

Project Manual for
Wayne State University
Gateway Theater Complex

Detroit, Michigan

WSU Proj. No. 189-178578

HAA Proj. No. 2016034.00

Owner

Wayne State University

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Detroit, MI 48202

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Norwalk, CT 06854

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AUDIO/VIDEO SYSTEMS DESIGN NARRATIVE

INTRODUCTION

This narrative establishes design criteria for the AV systems for the Wayne State University Hilberry Gateway Project. Systems criteria are addressed for the performance and support spaces, including the Proscenium Theater, the Studio Theater, the Lobby and other public areas, and the Production Shops and other backstage support spaces.

PROSCENIUM THEATER

Theater Audience Chamber

Theater Audio: The audio system is designed to fill multiple requirements – subtle, even, voice lift for lectures and drama, moderately higher outputs for reinforced music, and controlled vocal imaging and sound effects for musical theater.

Left/center/right (“LCR”) main loudspeakers are installed around the proscenium to provide the majority of sound to the audience. Each location is a single point source loudspeaker, and all cabinets are of the same type from the same manufacturer to facilitate creating a balanced audio image.

Supplemental loudspeakers extend the reach and frequency content of the LCR loudspeakers. Typically these supplemental loudspeakers are from the same manufacturer as the main system to help facilitate uniform voicing. Left and right subwoofers extend low-frequency content for music and sound effects. These are typically mounted vertically aligned with the side loudspeakers at stage level or rigged above the main left/right loudspeaker.

Small loudspeakers integrated into the architecture along the orchestra pit rail and stage edge provide imaging and intelligibility in the first few rows of seating.

Connections for effects and monitor loudspeakers are provided around the stage and orchestra pit, in the catwalks and around the seating areas. These are used to connect portable loudspeakers, as needed. Connections for microphones and other input devices are provided around the house, stage and in the catwalks. Patch-bays are used to interconnect the various input and output locations around the theater.

The house mix position will accommodate live mixing and playback equipment, including:
A digital console for primary mixing of musical theatre and music events is from the Allen & Heath dLive series. A typical console for this venue can accommodate 72 channels. Audio and Video playback utilizes QLAB for cueing. Recording is on a CD/SD card recorder as well as to multitrack capable computer recording systems.

Theater Video: Video functions include lecture projections (such as PowerPoint), archival recording, and local-access broadcast.

A semi-permanent screen is flown from a stage batten. A primary projector is provided for high-resolution video playback, primarily for lecture use, but possibly for production use as well.

A permanent high-resolution camera with remote pan/tilt/zoom ("PTZ") capability is provided mounted to the balcony rail. A lower-resolution camera capable of infrared imaging is also mounted to the balcony rail.

Connections for portable video (for temporary displays and camera locations) are provided around the stage and orchestra pit, in the catwalks and around the seating areas. These are used to connect portable devices, as needed.

Cameras are not included for broadcast or recording purposes, beyond the PTZ and infrared cameras for the balcony rail. Typical cameras used are from Panasonic or Sony.

Theater Booth and Rack Rooms

Booth audio loudspeakers are limited to monitoring show program for the lighting operator and stage manager. In the Audio booth, loudspeakers provide monitoring of show program as well as monitoring console inputs and mixes.

The rack room adjacent to the booth houses:

A shared digital signal processors ("DSP") used to time align, "tune" and control the main loudspeaker systems. These devices are selected for compatibility with the primary mix console and loudspeakers, and include products from BSS, Meyer, and QSC. Control and processing for the auxiliary systems, which includes the ADA-compliant listening assistance from Listen Tech or Sennheiser, 4 channel production intercom from Clear-Com, and backstage and lobby program and paging systems (see also below) is achieved using the same DSP system.

Analog microphone connections are routed to the stage and booth racks, as appropriate, and are connected to digital stage boxes for the mixing console, via patch bays. A system of line level tie lines are provided between the termination panels and the stage and booth racks, as well as between the racks. This cabling specified is AES digital compatible so that digital and analog signals may be patched from point to point or connected to the digital sound console stage boxes, as needed. The video distribution and patching systems are network based video transport. Digital audio and video networks as well as other network based systems are supported through a system of patchable Category 6A and fiber cabling. This also provides for future technologies to be incorporated into systems.

The amplifier rack room on an upper floor houses the amplifiers for the main audio systems, as well as page and program amplifiers for Lobby, public, and support spaces. Typical main amplifiers are by the loudspeaker manufacturer and matched to the particular loudspeaker. Other amplifiers are typically from QSC, Powersoft, or Yamaha.

Theater Loose Equipment

Microphones, DI boxes, cables, stands, effects loudspeakers and monitor wedges appropriate to the program are provided. Typical manufacturers include microphones by Shure, Sennheiser, Beyer, AKG, and Audio-Technica; stands by Atlas; cables and snakes by Whirlwind; and monitor/effect loudspeakers by EAW, JBL, Fulcrum Audio, or other similar manufacturers.

STUDIO THEATER

Studio Theater

Studio Theater Audio: The audio system is designed to provide an assortment of portable loudspeakers to be used in different configurations based on seating layout, and specific production requirements.

Portable loudspeakers of various sizes from larger main loudspeakers to smaller effects loudspeakers are provided with multiple options for floor or grid mounting. Typical manufacturers include EAW, Fulcrum, Electrovoice, and other similar manufacturers.

Connections for effects and monitor loudspeakers are provided around the stage, and around the grid area above the stage.

Connections for microphones and other input devices are provided around the house, and stage as well.

The house mix position houses live mixing and playback equipment, including:

A digital console for primary mixing of theatrical events is from the Allen & Heath dLive series. A typical console for this venue has 16-24 input channels.

Playback utilizes QLAB or a similar audio and video cueing system. Recording is on a CD/SD card recorder as well as to multitrack capable computer recording systems.

Patch bays are used to interconnect the various input and output locations around the theater to the major system racks, and to each other.

Video equipment is a collection of portable projectors, displays, and head end equipment, along with proper rigging, stands, and cabling.

A permanent high-resolution camera with remote pan/tilt/zoom ("PTZ") capability is provided to generate a static full stage feed. A lower-resolution camera capable of infrared imaging is also provided.

Connections for portable video (for temporary displays and camera locations) are provided around the stage, above the stage at the grid, and around the seating areas. Typical cameras used are from Panasonic, or Sony.

Studio Theater Booth and Rack Rooms

Booth audio playback is limited to monitoring show program for the lighting and sound operators, and stage manager.

The rack room adjacent to the theater houses:

The shared digital signal processors ("DSP") used to time align, "tune" and control the main loudspeaker systems.

Control and processing for the auxiliary systems, which includes the ADA-compliant listening assistance from Listen Tech or Sennheiser, 2-4 channel production intercom from Clear-Com, and backstage and lobby program and paging systems (see also below) is achieved using the same DSP system.

Analog microphone connections are routed to the stage and booth racks, as appropriate, and are connected to digital stage boxes for the mixing console, via patch bays. A system of line level tie lines are provided between the termination panels and the stage and booth racks, as well as between the racks. This cabling specified is AES digital compatible so that digital and analog signals may be patched from point to point or connected to the

digital sound console stage boxes, as needed. The video distribution and patching systems, are typically based on combination of SDI coaxial cable, and network based video transport. Digital audio and video networks as well as other network based systems are supported through a system of patchable Category 6A and fiber cabling. This also provides for future technologies to be incorporated into systems.

The amplifier rack room (shared with the Proscenium Theater) on an upper floor houses the amplifiers for the main loudspeakers, and page and program amplifiers for Lobby, public, and support spaces. Typical amplifiers are from QSC, Powersoft, or Yamaha.

Theater Loose Equipment

Microphones, DI boxes, cables, stands, and effects loudspeakers appropriate to the program are provided. Typical manufacturers include microphones by Shure, Sennheiser, Beyer, AKG, and Audio-Technica; stands by Atlas; cables and snakes by Whirlwind; and effects loudspeakers by EAW, or other similar manufacturers.

LOBBY

Lobby Systems

Lobby audio and video devices provide audio and video show program and house manager paging:

Distributed audio is provided for uniform coverage of the lobby and adjoining public spaces. Due to the height of the lobby ceiling, most loudspeakers will be wall-mounted around the perimeter. The house manager can select which source (Proscenium Theater, Studio Theater, or separate playback) provides the show sound in the multiple lobby zones. The house manager can also page to one or more areas of the lobby for pre-show announcements, and can play a chime tone to indicate pre-show and intermission warnings.

Connection points are provided to allow a portable system to be set up for lobby events (such as dinners). Portable loudspeakers for lobby events integrate with the distributed audio to provide a sense of "source" for the sound while maintaining even coverage.

Lobby video displays are set up to carry show video for latecomers. These same displays may be used for digital signage functions when not used to display show program.

Lobby Projection Systems

A Lobby Projection System has been added to base scope. This system consists of a dispersed horizontal array of projectors hung from the ceiling near the glass exterior wall. The projectors are to cover 115' wide by 16' tall of the wall above the box office and theater entrances. This wall requires a level 5 finish drywall layer and less than 2 footcandles to be effective. It must be fully dark outside for good projection on the wall, even at dusk, images will not be distinguishable. The system also includes a media server, encoders and decoders for each projector, and rigging for each projector. For the purposes of this design development document we will provide an estimate of probable cost for this video wall as an alternate, separate from the other Lobby systems.

BACKSTAGE

Backstage Systems

Backstage audio and video devices provide show program and stage manager paging.

Distributed audio is provided for uniform coverage of all backstage spaces used actively by cast and crew. The stage manager can select which source (Proscenium Theater, Studio Theater, separate playback, or none) provides the show sound to each zone of the backstage spaces. The stage manager(s) can also page to any of several selected areas for actor and crew calls.

Backstage video displays carry show video for monitoring in select locations. Unlike the lobby, backstage video does not usually include digital signage.

Support AV systems for the shops and office areas include an overhead projector with connection for a laptop to project images down onto the floor for sketching on drops, etc., and an overhead camera that feeds a display allowing the artists to evaluate their work from an audience perspective. They also include possible support for conference/presentation systems in a shared space.

SHARED COMMON EQUIPMENT

Shared Equipment

A small portable system (see also above) is provided. This system is suitable for use in lobby events or for outdoors performances.

All audio and video systems are powered by a separate Audio & Video Technical Power System (AVTP) to ensure noise-free operation. The AVTP system runs on a dedicated transformer and all associated outlets utilize dedicated isolated ground wires and hospital-grade outlets. The AVTP system is used only for audio and video equipment. The AVTP system includes 3-phase temporary power connections (company switches) onstage in the Hilberry Theater and the Jazz Center for connecting temporary or supplementary rental equipment.

AV WORKSHOP SPACE AND STORAGE

AV Workshop

A workshop space needs to be provided as a place for AV systems maintenance to be performed, including repairing cables and other equipment. This space can also be a storage space, but the storage and work areas must be clearly delineated.

AUDIO/VIDEO SYSTEMS STATEMENT OF PROBABLE COST

1.	Proscenium Theater	\$375K
2.	Studio Theater	\$85K
3.	Lobby	\$50K
4.	Lobby Projection System	\$250k
5.	Portable System	\$15K
6.	Total -- Estimate for AV Contractor	\$775K 1,2

Note 1: The AV subcontract budget estimates:

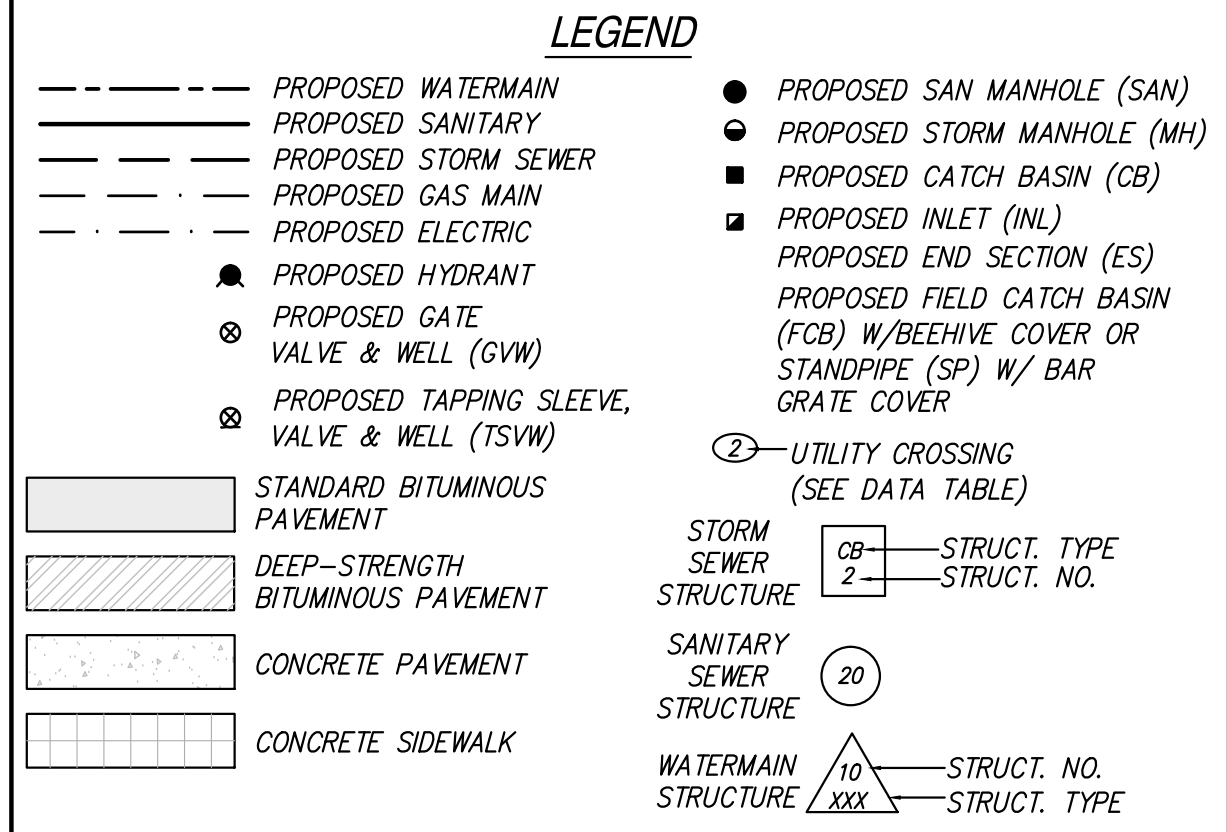
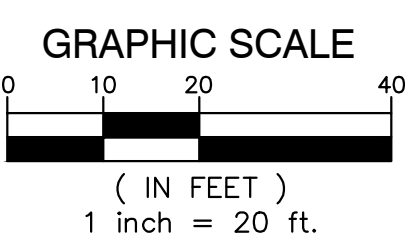
- are +/- 25% accurate, and are based on the design as presented in the Schematic Design Documentation, and on past projects of a similar nature.
- are for fully integrated, installed, tested and commissioned systems provided by a professional AV Integrator.
- are for normal work conditions in new construction in the greater Detroit area and are subject to market conditions. They do not include technical power and cable raceways, taxes, bonding, mark-ups, contingencies, inflation, or allowance for unusual contractual requirements included in the specification General Conditions.

Note 2: There is likely not enough information available at this time for the Electrical Engineer to estimate the associated electrical costs for the AV systems. Based on prior similar projects, we would estimate those costs to be \$200,000 (+/- 50%). These costs are NOT included in the Total on line 6 above.

ADDENDUM LIST

WSU GATEWAY THEATER – NEW CONSTRUCTION

1. ATT ductbank (C2.2)
2. Lobby connection Donor Room to existing building and landscape re-design of courtyard. (L1.1, Room 1201 on A1.1B and the following sketches - SK-13)
3. Updated electrical service. Relocation of main electrical room to the Lower Level (Room 0241 on A1.0B). Reconfiguration of toilet rooms and janitor room wing (A1.1B).

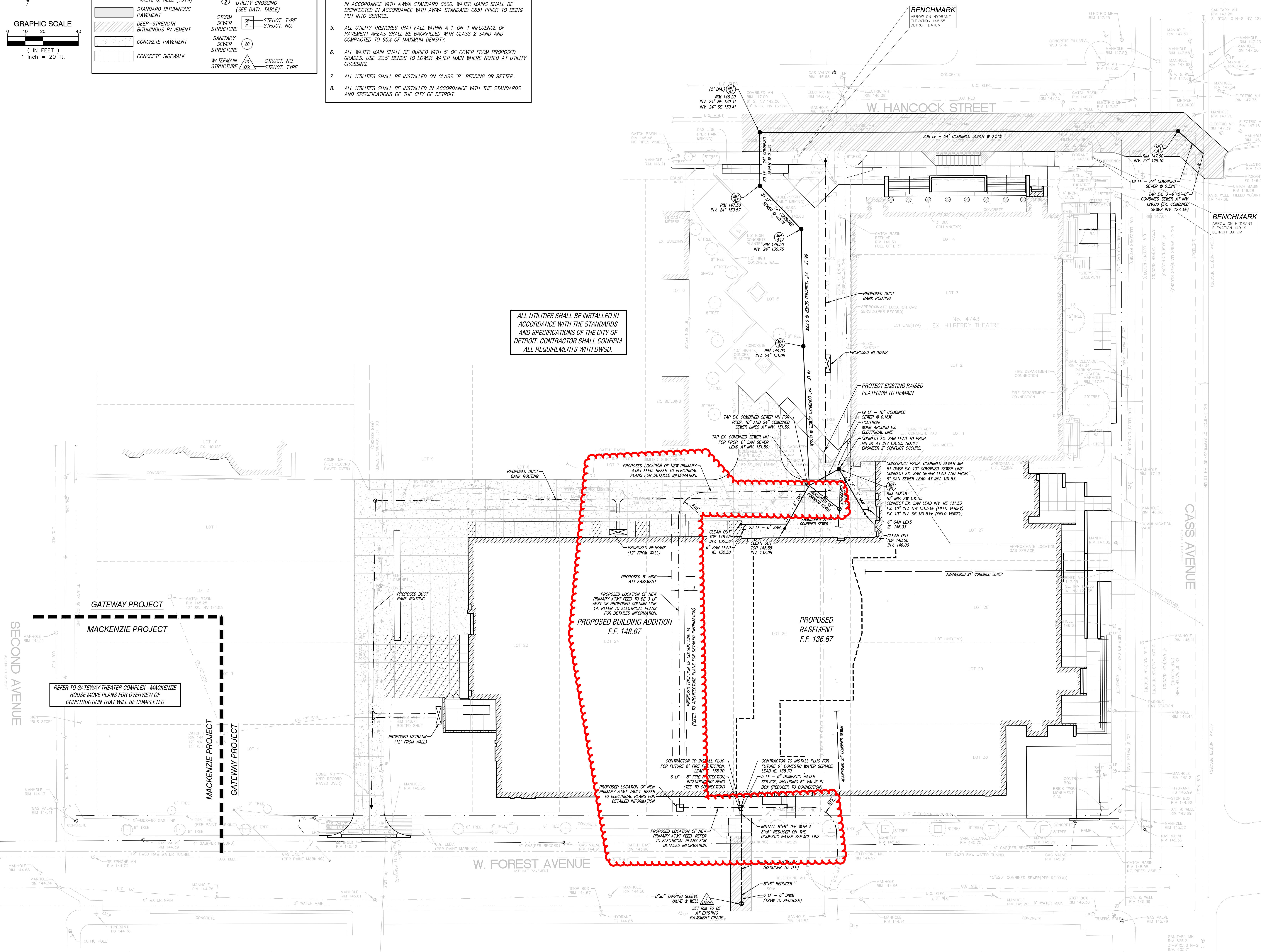


- UTILITY NOTES**
- STORM SEWER 12" AND LARGER SHALL BE C76 CL IV (PREM.JT.) UNLESS OTHERWISE NOTED ON THE PLAN.
 - STORM SEWER 6" AND SMALLER SHALL BE PVC SDR 23.5. STORM SEWER GREATER THAN 6" THROUGH 10" SHALL BE PVC SDR 26.
 - SANITARY SEWER SHALL BE PVC TRUSS PIPE. LEADS SHALL BE SOLID WALL, PVC, SDR 23.5.
 - WATER MAIN SHALL BE CLASS 54 DUCTILE IRON UNLESS OTHERWISE STATED ON THE PLANS. WATER MAINS SHALL BE LEAKAGE AND PRESSURE TESTED IN ACCORDANCE WITH AWWA STANDARD C600. WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651 PRIOR TO BEING PUT INTO SERVICE.
 - ALL UTILITY TRENCHES THAT FALL WITHIN A 1-ON-1 INFLUENCE OF PAVEMENT AREAS SHALL BE BACKFILLED WITH CLASS 2 SAND AND COMPACTED TO 95% OF MAXIMUM DENSITY.
 - ALL WATER MAIN SHALL BE BURIED WITH 5' OF COVER FROM PROPOSED GRADES. USE 22.5° BENDS TO LOWER WATER MAIN WHERE NOTED AT UTILITY CROSSING.
 - ALL UTILITIES SHALL BE INSTALLED ON CLASS "B" BEDDING OR BETTER.
 - ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF DETROIT.

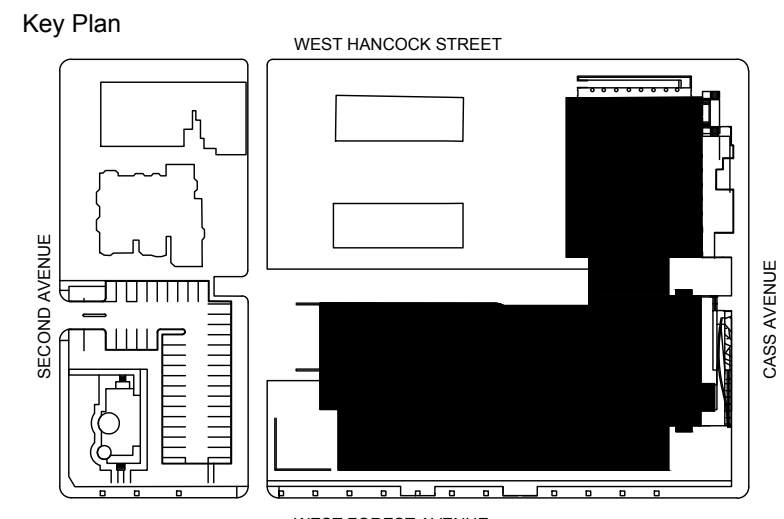
RESTORATION NOTE

RESTORE ALL NON-PAVED AREAS WITH 3" OF CLEAN TOPSOIL AND SEED MIX (30% KENTUCKY BLUEGRASS, 20% PERENNIAL RYEGRASS, 50% CREEPING RED FESCUE). PLACE MULCH IN ALL SEEDING AREAS. ON SLOPES IN EXCESS OF 10 HORIZONTAL TO 1 VERTICAL PLACE NORTH AMERICAN GREEN DIS150 MULCH BLANKET IMMEDIATELY AFTER SEEDING. USE METAL STAPLES PER MANUFACTURER'S RECOMMENDATIONS TO HOLD MATTING IN PLACE.

ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF DETROIT. CONTRACTOR SHALL CONFIRM ALL REQUIREMENTS WITH DWSD.



OWNER	Wayne State University FP&M 5454 Cass Ave. Detroit, MI 48202 313.577.2424
CONTRACTOR	Walbridge 777 Woodward Ave. Suite 300 Detroit, MI 48202 313.963.8000
Executive Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Design Architect	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
MEP Engineer	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
Structural Engineer	DESI / NASR Consulting Engineers 6765 Daly Road West Bloomfield, MI 48322 248.392.2010
Civil Engineer	Spalding DeDecker 905 South Blvd East Rochester Hills, MI 48307 800.598.1600
Landscape Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Theatrical	Auerbach Pollock Friedlander 266 West 37th Street New York, NY 10018 212.764.5630
Lighting	Auerbach Glasow 1045 Sansome Street, Suite 300 San Francisco, CA 94111 415.392.7629
Acoustics	Jaffe Holden 114-A Washington Street Norwalk, CT 06864 203.838.4168



Project
**WSU - GATEWAY
THEATER COMPLEX**

WSU PROJECT NO. 189-178578
Drawing Title
**WATER AND SEWER
PLAN**

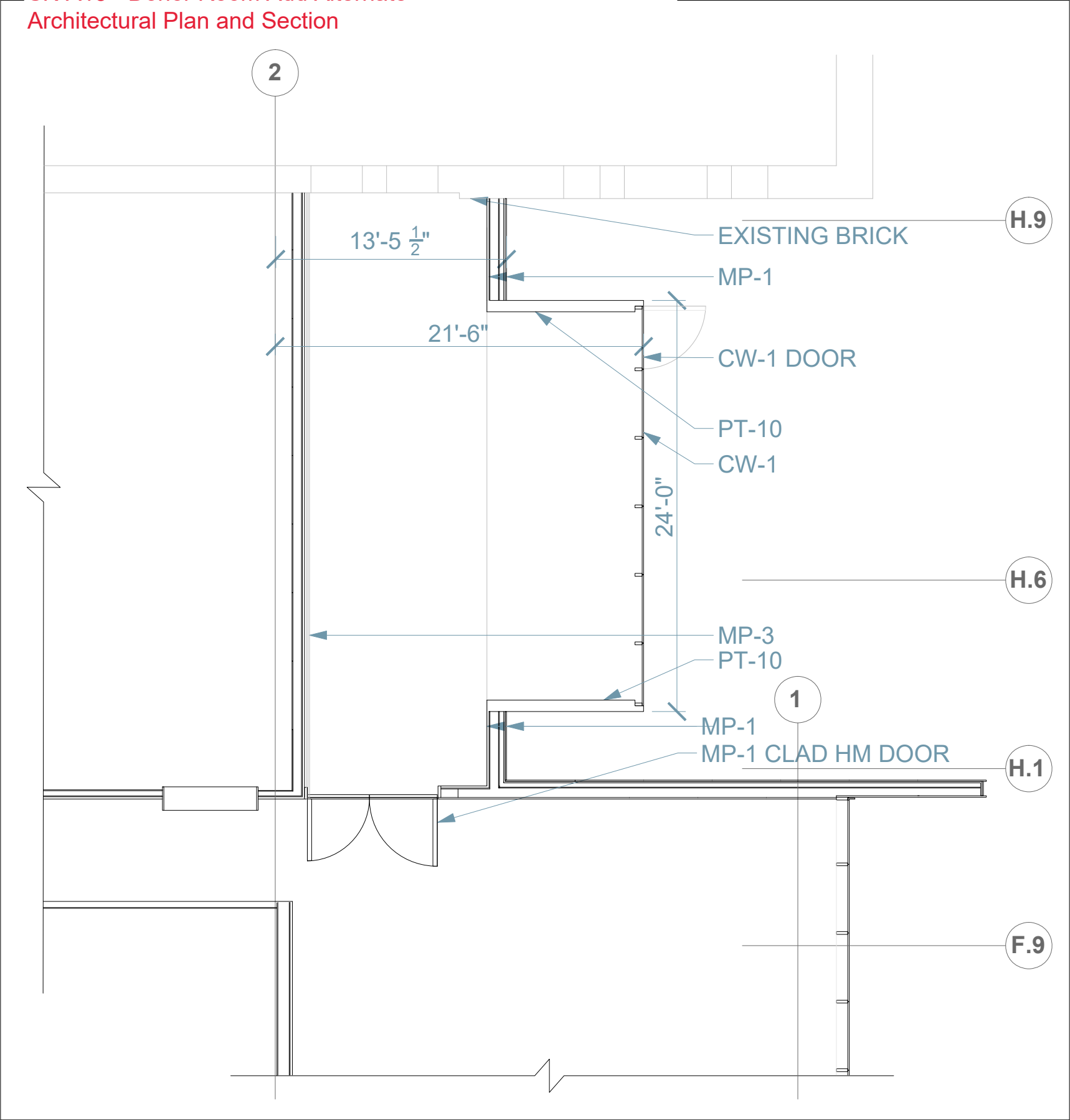
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Seal:

Signature:
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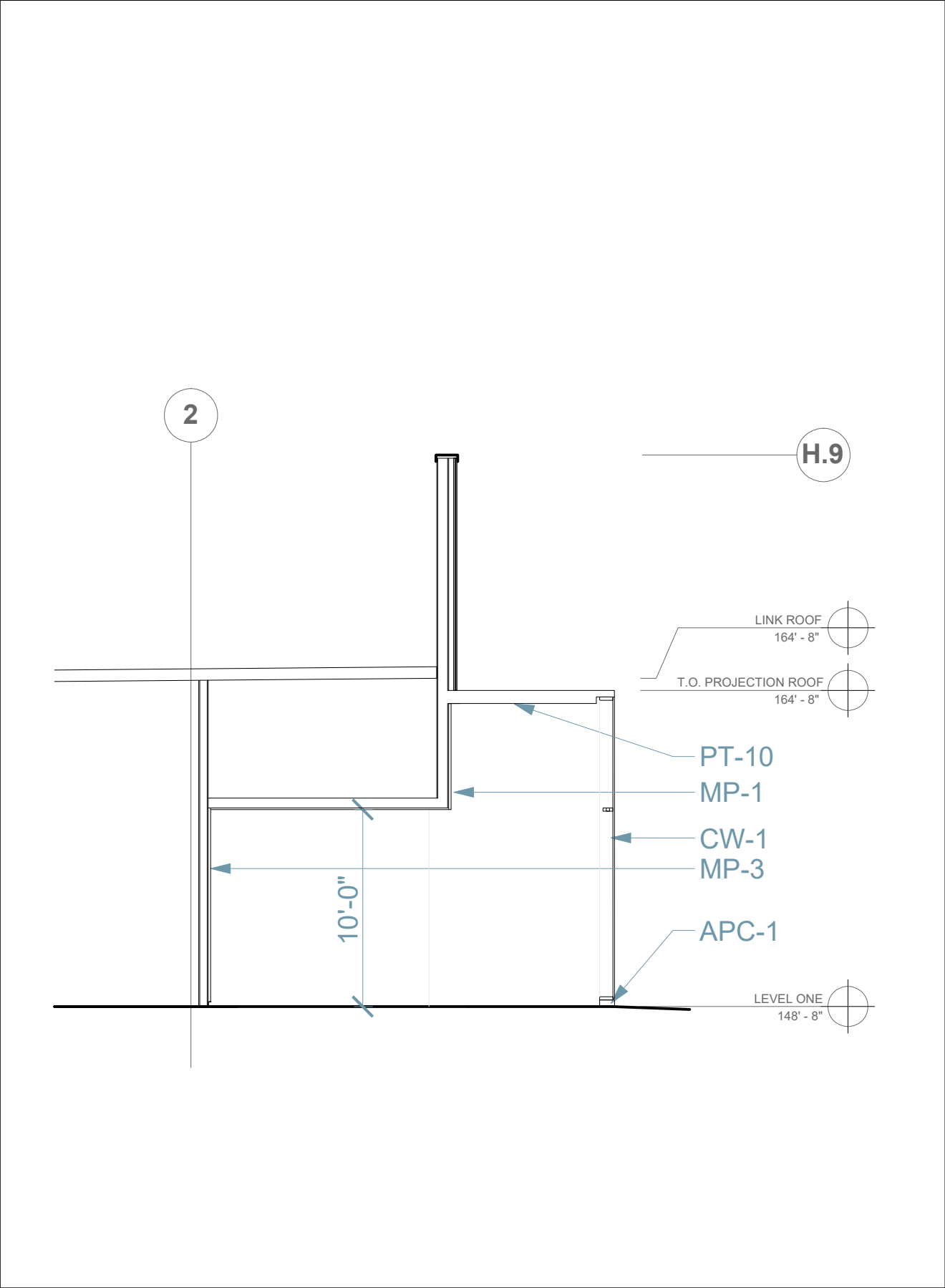


WSU - Gateway
Add Alternate #13 - Donor Room Addition

SK-A13 - Donor Room Add Alternate
Architectural Plan and Section

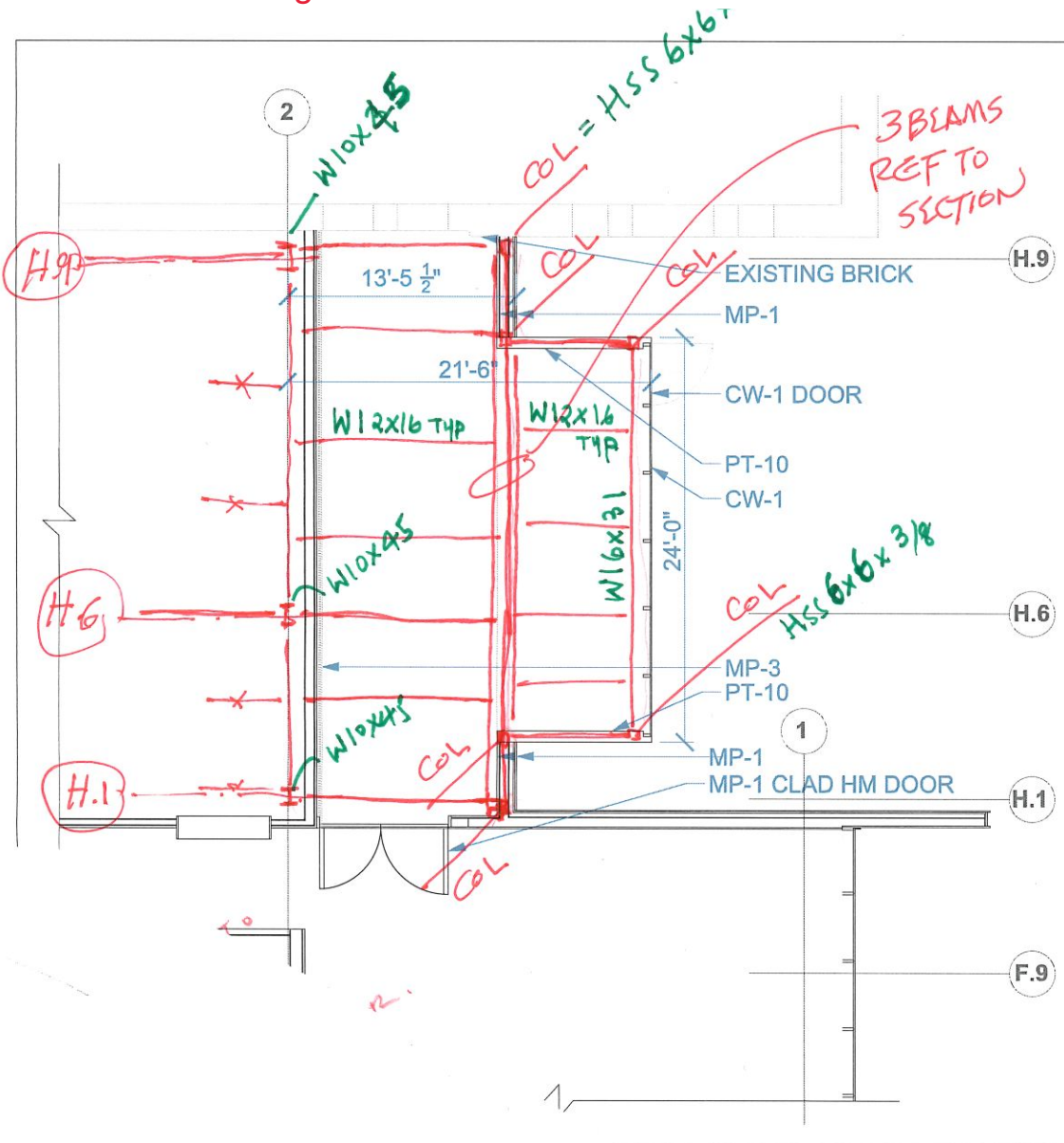


LINK PLAN
NTS

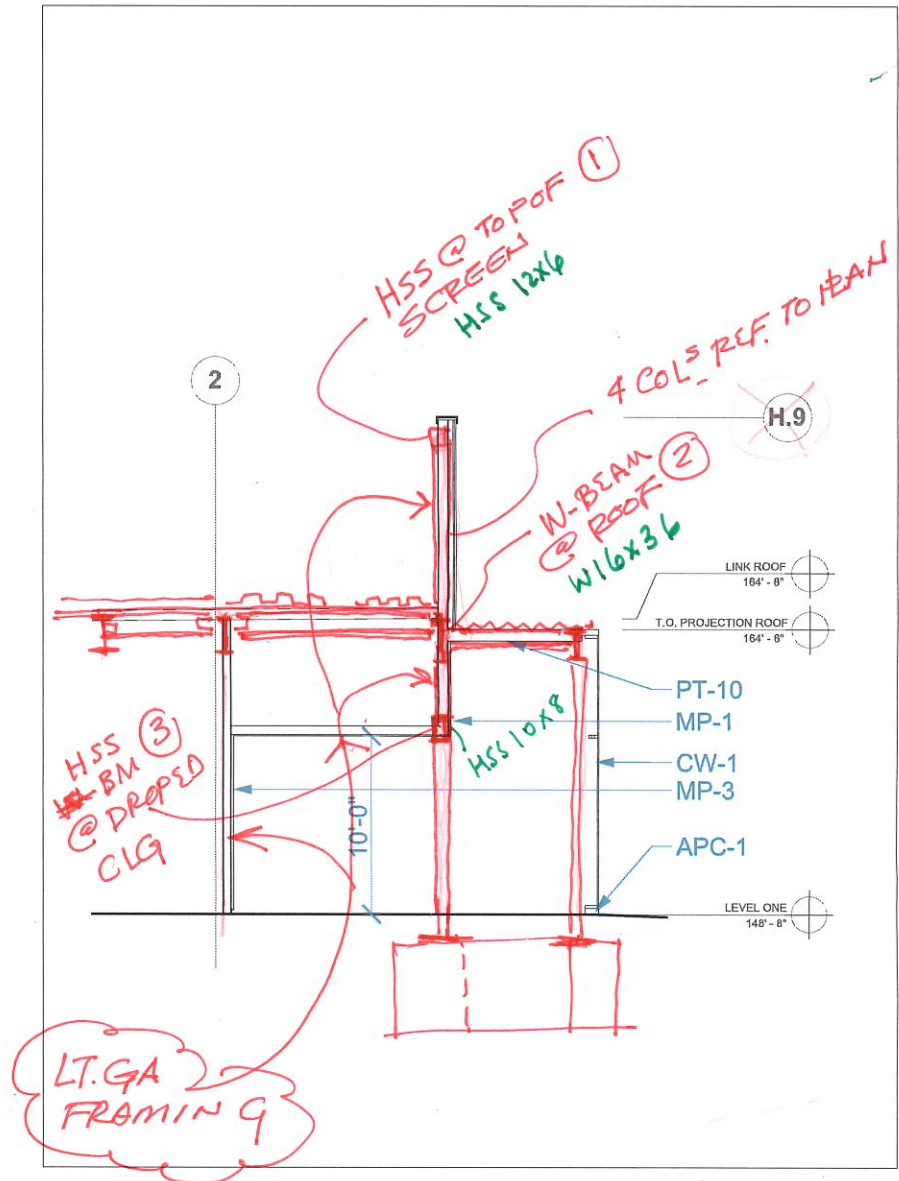


LINK SECTION
NTS

SK-S13 - Donor Room Add Alternate Structural Framing Plan

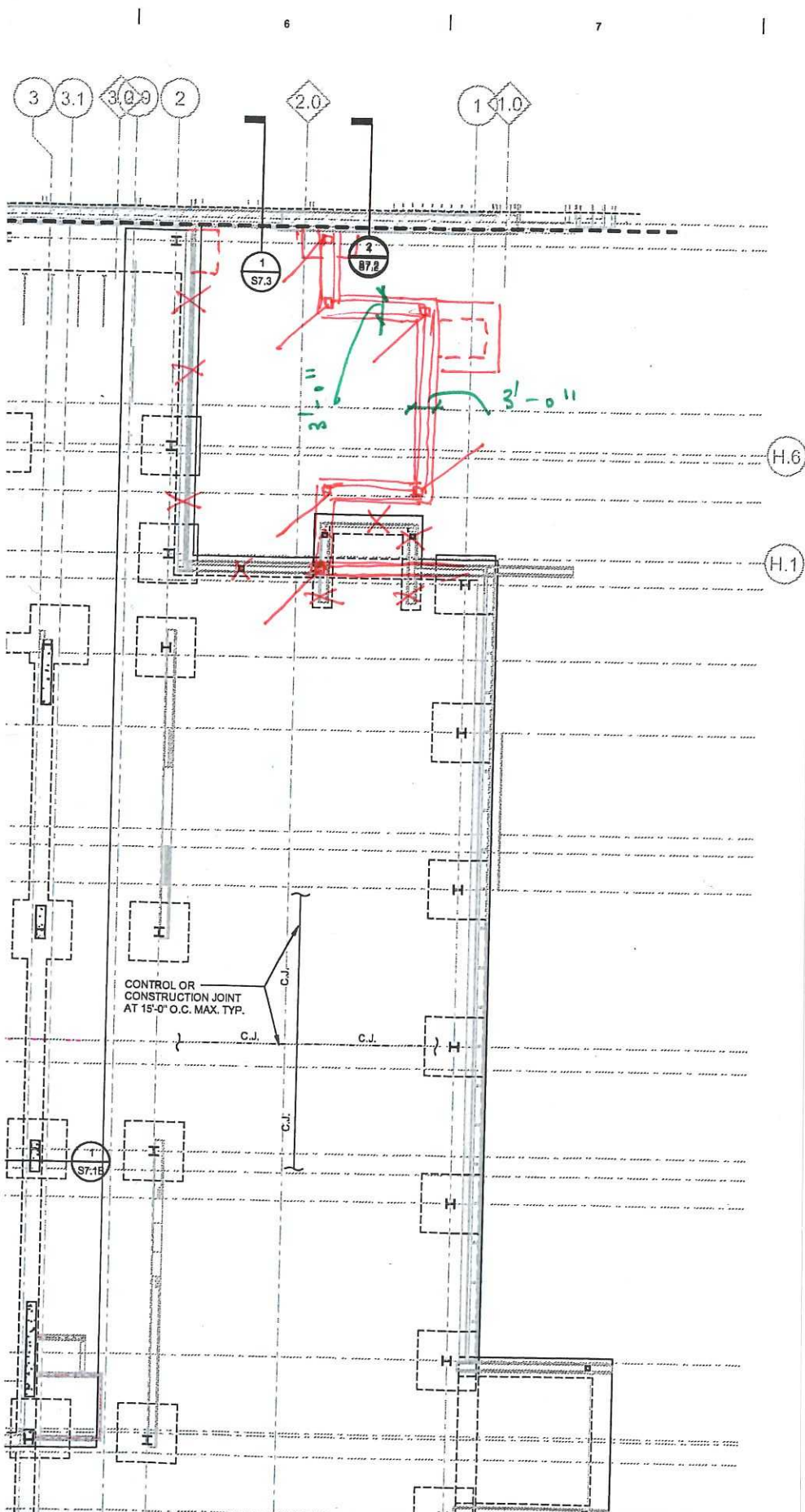


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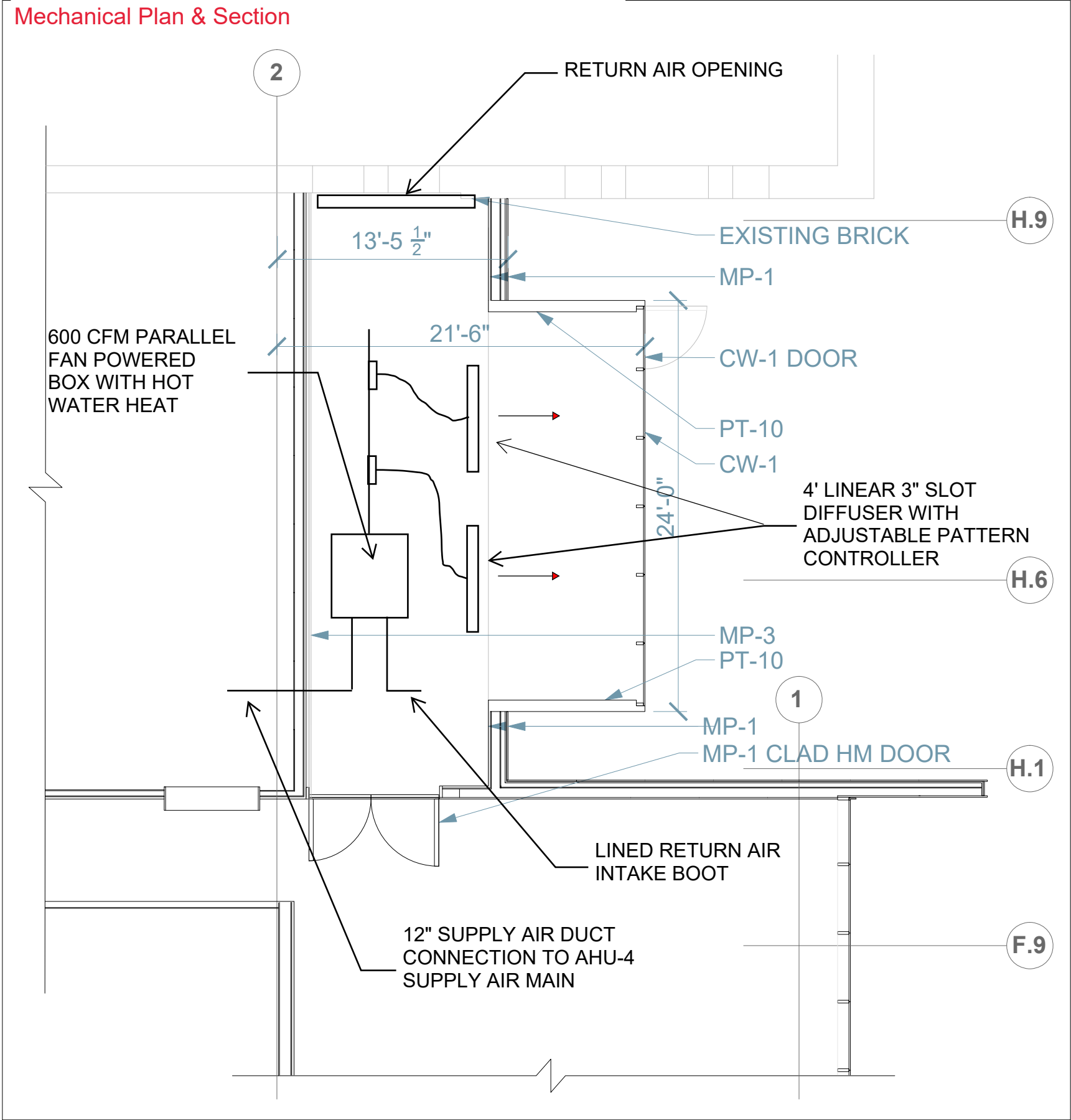


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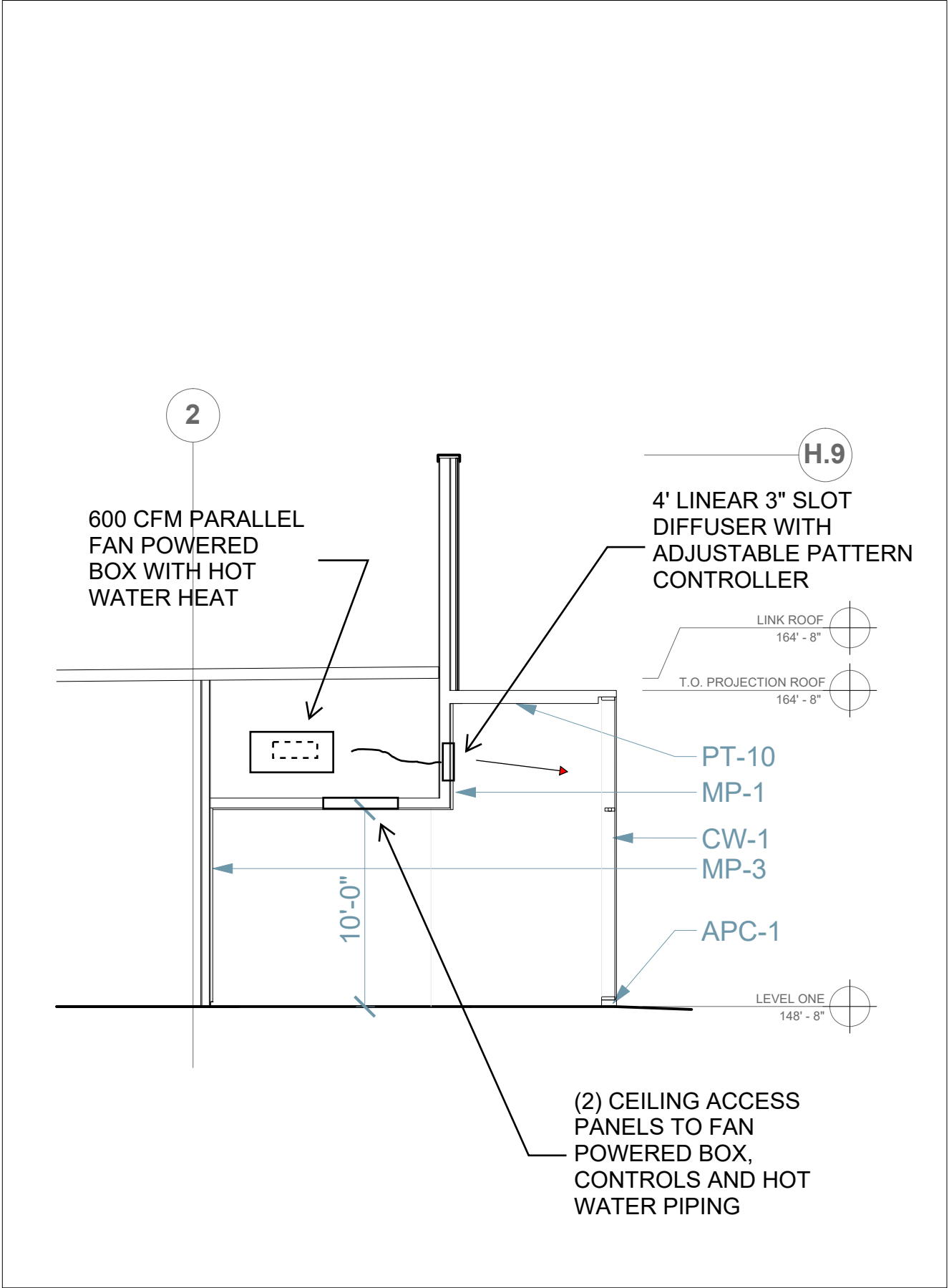
SK-S13 - Donor Room Add Alternate Structural Foundation Plan



SK-M13 - Donor Room Add Alternate
Mechanical Plan & Section



LINK PLAN
NTS



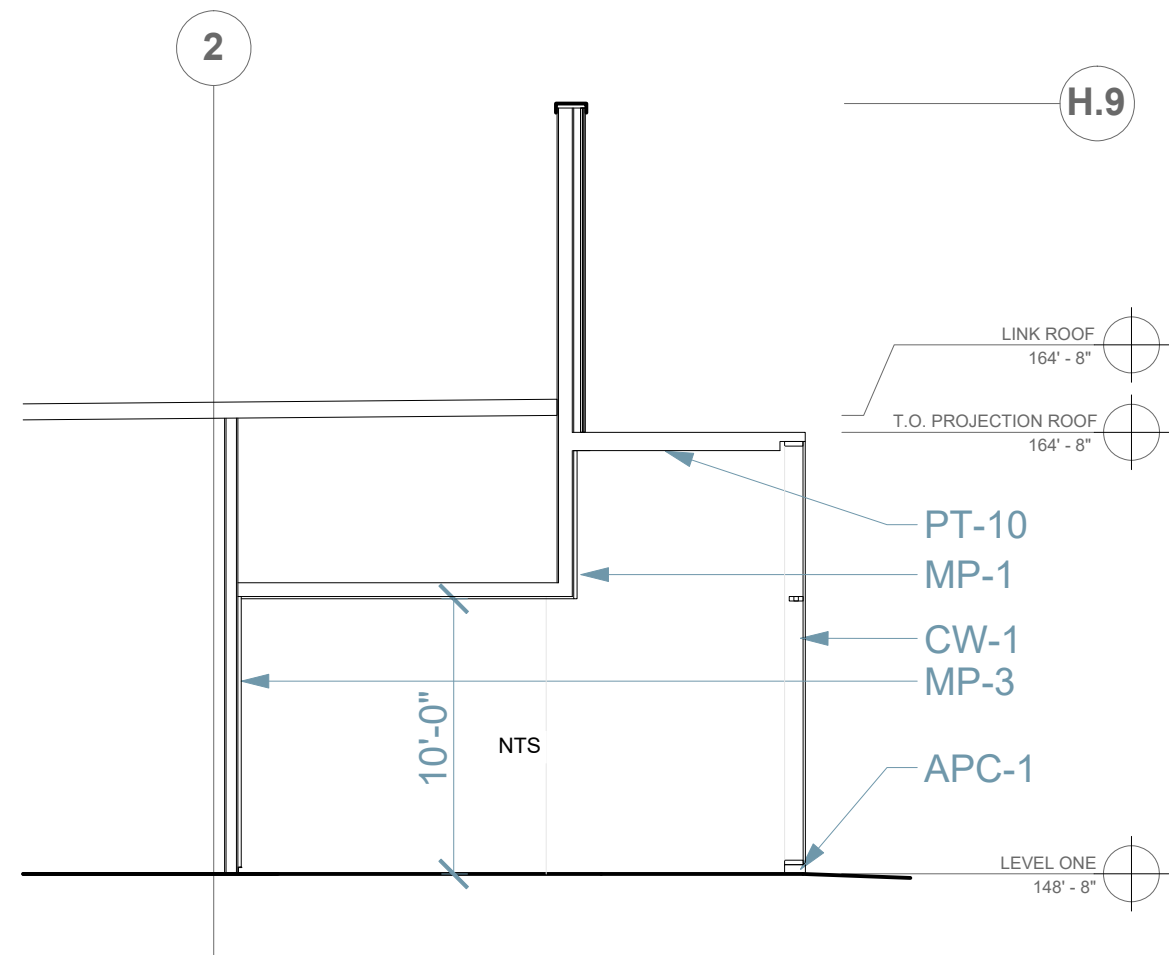
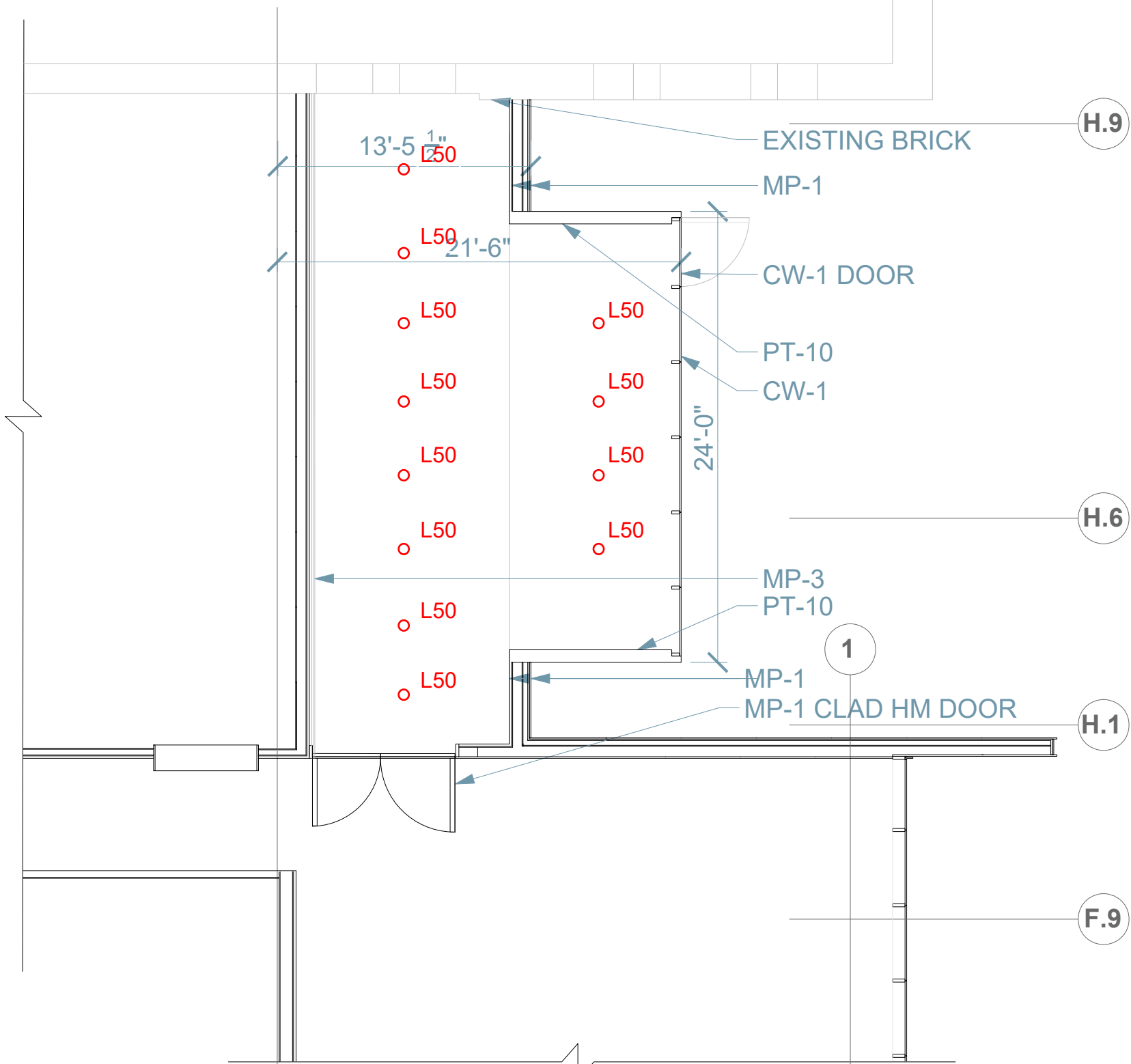
LINK SECTION
NTS

Lighting: Design provided by AG. Refer to separate sketch.

Power: Provide duplex receptacles along wall at every 10' along wall surfaces. Along curtain wall, Provide (3) Legrand RFB2 floorboxes with a duplex receptacle.

Signal: Provide (1)fire alarm strobe/speaker notification device on ceiling of room. Provide one Data drop on wall, provide one data drop in ceiling for WAP device.

SK-AL13 - Donor Room Add Alternate
Architectural Lighting Plan



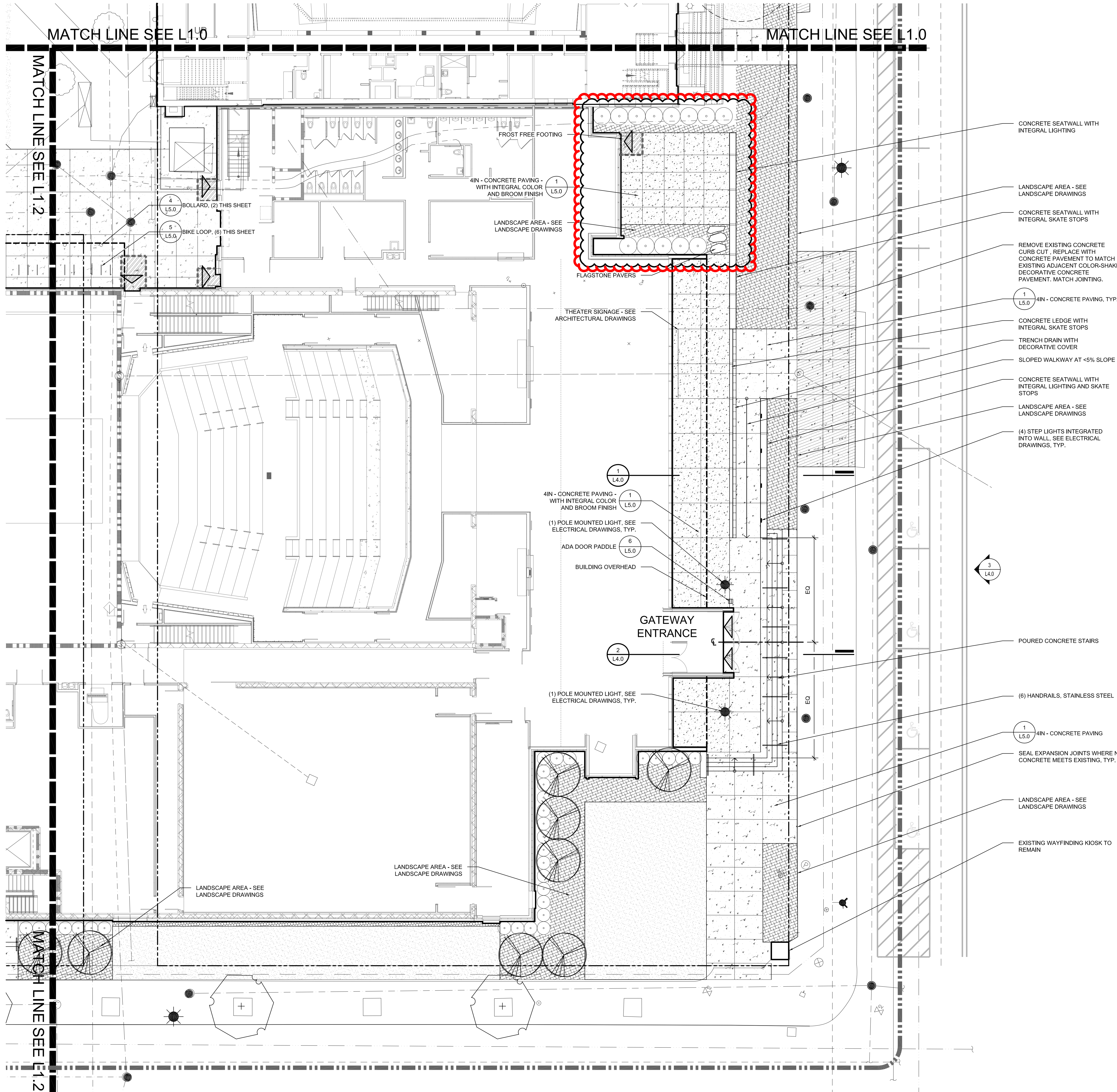
AUERBACH · GLASOW
Architectural Lighting Design and Consulting

1045 Sansome St., Ste. 300 San Francisco CA 94111
Tel 415 392 7528 Fax 415 392 7530

PROJECT: HILBERRY THEATRE			SCALE: NTS	
DATE: 1-24-2019	REV. NO:	DATE:	LSK 27	
DRAWN BY: CLM				

LINK PLAN
NTS

LINK SECTION
NTS



LEGEND

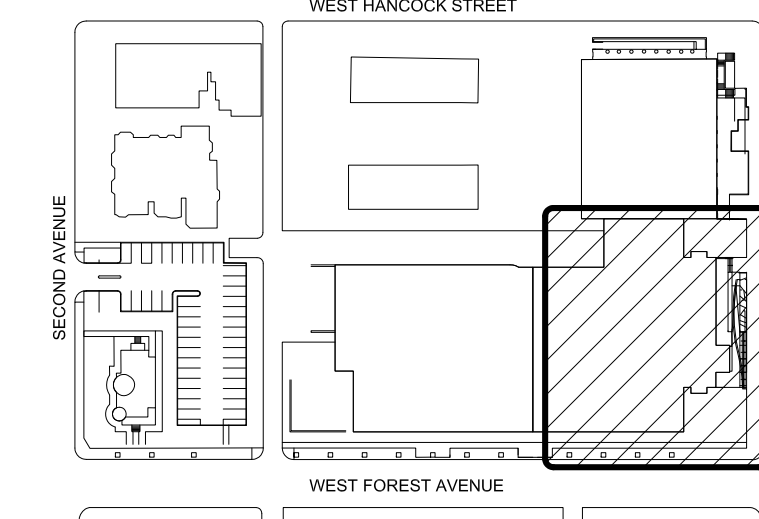
	PROJECT LIMITS
	MATCHLINE
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT - BROOM FINISH
	CONCRETE PAVEMENT - DECORATIVE FINISH
	CONCRETE PAVEMENT - MATCH EXISTING DECORATIVE FINISH
	STABILIZED DECOMPOSED STONE PAVING
	AGGREGATE GROUND COVER
	ORNAMENTAL METAL FENCING
	TREE GRATE
	TURF
	LANDSCAPE AREA
	EXISTING TREE TO REMAIN
	ORNAMENTAL TREE
	SHADE TREE

NOTES

- LAYOUT DIMENSIONS ARE FROM THE BACK OF CURB UNLESS OTHERWISE STATED.

Owner	Wayne State University FP&M 5454 Cass Ave Detroit, MI 48202 313.577.2424
Contractor	Walbridge 777 Woodward Ave, Suite 300 Detroit, MI 48202 313.963.8000
Executive Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Design Architect	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
MEP Engineer	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
Structural Engineer	DESI / NASR Consulting Engineers 6765 Daly Road West Bloomfield, MI 48322 248.392.2010
Civil Engineer	Spalding DeDecker 905 South Blvd East Rochester Hills, MI 48307 800.598.1600
Landscape Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Theatrical	Auerbach Pollock Friedlander 266 West 37th Street New York, NY 10018 212.764.5630
Lighting	Auerbach Glasow 1045 Sansome Street, Suite 300 San Francisco, CA 94111 415.392.7528
Acoustics	Jaffe Holden 114-A Washington Street Norwalk, CT 06864 203.838.4168

Key Plan



100% DESIGN DEVELOPMENT	JAN 30, 2019
50% DESIGN DEVELOPMENT	NOV 30, 2018

Project

WSU PROJECT NO. 189-178578

Drawing Title

SITE MATERIALS PLAN - AREA B

Project Number: 3995-001-00

Drawn By: GCR

Scale: AS SHOWN

Seal:

Signature:

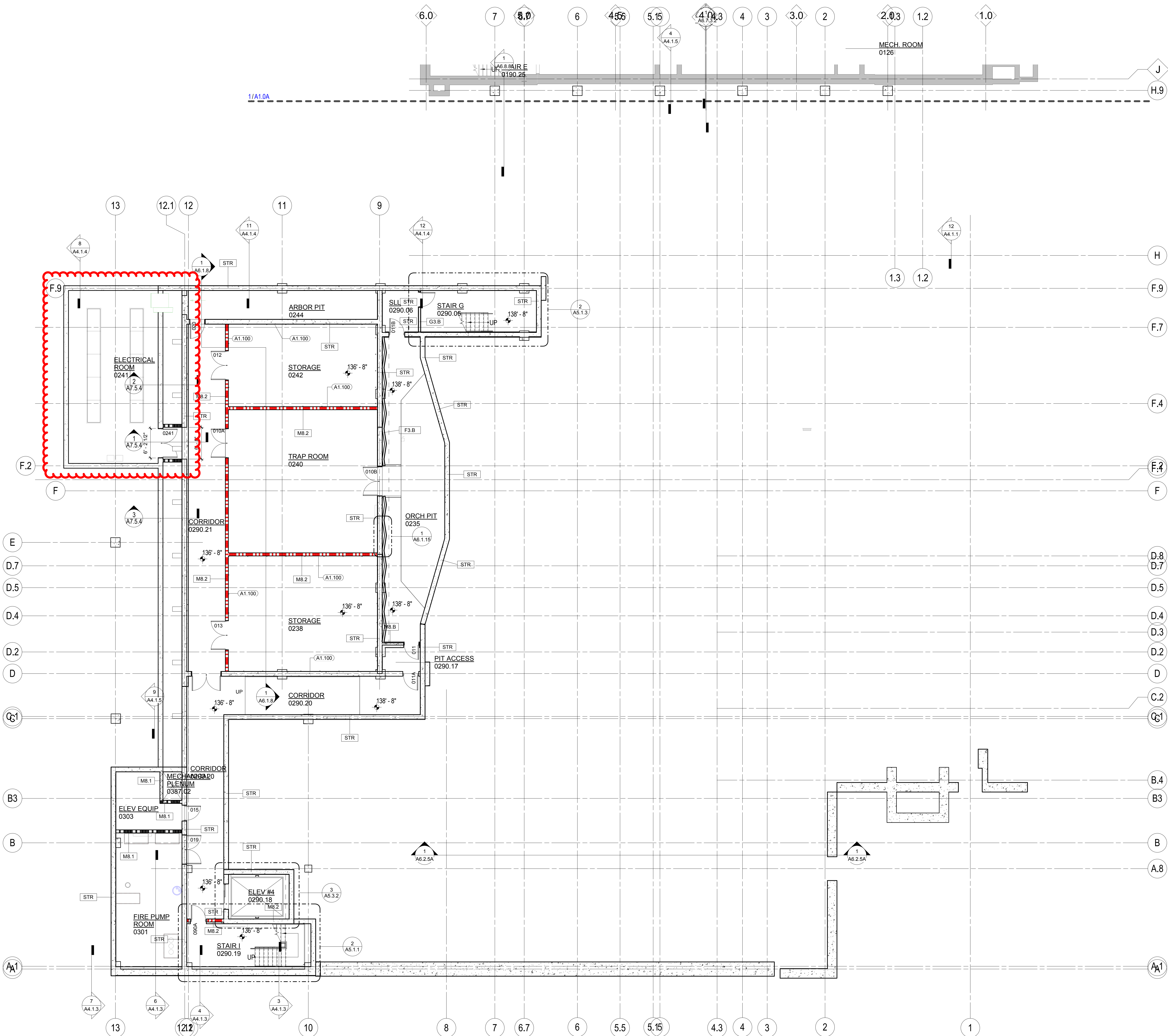
Drawing No:



Know what's below.
Call before you dig.

L1.1

FOR REFERENCE ONLY -
NOT FOR CONSTRUCTION



LOWER LEVEL - SECTOR B
1/8" = 1'-0"

FLOOR PLAN LEGEND

- AREA OF WORK
- NEW PARTITION WALL
- 1 HOUR RATED WALL
- 2 HOUR RATED WALL

FLOOR PLAN NOTES

- CONTRACTOR TO COORDINATE WITH ARCHITECT ALL DISCREPANCIES BETWEEN THE DRAWINGS AND EXISTING CONDITIONS PRIOR TO ANY WORK OR INSTALLATION
- ALL DIMENSIONS ARE TO FACE OF GYPSUM BOARD, COLUMN CENTERLINE, FACE OF CONCRETE, AND OR FACE OF MASONRY UNO
- PROVIDE PATCHING COMPOUND AND UNDERLAYMENT TO REPAIR FLOORS DAMAGED BY DEMOLITION, RESTORE FLOOR SURFACE TO A LEVEL SUBSTRATE SUITABLE FOR INSTALLATION OF NEW FLOORING.
- TYPICAL DOOR FRAME TO WALL DIMENSION IS 4" UNO. RE: A7.3
- REFER TO SHEET A7.4.1 FOR PARTITION TYPES
- REFER TO SHEET A7.4.3 FOR FIRESTOPPING AND PENETRATION DETAILS
- REFER TO SHEET A7.4.2 FOR WALL REINFORCING DETAILS - PROVIDE WALL REINFORCING FOR MILLWORK, SHELVES, WALL MOUNTED EQUIPMENT
- REFER TO FLOOR FINISH PLANS (DRAWING SERIES A7.7) FOR:
 - FLOOR PATTERN INTENT
 - WALL PROTECTION LOCATIONS
 - TRANSITION LOCATIONS
- PROVIDE POSITIVE SLOPE AT ALL FLOOR DRAINS - REDUCE SUPPORTED SLAB DESIGNED THICKNESS BY 1/4" MAX TO ACCOMMODATE FLOOR SLOPE TO DRAIN
- REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR EQUIPMENT PAD LOCATIONS
- ALL BASE CABINETS TO BE AS NOTED W/ WOOD FILLER PANELS WHERE NEEDED
- NEW CONSTRUCTION WALLS TO BE FLUSH WITH EXISTING WHERE INDICATED
- PROVIDE GLASSMATT BACKER AT ALL TOILET ROOM TILE WALLS.
- INFILL ALL UNUSED FLOORWALL PENETRATIONS TO MATCH ADJACENT SURFACE
- PROVIDE ACOUSTIC BATT AT PUBLIC RESTROOM

PLAN KEYNOTES

Number	Note
A1.100	PROVIDE MSA-1 ALONG WALL AT 4'-0" O.C.

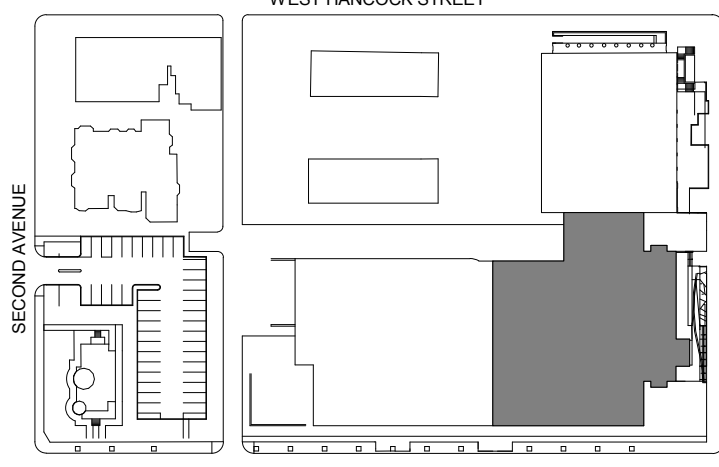
HamiltonAnderson
architecture landscape architecture urban design

HGA
WAYNE STATE
UNIVERSITY

Owner	Wayne State University FP&M 5454 Cass Ave Detroit, MI 48202 313.577.2424
Contractor	Walbridge 777 Woodward Ave, Suite 300 Detroit, MI 48202 313.963.8000
Executive Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Design Architect	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
MEP Engineer	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
Structural Engineer	DESAT / NASR Consulting Engineers Inc. 6765 Daly Road West Bloomfield, MI 48322 248.392.2010
Civil Engineer	Spalding DeDecker 905 South Blvd East Rochester Hills, MI 48307 800.598.1600
Landscape Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Theatrical	Auerbach Pollock Friedlander 286 West 37th Street New York, NY 10018 212.764.5630
Lighting	Auerbach Glasow 1045 Sansome Street, Suite 300 San Francisco, CA 94111 415.392.7528
Acoustics / AV	Jaffe Holden 114-A Washington Street Norwalk, CT 06864 203.836.4168

DETROIT, MI

Key Plan



100% DESIGN DEVELOPMENT
Project
JAN. 30, 2019

WSU - GATEWAY
THEATER COMPLEX
WSU PROJECT NO. 189-178578
Drawing Title
LOWER LEVEL PLAN -
SECTOR B

Project Number: 3995-001-00
Drawn By: Designer
Scale: As indicated
Seal:

FOR REFERENCE ONLY -
NOT FOR CONSTRUCTION

Signature:
Drawing No:

A1.0B



AREA OF WORK

NEW PARTITION WALL

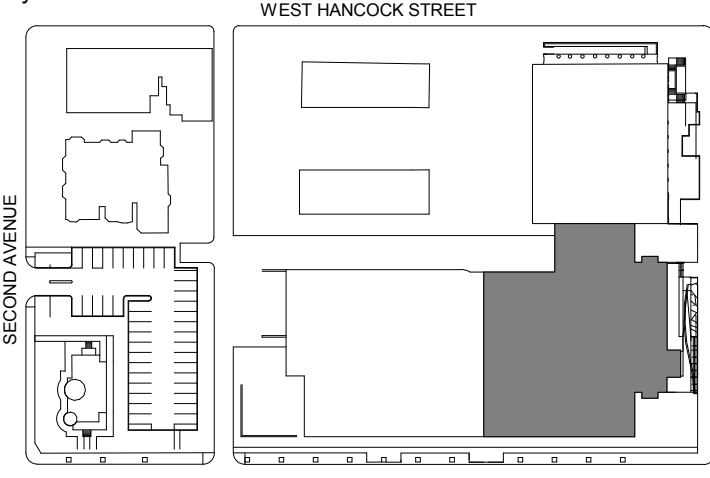
1 HOUR RATED WALL

2 HOUR RATED WALL

- CONTRACTOR TO COORDINATE WITH ARCHITECT ALL DISCREPANCIES BETWEEN THE DRAWINGS AND EXISTING CONDITIONS PRIOR TO ANY WORK OR INSTALLATION
- ALL DIMENSIONS ARE TO FACE OF GYPSUM BOARD, COLUMN CENTERLINE, FACE OF CONCRETE, AND TOP FACE OF MASONRY WALL
- PROVIDE PATCHING COMPOUND AND SMOOTH TO BE BLEND WITH EXISTING SURFACES
- BEFORE DEMOLITION, RESTORE FLOOR SURFACE TO LEVEL, SUBSTRATE SUITABLE FOR INSTALLATION OF NEW FINISH
- TYPICAL DOOR FRAME TO WALL DIMENSION IS 4" UNO RE AT 3
- REFER TO SHEET AT 4.1 FOR PARTITION TYPES
- REFER TO SHEET AT 4.3 FOR FIRESTOPPING AND PENETRATION DETAILS
- REFER TO SHEET AT 4.2 FOR WALL REINFORCING DETAIL
- PROVIDE WALL REINFORCING FOR MILLWORK, SHELVES, WALL MOUNTED EQUIPMENT
- FOR FLOOR FINISH PLANS (DRAWING SERIES) FOR:
 - FLOOR PATTERN INTENT
 - WALL PROTECTION LOCATIONS
 - TRANSITION LOCATIONS
- PROVIDE POSITIVE SLOPE AT ALL FLOOR DRAINS TO REDUCE UNDESIRABLE SLAB DESIGNED THICKNESS BY 1/4" MAX TO ACCOMMODATE FLOOR SLOPE TO DRAIN
- REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR EQUIPMENT PAD LOCATIONS.
- ALL BASE CABINETS TO BE AS NOTED W/ WOOD FILLER PANELS WHERE NEEDED
- NEW CONSTRUCTION WALLS TO BE FLUSH WITH EXISTING WHERE INDICATED.
- PROVIDE GLASSMATT BANNER AT ALL TOILET ROOM TILE WALLS.
- FILL ALL UNUSED FLOOR/WALL PENETRATIONS TO MATCH ADJACENT SURFACE.
- PROVIDE ACOUSTIC BATT AT PUBLIC RESTROOM

Owner	Wayne State University F&M 5454 Cass Ave Detroit, MI 48202 313.577.2424
Contractor	Walbridge 777 Woodward Ave. Suite 300 Detroit, MI 48202 313.993.8000
Executive Architect	Hamilton Anderson 1363 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Design Architect	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
MEP Engineer	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
Structural Engineer	DESJ NASR Consulting Engineers Inc 6765 Daly Road West Bloomfield, MI 48322 248.392.2010
Civil Engineer	Spalding DeDecker 905 South Blvd East Rochester Hills, MI 48307 800.598.1600
Landscape Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Theatrical	Auerbach Pollock Friedlander 266 West 37th Street New York, NY 10018 212.794.5630
Lighting	Auerbach Pollock 1045 Saratoga Street, Suite 300 San Francisco, CA 94111 415.392.7528
Acoustics / AV	Jaffe Holden 114-A Washington Street Norwalk, CT 06854 203.838.4168

Key Plan



00% DESIGN DEVELOPMENT JAN. 30, 2019

WSU PROJECT NO. 189-178578
Drawing Title
**LEVEL ONE PLAN -
SECTOR B**

Project Number: 3995-001-00

Drawn By: Designer

Scale: As indicated

Seal:

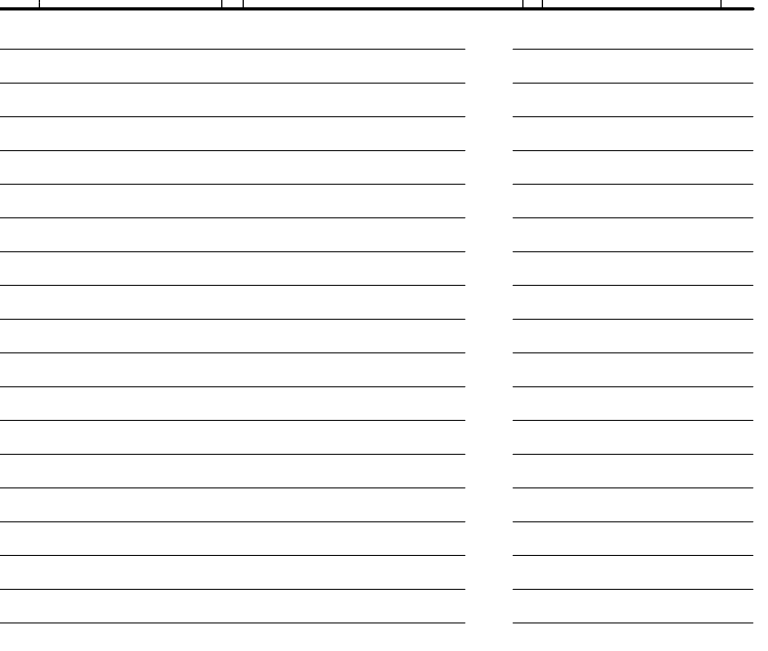
Signature: _____

Drawing No:

A1.1B

FOR REFERENCE ONLY -
NOT FOR CONSTRUCTION

Key Plan



AWS/SLI GATEWAY

WSU PROJECT NO. 189-178578

Project Number: 3995-001-00

Drawn By: BGUTIERREZ

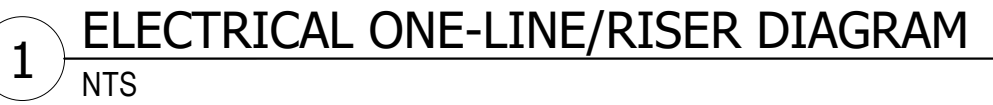
Scale: 1/8" = 1'-0"

Seal:

Signature: _____

Drawing No:

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NOT FOR CONSTRUCTION



1. PROVIDE INSTALLATION OF CONDUIT AND CABLING SERVING FIRE PUMP UNDERSLAB OR WITHIN CONCRETE ENCASEMENT WHICH MEETS 2 HR. PROTECTION DEFINED WITHIN NEC.



NOTES:
* VOLTAGE DROP CONSIDERATIONS NOT TAKEN INTO CONSIDERATION IN TABLE.

100= 3 WIRES
100N= 4 WIRES
100K= 200% NEUTRAL
100I= ISOLATED GROUND

Owner	Wayne State University FP&M 5454 Cass Ave Detroit, MI 48202 313.577.2424
Contractor	Walbridge 777 Woodward Ave, Suite 300 Detroit, MI 48202 313.963.8900
Executive Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Design Architect	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
MEP Engineer	HGA 420 5th Street N, Suite 100 Minneapolis, MN 55401 612.758.4000
Structural Engineer	DES / NASR Consulting Engineers 6765 Daly Road West Bloomfield, MI 48322 248.392.2010
Civil Engineer	Spalding DeDecker 905 South Blvd East Rochester Hills, MI 48307 800.598.1600
Landscape Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Theatrical	Auerbach Pollock Friedlander 285 West 37th Street New York, NY 10018 212.764.5630
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Acoustics / AV	Jaffe Holden 114-A Washington Street Norwalk, CT 06864 203.836.4168

4743 Cass Ave., Detroit, MI 48202

Key Plan



100% DESIGN DEVELOPMENT JAN. 30, 2019

Project

WSU - GATEWAY
THEATER COMPLEX

WSU PROJECT NO. 189-178578

Drawing Title
**LOWER LEVEL
POWER PLAN -
SECTOR B**

Project Number: 3995-001-00

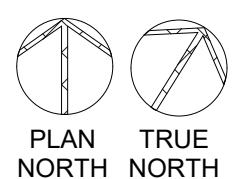
Drawn By: BGUTIERREZ

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

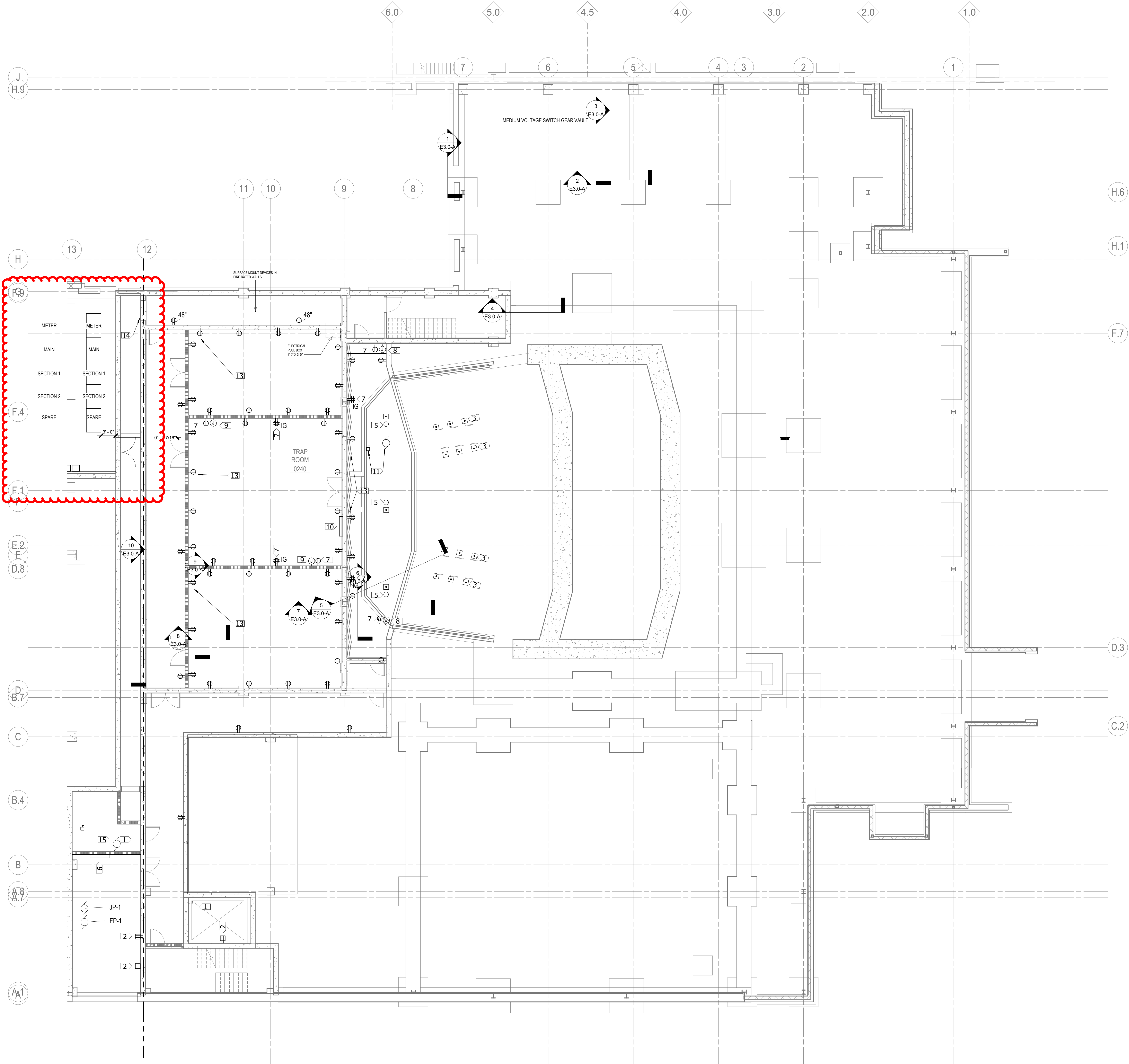
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Signature: _____

Drawing No:



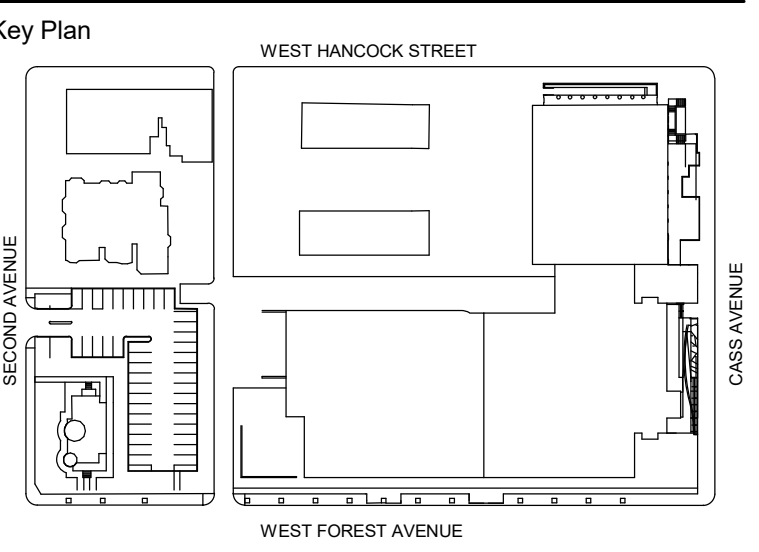
E3.0B



1 LOWER LEVEL POWER PLAN - SECTOR B
1/8" = 1'-0"

Owner	Wayne State University/PSRM 5454 Cass Ave Detroit, MI 48202 313.577.2424
Contractor	Walbridge 777 Woodward Ave., Suite 300 Detroit, MI 48202 313.963.8000
Executive Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
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Landscape Architect	Hamilton Anderson 1435 Randolph Street, Suite 200 Detroit, MI 48226 313.964.0270
Architectural	Auerbach Pollock Friedlander 266 West 37th Street New York, NY 10018 212.764.5630
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Acoustics / AV	Jaffe Holden 114-A Washington Street Norwalk, CT 06854 203.838.4168

4743 Cass Ave., Detroit, MI 48202



Project
WSU - GATEWAY
THEATER COMPLEX
WSU PROJECT NO. 189-178578
Drawing Title
LOWER LEVEL
POWER PLAN -
SECTOR C

Project Number: 3995-001-00

Drawn By: Designer

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

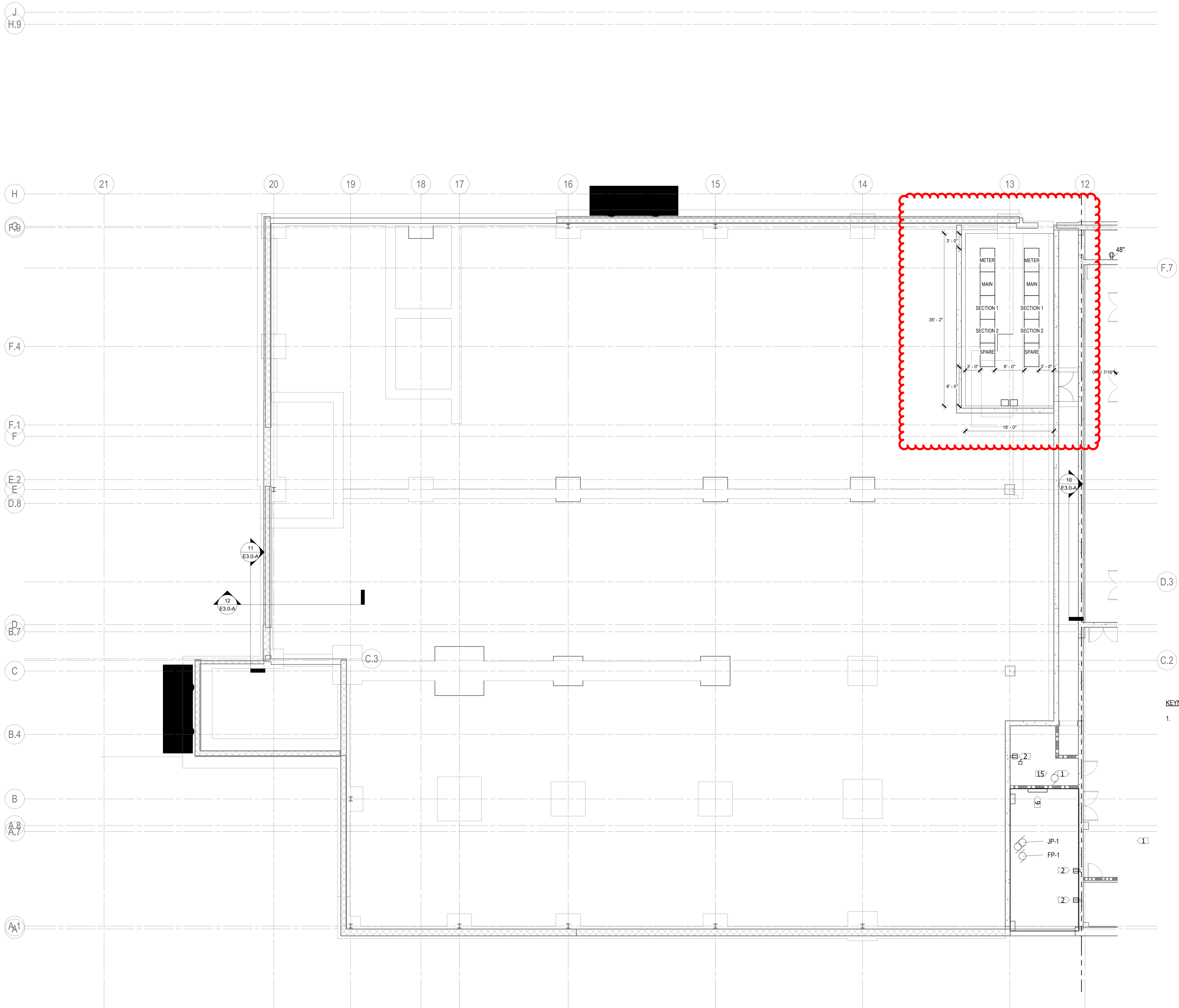
Seal:

FOR REFERENCE ONLY -
NOT FOR CONSTRUCTION

Signature: _____

Drawing No: _____

E3.0C



KEYNOTES:

1.

15/14/19

Project

NSU - GATEWAY
THEATER COMPLEX

WSU PROJECT NO. 189-178578

Drawing Title

LOWER LEVEL
POWER PLAN -
SECTOR C

Project Number: 3995-001-00

Drawn By: Designer

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

Seal:

Signature: _____

Drawing No: _____

Drawing No:

POWER PLAN - BASEMENT - SECTOR C
1/8" = 1'-0"

4743 Cass Ave., Detroit, MI 48202

Key Plan



WSU PROJECT NO. 189-178578
Drawing Title
**LEVEL ONE POWER
PLAN - SECTOR B**

Project Number: 3995-001-00

Drawn By: BGUTIERREZ

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

Seal:

Signature: _____

Drawing No:

PLAN NORTH TRUE NORTH

E3.1B

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1 LEVEL ONE POWER PLAN - SECTOR B
1/8" = 1'-0"