FLOOR ASSEMBLY (PRECAST)			
FIRE RATING (HR)	SOUND RATING (STC)	UL NO.	DESCRIPTION
3 HR.	- -	J901 J994	CONSTRUCTION TYPE: 12" CONCRETE PLANK W/ 2" CONC. TOPPING DETAIL

FLOOR / CEILING ASSEMBLY (WOOD FRAMED)				
FIRE RATING (HR)	SOUND RATING (STC)	UL NO.	DESCRIPTION	DETAIL AND DESIGN DATA
1 HR.	50 MIN.	UL L558 (SIM.)	CONSTRUCTION TYPE: WOOD JOISTS, GYPSUM WALLBOARD, GLASS FIBER 1/2" TYPE 'X' GYPSUM BOARDS OR VENEER BASE APPLIED AT RIGHT ANGLES TO RESILIENT FURRING CHANNELS WITH 1" TYPE 'S' DRYWALL SCREWS 8" O.C. ON ENDS AND 12" O.C. IN FIELD. WALLBOARD END JOINTS LOCATED MIDWAY BETWEEN CONTINUOUS CHANNELS AND ATTACHED TO ADDITIONAL PIECES OF CHANNELS 64" LONG WITH SCREWS 8" O.C.. RESILIENT FURRING CHANNELS APPLIED 24" O.C. AT RIGHT ANGLES TO WOOD JOIST 19.2" O.C. WITH 6d COATED NAILS 1 7/8" LONG, 0.085" SHANK, 1/2" HEADS, TWO PER JOIST. WOOD JOISTS SUPPORTING 1" GYPCRETE OVER 3/4" T & G PLYWOOD SUBFLOOR. GLUE AND SCREW TO JOISTS. 3 1/2" THICK GLASS FIBER INSULATION BATTS 0.7 pcf FRICTION FIT IN JOIST CAVITIES SUPPORTED ALTERNATELY EVERY 12" BY WIRE RCGG AND RESILIENT FURRING CHANNELS. SOUND TESTED WITH CARPET AND PAD AND WITH INSULATION STAPLED TO JOISTS. (GA FILE NO. FC 5126)	APPROX. CEILING WEIGHT: 2 PSF FIRE TEST: NEIR 145 SOUND TEST: R-NL L1224-38-65, 3-30-65 IIC & TEST: ITA C & P, R-NL L1224-27-65, 3-30-65

ROOF / CEILING ASSEMBLY (WOOD FRAMED)				
FIRE RATING (HR)	SOUND RATING (STC)	UL NO.		DETAIL AND DESIGN DATA
1 HR.	- -	UL P531	CONSTRUCTION TYPE: PRE-ENGINEERED WOOD TRUSS, GYPSUM BOARD, GLASS FIBER ROOFING SYSTEM OVER 1/2" CDX PLYWOOD GLASS FIBER INSULATION BATTS PITCHED (OR PARALLEL CHORD) PRE-ENGINEERED WOOD TRUSS @ 24" O.C. MAX. METAL FURRING CHANNELS (2) LAYERS 5/8" TYPE 'X' GYPSUM BOARD	

FIRE RESISTANT THRU-PENETRATIONS		
LOCATION	UL NO.	(HR) FIRE RATING
NON-METALIC PIPE THRU CONCRETE/PRECAST/CMU FLOOR OR WALL (6" DIAMETER OR SMALLER)	ULCAJ2089	2 HR.
METAL PIPES (STEEL PIPE/CONDUIT/COPPER TUBING/COPPER PIPE) THRU WOOD FRAME WALL (6" DIAMETER OR SMALLER)	ULWL1029	1&2 HR.
NON-METALIC PIPE THRU WOOD FLOOR/CEILING CONSTRUCTION (NOMINAL 4" DIAMETER OR SMALLER SCHEDULE 40 PVC PIPE)	ULFC2011	1 HR.
NON-METALIC PIPE THRU WOOD FLOOR/CEILING CONSTRUCTION AND ROLLED THRU FIRE RATED CHASE WALL (SCHEDULE 40 SOLID CORE PVC PIPE)	ULFC2030	1 HR.
NON-METALIC PIPE THRU WOOD FLOOR/CEILING CONSTRUCTION (CLOSED FLANGE NOMINAL 4" DIAMETER OR SMALLER SCHEDULE 40 PVC PIPE)	ULFC2037	1 HR.
METALIC PIPE (STEEL PIPE/ELECT...CONDUIT/COPPER TUBING/COPPER PIPE) THRU WOOD FLOOR/CEILING CONSTRUCTION AND ROLLED THRU FIRE RESISTANT CHASE WALL (NOMINAL 6" DIAMETER OR SMALLER)	ULFC1023	1 HR.
STEEL PIPE, CONDUIT, THRU CONCRETE FLOOR OR CONCRETE BLOCK CONSTRUCTION (6" DIAMETER OR SMALLER SCHEDULE 40 OR HEAVIER)	ULCAJ1150	3 HR.
PLASTIC, ABS AND PVC PIPE THROUGH-PENETRATION (6" DIAMETER OR SMALLER)	UL1479	3 HR.

NOTE: M/E/P CONTRACTOR SHALL SUBMIT APPROVED MANUFACTURER'S PRODUCT DATA (AND PROPOSED ALTERNATES) WITH UL DESIGN NUMBER AND ASSOCIATED FIRE RATING FOR EACH ASSEMBLY PENETRATION.

FIRE STOP NOTES

PROVIDE FIRE RESISTANT FIRE STOP SYSTEMS AT ALL FIRE RESISTANT FLOOR/CEILING AND WALL ASSEMBLIES PENETRATED BY PIPES/CONDUIT/ETC.

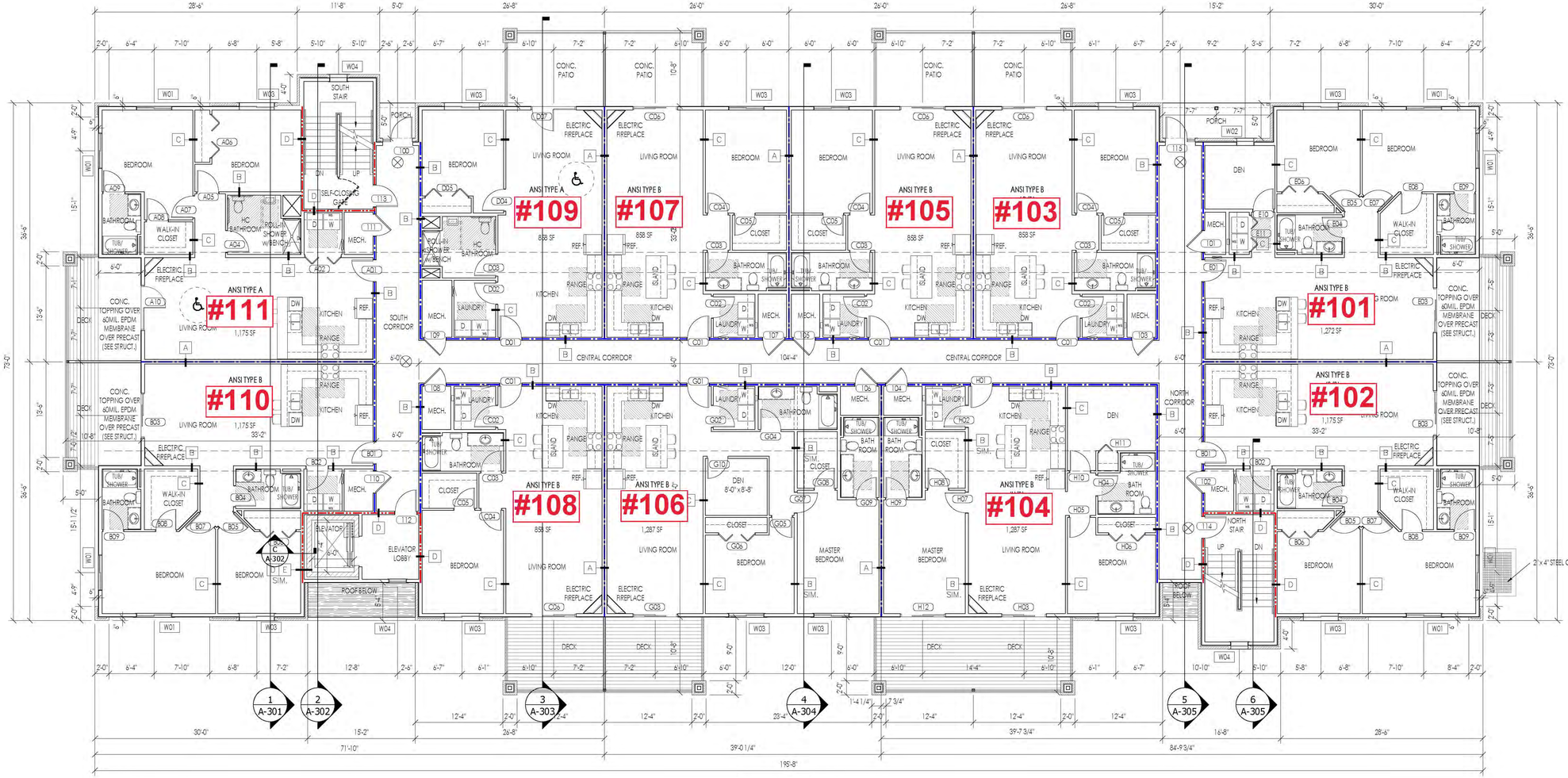
FIRE RATED WALL ASSEMBLIES
WHERE THE PENETRATING ITEMS ARE STEEL, FERROUS OR COPPER PIPES, TUBES OR CONDUITS, THE ANNULAR SPACE SHALL BE PROTECTED:
1.) IN CONCRETE OR MASONRY WALLS WHERE THE PENETRATING ITEM IS A MAXIMUM 6 INCH NOMINAL DIAMETER AND THE AREA OF THE OPENING THROUGH WALL DOES NOT EXCEED 144 SQUARE INCHES, CONCRETE, GROUT OR MORTAR IS PERMITTED WHERE INSTALLED TO FILL THE ENTIRE REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
2.) THE MATERIAL USED TO FILL THE ANNULAR SPACE SHALL PREVENT THE PASSAGE OF FLAME AND HOT GASES SUFFICIENT TO IGNITE COTTON WASTER WHEN SUBJECTED TO ASTM 19 OR UL263 TIME-TEMPERATURE FIRE CONDITIONS UNDER A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF 0.01 INCH OF WATER AT THE LOCATION OF THE PENETRATION FOR THE TIME PERIOD EQUIVALENT TO THE FIRE-RESISTANCE RATING OF THE CONSTRUCTION PENETRATED.

FIRE RATED HORIZONTAL ASSEMBLIES
1. PENETRATIONS BY STEEL, FERROUS, OR COPPER PIPES, TUBES, CONDUIT, OR VENTS IN CONCRETE OR MASONRY FIRE RESISTANCE RATED FLOOR ASSEMBLY WHERE THE ANNULAR SPACE IS PROTECTED WITH MATERIALS THAT PREVENT THE PASSAGE OF FLAME AND HOT GASES SUFFICIENT TO IGNITE COTTON WASTE WHEN SUBJECTED TO ASTM E119 OR UL263 TIME-TEMPERATURE FIRE CONDITIONS UNDER A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF 0.01 INCH OF WATER AT THE LOCATION OF PENETRATION FOR THE TIME PERIOD EQUIVALENT TO THE FIRE-RESISTANCE RATING OF THE CONSTRUCTION PENETRATED. PENETRATING ITEMS WITH A MAXIMUM 6" NOMINAL DIAMETER SHALL NOT BE LIMITED TO PENETRATION OF A SINGLE FIRE RESISTIVE RATED FLOOR ASSEMBLY, PROVIDED THE AGGREGATE AREA OF THE OPENINGS THRU THE ASSEMBLY DOES NOT EXCEED 144 SQUARE INCHES IN ANY 100 SQUARE FEET OF FLOOR AREA.
2. PENETRATION IN A SINGLE CONCRETE FLOOR BY STEEL, FERROUS OR COPPER PIPES, TUBES, CONDUITS, OR VENTS WITH A MAXIMUM 6 INCH NOMINAL DIAMETER, PROVIDED THE CONCRETE, GROUT OR MORTAR IS INSTALLED THE FULL THICKNESS OF THE FLOOR OR THE THICKNESS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING. THE SINGLE CONCRETE FLOOR, PROVIDED THE AREA OF THE OPENING THROUGH EACH FLOOR DOES NOT EXCEED 144 SQUARE INCHES.
3. PENETRATIONS BY LISTED ELECTRICAL BOXES OF ANY MATERIAL, PROVIDED SUCH BOXES HAVE BEEN TESTED FOR USE IN FIRE RESISTANCE RATED ASSEMBLIES AND INSTALLED IN ACCORDANCE WITH THE INSTRUCTIONS INCLUDED IN THE LISTING.

PROVIDE FIRE STOP SYSTEMS CORRESPONDING TO THE REQUIRED HOURLY FIRE RESISTANCE AT FLOOR/CEILING AND WALL ASSEMBLIES.

THE M/E/P CONTRACTOR SHALL SUBMIT PRODUCT DATA FOR ALL FIRE STOP SYSTEMS FOR ASSEMBLIES.

STREET SIDE



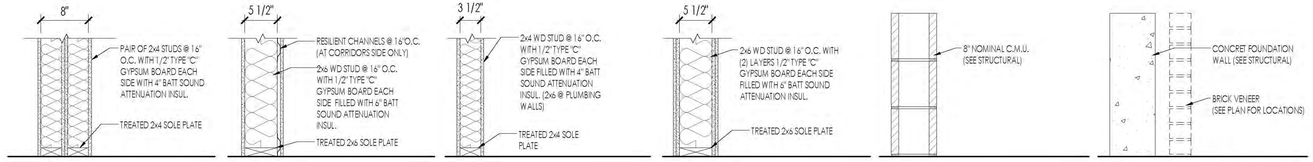
PARKING LOT SIDE

NORTH

1 FIRST FLOOR PLAN
13,625 SQ. FT.
Scale: 1/8" = 1'-0"

= 1 HOUR FIRE RATED
= 2 HOUR FIRE RATED

FE = FIRE EXTINGUISHER (1 PER UNIT - VERIFY WITH FIRE DEPARTMENT)
= ELECTRICAL 100 AMP PANEL- TYP., (VERIFY LOCATION)
ADA = ACCESSIBLE (TURN-AROUND)
ACCESSIBLE = CLEAR SPACE



SELECT STRUCTURAL ENGINEERING
606 14TH AVE SW
CEDAR RAPIDS, IA 52404
319-365-1150
2435 E KIMBERLY RD, SUITE 240S
BETTENDORF, IA 52722
563-359-3117
512 MULBERRY ST.
WATERLOO, IA 50703
319-287-9062

REVISIONS

#	DATE	BY	DESCRIPTION
-	-	-	-

THESE PLANS ARE PROPERTY OF SELECT STRUCTURAL ENGINEERING, LLC
THESE PLANS PERTAIN TO THIS SPECIFIC PROJECT AND LOCATION
DO NOT MODIFY / ALTER OR DUPLICATE OFF OF WITHOUT PRIOR AUTHORIZATION.

32-PLEX (MULTI-FAMILY)
2867 & 2869 SPRING ROSE CIRCLE
CORALVILLE, IOWA 52241
GRAND RAIL DEVELOPMENT

SHEET TITLE
FIRST FLOOR PLAN

DRAWN BY:	RS
CHECKED BY:	
APPROVED BY:	
JOB DATE:	04-19
JOB NO:	1925

PAGE NO.
A-101

P:\2019\19-203_SC-Plex Multi Family-Grand Rail\05 Drawings\SC-PLEX (CURRENT) (GRAND RAIL)_02 PLEX PLAN (CURRENT).dwg