

TOWN OF ASHLAND CITY Planning Commission Meeting February 07, 2022 5:30 PM Agenda

Chairman: Steven Stratton

Committee Members: Gerald Greer, Steve Allen, Vivian Foston, Mike Stuart, Mike Smith

CALL TO ORDER

ROLL CALL

APPROVAL OF AGENDA

APPROVAL OF MINUTES

1. January 03, 2022 Planning Commission Meeting Minutes

PUBLIC FORUM

OLD BUSINESS

2. Temporary Use Permits Discussion

NEW BUSINESS

- 3. Parking spots for Financial and Real Estate Offices Discussion
- 4. Site Plan Approval: Ashland City C-Store

OTHER

ADJOURNMENT

Those with disabilities who require certain accommodations in order to allow them to observe and/or participate in this meeting, or who have questions regarding the accessibility of the meeting, should contact the ADA Coordinator at 615-792-6455, M-F 8:00 AM – 4:00 PM. The town will make reasonable accommodations for those persons.



TOWN OF ASHLAND CITY Planning Commission Meeting January 03, 2022 5:30 PM Minutes

CALL TO ORDER

Vice-Chairman Greer called the meeting to order at 5:40 p.m.

ROLL CALL

PRESENT

Committee Member Steve Allen

Committee Member Vivian Foston

Committee Member Gerald Greer

Committee Member Michael Smith

Committee Member Mike Stuart

ABSENT

Chairman Steven Stratton

APPROVAL OF AGENDA

A motion was made by Committee Member Stuart, seconded by Committee Member Foston, to approve the agenda. All approved by voice vote.

APPROVAL OF MINUTES

1. December 6, 2021 Planning Commission Meeting Minutes A motion was made by Committee Member Stuart, seconded by Committee Member Smith, to approve the December 6, 2021 Planning Commission Meeting Minutes. All approved by voice vote.

PUBLIC FORUM

None.

OLD BUSINESS

None.

NEW BUSINESS

2. Rezone Request: Hwy 12 S Parcel 062 035.06

Mr. Michael Holt stated that he was wanting to rezone to R4 for the property located at Hwy 12 and Little Marrowbone. Mr. Rick Gregory stated that this is a request to rezone approximately three (3) acres from R-1 Low-Density Residential district to R-4 High-Density Residential district. He stated that permitted uses in the R-4 district include duplex dwellings, Multi-family dwellings, and a number of uses permitted as special exceptions. Mr. Gregory stated that oddly, single-family dwellings are not permitted but Planned Developments are listed as special exceptions even though multi-family dwellings are permitted uses. He stated that residential density is 3,000 square feet per unit and this approximately three (3) acres would yield a maximum of 44 residential dwellings. Mr. Gregory stated that this property is currently zoned R-1 Low-Density Residential district and properties surrounding this request are all zoned R-1 Low-Density Residential. He stated that Vantage Pointe and other properties west of Marrowbone Creek are zoned R-4 and a parcel approximately 4.49 acres in size was recently rezoned R-4 and is the subject of a site plan request for approval on tonight's agenda. Mr. Gregory stated that the property is located just south of Fire Station # 2 but does not physically adjoin this property. He stated that this request for R-4 zoning isn't sufficient in the area to be considered a standalone district but if viewed along with that recently rezoned 4.49-acre parcel it may be considered to be the initial phase(s) of a standalone R4 district. Further, he stated that there are no "transition" districts to separate this proposed rezoning from the existing R-1

- Page 2 - | ITEM # 1.

properties surrounding it and while it adjoins the city's fire station, it is a significant departure from the existing developed properties. Mr. Gregory recommended that due to the significant differences between residential densities permitted in the R-1 and R-4 districts, this request is premature and staff cannot yet recommend this request. Mayor Allen asked if this was considered spot zoning. Mr. Gregory stated that it is small enough and that it could be if others join. He stated that it is not far from the other 4 acres on the agenda tonight that is already rezoned, but with the size alone, it could be considered that. Committee Member Foston questioned if it was 44 units being built. Mr. Gregory stated that was the maximum amount that could be built there. Committee Member Greer asked if there would be a study done regarding the traffic coming off Little Marrowbone or if there would be a traffic light installed. Mr. Gregory stated that it could be asked of them, but that it would be a burden due to the expense. Committee Member Stuart asked what type of structures would be going there. Mr. Holt stated that it would be brick, hardy board, and rock units at 1840 sq foot with 1620 sq foot living space. He stated there would be 35 units total. Committee Member Greer asked how many of the units would be rentals. Mr. Holt stated that these units would be for sale and they were looking to sell them for around \$299,000 per unit. After much discussion, a motion was made by Committee Member Allen, seconded by Committee Member Smith, to approve the rezone request. Voting Yea: Committee Member Allen. Committee Member Foston. Committee Member Greer. Committee Member Smith, Committee Member Stuart.

- 3. Site Plan Approval: Waffle House
 - Mr. Walter Barineau stated that he was seeking site plan approval for the site located between Taco Bell and Popeye's. He stated that this is pretty straightforward and it is a flat site. Mr. Barineau stated that they have been working through a few technicalities with his team and our engineers, but they are significantly there. He stated that they are looking forward to being a part of our growing community. Mr. Rick Gregory stated that this is a request for approval of an approximately 1,775 square foot restaurant and staff review identified several minor technical issues that should be addressed prior to the start of construction. Mayor Allen asked about enforcing the sign. Mr. Gregory stated that they would have to meet the sign ordinance. He stated that with the corrections, staff recommends approval. A motion was made by Committee Member Allen, seconded by Committee Member Stuart, to approve the site plan with the proper changes identified in the Charter and from the planner. Voting Yea: Committee Member Allen, Committee Member Foston, Committee Member Greer, Committee Member Smith, Committee Member Stuart.
- 4. Site Plan Approval: 1807 Hwy 12S
 - Committee Member Mike Stuart declared a conflict for the record. Josh Lyon stated he was with Klober Engineering and was seeking site plan approval for 1807 Hwy 12S. He stated that he had received the comments from Mr. Gregory and they were working on those changes. Mr. Lyon stated that there had been some concern with the cemetery previously and that it would be remaining where it is. He stated that they would be placing a retaining wall around it. Mr. Gregory stated that this is a proposal for a 39 unit townhome development located adjacent to Fire Station #2 and staff review identified several minor technical issues that should be addressed prior to the start of construction. Mr. Gregory asked about access to the cemetery. Mr. Lyon stated that they could provide it. Mr. Gregory stated that with the corrections, staff recommends approval. Committee Member Foston questioned if any headstones would be moved. Committee Member Stuart stated that none have been moved and they wouldn't be. Committee Member Greer asked if there would be a turn lane added. Mr. Lyon stated that there would be a right turn in and a right turn out only. Committee Member Greer asked if we had Mr. Gregory's recommendation. Mr. Gregory stated yes, with his comments included. A motion was made by Committee Member Allen, seconded by Committee Member Smith, to approve the site plan with Mr. Gregory's recommended changes. Voting Yea: Committee Member Allen, Committee Member Foston, Committee Member Greer, Committee Member Smith, Voting Abstaining: Committee Member Stuart.

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5. Powers and Duties of Municipal Planning Commissions At this time, Mr. Gregory went over the Powers and Duties of Municipal Planning Commissions with the committee members.

OTHER

None.

ADJOURNMENT

A motion was made by Committee Member Stuart, seconded by Committee Member Smith, to adjourn the meeting. The meeting adjourned at 6:56 p.m.

CHAIRMAN STEVEN STRATTON

CITY RECORDER ALICIA MARTIN, CMFO



This Ashland City Temporary Use Permit will be good for the following dates starting 1st of April to end on 1st of Nov

Permit issued will be 1 per person per location per year

This permit is for use in any district / or ward {not in industrial area} inside the city limits of Ashland City Tennessee

Permit is good for the Time frame of not to start business before 8:30am & all business to end at location by 6:00pm daily

Cost of this Ashland City Temporary Use Permit will be \$25.00 per year

What is needed to apply for the Permit at the Ashland City Office: You must produce a Current Business License from Cheatham County & Business License from Ashland City

Rules you will have to follow with this permit:

This permit will only be valid for the location that is put on the application at time of submission to the city {you cannot change locations without a new permit} You must Have a Current Copy of your Business Permit from County, City and a Copy of your Temporary Use Permit at your selling location for easily to be seen by all to see visiting your location of business

You must have adequate off the road parking at your location

You must not cause a Traffic Flow problem on the main road at your location

Your location must stay organized, cleanly kept & no trash stored outside of trash containers

All Produce/Goods or Temporary Structures must be no less than 30 feet away from roadway

All temporary structures if vacant for more than 7 days must be removed before the 8th day

On 1st of Nov - all temporary structures must be removed till the next years permit start on 1st April

IF ANY OF THESE RULES ARE NOT FOLLOWED - YOUR PERMIT WILL BE REVOLTED & you can be refused a Permit for the next year

No Permits will be issued to any locations/person that gives an address selling at, {that is considered by Zoning Board} this location is in a subdivision



September 23, 2021

Michael Dewey RE: Old Hydes Ferry Pike (Indicated in attached drawing) Ashland City, Tn 37015

To Michael Dewey

In response to your request, natural gas is or can be made available to the above mentioned property in Ashland City, TN. Please have business owner contact us with specific natural gas needs (total connected btu/cfh of natural gas equipment) to determine if any costs are applicable.

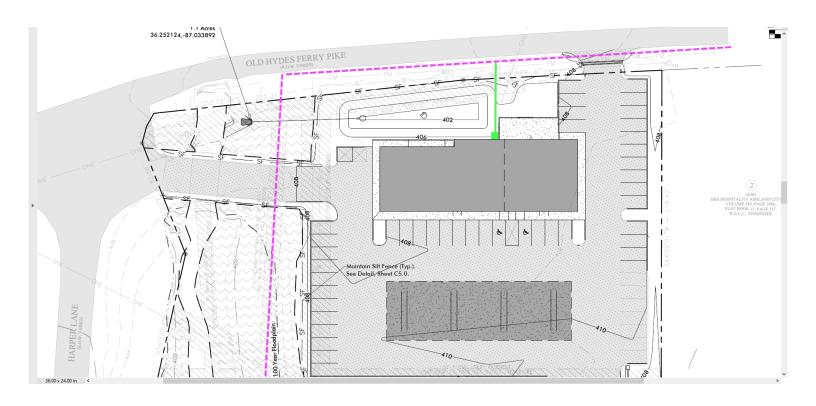
If you need further assistance, please do not hesitate to contact Matt Brown. He can be reached at 615-872-2349.

Sincerely,

PIEDMONT NATURAL GAS

Matt Brown Commercial/Residential Sales Specialist Matt.Brown@duke-energy.com

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10.20.2021

REVISIONS:

DRAWN BY:

PROJECT PHASE:

COVER SHEET



DHAVAL PATEL ASHLAND CITY C-STORE



CONSULTANT INFO

(615) 401-9956

Dewey Enginering Nashville, Tennessee 37204 Michael Dewey mdewey@dewey-engineering.com

Scallion Structural Engineering

401 Redfield Drive Jackson, TN 38305 Jeremy Scallion jeremy@scallionstructural.com (731) 217-1614

Win Engineering

2 International Plaza, Suite 410 Nashville, Tennessee 37217 Lori A. Walters lwalters@winengineer.com (615) 891-4565 (615) 400-8371

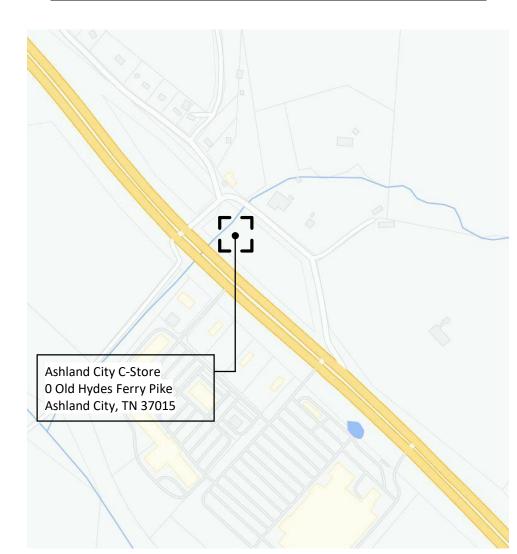
SPECIAL INSPECTIONS

Provide Special Inspections during construction as required by IBC 1704. A qualified Special Inspector must provide a Certificate of Special Inspection signed and sealed by a Registered Professional Engineer prior to commencing work.

Submit Reports to the Building Official and the Architect in a timely manner, per Section 13300.

STRUCTURAL SPECIAL INSPECTIONS

- Inspections must be performed as specified in General Structural Notes on the Structural Drawings. May include but not limited to:
- Anchor Bolts
- Structural Steel Braced Frames Multi-pass field welds
- Attachment of metal roof deck



SHEET INDEX

| | | 0 | REV. | REV. |
|--------|---------------------|------------|-------|------|
| SHEET# | DESCRIPTION | ISSUE DE | ELTA# | DATE |
| G-001 | COVER SHEET | 10/20/2021 | | |
| G-002 | PROJECT INFORMATION | 10/20/2021 | | |
| G-003 | WALL & ROOF TYPES | 10/20/2021 | | |
| G-004 | ADA DETAILS | 10/20/2021 | | |
| G-005 | ADA DETAILS | 10/20/2021 | | |
| G-006 | ADA DETAILS | 10/20/2021 | | |

civil

| SHEET# | DESCRIPTION | ORIG. REV. ISSUE DELTA# | |
|--------|--|----------------------------|--|
| | | | |
| C0.0 | Cover Sheet | 10/20/2021 | |
| C1.0 | Layout & Utilities Plan | 10/20/2021 | |
| C2.0 | Existing Conditions & Initial Erosion Control Plan | 10/20/2021 | |
| C3.0 | Intermediate Erosion Control Plan | 10/20/2021 | |
| C4.0 | Grading & Drainage Plan | 10/20/2021 | |
| C5.0 | Details | 10/20/2021 | |
| C5.1 | Details (Cont,) | 10/20/2021 | |
| L1.0 | Landscape Compliance Plan | 10/20/2021 | |

architectural

| SHEET# | DESCRIPTION | ORIG. ISSUE | REV. DELTA# | [[|
|--------|---|----------------|----------------|--------|
| | | | | |
| AS102 | ARCHITECTURAL SITE PLAN | 10/20/2021 | | |
| A-101 | FIRST FLOOR PLAN | 10/20/2021 | | |
| A-102 | FIRST FLOOR DIMENSION PLAN | 10/20/2021 | | |
| A-103 | REFLECTED CEILING PLAN | 10/20/2021 | | |
| A-104 | ROOF PLAN | 10/20/2021 | | |
| A-105 | EQUIPMENT | 10/20/2021 | | |
| A-201 | BUILDING ELEVATIONS | 10/20/2021 | | |
| A-202 | BUILDING 3D VIEWS - EXTERIOR | 10/20/2021 | | |
| A-203 | INTERIOR ELEVATIONS | 10/20/2021 | | |
| A-204 | BUILDING 3D VIEWS - INTERIOR | 10/20/2021 | | |
| A-301 | BUILDING SECTIONS | 10/20/2021 | | |
| A-302 | WALL SECTIONS | 10/20/2021 | | |
| A-501 | EXTERIOR / INTERIOR DETAILS | 10/20/2021 | | |
| A-601 | DOOR & WINDOW SCHEDULES, ELEVATIONS | 10/20/2021 | | |
| A-701 | FIRST FLOOR FINISH PLAN | 10/20/2021 | | |
| A-800 | FOR INFORMATION ONLY - COOLER / FREEZER | 10/20/2021 | | |
| | | | | |

| SHEET# | DESCRIPTION | ORIG. ISSUE | REV. DELTA# | REV. DATE |
|--------|-----------------------------|----------------|----------------|--------------|
| | | | - | |
| S1.0 | General Notes | 10/20/2021 | | |
| S1.1 | Quality Assurance Plan | 10/20/2021 | | |
| S2.0 | Foundation Plan | 10/20/2021 | | |
| S3.0 | Canopy Framing Plan | 10/20/2021 | | |
| S3.1 | Low Roof Framing Plan | 10/20/2021 | | |
| S3.2 | High Roof Framing Plan | 10/20/2021 | | |
| S4.0 | Base Plate and Pier Details | 10/20/2021 | | |
| S4.1 | Foundation Sections | 10/20/2021 | | |
| S5.0 | Typical Framing Sections | 10/20/2021 | | |
| S5.1 | Canopy Framing Sections | 10/20/2021 | | |
| S5.2 | Roof Framing Sections | 10/20/2021 | | |
| S6.1 | Framing Elevations | 10/20/2021 | | |
| S6.2 | Framing Elevations | 10/20/2021 | | |
| | | | | |

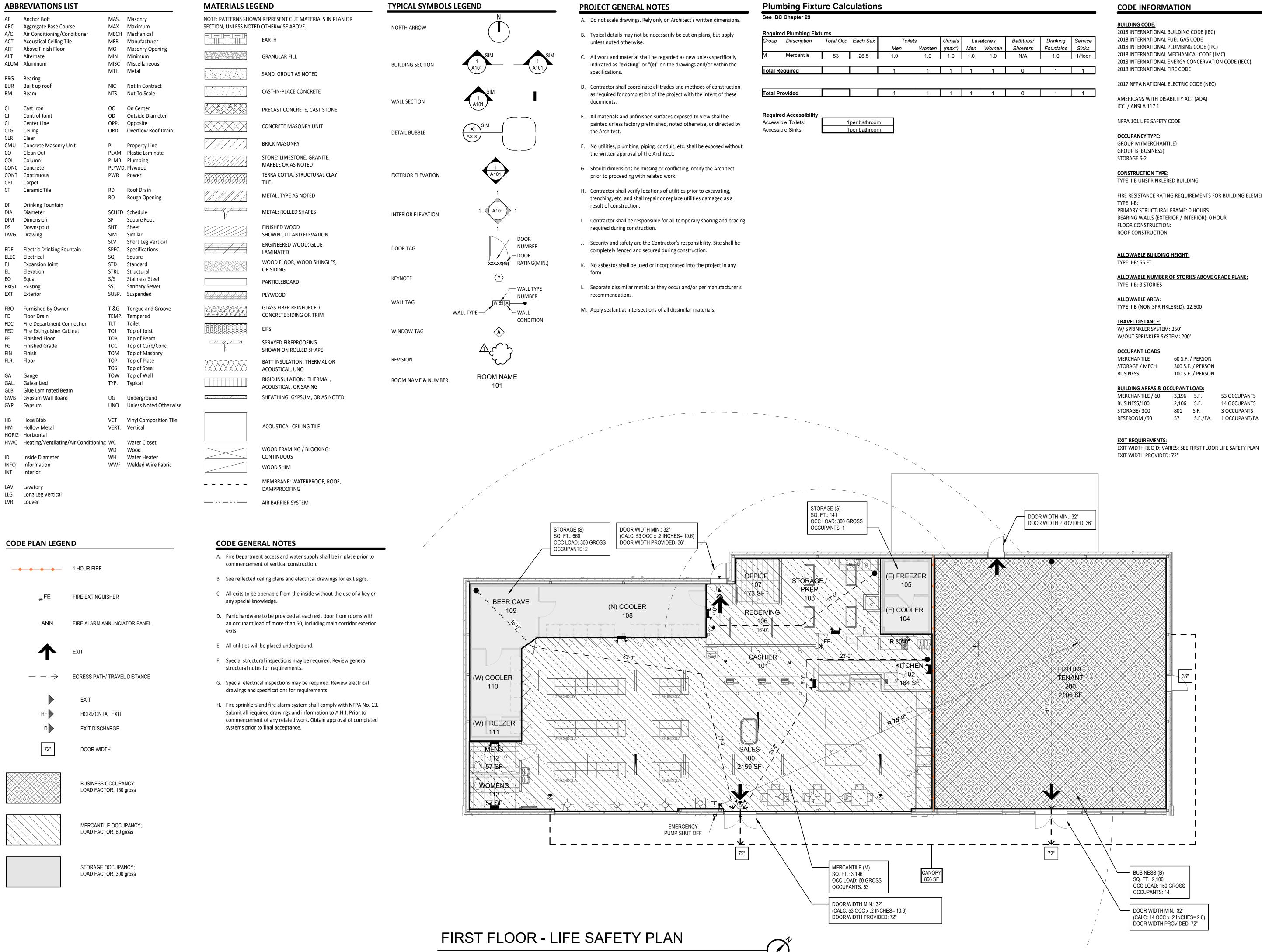
mechanical

| SHEET# | DESCRIPTION | ORIG. ISSUE | REV. DELTA# | REV. DATE |
|--------|--------------------------------|----------------|----------------|--------------|
| | | | | |
| M-101 | MECHANICAL PLAN | 10/20/2021 | | |
| M-102 | MECHANICAL GAS PLAN | 10/20/2021 | | |
| M-201 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-202 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-203 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-204 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-205 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-206 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-207 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-208 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-209 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-210 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |
| M-211 | MECHANICAL HOOD SPECIFICATIONS | 10/20/2021 | | |

plumbing

| SHEET# | # DESCRIPTION | ORIG. ISSUE | REV. DELTA# | REV. DATE |
|--------|---------------------|----------------|----------------|--------------|
| P-101 | PLUMBING PLAN | 10/20/2021 | | |
| P-102 | PLUMBING RISER PLAN | 10/20/2021 | | |

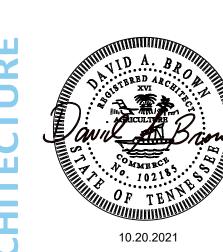
| electrical | | | | | |
|----------------|---|--------------------------|----------------|--------------|--|
| SHEET# | DESCRIPTION | ORIG. ISSUE | REV. DELTA# | REV. DATE | |
| ⊏ 001 | FLECTRICAL LECENDS & COLIEDIUS | 10/20/2021 | | | |
| E-001 F-002 | ELECTRICAL LEGENDS & SCHEDULES FLECTRICAL PANEL SCHEDULES RISER DIAGRAM | 10/20/2021 10/20/2021 | | | |
| E-003 | ELECTRICAL LIGHT FIXTURE SCHEDULE IECC REPORT | 10/20/2021 | | | |
| E-101 | ELECTRICAL LIGHTING FLOOR PLAN | 10/20/2021 | | | |
| E-102 | ELECTRICAL POWER FLOOR PLAN | 10/20/2021 | | | |
| E-103 | ELECTRICAL HVAC POWER ROOF & FLOOR PLANS | 10/20/2021 | | | |
| E-200 | ELECTRICAL SPECIFICATIONS | 10/20/2021 | | | |



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FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:



DATE OF ISSUE:

1/8" = 1'-0"

REVISIONS:

10.20.2021

0214-21

MA PROJECT NO:

PROJECT PHASE: DRAWN BY:

> PROJECT **INFORMATION**

INTERIOR WALL TYPE

S 06 WALL TYPE

INTERIOR WALL TYPE

EXTERIOR WALL TYPE

1 1/2" =1'-0"

10 1/4"

EXTERIOR WALL TYPE

W 03 1 1/2" =1'-0"

1' - 1 3/4"

ROOF TYPE

1 1/2" =1'-0"

R 01

60 MIL; FULLY ADHERED

METAL DECKING: 1-1/2"

MANUFACTURED THIN BRICK VENEER; R=0.36

CEMENT BACKERBOARD SHEATHING, 1/2" R=0.45

EXTRUDED POLYSTYRENE (XPS) RIGID

TOTAL: R=30.2

— FACE BRICK VENEER R=0.44

EXTRUDED POLYSTYRENE (XPS) RIGID

— EXTERIOR GYPSUM SHEATHING, 1/2" R=0.45

FOAM INSULATION, 1-1/2" R=7.5

6" METAL STUD FRAMING@ 16" O.C.

— BATT INSULATION CONT.; 6" R=21

— GYPSUM BOARD, 5/8" R=0.56

BRICK ANCHORS, TYP AIR SPACE, 1" R=0.25

FOAM INSULATION, 1-1/2" R=7.5

THIN SET

AIR/ WATER BARRIER

REF: STRUCTURAL

MECHANICALLY FASTENED; R=17.5" POLY ISO RIGID INSULATION BOARD, 3"

THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE ROOFING

B. All fire rated walls extend full height to structure above and seal to deck, UNO. See Fire Rated Details for approved joint conditions.

C. All penetrations at smoke and fire rated assemblies shall be protected, sealed, and dampered, using only UL or ICC-ES approved methods, materials and installation, as required to maintain the assembly's rating and smoke resistance. All materials and installation details shall conform to the UL listings for "through penetration fire stop systems" where applicable. The Contractor shall submit shop drawing details, furnished by the manufacturer of the fire stop material, that show complete conformance to the UL Listing, and such drawings shall be available to the Fire or Building Inspectors onsite. The drawings shall be specific for each penetration type.

A. All fire rated walls shall be completely and continuously constructed

first, and then other non-rated walls constructed to the finished

WALL & PARTITION GENERAL NOTES

D. Smoke separation walls shall form an effective membrane, continuous from outside wall to outside wall, from fire barrier to fire barrier, from smoke barrier to smoke barrier and from floor slab to floor or roof slab above, thereby providing continuity through all concealed spaces. The Contractor shall completely seal all openings where the smoke barrier abuts other smoke barriers, fire barriers, exterior walls, the floor below and the floor or ceiling above.

E. All backing support for wall mounted items shall be 16 gauge min. metal strapping, UNO.

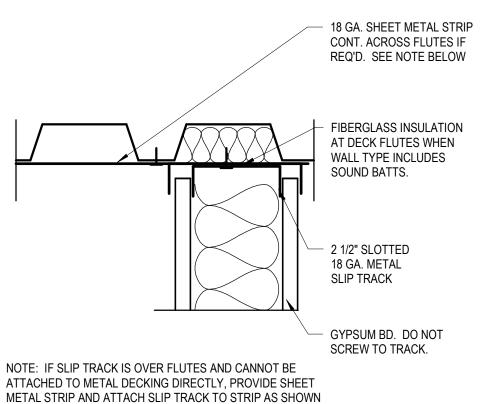
F. Brace interior non-bearing walls to structure per Architectural Drawings.

G. Slotted slip track shall be used at all top of full-height wall conditions subject to loading by deflection of the structure above.

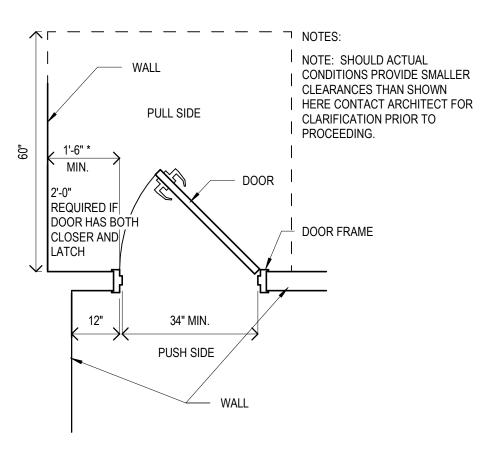
H. All light gauge metal framing shall be installed in strict accordance with ASTM 754 "Standard Specifications for Installation of Steel Framing Members".

STRUCTURAL FRAMING DECK - CEILING EXTERIOR PARAPET OR WALL UP TO DECK REQ'D WALL UP TO BOTTOM WALL ABOVE CEILING WALL UP TO CEILING EXTERIOR WALL OVERHEAD BRACED UP TO ROOF FIRE WALL FOR FIRE BARRIERS OF STRUCTURE OVERHEAD BRACED

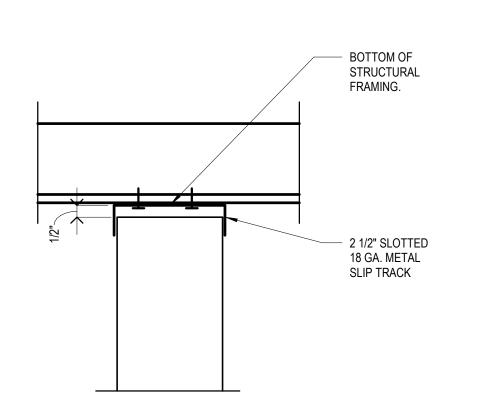
WALL COMBO CONDITIONS DIAGRAM



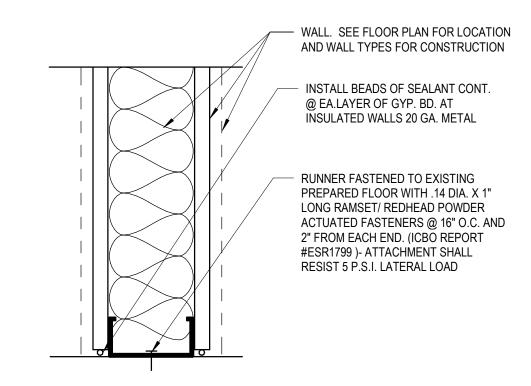
1 TOP OF WALL METAL DECK1



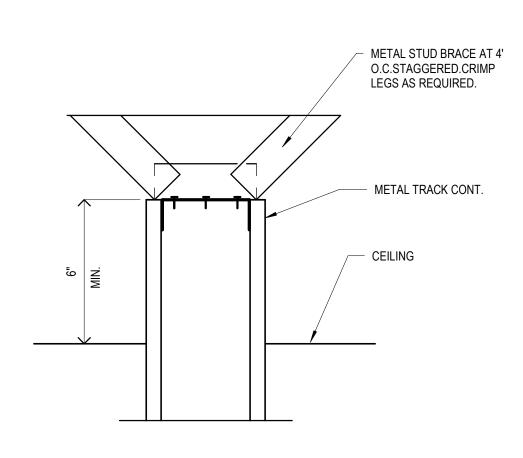
DOOR CLEARANCE1



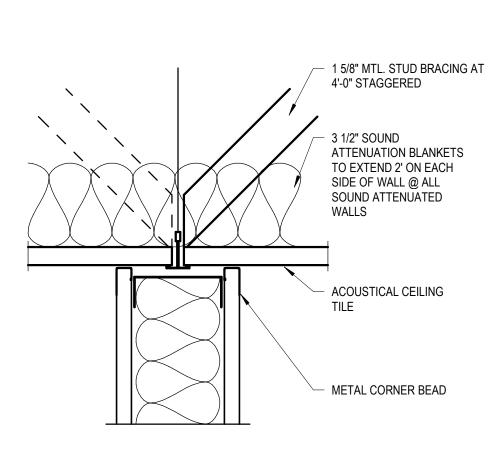
² TOP OF WALL AT STRUCTURAL FRAME



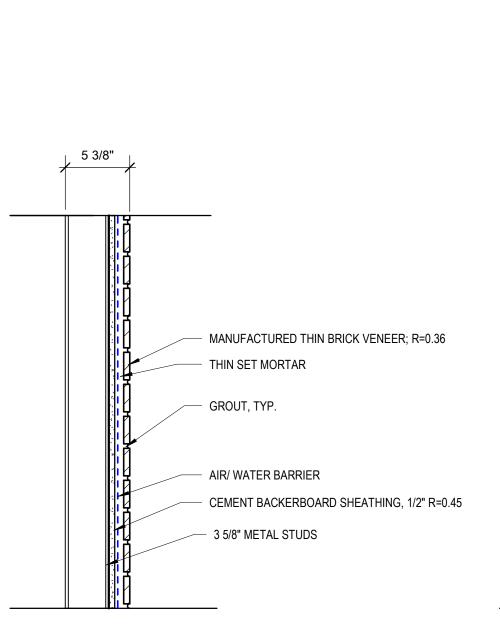
6 WALL AT FLOOR STEEL STUD PARTITIONS1



4 WALL AT CEILING 6 IN ABOVE1



5 WALL AT GRID CEILING1



COOLER/ FREEZER WALLS:

WHITE STUCCO EMBOSSED

GALVANIZED STEEL; 24 -26 GAUGE

- EXTRUDED POLYSTYRENE INSULATION CORE, 4"

SELF-ADHERED MEMBRANE FLASHING TRANSITION CAST STONE WATERTABLE MANUFACTURED STONE VENEER; R=0.36 - MORTAR SETTING BED MORTAR SCRATCH COAT AIR/ WATER BARRIER EXTERIOR PLYWOOD SHEATHING, 1/2" R=0.45 EXTRUDED POLYSTYRENE (XPS) RIGID FOAM INSULATION, 1-1/2" R=7.5

EXTERIOR WALL TYPE

1 1/2" =1'-0"

- 3 5/8" METAL STUDS @ 24" O.C.

TOTAL: R=30.2

CONSTRUCT PER U.L. DESIGN NO.U465 WHERE ONE HOUR RATED WALL IS REQUIRED. 5/8" TYPE "X" GYP. BD. ON **BOTH SIDES** SOUND ATT. BATT INSULATION 6" METAL STUDS @ 24" O.C.

INTERIOR WALL TYPE

[─] 1 1/2" =1'-0"

CONSTRUCT PER U.L. DESIGN NO.U465 WHERE ONE HOUR RATED WALL IS REQUIRED. 5/8" TYPE "X" GYP. BD. ON **BOTH SIDES**

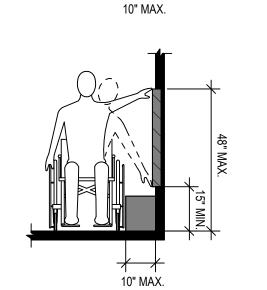
INTERIOR WALL TYPE

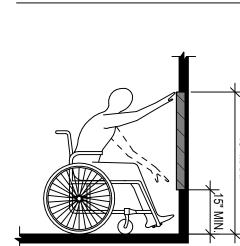
WALL & ROOF TYPES

REVISIONS:

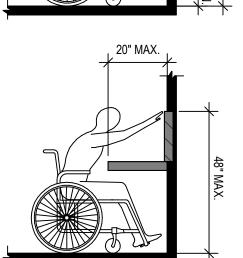
DATE OF ISSUE: 10.20.2021 MA PROJECT NO:

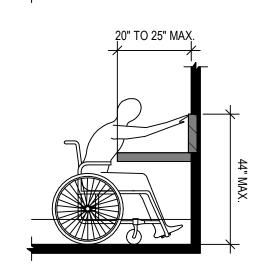
PROJECT PHASE: DRAWN BY:





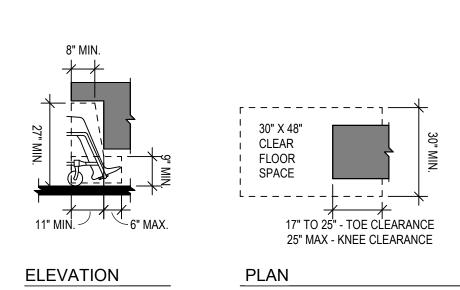
SIDE REACH



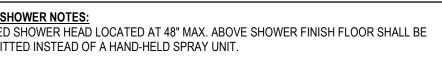




ACCESSIBLE REACH RANGES

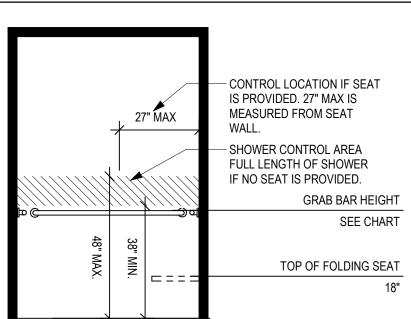


GENERAL SHOWER NOTES: A FIXED SHOWER HEAD LOCATED AT 48" MAX. ABOVE SHOWER FINISH FLOOR SHALL BE PERMITTED INSTEAD OF A HAND-HELD SPRAY UNIT.



FLOOR FOR SHOWER SHALL NOT SLOPE IN EXCESS OF 1:48 IN ANY DIRECTION. FOLD DOWN SEATS ARE NOT REQUIRED IN ROLL-IN TYPE SHOWER COMPARTMENTS

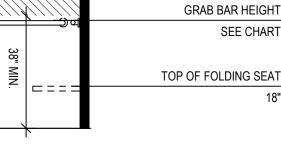
"L" SHAPED SEAT IS NOT REQUIRED AT TRANSFER TYPE STALL.



30" X 60"

CLEAR AREA

ACCESSIBLE SHOWER TYPES



SHOWER CONTROL AREA

F FOLD DOWN SEAT IS

PROVIDED THEN NO GRAB

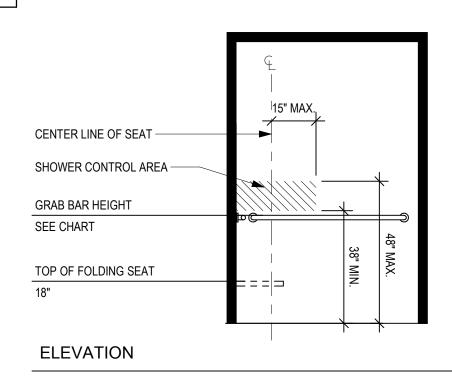
BAR AT THIS LOCATION.

THRESHOLD RE: ACS

TOP OF FINISH MATERIAL.

(CARPET, VCT, TILE, ETC.)

THRESHOLD



FOLDING SEAT (RECTANGULAR)

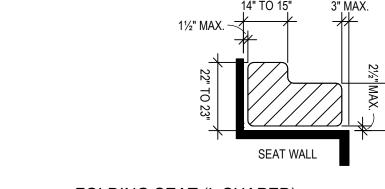
NO GRAB BAR -

FOLD DOWN SEAT

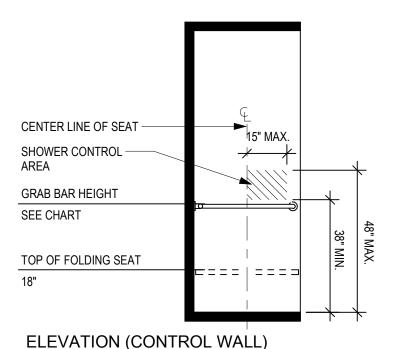
WHERE SHOWN

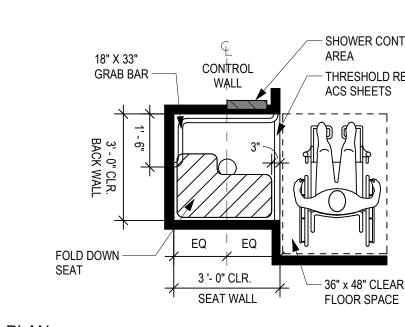
ON PLANS

ABOVE SEAT



FOLDING SEAT (L SHAPED)





- SHOWER CONTROL

- THRESHOLD RE:

ACS SHEETS

AREA

PLAN

TRANSFER TYPE SHOWER COMPARTMENT

-----PLAN PLAN STANDARD ROLL-IN TYPE SHOWER COMPARTMENT

MAXIMUM VERTICAL CHANGE IN LEVEL IS 1/4".

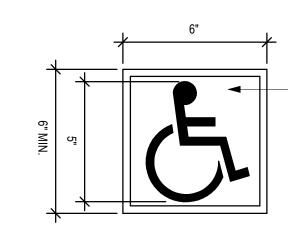
CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" HIGH (MAX)

CAN BE BEVELED WITH A SLOPE NO STEEPER THAN 1:2

THRESHOLD WHERE

INDICATED ON THE DRAWINGS.

ALTERNATE **ROLL-IN** TYPE SHOWER COMPARTMENT



THRESHOLD RE:

ACS SHEETS

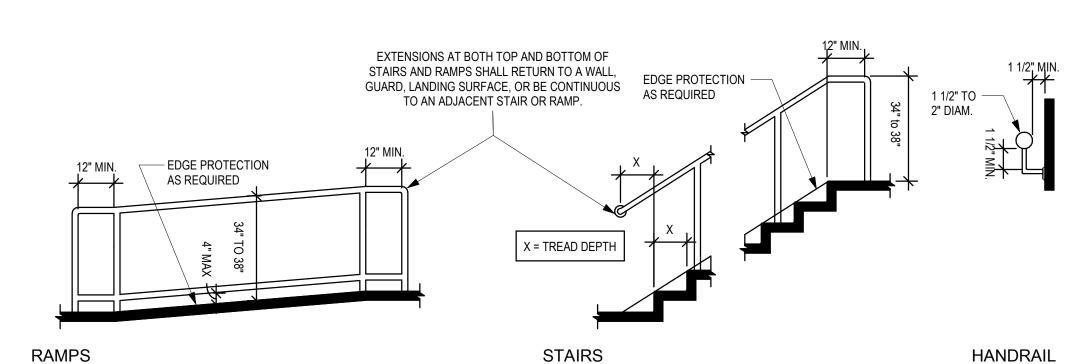
SHOWER CONTROL AREA

36" MIN.

- PICTOGRAPH SYMBOL

RAISED CHARACTERS SHALL BE AT LEAST 5/8" HIGH BUT NO HIGHER THAN 2". PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE 6" MINIMUM IN HEIGHT ADD BRAILLE WHERE REQUIRED.

INTERNATIONAL SYMBOL OF ACCESSIBILITY



| RA | AMPS |
|-----|--|
| | |
| RAI | MP GENERAL NOTES: |
| 1. | RUNNING SLOPE CANNOT BE STEEPER THAN 1:12 |
| 2. | AT EXISTING CONDITIONS: A. STEEPER THAN 1:10 BUT NOT STEEPER THAN 1:8 - MAX RISE IS 3" B. STEEPER THAN 1:12 BUT NOT STEEPER THAN 1:10 - MAX RISE IS 6" |
| 3. | MAX RISE OF ANY RAMP IS 30" |
| 4. | EDGE PROTECTION CAN BE CURB/ BARRIER (AS SHOWN ABOVE) OR EXTEND FLOOR /GROUND SURFACE 12" FROM EACH HANDRAIL. |
| 5. | EDGE PROTECTION NOT REQUIRED ON RAMP LANDINGS SERVING AN ADJOINING |

STAIR GENERAL NOTES: EXTENSIONS SHALL NOT BE REQUIRED FOR CONTINUOUS HANDRAILS AT THE INSIDE TURN OF SWITCHBACK OR DOGLEG STAIRS AND RAMPS. TREAD AND RISERS TO BE UNIFORM AND HAVE A RISE BETWEEN 4"-7" AND TREAD OF 11" DEEP MIN.

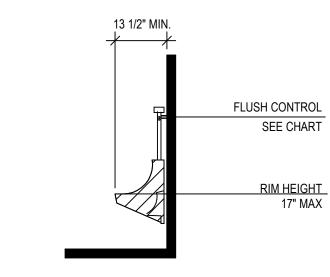
ACCESSIBLE DIMENSIONS STANDARD DESCRIPTION & LOCATION CHILDREN (NON ADA) ADULT (AGES 5 T0 12) FORWARD AND SIDE REACH RANGES 18" TO 40" 15" TO 48" -----WATER CLOSET CENTERLINE TO WALL 17" 15" PER PLAN 15" 16" TOILET SEAT HEIGHT **TOILET & SHOWER** -----STALL GRAB BAR HEIGHTS 2" BELOW 2" BELOW TOP OF TOILET PAPER **◆**── GRAB BAR IF GRAB BAR IF DISPENSER HEIGHT MTD BELOW. MTD BELOW. 12" TO **BOTTOM IF** BOTTOM IF MTD ABOVE MTD ABOVE FLUSH CONTROL HEIGHT 2" MIN. FOR WATER CLOSET BELOW BELOW POSITION FLUSH VALVE TO GRAB BAR GRAB BAR WIDE SIDE OF STALL OR ROOM -36" MAX 36" MAX DRINKING FOUNTAIN & ACCESSIBLE **ACCESSIBLE** WATER COOLER SPOUT HEIGHT 42" STANDING 42" STANDING FLUSH CONTROL HEIGHT FOR URINAL 46" POSITION FLUSH VALVE TO WIDE SIDE OF STALL OR ROOM -46" OR 48" MAX. FEMININE NAPKIN DISPENSER SEE ACCESSIBLE CONTROL LOCATION **REACH RANGES** 76" AFF TO 76" AFF TO 76" AFF TO MIRRORS MOUNTED ABOVE TOP EDGE TOP EDGE TOP EDGE COUNTER TOPS OR SINKS HEIGHTS ARE TO -40" MAX REFLECTING SURFACE BOTTOM BOTTOM BOTTOM **EDGE** EDGE EDGE 76" AFF TO 76" AFF TO 76" AFF TO FREE STANDING MIRRORS TOP EDGE TOP EDGE TOP EDGE HEIGHTS ARE TO — REFLECTING SURFACE 35" MAX TO 35" MAX TO BOTTOM BOTTOM BOTTOM **EDGE EDGE** EDGE LAVATORY AND SINK 31" MAX 34" MAX 36" RIM HEIGHT 46" OR 48" MAX. PAPER TOWEL DISPENSER SEE ACCESSIBLE CONTROL HEIGHT REACH RANGES 46" OR 48" MAX. **4** SOAP DISPENSER CONTROL SEE ACCESSIBLE REACH RANGES SOAP DISH 48" 38" FEMININE NAPKIN DISPOSAL 2" MIN. BELOW 2" MIN. BELOW 32" MTD. ON "BACK" HEIGHT TO TOP GRAB BAR GRAB BAR OF DISPOSAL UNIT TOWEL BAR 34" LIGHT SWITCHES, THERMOSTATS, WALL 46" OR 48" MAX. MOUNTED COMMUNICATION SEE ACCESSIBLE AND FIRE ALARM PULL REACH RANGES DEVICES. HEIGHT TO CENTER OF CONTROL. **ELECTRICAL OUTLETS** TELEPHONE OUTLETS, & DATA RECEPTACLES. HEIGHT TO CENTER OF OUTLET OR RECEPTACLE TOP OF STAIR AND RAMP HANDRAILS 36" HEIGHT IS ABOVE STAIR NOSING OR RAMP SURFACE CENTER OF DEDICATION **PLAQUE** FIRE EXTINGUISHER CABINET. HEIGHT TO DOOR HANDLE DOOR HARDWARE DOOR LEVER 41" DOOR PULL 41" 41" PANIC BAR 41" THE CENTER LINE OF DOOR HARDWARE MAY VARY BETWEEN WOOD DOOR WITH SIDE LIGHT AND ALUMINUM STORE FRONT DOORS. COORDINATE WITH PLANS AND HARDWARE MANUFACTURER TOP OF TRAY SLIDES 34" MAX 36" 000 36" TRAY RETURN COUNTER 34" MAX HEIGHT OF WORK SURFACES 34" MAX HEIGHT OF TABLES AND COUNTERS 30" MAX . ON PLUMBING FIXTURES THERE IS A RANGE OF +/- 1".

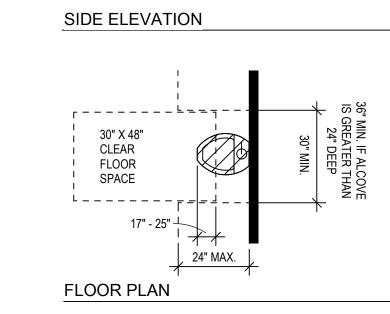
MOUNTING CHART

- CHILDREN AGES 5 THRU 12 REPRESENTS PRIMARY USER GROUP AS ELEMENTARY STUDENTS. MIDDLE SCHOOL IS CONSIDERED ADULT.
- COORDINATE MOUNTING HEIGHTS WITH ACCESSIBLE REACH RANGES.

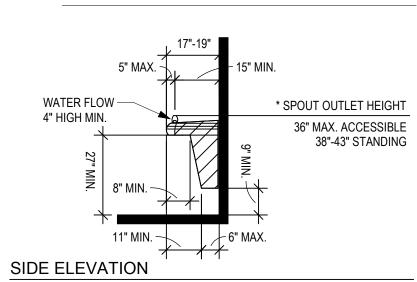
ACCESSIBILITY GENERAL NOTES

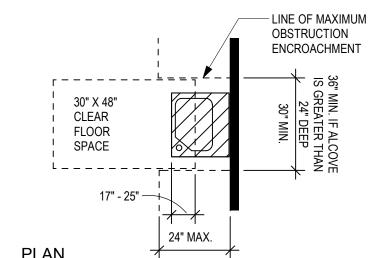
- A. Accessible entrances to the building shall be identified by the international symbol of accessibility.
- B. Exits that are located adjacent to accessible areas & within 6' of
- adjacent ground level shall be accessible.
- C. Accessible ramps over 1:20 (5%) slope as required by ICC/ANSI A117.1 shall have handrails and no slopes that exceed 1:12 (8.3%), UNO.
- D. The surface of all ramps, floors, stairs and ground surfaces shall be of slip resistant materials/textures, and not exceed 1:50 (2%) cross-
- E. An accessible route of travel (3 ft. wide min.) must be provided to all portions of the building and between the building and the public way.
- F. Thresholds must be 1/2" in height or less, and be beveled over 1/4"
- G. All accessible parking spaces shall have a slope not exceeding 1:50
- H. All accessible parking spaces shall be outlined on all four sides, have a contrasting color and the international wheelchair symbol on the ground within the space.
- I. All accessible parking spaces shall have a sign (min. 5 ft. above finish grade in front of the space) which includes the international symbol of accessibility and applicable municipal language.
- J. Signs designating permanent rooms and spaces shall meet accessibility requirements.
- K. All alarms shall meet accessibility requirements.
- L. Accessible route shall be without steps or changes in level greater than 1/2" without an approved ramp.
- M. Accessible routes shall serve as exit access or connect to areas of rescue assistance.
- N. No item shall protrude more than 4" from the surface of a wall along an accessible way, above 27" and below 80" AFF.





ACCESSIBLE URINAL





 PROVIDE A MIN. OF ONE ACCESSIBLE & ONE STANDING DRINKING FOUNTAIN PER PROJECT

OF THE UNIT.

GENERAL DRINKING FOUNTAIN NOTES: . A PARALLEL APPROACH SHALL BE PERMITTED AT UNITS FOR CHILDREN'S USE WHERE THE SPOUT IS 30" MAX A.F.F. AND IS 3 1/2" MAX FROM THE FRONT EDGE

WHERE MORE THAN 2 DRINKING FOUNTAINS ARE PROVIDED 50 MUST COMPLY WITH 602.1-602.6 (ACCESSIBLE) AND 50% COMPLY WITH 602.7 (STANDING) HEIGHTS. 211.3

ACCESSIBLE DRINKING FOUNTAIN

ADA DETAILS

10.20.2021

0214-21

REVISIONS:

DATE OF ISSUE:

MA PROJECT NO:

PROJECT PHASE:

DRAWN BY:

ACCESSIBLE TOE & KNEE CLEARANCE

HANDRAILS AT STAIRS & RAMPS

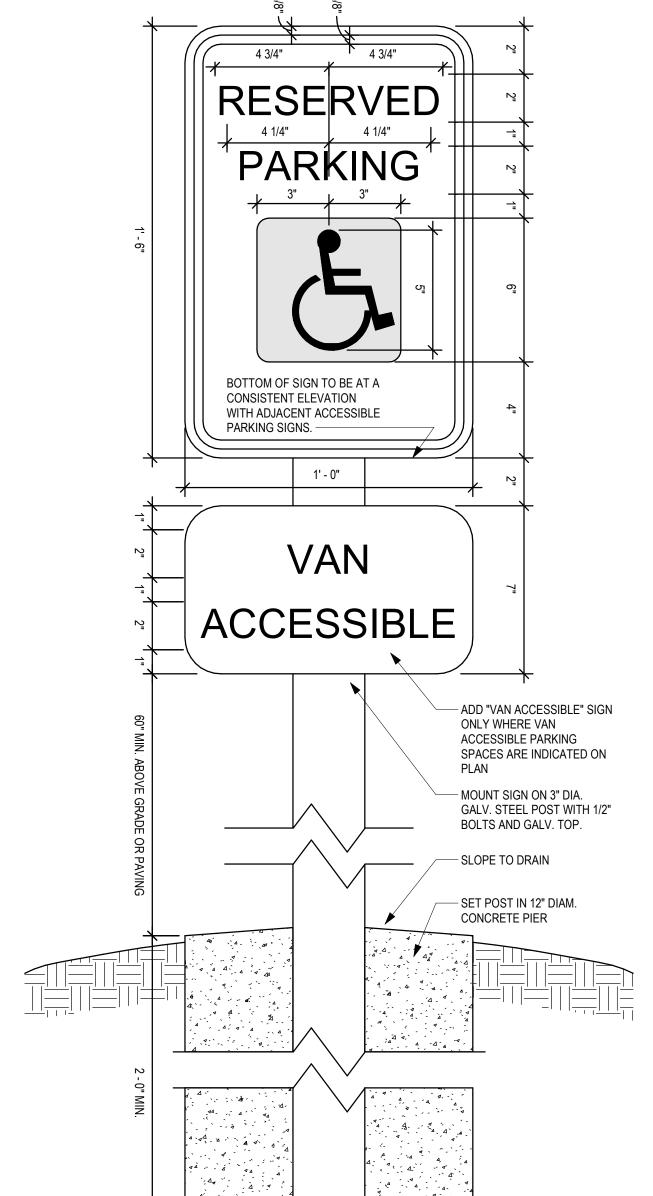
RAMP RUN OR STAIRWAY

K. All alarms shall meet accessibility requirements.

than 1/2" without an approved ramp.

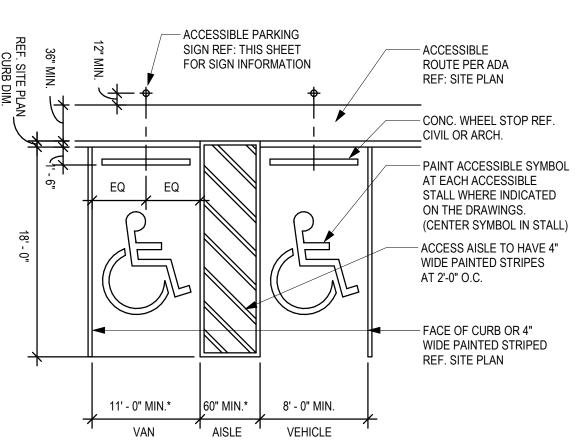
rescue assistance.

N. No item shall protrude more than 4" from the surface of a wall along an accessible way, above 27" and below 80" AFF.

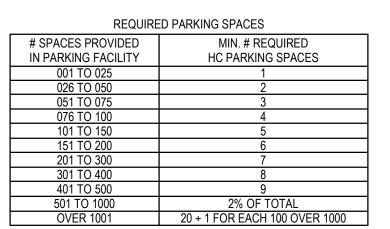


ACCESSIBLE PARKING SIGN

1' - 0" MIN.



* - VAN PARKING SPACE CAN BE 8'-0" WIDE IF ACCESS AISLE IS 8'-0" WIDE

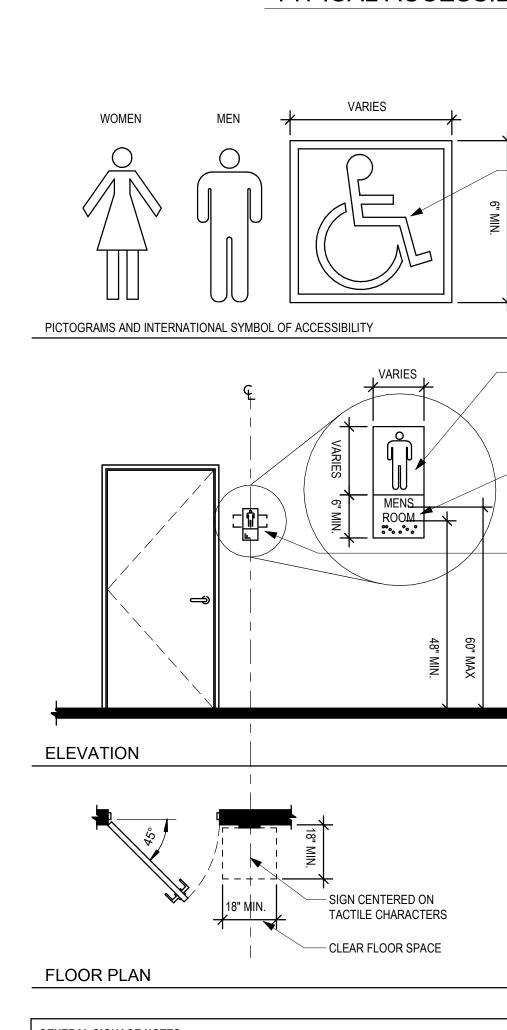


* - PROVIDE ONE VAN PARKING SPACE FOR EVERY 6 REQUIRED HC PARKING SPACES.

GENERAL PARKING NOTES:

- REFER TO LOCAL CODES FOR ADJUSTMENTS TO THESE STANDARDS.
- ACCESS AISLES SHALL NOT OVERLAP THE VEHICULAR WAY AND CAN BE PLACED ON EITHER SIDE OF THE PARKING SPACE EXCEPT FOR ANGLED VAN PARKING. WHICH SHALL HAVE ACCESS AISLES LOCATED ON THE PASSENGER SIDE OF THE PARKING SPACES.
- IT IS RECOMMENDED TO HAVE THE VAN ACCESS AISLE ON THE PASSENGER SIDE OF THE VAN PARKING SPACE.
- ACCESSIBLE ROUTE REQUIRED FOR VAN PARKING SPACE SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 98".

TYPICAL ACCESSIBLE PARKING STALLS



STANDARD PICTOGRAMS AND ACCESSIBILITY SIGNS SHALL HAVE NON-GLARE FINISH AND SHALL CONTRAST WITH THEIR FIELD. INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGN AND/OR PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE 6" MINIMUM IN HEIGHT.

GENERAL SIGNAGE NOTES: REFER TO PLANS AND SPECS FOR SIGNAGE SCHEDULE REFER TO THIS SHEET FOR INTERNATIONAL SYMBOL OF ACCESSIBILITY ROOM NUMBER AND NAME IDENTIFICATION SIGN: LETTERS & NUMERALS SHALL BE RAISED 1/32" TEXT TO BE UPPERCASE SANS SERIF TYPE

- TEXT AND BRAILLE CANNOT BE IN PICTOGRAM FIELD

CHARACTER PROPORTIONS: UPPERCASE LETTER "O" IS 55% MIN. & 110% MAX. OF THE HEIGHT OF THE UPPERCASE LETTER "I".

TEXT TO BE ACCOMPANIED WITH GRADE 2 BRAILLE

CHARACTER HEIGHT: MEASURED VERTICALLY FROM BASELINE, HEIGHT SHALL BE 5/8" MIN. AND 2" MAX. BASED ON UPPERCASE LETTER "I".

LOCATION AT DOORS: SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT

- THE LATCH SIDE. AT DOUBLE DOORS WITH ONE ACTIVE LEAF, SIGN TO
- BE LOCATED AT INACTIVE LEAF. AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, SIGN TO BE LOCATED AT THE RIGHT OF THE RIGHT HAND
- WHERE NO WALL SPACE IS AVAILABLE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGN TO BE LOCATED ON THE NEAREST ADJACENT WALL.

SPECIAL LOCATIONS: DOORS AT EXIT PASSAGEWAYS, EXIT DISCHARGE AND EXIT STAIRWAYS SHALL BE IDENTIFIED WITH

- TEXTILE SIGNS. IF ONE ENTRANCE IS NOT ACCESSIBLE THEN ALL ACCESSIBLE ENTRANCES MUST BE MARKED WITH
- INTERNATIONAL SIGN OF ACCESSIBILITY. IF EXISTING RESTROOMS ARE NOT ACCESSIBLE THEN PROVIDE A SIGN WITH INTERNATIONAL SIGN OF ACCESSIBILITY TO INDICATED CLOSEST ACCESSIBLE RESTROOM.

ACCESSIBLE DOOR DIAGRAMS

RECESSED PUSH SIDE

HINGE APPROACH

LATCH APPROACH

PUSH SIDE

FRONT APPROACH PUSH SIDE IF

CLOSER AND LATCH ARE PROVIDED

PUSH SIDE

48" MIN.

RECESSED PUSH SIDE IF CLOSER AND LATCH ARE PROVIDED

HINGE APPROACH

PULL SIDE

LATCH APPROACH

FRONT APPROACH

PUSH SIDE

PULL SIDE

36" MIN.

DOORS IN A SERIES

RECESSED PULL SIDE

RECESSED APPROACHES

HINGE APPROACH

LATCH APPROACH PULL SIDE IF

DOOR CLOSER IS PROVIDED

FRONT APPROACH

PULL SIDE

FRONT APPROACHES

LATCH APPROACHES

PULL SIDE

HINGE APPROACHES

42" MIN.

48" MIN.

DOOR CLEARANCES TYP.

HINGE APPROACH PUSH SIDE IF

CLOSER AND LATCH ARE PROVIDED

LATCH APPROACH PUSH SIDE IF

DOORS ON AN ACCESSIBLE ROUTE MUST BE 36"

CLEARANCE. NOTIFY THE ARCHITECT OF CONFLICTS

WIDE, MINIMUM, TO PROVIDE 32" MINIMUM

FOR RESOLUTION PRIOR TO CONSTRUCTION.

ALL DOOR LOCK SETS, LATCHSETS, AND PANIC

HARDWARE SHALL COMPLY WITH ADA STANDARDS AND HAVE A MAXIMUM OPERATING FORCE OF 5 LBS.

AT THE INTERIOR AND 8 LBS. AT EXTERIOR DOORS.

MANEUVERING CLEARANCE AT ALL DOORS SHALL

4. ----- INDICATES LINE OF MAXIMUM OBSTRUCTION

DOOR CLOSER IS PROVIDED

DOOR REQUIREMENTS / ACCESSIBILITY:

COMPLY WITH ADA STANDARDS.

ENCROACHMENT.

TYPICAL SIGNAGE

B. Exits that are located adjacent to accessible areas & within 6' of adjacent ground level shall be accessible.

A. Accessible entrances to the building shall be identified by the

ACCESSIBILITY GENERAL NOTES

international symbol of accessibility.

C. Accessible ramps over 1:20 (5%) slope as required by ICC/ANSI A117.1 shall have handrails and no slopes that exceed 1:12 (8.3%), UNO.

D. The surface of all ramps, floors, stairs and ground surfaces shall be of slip resistant materials/textures, and not exceed 1:50 (2%) cross-

E. An accessible route of travel (3 ft. wide min.) must be provided to all portions of the building and between the building and the public way.

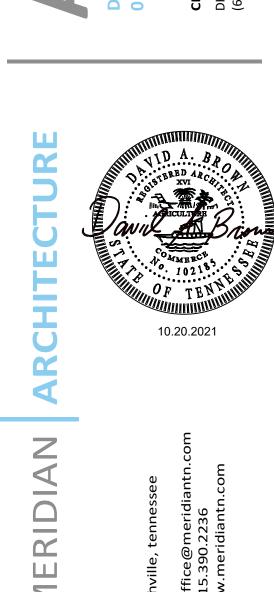
G. All accessible parking spaces shall have a slope not exceeding 1:50

H. All accessible parking spaces shall be outlined on all four sides, have a contrasting color and the international wheelchair symbol on the ground within the space.

I. All accessible parking spaces shall have a sign (min. 5 ft. above finish grade in front of the space) which includes the international symbol of accessibility and applicable municipal language.

L. Accessible route shall be without steps or changes in level greater

M. Accessible routes shall serve as exit access or connect to areas of

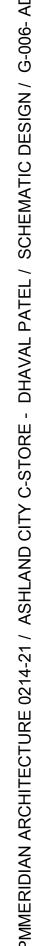


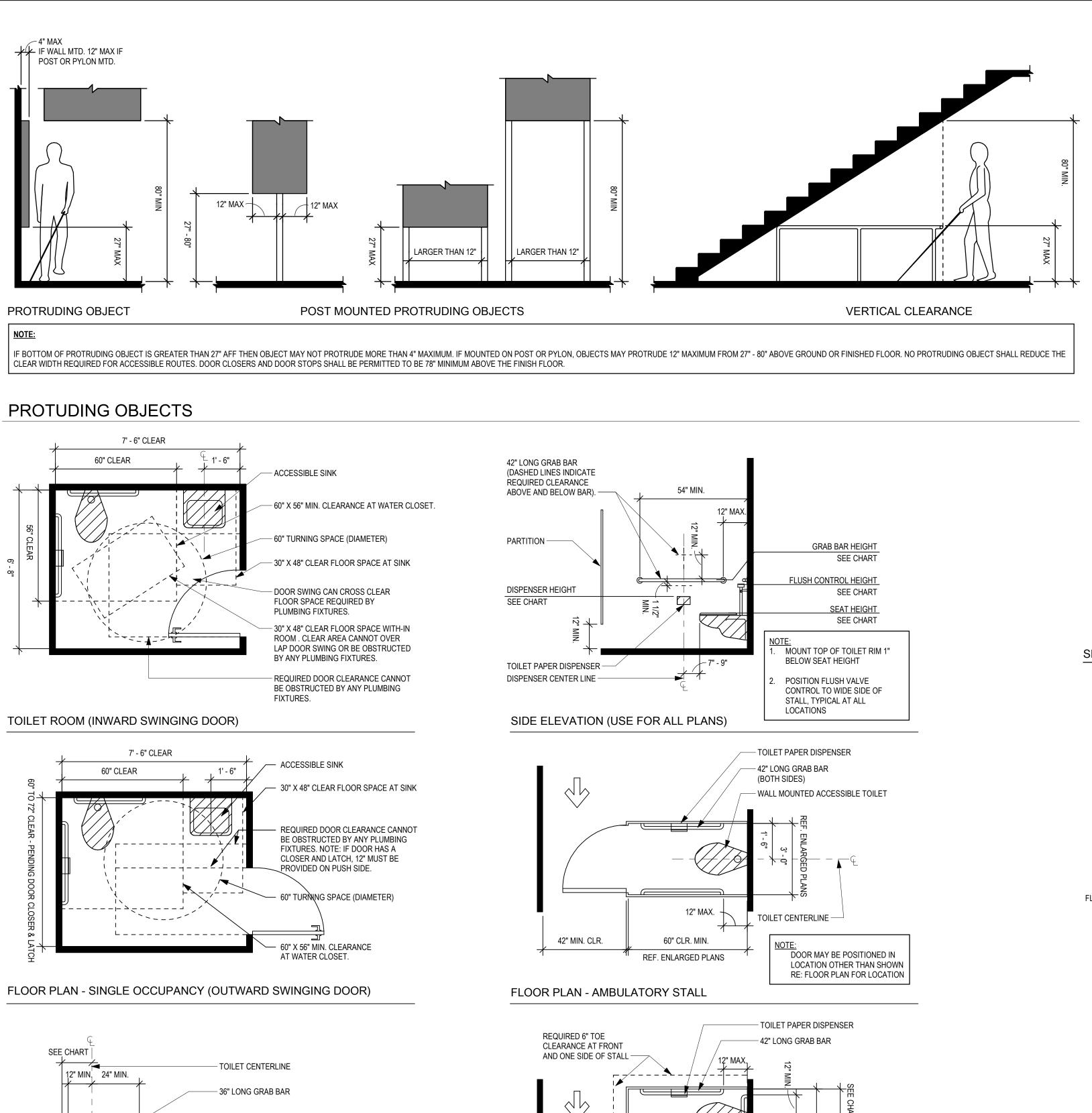
REVISIONS:

DATE OF ISSUE: 10.20.2021 0214-21 MA PROJECT NO: **PROJECT PHASE:**

ADA DETAILS

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34" DOOR

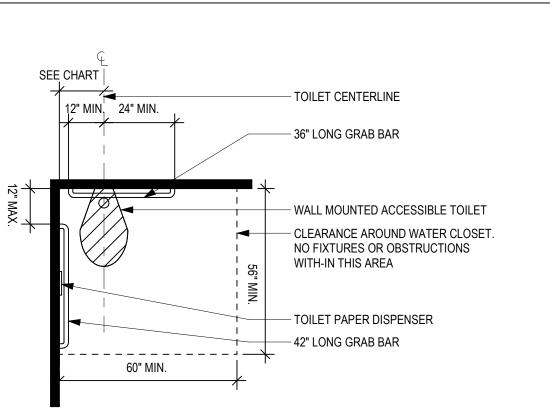
6" MIN. CLEAR —

FLOOR PLAN - PARTITION STALL

60" MIN. CLEAR

REF. ENLARGED PLANS

NOTE: DOOR MAY BE POSITIONED IN LOCATION OTHER THAN SHOWN RE: FLOOR PLAN FOR LOCATION

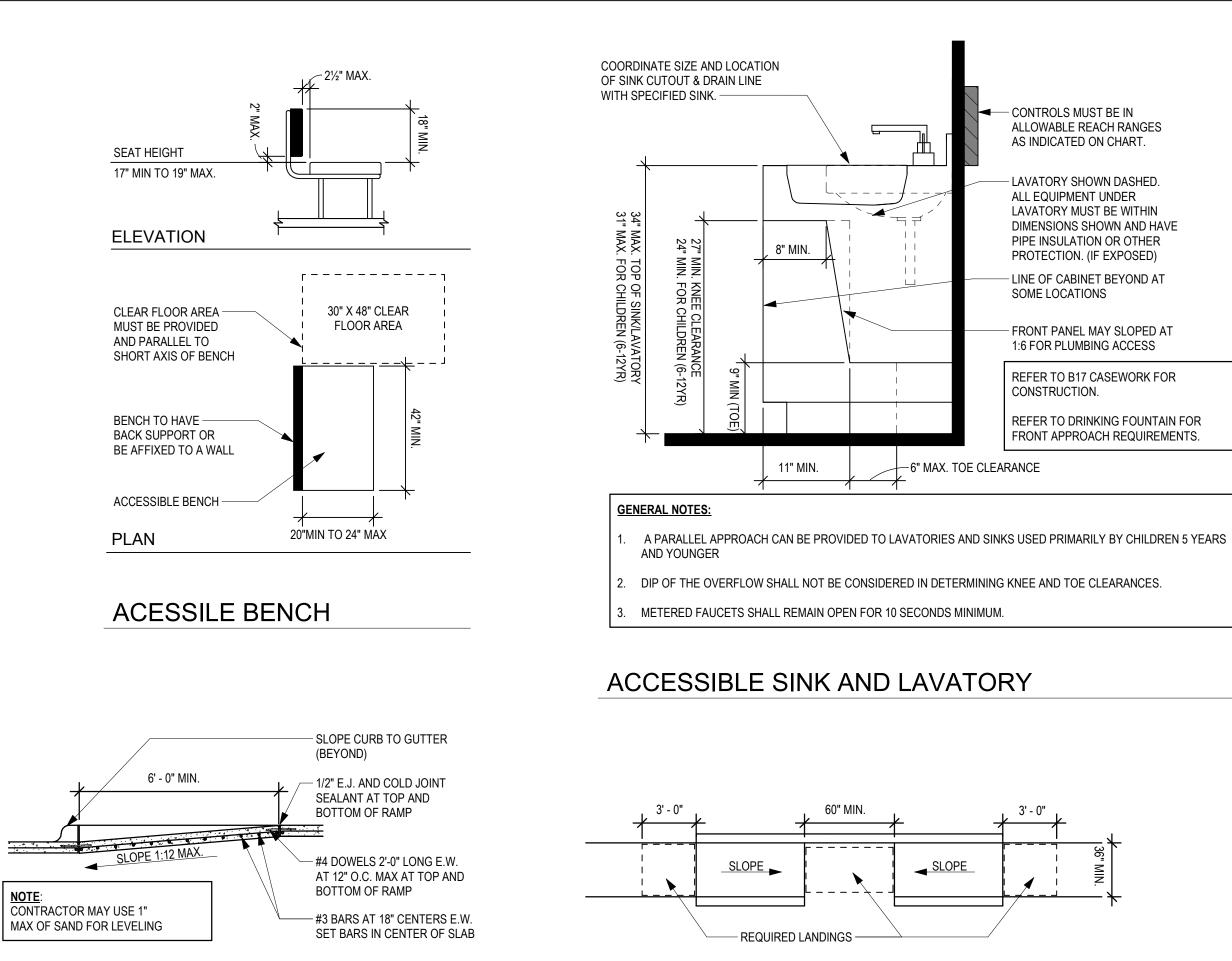


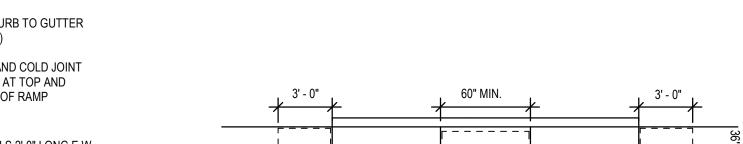


GENERAL WATER CLOSET NOTES:

- 1. REQUIRED CLEAR FLOOR SPACES, CLEARANCE AT FIXTURES, AND TURNING SPACE SHALL BE PERMITTED TO OVERLAP
- 2. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE REQUIRED FOR ANY FIXTURE EXCEPT IN A TOILET ROOM FOR INDIVIDUAL USE WHERE THE 30"X48" CLEAR FLOOR SPACE IS PROVIDED BEYOND THE ARC OF THE DOOR SWING.
- DOORS SHALL BE PERMITTED TO SWING INTO THE REQUIRED TURNING SPACE.
- 4. ALL DOORS MUST COMPLY WITH THEIR CLEAR FLOOR SPACE REQUIREMENTS.
- 5. IF THE TOTAL NUMBER OF TOILET FIXTURES (INCLUDING URINALS) IN A RESTROOM IS EQUAL TO 6 OR MORE, THEN AN AMBULATORY STALL IS REQUIRED.
- 6. DIMENSIONS SHOWN FROM WALL ARE ASSUMED TO BE CLEAR DIMENSIONS. CONTRACTOR TO ALLOW FOR FINISH MATERIAL.

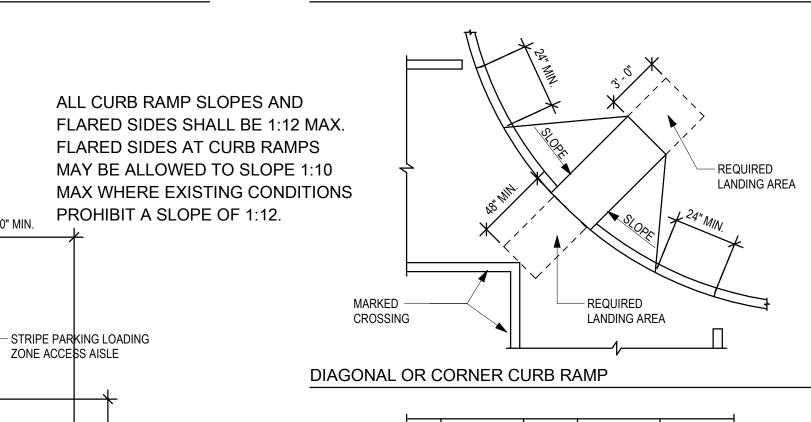
ACCESSIBLE WATER CLOSETS

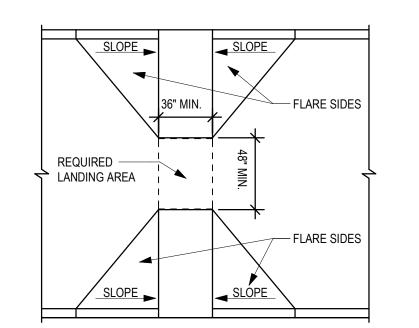


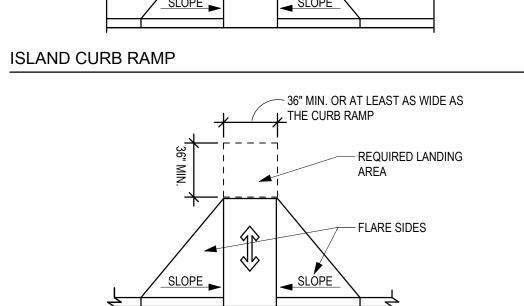




8' - 0" MIN.







SIDES AND TOP OF STANDARD CURB RAMP

- ONE PASSENGER LOADING ZONE SHALL BE PROVIDED FOR EVERY CONTINUOUS 100 LINEAR FEET OF LOADING SPACE, OR FRACTION THEREOF.

PASSENGER LOADING ZONE

SLOPE _

GENERAL CURB RAMP NOTES:

FLARE SIDES -

- TOILET CENTERLINE

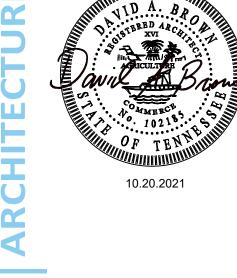
— 36" LONG GRAB BAR

WALL MOUNTED

ACCESSIBLE TOILET

- ADJACENT SURFACES TO RAMP MUST BE NO STEEPER THAN 1:20, REQUIRED LANDING AREAS SHALL BE NO STEEPER THAN 1:48. ALL CURB RAMPS OUTSIDE OF PROPERTY (IN RIGHT OF WAY) ARE TO BE DESIGNED BASED ON THE LOCAL JURISDICTION.
- CURB RAMPS ARE NOT TO BE PROJECTED INTO VEHICULAR TRAFFIC LANES, PARKING SPACES, OR PARKING ACCESS AISLES.
- RAMPS THAT ARE IN MARKED CROSSINGS SHALL BE CONTAINED WITHIN THAT MARKING.





REVISIONS:

10.20.2021 DATE OF ISSUE:

MA PROJECT NO: **DRAWN BY:**

ADA DETAILS

- Page 13 -

ENGINEERING

Cover Sheet

Job No. 20053

1 of 8

Site Plan

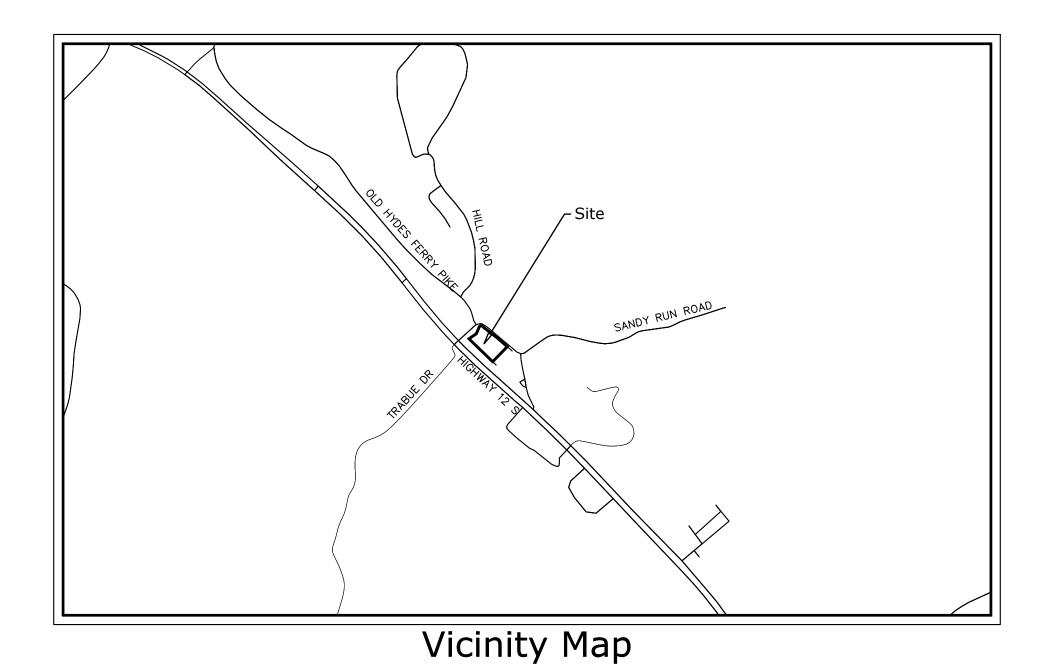
Old Hydes Ferry Pike

Being a Portion of Parcel 4.01 on Tax Map 62 Ashland City, Cheatham County, Tennessee

General Notes:

BOUNDARY, EASEMENT AND TOPOGRAPHIC INFORMATION SHOWN IN BASED ON A ALTA/ACSM LAND TITLE SURVEY CONDUCTED BY SOUTHERN CONSULTING AND DATED DECEMBER 3, 2020.

- THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF
- 72 HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE 811 AND ALL OTHER AGENCIES THAT MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF
- THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS. TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE
- THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND OWNER'S REPRESENTATIVE FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
- CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES AND PERFORM SAID ACTIVITIES IN ACCORDANCE WITH ALL LOCAL, STATE, FEDERAL & OSHA REGULATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL APPLICABLE PERMITS, AND PAY ALL REQUIRED FEES PRIOR
- ANY WORK PERFORMED IN THE LOCAL RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH THE APPLICABLE LOCAL REQUIREMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY PERMITS FOR THE WORK, SCHEDULE NECESSARY INSPECTIONS, AND PROVIDE THE NECESSARY TRAFFIC CONTROL MEASURES AND DEVICES, ETC., FOR WORK PERFORMED IN THE
- THE PROPOSED SITE IMPROVEMENTS ARE NOT EXPECTED TO REQUIRE COVERAGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT ISSUED BY THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC). THE TOTAL SITE DISTURBANCE WILL BE LESS THAN ONE ACRE.
- 10. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL, PRACTICES REQUIRED BY METRO NASHVILLE AND TDEC.
- . ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE PERMANENTLY STABILIZED AS SOON AS PRACTICAL IN ACCORDANCE WITH
- 12. ALL WORK SHALL COMPLY WITH METRO NASHVILLE PUBLIC WORKS SPECIFICATIONS, AND ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF METRO NASHVILLE.
- 13. ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH
- 14. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH
- . BEFORE INSTALLATION OF STORM OR SANITARY SEWER, OR OTHER UTILITY THE CONTRACTOR SHALL VERIFY ALL CROSSINGS, BY EXCAVATION WHERE NECESSARY, AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THEY ARE NOT NOTIFIED OF DESIGN CONFLICTS PRIOR TO CONSTRUCTION.
- 16. WHERE CURB IS PRESENT, DIMENSIONS ARE SHOWN TO THE FACE OF CURB, OTHERWISE DIMENSIONS ARE SHOWN TO THE EDGE OF PAVEMENT AND/OR EDGE OF BUILDING UNLESS OTHERWISE NOTED.
- 17. SITE SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
- 18. CONSTRUCTION OF ALL ROADWAYS AND SIDEWALKS SHALL MEET THE REQUIREMENTS OF METRO NASHVILLE PUBLIC WORKS ROADWAY CONSTRUCTION CRITERIA AND STANDARD DETAILS.
- 9. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
- 20. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL BE IN ACCORDANCE WITH ALL FEDERAL OSHA REGULATIONS. CONTRACTOR TO PAY PARTICULAR ATTENTION TO 29 CFR PART 1926, SUBPARTS M AND P.



| Sh | eet Sch | nedule |
|----|---------|--|
| 1 | C0.0 | Cover Sheet |
| 2 | C1.0 | Layout & Utilities Plan |
| 3 | C2.0 | Existing Conditions & Initial Erosion Control Plan |
| 4 | C3.0 | Intermediate Erosion Control Plan |
| 5 | C4.0 | Grading & Drainage Plan |
| 6 | C5.0 | Details |
| 7 | C5.1 | Details (Cont.) |
| 8 | L1.0 | Landscape Compliance Plan |

Project Summary

Site Data

Commissioner District - 4 Brian Abston

Property Location/Address 0 Old Hydes Ferry Pike Ashland City, TN 37015

Property Owner/Developer: Ramdal Ashland City LLC Address: 505 Whirlaway CT Burns, TN 37029

Phone: (615) 598-5887 Dewey Engineering Contact: Michael Dewey, PE Address: 2925 Berry Hill Drive Nashville, TN 37204

Phone: (615) 401-9956 Flood Note: A Portion of this Property is Located Within a Flood Hazard Area as Indicated by Zone 'AE' on FEMA Map Number 47189C0142C. Dated: Feb. 20, 2008.

Site Information

Parcel: Tax Map 62, Portion of Parcel 4.01

Current Zoning: C2 Total Site Area: 1.60 Acres (69,752 SF)

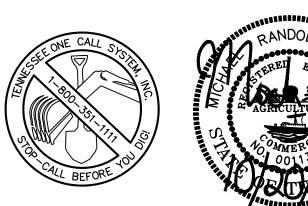
> Current Use: Vacant Proposed Use: Convenience Retail Sales and Services, Food & Beverage

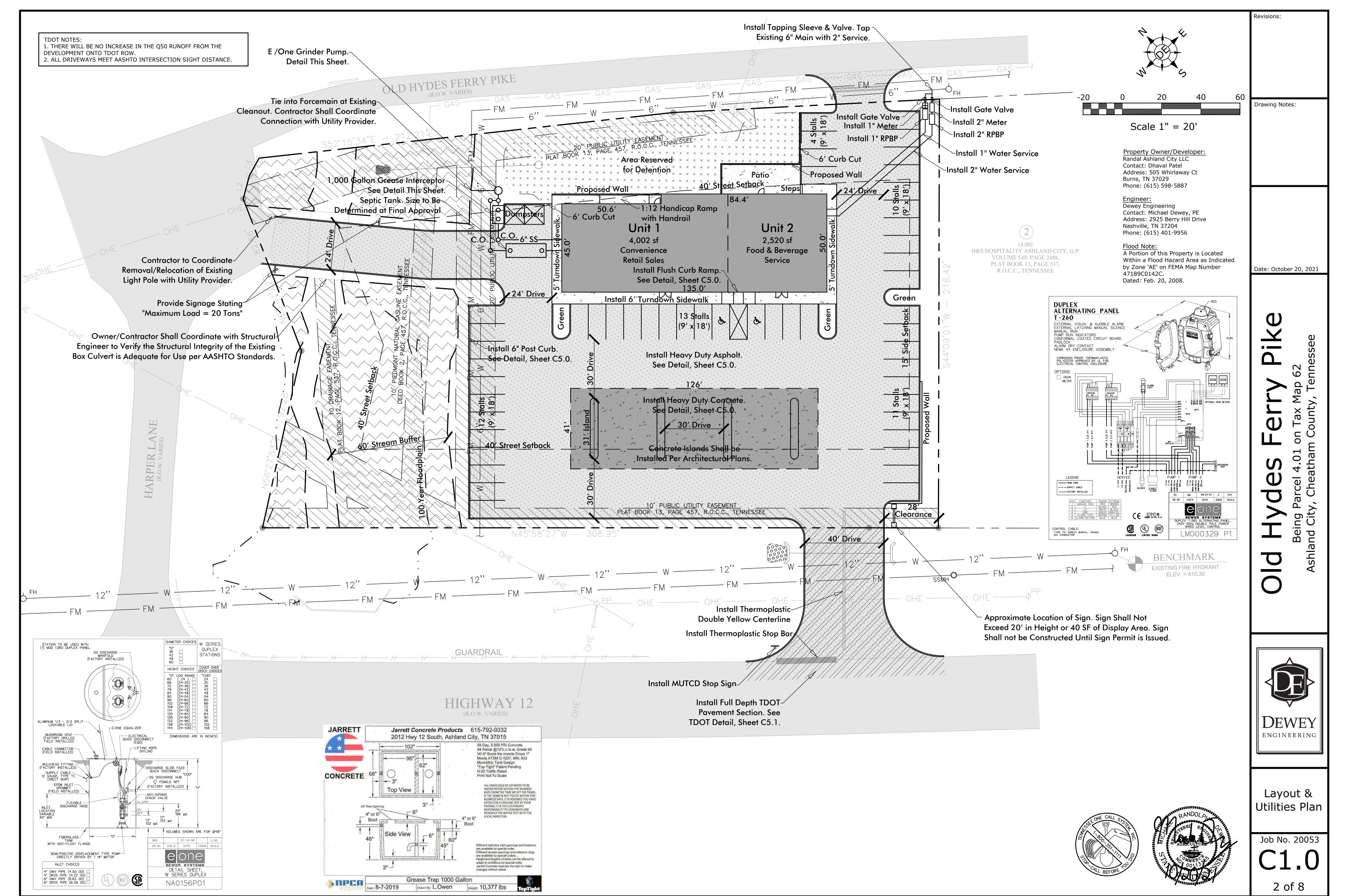
Setbacks: Street Yard: 40'

Side Yard: Max Building Height: 40' ISR of Site: 62%

Building Coverage of Site: 9% Building Square Footage (Gross) 4,002 SF Convenience Retail Sales and Services 2,520 SF Food & Beverage Service

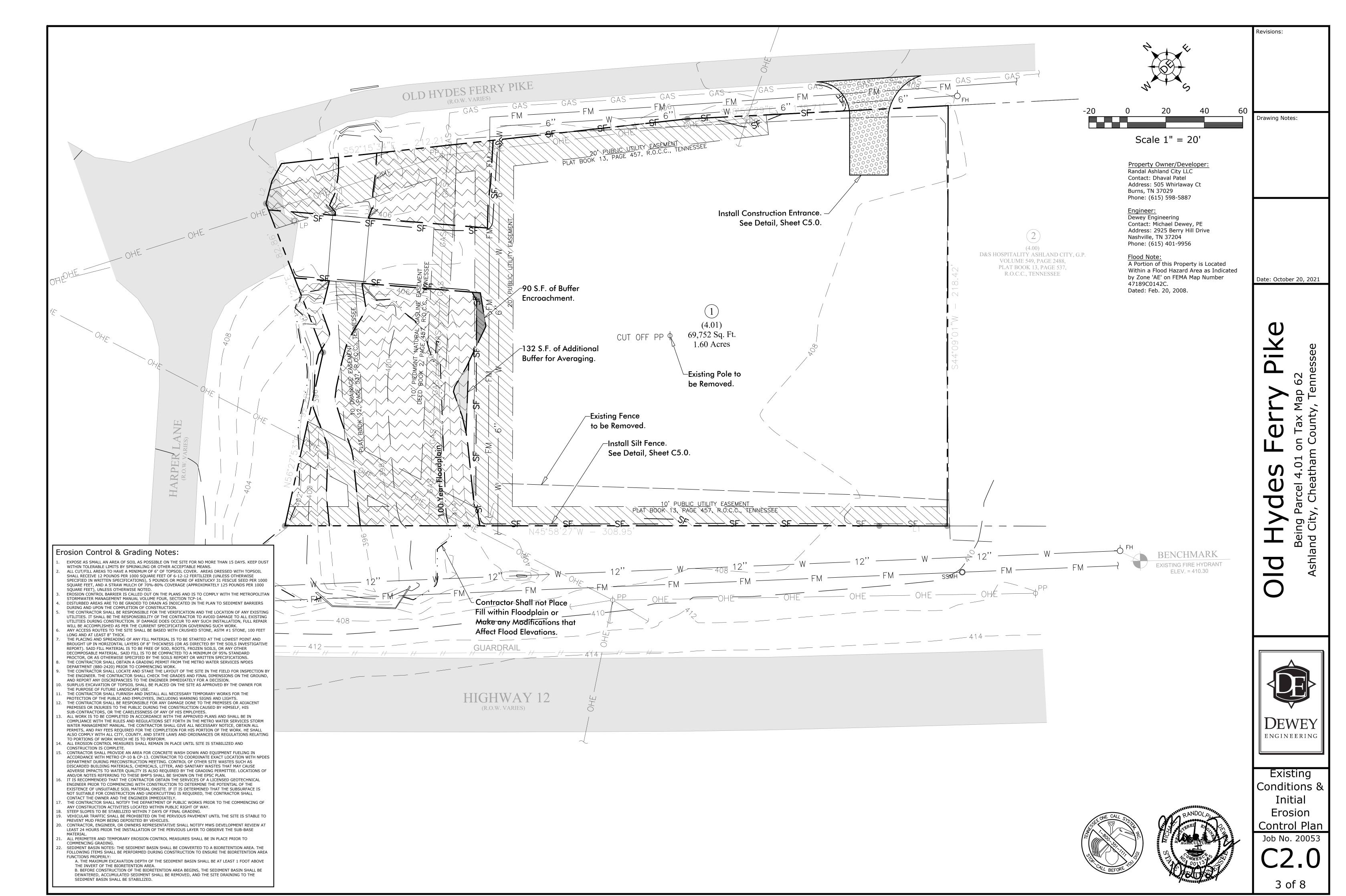
Parking Required: 29 Stalls (Per Section 4.010.1.C) Parking Provided: 50 Stalls

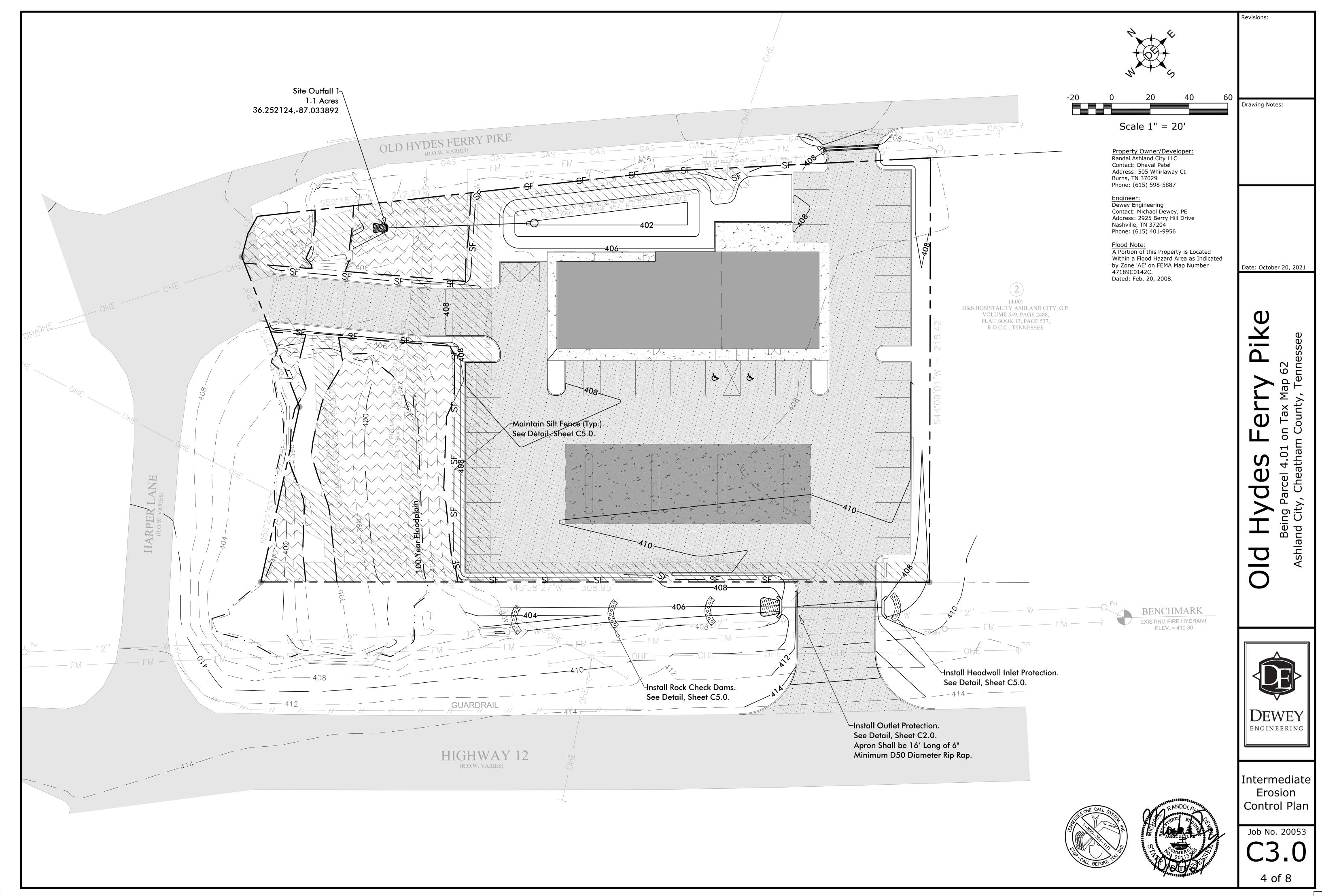




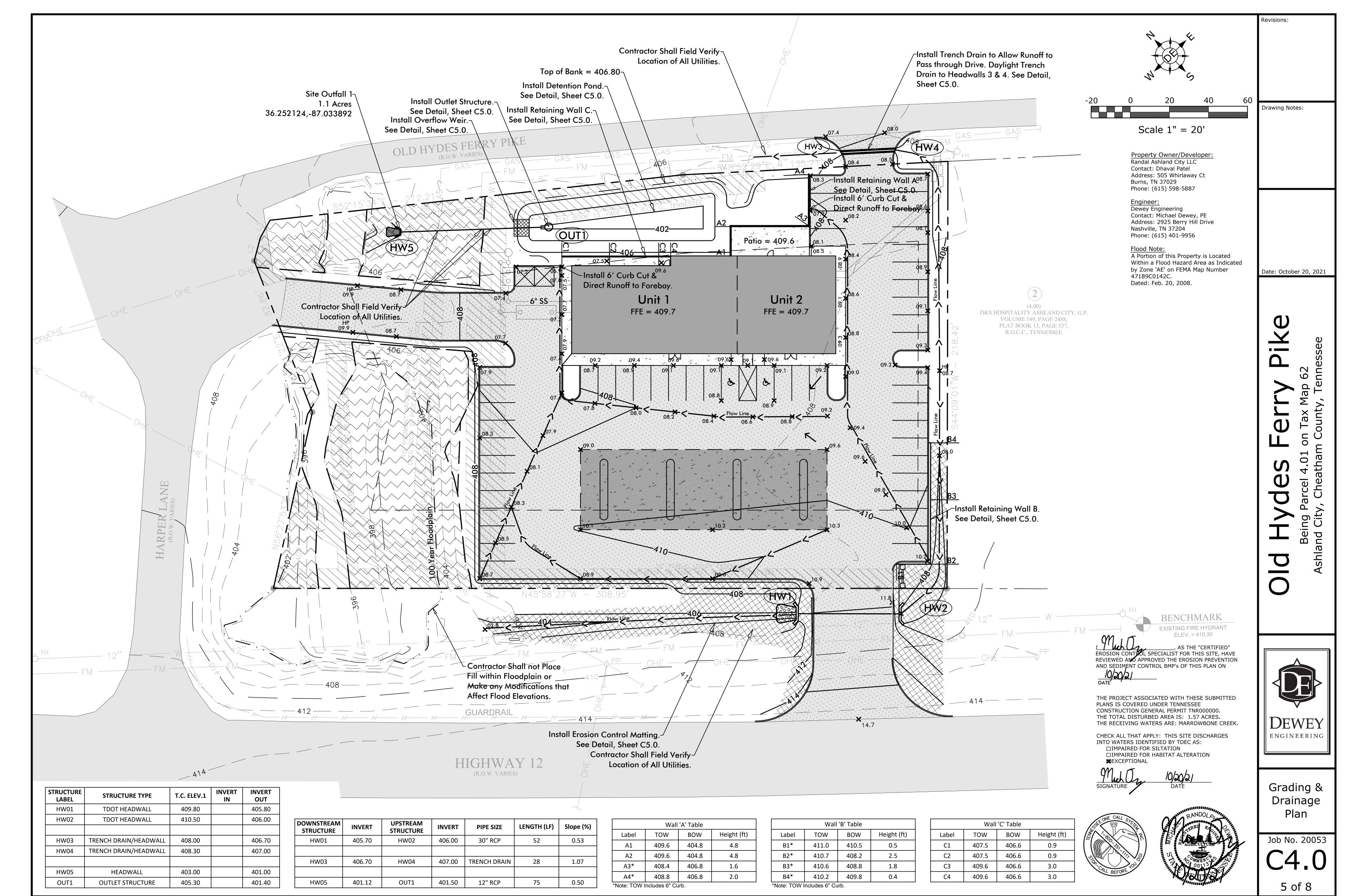
- Page 15 -

ITEM # 4.

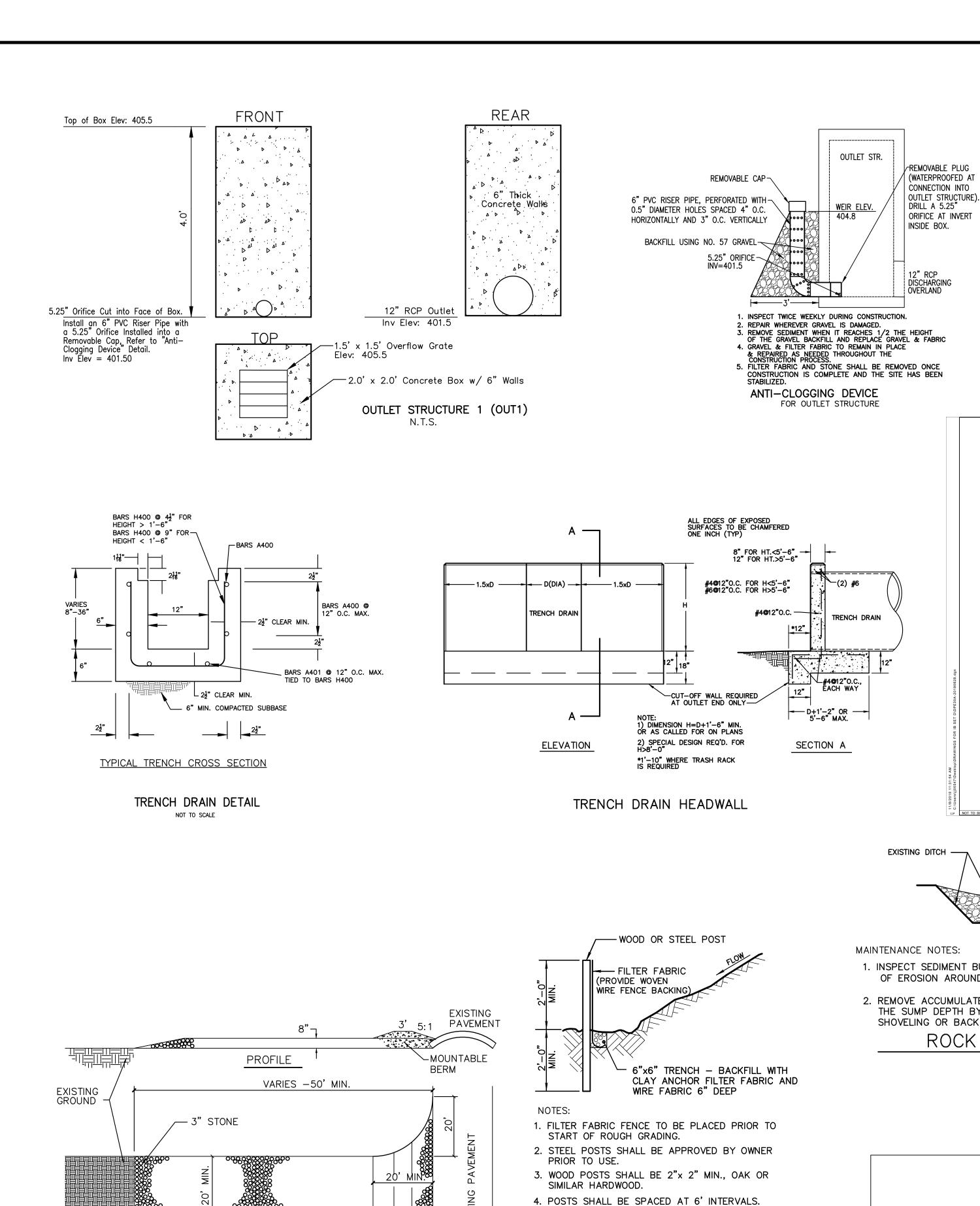


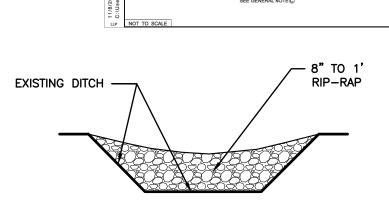


- Page 17 -



- Page 18 -





BOTTOM SLAB

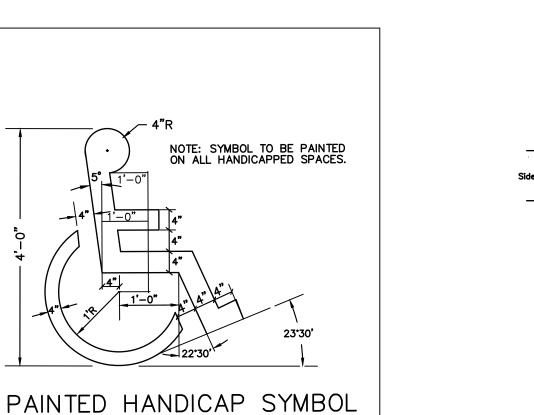
A431 3430

SEE NOTE (E) 8" W

MAINTENANCE NOTES:

- 1. INSPECT SEDIMENT BUILDUP BEHIND CHECK DAM AND SIGNS OF EROSION AROUND THE CHECK DAM AFTER EACH RAIN.
- 2. REMOVE ACCUMULATED SEDIMENT WHEN REACHES 1/2 THE SUMP DEPTH BY LIFTING THE FILTER FABRIC AND HAND SHOVELING OR BACK HOEING THE SILT.

ROCK CHECK DAM



-COMPACTED SUBGRADE ---6" CRUSHED STONE PLACED IN (2) 3" SEPARATELY COMPACTED LAYERS @ 95% COMPACTION -6" 3500 PSI CONCRETE DRIVE WITH #4 REBAR @ 12"

O.C. BOTH WAYS CONTINUOUS. PROVIDE SCORING
JOINTS 15" O.C., 1 1/2" BIT, EXPANSION JOINT
EVERY 30" O.C., BROOM FINISH CONCRETE AND PLACE ON 95% MODIFIED COMPACTED SUBBASE. HEAVY DUTY CONCRETE DETAIL

- LINE W/ RIP-RAP (SIDES & BOTTOM) POND BERM ELEV= 406.80

POND OVERFLOW WEIR

PARTIAL VIEW B-B

4½" (TYP.)

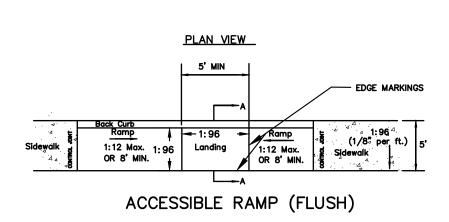
3:1 (6) S4-0 @ EQ. SPA.

A400 A400 A

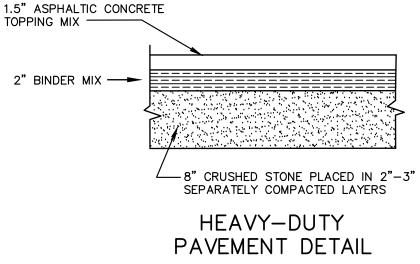
SERIES BAR H460

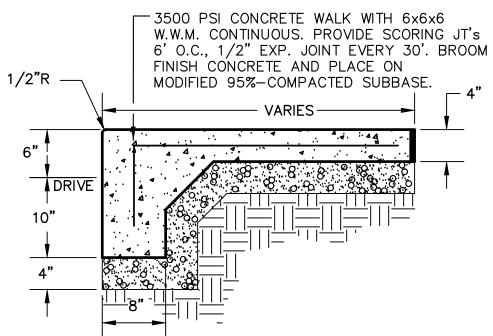
BOTTOM SLAB PLAN

SERIES BAR H440

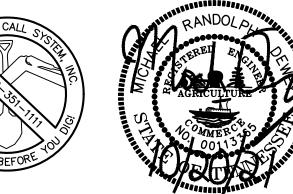


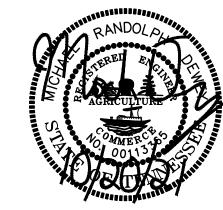
1:96 (1/8" per ft.) — SECTION A-A





SIDEWALK DETAIL





Drawing Notes:

Revisions:

Date: October 20, 2021

0

e

20-1/2"

SECTION: CONCRETE RETAINING WALL

=4000 PSI (MIN) CONCRETE

WATERPROOF COATING

— NO. 5 REBAR 12" O.C., VERT. +- Porous fill #57 fill

> - 4" PERFORATED CORRUGATED Drainage Pipe Wrapped IN FILTER FABRIC

NO. 5 REBAR @ 18"o.c. HORIZ.

NO. 6 REBARS 12" O.C.

NO. 5 REBARS 18" O.C., CONT.

REV. 1-6-15: REVISED HOLE OPENING SIZE. ADDED STEPPED HOLE DETAIL. REV. 1-21-16: REVISED GENERAL NO

REV. 06-28-19: ADJUSTED A-A, B-B AND ELEVATION VIEWS. RENAMED AND REDREW SHEET.

MINOR REVISION - FHW. APPROVAL NOT REQUIRE

TYPE "U"

FOR 30" PIPE WITH STEEL PIPE GRATE

(FOR 3:1, 4:1 & 6:1 SLOPES)

PARTIAL VIEW A-A

HEADWALL DETAILS NOTES: INSTALL BARS A701 AT 45° SEE GENERAL NOTES © & ©

GENERAL NOTES

B SEE STD. DWG. D-PE-30B FOR BILL OF STEEL & PRECAST NOTES.

"-" IN BAR DESIGNATION REPRESENTS 3, 4 OR 6 FOR 3:1, 4:1 OR 6:1 SLOPES, RESPECTIVELY.

SPLICING OF REINFORCEMENT IS ACCEPTABLE PROVIDED THAT A MINIMUM 21" SPLICE LENGTH IS USED.

E TOEWALL BACK SLOPE MAY BE CONSTRUCTED VARIABLE FROM VERTICAL UP TO 15°.

90° STEPS ARE SHOWN ON THE STEPPED HOLE DETAIL, HOWEVER MINOR VARIATIONS OF THE TAPER ARE ACCEPTABLE.

PAYMENT WILL BE MADE UNDER:

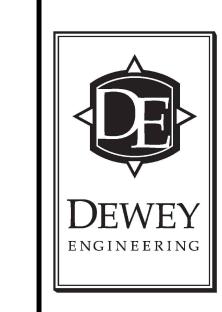
CONCRETE FOOTING

COMPACTED SUBGRADE

- 1. EXPANSION JOINTS TO BE SPACED A MAXIMUM OF 100 FEET APART OR AS DIRECTED BY THE ENGINEER.
- 2. EXPANSION JOINTS WILL ALSO BE REQUIRED AT TANGENT POINTS, RAMPS, AND INLETS.
- 3. CONTRACTION JOINTS ARE TO BE CUT INTO CURB AND GUTTER EVERY 10 FEET TO A DEPTH OF D/4, WHERE D EQUALS THE THICKNESS OF THE SECTION. THE SPACING OF 10 FEET MAY BE REDUCED AT CLOSURES BUT NO SECTION OF CURB SHALL BE LESS THAN 10 FEET.
- 4. COST OF JOINS TO BE INCLUDED IN THE UNIT BID PRICE FOR CONCRETE CURB.

STANDARD POST CURB

N.T.S.



Details

Job No. 20053

6 of 8

SILT FENCE DETAIL NOT TO SCALE

1. STONE SIZE - USE 3" STONE, OR EQUAL

5. FILTER CLOTH — WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED

TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS

7. MAINTENANCE — THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION

RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH

ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT

WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC

SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY

TEMPORARY CONSTRUCTION ENTRANCE

NOT TO SCALE

PLAN VIEW

3. MIN. THICKNESS - EIGHT(8) INCHES. 4. WIDTH - TWENTY(20) FOOT MINIMUM

MUST BE REMOVED IMMEDIATELY.

2. MIN. LENGTH - 50 FEET.

THE ENTRANCE.

- Page 19 -

5. FILTER FABRIC SHALL BE SECURELY BOUND TO POSTS WITH EITHER STAPLES OR WIRE TIES.

MAINTENANCE NOTES:

OF THE FENCE

AFTER EACH RAINFALL

6. FILTER FABRIC SHALL BE POLYPROPYLENE FABRIC

1. INSPECT TWICE WEEKLY, 72 HOURS APART AND

4. REMOVE SILT FENCE WHEN NO LONGER NEEDED.

REMOVE SEDIMENT ACCUMULATION, AND GRADE

2. REPAIR WHEREVER FENCE IS DAMAGED.

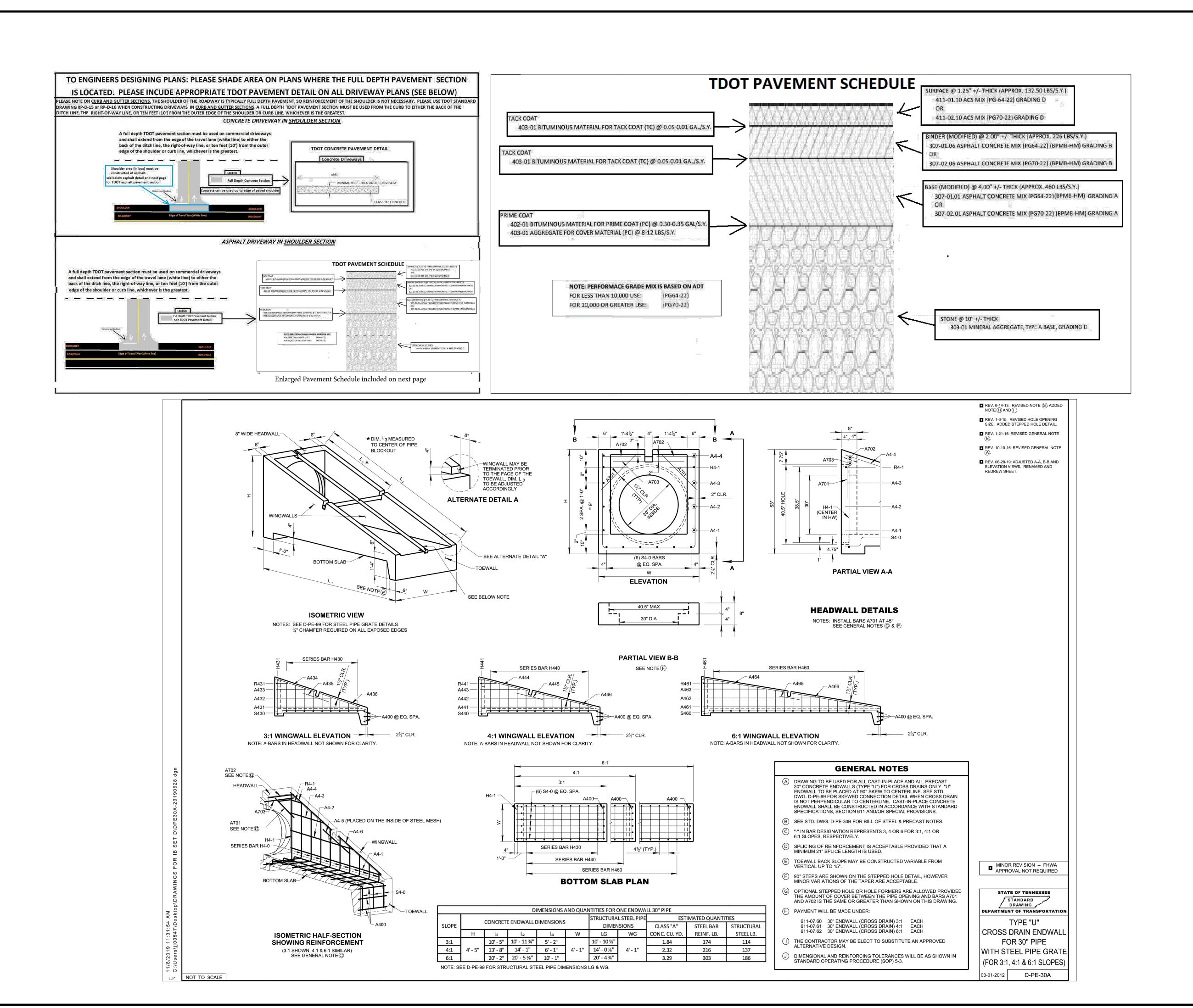
BY CORPS OF ENGINEERS GUIDE SPEC. CW 02215.

WITH EQUIVALENT OPENING SIZE (EOS) OF NO.100 SIEVE MIN., NO. 40 SIEVE MAX., ÀS DETERMINED

3. REMOVE SEDIMENT WHEN IT REACHES 1/3 THE HEIGHT

FILL AND COMPACT PAST HOLES AND ANCHOR TRENCH

ITEM # 4.



Revisions:

Drawing Notes:

Date: October 20, 2021

rry Pike

Being Parcel 4.01 on Tax Map 62
Ashland City, Cheatham County, Tenness

DEWEY

ENGINEERING

Details (Cont.)

Job No. 20053

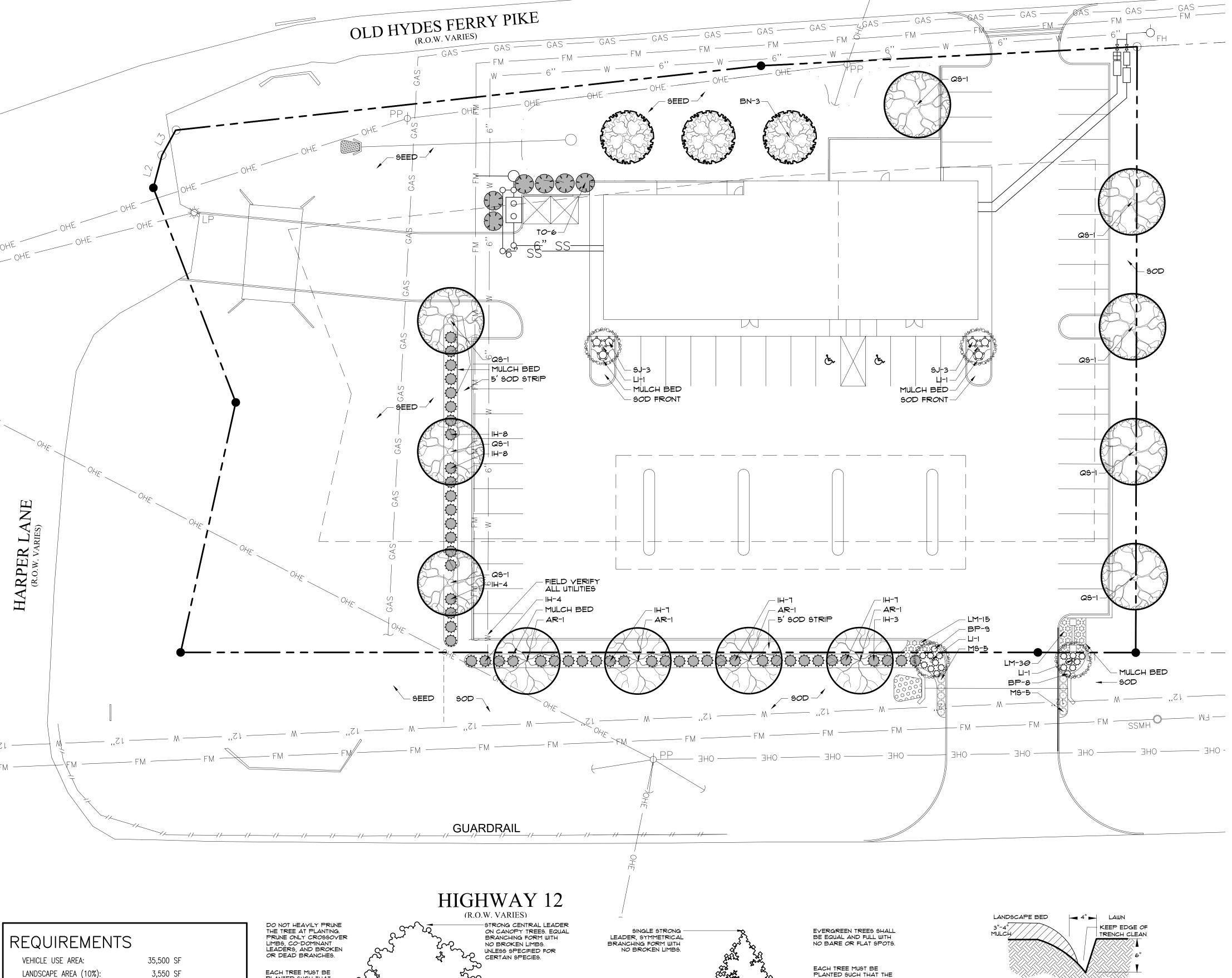
7 of 8

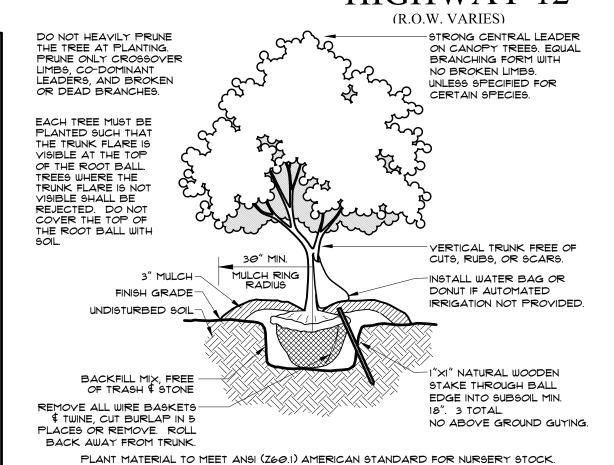
NOTES

- THE LANDSCAPE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.
- THE LANDSCAPE CONTRACTOR SHALL FINE GRADE ALL PLANTING AREAS.
- ALL PLANTING AREAS SHALL BE FERTILIZED WITH 12#/1000 S.F. OF 10-10-10 FERTILIZER.
- ALL PLANTING BEDS SHALL HAVE A MINIMUM OF 3" DEPTH OF SHREDDED BARK MULCH. FINELY GROUND, NO NUGGETS, 1/2" DIAMETER MAX. PIECES. REFUSE & STONE FREE.
- THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL MATERIAL QUANTITIES.
- THE LANDSCAPE CONTRACTOR NOTIFY THE LANDSCAPE ARCHITECT OF ANY ARCHITECTURAL FEATURES SUCH AS WALKWAYS, WINDOWS, OR BUILT ELEMENTS WHICH CONFLICT WITH THE APPROVED PLANTING PLAN.
- DISTURBED AREAS SHALL BE PLANTED WITH TURF AS INDICATED ON THE MATERIALS SCHEDULE.
- NO PLANT MATERIALS SHOULD BE SUBSTITUTED WITHOUT AUTHORIZATION.
- PLANT SIZES SHOWN ARE MINIMUMS REQUIRED BY THE LOCAL MUNICIPALITY AND MATERIALS SHOWN HAVE BEEN SELECTED SPECIFICALLY FOR THIS PROJECT.
- ALL WIRE BASKETS SHALL BE COMPLETELY REMOVED AND DISPOSED OF, BURLAP SHOULD BE REMOVED OR PUNCTURED IN AT LEAST 5 PLACES. REMOVE ALL TWINE FROM BURLAP MATERIALS.
- STAKE TREES IN PLACE PER DETAIL WIRE OR ROPE GUYING IS NOT ALLOWED.
- NO CANOPY TREE LOCATED WITHIN 15' OF AN OVERHEAD UTILITY, POWER LINE, OR LIGHT POLE.
- NO CANOPY TREE SHALL BE LOCATED WITHIN A GAS, WATER, SEWER, UNDERGROUND ELECTRIC, CABLE, FIBER, OR PUBLIC UTILITY EASEMENT WITHOUT SIGNING OF A RELEASE WAIVER AND APPROVAL BY THE EASEMENT HOLDER.

| KEY | AMOUNT | SCIENTIFIC NAME/ COMMON NAME | HEIGHT | SPREAD | TRUNK | NOTES |
|------|----------------|--|-----------------------|--------------------------|----------------------------|--------------------|
| | TREES | | | | | |
| AR | 4 | Acer rubrum 'Armstrong'/ Armstrong Red Maple | 14'-16' | 4'-5' | 3 1/2" | Matched 5'Clear |
| BN | 3 | Betula nigra/ River Birch | 7'-9' | 4'-5' | 3 Cane, | 1.5" Each |
| LI | 4 | Lagerstroemia indica/ Crapemyrtle | 6' Min. | 2'-3' | 3 Cane, | 1" Each |
| QS | 8 | Quercus acutissima/ Sawtooth Oak | 14'-16' | 6'-7' | 2 1/2" | Matched 5'Clear |
| | SHRUBS | 5 | | | | |
| BP | 17 | Berberis thunbergii 'Goruzam'/ Golden Ruby Barberry | 12" Min. | 15"-18" | F.T.B. | Or Equal |
| IH | 49 | llex crenata 'Helleri'/ Heller's Japanese Holly | 24" Min. | 18"-24" | F.T.B. | Or Equal |
| SJ | 6 | Spiraea x 'Zelda'/ Solar Flair Spirea | 18" Min. | 15"-18" | F.T.B. | Or Equal |
| ТО | 6 | Thuja occidentalis 'Smaragd'/ Emerald Green Arborvitae | 60" Min. | 15"-18" | F.T.B. | |
| | ORNAME | ENTAL GRASS | | | | |
| MS | 10 | Pennisetum alopecuroides 'Moudry'/ Black Fountain Grass | 1 0 | Gallon Cont | tainers | |
| | GOUND | COVER / TURF | | | | |
| LM | 45 | Liriope muscarii/ Monkeygrass | 1 Gallon, 18" O.C. | divide bib in triangu | os, install Ilar patter | plugs at 18 n. |
| SOD | | Rebel II Fine Bladed Sod | Install wh | nere showr | ١. | |
| SEED |) | Rebel II Fine Bladed Fescue | Seed at Install w/ | 5 lbs per / weed fre | 1,000 sf ee Straw | |
| | MISCEL | LANEOUS | REMARKS | | | |
| Mulc | h Bed NOTES | Hardwood Bark Mulch | Minimum | 3" depth | throughou | ut. |
| | | Full To Bottom | | | | |
| | - | Tull to bottom | | | | |







DECIDUOUS TREE PLANTING DETAIL

DETAIL BY CUMBERLAND LANDESIGN INC. 615-333-4636

REQUIRED

15

1 TREE PER 250 SF:

HIGHWAY 12 STREET TREES:

STREET SHRUB SCREENING:

HARPER LANE STREET TREES:

STREET SHRUB SCREENING:

NO EXISTING TREES TO REMOVE OR TO BE PRESERVED

BUFFERYARDS NOT PROPOSED AT UNDEVELOPED PARCEL

(3,550 / 250)

(200 / 40LF)

(200 / 5LF)

(125 / 40LF)

(125 / 5LF)

PROVIDED

47

PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL. 3" MULCH— -INSTALL WATER BAG OR FINISH GRADE DONUT IF AUTOMATED IRRIGATION NOT PROVIDED. UNDISTURBED SOIL BACKFILL MIX, FREE OF TRASH \$ STONE I"XI" NATURAL WOODEN STAKE THROUGH BALL EDGE INTO SUBSOIL MIN. REMOVE ALL WIRE BASKETS 18". 3 TOTAL. \$ TWINE, CUT BURLAP IN 5 PLACES OR REMOVE. ROLL NO ABOVE GROUND GUYING. BACK AWAY FROM TRUNK. 24" RADIUS. MULCH RING ON ALL PROPOSED TREES PLANT MATERIAL TO MEET ANSI (Z60.1) AMERICAN STANDARD FOR NURSERY STOCK.

DETAIL BY CUMBERLAND LANDESIGN INC. 615-333-4636 EVERGREEN TREE PLANTING DETAIL

MULCH BED EDGE SPACE AS SHOWN | MOVE ALL TWINE WHEN PRESENT MULCH SHALL BE FINISH GRADE -1" LOWER AT PAYED EDGES LOOSEN TOP, CUT
OR PIERCE IN 5
PLACES. REMOVE
ALL WIRE WHEN
PRESENT.

WHERE ROOTS HAVE WOUND RADIALLY INSIDE CONTAINERS, CUT 1/2" DEEP INTO BALL IN THREE PLACES TO PREVENT GIRDLING. PLANT MATERIAL TO MEET ANSI (Z60.1) AMERICAN STANDARD FOR NURSERY STOCK. DETAIL BY CUMBERLAND LANDESIGN INC. 615-333-4636

3" MULCH-

AMMENDED-

UNDISTURBED SOIL

TOPSOIL BACKFILL

FOOT TAMP FOR -

SHRUB PLANTING DETAIL

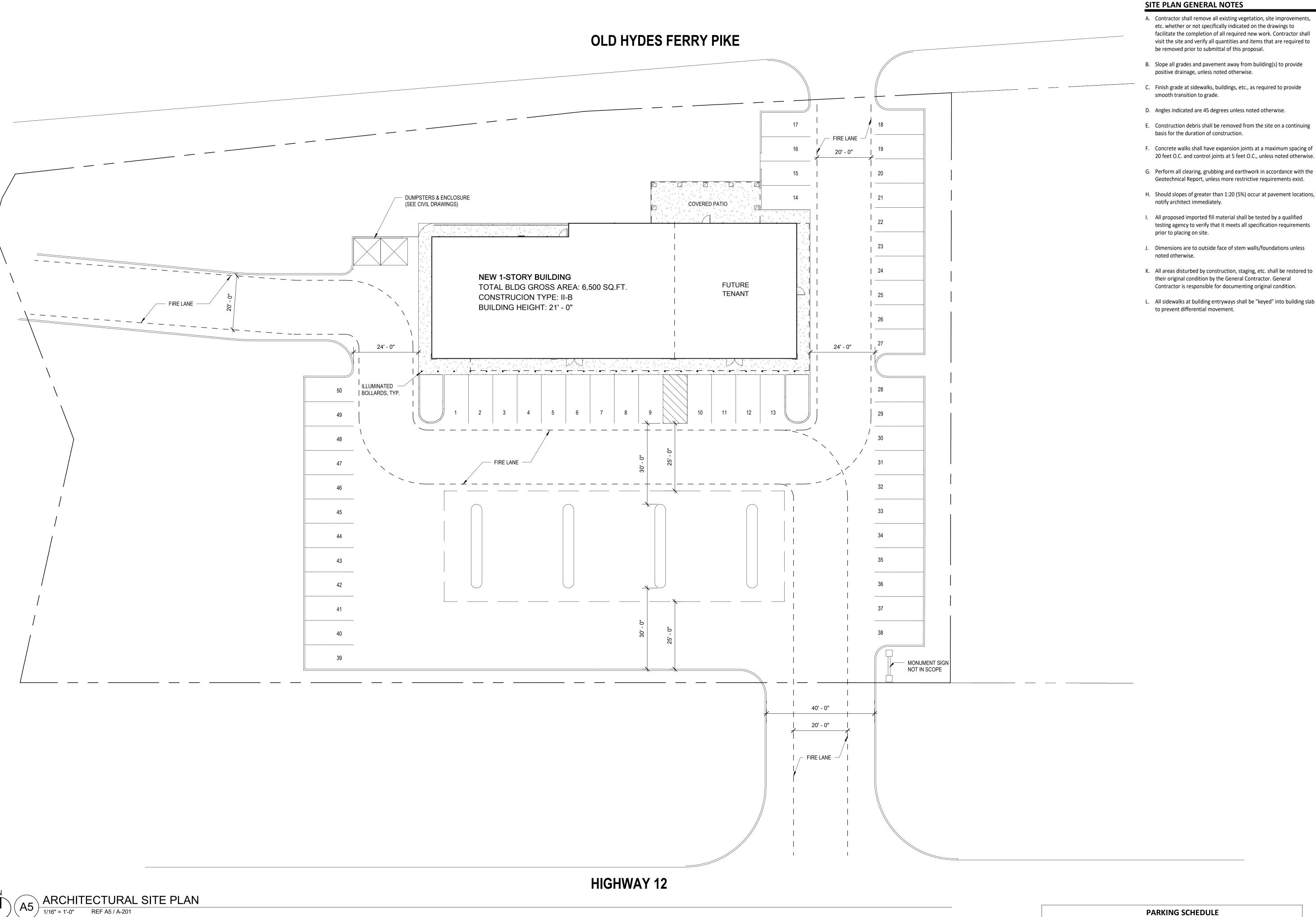
21102 Sheet:

1 of 1

Date: 01-15-2021

02-15-2021 09-23-2021

Revisions:



- etc. whether or not specifically indicated on the drawings to facilitate the completion of all required new work. Contractor shall visit the site and verify all quantities and items that are required to be removed prior to submittal of this proposal.
- B. Slope all grades and pavement away from building(s) to provide
- C. Finish grade at sidewalks, buildings, etc., as required to provide
- D. Angles indicated are 45 degrees unless noted otherwise.
- 20 feet O.C. and control joints at 5 feet O.C., unless noted otherwise.
- G. Perform all clearing, grubbing and earthwork in accordance with the Geotechnical Report, unless more restrictive requirements exist.
- H. Should slopes of greater than 1:20 (5%) occur at pavement locations,

- their original condition by the General Contractor. General Contractor is responsible for documenting original condition.

TYPE

PARKING SPACES REQUIRED

PARKING SPACES PROVIDED

ACCESSIBLE PARKING SPACES

PARKING COUNT

2 (incl. 1 VAN ACCESSIBLE SPACE)

L. All sidewalks at building entryways shall be "keyed" into building slab

REVISIONS:

DATE OF ISSUE:

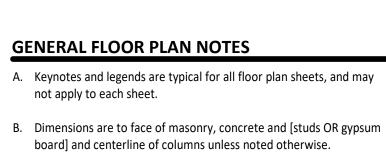
MA PROJECT NO:

DRAWN BY:

ARCHITECTURAL SITE PLAN

MA PROJECT NO: **DRAWN BY:**

FIRST FLOOR PLAN



B. Dimensions are to face of masonry, concrete and [studs OR gypsum board] and centerline of columns unless noted otherwise.

C. See enlarged floor plans and details for specific locations of plumbing

D. Field verify all dimensions prior to fabrication of any cabinetry, frames, structural items, etc.

E. Provide painted access panels in walls and ceilings at concealed items, such as valves, shock absorbers, controls, switches, etc., and any other items that may require access. It is the Contractor's responsibility to determine access panel locations.

F. All guardrails and handrails shall be fabricated and installed in accordance with applicable codes, regulations, and AHJ.

G. Seal all penetrations in fire rated assemblies as required by all applicable codes. Permanently label all penetrations and assemblies.

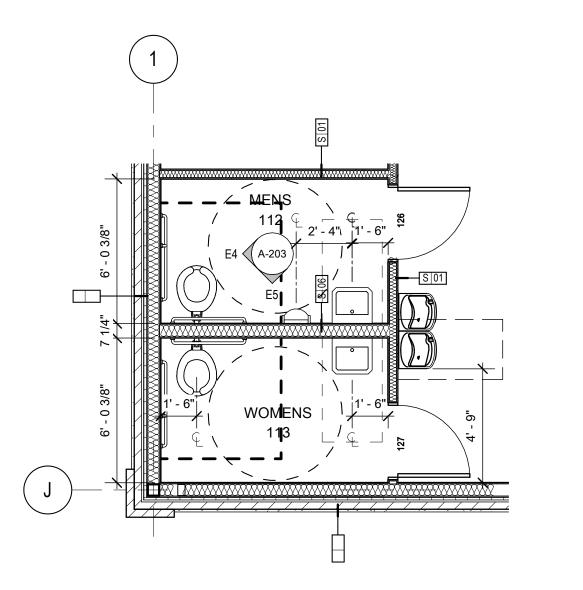
H. Verify and coordinate all requirements for owner furnished items, prior to performance of any work that is to accommodate and interface with such items.

I. All angles are increments of 45 degrees unless noted otherwise.

J. Extend wall envelope insulation from floor line to meet roof

K. Provide "Fry" reveal FDM 625-75 or equal at all gypsum board to masonry or concrete transitions.

L. All frame walls to be Type [S01C OR CHOOSE TYPE] and all furring walls to be [F01E OR CHOOSE TYPE], unless noted otherwise.





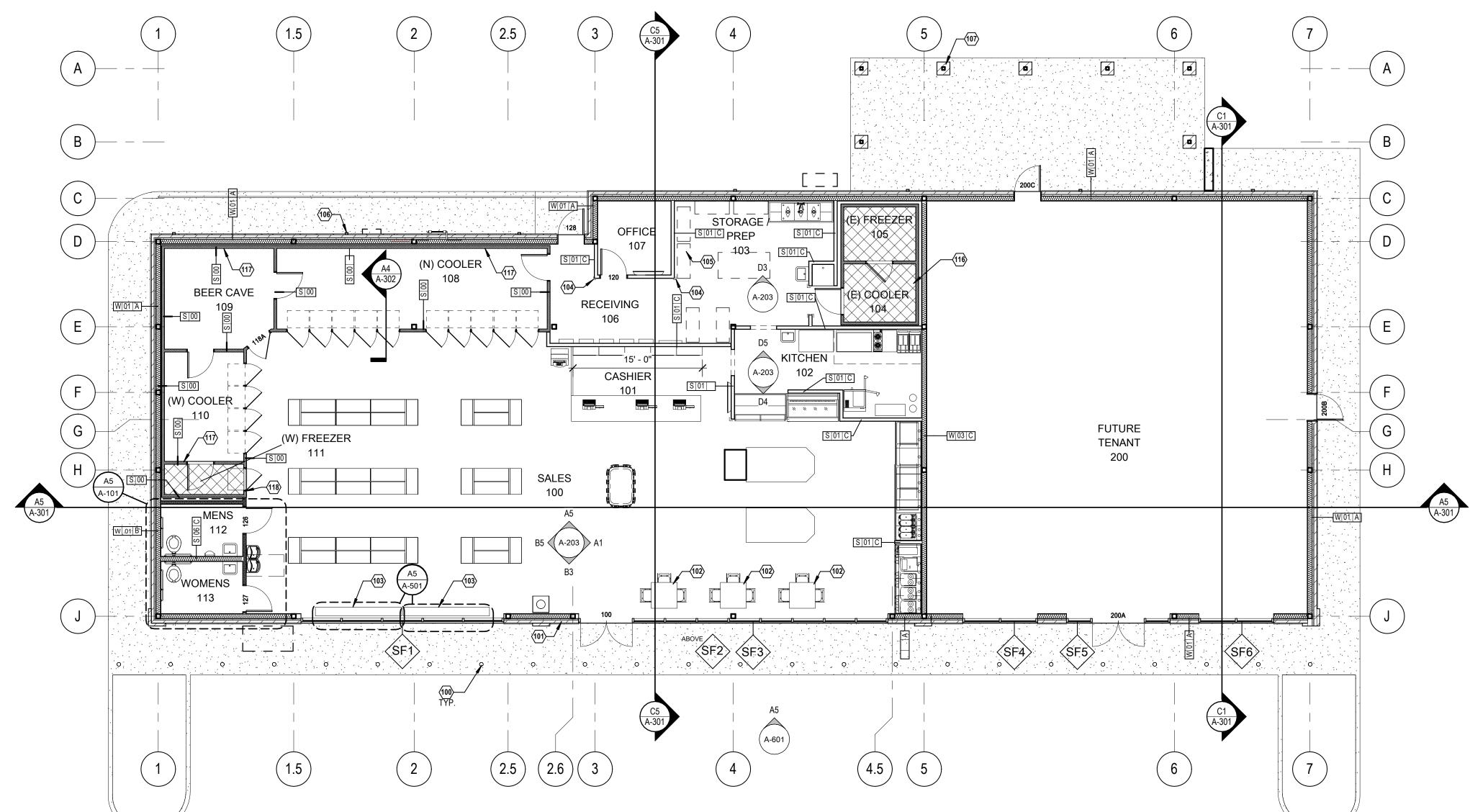
3' - 0"

15' - 0"

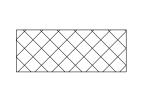
FIRST FLOOR - NOTED

1/8'' = 1'-0''

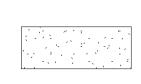




LEGEND



RECESSED SLAB; COORDINATE WITH COOLER / FREEZER MANUFACTURER



CONCRETE

KEYNOTES - PLAN

ILLUMINATED BOLLARDS, TYP; REFER TO ELECT.

EMERGENCY PUMP SHUTOFF SWITCH CHAIRS & TABLE SEATING (OWNER SUPPLIED) STANDING COUNTER (OWNER SUPPLIED) STAINLESS STEEL CORNER GUARD, TYP.

STORAGE SHELVING (OWNER SUPPLIED)

(IF NOT KEYNOTED, SEE A-105)

COLUMN, TYP.

10.20.2021

0214-21

DATE OF ISSUE:

REVISIONS:

PROJECT PHASE:

DRAWN BY: FIRST FLOOR

DIMENSION PLAN

GENERAL DIMENSION NOTES

A. The contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements, conditions, and other information known to the Contractor with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the Architect at once.

B. The Contractor shall not scale drawings.

C. Dimensions are not adjustable unless noted with plus/minus tolderance.

D. Dimensions are indicated as follows unless otherwise noted:

E. Columns - from centerline to centerline.

F. Metal stud partition - from face of stud to face of stud.

G. Wood stud partitions - from face of stud to face of stud.

H. Concrete - from face of concrete to face of concrete. I. Masonry - from face of masonry to face of masonry.

41' - 0"

3' - 2 1/2"

20' - 0"

9' - 6"

31' - 10 3/4"

44' - 8 1/8"

42' - 11 1/4"

12' - 0"

3' - 4" 8' - 8"

9' - 6"

49' - 3 1/2"

-18' - 10 3/8"- () () () () ()

(A-203)

42' - 2 7/8"

35' - 10"

135' - 0" 135' - 8" 20' - 0"

22' - 0 7/8"

84' - 4 3/4".

8' - 8"

12' - 0 1/8"

J. Exterior wall - from exterior face of wall to interior face of stud.

K. Interior elevation - from finished floor to finished ceiling or finished wall to finished wall.

L. Door shall be located 6" from clear opening to adjacent wall unless otherwise noted.

M. All floor to floor and ceiling heights shown on drawings are from finish floor.

GENERAL FLOOR PLAN NOTES

A. Keynotes and legends are typical for all floor plan sheets, and may

B. Dimensions are to face of masonry, concrete and [studs OR gypsum board] and centerline of columns unless noted otherwise.

C. See enlarged floor plans and details for specific locations of plumbing

D. Field verify all dimensions prior to fabrication of any cabinetry, frames, structural items, etc.

E. Provide painted access panels in walls and ceilings at concealed items, such as valves, shock absorbers, controls, switches, etc., and any other items that may require access. It is the Contractor's

F. All guardrails and handrails shall be fabricated and installed in

G. Seal all penetrations in fire rated assemblies as required by all

I. All angles are increments of 45 degrees unless noted otherwise.

J. Extend wall envelope insulation from floor line to meet roof

K. Provide "Fry" reveal FDM 625-75 or equal at all gypsum board to masonry or concrete transitions.

not apply to each sheet.

responsibility to determine access panel locations.

accordance with applicable codes, regulations, and AHJ.

applicable codes. Permanently label all penetrations and assemblies.

H. Verify and coordinate all requirements for owner furnished items, prior to performance of any work that is to accommodate and interface with such items.

L. All frame walls to be Type [S01C OR CHOOSE TYPE] and all furring walls to be [F01E OR CHOOSE TYPE], unless noted otherwise.



17' - 4"

50' - 7 1/4"

10' - 6 1/8"

3' - 2 4 5/8"

17' - 0 1/8"

8' - 10 5/8"

21' - 0 1/8"

7' - 11 7/8"

8' - 8"

9' - 5 7/8"

47' - 0 1/8"

45' - 0"

COOLER / FREEZER

42' - 6"

23' - 6"

20' - 0"

G. Fire sprinkler contractor shall reference all drawings and

I. Refer to electrical drawings for location of reused, relocated, existing or new light locations. Patch all GWB ceilings with new gypsum wall board where damaged or removed for new work. Match existing depth, finish and color of ceiling to be patched.

J. Ceiling heights indicated in existing areas are approximate. Maximize where possible. Where ceiling grids are to extend, match existing height, direction, manufacturer, style, color and type of grid.

KEYNOTES - RCP

acceptable.

finish floor.

BUILDING SIGNAGE (OWNER TO SUPPLY) SUSPENDED WOOD BEAM TRELLIS, TYP. EVENLY SPACED WITHIN STRUCTURAL FRAMING, TYP.

SUNSHADE SUSPENDED WOOD BEAM CEILING MOUNTED TO

STRUCTS, TYP. HOOD (SEE MECHANICAL)

STRUCTURE (SEE STRUCTURAL)

EXTERIOR LIGTH FIXTURE (SEE MEP DRAWINGS), TYP. **ROOF ACCESS LADDER**

DOWNSPOUT PAINTED GYP BOARD CEILING WITH CAN LIGHT FIXTURES

LEGEND

EXPOSED TO STRUCTURE ABOVE; PAINT MATTE BLACK INCLUDING EXPOSED MECHANICAL & ELECTRICAL EQUIPMENT AND CONDUIT

- HEIGHT ABOVE FINISHED FLOOR GYP: GYP. BOARD CEILING

2x4 L.E.D. FLAT PANEL TROFFER LIGHT FIXTURE (SEE ELEC.)

ACT: ACOUSTIC CEILING TILE

4' LED LINEAR PENDANT LIGHT FIXTURE (SEE ELEC.)

4' LED STRIP LIGHT FIXTURE (SEE ELEC.) WALL MOUNTED EXTERIOR LIGHT FIXTURE (SEE ELEC.)

6" DOWNLIGHT LIGHT FIXTURE (SEE ELEC.)

4" DOWNLIGHT LIGHT FIXTURE (SEE ELEC.)

L.E.D. CYLINDER DOWNLIGHT EXTERIOR LIGHT FIXTURE (SEE ELEC.)

EMERGENCY LIGHTING FIXTURES (SEE ELEC.)

4' L.E.D. STRIP GASKETED LIGHT FIXTURE (SEE ELEC.)

DECORATIVE L.E.D. PENDANT LIGHT FIXTURE (SEE ELEC.)

SUPPLY DIFFUSER (SEE MECH.)

RETURN DIFFUSER (SEE MECH.)

WALL MOUNTED EMERGENCY EXIT LIGHT (SEE ELEC.)

CEILING MOUNTED EMERGENCY EXIT LIGHT (SEE ELEC.)

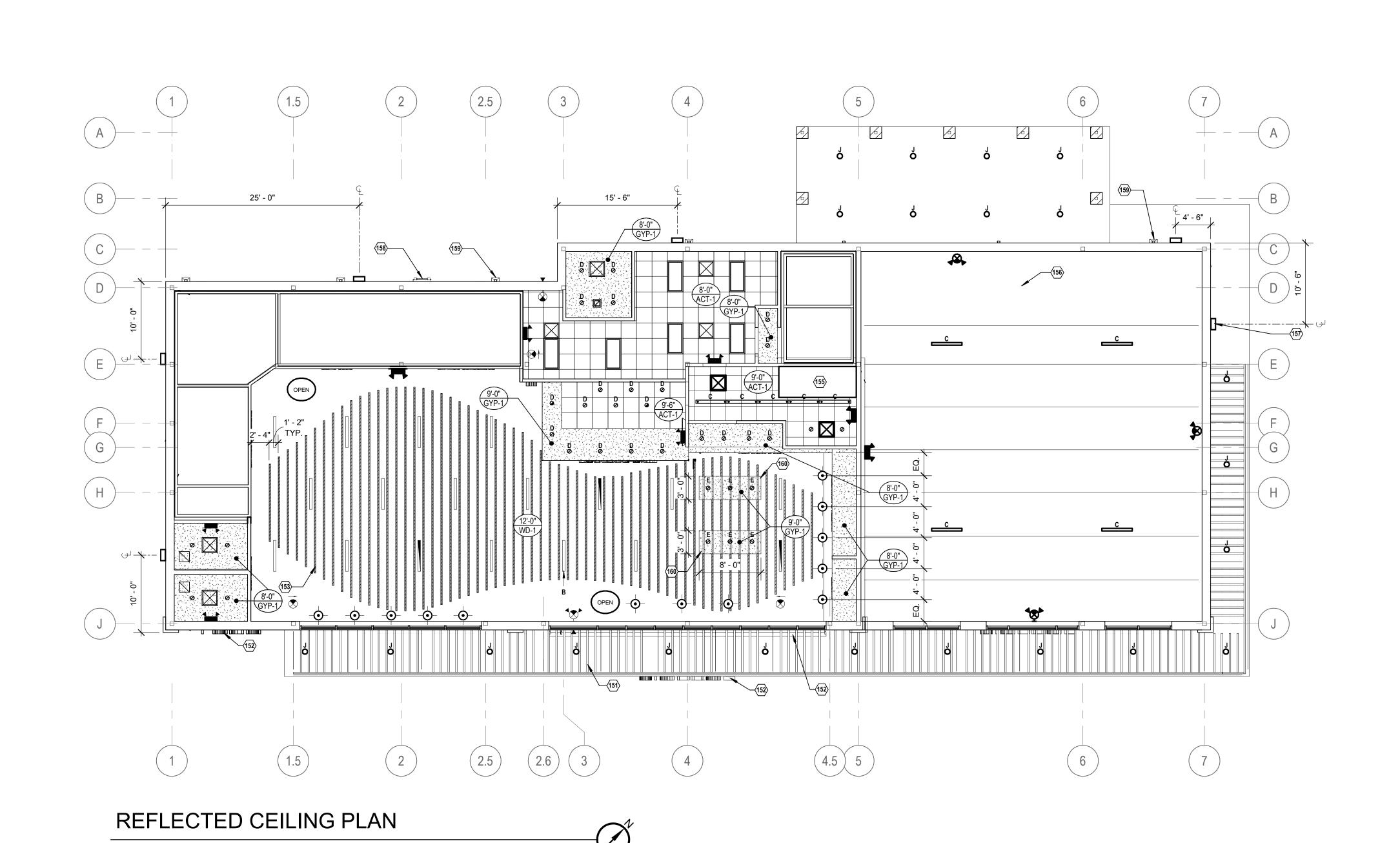
WALL MOUNTED EMERGENCY EXIT LIGHT (SEE ELEC.)

DECORATIVE L.E.D. PENDANT LIGHT FIXTURE (SEE ELEC.)



ACOUSTIC CEILING TILE





ROOM FINISH LEGEND

COLOR

- -

WHITE

METRO CREAM

ANTIQUE WHITE

TRICORN BLACK

EBONY

DIABLO RED

WHITE

PT-1 (SEE ABOVE)

PT-1 (SEE ABOVE)

MANUFACTURER

- -

- -

EMSER

SHERWIN WILLIAMS

SHERWIN WILLIAMS

ARMSTRONG

DAL-TILE

ARMSTRONG

- -

- -

PRODUCT

- -

- -

- -

#SW6119

#SW6258

#R48EB

#0T01

CLEANROOM VL

- -

- -

NOTES

TRIM PIECES AT TRANSITIONS AND PERIMETER

HONED

- -

- -

SCRUBBABLE/WASHABLE CEILING TILE

WATER RESISTANT GYP. BD. IN WET AREAS

DESCRIPTION

SEALED CONCRETE

FIBERGLASS REINFORCED PANEL

CERAMIC

PAINT

PAINT

RESILENT COVED RUBBER WALL BASE

QUARRY TILE

ACOUSTICAL CEILING TILE

GYPSUM BOARD

GYPSUM BOARD

SIZE

- -

12" x 24"

- -

- -

4"

6 "x 6"

2' x 2'

- -

DESIGNATION

CONC-1

FT-1

PNT-1

PNT-2

RB-1

QT-1

ACT-1

GYP-1

GYP-2

WD-1

REVISIONS:

DATE OF ISSUE: MA PROJECT NO:

DRAWN BY:

REFLECTED CEILING PLAN

0214-21

PROJECT PHASE:

DATE OF ISSUE:

DRAWN BY:

ROOF PLAN

A-104

ROOF PLAN GENERAL NOTES

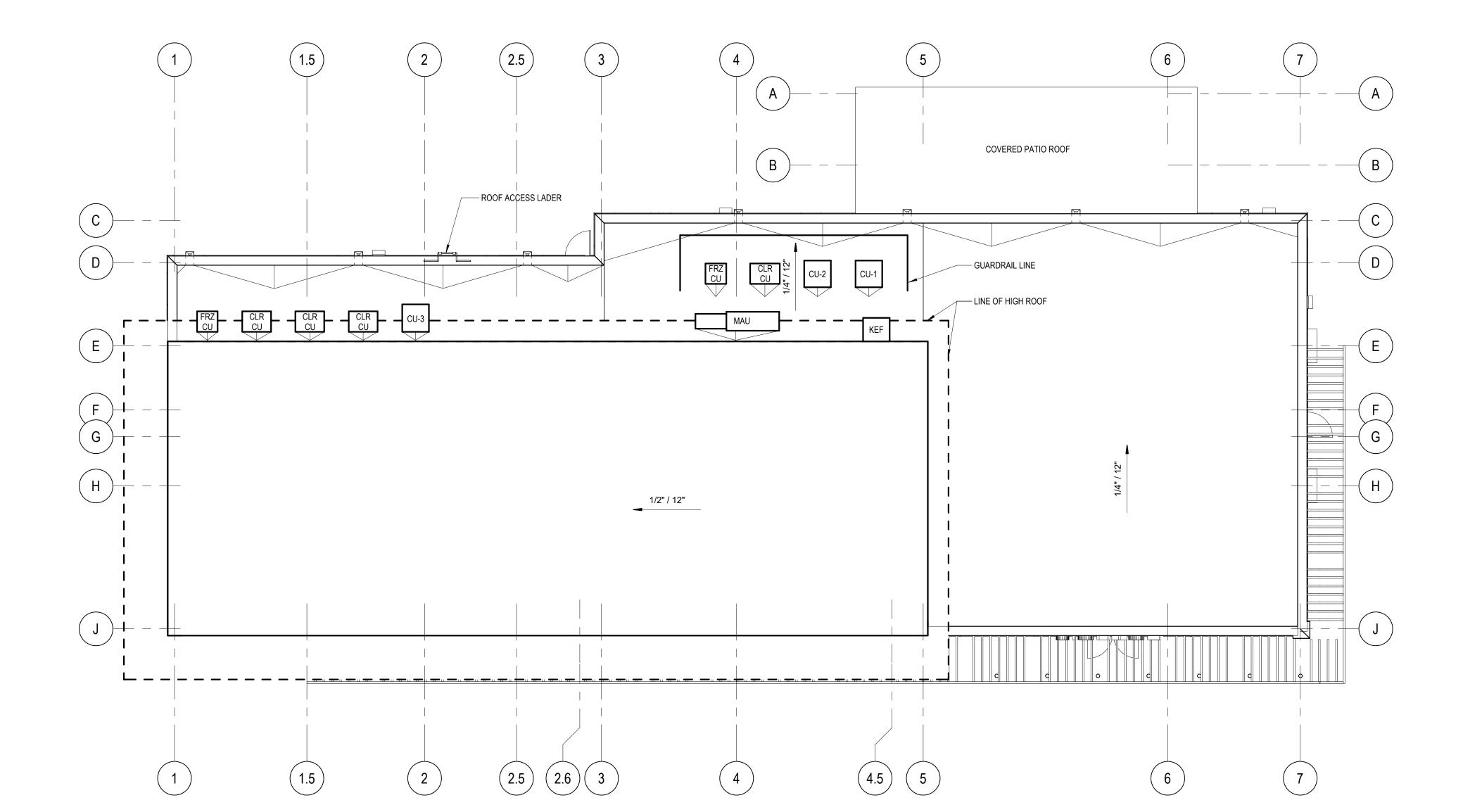
- A. Do not begin work without holding a pre-roofing conference. Notify Architect, Roofing Supplier, Manufacturer, Installer, Sheet Metal Subcontractor and other related subcontractors a minimum of 7 days before commencing roofing work.
- B. Roofing Supplier, Manufacturer and Installer shall review all roofing details and advise Architect on any recommended changes. Unless notified otherwise, details will be assumed to have been reviewed by all parties.
- C. Provide crickets behind all mechanical equip. curbs, roof hatch curbs, etc
- D. Minimum slope at all cricket valleys shall be 1/4" per foot. Do not scale plan for cricket dimensions.
- E. All cricket slopes shall be achieved in a manner acceptable to Architect and in accordance with roofing manufacturer's requirements.
- F. Provide curbs and flashing at any equipment not provided with premanufactured curbs.
- G. Separate all dissimilar metals with bituminous coatings or other methods acceptable to the Architect.
- H. Flashing details shall be in strict compliance with approved Roof Manufacturer's standards for application, and shall be fabricated in accordance with the latest edition of "Sheet Metal and Air Conditioning Contractor's National Association" (SMACNA) technical manual.
- All sheet metal scuppers, sleeves, etc., penetrating roofing or parapets to which rooming must attach shall be a minimum of 20 gauge, all soldered construction, with minimum 3" wide flanges.
- J. All scuppers shall be constructed with four full sides, with flanges through the thickness of the wall, forming a complete "sleeve" through the wall.
- Frovide flashing per Roofing Manufacturer's standard details at all electrical conduit, HVAC lines, plumbing vents, etc.
- L. Flashing shall be factory finished where indicated. Galvanized unfinished flashing exposed to view shall be washed, primed, and finished with paint per the Specifications.
- M. Provide concrete splash blocks below all scuppers and at all drain leaders that daylight above grade or onto other roof surfaces.
- N. Contractor and all sub-trades shall exercise the necessary care to limit traffic and prevent damage to the roof membrane.
- O. Where existing roofing is modified, engage qualified installers of the roofing systems to maintain roof warranties. It is the Contractor's responsibility to verify types and manufacturers of existing roofing systems.

GENERAL NOTES

1.) LOCATIONS OF HVAC EQUIPMENT APPROXIMATE, SEE MECHANICAL DRAWINGS FOR MORE DETAILS)

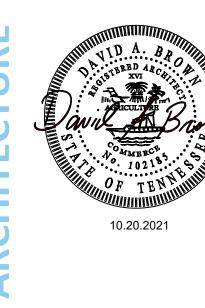
2.) EACH UNIT NEEDS 3FT OF CLEAR SPACE AROUND IT

3.)INSTALL GUARD RAIL AROUND UNITS AFTER INSTALLATION, STILL PROVIDING THE REQUIRED CLEAR SPACE AROUND EACH UNIT



ROOF PLAN

1/8" = 1'-0"





REVISIONS:

DESCRIPTION DATE

10.20.2021

0214-21

MA PROJECT NO: **PROJECT PHASE:**

DATE OF ISSUE:

DRAWN BY:

EQUIPMENT

3 Gondola, 7ft x 3ft x 4ft Owner to select Owner to select 3 Gondola, 15ft x 3ft x 4ft Owner to select Owner to select 1 | Elkay Versatile Cooler Wall Mount Bi- | ELKAY EZSTL8LC Level ADA Non-Filtered 8 GPH Light Gray Granite 36-3/4" x 19" x 25-5/16" Atm Machine Owner to select EIMSS60SC-3 Refrigerated Self-Serve Island Federal Industries Merchandiser 60" x 40" x 60" 1 Wall Display Non-Refrigerated, Self- Federal WCD42 Serve Bakery Case 42" x 30" x 62" 2 Center Island Cabinet (2) CENTER STORAGE: Royston CS48-23-34-DRSFP4830 96" x 48" x 34" RIGHT END UNIT: CIM60-CD12-34-SFP6024M LEFT END UNIT: CI24-48-34-DR SFP4830 177BW24D 1 Hot Dog Bun Warmer Grand Slam 15 ¾" x 11" x 4 7/8" 1 24 Hot Dog Roller Grill 177HDRG24 Grand Slam 22 ½" x 16" x 6 ½" 1 Glo-Ray Buffet Warmers 67" x 22.5" x 20.75" (3) CS48-29-34-DR-CB-B 3 2 door storage cabinet SF48-29 48" Self Service, 3 Shelf Heated Avantco Equipment | 177HDC48 Display Warmer with Sliding Doors 48" x 19" x 32" 14-100 | 2 | Cabinet w/built in cup holder & trash | Royston (3); CB36-36-34-3C-OB-B Solid surface countertop (3); CB18-36-34-3C-OB-B w/backsplash (see details) 4 Flavor Select 30 Lancer WorldWide Flavor Select 30 Ice Beverage Dispensers 30" x 30.5"x 40.25" 16-100 2 Ultra-Frozen Beverage System with 2 BUNN ULTRA-2, HP LAFI hoppers 16" x 24.5" x 31.9" 17-100 2 Cabinet w/built in cup holder & trash Royston (2); CB24-36-34-3C-OB-B Solid surface countertop (3); CB30-36-34-3C-OB-B (1); CS18-36-34-SW-LFD w/backsplash (see details) 1 Nuova Simonelli ProntoBar Touch 1- Nuova Simonelli Item #: 238PT1 Step Super Automatic Espresso Machine - 220V 13" x 21" x 25" 19-100 3 K-Series Cappuccino Dispensers CEILWARE 5K-10-GB-LD Cashier-101 1 Front Display Cabinet (3); CS48-29-34-MF 1-101 Royston (1); CS36-29-34-SF 2-101 Owner to select 3 Cash Register Owner to select Royston Tobacco Merchandisers 5 Cigarette display shelving 36" x 1'-0" 78"/92.74" 4-101 2 Security Monitor/TV Display Owner to select Owner to select Kitchen-102 4 Declyn Wall-Hung Lavatory American Standard 0321.026 600TSB3048S 1 16-gauge stainless steel work tables Regency with 4" backsplash 48" x 30" x 34" 1 Duke Baking Center- DBC-1 DBC-1 59-E3 Oven with 30" x 30" x 66" PFB-1 Proofer Base 1 Gas Griddle Cecilware Pro 48" x 30" x 15.6" Countertop Range Cooking 351RCPG12NL 12" x 26 13/16" x 15" Performance Group 1 16 gauge stainless steel work tables 600TSB3084S Regency with 4" backsplash 48" x 30" x 34" 2 Avantco FF300 Natural Gas 40 lb. 177FF300N Avantco Stainless Steel Floor Fryer 15 ½" x 30 ¼" x 47 1/8" 8-102 1 Kitchen Hood Econ Air 5424EX-2-PSP-F 1 Fountain Drink Supply Owner to select Owner to select 10-102 2 CO2 Tanks for Soda Machines Owner to select Owner to select Stor./Prep.-103 1 Stainless Steel Economy Fabricated Advance Tabco 9-OP-20-EC-X **Smart Fabrication** Floor Mop Sink 25" x 21" x 10" 2-103 1 Deep Three Compartment Economy Kintera KES31818S-218 Sink- S/S 1 Worktables with Backsplash and Eagle Group T3672SEB-BS Stainless Steel Base with Undershelf -Deluxe Series

72" x 36" x 35 1/8"

Beer Cave

1-112 2 Toilet with grab bars

1-111 1 Walk in Freezer with door System

Receiving- 106 6 Electrical Panels

2-112 1 Urinal

Mens Restroom- 112

1 Walk in Cooler & Freezer Combo

1 Walk in Cooler w/doors System &

MODEL

Model 600 Outdoor Unit-

Slant Front

Contractor to select | Contractor to select

Contractor to select | Contractor to select

See MEP drawings

FSDM232442DWLFD-

CB,NOB,SMF2324-DW-

Quote No. 555182, Rev 1

Quote No. 555187, Rev 1

Quote No. 555183, Rev 0

See MEP Drawings See MEP Drawings

Contractor to select | Contractor to select

Contractor to select | Contractor to select

U.S. Cooler

U.S. Cooler

U.S. Cooler

MANUFACTURER

Polar Temp. Ice Merchandisers

See MEP drawings

Royston

EQUIPMENT SCHEDULE

Exterior-000

4-000

Sales-100

DESCRIPTION

(length x width x height)

1 Exterior Bagged Ice Machine

1 Exterior Electrical Panels

1 Roof Access Ladder

1 Gas Connection

1 Trash cabinet

23" x 23" x 42"

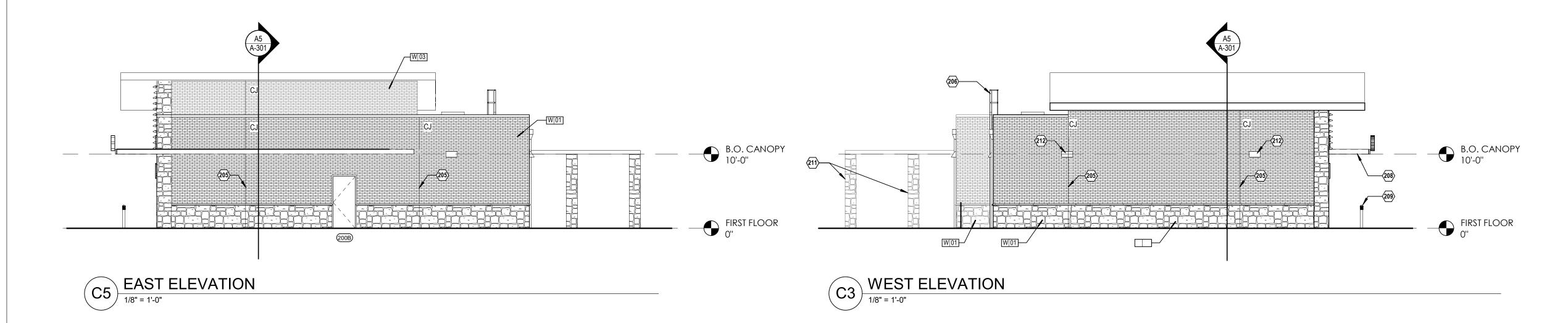
| 3-000 2-000 | 1-104 |
|--|--|
| 1-108 | 3-103 |
| 1-106 1-106 1-106 | 7-102 |
| 3-101 (3- | 1-102 (2-102) (3-102) (8-102) (7-102) |
| 3-100 | 11-100 12-100 12-100 13-100 15-100 15-100 T5-100 T5 |
| 1-111 2-112 1-102 3-100 2-100 | 9-100 10-100 15-100 16-100 16-100 16-100 |
| 4-100 | 17-100 18-100 19-100 30 19-100 |
| | 19-100 |

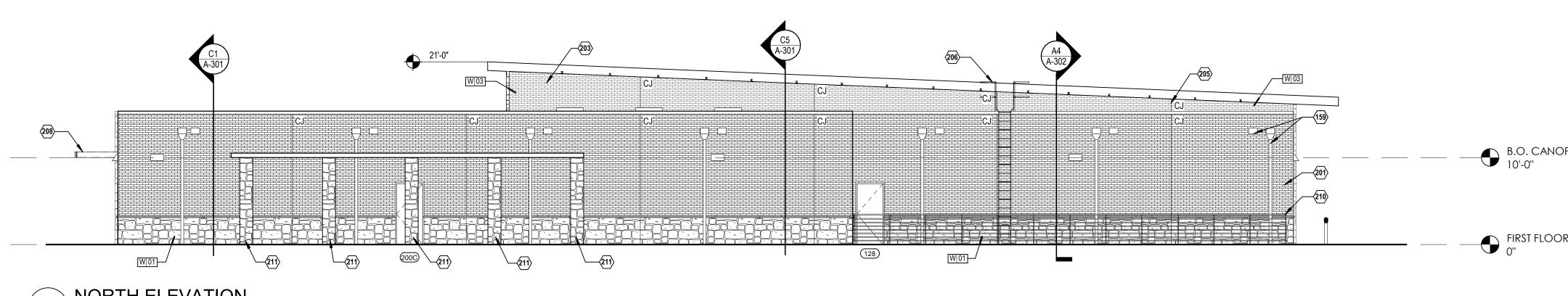
above floor line. B. Sidewalks at building and structures shall match finish floor flush at doorways and slope away from the building.

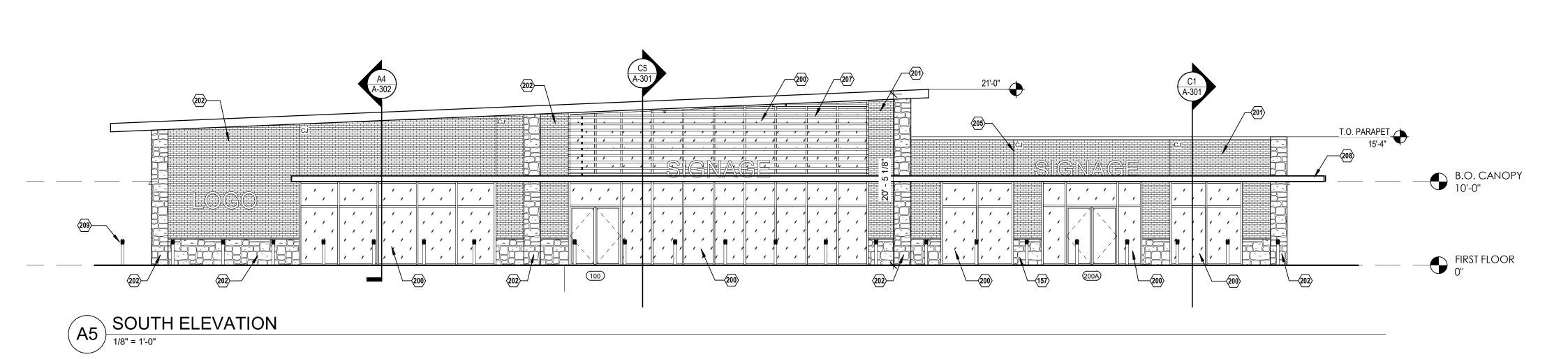
C. Paint all exposed metal that is not specified to receive factory finish.

D. All exposed flashing shall be factory finished.

E. See Plans and Schedule for door and window types and sizes.







SCHEDULED ALUMINUM STOREFRONT; REF.

MASONRY CONTROL JOINT, TYP.

ROOF ACCESS LADDER

ALUMINUM AIRFOIL SUNSHADE, TYP. PAINTED STEEL CANOPY WITH INFILL SLATS

ILLUMINATED BOLLARDS, TYP.

PAINTED STEEL GUARDRAIL

STONE COLUMN, TYP.

EXTERIOR LIGHTING; REF. ELECT

DATE OF ISSUE: 10.20.2021 MA PROJECT NO: 0214-21 **PROJECT PHASE:**

DRAWN BY:

REVISIONS:

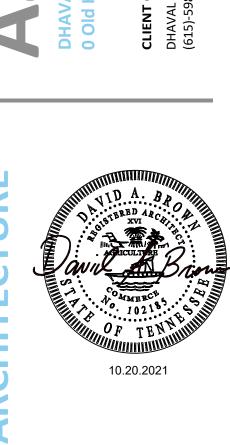
BUILDING ELEVATIONS

OF TENNE

B.O. CANOPY 10'-0" FIRST FLOOR 0" **KEYNOTES - ELEVATION** NORTH ELEVATION

1/8" = 1'-0" FACE BRICK THIN BRICK FACADE AT UPPER ROOF, TYP.





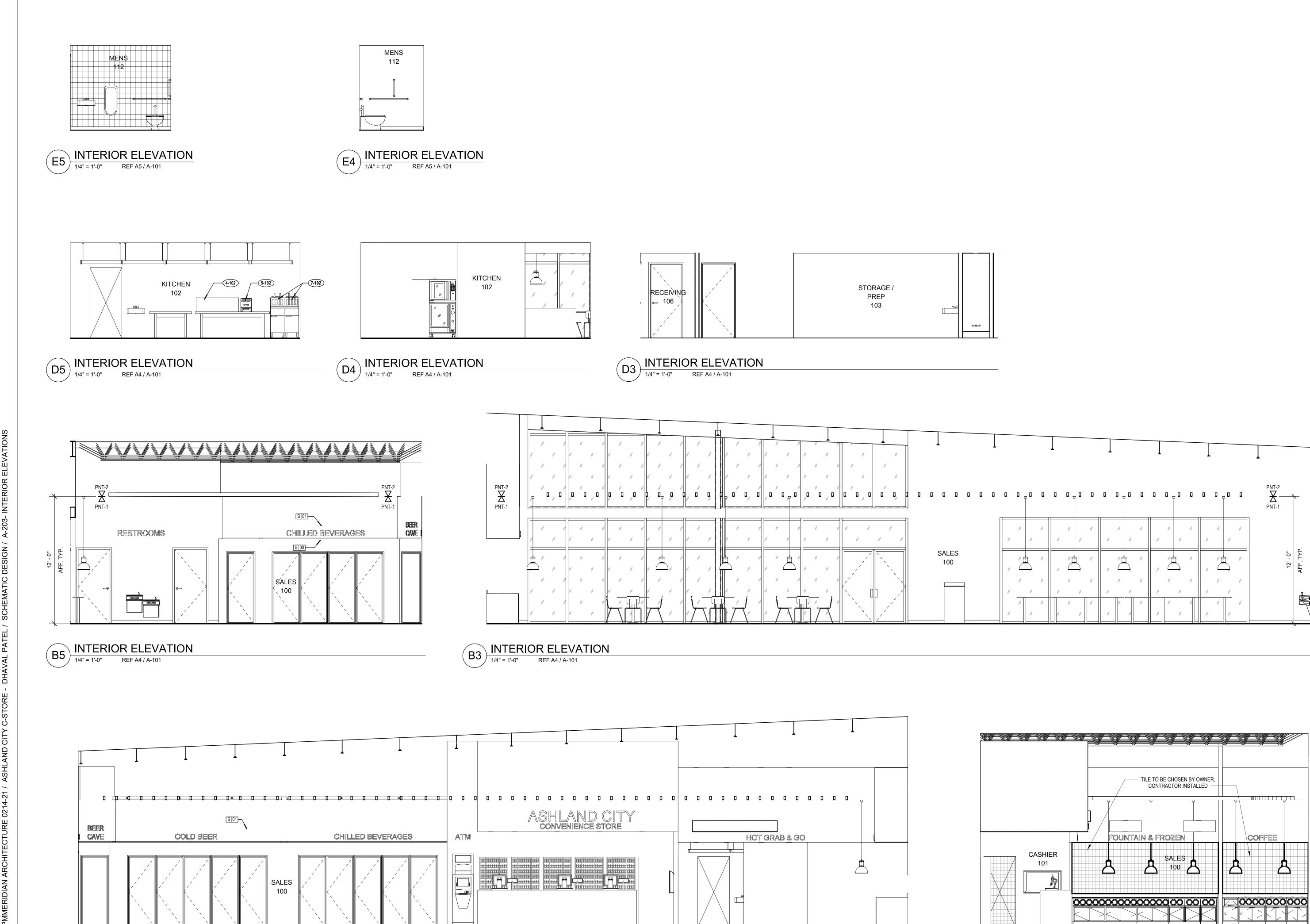
D5 EXTERIOR 3D VIEW

(A5) EXTERIOR 3D VIEW

REVISIONS:

DATE OF ISSUE: MA PROJECT NO: DRAWN BY:

BUILDING 3D VIEWS -EXTERIOR



A5 INTERIOR ELEVATION

1/4" = 1'-0" REF A4 / A-101

MERIDIAN

REVISIONS:

OF TENNE

DATE OF ISSUE: 10.20.2021 0214-21 MA PROJECT NO: **PROJECT PHASE:** DRAWN BY:

INTERIOR ELEVATIONS

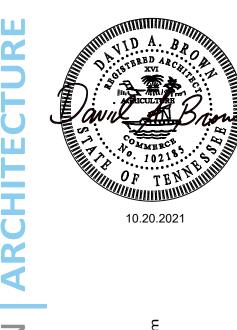
ITEM # 4.

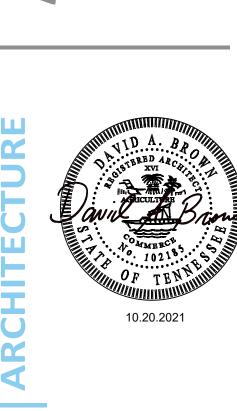
A1 INTERIOR ELEVATION

1/4" = 1'-0" REF A4 / A-101

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(A5) INTERIOR 3D PERSPECTIVE





REVISIONS:

ATI

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CHILLED BEVERAGES

DATE OF ISSUE:

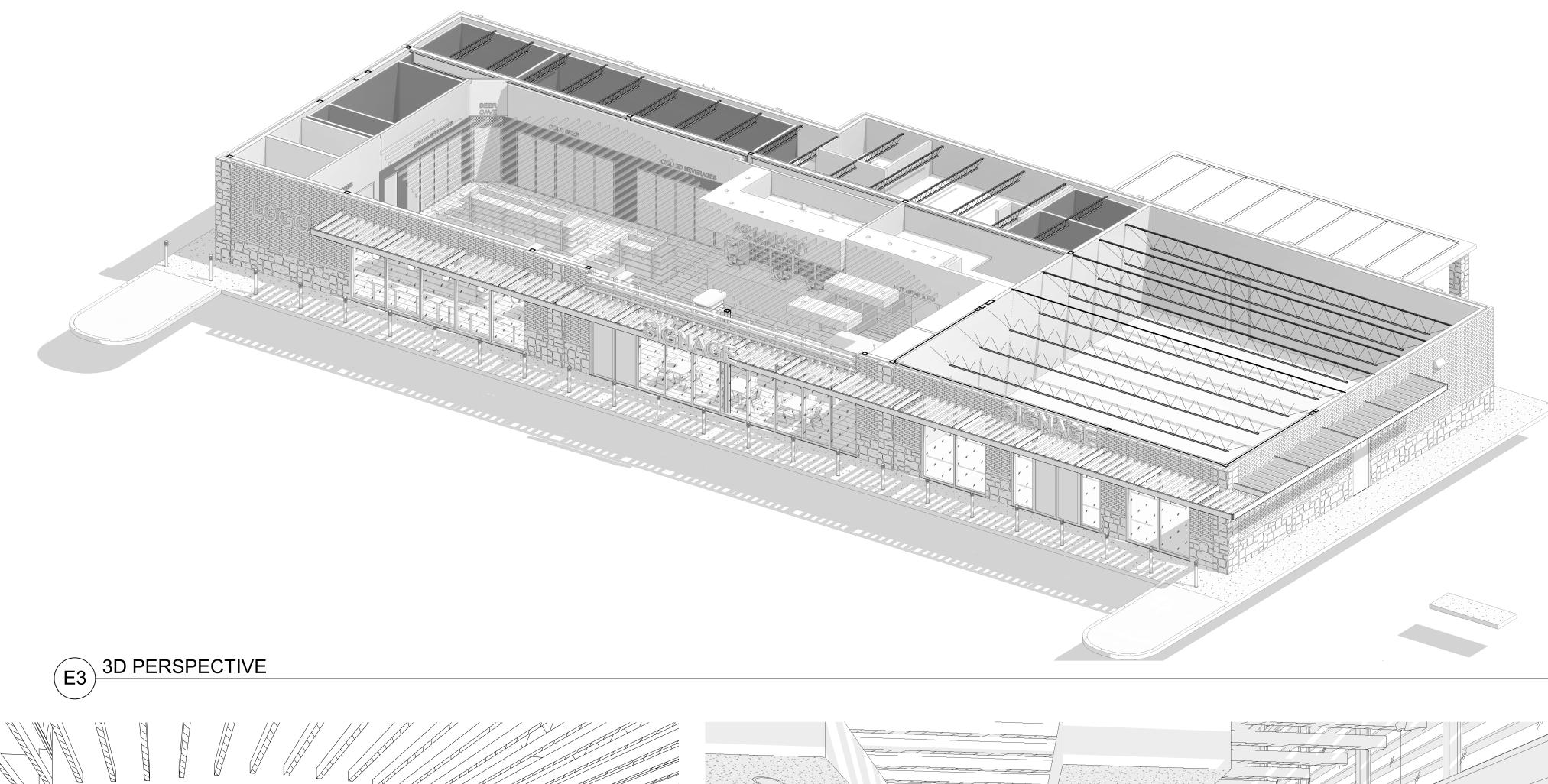
MA PROJECT NO:

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BUILDING 3D VIEWS -INTERIOR

(A2) INTERIOR 3D PERSPECTIVE

B2



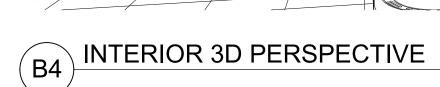
FOUNTAIN & FROZEN

INTERIOR 3D PERSPECTIVE

RESTROOMS

COFFEE













PROJECT PHASE:

DRAWN BY:

BUILDING SECTIONS

A-301

ITEM # 4.

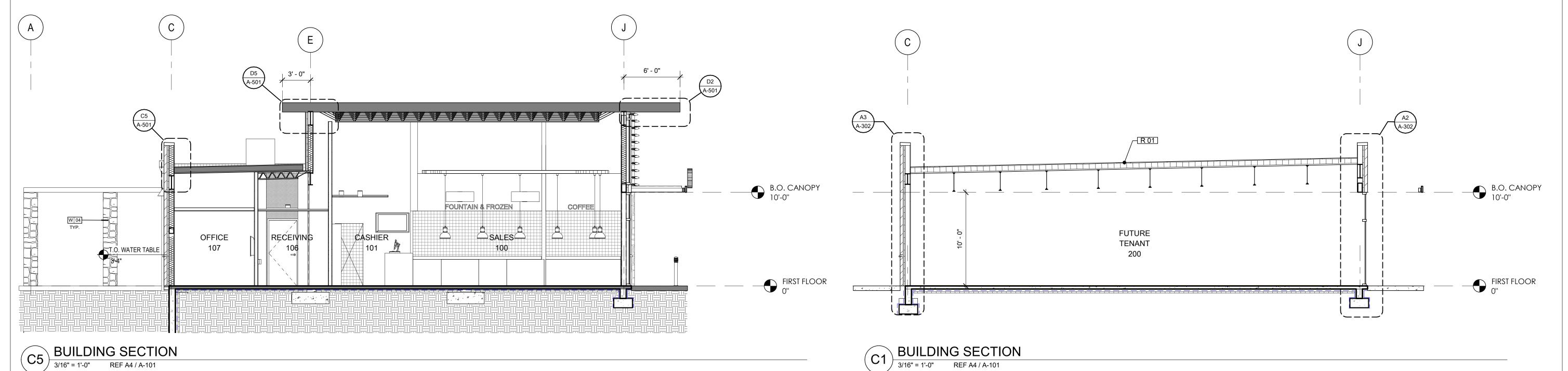
SECTION GENERAL NOTES

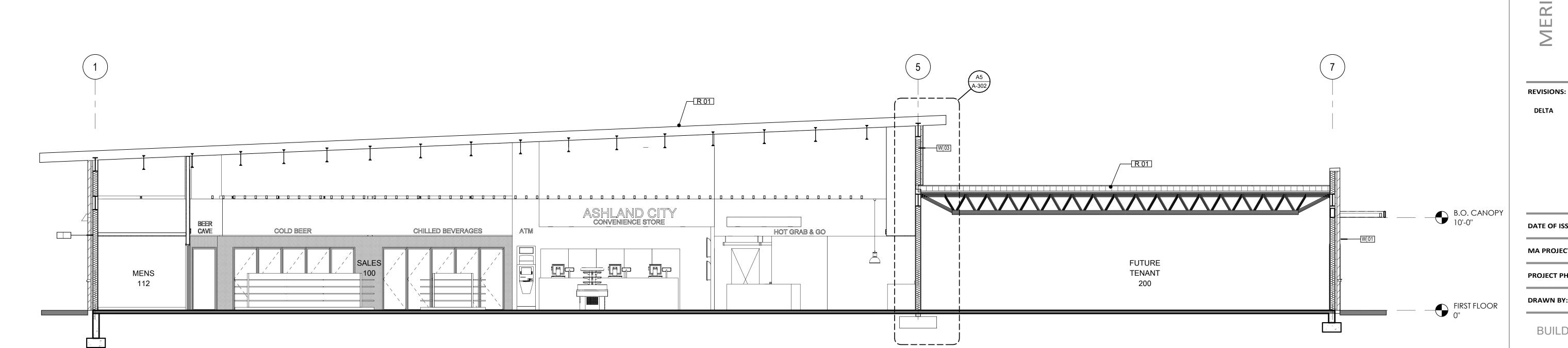
A. Suspended materials shall be attached to structure with tested connectors for tension or shear condition at frequency to support load applied.

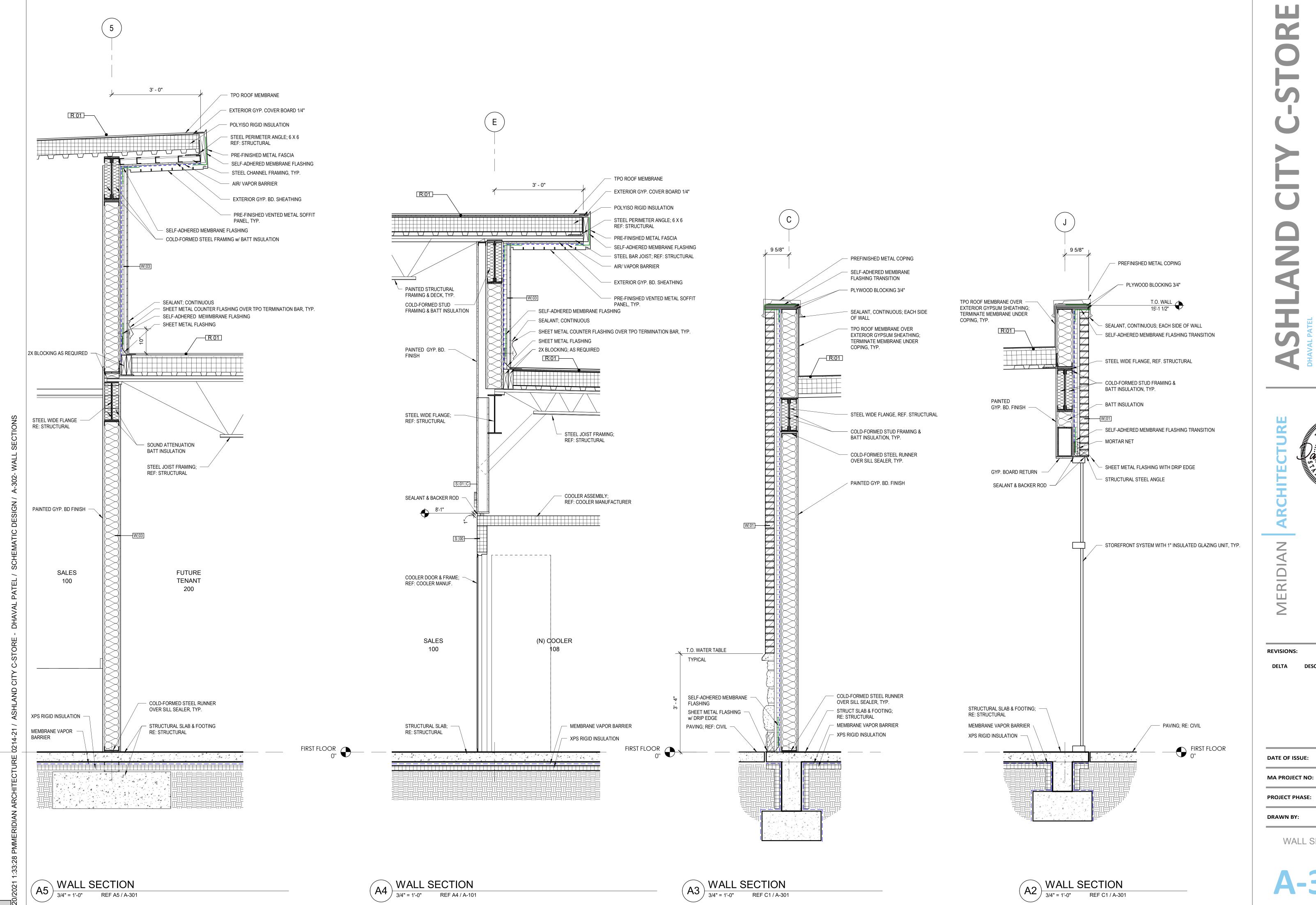
B. Insulation shall be continuous at the roof plane and shall lap wall insulation.

C. Route all plumbing, fire sprinkler, mechanical, electrical, fire alarm, piping, and conduit in concealed or furred area only. Exposed piping and conduit shall not be allowed in any area except at electrical and fire riser rooms.

KEYNOTES - BUILDING SECTION







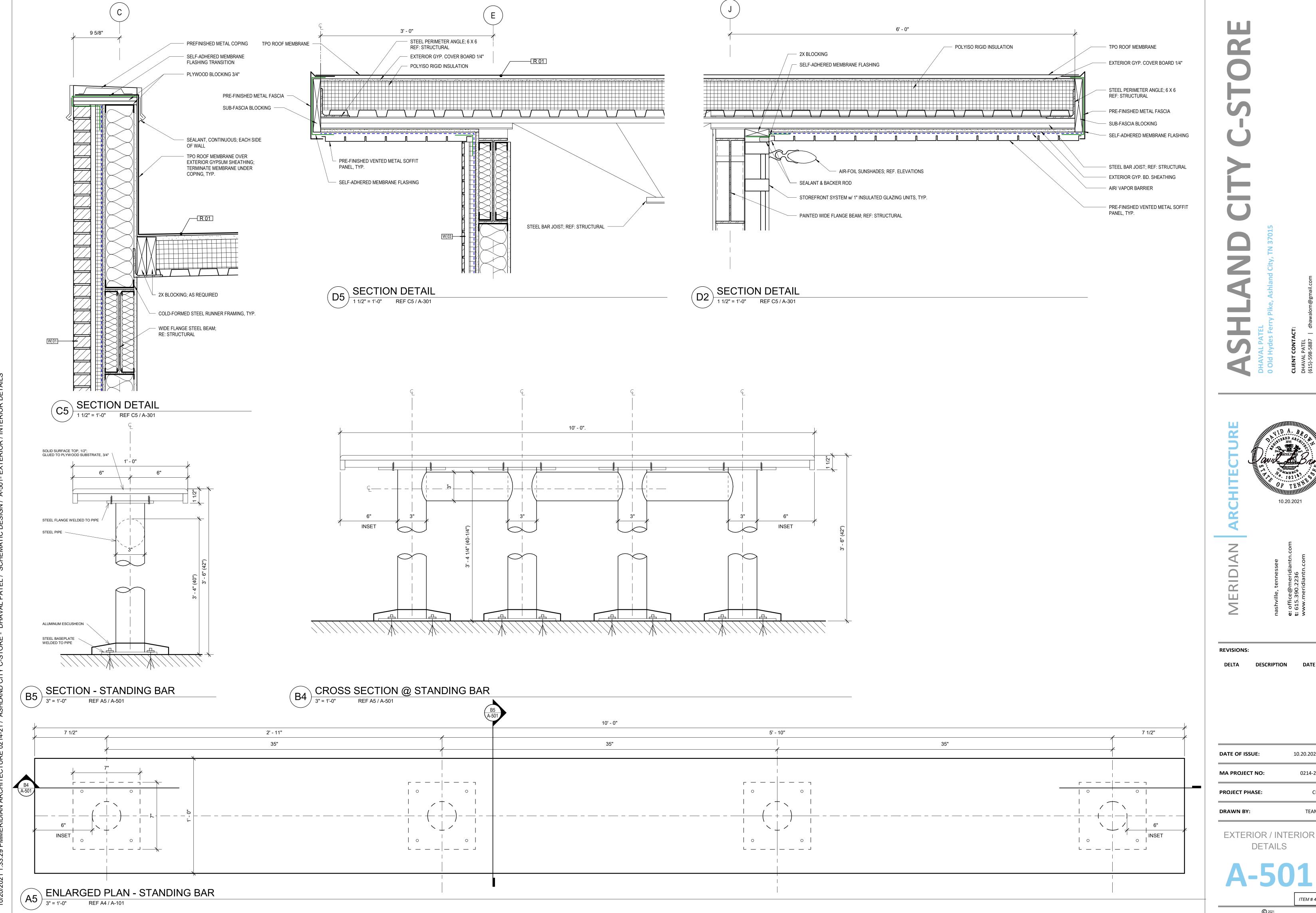
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0214-21

10.20.2021

WALL SECTIONS

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DETAILS

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OF TENNE

Z

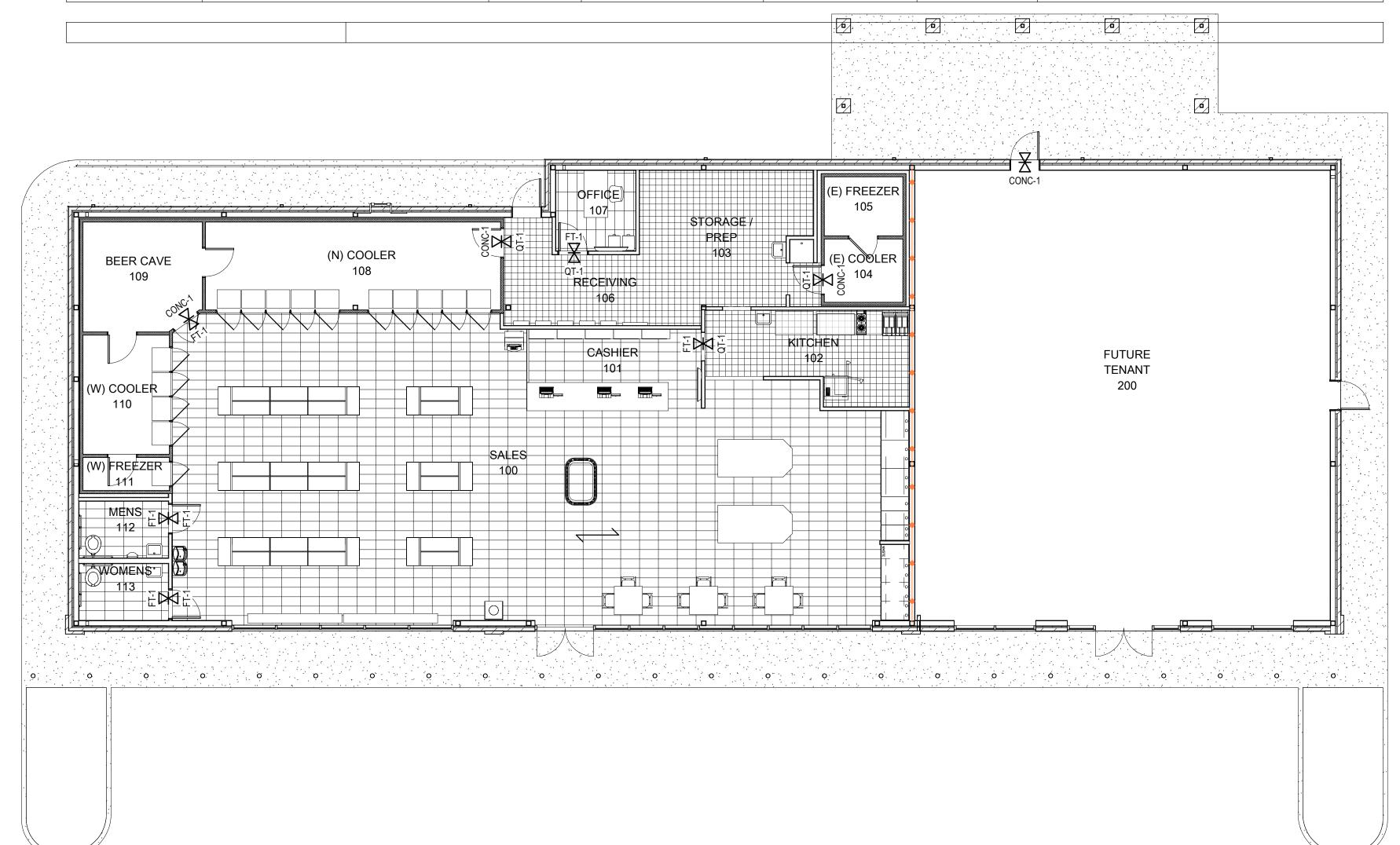
REVISIONS:

10.20.2021 DATE OF ISSUE: MA PROJECT NO:

DRAWN BY:

DOOR & WINDOW SCHEDULES,

| | ROOM FINISH LEGEND | | | | | | | | |
|-------------|---------------------------------|-----------|------------------|------------------|--------------|--|--|--|--|
| DESIGNATION | DESCRIPTION | SIZE | COLOR | MANUFACTURER | PRODUCT | NOTES | | | |
| CONC-1 | SEALED CONCRETE | | | | | | | | |
| FRP-1 | FIBERGLASS REINFORCED PANEL | | WHITE | | | TRIM PIECES AT TRANSITIONS AND PERIMETER | | | |
| FT-1 | CERAMIC | 12" x 24" | METRO CREAM | EMSER | | HONED | | | |
| PNT-1 | PAINT | | ANTIQUE WHITE | SHERWIN WILLIAMS | #SW6119 | | | | |
| PNT-2 | PAINT | | TRICORN BLACK | SHERWIN WILLIAMS | #SW6258 | | | | |
| RB-1 | RESILENT COVED RUBBER WALL BASE | 4" | EBONY | ARMSTRONG | #R48EB | | | | |
| QT-1 | QUARRY TILE | 6 "x 6" | DIABLO RED | DAL-TILE | #0T01 | | | | |
| ACT-1 | ACOUSTICAL CEILING TILE | 2' x 2' | WHITE | ARMSTRONG | CLEANROOM VL | SCRUBBABLE/WASHABLE CEILING TILE | | | |
| GYP-1 | GYPSUM BOARD | | PT-1 (SEE ABOVE) | | | | | | |
| GYP-2 | GYPSUM BOARD | | PT-1 (SEE ABOVE) | | | WATER RESISTANT GYP. BD. IN WET AREAS | | | |
| WD-1 | | | | | | | | | |



FINISH PLAN GENERAL NOTES

- A. All flooring materials to meet at center of doorway UNO.
- B. All flooring materials continue under casework to toe kick or under open counter to wall.
- C. Interior door frames to be painted Sherwin Williams, Color: SW1076. Finish: Semi-gloss enamel, UNO.
- D. Refer to Reflected Ceiling Plan sheet(s) for soffit ceiling finishes.

HLANDCITY



shville, tennessee office@meridiantn.com 315.390.2236 vw.meridiantn.com

REVISIONS:

DESCRIPTION

DATE OF ISSUE: 1

MA PROJECT NO:

PROJECT PHASE:

DRAWN BY:

FIRST FLOOR FINISH

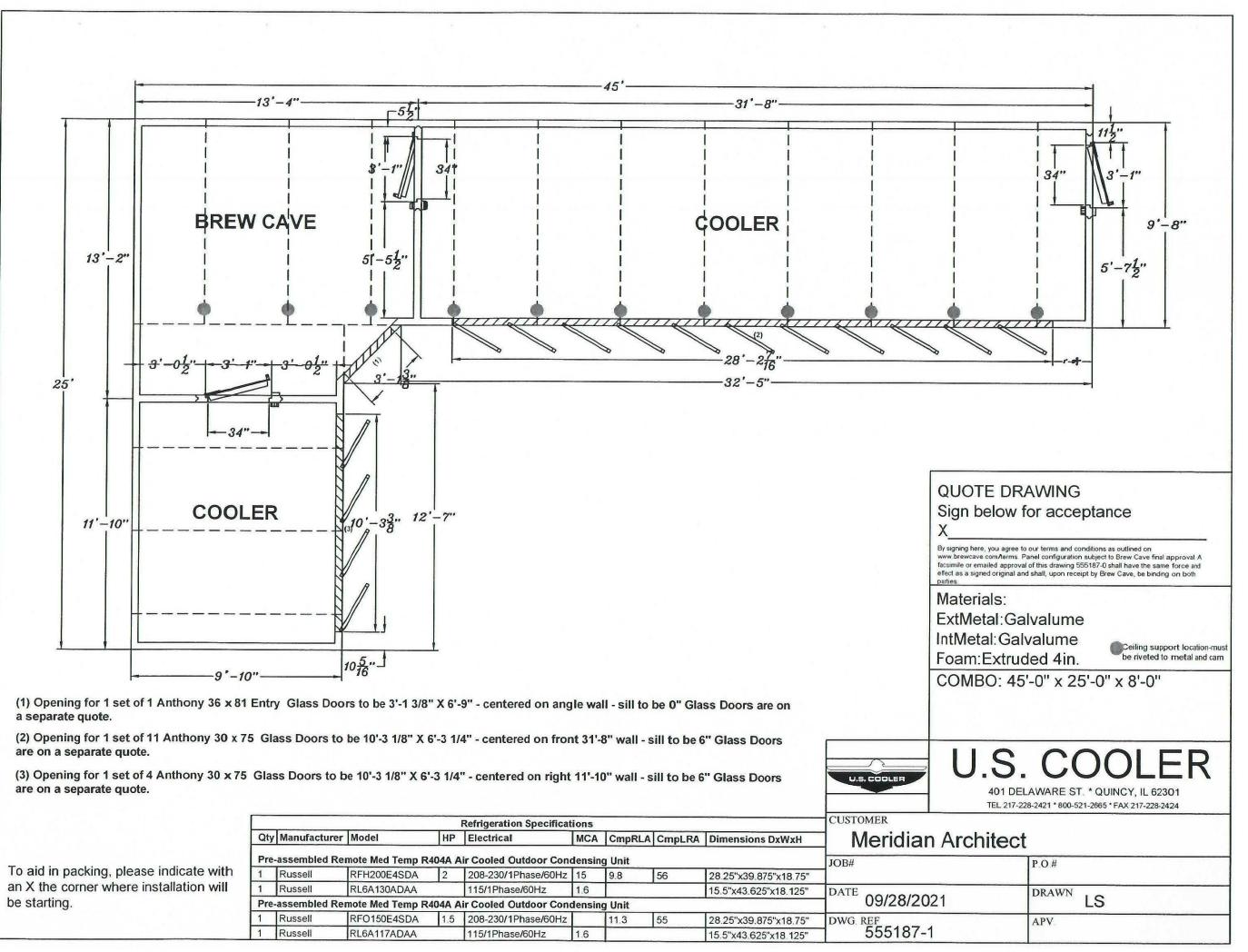
PLAN

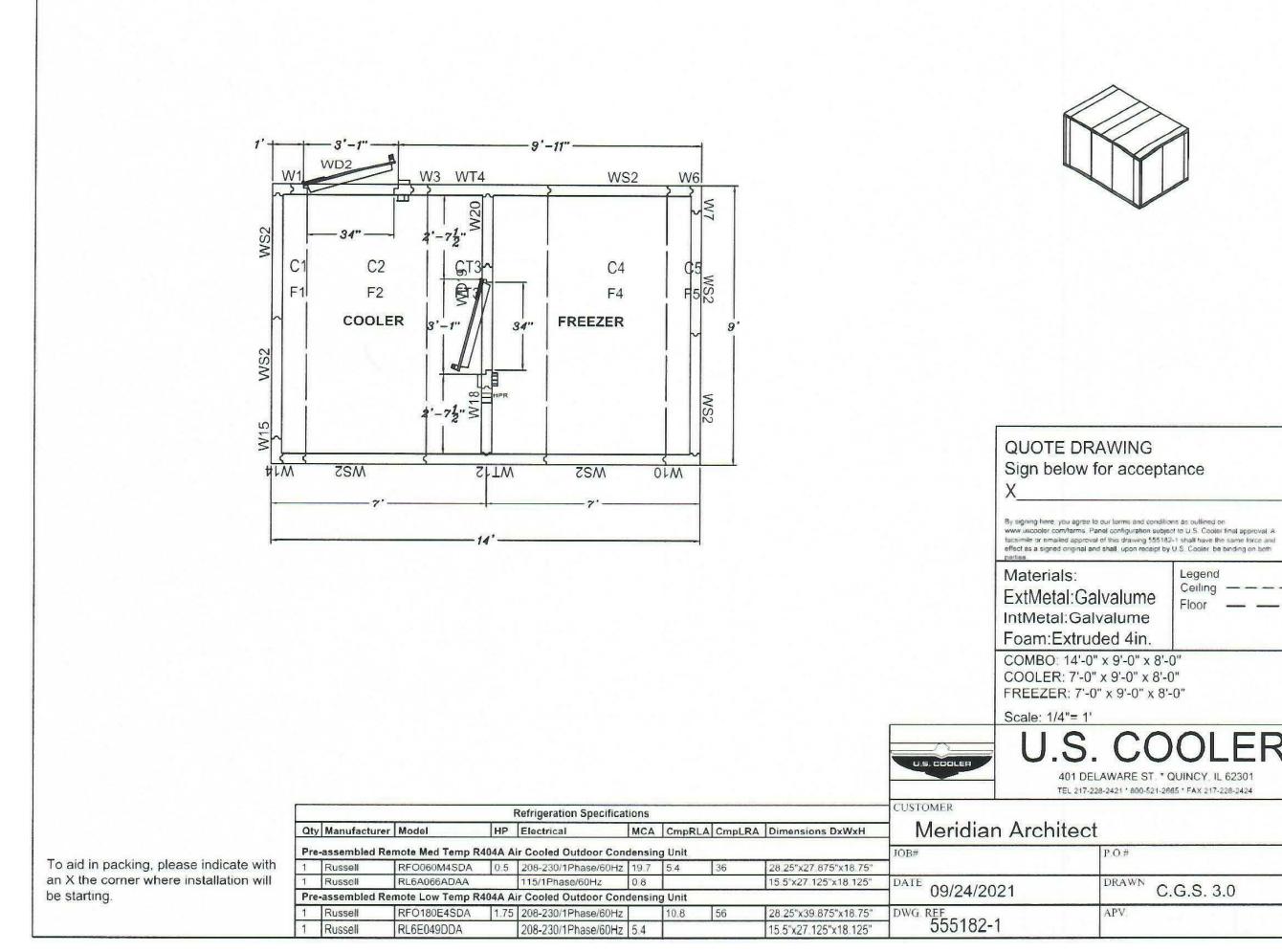
A-701

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FIRST FLOOR FINISH PLAN

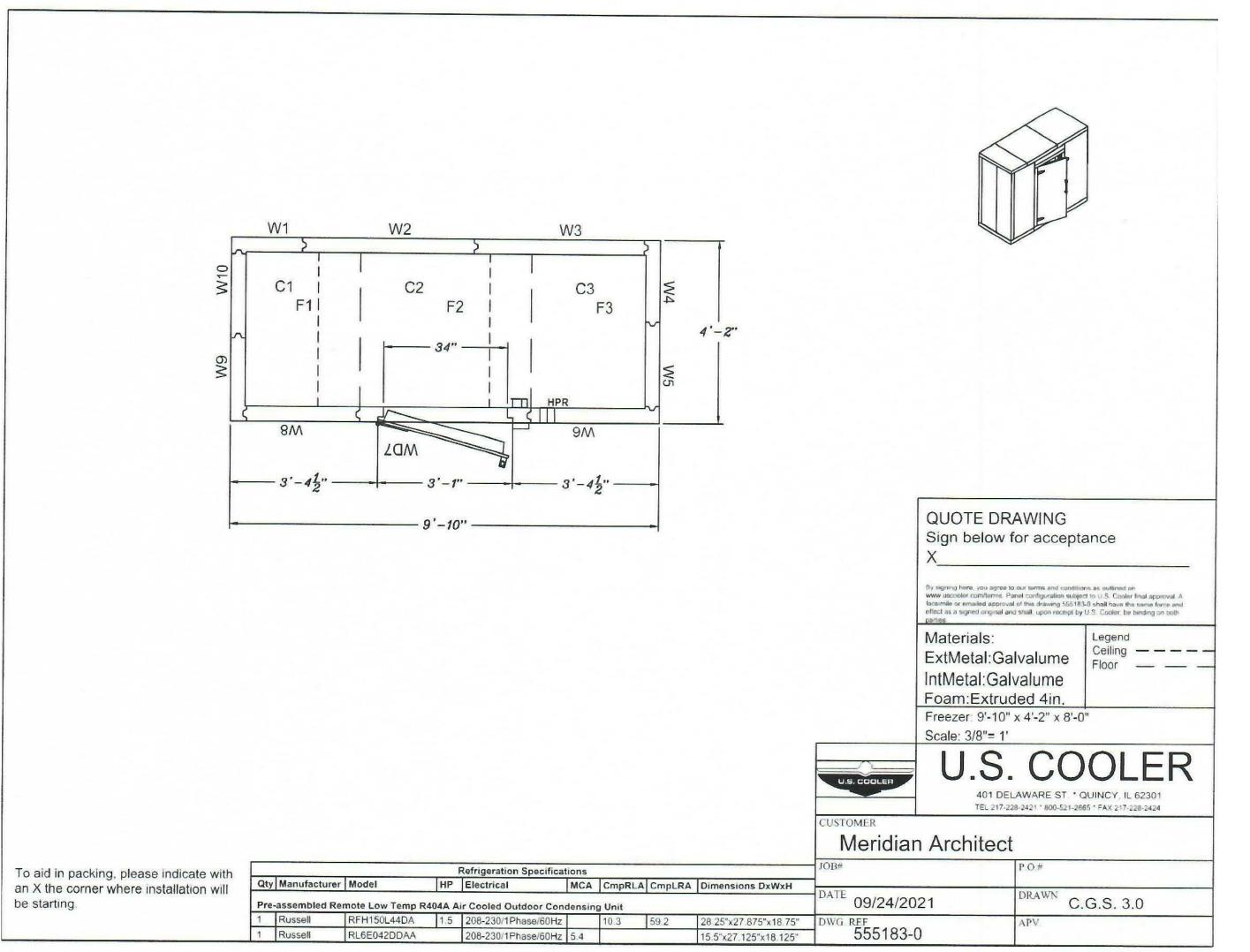
1/8" = 1'-0" REF A5 / A-201





COOLER FREEZER COMBO

COOLER COMBO WITH BREW CAVE



REFER TO U.S. COOLER QUOTE No. 555187 Rev 1 & Rev 2 for more detailed specifications.

Contact U.S. Cooler for more information.

A5) FREEZER

REVISIONS:

<u>Design Criteria</u>

| 2015 International Building | Code (IBC) |
|-----------------------------|------------|
| ASCE 7-10 | |
| Roof Loads: | |
| Dead Load = | 20 psf |
| Live Load = | 20 psf |
| Ground Snow Load = | 10 psf |

| e Load = | 20 psf |
|------------------------|----------|
| ound Snow Load = | 10 psf |
| ind Loads (Per ASCE 7- | -10): |
| imate Wind Speed | 115 mph |
| minal Wind Speed | 89.1 mph |
| sk Category | II |
| ernal Pressure Coeff | +/- 0.18 |

| Spectral Response Coefficients | | | | | | | | |
|--------------------------------|--|-------|--|--|--|--|--|--|
| | Ss | 0.358 | | | | | | |
| | S1 | 0.162 | | | | | | |
| | Sds | 0.361 | | | | | | |
| | Sd1 | 0.233 | | | | | | |
| Soil Site Class | | D | | | | | | |
| Seismic Design Category | D | | | | | | | |
| Seismic Force Resisting Syste | Ordinary Concentrically Braced Steel Frames | | | | | | | |
| Risk Category | | II | | | | | | |

Seismic Loads (Per ASCE 7-10):

^l W.W.F.

Welded Wire Fabric

Equivalent Lateral Force

V =Cs * W

Shallow Foundations

Wind Exposure

1. Foundations are designed based upon assumed soil bearing capacities as stated below

В

2. Allowable soil bearing pressures used in design: Spread footings =1500 psf /Continuous footing = 1500 psf

3. Footing excavations shall be observed and tested by an experienced geotechnical engineer prior to steel or concrete placement in order to assess that the foundation materials are consistent with above stated assumed soil bearing capacities.

Risk Category

Analysis Procedure

Design Base Shear:

4. In the event that the soils test results are disapproved, footing excavations shall be undercut (under the direction of the soils engineer) until soils of adequate bearding capacity are encountered. Backfill under footings shall consist of concrete f'c = 2500 psi @ 28 days placed up to the proposed bottom of footing elevation.

5. Footings shall bear on undisturbed residual soils or compacted fill, maximum desnist of 98% ASTM D-698.

6. Footing elevations shown on the plans are for estimating purposes only. Actual footing elevations shall be determined by the contractor at the site and shall be a minimum of 12" below finished grade.

7. All water shall be removed from foundation excavations prior to placing of concrete. If bottoms of trenches become softened due to water before footings are cast, the contractor, at his own expense, shall excavate the softened material

8. All pipes (water lines, sewer lines, etc.) And conduits running through walls / slabs shall be protected with ½"

9. Continuous footing perpendicular to pipe runs shall be either lowered to allow pipes to pass through above such footings or have concrete jacket if pipes are low enough to be placed below such footings. Footings parallel to pipe runs shall be lowered to avoid surcharge onto the trench excavations.

General Notes

1. No provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the contract documents) shall be effective to change the duties and responsibilities of the owner, contractor, architect, engineer, supplier, or any of the consultants, agents, or employees from those set forth in the contract documents, nor shall it be effective to assign to the structural engineer of record (S.E.R.) or any of the S.E.R.'s consultants, agents, or employees any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibilities contrary to the provisions of the contract documents.

2. Reference to standard specifications (concerning structural design) of any technical society, organization, or association or to codes of local or state authorities, shall mean the latest standard codes, specification or tentative specification adopted at the date of taking bids, unless specifically stated otherwise.

3. In the event contract documents conflict with the code of practice or specifications of ACI, PCI, AISC, AISI, SJI or other standards, contact structural engineer for clarification.

4. Notes and specific details on the drawings shall take precedence over general structural notes and typical details. Contact the architect / engineer for a determination of intent before proceeding with related work if there is any discrepancy or question regarding which note to follow.

5. Material, workmanship, and design shall conform to the referenced building code.

6. The contractor shall verify the dimensions, elevations and site conditions before starting work. The architect / engineer shall be notified of any discrepancy.

7. The design, adequacy, and safety of erection bracing, shoring, temporary supports, etc. is the sole responsibility of the contractor.

8. The contractor shall coordinate the architectural, mechanical, electrical, plumbing and civil works with the structural contract documents. The architect / engineer shall be notified of any discrepancies or omissions.

9. The contractor shall notify, in writing, the engineer of conditions encountered in the field that are contradictory to

10. For dimensions not shown on the structural drawings see the architectural drawings.

those shown on the contract documents.

Concrete

1. All phases of work pertaining to the concrete construction shall conform to the "Building Code Requirements for Structural Concrete" (ACI 318), latest edition with modifications as noted in the drawings or specifications.

2. Concrete mixes shall be designed by a qualified testing laboratory and approved by the structural

3. All exposed corners or edges of columns, piers, walls, etc., shall be formed with a 3/4" chamfer unless noted otherwise on structural or architectural drawings.

4. All reinforcing bars, anchor bolts and other concrete inserts shall be well secured in position prior to placing concrete. 5. Provide sleeves for plumbing and electrical openings in concrete before placing concrete. Do not

cut any reinforcing that may conflict. Coring is not permitted except as shown. Notify the structural engineer in advance of conditions not shown on the drawings.

6. Conduit or pipe size (o.d.) shall not exceed 30% of the slab thickness and shall be placed between the top and bottom reinforcing unless specifically detailed otherwise. Concentrations of conduits or pipes shall be avoided except where detailed openings are provided.

7. Curing compounds on concrete that is to receive special finish shall be approved by the manufacturer before use.

8. Roughen surface of horizontal or nearly horizontal construction joints so that the aggregate shall be exposed uniformly, leaving no laitance, loosed particles or damaged concrete.

9. Locate joints not indicated to least impair strength and appearance of the structure. Locate horizontal joints in concrete only where they normally occur or where indicated. Locate vertical joints in middle third of spans of slabs, beams, or girders unless a beam intersects a girder at middle location, in which case offset joints in girders twice the width of the beam.

10. Once formwork has been removed from concrete retaining walls, brace walls thoroughly before placing soil against wall and keep bracing in place for a minimum of 7 days after earthwork is complete

| Schedule of Concrete Strengths | | | | | | | | | | | | |
|---|--------------------|--------------------------|---------------------|---------------------|-----------------|-------------------|--|--|--|--|--|--|
| Use (Location) | 28 Day Strength | Aggregate Size (Max.) | Cement/CY (Min.) | W/C ratio (Max.) | Slump (Max.) | Air Entrainmer | | | | | | |
| Slab-on-grade (Interior) | f'c=3,000 psi | 1" | 480# | .62 | 4-1/2" | None | | | | | | |
| Exposed Concrete | f'c=4,000 psi | 1" | 560# | .54 | 4-1/2" | 4%-6% | | | | | | |
| Footings | f'c=3,000 psi | 1" | 480# | .62 | 4-1/2" | None | | | | | | |
| All aggregate shall be Limestone All cement shall be Portland Cement Type 1 | | | | | | | | | | | | |

Reinforcing

1. Reinforcing shall be detailed and placed in conformance with ACI Detailing Manual.

2. Reinforcing bars shall conform to the requirements of ASTM A615 Grade 60 except all reinforcing in concrete moment frames and shear walls and all welded reinforcement shall conform to ASTM A706 Grade 60.

3. Welded wire fabric shall conform to ASTM A185.

4. Minimum lap of welded wire fabric shall be 6" or one full mesh + 2", whichever is greater.

5. Dowels between footings and walls shall be the grade, size and spacing or number as the vertical reinforcing, respectively.

6. Reinforcing steel in all concrete walls and footings shall be continuous around corners.

7. Provide (2) #5 extra reinforcing bars around all side of openings in concrete, unless noted otherwise on the plans. Extend bars 2'-0" beyond each edge of opening.

| 8. Minimum clear coverage of concrete over reinforcement shall be: | |
|--|-------|
| a. Concrete cast against and permanently exposed to earth | |
| b. Concrete exposed to earth or weather: | |
| i. No. 6 through no. 18 bar | |
| ii. No. 5 bar, w31 or d31 wire or smaller | 1-1/2 |
| c. Concrete not exposed to weather or in contact with ground: | |
| i. Slabs walls and joists no. 14 & no. 18 | 1-1/2 |
| ii. Slabs walls and joists no. 11 & smaller | 3/4 |
| iii.Beams, columns: ties and primary reinforcing | |
| | |

Metal Decking

1. Provide design, fabrication, and erection of metal deck conforming to the Steel Deck Institute's "Code of

Recommended Standard Practice and Basic Design Specifications".

2. Form roof deck from steel sheets conforming to ASTM A611 or A653 or higher specifications with minimum

3. Attach sheets to steel support members as indicated and in accordance with the manufacturer's instructions for installation. When deck is scheduled to be exposed, de-slag, clean and touched up welds with a zinc-rich

4. Lap roof ends minimum of 2 inches when fastening deck to support members provide welding materials installation procedures to prevent burning of holes in deck.

5. Metal deck fabricator to furnish shop drawings for structural engineer's review prior to fabrication. Shop drawings shall include welding procedure, side lap connections, testing programs for welding, coating material

6. Roof deck shall have the following minimum section properties.

a. Section properties (per foot of width). **Type = 1.5B:** 20 gauge: I = .212 in^4; Sp = .234 in^3; Sn = .247 in^3

Structural Steel

1. Structural steel shall conform to:

 W-Shapes = A992 Pipe columns = ASTM A53 type E or S Grade B.

 HSS = ASTM A500 Grade B. Plates, Channels, Angles, Misc, etc. = A36

2. Design, fabrication, and erection shall be in accordance with aisc specification for the design, fabrication, and erection of structural steel buildings.

3. Structural steel shall be detailed in accordance with standard practices of AISC

a. Connections: AISC Manual standard connections, unless noted. b. High-strength bolts: ASTM A325 bearing type N installed in accordance with "specification for structural joints

Using ASTM A325 or A490 Bolts", research council on riveted and bolted structural joints.

4. All welds must be made in accordance with the American Welding Society Code D-1.1.

5. Field and shop connections shall be welded as shown on drawings or bolted with high strength bolts, unless noted

6. See architectural drawings for angles, clips, bars, plates, and other items attached to structural members, and for chamfers on concrete walls, beams, etc.

7. Provide temporary bracing as required to maintain alignment and security of structures during construction.

8. Do no cutting, drilling or modifying of structural members without the approval of the engineer.

9. The manufacturer's name, brand or trademark (mill identification marks) shall be shown in raised letters at intervals along the length. (ASTM A6/A6M 96-97, paragraph 12.2) note: small shapes with the greatest crosssectional dimension not greater.

Bar Joist

1. Provide open web under slung, parallel chord joists and joist girders unless noted otherwise on the drawings.

2. Design, fabricate, and erect open web steel joists and joist girders to the specifications of the Steel Joist Institute, latest edition.

3. Unless noted otherwise, weld K-series joists to supporting beams or bearing plates with 1/8 inch fillet weld, 2 inches long on each side of joist seat. Use minimum of 2-3/4 inch diameter A325-N bolts at joist connections on or nearest to column lines.

4. Unless noted otherwise, weld LH or DLH-series joists to supporting beams or bearing plates with 1/4 inch fillet weld, 2 inches long on each side of joist seat. Use minimum of 2-3/4 inch diameter A325-N connection bolts at joist connections on or nearest to column lines.

5. Provide joist bridging, size and spacing, in accordance with Steel Joist Institute. Provide supplemental bridging as required for net wind uplift pressures.

6. Design roof joists for the following net uplift wind uplift pressures

a. Edge zones (regions within "Z" distance of roof edge) = 20 psf. b. Corner zones (regions within "Z" distance of two intersecting roof edges) = 25 psf.

c. Interior zones (regions that are not edge or corner zones = 15 psf.

d. Distance Z = 10.0 ft.

7. Joist sizes as shown on drawings are based on gravity load capacities. Design joists for the gravity load capacities in addition to other loads (uplift, axial loads, concentrated loads, moments, etc.) as indicated on

8. Shop drawings for joists, and joist accessories to be prepared by the joist manufacturer's detailers.

9. Submit design calculations in accordance with steel joist institute design standards for all joist and joist girders. Design calculations to be signed and sealed by a professional engineer licensed in the state where the project is located.

10. Provide 2-1/2 inch minimum bearing on structural steel for K-series joists, 4 inch minimum bearing on masonry or provide bearing lengths per steel joist institute requirements unless greater lengths are shown on

11. Verify size, weight, location and configuration of all roof top equipment with the architect and mechanical engineer. Coordinate openings with the mechanical and general contractor.

12. All concentrated loads greater than 100 pounds supported by open web steel joists and girders shall be located within 6 inches of joist or girder panel points or the joist or girder shall be reinforced with an additional web member. Refer to the "Typical Joist Modification Detail" on the structural drawings

13. Provide special bearing ends to accommodate slopes from sloped joists or sloped bearing conditions.

chord extensions as required indicated in structural or architectural drawings.

14. Extend all joist bottom chords at columns and weld after dead load is applied. Provide additional bottom

15. At joist parallel to beams anchor bridging by welding to beams. At joists parallel to walls, weld bridging to an L3x3x3/16 at top and bottom. Anchor angle to wall using (2) 3/8" diameter sleeve anchors.

DATE OF ISSUE: **MA PROJECT NO:**

DRAWING LIST Sheet No: **Sheet Name** S1.0 General Notes Quality Assurance Plan S2.0 Foundation Plan S3.0 Canopy Framing Plan Low Roof Framing Plan High Roof Framing Plan Base Plate and Pier Details Foundation Sections Typical Framing Sections

Canopy Framing Sections

Roof Framing Sections Framing Elevations

Framing Elevations

S5.2

S6.2

General Notes

PROJECT PHASE:

DRAWN BY:

10/20/2021

0214-21

REVISIONS:

GENERAL

THIS STRUCTURAL QUALITY ASSURANCE PLAN IDENTIFIES THE RESPONSIBILITIES OF THE CONTRACTOR AND THE SPECIAL INSPECTOR IN PERFORMING THE TESTING AND INSPECTION OF THE WORK REQUIRED BY CHAPTER 17 OF THE 2015 INTERNATIONAL BUILDING CODE THAT IS WITHIN THE SCOPE OF THE STRUCTURAL ENGINEERING SERVICES FOR THIS PROJECT. REFER TO OTHER PORTIONS OF THE CONSTRUCTION DOCUMENTS FOR TESTING AND INSPECTIONS REQUIRED OF ARCHITECTURAL, MECHANICAL, ELECTRICAL, OR OTHER BUILDING COMPONENTS.

CONTRACTOR RESPONSIBILITIES

THE CONTRACTOR SHALL SUBMIT TO THE BUILDING OFFICIAL AND THE ARCHITECT A WRITTEN STATEMENT OF RESPONSIBILITY THAT CONTAINS THE FOLLOWING:

- 1. ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED WITHIN THIS STRUCTURAL QUALITY ASSURANCE PLAN. 2. ACKNOWLEDGMENT THAT CONTROL SHALL BE EXERCISED TO OBTAIN CONFORMANCE WITH
- THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL. 3. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE
- METHOD AND FREQUENCY OF REPORTING, AND THE DISTRIBUTION OF REPORTS. 4. IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.

THE STRUCTURAL TESTING/INSPECTION AGENCY THAT IS TO ACT AS THE SPECIAL INSPECTOR SHALL BE HIRED BY THE OWNER AND SHALL BE APPROVED BY THE BUILDING OFFICIAL AND THE ARCHITECT. THE CONTRACTOR SHALL SUBMIT WITH HIS BID THE NAME AND QUALIFICATIONS OF THE STRUCTURAL TESTING/INSPECTION AGENCY AND IT PERSONNEL THAT WILL ACT AS THE SPECIAL INSPECTOR. IF MULTIPLE STRUCTURAL TESTING/INSPECTION AGENCIES ARE USED. SUBMIT THE INFORMATION STATED ABOVE FOR EACH FIRM ALONG WITH A STATEMENT OF THE SPECIAL INSPECTION RESPONSIBILITIES FOR EACH FIRM.

CONTRACTOR SHALL PAY FOR ANY ADDITIONAL STRUCTURAL TESTING /INSPECTION REQUIRED FOR WORK OR MATERIALS NOT COMPLYING WITH THE CONSTRUCTION DOCUMENTS DUE TO NEGLIGENCE OR NONCONFORMANCE AND SHALL PAY FOR ANY ADDITIONAL STRUCTURAL TESTING/ INSPECTION REQUIRED FOR HIS CONVENIENCE.

CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE SPECIAL INSPECTOR IS PRESENT FOR ALL WORK REQUIRING SPECIAL INSPECTION. ANY WORK THAT REQUIRES SPECIAL INSPECTION AND IS PERFORMED WITHOUT THE SPECIAL INSPECTOR BEING PRESENT IS SUBJECT TO BEING DEMOLISHED AND RECONSTRUCTED.

CONTRACTOR HAS THE FOLLOWING RESPONSIBILITIES TO THE SPECIAL INSPECTOR:

- 1. PROVIDE COPY OF CONSTRUCTION DOCUMENTS TO THE SPECIAL INSPECTOR. 2. NOTIFY THE SPECIAL INSPECTOR SUFFICIENTLY IN ADVANCE OF OPERATIONS TO ALLOW
- ASSIGNMENT OF PERSONNEL AND SCHEDULING OF TESTS.
- 3. COOPERATE WITH SPECIAL INSPECTOR AND PROVIDE ACCESS TO WORK.
- 4. PROVIDE SAMPLES OF MATERIALS TO BE TESTED IN REQUIRED QUANTITIES. 5. PROVIDE STORAGE SPACE FOR THE SPECIAL INSPECTOR'S EXCLUSIVE USE, SUCH AS FOR
- STORING AND CURING CONCRETE TESTING SAMPLES. 6. PROVIDE LABOR TO ASSIST THE SPECIAL INSPECTOR IN PERFORMING TESTS/ INSPECTIONS.

SPECIAL INSPECTOR RESPONSIBILITIES

SPECIAL INSPECTOR SHALL MAINTAIN RECORDS OF INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE 2015 INTERNATIONAL BUILDING CODE AND SHALL DISTRIBUTE THESE RECORDS TO THE BUILDING OFFICIAL, ARCHITECT, AND STRUCTURAL ENGINEER ON A REGULAR BASIS. AT THE CONCLUSION OF THE PROJECT, THE SPECIAL INSPECTOR SHALL SUBMIT A WRITTEN STATEMENT THAT THE SPECIAL INSPECTIONS DURING CONSTRUCTION HAVE COMPLIED WITH THE STRUCTURAL QUALITY ASSURANCE PLAN AND THAT ANY DISCREPANCIES NOTED DURING

CAST-IN-PLACE CONCRETE:

CONTRACTOR SHALL PERFORM THE FOLLOWING:

CONSTRUCTION HAVE BEEN CORRECTED.

- 1. SUBMIT MANUFACTURER'S DATA FOR TENSILE AND COMPRESSIVE SPLICES.
- 2. ESTABLISH CONCRETE MIX DESIGN PROPORTIONS PER ACI 318, CHAPTER 5. SUBMIT THREE COPIES OF THE CONCRETE MIX DESIGNS.
- INCLUDE THE FOLLOWING:
- 2.1 TYPE AND QUANTITIES OF MATERIALS
- 2.2. SLUMF
- 2.3. AIR CONTENT 2.4. FRESH UNIT WEIGHT
- 2.5. AGGREGATES SIEVE ANALYSIS 2.6. DESIGN COMPRESSIVE STRENGTH
- 2.7. LOCATION OF PLACEMENT IN STRUCTURE
- 2.8. METHOD OF PLACEMENT 2.9. METHOD OF CURING
- 2.10. 7-DAY AND 28-DAY COMPRESSIVE STRENGTHS
- 3. SUBMIT A CERTIFICATION FROM EACH MANUFACTURER OR SUPPLIER STATING THAT MATERIALS MEET THE REQUIREMENTS OF THE
- SPECIFIED ASTM AND ACI STANDARDS.
- 4. SUBMIT CERTIFICATION THAT THE READY-MIX CONCRETE PLANT COMPLIES WITH THE REQUIREMENTS OF THE NATIONAL READY MIX CONCRETE ASSOCIATION.

SPECIAL INSPECTOR SHALL PERFORM THE FOLLOWING ITEMS

CONTRACTOR SHALL PERFORM THE FOLLOWING:

NON REQUIRED THIS PROJECT

STRUCTURAL STEEL:

- 1. SUBMIT CERTIFICATION THAT STEEL FABRICATOR IS CERTIFIED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) QUALITY CERTIFICATION PROGRAM FOR: CONVENTIONAL STEEL
- 2. FABRICATOR NOT CERTIFIED BY THE AISC QUALITY CERTIFICATION PROGRAM SHALL HAVE FABRICATION PROCEDURES AND FABRICATED STEEL TESTED AND INSPECTED BY AN INDEPENDENT TESTING AGENCY. PAYMENT OF THESE TESTS AND INSPECTIONS SHALL BE BY THE FABRICATOR. TESTS AND INSPECTIONS SHALL BE PERFORMED BY AWS CERTIFIED WELDING INSPECTORS. PRIOR TO DELIVERY OF STRUCTURAL STEEL TO THE PROJECT, SUBMIT COPIES OF THE INSPECTION REPORTS TO THE STRUCTURAL ENGINEER. THE PURPOSE OF THIS INSPECTION IS TO ENABLE THE TESTING/INSPECTION AGENCY TO VERIFY THAT, IN GENERAL, THE STEEL IS BEING FABRICATED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. A MINIMUM OF ONE TRIP PER WEEK IS RECOMMENDED. THE FIRST TRIP SHOULD BE SCHEDULED IN THE EARLY STAGES OF FABRICATION. CONTACT STRUCTURAL ENGINEER PRIOR TO INITIAL INSPECTION. TESTS AND INSPECTIONS SHALL
- INCLUDE THE FOLLOWING: 2.1. EXAMINE MILL TEST REPORTS AND VERIFY THAT MATERIAL BEING USED IS THE SAME AS THE MILL TESTED REPORT.
- 2.2. REVIEW THE FABRICATOR'S WRITTEN WELDING PROCEDURES. VERIFY THAT THE FABRICATOR'S WELDING PROCEDURES ARE BEING FOLLOWED. VERIFY THAT WELDERS ARE CERTIFIED WITH CURRENT PAPERS AND THAT THEY DEMONSTRATE PROPER TECHNIQUES.
- 2.3. OBSERVE HIGH STRENGTH BOLTING PROCEDURES. VERIFY THAT SHOP INSTALLATION OF HIGH STRENGTH BOLTS CONFORM TO AISC SPECIFICATIONS.
- 2.4. EXAMINE JOINT PREPARATION FOR COMPLETE PENETRATION JOINTS. ULTRASONICALLY
- INSPECT 100% OF THE COMPLETE PENETRATION WELDS. 2.5. EXAMINE FILLET WELDS FOR PROPER SIZE, PROFILE, THROAT, POROSITY AND END RETURNS. 2.6. EXAMINE STEEL MEMBERS FOR LAMELLAR TEARING. SPOT CHECK DIMENSIONS AND HOLE
- 2.7. EXAMINE BOLT AREA BURRS.
- 3. SUBMIT CERTIFIED MILL TEST REPORTS FOR STRUCTURAL STEEL.
- 4. SUBMIT MANUFACTURE'S CERTIFICATION OF COMPLIANCE FOR HIGH-STRENGTH BOLTING AND WELD

SPECIAL INSPECTOR SHALL PERFORM THE FOLLOWING ITEMS:

SEE SPECIAL INSPECTION TABLE

| VERIFICATION AND INSPECTION | FREQUENCY OF INSPECTION | REFERENCED STANDARD | REMARKS |
|--|-------------------------|--|------------|
| 1. MATERIAL VERIFICATION OF HIGH STRENGTH BOLTS, NUTS AND WASHERS: | - | | |
| a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS. | PERIODIC | AISC 360, SECTION A3.3 AND APPLICABLE | |
| b. MANUFACTURER'S CERTIFICATION OF COMPLIANCE REQUIRED. | PERIODIC | ASTM MATERIAL STANDARDS | |
| 2. INSPECTION OF HIGH-STRENGTH BOLTING: | | | |
| a. SNUG-TIGHT JOINTS. | PERIODIC | | |
| b. PRETENSIONED AND SLIP-DRITICAL JOINTS USING TURN-OF-NUT WITH MATCHMARKING, TWIST-OFF BOLT OR DIRECT TENSION INDICATOR METHODS OF INSTALLATION. | PERIODIC | AISC 360, SECTION M2.5 | SEE NOTE 1 |
| c. PRETENSIONED AND SLIP-DRITICAL JOINTS USING TURN-OF-NUT WITHOUT MATCHMARKING OR CALIBRATED WRENCH METHODS OF INSTALLATION. | CONTINUOUS | | SEE NOTE 1 |
| 3. MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD-FORMED ST | TEEL DECK: | | |
| a. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360. | PERIODIC | AISC 360, SECTION M5.5 | |
| b. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS. | PERIODIC | APPLICABLE ASTM MATERIAL STANDARDS | |
| c. MANUFACTURER'S CERTIFIED TEST REPORTS. | PERIODIC | SEE DWG. NOTES | |
| 4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS: | | | |
| a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS. | PERIODIC | AISC 360, SECTION A3.5 AND | |
| b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED. | PERIODIC | APPLICABLE AWS AS DOCUMENTS | |
| 5. INSPECTION OF WELDING: | • | · | |
| a. STRUCTURAL STEEL AND COLD-FORMED STEEL DECK: | | | |
| 1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS. | CONTINUOUS | | |
| 2) MULTIPASS FILLET WELDS. | CONTINUOUS | 1 [| |
| 3) SINGLE-PASS FILLET WELDS > 5/16" | CONTINUOUS | AWS D1.1 | |
| 4) PLUG AND SLOT WELDS. | CONTINUOUS | 1 [| |
| 5) SINGLE-PASS FILLET WELDS <= 5/16" | PERIODIC | | |
| 6) FLOOR AND ROOF DECK WELDS. | PERIODIC | AWS D1.3 | |
| b. REINFORCING STEEL: | | | |
| 1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706. | PERIODIC | | SEE NOTE 2 |
| 2) REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT. | CONTINUOUS | AWS D1.4 AND ACI 318, SECTION 3.5.2 | SEE NOTE 2 |
| 3) SHEAR REINFORCEMENT. | CONTINUOUS | | SEE NOTE 2 |
| 4) OTHER REINFORCING STEEL. | PERIODIC | 7 | SEE NOTE 2 |
| 6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE: | · | | |
| a. DETAILS SUCH AS BRACING AND STIFFENING. | PERIODIC | VERIFICATION WITH | |
| b. MEMBER LOCATIONS. | PERIODIC | DESIGN DOCUMENTS AND APPROVED | |
| c. APPLICATION OF JOINT DETAILS AT EACH CONNECTION. | PERIODIC | SHOP DRAWINGS | |

^{1.} INSPECTION NOT REQUIRED; NO PRETENSIONED OR SLIP-CRITICAL JOINTS INCLUDED IN THIS PROJECT. 2. INSPECTION NOT REQUIRED; NO WELDING OF REINFORCING STEEL INCLUDED IN THIS PROJECT.

| SPECIAL INSPECTION TABLE: SOILS | | | | | | | | | | | |
|---|-------------------------|-------------------------------|--|--|--|--|--|--|--|--|--|
| VERIFICATION AND INSPECTION | FREQUENCY OF INSPECTION | REFERENCED STANDARD | | | | | | | | | |
| VERIFY MATERIALS BELOW SHALLOW FOUNDATION ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY. | PERIODIC | | | | | | | | | | |
| 2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL. | PERIODIC | VERIFICATION WITH | | | | | | | | | |
| 3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS. | PERIODIC | DOCUMENTS AND GEOTECHNICAL | | | | | | | | | |
| 4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF FILL. | CONTINUOUS | REPORT | | | | | | | | | |
| 5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY. | PERIODIC | | | | | | | | | | |

TABLE NOTES: NONE

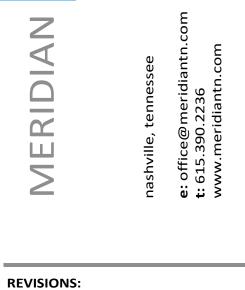
DESCRIPTION

Quality Assurance Plan

DRAWN BY:







DATE OF ISSUE: 10/20/2021

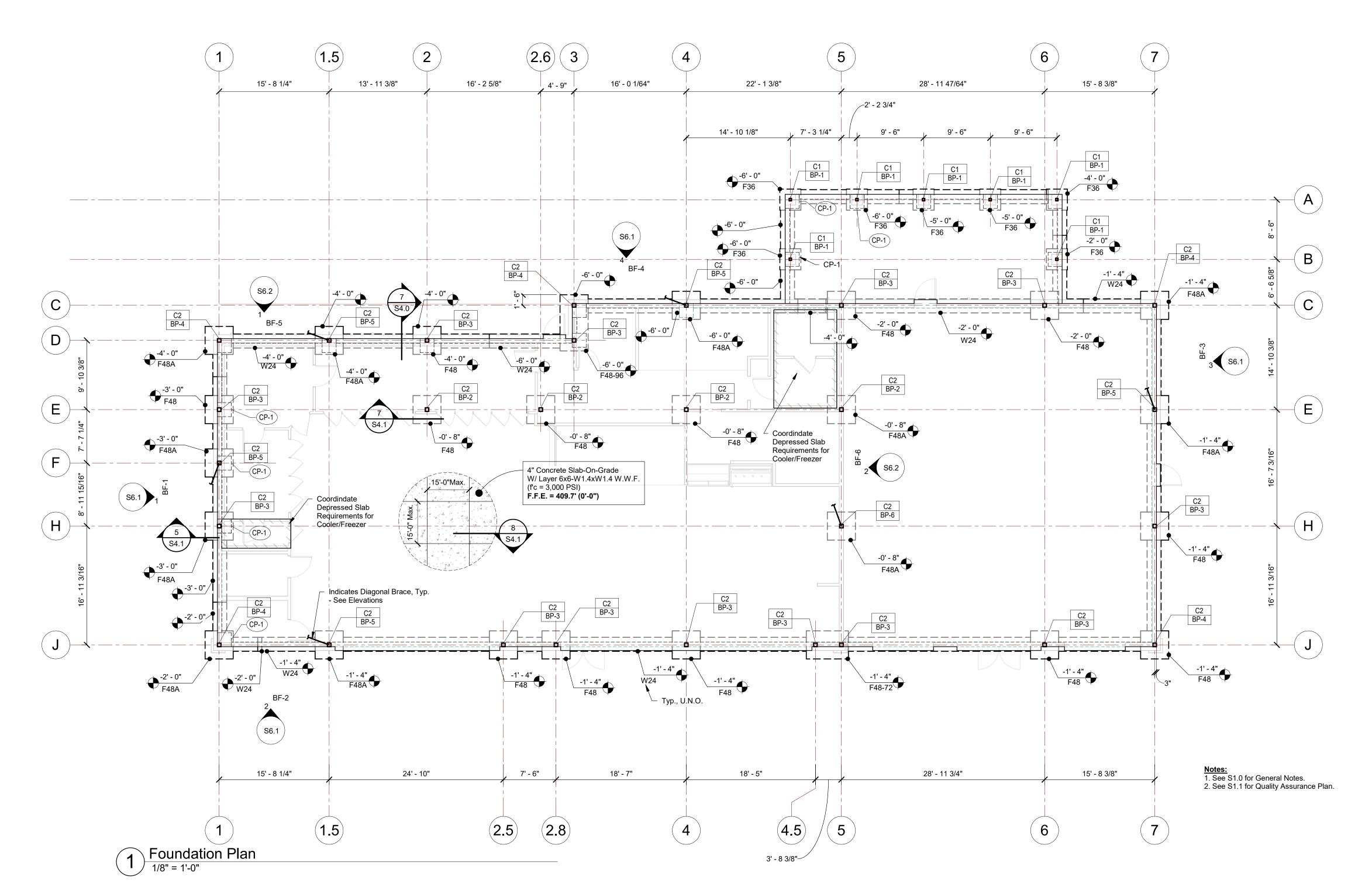
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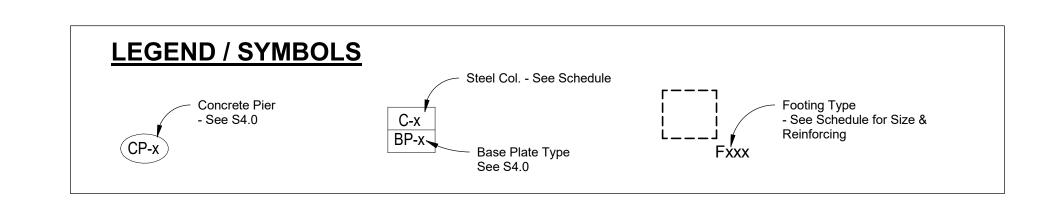
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DRAWN BY: JRS

Foundation Plan

S2.0 *ITEM # 4.*





| CC | LUMN SCHEDULE |
|------|---------------|
| TYPE | COLUMN SIZE |
| C1 | HSS4X4X1/4 |
| C2 | HSS6X6X3/8 |

| FOOTING SCHEDULE | | | | | | | | | | | | |
|------------------|---------|------------|---------|--------------|-------------|-----------|--|--|--|--|--|--|
| | | Dimensions | ; | | Reinforcing | | | | | | | |
| Type | Length | Width | Depth | Longitudinal | Transverse | Remarks | | | | | | |
| F36 | 3' - 0" | 3' - 0" | 1' - 3" | (4) #5 | (4) #5 | | | | | | | |
| F48 | 4' - 0" | 4' - 0" | 1' - 3" | (5) #5 | (5) #5 | | | | | | | |
| F48-72 | 6' - 0" | 4' - 0" | 1' - 3" | (5) #5 | (7) #5 | | | | | | | |
| F48-96 | 8' - 0" | 4' - 0" | 1' - 3" | (5) #5 | (8) #5 | | | | | | | |
| F48A | 4' - 0" | 4' - 0" | 1' - 3" | (5) #5 | (5) #5 | Top & Btm | | | | | | |

| CONTINUOUS WALL FOOTING SCHEDULE | | | | | | | | | | | | |
|----------------------------------|---------|---------|----------------|----------------------|---------|--|--|--|--|--|--|--|
| | Dimer | nsions | Reinforcing | | | | | | | | | |
| Type | Width | Depth | Longitudinal | Transverse | Remarks | | | | | | | |
| W24 | 2' - 0" | 1' - 0" | (3) #4 x Cont. | #4 x 1'-6" @ 60"o.c. | | | | | | | | |







REVISIONS:

10/20/2021 0214-21

DATE OF ISSUE: **MA PROJECT NO:**

PROJECT PHASE:

DRAWN BY: Canopy Framing Plan

ITEM # 4.

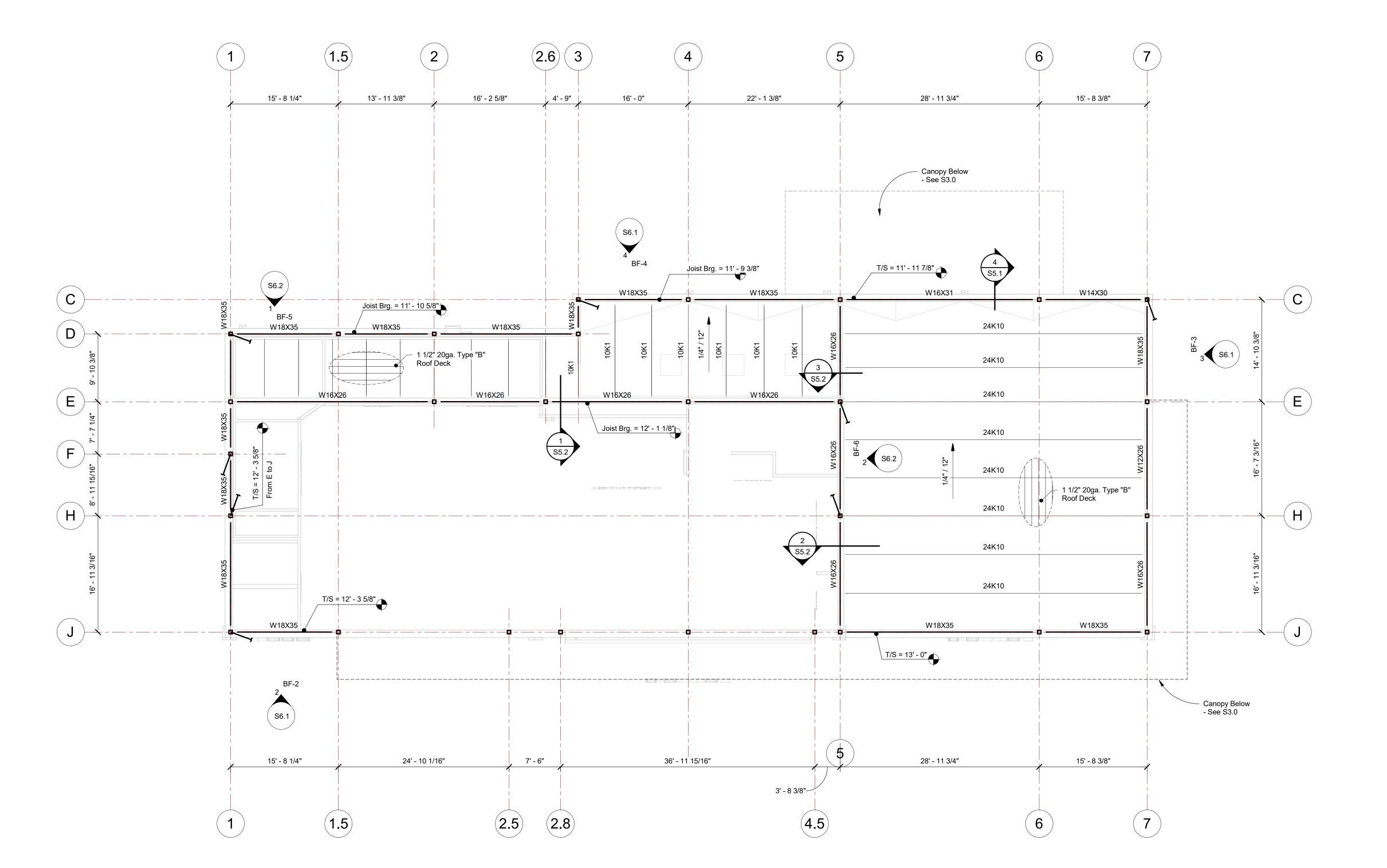
28' - 11 3/4" 15' - 8 3/8" 13' - 11 3/8" HSS6X4X1/4 Typ. @ Canopy, U.N.O. B/S = 10' - 0" HSS12x6x3/8 HSS12x6x3/8 HSS12x6x3/8 HSS12x6x3/8 HSS12x6x3/8 HSS12x6x3/8 HSS12x6x3/8 HSS8x2x3/16 EQ S6.1 S5.1 EQ 1 S5.1 ĖQ EQ EQ EQ 36' - 11 15/16" 24' - 10 1/16" 7' - 6" 32' - 8 1/8" 15' - 8 3/8" (3) Eq. Spaces (5) Eq. Spaces (4) Eq. Spaces (2) Eq. Spaces

4.5

6

Canopy Framing Plan

1/8" = 1'-0"



Low Roof Framing Plan

1/8" = 1'-0"

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DELTA DESCRIPTION DESCRIPTION

DATE OF ISSUE: 10/20/2021

MA PROJECT NO: 0214-21

PROJECT PHASE: CD

Low Roof Framing Plan

53.1 *ITEM # 4.*

- Page 42



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REVISIONS:

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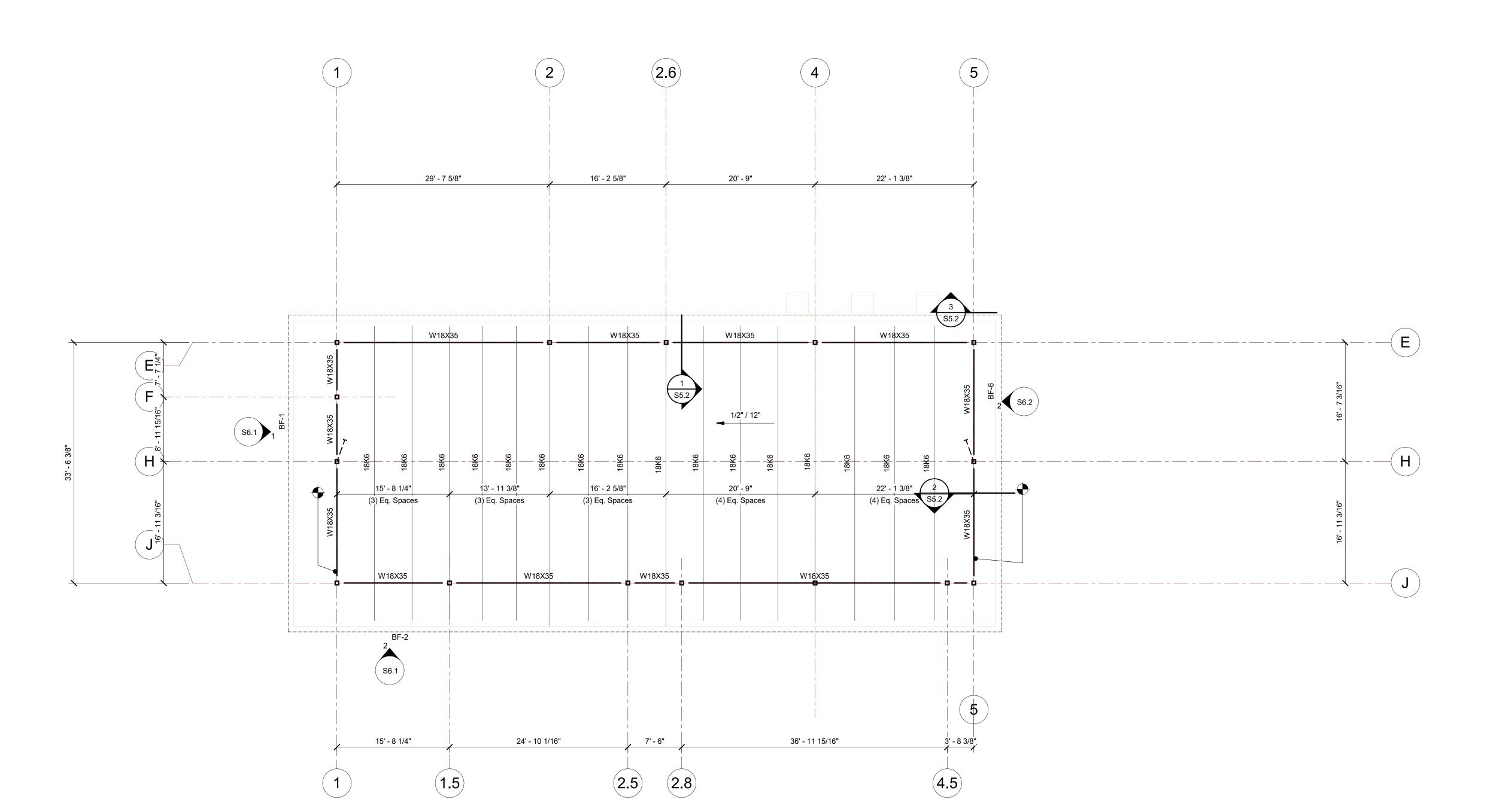
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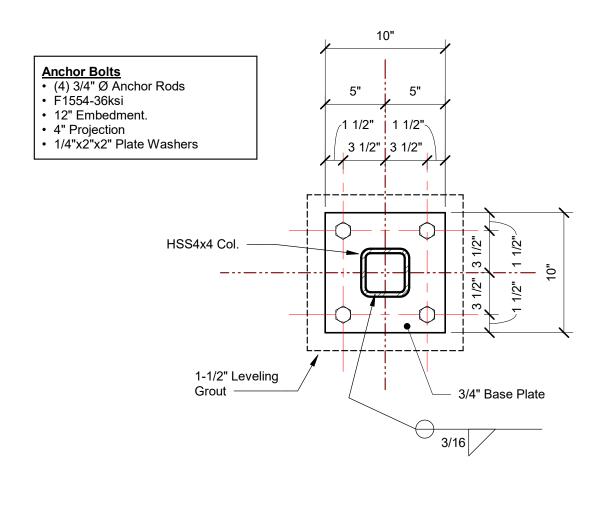
High Roof Framing Plan

53.2 *ITEM#*

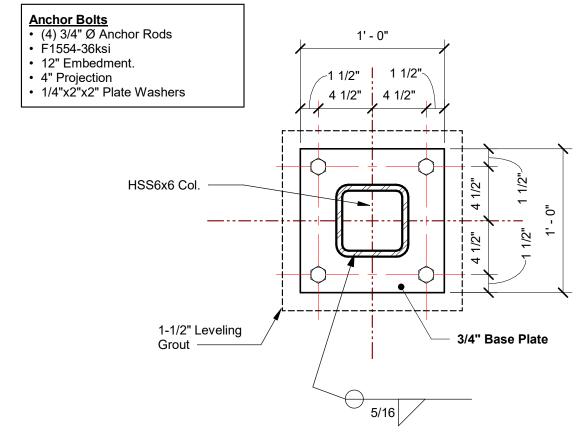


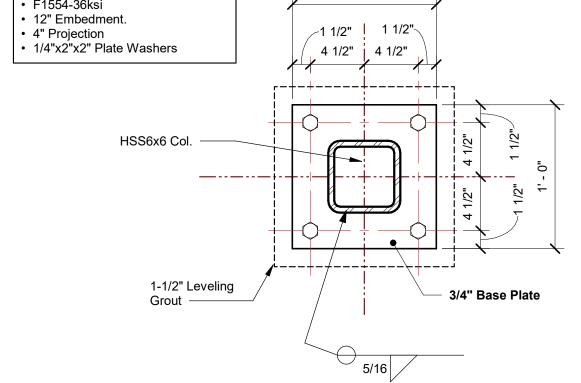
High Roof Framing Plan

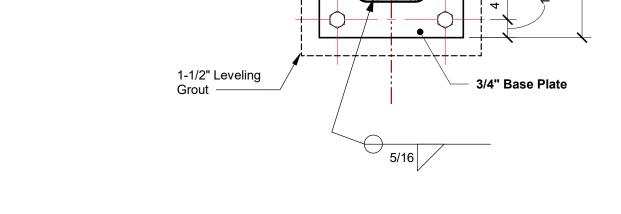
1/8" = 1'-0"



1 Base Plate BP-1
1 1/2" = 1'-0"

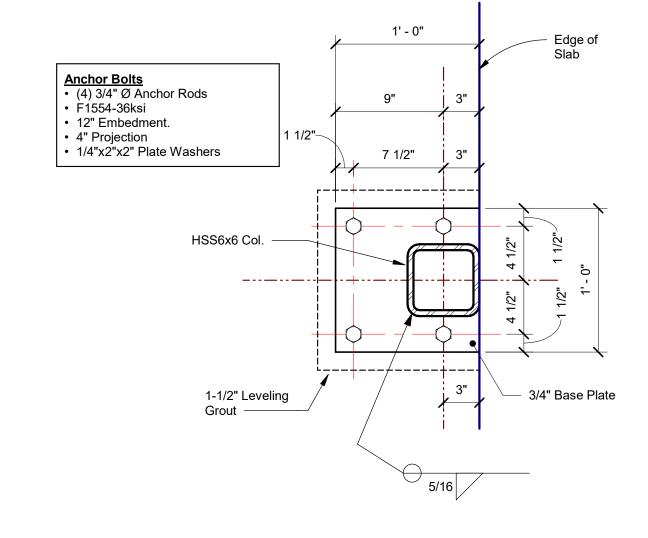


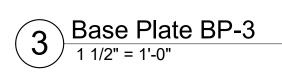


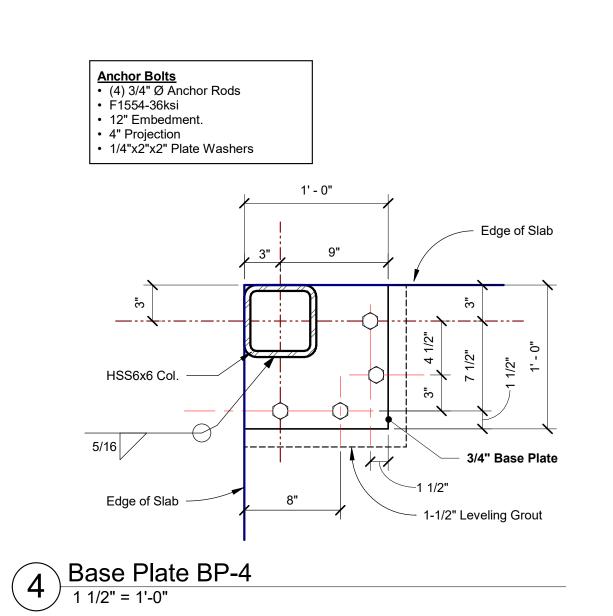


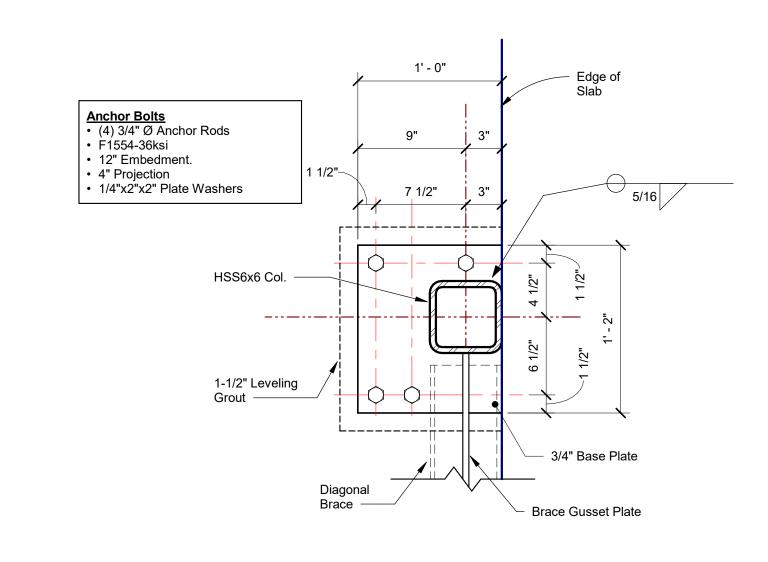
Base Plate BP-2
1 1/2" = 1'-0"

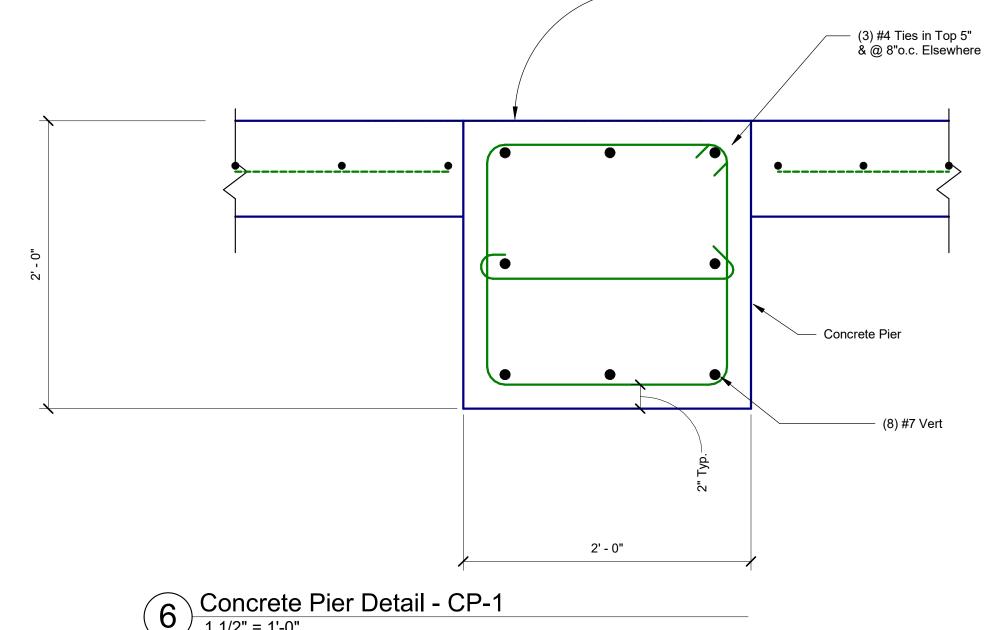
5 Base Plate BP-5
1 1/2" = 1'-0"

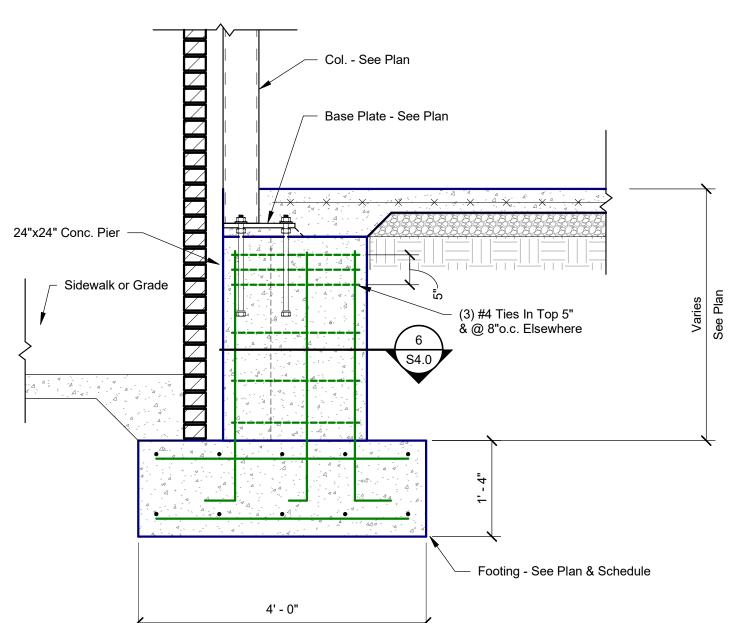




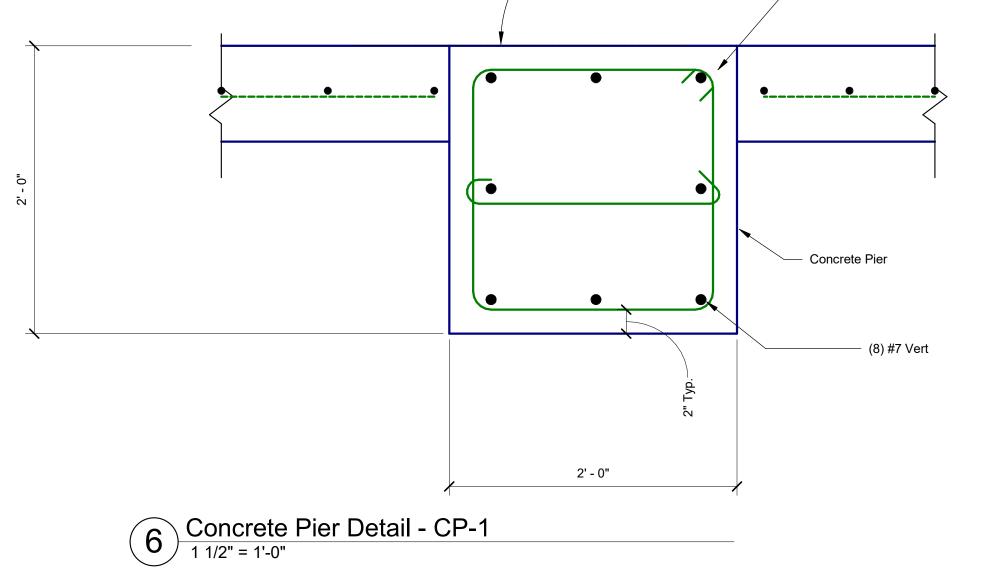












- Edge of Slab

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REVISIONS:

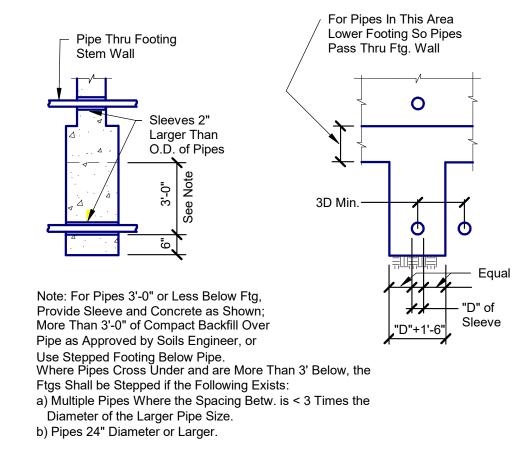
DATE OF ISSUE: 10/20/2021 0214-21 **MA PROJECT NO:**

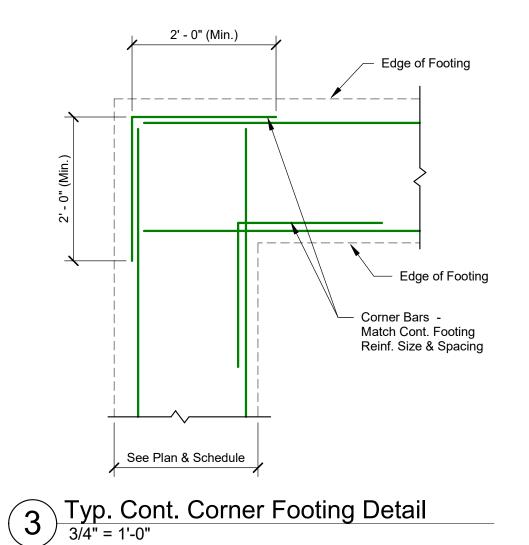
PROJECT PHASE:

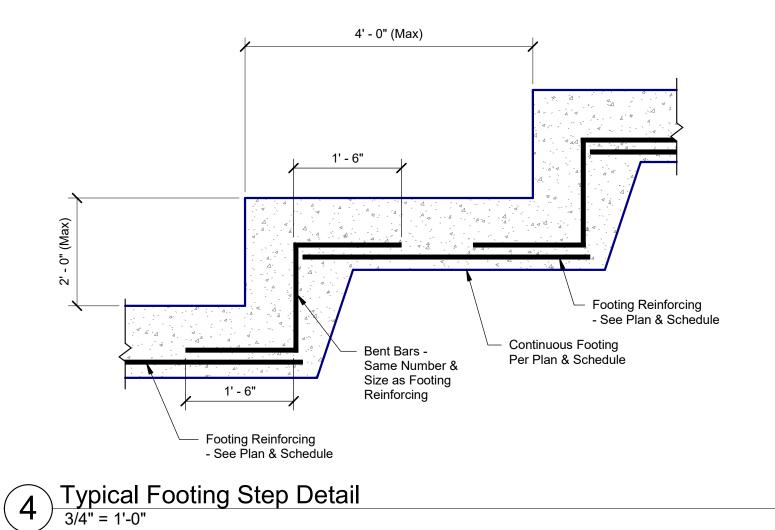
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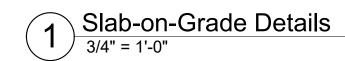
Base Plate and Pier Details

ITEM # 4.



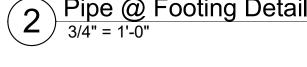


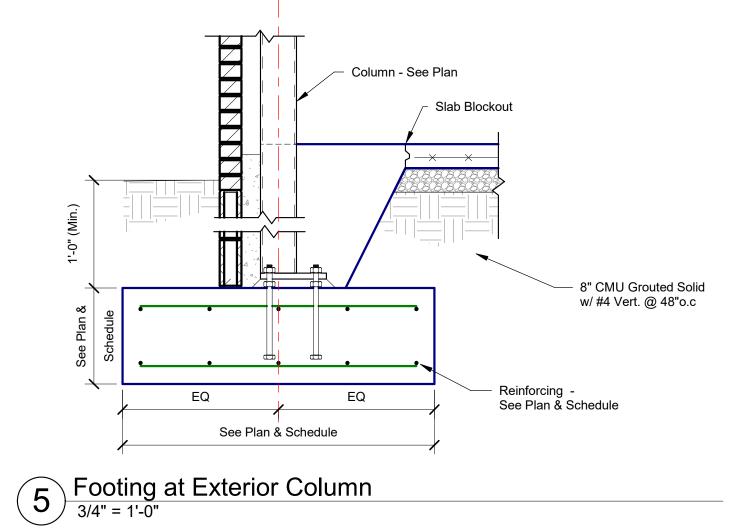




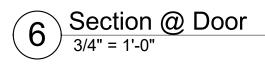








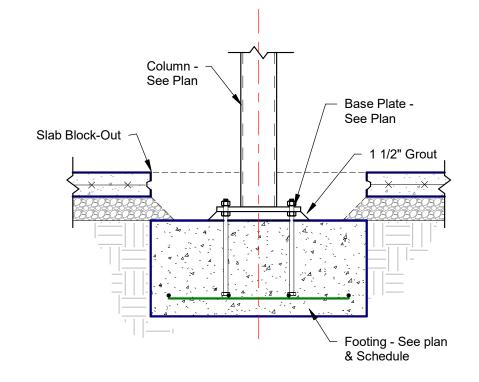




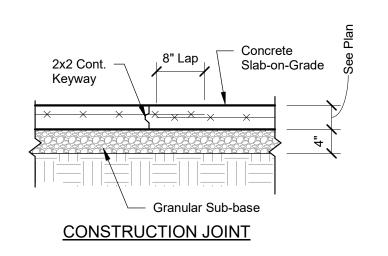
Wall Beyond

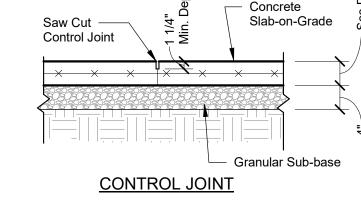
(1) #4 x Cont.

Sidewalk See Civil -



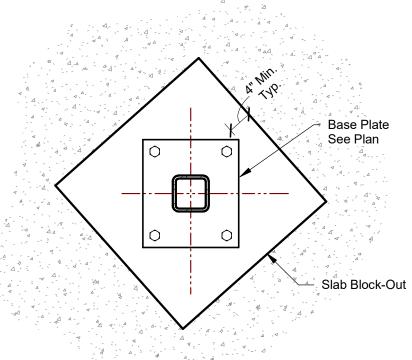
7 Footing @ Interior Column
3/4" = 1'-0"



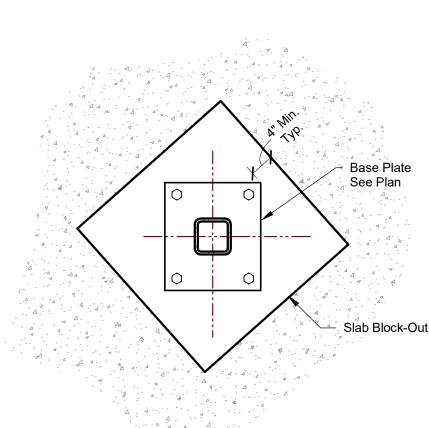


 Maximum spacing of control joints shall be 15'-0"o.c. (U.N.O.). Locate control joints as specified on architectural drawings (when applicable).
 Provide 10 MIL Vapor Barier below slab (U.N.O.)

8 Slab-on-Grade Details
3/4" = 1'-0"



9 Typical Slab Block-Out Detail 3/4" = 1'-0"



Field Bend 2' - 0" Min.

Into Slab

Finish Floor

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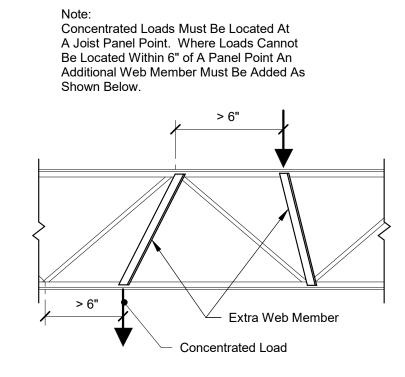
REVISIONS:

DATE OF ISSUE: 10/20/2021 MA PROJECT NO: 0214-21 **PROJECT PHASE:**

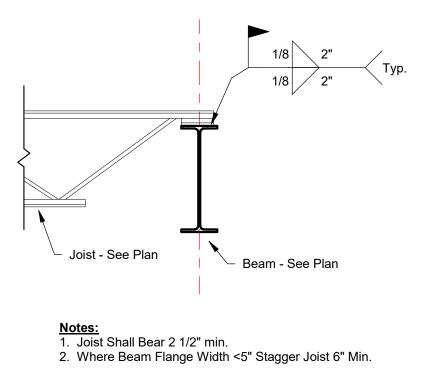
Foundation Sections

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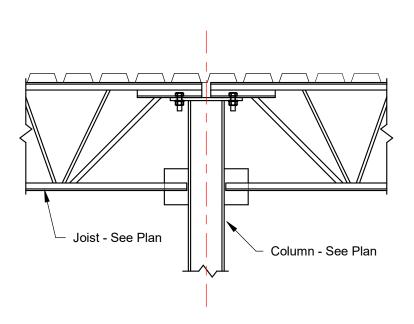
ITEM # 4.



2 Typical Joist Modification Detail
Not To Scale

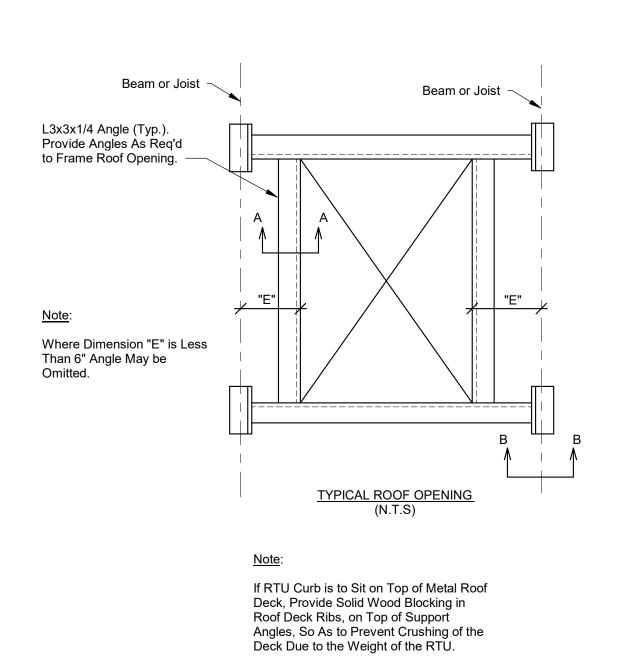


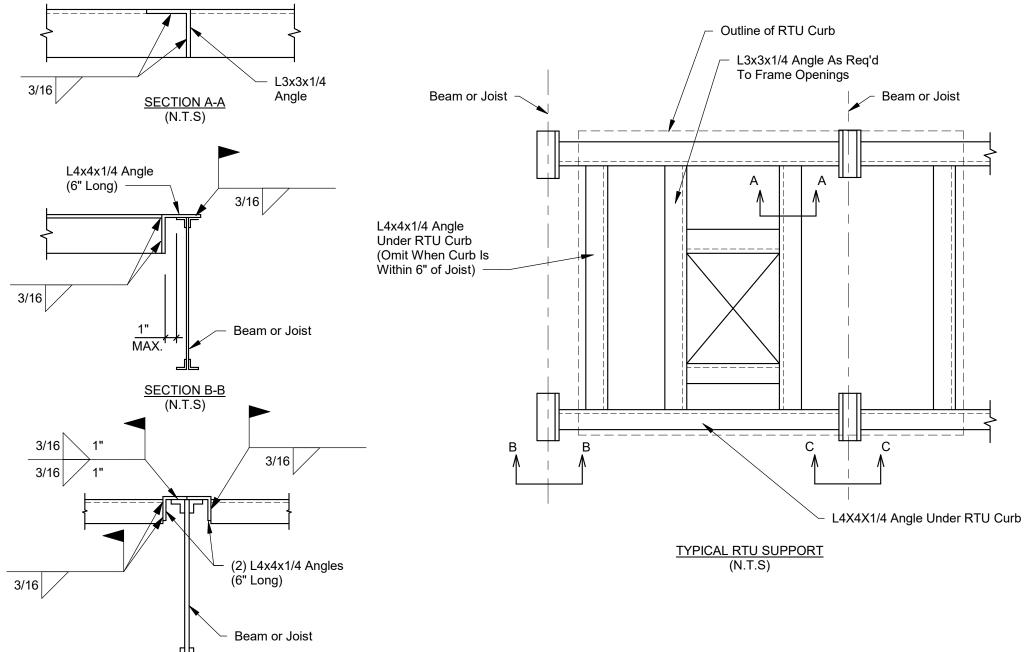




5 Typical Joist @ Column at Roof
3/4" = 1'-0"

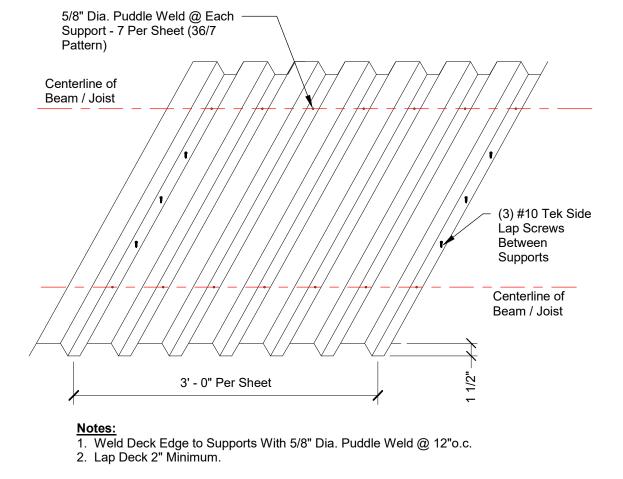
SECTION C-C (N.T.S)





RTU Support Detail

Not To Scale



Roof Deck Attachment Detail
Not To Scale

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REVISIONS: DESCRIPTION

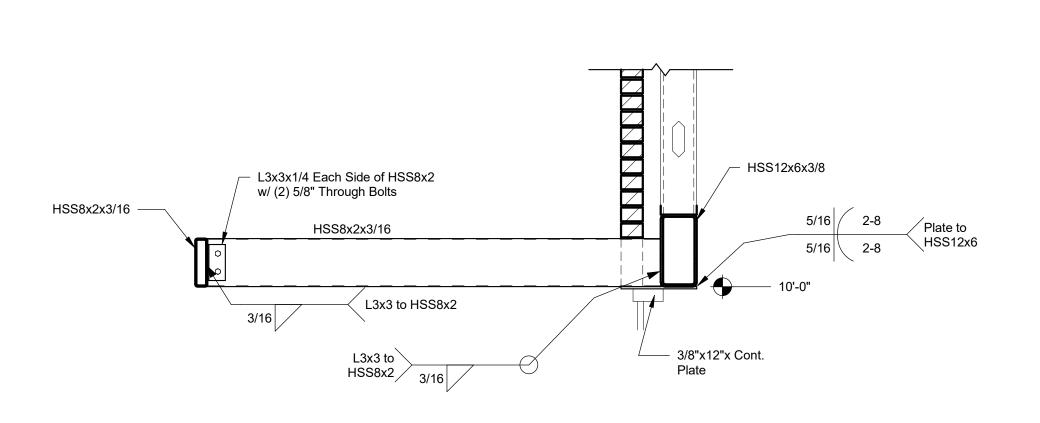
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10/20/2021 DATE OF ISSUE: 0214-21 **MA PROJECT NO: PROJECT PHASE:**

Typical Framing Sections

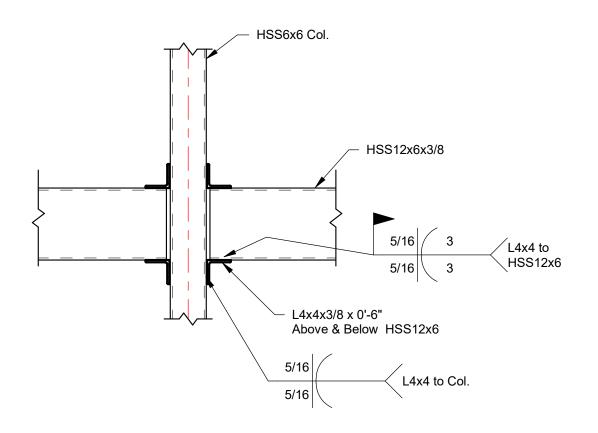
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ITEM # 4.



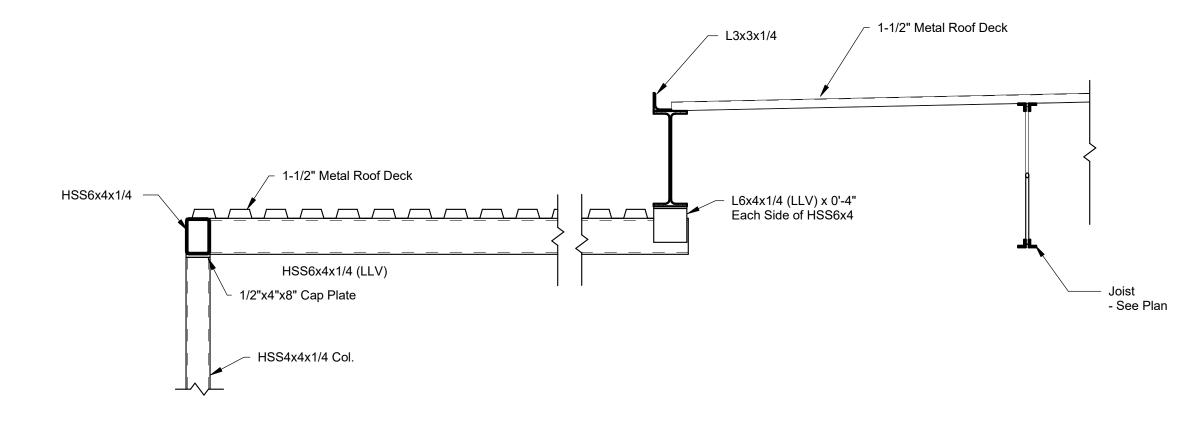
L3x3x1/4 Each Side of HSS8x2 w/ (2) 5/8" Through Bolts HSS8x2x3/16 -HSS8x2x3/16 ─ HSS12x6x3/8 10'-0" L3x3 to HSS8x2 L3x3 to HSS6x6 Col. 3/16 — HSS6x6 Col.

2 Canopy Section @ Column
3/4" = 1'-0"



Oetail at HSS12x6 to HSS6x6 Col. Connection

3/4" = 1'-0"



Canopy Section @ Back of Store

3/4" = 1'-0"

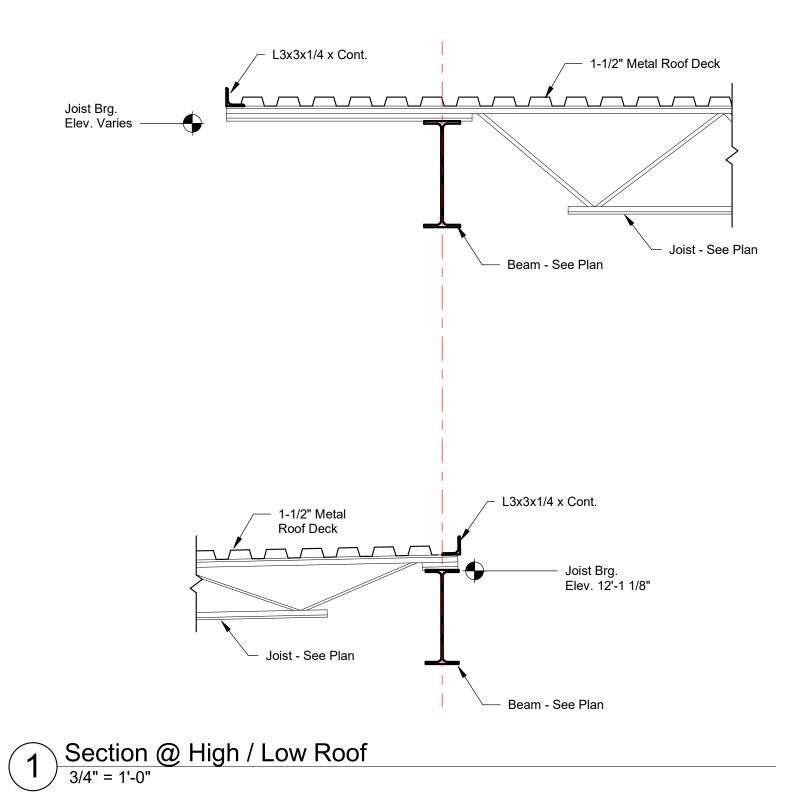
Canopy Section @ Storefront
3/4" = 1'-0"

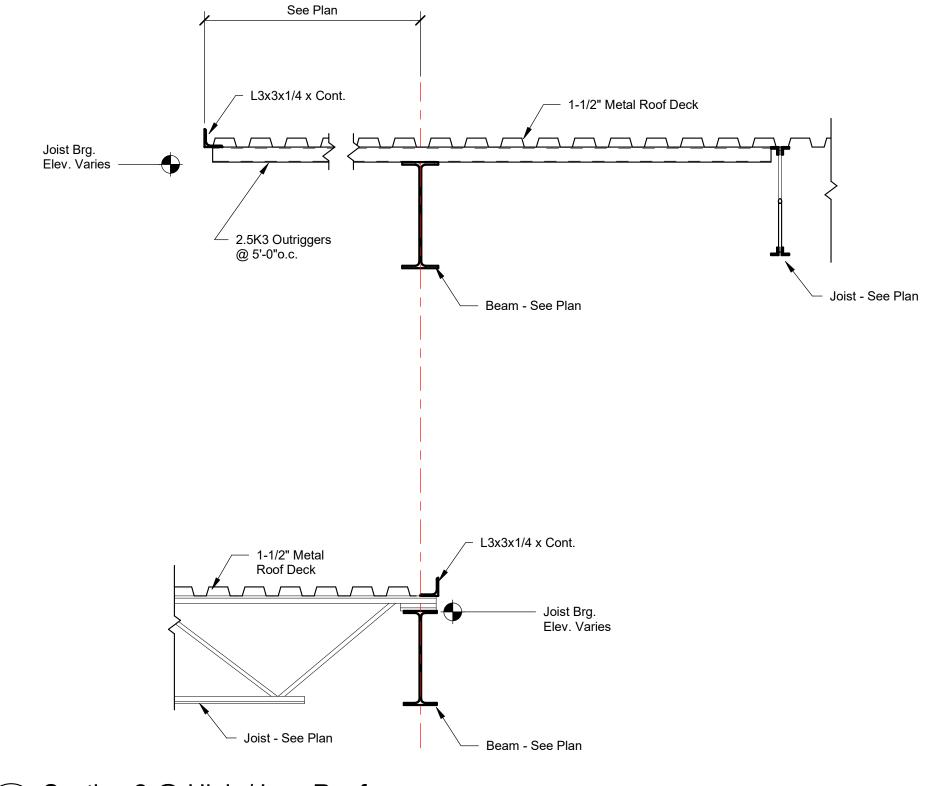
REVISIONS:

DATE OF ISSUE:

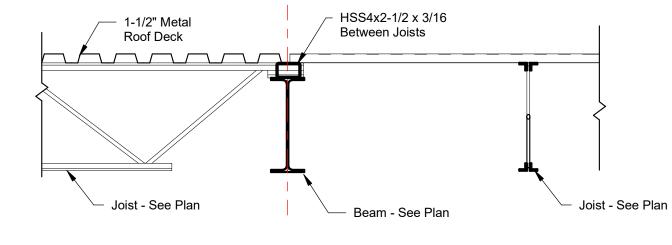
0214-21 MA PROJECT NO: PROJECT PHASE:

DRAWN BY: Canopy Framing Sections









Section @ Change in Deck Direction

3/4" = 1'-0"

ASH LAND

DHAVAL PATEL

0 Old Hydes Ferry Pike, Ashland City, TN 370

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AGRICULTURE

ON 104890

OF TENNESSITI

nashville, tennessee
e: office@meridiantn.com
t: 615.390.2236
www.meridiantn.com

REVISIONS:

DESCRIPTION

DATE OF ISSUE:

0214-21

PROJECT PHASE:

DRAWN BY:

Roof Framing Sections

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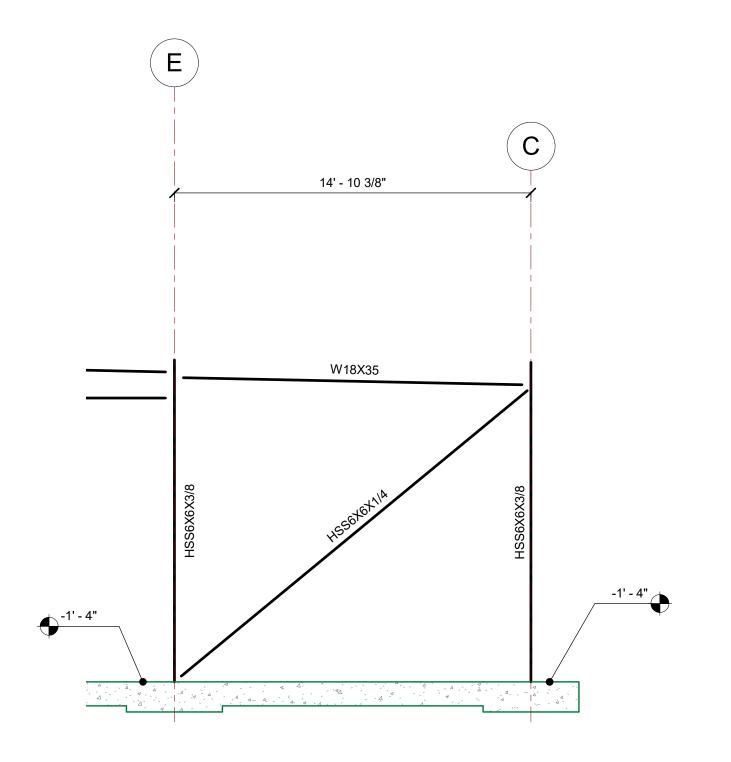
- Page 48 -

BF-1
1/4" = 1'-0"

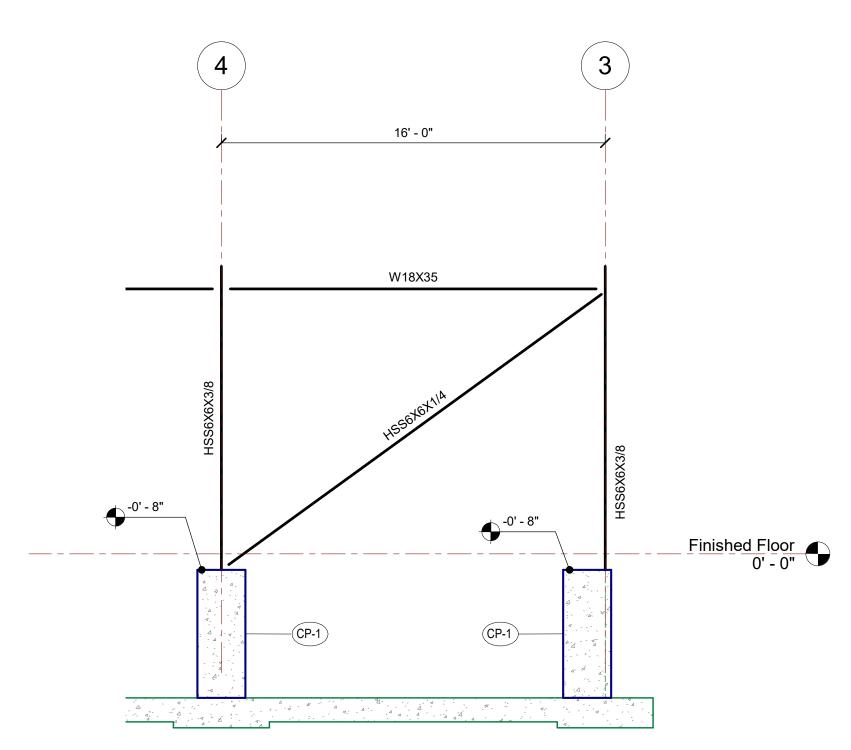
3 BF-3
1/4" = 1'-0"

(1.5) 15' - 8 1/4" W18X35 W18X35

2 BF-2 1/4" = 1'-0"



BF-4
1/4" = 1'-0"



REVISIONS:

DATE OF ISSUE: MA PROJECT NO: 0214-21 PROJECT PHASE: **DRAWN BY:**

Framing Elevations

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REVISIONS:

DATE OF ISSUE: 10/20/2021 0214-21 MA PROJECT NO:

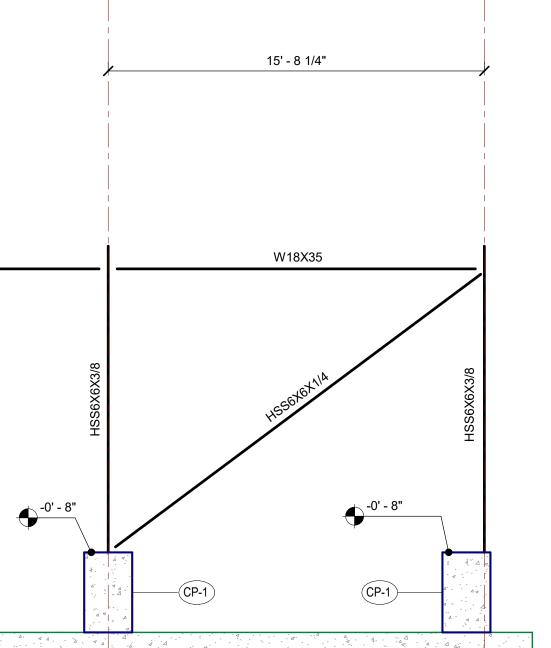
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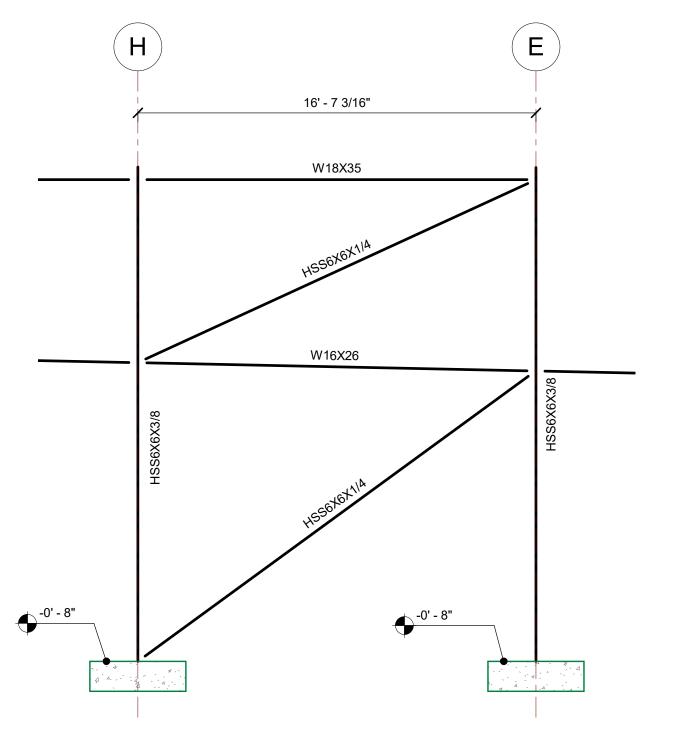
Framing Elevations

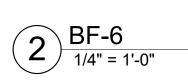
PROJECT PHASE:

\$6.2 ITEM#4.

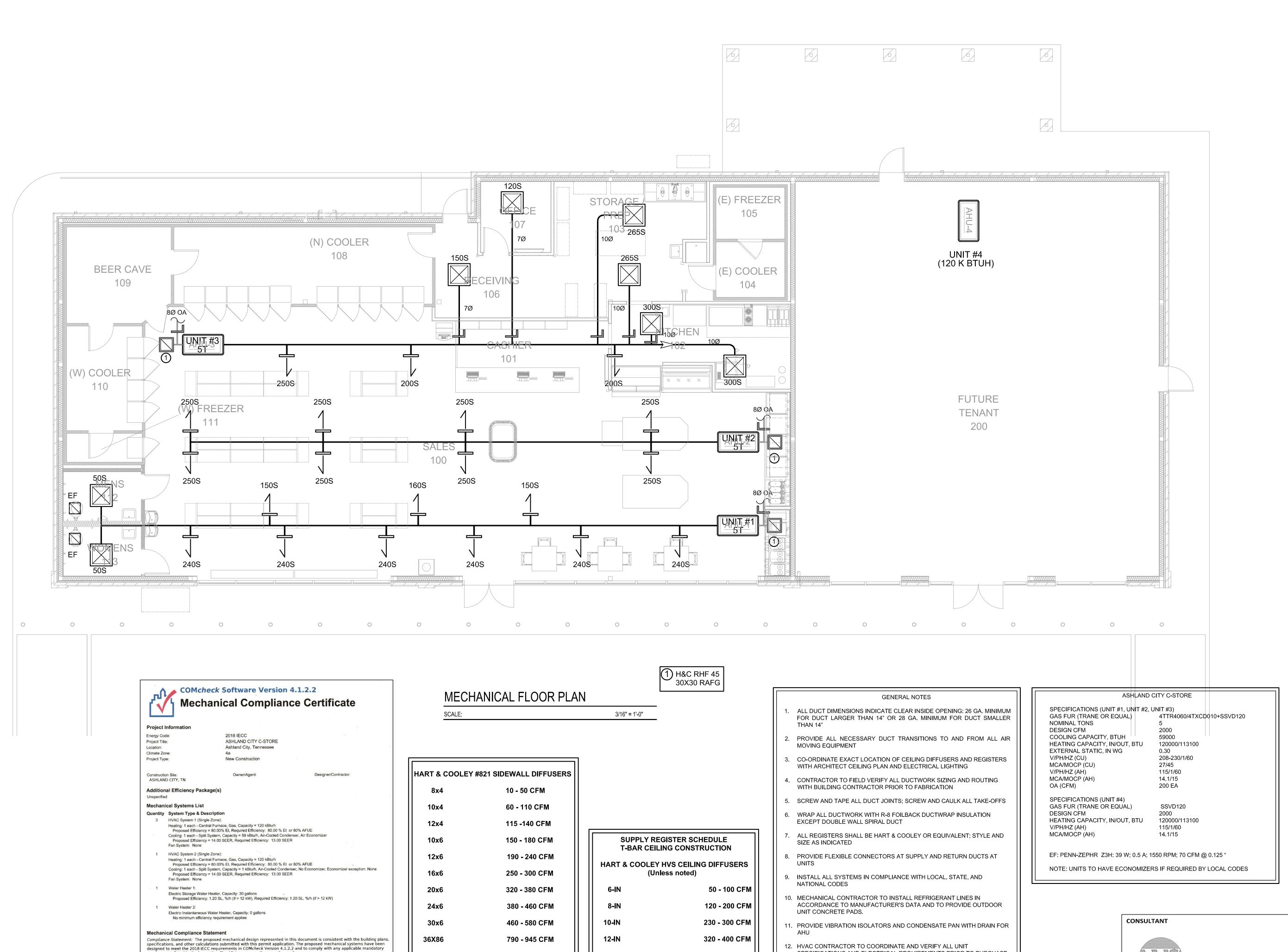
15' - 8 1/4" W18X35 -0' - 8" (CP-1)







1 BF-5
1/4" = 1'-0"



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REVISIONS:

DESCRIPTION

DATE OF ISSUE: 10.20.2021

0214-21

MECHANICAL PLAN

- Page 51 -

uirements listed in the Inspection Checklist.

MR BUSBY, PE

MA PROJECT NO: PROJECT PHASE: DRAWN BY:



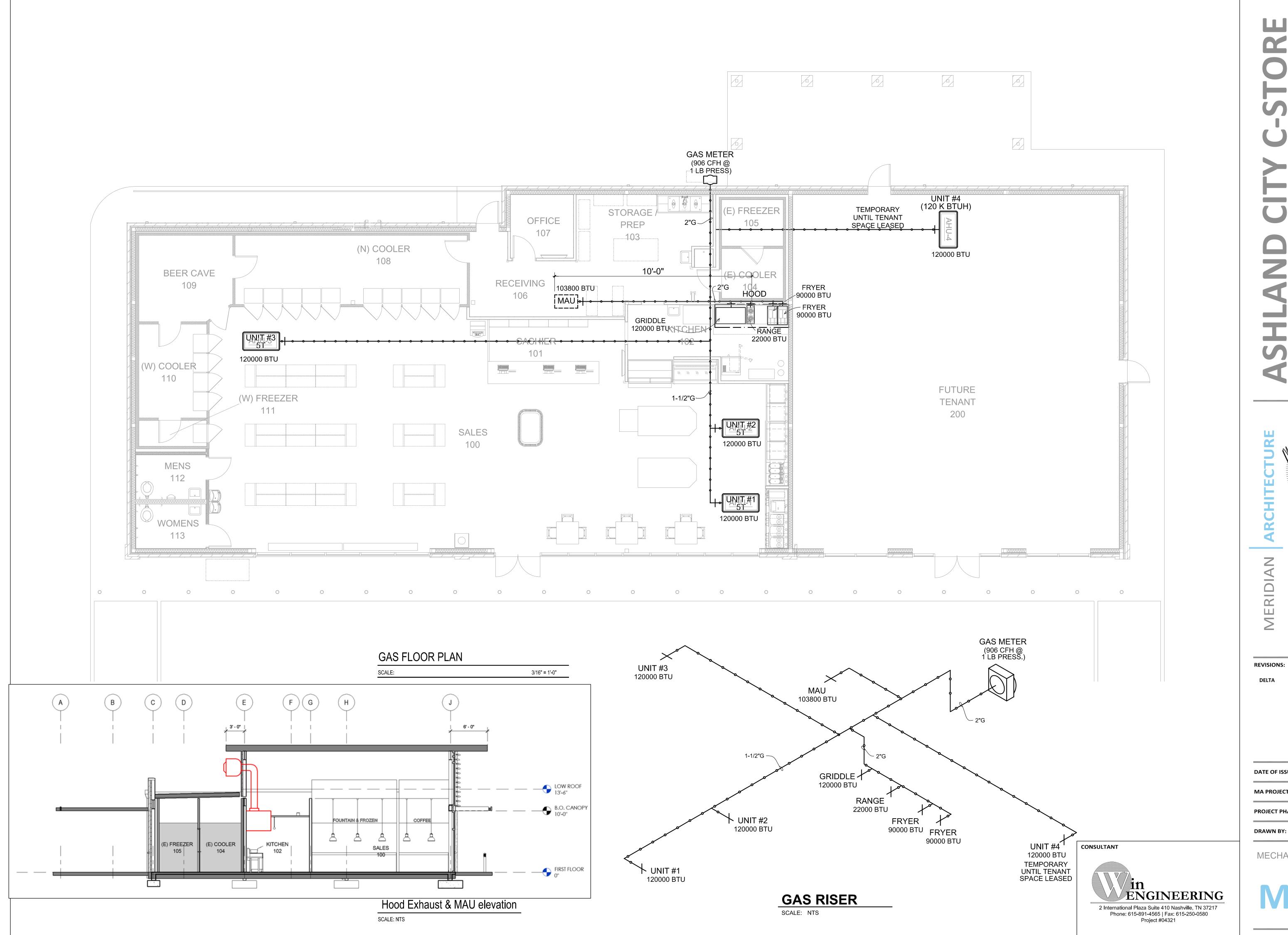
12. HVAC CONTRACTOR TO COORDINATE AND VERIFY ALL UNIT

OF EQUIPMENT AND INSTALLATION

420 - 500 CFM

960 - 1440 CFM

SPECIFICATIONS AND ELECTRICAL REQUIREMENTS PRIOR TO PURCHASE



e: office@meridi t: 615.390.2236 www.meridiantn

DATE OF ISSUE: 10.20.2021 0214-21 MA PROJECT NO:

PROJECT PHASE:

MECHANICAL GAS PLAN

 $HOOD\ INFORMATION - IOR#5109685$

| 11 | UUD | IIVI' | UINMAIIUN | - JUD# | <u>010000</u> | , | | | | | | | | | | | | | | | |
|----|-----|--------|------------|-----------------|---------------|------------|------|-----------|--------|---------|----------------|-------|-----------|---------|------|-------|---------|--------|---------------|--------|-------|
| | | | | ,,, | | MAX | | | | | EXHAUST PLENUM | | | | | | TOTAL | | HOOD (| CONFIG | |
| | | TAG | MODEL M | I Anufacture | TO LENGTH | | TYPE | APPLIANCE | DESIGN | TOTAL | | | F | RISER(S | ((| | | SUPPLY | HOOD | END TO | |
| | ND | IAU | LIUDEC IN | HINOI ACTORL | | TEMP | | DUTY | CFM/FT | EXH CFM | WIDTH | LENG | HEIGHT | ם וח | CFM | V/FI | SP. | CFM | CONSTRUCTION | END | ROW |
| L | | | | | | 1 | | | | | WIDIII | LLIVO | IILLIGIII | DILI | CITI | V L L | 31 | CITI | | LIVE | |
| | , | 121.14 | 5424 | | 10/0// | 600 | _ | | 000 | 0000 | | | 4 " | 4 4 " | | 4074 | 0.004# | 4600 | 430 SS | A | A |
| | 1 | KH1 | FX-2-PSP-F | ECON-AIR | 10′ 0″ | 600 DEG | 1 | HEAVY | 200 | 2000 | | | 4" | 14" | 2000 | 1871 | -0.801" | 1600 | WHERE EXPOSED | ALONE | ALONE |
| | | | | | 1 | | 1 | | | | | I | I | | | | | | | | 1 |

HOOD INFORMATION

| | | | FILTER(S) | | | | | LIGHT(S) | | | | UTILITY CABINET(S) | | | | | HOOD |
|--|------|-----|----------------------|-----|---------------|------------------------|-----|----------------|-----------------|----------|-------------|--------------------|-----------|------------|------------------|-------------|------------|
| | 100D | TAG | | | | EFFICIENCY @ 7 | | | \./TDE | | | FIF | RE SYSTEM | ELECTRICAL | SWITCHES | FIRE SYSTEM | |
| | NO ' | IAU | TYPE | QTY | HEIGHT LENGTH | MICRONS | QTY | TYPE | WIRE GUARD L | LOCATION | SIZE | TYPE | SIZE | MODEL # | QUANTITY | PIPING | |
| | 1 | KH1 | CAPTRATE SOLO FILTER | 7 | 20" 16" | 85% SEE FILTER SPEC | 3 | RECESSED ROUND | NO | LEFT | 12"×54"×24" | TANK FS | 4.0/4.0 | DC∨-1111 | 1 LIGHT 1 FAN | YES | 876 LBS |

HOOD OPTIONS

| NO | TAG | | | | | OPTI | □N | | | |
|----|-----|---------|--------------|---------|---------|------|-----------|-----|------|------------|
| | | FIELD | WRAPPER | 18.00″ | HIGH | FRE | INT, LEFT | | | |
| 1 | KH1 | RIGHT | END STAND | OFF (FI | NISHED) | 1" | WIDE | 54″ | LONG | INSULATED. |
| | | INSUL A | TION FOR BAG | CK OF H | ІППЪ. | | | | | |

PERFORATED SUPPLY PLENUM(S)

| | 010211 | <u> </u> | | | | | | | | | |
|-------------|---------|-----------|--------|----------|--------|------|-------|------|---------|-----|--------|
| | | | | | , , | | | F | RISER(S | 3) | |
| MD | TAG | POS | LENGTH | WIDTH | HEIGHT | TYPE | WIDTH | LENG | DIA | CFM | SP |
| 1 | IZ L.11 | F10.010.± | 133″ | 14" | 6" | MUA | 12" | 28" | | 800 | 0.191″ |
| 1 | KH1 | Front | 133" | 14 | | MUA | 12" | 28" | | 800 | 0.191" |

SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL, TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO

ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS

RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK, SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER, SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

ECON AIR HOODS ARE BUILT IN COMPLIANCE WITH BUILT IN ACCURDANCE WITH NFPA No. 96 Intertek

NFPA #96 UL 710 & ULC710 STANDARDS E.T.L. LISTED 3054804-001

CUSTOMER APPROVAL TO MANUFACTURE:

| Approved as Noted | | |
|----------------------------------|------|--|
| Approved with NO Exception Taken | | |
| Revise and Resubmit | | |
| SIGNATURE | | |
| Your Title | Date | |
| | | |

FOR QUESTIONS, CALL THE Nashville Office REGION 44 PHONE: (615) 599-8300 EMAIL: reg44@econair.com

SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

GRADE 5 (MINIMUM) STEEL HEX NUTS.

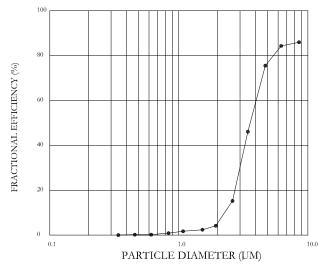
GRADE 5 (MINIMUM) T STEEL HEX NUT.

1/2" GRADE 5

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 85% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE. THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05. MANUFACTURER APPROVED FOR USE IN SOLID FUEL APPLICATIONS AS A SPARK ARRESTER.

EFFICIENCY VS. PARTICLE DIAMETER



FLOW RATE (CFM)

CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH:

NSF STANDARD #2. UL STANDARD #1046. INT. MECH. CODE (IMC). ULC-S649.

HOOD CORNER

HANGING ANGLE

1/2" - 13 TPI GRADE 5 (MINIMUM)—/ STEEL HEX NUTS,

ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD, SANDWICH HANGING

ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5

DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING

ANGLES AND ABOVE CEILING ANCHORS, MAINTAIN 1/4" OF

EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE

PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW"

IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING

CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS, MODEL "DW"

DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER

PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER.

SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12"

IF THE DUCT IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 LISTED

DOUBLE WALL GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 3R, OR 3Z"

ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS

PER MANUFACTURES LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE

DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE

ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK, MODEL "DW"

ALL HEX NUTS TO 57 FT-LBS.

(MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI

GRADE 5 (MINIMUM) HEX NUTS AS SHOWN, MUST USE

GRADE 5 (MINIMUM)— STEEL HEX NUT.

GREASE DUCT SPECIFICATIONS:

THE MANUFACTURES INSTALLATION GUIDE

ACCUMULATION IN HORIZONTAL RUNS.

DUTER SHELL.

SUPPLY PLENUM HANGING ANGLE HANGING ANGLE (WEIGHT BEARING— ANCHOR POINT FOR SUPPLY

ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN, MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS, SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR PSP HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

()(/)Q | | |

DATE: 9/28/2021 DWG.#:

HDDD-1-5109685 DRAWN DDR-44 SCALE: 3/4" = 1'-0"

HOOD

SHEET NO.



REVISIONS:

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DATE OF ISSUE: 10.20.2021

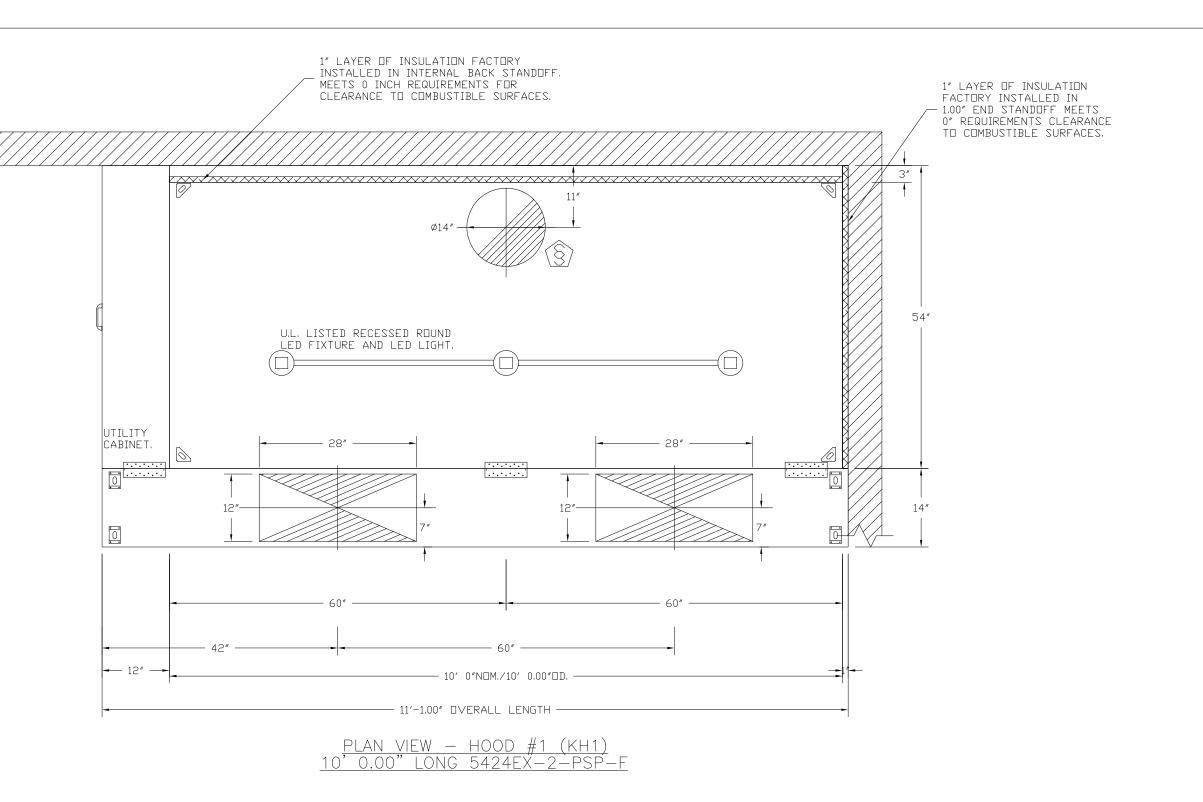
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MA PROJECT NO:

PROJECT PHASE:

DRAWN BY:

MECHANICAL HOOD SPECIFICATIONS



VERIFY CEILING HEIGHT

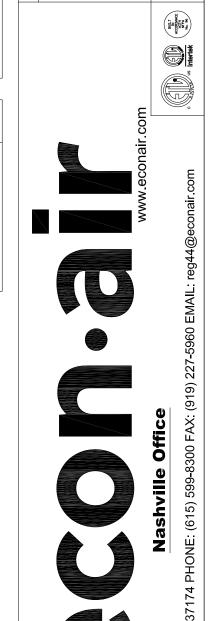
HEIGHT REQUIRED TO VERIFY THAT HOOD FITS SPACE AND TO SIZE THE ENCLOSURE PANELS

HVAC DISTRIBUTION NOTE

IT IS RECOMMENDED NOT TO INSTALL HIGH VELOCITY DIFFUSERS OR HVAC RETURNS WITHIN TEN (10) FEET OF THE EXHAUST HOOD. PERFORATED DIFFUSERS ARE RECOMMENDED.

ECONAIR SYSTEMS RECOMMENDS THE USE OF INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

RECESSED ROUND LED FIXTURE AND LED LIGHT, 3500 K WARM OUTPUT.



REVISIONS

DWG.#:

SCALE:

HOOD

SHEET NO.

REVISIONS:

Z

MERIDI

DESCRIPTION

DATE OF ISSUE: 10.20.2021

0214-21

MA PROJECT NO: **PROJECT PHASE:**

DRAWN BY:

MECHANICAL HOOD SPECIFICATIONS

FIELD WRAPPER 18,00" HIGH EXHAUST RISER. — — ATTACHING PLATES. _ SUPPLY RISER WITH VOLUME DAMPER, HANGING ANGLE. ~ ___23.5% OPEN STAINLESS STEEL PERFORATED PANEL. 20" CAPTRATE SOLO FILTER WITH HOOK. 1" LAYER OF INSULATION FACTORY INSTALLED IN 3" INTERNAL STANDOFF, MEETS 0 INCH REQUIREMENTS FOR CLEARANCE TO COMBUSTIBLE SURFACES. (/)24″ NOM. IT IS THE RESPONSIBILITY OF THE ARCHITECT/OWNER TO ENSURE THAT THE HOOD CLEARANCE FROM LIMITED-COMBUSTIBLE -AND COMBUSTIBLE MATERIALS IS IN COMPLIANCE WITH LOCAL CODE REQUIREMENTS. Ashland 48.0" MAX. GREASE DRAIN _ WITH REMOVABLE CUP. **DATE:** 9/28/2021 H00D-2-5109685 DRAWN DDR-44 EQUIPMENT BY OTHERS, 3/4" = 1'-0"

SECTION VIEW - MODEL 5424EX-2-PSP-F HOOD - #1 (KH1)

BUILT IN ACCORDANCE WITH NFPA No. 96 Intertek NFPA #96

ECON AIR HOODS ARE

BUILT IN COMPLIANCE WITH

UL 710 & ULC710 STANDARDS E.T.L. LISTED 3054804-001

CUSTOMER APPROVAL TO MANUFACTURE:

Approved as Noted Approved with NO Exception Taken Revise and Resubmit SIGNATURE ____

FOR QUESTIONS, CALL THE Nashville 🛮 ffice REGION 44 PHONE: (615) 599-8300 EMAIL: reg44@econair.com

CONSULTANT



SECTION 23 38 13 13

SPECIFICATIONS TAG: Commercial Kitchen Ventilation Hoods, Listed Commercial Kitchen

PART 1 - GENERAL

1.1 SUMMARY

- A. The ND2 series is a Type I, wall canopy hood for use over 600°F cooking surface temperatures. The aerodynamic design includes a mechanical baffle and performance enhancing lip for exceptional capture and containment.
- B. The hood shall have the size, shape, and performance specified on drawings.

1.2 SUBMITTALS

- A. The manufacturer assumes no liability for the use or results of use from this document. Specifications are to be reviewed by the engineer to confirm the project's requirements and meet Federal, State, and Local codes and regulations.
- B. As the manufacturer continues product development, it reserves the right to change design and specifications without notice.
- C. The manufacturer shall supply complete computer generated submittal drawings, including hood section view(s) and hood plan view(s). These drawings must be available to the engineer, architect, and owner for their use in construction, operation, and maintenance.

1.3 QUALITY ASSURANCE

A. This hood is ETL-listed to standard UL710, ULC710, and ULC-S646 when installed in accordance with these installation instructions and National Fire Protection Association Standard "NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking

B. Built-in compliance with NSF/ANSI Standard 2.

C. The hood shall be ETL Listed as:

- 1. "Exhaust Hood Without Exhaust Damper."
- 2. ETL Sanitation Listed and built in accordance with NFPA 96.
- 3. The ETL label shall list temperature rating(s) and minimum CFM/ft rating(s).

1.4 WARRANTY

- A. All units shall be provided with the following standard warranty:
- 1. This equipment is warranted to be free from defects in materials and workmanship, under normal use and service, for a period of 2-years from date of shipment.
- B. The manufacturer shall not be liable for incidental and consequential losses and damages potentially attributable to malfunctioning equipment. Should any part of the equipment prove to be defective in material or workmanship within the 2-year warranty period, upon examination by the manufacturer, such part will be repaired or replaced by manufacturer at no charge. The buyer shall pay all labor costs incurred in connection with such repair or replacement. Equipment shall not be returned without manufacturer's prior authorization, and all returned equipment shall be shipped by the buyer, freight prepaid to a destination determined by the manufacturer.
- C. Refer to Manufacturer's Operation, Installation, and Maintenance (DIM) Manual for detailed descriptions of what is/is not covered and contact information for warranty claims.

PART 2 - PRODUCTS

2.1 GENERAL

A. Construction shall be dependent on the structural application to minimize distortion and other defects. All seams, joints, and penetrations of the hood enclosure to the lower outermost perimeter, which directs and captures grease-laden vapor and exhaust gases, shall have a liquid-tight continuous external weld in accordance with NFPA 96.

ECON AIR HOODS ARE BUILT IN COMPLIANCE WITH BUILT IN ACCORDANCE WITH NFPA Intertek NFPA #96 UL 710 & ULC710 STANDARDS E.T.L. LISTED 3054804-001

CUSTOMER APPROVAL TO MANUFACTURE:

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| | Approved with NO Exception Taken | |
| | Revise and Resubmit | |
| | SIGNATURE | |
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B. Duct sizes, CFM, and static pressure requirements shall be as shown on drawings. Static pressure requirements shall be precise and accurate; air velocity and volume information shall be accurate within 1-ft increments along the length of the ventilator.

2.2 CONSTRUCTION

- A. Construction shall be type 430 stainless steel.
- B. Double wall insulated front to eliminate condensation and increase rigidity on wide sizes. The insulation shall have a flexural modulus of 475 EI, meet UL 181 requirements and be in accordance with NFPA 90A
- C. Hood shall be equipped with a minimum of four connections for hanger rods. Hood lengths greater than 12'will have added hangers.
- D. Exhaust duct collar to be 4"high with flange.
- E. The grease drain system shall be an enclosed integral part of the hood back and have slopes with an exposed, removable 1/2 grease cup to facilitate cleaning.
- F. An integral baffle to direct grease laden vapors toward the exhaust filter bank.
- G. Hood shall be furnished with UL classified filters, supplied in size and quantity as required by ventilator.
- H. All seams shall be welded and have stainless steel on exposed surfaces,

2.3 LIGHTING

- A. Recessed round LED fixture and LED light, 3500K Warm output.
- 2.4 FILTERS
- A. Stainless Steel Captrate Solo filter with hook, ETL Listed. Particulate capture efficiency: 85% efficient at 9 microns, 76% efficient at 5 microns.

2.5 OPTIONS

- A. Fire Suppression System: UL 300 fire suppression system.
- B. Optional perforated supply plenum shall provide make-up air discharged below the cooking equipment.
- 1. Perforated diffuser plates shall be included in the design to provide even air distribution.
- 2. Unexposed surfaces shall be constructed of aluminized steel.
- Plenum shall be insulated to prevent condensation.
- 3. Perforated Supply Plenum (PSP)
- C. Hood Mounted Utility Cabinet Cabinet can store listed fire suppression system, listed components, pre-wired electrical controls.

2.6 ACCESSORIES

- A. Standoff(s) selected:
- 1. Right End Standoff
- B. Wrapper(s) may be installed from the factory or field installed. Wrapper(s) selected:
- 1. Wrapper
- C. Miscellaneous option(s) selected:

FOR QUESTIONS, CALL THE Nashville Office REGION 44

> PHONE: (615) 599-8300 EMAIL: reg44@econair.com

1. Insulation for Back of Hood -Backside of hood is fully insulated.

PART 3 - EXECUTION

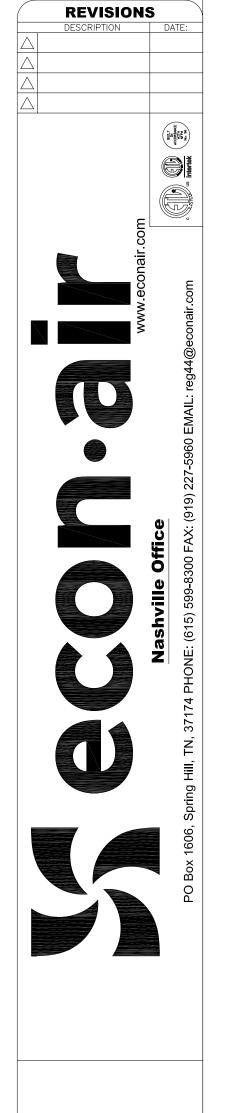
3.1 EXAMINATION

A. Examine areas and conditions under which the system is installed. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Installer.

3.2 INSTALLATION

A. Install in accordance with manufacturer's instructions, drawings, written specifications, manufacturer's installation manual, and all

applicable building codes.



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DATE: 9/28/2021 DWG.#: HDDD-3-5109685 DRAWN DDR-44

SCALE: 3/4" = 1'-0" HOOD

SHEET NO.

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REVISIONS: DESCRIPTION

10.20.2021

0214-21

MA PROJECT NO:

PROJECT PHASE:

DRAWN BY:

DATE OF ISSUE:

MECHANICAL HOOD

SPECIFICATIONS

- Page 55 -

FIRE SYSTEM INFORMATION - JOB#5109685

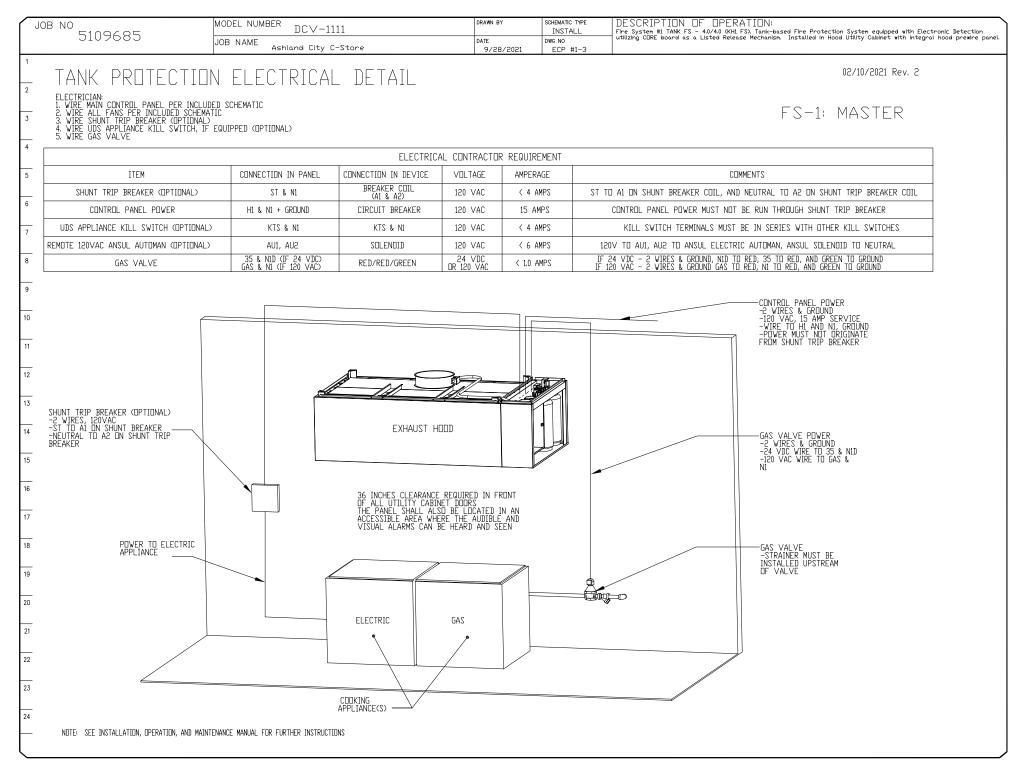
| FIRE | | | " | FLOW | INSTALLATION | | | | | |
|--------------|--------|---------|---------|------------|-------------------|------------------|--|--|--|--|
| SYSTEM NO | TAG | TYPE | SIZE | POINTS | SYSTEM | LOCATION ON HOOD | | | | |
| 1 | KH1 FS | TANK FS | 4,0/4.0 | 24 | FIRE CABINET LEFT | LEFT, HOOD 1 | | | | |

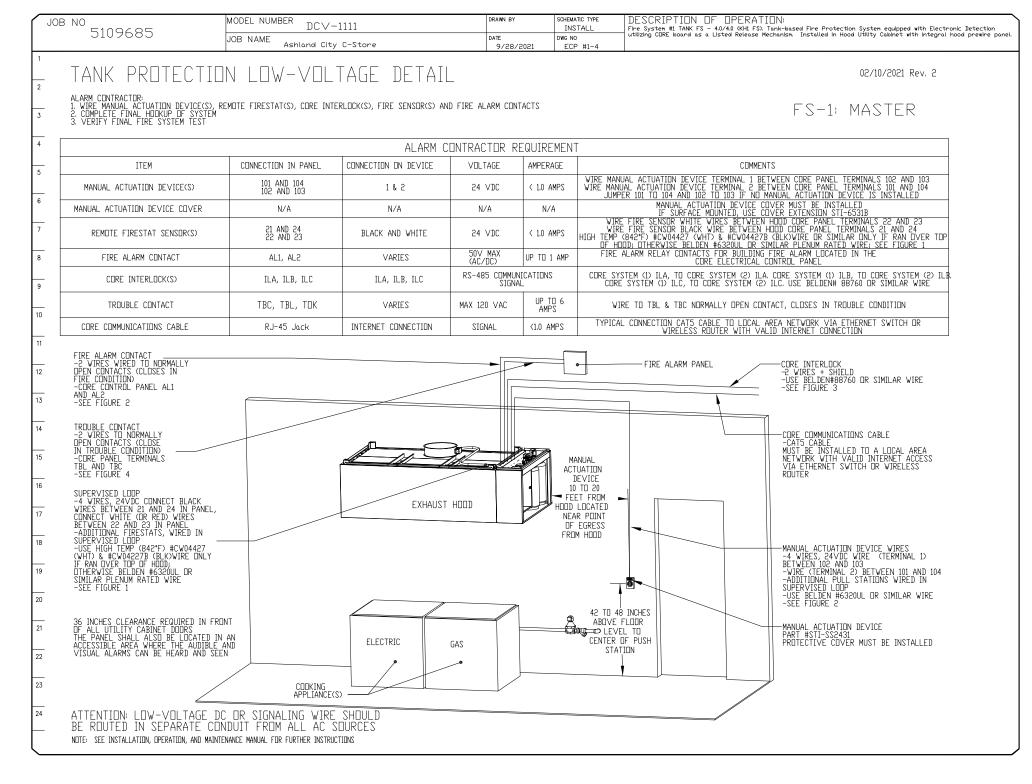
GAS VALVE(S)

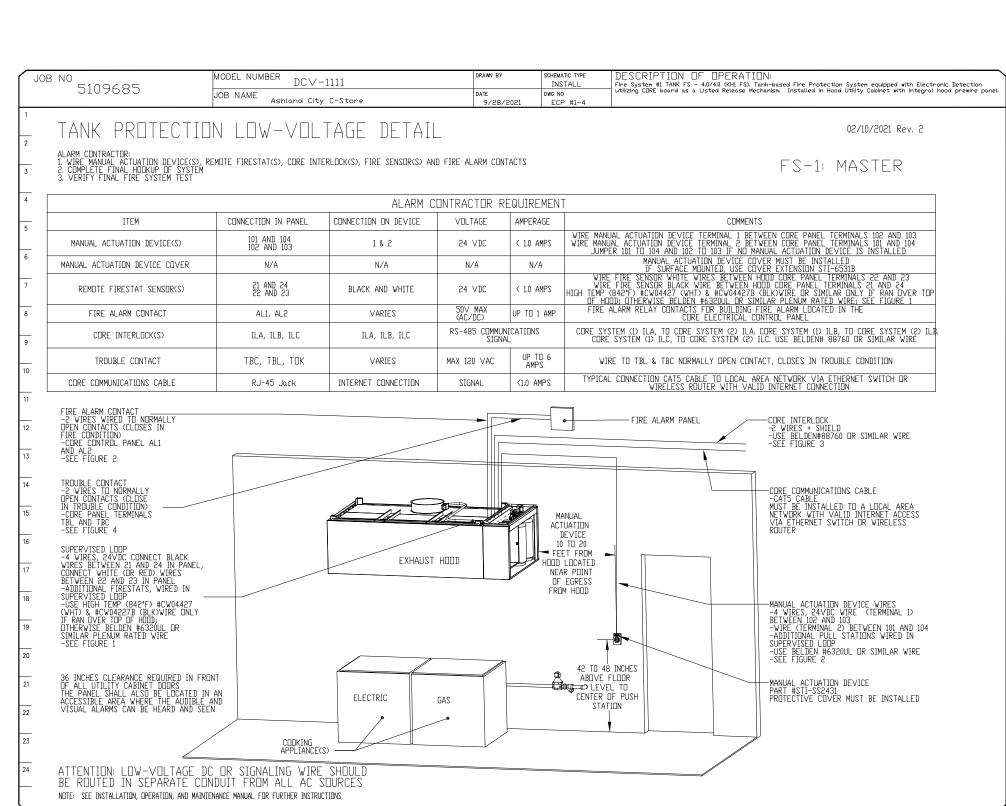
| FIRE SYSTEM NO | TAG | TYPE | SIZE | SUPPLIED BY |
|----------------------|--------|---------------|-------|-------------|
| 1 | KH1 FS | SC ELECTRICAL | 2.000 | ECON-AIR |

FIRE SYSTEM PARTS LIST KEY

| FIRE SYSTEM NO | TAG | KEY NUMBER - PART DESCRIPTION | QTY BY FACTORY | QTY B' |
|----------------------|--------|--|-------------------|--------|
| | | 0 - 0 - 12-F28021-32144-DT-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS, NO, CLOSE ON TEMP RISE AT 360°F. | 1 | 0 |
| | | 0 - 0 - 87-120042-001 SECONDARY ACTUATOR VALVE (SVA) - SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION. | 1 | 0 |
| | | 0 - 0 - 87-120045-001 HOSE, SECONDARY ACTUATOR HOSE, 7.5" BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION. | 1 | 0 |
| | | 0 - 0 - 87-300001-001 TANK - PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION. | 2 | 0 |
| | | 0 - 0 - 87-300030-001 PRIMARY ACTUATOR KIT (PAK) - ACTUATOR AND RELEASE SOLENDID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION. | 1 | 0 |
| | | 0 - 0 - 87-300033-001 DIN CONNECTOR, CANFIELD PART #5J560-201-EU0A, TANK FIRE SUPPRESSION, SUBMINATURE SOLENOID CONNECTION (CED VENDOR 30377). | 1 | 0 |
| | | 0 - 0 - 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION. | 8 | 0 |
| | | 0 - 0 - 9055455PC PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD. | 5 | 0 |
| | | 0 - 0 - 9097200PC PRO PRESS PC611 1/2 PRESS TEE LD. | 5 | 0 |
| 1 | KH1 FS | 0 - 0 - 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION. | 4 | 0 |
| | | 0 - 0 - A0034332 JUNCTION BOX FOR MANUAL PULL STATION, 1.5" DEEP BACK BOX, RED COLOR. | 1 | 0 |
| | | 0 - 0 - BI145 3/8" BLACK IRON 90 ELL. | 2 | 0 |
| | | 0 - 0 - DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION. | 2 | 0 |
| | | 0 - 0 - TANK STRAP TANK STRAP - USED FOR TANK FIRE SUPPRESSION. | 6 | 0 |
| | | 0 - 0 - TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION. | 2 | 0 |
| | | 0 - 0 - WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION. | 2 | 0 |
| | | 16 - 16 - 3070-3/8H-10-SS NOZZLE - TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANYARD, AND CHROME-PLATED PIPE)- 4 FLOW POINTS. | 6 | 0 |
| | | 16 - 16 - 79210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA. | 6 | 0 |
| | | 26 - 26 - QSA-3/8 QUIK SEAL - 3/8" (UL), | 6 | 0 |
| | | 34 - 34 - A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) With Protective Cover, one (1) Normally open contact. Red color. | 1 | 0 |







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SHLAND Ashland **DATE:** 9/28/2021 DWG.#: FS-1-5109685 DRAWN DDR-44 SCALE: 3/4" = 1'-0" FIRE SYSTEM

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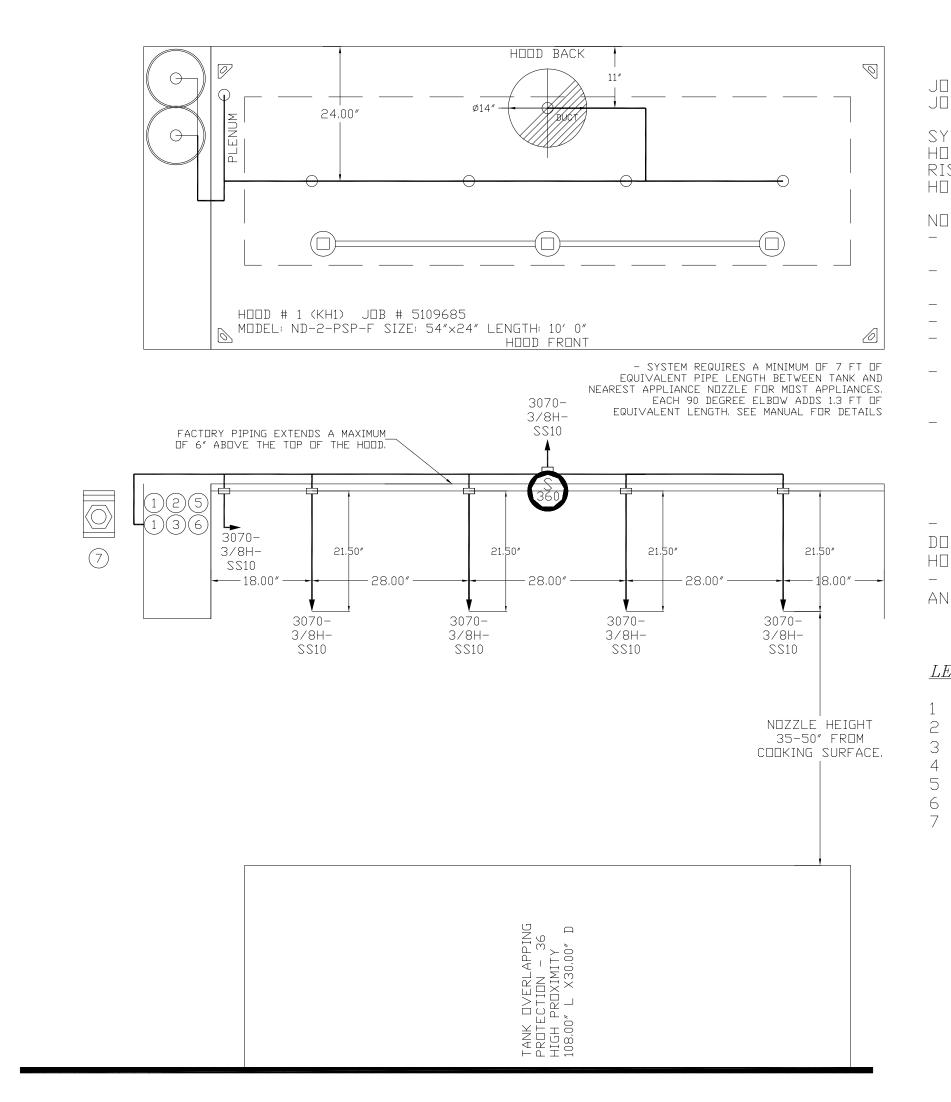
REVISIONS:

DATE OF ISSUE: 10.20.2021

MA PROJECT NO: PROJECT PHASE:

DRAWN BY:

MECHANICAL HOOD SPECIFICATIONS



JOB #: 5109685.

JOB NAME: ASHLAND CITY C-STORE.

SYSTEM SIZE: TANK-SP-2 TOTAL FP REQUIRED: 24. HOOD # 1 10' 0.00" LONG × 54" WIDE × 24" HIGH. RISER # 1 SIZE: 14" DIA.

HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

- FIELD PIPE DROPS AS SHOWN

- PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS. - RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING,
- SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION. IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE. FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.
- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH,

- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

<u>LEGEND - FIRE CABINET TANK SYSTEM</u>

4 GALLON TANK.

- PRIMARY ACTUATOR RELEASE. SECONDARY ACTUATOR RELEASE.
- PRESSURE SUPERVISION SWITCH.
- PRIMARY HOSE ASSEMBLY.
- SECONDARY HOSE ASSEMBLY. REMOTE MANUAL ACTUATION DEVICE.

GAS VALVES AND STRAINERS GAS VALVE SIZING GAS VALVE DIMENSIONS INSTALLATION PART NUMBERS TYPE SIZE VOLTAGE MIN. INLET MAX. INLET FLOW AT 1 IN.W.C. FLOW AT 1 IN.W.C. DIM "A" DIM "B" DIM "C" DIM "D" DIM "F" DIM "G" DIM "G" GAS VALVE | STRAINER PART | ORIENTATION PART NUMBER NUMBER VALVE/STRAINER KIT GAS VALVE FOR FS#1 ELECTRICAL 2" 120 VAC 0 PSI 1,908,048 8214280 7-5/8" | 6-3/8" | 7-1/4" | 7-13-16" | 15-5/8" | 13-15/16" | HORIZONTAL/ | 4417K68 (SC)EGVA2 (0 IN.W.C.) (138 IN.W.C.) BTU/HR BTU/HR VERTICAL

> ALL GAS VALVES/STRAINERS PROPER CLEARANCE MUST BE PROVIDED IN ORDER TO SERVICE THE STRAINERS A MINIMUM OF 4" CLEARANCE DISTANCE MUST BE OF NATURAL GAS = 0.64, SPECIFIC GRAVITY OF LP = 1.52.

CALCULATIONS TO CALCULATE GAS FLOW FOR OTHER THAN 1 IN.W.C. PRESSURE DROP NEW BTU/HR = (BTU/HR AT 1 IN.W.C. PRESSURE DROP) X NEW PRESSURE DROP $^{0.5}$ PROVIDED AT THE BASE OF THE STRAINER CUSTOMER MUST VERIFY
BTU CONSUMPTION AS WELL AS PRESSURE RATING SPECIFIC GRAVITY
NEW BTU/HR AT 0.64) X (0.64 / NEW SPECIFIC GRAVITY)

NEW BTU/HR AT 0.64) X (0.64 / NEW SPECIFIC GRAVITY)

—DIM "F"— ELECTRIC GAS VALVE.

DATE: 9/28/2021 DWG.#: FS-2-5109685 DRAWN DDR-44 SCALE: 3/4" = 1'-0" FIRE SYSTEM

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EMAIL: reg44@econair.com

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DATE OF ISSUE: 10.20.2021

PROJECT PHASE:

DRAWN BY:

MA PROJECT NO:

MECHANICAL HOOD SPECIFICATIONS

Your Title

TANK FIRE SUPPRESSION SYSTEM SPECIFICATIONS TAG: TANK Fire Suppression

PART 1 - GENERAL

1.1 SUMMARY

A. TANK Fire Suppression is a pre-engineered, stored-pressure wet chemical solution extinguishing system.

1.2 SUBMITTALS

- A. The manufacturer assumes no liability for the use or results of use from this document. Specifications are to be reviewed by the engineer to confirm the requirements of the project and meet Federal, State, and Local codes.
- B. As the manufacturer continues product development, it reserves the right to change design and specifications without notice.

1.3 QUALITY ASSURANCE

- A. TANK Fire Suppression System shall be UL & ULC listed in accordance with UL300, UL1254, ULCORD-C1254.6.
- B. Microprocessor-based control board shall be ETL Listed to UL Standard 864 and CAN/ ULC-S527-11.
- C. TANK Fire Suppression System intended for installation and for use in accordance with the National Fire Protection Association Standards:
- 1. Wet Chemical Extinguishing Systems, NFPA 17A
- 2. National Electrical Code, NFPA 70
- 3. National Fire Alarm & Signaling Code, NFPA 72
- D. New York City and FDNY approved under COA# 5870.
- E. California State Fire Marshal (CFSM), Listing No. 7085-2199:0501.

1.4 Warranty

- A. All units shall be provided with the following standard warranties:
- 1. TANK Fire Suppression System is warranted to be free from defects in materials and workmanship, under normal use and service, for a period of 60-months from date of shipment.
- B. Warranty does not cover consumable products such as batteries, nitrogen, and nozzle caps.
- C. The manufacturer shall not be liable for incidental and consequential losses and damages potentially attributable to malfunctioning equipment. Should any part of the equipment prove to be defective in material or workmanship within the 60-month warranty period, upon examination by the manufacturer, such part will be repaired or replaced by manufacturer at no charge. The buyer shall pay all labor costs incurred in connection with such repair or replacement. Equipment shall not be returned without manufacturer's prior authorization, and all returned equipment shall be shipped by the buyer, freight prepaid to a destination determined by the manufacturer.
- D. Refer to Manufacturer's Operation, Installation, and Maintenance (DIM) Manual for detailed descriptions of what is/is not covered and contact information for warranty claims.

PART 2 - PRODUCTS

2.1 GENERAL

A. A pre-engineered, fixed pipe, automatic wet chemical agent fire suppression system for protection of all hazard areas associated with cooking operations, including exhaust hoods, plenums, ductwork, and cooking appliances.

2,2 COMPONENTS

- A. Exhaust hood fire system components to be factory installed.
- B. Cylinder and Valve Assembly

- 1. The cylinders shall have a tin-nickel alloy plated brass valve with pressure gauge.
- 2. Wet chemical agent shall be contained in one or more stored pressure DOT/TC rated steel cylinder and valve assemblies.
- 3. Each cylinder is factory-filled with liquid fire suppressant and pressurized to 200 PSIG at 70°F.

C. Distribution Nozzles

- 1. Nozzles shall be located to protect the exhaust ducts, plenums, and all cooking appliances requiring protection.
- 2. All nozzles shall be equipped with strainers to prevent foreign matter in the agent distribution piping or tubing from clogging the nozzle orifice. All nozzles shall be equipped with foil seals to prevent entry of grease and foreign matter into the nozzles and piping. The foil seals are to be ruptured by pressure at system discharge.
- 3. All nozzles shall incorporate a ring identification system to easily identify nozzle types. Rings are to be machined into the nozzle body by the manufacturer.

D. Distribution System

- 1. The distribution system shall consist of Schedule 40 black iron, chrome-plated or stainless-steel pipe and fittings. All exposed piping and fittings must be chrome-plated or stainless steel.
- 2. Fittings shall be minimum class 150. Galvanized fittings shall not be used.

E. Suppression System

- 1. The system control equipment shall be capable of all functions associated with automatically and manually discharging the wet chemical agent from all cylinder and valve assemblies, including automatic shutdown of the heat source or fuel and electrical power to all protected areas upon system discharge.
- 2. Liquid Fire Suppressant shall be Aqueous Potassium Carbonate
- 3. All mechanical components of the actuator kit shall be enclosed.
- 4. The actuator kit shall be capable of automatic or manual activation means.
- 5. Supervisory Pressure Switch added to monitor operating system pressure,
- 6. For manual activation, an electrically operated manual release shall be used to actuate the system manually.
- 7. For automatic activation, the system will be activated by a Firestat (heat) detector.

F. Electrical

- 1. Electrical Division to provide shunt trip breakers at main power panel, or disconnects, as designated by the Electrical Engineer; interconnection provided at hood control panel for the signal to shut down all electricity in and under the exhaust hood. Shunt trips/disconnects to accomplish shut off of electricity in the event of fire system activation by others.
- 2. Printed circuit board with microprocessor-based controller that provides all the necessary monitoring, timing, and supervision functions required for the reliable operation of the fire system.
- 3. Independent supervised loops incorporate redundancy and fault detection.
- 4. Real-time cloud-based monitoring connection provided with system by ownership.
- 5. Primary power supply, with battery backup for power loss. 6. All wiring must be in accordance to NFPA 70 and the Authority
- 7. Electric gas valve provided for equipment below exhaust hood. Coordinate size and installation with Plumbing Division.
- 8. All wiring is to be in accordance with the applicable manufacturer's instructions for the fire alarm control panel, gas shut-off valve, manual reset relay, and contractor supplied shut-off devices.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions under which the system is installed. Do not proceed with work until unsatisfactory conditions have been corrected in manner acceptable to Installer.

3.2 APPLICATION

A. Wet chemical-based fire suppression system for use in commercial kitchens. It can be mounted in the integral cabinet located at the end of the hood or offered as a wall mount package.

3.3 INSTALLATION

- A. As part of this item, provide wall mounted type K handheld portable fire extinguisher, placard, and mounting bracket as required in the immediate vicinity of each cooking area, per NFPA-96 and NFPA-10. Additional fire extinguishers as required in the kitchen area are to be specified by the Architect and provided by the General Contractor.
- B. Install in accordance with manufacturer's instructions, drawings, written specifications, manufacturer's installation manual, and all applicable building codes.
- C. Six-month and twelve-month inspections, servicing, and replacement of components as per NFPA 96 to be provided by the General Contractor or Owner.



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DATE: 9/28/2021 DWG.#: FS-3-5109685

DRAWN DDR-44 SCALE: 3/4" = 1'-0"

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Having Jurisdiction (AHJ).

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FIRE SYSTEM **DATE OF ISSUE:**

SHEET NO.

MECHANICAL HOOD SPECIFICATIONS

10.20.2021

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- Page 58 -

EXHAUST FAN INFORMATION - JOB#5109685

| FAN UNIT NO | TAG | QTY | FAN UNIT MODEL # | MANUFACTURER | CFM | ESP | RPM | MOTOR ENCL | HP | BHP | PHASE | VOLT | FLA | DISCHARGE VELOCITY | WEIGHT (LBS) | SONES |
|-------------------|------|-----|------------------|--------------|------|-------|------|---------------|-------|--------|-------|------|-----|-----------------------|-----------------|-------|
| 1 | KEF1 | 1 | EADU180H | ECON-AIR | 2000 | 1.200 | 1076 | ODP,PREMIUM | 1,500 | 0.8370 | 3 | 208 | 6,6 | 462 FPM | 182 | 12.6 |

MUA FAN INFORMATION - JOB#5109685

| | FAN UNIT | TAG | QTY | FAN UNIT MODEL # | BLOWER | HOUSING | MIN CEM | DESIGN CFM | ESP | RPM | MOTOR ENCL | HP | BHP | PHASE | VOLT | FLA | MCA | МПСР | WEIGHT (LBS) | SONE: |
|---|-------------|------|-----|------------------|------------|----------|------------|---------------|-------|------|---------------|-------|--------|-------|------|-----|------|------|-----------------|-------|
| - | N□ | | | | | | CITI | CITI | | | LINGL | | | | | | | | (LD3) | |
| | 2 | MAU1 | 1 | EA1-D.500-15D | 15MF-1-MOD | A1-D.500 | 1000 | 1600 | 0,500 | 1772 | ODP,PREMIUM | 1.500 | 0.8580 | 3 | 208 | 4.4 | 5.5A | 15A | 478 | 16.7 |

GAS FIRED MAKE-UP AIR UNIT(S)

| FAN UNIT NO | TAG | INPUT BTUs | OUTPUT BTUs | TEMP RISE | REQUIRED INPUT GAS PRESSURE | GAS TYPE | BURNER EFFICIENCY(%) |
|-------------------|------|---------------|----------------|-----------|--------------------------------|----------|-------------------------|
| 2 | MAU1 | 103779 | 95477 | 57°F | 7 IN. W.C. – 14 IN. W.C. | NATURAL | 92 |

FAN OPTIONS

| UNIT ND | TAG | QTY | DESCRIPTION | | | | | | |
|------------|-------|-----|---|--|--|--|--|--|--|
| | KEF1 | 1 | GREASE BOX. | | | | | | |
| 1 | | 1 | EXHAUST FAN HEAT BAFFLE. | | | | | | |
| 1 | | 1 | FAN BASE CERAMIC SEAL - INSTALLED AT PLANT - FOR GREASE DUCTS. | | | | | | |
| | | 1 | 2 YEAR PARTS WARRANTY. | | | | | | |
| | | 1 | INLET PRESSURE GAUGE, 0-35". | | | | | | |
| | | 1 | MANIFOLD PRESSURE GAUGE, -5 TO 15" WC. | | | | | | |
| 2 | MAU1 | 1 | 1 MOTORIZED BACKDRAFT DAMPER FOR A1-D HOUSING, MEETS AMCA CLASS 1A RATING. | | | | | | |
| | TIMOI | 1 | SEPARATE 120V WIRING PACKAGE (REQUIRED AND USED ONLY FOR DCV OR PREWIRE WITH VFD) - THREE PHASE ONLY. | | | | | | |
| | | 1 | 2 YEAR PARTS WARRANTY. | | | | | | |

FAN ACCESSORIES

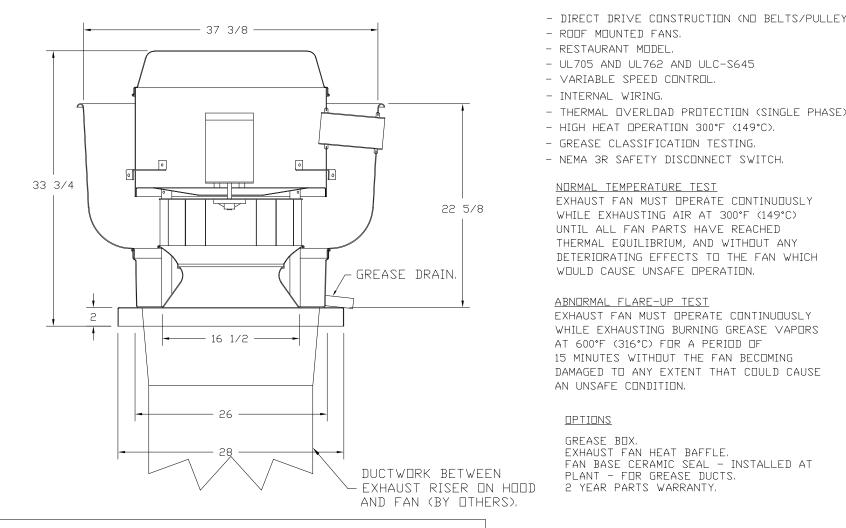
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|------------|------------|---------------|-------------------|--|-------------------|-------------------|---------------------|---------------|
| FAN | TAG | | EXHAUST | | | SUPF | PLY | |
| UNIT NO | TAU | GREASE CUP | GRAVITY DAMPER | | SIDE DISCHARGE | GRAVITY DAMPER | MOTORIZED DAMPER | WALL MOUNT |
| 1 | KEF1 | YES | | | | | | |
| 2 | MAU1 | | | | | | YES | |

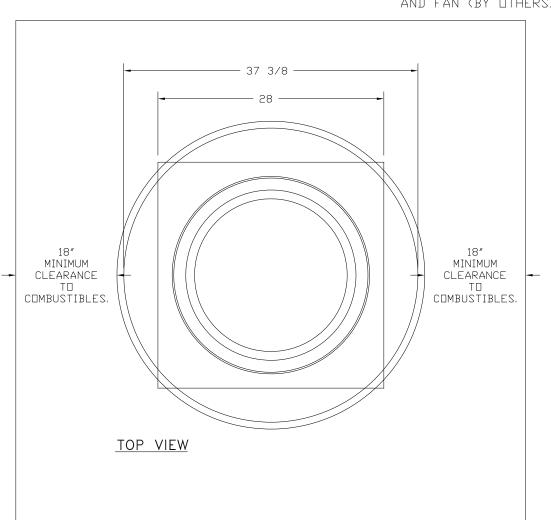
CURB ASSEMBLIES

| ND | □N FAN | TAG | WEIGHT | ITEM | SIZE |
|----|-----------|------|--------|------|--|
| 1 | # 1 | KEF1 | 34 LBS | CURB | 26,500"W X 26,500"L X 26.000"H 4,000:12,000 PITCH ALONG LENGTH, RIGHT VENTED HINGED. |
| 2 | # 2 | MAU1 | 65 LBS | CURB | 21.000"W X 71.000"L X 20.000"H 4.000:12.000 PITCH ALONG WIDTH, RIGHT INSULATED. |

— EXHAUST FAN. HIGH TEMP GASKET IS USED — TO SEAL THE FAN TO THE TRANSITION PLATE. — THE INNER DUCT IS FULLY WELDED TO THE TRANSITION PLATE, ALL WELDS ARE DYE TESTED. VENTED CURB Roof termination.— LISTED GREASE DUCT.

<u>FAN #1 EADU180H - EXHAUST FAN (KEF1)</u>





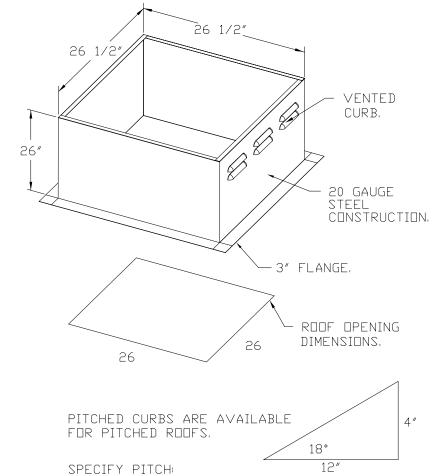
<u>FEATURES:</u>

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS). - ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645 - VARIABLE SPEED CONTROL.
- INTERNAL WIRING, - THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C). - GREASE CLASSIFICATION TESTING. - NEMA 3R SAFETY DISCONNECT SWITCH.
- NORMAL TEMPERATURE TEST EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY

DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION, <u>ABNORMAL FLARE-UP TEST</u> EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING

DAMAGED TO ANY EXTENT THAT COULD CAUSE

AN UNSAFE CONDITION,

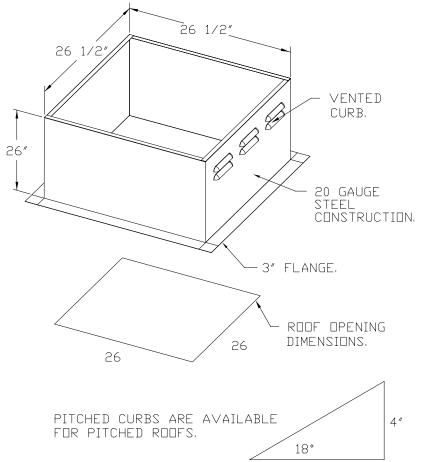


EXAMPLE: 7/12 PITCH = 30° SLOPE.

JOB 5109685 - Ashla...

SHIP DATE 9/28/2021 MODEL EADU180H

Exhaust Fan Wiring DRAWING NUMBER EXH5109685-1





ASHLAND

DATE: 9/28/2021

DRAWN DDR-44

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

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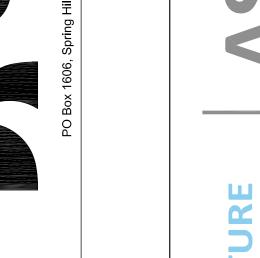
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PROJECT PHASE:

DATE OF ISSUE:

MECHANICAL HOOD SPECIFICATIONS

CUSTOMER APPROVAL TO MANUFACTURE:

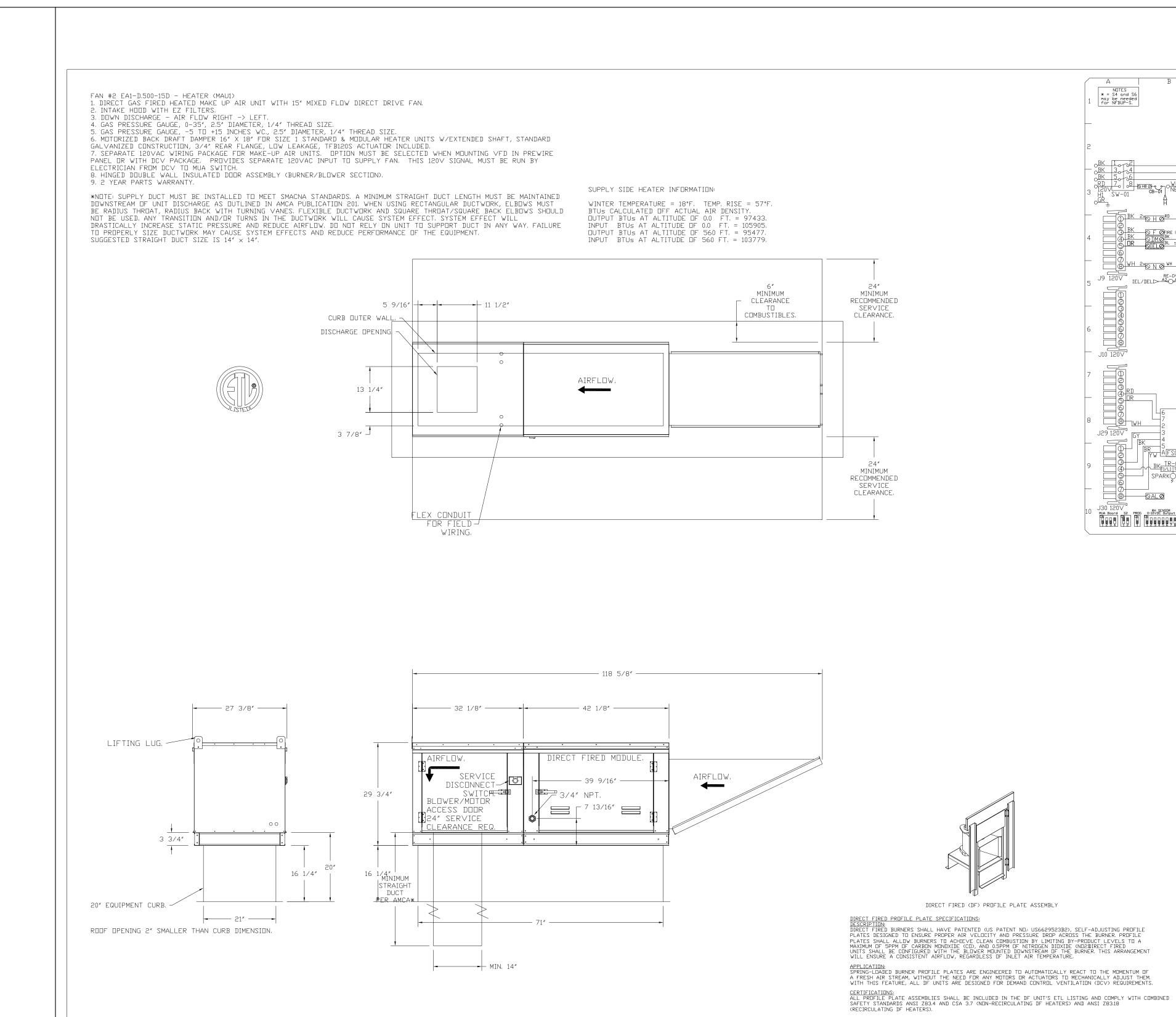
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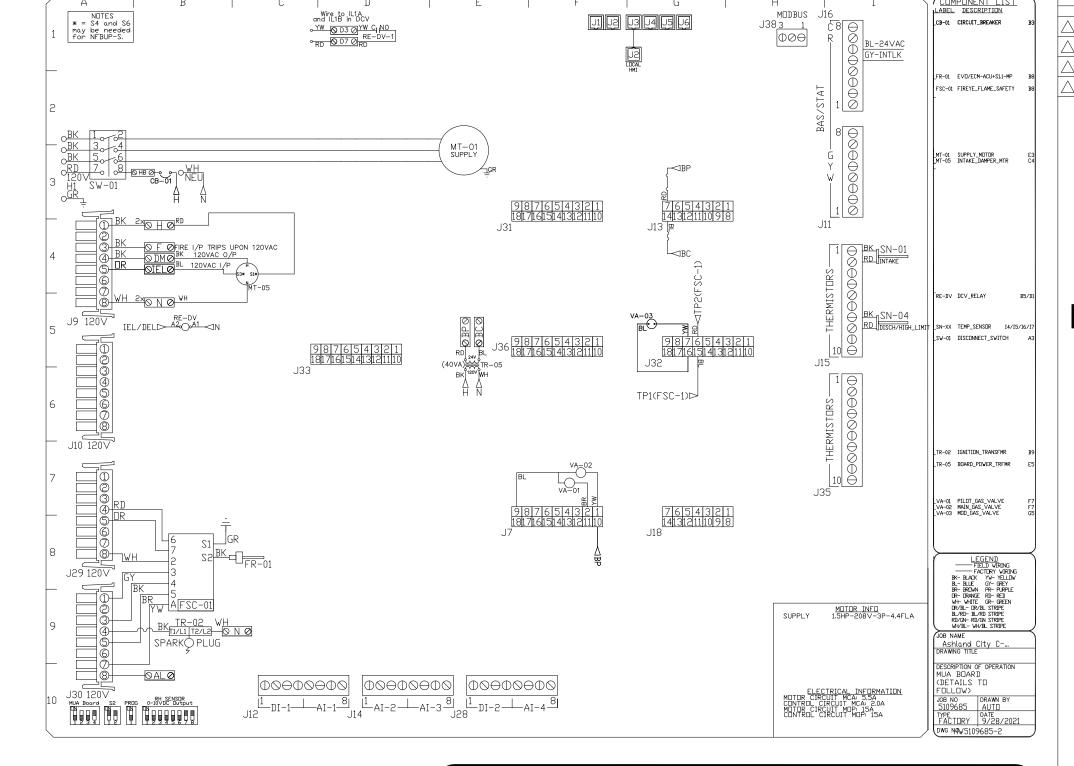
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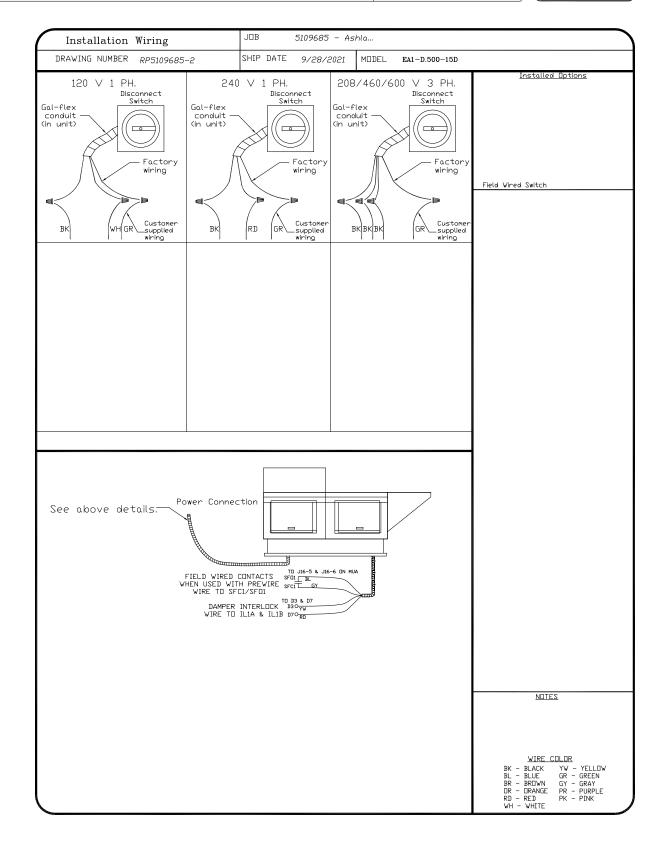
Installed Options → MT-01 Fan Motor SW-01 Main disconnect switch [3] <u>MOTOR_INFO</u> XHAUST 1.5HP-208V-3P-6.6FLA ELECTRICAL INFORMATION MOTOR/CTRL MCA: 8.3A MOTOR/CTRL MOP: 15A

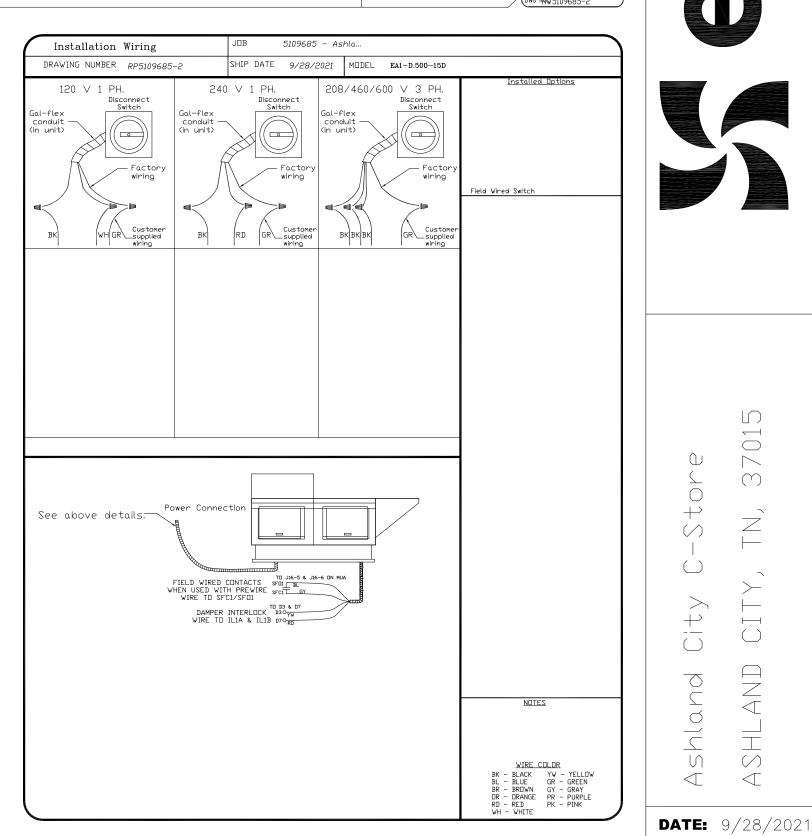
CONSULTANT

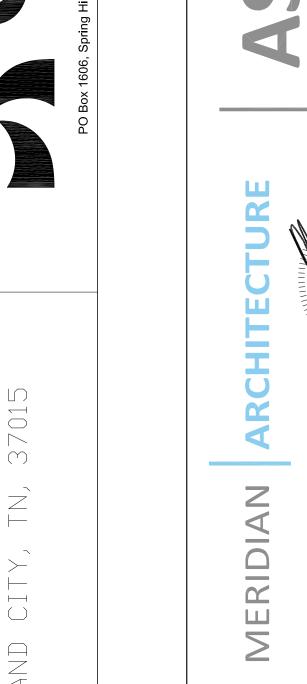












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REVISIONS: DESCRIPTION

DATE OF ISSUE: 10.20.2021 MA PROJECT NO: 0214-21

PROJECT PHASE:

DRAWN BY:

MECHANICAL HOOD SPECIFICATIONS

ENGINEERING 2 International Plaza Suite 410 Nashville, TN 37217 Phone: 615-891-4565 | Fax: 615-250-0580

Project #04321

CONSULTANT

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DWG.#: FAN-2-5109685

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GENERAL CONSTRUCTION:
-PROFILE PLATES SHALL BE FORMED FROM G90 GALVANIZED STEEL.
-PROFILE PLATES SHALL VARY IN SIZE PER UNIT.
-PROFILE PLATES SHALL BE MOUNTED ALONG THE SAME PLANE AS THE DISCHARGE OF THE BURNER.
-DESIGN SHALL INCORPORATE PROPERLY TORQUED, PERMANENTLY MOUNTED SPRING HINGES.
-SPRING HINGES SHALL BE MADE FROM PLATED STEEL.

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- Page 60 -

FACTORY FABRICATED PACKAGED HEATING AND COOLING MAKE-UP AIR UNITS SPECIFICATIONS

TAG: Modular Direct-Fired Heater

PART 1 - GENERAL 1.1 SUMMARY

A. This section includes modular packaged heating and cooling units capable of supplying up to 100 percent outdoor air.

1.2 SUBMITTALS

- A. The manufacturer assumes no liability for the use or results of use of this document. This specification is to be reviewed by the engineer to confirm requirements of the project and building codes are met.
- B. As the manufacturer continues product development, it reserves the right to change design and specifications without notice.

1.3 QUALITY ASSURANCE

- A. ETL-Listed to the American National Standard/CSA Standard for Gas Unit Heaters And Gas-Fired Duct Furnaces ANSI Z83,4, CSA 3,7.
- B. The Safety Control Board is ETL-Listed to standards UL 60730-2-9, UL 60730-1; CSA E60730-1, and CSA E60730-2-9.

1.4 WARRANTY

- A. All units are provided with the following 2-year standard warranty. B. This warranty shall not apply if:
- 1. The equipment is not installed by a qualified installer per the
- manufacturer's installation instructions shipped with the product. 2. The equipment is not installed in accordance with Federal, State,
- Local codes and regulations. 3. The equipment is misused, neglected, or not maintained per the
- manufacturer's maintenance instructions. 4. The equipment is not operated within its published capacity.
- 5. The invoice is not paid within the terms of the sales agreement.
- C. The manufacturer shall not be liable for incidental and consequential losses and damages potentially attributable to malfunctioning equipment. Should any part of the equipment prove to be defective in material or workmanship within the 2-year warranty period, upon examination by the manufacturer, such part will be repaired or replaced by the manufacturer at no charge. The buyer shall pay all labor costs incurred in connection with such repair or replacement. Equipment shall not be returned without manufacturer's prior authorization, and all returned equipment shall be shipped by the buyer, freight prepaid to a destination determined by the manufacturer.

PART 2 - PRODUCTS

2.1 GENERAL ASSEMBLY

A. Unit(s) shall be factory assembled, tested and shipped as a complete packaged assembly, for indoor or outdoor mounting, consisting of the following specifications, deliver all capacities scheduled, and conform to design indicated herein. Alternate layouts or dimensional changes will not be accepted.

2.2 CABINET

- A. Unit(s) shall be constructed of minimum 20-gauge G-90 galvanized steel riveted together via structural pop-rivets. All metal shall be CNC bent for precise assembly.
- 1. Base Construction: The base shall be constructed of galvanized steel for improved rigidity. Base shall be structurally reinforced to accommodate the blower assembly and burner.
- 2. Rigging Provisions: The unit shall have a structural base constructed of minimum 14ga. G-90 galvanized steel, and include lifting points on all four sides.
- 3. Roof Construction: Roof shall be pitched to allow for proper drainage.
- 4. Exterior Wall Construction: All exterior walls shall consist of insulated galvanized steel construction.
- 5. Service Access Doors: All door jambs shall be gasketed around their perimeter. Doors may be mounted via spring actuated, stainless steel hinges with stainless steel rivets, and self-compressing stainless steel pad lockable latches or through removable sliding panels.
- 6. Each compartment shall have removable access panels to allow for ease of service and maintainability. Electrical cabinet doors shall be outfitted with schematic/manual pouches formed into the door, along with wiring diagram attached to the indoor of the door from the factory.
- B. Entire interior and exterior casing shall be constructed of minimum 20-gauge G-90 galvanized steel with no painting, and shall have undergone a salt spray corrosion test as per ASTM B 117.
- C. An observation port shall be located on the exterior of the unit for observation of the main flame and pilot flame. All controls, gas valves, modulating controls and electrical components shall be mounted within the burner vestibule. The burner vestibule shall be an integral part of the unit and not extend outside the exterior casing of the unit and not exposed to the main air stream.

2.3 AIRFLOW CONFIGURATIONS

- A. Unit shall be configurable for down (vertical) discharge through unit.
- B. Unit intake airflow configuration shall be through use of a fresh/outdoor damper.
- 1. Damper: Manufacturer shall provide and install on unit, when possible, a two-position, motor-operated damper with internal end switch to energize the blower-starter circuit, when damper is 80%

- open. Blades shall be a maximum of 6" wide 16-gauge G-90 galvanized steel and shall be made to guarantee the absence of noticeable vibration at design air velocities. Damper blades are to be mounted on friction-free synthetic bearings. Damper edges shall have PVC coated polyester fabric mechanically locked into blade edge. Jamb seals used are flexible metal, compression type. Damper shall exceed AMCA Class 1A standard for low leakage. Damper assembly shall be a single assembly, and outfitted with an integral bird screen and louver/gutter system to divert any drainage through the base of the unit —intake air hood not
- 2. Discharge Diffuser: Shall be constructed of G-90 galvanized steel with horizontal and vertical blades capable of four-way diffusion.
- 3. Actuator: A single direct drive damper actuator shall be used with spring return to ensure that the outdoor air section opens when not powered.

2.4 SUPPLY AIR BLOWER AND MOTOR

A. All supply fans shall be:

- 1. Direct Drive: Blower assembly shall consist of a centrifugal backward inclined, non- overloading wheel secured directly to a heavy-duty, ball bearing type motor via two set screws. The motor and wheel assembly shall be mounted to a heavy gauge galvanized steel frame. The motor shall be controlled by a variable frequency drive, allowing for variable airflow without the need of belts and pulleys.
- B. Blower Motor: Motor shall be a premium efficiency motor available as: 1. Open Drip Proof (ODP) motor driven by a Variable Frequency Drive.
- C. Fans to be selected at or near efficiency peak. Check fan curves provided with job.
- D. Blower and motor assembly shall be dynamically balanced. The entire blower and motor assembly shall be mounted on rubber vibration isolators. Wheels balanced as per AMCA 204-96; Balance Quality and Vibration Levels for fans.

2.5 SHAFTS AND BEARINGS

A. Shafts shall be precision ground and polished. Heavy duty, pre-lubricated bearings designed for, and individually tested, specifically for, use in air handling applications.

2,6 HEATING SYSTEM

- A. The gas burner shall be a direct-fired, pull-through type, using natural gas at an inlet-supply pressure to the unit of 7"w.c. minimum
- B. Burner design shall be capable of using natural gas. Burner ignition shall be of the direct-spark design with remote flame sensing at the pilot assembly to detect the presence of flame in the burner.
- C. Direct-sparking sequence shall last through the complete duration of the trial for ignition period for guaranteed light-off. Each burner ignition module shall have LED indicators for troubleshooting and a set of exposed prongs for testing flame indication signal,
- D. Unit should include self-adjusting burner profile plates, which ensure proper air velocity and pressure drop across the burner for clean combustion. Spring-loaded profile plates should react to the momentum of the fresh air stream. No motors or actuators are needed to drive them, nor should they need to be manually set to a specific position. Units should be capable of variable air volume applications.

E. Each furnace shall have:

- 1. The burner shall have non-clogging, stainless steel combustion baffles attached to a ductile aluminum gas-supply section with no moving parts to wear out or fail. The burner shall be capable of 92% combustion efficiency with a maximum turndown ratio of up to
- 2. Stainless steel Quick Seal Connection for gas connection.
- 3. Manifold and Input gas pressure gauges.
- 4. Inlet pressure gauge installed on the gas manifold (0-35"wc).
- 5. Inlet pressure gauge installed on the gas manifold (-5 to 15"wc).

2.7 FILTERS

- A. Provide filters as part of unit. All filters shall be furnished and installed to meet the performance requirements set forth in the schedule and as specified under another section of this work.
- B. The filters shall be (2") thick, aluminum mesh coated with super-filter adhesive, aluminum mesh with polyester foam or pleated throw away. Aluminum-mesh filters shall have aluminum frames with media to be layers of slit and expanded aluminum, varying in pattern to obtain maximum depth loading. Washable 2" filters shall be enclosed in two- piece, die-cut frame with diagonal supports. Frame shall be constructed of heavy-duty beverage board. Filter media is supported on the air leaving side by a metal grid.
- C. All filters shall be installed on tracks for easy removal from the
- D. Shall be either insulated or non-insulated constructed of G-90 galvanized steel with filters supported by internal slides and with removable access panels.

2.8 ELECTRICAL

- A. All controls shall be pre-wired and housed in an insulated electrical cabinet within the unit to protect against risk of condensation.
- B. All direct fired and cooling only units shall be provided with single point electrical connection.
- C. Unit shall be provided with a door safety switch that de-energizes the supply fan when the door is opened.
- D. Units shall be provided with a factory mounted averaging intake air

temperature sensor to allow for accurate intake temperature reading regardless of how the DA/RA dampers are positioned.

- E. The electrical cabinet shall be outfitted with the following:
- 1. Color wiring schematics, laminated to the interior wall of the cabinet doors.
- 2. Factory mounted disconnect with unit bottom knockouts.
- 3. A LED backlit, LCD Human-Machine Interface (HMI) shall be mounted within the unit's control cabinet to allow for all set points configuration and refrigeration system monitoring at the unit.
- 4. Up to 4 additional space mounted HMIs available. Additional HMIs shall allow for full programming capabilities and are outfitted with integral temperature and humidity sensors. Additional HMIs shall be capable of being individually averaged for space temperature/humidity readings. All HMIs shall be wired using standard CAT5/6 cables.

2,9 CONTROLS

- A. Unit shall be outfitted with a control board to allow for full control of the entire unit.
- B. Provide onboard air flow switch located on MUA control board to sense air flow.
- C. All unit controls shall be compatible with BACnet and LonWorks based building management systems.
- D. All units shall be outfitted with CASLink cloud based monitoring, which monitors every point of operation. Provides configurable automated fault alert e-mails, and remote control capabilities.
- E. Integrated cellular module to provide remote connection to monitoring services to view both real time and historical unit operation. Data shall be stored a minimum of 3 years on the cloud. Data sample rate shall be a maximum of 60 seconds.

F. Temperature Control System:

1. Discharge Temp Control (Heating) - Unit modulates the burner flame (current supply in the case of electric heating) to accurately maintain the desired discharge temperature set point and compensate for fluctuations in entering air temperature, air volume and % of DA using heating PID controls.

G. Activation Controls:

- 1. Activate Based on Intake (Heating) Unit will activate heating when the intake temperature drops below the desired set point.
- 2. Activate Based on Space (Heating) Unit will activate heating when the space temperature drops below the desired set point.
- 3. Activate Based on Both (Heating) Unit will activate heating when the space AND intake temperature drop below the desired set
- 4. Activate Based on Either (Heating) Unit will activate heating when the space OR intake temperature drops below the desired
- 5. Activate Based on Stat (Heating) Unit will activate heating when the space thermostat sends a 24V signal to W and G on the main control board. Unit will modulate to maintain a constant discharge heat set point,

2.10 ROOF CURBS

- A. Unit shall be factory assembled, and constructed of 18GA galvanized
- B. Curb shall be fully insulated with 1"acoustical and thermal insulation.
- C. Curb shall be factory outfitted with duct support hangers.

2.11 VARIABLE FREQUENCY DRIVES

- A. Provide Variable Frequency Drive for speed control on all non-ECM direct drive supply fans.
- B. All VFDs shall provide the following inherent protections:

1. Phase protection

- 2. Brownout protection
- 3. Overload/Overheat protection
- 4. Soft starts to protect bearings/hardware
- 5. Low & High voltage & over-torque protections

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine all areas and conditions under which packaged units are to be installed. Do not proceed with work until unsatisfactory conditions have been corrected in a manner acceptable to Installer 3,2 INSTALLATION

A. Install units in accordance with manufacturer's instructions, drawings, written specifications, manufacturer's installation manual and all applicable building codes.

3.3 CONNECTIONS

- A. Piping installation requirements are specified in other Division 23 Sections. Drawings indicate the general arrangement of piping, fittings, and specialties. Install piping to allow service and maintenance.
- B. Duct installation requirements are specified in other Division 23 Sections. Drawings indicate the general arrangement of ducts.
- C. Electrical connections conform to applicable requirements in Division 26 Sections,

3,4 SYSTEM START-UP

A. System start-up is performed by a factory-trained Service Technician.





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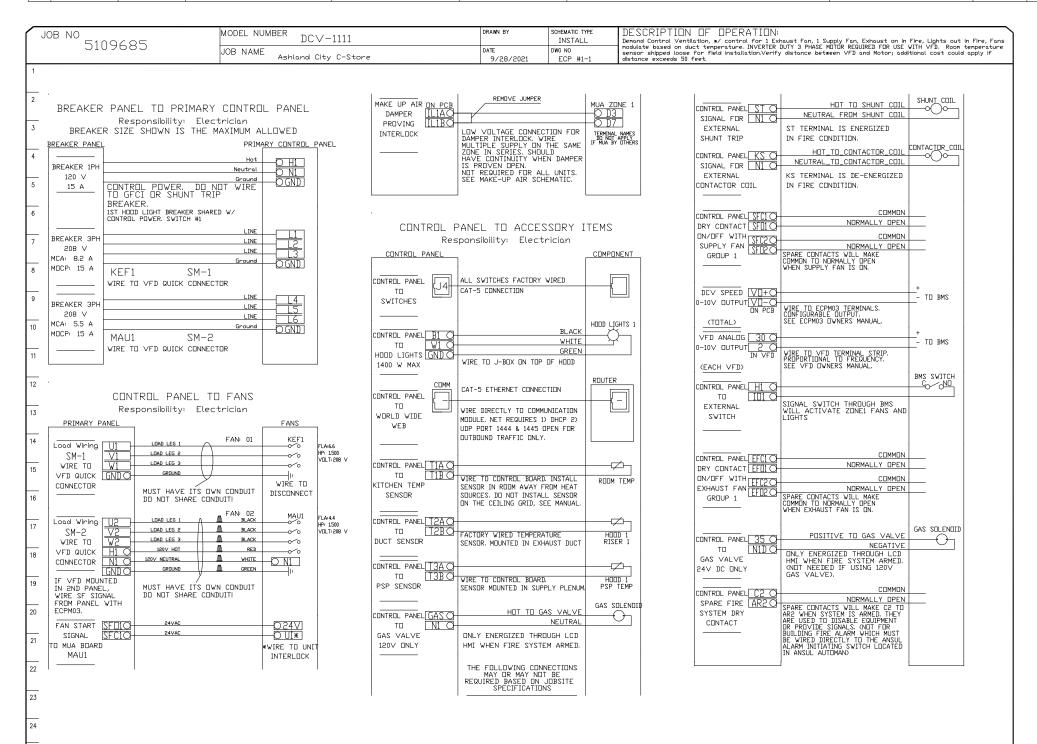
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DRAWN BY:

MECHANICAL HOOD

SPECIFICATIONS

- Page 61 -



| IOD NO | MODEL NUMBER DOV 4444 | DRAWN BY | SCHEMATIC TYPE | DESCRIPTION OF OPERATION: |
|---|--|---|------------------------|--|
| JOB NO 5109685 | JOB NAME | DATE | INSTALL DWG NO | Denand Control Ventilation, w/ control for 1 Exhaust Fan, 1 Supply Fan, Exhaust on in Fire, Lights out in Fire, Fans modulate based on duct temperature. INVERTER DUTY 3 PHASE MUTUR REQUIRED FOR USE WITH VFD. Room temperature sensor shipped loose for field installation.Verify distance between VFD and Motory additional cost could apply if |
| | Ashland City C-Store | 9/28/2021 | ECP #1-2 | sensor shipped loose for field installation. Verify distance between VFD and Motor; additional cost could apply if distance exceeds 50 feet. |
| | | | | |
| 2 . | | | | |
| CONTROL PANEL TO Responsibility: ALAR | CONTOR DANCE | | BLACK CA | ER CORE |
| 3 CONTROL PANEL | TD [| CC O WIRE TO LIKE TERMINA | SHIELD CD | |
| 4 | BUILDING ALARM PANEL | WIRE TO LIKE TERMINA CORE PANELS THAT MUS TOGETHER, SET MASTER DIP SWITCHES PER FIR | ST ACTIVATE & SLAVE | |
| CONTROL PANEL J9 | FIRE INPUT | MANUAL. | E 3131EM | |
| 5 SIGNAL FOR BUILDING AL1 | CONTROL PANEL TO EXTRA | PS O | PS-i | 2 <u> </u> |
| | | | ALL OTHER | |
| CONDITION. | BUILDING | PARALLEL. | | |
| 7 CONTROL PANEL SIGNAL FOR | COMMON CO | | | |
| BUILDING TBC O | RMALLY CLOSED O | | | |
| ALARM MAKE TBC TO TBL CONDITION. | | | | |
| 9 | | | | |
| CONTROL PANEL TO | FIRE SYSTEM | | | |
| Responsibility: CERTIF | | | | |
| 11 CONTROL PANEL | COMPONENT FIRE STATS | | | |
| 12 21 00 100 100 100 100 100 100 100 100 | | | | |
| | tory and field BK WH | | | |
| MOUNTED FIRE HIGH TEMP WIRE (| sors possible. | | | |
| 14 STAT(S) with a hood. All | wiring in contact | | | |
| be PN 6320UL, E | Belden or similar. Fire Stat | | | |
| 15 | PULL STATION | | | |
| 101 102 | MS-01 | | | |
| MANUAL ACTUATION LE SYSTEM LOOP. Multiple manual actu | DDP / REMOTE FIRE Micro SW | | | |
| 17 Multiple manual actur A Plug Jumper with to pin4 and from pin2: | wires from pini to AUX-01 AUX-01 | | | |
| TO FIRE Microswitch MS-01 is Microswitch MS-01 is | oners and | | | |
| STATION Auxiliary Interlock (| | | | |
| 19 panel(s) In each man for simultaneous ac system drawings for | tivation. See Fire | | | |
| 20 10300 | Monual Actuation Device | | | |
| | | | | |
| 21 ECPM03 | CORE PCB | | | |
| | CES MAY BE INLINE. [JS] | | | |
| MASTER FS PLACE END OF LIN BOARD. IN EMPTY JACK, PY UNLESS VFD, PC | N: EDL120A FDU 120A FIGURE | | | |
| 23 OR OTHER COMPO | | | | |
| 24 | | | | |
| _ | | | | |
| L | | | | |

Terminal Blocks for wired connection

CASlink Monitor and Control

Hood control panel to support communications to cloud-based Building Management System.

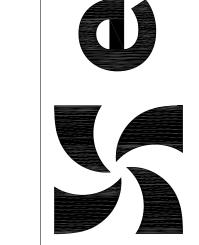
- Hood Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the points list.

- Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list. Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building

MONITORING AND CONTROL POINTS LIST

| DCV Packages | Function | SC Packages | Function |
|-----------------------------------|-------------------|-----------------------------------|-------------------|
| Room Temperature | MONITOR | Room Temperature(s) | MONITOR |
| Duct Temperature(s) | MONITOR | Duct Temperature(s) | MONITOR |
| MUA Discharge Temperature | MONITOR | MUA DIscharge Temperature | MONITOR |
| Kitchen RTU Discharge Temperature | MONITOR | Kitchen RTU Discharge Temperature | MONITOR |
| Fan Speed | MONITOR | Controller Faults | MONITOR |
| Fan Amperage | MONITOR | Fan Faults | MONITOR |
| Fan Power | MONITOR | Fan Status | MONITOR |
| VFD Faults | MONITOR | PCU Faults | MONITOR |
| Controller Faults | MONITOR | PCU Filter Clog Percentages | MONITOR |
| Fan Faults | MONITOR | Fire Condition | MONITOR |
| Fan Status | MONITOR | CORE Fire System | MONITOR |
| PCU Faults | MONITOR | Building Pressures | MONITOR |
| PCU Filter Clog Percentages | MONITOR | Fans Button(s) | MONITOR & CONTROL |
| Fire Condition | MONITOR | Lights Button(s) | MONITOR & CONTROL |
| CORE Fire System | MONITOR | Wash Button | MONITOR & CONTROL |
| Building Pressures | MONITOR | | |
| Prep Time Button | MONITOR & CONTROL | | |
| Fans Button | MONITOR & CONTROL | | |
| Lights Button | MONITOR & CONTROL | | |
| · | | | |

MONITOR & CONTROL



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DATE: 9/28/2021

DWG.#:

DCV-1-5109685

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3/4" = 1'-0"

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REVISIONS:

DATE OF ISSUE:

PROJECT PHASE:

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MECHANICAL HOOD

- THE CONTROL ENCLOSURE SHALL BE NEMA 1 RATED AND LISTED FOR INSTALLATION INSIDE OF THE EXHAUST HOOD UTILITY CABINET. THE CONTROL ENCLOSURE MAY BE CONSTRUCTED OF STAINLESS STEEL

<u>AUTOMATIC:</u> THE SYSTEM OPERATES BASED ON THE DIFFERENTIAL BETWEEN ROOM TEMPERATURE AND THE TEMPERATURE AT THE HOOD CAVITY OR EXHAUST DUCT COLLAR, FANS ACTIVATE AT A CONFIGURABLE TEMPERATURE DIFFERENTIAL THRESHOLD, DEPENDING ON THE JOB CONFIGURATION EACH FAN ZONE CAN BE CONFIGURED AS STATIC OR DYNAMIC, THESE TERMS REFER TO WHETHER A VARIABLE MOTOR (SUCH AS EC MOTORS OR VFD DRIVEN MOTORS) MODULATE WITH TEMPERATURE, IF THE PANEL IS EQUIPPED WITH VARIABLE SPEED FANS AND THE ZONE IS DEFINED AS "DYNAMIC", THESE WILL MODULATE WITHIN A USER-DEFINED RANGE BASED ON THE TEMPERATURE DIFFERENTIAL, PANELS EQUIPPED WITH VARIABLE SPEED FANS AND A FAN ZONE DEFINED AS "STATIC", FANS WILL RUN AT A SET SPEED CALCULATED FOR THE DRIVE, DEMAND CONTROL VENTILATION SYSTEMS ARE CAPABLE OF MODULATING

MANUAL: THE SYSTEM OPERATES BASED ON HUMAN INPUT FROM AN HMI.

<u>fire:</u> upon activation of the hood fire suppression system, the exhaust fan will come on or CONTINUE TO TO RUN, THE HOOD MAKEUP AIR WILL SHUTDOWN, AND A SIGNAL WILL BE SENT FOR ACTIVATING THE SHUNT TRIP BREAKER PROVIDED BY THE ELECTRICIAN, FUEL GAS WILL SHUT OFF VIA A MECHANICAL/ELECTRICAL GAS VALVE ACTUATED BY THE HOOD FIRE SUPPRESSION SYSTEM.

CUSTOMER APPROVAL TO MANUFACTURE:

| Approved as Noted | |
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| Approved with NO Exception Taken | |
| Revise and Resubmit | |
| SIGNATURE | |
| Your Title | |

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DEMAND CONTROL VENTILATION HOOD CONTROL PANEL SPECIFICATIONS

- TEMPERATURE PROBE(S) LOCATED IN THE EXHAUST DUCT RISER(S) SHALL BE CONSTRUCTED OF

TURNDOWN REQUIREMENTS OUTLINED IN IECC 403,2.8 (2015).

SHALL MEET THE REQUIREMENTS OF IMC 507.1.1.

CALCULATE THE SPEED REFERENCE SIGNAL.

IS DETECTED ON A COVERED HOOD,

OR PAINTED STEEL.

STAINLESS STEEL.

SYSTEM IS REDUCED.

CONTROLS SHALL BE LISTED BY ETL (UL 508A) AND SHALL COMPLY WITH DEMAND VENTILATION SYSTEM

- A DIGITAL CONTROLLER SHALL BE PROVIDED TO ACTIVATE THE HOOD EXHAUST FANS DYNAMICALLY BASED ON A FIXED DIFFERENTIAL BETWEEN THE AMBIENT AND DUCT TEMPERATURES SENSORS, THIS FUNCTION

- A DIGITAL CONTROLLER SHALL PROVIDE ADJUSTABLE HYSTERESIS SETTINGS TO PREVENT CYCLING OF THE

- A DIGITAL CONTROLLER SHALL PROVIDE AN ADJUSTABLE MINIMUM FAN RUN-TIME SETTING TO PREVENT FAN

CONTROLLER SHALL MODULATE THE VFDS BETWEEN A MINIMUM SETPOINT AND A MAXIMUM SETPOINT ON

DEMAND, THE DUCT TEMPERATURE SENSOR INPUT(S) TO THE DIGITAL CONTROLLER SHALL BE USED TO

PROPORTIONAL TO ALL EXHAUST FANS THAT ARE LOCATED IN THE SAME FAN GROUP AS THE SUPPLY FAN.

COMPLETED. OPERATION DURING EITHER OF THESE PERIODS WILL DISABLE THE SUPPLY FANS AND PROVIDE

THE APPLIANCE SHUNT TRIP, AND DISABLE AN ELECTRIC GAS VALVE AUTOMATICALLY WHEN FIRE CONDITION -

- THE VFD SPEED RANGE OF OPERATION SHALL BE FROM 0% TO 100% FOR THE SYSTEM, WITH THE ACTUAL

FANS AFTER THE COOKING APPLIANCES HAVE BEEN TURNED OFF AND/OR THE HEAT IN THE EXHAUST

- VARIABLE FREQUENCY DRIVES (VFDS) SHALL BE PROVIDED FOR FANS AS REQUIRED. THE DIGITAL

- AN INTERNAL ALGORITHM TO THE DIGITAL CONTROLLER SHALL MODULATE SUPPLY FAN VFD SPEED

SUFFICIENT HEAT REMAINS UNDERNEATH THE HOOD SYSTEM AFTER COOKING OPERATIONS HAVE

- THE SYSTEM SHALL OPERATE IN PREP MODE DURING LIGHT COOKING LOAD OR COOL DOWN MODE WHEN

- A DIGITAL CONTROLLER SHALL DISABLE THE SUPPLY FAN(S), ACTIVATE THE EXHAUST FAN(S), ACTIVATE

- A DIGITAL CONTROLLER SHALL ALLOW FOR EXTERNAL BMS FAN CONTROL VIA DRY CONTACT (EXTERNAL

B. INTEGRATED GAS VALVE RESET FOR ELECTRONIC GAS VALVES (NO RESET RELAY REQUIRED).

D. DUCT TEMPERATURE SENSOR FAILURE DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.

E. MIS-WIRED DUCT TEMPERATURE SENSOR DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.

MINIMUM SPEED SET AS REQUIRED TO MEET MINIMUM VENTILATION REQUIREMENTS.

AN EXHAUST FAN SPEED THAT IS EQUAL TO THE MINIMUM VENTILATION REQUIREMENT.

CONTROL SHALL NOT OVERRIDE FAN OPERATION LOGIC AS REQUIRED BY CODE).

G. AN ENERGY SAVINGS INDICATOR THAT UTILIZES MEASURED KWH FROM THE VFDS.

AN LCD INTERFACE SHALL BE PROVIDED WITH THE FOLLOWING FEATURES:

C. VFD FAULT DISPLAY WITH AUDIBLE & VISUAL ALARM NOTIFICATION.

A. ON/OFF PUSH BUTTON FAN & LIGHT SWITCH ACTIVATION.

F. A SINGLE LOW VOLTAGE CAT-5 RJ45 WIRING CONNECTION.

DUCT TEMPERATURE SENSOR. - CONTROL PANEL. ROOM TEMPERATURE

TYPICAL HOOD CONTROL PANEL INSTALLATION

THE HOOD CONTROL PANEL IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY GIVEN TIME:

EXHAUST AND MAKE UP AIR FAN SPEEDS PER THE REQUIREMENTS DUTLINED IN IECC 403.2.8.

SCHEDULE: A WEEKLY SCHEDULE CAN BE SET TO RUN FANS FOR A SPECIFIED PERIOD THROUGHOUT THE DAY. THERE ARE THREE OCCUPIED TIMES PER DAY TO ALLOW FOR THE USER TO SET UP A TIME THAT IS SUITABLE TO THEIR NEEDS, ANY TIME THAT IS WITHIN THE DEFINED OCCUPIED TIME, THE SYSTEM WILL RUN AT MODULATION MODE AND FOLLOW THE FAN PROCEDURE ALGORITHM BASED ON TEMPERATURE DURING THIS TIME. DURING UNDCCUPIED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNINTENDED ACTIVATION OF THE SYSTEM DURING A TIME WHERE THE SYSTEM IS NOT BEING OCCUPIED.

OTHER: THE SYSTEM OPERATES BASED ON THE INPUT FROM AN EXTERNAL SOURCE (DDC, BMS OR HARD-WIRED INTERLOCK).

CONSULTANT

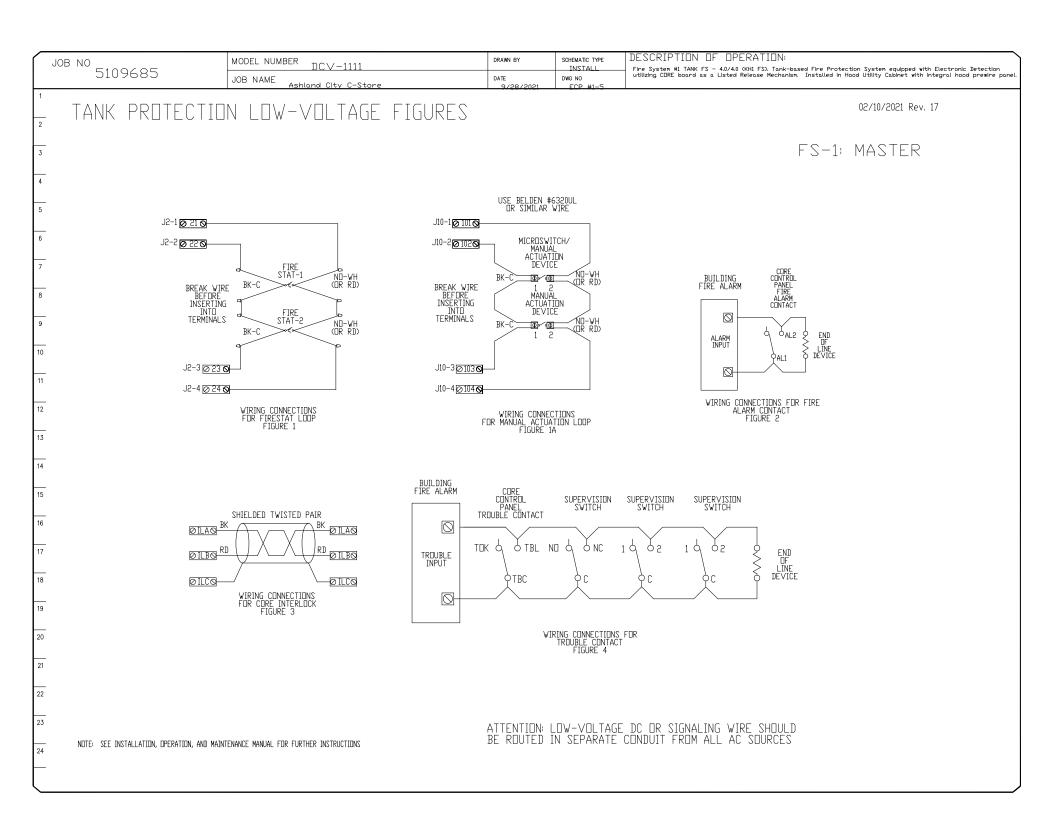


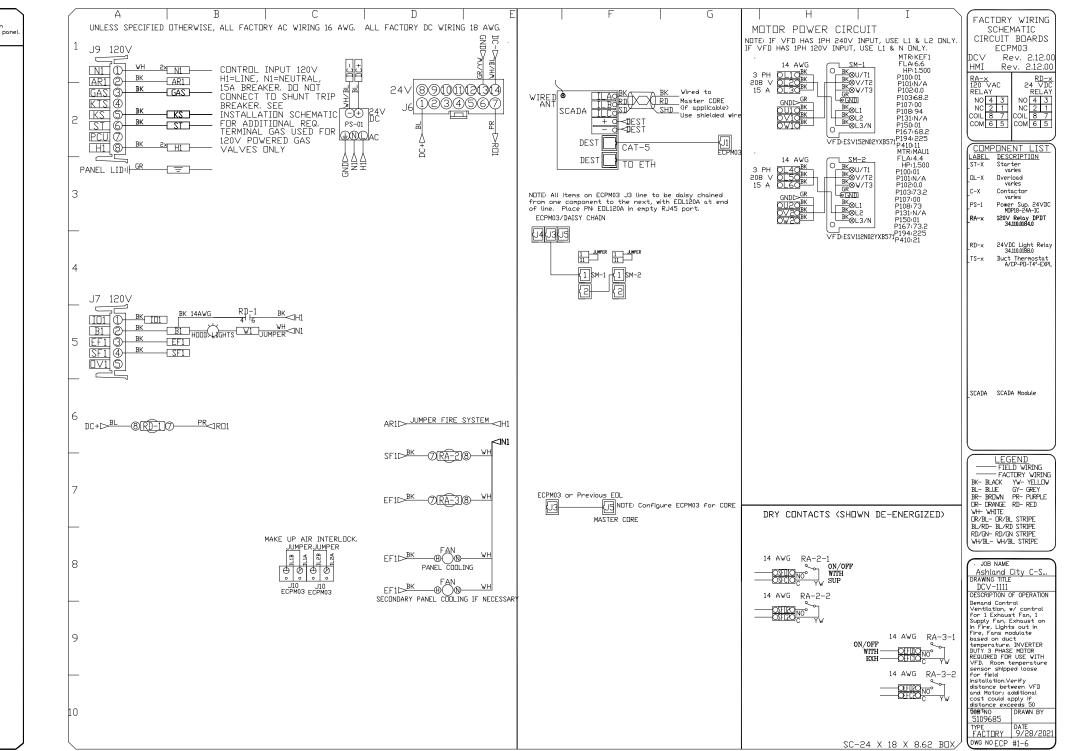
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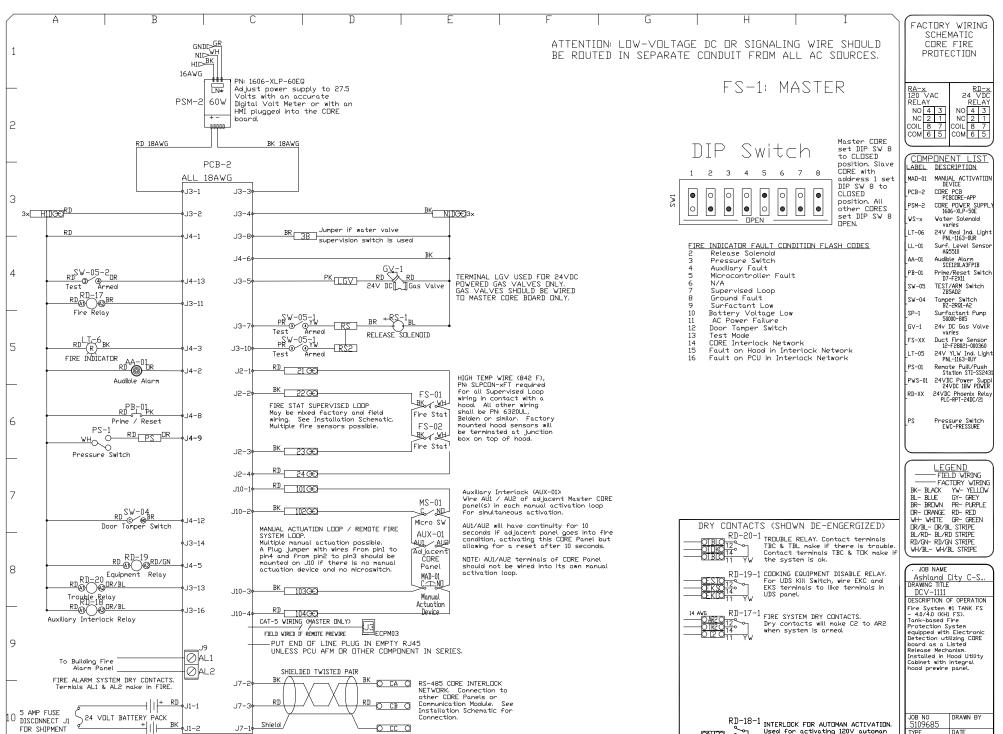
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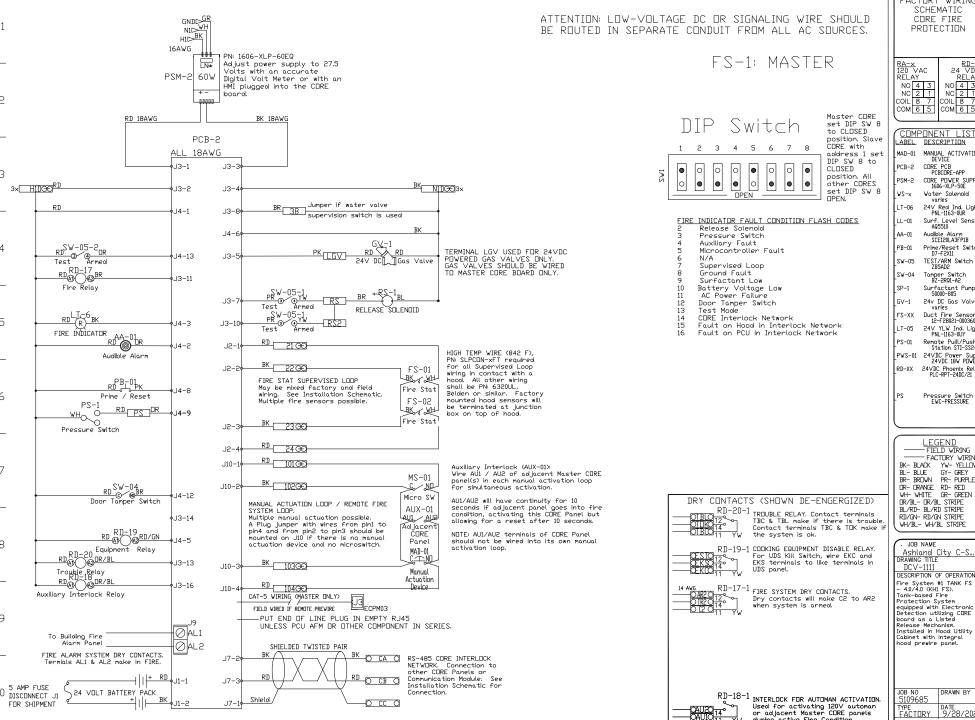
0214-21

SPECIFICATIONS









| CUSTOMER APPROVAL TO | MANUFACTURE: |
|----------------------------------|--------------|
| Approved as Noted | |
| Approved with NO Exception Taken | |
| Revise and Resubmit | |
| SIGNATURE | |
| Your TitleDate | |

FOR QUESTIONS, CALL THE Nashville Office REGION 44 PHONE: (615) 599-8300 EMAIL: reg44@econair.com



REVISIONS

 \triangleleft **DATE:** 9/28/2021

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Shland

DWG.#: DCV-2-5109685

DRAWN DDR-44

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

DEMAND CONTROL

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DESCRIPTION

10.20.2021

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ITEM # 4.

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PROJECT PHASE:

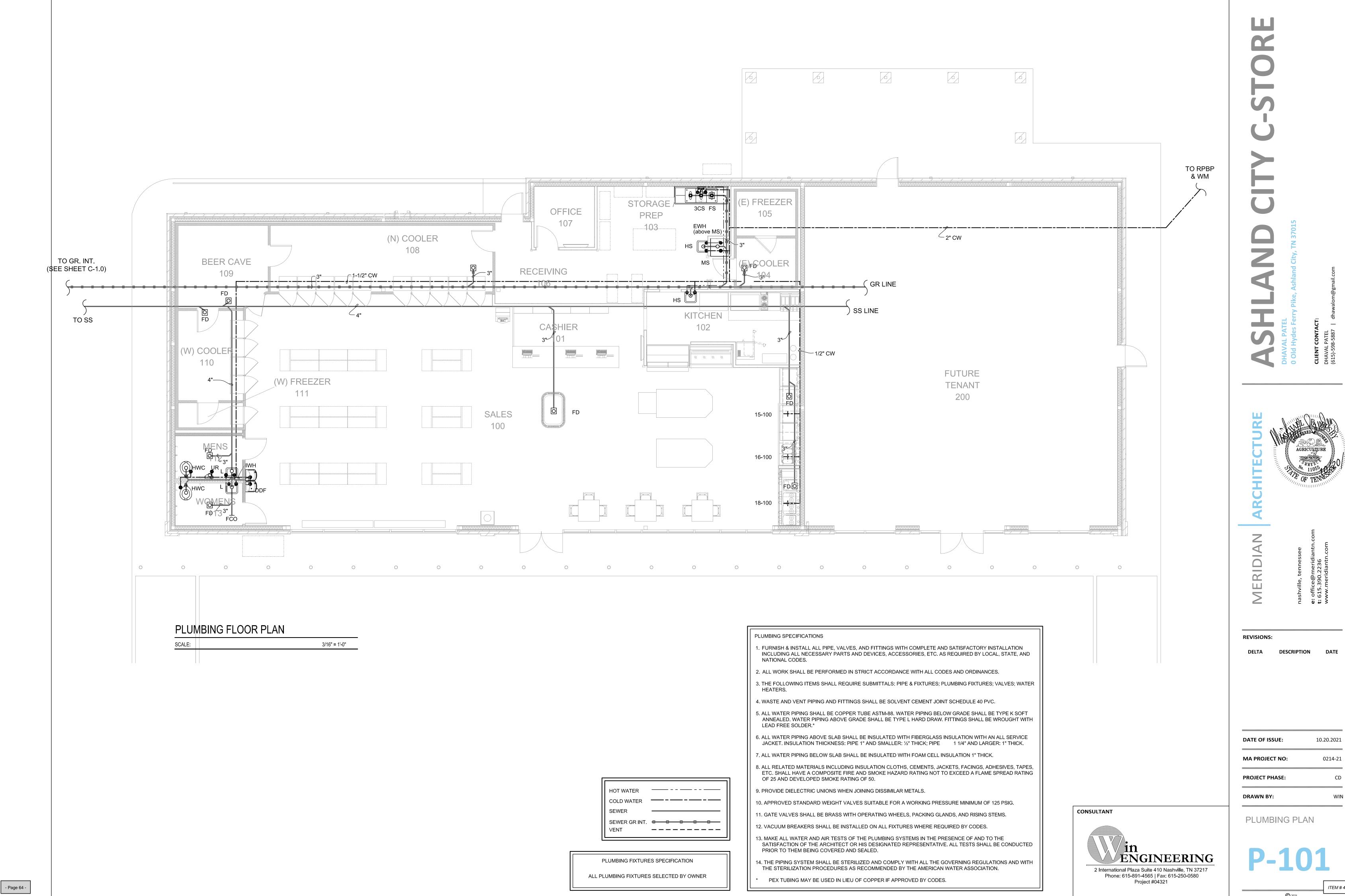
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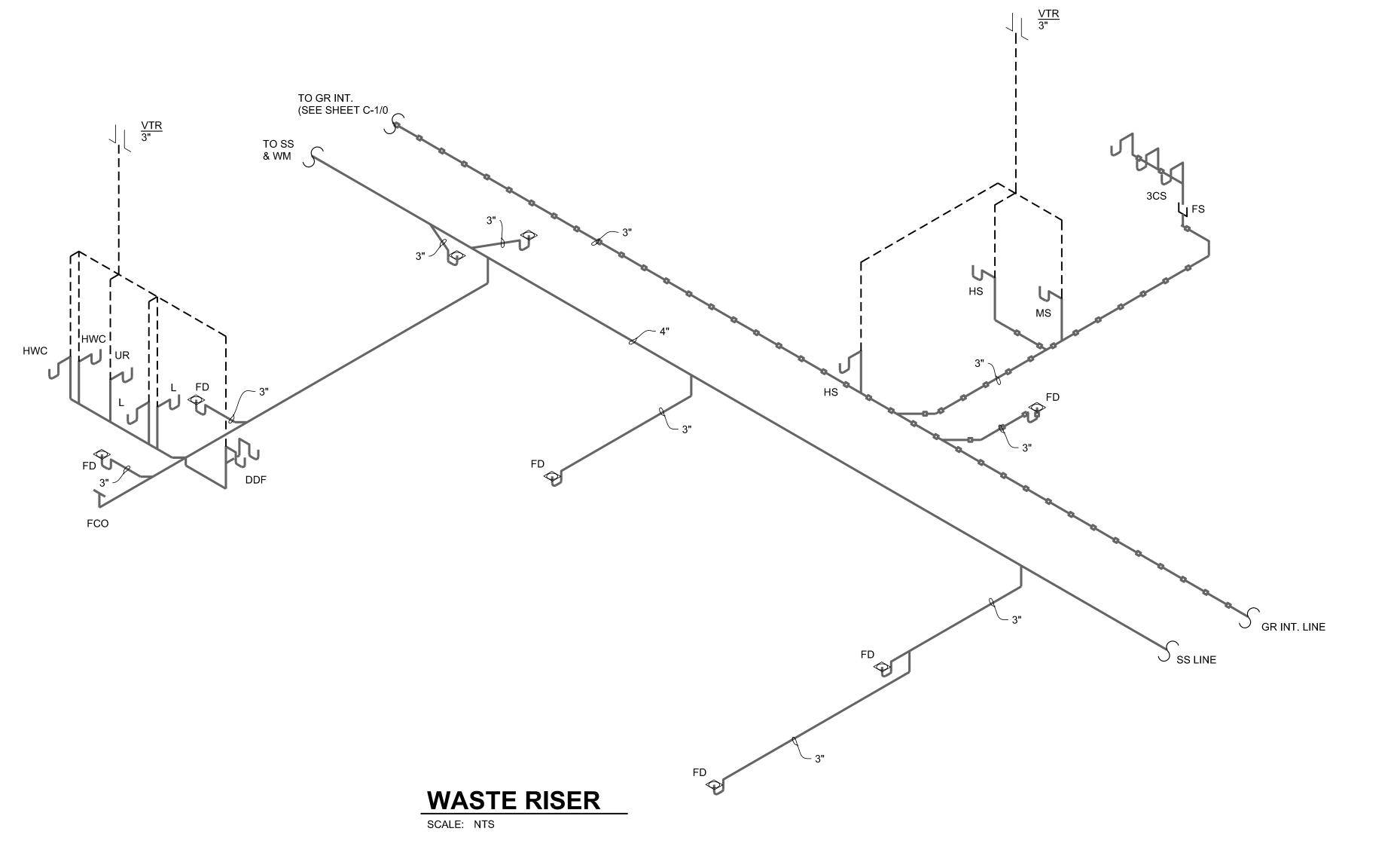
DRAWN BY: MECHANICAL HOOD

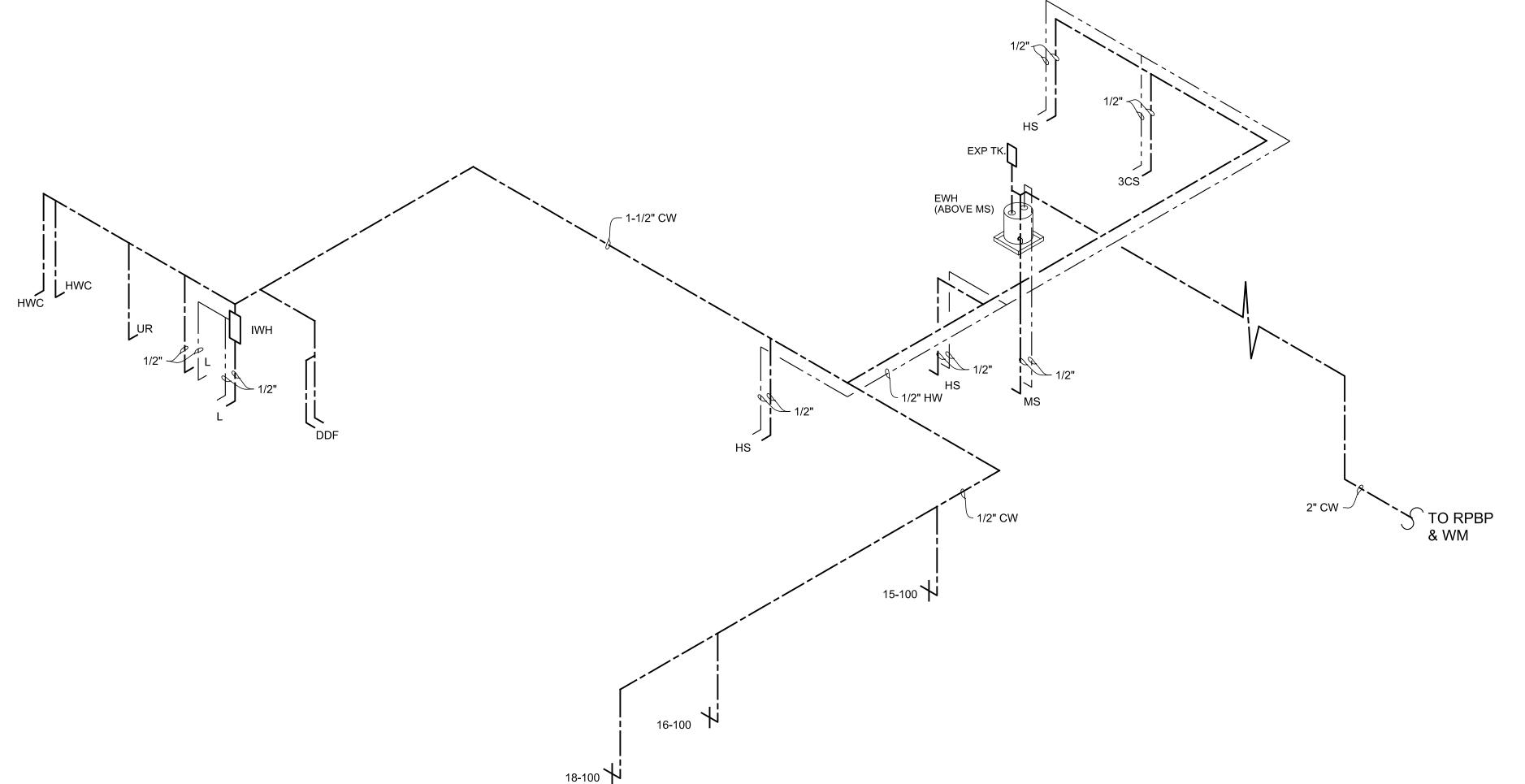
SPECIFICATIONS

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PLUMBING FIXTURES SPECIFICATION

ALL PLUMBING FIXTURES SELECTED BY OWNER

PLUMBING SPECIFICATIONS

- 1. FURNISH & INSTALL ALL PIPE, VALVES, AND FITTINGS WITH COMPLETE AND SATISFACTORY INSTALLATION INCLUDING ALL NECESSARY PARTS AND DEVICES, ACCESSORIES, ETC. AS REQUIRED BY LOCAL, STATE, AND NATIONAL CODES
- 2. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL CODES AND ORDINANCES.
- 3. THE FOLLOWING ITEMS SHALL REQUIRE SUBMITTALS: PIPE & FIXTURES; PLUMBING FIXTURES; VALVES; WATER HEATERS.
- 4. WASTE AND VENT PIPING AND FITTINGS SHALL BE SOLVENT CEMENT JOINT SCHEDULE 40 PVC.
- 5. ALL WATER PIPING SHALL BE COPPER TUBE ASTM-88. WATER PIPING BELOW GRADE SHALL BE TYPE K SOFT ANNEALED. WATER PIPING ABOVE GRADE SHALL BE TYPE L HARD DRAW. FITTINGS SHALL BE WROUGHT WITH LEAD FREE SOLDER.*
- 6. ALL WATER PIPING ABOVE SLAB SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH AN ALL SERVICE JACKET. INSULATION THICKNESS: PIPE 1" AND SMALLER: ½" THICK; PIPE 1 1/4" AND LARGER: 1" THICK.
- 7. ALL WATER PIPING BELOW SLAB SHALL BE INSULATED WITH FOAM CELL INSULATION 1" THICK.
- 8. ALL RELATED MATERIALS INCLUDING INSULATION CLOTHS, CEMENTS, JACKETS, FACINGS, ADHESIVES, TAPES, ETC. SHALL HAVE A COMPOSITE FIRE AND SMOKE HAZARD RATING NOT TO EXCEED A FLAME SPREAD RATING OF 25 AND DEVELOPED SMOKE RATING OF 50.
- 9. PROVIDE DIELECTRIC UNIONS WHEN JOINING DISSIMILAR METALS.
- 10. APPROVED STANDARD WEIGHT VALVES SUITABLE FOR A WORKING PRESSURE MINIMUM OF 125 PSIG.
- 11. GATE VALVES SHALL BE BRASS WITH OPERATING WHEELS, PACKING GLANDS, AND RISING STEMS.
- 12. VACUUM BREAKERS SHALL BE INSTALLED ON ALL FIXTURES WHERE REQUIRED BY CODES.
- 13. MAKE ALL WATER AND AIR TESTS OF THE PLUMBING SYSTEMS IN THE PRESENCE OF AND TO THE SATISFACTION OF THE ARCHITECT OR HIS DESIGNATED REPRESENTATIVE. ALL TESTS SHALL BE CONDUCTED PRIOR TO THEM BEING COVERED AND SEALED.
- 14. THE PIPING SYSTEM SHALL BE STERILIZED AND COMPLY WITH ALL THE GOVERNING REGULATIONS AND WITH THE STERILIZATION PROCEDURES AS RECOMMENDED BY THE AMERICAN WATER ASSOCIATION.

PEX TUBING MAY BE USED IN LIEU OF COPPER IF APPROVED BY CODES.

CONSULTANT



SHLANDC

AGRICULTURE OF TEN

shville, tennessee office@meridiantn.com

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REVISIONS:

DATE OF ISSUE:

DRAWN BY:

MA PROJECT NO:

PROJECT PHASE:

PLUMBING RISER PLAN

10.20.2021

0214-21

P-102

ITEM;

SCALE:

SUPPLY RISER

- Page 65 -

GENERAL NOTES

- 1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70, NATIONAL ELECTRICAL CODE.
- 2. ALL SINGLE PHASE BRANCH CIRCUITS (RECEPTACLES, LIGHTING, ETC.) ARE 3/4" CONDUIT OR EMT WITH (3)#12 BLACK/WHITE/GREEN, THHN, 90 DEGREES C WIRING. ALL OTHER CONDUIT AND WIRING SHALL BE AS INDICATED ON THE PLANS. ACTUAL ROUTING AND HOMERUN GROUPINGS ARE TO BE DETERMINED IN THE FIELD. ALL WIRING SHALL BE COPPER.
- 3. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC EXCEPT FOR DETAILS AND ELEVATIONS. DO NOT SCALE FROM DIAGRAMMATIC DRAWINGS. EXACT LOCATIONS OF DEVICES AND PANELS ARE TO BE DETERMINED AND ROUGHED-IN DURING CONSTRUCTION TO AVOID INTERFERENCE, TO MEET USER REQUIREMENTS, TO PROVIDE ADEQUATE MOUNTING, AND TO MEET NEC LINEAR ACCESS AND CLEARANCE REQUIREMENTS.
- 4. VERIFY EXACT LOCATIONS OF MOTORS AND EQUIPMENT BEFORE ROUGHING IN. VERIFY ALL NEW RECEPTACLE LOCATIONS AND RECEPTACLE TYPES WITH OWNER PRIOR TO CONSTRUCTION.
- 5. FINAL CONNECTIONS TO ALL AIR-HANDLERS, CONDENSING UNITS, EXHAUST FANS, AND OTHER EQUIPMENT DEVICES WHICH VIBRATE, SHALL BE MADE WITH FLEXIBLE SEALTITE AND APPROPRIATE
- 6. IN ADDITION TO THE NEC REQUIREMENTS FOR GFCI RATED RECEPTACLES, THE FOLLOWING RECEPTACLES SHALL ALSO BE GFCI RATED: (1) ALL RECEPTACLES LOCATED WITHIN 6 FEET OF A SINK, (2) ALL RECEPTACLES WHICH ARE PROVIDED FOR CONVENIENCE IN SERVICING HVAC EQUIPMENT REGARDLESS OF LOCATION. PROVIDE INDIVIDUAL GFCI DEVICES ONLY. GFCI CIRCUIT BREAKERS ARE NOT ACCEPTABLE.
- 7. PROVIDE A LAMICOID NAMEPLATE (WHITE LETTERS ON BLACK BACKGROUND) ON EACH PANELBOARD, MOTOR STARTER, CONTACTOR, TRANSFORMER, ETC. LETTERS SHALL BE 0.75 INCH MINIMUM.
- 8. CIRCUIT BREAKERS FOR HVAC EQUIPMENT SHALL BE HACR RATED.
- 9. MINIMUM HORIZONTAL SEPARATION BETWEEN BOXES ON OPPOSITE WALLS OF FIRE RATED WALL SHALL BE 24 INCHES.
- 10. VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL BEFORE ROUGHING IN LIGHT SWITCHES.
- 11. TRADE NAMES ARE GIVEN TO CLARIFY TYPE OF PRODUCT AND QUALITY DESIRED.
- 12. CONTRACTOR SHALL CUT AS REQUIRED TO INSTALL ELECTRICAL EQUIPMENT. REPAIR OF FLOOR OR WALLS SHALL BE COORDINATED WITH GENERAL CONTRACTOR. CONTRACTOR SHALL ALSO REPAIR ALL OPENINGS LEFT DUE TO EQUIPMENT REMOVAL.
- 13. CONDUCTORS ARE AWG#12 COPPER UNLESS OTHERWISE SHOWN. ALL CONDUCTORS LARGER THAN #10 SHALL BE STRANDED. BRANCH CIRCUIT RUNS IN EXCESS OF 100 FEET (ONE WAY) SHALL BE SIZED PER THE NATIONAL ELECTRICAL CODE MAXIMUM 3% VOLTAGE DROP. SEE SCHEDULE, THIS SHEET. FEEDER CIRCUIT RUNS IN EXCESS OF 100 FEET (ONE WAY) SHALL BE SIZED PER THE NATIONAL ELECTRICAL CODE MAXIMUM 2% VOLTAGE DROP.
- 14. PANELBOARDS SHALL CONTAIN A TYPEWRITTEN DIRECTORY WITH A PLASTIC COVER AFFIXED TO THE INSIDE OF THE DOOR. UPDATE EXISTING PANELBOARD DIRECTORIES WHERE MODIFICATIONS ARE
- 15. ALL FIXTURES, DEVICES, CONDUIT, AND EQUIPMENT SHALL BE SECURED WITH APPROVED HANGERS AND ANCHORS AND IN ACCORDANCE WITH APPROVED STANDARDS OF INSTALLATION.
- 16. ALL BREAKERS SHOWN IN THE PANELBOARD SCHEDULE SHALL BE RATED AS SHOWN FOR BOTH CIRCUIT CAPACITY AND FAULT CURRENT INTERRUPTING CAPACITY.
- 17. CONDUIT FOR TELEPHONE OUTLETS SHALL BE 3/4" EMT. PROVIDE PULL STRING TO TELEPHONE BACKBOARD VIA CONDUITS AND CABLE TRAY WHERE FEASIBLE.
- 18. ALL PANELBOARDS, DISCONNECT SWITCHES, MOTOR STARTERS, AND CONTACTORS SHALL BE NEMA 1 UNLESS OTHERWISE NOTED.
- 19. THESE DRAWINGS HAVE BEEN DEVELOPED FROM THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING JOB SITE CONDITIONS. CARE SHALL BE TAKEN DURING DEMOLITION TO AVOID DAMAGE TO ADJACENT AREA.
- 20. WHERE DISCREPANCIES EXIST BETWEEN DRAWINGS AND SPECIFICATIONS, DRAWINGS SHALL OVERRIDE SPECIFICATIONS.
- 21. ALL OCCUPANCY SENSORS SHALL BE DUAL TECHNOLOGY.
- 22. VERIFY FUNCTIONALITY AND CONDITION OF ALL ELECTRICAL CONDUIT, WIRING, AND DEVICES AFFECTED BY THIS PROJECT THAT SHALL REMAIN OR BE REUSED.
- 23. MAINTAIN ELECTRICAL PANEL CONNECTIONS TO EXISTING AREAS AND EMERGENCY GENERATOR IF APPLICABLE.
- 24. MAINTAIN CIRCUITRY OF ALL EXISTING EQUIPMENT NOT SHOWN AS CHANGING OR NOT IN THE SCOPE OF THIS PROJECT. UTILITIES SERVING OTHER AREAS BUT PASSING THROUGH CONSTRUCTION AREA SHALL REMAIN BUT MAY REQUIRE REWORK TO ACHIEVE THE REQUIREMENTS OF THIS PROJECT.

| | ABBREVIATIONS | |
|--------------------------|---|--|
| <u>abbreviation</u> A | MEANING AMPS | |
| AFF | ABOVE FINISHED FLOOR | |
| AFG | ABOVE FINISHED GRADE | |
| C | CEILING | |
| EL | EXISTING TO BE RELOCATED | |
| ER | EXISTING TO BE REMOVED | |
| EX | EXISTING TO REMAIN | |
| FB0 | FURNISHED BY OTHERS | |
| FPMR | FUSE PER MANUFACTURER'S RECOMMENDATIONS | |
| G, GFCI | GROUND FAULT CIRCUIT INTERRUPTER | |
| HP | HORSEPOWER | |
| MTD | MOUNTED | |
| NA NA | NOT APPLICABLE | |
| NF | NON-FUSED | |
| NIC | NOT IN CONTRACT | |
| NL | NIGHTLIGHT — PROVIDE UNSWITCHED HOT TO LIGHTING FIXTURE | |
| RL | RELOCATE/RELOCATED | |
| S | SAFETY TYPE RECEPTACLE | |
| TV | TELEVISION CONNECTION — MOUNTING HT @ 84" AFF U.N.O. | |
| UON | UNLESS OTHERWISE NOTED | |
| V | VOLTS | |
| VA | VOLT-AMPS | |
| W | WATTS | |
| WP | WEATHER PROOF | |
| WR | WEATHER RESISTANT | |
| XFMR | TRANSFORMER | |

MAXIMUM BRANCH CIRCUIT LENGTH FOR SINGLE-PHASE LOADS (IN FEET)

| MAXIMUM ALLOWABLE VOLTAGE DROP | | | 3 | 3% | | | |
|---|----------------|--------|---------------------------|--------|---------------------------|--------|--|
| BRANCH | 12 | OV | 20 | 8V | 277V | | |
| CIRCUIT VOLTAGE | BRANCH BREA | | BRANCH CIRCUIT BREAKER | | BRANCH CIRCUIT BREAKER | | |
| CONDUCTOR WIRE SIZE (AWG) | 20A/1P | 30A/1P | 20A/1P | 30A/1P | 20A/1P | 30A/1P | |
| # 12 | 60 | N/A | 105 | N/A | 140 | N/A | |
| #10 | 95 | 65 | 170 | 110 | 225 | 150 | |
| #8 | 150 | 95 | 260 | 170 | 345 | 230 | |
| #6 | 235 | 150 | 410 | 270 | 545 | 360 | |
| #4 | 365 | 245 | 635 | 425 | 850 | 565 | |
| #3 | 465 | 310 | 810 | 540 | 1,080 | 720 | |
| #2 | 560 | 375 | 975 | 650 | 1,295 | 865 | |
| #1 | 700 | 465 | 1,215 | 810 | 1,620 | 1,080 | |
| NOTES: 1. CALCULATIONS BASED ON LOAD 80% OF BRANCH BREAKER SIZE. | | | | | | | |

. BRANCH CIRCUIT LENGTH VALUES INDICATED ARE WIRE DISTANCE FROM PANELBOARD TO LOAD

. VOLTAGE DROP BASED ON 0.95 POWER FACTOR.

ALL FEEDER CIRCUITS TO MAINTAIN A MAXIMUM VOLTAGE DROP OF 2%. ADJUST FEEDER CIRCUIT WIRE SIZE PER MAXIMUM FEEDER CIRCUIT LENGTH.

ALL BRANCH CIRCUITS TO MAINTAIN A MAXIMUM VOLTAGE DROP OF 3%. ADJUST BRANCH CIRCUIT WIRE SIZE PER MAXIMUM BRANCH CIRCUIT LENGTH.

FIRE ALARM LEGEND & NOTES

| | SYMBOL | DESCRIPTION | MTG. HT. |
|---|-------------------|---|-----------------|
| | F | FIRE ALARM MANUAL PULL STATION | 3'-10" AFF |
| | €D | FIRE ALARM VISUAL STATION — STROBE LIGHT ONLY | 6'-8'' AFF |
| | Fø | FIRE ALARM HORN WITH STROBE LIGHT | 6'-8" AFF |
| | 0 | SMOKE DETECTOR - CEILING MOUNTED (W INDICATES WALL-MOUNTED) | CEILING |
| | ⊕ | HEAT DETECTOR — CEILING MOUNTED (W INDICATES WALL-MOUNTED) | CEILING |
| | SDS | DUCT SMOKE DETECTOR - SUPPLY | CEILING |
| | \mathbb{SD}_{R} | DUCT SMOKE DETECTOR — RETURN | |
| | FACP | FIRE ALARM CONTROL PANEL | |
| | [FAA] | FIRE ALARM ANNUCIATOR | 3'-10" AFF |
| | FS | FIRE ALARM FLOW SWITCH | SPRINKLER RISER |
| | TS | FIRE ALARM TAMPER SWITCH | |
| ĺ | | | |

- 1. VERIFY LOCATION OF ALL DEVICES AND PANEL WITH FIRE MARSHALL AND CITY REPRESENTATIVE.
- 2. FOR INTERFACE WITH EXISTING FIRE ALARM SYSTEMS, ENSURE DEVICES ARE COMPATIBLE WITH EXISTING INSTALLATION. EXPAND/REPLACE EXISTING PANEL AS NEEDED.
- 3. TROUBLE AND ALARM INITIATIONS TO TRANSMIT SEPARATE AND DISTINCT SIGNALS TO MONITORING
- 4. INCOMING "FIRE" ALARM INITIATIONS SHALL OVERRIDE "TROUBLE" INITIATIONS.
- 5. SEPARATE "TROUBLE" AND "ALARM" SIGNALS SHALL BE ANNUNCIATED AT CONTROL PANEL.
- 6. SUBMIT SHOP DRAWINGS TO FIRE MARSHALL FOR APPROVAL PRIOR TO ROUGH-IN.
- 7. ALL WORK SHALL BE DONE IN ACCORDANCE WITH NEC AND ALL STATE & LOCAL CODES.
- 8. USE TW/SH #18 WIRE FOR ADDRESSABLE CKT. USE #14 THHN FOR OTHER CIRCUITS. ALL FIRE ALARM TO BE IN CONDUIT.
- 9. ALARM SYSTEM SHOWN HERE IS DIAGRAMMATIC ONLY.
- 10. PROVIDE & INSTALL ALL "FIRE MARSHALL APPROVED" SIGNAL TRANSMISSION EQUIP. FOR MUNICIPAL TIE-IN. COORDINATE WITH FIRE DEPARTMENT.
- 11. COORDINATE DEVICE TEMPERATURE REQUIREMENTS WITH SPRINKLER SYSTEM ALL DEVICES IN TOP AND BOTTOM OF ELEVATOR SHAFT.
- 12. PROVIDE BATTERY WITH 4 HOUR STANDBY AND 10 MINUTE ALARM.
- 13. PROVIDE SURGE SUPPRESSORS ON DACT LINES.
- 14. PROVIDE SURGE SUPPRESSORS ON 120VAC.
- 15. THE FIRE ALARM CONTRACTOR MUST BE CERTIFIED IN ACCORDANCE WITH TENNESSEE ALARM CONTRACTORS LICENSING ACT OF 1991, TCA TITLE 62, CHAPTER 32.
- 16. THE FIRE ALARM CONTROL PANEL CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING, SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT". THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM UNIT.

ELECTRICAL LEGEND

| SYMBOL | DESCRIPTION | MTG. HT. |
|-----------------------|---|---------------------|
| | CONCEALED CONDUIT & CIRCUITRY (20 UON) | NA |
| | CONCEALED CONDUIT & CIRCUITRY HOMERUN TO PANELBOARD AND BREAKER NUMBER AS INDICATED | NA |
| /\ | CONDUIT BELOW GRADE ON SITE | NA |
| | EXPOSED CONDUIT ON WALL OR CEILING | NA |
| A A | SURFACE OR RECESSED FIXTURE (LETTER DENOTES TYPE, REFER TO LIGHT FIXTURE SCHEDULE) | AS INDICATED |
| A A | SURFACE OR RECESSED FIXTURE W/ BATTERY PACK (LETTER DENOTES TYPE, REFER TO LIGHT FIXTURE SCHEDULE) | AS INDICATED |
| <u> </u> | SURFACE OR RECESSED FIXTURE (LETTER DENOTES TYPE, REFER TO LIGHT FIXTURE SCHEDULE) | AS INDICATED |
| A 0 ^A | SURFACE OR RECESSED FIXTURE W/ BATTERY PACK (LETTER DENOTES TYPE, REFER TO LIGHT FIXTURE SCHEDULE) | AS INDICATED |
| <u>0</u> ^ <u>△</u> ^ | WALL MOUNTED FIXTURE (LETTER DENOTES TYPE, REFER TO LIGHT FIXTURE SCHEDULE) | AS INDICATED |
| Q^^ _A^ | WALL MOUNTED FIXTURE W/ BATTERY PACK (LETTER DENOTES TYPE, REFER TO LIGHT FIXTURE SCHEDULE) | AS INDICATED |
| - \$^ | SURFACE OR PENDANT MOUNTED LIGHT FIXTURE (LETTER DENOTES TYPE, REFER TO LIGHT FIXTURE SCHEDULE) | AS INDICATED |
| ⊗ ⊗ ⊗ | EXIT LIGHT, UNIVERSAL MOUNTING, W/ INTEGRAL BATTERY PACK SHADING INDICATES FACE | AS INDICATED |
| 4 | BATTERY PACK FIXTURE | AS INDICATED |
| _ v v A | TRACK LIGHTING — LETTER DENOTES TYPE, REFER TO LIGHT FIXTURE SCHEDULE | |
| A | ALL FIXTURES IN THIS SPACE SHALL BE SAME TYPE INDICATED | NA |
| 2 | NOTE REFERENCE — REFER TO NOTE INDICATED | NA |
| S | SINGLE POLE SWITCH - TOGGLE | 3'-10" AFF |
| S ₃ | THREE-WAY SWITCH - TOGGLE | 3'-10" AFF |
| S ₄ | FOUR-WAY SWITCH - TOGGLE | 3'-10" AFF |
| S _D | DIMMER SWITCH | 3'-10" AFF |
| S _{oc} | OCCUPANCY SENSOR SWITCH | 3'-10" AFF |
| <u>(S)</u> | CEILING MOUNTED OCCUPANCY SENSOR SWITCH | NA |
| Ю | WALL MOUNTED OCCUPANCY SENSOR SWITCH | 8'-0" AFF |
| S _{LV} | LOW VOLTAGE SWITCH - OVER-RIDE FOR LIGHTING CONTROL SYSTEM | 3'-10" AFF |
| S _{LV3} | LOW VOLTAGE SWITCH - NUMBER INDICATES NO. OF LIGHTING LEVELS | 3'-10" AFF |
| © | PHOTOCELL | |
| TC | ASTRONOMICAL TIME CLOCK | 5'-6" AFF |
| | RECEPTACLES | |
| = | 120V. DUPLEX RECEPTACLE (C=CEILING, G=GFCI, WP=WEATHERPROOF, WR=WEATHER RESISTANT, T=TAMPER RESISTANT) | 1'-6" AFF UON |
| • | 120V. DUPLEX RECEPTACLE - SPECIAL MOUNTING HEIGHT | 3'-10" AFF |
| # | 120V. QUADPLEX RECEPTACLE UNDER SINGLE COVERPLATE | 1'-6" AFF |
| 30A - | SINGLE SPECIAL PURPOSE RECEPTACLE — VOLTAGE, AMP, & NEMA CONFIGURATION AS NOTED. | 1'-6" AFF UON |
| | 120V. QUADPLEX RECEPTACLE - SPECIAL MOUNTING HEIGHT | 3'-10" AFF |
| PP | POWER POLE | POLE |
| ⊚ (2) | DUPLEX FLOOR RECEPTACLE (2 INDICATES 2 DUPLEXES IN 2-GANG BOX) JUNCTION BOX | FLOOR SEE SPEC'S |
| S _M | MANUAL MOTOR RATED SWITCH, 120V FRACTIONAL HP NEMA 1 UON | |
| | NON-FUSED DISCONNECT - VOLT/POLE/AMP/NEMA RATING AS INDICATED (NEMA 1 UON) | |
| | FUSED DISCONNECT — VOLT/POLE/AMP/NEMA RATING AS INDICATED FUSED PER MANUFACTURER REQUIREMENTS (NEMA 1 UON) | |
| ⊠ [⊥] | COMBINATION ACROSS THE LINE MOTOR STARTER (NEMA 1 UON) | |
| | COMMUNICATIONS | |
| ٥ | TELEPHONE/DATA 2 GANG OUTLET WITH SINGLE COVER PLASTER RING WITH 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING | 1-6" AFF |
| • | TELEPHONE/DATA 2 GANG OUTLET WITH SINGLE COVER PLASTER RING WITH 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING | 3-10" AFF |
| €s | TELEPHONE/DATA OUTLET MOUNTED FLUSH IN FLOOR WITH 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING (S INDICATES SURFACE TYPE) | FLOOR |
| TV | TELEVISION OUTLET WITH 3/4" CONDUIT TO ABOVE ACCESSIBLE CEILING | 1'-6" AFF |
| SS | SOUND SYSTEM OUTLET WITH 1"C TO ABOVE ACCESSIBLE CEILING | |
| πв | TELEPHONE TERMINAL BACKBOARD — PROVIDE 3/4" EXTERIOR GRADE PLYWOOD WITH TWO COATS OF INSULATING VARNISH. SIZE AS INDICATED ON DRAWING. INSTALL A SEPARATE GROUNDING ELECTRODE AND BOND TO ELECTRICAL SERVICE GROUND PER NFPA 800—11C. STUB OU 2" CONDUIT FROM UTILITY SERVICE AT BACKBOARD. | |
| MP | SURFACE MOUNTED PANELBOARD WITH DESIGNATION — SEE SCHEDULE | |
| MP. | FLUSH MOUNTED PANELBOARD WITH DESIGNATION — SEE SCHEDULE | |
| | ELECTRIC MOTOR | |

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| ELECTRIC MOTOR

EXHAUST FAN



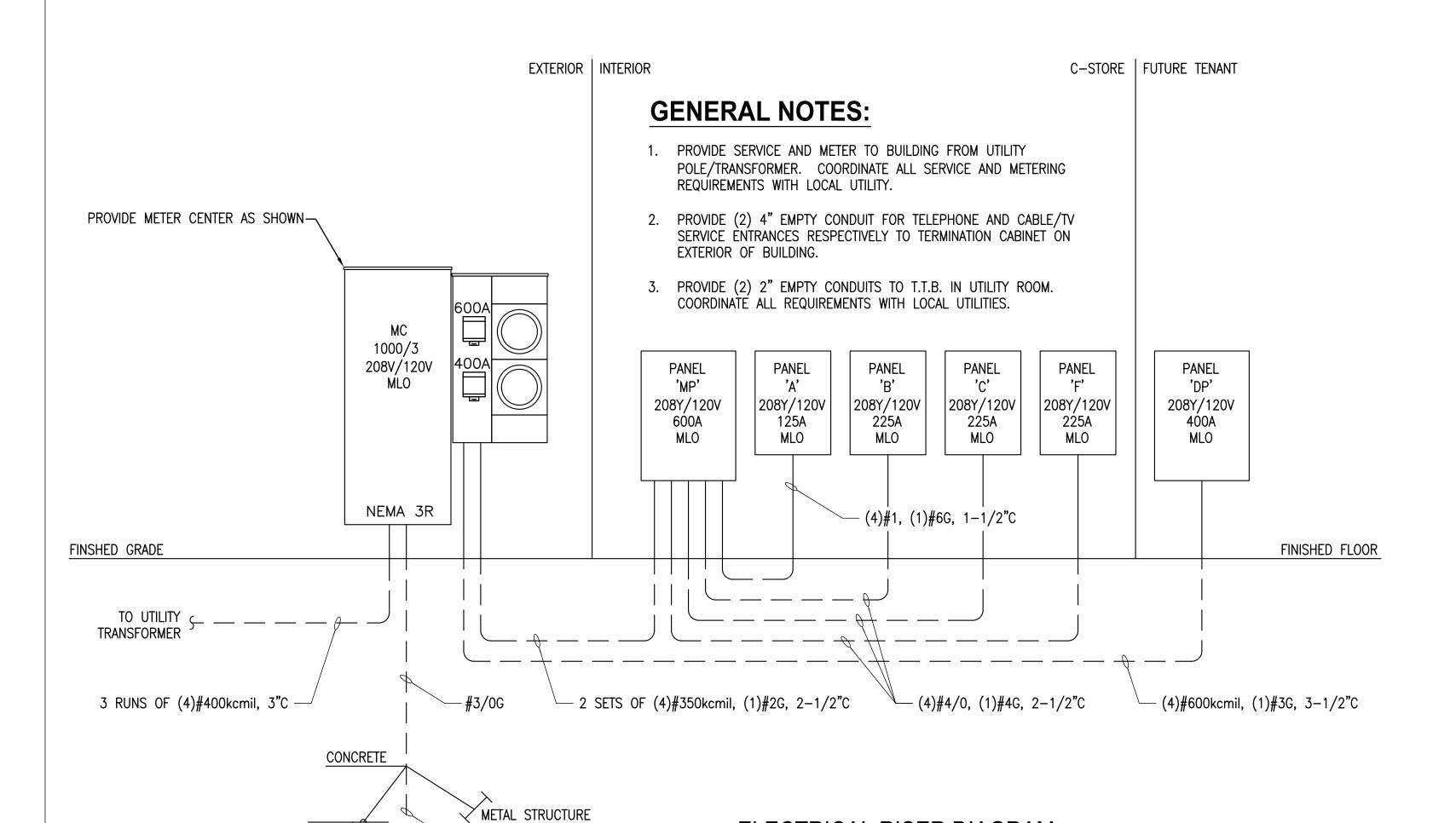
REVISIONS:

DRAWN BY:

ELECTRICAL LEGENDS & SCHEDULES

| Panel | MP | | | | OC 1 | Гуре | | CKT | BRK | R | | | Volta | ge L-L | 208 |
|------------|-------------|---------|---------|---------|------|--------|----|-----|------|-------|-----------|--------|-------|--------------|---------|
| Device | MOLDED CASE | | | | | losure |) | NEI | MA 1 | | | | Volta | ge L-N | 120 |
| Mounting | SURFACE | | | | Com | ment | s | M.L | .O. | | | | Ampe | rage | 600 |
| Ckt No. | Description | Type | Load | Remarks | СВ | Pole | PH | РΗ | Pole | СВ | Remarks | Load | Type | Description | Ckt No. |
| 1 | PANEL'A' | 6 | 3640 | - | 125 | 3 | Α | Α | 3 | 225 | - | 17045 | 6 | PANEL 'B' | 2 |
| | | 6 | 4821 | - | | | В | В | | | - | 16732 | 6 | | |
| | | 6 | 4541 | - | | | С | С | | | - | 16420 | 6 | | |
| 3 | PANEL 'C' | 6 | 21847 | - | 225 | 3 | Α | Α | 3 | 225 | - | 1326 | 6 | PANEL 'F' | 4 |
| | | 6 | 22627 | - | | | В | В | | | - | 750 | 6 | | |
| | | 6 | 21942 | - | | - | С | С | | | - | 466 | 6 | | |
| 5 | SPACE | - | - | - | 225 | 3 | Α | Α | 3 | 225 | - | - | - | SPACE | 6 |
| | | - | - | - | | | В | В | | | - | - | - | | |
| | | - | - | - | | - | С | С | | | - | - | - | | |
| Phase A | 43858 VA | · | | | | | | | NOTE | : | | | | | |
| Phase B | 44930 VA | | | | | | | | | | | | | | |
| Phase C | 43369 VA | | | | | | | | | | | | | | |
| Total kVa= | 132.2 | 2 Demar | nd kVa | 112.3 | | | | | | | | | | | |
| Total Amps | 366.8 | B Demar | nd Amps | 311.8 | | | | | | A.I.C | . RATING: | VERIFY | WITHL | OCAL UTILITY | |

| Panel | A | | | | OC 1 | Гуре | | CKT | BRK | R | | | Volta | ge L-L | 208 |
|------------|--------------------|------|---|---------|------|-------|----|-----|------|----|---------|------|-------|-------------------|---------|
| Device | MOLDED CASE | | | | Encl | osure |) | NEI | MA 1 | | | | Volta | ge L-N | 120 |
| Mounting | SURFACE | | | | Com | ment | s | M.L | О. | | | | Ampe | rage | 125 |
| Ckt No. | Description | Type | Load | Remarks | СВ | Pole | РΗ | ΡН | Pole | СВ | Remarks | Load | Type | Description | Ckt No. |
| 1 | P.O.S. RECEPTACLES | 3 | 360 | - | 20 | 1 | Α | Α | 1 | 20 | - | 500 | 5 | LCP & PC | 2 |
| 3 | P.O.S. RECEPTACLES | 3 | 360 | - | 20 | 1 | В | В | 1 | 20 | - | 1581 | 2 | LIGHTS | 4 |
| 5 | P.O.S. RECEPTACLES | 3 | 360 | - | 20 | 1 | С | С | 1 | 20 | - | 1661 | 2 | LIGHTS | 6 |
| 7 | DISPLAY RECEPT. | 3 | 900 | - | 20 | 1 | Α | Α | 1 | 20 | - | 500 | 5 | F.A.C.P. | 8 |
| 9 | DISPLAY RECEPT. | 3 | 1080 | - | 20 | 1 | В | В | 1 | 20 | - | 360 | 3 | T.T.B. RECEPTACLE | 10 |
| 11 | DISPLAY RECEPT. | 3 | 1080 | - | 20 | 1 | С | С | 1 | 20 | - | 360 | 3 | R.R. RECEPTACLES | 12 |
| 13 | RECEPTACLES | 3 | 1080 | - | 20 | 1 | Α | Α | 1 | 20 | - | 300 | 2 | HOOD LIGHTS | 14 |
| 15 | RECEPTACLES | 3 | 1080 | - | 20 | 1 | В | В | 1 | 20 | - | 360 | 3 | DRINKING FOUNTAIN | 16 |
| 17 | RECEPTACLES | 3 | 720 | - | 20 | 1 | С | С | 1 | 20 | - | 360 | 3 | ATM RECEPTACLE | 18 |
| 19 | SPACE ONLY | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 20 |
| 21 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 22 |
| 23 | SPACE ONLY | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPACE ONLY | 24 |
| 25 | SPACE ONLY | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 26 |
| 27 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 28 |
| 29 | SPACE ONLY | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPACE ONLY | 30 |
| Phase A | 3640 VA | | | | | | | | | | | | | | |
| Phase B | 4821 VA | | | | | | | NOT | E: | | | | | | |
| Phase C | 4541 VA | | | | | | | | | | | | | | |
| Total kVa= | 13.0 | 6.7 | 6.7 | | | | | | | | | | | | |
| Total Amps | 36.1 | 18.6 | 18.6 A.I.C. RATING: VERIFY WITH LOCAL UTILITY | | | | | | | | | | | | |



- 3/4" X 10' GND ROD

ELECTRICAL RISER DIAGRAM

NOT TO SCALE

| Panel | В | | | | ОС | Type | | CK | T BRK | R | | | Volta | ge L-L | 208 |
|-------------------------------|----------------------------------|------|------|---------|-----|-------|----|-----|-------|--------|---------|--------|--------|--------------------|--------|
| Device | MOLDED CASE | | | | | losur | | ΝE | MA 1 | | | | | ge L-N | 120 |
| Mountina | SURFACE | | | | Con | nme n | ts | M.L | .O. | | | | Ampe | • | 225 |
| Ckt No. | Description | Type | Load | Remarks | СВ | Pole | РН | ΡН | Pole | СВ | Remarks | Load | Type | | Ckt No |
| 1 | 59-E3 OVEN | 6 | 4197 | - | 45 | 3 | Α | Α | 2 | 20 | - | 1000 | 6 | COFFEE MACHINE | 2 |
| 3 | - | 6 | 4197 | - | - | - | В | В | - | - | - | 1000 | 6 | - | 4 |
| 5 | - | 6 | 4197 | - | - | - | С | С | 2 | 20 | - | 1000 | 6 | COFFEE MACHINE | 6 |
| 7 | PFB-1 PROOFER BASE | 6 | 1548 | - | 20 | 1 | Α | Α | - | - | - | 1000 | 6 | - | 8 |
| 9 | ISLAND MERCHAND | 6 | 1040 | - | 20 | 2 | В | В | 2 | 20 | - | 1000 | 6 | COFFEE MACHINE | 10 |
| 11 | - | 6 | 1040 | - | - | - | С | С | - | - | - | 1000 | 6 | - | 12 |
| 13 | FLAVOR SELECT | 6 | 805 | - | 20 | 1 | Α | Α | 2 | 20 | - | 1000 | 6 | COFFEE MACHINE | 14 |
| 15 | FLAVOR SELECT | 6 | 805 | - | 20 | 1 | В | В | - | - | - | 1000 | 6 | - | 16 |
| 17 | FLAVOR SELECT | 6 | 805 | - | 20 | 1 | С | С | 1 | 20 | - | 1800 | 6 | CAPPUCCINO MACHINE | 18 |
| 19 | FLAVOR SELECT | 6 | 805 | - | 20 | 1 | Α | Α | 1 | 20 | - | 1440 | 6 | SLUSHIE MACHINE | 20 |
| 21 | COUNTER TOP DISPL. | 6 | 1500 | - | 20 | 1 | В | В | 1 | 20 | - | 1440 | 6 | SLUSHIE MACHINE | 22 |
| 23 | SELF-SERVE DISPL | 6 | 1750 | - | 20 | 1 | С | С | 1 | 20 | - | 828 | 6 | ICE STORAGE BIN | 24 |
| 25 | ISLAND CIRCUIT | 6 | 1500 | - | 20 | 1 | Α | Α | 1 | 20 | - | 1500 | 6 | ISLAND CIRCUIT | 26 |
| 27 | ISLAND CIRCUIT | 6 | 1500 | - | 20 | 1 | В | В | 1 | 20 | - | 1500 | 6 | ISLAND CIRCUIT | 28 |
| 29 | EWH | 4 | 2250 | - | 30 | 2 | С | С | 1 | 20 | - | - | - | SPARE | 30 |
| 31 | - | 4 | 2250 | - | - | - | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 32 |
| 33 | IWH | 4 | 1750 | - | 20 | 2 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 34 |
| 35 | - | 4 | 1750 | - | - | - | С | С | 1 | 20 | - | - | - | SPACE ONLY | 36 |
| 37 | SPACE ONLY | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 38 |
| 39 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 40 |
| 41 | SPACE ONLY | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPACE ONLY | 42 |
| Phase A Phase B Phase C | 17045 VA 16732 VA 16420 VA | | | | | | | | | NOT | E: | | | | |
| Total kVa= Total Amps | | | | | | | | | | A.I.C. | RATING: | VERIFY | WITH I | LOCAL UTILITY | |

| Panel | С | | | | OC. | Type | | CKT | BRK | R | | | Volta | ge L-L | 208 |
|------------|--------------------|-------|---------|---------|----------|--------|----|------|------|--------|---------|--------|-------|-------------------|---------|
| Device | MOLDED CASE | | | | Enc | losur | e | NEN | MA 1 | | | | Volta | ge L-N | 120 |
| Mounting | SURFACE | | | | Con | nme nt | ts | M.L. | .O. | | | | Ampe | rage | 225 |
| Ckt No. | Description | Type | Load | Remarks | СВ | Pole | PH | РН | Pole | | Remarks | Load | Type | | Ckt No. |
| 1 | CU - 1 | 10 | 2808 | - | 45 | 2 | Α | Α | 3 | 20 | - | 2362 | 8 | COOLER CU | 2 |
| 3 | - | 10 | 2808 | - | - | - | В | В | - | - | - | 2362 | 8 | - | 4 |
| 5 | CU - 2 | 8 | 2808 | - | 45 | 2 | С | С | - | - | - | 2362 | 8 | - | 6 |
| 7 | - | 8 | 2808 | - | - | - | Α | Α | 3 | 20 | - | 2362 | 8 | BEER CAVE CU | 8 |
| 9 | CU - 3 | 8 | 2808 | - | 45 | 2 | В | В | - | - | - | 2362 | 8 | - | 10 |
| 11 | - | 8 | 2808 | - | - | - | С | С | - | - | - | 2362 | 8 | - | 12 |
| 13 | W.I.F. CU | 8 | 2704 | - | 20 | 2 | Α | Α | 3 | 20 | - | 2362 | 8 | COOLER CU | 14 |
| 15 | - | 8 | 2704 | - | - | - | В | В | - | - | - | 2362 | 8 | - | 16 |
| 17 | W.I.C. CU | 8 | 2049 | - | 20 | 2 | С | С | - | - | - | 2362 | 8 | - | 18 |
| 19 | - | 8 | 2049 | - | - | - | Α | Α | 3 | 15 | - | 791 | 9 | KEF - 1 | 20 |
| 21 | W.I.F. CU | 8 | 2704 | - | 20 | 2 | В | В | - | - | - | 791 | 9 | - | 22 |
| 23 | - | 8 | 2704 | - | - | - | С | С | - | - | - | 791 | 9 | - | 24 |
| 25 | AHU - 1 | 9 | 1622 | - | 20 | 1 | Α | Α | 3 | 15 | - | 660 | 9 | MAU - 1 | 26 |
| 27 | AHU - 2 | 9 | 1622 | - | 20 | 1 | В | В | - | - | - | 660 | 9 | - | 28 |
| 29 | AHU - 3 | 9 | 1622 | - | 20 | 1 | С | С | - | - | - | 660 | 9 | - | 30 |
| 31 | W.I.F. EVAPORATOR | 9 | 510 | - | 15 | 2 | Α | Α | 1 | 20 | - | 184 | 9 | COOLER EVAPORAT'R | 32 |
| 33 | - | 9 | 510 | - | - | - | В | В | 1 | 20 | - | 184 | 9 | COOLER EVAPORAT'R | 34 |
| 35 | W.I.F. EVAPORATOR | 9 | 510 | - | 20 | 1 | С | С | 1 | 20 | - | 184 | 9 | COOLER EVAPORAT'R | 36 |
| 37 | - | 9 | 510 | - | 20 | 1 | Α | Α | 1 | 20 | - | 115 | 9 | COOLER EVAPORAT'R | 38 |
| 39 | COOLER DOOR LIGHTS | 1 | 750 | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPARE | 40 |
| 41 | ROOFTOP RECEPT. | 3 | 720 | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPARE | 42 |
| Phase A | 21847 VA | | | | | | | | | | | | | | |
| Phase B | 22627 VA | | | | | | | | | NOT | E: | | | | |
| Phase C | 21942 VA | | | | | | | | | | | | | | |
| Total kVa= | **** | Demar | | 57.3 | | | | | | | | | | | |
| Total Amps | 184.4 | Demar | nd Amps | 159.2 | <u> </u> | | | | | A.I.C. | RATING: | VERIFY | WITH | LOCAL UTILITY | |

| Panel | F | | | · | OC | Type | | CKT | BRK | R | | | Volta | ge L-L | 208 |
|------------|------------------|----------|---------|---------|-----|--------|----|-----|------|--------|-----------|--------|-------|---------------|---------|
| Device | MOLDED CASE | | | | Enc | losur | Э | NE | MA 1 | | | | Volta | ge L-N | 120 |
| Mounting | SURFACE | | | | Con | nme nt | s | M.L | Ο. | | | | Ampe | rage | 225 |
| Ckt No. | Description | Type | Load | Remarks | СВ | Pole | РΗ | РΗ | Pole | СВ | Remarks | Load | Type | Description | Ckt No. |
| 1 | BUILDING SIGNAGE | 1 | 750 | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPARE | 2 |
| 3 | BUILDING SIGNAGE | 1 | 750 | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPARE | 4 |
| 5 | BUILDING LIGHTS | 1 | 466 | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPARE | 6 |
| 7 | BOLLARD LIGHTS | 1 | 576 | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPARE | 8 |
| 9 | SPARE | - 1 | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPARE | 10 |
| 11 | SPARE | - 1 | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPARE | 12 |
| 13 | SPARE | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPARE | 14 |
| 15 | SPARE | - 1 | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPARE | 16 |
| 17 | SPARE | - 1 | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPARE | 18 |
| 19 | SPACE ONLY | - 1 | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 20 |
| 21 | SPACE ONLY | - 1 | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 22 |
| 23 | SPACE ONLY | - 1 | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPACE ONLY | 24 |
| 25 | SPACE ONLY | - 1 | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 26 |
| 27 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 28 |
| 29 | SPACE ONLY | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPACE ONLY | 30 |
| 31 | SPACE ONLY | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 32 |
| 33 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 34 |
| 35 | SPACE ONLY | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPACE ONLY | 36 |
| 37 | SPACE ONLY | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 38 |
| 39 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 40 |
| 41 | SPACE ONLY | | - | - | 20 | 1 | С | С | 1 | 20 | - | | _ | SPACE ONLY | 42 |
| Phase A | 1326 V | | | | | | | | | | | | | | |
| Phase B | 750 V | | | | | | | | | NOT | E: | | | | |
| Phase C | 466 V | A | | | | | | | | | | | | | |
| Total kVa= | = : | 5 Demar | | 3.2 | | | | | | | | | | | |
| Total Amps | 7. | .1 Demar | nd Amps | 8.8 | 3 | | | | | A.I.C. | . RATING: | VERIFY | WITH | LOCAL UTILITY | |

| Panel | DP | | | | OC T | ype | | CKT | BRK | R | | | Volta | ge L-L | 208 |
|------------|------------------|------------|---------|---------|------|-------|----|-----|------|--------|---------|--------|-------|------------------|--------|
| Device | MOLDED CASE | | | | Encl | osur | • | NEI | MA 1 | | | | Volta | ge L-N | 120 |
| Mounting | SURFACE | | | | Com | me nt | s | M.L | Ο. | | | | Ampe | erage | 400 |
| Ckt No. | Description | Type | Load | Remarks | СВ | Pole | РΗ | РΗ | Pole | СВ | Remarks | Load | Type | | Ckt No |
| 1 | LIGHTS | 2 | 120 | - | 20 | 1 | Α | Α | 1 | 20 | - | 1622 | 9 | AHU - 4 | 2 |
| 3 | EXTERIOR LIGHTS | 2 | 82 | - | 20 | 1 | В | В | 1 | 20 | - | 360 | 3 | RECEPTACLES | 4 |
| 5 | BUILDING SIGNAGE | 1 | 750 | - | 20 | 1 | С | С | 1 | 20 | - | 1080 | 3 | EXTERIOR RECEPT. | 6 |
| 7 | SPARE | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPARE | 8 |
| 9 | SPARE | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPARE | 10 |
| 11 | SPARE | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPARE | 12 |
| 13 | SPARE | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPARE | 14 |
| 15 | SPARE | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPARE | 16 |
| 17 | SPARE | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPARE | 18 |
| 19 | SPACE ONLY | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 20 |
| 21 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 22 |
| 23 | SPACE ONLY | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPACE ONLY | 24 |
| 25 | SPACE ONLY | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 26 |
| 27 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 28 |
| 29 | SPACE ONLY | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPACE ONLY | 30 |
| 31 | SPACE ONLY | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 32 |
| 33 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | - | SPACE ONLY | 34 |
| 35 | SPACE ONLY | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | - | SPACE ONLY | 36 |
| 37 | SPACE ONLY | - | - | - | 20 | 1 | Α | Α | 1 | 20 | - | - | - | SPACE ONLY | 38 |
| 39 | SPACE ONLY | - | - | - | 20 | 1 | В | В | 1 | 20 | - | - | _ | SPACE ONLY | 40 |
| 41 | SPACE ONLY | - | - | - | 20 | 1 | С | С | 1 | 20 | - | - | _ | SPACE ONLY | 42 |
| Phase A | 1742 V | /A | | | | | | | | | | | | | |
| Phase B | 442 V | / A | | | | | | | | NOT | E: | | | | |
| Phase C | 1830 V | / A | | | | | | | | | | - | | | |
| Total kVa= | | .0 Demar | | 3.1 | | | | | | | | | | | |
| Total Amps | 11 | .1 Demar | nd Amps | 8.7 | | | | | | A.I.C. | RATING: | VERIFY | WITH | LOCAL UTILITY | |



JD CITY C-STORE

/AL PATEL Hydes Ferry Pike, Ashland City, TN 37015

U Old Hydes Ferry Pike,

AGRICULTURE

AGRICULTURE

AGRICULTURE

OF TENERS

ville, tennessee fice@meridiantn.com

REVISIONS:

DELTA DESCRIPTION

 DATE OF ISSUE:
 10.20.2021

 MA PROJECT NO:
 0214-21

PROJECT PHASE:

DRAWN BY:

ELECTRICAL
PANEL SCHEDULES
RISER DIAGRAM

E-002

(C) 2021

- Page 67 -



Project Informat

Energy Code: 2018 IECC
Project Title: Ashland City C-Store
Project Type: New Construction

Area Category

2-Cooler/Freezer (Common Space Types: Storage >=50 - <=1000 sq.ft.)

LED 7: G: 4' GASKETED STRIP: LED Linear 33W:

Construction Site: Owner/Agent: Designer/Contractor:

Ashland City, TN

Additional Efficiency Package(s)

Owner/Agent: Designer/Contractor:

Lori Walters

Win Engineering
2 International Plaza
Suite 410

High efficiency HVAC. Systems that do not meet the performance requirement will be identified in the mechanical requirements checklist report.

Allowed Watts

(B X C)

Watts / ft2

1 17 34 578

Floor Area

Allowed Interior Lighting Power

| 1-Sales (Retail:Sales Area) | 2323 | 1.22 | | 2834 |
|--|---------|---------------|---------|--------|
| 3-Restrooms (Common Space Types:Restrooms) | 129 | 0.85 | | 110 |
| 4-Prep/Kitchen (Common Space Types:Food Preparation) | 604 | 1.06 | | 640 |
| 5-Office (Common Space Types:Office - Open Plan) | 81 | 0.81 | | 66 |
| 2-Cooler/Freezer (Common Space Types:Storage >=50 - <=1000 sq.ft.) | 815 | 0.46 | | 375 |
| 6-Future Tenant Space (Retail:Sales Area) | 2106 | 1.22 | | 2569 |
| | Tot | tal Allowed V | Vatts = | 6594 |
| Proposed Interior Lighting Power | | | | |
| Α | В | С | D | E |
| Fixture ID: Description / Lamp / Wattage Per Lamp / Ballast | Lamps/ | # of | Fixture | (C X D |
| | Fixture | Fixtures | Watt. | |
| 1-Sales (Retail:Sales Area) | | | | |
| LED 2: B: 4' LINEAR: LED Linear 33W: | 1 | 18 | 32 | 574 |
| LED 4: D: 6" DOWNLIGHT: LED Panel 19W: | 1 | 12 | 18 | 210 |
| LED 5: E: 4" DOWNLIGHT: LED Panel 19W: | 1 | 6 | 11 | 64 |
| LED 6: F: PENDANT: LED Panel 19W: | 1 | 13 | 12 | 156 |
| 3-Restrooms (Common Space Types:Restrooms) | | | | |
| LED 4: D: 6" DOWNLIGHT: LED Panel 19W: | 1 | 4 | 18 | 70 |
| 4-Prep/Kitchen (Common Space Types:Food Preparation) | | | | |
| LED 1: A: 2X4 TROFFER: LED Panel 40W: | 1 | 6 | 39 | 234 |
| LED 3: C: 4' STRIP: LED Linear 33W: | 1 | 5 | 30 | 150 |
| LED 4: D: 6" DOWNLIGHT: LED Panel 19W: | 1 | 8 | 18 | 140 |
| 5-Office (Common Space Types:Office - Open Plan) | | | | |
| LED 4: D: 6" DOWNLIGHT: LED Panel 19W: | 1 | 4 | 18 | 70 |
| | | | | |

Project Title: Ashland City C-Store Report date: 09/27/21

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Fixture ID: Description / Lamp / Wattage Per Lamp / Ballast

6-Future Tenant Space (Retail: Sales Area)
LED 3: C: 4' STRIP: LED Linear 33W:

Interior Lighting PASSES: Design 64% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Lori A. Walters, P.E.

Name - Title

B

C X D)

of # of Fixture Vatte (C X D)

of Fixture Vatte

AGRICULTUR AGRICULTUR OF TEN

DNS.

REVISIONS:

DELTA DESCRI

 DATE OF ISSUE:
 10.20.2021

 MA PROJECT NO:
 0214-21

PROJECT PHASE:

DRAWN BY:

ELECTRICAL LIGHT FIXTURE SCHUDLE IECC REPORT

E-003

Project Title: Ashland City C-Store Report date: 09/27/21

Data filename: C:\Users\Derwin\Dropbox (Win Engineering)\Work 2021\04321_Ashland City C-Store - Ashland Page 2 of 7

City, TN\Design\Work in Process\C-STORE.cck

CONSULTANT



THESE CONSTRUCTION DOCUMENTS DO NOT INCLUDE THE DESIGN OF THE GAS PUMPS, CANOPY LIGHTING, SITE LIGHTING OR ANY EQUIPMENT OUTSIDE OF THE BUILDING ENVELOPE. ELECTRICAL PANEL 'F' HAS BEEN PROVIDED FOR THESE ADDITIONAL ELECTRICAL LOADS.

CELL, CIRCUIT A-2 TO CONTROL THE FOLLOWING:

(A) BUILDING LIGHTS

(C) BUILDING SIGNAGE

(D) BUILDING SIGNAGE

(F) POLE LIGHTS (BY OTHERS)

2 PROVIDE LIGHT SWITCH/THERMOMETER IF NOT SUPPLIED WITH MANUFACTURER. COORDINATE REQUIREMENTS WITH MANUFACTURER PRIOR TO CONSTRUCTION.

3 PROVIDE REPLACEMENT L.E.D. LAMPS FOR HOOD LIGHTS, CIRCUIT

4 SWITCH RESTROOM EXHAUST FANS WITH THE LIGHTS AS SHOWN.

5 PROVIDE CONNECTION TO COOLER DOOR LIGHTS (C-39) NOT

6 LIGHT FIXTURES ARE SHOWN FOR COOLER AND FREEZER LOCATIONS. PRIOR TO CONSTRUCTION, VERIFY WITH MANUFACTURER IF LIGHT FIXTURES ARE PROVIDED WITH COOLER AND FREEZER UNITS. REMOVE TYPE 'G' LIGHT FIXTURES AS

KEYNOTES

1 PROVIDE 8 RELAY LIGHTING CONTROL PANEL WITH ASTRONOMICAL TIME CLOCK AND COMPATIBLE ELECTRONIC PHOTO

(B) BOLLARD LIGHTS

(E) CANOPY LIGHTS (BY OTHERS)

(G) MONUMENT SIGNAGE (BY OTHERS)

(H) SPARE

(A-14) NOT SHOWN.

NEEDED.

ELECTRICAL LIGHTING FLOOR PLAN

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

CONSULTANT

2 International Plaza Suite 410 Nashville, TN 37217 Phone: 615-891-4565 | Fax: 615-250-0580 Project #04321

ELECTRICAL LIGHTING

10.20.2021

0214-21

REVISIONS:

DATE OF ISSUE:

MA PROJECT NO:

DRAWN BY:

FLOOR PLAN

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ELECTRICAL POWER FLOOR PLAN

1/8" = 1'-0"

IMPORTANT NOTE

THE GAS PUMPS, CANOPY LIGHTING, SITE LIGHTING OR ANY EQUIPMENT OUTSIDE OF THE BUILDING ENVELOPE. ELECTRICAL PANEL 'F' HAS

KITCHEN EQUIPMENT NOTE

VERIFY ALL KITCHEN EQUIPMENT ELECTRICAL REQUIREMENTS PRIOR TO CONSTRUCTION. ADJUST PANEL SCHEDULE, CIRCUIT BREAKERS, WIRING, ETC. AS REQUIRED.

KEYNOTES

- 1 PROVIDE 2" EMPTY CONDUIT WITH PULL WIRE STUBBED UP IN TENANT SPACE FROM BUILDINGS TELEPHONE/CABLE TV TERMINATION CABINET.
- 2 VERIFY LOCATION OF TV MONITOR AND ADJACENT RECEPTACLE WITH OWNER PRIOR TO CONSTRUCTION.
- 3 PROVIDE RECEPTACLE FOR VENDOR DISPLAY SIGNS AT OR ABOVE CEILING. VERIFY RECEPTACLE LOCATIONS WITH OWNER PRIOR TO CONSTRUCTION.

THESE CONSTRUCTION DOCUMENTS DO NOT INCLUDE THE DESIGN OF BEEN PROVIDED FOR THESE ADDITIONAL ELECTRICAL LOADS.



REVISIONS:

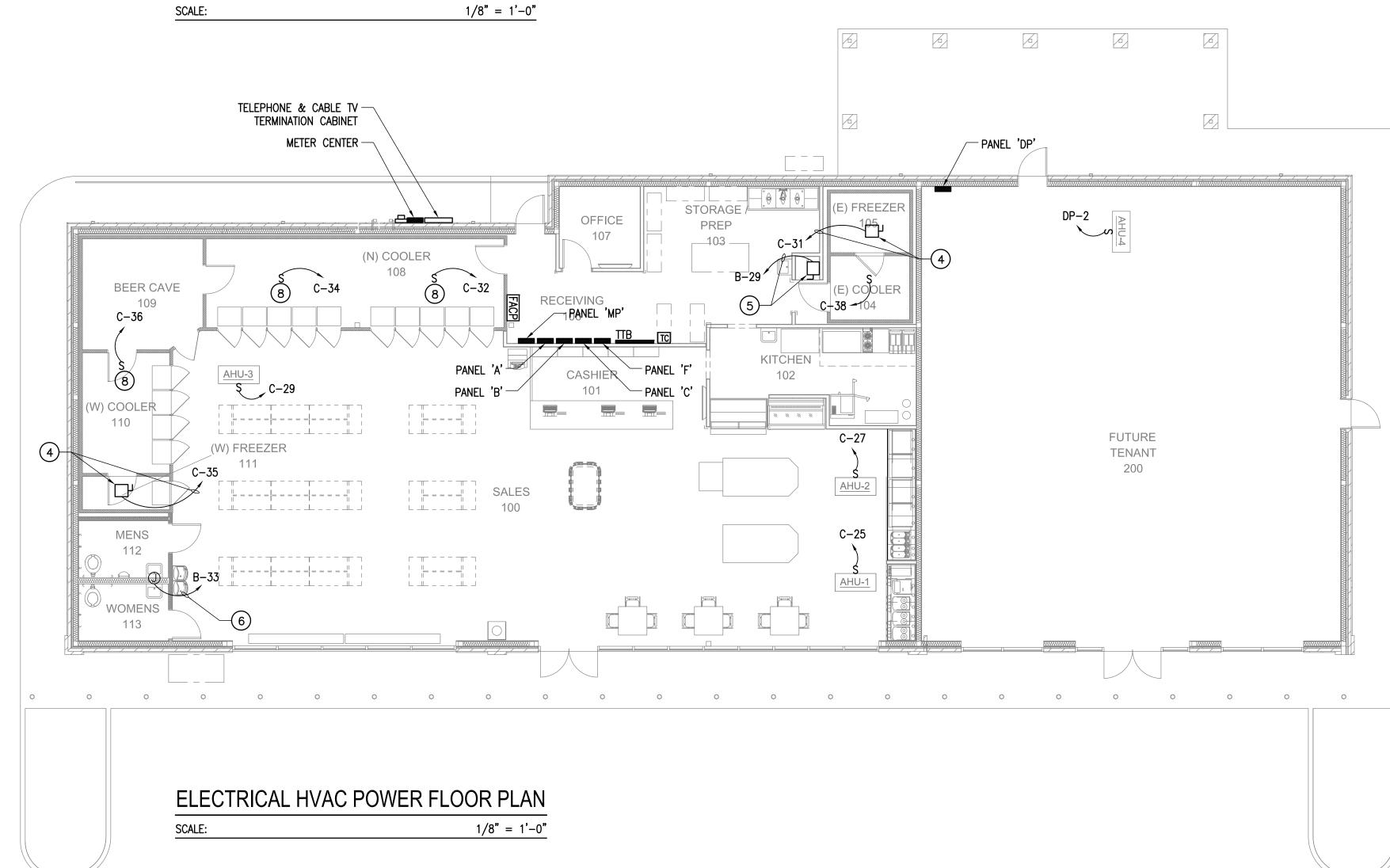
10.20.2021 DATE OF ISSUE: MA PROJECT NO: 0214-21 **PROJECT PHASE:** DRAWN BY:

ELECTRICAL POWER FLOOR PLAN

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CONSULTANT

ELECTRICAL HVAC POWER ROOF PLAN



KEYNOTES

- 1 PROVIDE 240V/2P/60A/3R DISCONNECT SWITCH WITH (2)#8, (1)#10G, 3/4°C.
- 2 PROVIDE 240V/2P/30A/3R DISCONNECT SWITCH WITH (2)#12, (1)#12G, 3/4"C.
- PROVIDE 240V/2P/30A DISCONNECT SWITCH WITH (2)#10, (1)#10G, 3/4°C.
- 8 COOLER EVAPORATORS ARE NOT SHOWN, PROVIDE 120V, 20A SWITCHES WITH NEMA 3R ENCLOSURE.

3 PROVIDE 240V/3P/30A/3R DISCONNECT SWITCH WITH (3)#12, (1)#12G, 3/4"C. 4 PROVIDE 240V/2P/30A DISCONNECT SWITCH WITH (2)#12, (1)#12G, 3/4"C.

6 PROVIDE (2)#12, (1)#12G, 3/4"C FOR IWH.

PROVIDE OPTIONAL LINEAR LUMINAIRE (LED LINEAR – ADONIS IP67), UNDER OVERHANG. CONNECT (F-7) AND TO BUILDINGS EXTERIOR LIGHTING CONTROLS. VERIFY LENGTH OF RUN WITH OWNER & G.C. PRIOR TO CONSTRUCTION.

REVISIONS:

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ELECTRICAL HVAC POWER ROOF & FLOOR PLANS

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PART 1 GENERAL

- FURNISH ALL MATERIALS, LABOR, TOOLS, TRANSPORTATION AND INCIDENTALS TO COMPLETE IN EVERY DETAIL AND LEAVE IN WORKING ORDER ITEMS SHOWN ON THE CONTRACT.
- INSTALL AND COORDINATE ALL WORK WITH OTHER TRADES. CONTRACTOR SHALL COORDINATE AND MAKE MINOR ADJUSTMENTS IN INSTALLATION IN THE EVENT OF CONFLICTS.
- LAYOUT SHOWN IN DRAWINGS IS BASED ON A PARTICULAR MODEL OF EQUIPMENT. CONTRACTOR SHALL PROVIDE SIX SUBMITTAL SETS OF INDICATED PRODUCTS SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING WORK. SWITCHBOARDS SHALL BE REJECTED WITHOUT DIMENSIONED LAYOUT OF E LECTRICAL ROOM(S). IF ANOTHER MODEL OF EQUIPMENT IS DESIRED, THESE SUBMITTALS SHALL ALSO SHOW ALL REQUIRED MODIFICATIONS AND CHANGES. CONTRACTOR MUST RECEIVE APPROVED SUBMITTAL COPY, SIGNED BY ENGINEER, BEFORE PROCEEDING WITH ANY MODIFICATIONS WORK INSTALLED USING UNAPPROVED SUBSTITUTIONS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL VISIT THE SITE AND FULLY INFORM HIMSELF CONCERNING ALL CONDITIONS AFFECTING SCOPE OF WORK. FAILURE TO DO SO SHALL NOT RELIEVE CONTRACTOR OF ANY RESPONSIBILITY IN THE PERFORMANCE OF HIS WORK. ALL WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY IN ACCORDANCE WITH THE BEST PRACTICES OF THE TRADE BY CRAFTSMEN SKILLED IN HIS PARTICULAR WORK. IMMEDIATELY INFORM EH ENGINEER OF ANY FIELD CONDITIONS THAT MAY PREVENT INSTALLATION OF EQUIPMENT AND DEVICES IN ACCORDANCE WITH CONTRACT DOCUMENTS.
- COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCE, INCLUDING BUT NOT LIMITED TO THE LATEST APPROVED EDITIONS OF THE FOLLOWING:
- A. INTERNATIONAL BUILDING CODE
- NFPA 70: NATIONAL ELECTRICAL CODE
- NFPA 101: LIFE SAFETY CODE
- NFPA 72: NATIONAL FIRE ALARM AND SIGNALING CODE
- NFPA 99: HEALTH CARE FACILITIES CODE
- CONTRACTOR SHALL COORDINATE WITH MONTGOMERY COUNTY PARKS DEPARTMENT WHO IS RESPONSIBLE FOR UTILITY PAYMENT DURING CONSTRUCTION.
- OBTAIN PERMITS AND CERTIFICATES OF APPROVAL FROM ALL AUTHORITIES HAVING JURISDICTION OVER THE INSTALLATION AND PAY ALL FEES REQUIRED. CONTRACTOR SHALL COORDINATE WITH ALL LOCAL UTILITIES AND OBTAIN ALL REQUIRED FEE AMOUNTS AND INCLUDE THESE FEES IN THE BID PRICE.
- CONTRACTOR SHALL SUBMIT LOAD SUMMARY TO THE LOCAL UTILITY AND COORDINATE THE INSTALLATION OF NEW SERVICE TO THE BUILDINGS(S) BEING SERVED. CONTRACTOR SHALL COORDINATE WITH ALL LOCAL ELECTRIC, CATV, AND TELEPHONE UTILITIES AND PROVIDE AND INSTALL ANY ADDITIONAL REQUIRED EQUIPMENT (CONDUIT, UTILITY PADS, WIRING, METER BASES, ETC.) IN ACCORDANCE WITH UTILITY STANDARDS. THE ADDITION OR REPLACEMENT OF EQUIPMENT THAT DOES NOT MEET UTILITY STANDARDS RESULTING FROM POOR COORDINATION WITH LOCAL UTILITIES SHALL BE DONE AT THE EXPENSE OF THE

- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEFECTS, REPAIRS AND MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR AFTER FINAL PAYMENT IS APPROVED. CONTRACTOR SHALL HONOR FACTORY WARRANTIES ON ALL EQUIPMENT PROVIDED.
- UPON COMPLETION OF PROJECT, ALL EQUIPMENT AND MATERIALS SHALL BE IN NEW, CLEAN CONDITIONS WITH ALL DAMAGE RESTORED TO ACCEPTABLE CONDITION. ALL EQUIPMENT SHALL BE INSPECTED AND THOROUGHLY CLEANED, READY FOR USE. AT COMPLETIONS OF JOB. ALL MISCELLANEOUS TOOLS, SCAFFOLDING, SURPLUS MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED BY CONTRACTOR.
- WHERE CONDUITS ARE TO PASS THROUGH WALLS, FLOORS, ETC. SLEEVES SHALL BE PROVIDED PRIOR TO WALL CONSTRUCTION. SLEEVES SHALL BE OF RIGID METAL. WHERE SLEEVES PENETRATE EXTERIOR SURFACES, VOIDS SHALL BE SEALED WATER TIGHT. WHERE SLEEVES PASS THROUGH RATED PARTITIONS, SLEEVE PACKING SHALL BE OF U.L. LISTED FIRE SAFE TYPE.
- CONTRACTOR SHALL SUBMIT THREE (3) SETS OF INSTRUCTION BOOKS, INCLUDING INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS, PAMPHLETS OR PROCEDURES AND ALL EQUIPMENT WARRANTIES OBTAINED FROM EACH MANUFACTURER OF EQUIPMENT.
- CONTRACTOR SHALL MAINTAIN ONE (1) SET OF BLUE LIENS AT THE CONSTRUCTION SITE. THESE BLUE LINES SHALL BE MARKED FOR CHANGED AND SHALL BE USED FOR AS-BUILT DRAWINGS. TURN DRAWINGS OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT.
- ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED FOR EXACT SIZES OR LOCATIONS.

26 05 19 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLE

PRODUCTS AND EXECUTION

- A. PROVIDE A COMPLETE SYSTEM OF CONDUCTORS LIGHTING AND POWER SYSTEMS THROUGHOUT THE PROJECT.
- ALL CONDUCTORS SHALL BE 98 PERCENT CONDUCTIVITY COPPER WITH 600 VOLT MINIMUM INSULATION. 75° C INSULATION MINIMUM. ALL CONDUCTORS NO. 10 AND SMALLER SHALL HAVE TYPE THW OR THWN
- INSULATION AND SHALL EB SOLID UNLESS NOTED OTHERWISE ON PLANS. D. ALL CONDUCTORS NO. 8 AND LARGER SHALL HAVE TYPE THW OR THWN
- INSULATION AND SHALL BE STRANDED UNLESS NOTED OTHERWISE ON PLANS. CONDUCTORS SHALL BE AS MANUFACTURED BY ANACONDA, GENERAL CABLE, HABIRSHAW, OKONITE, ROME, TRIANGLE OR SOUTHWIRE UNLESS
- OTHERWISE NOTED. MAKE ALL SPLICES OR CONNECTIONS ONLY AT OUTLET OR JUNCTION BOXES.
- G. USE ONLY APPROVED (SOAPSTONE) OR OTHER LUBRICANT WHERE
- REQUIRED.

26 05 33.13 CONDUIT FOR ELECTRICAL SYSTEMS

1. PRODUCTS AND EXECUTION

- A. PROVIDE A COMPLETE CONDUIT SYSTEM WITH ASSOCIATED COUPLINGS, CONNECTORS AND FITTINGS.
- B. CONDUIT SHALL BE AS MANUFACTURED BY ALLIED, WHEATLAND OR REPUBLIC FOR GALVANIZED RIGID/EMT AND ANACONDA, ALFLEX OR INTERNATIONAL FOR FLEXIBLE STEEL CONDUIT.
- FOR EMT, PROVIDE STEEL SET SCREW TYPE COUPLINGS, CONNECTORS, AND FITTINGS WITH NYLON INSULATED THROATS AND CASE HARDENED LOCKNUTS.

RIGID NONMETALLIC (PVC) CONDUIT: CARLON SCHEDULE 40, HEAVY WALL OR

- RUN CONCEALED CONDUITS IN AS DIRECT LINE AS POSSIBLE BETWEEN OUTLETS. RUN EXPOSED CONDUITS AT RIGHT ANGLES WITH BUILDING
- MAINTAIN INTEGRITY OF FIRE PARTITIONS AND FLOOR SLABS WHERE CONDUITS PASS THROUGH SLEEVES FROM ONE AREA TO ANOTHER WITH U.L. LISTED THREE-HOUR FIRE AND SMOKE STOP FITTINGS. USE "3M FIRE BARRIER" FOR 4-HOUR SEPARATION WALL PENETRATIONS.
- COMPLETE ALL CONDUIT SYSTEMS BEFORE INSTALLING CONDUCTORS. INSTALL COPPER, GROUND WIRE IN ALL FLEXIBLE CONDUIT.
- ALLOW SUFFICIENT SLACK IN FLEXIBLE CONDUIT TO REDUCE VIBRATION
- SUPPORT CONDUIT WITH APPROVED STRAPS AND HANGERS AT INTERVALS REQUIRED BY N.E.C.
- USE ELECTRICAL METALLIC TUBING WHERE DRAWINGS CALL FOR CONDUIT TO BE CONCEALED IN WALLS OR ABOVE CEILINGS. USE GALVANIZED RIGID WHERE CONDUITS ARE RUN EXPOSED ABOVE FINISHED
- FLOOR OR GRADE. USE PVC SCHEDULE 40 WHERE RAN IN SLAB (ON FIRST FLOOR ONLY) AND

BELOW GRADE WITH TRANSITION BEING MADE TO GALVANIZED RIGID BEFORE

- TURNING UP OUT OF SLAB OR GRADE. MINIMUM CONDUIT SIZE SHALL BE 3/4"
- USE APPROVED SCOTCHLOCK OR T&B CONNECTORS FOR INTENDED
- APPLICATION WHERE CONNECTORS ARE REQUIRED. CONDUCTORS ARE TO BE COLOR CODED WITH A DIFFERENT COLOR OR EACH PHASE, NEUTRAL, AND GROUND AS FOLLOWS:

277/480 VOLT CIRCUITS:

PHASE A: BROWN PHASE B: ORANGE

PHASE C: YELLOW

120/208 VOLT CIRCUITS: PHASE A: BLACK

PHASE B: RED

PHASE C: BLUE 120/240 VOLT CIRCUITS: PHASE A: BLACK

PHASE B: RED

NEUTRAL: WHITE FOR 120/208V & 120/240V, GREY FOR 277/480V GROUND: GREEN

APPROVED COLOR TAPE IS ACCEPTABLE FOR FEEDERS. PROVIDE COLOR CODED WIRE FOR CONTROL CIRCUITS.

- PROVIDE NO. 10 WIRE IN LIEU OF NO. 12 WIRE FOR ANY BRANCH CIRCUIT IN EXCESS OF 100' LINEAR LENGTH TO PREVENT EXCESSIVE VOLTAGE DROP.
- CONDUCTOR SIZES INDICATED ON DRAWINGS ARE BASED ON COPPER WIRE (75 DEGREES C) IN CONDUIT. IF NON-METALLIC CABLING 'NM' (A.K.A. 'ROMEX') OR METAL CLAD CABLING (A.K.A. 'MC'CABLE) IS USED, CONTRACTOR IS RESPONSIBLE FOR SIZING CIRCUITS ACCOUNTING FOR DEVIATION FROM DESIGN AND FOR ANY REQUIRED DERATING FOR INSTALLATION IN ACCORDANCE WITH THE N.E.C. NM OR MC CABLE SHALL NOT BE USED UNLESS INDICATED ON DRAWINGS OR WRITTEN PERMISSION IS OBTAINED FROM ENGINEER OF RECORD.

26 05 33.16 BOXES FOR ELECTRICAL SYSTEMS

1. PRODUCTS AND EXECUTION

- PROVIDE EACH FIXTURE SWITCH, RECEPTACLE, AND OTHER DEVICE WITH A GALVANIZED STEEL OUTLET BOX OF APPROPRIATE SIZE AND DEPTH FOR TIS PARTICULAR LOCATION AND PROVIDE PULL AND JUNCTION BOXES WHERE REQUIRED
- B. CEILING OUTLET BOXES SHALL BE 4" OCTAGON AND WALL BOXES TO BE 4" SQUARE WITH RAISED PLASTER RINGS OR DEVICE RINGS. PROVIDE
- FIXTURES STUDS IN CENTER OF BOXES USED FOR SUPPORT OF FIXTURES. C. OUTLET AND JUNCTION BOXES IN ALL CIRCUITS OR FEEDERS OVER 100'
- INSTALL PULL BOXES IN ALL CIRCUITS OR FEEDERS OVER 100' LONG.
- OUTLET BOXES SHALL BE SECURELY ANCHORED. SET TRUE AND PLUMB AND NO PART OF BOX OR COVER SHALL EXTEND BEYOND FINISHED WALL OR CEILING. FLUSH MOUNTED BOXES SHALL BE SET TO WITHIN 1/8" IF FINISHED
- WALL AND A PLASTER RING USED TO MAKE COVER FLUSH WITH WALL. OUTLET BOXES SHALL NOT BE LOCATED ON OPPOSITE SIDES OF THE SAME FIRE OR SMOKE RATED WALL WITHIN THE SAME STUD COMPARTMENT. BOXES SHALL BE OFFSET AS REQUIRED TO PREVENT THIS AND TO MAINTAIN WALL RATINGS.

26 21 16 LOW-VOLTAGE UNDERGROUND ELECTRICAL SERVICE ENTRANCE

1. PRODUCTS AND EXECUTION

- A. THE ENTIRE INSTALLATION SHALL BE GROUNDED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE, ARTICLE 250.
- B. ALL CURRENT CONSUMING DEVICES SHALL HAVE A GROUND WIRE INSTALLED IN THE SAME CONDUIT AS THE PHASE CONDUCTORS FROM THE
- PANEL TO THE DEVICE. THIS APPLIES TO RECEPTACLES, MOTORS, ETC. SERVICE ENTRANCE RACEWAYS, CONDUCTORS, TRENCHING, BACKFILL, ETC. SHALL BE INSTALLED AS INDICATED ON DRAWINGS AND PER NEC AND LOCAL CODE REQUIREMENTS INCLUDING LOCAL UTILITY COMPANY
- INSTALLATION SPECIFICATIONS. D. ALL GROUND WIRE SHALL BE COPPER WITH A GREEN INSULATION OR IF A GREEN INSULATION IS NOT AVAILABLE. THEN GREEN IDENTIFYING TAPE
- WILL BE INSTALLED AT BOTH TERMINATION POINTS. ALL MATERIALS SHALL BE AS SPECIFIED ON DRAWINGS OR AS SPECIFIED BY
- LOCAL UTILITY COMPANY FOR SERVICE EQUIPMENT INSTALLATIONS. PROVIDE GROUND WIRES THROUGHOUT DISTRIBUTION SYSTEM AND TO ALL UTILIZATION EQUIPMENT, SUCH AS RECEPTACLES, MOTORS AND OTHER
- PROVIDE SERVICE INSTALLATION PER DRAWINGS. CONTRACTOR SHALL FIELD COORDINATE EXACT LOCATION AND POINT OF SERVICE INSTALLATION WITH UTILITY COMPANY, INCLUDING PROVIDING FINAL BROKEN-DOWN LIST OF LOADS FOR UTILITY COMPANY TO USE IN DETERMINING SERVICE EQUIPMENT SIZES AND TYPES.

REQUIREMENTS LOCATIONS PER NATIONAL ELECTRICAL CODE AND ARTICLE

26 24 16 PANELBOARDS

PRODUCTS AND EXECUTION

- A. PROVIDE SUBMITTALS SHOWING CIRCUIT BREAKER SIZES, AIC RATINGS, BUS AND NEUTRAL SIZES. PROVIDE ROOM DIMENSIONS IF APPLICABLE.
- PANELBOARDS SHALL BE OF THE CIRCUIT BREAKER TYPE AS MANUFACTURED BY SQUARE 'D', SIEMENS, GENERAL ELECTRIC,
- CUTLER-HAMMER OR APPROVED EQUAL. PANELBOARDS SHALL BE RATED AS INDICATED ON SCHEDULE.
- ALL PANELBOARDS SHALL HAVE ISOLATED NEUTRAL BUS. ALL PANELS SHALL HAVE SEPARATE GROUND BUS CONNECTED WITH A GREEN GROUNDING CONDUCTOR BACK TO THE SOURCE OF ITS PARTICULAR
- F. ALL PANELBOARDS SHALL HAVE TYPED DIRECTORY CARDS EXCEPT THAT POWER PANELS WILL BE ENGRAVED PHENOLIC NAMEPLATES ATTACHED TO THE INDIVIDUAL BREAKERS INDICATED THE PANELBOARD OR DEVICE BEING
- INSTALL FLUSH MOUNTED PANELBOARDS WHERE INDICATED SO THAT THE PANEL BOX WILL BE FLUSH WITH THE WALL SURFACE AND THE PANELBOARD FROM WILL BE IN FULL CONTACT WITH THE WALL. STUB OUT INTO CEILING SPACE A MINIMUM OF ONE 3-4" EMPTY CONDUIT PER EACH 3 POLES OF SPARES OR SPACES.
- SURFACE MOUNTED PANELBOARDS SHALL BE FIRMLY ATTACHED TO THE WALL ON WHICH IT IS BEING MOUNTED.
- ALL PANELBOARDS SHALL HAVE A COPPER BUS.

26 27 26 WIRING DEVICES

1. PRODUCTS AND EXECUTION

- PROVIDE SWITCHES, RECEPTACLES, AND OTHER WIRING DEVICES AS INDICATED ON DRAWINGS.
- COORDINATE FACEPLATE COLORS WITH ARCHITECT PRIOR TO ORDERING. MISCELLANEOUS DEVICES
- MANUAL MOTOR STARTER: BRYANT: NO. 30002
- SQUARE 'D': CLASS 2150
- OVEN: HUBBELL NO. HBL7962 W/SS PLATE S723
- HUBBELL NO. HBL9350 W/SS PLATE S723
- MOUNT ALL SWITCHES 46" ABOVE FINISHED FLOOR TO THE CENTER OF THE SWITCH WITH ON IN THE UP POSITION UNLESS OTHERWISE NOTED.
- MOUNT ALL RECEPTACLES 18" ABOVE FINISHED FLOOR WITH GROUNDING PIN IN THE UP POSITION UNLESS OTHERWISE NOTED OR OTHERWISE REQUIRED TO MATCH EXISTING DEVICES IN SAME ROOM. F. CHECK ARCHITECTURAL DRAWINGS FOR SPECIAL MOUNTING CONDITIONS FOR

CASEWORK AND IN SPECIAL AREAS (SUCH AS BENEATH CHALK OR TACK

- G. INSTALL DEVICE PLATES IN FULL CONTACT WITH WALL. RECEPTACLES - COMMERCIAL GRADE (LEVITON P&S, LUTRON AND HUBBELL ARE ACCEPTABLE MANUFACTURERS)
 - 15 AMP, 125 VOLT, AC: HUBBELL: BR15* - DUPLEX TYPE
 - HUBBELL: GFRST15* GFCI TYPE
 - HUBBELL: 5262*WR WEATHER RESISTANT DUPLEX TYPE HUBBELL: BR15*TR - TAMPER RESISTANT DUPLEX TYPE
- HUBBELL: HBL8200* HOSPITAL GRADE DUPLEX TYPE 20 AMP, 125 VOLT, AC:
 - HUBBELL: BR20* DUPLEX TYPE
- HUBBELL: GFRST20* GFCI TYPE HUBBELL: 5362*WR - WEATHER RESISTANT DUPLEX TYPE
- HUBBELL: BR20*TR TAMPER RESISTANT DUPLEX TYPE
- HUBBELL: HBL8300* HOSPITAL GRADE DUPLEX TYPE SWITCHES - COMMERICAL SPECIFICATION GRADE (LEVITON, P&S, LUTRON, EATON, ACUITY, AND HUBBELL ARE ACCEPTABLE MANUFACTURERS)
- 15 AMP. 120/277 VOLT: LEVITON: 54501-2* SINGLE POLE
- LEVITON: 54501-LH* SINGLE POLE W/PILOT LIGHT
- LEVITON: 54502-2* TWO POLE LEVITON: 54503-2 THREE WAY
- LEVITON: 54504-2* FOUR WAY 20 AMP, 120/277 VOLT:
- LEVITON: 54521-2* SINGLE POLE LEVITON: 54522-2* TWO POLE LEVITON: 54523-2 THREE WAY
- LEVITON: 54524-2* FOUR WAY DIMMERS, 120/277V:
- LUTRON: LUMEA OR SKYLARK SERIES RATED FOR LOAD TYPE AND
- OCCUPANCY SENSORS, 120/277V: LUTRON: MAESTRO SERIES - PASSIVE INFRARED IN WALL WITH 0-10V
- DIMMING CAPABILITY LUTRON: LOS C SERIES - DUAL TECHNOLOGY CEILING MOUNT ASTERISK (*) INDICATES COLOR. COORDINATE WITH ARCHITECTURAL REQUIREMENTS.

26 27 13 ELECTRICITY METERING

1. PRODUCTS AND EXECUTION

A. METERING EQUIPMENT SHALL BE AS INDICATED ON DRAWINGS AND PHASE BALANCED METER SECTIONS USING METER SOCKETS OR EQUAL BY SIEMENS, ALLIS, ITE OR WESTINGHOUSE. ALL COMPONENTS SHALL HAVE BEEN TESTED UNDERWRITERS LABORATORIES LISTED FOR USE AS AN INTEGRAL PART OF THE MUTLI-METERING SYSTEM. INSTALLATION SHALL BE MADE AS HEREIN SPECIFIED AND SHOWN ON THE ASSOCIATED ELECTRICAL DRAWINGS. ALL COMPONENTS SHALL BE FACTORY ASSEMBLED AND ALL CURRENT CARRYING PARTS SHALL BE PLATED BUS BARS.

ENCLOSURES SHALL BE NEMA 3R AND SHALL BE CONSTRUCTED OF FORMED AND WELDED CODE GAUGE STEEL. NO DEVICE DISASSEMBLY IS TO BE REQUIRED BEFORE MOUNTING. MOOTING SHALL BE ACCOMPLISHED BY USING A SEPARATE MOUNTING CHANNEL IN CONJUNCTION WITH ENCLOSURE FOR VERTICAL SUPPORT. FINAL MOUNTING FEET FOR ATTACHING TO WALLS. ALL DEVICES MUST BE BONDED TOGETHER WITH BOLTED CONNECTIONS. METER UNITS SHALL BE PROVIDED WITH INDIVIDUAL, REMOVABLE COVERS FOR EACH METER POSITION. ALL COMPARTMENTS CONTAINING UNMETERED CIRCUITS SHALL BE PROVIDED WITH A SEALING MEANS.

- METER SOCKETS SHALL BE JAW TYPE OR AS REQUIRED BY LOCAL UTILITY COMPANY. SOCKETS SHALL BE RATED AS INDICATED ON DRAWINGS. METER SOCKET JAWS MUST BE SPRING REINFORCED AND FRONT REMOVABLE.
- D. BRANCH CIRCUIT BREAKERS FOR AMPERE DEVICES AS INDICATED ON
- DRAWINGS SHAL BE PLU-ON TYPE. THE METER CENTER SHALL BE UL LISTED WITH A SHORT CIRCUIT CURRENT RATING EQUAL TO OR GREATER THAN THE AVAILABLE CURRENT AT THAT METER CENTER. METER CENTERS SHALL BE PHASE BALANCED AS A SINGLE ASSEMBLY.

26 28 16.16 ENCLOSED SWITCHES

PRODUCTS AND EXECUTION

- A. ALL SAFETY SWITCHES SHALL BE FUSIBLE UNLESS OTHERWISE NOTED. PROVIDE AND INSTALL FUSED SIZED PER THE MANUFACTURER'S RECOMMENDATION FOR THE EQUIPMENT BEING SERVED.
- SAFETY SWITCHES SHALL BE AS MANUFACTURED BY SQUARE 'D', SIEMENS, GENERAL ELECTRIC, CUTLER-HAMMER OR APPROVED EQUAL.
- SAFETY SWITCHES SHALL BE OF THE GENERAL DUTY TYPE WITH ARC SHIELDS AND GROUND LUG AND SHALL BE RATED FOR THE VOLTAGE OF THE SYSTEM TO WHICH IS BEING USED.
- PROVIDED NEMA 1 ENCLOSURES FOR INTERIOR APPLICATIONS AND NEMA 3R
- FOR EXTERIOR APPLICATIONS OR IN WET LOCATIONS. E. FUSES FOR SAFETY SWITCHES SHALL BE AS MANUFACTURED BY BUSSMAN OR LITTLEFUSE AND SHALL BE DUAL ELEMENT FUSETRONS FOR MOTORS AND "LOW PEAK" FOR OTHER LOADS

26 50 00 LIGHTING

PRODUCTS AND EXECUTION

- A. PROVIDE SUBMITTALS FOR ALL SPECIFIED FIXTURES & CONTROLS. B. PROVIDE LIGHTING FIXTURES AS INDICATED ON LIGHTING FIXTURE SCHEDULE ON DRAWINGS. EQUAL TO BE BY LITHONIA, BEMJAMIN-DAYBRITE,
- H.E. WILLIAMS, COLUMBIA, PRESCOLITE, METALUX OR LIGHTOLIER. C. FLUORESCENT BALLASTS SHALL BE ELECTRONIC INSTANT START AS
- MANUFACTURED BY PHILIPS, ADVANCE, SYLVANIA, OR G.E. D. FLUORESCENT LAMPS SHALL BE T5 OR T8 COOL WHITE (4100K) UNLESS
- NOTED OTHERWISE. E. LED LUMINAIRES:
 - COMPONENTS: UL 8750 RECOGNIZED OR LISTED AS APPLICABLE TESTED IN ACCORDANCE WITH IES LM-79 AND IES LM-80. LED ESTIMATED USEFUL LIFE: MINIMUM OF 50,000 HOURS AT 70 PERCENT LUMEN MAINTENANCE, CALCULATED BASED ON IES
- LM-80 TEST DATA.
- F. DRIVERS DRIVERS - GENERAL REQUIREMENTS:
 - ELECTRONIC DRIVERS: INRUSH CURRENTS NOT EXCEEDING PEAK CURRENTS SPECIFIED IN NEMA 410.
 - DIMMABLE LED DRIVERS: DIMMING RANGE: CONTINUOUS DIMMING FROM 100 PERCENT TO 5 PERCENT RELATIVE LIGHT OUTPUT UNLESS DIMMING CAPABILITY TO LOWER LEVEL IS INDICATED, WITHOUT FLICKER.
- CONTROL COMPATIBILITY: FULLY COMPATIBLE WITH THE DIMMING CONTROLS TO BE INSTALLED.
- G. TIME SWITCHES OR PHOTOCELLS SHALL BE TORK, INTERMATIC OR PARAGON OF TYPES SHOWN ON DRAWINGS. H. JOINTS AND FIXTURE WIRING SHALL BE MADE USING WIRE NUTS, PRE-INSULATED SCOTCH LOCKS OR OTHER APPROVED MECHANICAL MEANS
- OF CONNECTIONS. RECESS FIXTURES ON LAY-IN TYPE GRID CEILINGS SHALL BE SUITABLE FOR INSTALLATION ON THIS TYPE CEILING, SURFACE FIXTURES SHAL BE SUPPORTED FROM STRUCTURE USING U.L. LISTED SUPPORTS AND HANGERS AS REQUIRED FOR PROPER INSTALLATION AND AS REQUIRED BY N.E.C.
- COORDINATE FIXTURE LOCATIONS TO CLEAR DIFFUSERS, DUCTWORK,
- COORDINATE FIXTURE TYPES WITH CEILING TYPES BEING INSTALLED.
- ADJUST FIXTURES TO LIGHT INTENDED AREA WHERE ADJUSTABLE.
- EMERGENCY BALLAST SHALL BE BY BODINE OR IOTA. N. PROVIDE SLOPED CEILING ADAPTERS IN LOCATIONS WHERE LIGHTING FIXTURES ARE INSTALLED IN SLOPED CEILINGS.

27 05 33 CONDUITS AND BACKBOXES FOR COMMUNICATIONS SYSTEMS

ROUGH-IN.

- PRODUCTS AND EXECUTION A. PROVIDE CONDUIT STUB UP AS INDICATED ON THE DRAWINGS AT EACH
 - B. TERMINATE CONDUITS ABOVE DROPPED CEILING USING NYLON INSULATED BUSHINGS.
 - C. OUTLET BOXES SHALL BE 4" SQUARE BOXES WITH PLASTER RING AND COVER AS REQUIRED BY TELEPHONE VENDOR. PROVIDE SERVICE CONDUITS, OUTLETS CONDUITS, BACK BOXES, COVER PLATES, JUNCTION BOXES, AND TERMINAL BOARDS OR CABINETS AS
- REQUIRED BY DRAWINGS AND TELEPHONE/DATA VENDOR. E. LEAVE NYLON PULL STRING IN ALL EMPTY CONDUITS. F. PROVIDE METALLIC CONDUIT SLEEVES WHEREVER CABLES PASS THROUGH
- FIRE OR SMOKE RATED WALL ASSEMBLIES. G. OWNER'S VENDOR TO PROVIDE CABLE, PULL CABLE AND MAKE TERMINATIONS. H. SERVICE ENTRANCE CONDUITS AND FIREPROOF 8' X 4' X 3/4" TERMINAL BOARDS PAINTED BLACK OR CABINETS SHALL BE FURNISHED AS SHOWN ON DRAWINGS. CONTRACTOR SHALL FIELD COORDINATE ACTUAL LOCATION OF

SERVICE TERMINATION WITH THE LOCAL UTILITY COMPANY PRIOR TO

- PROVIDE ALL LABOR, MATERIALS, TOOLS, AND SERVICE FOR A COMPLETE FIRE ALARM INSTALLATION AS SPECIFIED AND SHOWN ON DRAWINGS. INSTALLATION SHALL COMPLY WITH NFPA 70, NFPA 72, AND CONTRACT
- APPROVED MANUFACTURERS FOR FIRE ALARM EQUIPMENT & DEVICES ARE
- PROVIDE SYSTEM COMPLETE. IN ACCORDANCE WITH MANUFACTURER'S
- F. PROVIDE ON PREMISES MAINTENANCE DURING NORMAL WORKING HOURS AT NO COST FOR A PERIOD OF TWELVE MONTHS FROM DATE OF
- SUPPLIER SHALL HAVE BEEN IN BUSINESS FOR A MINIMUM OF FIVE YEARS.
- SUBMIT SHOP DRAWINGS OF FIRE ALARM ANNUNCIATOR LAYOUT PER SCHEDULE ON DRAWINGS.
- INSTRUCTIONS FOR OPERATION AND MAINTENANCE OF SYSTEMS. PROVIDE 195 DEGREES F FIXED TEMPERATURE HEAT DETECTORS IN MECHANICAL ROOM AND 135 DEGREES F FIXED TEMPERATURE AND RATE OF RISE HEAT DETECTORS IN ALL OTHER AREAS WHERE HEAT DETECTORS ARE
- INITIATION DEVICES SHAL BE WIRED USING CLASS "B", TWO WIRE, FULLY SUPERVISED CIRCUITS TO END OF LINE DEVICE LOCATED AFTER LAST DEVICE IN EACH CIRCUIT. ANNUNCIATION SHALL BE FROM ANNUNCIATION CONTACTS ON INITIATION MODULE IN CONTROL PANEL.
- WHEN A GENERAL ALARM SIGNAL IS SILENCED AT THE CONTROL PANEL, THE LIGHTS SHALL CONTINUE TO FLASH UNTIL ALARM CONDITION IS PROVIDE A SEPARATE DISTINCT SIGNALING DEVICE AT THE CONTROL PANEL

M. FLASHING LIGHTS SHALL BE WIRED SEPARATELY FROM AUDIBLE DEVICES.

- THE CONTRACT DOCUMENTS DETAILS.
- Q. MOUNTING HEIGHTS FOR FIRE ALARM DEVICES ARE AS FOLLOWS: AUDIBLE APPLIANCES - 90" A.F.F. VISUAL APPLIANCES - 80" A.F.F.
- TELEPHONE APPLIANCE 66" A.F.F. MANUAL PULL STATIONS - 46" A.F.F. CENTER OF PULL R. CONTROL PANEL SHALL BE EDWARDS AND SHALL CONSIST OF THE
- DIGITAL ALARM COMMUNICATION TRANSMITTER MICROPHONE TYPE ANNUNCIATOR WITH BATTERY BACKUP
 - SINGLE ACTION STATION (PULL) TRIM PLATE DUCT DETECTOR HOUSINGS WITH PHOTOELECTRIC S/D WITH SAMPLING
 - TUBE AS RECOMMENDED BY MANUFACTURER REMOTE TEST STATION HEAT DETECTOR 136 DEGREE SMOKE DETECTOR WITH BASE WALL STROBE ONLY RED WITH WHITE LETTERS

WALL STROBE AND HORN RED WITH WHITE LETTERS

- DOOR HOLDERS/CLOSER WALL STROBE AND SPEAKER (FOR ANNUNCIATOR UNITS)
- IDENTIFIED AT THE FIRE ALARM UNIT. PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH NFPA 72 AND REQUIREMENTS OF LOCAL AUTHORITY HAVING JURISDICTION. PROVIDE ALL NECESSARY TOOLS, SUPPLIES, ETC. TO ACCOMPLISH INSPECTION AND TESTING. CORRECT DEFECTIVE WORK, ADJUST FOR PROPER OPERATION, AND

RETEST UNTIL ENTIRE SYSTEM COMPLIES WITH CONTRACT DOCUMENTS.

CONSULTANT



28 46 00 FIRE DETECTION AND ALARM

1. PRODUCTS AND EXECUTION

- DOCUMENTS. ACTUATION OF EITHER NONCODED STATION, HEAT DETECTOR, SPRINKLER WATERFLOW SWITCH OR SMOKE DETECTOR SHALL CAUSE AUDIBLE ALARM SIGNALS TO SOUND, VISUAL ALARM SIGNALS TO FLASH, MAGNETIC DOOR HOLDERS TO RELEASE AND ANNUNCIATOR LIGHT TO OPERATE INDICATING THE ALARM INITIATING ZONE.
- IN THE EVENT OF EITHER AN OPERATING POWER FAILURE, AN OPEN CIRCUIT, GROUND IN SYSTEM OR ACTUATION OF SPRINKLER VALVE TAMPER SWITCH, TROUBLE SIGNAL AND TROUBLE LAMP SHALL ACTUATE UNTIL SYSTEM IS RESTORED TO NORMAL. TROUBLE SIGNAL SHALL BE SILENCED BY MEANS OF SYSTEM TO NORMAL, TROUBLE SIGNAL SHALL AGAIN SOUND UNTIL THE SWITCH IS RETURNED TO NORMAL POSITION.
- EDWARDS, SIMPLEX, HONEYWELL, & SYSTEM SENSOR.
- INSTRUCTIONS, INCLUDING CONDUIT, BOXES, WIRING AND ACCESSORIES. INSTALL AL WIRING IN EMT, METALLIC CONDUITS. TAG WIRES AR JUNCTION
- COMPLETION.
- SUBMIT COMPLETE CONDUIT AND WIRING LAYOUT AND POINT TO POINT WIRING DIAGRAMS FOR APPROVAL.
- PROVIDE OWNER'S MAINTENANCE PERSONNEL A MINIMUM OF TWO DAYS
- SHOWN ON DRAWINGS.
- AND REMOTE ANNUNCIATOR FOR SUPERVISORY SIGNAL NOTIFICATION
- WHEN SPRINKLER TAMPER SWITCHES ARE ACTUATED. SPRINKLER TAMPER SWITCHES SHALL NOT INITIATE A GENERAL ALARM.
- INSTALL THE WIRING SYSTEM COMPLETELY IN CONDUIT. SYSTEM SHALL FOLLOW THE SEQUENCE OF OPERATION AS INDICATED ON
- FOLLOWING, BUT NOT LIMITED TO MODULES HOUSED IN A COMMON CABINET BEARING UL LABEL: 120 VOLT RED CONTROL PANEL. S. OPTIONS (IF REQUIRED BY DRAWINGS)
 - REMOTE CONTROL AND LED ANNUNCIATOR
- T. THE FIRE ALARM CONTRACTOR MUST BE CERTIFIED IN ACCORDANCE WITH THE TENNESSEE ALARM CONTRACTORS LICENSING ACT OF 1991, TCA TITLE 62, AND CHAPTER 32. U. THE FIRE ALARM CONTROL PANEL CIRCUIT DISCONNECTING MEANS SHALL

HAVE A RED MARKING. SHALL BE ASSESSABLE ONLY TO AUTHORIZED

PERSONNEL AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT". THE

LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY





REVISIONS:

DESCRIPTION

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ELECTRICAL

SPECIFICATIONS

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