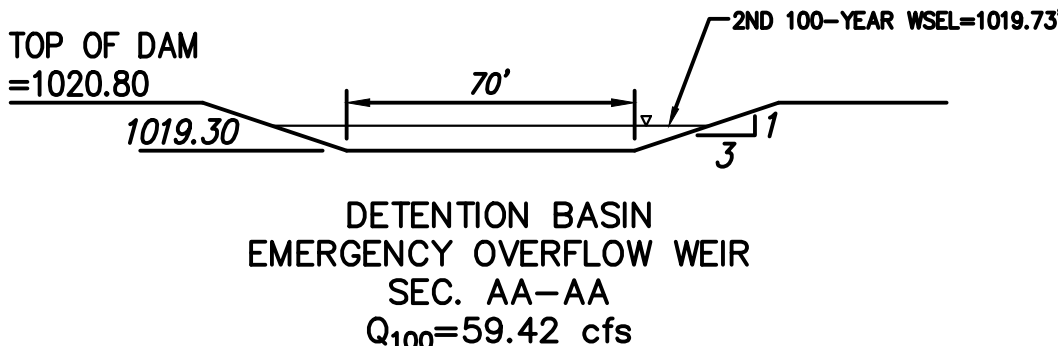


LOCATION MAP
SECTION 28-13-24



Know what's below.
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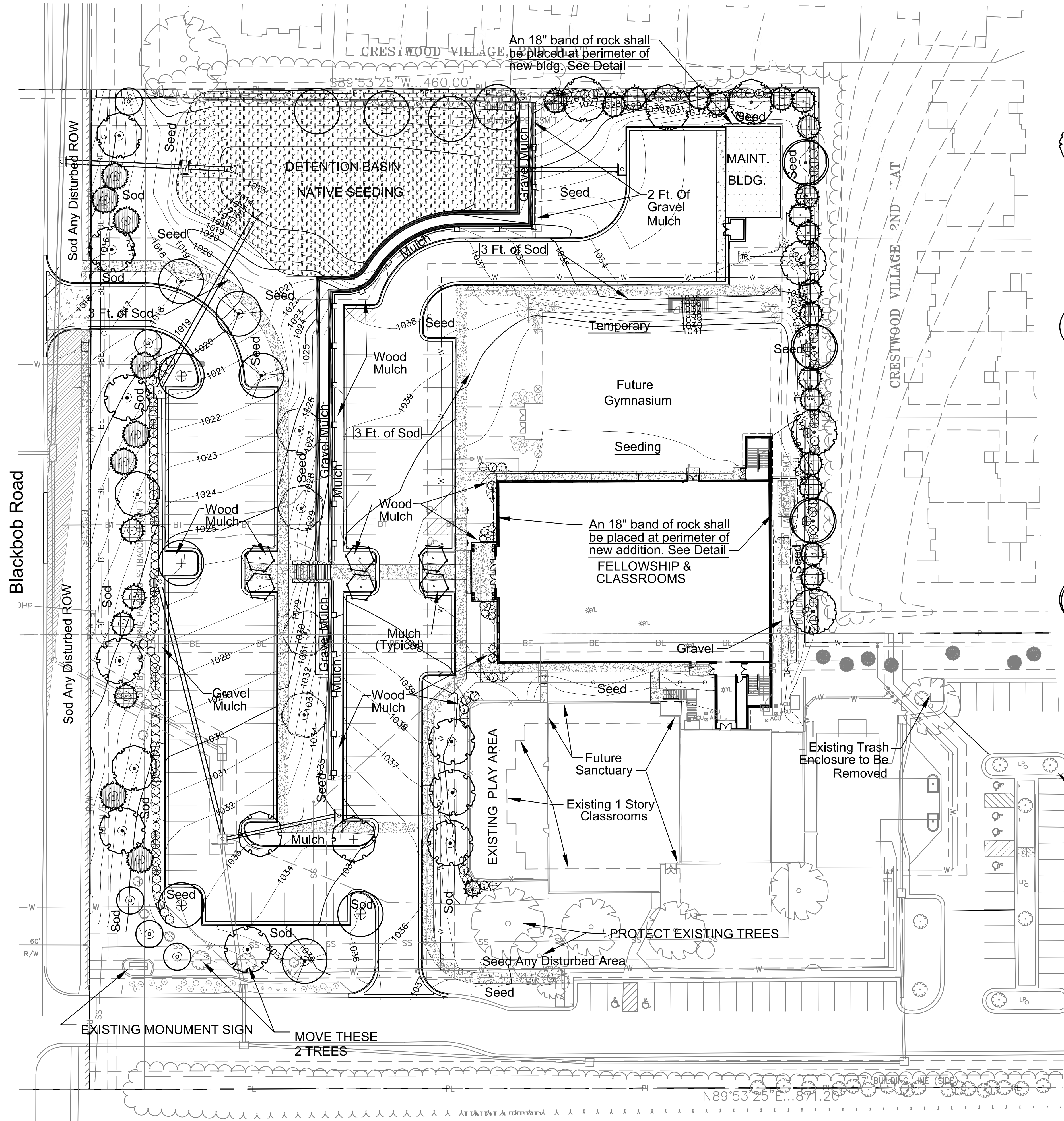
PLANNING
ENGINEERING
IMPLEMENTATION



DETENTION BASIN PLAN
BEAUTIFUL SAVIOR LUTHERAN CHURCH
13145 S BLACKBOB ROAD, OLATHE
JOHNSON COUNTY, KANSAS

PROJECT NO.	190550	DATE	12/20/19	DRAWN BY	JMO	CHECKED BY	ALN	APPROVED BY	JMO	DATE OF AUTHORIZATION	12/20/19	LAND SURVEYING	LS-82	CERTIFICATE OF AUTHORIZATION	12/20/19	ENGINEERING	EE-00000000000000000000
Revisions:																	
By	Asp.																

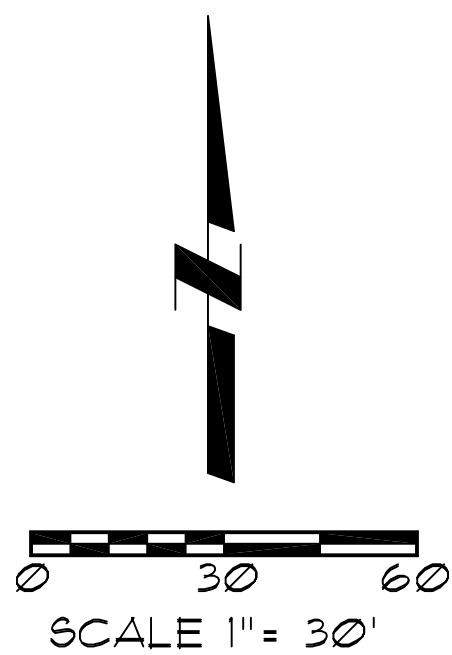
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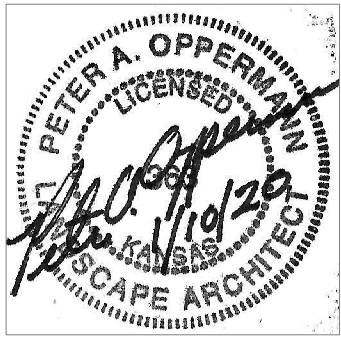
PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	CONT	CAL	SIZE
	2	Acer campestre / Hedge Maple	B & B	2.5"	Cal
	3	Acer rubrum 'October Glory' TM / October Glory Maple	B & B	2.5"	cal.
	8	Acer rubrum 'Red Pointe' / Red Pointe Red Maple	B & B	2.5"	cal.
	6	Amelanchier arborea 'Autumn Sunset' / Downy Serviceberry Single Stem	B & B		8' hgt.
	5	Cercis canadensis / Oklahoma Redbud	B & B	1.5"	Cal
	8	Gleditsia triacanthos 'Skyline' / 'Skyline' Honey Locust	B & B	2.5"	Cal
	4	Gymnocladus dioica / Kentucky Coffee Tree Seedless	B & B	2.5"	Cal
	1	Juniperus virginiana 'Canaertii' / Canaerti Juniper	B & B		6' hgt.
	23	Juniperus virginiana 'Hillspire' / Hillspire Juniper	B & B		6' hgt.
	8	Pinus flexilis 'Vanderwolf's Pyramid' / Vanderwolf's Pyramid Pine	B & B		6' hgt.
	4	Quercus bicolor / Swamp White Oak	B & B	2.5"	Cal
	3	Quercus phellos / Willow Oak	B & B	2.5"	Cal
	6	Quercus shumardii / Shumard Red Oak	B & B	2.5"	cal.
SHRUBS	QTY	BOTANICAL / COMMON NAME	CONT		
	6	Berberis thunbergii 'Atropurpurea Nana' / Dwarf Redleaf Japanes Barberry 15"-18" hgt. & sp.	2 gal		
	36	Hypericum frondosum 'Sunburst' / Sunburst Hypericum 24" hgt. & sp.	3 gal		
	75	Juniperus chinensis 'Sea Green' / Sea Green Juniper 24" hgt. & sp.	5 gal		
	9	Juniperus virginiana 'Grey Owl' / Grey Owl Juniper 24" sp.	3 gal		
	10	Physocarpus opulifolius 'Center Glow' / Center Glow Ninebark 24"-30" hgt. & sp.	3 gal		
GRASSES	QTY	BOTANICAL / COMMON NAME	CONT		
	14	Calamagrostis acutiflora 'Karl Foerster' / Feather Reed Grass 24" hgt.	3 gal		
GROUND COVERS	QTY	BOTANICAL / COMMON NAME	CONT		
	14,910 sf	Medium Hgt. Native Seed Mix / Grasses Only Hydromulched and Blanketed	seed		

Irrigation Note:
Existing irrigation is to be incorporated into an expanded system and coordinated with the owners representative. See Irrigation Guide specs on Sheet SP-3 & SP-4. See areas to be irrigated on sheet IR-1. See Turf Plan on Sheet TP-1.



Landscape Plan
Beautiful Savior
Lutheran Church
Olathe, Kansas





Oppermann LandDesign, LLC
Land Planning Landscape Architecture
18990 West 117th Street
Olathe, Kansas 66061
oppermannlanddesign.com
pete@opperland.com
913.894.9407

Utility Note:
Utilities shown on plan are diagrammatic and some may be missing. Before starting any construction call appropriate locating service. In Kansas call 1-800-DIG-SAFE (344-7233) to have utilities located.

01/10/2020

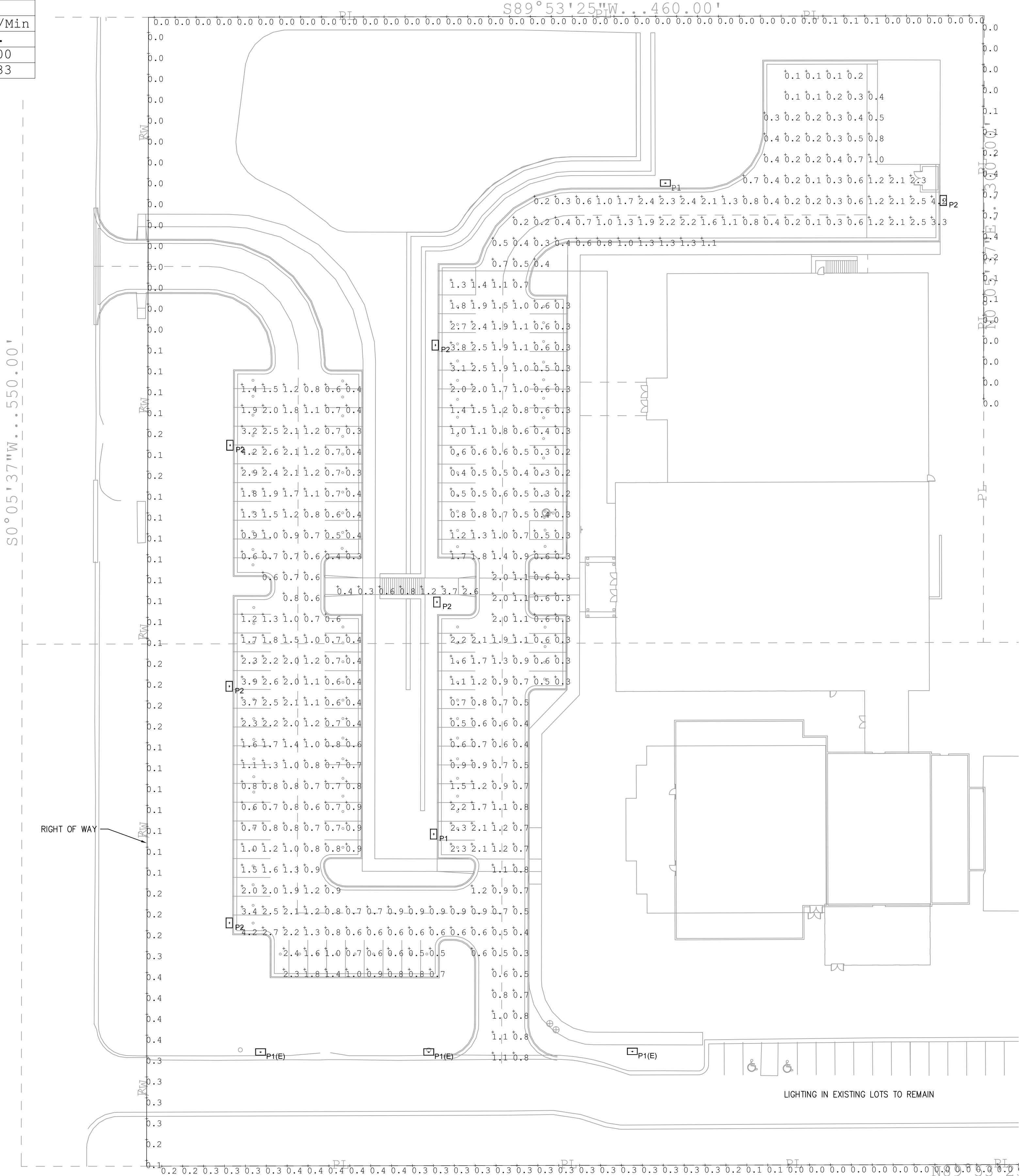
LS-1

Luminaire Schedule									
Symbol	Qty	Tag	Label	Arrangement	LLF	Description	Lum. Watts	Arr. Watts	Mount Height
	6	P2	KAD LED 40C 700 40K R4 MVOLT	SINGLE	0.910	KAD LED 40C 700 40K R4 MVOLT	94	94	20 FT
	5	P1	KAD LED 40C 700 40K R5 MVOLT	SINGLE	0.910	KAD LED 40C 700 40K R5 MVOLT	91	91	20 FT

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Boundary Line	Illuminance	Fc	0.10	0.7	0.0	N.A.	N.A.
New Parking Lot	Illuminance	Fc	1.04	4.2	0.1	10.40	42.00
Sidewalk	Illuminance	Fc	1.37	3.7	0.3	4.57	12.33

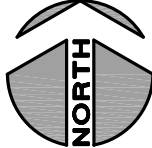


LITHONIA KAD LED



SITE PHOTOMETRIC PLAN

SCALE: 1" = 30'-0"

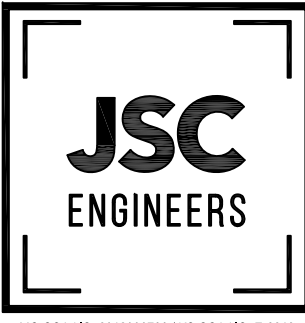


scharhag

HERMAN A. SCHARHAG COMPANY, ARCHITECTS
6247 Brookside Blvd. #204 Kansas City, Mo 64113
Phone: 816-656-5055 Scharhag@att.net

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MEP ENGINEER:



MO CSA NO. 22106276 / KS CSA NO. 62818
1801 NW BLUE PARKWAY, UNITY VILLAGE, MO 64065
3rd FLOOR UNITY VILLAGE TOWER
phone: (816) 273-0283 email: jsc@jscengineers.com

BUILDING ADDITION FOR
**BEAUTIFUL SAVIOR
LUTHERAN CHURCH**
13145 S BLACKBOB

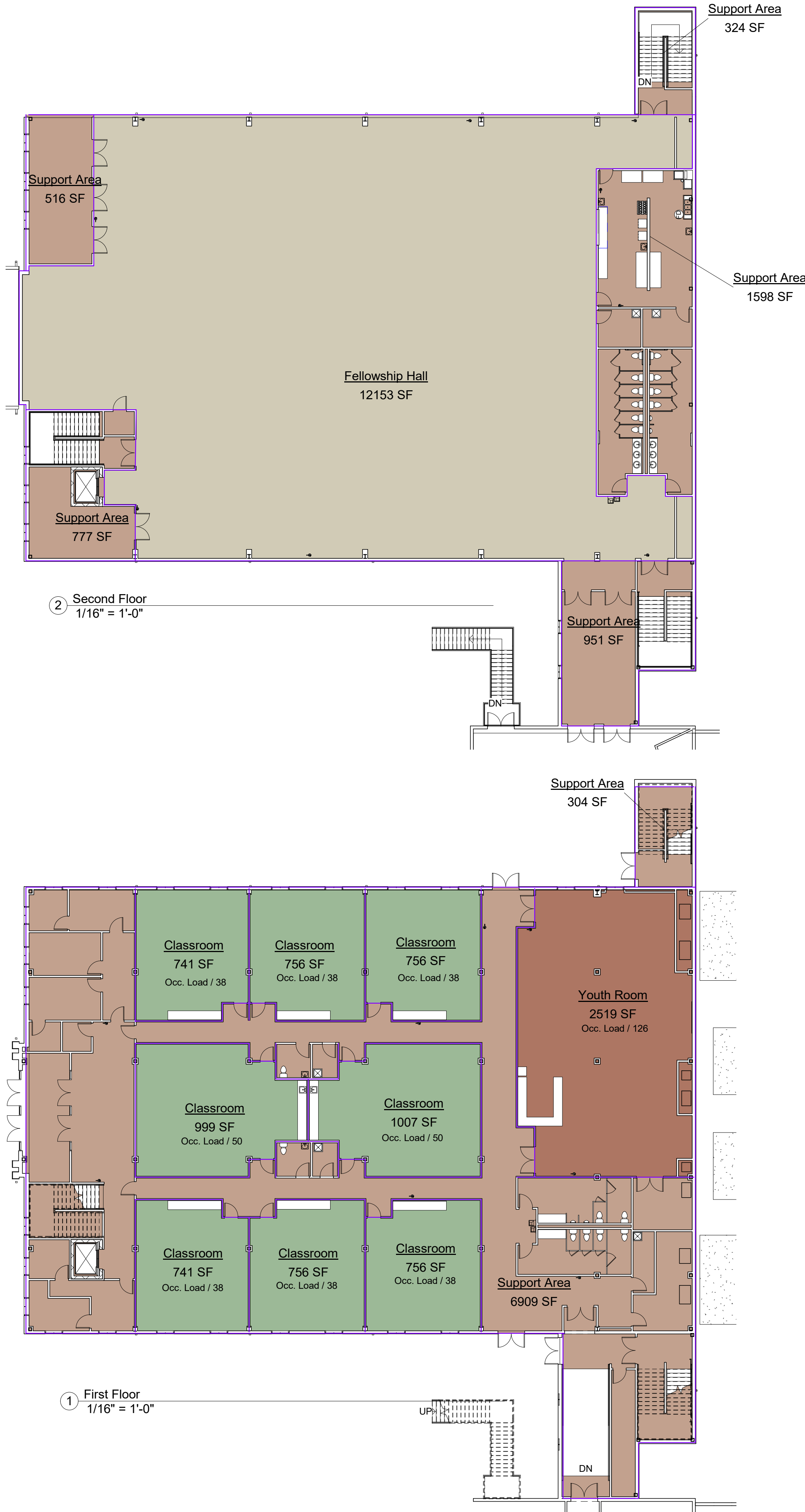


No.	Description	Date

SITE
PHOTOMETRIC
PLAN

Project number 19-130
Date 01.09.2020

ES1



BUILDING CODE ANALYSIS

APPLICABLE CODES
2018 INTERNATIONAL BUILDING CODE
2018 INTERNATIONAL MECHANICAL CODE
2018 INTERNATIONAL PLUMBING CODE
2018 INTERNATIONAL FIRE CODE
2018 INTERNATIONAL ENERGY CONSERVATION CODE
2017 NATIONAL ELECTRICAL CODE
2017 ICC/ANSI A117.1

SUMMARY OF WORK
THIS IS A NEW ADDITION TO AN EXISTING BUILDING.
THE ADDITION WILL BE SEPARATED BY A TWO HOUR RATED
FIRE BARRIER WALL FROM THE EXISTING BUILDING.

OCCUPANCY CLASSIFICATION
E (CLASSROOMS) – FIRST FLOOR
A-3 (COMMUNITY HALL) – SECOND FLOOR

TYPE OF CONSTRUCTION
II-B, SPRINKLED

FLOOR AREA
TOTAL AREA: 15,944 SQ.FT. PER EACH FLOOR

OCCUPANT LOAD
FIRST FLOOR: CLASSROOMS: 9,080 / 20 = 454 AS NOTED ON PLAN)
SUPPORT AREAS: 6,864 / 200 = 35
TOTAL: 489

SECOND FLOOR: COMMUNITY HALL: 12,153 / 15 = 804
SUPPORT AREAS: 3,791/ 200 = 20
TOTAL: 824

EXITS REQUIRED
FIRST FLOOR: THREE
WIDTH REQUIRED: DOORS: (.15) 489 X .15 = 74" = 6'-2"
SECOND FLOOR: THREE
WIDTH REQUIRED: STAIRS: (.2) 824 X .2 = 165" = 13'-9"
DOORS: (.15) 824 X .15 = 124" = 10'-4"

EXITS PROVIDED
FIRST FLOOR: THREE
WIDTH PROVIDED: DOORS: 9 X 35.5" = 319.5" = 26'-8"
SECOND FLOOR: THREE
WIDTH PROVIDED: STAIRS: 3 X 5'-6" = 198" = 16'-6"
DOORS: 6 X 35.5" = 213" = 17'-9"

TOILET FACILITIES REQUIRED
FIRST FLOOR: MEN: 5 WC, 5 LAV
WOMEN: 5 WC, 5 LAV
SERVICE SINK & DRINKING FOUNTAIN (ADA)
SECOND FLOOR: MEN: 3 WC, 3 LAV
WOMEN: 6 WC, 3 LAV
SERVICE SINK & DRINKING FOUNTAIN (ADA)

TOILET FACILITIES PROVIDED
FIRST FLOOR: MEN: 3 WC, 2 UR, 7 LAV
WOMEN: 5 WC, 7 LAV
SERVICE SINK & DRINKING FOUNTAIN (ADA)
SECOND FLOOR: MEN: 3 WC, 3 UR, 3 LAV
WOMEN: 6 WC, 3 LAV
SERVICE SINK & DRINKING FOUNTAIN (ADA)

DEFERRED SUBMITTALS TO BE COMPLETED BY OTHERS
FIRE SPRINKLER PLANS (PLANS BY SUBCONTRACTOR)
FIRE ALARM PLANS (PLANS BY SUBCONTRACTOR)
PRE-ENGINEERED METAL BUILDING PLANS (PLANS BY SUBCONTRACTOR)

EGRESS DOORS SHALL BE READILY OPENABLE FROM
THE EGRESS SIDE WITHOUT THE USE OF A KEY OR
SPECIAL KNOWLEDGE OR EFFORT. ALL EGRESS DOORS SHALL
HAVE PANIC HARDWARE.

PREMISES SHALL BE IDENTIFIED ON FRONT
DOOR, WITH NUMBERS AND/OR LETTERS. EACH
CHARACTER SHALL BE NOT LESS THAN 4" HIGH WITH A
MINIMUM STROKE WIDTH OF 0.5 INCHES. THEY SHOULD
BE INSTALLED ON A CONTRASTING BACKGROUND AND
BE PLAINLY LEGIBLE AND VISIBLE FROM THE STREE OR
ROAD FRONTING THE PROPERTY. ADDRESS NUMBERS
AND/OR LETTERS SHALL BE ARABIC NUMBERS OR
ALPHABETIC LETTERS.

IECC REQUIREMENTS REQUIRED
ROOF: R-19 + R-11 LS
WALLS: R-13 + R-3.8 CI or R-20
UNHEATED SLAB: R-10 FOR 24" BELOW

IECC REQUIREMENTS PROVIDED
ROOF: R-19 + R-11 LS
WALLS: R-13 + R-3.8 CI NORTH & SOUTH WALLS
R-20 WEST & EAST WALLS
UNHEATED SLAB: R-10 FOR 24" BELOW

SEE SHEET A404 FOR DEMO INFORMATION

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BEAUTIFUL SAVIOR LUTHERAN CHURCH
13145 S BLACKBOB

BUILDING ADDITION FOR

J. Jeffrey Schroeder, Ks. License 2878
Herman Scharhag Co., Architects, Cert. of Authority A-9

No.	Description	Date
Revision Schedule		

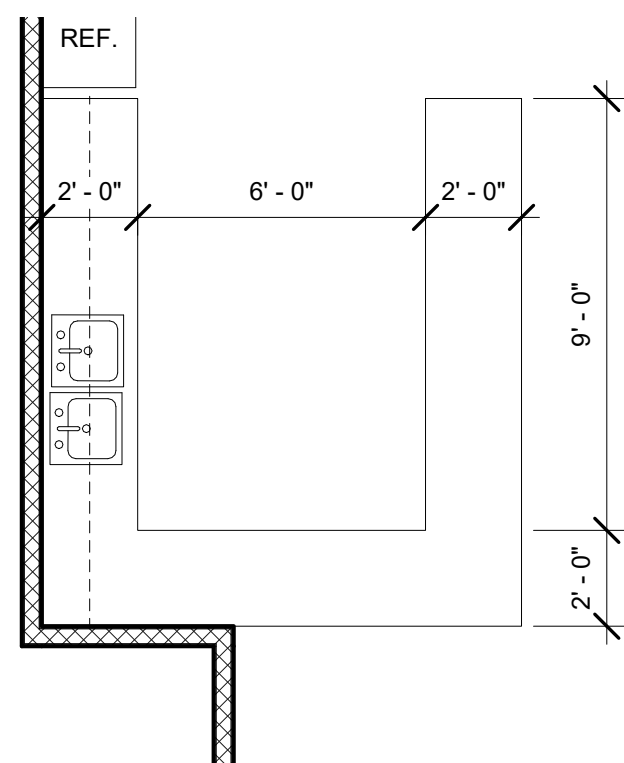
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Project number	2090
Date	01/15/2020

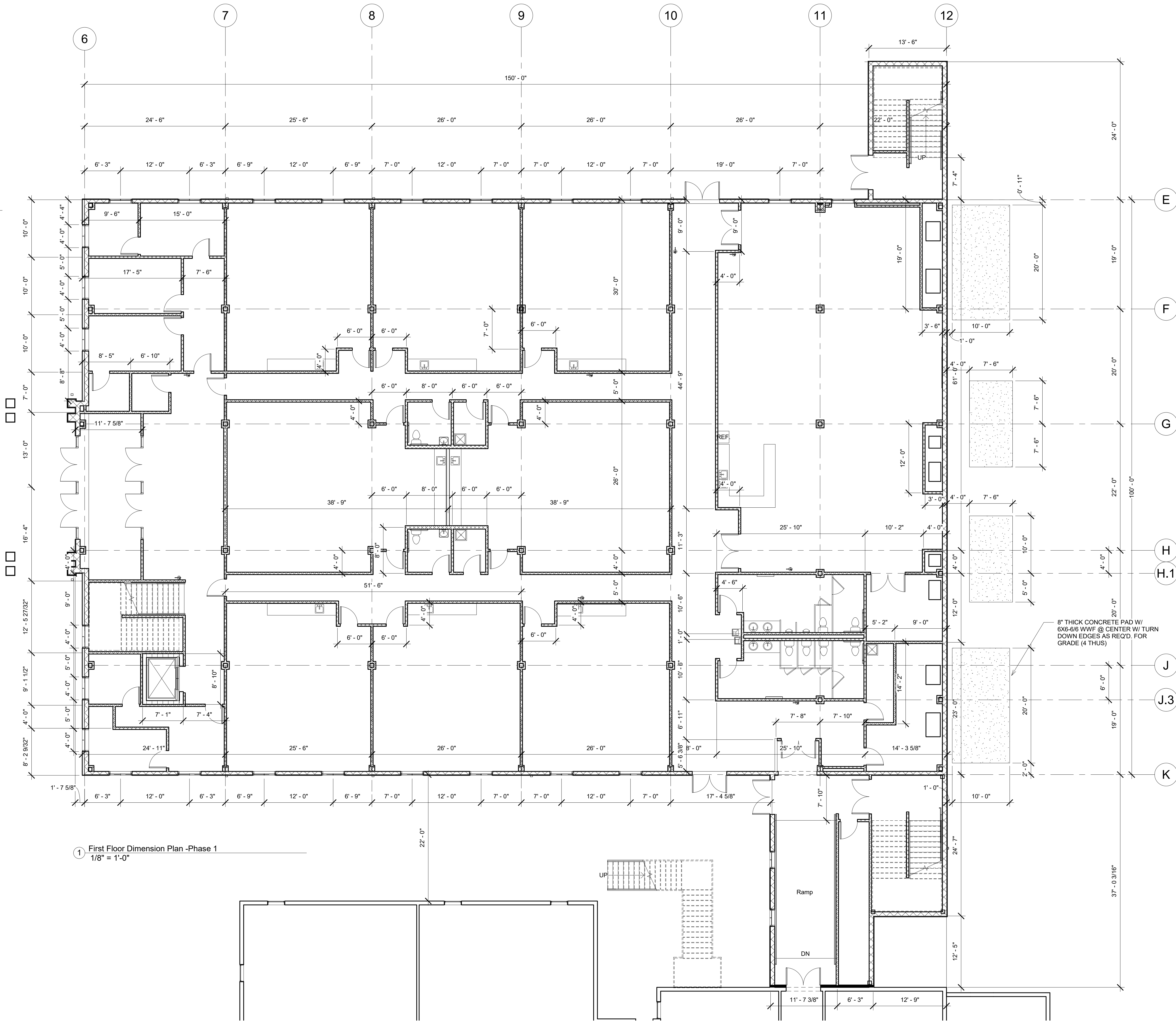
A100

Scale	1/16" = 1'-0"
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2/14/2020 12:56:39 PM



② Youth Room Cabinetry
1/4" = 1'-0"



① First Floor Dimension Plan -Phase 1
1/8" = 1'-0"



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No.	Description	Date
Revision Schedule		

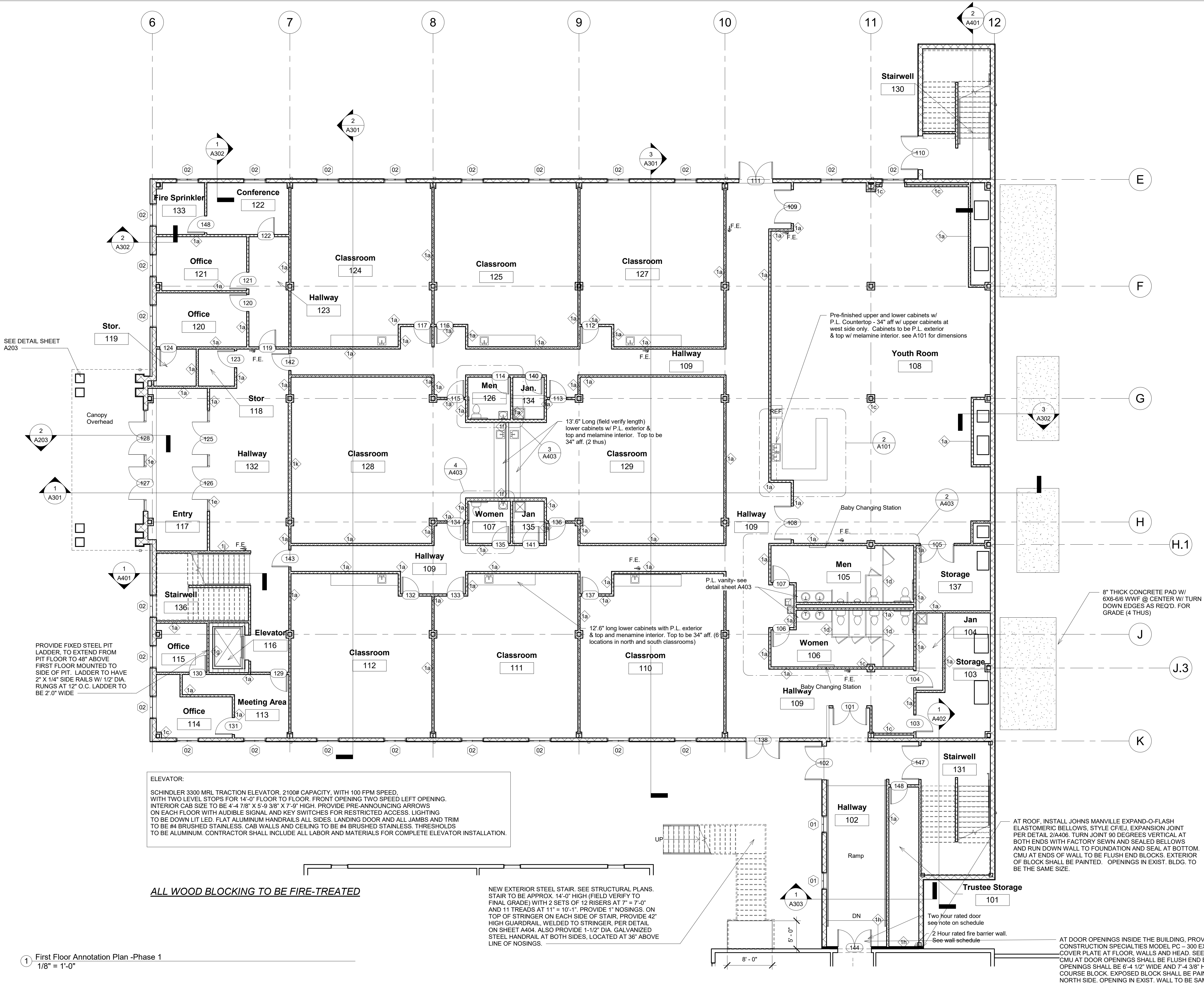
**1st Floor
Dimension Plan**

Project number 2090
Date 01/15/2020

A101

Scale As indicated

2/14/2020 12:56:42 PM



1 First Floor Annotation Plan -Phase 1
1/8" = 1'-0"

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No.	Description	Date
Revision Schedule		

**1st Floor
Annotation Plan**

Project number 2090
Date 01/15/2020

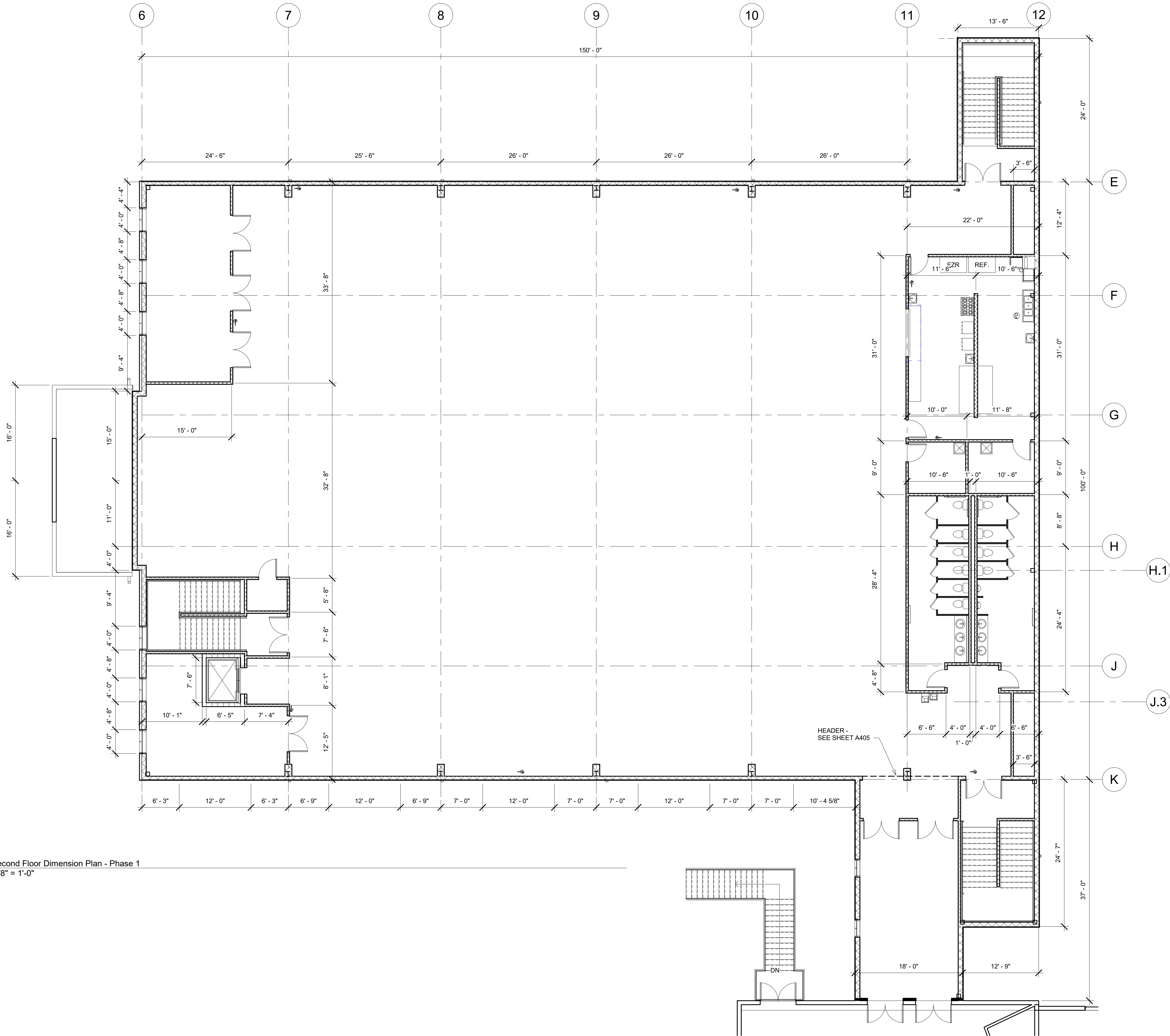
A102

Scale 1/8" = 1'-0"

2/14/2020 12:56:43 PM



1 Second Floor Dimension Plan - Phase 1
1/8" = 1'-0"



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No.	Description	Date
Revision Schedule		

2nd Floor
Dimension Plan

Project number	2090
Date	01/15/2020

A103

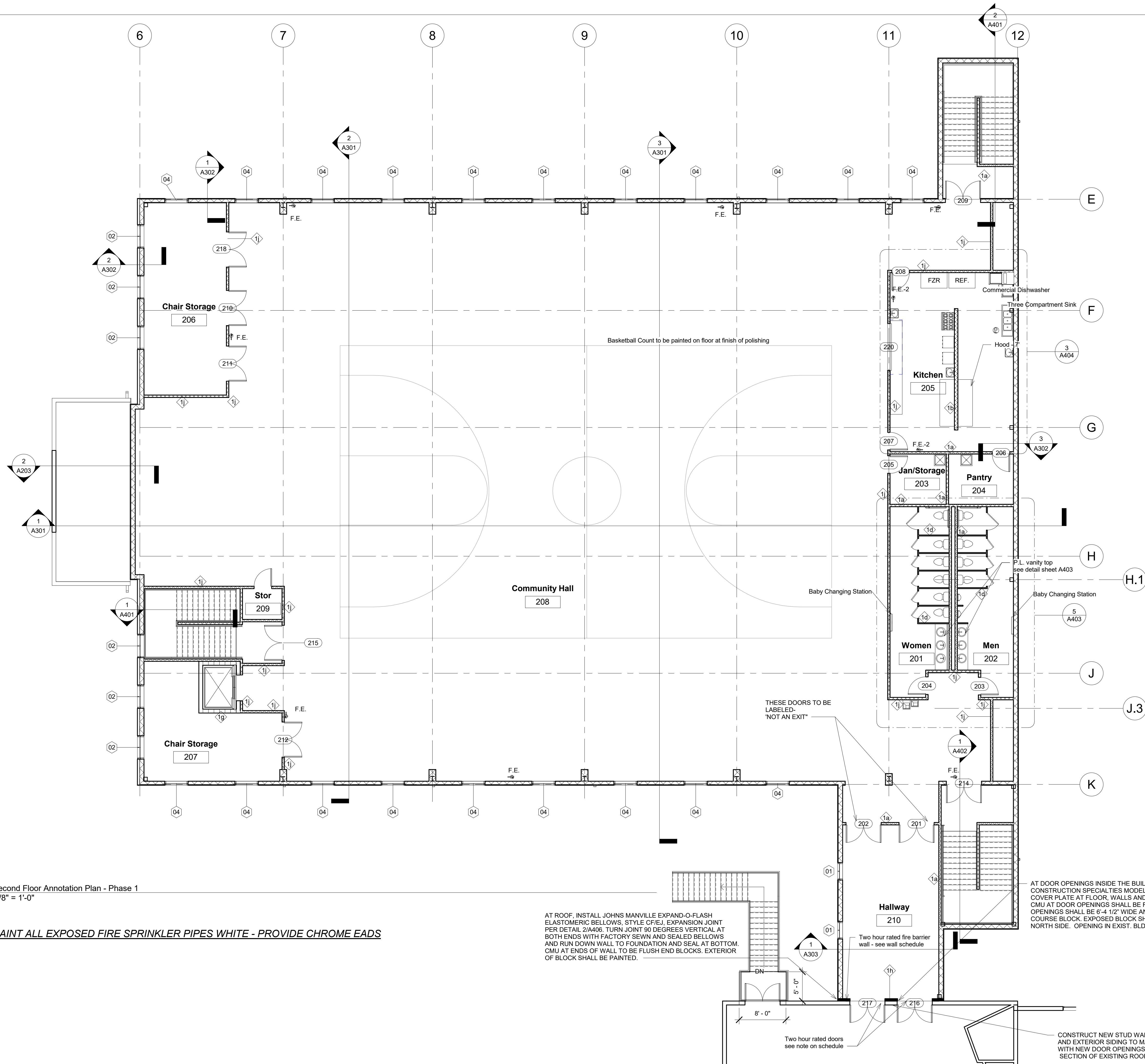
Scale	1/8" = 1'-0"
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2/14/2020 12:56:45 PM



1 Second Floor Annotation Plan - Phase 1
1/8" = 1'-0"

PAINT ALL EXPOSED FIRE SPRINKLER PIPES WHITE - PROVIDE CHROME EADS



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No.	Description	Date
Revision Schedule		

**2nd Floor
Annotation Plan**

Project number 2090
Date 01/15/2020

A104

Scale 1/8" = 1'-0"

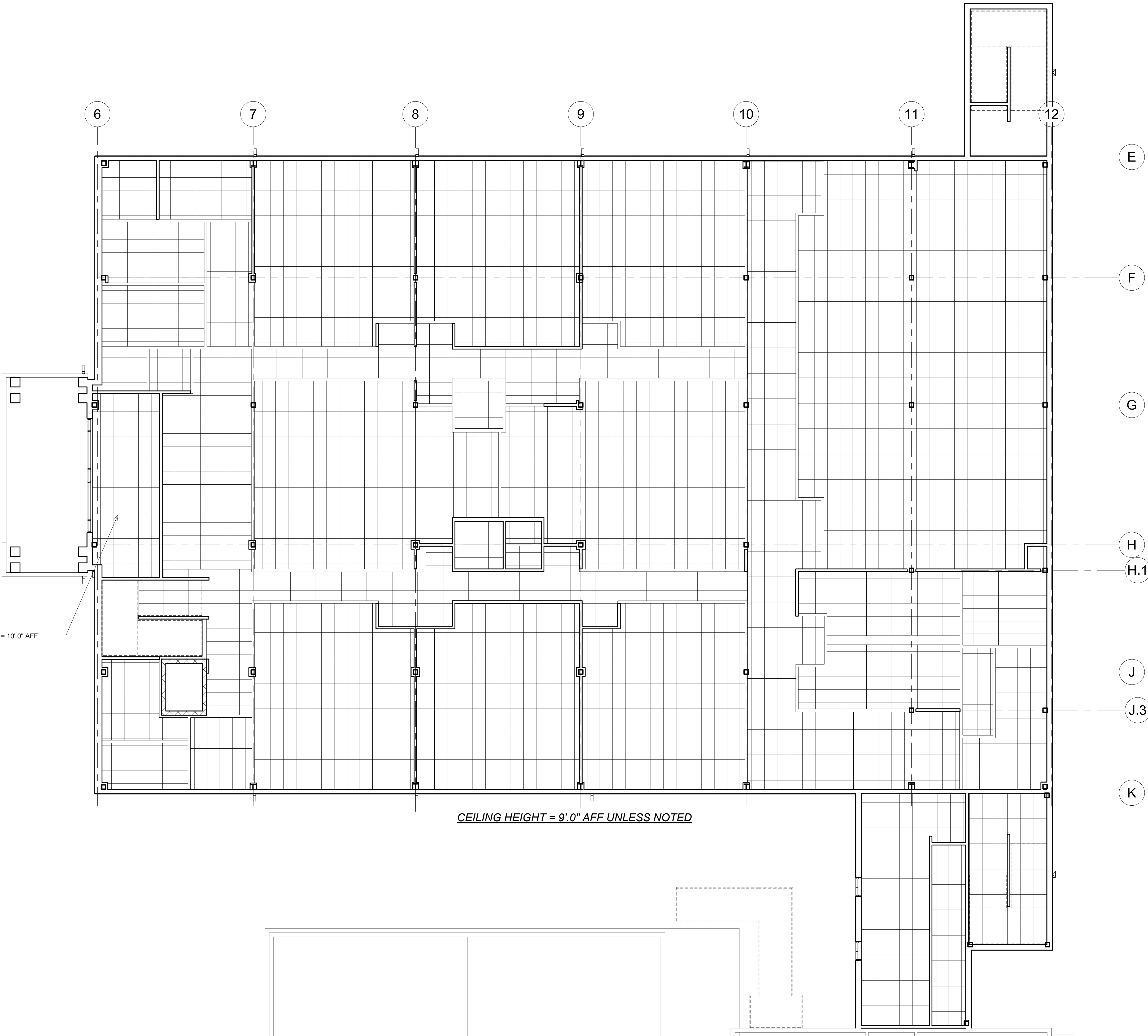
2/14/2020 12:56:46 PM



1 Reflected Ceiling Plan 1st floor
1/8" = 1'-0"

CEILING HEIGHT = 10'-0" AFF

CEILING HEIGHT = 9'-0" AFF UNLESS NOTED



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No.	Description	Date
Revision Schedule		

1st Floor
Reflected
Ceiling Plan

Project number 2090
Date 01/15/2020

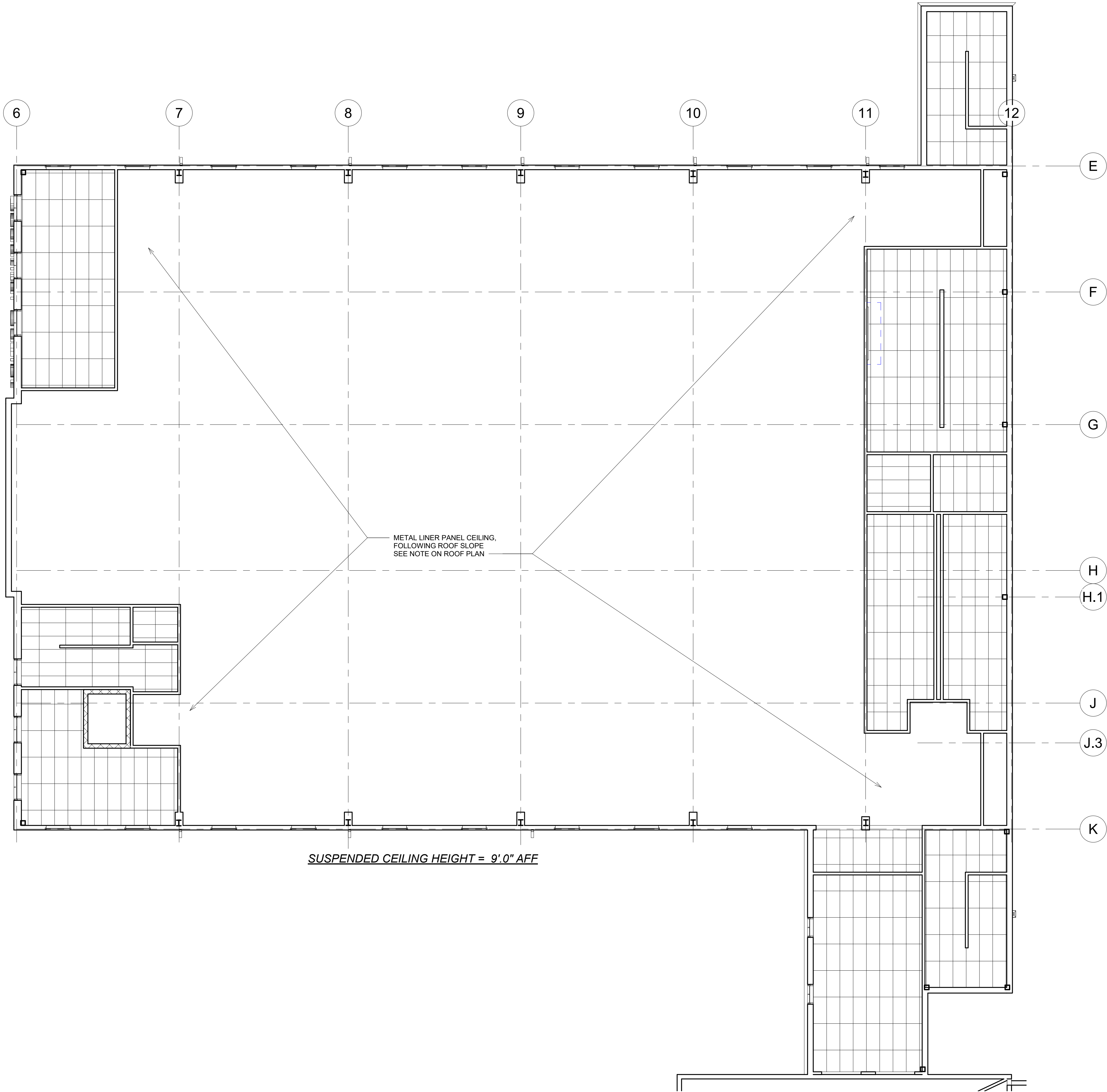
A105

Scale 1/8" = 1'-0"

2/14/2020 12:56:46 PM



1 Reflected Ceiling Plan 2nd Floor
1/8" = 1'-0"



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No.	Description	Date
Revision Schedule		

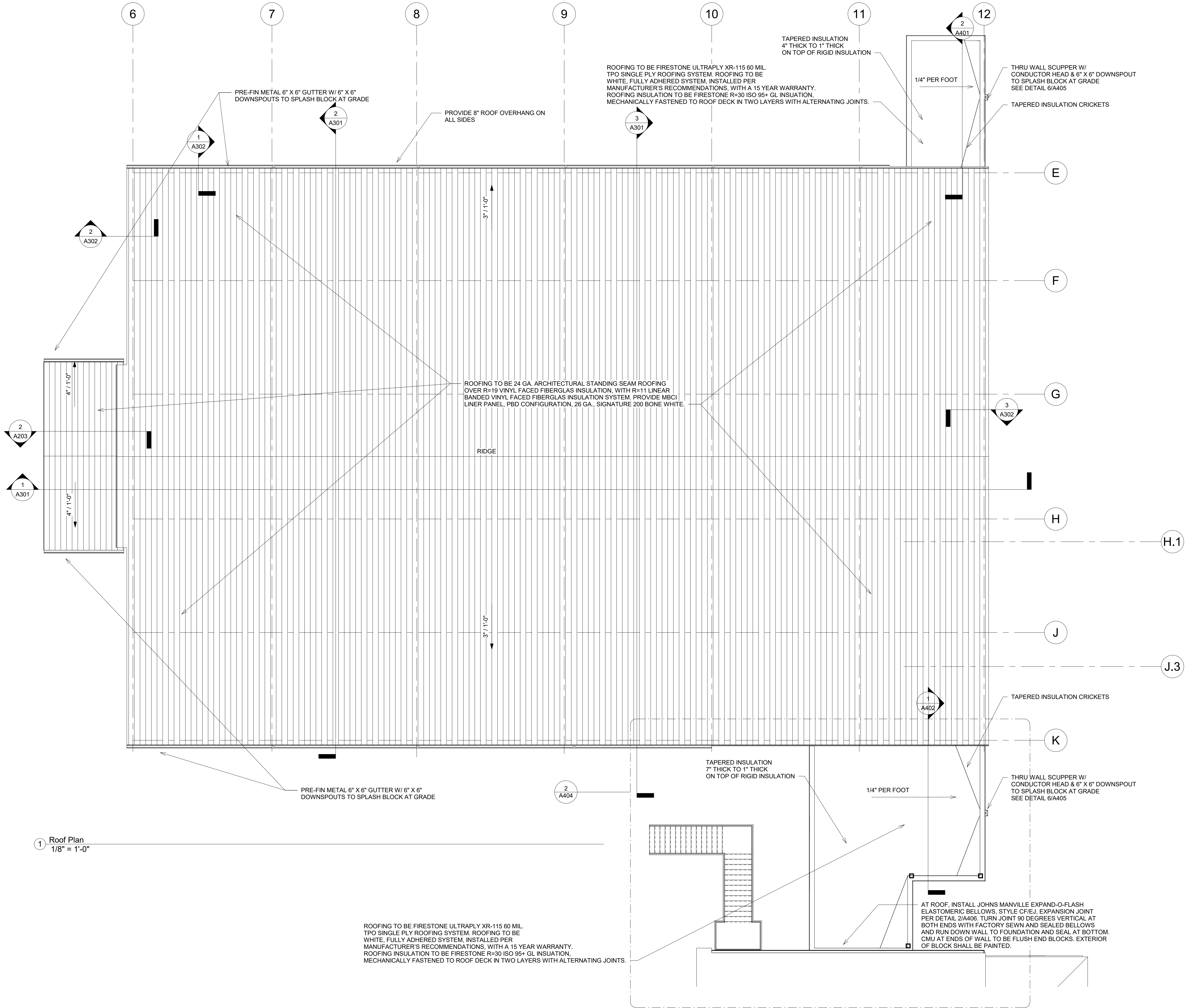
2nd Floor
Reflected
Ceiling Plan

Project number 2090
Date 01/15/2020

A106

Scale 1/8" = 1'-0"

2/14/2020 12:56:47 PM



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No.	Description	Date
Revision Schedule		

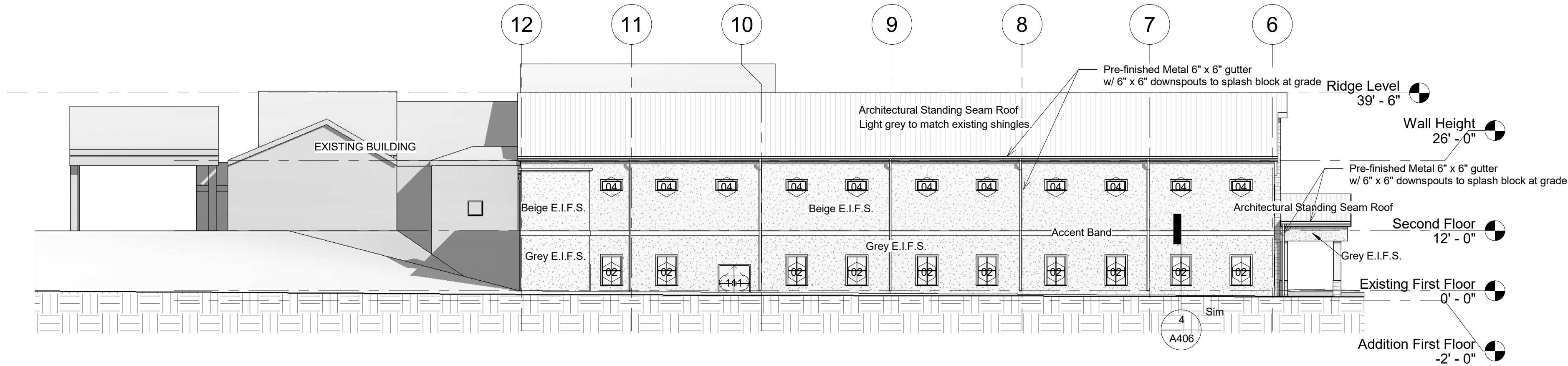
Roof Plan

Project number	2090
Date	01/15/2020

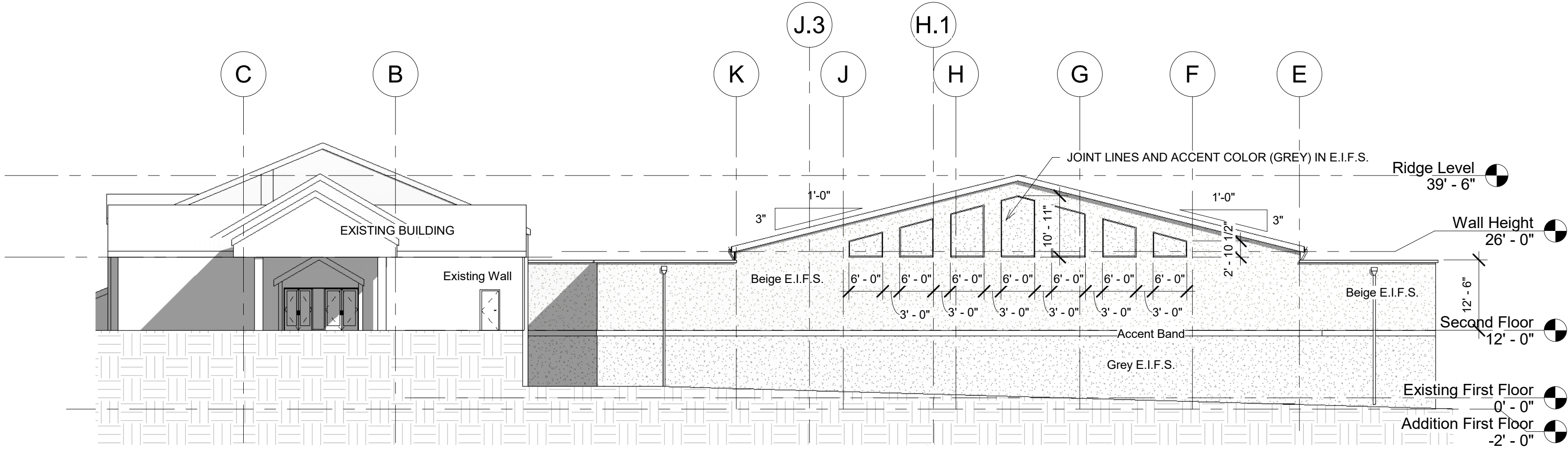
A107

Scale	1/8" = 1'-0"
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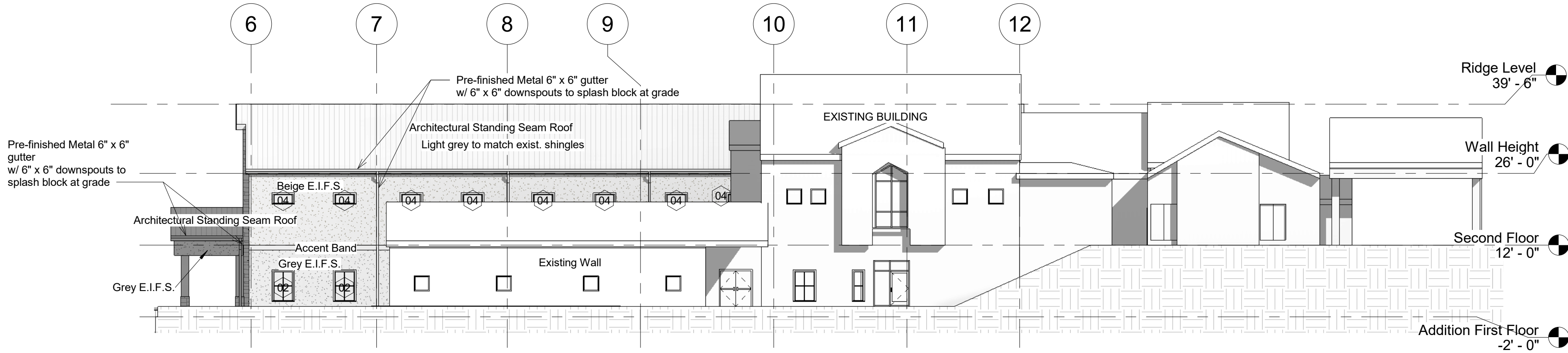
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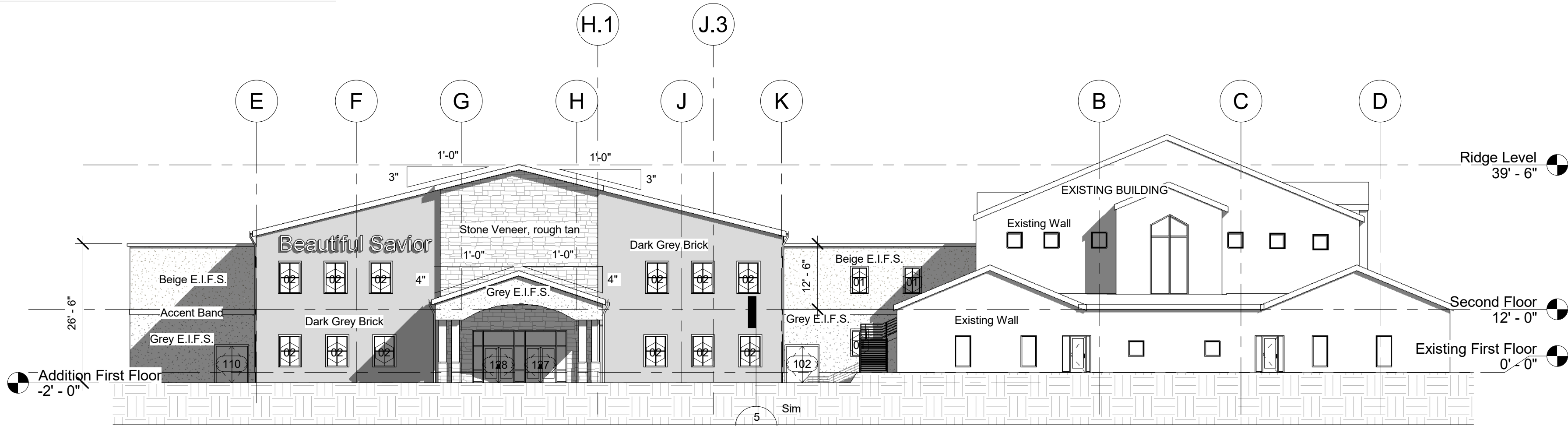
1 North Phase 1
1/16" = 1'-0"



4 East Phase 1
1/16" = 1'-0"



2 South Phase 1
1/16" = 1'-0"



3 West Phase 1
1/16" = 1'-0"

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No.	Description	Date
Revision Schedule		

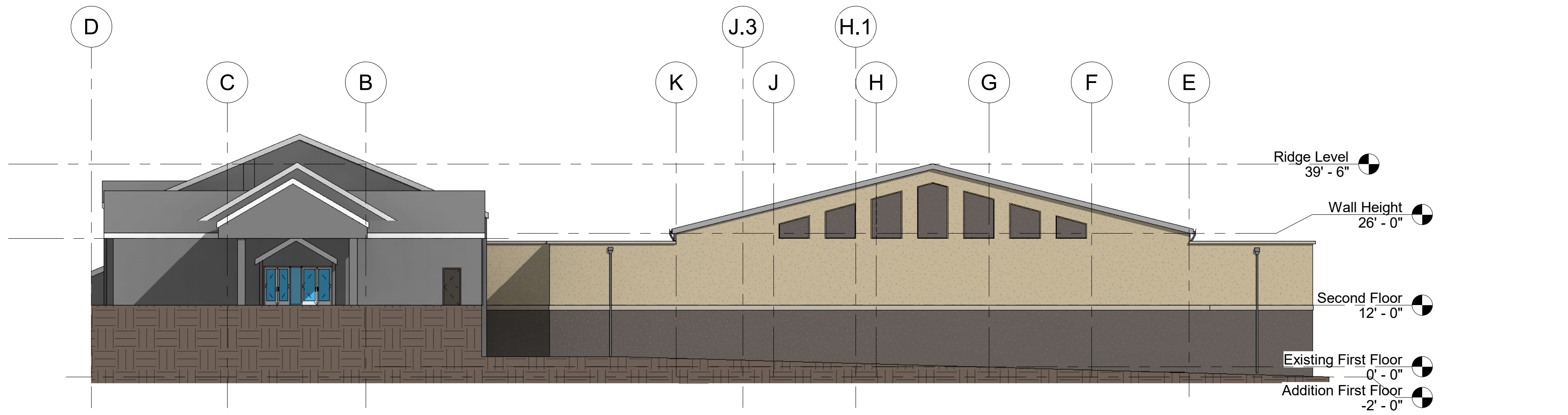
Elevations

Project number	2090
Date	01/15/2020

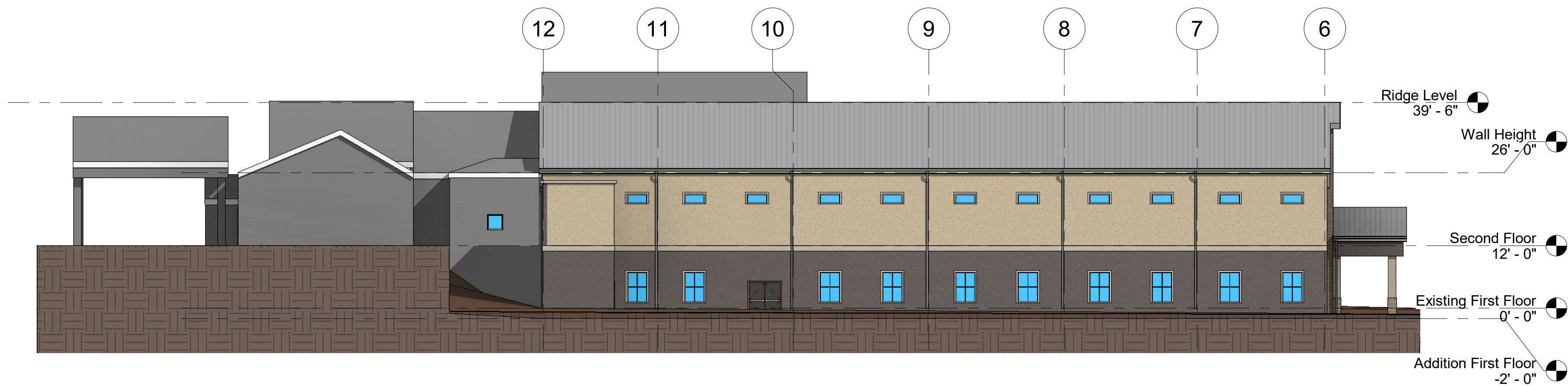
A201

Scale	1/16" = 1'-0"
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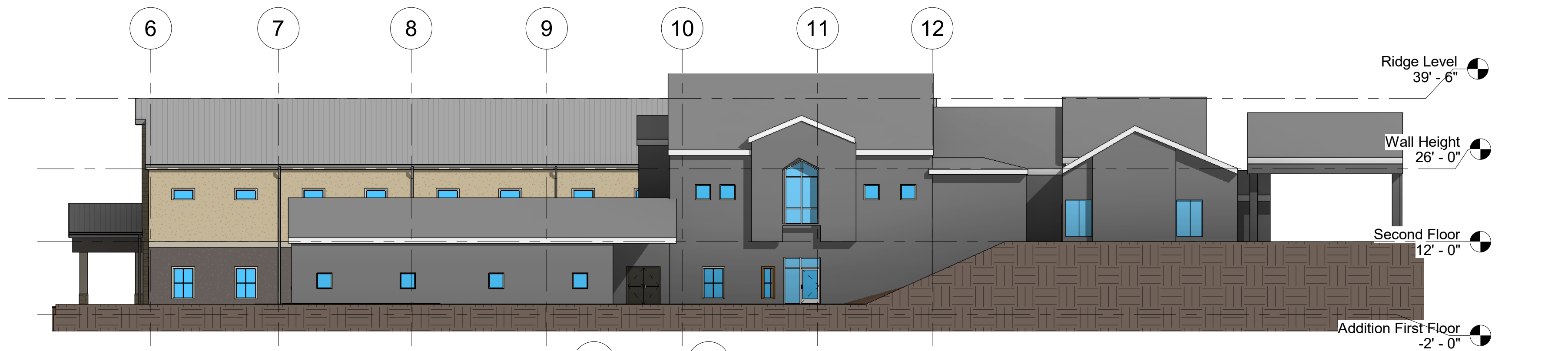
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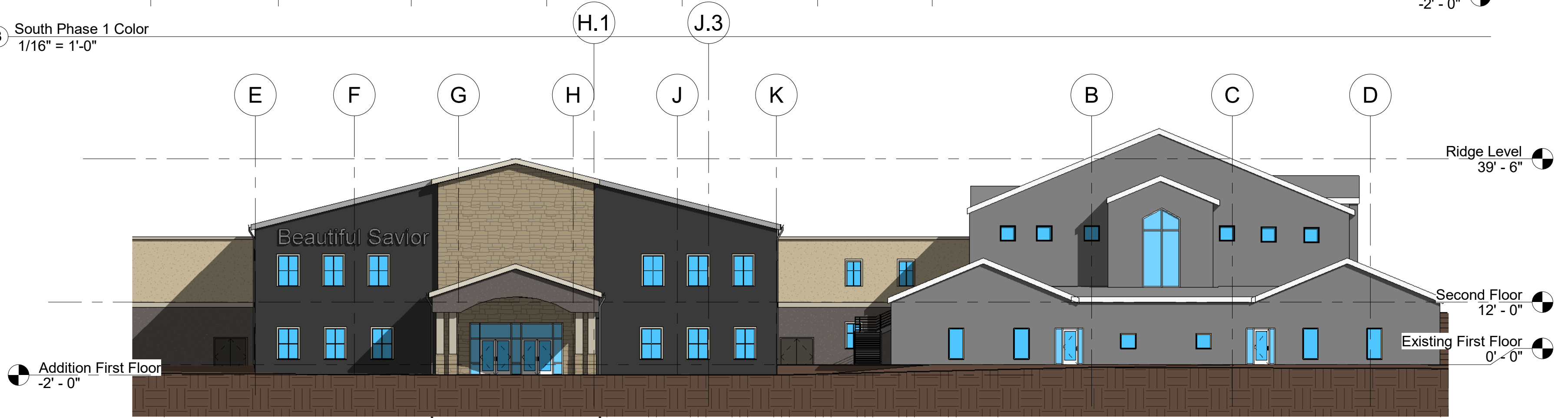
1 East Phase 1 Color
1/16" = 1'-0"



2 North Phase 1 Color
1/16" = 1'-0"



3 South Phase 1 Color
1/16" = 1'-0"



4 West Phase 1 Color
1/16" = 1'-0"

Composite Standards Building Design Category 'C'

West Elevation (Primary Façade)

Material	Square footage	Percentage of Total
Dryvit Outsulation	0	0%
Brick	2012	57%
Stone	1200	34%
Arch. Wall Panels	0	0%
Transparent Glass	288	9%

Total Square footage = 3508

East Elevation

Material	Square footage	Percentage of Total
Dryvit Outsulation	3612	87%
Brick	0	0%
Stone	0	0%
Arch. Wall Panels	528	13%
Transparent Glass	0	0%

Total Square footage = 4140

South Elevation

Material	Square footage	Percentage of Total
Dryvit Outsulation	3468	89%
Brick	0	0%
Stone	0	0%
Arch. Wall Panels	0	0%
Transparent Glass	432	11%

Total Square footage = 3900

North Elevation

Material	Square footage	Percentage of Total
Dryvit Outsulation	3896	93%
Brick	0	0%
Stone	0	0%
Arch. Wall Panels	0	0%
Transparent Glass	304	7%

Total Square footage = 4200

Façade Expressions

- A**
Wall offsets, variations in height, and variations in roof forms have been employed for this section
- B**
Pitched roof elements have been employed for this section
- C**
Change in materials and canopies have been employed for this section
- D**
13% Transparent Glass is provided. A waiver is requested for this requirement.
- E**
Entry elements and architectural details have been employed for this section
- F**
First floor height is 14'
- G**
Canopies and a courtyard have been employed for this section
- H**
Building materials on the Primary Façade (West) are 100% Category 1 Materials, which exceeds the minimum requirement
- I**
Building materials on the (South) Secondary Façade are 100% Category 1 Materials. This exceeds the minimum requirement. Building materials on the (North and East) Secondary Facades over 80% Category 1 Materials, which meets the minimum requirement.
- J**
The portion of the building within 50' of a residential district is no more than 35' in height
- K**
There are no OH doors as part of this project

(We are noting to use the "Dryvit Outsulation Plus MD E.I.F.S. System" as a Category 1 Material. This has previously been approved for the Harvest Bible Church at 159th & Ridgeview in that category)

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BUILDING ADDITION FOR
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13145 S BLACKBOB

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No.	Description	Date
Revision Schedule		

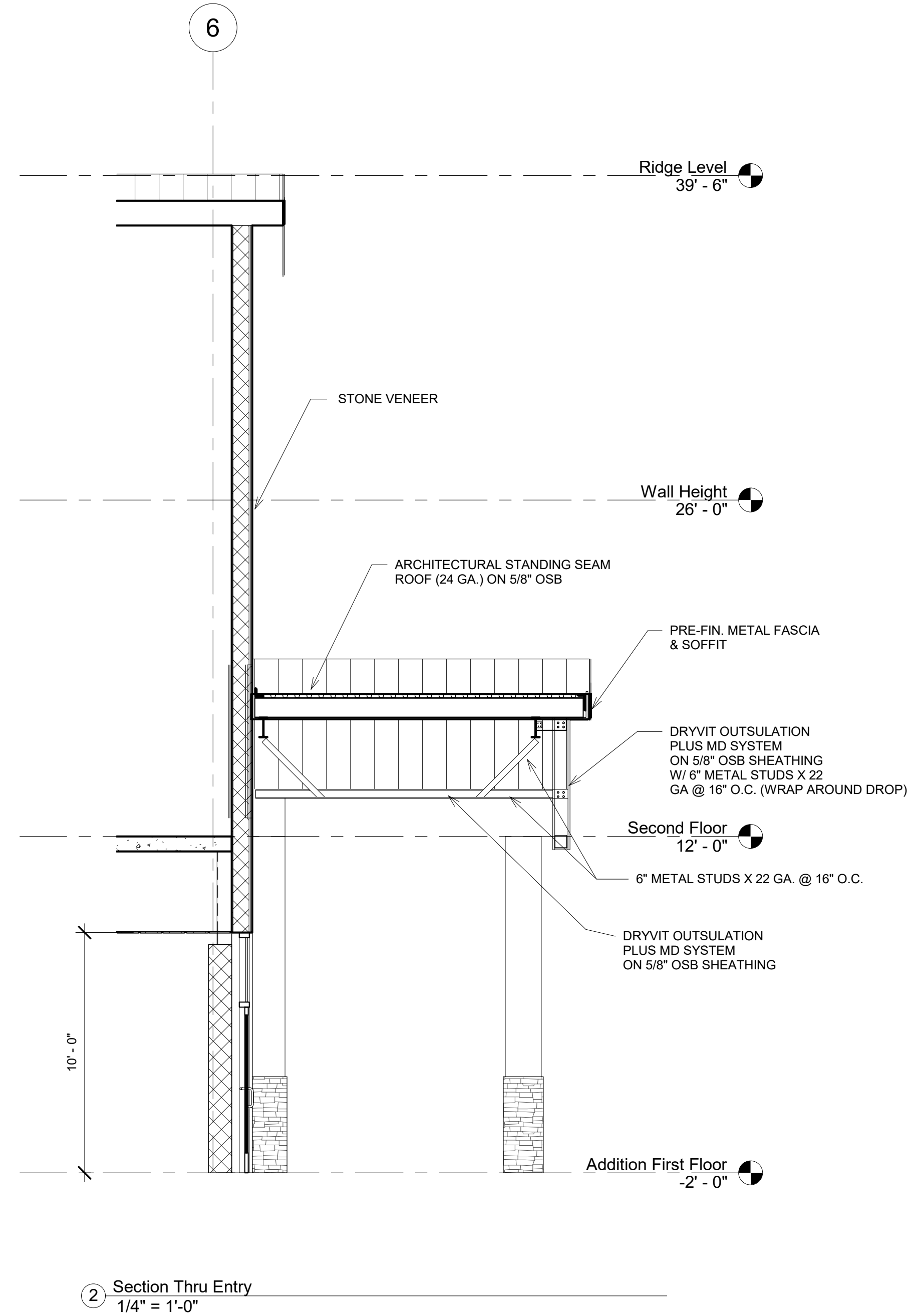
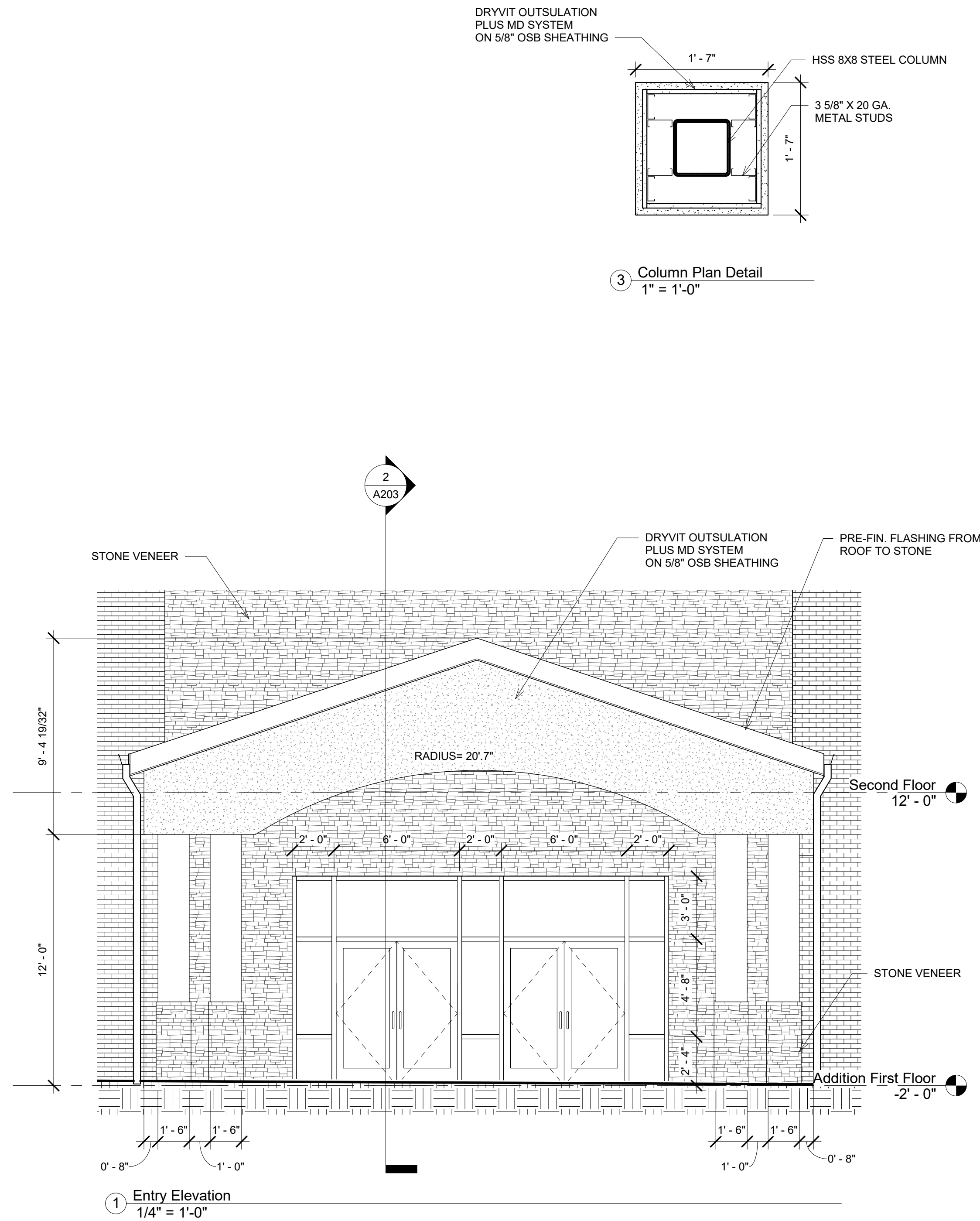
Colored
Elevations

Project number	2090
Date	01/15/2020

A202

Scale	As indicated
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2/14/2020 12:57:17 PM



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13145 S BLACKBOB

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No.	Description	Date
Revision Schedule		

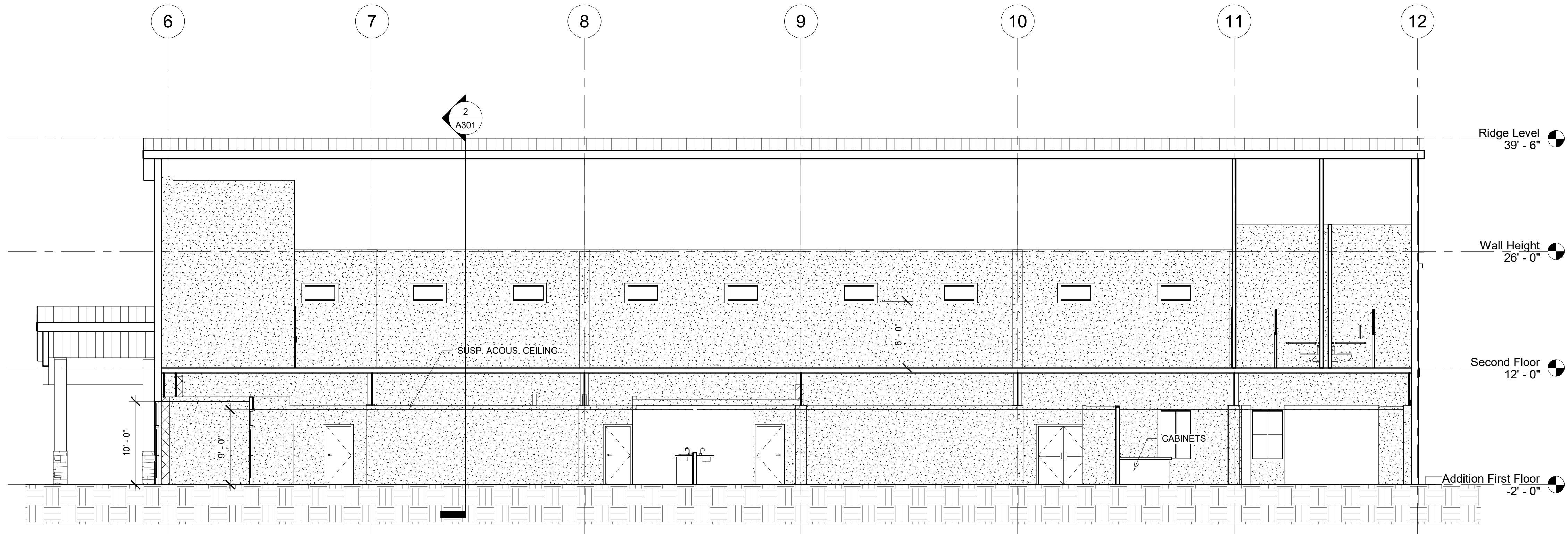
**Large Scale
Elevations**

Project number 2090
Date 01/15/2020

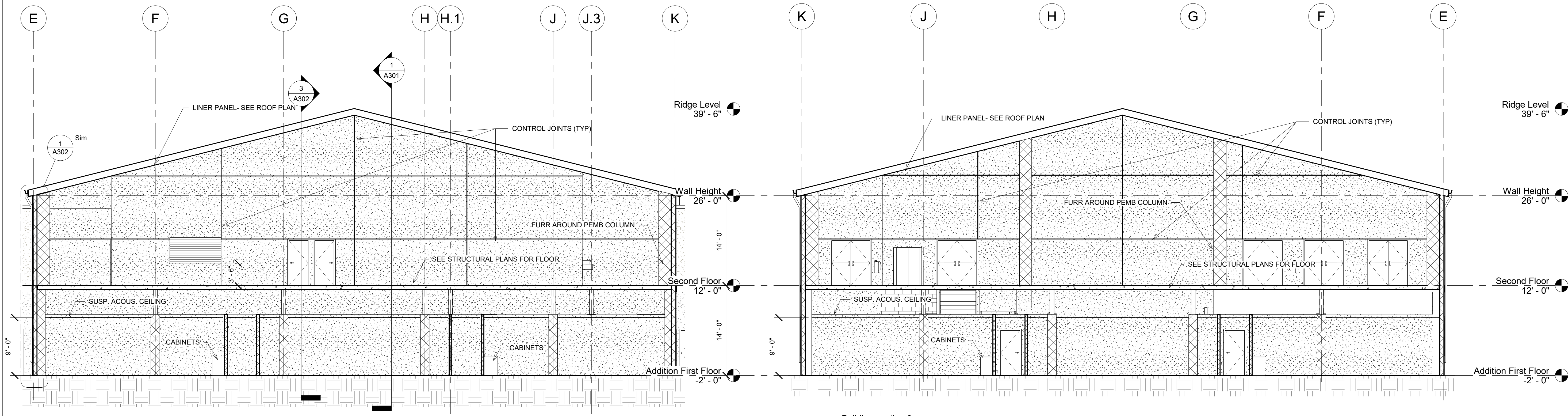
A203

Scale As indicated

2/14/2020 12:57:16 PM



① Building Section 1
1/8" = 1'-0"



③ Building Section 2
1/8" = 1'-0"

② Building section 3
1/8" = 1'-0"

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No.	Description	Date
Revision Schedule		

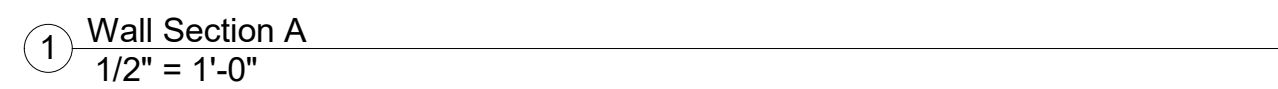
**Building
Sections**

Project number 2090
Date 01/15/2020

A301

Scale 1/8" = 1'-0"

2/14/2020 12:57:25 PM



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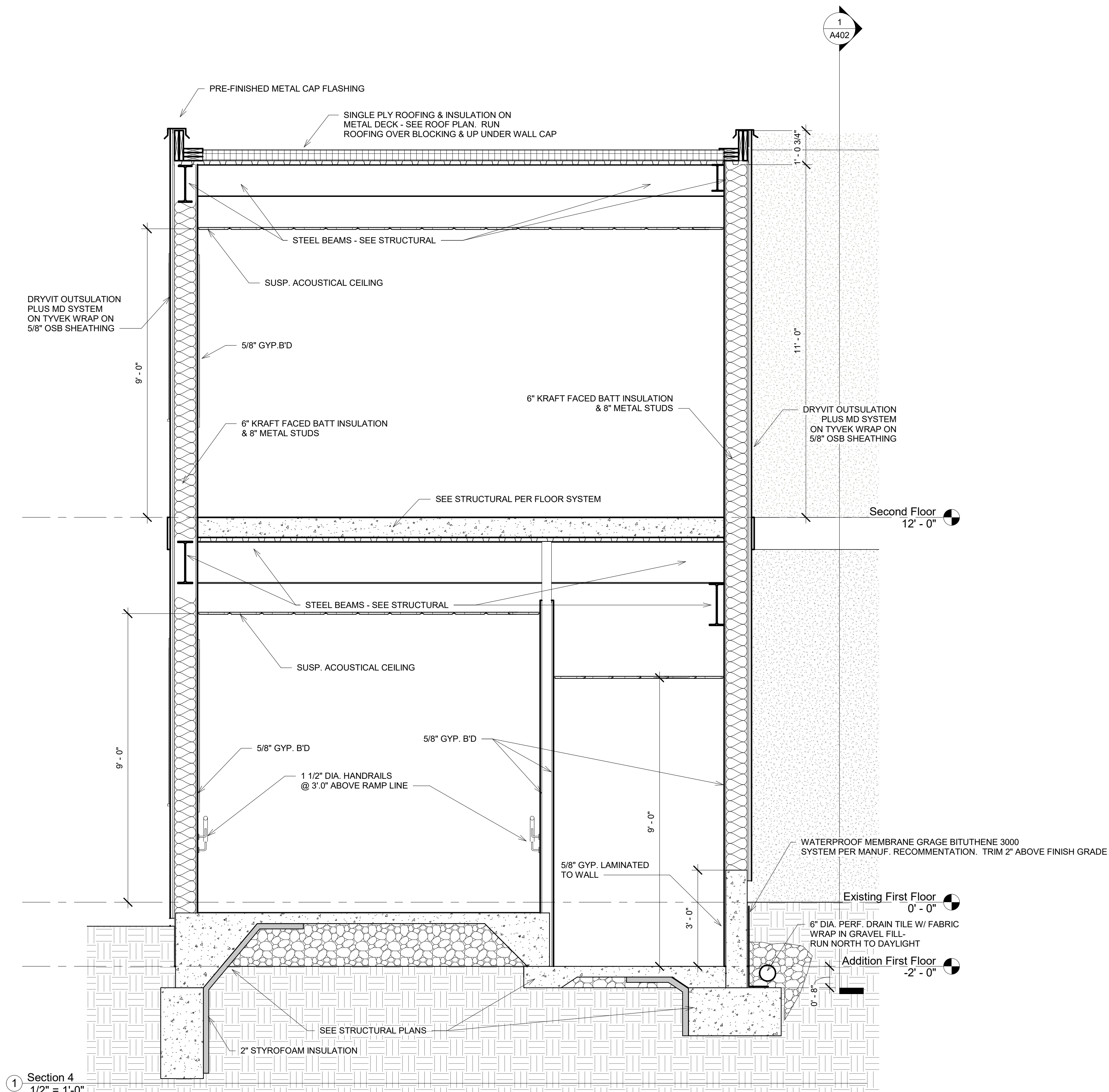
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Wall Sections

A302

Scale $1/2" = 1'-0"$

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No.	Description	Date
Revision Schedule		

Wall Sections

Project number 2090
Date 01/15/2020

A303

Scale 1/2" = 1'-0"

2/14/2020 12:57:27 PM



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No.	Description	Date
Revision Schedule		

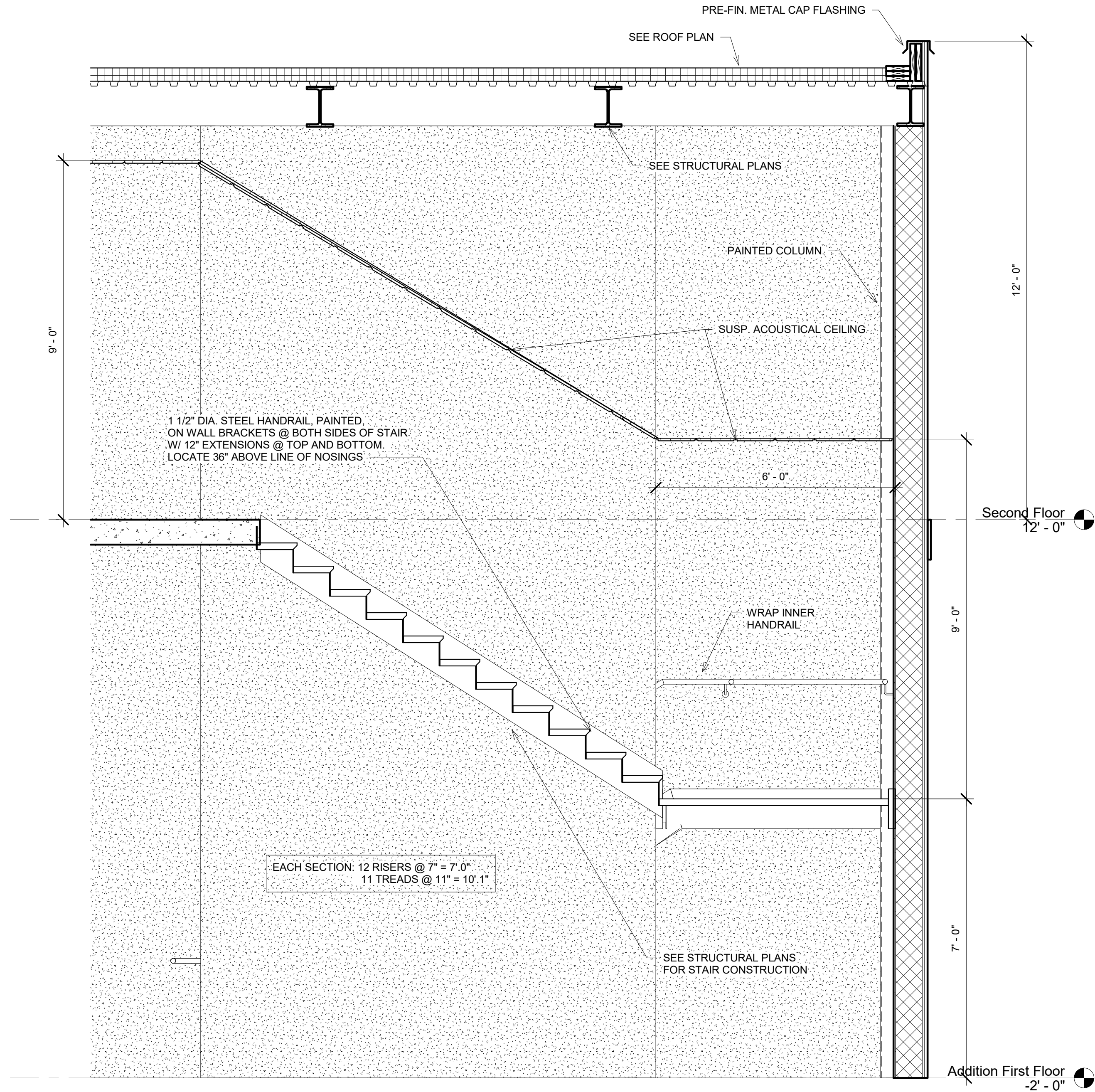
Stair Sections

Project number	2090
Date	01/15/2020

A401

Scale $1/2" = 1'-0"$

2/14/2020 12:57:39 PM



1 Stair Section 3
1/2" = 1'-0"

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No.	Description	Date
Revision Schedule		

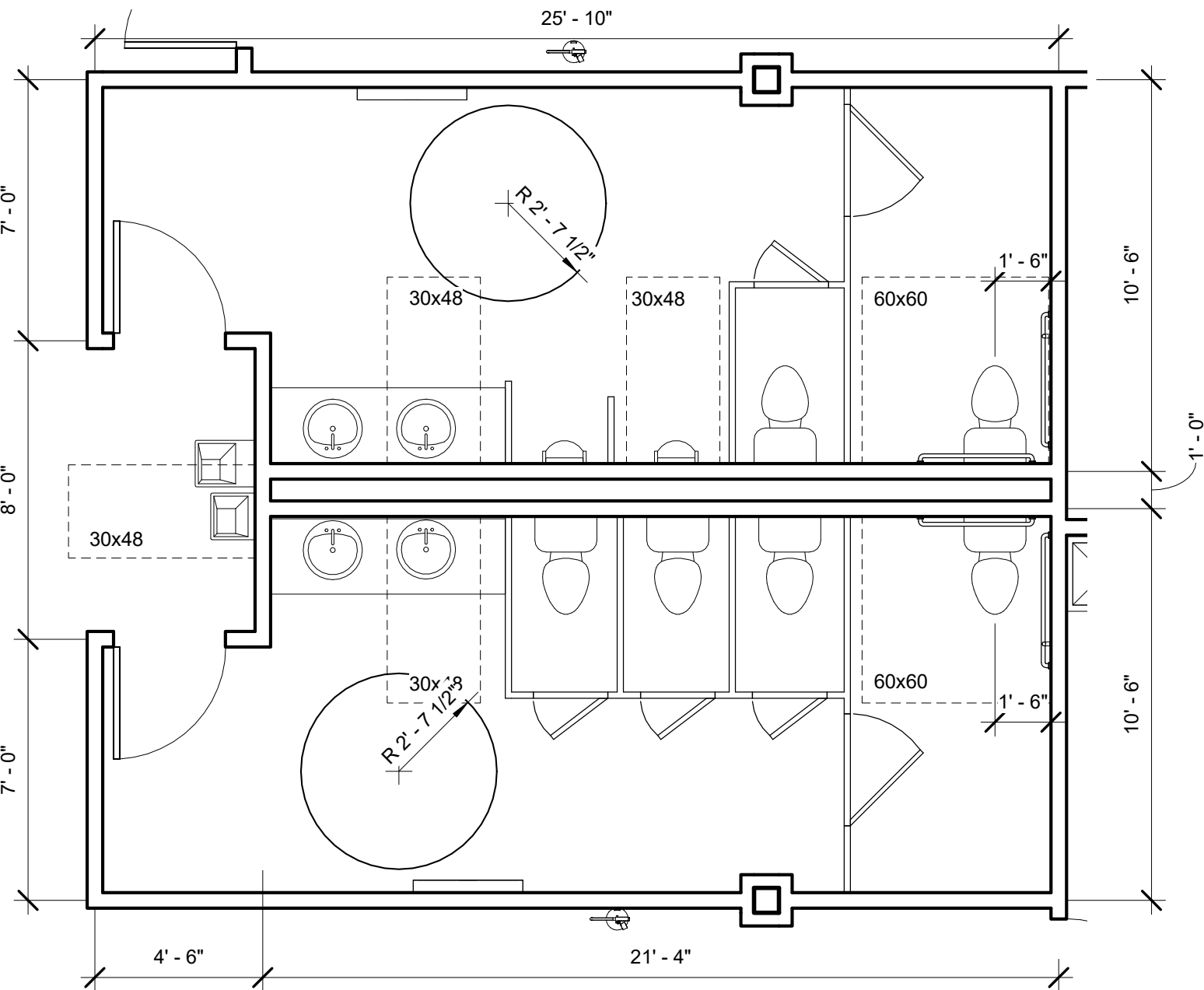
Stair Sections

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Date	01/15/2020

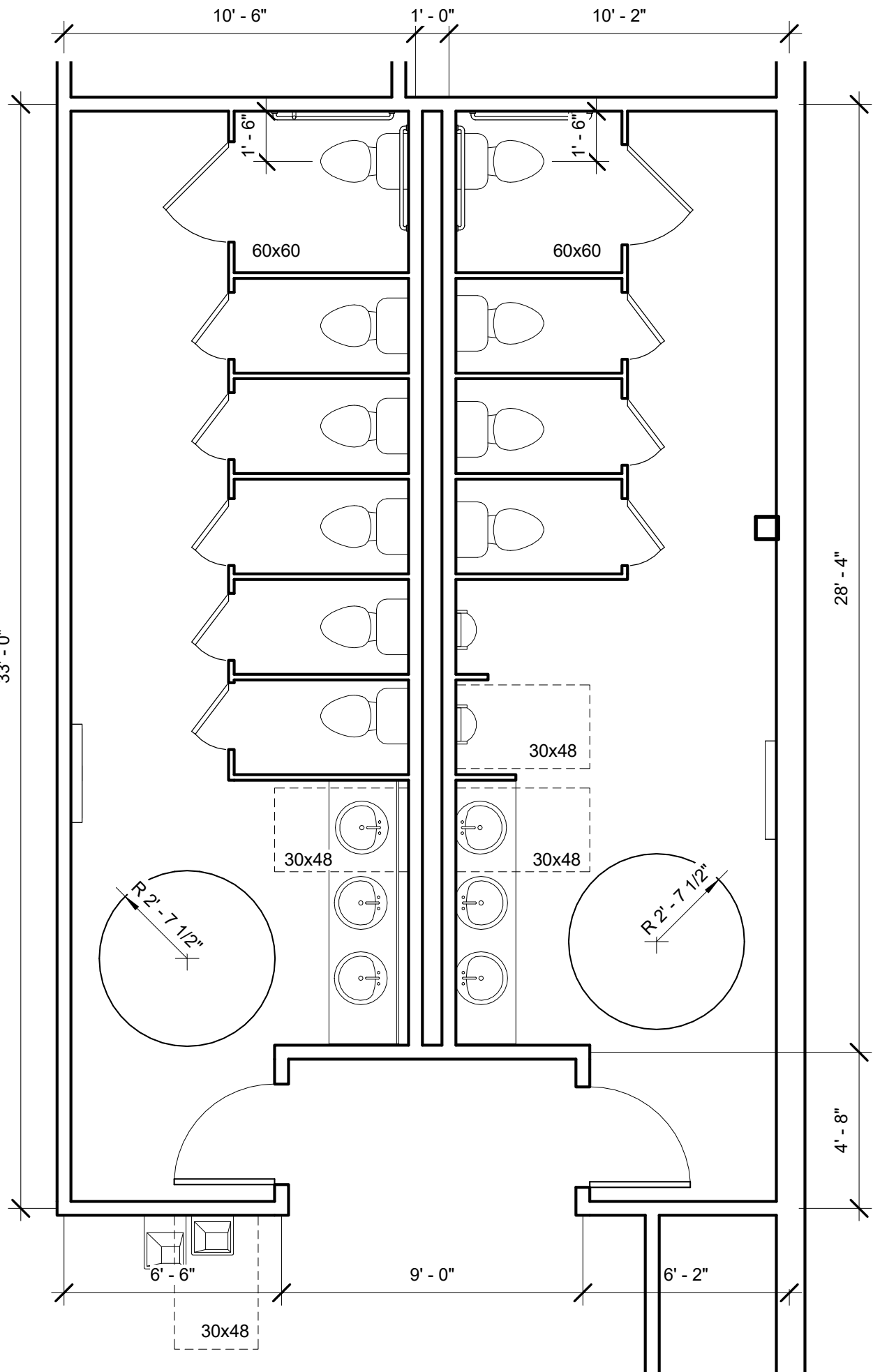
A402

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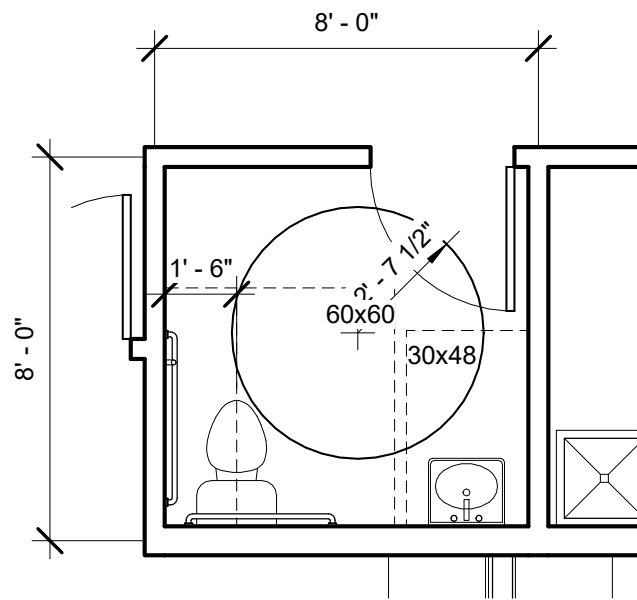
2/14/2020 12:57:42 PM



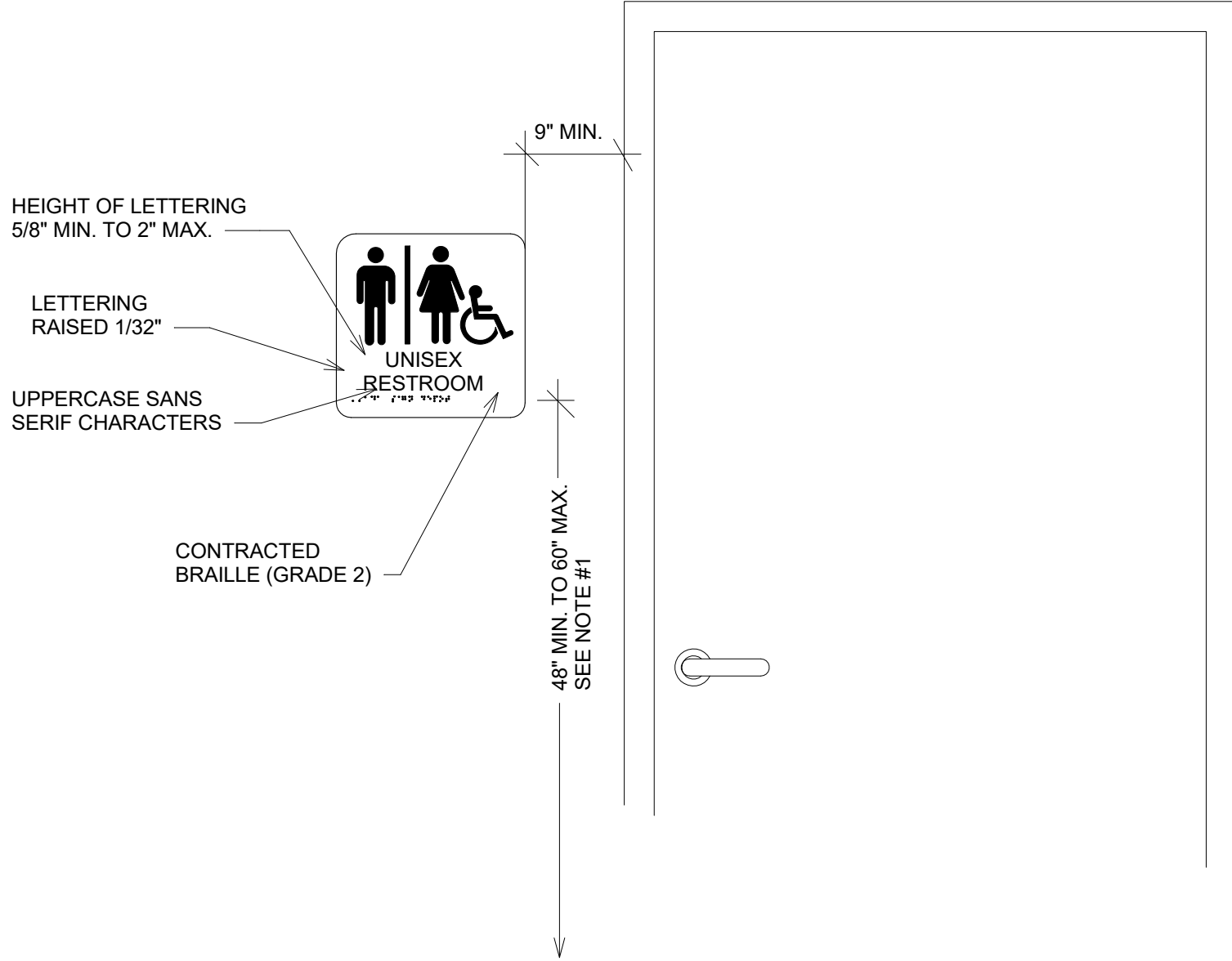
2 ADA Toilet Detail 1
1/4" = 1'-0"



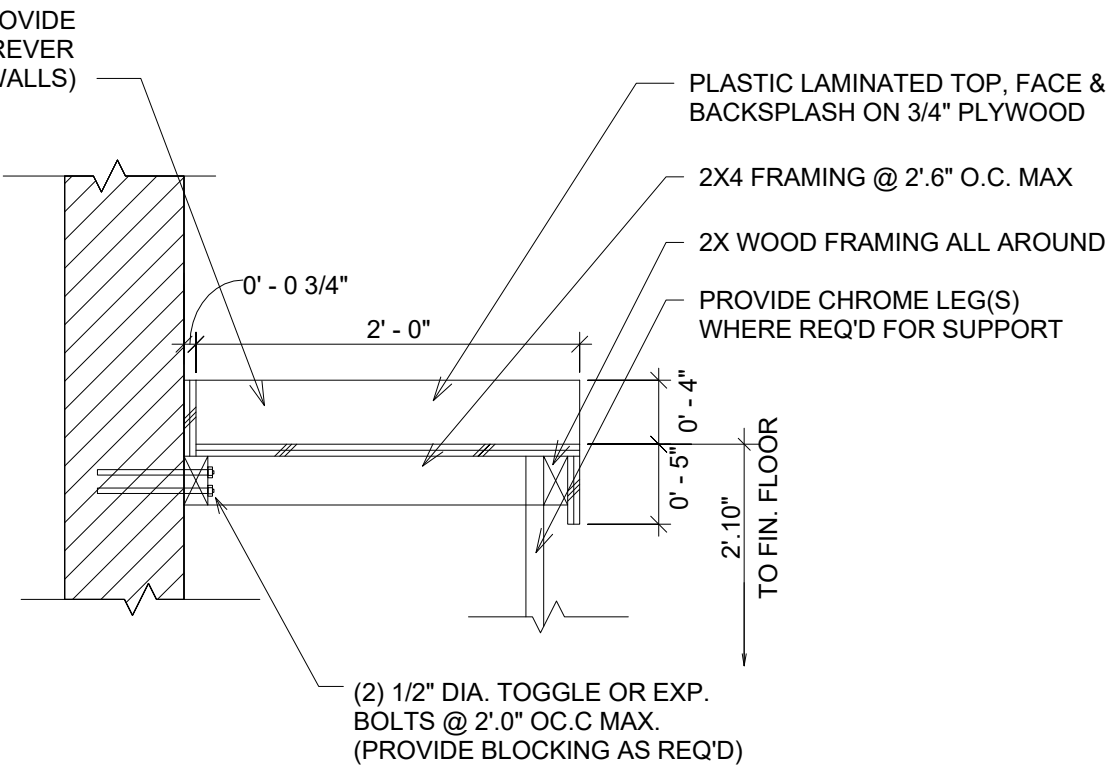
5 ADA Toilet Detail 4
1/4" = 1'-0"



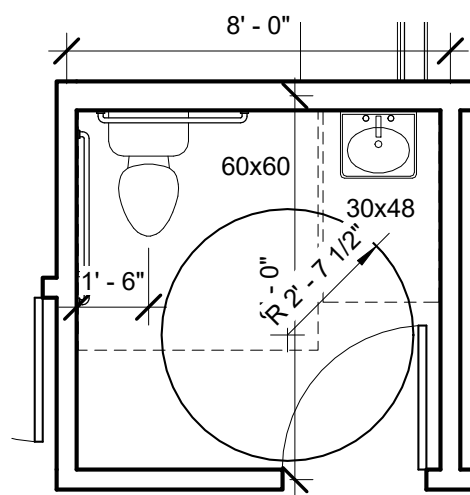
3 ADA Toilet Detail 2
1/4" = 1'-0"



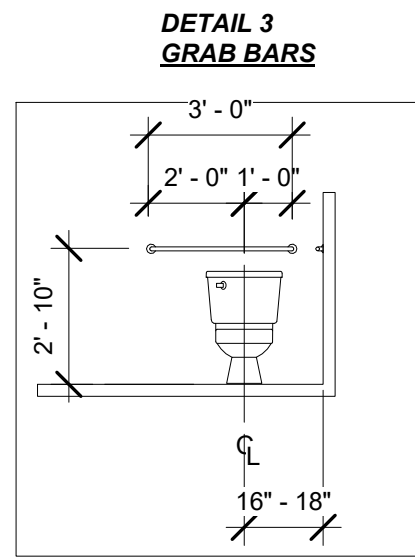
8 Unisex Handicapped toilet door detail
1/32" = 1'-0"



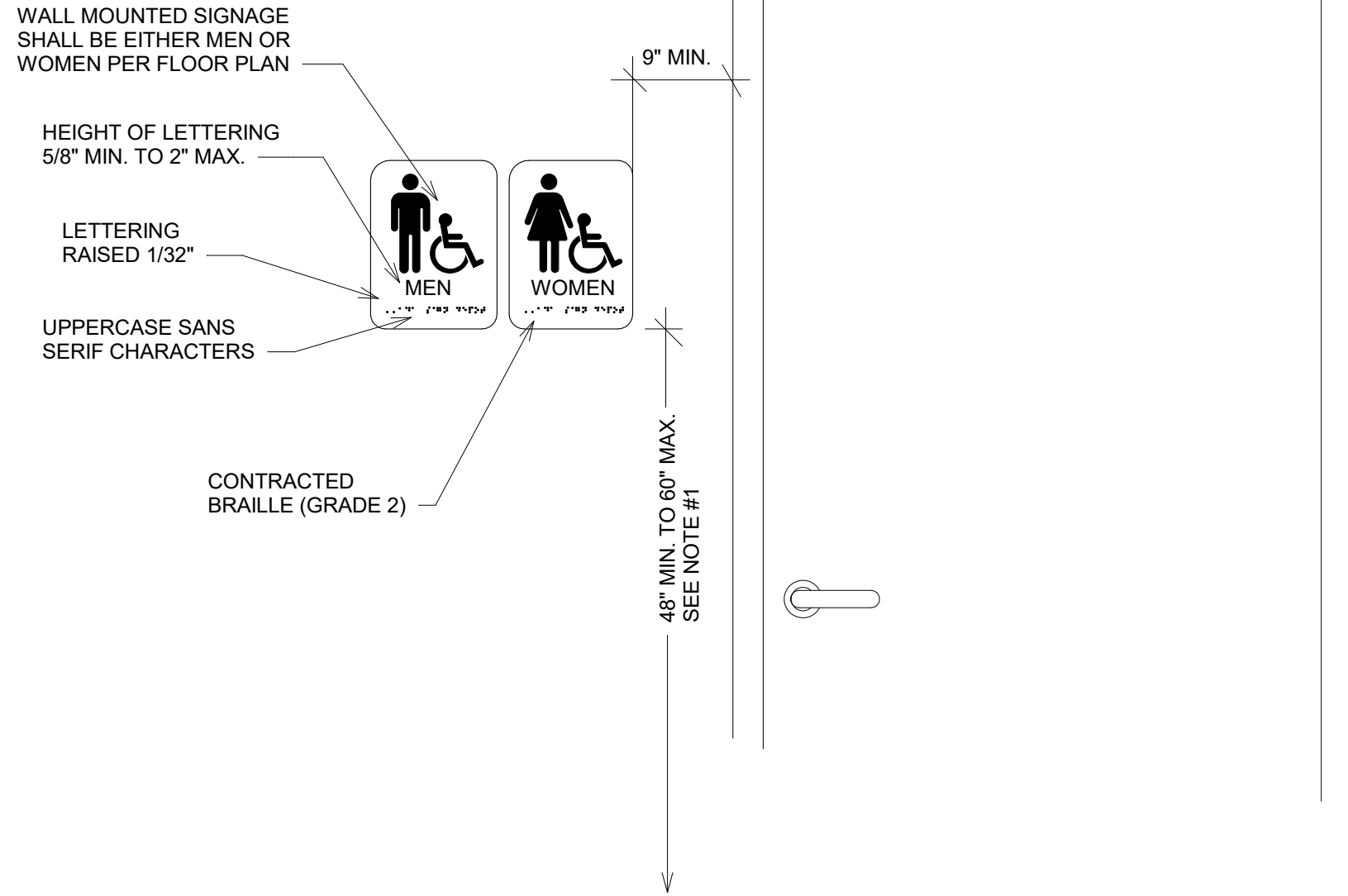
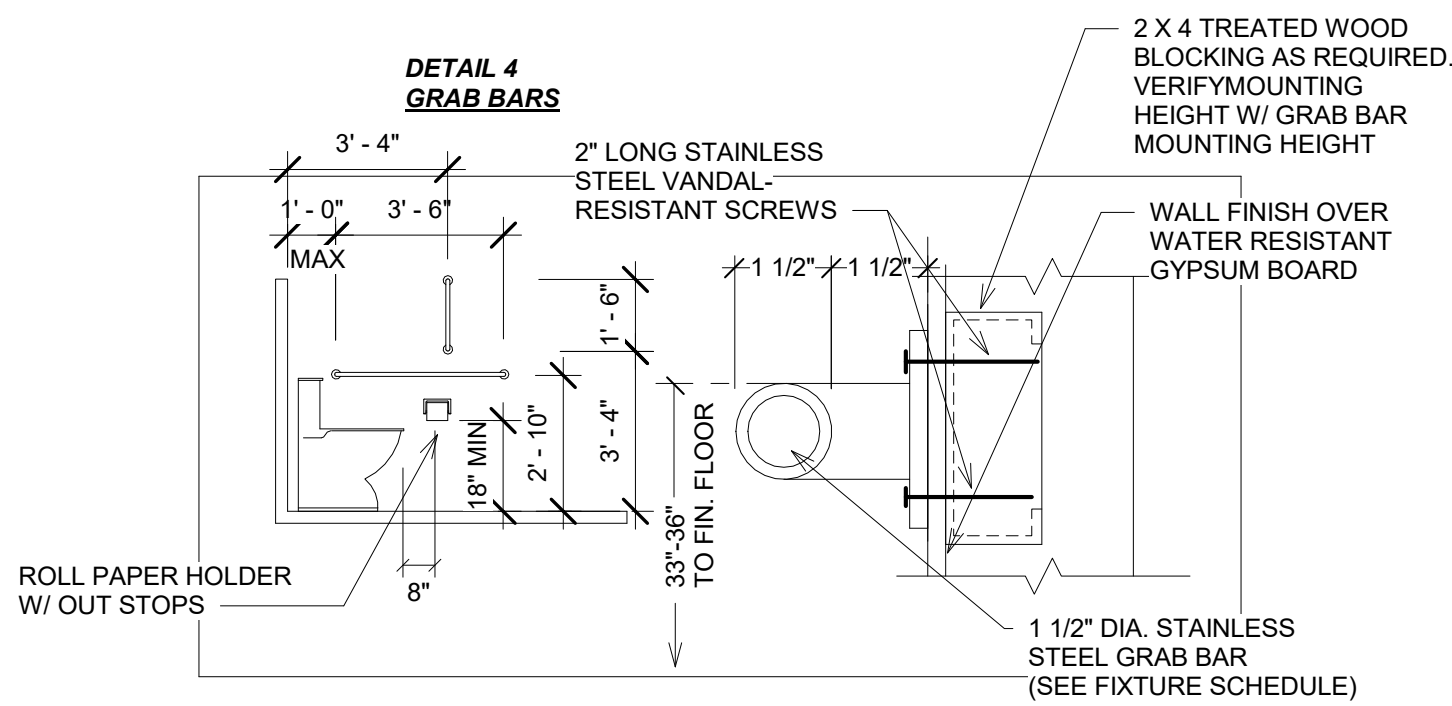
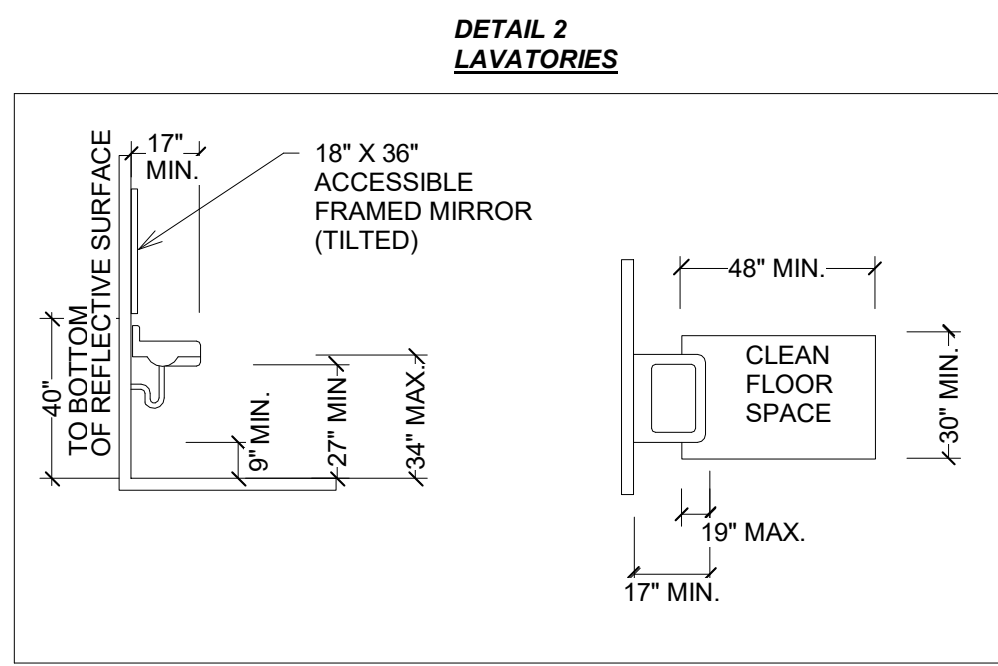
9 Vanity Detail
1" = 1'-0"



4 ADA Toilet Detail 3
1/4" = 1'-0"



6 ADA Toilet Details
1/4" = 1'-0"



7 Handicapped toilet door detail
1/32" = 1'-0"

Toilet Accessories Schedule						
Number	Name	Grab Bar Set	Mirror (30x48)	Paper Tower Dispenser	Wall Mounted Soap Dispenser	Toilet Paper Dispenser
201	Women	1	1	2	2	6
202	Men	1	1	2	2	4
105	Men	1	1	2	2	2
106	Women	1	1	2	2	4
107	Women	1	1	1	1	1
126	Men	1	1	1	1	1
Grand total: 6		6	6	10	10	18

1. MATERIALS LISTED ABOVE SHALL BE BY BOBRICK, BRADLEY CORP., OR APPROVED EQUAL.
2. ACCESSORIES SHALL BE AS FOLLOWS:
 - a. SURFACE MOUNTED TOILET PAPER HOLDER: B-686
 - b. SURFACE MOUNTED PAPER TOWER HOLDER: B-262
 - c. MIRROR: CHROME EDGED MIRROR.
 - d. WALL MOUNTED SOAP DISPENSER: B-11

<u>SANITARY FACILITIES</u>		ICC/ANSI A117.1-2009
1.	GENERAL -PROVIDE SUFFICIENT SPACE IN THE BATHROOM FOR A WHEELCHAIR MEASURING 30" WIDE X 48" LONG TO ENTER THE ROOM AND PERMIT THE DOOR TO CLOSE. THERE SHALL BE ROOM FOR A 60" DIA. TURNING CIRCLE AS SHOWN ON PLAN. THE WATER CLOSET SHALL BE LOCATED IN A SPACE WHICH PROVIDES A 60" WIDE CLEAR SPACE FROM A FIXTURE OR A WALL AT ONE SIDE AND 60" OF CLEAR SPACE IN FRONT OF THE WATER CLOSET.	
2.	DOORS -SANITARY FACILITY DOORS SHALL HAVE AN AUTOMATIC CLOSING DEVICE & BE 3'-0" WIDE	
3.	GRAB BARS - GRAB BARS SHALL BE AS PER DETAIL 3 & 4 AND SHALL BE CAPABLE OF CARRYING 250 LBS PER FT.	
4.	LAVATORY - LAVATORY HEIGHTS AND CLEARANCES SHALL COMPLY WITH DETAIL 2. INSULATE HOT WATER AND DRAIN PIPES UNDER LAVATORIES. NO SHARP OR ABRASIVE SURFACES ARE ALLOWED UNDER LAVATORIES. FAUCET CONTROLS AND OPERATING MECHANISMS ARE REQUIRED TO BE OPERABLE WITH ONE HAND AND CAN NOT REQUIRE GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS IS NOT TO EXCEED 5 LB. LEVER-OPERATED, PUSH-TYPE, AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.	
5.	ACCESSORIES - IF MIRRORS, PAPER TOWEL, SANITARY NAPKIN, WASTE RECEPTACLES AND SIMILAR DISPENSING AND DISPOSAL FIXTURES ARE PROVIDED, AT LEAST ONE OF EACH TYPE IS TO BE LOCATED WITH BOTTOM MAX. 40 INCHES ABOVE THE FLOOR.	
6.	FINISHES - FLOOR FINISH SHALL BE VCT WITH 6" RUBBER COVE BASE. WALL FINISHES WILL BE EPOXY PAINT	
7.	URINAL - IF PROVIDED, URINAL LIP SHALL BE MAX. 17" ABOVE FLOOR WITH A CLEAR SPACE OF 30" WIDE X 48" IN FRONT OF URINAL.	

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BEAUTIFUL SAVIOR LUTHERAN CHURCH

13145 S BLACKBOB

BUILDING ADDITION FOR

J. Jeffrey Schroeder, Ks. License 2878
Herman Scharhag Co., Architects, Cert. of Authority A-9

No.	Description	Date
Revision Schedule		

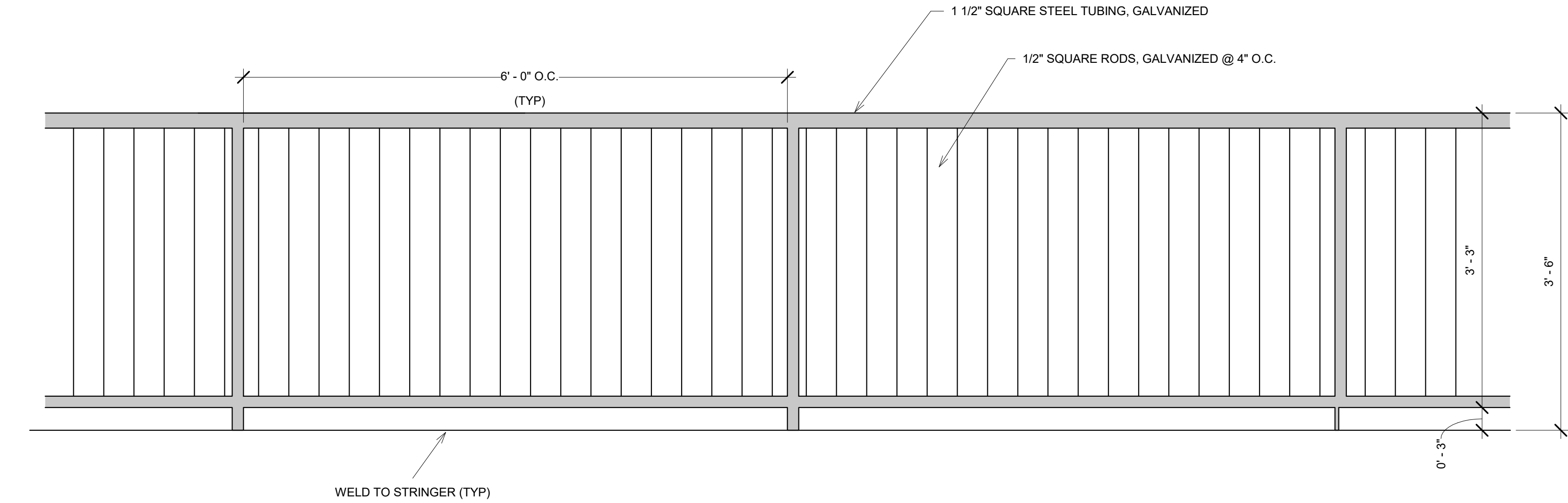
ADA Toilet
Details

Project number 2090
Date 01/15/2020

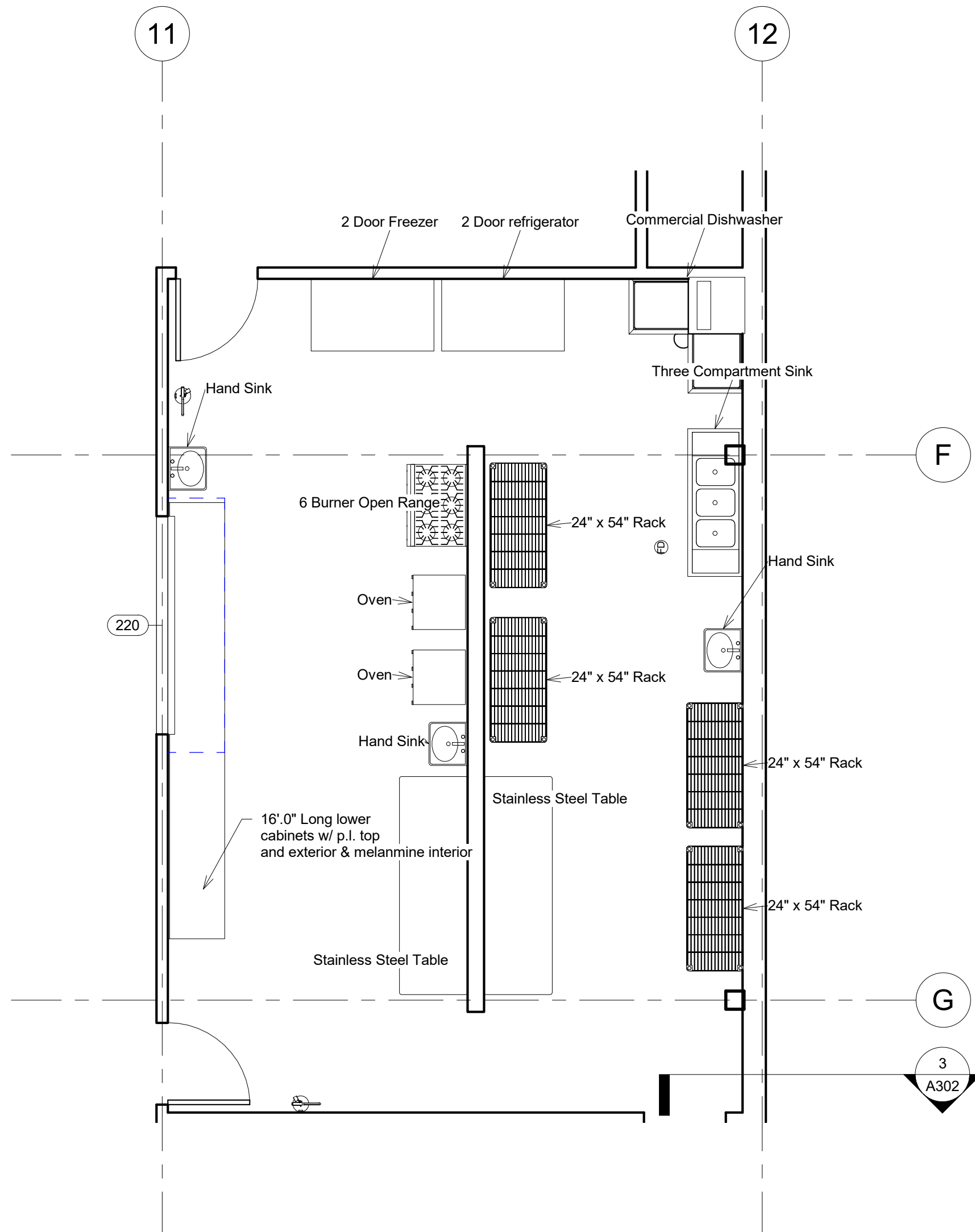
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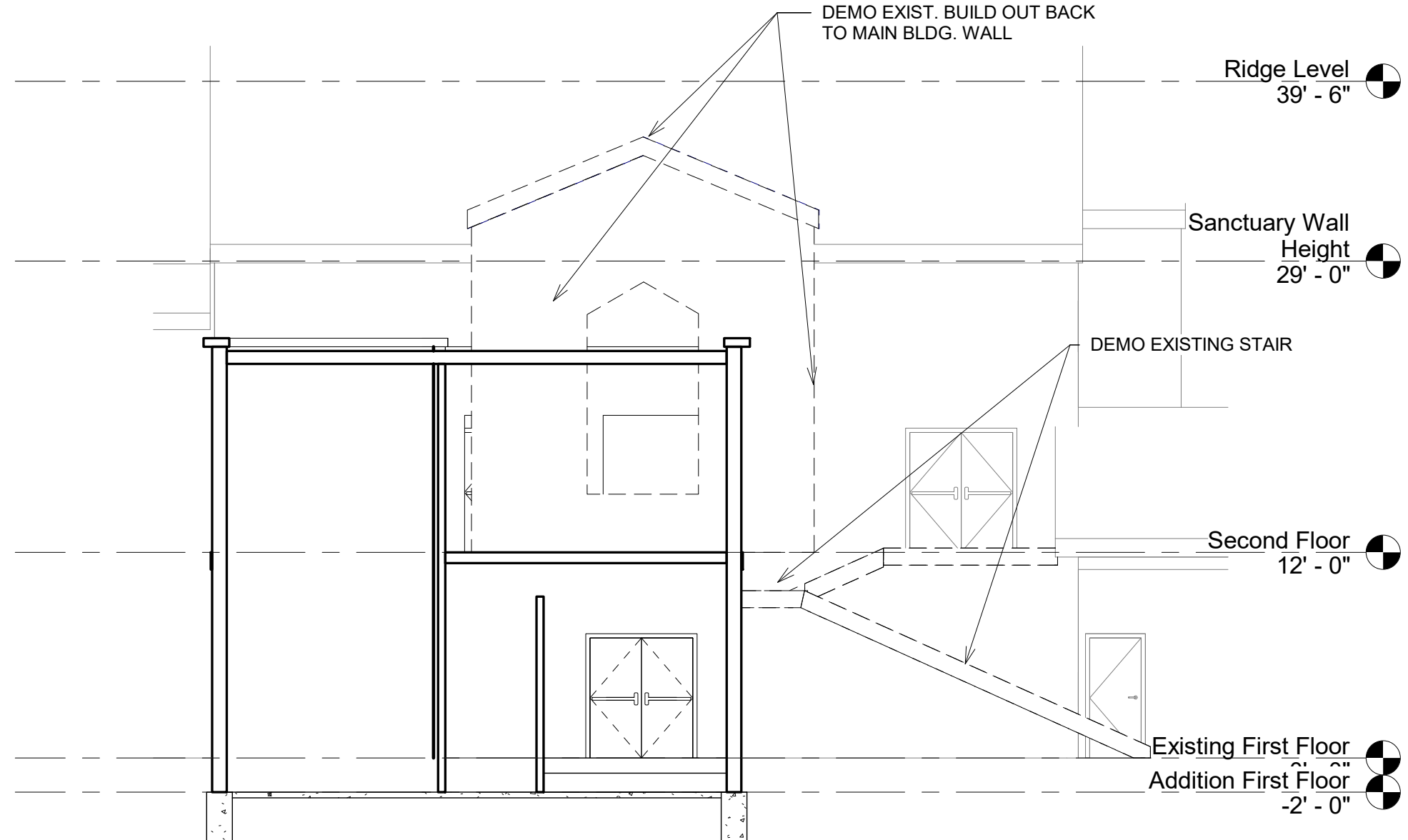
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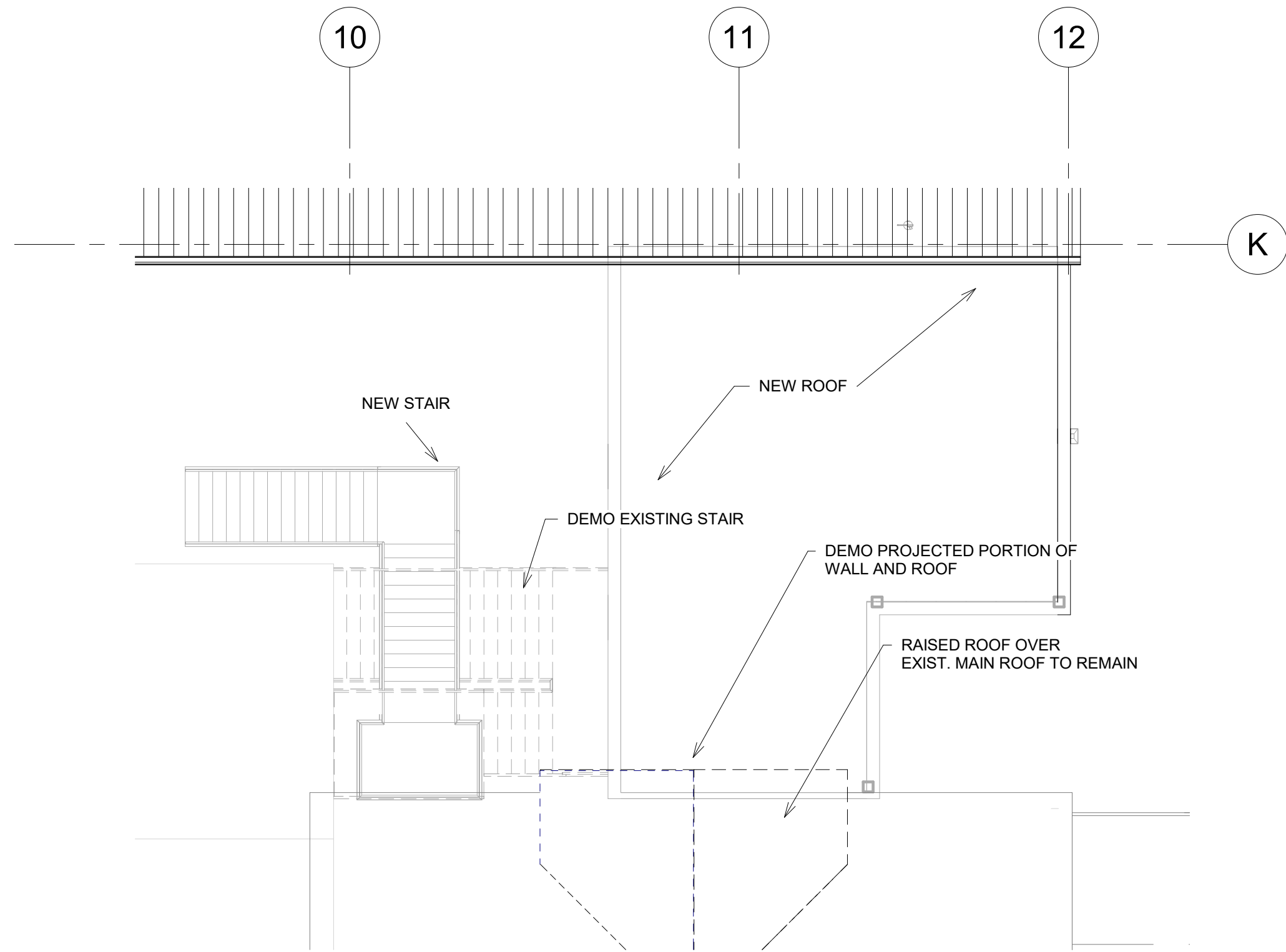
1 Outside Stair Guardrail Detail
1" = 1'-0"



3 Kitchen Plan
1/4" = 1'-0"



4 Demo Elevation
1/8" = 1'-0"



2 Roof Plan - Callout 1
1/8" = 1'-0"

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BUILDING ADDITION FOR
BEAUTIFUL SAVIOR LUTHERAN CHURCH
13145 S BLACKBOB

J. Jeffrey Schroeder, Ks. License 2878
Herman Scharhag Co., Architects, Cert. of Authority A-9

No.	Description	Date
Revision Schedule		

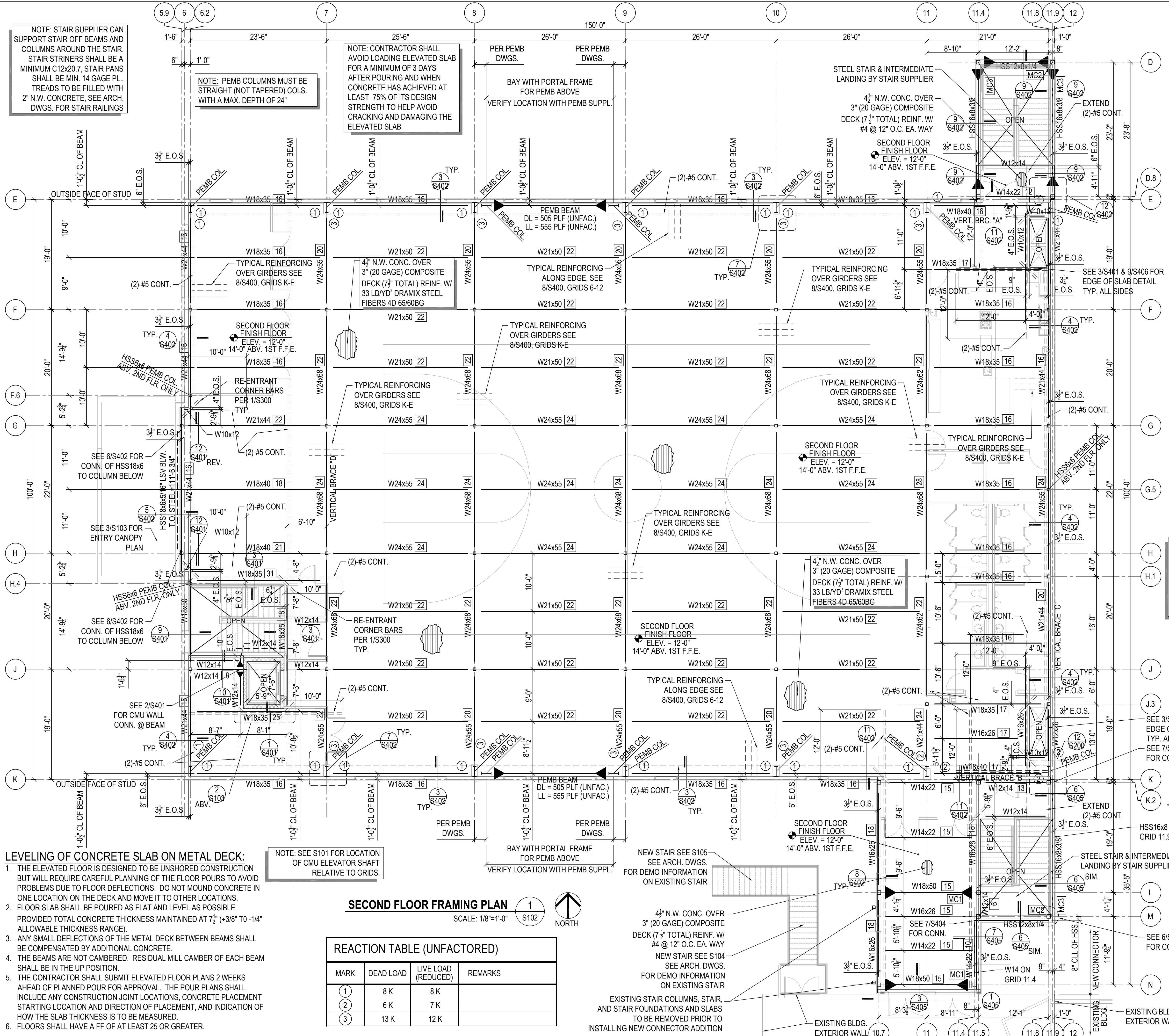
Details

Project number	2090
Date	01/15/2020

A404

Scale	As indicated
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NOTE: STAIR SUPPLIER CAN SUPPORT STAIR OFF BEAMS AND COLUMNS AROUND THE STAIR. STAIR STRINGERS SHALL BE A MINIMUM C12x20.7, STAIR PANS SHALL BE MIN. 14 GAGE PL. TREADS TO BE FILLED WITH 2" N.W. CONCRETE, SEE ARCH. DWGS. FOR STAIR RAILINGS

NOTE: PEMB COLUMNS MUST BE STRAIGHT (NOT TAPERED) COLS. WITH A MAX. DEPTH OF 24"

NOTE: CONTRACTOR SHALL AVOID LOADING ELEVATED SLAB FOR A MINIMUM OF 3 DAYS AFTER POURING AND WHEN CONCRETE HAS ACHIEVED AT LEAST 75% OF ITS DESIGN STRENGTH TO HELP AVOID CRACKING AND DAMAGING THE ELEVATED SLAB

- LEVELING OF CONCRETE SLAB ON METAL DECK:**
1. THE ELEVATED FLOOR IS DESIGNED TO BE UNSHORED CONSTRUCTION BUT WILL REQUIRE CAREFUL PLANNING OF THE FLOOR POURS TO AVOID PROBLEMS DUE TO FLOOR DEFLECTIONS. DO NOT MOUND CONCRETE IN ONE LOCATION ON THE DECK AND MOVE IT TO OTHER LOCATIONS.
 2. FLOOR SLAB SHALL BE POURED AS FLAT AND LEVEL AS POSSIBLE PROVIDED TOTAL CONCRETE THICKNESS MAINTAINED AT 7 3/4" (-3/8" TO -1/4" ALLOWABLE THICKNESS RANGE).
 3. ANY SMALL DEFLECTIONS OF THE METAL DECK BETWEEN BEAMS SHALL BE COMPENSATED BY ADDITIONAL CONCRETE.
 4. THE BEAMS ARE NOT CAMBERED. RESIDUAL MILL CAMBER OF EACH BEAM SHALL BE IN THE UP POSITION.
 5. THE CONTRACTOR SHALL SUBMIT ELEVATED FLOOR PLANS 2 WEEKS AHEAD OF PLANNED POUR FOR APPROVAL. THE POUR PLANS SHALL INCLUDE ANY CONSTRUCTION JOINT LOCATIONS, CONCRETE PLACEMENT STARTING LOCATION AND DIRECTION OF PLACEMENT, AND INDICATION OF HOW THE SLAB THICKNESS IS TO BE MEASURED.
 6. FLOORS SHALL HAVE A FF OF AT LEAST 25 OR GREATER.

SECOND FLOOR FRAMING PLAN

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

REACTION TABLE (UNFACTORED)			
MARK	DEAD LOAD	LIVE LOAD (REDUCED)	REMARKS
①	8 K	8 K	
②	6 K	7 K	
③	13 K	12 K	

4 1/2" N.W. CONC. OVER 3" (20 GAGE) COMPOSITE DECK (7 3/4" TOTAL) REINF. W/ #4 @ 12" O.C. EA. WAY

NEW STAIR SEE S105 SEE ARCH. DWGS. FOR DEMO INFORMATION ON EXISTING STAIR

NEW STAIR SEE S104 SEE ARCH. DWGS. FOR DEMO INFORMATION ON EXISTING STAIR

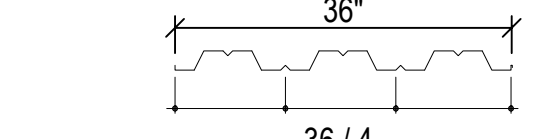
EXISTING STAIR COLUMNS, STAIR, AND STAIR FOUNDATIONS AND SLABS TO BE REMOVED PRIOR TO INSTALLING NEW CONNECTOR ADDITION

FLOOR FRAMING PLAN NOTES:

1. SEE SHEETS S001 AND S002 FOR STRUCTURAL GENERAL NOTES.
2. FINISH FLOOR ELEVATION AT THE SECOND FLOOR IS 12'-0" U.N.O. ON THE PLANS.
3. SECOND FLOOR DECK SHALL BE 3" COMPOSITE FLOOR DECK (20 GAGE) VUL OR EQUIVALENT W/PRIME PAINTED FINISH ON THE BOTTOM SIDE WITH 4 1/2" NORMAL WEIGHT CONCRETE ON METAL DECK (7 3/4" TOTAL THICKNESS) U.N.O.. FLOOR SLAB REINFORCING SHALL BE 33 POUND PER CUBIC YARD OF DRAMIX FIBERS 4D 65/60BG MIXED UNIFORMLY IN THE CONCRETE MIX PER DRAMIX BEST PRACTICES U.N.O. CONTACT BEKAERT CORPORATION FOR INFORMATION. ADDITIONAL REINFORCING IS SHOWN ON THE PLANS AND SECTIONS OVER GIRDERS AND THE PERIMETER OF SLAB. REINFORCING SHALL BE CHAIRED WITH SLAB BOLSTERS 1" BELOW TOP OF SLAB U.N.O..
4. SEE S700 FOR RE-ENTRANT CORNER DETAIL AT ALL ELEVATED SLAB RE-ENTRANT CORNERS.
5. E.O.S. = OUTSIDE EDGE OF SLAB POUR STOP ANGLE.
6. FLOOR DECK SHALL BE ERECTED WITH A MINIMUM OF 3 SPANS PER SHEET U.N.O..
7. ERECTOR SHALL INSTALL AND PROVIDE SUFFICIENT TEMPORARY BRACING TO STABILIZE THE BUILDING DURING ERECTION PER AISC CODE OF STANDARD PRACTICE.
8. THE EDGE ANGLE IS REQUIRED TO BE CONTINUOUS AND SHALL BE SPLICED BY A FULL-PENETRATION BUTT WELD OR SPLICE PLATE PER DETAILS.
9. SEE S1500 FOR TYPICAL BEAM SHEAR CONNECTIONS U.N.O..
10. SEE S400 FOR ADDITIONAL REINFORCING STEEL IN THE ELEVATED SLABS AROUND COLUMNS AND SLAB OPENINGS.
11. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
12. SHEAR STUDS ARE SHOWN ABOVE OR NEW TO BEAMS THUS:
BEAM SIZE W24x55 [22] NO. OF STUDS
13. SEE SHEET S400 FOR TYPICAL COMPOSITE BEAM SECTIONS.
14. SHEAR STUDS AND THEIR INSTALLATION SHALL MEET THE REQUIREMENTS SPECIFIED IN SECTION 7 OR AWS: 3" DIAMETER x 6" LONG.
15. COORDINATE AND VERIFY EDGE OF SLAB AT STAIR SHAFT WITH STAIR SUPPLIER AND ACCOMMODATE CLEARANCES AS INDICATED ON THE ARCHITECTURAL DRAWINGS.
16. COORDINATE AND VERIFY LOCATION AND SIZE OF ELEVATION SHAFT CHOSEN AND NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT ELEVATOR HAS BEEN CHOSEN FROM THAT SHOWN.
17. ELEVATED SECOND FLOOR SLAB SHALL BE A POLISHED SEALED SLAB, SEE ARCH. DWGS. FOR ANY ADDITIONAL REQUIREMENTS.
18. COORDINATE AND VERIFY ALL DIMENSIONS AND LOCATIONS OF ELEVATOR SHAFT INDICATED THUS "10'-0" * " WITH ELEVATOR SUPPLIER CHOSEN AND ARCHITECT PRIOR TO LAYING OUT OR BUILDING SHAFT.
19. MOMENT CONNECTION ARE INDICATED THUS " [MC1] ", CONNECTION IS ON EACH END OF THE BEAM. SEE SHEET S401 FOR MOMENT CONNECTION DETAILS.
20. FOR OPENINGS IN BRICK WALL AT WINDOWS AND DOORS, SEE S001 FOR STEEL ANGLE SIZE. ALL ANGLES SHALL BE HOT DIP GALVANIZED. SEE ARCH. DRAWINGS FOR SIZE AND LOCATIONS OF OPENINGS.
21. FINISH FLOOR IS A POLISHED CONCRETE FLOOR. SEE ARCHITECTURAL DRAWINGS FOR MORE INFORMATION. ALL SLAB REINFORCEMENT SHALL BE ON SLAB BOLSTERS SO THAT THE REINFORCING HAS A CLEAR COVER TO TOP OF THE SLAB OF 1" & SPACED AT MAX. 3'-0" EA. WAY TYP. THIS 1" CLEAR COVER SHALL BE MAINTAINED THROUGHOUT THE ELEVATED SLAB POUR. CONTRACTOR SHALL TAKE PRECAUTIONS TO LIMIT SLAB SHRINKAGE BY USING A SHRINKAGE COMPENSATING CONCRETE MIX DESIGN AND USING A MOIST CURING WITH ABSORBATIVE COVERS.
22. ALL FLOOR BEAMS SHALL BE INSTALLED WITH NATURAL MIL CAMBER IN THE UP RIGHT POSITION.

FLOOR DECK NOTES:

1. SEE DECK NOTES ON S001.
2. FASTEN DECK PER PATTERNS SPECIFIED AND NOT LESS THAN 6" O.C. AT DECK PERIMETER TO LEDGER ANGLE OR PERIMETER BEAM.



FLOOR DECK SHALL BE 3" VLI (20 GAGE) DECK W/36/4 PATTERN 3/4" PUDDLE WELDS w/ (4) #10 TEK SIDELAP SCREWS AT EQUAL SPACES BETWEEN SUPPORTS

FLOOR DECK ATTACHMENT PATTERN PLAN

N.T.S. S102

NOTE: THE ELEVATED SECOND FLOOR SLAB HAS BEEN DESIGNED TO MINIMIZE ANNOYING AND DISRUPTIVE SECOND FLOOR, FLOOR VIBRATIONS DUE TO ACTIVITIES IN THE GYMNASIUM. THE SECOND FLOOR BEAMS AND SLAB HAVE BEEN DESIGNED TO MINIMIZE FLOOR CRACKING IN THE EXPOSED SECOND FLOOR POLISHED CONCRETE SLAB THROUGH THE USE OF STIFFER BEAMS AND SLAB REINFORCING. THE CONTRACTOR WILL ALSO NEED TO USE SHRINKAGE COMPENSATING CONCRETE AND WET CURING METHODS TO FURTHER HELP TO MINIMIZE CONCRETE SHRINKAGE CRACKING. THESE METHODS WILL HELP TO MINIMIZE EXPOSED CONCRETE FLOOR CRACKING BUT WILL NOT NECESSARILY ELIMINATE ALL CRACKING. THE OWNER SHOULD EXPECT SOME POTENTIAL CRACKING OF THE ELEVATED POLISHED CONCRETE SLAB AND DIFFERENCES IN APPEARANCE OF THE CONCRETE FROM A UNIFORM CREAM FINISH TO AREAS OF EXPOSED AGGREGATE DUE TO FLOOR POLISHING.

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BEAUTIFUL SAVIOR LUTHERAN CHURCH

13145 S BLACKBOB

BUILDING ADDITION FOR

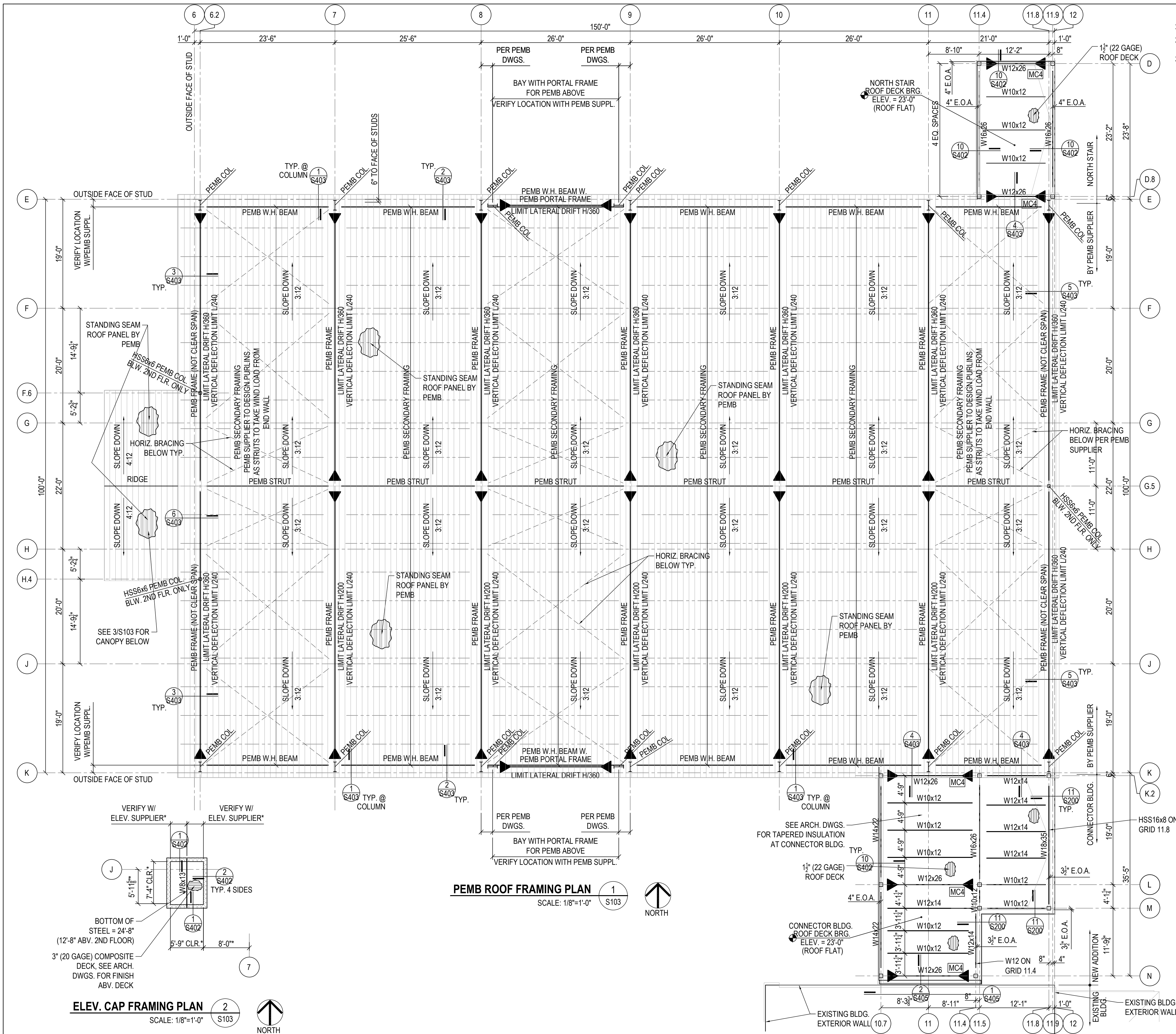
No.	Description	Date
Revision Schedule		

Second Floor Framing Plan

Project number 2090
Date 1/15/2020

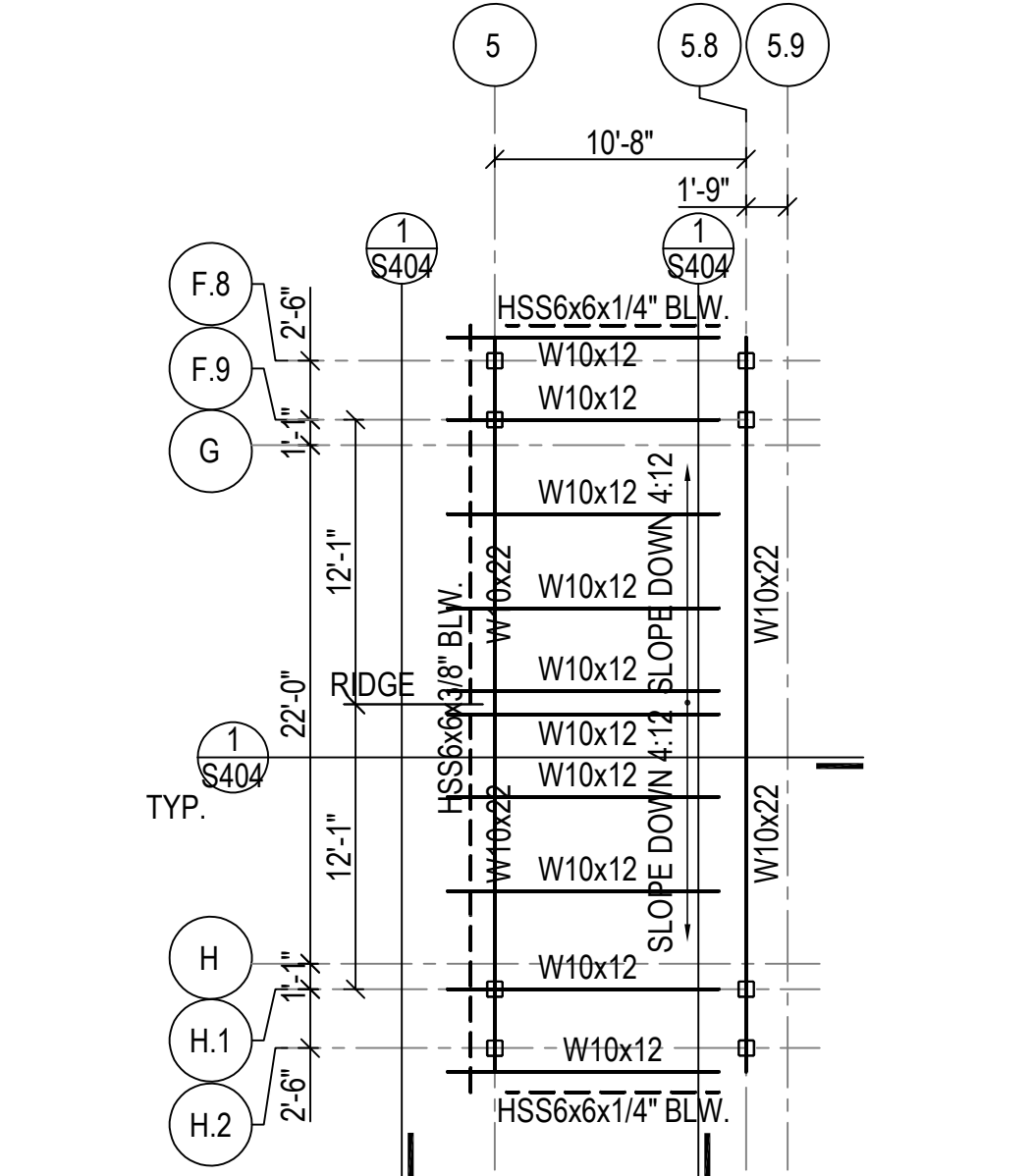
S102

Scale 1/8" = 1'-0"



ROOF FRAMING PLAN NOTES:

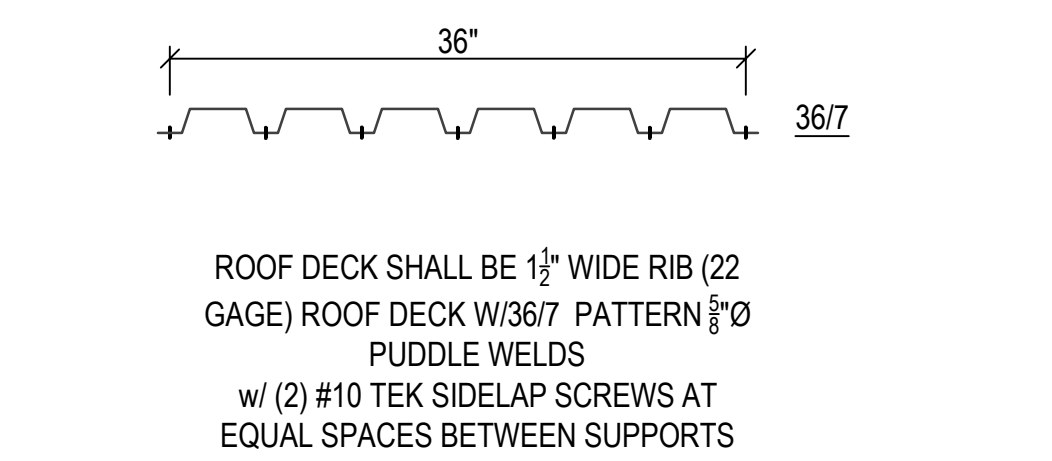
1. PEMB = PRE-ENGINEERED METAL BUILDING SUPPLIER.
2. ALL ROOF FRAMING AND BRACING BY PRE-ENGINEERED METAL BUILDING SUPPLIER.
3. MOMENT CONNECTION ARE INDICATED THUS "MC1". CONNECTION IS ON EACH END OF THE BEAM. SEE SHEET S401 FOR MOMENT CONNECTION DETAILS. MOMENT CONNECTIONS PEMB FRAMES ARE BY THE PEMB SUPPLIER.



ENTRY CANOPY FRAMING PLAN 3
SCALE: 1/8"=1'-0" S103

NORTH STAIR & CONNECTOR BLDG. ROOF DECK NOTES:

1. SEE DECK NOTES ON S001.
2. FASTEN DECK PER PATTERNS SPECIFIED AND NOT LESS THAN 6" O.C. AT DECK PERIMETER TO LEDGER ANGLE OR PERIMETER BEAM.
3. AT MAIN BUILDING SEE PEMB DRAWINGS FOR STANDING SEAM ROOFING AND ATTACHMENT.



ROOF DECK ATTACHMENT 4
SCALE: 1/8"=1'-0" S103

NOTE: PEMB COLUMNS MUST BE STRAIGHT (NOT TAPERED) COLS. WITH A MAX. DEPTH OF 24"

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BEAUTIFUL SAVIOR LUTHERAN CHURCH
13145 S BLACKBOB

BUILDING ADDITION FOR

No.	Description	Date
Revision Schedule		

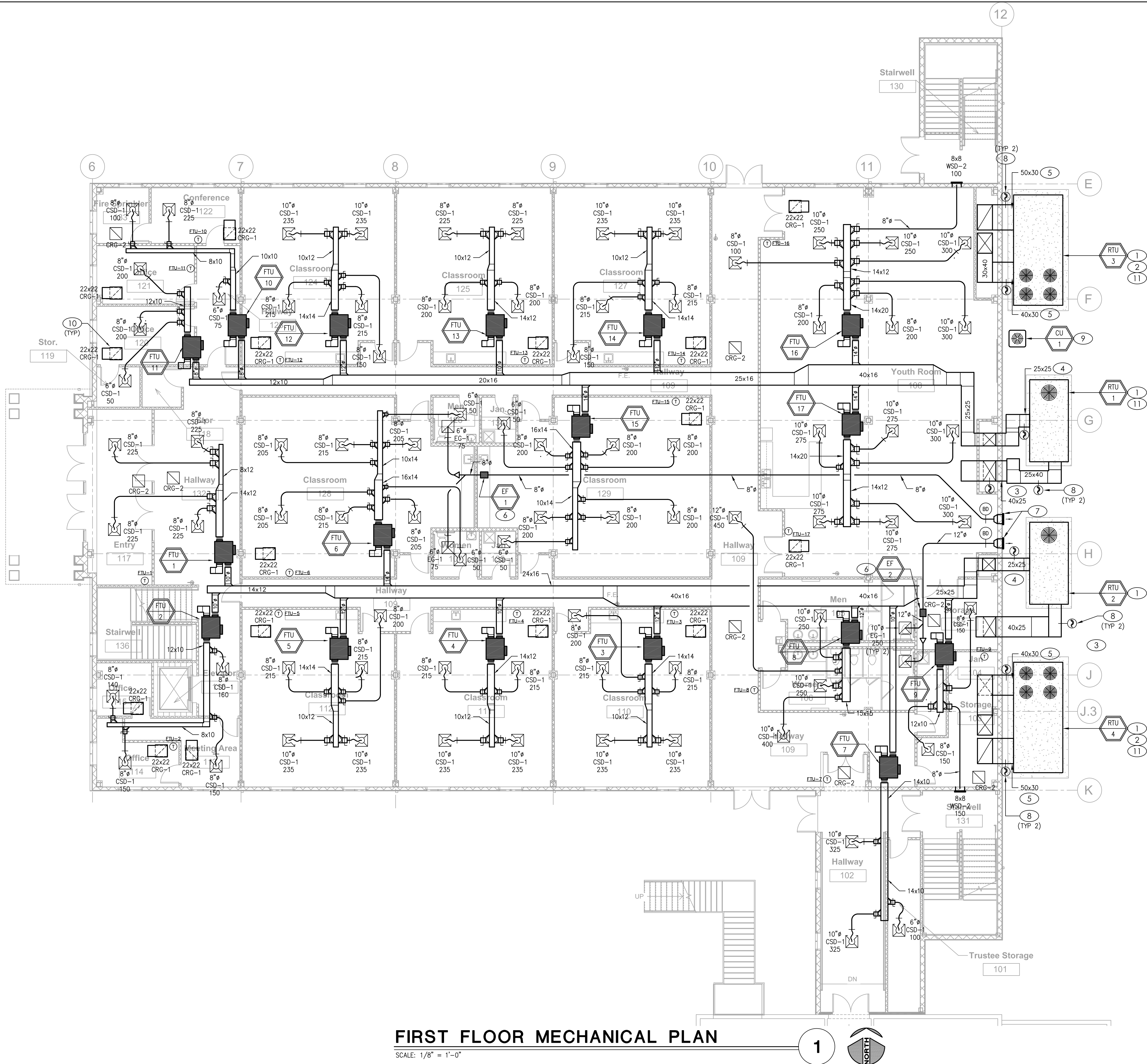
Roof Framing Plan	
Project number	2090
Date	1/15/2020
S103	
Scale	1/8" = 1'-0"

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Scale $1/8" = 1'-0"$



FIRST FLOOR MECHANICAL PLAN

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

GENERAL NOTES

- A. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- B. COORDINATE INSTALLATION OF MECHANICAL SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION AND AVOID CONFLICTS. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC. VERIFY DUCT SPACE AVAILABLE ABOVE ALL CEILINGS PRIOR TO ANY FABRICATION OF INSTALLATION.
- C. NEW MECHANICAL EQUIPMENT, DUCTWORK AND PIPING ARE SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK AND PIPING LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED TO FIT THE DUCTWORK AND PIPING WITHIN THE AVAILABLE SPACE. VERIFY THAT FINAL EQUIPMENT LOCATIONS MEET MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AROUND EQUIPMENT.
- D. OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF.
- E. PROVIDE A PREFABRICATED 45 DEGREE, HIGH EFFICIENCY, RECTANGULAR/ROUND BRANCH DUCT TAKEOFF FITTING WITH MANUAL BALANCING DAMPER AND LOCKING QUADRANT FOR BRANCH DUCT CONNECTIONS AND TAKE-OFFS TO INDIVIDUAL DIFFUSERS AND REGISTERS.
- F. BRANCH DUCTWORK SHALL BE THE SAME SIZE AS NECK SIZE SHOWN UNLESS OTHERWISE NOTED.
- G. REFER TO SPECIFICATIONS FOR DUCTWORK AND PIPING INSULATION REQUIREMENTS. DUCT SIZES ON MECHANICAL PLANS ARE INDICATED CLEAR INSIDE AIRFLOW DIMENSIONS. INCREASE SHEET METAL SIZES ACCORDINGLY TO ACCOUNT FOR THICKNESS OF DUCT LINER.
- H. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- I. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED HVAC EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE HVAC EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

KEYED PLAN NOTES

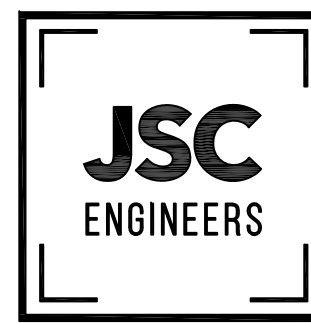
1. GROUND MOUNTED PACKAGED AC UNIT. INSTALL ON CONCRETE EQUIPMENT PAD PROVIDED BY OTHERS.
2. UNDER UNIT PROVIDE 36" TALL INSULATED SUPPLY/RETURN AIR PLENUM CURB. CONNECT SUPPLY AND RETURN AIR DUCTS TO CURB AS REQUIRED.
3. ROUTE 40x25 RETURN DUCT INTO BUILDING THEN UP TO ELEVATION OF PLENUM SPACE. EXTEND 36" INTO PLENUM AND TERMINATE WITH OPEN END. AT EXTERIOR WALL COORDINATE WITH GENERAL CONTRACTOR TO NOTCH STEM WALL FOR DUCT. SEAL WEATHER TIGHT.
4. ROUTE 25x25 SUPPLY DUCT INTO BUILDING THEN UP TO ELEVATION OF PLENUM SPACE. ROUTE DUCT AS SHOWN WITH MAIN TRUNK DOWN CORRIDOR. AT EXTERIOR WALL COORDINATE WITH GENERAL CONTRACTOR TO NOTCH STEM WALL FOR DUCT. SEAL WEATHER TIGHT.
5. ROUTE DUCT FROM UNIT TO INSIDE OF BUILDING THEN UP TO SECOND FLOOR. SEE M102 FOR CONTINUATION. AT EXTERIOR WALL COORDINATE WITH GENERAL CONTRACTOR TO NOTCH STEM WALL FOR DUCT. SEAL WEATHER TIGHT.
6. PROVIDE INLINE EXHAUST FAN AT LOCATION SHOWN. INSTALL BACKDRAFT DAMPER IN DISCHARGE DUCT. TRANSITION DUCTWORK TO FAN AS REQUIRED.
7. PROVIDE 18"x18" LOUVER ON WALL EQUAL TO RUSKIN ELF6375DX WITH MINIMUM 0.91 SQ-FT OF FREE AREA AND INSECT SCREEN. TRANSITION DUCTWORK TO LOUVER AS REQUIRED. PAINT LOUVER COLOR TO MATCH BUILDING. COORDINATE COLOR WITH ARCHITECT. VERIFY DISCHARGE IS A MINIMUM OF 10'-0" FROM RTU OUTSIDE AIR INTAKE.
8. PROVIDE NEMA 4 RATED SMOKE DETECTOR IN RETURN AND SUPPLY AIR DUCTS IN COMPLIANCE WITH NFPA 72. DUCT SMOKE DETECTOR SHALL BE CONNECTED TO THE FIRE ALARM SYSTEM. DUCT SMOKE DETECTORS SHALL BE INTERLOCKED TO SHUT DOWN ALL 'RTU' UNITS UPON DETECTION OF SMOKE.
9. CONDENSING UNIT LEVEL AT GRADE ON PREMANUFACTURED PAD. INSTALL PER MANUFACTURER'S INSTRUCTIONS MAINTAINING RECOMMENDED SERVICE CLEARANCES. ROUTE REFRIGERANT LINES THROUGH WALL 18" AFG. WEATHER SEAL REFRIGERANT LINE PENETRATIONS OF BUILDING. PROVIDE ALL RECOMMENDED VALVES, FILTERS, FITTINGS, ETC. AND MAKE ALL NECESSARY CONNECTIONS TO CASED COILS AT FURNACE. SIZE, ROUTE AND SLOPE REFRIGERANT LINES PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
10. PROVIDE RETURN BOOT OR FLEXBOOT PER SCHEDULE WITH 16"Ø DUCT. TYPICAL ALL RETURNS WITH THIS SYMBOL.
11. SUPPORT VERTICAL DUCTS IN BUILDING WITH STEEL ANGLES OR CHANNEL SECURED TO THE SIDES OF THE DUCT WITH WELDS, BOLTS, SHEET METAL SCREWS, OR BLIND RIVETS. SUPPORT AT EACH FLOOR AND AT A MAXIMUM INTERVALS OF 16 FEET.

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BUILDING ADDITION FOR
**BEAUTIFUL SAVIOR
LUTHERAN CHURCH**

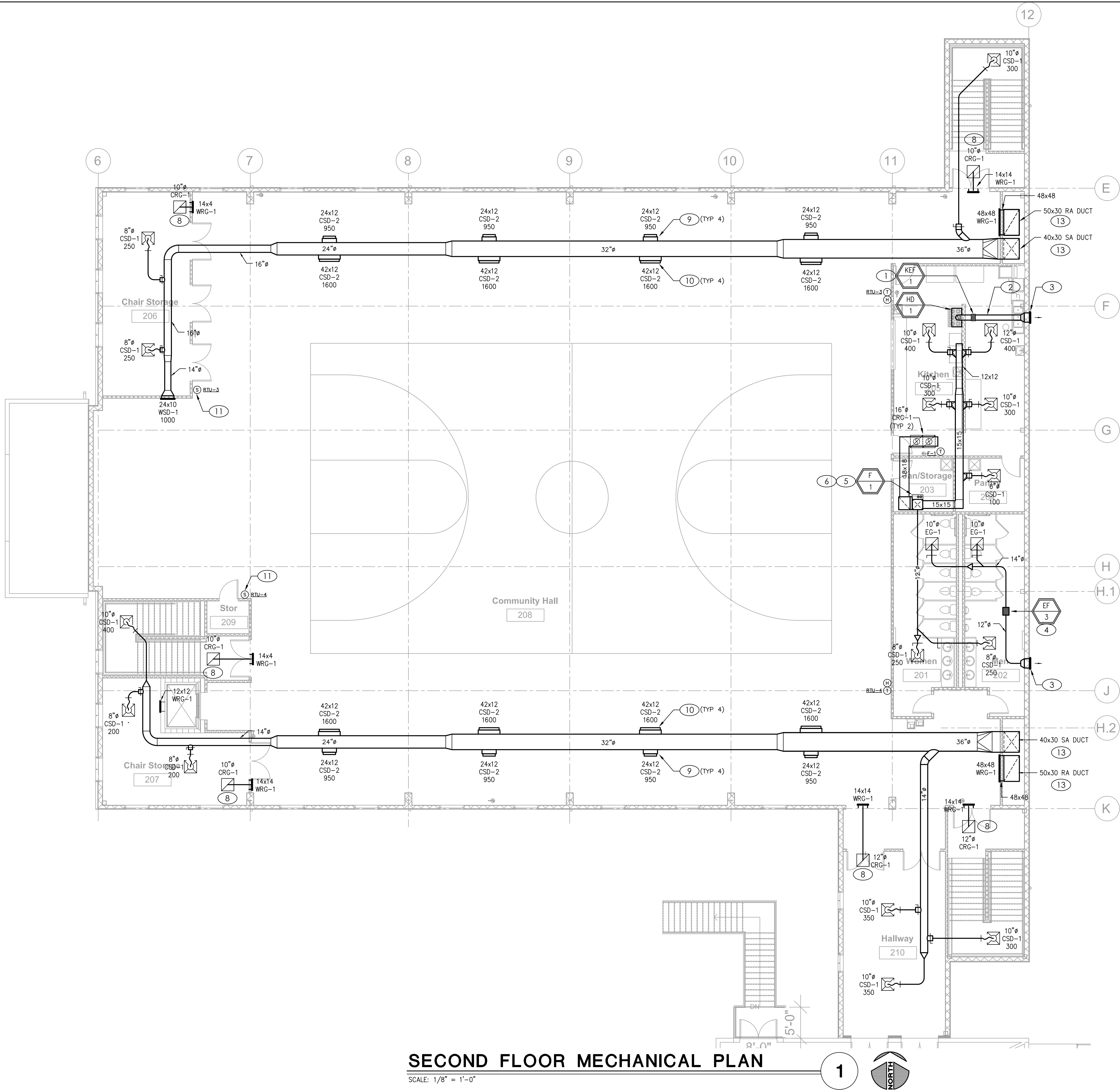
13145 S BLACKBOB

No.	Description	Date

1ST FLOOR
MECHANICAL
PLAN

Project number	19-130
Date	01.15.2020

M101



SECOND FLOOR MECHANICAL PLAN

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

GENERAL NOTES

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- B. COORDINATE INSTALLATION OF MECHANICAL SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION AND AVOID CONFLICTS. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC. VERIFY DUCT SPACE AVAILABLE ABOVE ALL CEILINGS PRIOR TO ANY FABRICATION OF INSTALLATION.
- C. NEW MECHANICAL EQUIPMENT, DUCTWORK AND PIPING ARE SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK AND PIPING LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED TO FIT THE DUCTWORK AND PIPING WITHIN THE AVAILABLE SPACE. VERIFY THAT FINAL EQUIPMENT LOCATIONS MEET MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AROUND EQUIPMENT.
- D. OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF.
- E. PROVIDE A PREFABRICATED 45 DEGREE, HIGH EFFICIENCY, RECTANGULAR/ROUND BRANCH DUCT TAKEOFF FITTING WITH MANUAL BALANCING DAMPER AND LOCKING QUADRANT FOR BRANCH DUCT CONNECTIONS AND TAKE-OFFS TO INDIVIDUAL DIFFUSERS AND REGISTERS.
- F. BRANCH DUCTWORK SHALL BE THE SAME SIZE AS NECK SIZE SHOWN UNLESS OTHERWISE NOTED.
- G. REFER TO SPECIFICATIONS FOR DUCTWORK AND PIPING INSULATION REQUIREMENTS. DUCT SIZES ON MECHANICAL PLANS ARE INDICATED CLEAR INSIDE AIRFLOW DIMENSIONS. INCREASE SHEET METAL SIZES ACCORDINGLY TO ACCOUNT FOR THICKNESS OF DUCT LINER.
- H. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- I. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED HVAC EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE ELECTRICAL REQUIREMENTS OF THE HVAC EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT OTHER THAN THE SPECIFIED EQUIPMENT BEING FURNISHED SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

KEYED PLAN NOTES

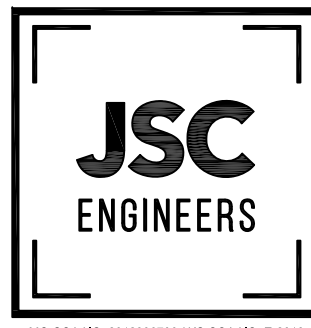
1. INLINE EXHAUST FAN FURNISHED WITH HOOD SYSTEM. INSTALL PER MANUFACTURER'S WRITTEN REQUIREMENTS. TRANSITION DUCTWORK TO FAN AND HOOD AS REQUIRED.
2. PROVIDE 10" TYPE 'B' VENT DUCTWORK FOR HOOD EXHAUST.
3. PROVIDE 18"x18" LOUVER ON WALL EQUAL TO RUSKIN ELF6375DX WITH MINIMUM 0.97 SQ-FT OF FREE AREA AND INSECT SCREEN. TRANSITION DUCTWORK TO LOUVER AS REQUIRED. PAINT LOUVER COLOR TO MATCH BUILDING. COORDINATE COLOR WITH ARCHITECT.
4. PROVIDE INLINE EXHAUST FAN AT LOCATION SHOWN. INSTALL BACKDRAFT DAMPER IN DISCHARGE DUCT. TRANSITION DUCTWORK TO FAN AS REQUIRED.
5. PROVIDE CONCENTRIC VENT FOR FURNACE TO EXTERIOR WALL INSTALLED PER MANUFACTURER'S WRITTEN INSTRUCTIONS. ADHERE TO SIZE AND LENGTH LIMITATIONS. LOCATED A MINIMUM OF 10'-0" FROM OUTSIDE AIR INTAKE.
6. PROVIDE CONDENSATE DRAIN TRAP. DISCHARGE WITH AIR GAP TO MOP SINK IN ROOM.
7. OUTDOOR AIR DUCT UP TO INTAKE HOOD. SIZE PER PLANS. PROVIDE RUSKIN CR25 ROUND CONTROL DAMPER WITH 24V SPRING RETURN ACTUATOR FOR CONTROL OF OUTDOOR AIR SUPPLY. INTERLOCK WITH FURNACE CONTROLS SO THAT DAMPER IS OPEN WHEN THE FURNACE FAN IS ON AND CLOSED WHEN THE FURNACE FAN IS OFF.
8. PROVIDE LAY-IN GRILLE WITH DUCT TO GRILLE MOUNTED HIGH ON WALL.
9. INSTALL DUCT MOUNTED DRUM LOUVER AT 30° ANGLE DOWN FROM HORIZONTAL. TYPICAL ALL LOUVERS FACING EXTERIOR WALL.
10. INSTALL DUCT MOUNTED DRUM LOUVER AT 0° ANGLE. TYPICAL ALL LOUVERS FACING INTERIOR OF SPACE.
11. PROVIDE AVERAGING SENSOR FOR INDICATED RTU THERMOSTAT. MOUNT AT 48" AFF.
12. PROVIDE 12x12 OPENING THROUGH WALL INTO ELEVATOR HOISTWAY WITH GRILLE ON STORAGE ROOM SIDE.
13. SUPPORT VERTICAL DUCTS WITH STEEL ANGLES OR CHANNEL SECURED TO THE SIDES OF THE DUCT WITH WELDS, BOLTS, SHEET METAL SCREWS, OR BLIND RIVETS. SUPPORT AT EACH FLOOR AND AT A MAXIMUM INTERVALS OF 16 FEET.

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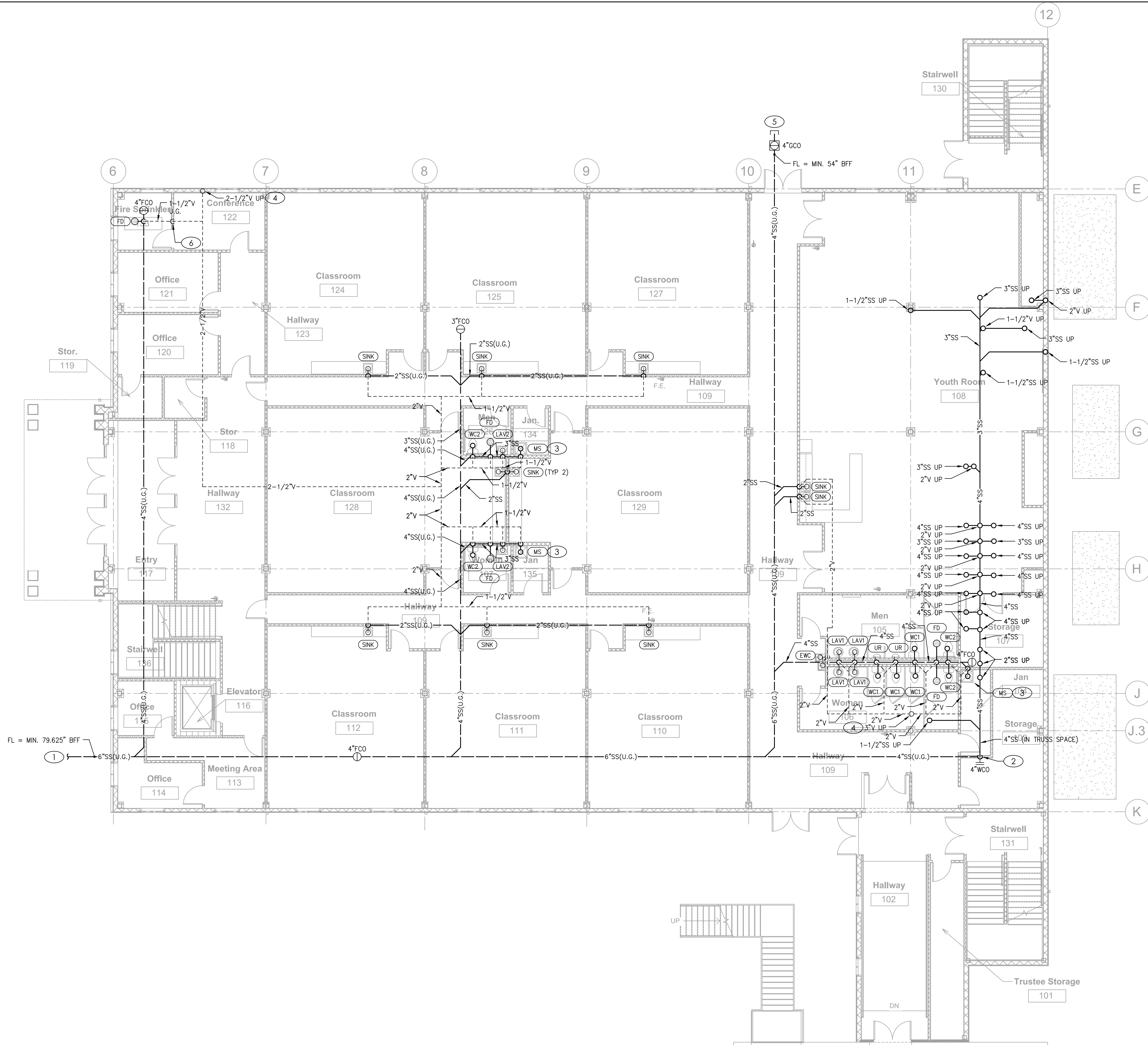
BUILDING ADDITION FOR
BEAUTIFUL SAVIOR
LUTHERAN CHURCH
13145 S BLACKBOB

No.	Description	Date

2ND FLOOR
MECHANICAL
PLAN

Project number	19-130
Date	01.15.2020

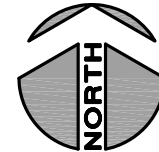
M102



FIRST FLOOR WASTE & VENT PLAN

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

1



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- OVERHEAD HANGERS AND SUPPORTS PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE ROOF.
- ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- PROVIDE THE GC WITH A COPY OF THE INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS.
- EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO ANY INSTALLATION OR CONNECTIONS THEREOF. ALL CONNECTIONS TO EXISTING UTILITIES (E. WATER, SEWER & GAS) SHALL BE MADE WITH APPROVAL OF THE ADMINISTRATIVE AUTHORITY AND THE RESPECTIVE UTILITY COMPANY.
- COORDINATE THE ROOF PENETRATIONS WITH OTHER TRADES. MAINTAIN 10' MINIMUM CLEARANCE FROM ALL AIR INTAKES. MAINTAIN 3' FROM ALL OTHER EQUIPMENT.
- SEE BRANCH CONNECTION SCHEDULE FOR MINIMUM BRANCH PIPING SIZES.

KEYED PLAN NOTES

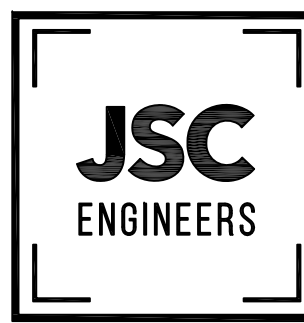
- 6" SANITARY TO UTILITY SERVICE. PLUMBING CONTRACTOR SHALL WORK WITH LOCAL WASTE WATER AUTHORITY FOR INSTALLATION OF A NEW SEWER LINE CONNECTING INTO THE SEWER MAIN. REFER TO CIVIL PLANS FOR CONTINUATION.
- 4"SS RISER DOWN FROM TRUSS SPACE TO BELOW GRADE. INSTALL LINE SIZE WCO 18" AFF.
- PLUMBING CONTRACTOR TO PROVIDE 3/4" T&P RELIEF AND 3/4" CONTAINMENT PAN DRAINS FROM WATER HEATER TO MOP SINK. DISCHARGE WITH AIR GAP. SEE DETAIL 5/P002.
- LOCATION OF VENT STACK UP TO SECOND FLOOR. SEE SHEET P102 FOR CONTINUATION.
- CAP 4"SS FOR FUTURE EXPANSION.
- ROUTE VENT UP IN WALL TO TRUSS SPACE AT THIS LOCATION.

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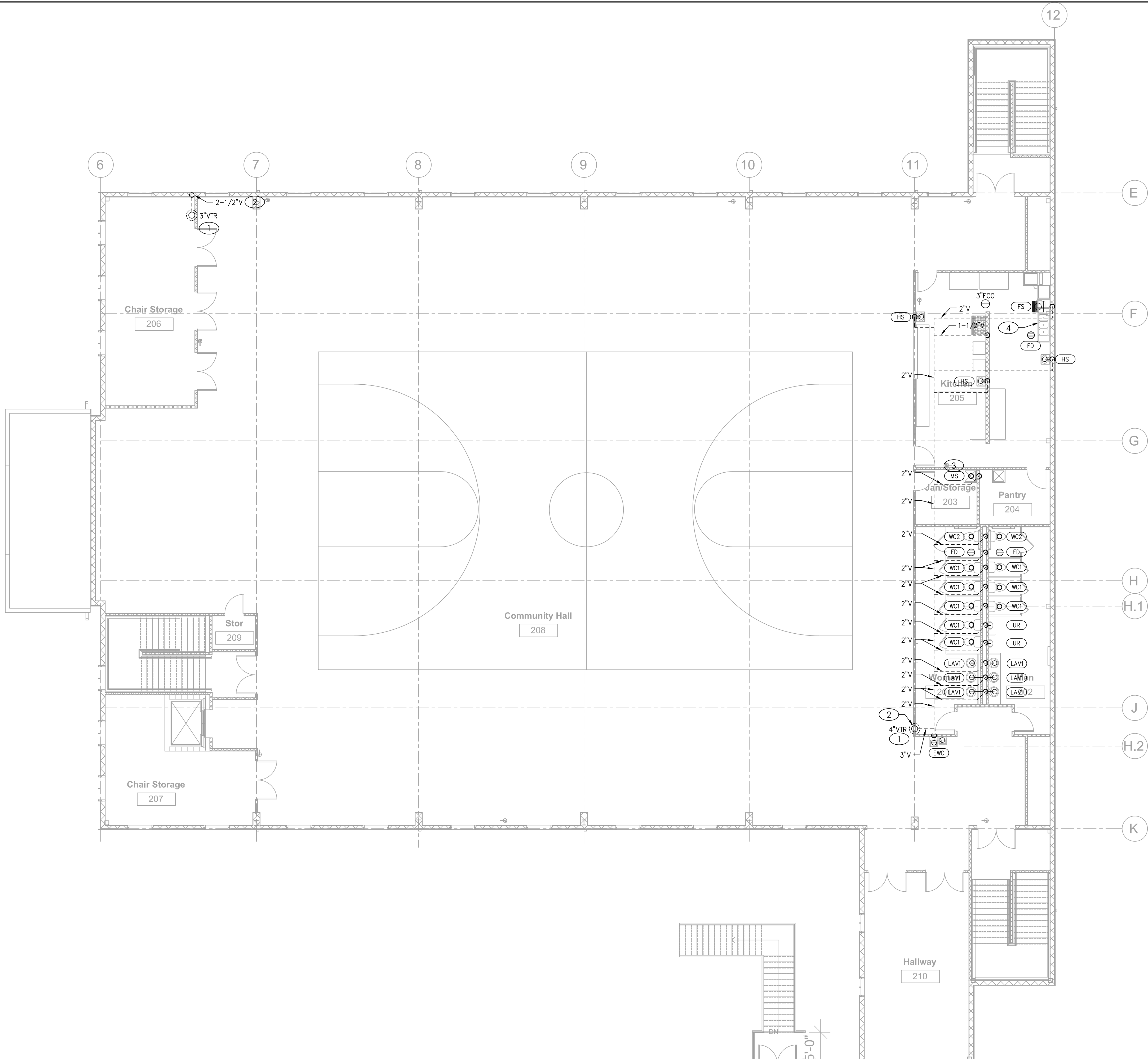
BUILDING ADDITION FOR
**BEAUTIFUL SAVIOR
LUTHERAN CHURCH**
13145 S BLACKBOB

No.	Description	Date

**1ST FLOOR
PLUMBING PLAN -
WASTE & VENT**

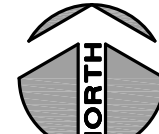
Project number	19-130
Date	01.15.2020

P101



SECOND FLOOR WASTE & VENT PLAN

1



GENERAL NOTES

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- C. OVERHEAD HANGERS AND SUPPORTS PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE ROOF.
- D. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- E. PROVIDE THE GC WITH A COPY OF THE INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS.
- F. EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO ANY INSTALLATION OR CONNECTIONS THEREOF. ALL CONNECTIONS TO EXISTING UTILITIES (E. WATER, SEWER & GAS) SHALL BE MADE WITH APPROVAL OF THE ADMINISTRATIVE AUTHORITY AND THE RESPECTIVE UTILITY COMPANY.
- G. COORDINATE THE ROOF PENETRATIONS WITH OTHER TRADES. MAINTAIN 10' MINIMUM CLEARANCE FROM ALL AIR INTAKES. MAINTAIN 3' FROM ALL OTHER EQUIPMENT.
- H. SEE BRANCH CONNECTION SCHEDULE FOR MINIMUM BRANCH PIPING SIZES.

KEYED PLAN NOTES

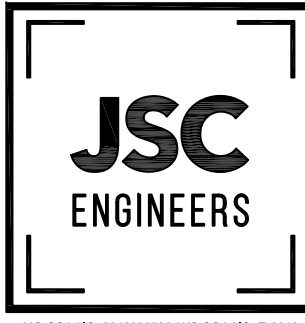
1. NEW VENT THROUGH ROOF (VTR). LOCATE VTR A MINIMUM OF 3'-0" FROM EDGE OF ROOF AND MINIMUM 10'-0" FROM ANY OUTSIDE AIR INTAKE. SEAL PENETRATION WEATHER TIGHT. COORDINATE WITH MECHANICAL CONTRACTOR.
2. VENT RISER UP IN WALL FROM FIRST FLOOR FIXTURES. SEE SHEET P101 FOR CONTINUATION.
3. PLUMBING CONTRACTOR TO PROVIDE 3/4" T&P RELIEF AND 3/4" CONTAINMENT PAN DRAINS FROM WATER HEATER TO MOP SINK. DISCHARGE WITH AIR GAP. SEE DETAIL 3/P002.
4. 3 COMPARTMENT SINK. PROVIDE 2" DRAIN FROM EACH COMPARTMENT. COMBINE AND ROUTE TO FLOOR SINK PER DETAIL ON SHEET P002.

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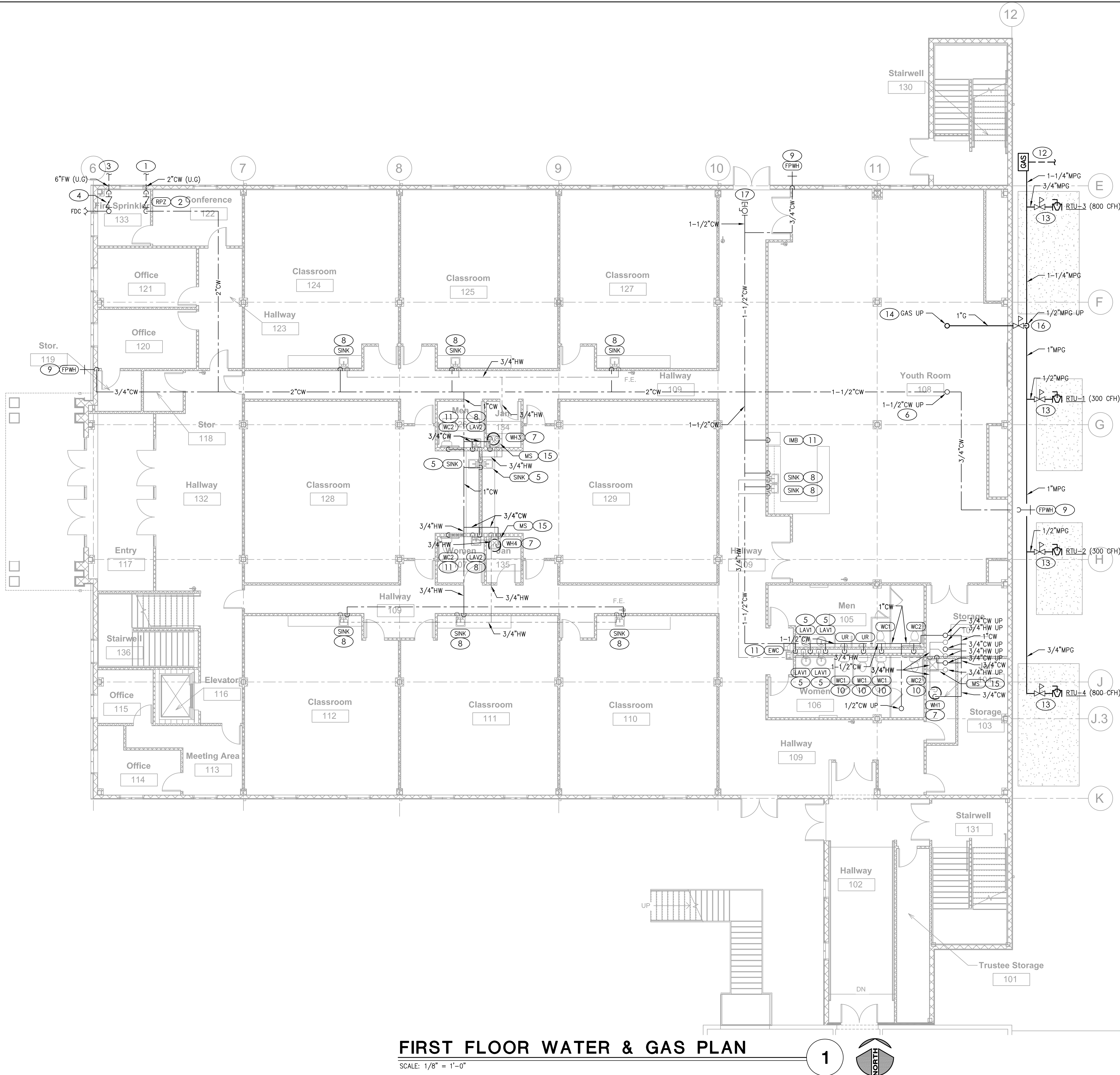
BUILDING ADDITION FOR
BEAUTIFUL SAVIOR
LUTHERAN CHURCH
13145 S BLACKBOB

No.	Description	Date

2ND FLOOR
PLUMBING PLAN -
WASTE & VENT

Project number	19-130
Date	01.15.2020

P102



FIRST FLOOR WATER & GAS PLAN

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

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- E. PROVIDE THE GC WITH A COPY OF THE INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS.
- F. EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO ANY INSTALLATION OR CONNECTIONS THEREOF. ALL CONNECTIONS TO EXISTING UTILITIES (E. WATER, SEWER & GAS) SHALL BE MADE WITH APPROVAL OF THE ADMINISTRATIVE AUTHORITY AND THE RESPECTIVE UTILITY COMPANY.
- G. COORDINATE THE ROOF PENETRATIONS WITH OTHER TRADES. MAINTAIN 10' MINIMUM CLEARANCE FROM ALL AIR INTAKES. MAINTAIN 3' FROM ALL OTHER EQUIPMENT.
- H. SEE BRANCH CONNECTION SCHEDULE FOR MINIMUM BRANCH PIPING SIZES.

KEYED PLAN NOTES

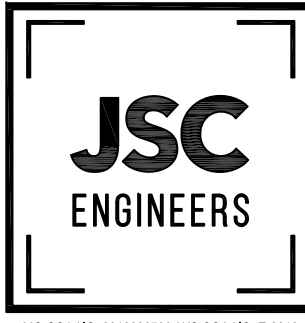
1. PLUMBING CONTRACTOR SHALL WORK WITH THE WATER COMPANY FOR THE INSTALLATION OF A NEW 2" WATER MAIN ENTRANCE WITH 1-1/2" TAP & 1-1/2" METER, METER PIT, PIPING, ETC. FOR A COMPLETE INSTALLATION. SEE CIVIL PLANS FOR CONTINUATION.
2. 2" VALVE AND 2" RPZ BACKFLOW PREVENTER APPROVED FOR DOMESTIC WATER SERVICE. INSTALL BACKFLOW PREVENTER 24" ABOVE FINISHED FLOOR. PROVIDE MINIMUM 12" CLEARANCE FRONT AND BACK. PROVIDE DRAIN FROM BFP TO FLOOR DRAIN AND DISCHARGE WITH AIR GAP. PROVIDE PRESSURE REDUCING VALVE IF SERVICE PRESSURE AT DOMESTIC WATER ENTRY EXCEEDS 75 P.S.I. DOWNSTREAM OF REDUCED PRESSURE BACKFLOW PREVENTER. SEE DETAIL ON P002.
3. 6" FIRE SERVICE TO MAIN. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
4. FIRE RISER. SEE DETAIL ON P002 FOR GENERAL REQUIREMENTS. COORDINATE WITH FIRE SPRINKLER CONTRACTOR FOR INSTALLATION AND LOCATING AND SIZING FIRE DEPARTMENT CONNECTION.
5. 3/4"HW & 3/4"CW DOWN IN WALL TO BACK-TO-BACK FIXTURES. PROVIDE 1/2"HW & 1/2"CW TO EACH LAV/SINK. PROVIDE THERMOSTATIC MIXING VALVE FOR FIXTURE EQUAL TO LEONARD MODEL 170. SET HW SUPPLY WATER TEMPERATURE TO 110°F.
6. CW PIPING UP TO SECOND FLOOR. SEE P202 FOR CONTINUATION.
7. 3/4"CW AND 3/4"HW TO WATER HEATER. SEE DETAIL 5/P002.
8. 1/2"HW & 1/2"CW DOWN IN WALL TO LAV/SINK. PROVIDE THERMOSTATIC MIXING VALVE FOR FIXTURE EQUAL TO LEONARD MODEL 170. SET HW SUPPLY WATER TEMPERATURE TO 110°F.
9. 3/4"CW DOWN IN WALL TO WALL HYDRANT. INSULATE PIPING IN EXTERIOR WALL WITH 1" INSULATION. INSTALL WALL HYDRANT AT 18" ABOVE GRADE.
10. 1"CW DOWN IN WALL TO BACK-TO-BACK FIXTURES. PROVIDE 1/2"CW TO EACH WATER CLOSET AND 3/4"CW TO EACH URINAL.
11. 1/2"CW DOWN IN WALL TO FIXTURE.
12. COORDINATE WITH GAS COMPANY FOR INSTALLATION OF A METER WITH CAPACITY FOR 2,410 CFH @ 2 PSIG. VERIFY ALL EQUIPMENT GAS CAPACITIES AND OPERATING PRESSURES PRIOR TO INSTALLATION OF ANY PIPING.
13. PROVIDE GAS REGULATOR SIZED FOR CAPACITY SHOWN WITH SHUT-OFF VALVE AND DIRT LEG PRIOR TO EQUIPMENT CONNECTION. COORDINATE EXACT EQUIPMENT GAS DEMAND WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION OF PIPING.
14. GAS PIPING UP TO SECOND FLOOR. SEE P202 FOR CONTINUATION.
15. 3/4"CW AND 3/4"HW DOWN IN WALL TO MOP SINK.
16. ROUTE PIPING UP EXTERIOR WALL TO TRUSS SPACE. PROVIDE GAS REGULATOR SIZED FOR 210 CFH CAPACITY IN ACCESSIBLE LOCATION OUTSIDE THE BUILDING. SEAL WALL PENETRATION WEATHER-TIGHT. ALL CONCEALED JOINTS ARE TO BE WELDED OR USE FITTINGS APPROVED FOR CONCEALED USE.
17. 1-1/2"CW WITH VALVE CAPPED ABOVE CEILING FOR FUTURE EXPANSION.

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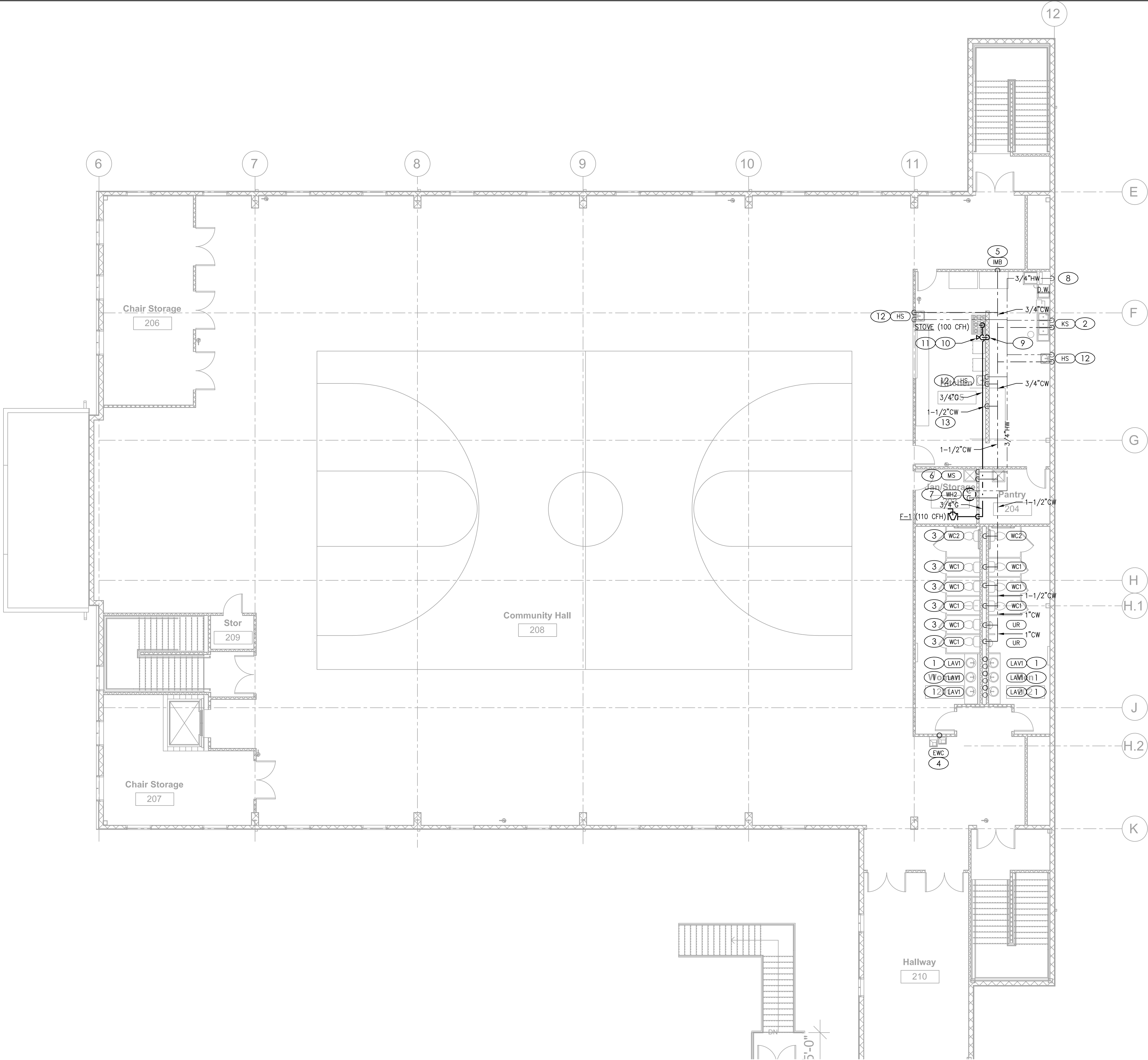
BUILDING ADDITION FOR
BEAUTIFUL SAVIOR
LUTHERAN CHURCH
13145 S BLACKBOB

No.	Description	Date

1ST FLOOR
PLUMBING PLAN -
WATER & GAS

Project number	19-130
Date	01.15.2020

P201



SECOND FLOOR WATER AND GAS PLAN

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

1



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- G. COORDINATE THE ROOF PENETRATIONS WITH OTHER TRADES. MAINTAIN 10' MINIMUM CLEARANCE FROM ALL AIR INTAKES. MAINTAIN 3' FROM ALL OTHER EQUIPMENT.
- H. SEE BRANCH CONNECTION SCHEDULE FOR MINIMUM BRANCH PIPING SIZES.

KEYED PLAN NOTES

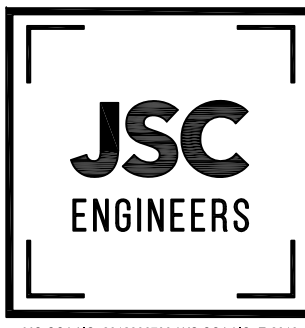
1. 3/4"HW & 3/4"CW UP IN WALL TO BACK-TO-BACK FIXTURES. PROVIDE 1/2"HW & 1/2"CW TO EACH FIXTURE. AT EACH LAV, PROVIDE THERMOSTATIC MIXING VALVE FOR FIXTURE EQUAL TO LEONARD MODEL 170. SET HW SUPPLY WATER TEMPERATURE TO 110°F.
2. 3/4"HW & 3/4"CW DOWN IN WALL TO 3-COMPARTMENT SINK.
3. 1"CW DOWN IN WALL TO BACK-TO-BACK FIXTURES. PROVIDE 1/2"CW TO EACH WATER CLOSET AND 3/4"CW TO EACH URINAL.
4. 1/2"CW UP IN WALL TO FIXTURE.
5. 1/2"CW DOWN IN WALL TO FIXTURE.
6. 3/4"CW AND 3/4"HW DOWN IN WALL TO MOP SINK.
7. 3/4"CW AND 3/4"HW TO WATER HEATER. SEE DETAIL 3/P002.
8. 3/4"HW DOWN TO DISHWASHER.
9. 1" GAS PIPING FROM FIRST FLOOR. SEE P201 FOR CONTINUATION.
10. 3/4" GAS PIPING DOWN NEXT TO HOOD. PROVIDE GAS COCK AND AUTOMATIC SHUT-OFF VALVE FURNISHED WITH HOOD. SEE DETAIL 6/P002 FOR ADDITIONAL INSTALLATION INSTRUCTIONS. PROVIDE DIRT LEG AT BOTTOM OF RISER. ROUTE 3/4" HEADER AT FLOOR AND PROVIDE FLEXIBLE CONNECTIONS TO EQUIPMENT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
11. LOCATION OF AUTOMATIC GAS SHUTOFF VALVE FOR COOK LINE. INSTALL IN AN ACCESSIBLE LOCATION.
12. 1/2"HW & 1/2"CW DOWN IN WALL TO HAND SINK. PROVIDE THERMOSTATIC MIXING VALVE FOR FIXTURE EQUAL TO LEONARD MODEL 170. SET HW SUPPLY WATER TEMPERATURE TO 110°F.
13. CW PIPING FROM FIRST FLOOR UP TO DROP CEILING. SEE P201 FOR CONTINUATION.

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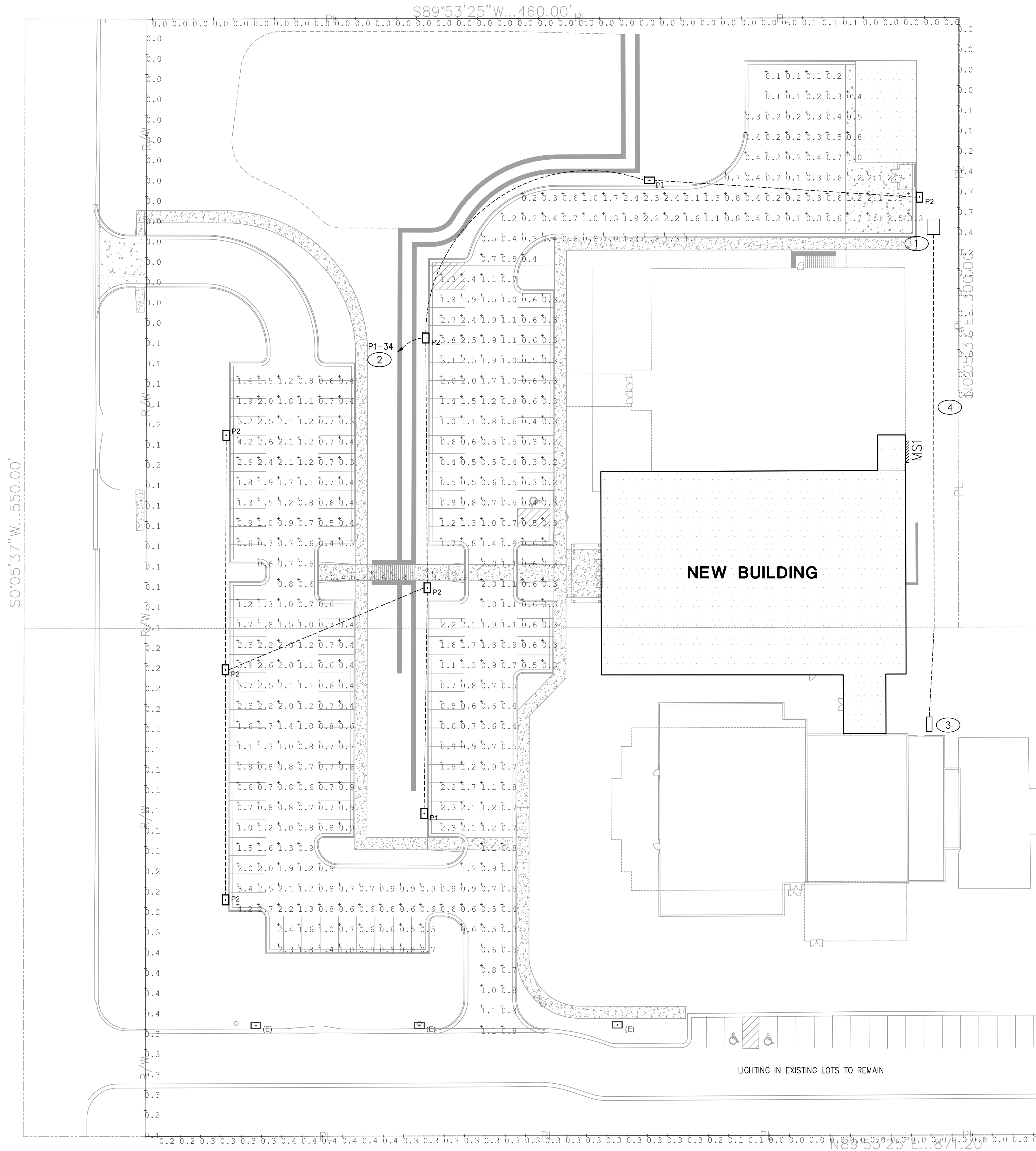
BUILDING ADDITION FOR
BEAUTIFUL SAVIOR
LUTHERAN CHURCH
13145 S BLACKBOB

No.	Description	Date

2ND FLOOR
PLUMBING PLAN -
WATER & GAS

Project number	19-130
Date	01.15.2020

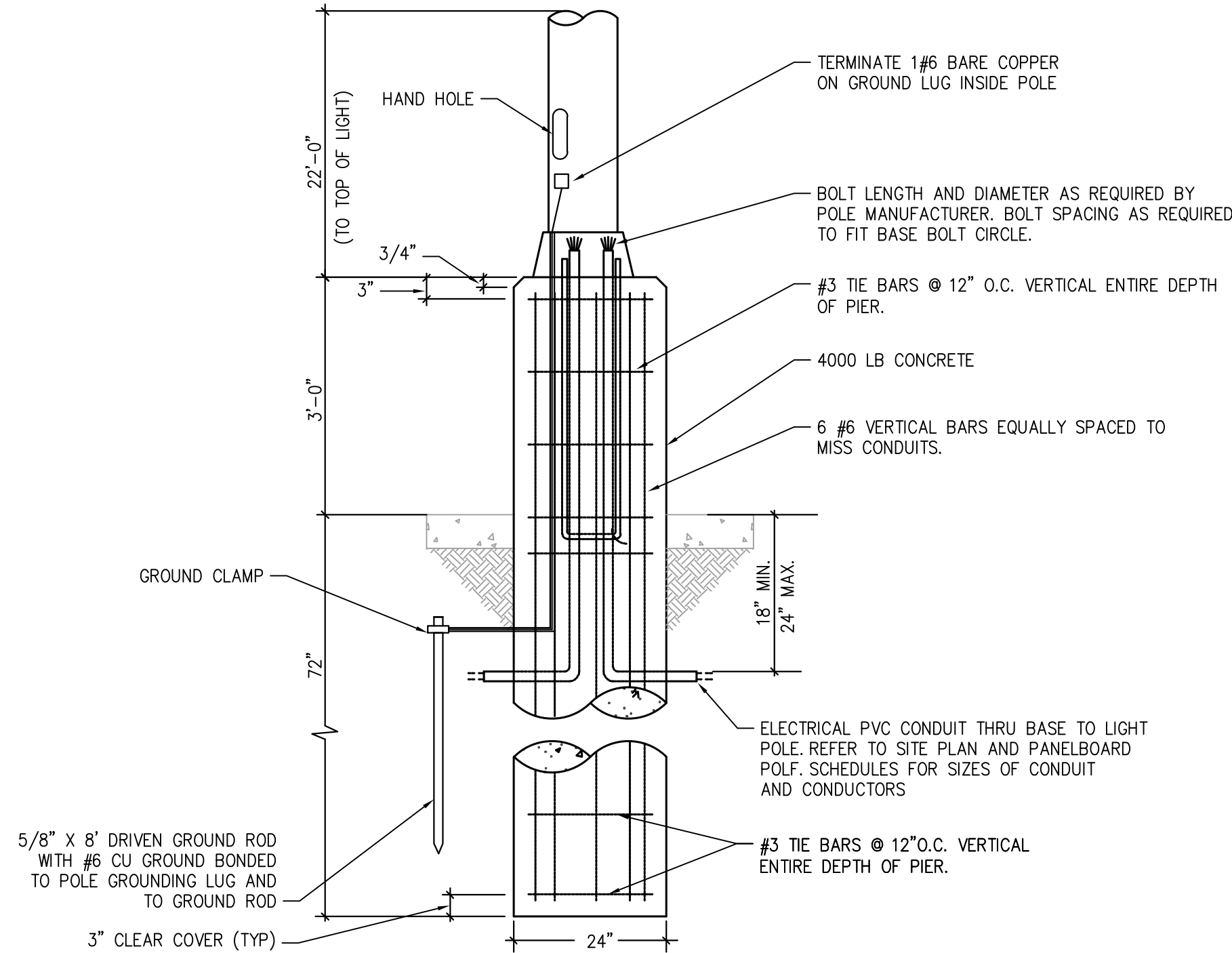
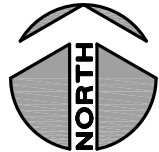
P202



ELECTRICAL SITE PLAN

SCALE: 1" = 30'-0"

1



POLE FOUNDATION DETAIL

SCALE: NONE

2

GENERAL NOTES

- A. TO PROVIDE CONDUIT, CONDUCTORS, PARKING LOT LIGHTING FIXTURES, POLES, AND POLE FOUNDATIONS FOR PARKING LOT LIGHTING AS SHOWN ON THIS PLAN.
- B. ELECTRICAL CONTRACTOR TO COORDINATE EXACT DISTANCE OF LIGHTING POLE FROM PANEL AND CONFIRM CONDUCTORS ARE SUFFICIENT FOR VOLTAGE DROP.

KEYED PLAN NOTES

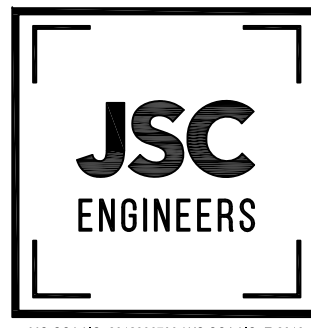
1. NEW UTILITY TRANSFORMER PROPOSED LOCATION. COORDINATE ALL REQUIREMENTS WITH THE UTILITY.
2. (1) 1"-3 #6 & 1 #6 GND THROUGHOUT CIRCUIT. REFER TO FLOOR PLAN ON E201 AND PANEL SCHEDULE ON E301 FOR HOMERUN LOCATION AND CONNECTION DETAILS.
3. RE-FEED EXISTING CHURCH SERVICE ENTRANCE CURRENT TRANSFORMER APPROXIMATELY AT THIS LOCATION VIA TRENCH FROM NEW UTILITY TRANSFORMER AS SHOWN AND CONSISTING OF (3) 4" SCHEDULE 40 PVC CONDUITS SPACED PER THE NEC. EACH CONDUIT SHALL FILLED W/4 # 400KCM 90°C AL.
4. PROVIDE (2) 4" SCHEDULE 40 PVC SPARE CONDUITS WITH PULL ROPES FOR FUTURE EXPANSION IN SAME TRENCH DESCRIBED IN NOTE 3 ABOVE SPACED PER THE NEC.

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BUILDING ADDITION FOR
BEAUTIFUL SAVIOR
LUTHERAN CHURCH
13145 S BLACKBOB

No.	Description	Date

ELECTRICAL
SITE PLAN

Project number 19-130
Date 01.15.2020

E100



GENERAL NOTES

- REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES.
- REFER TO LIGHTING FIXTURE SCHEDULE FOR LIGHT FIXTURE TYPES AND REQUIREMENTS.
- CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTING UNITS TO THE INDICATED CIRCUIT WITH A SEPARATE AND UN-SWITCHED CONDUCTOR BYPASSING ALL CONTROLS AND CONTACTORS. REFER TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROPER INSTALLATION AND TESTING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT COORDINATION AND CONFLICT ISSUES BE RESOLVED PRIOR TO INSTALLATION OF LIGHT FIXTURES.
- ROUTE ALL EXPOSED, RIGID CONDUIT TIGHT TO STRUCTURE, PARALLEL TO BUILDING LINES AND IN UNISTRUT CABLE/PIPE TRAY WHERE POSSIBLE. COORDINATE CONDUIT ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH-IN. SUPPORT CONDUIT FROM STRUCTURE NOT ROOF DECK. MAINTAIN 2" MIN SPACING FROM BOTTOM OF ROOF DECK TO PREVENT ROOFING SCREWS FROM PENETRATING CONDUITS.
- THROUGH WIRING OF RECESSED LIGHT FIXTURES, IN SUSPENDED CEILINGS, IS NOT PERMITTED. CONNECT EACH LIGHT FIXTURE BY A WHIP TO A JUNCTION BOX. PROVIDE CABLE WHIPS OF SUFFICIENT LENGTH TO ALLOW FOR RELOCATING EACH LIGHT FIXTURE WITHIN A 5-FOOT RADIUS OF ITS INSTALLED LOCATION, BUT NOT EXCEEDING 6 FEET IN UNSUPPORTED LENGTH.
- ALL INTERNALLY ILLUMINATED SIGNS SHALL BE PROVIDED WITH AN ACCESSIBLE DISCONNECTION MEANS. VERIFY EACH SIGN IS FURNISHED WITH AN INTEGRAL DISCONNECT SWITCH. PROVIDE WEATHERPROOF DISCONNECT SWITCHES WITHIN SIGHT OF ALL SIGNS AS REQUIRED. MAKE FINAL CONNECTION AS REQUIRED.
- PROVIDE FUNCTIONAL TESTING OF OCCUPANCY SENSING LIGHTING CONTROL DEVICES WITH IECC 2018 REQUIREMENTS.
- LIGHTING CONTROLS SHALL MEET IECC 2018 REQUIREMENTS.

KEYED PLAN NOTES

- (1) 3/4" - 3 #8 & 1 #8 GND THROUGHOUT CIRCUIT.

LIGHTING CONTROL LEGEND

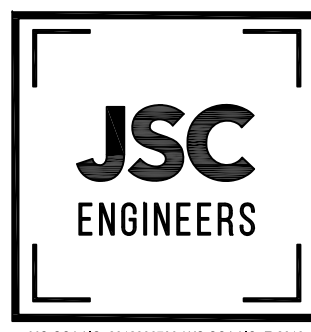
- SOS** DUAL CONTROL WALL DIMMING SWITCH WITH OCCUPANCY SENSOR MOUNTED @48" UNLESS NOTED, CAPABLE OF ON/OFF/0-10V DIMMING. PROVIDE ALL EXTRA CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.
- S3OS** DUAL CONTROL THREE-WAY WALL DIMMING SWITCH WITH OCCUPANCY SENSOR MOUNTED @48" UNLESS NOTED, CAPABLE OF ON/OFF/0-10V DIMMING. PROVIDE ALL EXTRA CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.
- OS** OCCUPANCY SENSOR CEILING MOUNTED TO BE COMPATIBLE AND INTERLOCKED WITH ASSOCIATED OVERRIDE WALL SWITCH, POWERPACK AND DAYLIGHT SENSOR TO COMPLY WITH IECC 2018. PROVIDE ALL EXTRA JBOXES, CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.
- PP** CEILING MOUNTED DIMMING POWER PACK TO BE COMPATIBLE AND INTERLOCKED WITH ASSOCIATED OCCUPANCY SENSOR, OVERRIDE WALL SWITCH, AND DAYLIGHT SENSOR TO COMPLY WITH IECC 2018. PROVIDE ALL EXTRA JBOXES, CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.
- DD** CEILING MOUNTED DAYLIGHT SENSOR TO BE COMPATIBLE AND INTERLOCKED WITH ASSOCIATED OCCUPANCY SENSOR, WALL SWITCH, AND POWERPACK TO COMPLY WITH IECC 2018. PROVIDE ALL EXTRA JBOXES, CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.

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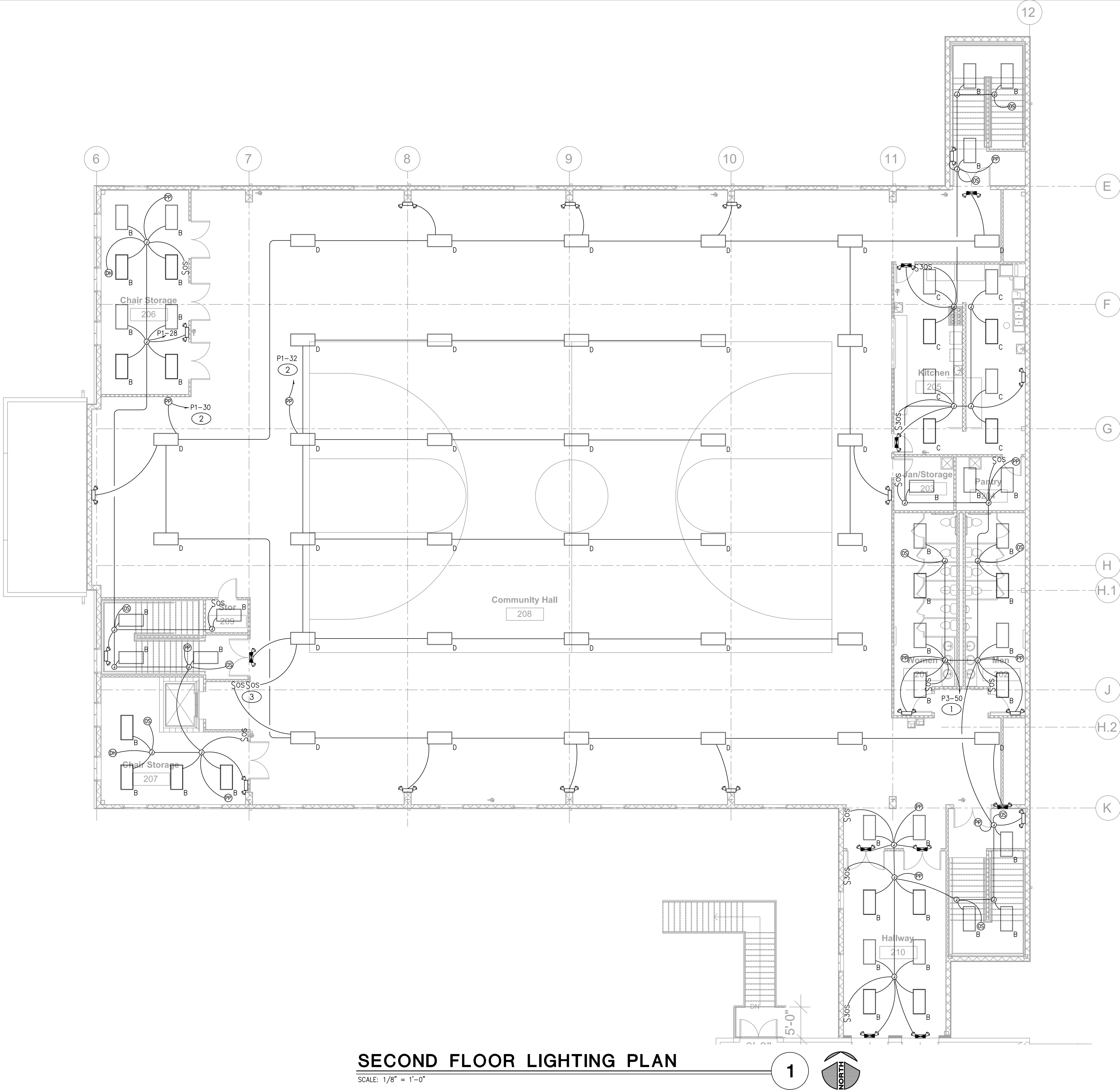
BUILDING ADDITION FOR
**BEAUTIFUL SAVIOR
LUTHERAN CHURCH**
13145 S BLACKBOB

No.	Description	Date

1ST FLOOR
ELECTRICAL PLAN -
LIGHTING

Project number	19-130
Date	01.15.2020

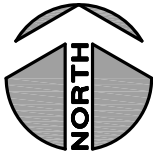
E101



SECOND FLOOR LIGHTING PLAN

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

1



GENERAL NOTES

- REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES.
- REFER TO LIGHTING FIXTURE SCHEDULE FOR LIGHT FIXTURE TYPES AND REQUIREMENTS.
- CONNECT ALL EXIT SIGNS AND EMERGENCY LIGHTING UNITS TO THE INDICATED CIRCUIT WITH A SEPARATE AND UN-SWITCHED CONDUCTOR BYPASSING ALL CONTROLS AND CONTACTORS. REFER TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR PROPER INSTALLATION AND TESTING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT COORDINATION AND CONFLICT ISSUES BE RESOLVED PRIOR TO INSTALLATION OF LIGHT FIXTURES.
- ROUTE ALL EXPOSED, RIGID CONDUIT TIGHT TO STRUCTURE, PARALLEL TO BUILDING LINES AND IN UNISTRUT CABLE/PIPE TRAY WHERE POSSIBLE. COORDINATE CONDUIT ROUTING AND INSTALLATION WITH OTHER TRADES PRIOR TO ROUGH-IN. SUPPORT CONDUIT FROM STRUCTURE NOT ROOF DECK. MAINTAIN 2" MIN SPACING FROM BOTTOM OF ROOF DECK TO PREVENT ROOFING SCREWS FROM PENETRATING CONDUITS.
- THROUGH WIRING OF RECESSED LIGHT FIXTURES, IN SUSPENDED CEILINGS, IS NOT PERMITTED. CONNECT EACH LIGHT FIXTURE BY A WHIP TO A JUNCTION BOX. PROVIDE CABLE WHIPS OF SUFFICIENT LENGTH TO ALLOW FOR RELOCATING EACH LIGHT FIXTURE WITHIN A 5-FOOT RADIUS OF ITS INSTALLED LOCATION, BUT NOT EXCEEDING 6 FEET IN UNSUPPORTED LENGTH.
- ALL INTERNALLY ILLUMINATED SIGNS SHALL BE PROVIDED WITH AN ACCESSIBLE DISCONNECTION MEANS. VERIFY EACH SIGN IS FURNISHED WITH AN INTEGRAL DISCONNECT SWITCH. PROVIDE WEATHERPROOF DISCONNECT SWITCHES WITHIN SIGHT OF ALL SIGNS AS REQUIRED. MAKE FINAL CONNECTION AS REQUIRED.
- PROVIDE FUNCTIONAL TESTING OF OCCUPANCY SENSING LIGHTING CONTROL DEVICES WITH IECC 2018 REQUIREMENTS.
- LIGHTING CONTROLS SHALL MEET IECC 2018 REQUIREMENTS.

KEYED PLAN NOTES

- (1) 3/4" - 3 #10 & 1 #10 GND THROUGHOUT CIRCUIT.
- (1) 3/4" - 3 #8 & 1 #8 GND THROUGHOUT CIRCUIT.
- PROVIDE TAMPER RESISTANT LOCKABLE COVER FOR THESE (2) SWITCHES.

LIGHTING CONTROL LEGEND

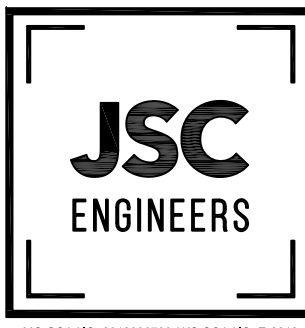
- SOS** DUAL CONTROL WALL DIMMING SWITCH WITH OCCUPANCY SENSOR MOUNTED @48" UNLESS NOTED, CAPABLE OF ON/OFF/0-10V DIMMING. PROVIDE ALL EXTRA CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.
- S3OS** DUAL CONTROL THREE-WAY WALL DIMMING SWITCH WITH OCCUPANCY SENSOR MOUNTED @48" UNLESS NOTED, CAPABLE OF ON/OFF/0-10V DIMMING. PROVIDE ALL EXTRA CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.
- CS** OCCUPANCY SENSOR CEILING MOUNTED TO BE COMPATIBLE AND INTERLOCKED WITH ASSOCIATED OVERRIDE WALL SWITCH, POWERPACK AND DAYLIGHT SENSOR TO COMPLY WITH IECC 2018. PROVIDE ALL EXTRA JBOXES, CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.
- CP** CEILING MOUNTED DIMMING POWER PACK TO BE COMPATIBLE AND INTERLOCKED WITH ASSOCIATED OCCUPANCY SENSOR, OVERRIDE WALL SWITCH, AND DAYLIGHT SENSOR TO COMPLY WITH IECC 2018. PROVIDE ALL EXTRA JBOXES, CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.
- CD** CEILING MOUNTED DAYLIGHT SENSOR TO BE COMPATIBLE AND INTERLOCKED WITH ASSOCIATED OCCUPANCY SENSOR, WALL SWITCH, AND POWERPACK TO COMPLY WITH IECC 2018. PROVIDE ALL EXTRA JBOXES, CONDUIT AND CONDUCTORS NEEDED FOR POWER AND LOW VOLTAGE CONTROL.

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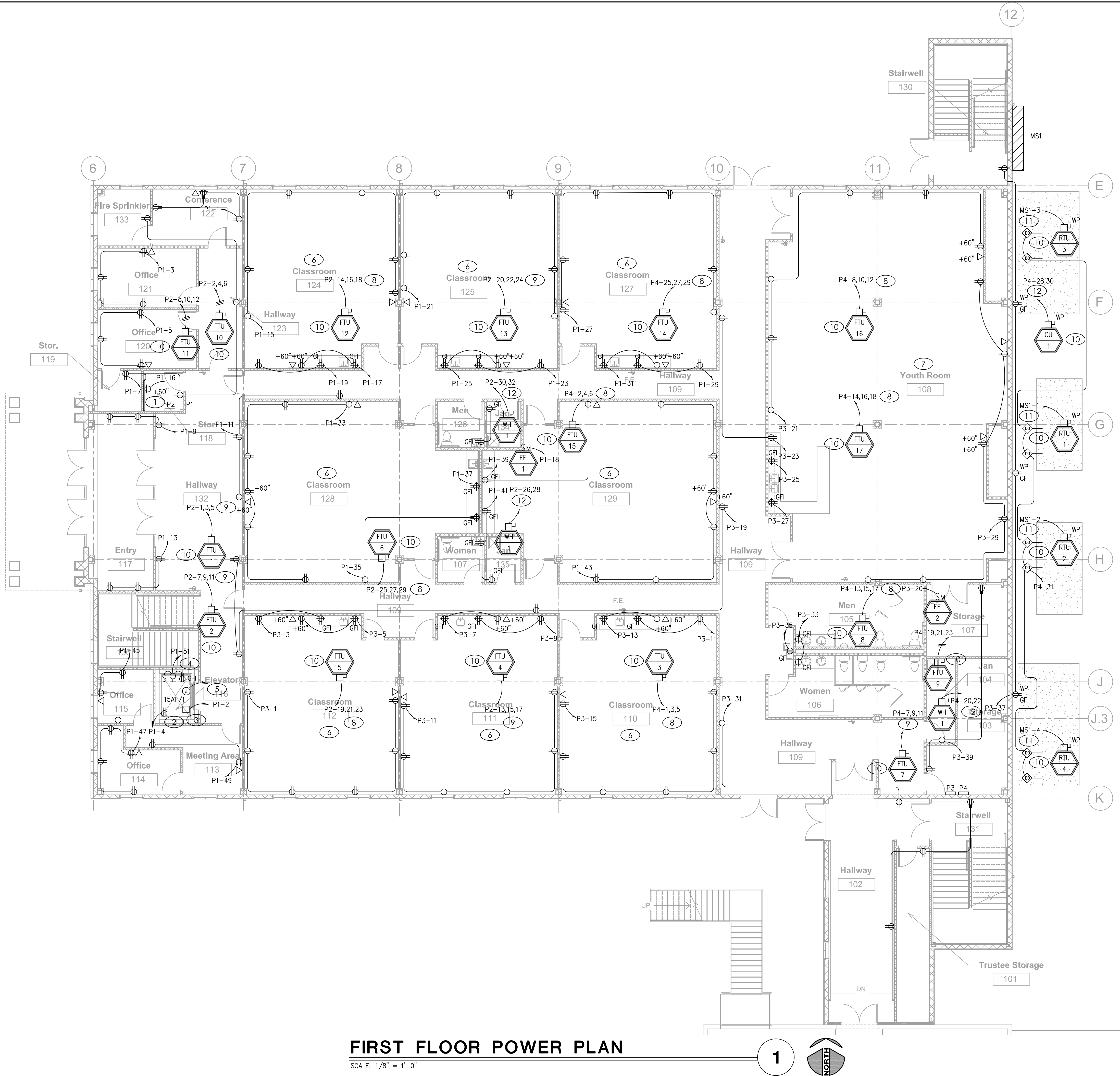
BUILDING ADDITION FOR
**BEAUTIFUL SAVIOR
LUTHERAN CHURCH**
13145 S BLACKBOB

No.	Description	Date

2ND FLOOR
ELECTRICAL PLAN -
LIGHTING

Project number 19-130
Date 01.15.2020

E102



GENERAL NOTES

- A. DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS OR FIELD MEASUREMENTS FOR DIMENSIONS.
- B. ALL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL LOCAL BUILDING CODES AND AMENDMENTS.
- C. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- D. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACE AVAILABLE, AND WITHOUT INTERFERENCES.
- E. THIS CONTRACTOR SHALL PERFORM ALL WORK INDICATED AND/OR AS REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE ELECTRICAL SYSTEMS.
- F. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED HVAC AND PLUMBING EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT SUBSTITUTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- G. ALL POWER WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR. ALL CONTROL WIRING SHALL BE ROUTED BY THE ELECTRICAL CONTRACTOR WITH FINAL CONTROL DEVICE (T-STATS) LANDINGS BY THE MECHANICAL CONTRACTOR.
- H. ALL WIRING SHALL BE IN APPROVED RACEWAY.
- I. WIRE SIZE SHALL BE MINIMUM #12 AWG, THWN SOLID COPPER UNLESS OTHERWISE NOTED. PROVIDE GROUND WIRE WHERE REQUIRED BY CODE. INCREASE WIRE SIZE TO COMPENSATE FOR VOLTAGE DROP WHERE TOTAL LENGTH OF ANY BRANCH EXCEEDS 100 FEET.
- K. FIRE ALARM, AUDIO/VIDEO AND SURVEILLANCE SYSTEMS BY OTHERS.

KEYED PLAN NOTES

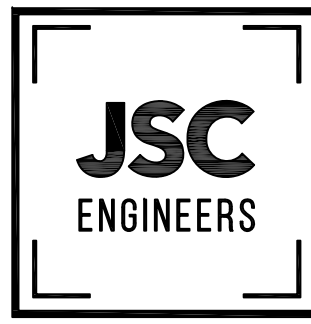
1. PROVIDE NEW VOID FREE TENANT TELEPHONE TERMINAL BACKBOARD, 3/4" DEEP X 4" WIDE X 4" HIGH MADE OF FIRE RETARDANT RATED AC PLYWOOD, ROT TREATED. PROVIDE HOFFMAN ENCLOSURE #ATC42R369 OR EQUAL, WITH NECESSARY PATCH PANELS AND SECURE TO BOARD FOR TELEPHONE AND DATA TERMINATIONS. PROVIDE (2) 2" C BACK TO CATV AND TELEPHONE DEMARCATION POINTS. PROVIDE (1) 1/4" X 4" COPPER GROUNDING BAR AND CONNECT VIA 3/4"-1 #6 INSULATED GROUND TO BUILDING MAIN GROUND BUSBAR.
2. CONNECT TO ELEVATOR SUMP PUMP. VERIFY LOCATION WITH ELEVATOR MANUFACTURER REQUIREMENTS
3. CONNECT TO ELEVATOR CAB LIGHTS.
4. PROVIDE VAPOR TIGHT LIGHTING FIXTURE, 3500K, 6000 LUMENS AND LOCATE WITH SWITCH AND OUTLET PER ELEVATOR MANUFACTURER REQUIREMENTS.
5. PROVIDE 3/4" CONDUIT WITH PULLSTRING BACK TO TELEPHONE BOARD PER ELEVATOR MANUFACTURER REQUIREMENTS.
6. ALL WALL OUTLETS MOUNTED AT 18" ABOVE FINISHED FLOOR IN THIS CLASSROOM SHALL BE TAMPER RESISTANT TYPE.
7. ALL WALL OUTLETS MOUNTED AT 18" ABOVE FINISHED FLOOR IN THIS YOUTH ROOM SHALL BE TAMPER RESISTANT TYPE.
8. (1) 3/4"- 3 #8 & 1 #10 GND.
9. (1) 3/4"- 3 #10 & 1 #12 GND.
10. PROVIDE DISCONNECT TO BE SIZED PER HVAC MANUFACTURER REQUIREMENTS. ALSO, PROVIDE 1/2" C W/ PULLSTRING TO THERMOSTAT FOR HVAC CONTROLS. REFER TO MECHANICAL PLANS FOR ADDITIONAL DETAILS.
11. REFER TO SINGLE LINE DIAGRAM ON E301 FOR CONNECTION DETAILS.
12. (1) 3/4"- 2 #10 & 1 #10 GND.
13. (1) 3/4"- 2 #8 & 1 #10 GND.

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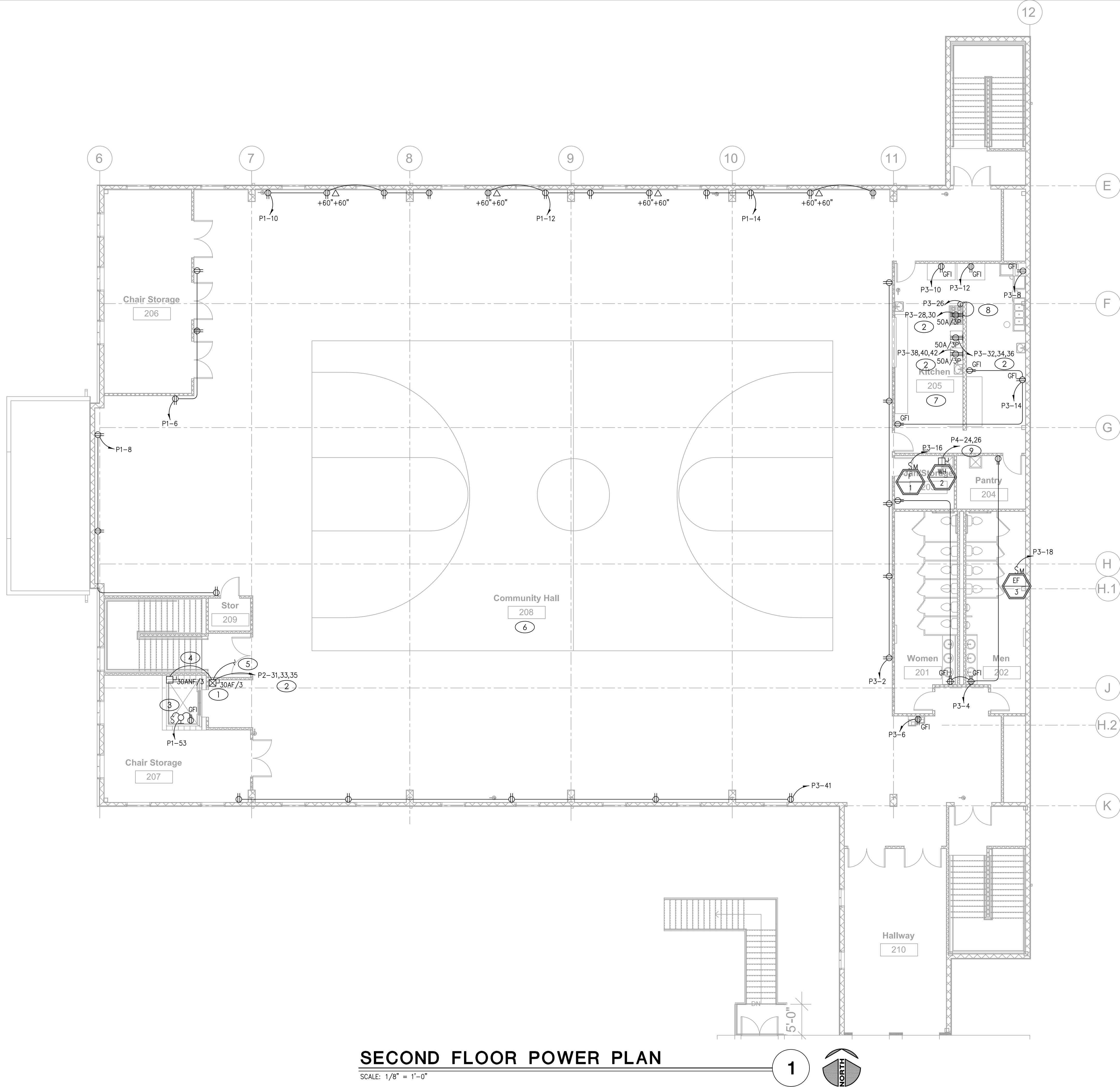
BUILDING ADDITION FOR
**BEAUTIFUL SAVIOR
LUTHERAN CHURCH**
13145 S BLACKBOB

No.	Description	Date

1ST FLOOR
ELECTRICAL PLAN -
POWER

Project number	19-130
Date	01.15.2020

E201



SECOND FLOOR POWER PLAN

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

GENERAL NOTES

- A. DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL PLANS OR FIELD MEASUREMENTS FOR DIMENSIONS.
- B. ALL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ALL LOCAL BUILDING CODES AND AMENDMENTS.
- C. ALL ROOF AND WALL PENETRATIONS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR. PROVIDE ALL REQUIRED SLEEVES, FLASHINGS, CURBS, REINFORCED ANGLES, SUPPORTING FRAMES, ETC. UNLESS THEY ARE SPECIFICALLY CALLED OUT TO BE FURNISHED BY OTHERS.
- D. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACE AVAILABLE, AND WITHOUT INTERFERENCES.
- E. THIS CONTRACTOR SHALL PERFORM ALL WORK INDICATED AND/OR AS REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF THE ELECTRICAL SYSTEMS.
- F. THE ELECTRICAL SYSTEM DESIGN IS BASED IN PART ON THE SPECIFIED HVAC AND PLUMBING EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE EXACT LOCATIONS AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT BEING FURNISHED. ANY CHANGES TO THE ELECTRICAL SYSTEM DUE TO HVAC EQUIPMENT SUBSTITUTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- G. ALL POWER WIRING SHALL BE BY THE ELECTRICAL CONTRACTOR. ALL CONTROL WIRING SHALL BE ROUTED BY THE ELECTRICAL CONTRACTOR WITH FINAL CONTROL DEVICE (T-STATS) LANDINGS BY THE MECHANICAL CONTRACTOR.
- H. ALL WIRING SHALL BE IN APPROVED RACEWAY.
- I. WIRE SIZE SHALL BE MINIMUM #12 AWG, THWN SOLID COPPER UNLESS OTHERWISE NOTED. PROVIDE GROUND WIRE WHERE REQUIRED BY CODE. INCREASE WIRE SIZE TO COMPENSATE FOR VOLTAGE DROP WHERE TOTAL LENGTH OF ANY BRANCH EXCEEDS 100 FEET.
- K. FIRE ALARM, AUDIO/VIDEO AND SURVEILLANCE SYSTEMS BY OTHERS.

KEYED PLAN NOTES

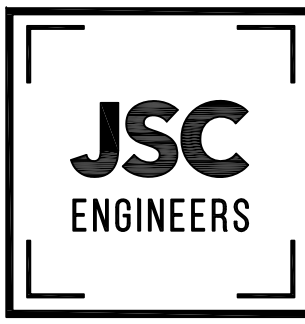
- 1. PROVIDE MAIN DISCONNECT WITH SHUNT TRIP. CONNECT AND LOCATE PER ELEVATOR MANUFACTURER REQUIREMENTS.
- 2. (1) 3/4"- 3 #8 & 1 #10 GND.
- 3. PROVIDE VAPOR TIGHT LIGHTING FIXTURE, 3500K, 6000 LUMENS AND LOCATE WITH SWITCH AND OUTLET PER ELEVATOR MANUFACTURER REQUIREMENTS.
- 4. PROVIDE 3/4" CONDUIT WITH PULLSTRING UP TO 30A 3-POLE NON FUSED DISCONNECT ON TOP OF HOISTWAY FOR AUXILIARY CONTROLS PER ELEVATOR MANUFACTURER REQUIREMENTS.
- 5. INTERCONNECT WITH (1) 3/4"- 3 #8 & 1 #10 GND UP TO 30A 3-POLE NON FUSED DISCONNECT ON TOP OF HOISTWAY SHOWN ON E202 PER ELEVATOR MANUFACTURER REQUIREMENTS.
- 6. ALL WALL OUTLETS MOUNTED AT 18" ABOVE FINISHED FLOOR IN THIS COMMUNITY HALL SHALL BE TAMPER RESISTANT TYPE.
- 7. ALL OUTLETS IN THIS KITCHEN SHALL HAVE STAINLESS STEEL COVERS. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ACTUAL EQUIPMENT SUPPLIED AND ADJUST OUTLETS AND WIRING AS NECESSARY.
- 8. INTERCONNECT HOOD POWER AND LIGHTING WITH RANGE OUTLET FOR AUTOMATIC FIRE SHUTOFF PER HOOD MANUFACTURER INSTALLATION INSTRUCTIONS.
- 9. (1) 3/4"- 2 #10 & 1 #10 GND.

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BUILDING ADDITION FOR
BEAUTIFUL SAVIOR
LUTHERAN CHURCH
13145 S BLACKBOB

No.	Description	Date

2ND FLOOR
ELECTRICAL PLAN -
POWER

Project number	19-130
Date	01.15.2020

E202