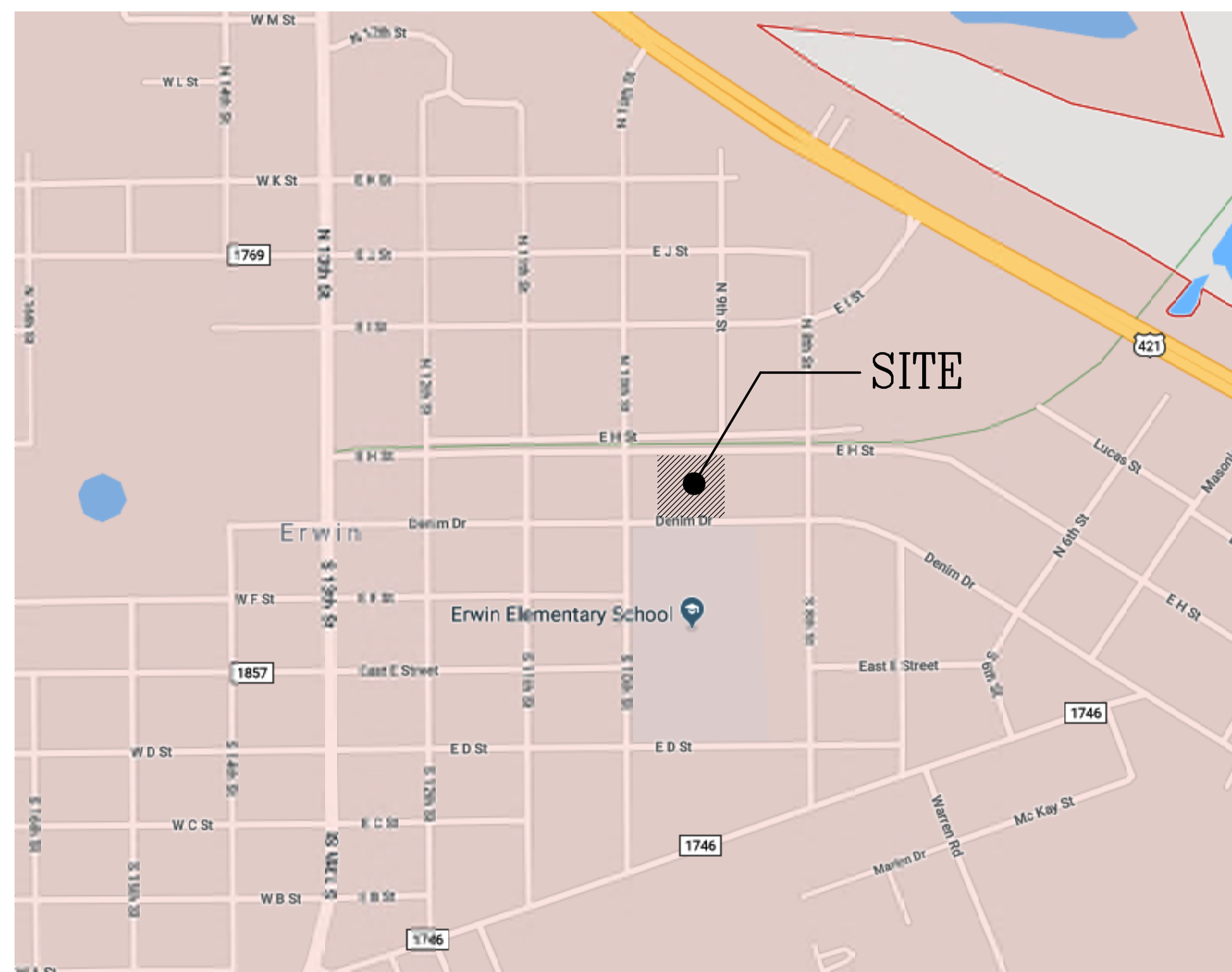


SITE LOCATION



GENERAL NOTES

- GENERAL CONTRACTOR TO FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO PRICING OR BEGINNING ANY WORK. NOTIFY ARCHITECT OF ANY INCONSISTENCIES.
- DRAWINGS HAVE BEEN PREPARED AT FULL SCALE ON 22x34 SHEETS.
- GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL LOCAL FEES INCLUDING, BUT NOT LIMITED TO, PERMITS, TEMPORARY POWER, TAP MATERIAL + INSTALLATION COMPLETE, ETC.
- OWNER TO OCCUPY EXISTING BUILDING THROUGHOUT CONSTRUCTION OF NEW ADDITION AND NOT IMPACT THEIR OPERATION. CONTRACTOR TO COORDINATE ANY WORK THAT MIGHT IMPACT THEIR OPERATION.
- GENERAL CONTRACTOR TO PROVIDE THE DESIGN AND INSTALLATION OF A FULLY OPERATIONAL SPRINKLER SYSTEM FOR NEW ADDITION, THAT MEETS THE REQUIREMENTS OF NFPA 13 AND ALL OTHER BUILDING CODES HAVING JURISDICTION.
- G.C. SHALL BE RESPONSIBLE FOR BOTH LOCAL INSPECTIONS APPROVAL AND CERTIFICATE OF OCCUPANCY AND NC DHSR INSPECTION AND APPROVAL.

LEGEND

- DRAWING NUMBER: 1/A1.1
 (01 IN THIS CASE) (A1.1 IN THIS CASE)
- KEYNOTE TAG: 5
- SECTION TAG: 1/A3.5
- PLAN/DETAIL TAG: 1/A4.2
- ROOM TAG: LOBBY 101
- INTERIOR ELEVATION TAG: A, B, C, D, 4
- WINDOW TAG: A
- DOOR TAG: 100
- WALL TAG: B
- ELEVATION TAG: T.O.S. 199.97'
- ROLLER SHADE: RS
- TACKBOARD: TB-4
- COLUMN GRID LINE: B

INDEX OF DRAWINGS

| DWG NO | DRAWING TITLE |
|----------------------------|---|
| PROJECT INFORMATION | |
| COVER | INDEX OF DRAWINGS, LEGEND, SCOPE OF WORK, GENERAL NOTES AND SITE LOCATION |
| G1.0 | ABBREVIATIONS |
| G1.1 | BUILDING CODE SUMMARY - PAGE 1 |
| G1.2 | BUILDING CODE SUMMARY - PAGE 2 |
| G1.3 | BUILDING CODE SUMMARY - PAGE 3 |
| G1.4 | LIFE SAFETY PLAN |
| G1.5 | UL DESIGN ASSEMBLIES |

| CIVIL | |
|--------------|------------------------------------|
| C-01 | GENERAL NOTES AND LEGEND |
| C-02 | EXISTING TOPOGRAPHIC SURVEY |
| C-03 | DEMOLITION PLAN |
| C-04 | SITE LAYOUT PLAN |
| C-05 | STORM DRAINAGE PLAN |
| C-06 | GRADING AND EROSION CONTROL PLAN |
| C-07 | UTILITY PLAN |
| D-01 | SITE DETAILS |
| D-02 | SITE DETAILS |
| D-03 | DRAINAGE DETAILS |
| D-04 | EROSION CONTROL DETAILS |
| D-04.1 | NCGOI STORMWATER DETAILS AND NOTES |
| D-05 | WATER DISTRIBUTION NOTES |
| D-06 | WATER DISTRIBUTION DETAILS |
| D-07 | WATER DISTRIBUTION DETAILS |
| D-08 | SANITARY SEWER NOTES |
| D-09 | SANITARY SEWER DETAILS |
| L-01 | LANDSCAPE PLAN |

| ARCHITECTURAL | |
|----------------------|--|
| A1.0 | KEY FLOOR PLAN |
| A1.1 | FLOOR PLAN - NEW ADDITION |
| A1.2 | MECHANICAL MEZZANINE PLAN |
| A1.3 | REFLECTED CEILING PLAN - NEW ADDITION & MEZZANINE CEILING PLAN |
| A2.0 | EXTERIOR ELEVATIONS |
| A2.1 | EXTERIOR ELEVATIONS |
| A3.0 | BUILDING SECTIONS |
| A3.1 | WALL SECTIONS |
| A3.2 | WALL SECTIONS |
| A3.3 | EXISTING BASEMENT REMEDIAL WORK |
| A4.0 | HANDICAP ACCESSORY MOUNTING ILLUSTRATION & KEYNOTES |
| A4.1 | ENLARGED PLANS & INTERIOR ELEVATIONS |
| A4.2 | ENLARGED PLANS & INTERIOR ELEVATIONS |
| A4.3 | ENLARGED PLANS & INTERIOR ELEVATIONS |
| A4.4 | ENLARGED PLANS & INTERIOR ELEVATIONS |
| A4.5 | INTERIOR ELEVATIONS |
| A5.0 | CASEWORK DETAILS |
| A5.1 | CASEWORK & BUILDING DETAILS |
| A5.2 | BUILDING DETAILS |
| A6.0 | ROOM FINISH SCHEDULE |
| A6.1 | DOOR SCHEDULE |
| A6.2 | DOOR & FRAME TYPES - WINDOW TYPES & WINDOW DETAILS |
| A6.3 | DOOR DETAILS |

| STRUCTURAL | |
|-------------------|---|
| S1.0 | STRUCTURAL GENERAL NOTES |
| S1.1 | FOUNDATION PLAN |
| S1.2 | MEZZANINE FLOOR & CONNECTOR ROOF FRAMING PLAN |
| S1.3 | FOUNDATION DETAILS |
| S1.4 | STRUCTURAL SECTIONS |
| S1.5 | RETAINING WALL DETAIL @ EXISTING BUILDING |

| DWG NO | DRAWING TITLE |
|-----------------|--------------------------------------|
| PLUMBING | |
| P0.0 | PLUMBING LEGEND, NOTES AND SCHEDULES |
| P0.1 | PLUMBING DETAILS |
| P1.0 | PLUMBING FLOOR PLAN |
| P2.0 | PLUMBING RISER DIAGRAM |
| P2.1 | PLUMBING RISER DIAGRAM |

| MECHANICAL | |
|-------------------|--|
| M0.0 | MECHANICAL LEGEND, NOTES AND SCHEDULES |
| M0.1 | MECHANICAL DETAILS |
| M0.2 | MECHANICAL DETAILS |
| M0.3 | MECHANICAL DETAILS |
| M0.4 | MECHANICAL DETAILS |
| M1.0 | MECHANICAL SUPPLY - FLOOR PLAN |
| M1.1 | MECHANICAL RETURN - FLOOR PLAN |
| M1.2 | MECHANICAL MEZZANINE PLAN |

| ELECTRICAL | |
|-------------------|---------------------------------------|
| E0.0 | ELECTRICAL LIGHTING FIXTURE SCHEDULES |
| E0.1 | ELECTRICAL LEGEND AND NOTES |
| E1.0 | ELECTRICAL POWER - FLOOR PLAN |
| E1.1 | ELECTRICAL - PLATFORM PLAN |
| E1.2 | ELECTRICAL LIGHTING - FLOOR PLAN |
| E2.0 | ELECTRICAL PANEL SCHEDULES |
| E2.1 | ELECTRICAL PANEL SCHEDULES |
| E3.0 | ELECTRICAL RISER DIAGRAM |

| FIRE ALARM | |
|-------------------|--|
| FA0.0 | FIRE ALARM LEGEND, NOTES AND SCHEDULES |
| FA1.0 | FIRE ALARM PLAN |

Reviewed For Code Compliance By:
D. Banks Wallace
Chief Deputy Fire Marshal
01/11/2021 10:17:48 AM

SCOPE OF WORK

THE WORK SHALL CONSIST OF THE FOLLOWING ITEMS AND ALL OTHER WORK AS SHOWN ON THE PLANS, IN THE PROJECT MANUAL AND AS REQUIRED BY CODE.

- CONSTRUCT NEW 12,930 S.F. SINGLE STORY BUILDING ADDITION TO EXISTING SINGLE STORY BUILDING.
- PROVIDE NEW EXTERIOR PATIENT ACTIVITY SPACE (1,760 S.F.) ON EAST SIDE OF ADDITION ENCLOSED WITH 10' HIGH SPLIT FACE CMU WALL.
- RENOVATE TWO (2) EXISTING PATIENT ROOMS TO ACCOMMODATE NEW CONNECTING CORRIDOR FROM NEW TO EXISTING.
- CONSTRUCT NEW STAIR ACCESS TO REAR OF EXISTING VACANT BUILDING WITH NEW CONCRETE RETAINING WALL AND WOOD FRAMED WALLS AND ROOF ABOVE.
- PROVIDE NEW ELECTRICAL TRANSFORMER ON NEW CONCRETE SUPPORT PAD, LOCATED NEXT TO EXISTING EMERGENCY GENERATOR.
- NEW SITE WORK TO INCLUDE:
 - NEW PAVED PARKING AREA WITH 17 NEW PARKING SPACES
 - NEW DROP-OFF LANE.
 - NEW CONCRETE WALKWAYS.
 - NEW CONCRETE DUMPSTER PAD AND BOLLARDS.
 - NEW LANDSCAPING.

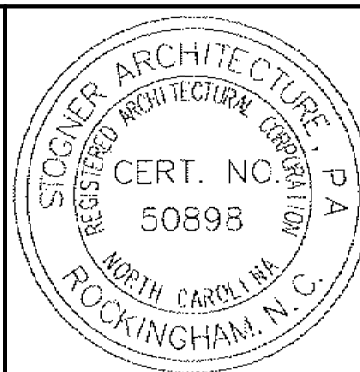
GOOD HOPE HOSPITAL

410 DENIM DRIVE ERWIN, NORTH CAROLINA

ADDITION and RENOVATIONS

REVISIONS

FOR CONSTRUCTION



Stogner Architecture, PA

ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
 615 East Broad Avenue, Rockingham, North Carolina, 28379
 Phone 910-895-6874 Fax 910-895-1111

INDEX OF DRAWINGS, LEGEND, SCOPE OF WORK,
 GENERAL NOTES AND SITE LOCATION

GOOD HOPE HOSPITAL
 410 DENIM DRIVE ERWIN, NORTH CAROLINA

ADDITION and RENOVATIONS



BEFORE YOU DIG!
 CALL 1-800-832-8849
 N.C. ONE-CALL CENTER
 IT'S THE LAW

COMM. NO.: 4535
 DRAWN BY: JKM
 CHECKED BY: DWS
 DATE: 9/11/2020
 SHEET NO.

COVER

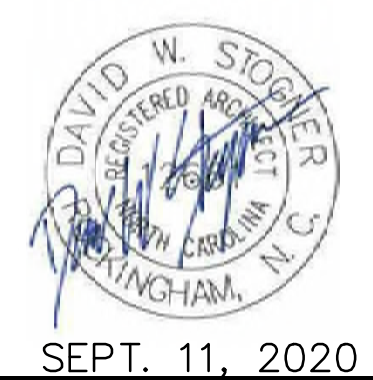
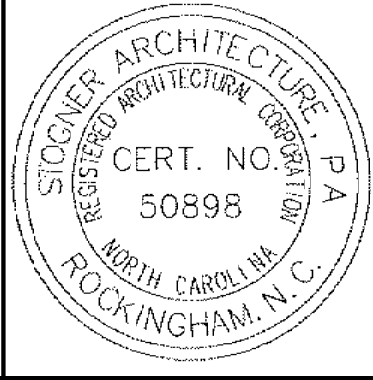
ABBREVIATIONS

| | | | | | | | |
|--------------|---------------------------------|-------------|---|------------|-------------------------|---------------|--------------------------|
| A | AMPERES | DR | DOOR | INCL. | "INCLUDE, INCLUSIVE" | R | RADIUS |
| A.B. | ANCHOR BOLT | E.A. | EXPANSION ANCHOR | INSUL. | INSULATION | R.D.L. | ROOF DRAIN LEADER |
| A.F.F. | ABOVE FINISHED FLOOR | E.F. | EXHAUST FAN | INT. | INTERIOR | R.D.O. | ROOF DRAIN OVERFLOW |
| A.F.G. | ABOVE FINISHED GRADE | E.J. | EXPANSION JOINT | J-BOX | JUNCTION BOX | R.O. | ROUGH OPENING |
| A/C | AIR CONDITIONING | E.N. | END NAILING | JCT | JUNCTION | R.O.W. or R/W | RIGHT OF WAY |
| ABC | AGGREGATE BASE COURSE | E.W. | EACH WAY | JST. | JOIST | REF | REFRIGERATOR |
| ABS | ACRYLONITRILE-BUTADIENE-STYRENE | EA. | EACH | JT. | JOINT | REF. | REFERENCE |
| ABV. | ABOVE | EL | ELEVATION | K-D | KNOCK DOWN | REINF. | REINFORCED |
| ACB | ASBESTOS-CEMENT BOARD | ELECT. | "ELECTRIC, ELECTRICAL" | KD | KILN DRIED | REQ'D. | REQUIRED |
| ACOU. | ACOUSTIC | ELEV. | ELEVATOR | KO | KNOCK OUT | RET. | RETURN |
| ACT | ACOUSTICAL CEILING TILE | EMC | ELECTRICAL METALLIC CONDUIT | L.E.D. | LIGHT EMITTING DIODE | REV. | REVISION |
| ADD. | ADDITION or ADDENDUM | EMT | ELECTRICAL METALLIC TUBING | L.F.T. | LINEAR FEET | RM | ROOM |
| AG | ABOVE GRADE | ENT | ELECTRICAL NON-METALLIC TUBING | LAM | LAMINATE | RMV. | REMOVE |
| AHU | AIR HANDLER UNIT | EQ. | EQUAL | LAT. | LATERAL | S.C. | SOLID CORE |
| AL. or ALUM. | ALUMINUM | EQUIP. | EQUIPMENT | LAV | LAVATORY | S.D. | SMOKE DETECTOR |
| ALT. | ALTERNATE | EST. | ESTIMATE | LD. | LEAD | S.O.V. | SHUT OFF VALVE |
| ANL | ANNEALED | EVAP. | EVAPORATIVE COOLER | LIN. | LINEAR | S/L | SKYLIGHT |
| ASPH. | ASPHALT | EW | ELECTRIC DRINKING COOLER | LINO. | LINOLEUM | S/S | STAINLESS STEEL |
| AVG | AVERAGE | EXC | EXCAVATE | LT. | LIGHT | SC | SELF CLOSING |
| AWG | AMERICAN WIRE GAUGE | EXH. | EXHAUST | L.T.G. | LIGHTING | SCHED. | SCHEDULE |
| ∠ | ANGLE | EXIST. or E | EXISTING | LVL | LAMINATED VENEER LUMBER | SECT. | SECTION |
| B.M. | BENCH MARK | EXT. | EXTERIOR | M.B. | MACHINE BOLT | SES | SERVICE ENTRANCE SECTION |
| B.N. | BOUNDARY NAILING | F.A. | FIRE ALARM | M.H. | MANHOLE | SH | SHEET |
| B.O. | BOTTOM OF | F.C. | FAN COIL | M.I. | MALLEABLE IRON | SHT'G. | SHEATHING |
| B.O.F. | BOTTOM OF FOOTING | F.C.O. | FLOOR CLEAN OUT | M.O. | MASONRY OPENING | SIM. | SIMILAR |
| B.U. | BUILT UP | F.D. | FLOOR DRAIN | MAR. | MARBLE | SPA. | SPACE |
| B/C | BACK OF CURB | F.E. | FIRE EXTINGUISHER | MAS. | MASONRY | SPECS | SPECIFICATIONS |
| BD. | BOARD | F.N. | FIELD NAILING | MAT'L | MATERIAL | SPKR. | SPEAKER |
| BLDG | BUILDING | F.O. | FACE OF | MAX. | MAXIMUM | SQ. FT. | SQUARE FEET |
| BLK. | BLOCK | F.S. | FLOOR SINK | MECH. | MECHANICAL | SQ. IN. | SQUARE INCHES |
| BLKG. | BLOCKING | F/G | FIBERGLASS | MED. | MEDIUM | STC | SOUND TRANSMISSION CLASS |
| BM. | BEAM | FAB. | FABRICATE | MFG. | MANUFACTURING | STD. | STANDARD |
| BR | BRASS | FACP | FIRE ALARM CONTROL PANEL | MFR. | MANUFACTURER | STL | STEEL |
| BRG. | BEARING | FDC | FIRE DEPARTMENT CONNECTION | MIN. | MINIMUM | SUSP. | SUSPENDED |
| BRZ | BRONZE | FDN. | FOUNDATION | MISC. | MISCELLANEOUS | SW | SWITCH |
| C.A.P. | CONCRETE ASBESTOS PIPE | FHC | FIRE HOSE CABINET | MOD | MODULAR | SYM | SYMMETRICAL |
| C.D. | CONSTRUCTION DOCUMENTS | FIN. | FINISH | MTL. | METAL | SYS. | SYSTEM |
| C.I.P. | CAST IN PLACE | FL | FLOOR | MUL | MULLION | T & G | TONGUE AND GROOVE |
| C.J. | CONTROL JOINT | FLG. | FLOORING | N.I.C. | NOT IN CONTRACT | T.B. | THROUGH BOLT |
| C.O. | CLEAN OUT | FLUOR. | FLUORESCENT | N.T.S. | NOT TO SCALE | T.M.B. | TELEPHONE MOUNTING BOARD |
| C.T. | CERAMIC TILE | FP | FIRE PROOF | NCM | NON-CORROSIVE METAL | T.O. | TOP OF |
| CAB | CABINET | FTG. | FOOTING | NFC | NOT FOR CONSTRUCTION | T.O.B. | TOP OF BEAM |
| CAM. | CAMBER | FURN. | FURNISH | NLR. | NAILER | T.O.C. | TOP OF CURB |
| CCTV | CLOSED CIRCUIT TELEVISION | G.I. | GALVANIZED IRON | NO. | NUMBER | T.O.F. | TOP OF FOOTING |
| CEM. | CEMENT | GA. | GAUGE | NOM. | NOMINAL | T.O.J. | TOP OF JOIST |
| CER | CERAMIC | GALV. | GALVANIZED | O.C. | ON CENTER | T.O.M. | TOP OF MASONRY |
| CFM | CUBIC FEET PER MINUTE | GAR. | GARAGE | O.D. | OUTSIDE DIAMETER | T.O.S. | TOP OF SLAB |
| CH or C | CHANNEL | GFCI | GROUND FAULT CIRCUIT INTERRUPTER | O.H. | OVER HANG | T.O.W. | TOP OF WALL |
| CKT. BKR. | CIRCUIT BREAKER | GFI | GROUND FAULT INTERRUPTER | O.I. | ORNAMENTAL IRON | T.S. | TUBE STEEL |
| CL or Q | CENTERLINE | GL | GLASS | O.R. | OUTSIDE RADIUS | T.V. | TELEVISION OUTLET |
| CLG. | CEILING | GLB | GLUE LAMINATED BEAM | OAI | OUTSIDE AIR INTAKE | TEL. | TELEPHONE |
| CLKG. | CAULKING | GM | GRADE MARK | OH | OVER HEAD | TH. | THRESHOLD |
| CLD. | CLOSED | GM | GATE VALVE | OPNG. | OPENING | THD. | THREADED |
| CLR. | CLEAR | GRC | GALVANIZED RIGID TUBING | OPPO. | OPPOSITE | THK. | THICK |
| CMU | CONCRETE MASONRY UNIT | GYP. | GYP SUM | P.C. | PRECAST CONCRETE | THRU | THROUGH |
| CNTRD. | CENTERED | GYP. BD. | GYP SUM BOARD | P.L. or P | PROPERTY LINE | TLT. | TOILET |
| COL. | COLUMN | H.B. | HOSE BIBB | P.LAM. | PLASTIC LAMINATE | TRANS. | TRANSFORMER |
| COMB. | COMBINATION | H.C. | HOLLOW CORE | P.O.C. | POINT OF CONNECTION | TYP. | TYPICAL |
| CONC. | CONCRETE | H.M. | HOLLOW METAL | PERF. | PERFORATED | UNF. | UNFINISHED |
| CONST. | CONSTRUCTION | H/C | HANDICAPPED | PERP. or ⊥ | PERPENDICULAR | UR | URINAL |
| CONT. | CONTINUOUS | HDBD. | HARDBOARD | PH or | PHASE | V.B. | VAPOR BARRIER |
| CONTR. | CONTRACTOR | HDW | HARDWARE | PL. | PLASTER | V.I.F. | VERIFY IN FIELD |
| CU | COPPER | HGT. | HEIGHT | PL. or P | PLATE | VA | VOLT AMPERE |
| d | PENNY | HOR. | HORIZONTAL | PLAS. | PLASTIC | VCT | VINYL COMPOSITION TILE |
| D.F. | DRINKING FOUNTAIN | HTR | HEATER | PLUMB. | PLUMBING | VERT. | VERTICAL |
| D.G. | DECOMPOSED GRANITE | HVAC | "HEATING, VENTILATING & AIR CONDITIONING" | PLYWD. | PLYWOOD | W/C | WATER CLOSET |
| D.S. | DOWN SPOUT | HW | HOT WATER | PORC. | PORCELAIN | WDW | WINDOW |
| D/W | DISHWASHER | HYD. | HYDRAULIC | PREFAB. | PREFABRICATED | WCT | WAINSCOT |
| DBL. | DOUBLE | I.C. | INTERCOM OUTLET | PSF | POUNDS PER SQUARE FOOT | WP | WEATHER PROOF |
| DEMO | DEMOLITION | I.D. | INSIDE DIAMETER | PSI | POUNDS PER SQUARE INCH | WT. | WEIGHT |
| DIA. or Ø | DIAMETER | I.F. | INSIDE FACE | PTN. | PARTITION | W/ | WITH |
| DIAG. | DIAGONAL | ID | IDENTIFICATION | PVC | POLYVINYLCHLORIDE | W/O | WITHOUT |
| DIM. | DIMENSION | IG | ISOLATED GROUND | PWR. | POWER | WD. | WOOD |
| DL | DEAD LOAD | IMC | INTERMEDIATE METALLIC CONDUIT | Q.T. | QUARRY TILE | W.I. | WROUGHT IRON |
| DN. | DOWN | IMP | IMPREGNATED | QTY. | QUANTITY | YD. | YARD |

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| |
|-----------|
| REVISIONS |
|-----------|

FOR CONSTRUCTION



Stogner Architecture, PA
 ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
 615 East Broad Avenue, Rockingham, North Carolina, 28379
 Phone 910-895-6874 Fax 910-895-1111

ABBREVIATIONS

GOOD HOPE HOSPITAL
 410 DENIM DRIVE ERWIN, NORTH CAROLINA

ADDITION and RENOVATIONS

COMM. NO.: 4535
 DRAWN BY: JKM
 CHECKED BY: DWS
 DATE: 9/11/2020
 SHEET NO. **G1.0**

SEPT. 11, 2020

BUILDING CODE SUMMARY

Name of Project: _____ Good Hope Hospital, Inc.
 Address: _____ 410 Denim Drive, Erwin, NC 28339 Zip Code 27203
 Proposed Use: _____ Hospital (Mental Health)
 Owner/Authorized Agent: _____ Matthew Bertagnole Phone (910) 230-4011 E-Mail matthew.bertagnole@horizonhealth.com
 Owned By: City/County Private State
 Code Enforcement Jurisdiction: City of Erwin County State

LEAD DESIGN PROFESSIONAL: Stogner Architecture, PA

| DESIGNER | FIRM | NAME | LICENSE # | TELEPHONE # | E-MAIL |
|---------------------------|--------------------------|----------------------|-----------|----------------|----------------------------------|
| Architectural | Stogner Architecture, PA | David W. Stogner | NC 12661 | (910) 895-6874 | dstogner@stognerarchitecture.com |
| Civil | LKC Engineering, PLLC | Bill Lester, P.E. | NC 17651 | (910) 420-1437 | tim@lkcengineering.com |
| Electrical | Lighthouse Engineering | Paul S. Scott, P.E. | NC 26585 | (919) 835-9781 | jrs@lighthouseengineering.com |
| Fire Alarm | Lighthouse Engineering | Paul S. Scott, P.E. | NC 26585 | (919) 835-9781 | pss@lighthouseengineering.com |
| Plumbing | Lighthouse Engineering | Scott A. Brown, P.E. | NC 28385 | (919) 835-9781 | sab@lighthouseengineering.com |
| Mechanical | Lighthouse Engineering | Scott A. Brown, P.E. | NC 28385 | (919) 835-9781 | sab@lighthouseengineering.com |
| Sprinkler | (By General Contractor) | . | . | . | . |
| Structural | Stogner Architecture, PA | David W. Stogner | NC 12661 | (910) 895-6874 | dstogner@stognerarchitecture.com |
| Retaining Walls > 5' High | NA. | . | . | () ____-____ | _____ |
| Other | NA. | . | . | () ____-____ | _____ |

2018 EDITION OF NC CODE FOR: New Construction Addition Upfit
 EXISTING: Reconstruction Alteration Repair Renovation
 CONSTRUCTED: (date) _____ ORIGINAL USE(S) (Ch. 3): _____
 RENOVATED: (date) _____ CURRENT USE(S) (Ch. 3): _____
 PROPOSED USE(S) (Ch. 3): _____

BASIC BUILDING DATA:

Construction Type : (Existing) (check all that apply) I-A II-A III-A IV V-A I-B II-B III-B V-B
 Mixed construction: No Yes Types _____
 Construction Type : (New) (check all that apply) I-A II-A III-A IV V-A I-B II-B III-B V-B
 Mixed construction: No Yes Types _____
 Sprinklers: No Partial Yes NFPA 13 NFPA 13R NFPA 13D
 Standpipes: No Yes Class I II III Wet Dry
 Fire District: No Yes (Primary) Flood Hazard Area: No Yes
 Building Height: Feet 28'-0"

| Gross Building Area | | | |
|---------------------|------------------|-------------|-----------|
| FLOOR | EXISTING (SQ FT) | NEW (SQ FT) | SUB-TOTAL |
| 6th Floor | | | |
| 5th Floor | | | |
| 4th Floor | | | |
| 3rd Floor | | | |
| 2nd Floor | | | |
| Mezzanine | | | |
| 1st Floor | 15,000 SF +/- | 12,930 SF | 27,930 SF |
| Basement | | | |
| TOTAL | 15,000 SF | 12,930 SF | 27,930 SF |

ALLOWABLE AREA

Occupancy:
 Assembly A-1 A-2 A-3 A-4 A-5
 Business
 Educational
 Factory F-1 Moderate F-2 Low
 Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
 Institutional I-1 I-2 I-3 I-4
 I-3 Condition 1 2 3 4 5
 Mercantile
 Residential R-1 R-2 R-3 R-4
 Storage S-1 Moderate S-2 Low High-piled
 Parking Garage Open Enclosed Repair Garage
 Utility and Miscellaneous

Accessory Occupancies:
 Assembly A-1 A-2 A-3 A-4 A-5
 Business
 Educational
 Factory F-1 Moderate F-2 Low
 Hazardous H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
 Institutional I-1 I-2 I-3 I-4
 I-3 Condition 1 2 3 4 5
 Mercantile
 Residential R-1 R-2 R-3 R-4
 Storage S-1 Moderate S-2 Low High-piled
 Parking Garage Open Enclosed Repair Garage
 Utility and Miscellaneous

Incidental Uses (Table 509):

- Furnace room where any piece of equipment is over 400,000 Btu per hour input
- Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
- Refrigerant machine room
- Hydrogen cutoff rooms, not classified as Group H
- Incinerator rooms
- Paint shops, not classified as Group H, located in occupancies other than Group F
- Laboratories and vocational shops, not classified as Group H, located in a Group E or I-2 occupancy
- Laundry rooms over 100 square feet
- Group I-3 cells equipped with padded surfaces
- Group I-2 waste and linen collection rooms
- Waste and linen collection rooms over 100 square feet
- Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies
- Rooms containing fire pumps
- Group I-2 storage rooms over 100 square feet
- Group I-2 commercial kitchens
- Group I-2 laundries equal to or less than 100 square feet
- Group I-2 rooms or spaces that contain fuel-fired heating equipment

Special Uses: 402 403 404 405 406 407 408 409 410 411 412 413 414
 415 416 417 418 419 420 421 422 423 424 425 426 427

Special Provisions: 509.2 509.3 509.4 509.5 509.6 509.7 509.8 509.9

Mixed Occupancy: No Yes Separation: _____Hr. Exception: _____

Non-Separated Use (508.3)

The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

Separated Use (508.4) - See below for area calculations

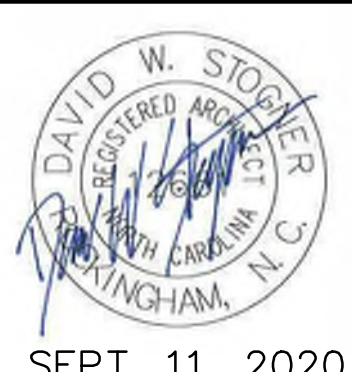
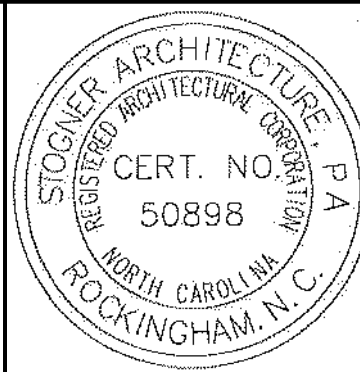
For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} + \dots \leq 1.00$$

$$\dots + \dots + \dots \leq 1.00$$

REVISIONS
 1 12/29/2020 EXISTING BUILDING CONSTRUCTION TYPE ADDED PER OSFM

FOR CONSTRUCTION



Stogner Architecture, PA

ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
 615 East Broad Avenue, Rockingham, North Carolina, 28379
 Phone 910-895-6874 Fax 910-895-1111

BUILDING CODE SUMMARY - PAGE 1

GOOD HOPE HOSPITAL

410 DENIM DRIVE ERWIN, NORTH CAROLINA

ADDITION and RENOVATIONS

COMM. NO.: 4535
 DRAWN BY: JKM
 CHECKED BY: DWS
 DATE: 9/11/2020
 SHEET NO.

G1.1

BUILDING CODE SUMMARY

ALLOWABLE AREA CONTINUED

| STORY NO. | DESCRIPTION AND USE | (A) BLDG AREA PER STORY (ACTUAL) | (B) TABLE 506.2 AREA | (C) AREA FOR FRONTAGE INCREASE ¹ | (D) AREA FOR SPRINKLER INCREASE | (E) ALLOWABLE AREA OR UNLIMITED ² | (F) MAXIMUM BUILDING AREA ³ |
|-----------|---------------------|----------------------------------|----------------------|---|---------------------------------|--|--|
| 1st | HOSPITAL | 27,930 SF | 11,000 SF | 6,270 SF | 33,000 SF | ALLOWABLE | 50,270 SF |

¹ Frontage area increases from Section 506.3 are computed thus:

- a. Perimeter which fronts a public way or open space having 20 feet minimum width = 430.00' (F)
 - b. Total Building Perimeter = 448.00' (P)
 - c. Ratio (F/P) = .96 (F/P)
 - d. W = Minimum width of public way = 24 (W)
 - e. Percent of frontage increase $I_f = [F/P - 0.25] \times W/30 = \underline{.57}$ (%)
- HOSPITAL**
 $[430.00/448.00 - 0.25] \times 24/30 = .57\%$
 $11,000 \text{ SF} \times .57 = 6,270 \text{ SF}$
 $11,000 \text{ SF} + 6,270 \text{ SF} = 17,270 \text{ SF}$

² Unlimited area applicable under conditions of Section 507.

³ Maximum Building Area = total number of stories in the building x E (506.4).

⁴ The maximum area of open parking garages must comply with Table 406.3.5. The maximum area of air traffic control towers must comply with Table 412.3.2.

ALLOWABLE HEIGHT

| | ALLOWABLE (Table 504.3) | INCREASE FOR SPRINKLERS | SHOWN ON PLANS | CODE REFERENCE |
|----------------------------|-------------------------|-----------------------------|------------------|----------------|
| Type of Construction | Type <u>II-B</u> | | Type <u>II-B</u> | |
| Building Height in Feet | Feet <u>55'</u> | Feet = H + 20' = <u>75'</u> | <u>28'-0"</u> | |
| Building Height in Stories | Stories <u>1</u> | Stories + 1 = <u>2</u> | Stories <u>1</u> | |

FIRE PROTECTION REQUIREMENTS

| BUILDING ELEMENT | FIRE SEPARATION DISTANCE (Feet) | RATING | | DETAIL # AND SHEET # | DESIGN # FOR RATED ASSEMBLY | DESIGN # FOR RATED PENETRATION | DESIGN # FOR RATED JOINTS |
|--|---------------------------------|---------|---------------------------|----------------------|-----------------------------|--------------------------------|---------------------------|
| | | REQ'D | PROVIDED (w/ # REDUCTION) | | | | |
| Structural frame including columns, girders, trusses | | N/A | | | | | |
| Bearing Walls | | N/A | | | | | |
| Exterior | | | | | | | |
| North | | | | | | | |
| East | | | | | | | |
| West | | | | | | | |
| South | | | | | | | |
| Interior | | | | | | | |
| Non-Bearing Walls and Partitions | | N/A | | | | | |
| Exterior Walls | | | | | | | |
| North | | | | | | | |
| East | | | | | | | |
| West | | | | | | | |
| South | | | | | | | |
| Interior walls and partitions | | | | | | | |
| Floor construction including supporting beams and joists | | 1 HR. | | 3/G1.5 | D914 | | |
| Roof construction including supporting beams and joists | | N/A | | | | | |
| Shaft Enclosures - Exit | | N/A | | | | | |
| Shaft Enclosures - Other | | N/A | | | | | |
| Corridor Separation | | 20 MIN. | | | | | |
| Occupancy Separation | | N/A | | | | | |
| Party/Fire Wall Separation | | N/A | | | | | |
| Smoke Barrier Separation | | 1 HR. | | 1/G1.5 | U419 | | |
| Smoke Partition Separation | | 20 MIN. | | | | | |
| Horizontal Assembly | | 1 HR. | | 2/G1.5 | U415 SYSTEM A | | |
| Tenant Separation | | N/A | | | | | |
| Incidental Use Separation | | 1 HR. | | 1/G1.5 | U419 | | |

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

- Emergency Lighting: NO YES
- Exit Signs: NO YES
- Fire Alarm: NO YES
- Smoke Detection Systems: NO YES PARTIAL
- Panic Hardware: NO YES

BUILDING CODE SUMMARY
STRUCTURAL DESIGN

DESIGN LOADS:

Importance Factors: Snow (Is) 1.0
Seismic (Ie) 1.0

Live Loads: Roof 20 psf
Mezzanine 60 psf
Floor N/A psf

Ground Snow Load: 10 psf

Wind Load: Ultimate Wind Speed 120 mph (ASCE-7)
Exposure Category C

SEISMIC DESIGN CATEGORY: A B C D

Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) I II III IV
Spectral Response Acceleration S_s 27.8 %g S_1 11.3 %g

Site Classification (ASCE 7) A B C D E F
 Data Source: Field Test Presumptive Historical Data

Basic structural system Bearing Wall Dual w/Special Moment Frame
 Building Frame Dual w/Intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum

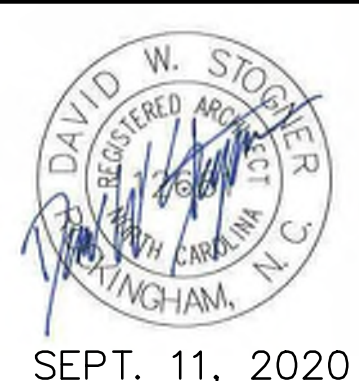
Analysis Procedure: Simplified Equivalent Lateral Force Dynamic
 Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL: Earthquake Wind

SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report) N/A psf
 Presumptive Bearing capacity 2,300 psf
 Pile size, type, and capacity N/A

REVISIONS
 1 12/29/2020 BUILDING CODE SUMMARY STRUCTURAL DESIGN ADDED PER OSFM

FOR CONSTRUCTION



Stogner Architecture, PA
 ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
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BUILDING CODE SUMMARY - PAGE 2

GOOD HOPE HOSPITAL
 410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

COMM. NO.: 4535
 DRAWN BY: JKM
 CHECKED BY: DWS
 DATE: 9/11/2020
 SHEET NO. **G1.2**

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BUILDING CODE SUMMARY

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: G1.4

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations
- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Existing structures within 30' of proposed building
- Occupancy loads for each area
- Exit access travel distances (1016)
- Common path of travel distances (1014.3 & 1028.8)
- Dead end lengths (1018.4)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (1008.1.10)
- Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
- Location of doors with electromagnetic egress locks (1008.1.9.8)
- Location of doors equipped with hold-open devices
- Location of emergency escape windows (1029)
- The square footage of each fire area (902)
- The square footage of each smoke compartment (407.4)
- Note any exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS & SLEEPING UNITS (NEW ADDITION) (SECTION 1107)

| TOTAL UNITS | ACCESSIBLE UNITS REQUIRED | ACCESSIBLE UNITS PROVIDED | TYPE A UNITS REQUIRED | TYPE A UNITS PROVIDED | TYPE B UNITS REQUIRED | TYPE B UNITS PROVIDED | TOTAL ACCESSIBLE UNITS PROVIDED |
|-------------|---------------------------|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------------------|
| 16 | 2 | 8 | 2 | 8 | 8 | 8 | 16 |

ACCESSIBLE PARKING (SECTION 1106)

| LOT OR PARKING AREA | TOTAL NO. OF PARKING SPACES REQUIRED | TOTAL NO. OF PARKING SPACES PROVIDED | NO. OF ACCESSIBLE SPACES PROVIDED | | | TOTAL NO. ACCESSIBLE REQUIRED | TOTAL NO. ACCESSIBLE PROVIDED |
|---------------------|--------------------------------------|--------------------------------------|-----------------------------------|-----------------------------------|-----------------|-------------------------------|-------------------------------|
| | | | REGULAR WITH 5' ACCESS AISLE | VAN SPACES WITH 132" ACCESS AISLE | 8' ACCESS AISLE | | |
| ALL PARKING | 41 | 55 | 0 | 0 | 7 | 3 | 7 |
| TOTAL | 41 | 55 | 0 | 0 | 7 | 3 | 7 |

PLUMBING FIXTURE REQUIREMENTS (TABLE 403.1)

| USE | | WATERCLOSETS | | | URINALS | LAVATORIES | | SHOWERS/TUBS | DRINKING FOUNTAINS | |
|---------------------|-------------------|--------------|--------|--------|---------|------------|--------|--------------|--------------------|------------|
| | | MALE | FEMALE | UNISEX | | MALE | FEMALE | | REGULAR | ACCESSIBLE |
| EMPLOYEES - (1-2) | NEW | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 1 | 1 |
| | REQUIRED | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 1 | 1 |
| INPATIENT FBC (1-2) | NEW | 4 | 4 | 1 | 0 | 4 | 4 | 8 | 0 | 0 |
| | REQUIRED PER DHHS | 4 | 4 | 0 | 0 | 4 | 4 | 8 | 0 | 0 |

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

REQUIRED TO HAVE DHHS REVIEW AND APPROVAL

ENERGY SUMMARY

ENERGY REQUIREMENTS

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs. annual energy cost for the proposed design.

Climate Zone: 3 4 5

Method of Compliance:

- Prescriptive (Energy Code)
- Performance (Energy Code)
- Prescriptive (ASHRAE 90.1)
- Performance (ASHRAE 90.1)

HERMAL ENVELOPE

Roof/ceiling Assembly (each assembly)

| | | |
|-------------------------|------------------------------|---------|
| Description of assembly | OUTSIDE AIR FILM | - 0.17 |
| | STANDING SEAM METAL ROOF | - 0.00 |
| | VAPOR BARRIER | - 0.00 |
| | 9 1/4" FIBERGLASS INSULATION | - 30.00 |
| | INSIDE FILM | - 0.68 |
| | LAY-IN CEILING | - 0.61 |

U-Value of total assembly **0.032**

R-Value of insulation **31.46**

Skylights in each assembly **N/A**

U-Value of skylight **N/A**

total square footage of skylights in each assembly **N/A**

Exterior Walls (each assembly)

| | | |
|-------------------------|--------------------------|---------|
| Description of assembly | OUTSIDE AIR FILM | - 0.17 |
| | METAL WALL PANEL | - 0.00 |
| | VAPOR BARRIER | - 0.00 |
| | 8" FIBERGLASS INSULATION | - 25.00 |
| | 7/8" METAL FURRING | - 1.00 |
| | 5/8" GYPSUM BOARD | - 0.56 |
| | INSIDE FILM | - 0.68 |

U-Value of total assembly **0.036**

R-Value of insulation **27.41**

Openings (windows or doors with glazing)

U-Value of assembly **0.580**

solar heat gain coefficient **0.450**

projection factor **XX**

Door R-Values **1.72 GLASS AND ALUMINUM, 15.00 INSULATED METAL**

Floors over unconditioned space (each assembly)

Description of assembly **N/A**

U-Value of total assembly **N/A**

R-Value of insulation **N/A**

Floors slab on grade

| | | |
|-------------------------|------------------|--------|
| Description of assembly | VINYL | - 0.05 |
| | 4" CONCRETE SLAB | - 0.28 |
| | VAPOR BARRIER | - 0.00 |

U-Value of total assembly **3.03**

R-Value of insulation **0.33**

Horizontal/vertical requirement **N/A**

Slab heated **N/A**

METAL BUILDING

CONNECTOR

| | | |
|-------------------------|-------------------------------|---------|
| Description of assembly | OUTSIDE AIR FILM | - 0.17 |
| | STANDING SEAM METAL ROOF | - 0.00 |
| | VAPOR BARRIER | - 0.00 |
| | 1/2" DENSDECK BOARD | - 0.56 |
| | 5" POLYSOCYANURATE INSULATION | - 30.00 |
| | 1 1/2" METAL ROOF DECK | - 0.00 |
| | INSIDE FILM | - 0.68 |
| | LAY-IN CEILING | - 0.61 |

U-Value of total assembly **0.031**

R-Value of insulation **32.02**

Skylights in each assembly **N/A**

U-Value of skylight **N/A**

total square footage of skylights in each assembly **N/A**

| | | |
|-------------------------|-------------------------------|---------|
| Description of assembly | OUTSIDE AIR FILM | - 0.17 |
| | METAL WALL PANEL | - 0.00 |
| | 3" POLYSOCYANURATE INSULATION | - 18.00 |
| | VAPOR BARRIER | - 0.00 |
| | 5/8" DENSGLASS GOLD SHEATHING | - 0.67 |
| | 6" METAL STUD FRAMING | - 1.00 |
| | 5/8" GYPSUM BOARD | - 0.56 |
| | INSIDE FILM | - 0.68 |

U-Value of total assembly **0.047**

R-Value of insulation **21.08**

Walls below grade (each assembly)

Description of assembly **N/A**

U-Value of total assembly **N/A**

R-Value of insulation **N/A**

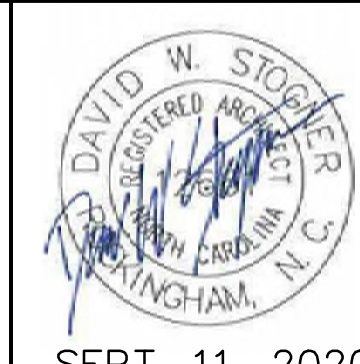
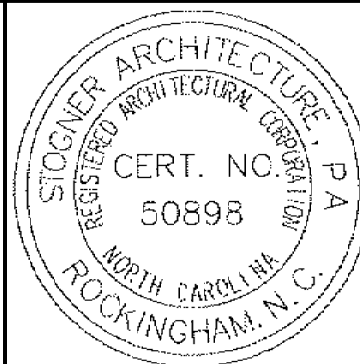
STRUCTURAL SUMMARY - SEE STRUCTURAL DRAWINGS

ELECTRICAL SUMMARY - SEE ELECTRICAL DRAWINGS

MECHANICAL SUMMARY - SEE MECHANICAL DRAWINGS

REVISIONS

FOR CONSTRUCTION



Stogner Architecture, PA

ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
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BUILDING CODE SUMMARY - PAGE 3

GOOD HOPE HOSPITAL

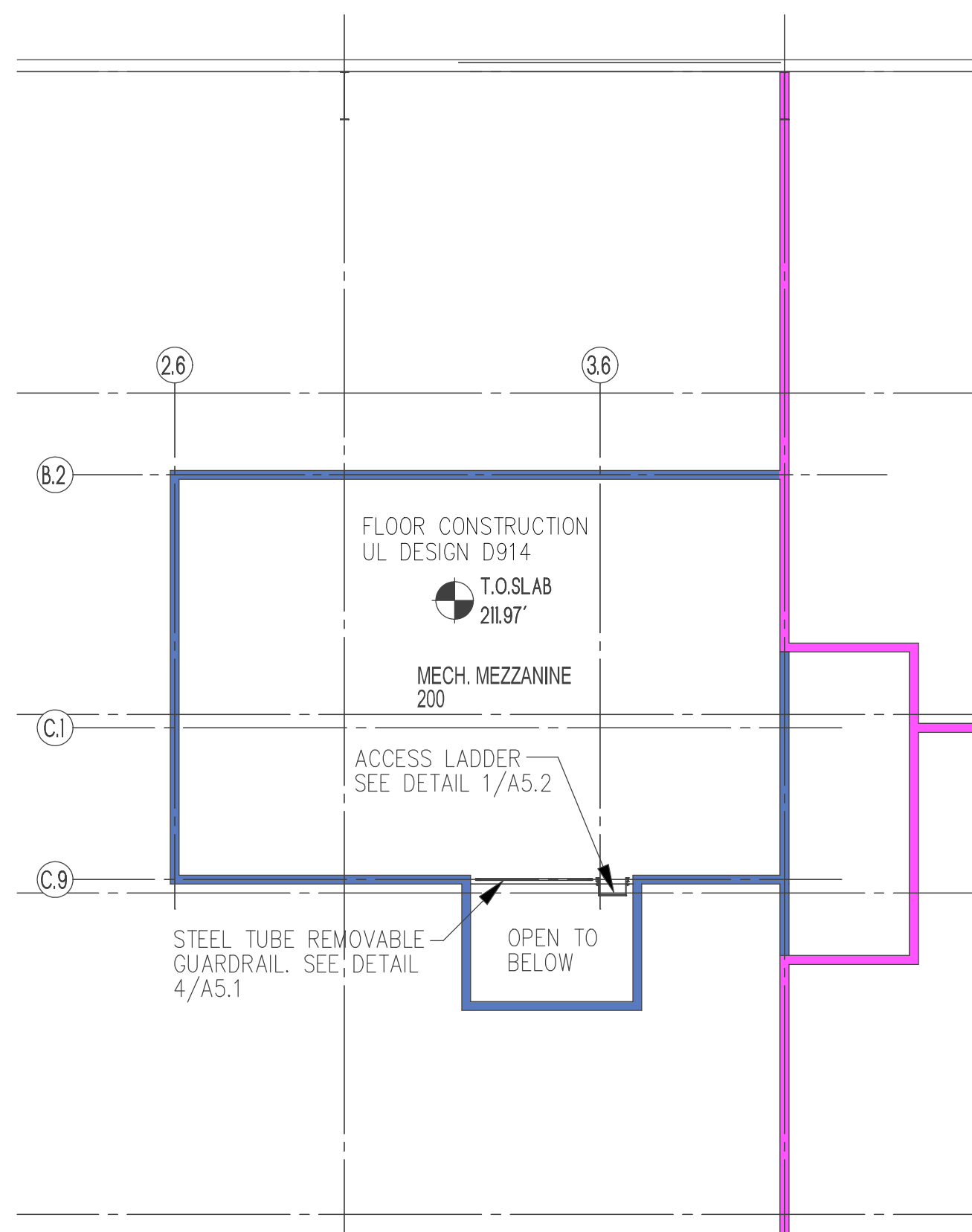
410 DENIM DRIVE ERWIN, NORTH CAROLINA

ADDITION and RENOVATIONS

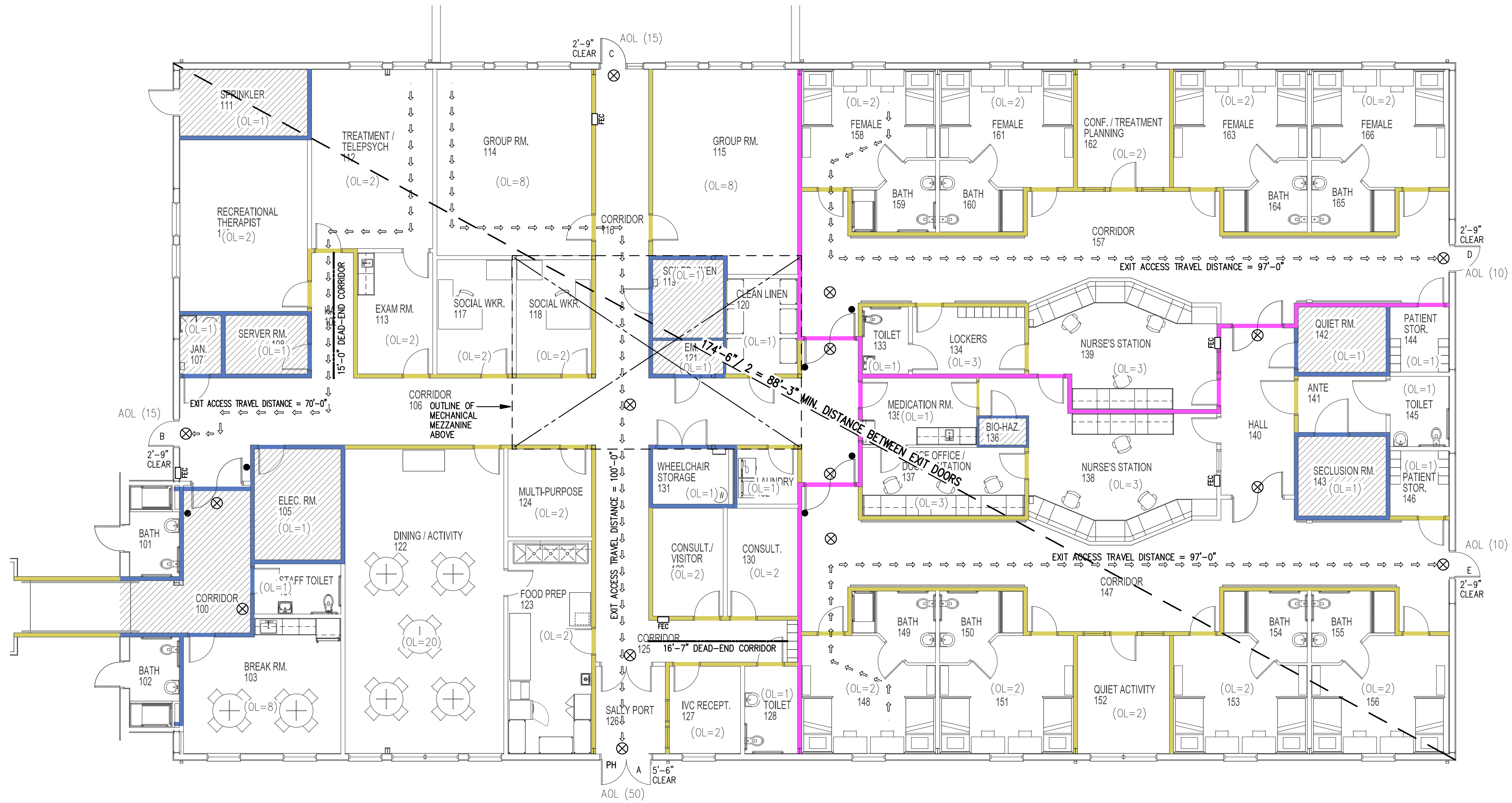
COMM. NO.: 4535
DRAWN BY: JKM
CHECKED BY: DWS
DATE: 9/11/2020
SHEET NO.

G1.3

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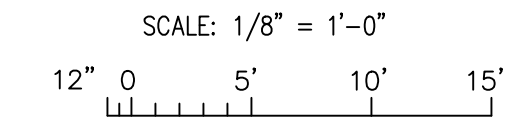
2 MECHANICAL MAZZANINE
SCALE: 1/8"=1'-0"



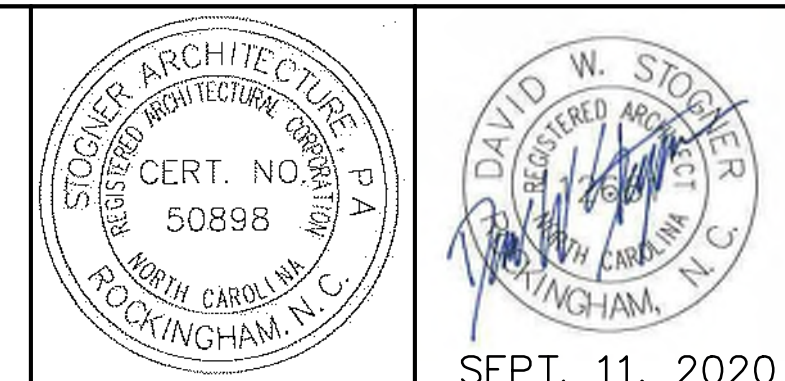
1 LIFE SAFETY PLAN
SCALE: 1/8"=1'-0"

- LEGEND**
- DEAD-END LENGTH
 - ⇒ ⇒ EXIT ACCESS TRAVEL DISTANCE
 - PH - PANIC HARDWARE PROVIDED
 - (OL=X) - OCCUPANT LOAD
 - AOL (X) - ACTUAL OCCUPANT LOAD AT EXIT DOOR
 - ⊗ - EXIT SIGN
 - REC - FIRE EXTINGUISHER & CABINET (COORDINATE FINAL LOCATIONS W/ OWNER + FIRE MARSHAL)
 - - MAGNETIC DOOR HOLD OPENS
 - 1 HOUR FIRE RATED PARTITION - U419 (WALL TO EXTEND FROM FLOOR TO 8" ABOVE CEILING @ MAIN FLOOR LEVEL, RUN TO UNDERSIDE OF ROOF @ MECHANICAL MEZZANINE)
 - SMOKE BARRIER-1 HOUR FIRE RATED - U419 (WALL TO EXTEND FROM FLOOR TO UNDERSIDE OF ROOF DECK)
 - SMOKE PARTITION (WALL TO EXTEND 8" MIN. ABOVE CEILING)
 - 1 HOUR FIRE RATED CEILING - UL DESIGN U415 SYSTEM A (HORIZONTAL ASSEMBLY)

1. MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY OF EACH EXIT DOOR.
DOOR A = 330
DOOR B = 165
DOOR C = 165
DOOR D = 165
DOOR E = 165



FOR CONSTRUCTION



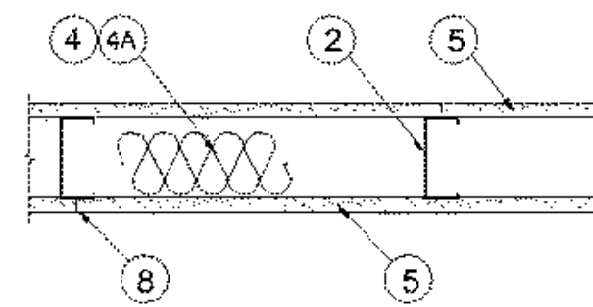
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LIFE SAFETY PLAN
GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

COMM. NO.: 4535
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SHEET NO. **G14**

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1 UL DESIGN NO. U419
NONBEARING WALL RATING - 1 HR



1. Floor and Ceiling Runners - (Not Shown) - For use with Item 2 - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.
2. Steel Studs - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.
4. Batts and Blankets* - (Required as indicated under Item 5) - Mineral wool batts, friction fitted between studs and runners. Min nom thickness as indicated under Item 5. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.
5. Gypsum Board* - Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. The thickness and number of layers for the 1 hr, 2 hr, 3 hr and 4 hr ratings are as follows:

Gypsum Board Protection on Each Side of Wall

| Rating, Hr | Min Stud Depth, in. Items 2, 2C, 2D, 2F, 2G, 2O | No. of Layers & Thins of Panel | Min Thins of Insulation (Item 4) |
|------------|---|--------------------------------|----------------------------------|
| 1 | 3-1/2 | 1 layer, 5/8 in. thick | Optional |
| 1 | 2-1/2 | 1 layer, 1/2 in. thick | 1-1/2 in. |
| 1 | 1-5/8 | 1 layer, 3/4 in. thick | Optional |
| 2 | 1-5/8 | 2 layers, 1/2 in. thick | Optional |
| 2 | 1-5/8 | 2 layers, 5/8 in. thick | Optional |
| 2 | 3-1/2 | 1 layer, 3/4 in. thick | 3 in. |
| 3 | 1-5/8 | 3 layers, 1/2 in. thick | Optional |
| 3 | 1-5/8 | 3 layers, 3/4 in. thick | Optional |
| 3 | 1-5/8 | 3 layers, 5/8 in. thick | Optional |
| 4 | 1-5/8 | 4 layers, 5/8 in. thick | Optional |
| 4 | 1-5/8 | 4 layers, 1/2 in. thick | Optional |
| 4 | 2-1/2 | 2 layers, 3/4 in. thick | 2 in. |

UNITED STATES GYPSUM CO - 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type SCX, SHX, WRX, IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR; 3/4 in. thick Types IP-X3 or ULTRACODE

USG BORAL DRYWALL SFZ LLC - 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, ULTRACODE

USG MEXICO S A DE C V - 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX, WRC or; 3/4 in. thick Types IP-X3 or ULTRACODE

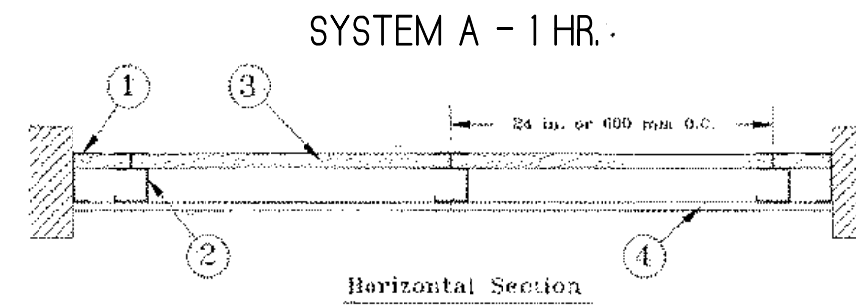
6. Fasteners - (Not Shown) - For use with Items 2 and 2F - Type S or S-12 steel screws used to attach panels to studs (Item 2) or furring channels (Item 7). Single layer systems: 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 8 in. OC when panels are applied horizontally, or 8 in. OC along vertical and bottom edges and 12 in. OC in the field when panels are applied vertically. Two-layer systems: First layer- 1 in. long for 1/2 and 5/8 in. thick panels or 1-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels or 2-1/4 in. long for 3/4 in. thick panels, spaced 16 in. OC with screws offset 8 in. from first layer. Three-layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in., 5/8 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below. Four-layer systems: First layer- 1 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Second layer- 1-5/8 in. long for 1/2 in., 5/8 in. thick panels, spaced 24 in. OC. Third layer- 2-1/4 in. long for 1/2 in. thick panels or 2-5/8 in. long for 5/8 in. thick panels, spaced 24 in. OC. Fourth layer- 2-5/8 in. long for 1/2 in. thick panels or 3 in. long for 5/8 in. thick panels, spaced 12 in. OC. Screws offset min 6 in. from layer below.

8. Joint Tape and Compound - Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layers. Paper tape, nom 2 in. wide, embedded in first layer of compound over all joints of outer layer panels. Paper tape and joint compound may be omitted when gypsum panels are supplied with a square edge.

10. Caulking and Sealants* - (Optional, Not Shown) - A bead of acoustical sealant applied around the partition perimeter for sound control.

UNITED STATES GYPSUM CO - Type ASE

2 UL DESIGN NO. U415
HORIZONTAL ASSEMBLY RATING - 1 HR



1. Floor, Side and Ceiling Runners - "J" - shaped runner, min 2-1/2 in. deep (min 4 in. deep when System C is used), with unequal legs of 1 in. and 2 in., fabricated from min 24 MSG (min 20 MSG when Item 4A, 4B, 4C, 4D or 7 are used) galv steel. Runners positioned with short leg toward finished side of wall. Runners attached to structural supports with steel fasteners located not greater than 2 in. from ends and not greater than 24 in. OC. "E" - shaped studs (Item 2A) may be used as side runners in place of "J" - shaped runners.
2. Steel Studs - "C-H" - shaped studs, min 2-1/2 in. deep (min 4 in. deep when System C is used), fabricated from min 25 MSG (min 20 MSG when Items 2D, 4A, 4B, 4C, 4D or 7 is used) galv steel. Cut to lengths 3/8 to 1/2 in. less than floor to-ceiling height and spaced 24 in. or 600 mm OC (max 16 in. OC when Items 4A, 4B, 4C, or 4D are used).
3. Gypsum Board* - Gypsum liner panels, nom 1 in. thick, 24 in. or 600 mm (for metric spacing) wide. Panels cut 1 in. less in length than floor to ceiling height. Vertical edges inserted in "H" portion of "C-H" studs or the gap between the two 3/4 in. legs of the "E" studs. Free edge of end panels attached to long leg of vertical "J" - runners with 1-5/8 in. long Type S steel screws spaced not greater than 12 in. OC. When wall height exceeds liner panel length, liner panel may be butted to extend to the full height of the wall. Horizontal joints need not be backed by steel framing. In System I, butt joints in liner panels are staggered min 36 in. Butt joints backed with 6 in. by 22 in. strips of 3/4 in. thick gypsum wallboard (Item 4). Wallboard strips centered over butt joints and secured to liner panels with six 1-1/2 in. long Type G steel screws, three screws along the 22 in. dimension at the top and bottom of the strips. CGC INC - Type SLX

UNITED STATES GYPSUM CO - Type SLX

USG BORAL DRYWALL SFZ LLC - Type SLX

USG MEXICO S A DE C V - Type SLX

4. Gypsum Board* - System A - 1 Hr Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. long Type S steel screws spaced 12 in. when installed vertically or 8 in OC when installed horizontally. Horizontal joints need not be backed by steel framing. CGC INC - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

UNITED STATES GYPSUM CO - Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SCX, SHX, ULX, WRC, WRX, USGX. When ULX is used insulation, Item 6, Batts and Blankets* is required and minimum stud depth is 4 in.

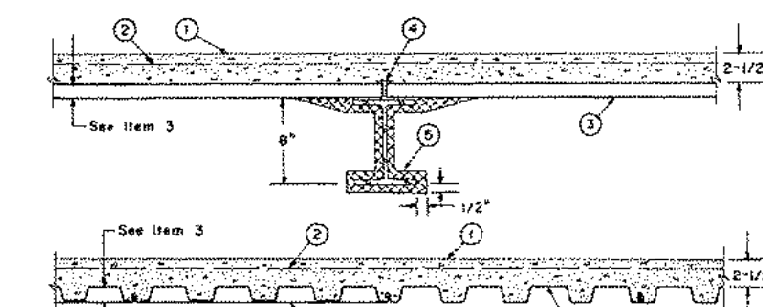
USG BORAL DRYWALL SFZ LLC - Types C, SCX, SGX, USGX

USG MEXICO S A DE C V - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX

5. Joint Tape and Compound - (Not Shown) Systems A, B, C, E, F, G, H, I Joints on outer layers of gypsum boards (Item 4 and 4A) covered with paper tape and joint compound. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. Exposed screw heads covered with joint compound.

6. Batts and Blankets* - Systems A, (Optional) - Mineral wool or glass fiber batts partially or completely filling stud cavity. Any mineral wool or glass fiber batt mineral bearing the UL Classification Marking as to Fire Resistance. System A with Type ULIX Gypsum Boards Placed in stud cavities, any min. 3-1/2 in. thick glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

3 UL DESIGN NO. D914
FLOOR / CEILING RATING - 1 HR



1. Light Weight Concrete - Expanded shale, clay, or slate aggregate by rotary-kiln method, or pelletized expanded blast furnace slag aggregate, 110 pcf unit weight, 3500 psi compressive strength, vibrated, 4 to 7 percent entrained air.
2. Welded Wire Fabric - 6x6 - W1.4xW1.4.
3. Steel Floor and Form Units* - Composite 1-1/2, 2 or 3 in. deep galv units. Min gauges are 22 MSG for fluted and 20/20 MSG for cellular. Fluted units may be phos/ptd. The following combinations of units may be used:
 - (1) All 24 or 36 in. wide cellular;
 - (2) All fluted;
 - (3) One or two 3 in. deep 12 in. wide, 18/18 MSG min cellular alternating with 3 in. deep fluted or other cellular;
 - (4) Any blend of fluted and 24 or 36 in. wide cellular.
4. ASC STEEL DECK, DIV OF ASC PROFILES L L C - 32 in. wide Types NH-32, NHN-32, NHF-32; 36 in. wide Types BH-36, BHN-36, BHN-35-1/4, BHF-36, BHF-36A, 2WH-36, 2WHS-36, 2WHF-36, 2WHF-36A, 3WXH-36, 3WXHF-36, 3WXHF-36A, 3WH-36, 3WHF-36, 3WHF-36A, 3W-36, 3WF-36, DG3W-36, DG3WF-36. All units may be galvanized or Prime Shield. Non-cellular decks may be vented designated with a "V" suffix to the product name. Cellular deck top and bottom sections may be riveted together (designated with "Fr") vs. arc spot welded, "F".

Spacing of welds attaching units to supports shall be at each side and not to exceed 16 in. OC between sides. Unless noted otherwise, adjacent units button-punched or welded together 36 in. OC alongside joints.

4. Joint Cover - (Use with fluted units optional) 2 in. wide cloth adhesive tape applied following the contour of the steel form units.

5. Spray-Applied Fire Resistive Materials* - Applied by spraying with water in one coat after surface has been wetted with water, to a final tamped or untamped thickness as shown above, to steel surfaces which are free of dirt, oil or scale. Use of adhesive is optional. Tamping is optional. Min avg untamped density is 13 pcf with a min individual untamped density of 11 pcf for Types II, II HS, or DC/F. Min avg and min ind untamped densities of 22 and 19 pcf, respectively, for Type HP. For method of density determination refer to Design Information Section. ISOLATEK INTERNATIONAL - Type D-C/F, HP, II, or Type II HS, Type EBS or Type X adhesive. Type E.B.S. adhesive may also be used as a surface sealer.

6. Shear Connector Studs - Optional - (Not Shown) - Studs, 3/4 in. diam, by 3 in. long for 1-1/2 in. deep form units to 5-1/4 in. deep for 3 in. units, headed type or equivalent per AISC specifications. Welded to top flange of beam through form units.

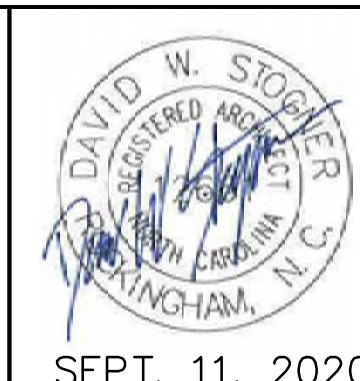
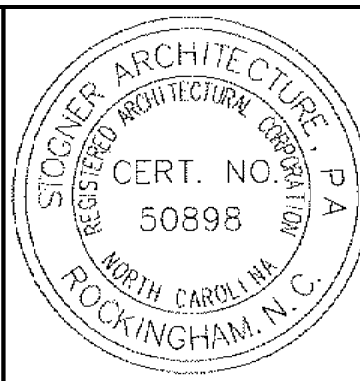
7. Electrical Inserts - (Not shown) Classified as "Outlet Boxes and Fittings Classified for Fire Resistance." Restrained Assembly rating is 3/4 hr. with Tapmate II-FS-1 and 1 hr with Tapmate II-FS-2 inserts. Installed over factory-punched holes in QL-WKX steel floor units per accompanying installation instructions. Spacing shall not be more than one insert in each 14 sq ft. of floor area with spacing along floor units not less than 48 in. OC. The holes cut in insert cover for passage of wires shall be no more than 1/8 in larger diam. than wire. KAM INDUSTRIES LTD, DBA CORDECK - Tapmate II-FS-1, II-FS-2; Series KEB.

NOTE:
UL DESIGNS LISTED ARE IN ABBREVIATED FORMAT.
REFER TO THE UL WEBSITE FOR THE FULL DESCRIPTION.

C:\NON-HUD PROJECTS\ERWIN\4535 SCMH - Erwin\DRAWINGS\XCADD\GT-O Cover Sheet-BLDC Code.aec

REVISIONS

FOR CONSTRUCTION



Stogner Architecture, PA

ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD

615 East Broad Avenue, Rockingham, North Carolina, 28379

Phone 910-895-6874

Fax 910-895-1111

UL DESIGN ASSEMBLIES

GOOD HOPE HOSPITAL

410 DENIM DRIVE ERWIN, NORTH CAROLINA

ADDITION and RENOVATIONS

COMM. NO.: 4535

DRAWN BY: JKM

CHECKED BY: DWS

DATE: 9/11/2020

SHEET NO.

G1.5

GENERAL NOTES

ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON THIS SHEET SHALL APPLIED TO ALL CONTRACT DOCUMENTS AND SHEETS IN THIS SET.

- THE GENERAL CONTRACTOR SHALL FIELD VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AT THE JOB SITE.
- ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARK AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR WITH THE SURVEYOR OF RECORD PRIOR TO BEGINNING CONSTRUCTION. ONE BENCHMARK IS A NAIL SET IN THE PAVEMENT NEAR THE SOUTHWEST CORNER OF THE PARKING LOT WITH AN ELEVATION OF 202.82. THE OTHER BENCHMARK IS LOCATED IN A LOT NORTH OF E H STREET WITH AN ELEVATION OF 193.69.
- THE VERTICAL DATUM FOR THIS SURVEY IS BASED ON NAVD 88.
- ALL DIMENSIONS AND ALL ELEVATIONS ARE MEASURED TO BACK OF CURB UNLESS OTHERWISE NOTED.
- THE INTENT OF THE LIMITS OF DISTURBANCE/CONSTRUCTION (LOD/C) SHOWN ON THE DRAWINGS IS TO DEFINE THE GENERAL PROJECT AREA TO CONSTRUCT, INSTALL AND/OR MODIFY THE SITE. TYPICALLY, THE LOD/C WILL FOLLOW RIGHT-OF-WAY OR PROPERTY LINES. THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE REGARDING ANY QUESTIONS AS TO THE EXACT LOCATION OF THE LOD/C PRIOR TO BID AND PRIOR TO BEGINNING CONSTRUCTION. ALL ITEMS SHOWN ON THESE PLANS THAT DO NOT SPECIFICALLY STATE "NOT-IN-CONTRACT (NIC), SHALL BE INCLUDED IN THE BID COST, INCLUDING ITEMS THAT MAY BE OUTSIDE THE PROJECT LIMITS.
- LOCATIONS OF EXISTING UTILITY LINES HAVE BEEN TAKEN FROM UTILITY RECORDS SUPPLEMENTED BY FIELD INSPECTIONS AND SHOULD INDICATE IN GENERAL THE TYPE OF UNDERGROUND UTILITIES NOW IN SERVICE. LOCATIONS SHOWN ARE NOT GUARANTEED. DEVELOPERS AND/OR CONTRACTORS SHALL NOT ONLY MAKE SUBSURFACE INVESTIGATIONS BUT SHALL ALSO ALLOW FOR CONTINGENCIES WHICH MIGHT ARISE BY REASON OF ENCOUNTERING UNRECORDED LINES OR LINES BEING IN DIFFERENT LOCATIONS THAN INDICATED ON THESE PLANS. AT LEAST 48-HOURS PRIOR OR SOONER IF REQUIRED BY THE LOCAL MUNICIPALITY TO ANY CONSTRUCTION ACTIVITY, EXCAVATION, GRADING, OR DIGGING ON THE SITE, THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO VERIFY AND/OR FIELD-LOCATE THEIR RESPECTIVE UTILITIES (THE NORTH CAROLINA ONE CALL CENTER - 1-800-632-4949). ALL DAMAGE INCURRED TO EXISTING UTILITY LINES DURING CONSTRUCTION SHALL BE REPAIRED AT THE GENERAL CONTRACTORS EXPENSE.
- ALL WASTE MATERIAL TO BE BROUGHT OFF-SITE SHALL BE DISPOSED OF IN A LEGALLY PERMITTED DISPOSAL SITE.
- A FORMAL EROSION AND SEDIMENTATION CONTROL PERMIT IS REQUIRED FOR THIS SITE UNDER THE REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (NCDENR). THE GENERAL CONTRACTOR IS REQUIRED TO AND SHALL FOLLOW ALL LOCAL, STATE AND FEDERAL REGULATIONS TO MINIMIZE EROSION AND THE TRANSPORT OF SEDIMENT OFF-SITE DURING, INCLUDING THE PLACEMENT AND MAINTENANCE OF CONTROL MEASURES. ALL MEASURES REQUIRED SHALL BE INCLUDED IN THE BID COST WHETHER SPECIFICALLY INDICATED OR NOT.
- ANY AND ALL PARKING STRIPES SHALL BE 4" WIDE AND SHALL BE MARKED WITH STANDARD WHITE TRAFFIC PAINT. ALL ISLANDS AND TRAFFIC ARROWS SHALL BE MARKED WITH STANDARD WHITE TRAFFIC PAINT.
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL ERWIN, HARNETT COUNTY & STATE REQUIREMENTS.
- DISTURBED AREAS NOT COVERED BY ASPHALT OR OTHER IMPERMEABLE SURFACES SHALL BE SEEDED AND STABILIZED PER SPECIFICATIONS.
- ACCESSIBLE PARKING SPACES, ACCESS AISLES, & SIGNAGE SHALL BE PROVIDED BY THE GENERAL CONTRACTOR AND INSTALLED PER FEDERAL, STATE, AND LOCAL REQUIREMENTS UNDER THE AMERICANS WITH DISABILITIES ACT (ADA). STANDARD R7-8 RESERVED PARKING AND MAXIMUM PENALTY \$250 NCGS 20.37.6 SIGNS MUST BE INSTALLED IN FRONT OF ALL ACCESSIBLE PARKING SPACES. "VAN ACCESSIBLE" SIGNS MUST BE PROVIDED IN FRONT OF THE VAN ACCESSIBLE PARKING SPACE(S).
- ALL TRAFFIC CONTROL DEVICES, PAVEMENT MARKINGS, SIGNS, AND SIGNALS SHALL BE DESIGNED, INSTALLED AND MAINTAINED IN CONFORMANCE WITH THE STANDARDS SET FORTH IN THE NORTH CAROLINA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- SURVEY, BASE MAPPING, & TOPOGRAPHICAL DATA PROVIDED BY LKC ENGINEERING, PLLC; JEFFREY GREEN, PLS, LIC. # L-3972; 140 AQUA SHED CT., ABERDEEN, NC 28315, TEL #: 910-420-1436.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING TREE PROTECTION FENCING AROUND ALL "AT-RISK" TREES WITHIN THE VICINITY OF THE CONSTRUCTION ACTIVITY WHETHER SPECIFICALLY INDICATED ON THE PLANS OR NOT. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION OR OTHER DEVELOPMENT ACTIVITIES, AND SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT UNTIL FINAL SITE INSPECTION. REFER TO CONSTRUCTION PLAN DETAIL SHEETS FOR TREE PROTECTION DETAIL(S).
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY & THE NORTH CAROLINA DEPARTMENT OF WATER QUALITY FOR APPROVAL TO REMOVE ALL CONSTRUCTED TEMPORARY & PERMANENT EROSION & SEDIMENTATION CONTROL MEASURES, AND FOR THE APPROVAL OF PERMANENT GROUND COVER.
- CONTRACTOR SHALL INSTALL A RAIN GAUGE AND MAINTAIN A MONITORING LOG ACCORDING TO NCDENR REQUIREMENTS UNTIL THE AGENCY HAS RELEASED THE SITE.
- CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL ACCORDING TO NCDOT REQUIREMENTS DURING THE CONSTRUCTION OF IMPROVEMENTS IN THE RIGHT-OF-WAY.
- CONTRACTOR SHALL PROVIDE RED-LINE PRINTS OF ALL CHANGES AND MODIFICATIONS. THIS INFORMATION SHALL BE PROVIDED TO THE DESIGNER OF RECORD AT THE TIME OF SUBSTANTIAL COMPLETION.
- CONTRACTOR SHALL INSTALL 6-FT HIGH TEMPORARY CHAIN LINK CONSTRUCTION FENCING IN ALL AREAS WHERE DIRECT ACCESS TO CONSTRUCTION ACTIVITY IS POSSIBLE, AND SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE OWNER REGARDING THE LOCATION OF THE CONSTRUCTION FENCE AND PEDESTRIAN TRAFFIC CONTROL DURING CONSTRUCTION. ALL FENCING SHALL BE INCLUDED IN THE BID COST WHETHER SPECIFICALLY INDICATED OR NOT.
- FINAL INSPECTION AND APPROVAL SHALL BE MADE PRIOR TO CERTIFICATE OF OCCUPANCY BEING ISSUED.
- CONTRACTOR SHALL MAINTAIN A COPY OF THE LOCAL AUTHORITY'S APPROVED PLANS ALONG WITH ANY PERMIT LETTERS THAT HAVE BEEN MARKED "APPROVED" OR "APPROVED AS CORRECTED" ON SITE DURING CONSTRUCTION.
- ALL EXCAVATION IN THE PROJECT AREA SHALL BE UNCLASSIFIED. CONTRACTOR SHALL INCLUDE ALL COST ASSOCIATED WITH SOIL MATERIAL REMOVAL, REPAIR AND DISPOSAL UNDER THE BASE BID SCOPE OF WORK.

ABBREVIATIONS

| ABBREVIATION: | DESCRIPTION: | ABBREVIATION: | DESCRIPTION: |
|---------------|----------------------------|---------------|--------------------------|
| A/C | AIR CONDITIONING | NIC | NOT IN CONTRACT |
| ADJ | ADJACENT | NTS | NOT TO SCALE |
| AL | AREA LIGHT | | |
| APROX | APPROXIMATE | O.C. | ON CENTER |
| ASSM | ASSEMBLY | OHE | OVERHEAD ELECTRIC |
| ASPH | ASPHALT | | |
| | | PC | POINT OF CURVATURE |
| BLDG | BUILDING | PI | POINT OF INTERSECTION |
| B.O. | BLOW-OFF | PIV | POST INDICATION VALVE |
| BOC | BACK OF CURB | PP | POWER POLE |
| BOW | BOTTOM OF WALL | PT | POINT OF TANGENCY |
| BX | BOX | PVC | POLYVINYL CHLORIDE |
| | | PVMT | PAVEMENT |
| | | | |
| C.F. | CUBIC FOOT | | |
| CI | CURB INLET | R | RADIUS |
| CL | CENTER LINE | R.J. | RESTRAINED JOINT |
| CONC | CONCRETE | R/W, ROW | RIGHT OF WAY |
| CONST | CONSTRUCTION | RCP | REINFORCED CONCRETE PIPE |
| CY | CUBIC YARD | RDCO | ROOF DRAIN CLEAN OUT |
| | | REOD | REQUIRED |
| DEMO | DEMOLISH (DEMOLITION) | RQMT | REQUIREMENT |
| DP | DEEP | RT | RIGHT |
| DI | DUCTILE IRON | RWM | RIGHT OF WAY MONUMENT |
| D.I.P. | DUCTILE IRON PIPE | | |
| DIA | DIAMETER | SCH | SCHEDULE |
| DIM | DIMENSION | SD | STORM DRAIN |
| DWG | DRAWING | SDCO | STORM DRAIN CLEAN OUT |
| | | SDMH | STORM DRAIN MANHOLE |
| ECM | EXISTING CONCRETE MONUMENT | SED | SEDIMENT |
| EIP | EXISTING IRON PIPE | SF | SQUARE FOOT |
| EIS | EXISTING IRON STAKE | SPEC | SPECIFICATION |
| ELEC | ELECTRIC | SQ | SQUARE |
| ELEV | ELEVATION | SS | SANITARY SEWER |
| ELMH | ELECTRICAL MANHOLE | SSCO | SANITARY SEWER CLEAN OUT |
| ENCL | ENCLOSURE | SSMH | SANITARY SEWER MANHOLE |
| EOC | EDGE OF CONCRETE | STA | STATION |
| EOP | EDGE OF PAVEMENT | SY | SQUARE YARD |
| EQPT | EQUIPMENT | | |
| ESMT | EASEMENT | TBM | TEMPORARY BENCHMARK |
| EX | EXISTING | TEL | TELEPHONE |
| | | TEMP | TEMPORARY |
| FES | FLARED END SECTION | THK | THICK |
| FFE | FINISH FLOOR ELEVATION | TOC, T/C | TOP OF CURB |
| FH | FIRE HYDRANT | TOW | TOP OF WALL |
| FNC | FENCE | TPED | TELEPHONE PEDESTAL |
| FO | FIBER OPTIC | TS&V | TAPPING SADDLE & VALVE |
| FOC | FACE OF CURB | TYP | TYPICAL |
| FT | FOOT | | |
| | | UGE | UNDERGROUND ELECTRIC |
| G.V. | GATE VALVE | UTIL | UTILITY |
| GALV | GALVANIZE | | |
| GND | GROUND | | |
| GRAV | GRAVEL | | |
| | | | |
| HDPE | HIGH DENSITY POLYETHYLENE | | |
| | | | |
| L | LENGTH | | |
| LF | LINEAR FOOT | | |
| LFT | LEFT | | |
| | | | |
| MAX | MAXIMUM | | |
| MIN | MINIMUM | | |
| MISC | MISCELLANEOUS | | |
| M.J. | MECHANICAL JOINT | | |

LEGEND / KEY

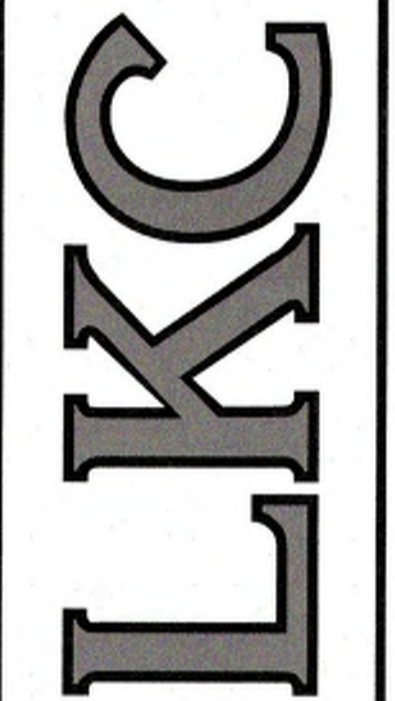
| NAME: | EXISTING | NEW | EROSION CONTROL: | NEW |
|----------------------|----------|-------|----------------------------------|-----|
| ASPHALT PAVEMENT | | | TEMP. CONST ENT. | |
| CABLE TV | CA | | TEMP. SILT FENCE | |
| CENTERLINE | --- | --- | TEMP. DIVERSION | |
| CURB & GUTTER | --- | --- | TEMP. INLET PROTECT. | |
| CONCRETE | | | TEMP. ROCK PIPE INLET PROTECTION | |
| CONTOUR MAJOR | 100 | 100 | RIPRAP DISSIPATOR | |
| CONTOUR MINOR | 99 | 99 | TEMP. SILT FENCE OUTLET | |
| EASEMENT | --- | --- | TEMP. SKIMMER BASIN WITH BAFFLES | |
| FENCE | X | X | FAIRCLOTH SKIMMER | |
| FIBER OPTIC | FO | FM | TEMP. SEDIMENT TRAP WITH BAFFLES | |
| FORCE MAIN | FM | FM | TEMP. SLOPE DRAIN | |
| GAS LINE | G | | TREE PROTECTION | |
| GAS VALVE | | | ROLLED EROSION CONTROL MATTING | |
| GRAVEL | | | DEMOLITION LIMITS | |
| LIMITS OF DIST/CONST | --- | LOD/C | | |
| LIGHT POLE | | | | |
| OVERHEAD ELECTRIC | OE | | | |
| POWER POLE | | | | |
| PROPERTY LINE | --- | --- | | |
| PROPERTY LINE - ADJ | --- | --- | | |
| RAILROAD | +++++ | +++++ | | |
| RIGHT-OF-WAY (ROW) | R/W | R/W | | |
| SANITARY SEWER LINE | SS | SS | | |
| SANITARY SEWER MH | | | | |
| SANITARY SEWER CO | | | | |
| SPOT EL. GS | +100.00 | | | |
| SPOT EL. TOC | +100.00 | | | |
| SPOT EL. TOW | +100.00 | | | |
| STORM DRAIN LINE | SD | SD | | |
| STORM DRAIN FES | SD | SD | | |
| STORM DRAIN MH | | | | |
| STORM DRAIN CI | | | | |
| STORM DRAIN GI | | | | |
| STORM DRAIN YI | | | | |
| TELEPHONE LINE | T | T | | |
| TELEPHONE PEDESTAL | | | | |
| UNDERGROUND ELEC. | UE | UE | | |
| UTILITY POLE | | | | |
| WATER LINE | W | W | | |
| WATER VALVE | | | | |
| FIRE HYDRANT | | | | |
| WATER METER | | | | |
| WATER LINE BACKFLOW | | | | |
| WATER LINE REDUCER | | | | |
| IRON ROD/PIPE | | | | |
| CONCRETE MONUMENT | | | | |
| BENCHMARK | | | | |

FOR CONSTRUCTION



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Aberdeen, NC 28315
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F: 910.637.0096
lkceengineering.com
License No. P-1095

Engineering
Landscape Architecture
Surveying



GENERAL NOTES
AND LEGEND

GOOD HOPE HOSPITAL
RENOVATIONS
Erwin, North Carolina

DATE: JULY, 2020
DESIGNED: FDW
DRAWN: FDW
CHECKED: TAC
NO.

C-01

File: L:\3\Stopper-19.01 Good Hope Hosp\B00 - Drawings\B10 Design Drawings\02 Civil\STOODER-19.01 C01 LEGEND.dwg, By: frank, Plotted: Thu Jul 23, 2020 at 8:52am

| REVISIONS | | | |
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| SYM. | DESCRIPTION | DATE | BY |
| | | | |



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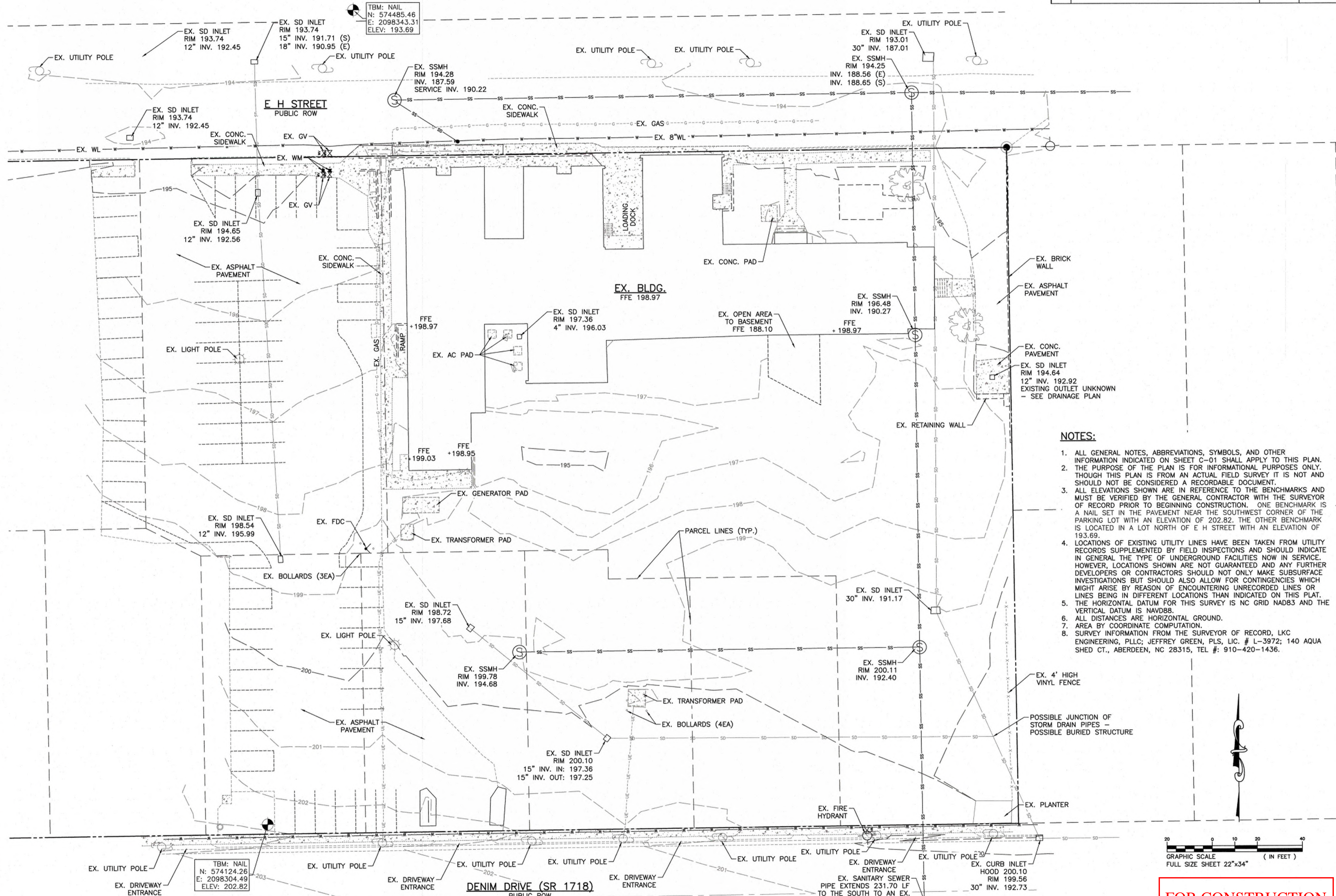
Engineering
 Landscape Architecture
 Surveying

LKC

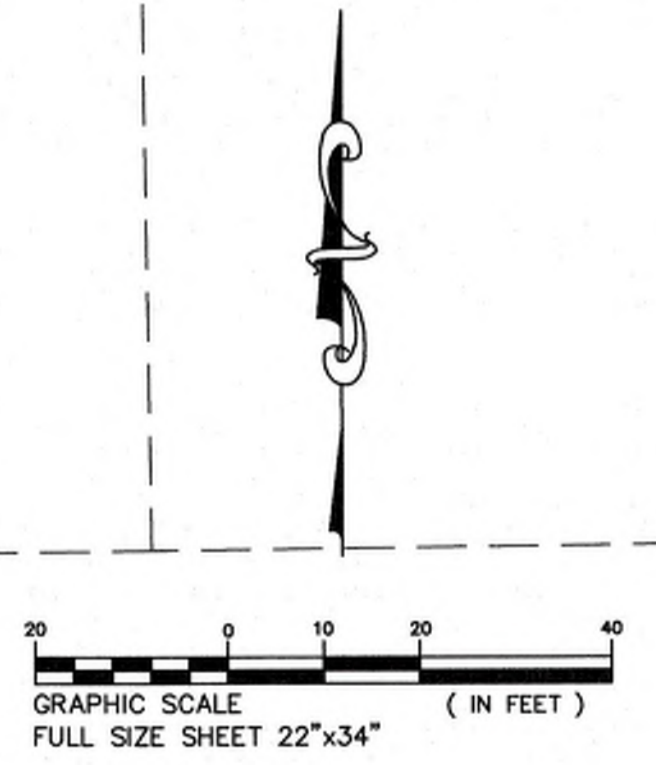
EXISTING TOPOGRAPHIC
 SURVEY

GOOD HOPE HOSPITAL
 RENOVATIONS

Erwin, North Carolina
 DATE: JULY, 2020
 DESIGNED: FDW
 DRAWN: FDW
 CHECKED: TAC
 NO.
C-02



- NOTES:**
1. ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON SHEET C-01 SHALL APPLY TO THIS PLAN.
 2. THE PURPOSE OF THE PLAN IS FOR INFORMATIONAL PURPOSES ONLY. THOUGH THIS PLAN IS FROM AN ACTUAL FIELD SURVEY IT IS NOT AND SHOULD NOT BE CONSIDERED A RECORDABLE DOCUMENT.
 3. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARKS AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR WITH THE SURVEYOR OF RECORD PRIOR TO BEGINNING CONSTRUCTION. ONE BENCHMARK IS A NAIL SET IN THE PAVEMENT NEAR THE SOUTHWEST CORNER OF THE PARKING LOT WITH AN ELEVATION OF 202.82. THE OTHER BENCHMARK IS LOCATED IN A LOT NORTH OF E H STREET WITH AN ELEVATION OF 193.69.
 4. LOCATIONS OF EXISTING UTILITY LINES HAVE BEEN TAKEN FROM UTILITY RECORDS SUPPLEMENTED BY FIELD INSPECTIONS AND SHOULD INDICATE IN GENERAL THE TYPE OF UNDERGROUND FACILITIES NOW IN SERVICE. HOWEVER, LOCATIONS SHOWN ARE NOT GUARANTEED AND ANY FURTHER DEVELOPERS OR CONTRACTORS SHOULD NOT ONLY MAKE SUBSURFACE INVESTIGATIONS BUT SHOULD ALSO ALLOW FOR CONTINGENCIES WHICH MIGHT ARISE BY REASON OF ENCOUNTERING UNRECORDED LINES OR LINES BEING IN DIFFERENT LOCATIONS THAN INDICATED ON THIS PLAN.
 5. THE HORIZONTAL DATUM FOR THIS SURVEY IS NC GRID NAD83 AND THE VERTICAL DATUM IS NAVD88.
 6. ALL DISTANCES ARE HORIZONTAL GROUND.
 7. AREA BY COORDINATE COMPUTATION.
 8. SURVEY INFORMATION FROM THE SURVEYOR OF RECORD, LKC ENGINEERING, PLLC; JEFFREY GREEN, PLS., LIC. # L-3972; 140 AQUA SHED CT., ABERDEEN, NC 28315, TEL #: 910-420-1436.



FOR CONSTRUCTION

File: L:\Stages-19.01 Good Hope Hosp\800 - Drawing\810 Design Drawings\02 Civil\STG02R-19.01 022_X-TOPG.dwg, By: Frank, Plotted: Thu Jul 23, 2020 at 8:52am

TBM: NAIL
 N: 574124.26
 E: 2098304.49
 ELEV: 202.82

TBM: NAIL
 N: 574485.46
 E: 2098343.31
 ELEV: 193.69

| REVISIONS | | | |
|-----------|-------------|------|----|
| SYM. | DESCRIPTION | DATE | BY |
| | | | |



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Engineering
 Landscape Architecture
 Surveying

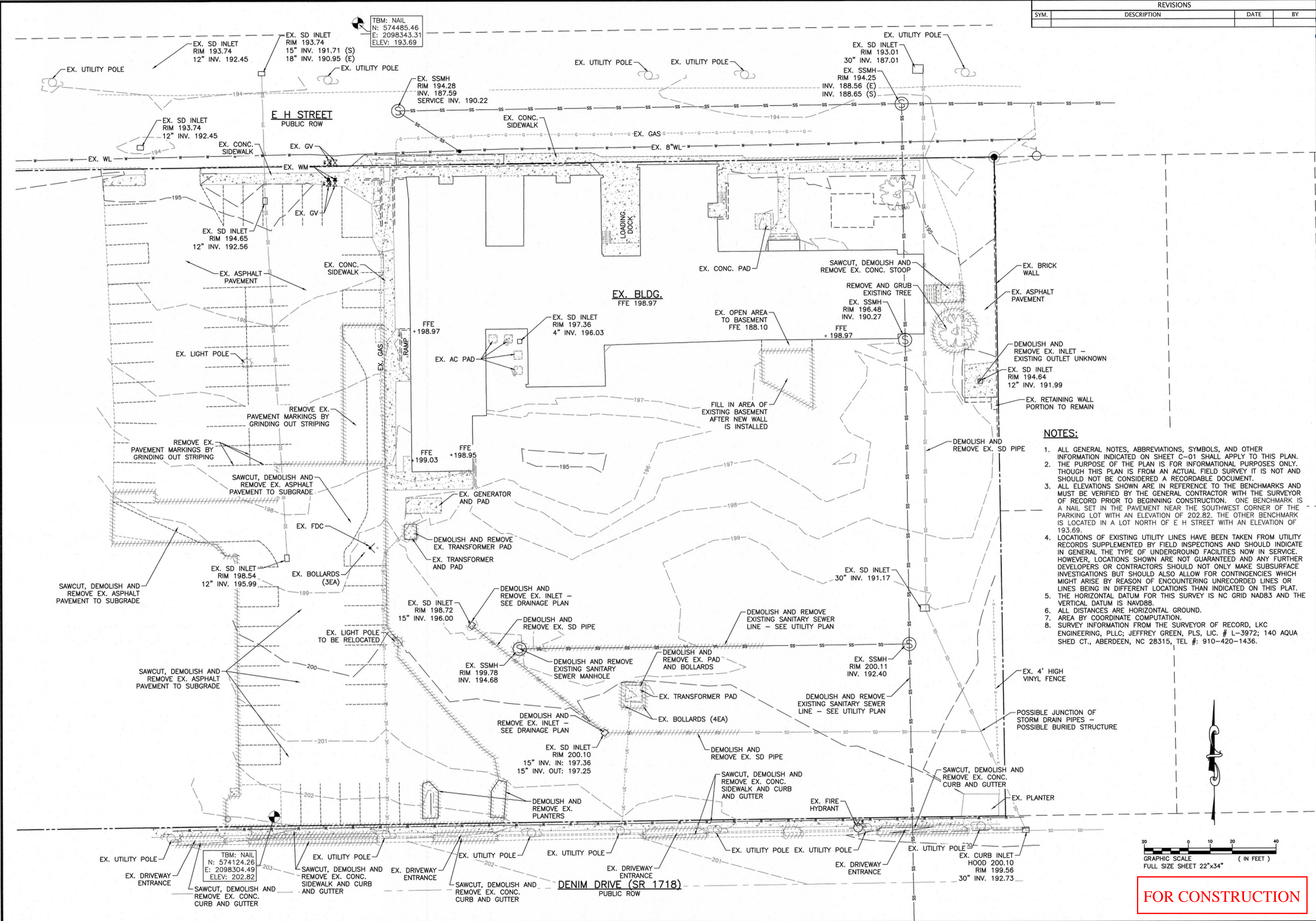
LKC

DEMOLITION PLAN

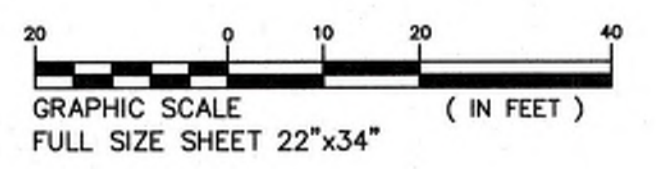
GOOD HOPE HOSPITAL
 RENOVATIONS

DATE: JULY, 2020
 DESIGNED: FDW
 DRAWN: FDW
 CHECKED: TAC
 NO.

C-03



- NOTES:**
1. ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON SHEET C-01 SHALL APPLY TO THIS PLAN. THE PURPOSE OF THE PLAN IS FOR INFORMATIONAL PURPOSES ONLY. THOUGH THIS PLAN IS FROM AN ACTUAL FIELD SURVEY IT IS NOT AND SHOULD NOT BE CONSIDERED A RECORDABLE DOCUMENT.
 2. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARKS AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR WITH THE SURVEYOR OF RECORD PRIOR TO BEGINNING CONSTRUCTION. ONE BENCHMARK IS A NAIL SET IN THE PAVEMENT NEAR THE SOUTHWEST CORNER OF THE PARKING LOT WITH AN ELEVATION OF 202.82. THE OTHER BENCHMARK IS LOCATED IN A LOT NORTH OF E H STREET WITH AN ELEVATION OF 193.69.
 3. LOCATIONS OF EXISTING UTILITY LINES HAVE BEEN TAKEN FROM UTILITY RECORDS SUPPLEMENTED BY FIELD INSPECTIONS AND SHOULD INDICATE IN GENERAL THE TYPE OF UNDERGROUND FACILITIES NOW IN SERVICE. HOWEVER, LOCATIONS SHOWN ARE NOT GUARANTEED AND ANY FURTHER DEVELOPERS OR CONTRACTORS SHOULD NOT ONLY MAKE SUBSURFACE INVESTIGATIONS BUT SHOULD ALSO ALLOW FOR CONTINGENCIES WHICH MIGHT ARISE BY REASON OF ENCOUNTERING UNRECORDED LINES OR LINES BEING IN DIFFERENT LOCATIONS THAN INDICATED ON THIS PLAN. THE HORIZONTAL DATUM FOR THIS SURVEY IS NC GRID NAD83 AND THE VERTICAL DATUM IS NAVD88.
 4. ALL DISTANCES ARE HORIZONTAL GROUND.
 5. AREA BY COORDINATE COMPUTATION.
 6. SURVEY INFORMATION FROM THE SURVEYOR OF RECORD, LKC ENGINEERING, PLLC; JEFFREY GREEN, PLS, LIC. # L-3972; 140 AQUA SHED CT., ABERDEEN, NC 28315, TEL #: 910-420-1436.



FOR CONSTRUCTION

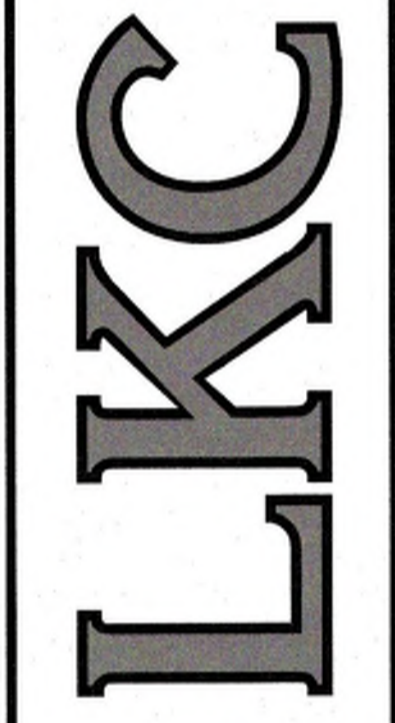
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| REVISIONS | | | |
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| SYM. | DESCRIPTION | DATE | BY |
| | | | |



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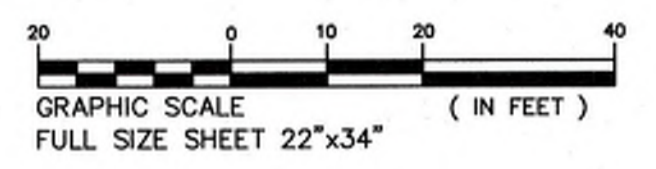
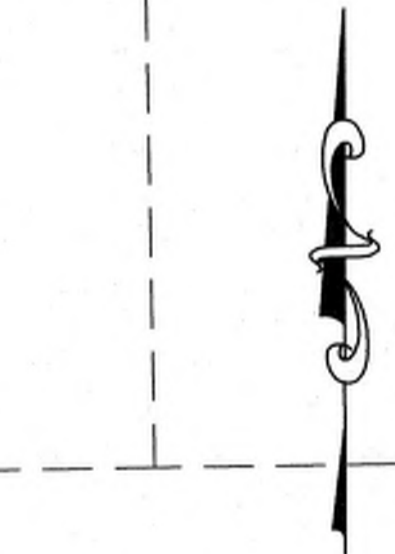
SITE LAYOUT PLAN

GOOD HOPE HOSPITAL
 RENOVATIONS
 Erwin, North Carolina

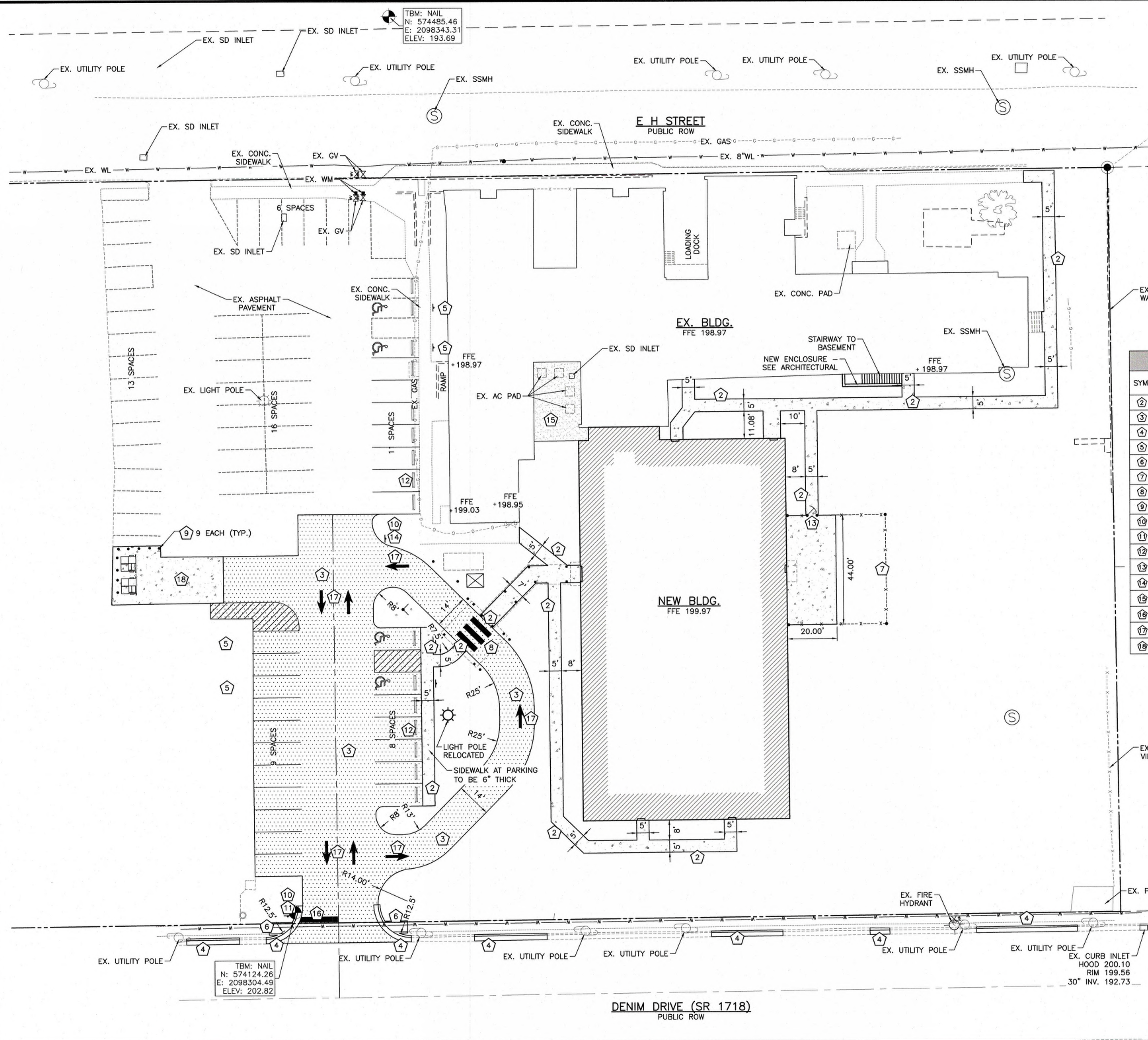
DATE: JULY, 2020
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 NO.
C-04

- GENERAL NOTES:**
- ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON THE GENERAL NOTES, LEGEND AND ABBREVIATIONS SHEET, SHEET C-01 SHALL APPLY TO THIS PLAN.
 - ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL TOWN OF ERWIN AND HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
 - ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARK AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR WITH THE SURVEYOR OF RECORD PRIOR TO BEGINNING CONSTRUCTION.

| SITE KEY NOTING: | | |
|------------------|--|-------------------------|
| SYM. | DESCRIPTION | SHEET REFERENCE |
| ② | INSTALL CONCRETE STANDARD SIDEWALK | SHT. D-01, #1 |
| ③ | INSTALL ASPHALT PAVEMENT | SHT. D-01, #2 |
| ④ | INSTALL 30" CONCRETE CURB & GUTTER | SHT. D-01, #3 |
| ⑤ | INSTALL HANDICAP PARKING SIGN | SHT. D-01, #5 |
| ⑥ | INSTALL "IN-LINE" HANDICAP ACCESSIBLE RAMP | SHT. D-01, #6 |
| ⑦ | INSTALL FENCE | SEE ARCHITECTS DRAWINGS |
| ⑧ | INSTALL CROSSWALK STRIPING | SHT. D-01, #8 |
| ⑨ | INSTALL CONCRETE FILLED BOLLARD | SHT. D-01, #9 |
| ⑩ | INSTALL SIGN POST | SHT. D-01, #10 |
| ⑪ | INSTALL "STOP" SIGN | SHT. D-01, #11 |
| ⑫ | INSTALL PRECAST WHEELSTOP | SHT. D-02, #1 |
| ⑬ | INSTALL 4' PEDESTRIAN GATE | SEE ARCHITECTS DRAWINGS |
| ⑭ | INSTALL "DO NOT ENTER" SIGN | SHT. D-02, #2 |
| ⑮ | INSTALL GRAVEL YARD W/FILTER FABRIC UNDERLINER | SHT. D-02, #3 |
| ⑯ | INSTALL "STOP BAR" STRIPING | SHT. D-02, NCDOT STD |
| ⑰ | INSTALL "DIRECTIONAL ARROW" STRIPING | SHT. D-02, NCDOT STD |
| ⑱ | INSTALL CONCRETE PAVEMENT | SHT. D-02, #4 |



FOR CONSTRUCTION



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GENERAL NOTES:

1. ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON THE GENERAL NOTES, LEGEND AND ABBREVIATIONS SHEET, SHEET C-01 SHALL APPLY TO THIS PLAN.
2. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL TOWN OF ERWIN AND HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
3. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARK AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR WITH THE SURVEYOR OF RECORD PRIOR TO BEGINNING CONSTRUCTION.
4. STORM DRAIN CLEANOUTS SHALL BE INSTALLED AT ALL DOWNSPOUT CONNECTIONS AND AT ALL TEES AND BENDS.



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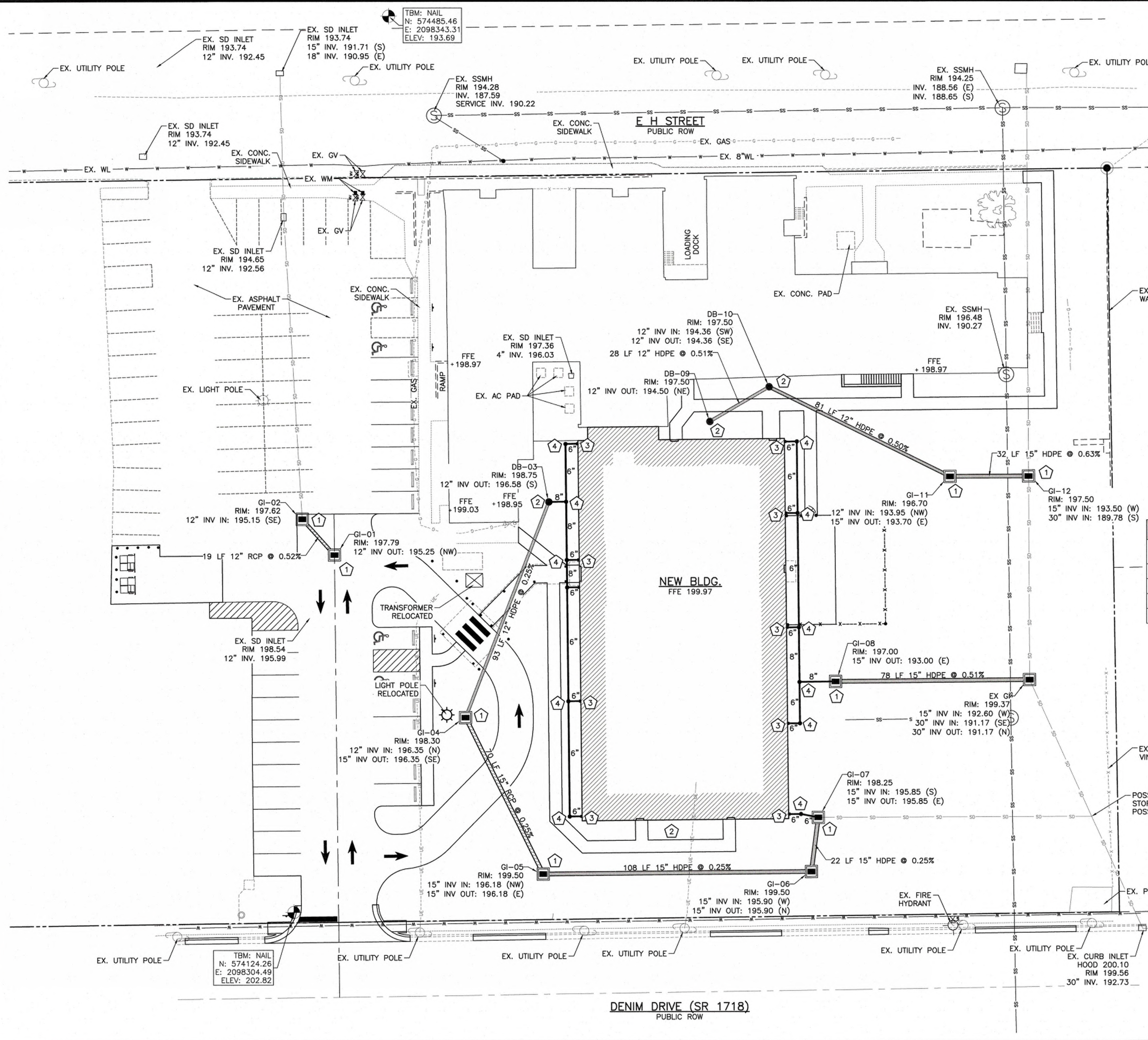
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STORM DRAINAGE PLAN

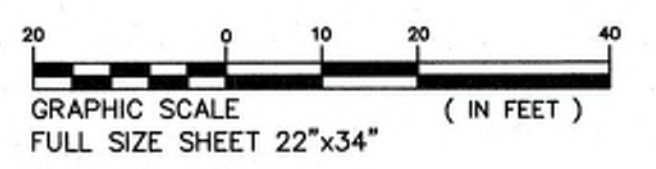
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 RENOVATIONS

DATE: JULY, 2020
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 DRAWN: FDW
 CHECKED: TAC
 NO.
C-05



STORM DRAINAGE KEY NOTING:

| SYM. | DESCRIPTION | SHEET REFERENCE |
|------|------------------------------|-----------------|
| ① | INSTALL GRATE INLET | SHT. D-03, #1,2 |
| ② | INSTALL DRAIN BASIN | SHT. D-03, #4 |
| ③ | INSTALL DOWNSPOUT CONNECTION | SHT. D-03, #5 |
| ④ | INSTALL STORM DRAIN CLEANOUT | SHT. D-03, #6 |



FOR CONSTRUCTION

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 ELEV: 202.82

TBM: NAIL
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 ELEV: 193.69

TBM: NAIL
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 E: 2098304.49
 ELEV: 202.82

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| SYM. | DESCRIPTION | DATE | BY |
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GRADING AND EROSION
 CONTROL PLAN

GOOD HOPE HOSPITAL
 RENOVATIONS

DATE: JULY, 2020
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 DRAWN: FDW
 CHECKED: TAC
 NO.
C-06

- NOTES:**
- ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON SHEET C-01 SHALL APPLY TO THIS PLAN.
 - ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL TOWN OF ERWIN AND HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
 - CONTRACTOR SHALL ENSURE THAT THE EXISTING UTILITIES ARE LOCATED AND MARKED PRIOR TO INSTALLATION OF NEW UTILITIES.
 - PURSUANT TO G.S. 113A-57(2), THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 7 OR 14 DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PURSUANT TO G.S. 113A-57(3), PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATION COVER. IF ANY SEEDING FAILURE OCCURS, THOSE AREAS SHALL BE RE-SEEDED WITH RYE GRAIN FOR TEMPORARY STABILIZATION AND PREPARED FOR PERMANENT SEEDING.
 - STABILIZE ALL TEMPORARY OR PERMANENT DIVERSIONS WITHIN SEVEN DAYS OF CONSTRUCTION.
 - CONTRACTOR SHALL MAINTAIN THE NCDEQ'S "SELF INSPECTION" REPORT LOCATED ON THE NCDEQ'S WEBSITE.

EROSION CONTROL SEQUENCE:

- OBTAIN ALL NECESSARY PERMITS AND APPROVALS AND HOLD PRE-CONSTRUCTION CONFERENCE.
- INSTALL TEMPORARY SILT FENCE WITH SILT FENCE OUTLETS AND GRAVEL CONSTRUCTION ENTRANCE AS SHOWN ON PLAN.
- APPLY TEMPORARY SEEDING TO ALL DISTURBED AREAS.
- INSTALL SANITARY SEWER LINES.
- INSTALL NEW STORM DRAINAGE SYSTEM AND IMMEDIATELY INSTALL INLET PROTECTION AS INLETS ARE INSTALLED AT ALL STORM DRAINAGE STRUCTURES.
- WHEN INLET GI-01C AND GI-01A1 ARE INSTALLED, INSTALL THE TEMPORARY DIVERSION SWALES.
- SEED THE DIVERSION SWALES WITHIN 7 DAYS IN ACCORDANCE WITH THE NPDES REQUIREMENTS.
- ROUGH GRADE THE PROPOSED BUILDING PAD, PARKING FACILITY, DRIVEWAYS, AND OTHER RELATED SITE AMENITIES.
- INSTALL WATER LINES AND ROOF DRAINS.
- CONSTRUCT BUILDING, SIDEWALKS, AND THE DRIVE AND PARKING AREAS WHILE MAINTAINING ALL EROSION CONTROL DEVICES.
- AREAS THAT ARE GETTING NEW PAVEMENT WITH ABC SUB-BASE SHALL BE INSTALLED TO THE ABC ONLY, ASPHALT SHALL NOT BE INSTALLED AT THIS TIME.
- COMPLETE FINE GRADING AND SEEDING/SODDING OF THE SITE.
- ONCE THE CONSTRUCTION OF THE IMPERVIOUS AREAS ARE ACCOMPLISHED AND ALL UPSTREAM AREAS ARE STABILIZED, CALL FOR AN INSPECTION BY THE NCDEQ EROSION CONTROL INSPECTOR.
- ASPHALT SURFACE SHALL BE INSTALLED AT THIS TIME.
- ALL EXCAVATED SOILS, NO LONGER REQUIRED FOR THE PROJECT AREA ARE TO BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGALLY PERMITTED BORROW PIT.
- ONCE ALL WORK IS COMPLETED AND ALL AREAS STABILIZED, CONTRACTOR SHALL REQUEST AN INSPECTION BY NCDEQ LAND QUALITY SECTION.

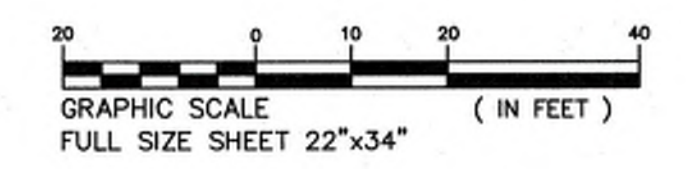
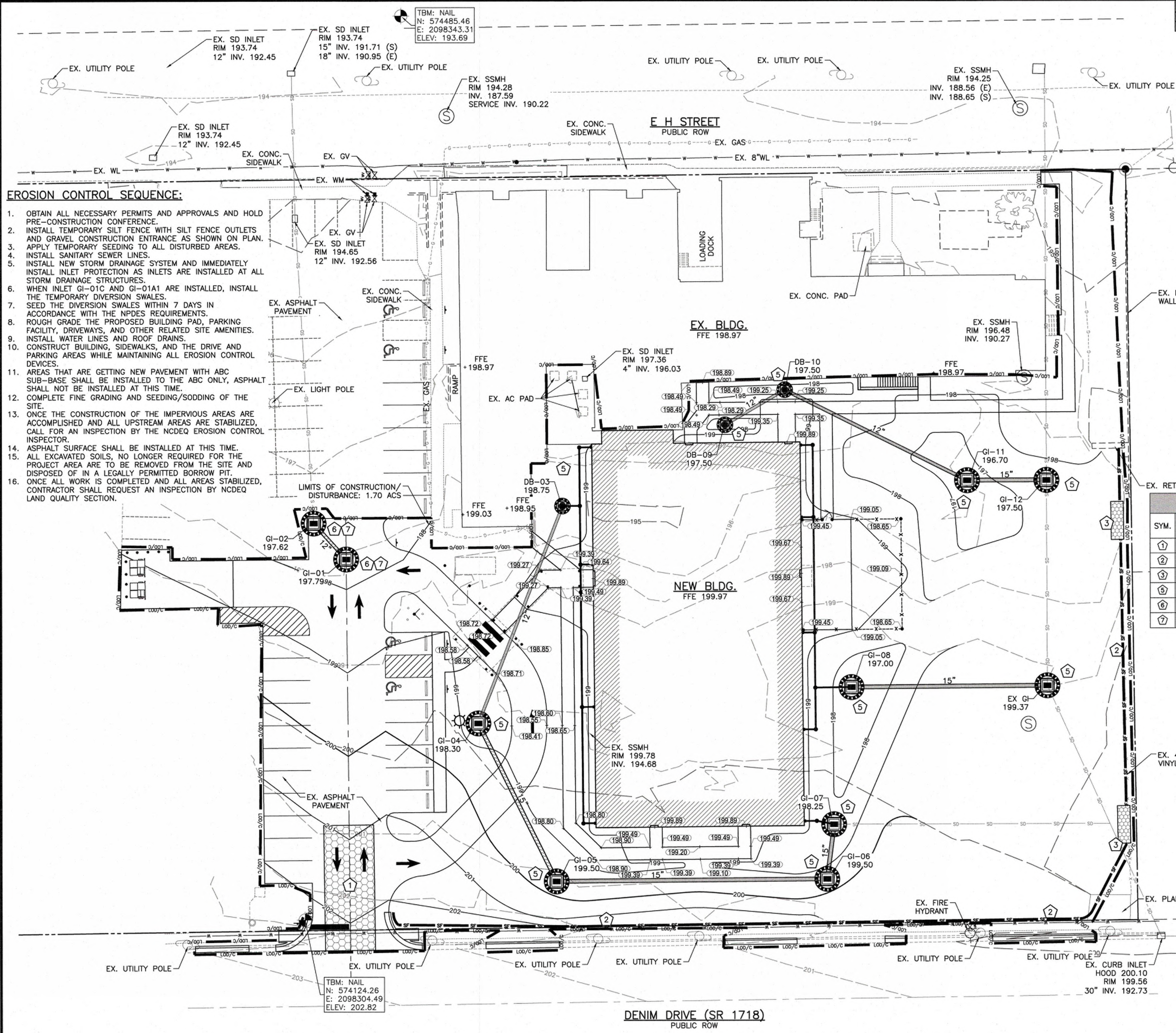
EROSION CONTROL KEY NOTING:

| SYM. | DESCRIPTION | SHEET REFERENCE |
|------|--|-----------------|
| ① | INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE | SHT. D-04, #1 |
| ② | INSTALL TEMPORARY SILT FENCE | SHT. D-04, #2 |
| ③ | INSTALL TEMPORARY SILT FENCE OUTLET | SHT. D-04, #3 |
| ④ | INSTALL TEMPORARY INLET PROTECTION | SHT. D-04, #5 |
| ⑤ | INSTALL TEMPORARY INLET PROTECTION WITH STONE | SHT. D-04.1, #1 |
| ⑥ | INSTALL EXCAVATED DROP INLET PROTECTION | SHT. D-04.1, #2 |

DWQ CONSTRUCTION GENERAL PERMIT GROUND STABILIZATION REQUIREMENTS

| SITE AREA DESCRIPTION | STABILIZATION TIME FRAME | STABILIZATION TIME FRAME EXCEPTIONS |
|--|--------------------------|---|
| Perimeter dikes, swales, ditches and slopes | 7 days | None |
| High Quality Water (HQW) Zones | 7 days | None |
| Slopes steeper than 3:1 | 7 days | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed |
| Slopes 3:1 or flatter | 14 days | 7-days for slopes greater than 50 feet in length |
| All other areas with slopes flatter than 4:1 | 14 days | None (except for perimeters and HQW Zones) |

* Extensions of time may be approved by the permitting authority based on weather or other site-specific condition that make compliance impracticable. (Section II.B(2)(b))



FOR CONSTRUCTION

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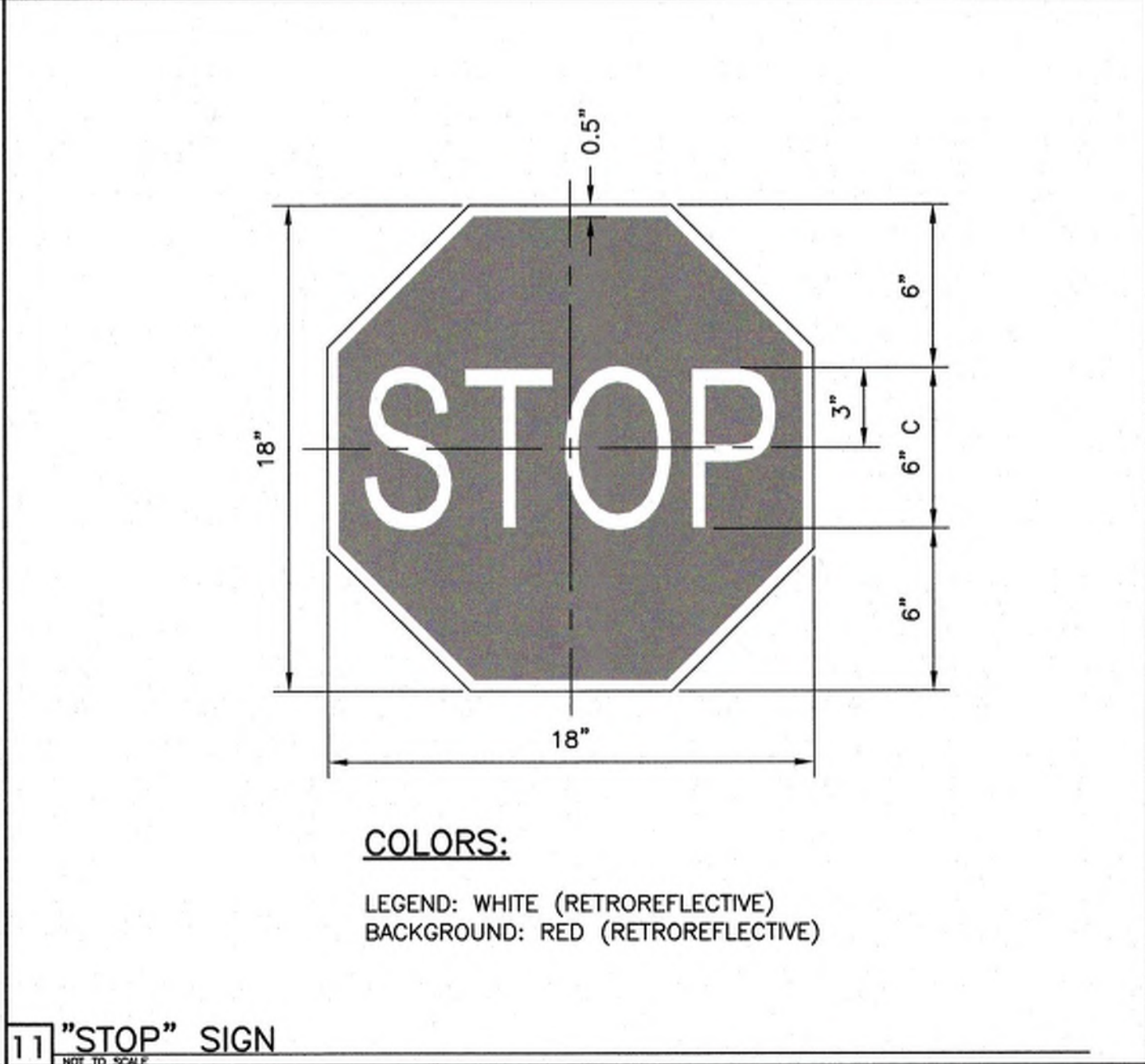
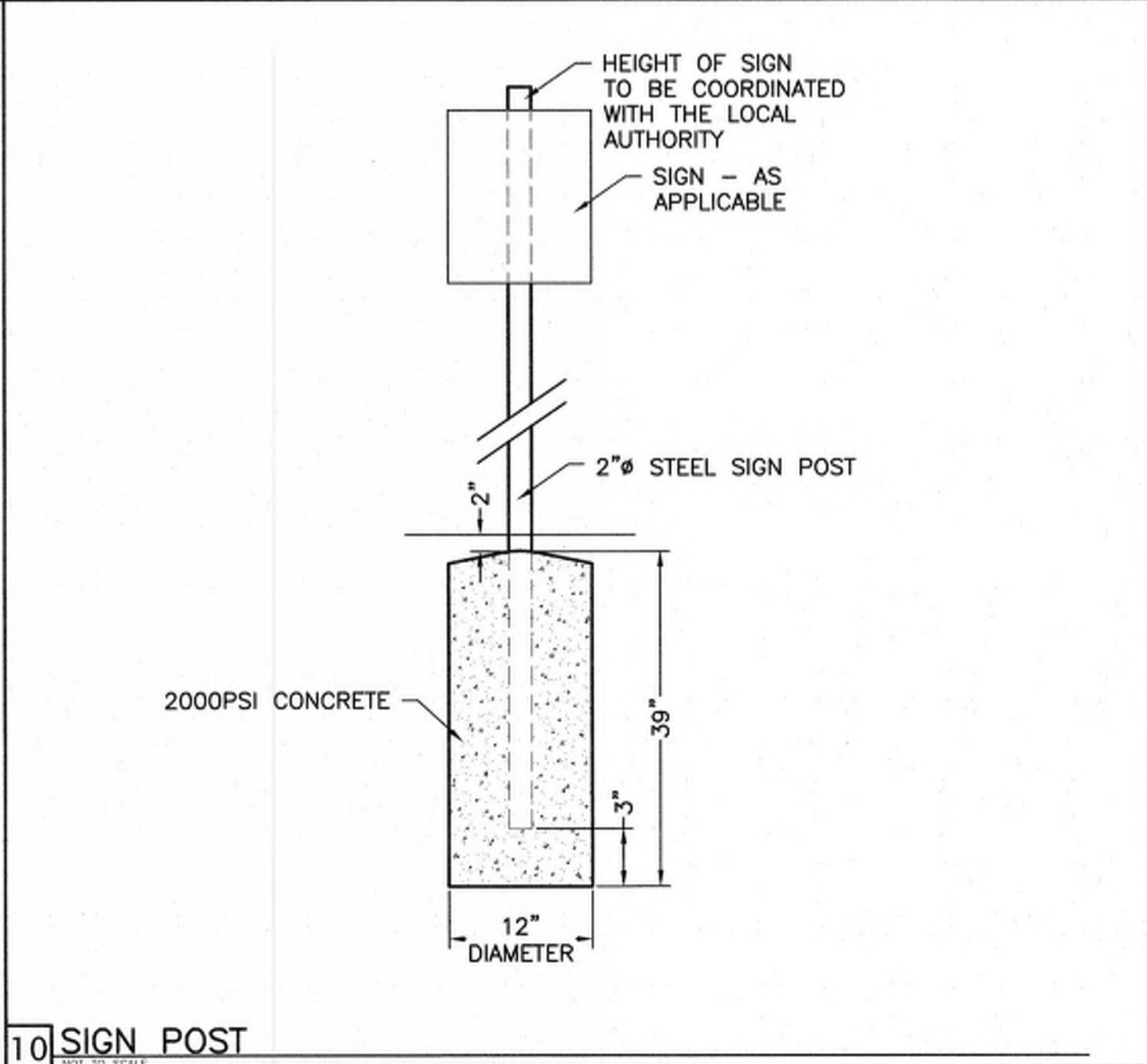
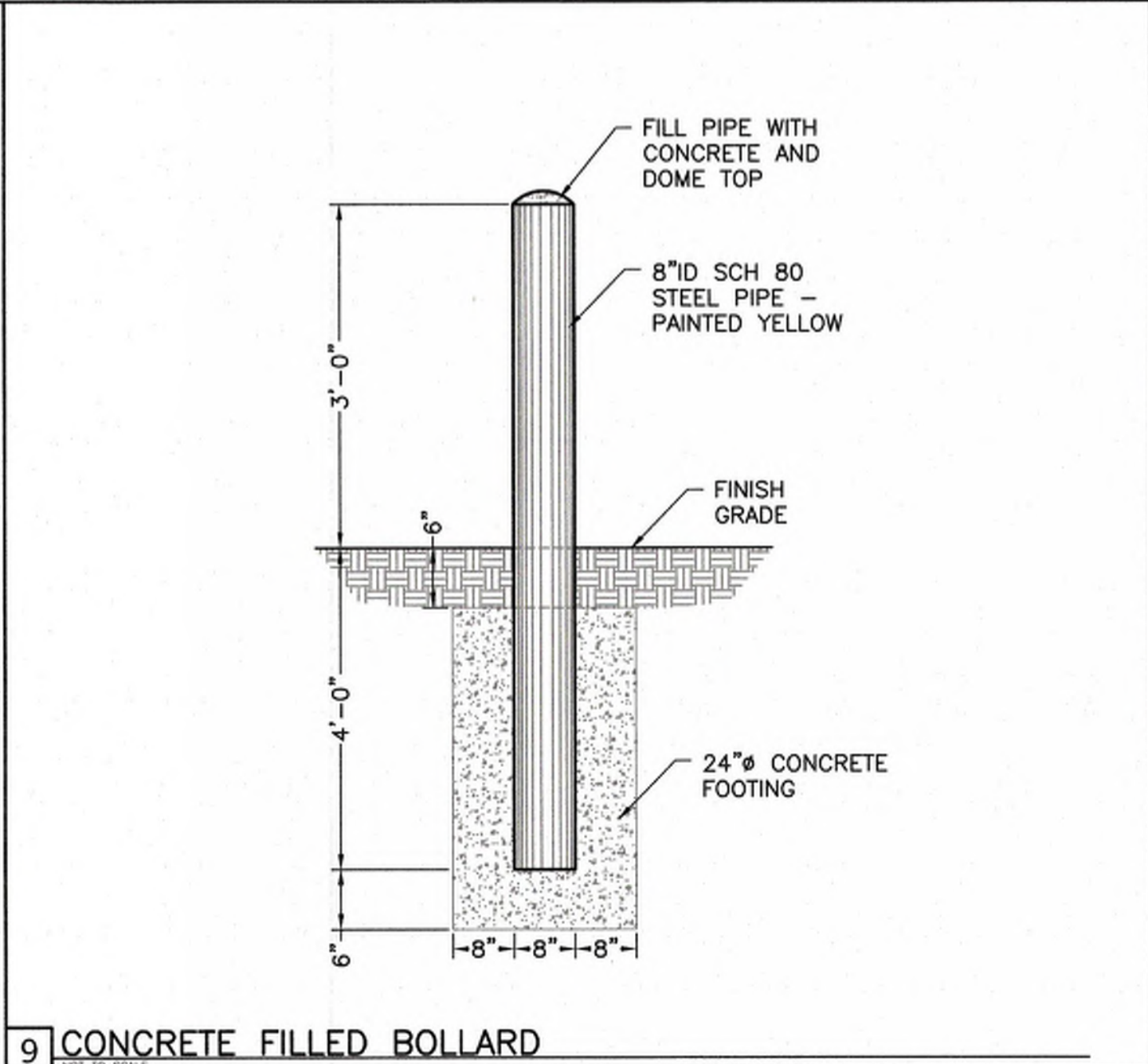
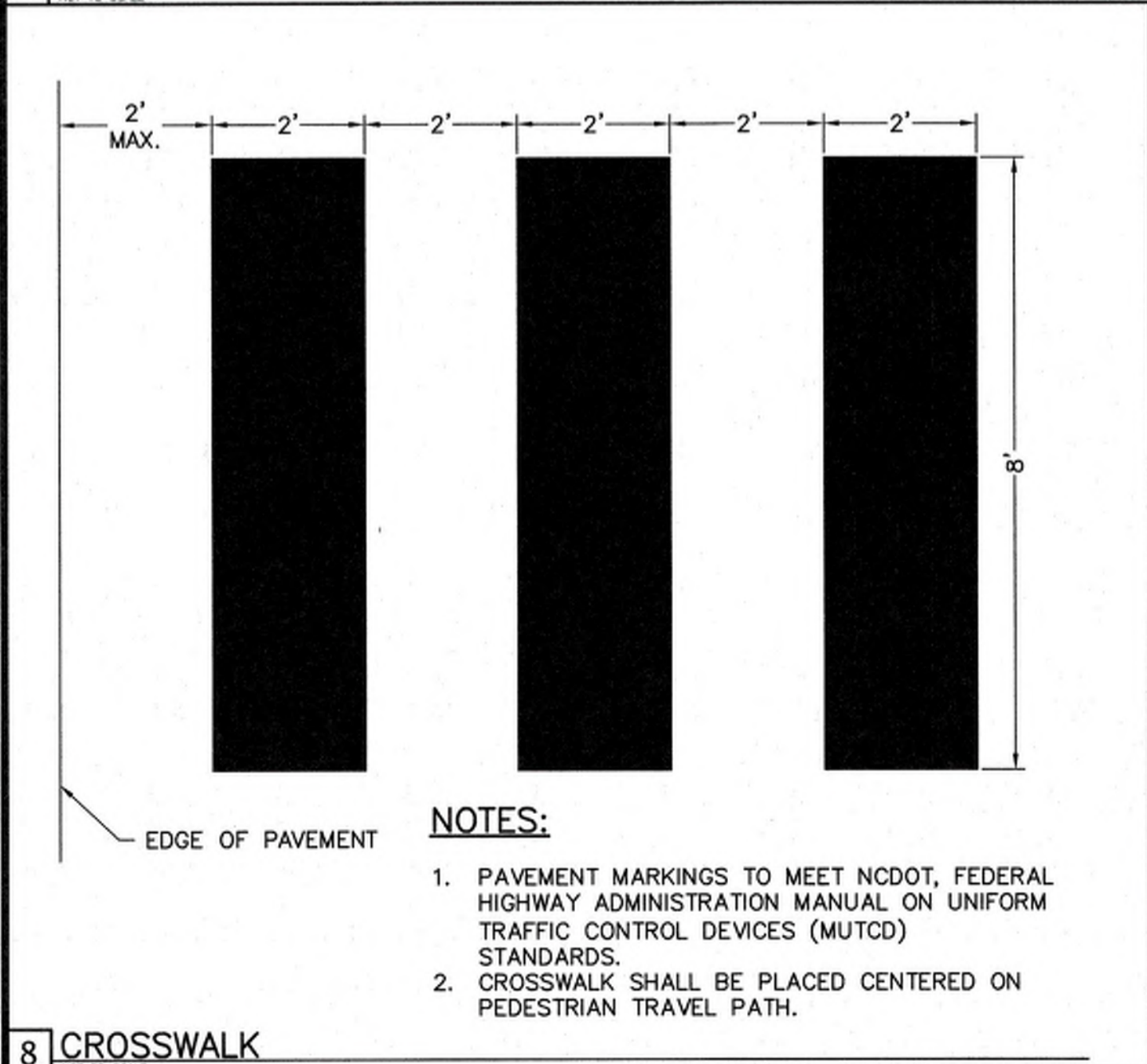
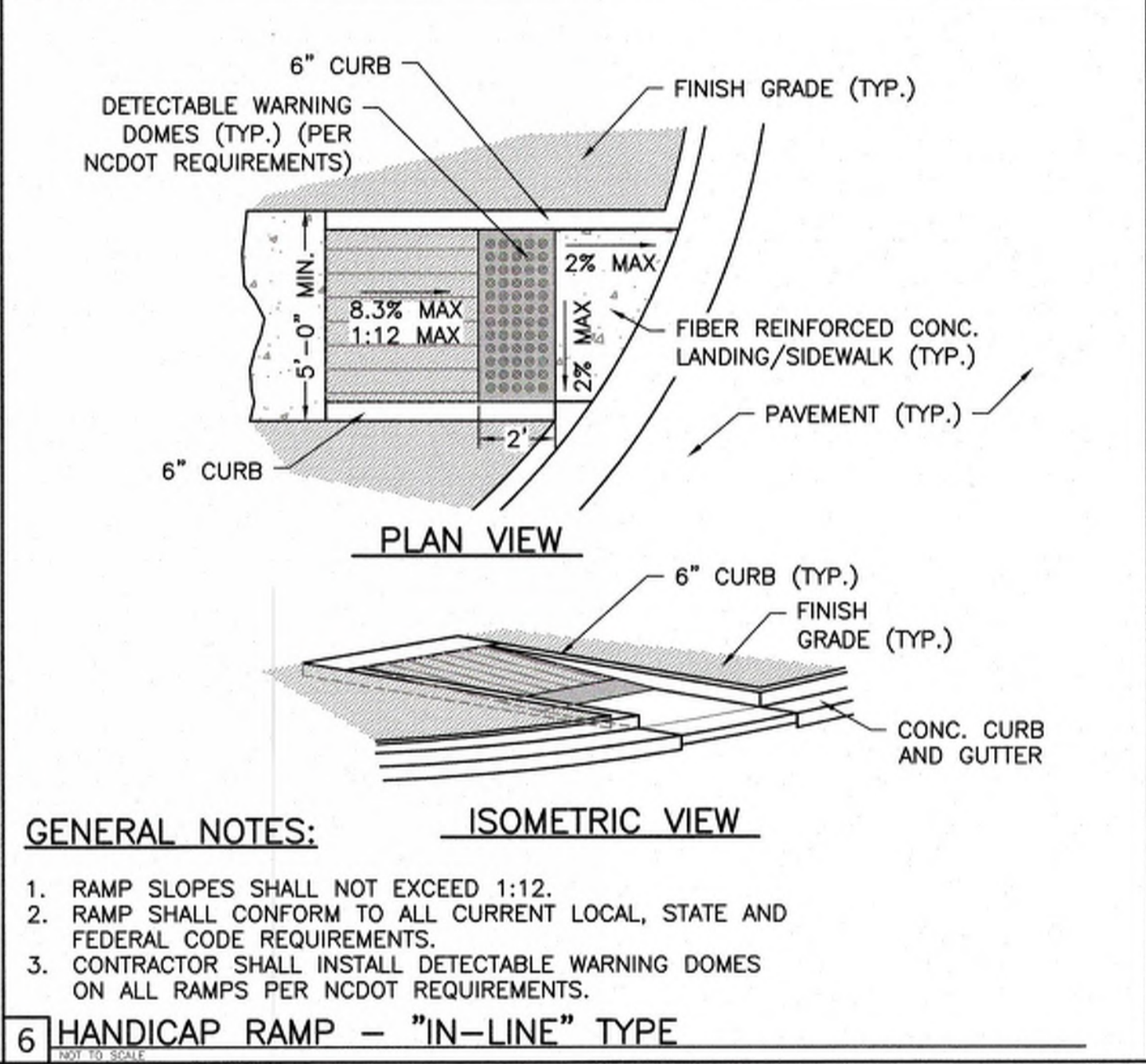
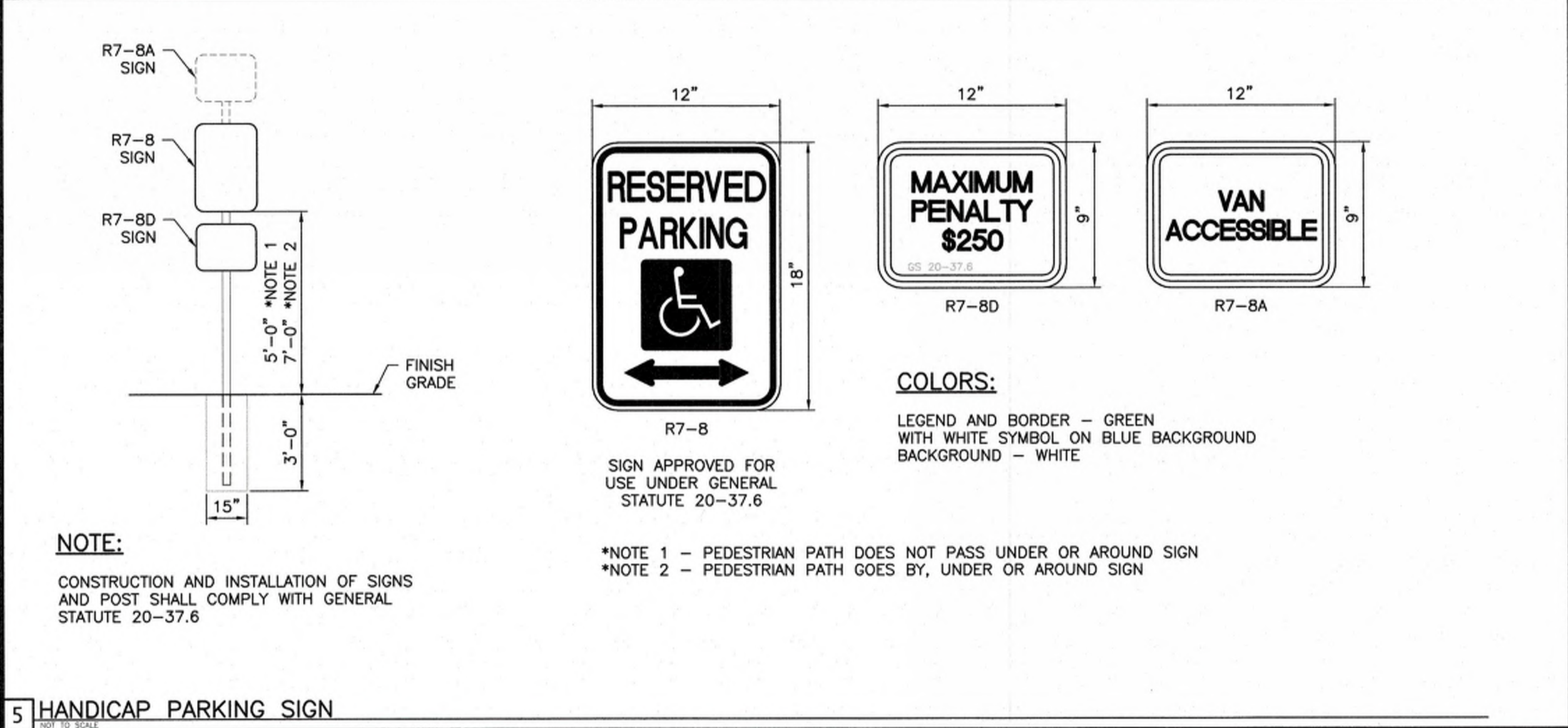
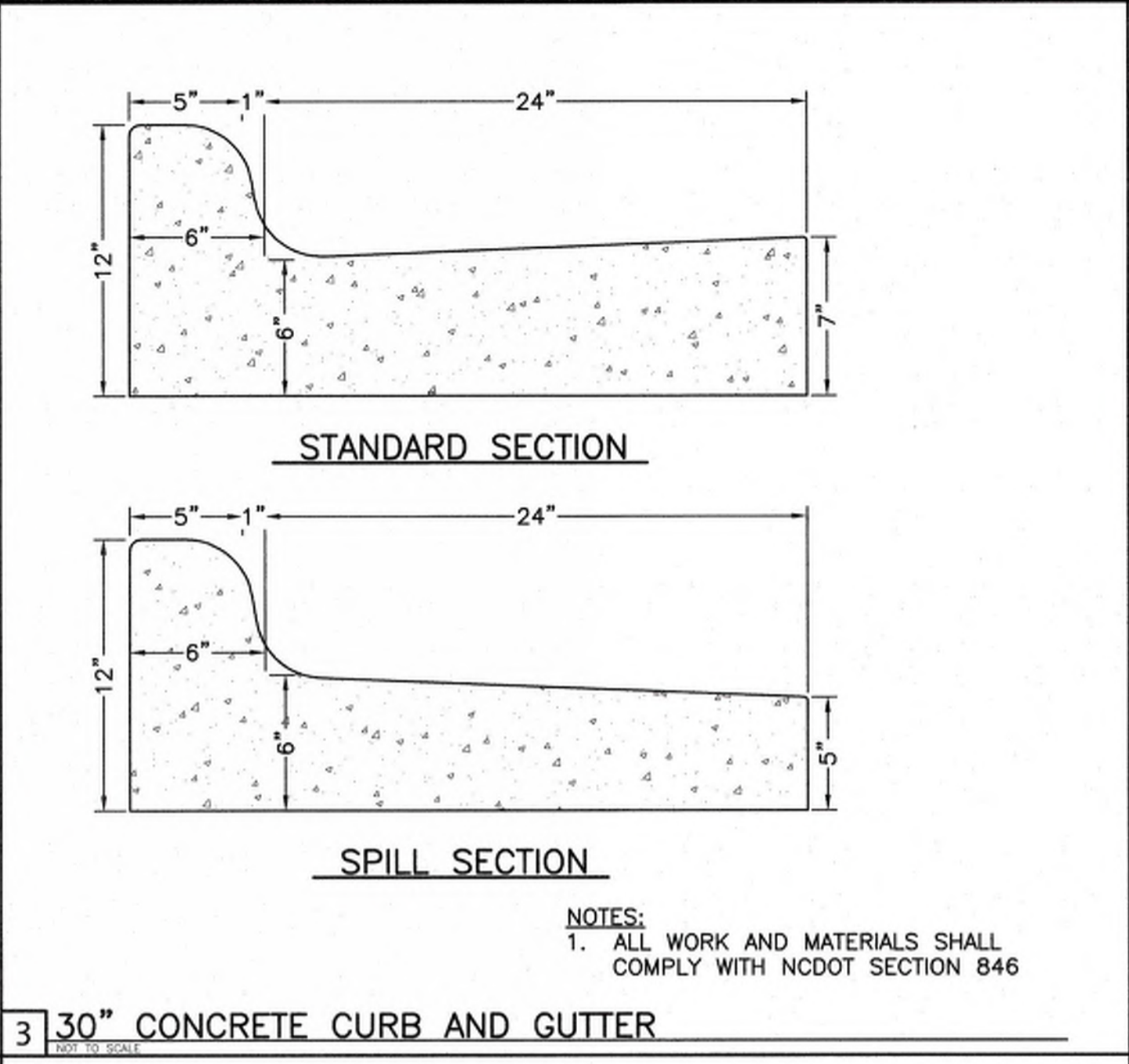
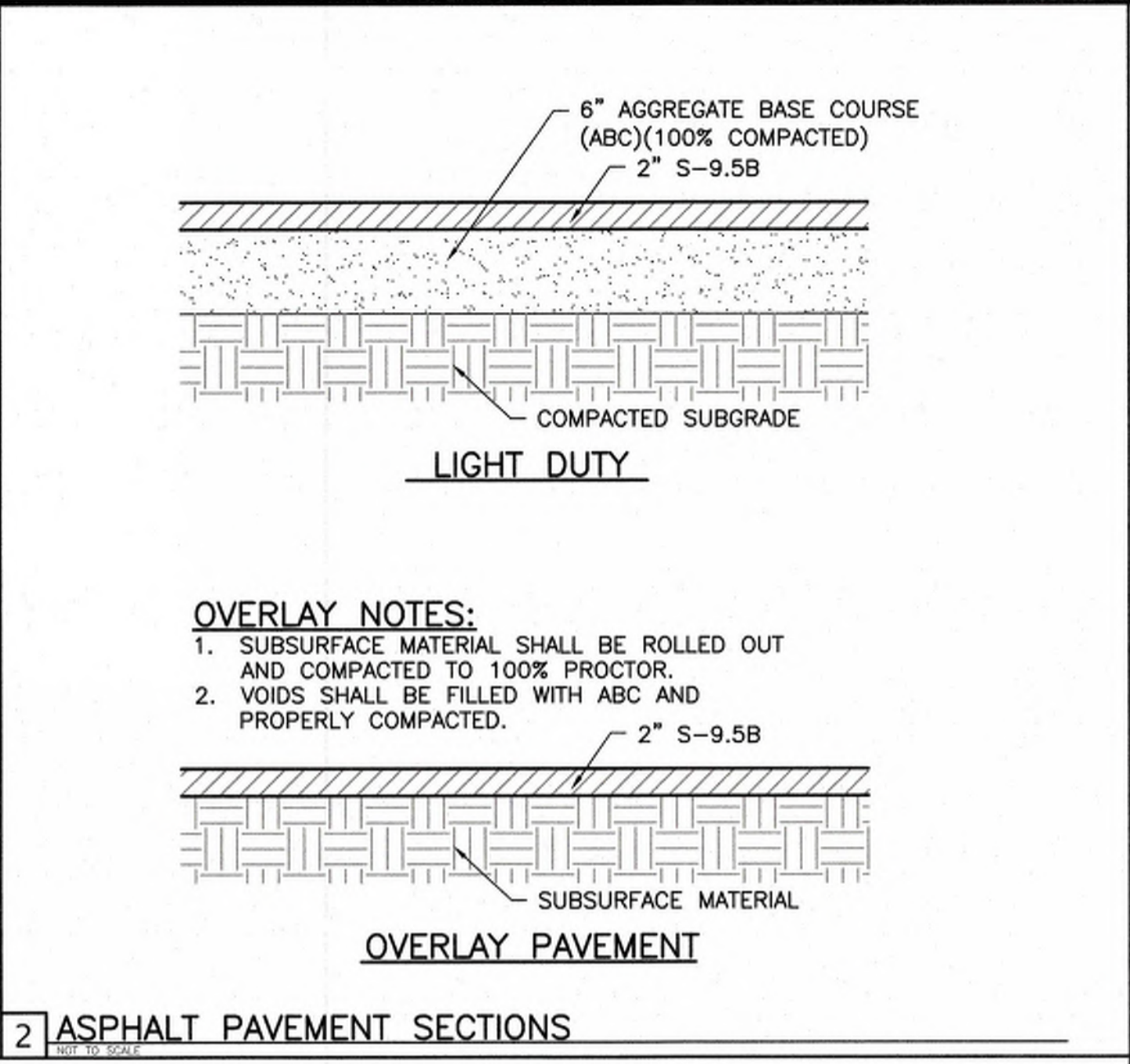
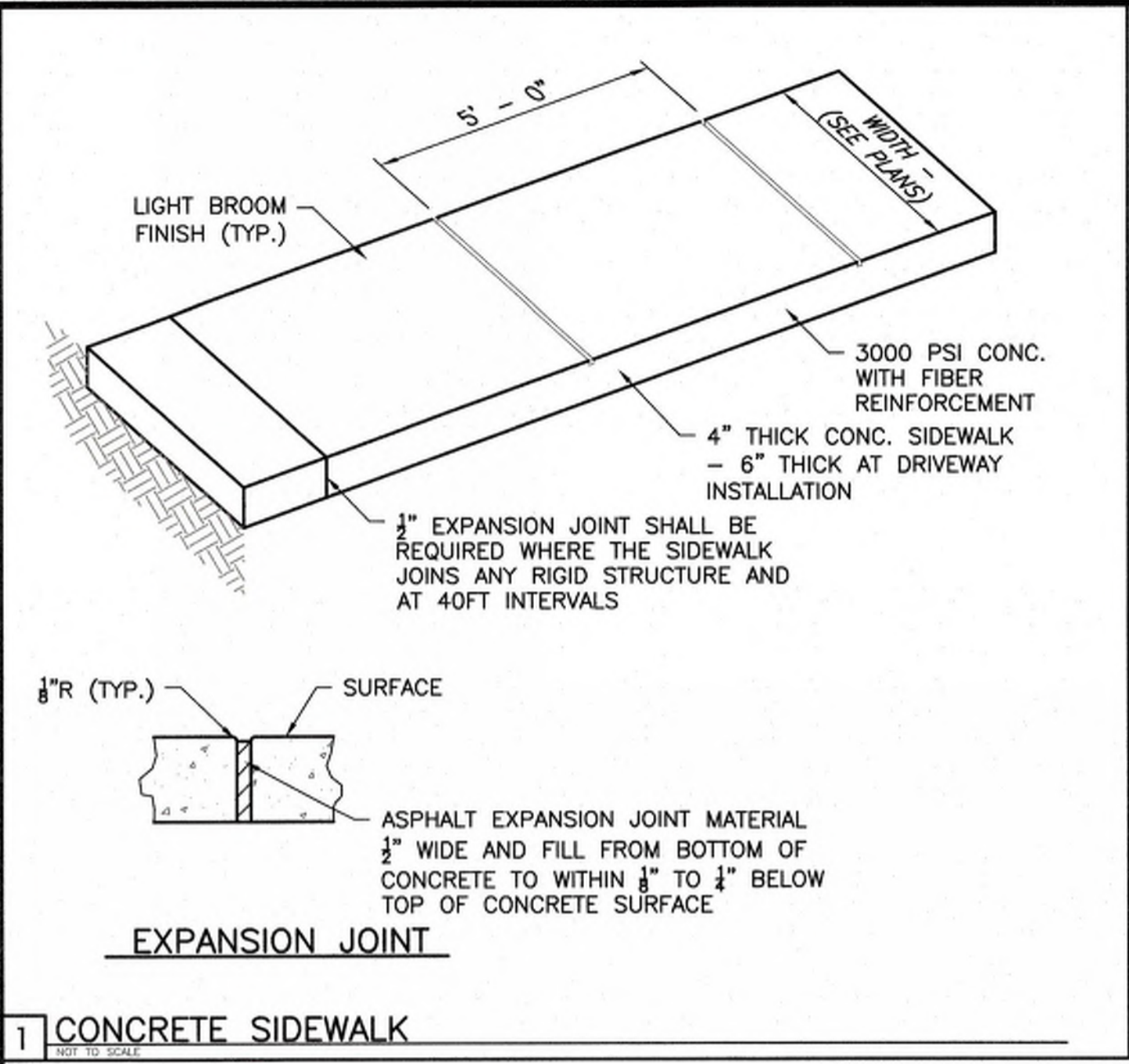
LKC

SITE DETAILS

GOOD HOPE HOSPITAL
 RENOVATIONS
 Erwin, North Carolina

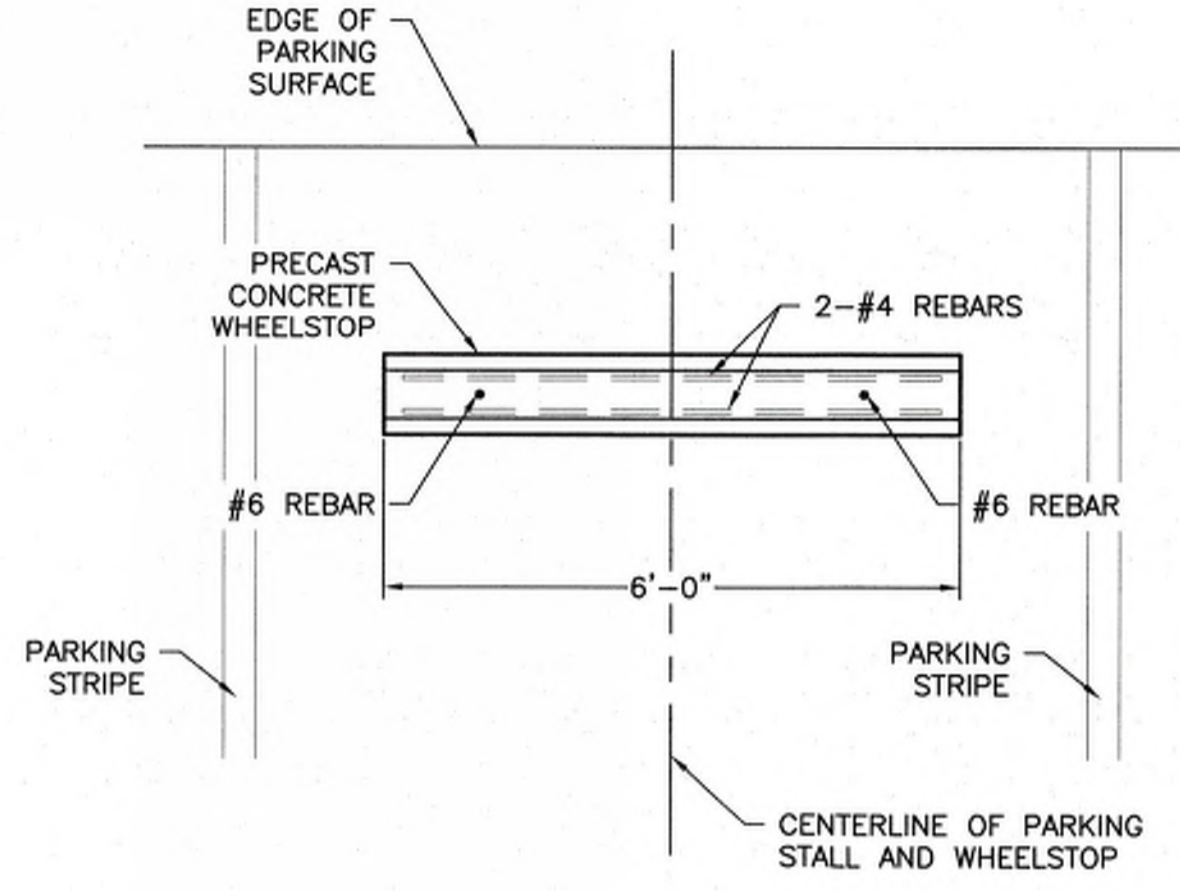
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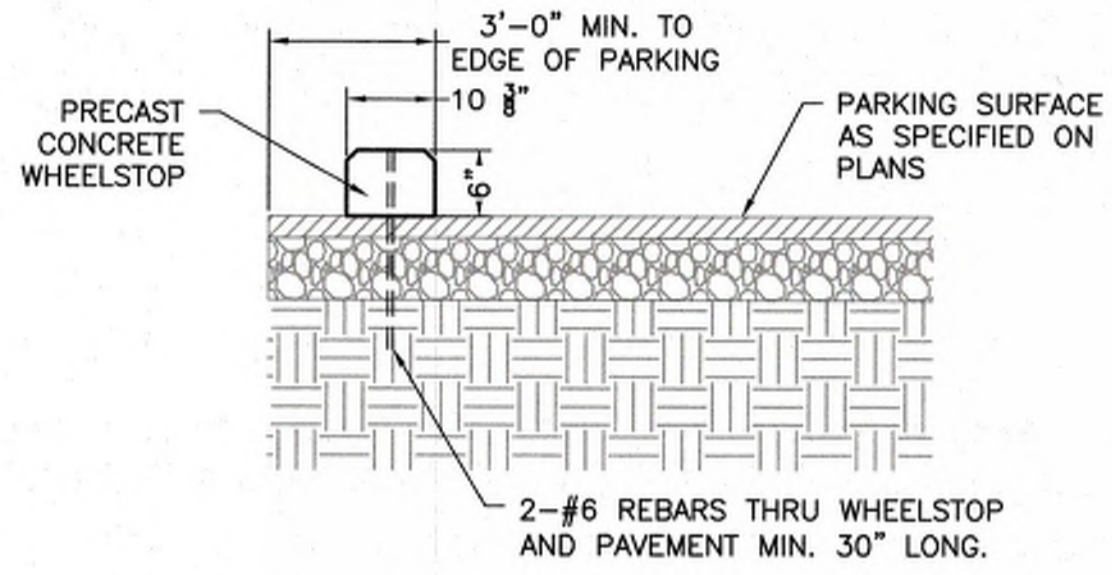


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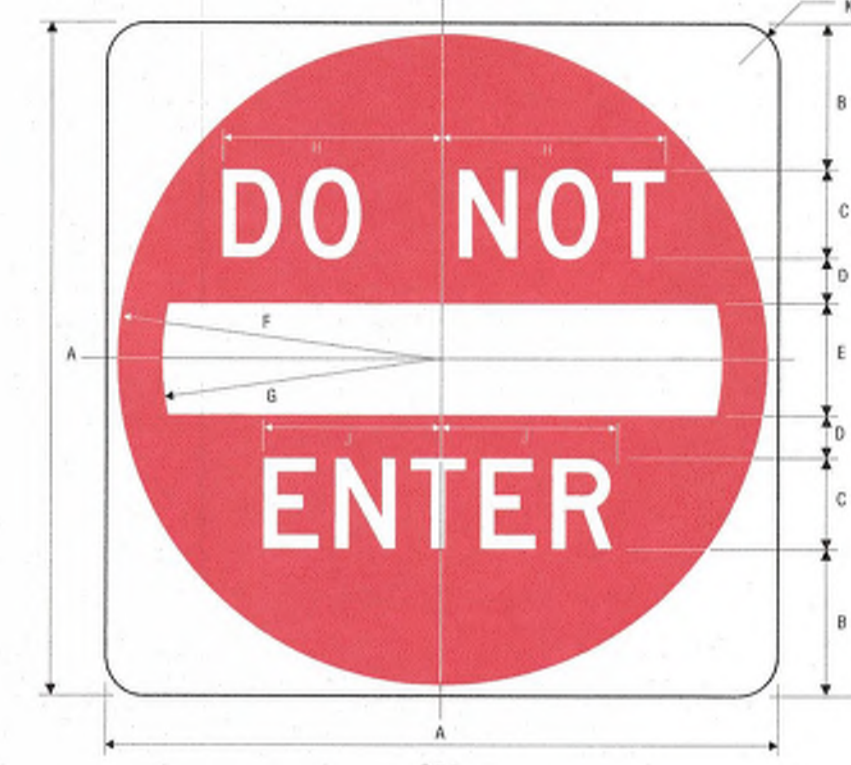


PLAN VIEW



SECTION VIEW

1 CONCRETE WHEELSTOP



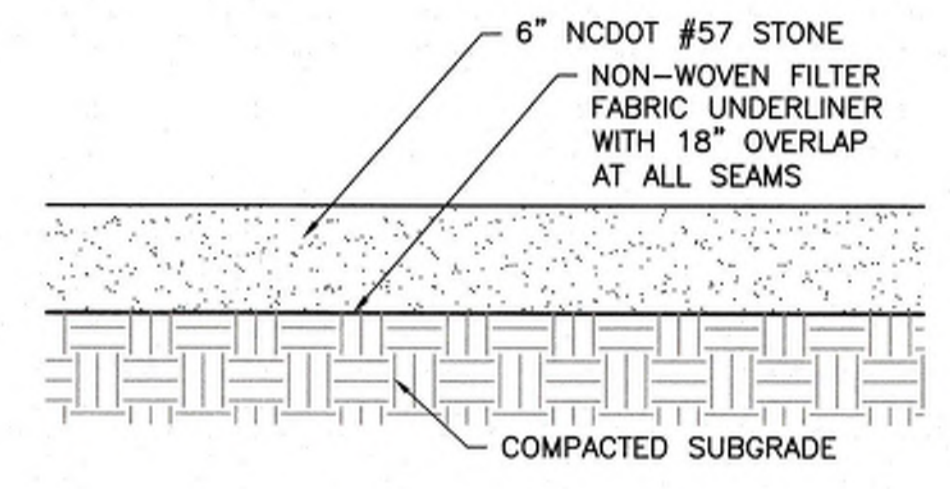
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|------|-----|-------|----|-----|-----|-----|-----|-------|----|
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| 750 | 162 | 100.0 | 50 | 125 | 362 | 305 | 250 | 183 | 50 |
| 900 | 190 | 125.0 | 60 | 150 | 435 | 334 | 305 | 235.5 | 60 |
| 1200 | 275 | 150.0 | 75 | 200 | 580 | 498 | 410 | 288 | 70 |

COLORS: SYMBOL - RED (RETROREFLECTIVE)
 LEGEND & BACKGROUND - WHITE (RETROREFLECTIVE)

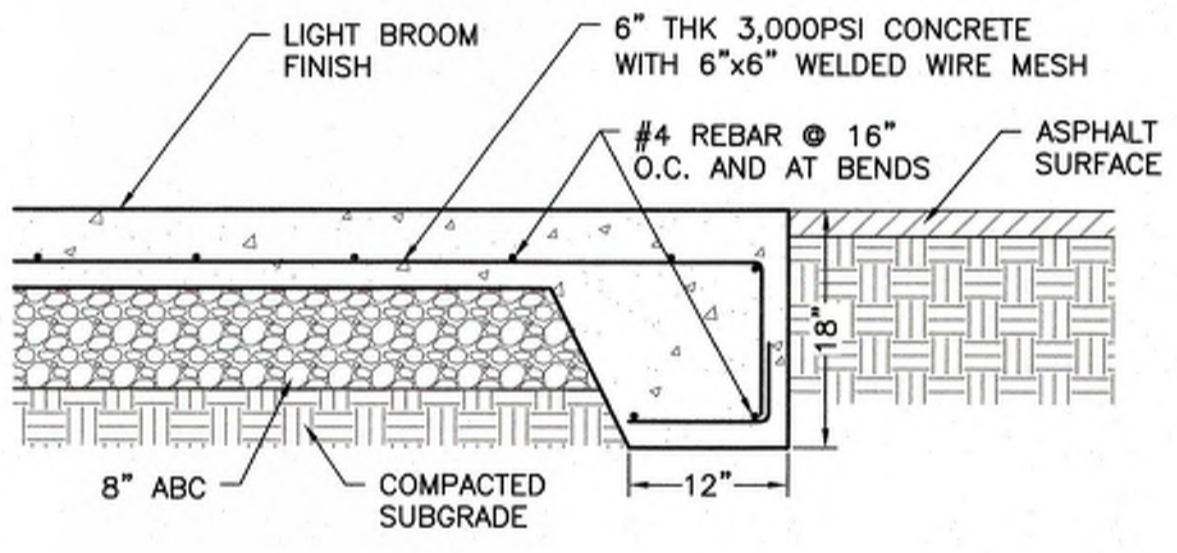
2 "DO NOT ENTER" SIGN

NOTE:
 USE SIGN POST AT HEIGHT TO PUT SIGN AT 5' HIGH AND SECURE POST 3' IN GROUND.

FOR CONSTRUCTION



3 GRAVEL YARD



NOTE:
 CONTROL JOINTS TO BE PLACE AT 20' INTERVALS

4 CONCRETE PAVEMENT

5

6

7

| CONTINUOUS LINES | 10'-30'/SP SKIP LINE | 2'-6'/SP MINI-SKIP LINE |
|---|--|---|
| EDGE LINE YELLOW OR WHITE 4"/6" LANE LINE WHITE 4"/6" CENTER LINE YELLOW 4"/6" GORE LINE WHITE 6"/12" DIAGONAL LINE YELLOW OR WHITE 12" 45 MPH OR HIGHER 8" LESS THAN 45 MPH CROSSWALK LINE WHITE 6" TRANSVERSE 24" LONGITUDINAL RXR LINE WHITE 16" STOP OR TRANSVERSE BAR WHITE 24" | 3'-3'/SP MINI-SKIP LINE WHITE 3" 3'-9'/SP MINI-SKIP LINE WHITE 3" GENERAL NOTES: 1- USE 6" LANE, EDGE, AND CENTER LINES ON ALL FULL CONTROL OF ACCESS FACILITIES AND OTHER ROUTES AS DIRECTED BY THE ENGINEER. 2- LANE LINES INDICATED AS "WIDE" ON THE ROADWAY STANDARD DRAWINGS SHALL BE AT LEAST TWICE THE WIDTH OF THE NORMAL LINE. 3- GORE LINES SHALL BE TWICE THE WIDTH OF THE NORMAL LINE. | GENERAL NOTES: 1- UNLESS OTHERWISE SHOWN, USE 12'-30"/SP SKIPS FOR LANE LINE EXTENSIONS THROUGH INTERSECTIONS, EDGE LINE EXTENSIONS THROUGH INTERSECTIONS AND MINI-SKIPS USED FOR BICYCLE LANE LINES. 2- UNLESS OTHERWISE SHOWN, USE 2'-6"/SP MINI-SKIPS FOR LANE LINE EXTENSIONS THROUGH INTERSECTIONS, EDGE LINE EXTENSIONS THROUGH INTERSECTIONS AND MINI-SKIPS USED FOR BICYCLE LANE LINES. 3- UNLESS OTHERWISE SHOWN, USE 2'-6"/SP MINI-SKIPS FOR MINI-SKIP LANE LINES AND LINE EXTENSIONS THROUGH PAPERS. |

SHEET 1 OF 2
 1205.01

SHEET 1 OF 2
 1205.01

| STRAIGHT ARROW | RIGHT OR LEFT TURN ARROW | COMBINATION STRAIGHT AND LEFT OR RIGHT TURN ARROW | COMBINATION LEFT AND RIGHT TURN ARROW |
|---|---|--|--|
| MERGE ARROW 14'-10 1/4" 4'-0 1/4" 2'-0 1/4" 5'-0" 12'-3" 16'-0" RAMP ARROW 10'-0" 5'-0" 2'-0" 18'-8" 7'-1" RAMP ARROW AT EXIT RAMP 100' | GENERAL NOTES: 1- USE THE COLOR WHITE FOR ALL PAVEMENT MARKING SYMBOLS. 2- DO NOT LOCATE PAVEMENT MARKING SYMBOLS AS TO ENCRoACH INTO INTERSECTION AREAS. 3- DO NOT PLACE PAVEMENT MARKING SYMBOLS ACROSS TRANSVERSE EXPANSION JOINTS OR PORTLAND CEMENT CONCRETE PAVEMENTS, UNLESS APPROVED BY THE ENGINEER. 4- CONFORM ALL SYMBOLS TO THE FHWA "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (REFER TO SHEETS 5 THRU 8). SYMBOL DIMENSIONS CAN VARY AMONG MANUFACTURERS; THEREFORE SLIGHT VARIANCES ARE ACCEPTABLE. HOWEVER, ALL SYMBOLS ARE REQUIRED TO BE APPROVED BY THE DEPARTMENT. | GENERAL NOTES: 1- USE THE COLOR WHITE FOR ALL PAVEMENT MARKING SYMBOLS AS TO ENCRoACH INTO INTERSECTION AREAS. 2- DO NOT LOCATE PAVEMENT MARKING SYMBOLS AS TO ENCRoACH INTO INTERSECTION AREAS. 3- DO NOT PLACE PAVEMENT MARKING SYMBOLS ACROSS TRANSVERSE EXPANSION JOINTS OR PORTLAND CEMENT CONCRETE PAVEMENTS, UNLESS APPROVED BY THE ENGINEER. 4- CONFORM ALL SYMBOLS TO THE FHWA "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (REFER TO SHEETS 5 THRU 8). SYMBOL DIMENSIONS CAN VARY AMONG MANUFACTURERS; THEREFORE SLIGHT VARIANCES ARE ACCEPTABLE. HOWEVER, ALL SYMBOLS ARE REQUIRED TO BE APPROVED BY THE DEPARTMENT. | GENERAL NOTES: 1- USE THE COLOR WHITE FOR ALL PAVEMENT MARKING SYMBOLS AS TO ENCRoACH INTO INTERSECTION AREAS. 2- DO NOT LOCATE PAVEMENT MARKING SYMBOLS AS TO ENCRoACH INTO INTERSECTION AREAS. 3- DO NOT PLACE PAVEMENT MARKING SYMBOLS ACROSS TRANSVERSE EXPANSION JOINTS OR PORTLAND CEMENT CONCRETE PAVEMENTS, UNLESS APPROVED BY THE ENGINEER. 4- CONFORM ALL SYMBOLS TO THE FHWA "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (REFER TO SHEETS 5 THRU 8). SYMBOL DIMENSIONS CAN VARY AMONG MANUFACTURERS; THEREFORE SLIGHT VARIANCES ARE ACCEPTABLE. HOWEVER, ALL SYMBOLS ARE REQUIRED TO BE APPROVED BY THE DEPARTMENT. |

SHEET 1 OF 7
 1205.08

SHEET 1 OF 8
 1205.08



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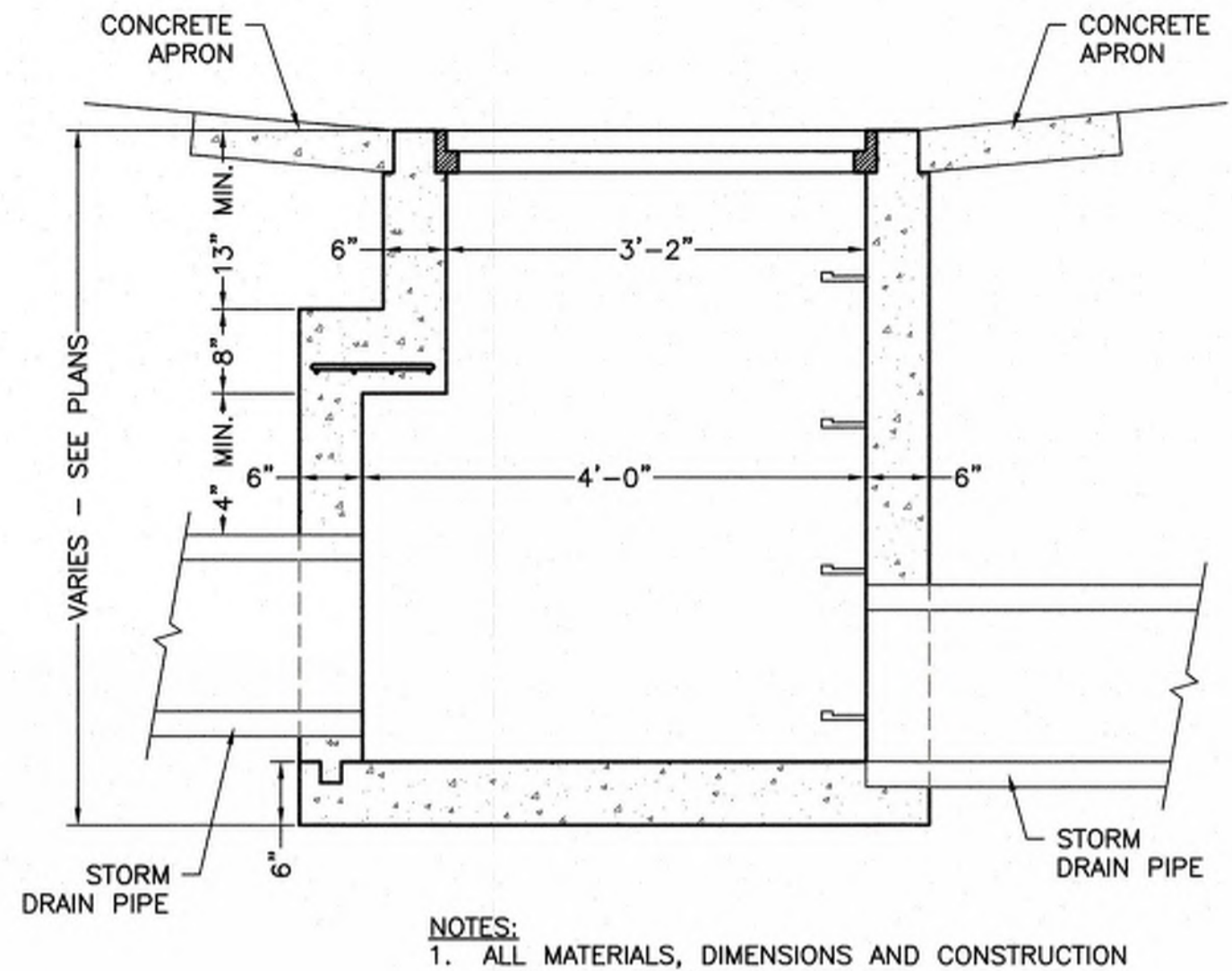
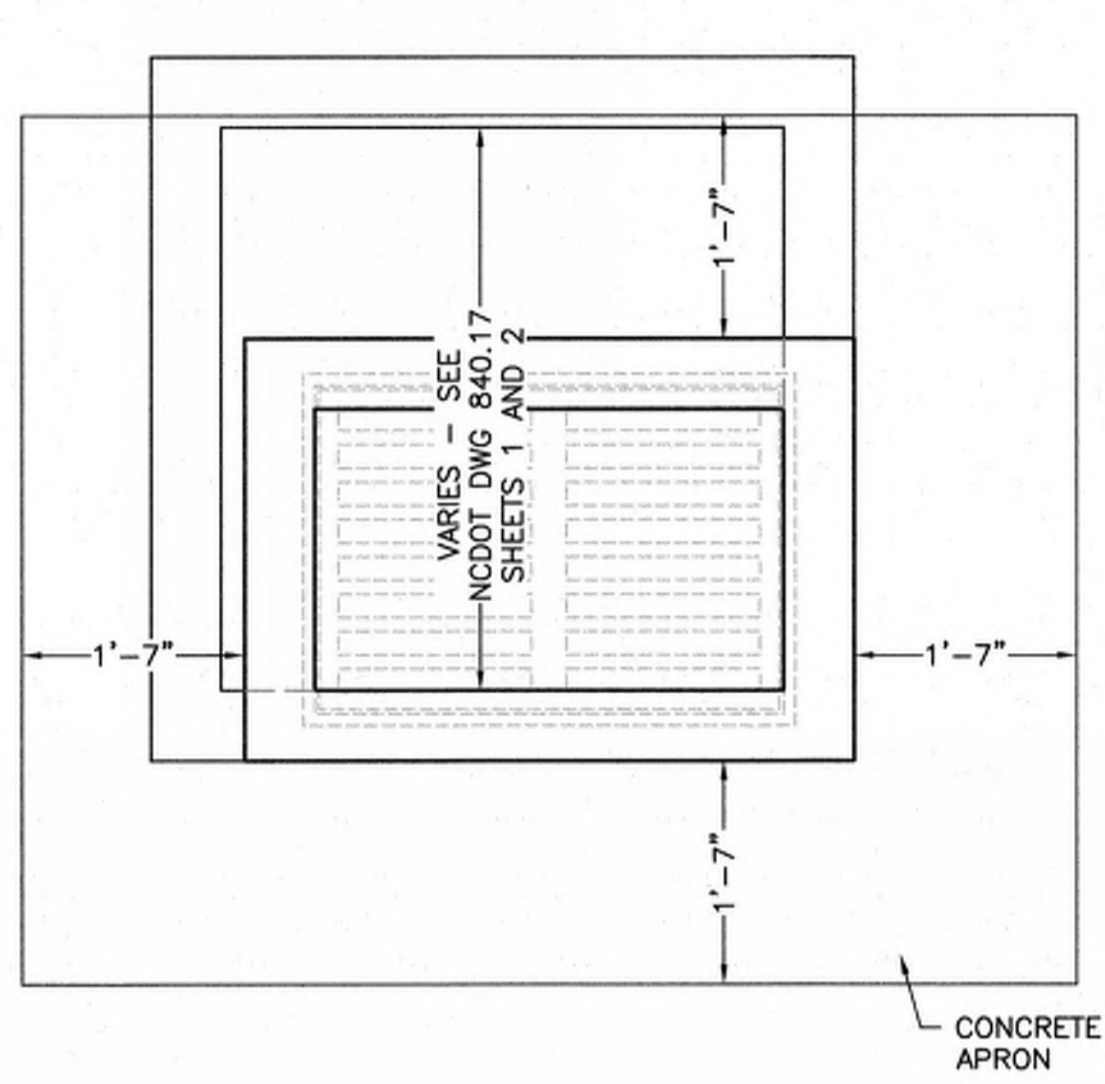
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SITE DETAILS

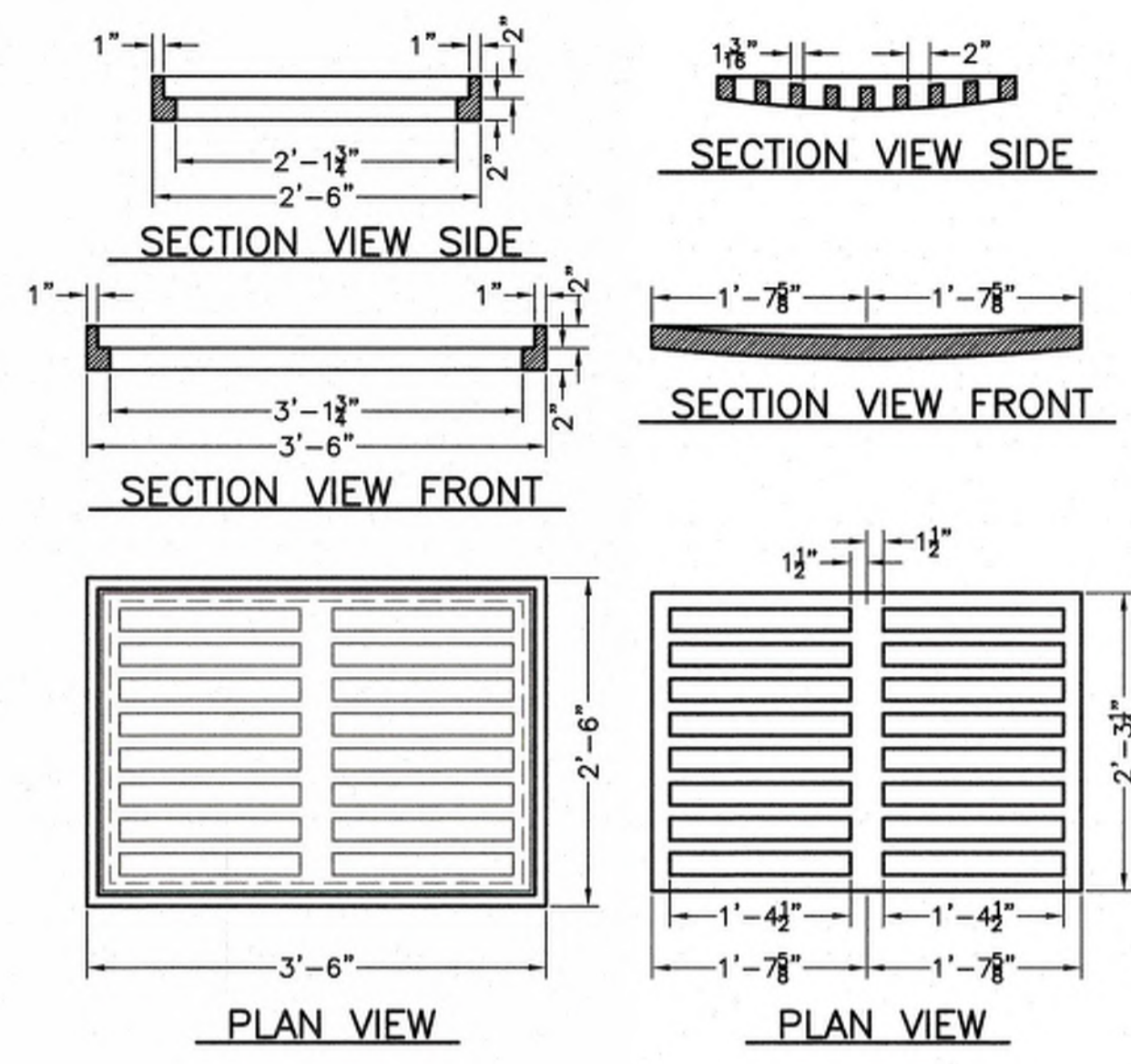
GOOD HOPE HOSPITAL
 RENOVATIONS
 Erwin, North Carolina

DATE: JULY, 2020
 DESIGNED: FDW
 DRAWN: FDW
 CHECKED: TAC
 NO.
 D-02

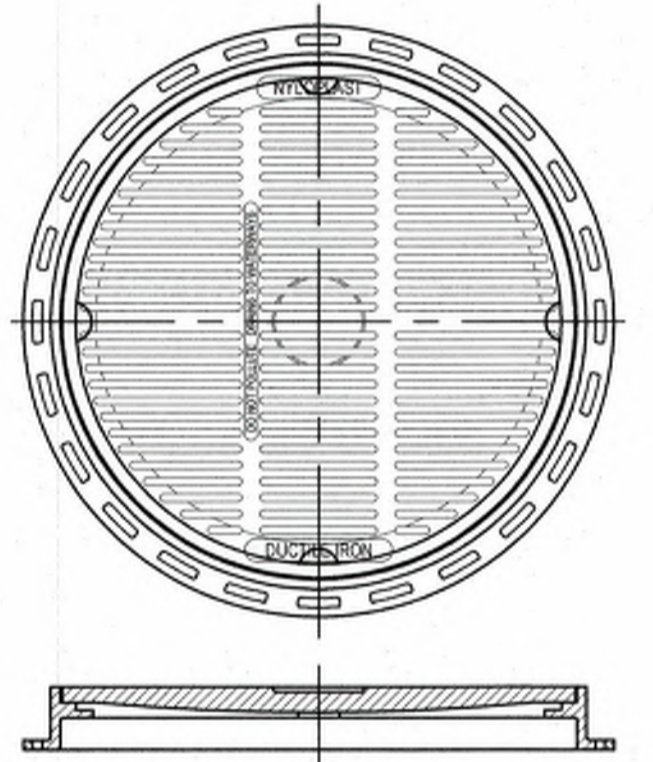
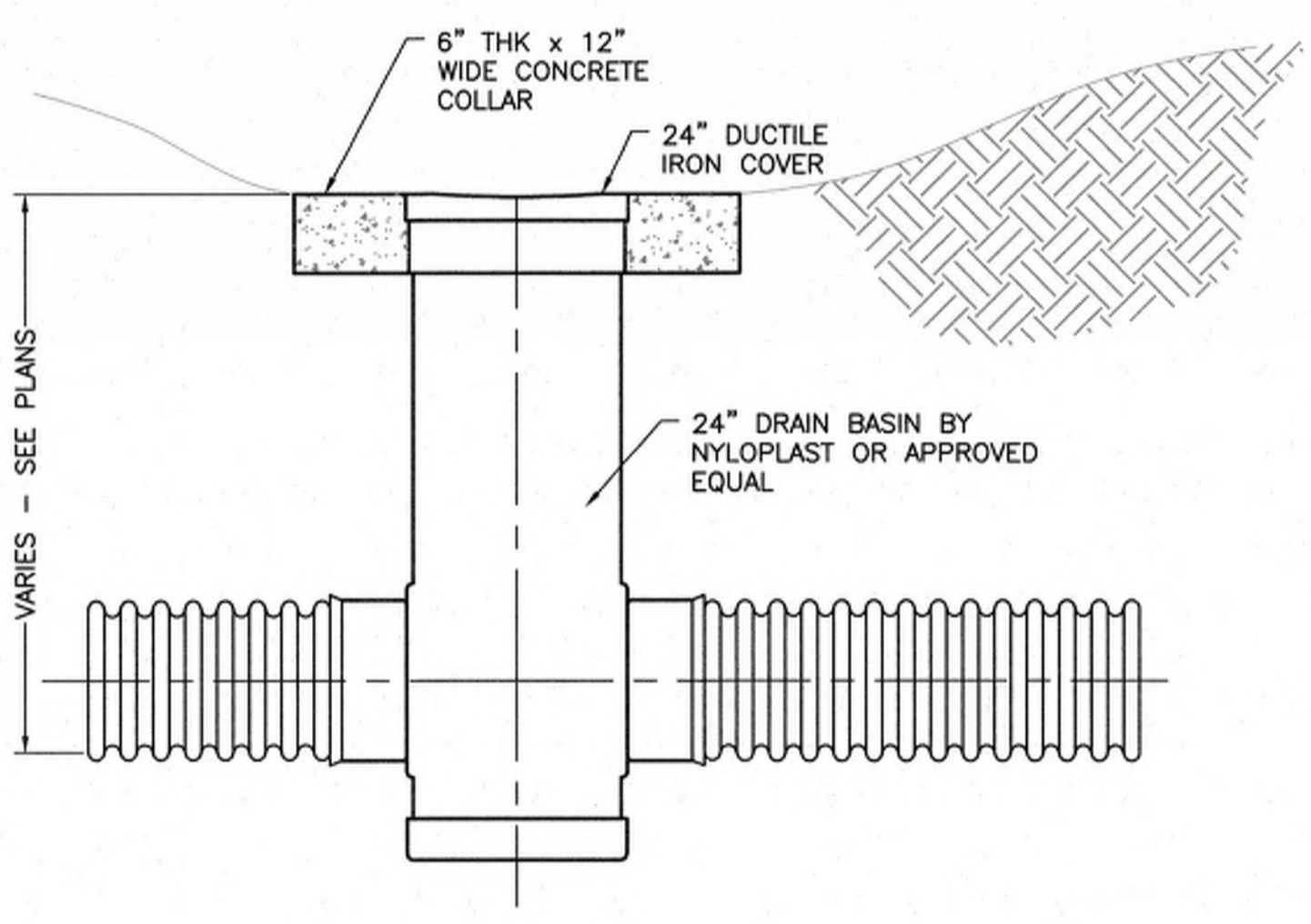


NOTES:
 1. ALL MATERIALS, DIMENSIONS AND CONSTRUCTION SHALL CONFORM TO NCDOT STD. DWG. 840.17 BRICK OR CONCRETE DROP INLETS TYPE "A".

1 GRATE INLET

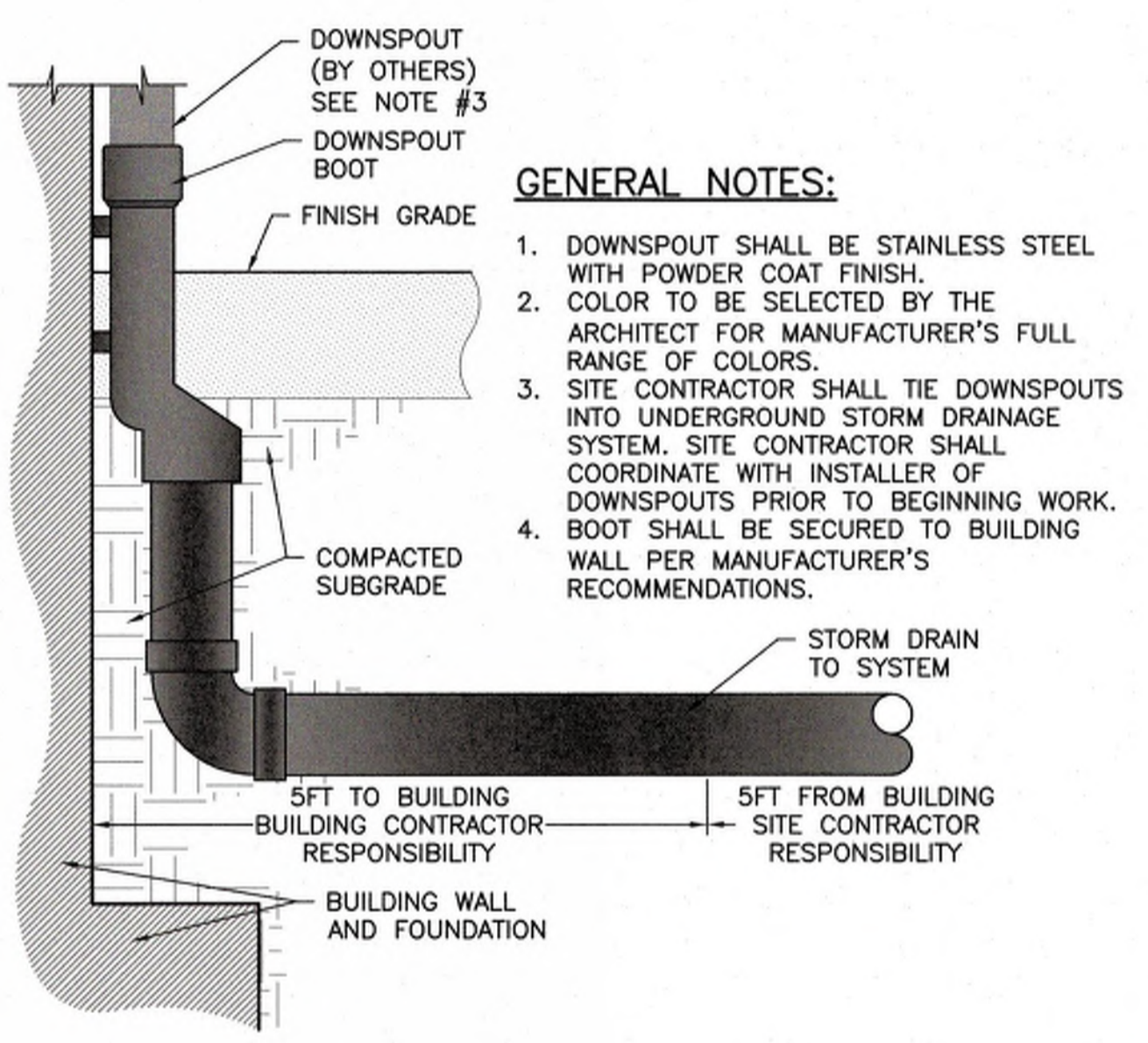


2 24"x36" FRAME AND GRATE



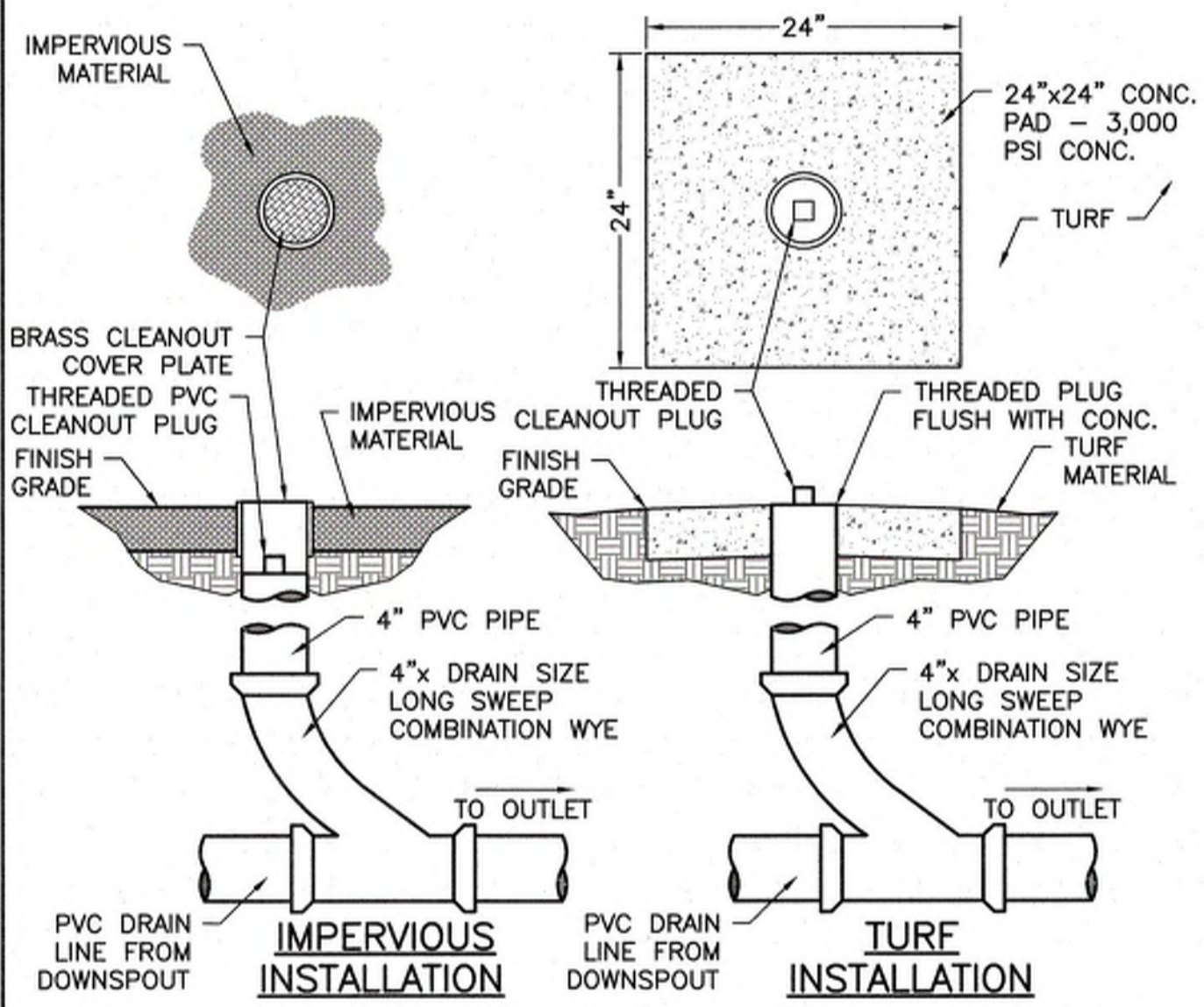
GRATE SPECIFICATIONS:
 GRATE MEETS H-10 LOAD RATING
 QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
 PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
 SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36.
 LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-023

4 DRAIN BASIN



GENERAL NOTES:
 1. DOWNSPOUT SHALL BE STAINLESS STEEL WITH POWDER COAT FINISH.
 2. COLOR TO BE SELECTED BY THE ARCHITECT FOR MANUFACTURER'S FULL RANGE OF COLORS.
 3. SITE CONTRACTOR SHALL TIE DOWNSPOUTS INTO UNDERGROUND STORM DRAINAGE SYSTEM. SITE CONTRACTOR SHALL COORDINATE WITH INSTALLER OF DOWNSPOUTS PRIOR TO BEGINNING WORK.
 4. BOOT SHALL BE SECURED TO BUILDING WALL PER MANUFACTURER'S RECOMMENDATIONS.

5 DOWNSPOUT TO DRAINAGE TIE-IN



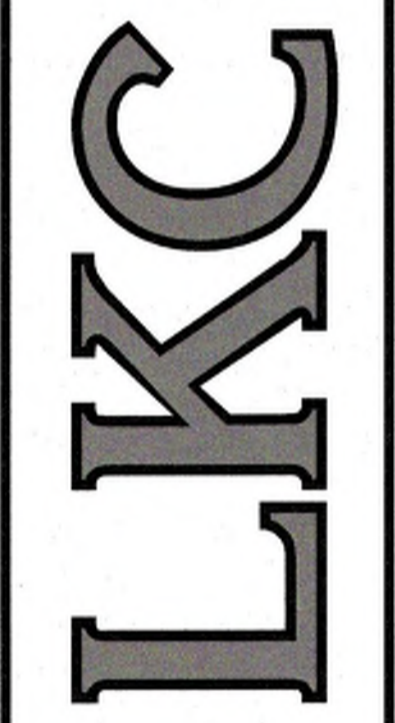
6 STORM DRAIN CLEANOUT

| REVISIONS | | | |
|-----------|-------------|------|----|
| SYM. | DESCRIPTION | DATE | BY |
| | | | |



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 Aberdeen, NC 28315
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 F: 910.637.0096
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DRAINAGE DETAILS

GOOD HOPE HOSPITAL
 RENOVATIONS
 Erwin, North Carolina

| |
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| DATE: JULY, 2020 |
| DESIGNED: FDW |
| DRAWN: FDW |
| CHECKED: TAC |
| NO. |

FOR CONSTRUCTION

D-03

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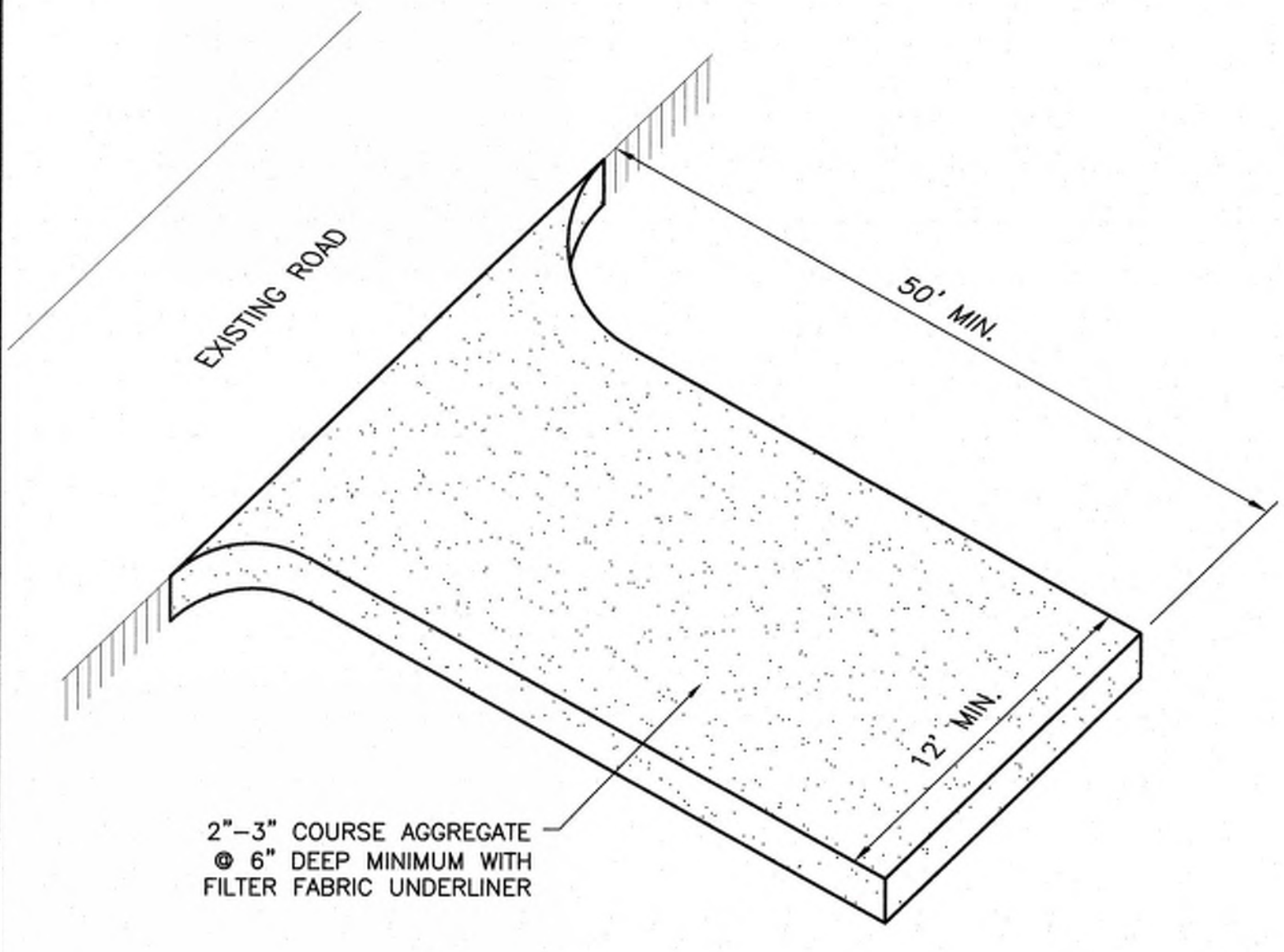
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EROSION CONTROL DETAILS

GOOD HOPE HOSPITAL
 RENOVATIONS
 Erwin, North Carolina

DATE: JULY, 2020
 DESIGNED: FDW
 DRAWN: FDW
 CHECKED: TAC
 NO.

D-04



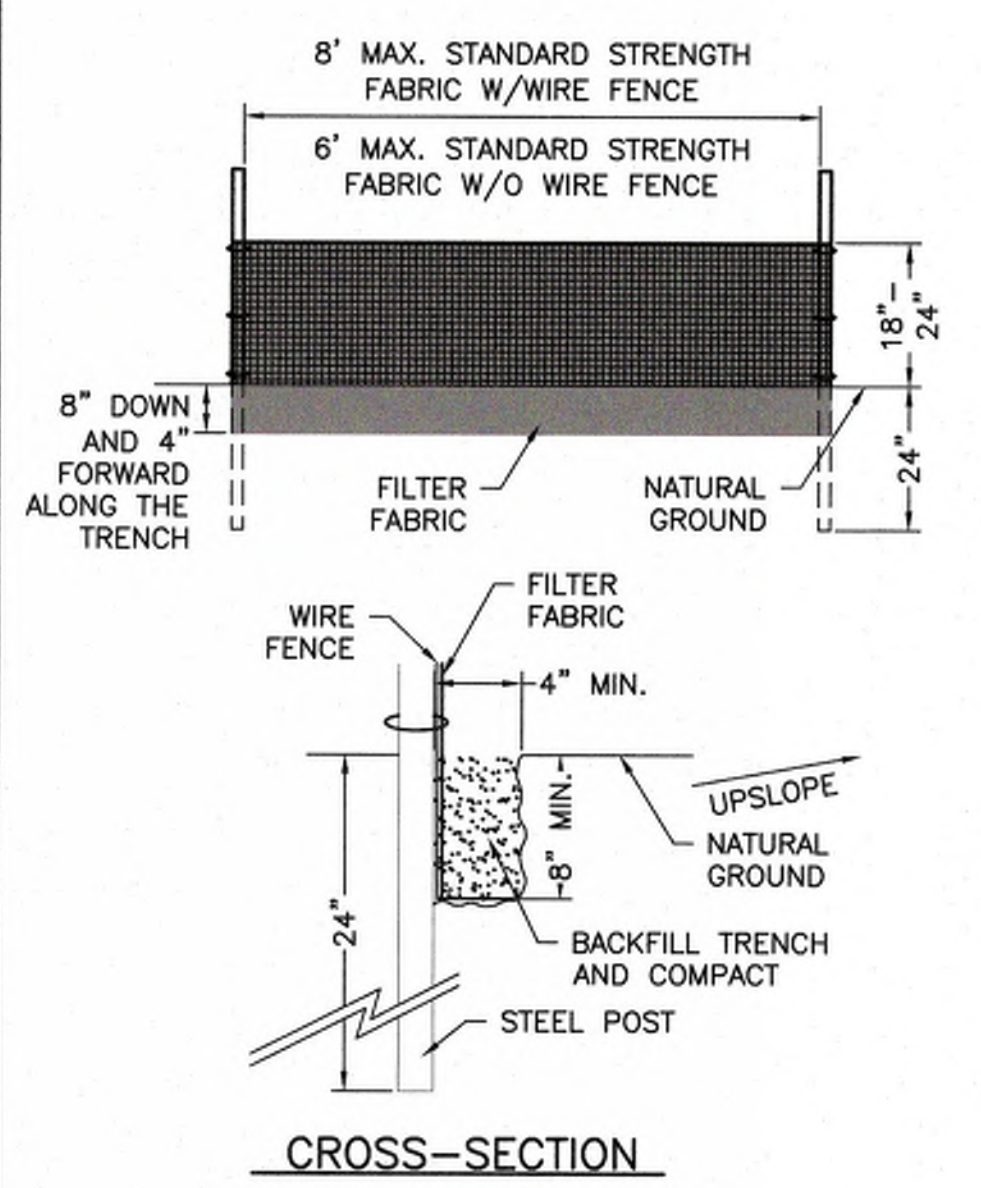
CONSTRUCTION SPECIFICATIONS:

1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.
2. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS AND SMOOTH IT.
3. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
4. USE GEOTEXTILE FABRICS BECAUSE THEY IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

MAINTENANCE:

MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2" STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED OR TRACKED ONTO PUBLIC ROADWAYS.

1 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
NOT TO SCALE



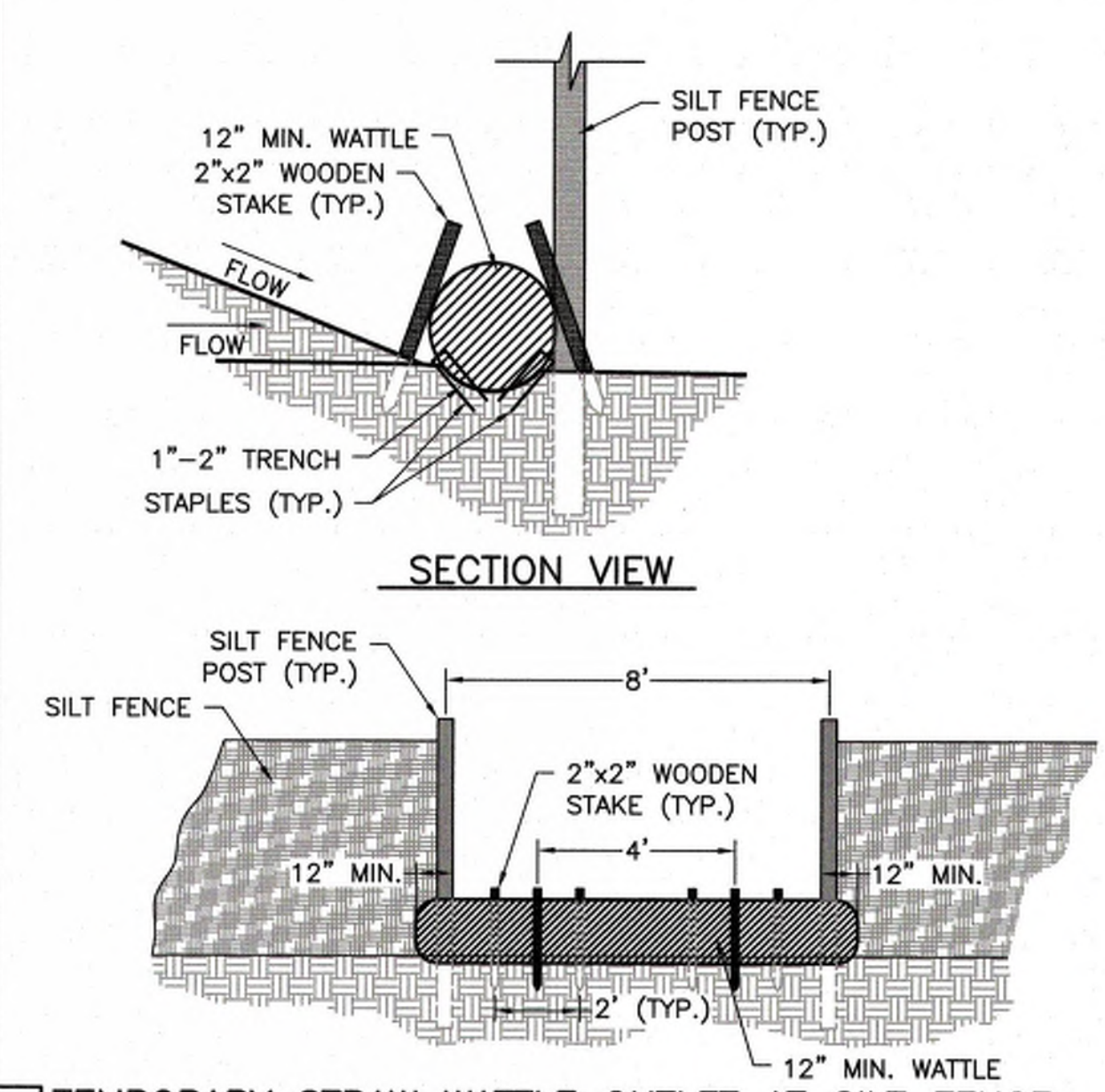
CONSTRUCTION SPECIFICATIONS:

1. CONSTRUCT THE SEDIMENT BARRIER OF STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.
2. ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT EXCEED 24 INCHES ABOVE THE GROUND SURFACE. (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).
3. CONSTRUCT THE FILTER FABRIC FROM CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.
4. SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS. EXTEND THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN THE WIRE REINFORCEMENT, THE FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
5. WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORT POSTS SHOULD BE DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES.
6. EXTRA STRENGTH FILTER FABRIC WITH 6 FEET POST SPACING DOES NOT REQUIRE WIRE MESH SUPPORT FENCE. SECURELY FASTEN THE FILTER FABRIC DIRECTLY TO POSTS. WIRE OR PLASTIC ZIP TIES SHOULD HAVE A MINIMUM 50 POUND TENSILE STRENGTH.
7. EXCAVATE A TRENCH APPROXIMATELY 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER (FIGURE 6.62A, NORTH CAROLINA EROSION AND SEDIMENTATION CONTROL DESIGN MANUAL)
8. PLACE 12 INCHES OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
9. BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.

MAINTENANCE:

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

2 TEMPORARY SILT FENCE
NOT TO SCALE



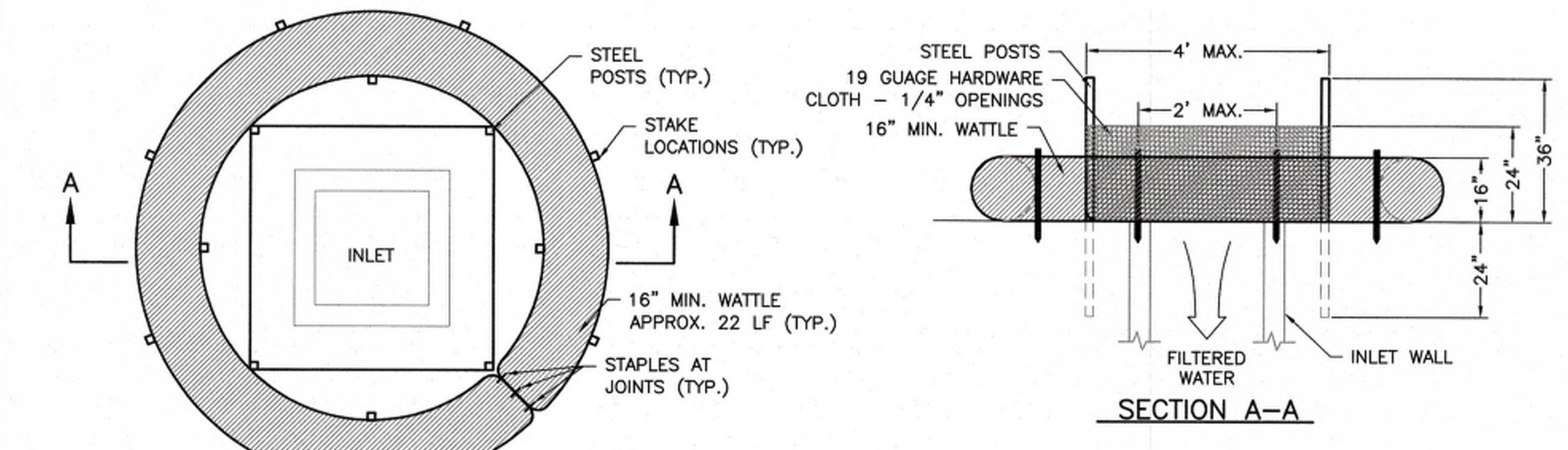
CONSTRUCTION SPECIFICATIONS:

1. USE A MINIMUM 12" DIAMETER WATTLE WITH A MINIMUM LENGTH OF 10 FT.
2. USE 2" X 2" X 2 FT. LONG WOODEN STAKES.
3. EXCAVATE A 1" TO 2" TRENCH FOR WATTLE TO BE PLACED.
4. INSTALL A MINIMUM OF 2 UPSLOPE AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE THE WATTLE TO THE GROUND.
5. PROVIDE STAPLES MADE OF 0.125" DIAMETER STEEL WIRE FORMED INTO A "U" SHAPE AND NOT LESS THAN 12" LENGTH.
6. INSTALL STAPLES APPROXIMATELY EVERY 12" ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
7. WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.
8. INSTALL TEMPORARY SEDIMENT FENCE IN ACCORDANCE WITH NCDENR REGULATIONS.
9. OUTLETS TO BE PLACED AS SHOWN ON PLANS ALONG SILT FENCE.

MAINTENANCE:

1. INSPECT OUTLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENT.
2. CLEAR THE OUTLET OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS.
3. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE OUTLET DURING SEDIMENT REMOVAL.
4. REPLACE WATTLE AS NEEDED.

3 TEMPORARY STRAW WATTLE OUTLET AT SILT FENCE
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5" STEEL POST 2" INTO THE GROUND SURROUNDING THE INLET SPACE POSTS EVENLY AROUND THE PERIMETER ON THE INLET, MAX. 4' APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE AND BOTTOM. PLACING A 2" FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. USE A MINIMUM 16" DIAMETER WATTLE WITH A LENGTH TO SURROUND WIRE MESH HARDWARE CLOTH FITTING SNUG AGAINST THE GROUND.

5. USE 2" X 2" X 30" LONG WOODEN STAKES.
6. EXCAVATE A 1" TO 2" TRENCH FOR WATTLE TO BE PLACED.
7. INSTALL A MINIMUM OF 2 UPSLOPE STAKES AT AN ANGLE TO WEDGE THE WATTLE TO THE GROUND AND UP AGAINST THE HARDWARE CLOTH.
8. PROVIDE STAPLES MADE OF 0.125" DIAMETER STEEL WIRE FORMED INTO A "U" SHAPE AND NOT LESS THAN 12" LENGTH.
9. INSTALL STAPLES APPROXIMATELY EVERY 12" ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
10. WATTLE INSTALLATION SHALL BE ON THE OUTSIDE OF THE HARDWARE CLOTH.
11. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
12. COMPACT THE AREA PROPERLY AND STABILIZE IT WITH GROUND COVER.

MAINTENANCE:

INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

NOTE:
 INLET TOPS TO REMAIN OFF INLET STRUCTURES WHILE INLET PROTECTION IS IN PLACE.

5 TEMPORARY INLET PROTECTION

FOR CONSTRUCTION

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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

| Site Area Description | Stabilize within this many calendar days after ceasing land disturbance | Timeframe variations |
|--|---|---|
| (a) Perimeter dikes, swales, ditches, and perimeter slopes | 7 | None |
| (b) High Quality Water (HQW) Zones | 7 | None |
| (c) Slopes steeper than 3:1 | 7 | If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed. |
| (d) Slopes 3:1 to 4:1 | 14 | -7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed |
| (e) Areas with slopes flatter than 4:1 | 14 | -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope |

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

| Temporary Stabilization | Permanent Stabilization |
|---|--|
| <ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Hydroseeding Roller erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Plastic sheeting | <ul style="list-style-type: none"> Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls Roller erosion control products with grass seed |

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

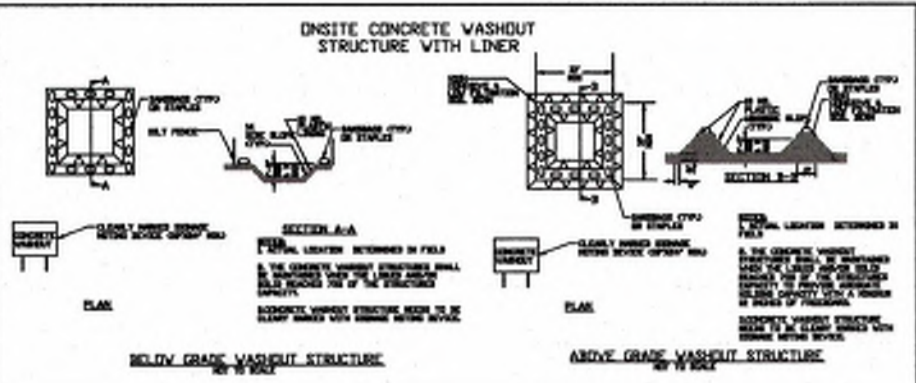
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the top of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials on-site.

HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

| REVISIONS | | | |
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CONSTRUCTION SPECIFICATIONS:

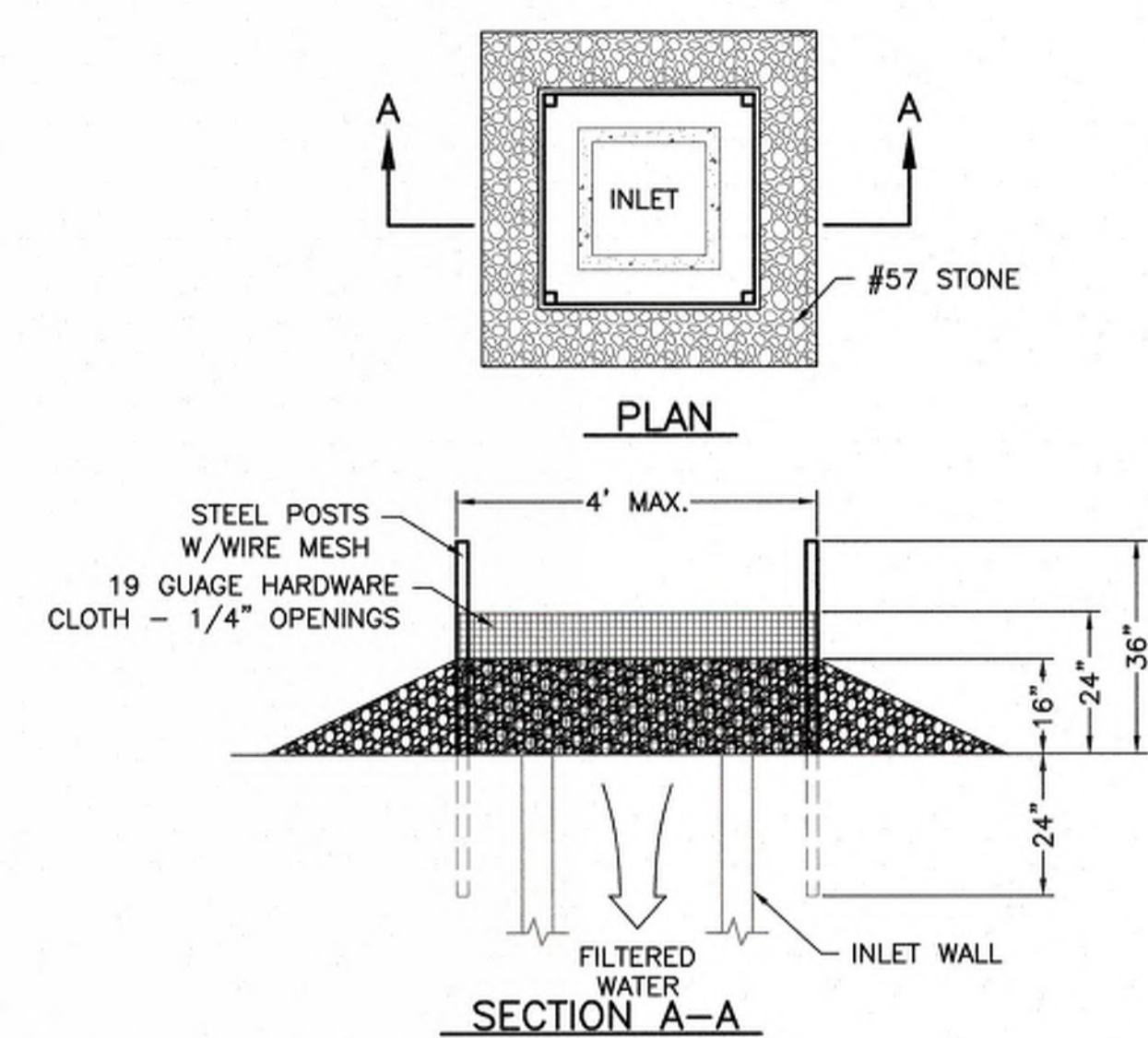
- UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
- DRIVE 5' STEEL POST 2' INTO THE GROUND SURROUNDING THE INLET SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, MAX. 4' APART.
- SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE AND BOTTOM. PLACING A 2' FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
- PLACE CLEAN GRAVEL (NCDOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16" AROUND THE WIRE, AND SMOOTH TO AN EVEN LEVEL.
- ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
- COMPACT THE AREA PROPERLY AND STABILIZE IT WITH GROUND COVER.

MAINTENANCE:

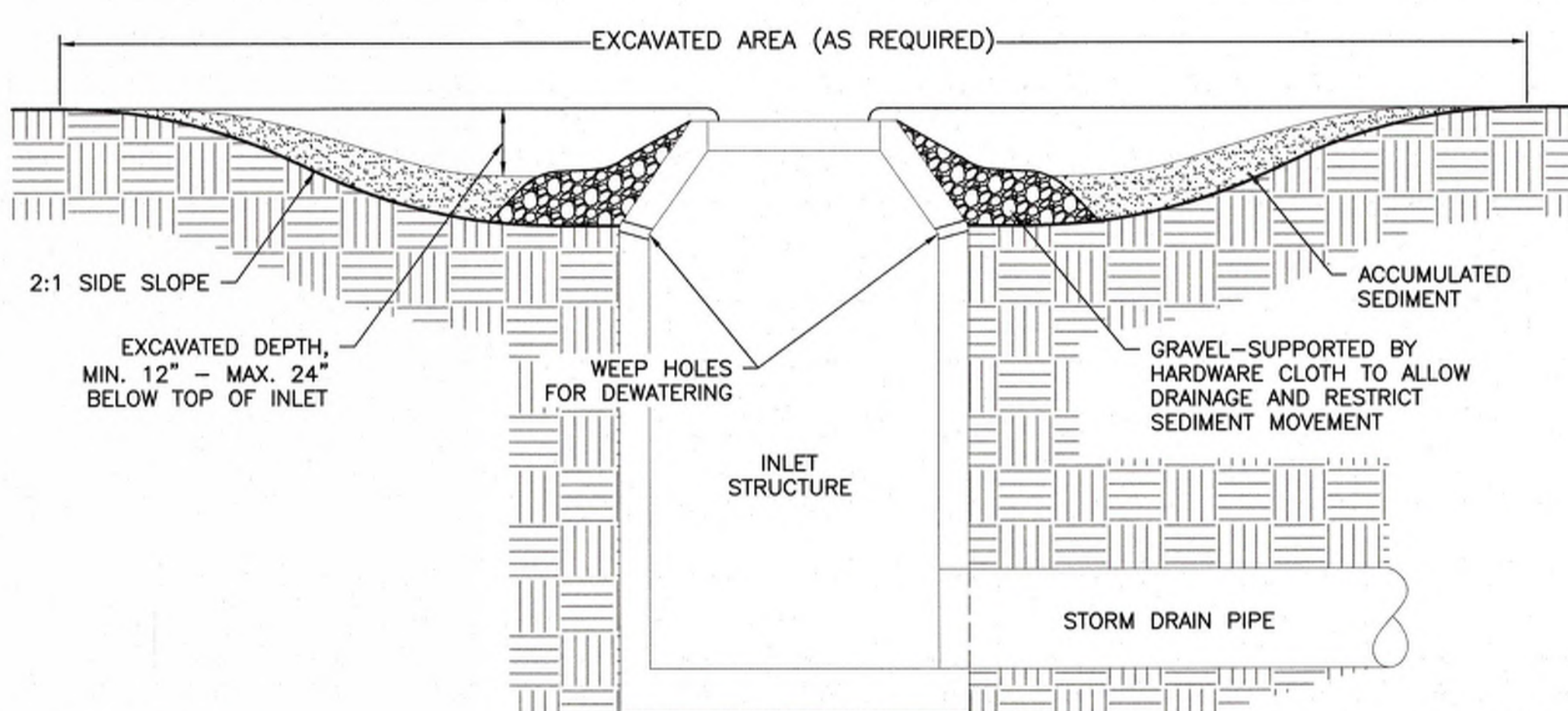
INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2" OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

NOTES:

- INLET TOPS TO REMAIN OFF INLET STRUCTURES WHILE INLET PROTECTION IS IN PLACE.



1 TEMPORARY INLET PROTECTION



MAINTENANCE:

INSPECT, CLEAN AND PROPERLY MAINTAIN THE EXCAVATED BASIN AFTER EVERY STORM UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED. TO PROVIDE SATISFACTORY BASIN HAS BEEN REDUCED BY ONE-HALF. SPREAD ALL EXCAVATED MATERIAL EVENLY OVER THE SURROUNDING LAND AREA OR STOCKPILE AND STABILIZE IT APPROPRIATELY.

CONSTRUCTION SPECIFICATIONS:

- CLEAR THE AREA OF ALL DEBRIS THAT MIGHT HINDER EXCAVATION AND DISPOSAL OF SPOIL.
- GRADE THE APPROACH TO THE INLET UNIFORMLY.
- PROTECT WEEP HOLES BY GRAVEL.
- WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, SEAL WEEP HOLES, FILL THE BASIN WITH STABLE SOIL TO FINAL GRADING ELEVATIONS, COMPACT IT PROPERLY, AND STABILIZE.

2 EXCAVATED DROP INLET PROTECTION

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

| Inspect | Frequency (during normal business hours) | Inspection records must include: |
|--|--|---|
| (1) Rain gauge maintained in good working order | Daily | Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days in which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-measuring device approved by the Division. |
| (2) E&SC Measures | At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours | 1. Identification of the measures inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the measures were operating properly. 5. Description of maintenance needs for the measures. 6. Description, evidence, and date of corrective actions taken. |
| (3) Stormwater discharge outfalls (SOOs) | At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours | 1. Identification of the discharge outfalls inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration. 5. Indication of visible sediment leaving the site. 6. Description, evidence, and date of corrective actions taken. |
| (4) Perimeter of site | At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours | If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits. 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases. |
| (5) Streams or wetlands onsite or offsite (where accessible) | At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours | If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item 2(j) of this permit. |
| (6) Ground stabilization measures | After each phase of grading | 1. The phase of grading/installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover. 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible. |

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

| Item to Document | Documentation Requirements |
|---|---|
| (a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan. | Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation. |
| (b) A phase of grading has been completed. | Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase. |
| (c) Ground cover is located and installed in accordance with the approved E&SC plan. | Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications. |
| (d) The maintenance and repair requirements for all E&SC measures | Complete, date and sign an inspection report. |
| (e) Corrective actions have been taken to E&SC measures. | Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action. |

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- Documentation to be Retained for Three Years
All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.
- Oil spills if:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).
- Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.83.
- Anticipated bypasses and unanticipated bypasses.
- Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

| Occurrence | Reporting Timeframes (After Discovery) and Other Requirements |
|--|--|
| (a) Visible sediment deposition in a stream or wetland | <ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired waters conditions. |
| (b) Oil spills and release of hazardous substances per Item 1(b)-(c) above | <ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release. |
| (c) Anticipated bypasses [40 CFR 122.41(m)(3)] | <ul style="list-style-type: none"> A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass. |
| (d) Unanticipated bypasses [40 CFR 122.41(m)(3)] | <ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass. |
| (e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(j)(7)] | <ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(j)(6)]. Division staff may waive the requirement for a written report on a case-by-case basis. |

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

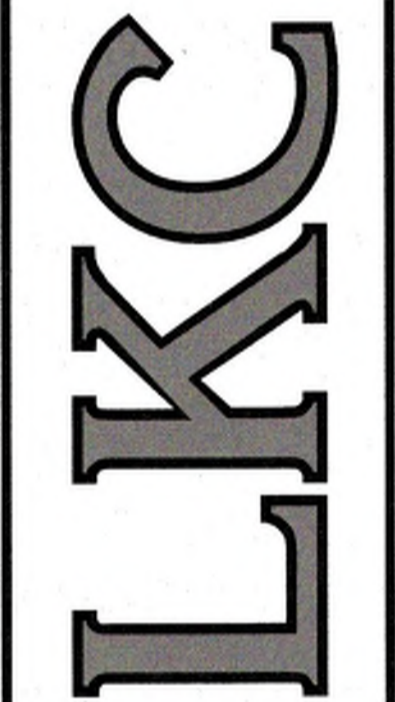
- The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item 2(c) and (d) of this permit.
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19



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Engineering
Landscape Architecture
Surveying



NCG01 STORMWATER DETAILS AND NOTES

GOOD HOPE HOSPITAL RENOVATIONS Erwin, North Carolina

FOR CONSTRUCTION

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|------------------|
| DATE: JULY, 2020 |
| DESIGNED: FDW |
| DRAWN: FDW |
| CHECKED: TAC |
| NO. |

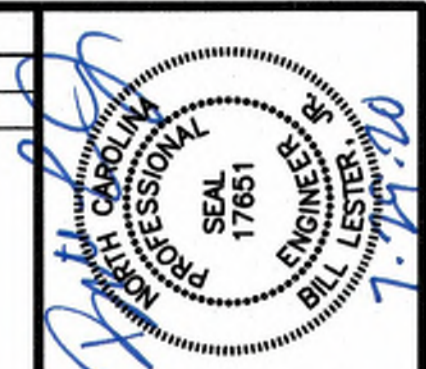
D-04.1

2019 HRW REQUIRED UTILITY NOTES
(REVISION 7 – NOVEMBER 2019)

| REVISIONS | | | |
|-----------|-------------|------|----|
| SYM. | DESCRIPTION | DATE | BY |
| | | | |

WATER

- A. THE FIRE MARSHAL'S OFFICE SHALL APPROVE ALL HYDRANT TYPES AND LOCATIONS IN NEW SUBDIVISIONS. HOWEVER, HARNETT REGIONAL WATER (HRW) PREFERENCES THE CONTRACTORS TO INSTALL ONE OF THE FOLLOWING FIRE HYDRANTS:
- MUELLER – SUPER CENTURION 250 A-423 MODEL WITH A 5/4" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE);
 - AMERICAN DARLING – MARK B-84-B MODEL WITH A 5/4" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE);
 - WATEROUS – PACER B-67-250 MODEL WITH A 5/4" MAIN VALVE OPENING THREE WAY (TWO HOSE NOZZLES AND ONE PUMPER NOZZLE) OR APPROVED EQUAL FOR STANDARDIZATION.
- B. FIRE HYDRANTS ARE INSTALLED AT CERTAIN ELEVATIONS. ANY GRADE CHANGE IN THE VICINITY OF ANY FIRE HYDRANT WHICH IMPEDES ITS OPERATION SHALL BECOME THE RESPONSIBILITY OF THE UTILITY CONTRACTOR FOR CORRECTION. CORRECTIONS WILL BE MONITORED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND THE HARNETT COUNTY FIRE MARSHAL.
- C. THE PROFESSIONAL ENGINEER (PE) SHALL OBTAIN AND PROVIDE THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT TO THE UTILITY CONTRACTOR BEFORE THE CONSTRUCTION OF THE WATER LINE SHALL BEGIN. THE UTILITY CONTRACTOR MUST POST A COPY OF THE NCDEQ "AUTHORIZATION TO CONSTRUCT" PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) ON SITE PRIOR TO THE START OF CONSTRUCTION. THE PERMIT MUST BE MAINTAINED ON SITE THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS OF THE PROPOSED WATER LINES THAT WILL SERVE THIS PROJECT.
- D. THE UTILITY CONTRACTOR SHALL NOTIFY HARNETT REGIONAL WATER (HRW) AND THE PROFESSIONAL ENGINEER (PE) AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE UTILITY CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH MR. ALAN MOSS, HRW UTILITY CONSTRUCTION INSPECTOR AT LEAST TWO (2) DAYS BEFORE CONSTRUCTION WILL BEGIN AND THE UTILITY CONTRACTOR MUST COORDINATE WITH HRW FOR REGULAR INSPECTION VISITATIONS AND ACCEPTANCE OF THE WATER SYSTEM(S). CONSTRUCTION WORK SHALL BE PERFORMED ONLY DURING THE NORMAL WORKING HOURS OF HRW WHICH IS 8:00 AM – 5:00 PM MONDAY THROUGH FRIDAY. HOLIDAY AND WEEKEND WORK IS NOT PERMITTED BY HRW.
- E. THE PROFESSIONAL ENGINEER (PE) SHALL PROVIDE HRW AND THE UTILITY CONTRACTOR WITH A SET OF NCDEQ APPROVED PLANS MARKED "RELEASED FOR CONSTRUCTION" AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE REGISTERED LAND SURVEYOR (RLS) SHOULD STAKE OUT ALL LOT CORNERS AND THE GRADE STAKES FOR THE PROPOSED FINISH GRADE FOR EACH STREET BEFORE THE UTILITY CONTRACTOR BEGINS CONSTRUCTION OF THE WATER LINE(S). THE GRADE STAKES SHOULD BE SET WITH A CONSISTENT OFFSET FROM THE STREET CENTERLINE SO AS NOT TO INTERFERE WITH THE STREET GRADING AND UTILITY CONSTRUCTION.
- F. THE UTILITY CONTRACTOR SHALL PROVIDE THE HRW UTILITY CONSTRUCTION INSPECTOR WITH MATERIAL SUBMITTALS AND SHOP DRAWINGS FOR ALL PROJECT MATERIALS PRIOR TO THE CONSTRUCTION OF ANY WATER LINE EXTENSION(S), AND ASSOCIATED WATER SERVICES IN HARNETT COUNTY. THE MATERIALS TO BE USED ON THE PROJECT MUST MEET THE ESTABLISHED SPECIFICATIONS OF HRW AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. ALL SUBSTANDARD MATERIALS OR MATERIALS NOT APPROVED FOR USE IN HARNETT COUNTY FOUND ON THE PROJECT SITE MUST BE REMOVED IMMEDIATELY WHEN NOTIFIED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.
- G. THE WATER MAIN(S), FIRE HYDRANTS, SERVICE LINES, METER SETTERS AND ALL ASSOCIATED APPURTENANCES SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER (HRW). THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED WATER MAIN(S), WATER SERVICE LINES AND ALL ASSOCIATED METER SETTERS AND METER BOXES FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW WATER MAIN(S) HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF ENVIRONMENTAL HEALTH, PUBLIC WATER SUPPLY SECTION (NCDEQ, DEH, PWS) AND ACCEPTED BY HRW.
- H. PRIOR TO ACCEPTANCE, ALL SERVICES WILL BE INSPECTED TO INSURE THAT THEY ARE INSTALLED AT THE PROPER DEPTH. ALL METER BOXES MUST BE FLUSH WITH THE GROUND LEVEL AT FINISH GRADE AND THE METER SETTERS MUST BE A MINIMUM OF 8" BELOW THE METER BOX LID. METER SETTERS SHALL BE CENTERED IN THE METER BOX AND SUPPORTED BY BRICK, BLOCK OR STONE.
- I. THE UTILITY CONTRACTOR SHALL PROVIDE THE PROFESSIONAL ENGINEER (PE) AND HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE DRAWINGS IDENTIFYING THE COMPLETE WATER SYSTEM INSTALLED FOR EACH PROJECT. THE RED LINE DRAWINGS SHOULD IDENTIFY THE MATERIALS, PIPE SIZES AND APPROXIMATE DEPTHS OF THE WATER LINES AS WELL AS THE GATE VALVES, FIRE HYDRANTS, METER SETTERS, BLOW OFF ASSEMBLIES AND ALL ASSOCIATED APPURTENANCES FOR ALL WATER LINE(S) CONSTRUCTED IN HARNETT COUNTY. THE RED LINE DRAWINGS SHOULD CLEARLY IDENTIFY ANY DEVIATIONS FROM THE NCDEQ APPROVED PLANS. ALL CHANGE ORDERS MUST BE APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.
- J. POTABLE WATER MAINS CROSSING OTHER UTILITIES AND NON-POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWENTY-FOUR (24") INCHES BETWEEN THE POTABLE WATER MAIN AND ALL OTHER UTILITIES. NCDOT REQUIRES THE NEW WATER MAINS TO BE INSTALLED UNDER THE STORM WATER LINES. THE POTABLE WATER MAIN SHALL BE INSTALLED WITH TWENTY-FOUR (24") INCHES OF VERTICAL SEPARATION AND WITH DUCTILE IRON PIPE WHEN DESIGNED TO BE PLACED UNDER A NON-POTABLE WATER LINE SUCH AS SANITARY SEWER OR STORM SEWER LINES. IF THESE SEPARATIONS CANNOT BE MAINTAINED THEN THE WATER MAIN SHALL BE INSTALLED WITH DUCTILE IRON PIPE. BOTH THE POTABLE WATER MAIN AND THE NON-POTABLE WATER LINE MUST BE CAST IRON OR DUCTILE IRON PIPE (DIP) IF THE STATE MINIMUM SEPARATIONS CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE MUST BE LAID SO THE MECHANICAL JOINTS ARE AT LEAST (10') FEET FROM THE POINT WHERE THE POTABLE WATER MAIN CROSSES THE NON-POTABLE WATER LINE.
- K. POTABLE WATER MAINS INSTALLED PARALLEL TO NON-POTABLE WATER LINES (SANITARY SEWER, STORM SEWER, RCP, ETC.) SHALL BE LAID TO PROVIDE A MINIMUM HORIZONTAL DISTANCE OF TEN (10') FEET BETWEEN THE POTABLE WATER MAIN AND SANITARY SEWER MAINS, SEWER LATERALS AND SERVICES. THE HORIZONTAL SEPARATION BETWEEN THE POTABLE WATER MAIN AND ANY OTHER UTILITY OR STORM SEWER SHALL NOT BE LESS THAN FIVE (5') FEET. THE POTABLE WATER MAIN MUST BE DUCTILE IRON PIPE IF THIS HORIZONTAL SEPARATION OF TEN (10') FEET CANNOT BE MAINTAINED. THE DUCTILE IRON PIPE SHALL EXTEND AT LEAST TEN (10') FEET BEYOND THE POINT WHERE THE MINIMUM REQUIRED HORIZONTAL SEPARATION OF TEN (10') FEET CAN BE RE-ESTABLISHED.
- L. METER SETTERS SHALL BE INSTALLED IN PAIRS ON EVERY OTHER LOT LINE WHERE POSSIBLE TO LEAVE ADEQUATE SPACE FOR OTHER UTILITIES TO BE INSTALLED AT A LATER TIME. THE METER SETTERS SHALL BE INSTALLED AT LEAST ONE (1') FOOT INSIDE THE RIGHT-OF-WAY AND AT LEAST THREE (3') TO FIVE (5') FEET FROM THE PROPERTY LINE BETWEEN THE LOTS.
- M. HRW REQUIRES THAT METER BOXES FOR 1/2" SERVICES SHALL BE 12" WIDE X 17" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH CAST IRON LIDS/COVERS. METER BOXES FOR 1" SERVICES SHALL BE 17" WIDE X 21" LONG ABS PLASTIC BOXES AT LEAST 18" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS. METER BOXES FOR 2" SERVICES SHALL BE 20" WIDE X 32" LONG ABS PLASTIC BOXES AT LEAST 20" IN HEIGHT WITH PLASTIC LIDS AND CAST IRON FLIP COVERS IN THE CENTER OF THE LIDS.
- N. MASTER METERS MUST BE INSTALLED IN CONCRETE VAULTS SIZED FOR THE METER ASSEMBLY AND ASSOCIATED APPURTENANCES SO AS TO PROVIDE AT LEAST EIGHTEEN (18") INCHES OF CLEARANCE BETWEEN THE BOTTOM OF THE CONCRETE VAULT AND THE BOTTOM OF THE METER SETTER. THE MASTER METER MUST BE PROVIDED TEST PORTS IF THE METER IS NOT EQUIPPED WITH TEST PORTS FROM THE MANUFACTURER IN ACCORDANCE WITH THE HRW ESTABLISHED STANDARD SPECIFICATIONS AND DETAILS. DUCTILE IRON PIPE MUST BE USED FOR THE MASTER METER VAULT PIPING AND VALVE VAULT PIPING. THE UTILITY CONTRACTOR MUST PROVIDE SHOP DRAWINGS FOR THE METER VAULTS TO HRW PRIOR TO ORDERING THE CONCRETE VAULTS.
- O. THE UTILITY CONTRACTOR WILL INSTALL POLYETHYLENE SDR-9 WATER SERVICE LINES THAT CROSS UNDER THE PAVEMENT INSIDE A SCHEDULE 40 PVC CONDUIT TO ALLOW FOR REMOVAL AND REPLACEMENT IN THE FUTURE. TWO (2) INDEPENDENT 3/4" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE (1) – TWO (2") INCH SCHEDULE 40 PVC CONDUIT OR TWO (2) INDEPENDENT 1" WATER SERVICE LINES MAY BE INSTALLED INSIDE ONE (1) – THREE (3") INCH SCHEDULE 40 PVC CONDUIT, BUT EACH WATER SERVICE SHALL BE TAPPED DIRECTLY TO THE WATER MAIN. SPLIT SERVICES ARE NOT ALLOWED BY HRW.
- P. THE WATER MAIN(S), FIRE HYDRANTS, GATE VALVES, SERVICE LINES, METER SETTERS AND ASSOCIATED APPURTENANCES MUST BE RATED FOR 200 PSI AND HYDROSTATICALLY PRESSURE TESTED TO 200 PSI. THE HYDROSTATIC PRESSURE TEST(S) MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR MUST NOTIFY HRW WHEN THEY ARE READY TO BEGIN FILLING IN LINES AND COORDINATE WITH HARNETT REGIONAL WATER TO WITNESS ALL PRESSURE TESTING.
- Q. THE UTILITY CONTRACTOR SHALL CONDUCT A PNEUMATIC PRESSURE TEST USING COMPRESSED AIR OR OTHER INERT GAS ON THE STAINLESS STEEL TAPPING SLEEVE(S) PRIOR TO MAKING THE TAP ON THE EXISTING WATER MAIN. THIS PNEUMATIC PRESSURE TEST MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STAINLESS STEEL TAPPING SLEEVE(S) OR APPROVED EQUAL FOR ALL TAPS MADE IN HARNETT COUNTY. ALL NEW WATER LINE EXTENSIONS MUST BEGIN WITH A RESILIENT WEDGE TYPE GATE VALVE SIZED EQUAL TO THE DIAMETER OF THE NEW WATER LINE EXTENSION IN ORDER TO PROVIDE A MEANS OF ISOLATION BETWEEN HARNETT REGIONAL WATER'S EXISTING WATER MAINS AND THE NEW WATER LINE EXTENSIONS UNDER CONSTRUCTION.
- R. ALL WATER MAINS WILL BE CONSTRUCTED WITH SDR-21 PVC PIPE OR CLASS 50 DUCTILE IRON PIPE RATED FOR AT LEAST 200 PSI OR GREATER. ALL PIPES MUST BE PROTECTED DURING LOADING, TRANSPORT, UNLOADING, STAGING, AND INSTALLATION. PVC PIPE MUST BE PROTECTED FROM EXTENDED EXPOSURE TO SUNLIGHT PRIOR TO INSTALLATION.
- S. ALL WATER MAINS WILL BE FLUSHED AND DISINFECTED IN STRICT ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER. ALL WATER SAMPLES COLLECTED FOR BACTERIA TESTING WILL BE COLLECTED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND TESTED IN THE HRW LABORATORY.
- T. ALL FITTINGS LARGER THAN TWO (2") INCHES DIAMETER SHALL BE DUCTILE IRON. HRW REQUIRES THAT MECHANICAL JOINTS BE ASSEMBLED WITH GRIP RINGS AS "MEGALUG" FITTINGS ARE NOT APPROVED BY HARNETT REGIONAL WATER FOR PIPE SIZES SMALLER THAN TWELVE INCHES (12") DIAMETER. PVC PIPE USED FOR WATER MAINS SHALL BE CONNECTED BY SLIP JOINT OR MECHANICAL JOINT WITH GRIP RINGS. GLUED PIPE JOINTS ARE NOT ALLOWED ON PVC PIPE USED FOR WATER MAINS IN HARNETT COUNTY.
- U. HRW REQUIRES THAT THE UTILITY CONTRACTOR INSTALL TRACER WIRE IN THE TRENCH WITH ALL WATER LINES. THE TRACER WIRE SHALL BE 12 GA. INSULATED, SOLID COPPER CONDUCTOR AND IT SHALL BE TERMINATED AT THE TOP OF THE VALVE BOXES OR MANHOLES. NO SPLICED WIRE CONNECTIONS SHALL BE MADE UNDERGROUND ON TRACER WIRE INSTALLED IN HARNETT COUNTY. THE TRACER WIRE MAY BE SECURED WITH DUCT TAPE TO THE TOP OF THE PIPE BEFORE BACKFILLING.
- V. THE UTILITY CONTRACTOR WILL PROVIDE PROFESSIONAL ENGINEER (PE) AND THE HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE FIELD DRAWINGS TO IDENTIFY THE INSTALLED LOCATIONS OF THE WATER LINE(S) AND ALL ASSOCIATED SERVICES. ALL CHANGE ORDERS MUST BE PRE-APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.
- W. THE UTILITY CONTRACTOR SHALL SPOT DIG TO EXPOSE EACH UTILITY PIPE OR LINE WHICH MAY CONFLICT WITH CONSTRUCTION OF PROPOSED WATER LINE EXTENSIONS WELL IN ADVANCE TO VERIFY LOCATIONS OF THE EXISTING UTILITIES. THE UTILITY CONTRACTOR SHALL PROVIDE BOTH HORIZONTAL AND VERTICAL CLEARANCES TO THE PROFESSIONAL ENGINEER (PE) TO ALLOW THE PE TO ADJUST THE WATER LINE DESIGN IN ORDER TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES. THE UTILITY CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER AND BE RESPONSIBLE FOR TEMPORARY RELOCATION AND/OR SECURING EXISTING UTILITY POLES, PIPES, WIRES, CABLES, SIGNS AND/OR UTILITIES INCLUDING SERVICES IN ACCORDANCE WITH THE UTILITY OWNER REQUIREMENTS DURING WATER LINE INSTALLATION, GRADING AND STREET CONSTRUCTION.
- X. PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN ESTABLISHED UTILITY EASEMENTS OR NCDOT RIGHT-OF-WAYS THE UTILITY CONTRACTOR IS REQUIRED TO HAVE A SIGNED NCDOT ENCROACHMENT AGREEMENT POSTED ON SITE AND NOTIFY ALL CONCERNED UTILITY COMPANIES IN ACCORDANCE WITH G.S. 87-102. THE UTILITY CONTRACTOR MUST CALL THE NC ONE CALL CENTER AT 811 OR (800) 632-4949 TO VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. EXISTING UTILITIES SHOWN IN THESE PLANS ARE TAKEN FROM MAPS FURNISHED BY VARIOUS UTILITY COMPANIES AND HAVE NOT BEEN PHYSICALLY LOCATED OR VERIFIED BY THE P.E. (I.E. TELEPHONE, CABLE, WATER, SEWER, ELECTRICAL POWER, FIBER OPTIC, NATURAL GAS, ETC.). THE UTILITY CONTRACTOR WILL BE RESPONSIBLE TO REPAIR ANY AND ALL DAMAGES TO THE SATISFACTION OF THE RELATED UTILITY COMPANY.
- Y. THE UTILITY CONTRACTOR SHALL PROVIDE HRW WITH AT LEAST ONE (1) FIRE HYDRANT WRENCH AND ONE (1) BREAK-AWAY FLANGE KIT FOR EVERY SUBDIVISION WITH FIRE HYDRANTS DEVELOPED IN HARNETT COUNTY. THESE ITEMS MUST BE PROVIDED TO HRW BEFORE THE FINAL INSPECTION WILL BE SCHEDULED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. IN ADDITION, THE UTILITY CONTRACTOR SHALL INSTALL A 4" X 4" CONCRETE VALVE MARKER AT THE EDGE OF THE RIGHT-OF-WAY TO IDENTIFY THE LOCATION OF EACH GATE VALVE INSTALLED IN THE NEW WATER SYSTEM WITH THE EXCEPTION OF THE FIRE HYDRANT ISOLATION VALVES. THE CONTRACTOR SHALL MEASURE THE DISTANCE FROM THE CENTER OF THE CONCRETE MARKER TO THE CENTER OF THE VALVE BOX. THIS DISTANCE (IN LINEAR FEET) SHALL BE STAMPED ON THE BRASS PLATE LOCATED ON THE TOP OF THE CONCRETE VALVE MARKER. IN LIEU OF INSTALLING THE CONCRETE VALVE MARKERS, THE UTILITY CONTRACTOR MAY PROVIDE AT LEAST TWO MEASUREMENTS FROM TWO INDEPENDENT PERMANENT ABOVE GROUND STRUCTURES TO THE PROFESSIONAL ENGINEER (PE) IN THE RED LINE DRAWINGS TO IDENTIFY THE VALVE LOCATIONS. THE PROFESSIONAL ENGINEER (PE) MUST INCLUDE THESE MEASUREMENTS IN THE AS-BUILT RECORD DRAWINGS SUBMITTED TO HRW.
- Z. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO LEAKAGE DAMAGE FROM POOR WORKMANSHIP DURING THE ONE (1) YEAR WARRANTY PERIOD ONCE THE WATER SYSTEM IMPROVEMENTS HAVE BEEN ACCEPTED BY HARNETT REGIONAL WATER. HARNETT REGIONAL WATER WILL PROVIDE MAINTENANCE AND REPAIRS WHEN REQUESTED AND BILL THE DEVELOPER AND/OR UTILITY CONTRACTOR IF NECESSARY DUE TO LACK OF RESPONSE WITHIN 48 HOURS OF NOTIFICATION OF WARRANTY WORK. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO DAMAGES RESULTING FROM FAILURE TO LOCATE THE NEW WATER LINES AND ASSOCIATED APPURTENANCES FOR OTHER UTILITIES AND THEIR CONTRACTORS UNTIL THE WATER LINES HAVE BEEN APPROVED BY NCDEQ AND ACCEPTED BY HRW. THE FINAL INSPECTION OF WATER SYSTEM IMPROVEMENTS CANNOT BE SCHEDULED WITH HRW UNTIL THE STREETS HAVE BEEN PAVED; THE RIGHTS-OF-WAY AND UTILITY EASEMENTS HAVE BEEN SEEDING AND STABILIZED WITH AN ADEQUATE STAND OF GRASS IN PLACE TO PREVENT EROSION ISSUES ON SITE.
- AA. THE ENGINEER OF RECORD IS RESPONSIBLE TO INSURE THAT CONSTRUCTION IS, AT ALL TIMES, IN COMPLIANCE WITH ACCEPTED SANITARY ENGINEERING PRACTICES AND APPROVED PLANS AND SPECIFICATIONS. NO FIELD CHANGES TO THE APPROVED PLANS ARE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY HRW. A COPY OF EACH ENGINEER'S FIELD REPORT IS TO BE SUBMITTED TO HRW AS EACH SUCH INSPECTION IS MADE ON SYSTEM IMPROVEMENTS OR TESTING IS PERFORMED BY THE CONTRACTOR. WATER AND SEWER INFRASTRUCTURE MUST PASS ALL TESTS REQUIRED BY HRW SPECIFICATIONS AND THOSE OF ALL APPLICABLE REGULATORY AGENCIES. THESE TESTS INCLUDE, BUT ARE NOT LIMITED TO: AIR TEST, VACUUM TEST, MANDREL TEST, VISUAL TEST, PRESSURE TEST, BACTERIOLOGICAL TEST, ETC. A HRW INSPECTOR MUST BE PRESENT DURING TESTING AND ALL TEST RESULTS SHALL BE SUBMITTED TO HRW. ALL TESTS MUST BE SATISFIED BEFORE THE FINAL INSPECTION WILL BE SCHEDULED WITH THE HRW INSPECTOR. THE ENGINEER OF RECORD MUST REQUEST IN WRITING TO SCHEDULE THE FINAL INSPECTION ONCE ALL CONSTRUCTION IS COMPLETE. THE DEVELOPER'S ENGINEER OF RECORD AND THE HRW UTILITY CONSTRUCTION INSPECTOR SHALL PREPARE A WRITTEN PUNCH LIST OF ANY DEFECTS OR DEFICIENCIES NOTED DURING THE FINAL INSPECTION, SHOULD ANY EXIST. UPON COMPLETION OF THE PUNCH LIST, THE DEVELOPER'S ENGINEER OF RECORD WILL SCHEDULE ANOTHER INSPECTION. IN THE EVENT THE NUMBER OF INSPECTIONS PERFORMED BY THE HRW EXCEEDS TWO, ADDITIONAL FEES MAY BE ACCESSED TO THE DEVELOPER.



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WATER DISTRIBUTION NOTES

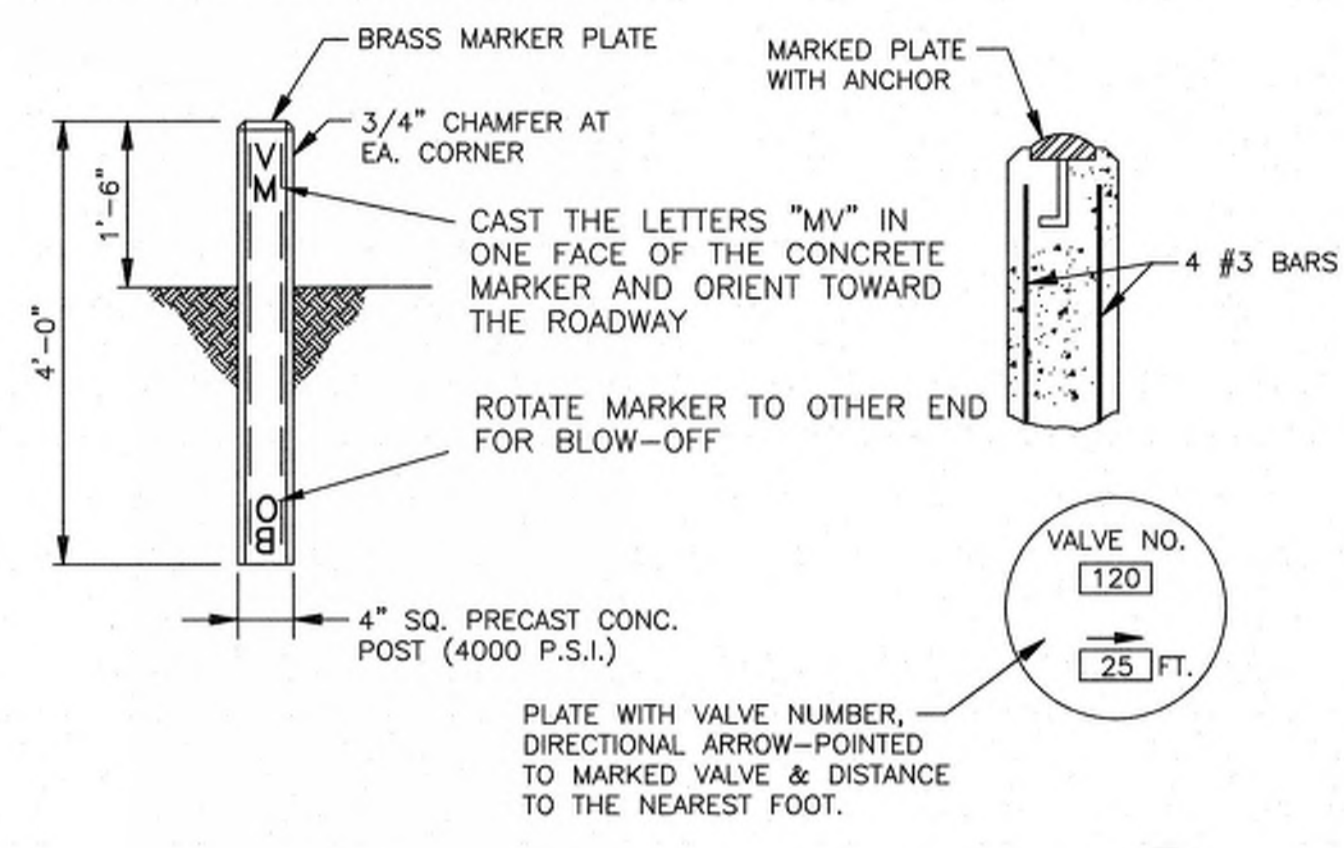
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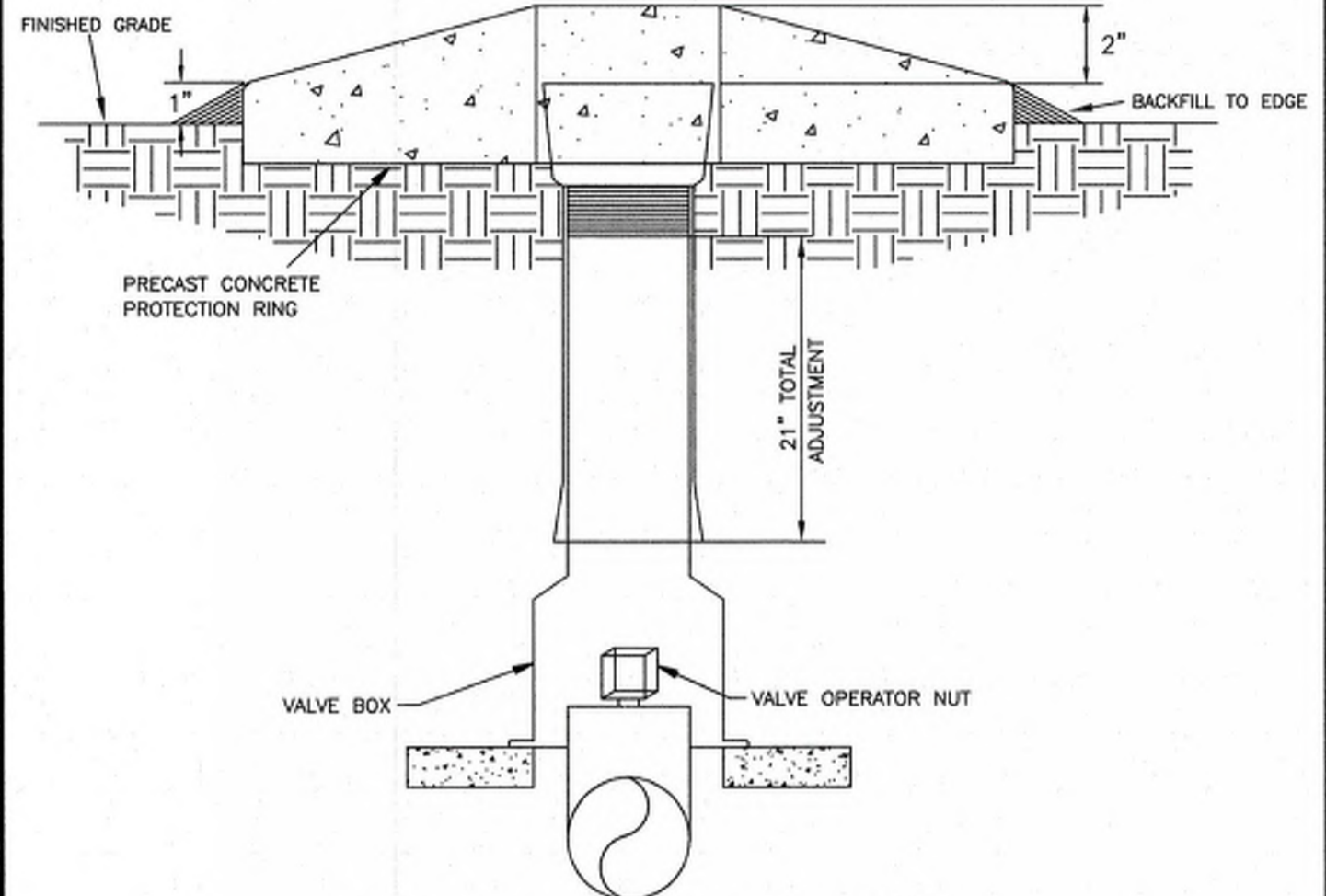
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| DATE: JULY, 2020 |
| DESIGNED: FDW |
| DRAWN: FDW |
| CHECKED: TAC |
| NO. |
| D-05 |

FOR CONSTRUCTION

NOTES:
PAINT MARKER BLUE AFTER INSTALLATION

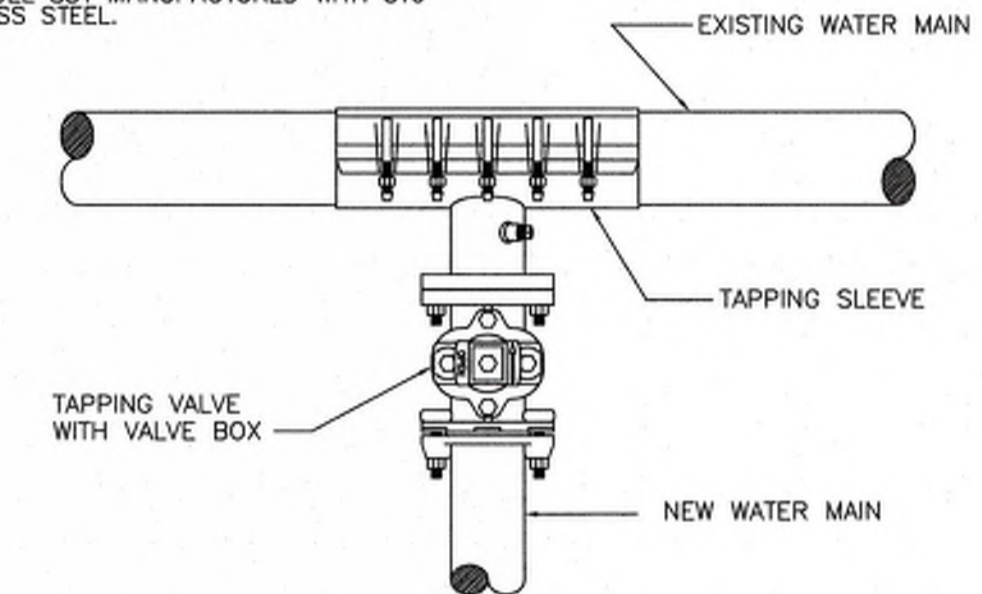


TYPICAL VALVE MARKER DETAIL (W) 1
NO SCALE



TYPICAL VALVE BOX DETAIL (W) 2
NO SCALE

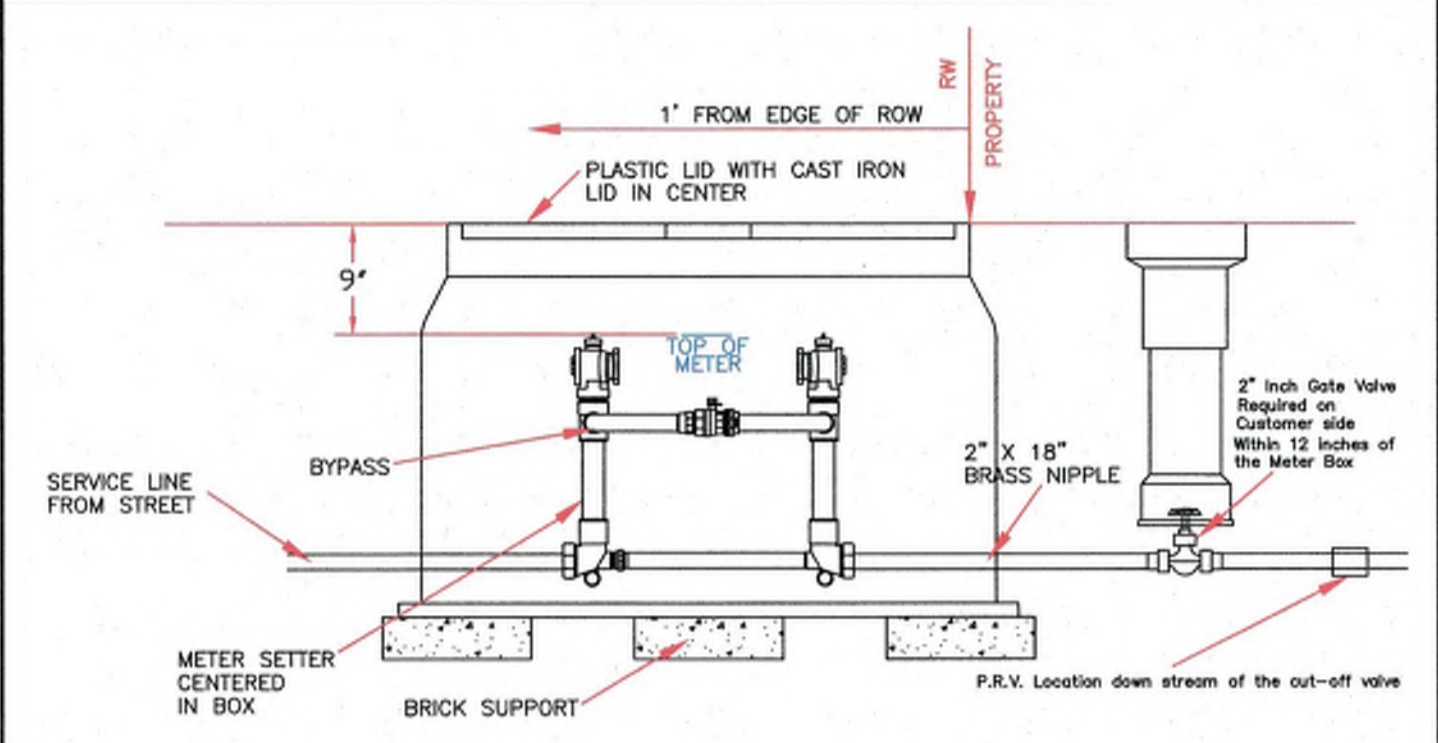
NOTES:
1. TAPPING SLEEVE SHALL BE ROMAC BRAND MODEL SST MANUFACTURED WITH 316 STAINLESS STEEL.



NOTE: TAPPING SLEEVE SHALL BE 316 STAINLESS STEEL ONLY

TYPICAL TAPPING SLEEVE AND VALVE ASSEMBLY DETAIL (W) 5
NO SCALE

| REVISIONS | | | |
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| SYM. | DESCRIPTION | DATE | BY |
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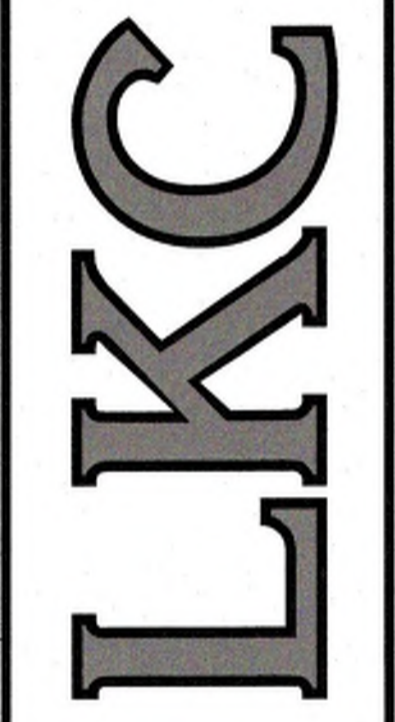


- METER AND PRIVATE SERVICE LINE NOT IN CONTRACT UNLESS SPECIFIED
- INCLUDE STONE IN PRICE OF METER BOX.
- METER SETTER SIZE AS NOTED ON PLANS.
- ALL BRASS FITTINGS SHALL BE COMPRESSION TYPE.

TYPICAL 2" METER SETTER INSTALLATION DETAIL (W) 18
NO SCALE

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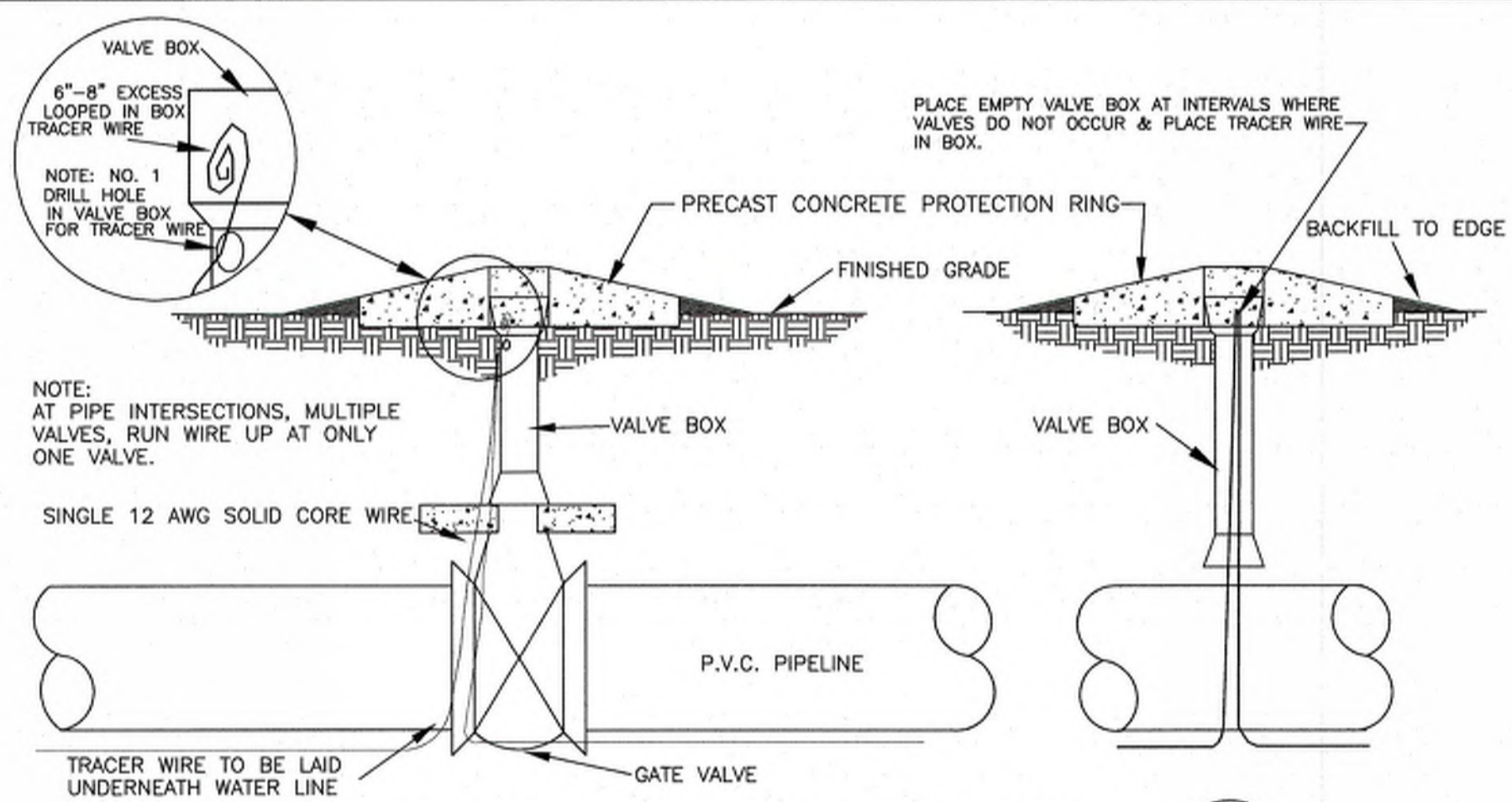
DATE: JULY, 2020
DESIGNED: FDW
DRAWN: FDW
CHECKED: TAC
NO.

D-06

GENERAL WATERLINE NOTES

- CONTRACTOR SHALL REPAIR ALL WATER LATERALS, AND MAINS DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL REPORT IMMEDIATELY ALL WATER MAIN AND LATERAL BREAKS TO HARNETT COUNTY DISPATCHER AND TO THE OWNER'S REPRESENTATIVE AND SHALL INITIATE IMMEDIATE REPAIRS TO HARNETT COUNTY STANDARDS. CONTRACTOR SHALL NOT OPERATE HARNETT COUNTY WATER MAIN VALVES WITHOUT HARNETT COUNTY APPROVAL AND SHALL COORDINATE ALL VALVE CLOSINGS WITH THE HARNETT COUNTY WATER AUTHORITY. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH WATER SYSTEM IN THE AREA SO AS TO LESSEN THE CHANCE OF SERVICE INTERRUPTION.
- THE CONTRACTOR SHALL NOT USE HOUSE HOSE BIBBS OR ANY OTHER METHOD OF BLOW OFF WHICH ALLOWS DOMESTIC WATER CONTAINING SEDIMENTS OR HIGH LEVELS OF CHLORINE TO PASS THRU RESIDENT'S METERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES RESULTING FROM ALLOWING "DIRTY" WATER TO ENTER RESIDENT'S PLUMBING SYSTEM, SUCH AS WATER HEATERS, STAINED CLOTHING, CLOGGED SCREENS, ETC.

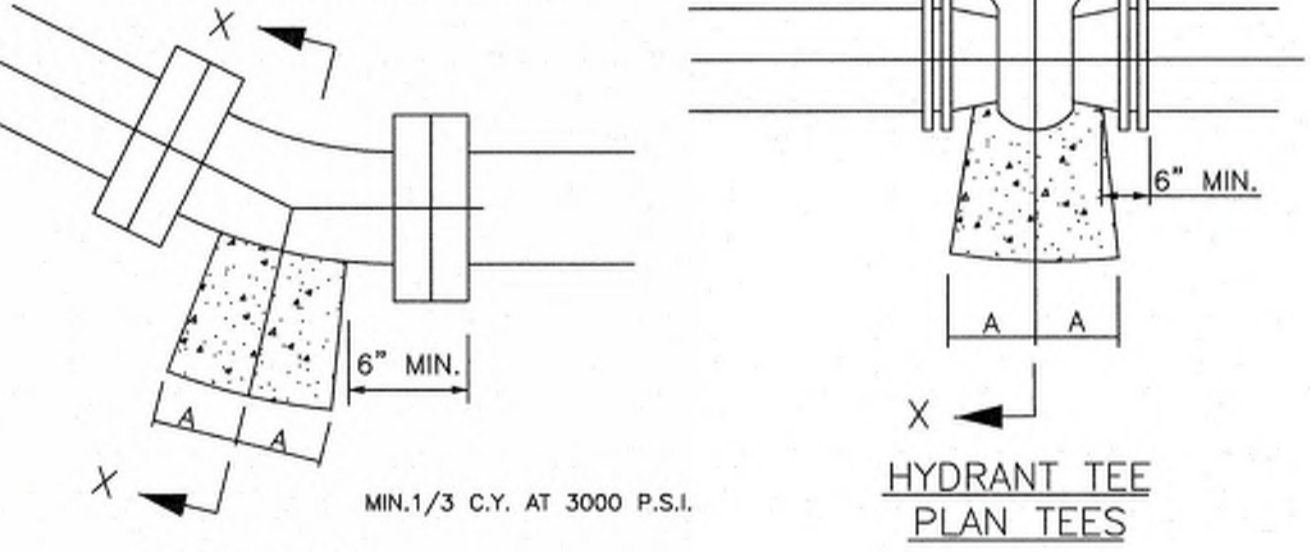
FOR CONSTRUCTION



TYPICAL TRACER WIRE INSTALLATION DETAIL (W) 3
NO SCALE

- NOTES:
- DRILL HOLE IN VALVE BOX TO INSERT TRACER WIRE, BRING UP TO INSIDE AND ROLL UP AT LEAST 6"-8" EXCESS
 - PLACE TRACER WIRE IN VALVE BOX AT 1,000" INTERVALS OR AS NOTED ON THE PLANS, TYPICAL.
 - DO NOT SPLICE WIRE WHEN BEGINNING A NEW SPOOL. INSTEAD INSTALL A VALVE BOX AND ATTACH EACH WIRE WITH A BRASS SCREW TO THE VALVE BOX.

- NOTES:
- CONCRETE SHALL BE 3,000 PSI MIN.
 - CONCRETE FOR THRUST BLOCKING SHALL BE KEPT FAIRLY DRY, THUS MAKING THE CONCRETE WEDGE SHAPE MORE EASILY FORMED WITH THE WIDEST PART (BLOCKING AREA) AGAINST UNDISTURBED SOIL.
 - NO CONCRETE SHALL COVER ANY BOLTS OR GLANDS.
 - ALL PIPING AND ACCESSORIES TO BE WRAPPED WITH 10 MIL. POLYETHYLENE PRIOR TO POURING BLOCKING.
 - VOLUME OF THRUST BLOCKING SHALL BE AS SHOWN ON THE THRUST BLOCKING SCHEDULE.



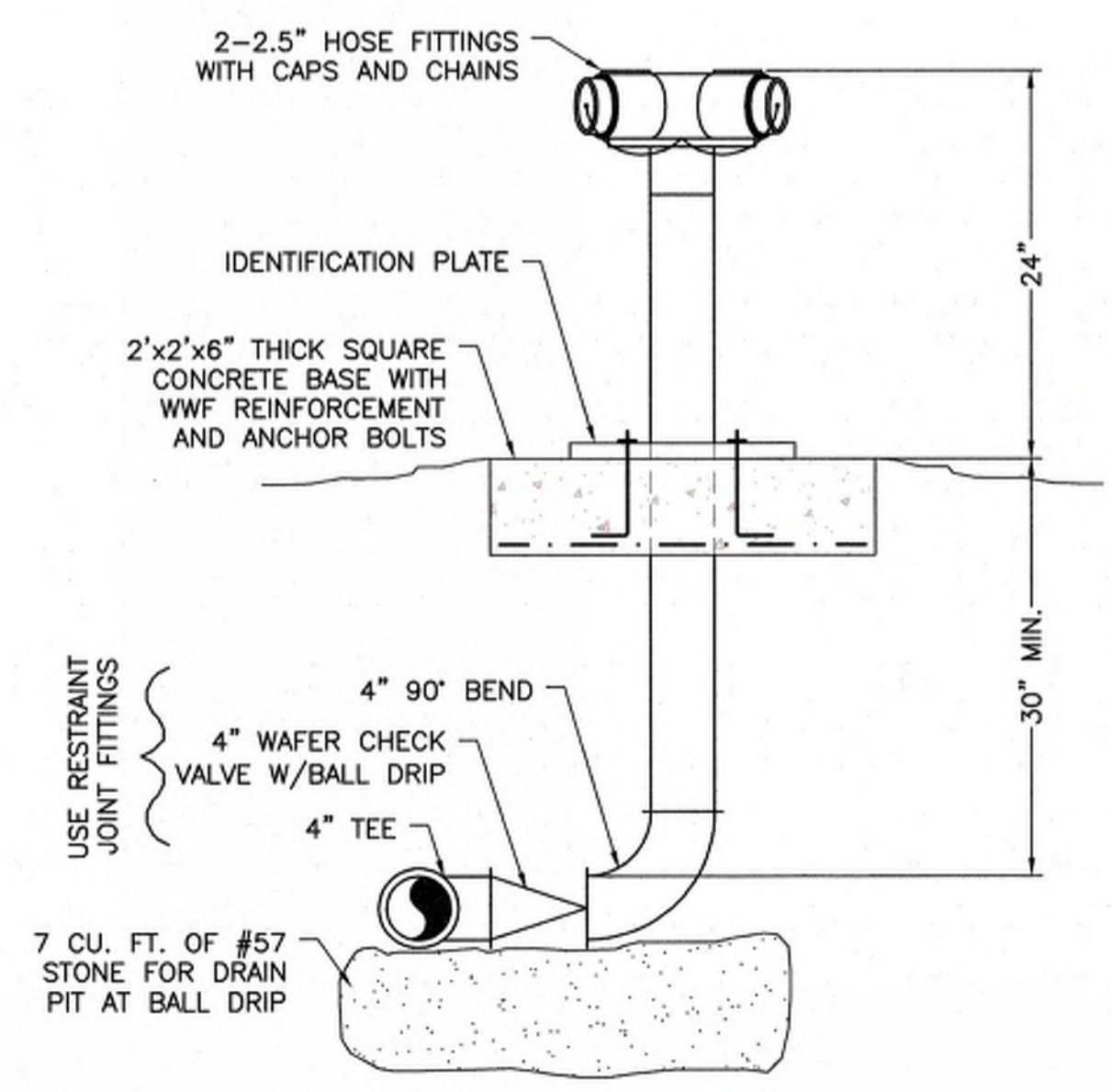
MIN. 1/3 C.Y. AT 3000 P.S.I.

| PIPE SIZE | 90° BEND | | 45° BEND | | 22 1/2° BEND | | 11 1/4° BEND | | TEE | | | PLUG | |
|-----------|----------|-----|----------|-----|--------------|-----|--------------|-----|-----|-----|-----|------|--|
| | A | B | A | B | A | B | A | B | C | D | C | D | |
| 4" | 8" | 12" | 8" | 8" | 6" | 6" | 6" | 6" | 8" | 9" | 10" | 16" | |
| 6" | 10" | 12" | 8" | 10" | 8" | 8" | 8" | 8" | 10" | 10" | 12" | 18" | |
| 8" | 15" | 13" | 10" | 10" | 8" | 8" | 8" | 8" | 10" | 12" | 12" | 24" | |
| 10" | 16" | 14" | 10" | 12" | 6" | 10" | 6" | 10" | 11" | 14" | 14" | 25" | |
| 12" | 20" | 16" | 12" | 14" | 8" | 12" | 8" | 12" | 14" | 16" | 16" | 30" | |
| 14" | 22" | 18" | 14" | 16" | 10" | 14" | 10" | 14" | 16" | 18" | 18" | 34" | |
| 16" | 26" | 20" | 16" | 18" | 12" | 16" | 12" | 16" | 18" | 20" | 20" | 36" | |

TYPICAL THRUST BLOCK DETAIL (W) 7
NO SCALE

| LAYING CONDITIONS | DESCRIPTION | PROJECT USE |
|-------------------|--|--|
| TYPE 1 | FLAT BOTTOM UNDISTURBED EARTH TRENCH, LOOSE BACKFILL | NOT USED. |
| TYPE 2 | FLAT BOTTOMED UNDISTURBED EARTH TRENCH, BACKFILL LIGHTLY CONSOLIDATED TO CENTERLINE OF PIPE. | NOT USED. |
| TYPE 3 | PIPE BEDDED IN 4" MINIMUM JOB EXCAVATED MATERIAL. BACKFILL LIGHTLY CONSOLIDATED TO TOP OF PIPE. | ALL DUCTILE IRON GRAVITY SEWER LINE. |
| TYPE 4 | PIPE BEDDED IN SAND, GRANULAR MATERIAL OR GRADED GRAVEL TO THE DEPTH OF 1/8 PIPE DIAMETER, 4" MIN. JOB EXCAVATED MATERIAL COMPACTED TO 4" ABOVE TOP OF PIPE. (APPROX. 95% STANDARD PROCTOR, AASHTO T-99) | ALL PVC WATER LINE AND PVC FORCE MAIN. |
| TYPE 5 | PIPE BEDDED TO ITS CENTERLINE IN COMPACTED GRANULAR MATERIAL 4" MIN. UNDER PIPE. COMPACTED GRANULAR OR SAND MATERIAL TO 4" ABOVE TOP OF PIPE. (APPROX. 95% STANDARD PROCTOR, AASHTO T-99) | ALL PVC GRAVITY SEWER LINE. |

TYPICAL LAYING CONDITIONS DETAIL (W) 11
NO SCALE



SIAMESE FIRE DEPARTMENT CONNECTION (W) 6
NO SCALE

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| REVISIONS | | | |
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| SYM. | DESCRIPTION | DATE | BY |
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2019 HRW REQUIRED UTILITY NOTES
(REVISION 7 - NOVEMBER 2019)

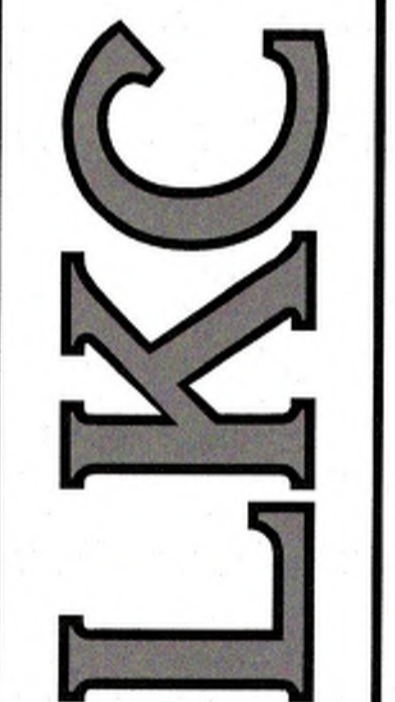
SANITARY SEWER

- A. THE PROFESSIONAL ENGINEER (PE) SHALL OBTAIN AND SUPPLY A COPY OF THE SEWER PERMIT FOR THE CONSTRUCTION AND OPERATION OF THE WASTEWATER COLLECTION SYSTEM TO THE UTILITY CONTRACTOR BEFORE THE CONSTRUCTION OF THE SANITARY SEWER LINE, SEWER LIFT STATION AND ASSOCIATED FORCE MAIN SHALL BEGIN. THE UTILITY CONTRACTOR MUST POST A COPY OF THE SEWER PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) ON SITE PRIOR TO THE START OF CONSTRUCTION. THE PERMIT MUST BE MAINTAINED ON SITE DURING THE CONSTRUCTION OF THE SEWER SYSTEM IMPROVEMENTS.
- B. THE UTILITY CONTRACTOR SHALL NOTIFY HARNETT REGIONAL WATER (HRW) AND THE PROFESSIONAL ENGINEER (PE) AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. THE UTILITY CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH MR. ALAN MOSS, HRW UTILITY CONSTRUCTION INSPECTOR AT LEAST TWO (2) DAYS BEFORE WEEKEND WORK IS NOT PERMITTED BY HRW.
- C. THE PROFESSIONAL ENGINEER (PE) SHALL PROVIDE HRW WITH A SET OF NCDEQ APPROVED PLANS MARKED "RELEASED FOR CONSTRUCTION" AT LEAST TWO DAYS PRIOR TO CONSTRUCTION COMMENCING. HRW WILL STAMP THE APPROVED PLANS AS "RELEASED FOR CONSTRUCTION" AND PROVIDE COPIES TO THE UTILITY CONTRACTOR. THE REGISTERED LAND SURVEYOR (RLS) SHALL STAKE OUT ALL LOT CORNERS AND ESTABLISH GRADE STAKES FOR THE PROPOSED FINISH GRADE FOR EACH STREET AND SEWER LINE BEFORE THE UTILITY CONTRACTOR BEGINS CONSTRUCTION OR INSTALLATION OF THE MANHOLES, SANITARY SEWER GRAVITY LINE(S), SEWER LIFT STATIONS AND/OR SANITARY SEWER FORCE MAIN(S). THE GRADE STAKES SHOULD BE SET WITH A CONSISTENT OFFSET FROM THE STREET CENTERLINE SO AS NOT TO INTERFERE WITH THE STREET GRADING OR UTILITY CONSTRUCTION.
- D. THE UTILITY CONTRACTOR SHALL PROVIDE THE HRW UTILITY CONSTRUCTION INSPECTOR WITH MATERIAL SUBMITTALS AND SHOP DRAWINGS FOR ALL PROJECT MATERIALS PRIOR TO THE CONSTRUCTION OF ANY GRAVITY SEWER LINE(S), MANHOLE(S), SEWER LIFT STATION(S) AND ASSOCIATED FORCE MAIN(S) IN HARNETT COUNTY. THE MATERIALS TO BE USED ON THE PROJECT MUST MEET THE ESTABLISHED SPECIFICATIONS OF HRW AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION. ALL SUBSTANDARD MATERIALS OR MATERIALS NOT APPROVED FOR USE IN HARNETT COUNTY FOUND ON THE PROJECT SITE MUST BE REMOVED IMMEDIATELY WHEN NOTIFIED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.
- E. THE SANITARY SEWER LATERAL CONNECTIONS SHOULD BE INSTALLED 90° (PERPENDICULAR) TO THE SANITARY SEWER GRAVITY LINES WITH SCHEDULE 40 PVC PIPE. HRW REQUIRES THE UTILITY CONTRACTOR TO PROVIDE THE PROFESSIONAL ENGINEER (PE) WITH ACCURATE MEASUREMENTS FOR LOCATING SANITARY SEWER SERVICE LATERAL AND ASSOCIATED EACH SANITARY SEWER CLEAN-OUT. THESE MEASUREMENTS SHOULD BE TAKEN FROM THE NEAREST DOWNSTREAM MANHOLE UP ALONG THE SANITARY SEWER MAIN TO THE IN-LINE WYE FITTING (OR TAPPING SADDLE) AND THEN ANOTHER MEASUREMENT FROM THE IN-LINE WYE FITTING (OR TAPPING SADDLE) TO THE 4" X 4" LONG SWEEP COMBINATION WYE FITTING AT THE BOTTOM OF THE SEWER CLEAN-OUT STACK. THESE FIELD MEASUREMENTS MUST BE PROVIDED TO THE PROFESSIONAL ENGINEER (PE) IN THE RED LINE DRAWINGS FROM THE UTILITY CONTRACTOR FOR PROPER DOCUMENTATION IN THE AS-BUILT RECORD DRAWINGS SUBMITTED TO HRW.
- F. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED SANITARY SEWER GRAVITY LINE(S), SANITARY SEWER FORCE MAIN(S), SANITARY SEWER SERVICE LATERAL(S) AND ALL ASSOCIATED SEWER CLEAN-OUT(S) IN THE PROPOSED SANITARY SEWER SYSTEM FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW SANITARY SEWER LINE(S) AND ASSOCIATED APPURTENANCES HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW. ALL NEW SANITARY SEWER LINES MUST HAVE AT LEAST THREE (3 FT.) FEET OF COVER AND EXTEND UNDER ALL EXISTING WATER MAIN AND STORM WATER LINES WITH A LEAST 24" OF VERTICAL CLEARANCE BELOW THE BOTTOM OF THE EXISTING WATER MAIN AND STORM WATER LINES.
- G. THE SANITARY SEWER GRAVITY LINE(S), MANHOLE(S), SANITARY SEWER SERVICE LATERAL(S) AND ASSOCIATED CLEAN-OUT(S) SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE HARNETT REGIONAL WATER. THE SANITARY SEWER GRAVITY LINE(S) MUST PNEUMATICALLY PRESSURE TESTED WITH COMPRESSED AIR AT 5 PSI AND THE SANITARY SEWER FORCE MAIN(S) MUST HYDROSTATICALLY PRESSURE TESTED WITH WATER OR AIR AT 200 PSI. SANITARY SEWER MANHOLES MUST BE VACUUM TESTED TO 10 INCHES OF MERCURY AND CANNOT DROP BELOW 9 INCHES IN 60 SECONDS FOR 4 FT. DIAMETER MANHOLES, 75 SECONDS FOR 5 FT. DIAMETER MANHOLES. ALL TESTS MENTIONED ABOVE MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR AND ENGINEER.
- H. PRIOR TO ACCEPTANCE, ALL SEWER SERVICE LATERALS WILL BE INSPECTED TO INSURE THAT THEY ARE INSTALLED AT THE PROPER DEPTH. ALL SEWER CLEAN-OUTS MUST BE INSTALLED SO THE 4" X 4" LONG SWEEP COMBINATION WYE IS AT LEAST THREE (3') FEET BUT NO MORE THAN FOUR (4') FEET BELOW THE FINISH GRADE UNLESS OTHERWISE APPROVED IN WRITING BY HRW. THE SEWER CLEANOUTS SHALL HAVE A FOUR (4") SCHEDULE 40 PVC PIPE STUBBED UP FROM BOTH ENDS OF THE 4" X 4" LONG SWEEP COMBINATION WYE TO BE AT LEAST TWO (2') FEET ABOVE THE FINISH GRADE AND COVER EACH END WITH A FOUR (4") INCH TEMPORARY CAP TO KEEP OUT DIRT, SAND, ROCKS, WATER AND CONSTRUCTION DEBRIS. THE VERTICAL STACK ON EACH CLEAN-OUT MUST BE PROVIDED WITH A CONCRETE DONUT FOR PROTECTION.
- I. ONCE THE SANITARY SEWER GRAVITY LINE(S) HAVE BEEN INSTALLED, PNEUMATICALLY PRESSURE TESTED AND IN PLACE FOR AT LEAST 30 DAYS, THE UTILITY CONTRACTOR MUST CONTACT THE HRW UTILITY CONSTRUCTION INSPECTOR TO WITNESS THE MANDREL TEST ON EACH PVC SANITARY SEWER GRAVITY LINE. THE UTILITY CONTRACTOR WILL NOTIFY HRW TO SCHEDULE THE MANDREL TESTING. THE MANDREL AND PROVING RING MUST BE SUPPLIED BY THE UTILITY CONTRACTOR. CLOSED CIRCUIT VIDEO CAMERA INSPECTIONS (AT THE UTILITY CONTRACTOR'S EXPENSE) MAY BE REQUIRED BY THE HRW UTILITY CONSTRUCTION INSPECTOR IF THE MANDREL AND MIRROR TAMPING TESTING CANNOT BE COMPLETED WITH SATISFACTORY RESULTS. THE SANITARY SEWER LINES SHOULD BE FLUSHED CLEAN USING A SEWER BALL OF THE PROPER DIAMETER BEFORE ANY MANDREL TESTING CAN BE PERFORMED. THE UTILITY CONTRACTOR IS RESPONSIBLE TO REMOVE ALL DIRT, SAND, SILT, GRAVEL, MUD AND DEBRIS FROM THE NEWLY CONSTRUCTED SEWER LINES EXERCISING CARE TO KEEP THE HARNETT REGIONAL WATER'S EXISTING SANITARY SEWER SYSTEMS CLEAN. SANITARY SEWER FORCE MAIN(S) SHALL BE PRESSURE TESTED TO 200 PSI FOR AT LEAST 2 HOURS LIKE WATER LINES.
- J. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE THE NEWLY INSTALLED SANITARY SEWER SYSTEM(S) FOR OTHER UTILITY COMPANIES AND THEIR CONTRACTORS UNTIL THE NEW SANITARY SEWER SYSTEM(S) HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW.
- K. HRW REQUIRES THAT THE UTILITY CONTRACTOR INSTALL TRACER WIRE IN THE TRENCH WITH ALL SANITARY SEWER FORCE MAINS. THE TRACER WIRE SHALL BE 12 GA. INSULATED, SOLID COPPER CONDUCTOR AND IT SHALL BE TERMINATED AT THE TOP OF THE VALVE BOXES OR MANHOLES. NO SPLICED WIRE CONNECTIONS SHALL BE MADE UNDERGROUND ON TRACER WIRE INSTALLED IN HARNETT COUNTY. THE TRACER WIRE MAY BE SECURED WITH DUCT TAPE TO THE TOP OF THE PIPE BEFORE BACKFILLING. THE TRACER WIRE IS NOT REQUIRED FOR THE GRAVITY SEWER LINE(S) BETWEEN MANHOLES.
- L. THE UTILITY CONTRACTOR SHALL PROVIDE THE PROFESSIONAL ENGINEER (PE) AND HRW UTILITY CONSTRUCTION INSPECTOR WITH A SET OF RED LINE DRAWINGS IDENTIFYING THE COMPLETE SEWER SYSTEM INSTALLED FOR EACH PROJECT. THE RED LINE DRAWINGS SHOULD IDENTIFY THE MATERIALS, PIPE SIZES AND APPROXIMATE DEPTHS OF THE SEWER LINES AS WELL AS THE INSTALLED LOCATIONS OF THE MANHOLE(S), SANITARY SEWER GRAVITY LINE(S), SANITARY SEWER SERVICE LATERALS, CLEAN-OUTS, SEWER LIFT STATION(S) AND ASSOCIATED FORCE MAIN(S). THE RED LINE DRAWINGS SHOULD CLEARLY IDENTIFY ANY DEVIATIONS FROM THE NCDEQ APPROVED PLANS. ALL CHANGE ORDERS MUST BE APPROVED BY HRW AND THE PROFESSIONAL ENGINEER (PE) IN WRITING AND PROPERLY DOCUMENTED IN THE RED LINE FIELD DRAWINGS.
- M. PRIOR TO THE COMMENCEMENT OF ANY WORK WITHIN ESTABLISHED UTILITY EASEMENTS OR NCDOT RIGHT-OF-WAYS THE UTILITY CONTRACTOR IS REQUIRED TO NOTIFY ALL CONCERNED UTILITY COMPANIES IN ACCORDANCE WITH G.S. 87-102. THE UTILITY CONTRACTOR MUST CALL THE NC ONE CALL CENTER AT 811 OR (800) 632-4949 TO VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. EXISTING UTILITIES SHOWN IN THESE PLANS ARE TAKEN FROM MAPS FURNISHED BY VARIOUS UTILITY COMPANIES AND HAVE NOT BEEN PHYSICALLY LOCATED BY THE P.E. (I.E. TELEPHONE, CABLE, WATER, SEWER, ELECTRICAL POWER, FIBER OPTIC, NATURAL GAS, ETC.).
- N. THE UTILITY CONTRACTOR SHALL SPOT DIG TO EXPOSE EACH EXISTING UTILITY PIPE OR LINE WHICH MAY CONFLICT WITH CONSTRUCTION OF PROPOSED SANITARY SEWER LINE EXTENSIONS WELL IN ADVANCE TO VERIFY LOCATIONS OF THE EXISTING UTILITIES. THE UTILITY CONTRACTOR SHALL PROVIDE BOTH HORIZONTAL AND VERTICAL CLEARANCES TO THE PROFESSIONAL ENGINEER (PE) TO ALLOW THE PE TO ADJUST THE SANITARY SEWER LINE DESIGN IN ORDER TO AVOID CONFLICTS WITH EXISTING UNDERGROUND UTILITIES. THE UTILITY CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER AND BE RESPONSIBLE FOR TEMPORARY RELOCATION OF EXISTING UTILITIES AND/OR SECURING EXISTING UTILITY POLES, PIPES, WIRES, CABLES, SIGNS AND/OR UTILITIES INCLUDING SERVICES IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS DURING SANITARY SEWER LINE INSTALLATION, GRADING AND STREET CONSTRUCTION.
- O. WHEN MAKING A TAP ON AN EXISTING SEWER FORCE MAIN, THE UTILITY CONTRACTOR MUST HAVE A PERMIT FROM THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) PRIOR TO BEGIN THE TAP WORK. THE UTILITY CONTRACTOR SHALL CONDUCT A PNEUMATIC PRESSURE TEST USING COMPRESSED AIR OR OTHER INERT GAS ON THE STAINLESS STEEL TAPPING SLEEVE AND GATE VALVE PRIOR TO MAKING THE TAP ON AN EXISTING SANITARY SEWER FORCE MAIN. THIS PNEUMATIC PRESSURE TEST MUST BE WITNESSED BY THE HRW UTILITY CONSTRUCTION INSPECTOR. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STAINLESS STEEL TAPPING SLEEVE(S) OR APPROVED EQUAL FOR ALL TAPS MADE ON SANITARY SEWER FORCE MAINS IN HARNETT COUNTY. THE UTILITY CONTRACTOR SHALL USE ROMAC BRAND STYLE "CB" SEWER SADDLES WITH STAINLESS STEEL BANDS OR APPROVED EQUAL FOR ALL TAPS MADE ON EXISTING SANITARY SEWER GRAVITY LINES IN HARNETT COUNTY.
- P. THE UTILITY CONTRACTOR SHALL PROVIDE A GREASE TRAP FOR EACH SANITARY SEWER SERVICE LATERAL THAT WILL BE CONNECTED TO A RESTAURANT, FOOD PROCESSING FACILITY AND ANY OTHER COMMERCIAL OR INDUSTRIAL FACILITY AS REQUIRED BY THE HARNETT COUNTY FAT, OIL & GREASE ORDINANCE. THE GREASE TRAP MUST BE RATED FOR A MINIMUM CAPACITY OF AT LEAST 1,000 GALLONS UNLESS OTHERWISE APPROVED IN WRITING BY THE HRW PRE-TREATMENT COORDINATOR. GARBAGE DISPOSALS SHOULD NOT BE INSTALLED IN HOMES AND BUSINESSES THAT DISCHARGE WASTEWATER TO THE HARNETT REGIONAL WATER'S SANITARY SEWER SYSTEM AS THEY ARE NOT APPROVED BY HRW.
- Q. EACH SEWER LIFT STATION MUST BE PROVIDED WITH THREE PHASE POWER (AT LEAST 480 VOLTS) AND CONSTRUCTED TO MEET THE MINIMUM REQUIREMENTS OF THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE (NEC) AND HARNETT REGIONAL WATER STANDARD SPECIFICATIONS AND DETAILS. IF THREE PHASE POWER IS NOT AVAILABLE FROM THE POWER COMPANY OTHER ARRANGEMENTS MUST BE APPROVED BY HRW ENGINEERING PRIOR TO THE START OF CONSTRUCTION.
- R. WHERE A NEW SANITARY SEWER FORCE MAIN IS CONNECTED TO AN EXISTING MANHOLE IN THE HARNETT REGIONAL WATER SEWER COLLECTIONS SYSTEM, THE UTILITY CONTRACTOR MUST PROVIDE A PROTECTIVE COATING (COAL TAR EPOXY) FOR THE INTERIOR SURFACES OF THE MANHOLE TO PROTECT IT AGAINST CORROSION, EROSION AND DETERIORATION FROM THE RELEASE OF SEWER GASES SUCH AS METHANE AND HYDROGEN SULFIDE.
- S. THE SEWER LIFT STATION DESIGN AND ASSOCIATED EQUIPMENT MUST MEET OR EXCEED THE MINIMUM REQUIREMENTS FOR HARNETT COUNTY SEWER LIFT STATIONS 2009 EDITION. EACH SANITARY SEWER LIFT STATION MUST BE CONSTRUCTED WITH AN ALL-WEATHER ACCESS ROAD THAT IS AT LEAST 20 FEET WIDE. THE LIFT STATION SITE MUST BE COVERED WITH WEED BLOCKING MATERIAL AND AT LEAST SIX (6") INCHES OF # 57 STONE (CRUSH AND RUN).
- T. ONCE A SEWER LIFT STATION HAS BEEN INSTALLED, THE UTILITY CONTRACTOR IS RESPONSIBLE TO SCHEDULE A DRAW DOWN TEST WITH HRW ENGINEERING AND COLLECTIONS STAFF, THE PROFESSIONAL ENGINEER (PE), THE ELECTRICIAN, THE ORIGINAL EQUIPMENT MANUFACTURER'S (OEM) REPRESENTATIVES [FOR BOTH THE PUMPS AND THE GENERATOR]. THIS DRAW DOWN TEST MUST BE COMPLETED WITH POWER SUPPLIED FROM THE ELECTRICAL UTILITY COMPANY AND WITH POWER SUPPLIED BY THE EMERGENCY GENERATOR WITH SATISFACTORY RESULTS BEFORE FINAL INSPECTIONS ARE CONDUCTED BY THE HRW UTILITY CONSTRUCTION INSPECTOR.
- U. ONCE THE UTILITY CONTRACTOR COMPLETES THE INSTALLATION OF A SEWER LIFT STATION, THE PROFESSIONAL ENGINEER (PE) MUST SUBMIT THE SEWER PERMIT CERTIFICATION AND AS-BUILT RECORD DRAWINGS TO THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND HRW FOR FINAL APPROVAL. THE UTILITY CONTRACTOR MUST SUPPLY HRW ENGINEERING STAFF WITH THREE ORIGINAL OPERATION & MAINTENANCE (O&M) MANUALS ALONG WITH THE ASSOCIATED PUMP CURVES AND ELECTRICAL SCHEMATICS FOR THE ASSOCIATED SEWER LIFT STATION EQUIPMENT INCLUDING ALL WARRANTY INFORMATION AND DOCUMENTATION.
- V. ONCE THE UTILITY CONTRACTOR COMPLETES THE INSTALLATION OF A SEWER LIFT STATION, THE DEVELOPER MUST PAY HRW THE ESTABLISHED SYSTEM CONTROL AND DATA ACQUISITION (SCADA) FEES BEFORE THE SCADA SYSTEM WILL BE INSTALLED AT THE NEW SEWER LIFT STATION. THE SCADA SYSTEM MUST BE INSTALLED AND OPERATIONAL BEFORE THE UTILITIES MAY BE ACCEPTED BY HRW AND PLACED INTO OPERATION.
- W. HRW REQUIRES THE UTILITY CONTRACTOR TO PROVIDE ALL NECESSARY EQUIPMENT AND DEVICES FOR THE TESTING AND INSPECTION OF THE SANITARY SEWER SYSTEM. THE EQUIPMENT AND DEVICES MAY INCLUDE BUT NOT LIMITED TO LAMPING WITH MIRRORS, MANDRELS, SEWER BALLS, PLUGS, AIR COMPRESSORS AND ASSOCIATED COMPRESSED AIR LINES. IF THE HRW UTILITY CONSTRUCTION INSPECTOR DEEMS THAT A CLOSED CIRCUIT VIDEO CAMERA INSPECTION OF THE NEWLY CONSTRUCTED SEWER SYSTEM IS NECESSARY, THEN ALL COSTS FOR THE CLOSED CIRCUIT CAMERA INSPECTION WILL BE THE RESPONSIBILITY OF THE UTILITY CONTRACTOR. ALL CLOSED CIRCUIT VIDEO CAMERA INSPECTIONS MUST BE RECORDED ON VHS TAPES THAT WILL BE RELEASED TO HRW FOR RECORD KEEPING, REVIEW AND APPROVAL OF THE SEWER SYSTEM.
- X. ANY USE OF SEWER PLUGS TO TEMPORARILY BLOCK HARNETT REGIONAL WATER'S EXISTING SANITARY SEWER LINES MUST BE COORDINATED WITH THE HRW COLLECTIONS SUPERVISOR AT LEAST TWO (2) DAYS IN ADVANCE OF INSTALLING THE PLUGS. THE SEWER PLUGS MUST BE REMOVED AS SOON AS POSSIBLE ONCE THE NEW SANITARY SEWER LINES HAVE BEEN INSPECTED, PRESSURE TESTED, MANDREL TESTED, APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW TO ALLOW THE SEWER TO FLOW AS DESIGNED IN HARNETT REGIONAL WATER'S EXISTING SANITARY SEWER LINES OR WHEN SO ORDERED BY THE HRW COLLECTIONS SUPERVISOR TO LIMIT INTERRUPTIONS TO THE NORMAL FLOW OF THE SANITARY SEWER COLLECTION SYSTEM(S). THE UTILITY CONTRACTOR MUST PROVIDE THE PUMPS HOSES AND NECESSARY CONNECTORS FOR A TEMPORARY PUMP AROUND SETUP IF REQUIRED BY THE HRW COLLECTIONS SUPERVISOR. MR. RANDOLPH CLEGG, HRW COLLECTIONS SUPERVISOR MAY BE CONTACTED BETWEEN 8:00 AM AND 5:00 PM MONDAY THROUGH FRIDAY AT (910) 893-7575 EXTENSION 3241.
- Y. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO LEAKAGE OR DAMAGE RESULTING FROM POOR WORKMANSHIP DURING THE ONE (1) YEAR WARRANTY PERIOD ONCE THE SEWER SYSTEM IMPROVEMENTS HAVE BEEN APPROVED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND ACCEPTED BY HRW. THE UTILITY CONTRACTOR WILL BE RESPONSIBLE FOR ANY AND ALL REPAIRS DUE TO DAMAGES RESULTING FROM FAILURE TO LOCATE THE NEW SANITARY SEWER LINES AND ASSOCIATED APPURTENANCES FOR OTHER UTILITIES AND THEIR CONTRACTORS UNTIL THE SANITARY SEWER LINES HAVE BEEN APPROVED BY NCDEQ AND ACCEPTED BY HRW. HRW WILL PROVIDE MAINTENANCE AND WARRANTY REPAIRS IF NECESSARY DUE TO LACK OF RESPONSE WITHIN 48 HOURS OF NOTIFICATION OF WARRANTY WORK. HRW WILL INVOICE THE DEVELOPER AND/OR UTILITY CONTRACTOR FOR MATERIALS AND LABOR IN SUCH CASES.
- Z. IN DEVELOPMENTS AND PROJECTS THAT REQUIRE UTILITY EASEMENTS TO BE ESTABLISHED FOR FUTURE HRW RIGHT-OF-WAY, THE REGISTERED LAND SURVEYOR (RLS) MUST PROVIDE THE HRW RIGHT-OF-WAY AGENT WITH AN OFFICIAL COPY OF THE RECORDED PLAT AND LEGAL DESCRIPTION OF THE SAID EASEMENT AS RECORDED WITH THE HARNETT COUNTY REGISTER OF DEEDS. THE RECORDED DOCUMENTS MUST BE PROVIDED TO THE HRW RIGHT-OF-WAY AGENT BEFORE THE UTILITY IMPROVEMENTS WITHIN THE SAID EASEMENT CAN BE PLACED INTO OPERATION. ANY AND ALL EASEMENTS THAT MUST BE OBTAINED FROM ADJOINING PROPERTY OWNERS MUST BE PROVIDED TO HRW BY THE DEVELOPER AT NO COST TO HARNETT COUNTY. THE FINAL INSPECTION OF ALL SANITARY SEWER SYSTEM IMPROVEMENTS CANNOT BE SCHEDULED WITH HRW UNTIL THE STREETS HAVE BEEN PAVED; THE RIGHTS-OF-WAY AND UTILITY EASEMENTS HAVE BEEN SEEDED AND STABILIZED WITH AN ADEQUATE STAND OF GRASS IN PLACE TO PREVENT EROSION ISSUES ON SITE.
- AA. THE ENGINEER OF RECORD IS RESPONSIBLE TO INSURE THAT CONSTRUCTION IS, AT ALL TIMES, IN COMPLIANCE WITH ACCEPTED SANITARY ENGINEERING PRACTICES AND APPROVED PLANS AND SPECIFICATIONS. NO FIELD CHANGES TO THE APPROVED PLANS ARE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL BY HRW. A COPY OF EACH ENGINEER'S FIELD REPORT IS TO BE SUBMITTED TO HRW AS EACH SUCH INSPECTION IS MADE ON SYSTEM IMPROVEMENTS OR TESTING IS PERFORMED BY THE CONTRACTOR. WATER AND SEWER INFRASTRUCTURE MUST PASS ALL TESTS REQUIRED BY HRW SPECIFICATIONS AND THOSE OF ALL APPLICABLE REGULATORY AGENCIES. THESE TESTS INCLUDE, BUT ARE NOT LIMITED TO: AIR TEST, VACUUM TEST, MANDREL TEST, VISUAL TEST, PRESSURE TEST, BACTERIOLOGICAL TEST, ETC. A HRW INSPECTOR MUST BE PRESENT DURING TESTING AND ALL TEST RESULTS SHALL BE SUBMITTED TO HRW. ALL TESTS MUST BE SATISFIED BEFORE THE FINAL INSPECTION WILL BE SCHEDULED WITH THE HRW INSPECTOR. THE ENGINEER OF RECORD MUST REQUEST IN WRITING TO SCHEDULE THE FINAL INSPECTION ONCE ALL CONSTRUCTION IS COMPLETE. THE DEVELOPER'S ENGINEER OF RECORD AND THE HRW UTILITY CONSTRUCTION INSPECTOR SHALL PREPARE A WRITTEN PUNCH LIST OF ANY DEFECTS OR DEFICIENCIES NOTED DURING THE FINAL INSPECTION, SHOULD ANY EXIST. UPON COMPLETION OF THE PUNCH LIST, THE DEVELOPER'S ENGINEER OF RECORD WILL SCHEDULE ANOTHER INSPECTION. IN THE EVENT THE NUMBER OF INSPECTIONS PERFORMED BY THE HRW EXCEEDS TWO, ADDITIONAL FEES MAY BE ACCESSED TO THE DEVELOPER.



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SANITARY SEWER NOTES

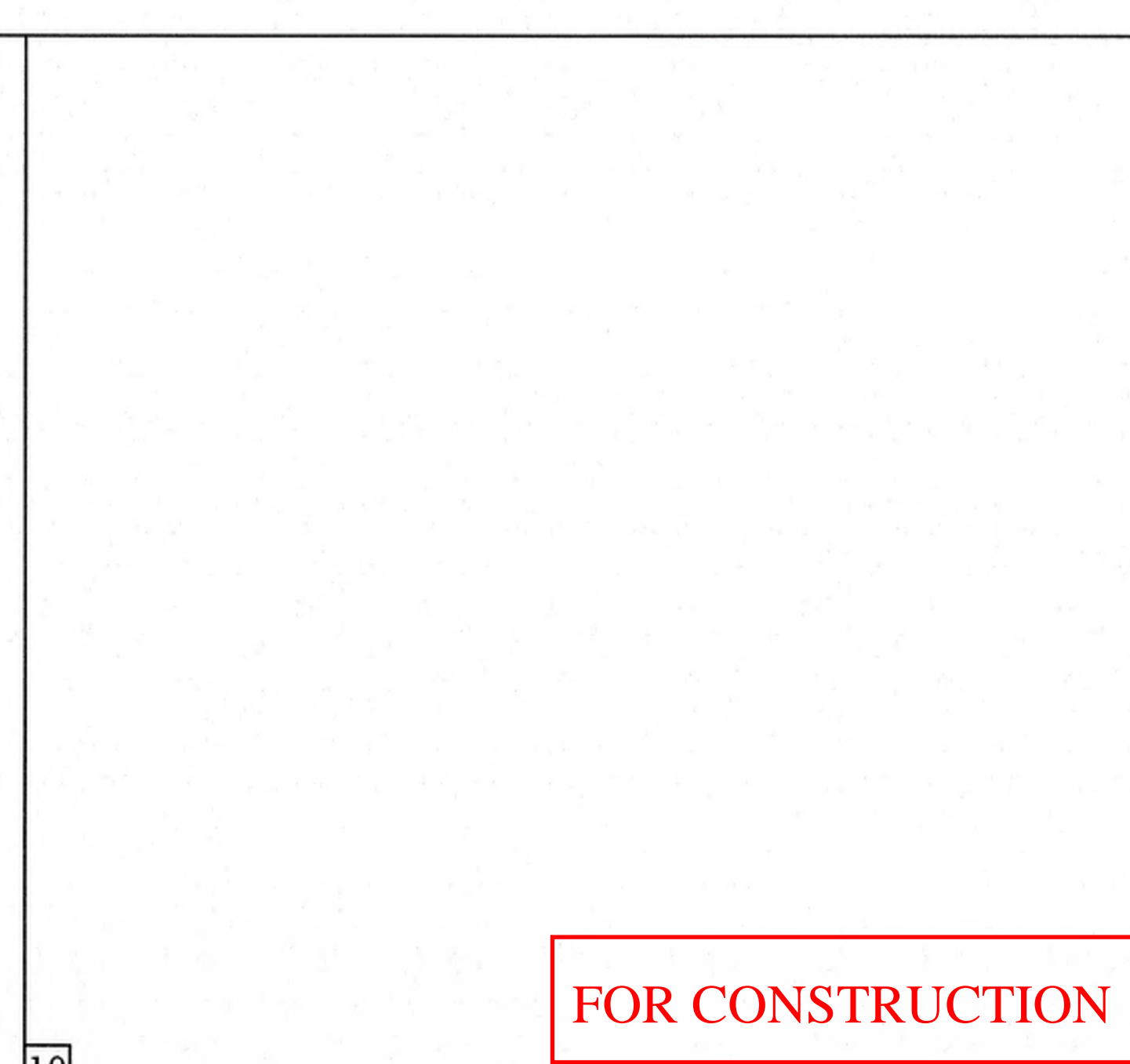
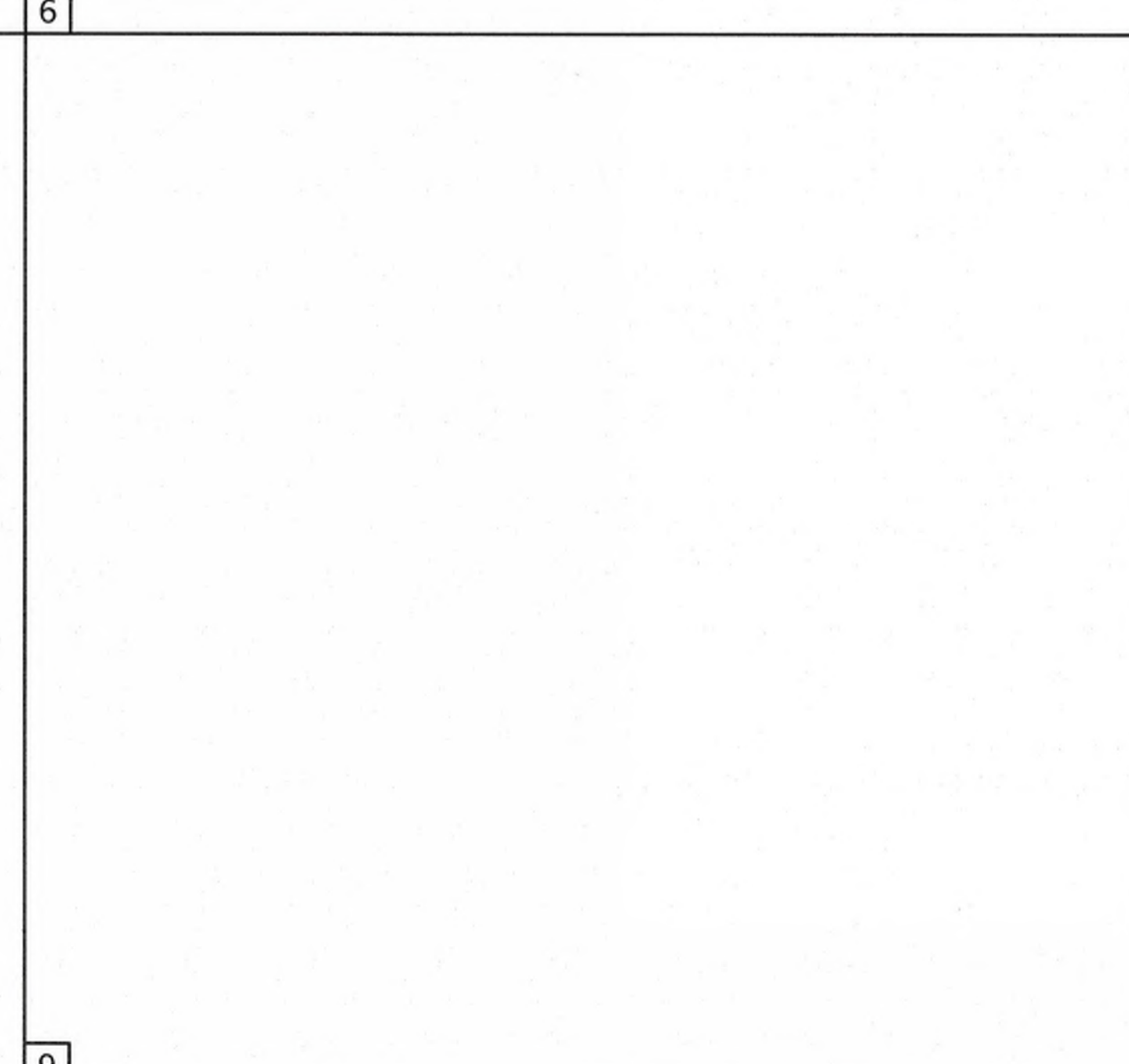
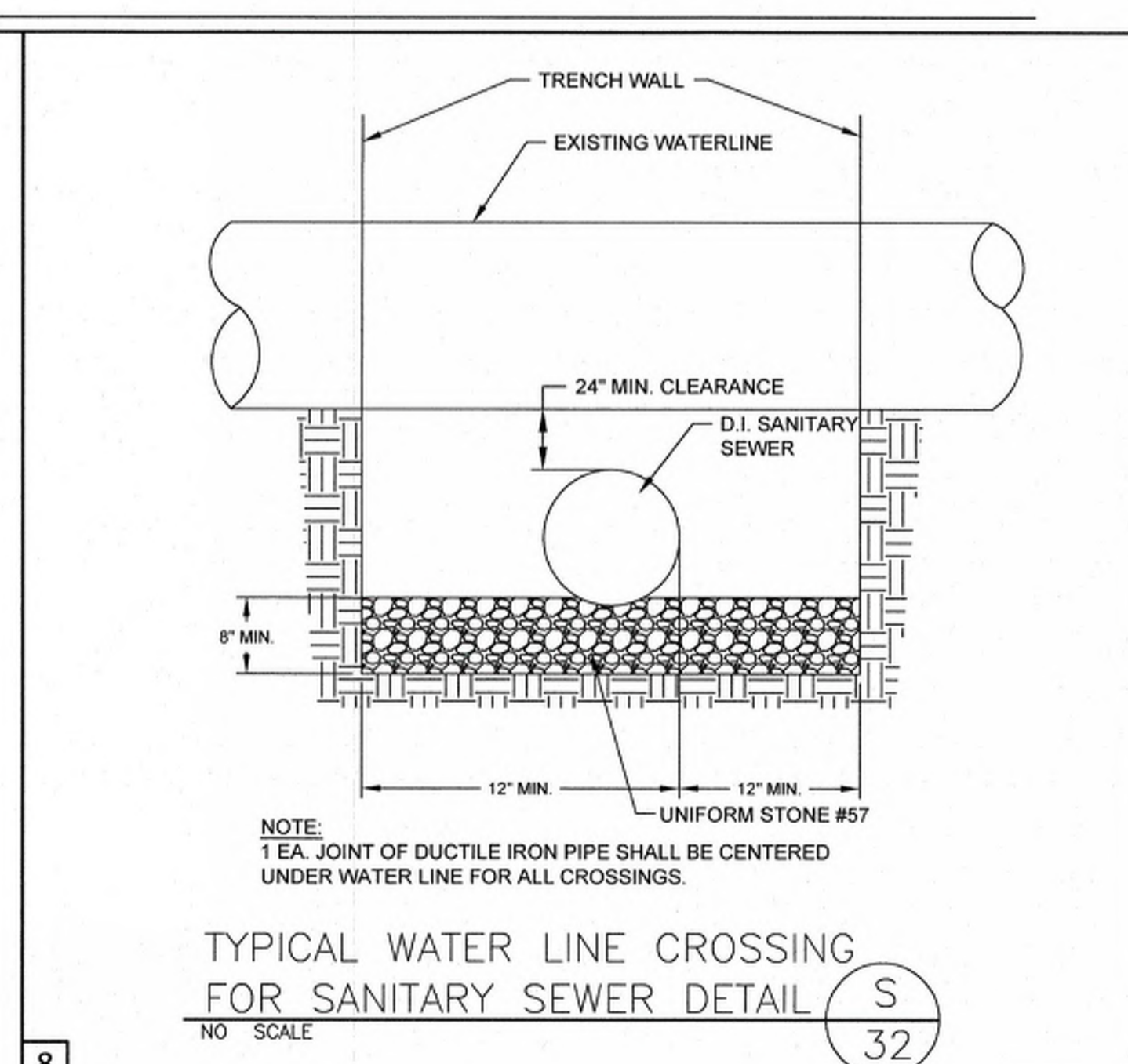
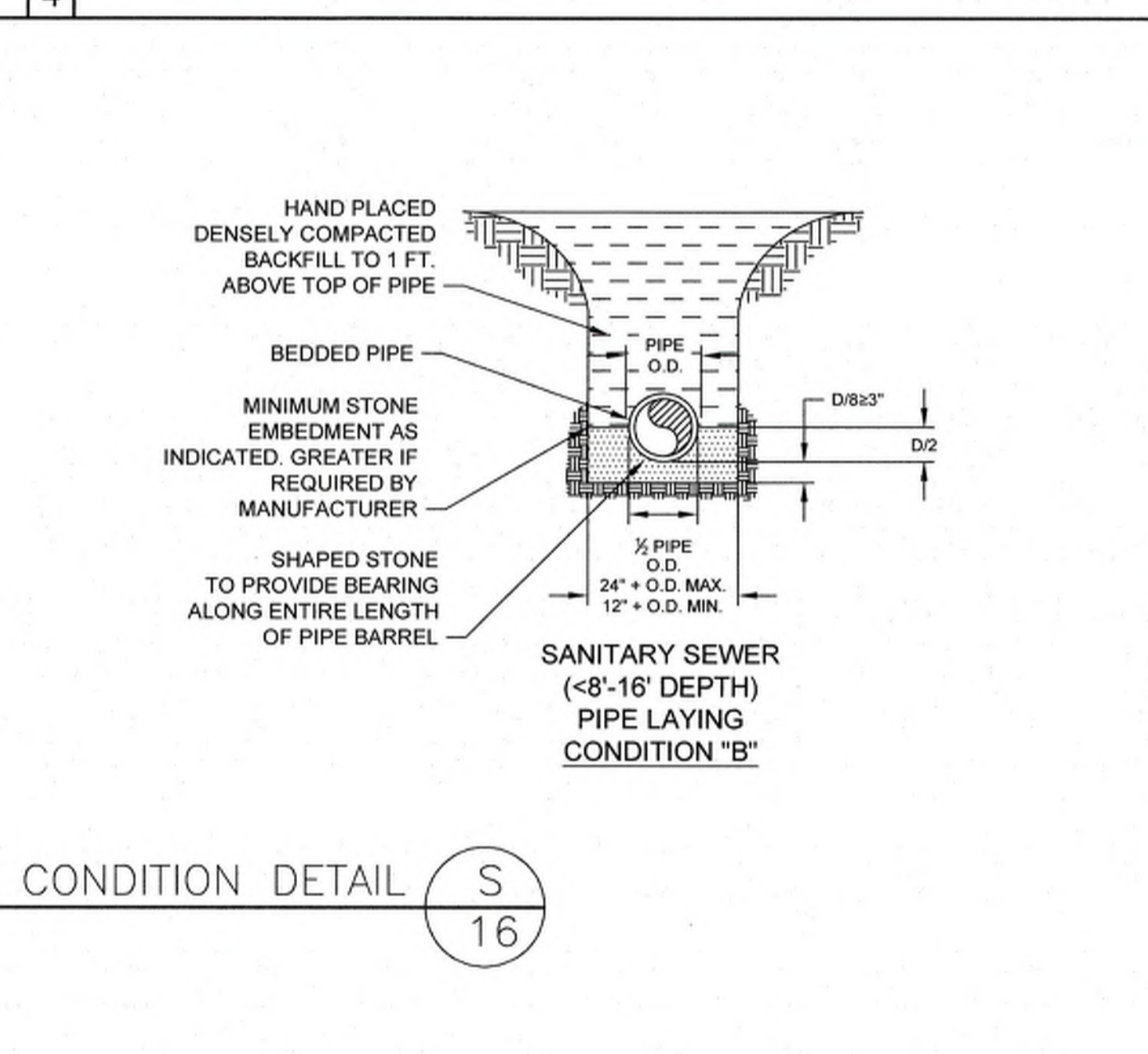
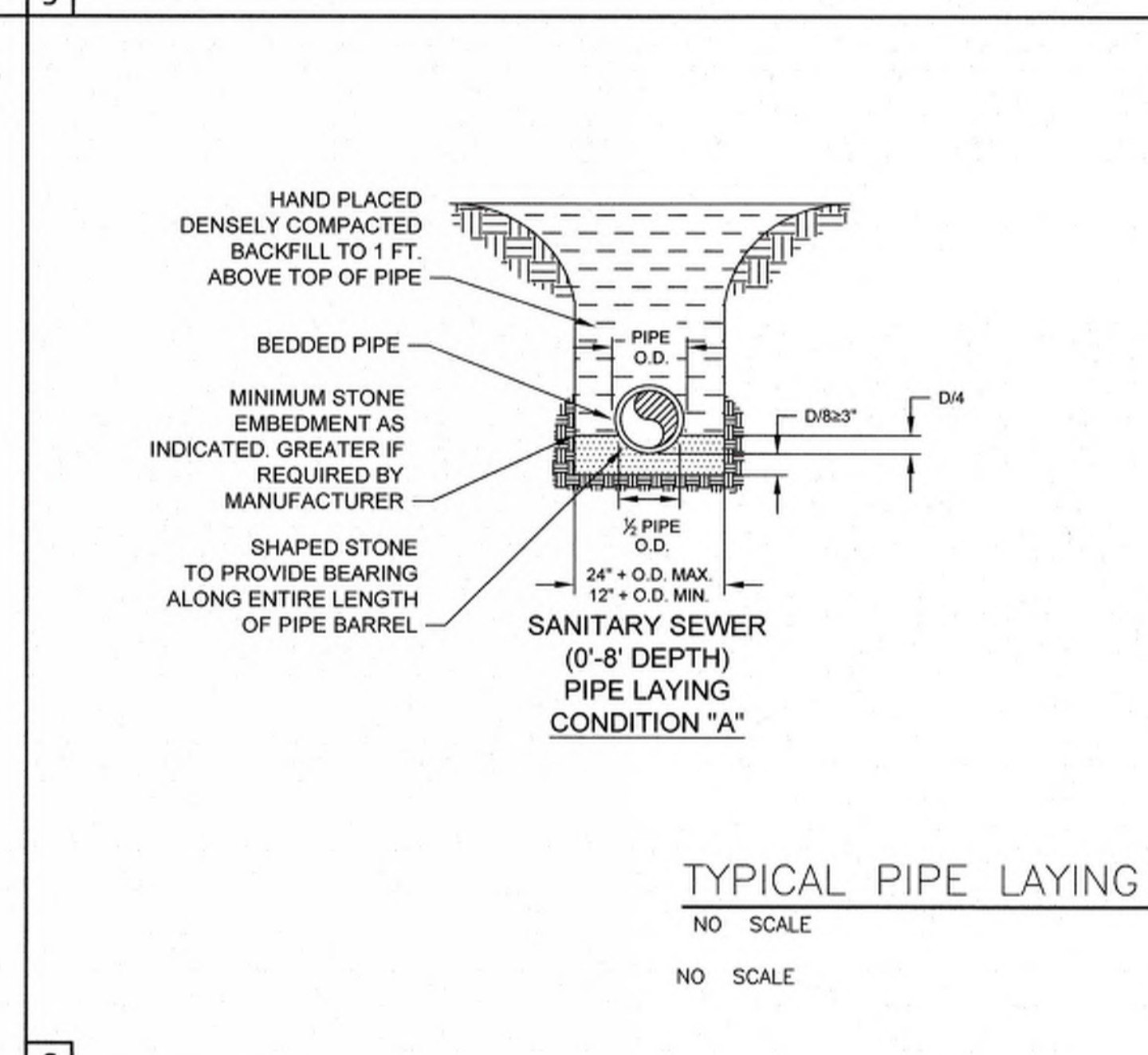
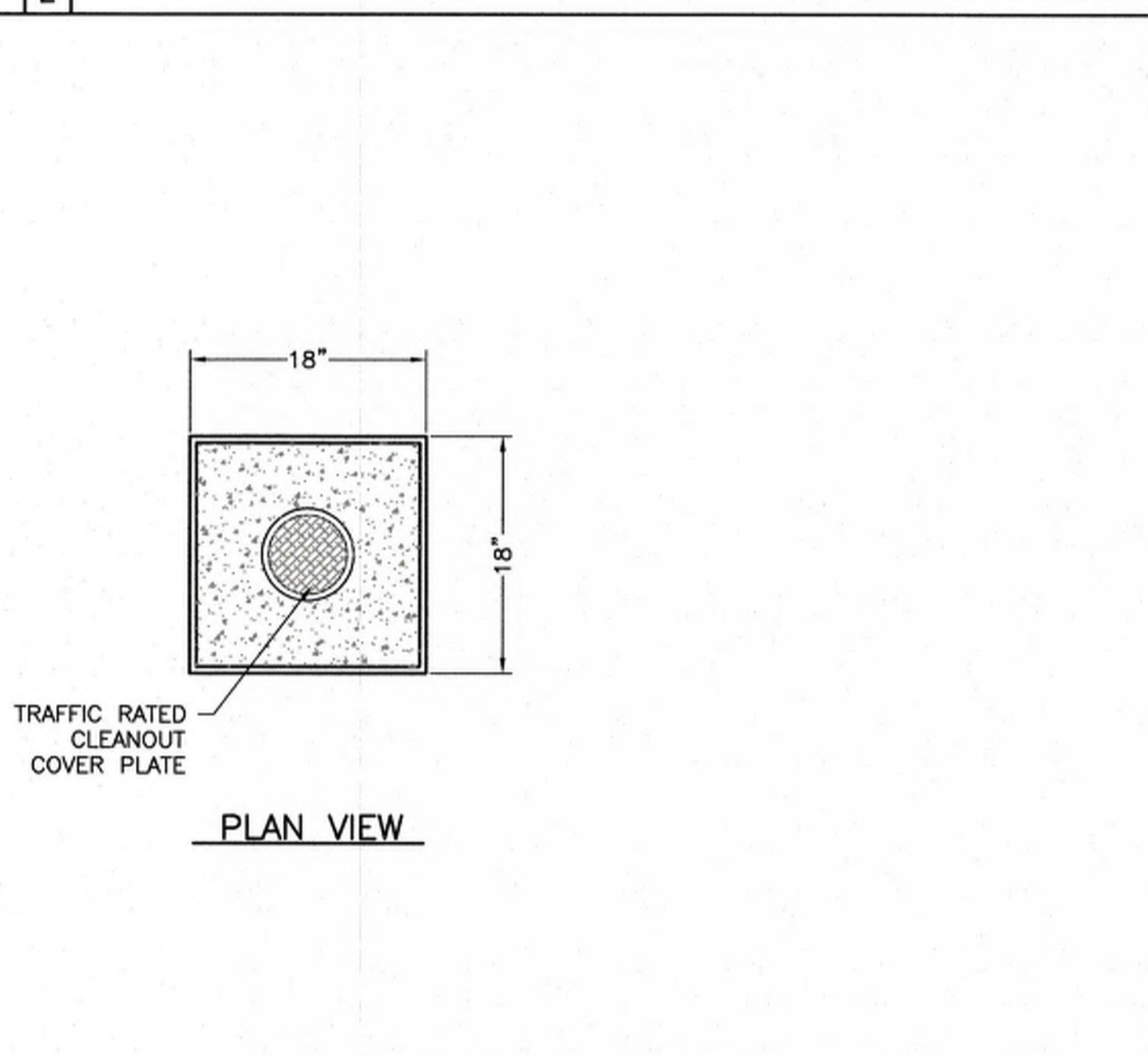
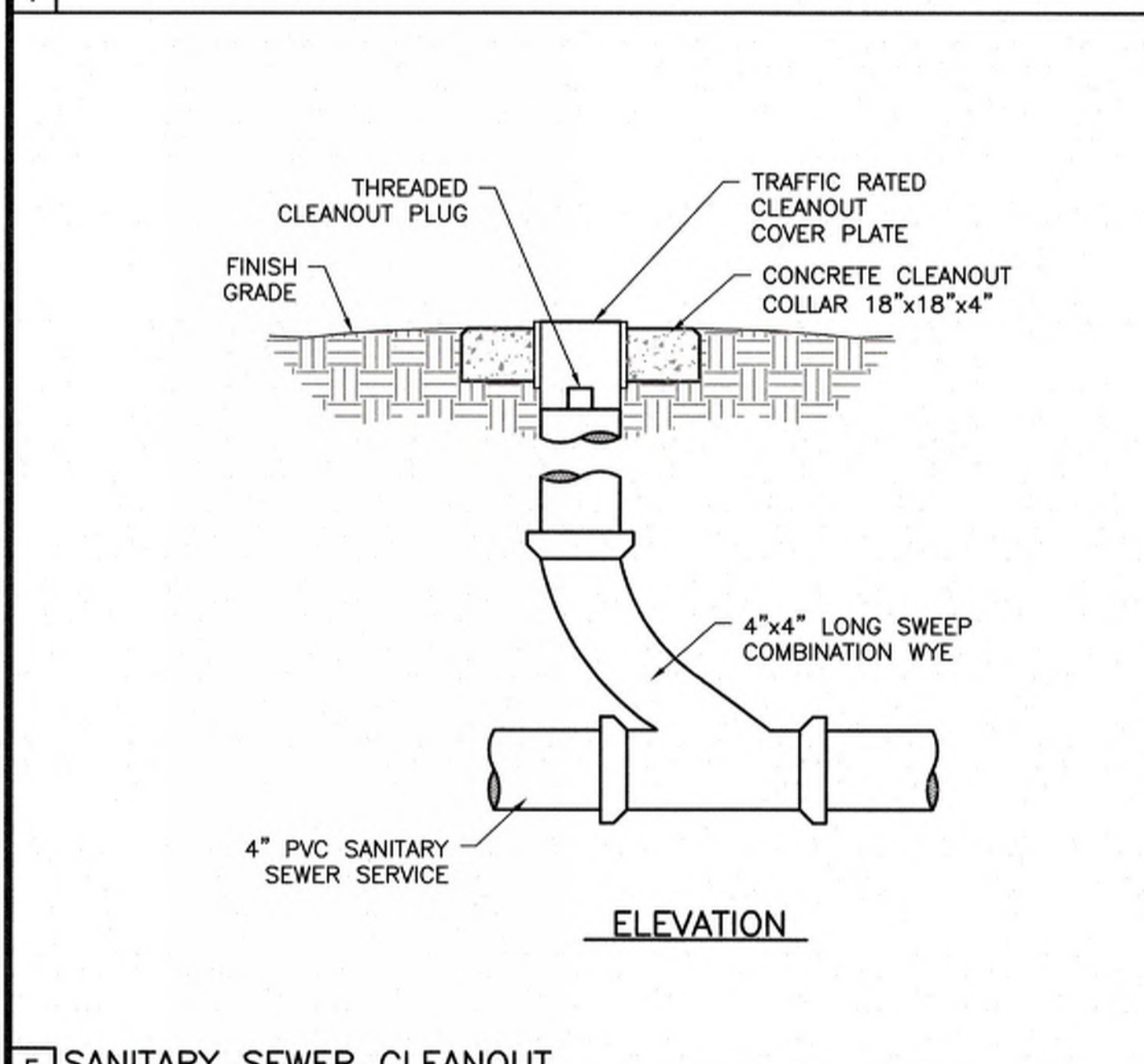
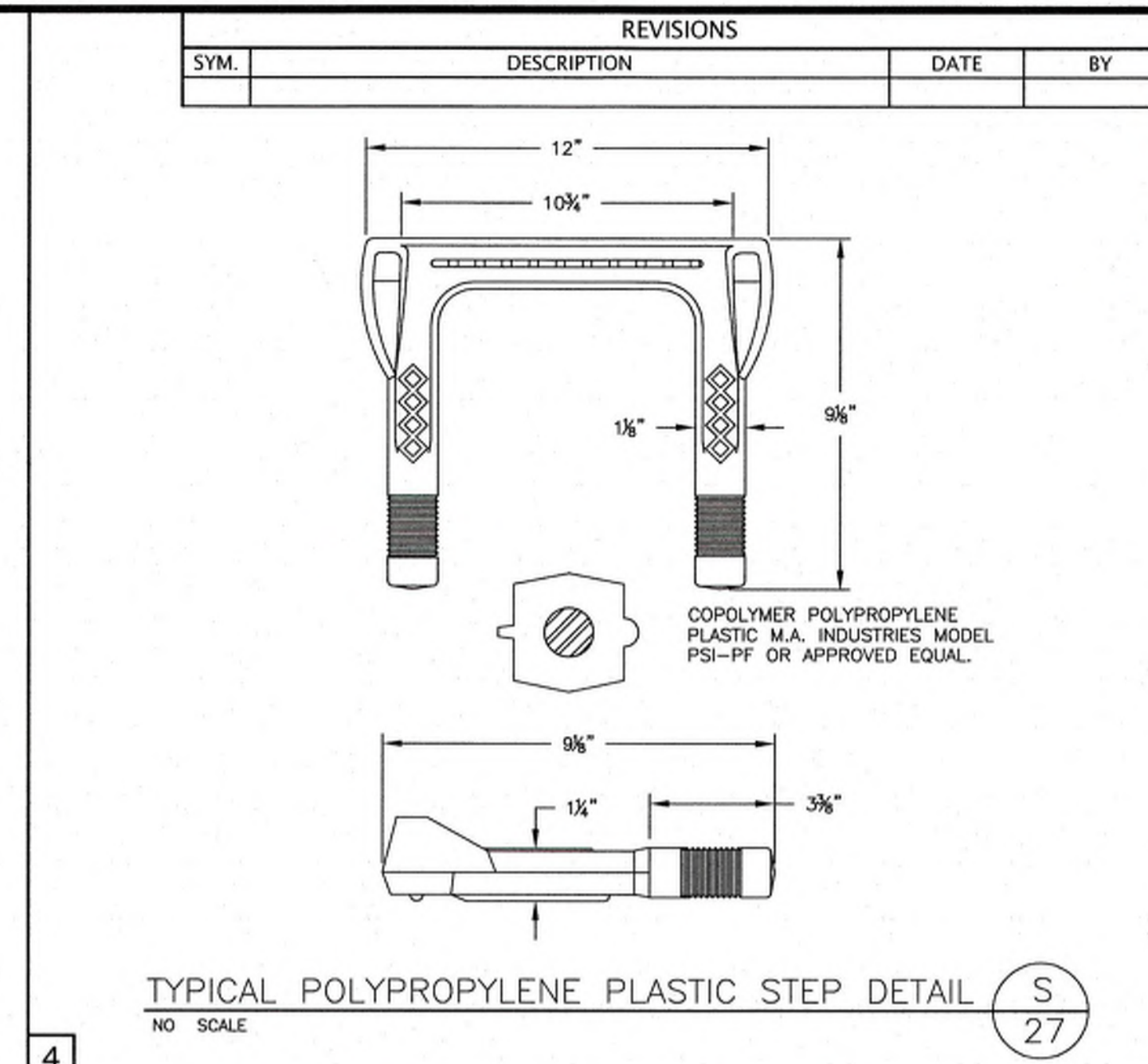
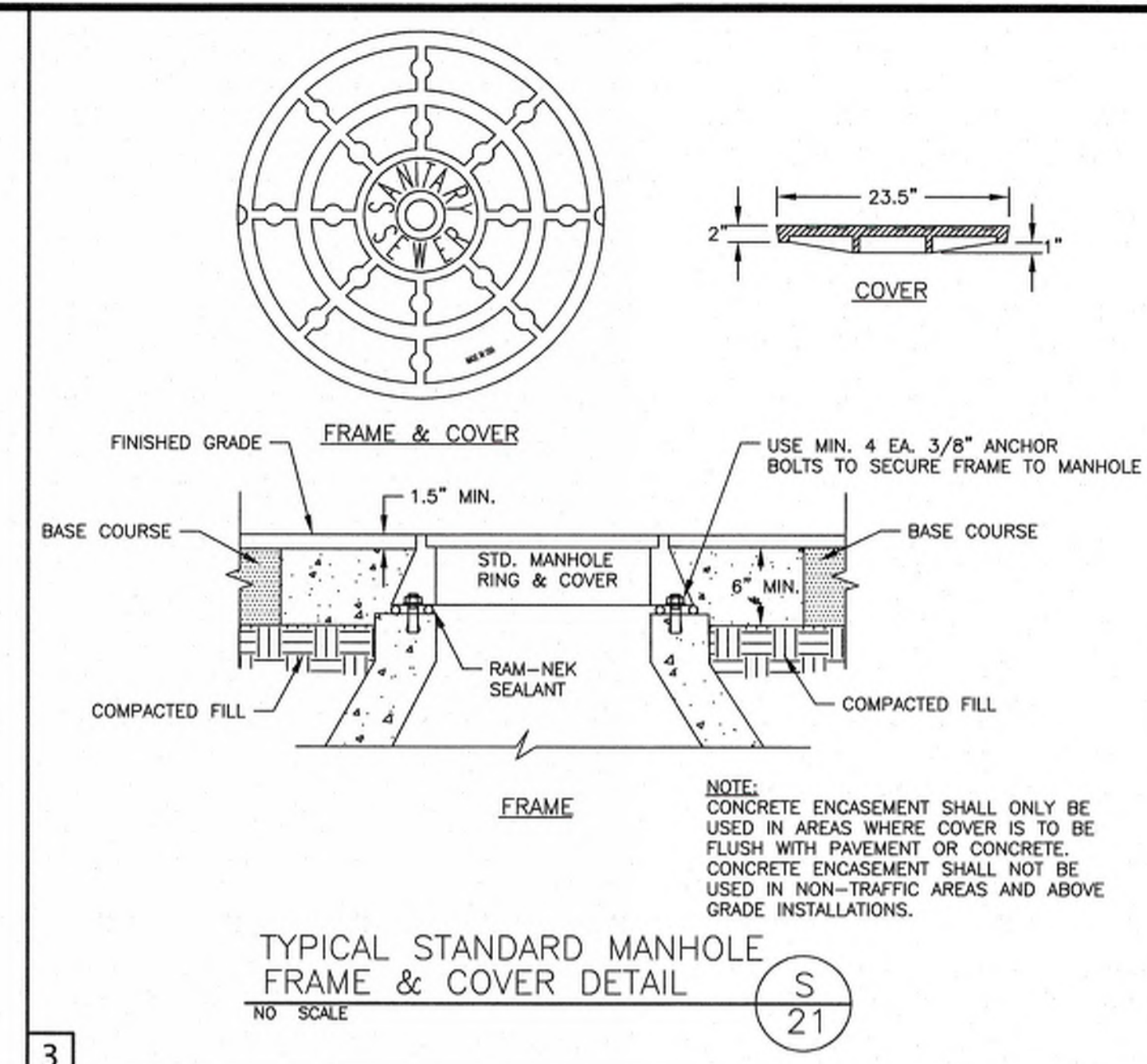
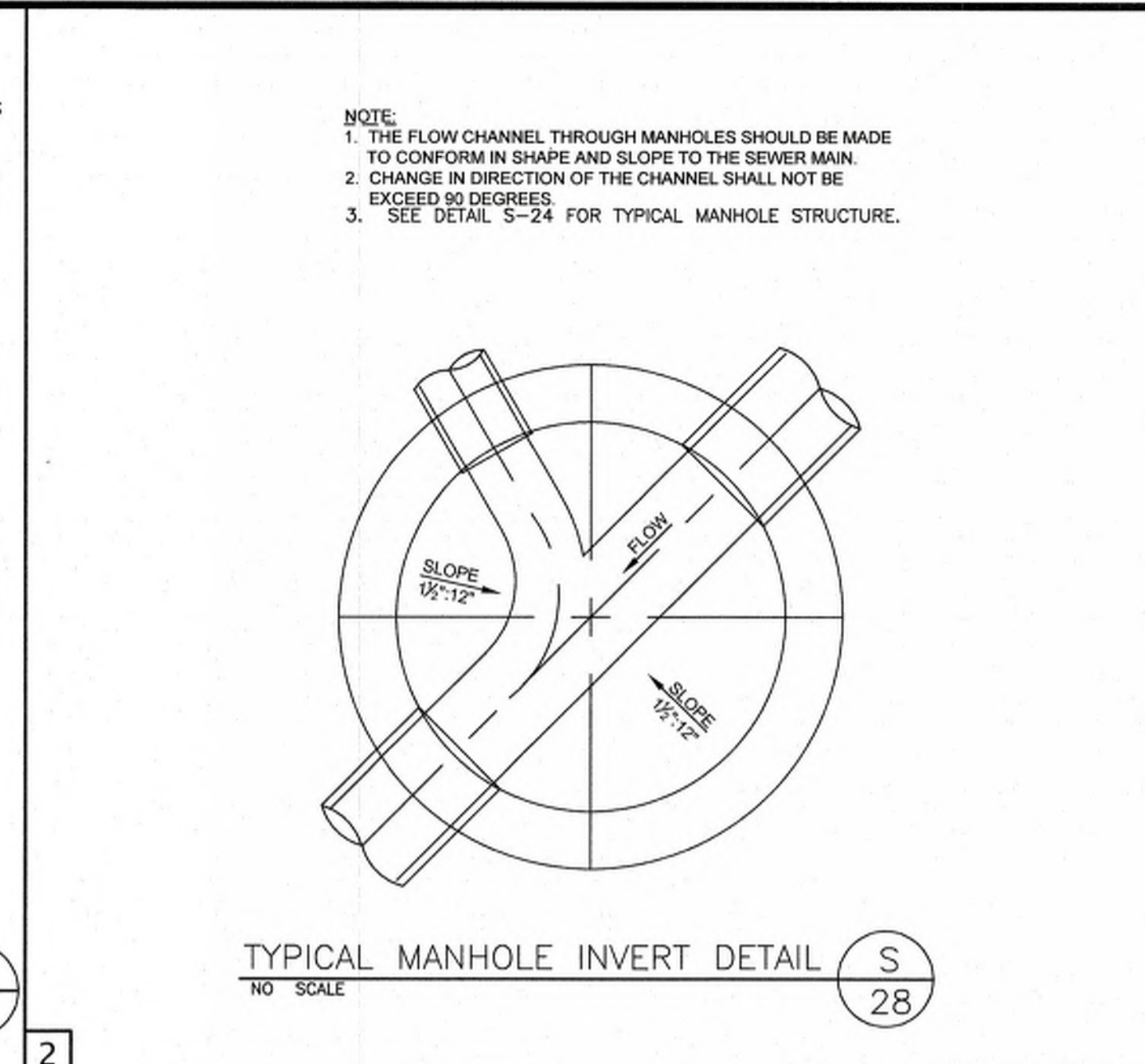
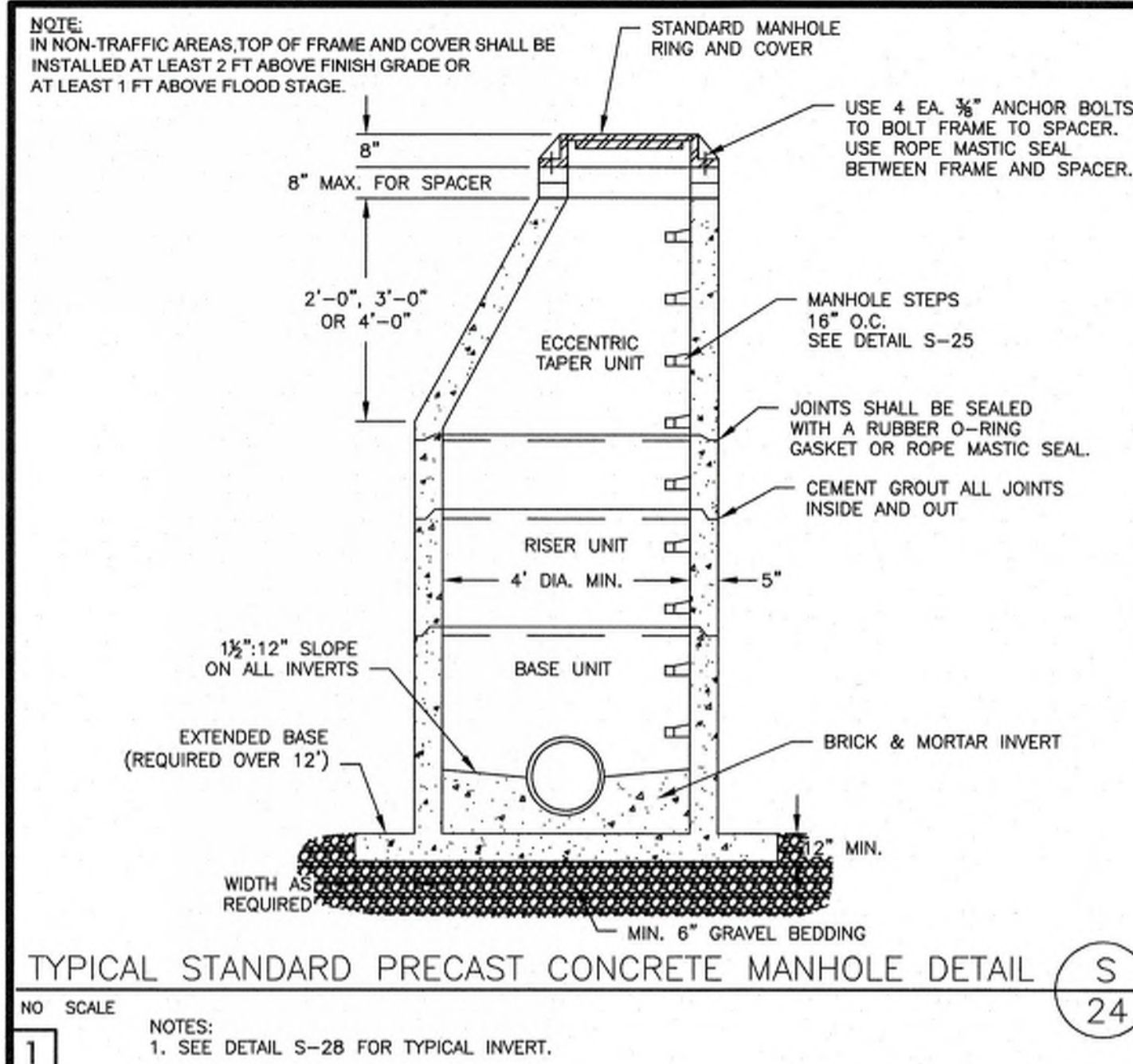
GOOD HOPE HOSPITAL
RENOVATIONS
Erwin, North Carolina

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| DATE: JULY, 2020 |
| DESIGNED: FDW |
| DRAWN: FDW |
| CHECKED: TAC |
| NO. |

FOR CONSTRUCTION

D-08

File: L:\Bogner-19.01 Good Hope Hosp\B00 - Drawings\B10 Design Drawings\02 Civil\STATIONER-19.01 D01 DETAILS.dwg, By: mrook, Plotted: Thu Jul 23, 2020 at 8:55am



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SANITARY SEWER DETAILS

GOOD HOPE HOSPITAL
RENOVATIONS

Erwin, North Carolina

DATE: JULY, 2020
DESIGNED: FDW
DRAWN: FDW
CHECKED: TAC
NO.

FOR CONSTRUCTION

D-09

| REVISIONS | | | |
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| SYM. | DESCRIPTION | DATE | BY |
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LANDSCAPE PLAN

GOOD HOPE HOSPITAL
 RENOVATIONS

DATE: JULY, 2020
 DESIGNED: WLS
 DRAWN: WLS
 CHECKED: TAC
 NO. L-01

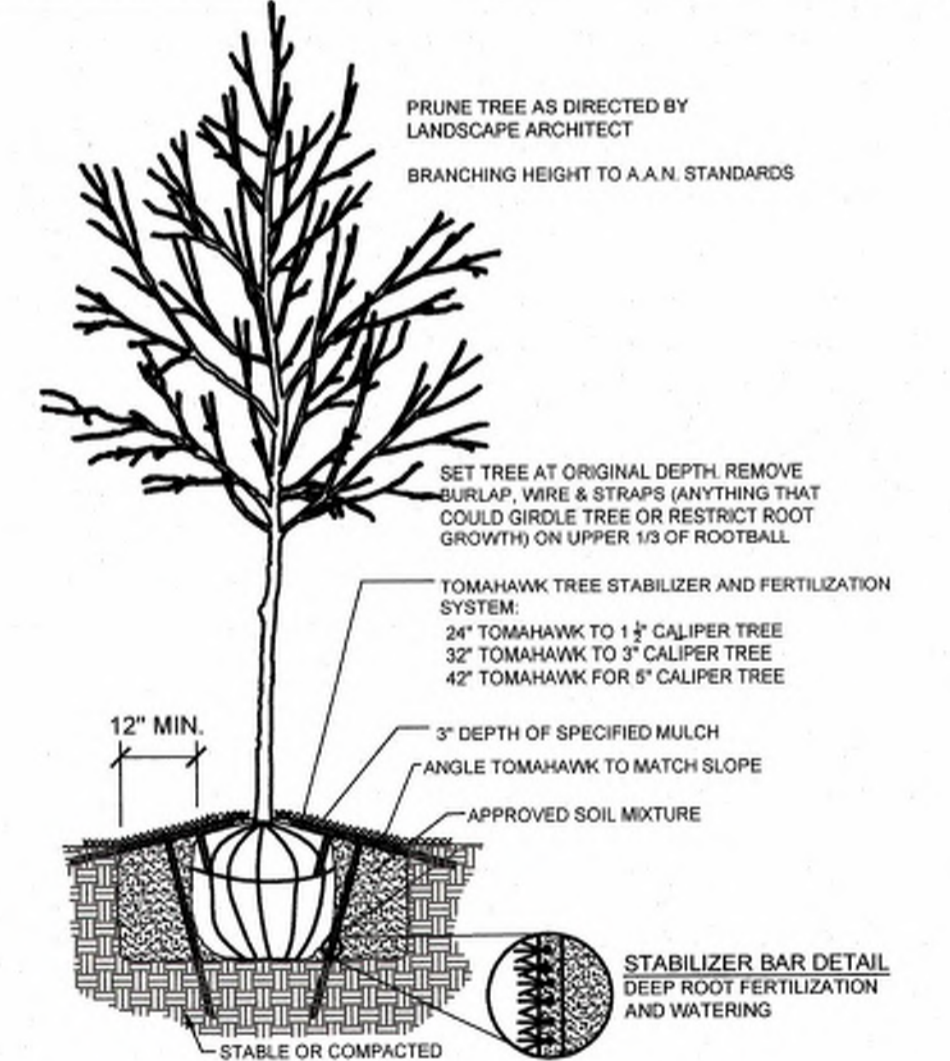
| QTY. | BOTANICAL NAME | COMMON NAME | SIZE |
|----------------------------------|-----------------------------------|----------------------------|--------------------------|
| TREES | | | |
| 4 | LAGERSTROEMIA INDICA 'MUSKOGEE' | MUSKOGEE CREPE MYRTLE | 10'-12' HT. MULTI-STEM |
| 6 | MAGNOLIA GRANDIFLORA 'LITTLE GEM' | LITTLE GEM MAGNOLIA | 6'-7' HT. MIN. |
| 4 | PRUNUS x YEDOENSIS 'AKEBONO' | AKEBONO YOSHINO CHERRY | 7'-8' HT. MIN. |
| 3 | ULMUS AMERICANA 'PRINCETON' | PRINCETON ELM | 2" CAL., 8'-10' HT. MIN. |
| SHRUBS & GROUNDCOVERS | | | |
| 49 | ABELIA GRANDIFLORA 'KALEIDOSCOPE' | KALEIDOSCOPE ABELIA | 15'-18" HT., 3 GAL. MIN. |
| 35 | AZALEA INDICA 'G.G. GERBING' | G.G. GERBING AZALEA | 36" HT., 5 GAL. MIN. |
| 36 | DISTYLUM x 'PIIDIST-IF PP244094 | BLUE CASCADE DISTYLUM | 3 GAL. |
| 31 | JUNIPERUS CONFERTA 'BLUE PACIFIC' | BLUE PACIFIC SHORE JUNIPER | 3 GAL. |
| 30 | ILEX CORNUTA 'BURFORDII NANA' | DWARF BURFORD HOLLY | 36" HT., 5 GAL. MIN. |
| 52 | ILEX GRENATA 'GREENLUSTRE' | GREENLUSTRE HOLLY | 15'-18" HT., 3 GAL. MIN. |
| 6 | ILEX GRENATA 'SKYPENCIL' | SKYPENCIL HOLLY | 3'-4' HT. |
| 221 | LIRIOPE MUSCARI 'VARIEGATA' | VARIEGATED LIRIOPE | 6 BIB CLUMPS |
| 35 | NANDINA DOMESTICA 'FIREPOWER' | FIREPOWER DWARF NANDINA | 1 GAL. |
| 38 | RHODODENDRON 'ROBLEG' PP15227 | AUTUMN ANGEL AZALEA | 12"-15" HT., 3 GAL. MIN. |
| 11 | THUJA OCCIDENTALIS 'SMARAGD' | EMERALD GREEN ARBORVITAE | 4'-5' HT. |
| TURF | | | |
| 12,275sf | ZOYSIA | ZOYSIA GRASS | SOD |
| 21,475sf | ZOYSIA | ZOYSIA GRASS | SEED |

2 PLANT SCHEDULE

- THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH COMPETENT RELIABLE SOURCES TO ENSURE THAT AN ADEQUATE SUPPLY OF THE REQUIRED PLANT MATERIAL IS AVAILABLE. THIS SHALL BE COMPLETED A MINIMUM OF THREE MONTHS PRIOR TO PLANTING TIME TO ALLOW FOR PLANT COLLECTIONS, STORAGE, AND PREPARATION. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL PLANT MATERIAL IN THE APPROPRIATE SEASON FOR EACH PLANT TYPE.
- ALL PLANT MATERIAL RECEIVED FROM COMMERCIAL NURSERIES SHALL CONFORM TO THE CURRENT ISSUE OF THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, EXCEPT WHERE OTHERWISE SPECIFIED.
- ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE UNIFORMLY BRANCHED AND HAVE A VIGOROUS ROOT SYSTEM. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS AND FREE FROM DEFECTS, DECAY, ABRASIONS OF THE BARK, PLANT DISEASES, INSECT PEST EGGS, AND ALL FORMS OF INFESTATIONS. ALL PLANT MATERIAL SHALL BE FRESH, FREE FROM TRANSPORT SHOCK OR VISIBLE WILT. UNHEALTHY STOCK IS UNACCEPTABLE. PLANTS FROM COLD STORAGE ARE UNACCEPTABLE.
- PLANT MATERIAL SHALL BE INSPECTED BY THE OWNER'S REPRESENTATIVE UPON ARRIVAL AT THE PROJECT SITE. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT OR ACCEPT ANY PLANT MATERIAL FOLLOWING FINAL INSPECTION.
- PLANTS NOT INSTALLED ON THE DAY OF ARRIVAL AT THE SITE WILL BE STORED AND PROTECTED. OUTSIDE STORAGE LOCATIONS WILL BE CONTINUALLY SHADED AND PROTECTED FROM THE WIND AND SUN. PLANTS STORED ON SITE WILL BE PROTECTED FROM ANY DRYING AT ALL TIMES BY COVERING THE BALLS OR ROOTS WITH MOIST SAWDUST, WET BURLAP, WOODCHIPS, SHREDDED BARK, PEAT MOSS, OR OTHER SIMILAR MULCHING MATERIAL.
- THE FINAL LOCATION AND ORIENTATION OF ALL PLANT MATERIAL AS WELL AS THE LOCATION OF ALL PLANTING ZONES WILL BE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE. CONTRACTOR MAY BE RESPONSIBLE FOR REPLANTING ANY PLANT MATERIAL INSTALLED WITHOUT APPROVAL BY THE OWNER'S REPRESENTATIVE.
- THE OWNER'S REPRESENTATIVE SHALL HAVE FINAL APPROVAL FOR THE SELECTION OF SPECIES SUBSTITUTIONS USED IN PLANTINGS. ALL REQUESTS FOR SUBSTITUTIONS MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO PLANTING.
- OSMOCOTE, NUTRIQOTE, OR OTHER CONTROLLED RELEASE COMMERCIAL GRADE GRANULAR FERTILIZER (18-6-12) FERTILIZER SHALL BE APPLIED IN EACH PLANTING HOLE ACCORDING TO MANUFACTURER'S LABEL OR OTHER SPECIFICATIONS. THE SELECTION OF FERTILIZER AND ALL APPLICATION SPECIFICATIONS SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE REQUIRED TO GUARANTEE AND MAINTAIN ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE OF FINISHED PLANTING IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE SPECIAL PROVISIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING CONDITIONS AS A RESULT OF ITS WORK PERFORMED DURING THE CONTRACT PERIOD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING ALL PLANT QUANTITIES FOR BIDDING PURPOSES.
- PLANT LOCATIONS ARE APPROXIMATE. FIELD STAKING SHOULD BE DONE TO AVOID UNDERGROUND UTILITIES.
- PROVIDE CONTINUOUS PINE STRAW MULCH (3" THICK) IN ALL SHRUB AND TREE AREAS AND AT THE BASE OF SPECIMEN TREES IN A 5' MINIMUM DIAMETER.
- SIZES OF PLANT MATERIAL IN PLANT SCHEDULE ARE TO BE CONSIDERED MINIMUMS.
- ALL UTILITIES SHALL BE LOCATED AND MARKED IN FIELD PRIOR TO INSTALLATION OF PLANTS. NO PLANTS SHALL BE LOCATED ABOVE UTILITIES OR WITHIN EASEMENTS UNLESS SHOWN OTHERWISE.
- ALL AREAS TO BE SODDED SHALL RECEIVE 4" LOAM SOIL AND TILLED INTO EXISTING SOIL 12" DEEP. COORDINATE WITH GRADING CONTRACTOR TO ACHIEVE FINISH GRADE.

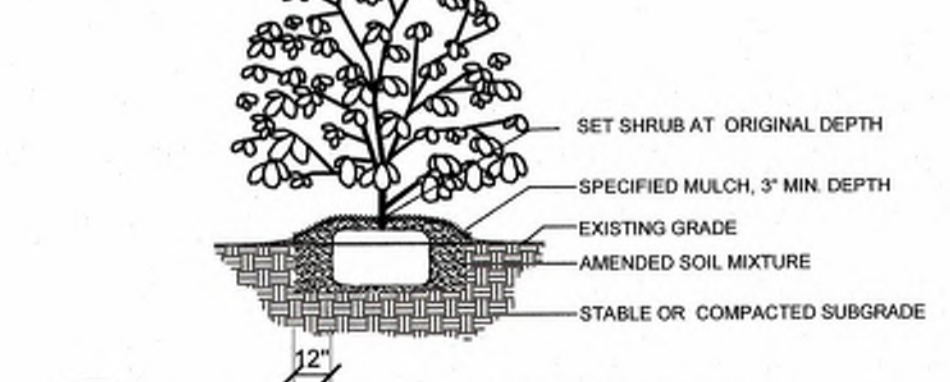
3 PLANTING NOTES

TYPE 'A' BUFFER:
 LENGTH: 188 ft
 WIDTH: 10'
 AREA: 1,880 sf
 TREES: 3' / 1000sf = 6 TREES
 SHRUBS: 12' / 1000sf = 23 SHRUBS



4 TREE PLANTING DETAIL

NOT TO SCALE



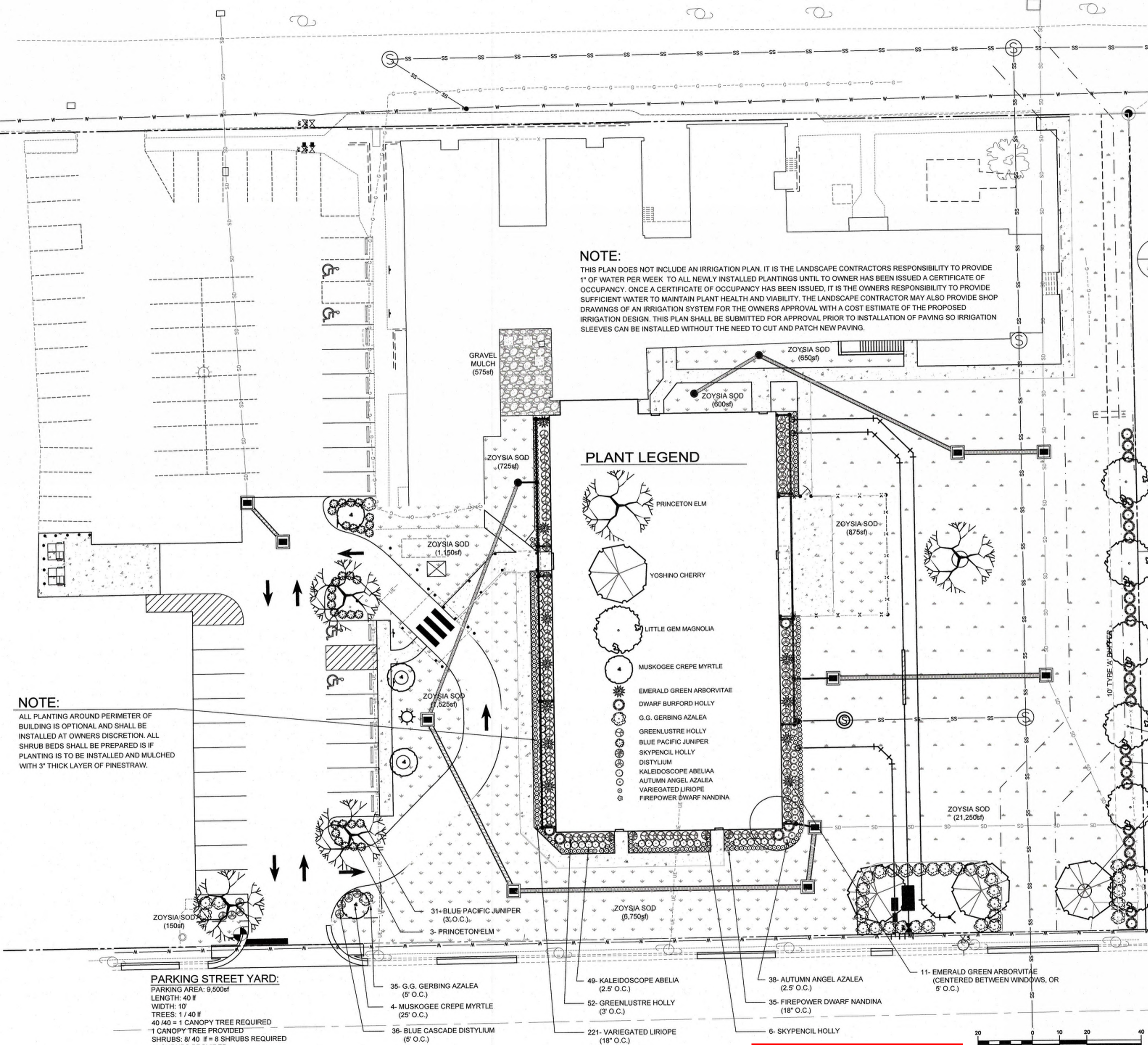
5 SHRUB PLANTING DETAIL

NOT TO SCALE

NOTE:
 THIS PLAN DOES NOT INCLUDE AN IRRIGATION PLAN. IT IS THE LANDSCAPE CONTRACTORS RESPONSIBILITY TO PROVIDE 1" OF WATER PER WEEK TO ALL NEWLY INSTALLED PLANTINGS UNTIL TO OWNER HAS BEEN ISSUED A CERTIFICATE OF OCCUPANCY. ONCE A CERTIFICATE OF OCCUPANCY HAS BEEN ISSUED, IT IS THE OWNERS RESPONSIBILITY TO PROVIDE SUFFICIENT WATER TO MAINTAIN PLANT HEALTH AND VIABILITY. THE LANDSCAPE CONTRACTOR MAY ALSO PROVIDE SHOP DRAWINGS OF AN IRRIGATION SYSTEM FOR THE OWNERS APPROVAL WITH A COST ESTIMATE OF THE PROPOSED IRRIGATION DESIGN. THIS PLAN SHALL BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION OF PAVING SO IRRIGATION SLEEVES CAN BE INSTALLED WITHOUT THE NEED TO CUT AND PATCH NEW PAVING.

PLANT LEGEND

- PRINCETON ELM
- YOSHINO CHERRY
- LITTLE GEM MAGNOLIA
- MUSKOGEE CREPE MYRTLE
- EMERALD GREEN ARBORVITAE
- DWARF BURFORD HOLLY
- G.G. GERBING AZALEA
- GREENLUSTRE HOLLY
- BLUE PACIFIC JUNIPER
- SKYPENCIL HOLLY
- DISTYLUM
- KALEIDOSCOPE ABELIA
- AUTUMN ANGEL AZALEA
- VARIEGATED LIRIOPE
- FIREPOWER DWARF NANDINA



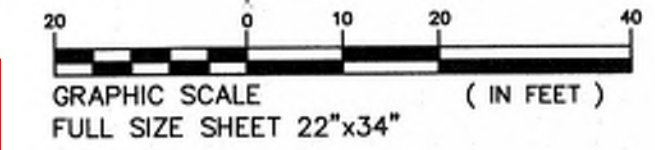
NOTE:
 ALL PLANTING AROUND PERIMETER OF BUILDING IS OPTIONAL AND SHALL BE INSTALLED AT OWNERS DISCRETION. ALL SHRUB BEDS SHALL BE PREPARED IF PLANTING IS TO BE INSTALLED AND MULCHED WITH 3" THICK LAYER OF PINESTRAW.

PARKING STREET YARD:
 PARKING AREA: 9,500sf
 LENGTH: 40 ft
 WIDTH: 10'
 TREES: 1 / 40 ft
 40 / 40 = 1 CANOPY TREE REQUIRED
 1 CANOPY TREE PROVIDED
 SHRUBS: 8 / 40 ft = 8 SHRUBS REQUIRED
 10 SHRUBS PROVIDED

1 PLANTING PLAN

SCALE: 1" = 20'-0"

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1 KEY FLOOR PLAN

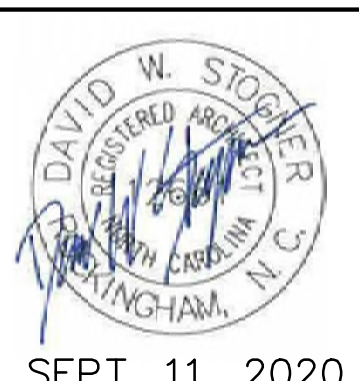
SCALE: 3/32"=1'-0"

SCALE: 3/32" = 1'-0"
 12" 0 5' 10' 15' 20'

EXISTING BUILDING AREA: 8,856 S.F.
 NEW BUILDING AREA: 12,930 S.F.
 NEW EXTERIOR ACTIVITY SPACE: 1,212 +/- S.F.

| REVISIONS |
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| |
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| |

FOR CONSTRUCTION



Stogner Architecture, PA
 ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
 615 East Broad Avenue, Rockingham, North Carolina, 28379
 Phone 910-895-6874 Fax 910-895-1111
 SEPT. 11, 2020

KEY FLOOR PLAN
GOOD HOPE HOSPITAL
 410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

| | |
|-------------|------------|
| COMM. NO.: | 4535 |
| DRAWN BY: | JKM |
| CHECKED BY: | DWS |
| DATE: | 9/11/2020 |
| SHEET NO.: | A10 |

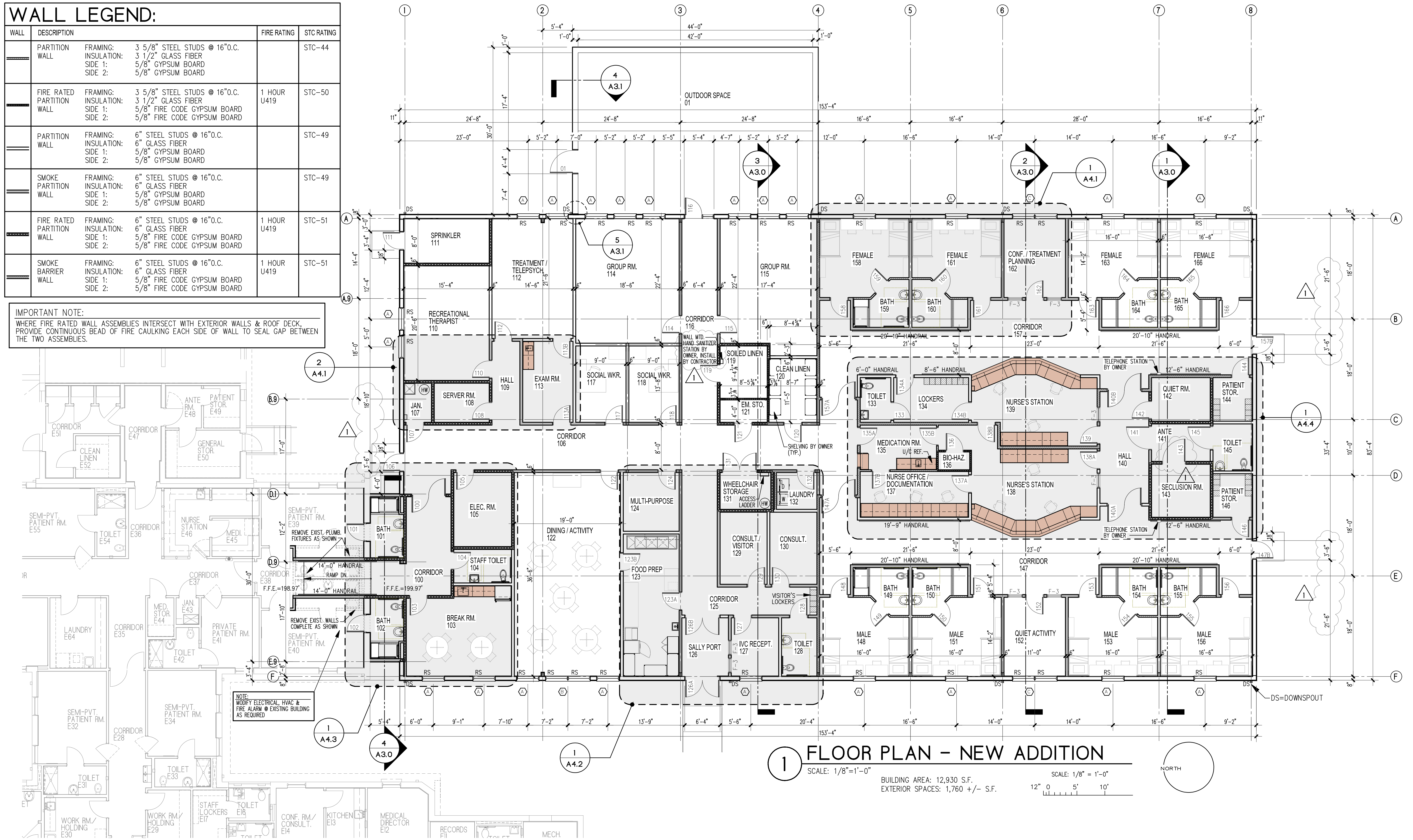
WALL LEGEND:

| WALL | DESCRIPTION | FIRE RATING | STC RATING |
|------|---|-------------|------------|
| --- | PARTITION WALL FRAMING: 3 5/8" STEEL STUDS @ 16" O.C. INSULATION: 3 1/2" GLASS FIBER SIDE 1: 5/8" GYPSUM BOARD SIDE 2: 5/8" GYPSUM BOARD | | STC-44 |
| --- | FIRE RATED PARTITION WALL FRAMING: 3 5/8" STEEL STUDS @ 16" O.C. INSULATION: 3 1/2" GLASS FIBER SIDE 1: 5/8" FIRE CODE GYPSUM BOARD SIDE 2: 5/8" FIRE CODE GYPSUM BOARD | 1 HOUR U419 | STC-50 |
| --- | PARTITION WALL FRAMING: 6" STEEL STUDS @ 16" O.C. INSULATION: 6" GLASS FIBER SIDE 1: 5/8" GYPSUM BOARD SIDE 2: 5/8" GYPSUM BOARD | | STC-49 |
| --- | SMOKE PARTITION WALL FRAMING: 6" STEEL STUDS @ 16" O.C. INSULATION: 6" GLASS FIBER SIDE 1: 5/8" GYPSUM BOARD SIDE 2: 5/8" GYPSUM BOARD | | STC-49 |
| --- | FIRE RATED PARTITION WALL FRAMING: 6" STEEL STUDS @ 16" O.C. INSULATION: 6" GLASS FIBER SIDE 1: 5/8" FIRE CODE GYPSUM BOARD SIDE 2: 5/8" FIRE CODE GYPSUM BOARD | 1 HOUR U419 | STC-51 |
| --- | SMOKE BARRIER WALL FRAMING: 6" STEEL STUDS @ 16" O.C. INSULATION: 6" GLASS FIBER SIDE 1: 5/8" FIRE CODE GYPSUM BOARD SIDE 2: 5/8" FIRE CODE GYPSUM BOARD | 1 HOUR U419 | STC-51 |

IMPORTANT NOTE:

WHERE FIRE RATED WALL ASSEMBLIES INTERSECT WITH EXTERIOR WALLS & ROOF DECK, PROVIDE CONTINUOUS BEAD OF FIRE CAULKING EACH SIDE OF WALL TO SEAL GAP BETWEEN THE TWO ASSEMBLIES.

C:\NON-HUD PROJECTS\ERWIN_4535_SCHM - Erwin Drawings\XCADD\A1-0 Floor Plan.aec

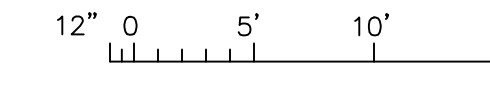


1 FLOOR PLAN - NEW ADDITION

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

BUILDING AREA: 12,930 S.F.
EXTERIOR SPACES: 1,760 +/- S.F.

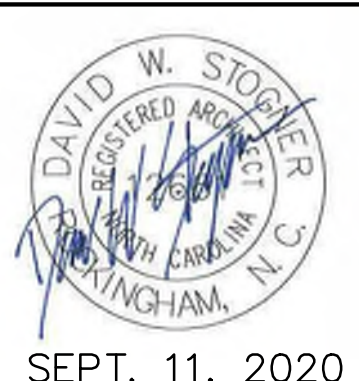
SCALE: 1/8" = 1'-0"



NORTH

| REVISIONS | DATE | DESCRIPTION |
|-----------|------------|----------------------|
| 1 | 11/20/2020 | DHHS REVIEW COMMENTS |

FOR CONSTRUCTION



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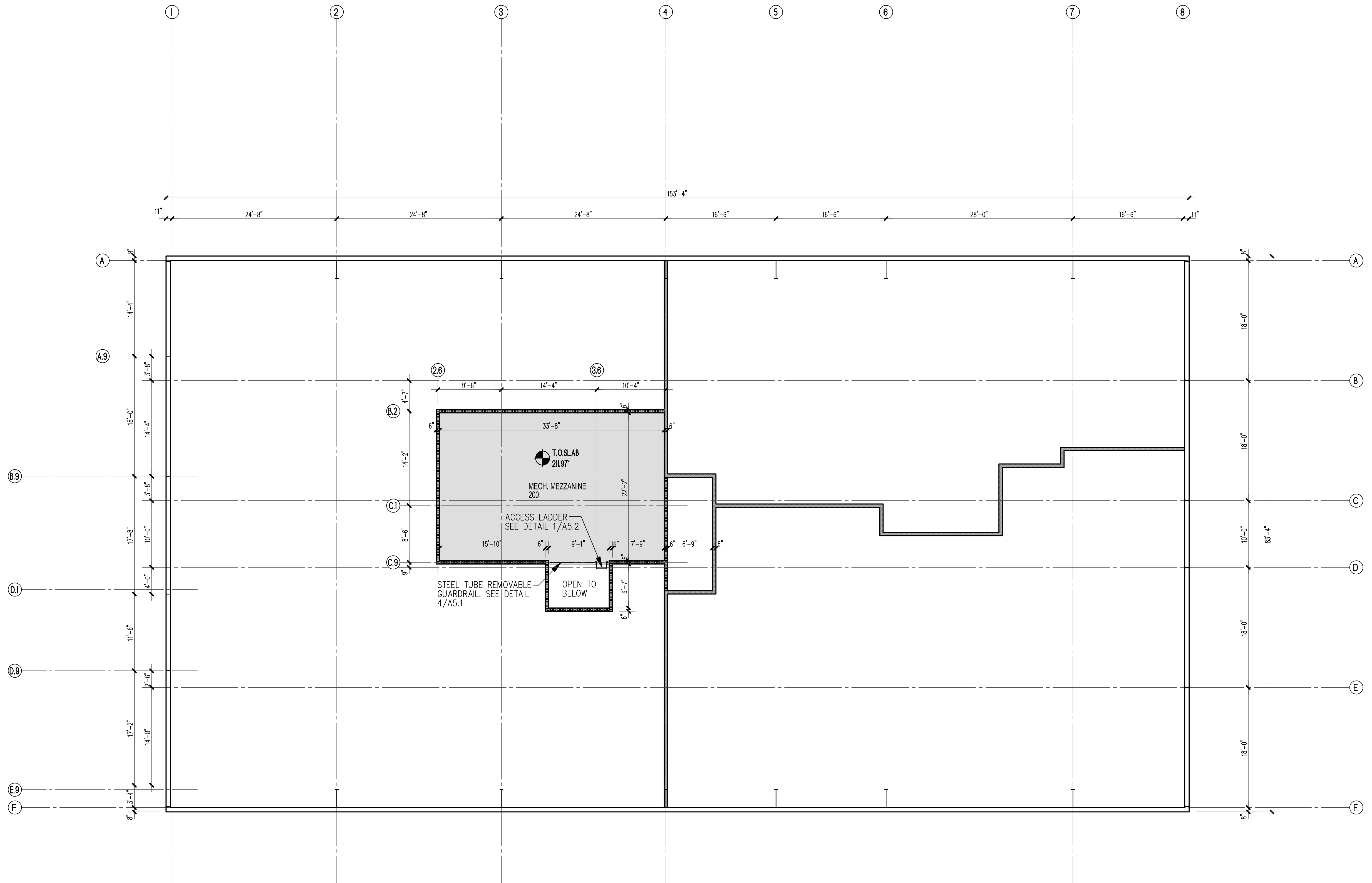
FLOOR PLAN - NEW ADDITION

GOOD HOPE HOSPITAL

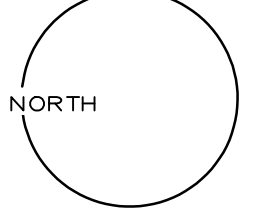
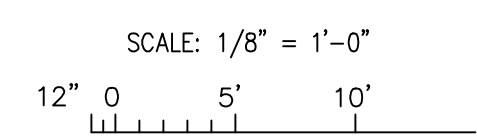
410 DENIM DRIVE ERWIN, NORTH CAROLINA

ADDITION and RENOVATIONS

| | |
|-------------|-----------|
| COMM. NO.: | 4535 |
| DRAWN BY: | JKM |
| CHECKED BY: | DWS |
| DATE: | 9/11/2020 |
| SHEET NO.: | A1.1 |



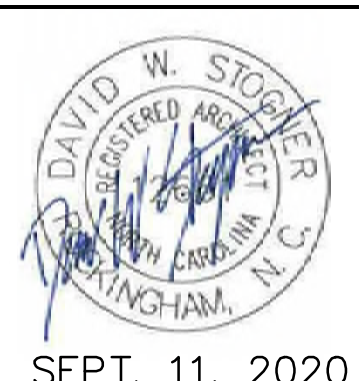
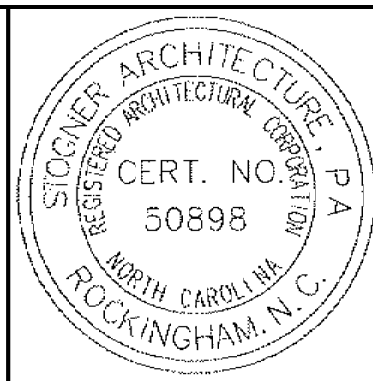
1 MECHANICAL MEZZANINE PLAN
 SCALE: 1/8"=1'-0"



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| REVISIONS |
|--|
| 1 7/18/19 ADDED HANDRAILS @ ACTIVITY AREAS |

FOR CONSTRUCTION



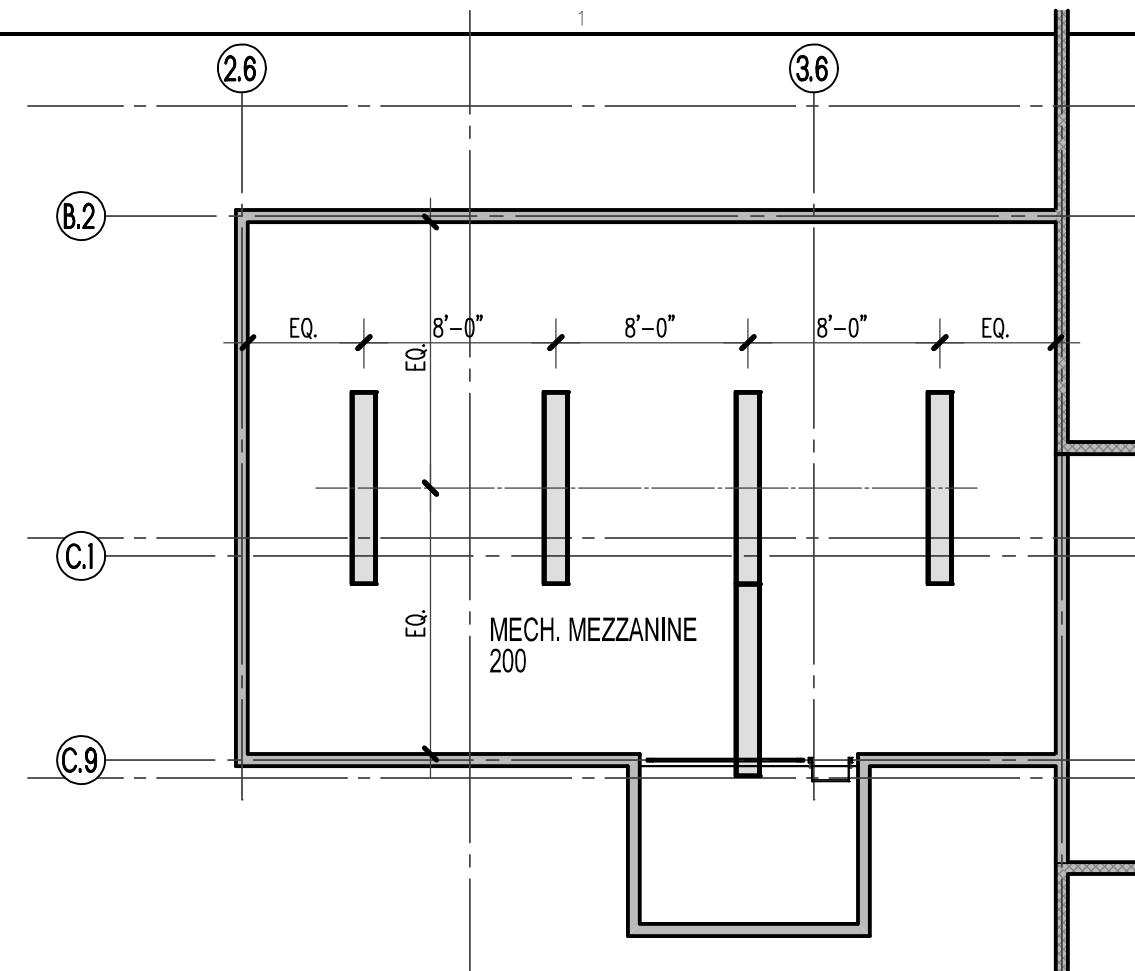
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MECHANICAL MEZZANINE PLAN

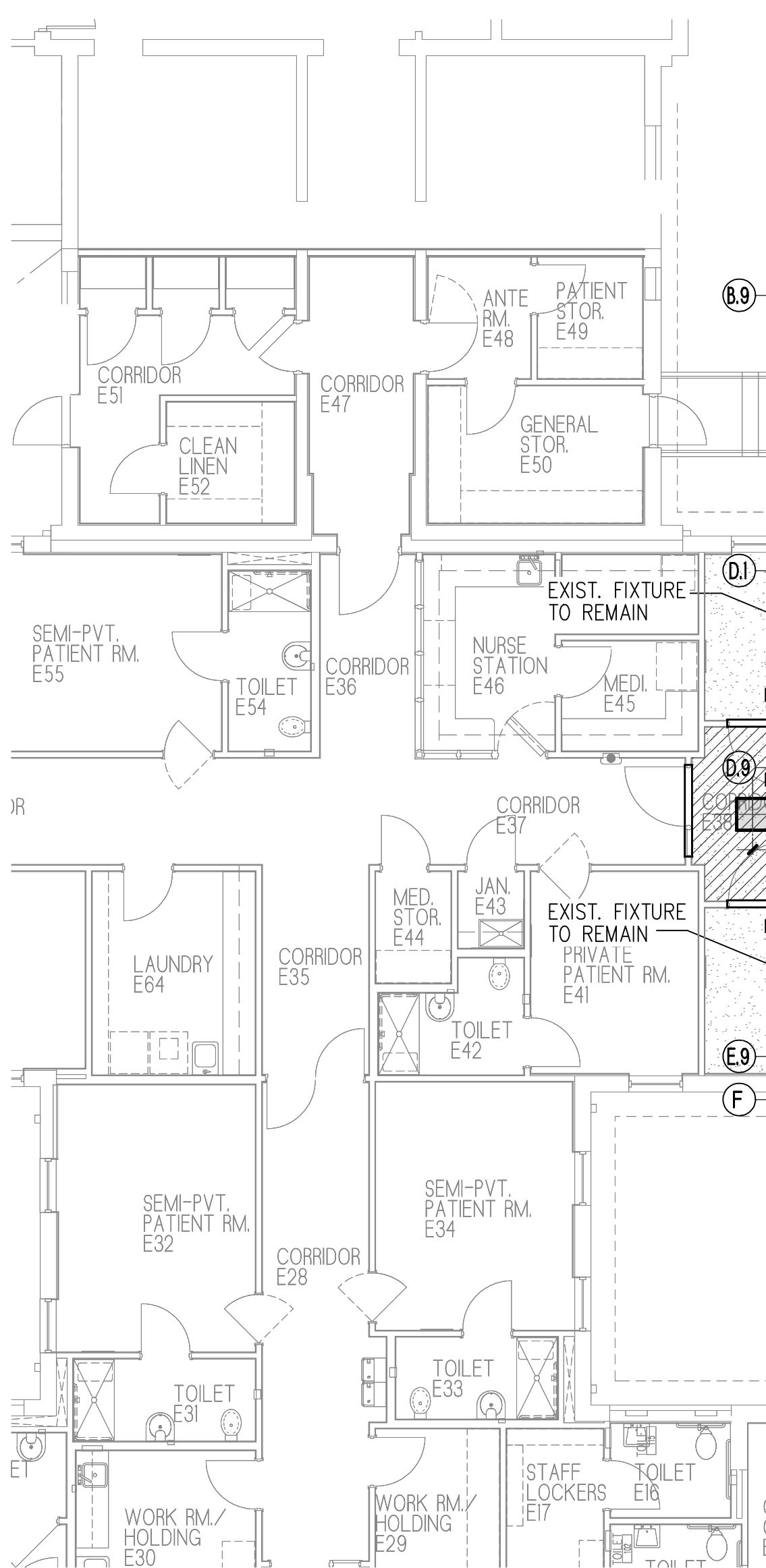
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ADDITION and RENOVATIONS

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|-----------------------|
| COMM. NO.: 4535 |
| DRAWN BY: JKM |
| CHECKED BY: DWS |
| DATE: 9/11/2020 |
| SHEET NO. A1.2 |



2 MEZZANINE CEILING PLAN
SCALE: 1/8"=1'-0"

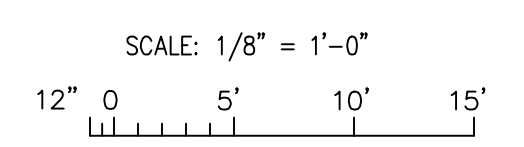


1 REFLECTED CEILING PLAN
SCALE: 1/8"=1'-0" (NEW ADDITION)

CEILING LEGEND:

- SCHEDULED LIGHT FIXTURES
SEE ELECTRICAL DWGS.
- MECHANICAL LOUVERS
SEE MECHANICAL DWGS.
- EXHAUST FAN
SEE MECHANICAL DWGS.
- 10'-0"
CEILING HEIGHT A.F.F.
- GYPSUM BOARD - PAINTED
- GYPSUM BOARD - PAINTED
1 HOUR FIRE RATED - U415
SYSTEM A - HORIZ. ASSEMBLY
- 22'X36' INSULATED
FIRE-RATED ACCESS
DOOR BY: NYSTROM,
MODEL: IWM22X36G

NOTE:
ALL LIGHTS TO BE CENTERED ON ROOMS U.O.N.
(TYP.)

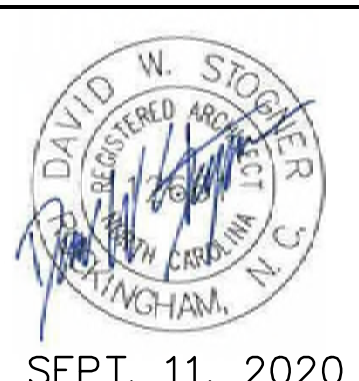


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REVISIONS

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|---|---------|----------------------------------|
| 1 | 7/18/19 | ADDED HANDRAILS @ ACTIVITY AREAS |
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FOR CONSTRUCTION

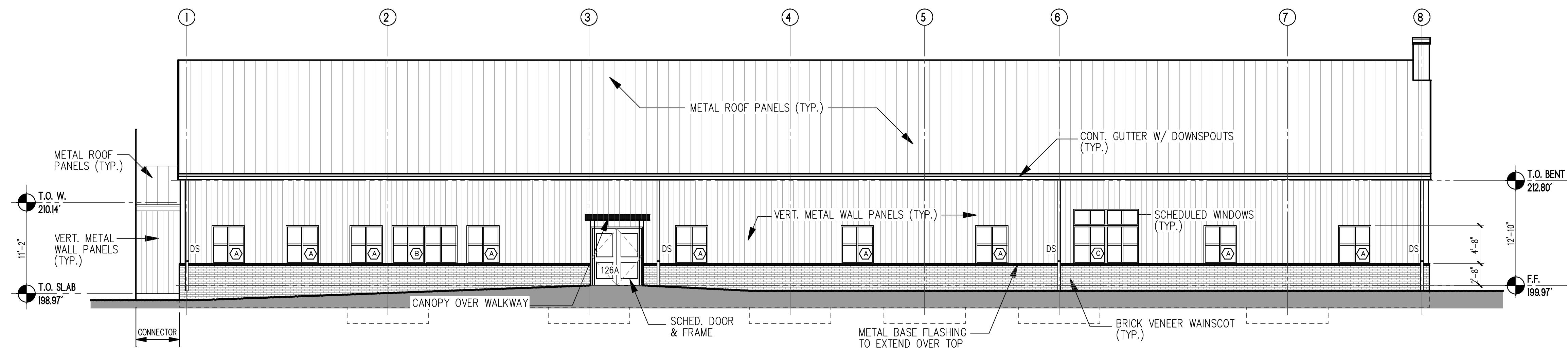


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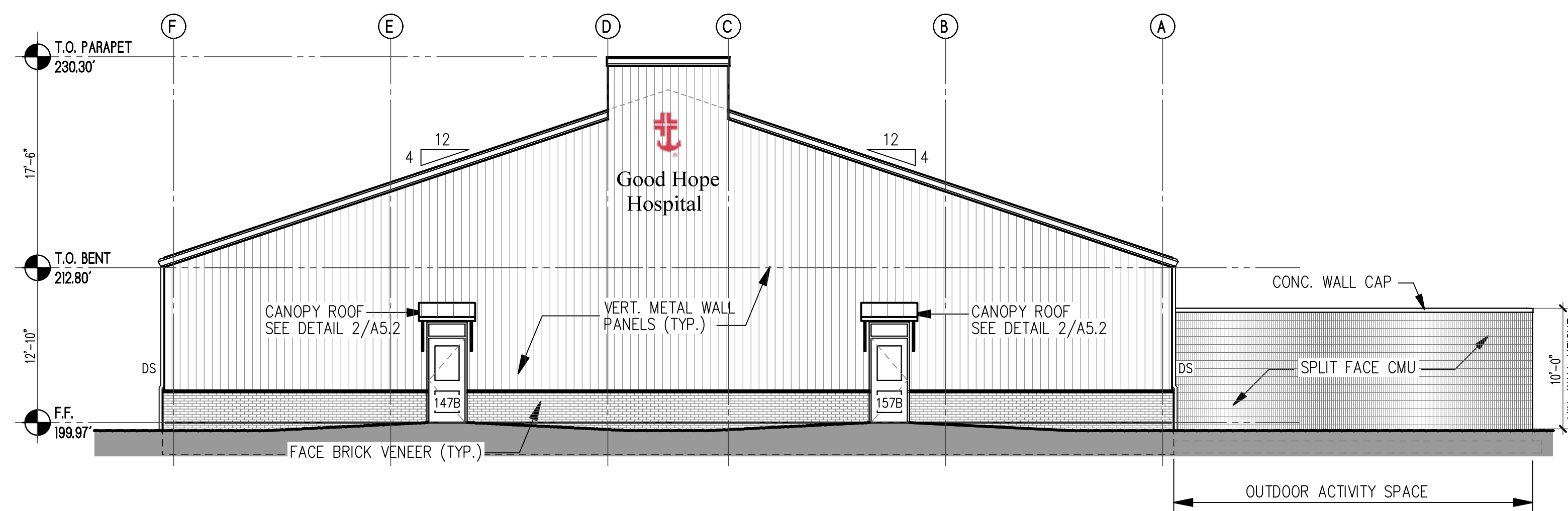
REFLECTED CEILING PLAN (NEW ADDITION) & MEZZANINE CEILING PLAN
GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

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| COMM. NO.: | 4535 |
| DRAWN BY: | JKM |
| CHECKED BY: | DWS |
| DATE: | 9/11/2020 |
| SHEET NO.: | A1.3 |

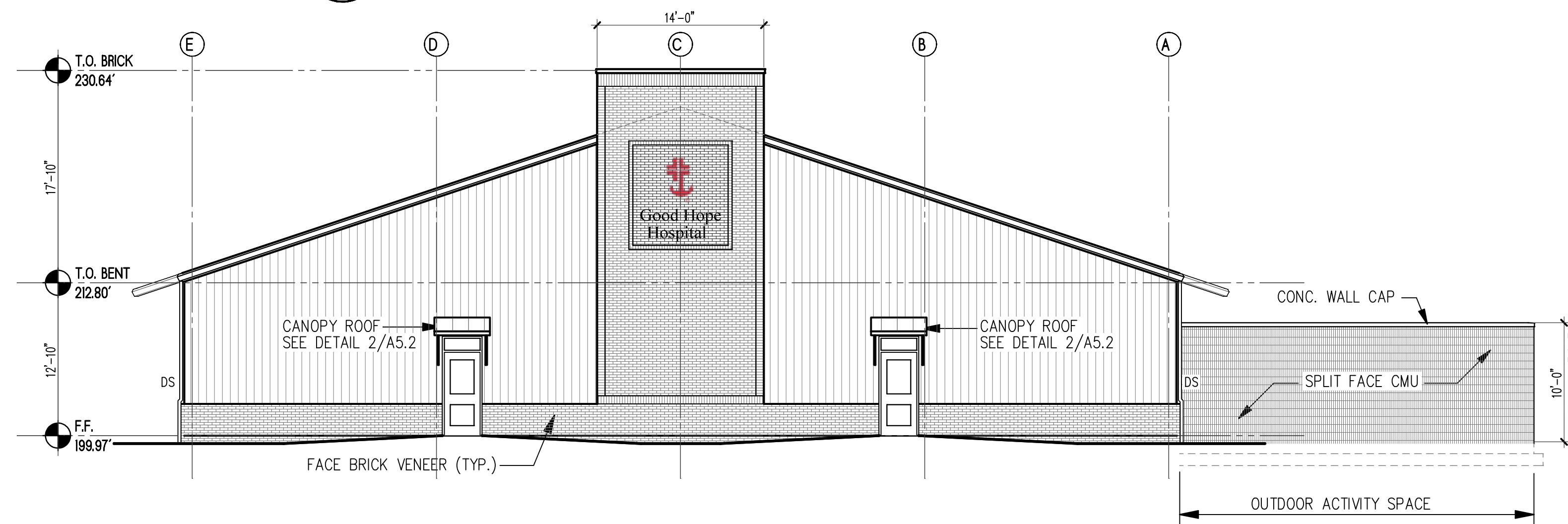
SEPT. 11, 2020



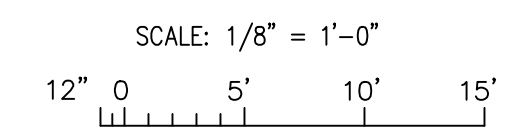
W WEST ELEVATION
SCALE: 1/8"=1'-0"



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



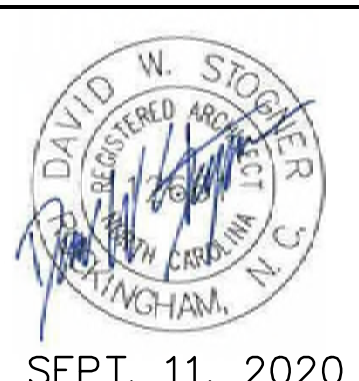
S SOUTH ELEVATION - ALTERNATE
SCALE: 1/8"=1'-0"



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| REVISIONS |
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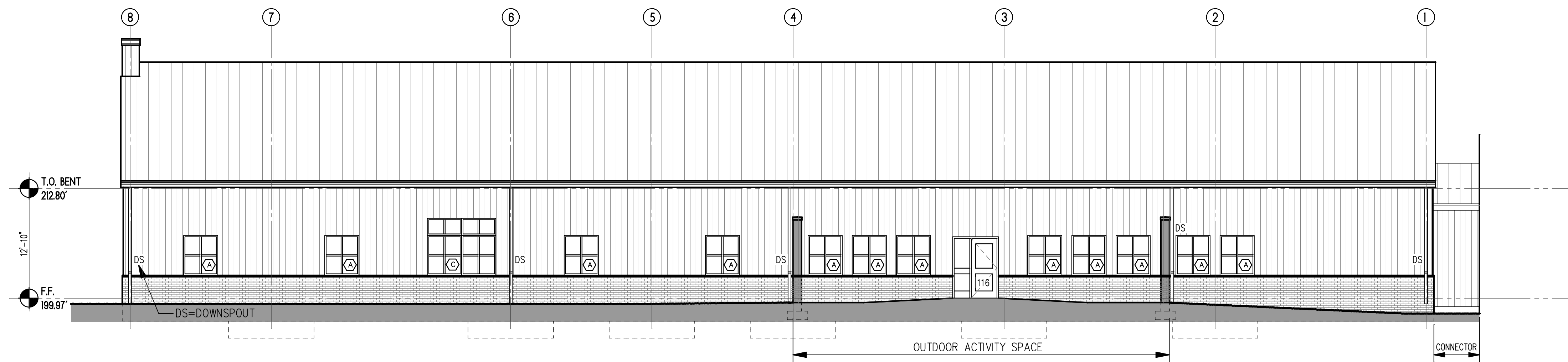
FOR CONSTRUCTION



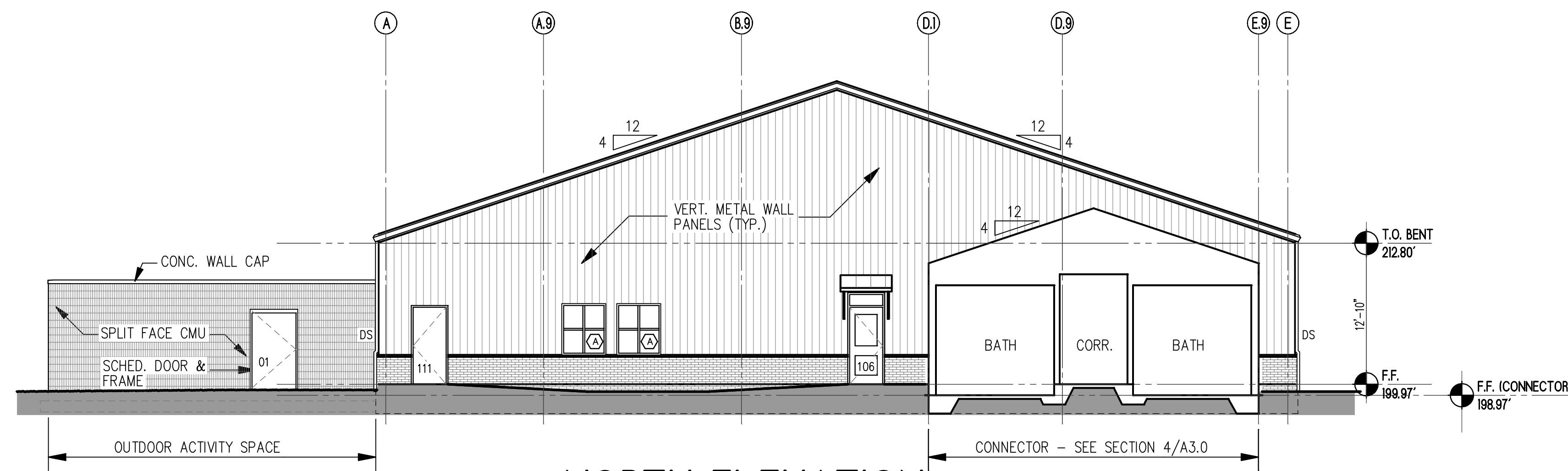
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EXTERIOR ELEVATIONS
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ADDITION and RENOVATIONS

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DATE: 9/11/2020
SHEET NO. **A2.0**



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



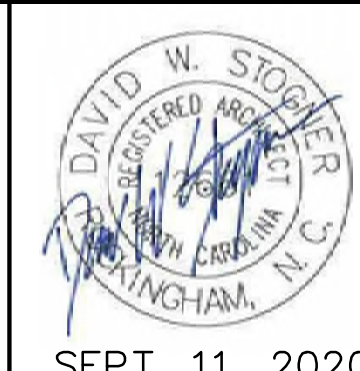
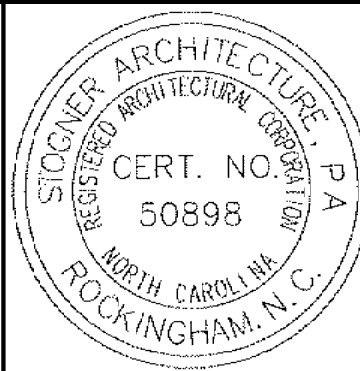
N NORTH ELEVATION
SCALE: 1/8"=1'-0"

SCALE: 1/8" = 1'-0"
12" 0 5' 10' 15'

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REVISIONS

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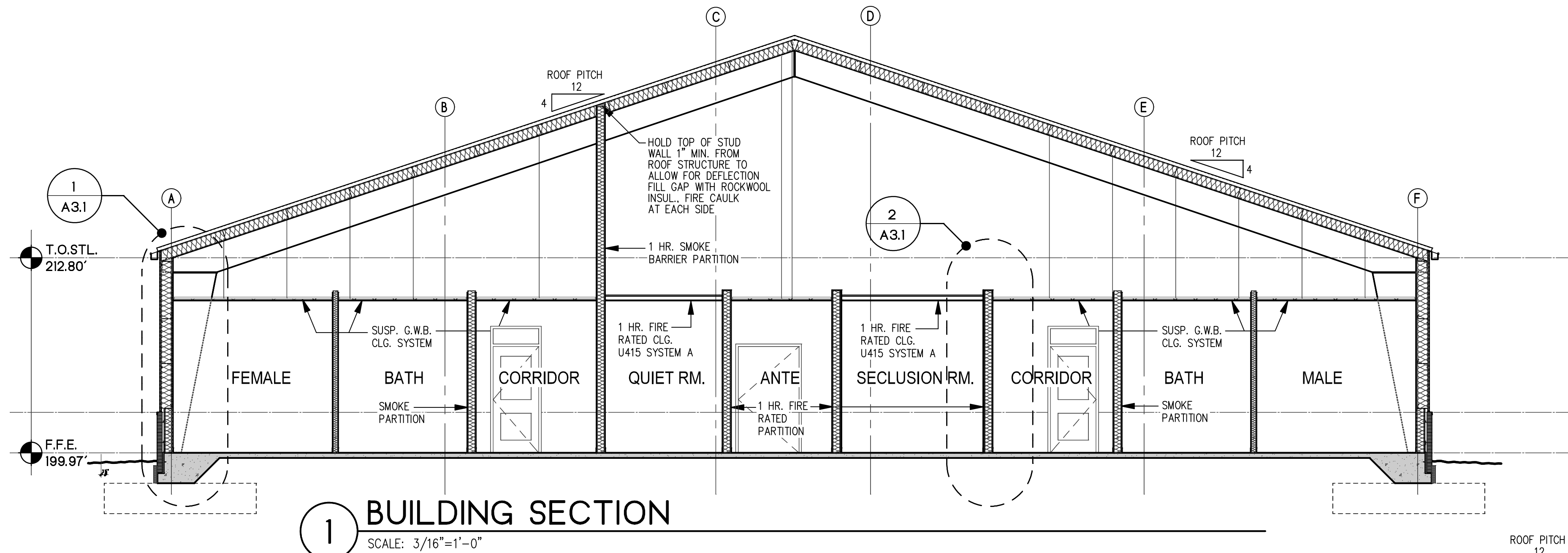
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EXTERIOR ELEVATIONS

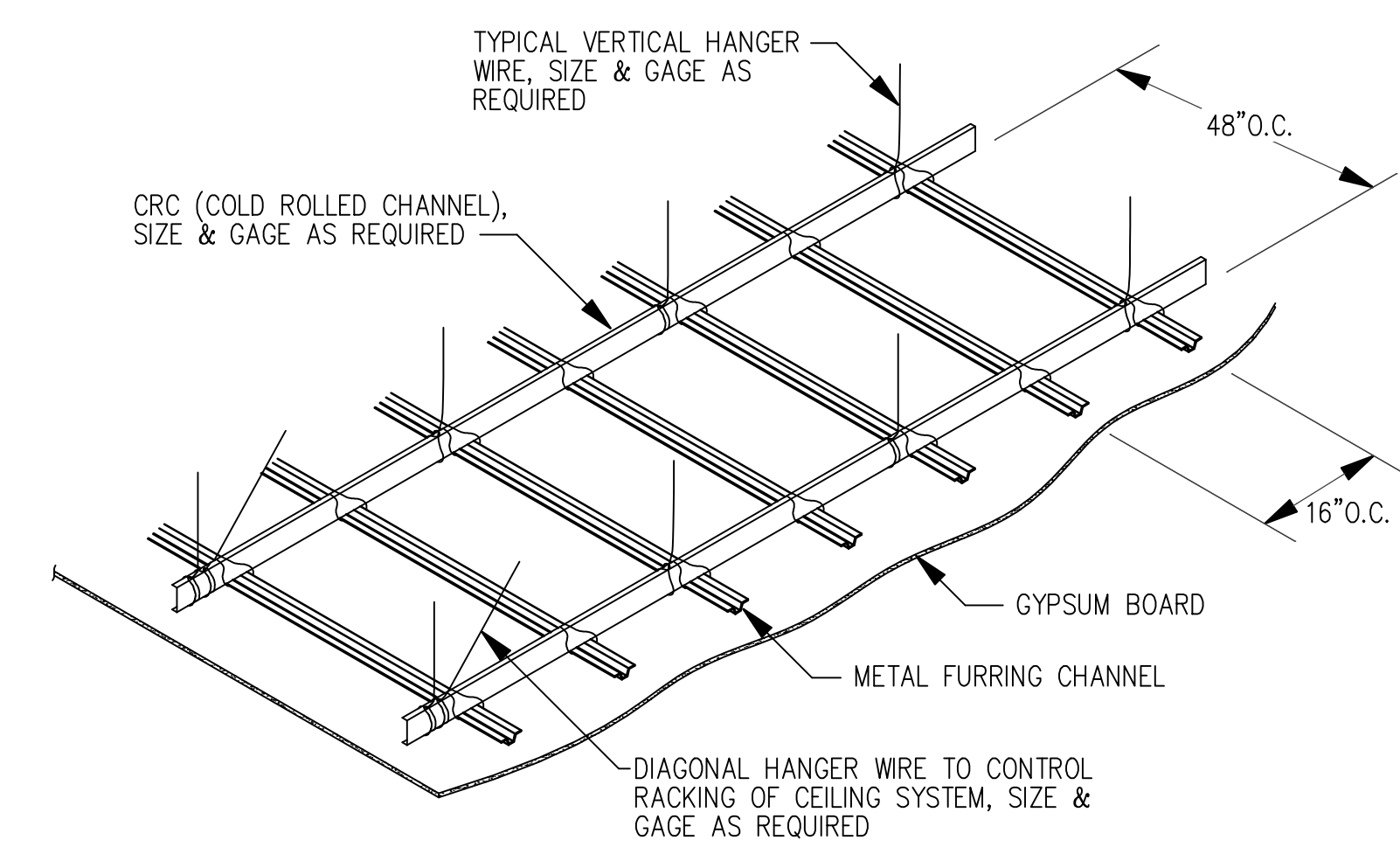
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ADDITION and RENOVATIONS

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DRAWN BY: JKM
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DATE: 9/11/2020
SHEET NO.

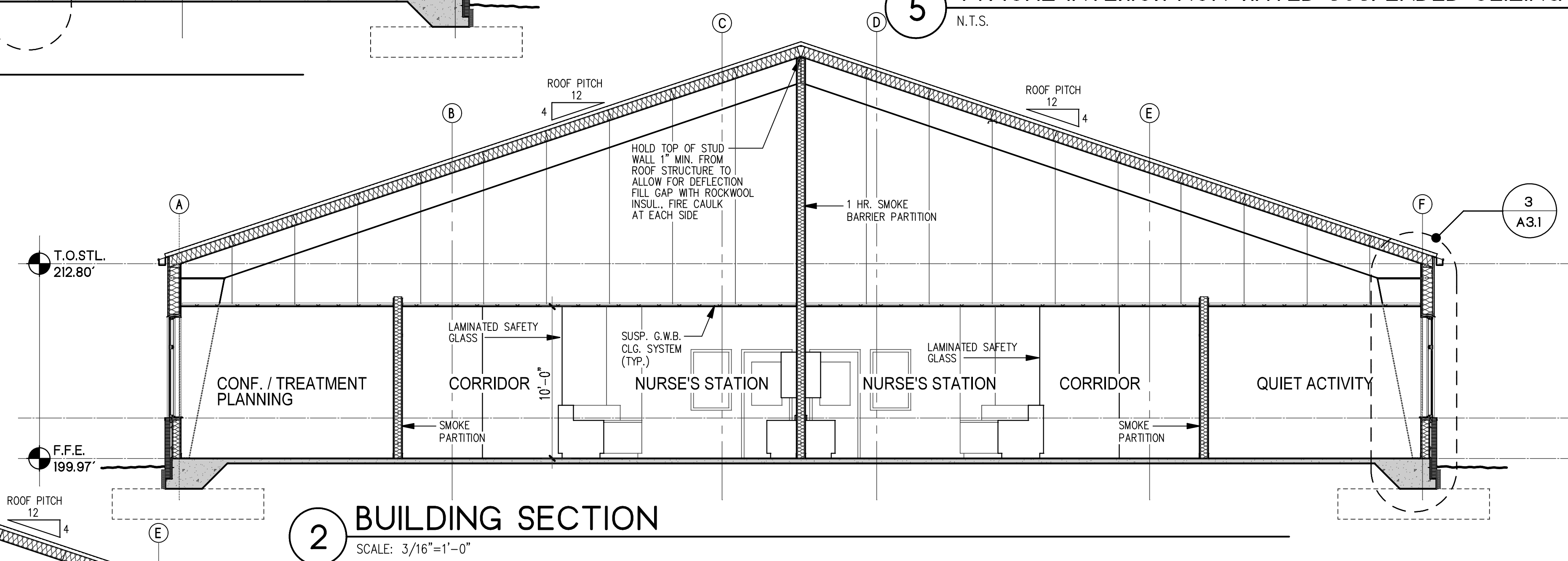
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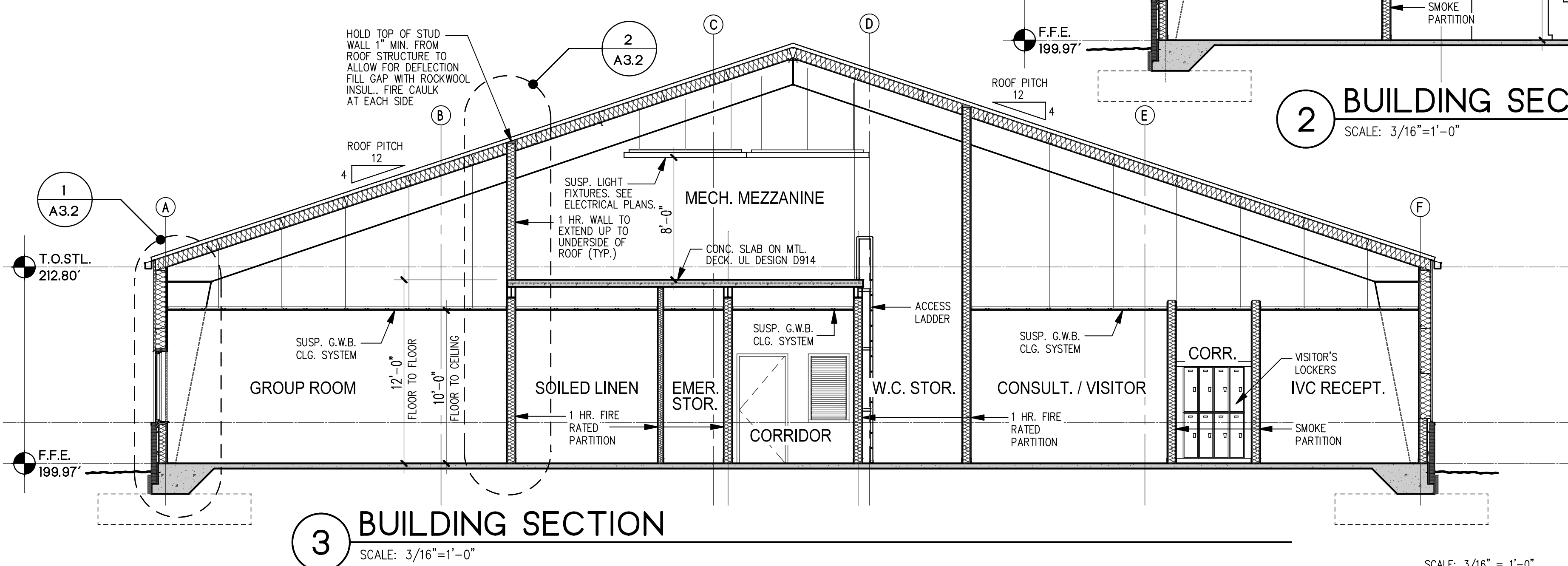
1 BUILDING SECTION
SCALE: 3/16"=1'-0"



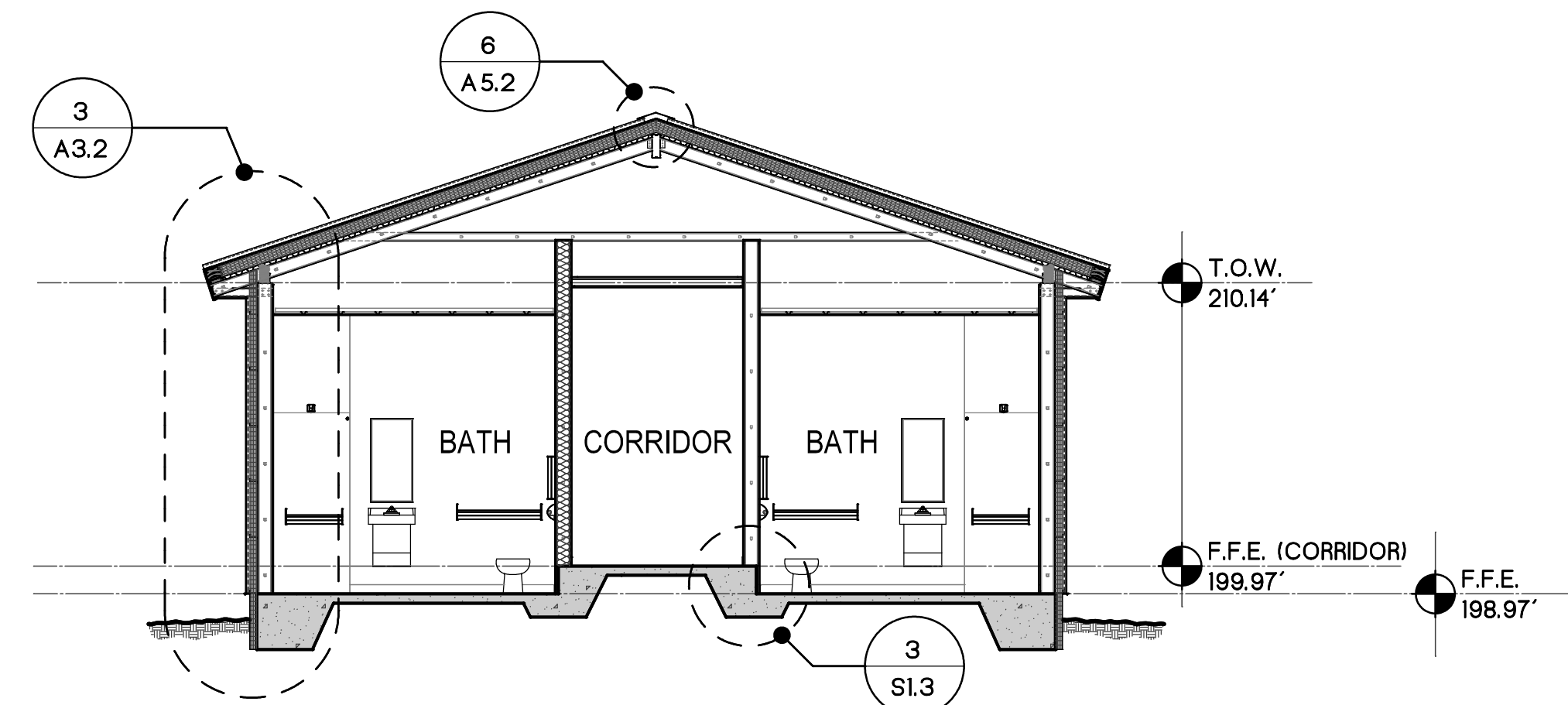
5 TYPICAL INTERIOR NON-RATED SUSPENDED CEILING
N.T.S.



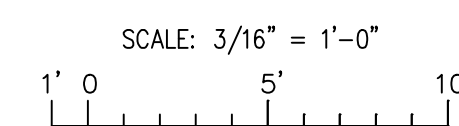
2 BUILDING SECTION
SCALE: 3/16"=1'-0"



3 BUILDING SECTION
SCALE: 3/16"=1'-0"



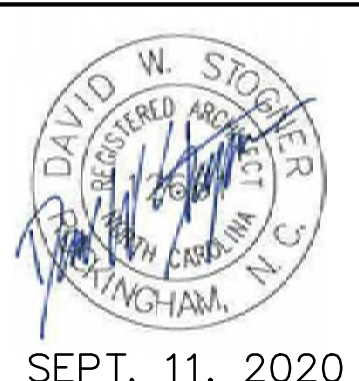
4 BUILDING SECTION @ CONNECTOR
SCALE: 3/16"=1'-0"



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| REVISIONS |
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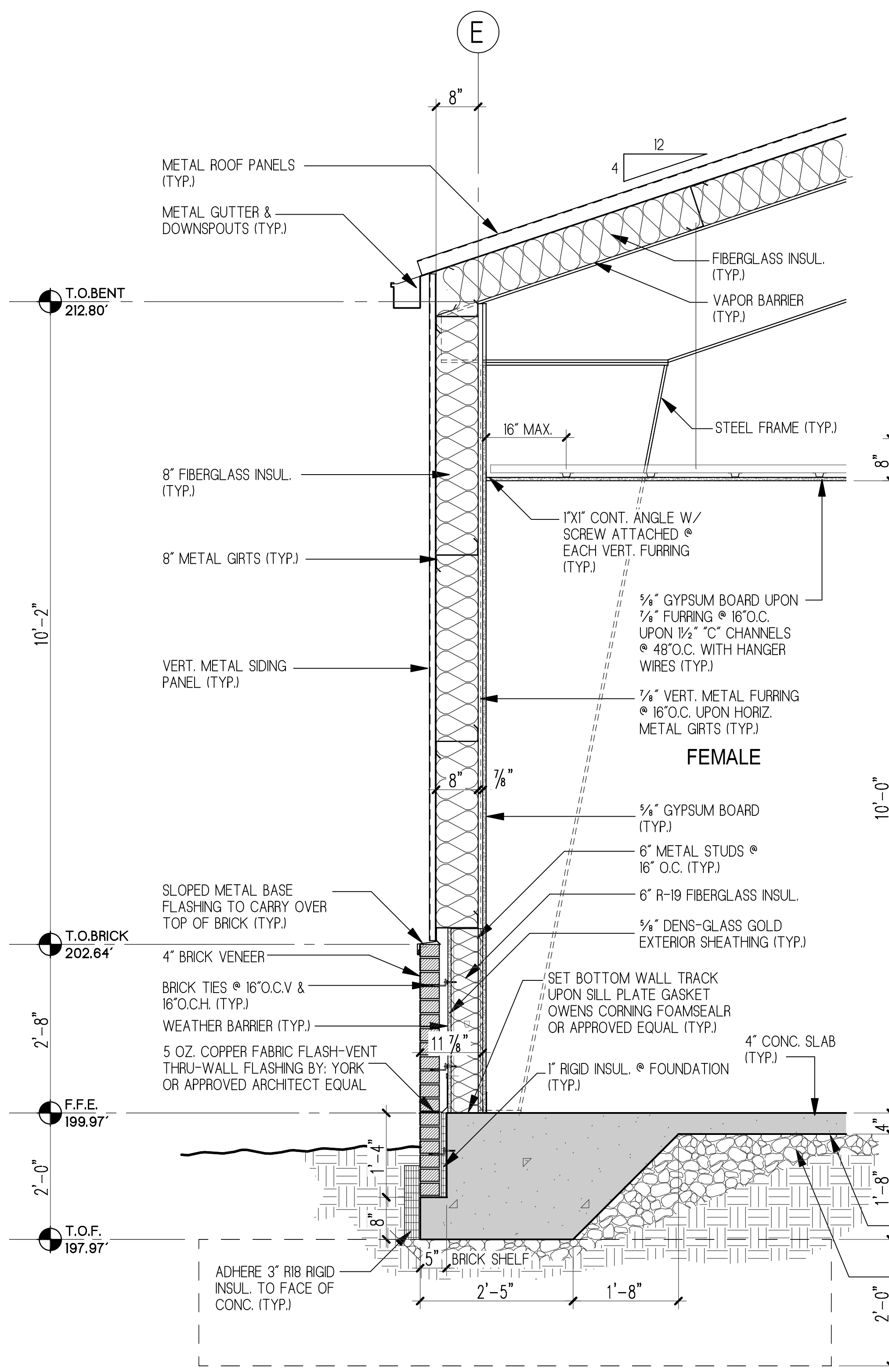
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BUILDING SECTIONS
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ADDITION and RENOVATIONS

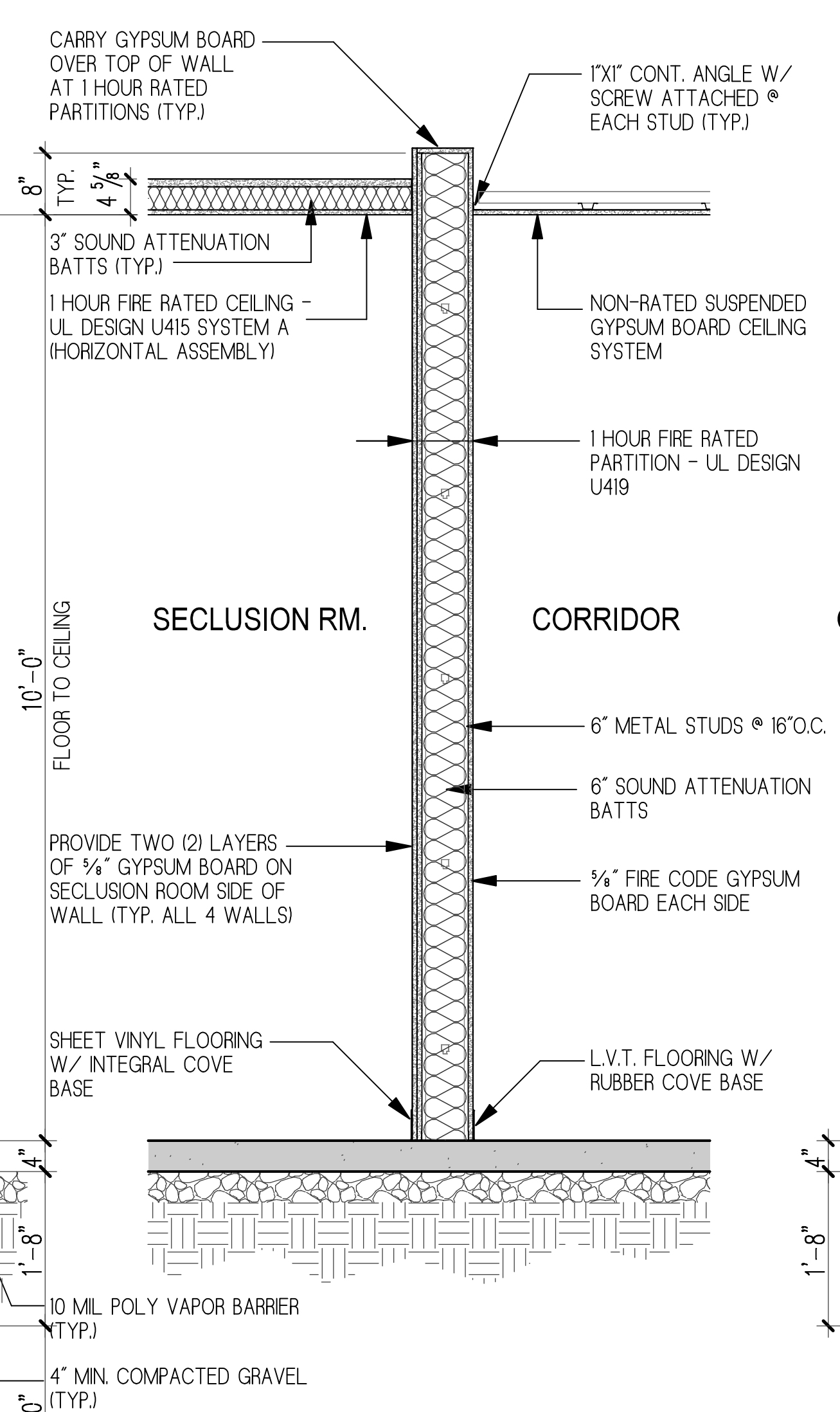
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DRAWN BY: JKM
CHECKED BY: DWS
DATE: 9/11/2020
SHEET NO. **A3.0**

SEPT. 11, 2020

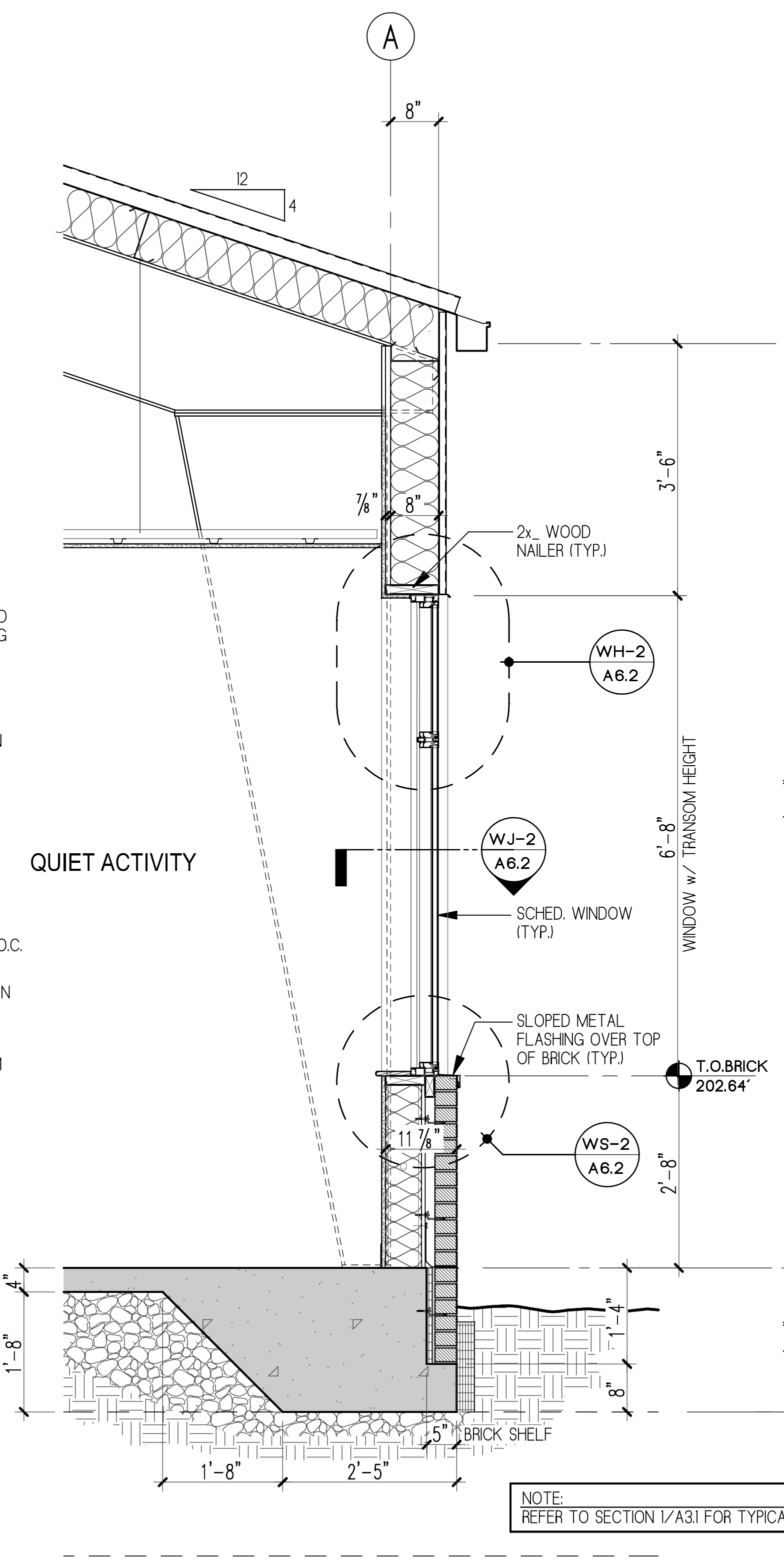
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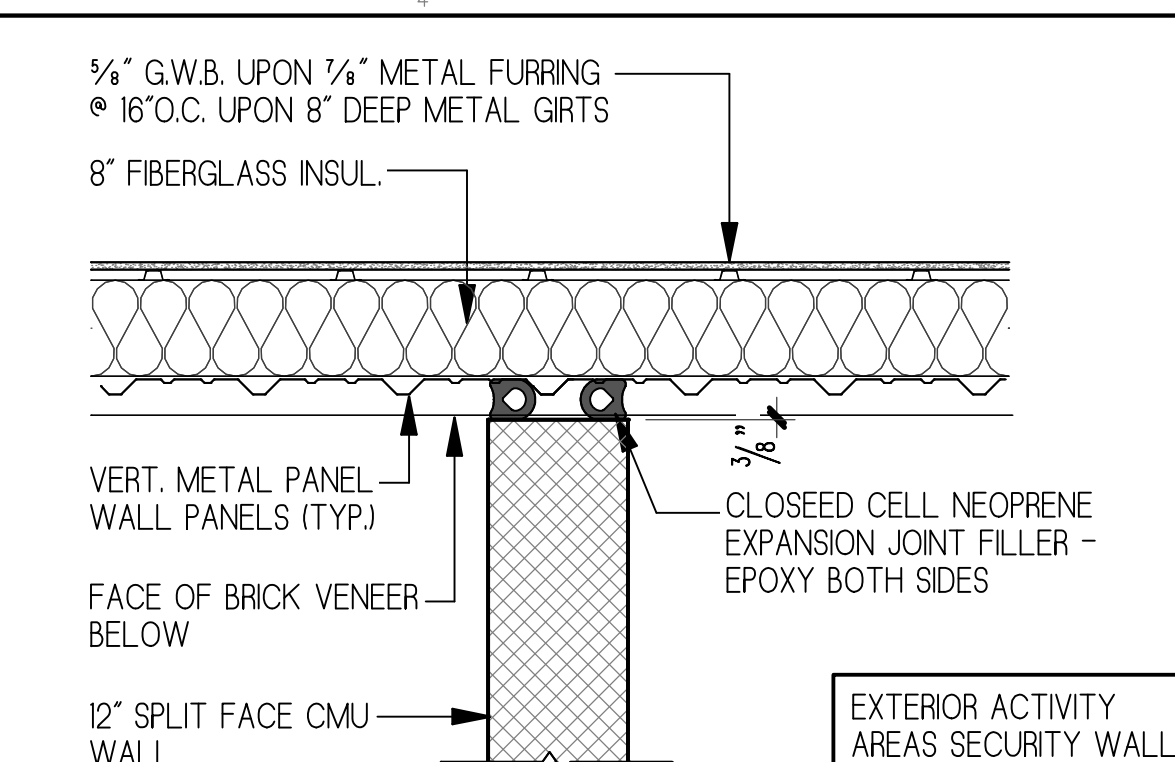
1 WALL SECTION
SCALE: 3/4"=1'-0"



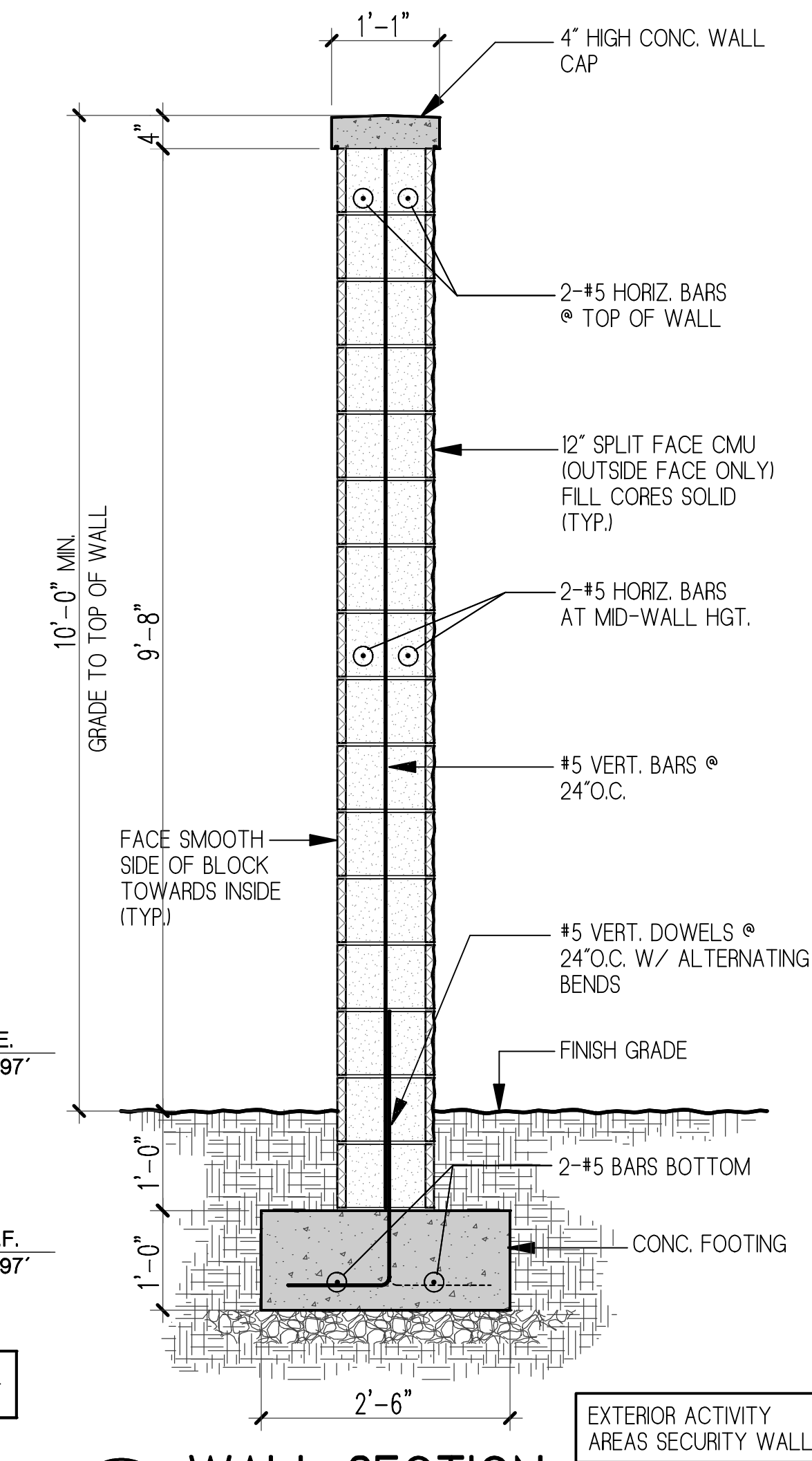
2 WALL SECTION
SCALE: 3/4"=1'-0"



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



5 PLAN of WALL JUNCTION @ BUILDING
SCALE: 3/4"=1'-0"

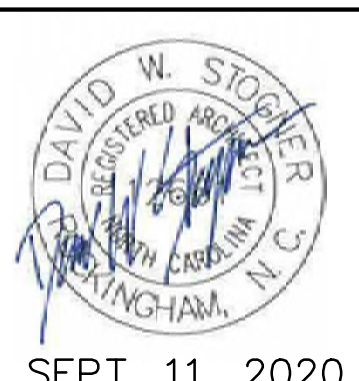


4 WALL SECTION
SCALE: 3/4"=1'-0"
NOTE: REFER TO LIFE SAFETY PLAN, G1.4 FOR RATED ASSEMBLY LOCATIONS

REVISIONS

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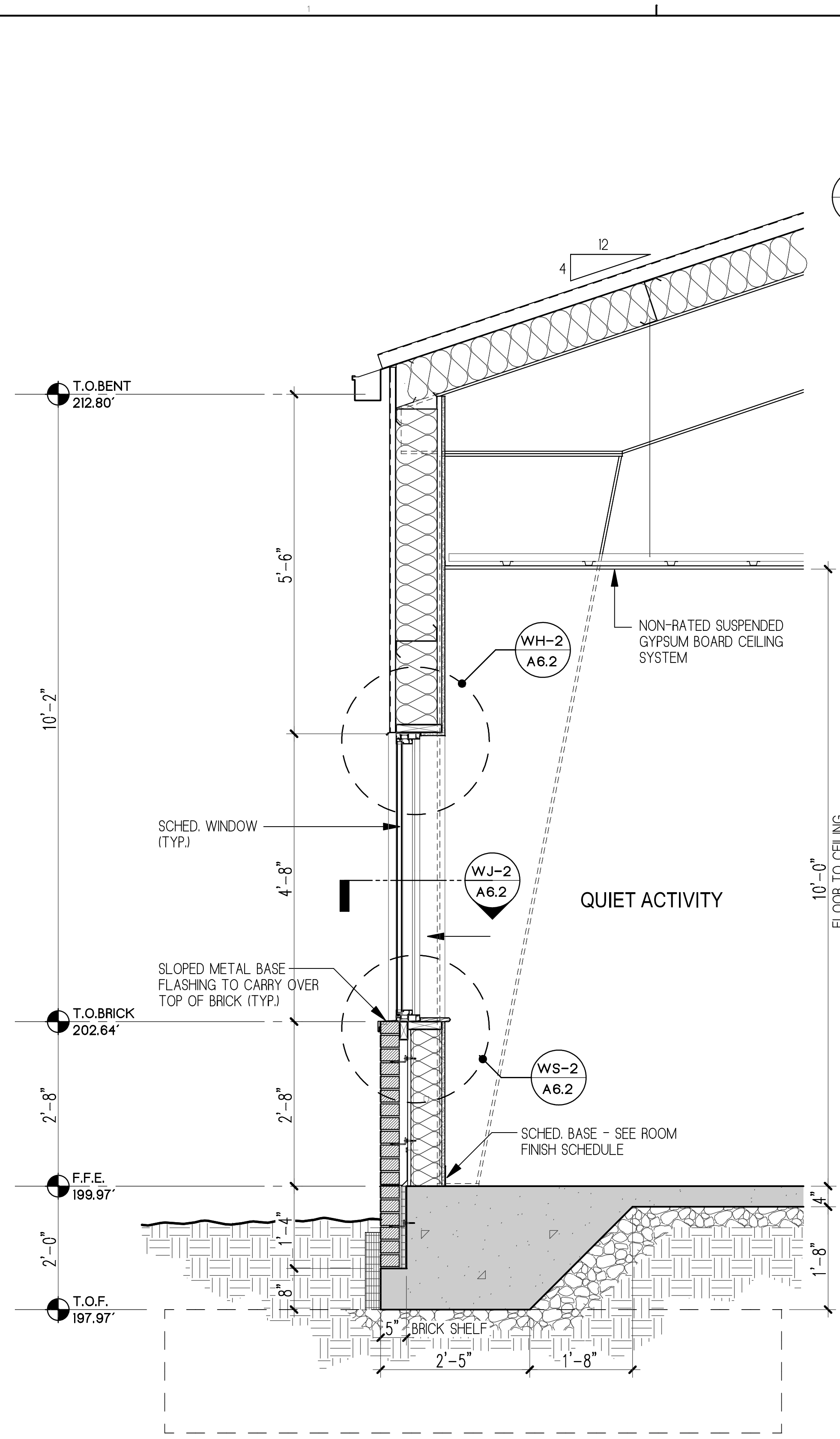


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WALL SECTIONS
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410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

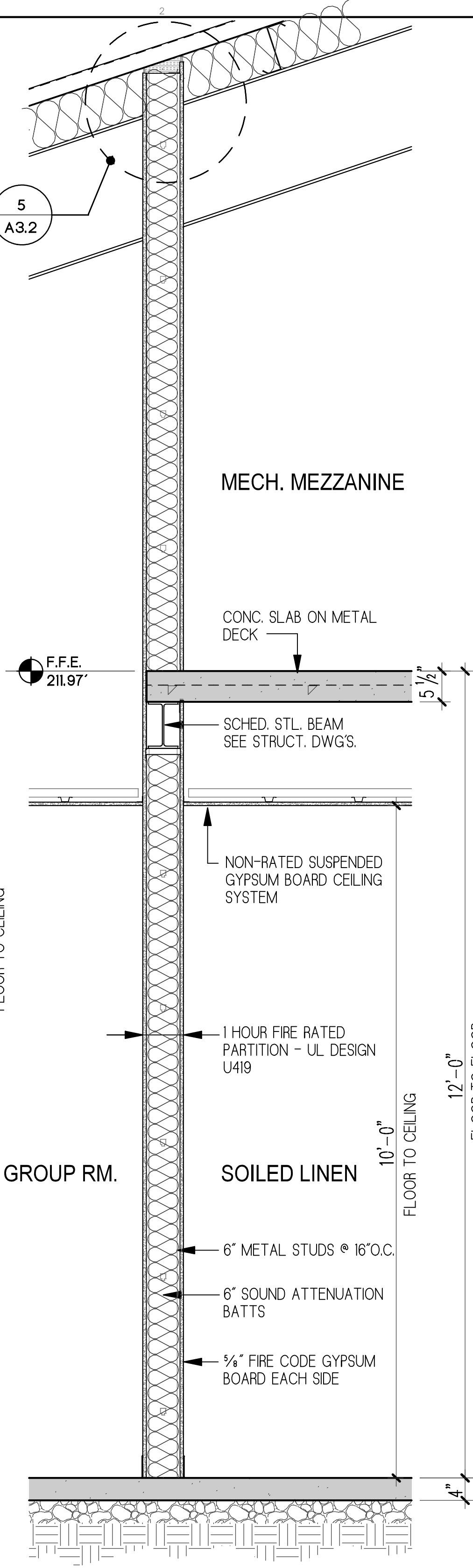
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| COMM. NO.: | 4535 |
| DRAWN BY: | JKM |
| CHECKED BY: | DWS |
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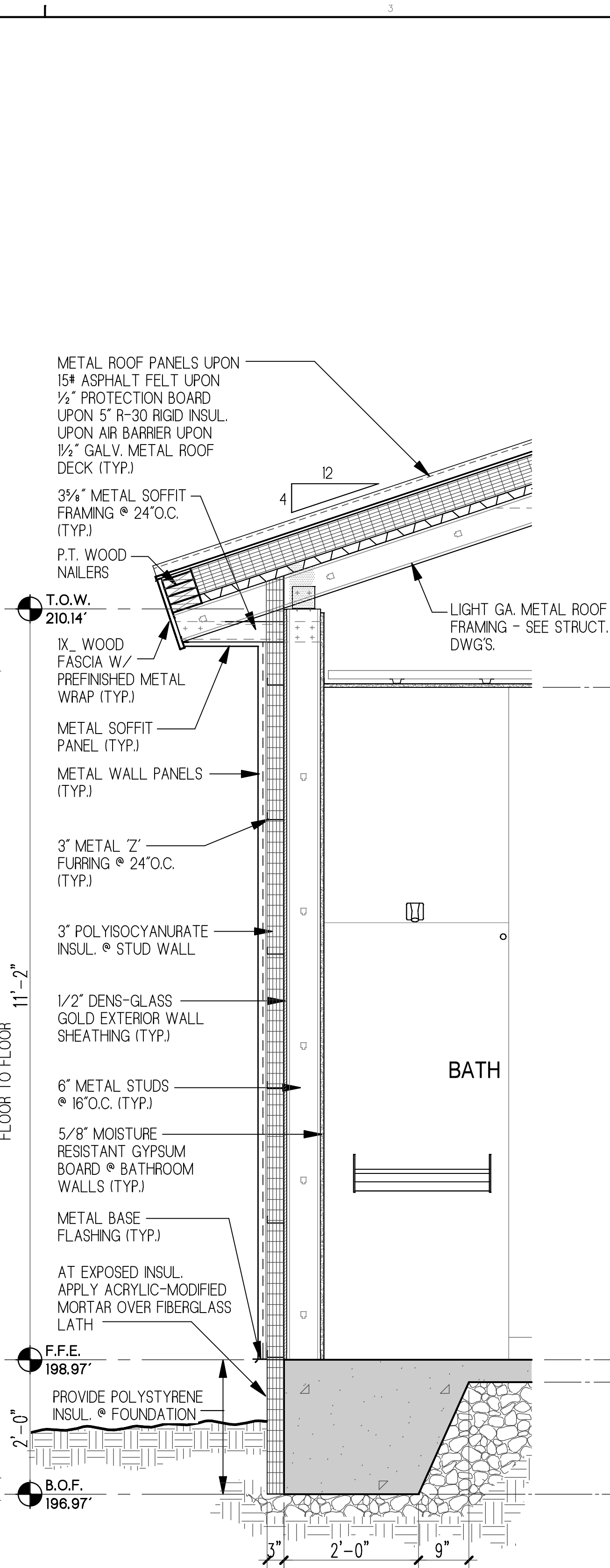


1 WALL SECTION
SCALE: 3/4"=1'-0"

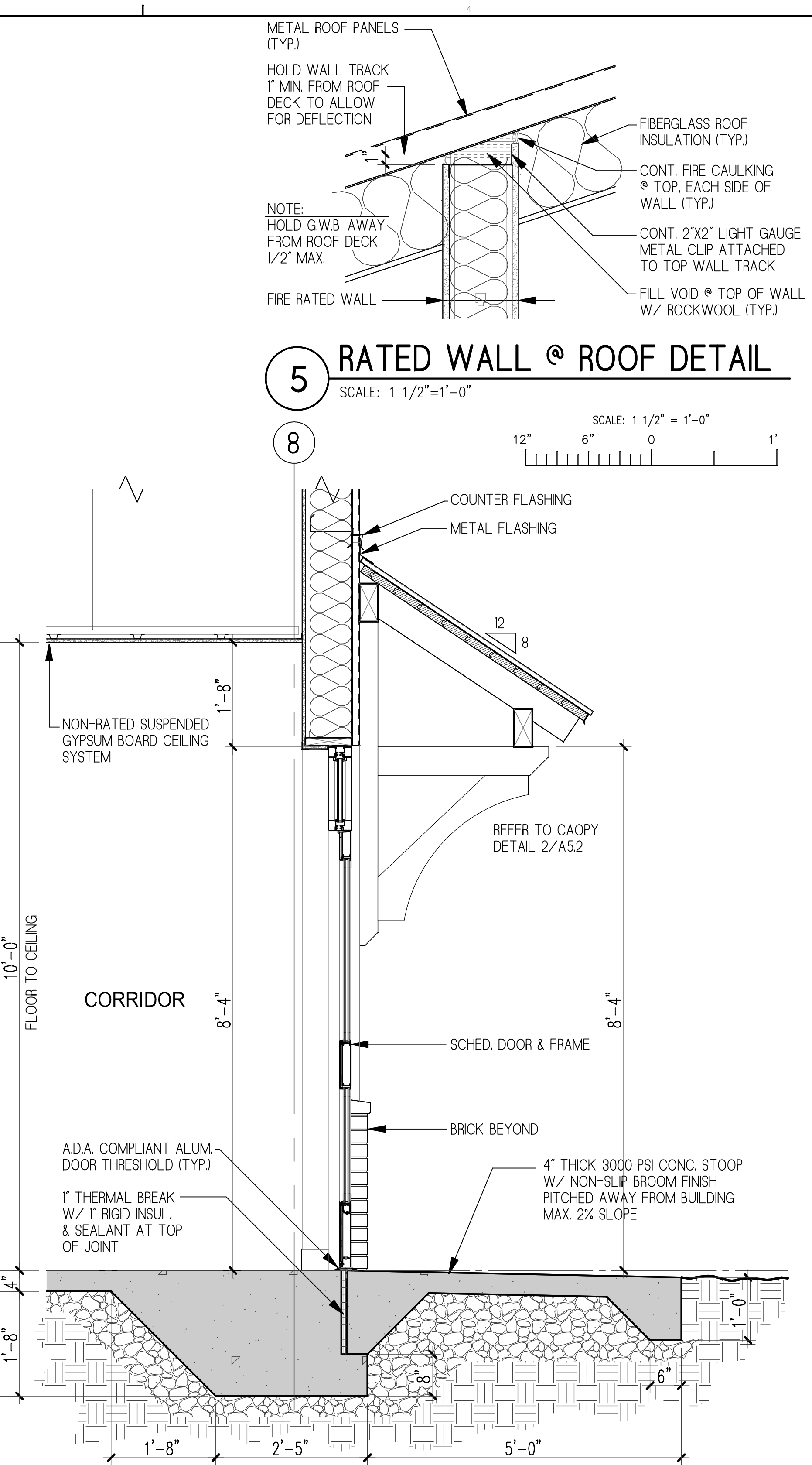
NOTE:
REFER TO SECTION 1/A3.1 FOR TYPICAL NOTES



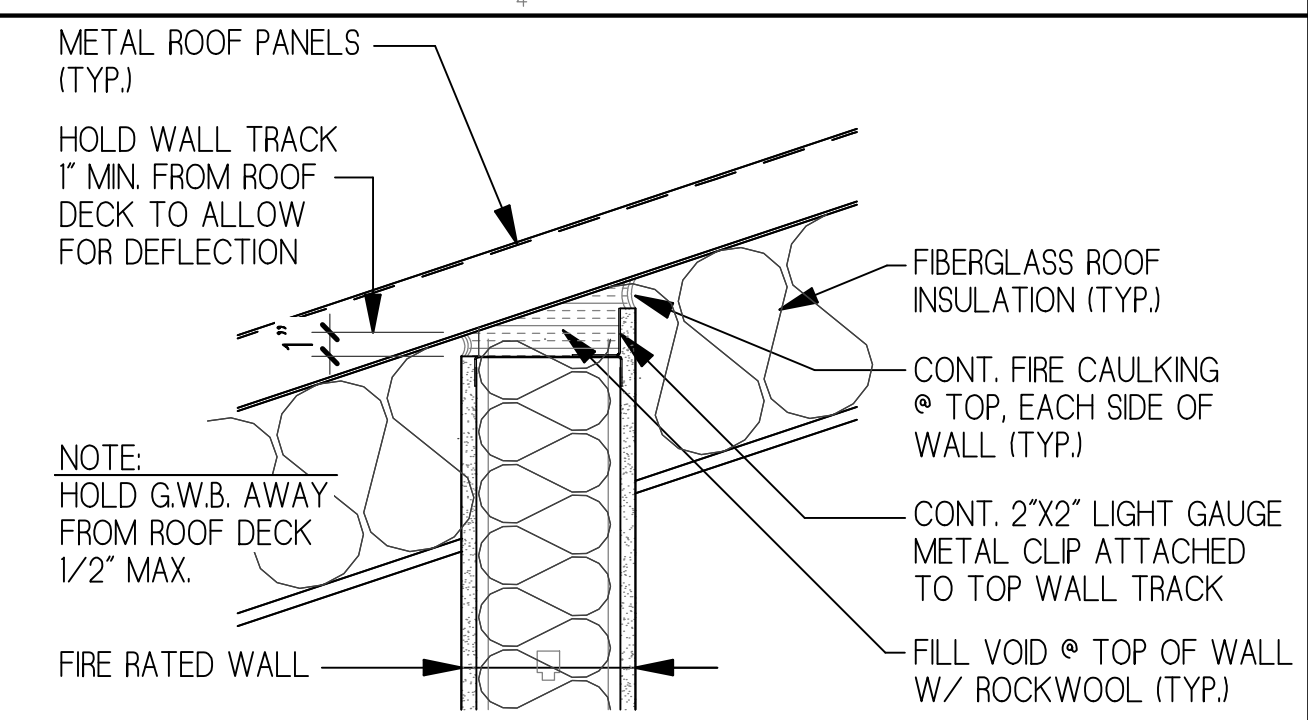
2 WALL SECTION
SCALE: 3/4"=1'-0"



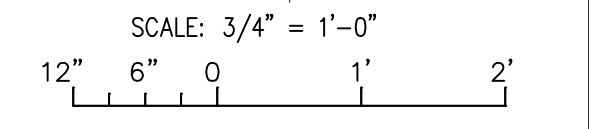
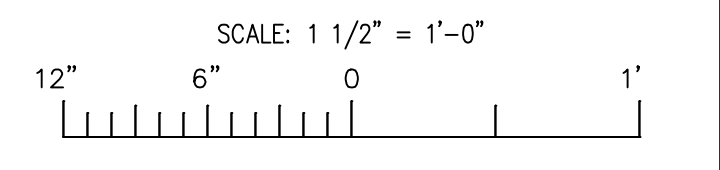
3 WALL SECTION
SCALE: 3/4"=1'-0"



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



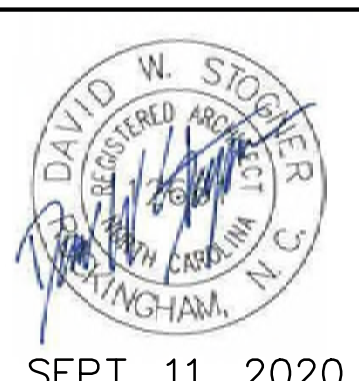
5 RATED WALL @ ROOF DETAIL
SCALE: 1 1/2"=1'-0"



NOTE:
REFER TO LIFE SAFETY PLAN, G1.4
FOR RATED ASSEMBLY LOCATIONS

| REVISIONS |
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FOR CONSTRUCTION

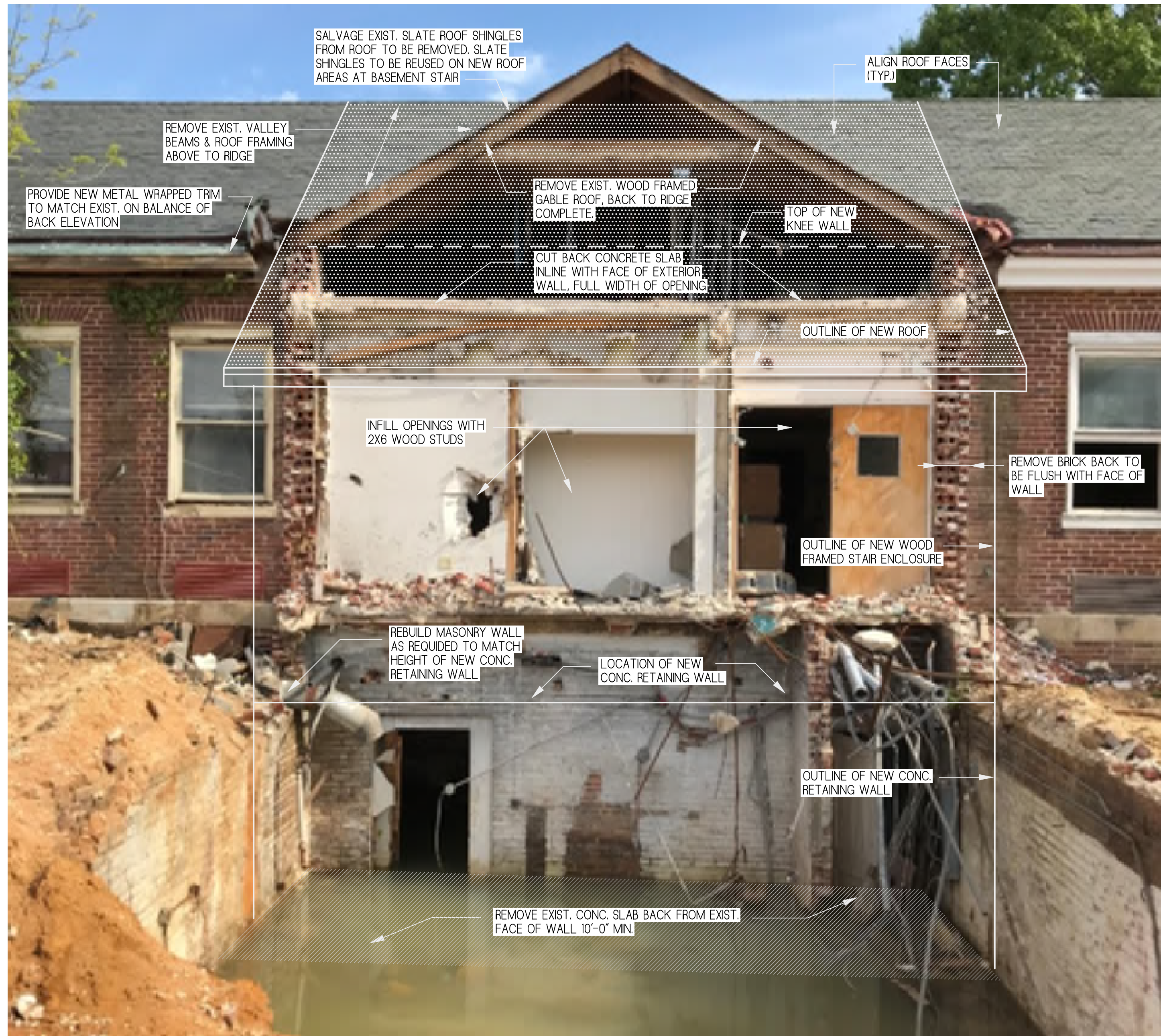


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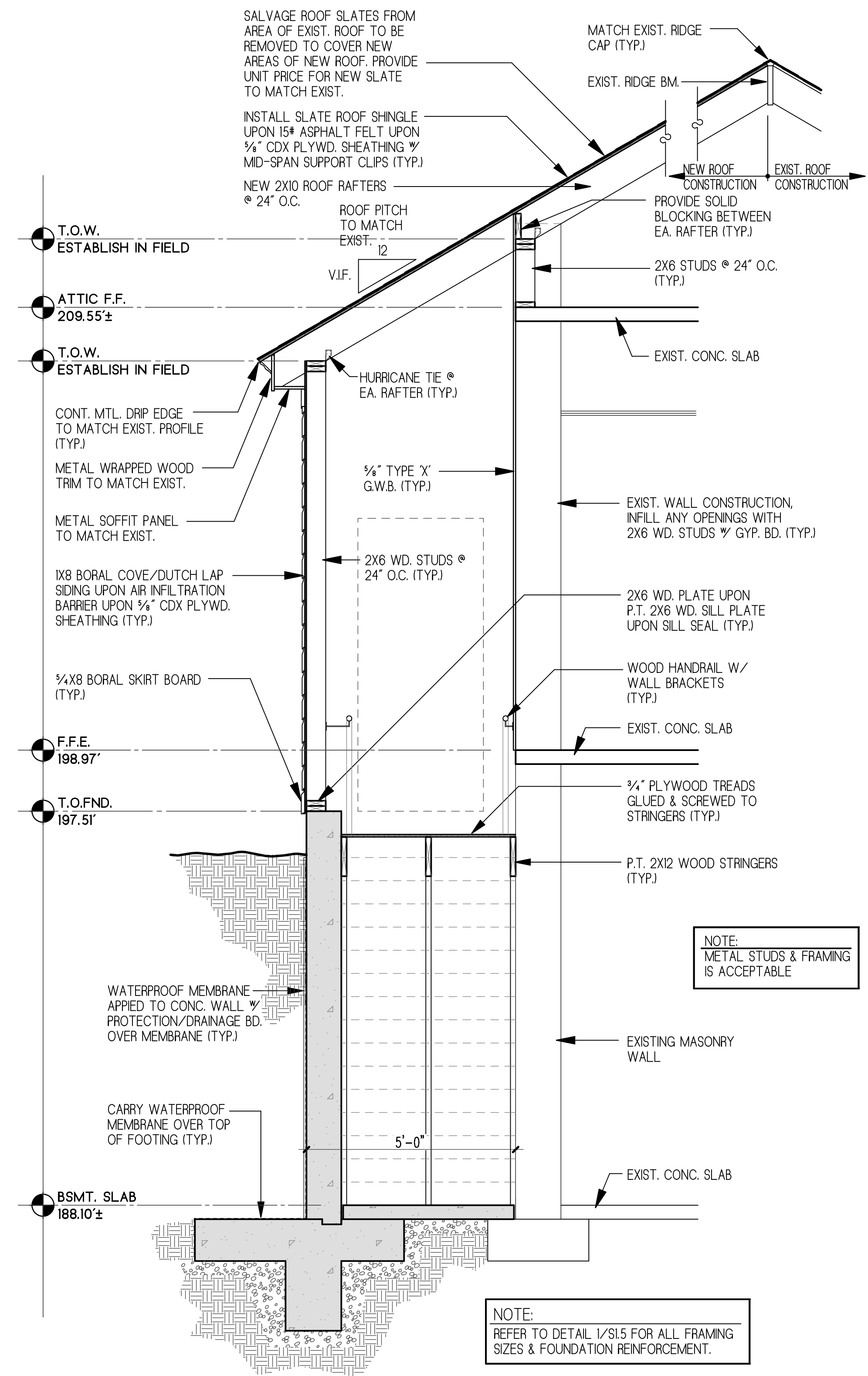
WALL SECTIONS
GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

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| COMM. NO.: | 4535 |
| DRAWN BY: | JKM |
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| DATE: | 9/11/2020 |
| SHEET NO.: | A3.2 |

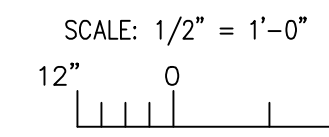
O:\NON-HUD PROJECTS\ERWIN\4535 SCMH - Erwin\DRAWINGS\XCADD\A3-3 Section BasementLoc



2 REMEDIAL WORK @ OLD BASEMENT AREA
N.T.S.



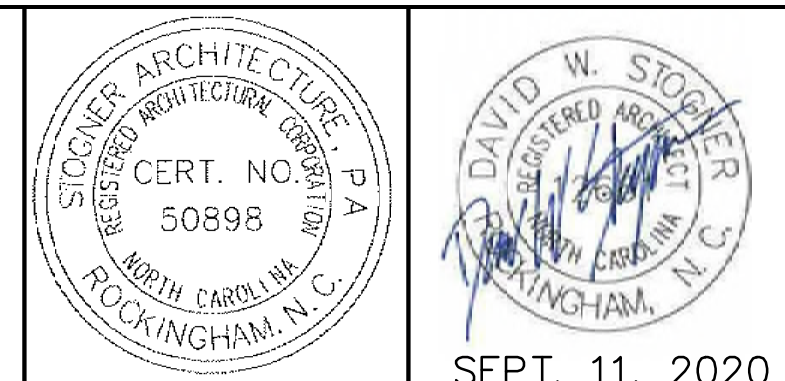
1 SECTION @ NEW BASEMENT STAIR
SCALE: 1/2" = 1'-0"



NOTE:
REFER TO LIFE SAFETY PLAN, G1.4
FOR RATED ASSEMBLY LOCATIONS

| REVISIONS |
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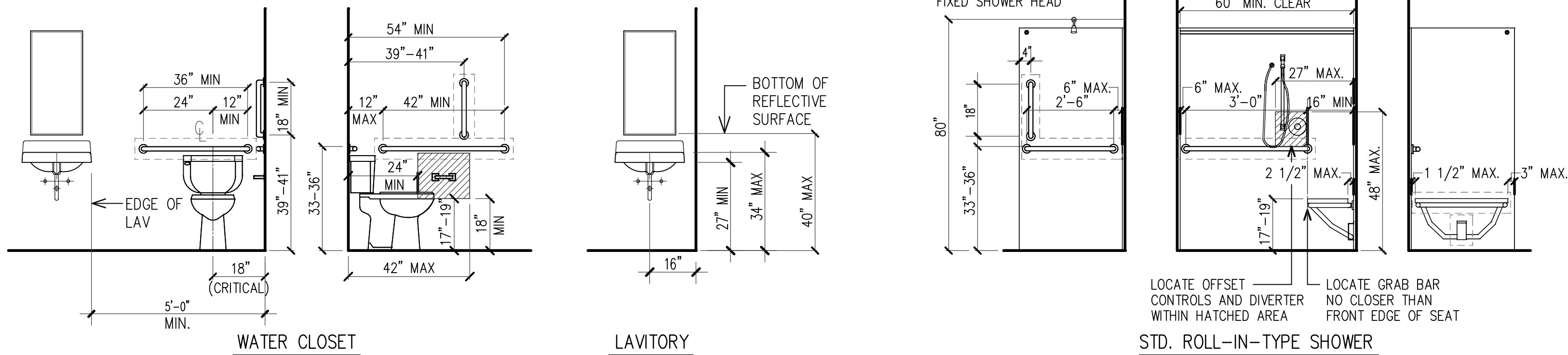
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EXISTING BASEMENT REMEDIAL WORK
GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

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DATE: 9/11/2020
SHEET NO.
A3.3



1 HANDICAP ACCESSORY MOUNTING ILLUSTRATION
SCALE: 3/8"=1'-0"

GENERAL NOTES

- G1. CONTRACTOR SHALL COORDINATE WITH P & E DRAWINGS.
- G2. CONTRACTOR TO FIELD MEASURE EACH ELEVATION PRIOR TO PREPARING SHOP DRAWINGS OR ORDERING MATERIALS.
- G3. CONTRACTOR SHALL COORDINATE WALL DIMENSIONS WITH ACCESSIBLE SHOWER.
- G4. DIMENSIONS ON ELEVATIONS ARE FROM FINISHED FACE TO FINISHED FACE.
- G5. DIMENSIONS ON ENLARGED PLANS ARE FROM FACE OF STUD TO FACE OF STUD, UNLESS OTHERWISE NOTED.
- G6. FLOOR TILE AND GROUT SHALL RECEIVE 2 SEAL COATS SUCH THAT WATER WILL "BEAD" ON GROUT.
- G7. GC SHALL INSTALL NEW PAPER TOWEL DISPENSER AND WASTE RECEPTACLE - COORDINATE MOUNTING LOCATION W/ OWNER. PAPER TOWEL DISPENSER & WASTE RECEPTACLE SHALL BE FURNISHED BY OWNER.
- G8. INCLUDE IN BASE BID PROVIDING 12 ANTI-LIGATURE COAT HOOKS - EXACT LOCATION OF INSTALLATION T.B.D. BY OWNER DURING CONSTRUCTION. PROVIDE CAPE COD SYSTEMS SECURITY HOOK MODEL #CCSA18 OR APPROVED EQUAL.
- G9. G.C. SHALL COORDINATE ALL ELECTRICAL, PHONE/DATA OUTLETS UNDER COUNTERS TO BE FREE OF BASE CABINETS.

TOILET ROOM KEYNOTES

- T1 - PROVIDE NEW WALL-HUNG SINK W/ HEAVY DUTY MOUNTING BRACKET/ANCHORS AND FAUCET SET. SEE ELECTRICAL AND PLUMBING DRAWINGS.
- T1A - PROVIDE NEW ANTI-LIGATURE WALL-HUNG SINK W/ HEAVY DUTY MOUNTING BRACKET/ANCHORS AND ANTI-LIGATURE FAUCET SET.
- T2 - PROVIDE NEW MIRROR AND FRAME. (18" x 36")
- T2A - PROVIDE NEW UNBREAKABLE MIRROR AND FRAME. (18" x 36")
- T3 - INSTALL NEW 2-ROLL TOILET TISSUE DISPENSER. FURNISHED BY OWNER.
- T3A - PROVIDE NEW ANTI-LIGATURE TOILET TISSUE DISPENSER.
- T4 - PROVIDE NEW WATER CLOSET.
- T4A - PROVIDE NEW ANTI-LIGATURE WATER CLOSET.
- T5 - PROVIDE NEW S.S. GRAB BARS. SIZE AS INDICATED. PROVIDE 2x8 WOOD BLOCKING IN WALL.
- T5A - PROVIDE NEW ANTI-LIGATURE S.S. GRAB BARS. SIZE AS INDICATED. PROVIDE 2x8 WOOD BLOCKING IN WALL.
- T6 - PROVIDE PRE-FORMED ROLL-IN TYPE FIBERGLASS SHOWER PAN WITH TILING SHIM, WATER DAM AND FRONT TRENCH DRAIN - FLEURCO #ABF3763AD-18-DC03-25 OR APPROVED EQUAL. PROVIDE CERAMIC TILE SHOWER SURROUND TO 6'-6" A.F.F. WITH ANSI 117.1 AND TO INCLUDE THE FOLLOWING COMPONENTS:
 - a. 1 1/2" S.S. ANTI-LIGATURE GRAB BAR.
 - b. HAND HELD/FIXED SHOWER ON 60" MIN. HOSE ON LONG WALL WITH ANTI-LIGATURE RELEASE. MUST ALLOW FIXED POSITION. FIXED ANTI-LIGATURE SHOWER HEAD ON SHORT WALL. (NOTE: SHOWER SHALL ALLOW FOR REMOVABLE/QUICK RELEASE SHOWER HOSE/HEAD. PROVIDE HOSE/HEAD(S) TO OWNER. INSTALL SHOWER HEAD IN FIXED POSITION.)
 - c. FIXED, ANTI-LIGATURE, ADA SEAT.
 - d. 1" ANTI-LIGATURE CURTAIN ROD W/ WEIGHTED CURTAIN.
 - e. BRASS DRAIN.
 - f. ADA 1 1/2" COMPRESSIBLE WATER DAMN.
 - g. ANTI-LIGATURE SHOWER CONTROLS & DIVERTER VALVE.
- T7 - INSTALL NEW WALL MTD. SOAP DISPENSOR. FURNISHED BY OWNER.
- T8 - PROVIDE EPOXY PAINT FROM FLOOR TO CEILING.
- T9 - PROVIDE NEW SANITARY NAPKIN DISPOSAL
- T10 - DOOR AND FRAME - SEE DOOR SCHEDULE.
- T11 - REFER TO ROOM FINISH SCHEDULE FOR WALL FINISH.
- T12 - PROVIDE NEW COMBINATION PAPER TOWEL DISPENSER & WASTE RECEPTACLE, FULLY RECESSED INTO WALL.
- T13 - PROVIDE NEW PROTECTIVE INSULATION WRAP.
- T14 - PROVIDE 2X8 WOOD BLOCKING IN WALL FOR FUTURE GRAB BARS.

CASEWORK LEGEND

- B - BASE CABINET
- D - DRAWER
- W - WALL CABINET
- F - FILLER
- SB - SINK BASE

CASEWORK KEYNOTES

- C1 - PROVIDE NEW LAMINATE WALL CABINETS.
- C2 - PROVIDE NEW LAMINATE BASE CABINETS. NOTE: PROVIDE CLOSED CORNER FOR FREE PASSAGE OF DRAWERS/HARDWARE.
- C3 - PROVIDE NEW LAMINATE COUNTER TOP W/ 4" BACKSPLASH & RETURNS.
- C4 - PROVIDE NEW DRAWER/CABINET LOCK.
- C5 - PROVIDE NEW COMPUTER KEYPAD PULL-OUT SHELF. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
- C6 - PROVIDE 4" HIGH TOE SPACE - TYPICAL.
- C7 - OPEN KNEE SPACE.
- C8 - PROVIDE 8 1/2 X 11 FILE HANGING HARDWARE AT ALL FILE DRAWERS.
- C9 - PROVIDE DATA OPG. IN DESK WITH FINISH 1 1/4" GROMMET. COORDINATE LOCATION WITH OWNER. QUANTITY (2).
- C10 - COORDINATE ALL DATA AND POWER OUTLETS WITH CASEWORK. COORDINATE LOCATION WITH ELECTRICIAN.
- C11 - SCHEDULED DOOR & FRAME. SEE DOOR SCHEDULE.
- C12 - NOT USED.
- C13 - WALL. SEE FINISH SCHEDULE.
- C14 - PROVIDE NEW SINGLE BOWL STAINLESS STEEL SINK WITH FAUCET SET. SEE PLUMBING DRAWINGS.
- C15 - PROVIDE NEW COUNTER FIRE/SMOKE SHUTTER - 1-HR RATED MIN. WITH LOCKING CAPABILITY.
- C16 - PROVIDE NEW SUPPORT PANEL W/ H.P.L. ON ALL SURFACES. PROVIDE WOOD BLOCKING AS REQ'D.
- C17 - NEW MINI-FRIDGE - FURNISHED BY OTHERS.

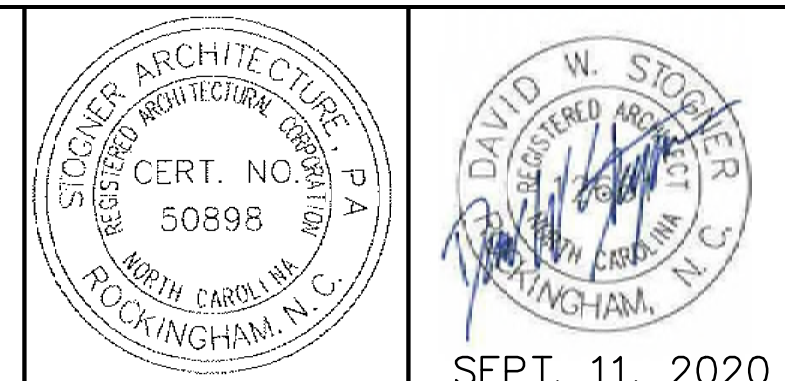
JANITOR CLOSET KEYNOTES

- J1 - PROVIDE NEW MOP BASIN. SEE PLUMBING DRAWINGS.
- J2 - PROVIDE NEW FAUCET SET. SEE PLUMBING DRAWINGS.
- J3 - PROVIDE NEW STAINLESS STEEL BACKSPLASH.
- J4 - PROVIDE NEW HOSE HOLDER.
- J5 - PROVIDE NEW MOP HOLDER.
- J6 - WALL. SEE FINISH SCHEDULE.

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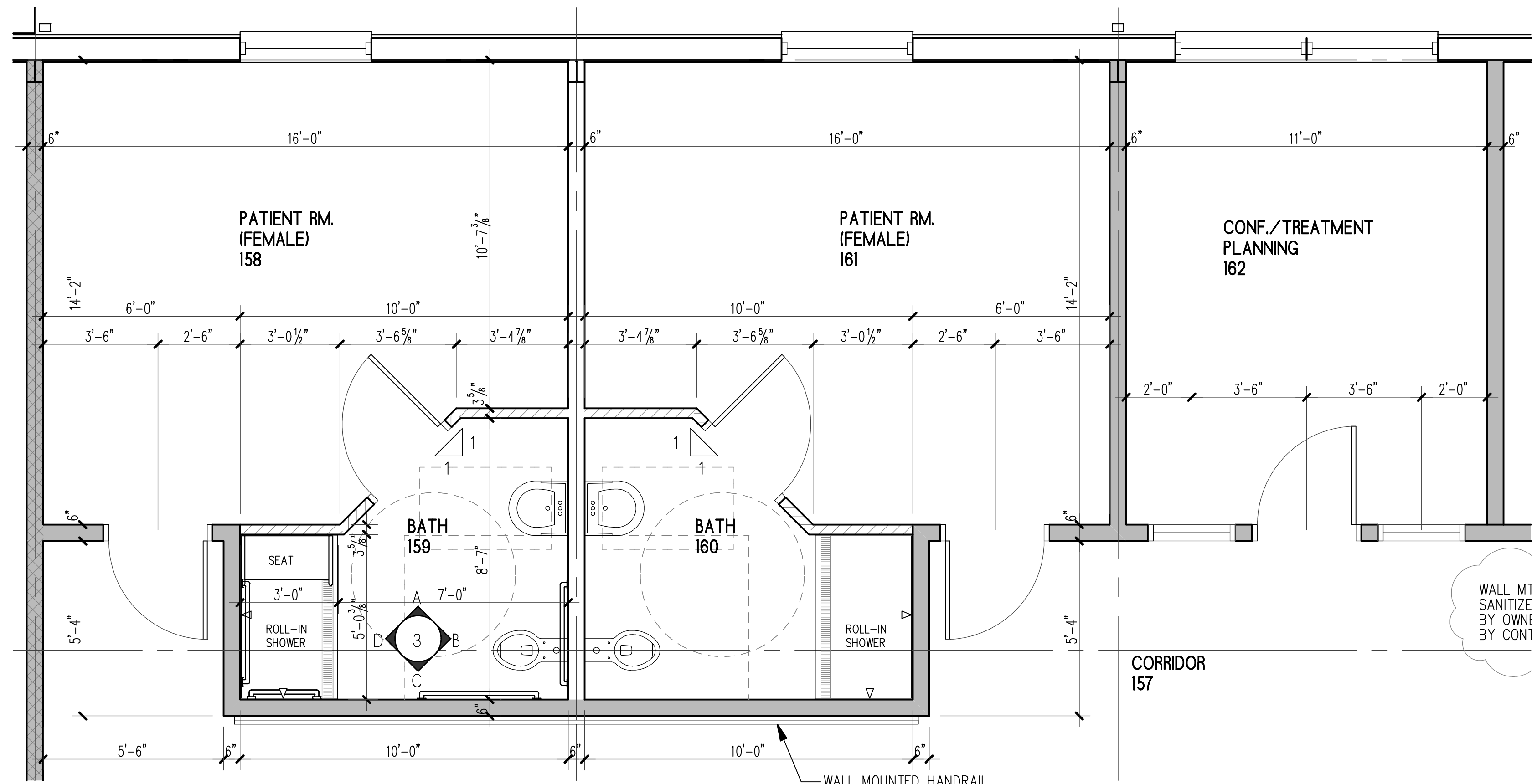
Stogner Architecture, PA
ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
615 East Broad Avenue, Rockingham, North Carolina, 28379
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HANDICAP ACCESSORY MOUNTING ILLUSTRATION & KEYNOTES

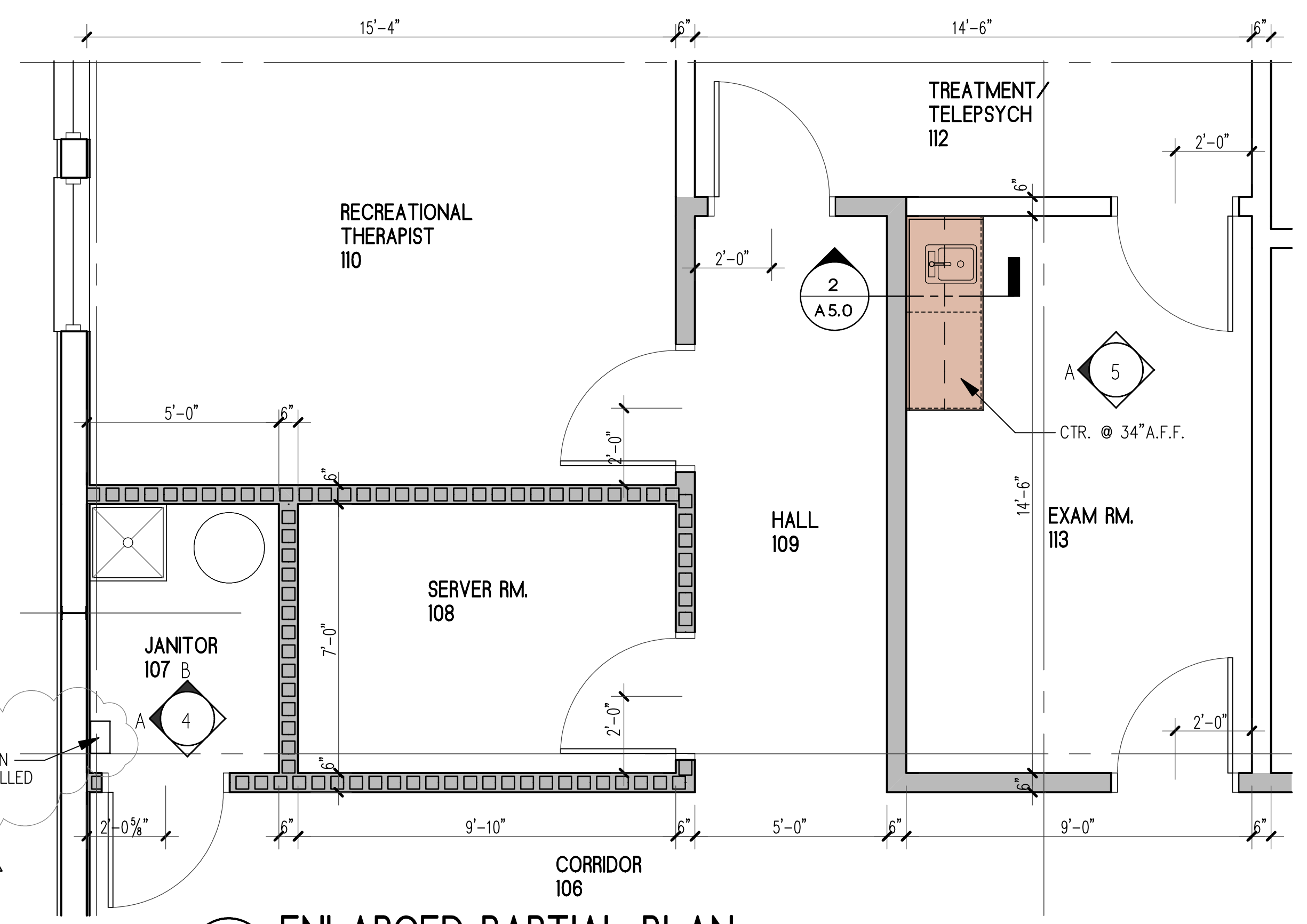
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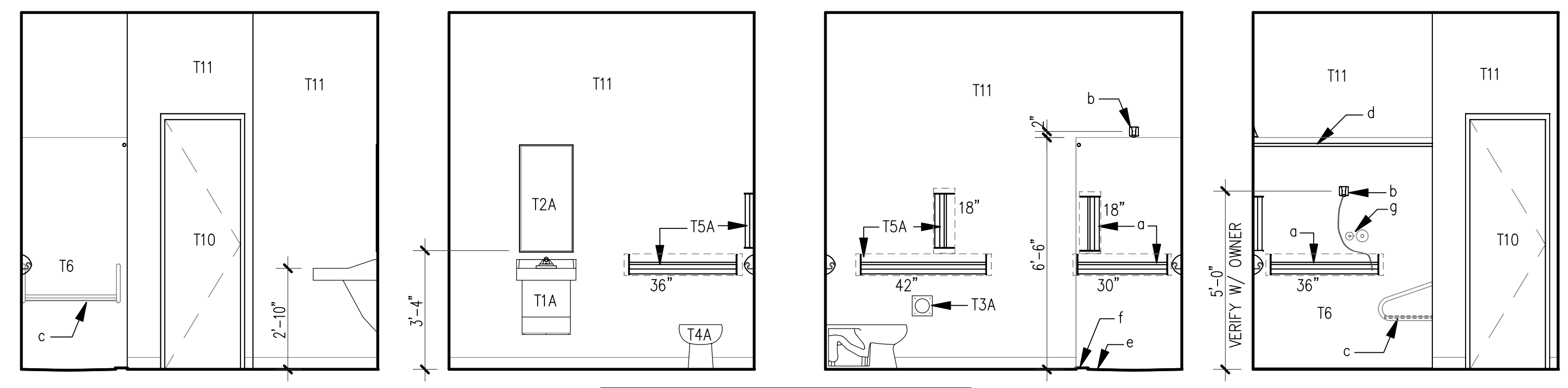
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| COMM. NO.: 4535 |
| DRAWN BY: JKM |
| CHECKED BY: DWS |
| DATE: 9/11/2020 |
| SHEET NO. A4.0 |



1 ENLARGED TYPICAL PATIENT ROOM
SCALE: 3/8"=1'-0"

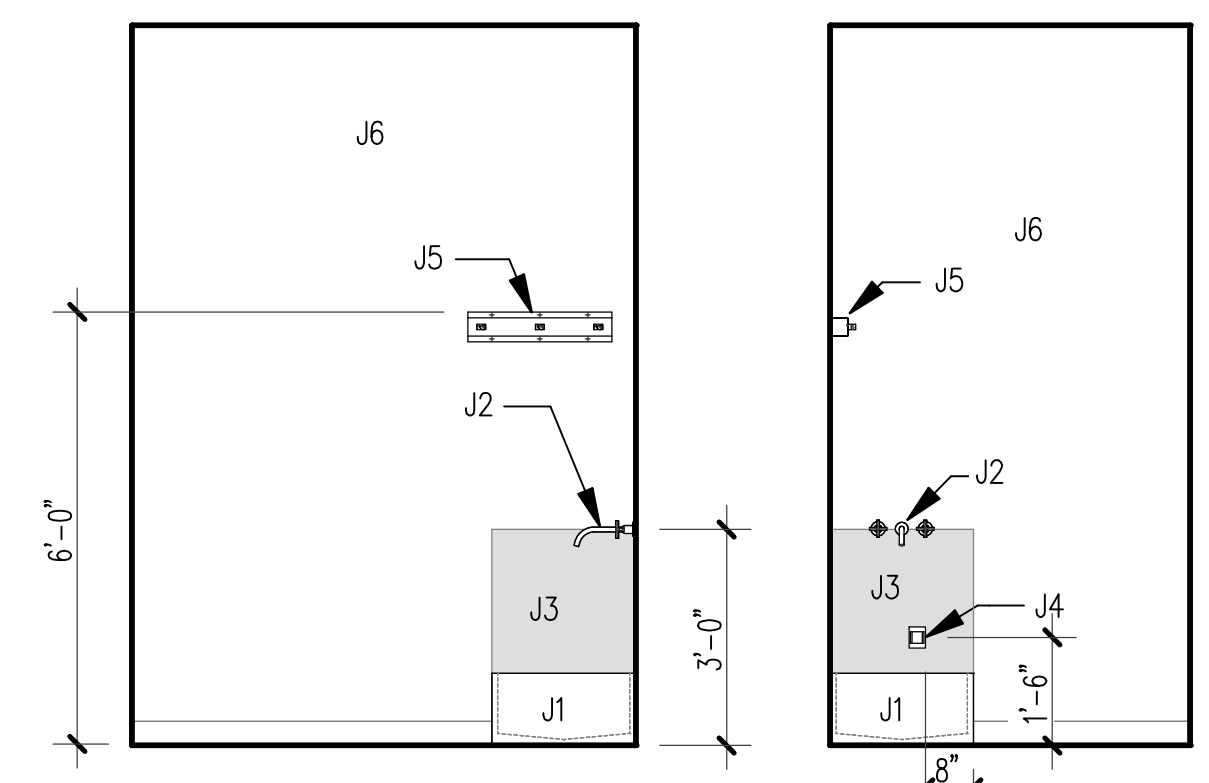


2 ENLARGED PARTIAL PLAN
SCALE: 3/8"=1'-0"

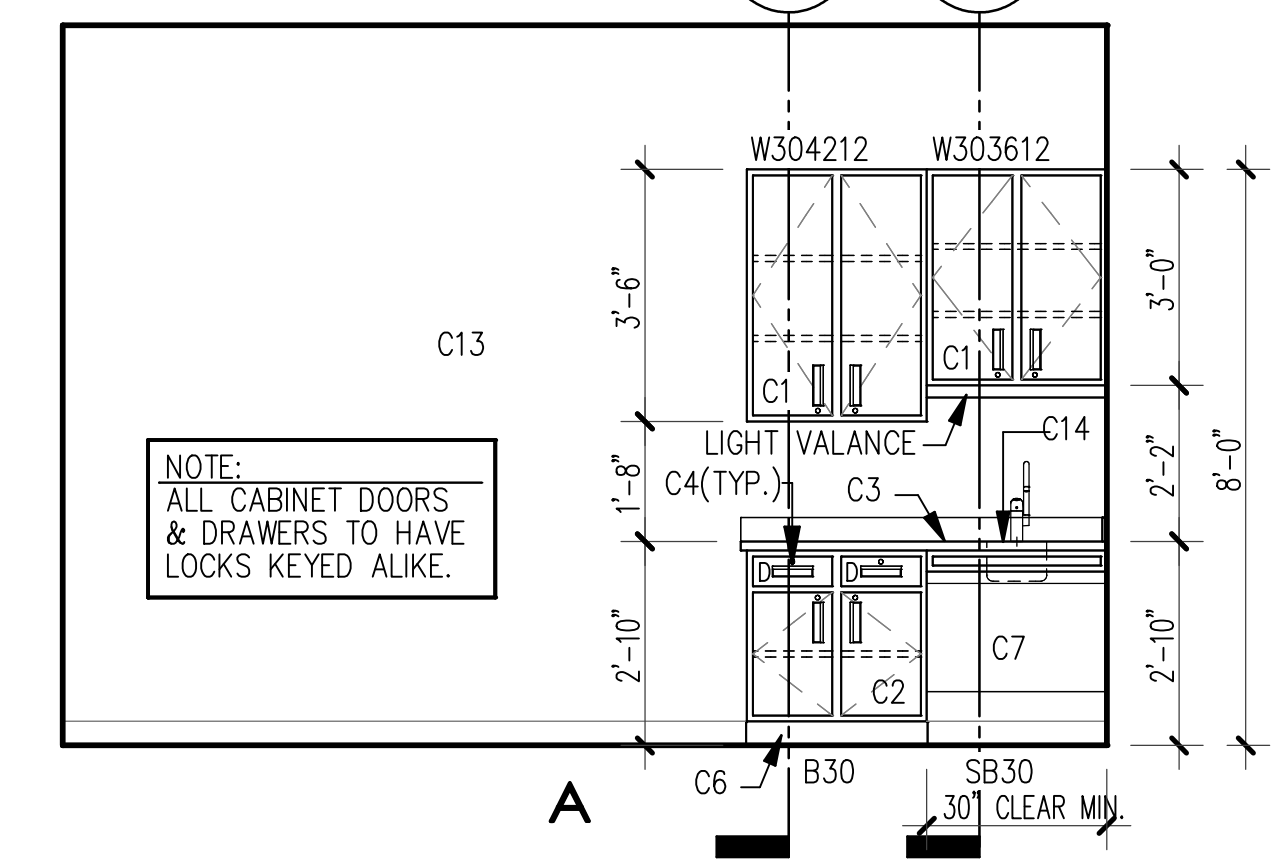


NOTE:
PROVIDE GRAB BARS & SHOWER SEATS IN BATH 149 & 159 ONLY. PROVIDE WOOD BLOCKING IN ALL OTHERS FOR FUTURE GRAB BARS & SEAT(S).

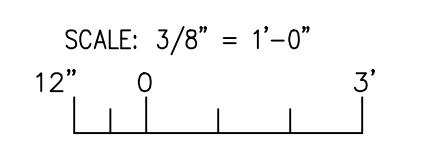
3 TYPICAL PATIENT BATH
SCALE: 3/8"=1'-0"



4 JANITOR 107
SCALE: 3/8"=1'-0"



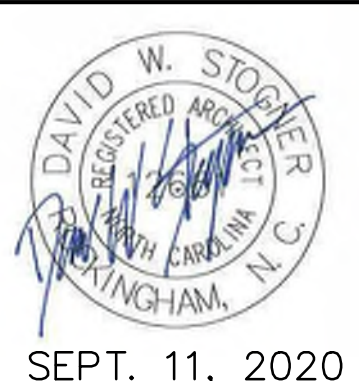
5 EXAM ROOM 113
SCALE: 3/8"=1'-0"



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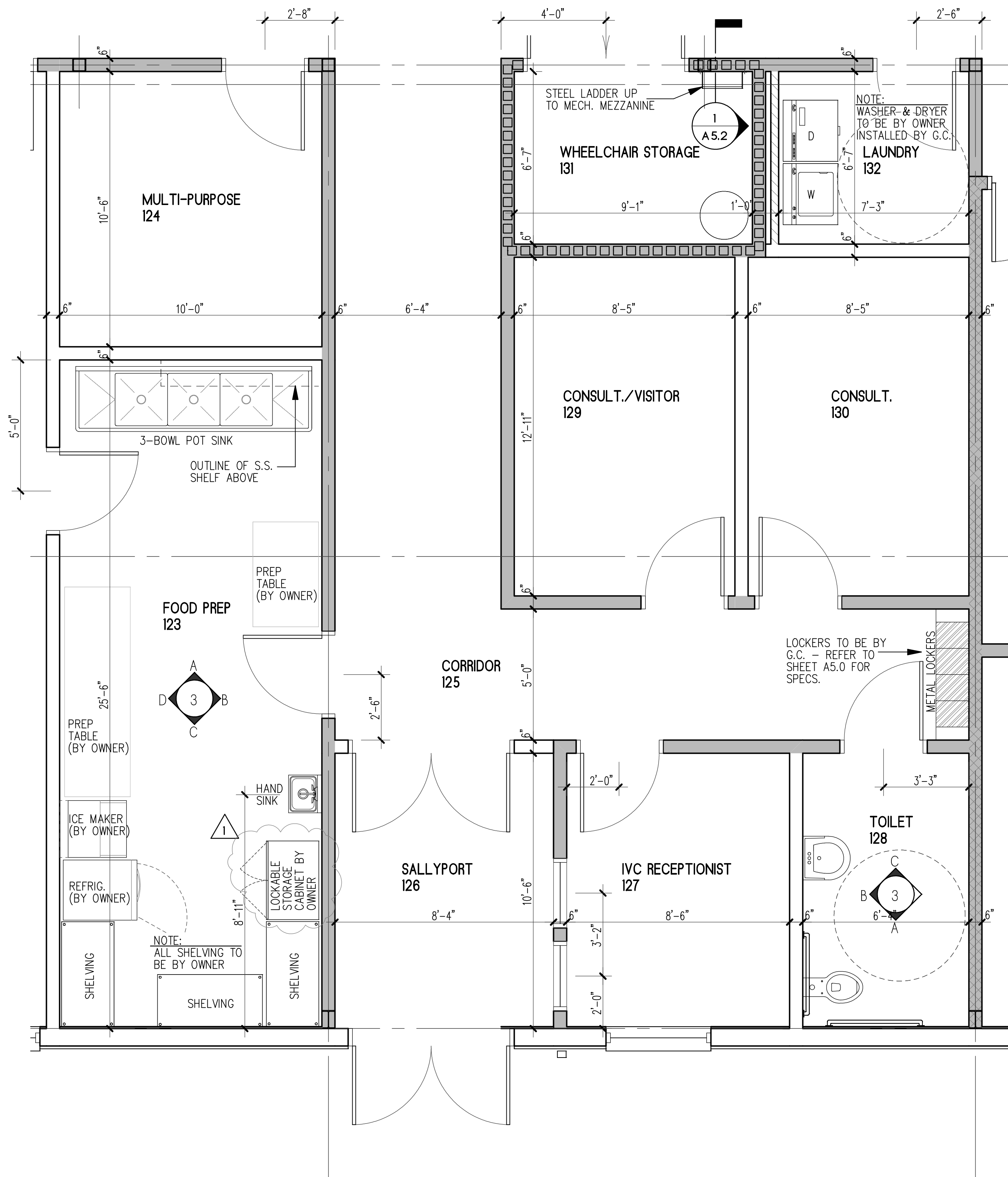
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SEPT. 11, 2020

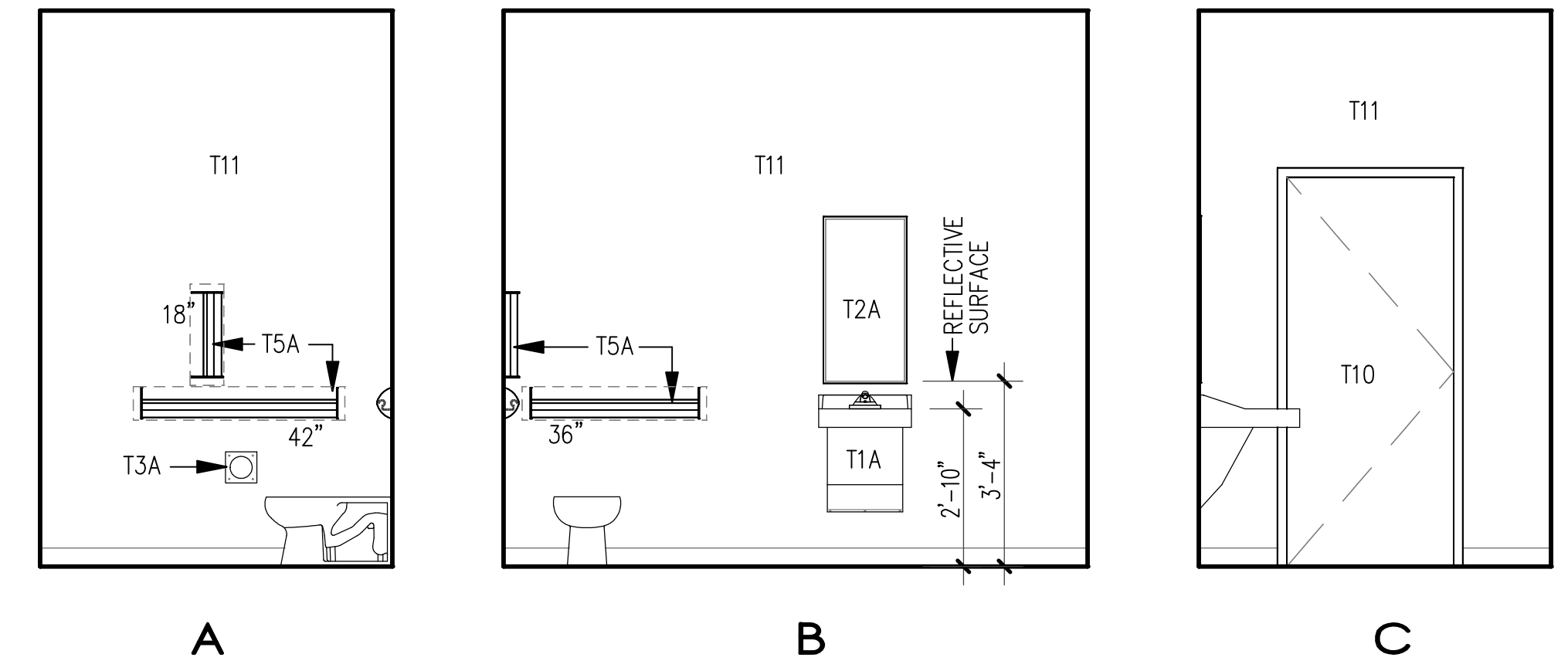
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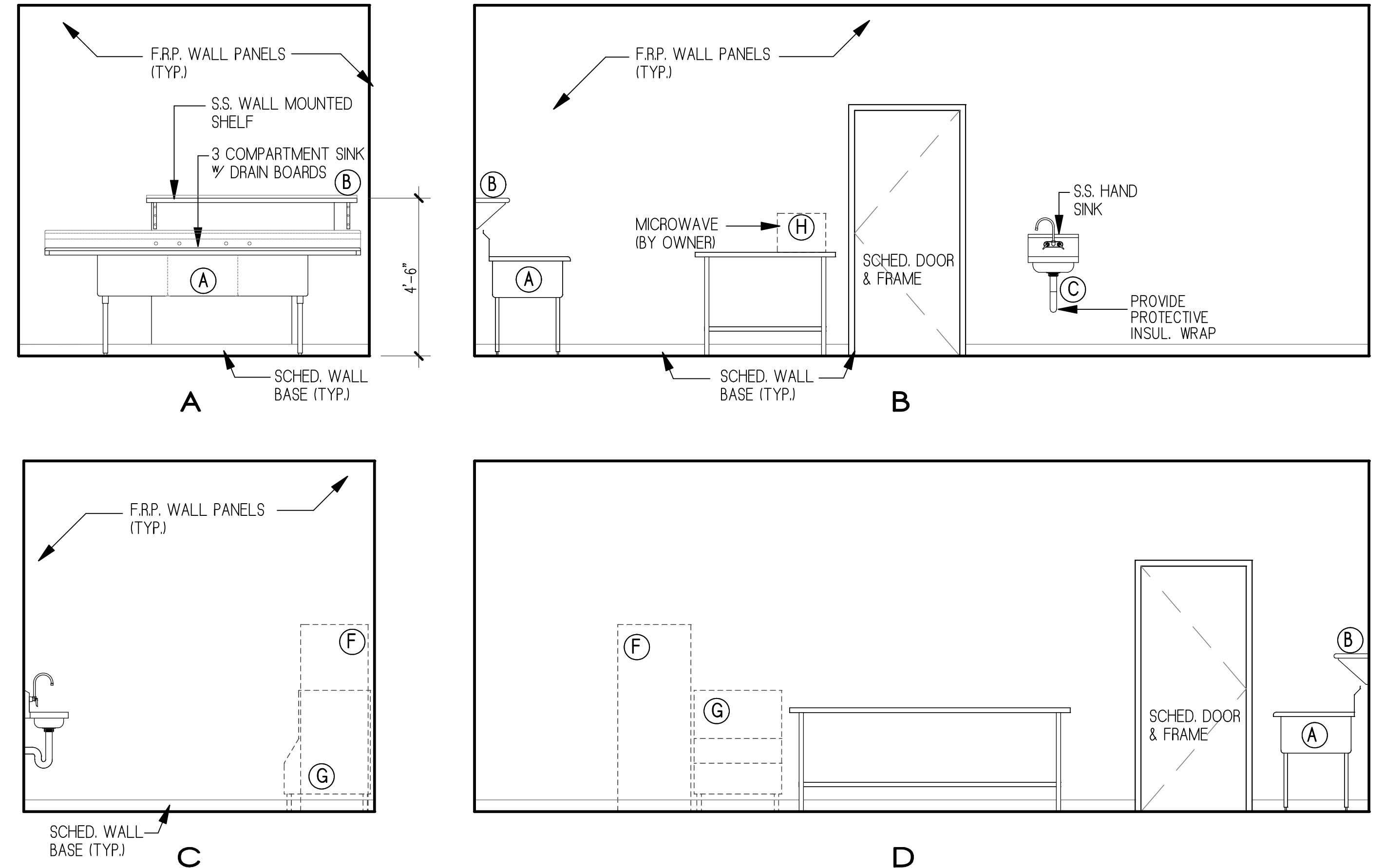
1 ENLARGED PARTIAL PLAN
SCALE: 3/8"=1'-0"

KITCHEN EQUIPMENT LIST:

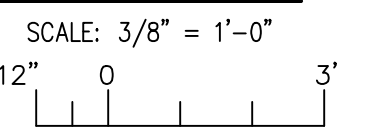
- (A) 14 GA. TYPE 304 STAINLESS STEEL THREE (3) COMPARTMENT SINK WITH DRAINBOARDS BOTH SIDES, BY: ADVANCE TABCO; MODEL #: FS-3-2424-18RL, WITH SPLASH MOUNTED FAUCET; MODEL #: K-105
- (B) 18 GA. 304 STAINLESS STEEL WALL SHELF, BY: ADVANCE TABCO; MODEL #: WS-12-72-16
- (C) STAINLESS STEEL HAND SINK BY: ADVANCE TABCO; MODEL #: 7-PS-60
- (D) 14 GA. TYPE 304 STAINLESS STEEL PREP WORK TABLE WITH 18 GA. STAINLESS STEEL BOTTOM SHELF BY: ADVANCE TABCO; MODEL #: SS-304
- (E) 14 GA. TYPE 304 STAINLESS STEEL PREP WORK TABLE WITH 18 GA. STAINLESS STEEL BOTTOM SHELF BY: ADVANCE TABCO; MODEL #: SS-308
- (F) REFRIGERATOR: PROVIDED BY OWNER
- (G) ICE MAKER: PROVIDED BY OWNER
- (H) MICROWAVE OVEN: PROVIDED BY OWNER



3 TOILET 128
SCALE: 3/8"=1'-0"

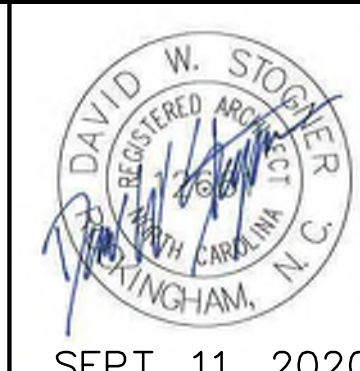
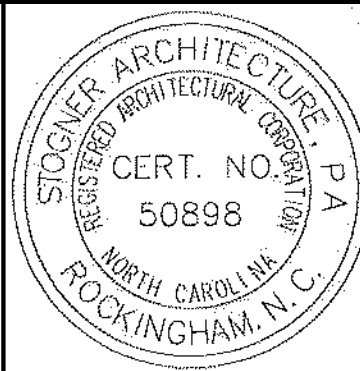


2 FOOD PREP 123
SCALE: 3/8"=1'-0"



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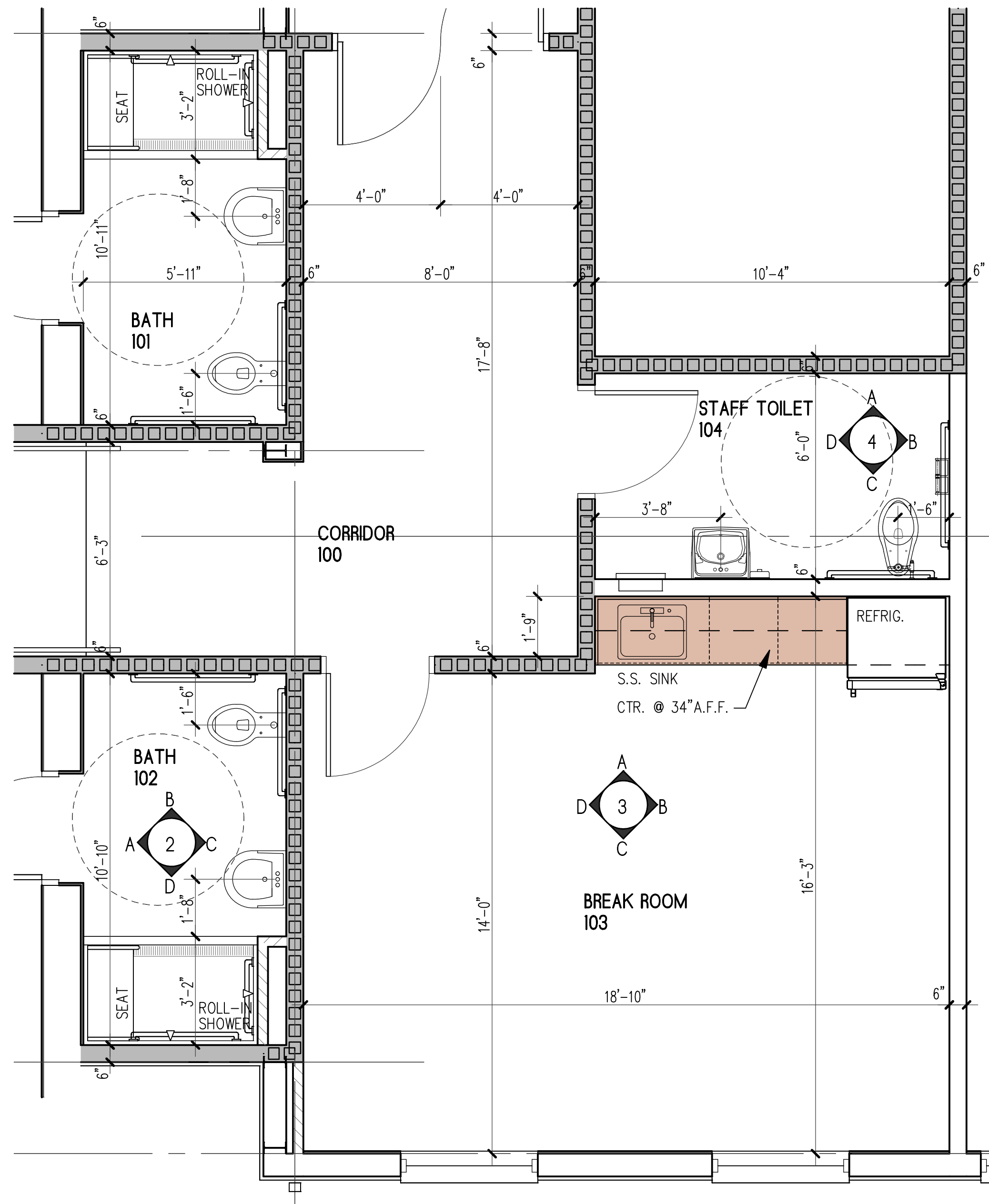
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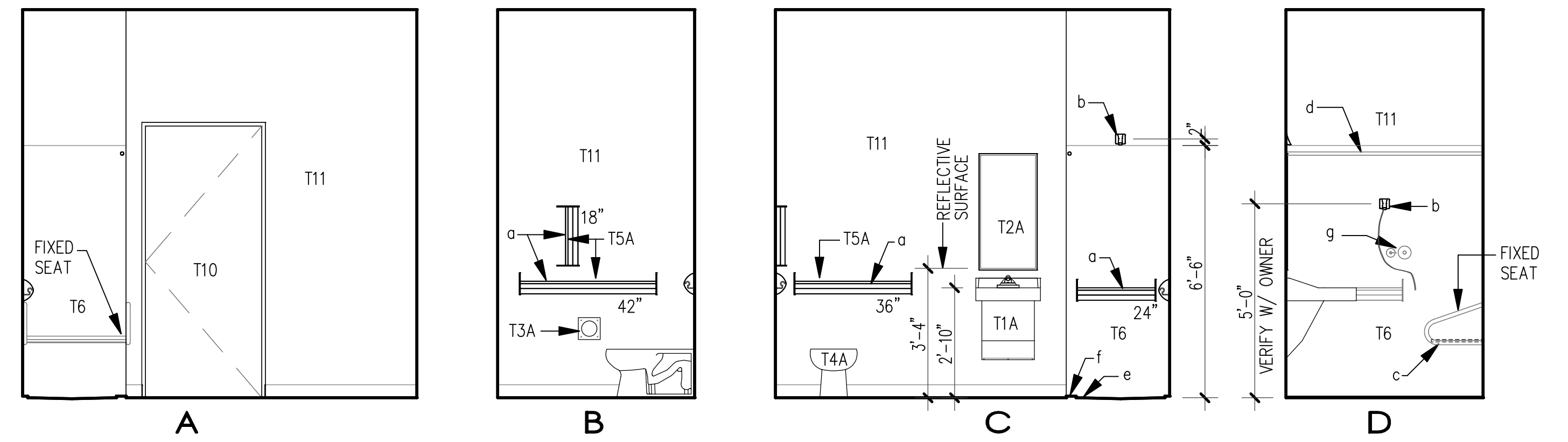
A4.2

SEPT. 11, 2020

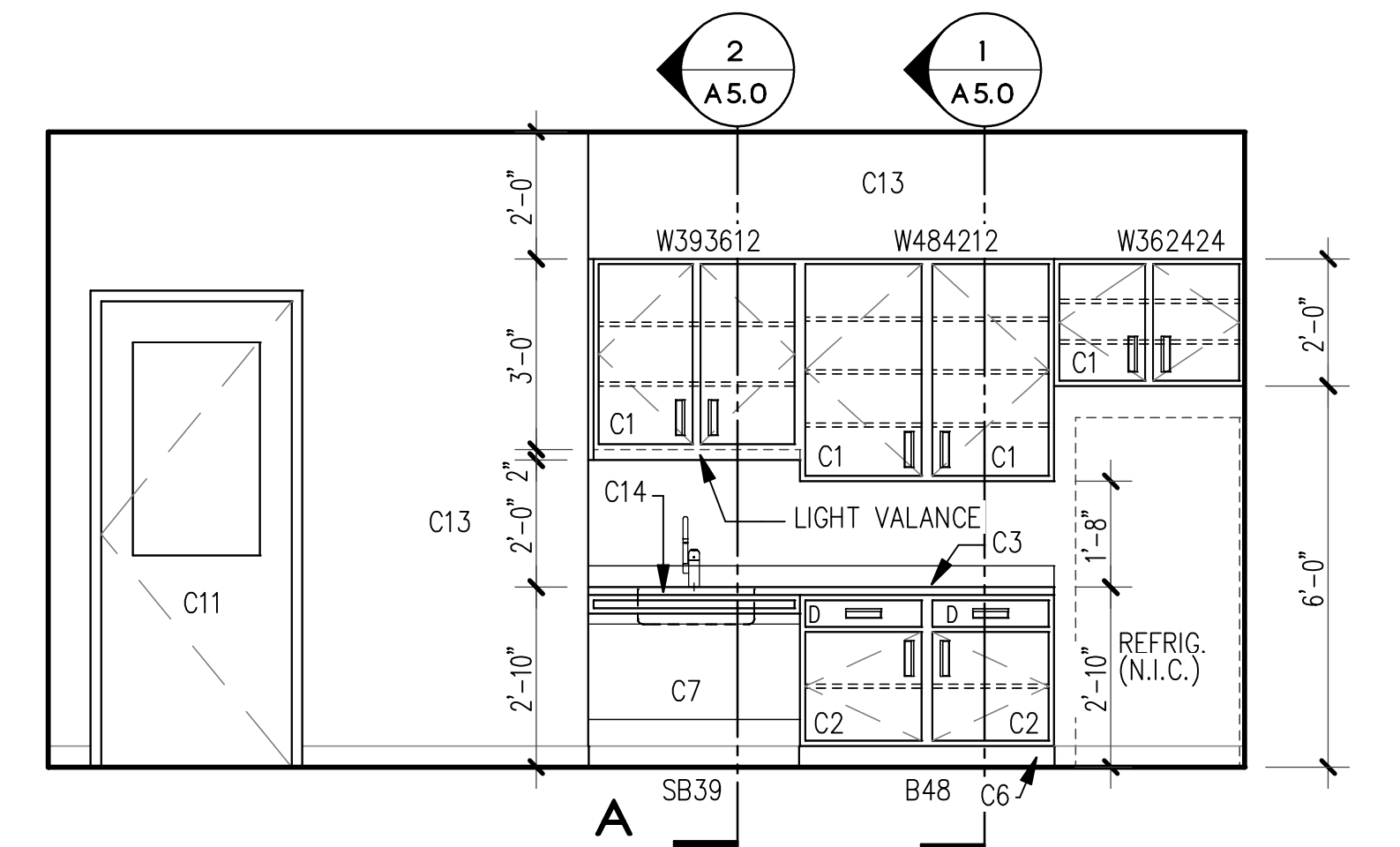
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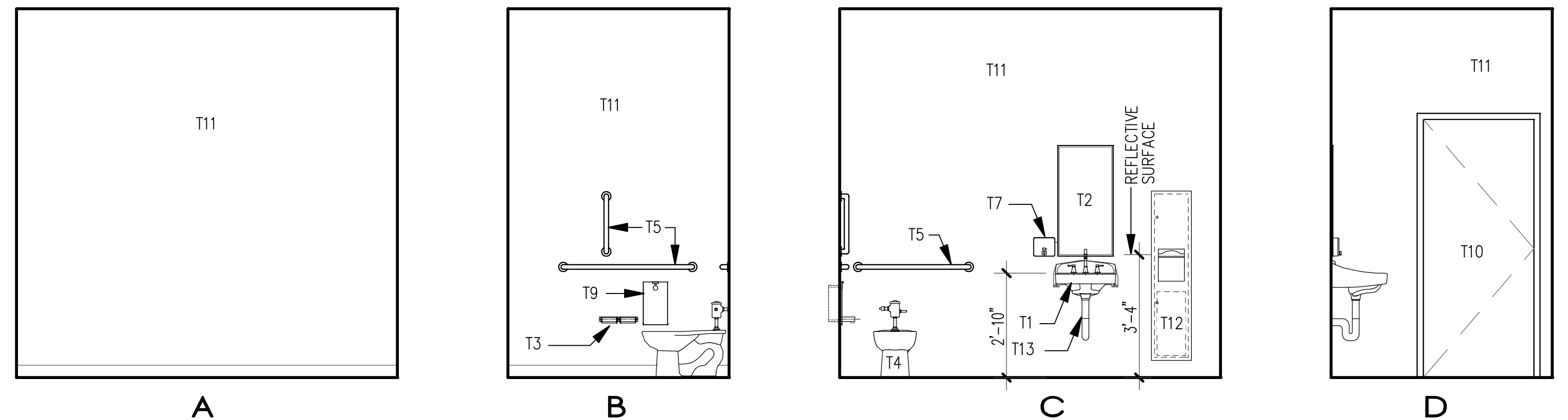
1 ENLARGED PARTIAL PLAN @ BREAK ROOM AREA
SCALE: 3/8"=1'-0"



2 BATH 102 (101 OPPOSITE HAND)
SCALE: 3/8"=1'-0"

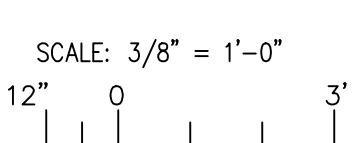


3 BREAK ROOM 136
SCALE: 3/8"=1'-0"



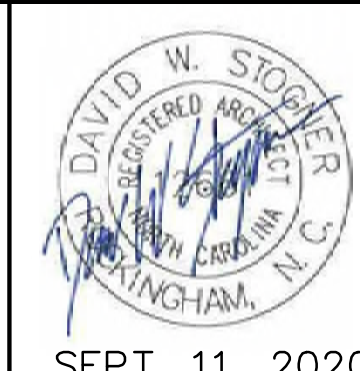
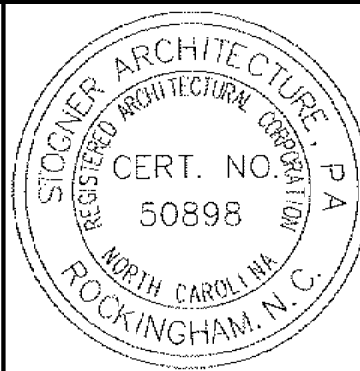
4 TOILET 104 - INTERIOR ELEVATIONS
SCALE: 3/8"=1'-0"

NOTE: REFER TO DETAIL 1/A4.0 FOR HANDICAP ACCESSORIES MOUNTING ILLUSTRATION



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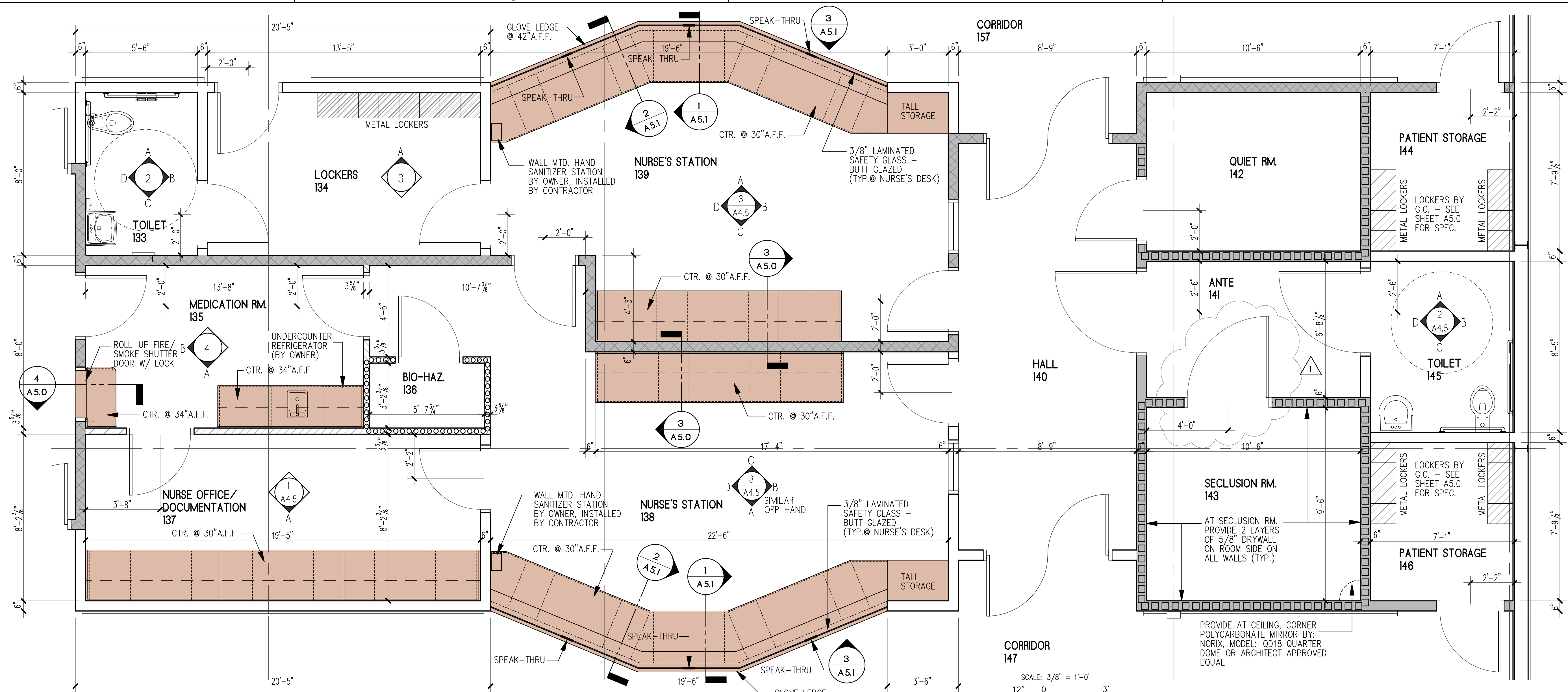
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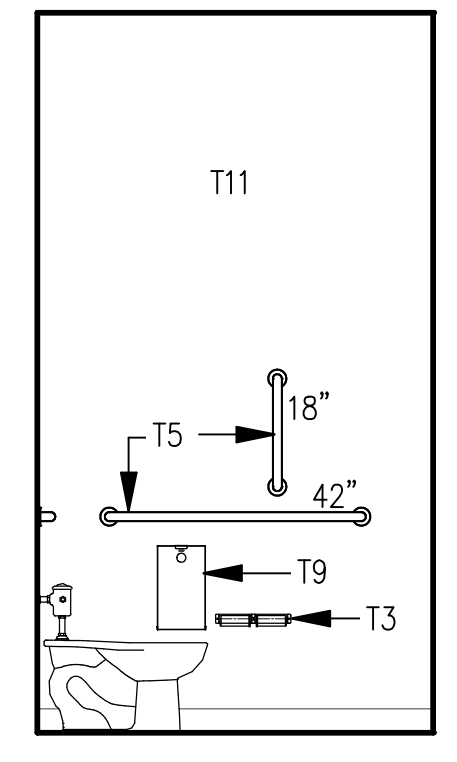
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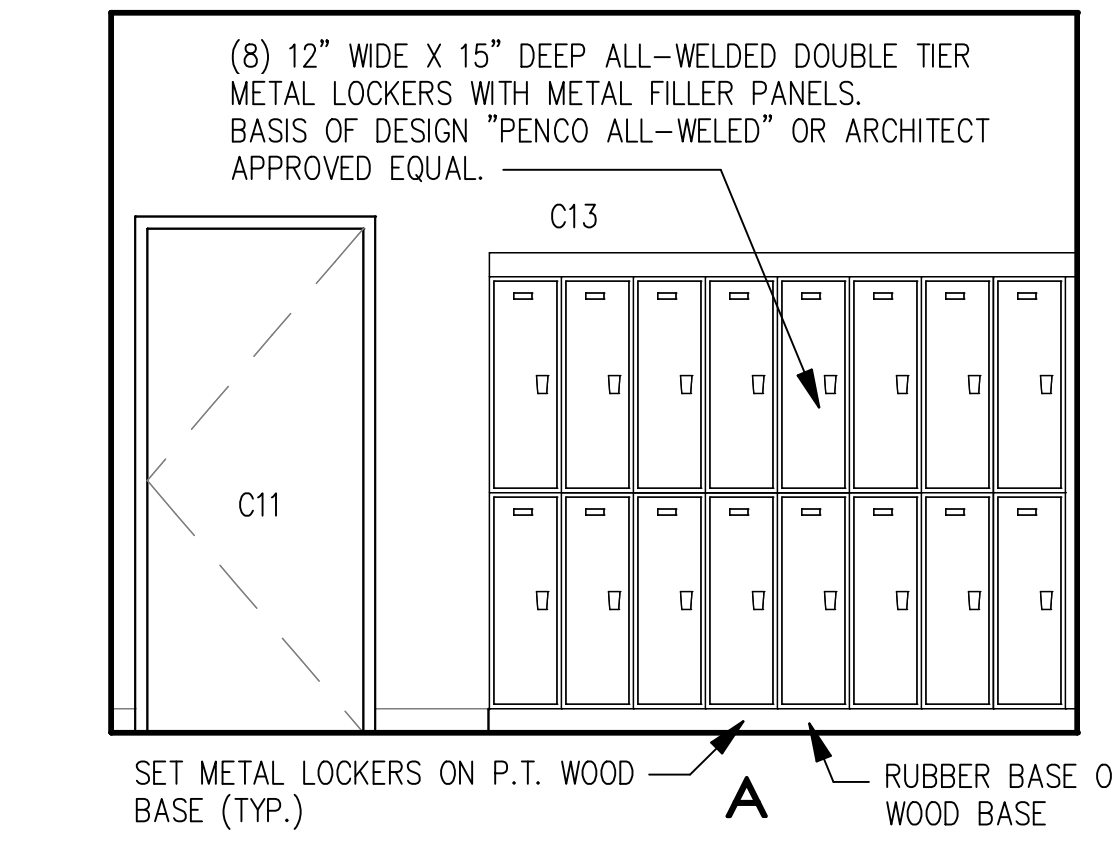
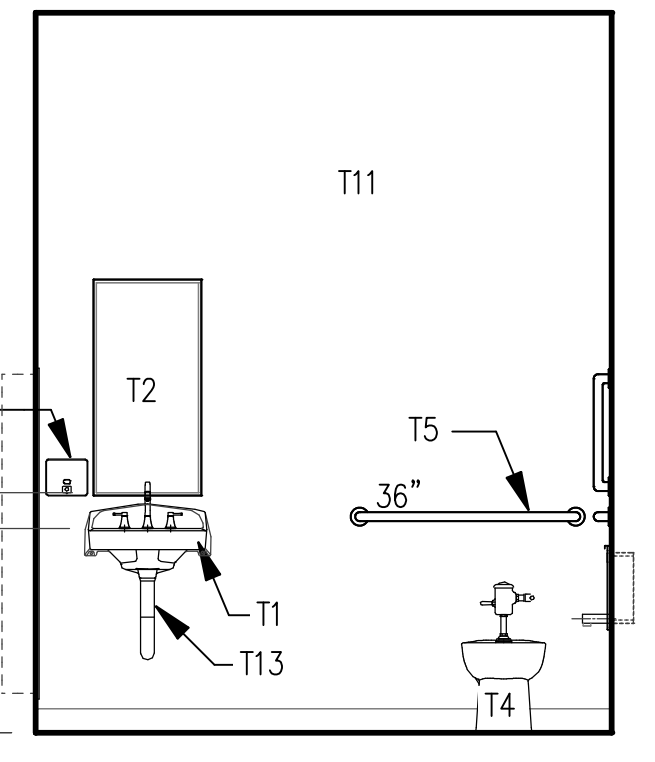
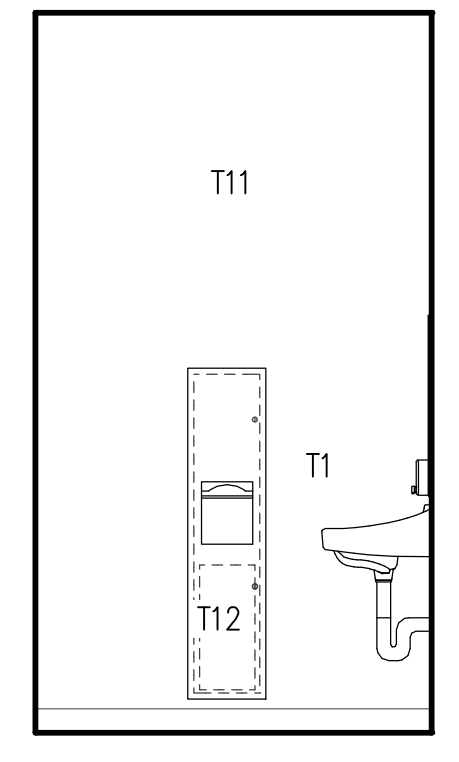
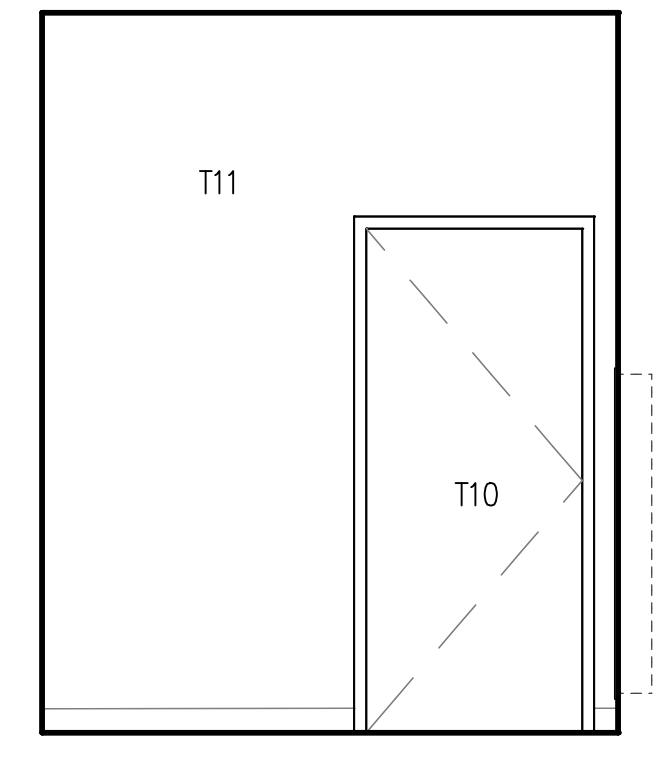
A4.3



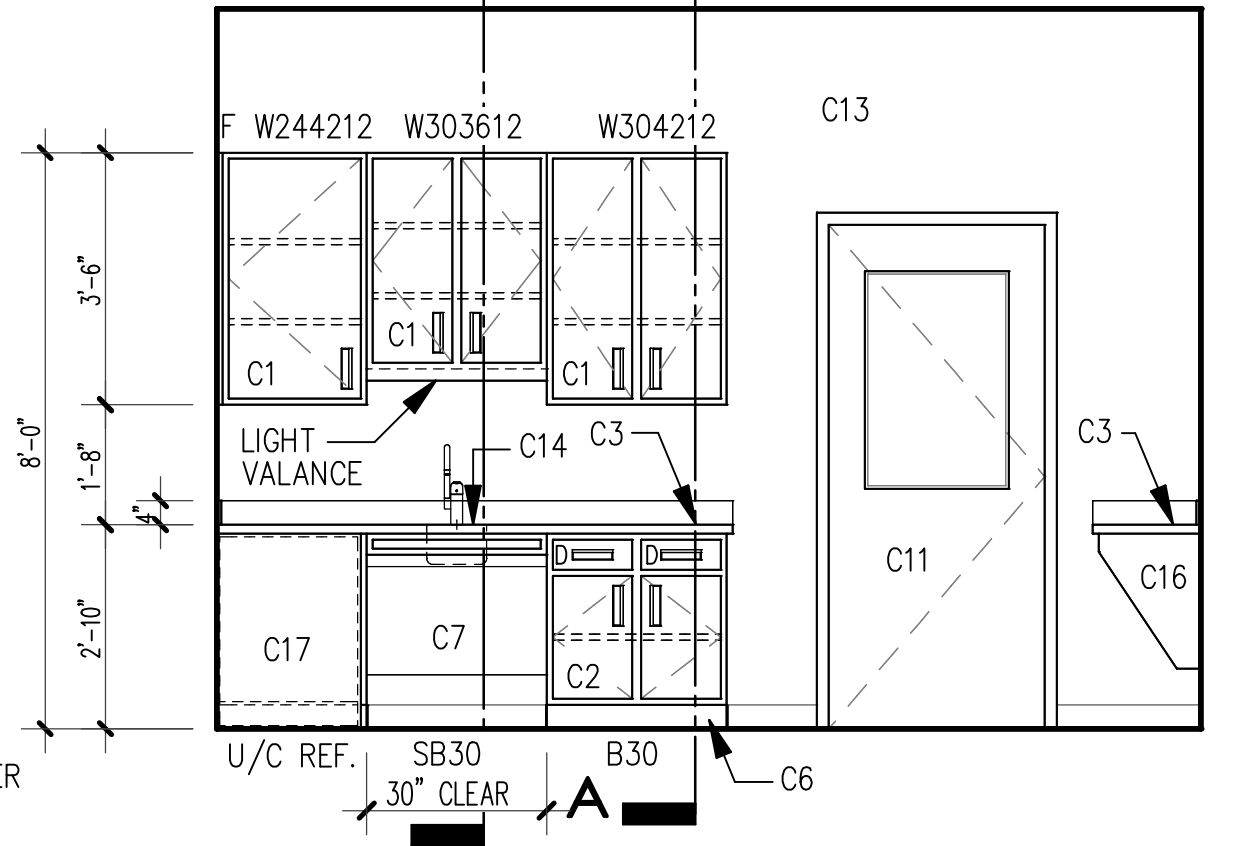
1 ENLARGED NURSE'S STATION PLAN
SCALE: 3/8"=1'-0"



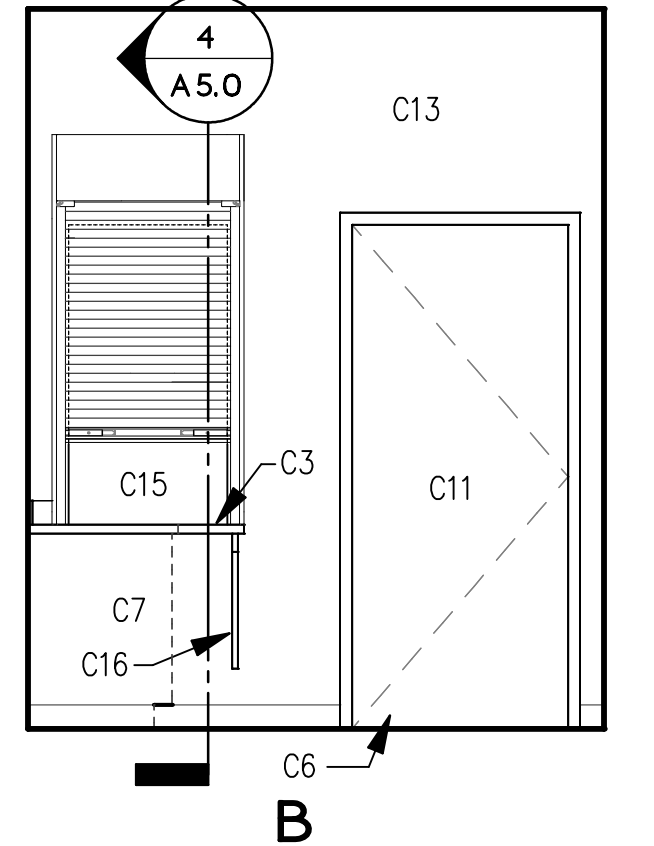
2 TOILET 133
SCALE: 3/8"=1'-0"



3 LOCKERS 134
SCALE: 3/8"=1'-0"

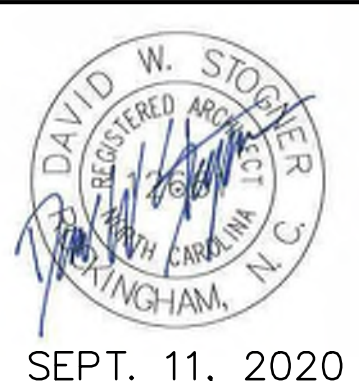


4 MEDICATION ROOM 135
SCALE: 3/8"=1'-0"



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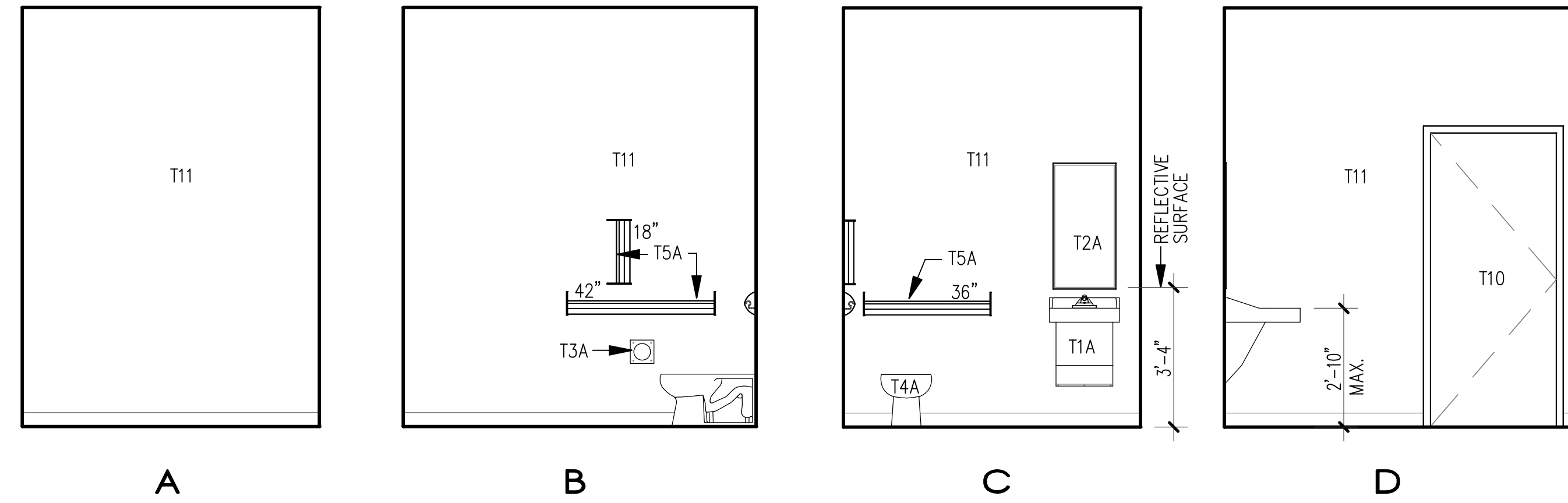
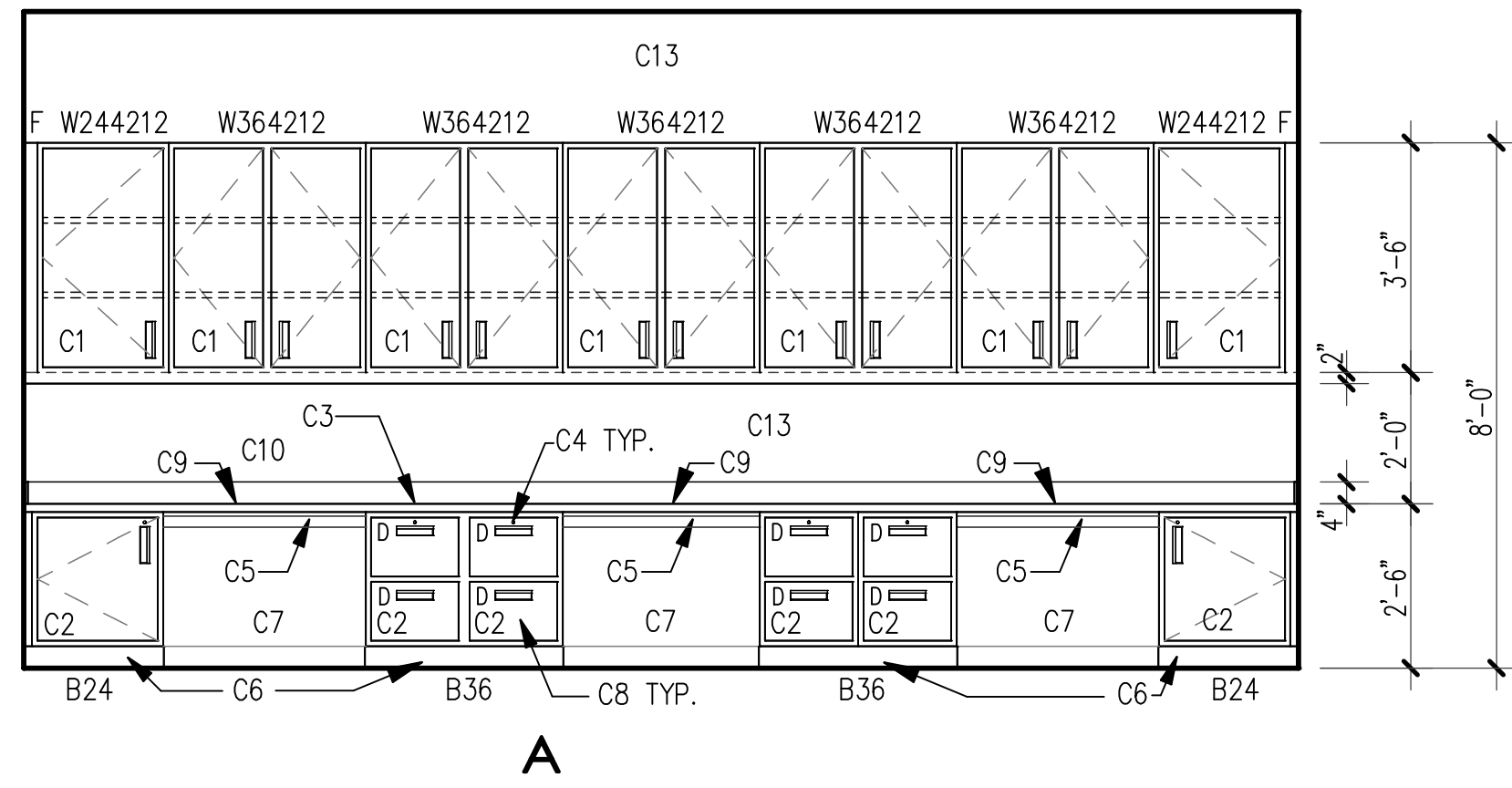
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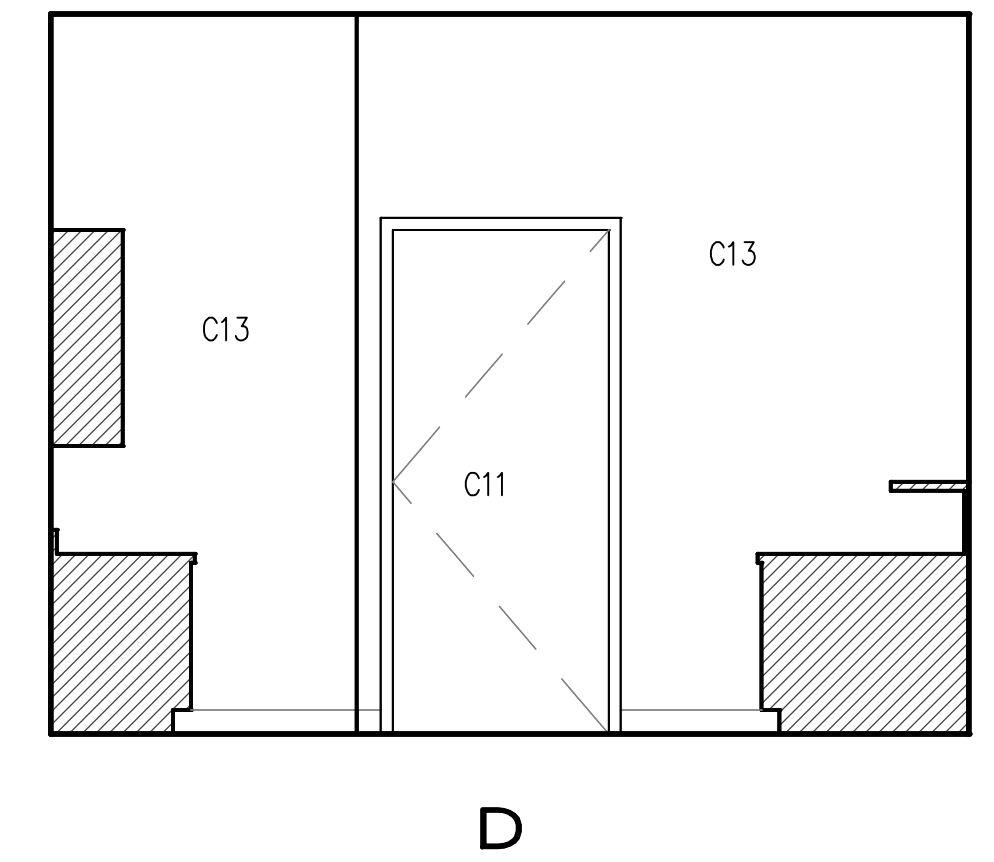
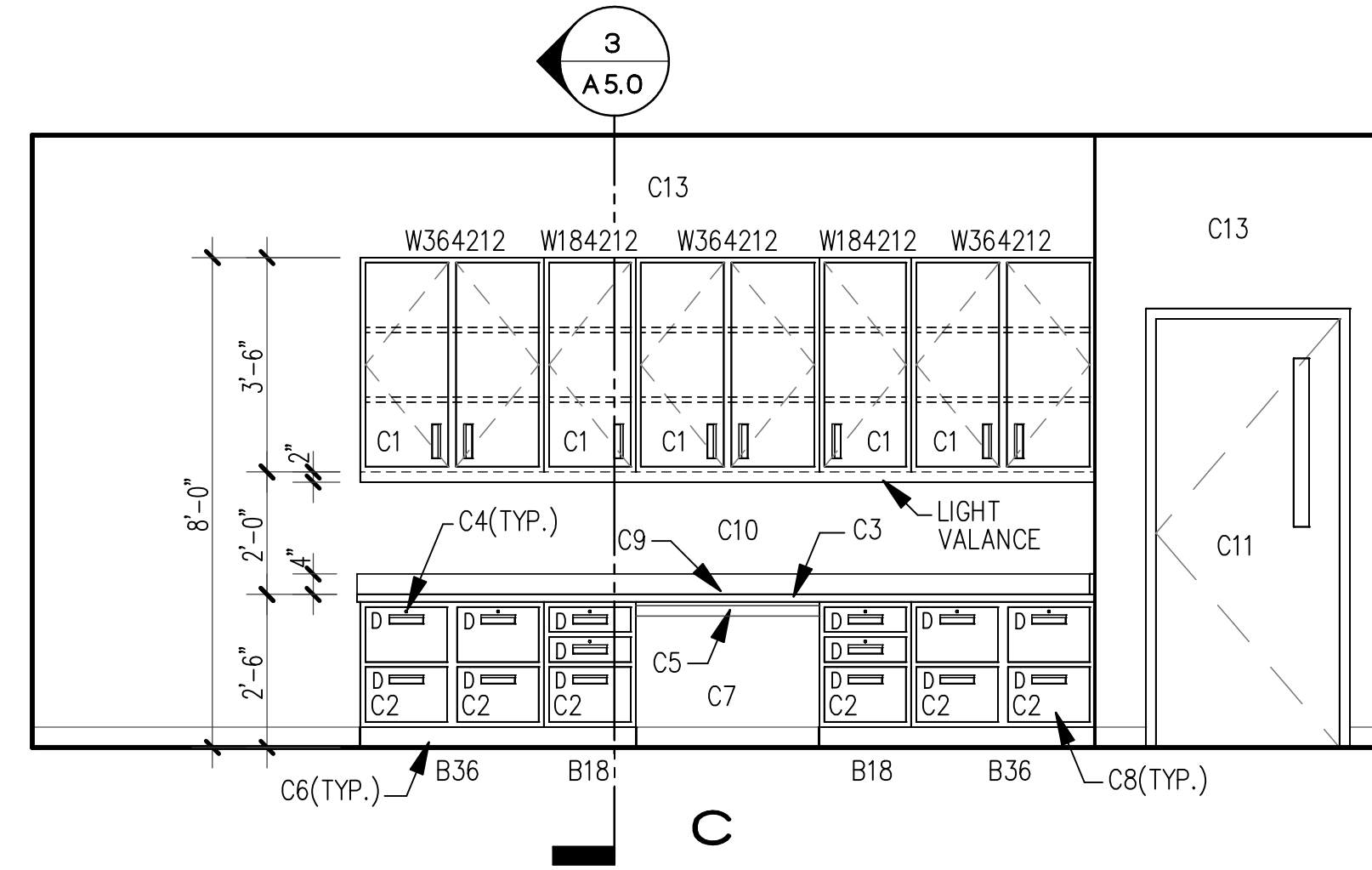
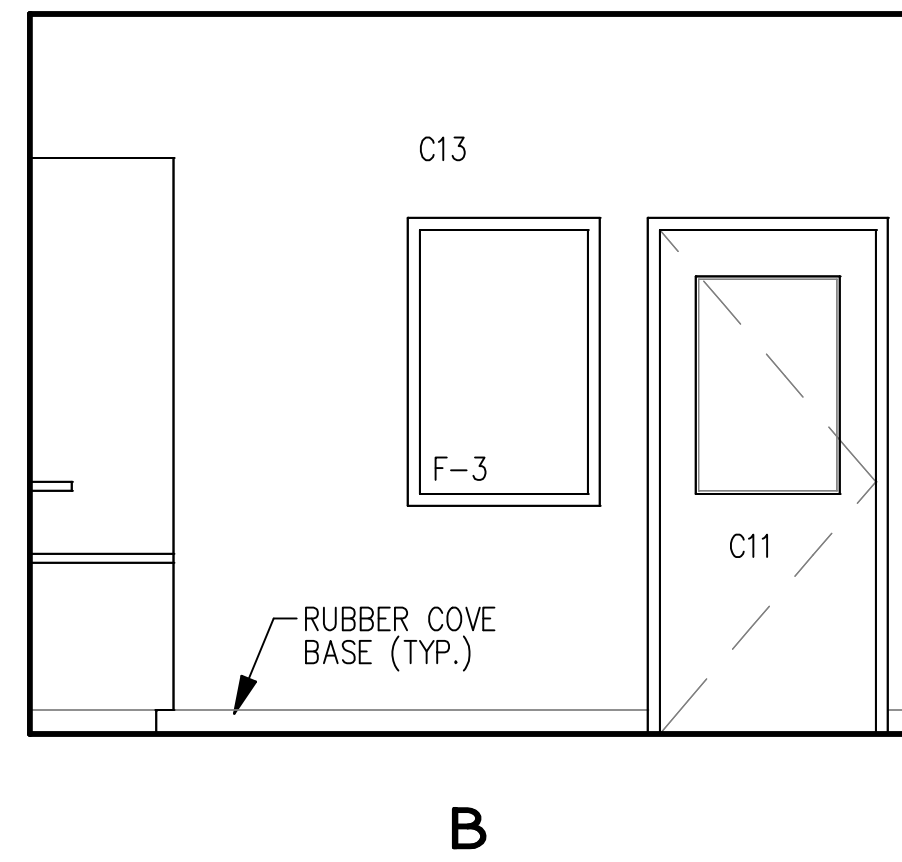
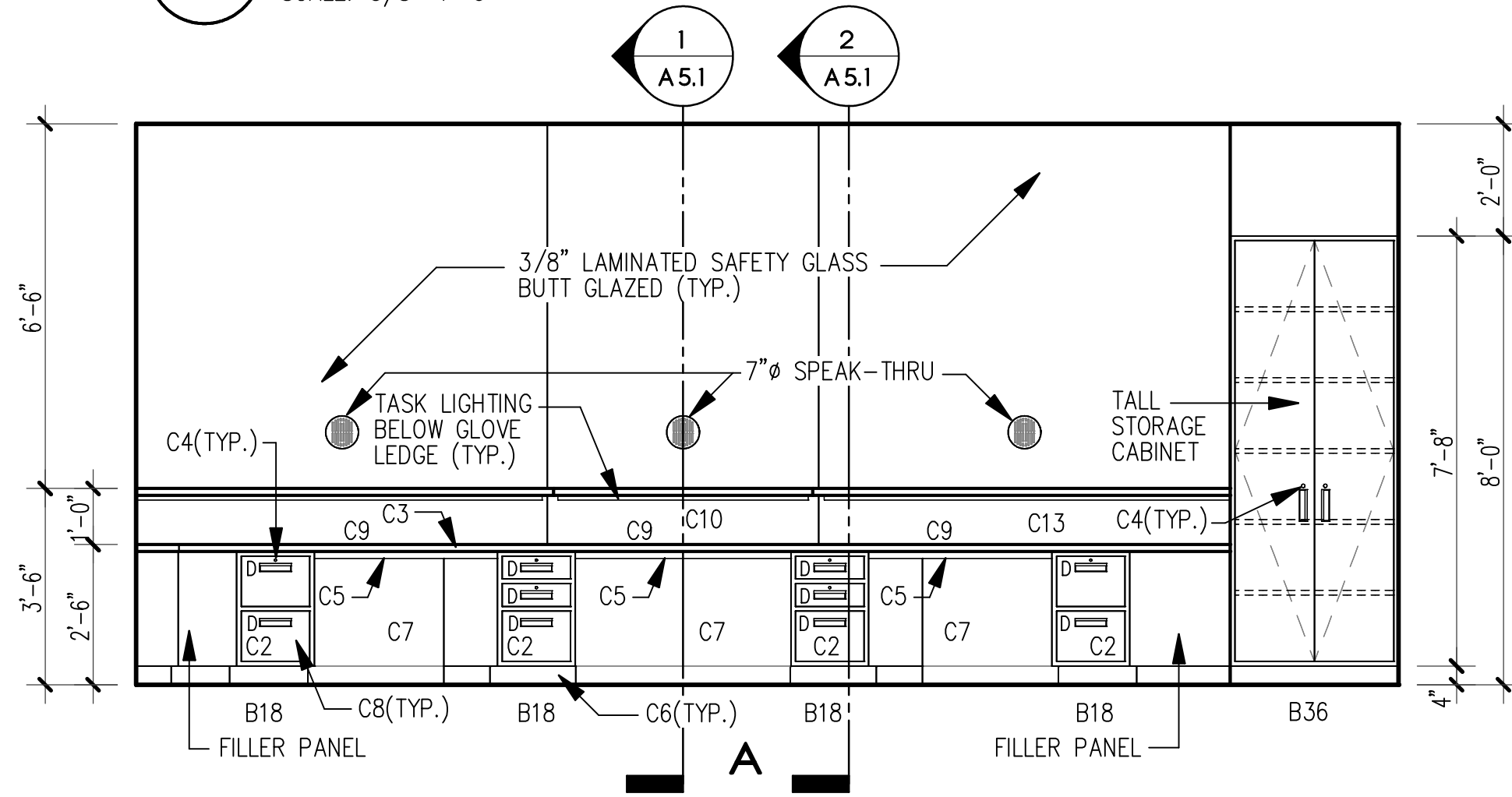
ENLARGED PLANS & INTERIOR ELEVATIONS
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SHEET NO. **A4.4**



1 NURSE OFFICE/DOCUMENTATION 137
SCALE: 3/8"=1'-0"

2 TOILET 145
SCALE: 3/8"=1'-0"



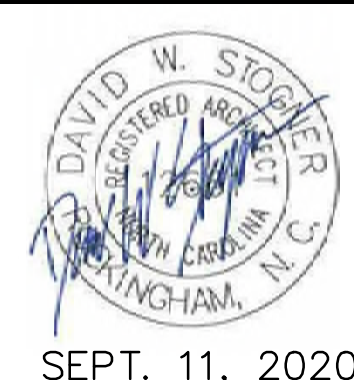
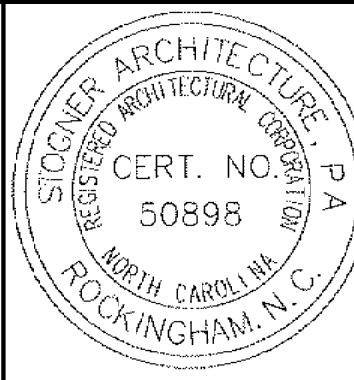
3 NURSE'S STATION 139
SCALE: 3/8"=1'-0"

SCALE: 3/8" = 1'-0"
12" 0 3'

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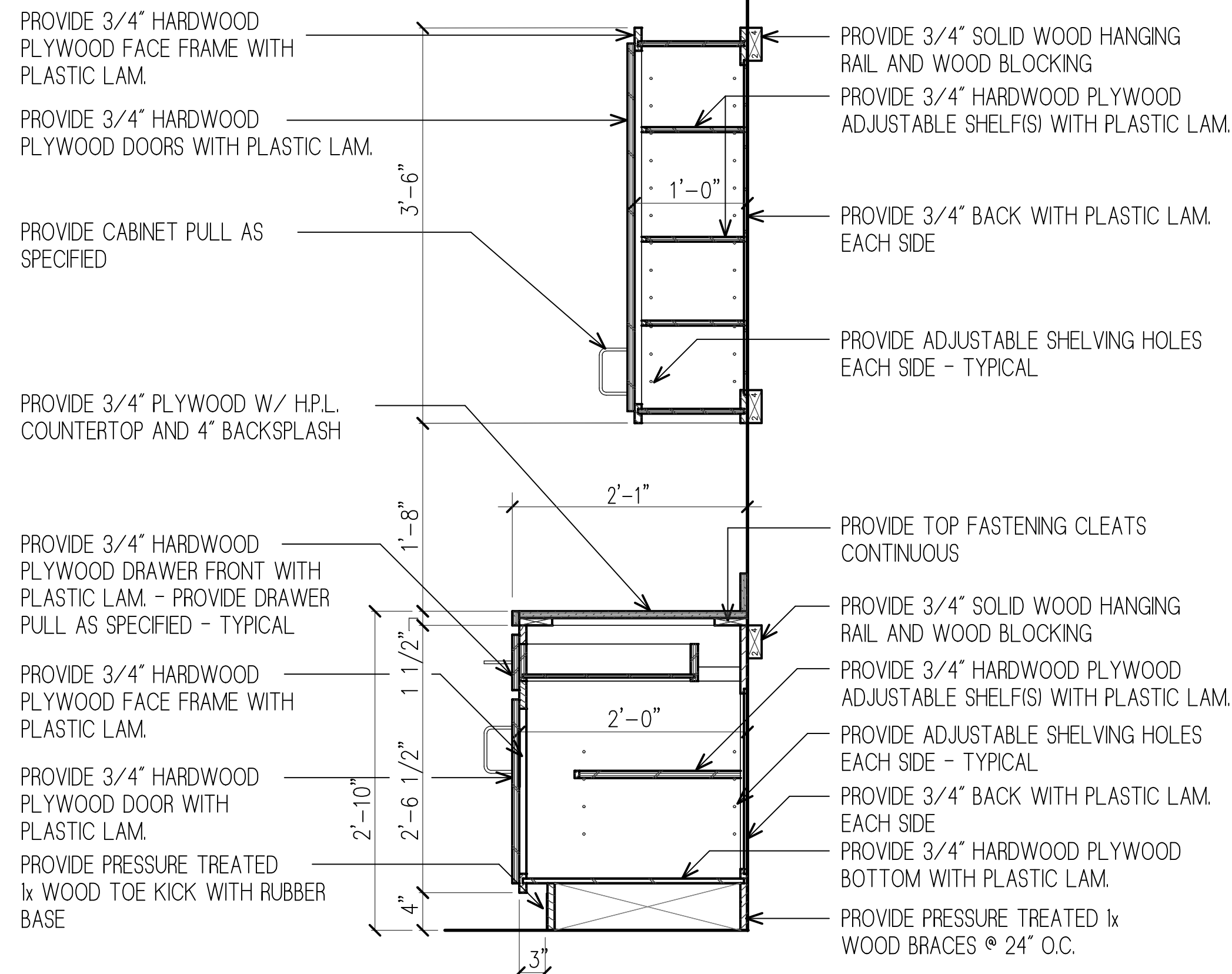


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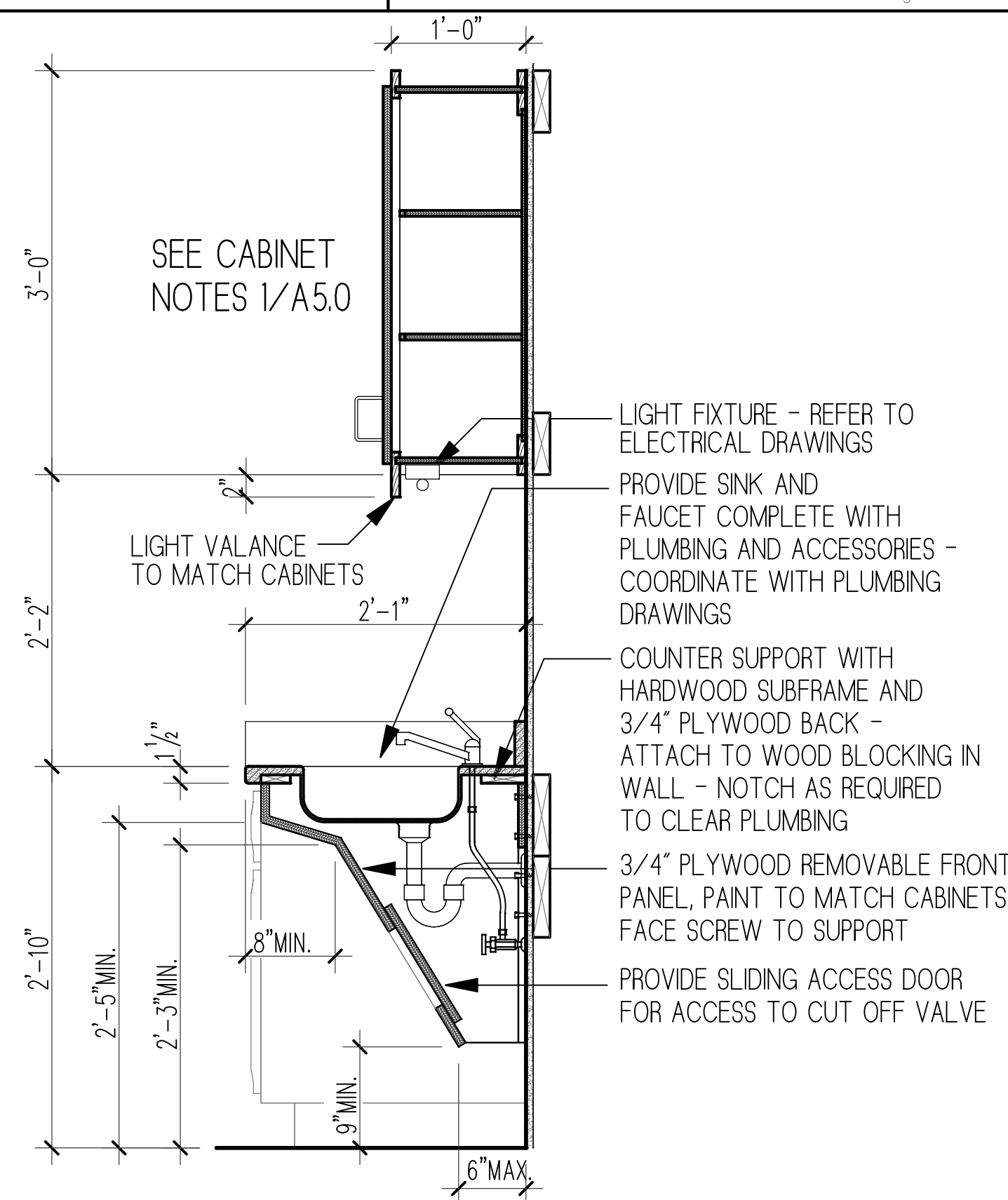
INTERIOR ELEVATIONS

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ADDITION and RENOVATIONS

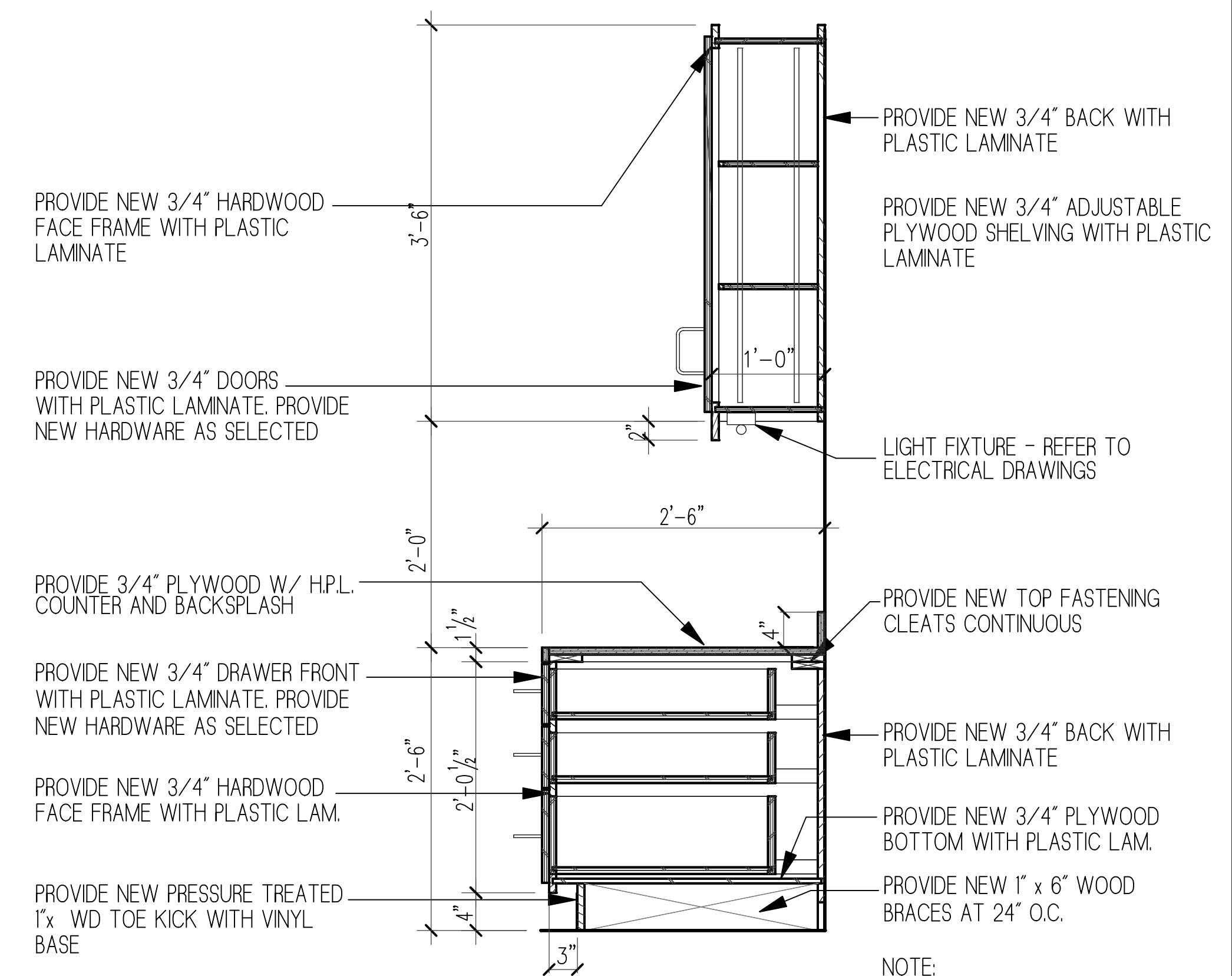
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| COMM. NO.: | 4535 |
| DRAWN BY: | JKM |
| CHECKED BY: | DWS |
| DATE: | 9/11/2020 |
| SHEET NO.: | A4.5 |



1 CASEWORK SECTION
SCALE: 1"=1'-0"

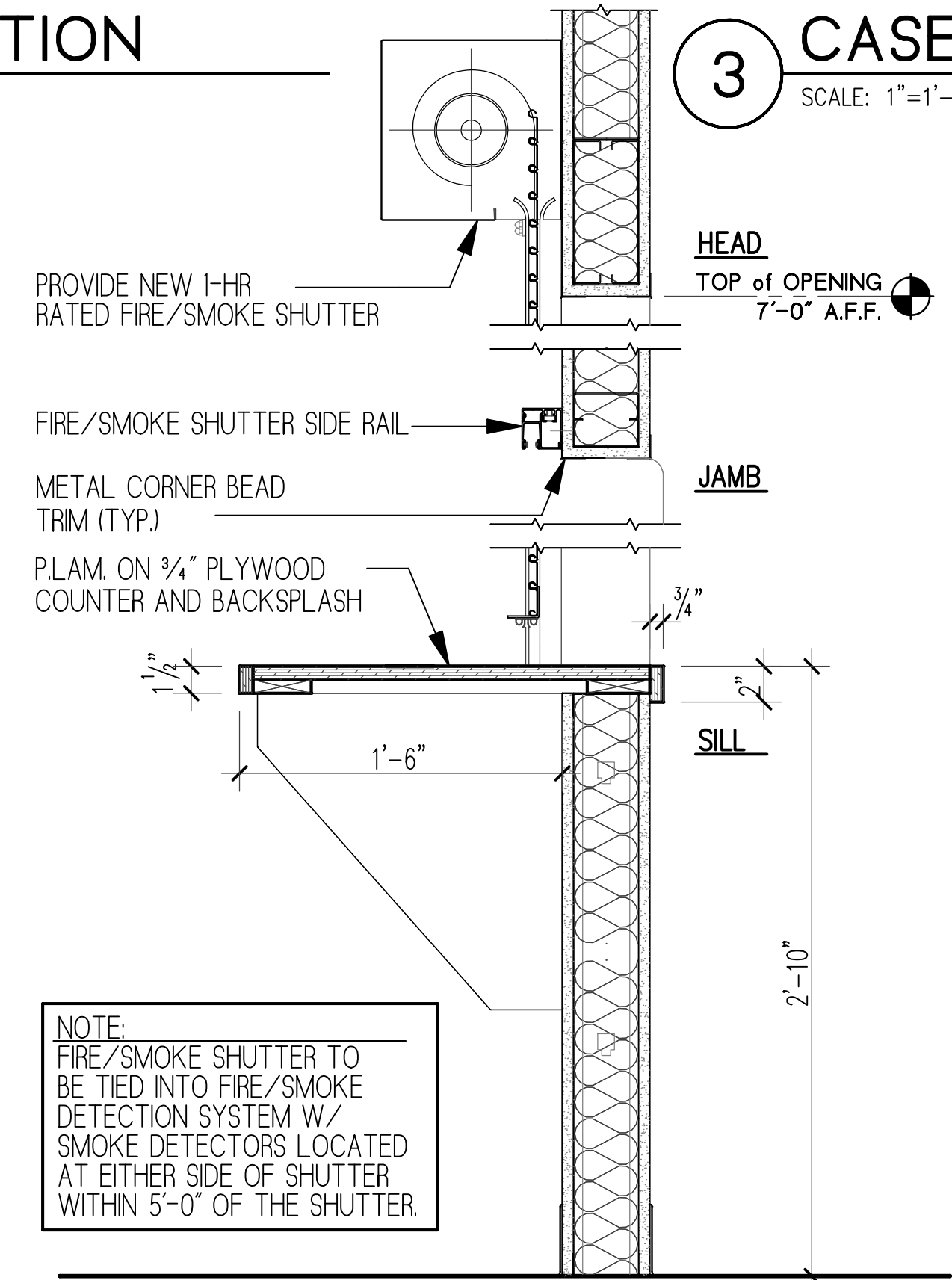


2 CASEWORK SECTION
SCALE: 1"=1'-0"



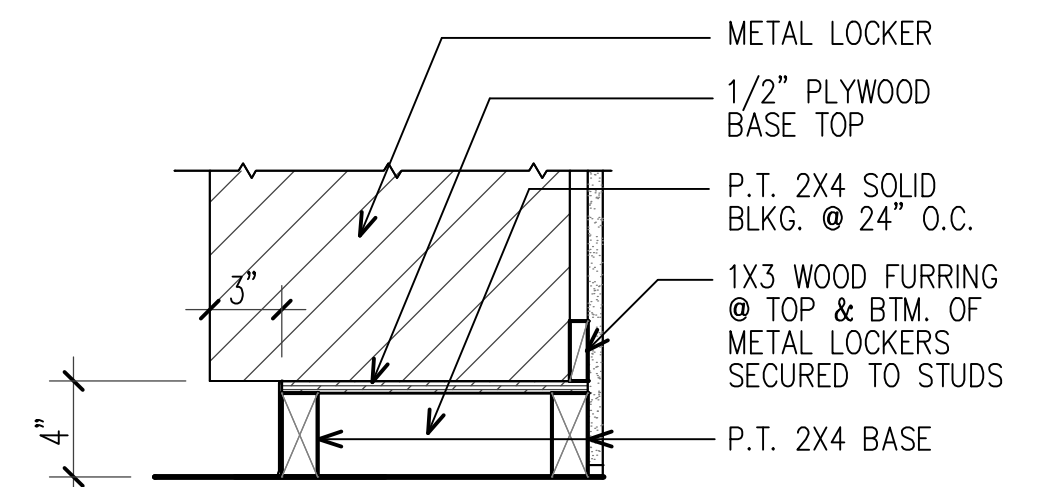
3 CASEWORK SECTION
SCALE: 1"=1'-0"

NOTE:
REFER TO CASEWORK ELEVATIONS
FOR NUMBER OF DRAWERS.



4 CASEWORK SECTION
SCALE: 1 1/2"=1'-0"

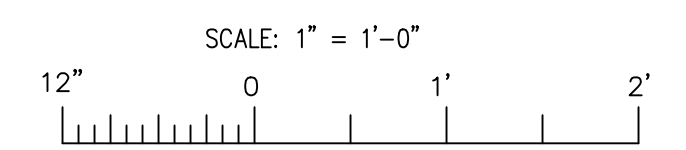
NOTE:
FIRE/SMOKE SHUTTER TO
BE TIED INTO FIRE/SMOKE
DETECTION SYSTEM W/
SMOKE DETECTORS LOCATED
AT EITHER SIDE OF SHUTTER
WITHIN 5'-0" OF THE SHUTTER.



5 LOCKER BASE DETAIL
SCALE: 1 1/2"=1'-0"

VISITORS LOCKERS AT CORRIDOR 125:
BY PENCO PRODUCTS, INC OR ARCHITECT APPROVED EQUAL
2 TIER HEAVY DUTY WELDED LOCKERS WITH DOORS - NO VENTILATION,
NO BASE, CONTINUOUS HINGES, MULTI POINT LATCHING WITH RECESSED
HANDLES. PROVIDE FILLERS AND SLOPED TOP.

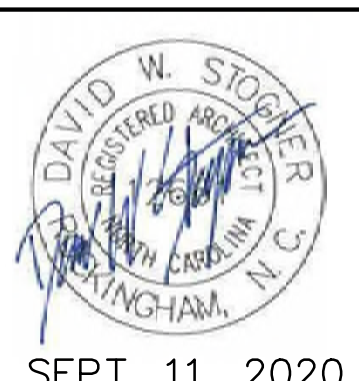
LOCKERS AT LOCKERS 134 & PATIENT STORAGE 144 & 146:
BY PENCO PRODUCTS, INC OR ARCHITECT APPROVED EQUAL
2 TIER HEAVY DUTY WELDED LOCKERS WITH DOORS - STANDARD LOUVERS,
NO BASE, CONTINUOUS HINGES, MULTI POINT LATCHING WITH RECESSED
HANDLES. PROVIDE FILLERS AND SLOPED TOP.



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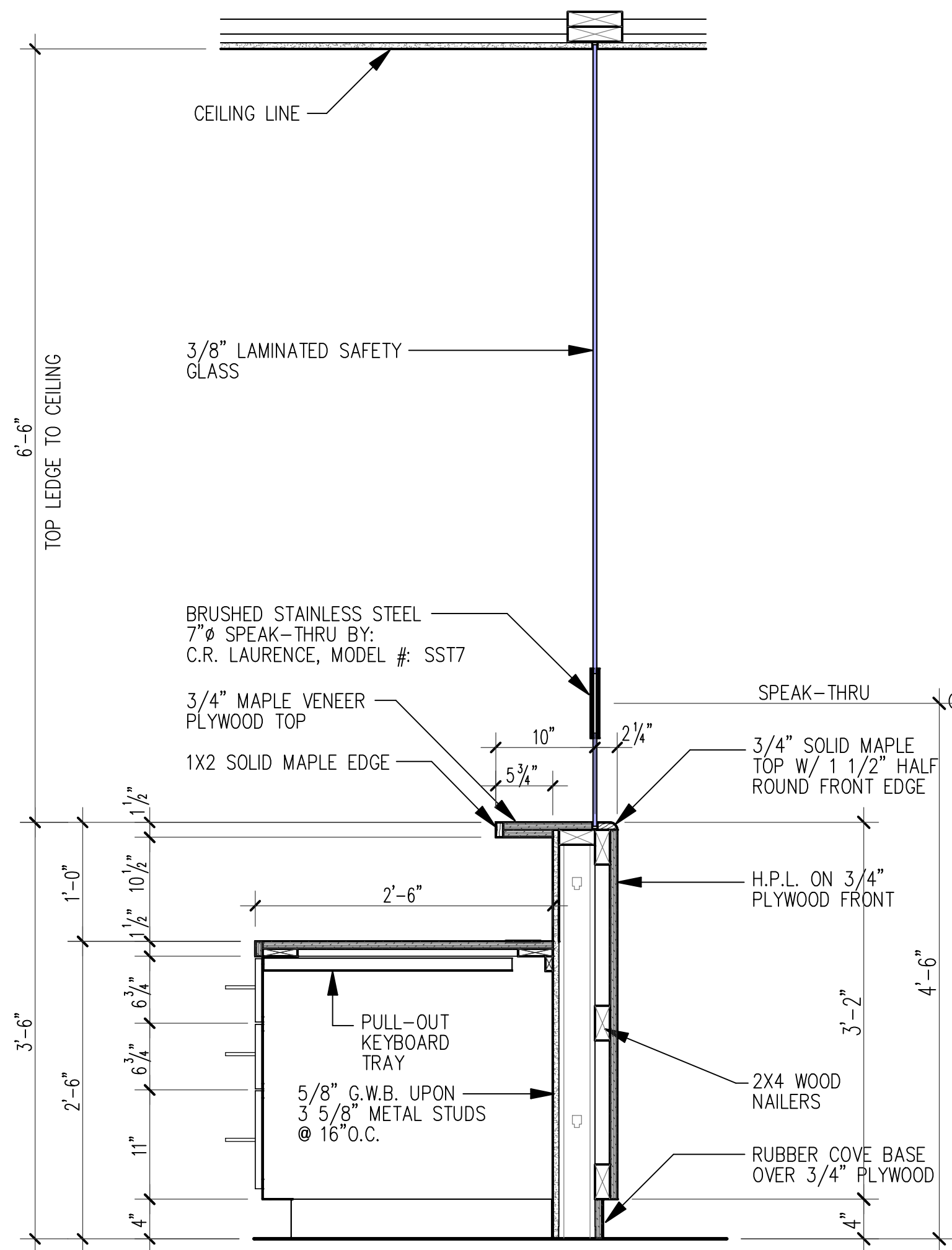


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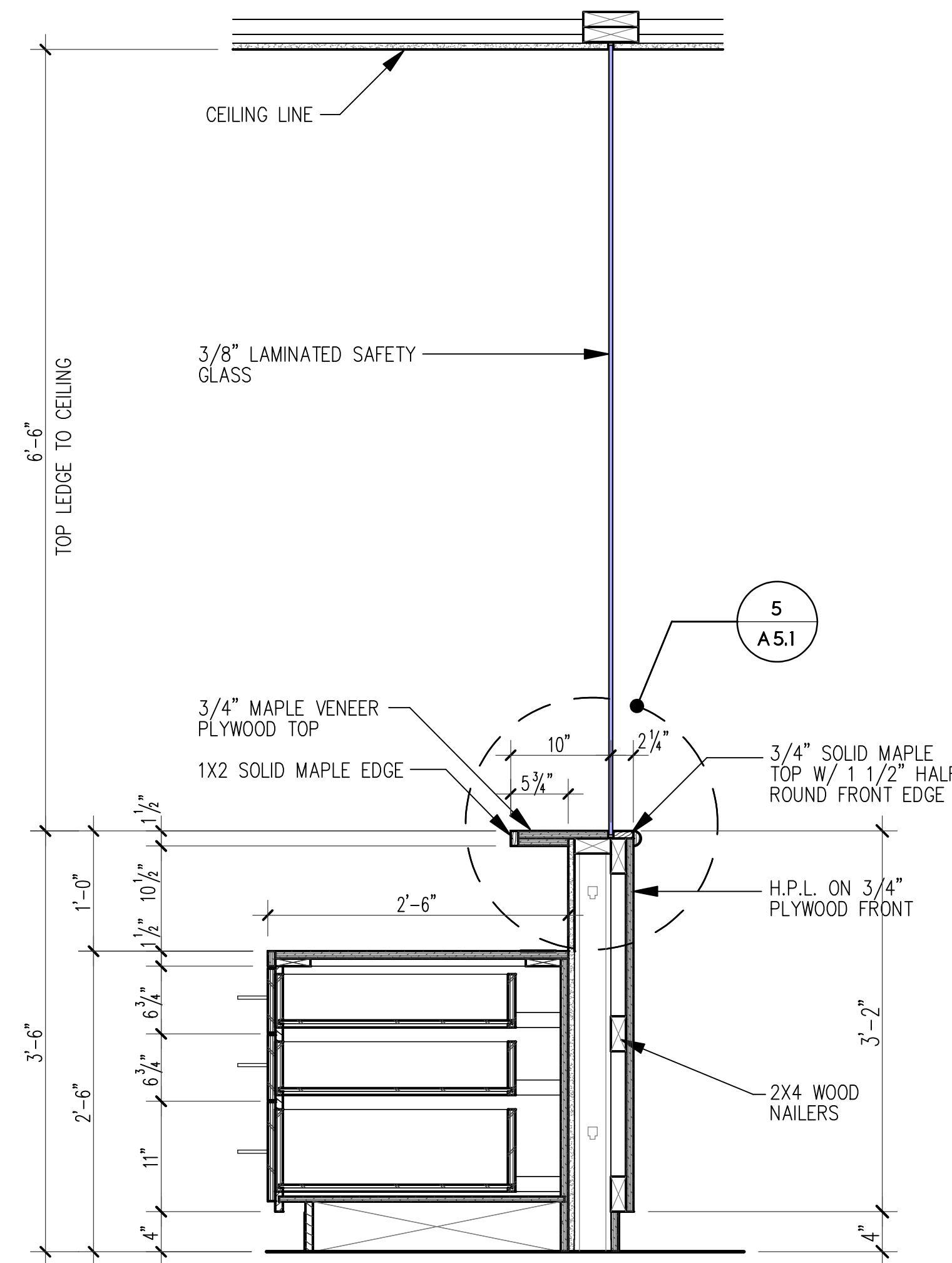
CASEWORK DETAILS

GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

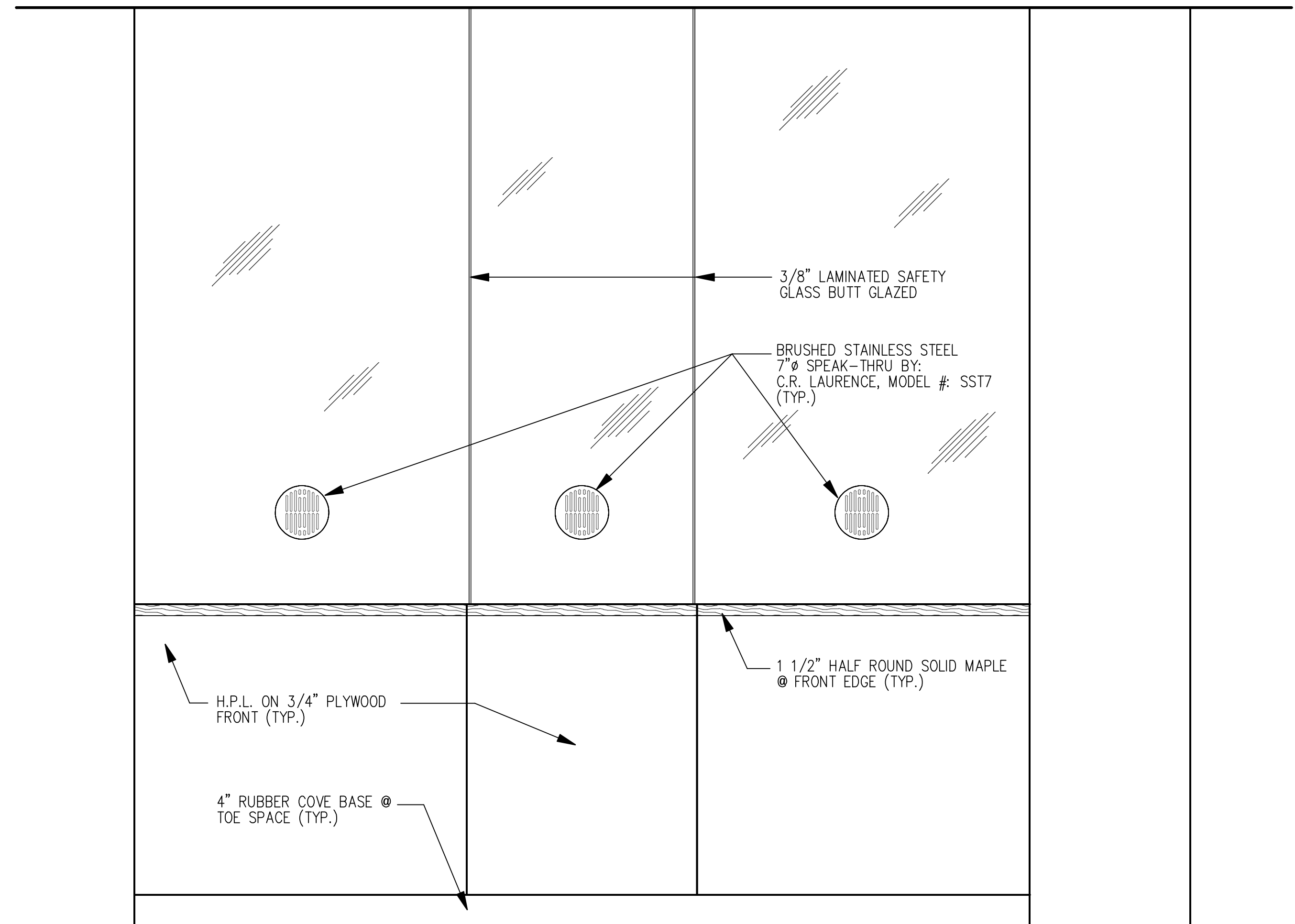
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| COMM. NO.: | 4535 |
| DRAWN BY: | JKM |
| CHECKED BY: | DWS |
| DATE: | 9/11/2020 |
| SHEET NO. | A5.0 |



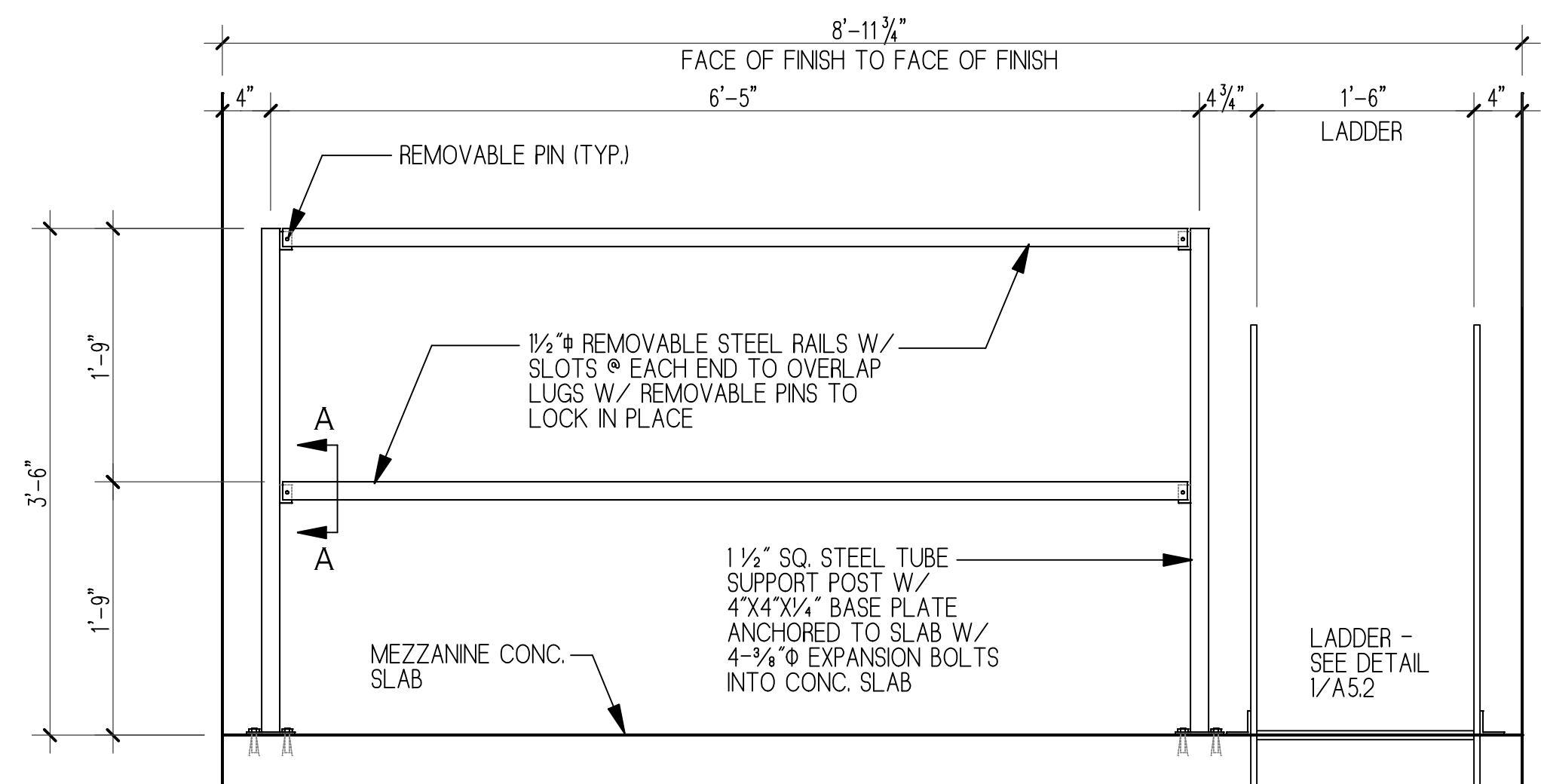
1 NURSE'S STATION DESK
SCALE: 1"=1'-0"



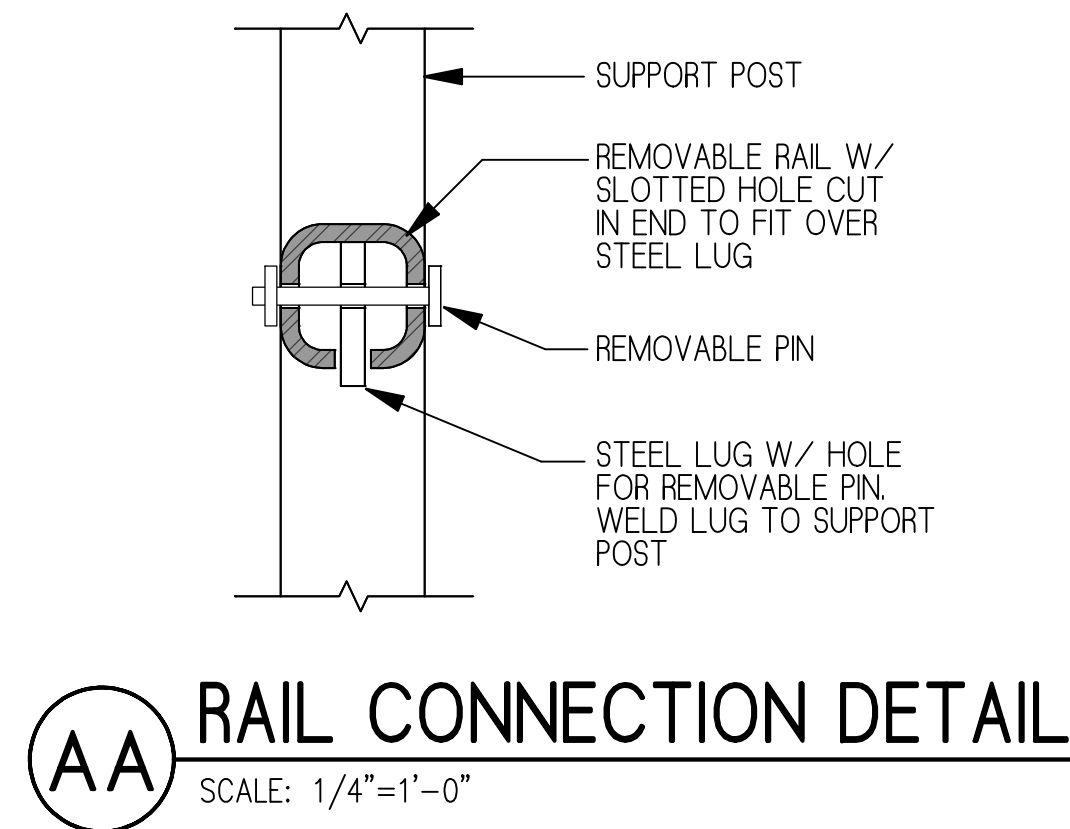
2 NURSE'S STATION DESK
SCALE: 1"=1'-0"



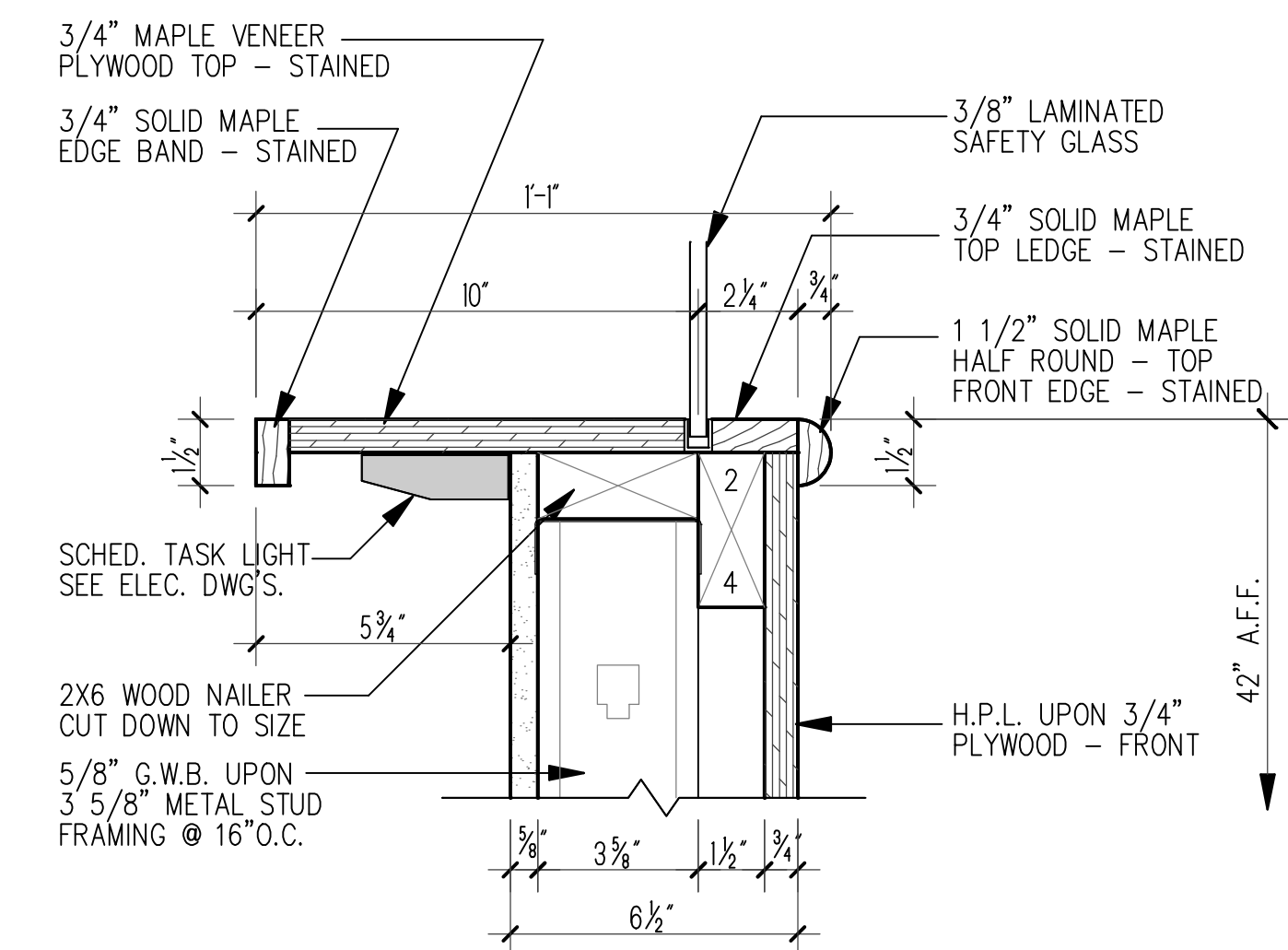
3 ELEVATION of NURSE'S STATION DESK
SCALE: 1"=1'-0"



4 ELEVATION of MEZZANINE GUARDRAIL
SCALE: 1"=1'-0"



AA RAIL CONNECTION DETAIL
SCALE: 1/4"=1'-0"

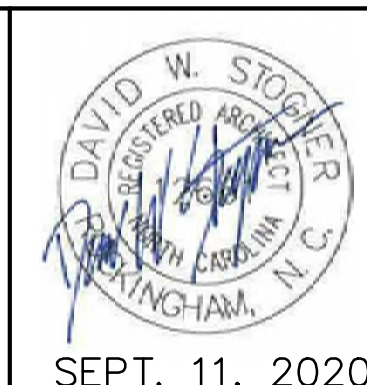
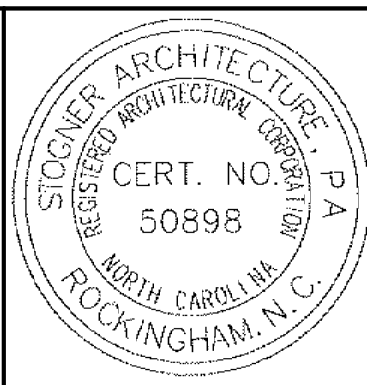


5 COUNTER LEDGE DETAIL
SCALE: 3"=1'-0"

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

FOR CONSTRUCTION

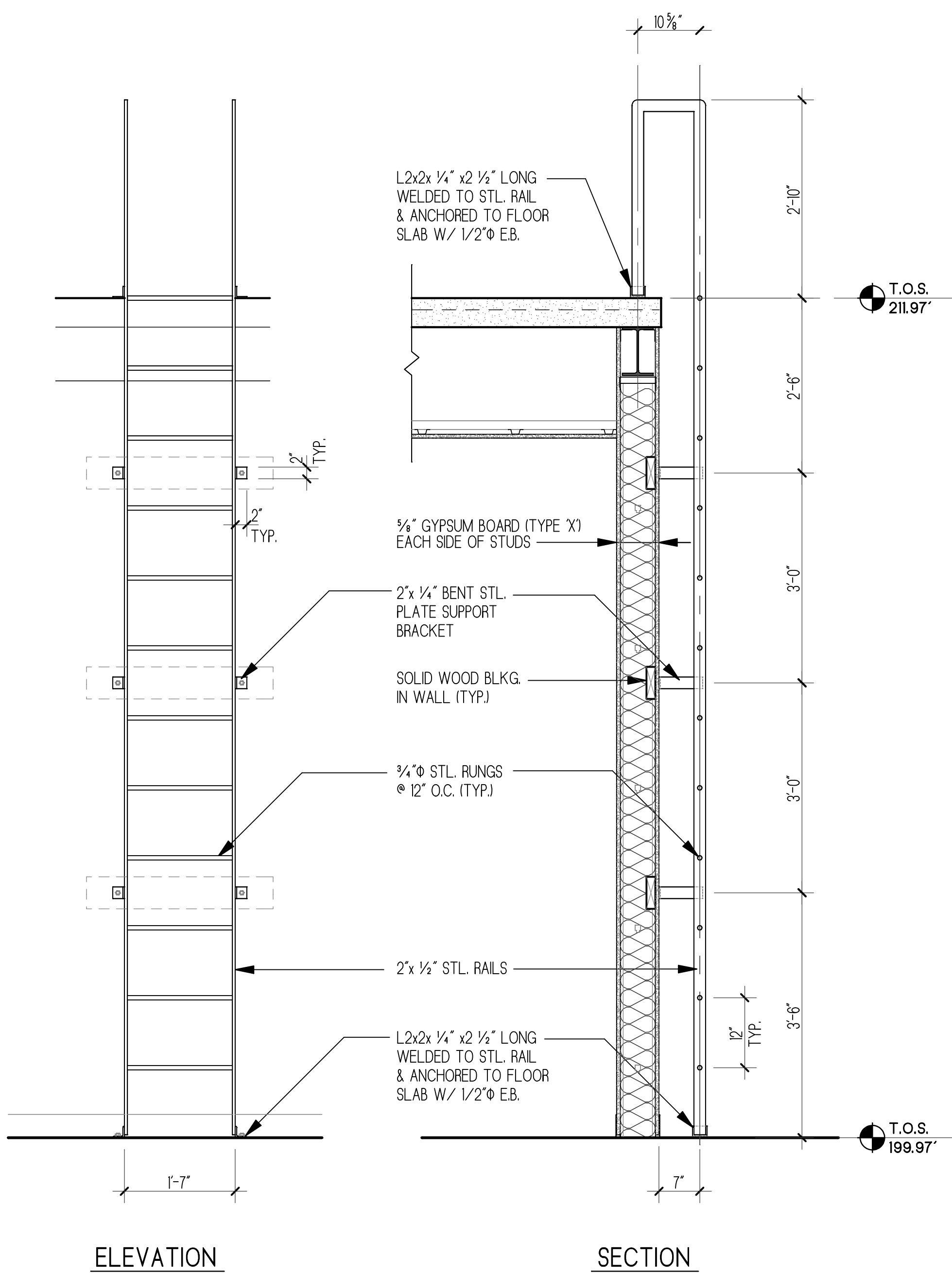


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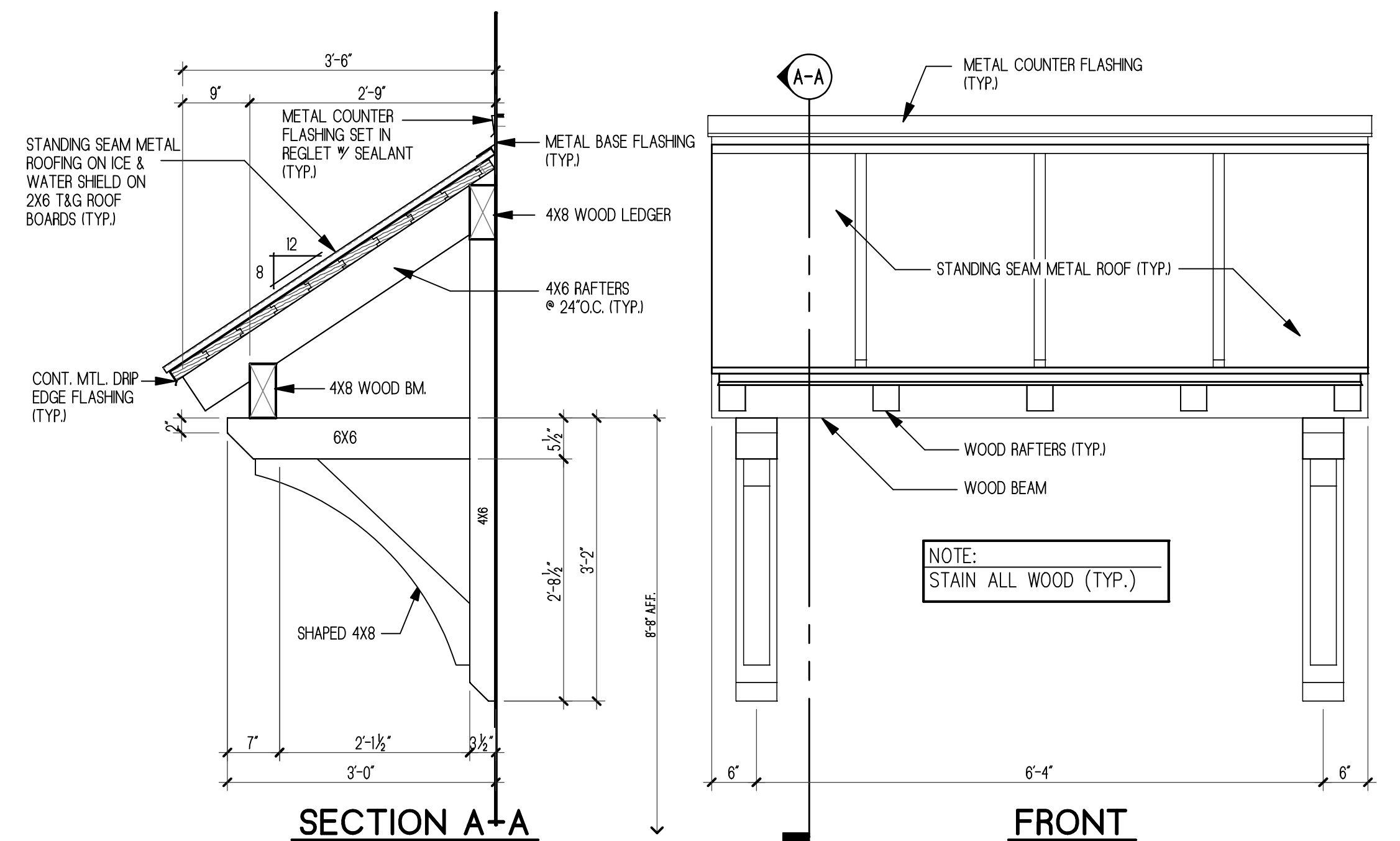
CASEWORK & BUILDING DETAILS
GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

COMM. NO.: 4535
DRAWN BY: JKM
CHECKED BY: DWS
DATE: 9/11/2020
SHEET NO. **A5.1**

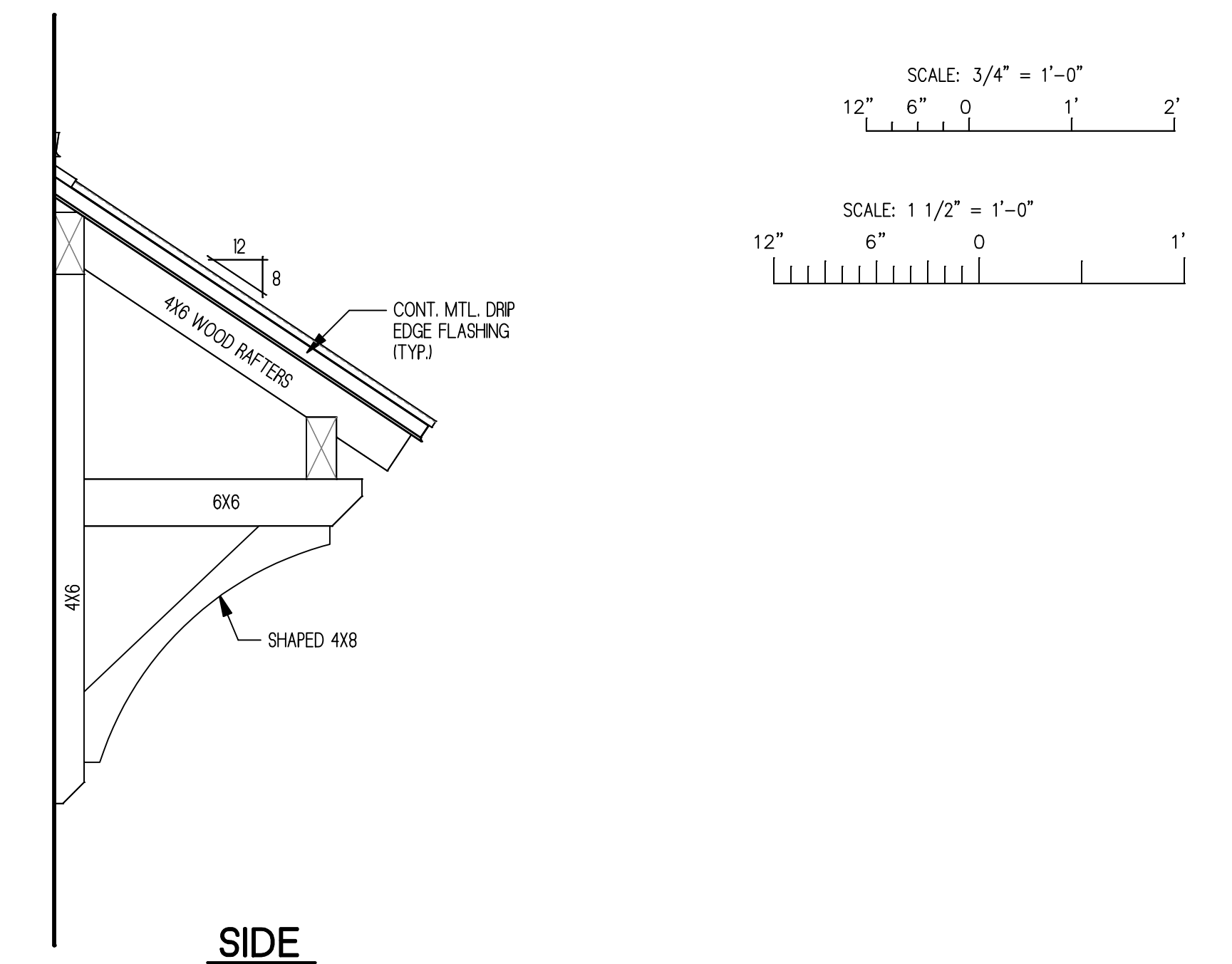
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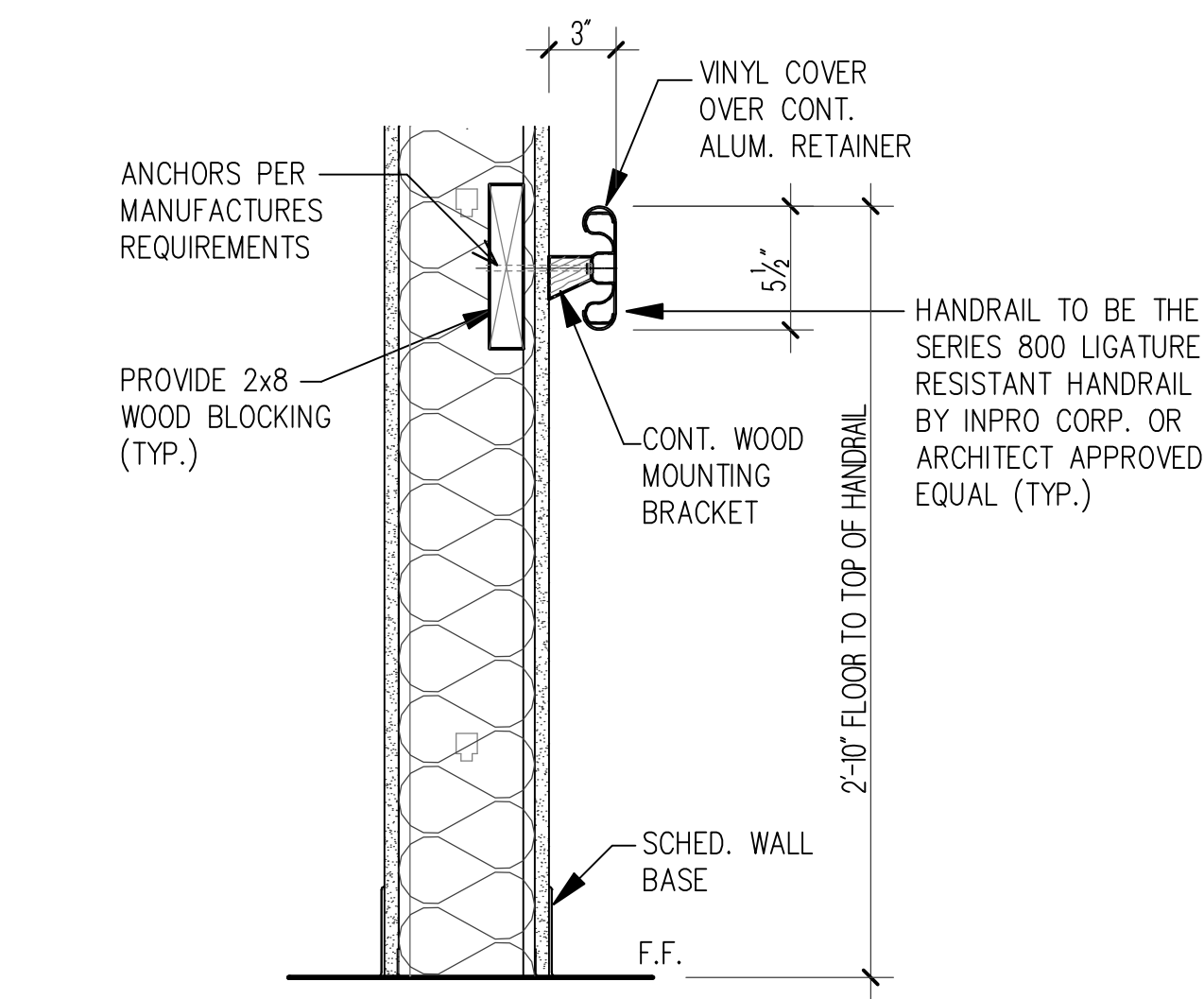
1 MECHANICAL PLATFORM ACCESS LADDER
SCALE: 3/4"=1'-0"



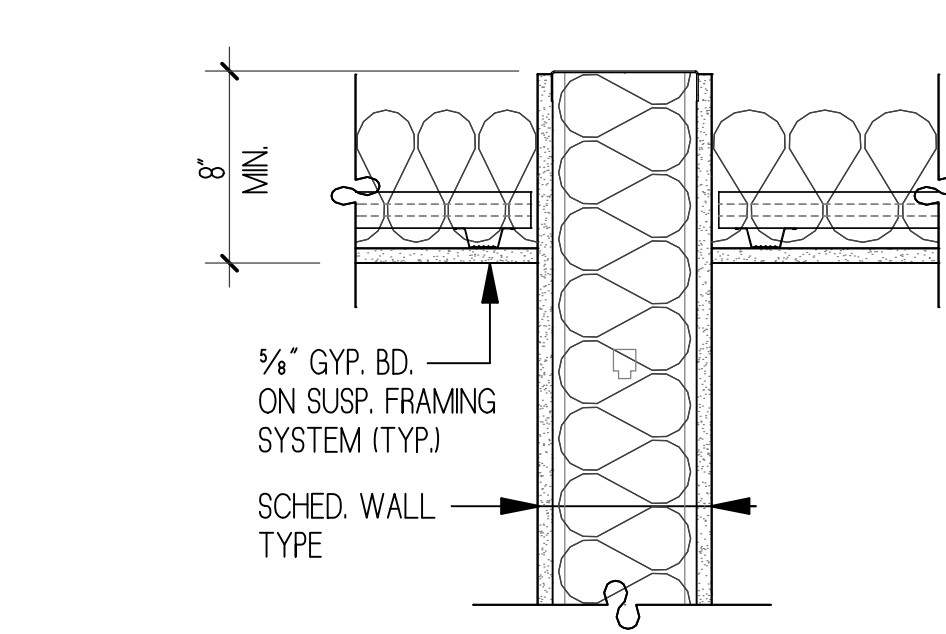
2 CANOPY DETAILS
SCALE: 3/4"=1'-0"



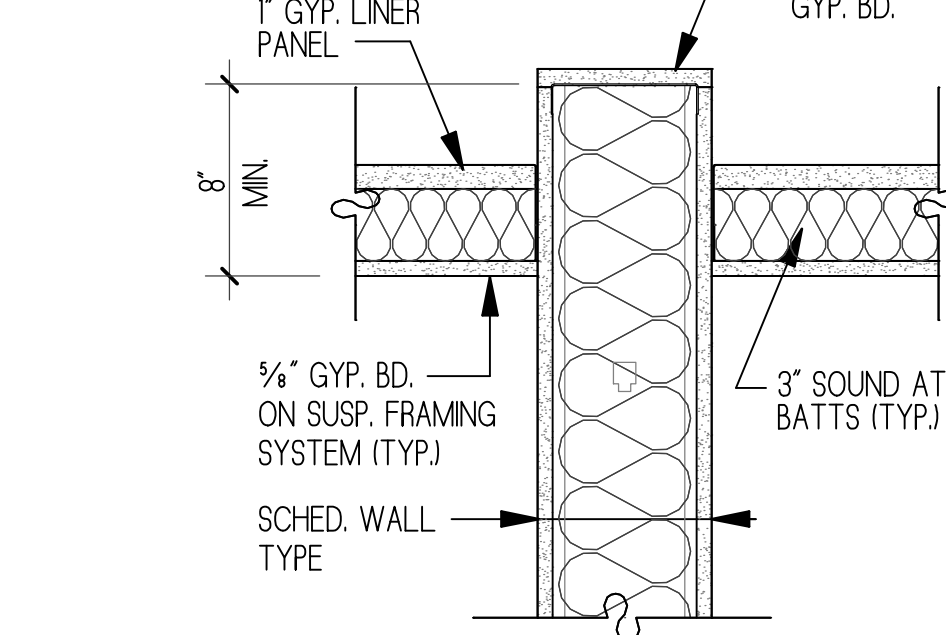
6 RIDGE DETAIL
SCALE: 1 1/2"=1'-0"



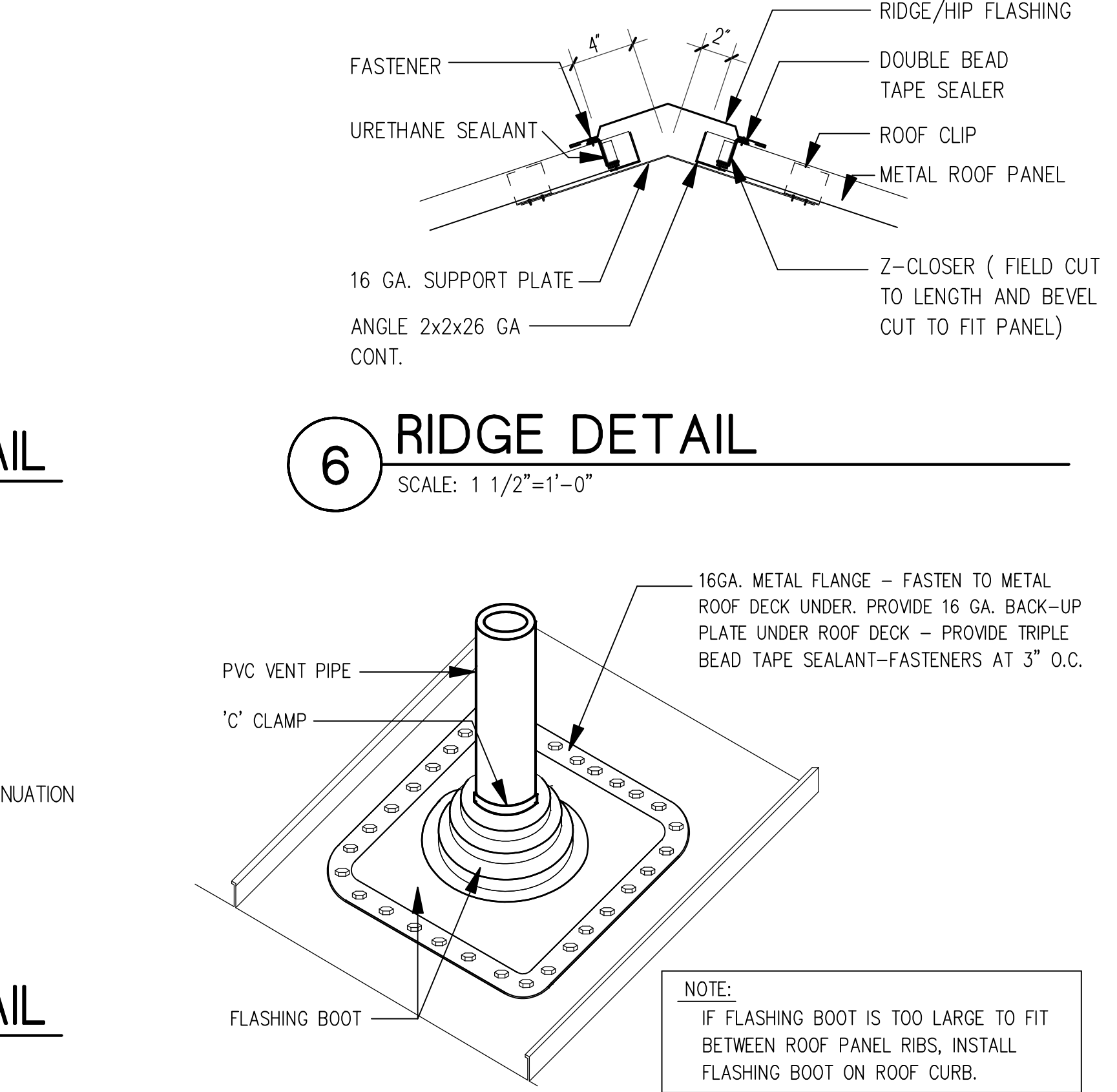
3 CORRIDOR HANDRAIL DETAIL
SCALE: 1 1/2"=1'-0"



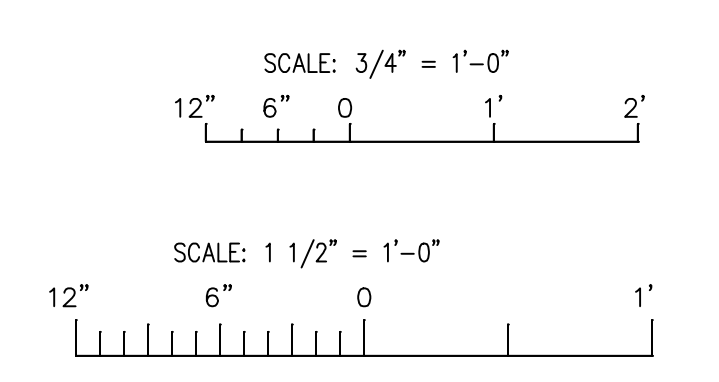
4 TOP OF WALL DETAIL
SCALE: 1 1/2"=1'-0"



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

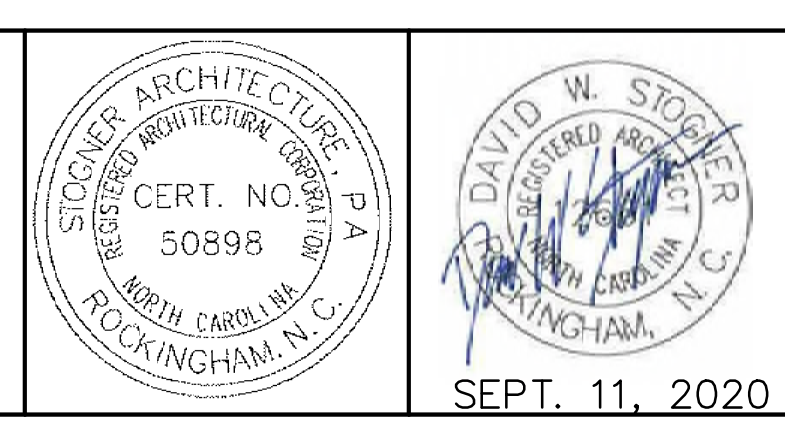


7 TYPICAL VENT PIPE FLASHING DETAIL
N.T.S.



| REVISIONS |
|-----------|
| |

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BUILDING DETAILS
GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

COMM. NO.: 4535
DRAWN BY: JKM
CHECKED BY: DWS
DATE: 9/11/2020
SHEET NO. **A5.2**

DOOR SCHEDULE

DOOR SCHEDULE

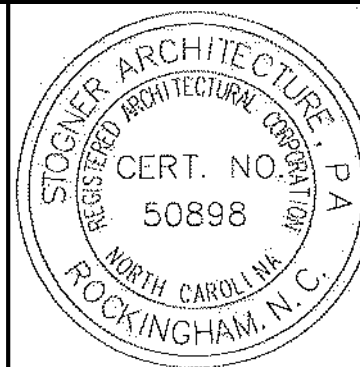
| NUMBER | DOOR | | FRAME | | | | | | FIRE RATE | REMARKS |
|--------|--------------------------|-------|-------|----------|------|------|------|---------|--|---------|
| | SIZE WxHxT | MATL | TYPE | DETAILS* | | | SILL | | | |
| | | | | MATL | TYPE | HEAD | | JAMB | | |
| 100 | (2) 3'-0"x 7'-0"x 1 3/4" | WD | NL | HM | F-1 | DH-4 | DJ-4 | | PROVIDE 45 MIN. FIRE RATED GLAZING DOUBLE EGRESS DOORS | |
| 101 | 3'-2"x 7'-0"x 1 3/4" | | F | | F-2 | DH-7 | DJ-7 | | | |
| 102 | 3'-2"x 7'-0"x 1 3/4" | | F | | F-2 | DH-7 | DJ-7 | | | |
| 103 | 3'-0"x 7'-0"x 1 3/4" | | NL | | F-1 | DH-2 | DJ-2 | 45 MIN. | PROVIDE 45 MIN. FIRE RATED GLAZING | |
| 104 | | | F | | | | | 45 MIN. | | |
| 105 | | | F | | | | | 45 MIN. | | |
| 106 | 3'-2"x 7'-0"x 1 3/4" | ALUM. | FG | AL | F-4 | DH-8 | DJ-8 | DS-8 | PROVIDE 1" INSULATED ALUM. PANELS | |
| 107 | 3'-0"x 7'-0"x 1 3/4" | WD | F | HM | F-1 | DH-2 | DJ-2 | | 45 MIN. | |
| 108 | 3'-0"x 7'-0"x 1 3/4" | | F | | | | | | 45 MIN. | |
| 110 | 3'-2"x 7'-0"x 1 3/4" | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 111 | 3'-0"x 7'-0"x 1 3/4" | HM | F | | | DH-5 | DJ-5 | DS-5 | | |
| 112 | 3'-2"x 7'-0"x 1 3/4" | WD | NL | | | DH-2 | DJ-2 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 113A | | | F | | | | | | | |
| 113B | | | F | | | | | | | |
| 114 | | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 115 | | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 116 | | ALUM. | FG | AL | F-5 | DH-9 | DJ-8 | DS-8 | PROVIDE 1" INSULATED TEMPERED GLASS | |
| 117 | | WD | HG | HM | F-1 | DH-2 | DJ-2 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 118 | | | HG | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 119 | | | F | | | | | | 45 MIN. | |
| 120 | | | F | | | | | | | |
| 121 | | | F | | | | | | 45 MIN. | |
| 122 | | | HG | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 123A | | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 123B | | | NL | | | | | | PROVIDE 1/4" TEMPERED GLASS | |
| 124 | | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 126A | (2) 3'-0"x 7'-0"x 1 3/4" | ALUM. | FG | AL | F-6 | DH-9 | DJ-8 | DS-8 | PROVIDE 1" INSULATED TEMPERED GLASS | |
| 126B | (2) 3'-0"x 7'-0"x 1 3/4" | WD | NL | HM | F-1 | DH-2 | DJ-2 | | PROVIDE 1/4" TEMPERED GLASS | |
| 127 | 3'-2"x 7'-0"x 1 3/4" | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 128 | | | F | | | | | | | |
| 129 | | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 130 | | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 131 | (2) 3'-0"x 7'-0"x 1 3/4" | | F | | | | | | 45 MIN. | |
| 132 | 3'-2"x 7'-0"x 1 3/4" | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 133 | 3'-0"x 7'-0"x 1 3/4" | | F | | | | | | | |
| 134A | | | F | | | | | | | |
| 134B | | | F | | | | | | | |
| 135A | | | F | | | | | | 45 MIN. | |
| 135B | | | HG | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 136 | | | F | | | DH-1 | DJ-1 | | 45 MIN. | |
| 137A | | | HG | | | DH-2 | DJ-2 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 137B | | | HG | | | | | | PROVIDE 1/4" TEMPERED GLASS | |
| 138A | | | HG | | | | | | PROVIDE 1/4" TEMPERED GLASS | |

| NUMBER | DOOR | | FRAME | | | | | | FIRE RATE | REMARKS |
|--------|--------------------------|-------|-------|----------|------|------|------|------|--|---------|
| | SIZE WxHxT | MATL | TYPE | DETAILS* | | | SILL | | | |
| | | | | MATL | TYPE | HEAD | | JAMB | | |
| 138B | 3'-0"x 7'-0"x 1 3/4" | WD | HG | HM | F-1 | DH-2 | DJ-2 | | PROVIDE 45 MIN. FIRE RATED GLAZING | |
| 139 | 3'-0"x 7'-0"x 1 3/4" | | HG | | | DH-2 | DJ-2 | | PROVIDE 45 MIN. FIRE RATED GLAZING | |
| 140A | (2) 3'-0"x 7'-0"x 1 3/4" | | NL | | | DH-4 | DJ-4 | | PROVIDE 20 MIN. FIRE RATED GLAZING DOUBLE EGRESS DOORS | |
| 140B | (2) 3'-0"x 7'-0"x 1 3/4" | | NL | | | DH-4 | DJ-4 | | PROVIDE 45 MIN. FIRE RATED GLAZING DOUBLE EGRESS DOORS | |
| 141 | 4'-0"x 7'-0"x 1 3/4" | | NL | | | DH-2 | DJ-2 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 142 | 3'-2"x 7'-0"x 1 3/4" | | NL | | | DH-2 | DJ-2 | | PROVIDE 45 MIN. FIRE RATED GLAZING | |
| 143 | 4'-0"x 7'-0"x 1 3/4" | | NL | | | DH-3 | DJ-3 | | PROVIDE 45 MIN. FIRE RATED IMPACT RESISTANT GLAZING | |
| 144 | 3'-0"x 7'-0"x 1 3/4" | | F | | | DH-2 | DJ-2 | | 45 MIN. | |
| 145 | 4'-0"x 7'-0"x 1 3/4" | | F | | | | | | | |
| 146 | 3'-0"x 7'-0"x 1 3/4" | | F | | | | | | | |
| 147A | (2) 3'-0"x 7'-0"x 1 3/4" | | NL | | | DH-4 | DJ-4 | | 45 MIN. PROVIDE 45 MIN. FIRE RATED GLAZING DOUBLE EGRESS DOORS | |
| 147B | 3'-2"x 7'-0"x 1 3/4" | ALUM. | FG | AL | F-4 | DH-8 | DJ-8 | DS-8 | PROVIDE 1" INSULATED ALUM. PANELS | |
| 148 | | WD | NL | HM | F-1 | DH-2 | DJ-2 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 149 | | | F | | | DH-1 | DJ-1 | | | |
| 150 | | | F | | | DH-1 | DJ-1 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 151 | | | NL | | | DH-2 | DJ-2 | | | |
| 152 | | | HG | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 153 | | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 154 | | | F | | | DH-1 | DJ-1 | | | |
| 155 | | | F | | | DH-1 | DJ-1 | | | |
| 156 | | | NL | | | DH-2 | DJ-2 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 157A | (2) 3'-0"x 7'-0"x 1 3/4" | | NL | | | DH-4 | DJ-4 | | 45 MIN. PROVIDE 45 MIN. FIRE RATED GLAZING DOUBLE EGRESS DOORS | |
| 157B | 3'-2"x 7'-0"x 1 3/4" | ALUM. | FG | AL | F-4 | DH-8 | DJ-8 | DS-8 | PROVIDE 1" INSULATED ALUM. PANELS | |
| 158 | | WD | NL | HM | F-1 | DH-2 | DJ-2 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 159 | | | F | | | DH-1 | DJ-1 | | | |
| 160 | | | F | | | DH-1 | DJ-1 | | | |
| 161 | | | NL | | | DH-2 | DJ-2 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 162 | | | HG | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 163 | | | NL | | | | | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 164 | | | F | | | DH-1 | DJ-1 | | | |
| 165 | | | F | | | DH-1 | DJ-1 | | | |
| 166 | | | NL | | | DH-2 | DJ-2 | | PROVIDE 20 MIN. FIRE RATED GLAZING | |
| 01 | 4'-0"x 7'-0"x 1 3/4" | HM | F | HM | F-2 | DH-6 | DJ-6 | | DOOR & FRAME TO BE GALV., SHOP PRIMED & PTD. | |

NOTE: REFER TO SPECIFICATIONS FOR DOOR HARDWARE SCHEDULE.

REVISIONS
1 11/20/2020 DHHS REVIEW COMMENTS

FOR CONSTRUCTION



Stogner Architecture, PA

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Phone 910-895-6874 Fax 910-895-1111

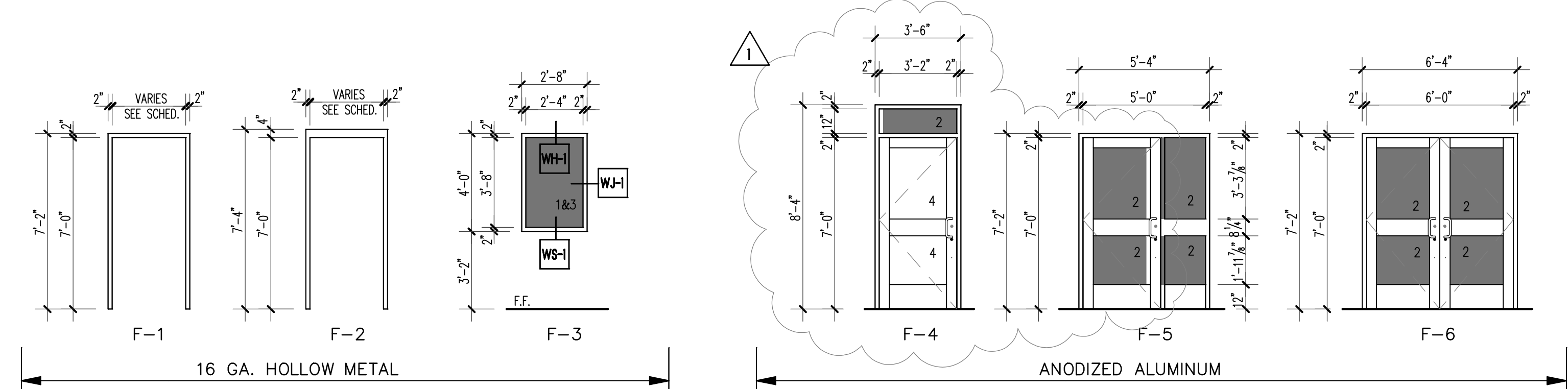
DOOR SCHEDULE

GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

COMM. NO.: 4535
DRAWN BY: JKM
CHECKED BY: DWS
DATE: 9/11/2020
SHEET NO. A6.1

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O:\NON-HUD PROJECTS\ERWIN\4535 SCMH - Erwin\DRAWINGS\XCADD\A6-0 Schedules.ecx

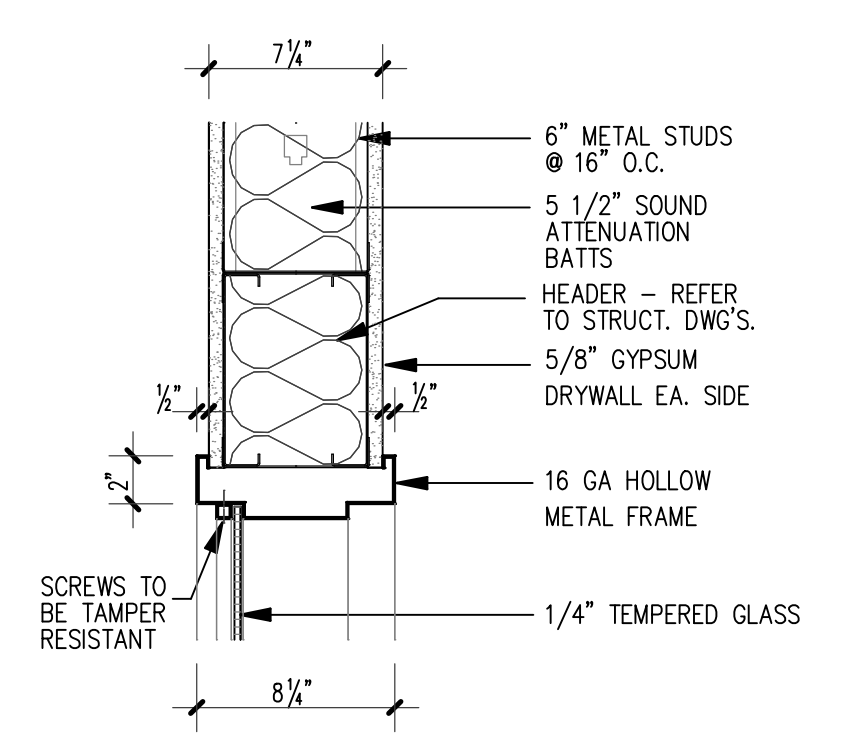


DOOR FRAME TYPES

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

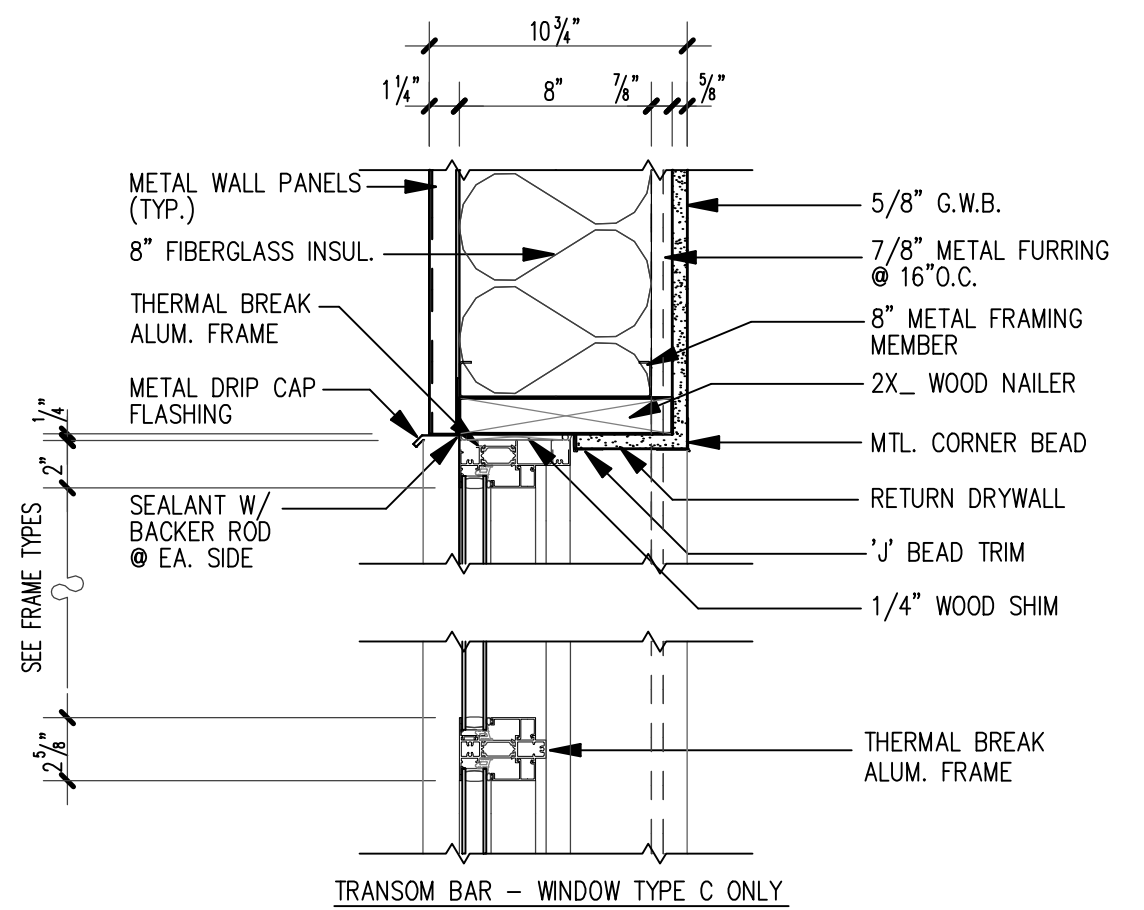
DOOR FRAME TYPES - KEYNOTES

1. 1/4" TEMPERED GLASS.
2. 1" INSULATED TEMPERED GLASS.
3. FIRE-PROTECTION-RATED GLAZING; 45 MINUTES RATED MINIMUM @ NURSE'S STATION 139 ONLY.
4. 1" INSULATED ALUMINUM PANEL



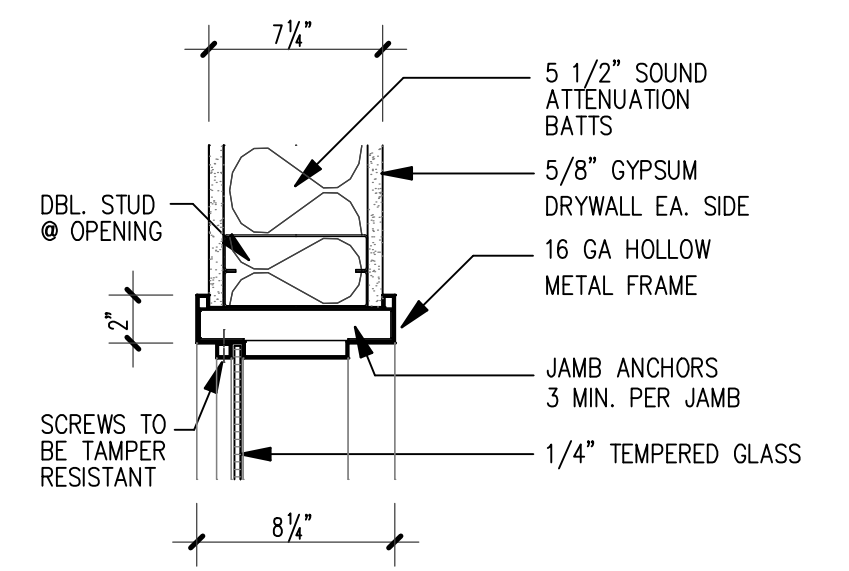
WH-1 HEAD DETAIL

SCALE: 1 1/2"=1'-0"



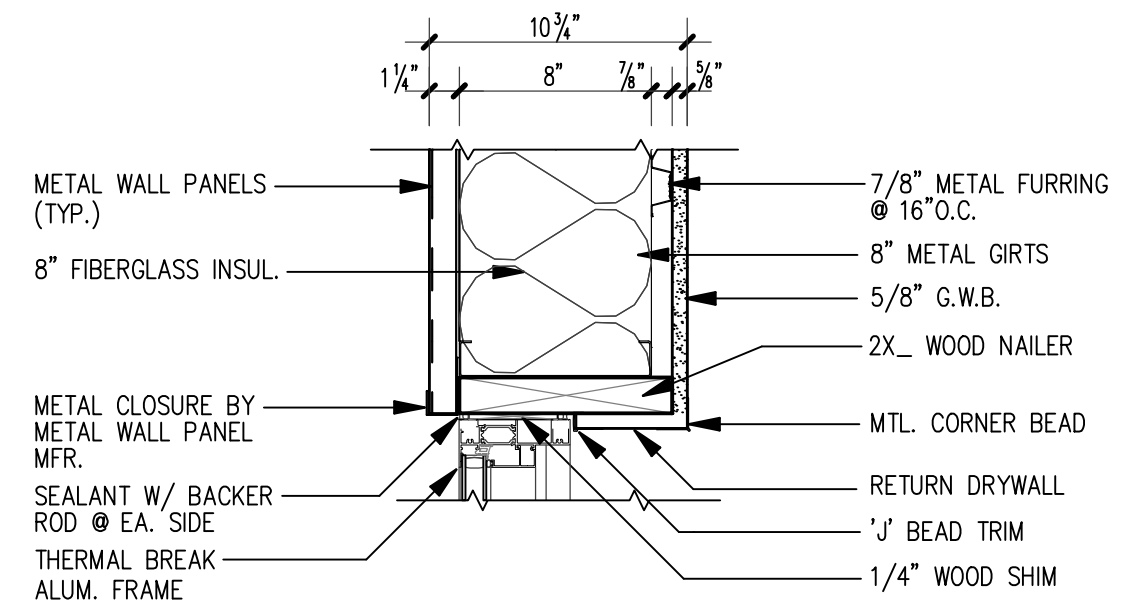
WH-2 HEAD DETAIL

SCALE: 1 1/2"=1'-0"



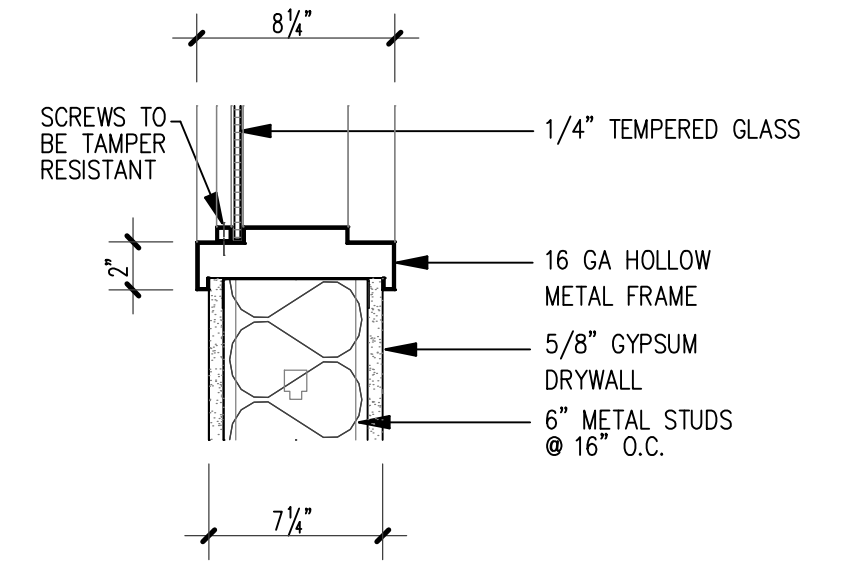
WJ-1 JAMB DETAIL

SCALE: 1 1/2"=1'-0"



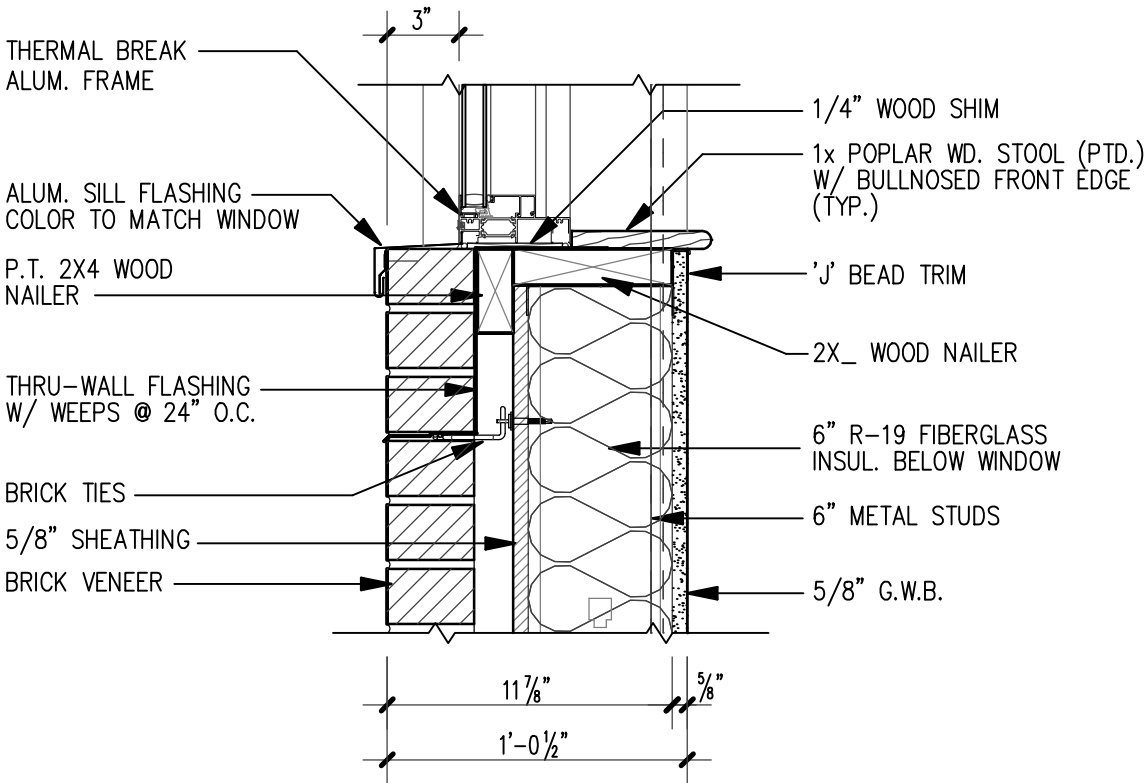
WJ-2 JAMB DETAIL

SCALE: 1 1/2"=1'-0"



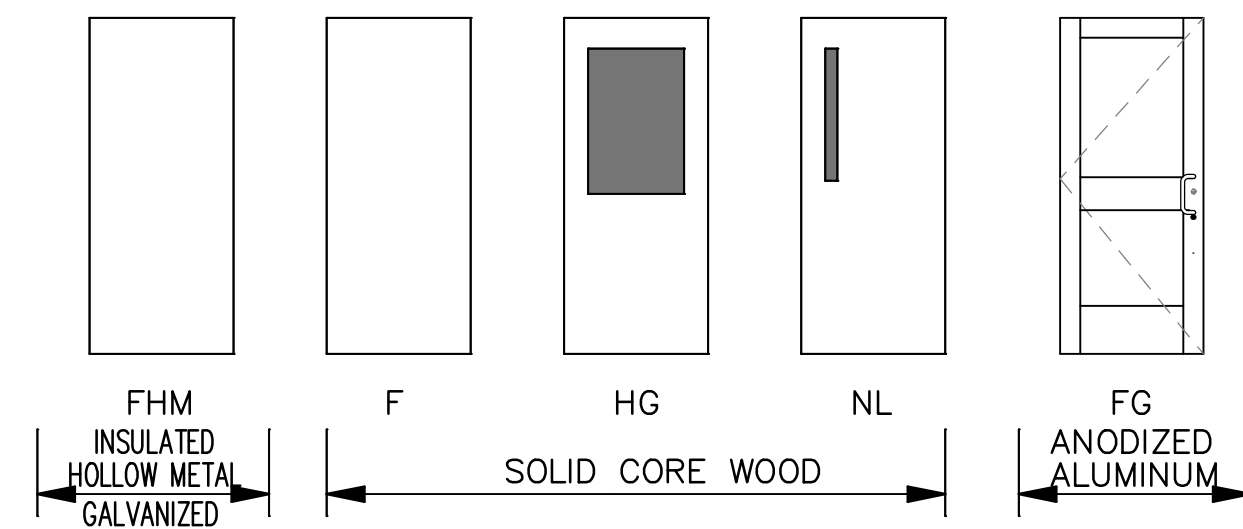
WJ-1 SILL DETAIL

SCALE: 1 1/2"=1'-0"



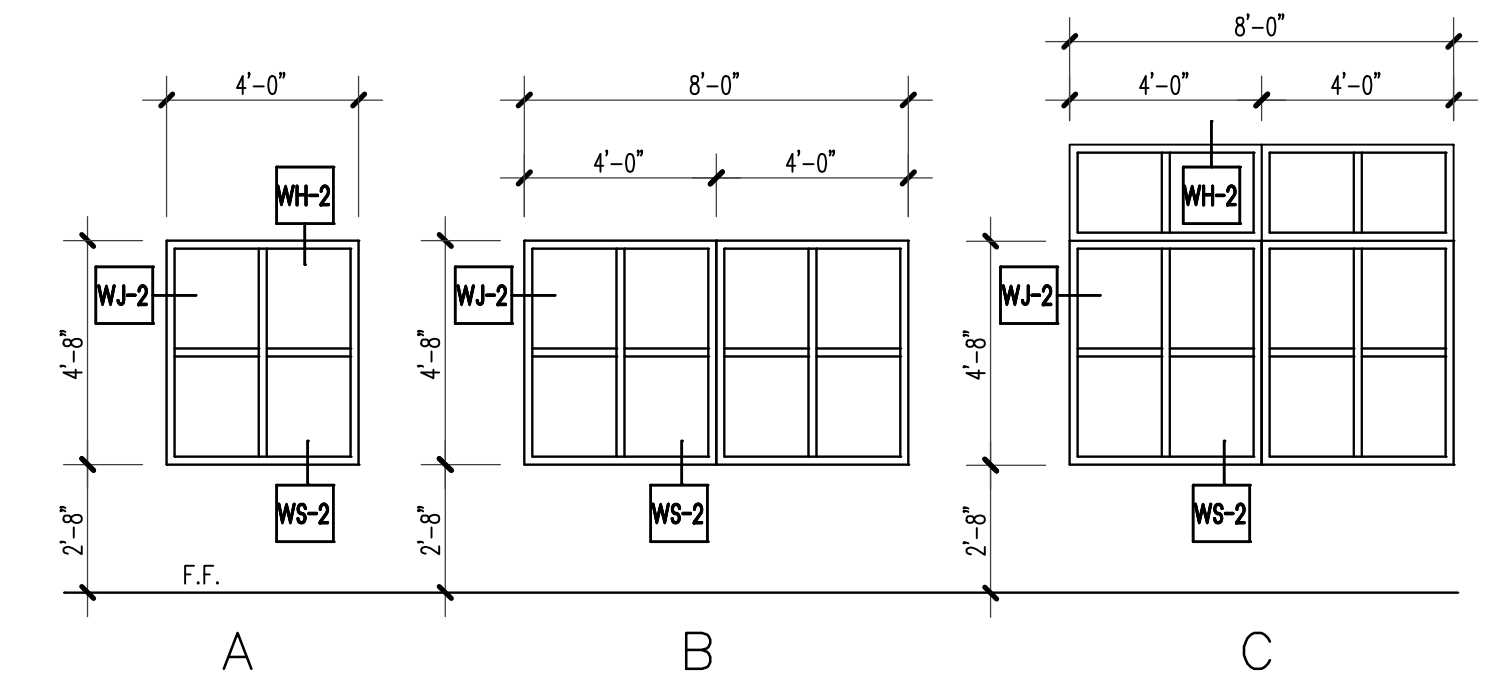
WS-2 SILL DETAIL

SCALE: 1 1/2"=1'-0"



DOOR TYPES

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

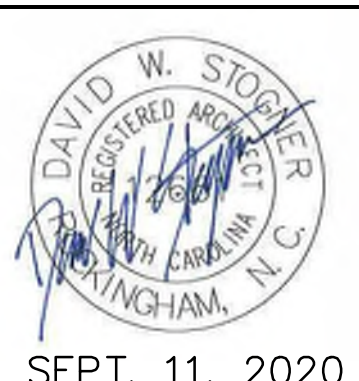


WINDOW TYPES

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

REVISIONS
1 11/20/2020 DHHS REVIEW COMMENTS

FOR CONSTRUCTION

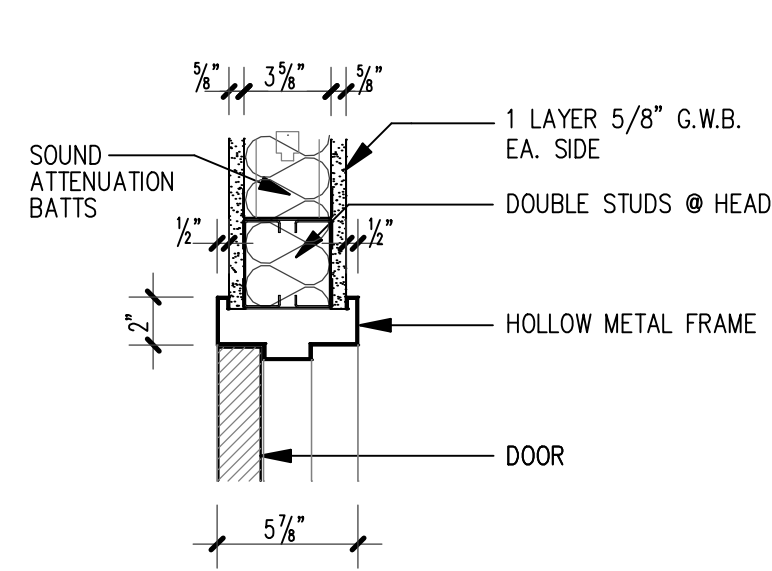


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Phone 910-895-6874 Fax 910-895-1111

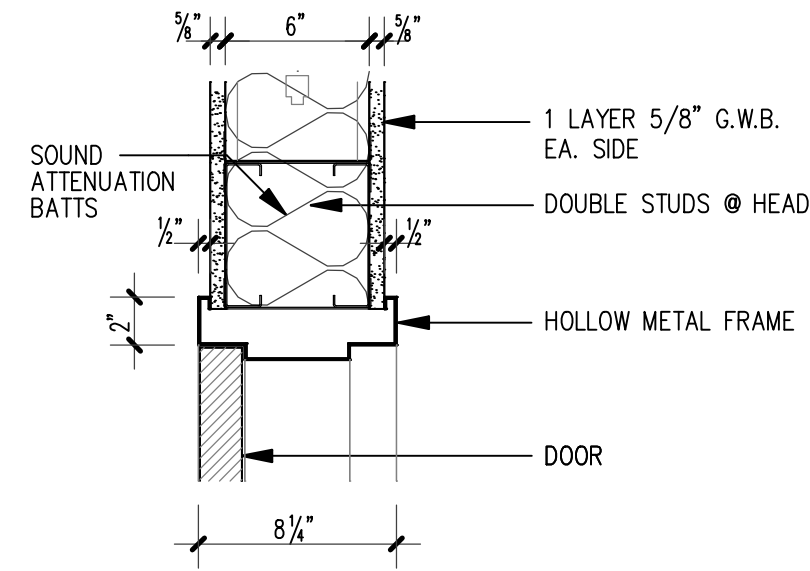
DOOR & FRAME TYPES - WINDOW TYPES & WINDOW DETAILS

GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

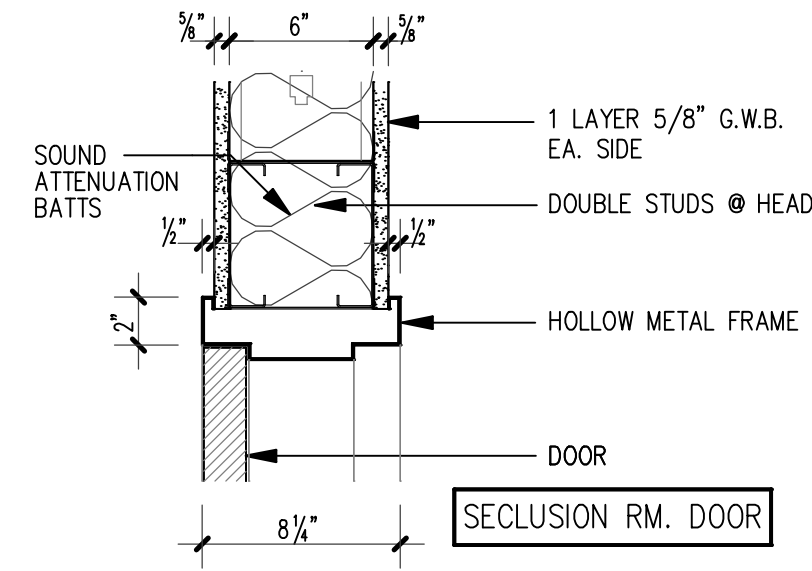
COMM. NO.: 4535
DRAWN BY: JKM
CHECKED BY: DWS
DATE: 9/11/2020
SHEET NO. **A6.2**



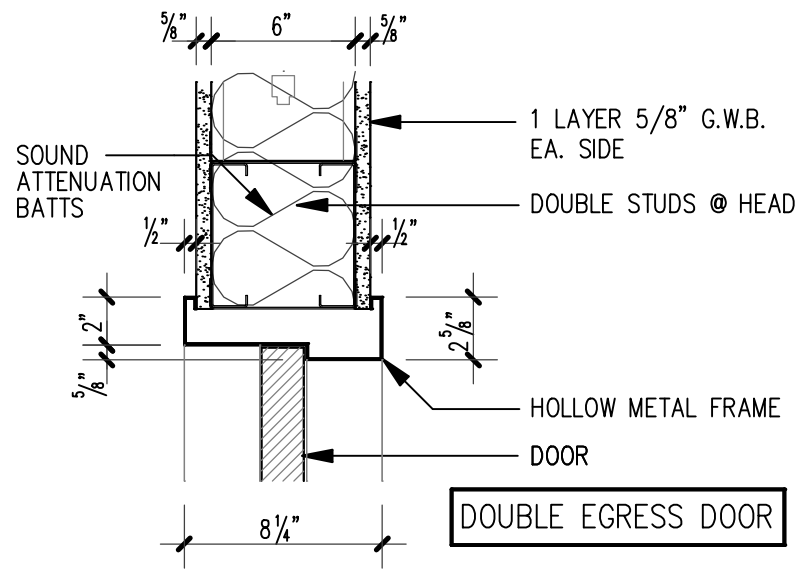
DH-1 HEAD DETAIL
SCALE: 1 1/2"=1'-0"



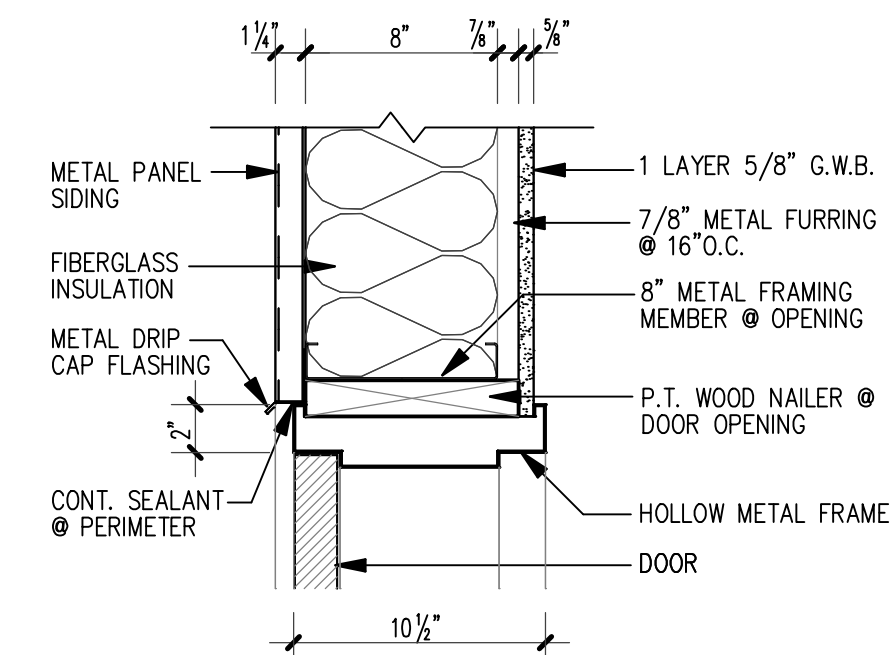
DH-2 HEAD DETAIL
SCALE: 1 1/2"=1'-0"



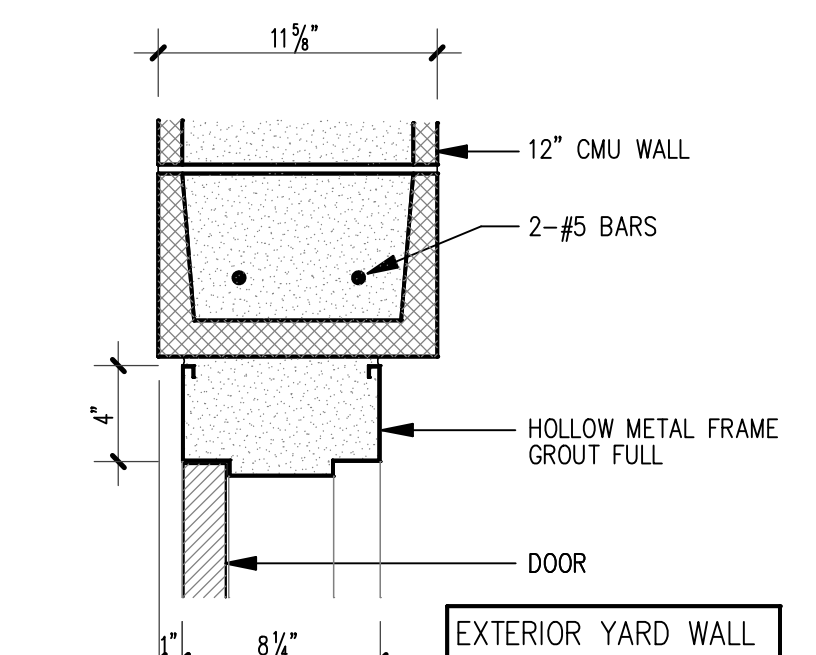
DH-3 HEAD DETAIL
SCALE: 1 1/2"=1'-0"



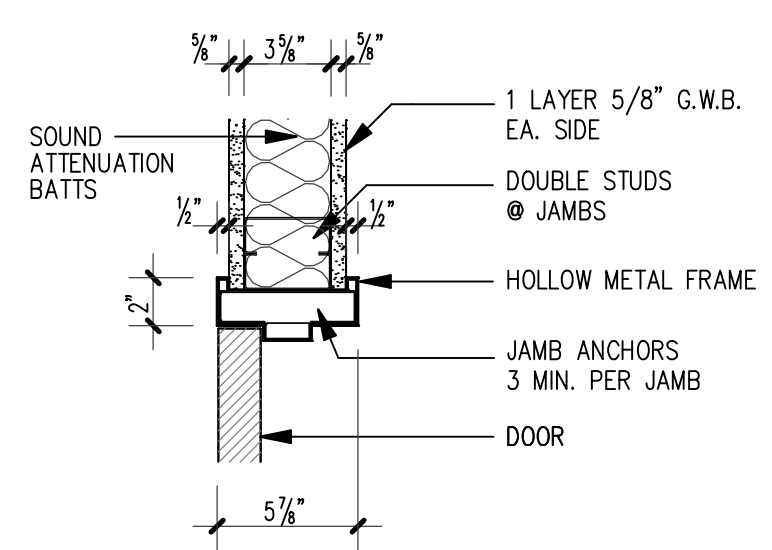
DH-4 HEAD DETAIL
SCALE: 1 1/2"=1'-0"



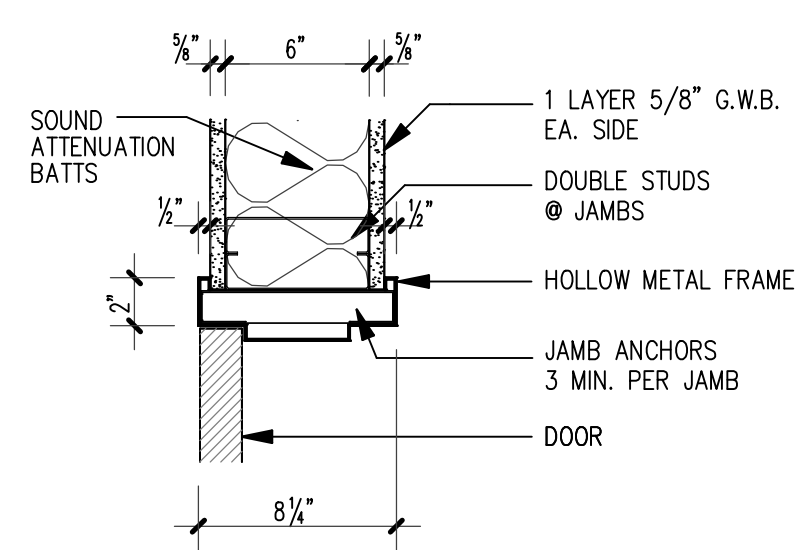
DH-5 HEAD DETAIL
SCALE: 1 1/2"=1'-0"



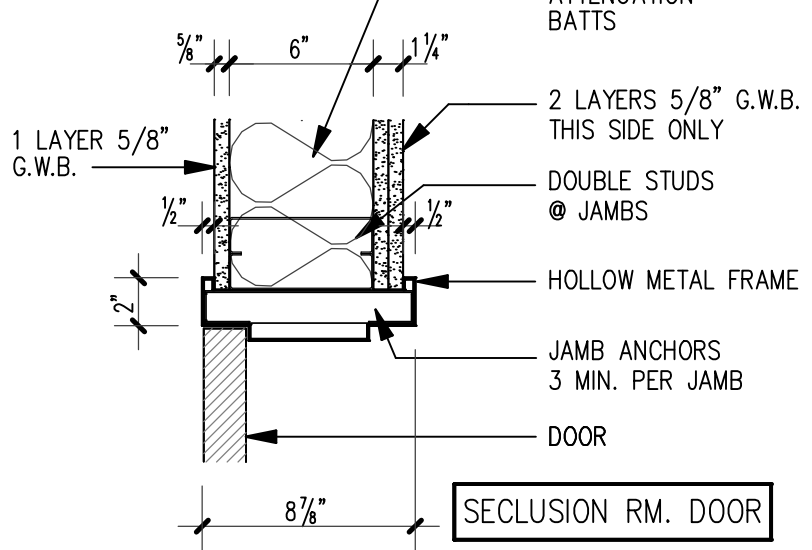
DH-6 HEAD DETAIL
SCALE: 1 1/2"=1'-0"



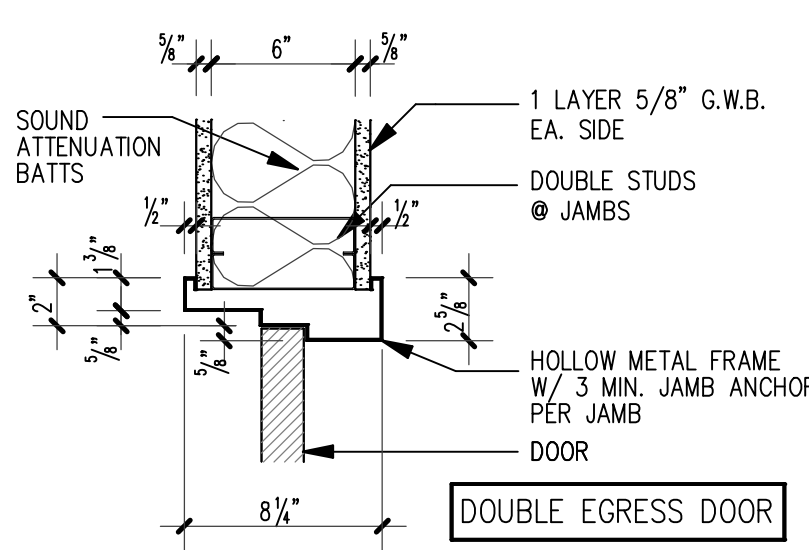
DJ-1 JAMB DETAIL
SCALE: 1 1/2"=1'-0"



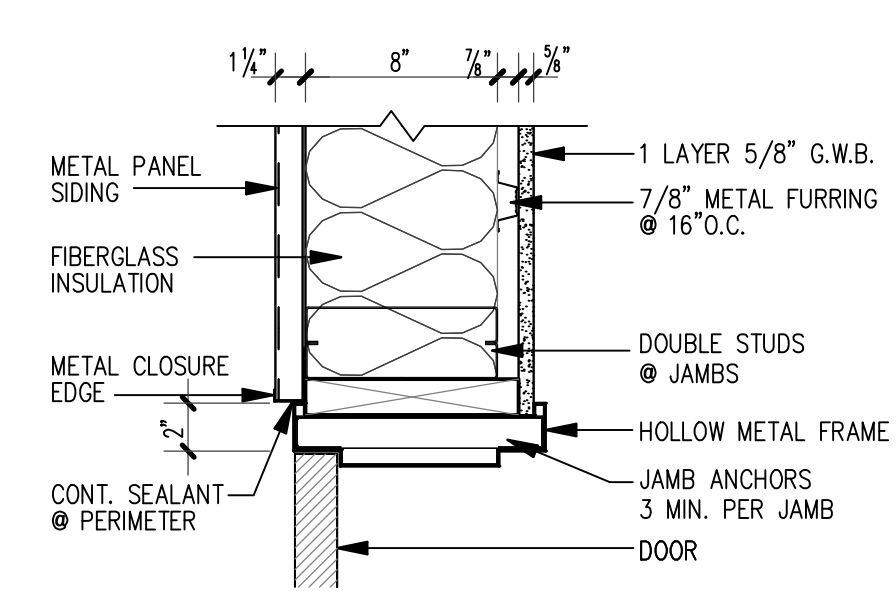
DJ-2 JAMB DETAIL
SCALE: 1 1/2"=1'-0"



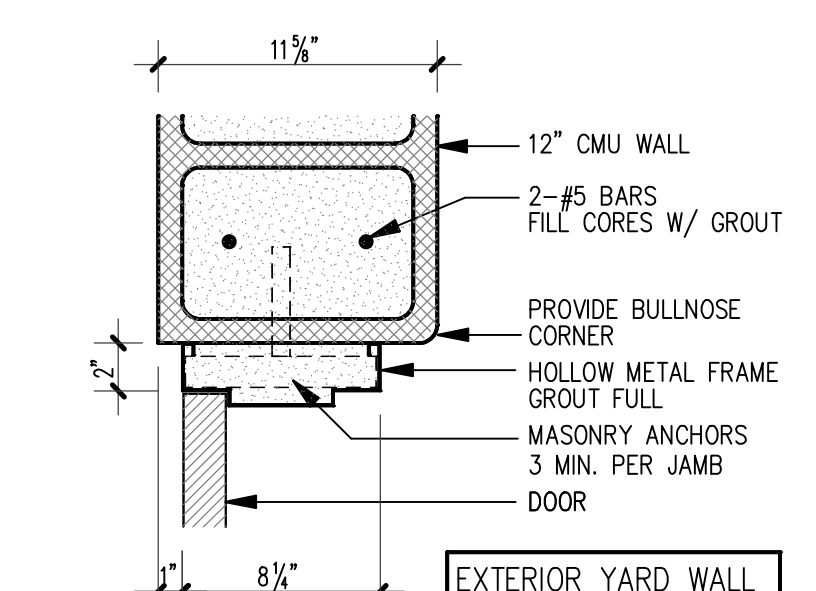
DJ-3 JAMB DETAIL
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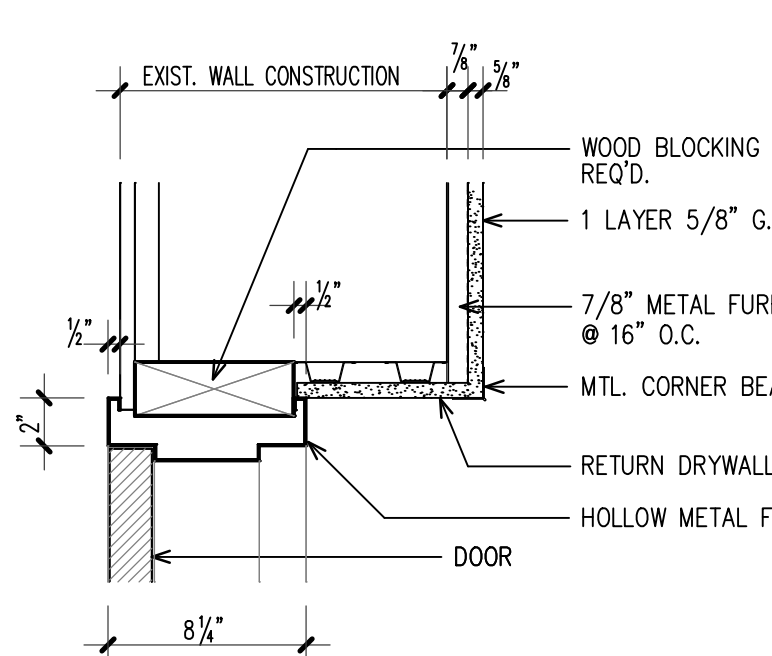
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SCALE: 1 1/2"=1'-0"



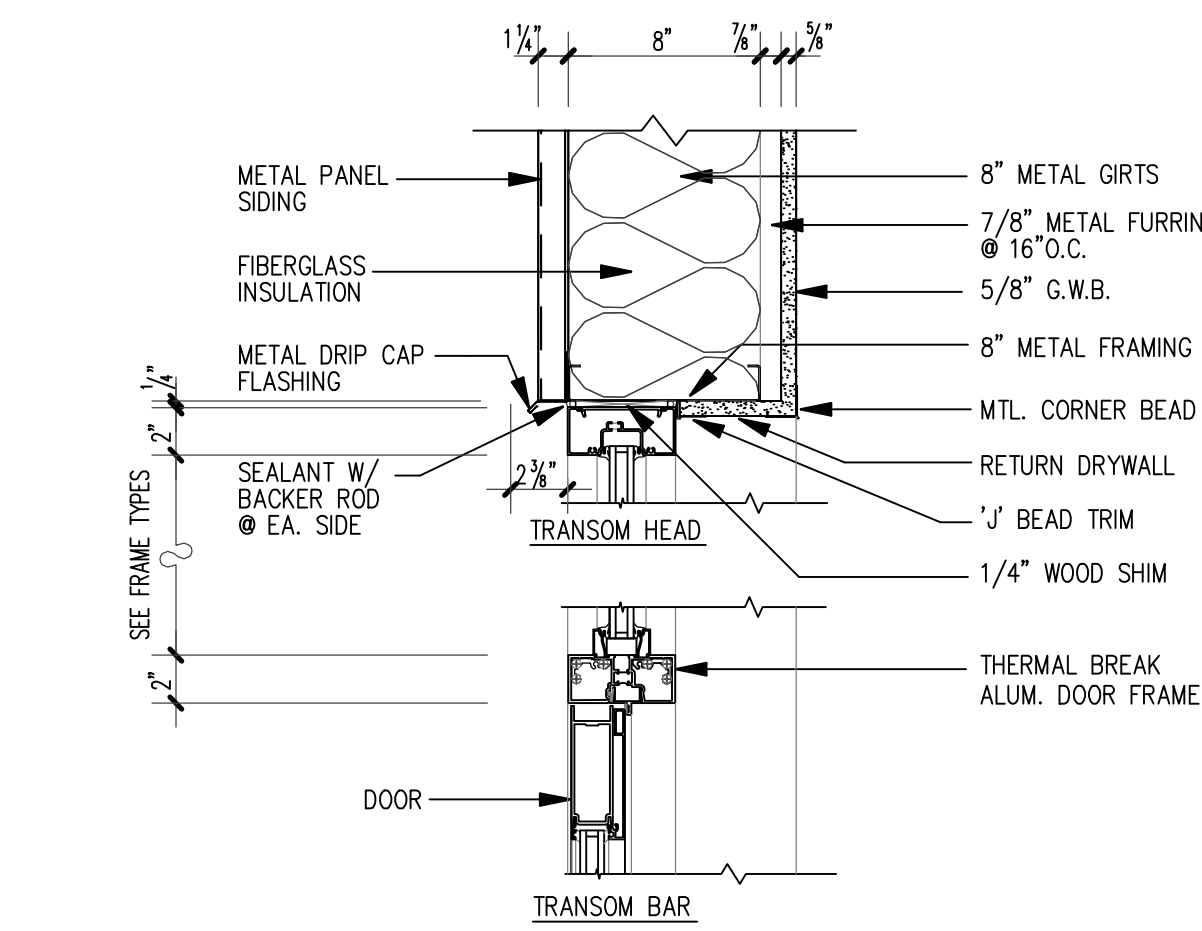
DJ-5 JAMB DETAIL
SCALE: 1 1/2"=1'-0"



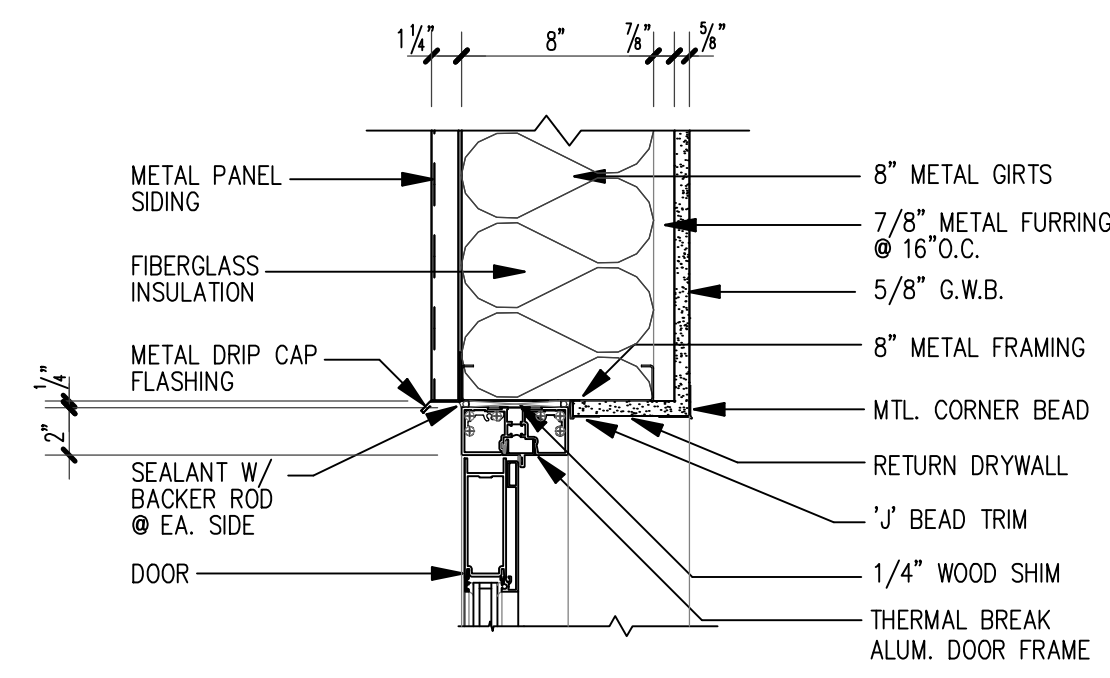
DJ-6 JAMB DETAIL
SCALE: 1 1/2"=1'-0"



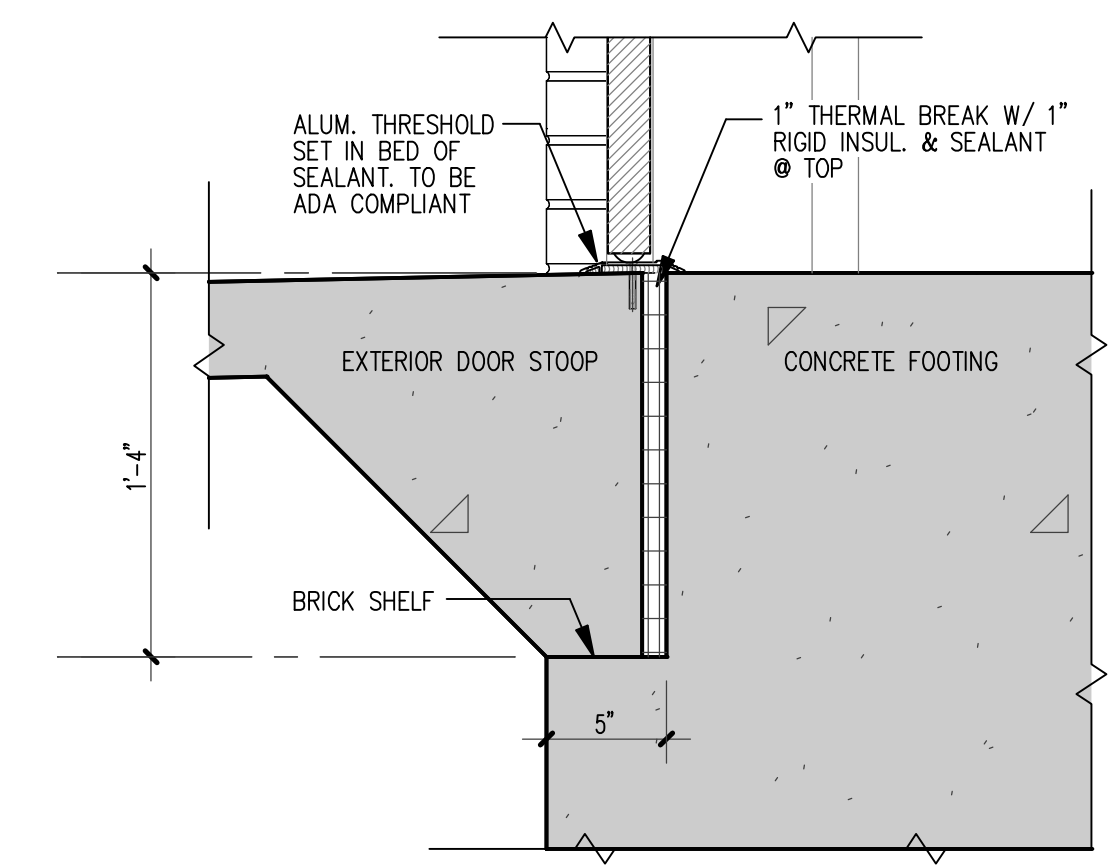
DH-7 HEAD DETAIL
SCALE: 1 1/2"=1'-0"



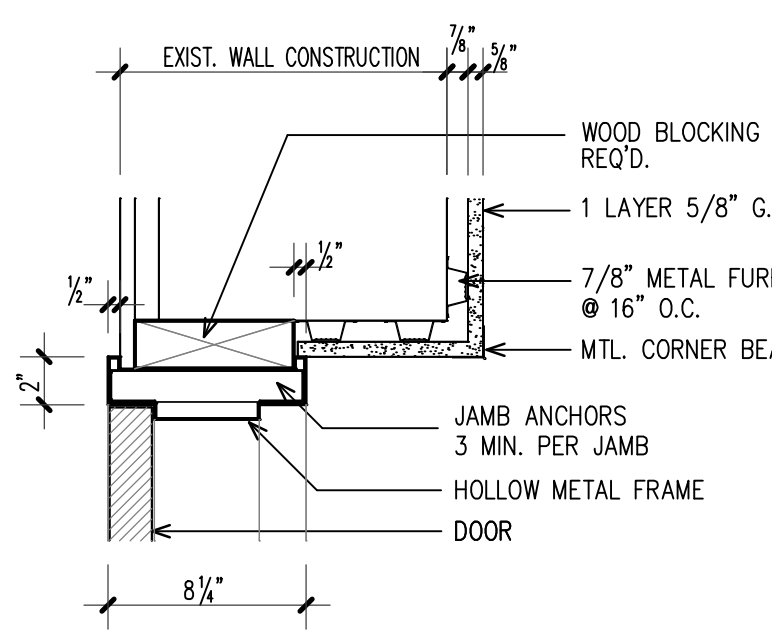
DH-8 HEAD DETAIL
SCALE: 1 1/2"=1'-0"



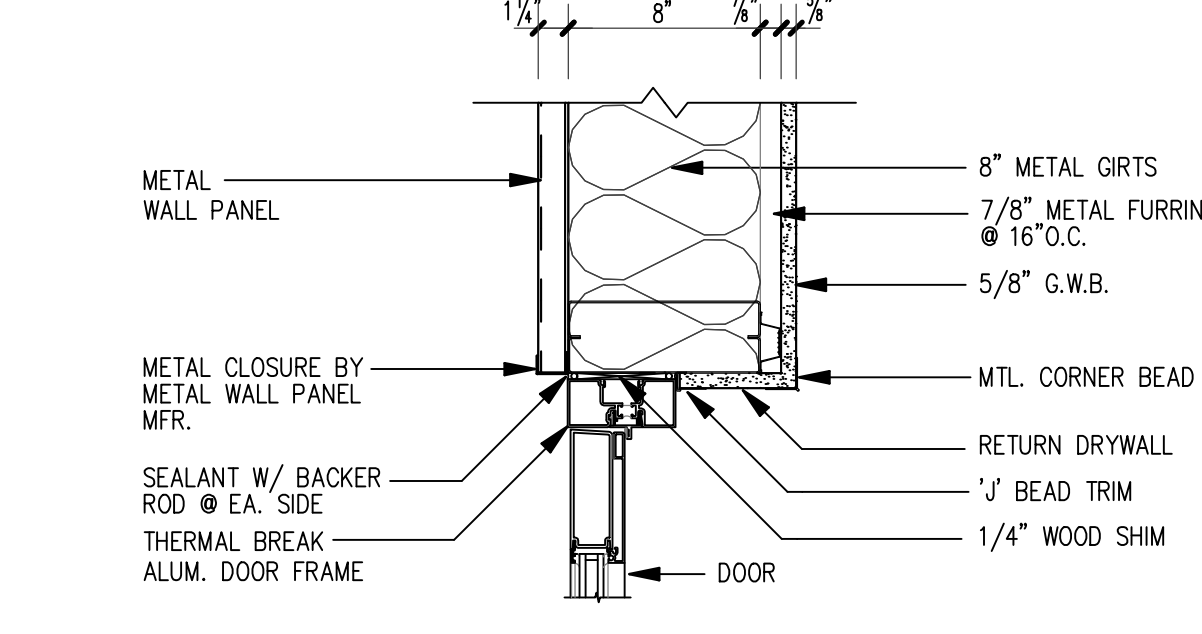
DH-9 HEAD DETAIL
SCALE: 1 1/2"=1'-0"



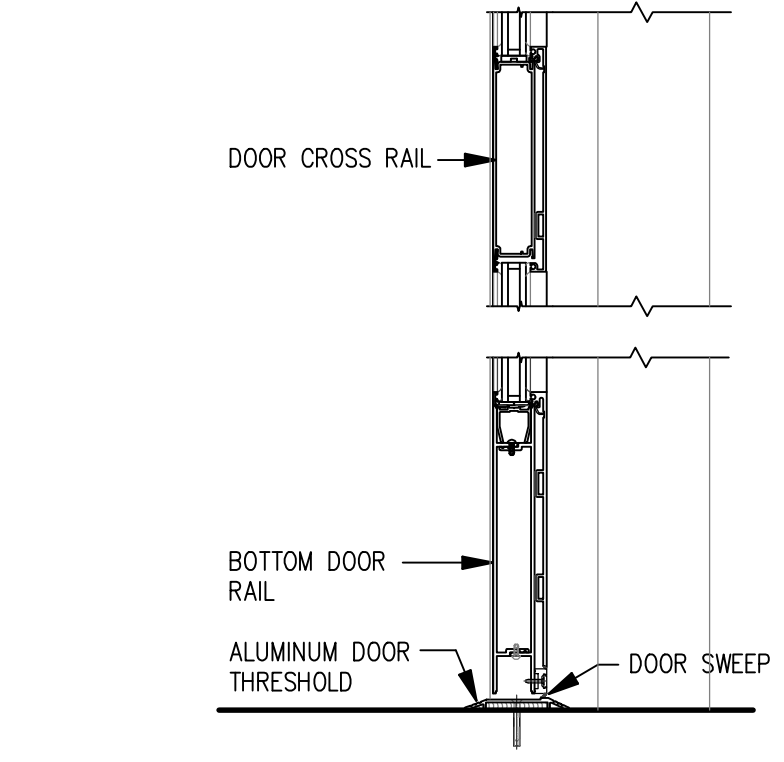
DS-5 SILL DETAIL
SCALE: 1 1/2"=1'-0"



DJ-7 JAMB DETAIL
SCALE: 1 1/2"=1'-0"



DJ-8 JAMB DETAIL
SCALE: 1 1/2"=1'-0"

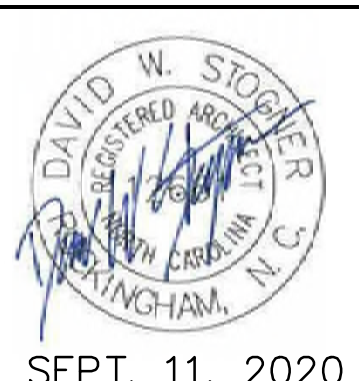


DS-8 SILL DETAIL
SCALE: 1 1/2"=1'-0"

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| NO. | REVISIONS |
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ADDITION and RENOVATIONS

| | |
|-------------|-------------|
| COMM. NO.: | 4535 |
| DRAWN BY: | JKM |
| CHECKED BY: | DWS |
| DATE: | 9/11/2020 |
| SHEET NO. | A6.3 |

GENERAL NOTES

COORDINATION:

- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH AND COORDINATED WITH ARCHITECTURAL DRAWINGS AND OTHER CONTRACT DOCUMENTS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL OF THE CONTRACT DOCUMENTS AND LATEST ADDENDA AND FOR SUBMITTING SUCH DOCUMENTS TO SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, FABRICATION OF ANY STRUCTURAL MEMBERS, AND ERECTION IN THE FIELD.
- THE GENERAL CONTRACTOR SHALL COMPARE THE STRUCTURAL DRAWINGS AND OTHER CONTRACT DRAWINGS AND REPORT ANY DISCREPANCY BETWEEN AND WITHIN EACH SET OF DRAWINGS WITH THE PROJECT ARCHITECT AND THE STRUCTURAL ENGINEER PRIOR TO THE FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.
- THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS OF THE EXISTING BUILDING AT THE JOB SITE AND REPORT ANY DISCREPANCIES FROM THE ASSUMED CONDITIONS SHOWN ON THE STRUCTURAL DRAWINGS TO THE PROJECT ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO THE FABRICATION AND ERECTION OF ANY STRUCTURAL MEMBERS.
- DRAWINGS SHOW GENERAL AND TYPICAL SECTIONS/DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR SECTIONS/DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO THE APPROVAL OF THE ENGINEER.
- THE STRUCTURAL MEMBERS OF THIS PROJECT HAVE BEEN DESIGNED BY THE STRUCTURAL ENGINEER TO RESIST THE REQUIRED CODE GRAVITY AND LATERAL FORCES THAT COULD OCCUR IN THE FINAL COMPLETED STRUCTURE ONLY. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED BRACING DURING CONSTRUCTION TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PROCESS UNTIL THE STRUCTURE IS TIED TOGETHER AND COMPLETED.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION, BRACING, AND SHORING OF EXISTING STRUCTURE AS REQUIRED TO INSTALL NEW BEAMS, WALLS, COLUMNS, AND FOUNDATIONS SHOWN ON THE STRUCTURAL DRAWINGS. GENERAL CONTRACTOR SHALL RETAIN AN INDEPENDENT ENGINEER FOR ALL SHORING DESIGN REQUIRED.
- THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE METHODS, TECHNIQUES, AND SEQUENCES OF PROCEDURES TO PERFORM THE WORK. THE SUPERVISION OF THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- LOADS APPLIED TO THE STRUCTURE DURING CONSTRUCTION SHALL NOT EXCEED THE SAFE LOAD-CARRYING CAPACITY OF THE STRUCTURAL MEMBERS. THE LIVE LOADS USED FOR THE DESIGN OF THE STRUCTURE ARE INDICATED IN THE GENERAL NOTES. DO NOT APPLY ANY CONSTRUCTION LOADS UNTIL STRUCTURAL FRAMING IS PROPERLY INSTALLED AND ALL TEMPORARY BRACING IS IN PLACE.
- ALL ASTM AND OTHER REFERENCES ARE PER THE LATEST EDITIONS UNLESS NOTED OTHERWISE.
- EQUIPMENT PADS SHALL BE PROVIDED BY THE MECHANICAL, ELECTRICAL, OR PLUMBING CONTRACTORS REQUIRING THE PAD.
- COORDINATE THE EXACT SIZE AND LOCATION OF ALL SLEEVES AND OPENINGS THROUGH CONCRETE WALLS, CONCRETE SLABS, OR MASONRY WALLS WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS.
- SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. CONTRACTOR SHALL REVIEW, APPROVE, AND SIGN EACH SHEET PRIOR TO SUBMISSION. THE STRUCTURAL ENGINEER'S REVIEW SHALL BE FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK, AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF THE SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, DIMENSIONS, ETC. SUBMIT ONE (1) REPRODUCIBLE AND TWO (2) PRINTS TO THE ENGINEER. ADDITIONAL COPIES WILL NOT BE RETURNED.
- CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO ASCERTAIN CONDITIONS WHICH MAY ADVERSELY AFFECT THE WORK OR COST THEREOF.
- WHERE CONFLICTS OCCUR BETWEEN GENERAL NOTES AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE NOR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.

FOUNDATIONS:

- FOUNDATION DESIGN OF FOOTINGS ARE BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 2,500 PSF.
- FOOTING SIZES WERE DETERMINED USING ASCE 07-05 LOAD COMBINATION FACTORS FROM ESTIMATED LOADS. ONCE PREFABRICATED BUILDING PLANS ARE PROVIDED FOOTING SIZES WILL HAVE TO BE RE-EVALUATED.
- FOUNDATION WALLS WITH BACKFILL ON EACH SIDE SHALL BE BACKFILLED EVENLY ON EACH SIDE. THESE WALLS HAVE NOT BEEN DESIGNED FOR UNBALANCED SOIL LOADS.
- COORDINATE FOUNDATION WORK WITH EXISTING UTILITIES. FOUNDATIONS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES. NOTIFY PROJECT ARCHITECT AND STRUCTURAL ENGINEER TO PROVIDE REINFORCED CONCRETE PIER FOR COLUMN FOOTINGS.
- UNLESS NOTED OTHERWISE COLUMN CENTERLINES SHALL BE CENTERLINES OF COLUMN FOOTINGS.
- HEAVY GRADING EQUIPMENT SHALL NOT BE ALLOWED WITHIN THE HEIGHT OF THE WALL (HORIZONTALLY) OF BASEMENT OR CANTILEVER RETAINING WALLS.

CONCRETE:

- CONCRETE SHALL BE PROPORTIONED TO MEET THE REQUIREMENTS OF THE FOLLOWING:

| | 28-DAY STRENGTH (PSI) | SLUMP RANGE (IN.) | UNIT WEIGHT (PCF) |
|-------------------|-----------------------|-------------------|-------------------|
| COLUMN FOOTINGS | 3000 | 3 - 5 | 150 |
| WALL FOOTINGS | 3000 | 3 - 5 | 150 |
| SLAB ON GRADE | 3000 | 3 - 5 | 150 |
| SUPPORTED SLABS | 3000 | 3 - 5 | 150 |
| EXTERIOR CONCRETE | 3000 | 3 - 5 | 150 |
- PORTLAND CEMENT SHALL BE ASTM C-50, TYPE I. FLY ASH SHALL BE ASTM C-618, CLASS F AND SHALL NOT EXCEED 25% OF CEMENT CONTENT BY WEIGHT. NORMAL WEIGHT AGGREGATE SHALL BE ASTM C-33.
- CONCRETE AGGREGATE GRADATION SHALL BE IN ACCORDANCE WITH ASTM C-33 SPECIFICATION, "SPECIFICATION FOR CONCRETE AGGREGATE." FINE AGGREGATE SHALL CONSIST OF NATURAL SAND OR A COMBINATION THEREOF, WITH A FINENESS MODULUS BETWEEN 2.3 AND 3.1. COARSE AGGREGATE CONTENT IS TO BE BETWEEN 35% AND 45% BY WEIGHT OR VOLUME OF THE TOTAL AGGREGATE CONTENT. LARGER COARSE AGGREGATE MIXES UP TO #467 ARE ACCEPTABLE FOR FLOOR SLAB CONCRETE TO MINIMIZE SHRINKAGE CRACKING.
- FLY ASH SHALL NOT BE PERMITTED IN CONCRETE PLACED SUBJECT TO COLD WEATHER PLACEMENT PRODUCERS.
- ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60, UNLESS NOTED OTHERWISE. ALL WELDED WIRE FABRIC (WWF) SHALL BE ASTM A82 AND A185 COLD DRAWN STEEL WIRE. WWF SHALL BE DELIVERED TO THE JOB SITE IN FLAT SHEETS (NO ROLLS). PLACE SHEETS ON BOLSTERS AT 48" MAXIMUM TO LOCATE IN UPPER THIRD OF SLAB.
- LAP CONTINUOUS REINFORCING BARS 36 BAR DIAMETERS UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS IN ALL WALLS AND FOOTINGS.
- BAR SUPPORTS, DESIGN, DETAILING, FABRICATION, AND PLACING OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE ACI CODE AND DETAILING MANUAL AND CRSI'S "MANUAL OF STANDARD PRACTICE."
- MINIMUM CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE:

| | |
|--|--------|
| CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH | 3" |
| CONCRETE EXPOSED TO EARTH OR WEATHER: | |
| No. 6 THROUGH No. 18 BARS | 2" |
| No. 5 AND SMALLER | 1 1/2" |
| CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: | |
| No. 14 AND No. 18 BARS | 1 1/2" |
| No. 11 AND SMALLER | 3/4" |
| BEAMS AND COLUMNS: | |
| PRIMARY REINFORCEMENT, TIES, STIRRUPS, AND SPIRALS | 1 1/2" |
- ANCHOR RODS FOR COLUMNS SHALL BE POSITIONED WITH A TEMPLATE PRIOR TO PLACING CONCRETE IN PIER OR FOOTING. NUTS SHALL BE TIGHTENED ON EACH SIDE OF THE TEMPLATE TO HOLD THE ANCHOR BOLTS IN PLACE.
- CONCRETE DESIGN AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONTENT" (ACI 318-LATEST EDITION) AND WITH "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (ACI 315-LATEST EDITION). CONCRETE PLACED DURING HOT WEATHER SHALL CONFORM TO ACI 305 AND CONCRETE PLACED DURING COLD WEATHER SHALL CONFORM TO ACI 306.
- CONCRETE MIXER SHALL BE DESIGNED IN ACCORDANCE WITH ACI 301.
- UNLESS OTHERWISE SHOWN ON ARCHITECTURAL DRAWINGS, PROVIDE 3/4" CHAMFER AT ALL COLUMN, WALL SLAB, AND BEAM EDGES THAT ARE EXPOSED TO VIEW IN THE FINAL STRUCTURE.

SLAB ON GRADE:

- CONTROL JOINTS FOR SLAB ON GRADE SHALL BE LOCATED AS SHOWN ON PLAN, WITH A MAXIMUM JOINT SPACING OF 3 TIMES THE SLAB THICKNESS IN FEET. JOINTS SHALL BE FORMED USING SAW CUTS 1/8" WIDE (MAXIMUM) BY T/4 (1/4" MINIMUM) DEEP. SAW CUT AS SOON AS PRACTICAL AND WITHIN 12 HOURS AFTER PLACING CONCRETE. JOINTS SHALL BE FILLED WITH SEMI-RIGID EPOXY JOINT FILLER (CONSPEC POLUREA JOINT FILL (OR EQUIVALENT)).
- SIDEWALKS AND OTHER EXTERIOR SLABS ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS. SEE ARCHITECTURAL, SITE, AND CIVIL DRAWINGS FOR LOCATIONS, DIMENSIONS, AND ELEVATIONS.
- SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF DEPRESSED SLAB AREAS AND DRAINS. SLOPE SLAB TO DRAIN WHERE INDICATED.
- ALL INTERIOR AND EXTERIOR FLOOR SLABS ARE TO RECEIVE ONE (1) COAT OF EVAPORATION REDUCER (CONSPEC AQUAFILM (OR EQUIVALENT) APPLIED TO FRESHLY PLACED CONCRETE IMMEDIATELY AFTER SCREEDING AND/OR AFTER THE FIRST FLOATING OPERATION. EVAPORATION REDUCER IS NOT RECOMMENDED FOR USE DURING COLD WEATHER PLACEMENT.
- FLOOR SLABS ARE TO RECEIVE TWO COATS OF 25% MINIMUM SOLID ACRYLIC HARDENER AND SEAL (CONSPEC INTRASEAL OR EQUIVALENT). APPLICATION IS TO CONFORM TO MANUFACTURER'S SPECIFICATIONS. FIRST COAT IS FOR CURING. SECOND COAT IS FOR SEALING AND DUST PROOFING AFTER BUILDING CONSTRUCTION COMPLETION.
- FLOOR SLAB MAY RECEIVE DENSIFIER APPLICATION (NOX-CRETE DURONOX, CONSPEC INTRASEAL, ASHFORD FORMULA, OR EQUIVALENT) IN PLACE OF ACRYLIC FLOOR SEALER. DENSIFIERS DO NOT CONFORM WITH ASTM C-309 AND MAY REQUIRE A CURING COMPOUND PRIOR TO APPLICATION OF DENSIFIER. CURING COMPOUND REQUIREMENT IS TO BE BASED ON CLIMATE CONDITIONS DURING TIME OF CONCRETE PLACEMENT. CONTRACTOR TO CONTACT ENGINEER FOR RECOMMENDATIONS.
- SLAB ON GRADE SHALL HAVE SECONDARY REINFORCEMENT CONSISTING OF FIBERMESH SYNTHETIC FIBERS - FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE, COMPLYING WITH ASTM C-1116, TYPE III, 1/2" LONG MAXIMUM, UNIFORMLY DISPERSED IN CONCRETE MIX AT MANUFACTURER'S RECOMMENDED RATE, BUT NOT LESS THAN 1.5 Rb/CUBIC YARD. THIS IS HIGHLY RECOMMENDED TO MINIMIZE SURFACE CRACKING, IN LIEU OF A DOUBLE LAYER OF REBAR.
- SEE PLAN FOR VAPOR RETARDER AND UNDERSLAB DRAINAGE FILL REQUIREMENTS.

BUILDING CODE SUMMARY STRUCTURAL DESIGN

DESIGN LOADS:

| | | |
|----------------------------|---------------------|------------------|
| Importance Factors: | Snow (Is) | 1.0 |
| | Seismic (Ie) | 1.0 |
| Live Loads: | Roof | 20 psf |
| | Mezzanine | 60 psf |
| | Floor | N/A psf |
| Ground Snow Load: | 10 psf | |
| Wind Load: | Ultimate Wind Speed | 120 mph (ASCE-7) |
| | Exposure Category | C |

SEISMIC DESIGN CATEGORY:

| | | | | |
|--|--|---|--|-----------------------------|
| Provide the following Seismic Design Parameters: | <input type="checkbox"/> A | <input type="checkbox"/> B | <input checked="" type="checkbox"/> C | <input type="checkbox"/> D |
| Risk Category (Table 1604.5) | <input type="checkbox"/> I | <input type="checkbox"/> II | <input checked="" type="checkbox"/> III | <input type="checkbox"/> IV |
| Spectral Response Acceleration | Ss 27.8 %g | S1 11.3 %g | | |
| Site Classification (ASCE 7) | <input type="checkbox"/> A | <input type="checkbox"/> B | <input checked="" type="checkbox"/> C | <input type="checkbox"/> D |
| Data Source: | <input type="checkbox"/> Field Test | <input checked="" type="checkbox"/> Presumptive | <input type="checkbox"/> Historical Data | |
| Basic structural system | <input type="checkbox"/> Bearing Wall | <input type="checkbox"/> Dual w/Special Moment Frame | | |
| | <input checked="" type="checkbox"/> Building Frame | <input type="checkbox"/> Dual w/Intermediate R/C or Special Steel | | |
| | <input type="checkbox"/> Moment Frame | <input type="checkbox"/> Inverted Pendulum | | |
| Analysis Procedure: | <input type="checkbox"/> Simplified | <input checked="" type="checkbox"/> Equivalent Lateral Force | <input type="checkbox"/> Dynamic | |
| | Architectural, Mechanical, Components anchored? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |

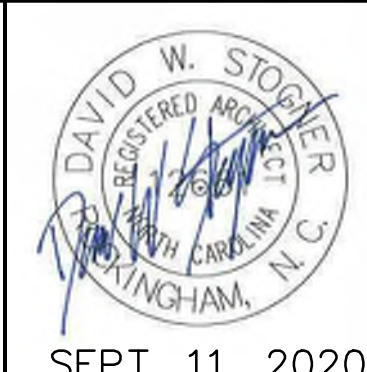
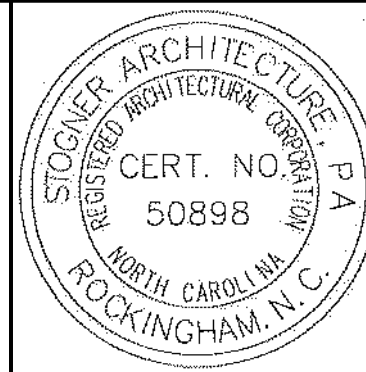
LATERAL DESIGN CONTROL:

| | | | |
|--|--------------------------|------|-------------------------------------|
| Earthquake | <input type="checkbox"/> | Wind | <input checked="" type="checkbox"/> |
| SOIL BEARING CAPACITIES: | | | |
| Field Test (provide copy of test report) | N/A | psf | |
| Presumptive Bearing capacity | 2,500 | psf | |
| Pile size, type, and capacity | N/A | | |

REVISIONS

12/29/2020 BUILDING CODE SUMMARY STRUCTURAL DESIGN ADDED PER OSFM

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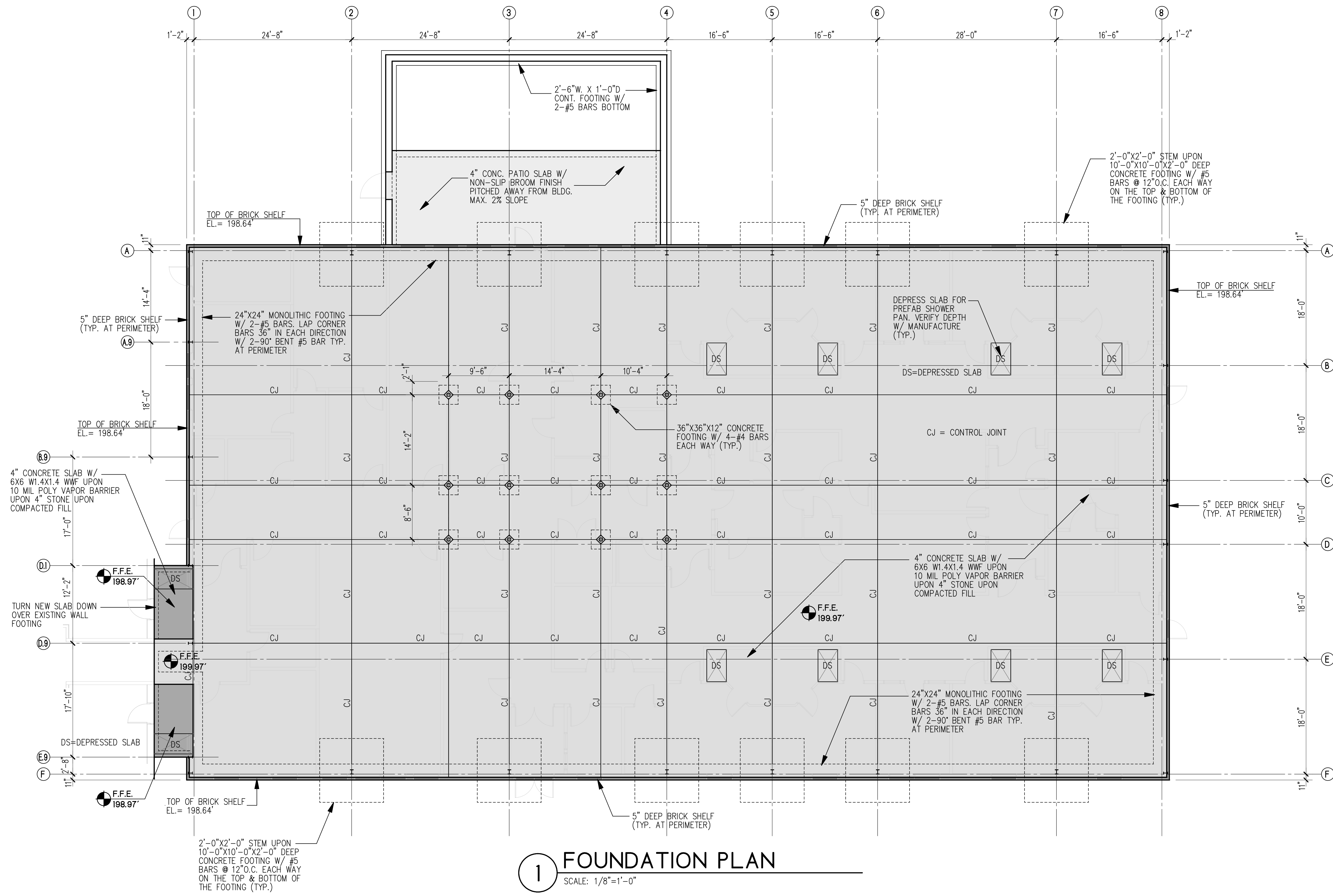
STRUCTURAL GENERAL NOTES

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S1.0

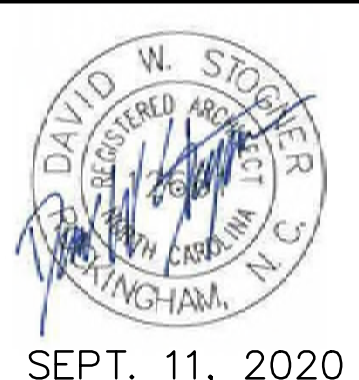
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1 FOUNDATION PLAN
SCALE: 1/8"=1'-0"

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FOUNDATION PLAN

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| SHEET NO. S1.1 |

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(600S162-54)
6" LIGHT GAUGE STEEL
RAFTERS @ 24" O.C.

RIDGE BM. TO BE (2) 10"
(1000S162-68) LIGHT GAUGE
STEEL MEMBERS W/ 3 1/2"
WIDE X 33 MIL TOP & BOTTOM
CHANNELS.

(600S162-54)
6" LIGHT GAUGE STEEL
RAFTERS @ 24" O.C.

NOTE:
ALL LIGHT GAUGE STEEL ROOFS
TO BE SHEATHED W/ 1 1/2"
METAL ROOF DECKING FASTENED
W/ #8 SELF-TAPPING SCREWS
@ 6" O.C.

NOTE:
SEE ARCHITECTURAL PLANS FOR
ALL DIMENSIONS.

C1 HSS 5"x5"x1/4" STEEL COLUMN UPON
12"x12"x1/2" STEEL BASE PLATE.
SEE CONNECTION DETAILS ON SHEET S1.4

SEE ARCHITECTURAL SHEETS FOR ALL
DIMENSIONS

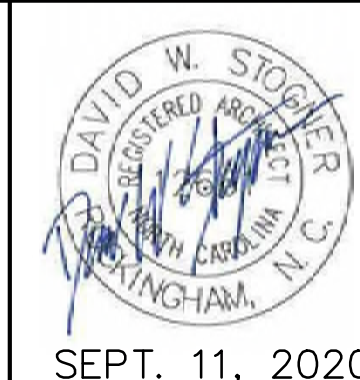
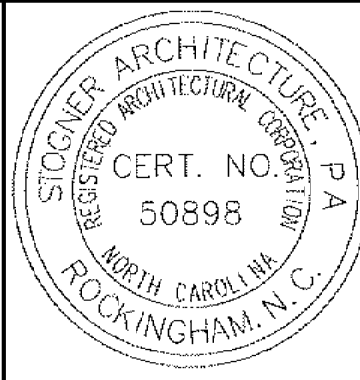
3" VLI 18GA METAL PAN W/
2 1/2" LT. WT. CONCRETE TOPPING
(5 1/2" MIN. CONCRETE DEPTH)
REINFORCE W/ 6X6 W1.4 X
1.4 WWF. INSTALL 8'-0" LONG
#4 BARS @ 12" O.C. ALONG
CENTER BEAM

1 MEZZANINE FLOOR & CONNECTOR ROOF FRAMING PLAN

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

REVISIONS

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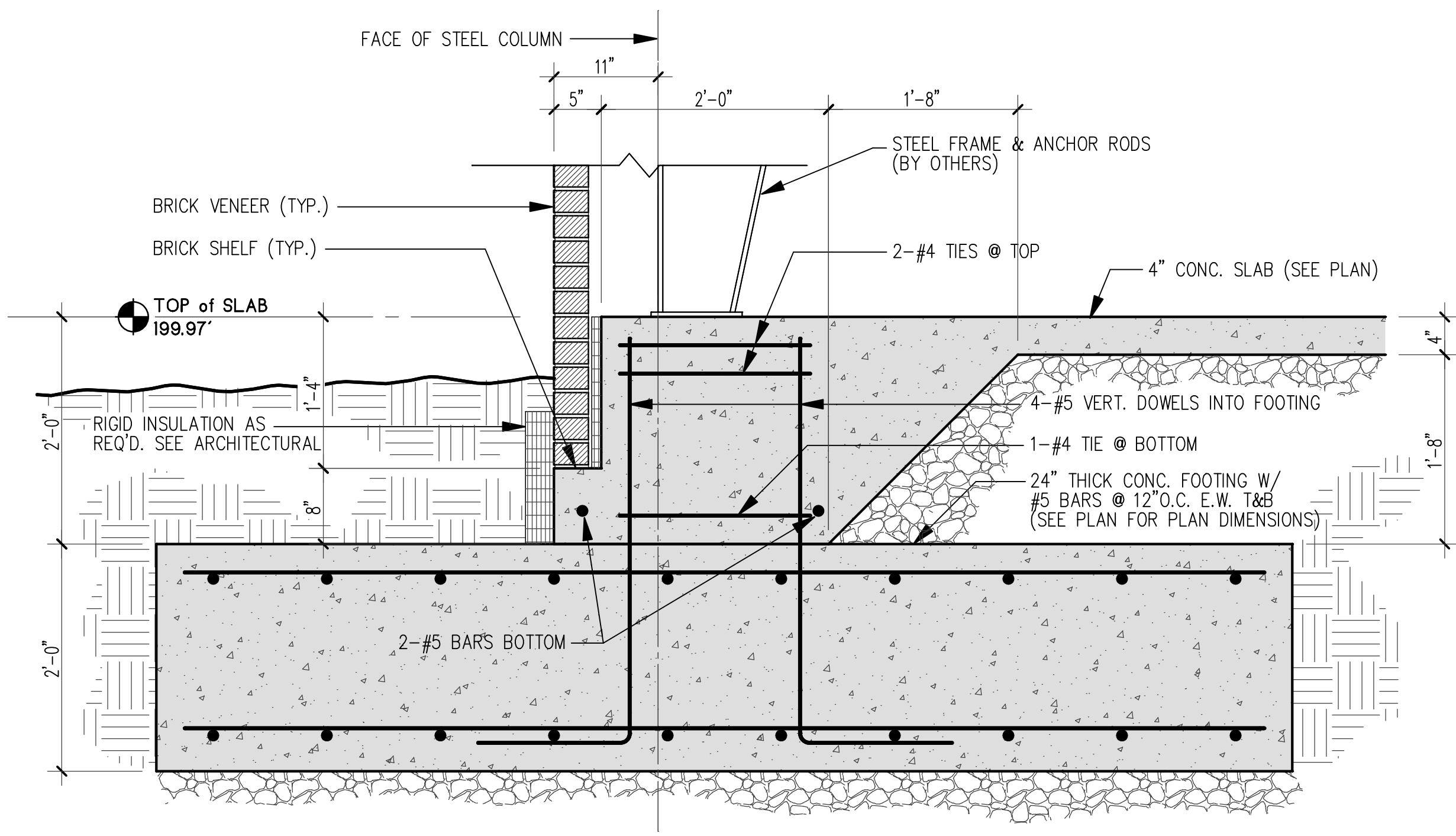
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MEZZANINE FLOOR & CONNECTOR ROOF FRAMING PLAN

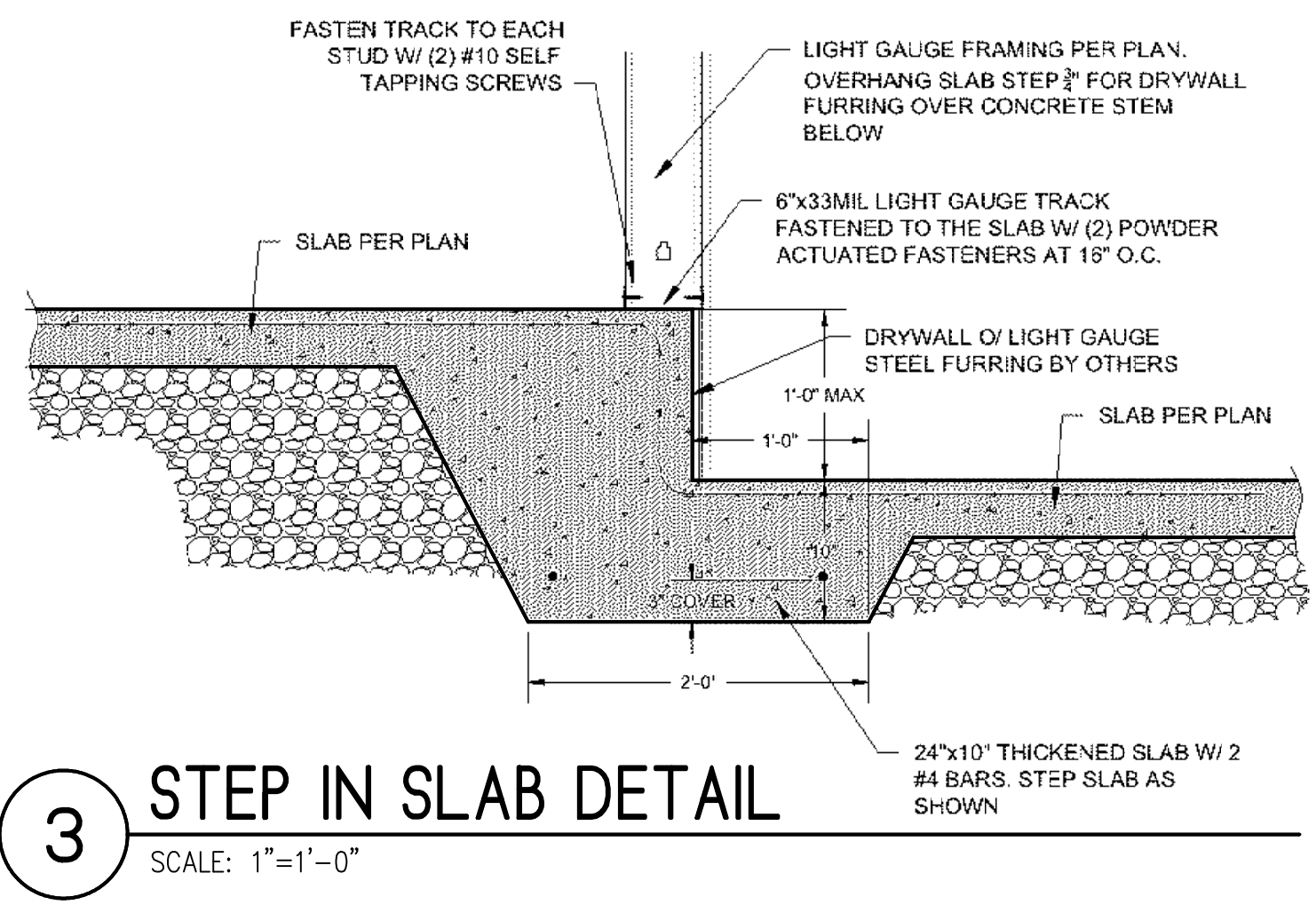
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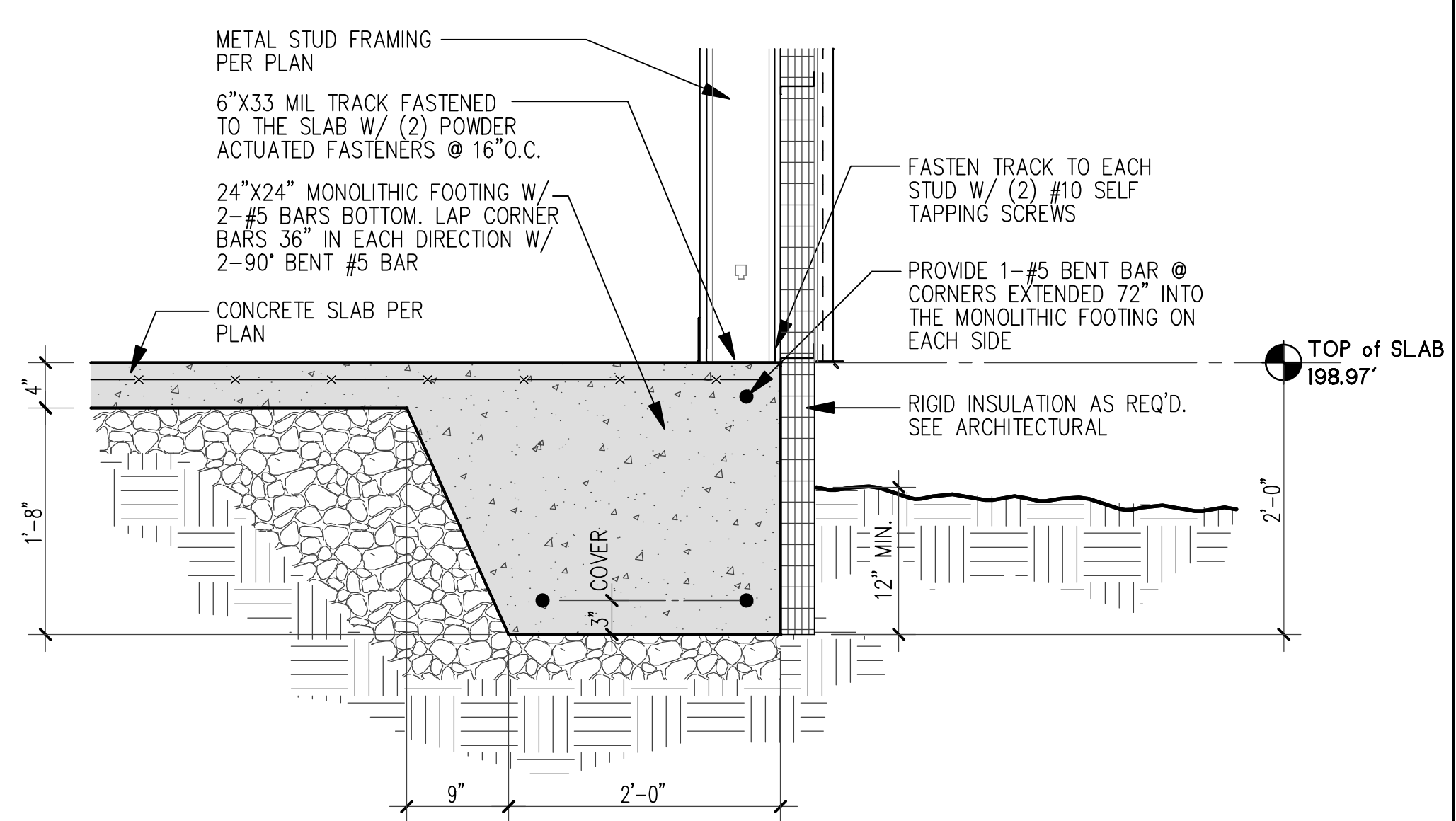
S1.2



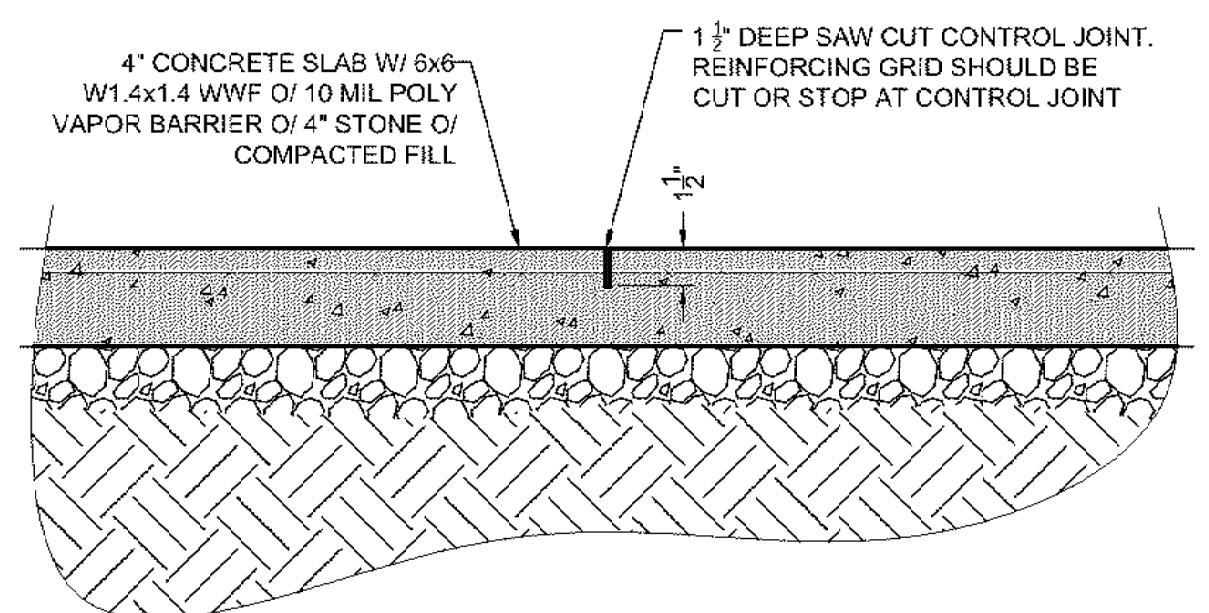
1 FOUNDATION DETAIL @ PREFAB STEEL COLUMNS
SCALE: 1"=1'-0"



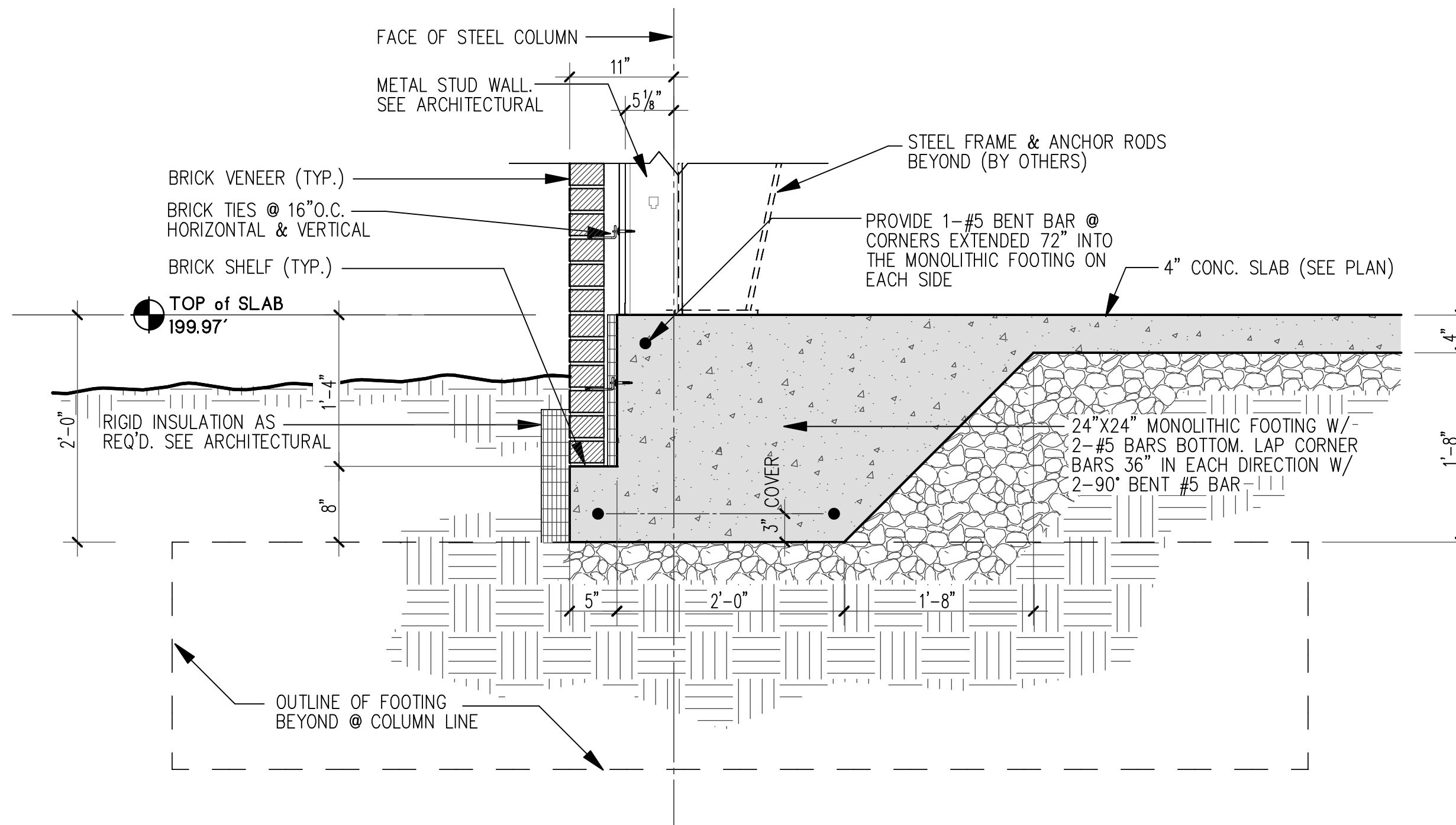
3 STEP IN SLAB DETAIL
SCALE: 1"=1'-0"



4 FOUNDATION DETAIL @ CONNECTOR
SCALE: 1"=1'-0"



5 TYPICAL SLAB CONTROL JOINT DETAIL
SCALE: 1 1/2"=1'-0"



2 TYPICAL FOUNDATION DETAIL @ PREFAB BUILDING
SCALE: 1"=1'-0"

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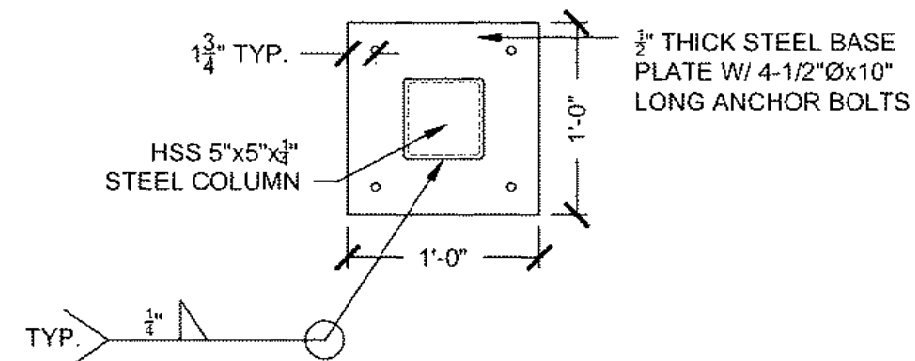
SEPT. 11, 2020

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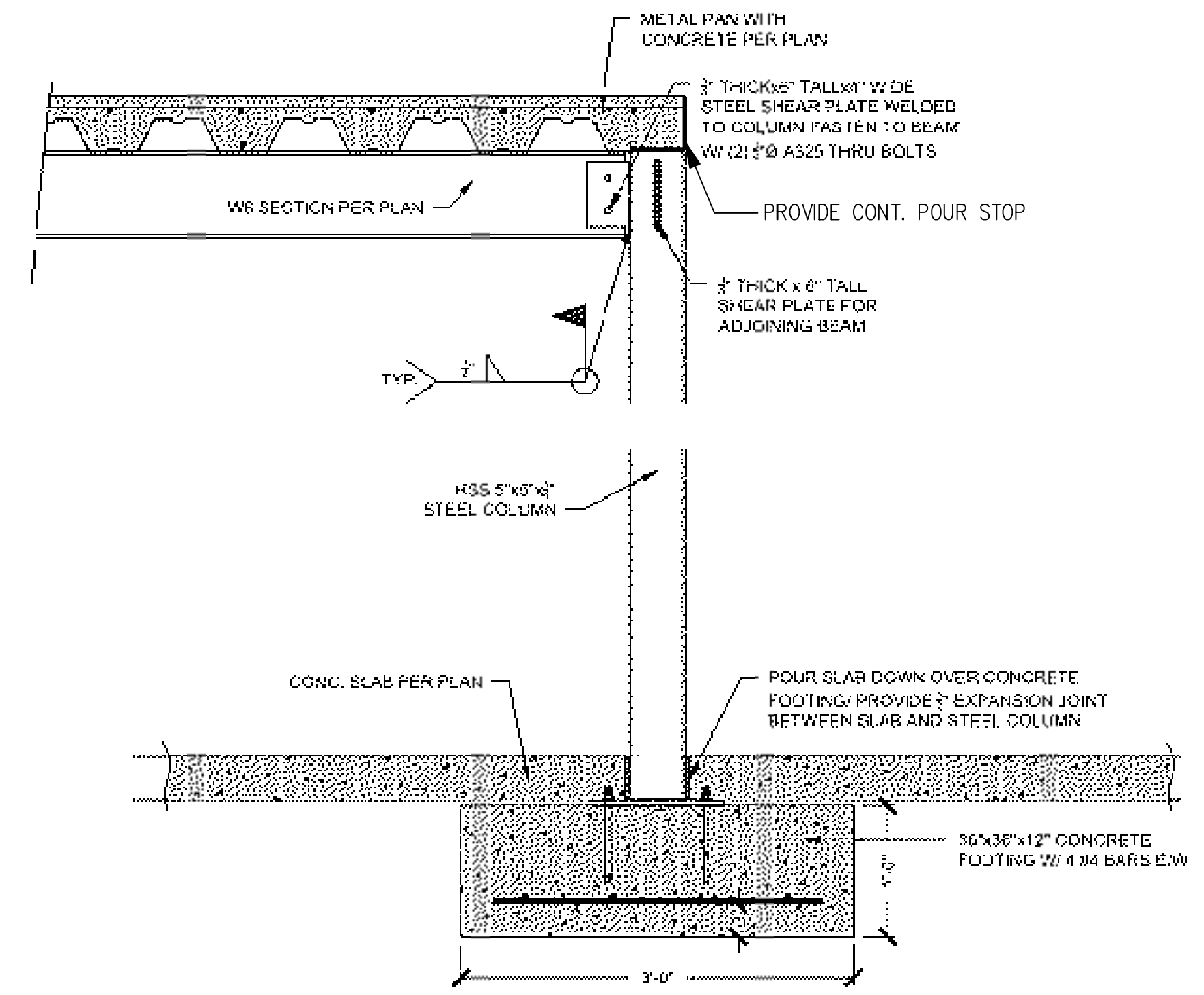
FOUNDATION DETAILS

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410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

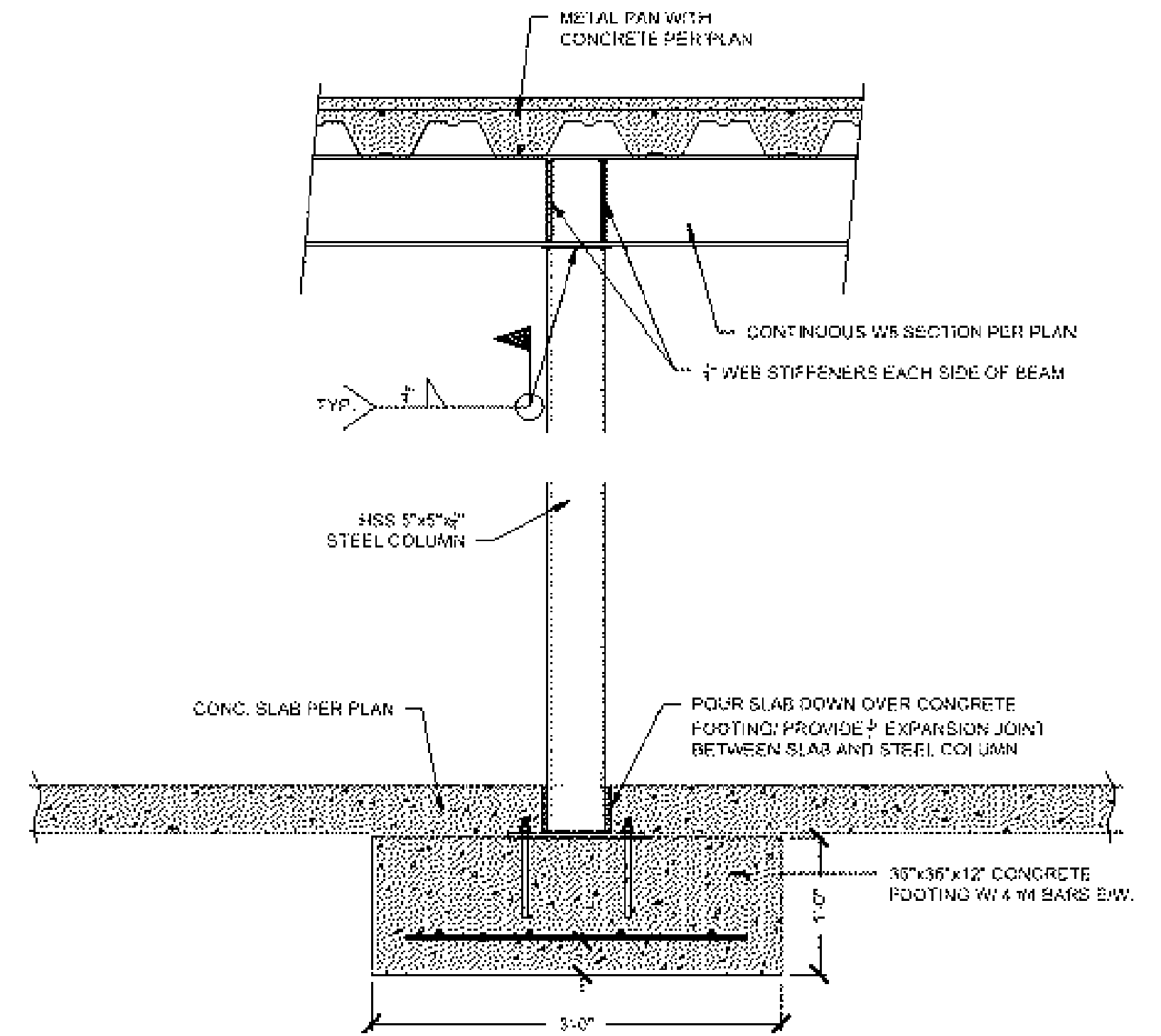
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| DRAWN BY: JKM |
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| DATE: 9/11/2020 |
| SHEET NO. SI.3 |



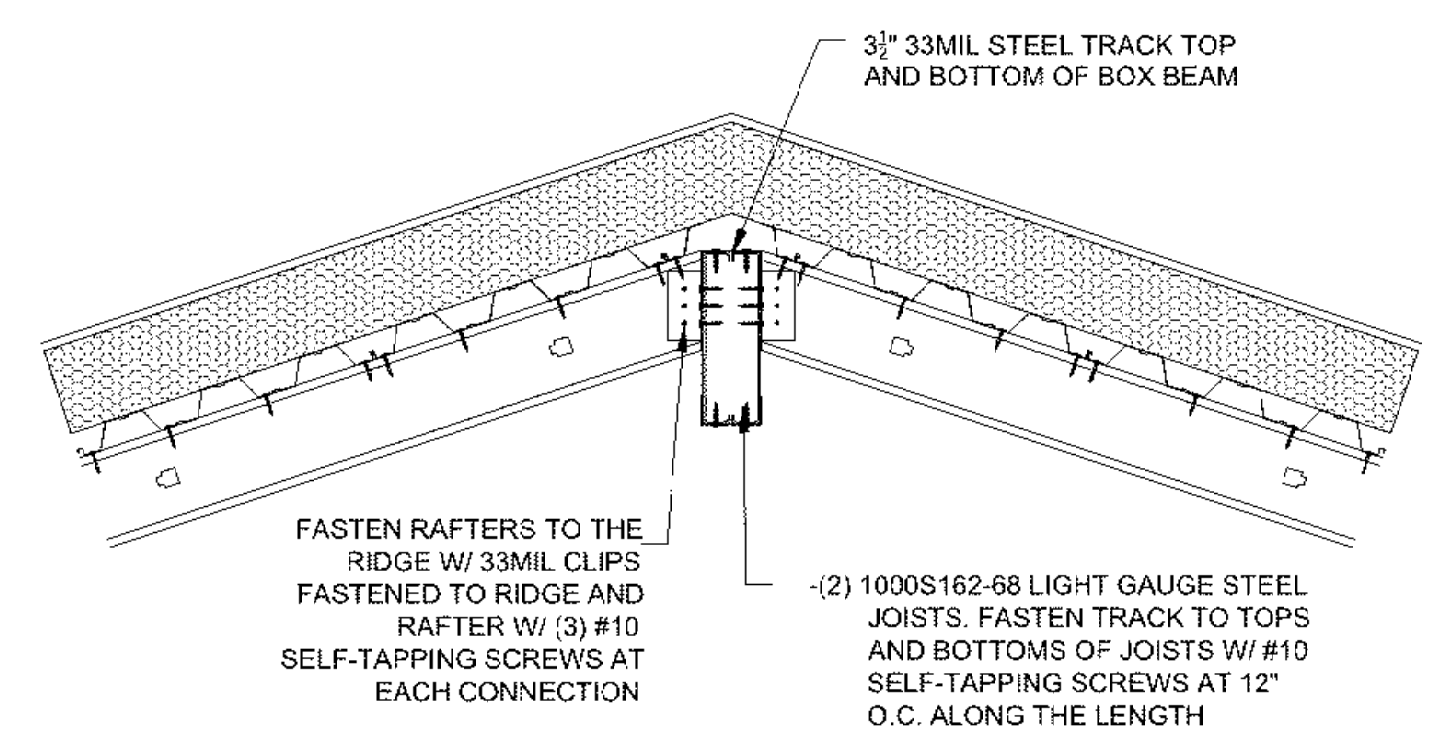
1 TYPICAL BASE PLATE DETAIL
SCALE: 1"=1'-0"



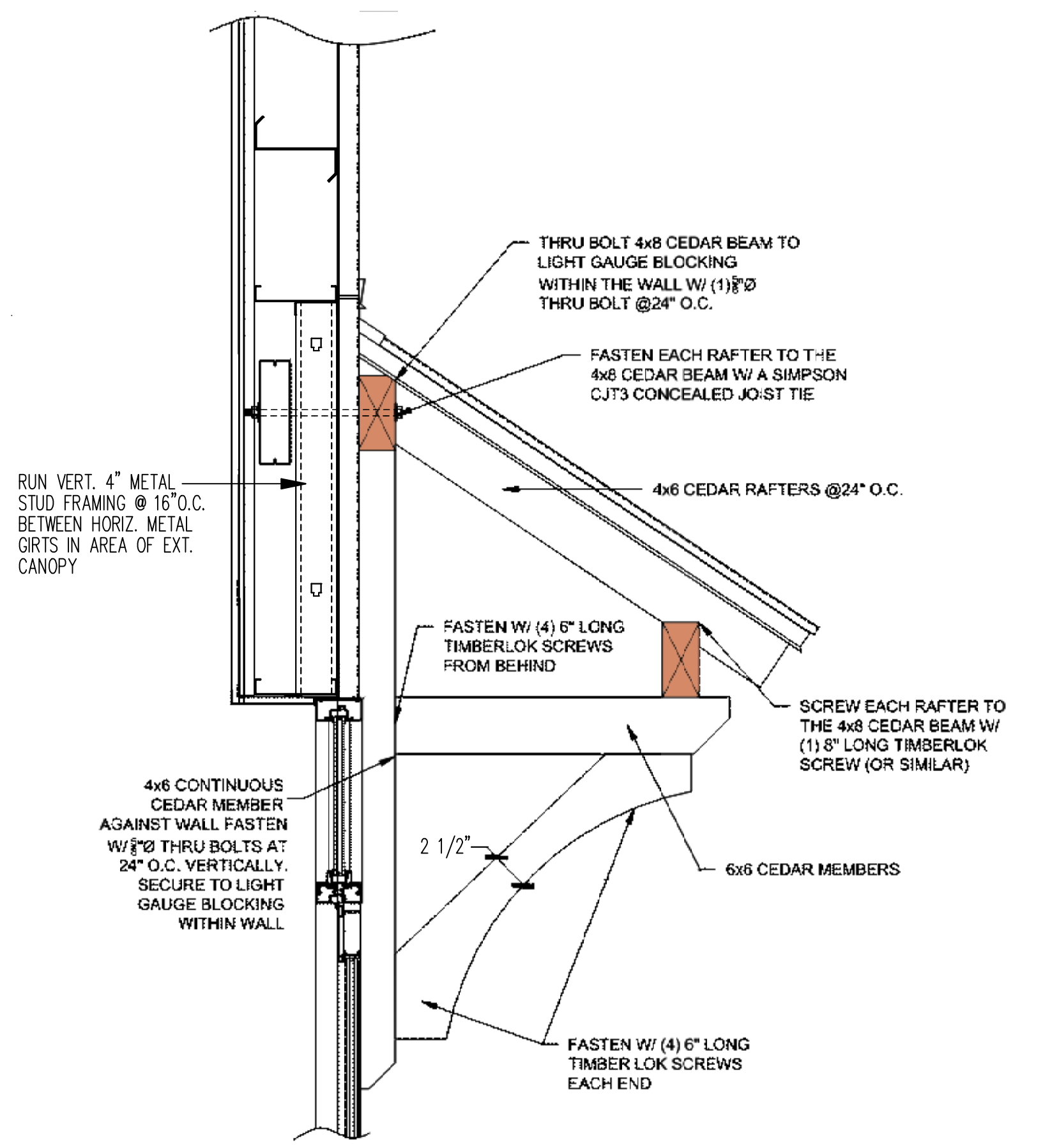
2 TYPICAL MEZZANINE COLUMN DETAIL
SCALE: 1"=1'-0"



3 TYPICAL MEZZANINE COLUMN DETAIL (CONTINUOUS BEAM)
SCALE: 1"=1'-0"



4 TYPICAL RIDGE CONNECTION DETAIL @ CONNECTOR
SCALE: 1"=1'-0"

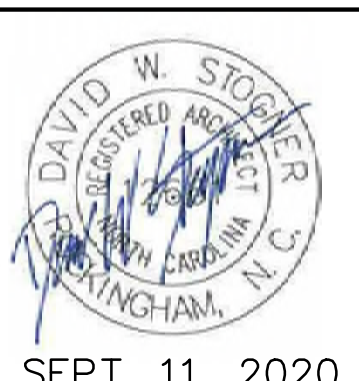
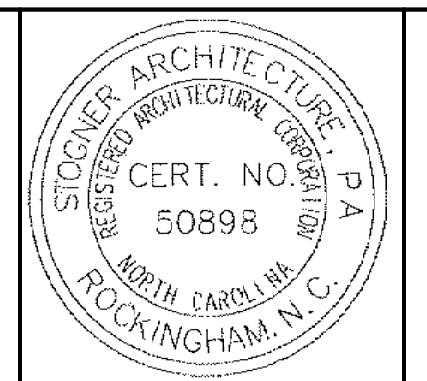


5 CANOPY ATTACHMENT DETAIL
SCALE: 1"=1'-0"

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| REVISIONS |
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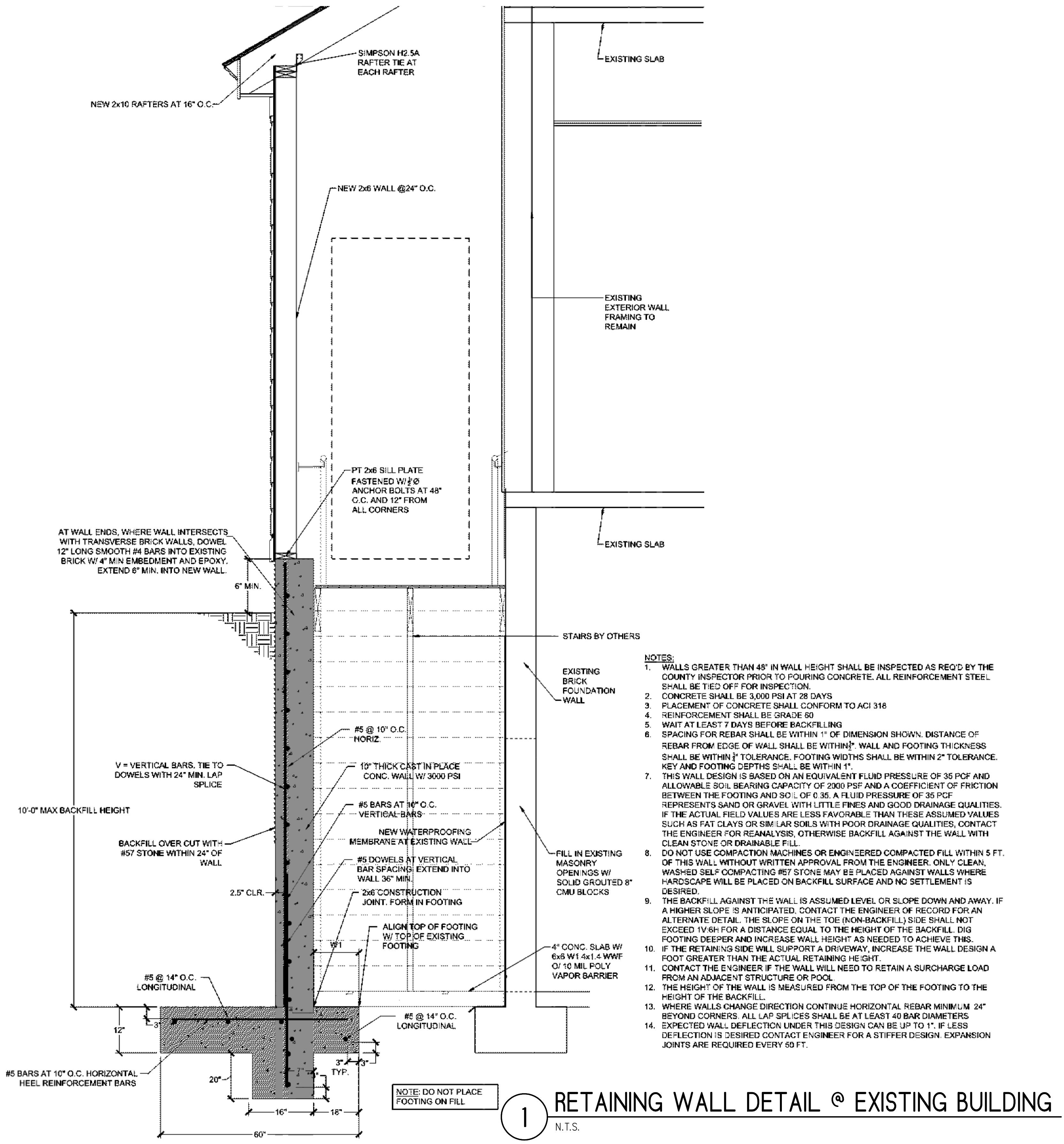


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STRUCTURAL SECTIONS
GOOD HOPE HOSPITAL
410 DENIM DRIVE ERWIN, NORTH CAROLINA
ADDITION and RENOVATIONS

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| COMM. NO.: 4535 |
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| DATE: 9/11/2020 |
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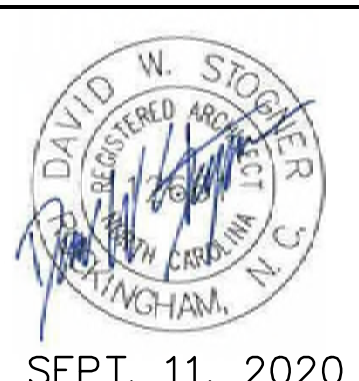


- NOTES:**
1. WALLS GREATER THAN 48" IN WALL HEIGHT SHALL BE INSPECTED AS REQ'D BY THE COUNTY INSPECTOR PRIOR TO POURING CONCRETE. ALL REINFORCEMENT STEEL SHALL BE TIED OFF FOR INSPECTION.
 2. CONCRETE SHALL BE 3,000 PSI AT 28 DAYS
 3. PLACEMENT OF CONCRETE SHALL CONFORM TO ACI 318
 4. REINFORCEMENT SHALL BE GRADE 60
 5. WAIT AT LEAST 7 DAYS BEFORE BACKFILLING
 6. SPACING FOR REBAR SHALL BE WITHIN 1" OF DIMENSION SHOWN. DISTANCE OF REBAR FROM EDGE OF WALL SHALL BE WITHIN 2" TOLERANCE. WALL AND FOOTING THICKNESS SHALL BE WITHIN 1/2" TOLERANCE. FOOTING WIDTHS SHALL BE WITHIN 2" TOLERANCE. KEY AND FOOTING DEPTHS SHALL BE WITHIN 1".
 7. THIS WALL DESIGN IS BASED ON AN EQUIVALENT FLUID PRESSURE OF 35 PCF AND ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF AND A COEFFICIENT OF FRICTION BETWEEN THE FOOTING AND SOIL OF 0.35. A FLUID PRESSURE OF 35 PCF REPRESENTS SAND OR GRAVEL WITH LITTLE FINES AND GOOD DRAINAGE QUALITIES. IF THE ACTUAL FIELD VALUES ARE LESS FAVORABLE THAN THESE ASSUMED VALUES SUCH AS FAT CLAYS OR SIMILAR SOILS WITH POOR DRAINAGE QUALITIES, CONTACT THE ENGINEER FOR REANALYSIS. OTHERWISE BACKFILL AGAINST THE WALL WITH CLEAN STONE OR DRAINABLE FILL.
 8. DO NOT USE COMPACTION MACHINES OR ENGINEERED COMPACTED FILL WITHIN 5 FT. OF THIS WALL WITHOUT WRITTEN APPROVAL FROM THE ENGINEER. ONLY CLEAN, WASHED SELF-COMPACTING #57 STONE MAY BE PLACED AGAINST WALLS WHERE HARDSCAPE WILL BE PLACED ON BACKFILL SURFACE AND NO SETTLEMENT IS DESIRED.
 9. THE BACKFILL AGAINST THE WALL IS ASSUMED LEVEL OR SLOPE DOWN AND AWAY. IF A HIGHER SLOPE IS ANTICIPATED, CONTACT THE ENGINEER OF RECORD FOR AN ALTERNATE DETAIL. THE SLOPE ON THE TOE (NON-BACKFILL) SIDE SHALL NOT EXCEED 1V:6H FOR A DISTANCE EQUAL TO THE HEIGHT OF THE BACKFILL. DIG FOOTING DEEPER AND INCREASE WALL HEIGHT AS NEEDED TO ACHIEVE THIS.
 10. IF THE RETAINING SIDE WILL SUPPORT A DRIVEWAY, INCREASE THE WALL DESIGN A FOOT GREATER THAN THE ACTUAL RETAINING HEIGHT.
 11. CONTACT THE ENGINEER IF THE WALL WILL NEED TO RETAIN A SURCHARGE LOAD FROM AN ADJACENT STRUCTURE OR POOL.
 12. THE HEIGHT OF THE WALL IS MEASURED FROM THE TOP OF THE FOOTING TO THE HEIGHT OF THE BACKFILL.
 13. WHERE WALLS CHANGE DIRECTION CONTINUE HORIZONTAL REBAR MINIMUM 24" BEYOND CORNERS. ALL LAP SPLICES SHALL BE AT LEAST 40 BAR DIAMETERS
 14. EXPECTED WALL DEFLECTION UNDER THIS DESIGN CAN BE UP TO 1". IF LESS DEFLECTION IS DESIRED CONTACT ENGINEER FOR A STIFFER DESIGN. EXPANSION JOINTS ARE REQUIRED EVERY 50 FT.

1 RETAINING WALL DETAIL @ EXISTING BUILDING
N.T.S.

| REVISIONS |
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RETAINING WALL DETAIL @ EXISTING BUILDING

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| SHEET NO. | S1.5 |

SEPT. 11, 2020

PLUMBING GENERAL NOTES

- FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL SYSTEMS IN THIS SECTION OF WORK IN ACCORDANCE WITH ALL APPLICABLE CODES.
- ALL PLUMBING FIXTURES AND PLUMBING SYSTEM EQUIPMENT SHALL BE PROVIDED COMPLETE WITH ALL ACCESSORIES, HANGERS, VALVES, STOPS, TAILPIECES, TRAPS, FAUCETS, STRAINERS, ETC. SEE FIXTURE SCHEDULE.
- FURNISH AND INSTALL COMPLETE SYSTEMS OF SOIL, WASTE, VENT, HOT AND COLD WATER PIPING FROM ALL PLUMBING FIXTURES, AND/OR OTHER EQUIPMENT.
- CLEANOUT PLUGS SHALL BE INSTALLED IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS. PROVIDE CLEANOUTS AT THE BASE OF ALL WASTE STACKS, AT EVERY FOUR 45 DEGREE TURNS, AND AT EVERY 100 FEET. CLEANOUTS SHALL BE PLACED IN READILY ACCESSIBLE LOCATIONS.
- ALL SOIL, WASTE, AND VENT LINES SHALL BE CONCEALED IN THE BUILDING CONSTRUCTION.
- COPPER PIPING SHALL BE PROTECTED AGAINST CONTACT WITH MASONRY OR DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS, AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON IRON TRAPEZOID HANGERS WITH OTHER PIPING, SATISFACTORY AND PERMANENT ELECTROLYTIC ISOLATION MATERIAL SHALL PROTECT THE COPPER AGAINST CONTACT WITH OTHER METALS.
- WHERE COPPER PIPING IS SLEEVED THROUGH MASONRY, SLEEVES SHALL BE COPPER OR RED BRASS. WHERE COPPER MUST BE CONCEALED IN A MASONRY PARTITION OR AGAINST MASONRY, CONTACT SHALL BE PREVENTED BY COATING THE COPPER HEAVILY WITH ASPHALTIC ENAMEL AND PROVIDING 15# ASPHALT SATURATED FELT BETWEEN THE PIPE AND MASONRY.
- THE PLUMBING CONTRACTOR SHALL COORDINATE CLOSELY WITH THE MECHANICAL AND THE ELECTRICAL CONTRACTORS TO AVOID CONFLICT WITH OTHER TRADES.
- CEILING AREA HAS LIMITED SPACE. CONTRACTOR MUST COORDINATE WITH OTHER TRADES FOR ALL STRUCTURES, PIPING, CONDUIT, DUCTWORK, LIGHTING, ETC. TO PROPERLY BE INSTALLED.
- ALL PIPE INSULATION SHALL RUN CONTINUOUSLY THROUGH FLOORS, WALLS, AND PARTITIONS.
- PROVIDE DRAIN VALVES IN THE HOT AND COLD WATER SYSTEM AT ALL LOW POINTS TO ALLOW FOR COMPLETE DRAINAGE. PROVIDE SHUT-OFF VALVES AT THE BASE OF ALL STACKS.
- PROVIDE BALL VALVES IN ALL BRANCH LINES OF THE HOT AND COLD WATER DISTRIBUTION SYSTEM ON 3/4" AND LARGER CN & HN AND AS SHOWN ON PLANS, RISERS, AND SCHEMATIC DETAILS. PROVIDE SHUT OFF VALVES ON THE FIXTURE SUPPLY TO EACH PLUMBING FIXTURE, APPLIANCE, OR MECHANICAL EQUIPMENT.
- VACUUM BREAKERS SHALL BE PROVIDED FOR ALL FIXTURES TO WHICH HOSES MAY BE ATTACHED. VACUUM BREAKERS SHALL BE PERMANENTLY ATTACHED.
- WASTE AND VENT PIPING SHALL BE AS FOLLOWS:
BELOW SLAB: PVC PIPE, PVC SOCKET FITTINGS, AND SOLVENT-CEMENTED FITTINGS.
ABOVE SLAB: PVC PIPE, PVC SOCKET FITTINGS, AND SOLVENT-CEMENTED FITTINGS.
- DOMESTIC WATER PIPING ABOVE SLAB SHALL BE TYPE 'L' COPPER. DOMESTIC WATER PIPING BELOW SLAB SHALL BE TYPE 'K' COPPER. INSULATION IS REQUIRED ON ALL WATER SUPPLY PIPING ABOVE FINISHED FLOOR. INSULATION TO HAVE A MINIMUM R FACTOR OF 6.5 OR PER LOCAL JURISDICTION.
- EXPOSED LAVATORY DRAINS AND HOT WATER LINES MUST BE INSULATED AND COVERED PER ADA REQUIREMENTS.
- ALL PLUMBING VENT LOCATIONS TO BE VERIFIED WITH ARCHITECT BEFORE INSTALLATION.
- ALL PLUMBING LINES REQUIRED TO BE JETTED PRIOR TO TURNOVER.
- PIPING SHOULD BE COORDINATED WITH ALL STRUCTURAL FOOTINGS AND FOUNDATIONS. PIPE SHOULD BE OFFSET TO AVOID CONTACT WITH FOOTINGS AND FOUNDATION WALLS. IF PIPING MUST RUN UNDERNEATH A FOOTING OR THROUGH A FOUNDATION WALL, THE PIPE MUST BE INSTALLED WITH A RELIEVING ARCH OR IN A PIPE SLEEVE.
- INVERT ELEVATIONS SHALL BE ESTABLISHED AND VERIFIED BEFORE WASTE PIPING IS INSTALLED SO THAT PROPER SLOPES WILL BE MAINTAINED.
- THE PLUMBING CONTRACTOR SHALL PROVIDE WATER HAMMER PROTECTION ON ALL WATER DISTRIBUTION PIPING. INSTALLATION OF AIR CHAMBERS OR SHOCK ARRESTORS SHALL BE IN ACCORDANCE WITH PDI-WH201. SEE SHOCK ARRESTOR SCHEDULE (IF PROVIDED).
- REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS OF PLUMBING FIXTURES.
- PROVIDE ACCESS DOORS FOR ALL VALVES AND DEVICES REQUIRING ACCESS WHEN LOCATED IN WALLS OR ABOVE INACCESSIBLE CEILING CONSTRUCTION. ACCESS DOORS TO BE RATED WHERE INSTALLED IN RATED ASSEMBLIES.
- PROVIDE DEEP SEAL TRAPS FOR ALL FLOOR DRAINS.
- WHERE EARTHQUAKE LOADS ARE APPLICABLE IN ACCORDANCE WITH THE NC INTERNATIONAL PLUMBING CODE, PIPING AND EQUIPMENT SUPPORTS SHALL BE DESIGNED AND INSTALLED FOR THE SEISMIC FORCES IN ACCORDANCE WITH THE NC BUILDING CODE.
- PROVIDE A U.L. LISTED ASSEMBLY FOR ALL PENETRATIONS THRU FIRE RATED WALLS AND FLOORS.
- PROVIDE PRESSURE REDUCING VALVE IF PRESSURE EXCEEDS 80 PSI.
- COORDINATE ALL WORK WITH KITCHEN PLANS AND SPECIFICATIONS.

PLUMBING LEGEND

| | |
|------|---------------------------------------|
| | DOMESTIC COLD WATER PIPING |
| | DOMESTIC COLD WATER PIPING (UNDRSLAB) |
| | DOMESTIC HOT WATER PIPING |
| | DOMESTIC HOT WATER RETURN |
| | VENT PIPING |
| | WASTE (SANITARY SEWER) |
| | EXISTING PIPING |
| | BALL VALVE |
| | CHECK VALVE |
| | BALANCING VALVE |
| | PIPE UP |
| | PIPE DOWN |
| | FLOOR DRAIN |
| | FLOOR SINK |
| | CONNECT TO EXISTING |
| | FIRE SPRINKLER RISER |
| AAV | AIR ADMITTANCE VALVE |
| ABV | ABOVE |
| AFF | ABOVE FINISHED FLOOR |
| CN | COLD WATER |
| DN | DOWN |
| E.C. | ELECTRICAL SUB-CONTRACTOR |
| FCO | FLOOR CLEAN OUT |
| FDD | FLOOR DRAIN |
| FR | FROM |
| FS | FLOOR SINK |
| G.C. | GENERAL CONTRACTOR |
| HB | HOSE BIBB |
| HD | HUB DRAIN |
| HN | HOT WATER |
| M.C. | MECHANICAL SUB-CONTRACTOR |
| P.C. | PLUMBING SUB-CONTRACTOR |
| V | VENT |
| W | WASTE |

PLUMBING FIXTURE SPECIFICATIONS AND CONNECTION SCHEDULE

| MARK | FIXTURE | TYPE | MANUFACTURER | MODEL NO. | MATERIAL | STYLE | FAUCET/VALVE | | | DRAIN | | SUPPLIES AND STOPS | PIPE SIZES | | | MOUNTING | REMARKS | |
|------|--------------------|---------------|--------------------|--------------------------|-----------------|--------------------------------|--------------------------------|-----------|--------------|---------|-----------|--------------------|----------------|--------|--------|----------|--|---|
| | | | | | | | MANUFACT. MODEL NO. | SPOUT | HANDLES | CENTERS | TYPE | | SIZE | WASTE | VENT | | | CN |
| P-1 | WATER CLOSET | FLUSH VALVE | AMERICAN STANDARD | 3043.102 | VITREOUS CHINA | ADA ELONGATED | SLOAN ROYAL III | - | - | - | - | - | 3" | 2" | 1 1/2" | - | FLOOR PROVIDE WITH OPEN FRONT SEAT WITH NO LID. 1.6 GPF SEE NOTE 5 | |
| P-1A | WATER CLOSET | FLUSH VALVE | WHITEHALL | WH2142-ADA-W-2-EGE10-HET | STAINLESS STEEL | ADA ELONGATED | - | - | - | - | - | - | 3 1/2" | 2" | 1 1/2" | - | FLOOR MOUNT/WALL WASTE SEAT INCLUDED. PROVIDE W/ 1.20 GPF FLUSH VALVE OPTION. LIGATURE RESISTANT SEE NOTE 5 | |
| P-3A | LAVATORY | WALL HUNG | AMERICAN STANDARD | 0355.012 | VITREOUS CHINA | ADA COMPLIANT | CFG 47713L | CENTERSET | SINGLE LEVER | 4" | GRID | 1 1/2" | McGUIRE 175 | 2" | 1 1/4" | 1/2" | 1/2" | WALL HUNG MOUNT AT ADA HEIGHT |
| P-3B | LAVATORY | WALL HUNG | WHITEHALL | WH3775-3373 | SOLID SURFACE | ADA COMPLIANT | BEHAVIORAL SAFETY PROD. SF-390 | CENTERSET | SENSOR | 4" | GRID | 1 1/2" | McGUIRE 175 | 2" | 1 1/4" | 1/2" | 1/2" | WALL HUNG DRAIN: ODDBALL SP-II-GDK MOUNT AT ADA HEIGHT LIGATURE RESISTANT HARD WIRED 120V CONNECTION |
| P-5A | SHOWER PAN | PREFAB | FLEURCO | ABF3763AD | ACRYLIC | ADA 40" x 40" | WHITEHALL WH5V16 | - | TWIST KNOB | - | INTEGRAL | 2" | - | 2" | 1 1/2" | 1/2" | 1/2" | FLOOR HOSE: ODDBALL SP-7WC SEAT: BREY KRAUSE S-6510-55 GRAB BAR: WHITEHALL WH1140 DRAIN: WHITEHALL WHFD LIGATURE RESISTANT SEE NOTES 2,3,7 |
| P-6 | BAR SINK | SINGLE COMPT | ELKAY | LRAD2022 | STAINLESS STEEL | 5 3/4" DEEP 3-HOLE HANDICAPPED | T45 BRASS B-2866-05 | 8" SWING | DUAL LEVER | 8" | CRUMB CUP | 1 1/2" | McGUIRE LF2165 | 1 1/2" | 1 1/2" | 1/2" | 1/2" | COUNTER TOP CUP STRAINER: ELKAY LK-35 PROVIDE OFFSET TAILPIECE INSULATE TRAP |
| P-6A | KITCHEN SINK | SINGLE COMPT | DAYTON | GE125214 | STAINLESS STEEL | 5 3/4" DEEP 4-HOLE HANDICAPPED | CFG 47513B | 8" SWING | SINGLE LEVER | 8" | CRUMB CUP | 1 1/2" | McGUIRE 165 | 1 1/2" | 1 1/2" | 1/2" | 1/2" | COUNTER TOP PROVIDE WITH ELKAY LK-35 INSULATE TRAP |
| P-7 | REFRIGERATOR BOX | BOTTOM SUPPLY | SPECIALTY PRODUCTS | OB-807 | PVC | RECESSED BOX | - | - | - | - | - | - | - | - | 1/2" | - | WALL SHUT-OFF VALVE & THREADED CN CONNECTION. PROVIDE F.R. MODEL WHEN IN RATED WALL. | |
| P-8 | MOP SINK | FLOOR MOUNTED | FIAT | TSB | TERRAZZO | 24" X 24" 12" HIGH | FIAT 830-AA | THREADED | TWO HANDLES | 8" | - | - | - | 3" | 1 1/2" | 3/4" | 3/4" | FLOOR PROVIDE MOP HANGER, HOSE, HOSE BRACKET, AND VACUUM BREAKER. |
| P-9 | WASHER WALL BOX | BOTTOM SUPPLY | SPECIALTY PRODUCTS | OB-351 | PVC | RECESSED BOX | - | - | - | - | - | - | - | 3" | 1 1/2" | 3/4" | 3/4" | WALL SHUT-OFF VALVES & HOSE CONNECTION FOR WASTE. PROVIDE F.R. MODEL WHEN IN RATED WALL |
| P-10 | 3-COMP SINK | TRIPLE COMPT | ADVANCE TABCO | FS-3-1824-24RL | STAINLESS STEEL | 18"x24"x14" BOWL | ADVANCE TABCO K-105 | 14" SWING | TWO HANDLE | 8" | BASKET | 1 1/2" | McGUIRE 165 | 1 1/2" | 1 1/2" | 1/2" | 1/2" | FLOOR WASTE DRAINS INCLUDED. INDIRECT DRAIN TO FLOOR SINK BELOW |
| P-11 | HAND SINK | SINGLE COMPT | ADVANCE TABCO | 7-PS-60 | STAINLESS STEEL | 5" DEEP | - | - | TWO HANDLE | 4" | BASKET | 1 1/2" | McGUIRE 165 | 1 1/2" | 1 1/2" | 1/2" | 1/2" | WALL HUNG PROVIDED WITH MFG SPLASH MOUNTED FAUCET AND 2 SS SUPPORT BRACKETS |
| WH-1 | WATER HEATER | ELECTRIC | RHEEM | ELD120-TB | GLASS LINED | TALL | - | - | - | - | - | - | - | - | 3/4" | 3/4" | FLOOR 120 GAL. STORAGE, 15KW, 208V, 3Ø, 49 GPH REC AT 100°F RISE PROVIDE DRAIN PAN; SEE NOTE 4 | |
| WH-2 | WATER HEATER | ELECTRIC | RHEEM | ELD80-TB | GLASS LINED | TALL | - | - | - | - | - | - | - | - | 3/4" | 3/4" | FLOOR 80 GAL. STORAGE, 12KW, 208V, 3Ø, 49 GPH REC AT 100°F RISE PROVIDE DRAIN PAN; SEE NOTE 4 | |
| FRHB | HOSE BIBB | FREEZE PROOF | WOODFORD | 25 | CAST BRASS | WALL FAUCET | - | - | - | - | - | - | - | - | 1/2" | - | WALL | |
| GCO | GRADE CLEAN-OUT | ROUND TOP | J.R. SMITH | 4240 | CAST IRON | CAST IRON TOP | - | - | - | - | - | - | - | - | - | - | GRADE PROVIDE WITH 24"x24"x8" THK CONCRETE PAD AT GRADE. | |
| MCO | WALL CLEAN-OUT | ROUND COVER | J.R. SMITH | 4472 | CAST IRON | S.S. COVER | - | - | - | - | - | - | - | - | - | - | WALL | |
| RP-1 | RECIRC PUMP | - | BELL & GOSSETT | SERIES PR | CAST IRON | - | - | - | - | - | - | - | - | - | - | - | - | |
| SI-1 | SOLIDS INTERCEPTOR | - | STRIEM | AA-M1 | HDPE | - | - | - | - | - | - | - | - | - | - | - | - | |
| FD | FLOOR DRAIN | SQUARE TOP | J.R. SMITH | 2010 | CAST IRON | NIKALOY TOP | - | - | - | - | - | - | - | - | - | - | FLOOR PROVIDE WITH TRAP PRIMER CONNECTION WHEN HB IS NOT SHOWN ON PLANS. SEE NOTE 6 | |
| FFD | FUNNEL FLOOR DRAIN | ROUND TOP | J.R. SMITH | 3510C | CAST IRON | NIKALOY TOP | - | - | - | - | - | - | - | 3" | - | - | FLOOR PROVIDE WITH TRAP PRIMER SEE NOTE 6 | |
| FS | FLOOR SINK | SQUARE TOP | J.R. SMITH | 3150 WITH HALF GRATE | CAST IRON | NIKALOY TOP | - | - | - | - | - | - | - | - | - | - | FLOOR ACID RESISTING ENAMEL INTERIOR DOME BOTTOM STRAINER FLASHING CLAMP | |

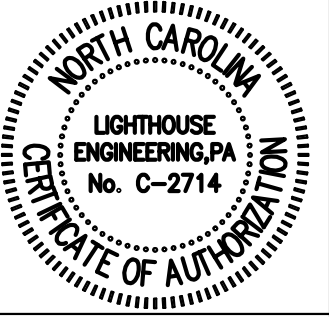
- NOTES:
- CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF FIXTURE DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY FIXTURES. INFORMATION ON ALTERNATE FIXTURES PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT FIXTURE (OR THE ALTERNATE PACKAGE AS A WHOLE).
 - SHOWER HOSE SHALL BE QUICK-RELEASE TYPE AND FAUCET SHALL BE SET UP TO ACCEPT BOTH HOSE AND FIXED POSITION SHOWER HEAD.
 - PROVIDE WITH LIGATURE RESISTANT DIVERTER VALVE. MOUNT FIXED SPRAYER (WHITEHALL WHCSH16) SO THAT SPRAY IS DIRECTED TO SEAT WALL AND NOT AT SHOWER CURTAIN.
 - SET LEAVING WATER TEMPERATURE TO 110°F.
 - PROVIDE ALL TOILETS WITH FLUSH CONTROL ON OPEN SIDE OF TOILET.
 - TRAP PRIMER FROM NEAREST WATER SUPPLY. PROVIDE ACCESS.
 - CERAMIC SURROUND BY G.C.

| Number | Title |
|--------|--------------------------------------|
| P0.0 | PLUMBING LEGEND, NOTES AND SCHEDULES |
| P0.1 | PLUMBING DETAILS |
| P1.0 | PLUMBING FLOOR PLAN |
| P2.0 | PLUMBING RISER DIAGRAM |
| P2.1 | PLUMBING RISER DIAGRAM |

FOR CONSTRUCTION

DHHS COMMENTS 11/23/20

REVISIONS

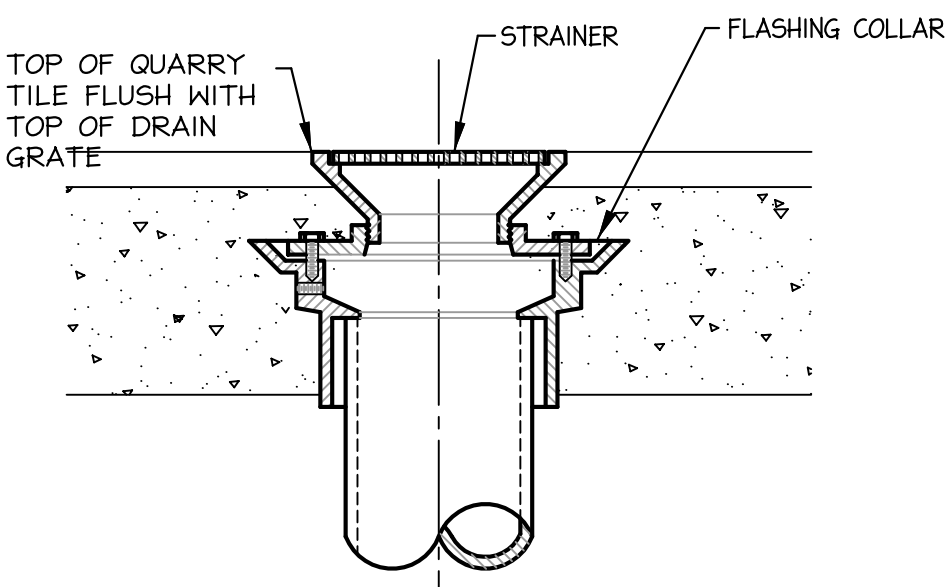


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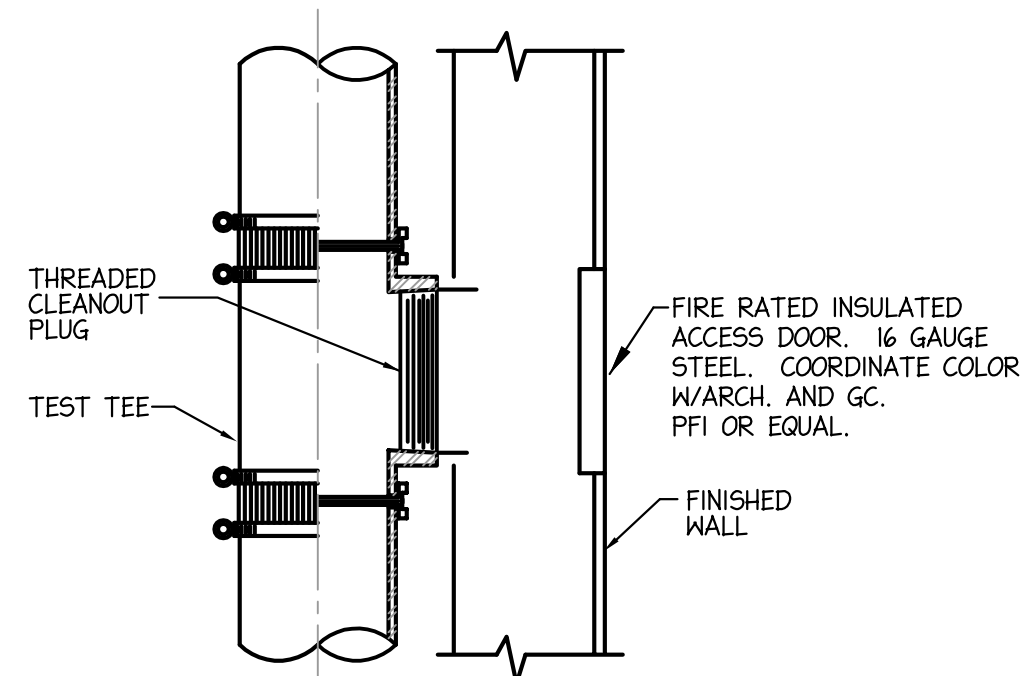
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PLUMBING NOTES AND SCHEDULES

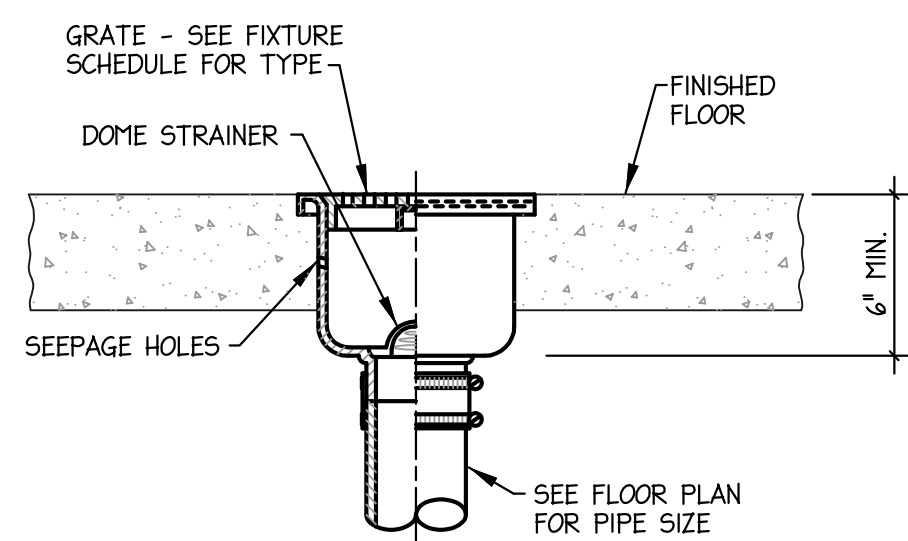
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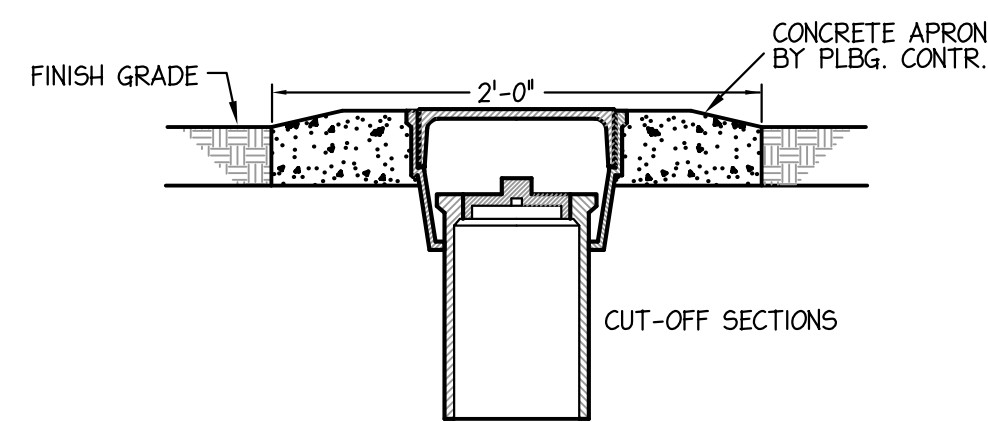
6 FLOOR DRAIN DETAIL
NO SCALE



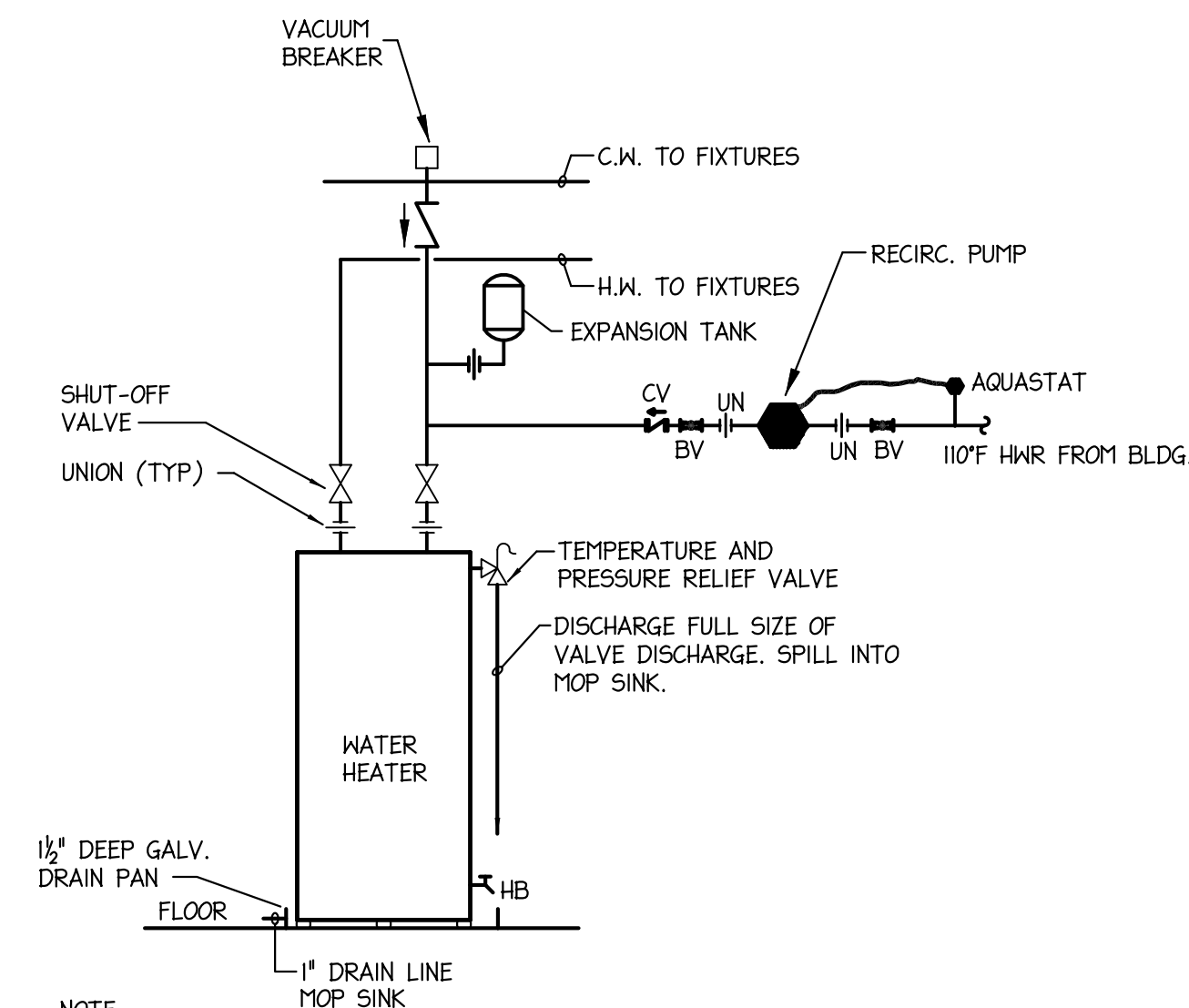
5 WALL CLEANOUT DETAIL
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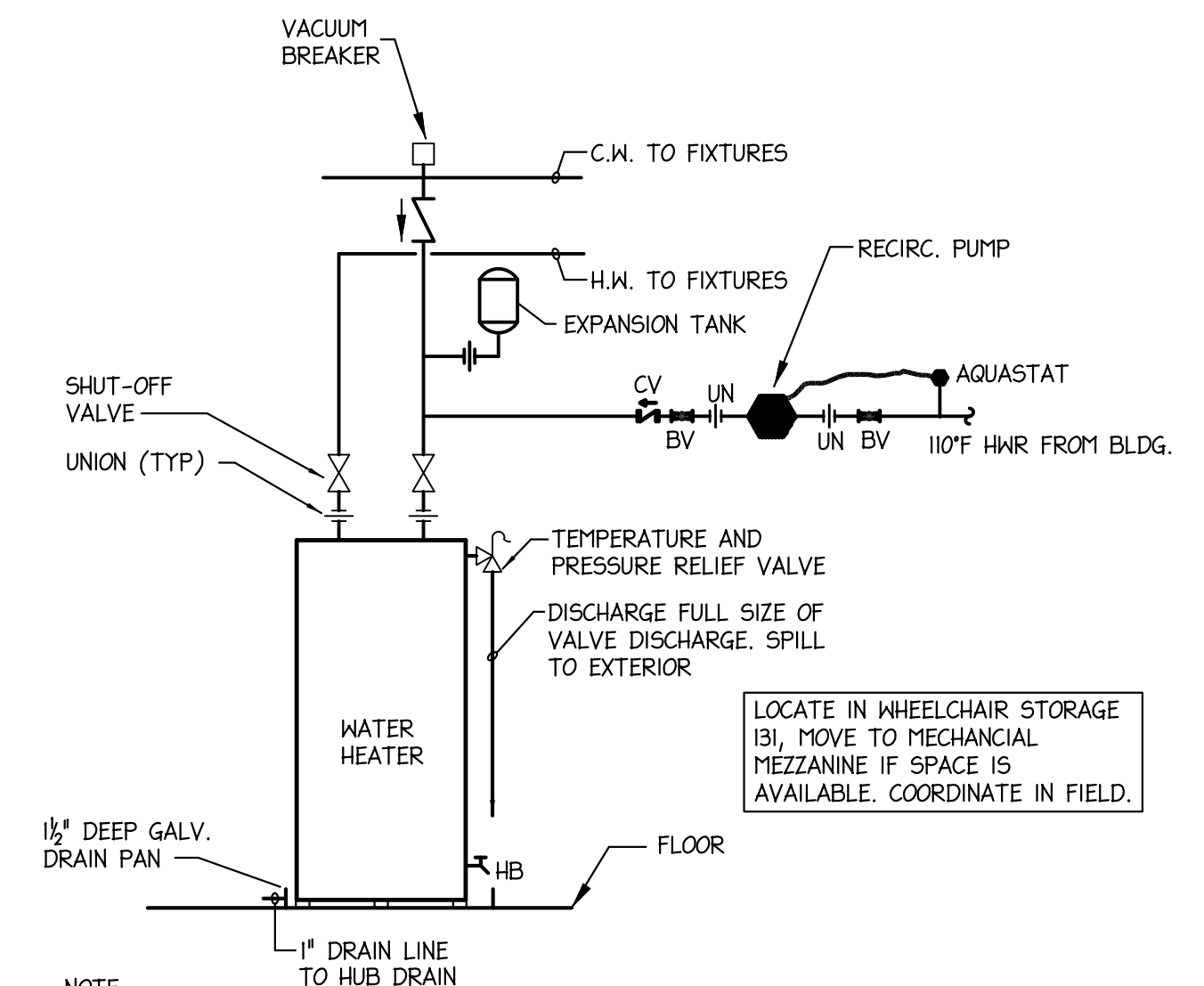
4 FLOOR SINK DETAIL
NO SCALE



3 EXTERIOR CLEANOUT DETAIL
NO SCALE



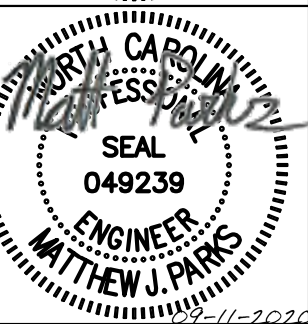
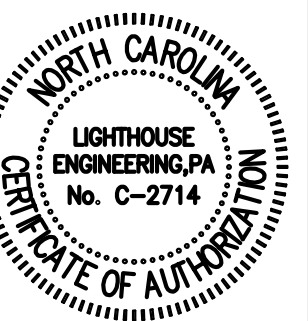
2 WATER HEATER DETAIL (WH-2)
NO SCALE



1 WATER HEATER DETAIL (WH-1)
NO SCALE

FOR CONSTRUCTION

REVISIONS



Stogner Architecture, PA
ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
615 East Broad Avenue, Rockingham, North Carolina, 28379
Phone 910-895-6874 Fax 910-895-1111

**GOOD HOPE HOSPITAL
ADDITION and RENOVATIONS**
410 DENIM DRIVE
ERWIN, NORTH CAROLINA

PLUMBING DETAILS

COMM. NO.: 4535
DRAWN BY: MJP
CHECKED BY: SAB
DATE: SEPT 11, 2020
SHEET NO. P0.1

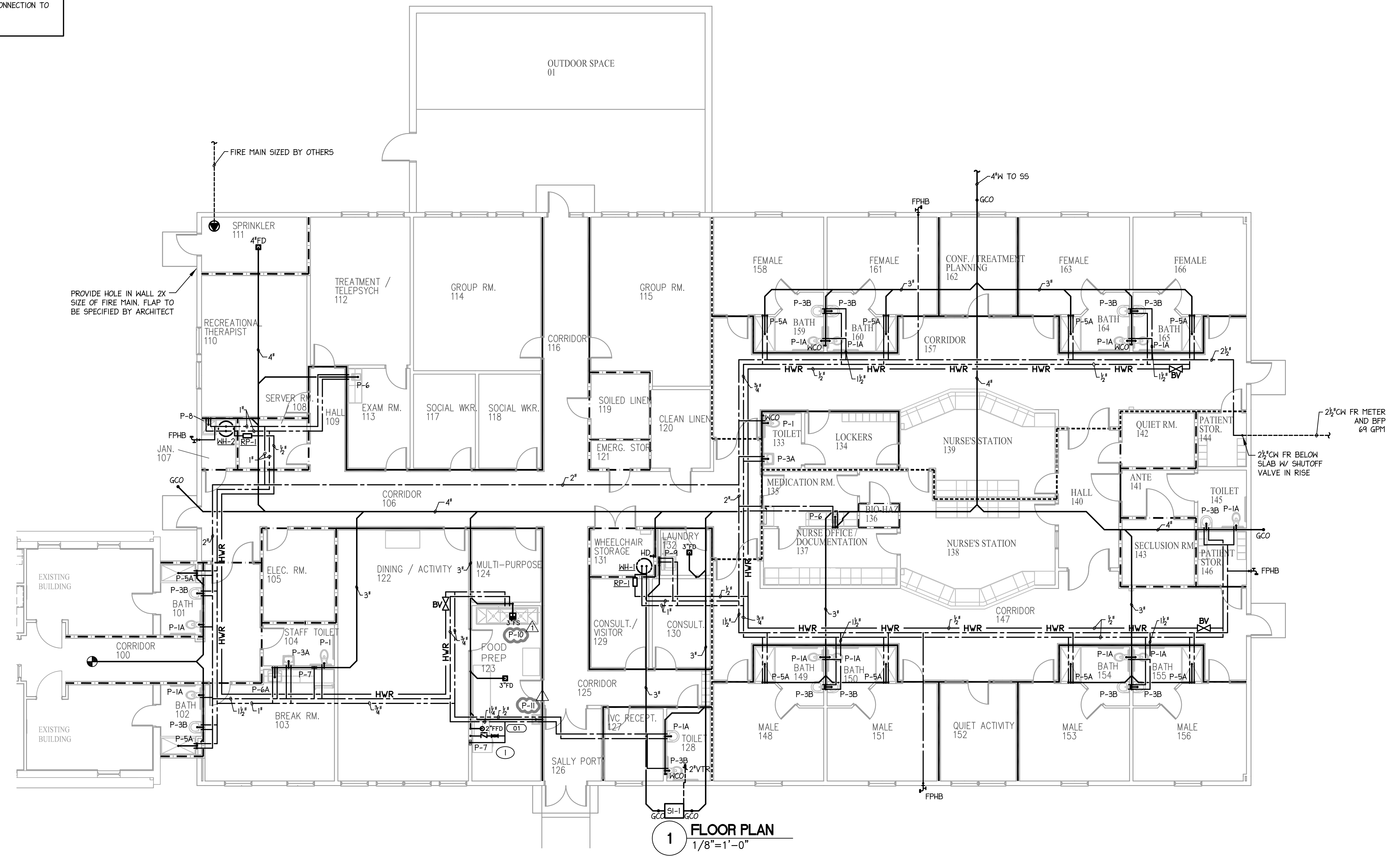
WALL LEGEND: (SEE ARCH. PLANS FOR INFO)
 - - - - - 1-HR FIRE RATED PARTITION
 - - - - - 1-HR FIRE RATED SMOKE BARRIER
 _____ SMOKE PARTITION

REVISIONS
 △ DHHS COMMENTS
 11/23/20

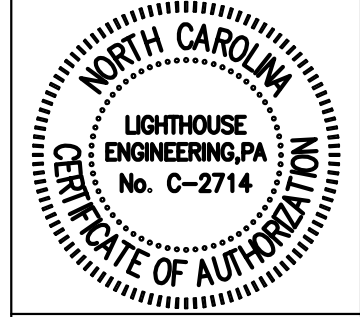
| FOOD SERVICE EQUIPMENT SCHEDULE | | | | | | | | | | | |
|---------------------------------|-----------------------|---------|---------|----------|-------------------|----------|------------------|----------|----------|-------|--|
| ITEM | EQUIPMENT DESCRIPTION | CW (in) | HW (in) | AFF (in) | DIRECT DRAIN (in) | AFF (in) | INDIRECT AIR GAP | GAS (in) | AFF (in) | MBTUH | REMARKS |
| 01 | ICE CUBE MACHINE | 0.5 | 0.5 | | | | 3" FFD | | | | CONNECT CW TO FILTER THEN ICE CUBE MACHINE |

TAGGED NOTES - THIS SHEET

1 P.C. TO PROVIDE 1/2" CM LINE WITH WATTS SD-3 MF BFP TO FILTER. PROVIDE 1/2" STUB WITH SHUT OFF FROM FILTER FOR CONNECTION TO ICE MAKER.



1 FLOOR PLAN
 1/8" = 1'-0"



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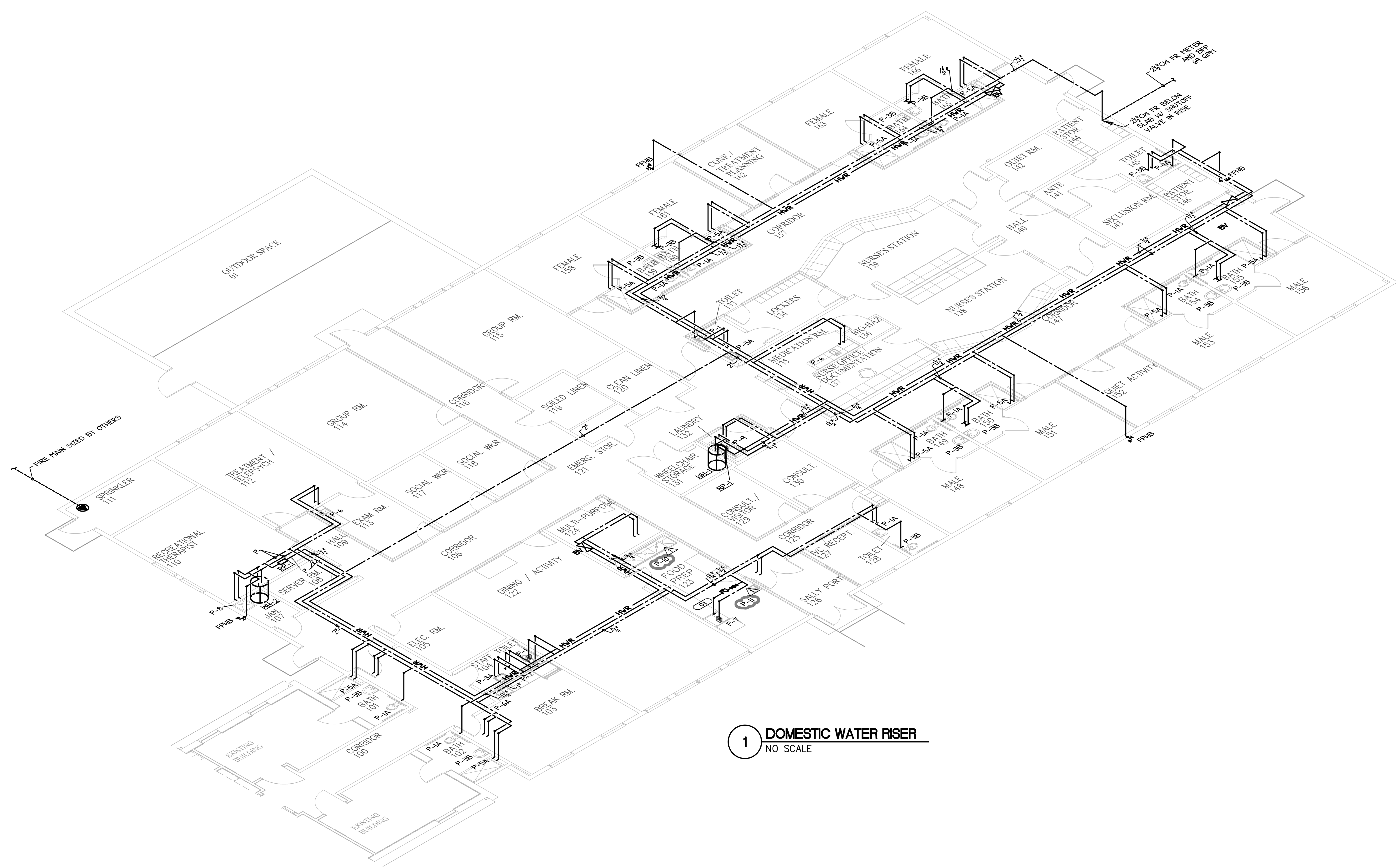
**GOOD HOPE HOSPITAL
 ADDITION and RENOVATIONS**
 410 DENIM DRIVE
 ERWIN, NORTH CAROLINA

PLUMBING
 FLOOR PLAN

COMM. NO.: 4535
 DRAWN BY: MJP
 CHECKED BY: SAB
 DATE: SEPT 11, 2020
 SHEET NO. P1.0

FOR CONSTRUCTION

SPD-18034P-01.dwg
 Nov 08, 2020 12:22pm



1 DOMESTIC WATER RISER
NO SCALE

REVISIONS

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NORTH CAROLINA PROFESSIONAL ENGINEER
049239
MATHEW J. PARKS

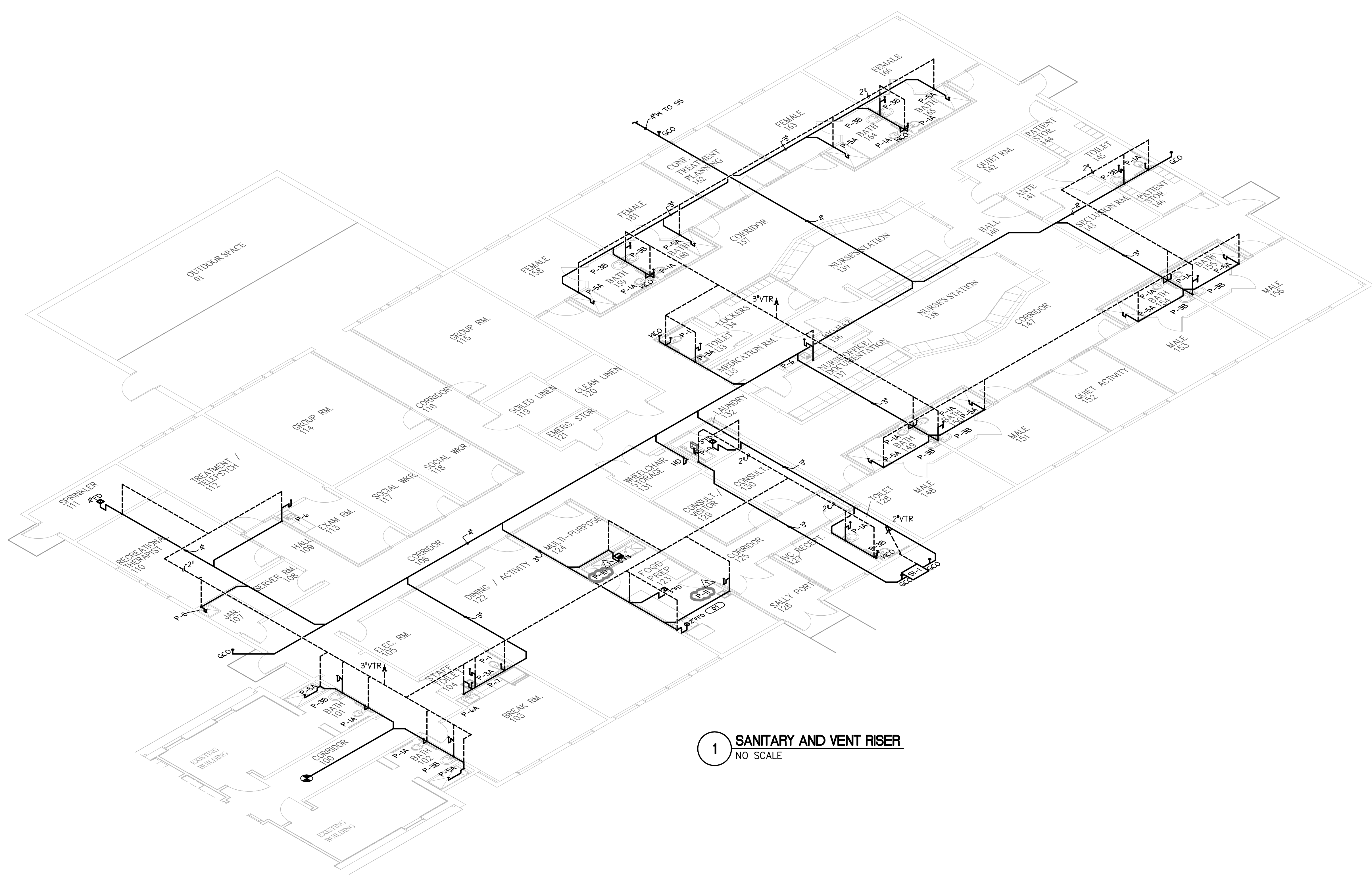
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ADDITION and RENOVATIONS
410 DENIM DRIVE
ERWIN, NORTH CAROLINA

| |
|------------------------|
| PLUMBING RISER DIAGRAM |
| COMM. NO.: 4535 |
| DRAWN BY: MJP |
| CHECKED BY: SAB |
| DATE: SEPT 11, 2020 |
| SHEET NO. P2.0 |

FOR CONSTRUCTION

SEP 14 10:34:20 AM
Rev 08, 2020 12:22pm



1 SANITARY AND VENT RISER
NO SCALE

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PLUMBING
RISER DIAGRAM

COMM. NO.: 4535
DRAWN BY: MJP
CHECKED BY: SAB
DATE: SEPT 11, 2020
SHEET NO.
P2.1

FOR CONSTRUCTION

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HVAC GENERAL NOTES

- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT IN STRICT ACCORDANCE WITH THE 2018 NORTH CAROLINA MECHANICAL CODE, ALL STATE AND LOCAL CODES AND STANDARDS, AND PER MANUFACTURER'S DIRECTIONS.
- THE CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS, LICENSE, INSPECTIONS, APPROVALS, AND FEES.
- THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES BEFORE INSTALLATION OF ANY MATERIALS OR EQUIPMENT.
- THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATION AND ARRANGEMENT OF ALL MATERIALS AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL PERMIT.
- DO NOT SCALE DRAWINGS FOR MEASUREMENTS.
- ALL DUCT DIMENSIONS SHOWN ARE INTERIOR DUCT DIMENSIONS.
- ALL PENETRATIONS THROUGH EXTERIOR WALLS & ROOF SHALL BE FLASHED & COUNTERFLASHED IN A WATERPROOF MANNER (COLOR TO MATCH EXTERIOR).
- SEAL ALL PENETRATIONS OF RATED WALLS WITH FIRE DAMPER OR SEALANT MATERIAL APPROVED BY LOCAL CODE. TO BE INSTALLED PER MFG. INSTRUCTIONS.
- ALL SUSPENDED MATERIALS AND EQUIPMENT SHALL BE INDIVIDUALLY SUPPORTED FROM THE BUILDING STRUCTURE. DO NOT SUSPEND ITEMS FROM THE CEILING OR ITS SUPPORT SYSTEM.
- INSTALL ALL CONTROL DEVICES, INCLUDING THERMOSTATS AND SWITCHES, 4'-0" ABOVE FINISHED FLOOR TO TOP OF DEVICE. PROVIDE THE REQUIRED DEVICE(S) FOR ALL SYSTEMS WHETHER LOCATED ON THE PLANS OR NOT.
- LOCATE CEILING DIFFUSERS IN ACCORDANCE WITH ARCHITECTURAL REFLECTED CEILING PLANS (IF PROVIDED).
- PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND MECHANICAL UNITS FOR MAINTENANCE AND FILTER REMOVAL.
- ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED W/ WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS, TO AVOID INTERFERENCE.
- ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTS SHALL BE INSULATED AS FOLLOWS:

| | |
|------------------------|-------------|
| CONDITIONED SPACES | R-6 MINIMUM |
| NON-CONDITIONED SPACES | R-8 MINIMUM |

CONCEALED SHEET METAL DUCT MAY BE EXTERNALLY INSULATED WITH MINERAL FIBER BOARD OR BLANKET OR MAY BE INTERNALLY INSULATED WITH DUCT LINER. THE FIRST 15' FROM THE AIR HANDLER SHALL BE INTERNALLY LINED.
- CERTIFIED TEST AND BALANCE CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE OWNER'S REPRESENTATIVE WITH COMPLETE BALANCE REPORT. IF BALANCING DAMPERS ARE NOT PROVIDED IN RETURN DUCTWORK, CONTRACTOR SHALL BALANCE SUPPLY SIDE TO AIR QUANTITIES INDICATED ON PLANS AND SHALL BALANCE OUTSIDE AIR AND RETURN AIR FLOWS AT THE AIR HANDLER TO AIR QUANTITIES INDICATED IN THE SCHEDULE. PROVIDE NEW AIR FILTERS FOR EACH UNIT.
- AS REQUIRED BY LOCAL CODES, MECHANICAL CONTRACTOR SHALL PROVIDE U.L. LISTED FIRE DAMPERS WHERE REQUIRED FOR FIRE PROTECTION REQUIREMENTS OF THE HVAC SYSTEM & THE UL ASSEMBLY.
- PROVIDE 1 YEAR WARRANTY ON ALL EQUIPMENT AND 5 YEAR WARRANTY ON ALL COMPRESSORS.
- ALL INTAKE OPENINGS SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ALL EXHAUST LOCATIONS.
- CONDENSATE DRAIN PIPING AND FITTINGS SHALL BE SCHEDULE 40 PVC WHEN LOCATED IN NON-PLENUM LOCATIONS. PIPING TO BE SCHEDULE 40 CPVC RATED FOR PLENUM INSTALLATION OR PVC WRAPPED WITH PLENUM RATED INSULATION WHEN LOCATED IN PLENUM LOCATIONS. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED.
- A COMPLETE SYSTEM OF SEISMIC RESTRAINTS SHALL BE DESIGNED BY MASON INDUSTRIES & SEALED BY THEIR REGISTERED ENGINEER, AS REQ'D BY APPLICABLE CODES FOR THE LOCALITY OF THIS PROJECT.
- ALL MAIN DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS. RUNOUTS FROM MAIN BRANCH DUCTS MAY BE FLEXIBLE DUCT CONFORMING TO THE REQUIREMENTS OF UL 181 FOR CLASS 1 FLEXIBLE AIR DUCTS.
- THE MECHANICAL CONTRACTOR SHALL PROVIDE REFRIGERANT AND LOW VOLTAGE CONTROL LINES FROM THE CONDENSER(S) TO THE AIR HANDLING UNIT(S). COORDINATE ROUTING AND INSTALLATION WITH THE GENERAL CONTRACTOR. SIZE REFRIGERANT LINES PER MANUFACTURER'S REQUIREMENTS.
- ELECTRICAL CONTRACTOR TO PROVIDE ALL HIGH VOLTAGE ELECTRICAL WIRING, CONDUIT, DISCONNECT SWITCHES, FUSES, ETC. TO SPLIT SYSTEM UNIT(S). ALL FINAL ELECTRICAL CONNECTIONS ARE BY ELECTRICAL CONTRACTOR.
- OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 1 1/2" FIBERGLASS DUCT WRAP WITH VAPOR BARRIER.
- REFRIGERANT PIPING, NOT SHOWN ON PLANS, SHALL BE SIZED & INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTALLATION INSTRUCTIONS AND LOCAL CODES.
- MECHANICAL CONTRACTOR SHALL VERIFY LOCATION OF ALL PENETRATIONS FOR RELIEF HOODS, OUTSIDE AIR HOODS, LOUVERS, AND WALL CAPS WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.
- MECHANICAL CONTRACTOR SHALL PAINT ALL RELIEF HOODS, INTAKE HOODS, LOUVERS, AND VENT CAPS. CONFIRM COLOR WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.
- PENETRATIONS OF RATED WALLS, PARTITIONS AND FLOORS OF NON-COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH NONCOMBUSTIBLE MATERIALS. PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOOR OF COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH MATERIALS EQUIVALENT TO TWO INCHES OF WOOD. FIRESTOPPING SHALL COMPLY WITH ASTM E-814.
- ALL CUTTING AND PATCHING OF WALLS AND FLOORS FOR MECHANICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.
- G.C. SHALL ENSURE SMOKE DETECTORS ARE INSTALLED IN ACCESSIBLE WORK AREA/CLEARANCE AT MECHANICAL PLATFORMS.

SYSTEM COMMISSIONING NOTES (NCECC C408)

- THE CONTRACTOR SHALL ENGAGE A COMMISSIONING AGENT, WHO SHALL BE A REGISTERED DESIGN PROFESSIONAL, TO DEVELOP A COMMISSIONING PLAN PER NCECC C408.2.1. THE CONTRACTOR SHALL BE REQUIRED TO FOLLOW THE PLAN.
- ALL NON-EXEMPT HVAC SYSTEMS SHALL BE ADJUSTED AND BALANCED PER C408.2.2.
- ALL NON-EXEMPT HVAC SYSTEMS SHALL BE TESTED PER C408.2.3.
- DOCUMENTATION, INCLUDING MANUALS AND TEST AND BALANCE REPORTS SHALL BE PROVIDED TO THE OWNER PER C408.2.5.
- THE STATEMENT OF SYSTEM COMMISSIONING (NCECC APPENDIX C1) SHALL BE COMPLETED AND PROVIDED TO THE OWNER AND CODE OFFICIAL PER C408.4.

Air Purification Schedule

| Zone Tag | Flow | S/A Flow | O/A Flow | GPS Model | GPS Quantity | Pressure Drop | Voltage (AC) | Watts | Mounting Location | Min Ion Density (ions/cc) | Notes |
|----------|------|----------|----------|-------------|--------------|---------------|--------------|-------|-------------------|---------------------------|--------|
| AH-1 | CV | 1600 | 240 | GPS-FC48-AC | 1 | 0.05" W.C. | 24-240 | 10.0 | AHU | 200 Million | 1 to 8 |
| AH-2 | CV | 1000 | 150 | GPS-FC48-AC | 1 | 0.05" W.C. | 24-240 | 10.0 | AHU | 200 Million | 1 to 8 |
| AH-3 | CV | 1000 | 150 | GPS-FC48-AC | 1 | 0.05" W.C. | 24-240 | 10.0 | AHU | 200 Million | 1 to 8 |
| AH-4 | CV | 1200 | 180 | GPS-FC48-AC | 1 | 0.05" W.C. | 24-240 | 10.0 | AHU | 200 Million | 1 to 8 |
| AH-5 | CV | 1200 | 180 | GPS-FC48-AC | 1 | 0.05" W.C. | 24-240 | 10.0 | AHU | 200 Million | 1 to 8 |
| AH-6 | CV | 1400 | 210 | GPS-FC48-AC | 1 | 0.05" W.C. | 24-240 | 10.0 | AHU | 200 Million | 1 to 8 |
| AH-7 | CV | 1200 | 180 | GPS-FC48-AC | 1 | 0.05" W.C. | 24-240 | 10.0 | AHU | 200 Million | 1 to 8 |
| AH-8 | CV | 700 | 105 | GPS-FC48-AC | 1 | 0.05" W.C. | 24-240 | 10.0 | AHU | 200 Million | 1 to 8 |

- Basis of Design: Global Plasma Solutions: Approved equals by Airgenics and Bioxgen subject to specification compliance
- Mount bi-polar ion generator where indicated on schedule
- If contractor substitutes basis of design with another manufacturer, contractor shall coordinate all electrical and mechanical changes
- Bi-polar ionization systems requiring perishable glass tubes are not acceptable
- All manufacturers must pass UL-867-2007 ozone chamber testing by either UL or ETL
- Provide with integral BAS alarm contacts
- Provide with integral self-cleaning system. Systems without self-cleaning shall not be acceptable
- Provide with rare earth magnets for ease of mounting

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE

| AIR HANDLING UNIT DATA | | | | | | | | | | | | HEAT PUMP | | | | | | | | | | | |
|------------------------|---------------|-------------------|---------|-----------------|------------|----------|--------------|-------------|--------------|---------------|-----------------|-----------|----------|----------|-------------------|---------|----------------|---------|----------|-----------------|----|-------------|-------|
| UNIT TAG | AREA SERVED | MANUF. MODEL | FAN CFM | FAN DATA | | | COOLING | | HEAT | AUX. | ELECTRICAL DATA | | | UNIT TAG | MANUF. MODEL | TONNAGE | GENERAL DATA | | | ELECTRICAL DATA | | | NOTES |
| | | | | ESP (1/2 OF WG) | MOTOR (HP) | OA (CFM) | TOTAL (T/HR) | SENS (T/HR) | TOTAL (T/HR) | HEAT (KW/240) | VOLTAGE (V/PH) | MCA (A) | MCCP (A) | | | | VOLTAGE (V/PH) | MCA (A) | MCCP (A) | | | | |
| AH-1 | DINING | CARRIER FV4CNE006 | 1600 | 0.5" | 3/4 | 240 | 47 | 35.2 | 27.4 | 15 | 208/1Ø | 76.3 | 80 | HP-1 | CARRIER 25HCE4048 | 4.0 | 15.0 | 8.5 | 208/1Ø | 25.2 | 40 | 1-5,6A,7-14 | |
| AH-2 | CONSULT. | CARRIER FV4CNF002 | 1000 | 0.5" | 1/2 | 150 | 28.8 | 21.6 | 17.2 | 10 | 208/1Ø | 53.8 | 60 | HP-2 | CARRIER 25HCE430 | 2.5 | 14.0 | 8.2 | 208/1Ø | 16.9 | 30 | 1-5,6A,7-14 | |
| AH-3 | SOCIAL WORKER | CARRIER FV4CNF002 | 1000 | 0.5" | 1/2 | 150 | 28.8 | 21.6 | 17.2 | 10 | 208/1Ø | 53.8 | 60 | HP-3 | CARRIER 25HCE430 | 2.5 | 14.0 | 8.2 | 208/1Ø | 16.9 | 30 | 1-5,6A,7-14 | |
| AH-4 | GROUP | CARRIER FV4CNF003 | 1200 | 0.5" | 1/2 | 180 | 33.4 | 25.0 | 20.4 | 15 | 208/1Ø | 76.3 | 80 | HP-4 | CARRIER 25HCE437 | 3.0 | 15.0 | 8.2 | 208/1Ø | 19.5 | 30 | 1-5,6A,7-14 | |
| AH-5 | MALE | CARRIER FV4CNF003 | 1200 | 0.5" | 1/2 | 180 | 33.4 | 25.0 | 20.4 | 15 | 208/1Ø | 76.3 | 80 | HP-5 | CARRIER 25HCE437 | 3.0 | 15.0 | 8.2 | 208/1Ø | 19.5 | 30 | 1-5,6B,7-14 | |
| AH-6 | NURSE | CARRIER FV4CNF005 | 1400 | 0.5" | 1/2 | 210 | 40.0 | 30.0 | 25.2 | 15 | 208/1Ø | 76.3 | 80 | HP-6 | CARRIER 25HCE437 | 3.5 | 14.5 | 8.2 | 208/1Ø | 24.0 | 40 | 1-5,6A,7-14 | |
| AH-7 | FEMALE | CARRIER FV4CNF003 | 1200 | 0.5" | 1/2 | 180 | 33.4 | 25.0 | 20.4 | 15 | 208/1Ø | 76.3 | 80 | HP-7 | CARRIER 25HCE437 | 3.0 | 15.0 | 8.2 | 208/1Ø | 19.5 | 30 | 1-5,6B,7-14 | |
| AH-8 | NURSE | CARRIER FV4CNF002 | 700 | 0.5" | 1/2 | 105 | 22.0 | 16.5 | 13.1 | 8 | 208/1Ø | 44.7 | 45 | HP-8 | CARRIER 25HCE430 | 2.0 | 14.5 | 8.2 | 208/1Ø | 14.2 | 25 | 1-5,6A,7-14 | |

NOTES:

- COOLING CAPACITIES ARE RATED IN ACCORDANCE WITH ARI STANDARD 210/240 AT 95°F AMBIENT OUTDOOR AIR TEMP., 80°F DRY BULB, 67°F NET BULB ENTERING AIR TEMP., AND AIR QUANTITY LISTED BY MFG. UNITS ABOVE 5 TONS ARE RATED IN ACCORDANCE WITH ARI STANDARD 340.
- REFRIG. PIPING TO BE SIZED PER TOTAL INSTALL. EQUIV. LENGTH. LONG-LINE APP. TO BE PROVIDED WHENEVER MFG. RECOMM. LENGTHS ARE EXCEEDED, INCL. LIQ. LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAX T.E.L. IS 15 PER MFG.
- PROVIDE SINGLE POINT ELECTRICAL CONNECTION FOR AIR HANDLING UNIT.
- PROVIDE 3 SETS OF NEW FILTERS FOR EACH UNIT. PROVIDE ONE AT INSTALLATION, ONE PRIOR TO AIR BALANCE AND ONE AT TURNOVER TO OWNER.
- SYSTEMS SHALL HAVE A MINIMUM 14 SEER RATING AS SHOWN IN SCHEDULE.
- PROVIDE MANUFACTURER'S 7 DAY PROGRAMMABLE THERMOSTAT WITH HUMIDITY CONTROL AND MANUAL OVERRIDE WITH PROTECTIVE LOCK BOX.
- PROVIDE MANUFACTURER'S 7 DAY PROGRAMMABLE THERMOSTAT W/ REMOTE SENSOR AND HUMIDITY CONTROL WITH PROTECTIVE LOCK BOX. REMOTE SENSOR TO BE EQUIPPED WITH MANUAL OVERRIDE.
- PROVIDE BI-FLOW TXV FOR HEAT PUMP OPERATION.
- AHU TO USE HORIZONTAL APPLICATION.
- RUN CONDENSATE TO EXTERIOR DOWN TO GRADE, AWAY FROM FOOT TRAFFIC, TOWARDS STORM RUN-OFF. IF NOT POSSIBLE FOR A GRAVITY RUN, PROVIDE CONDENSATE PUMP.
- OUTDOOR THERMOSTAT TO LOCK-OUT ELECTRIC HEAT WHEN TEMPERATURE IS 45°F OR HIGHER. PROVIDE UNIT WITH EMERGENCY HEAT OVERRIDE OPTION.
- CYCLE PROTECTOR AND TIME DELAY RELAY (IF AVAILABLE).
- LOW AMBIENT KIT DOWN TO 0°F.
- MINIMUM FILTRATION EFFICIENCY OF MERV 7 REQUIRED.
- CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF UNIT DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY UNITS. INFORMATION ON ALTERNATE UNITS PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT UNIT (OR THE ALTERNATE PACKAGE AS A WHOLE).

DIFFUSER SCHEDULE

| SYMBOL | CFM | NECK SIZE | MODULE SIZE | FRAME TYPE | PATTERN | DAMPER | MATERIAL | SERVICE | FINISH | MANUFACTURER & MODEL NO. | NOTES |
|--------|----------|-----------|-------------|------------|------------|--------|----------|---------|--------|--------------------------|-------|
| (A) | AS NOTED | AS NOTED | 24x24 | SURFACE | 4-WAY | YES | STEEL | SUPPLY | NOTE 2 | TITUS TDC | 1-3 |
| (B) | AS NOTED | AS NOTED | 12x12 | SURFACE | 4-WAY | YES | STEEL | SUPPLY | NOTE 2 | TITUS TDC | 1-3 |
| (C) | AS NOTED | AS NOTED | AS NOTED | SURFACE | PERFORATED | YES | STEEL | SUPPLY | NOTE 2 | TITUS SG-SD | 1-4 |
| (D) | AS NOTED | AS NOTED | 24x24 | SURFACE | - | NO | STEEL | RETURN | NOTE 2 | TITUS PAR | 1-3 |
| (E) | AS NOTED | AS NOTED | AS NOTED | SURFACE | PERFORATED | YES | STEEL | RETURN | NOTE 2 | TITUS SG-PRT | 1-4 |

NOTES:

- DIFFUSER DESIGNATIONS ON PLANS AS FOLLOWS:
- FINISH TO MATCH / BE ABLE MATCH CEILING OR WALL OR DOOR.
- FACTORY INSULATION BACKING ON GRILLES EXPOSED TO NON-CONDITIONED AREAS. ALTERNATELY, FIELD SUPPLY AND INSTALL.
- DIFFUSER/GRILLE SHALL BE MAXIMUM SECURITY/SUICIDE DETERRENT.

FAN SCHEDULE

| UNIT NO. | SERVICE | AREA SERVED | CFM | S.P. | RPM | TYPE & ARRANGEMENT | MIN. MOTOR HP & VOLTAGE | MANUFACTURER & MODEL NO. | DRIVE | CONTROL SCHEME | REMARKS |
|----------|---------|--------------|-----|-------|------|--------------------|-------------------------|--------------------------|--------|----------------|---------|
| EF-1 | EXHAUST | BATHROOMS | 140 | 0.25" | 900 | IN-LINE | 54 WATTS/0.46A 120/1Ø | GREENHECK MODEL CSP-A200 | DIRECT | A | 1-6 |
| EF-2 | EXHAUST | SERVER | 100 | 0.25" | 950 | CEILING | 19.2 WATTS/0.16A 120/1Ø | GREENHECK MODEL SP-A110 | DIRECT | B | 1-5 |
| EF-3 | EXHAUST | JANITOR | 100 | 0.25" | 950 | CEILING | 19.2 WATTS/0.16A 120/1Ø | GREENHECK MODEL SP-A110 | DIRECT | C | 1-5 |
| EF-4 | EXHAUST | SOILED LINEN | 170 | 0.25" | 1400 | CEILING | 48.7 WATTS/1.3A 120/1Ø | GREENHECK MODEL SP-A190 | DIRECT | C | 1-5 |
| EF-5 | EXHAUST | LAUNDRY | 100 | 0.25" | 950 | IN-LINE | 20 WATTS/0.19A 120/1Ø | GREENHECK MODEL CSP-A110 | DIRECT | C | 1-5 |
| EF-6 | EXHAUST | STAFF TOILET | 140 | 0.25" | 900 | CEILING | 54 WATTS/0.46A 120/1Ø | GREENHECK MODEL CSP-A200 | DIRECT | A | 1-5 |

NOTES:

- SCREEN
- BACKDRAFT DAMPER
- COLOR BY ARCHITECT
- INTEGRAL DISCONNECT SWITCH
- SPEED CONTROLLER
- PROVIDE WITH CEILING ACCESS DOOR
- CONTROL W/ ROOM LIGHTS
- CONTROL W/ THERMOSTAT
- CONTROL W/ SWITCH

UNIT HEATER SCHEDULE

| TAG | LOCATION | TYPE | INPUT (BTUH) | OUTPUT (BTUH) | ELECTRICAL DATA | | | | MANUFACTURER & MODEL NO. | NOTES |
|------|-----------|------|--------------|---------------|-----------------|-----|------|----|--------------------------|-------|
| | | | | | W | V | AMPS | HZ | | |
| UH-1 | SPRINKLER | ELEC | - | - | 750 | 120 | 6.25 | 60 | MARKEL E3321TD-RP | 1-5 |

NOTES:

- INTERNAL THERMOSTAT
- SURFACE MOUNT.
- MOUNT HEATER @ 12" A.F.F.
- UNIT DISCONNECT
- U.L. LISTED

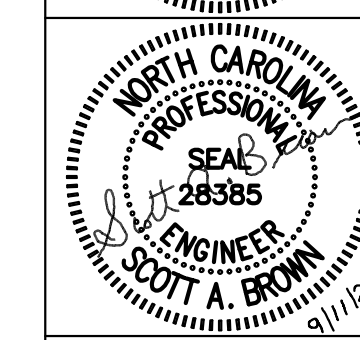
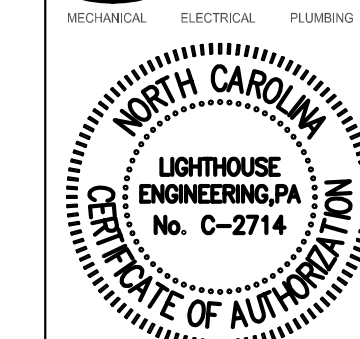
MECHANICAL LEGEND

| | |
|--|--|
| | RECTANGULAR DUCT |
| | ROUND METAL DUCT |
| | FLEXIBLE ROUND DUCT |
| | ELBOW WITH TURNING VANES |
| | VOLUME DAMPER |
| | SUPPLY TAP WITH VOLUME DAMPER |
| | SUPPLY TAP |
| | SUPPLY DIFFUSER/GRILLE OR RISER |
| | RETURN REGISTER/GRILLE OR RISER |
| | EXHAUST REGISTER/GRILLE OR RISER |
| | SIDEWALL DIFFUSER/GRILLE |
| | CEILING EXHAUST FAN |
| | T-STAT |
| | REMOTE SENSOR |
| | MOTORIZED DAMPER |
| | DUCT SMOKE DETECTOR W/ ACCESS DOOR |
| | MANUAL EMERGENCY STOP (TO BE INSTALLED AT ALL AH UNITS SERVING MULTIPLE ROOMS WITHIN THE 1-2 CONSTRUCTION) |
| | 1 st DOOR UNDER CUT |
| | U.L. FIRE DAMPER W/ ACCESS DOOR |
| | FIRE/SMOKE DAMPER (120V, CONTROL WIRING BY E.C.) |
| | U.L. CEILING RADIATION DAMPER |

Drawing Sheet List

| Number | Title |
|--------|--|
| MO.0 | MECHANICAL LEGEND, NOTES AND SCHEDULES |
| MO.1 | MECHANICAL DETAILS |
| MO.2 | MECHANICAL DETAILS |
| MO.3 | MECHANICAL DETAILS |
| MO.4 | MECHANICAL DETAILS |
| M1.0 | MECHANICAL SUPPLY - FLOOR PLAN |
| M1.1 | MECHANICAL RETURN - FLOOR PLAN |
| M1.2 | MECHANICAL MEZZANINE PLAN |

REVISIONS



Stogner Architecture, PA
 ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
 615 East Broad Avenue, Rockingham, North Carolina, 28379
 Phone 910-895-1111 Fax 910-895-6874

GOOD HOPE HOSPITAL
 ADDITION and RENOVATIONS
 410 DENIM DRIVE
 ERWIN, NORTH CAROLINA

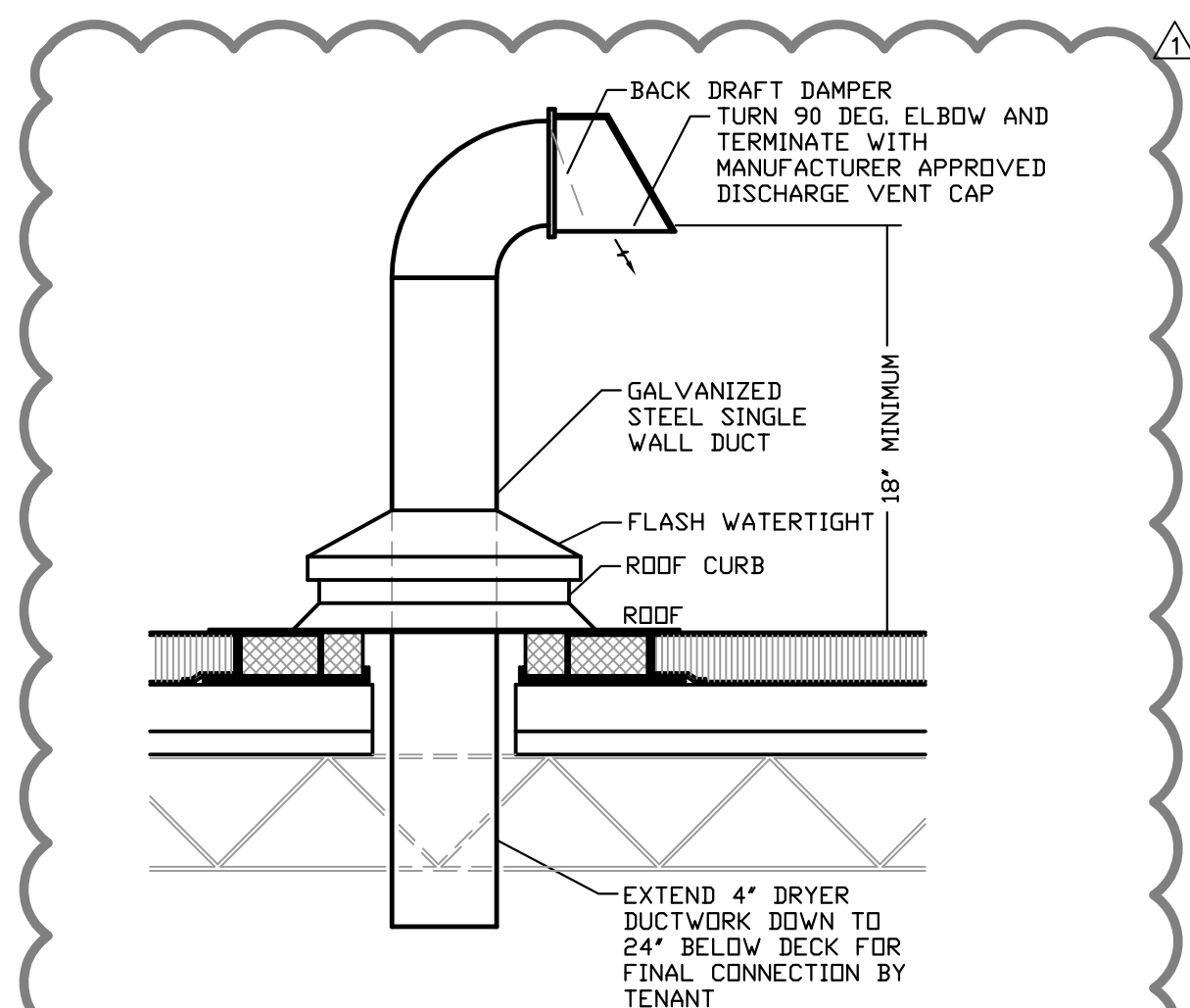
MECHANICAL LEGEND,
 NOTES AND SCHEDULES

COMM. NO.: 4535
 DRAWN BY: PWI
 CHECKED BY: SAB

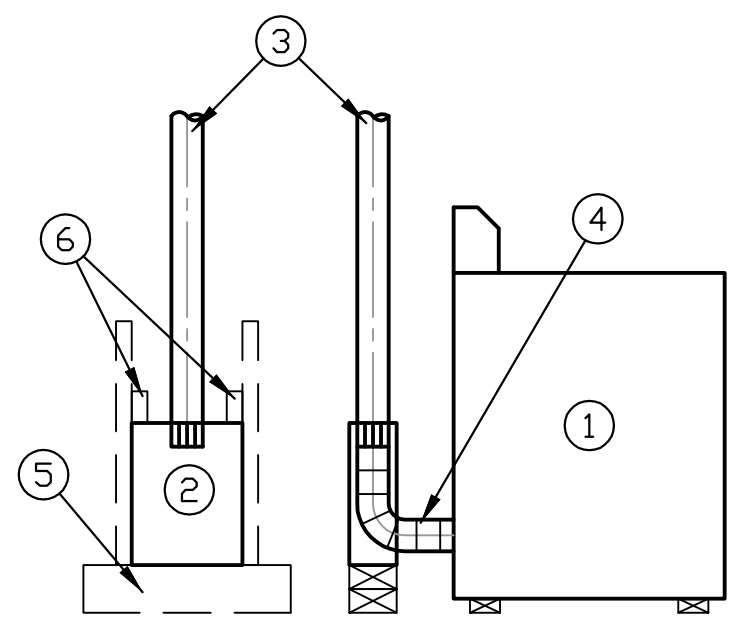
DATE: SEPT 11, 2020
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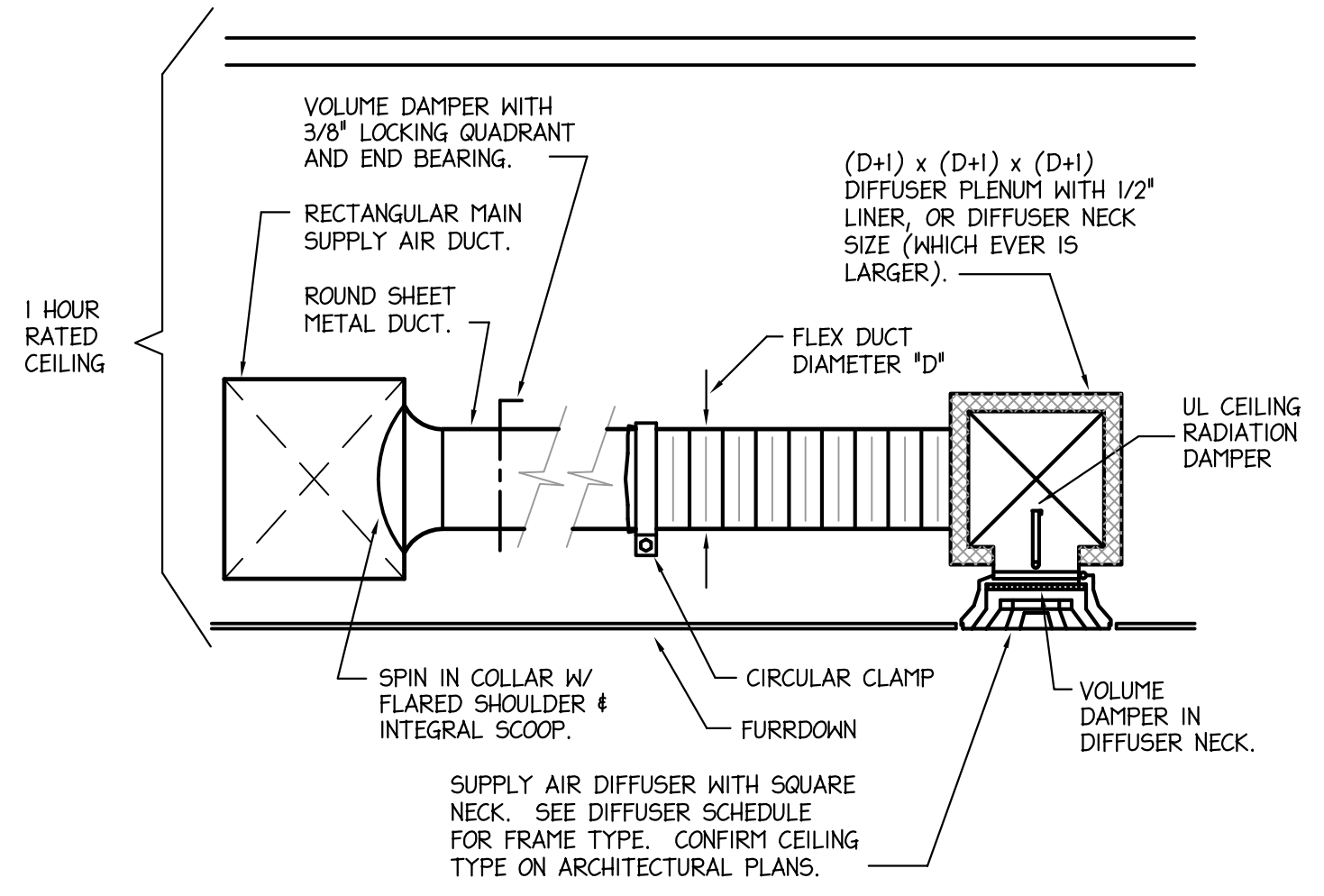


11 DRYER VENT DETAIL
NO SCALE



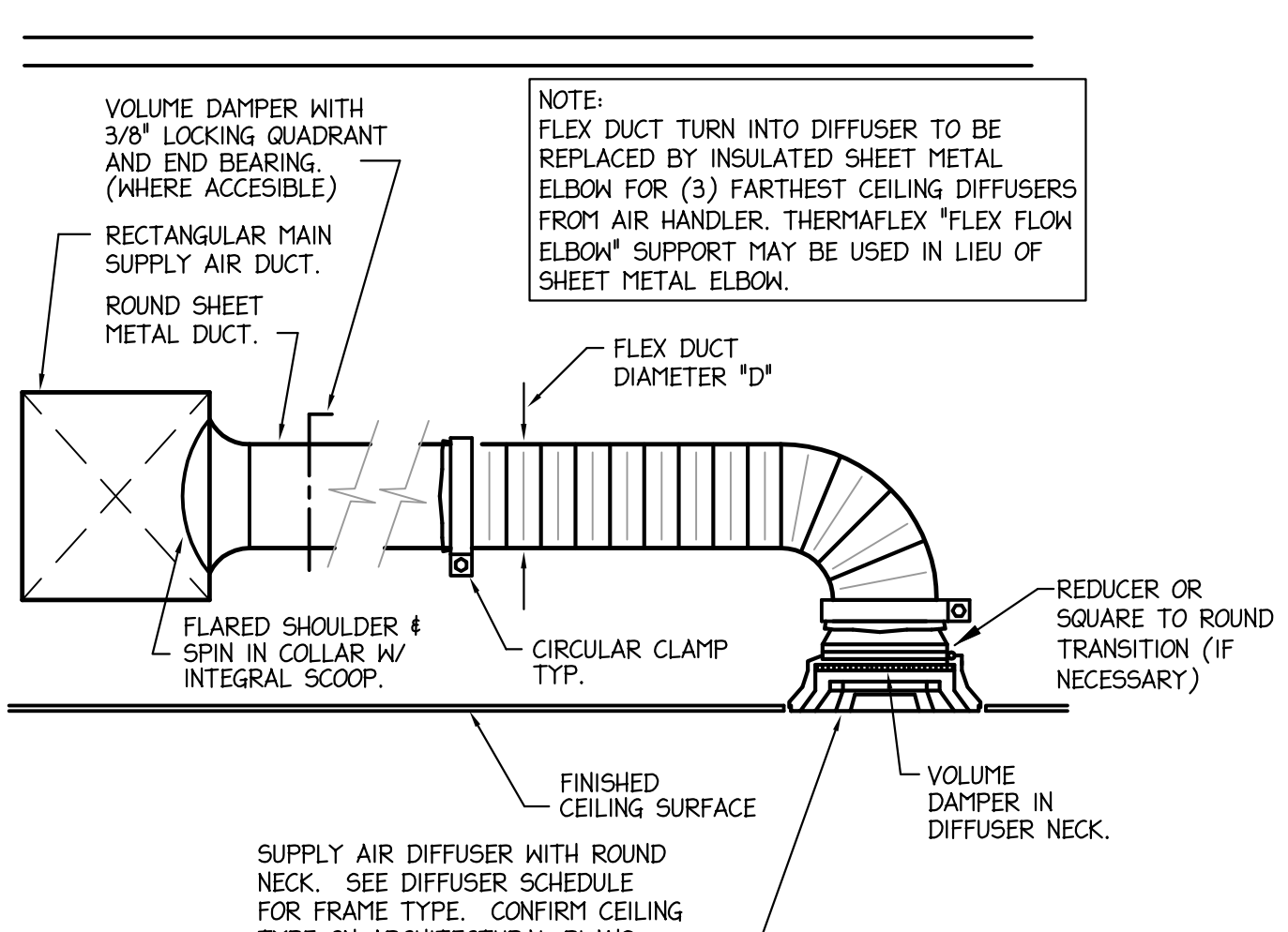
1. RESIDENTIAL DRYER
2. RECESSED METAL BOX (18"x14"x5 1/2")
3. 4" DRYER VENT
4. DRYER FLEX HOSE
5. ONE 2x6 BLOCK ON BOTTOM PLATE
6. 2x4 BLOCKING

8 RECESSED METAL BOX FOR DRYER EXHAUST
NO SCALE



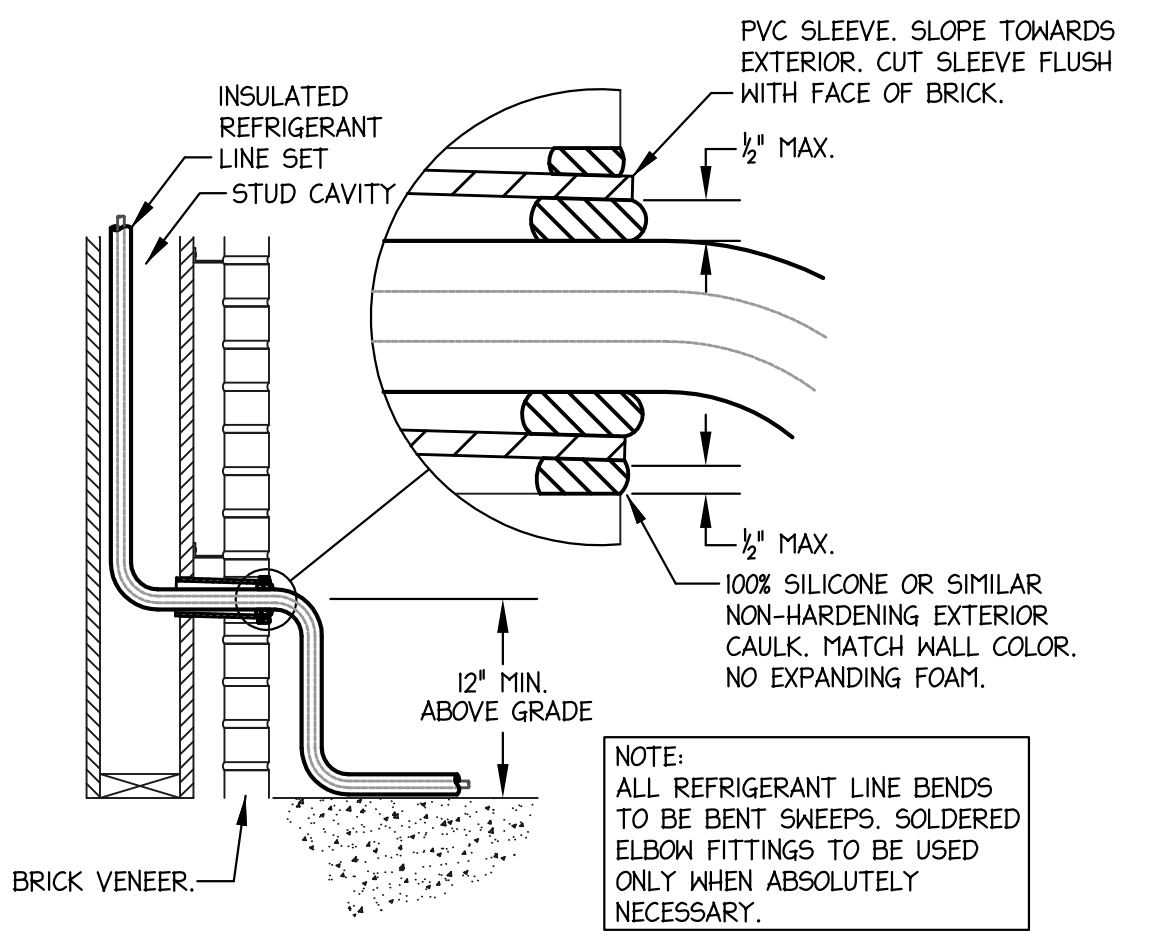
- NOTE:**
1. SEE HVAC GENERAL NOTES FOR DUCT INSULATION REQUIREMENTS.

7 SUPPLY AIR DIFFUSER DETAIL (RATED CEILING)
NO SCALE



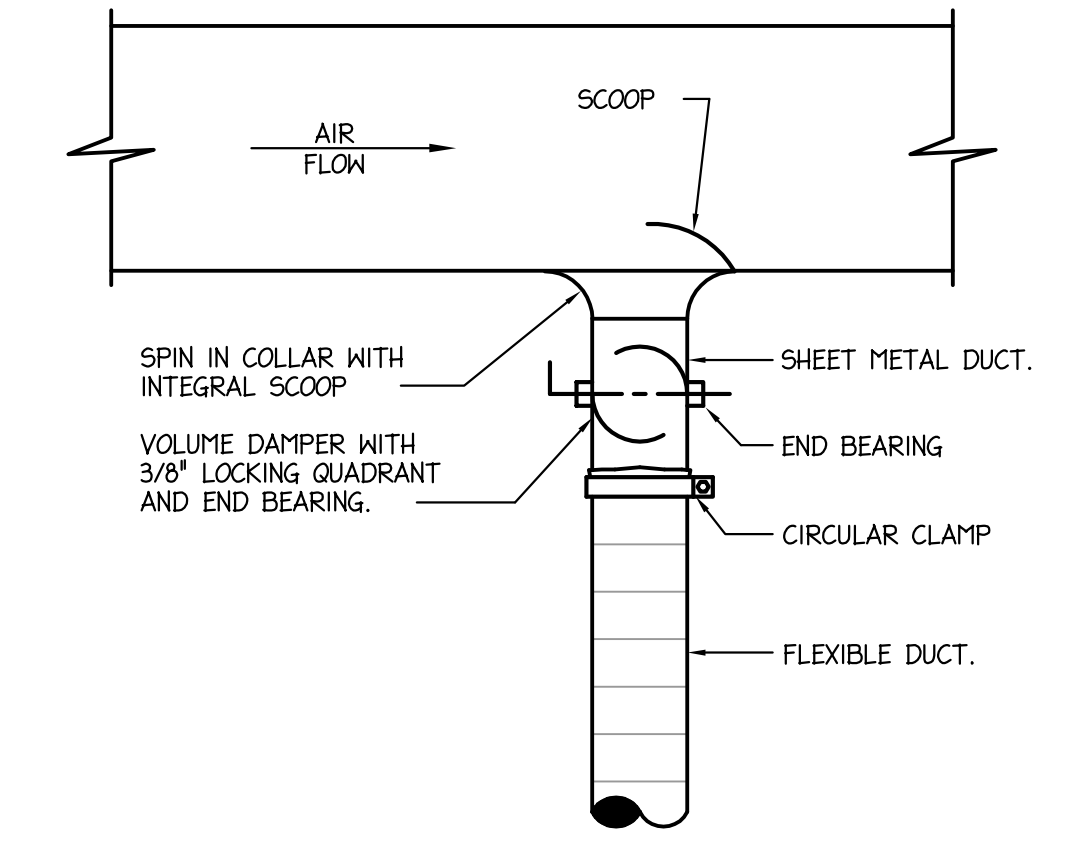
- NOTE:**
1. SEE HVAC GENERAL NOTES FOR DUCT INSULATION REQUIREMENTS.

6 SUPPLY AIR DIFFUSER DETAIL
NO SCALE



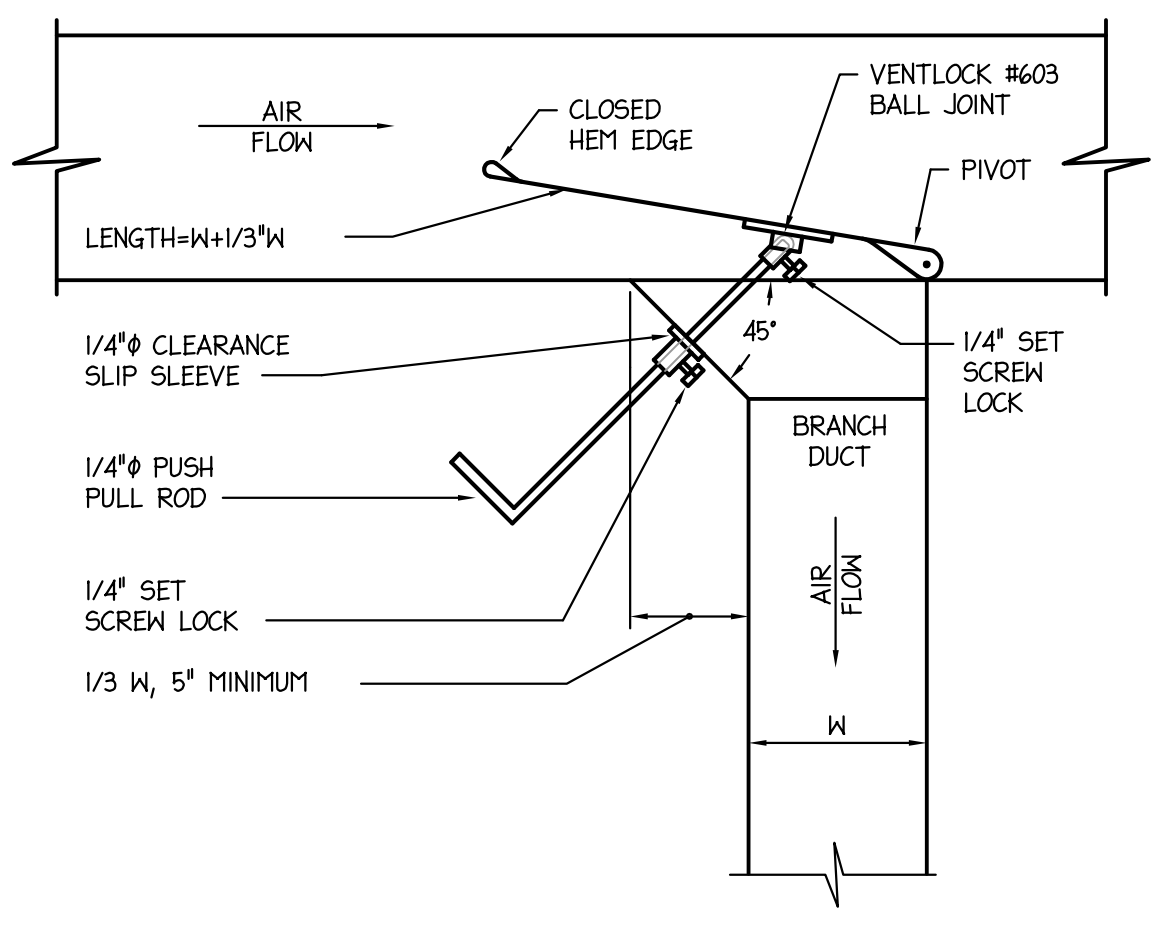
- NOTE:**
- ALL REFRIGERANT LINE BENDS TO BE BENT SWEEPS. SOLDERED ELBOW FITTINGS TO BE USED ONLY WHEN ABSOLUTELY NECESSARY.

5 HVAC LINE SET PENETRATION DETAIL (BRICK EXT.)
NO SCALE



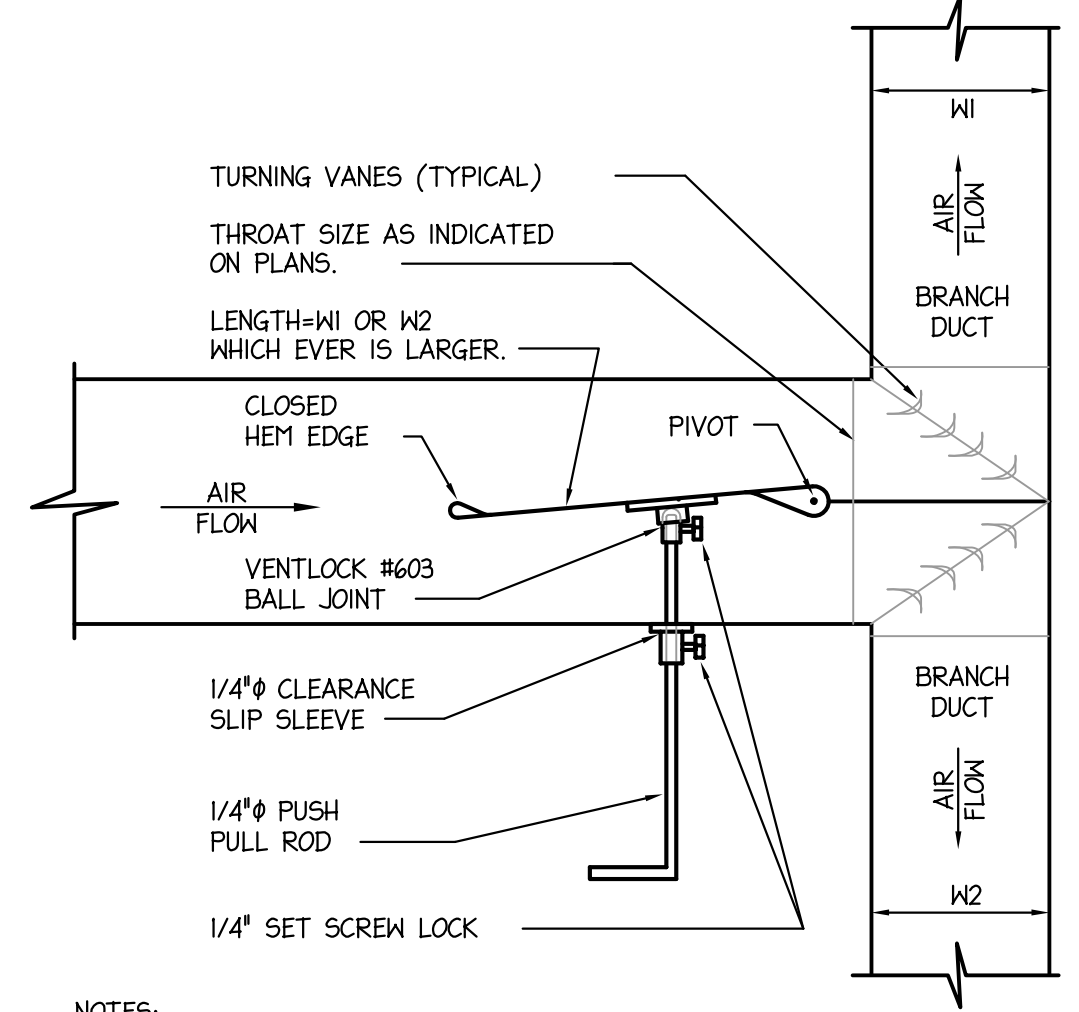
- NOTES:**
1. SEE FLOOR PLANS AND SPECIFICATIONS FOR DUCT INSULATION REQUIREMENTS.
 2. TAP OFF TOP/SIDE/BOTTOM OF DUCT AS REQUIRED

4 BRANCH TAKEOFF TO SINGLE OUTLET
NO SCALE



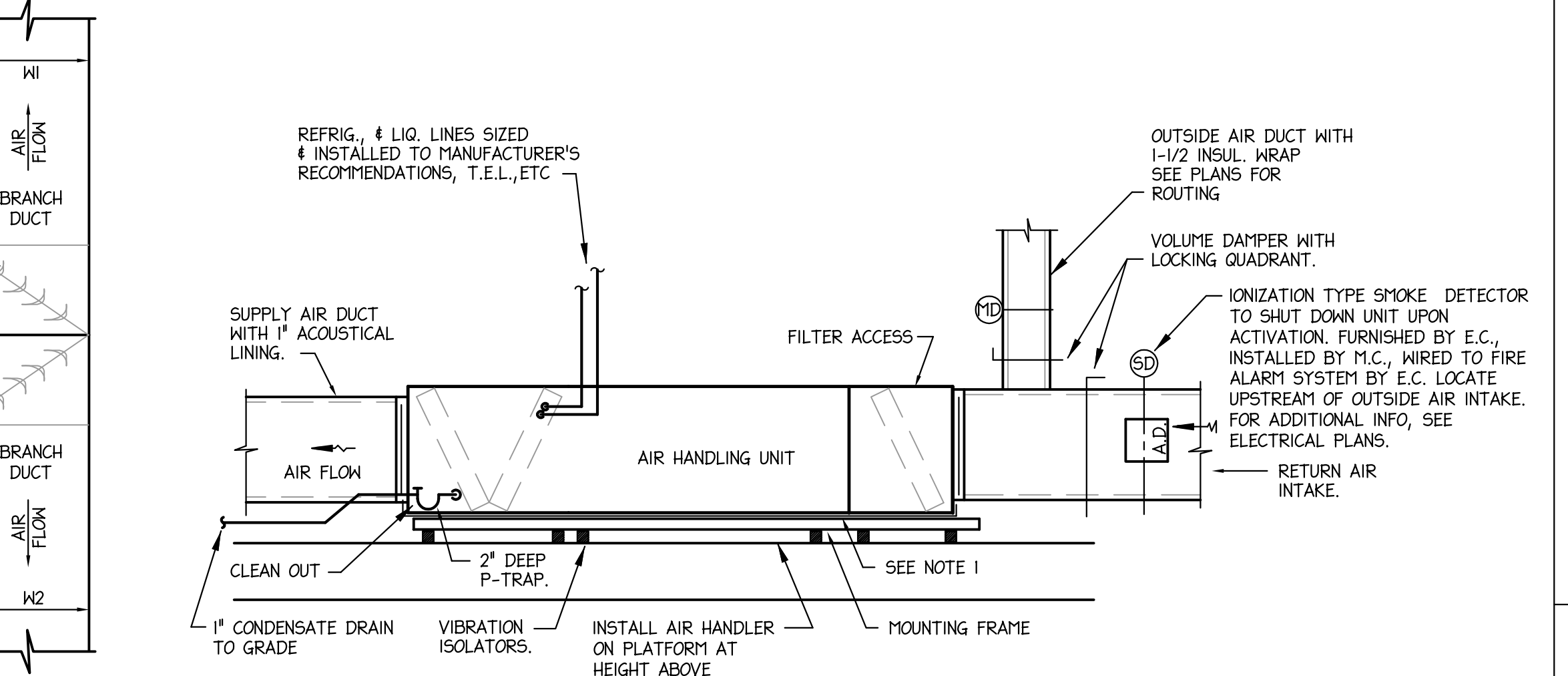
- NOTES:**
1. SEE FLOOR PLANS AND SPECIFICATIONS FOR DUCT INSULATION REQUIREMENTS.
 2. TAP OFF TOP/SIDE/BOTTOM OF DUCT AS REQUIRED

3 BRANCH TAKEOFF TO MULTIPLE OUTLETS
NO SCALE



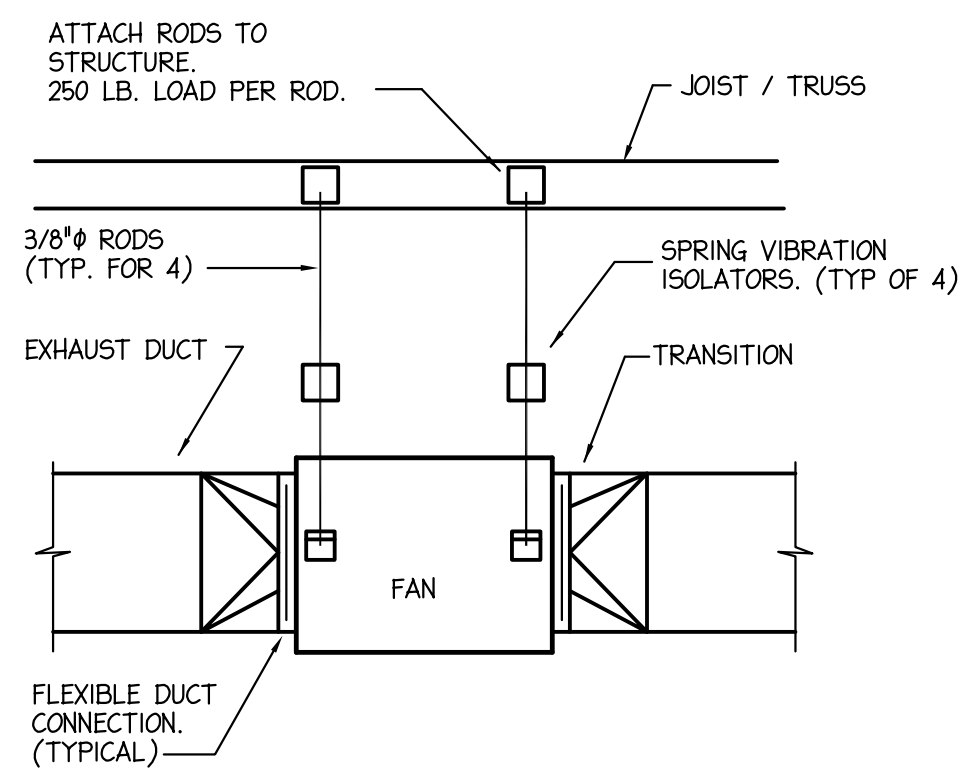
- NOTES:**
1. SEE FLOOR PLANS AND SPECIFICATIONS FOR DUCT INSULATION REQUIREMENTS.
 2. TAP OFF TOP/SIDE/BOTTOM OF DUCT AS REQUIRED

2 DUCT W/ SPLITTER DAMPER
NO SCALE

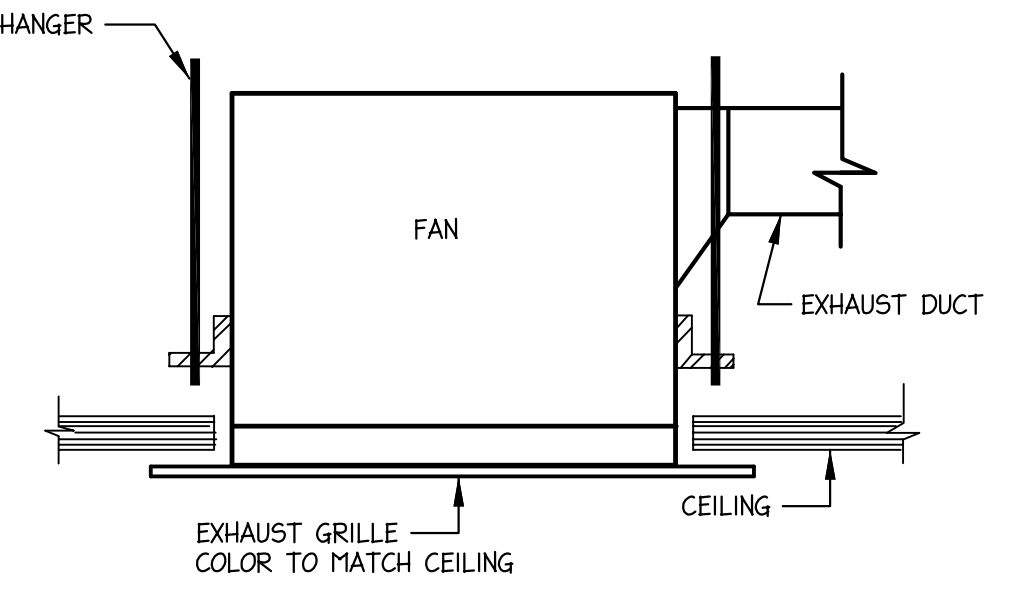


- NOTES:**
1. 1/2" DEEP AUXILIARY DRAIN PAN WITH MICROFLOAT SWITCH. INTERLOCK FLOAT SWITCH WITH AIR HANDLER. INSTALL FLOAT SWITCH IN ONE CORNER OF PAN AND TILT PAN TO THAT CORNER.
 2. AIR HANDLERS SERVING INSTITUTIONAL AREAS SHALL HAVE PUSH-BUTTON SHUTDOWN SWITCH IN OWNER APPROVED LOCATIONS WIRED TO AIR HANDLER.

1 AIR HANDLING UNIT DETAIL
NO SCALE

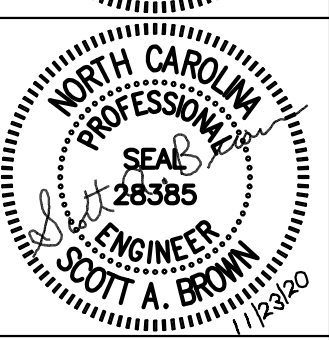
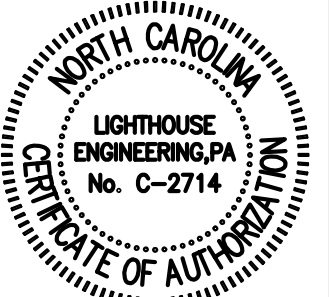


10 IN-LINE FAN DETAIL
NO SCALE



9 EXHAUST FAN DETAIL
NO SCALE

REVISIONS
DHHS COMMENTS
11/23/20



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MECHANICAL
DETAILS

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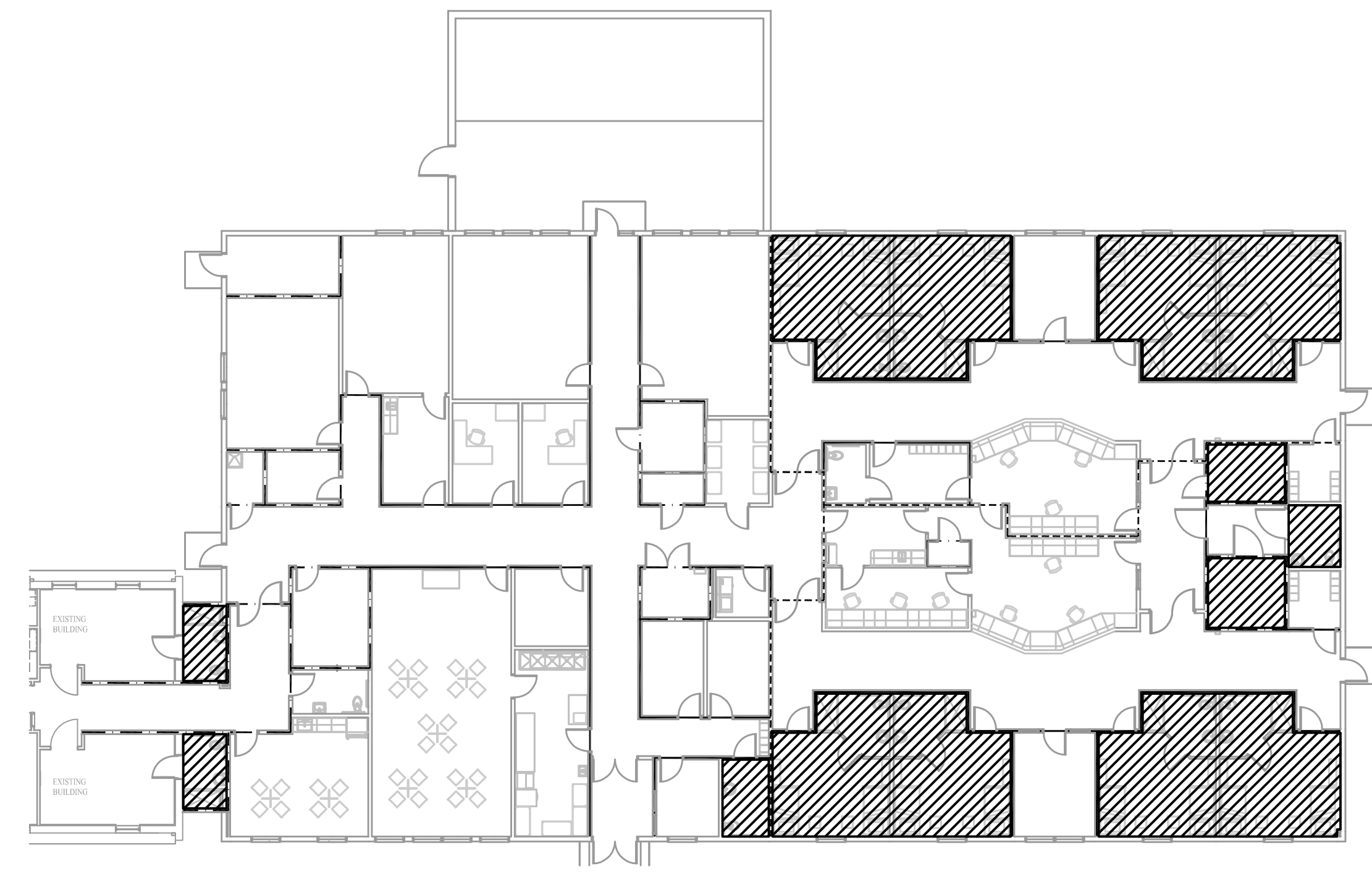
B

C

D



2 PRESSURE RELATIONSHIPS
NO SCALE

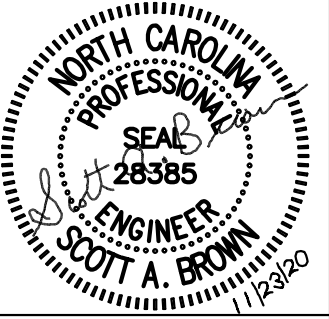
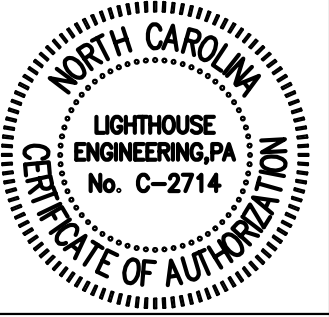


1 KEY PLAN
NO SCALE

NOTE:
DIFFUSERS IN THE SHADED AREAS ARE REQUIRED TO BE TAMPER RESISTANT; CONFIRM WITH OWNER AND ARCHITECT PRIOR TO BIDDING WORK.

FOR CONSTRUCTION

REVISIONS
DHS COMMENTS
11/23/20



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MECHANICAL
DETAILS

COMM. NO.: 4535

DRAWN BY: PWI

CHECKED BY: SAB

DATE: SEPT 11, 2020

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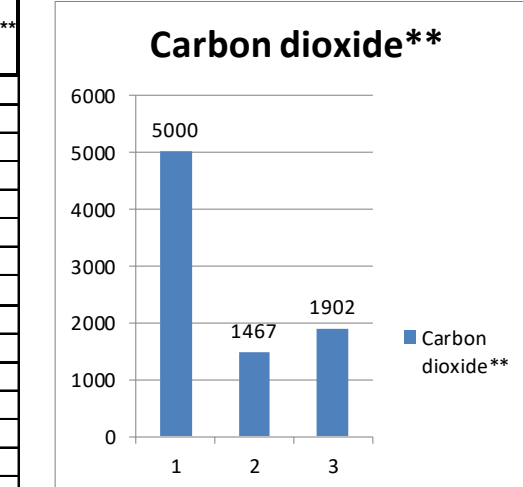
Table with 10 columns: Zone Tag, Facility Type, Zone Use, Zone Floor Area (square ft), Zone Max Occupancy, Table 6.1 OA per Occupant, Table 6.1 cfm/ft2, Pz * Rp, Az * Ra, Table 6.2 Ventilation Effectiveness, Outdoor Air to Zone (CFM) with Ez correction. Row AH-4: Office Buildings, Office Space, 1,290.0, 24.0, 5.0, 0.06, 120, 77, 0.8, 247.

Zone Height (feet): 16.0
Desired Outside Air (Vo) IAQP: 190
Supply Air (Vs): 1,200
Return Air (Vr): 1020
Recirc. Flow Factor (R): 0.85
Ventilation Effectiveness (Ez): 0.8
Level of Physical Activity: Standing (desk work)
Filter Location: B
HVAC Flow Type: Constant
Outdoor Air Flow Type: Constant

Air Changes Per Hour: 3.5
Outside Air Per VRP: 247 CFM
Outside Air Per IAQ: 180 CFM
Outside Air Savings: 67 CFM
OA Summer Drybulb: 94.0
OA Summer Wetbulb: 74.0
Coil Leaving Air Drybulb (F): 55.0
Coil Leaving Air Wetbulb (F): 55.0
OA MBH Saved Summer*: 4.3
OA Tons Saved Summer*: 0.4

VRP OA CFM per person: 10.3
IAQ OA CFM per person: 7.5
Winter Heating Savings
OA Winter Design DB (F): 18
Supply Air DB Setpoint (F): 95
MBH Saved Winter: 5.6
KW Saved Winter: 1.6

Indoor Contaminants table with columns: Generated By People & From Outdoors, Maximum Threshold Value (PPM), Steady State Using the VRP*, Steady State Using the IAQ Method, Is Steady State Level Acceptable at Reduced, Contaminant Generation Rate (PPM), Filtration Effectiveness, Cognizant Authority. Includes Acetaldehyde, Acetone, Ammonia, Benzene, etc.



Building materials and furnishings assumed to have no VOCs and off-gassing is complete. All yellow shaded boxes require user input or review. Is IAQ acceptable at reduced outside air levels? Yes

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Project info table: Date (9/11/2020), Job Name (SCMH Erwin - Good Hope), Representative (Lighthouse Engineering), Engineer (PWI), Contractor.

2018 NCMC ALLOWS FOR ASHRAE 62 IAQP THROUGH THE ENGINEERED EXCEPTION FOUND IN SECTION 403.2.



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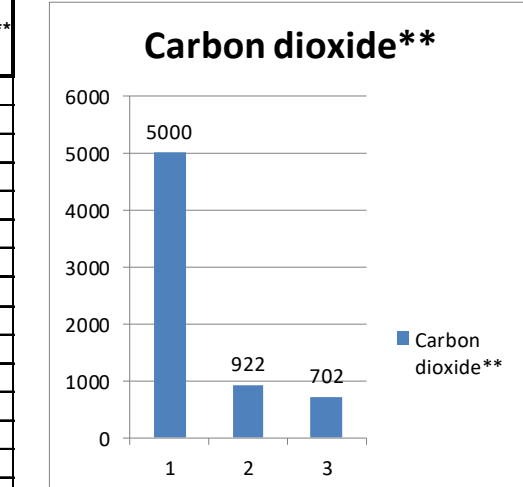
Table with 10 columns: Zone Tag, Facility Type, Zone Use, Zone Floor Area (square ft), Zone Max Occupancy, Table 6.1 OA per Occupant, Table 6.1 cfm/ft2, Pz * Rp, Az * Ra, Table 6.2 Ventilation Effectiveness, Outdoor Air to Zone (CFM) with Ez correction. Row AH-2: Office Buildings, Office Space, 870.0, 5.0, 5.0, 0.06, 25, 52, 0.8, 97.

Zone Height (feet): 16.0
Desired Outside Air (Vo) IAQP: 150
Supply Air (Vs): 1,000
Return Air (Vr): 850
Recirc. Flow Factor (R): 0.85
Ventilation Effectiveness (Ez): 0.8
Level of Physical Activity: Standing (desk work)
Filter Location: B
HVAC Flow Type: Constant
Outdoor Air Flow Type: Constant

Air Changes Per Hour: 4.3
Outside Air Per VRP: 97 CFM
Outside Air Per IAQ: 150 CFM
Outside Air Savings: -54 CFM
OA Summer Drybulb: 94.0
OA Summer Wetbulb: 74.0
Coil Leaving Air Drybulb (F): 55.0
Coil Leaving Air Wetbulb (F): 55.0
OA MBH Saved Summer*: -3.4
OA Tons Saved Summer*: -0.3

VRP OA CFM per person: 19.3
IAQ OA CFM per person: 30.0
Winter Heating Savings
OA Winter Design DB (F): 18
Supply Air DB Setpoint (F): 95
MBH Saved Winter: -4.5
KW Saved Winter: -1.3

Indoor Contaminants table with columns: Generated By People & From Outdoors, Maximum Threshold Value (PPM), Steady State Using the VRP*, Steady State Using the IAQ Method, Is Steady State Level Acceptable at Reduced, Contaminant Generation Rate (PPM), Filtration Effectiveness, Cognizant Authority. Includes Acetaldehyde, Acetone, Ammonia, Benzene, etc.



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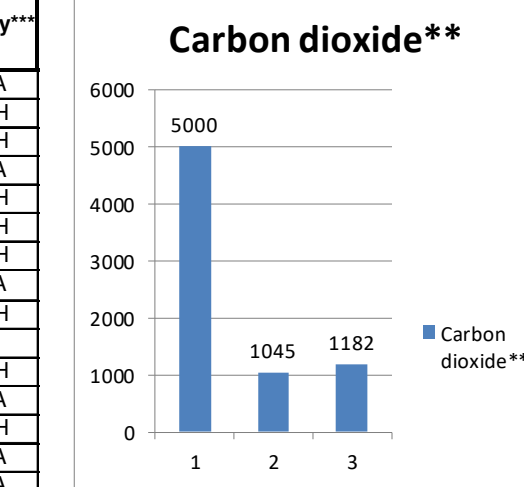
Table with 10 columns: Zone Tag, Facility Type, Zone Use, Zone Floor Area (square ft), Zone Max Occupancy, Table 6.1 OA per Occupant, Table 6.1 cfm/ft2, Pz * Rp, Az * Ra, Table 6.2 Ventilation Effectiveness, Outdoor Air to Zone (CFM) with Ez correction. Row AH-3: Office Buildings, Office Space, 1,445.0, 11.0, 5.0, 0.06, 55, 87, 0.8, 177.

Zone Height (feet): 16.0
Desired Outside Air (Vo) IAQP: 150
Supply Air (Vs): 1,000
Return Air (Vr): 850
Recirc. Flow Factor (R): 0.85
Ventilation Effectiveness (Ez): 0.8
Level of Physical Activity: Standing (desk work)
Filter Location: B
HVAC Flow Type: Constant
Outdoor Air Flow Type: Constant

Air Changes Per Hour: 2.6
Outside Air Per VRP: 177 CFM
Outside Air Per IAQ: 150 CFM
Outside Air Savings: 27 CFM
OA Summer Drybulb: 94.0
OA Summer Wetbulb: 74.0
Coil Leaving Air Drybulb (F): 55.0
Coil Leaving Air Wetbulb (F): 55.0
OA MBH Saved Summer*: 1.7
OA Tons Saved Summer*: 0.1

VRP OA CFM per person: 16.1
IAQ OA CFM per person: 13.6
Winter Heating Savings
OA Winter Design DB (F): 18
Supply Air DB Setpoint (F): 95
MBH Saved Winter: 2.3
KW Saved Winter: 0.7

Indoor Contaminants table with columns: Generated By People & From Outdoors, Maximum Threshold Value (PPM), Steady State Using the VRP*, Steady State Using the IAQ Method, Is Steady State Level Acceptable at Reduced, Contaminant Generation Rate (PPM), Filtration Effectiveness, Cognizant Authority. Includes Acetaldehyde, Acetone, Ammonia, Benzene, etc.



Building materials and furnishings assumed to have no VOCs and off-gassing is complete. All yellow shaded boxes require user input or review. Is IAQ acceptable at reduced outside air levels? Yes

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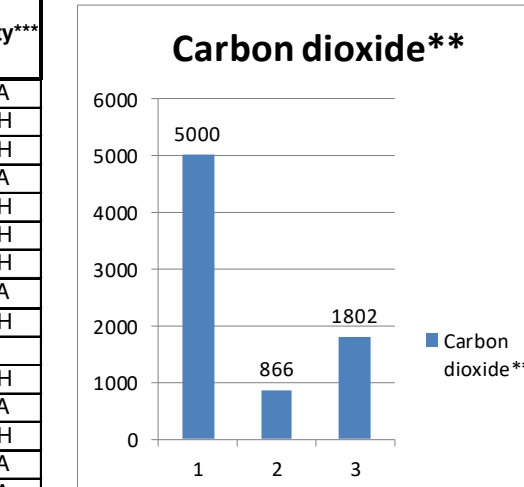
Table with 10 columns: Zone Tag, Facility Type, Zone Use, Zone Floor Area (square ft), Zone Max Occupancy, Table 6.1 OA per Occupant, Table 6.1 cfm/ft2, Pz * Rp, Az * Ra, Table 6.2 Ventilation Effectiveness, Outdoor Air to Zone (CFM) with Ez correction. Row AH-1: Public Assembly Spaces, Restaurant Dining Rooms, 1,575.0, 30.0, 7.5, 0.18, 225, 284, 0.8, 636.

Zone Height (feet): 16.0
Desired Outside Air (Vo) IAQP: 240
Supply Air (Vs): 1,600
Return Air (Vr): 1360
Recirc. Flow Factor (R): 0.85
Ventilation Effectiveness (Ez): 0.8
Level of Physical Activity: Standing (desk work)
Filter Location: B
HVAC Flow Type: Constant
Outdoor Air Flow Type: Constant

Air Changes Per Hour: 3.8
Outside Air Per VRP: 636 CFM
Outside Air Per IAQ: 240 CFM
Outside Air Savings: 396 CFM
OA Summer Drybulb: 94.0
OA Summer Wetbulb: 74.0
Coil Leaving Air Drybulb (F): 55.0
Coil Leaving Air Wetbulb (F): 55.0
OA MBH Saved Summer*: 25.5
OA Tons Saved Summer*: 2.1

VRP OA CFM per person: 21.2
IAQ OA CFM per person: 8.0
Winter Heating Savings
OA Winter Design DB (F): 18
Supply Air DB Setpoint (F): 95
MBH Saved Winter: 33.1
KW Saved Winter: 9.7

Indoor Contaminants table with columns: Generated By People & From Outdoors, Maximum Threshold Value (PPM), Steady State Using the VRP*, Steady State Using the IAQ Method, Is Steady State Level Acceptable at Reduced, Contaminant Generation Rate (PPM), Filtration Effectiveness, Cognizant Authority. Includes Acetaldehyde, Acetone, Ammonia, Benzene, etc.



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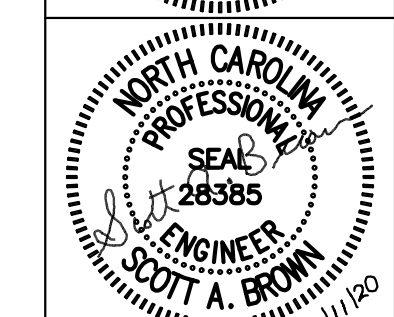
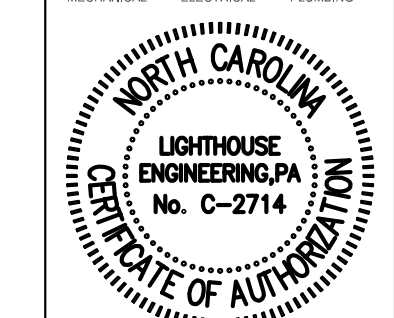
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2018 NCMC ALLOWS FOR ASHRAE 62 IAQP THROUGH THE ENGINEERED EXCEPTION FOUND IN SECTION 403.2.

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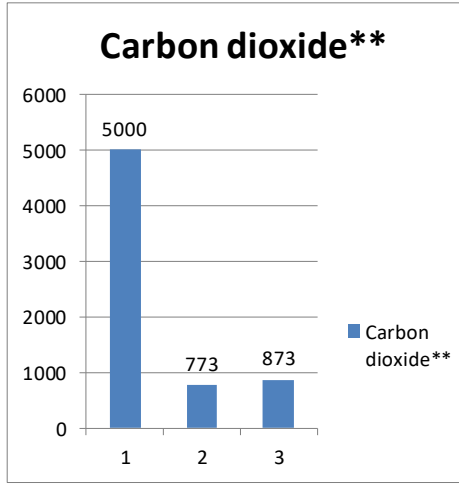
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| Zone Tag | Facility Type | Zone Use | Zone Floor Area (square ft) | Zone Max Occupancy | Table 6.1 OA per Occupant | Table 6.1 cfm/ft ² | Pz * Rp | Az * Ra | Table 6.2 Ventilation Effectiveness | Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez) |
|----------|--------------------------|-------------------------|-----------------------------|--------------------|---------------------------|-------------------------------|---------|---------|-------------------------------------|---|
| AH-8 | Is Motels Resorts Dormit | Barracks/Sleeping areas | 1,275.0 | 5.0 | 5.0 | 0.06 | 25 | 77 | 0.8 | 127 OA required per VRP |

| Indoor Contaminants | Generated By People & From Outdoors | Maximum Threshold Value (PPM) | Steady State Using the VRP* (Prescribed OA) Plasma Off | Steady State Using the IAQ Method (Reduced OA) Plasma On | Is Steady State Level Acceptable at Reduced OA Levels? | Contaminant Generation Rate (PPM) | Filtration Effectiveness | Cognizant Authority** |
|-----------------------|-------------------------------------|-------------------------------|--|--|--|-----------------------------------|--------------------------|-----------------------|
| Acetaldehyde | 100.0 | 0.0111 | 0.00145 | Yes | 0.00048 | 50% | OSHA | |
| Acetone | 250.0 | 0.00138 | 0.00027 | Yes | 0.00654 | 50% | NIOSH | |
| Ammonia | 25.00 | 0.01230 | 0.00356 | Yes | 0.21460 | 50% | NIOSH | |
| Benzene | 1.0000 | 0.00252 | 0.00033 | Yes | 0.00022 | 50% | OSHA | |
| 2-Butanone (MEK) | 200.0 | 0.00017 | 0.00003 | Yes | 0.00133 | 50% | NIOSH | |
| Carbon dioxide** | 5000 | 773 | 441 | Yes | 441 | 0% | NIOSH | |
| Chloroform | 2.0000 | 0.00011 | 0.00001 | Yes | 0.00004 | 50% | NIOSH | |
| Dioxane | 100.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | OSHA | |
| Hydrogen Sulfide | 10.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | NIOSH | |
| Methane | NA | 1.68094 | 1.68094 | Yes | 0.00000 | 0% | NA | |
| Methanol | 200.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 0% | NIOSH | |
| Methylene Chloride | 25.0 | 0.00075 | 0.00011 | Yes | 0.00121 | 50% | OSHA | |
| Propane | 1000.0 | 0.00998 | 0.00998 | Yes | 0.00000 | 0% | NIOSH | |
| Tetrachloroethane | 5.0000 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | OSHA | |
| Tetrachloroethylene | 100.0000 | 0.00037 | 0.00005 | Yes | 0.00001 | 50% | OSHA | |
| Toluene | 100.0000 | 0.00533 | 0.00070 | Yes | 0.00032 | 50% | NIOSH | |
| 1,1,1-Trichloroethane | 350.0000 | 0.00076 | 0.00010 | Yes | 0.00058 | 50% | NIOSH | |
| Xylene | 100.0000 | 0.00230 | 0.00030 | Yes | 0.00000 | 50% | OSHA | |



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Date: 9/11/2020
Job Name: SCMH Erwin - Good Hope
Representative: Lighthouse Engineering
Engineer: PWI
Contractor: -

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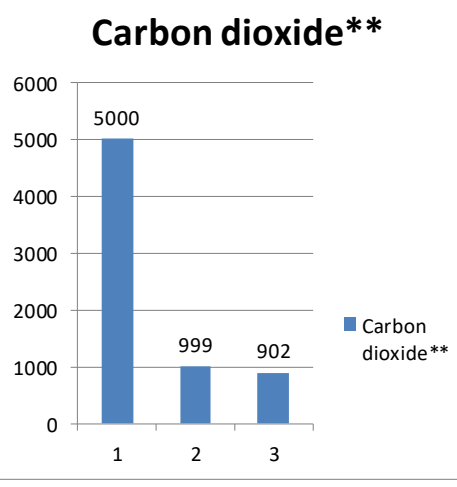


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| Zone Tag | Facility Type | Zone Use | Zone Floor Area (square ft) | Zone Max Occupancy | Table 6.1 OA per Occupant | Table 6.1 cfm/ft ² | Pz * Rp | Az * Ra | Table 6.2 Ventilation Effectiveness | Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez) |
|----------|--------------------------|-------------------------|-----------------------------|--------------------|---------------------------|-------------------------------|---------|---------|-------------------------------------|---|
| AH-7 | Is Motels Resorts Dormit | Barracks/Sleeping areas | 1,310.0 | 9.0 | 5.0 | 0.06 | 45 | 79 | 0.8 | 155 OA required per VRP |

| Indoor Contaminants | Generated By People & From Outdoors | Maximum Threshold Value (PPM) | Steady State Using the VRP* (Prescribed OA) Plasma Off | Steady State Using the IAQ Method (Reduced OA) Plasma On | Is Steady State Level Acceptable at Reduced OA Levels? | Contaminant Generation Rate (PPM) | Filtration Effectiveness | Cognizant Authority** |
|-----------------------|-------------------------------------|-------------------------------|--|--|--|-----------------------------------|--------------------------|-----------------------|
| Acetaldehyde | 100.0 | 0.0112 | 0.00145 | Yes | 0.00048 | 50% | OSHA | |
| Acetone | 250.0 | 0.00174 | 0.00027 | Yes | 0.00654 | 50% | NIOSH | |
| Ammonia | 25.00 | 0.01735 | 0.00372 | Yes | 0.21460 | 50% | NIOSH | |
| Benzene | 1.0000 | 0.00252 | 0.00033 | Yes | 0.00022 | 50% | OSHA | |
| 2-Butanone (MEK) | 200.0 | 0.00020 | 0.00004 | Yes | 0.00133 | 50% | NIOSH | |
| Carbon dioxide** | 5000 | 999 | 902 | Yes | 441 | 0% | NIOSH | |
| Chloroform | 2.0000 | 0.00011 | 0.00001 | Yes | 0.00004 | 50% | NIOSH | |
| Dioxane | 100.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | OSHA | |
| Hydrogen Sulfide | 10.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | NIOSH | |
| Methane | NA | 1.68094 | 1.68094 | Yes | 0.00000 | 0% | NA | |
| Methanol | 200.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 0% | NIOSH | |
| Methylene Chloride | 25.0 | 0.00078 | 0.00011 | Yes | 0.00121 | 50% | OSHA | |
| Propane | 1000.0 | 0.00998 | 0.00998 | Yes | 0.00000 | 0% | NIOSH | |
| Tetrachloroethane | 5.0000 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | OSHA | |
| Tetrachloroethylene | 100.0000 | 0.00037 | 0.00005 | Yes | 0.00001 | 50% | OSHA | |
| Toluene | 100.0000 | 0.00533 | 0.00070 | Yes | 0.00032 | 50% | NIOSH | |
| 1,1,1-Trichloroethane | 350.0000 | 0.00076 | 0.00010 | Yes | 0.00058 | 50% | NIOSH | |
| Xylene | 100.0000 | 0.00230 | 0.00030 | Yes | 0.00000 | 50% | OSHA | |



Building materials and furnishings assumed to have no VOCs and off-gassing is complete. Is IAQ acceptable at reduced outside air levels? **Yes**

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Date: 9/11/2020
Job Name: SCMH Erwin - Good Hope
Representative: Lighthouse Engineering
Engineer: PWI
Contractor: -

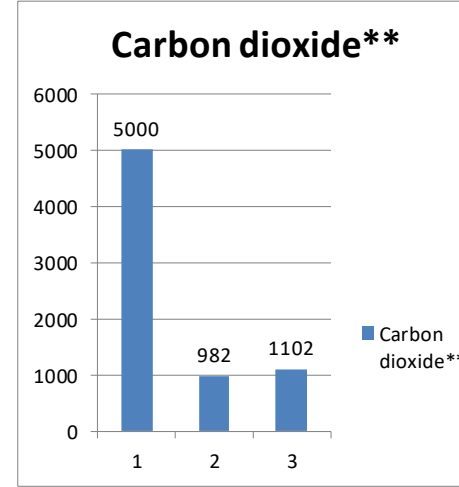
2018 NCMC ALLOWS FOR ASHRAE 62 IAQP THROUGH THE ENGINEERED EXCEPTION FOUND IN SECTION 403.2.



Global Plasma Solutions
10 Mall Terrace, Building C
Savannah, GA 31406
Phone: (912) 356-0115 Fax: (912) 356-0114
Email: info@globalplasmason.com Web: www.globalplasmason.com
VERSION 1.7 running ASHRAE 62.1-2013

| Zone Tag | Facility Type | Zone Use | Zone Floor Area (square ft) | Zone Max Occupancy | Table 6.1 OA per Occupant | Table 6.1 cfm/ft ² | Pz * Rp | Az * Ra | Table 6.2 Ventilation Effectiveness | Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez) |
|----------|--------------------------|-------------------------|-----------------------------|--------------------|---------------------------|-------------------------------|---------|---------|-------------------------------------|---|
| AH-6 | Is Motels Resorts Dormit | Barracks/Sleeping areas | 2,120.0 | 14.0 | 5.0 | 0.06 | 70 | 127 | 0.8 | 247 OA required per VRP |

| Indoor Contaminants | Generated By People & From Outdoors | Maximum Threshold Value (PPM) | Steady State Using the VRP* (Prescribed OA) Plasma Off | Steady State Using the IAQ Method (Reduced OA) Plasma On | Is Steady State Level Acceptable at Reduced OA Levels? | Contaminant Generation Rate (PPM) | Filtration Effectiveness | Cognizant Authority** |
|-----------------------|-------------------------------------|-------------------------------|--|--|--|-----------------------------------|--------------------------|-----------------------|
| Acetaldehyde | 100.0 | 0.0112 | 0.00145 | Yes | 0.00048 | 50% | OSHA | |
| Acetone | 250.0 | 0.00173 | 0.00031 | Yes | 0.00654 | 50% | NIOSH | |
| Ammonia | 25.00 | 0.01696 | 0.00489 | Yes | 0.21460 | 50% | NIOSH | |
| Benzene | 1.0000 | 0.00252 | 0.00033 | Yes | 0.00022 | 50% | OSHA | |
| 2-Butanone (MEK) | 200.0 | 0.00020 | 0.00004 | Yes | 0.00133 | 50% | NIOSH | |
| Carbon dioxide** | 5000 | 982 | 1102 | Yes | 441 | 0% | NIOSH | |
| Chloroform | 2.0000 | 0.00011 | 0.00001 | Yes | 0.00004 | 50% | NIOSH | |
| Dioxane | 100.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | OSHA | |
| Hydrogen Sulfide | 10.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | NIOSH | |
| Methane | NA | 1.68094 | 1.68094 | Yes | 0.00000 | 0% | NA | |
| Methanol | 200.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 0% | NIOSH | |
| Methylene Chloride | 25.0 | 0.00078 | 0.00012 | Yes | 0.00121 | 50% | OSHA | |
| Propane | 1000.0 | 0.00998 | 0.00998 | Yes | 0.00000 | 0% | NIOSH | |
| Tetrachloroethane | 5.0000 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | OSHA | |
| Tetrachloroethylene | 100.0000 | 0.00037 | 0.00005 | Yes | 0.00001 | 50% | OSHA | |
| Toluene | 100.0000 | 0.00533 | 0.00070 | Yes | 0.00032 | 50% | NIOSH | |
| 1,1,1-Trichloroethane | 350.0000 | 0.00076 | 0.00010 | Yes | 0.00058 | 50% | NIOSH | |
| Xylene | 100.0000 | 0.00230 | 0.00030 | Yes | 0.00000 | 50% | OSHA | |



Building materials and furnishings assumed to have no VOCs and off-gassing is complete. Is IAQ acceptable at reduced outside air levels? **Yes**

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Date: 9/11/2020
Job Name: SCMH Erwin - Good Hope
Representative: Lighthouse Engineering
Engineer: PWI
Contractor: -

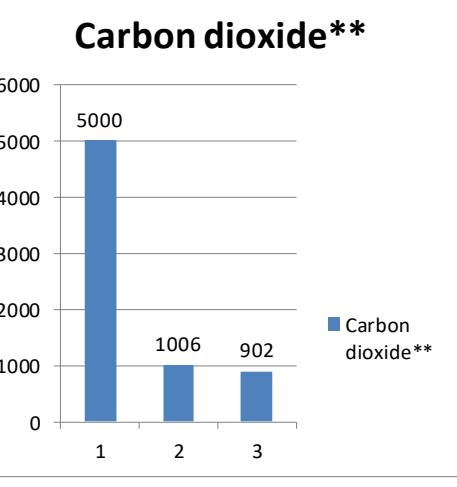
2018 NCMC ALLOWS FOR ASHRAE 62 IAQP THROUGH THE ENGINEERED EXCEPTION FOUND IN SECTION 403.2.



Global Plasma Solutions
10 Mall Terrace, Building C
Savannah, GA 31406
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Email: info@globalplasmason.com Web: www.globalplasmason.com
VERSION 1.7 running ASHRAE 62.1-2013

| Zone Tag | Facility Type | Zone Use | Zone Floor Area (square ft) | Zone Max Occupancy | Table 6.1 OA per Occupant | Table 6.1 cfm/ft ² | Pz * Rp | Az * Ra | Table 6.2 Ventilation Effectiveness | Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez) |
|----------|--------------------------|-------------------------|-----------------------------|--------------------|---------------------------|-------------------------------|---------|---------|-------------------------------------|---|
| AH-5 | Is Motels Resorts Dormit | Barracks/Sleeping areas | 1,290.0 | 9.0 | 5.0 | 0.06 | 45 | 77 | 0.8 | 153 OA required per VRP |

| Indoor Contaminants | Generated By People & From Outdoors | Maximum Threshold Value (PPM) | Steady State Using the VRP* (Prescribed OA) Plasma Off | Steady State Using the IAQ Method (Reduced OA) Plasma On | Is Steady State Level Acceptable at Reduced OA Levels? | Contaminant Generation Rate (PPM) | Filtration Effectiveness | Cognizant Authority** |
|-----------------------|-------------------------------------|-------------------------------|--|--|--|-----------------------------------|--------------------------|-----------------------|
| Acetaldehyde | 100.0 | 0.0112 | 0.00145 | Yes | 0.00048 | 50% | OSHA | |
| Acetone | 250.0 | 0.00174 | 0.00027 | Yes | 0.00654 | 50% | NIOSH | |
| Ammonia | 25.00 | 0.01751 | 0.00372 | Yes | 0.21460 | 50% | NIOSH | |
| Benzene | 1.0000 | 0.00252 | 0.00033 | Yes | 0.00022 | 50% | OSHA | |
| 2-Butanone (MEK) | 200.0 | 0.00020 | 0.00004 | Yes | 0.00133 | 50% | NIOSH | |
| Carbon dioxide** | 5000 | 1006 | 902 | Yes | 441 | 0% | NIOSH | |
| Chloroform | 2.0000 | 0.00011 | 0.00001 | Yes | 0.00004 | 50% | NIOSH | |
| Dioxane | 100.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | OSHA | |
| Hydrogen Sulfide | 10.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | NIOSH | |
| Methane | NA | 1.68094 | 1.68094 | Yes | 0.00000 | 0% | NA | |
| Methanol | 200.0 | 0.00000 | 0.00000 | Yes | 0.00000 | 0% | NIOSH | |
| Methylene Chloride | 25.0 | 0.00078 | 0.00011 | Yes | 0.00121 | 50% | OSHA | |
| Propane | 1000.0 | 0.00998 | 0.00998 | Yes | 0.00000 | 0% | NIOSH | |
| Tetrachloroethane | 5.0000 | 0.00000 | 0.00000 | Yes | 0.00000 | 50% | OSHA | |
| Tetrachloroethylene | 100.0000 | 0.00037 | 0.00005 | Yes | 0.00001 | 50% | OSHA | |
| Toluene | 100.0000 | 0.00533 | 0.00070 | Yes | 0.00032 | 50% | NIOSH | |
| 1,1,1-Trichloroethane | 350.0000 | 0.00076 | 0.00010 | Yes | 0.00058 | 50% | NIOSH | |
| Xylene | 100.0000 | 0.00230 | 0.00030 | Yes | 0.00000 | 50% | OSHA | |



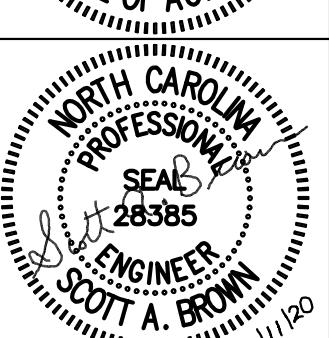
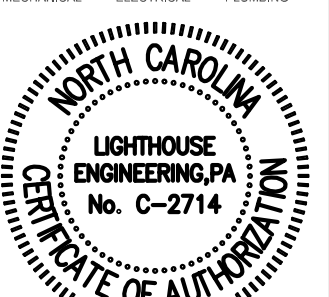
Building materials and furnishings assumed to have no VOCs and off-gassing is complete. Is IAQ acceptable at reduced outside air levels? **Yes**

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Date: 9/11/2020
Job Name: SCMH Erwin - Good Hope
Representative: Lighthouse Engineering
Engineer: PWI
Contractor: -

2018 NCMC ALLOWS FOR ASHRAE 62 IAQP THROUGH THE ENGINEERED EXCEPTION FOUND IN SECTION 403.2.

REVISIONS



Stogner Architecture, PA
ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
615 East Broad Avenue, Rockingham, North Carolina, 28379
Phone 910-895-1111
Fax 910-895-6874

GOOD HOPE HOSPITAL
ADDITION and RENOVATIONS
410 DENIM DRIVE
ERWIN, NORTH CAROLINA

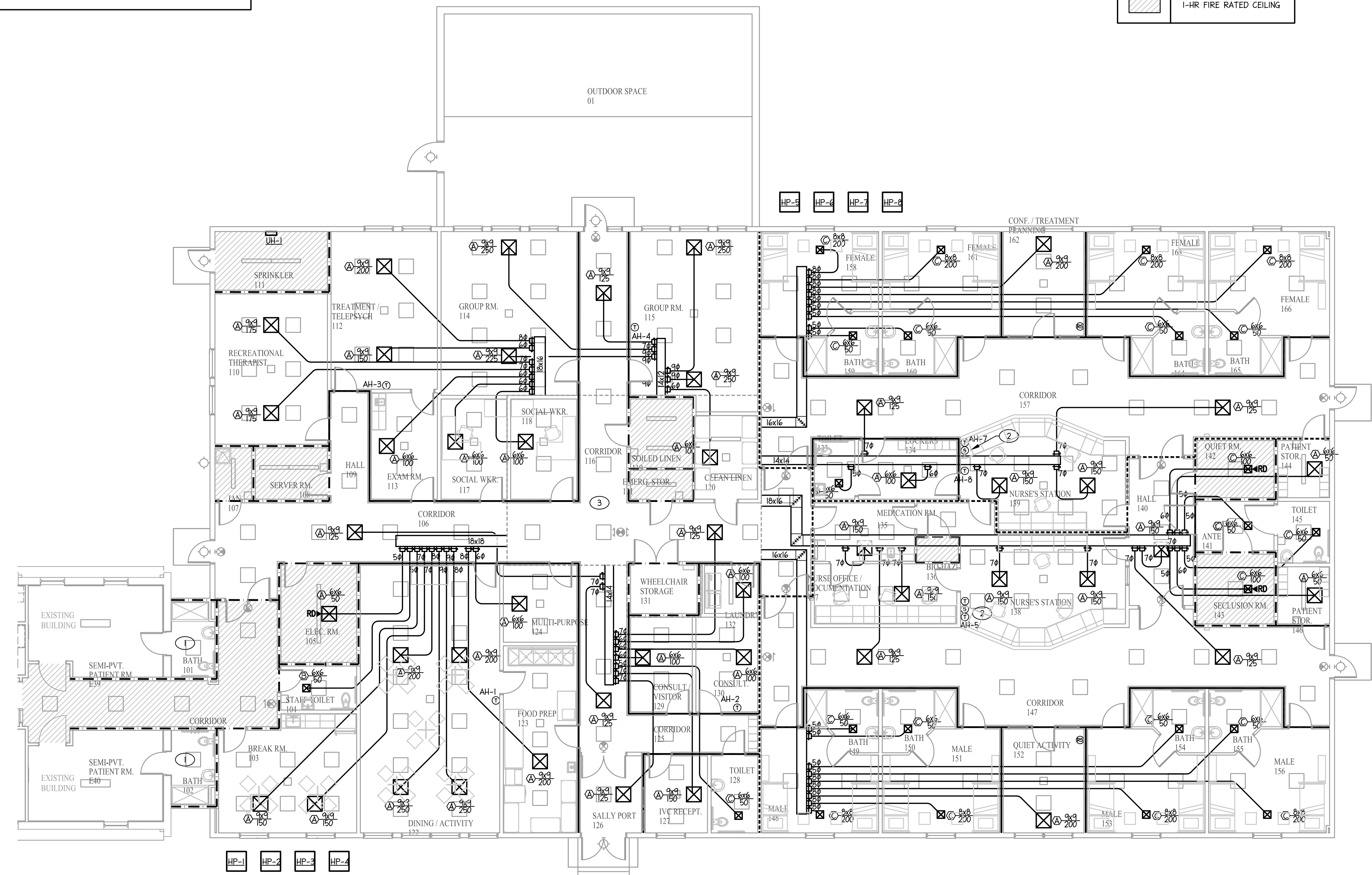
MECHANICAL DETAILS

COMM. NO.: 4535
DRAWN BY: PWI
CHECKED BY: SAB
DATE: SEPT 11, 2020
SHEET NO. MO.4

- TAGGED NOTES - THIS SHEET**
- 1 EXISTING SUPPLY AND EXHAUST TO BE EXTENDED FROM EXISTING BATHROOM TO NEW LOCATION
 - 2 AIR HANDLER SHUTOFF BUTTON TO BE TIED TO ALL UNITS FOR SHUT DOWN.
 - 3 MECHANICAL PLATFORM ABOVE. SEE SHEET M1.2 FOR DETAILS.

- WALL LEGEND: (SEE ARCH. PLANS FOR INFO)**
- 1-HR FIRE RATED PARTITION
 - 1-HR FIRE RATED SMOKE BARRIER
 - SMOKE PARTITION

- GENERAL NOTES - THIS SHEET**
1. COORDINATE FINAL T-STAT LOCATIONS WITH OWNER.
 2. ONLY ROOMS WITH A 1-HOUR FIRE RATED CEILING REQUIRE RADIATION DAMPERS.



1 FLOOR PLAN
1/8"=1'-0"

REVISIONS

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GOOD HOPE HOSPITAL
 ADDITION and RENOVATIONS
 410 DENIM DRIVE
 ERWIN, NORTH CAROLINA

MECHANICAL SUPPLY - FLOOR PLAN

COMM. NO.: 4535
 DRAWN BY: PWI
 CHECKED BY: SAB
 DATE: SEPT 11, 2020
 SHEET NO. M1.0

FOR CONSTRUCTION

A
B
C
D

1

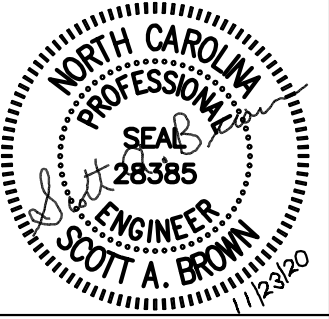
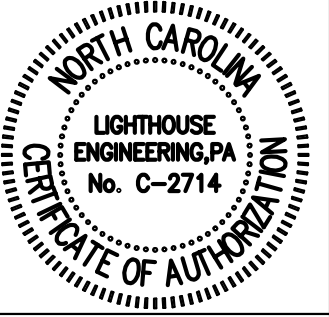
2

3

4

WALL LEGEND: (SEE ARCH. PLANS FOR INFO)
 - - - - - 1-HR FIRE RATED PARTITION
 - - - - - 1-HR FIRE RATED SMOKE BARRIER
 _____ SMOKE PARTITION

REVISIONS
 △ DHHS COMMENTS 11/23/20



| EXHAUST CALCULATIONS | |
|---|---|
| EF-1: BATH 101 & 102 = 58 SQFT X 2 CFM/SQFT = 116 CFM | EF-4: SOILED LINEN: = 84 SQFT X 2 CFM/SQFT = 168 CFM |
| STAFF TOILET 104 = 62 SQFT X 2 CFM/SQFT = 104 CFM | EF-4 PROVIDES 170 CFM |
| BATH 149, 150, 154 & 155 : = 68 SQFT X 2 CFM/SQFT = 136 CFM | EF-5: LAUNDRY: EF-5 = 48 SQFT X 2 CFM/SQFT = 96 CFM |
| BATH 159, 160, 164, & 165 = 68 SQFT X 2 CFM/SQFT = 136 CFM | EF-5 PROVIDES 100 CFM |
| TOILET 145 = 60 SQFT X 2 CFM/SQFT = 120 CFM | EF-6: TOILET 104: = 62 SQFT X 2 CFM/SQFT = 124 CFM |
| EF-1 PROVIDES 140 CFM | TOILET 128: = 66 SQFT X 2 CFM/SQFT = 132 CFM |
| EF-3: JANITOR 182: = 35 SQFT X 2 CFM/SQFT = 70 CFM | TOILET 133: = 44 SQFT X 2 CFM/SQFT = 88 CFM |
| EF-3 PROVIDES 100 CFM | EF-6 PROVIDES 140 CFM |

| DRYER VENT CALCULATION | | |
|--|----|-----------|
| Vertical Run (ft) | 10 | |
| Horizontal Run (ft) | 13 | |
| TOTAL LINEAR LENGTH (ft) | | 23 |
| # of 90° Elbows (5ft each) | 2 | |
| # of 45° Elbows (2.5ft each) | 0 | |
| DUCT FITTING EQUIVALENT LENGTH (ft) | | 10 |
| Equiv. Length (ft) Per 2018 NCMC 504.8.4.1 | | 33 |

NOTE: M.C. IS TO PROVIDE AND INSTALL PERMANENT SIGNS WITHIN 6 FT OF EACH EXHAUST DUCT CONNECTION WHICH STATE THE LINEAR DUCT LENGTH AND NUMBER OF ELBOWS FOR THE DRYER VENT RUN AS INSTALLED. EQUIVALENT LENGTH CALCULATIONS ARE BASED ON 2018 NCMC SECTION 504.8.4.1 AND ARE PROVIDED FOR CODE COMPLIANCE ONLY. WHEN USING ALTERNATE COMPLIANCE OF MFG INSTRUCTIONS, CALCULATIONS SHOULD BE BASED ON MFG EQUIVALENT LENGTH CALCULATIONS AND NOT THIS TABLE.

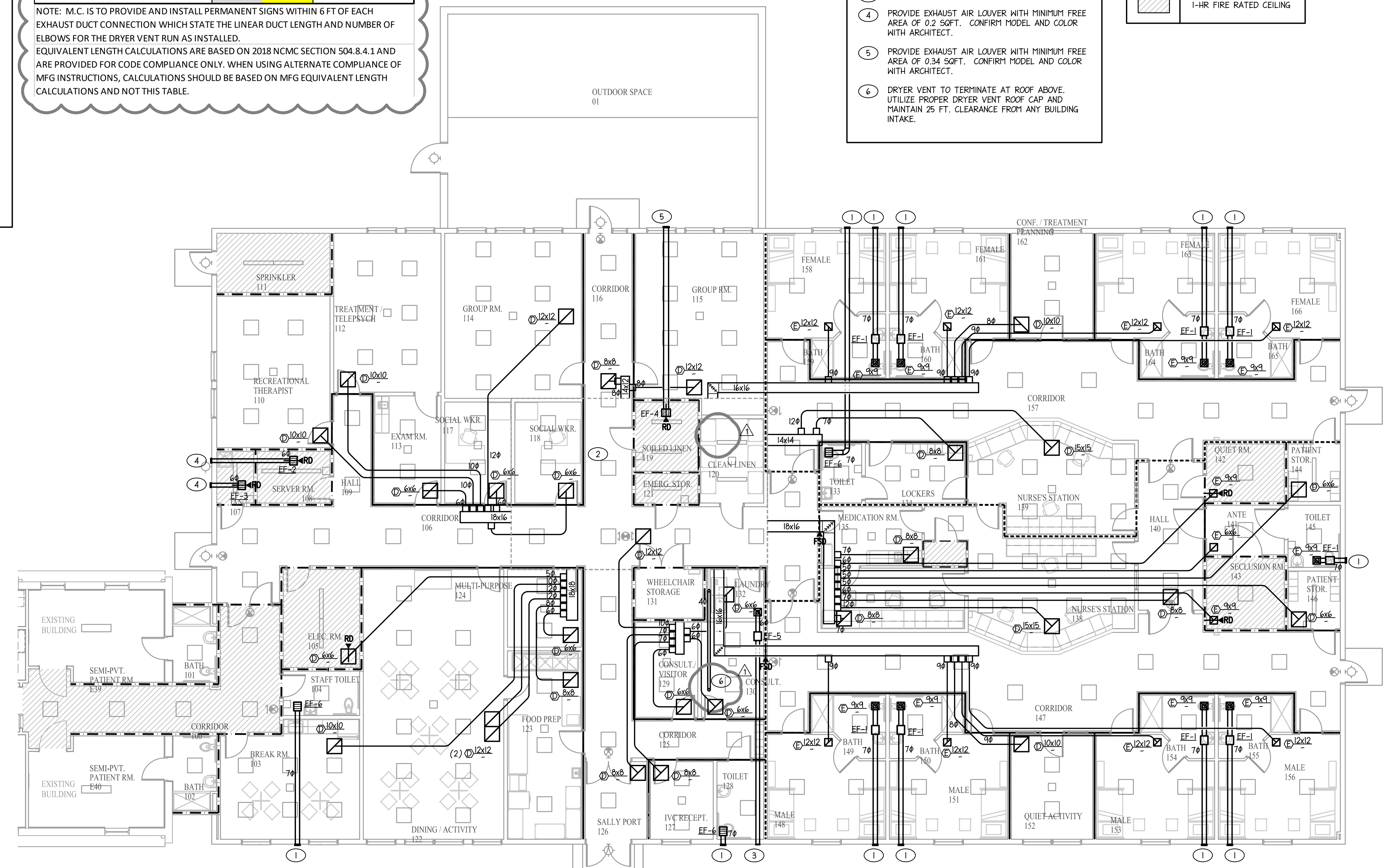
- TAGGED NOTES - THIS SHEET**
- 1 PROVIDE EXHAUST AIR LOUVER WITH MINIMUM FREE AREA OF 0.25 SQFT. CONFIRM MODEL AND COLOR WITH ARCHITECT.
 - 2 MECHANICAL PLATFORM ABOVE. SEE SHEET M1.2 FOR DETAILS.
 - 3 DRYER VENT WALL CAP.
 - 4 PROVIDE EXHAUST AIR LOUVER WITH MINIMUM FREE AREA OF 0.2 SQFT. CONFIRM MODEL AND COLOR WITH ARCHITECT.
 - 5 PROVIDE EXHAUST AIR LOUVER WITH MINIMUM FREE AREA OF 0.34 SQFT. CONFIRM MODEL AND COLOR WITH ARCHITECT.
 - 6 DRYER VENT TO TERMINATE AT ROOF ABOVE. UTILIZE PROPER DRYER VENT ROOF CAP AND MAINTAIN 25 FT. CLEARANCE FROM ANY BUILDING INTAKE.

GENERAL NOTE - THIS SHEET

1. ONLY ROOMS WITH A 1-HOUR FIRE RATED CEILING REQUIRE RADIATION DAMPERS.

LEGEND

| | |
|--|-------------------------|
| | 1-HR FIRE RATED CEILING |
|--|-------------------------|



1 FLOOR PLAN
 1/8"=1'-0"

Stogner Architecture, PA
 ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
 615 East Broad Avenue, Rockingham, North Carolina, 28379
 Phone 910-895-6874 Fax 910-895-1111

GOOD HOPE HOSPITAL
 ADDITION and RENOVATIONS
 410 DENIM DRIVE
 ERWIN, NORTH CAROLINA

MECHANICAL RETURN - FLOOR PLAN

COMM. NO.: 4535
 DRAWN BY: PWI
 CHECKED BY: SAB
 DATE: SEPT 11, 2020
 SHEET NO. M1.1

FOR CONSTRUCTION

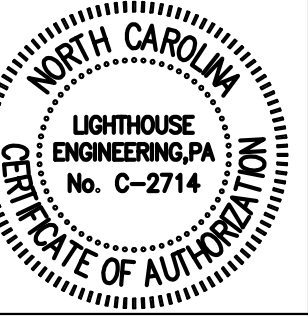
SPS-1803-001-1-0007
 MAY 28, 2020 11:45am

WALL LEGEND: (SEE ARCH. PLANS FOR INFO)

| | |
|------|-------------------------------|
| --- | 1-HR FIRE RATED PARTITION |
| ---- | 1-HR FIRE RATED SMOKE BARRIER |
| — | SMOKE PARTITION |

REVISIONS

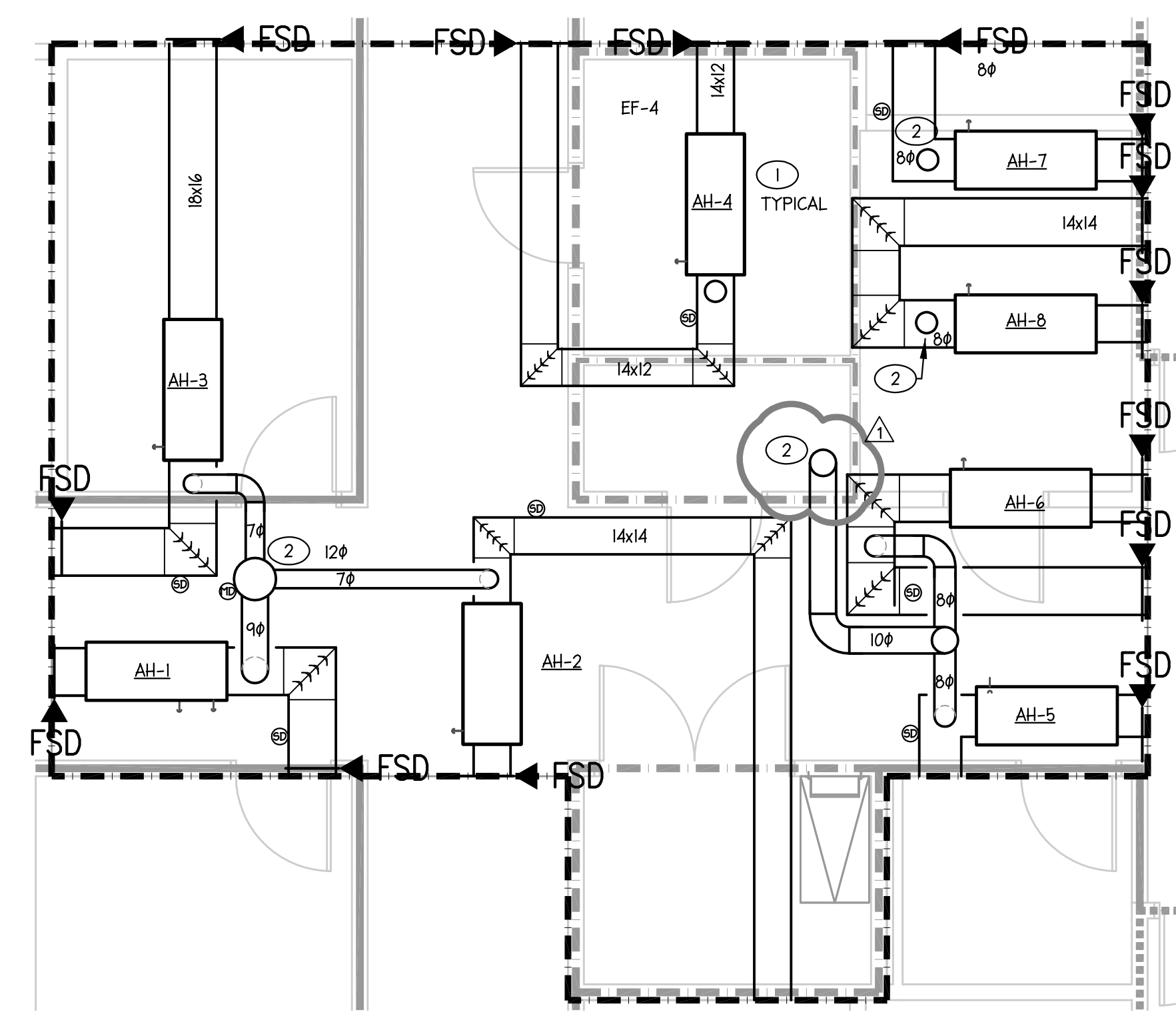
△ DHHS COMMENTS
11/23/20



TAGGED NOTES - THIS SHEET

① 1" CONDENSATE DRAIN PIPE FROM ATTIC DOWN IN OUTSIDE WALL TO FRENCH DRAIN AT GRADE.

② OUTSIDE AIR DUCT ABOVE TO ROOF. MAINTAIN 25 FT. CLEARANCE FROM ANY EXHAUST. COORDINATE ROOF PENETRATION LOCATION WITH ARCHITECT.



1 MEZZANINE PLAN
1/4" = 1'0"

Stogner Architecture, PA
ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
615 East Broad Avenue, Rockingham, North Carolina, 28379
Phone 910-895-1111 Fax 910-895-1111

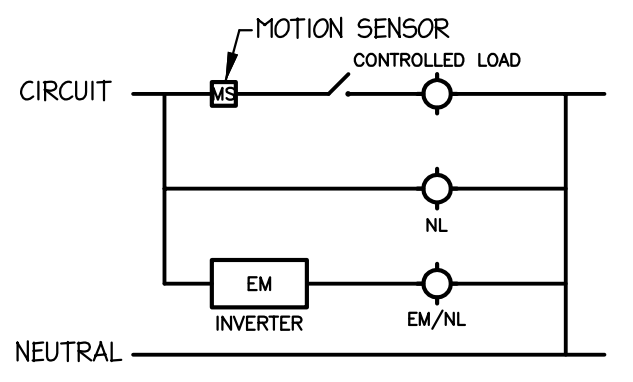
**GOOD HOPE HOSPITAL
ADDITION and RENOVATIONS**
410 DENIM DRIVE
ERWIN, NORTH CAROLINA

MECHANICAL
MEZZANINE
PLAN

COMM. NO.: 4535
DRAWN BY: PWI
CHECKED BY: SAB
DATE: SEPT 11, 2020

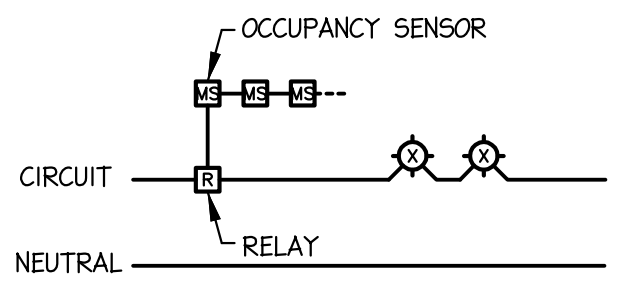
SHEET NO.
M1.2

FOR CONSTRUCTION



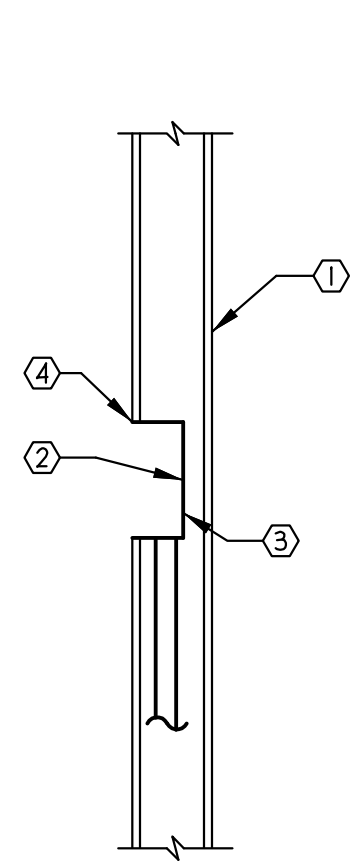
MOTION SENSOR AHEAD OF LOCAL SWITCHING FOR CONTROLLED FIXTURES ONLY.

3B LIGHTING CONTROLS
NTS



OCCUPANCY SENSOR GROUP SHALL CONTROL NON-EMERGENCY FIXTURES VIA RELAY.

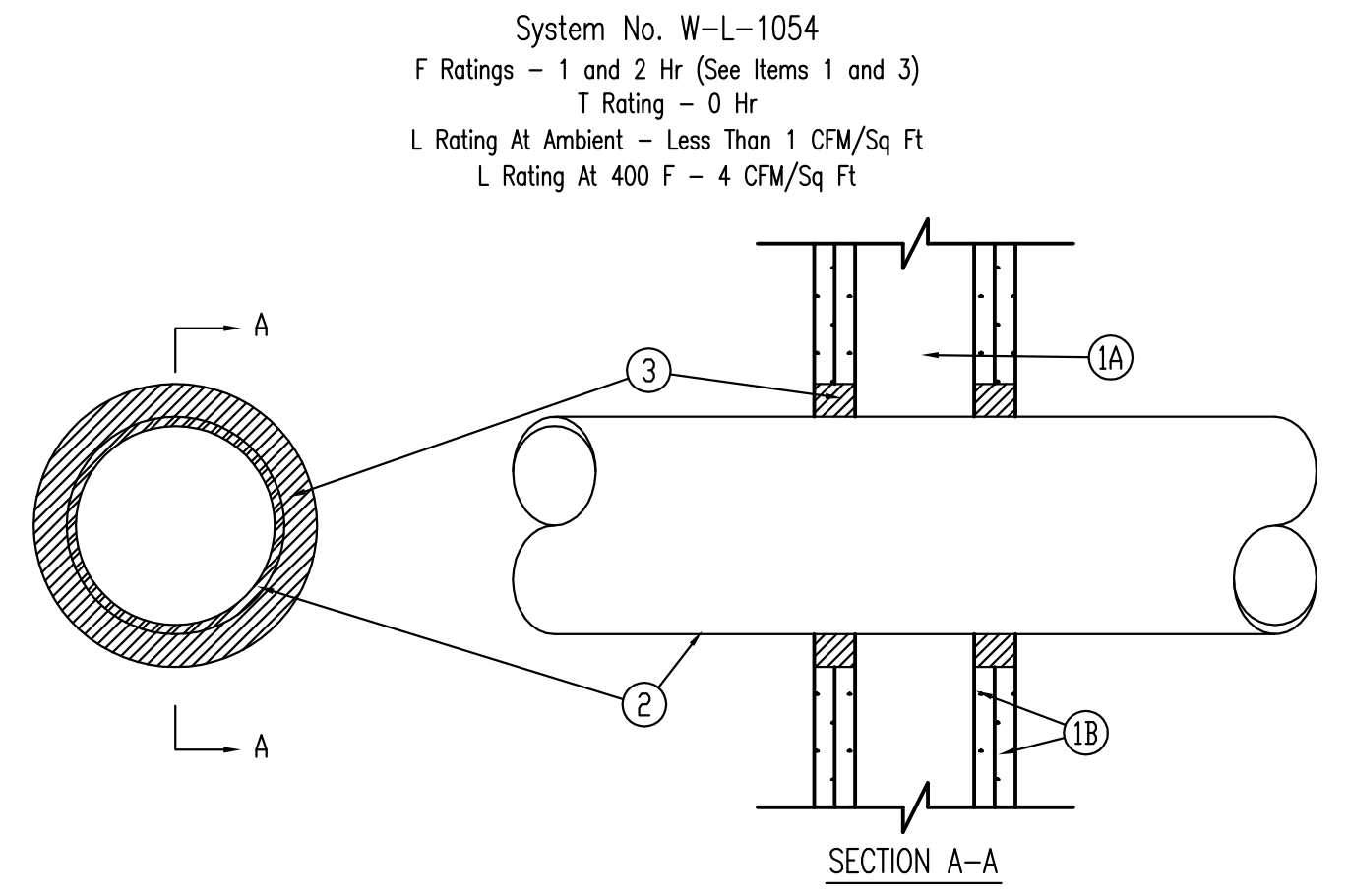
3A LIGHTING CONTROLS
NTS



NOTE: THIS DETAIL APPLIES TO 1 AND 2 HOUR WALL ASSEMBLIES WITH 4"x4" FLUSH ELECTRICAL BOXES ON OPPOSITE SIDES OF WALLS THAT HAVE LESS THAN 24" SEPARATION BETWEEN THEM AND TO ALL BOXES IN STAGGERED STUD WALLS. BOXES NOT PERMITTED BACK-TO-BACK.

2 PENETRATION DETAIL
NO SCALE

- ① 1 OR 2 HOUR WALL ASSEMBLY EQUIVALENT TO UL300 OR UL400 SERIES.
- ② ELECTRICAL OUTLET BOX, NOT MORE THAN 100 SQUARE INCHES PER 100 SQUARE FEET WALL AREA.
- ③ MOLDABLE INTUMESCENT PUTTY PADS ARE TO BE INSTALLED TO COMPLETELY COVER THE EXTERIOR SURFACES OF THE BOX WITHIN THE STUD CAVITY WITH A BALL OF THE PUTTY MATERIAL USED TO PLUG THE END OF EACH ELECTRICAL METALLIC TUBE OR CONDUIT AT ITS CONNECTION TO THE BOX.
- ④ INTUMESCENT PUTTY PAD EQUIVALENT TO 3M #MPP-45. 1/8" THICK PADS REQUIRED FOR 1 HOUR WALLS. 1/4" THICK PADS REQUIRED FOR 2 HOUR WALLS. A MAXIMUM 1/8" GAP BETWEEN BOX AND WALLBOARD.



System No. W-L-1054
F Ratings - 1 and 2 Hr (See Items 1 and 3)
T Rating - 0 Hr
L Rating At Ambient - Less Than 1 CFM/Sq Ft
L Rating At 400 F - 4 CFM/Sq Ft

- 1. Wall Assembly** The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs** Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom. 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC. When steel studs are used and the diam. of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. wider and 4 to 6 in. higher than the diam. of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. clearance is present between the penetrating item and the framing on all four sides.
 - B. Gypsum Board*** 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max. diam. of opening is 32-1/4 in. for steel stud walls. Max. diam. of opening is 14-1/2 in. for wood stud walls.
- The F Rating of the firestop system is equal to the fire rating of the wall assembly.**
- 2. Through-Penetrants** One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. An annular space of min 0 in. to max 2-1/4 in. is required within firestop system. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - A. Steel Pipe** Nom. 30 in. diam. (or smaller) schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe** Nom. 30 in. diam. (or smaller) cast or ductile iron pipe.
 - C. Conduit** Nom. 4 in. diam. (or smaller) steel electrical metallic tubing or 6 in. diam. steel conduit.
 - D. Copper Tubing** Nom. 6 in. diam. (or smaller) Type L (or heavier) copper tubing.
 - E. Copper Pipe** Nom. 6 in. diam. (or smaller) regular (or heavier) copper pipe.
- 3. Fill, Void or Cavity Material* - Sealant** Min 5/8 in. or 1-1/4 in. thickness of fill material applied within the annulus, flush with both surfaces of wall for 1 or 2 hr walls, respectively. At the point contact location between pipe and wall, a min 1/2 in. diam. bead of fill material shall be applied at the pipe covering/wall interface on both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC - FS-One Sealant
*Bearing the UL Classification Mark

1 PENETRATION DETAIL
NO SCALE

LIGHTING FIXTURE SCHEDULE

| MARK | MANUF. | CATALOG NUMBER | LAMP DATA | | VOLTS | BALLAST DATA | | INPUT WATTS | MOUNTING | DESCRIPTION |
|------|---------------------|------------------------------|-----------|------|---------|--------------|------|-------------|-----------|---|
| | | | NO. | TYPE | | NO. | TYPE | | | |
| A | COLUMBIA | LCAT22-35ML-G-EDU-FK22 | - | LED | MULTI | - | - | 29 | RECESSED | 2' X 2' LED CONTEMPORARY RECESSED TROFFER. |
| B | COLUMBIA | LJT22-35HL-G-FS-AI2-EDU-FK22 | - | LED | MULTI | - | - | 33 | RECESSED | 2' X 2' LED RECESSED TROFFER WITH LENS. |
| C | COLUMBIA | LCAT22-35ML-5M-EDU | - | LED | MULTI | - | - | 29 | SURFACE | 2' X 2' LED CONTEMPORARY SURFACE MOUNT TROFFER. |
| D | NEW STAR LIGHTING | 57R22-A/A-L4-35-A/A-UN | - | LED | MULTI | - | - | 50 | RECESSED | 2' X 2' TAMPER RESISTANT, ANTI-LIGATURE, LED RECESSED TROFFER. |
| DN | NEW STAR LIGHTING | 57R22-A/A-L4352C-A/A-UN-LN | - | LED | MULTI | - | - | 50 | RECESSED | 2' X 2' TAMPER RESISTANT, ANTI-LIGATURE, LED RECESSED TROFFER WITH NIGHT LIGHT. |
| F | NEW STAR LIGHTING | 5322-AL4351-A/A-UN | - | LED | MULTI | - | - | 50 | SURFACE | 2' X 2' TAMPER RESISTANT, ANTI-LIGATURE, LED SURFACE MOUNT TROFFER. SEE NOTE 7 BELOW. |
| G | COLUMBIA | LCL4-35ML-EU | - | LED | MULTI | - | - | 42 | SURFACE | 48" LENSED LED STRIPLIGHT. |
| H | COLUMBIA | LCL4-35ML-EU-LCLNG4 | - | LED | MULTI | - | - | 42 | SURFACE | 48" LENSED LED STRIPLIGHT WITH WIRE GUARD FOR RISER ROOM. |
| J | COLUMBIA | LCL8-35ML-EU-CSHC | - | LED | MULTI | - | - | 84 | PENDANT | 96" LENSED LED STRIPLIGHT, CHAIN HUNG. |
| U | COLUMBIA | CUC4-EDI20 | - | LED | MULTI | - | - | 25 | SURFACE | 48" LED UNDERCOUNTER TASK LIGHT WITH LENS, COORDINATE MOUNTING WITH MILLWORK TO BE PROVIDED. |
| U2 | COLUMBIA | CUC2-EDI20 | - | LED | MULTI | - | - | 14 | SURFACE | 24" LED UNDERCOUNTER TASK LIGHT WITH LENS, COORDINATE MOUNTING WITH MILLWORK TO BE PROVIDED. |
| X | HUBBELL | GSP2-24L-30-3K7-3-UNV-BL | - | LED | MULTI | - | - | 30 | WALL | EXTERIOR - DARK SKY QUARTERSPHERE WALL PACK W/ DIE-CAST HOUSING. |
| EX | DUAL LITE (HUBBELL) | EURWKE | - | LED | 120/277 | - | - | 4 | UNIVERSAL | ADMINISTRATION / FRONT WING - THERMOPLASTIC LED EXIT SIGN WITH RED LETTERS AND WHITE HOUSING. |
| EX-V | DUAL LITE (HUBBELL) | SEWLRW | - | LED | 120/277 | - | - | 4 | UNIVERSAL | PATIENT WING - VANDAL RESISTANT LED EXIT SIGN WITH RED LETTERS AND WHITE HOUSING. |

- NOTES:
1. CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF FIXTURE DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY FIXTURES. INFORMATION ON ALTERNATE FIXTURES PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT FIXTURE (OR THE ALTERNATE PACKAGE AS A WHOLE).
 2. EXIT LIGHTING FIXTURES SHALL BE CIRCUITED TO AN UNSWITCHED LEG OF THE LOCAL LIGHTING CIRCUIT, UNLESS NOTED OTHERWISE.
 3. PROVIDE DISCONNECT FOR LUMINAIRES WITH LINEAR FLUORESCENT LAMPS AND/OR SERVICEABLE BALLASTS PER NEC 410.130(G).
 4. WHERE FIXTURE IS LOCATED RECESSED IN A RATED FLOOR/CEILING ASSEMBLY PROVIDE WITH TENNAT 1-HOUR OR 2-HOUR FIRE RATED LIGHT COVER TO MATCH ASSEMBLY RATING. SEE ARCHITECTURAL SHEET G1.4, BY OTHERS, FOR FURTHER INFORMATION ON RATED CEILING LOCATIONS.
 5. COLOR TEMPERATURES OF COMPACT FLUORESCENT AND LED LAMPS SHALL BE CONFIRMED WITH THE ARCHITECT.
 6. PROVIDE BODINE "GTD" (OR EQUAL) FOR FIXTURES INDICATED TO HAVE NORMAL AND EMERGENCY CIRCUIT FEEDS, UNLESS FIXTURE HAS A STANDARD OPTION FOR EMERGENCY CIRCUIT CONNECTION.
 7. PROVIDE DIMMING CONTROL FOR THIS FIXTURE IN ROOMS I42 AND I43; SEE SHEET EI.2 FOR FURTHER INFORMATION.

LIGHTING SYSTEMS
ENERGY CONSERVATION CODE SECTION 405

| | | |
|--|--|--|
| THIS PROJECT IS CLASSIFIED AS - | <input type="checkbox"/> RESIDENTIAL | <input checked="" type="checkbox"/> COMMERCIAL (SEE BELOW) |
| LIGHTING POWER DENSITY CALCULATION COMPLIANCE | INTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE 405.4.2. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION. INTERIOR WATTAGE SPECIFIED VS. ALLOWED <u>7,153</u> VS. <u>12,471</u> EXTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE 405.6.2. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION. TRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED <u>210</u> VS. <u>600</u> NONTRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED <u>NA</u> VS. <u>NA</u> | |
| DESIGNER STATEMENT: | TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE LIGHTING SYSTEMS REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE, SECTION 505 AND ANY LOCAL AMENDMENTS THEREOF. SIGNED: _____ NAME: <u>PAUL SCOTT</u> TITLE: <u>ELECTRICAL ENGINEER</u> | |
| SECTION 406 COMPLIANCE - | <input type="checkbox"/> N/A | <input checked="" type="checkbox"/> 406.12 <input type="checkbox"/> 406.13 <input type="checkbox"/> 406.14 <input type="checkbox"/> 406.15 <input type="checkbox"/> 406.16 |

ELECTRICAL ABBREVIATIONS

| | |
|------|---|
| 18" | DIMENSION INDICATES HEIGHT ABOVE FINISHED FLOOR AT WHICH CENTER OF DEVICE IS TO BE MOUNTED. |
| AFF | ABOVE FINISHED FLOOR. |
| AFG | ABOVE FINISHED GRADE. |
| E.C. | ELECTRICAL CONTRACTOR. |
| FPN | FUSE PER EQUIPMENT NAMEPLATE REQUIREMENTS. |
| G.C. | GENERAL CONTRACTOR. |
| M.C. | MECHANICAL CONTRACTOR. |
| P.C. | PLUMBING CONTRACTOR. |
| WP | INDICATES DEVICE TO HAVE WEATHERPROOF COVER. |
| UON | UNLESS OTHERWISE NOTED. |
| FACP | FIRE ALARM CONTROL PANEL. |
| NL | NIGHT LIGHT, LIGHT NOT SWITCHED. |

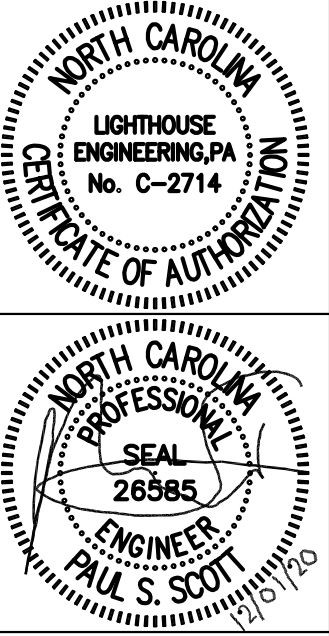
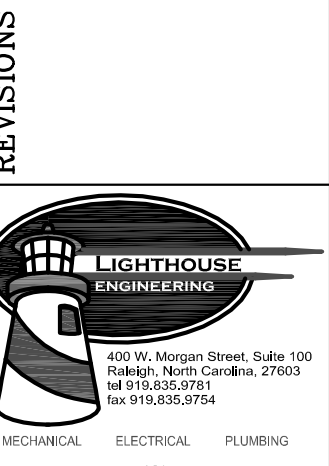
SYSTEM COMMISSIONING NOTES (NCECC C408)

1. ALL NON-EXEMPT LIGHTING SYSTEMS AND CONTROLS SHALL BE ADJUSTED, PROGRAMMED AND TESTED PER C408.3 TO ENSURE PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND THE MANUFACTURER'S INSTRUCTIONS
2. DOCUMENTATION, INCLUDING CUTSHEETS, MANUALS, TEST REPORTS, CALIBRATION REQUIREMENTS AND A NARRATIVE OF SYSTEM INTENDED OPERATION, SHALL BE PROVIDED TO THE OWNER PER C408.3.2.
3. THE STATEMENT OF SYSTEM COMMISSIONING (NCECC APPENDIX C1) SHALL BE COMPLETED AND PROVIDED TO THE OWNER AND CODE OFFICIAL PER C408.4.

| Drawing Sheet List | |
|--------------------|------------------------------------|
| Number | Title |
| E0.0 | ELECTRICAL LIGHT FIXTURE SCHEDULES |
| E0.1 | ELECTRICAL LEGEND AND NOTES |
| E1.0 | ELECTRICAL POWER - FLOOR PLAN |
| E1.1 | ELECTRICAL - PLATFORM PLAN |
| E1.2 | ELECTRICAL LIGHTING - FLOOR PLAN |
| E2.0 | ELECTRICAL PANEL SCHEDULES |
| E2.1 | ELECTRICAL PANEL SCHEDULES |
| E3.0 | ELECTRICAL RISER DIAGRAM |

FOR CONSTRUCTION

DHHS COMMENTS
11/23/20



Stogner Architecture, PA
ARCHITECTURE - CONSTRUCTION MANAGEMENT - DESIGN BUILD
615 East Broad Avenue, Rockingham, North Carolina, 28379
Phone 910-895-6874 Fax 910-895-1111

GOOD HOPE HOSPITAL
ADDITION and RENOVATIONS
410 DENIM DRIVE
ERWIN, NORTH CAROLINA

ELECTRICAL LIGHTING
FIXTURE SCHEDULES

COMM. NO.: 4535
DRAWN BY: JRS
CHECKED BY: PSS
DATE: SEPT 11, 2020
SHEET NO.
E0.0

GENERATOR SYSTEM GENERAL NOTES

- A SIGN SHALL BE PLACED AT THE SERVICE ENTRANCE EQUIPMENT INDICATING THE TYPE AND LOCATION OF ON-SITE EMERGENCY POWER SOURCES.
- TESTING OF THE GENERATOR SHALL CONFORM TO THE STANDARDS SET FORTH IN NFPA 110.
- ALL BOXES, ENCLOSURES, PANELS AND RECEPTACLES FOR EMERGENCY CIRCUITS SHALL BE PERMANENTLY MARKED SO THEY WILL BE READILY IDENTIFIED AS A COMPONENT OF AN EMERGENCY CIRCUIT OR SYSTEM (PAINTED RED).
- EMERGENCY GENERATOR OPERATING INSTRUCTIONS SHALL BE POSTED AT A LOCATION READILY ACCESSIBLE TO THE PERSONS OPERATING OR MAINTAINING THE GENERATOR.
- A DIAGRAM SHOWING LOCATIONS OF THE FUEL SHUTOFF VALVES SHALL BE POSTED AT THE ENGINE.
- THE SERVICE DISCONNECT FOR ANY GENERATOR SHALL BE LOCATED REMOTE FROM THE GROUPING OF THE NORMAL POWER SERVICE ENTRANCE DISCONNECTING MEANS.
- ANY GENERATOR SERVICE DISCONNECTING MEANS IS EXEMPT FROM THE MAXIMUM TOTAL OF SIX DISCONNECTS ALLOWED.
- EMERGENCY SYSTEM WIRING WILL BE MECHANICALLY PROTECTED WHERE INSTALLED AS BRANCH CIRCUITS IN PATIENT CARE AREAS AS REQUIRED BY 2017 NEC 517.13(A)(B).

ELECTRICAL DEMOLITION NOTES

- DRAWINGS ARE BASED ON EXISTING PLANS AND NON-DESTRUCTIVE FIELD INVESTIGATIONS. THE CONTRACTOR SHALL VISIT THE EXISTING BUILDING AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS. THE CONTRACTOR SHALL EXAMINE RELATED DRAWINGS TO AVOID CONFLICTS.
- PROVIDE ELECTRICAL DEMOLITION WORK AS NECESSARY TO INSTALL NEW WORK. ELECTRICAL CONTRACTOR SHALL REROUTE AND RECONNECT ANY CIRCUITS THAT WILL REMAIN IN USE BUT INTERFERES WITH NEW CONSTRUCTION.
- MATERIAL BEING REMOVED UNDER DEMOLITION (AND NOT TO BEING RELOCATED) SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED COMPLETELY FROM THE SITE, UNLESS OTHERWISE NOTED.
- EXISTING CONDUITS THAT WILL NOT BE REUSED SHALL BE REMOVED IN CEILING PLENUMS AND WALLS. OTHERS MAY BE ABANDONED BELOW FLOOR SLABS. CONTRACTOR SHALL REMOVE ALL WIRING FROM ABANDONED CONDUITS. CUT-OFF ABANDONED CONDUITS BELOW FLOOR AND GROUT FLUSH WITH NON-CONTRACTING GROUT.
- ABANDONED DEVICES SHALL BE REMOVED WITH THE JUNCTION BOX. WALLS SHALL BE PATCHED TO MATCH ADJACENT SURFACES.
- CONTRACTOR SHALL EXERCISE CARE IN REMOVING DEMOLITION ITEMS AND SHALL REPAIR OR REPLACE AT HIS COST ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION AND EQUIPMENT TO REMAIN.
- SCHEDULE WORK IN EXISTING BUILDING AT TIME CONVENIENT TO OWNER.
- DEVICES TO BE REMOVED AND NOT REINSTALLED SHALL HAVE JUNCTION BOXES, CONDUCTORS, CONDUIT AND ALL ASSOCIATED APPURTENANCES REMOVED BACK TO LAST ACTIVE DEVICE OR PANELBOARD.

GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES.
- ALL MATERIAL, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS OF THE UNDERWRITER'S LABORATORIES, INC., AND THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION.
- ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR. DRAWINGS ARE DIAGNOSTIC ONLY AND INDICATE ONLY THE GENERAL ARRANGEMENT. SEE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.
- ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.
- ELECTRICAL CONTRACTOR SHALL MAKE ALL ELECTRICAL POWER CONNECTIONS TO HVAC, PLUMBING AND OTHER EQUIPMENT AS REQUIRED.
- A COMPLETE GROUNDING SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH ARTICLE 250 OF THE NEC, AND AS SHOWN ON THE DRAWINGS.
- ALL CUTTING AND PATCHING OF WALLS AND FLOORS FOR ELECTRICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- CONDUCTORS #8 AND SMALLER SHALL BE COPPER RATED AT NOT LESS THAN 600 VOLTS. CONDUCTORS #6 AND LARGER MAY BE ALUMINUM RATED AT NOT LESS THAN 600 VOLTS. MINIMUM SIZE SHALL BE #14 AWG WITHIN RESIDENTIAL UNITS AND #12 ELSEWHERE. ALL WIRE #8 AWG AND LARGER SHALL BE STRANDED. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID, UNLESS OTHERWISE NOTED. BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE THHN OR THWN AS REQUIRED.
- ALL WIRING SHALL BE INSTALLED IN GALVANIZED RIGID CONDUIT, INTERMEDIATE METAL CONDUIT, OR EMT, EXCEPT AS ALLOWED BELOW. EMT SHALL NOT BE USED IN OR UNDER CONCRETE SLABS, OR IN MASONRY WALLS. USE SCHEDULE 40 PVC OUTDOORS WHERE NOT SUBJECT TO PHYSICAL DAMAGE OR BELOW FLOOR SLAB. MINIMUM CONDUIT SIZE TO BE 1/2". TYPE MC AND AC CABLE MAY BE USED WHERE PERMISSIBLE BY NEC. FLEXIBLE CONDUIT SHALL BE USED FOR CONNECTIONS TO VIBRATING EQUIPMENT AND LUMINAIRES, BUT SHALL NOT EXCEED 6' IN LENGTH.
- PROVIDE A PULLWIRE IN ALL EMPTY CONDUITS.
- PROVIDE A TYPED DIRECTORY IN ALL PANELBOARDS CLEARLY DESCRIBING THE LOCATION OF AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL PANELBOARDS AND DISCONNECT SWITCHES, WHITE LETTERS ON BLACK BACKGROUND.
- FUSES 0 - 600 AMPS SHALL BE UL CLASS "RK-1" LOW PEAK DUAL ELEMENT TIME DELAY WITH 200,000 AMPERE INTERRUPTING RATING AS MANUFACTURED BY BUSSMANN, UNLESS NOTED OTHERWISE.
- ALL TERMINALS/LUGS SHALL BE 60/75% RATED. ALL TERMINALS, SPLICING CONNECTORS, LUGS, ETC SHALL BE IDENTIFIED FOR USE WITH THE MATERIAL (CU/AL) OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED.
- VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF INCOMING ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO PROJECT START-UP. NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.
- E.C. TO VERIFY DEVICE PLATE COLOR AND MATERIAL WITH ARCHITECT PRIOR TO PURCHASE. ALL COVERPLATES IN PATIENT CARE SHALL BE STAINLESS STEEL.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ELECTRICAL EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION (PAINT, SPACKLE, ETC.).
- PENETRATIONS OF REQUIRED SMOKE PARTITIONS SHALL BE SEALED USING METHODS APPROVED UNDER THE STATE BUILDING CODE. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO ENSURE THAT THIS SMOKE STOPPING IS ACCOMPLISHED.
- WHERE PENETRATIONS ARE MADE THROUGH A REQUIRED FIRE-RESISTIVE WALL, FLOOR, OR PARTITION FOR THE PURPOSE OF RUNNING RACEWAY CARRYING ELECTRICAL, TELEPHONE, TELEVISION, OR LOCAL COMMUNICATION AND/OR SIGNALING CIRCUITS, THE OPENING AROUND THE RACEWAY SHALL BE FIRE STOPPED PER THE STATE BUILDING CODE. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO INSURE THAT THIS FIRE STOPPING IS ACCOMPLISHED. USE APPROVED U.L. OR EQUIVALENT ASSEMBLIES.
- IN REQUIRED FIRE RATED WALLS AND PARTITIONS, OPENINGS FOR INSTALLATION OF BOXES THAT ARE GREATER THAN 16 SQUARE INCHES SHALL BE PROTECTED AS REQUIRED BY U.L. COORDINATE CLOSELY WITH THE GENERAL CONTRACTOR TO INSURE THAT THE INTEGRITY OF THE U.L. RATING IS MAINTAINED.
- WHERE A HOME RUN IS SHOWN THE CIRCUIT SHALL BE INSTALLED IN A DEDICATED CONDUIT, DO NOT COMBINE WITH OTHER CIRCUITS. WHERE A CIRCUIT HOMERUN IS NOT SHOWN, THE CONTRACTOR SHALL COMBINE CIRCUITS AS FOLLOWS: A MAXIMUM OF THREE 20A BRANCH CIRCUITS MAY BE COMBINED IN A COMMON HOMERUN WITH SEPARATE NEUTRALS FOR A MAXIMUM TOTAL OF SIX CURRENT CARRYING CONDUCTORS. ALL BRANCH CIRCUITS LARGER THAN 20A SHALL BE SEPARATELY HOMERUN TO THE PANEL.
- COORDINATE WITH THE CABLE TV AND TELEPHONE UTILITIES FOR SERVICE ENTRANCE AND CABLING REQUIREMENTS PRIOR TO ANY PURCHASING. INSTALLATION MUST COMPLY WITH THEIR RESPECTIVE REGULATIONS AND REQUIREMENTS.
- ALL RECEPTACLES SHALL BE TAMPER RESISTANT AND SPECIFICATION GRADE EQUAL TO HUBBELL BR20 SERIES; GROUND FAULT RECEPTACLES SHALL BE EQUAL TO HUBBELL GFR-5362. LIGHTING SWITCHES SHALL BE SPECIFICATION GRADE EQUAL TO HUBBELL I200 SERIES. PROVIDE HIGH-ABUSE SECURITY WALL PLATES IN ALL PATIENT AREAS. ENSURE DEVICES ARE INSTALLED IN COMPLIANCE WITH ANSI A117.1 FOR ADA REQUIREMENTS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL ELECTRICAL EQUIPMENT, DEVICES, ETC. IN ACCORDANCE WITH FACILITY REQUIREMENTS AND REGULATIONS.
- OUTLETS SHALL BE STAGGERED BETWEEN STUDS TO REDUCE SOUND TRANSMISSION.
- ALL EXTERIOR FIXTURES AND DEVICES SHALL BE RATED FOR OPERATION AT 0° F AND SHALL BE DAMP OR WET LABELED AS REQUIRED.
- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL ELECTRICAL EQUIPMENT, DEVICES, ETC. IN ACCORDANCE WITH LOCAL SEISMIC CODE REQUIREMENTS. PROVIDE SEISMIC RESTRAINTS, ACCESSORIES AND INSTALLATION DETAIL AS REQUIRED.
- ALL QUESTIONS MUST BE SUBMITTED IN RFI FORMAT TO THE ARCHITECT AND MUST BE ADDRESSED BY THE APPROPRIATE DESIGNER OF RECORD PRIOR TO BECOMING A PROPOSED CHANGE ORDER.
- THE MOTION SENSOR LAYOUT SHALL BE REVIEWED AND ADJUSTED BY THE ACTUAL DEVICE MANUFACTURER WHICH THE CONTRACTOR SELECTS. THE CONTRACTOR SHALL PROVIDE SHIP DRAWINGS FOR THE SYSTEM TO THE ENGINEER FOR REVIEW, PRIOR TO PURCHASE AND INSTALLATION.
- REVIEWS AND USE OF THESE PLANS SHALL BE DONE IN CONJUNCTION AND COORDINATED WITH ALL OTHER TRADES; THESE DRAWINGS SHALL NOT BE REVIEWED OR USED AS STANDALONE DOCUMENTS.
- PROVIDE HOSPITAL GRADE RECEPTACLES IN ALL EXAM ROOMS AND PATIENT BEDROOMS, EQUAL TO HUBBELL 8300 SERIES.
- WIRING METHODS IN PATIENT CARE AREAS SHALL INCLUDE AN INSULATED GROUNDING CONDUCTOR INSTALLED IN METAL RACEWAYS IN ACCORDANCE WITH ARTICLE 517 OF THE NEC.
- EQUIPMENT REQUIRING BACKUP POWER FOR ORDERLY SHUTDOWN UPON LOSS OF UTILITY POWER SHALL BE PROVIDED WITH INTEGRAL BATTERY BACKUP AS REQUIRED.

GENERAL NOTE 22 ADDITIONAL ITEM:

RECEPTACLES SHALL BE COLORED AS FOLLOWS: (COVERPLATES SHALL MATCH EXCEPT WHERE STAINLESS STEEL IS REQUIRED).

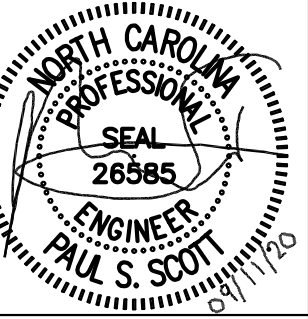
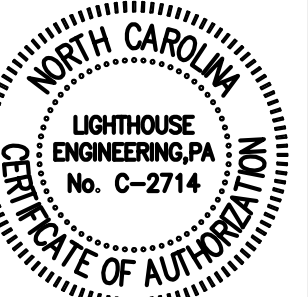
- * CRITICAL BRANCH SHALL BE RED.
- * LIFE SAFETY BRANCH SHALL BE ORANGE.
- * EQUIPMENT BRANCH SHALL BE BLUE.
- * OTHERS SHALL BE IVORY.

FOR CONSTRUCTION

ELECTRICAL SYMBOL LEGEND

| | |
|--|---|
| | CIRCUIT CONDUCTORS CONCEALED IN FLOOR, WALL OR CEILING. |
| | ARROWHEAD INDICATES HOMERUN TO PANEL NOTED. |
| | INDICATES HOT LEG OF CIRCUIT TO BE CARRIED OVER TO NEXT DEVICE. SEE PLANS FOR CONTROL SCHEME. |
| | JUNCTION BOX CEILING MOUNTED. |
| | JUNCTION BOX FLOOR MOUNTED. |
| | JUNCTION BOX WALL MOUNTED AT HEIGHT INDICATED ON DRAWINGS. |
| | SINGLE POLE SWITCH, 20A, 120/277 VOLT, 46" A.F.F. TO CENTER. *3" INDICATES 3-WAY SWITCH. *4" INDICATES 4-WAY SWITCH. *D" INDICATES DIMMER SWITCH OF TYPE TO SUIT LOAD. *H" INDICATES HINGE MOUNTED PUSH OFF SWITCH. *K" INDICATES KEY OPERATED SWITCH. *M" INDICATES 120V, 20A MOTOR RATED TOGGLE SWITCH. |
| | INDICATES FLUORESCENT FIXTURES DUAL SWITCHED, INBOARD/OUTBOARD SWITCHED SEPARATELY. |
| | SINGLE RECEPTACLE, 20 AMP, 120 VOLT, 18" A.F.F. TO CENTER. |
| | DUPLEX RECEPTACLE, 15 AMP, 120 VOLT, 18" A.F.F. TO CENTER. *GFI" INDICATES GROUND FAULT CIRCUIT INTERRUPTER TYPE. *WP" INDICATES WEATHERPROOF. *EWC" INDICATES MOUNT GFI RECEPTACLE BESIDE ENCLOSURE OF ELECTRIC WATER COOLER. GFI RESET MUST BE READILY ACCESSIBLE. |
| | QUADRUPLEX RECEPTACLE, AS ABOVE, 18" A.F.F. |
| | DUPLEX RECEPTACLE WITH POWER CONTROLLED VIA REMOTE SWITCH (NOT IN ROOM), 18" A.F.F. |
| | DUPLEX RECEPTACLE, AS ABOVE, MOUNTED 6" ABOVE COUNTER TOP OR 4" ABOVE BACKSPLASH, AS APPROPRIATE, OR AT HEIGHT INDICATED. |
| | DUPLEX RECEPTACLE, AS ABOVE, MOUNTED 6" ABOVE COUNTER TOP OR 4" ABOVE BACKSPLASH, AS APPROPRIATE, OR AT HEIGHT INDICATED, WITH GFI PROTECTION. |
| | RECESSED FLUSH FLOOR DUPLEX RECEPTACLE WITH BRASS COVERPLATE. COORDINATE EXACT FINISH WITH ARCHITECT AND OWNER. |
| | 208V RECEPTACLE, SEE PLANS FOR NEMA CONFIGURATION. |
| | TELEPHONE OUTLET, 18" A.F.F. TO CENTER OR ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE, UNLESS OTHERWISE NOTED. COORDINATE CONDUIT REQUIREMENTS AND ROUTING WITH SYSTEM INSTALLER. ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE. |
| | DATA OUTLET, 18" A.F.F. TO CENTER OR ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE, UNLESS OTHERWISE NOTED. COORDINATE CONDUIT REQUIREMENTS AND ROUTING WITH SYSTEM INSTALLER. |
| | TELEPHONE/DATA OUTLET, 18" A.F.F. TO CENTER OR ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE, UNLESS OTHERWISE NOTED. COORDINATE CONDUIT REQUIREMENTS AND ROUTING WITH SYSTEM INSTALLER. |
| | HEAVY DUTY FUSIBLE/NON-FUSIBLE DISCONNECT SWITCH, NUMBERS INDICATE FRAME SIZE, NUMBER OF POLES AND FUSING. PROVIDE NEMA 1 ENCLOSURE INSIDE. PROVIDE NEMA 3 ENCLOSURE FOR ALL SWITCHES LOCATED OUTSIDE. *FPN" INDICATES FUSE PER EQUIPMENT NAMEPLATE *NF" INDICATES NON-FUSED. *MS" INDICATES MOTOR STARTER OF TYPE TO SUIT LOAD. |
| | 208V/120V PANEL, SURFACE OR RECESS MOUNTED, SEE SCHEDULE FOR DETAILS. |
| | FAN, PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. PROVIDE DISCONNECTING MEANS AS REQUIRED. |
| | WATER HEATER, PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. PROVIDE DISCONNECTING MEANS AS REQUIRED. |
| | TROFFER LIGHTING FIXTURE, SEE FIXTURE SCHEDULE FOR DETAILS. |
| | STRIP LIGHTING FIXTURE, SEE FIXTURE SCHEDULE FOR DETAILS. |
| | WALL MOUNTED LIGHTING FIXTURE, SEE FIXTURE SCHEDULE FOR DETAILS. |
| | SURFACE, RECESSED OR GROUND MOUNTED LIGHTING FIXTURE, SEE FIXTURE SCHEDULE FOR DETAILS. |
| | ELECTRIC UTILITY METER LOCATION. |
| | CABLE TV OUTLET, 18" A.F.F. TO CENTER, UNLESS OTHERWISE NOTED. |
| | CARD READER ACCESS, COORDINATE REQUIREMENTS AND FINAL QUANTITIES WITH OWNER AND SYSTEM INSTALLER; LOW VOLTAGE OR CIRCUIT TO NEAREST 120V DEVICE AS REQUIRED. |
| | ELECTRIC STRIKE, COORDINATE REQUIREMENTS AND FINAL QUANTITIES WITH OWNER AND SYSTEM INSTALLER; LOW VOLTAGE OR CIRCUIT TO NEAREST 120V DEVICE AS REQUIRED. |
| | WALL SWITCH PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WSD PDT. TIME DELAYS 10 MINUTES FOR ON/OFF. |
| | WALL OR CEILING MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL HW IS. TIME DELAYS 10 MINUTES FOR ON/OFF. |
| | CEILING MOUNTED PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL CM PDT 9. TIME DELAYS 10 MINUTES FOR ON/OFF. |
| | CEILING MOUNTED PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL CM PDT 10. TIME DELAYS 30 MINUTES FOR ON/OFF. |
| | CORNER MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WV 16. TIME DELAYS 10 MINUTES FOR ON/OFF. |
| | CORNER MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WV 16 R P. TIME DELAYS 10 MINUTES FOR ON/OFF. |
| | CORNER MOUNTED PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WV PDT 16 R P. TIME DELAYS 10 MINUTES FOR ON/OFF. |
| | WALL SWITCH PASSIVE INFRARED OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WSD. TIME DELAYS 10 MINUTES FOR ON/OFF. |
| | CEILING MOUNTED PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL CM PDT 10. TIME DELAYS 10 MINUTES FOR ON/OFF. |
| | WALL SWITCH PASSIVE INFRARED OCCUPANCY SENSOR WITH DUAL RELAYS FOR INBOARD/OUTBOARD SWITCHING EQUAL TO SENSOR SWITCH MODEL WSD 2P. TIME DELAYS 10 MINUTES FOR ON/OFF. |

REVISIONS



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 ADDITION and RENOVATIONS**
 410 DENIM DRIVE
 ERWIN, NORTH CAROLINA

ELECTRICAL LEGEND AND NOTES

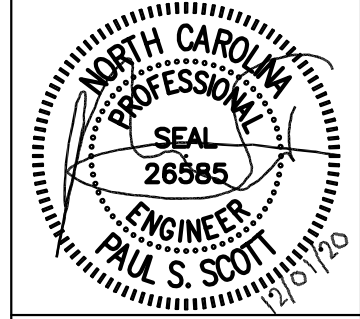
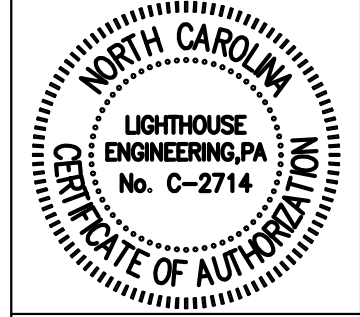
COMM. NO.: 4535
 DRAWN BY: JRS
 CHECKED BY: PSS
 DATE: SEPT 11, 2020
 SHEET NO.

E0.1

| | |
|-----|---|
| --- | WALL LEGEND: (SEE ARCH. PLANS FOR INFO) |
| --- | 1-HR FIRE RATED PARTITION |
| --- | 1-HR FIRE RATED SMOKE BARRIER |
| --- | SMOKE PARTITION |

REVISIONS

△ DHHS COMMENTS
11/23/20



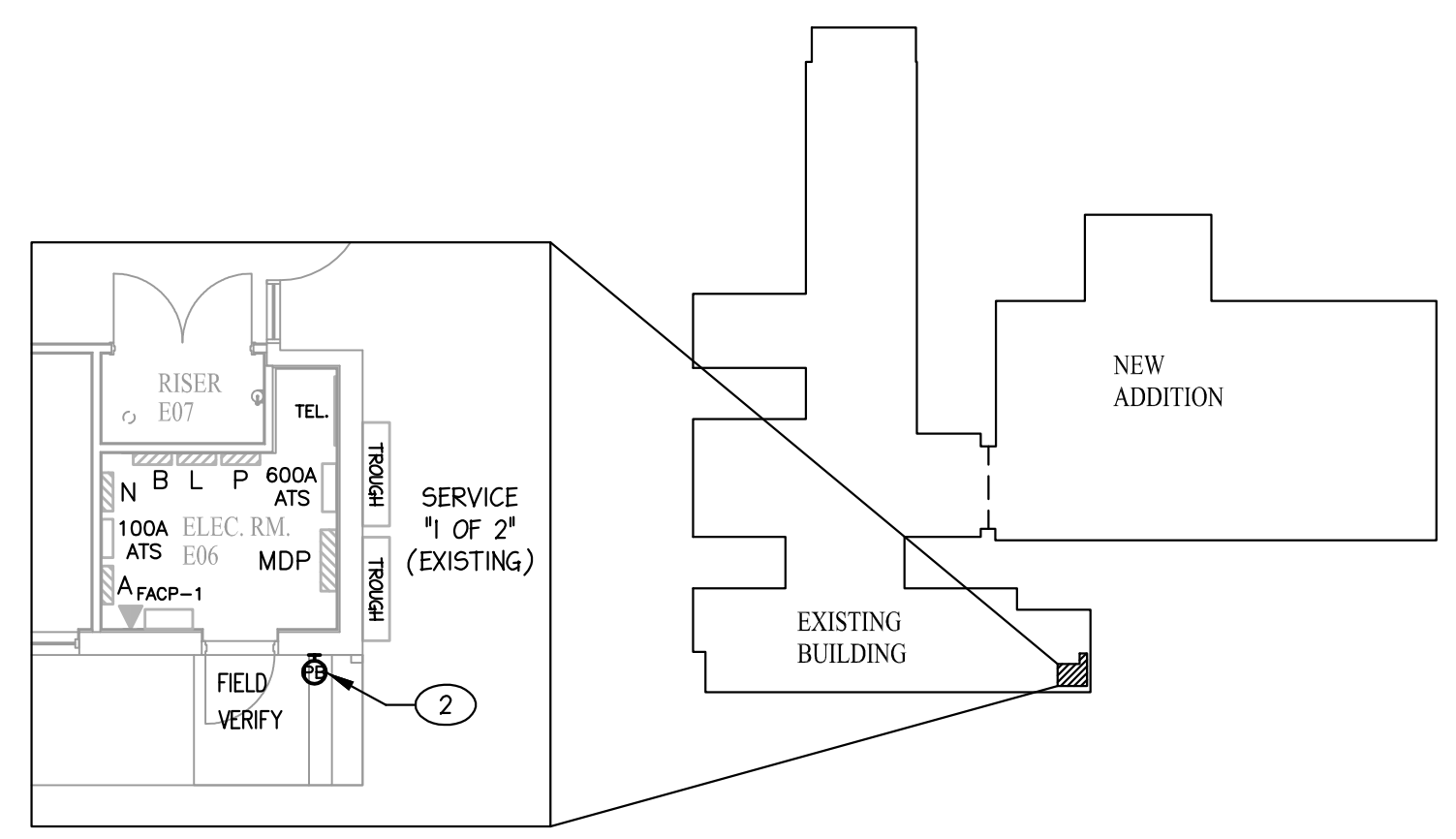
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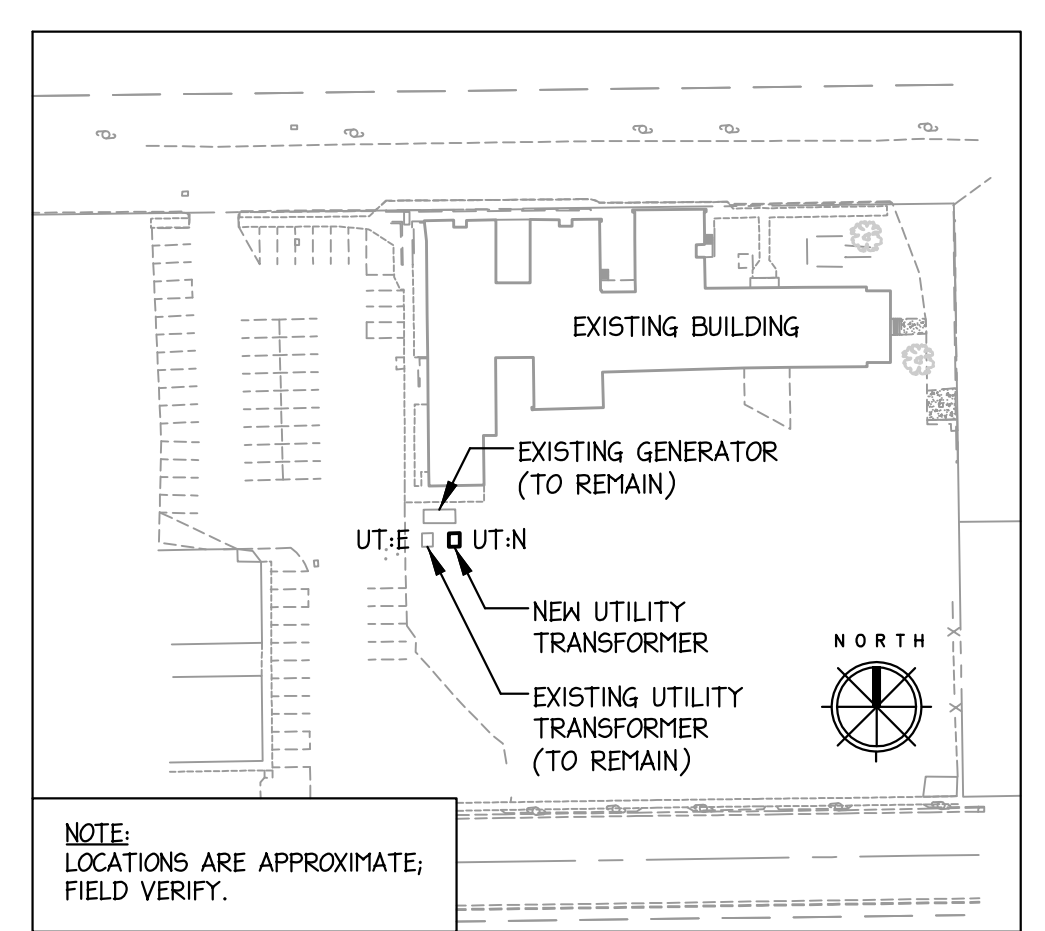
ELECTRICAL POWER - FLOOR PLAN

COMM. NO.: 4535
DRAWN BY: JRS
CHECKED BY: PSS
DATE: SEPT 11, 2020
SHEET NO. E1.0

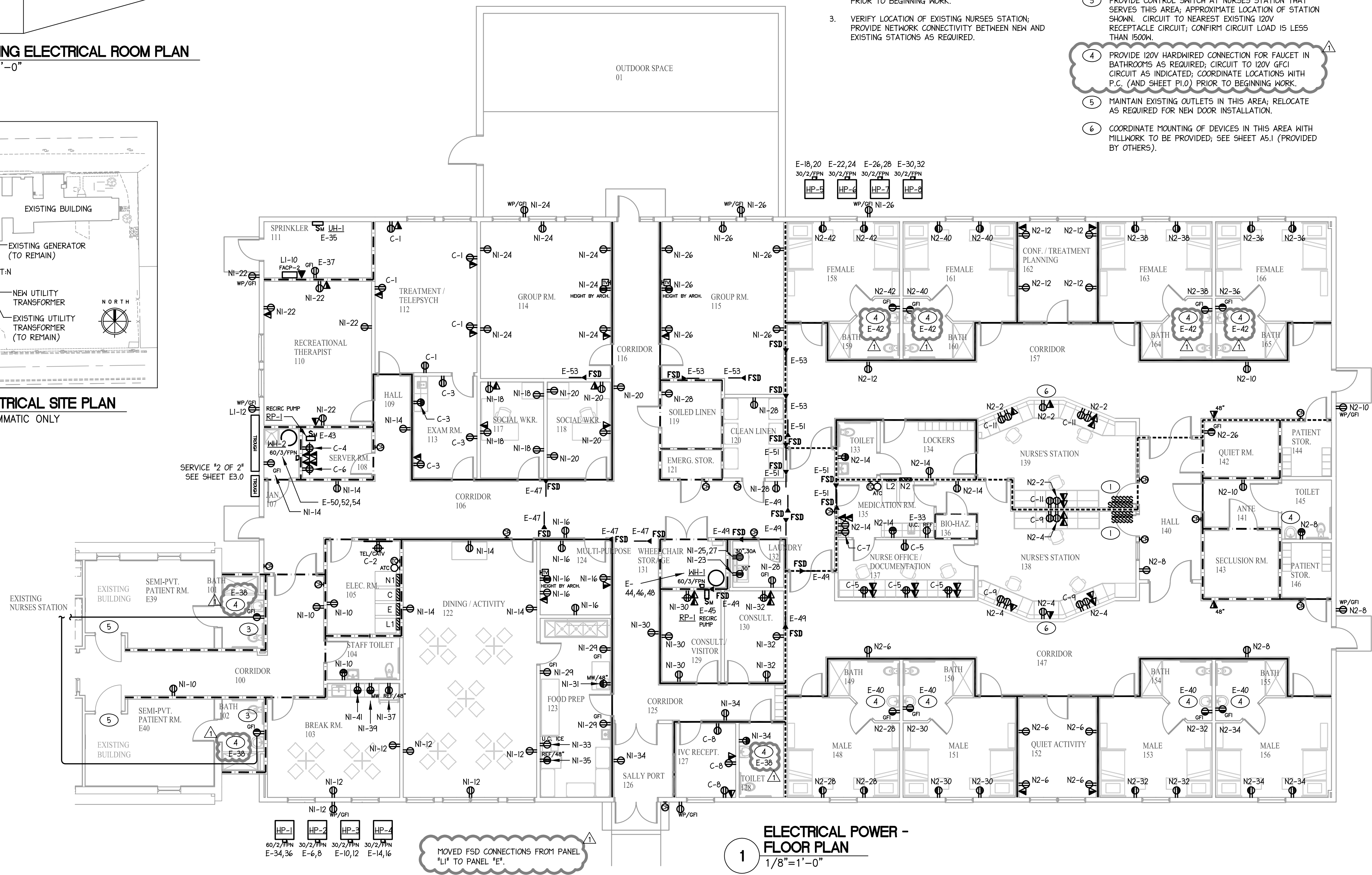
FOR CONSTRUCTION



2 EXISTING ELECTRICAL ROOM PLAN
1/8"=1'-0"



3 ELECTRICAL SITE PLAN
DIAGRAMMATIC ONLY



1 ELECTRICAL POWER - FLOOR PLAN
1/8"=1'-0"

A
B
C
D

SPS: M004E-01.dwg
Date: 01/2020/10/20/20

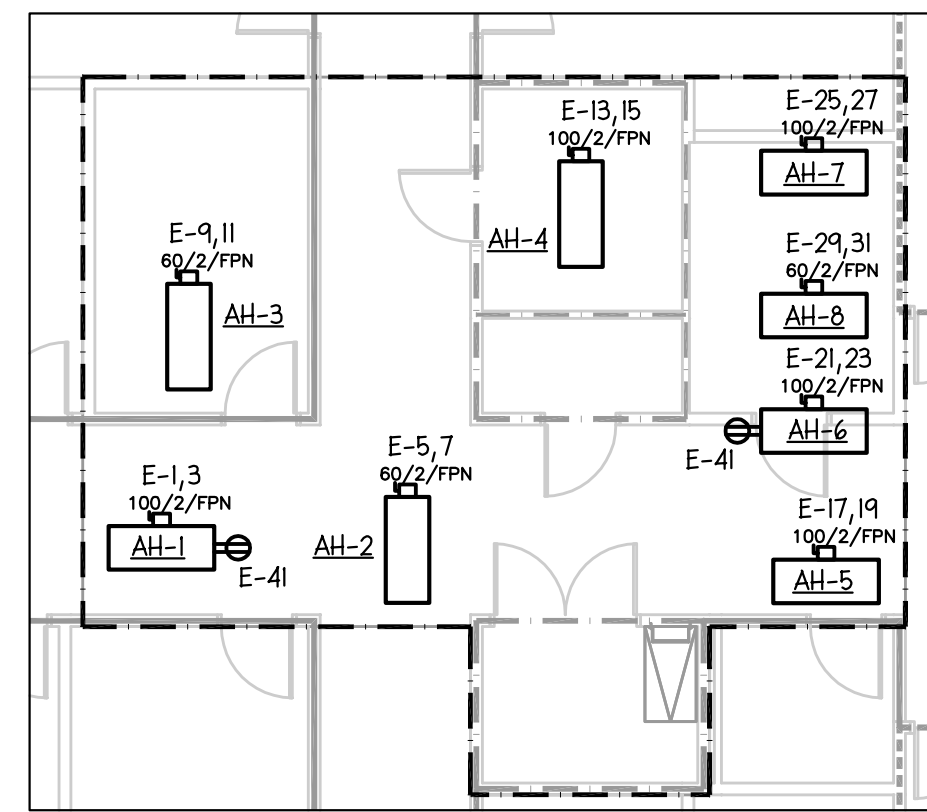
| WALL LEGEND: (SEE ARCH. PLANS FOR INFO) | |
|---|-------------------------------|
| --- | 1-HR FIRE RATED PARTITION |
| - - - - | 1-HR FIRE RATED SMOKE BARRIER |
| --- | SMOKE PARTITION |

GENERAL NOTES:

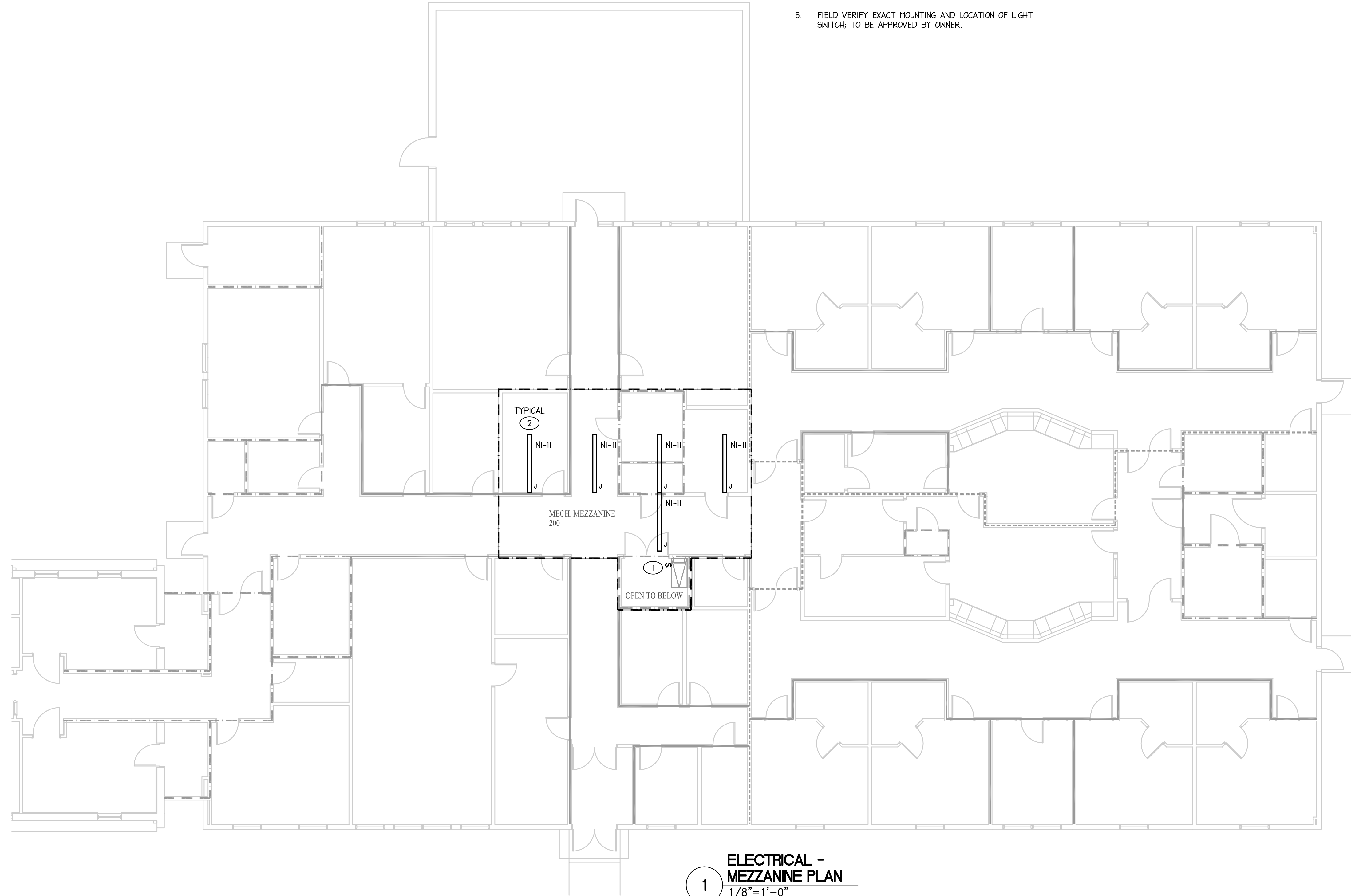
- COORDINATE ALL DEVICE LOCATIONS WITH OTHER TRADES TO AVOID CONFLICTS.
- ALL DISCONNECT SWITCHES SHALL BE INSTALLED TO PERMIT REQUIRED WORKING CLEARANCE.
- ALL CONDUIT RUNS AND ROUTING SHALL BE LAID OUT IN AN ORGANIZED MANNER.
- CONFIRM A SERVICE RECEPTACLE IS WITHIN 25'-0" OF ALL HVAC EQUIPMENT. PROVIDE ADDITIONAL DEVICES AS NEEDED.
- FIELD VERIFY EXACT MOUNTING AND LOCATION OF LIGHT SWITCH; TO BE APPROVED BY OWNER.

TAGGED NOTES:

- VERIFY MOUNTING LOCATION OF LIGHT SWITCH WITH ARCHITECT PRIOR TO ROUGH-IN.
- TYPE 'J' LIGHT FIXTURES SHALL BE PENDANT MOUNTED AT 8'-0" AFF.

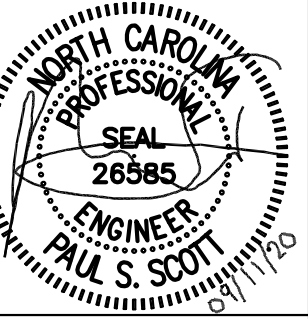
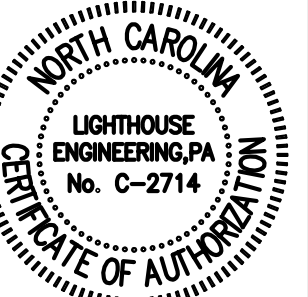


2 HVAC - MEZZANINE PLAN
1/8"=1'-0"



1 ELECTRICAL - MEZZANINE PLAN
1/8"=1'-0"

REVISIONS



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ELECTRICAL - PLATFORM PLAN

COMM. NO.: 4535

DRAWN BY: JRS

CHECKED BY: PSS

DATE: SEPT 11, 2020

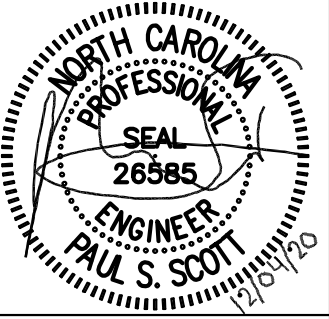
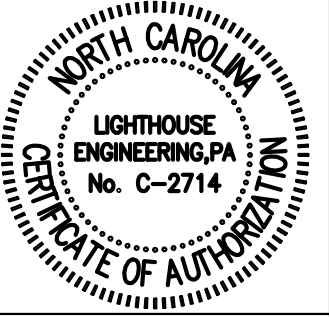
SHEET NO.

E1.1

FOR CONSTRUCTION

WALL LEGEND: (SEE ARCH. PLANS FOR INFO)
- - - 1-HR FIRE RATED PARTITION
- - - 1-HR FIRE RATED SMOKE BARRIER
- - - SMOKE PARTITION

REVISIONS
△ DHHS COMMENTS 11/23/20
△ DHHS COMMENTS 12/04/20



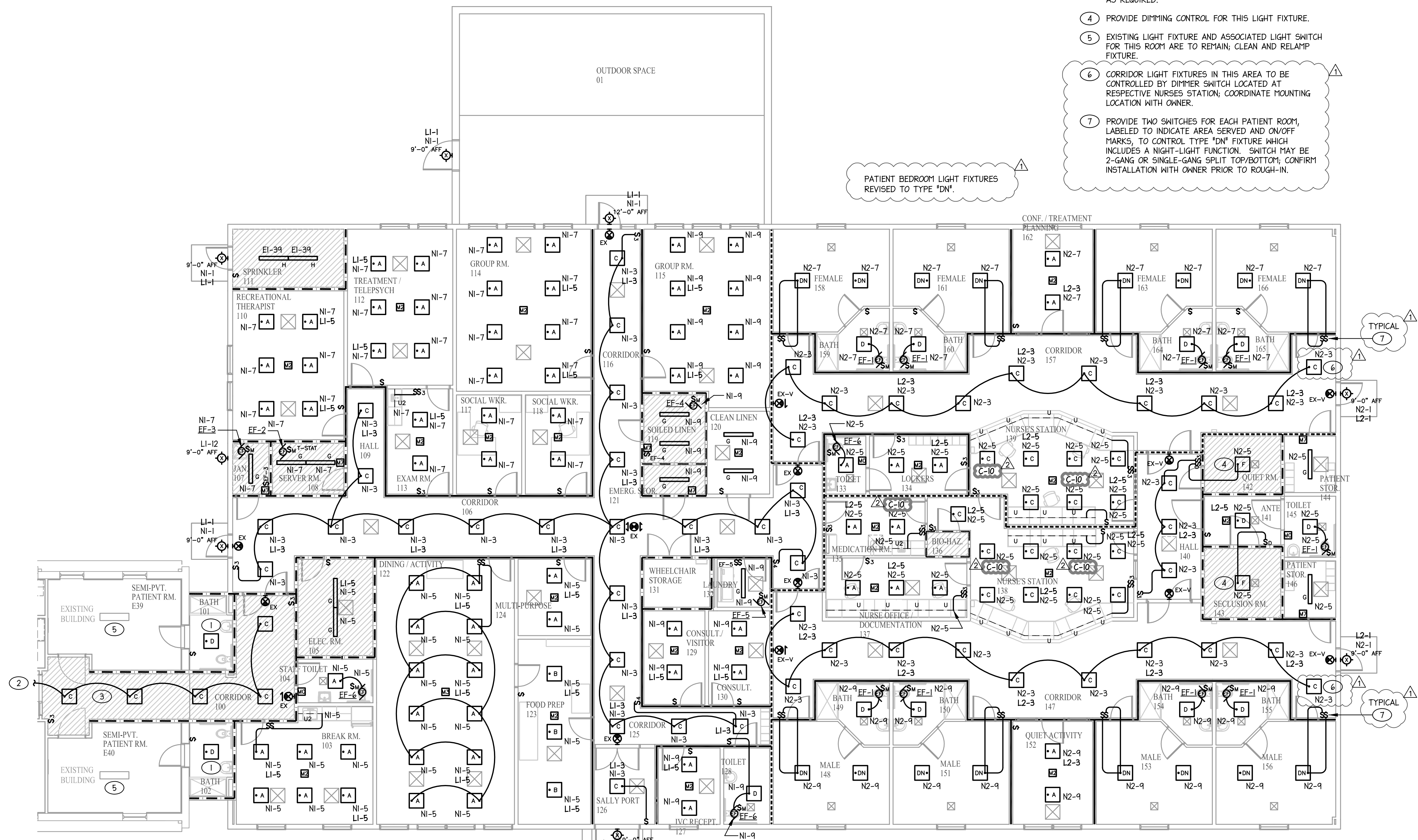
| LEGEND | |
|--------|-------------------------|
| | 1-HR FIRE RATED CEILING |

GENERAL NOTES:

- GTD TRANSFER DEVICE SHALL BE PROVIDED FOR EACH FIXTURE WHERE AN EMERGENCY CIRCUIT "Lx-x" IS SHOWN; SEE LIGHTING FIXTURE SCHEDULE FOR FURTHER INFORMATION.
- CONFIRM LOCATIONS AND CONTROL OF ALL EXHAUST FANS WITH M.C. PRIOR TO BEGINNING WORK.

TAGGED NOTES:

- CIRCUIT NEW BATHROOM LIGHT AND RELOCATED EXHAUST FAN TO EXISTING PATIENT ROOM 120V LIGHTING CIRCUIT; CONFIRM CIRCUIT LOAD IS LESS THAN 1500W.
- CIRCUIT TO NEAREST EXISTING CORRIDOR 120V LIGHTING CIRCUIT; CONFIRM CIRCUIT LOAD IS LESS THAN 1500W.
- E.C. TO FIELD VERIFY EXISTING EMERGENCY EGRESS LIGHTING, PROVIDED UNDER PREVIOUS PERMIT, IS ADEQUATE AND FULLY OPERATIONAL IN THIS AREA; PROVIDE AS NEEDED. CLEAN AND RELAMP FIXTURES AS REQUIRED.
- PROVIDE DIMMING CONTROL FOR THIS LIGHT FIXTURE.
- EXISTING LIGHT FIXTURE AND ASSOCIATED LIGHT SWITCH FOR THIS ROOM ARE TO REMAIN; CLEAN AND RELAMP FIXTURE.
- CORRIDOR LIGHT FIXTURES IN THIS AREA TO BE CONTROLLED BY DIMMER SWITCH LOCATED AT RESPECTIVE NURSES STATION; COORDINATE MOUNTING LOCATION WITH OWNER.
- PROVIDE TWO SWITCHES FOR EACH PATIENT ROOM, LABELED TO INDICATE AREA SERVED AND ON/OFF MARKS; TO CONTROL TYPE "DN" FIXTURE WHICH INCLUDES A NIGHT-LIGHT FUNCTION. SWITCH MAY BE 2-GANG OR SINGLE-GANG SPLIT TOP/BOTTOM; CONFIRM INSTALLATION WITH OWNER PRIOR TO ROUGH-IN.



PATIENT BEDROOM LIGHT FIXTURES REVISED TO TYPE "DN".

PATIENT BEDROOM LIGHT FIXTURES REVISED TO TYPE "DN".

1 ELECTRICAL LIGHTING - FLOOR PLAN
1/8"=1'-0"

FOR CONSTRUCTION

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ELECTRICAL LIGHTING - FLOOR PLAN

COMM. NO.: 4535
DRAWN BY: JRS
CHECKED BY: PSS
DATE: SEPT 11, 2020
SHEET NO. E1.2

L + E + C + N LOAD SUMMARY

| LOAD TYPE | kVA CONN | DEM FACT | kVA DEM |
|---------------------------------|---------------|----------|---------|
| LOADS ON NEW TRANSFORMER (UT-N) | | | |
| LIGHTS | 10.0 | 1.25 | 12.5 |
| RECEPTACLES | IST 10kVA | 1.0 | 10.0 |
| | REMAINDER | 17.9 | 0.5 |
| HVAC | LARGEST MOTOR | 8.0 | 1.25 |
| | REMAINDER | 108.0 | 1.0 |
| WATER HEATERS | | 27.0 | 1.0 |
| PREP / BREAK EQUIPMENT | | 6.2 | 0.8 |
| EQUIPMENT | | 10.2 | 1.0 |
| MISCELLANEOUS | | - | 1.0 |
| TOTALS | 197.3 | | 191.7 |
| TOTAL AMPS @ 208V 3φ | 532.1 | | |

EXISTING GENERATOR (150kW) LOAD JUSTIFICATION

| | |
|--------------------------|---|
| EXISTING CONDITIONS | $\frac{\text{EXISTING BUILDING DEMAND}}{\text{EXISTING BUILDING AREA}} = \frac{45,200W}{15,000SF} = 3.01W / 5F$ <p style="text-align: right;">PEAK DEMAND PER PROGRESS ENERGY FROM PREVIOUS 12 MONTHS UTILITY BILLS</p> |
| NEW PEAK DEMAND ESTIMATE | $3.01W / 5F \times 28,000 SF = 84,280W (84.3kW)$ <p style="text-align: center;">NEW BUILDING TOTAL AREA (EXISTING: 15000SF + NEW: 13000SF)</p> |
| | <p>84kW < 150kW EXISTING GENERATOR SIZE</p> <p>EXISTING GENERATOR IS ADEQUATE</p> |

LIFE SAFETY BRANCH NEC: 517.33

VOLTAGE: 208Y/120V
AMPS: 100 - MLO

NEW PANEL: L1

3 PHASE 4 WIRE SURFACE MOUNTED NEMA 1

| - DESCRIPTION - | LOAD PER PHASE | | | | | | | | | | | |
|--------------------------------|----------------|-----------|----------|-------|-------|-------|-----|-----------------|-----------------|----------|------|-------------------------|
| | POLE | WIRE SIZE | BRK SIZE | CCT # | A | B | C | CCT # | WIRE SIZE | BRK SIZE | POLE | - DESCRIPTION - |
| LTS: EMERGENCY (EXT.) | 1 | 12 | 20 | 1 | 02/01 | | | 2 | | | | |
| LTS: EMERGENCY | 1 | 12 | 20 | 3 | 03/05 | | | 4 | 60 | # | 3 | PANEL "L2" |
| LTS: EMERGENCY | 1 | 12 | 20 | 5 | | 04/03 | | 6 | | | | |
| SPARE | 1 | - | 20 | 7 | -/- | | | 8 | 20 | - | 1 | SPARE |
| SPARE | 1 | - | 20 | 9 | | 07 | | 10 | 20 | 12 | 1 | EQ: FACP-2 |
| SPARE | 1 | - | 20 | 11 | | 03 | | 12 | 20 | 12 | 1 | LTS/REC. EXTERIOR @ ATS |
| SPARE | 1 | - | 20 | 13 | -/- | | | 14 | 20 | - | 1 | SPARE |
| SPARE | 1 | - | 16 | | -/- | | | 16 | 20 | - | 1 | SPARE |
| SPARE | 1 | - | 17 | | -/- | | | 18 | 20 | - | 1 | SPARE |
| SPARE | 1 | - | 19 | -/- | | | | 20 | 20 | - | 1 | SPARE |
| SPARE | 1 | - | 21 | -/- | | | | 22 | - | - | 1 | SPARE |
| SPARE | 1 | - | 23 | -/- | | | | 24 | - | - | 1 | SPARE |
| SPARE | 1 | - | 25 | -/- | | | | 26 | - | - | 1 | SPARE |
| SPARE | 1 | - | 27 | -/- | | | | 28 | - | - | 1 | SPARE |
| SPARE | 1 | - | 29 | -/- | | | | 30 | - | - | 1 | SPARE |
| SPARE | 1 | - | 31 | -/- | | | | 32 | - | - | 1 | SPARE |
| SPARE | 1 | - | 33 | -/- | | | | 34 | - | - | 1 | SPARE |
| SPARE | 1 | - | 35 | -/- | | | | 36 | - | - | 1 | SPARE |
| SPARE | 1 | - | 37 | -/- | | | | 38 | - | - | 1 | SPARE |
| SPARE | 1 | - | 39 | -/- | | | | 40 | - | - | 1 | SPARE |
| SPARE | 1 | - | 41 | -/- | | | | 42 | - | - | 1 | SPARE |
| TOTAL CONNECTED kVA | | | | | 1.1 | 1.5 | 1.6 | DEMAND kVA: 4.8 | | | | |
| PANEL RMS SYM. AMPS: SEE RISER | | | | | | | | | DEMAND AMPS: 13 | | | |

- PANEL SHALL BE SERVICE ENTRANCE RATED, EQUAL TO SQUARE D NO.
- PROVIDE SWD/HID RATED BREAKERS FOR LIGHTING CIRCUITS.
- L - INDICATES LOCK-ON ATTACHMENT REQUIRED.
- A LISTED SPD SHALL BE INSTALLED IN OR ON ALL EMERGENCY SYSTEMS PANELBOARDS.
- * - SEE RISER DIAGRAM FOR FURTHER INFORMATION.

PANEL "L1" LOAD SUMMARY

| LOAD TYPE | kVA CONN | DEM FACT | kVA DEM |
|----------------------|----------|----------|---------|
| LOADS ON 100AMP MCB | | | |
| LIGHTS | 2.3 | 1.25 | 2.9 |
| EQUIPMENT | 1.9 | 1.0 | 1.9 |
| MISCELLANEOUS | - | 1.0 | - |
| TOTALS | 4.2 | | 4.8 |
| TOTAL AMPS @ 208V 3φ | 13.3 | | |

LIFE SAFETY BRANCH NEC: 517.33

VOLTAGE: 208Y/120V
AMPS: 60 - MLO

NEW PANEL: L2

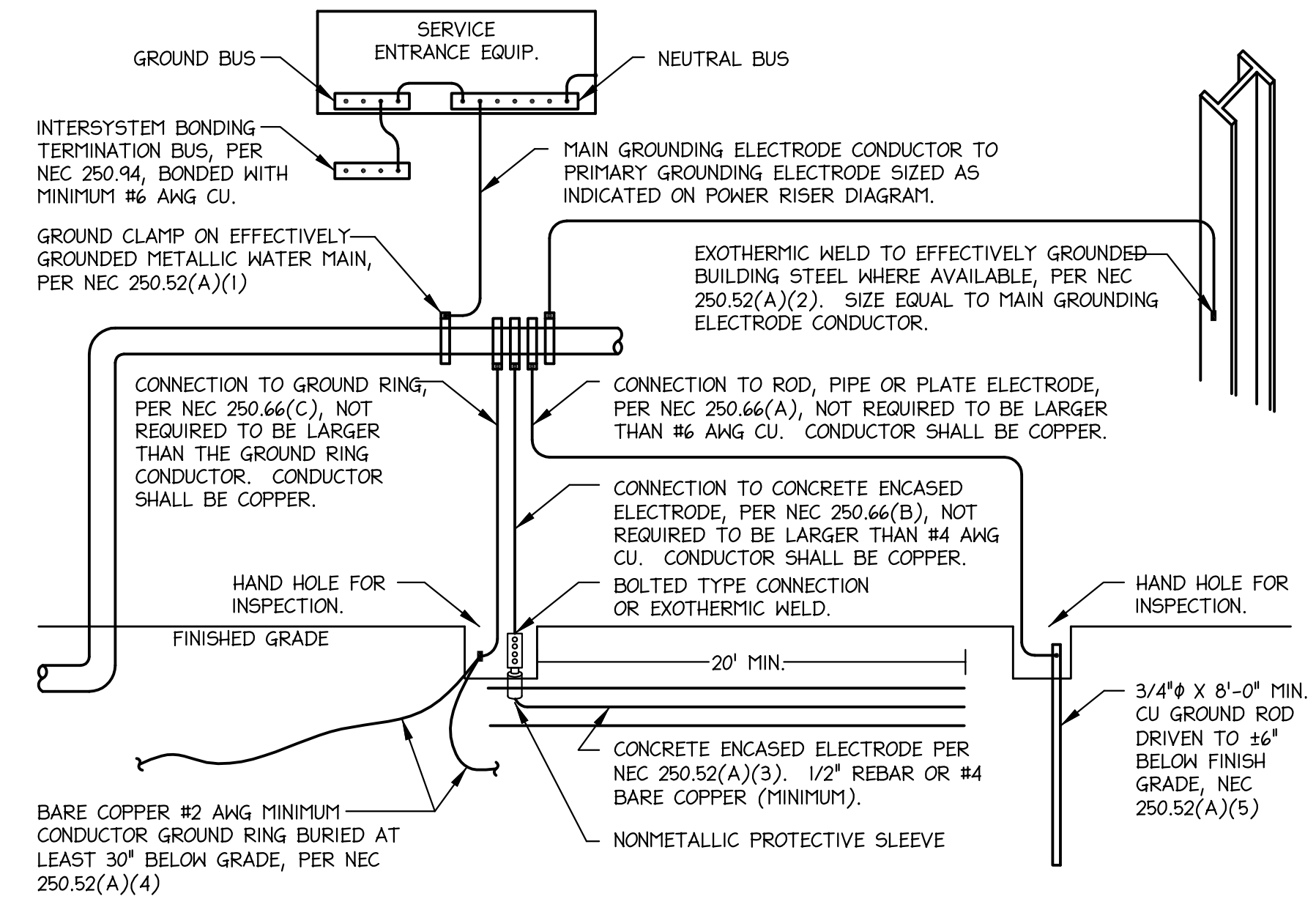
3 PHASE 4 WIRE FLUSH MOUNTED NEMA 1

| - DESCRIPTION - | LOAD PER PHASE | | | | | | | | | | | |
|--------------------------------|----------------|-----------|----------|-------|------|------|-----|-----------------|----------------|----------|------|-----------------|
| | POLE | WIRE SIZE | BRK SIZE | CCT # | A | B | C | CCT # | WIRE SIZE | BRK SIZE | POLE | - DESCRIPTION - |
| LTS: EMERGENCY (EXT.) | 1 | 12 | 20 | 1 | 01/- | | | 2 | | | | SPACE |
| LTS: EMERGENCY | 1 | 12 | 20 | 3 | 05/- | | | 4 | | | | SPACE |
| LTS: EMERGENCY | 1 | 12 | 20 | 5 | | 03/- | | 6 | | | | SPACE |
| SPACE | 1 | - | - | 7 | -/- | | | 8 | - | - | | SPACE |
| SPACE | 1 | - | - | 9 | | -/- | | 10 | - | - | | SPACE |
| SPACE | 1 | - | - | 11 | | -/- | | 12 | - | - | | SPACE |
| TOTAL CONNECTED kVA | | | | | 0.1 | 0.5 | 0.3 | DEMAND kVA: 1.1 | | | | |
| PANEL RMS SYM. AMPS: SEE RISER | | | | | | | | | DEMAND AMPS: 3 | | | |

- PANEL SHALL BE EQUAL TO SQUARE D QO.
- PROVIDE SWD/HID RATED BREAKERS FOR LIGHTING CIRCUITS.
- A LISTED SPD SHALL BE INSTALLED IN OR ON ALL EMERGENCY SYSTEMS PANELBOARDS.

PANEL "L2" LOAD SUMMARY

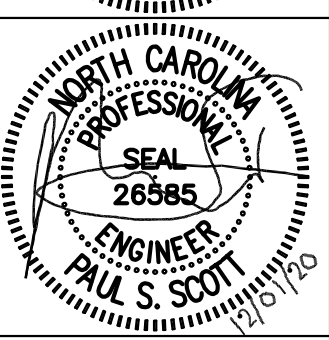
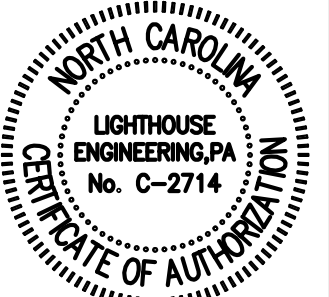
| LOAD TYPE | kVA CONN | DEM FACT | kVA DEM |
|----------------------|----------|----------|---------|
| LOADS ON 60AMP CB | | | |
| LIGHTS | 0.9 | 1.25 | 1.1 |
| MISCELLANEOUS | - | 1.0 | - |
| TOTALS | 0.9 | | 1.1 |
| TOTAL AMPS @ 208V 3φ | 3.1 | | |



1 GROUNDING DETAIL NTS

GROUNDING ELECTRODES SHALL BE PROVIDED IN ACCORDANCE WITH NEC SECTION 250. ALL GROUNDING ELECTRODE CONDUCTORS SIZED AS INDICATED ON POWER RISER DIAGRAM. ALL METHODS OF CREATING THE GROUNDING SYSTEM MAY NOT BE REQUIRED OR AVAILABLE.

REVISIONS
DHS COMMENTS
11/23/20



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ADDITION and RENOVATIONS**
 410 DENIM DRIVE
 ERWIN, NORTH CAROLINA

ELECTRICAL PANEL SCHEDULES

COMM. NO.: 4535
 DRAWN BY: JRS
 CHECKED BY: PSS
 DATE: SEPT 11, 2020
 SHEET NO.

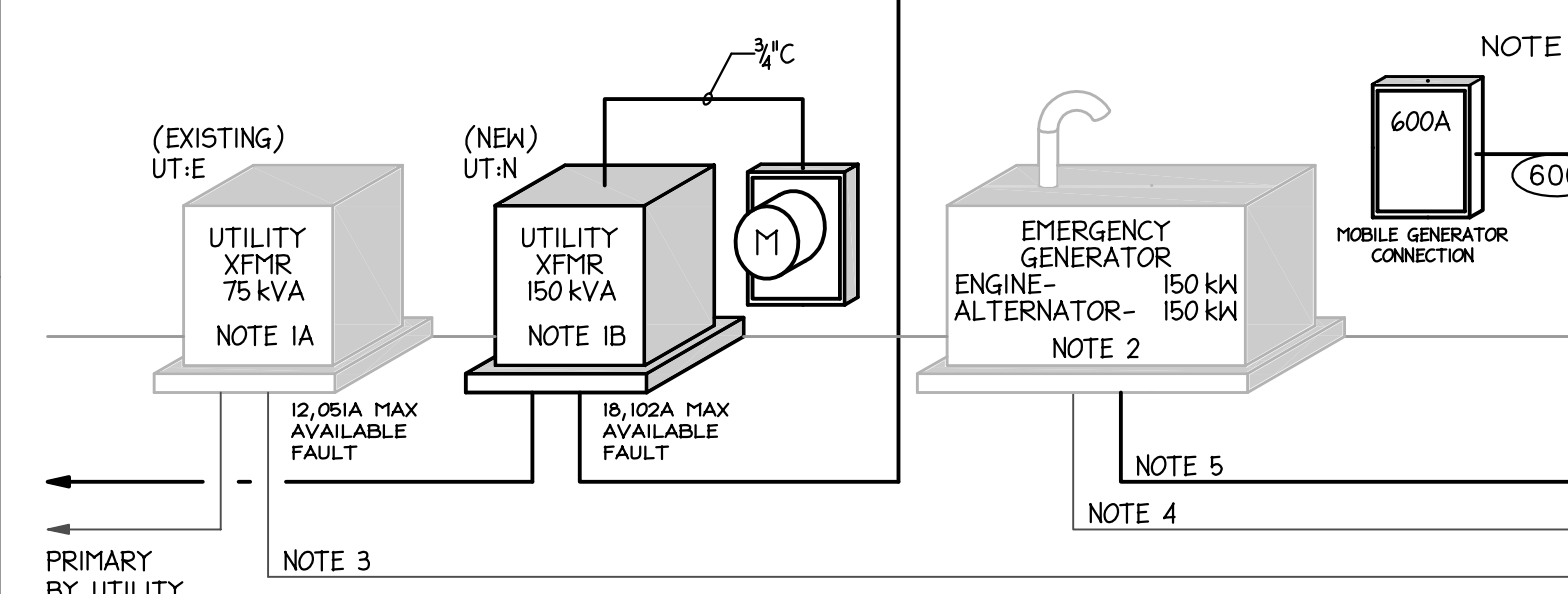
FOR CONSTRUCTION

E2.1

FEEDER SCHEDULE

| STD. FUSE OR C/B TRIP SIZE | # OF SETS | COPPER | | ALUMINUM | |
|----------------------------|-----------|--|----------------------|--|----------------------|
| | | BUILDING WIRE QUANTITY & SIZE. TYPE THHN - DRY TYPE THWN - WET | MINIMUM CONDUIT SIZE | BUILDING WIRE QUANTITY & SIZE. TYPE THHN - DRY TYPE THWN - WET | MINIMUM CONDUIT SIZE |
| 60 | 1 | 4 #6, #10 G | 1" | 4 #3, #8 G | 1 1/4" |
| 70 | 1 | 4 #4, #8 G | 1 1/4" | 4 #2, #6 G | 1 1/4" |
| 80 | 1 | 4 #3, #8 G | 1 1/4" | 4 #1, #6 G | 1 1/4" |
| 90 | 1 | 4 #2, #8 G | 1 1/4" | 4 #1/0, #6 G | 1 1/2" |
| 100 | 1 | 4 #2, #8 G | 1 1/4" | 4 #1/0, #6 G | 1 1/2" |
| 110 | 1 | 4 #2, #6 G | 1 1/2" | 4 #1/0, #4 G | 1 1/2" |
| 125 | 1 | 4 #1, #6 G | 1 1/2" | 4 #2/0, #4 G | 2" |
| 150 | 1 | 4 #1/0, #6 G | 2" | 4 #3/0, #4 G | 2" |
| 175 | 1 | 4 #2/0, #6 G | 2" | 4 #4/0, #4 G | 2" |
| 200 | 1 | 4 #3/0, #6 G | 2" | 4 #250KCM, #4 G | 3" |
| 225 | 1 | 4 #4/0, #4 G | 2 1/2" | 4 #300KCM, #2 G | 3" |
| 250 | 1 | 4 #250KCM, #4 G | 3" | 4 #350KCM, #2 G | 3" |
| 300 | 1 | 4 #350KCM, #4 G | 3" | 4 #500KCM, #2 G | 3 1/2" |
| 350 | 2 | 4 #2/0, #3 G | 2" | 4 #4/0, #1 G | 2 1/2" |
| 400 | 1 | 4 #500KCM, #3 G | 3 1/2" | 4 #250KCM, #1 G | 3" |
| 450 | 2 | 4 #4/0, #2 G | 2 1/2" | 4 #300KCM, #1/0 G | 3" |
| 500 | 2 | 4 #250KCM, #2 G | 3" | 4 #350KCM, #1/0 G | 3" |
| 600 | 2 | 4 #350KCM, #1 G | 3" | 4 #500KCM, #2/0 G | 3 1/2" |
| 700 | 2 | 4 #500KCM, #1/0 G | 3 1/2" | 4 #600KCM, #3/0 G | 4" |
| 800 | 2 | 4 #500KCM, #1/0 G | 3 1/2" | 4 #400KCM, #3/0 G | 3" |
| 1000 | 3 | 4 #400KCM, #2/0 G | 3" | 4 #600KCM, #4/0 G | 4" |
| 1200 | 4 | 4 #350KCM, #3/0 G | 3" | 4 #500KCM, #250KCM G | 3 1/2" |

NOTES:
 1. ALL FEEDER SIZES LISTED MAY NOT BE USED IN PROJECT RISER DIAGRAM.
 2. ELECTRICAL CONTRACTOR TO VERIFY CONDUIT SIZE REQUIRED IF WIRE TYPES OTHER THAN THOSE LISTED ABOVE ARE USED.
 3. REFER TO LATEST EDITION OF NEC FOR CONDUIT TYPES REQUIRED PER THEIR LOCATION. IF CONDUIT OTHER THAN 'EMT' IS REQUIRED USE SIZE PER MAXIMUM FILL TABLES.

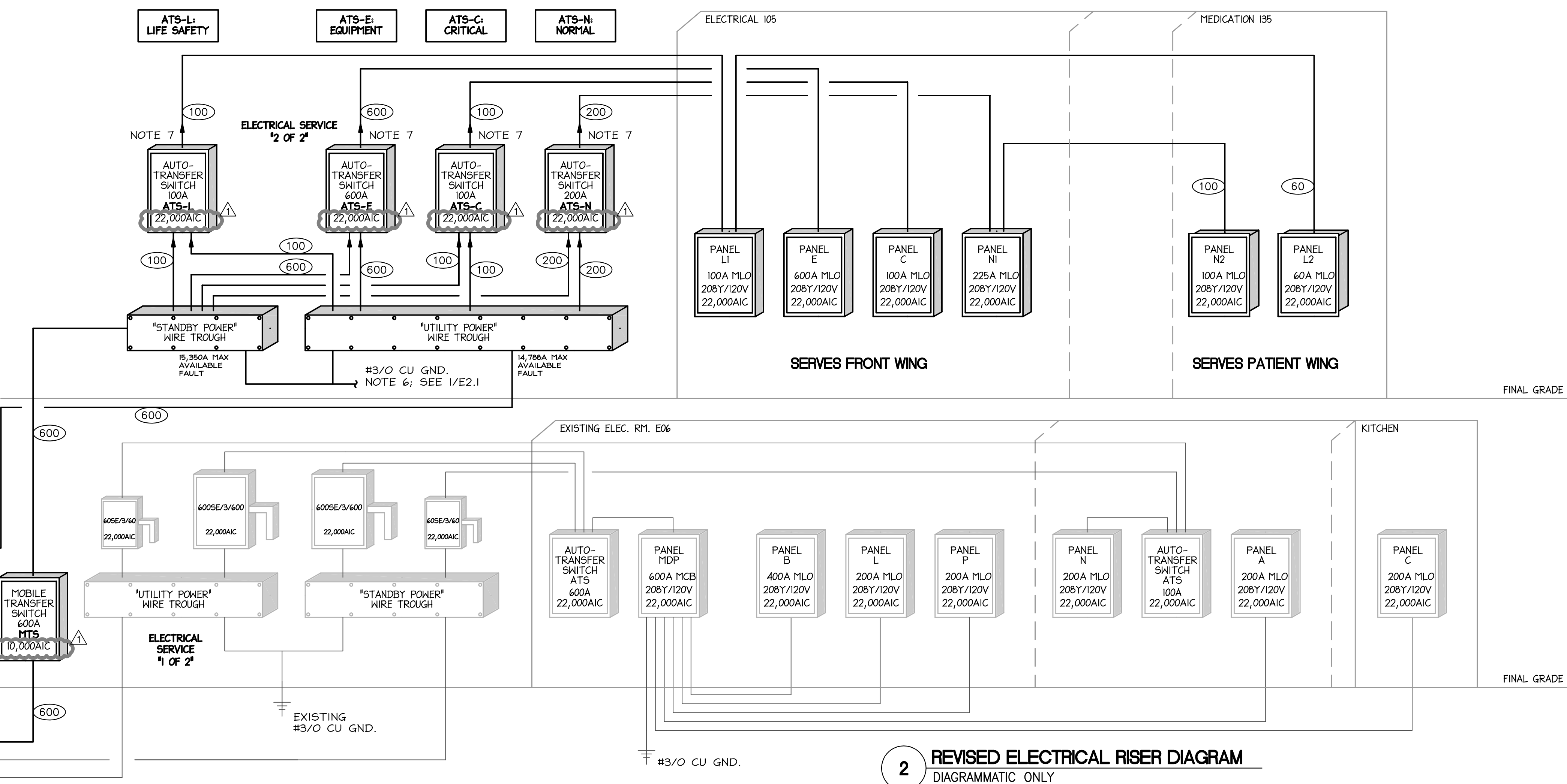
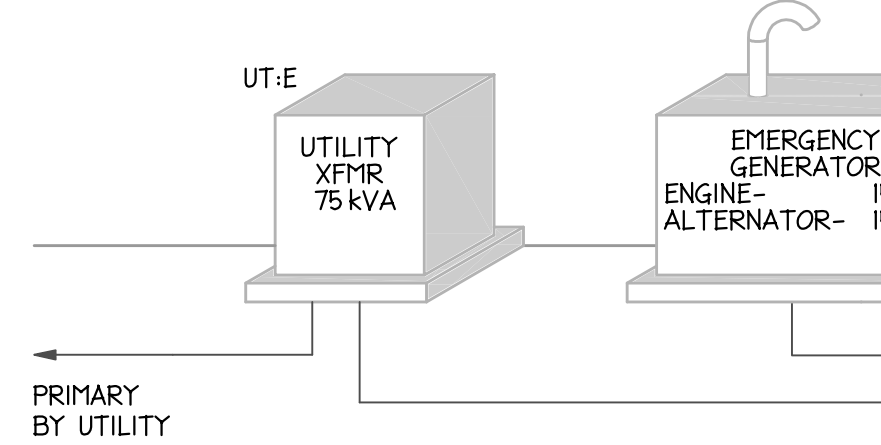


MAXIMUM AVAILABLE FAULT CURRENT IS BASED ON 150KVA UTILITY TRANSFORMER WITH 2.3% Z. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY IF TRANSFORMER CHARACTERISTIC INDICATE A HIGHER FAULT CURRENT IS POSSIBLE.

- REVISED ELECTRICAL RISER DIAGRAM NOTES:**
- ITEMS SHOWN FAINT ARE EXISTING, ITEMS SHOWN **BOLD** ARE NEW AND/OR RELOCATED.
 - ALUMINUM CONDUCTORS MAY BE USED AS LONG AS EQUIVALENT AMPACITY IS PROVIDED.
 - SERVICE EQUIPMENT SHALL BE LABELED PER NEC 110.22(A) AND 110.24(A). E.C. SHALL CONFIRM EXISTING ELECTRICAL EQUIPMENT HAS MINIMUM REQUIRED AIC RATING BASED ON MAX FAULT CURRENT AVAILABLE.
 - ALL CIRCUIT BREAKERS IN THE EMERGENCY POWER DISTRIBUTION SYSTEMS SHALL BE SELECTIVELY COORDINATED TO ENSURE THAT ANY FAULT IS CLEARED BY THE NEXT UPSTREAM OVERCURRENT DEVICE. THE GEAR MANUFACTURER SHALL PROVIDE A COORDINATION STUDY FOR REVIEW AND APPROVAL BY THE ENGINEER AND A.H.

E.C. TO FIELD VERIFY ALL EXISTING CONDITIONS AND LOCATIONS OF EQUIPMENT PRIOR TO BIDDING WORK.

ITEMS SHOWN FAINT ARE EXISTING, ITEMS SHOWN **BOLD** ARE TO BE RELOCATED AND/OR REMOVED.



2 REVISED ELECTRICAL RISER DIAGRAM
 DIAGRAMMATIC ONLY

REVISED ELECTRICAL RISER DIAGRAM NOTES: (CONT'D)

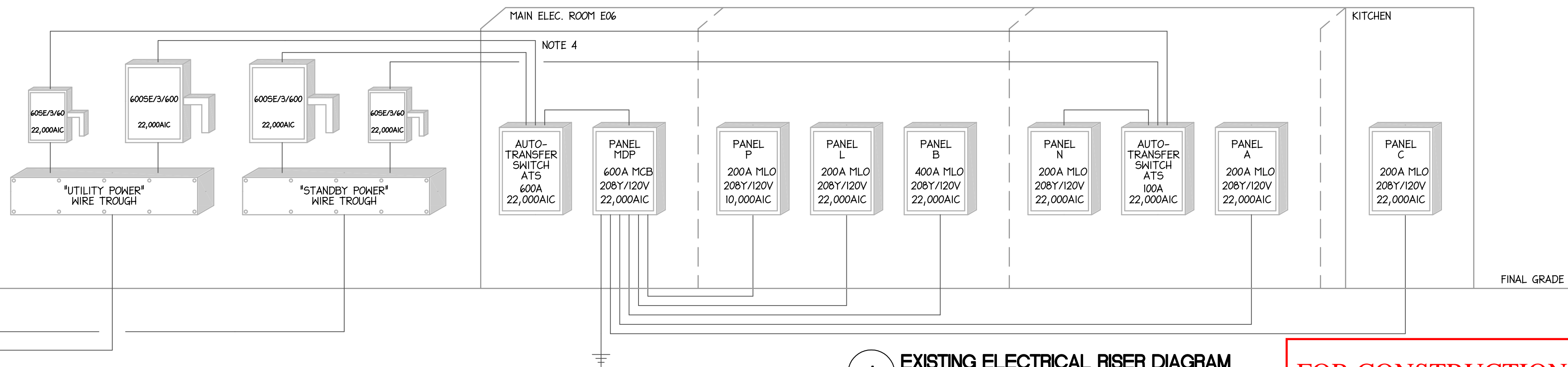
- EXISTING UTILITY TRANSFORMER TO REMAIN.
- EXISTING 150kW, 208V 3Ø DIESEL GENERATOR SET WITH 850 GALLON FUEL CAPACITY, TO REMAIN; CONFIRM EXISTING SERVICE LIGHT & RECEPTACLE ARE OPERATIONAL.
- EXISTING TWO SETS 4#350KCM CU., IN TWO 3" CONDUITS.
- EXISTING TWO SETS 4#350KCM CU., #1 CU. GND, IN TWO 3" CONDUITS.

REVISED ELECTRICAL RISER DIAGRAM NOTES: (CONT'D)

- PROVIDE ONE 600A OUTPUT BREAKER TO FEED EMERGENCY DISTRIBUTION SYSTEM. E.C. TO CONFIRM CONNECTION REQUIREMENTS PRIOR TO BEGINNING WORK.
- BOND ALL GROUNDS TOGETHER W/ #3/0 TO FORM ONE GROUNDING SYSTEM.
- 3-POLE (WITH SOLID NEUTRAL) SERVICE ENTRANCE RATED, AUTOMATIC TRANSFER SWITCH. LABEL EACH AS SERVICE DISCONNECT. AUTOMATIC TRANSFER SWITCHES SHALL TRANSFER TO THE GENERATOR IN THE FOLLOWING ORDER:
 - LIFE SAFETY BRANCH
 - CRITICAL BRANCH
 - EQUIPMENT BRANCH
 - NORMAL BRANCH

REVISED ELECTRICAL RISER DIAGRAM NOTES: (CONT'D)

- IF THE GENERATOR OUTPUT VOLTAGE SAGS BELOW 85% OF NOMINAL AT ANY TIME THE TRANSFER SWITCHES SHALL TRANSFER OFF THE GENERATOR IN THE REVERSE ORDER.
- DEVICE SHALL BE SERVICE ENTRANCE RATED.
- THE EMERGENCY SYSTEM SHALL INCLUDE PERMANENT SWITCHING MEANS TO CONNECT A PORTABLE OR TEMPORARY ALTERNATE SOURCE OF POWER PER NEC700.3(F). LOCATE ADJACENT TO EXISTING GENERATOR.
- BOND EQUIPMENT GROUNDING TERMINALS OF ELECTRICAL PANELS L1, L2, C, NI AND N2 WITH INSULATED #10AWG PER NEC 517.14.

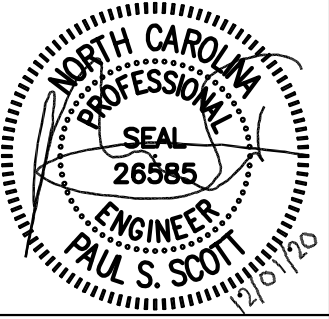
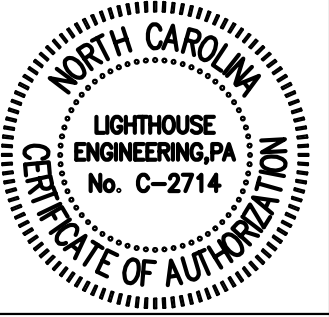


1 EXISTING ELECTRICAL RISER DIAGRAM
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ELECTRICAL RISER DIAGRAM

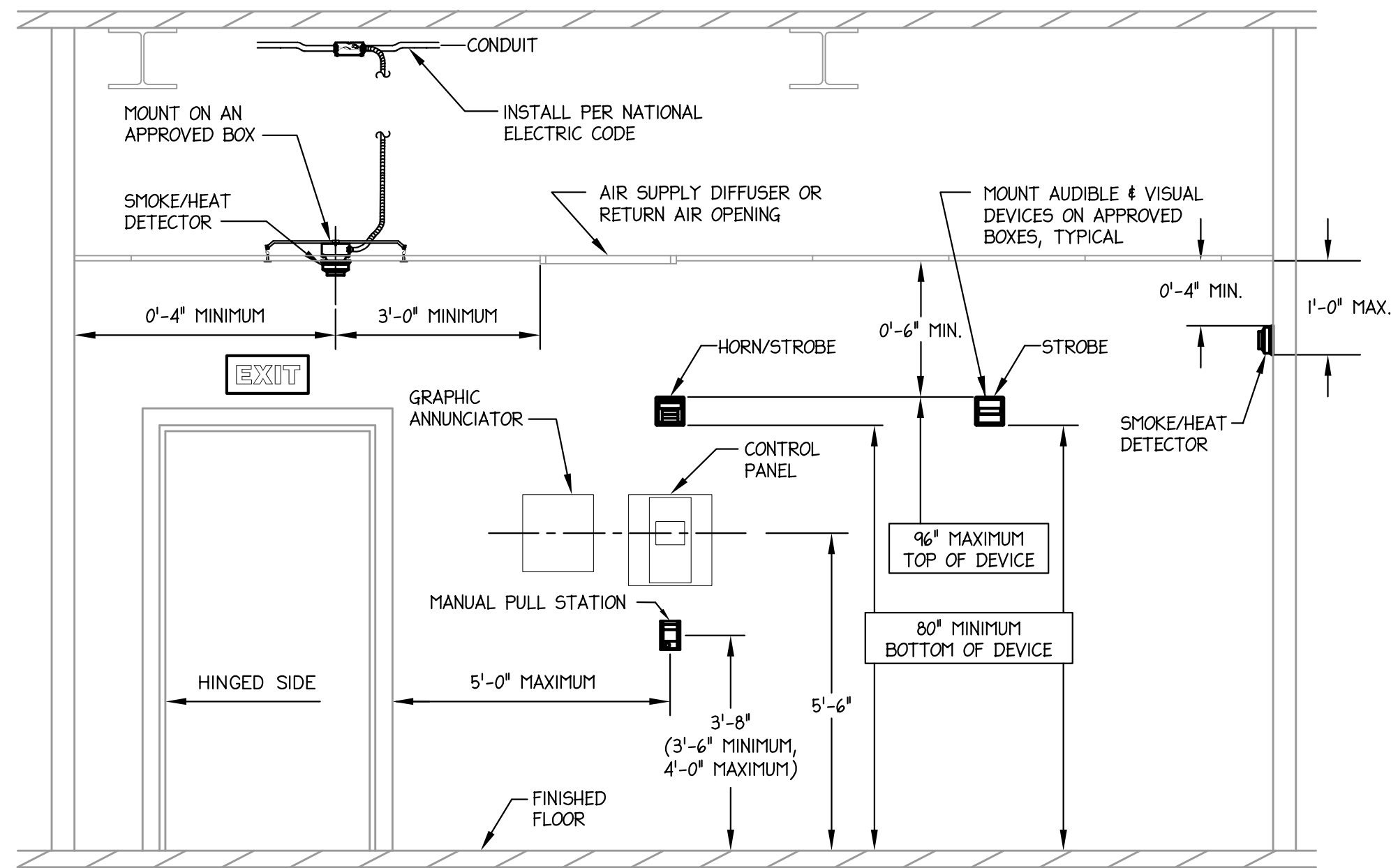
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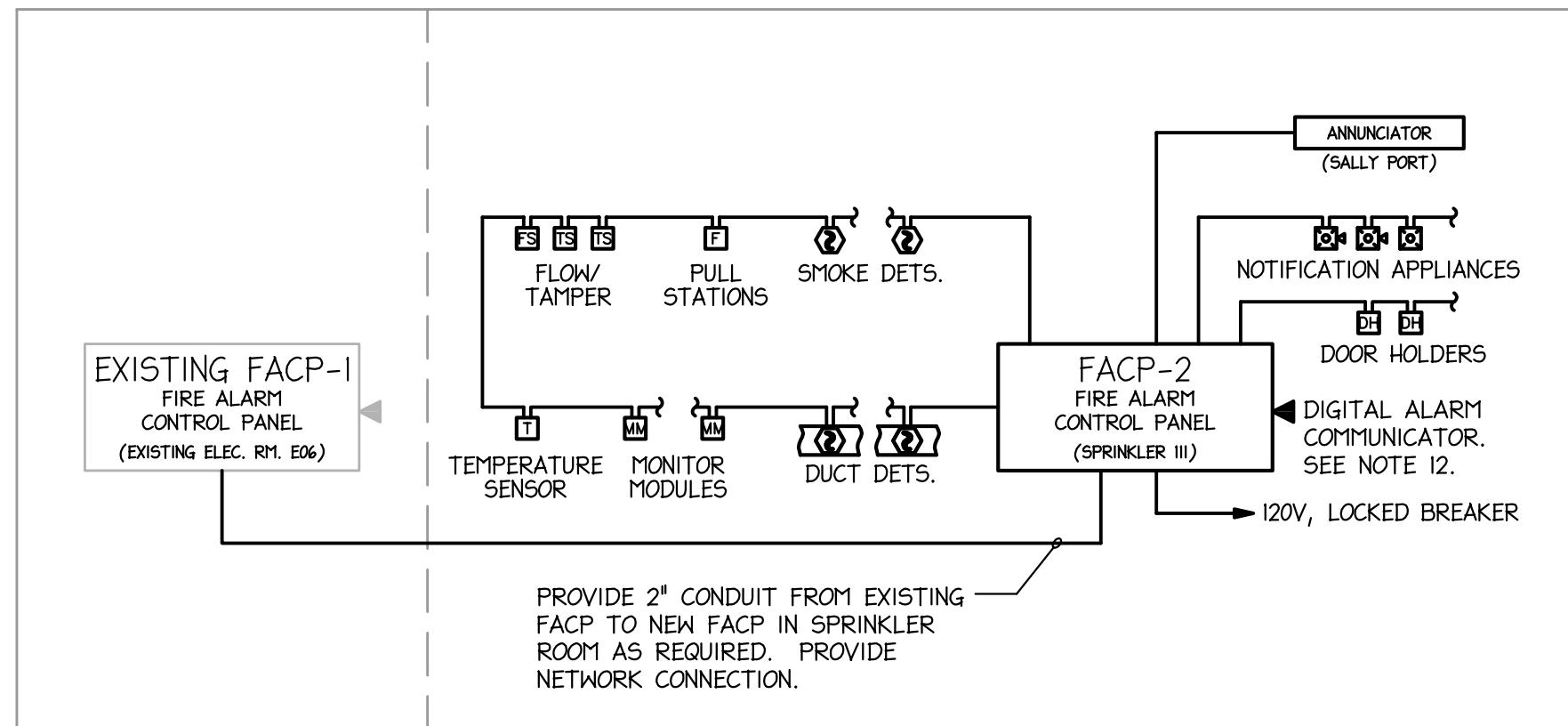
FIRE ALARM SYSTEM SCHEDULE

| ALARM | RESPONSE | | | | | | | | | |
|---|---|---|--|---|---|------------------------|---|---|---|---|
| | AUDIBLE/VISUAL SIGNALS WITHIN PATIENT CARE AREA (2 OCCUPANCY) | AUDIBLE/VISUAL SIGNALS WITHIN OFFICE AREA (B OCCUPANCY) | SEND ALARM TO CENTRAL MONITORING STATION | SEND SUPERVISORY SIGNAL TO CENTRAL MONITORING STATION | SEND TROUBLE SIGNAL TO CENTRAL MONITORING STATION | ACTIVATE HVAC SHUTDOWN | SEND ALARM SIGNAL TO STAFF COMMUNICATION SYSTEM | SEND SUPERVISORY SIGNAL TO STAFF COMMUNICATION SYSTEM | ACTIVATE NURSE'S STATION AND FIRE/SMOKE SHUTTER | |
| GENERAL ALARM (PULL STATIONS) IN PATIENT CARE AREA (1-2 OCCUPANCY) | X | X | X | | | | X | X | | X |
| GENERAL ALARM (PULL STATIONS) IN OFFICE AREA (B OCCUPANCY) | | X | X | | | | | | | X |
| SMOKE DETECTOR IN PATIENT CARE AREA (1-2 OCCUPANCY) | X | X | | | | | X | | | |
| SMOKE DETECTORS IN OFFICE AREA (B OCCUPANCY) | | X | X | | | | | | | X |
| SMOKE DETECTORS FOR FIRE/SMOKE SHUTTER (1-2 OCCUPANCY) | X | X | | | | | X | X | | X |
| FLOW SWITCH SIGNAL | X | X | X | | | | | | X | |
| TAMPER SWITCH SIGNAL | | | | X | | | | | | X |
| DUCT DETECTORS THROUGHOUT BUILDING | | | | X | | X | | X | | |
| SPRINKLER RISER ROOM TEMPERATURE MONITOR | | | | X | | | | | | X |
| FACP POWER LOSS OR FAULT CONDITION | | | | | X | | | X | | |
| TROUBLE SIGNAL THROUGHOUT BUILDING | | | | | X | | | X | | |
| GENERATOR MTS MONITORING MODULE - SYSTEM ON MAINTENANCE (SEE 3/FA1.0) | | | | X | | | | X | | |
| GENERATOR ATS MONITORING MODULE - SYSTEM NOT IN AUTOMATIC (NEW) | | | | X | | | | X | | |
| GENERATOR ATS MONITORING MODULE - SYSTEM NOT IN AUTOMATIC (EXISTING) | | | | X | | | | X | | |
| GENERATOR MONITORING MODULE - RUNNING (EXISTING) | | | | X | | | | X | | |
| GENERATOR MONITORING MODULE - LOW FUEL LEVEL (EXISTING) | | | | X | | | | X | | |

NFPA 72 AND ADA DEVICE INSTALLATION REQUIREMENTS



2 ADA DEVICE INSTALLATION
DIAGRAMMATIC ONLY



1 FIRE ALARM RISER DIAGRAM
NTS

FIRE ALARM RISER DIAGRAM NOTES:

- FIRE ALARM SYSTEM SHALL BE ADDRESSABLE, 24V DC, POWER LIMITED, FULLY SUPERVISED, WITH 24 HOUR STANDBY BATTERY. PANEL SHALL BE SIMPLEX 4010ES OR EQUAL, FULLY COMPATIBLE WITH EXISTING SIMPLEX 4010ES FACP. PANEL TO BE SURFACE MOUNTED.
- FIRE ALARM DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH NFPA 72 AND 'ADA'.
- ALL FIRE ALARM WIRING SHALL BE IN CONDUIT OR AS ALLOWED BY NEC OR LOCAL AHJ.
- DEVICE QUANTITIES SHALL BE AS INDICATED ON THE PLANS. VERIFY QUANTITY AND EXACT LOCATION WITH AUTHORITY HAVING JURISDICTION TO ENSURE BID INCLUDES ALL REQUIRED WORK.
- DUCT MOUNTED SMOKE DETECTORS ARE TO BE PROVIDED AND WIRED BY E.C., INSTALLED BY M.C.
- ELECTRICAL CONTRACTOR SHALL PROVIDE A FIRE ALARM LAYOUT PLAN AT THE FACP AND THE ANNUNCIATOR PANEL IN THE LOBBY.
- TESTING OF THE FIRE ALARM SYSTEM SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- FIELD COORDINATE EXACT QUANTITY AND LOCATION FOR FLOW AND TAMPER SWITCHES WITH SPRINKLER CONTRACTOR INCLUDING BACK FLOW PREVENTER WHICH MAY BE LOCATED OUTSIDE ON SITE.
- ALL VISUAL DEVICES IN A COMMON VIEWING AREA SHALL BE SYNCHRONIZED.
- ALL NOTIFICATION APPLIANCES WITH AUDIBLE NOTIFICATION CAPABILITIES SHALL EMIT A THREE-PULSE TEMPORAL PATTERN TONE COMPLIANT WITH ANSI S3.41.
- PRIVATE SIGNALING MODE SHALL BE USED WITHIN THE PATIENT CARE PORTIONS OF THE BUILDING (1-2 OCCUPANCY) FOR NOTIFICATION OF INDIVIDUAL OCCUPANTS. AUDIBLE NOTIFICATION APPLIANCES WITHIN THE STAFF AREA SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15DBA ABOVE THE AVERAGE AMBIENT SOUND PRESSURE LEVEL. FACILITY STAFF SHALL BE RESPONSIBLE FOR OCCUPANT NOTIFICATION AND EVACUATION. REFER TO NFPA 72 18.4.4.2 AND 18.6 FOR FURTHER INFORMATION.
- A DIGITAL CELLULAR COMMUNICATION DEVICE SHALL BE THE PRIMARY MEANS OF COMMUNICATION FOR THE FIRE ALARM SYSTEM CENTRAL STATION. A LAND LINE COMMUNICATION DEVICE OR A HARD WIRED IP DEVICE MAY BE USED AS THE SECONDARY MEANS OF COMMUNICATION.
- COORDINATE EMERGENCY GENERATOR (AND TRANSFER SWITCH) MONITORING AND CONTROL REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- MANUAL PULL STATIONS SHALL BE INSTALLED WITH TAMPER PROOF COVER WHICH SOUNDS A LOCAL ALARM WHEN OPENED, EQUAL TO SIMPLEX 2099-9815.

FIRE ALARM SYMBOL LEGEND

| | |
|--|---|
| | FIRE ALARM CONTROL PANEL, SURFACE MOUNTED. |
| | FIRE ALARM SYSTEM ANNUNCIATOR PANEL, 48" A.F.F. |
| | FIRE ALARM SYSTEM MANUAL PULL STATION, 48" A.F.F. PROVIDE WITH UL LISTED NON-SOUNDING PROTECTIVE COVER. |
| | FIRE ALARM SYSTEM ALARM INDICATING DEVICE, HORN/STROBE. 80" A.F.F. |
| | FIRE ALARM SYSTEM ALARM INDICATING DEVICE, HORN/STROBE. CEILING MOUNTED. |
| | FIRE ALARM SYSTEM ALARM INDICATING DEVICE, STROBE. 80" A.F.F. |
| | FIRE ALARM SYSTEM ALARM INDICATING DEVICE, STROBE. CEILING MOUNTED. |
| | FIRE ALARM SYSTEM CEILING MOUNTED SMOKE DETECTOR, MULTI-MODE TYPE. |
| | FIRE ALARM SYSTEM CEILING MOUNTED COMBINATION FIXED TEMPERATURE AND RATE OF RISE HEAT DETECTOR. |
| | FIRE ALARM SYSTEM DUCT MOUNTED SMOKE DETECTOR. PROVIDED AND WIRED BY E.C., INSTALLED BY M.C.; PROVIDE CEILING ACCESS PANEL. |
| | FIRE ALARM SYSTEM TAMPER SWITCH. FIELD COORDINATE EXACT QUANTITY AND LOCATIONS. |
| | FIRE ALARM SYSTEM FLOW SWITCH. FIELD COORDINATE EXACT QUANTITY AND LOCATIONS. |
| | FIRE ALARM SYSTEM ROOM TEMPERATURE SUPERVISORY SWITCH. ALARM SHALL INDICATE A DECREASE IN ROOM TEMP TO BELOW 40°F AND ITS RESTORATION TO ABOVE 40°F. FIELD COORDINATE EXACT QUANTITY AND LOCATIONS. |
| | DEVICE MONITORING POINT. PROVIDE ALL REQUIRED HARDWARE TO FACILITATE MONITORING OF DEVICE INDICATED. |
| | CONTROL POINT. PROVIDE ALL REQUIRED HARDWARE TO FACILITATE CONTROL OF DEVICE INDICATED. |
| | MAGNETIC DOOR HOLDER (SUPPLIED WITH DOOR HARDWARE), CONNECT TO LOCAL SMOKE DETECTOR. |
| | U.L. FIRE/SMOKE DAMPER WITH ACCESS DOOR. COORDINATE WITH M.C. |

GENERAL FIRE ALARM NOTES

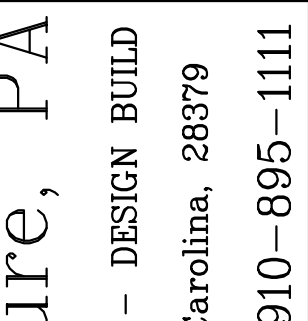
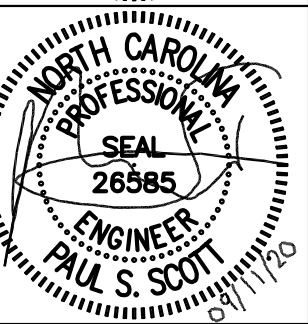
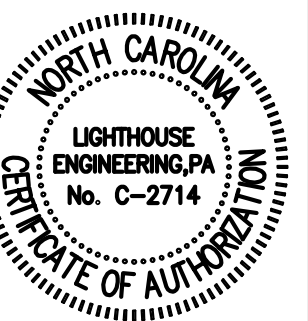
- AUDIBLE FIRE ALARM NOTIFICATION APPLIANCES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15DBA ABOVE THE AVERAGE AMBIENT SOUND PRESSURE LEVEL AT ALL LOCATIONS WITHIN THE OCCUPIABLE SPACE. TYPICAL AVERAGE AMBIENT SOUND PRESSURE LEVELS ARE GIVEN IN NFPA 72 TABLE A-4-3.2.
- ALL EXTERIOR FIXTURES AND DEVICES SHALL BE RATED FOR OPERATION AT 0° F AND SHALL BE DAMP OR WET LABELED AS REQUIRED.
- ALL QUESTIONS MUST BE SUBMITTED IN RFI FORMAT TO THE ARCHITECT AND MUST BE ADDRESSED BY THE APPROPRIATE DESIGNER OF RECORD PRIOR TO BECOMING A PROPOSED CHANGE ORDER.
- FIRE ALARM SYSTEM POWER SUPPLIES SHALL BE SIZED TO PROVIDE 25% SPARE CAPACITY TO ALLOW FOR ADDITIONAL LOAD DUE TO ADDITIONAL VISIBLE ALARM NOTIFICATION PER IBC SECTION 907.5.2.3.3. FIRE ALARM NOTIFICATION CIRCUITS SHALL ALSO BE SIZED TO PROVIDE FOR 25% SPARE CAPACITY.
- IF THE LISTED CANDELA RATING OF A STROBE DEVICE IS NOT READILY AVAILABLE FROM THE MANUFACTURER SELECTED FOR THE PROJECT THEN NEXT STANDARD SIZE UP SHALL BE ACCEPTABLE AND VOLTAGE DROP AND BATTERY CALCULATIONS SHALL BE PERFORMED BASED ON THE DEVICES TO PROVIDED.

Drawing Sheet List

| Number | Title |
|--------|--|
| FA0.0 | FIRE ALARM LEGEND, NOTES AND SCHEDULES |
| FA1.0 | FIRE ALARM PLAN |

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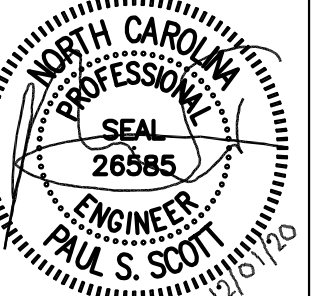
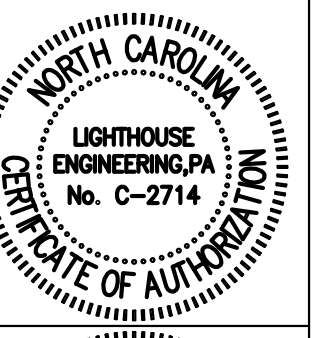
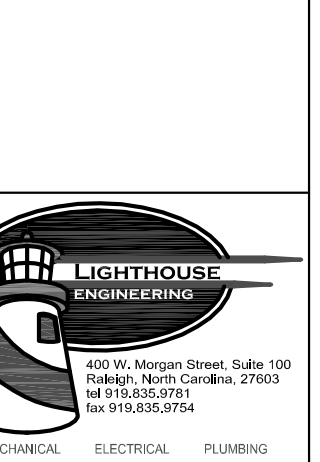
FIRE ALARM LEGEND,
NOTES AND SCHEDULES

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| |
|---|
| WALL LEGEND: (SEE ARCH. PLANS FOR INFO) |
| ----- 1-HR FIRE RATED PARTITION |
| ----- 1-HR FIRE RATED SMOKE BARRIER |
| ----- SMOKE PARTITION |

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| LEGEND | |
|--------|-------------------------|
| | 1-HR FIRE RATED CEILING |

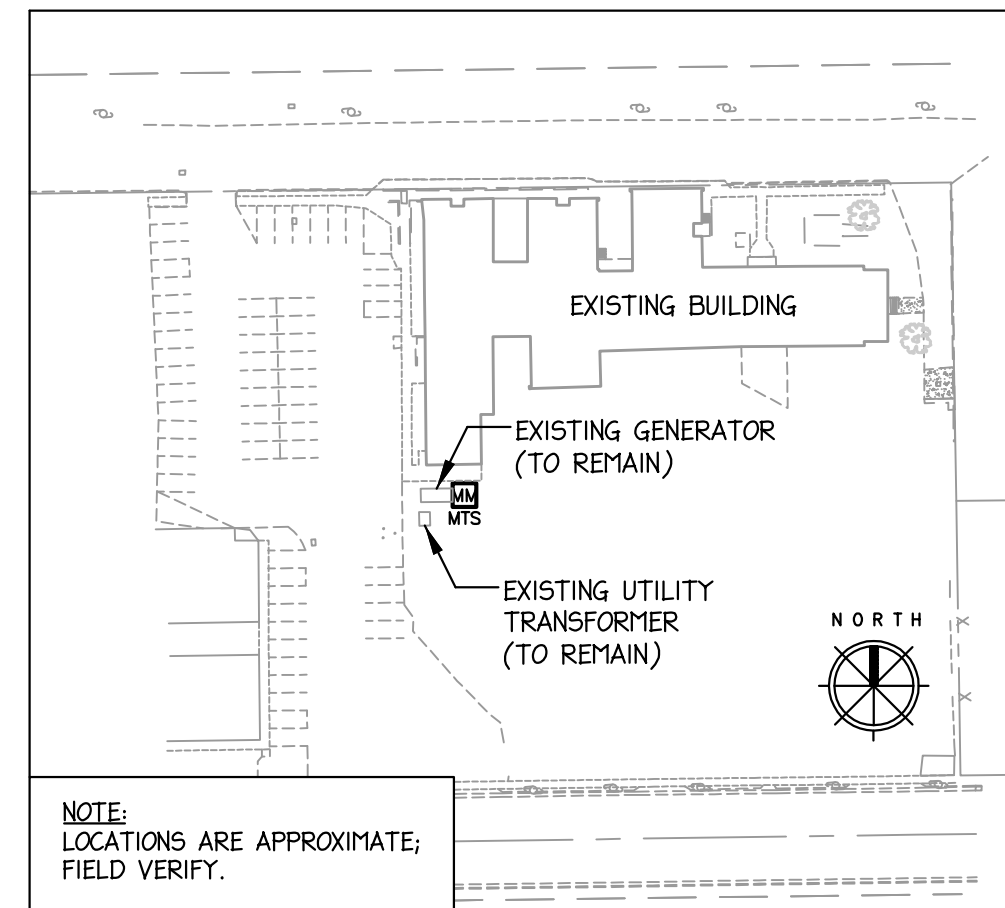
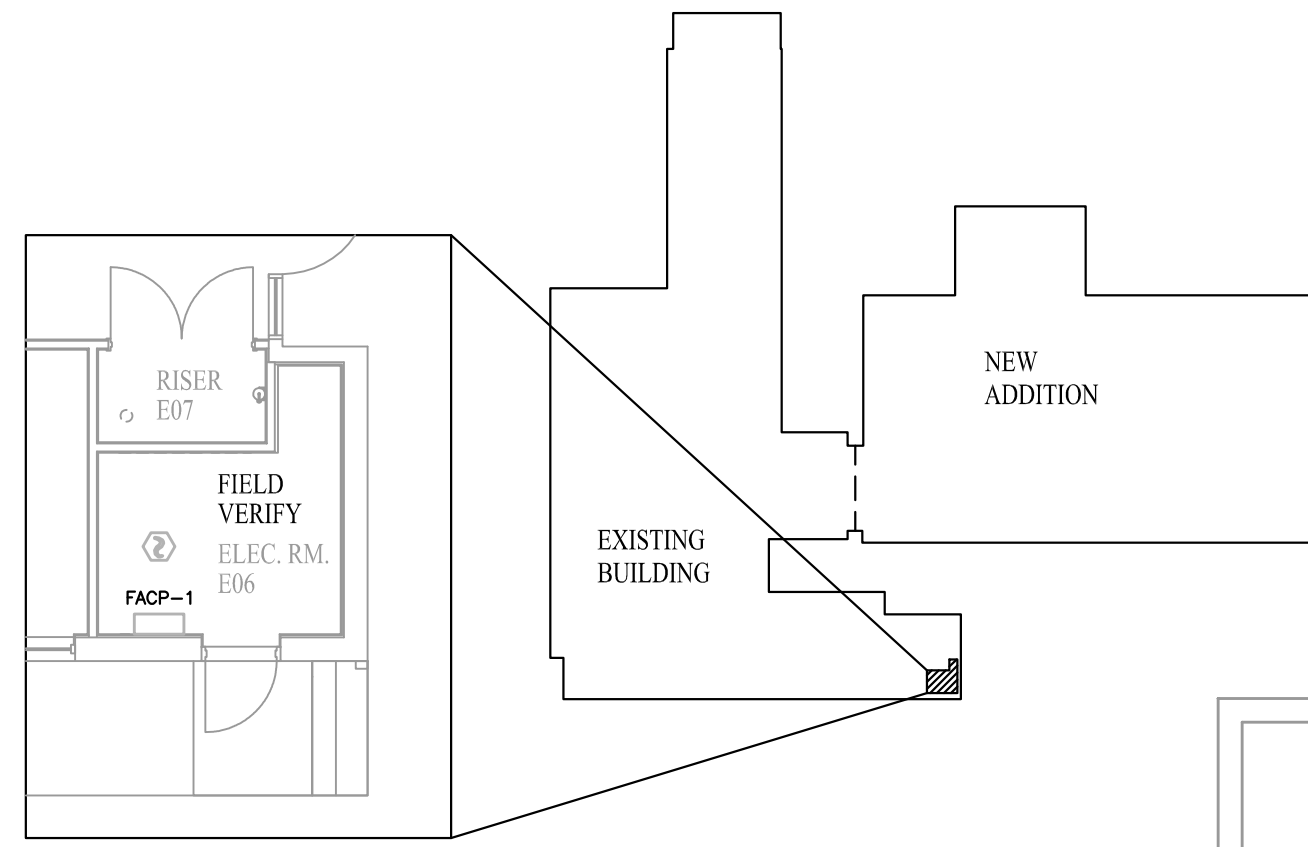
GENERAL NOTES:

- SMOKE DETECTORS SHALL GENERATE LOCAL ALARM AND NOTIFICATION MESSAGE TO STAFF VIA LOW VOLTAGE COMMUNICATION SYSTEM.
- PRIVATE SIGNALING MODE SHALL BE USED IN THE PATIENT CARE UNITS.
- COORDINATE ALL DEVICE LOCATIONS (INCLUDING CEILING DEVICES) WITH OTHER TRADES TO AVOID CONFLICTS.
- COORDINATE EXACT LAYOUT OF SPRINKLER RISER ROOM III WITH SPRINKLER CONTRACTOR.
- COORDINATE QUANTITY AND LOCATION OF ALL TAMPER, FLOW, AND MONITORED POINTS ON GENERATOR WITH SPRINKLER CONTRACTOR.
- VERIFY PULLSTATION LOCATIONS WITH LOCAL FIRE MARSHAL PRIOR TO ROUGH-IN.

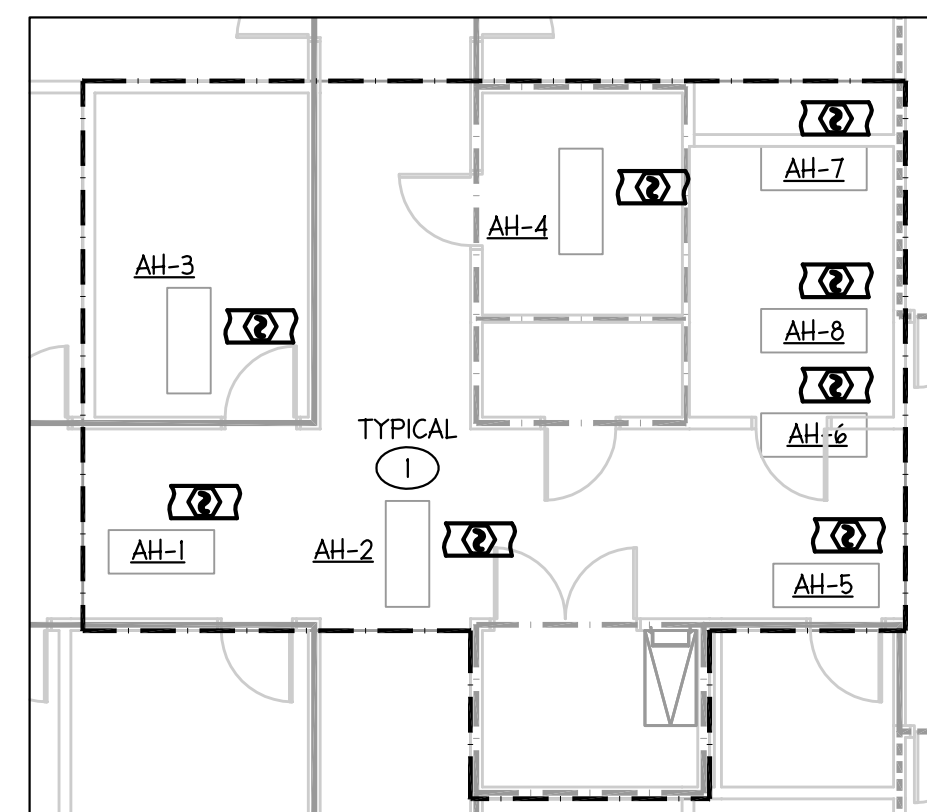
TAGGED NOTES:

- AIR HANDLER LOCATED ON MECHANICAL PLATFORM. SEE MECHANICAL PLANS FOR FURTHER INFORMATION.
- CONFIRM LOCATION AND CONNECTION REQUIREMENTS WITH E.C.
- SECLUSION ROOM LOCKS MUST BE INTERLOCKED WITH FIRE ALARM SYSTEM SO THAT DOOR AUTOMATICALLY UNLOCKS WHEN FIRE ALARM SYSTEM IS ACTIVATED.

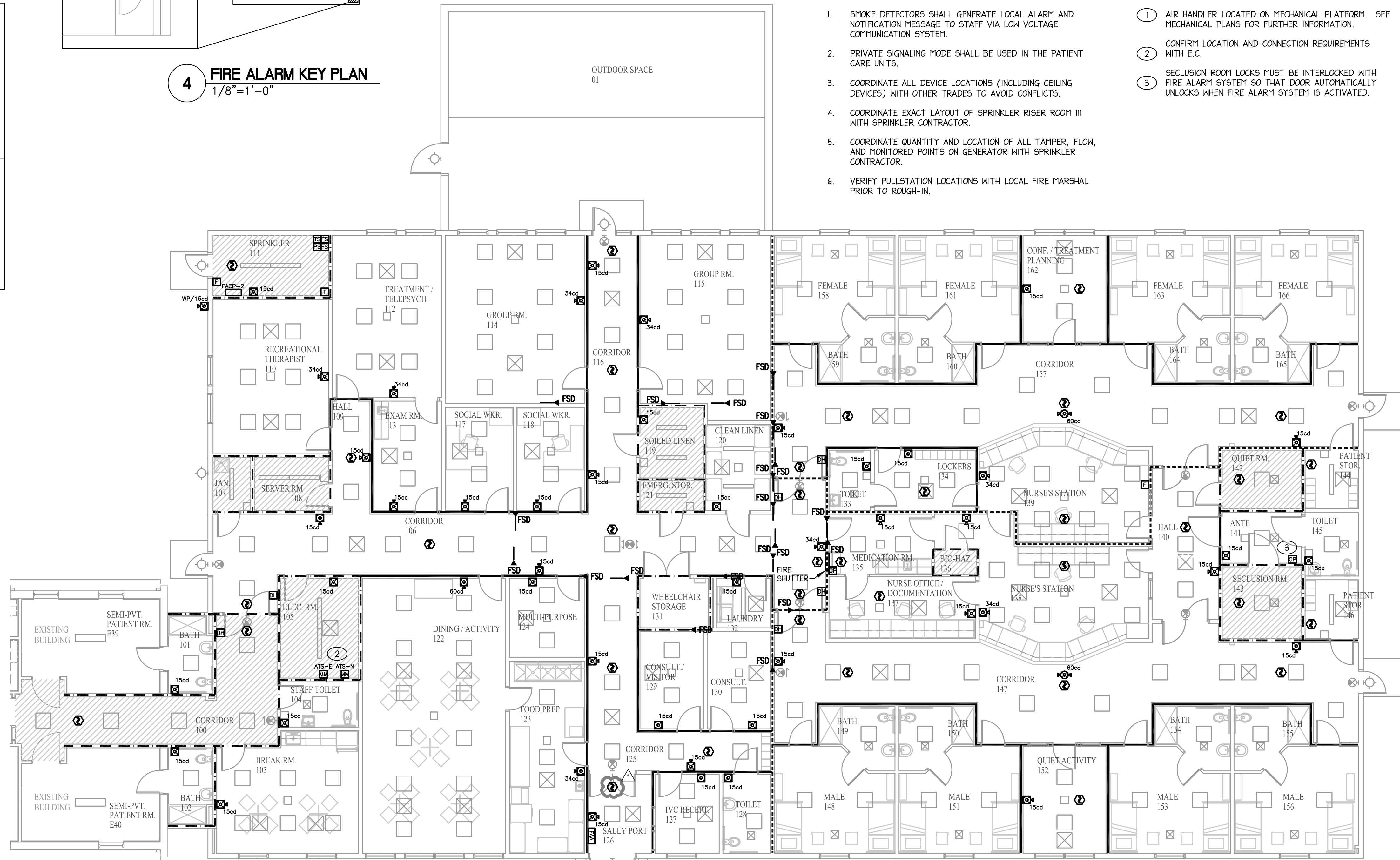
4 FIRE ALARM KEY PLAN
 1/8"=1'-0"



3 FIRE ALARM SITE PLAN
 DIAGRAMMATIC ONLY



2 FIRE ALARM - MEZZANINE PLAN
 1/8"=1'-0"



1 FIRE ALARM - FLOOR PLAN
 1/8"=1'-0"