Schematic Design
Report for

# La Crosse Station No. 2

Five Bugles Design™

September 9, 2021

# Narratives

# Architectural Narrative

## General Building Description

The La Crosse Fire Station No. 2 building in La Crosse, WI will house the Department's headquarter station for the full-time fire department. The project is currently designed with a total area of 20,360 square feet, that includes the following primary components:

- Apparatus Bays for the storage and maintenance of the departments fire vehicles, including large training apparatus and equipment.
- Apparatus Support, including gear storage as well as equipment maintenance repair and decontamination.
- Administrative Offices:
    - Private offices for fire administration
    - Small conference room
    - Work room
- Training, including a 12-person conference
- Public lobby
- Personnel Support spaces, including dorm rooms, kitchen/dining/day room and fitness.

The structure is envisioned as a two-story building with an additional mezzanine located on the eastern side of the apparatus bay. The second floor of the facility will occupy space above the first apparatus bay, creating one lower ceilinged apparatus bay, and two full-height apparatus bays; all of which are drive-through bays.

The dorm rooms, decontamination (decon) area, watch room and exercise room are all located on the first floor to allow the fastest and safest response times. Attention has been paid to developing appropriate response scenarios for both firefighters as well as potential responding administrative members.

The project site is prominently located on La Crosse Street (State Highway 16), on the most northwestern edge of the University of Wisconsin-La Crosse (UW-L). Its site is surround by La Crosse Street to the north, Oakland Street to the west, 14th Street to the South, and the primary entry to Coates Residence Hall to the east; causing this facility to have no back side. Though the site is just under 1-acre, the City of La Crosse does require stormwater management on any parcels of land over a quarter of an acre. On-site water management will need to be considered as the site is constrained.

The exterior design features prominent use of warm-toned natural materials such as brick and stone, supplemented with metal panel, to create a durable façade that also aligns with the architectural of UW-L and the adjacent residential properties. . Windows are prominently used at the overhead door openings and picked up elsewhere in the design, promoting natural daylighting.

The interior design will feature three separate zones: apparatus and associated support areas; administration spaces; and living quarters. Apparatus and support areas will typically be finished with sealed concrete floors, painted concrete block and painted exposed structure in the apparatus bays and drop ceilings in the decon areas. Administrative spaces will be finished with carpet and resilient tile flooring and lay-in ceilings. Staff support spaces will be typically

finished with softer finishes including carpet tile, painted drywall partitions, wood cabinetry with quartz counters, and high-end residential appliances.

## Architectural Systems

1. Exterior walls will be masonry cavity wall construction with a mix of stone, brick, and metal panel as the exterior finishes. The building will be spray foam insulated with R-values as required by code standards.

2. Floor slabs will be insulated with Hi-Load 60 psi insulation where in-floor heat is installed in the apparatus bays as well as the perimeter to the first floor living quarter areas. The rest of the facility will be slab on grade. Trench drains will run parallel with the bays with appropriate catch basins.

3. Stairs to the mezzanine shall be constructed of steel stringers and formed steel treads, risers and mid-floor landings. The hose tower treads and landings will be galvanized metal grating. Railings will be fabricated of steel bars and tubes with a painted finish. Stairs to the second-floor administration and living quarters will be concrete pans with rubber stair treads/risers in the northern stairwell, and porcelain tile in the southern, open stair.

4. The roof system will be fully adhered EPDM membrane and insulation over metal deck. Roof edge coping, fascia and trim shall be 22-gauge galvanized steel with manufacturer's standard Kynar finish. The roof will include internal roof drains with overflow roof drains.

5. Exterior storefront framing to consist of thermally broken anodized aluminum frames and mullions. Glazing shall be insulated, double pane units, with ¼" tempered glass at the exterior and ¼" laminated glass at the interior. Low 'E' coating shall be located on the #3 surface.

6. Exterior overhead doors shall be insulated steel sectional with insulated glazing and exterior weather-strip and jack shaft type operators. Glazing units shall meet same specification as windows. Exterior service doors and frames shall be galvanized steel. Exterior louvers shall be extruded aluminum with drainable blades and bird screens.

7. Interior doors shall be wood or 18-gauge steel while the interior frames shall be 16-gauge steel.

8. All door hardware shall be commercial grade with select doors having key fob access control systems. Exterior lobby doors shall have Automatic Door Operators.

9. Interior partitions shall be concrete masonry or gypsum wallboard on metal stud with sound insulation and wood blocking as required for equipment mounting.

10. Typical interior wall finishes to include primer and two finish coats of paint. Wall Coverings will be used in select rooms. Epoxy paint is required in the apparatus bays and various apparatus support rooms.

11. Floor finish shall be sealed concrete at the garage, apparatus bays and apparatus support areas. Fluid Applied Flooring will be used in the decontamination areas. Porcelain Tiling and Resilient Flooring will be used in select areas of the administration areas where circulation and cleanliness are key. Carpet tiles and flocked carpet tiles will be used in the dorms, day room, conference room and offices. Vulcanized rubber flooring will be installed in the exercise room.

12. Acoustical ceilings shall be 24" x 24" in office and other work areas where required with a 15/16" suspension system. Decorative linear panel metal ceilings will be in select locations.

13. Casework shall be plastic laminate constructed in accordance with AWI Custom Quality. Solid surface countertops shall be used at lavatories and windowsills. Quartz countertops will be used in the kitchenette areas. All apparatus bay support casework will be metal with Stainless Steel Countertops or Butcher Block in select rooms.

14. Shower rooms will consist of porcelain tile shower surrounds and appropriate waterproofing with porcelain tile floors.

15. Toilet accessories shall be commercial quality brushed stainless steel at all toilet rooms. PVC benches will be located at each shower area.

16. Lockers shall be fully ventilated painted metal at the Decontamination.

17. Fire extinguisher cabinets are to be fully recessed, steel construction with vertical glass insert.

18. Window Shades shall be fabric roller shades complete with mounting brackets, roller tubes, hembars, hardware and accessories. All window shades are to be manually operated.

# Electrical Narrative

## System Type (Electrical)

Applicable Codes and Standards

Codes:

- 2017 National Electrical Code 70
- 2015 Standard for Electrical Safety in the Workplace 70E
- 2015 National Fire Alarm Code 72
- 2015 Life Safety Code 101
- 2015 International Building Code
- 2015 International Existing Building Code
- 2015 International Energy Conservation Code
- SPS 316

Guidelines/Standards:

- The Lighting Handbook 10th Edition – Illuminating Engineering Society

## Electrical Systems Description:

- Normal Power:
  - The new fire station will be served from a 208/120V 3-phase, 4-wire 600 Amps electrical service. Coordination with the utility required. The proposed utility service shall be fed from a transformer with underground service to exterior building mounted CT cabinet and service entrance disconnect. The main distribution panels will be located on the second level and shall include a surge protection device. Remote branch feeder panelboards shall be mounted within storage rooms or other utilitarian type spaces. These panelboards shall be provided for general power, lighting circuits, plumbing and mechanical equipment.
  - Final termination from the utility pole to the CT cabinet will be completed by the local power company.
- Emergency Power:
  - The state of Wisconsin has deemed natural gas not a reliable source for providing power to an emergency generator. There are four options: 1) provide a diesel generator with a separate transfer switch to handle the emergency loads or 2) provide battery backed up devices to handle the egress lighting or 3) provide a dual fueled generator with natural gas and propane and a minimum of 2 hours of propane on the site with an additional transfer switch for emergency loads or 4) If you desire not to have the additional code mandated on premise (2) hour supply, you must submit a petition for variance to DSPS. The variance shall include a position statement from the fire department & the local AHJ as well as a letter from the utility stating the reliability of the natural gas supply. Further discussion required.

- Standby Power:
  - The new fire station shall be equipped with an exterior generator set. A 60-100kW natural gas generator is proposed to be able to handle the building's required functional loads.
  - Optional standby loads deemed unnecessary will be determined at a later time to potentially reduce the size of the emergency generator and assist in the system design.
- Interior Lighting:
  - LED luminaires will be provided throughout the new fire station. Luminaires shall consist of 1'x4', 2'x2', and 2'x4' troffers, chain mount 4ft open and enclosed industrials, and high bay fixtures in the apparatus bays. LED down lights and decorative pendants shall also be used in specific areas as coordinated with the Owner and Architect. Decorative lights will be used in the kitchen, dining and historic display areas.
  - The front of the fire trucks will be lit up at night for display through the glass garage doors.
  - Lighting control throughout the building shall consist of wall and ceiling mounted occupancy sensors in offices, conference rooms, training rooms etc., day light sensors in open areas with an abundant amount of natural day lighting.
  - Lighting controls will also incorporate vacancy sensing, meeting new energy conservation code.
  - All lighting layouts will be verified in compliance with the current IES recommended foot-candle levels.
- Exterior Lighting:
  - LED luminaires will be provided on the exterior of the new fire station.
  - Exterior building mounted luminaires shall be operated by local photocells or a lighting control panel. Exterior luminaires shall be backed up by the emergency generator.
  - Exterior site luminaires will be operated by photocells and motion sensors to turn on at dusk and off at dawn and dim to 50% after a set amount of no occupancy.
  - Decorative building mounted lighting is being coordinated with the architect.
- Voice / Data:
  - All systems and wiring shall be provided by the Owner under separate contract. This project will provide conduit rough-ins only. The rough-in requirements will need to be coordinated with the Owner.
  - Power for head end equipment and grounding will be provided in the IT closet for use by owner supplied systems.
- Security Systems / Intrusion Detection / CCTV / Cable TV:
  - All systems and wiring shall be provided by the Owner under separate contract. This project will provide conduit rough-ins only. The rough-in requirements will need to be coordinated with the Owner.
  - Power for head end equipment and grounding will be provided in the IT closet for use by owner supplied systems.
- Alerting Systems:
  - All systems and wiring shall be provided by the Owner under separate contract. This project will provide conduit rough-ins only. The rough-in

requirements will need to be coordinated with the Owner.

- Audio/Visual Systems:
  - All systems and wiring shall be provided by the Owner under separate contract. This project will provide rough-ins only. The rough-in requirements will need to be coordinated with the Owner.
- Fire Alarm System:
  - The new fire alarm system shall be an addressable system with ceiling and wall mounted notification devices. Since the building will be fully sprinklered, the fire alarm system's automatic detection will be minimal.
  - Devices will be installed as follows:
    - A remote annunciator panel will be located at the main building exit, or Lobby.
    - Manual fire alarm pull station will be installed near the fire alarm control panel for testing.
    - Smoke/$CO_2$ detectors will be installed in all dorm rooms and hallways near the dorm rooms. These rooms will be equipped with combination fixed/rate-of-rise heat detectors.
    - Magnetic door holders will be installed at doors at each fire separation.
    - Duct smoke detectors will be installed in air-handling units as required by code.
    - Horns will be installed such that alarm signals can be heard/seen throughout each space in the building, and in compliance with ADA requirements.
    - Strobes will be provided in all required areas. Fire alarm system power supplies shall be sized to accommodate the addition of devices within adaptable dorm rooms.
    - System amplifiers and Notification extender panels will be provided as required.
- Power to Mechanical Systems:
  - Electrical power will be provided to all mechanical equipment, fans, pumps, etc. Motor starters and disconnects will be provided by the electrical contractor. All starters and disconnects must be provided with code required working clearance space.
- Miscellaneous Requirements:
  - Apparatus bay shall be provided with one cord drop for each engine and other vehicle locations. Cord drops shall have a GFCI receptacle and hang at a set height above the floor. They shall also be compatible with the Owners automatic disconnect system on their fire trucks.
  - Employee Parking lot shall be provided with four power outlets (standard 120volt GFI Weatherproof outlets) for employee vehicles block heaters. Coordination required.

# HVAC Narrative

## HVAC Systems Description

- Heating Systems:
  - Boiler Plant: The bulk of the heating will be provided by multiple natural gas-fired high efficiency condensing hot water boilers. 399 MBH each. Type L Copper pipe with solder fittings will distribute hot water to in-floor hydronic manifolds, unit heaters, and VAV terminal boxes with a two-pipe supply/return system. The hydronic pumping arrangement will consist of a primary/secondary system with lead/lag redundant control. Pumps will be variable speed or provided with electronically commutated motors to control flow and reduce energy use.
  - Rooftop Unit: Two natural gas fired, packaged rooftop units shall provide heating, cooling, and ventilation for the first and second floor office and living areas (one unit for each floor).
  - Make-up Air Unit: Roof-mounted, natural gas fired unit shall provide preheated ventilation air for the apparatus bay. Unit shall be direct fired. At this time, we are assuming that the Kitchen hood will be less than 400 cfm, will not be a Type 1, and a make-up air unit will not be required.
- Cooling Systems:
  - The packaged rooftop units indicated above shall provide cooling to the dorm and office areas. Conditioned air distributed through sheet metal ductwork and zoned with VAV terminal units (VAV boxes).
  - A ductless split system will serve the I.T. closet (to be verified). This system will have a wall mounted evaporator and a roof mounted air-cooled condensing unit.
- Office/Dorm Area HVAC System:
  - The electric cooling /gas heating packaged rooftop unit, as noted above, will provide preheated air or air conditioning through insulated sheet metal ductwork to each zone's VAV box. The VAV boxes will have a hot water reheat coil to provide additional temperature control to each zone for added IAQ.
  - Supply ductwork will be provided throughout and sized to accommodate heating, cooling and ventilation requirements. A ducted return air system will be provided back to the rooftop.
  - The rooftop unit shall be provided with an economizer section. The economizer section will provide continuous ventilation and/or full outside air to take advantage of free cooling. Enthalpy control will be used to prevent indoor humidity issues during economizer mode.
  - Toilet, locker and other required exhaust will be provided via powered roof ventilators.
  - Hydronic radiant in-floor heat will be provided along the perimeter of the exterior first floor area, approximately 4'-6' in from exterior walls.
  - Vestibules and stairwells will be heated by hot water cabinet unit heaters.
  - Toilet rooms with exterior exposure will be heated by hot water radiant panels.
  - The kitchen ventilation system shall consist of a high-end residential style range hood. (To be verified).
  - Work Room SCBA compressor and tank fill stations by Owner. Compressor to be vented as required.
  - Gear Turnout Room shall be exhausted as a locker area to remove humidity.
  - Dryer venting will be provided.
  - Elevator equipment exhaust fan will be provided.

  - Hose drying area will be heated by a hot water unit heater, and ventilated during simulated smoke events by a powered roof or wall ventilator, and an intake louver with a motor-operated control damper.
  - The Office/Dorm area will be balanced positively with respect to the Apparatus Bay.
- Apparatus Bay Area HVAC System:
  - Radiant in-floor heating will provide the primary heating source. Hot water will be provided by the same boilers serving the office/dorm areas. Additional hot water unit heaters will be provided for supplemental heat. Destratification fans shall be used to move air during heating periods (type of fan to be determined).
  - The apparatus bays will not be cooled, destratification fans will be provided to move air during cooling periods.
  - The ventilation system will consist of a natural gas direct fired make-up air unit and roof mounted power ventilators. The make-up air unit/exhaust fan will be controlled by a time clock to provide .75cfm/sq. ft. of exhaust during occupied times, and for 5 hours in every 24 hours period. The system will also be controlled by an automatic CO/NO2 exhaust detection system. When either CO/NO2 exceed normal levels, the MAU/EF system will turn on if it is in the off position. The Apparatus Bay area will be balanced negatively with respect to the Office/Dorm portion of the building.
  - Vehicle exhaust system will be provided by the owner. The HVAC design shall include capped roof curbs to accommodate the vehicle exhaust system roof terminations.
- Controls:
  - Digital direct controls (DDC) will be provided to operate the HVAC system. The specifications will be written to allow open bidding on the system.

# Plumbing Narrative

## Fire Protection Systems Description:

- The building will be protected with a wet (water) sprinkler system. Where there are ceilings, piping will be concealed with recessed concealed sprinkler heads. Where piping is exposed, there will be upright sprinkler heads.
- The building will be provided with one 6" combined water service that enters the first floor water room from below floor. Above the floor, the service will tee into a 4" domestic water main and a 6" fire protection main. The fire protection main will be protected with an RPZ type backflow preventer that will be drained through the wall of the building above grade.
- Piping associated with wet system will be Schedule 10 steel or Schedule 40 steel with mechanical grooved fittings for pipes 2-1/2" and larger and threaded for pipes 2" and smaller.
- For sprinkler system to operate as described above, the City water pressure will need to be 50 psi @ 800 gpm or better. If this condition is not true, a fire pump will be required.
- The fire department connection, location and type will be coordinated with the Fire Department.
- There will be a hydrant located with-in 100 feet of the Fire Department Connection located in the West of the building. Coordination between fire protection, plumbing, and site utilities will need to occur during DD phase to determine routing of water utilities to accommodate the hydrants.
- Will provide a "practice water riser" in the hose tower for connecting hose and trucks to building.

## Plumbing Systems Description:

- The building's domestic water main will be a ±3" metered line downstream of the 6" combined water service. A cold domestic water supply for truck filling will be provided per bay and one 2-1/2" fill outlet will be provided, location determined by owner. This fill outlet will be provided with double check type backflow preventer to avoid contamination.
- Plumbing fixture for the toiler rooms will have water closets that are floor mount with flush valves, urinals will be wall mount with flush valves, lavatory sinks will be counter type with faucets. Toilet rooms for the public will have sensor faucet and flush valves and the employee toilet rooms will be handle operated.
- Plumbing fixtures will be wall mounted vitreous china lavatories, Stainless steel sinks in kitchen, floor mounted water closets with exposed flush valves, stainless steel water fountains with bottle fill in the office and dorm corridors. All showers will be tile with hand held shower. There will be dedicated ADA fixtures for the facility. Faucets in private areas and kitchen shall be manually operated.
- Kitchen sinks will be two or three compartments sink with one or two faucets, and dishwasher which will drain through a grease interceptor located within the building. Hand wash sink will be either wall or counter mount.
- Laundry and SCBA rooms will have larger double compartment sinks with over head spray for cleaning gear. Laundry tub, eyewash, mop sink and connections for clothes washer and extractor. Extractor will discharge into a lint collection system.

- Training/Community and Work rooms will have stainless steel sink with faucet and water supply for coffee makers.
- Water heating will be provided with a high efficiency natural gas tank type water heater. The hot water system will provide 120°F water will be supplied to kitchen, and all other fixtures. The hot water system will be provided with hot water return piping system, expansion tank and hot water return pump.
- A water softening system for the domestic water system if required. The domestic water truck fill connections to the trucks will not require water softening. Water softener to be either purchase or rented.
- An emergency eyewash station will be provided in the Gear Laundry room, the eyewash station will be provided with temper water.
- Piping associated with domestic water system will be type 'L' copper with press or soldered joints.
- Apparatus Bays will be provided with heavy-duty trench drains and catch basins. Cold water, along with Cold and Hot water hose bibbs be located around the room.
- Piping associated with Sanitary and Vent system will be DWV PVC or cast iron.
- All flat areas of the roof will be provided with roof drains with piping routed through the building down to storm drain system. Secondary roof drains or scuppers will be installed to provide over flow of water from the roof.
- Piping associated with storm system will be insulated DWV PVC or cast iron. Where required, the piping will be cast iron pipe for sound control.
- The apparatus area will be provided with air compressor for facility needs. Outlets for truck connections, will be provided at both ends of each bay or as requested by the fire department.
- Piping associated with compressed air system will be Schedule 40 steel with threaded fittings.
- Gas Piping:
    - We will coordinate to have natural gas service provided to the building by the gas utility.
    - Utility to provide a 2 psi-pressure gas meter to the building.
    - Provide natural gas piping, fittings, valves and regulators from the gas meter to the emergency generator, boilers, rooftop units, makeup air units, domestic water heater, and oven/range/grille as required.
    - Range and grille will be provided with an automatic shutoff valve upon a fire call.
    - Gas piping and fittings shall be black steel, gas piping buried to Generator shall be Polyethylene. Exterior gas piping shall be painted with corrosion preventing paint.

# Structural Narrative

## Structural Description

The new La Crosse Fire Station No. 2 public safety building, located in La Crosse, Wisconsin, will be an essential facility building with a two-story office area, a partial second level mezzanine and a clerestory apparatus bay. The following information is to be used in conjunction with the schematic structural drawings to qualitatively describe the proposed structural systems for this project.

- Foundation
  - It is assumed that the new building structure will be supported on conventional reinforced concrete spread footings and concrete foundation walls. A project specific geotechnical evaluation report will be required to confirm the existing soil conditions and to provide recommendations for the structural foundation design and site preparation.
- Wall Construction
  - The exterior walls of the office area will be 8" load bearing CMU walls and the exterior walls of the apparatus bay will be 12" load bearing CMU walls. Interior load bearing walls will be 8" CMU.
- Floor Framing
  - The ground floor will be concrete slab on grade. The slab in the office areas will be a 4" thick and reinforced with synthetic fibers. The slab in the apparatus bay will by 7" thick and mild reinforced with #4 at 1'-4" on center each way. An additional inch of concrete should be added if/where radiant heating will be placed within the slab.
  - The second floor and the mezzanine floor will be 8" precast concrete floor plank with a 2" non-structural concrete topping. The floor planks will be supported on CMU bearing walls.
- Roof Framing
  - The roofs over the office area and the apparatus bay will consist of 1 ½" steel roof deck over open web steel joists. The joists will be supported by CMU bearing walls at exterior and post and beam steel framing at the interior.
  - The low roofs will be 8" precast plank with no topping or 1 ½" steel roof deck over steel framing
- Lateral System
  - The Lateral forces on the building will be resisted by the roof and floor diaphragms and the CMU shear walls. Steel drag struts may be required in the roof diaphragm to transfer the load to the shear walls.

## Building Codes and References

Building Codes

- 2018 Wisconsin Commercial Building Code. [a]
- 2015 International Building Code (IBC). [b]

References

- Minimum Design Loads for Buildings and Other Structure, ASCE 7-10. [c]
- Concrete: Building Code Requirements for Structural Concrete and Commentary, American
- Concrete Institute, ACI 318-14. [d]
- Masonry: Building Code Requirements for Masonry Structures, American Concrete
- Institute, ACI 530-13 / TMS 402-13 / ASCE 5-13. [e]
- Structural Steel: Specification for Structural Steel Buildings, Fourteenth Edition, American
- Institute of Steel Construction, AISC 360-10. [f]
- Cold Formed Steel: North American Specification for the Design of Cold-Formed steel
- Structural Members, AISI 2012. [g]

## Loading Criteria

A summary of the project-specific loading criteria follows. This loading meets or exceeds the requirements of the IBC and incorporates loading requirements specific to this project.

- Gravity Loading
  - The following loads are in addition to the self-weight of the structure. The minimum loading requirements have been taken from Table 1607.1 of the International Building Code. Live loads are reduced where permitted in accordance with Section 1607.10. Loads are given in pounds per square foot (psf).

Table 1. Gravity Loads

| Use | Live Loading | Superimposed Dead Loading |
|---|---|---|
| Offices | 50 psf (reducible) | 5 psf MEP/Ceiling<br>15 psf Partitions<br>= **20 psf Total SDL** |
| Lobby and Public Areas | 100 psf (not reduced) | 5 psf MEP/Ceiling<br>5 psf Partitions<br>= **10 psf Total SDL** |
| Exercise Room | 80 psf (not reduced) | 5 psf MEP/Ceiling<br>5 psf Misc.<br>= **10 psf Total SDL** |
| Kitchen and Day Room | 60 psf (not reduced) | 5 psf MEP/Ceiling<br>5 psf Misc.<br>= **10 psf Total SDL** |
| Dorm Rooms | 40 psf (not reduced) | 5 psf MEP/Ceiling<br>5 psf Misc.<br>= **10 psf Total SDL** |
| Stairs and Landings | 100 psf (not reduced) | 5 psf MEP/Ceiling<br>5 psf Misc.<br>= **10 psf Total SDL** |
| Mechanical and Light Storage | 125 psf (not reduced) | 5 psf MEP/Ceiling<br>5 psf Partitions<br>= **10 psf Total SDL** |

- Snow Design Criteria
  - Snow loading is in accordance with the 2018 Wisconsin Commercial Building Code and ASCE 7-10 requirements. Snow drifting, unbalanced loading and partial loading are considered in the design of the roof framing.

Table 2. Snow Design Criteria

| Parameter | Value |
|---|---|
| Ground Snow Load ($P_g$) | 40 psf |
| Exposure | Terrain Category C |
| Exposure Factor ($C_e$) | 1.0 |
| Thermal Factor ($C_t$) | 1.0 |
| Importance Factor ($I_s$) | 1.2 |
| Flat Roof Snow Load ($p_f$) $p_f = 0.7C_eC_tI_sp_g$ | 34 psf |

- Wind Design Criteria
  - Wind loading is in accordance with the 2018 Wisconsin Commercial Building Code and ASCE 7-10 requirements

Table 3. Wind Design Criteria

| Parameter | Value |
|---|---|
| Basic Wind Speed, 3-second gust (V) | 120 mph |
| Exposure | C |
| Risk Category | IV |
| Enclosure Classification | Enclosed |
| Internal Pressure Coefficient ($GC_{pi}$) | ±0.18 |
| Mean Roof Height (h) | 28 feet |

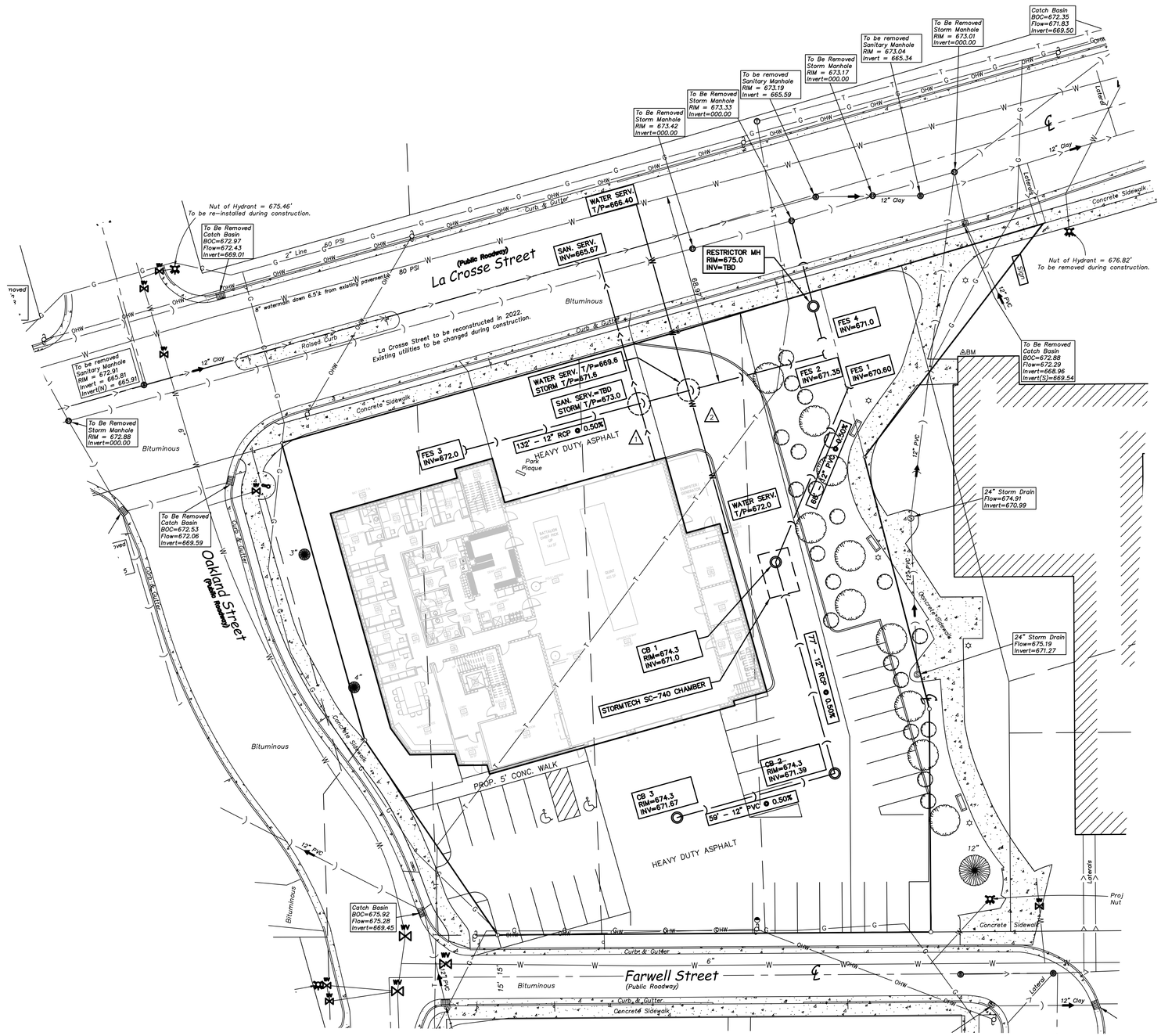
## Materials

The materials properties used for design include the following:

Table 4. Material Properties

| Member | Strength |
|---|---|
| Non-structural Concrete | f'c = 3.0 ksi at 28 days |
| Interior Slabs on Grade, Sidewalks, Curbs, Mechanical Pads | f'c = 4.0 ksi at 28 days |
| Exterior Slabs on Grade, Sidewalks, Curbs, Mechanical Pads | f'c = 4.5 ksi at 28 days |
| Concrete Footings and Foundation Walls | f'c = 4.0 ksi at 28 days |
| 8" Masonry Walls | f'm = 1.5 ksi at 28 days |
| 12" Masonry Walls | f'm = 2.5 ksi at 28 days |
| Concrete and Masonry Reinforcing Steel | 60 ksi |
| Structural Steel – W Shapes | Fy = 50 ksi, ASTM A992 |
| Structural Steel – Angles, Plates, Channels | Fy = 36 ksi, ASTM A36 |
| Structural Steel – Pipe | Fy = 35 ksi, ASTM A53 |
| Structural Steel – Square or Rectangular Tube | Fy = 46 ksi, ASTgM A500 |

# Schematic Design Drawings




GRAPHIC SCALE

0 10 20 40

( IN FEET )
1 inch = 20 ft.

UTILITY NOTES:

1. ALL SEWERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND THE CITY OF CHICAGO. IN CASE OF CONFLICT, THE LATTER SHALL TAKE PRECEDENCE.
2. SEWERS OF 21 INCHES IN DIAMETER AND SMALLER SHALL BE CONSTRUCTED OF EXTRA STRENGTH VITRIFIED CLAY PIPE (ESVCP) WITH ASTM DESIGNATION C-700 WITH ASTM C-425 JOINTS AS SPECIFIED IN THE REGULATIONS SET BY THE DEPARTMENT OF WATER MANAGEMENT.
3. PRIOR TO STARTING CONSTRUCTION AN INSPECTION OF EXISTING MANHOLES, INLETS, AND CATCH BASINS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE CONDITION AND AMOUNT OF EXISTING DEBRIS IN THESE STRUCTURES. THE OWNER SHALL BE NOTIFIED OF ANY BLOCKED OR DAMAGED STRUCTURES.
4. ALL STORM WATER STRUCTURES WITH OPEN LIDS SHALL RECEIVE INLET & PIPE PROTECTION. PROTECTION SHALL REMAIN UNTIL THE SITE IS PERMANENTLY STABILIZED. INLET PROTECTION SHALL BE INSTALLED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION HIGHWAY STANDARD 280001 AND SECTION 280 OF THE STANDARD SPECIFICATIONS.
5. REUSE OF ANY EXISTING OUTLET PIPES OR SERVICE SEWERS FROM THE SITE, SEWER PIPES MUST BE TELEVISED IN THE PRESENCE OF A CITY INSPECTOR FOR REVIEW AND APPROVAL.
6. ALL EXISTING STORM SEWERS AND STRUCTURES MUST BE CHECKED AND CLEANED AS NEEDED.
7. ALL EXISTING CATCH SHOWN TO REMAIN SHALL BE INSPECTED FOR SUITABILITY FOR CONTINUED USE. REPLACE IF NECESSARY.

SERVICES

1. 8" PVC SANITARY SERVICE
1.0% MIN. SLOPE. CONNECT TO EXISTING. SAN. SEWER PER CITY SANITARY SERVICE AND SANITARY RISER DETAILS.

2. 1-1/2" TYPE "K" COPPER WATER SERVICE

LEGEND

| | | | |
|---|---|---|---|
| P.U. | PUBLIC UTILITY EASEMENT | +CN | FOUND CROSS-CUT |
| D.E. | DRAINAGE EASEMENT | ●PK | FOUND P.K. NAIL |
| P.S.E. | PUBLIC WALK EASEMENT | (XX.XX) | PROPOSED SPOT ELEVATIONS |
| PROP. | PROPOSED FEATURE | XX.XX | EXISTING SPOT ELEVATIONS |
| EXIST. | EXISTING | --812-- | EXISTING CONTOURS |
| MH | MANHOLE | BB | BUFFALO BOX |
| T/F | TOP OF FOUNDATION | | CLEANOUT |
| CONC. | CONCRETE | | A/C UNIT |
| ME | MEET EXISTING | | DRAINAGE FLOW ARROW |
| M= | MEASURED DIMENSION | W | WATER VALVE VAULT |
| R= | RECORDED DIMENSION | | SEWER CATCH BASIN/ INLET |
| BLDG. | BUILDING | | SEWER MANHOLE |
| RAD | RADIUS | | TREE W/ SIZE |
| ●IP | FOUND IRON PIPE | | FIRE YDRANT |
| ●IR | FOUND IRON ROD | | BOLLARD |
| IP | INLET BASKET FILTER | | POWER POLE |
| | SHUT-OFF BOX | | EXISTING CONCRETE PAVEMENT |
| | 1 ½" WATER SERVICE STANDARD METER VAULT | | EXISTING BITUMINOUS PAVEMENT |
| | PROPERTY LINE | | EXISTING GRAVEL PAVEMENT |
| W | WATER MAIN | | STRUCTURE OR ITEM TO BE REMOVED |
| G | GAS MAIN | X | TO BE REMOVED |
| SS | COMBINED SEWER LINE | | |
| S | STORM SEWER LINE | | |
| TV | CABLE/TV LINE | | |
| T | TELEPHONE/COMMUNICATION LINE | | |
| E | ELECTRIC LINE | | |
| OHW | OVERHEAD LINE | | |
| | SILT FENCING | | |
| X | CHAIN LINK CONSTRUCTION FENCING | | |

Drawn By: JV Designed By: JM Scale: 1"=20'

REVISIONS

# UTILITY PLAN

## LA CROSSE FIRE STATION #2

PREPARED FOR:

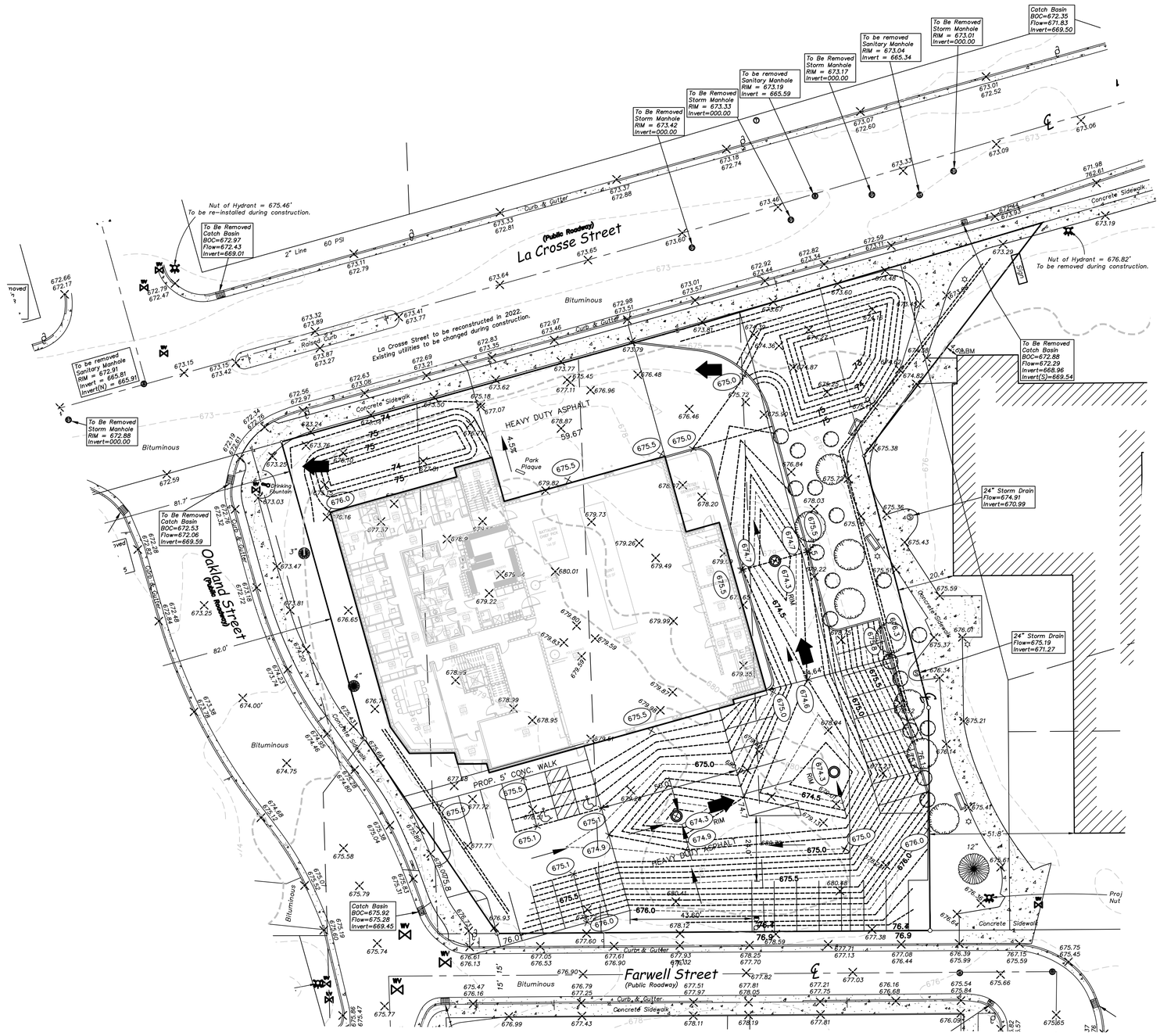
WENDEL COMPANIES
BANBURY PLACE, BUILDING D04
800 WISCONSIN STREET, SUITE 202
EAU CLAIRE, WI 54703
(715) 832-4848


KNIGHT
Engineers & Architects
Knight E/A, Inc.
221 N. LaSalle Street, Suite 300
Chicago, Illinois 60601-1211
Phone (312) 577-3300
Fax (312) 577-3526
knightea.com


SHEET NO. 5 OF 9

DATE: 08/25/2021

JOB NO. 7752.01




GRAPHIC SCALE

0 10 20 40

( IN FEET )
1 inch = 20 ft.

LEGEND

| | | | |
|---|---|---|---|
| P.U. | PUBLIC UTILITY EASEMENT | +CN | FOUND CROSS-CUT |
| D.E. | DRAINAGE EASEMENT | ●PK | FOUND P.K. NAIL |
| P.S.E. | PUBLIC WALK EASEMENT | X (XXX.X) | PROPOSED SPOT ELEVATIONS |
| PROP. | PROPOSED FEATURE | X XXX.X | EXISTING SPOT ELEVATIONS |
| EXIST. | EXISTING | --812-- | EXISTING CONTOURS |
| MH | MANHOLE | ⊗BB | BUFFALO BOX |
| T/F | TOP OF FOUNDATION | ⊗ | CLEANOUT |
| CONC. | CONCRETE | ⊠ | A/C UNIT |
| ME | MEET EXISTING | ◄ | DRAINAGE FLOW ARROW |
| M= | MEASURED DIMENSION | ┐ | AS-BUILT SANITARY WYE CONNECTION |
| R= | RECORDED DIMENSION | (W) | WATER VALVE VAULT |
| BLDG. | BUILDING | ▨ | SEWER CATCH BASIN/INLET |
| RAD | RADIUS | ◎ | SEWER MANHOLE |
| ●IP | FOUND IRON PIPE | | TREE W/ SIZE |
| ●IR | FOUND IRON ROD | | FIRE HYDRANT |
| (IP) | INLET BASKET FILTER | ● | BOLLARD |
| ⊖ | SHUT-OFF BOX | -⊕- | POWER POLE |
| ▨ | 1 ½" WATER SERVICE STANDARD METER VAULT | | |
| ◄ | OVERLAND FLOOD ROUTE | | |

Drawn By: JV Designed By: JM Scale: 1"=20'

# GRADING PLAN

REVISIONS

## LA CROSSE FIRE STATION #2

PREPARED FOR:

WENDEL COMPANIES
BANBURY PLACE, BUILDING D04
800 WISCONSIN STREET, SUITE 202
EAU CLAIRE, WI 54703
(715) 832-4848

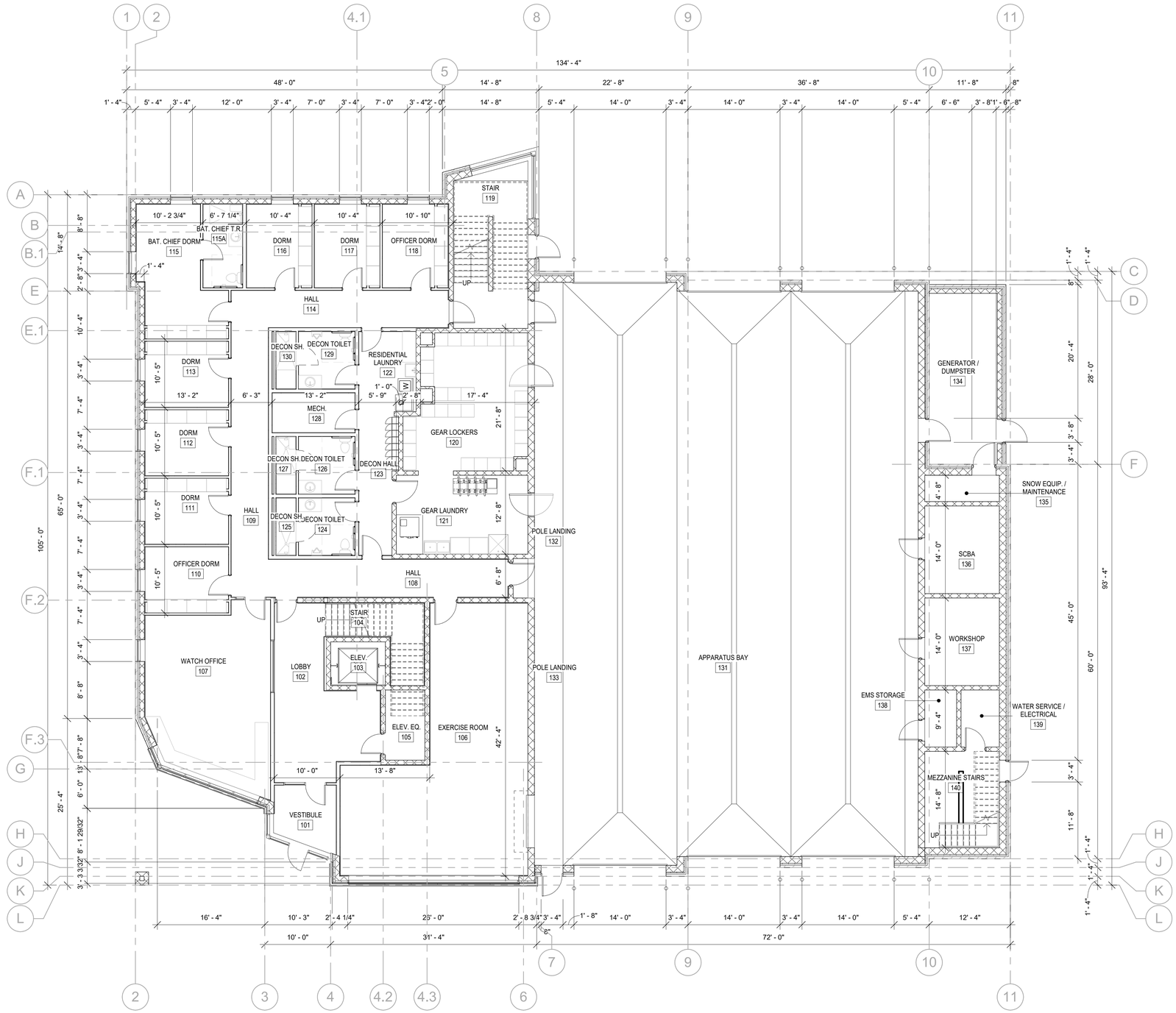

KNIGHT
Engineers & Architects
Knight E/A, Inc.
221 N. LaSalle Street, Suite 300
Chicago, Illinois 60601-1211
Phone (312) 577-3300
Fax (312) 577-3526
knightea.com


SHEET NO. 6 OF 9

DATE: 08/25/2021
JOB NO. 7752.01

## GENERAL DIMENSIONAL PLAN NOTES

1. EXTERIOR DIMENSIONS:
   - 1.1 EXTERIOR STUD WALLS: FACE OF EXTERIOR SIDE OF STUD
   - 1.2 CLEAR: OUTSIDE OF FINISHED WALL SURFACE TO OUTSIDE OF FINISHED WALL SURFACE.
2. INTERIOR DIMENSIONS:
   - 2.1 STUD WALLS: FACE OF STUD, NOMINAL.
   - 2.2 OPENINGS: INSIDE FACE OF OPENING.




1 01 - DIMENSION PLAN
SCALE: 1/8" = 1'-0"

N TRUE NORTH

LA CROSSE WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**


wendel · Five Bugles Design
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz




| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

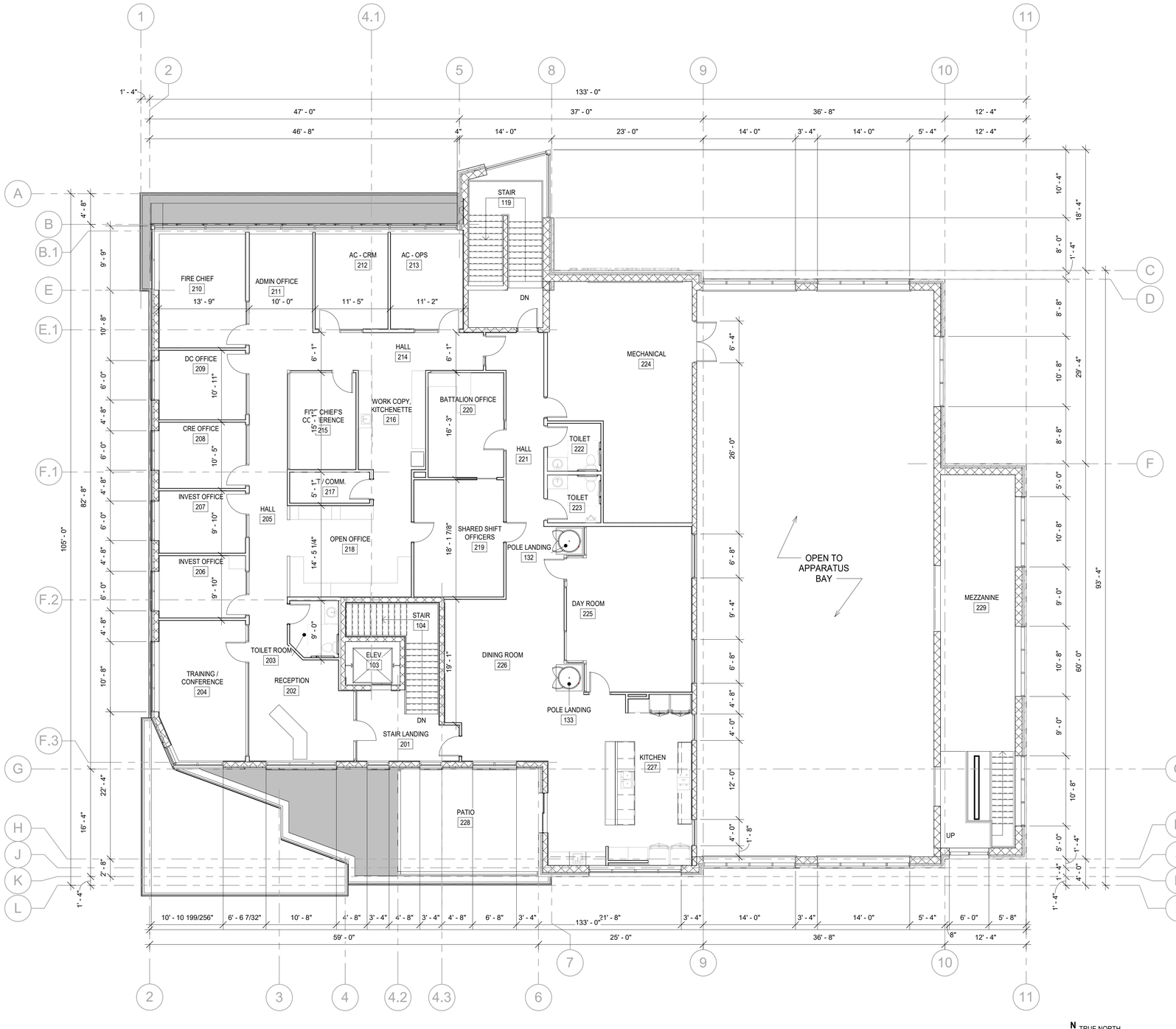
**FIRST FLOOR DIMENSION PLAN**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | | | |
|---|---|---|---|
| DATE | 08.06.2021 | | |
| SCALE | As indicated | | |
| DWN. | Author | CHK. | Checker |
| PROJ. No. | 601804 | | |
| DWG. No. | **A101** | | |

## GENERAL DIMENSIONAL PLAN NOTES

1. EXTERIOR DIMENSIONS:
   - 1.1 EXTERIOR STUD WALLS: FACE OF EXTERIOR SIDE OF STUD
   - 1.2 CLEAR: OUTSIDE OF FINISHED WALL SURFACE TO OUTSIDE OF FINISHED WALL SURFACE.
2. INTERIOR DIMENSIONS:
   - 2.1 STUD WALLS: FACE OF STUD, NOMINAL.
   - 2.2 OPENINGS: INSIDE FACE OF OPENING.




1 02 - DIMENSION PLAN
SCALE: 1/8" = 1'-0"

N TRUE NORTH

LA CROSSE WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**


wendel Five Bugles Design.
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POJACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz




| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

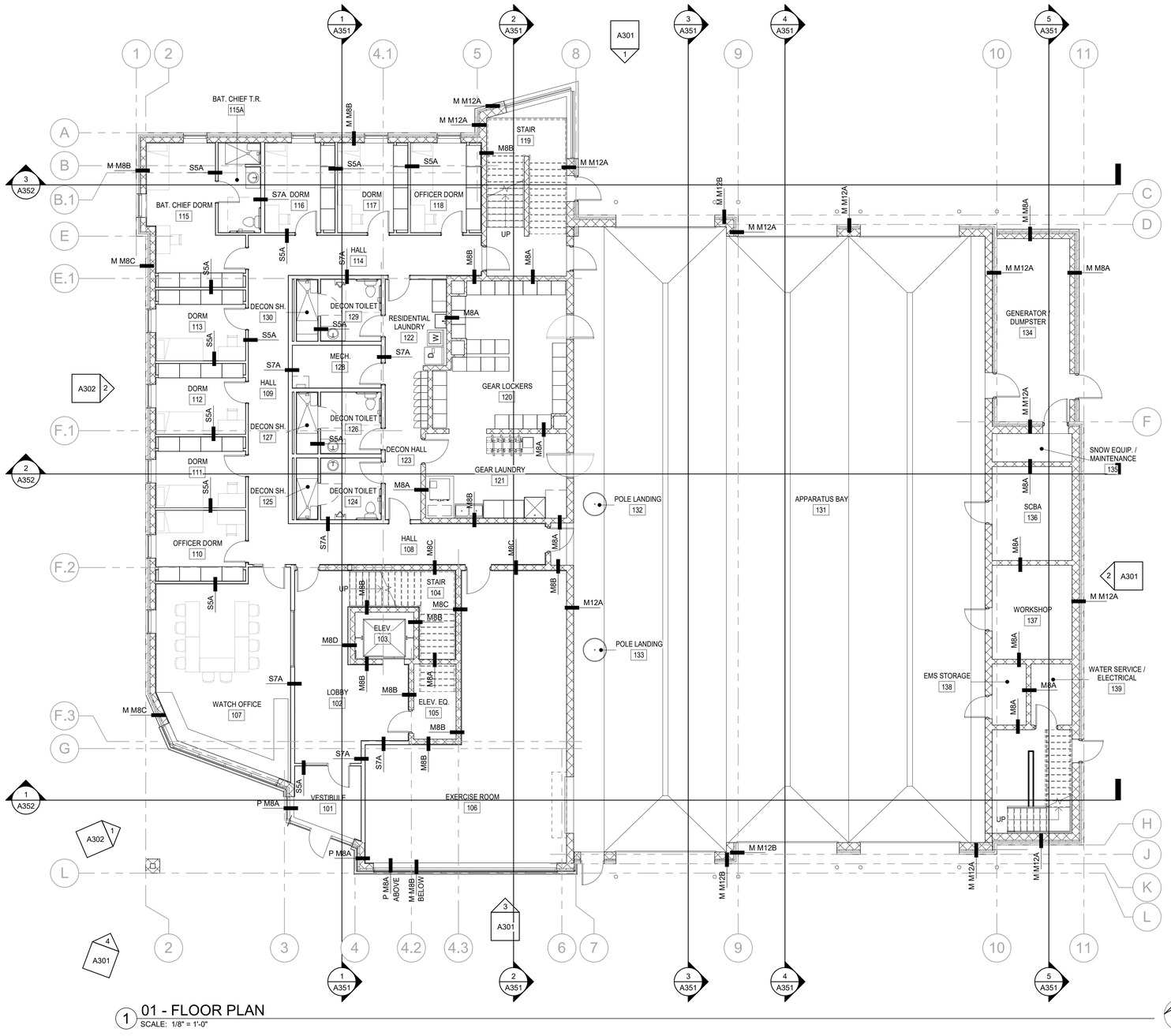
**SECOND FLOOR DIMENSION PLAN**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | | | |
|---|---|---|---|
| DATE | 08.06.2021 | | |
| SCALE | As indicated | | |
| DWN. | Author | CHK. | Checker |
| PROJ. No. | 601804 | | |

DWG. No.

**A102**




1 01 - FLOOR PLAN
SCALE: 1/8" = 1'-0"

## EQUIPMENT KEY NOTES

| | |
|---|---|
| EQ.1 | RESIDENTIAL WASHING MACHINE, BY OWNER |
| EQ.2 | RESIDENTIAL DRYING MACHINE, BY OWNER |
| EQ.3 | WASHER / EXTRACTOR, BY OWNER |
| EQ.4 | GEAR DRYER, BY OWNER |
| EQ.5 | SCBA COMPRESSOR, EXISTING BY OWNER |
| EQ.6 | SCBA FILL STATION, EXISTING, BY OWNER |
| EQ.7 | TV, BY OWNER |
| EQ.8 | REFRIGERATOR / FREEZER, BY OWNER |
| EQ.9 | RANGE, BY OWNER |
| EQ.10 | RANGE HOOD, BY CONTRACTOR |
| EQ.11 | MICROWAVE, BY OWNER |
| EQ.12 | DISHWASHER, BY OWNER |
| EQ.13 | ICE MACHINE, BY OWNER |
| EQ.14 | UNDER COUNTER REFRIGERATOR, BY OWNER |
| EQ.15 | COPIER, BY OWNER |
| EQ.16 | EVIDENCE DRYER, BY OWNER |

## PARTITION SYMBOLS

NOMINAL SUPPORT MATERIAL DIMENSION
WALL TYPE PLACE HOLDER
M M12A
EXTERIOR WALL TYPE FINISH MATERIAL
M - CONCRETE MASONRY UNITS
P - PER-FINISHED METAL PANEL
SUPPORT MATERIAL
S - METAL STUD
M - CONCRETE MASONRY UNITS

## ALTERNATE LEGEND

| | | | |
|---|---|---|---|
| ALTERNATE #1 | | ADD SKYLIGHT | |
| ALTERNATE #2 | | ..... | |

## GENERAL CONSTRUCTION NOTES

A. ALL DIMENSIONS ARE TO BE TAKEN OFF OF EDGE OF STUD WALLS.
B. FIRE EXTINGUISHERS.
F.E.=WALL MOUNTED
F.E.=RECESSED IN WALL
C. COORDINATE WITH OWNER BEFORE GYPSUM BOARD INSTALLATION FOR ANY WOOD BLOCKING REQUIRED FOR OWNER PROVIDED EQUIPMENT.
D. REFER TO STRUCTURAL DRAWINGS FOR EXACT LOCATIONS OF COLUMNS
E. REFER TO RCP FOR WALL HEIGHTS.
F. SEE SHEET G.002 FOR CODE PLAN AND LOCATIONS OF FIRE CONSTRUCTION.
G. CONSTRUCTION NOTES LISTED ON SHEETS A103 & A104 ARE TYPICAL TO THOSE SHEETS. SOME NOTES MAY NOT BE REFERENCED ON EACH SHEET.

## FLOOR PLAN KEY NOTES

| | |
|---|---|
| 1 | ADA DOOR OPERATORS. FIELD VERIFY EXACT LOCATIONS OF OPERATORS IN THE FIELD WITH ARCHITECT. |
| 2 | TRENCH DRAIN, TOP OF TRENCH ELEVATION AT 99'-10 1/2". REFER TO PLUMBING PLANS. |
| 3 | CATCH BASIN, REFER TO PLUMBING PLANS. |
| 4 | PIPE BOLLARD. REFER TO DETAIL X/XXX |
| 5 | 20"x20" GEAR LOCKERS WALL MOUNDED, BY OWNER. |
| 6 | 20"x20" GEAR LOCKERS COLUMN MOUNDED, BY OWNER. |
| 7 | FIXED LADDER TO MEZZANINE. REFER TO SPEC. |
| 8 | REMOVABLE GUARDRAIL, REFER TO DETAIL X/XXX |
| 9 | HOIST BEAM, REFER TO STRUCTURAL |
| 10 | HOIST: (1) AT HOSE / TRAINING STAIRWAY AND (1) AT APPARATUS BAY #. REFER TO SPEC NOTE ON SHEET X/XXX |

## DRAWING SYMBOLS

| | |
|---|---|
| COLUMN LINE | 1 — COLUMN DESIGNATION / COLUMN CENTERLINE |
| BUILDING SECTION | 1 A101 SIM — BLDG CROSS SECTION NUMBER / DRAWING NUMBER |
| WALL SECTION | 1 A101 SIM — SECTION NUMBER / DRAWING NUMBER |
| DETAIL SECTION | 1 A101 — DETAIL NUMBER / DRAWING NUMBER |
| ROOM TAG | ROOM NAME / ROOM NUMBER |
| EXTERIOR ELEVATION TAG | A101 1 — ELEVATION NUMBER / DRAWING NUMBER |
| INTERIOR ELEVATION TAG (MULTIPLE ELEVATIONS) | 1 2 3 4 A100 — ELEVATION NUMBERS / DRAWING NUMBER |
| INTERIOR ELEVATION TAG (SINGLE ELEVATION) | 4 A100 — ELEVATION NUMBERS / DRAWING NUMBER |
| ROOM TAG | Room name 101 — ROOM NAME / ROOM NUMBER |
| DOOR TAG | 101 — DOOR NUMBER |
| WINDOW / STOREFRONT TAG | W1 — WINDOW / STOREFRONT DESIGNATION |
| WALL TAG | 1I — WALL DESIGNATION |
| VIEW TITLE | 1 View Name 1/8" = 1'-0" — PLAN, SECTION OR DETAIL NUMBER / TITLE / SCALE |

LA CROSSE WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**


wendel — Five Bugles Design
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz

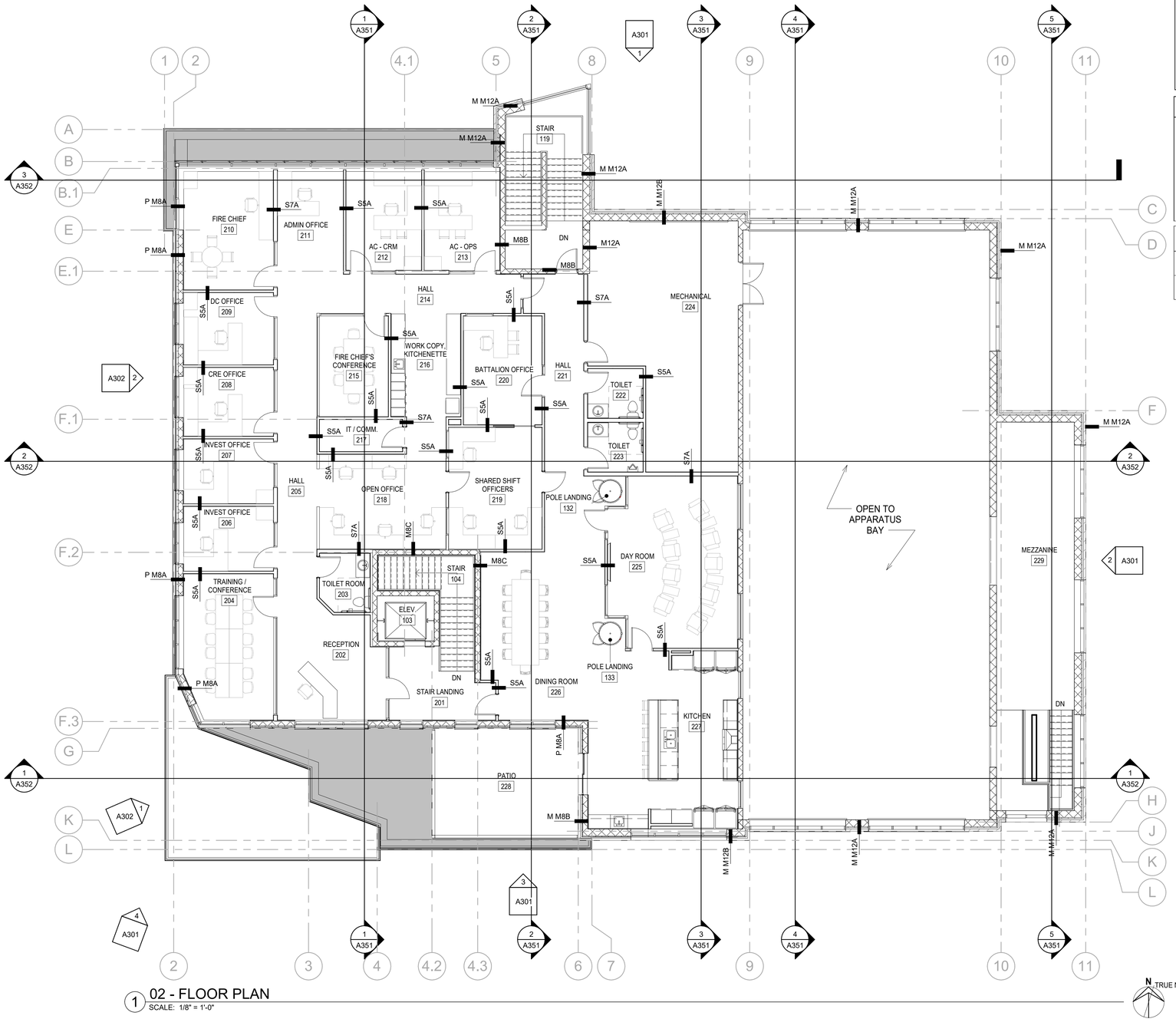



| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE
**FIRST FLOOR PLAN**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | |
|---|---|
| DATE | 08.06.2021 |
| SCALE | As indicated |
| DWN. | Author |
| CHK. | Checker |
| PROJ. No. | 601804 |
| DWG. No. | **A103** |




1 02 - FLOOR PLAN
SCALE: 1/8" = 1'-0"

## EQUIPMENT KEY NOTES

| | |
|---|---|
| EQ.1 | RESIDENTIAL WASHING MACHINE, BY OWNER |
| EQ.2 | RESIDENTIAL DRYING MACHINE, BY OWNER |
| EQ.3 | WASHER / EXTRACTOR, BY OWNER |
| EQ.4 | GEAR DRYER, BY OWNER |
| EQ.5 | SCBA COMPRESSOR, EXISTING BY OWNER |
| EQ.6 | SCBA FILL STATION, EXISTING, BY OWNER |
| EQ.7 | TV, BY OWNER |
| EQ.8 | REFRIGERATOR / FREEZER, BY OWNER |
| EQ.9 | RANGE, BY OWNER |
| EQ.10 | RANGE HOOD, BY CONTRACTOR |
| EQ.11 | MICROWAVE, BY OWNER |
| EQ.12 | DISHWASHER, BY OWNER |
| EQ.13 | ICE MACHINE, BY OWNER |
| EQ.14 | UNDER COUNTER REFRIGERATOR, BY OWNER |
| EQ.15 | COPIER, BY OWNER |
| EQ.16 | EVIDENCE DRYER, BY OWNER |

## PARTITION SYMBOLS

NOMINAL SUPPORT MATERIAL DIMENSION
WALL TYPE PLACE HOLDER
M M12A
EXTERIOR WALL TYPE FINISH MATERIAL
M - CONCRETE MASONRY UNITS
P - PER-FINISHED METAL PANEL
SUPPORT MATERIAL
S - METAL STUD
M - CONCRETE MASONRY UNITS

## ALTERNATE LEGEND

| | | | |
|---|---|---|---|
| ALTERNATE #1 | | ADD SKYLIGHT | |
| ALTERNATE #2 | | ..... | |

## GENERAL CONSTRUCTION NOTES

A. ALL DIMENSIONS ARE TO BE TAKEN OFF OF EDGE OF STUD WALLS.

B. FIRE EXTINGUISHERS.
F.E.=WALL MOUNTED
F.E.=RECESSED IN WALL

C. COORDINATE WITH OWNER BEFORE GYPSUM BOARD INSTALLATION FOR ANY WOOD BLOCKING REQUIRED FOR OWNER PROVIDED EQUIPMENT.

D. REFER TO STRUCTURAL DRAWINGS FOR EXACT LOCATIONS OF COLUMNS

E. REFER TO RCP FOR WALL HEIGHTS.

F. SEE SHEET G.002 FOR CODE PLAN AND LOCATIONS OF FIRE CONSTRUCTION.

G. CONSTRUCTION NOTES LISTED ON SHEETS A103 & A104 ARE TYPICAL TO THOSE SHEETS. SOME NOTES MAY NOT BE REFERENCED ON EACH SHEET.

## FLOOR PLAN KEY NOTES

| | |
|---|---|
| 1 | ADA DOOR OPERATORS. FIELD VERIFY EXACT LOCATIONS OF OPERATORS IN THE FIELD WITH ARCHITECT. |
| 2 | TRENCH DRAIN, TOP OF TRENCH ELEVATION AT 99'-10 1/2". REFER TO PLUMBING PLANS. |
| 3 | CATCH BASIN, REFER TO PLUMBING PLANS. |
| 4 | PIPE BOLLARD. REFER TO DETAIL X/XXX |
| 5 | 20"x20" GEAR LOCKERS WALL MOUNDED, BY OWNER. |
| 6 | 20"x20" GEAR LOCKERS COLUMN MOUNDED, BY OWNER. |
| 7 | FIXED LADDER TO MEZZANINE. REFER TO SPEC. |
| 8 | REMOVABLE GUARDRAIL, REFER TO DETAIL X/XXX |
| 9 | HOIST BEAM, REFER TO STRUCTURAL |
| 10 | HOIST: (1) AT HOSE / TRAINING STAIRWAY AND (1) AT APPARATUS BAY #. REFER TO SPEC NOTE ON SHEET X/XXX |

## DRAWING SYMBOLS

| | |
|---|---|
| COLUMN LINE | 1 — COLUMN DESIGNATION; COLUMN CENTERLINE |
| BUILDING SECTION | 1 A101 SIM — BLDG CROSS SECTION NUMBER; DRAWING NUMBER |
| WALL SECTION | 1 A101 SIM — SECTION NUMBER; DRAWING NUMBER |
| DETAIL SECTION | 1 A101 — DETAIL NUMBER; DRAWING NUMBER |
| ROOM TAG | ROOM NAME; ROOM NUMBER |
| EXTERIOR ELEVATION TAG | A101 1 — ELEVATION NUMBER; DRAWING NUMBER |
| INTERIOR ELEVATION TAG (MULTIPLE ELEVATIONS) | 4 1 2 3 A100 — ELEVATION NUMBERS; DRAWING NUMBER |
| INTERIOR ELEVATION TAG (SINGLE ELEVATION) | 4 A100 — ELEVATION NUMBERS; DRAWING NUMBER |
| ROOM TAG | Room name 101 — ROOM NAME; ROOM NUMBER |
| DOOR TAG | 101 — DOOR NUMBER |
| WINDOW / STOREFRONT TAG | W1 — WINDOW / STOREFRONT DESIGNATION |
| WALL TAG | 1| — WALL DESIGNATION |
| VIEW TITLE | 1 View Name 1/8" = 1'-0" — PLAN, SECTION OR DETAIL NUMBER; TITLE; SCALE |

LA CROSSE WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**


wendel — Five Bugles Design
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.
221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz




| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

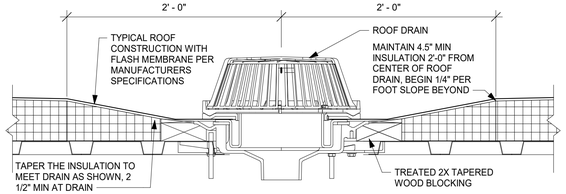
**SECOND FLOOR PLAN**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | | | |
|---|---|---|---|
| DATE | 08.06.2021 | | |
| SCALE | As indicated | | |
| DWN. | Author | CHK. | Checker |
| PROJ. No. | 601804 | | |

DWG. No.

**A104**




## 2 ROOF DRAIN DETAIL
SCALE: 1 1/2" = 1'-0"

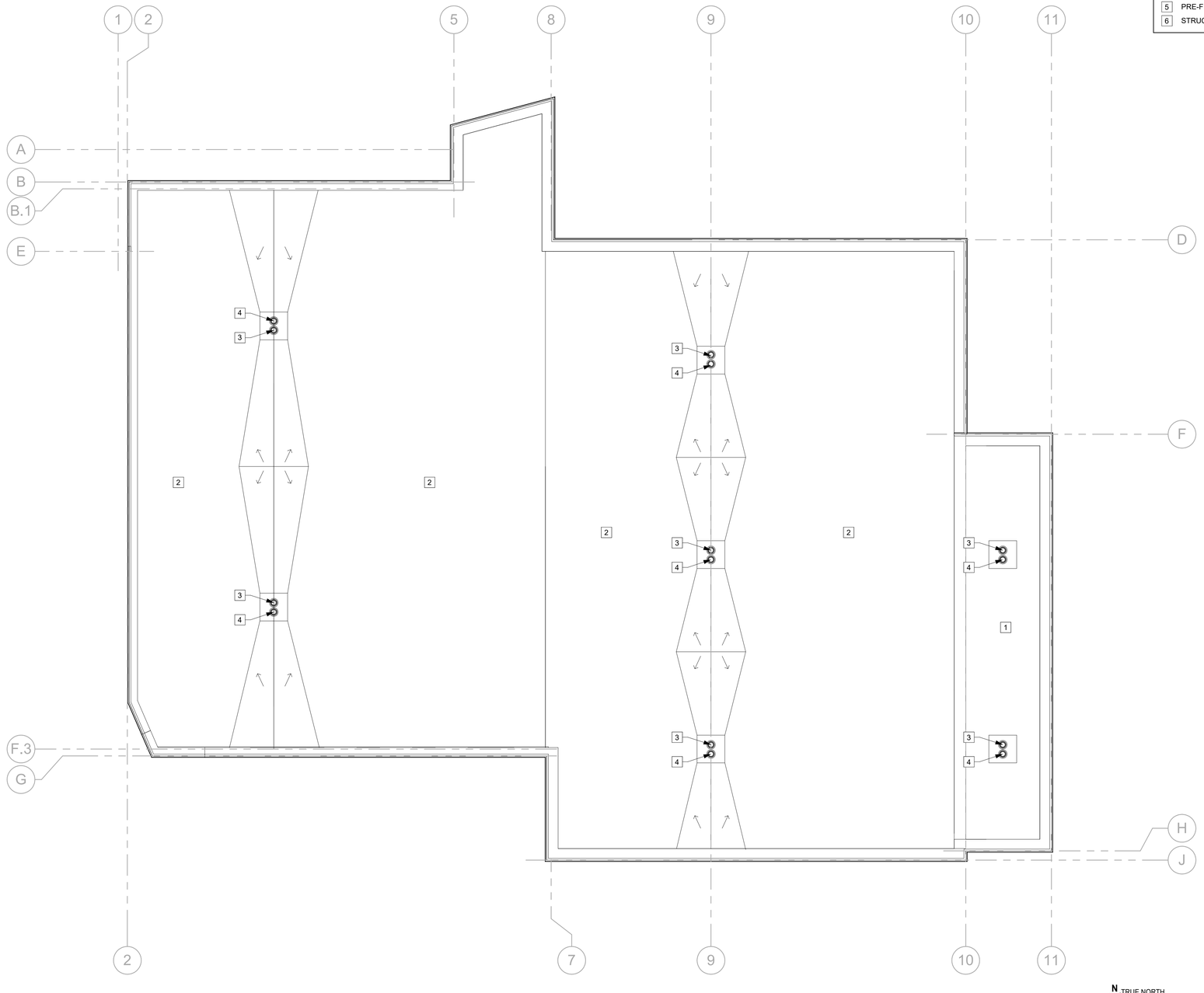
| ALTERNATE LEGEND | | | |
|---|---|---|---|
| ALTERNATE #1 | | ADD SKYLIGHT | |
| ALTERNATE #2 | | ..... | |

## GENERAL ROOF PLAN NOTES

1. VERIFY ALL MECHANICAL AND PLUMBING ROOF PENETRATIONS, SIZES AND LOCATIONS WITH MECHANICAL AND PLUMBING PLAN. COORDINATE AND FLASH ALL OPENINGS THROUGH ROOF SYSTEM. ALL CURBS BY GENERAL CONTRACTOR.

## ROOF PLAN KEY NOTES

1. EPDM ROOF SYSTEM OVER TAPERED INSULATION (R-30 MIN), MINIMUM SLOPE 1/4" PER 1'-0", MINIMUM THICKNESS AT ROOF DRAINS = 2.5". ROOF SYSTEM IS OVER METAL DECK AND METAL BAR JOIST.
2. EPDM ROOF SYSTEM OVER CONTINUOUS INSULATION (R-30 MIN), SLOPE INSULATION AT ROOF DRAINS, MINIMUM THICKNESS AT ROOF DRAINS = 2.5". ROOF SYSTEM IS OVER SLOPED METAL DECK AND METAL BAR JOIST.
3. TYPICAL ROOF DRAIN, SEE DETAIL 2/A150
4. TYPICAL OVERFLOW ROOF DRAIN, SEE DETAIL 2/A150
5. PRE-FINISHED METAL GUTTER / DOWNSPOUTS.
6. STRUCTURAL RIDGE METAL-FRAMED SKYLIGHT




## 1 ROOF PLAN
SCALE: 1/8" = 1'-0"

LA CROSSE WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**

wendel · Five Bugles Design
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz



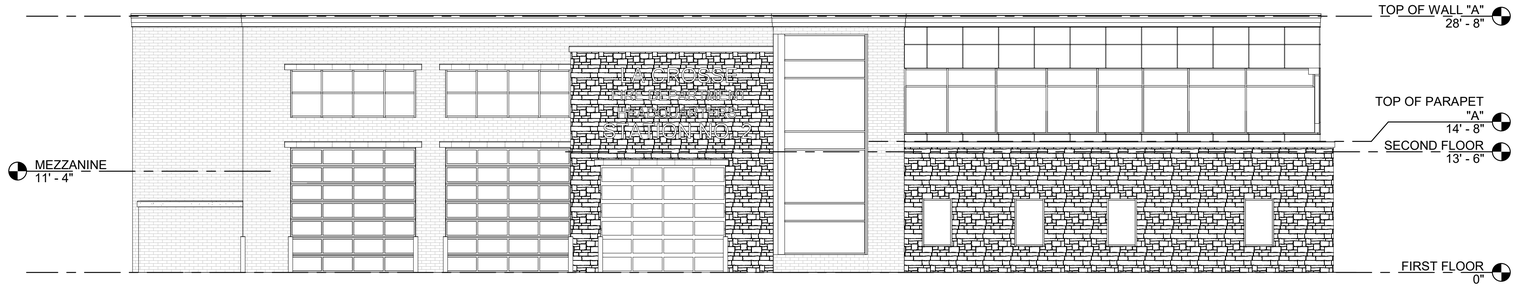
| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

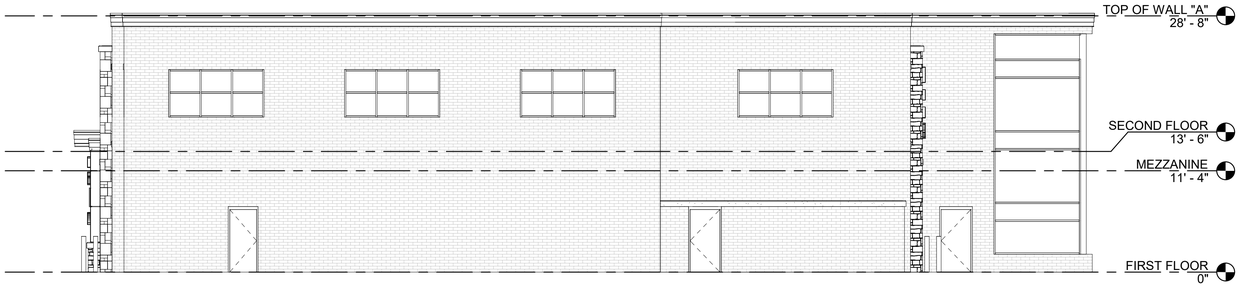
**ROOF PLAN**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

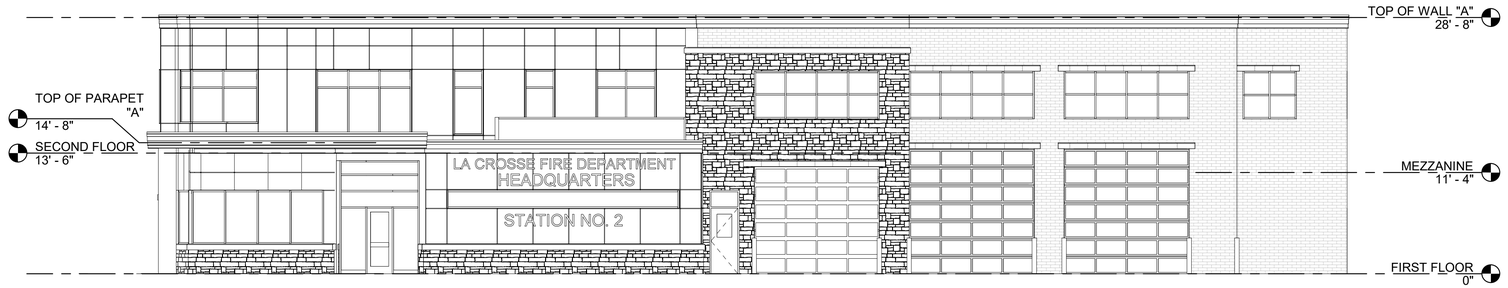
| | | | |
|---|---|---|---|
| DATE | 08.06.2021 | | |
| SCALE | As indicated | | |
| DWN. | Author | CHK. | Checker |
| PROJ. No. | 601804 | | |
| DWG. No. | **A150** | | |




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




2 EAST ELEVATION
SCALE: 1/8" = 1'-0"




3 SOUTH ELEVATION
SCALE: 1/8" = 1'-0"


4 SOUTHWEST ELEVATION
SCALE: 1/8" = 1'-0"

## EXTERIOR ELEVATION KEY NOTES

| | |
|---|---|
| 1 | CONCRETE MASONRY VENEER |
| 2 | CAST STONE UNIT #1 (SILL). SEE DETAIL 5/A433 |
| 3 | UTILITY BRICK #1 |
| 4 | UTILITY BRICK #2 |
| 5 | PRE-FINISHED METAL WALL PANEL |
| 6 | PIPE BOLLARD WITH PLASTIC COVER, REFER TO DETAIL 3/A433 |
| 7 | PRE-FINISHED METAL FASCIA |
| 8 | CANOPY SUPPORT CABLE |
| 9 | 20" DIMENSIONAL LETTERS, TEXT STYLE: LUCIDA CALLIGRAPHY, BY OWNER |
| 10 | 12" DIMENSIONAL LETTERS, BY OWNER |
| 11 | ROOF ACCESS LADDER, REFER TO DETAIL 8/A150 |
| 12 | FLAG POLE, REFER TO DETAIL 2/A433 |
| 13 | MECHANICAL LOUVER, REFER TO MECHANICAL PLANS |

LA CROSSE
WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**

wendel
Five Bugles Design
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knighte a.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz



| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

**EXTERIOR ELEVATIONS**

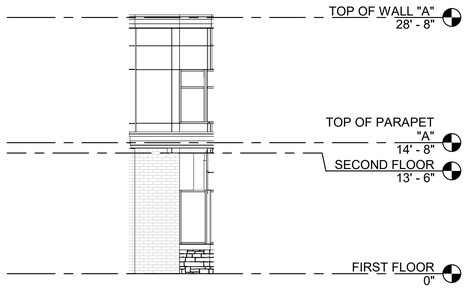
0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | | | |
|---|---|---|---|
| DATE | 08.06.2021 | | |
| SCALE | As indicated | | |
| DWN. | Author | CHK. | Checker |
| PROJ. No. | 601804 | | |
| DWG. No. | | | |

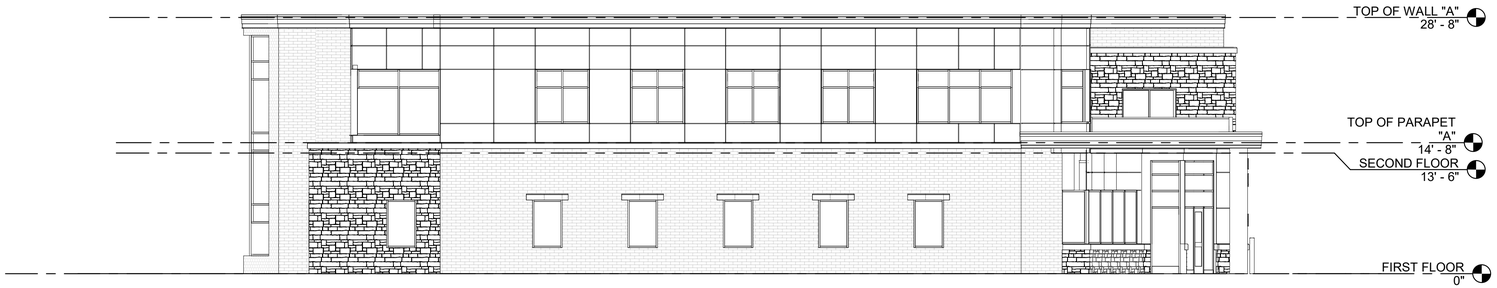
**A301**

## EXTERIOR ELEVATION KEY NOTES

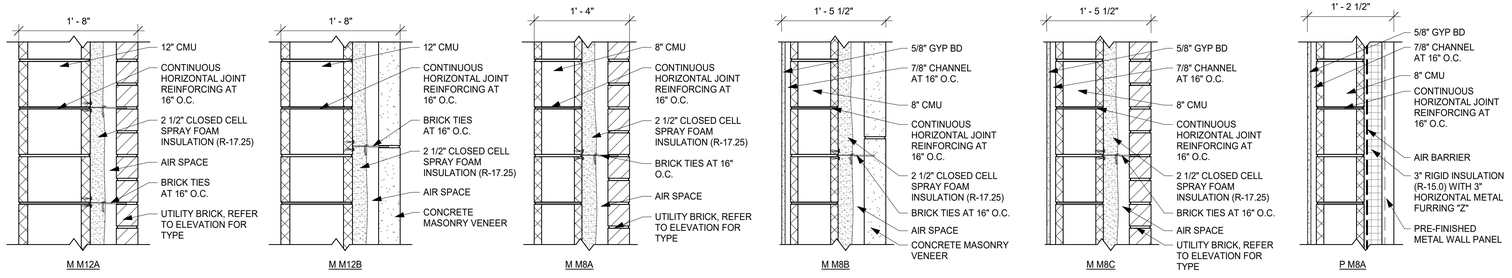
| | |
|---|---|
| 1 | CONCRETE MASONRY VENEER |
| 2 | CAST STONE UNIT #1 (SILL). SEE DETAIL 5/A433 |
| 3 | UTILITY BRICK #1 |
| 4 | UTILITY BRICK #2 |
| 5 | PRE-FINISHED METAL WALL PANEL |
| 6 | PIPE BOLLARD WITH PLASTIC COVER, REFER TO DETAIL 3/A433 |
| 7 | PRE-FINISHED METAL FASCIA |
| 8 | CANOPY SUPPORT CABLE |
| 9 | 20" DIMENSIONAL LETTERS, TEXT STYLE: LUCIDA CALLIGRAPHY, BY OWNER |
| 10 | 12" DIMENSIONAL LETTERS, BY OWNER |
| 11 | ROOF ACCESS LADDER, REFER TO DETAIL 8/A150 |
| 12 | FLAG POLE, REFER TO DETAIL 2/A433 |
| 13 | MECHANICAL LOUVER, REFER TO MECHANICAL PLANS |

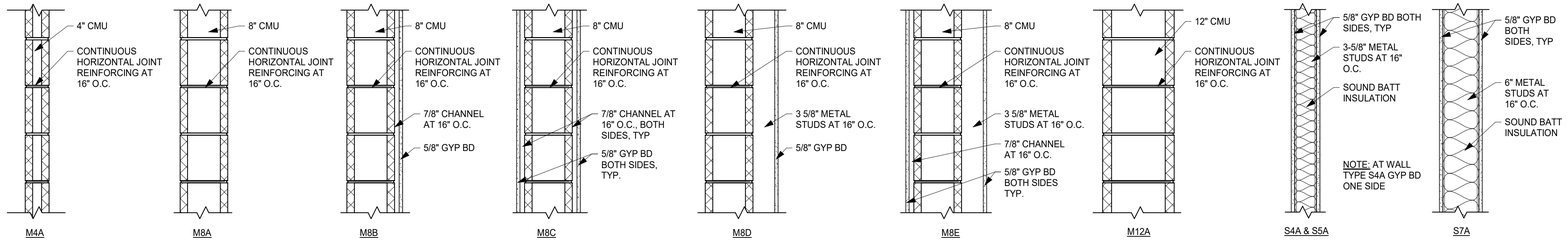



1 SOUTHWEST ELEVATION
SCALE: 1/8" = 1'-0"




2 WEST ELEVATION
SCALE: 1/8" = 1'-0"




3 WALL TYPES
SCALE: 1" = 1'-0"

LA CROSSE
WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**


wendel
Five Bugles Design.
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz



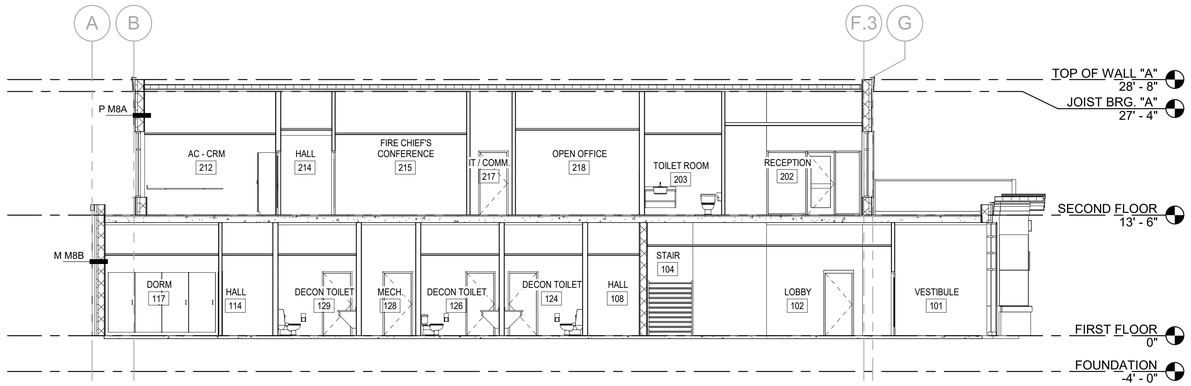

| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

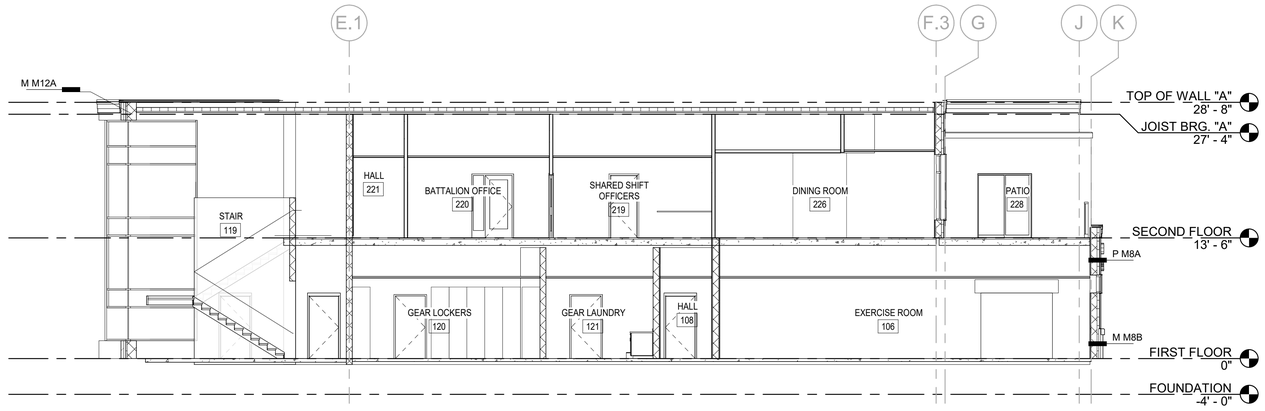
**EXTERIOR ELEVATIONS**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

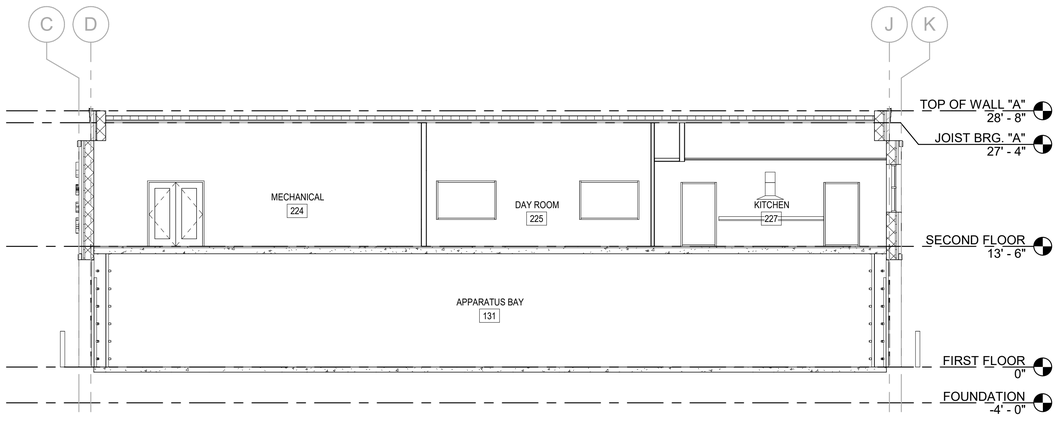
| | |
|---|---|
| DATE | 08.06.2021 |
| SCALE | As indicated |
| DWN. | Author |
| CHK. | Checker |
| PROJ. No. | 601804 |
| DWG. No. | **A302** |



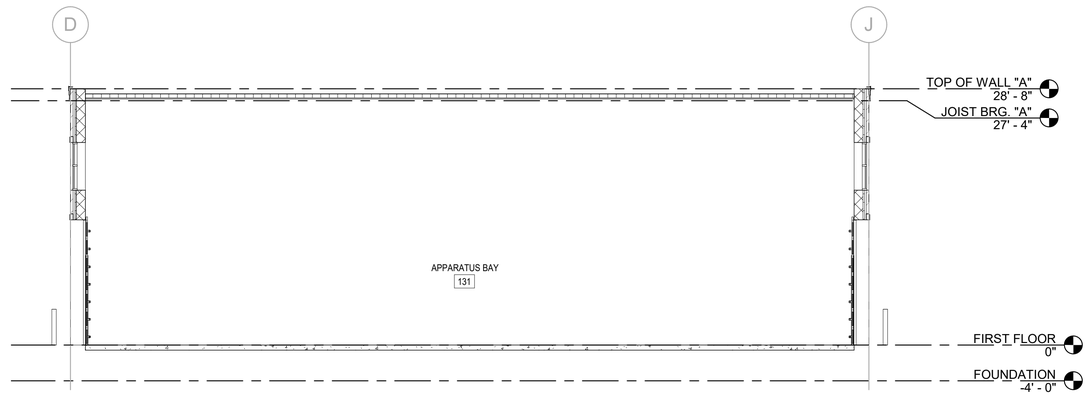

1 BUILDING SECTION
SCALE: 1/8" = 1'-0"




2 BUILDING SECTION
SCALE: 1/8" = 1'-0"




3 BUILDING SECTION
SCALE: 1/8" = 1'-0"




4 BUILDING SECTION
SCALE: 1/8" = 1'-0"

LA CROSSE
WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**

wendel
Five Bugles Design.
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz



| NO. | REVISIONS | DATE |
|---|---|---|

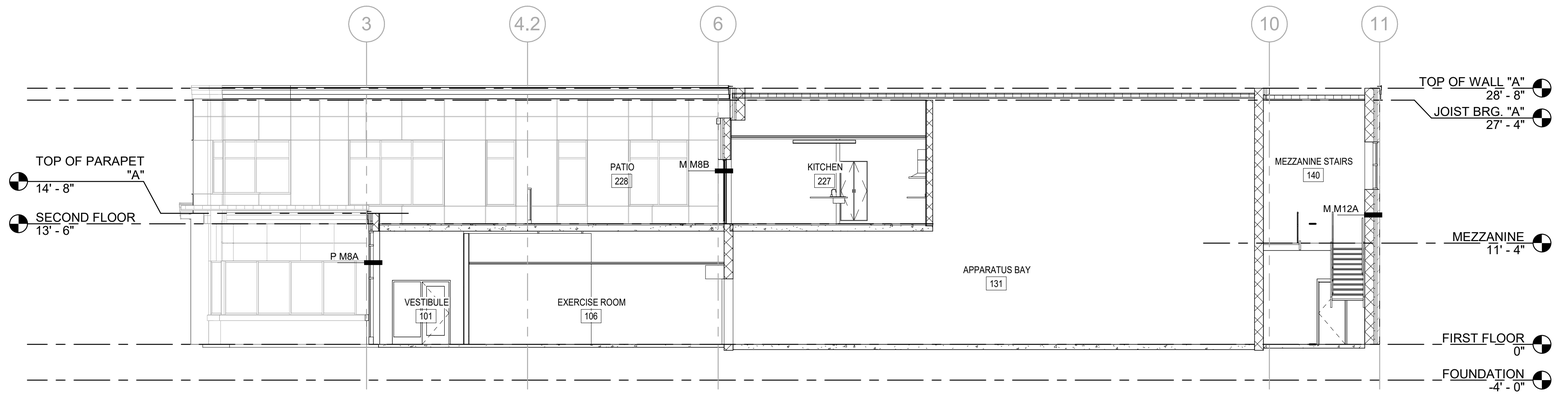
DWG. TITLE

**BUILDING SECTIONS**

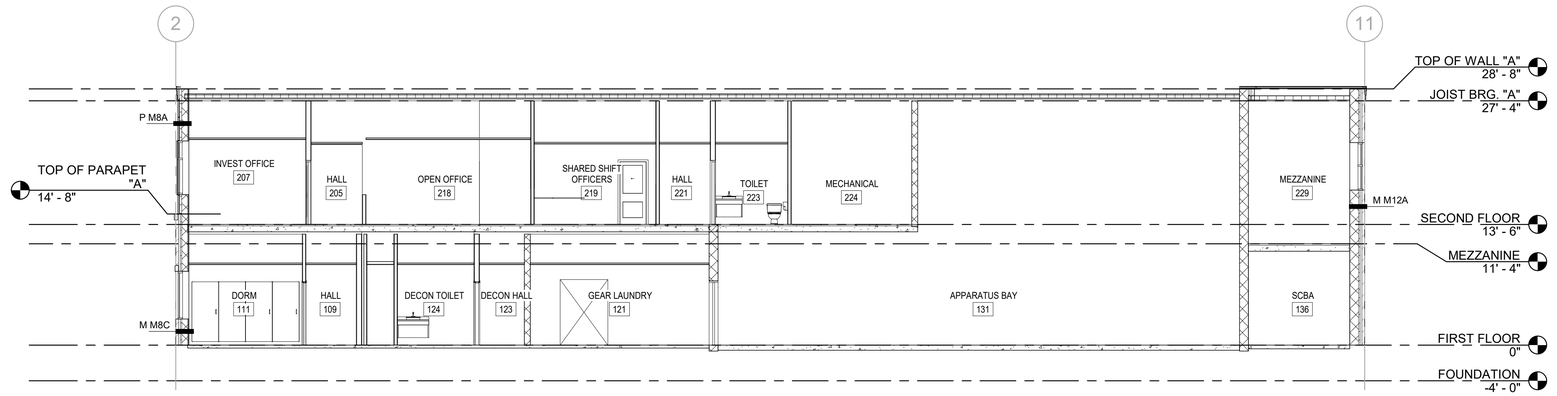
0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | | | |
|---|---|---|---|
| DATE | 08.06.2021 | | |
| SCALE | 1/8" = 1'-0" | | |
| DWN. | Author | CHK. | Checker |
| PROJ. No. | 601804 | | |
| DWG. No. | | | |

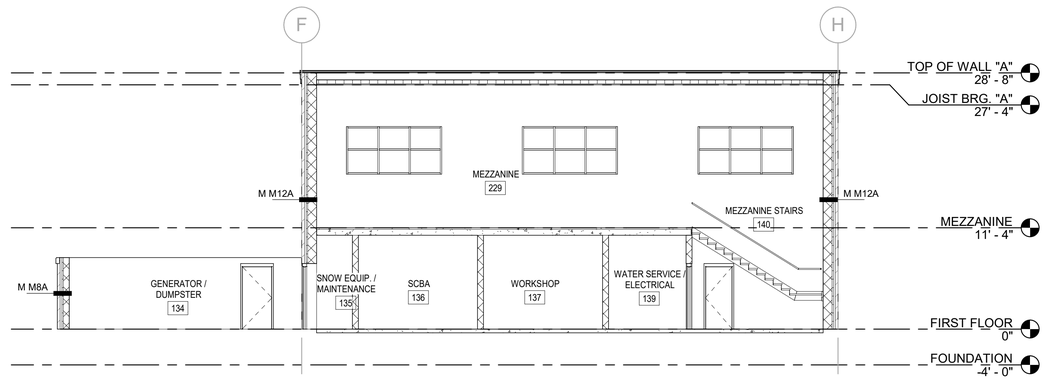
**A351**



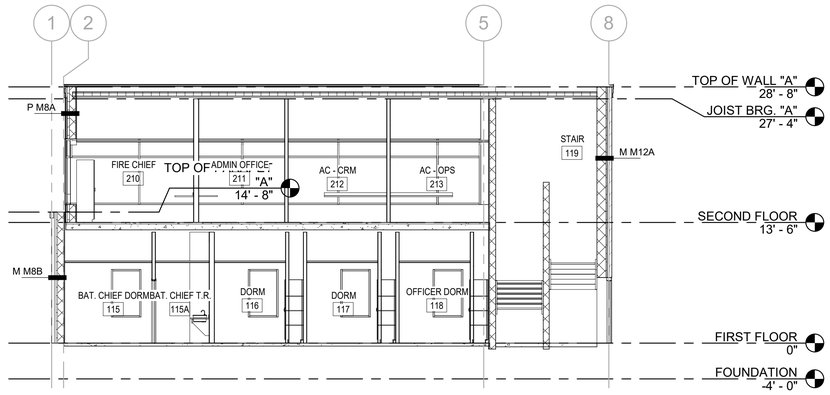

1 BUILDING SECTION
SCALE: 1/8" = 1'-0"




2 BUILDING SECTION
SCALE: 1/8" = 1'-0"




3 BUILDING SECTION
SCALE: 1/8" = 1'-0"




4 BUILDING SECTION
SCALE: 1/8" = 1'-0"

LA CROSSE
WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**

wendel
Five Bugles Design.
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz



| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

**BUILDING SECTIONS**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | |
|---|---|
| DATE | 08.06.2021 |
| SCALE | 1/8" = 1'-0" |
| DWN. | Author CHK. Checker |
| PROJ. No. | 601804 |
| DWG. No. | **A352** |


1 01 - FINISH PLAN
SCALE: 1/8" = 1'-0"

## FLOOR FINISH TYPES

| | |
|---|---|
| CPT | CARPET TILE |
| CPTM | CARPET TILE WALK-OFF MAT |
| FAF | FLUID APPLIED FLOORING |
| FCPT | FLOCKED CARPET TILE - SUCH AS FORBO FLOTEX |
| LVT | LUXARY VINYL TILE - 5MM TOTAL THICKNESS SUCH AS INTERFACE LEVEL SET |
| PT | PORCELAIN TILE |
| SC | SEALED CONCRETE |
| SRF1 | SPORTS RUBBER FLOORING - VULCANIZED RUBBER SUCH AS MONDO SPORT IMPACT |

LA CROSSE
WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**


wendel
Five Bugles Design.
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz




| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

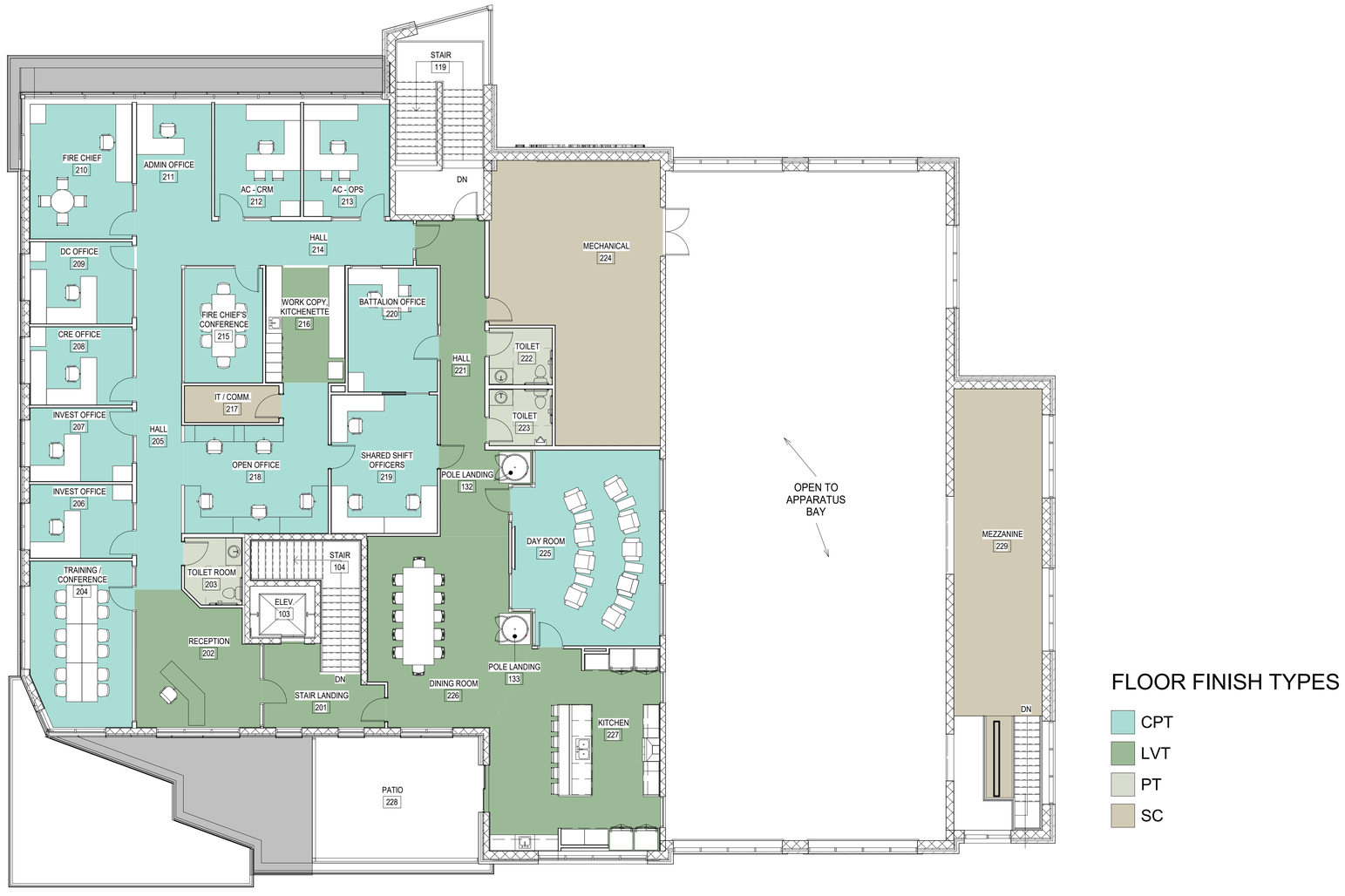
**FIRST FLOOR FINISH PLAN**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | | | |
|---|---|---|---|
| DATE | 07/30/21 | | |
| SCALE | 1/8" = 1'-0" | | |
| DWN. | Author | CHK. | Checker |
| PROJ. No. | 601804 | | |

DWG. No.

**I101**




1 02 - FINISH PLAN
SCALE: 1/8" = 1'-0"

## FLOOR FINISH TYPES

- CPT
- LVT
- PT
- SC

LA CROSSE
WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**

wendel
Five Bugles Design.
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knighte a.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz



| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

**SECOND FLOOR FINISH PLAN**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | | | |
|---|---|---|---|
| DATE | 07/30/21 | | |
| SCALE | 1/8" = 1'-0" | | |
| DWN. | Author | CHK. | Checker |
| PROJ. No. | 601804 | | |
| DWG. No. | **I102** | | |

# CONCEPT


1 EXTERIOR 3D VIEW
SCALE:


2 EXTERIOR 3D VIEW
SCALE:

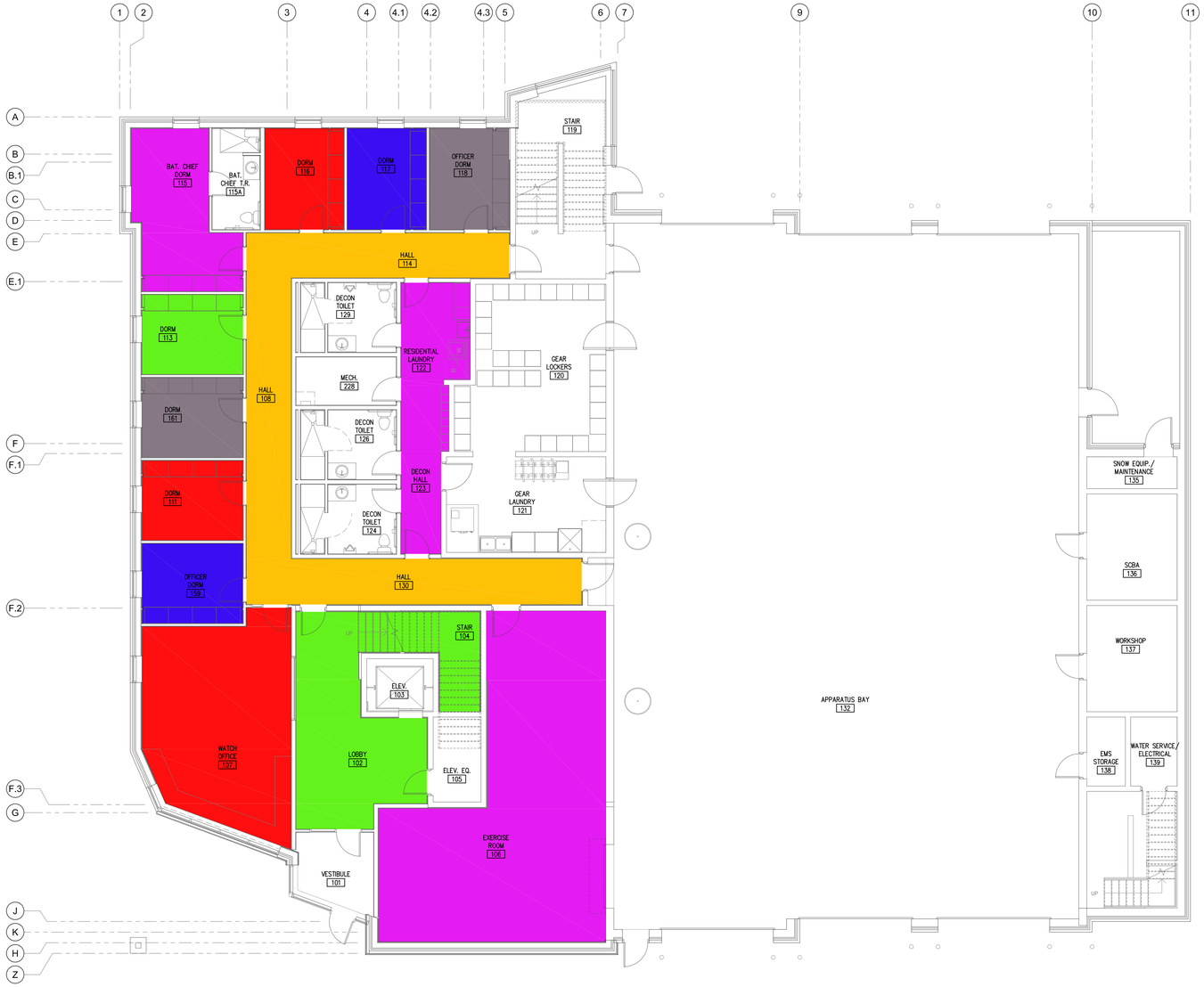
# LA CROSSE FIRE STATION #2

## La Crosse, WI

**PROJECT NUMBER: 601804**

*THIESE 3D VIEWS ARE FOR CONCEPTUAL PURPOSES ONLY AND DO NOT REFLECT FINAL: BUILDING FOOTPRINT, WINDOW LOCATIONS, COLORS OR FINISHES.*

wendel Home of the Award Winning Five Bugles Design™




# 1 M001 MECHANICAL FIRST FLOOR PLAN (ZONING)

1/8"= 1'-0"

NORTH

**PRELIMINARY ONLY**
**NOT FOR CONSTRUCTION**
**8-6-2021**


APEX Engineering
Eau Claire, Wisconsin
Telephone: 715-835-7736
Web: apexengineering.biz
Project No.: 20079


LA CROSSE WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**DESIGN DEVELOPMENT**


wendel
Five Bugles Design.
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz




| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE
**MECHANICAL FIRST FLOOR PLAN - ZONING**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | |
|---|---|
| DATE | 08.02.2021 |
| SCALE | As indicated |
| DWN. | LJJ CHK. DMP |
| PROJ. No. | 601804 |
| DWG. No. | M001 |

landonJ 8/5/2021 2:23 PM 20079 mech zoning plan.dwg


## 1 / M002 MECHANICAL SECOND FLOOR PLAN

1/8"= 1'-0" (ZONING)

NORTH

**PRELIMINARY ONLY**
**NOT FOR CONSTRUCTION**
**8-6-2021**


APEX Engineering
Eau Claire, Wisconsin
Telephone: 715-835-7736
Web: apexengineering.biz
Project No.: 20079


LA CROSSE WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**DESIGN DEVELOPMENT**


wendel / Five Bugles Design
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz



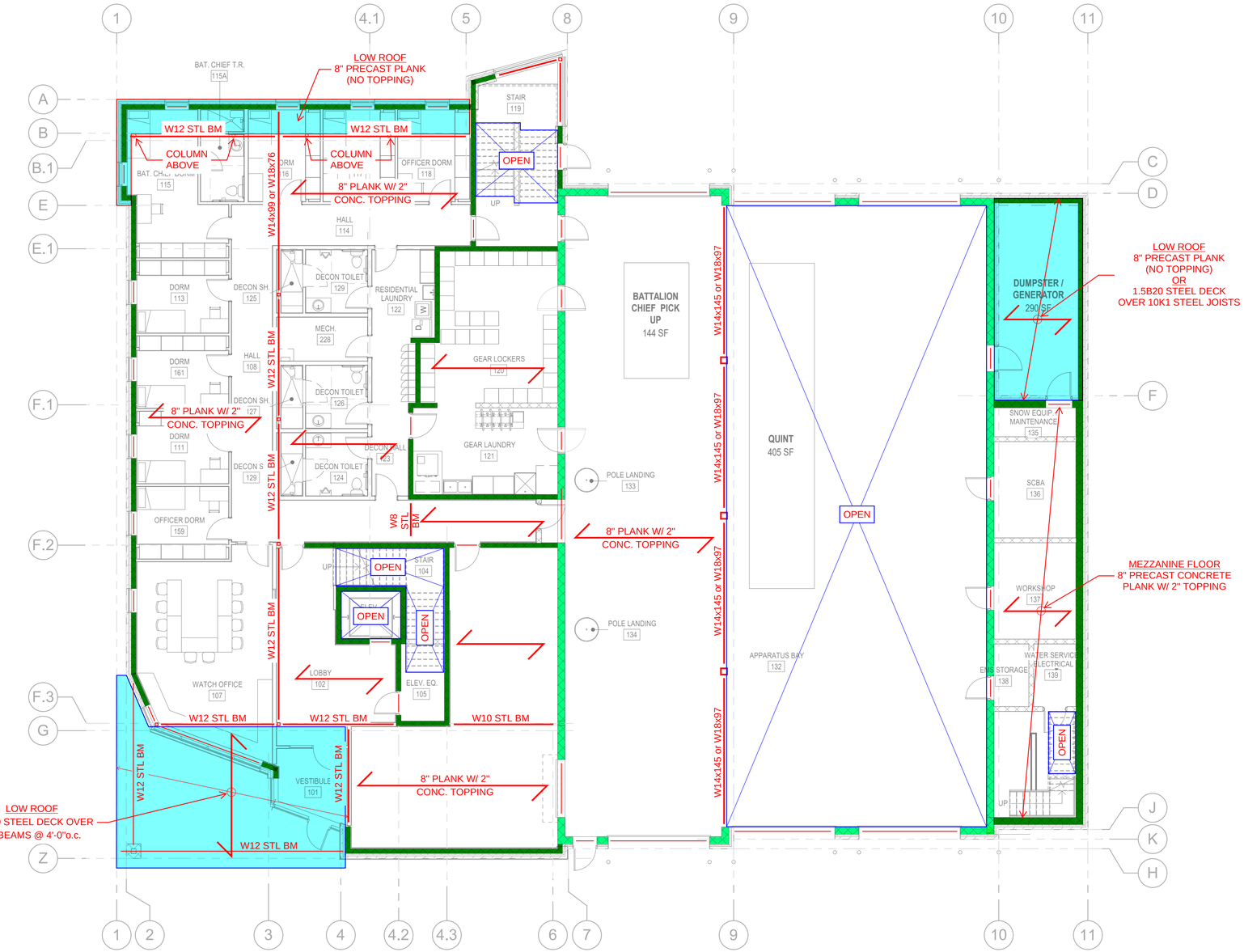

| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE
**MECHANICAL SECOND FLOOR PLAN - ZONING**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | |
|---|---|
| DATE | 08.02.2021 |
| SCALE | As indicated |
| DWN. | LJJ CHK. DMP |
| PROJ. No. | 601804 |
| DWG. No. | **M002** |

landonJ 8/5/2021 2:23 PM 20079 mech zoning plan.dwg




1 SCHEMATIC SECOND FLOOR FRAMING PLAN
SCALE: 1/8" = 1'-0"

**LEGEND:**

12" CMU BEARING WALL

8" CMU BEARING WALL

**SCHEMATIC SECOND FLOOR FRAMING PLAN NOTES:**

1. SECOND FLOOR TO CONSIST OF 8" PRECAST CONCRETE PLANK WITH 2" CONCRETE TOPPING.V

LA CROSSE
WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**


wendel
Five Bugles Design
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knightea.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz



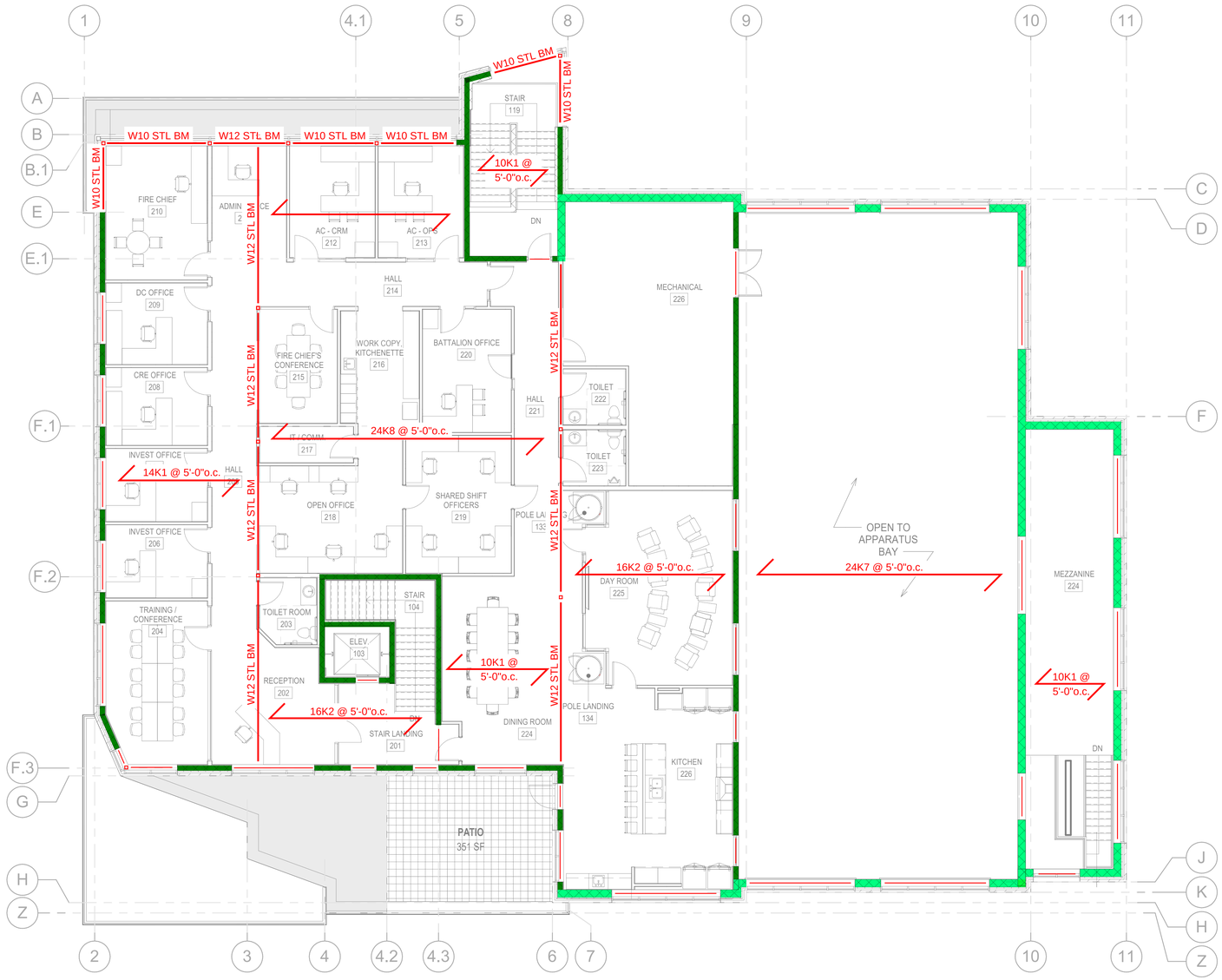

| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

**SCHEMATIC SECOND FLOOR FRAMING PLAN**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | |
|---|---|
| DATE | 08/06/21 |
| SCALE | 1/8" = 1'-0" |
| DWN. | TDR |
| CHK. | TDR |
| PROJ. No. | 601804 (NCE No. 21-411) |
| DWG. No. | **S101** |




1 SCHEMATIC ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"

**LEGEND:**

- 12" CMU BEARING WALL
- 8" CMU BEARING WALL

**SCHEMATIC ROOF FRAMING PLAN NOTES:**

1. ROOF TO CONSIST OF 1 1/2" STEEL ROOF DECK (1.5B20) OVER STEEL ROOF JOISTS, UNLESS NOTES OTHERWISE.
2. STEEL ROOF JOISTS TO BE SPACED AT 5'-0" ON CENTER, SPACING MAY BE LESS AT SNOW DRIFT AREAS AND RTU LOCATIONS.

LA CROSSE WISCONSIN

**CITY OF LA CROSSE**
La Crosse, WI

**LA CROSSE FIRE STATION #2**

**SCHEMATIC DESIGN**


wendel · Five Bugles Design
Banbury Place, Building D04
800 Wisconsin Street, Suite 202
Eau Claire, WI 54703
www.wendelcompanies.com
p:715.832.4848 f:716.625.6825
WENDEL ARCHITECTURE, P.C

ARCHITECT
WENDEL
ROBERT KRZYZANOWSKI, PROJECT MANAGER
JENNIFER POLACEK, AIA
BUILDING D04, SUITE 202
MAILBOX 2
800 WISCONSIN STREET
EAU CLAIRE, WI 54703
715.832.4848
rkrzyzanowski@wendelcompanies.com

CIVIL ENGINEER
KNIGHT E/A, INC.

221 NORTH LaSALLE st. SUITE 300
CHICAGO, IL 60601
312.577.3335
knighte a.com

STRUCTURAL ENGINEER
NORTHLAND CONSULTING ENGINEERS, LLP
TOM RINES, PE
102 SOUTH 21st AVENUE WEST, SUITE 1
DULUTH, MN 55806
218.727.5995
tom@nce-duluth.com

PLUMBING
APEX ENGINEERING, INC.
HEATH MATHEWS, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
heathm@apexengineering.biz

MECHANICAL
APEX ENGINEERING, INC.
DAN PETERSON, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
danp@apexengineering.biz

ELECTRICAL
APEX ENGINEERING, INC.
PAUL KUCHTA, DES
110A EAST GRAND AVENUE
EAU CLAIRE, WI 54701
715.835.7736
PaulK@apexengineering.biz




| NO. | REVISIONS | DATE |
|---|---|---|

DWG. TITLE

**SCHEMATIC ROOF FRAMING PLAN**

0 1" 2"
GENERIC SCALE BAR
SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING. IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY

| | |
|---|---|
| DATE | 08/6/21 |
| SCALE | 1/8" = 1'-0" |
| DWN. | TDR |
| CHK. | TDR |
| PROJ. No. | 601804 (NCE No. 21-411) |
| DWG. No. | **S102** |