

Addendum #6
East Lake Community Center Renovations
CONTRACT NO. Y-17-005

Bid schedule per Addendum 5

Pre-Bid Meeting January 9th, 2020 at 10:00am

Last Day for Questions January 17th, 2020

Bid Opening January 30th, 2020 at 2:00 pm

Attachments:

SPECIFICATIONS

Section 102800 Toilet, Bath, and Laundry Accessories

- Revised and reissued in its entirety as part of this addendum.

Section 26 0100 Electrical General Conditions:

- Delete Paragraph 1.10.D in its entirety.

Section 26 0573 Power System Studies

- Paragraph 1.05.B, Add the following sentence:
“Preparer must be a licensed Professional Engineer qualified to perform engineering design work in the State of Tennessee. “

Section 26 0918 Remote Control Switching Devices:

- Delete this section in its entirety and replace with the following section (attached):
“26 0943 Network Lighting Controls”

Section 26 2100 Low Voltage Electrical Service Entrance:

- delete paragraph 2.01.C, in its entirety and replace with the following:
C. Utility Company: EPB
1. Point of Contact: Aaron Willey, Industrial and Commercial Engineer
2. Phone: (423)551-0730
3. Email: willeyad@epb.net

Section 26 5100 is added in its entirety and is attached.

Section 27 2000 Communications and Audio-Visual Systems General Conditions:

- Paragraph 1.2.A.2: Delete the words “and 27 4300”.
- Paragraph 1.2.A.4: Delete “Section 274500” and Substitute “Section 27 4600”
- Paragraph 1.2.A.5: Delete this paragraph in its entirety.
- Paragraph 1.5.D.2: Delete the reference to “Alabama Board of Engineers” and substitute in lieu thereof, “the State of Tennessee Board of Architecture and Engineering Examiners”.
- Paragraph 3.3.A.1: Delete this paragraph in its entirety.

Section 274400 Control and Automation Systems:

- Paragraph 1.2.A, Delete reference to Game Room and Weight Room and change Teen Room to Teen Lounge.
- Part 2 –Products, add the following:
 - “Paragraph 2.0 Basis of Design:
 - A. The basis of design for this system is Crestron as shown on the drawings. Equal products by Extron may be used if available. See the AV equipment schedule on the drawings. “
- Paragraph 2.2.B.1, Delete reference to meeting rooms “C”.

Section 27 4600 Audio and Video Systems:

- Paragraph 1.2.A.6. Delete this Paragraph in its entirety.
- Paragraph 1.3.C. Delete this paragraph in its entirety.
- PART 2 – PRODUCTS: Add the following paragraph:
 - “2.0 BASIS OF DESIGN EQUIPMENT:
 - A. The Basis of Design (B.O.D.) Equipment is shown on the AV Equipment Schedule on the drawings and generally takes precedence over the products listed here-in. “
- Paragraph 2.1.E. Delete this paragraph in its entirety.
- Paragraph 2.5 CEILING MOUNTED VIDEO PROJECTOR SYSTEM. Delete this paragraph in its entirety.
- Paragraph 2.8 PORTABLE SOUND SYSTEM: Delete this paragraph in its entirety.

DRAWINGS

Civil

Sheet C1.1 & C1.2 (Revision 1 dated 01-14-2020)

- Added EJ/CJ callouts and dimensions.
- Updated wall guardrail (Deductive Alternate #1)
- Adjusted plotted graphics to improve drawing legibility.
- Revised entry at SW corner.

Sheet C2.1 & C2.2 (Revision 1 dated 01-14-2020)

- Added list of items to be salvaged
- Hatched and noted limit of demo of existing fence along top of wall (Deductive Alternate #1)
- Noted the basement area on existing building.
- Noted the existing trailer to remain during construction for contractor’s use.

Sheet C3.1 (Revision 1 dated 01-14-2020)

- Added contour around building area to clarify grading intent.
- Added note about undercutting per geotechnical report.

Sheet C7.0 (Revision 1 dated 01-14-2020)

- Revised joint detail for hand tooled joints.

Architectural

Sheet A6.1 (Revision 2 dated 01-14-2020)

- Restrooms Plan 1: Modified to clarify toilet accessory locations and tags.
- Reception Desk Plan 2: Modified to clarify toilet accessory locations and tags.
- Women’s Restroom 3: Modified to clarify toilet accessory locations and tags.
- Men’s Restroom 4: Modified to clarify toilet accessory locations and tags.
- Toilet Accessories: Modified to clarify requirements.

Electrical

Sheet E5.1 Sound Diagrams (Revision 2 dated January 14, 2020):

- Modification to the configuration and equipment for the Multi-Purpose Room Sound systems to allow these rooms to be used either independently or combined as programmed by a Crestron control system. Equipment arrangement and configuration is substantially modified.
- Gymnasium is modified to utilize a 12x8 audio processor by combining stereo program inputs into a mono summed signal.
- Teen Lounge is modified to provide the same 12x8 audio processor as the other spaces.
- An Audio Visual Equipment Schedule is added to the drawing to document the Basis of Design products to be used on the project.

Sheet E5.2 Sound Rack Details (Revision 2 dated January 14, 2020):

- Modifications to the SS-MP Power Distribution detail to coordinate with Multi-Purpose Room Single Line Diagram and clarification of device descriptions.
- Modifications to the Multi-Purpose Room Rack SS-MP to coordinate with the Single Line Diagram changes and terminology.
- Modifications to the Gymnasium Rack SS-G to coordinate with the Single Line terminology and equipment sizes.
- Modifications to the Teen Lounge Rack SS-TL to coordinate with Single Line terminology and equipment sizes.

ELECTRICAL EQUIPMENT APPROVALS:

Lighting Fixtures: H.E. Williams, Inc. is approved for bidding purposes as equal to Acuity Lithonia for fixtures A, AE, B, BE, C, E, Q, S, W and XL

Questions Received via Email

1. Is this job subject to Davis Bacon Wage rates?
 - a. No, this project is not receiving federal funds
2. Will this be a LEED Certified project? Section for Unit Masonry 04 2000-1 1.3.B references LEED Submittal documents.
 - a. Owner will not be pursuing LEED Certification for this project
3. Will AISC Certification be required for the steel fabricator and erector, or can this be waived?
 - a. Yes, per Specification 133419 Para 1.5-A-1. No, this requirement will not be waived.
4. Testing is to be by owner BUT floor moisture testing is to be by the contractor. Would this be able to be covered by owner as well to avoid any conflict of interest?
 - a. Contractor will be responsible for floor moisture testing as part of the wood floor installation process.
5. Specs included in addendum 1 still have draft by the titles. Will this be the final set of specs to be used?
 - a. Sections that were not updated appear to still have "Draft" in the title, however this is the final copy of the Spec Book
6. Civil specifications reference site as being classified. It also reference unsuitable soils or rock can be addressed via unit prices. There is not a schedule of unit prices in the Unit Prices specification and there are no places to list unit prices on the bid form. Will this be revised?
 - a. Clarified in drawings attached, bid schedule to be included in a future addendum
7. C8.0 has detail on Wood Privacy Fence. Where is this fence to be located?
 - a. This is the dumpster enclosure shown in attached drawings
8. S1.1 references aluminum canopies by others. I want to confirm that the aluminum canopies are to be in our base bid pricing.
 - a. The structural note is intended to say that structural has not detailed them, but they are required to be provided as part of this project.
9. Drawings E0.1 Security legend shows card reader and cameras "by owner"
 - a. Camera and card read install will be Owner's responsibility. Contractor to provide low voltage or data as specified to each install location
10. Drawings E0.1 electrical symbols shows "communication cables and outlets furnished and installed under other sections"
 - a. Please clarify question and resubmit

11. What is finish material and STC rating for the operable partitions? Also, just a note, the panels are mentioned being paired in the specifications, but the way the track is drawn on the drawings the only type of panel able to make a 90 degree turn is a single panel.
 - a. Manufacturer's heavy duty vinyl, color to be selected from their standard range of colors. Minimum STC 56.
 - b. They are to be single panels
12. There is not a rubber flooring specification – the finish schedule on plan sheet A1.1F lists DINO FLEX – what is the thickness required and is this to be rolls or tiles?
 - a. Square cut tile, ½" thickness.
13. The wood flooring is Robbins Sport Surfaces an acceptable manufacturer? The specification 096466 1.06 Manufacturer indicates a list of manufacturer but only Connor is listed.
 - a. Connor is the Basis of Design. Robbins would be an acceptable alternative.
14. Do we want Thermally Broken Doors for this Application and in the Southern Climate?
 - a. No
15. We have two areas that show the finish of the aluminum. One is in 2.03 Storefront shown to be selected from full line of manufacturer's colors and the other is 2.06 Finishes 0.7 Clear and Door Schedule has Clear Anodized. Which is correct?
 - a. All aluminum is to be clear anodized.
16. Aluminum Door Hardware Set # 1 has Lockset to be Electronic with Panic Hardware to be concealed crossbar panic. Do we provide electrified concealed panics on both leafs of the pair of doors 001 & 006 or what is desired ??
 - a. Door hardware should be concealed electrified panics on both leafs.
17. On the East Lake proposal, the door schedule shows Tag 026 as type 'J', elevation says this is a steel folding door, door schedule says stained wood, clarification please.
 - a. This is to be a solid core wood bifold finished to match the other interior wood doors.
18. Is there a possibility to push the bid date on the project?
 - a. Bid date was pushed to 1/30 in Addendum 5
19. The electrical drawings have no scale on them. Could you verify the scale for the drawings?
 - a. Architect discourages contractor from scaling any kind of drawing, even drawings that DO show a scale, because printing and copying processes can alter the actual printed image scale.
20. Will this project be held to the 2012 IECC(SEE LINK)? If so, we will need to quote an R-30 LS roof assembly at the PEMB area.
 - a. Sheet T1.2 states that the design follows 2009 IECC

END OF ADDENDUM #6

102800 TOILET, BATH, AND LAUNDRY ACCESSORIES

SECTION 102800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Commercial toilet accessories.
- B. Under-lavatory pipe supply covers.
- C. Electric hand/hair dryers.
- D. Diaper changing stations.
- E. Utility room accessories.

1.02 REFERENCE STANDARDS

- A. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.
- B. ASTM C1036 - Standard Specification for Flat Glass; 2016.
- C. ASTM C1048 - Standard Specification for Heat-Strengthened and Fully Tempered Flat Glass; 2018.
- D. ASTM F2285 - Standard Consumer Safety Performance Specification for Diaper Changing Tables for Commercial Use; 2004, with Editorial Revision (2016).

1.03 SUBMITTALS

- A. See Section 013000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Submit data on accessories describing size, finish, details of function, and attachment methods.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Commercial Toilet, Shower, and Bath Accessories:
 - 1. AJW Architectural Products; _____: www.ajw.com/#sle.
 - 2. American Specialties, Inc; _____: www.americanspecialties.com/#sle.
 - 3. Bradley Corporation; _____: www.bradleycorp.com/#sle.
 - 4. Substitutions: Section 016000 - Product Requirements.
- B. Under-Lavatory Pipe Supply Covers:

2.02 MATERIALS

- A. Accessories - General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.
- B. Mirror Glass: Tempered safety glass, ASTM C1048; and ASTM C1036 Type I, Class 1, Quality Q2, with silvering as required.
- C. Fasteners, Screws, and Bolts: Hot dip galvanized; tamper-proof; security type.
- D. Expansion Shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component and substrate.

2.03 FINISHES

- A. Stainless Steel: Satin finish, unless otherwise noted.

2.04 COMMERCIAL TOILET ACCESSORIES

- A. Toilet Paper Dispenser: Double roll, surface-mounted, stainless steel unit with pivot hinge, tumbler lock.
- B. Paper Towel Dispenser: Electric, roll paper type.
 - 1. Cover: Stainless steel.
 - 2. Paper Discharge: Touchless automatic.
 - 3. Capacity: 8 inch diameter roll.
 - 4. Mounting: Surface mounted.
 - 5. Power: Battery operated.
 - 6. Refill Indicator: Illuminated refill indicator.
- C. Waste Receptacle: Stainless steel, freestanding style open top.

102800 TOILET, BATH, AND LAUNDRY ACCESSORIES

D. Soap Dispenser: Liquid soap dispenser, wall-mounted, surface, with stainless steel cover and horizontal stainless steel tank and working parts; push type soap valve, check valve, and window gauge refill indicator, tumbler lock.

E. Grab Bars: Stainless steel, smooth surface.

1. Standard Duty Grab Bars:

a. Push/Pull Point Load: 250 pound-force, minimum.

b. Dimensions: 1-1/4 inch outside diameter, minimum 0.05 inch wall thickness, exposed flange mounting, 1-1/2 inch clearance between wall and inside of grab bar.

c. Finish: Satin.

d. Length and Configuration: As indicated on drawings.

F. Combination Sanitary Napkin/Tampon Dispenser: Stainless steel, surface-mounted.

G. Sanitary Napkin Disposal Unit: Stainless steel, surface-mounted, self-closing door, locking bottom panel with full-length stainless steel piano-type hinge, removable receptacle.

2.05 UNDER-LAVATORY PIPE AND SUPPLY COVERS

A. Under-Lavatory Pipe and Supply Covers:

1. Insulate exposed drainage piping including hot, cold, and tempered water supplies under lavatories or sinks to comply with ADA Standards.

2.06 ELECTRIC HAND/HAIR DRYERS

A. Electric Hand Dryers: Traditional fan-in-case type, with downward fixed nozzle.

1. Operation: Automatic, sensor-operated on and off.

2. Mounting: Surface mounted.

3. Cover: Stainless steel with brushed finish.

a. Tamper-resistant screw attachment of cover to mounting plate.

4. Air Velocity: 4,000 linear feet per minute, minimum.

5. Heater: 500 W, minimum, at full power.

6. Total Wattage: 1500 W, maximum.

2.07 DIAPER CHANGING STATIONS

A. Diaper Changing Station: Wall-mounted folding diaper changing station for use in commercial toilet facilities, meeting or exceeding ASTM F2285.

1. Material: Polyethylene.

2. Mounting: Surface.

3. Products:

a. Basis of Design: subject to compliance with requirements, Koala Kare KB200-01.

b. Provide one each in Women 119, Men 120, and Family Tlt. 127..

2.08 UTILITY ROOM ACCESSORIES

A. Mop and Broom Holder: 0.05 inch thick stainless steel, Type 304, hat-shaped channel.

1. Holders: Three spring-loaded rubber cam holders.

2. Length: 36 inches.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions before starting work.

B. Verify exact location of accessories for installation.

C. For electrically-operated accessories, verify that electrical power connections are ready and in the correct locations.

D. Verify that field measurements are as indicated on drawings.

3.02 PREPARATION

A. Deliver inserts and rough-in frames to site for timely installation.

B. Provide templates and rough-in measurements as required.

102800 TOILET, BATH, AND LAUNDRY ACCESSORIES

3.03 INSTALLATION

- A. Install accessories in accordance with manufacturers' instructions in locations indicated on drawings.
- B. Install plumb and level, securely and rigidly anchored to substrate.
- C. Mounting Heights: As required by accessibility regulations, unless otherwise indicated.

3.04 PROTECTION

- A. Protect installed accessories from damage due to subsequent construction operations.

END OF SECTION

SECTION 26 0943
NETWORK LIGHTING CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Network lighting control system and associated components:
 - 1. Lighting management panels and associated lighting management modules.
 - 2. Networked power interfaces.
 - 3. Networked low voltage wall stations.
 - 4. Low voltage network interfaces.
 - 5. Accessories.
 - 6. RS-232 interface to AV enabled Touch Screens (by others)

1.02 RELATED REQUIREMENTS

- A. Section 26 0553 - Identification for Electrical Systems: Identification products and requirements.
- B. Section 26 2726 - Wiring Devices: Finish requirements for wall controls specified in this section.
- C. Section 26 5100 - Interior Lighting: Luminaires and associated components, for interface with lighting control system.

1.03 REFERENCE STANDARDS

- A. IEC 61000-4-2 - Electromagnetic Compatibility (EMC) - Part 4-2: Testing and Measurement Techniques - Electrostatic Discharge Immunity Test; 2008.
- B. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2010.
- C. NECA 130 - Standard for Installing and Maintaining Wiring Devices; National Electrical Contractors Association; 2010.
- D. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2008.
- E. NFPA 70 - National Electrical Code; National Fire Protection Association; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- F. UL 2043 - Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate the placement of sensors and wall controls with millwork, furniture, equipment, etc. installed under other sections or by others.
 - 2. Coordinate the work to provide luminaires and lamps compatible with the lighting controls to be installed.
 - 3. Notify Architect of any conflicts or deviations from the contract documents to obtain direction prior to proceeding with work.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Include ratings, configurations, standard wiring diagrams, dimensions, colors, service condition requirements, and installed features.
- C. Shop Drawings:
 - 1. Provide schematic system riser diagram indicating component interconnections. Include requirements for interface with other systems.
 - 2. Manufacturer's Installation Instructions: Include application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

3. Field quality control test reports.
4. Project Record Documents: Record actual installed locations and settings for lighting control system components.
5. Operation and Maintenance Data: Include detailed information on lighting control system operation, equipment programming and setup, replacement parts, and recommended maintenance procedures and intervals.
6. Executed Warranty: Submit documentation of final executed warranty completed in Owner's name and registered with manufacturer.

1.06 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Maintain at the project site a copy of each referenced document that prescribes execution requirements.
- C. Manufacturer Qualifications: Company with not less than ten years designing and assembling architectural lighting controls.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Store products in a clean, dry space in original manufacturer's packaging in accordance with manufacturer's written instructions until ready for installation.

1.08 FIELD CONDITIONS

- A. Maintain field conditions within manufacturer's required service conditions during and after installation.
 1. Basis of Design Requirements - Acuity Fresco (except where low temperature/high humidity devices are specified):
 - a. Ambient Temperature: Between 14 and 105 degrees F.
 - b. Relative Humidity: Less than 90 percent, non-condensing.
 2. Protect equipment from dust, debris and moisture.

1.09 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Provide manufacturer warranty covering repair or replacement due to defective materials or workmanship:
 1. Lighting Management Panels and Associated Lighting Management Modules: Two years.
 2. Networked Power Interfaces: Five years.
 3. Networked Low Voltage Wall Stations: Five years.
 4. Low Voltage Network Interfaces: Five years.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Basis of Design: Acuity Brands, Inc; nLight Controls; www.acuitybrands.com.
- B. Other Acceptable Manufacturers:
 1. Watt Stopper.
 2. Lutron
 3. Crestron
 4. Substitutions: See Section 01 6000 - Product Requirements.
 - a. All proposed substitutions must be submitted in writing for approval by Architect a minimum of 10 working days prior to the bid date.
 5. Products other than basis of design are subject to compliance with specified requirements and prior approval of Engineer. By using products other than basis of design, Contractor accepts responsibility for costs associated with any necessary modifications to related work, including any design fees.
 6. Source Limitations: Furnish products designed, tested, manufactured, and warranted by a single manufacturer and obtained from a single supplier.

2.02 NETWORK LIGHTING CONTROL SYSTEM - GENERAL REQUIREMENTS

- A. Unless specifically indicated to be excluded, provide all required equipment, conduit, boxes, wiring, connectors, hardware, supports, accessories, software, system programming, etc. as necessary for a complete operating system that provides the control intent indicated.
- B. Operational Life: At least 10 years expected life while operating within the specified ambient temperature and humidity range.
- C. Power Failure Memory: Automatically store system settings and recover from a power failure without requiring user input.
- D. Electrostatic Discharge Tolerance: Design and test equipment to withstand electrostatic discharges without impairment when tested according to IEC 61000-4-2.
- E. Dimming and Switching Performance Requirements:
 - 1. Electrolytic capacitors operate at least 36 degrees F below the capacitor's maximum temperature rating when the device is under full load.
 - 2. Inrush Tolerance: Use MOSFET that has a maximum rating of six times the operating current of the dimmer/relay.
 - 3. Power Failure Recovery: When power is interrupted and subsequently restored, within 3 seconds lights to automatically return to same levels as prior to power failure.
 - 4. Utilize half cycle to half cycle zero cross movement to allow for voltage compensation in order to overcome line noise and lamp flickering.
 - 5. Incorporate electronic soft-start default at initial turn-on that smoothly ramps lights to appropriate levels within 0.5 seconds.
 - 6. Utilize air gap off to disconnect the load from line supply.
 - 7. Control all light sources in smooth and continuous manner. Dimmers with visible steps are not acceptable.
 - 8. Assign a load type to each dimmer that will provide proper dimming curve for the specific light source to be controlled.
 - 9. Provide capability of being field-configured to have load types assigned per circuit.
 - 10. Minimum and maximum light levels to be user adjustable on a circuit-by-circuit basis.

2.03 LIGHTING MANAGEMENT PANELS

- A. Provide lighting management panels with configurations as indicated on the drawings.
- B. Comply with UL 508.
- C. Provide oversized channel for separation of line voltage and low voltage field wiring.
- D. Lighting Management Modules:
 - 1. Equip lighting management panels with lighting management modules as indicated or as necessary for specified control requirements.
 - 2. 4-Circuit 0-10V Dimming Module:
 - a. Basis of Design: Acuity Fresco Model LM 4L MVOLT.
 - b. Load Types: 0-10VDC devices conforming to IEC 60929 and non-dim lighting.
 - c. Circuits: Four.
 - d. Relays: 50 A mechanically latching, with manual override switch.
 - e. 0-10VDC Rating: 25 mA maximum per circuit.
 - f. Circuit Rating: 16 A continuous.

2.04 NETWORKED WALL MOUNTED PRESET PANELS:

- A. Provide networked preset panels as indicated or as necessary for specified control requirements.
- B. Utilizes Category 5e wiring with two RJ-45 ports for network communication; supports daisy chain wiring method (allows device to be located at any position in the network).
- C. Parameters to be available and configurable remotely via software and locally via device push button.

- D. Devices shall be wall mounted where shown on the drawings and provided with four touch buttons for control of preset functions indicated. Provide dimming control of zones as indicated.

2.05 NETWORKED SYSTEM POWER (RELAY) PACKS

- A. Power Packs shall incorporate one Class 1 relay, a 0-10 VDC dimming output, and contribute low voltage power to the rest of the system. Secondary Packs shall incorporate the relay and 0-10 VDC or line voltage dimming output, but shall not be required to contribute system power. Power Supplies shall provide system power only, but are not required to switch line voltage circuit. Auxiliary Relay Packs shall switch low voltage circuits only.
- B. Power Packs shall accept 120 or 277 VAC (or optionally 347 VAC), be plenum rated, and provide Class 2 power to the system.
- C. All devices shall have two RJ-45 ports.
- D. Every Power Pack parameter shall be available and configurable remotely from the software and locally via the device push-button.
- E. Power Pack shall securely mount to junction location through a threaded ½ inch chase nipple or be capable of being secured within a luminaire ballast channel. Plastic clips into junction box shall not be accepted. All Class 1 wiring shall pass through chase nipple into adjacent junction box without any exposure of wire leads. Note: UL Listing under Energy Management or Industrial Control Equipment automatically meets this requirement, whereas Appliance Control Listing does not meet this safety requirement.
- F. When required by local code, Power Pack must install inside standard electrical enclosure and provide UL recognized support to junction box. All Class 1 wiring is to pass through chase nipple into adjacent junction box without any exposure of wire leads.
- G. Power Packs (Secondary) shall be available that provide up to 16 Amp switching of all lighting load types.
- I. Power (Relay) Packs and Supplies shall be the following nLight model number:
 - 1. nPP16 D (Power Pack w/ 16A relay and 0-10VDC dimming output)

2.07 ACCESSORIES

- A. Provide cables as indicated or as required for connections between system components.
 - 1. Unshielded Twisted Pair (UTP) Cable: Minimum Category 5e.

2.08 AV CONTROL SYSTEM INTERFACE

- A. A. Networked Auxiliary Input / Output (I/O) Devices
 - 1. 1. Devices shall be plenum rated and be inline wired, screw mountable, or have an extended chase nipple for mounting to a ½" knockout.
 - 2. 2. Devices shall have two RJ-45 ports
 - 3. 3. Communication and low voltage power shall be delivered to each device via standard CAT-5 low voltage cabling with RJ-45 connectors.
 - 4. 4. Specific I/O devices shall enable RS-232 communication between lighting control system and Touch Screen based A/V control systems.
 - 5. 5. Specific I/O devices shall sense momentary and maintained contact closures, and either toggle a connected load after a momentary contact or ramp the load high/low during a maintained contact (stopping when the contact releases).
 - 6. 6. Auxiliary Input/Output Devices shall be the following nLight model numbers:
 - 7. nIO X (Interface device for communicating with RS-232 enabled AV Touch Screens

2.09 SOURCE QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for additional requirements.
- B. Perform full-function factory testing on all devices.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as shown on the drawings.
- B. Verify that ratings and configurations of system components are consistent with the indicated requirements.
- C. Verify that mounting surfaces are ready to receive system components.
- D. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Perform work in a neat and workmanlike manner in accordance with NECA 1 and, where applicable, NECA 130, except for mounting heights specified in those standards.
- B. Install products in accordance with manufacturer's instructions.
- C. Identify system components in accordance with Section 26 0553.

3.03 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for additional requirements.
- B. Provide services of a manufacturer's authorized representative to observe installation and assist in inspection and testing. Include manufacturer's reports with submittals.
- C. Correct defective work, adjust for proper operation, and retest until entire system complies with contract documents.
- D. Submit detailed reports indicating inspection and testing results and corrective actions taken.

3.04 ADJUSTING

- A. Program system parameters according to requirements of Owner.

3.05 CLEANING

- A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

3.06 COMMISSIONING

- A. See Section 01 9113 - General Commissioning Requirements for commissioning requirements.

3.07 CLOSEOUT ACTIVITIES

- A. See Section 01 7800 - Closeout Submittals, for closeout submittals.
- B. See Section 01 7900 - Demonstration and Training, for additional requirements.
- C. Training: Train Owner's personnel on operation, adjustment, and maintenance of system.
 - 1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.
 - 2. Provide minimum of 2 hours of training.
 - 3. Instructor: Manufacturer's authorized representative.
 - 4. Location: At project site.

3.08 PROTECTION

- A. Protect installed products from subsequent construction operations.

END OF SECTION

SECTION 26 5100
INTERIOR LIGHTING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Interior luminaires.
- B. Emergency lighting units.
- C. Exit signs.
- D. Ballasts and drivers.
- E. LED emergency power supply units.
- F. LED Lamps.
- G. Luminaire accessories.

1.02 RELATED REQUIREMENTS

- A. Section 26 0529 - Hangers and Supports for Electrical Systems.
- B. Section 26 0533.16 - Boxes for Electrical Systems.
- C. Section 26 0553 - Identification for Electrical Systems: Identification products and requirements.
- D. Section 26 0918 - Remote Control Switching Devices: Remote controls for lighting, including network lighting controls, programmable relay panels, and remote control switching relays.
- E. Section 26 0919 - Enclosed Contactors: Lighting contactors.
- F. Section 26 0923 - Lighting Control Devices: Automatic controls for lighting including occupancy sensors, outdoor motion sensors, time switches, outdoor photo controls, and daylighting controls.
- G. Section 26 2726 - Wiring Devices: Manual wall switches and wall dimmers.
- H. Section 26 5600 - Exterior Lighting.

1.03 REFERENCE STANDARDS

- A. 47 CFR 15 - Radio Frequency Devices; current edition.
- B. IEC 60529 - Degrees of Protection Provided by Enclosures (IP Code); 2013 (Corrigendum 2015).
- C. IEEE C62.41.2 - IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC Power Circuits; 2002 (Corrigendum 2012).
- D. IES LM-63 - IESNA Standard File Format for Electronic Transfer of Photometric Data and Related Information; 2002 (Reaffirmed 2008).
- E. IES LM-79 - Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products; 2008.
- F. IES LM-80 - Approved Method: Measuring Luminous Flux and Color Maintenance of LED Packages, Arrays, and Modules; 2015, with Errata (2017).
- G. NECA 1 - Standard for Good Workmanship in Electrical Construction; 2015.
- H. NECA/IESNA 500 - Standard for Installing Indoor Commercial Lighting Systems; 2006.
- I. NECA/IESNA 502 - Standard for Installing Industrial Lighting Systems; 2006.
- J. NEMA 410 - Performance Testing for Lighting Controls and Switching Devices with Electronic Drivers and Discharge Ballasts; 2016.
- K. NEMA LE 4 - Recessed Luminaires, Ceiling Compatibility; 2012.
- L. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

- M. NFPA 101 - Life Safety Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- N. UL 924 - Emergency Lighting and Power Equipment; Current Edition, Including All Revisions.
- O. UL 1598 - Luminaires; Current Edition, Including All Revisions.
- P. UL 8750 - Light Emitting Diode (LED) Equipment for Use in Lighting Products; Current Edition, Including All Revisions.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 1. Coordinate the installation of luminaires with mounting surfaces installed under other sections or by others. Coordinate the work with placement of supports, anchors, etc. required for mounting. Coordinate compatibility of luminaires and associated trims with mounting surfaces at installed locations.
 2. Coordinate the placement of luminaires with structural members, ductwork, piping, equipment, diffusers, fire suppression system components, and other potential conflicts installed under other sections or by others.
 3. Coordinate the placement of exit signs with furniture, equipment, signage or other potential obstructions to visibility installed under other sections or by others.
 4. Notify Architect of any conflicts or deviations from the contract documents to obtain direction prior to proceeding with work.

1.05 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
- B. Shop Drawings:
 1. Indicate dimensions and components for each luminaire that is not a standard product of the manufacturer.
 2. Provide photometric calculations where luminaires are proposed for substitution upon request.
- C. Product Data: Provide manufacturer's standard catalog pages and data sheets including detailed information on luminaire construction, dimensions, ratings, finishes, mounting requirements, listings, service conditions, photometric performance, installed accessories, and ceiling compatibility; include model number nomenclature clearly marked with all proposed features.
 1. LED Luminaires:
 - a. Include estimated useful life, calculated based on IES LM-80 test data.
 - b. Include IES LM-79 test report upon request.
 2. Provide electronic files of photometric data certified by a National Voluntary Laboratory Accreditation Program (NVLAP) lab or independent testing agency in IES LM-63 standard format upon request.
 3. LED Emergency Power Supply Unit: Include list of compatible LED lamp configurations and associated lumen output.
- D. Field quality control reports.
- E. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.
- F. Operation and Maintenance Data: Instructions for each product including information on replacement parts.
- G. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
 1. See Section 01 6000 - Product Requirements, for additional provisions.
 2. Extra Lenses and Louvers: Two percent of total quantity installed for each type, but not less than one of each type.

- H. Project Record Documents: Record actual connections and locations of luminaires and any associated remote components.

1.06 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Maintain at the project site a copy of each referenced document that prescribes execution requirements.
- C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- D. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

1.07 DELIVERY, STORAGE, AND PROTECTION

- A. Receive, handle, and store products according to NECA/IESNA 500 (commercial lighting), NECA/IESNA 502 (industrial lighting), and manufacturer's written instructions.
- B. Keep products in original manufacturer's packaging and protect from damage until ready for installation.

1.08 FIELD CONDITIONS

- A. Maintain field conditions within manufacturer's required service conditions during and after installation.

1.09 WARRANTY

- A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
- B. Provide three year manufacturer warranty for all LED luminaires, including drivers.
- C. Provide five year pro-rata warranty for batteries for emergency lighting units.
- D. Provide ten year pro-rata warranty for batteries for self-powered exit signs.

PART 2 PRODUCTS

2.01 LUMINAIRE TYPES

- A. Furnish products as indicated in luminaire schedule included on the drawings.
- B. Substitutions: See Section 01 6000 - Product Requirements, except where individual luminaire types are designated with substitutions not permitted.

2.02 LUMINAIRES

- A. Provide products that comply with requirements of NFPA 70.
- B. Provide products that are listed and labeled as complying with UL 1598, where applicable.
- C. Provide products listed, classified, and labeled as suitable for the purpose intended.
- D. Unless otherwise indicated, provide complete luminaires including LED lamp(s) and all sockets, drivers, reflectors, lenses, housings and other components required to position, energize and protect the lamp and distribute the light.
- E. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, hardware, supports, trims, accessories, etc. as necessary for a complete operating system.
- F. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.
- G. Recessed Luminaires:
 - 1. Ceiling Compatibility: Comply with NEMA LE 4.
 - 2. Luminaires Recessed in Insulated Ceilings: Listed and labeled as IC-rated, suitable for direct contact with insulation and combustible materials.
 - 3. Luminaires Recessed in Sloped Ceilings: Provide suitable sloped ceiling adapters.

- H. LED Luminaires:
 - 1. Components: UL 8750 recognized or listed as applicable.
 - 2. Tested in accordance with IES LM-79 and IES LM-80.
 - 3. LED Estimated Useful Life: Minimum of 50,000 hours at 70 percent lumen maintenance, calculated based on IES LM-80 test data.

2.03 EMERGENCY LIGHTING UNITS

- A. Description: Emergency lighting units complying with NFPA 101 and all applicable state and local codes, and listed and labeled as complying with UL 924.
- B. Operation: Upon interruption of normal power source or brownout condition exceeding 20 percent voltage drop from nominal, solid-state control automatically switches connected lamps to integral battery power for minimum of 90 minutes of rated emergency illumination, and automatically recharges battery upon restoration of normal power source.
- C. Battery:
 - 1. Sealed maintenance-free lead calcium unless otherwise indicated.
 - 2. Size battery to supply all connected lamps, including emergency remote heads where indicated.
- D. Diagnostics: Provide power status indicator light and accessible integral test switch to manually activate emergency operation.
- E. Provide low-voltage disconnect to prevent battery damage from deep discharge.
- F. Accessories:
 - 1. Provide compatible accessory mounting brackets where indicated or required to complete installation.
 - 2. Provide compatible accessory wire guards where indicated.
 - 3. Where indicated, provide emergency remote heads that are compatible with the emergency lighting unit they are connected to and suitable for the installed location.

2.04 EXIT SIGNS

- A. Description: Internally illuminated exit signs with LEDs unless otherwise indicated; complying with NFPA 101 and all applicable state and local codes, and listed and labeled as complying with UL 924.
 - 1. Number of Faces: Single or double as indicated or as required for the installed location.
 - 2. Directional Arrows: As indicated or as required for the installed location.
- B. Self-Powered Exit Signs:
 - 1. Operation: Upon interruption of normal power source or brownout condition exceeding 20 percent voltage drop from nominal, solid-state control automatically switches connected lamps to integral battery power for minimum of 90 minutes of rated emergency illumination, and automatically recharges battery upon restoration of normal power source.
 - 2. Battery: Sealed maintenance-free nickel cadmium unless otherwise indicated.
 - 3. Diagnostics: Provide power status indicator light and accessible integral test switch to manually activate emergency operation.
 - 4. Provide low-voltage disconnect to prevent battery damage from deep discharge.
- C. Accessories:
 - 1. Provide compatible accessory high impact polycarbonate vandal shields where indicated.
 - 2. Provide compatible accessory wire guards where indicated.

2.05 LED DRIVERS

- A. Drivers - General Requirements:
 - 1. Provide LED drivers containing no polychlorinated biphenyls (PCBs).
 - 2. Minimum Efficiency/Efficacy: Provide LED drivers complying with all current applicable federal and state driver efficiency/efficacy standards.
- B. Dimmable LED Drivers:

1. Dimming Range: Continuous dimming from 100 percent to five percent relative light output unless dimming capability to lower level is indicated, without flicker.
2. Control Compatibility: Fully compatible with the dimming controls to be installed.

2.06 LED EMERGENCY POWER SUPPLY UNITS

- A. Description: Self-contained LED emergency power supply units suitable for use with indicated luminaires, complying with NFPA 101 and all applicable state and local codes, and listed and labeled as complying with UL 924.
- B. Compatibility:
 1. LED Drivers: Compatible with electronic, and dimming AC drivers, including those with end of lamp life shutdown circuits.
- C. Operation: Upon interruption of normal power source, solid-state control automatically switches connected LED lamp(s) to the emergency power supply for minimum of 90 minutes of rated emergency illumination, and automatically recharges battery upon restoration of normal power source.
- D. Battery: Sealed maintenance-free high-temperature nickel cadmium unless otherwise indicated.
- E. Emergency Illumination Output:
 1. Luminaires with LEDs: Operate entire LED lamp system at a minimum of 1400 lumens unless otherwise indicated.
- F. Diagnostics: Provide accessible and visible multi-chromatic combination test switch/indicator light to display charge, test, and diagnostic status and to manually activate emergency operation.
- G. Self-Diagnostics: Provide units that self-monitor functionality and automatically perform testing required by NFPA 101 where indicated; provide indicator light(s) to report test and diagnostic status and field selectable audible alert.
- H. Operating Temperature: From 32 degrees F to 122 degrees F unless otherwise indicated or required for the installed location.
- I. Accessories:
 1. Provide compatible accessory remote combination test switch/indicator light where indicated.

2.07 LAMPS

- A. Lamps - General Requirements:
 1. Unless explicitly excluded, provide new, compatible, operable LED lamps in each luminaire.
 2. Minimum Efficiency: Provide lamps complying with all current applicable federal and state lamp efficiency standards.
 3. Color Temperature Consistency: Unless otherwise indicated, for each type of fixture furnish products which are consistent in perceived color temperature. Replace fixtures that are determined by the Architect to be inconsistent in perceived color temperature.

2.08 ACCESSORIES

- A. Stems for Suspended Luminaires: Steel tubing, minimum 1/2" size, factory finished to match luminaire or field-painted as directed.
- B. Threaded Rods for Suspended Luminaires: Zinc-plated steel, minimum 1/4" size, field-painted as directed.
- C. Provide accessory plaster frames for luminaires recessed in plaster ceilings.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.

- B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate conductors in accordance with NFPA 70.
- C. Verify that suitable support frames are installed where required.
- D. Verify that branch circuit wiring installation is completed, tested, and ready for connection to luminaires.
- E. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

- A. Provide extension rings to bring outlet boxes flush with finished surface.
- B. Clean dirt, debris, plaster, and other foreign materials from outlet boxes.

3.03 INSTALLATION

- A. Coordinate locations of outlet boxes provided under Section 26 0533.16 as required for installation of luminaires provided under this section.
- B. Perform work in accordance with NECA 1 (general workmanship).
- C. Install products in accordance with manufacturer's instructions.
- D. Install luminaires securely, in a neat and workmanlike manner, as specified in NECA 500 (commercial lighting) and NECA 502 (industrial lighting).
- E. Provide required support and attachment in accordance with Section 26 0529.
- F. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.
- G. Suspended Ceiling Mounted Luminaires:
 - 1. Do not use ceiling tiles to bear weight of luminaires.
 - 2. Do not use ceiling support system to bear weight of luminaires unless ceiling support system is certified as suitable to do so.
 - 3. Secure surface-mounted and recessed luminaires to ceiling support channels or framing members or to building structure.
 - 4. Secure pendant-mounted luminaires to building structure.
 - 5. Secure lay-in luminaires to ceiling support channels using listed safety clips at four corners.
 - 6. In addition to ceiling support wires, provide two galvanized steel safety wire(s), minimum 12 gage, connected from opposing corners of each recessed luminaire to building structure.
 - 7. See appropriate Division 9 section where suspended grid ceiling is specified for additional requirements.
- H. Recessed Luminaires:
 - 1. Install trims tight to mounting surface with no visible light leakage.
 - 2. Non-IC Rated Luminaires: Maintain required separation from insulation and combustible materials according to listing.
 - 3. Luminaires Recessed in Fire-Rated Ceilings: Install using accessories and firestopping materials to meet regulatory requirements for fire rating.
- I. Suspended Luminaires:
 - 1. Unless otherwise indicated, specified mounting heights are to bottom of luminaire.
 - 2. Install using the suspension method indicated, with support lengths and accessories as required for specified mounting height.
 - 3. Provide minimum of two supports for each luminaire equal to or exceeding 4 feet nominal length, with no more than 4 feet between supports.
 - 4. Install canopies tight to mounting surface.
 - 5. Unless otherwise indicated, support pendants from swivel hangers.
- J. Wall-Mounted Luminaires: Unless otherwise indicated, specified mounting heights are to center of luminaire.

- K. Install accessories furnished with each luminaire.
- L. Bond products and metal accessories to branch circuit equipment grounding conductor.
- M. Emergency Lighting Units:
 - 1. Unless otherwise indicated, connect unit to unswitched power from same circuit feeding normal lighting in same room or area. Bypass local switches, contactors, or other lighting controls.
 - 2. Install lock-on device on branch circuit breaker serving units.
- N. Exit Signs:
 - 1. Unless otherwise indicated, connect unit to unswitched power from same circuit feeding normal lighting in same room or area. Bypass local switches, contactors, or other lighting controls.
 - 2. Install lock-on device on branch circuit breaker serving units.
- O. LED Emergency Power Supply Units: Identify luminaires connected to emergency power system in accordance with Section 26 0553.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements, for additional requirements.
- B. Inspect each product for damage and defects.
- C. Operate each luminaire after installation and connection to verify proper operation.
- D. Test self-powered exit signs, emergency lighting units, and LED emergency power supply units to verify proper operation upon loss of normal power supply.
- E. Correct wiring deficiencies and repair or replace damaged or defective products. Repair or replace excessively noisy ballasts as determined by Architect.

3.05 ADJUSTING

- A. Aim and position adjustable luminaires to achieve desired illumination as indicated or as directed by Architect. Secure locking fittings in place.
- B. Aim and position adjustable emergency lighting unit lamps to achieve optimum illumination of egress path as required or as directed by Architect or authority having jurisdiction.
- C. Exit Signs with Field-Selectable Directional Arrows: Set as indicated or as required to properly designate egress path as directed by Architect or authority having jurisdiction.

3.06 CLEANING

- A. Clean surfaces according to NECA 500 (commercial lighting), NECA 502 (industrial lighting), and manufacturer's instructions to remove dirt, fingerprints, paint, or other foreign material and restore finishes to match original factory finish.

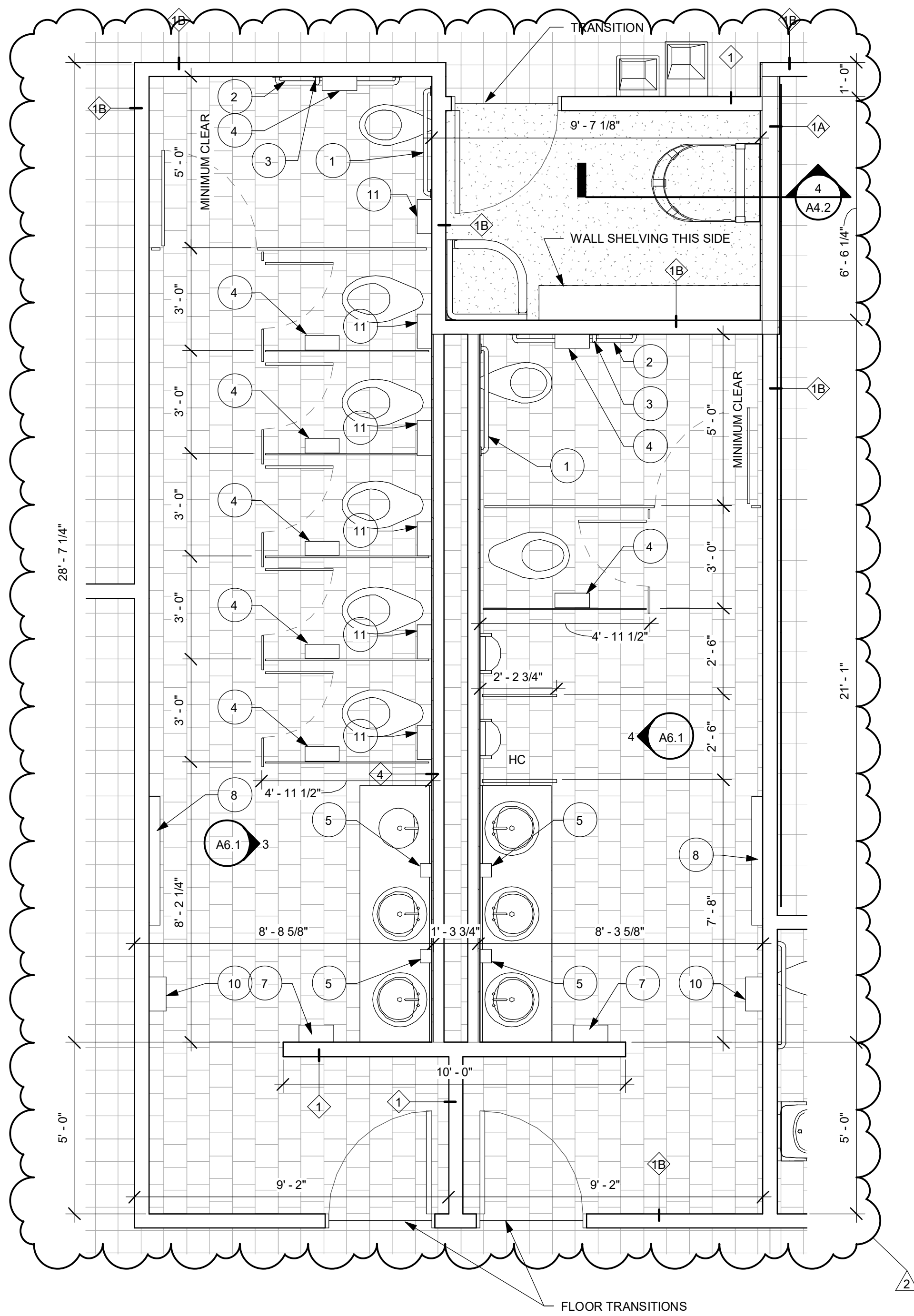
3.07 CLOSEOUT ACTIVITIES

- A. See Section 01 7800 - Closeout Submittals, for closeout submittals.
- B. See Section 01 7900 - Demonstration and Training, for additional requirements.
- C. Demonstration: Demonstrate proper operation of luminaires to Architect, and correct deficiencies or make adjustments as directed.
- D. Just prior to Substantial Completion, replace all lamps that have failed.

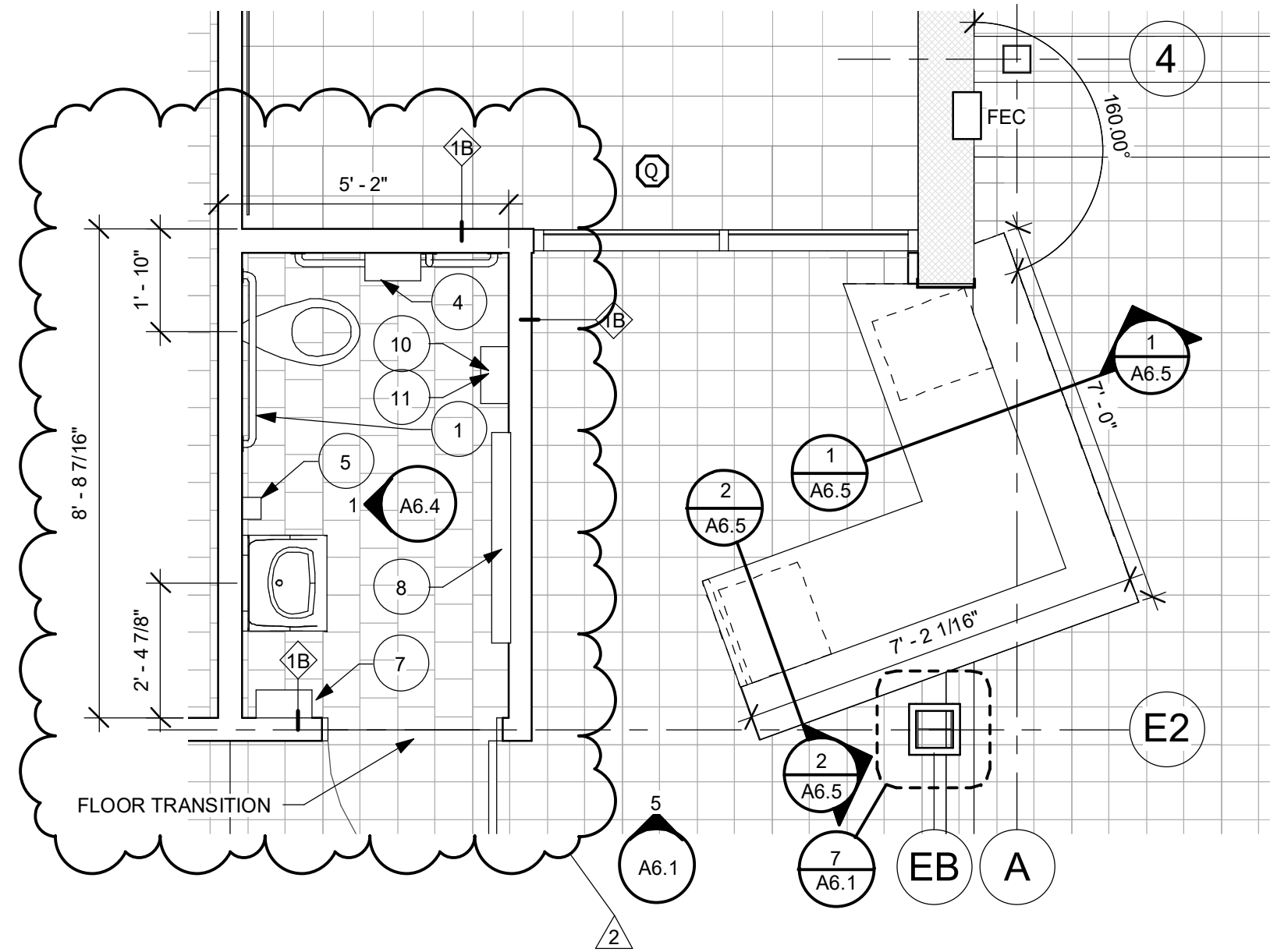
3.08 PROTECTION

- A. Protect installed luminaires from subsequent construction operations.

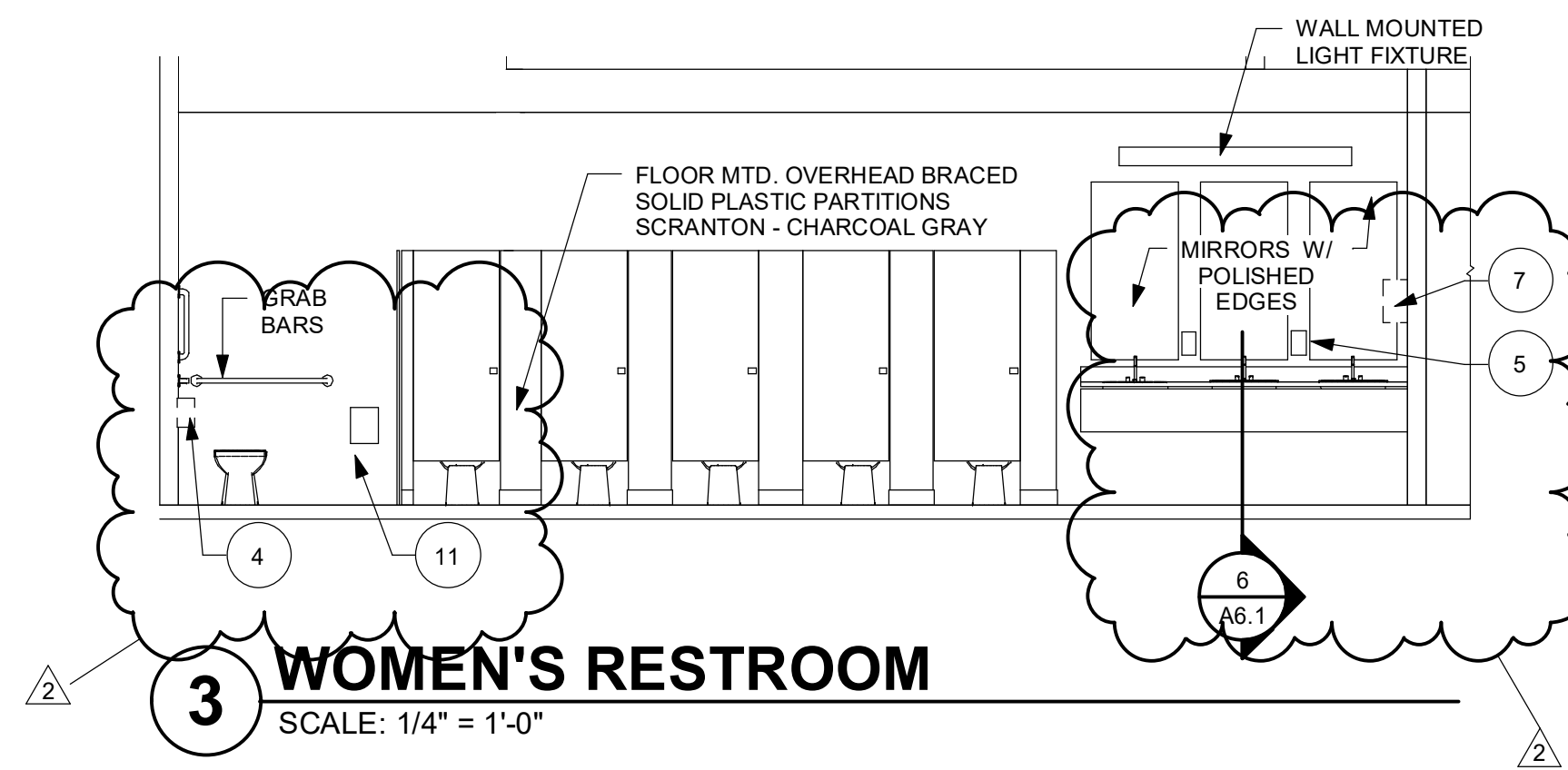
END OF SECTION



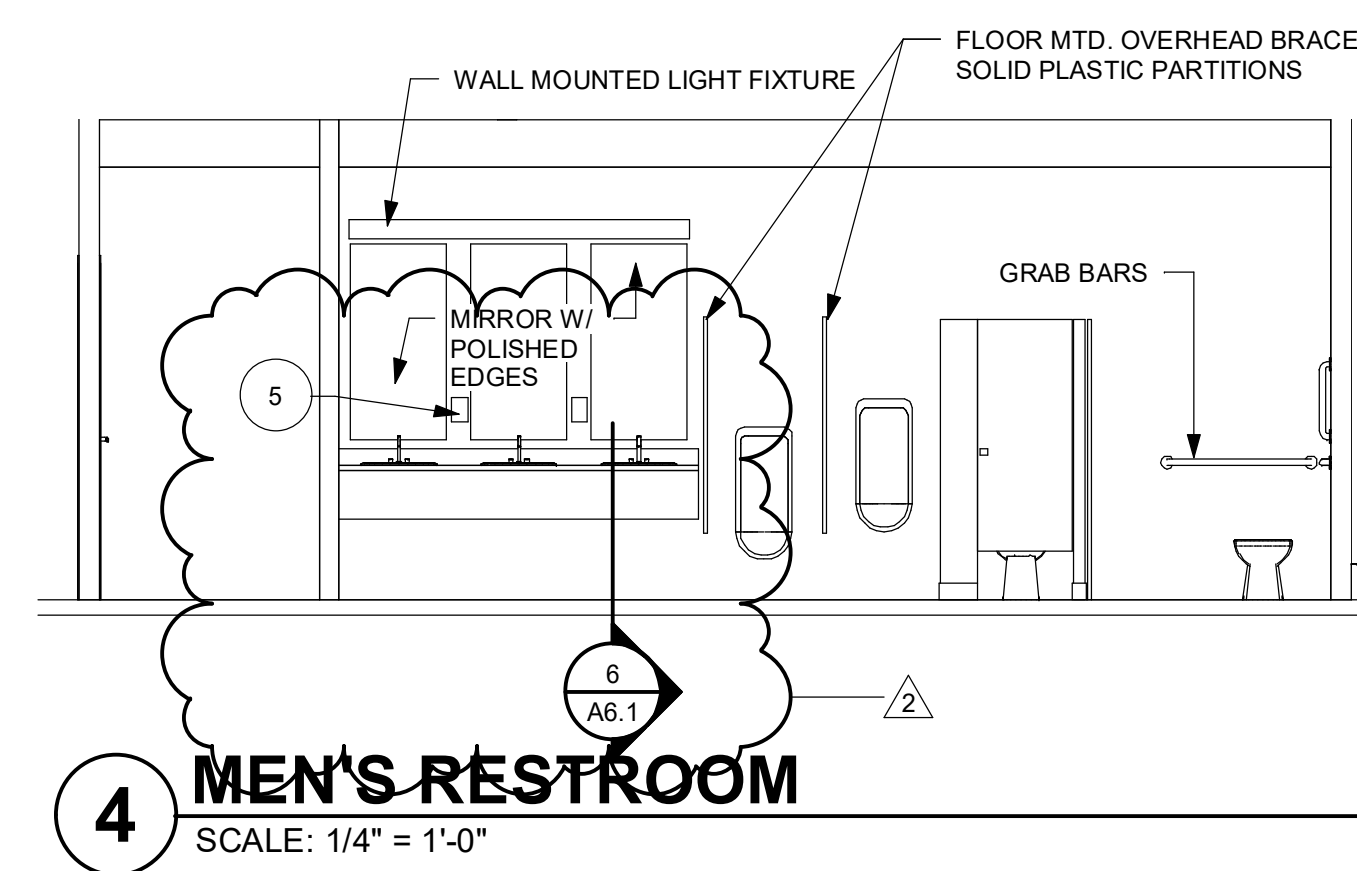
1 RESTROOMS PLAN
SCALE: 3/8" = 1'-0"



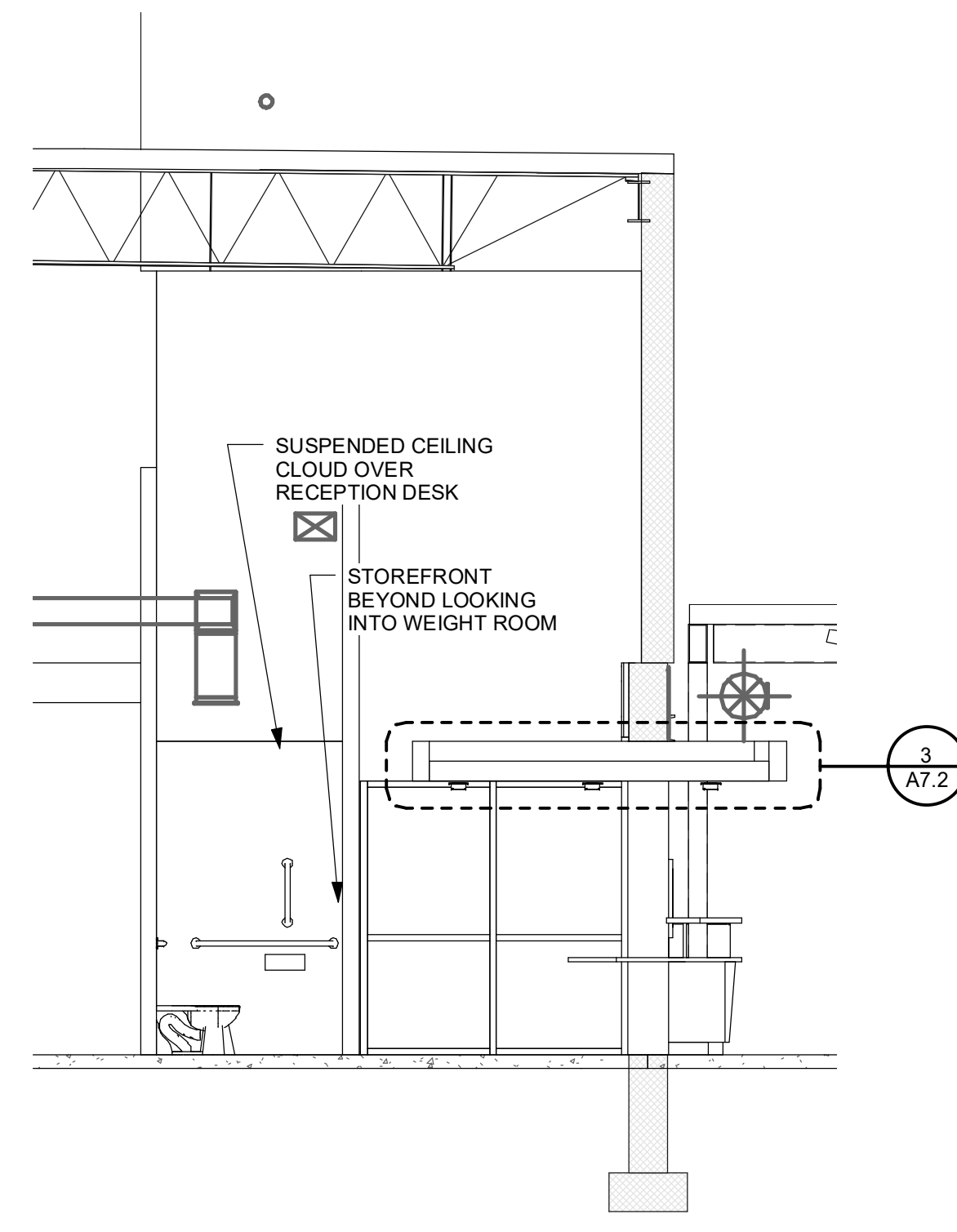
2 RECEPTION DESK PLAN
SCALE: 3/8" = 1'-0"



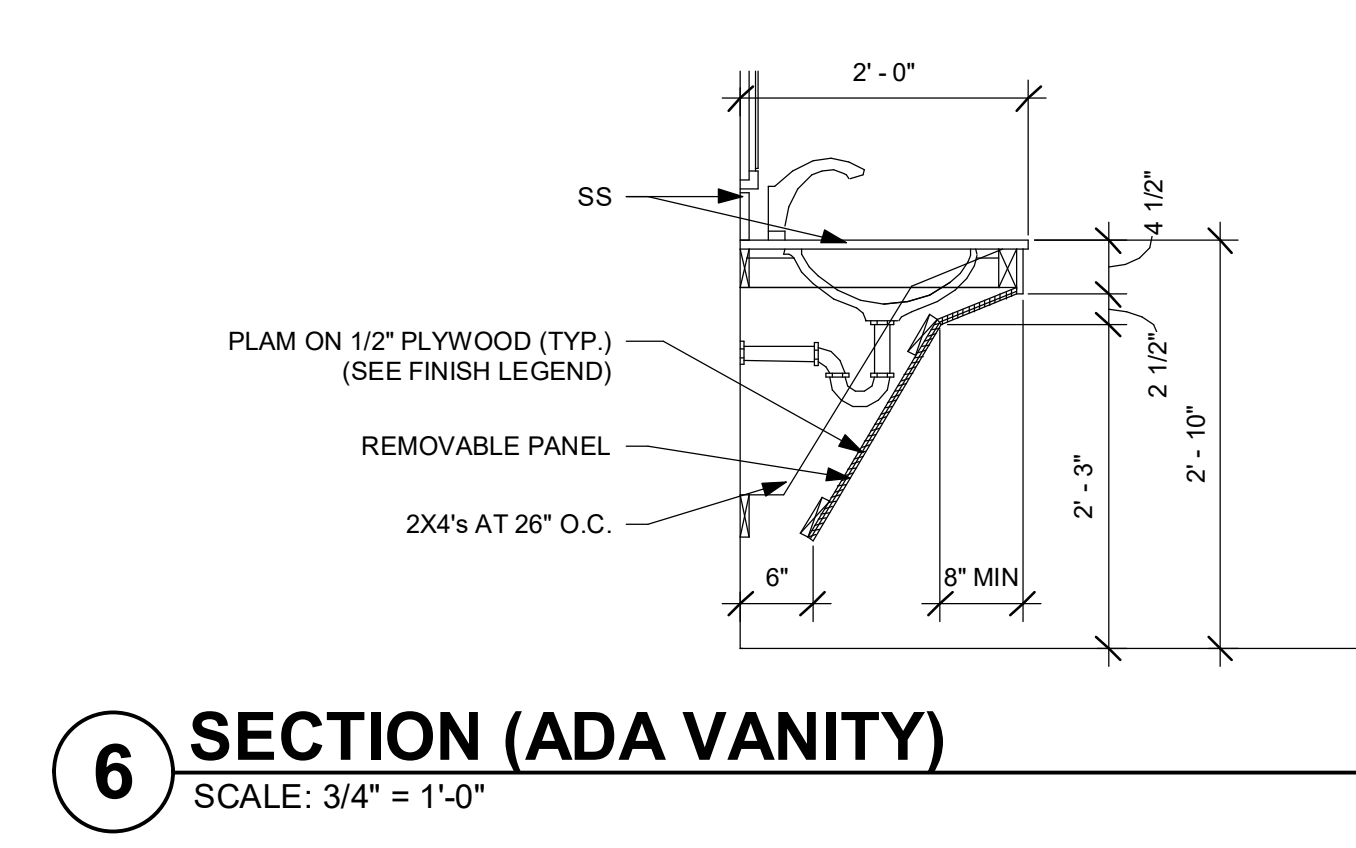
3 WOMEN'S RESTROOM
SCALE: 1/4" = 1'-0"



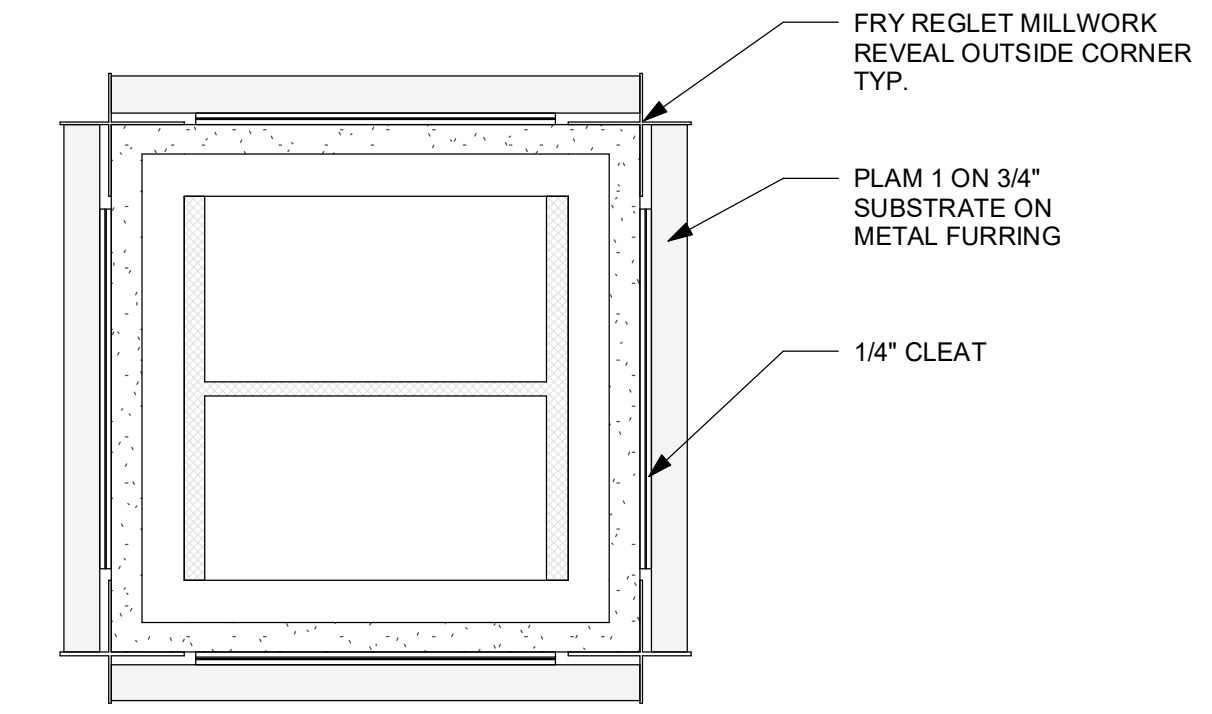
4 MEN'S RESTROOM
SCALE: 1/4" = 1'-0"



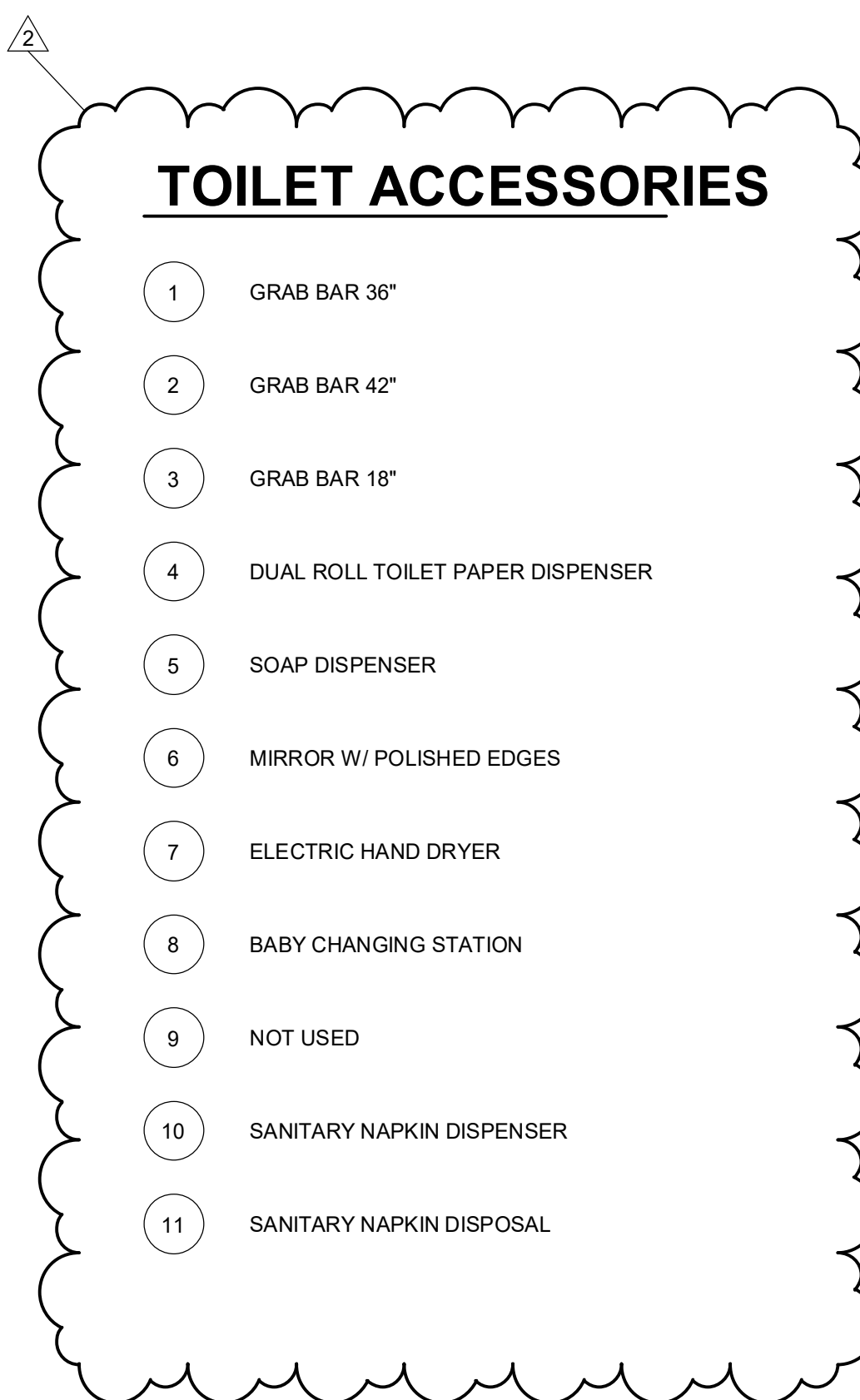
5 RECEPTION ELEVATION
SCALE: 1/4" = 1'-0"



6 SECTION (ADA VANITY)
SCALE: 3/4" = 1'-0"



7 EXISTING COLUMN WRAP DETAIL
SCALE: 3" = 1'-0"



ENTIRE SHEET RESISSUED AS PART OF THIS ADDENDUM.



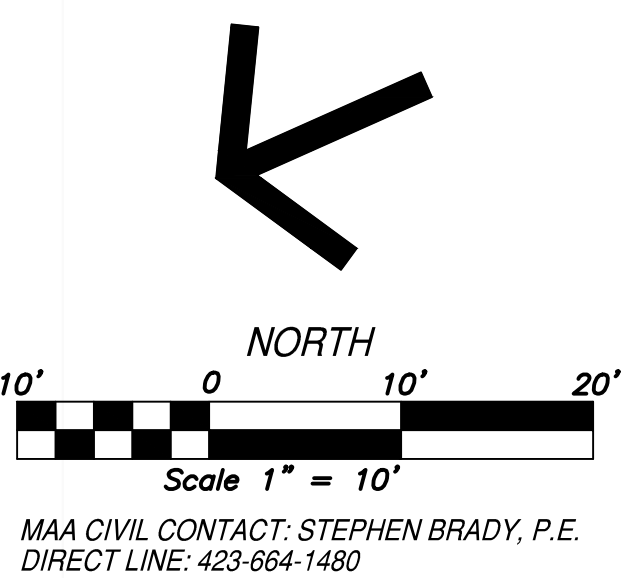
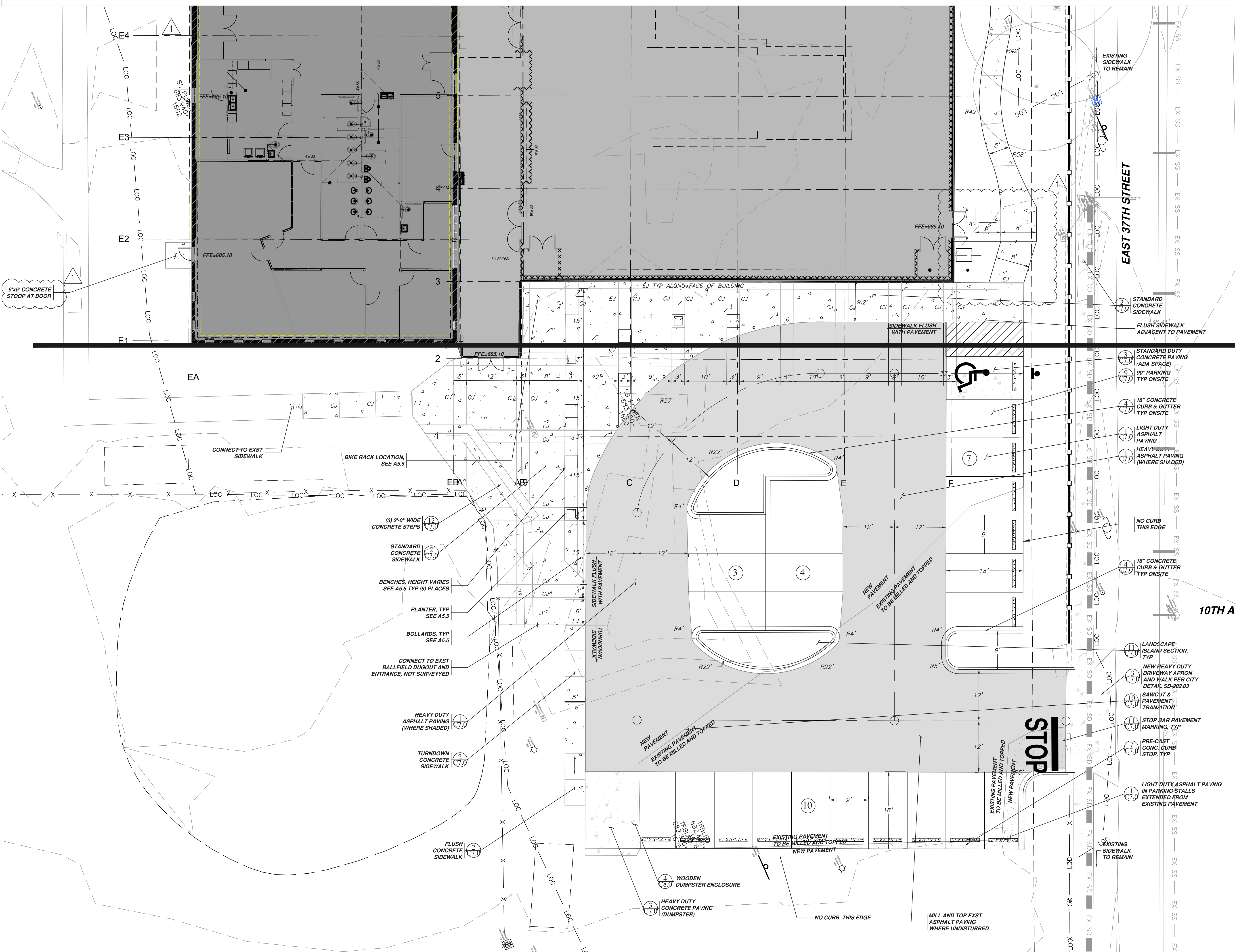
ISSUE DATES
INITIAL ISSUE 12-20-19
1 Addendum 4 01/10/2020
2 Addendum 6 01/14/2020

JOB NO. 15-072 | D'WIN Author | CKD Checker

A6.1
ENLARGED PLANS

East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402



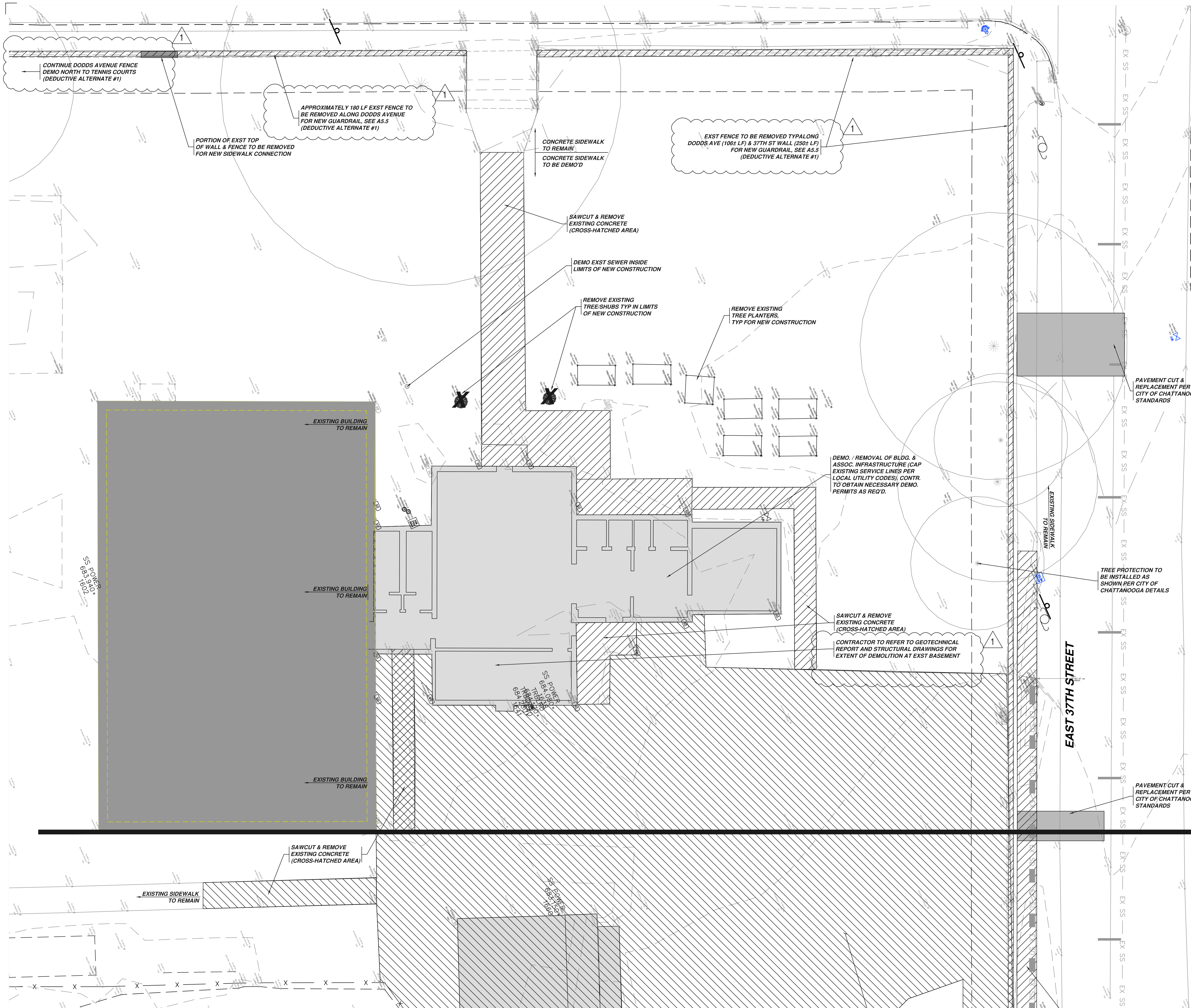
ISSUE DATES
 INITIAL ISSUE 12/20/19
 ADDENDUM 6 01/14/20

JOB NO. 18-072
 D'WN SDB
 CK'D MH

MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
 DIRECT LINE: 423-664-1480

C1.2

Site Grading Plan



LEGEND

Ex. Curb	EX CS
Ex. Centerline	EX CL
Ex. Fence	EX F
Ex. Water Line	EX WL
Ex. Fire Line	EX FL
Ex. Irrigation Line	EX IRR
Ex. Storm Drainage Line	EX SD
Ex. Sanitary Sewer Line	EX SSW
Ex. Sanitary Sewer Force Main	EX SSM
Ex. Swale Centerline	EX SWC
Ex. Ditch Centerline	EX DCH
Ex. Gas Line	EX G
Ex. Overhead Elect. or Utility Line	EX OHE
Ex. Underground Electrical	EX UGE
Ex. Underground Fiber Optics	EX UGFO
Ex. Underground Telephone	EX UGT

PROPERTY LINE

BUILDING LINE	BL
EASEMENT LINE	EL
BUILDING SETBACK LINE	BSL
LANDSCAPE BUFFER LINE	LBL
LOT LINE	LL
ROW LINE	RL
CURB	C
CENTERLINE	CL
PROP. FENCE LINE	PF
PROP. LIMITS OF CONSTRUCTION	PLC
PROPOSED TREE PROTECTION	TF
PROPOSED SWALE CENTERLINE	SWC
PROPOSED DITCH CENTERLINE	DCH
PROP. WATER LINE	W
PROP. FIRE LINE	FL
PROP. IRRIGATION LINE	IRR
PROP. GAS LINE	G
PROP. STORM DRAINAGE LINE	SD
PROP. SANITARY SEWER LINE	SS
PROP. SANITARY SEWER FORCE MAIN	SSM
PROP. OVERHEAD ELECT. OR UTILITY LINE	OHE
PROP. UNDERGROUND ELECTRICAL	UGE
PROP. UNDERGROUND FIBER OPTICS	UGFO
PROP. UNDERGROUND TELEPHONE	UGT

ABBREVIATIONS:
 SSW - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH).
 DE - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH).
 WL - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH).
 L/A BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE).
 FYSB - FRONT YARD SETBACK
 SWSB - SIDE YARD SETBACK
 RYSB - REAR YARD SETBACK
 FFE - FINISHED FLOOR ELEVATION
 TW - FINISH GRADE AT TOP OF RETAINING WALL
 BW - FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL (GRASS GRADE)
 SDOO / SSSO - STORM DRAINAGE / SANITARY SEWER CLEAN-OUT
 DS - ROOF DOWNSPOUT CONNECTION

SITE INFORMATION:
 SITE AREA: 8.8 ACRES
 SITE IS ZONED: R-2
 LAND DISTURBANCE AREA: 0.90± ACRES
 TAX MAP PARCEL #: 168B J 016
 EXST BUILDING AREA: 11,341± SF
 BUILDING AREA: 16,324± SF (44% INCREASE COMPARED TO PRE)
 BUILDING TYPE: GYMNASIUM

STREET ADDRESS: 3610 DODDS AVENUE
 FRONT YARD SETBACK: 25 FEET
 SIDE YARD SETBACK: 10 FEET
 REAR YARD SETBACK: 25 FEET

SANITARY SEWER AVAILABILITY: EXST. PUBLIC SEWER MAIN LOCATED IN EAST 37TH STREET.
 POTABLE WATER EXST. PUBLIC WATER MAIN LOCATED IN SUPPLY AVAILABILITY: EAST 37TH STREET.

STORM DRAINAGE: STORM DRAINAGE WILL DISCHARGE INTO AN EXISTING CULVERT IN EAST 37TH STREET.

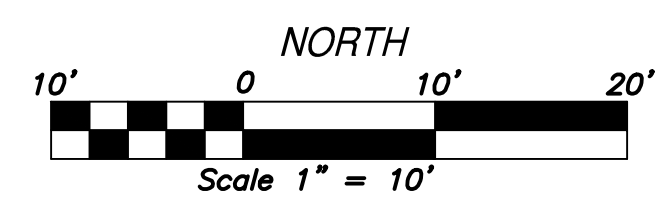
PROPERTY FRONTAGE: 240 LF DODDS AVE = 7 REQUIRED TREES
 340 LF E 37TH ST = 10 REQUIRED TREES
 REQUIRED STREET YARD TREES: 17
 EXISTING STREET YARD TREES: 6
 PROPOSED STREET YARD TREES: 11

REGULAR PARKING SPACES: 23
 REGULAR H/CAP SPACES: 0
 VAN ACCESSIBLE H/CAP SPACES: 1
 TOTAL PARKING PROVIDED: 24 SPACES

FLOODZONE PORTIONS OF THE PROPERTY ARE LOCATED IN FLOOD ZONE "X" AS SCALED FROM THE FIRM MAP COMMUNITY-PANEL NUMBER 47065004570, MAP REVISED 2/3/2016.
 PROPERTY OWNER: CITY OF CHATTANOOGA

NOTE:
 CONTRACTOR TO REFER TO STRUCTURAL AND ARCHITECTURAL SHEETS FOR ADDITIONAL REQUIREMENTS OF DEMO OF EXISTING.
 FOUNDRY SAND WAS LOCATED ON SITE PER THE GEOTECHNICAL REPORT. CONTRACTOR RESPONSIBLE FOR TESTING AND PROPER DISPOSAL OF ONSITE CONTAMINATED SOIL.

- ITEMS TO BE SALVAGE INCLUDE:**
1. EXTERIOR FLOOD LIGHTS (LED) MOUNTED TO THE EXISTING GYM.
 2. INTERIOR LED BULBS IN OLD FLUORESCENT FIXTURES
 3. INTERIOR GYM LED FIXTURES
 4. BACKBOARDS
 5. BACKBOARD SUPPORTS
 6. SCOREBOARDS
 7. EXTERIOR BIKE RACK



MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
 DIRECT LINE: 423-664-1480

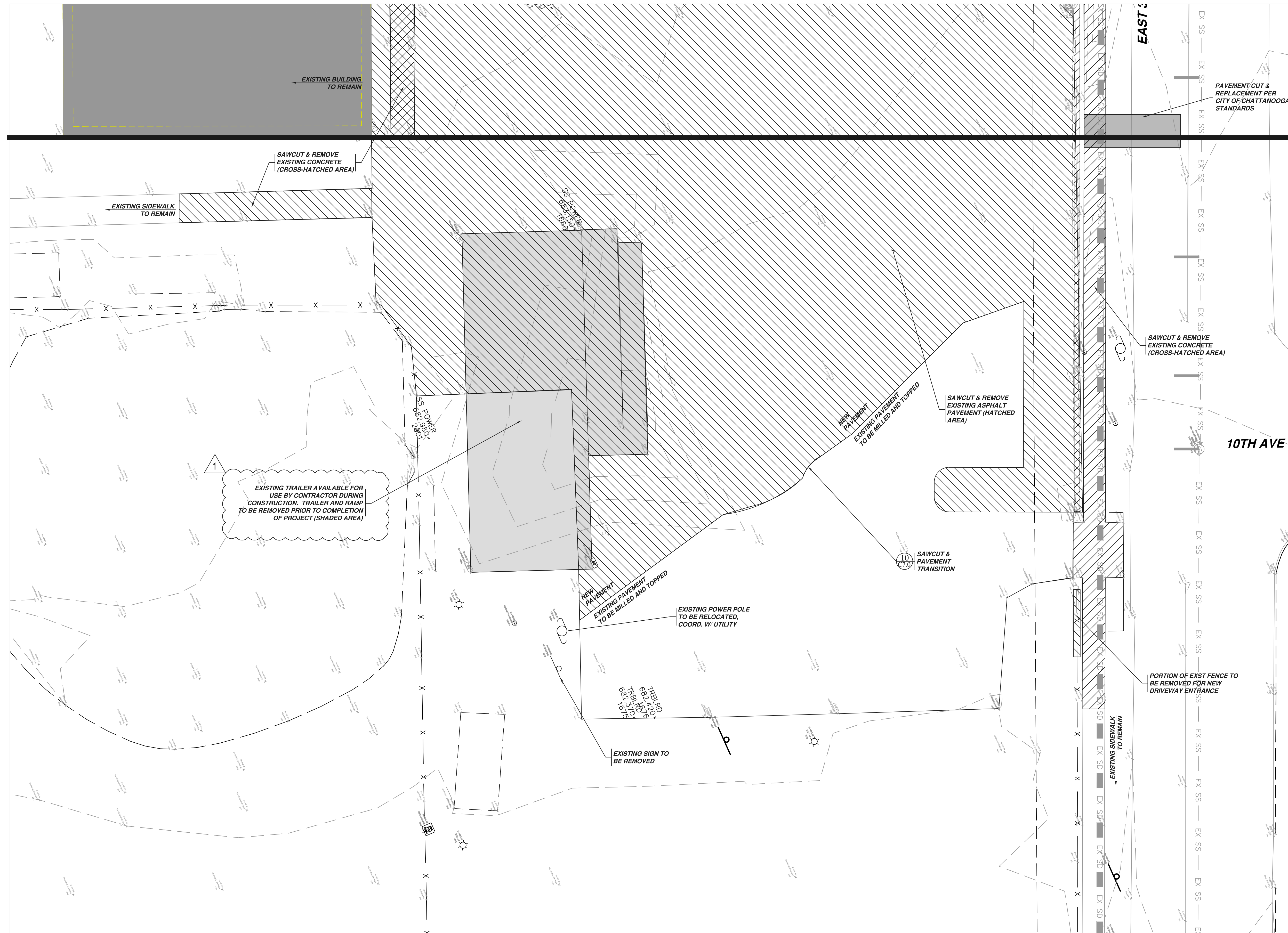
ISSUE DATES
 INITIAL ISSUE 12/20/19
 ADDENDUM 6 01/14/20

JOB NO. 18-072 | D'WN SDB | CK'D MH

C2.1
 Existing Conditions & Demolition Plan

ARTECH
 1410 COWART STREET
 CHATTANOOGA, TN 37408
 423.265.4313
 WWW.ARTECH.PRO

East Lake YFD Center Improvements
 3610 Dodds Avenue, Chattanooga, TN 37402



MATCH LINE C2.1
MATCH LINE C2.2

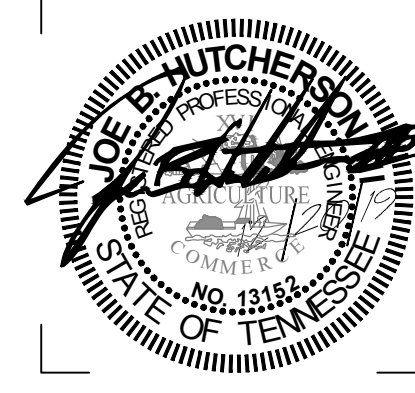
LEGEND	
---	Ex. Curb
---	Ex. Centerline
---	Ex. Fence
---	Ex. Water Line
---	Ex. Fire Line
---	Ex. Irrigation Line
---	Ex. Storm Drainage Line
---	Ex. Sanitary Sewer Line
---	Ex. Sanitary Sewer Force Main
---	Ex. Swale Centerline
---	Ex. Ditch Centerline
---	Ex. Gas Line
---	Ex. Overhead Elect. or Utility Line
---	Ex. Underground Electrical
---	Ex. Underground Fiber Optics
---	Ex. Underground Telephone
PROPERTY LINE	
---	BUILDING LINE
---	EASEMENT LINE
---	BUILDING SETBACK LINE
---	LANDSCAPE BUFFER LINE
---	LOT LINE
---	ROW LINE
---	CURB
---	CENTERLINE
---	PROP. FENCE LINE
---	PROP. LIMITS OF CONSTRUCTION
---	PROPOSED TREE PROTECTION
---	PROPOSED SWALE CENTERLINE
---	PROPOSED DITCH CENTERLINE
---	PROP. WATER LINE
---	PROP. FIRE LINE
---	PROP. IRRIGATION LINE
---	PROP. GAS LINE
---	PROP. STORM DRAINAGE LINE
---	PROP. SANITARY SEWER LINE
---	PROP. SANITARY SEWER FORCE MAIN
---	PROP. OVERHEAD ELECT. OR UTILITY LINE
---	PROP. UNDERGROUND ELECTRICAL
---	PROP. UNDERGROUND FIBER OPTICS
---	PROP. UNDERGROUND TELEPHONE

ABBREVIATIONS:
 SSE - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH).
 SE - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH).
 WE - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH).
 LVA BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE).
 FYSB - FRONT YARD SETBACK
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 FFE - FINISHED FLOOR ELEVATION
 TW - FINISH GRADE AT TOP OF RETAINING WALL
 BW - FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL (GRASS GRADE)
 SDCO / SSCO - STORM DRAINAGE / SANITARY SEWER CLEAN-OUT
 DS - ROOF DOWNSPOUT CONNECTION

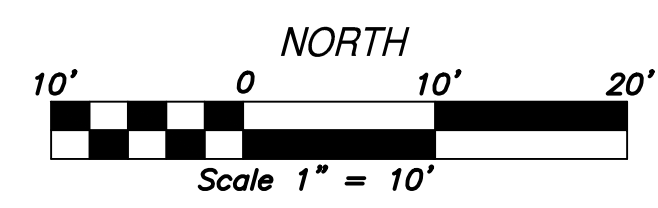
SITE INFORMATION:
 SITE AREA: 8.2 ACRES
 SITE IS ZONED: R-2
 LAND DISTURBANCE AREA: 0.90+ ACRES
 TAX MAP PARCEL #: 188B J 016
 EXST BUILDING AREA: 11,341± SF
 BUILDING AREA: 16,324± SF (44% INCREASE COMPARED TO PRE)
 BUILDING TYPE: GYMNASIUM
 STREET ADDRESS: 3610 DODDS AVENUE
 FRONT YARD SETBACK: 25 FEET
 SIDE YARD SETBACK: 10 FEET
 REAR YARD SETBACK: 25 FEET
 SANITARY SEWER AVAILABILITY: EXST. PUBLIC SEWER MAIN LOCATED IN EAST 37TH STREET.
 POTABLE WATER EXST. PUBLIC WATER MAIN LOCATED IN SUPPLY AVAILABILITY: EAST 37TH STREET.
 STORM DRAINAGE: STORM DRAINAGE WILL DISCHARGE INTO AN EXISTING CULVERT IN EAST 37TH STREET.
 PROPERTY FRONTAGE: 240 LF DODDS AVE = 7 REQUIRED TREES
 340 LF E 37TH ST = 10 REQUIRED TREES
 REQUIRED STREET YARD TREES: 17
 EXISTING STREET YARD TREES: 6
 PROPOSED STREET YARD TREES: 11
 REGULAR PARKING SPACES: 23
 REGULAR H/CAP SPACES: 0
 VAN ACCESSIBLE H/CAP SPACES: 1
 TOTAL PARKING PROVIDED: 24 SPACES
 FLOODZONE: PORTIONS OF THE PROPERTY ARE LOCATED IN FLOOD ZONE "X" AS SHOWN FROM THE FIRM MAP COMMUNITY-PANEL NUMBER 4706500457G. MAP REVISED 2/21/2016.
 PROPERTY OWNER: CITY OF CHATTANOOGA

East Lake YFD Center Improvements

3610 Dodds Avenue, Chattanooga, TN 37402

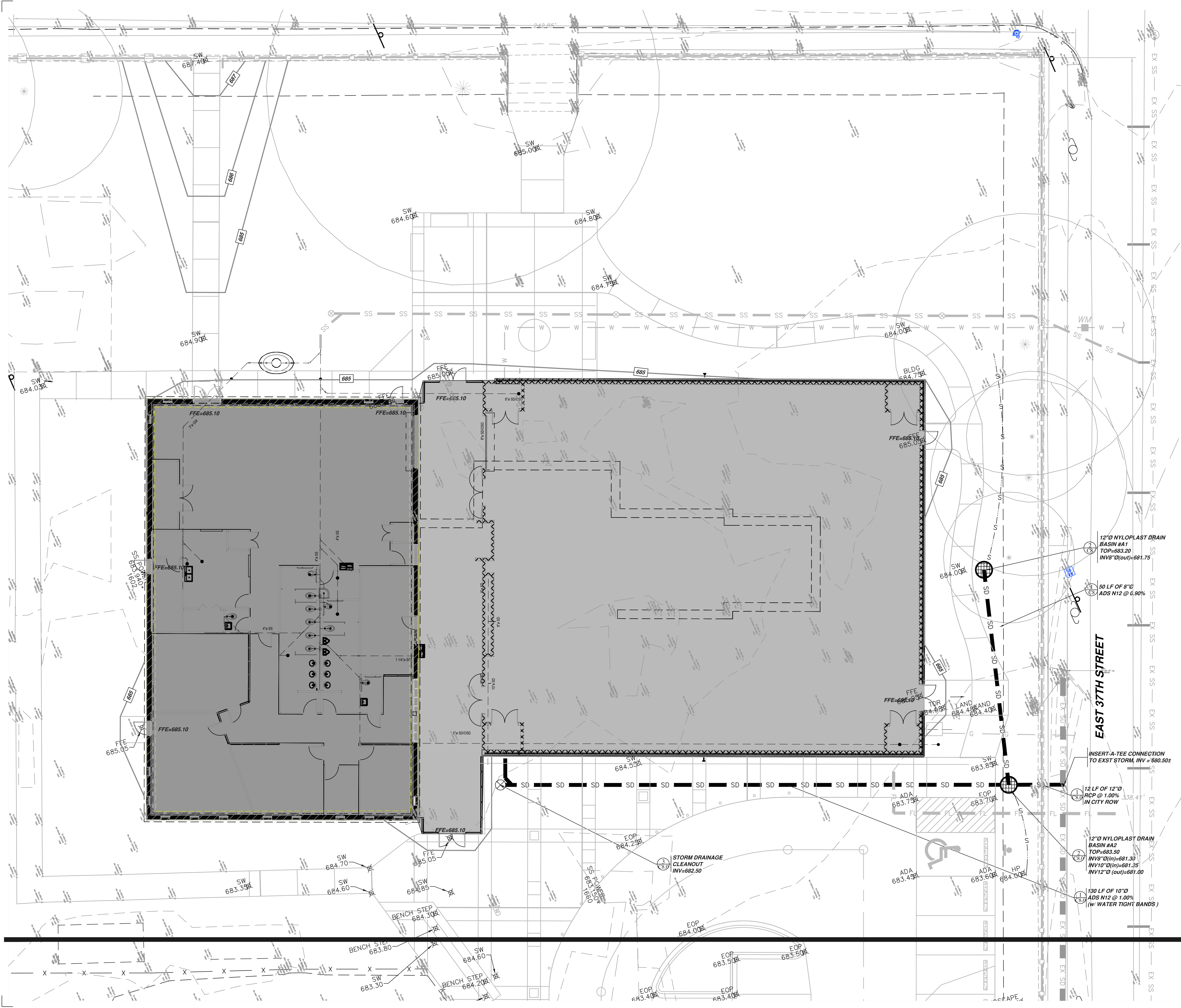


ISSUE DATES
 INITIAL ISSUE 12/20/19
 ADDENDUM 6 01/14/20



MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
 DIRECT LINE: 423-664-1480

JOB NO. 18-072 | D'WN SDB | CK'D MH



LEGEND

EX C	Ex. Curb
EX CL	Ex. Centerline
EX F	Ex. Fence
EX WL	Ex. Water Line
EX FL	Ex. Fire Line
EX IRR	Ex. Irrigation Line
EX SD	Ex. Storm Drainage Line
EX SS	Ex. Sanitary Sewer Line
EX FM	Ex. Sanitary Sewer Force Main
EX SC	Ex. Swale Centerline
EX DL	Ex. Ditch Centerline
EX G	Ex. Gas Line
EX OHE	Ex. Overhead Elect. or Utility Line
EX UGE	Ex. Underground Electrical
EX UGFO	Ex. Underground Fiber Optics
EX UGT	Ex. Underground Telephone

PROPERTY LINE

---	BUILDING LINE
---	EASEMENT LINE
---	BUILDING SETBACK LINE
---	LANDSCAPE BUFFER LINE
---	LOT LINE
---	ROW LINE
---	CURB
---	CENTERLINE
---	PROP. FENCE LINE
---	PROP. LIMITS OF CONSTRUCTION
---	PROPOSED TREE PROTECTION
---	PROPOSED SWALE CENTERLINE
---	PROPOSED DITCH CENTERLINE
---	PROP. WATER LINE
---	PROP. FIRE LINE
---	PROP. IRRIGATION LINE
---	PROP. GAS LINE
---	PROP. STORM DRAINAGE LINE
---	PROP. SANITARY SEWER LINE
---	PROP. SANITARY SEWER FORCE MAIN
---	PROP. OVERHEAD ELECT. OR UTILITY LINE
---	PROP. UNDERGROUND ELECTRICAL
---	PROP. UNDERGROUND FIBER OPTICS
---	PROP. UNDERGROUND TELEPHONE

ABBREVIATIONS:

SSE - NEW PUBLIC SANITARY SEWER EASEMENT (SEE PLAN FOR WIDTH).
 DE - NEW DRAINAGE EASEMENT (SEE PLAN FOR WIDTH).
 WE - NEW PUBLIC WATER EASEMENT (SEE PLAN FOR WIDTH).
 L/A BUFFER - NEW LANDSCAPE BUFFER (SEE PLAN FOR WIDTH AND TYPE).
 FYSB - FRONT YARD SETBACK
 SYSB - SIDE YARD SETBACK
 RYSB - REAR YARD SETBACK
 FFE - FINISHED FLOOR ELEVATION
 FFG - FINISH GRADE AT TOP OF RETAINING WALL
 BW - FINISHED GROUND GRADE AT BOTTOM OF RETAINING WALL (GRASS GRADE)
 SDOO / SSSO - STORM DRAINAGE / SANITARY SEWER CLEAN-OUT
 DS - ROOF DOWNSPOUT CONNECTION

SITE INFORMATION:

SITE AREA: 8.4 ACRES
 SITE IS ZONED: R-2
 LAND DISTURBANCE AREA: 0.908 ACRES
 TAX MAP PARCEL #: 1888 U 016
 EXIST. BUILDING AREA: 11,314 SF
 BUILDING AREA: 16,324 SF (44% INCREASE COMPARED TO PRE)
 BUILDING TYPE: GYMNASIUM

STREET ADDRESS: 3610 DODDS AVENUE
 FRONT YARD SETBACK: 25 FEET
 SIDE YARD SETBACK: 10 FEET
 REAR YARD SETBACK: 25 FEET

SANITARY SEWER AVAILABILITY: EXST. PUBLIC SEWER MAIN LOCATED IN EAST 37TH STREET.

POTABLE WATER EXST. PUBLIC WATER MAIN LOCATED IN SUPPLY AVAILABILITY: EAST 37TH STREET.

STORM DRAINAGE: STORM DRAINAGE WILL DISCHARGE INTO AN EXISTING CULVERT IN EAST 37TH STREET.

PROPERTY FRONTAGE: 240 LF DODDS AVE = 7 REQUIRED TREES
 340 LF E 37TH ST = 10 REQUIRED TREES

REQUIRED STREET YARD TREES: 17
EXISTING STREET YARD TREES: 6
PROPOSED STREET YARD TREES: 11

REGULAR PARKING SPACES: 23
REGULAR HOUP SPACES: 0
VAN ACCESSIBLE HOUP SPACES: 1
TOTAL PARKING PROVIDED: 24 SPACES

FLOODZONING: PORTIONS OF THE PROPERTY ARE LOCATED IN FLOOD ZONE "1" AS SHOWN ON THE FIRM MAP COMMUNITY-PANEL NUMBER 4706500457G, MAP REVISED 2/3/2016.

PROPERTY OWNER: CITY OF CHATTANOOGA

- PRIOR TO FINAL ACCEPTANCE BY THE CITY ENGINEER AND/OR ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE OWNER OR OWNER'S AGENT SHALL:**
- SUBMIT AN INVENTORY OF THE CONSTRUCTED STORMWATER DRAINAGE SYSTEM, WHETHER PUBLIC OR PRIVATE, TO THE CITY OF CHATTANOOGA IN ELECTRONIC FORMAT. ELECTRONIC AS-BUILT DRAWINGS SHALL BE SUBMITTED IN AUTOCAD AND PDF FORMAT AND SHALL SHOW PLAINLY THE APPROVED AND CONSTRUCTED LAYOUT OF THE STORMWATER SYSTEMS. THE AS-BUILT DRAWING SHALL INCLUDE ALL STORMWATER FEATURES, WHETHER NEW OR EXISTING, INCLUDING THE OUTFALL TO THE CITY DRAINAGE SYSTEM (EX. CATCH BASINS, CONDUITS, HYDROLOGIC FEATURES INCLUDING PONDS, STREAMS, CULVERT INLETS AND OUTFALLS, AND ALL PVIOUS SURFACES, ETC).
 - COMPLY WITH ALL PERMANENT LANDSCAPING REQUIREMENTS AND SCHEDULE A LANDSCAPE INSPECTION WITH THE CITY OF CHATTANOOGA'S LANDSCAPE INSPECTOR. AN APPOINTMENT MAY BE SCHEDULED BY CALLING 423-643-5837 A MINIMUM OF TWO BUSINESS DAYS BEFORE THE DESIRED INSPECTION APPOINTMENT.
 - ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST COMPLY WITH THE CURRENT EDITION OF THE TN EROSION & SEDIMENT CONTROL MANUAL, THE CITY OF CHATTANOOGA BMP MANUAL, AND THE TDEC CONSTRUCTION GENERAL PERMIT (IF APPLICABLE).
- NOTES**
- SEE SHEET C0.1 FOR GENERAL AND GRADING AND DRAINAGE NOTES.
 - REFER TO GEOTECHNICAL REPORT FOR UNDERCUTTING REQUIREMENTS (60" BELOW FOUNDATIONS/FLOORS; 15" BELOW PAVEMENTS)
 - CROSS SLOPES OF SIDEWALKS NOT TO EXCEED 2.00% SLOPE.
 - ANY EXCAVATED SLOPE 3:1 OR STEEPER IS TO BE STABILIZED WITHIN 7 DAYS.
 - CONTRACTOR SHALL NOTIFY SURVEYOR AND CITY STORM WATER INSPECTOR AT LEAST 48 HOURS PRIOR TO ANY COVER PLACED ON UNDERGROUND SYSTEMS. FAILURE TO DO SO MAY RESULT IN RE-EXCAVATION.
 - CONTRACTOR IS RESPONSIBLE FOR PROVIDING A STORM WATER AS-BUILT AT THE CLOSE OUT OF PROJECT. AS-BUILT DRAWINGS SHALL BE ACCOMPANIED BY AS-BUILT PHOTOGRAPHS MADE DURING THE SURVEY/INSPECTION. MARCH ADAMS & ASSOCIATES CAN HELP PROVIDE THESE PHOTOGRAPHS, PROVIDED THAT 72 HOUR NOTICE IS PROVIDED BY THE CONTRACTOR.

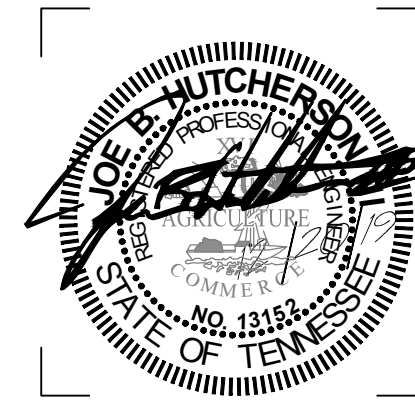
ISSUE DATES

INITIAL ISSUE 12/20/19
 ADDENDUM 6 01/14/20

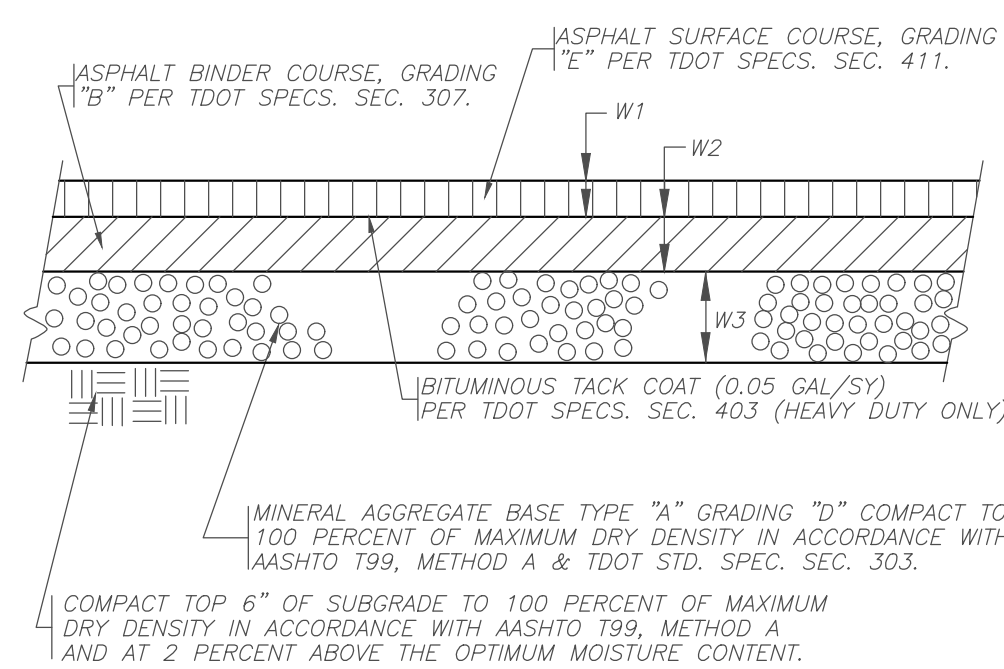
Scale 1" = 10'

MAA CIVIL CONTACT: STEPHEN BRADY, P.E.
 DIRECT LINE: 423-664-1480

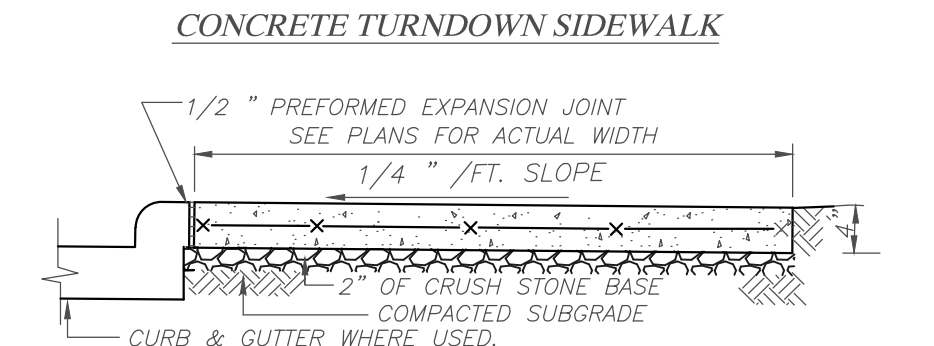
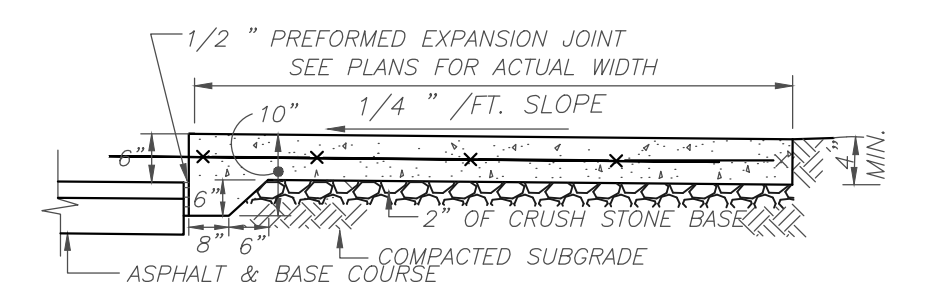
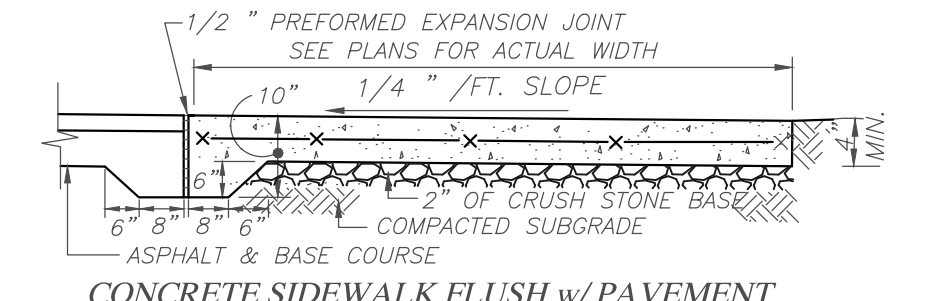
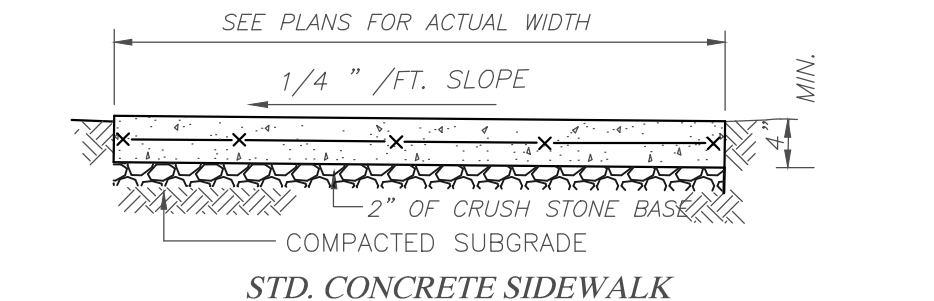
**East Lake YFD Center
 Improvements**
 3610 Dodds Avenue, Chattanooga, TN 37402



	STANDARD DUTY THICKNESS	HEAVY DUTY THICKNESS
ASPH. SURFACE COURSE THICKNESS "W1"	2"	1.5"
ASPH. BINDER COURSE THICKNESS "W2"	2"	2"
AGGREGATE BASE THICKNESS "W3"	6"	6"



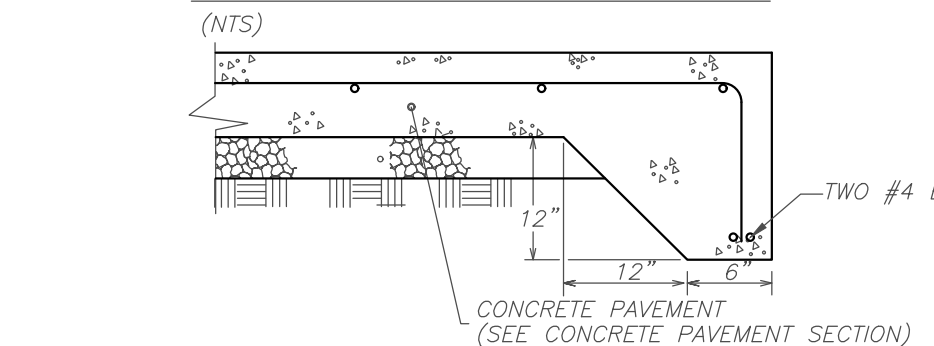
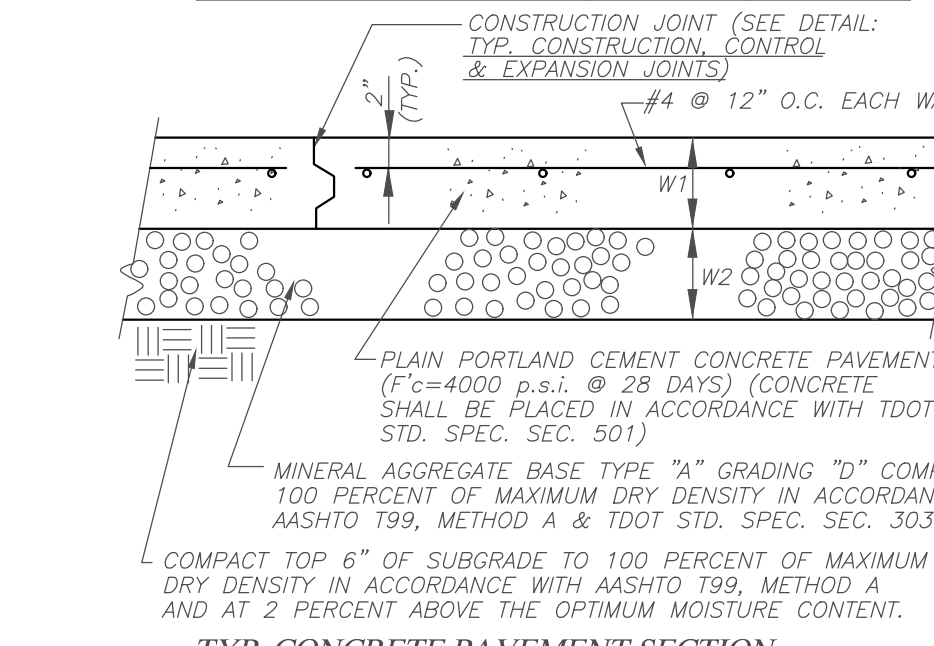
1 C7.0 **DETAIL: ASPHALT PAVEMENT SECTIONS** (NTS)



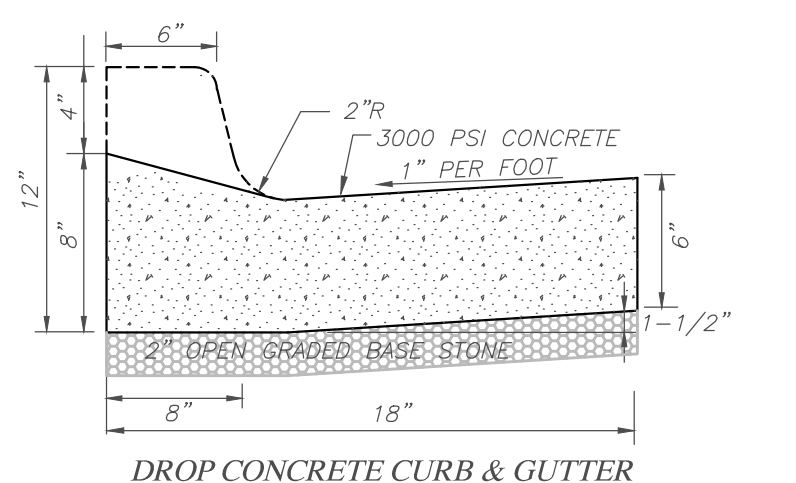
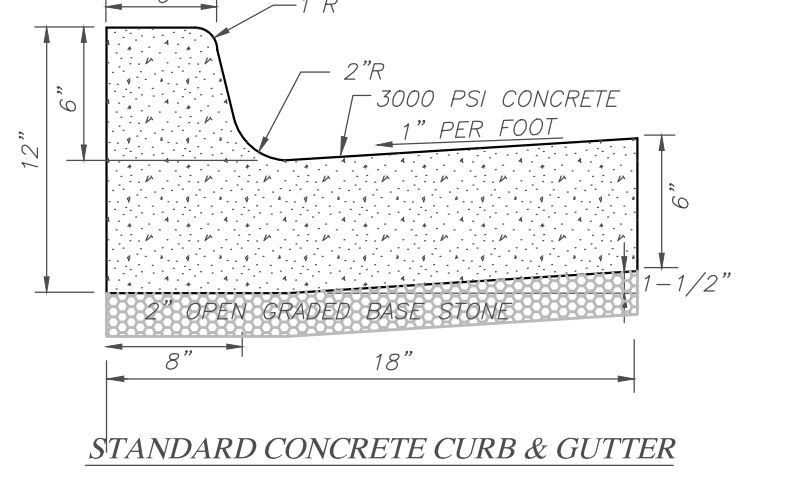
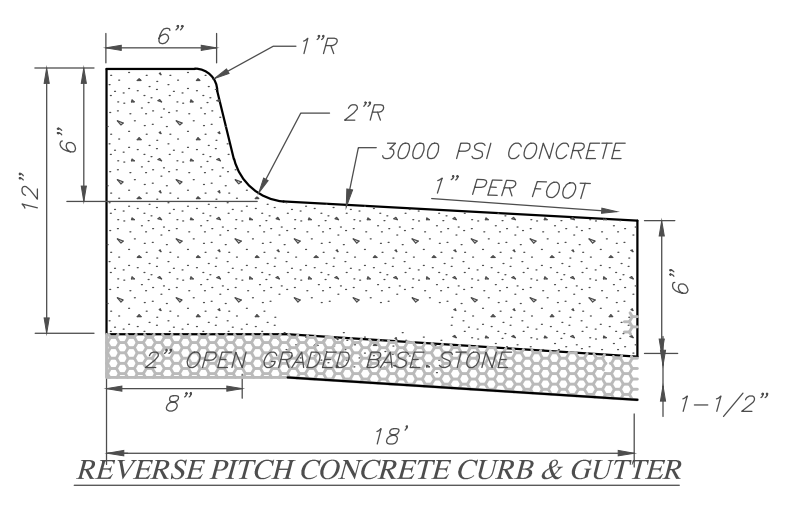
- NOTES:**
- 4,000 PSI CONCRETE @ 28 DAYS WITH REINFORCEMENT - 6X6-W1.4 X W1.4 W.W.M.
 - SEE ALSO DETAIL: TYP. CONSTRUCTION, CONTROL & EXPANSION JOINTS
 - PROVIDE 1" DEEP TRANSVERSE GROOVES AT 5'-0" INTERVALS, OR AS SHOWN ON PLAN.
 - PROVIDE 1/2" WIDE EXPANSION JOINT AT 20' INTERVALS AND AT ALL CURBS, RIGID STRUCTURES AND RIGID PAVEMENT.
 - TOOL ALL EXPOSED EDGES AND JOINTS TO 1/4" RADIUS.
 - BROOM FINISH ACROSS DIRECTION OF TRAVEL.
 - MAXIMUM SLOPE: 2%.
 - FIBERMESH ALTERNATIVE: MIX AND RATE OF APPLICATION OF "FIBERMESH" SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

2 C7.0 **DETAIL: CONCRETE SIDEWALK** (NTS)

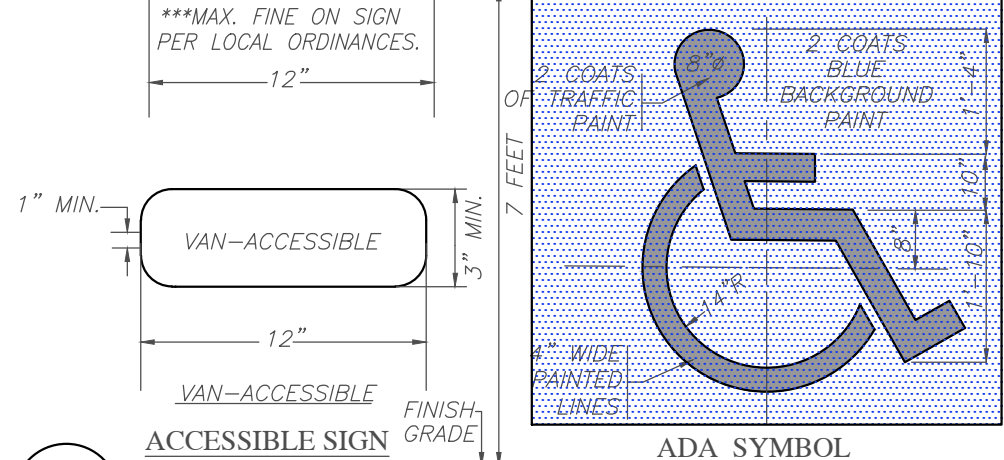
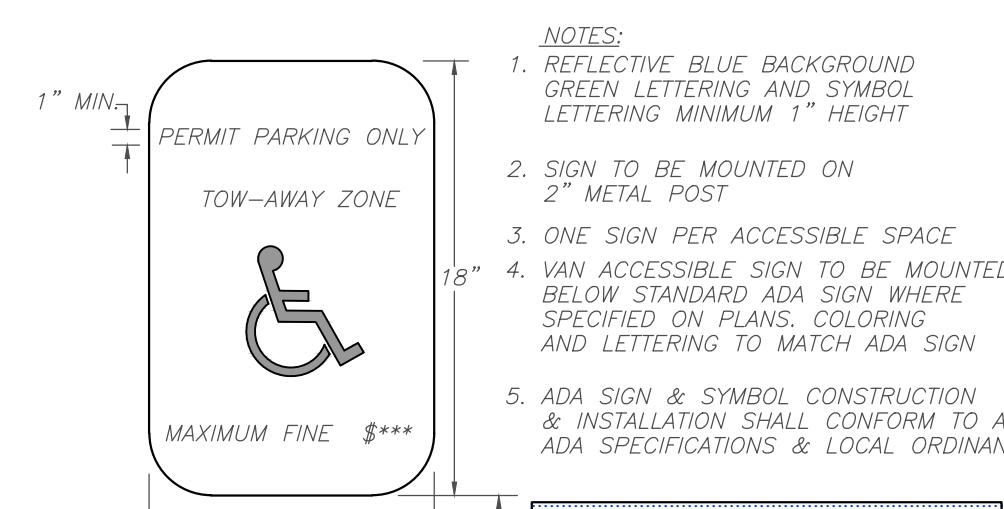
	STD. DUTY THICKNESS	HEAVY DUTY THICKNESS
CONC. PAVT. THICKNESS "W1"	5"	6"
AGGR. BASE THICKNESS "W2"	4"	6"



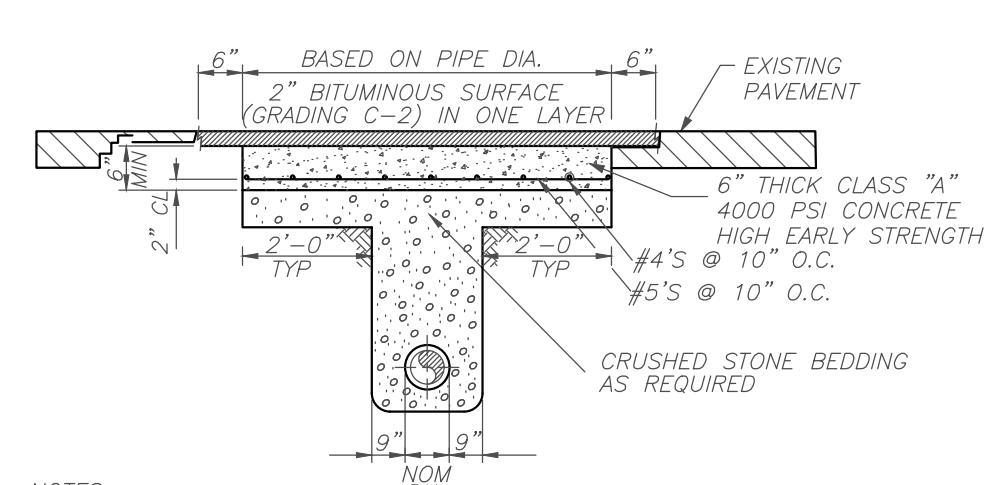
3 C7.0 **DETAIL: TYP. CONCRETE PAVEMENT w/ TURNDOWN** (NTS)



4 C7.0 **DETAIL: 18" CONCRETE CURB & GUTTER** (NTS)

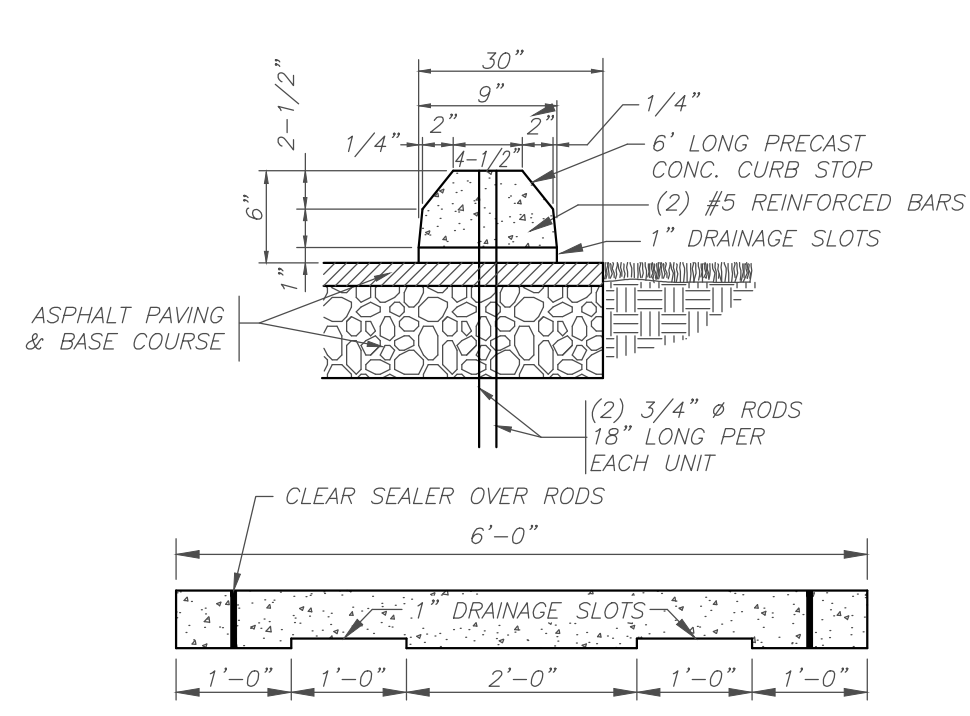


5 C7.0 **DETAIL: ACCESSIBLE PARKING SIGN & SYMBOL** (NTS)

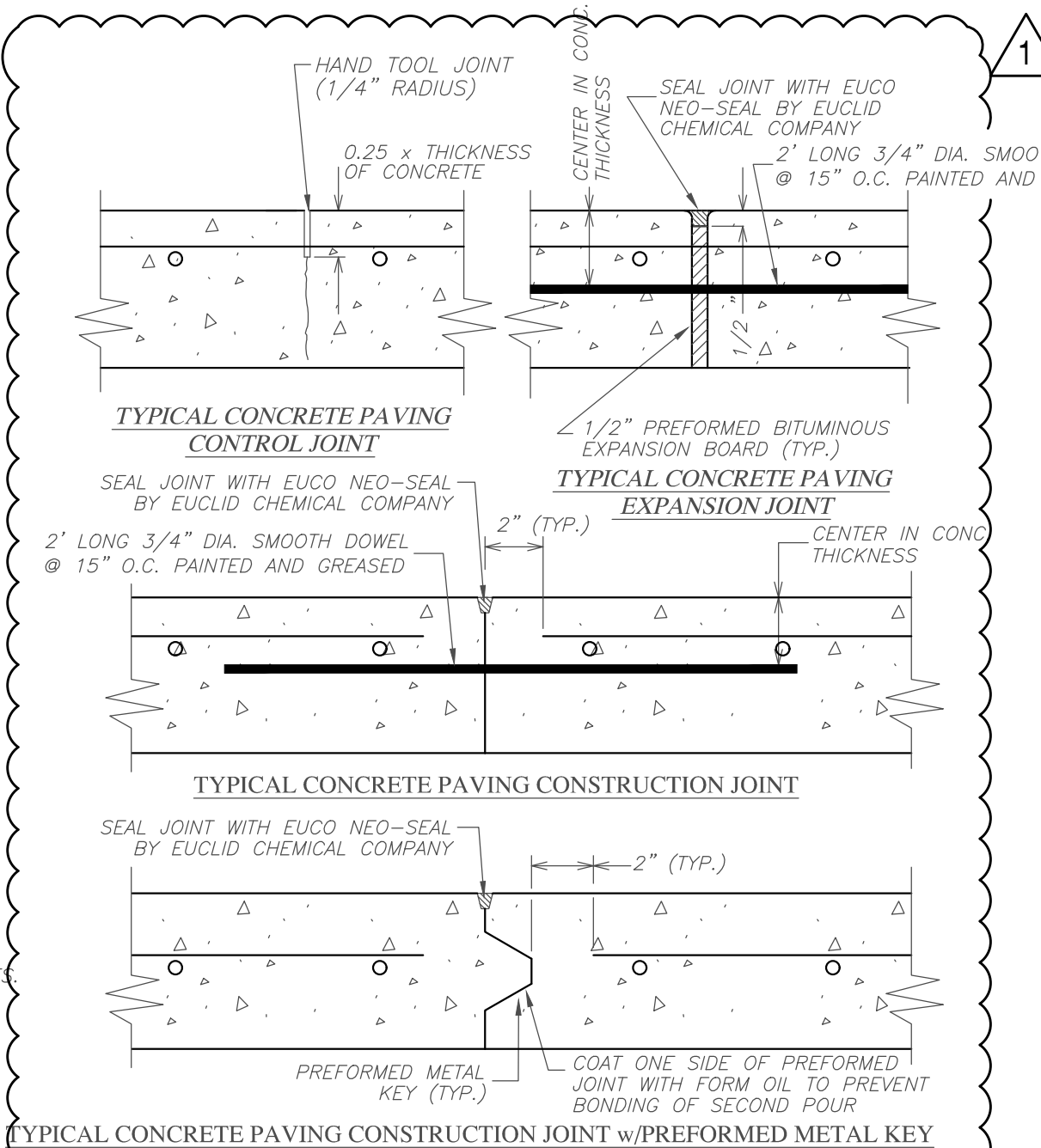


- NOTES:**
- ALL LATERAL STREET CUTS MUST BE COVERED WITH STEEL PLATES OF SUFFICIENT THICKNESS TO SPAN THE CUT WITHOUT NOTICABLE DEFLECTION. PLATES TO REMAIN IN PLACE UNTIL THE CONCRETE BASE HAS GAINED SUFFICIENT STRENGTH TO WITHSTAND TRAFFIC LOADS (24 HR. MINIMUM).
 - ON LONGITUDINAL CUTS 150 FT. IN LENGTH, THE CONCRETE IN THE TRENCH WILL BE BROUGHT FLUSH WITH THE EXISTING PAVEMENT AND THE ENTIRE WIDTH OF ROADWAY RESURFACED WITH A MINIMUM OF 1" OF TYPE "F" ASPHALT TOPPING OR 1 1/2" OF TYPE "E" ASPHALT TOPPING OR SURFACE COURSE.
 - THE CONTRACTOR SHALL REPLACE ALL OTHER DAMAGED PAVEMENT OUTSIDE OF LIMITS SHOWN AT HIS OWN EXPENSE.

6 C7.0 **DETAIL: PAVEMENT CUT & REPLACEMENT** (NTS)

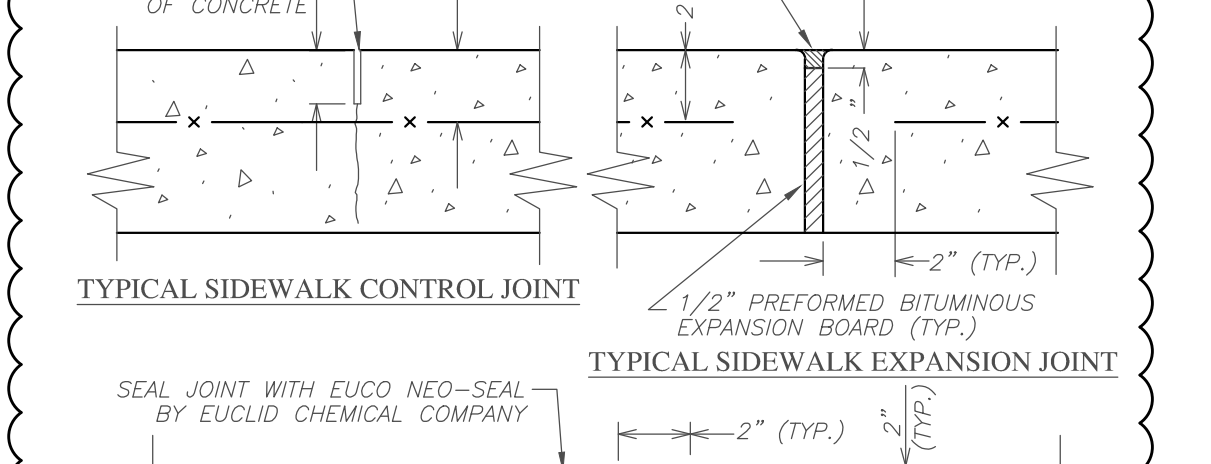


7 C7.0 **DETAIL: PRE-CAST CONC. CURB STOP DETAIL** (NTS)



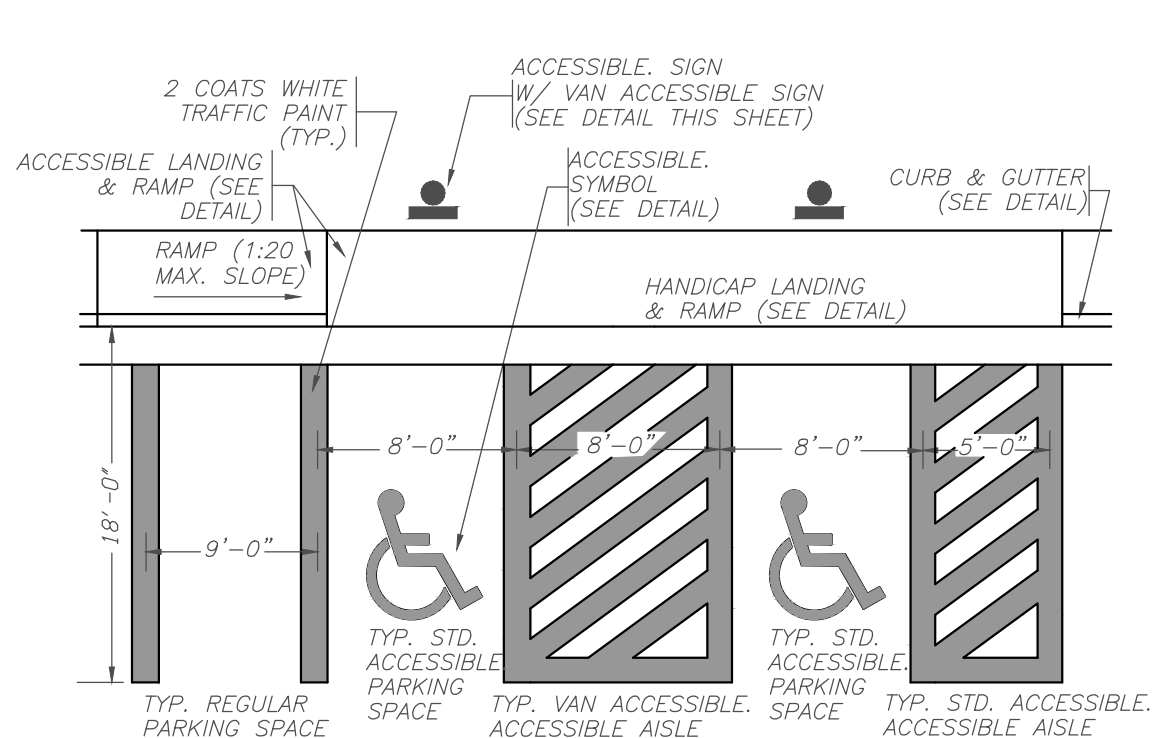
- NOTES:**
- JOINTS NOT TO EXCEED 30 TIMES THE CONCRETE THICKNESS AS PER AMERICAN CONCRETE INSTITUTES RECOMMENDATIONS.
 - DOWEL BARS SHALL BE HELD IN PLACE BY BAR SUPPORT ASSEMBLY. DOWEL CONC. PAVEMENT TO CURB & GUTTER. PROVIDE EXPANSION JOINT WHERE CONC. PAVEMENT AND CURB & GUTTER MEET.

8 C7.0 **DETAIL: EXPANSION JOINTS** (NTS)



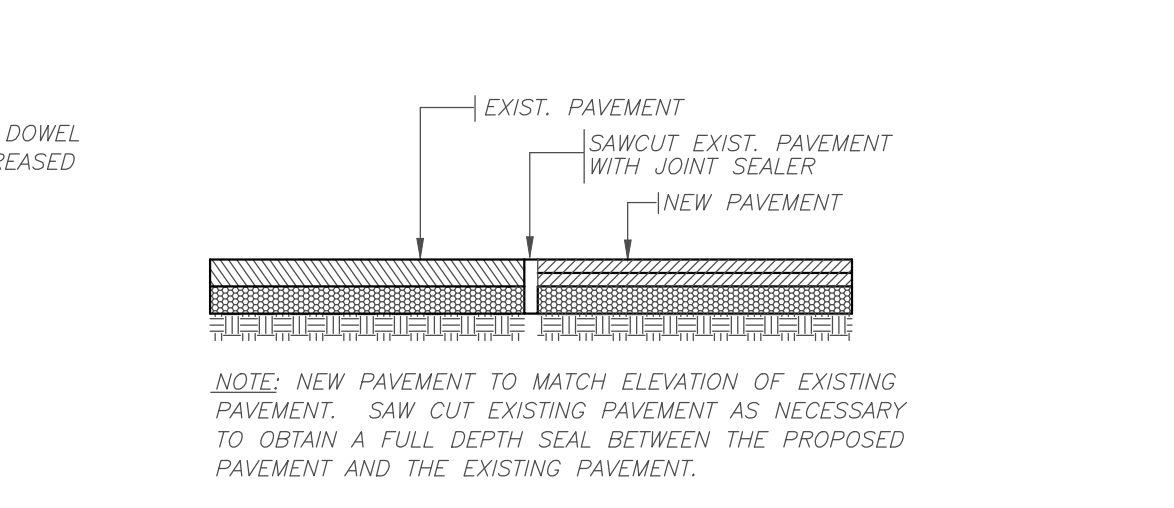
- NOTES:**
- JOINTS NOT TO EXCEED 30 TIMES THE CONCRETE THICKNESS AS PER AMERICAN CONCRETE INSTITUTES RECOMMENDATIONS.

8 C7.0 **DETAIL: TYP. CONSTRUCTION, CONTROL & EXPANSION JOINTS** (NTS)

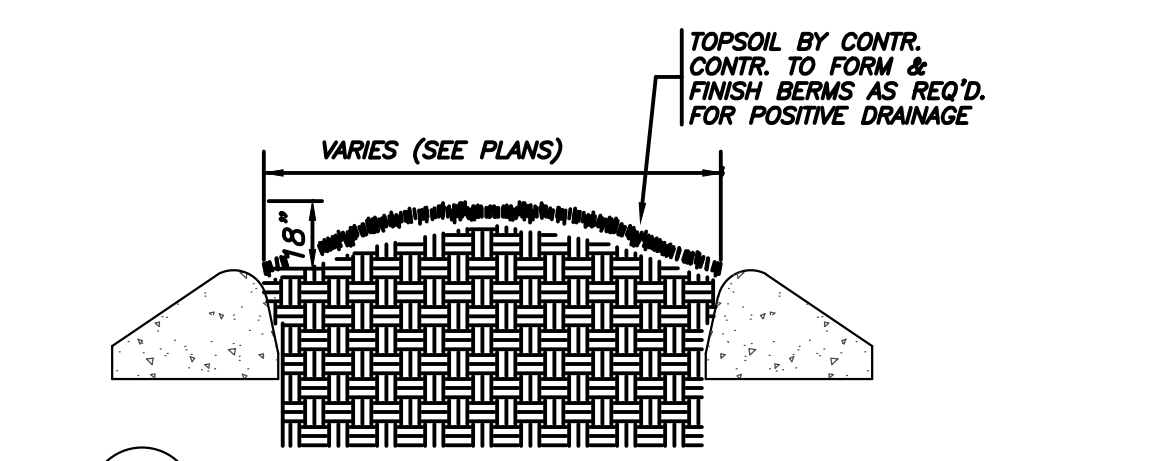


- NOTES:**
- CURB RAMP & PARKING SPACE CONSTRUCTION & INSTALLATION SHALL CONFORM TO ALL ADA SPECIFICATIONS & LOCAL ORDINANCES.
 - PAVEMENT STRIPING PER LOCAL DOT STANDARDS AND SPECIFICATIONS.
 - FINISHED GROUND SLOPE AT NEW ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT BE STEEPER THAN 1:48 (1/4 INCH PER FOOT)

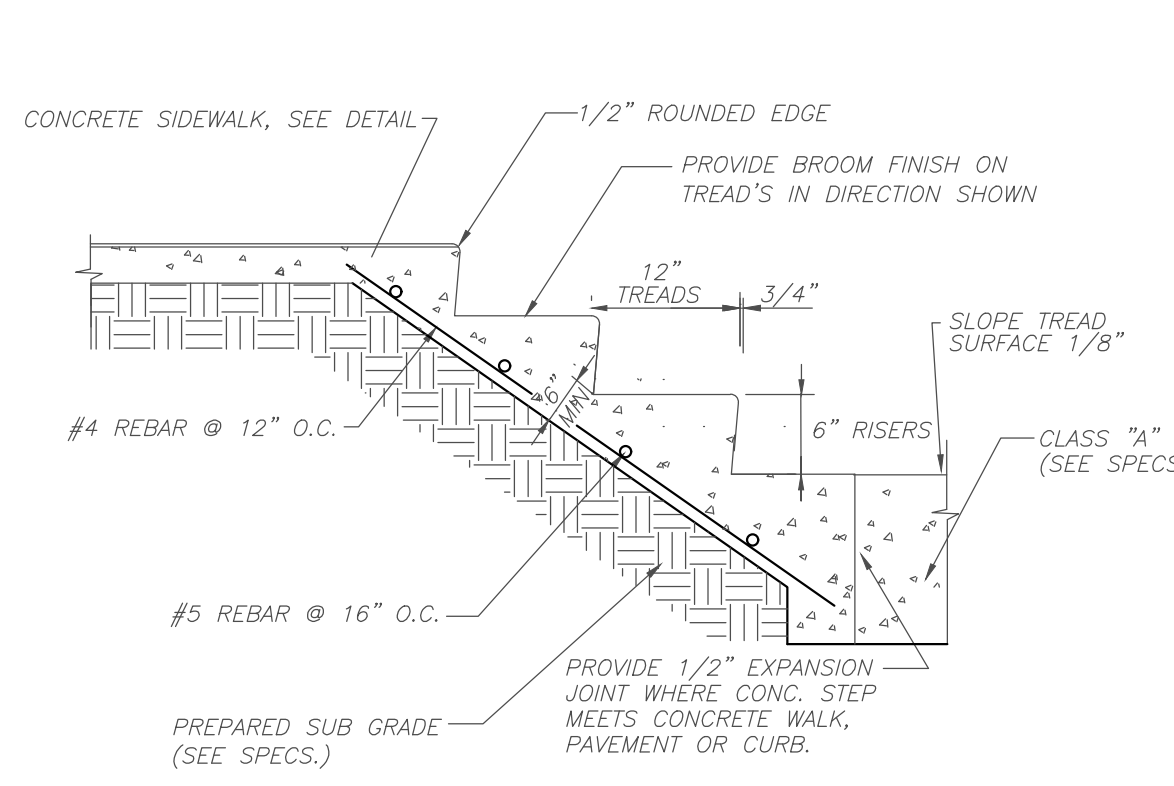
9 C7.0 **DETAIL: 90° PARKING** (NTS)



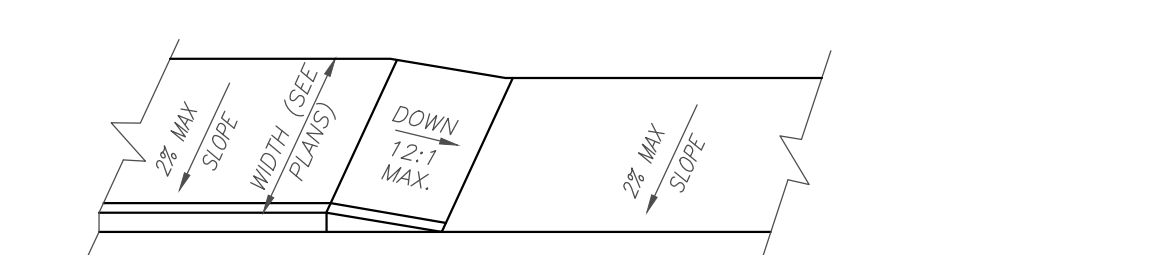
10 C7.0 **DETAIL: SAWCUT & PAVEMENT TRANSITION** (NTS)



11 C7.0 **DETAIL: LANDSCAPE ISLAND SECTION** (NTS)

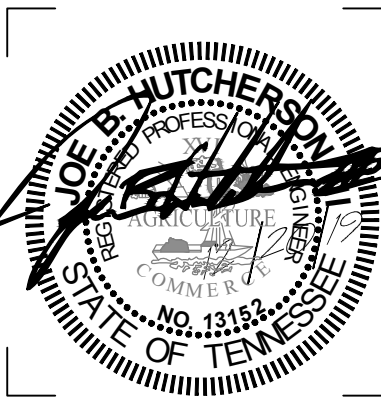


12 C7.0 **DETAIL: CONCRETE STEPS** (NTS)



- NOTES:**
- H/CAP. RAMP CONSTRUCTION & INSTALLATION SHALL CONFORM TO ALL ADA SPECIFICATIONS & LOCAL ORDINANCES.
 - REFER ALSO TO SIDEWALK DETAIL.

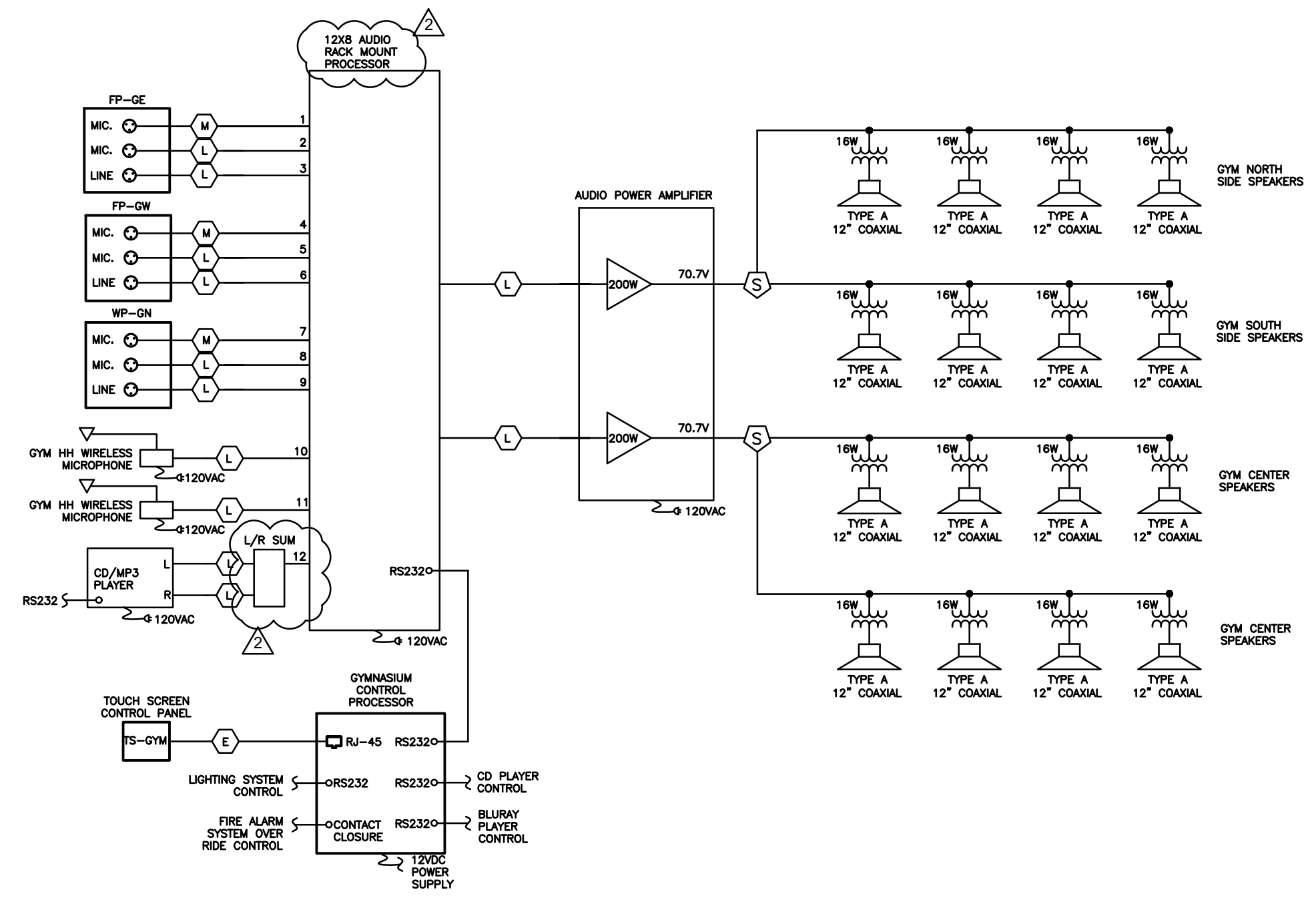
13 C7.0 **DETAIL: HANDICAP LANDING & RAMP** (NTS)



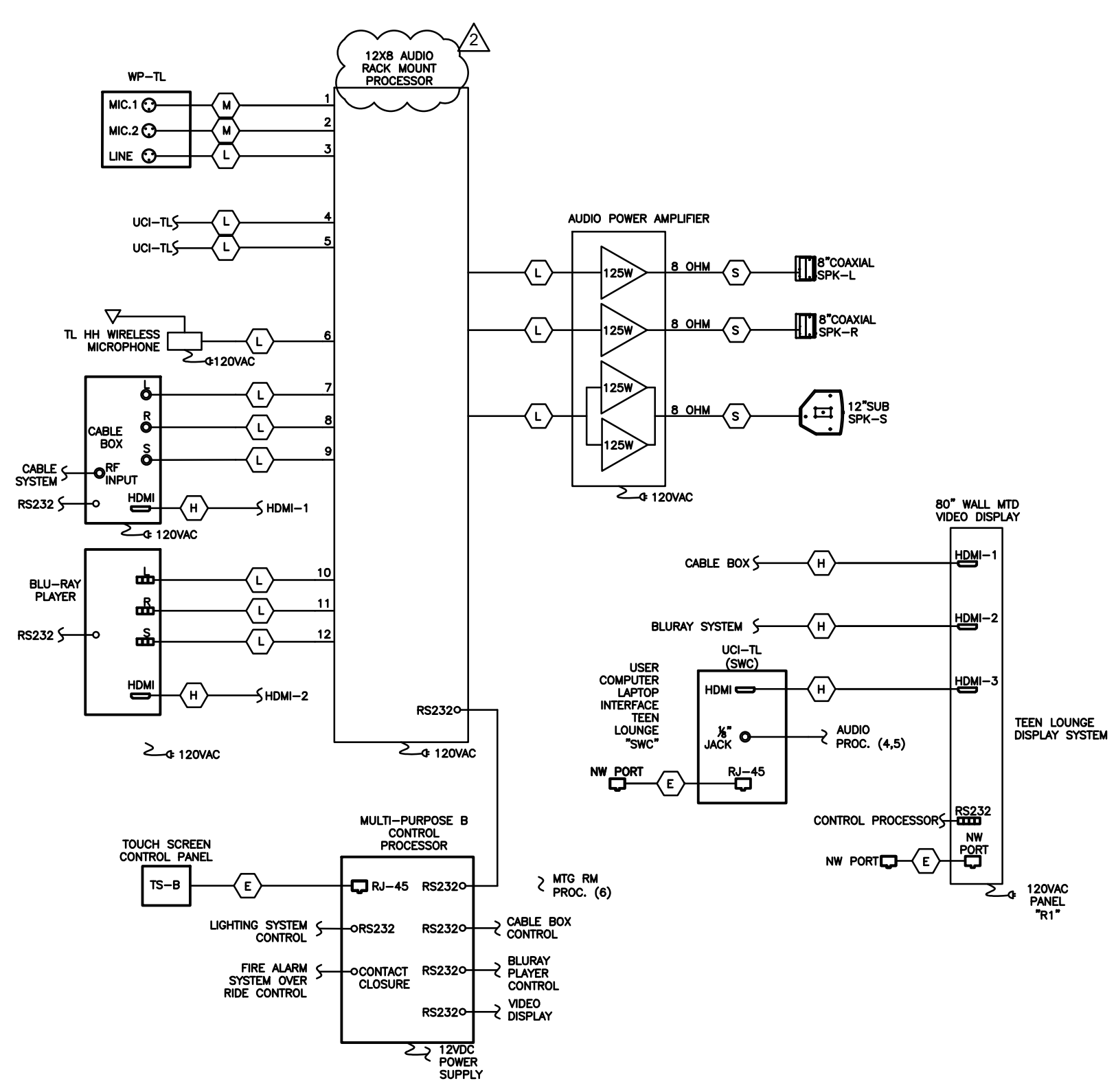
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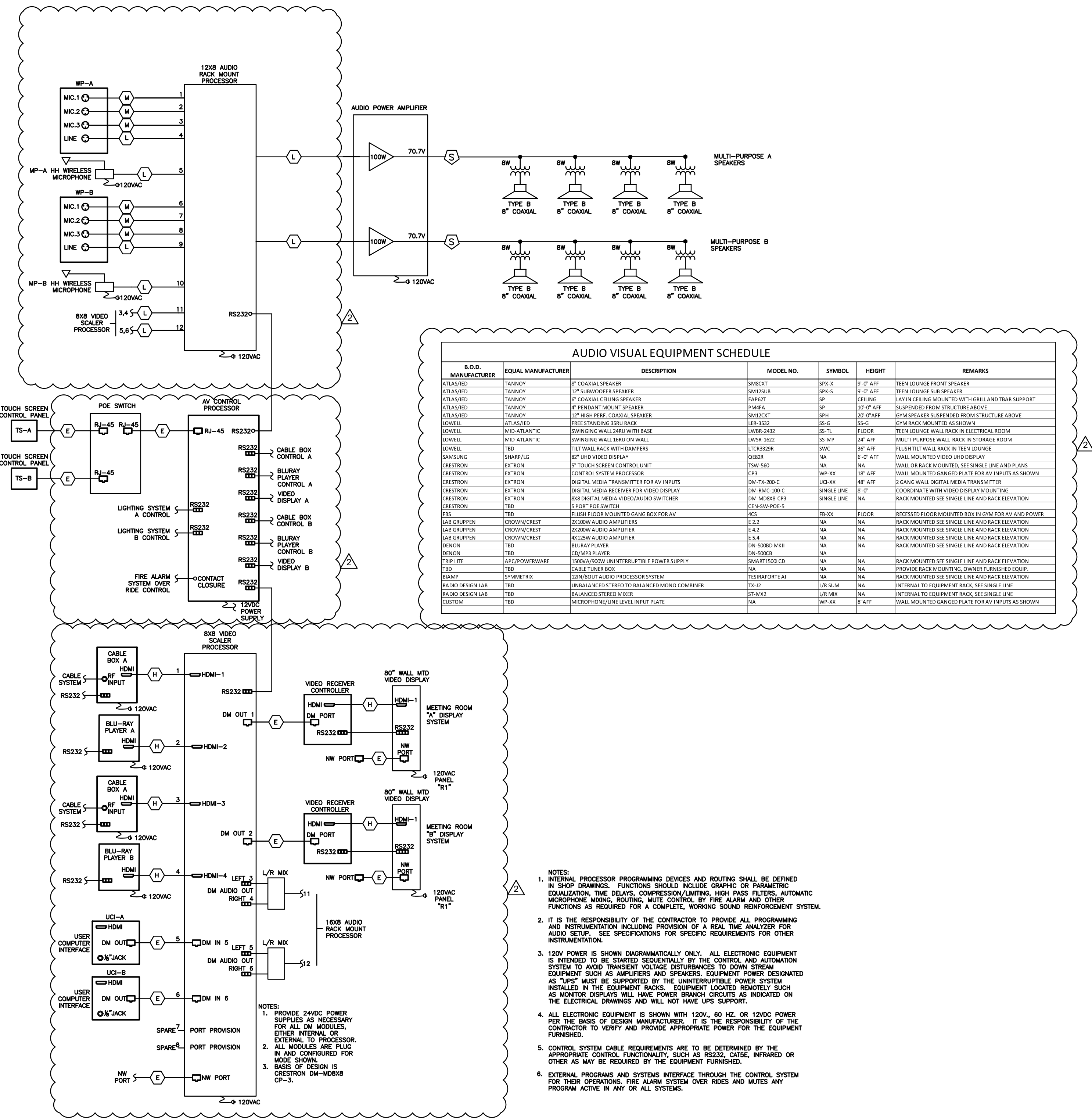
C7.0
 Site Details



GYMNASIUM SOUND SYSTEM SINGLE LINE DIAGRAM



TEEN LOUNGE SOUND SYSTEM SINGLE LINE DIAGRAM



MULTI-PURPOSE ROOMS SOUND SYSTEM SINGLE LINE DIAGRAM

AUDIO VISUAL EQUIPMENT SCHEDULE

B.O.D.	MANUFACTURER	EQUAL MANUFACTURER	DESCRIPTION	MODEL NO.	SYMBOL	HEIGHT	REMARKS
ATTACHED	TANNY	8" COAXIAL SPEAKER	SMRKT	SPK-X	SP-X	9' 0" AFF	TEEN LOUNGE FRONT SPEAKER
ATTACHED	TANNY	12" SUBWOOFER SPEAKER	SPK12M-B	SPK-S	SP-S	9' 0" AFF	TEEN LOUNGE SUB SPEAKER
ATTACHED	TANNY	8" COAXIAL CEILING SPEAKER	PARFKT	SP	CEILING	14" IN CEILING MOUNTED WITH GRILL AND TRAP SUPPORT	
ATTACHED	TANNY	8" PENDANT MOUNT SPEAKER	PMRFA	SP	10' 0" AFF	SUSPENDED FROM STRUCTURE ABOVE	
ATTACHED	TANNY	12" HIGH FREQ. COAXIAL SPEAKER	SMRKT	SPH	10' 0" AFF	GYM SPEAKER SUSPENDED FROM STRUCTURE ABOVE	
DETACHED	ATLANTIC	FREESTANDING WALL RACK	WR-355	35-5	35-5		GYM RACK INSTALLED AS SHOWN
DETACHED	MTD-ATLANTIC	SWYRING WALL 2MR WITH BASE	WMR-2432	24-3	FLOOR	TEEN LOUNGE WALL RACK IN ELECTRICAL ROOM	
DETACHED	MTD-ATLANTIC	SWYRING WALL 1MR ON WALL	WMR-1432	14-3	14' AFF	HEALTH PURPOSE WALL RACK IN STORAGE ROOM	
DETACHED	TBD	TILT WALL RACK WITH DAMPERS	STER320R	SMC	10' AFF	FLOUSH TILT WALL RACK IN TEEN LOUNGE	
DETACHED	SHARP	8" LCD VIDEO DISPLAY	8E8R	NA	8' 0" AFF	WALL MOUNTED VIDEO DISPLAY	
DETACHED	EXTON	15" TOUCH SCREEN CONTROL UNIT	TSW-560	NA	NA	WALL OR RACK MOUNTED. SEE SINGLE LINE AND PLANS	
DETACHED	EXTON	CONTROL SYSTEM PROCESSOR	CP-3	WP-XX	10' AFF	WALL MOUNTED GANGED PLATE FOR AV INPUTS AS SHOWN	
DETACHED	EXTON	DIGITAL MEDIA TRANSMITTER FOR AV INPUTS	DM-TX-200-C	LCI-XX	40' AFF	2 GANG WALL DIGITAL MEDIA TRANSMITTER	
DETACHED	EXTON	DIGITAL MEDIA RECEIVER FOR VIDEO DISPLAY	DM-RVC-300-C	SINGLE LINE	35' 0"	COORDINATE WITH VIDEO DISPLAY MOUNTING	
DETACHED	EXTON	8X8 DIGITAL MEDIA VIDEO/AUDIO SWITCHER	DM-MORBS-CP3	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION	
DETACHED	TBD	15" AV CONTROL PROCESSOR	CP-3	CP-3	NA		
FBS	TBD	FLOUSH FLOOR MOUNTED GANG BOX FOR AV	GBS	FR-XX	FLOOR	RECESSED FLOOR MOUNTED BOX IN GYM FOR AV AND POWER	
JAB GRIPPEN	CROWN/CHEST	2X200W AUDIO AMPLIFIERS	E 2.2	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION	
JAB GRIPPEN	CROWN/CHEST	2X200W AUDIO AMPLIFIERS	E 4.2	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION	
JAB GRIPPEN	CROWN/CHEST	4X150W AUDIO AMPLIFIER	E 5.4	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION	
GENON	TBD	15" AV CONTROL PROCESSOR	DM-500B-M8H	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION	
GENON	TBD	15" AV CONTROL PROCESSOR	DM-500B-B	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION	
TRIP LITE	AP/POWERWARE	1000VA/200W UNINTERRUPTIBLE POWER SUPPLY	SMART1500C	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION	
TBD	TBD	CABLE TRAY BOX	NA	NA	NA	PROVIDE BACK MOUNTING, COVER FOR BUSES ONLY	
BLAMP	SYMMETRIX	120W/NDT AUDIO PROCESSOR SYSTEM	TRHARPORT-AI	NA	NA	RACK MOUNTED SEE SINGLE LINE AND RACK ELEVATION	
RADIO DESIGN LAB	TBD	UNBALANCED STEREO TO BALANCED MONO CONVERTER	TK-12	L/R-SUM	NA	INTERNAL TO EQUIPMENT RACK. SEE SINGLE LINE	
RADIO DESIGN LAB	TBD	BALANCED STEREO MIXER	ST-MX2	L/R-MIX	NA	INTERNAL TO EQUIPMENT RACK. SEE SINGLE LINE	
CUSTOM	TBD	MICROPHONE LINE LEVEL INPUT PLATE	MP-XX	8" AFF	NA	WALL MOUNTED GANGED PLATE FOR AV INPUTS AS SHOWN	

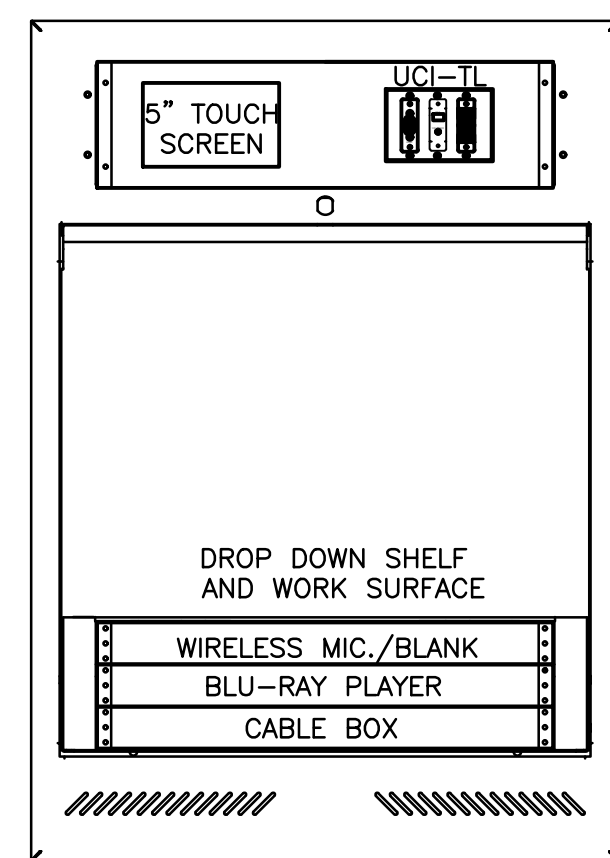
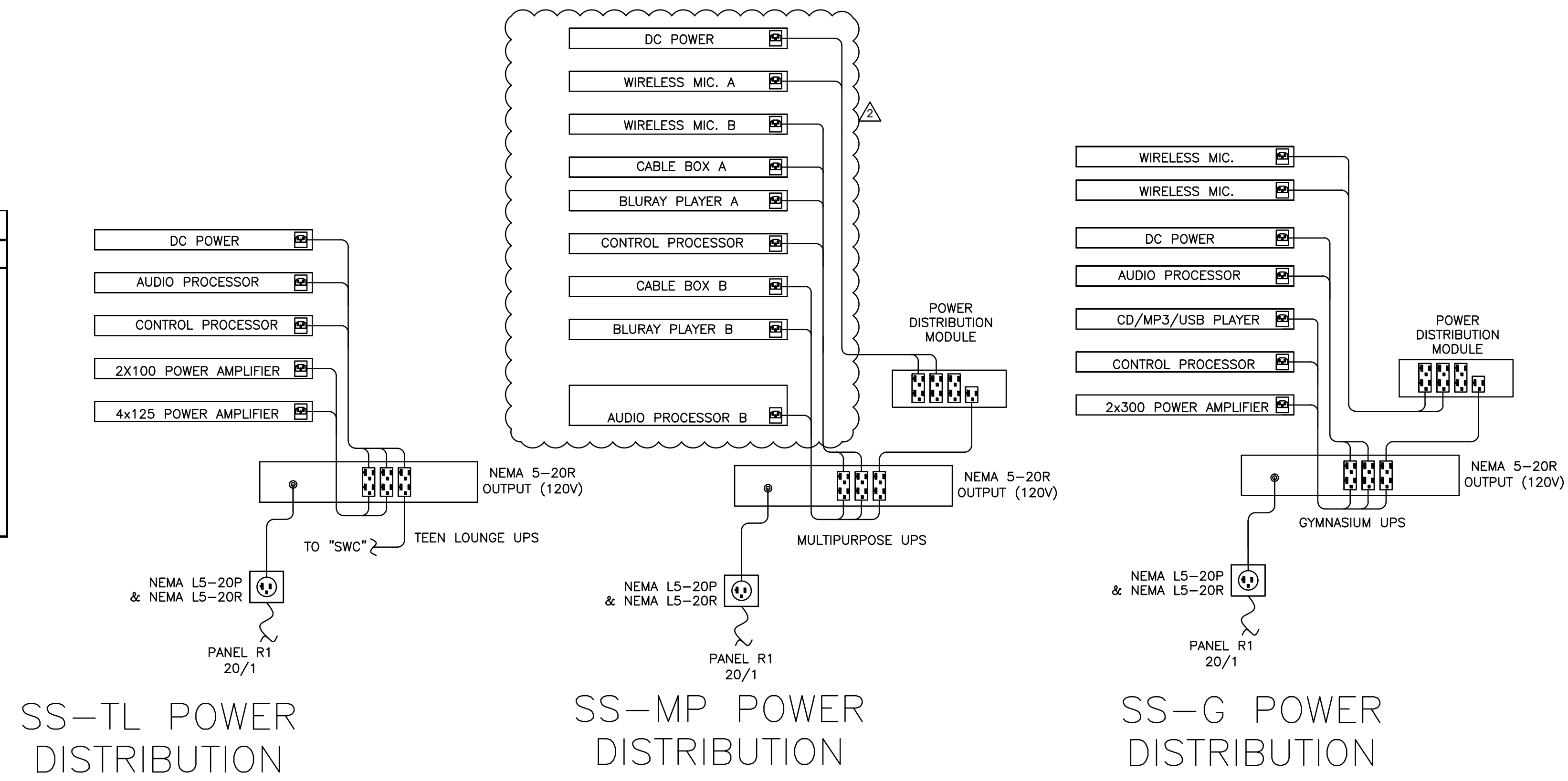
- NOTES:
- INTERNAL PROCESSOR PROGRAMMING DEVICES AND ROUTING SHALL BE DEFINED IN SHOP DRAWINGS. FUNCTIONS SHOULD INCLUDE GRAPHIC OR PARAMETRIC EQUALIZATION, TIME DELAYS, COMPRESSION/LIMITING, HIGH PASS FILTERS, AUTOMATIC MICROPHONE MUTE, ROUTING, MUTE CONTROL, BY FIRE ALARM AND OTHER FUNCTIONS AS REQUIRED FOR A COMPLETE, WORKING SOUND REINFORCEMENT SYSTEM.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL PROGRAMMING AND INSTRUMENTATION INCLUDING PROVISION OF A REAL TIME ANALYZER FOR AUDIO SETUP. SEE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS FOR OTHER INSTRUMENTATION.
 - 120V POWER IS SHOWN DRAMMATICALLY ONLY. ALL ELECTRONIC EQUIPMENT IS INTENDED TO BE STARTED SEQUENTIALLY BY THE CONTROL AND AUTOMATION SYSTEM TO AVOID TRANSIENT VOLTAGE DISTURBANCES TO DOWN STREAM EQUIPMENT SUCH AS AMPLIFIERS AND SPEAKERS. EQUIPMENT DESIGNATED AS "UPS" MUST BE SUPPORTED BY THE UNINTERRUPTIBLE POWER SYSTEM INSTALLED IN THE EQUIPMENT RACKS. EQUIPMENT LOCATED REMOTELY SUCH AS MONITOR DISPLAYS WILL HAVE POWER BRANCH CIRCUITS AS INDICATED ON THE ELECTRICAL DRAWINGS AND WILL NOT HAVE UPS SUPPORT.
 - ALL ELECTRONIC EQUIPMENT IS SHOWN WITH 120V, 60 HZ OR 120VDC POWER. PER THE BASIS OF DESIGN MANUFACTURER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY AND PROVIDE APPROPRIATE POWER FOR THE EQUIPMENT FURNISHED.
 - CONTROL SYSTEM CABLE REQUIREMENTS ARE TO BE DETERMINED BY THE APPROPRIATE CONTROL FUNCTIONALITY, SUCH AS RS232, GATSE, INFRARED OR OTHER AS MAY BE REQUIRED BY THE EQUIPMENT.
 - EXTERNAL PROGRAMS AND SYSTEMS INTERFACE THROUGH THE CONTROL SYSTEM FOR THEIR OPERATIONS. FIRE ALARM SYSTEM OVER RIDES AND MUTES ANY PROGRAM ACTIVE IN ANY OF ALL SYSTEMS.

ENTIRE SHEET REISSUED AS PART OF THIS ADDENDUM

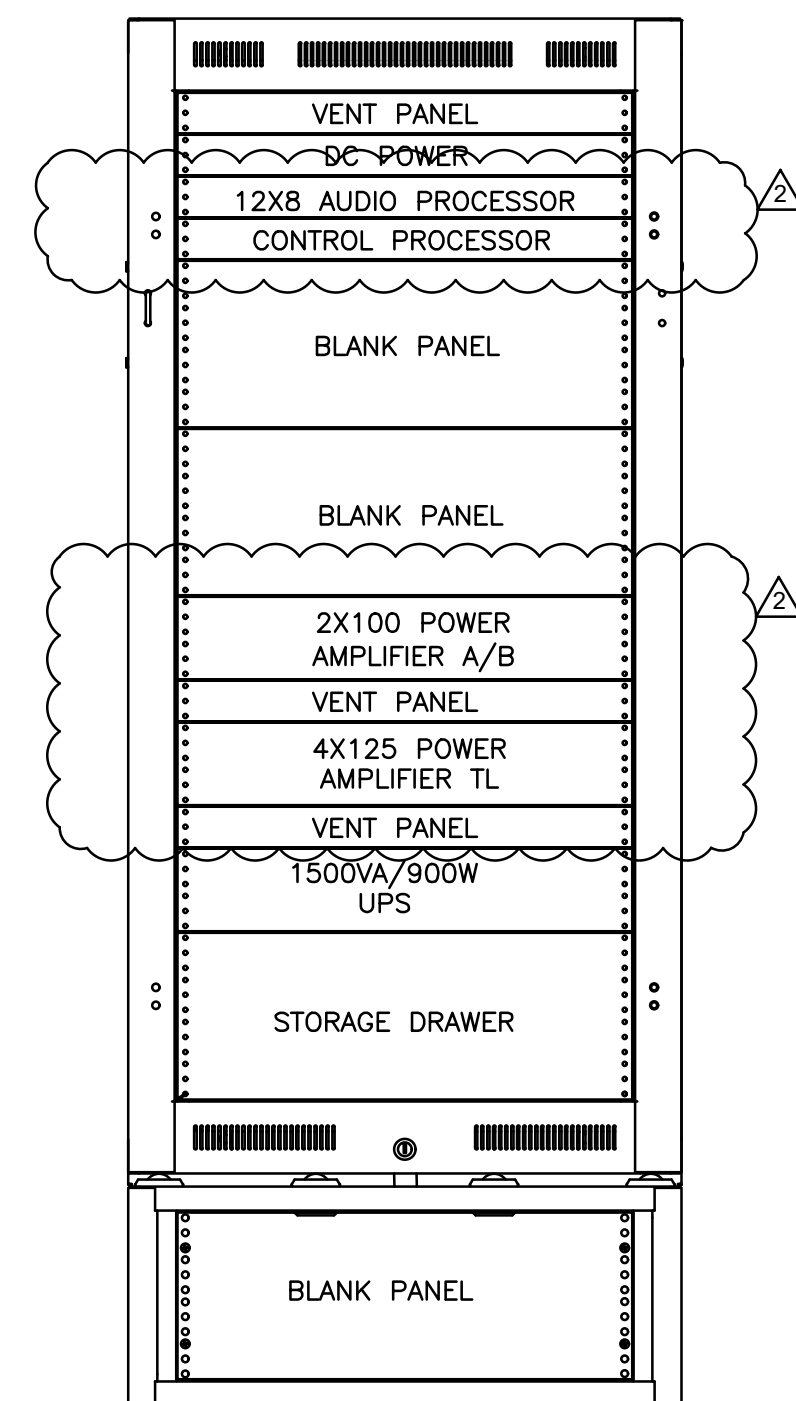
ISSUE DATES
INITIAL ISSUE 12-20-19
ADDENDUM 4 01-09-20
ADDENDUM 6 01-14-20

JOB NO. 18-072 | D'WN JR TT | CK'D C/JWR

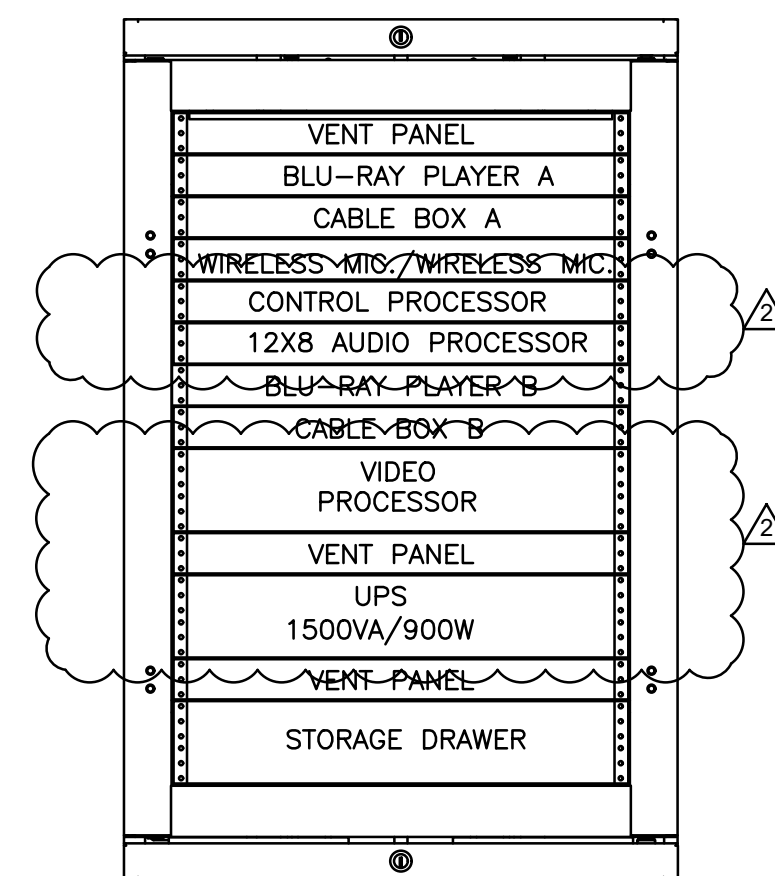
MISCELLANEOUS SOUND SYSTEM EQUIPMENT SCHEDULE		
QUANTITY	USE AREA	Description
4	ALL SYSTEMS	HANDHELD WIRED MICROPHONES
AS SHOWN	SEE SINGLE LINES	WIRELESS MICROPHONES
6	ALL SYSTEMS	MICROPHONE FLOOR STANDS
2	ALL SYSTEMS	MICROPHONE TABLE STANDS
8	ALL SYSTEMS	25 FOOT MICROPHONE CABLE
4	ALL SYSTEMS	50 FOOT MICROPHONE CABLE
4	ALL SYSTEMS	10 FOOT LINE LEVEL CABLE
4	ALL SYSTEMS	6 FOOT HDMI CABLE



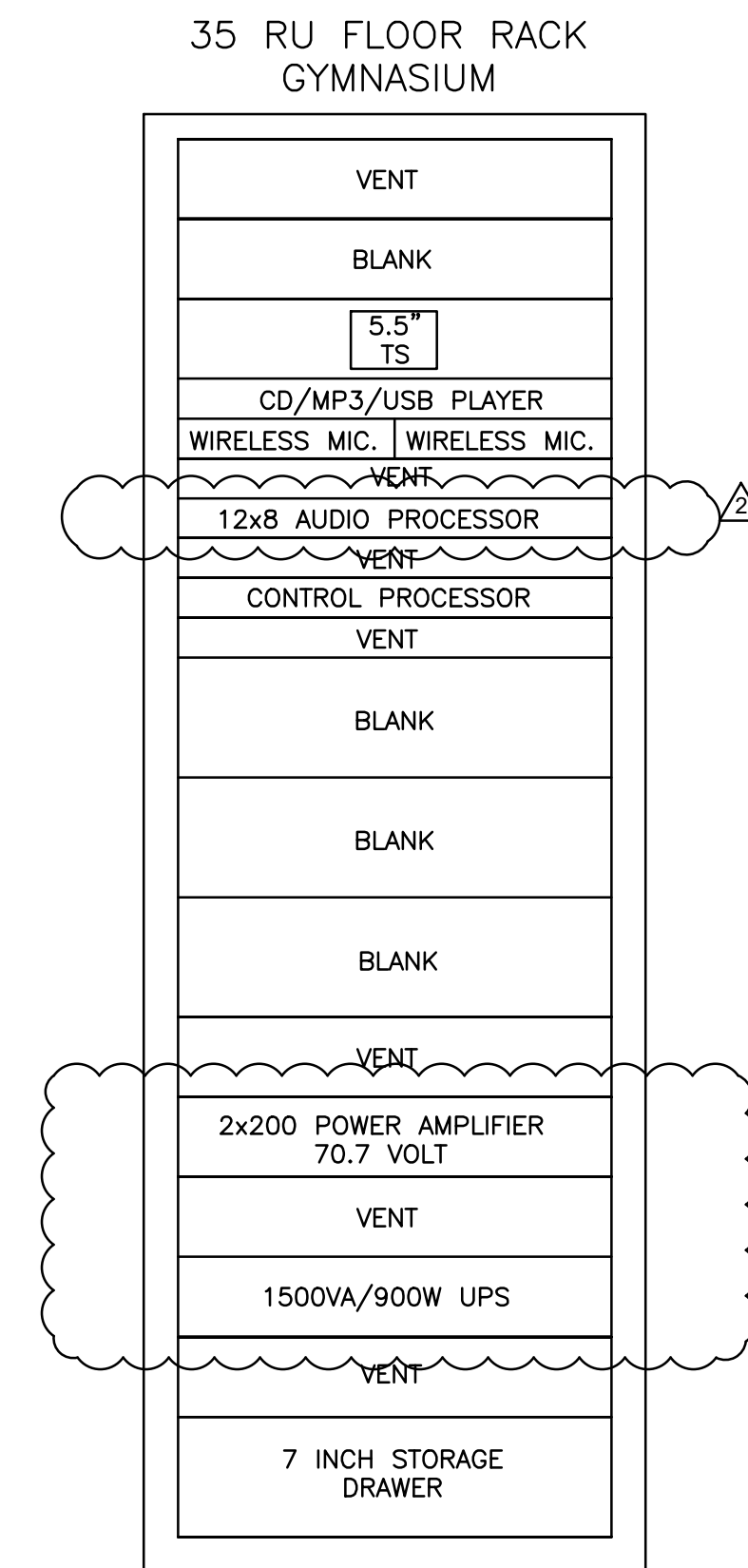
TEEN ROOM WALL CABINET "SWC"
N.T.S.



TEEN LOUNGE RACK "SS-TL"
N.T.S.

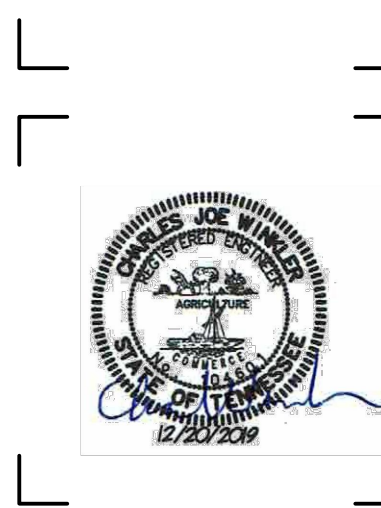


MULTI-PURPOSE ROOM RACK SS-MP
N.T.S.



GYMNASIUM RACK SS-G
N.T.S.

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