

ADDENDUM NO. 1

December 8, 2021

Parkwood-Upjohn Elementary School Remodel & Site Improvements

**Parkwood-Upjohn Elementary School
2321 South Park Street
Kalamazoo, MI, 49001**

TO: ALL BIDDERS OF RECORD

****BIDS DUE TIME CHANGED TO 3:00 PM****

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated November 1, 2021, by TowerPinkster. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 1-1 through ADD 1-3, dated December 8, 2021, TowerPinkster Addendum No. 1, dated December 6, 2021, consisting of 3 pages, Specification Sections: 22 40 00, 32 31 13, 32 31 19, Drawings: L001, AD101, A101, P101, P102, E001, E101, E102, and E501.

A. SPECIFICATION SECTION 00 00 10 – TITLE PAGE

1. All references to the **Bids Due** are to change from 2:00 pm (local time), to **3:00 pm** (local time), and bids will be publicly read aloud immediately following the deadline.

B. SPECIFICATION SECTION 00 02 00 – NOTICE TO BIDDERS

1. All references to the **Bids Due** are to change from 2:00 pm (local time), to **3:00 pm** (local time), and bids will be publicly read aloud immediately following the deadline.

C. SPECIFICATION SECTION 00 31 00 – BID FORM

1. Replace with attached revised Bid Form. **NOTE REVISED DESCRIPTION FOR ALTERNATE No. 1.**

D. SPECIFICATION SECTION 01 12 00b – MULTIPLE CONTRACT SUMMARY

Part 3.03 Bid Categories

A. BID CATEGORY NO. 1 – GENERAL TRADES

1. Revise the following Clarification:

No. 2 to read: Provide new ornamental and chain link fence in its entirety including work stone dust shown on sheet L001.

2. Add the following Specification Section:

32 31 13 - Chain Link Fence

3. Add the following Clarification:

No. 8: At all new interior signage locations of replacement, provide removal, disposal of existing sign, clean, prime and paint the surface to match existing surface at all sign mounted locations and prep for new installation.

D. BID CATEGORY NO. 4 - ELECTRICAL

1. Add the following Clarification:

No. 4: Provide projection screen and associated controller per Sheets E001, E101, and E501.

E. SPECIFICATION SECTION 01 23 00 – ALTERNATES

- 1.04 Revise the following Alternate:

- A. ALTERNATE NO. 1: Ceramic Tile at Drinking Fountains: Ceramic tile at drinking fountains indicated as Alternate No. 1 is not a part of base-bid. If Alternate No. 1 is accepted, remove existing drinking fountains, provide ceramic tile at drinking fountains, and reinstall drinking fountains in areas indicated as Alternate No. 1.

F. SPECIFICATION SECTION 01 32 00 – SCHEDULES AND REPORTS

1. Issued new Guideline Construction Schedule
2. Issued new Site Logistics Plan
3. Post-bid Interview Schedule

End of Addendum

(Amended for KPS)

CONTRACTOR'S BID FOR PUBLIC WORKS

**Parkwood-Upjohn Elementary School
Remodel & Site Improvements
Kalamazoo Public Schools
Kalamazoo County**

PART I

(To be completed for all bids)
(Please type or print)

BIDDER (firm) _____

Address _____ P.O. Box _____

City/State/Zip _____

Telephone Number _____ Email Address: _____

Person to contact regarding this Bid: _____

Pursuant to notices given, the undersigned offers to furnish labor and materials necessary to complete the construction work for:

Insert Bid Category No.(s) and Name(s)

of public works project, **Parkwood-Upjohn Elementary School Remodel & Site Improvements**, in accordance with Plans and Specifications prepared by **TowerPinkster, 242 E. Kalamazoo Avenue, Suite 100, Kalamazoo, MI 49007**, as follows:

BASE BID

For the sum of _____
(sum in words)

_____ DOLLARS (\$ _____)
(sum in figures)

The undersigned acknowledges receipt of the following Addenda:

Receipt of Addenda No.(s) _____

PROPOSAL TIME

Bidder agrees that this Bid shall remain in force for a period of sixty (60) consecutive calendar days from the due date, and Bids may be accepted or rejected during this period. Bids not accepted within said sixty (60) consecutive calendar days shall be deemed rejected.

Attended pre-bid conference YES _____ NO _____

Has visited the jobsite YES _____ NO _____

The Bidder must attach to this bid, the sworn and notarized affidavit (attached at the end of this Bid Form) disclosing any familial relationship between the Owner or an employee of the bidder and any member of the District's Board or the Superintendent of the District.

The Bidder has reviewed the Guideline Schedule in Section 01 32 00 and the intent of the schedule can be met. _____ YES _____ NO

The Skillman Corporation's diversity initiative is to create a program to encourage, assist and measure the active participation of Minority- Owned, Women-Owned, Veteran – Owned and Disabled Individual-Owned Businesses. The Program is to ensure that MWVDBEs are provided full and equal opportunity to participate in all Skillman Corporation's Projects.

Bidder has included:	DBE: YES _____%	NO _____
	MBE: YES _____%	NO _____
	WBE: YES _____%	NO _____
	VBE: YES _____%	NO _____

The undersigned further agrees to furnish a bond or certified check with this Bid for an amount specified in the Notice to Bidders. If Alternate Bids apply, submit a proposal for each in accordance with the Plans and Specifications.

ALTERNATE BIDS

A blank entry or an entry of "No Bid", "N/A", or similar entry on any Alternate will cause the bid to be rejected as non-responsive only if that Alternate is selected. If no change in the bid amount is required, indicate "No Change".

****MARK "ADD" OR "DEDUCT" FOR EACH ALTERNATE****

Alternate Bid No. 1 – Ceramic Tile at Drinking Fountains: Ceramic tile at drinking fountains indicated as Alternate No. 1 is not a part of base-bid. If Alternate No. 1 is accepted, remove existing drinking fountains, provide ceramic tile at drinking fountains, and reinstall drinking fountains in areas indicated as Alternate No. 1.

Change the Base Bid the sum of _____
(sum in words)

_____ DOLLARS (\$ _____) ADD
(sum in figures) DEDUCT

Unit Prices

A. Unit Price No. 1: Supplemental Excavation, Satisfactory Soil Fill:

1. Description: Unit price for the removal of unforeseen unsatisfactory soil and replacement with satisfactory soil, according to Section 31 2000 "Earth Moving."

_____ DOLLARS (\$ _____)
(sum in figures)

2. Unit of Measurement: Cubic yard of soil excavated, based on in-place surveys of volume before and after removal.

_____ DOLLARS (\$ _____)
(sum in figures)

B. Unit Price No. 2: Supplemental Excavation, Engineered Fill:

1. Description: Unit price for the removal of unforeseen unsatisfactory soil and replacement with engineered fill, according to Section 31 2000 "Earth Moving."

_____ DOLLARS (\$ _____)
(sum in figures)

2. Unit of Measurement: Cubic yard of soil excavated, based on in-place surveys of volume before and after removal.

_____ DOLLARS (\$ _____)
(sum in figures)

NON-COLLUSION AFFIDAVIT

The undersigned Bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this Bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporations has, have, or will receive directly or indirectly, any rebate, fee, gift, commission, or thing of value on account of such sale.

OATH AND AFFIRMATION

I affirm under the penalties of perjury that the foregoing facts and information are true and correct to the best of my knowledge and belief.

Dated at _____ this _____ day of _____, 2021.

(Name of Organization)

By _____
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)

) SS:

COUNTY OF _____)

_____ being duly sworn, deposes and says that

he is _____ of the above _____
(Title) (Name of Organization)

and that the statements contained in the foregoing Bid, certification and Affidavit are true and correct.

Subscribed and sworn to before me this _____ day of _____, 20 ____.

Notary Public

My Commission Expires: _____

County of Residence: _____

PART II

(Complete sections I, II, and III for all state and local public works projects)

These statements to be submitted under oath by each bidder with and as a part of his bid. (Attach additional pages for each section as needed.)

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed?

Contract Amount	Class of Work	When Completed	Name and Address of Owner

2. What public works projects has your organization now in process of construction:

Contract Amount	Class of Work	When Completed	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you?_____ If so, where and why?_____

4. List references from private firms for which you have performed work.

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed Work.
2. If you intend to sublet any portion of the Work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you expect to require a bond.
3. What equipment do you intend to use for the proposed Project?
4. Have you made contracts or received offers for all materials within prices used in preparing your proposal? _____ yes _____ no.

SECTION III OATH AND AFFIRMATION

I hereby affirm under the penalties of perjury that the facts and information contained in the foregoing Bid for public works are true and correct to the best of my knowledge and belief.

IN TESTIMONY WHEREOF, The Bidder has hereunto set his hand this

_____ day of _____, 20_____.

Bidder:_____

IN TESTIMONY WHEREOF, The Bidder (a firm) have hereunto set their hands this

_____ day of _____, 20_____.

Firm Name: _____

By:_____

Individual names:_____

IN TESTIMONY WHEREOF, The Bidder (a corporation) has caused this proposal to be signed by its President and Secretary and affixed its corporate seal this _____ day of _____, 20 ____.

Name of Corporation: _____

President: _____

Secretary: _____

ACKNOWLEDGEMENT

STATE OF _____)

) SS:

COUNTY OF _____)

_____ being duly sworn, deposes and says that

he is _____ of the above _____
(Title) (Name of Organization)

and that the answers to the questions in the foregoing questionnaires and all statements therein contained are true and correct.

Subscribed and sworn to before me this _____ day of _____, 20 ____.

Notary Public

My Commission Expires: _____

County of Residence: _____

KALAMAZOO PUBLIC SCHOOLS
FAMILIAL STATEMENT OF DISCLOSURE

***** Failure to return this notarized statement/signature
with the bid will result in bid disqualification *****

Kalamazoo Public Schools
600 Vine Street
Kalamazoo, MI 49008

Dear Ladies and Gentlemen:

I/We, the undersigned, acknowledge by this sworn and notarized statement disclosing any familial relationship (or lack of a relationship) that exists between the Owner or any employee of the bidder and any member of the Board of Education of the Kalamazoo Public Schools or the Superintendent of the School District. The District shall not accept a bid that does not include a sworn and notarized disclosure statement.

- ☐ We have prior familial knowledge of parties' involved (Attached clarification).
- ☐ We have no prior familial knowledge of parties involved.

Signature

Company Name

Notary Public

_____ County, Michigan

My Commission Expires: _____

CERTIFICATION OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT
Michigan Public Act No. 517 of 2012

The undersigned, the owner, or authorized officer of the below-named company (the “Company”), pursuant to the compliance certification requirement provided in the **Kalamazoo Public School’s** Request For Proposal (the “RFP”), hereby certifies, represents, and warrants that the Company (which includes its officers, directors and employees) is not an “Iran Linked Business” within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the “Act”), and that in the event the Company is awarded a contract by the **Kalamazoo Public School** as a result of the aforementioned RFP, the Company is not and will not become an “Iran Linked Business” at any time during the course of performing any services under the contract.

The Company further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or two (2) times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the **Kalamazoo Public Schools’s** investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date that it is determined that the person has submitted the false certification.

BIDDER:

By: _____

Its: _____

STATE OF MICHIGAN)
)ss.
COUNTY OF _____)

This instrument was acknowledged before me on the ____ day of _____, 20__, by _____.

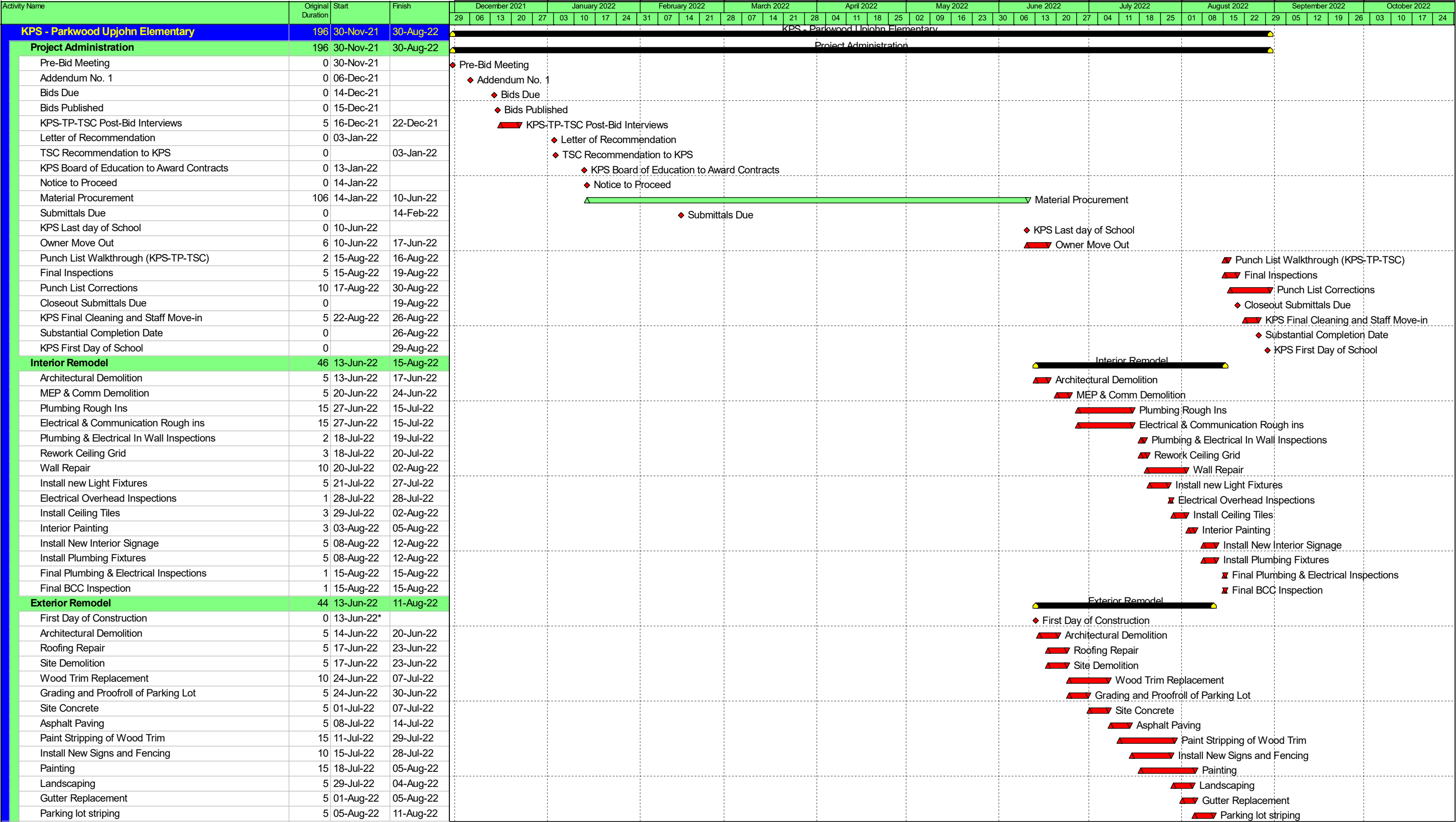
_____, Notary Public

_____ County, Michigan

My Commission Expires: _____

Acting in the County of: _____

END OF SECTION 00 31 00



Actual Work

Remaining Work

Critical Remaining Work

◆

Milestone

Summary

218020.28 - KPS - Parkwood Upjohn Elementary

Guideline Schedule - 05-Nov-21





KPS - Parkwood-Upjohn Elementary School

Site Logistics Plan - 11.22.2021



Pre-Award Conference Schedule

12/8/2021

KPS Parkwood, Milwood Elementary and Northglade



Bid Category #/Name:	Project	Contractor:	Time:	Kalamazoo Public Schools	TowerPinkster	Skillman
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THURSDAY DECEMBER 16

FLOORING	MILWOOD ELEM.		8:30 - 9	Karen Jackson	Mike Galovan	Rohit Tilekar
FLOORING	NORTHGLADE		9:15 - 10	Karen Jackson	Mike Galovan	Rohit Tilekar
ROOFING	NORTHGLADE		10 - 10:45	Karen Jackson	Mike Galovan	Rohit Tilekar
LOCKERS	NORTHGLADE		11 - 11:30	Karen Jackson	Mike Galovan	Rohit Tilekar

FRIDAY DECEMBER 17

PLUMBING	PARKWOOD		8:30 - 9	Karen Jackson	Perry / Mike	Rohit Tilekar
MECHANICAL	MILWOOD ELEM.		9:15 - 10	Karen Jackson	Perry / Mike	Rohit Tilekar
MECHANICAL	NORTHGLADE		10 - 10:45	Karen Jackson	Perry / Mike	Rohit Tilekar
ELECTRICAL	PARKWOOD		11 - 11:30	Karen Jackson	LENTZ / MIKE	Rohit Tilekar
ELECTRICAL	NORTHGLADE		11:30 - 12	Karen Jackson	LENTZ / MIKE	Rohit Tilekar

MONDAY DECEMBER 20

GENERAL TRADES	PARKWOOD		12:30 - 1:30	Karen Jackson	Mike Galovan	Rohit Tilekar
GENERAL TRADES	MILWOOD		1:30 - 2:15	Karen Jackson	Mike Galovan	Rohit Tilekar
GENERAL TRADES	NORTHGLADE		2:15 - 3:15	Karen Jackson	Mike Galovan	Rohit Tilekar
ASPHALT PAVING	NORTHGLADE		3:15 - 3:45	Karen Jackson	Mike Galovan	Rohit Tilekar
ASPHALT PAVING	PARKWOOD		3:45 - 4	Karen Jackson	Mike Galovan	Rohit Tilekar

ADDENDUM NO. 1

DATE OF ISSUANCE:	December 6, 2021
PROJECT:	Parkwood-Upjohn Elementary School Remodel & Site Improvements 2321 South Park Street Kalamazoo, MI 49001
OWNER:	Kalamazoo Public Schools
ARCHITECT'S PROJECT NO.:	18-526.00
ORIGINAL BID ISSUE DATE:	November 1, 2021

SCOPE OF WORK

This Addendum includes changes to, or clarifications of, the original Bidding Documents and any previously issued addenda, and shall be included in the Bid. All of these Addendum items form a part of the Contract Documents. The Bidder shall acknowledge receipt of this Addendum in the appropriate space provided on the Bid Form. Failure to do so may result in disqualification of the Bid.

DOCUMENTS INCLUDED IN THIS ADDENDUM

This Addendum includes **three (3)** pages of text and the following documents:

- Bidding Documents: **None**
- Contract Conditions: **None**
- Specification Sections: **01-2300, 22-4000, 32-3113 & 32-3119**
- Sketches: **None**
- Drawings: **L 001, AD101, A101, P 101, P 102, E 001, E 101, E 102 & E 501**

CHANGES TO PREVIOUSLY ISSUED ADDENDA

None.

CHANGES TO BIDDING REQUIREMENTS

None.

CHANGES TO CONTRACT CONDITIONS

None.

CHANGES TO SPECIFICATION

ADD-1 Item No. S-1 - Alternates

Refer to added Specification Section 01 2300 "Alternates" for added information on Alternates shown in the documents.

ADD-1 Item No. S-2 - Chain Link Fence

Refer to added Specification Section 32-3113 "Chain Link Fence" for chain link fence shown in the documents.

ADD-1 Item No. S-3 - Decorative Fence

Refer to added Specification Section 32-3119 "Decorative Fence" for added swing gate information as shown in the documents.

ADD-1 Item No. S-4 - Plumbing Fixtures

Refer to the reissued Specification Section 22-4000 Plumbing Fixtures for the revised electric water coolers.

CHANGES TO DRAWINGS

ADD-1 Item No. D-1 - Existing Signage Demolition

Refer to Interior Signage Drawings (Not Reissued)

At each new sign location remove and dispose existing sign. Where applicable prep for; cleaning, prime and painting of surface below where the sign was mounted. Paint to match the existing surrounding area. Refer to Interior Signage sheets for all new sign locations.

ADD-1 Item No. D-2 - Chain Link Fence Plan and Detail

Refer to Re-issued Landscape Plan, sheet L001. Provide chain link fence at locations indicated and as detailed.

ADD-1 Item No. D-3 - Drinking Fountain / EWC Change

- Refer to Re-issued AD 101, A 101, P 101 and P 102.
- Electric water cooler changes as noted below, and as per revised and reissued drawings.
 - At Classroom 105 [new room number]:
 - On drawing AD 101 change demo keynote at existing water fountain to keynote 2.
 - On drawing A101 change keynote at new EWC to new keynote 2.
 - On drawing P 101 revise the EWC tag.

- At Classroom 205 (new room number):
 - o On drawing A 101 change keynote at new EWC to new keynote 2.
 - o On drawing P 102 revise the EWC tag.
- At Classroom 220 (new room number):
 - o On drawing A 101 change keynote at new EWC to new keynote 2.
 - o On drawing P 102 Revise the EWC tag.

ADD-1 Item No. D-4 - Gym Projection Screen

Refer to reissued sheet(s): E 001, E 101 & E 501

Projection screen and projection screen controller symbols have been added to symbol legend under AUDIO/VISUAL [E 001].

Projection screen shall be provided and installed by electrical contractor. Screen controller that comes with screen shall be installed by electrical contractor. Refer to floor plans and details [E 101 & E 501].

ADD-1 Item No. D-5 - Classroom 145S

Refer to reissued sheet(s): E 102

Teacher station rough-in has been added.

END OF ADDENDUM.

SECTION 22 4000 - PLUMBING FIXTURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes plumbing fixtures and related components.
- B. Related Sections include the following:
 - 1. Division 22 Section "Domestic Water Piping Specialties" for mixing valves and specialty fixtures not included in this Section.

1.2 DEFINITIONS

- A. Barrier-Free Fixture: Plumbing fixture that can be approached, entered, and used by people with disabilities.
- B. Fitting: Device that controls the flow of water into or out of the plumbing fixture. Piping and general-duty valves are included where indicated. Fittings specified in this Section include:
 - 1. Supplies and stops.
 - 2. Faucets and spouts.
 - 3. Drains and tailpieces.
 - 4. Traps and waste pipes.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of plumbing fixture indicated. Include selected fixture and trim, fittings, accessories, appliances, appurtenances, equipment, and supports. Indicate materials and finishes, dimensions, construction details, and flow-control rates.

1.4 CLOSEOUT SUBMITTALS

- A. Operation and maintenance data.

1.5 QUALITY ASSURANCE

- A. Source Limitations: Obtain plumbing fixtures, faucets, and other components of each category through one source from a single manufacturer.
 - 1. Exception: If fixtures, faucets, or other components are not available from a single manufacturer, obtain similar products from other manufacturers specified for that category.
- B. Regulatory Requirements: Comply with the following:

1. Michigan Building Code (ANSI117) for plumbing fixtures for people with disabilities.
 2. Michigan Plumbing Code.
 3. Local authority having jurisdiction.
 4. Michigan and local Department of Health requirements.
- C. Regulatory Requirements: Comply with requirements in Public Law 102-486, "Energy Policy Act," about water flow and consumption rates for plumbing fixtures.
- D. [NSF Compliance as required by authorities having jurisdiction:](#)
1. [Comply with NSF 14, "Plastics Piping Components and Related Materials," for plastic domestic water piping components.](#)
 2. Comply with NSF 61, "Drinking Water System Components - Health Effects; Sections 1 through 9."
 3. Comply with NSF 372, "Drinking Water System Components – Lead Content"
- E. Select combinations of fixtures and trim, faucets, fittings, and other components that are compatible.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with specified requirements, provide commercial grade plumbing fixtures by one of the following:
1. Water Coolers:
 - a. Elkay
 - b. Oasis
 - c. Halsey-Taylor
 - d. Haws
 - e. Murdock
 2. Fixture Supports:
 - a. Josam
 - b. Wade
 - c. Zurn
 - d. Jay R. Smith
 - e. MIFAB
 - f. Watts.

2.2 ELECTRIC WATER COOLERS

- ~~A. EWC 1 Electric Water Coolers (Barrier Free): Wall mounted, self-contained barrier free access electric water cooler with fully sealed hermetic refrigeration system. Capacity 8 GPH of 50°F drinking water, 80°F inlet and 90°F ambient. Hand operated, flexible safety bubbler and self-closing push-bar controls located on front and side panels of cabinet, flow regulator from 20 to 100 psi, mounting hangers, stainless steel basin. Refrigeration system is located below basin, 115/1/60 compressor. Provide 1 1/4" P-trap and supply with stop. Elkay Model EZS8 or equivalent. When installed in pairs, mount unit indicated on drawings as barrier free at barrier free elevations and other unit at standard elevation. Refer to mounting height schedule.~~

- B. **EWC-1 Electric Water Coolers (Barrier-Free):** Two-level wall mounted, self-contained barrier free access electric water coolers with fully sealed hermetic refrigeration system. Capacity 8 GPH of 50°F drinking water, 80°F inlet and 90°F ambient. Hand operated, flexible safety bubbler and self-closing push-bar controls located on front and side panels of cabinet, flow regulator from 20 to 100 psi, mounting hangers, stainless steel basins, cabinet shall be steel with manufacturers standard finish. Refrigeration system is located below basin, 115/1/60 compressor. Provide P-trap and supply with stop. Elkay Model EZSTL8C or equivalent.
1. Provide Elkay Model LKAPREZL or equivalent Thermo-formed textured ABS plastic apron accessory with bottom cover plate designed to bring water coolers into compliance with the Americans with Disabilities Act (A.D.A.) when units are mounted on an exposed wall.
- C. **EWC-2 Electric Water Coolers (Barrier-Free):** Two-level wall mounted, self-contained barrier free access electric water coolers with fully sealed hermetic refrigeration system and bottle fill station. Capacity 8 GPH of 50°F drinking water, 80°F inlet and 90°F ambient. Include front and side push-bar hand operators, flex-guard bubbler, and flow regulator from 20 to 100 psi, mounting hangers, stainless steel basins, and, cabinet shall be steel with manufacturers standard finish. Bottle filler shall provide 1.1 gpm flow rate with laminar flow to minimize splashing and include the minimum 3000-gallon capacity filter with visual monitor to indicate when replacement is necessary. Unit shall include integrated silver ion anti-microbial protection in key areas. Refrigeration system is located below basin, 115/1/60 compressor. Provide P-trap and supply with stop. Elkay Model LZSTL8WSLK or equivalent.
1. Provide Elkay Model LKAPREZL or equivalent Thermo-formed textured ABS plastic apron accessory with bottom cover plate designed to bring water coolers into compliance with the Americans with Disabilities Act (A.D.A.) when units are mounted on an exposed wall.

2.3 FITTINGS, TRIM AND ACCESSORIES

- A. Fittings for Plumbing Fixtures: Fittings include the following:
1. Supply Inlets: Copper tube, size required for final connection.
 2. Supply Stops: Chrome-plated brass body, angle or straight configuration with compression fittings, loose-key type; size to match inlet pipe and supply riser.
 3. Supply Risers: 3/8-inch OD flexible chrome-plated brass tube with 1/2-inch IPS straight or offset, knob-end tailpiece; or braided flexible stainless steel.
 4. Traps: Chrome-plated, 17 gauge tubular brass P-trap and wall bend, with slip-joint inlet, wall flange, and escutcheon; same size as fixture outlet connection.
 - a. For concealed applications within water coolers or casework, ASTM F 409 PVC one or two-piece trap and waste to wall maybe used.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine roughing-in of water supply and sanitary drainage and vent piping systems to verify actual locations of piping connections before plumbing fixture installation.

- B. Examine cabinets, counters, floors, and walls for suitable conditions where fixtures will be installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Assemble plumbing fixtures, trim, fittings, and other components according to manufacturers' written instructions.
- B. Install off-floor supports, affixed to building substrate, for wall-mounting fixtures.
 - 1. Use carrier supports with waste fitting and seal for back-outlet fixtures.
 - 2. Use carrier supports without waste fitting for fixtures with tubular waste piping.
 - 3. Use chair-type carrier supports with rectangular steel uprights for accessible fixtures.
- C. Install back-outlet, wall-mounting fixtures onto waste fitting seals and attach to supports.
- D. Install wall-mounting fixtures with tubular waste piping attached to supports.
- E. Install fixtures level and plumb according to roughing-in drawings.
- F. Install water-supply piping with stop on each supply to each fixture to be connected to water distribution piping. Attach supplies to supports or substrate within pipe spaces behind fixtures. Install stops in locations where they can be easily reached for operation.
 - 1. Exception: Use ball valves if supply stops are not specified with fixture. Valves are specified in Division 22 Section "General-Duty Valves for Plumbing Piping."
- G. Install trap and tubular waste piping on drain outlet of each fixture to be directly connected to sanitary drainage system.
- H. Install tubular waste piping on drain outlet of each fixture to be indirectly connected to drainage system.
- I. Install traps on fixture outlets.
 - 1. Exception: Omit trap on fixtures with integral traps.
- J. Install escutcheons at piping wall ceiling penetrations in exposed, finished locations and within cabinets and millwork. Use deep-pattern escutcheons if required to conceal protruding fittings. Escutcheons are specified in Division 22 Section "Common Work Results for Plumbing."
- K. Seal joints between fixtures and walls, floors, and countertops using sanitary-type, one-part, mildew-resistant silicone sealant. Match sealant color to fixture color. Sealants are specified in Division 07 Section "Joint Sealants."

3.3 CONNECTIONS

- A. Piping installation requirements are specified in other Division 22 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.

- B. Connect fixtures with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.

3.4 FIELD QUALITY CONTROL

- A. Verify that installed plumbing fixtures are categories and types specified for locations where installed.
- B. Check that plumbing fixtures are complete with trim, faucets, fittings, and other specified components.
- C. Inspect installed plumbing fixtures for damage. Replace damaged fixtures and components.
- D. Test installed fixtures after water systems are pressurized for proper operation. Replace malfunctioning fixtures and components, then retest. Repeat procedure until units operate properly.

3.5 ADJUSTING

- A. Operate and adjust faucets and controls. Replace damaged and malfunctioning fixtures, fittings, and controls.

3.6 CLEANING

- A. Clean fixtures, faucets, and other fittings with manufacturers' recommended cleaning methods and materials. Do the following:
 - 1. Remove faucet spouts and strainers, remove sediment and debris, and reinstall strainers and spouts.
 - 2. Remove sediment and debris from drains.
- B. After completing installation of exposed, factory-finished fixtures, faucets, and fittings, inspect exposed finishes and repair damaged finishes.

3.7 PROTECTION

- A. Provide protective covering for installed fixtures and fittings.
- B. Do not allow use of plumbing fixtures for temporary facilities unless approved in writing by Owner.

3.8 DEMONSTRATION

- A. Train Owner's maintenance personnel to adjust, operate, and maintain the following:
 - 1. Drinking fountains
- B. Refer to Division 01 Section "Demonstration and Training."

3.9 FIXTURE HEIGHT SCHEDULE

A. Install fixtures to heights above finished floor as indicated.

1. Water Cooler:
 - a. Standard Adult: Minimum 38 inches and maximum 43 inches to spout outlet.
 - b. Barrier Free: Maximum 36 inches to spout outlet.

3.10 FIXTURE ROUGH-IN SCHEDULE

A. Line sizes indicated below are run-out sizes, reduce size as required at connection to fixture. Main lines and drops shall be installed in sizes as indicated on drawings.

1. Water Cooler:
 - a. Cold Water: 1/2 Inch.
 - b. Waste: 1-1/4 Inch.
 - c. Vent: 1-1/4 Inch.

END OF SECTION 22 4000

SECTION 32 3113 - CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Chain-link fences.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
 - a. Fence and gate posts, rails, and fittings.
 - b. Chain-link fabric, reinforcements, and attachments.
- B. Shop Drawings: For each type of fence and gate assembly.
 - 1. Include plans, elevations, sections, details, and attachments to other work.
 - 2. Include accessories, hardware, gate operation, and operational clearances.

1.4 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of chain-link fence, and gate.
- B. Sample Warranty: For special warranty.

1.5 FIELD CONDITIONS

- A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

1.6 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of chain-link fences and gates that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Failure to comply with performance requirements.

- b. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
2. Warranty Period: 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

2.2 CHAIN-LINK FENCE FABRIC

- A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist according to "CLFMI Product Manual" and requirements indicated below:
 1. Fabric Height: As indicated on Drawings.
 2. Steel Wire for Fabric: Wire diameter of 0.192 inch (4.88 mm).
 - a. Mesh Size: 2 inches (50 mm).
 - b. Polymer-Coated Fabric: ASTM F668, Class 1 over aluminum -coated steel wire.
 - 1) Color: Black, according to ASTM F934.
 - c. Coat selvage ends of metallic-coated fabric before the weaving process with manufacturer's standard clear protective coating.
 3. Aluminum Wire Fabric: ASTM F1183, with mill finish, and wire diameter of 0.192 inch (4.88 mm).
 - a. Mesh Size: 2 inches (50 mm).
 4. Selvage: Knuckled at both selvages.

2.3 FENCE FRAMEWORK

- A. Posts and Rails: ASTM F1043 for framework, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F1043 or ASTM F1083 based on the following:
 1. Fence Height: As indicated on Drawings.
 2. Heavy-Industrial-Strength Material: Group IA, round steel pipe, Schedule 40.
 - a. Line Post: 2.375 inches (60 mm) in diameter.
 - b. End, Corner, and Pull Posts: 2.875 inches (73 mm) in diameter.
 3. Horizontal Framework Members: top and bottom rails according to ASTM F1043.
 - a. Top and bottom Rails: 1.66 inches (42 mm) in diameter.
 4. Brace Rails: ASTM F1043.
 5. Metallic Coating for Steel Framework:
 - a. Type A: Not less than minimum 2.0-oz./sq. ft. (0.61-kg/sq. m) average zinc coating according to ASTM A123/A123M or 4.0-oz./sq. ft. (1.22-kg/sq. m) zinc coating according to ASTM A653/A653M.
 - b. Type B: Zinc with organic overcoat, consisting of a minimum of 0.9 oz./sq. ft. (0.27 kg/sq. m) of zinc after welding, a chromate conversion coating, and a clear, verifiable polymer film.

- c. External, Type B: Zinc with organic overcoat, consisting of a minimum of 0.9 oz./sq. ft. (0.27 kg/sq. m) of zinc after welding, a chromate conversion coating, and a clear, verifiable polymer film. Internal, Type D, consisting of 81 percent, not less than 0.3-mil- (0.0076-mm-) thick, zinc-pigmented coating.
 - d. Type C: Zn-5-Al-MM alloy, consisting of not less than 1.8-oz./sq. ft. (0.55-kg/sq. m) coating.
 - e. Coatings: Any coating above.
6. Polymer coating over metallic coating.
- a. Color: Match chain-link fabric, according to ASTM F934.

2.4 FITTINGS

- A. Provide fittings according to ASTM F626.
- B. Post Caps: Provide for each post.
 - 1. Provide line post caps with loop to receive tension wire or top rail.
- C. Rail and Brace Ends: For each gate, corner, pull, and end post.
- D. Rail Fittings: Provide the following:
 - 1. Top Rail Sleeves: Pressed-steel or round-steel tubing not less than 6 inches (152 mm) long.
 - 2. Rail Clamps: Line and corner boulevard clamps for connecting bottom rails to posts.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for a certified survey of property lines and legal boundaries, site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.
 - 1. Do not begin installation before final grading is completed unless otherwise permitted by Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet (152 m) or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 CHAIN-LINK FENCE INSTALLATION

- A. Install chain-link fencing according to ASTM F567 and more stringent requirements specified.

1. Install fencing on established boundary lines inside property line.
 - B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
 - C. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.
 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
 - a. Concealed Concrete: Place top of concrete 2 inches (50 mm)
 - D. Terminal Posts: Install terminal end, corner, and gate posts according to ASTM F567 and terminal pull posts at changes in horizontal or vertical alignment of 15 degrees or more. For runs exceeding 500 feet (152 m), space pull posts an equal distance between corner or end posts.
 - E. Line Posts: Space line posts uniformly at 10 feet (3 m) o.c.
 - F. Post Bracing and Intermediate Rails: Install according to ASTM F567, maintaining plumb position and alignment of fence posts. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.
 - G. Top Rail: Install according to ASTM F567, maintaining plumb position and alignment of fence posts. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.
 - H. Bottom Rails: Secure to posts with fittings.
 - I. Chain-Link Fabric: Apply fabric to inside of enclosing framework. Leave 2-inch (50-mm) bottom clearance between finish grade or surface and bottom selvage unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.
 - J. Fasteners: Install nuts for tension bands and carriage bolts on the side of fence opposite the fabric side.
- 3.4 GROUNDING AND BONDING
- A. Fence and Gate Grounding:
 1. Install ground rods and connections at maximum intervals of 1500 feet (450 m).
 2. Fences within 100 Feet (30 m) of Buildings, Structures, Walkways, and Roadways: Ground at maximum intervals of 750 feet (225 m).
 - B. Protection at Crossings of Overhead Electrical Power Lines: Ground fence at location of crossing and at a ground rod located a maximum distance of 150 feet (45 m) on each side of crossing.

- C. Grounding Method: At each grounding location, drive a grounding rod vertically until the top is 6 inches (152 mm) below finished grade. Connect rod to fence with No. 6 AWG conductor. Connect conductor to each fence component at grounding location.
- D. Connections:
 - 1. Make connections with clean, bare metal at points of contact.
 - 2. Make above-grade ground connections with mechanical fasteners.
 - 3. Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.

END OF SECTION 32 3113

SECTION 32 3119 - DECORATIVE METAL FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Decorative aluminum fences.
 - 2. Swing gates.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For fencing and gates.
 - 1. Include plans, elevations, sections, and attachment details.

1.4 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.
- B. Product test reports.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance data.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Fabricator of products.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Lightning-Protection System: Maximum grounding-resistance value of 25 ohms under normal dry conditions.

2.2 FENCING

- A. Basis of Design; Aluminum Ornamental Fence, 48 inch height, Ultra Aluminum Manufacturing, Inc, Howell, Michigan, Style; UAF 200 Flat Top Commercial Fence, or approved equal.

2.3 SWING GATES

- A. Basis of Design; Aluminum Ornamental Walk Gate by Ultra Aluminum Manufacturing, Inc, Howell, Michigan, Style; UAF 200 W Commercial Walk Gate, or approved equal. Match fencing height.
- B. Aluminum Finish: Baked enamel or powder coating per manufacture.

2.4 ALUMINUM

- A. Extrusions: **ASTM B221 (ASTM B221M)**, Alloy 6063-T5.
- B. Tubing: ASTM B429/B429M, Alloy 6063-T6.
- C. Castings: ASTM B26/B26M, Alloy A356.0-T6.

2.5 MISCELLANEOUS MATERIALS

- A. Concrete: Normal-weight, air-entrained, ready-mix concrete complying with requirements in Section 03 3000 "Cast-in-Place Concrete" with a minimum 28-day compressive strength of **3000 psi**

2.6 METALLIC-COATED-STEEL FINISHES

- A. Powder Coating: Immediately after cleaning and pretreating, apply manufacturer's standard TGIC polyester powder-coat finish to a minimum dry film thickness of **2 mils (0.05 mm)** or per manufactures standard
 - 1. Color and Gloss: Black.

PART 3 - EXECUTION

3.1 DECORATIVE FENCE INSTALLATION

- A. Install fences according to manufacturer's written instructions.
- B. Install fences by setting posts as indicated and fastening rails and infill panels to posts.
- C. Post Excavation: Drill or hand-excavate holes for posts in firm, undisturbed soil. Excavate holes to a diameter of not less than 4 times post size and a depth of not less than **24 inches (600 mm)** plus **3 inches (75 mm)** for each **foot (300 mm)** or fraction of a **foot (300 mm)** that fence height exceeds **4 feet (1.2 m)**.
- D. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.

3.2 GATE INSTALLATION

- A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

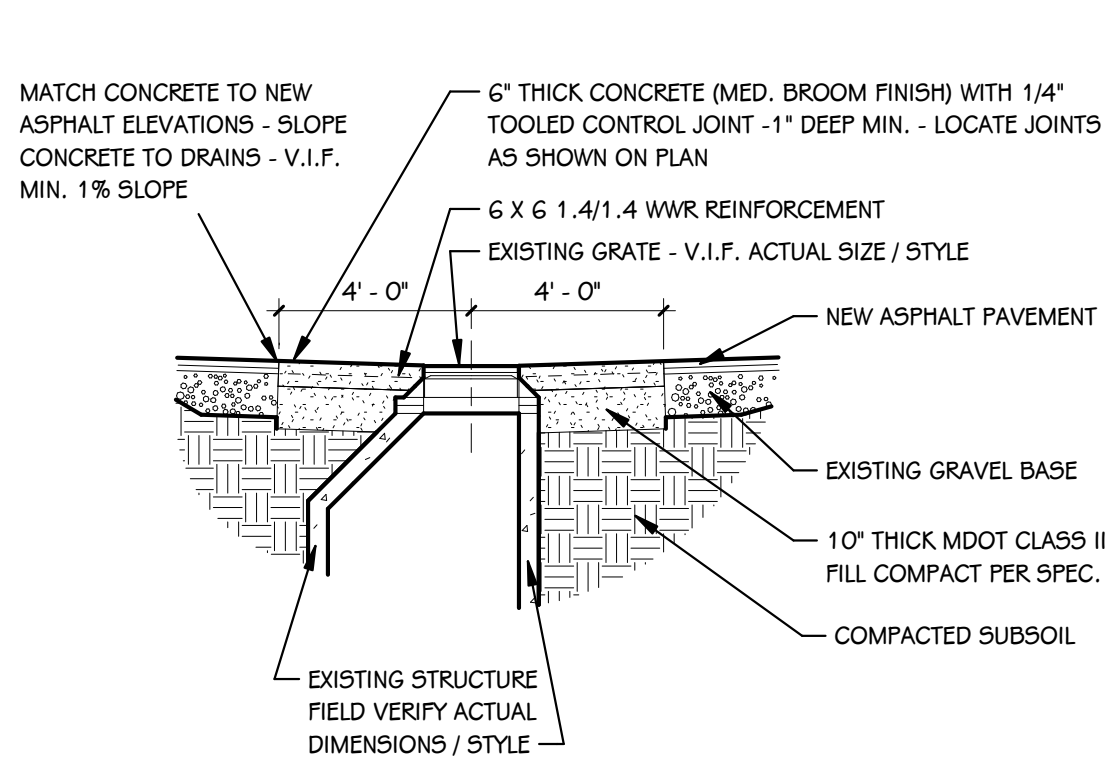
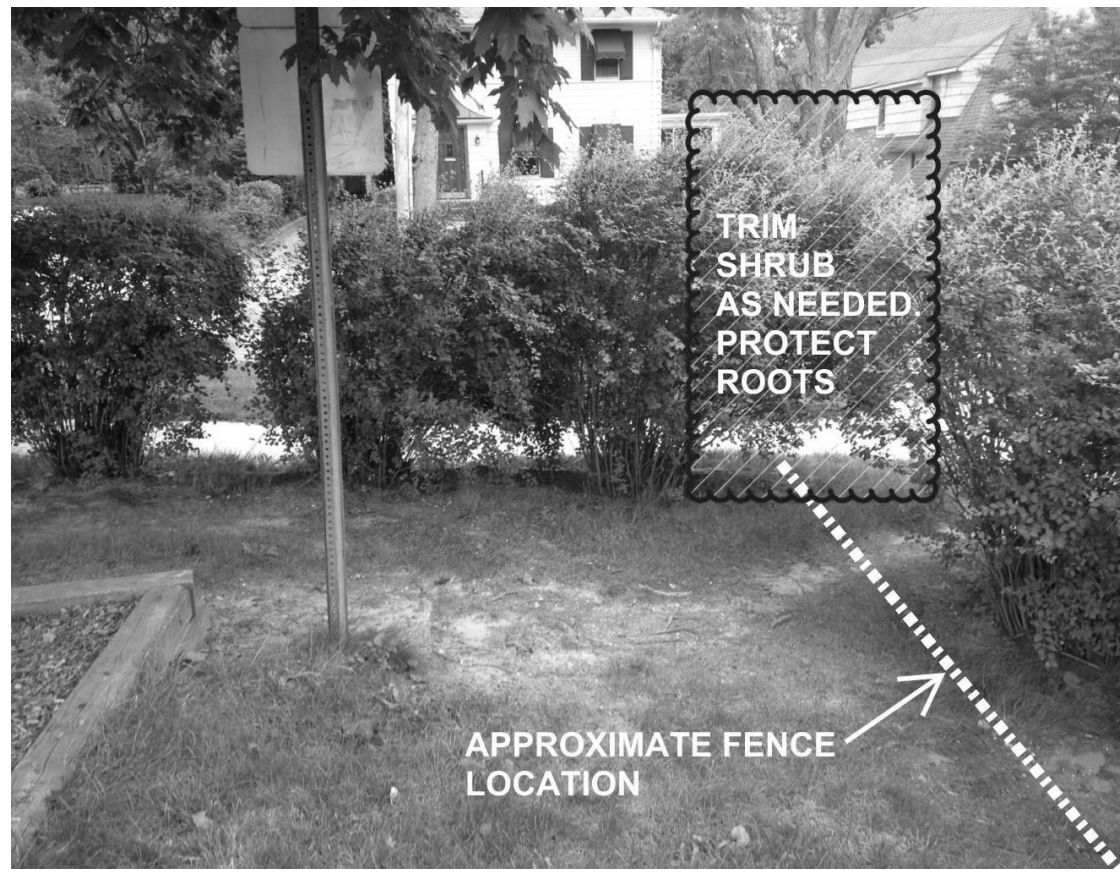
3.3 GROUNDING AND BONDING

- A. Fence Grounding: Install at maximum intervals of 1500 feet (450 m) except as follows:
 1. Fences within 100 Feet (30 m) of Buildings, Structures, Walkways, and Roadways: Ground at maximum intervals of 750 feet (225 m).
 - a. Gates and Other Fence Openings: Ground fence on each side of opening.
- B. Grounding Method: At each grounding location, drive a grounding rod vertically until the top is 6 inches (150 mm) below finished grade. Connect rod to fence with No. 6 AWG conductor. Connect conductor to each fence component at grounding location.
- C. Bonding Method for Gates: Connect bonding jumper between gate post and gate frame.
- D. Connections: Make connections so possibility of galvanic action or electrolysis is minimized. Select connectors, connection hardware, conductors, and connection methods so metals in direct contact are galvanically compatible.
- E. Bonding to Lightning-Protection System: If fence terminates at lightning-protected building or structure, ground the fence and bond the fence grounding conductor to lightning-protection down conductor or lightning-protection grounding conductor, complying with NFPA 780.

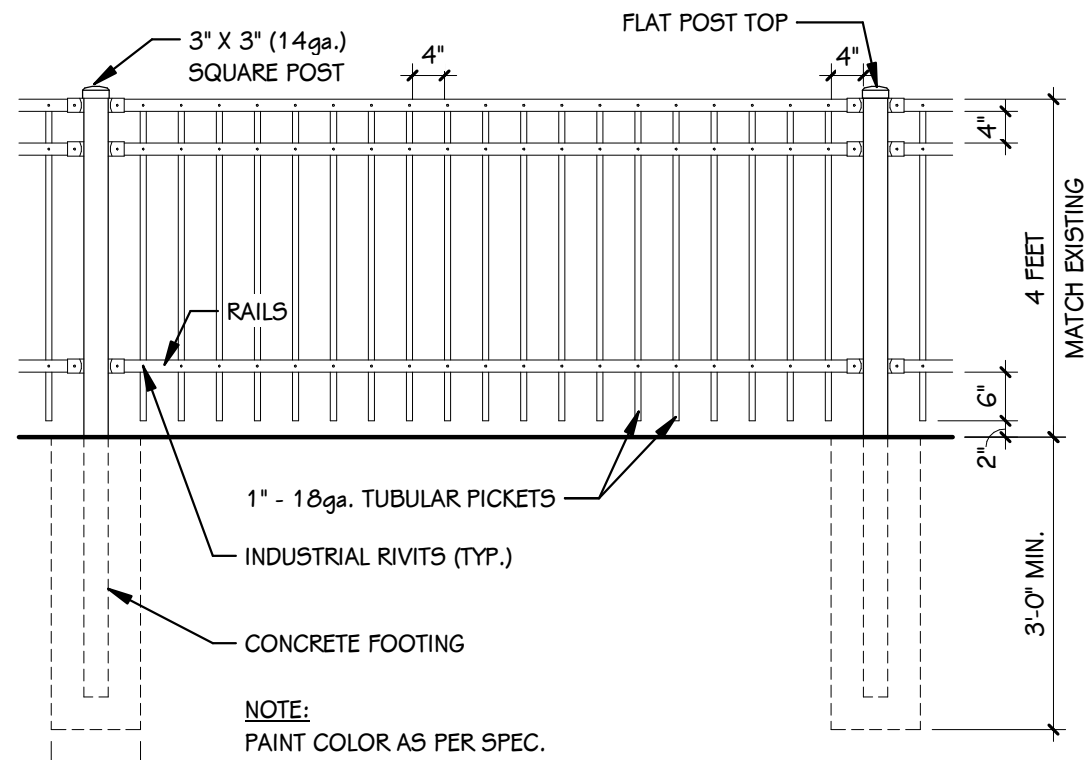
3.4 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
 1. Grounding-Resistance Tests: Subject completed grounding system to a megger test at each grounding location. Measure grounding resistance not less than two full days after last trace of precipitation, without soil having been moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural grounding resistance. Perform tests by two-point method according to IEEE 81.

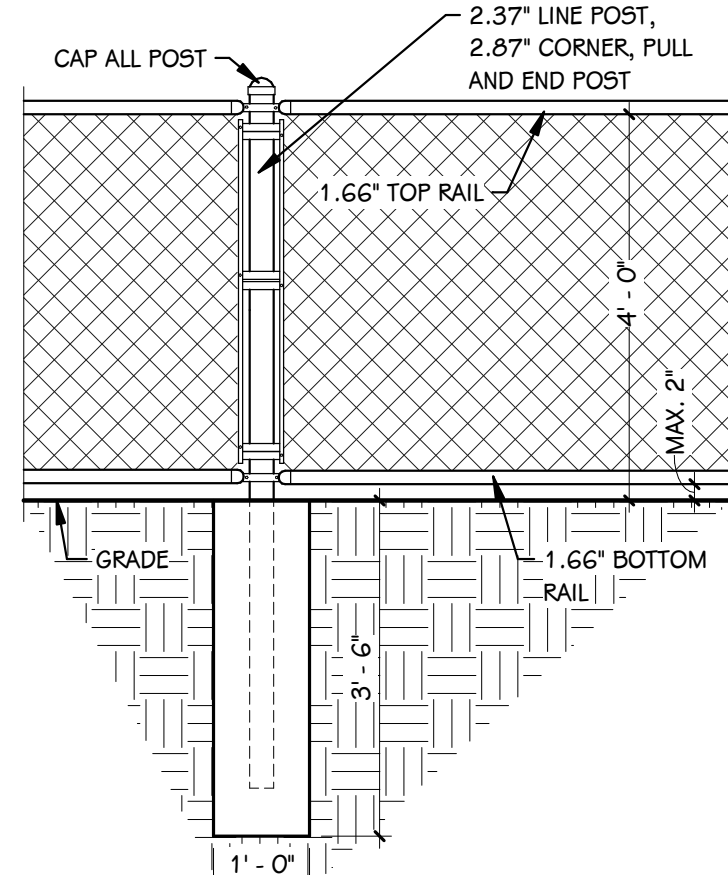
END OF SECTION 32 3119



CONCRETE PAVEMENT DRAIN DETAIL
1/4" = 1'-0"



ORNAMENTAL FENCE
1/2" = 1'-0"



CHAIN LINK FENCE DETAIL
1/2" = 1'-0"

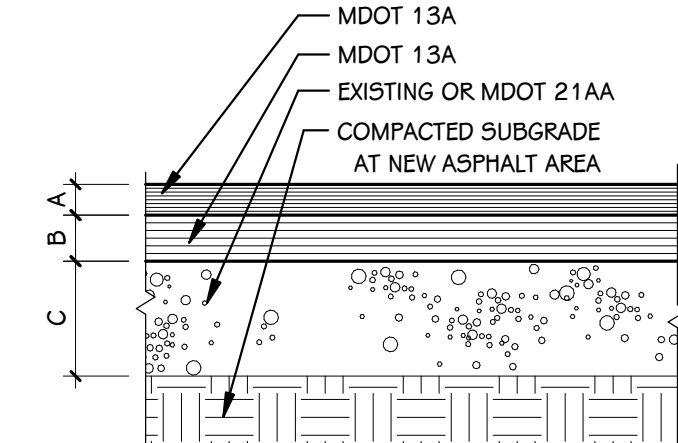
SITE PLAN NOTES

1. CALL "MISS DIG" AND HAVE EXISTING UTILITY LOCATIONS MARKED PRIOR TO ANY EXCAVATIONS OR INSTALLATIONS ON SITE.
2. EXISTING INFORMATION SHOWN HEREIN IS APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.
3. DOCUMENT EXISTING CONDITIONS AND ELEVATIONS PRIOR TO DEMOLITION. MATCH ALL EXISTING ELEVATIONS AND DRAINAGE PATTERNS. NO PONDING IN ANY AREAS. MIN. 1% SLOPE, MAX. 5% SLOPE, V.I.F.
4. COORDINATE ALL WORK AND PERMITTING WITHIN THE ROAD RIGHT-OF-WAY WITH THE CITY OF KALAMAZOO.
5. PROTECT ALL EXISTING TREES IDENTIFIED TO REMAIN. DO NOT STOCKPILE MATERIAL OR OPERATE EQUIPMENT WITHIN THE TREES DRIP LINE/ROOT ZONE.
6. SEED AND TOPSOIL ALL DISTURBED AREAS AS STATED IN THE SPECIFICATIONS.

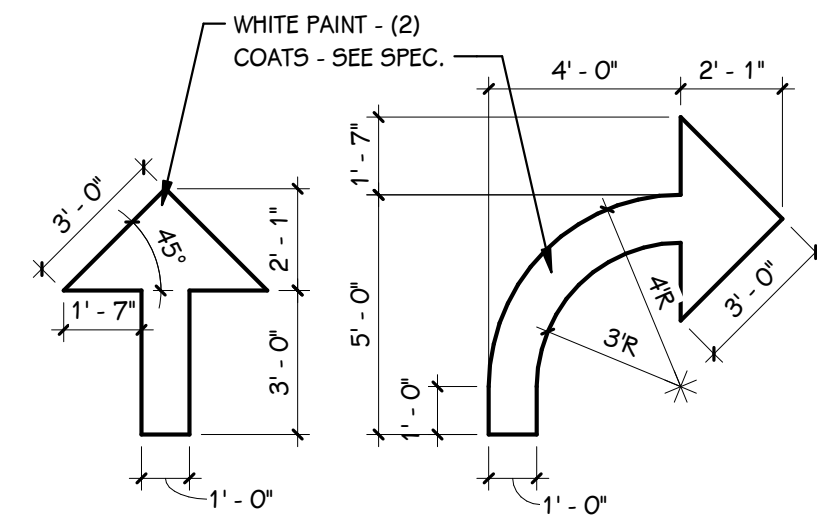
LEGEND

- REMOVE AND REPLACE ASPHALT PAVEMENT. EXISTING GRAVEL TO REMAIN. MATCH ALL EXISTING ELEVATIONS AND DRAINAGE PATTERNS
- NEW ASPHALT PAVEMENT WITH NEW GRAVEL BASE, SEE DETAIL. MATCH TO EXISTING ELEV. PITCH TO DRAIN TO EX. C.B., V.I.F.

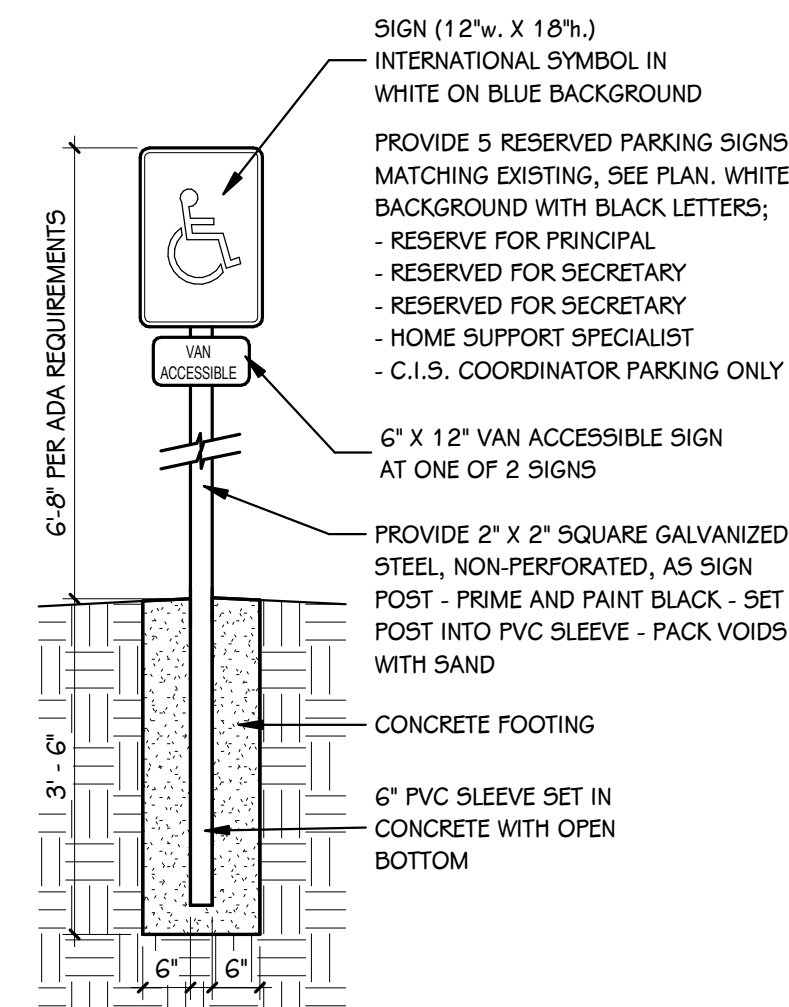
DIM.	EXISTING	NEW
A	1 1/2"	1 1/2"
B	1 1/2"	1 1/2"
C	EXISTING	8"



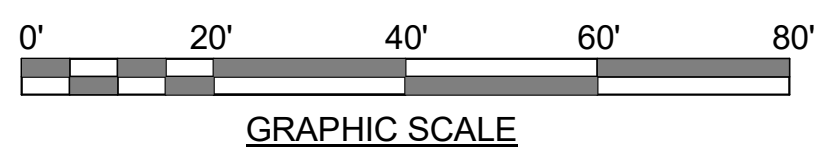
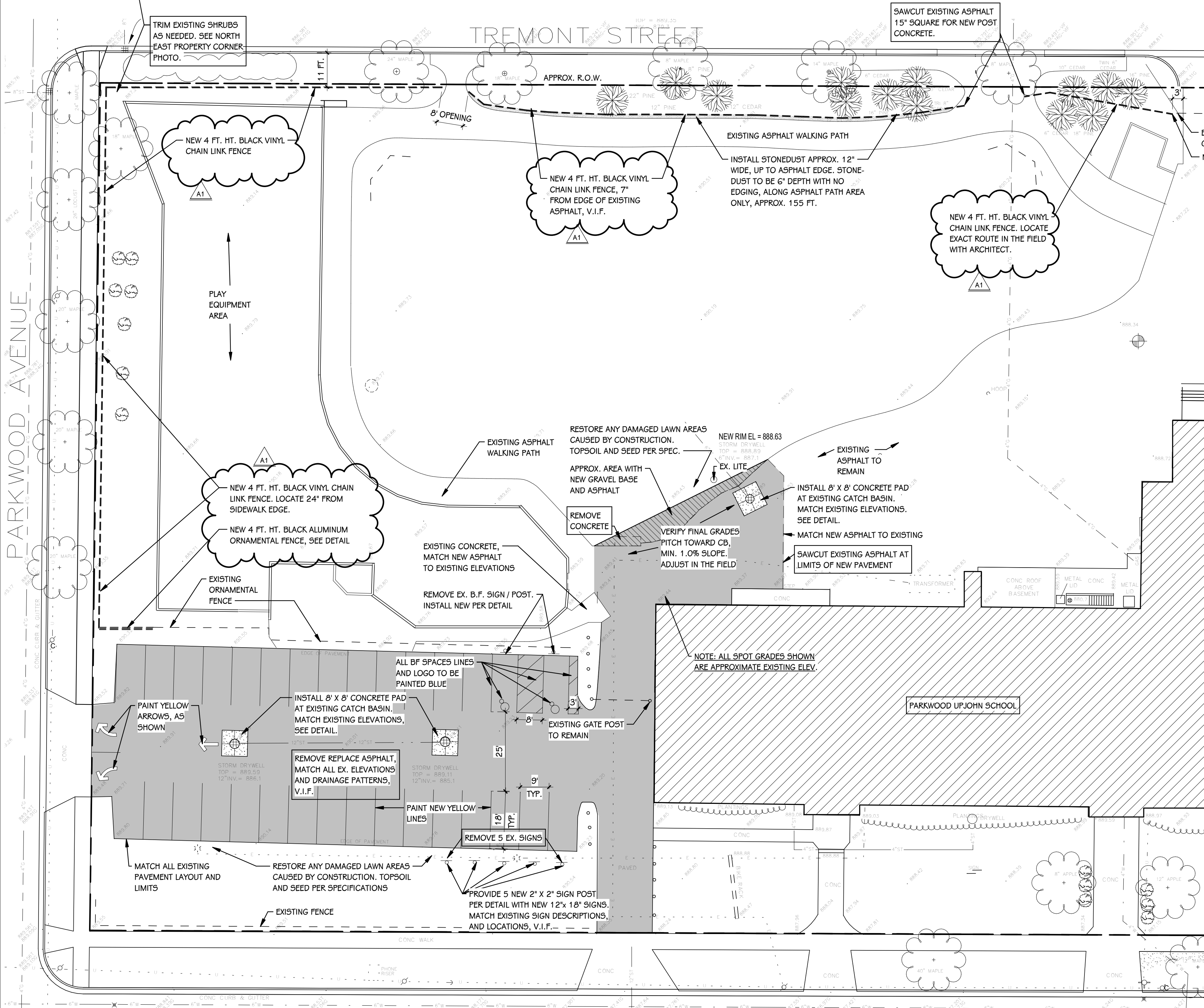
ASPHALT PAVING DETAIL
1/8" = 1'-0"



PAINT ARROWS DETAIL
1/4" = 1'-0"



SIGN DETAIL
1/2" = 1'-0"



SITE PLAN
1" = 20'-0"

SOUTH BLDG. FENCE PLAN
1" = 20'-0"

ADDENDUM No. 1

DEC. 6, 2021

ISSUED FOR

DATE

PROJECT TITLE
PARKWOOD-UPJOHN
ELEMENTARY SCHOOL
REMODEL AND SITE
IMPROVEMENTS

OWNER
KALAMAZOO PUBLIC
SCHOOLS

Kalamazoo, Michigan

SHEET TITLE
LANDSCAPE PLAN

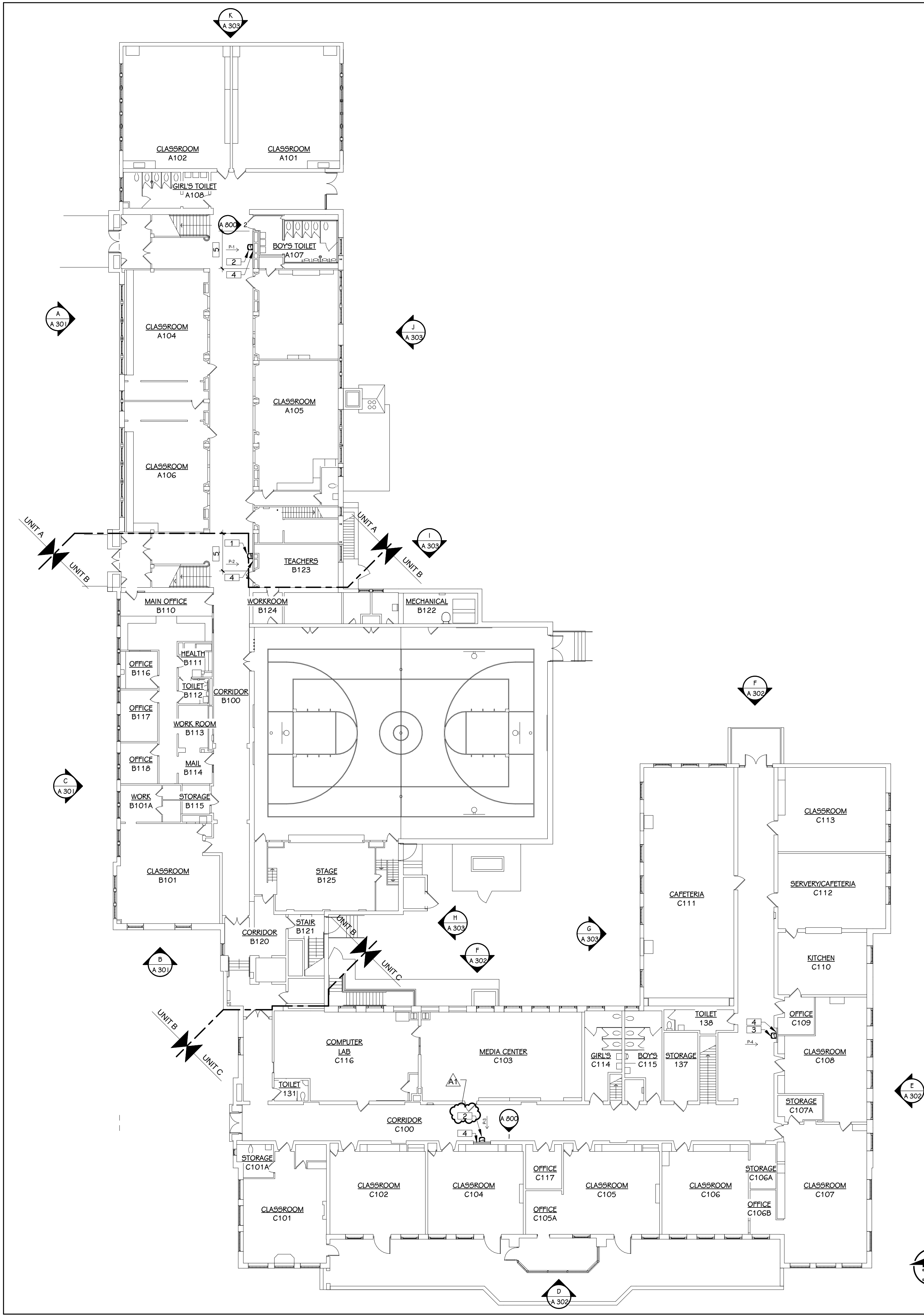
DATE
NOVEMBER 1, 2021

SHEET NUMBER
L 001
18-526.00

TowerPinkster

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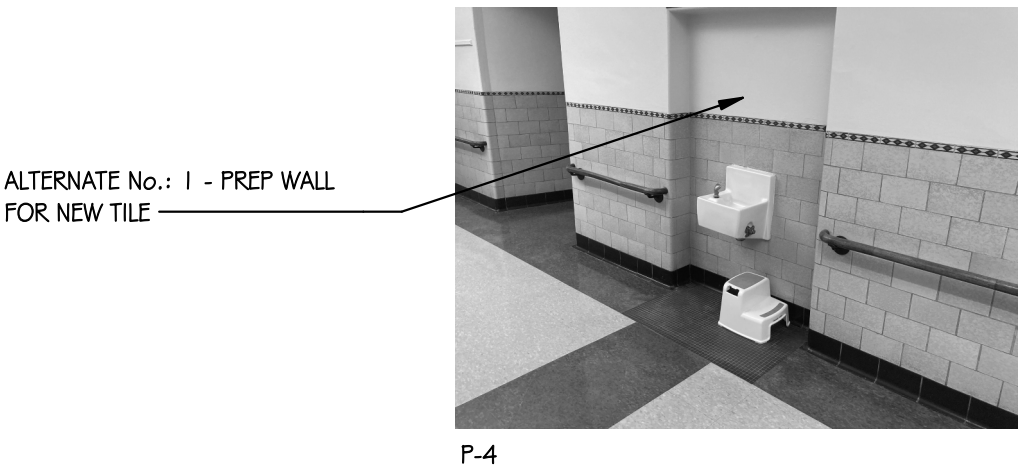
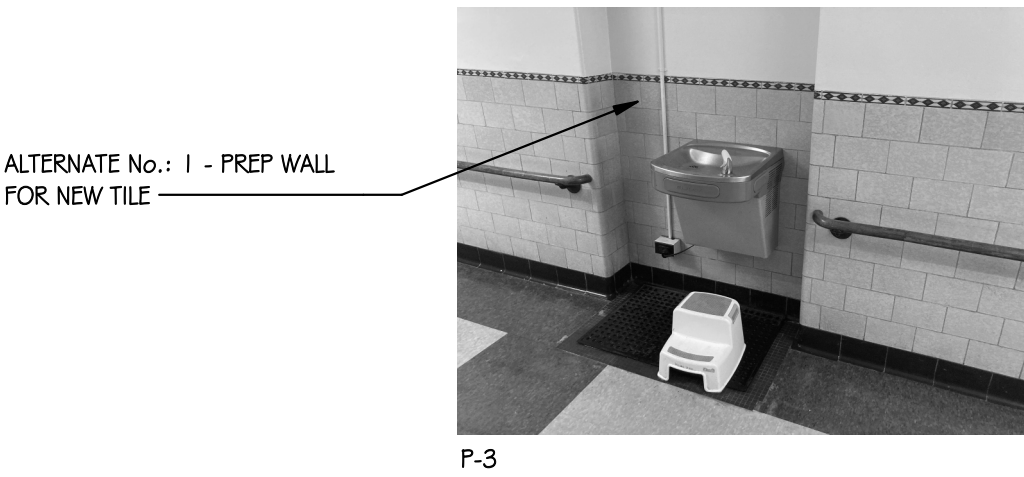
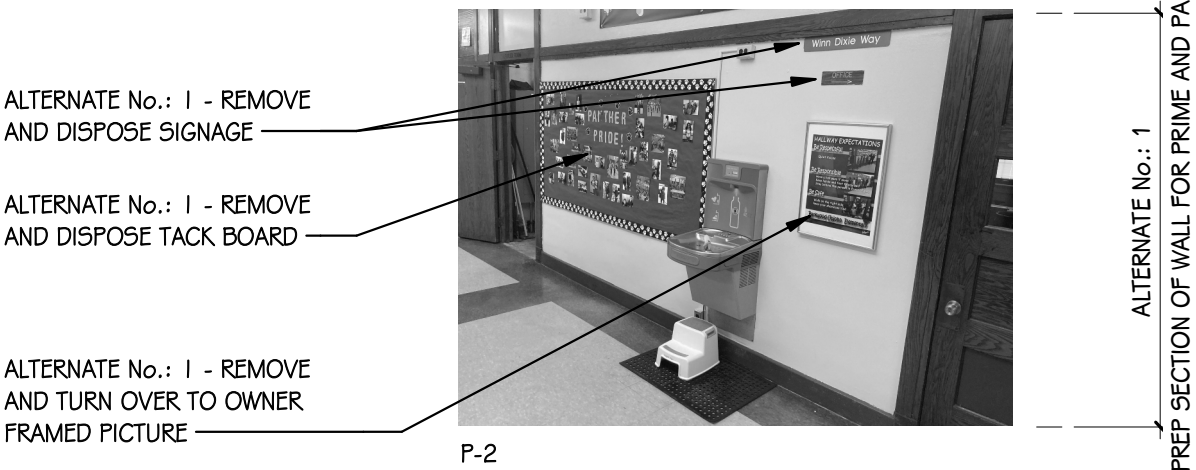
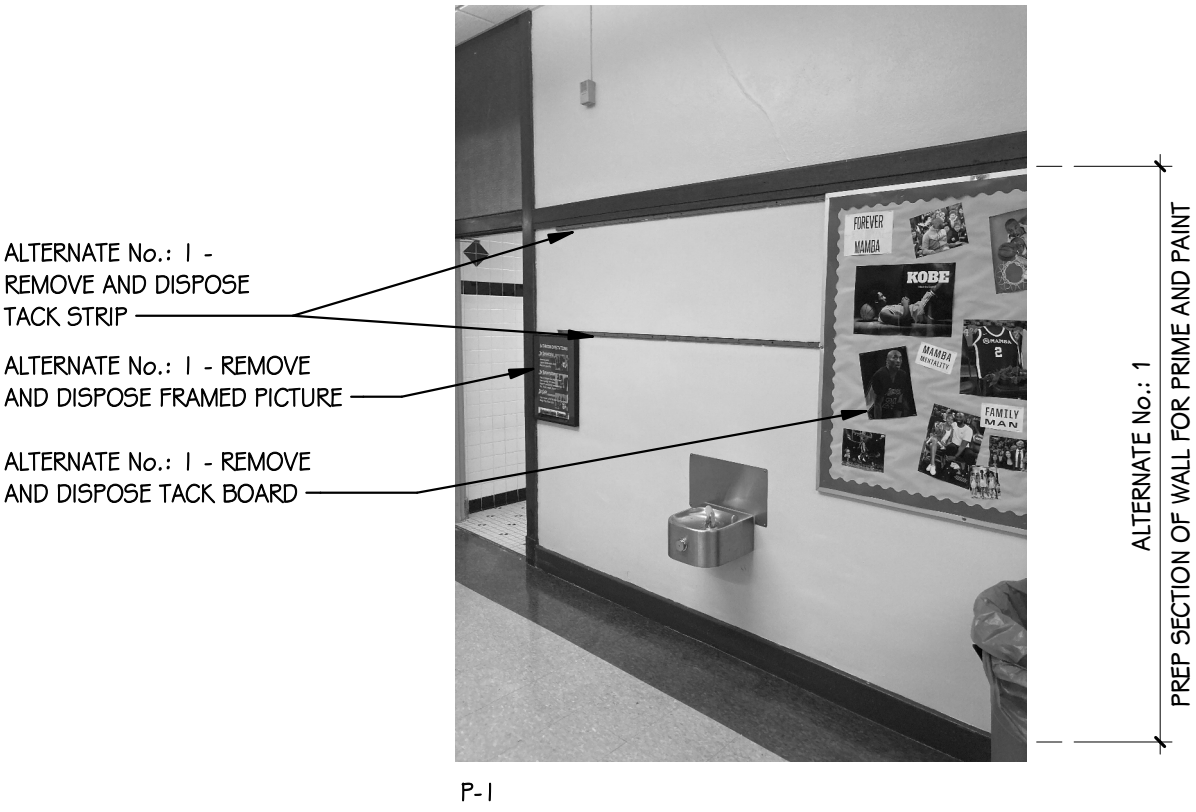
NOTE:
REFER TO MECHANICAL BASEMENT
DEMOLITION PLAN FOR DOOR DEMOLITION
IN BASEMENT. DOOR AND ALL HARDWARE
TO BE REMOVED AND DISPOSED. DOOR
FRAME TO REMAIN.



OVERALL FIRST FLOOR DEMOLITION PLAN
1/16" = 1'-0"

KEYED NOTES - DEMOLITION

- 1 ALTERNATE No.: 1 - REMOVE EWC AND SALVAGE FOR REUSE., PREPARE TO REINSTALL
- 2 REMOVE AND DISPOSE EXISTING SS DRINKING FOUNTAIN AND PREPARE WALL FOR NEW EWC
- 3 REMOVE AND DISPOSE EXISTING DRINKING FOUNTAIN AND PREPARE WALL TO INSTALL NEW EWC
- 4 ALTERNATE No.: 1- PREPARE EXISTING WALL FOR NEW WALL TILE INSTALLATION
- 5 ALTERNATE No.: 1- REMOVE AND DISPOSE EXISTING TACKBOARD, TACKSTRIPS, AND SIGNAGE. PREP WALL FOR NEW WALL FINISH. THIS SCOPE IS UP TO WOOD TRIM AT TOP OF DOOR HEIGHT.
- 6 REMOVE AND DISPOSE EXISTING 8X4 SMART WHITE BOARD



PROJECT TITLE
PARKWOOD-UPJOHN
ELEMENTARY SCHOOL
REMODEL AND SITE
IMPROVEMENTS

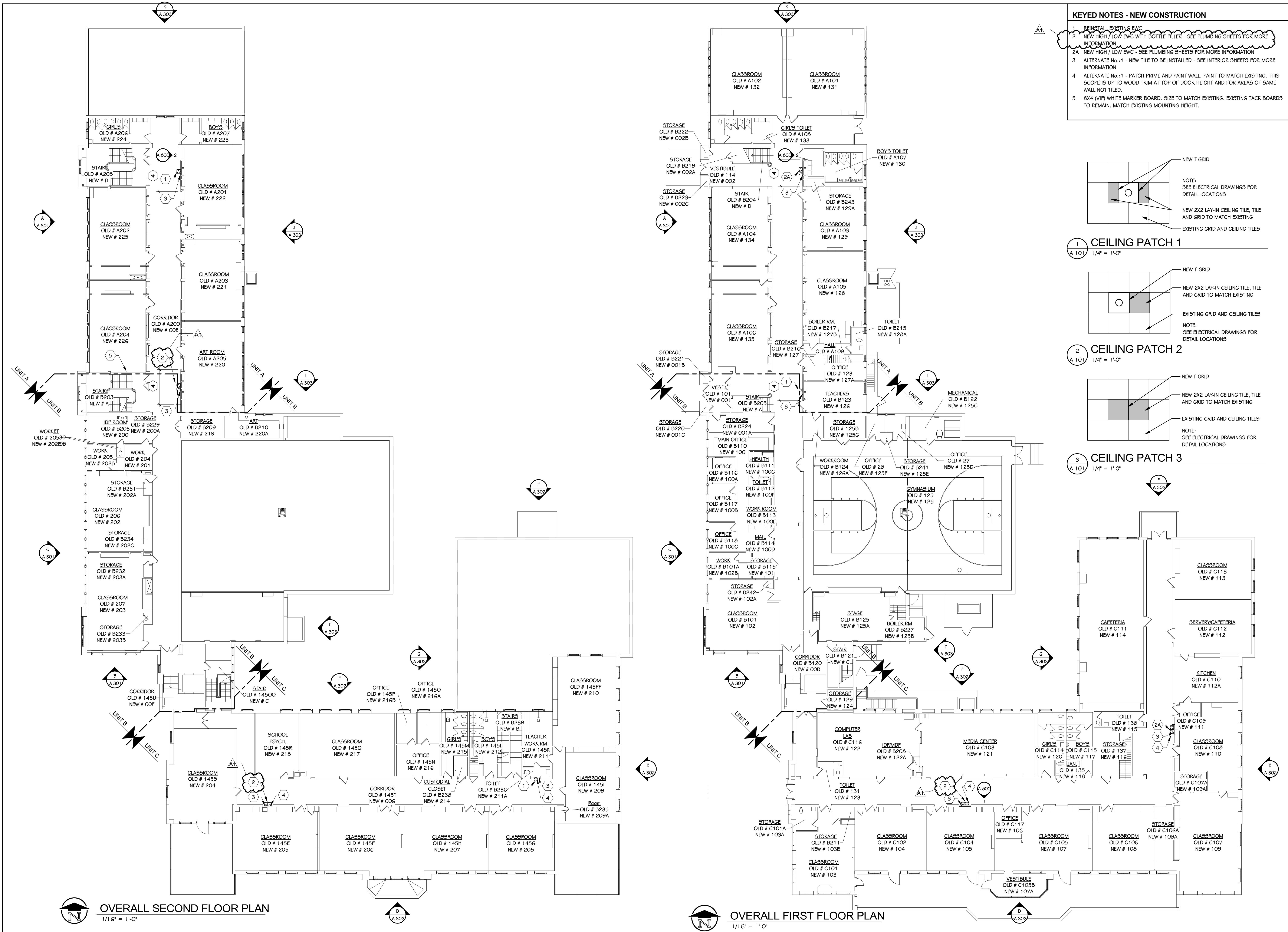
OWNER
KALAMAZOO PUBLIC
SCHOOLS

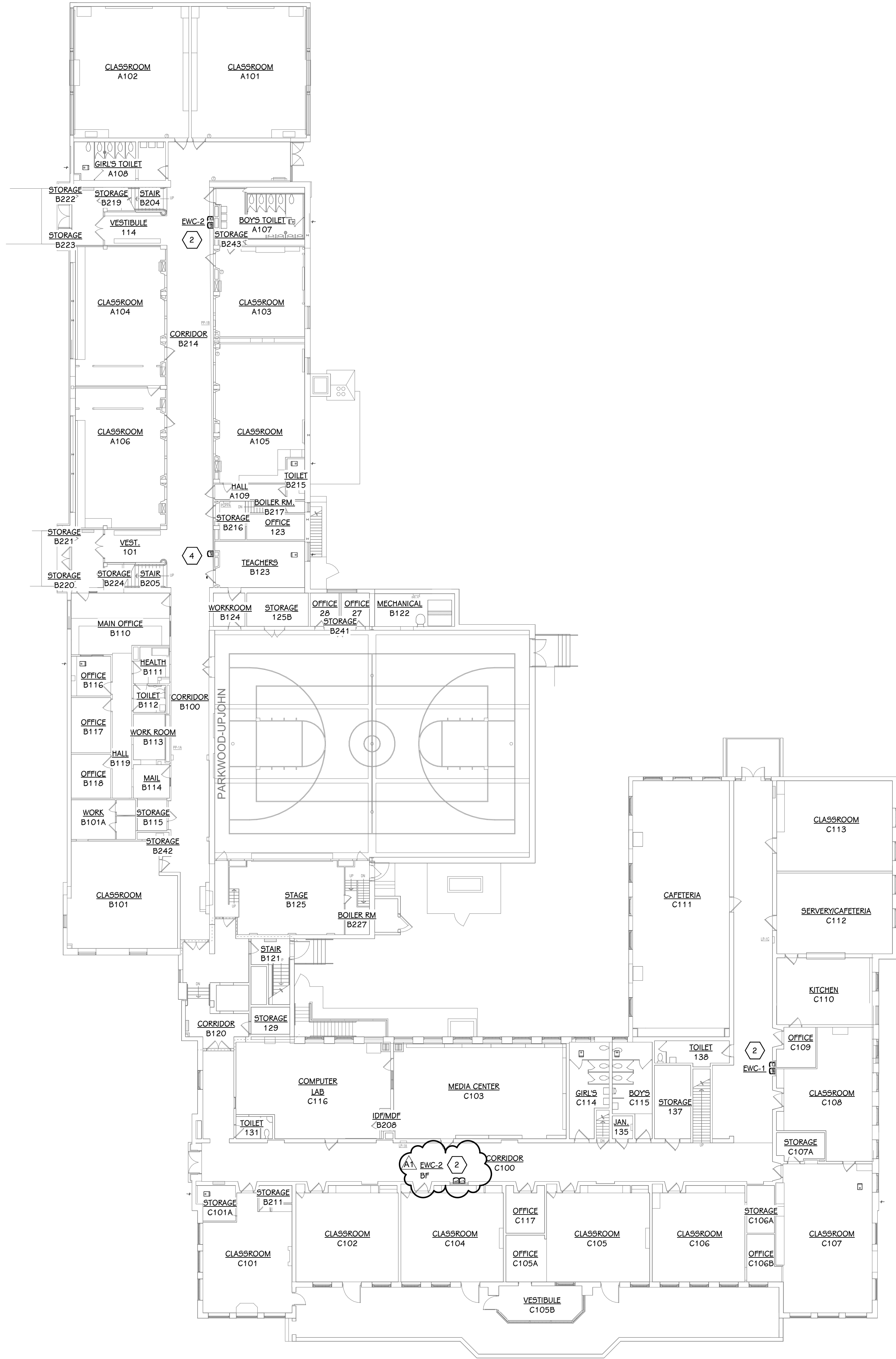
KALAMAZOO, MICHIGAN

SHEET TITLE
OVERALL FIRST FLOOR DEMOLITION
PLAN

SHEET NUMBER
AD 101
18-526.00

DATE
NOVEMBER 1, 2021





FIRST FLOOR PLUMBING PLAN
1/16" = 1'-0"

- GENERAL PLUMBING NOTES
- 1

DETAILS SHOWN ILLUSTRATE DESIGN INTENT, NOT ALL POSSIBLE CONDITIONS. DRAWINGS ARE NOT TO BE CONSIDERED FABRICATION DRAWINGS.
- 2

IF THE CONTRACTOR ELECTS TO PROVIDE EQUIPMENT OTHER THAN BASIS OF DESIGN, THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE LAYOUT AND CLEARANCE REQUIREMENTS IN ALL SPACES CONTAINING EQUIPMENT AND PROVIDE EQUIPMENT MEETING THE SPECIFICATIONS AND ACHIEVING CODE REQUIRED CLEARANCES WITHIN THE SPACE PROVIDED.
- 3

COORDINATE ALL NEW CONSTRUCTION WORK OR ACTIVITY WITH THAT WHICH IS REQUIRED BY OTHER TRADES OR INSTALLERS IN ORDER TO PROVIDE A COMPLETE SYSTEM INCLUDING ALL NECESSARY COMPONENTS, FITTINGS, AND OFFSETS.
- 4

INSTALLER SHALL VERIFY ALL EXISTING JOBSITE CONDITIONS AND DIMENSIONS AND BE RESPONSIBLE FOR THE SAME. NOTIFY THE ENGINEER OF DISCREPANCIES PRIOR TO COMMENCING WORK.
- 5

FIRE SEAL ALL PENETRATIONS, SUCH AS PIPES, DUCTS, CONDUIT, ETC. THROUGH FIRE AND/OR SMOKE RATED ASSEMBLIES.
- 6

MECHANICAL INSTALLER IS RESPONSIBLE FOR PATCHING OF WALLS, CEILINGS, AND FLOORS WHERE FIXTURES, MECHANICAL EQUIPMENT, SHEET METAL, OR PIPING HAS BEEN REMOVED, RELOCATED, OR INSTALLED.
- 7

ALL PIPING SHALL AVOID LOCATIONS DIRECTLY ABOVE ALL ELECTRICAL EQUIPMENT. COORDINATE WITH ELECTRICAL.
- 8

UNLESS SPECIFICALLY NOTED AS NON-ASBESTOS CONTAINING MATERIAL, ALL THERMAL SYSTEMS SHALL BE ASSUMED TO CONTAIN ASBESTOS. OWNER SHALL ABATE ALL ASBESTOS CONTAINING MATERIAL IDENTIFIED BY THE INSTALLER TO BE REMOVED.
- 9

THE OWNER SHALL BE RESPONSIBLE FOR RELOCATING ALL MISCELLANEOUS FURNITURE AND EQUIPMENT ITEMS (NOT PHYSICALLY ATTACHED TO THE BUILDING) AWAY FROM THE CONSTRUCTION SITE.

- PLUMBING KEYED NOTES
- 1

PROVIDE GROUNDING JUMPER ACROSS METER.
- 2

CONNECT EWC TO EXIST CW, SAN, AND VENT.
- 3

PROVIDE CAP AT OPEN END.
- 4

ALTERNATE No.1 - REINSTALL SALVAGED EWC. CONNECT TO EXIST CW, SAN, AND VENT.
- 5

TIE INTO EXIST.
- 6

CONNECT NEW 3/4" TO EXIST.
- 7

TO EXIST WALL HYDRANT.
- 8

EXIST HWR PUMP.
- 9

EXIST WH.
- 10

MAINTAIN 42" OF CLEARANCE INFRONT OF ALL ELECTRICAL PANELS.
- 11

RACK PIPES ON THE SOUTH WALL TO MAINTAIN TUNNEL ACCESS.
- 12

INSTALL NEW REDUCED PRESSURE PRINCIPAL BACK FLOW PREVENTOR WITH STRAINER UP STREAM. PROVIDE AIR GAP DRAIN FITTING AND PIPE TO FLOOR DRAIN.

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Kalamazoo, Michigan 49001-7528
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TOWERPINKSTER

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PROJECT TITLE

PARKWOOD-UPJOHN
ELEMENTARY SCHOOL
REMODEL AND SITE
IMPROVEMENTS

OWNER

KALAMAZOO PUBLIC
SCHOOLS

SHEET TITLE

FIRST FLOOR PLUMBING PLAN

DATE

NOVEMBER 1, 2021

SHEET NUMBER

P 101

18-526.00

ADDENDUM No. 1

DECEMBER 6, 2021

ISSUED FOR

DATE

KALAMAZOO, MICHIGAN


$$1/16'' = 1'-0''$$

1 DETAILS SHOWN ILLUSTRATE DESIGN INTENT, NOT ALL POSSIBLE
CONDITIONS. DRAWINGS ARE NOT TO BE CONSIDERED FABRICATION
DRAWINGS.

2 IF THE CONTRACTOR ELECTS TO PROVIDE EQUIPMENT OTHER THAN
BASIS OF DESIGN, THE CONTRACTOR SHALL BE RESPONSIBLE TO
COORDINATE THE LAYOUT AND CLEARANCE REQUIREMENTS IN ALL
SPACES CONTAINING EQUIPMENT AND PROVIDE EQUIPMENT MEETING
THE SPECIFICATIONS AND ACHIEVING CODE REQUIRED CLEARANCES
WITHIN THE SPACE PROVIDED.

3 COORDINATE ALL NEW CONSTRUCTION WORK OR ACTIVITY WITH THAT
WHICH IS REQUIRED BY OTHER TRADES OR INSTALLERS IN ORDER TO
PROVIDE A COMPLETE SYSTEM INCLUDING ALL NECESSARY
COMPONENTS, FITTINGS, AND OFFSETS.

4 INSTALLER SHALL VERIFY ALL EXISTING JOBSITE CONDITIONS AND
DIMENSIONS AND BE RESPONSIBLE FOR THE SAME. NOTIFY THE
ENGINEER OF DISCREPANCIES PRIOR TO COMMENCING WORK.

5 FIRE SEAL ALL PENETRATIONS, SUCH AS PIPES, DUCTS, CONDUIT, ETC
THROUGH FIRE AND/OR SMOKE RATED ASSEMBLIES.

6 MECHANICAL INSTALLER IS RESPONSIBLE FOR PATCHING OF WALLS,
CEILINGS, AND FLOORS WHERE FIXTURES, MECHANICAL EQUIPMENT,
SHEET METAL, OR PIPING HAS BEEN REMOVED, RELOCATED, OR
INSTALLED.

7 ALL PIPING SHALL AVOID LOCATIONS DIRECTLY ABOVE ALL ELECTRICAL
EQUIPMENT. COORDINATE WITH ELECTRICAL.

8 UNLESS SPECIFICALLY NOTED AS NON-ASBESTOS CONTAINING
MATERIAL, ALL THERMAL SYSTEMS SHALL BE ASSUMED TO CONTAIN
ASBESTOS. OWNER SHALL ABATE ALL ASBESTOS CONTAINING
MATERIAL IDENTIFIED BY THE INSTALLER TO BE REMOVED.

9 THE OWNER SHALL BE RESPONSIBLE FOR RELOCATING ALL
MISCELLANEOUS FURNITURE AND EQUIPMENT ITEMS (NOT PHYSICALLY
ATTACHED TO THE BUILDING) AWAY FROM THE CONSTRUCTION SITE.

- 11 RACK PIPES ON THE SOUTH WALL TO MAINTAIN TUNNEL ACCESS.

DECEMBER
6, 2021

DATE _____

PROJECT TITLE




















































































OWNER

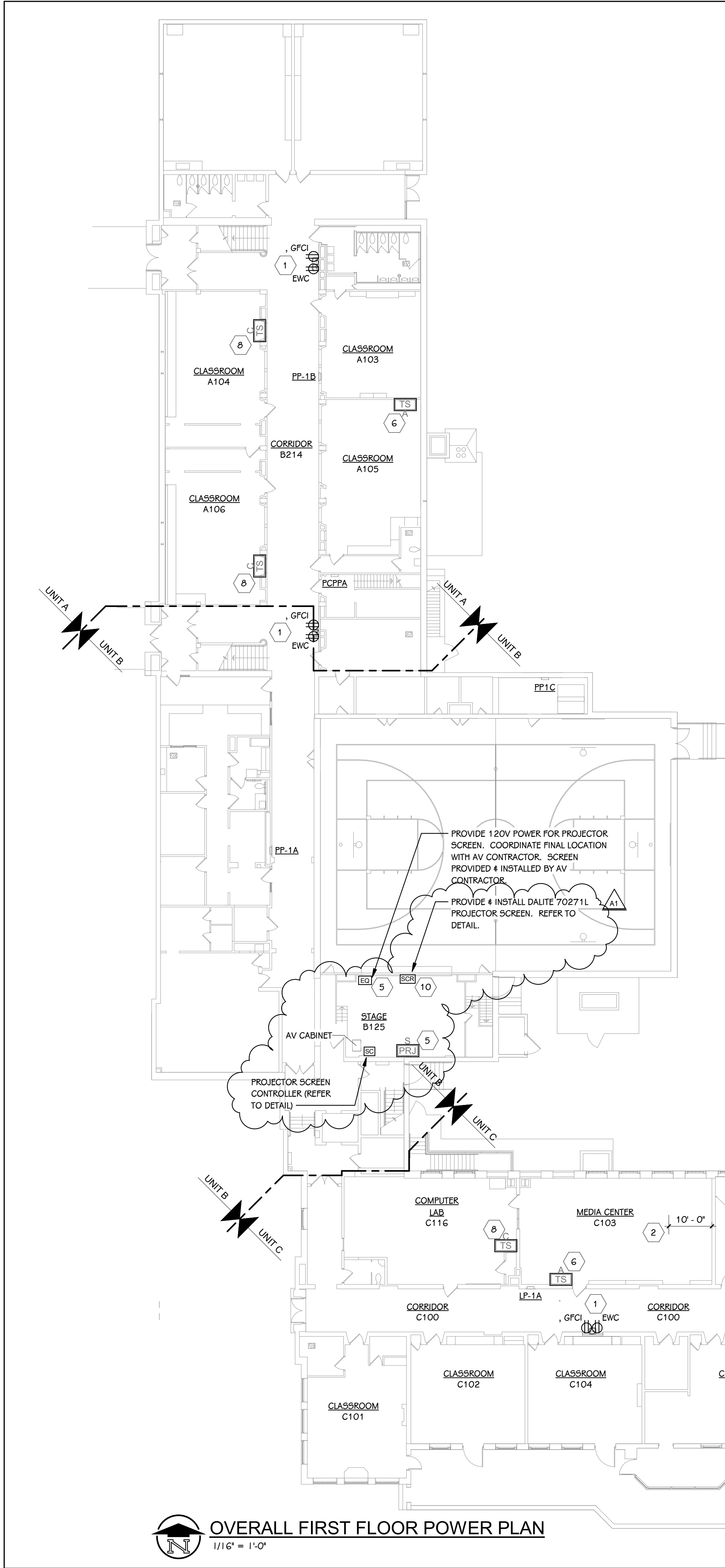
KALAMAZOO, MICHIGAN

SHEET TITLE

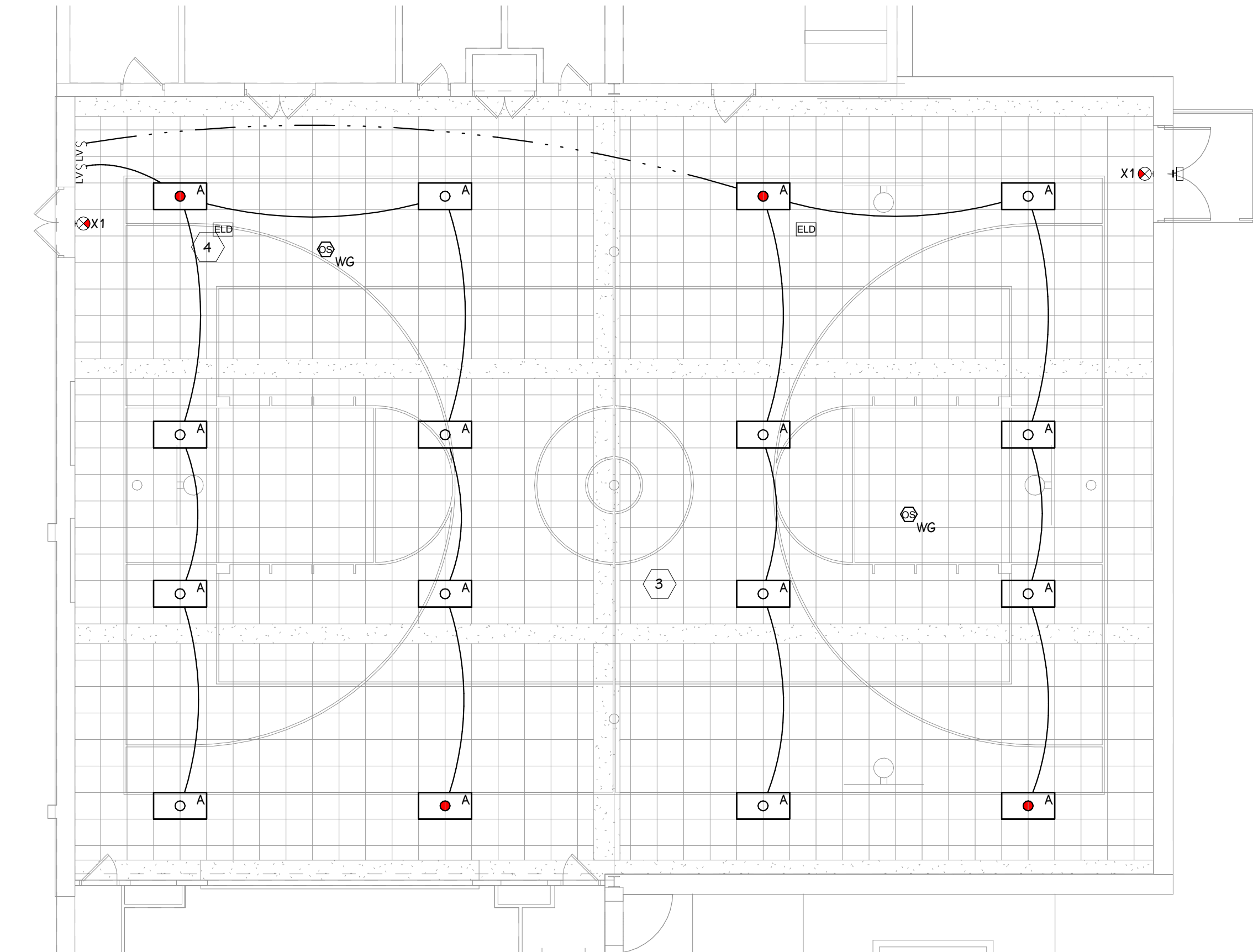
SHEET NUMBER

18-526.00

LIGHTING SYMBOLS		MOUNTING HEIGHTS		POWER SYMBOLS		MOUNTING HEIGHTS	
S	SINGLE POLE SWITCH		40"		ELECTRIC METER		
Sos	OCCUPANCY SENSOR (SET TO VACANCY MODE) - SWITCH MOUNTED		40"		SURGE PROTECTION DEVICE		
SLV-a	LOW VOLTAGE CONTROL SWITCH, REFER TO DETAIL		40"		MOTOR CONTROL CENTER		90" TO TOP
S3	THREE-WAY SWITCH		40"		PANELBOARD		72" TO TOP
S4	FOUR-WAY SWITCH		40"		DISTRIBUTION PANELBOARD		72" TO TOP
Sb	DIMMER SWITCH (NON-SYSTEM TYPE) 0-10 ELV DIMMER		40"		ELECTRICAL EQUIPMENT CONNECTION - REFER TO CONNECTION SCHEDULES FOR FEEDER SIZE, BREAKERS, DISCONNECT MEANS ETC.		
Sp	SWITCH AND PILOT LIGHT		40"		TEMPERATURE CONTROL PANEL		72" TO TOP
Sk	KEY OPERATED, SINGLE POLE SWITCH		40"		DISCONNECT SWITCH - UNFUSED		
SKk	KEY OPERATED, THREE-WAY SWITCH		40"		DISCONNECT SWITCH - FUSED		
SKk	KEY OPERATED, FOUR-WAY SWITCH		40"		COMBINATION DISCONNECT/MAGNETIC MOTOR STARTER		
SS	DUAL SINGLE POLE SWITCH		40"		MANUAL MOTOR STARTER WITH PILOT LIGHT		40"
SSS3	DUAL THREE-WAY SWITCH		40"		BUSSMANN "SSU" W/FUSES		
	OCCUPANCY SENSOR (SET TO VACANCY MODE) CEILING MOUNTED				VARIABLE FREQUENCY DRIVE		
	OCCUPANCY SENSOR (SET TO VACANCY MODE) - WALL MOUNTED		88"		MOTOR - HP AS INDICATED		
	LOCAL, NON-SYSTEM 0-10V DIMMING CONTROLLER, SEE DETAIL		40"		FUSE		
	EMERGENCY LIGHTING DEVICE - UL924 EMERGENCY SWITCHING DEVICE (FORMERLY GTD)				CIRCUIT BREAKER		
	EMERGENCY BATTERY UNIT		88"		CIRCUIT BREAKER - ELECTRONIC TRIP		
	WALL MTD. LIGHT FIXTURE				SWITCH		
	DOWNLIGHT FIXTURE				POWER FACTOR CORRECTION CAPACITOR		
	DOWNLIGHT WALL WASH FIXTURE				COIL		
	DOWNLIGHT FIXTURE - EMERGENCY, SWITCHABLE				INDICATOR LIGHT (R=RED, G=GREEN, B=BLUE, Y=YELLOW, A=AMBER)		
	RECTANGULAR LIGHT FIXTURE				CURRENT TRANSFORMER		
	RECTANGULAR EMERGENCY LIGHT FIXTURE ON				THERMAL OVERLOADS		
	EMERGENCY POWER, SWITCHABLE				CONTACTS - NORMALLY OPEN		
	INDUSTRIAL LIGHT FIXTURE				CONTACTS - NORMALLY CLOSED		
	TRACK LIGHT - LENGTH AS INDICATED				TRANSFORMER		
	EXIT SIGN - CEILING MOUNTED				RELAY		
	EXIT SIGN - WALL MOUNTED				TRANSFORMER		
	EXTERIOR POLE LIGHT				SYSTEM GROUND - REFER TO SPECIFICATIONS		40"
	EXTERIOR POLE LIGHT - POLE AND BASE PREPARED FOR CAMERA PER DETAIL.				PUSH-BUTTON STATION - 1 HOLE		40"
	PHOTOCONTROL				PUSH-BUTTON STATION - 2 HOLE		40"
					PUSH-BUTTON STATION - 3 HOLE		40"
					EMERGENCY MUSHROOM HEAD PUSH-BUTTON STATION - 1 HOLE		40"
					LIGHTING CONTACTOR		
					TIME CLOCK		72" TO TOP
					JUNCTION BOX - SIZE AND TYPE AS REQUIRED		
					PULL BOX - SIZE AND TYPE AS REQUIRED		
					FLUSH IN-GRADE HAND HOLE		
					DOOR OPERATOR		
RECEPTACLE SYMBOLS							
	DUPLEX RECEPTACLE		16"				
	DUPLEX RECEPTACLE - 4" ABOVE COUNTER BACKSPLASH						
	DUPLEX RECEPTACLE - WET LOCATION ENCLOSURE WITH GFI						
				RECEPTABLES VARIATIONS - HEIGHT PER ABOVE UNLESS INDICATED ON DRAWINGS:			
	DOUBLE DUPLEX RECEPTACLE						
	DUPLEX RECEPTACLE - SURFACE MOUNTED #WM500						
	DUPLEX RECEPTACLE - EMERGENCY						
	DUPLEX RECEPTACLE - WITH GFI						
	DUPLEX RECEPTACLE - FOR ELECTRIC WATER COOLER, WITH GFI						
	DUPLEX RECEPTACLE - WITH (2) USB OUTLETS BETWEEN POWER						
	DUPLEX RECEPTACLE - HORIZONTAL MOUNTING						
	DUPLEX RECEPTACLE - STACK ALIGNED BELOW DEVICE ABOVE (DEVICE ALIGNMENT IS NOT LIMITED TO THOSE LABELED, REFER TO ELECTRICAL DEVICE ALIGNMENT GUIDELINES)						
	GFCI REMOTE TRIP DEVICE, CONNECT NEARBY OUTLET TO LOAD SIDE		40"				
	SPECIAL PURPOSE RECEPTACLE		16"				
	POWER/COMMUNICATION FLOOR BOX LEGRAND EVOLUTION #RFB4E-OG-6CTC2(COLOR)-1-1/4" DATA						
	POWER/COMMUNICATION FLOOR BOX LEGRAND <#####>-3/4" DATA						
	POWER/COMMUNICATION FLOOR BOX - FURNITURE LEGRAND EVOLUTION #RFB4E-OG-RFBKIT-6CTC(COLOR)-1-1/4" DATA W/ (3-POLE CIRCUIT PER PLANS)						
	POKE THROUGH POWER DEVICE - LEGRAND EVOLUTION #GATC2P(COLOR)-1-1/4" DATA						
	POKE THROUGH POWER DEVICE - FURNITURE LEGRAND <#####>-1-1/4" DATA						
	POKE THROUGH POWER DEVICE - FURNITURE LEGRAND EVOLUTION # GATCFF(COLOR)-1 1/4CHA AND 1-1/4" DATA W/ (3-POLE CIRCUIT PER PLANS)						
	HAND/HAIR DRYER						
	CEILING FAN						
FIRE ALARM SYMBOLS							
	FIRE ALARM SMOKE DETECTOR - CEILING TYPE						
	FIRE ALARM SMOKE DETECTOR - ELEVATOR TYPE, CONNECT TO FIRE ALARM SYSTEM AND TO ELEVATOR CONTROL PANEL. COORDINATE WITH ELEVATOR MANUFACTURER.						
	FIRE ALARM HEAT DETECTOR - CEILING TYPE						
	FIRE ALARM SMOKE DETECTOR - DUCT TYPE						
	FIRE ALARM DUCT DETECTOR REMOTE TEST STATION		60"				
	SMOKE/FIRE DAMPER, PROVIDE WITH DUCT DETECTOR AND 120V POWER						
	FIRE SHUTTER						
	MAGNETIC DOOR HOLDER						
	FIRE ALARM MANUAL PULL STATION		40"				
	FIRE ALARM MANUAL PULL STATION - INSTITUTIONAL W/KEY		40"				
	BEAM DETECTOR						
	FIRE ALARM AUDIO/VISUAL ALARM, WALL MTD., CANDELA INDICATED		80"				
	FIRE ALARM - VISUAL ALARM, CANDELA INDICATED		80"				
	FIRE ALARM AUDIO/VISUAL ALARM, CEILING MTD., CANDELA INDICATED						
	FIRE ALARM - VISUAL ALARM, CEILING MTD., CANDELA INDICATED						
	FIRE ALARM SPEAKER						
	SPRINKLER SYSTEM FLOW SWITCH						
	FIRE ALARM - BELL						
	SPRINKLER VALVE MONITOR SWITCH						
	FIRE ALARM CONTROL PANEL - FLUSH MTD.		72" TO TOP				
	FIRE ALARM ANNUNCIATOR PANEL REMOTE - FLUSH MTD.		60" TO TOP				



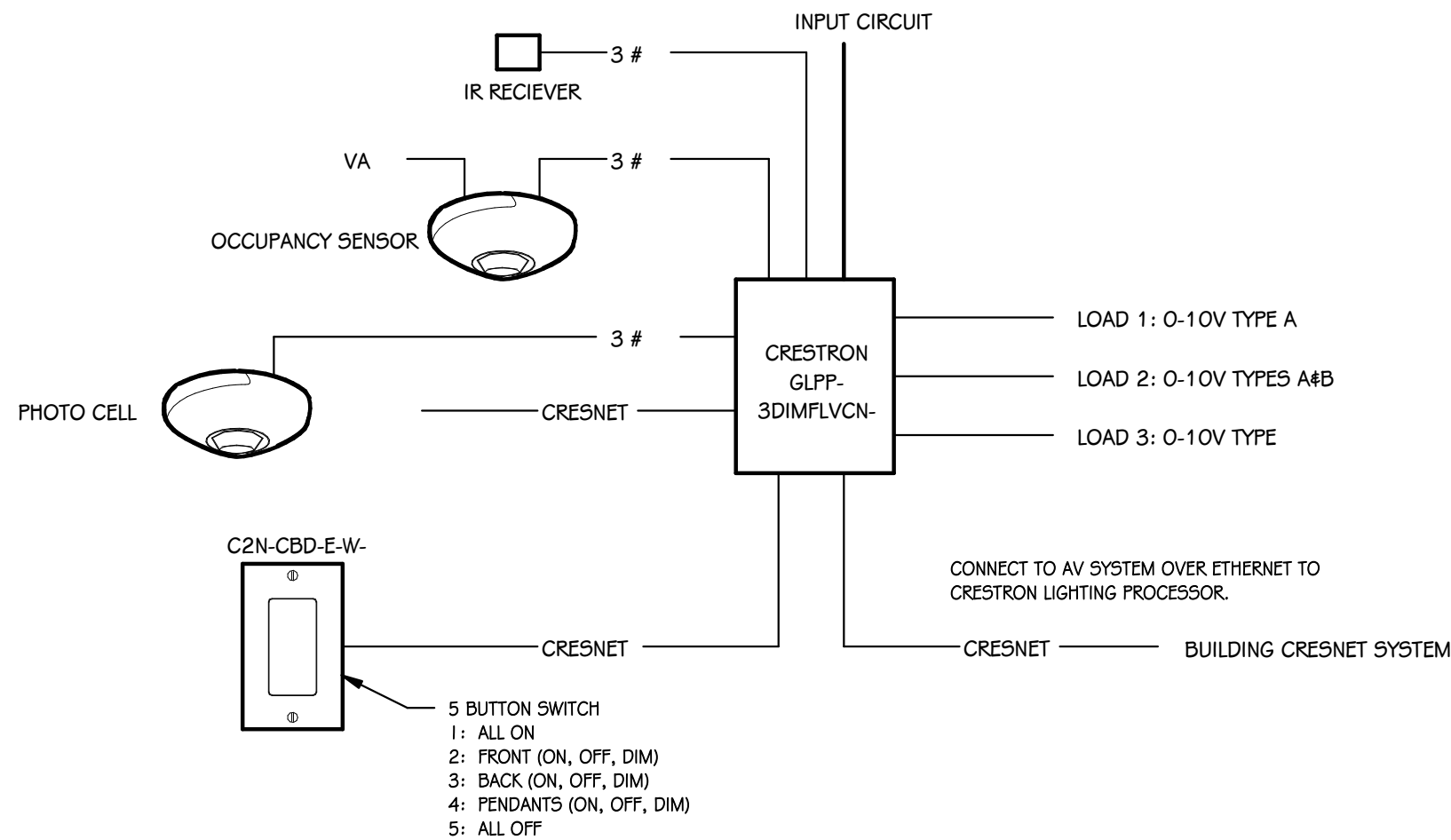
OVERALL FIRST FLOOR POWER PLAN
1/16" = 1'-0"



FIRST FLOOR GYM LIGHTING PLAN
1/8" = 1'-0"

LIGHT FIXTURE SCHEDULE						
SERIES	DESCRIPTION	MOUNTING	DRIVER	WATTS	MANUFACTURER	NOTES
A	2x4 TROFFER, 2' - 0" LONG	RECESSED		37 VA	KENALL #HASEDI-24-180L-40K8-DIM1-120-XX-XX-6-XX	1, 2
B	LED WALL PACK			0 VA	LITHONIA: # WST	NOTES 1, 2, 3, 4

- * FIELD COORDINATE AND FIELD MEASURE FOR CUSTOM LENGTH FIXTURES, LENGTHS PROVIDED ARE ROUNDED AND DEPEND ON FIELD CONDITIONS.
- 1 ALL LED FIXTURES TO HAVE WARRANTY TO MEET OR EXCEED WARRANTY INCLUDED IN BASIS OF DESIGN. FIXTURES LISTED AS EQUALS SHALL MEET DELIVERED LUMENS, CRI, EFFICACY AND OPTIONS OF THAT SPECIFIED. REFER TO SPECIFICATIONS 265100 AND 265600 FOR ADDITIONAL REQUIREMENTS.
- 2 THE MOUNTING DESCRIPTION IS GENERAL. REFER TO SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SPECIFIC MOUNTING DETAILS.



TYPICAL SENSOR DIAGRAM - CLASSROOM
SCALE: NONE

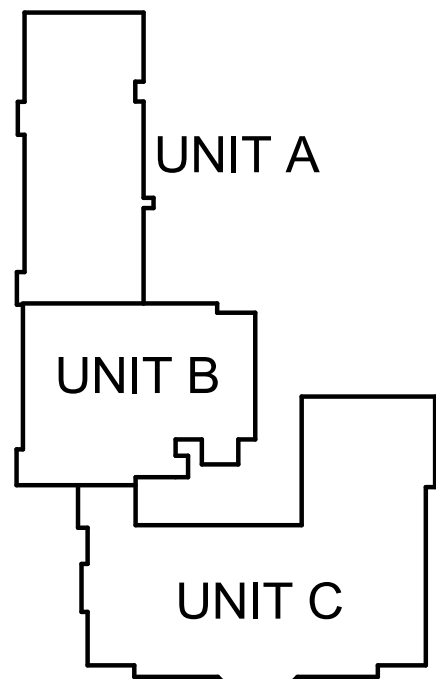
GENERAL ELECTRICAL NOTES

- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR NEW WORK OR WHERE DEVICES ARE REMOVED AND NOT REPLACED.
- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH G SERIES SHEETS. DEVICES ARE TO ALIGN VERTICALLY AND HORIZONTALLY AND FOLLOW THE RULES OF THIS DETAIL. CONSISTENTLY, A PRE-INSTALL DEVICE COORDINATION MEETING FOR DEVICE FINISHES AND LAYOUT MAY BE REQUIRED IN THE SPECIFICATION FOR THIS PROJECT.
- PATCH ALL PENETRATIONS AS REQUIRED TO MAINTAIN FIRE RATING.
- REFER TO INTERIOR ELEVATIONS, SECTIONS, ARCHITECTURAL ELEVATIONS AND RELATED DRAWINGS FOR EXACT DEVICE LOCATIONS AND MOUNTING HEIGHTS. WHERE DEVICES ARE MOUNTED UNDER OR ABOVE JACK BOARDS, DOORS, WINDOWS, OR ANY PIECE OF EQUIPMENT, THE ELECTRICAL DEVICE SHALL BE CENTERED AS SHOWN. COORDINATE LOCATION OF FURNITURE CONNECTIONS AND/OR RECEPTACLES AND DATA RACEWAYS WITH APPROVED FURNITURE SHOP DRAWINGS, FINAL CONNECTIONS TO FURNITURE BY ELECTRICAL CONTRACTOR.
- ALL CONDUITS SHALL RUN AS NEAR TO DECK AS PERMITTED BY CODE. SOME CONDUITS WILL BE EXPOSED AND SHALL BE RUN IN A NEAT MANNER. MAINTAIN THE SAME SPACING WHEN CONDUITS ARE RUN TOGETHER. CONCEAL JUNCTION BOXES OVER LAY-IN CEILING AND USE EMT DROPS DOWN TO CLOUDS. LOCATE CONDUIT DROPS TO CLOUDS AND CEILING ELEMENTS IN LEAST VISIBLE LOCATION.
- WHEN CEILINGS ARE REMOVED ELECTRICAL CONTRACTOR SHALL PROPERLY SUPPORT ALL CONDUIT AND LOW VOLTAGE WIRING AS REQUIRED PER NEC.
- REMOVE CEILINGS AND GRID AS REQUIRED. REPLACE ANY DAMAGED CEILINGS.
- ALL LOW VOLTAGE CABLING SHALL BE RUN IN CONDUIT BETWEEN DEVICE AND CABLE TRAY OR TECHNOLOGY RACK. NO CABLING SHALL BE VISIBLE IN EXPOSED CEILING SPACES. EXPOSED CONDUIT SHALL BE PAINTED TO MATCH SURFACE IT IS SUPPORTED FROM. WIRING ROUTED IN ACCESSIBLE CEILING SPACES SHALL BE INDEPENDENTLY SUPPORTED WITH COMM HOOKS OR RINGS.

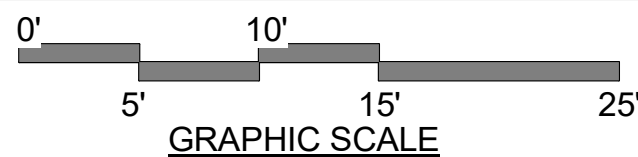
ELECTRICAL KEYED NOTES

- PROVIDE NEW GFI TYPE OUTLET ADJACENT TO NEW WATER COOLER. PROVIDE NEW RECEPTACLE AND FEED FROM LOAD SIDE OF ADJACENT GFI FOR WATER COOLER, COORDINATE EXACT LOCATION IN FIELD WITH EQUIPMENT. ALL CONDUIT AND BACKBOX SHALL BE CONCEALED, CUT AND PATCH WALL AS REQUIRED.
- PROVIDE NEW CEILING MOUNTED RECEPTACLE, FLUSH MOUNTED IN CEILING. RECEPTACLE AND COVER PLATE SHALL BE WHITE. CONNECT TO SPARE CIRCUIT.
- PROVIDE NEW RECESSED FIXTURES IN PLACE OF EXISTING. CONNECT TO EXISTING CIRCUIT, EXTEND AS REQUIRED.
- PROVIDE NEW LOW VOLTAGE SWITCH IN PLACE OF EXISTING LINE VOLTAGE SWITCHES. REMOVE LINE VOLTAGE WIRING, REWORK CIRCUIT AS REQUIRED.
- PROVIDE 120 VOLT CIRCUITS TO NEW PROJECTOR AND PROJECTOR SCREEN. COORDINATE LOCATION IN FIELD WITH AV CONTRACTOR. ALL CONDUIT AND BACKBOXES SHALL BE CONCEALED, CUT AND PATCH AS REQUIRED.
- NEW TEACHER'S STATION. REFER TO ROUGH-IN DETAILS. CONNECT TO NEAREST AVAILABLE SPARE 120 VOLT CIRCUIT.
- REWORK EXISTING WIREMOLD 4000 FOR NEW TEACHER'S STATION. REFER TO ROUGH-IN DETAILS.
- NEW TEACHER'S STATION. REFER TO ROUGH-IN DETAILS.
- REMOVE RECEPTACLE AND ASSOCIATED WIRE TO EXISTING SMART BOARD.
- PROVIDE # INSTALL PROJECTOR SCREEN. INSTALL UNISTRUT AS NEEDED TO SUPPORT SCREEN. FINAL LOCATION INCLUDING HEIGHT TO BE COORDINATED WITH AV CONTRACTOR.

PARKWOOD UPJOHN



KEY PLAN
SCALE: NO SCALE



PROJECT TITLE
**PARKWOOD-UPJOHN
ELEMENTARY SCHOOL
REMODEL AND SITE
IMPROVEMENTS**

OWNER
**KALAMAZOO PUBLIC
SCHOOLS**

KALAMAZOO, MICHIGAN

SHEET TITLE
**FIRST FLOOR OVERALL POWER AND
LIGHTING PLAN**

SHEET NUMBER
E 101
18-526.00

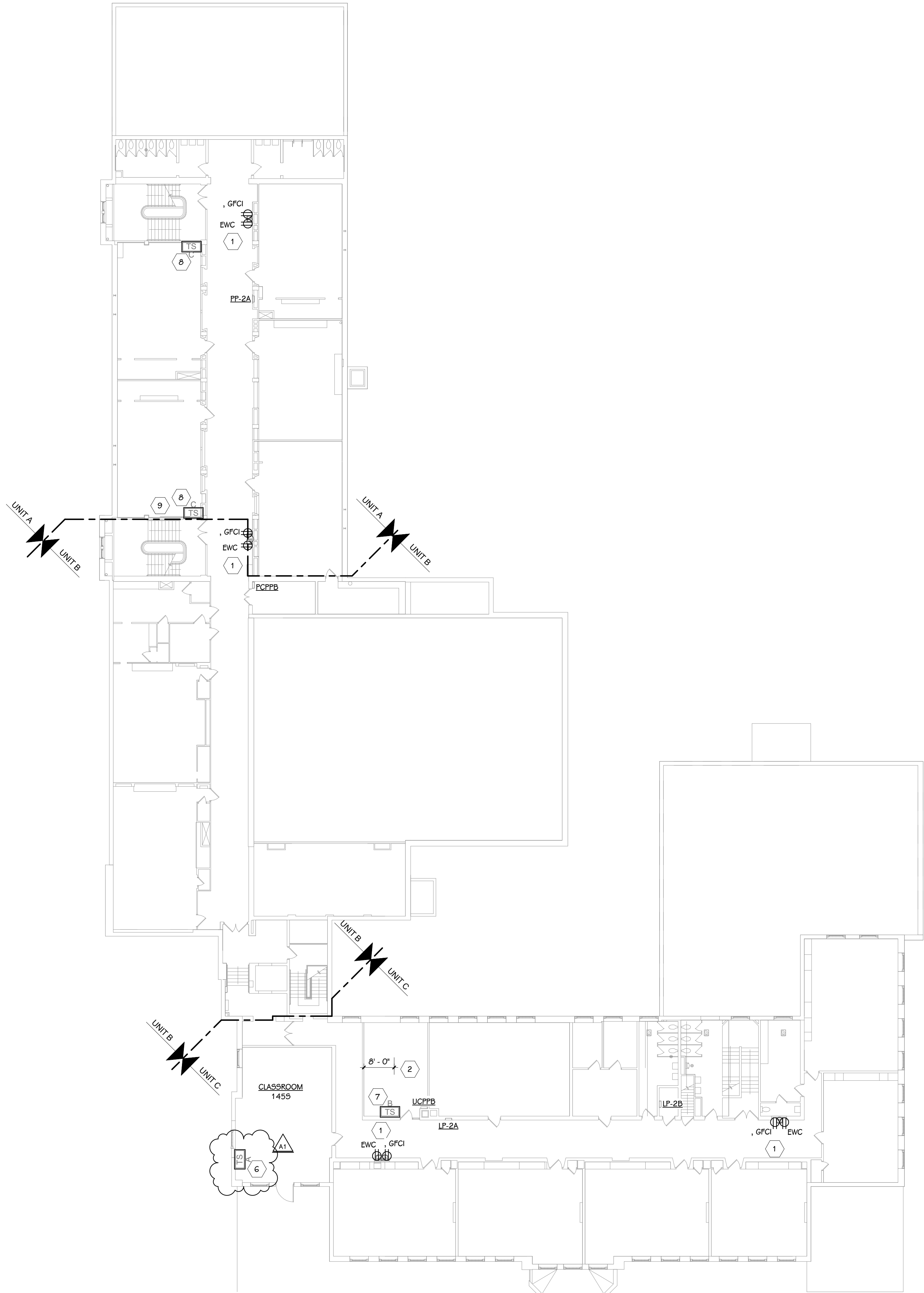
ADDENDUM NO. 1
DECEMBER 6, 2021

ISSUED FOR
DATE

TowerPinkster

Architecture · Engineering · Interiors

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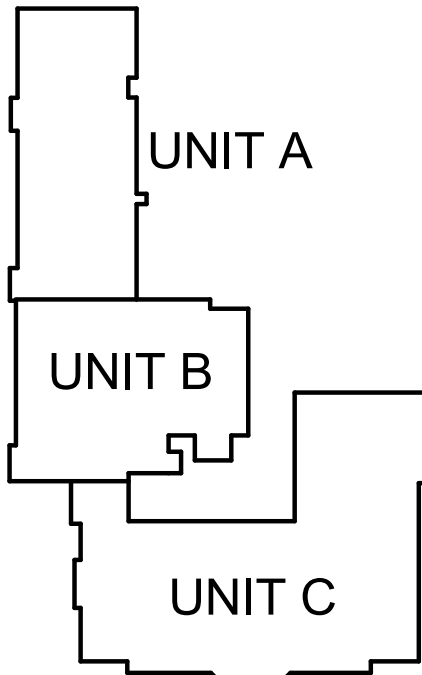
 **OVERALL SECOND FLOOR POWER PLAN**
1/16" = 1'-0"

- GENERAL ELECTRICAL NOTES**
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR NEW WORK OR WHERE DEVICES ARE REMOVED AND NOT REPLACED.
 - ELECTRICAL CONTRACTOR SHALL COORDINATE WITH G SERIES SHEETS DEVICE COORDINATION DETAIL. DEVICES ARE TO ALIGN VERTICALLY AND HORIZONTALLY AND FOLLOW THE RULES OF THIS DETAIL. CONSISTENTLY, A PRE-INSTALL DEVICE COORDINATION MEETING FOR DEVICE FINISHES AND LAYOUT MAY BE REQUIRED IN THE SPECIFICATION FOR THIS PROJECT.
 - PATCH ALL PENETRATIONS AS REQUIRED TO MAINTAIN FIRE RATING.
 - REFER TO INTERIOR ELEVATIONS, SECTIONS, ARCHITECTURAL ELEVATIONS AND RELATED DRAWINGS FOR EXACT DEVICE LOCATIONS AND MOUNTING HEIGHTS. WHERE DEVICES ARE MOUNTED UNDER OR ABOVE TACK BOARDS, DOORS, WINDOWS, OR ANY PIECE OF EQUIPMENT, THE ELECTRICAL DEVICE SHALL BE CENTERED AS SHOWN. COORDINATE LOCATION OF FURNITURE CONNECTIONS AND/OR RECEPTACLES AND DATA RACEWAYS WITH APPROVED FURNITURE SHOP DRAWINGS, FINAL CONNECTIONS TO FURNITURE BY ELECTRICAL CONTRACTOR.
 - ALL CONDUITS SHALL RUN AS NEAR TO DECK AS PERMITTED BY CODE. SOME CONDUITS WILL BE EXPOSED AND SHALL BE RUN IN A NEAT MANNER. MAINTAIN THE SAME SPACING WHEN CONDUITS ARE RUN TOGETHER. CONCEAL JUNCTION BOXES OVER LAY-IN CEILING AND USE EMT DROPS DOWN TO CLOUDS. LOCATE CONDUIT DROPS TO CLOUDS AND CEILING ELEMENTS IN LEAST VISIBLE LOCATION.
 - WHEN CEILINGS ARE REMOVED ELECTRICAL CONTRACTOR SHALL PROPERLY SUPPORT ALL CONDUIT AND LOW VOLTAGE WIRING AS REQUIRED PER NEC.
 - REMOVE CEILINGS AND GRID AS REQUIRED. REPLACE ANY DAMAGED CEILINGS.
 - ALL LOW VOLTAGE CABLING SHALL BE RUN IN CONDUIT BETWEEN DEVICE AND CABLE TRAY OR TECHNOLOGY RACK. NO CABLING SHALL BE VISIBLE IN EXPOSED CEILING SPACES. EXPOSED CONDUIT SHALL BE PAINTED TO MATCH SURFACE IT IS SUPPORTED FROM. WIRING ROUTED IN ACCESSIBLE CEILING SPACES SHALL BE INDEPENDENTLY SUPPORTED WITH COMM HOOKS OR RINGS.

- ELECTRICAL KEYED NOTES**
- PROVIDE NEW GFI TYPE OUTLET ADJACENT TO NEW WATER COOLER. PROVIDE NEW RECEPTACLE AND FEED FROM LOAD SIDE OF ADJACENT GFI FOR WATER COOLER, COORDINATE EXACT LOCATION IN FIELD WITH EQUIPMENT. ALL CONDUIT AND BACKBOX SHALL BE CONCEALED, CUT AND PATCH WALL AS REQUIRED.
 - PROVIDE NEW CEILING MOUNTED RECEPTACLE, FLUSH MOUNTED IN CEILING. RECEPTACLE AND COVER PLATE SHALL BE WHITE. CONNECT TO SPARE CIRCUIT.
 - PROVIDE NEW RECESSED FIXTURES IN PLACE OF EXISTING. CONNECT TO EXISTING CIRCUIT, EXTEND AS REQUIRED.
 - PROVIDE NEW LOW VOLTAGE SWITCH IN PLACE OF EXISTING LINE VOLTAGE SWITCHES. REMOVE LINE VOLTAGE WIRING, REWORK CIRCUIT AS REQUIRED.
 - PROVIDE 120 VOLT CIRCUITS TO NEW PROJECTOR AND PROJECTOR SCREEN. COORDINATE LOCATION IN FIELD WITH AV CONTRACTOR. ALL CONDUIT AND BACKBOXES SHALL BE CONCEALED, CUT AND PATCH AS REQUIRED.
 - NEW TEACHER'S STATION. REFER TO ROUGH-IN DETAILS. CONNECT TO NEAREST AVAILABLE SPARE 120 VOLT CIRCUIT.
 - REWORK EXISTING WIREMOLD 4000 FOR NEW TEACHER'S STATION. REFER TO ROUGH-IN DETAILS.
 - NEW TEACHER'S STATION. REFER TO ROUGH-IN DETAILS.
 - REMOVE RECEPTACLE AND ASSOCIATED WIRE TO EXISTING SMART BOARD.
 - PROVIDE & INSTALL PROJECTOR SCREEN. INSTALL UNISTRUIT AS NEEDED TO SUPPORT SCREEN. FINAL LOCATION INCLUDING HEIGHT TO BE COORDINATED WITH AV CONTRACTOR.

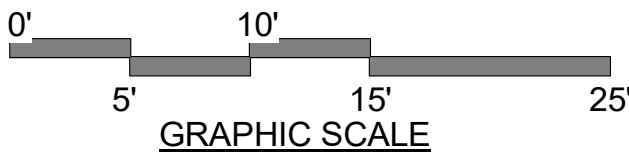
A1

PARKWOOD UPJOHN



KEY PLAN

SCALE: NO SCALE



Addendum No. 1
ISSUED FOR
DECEMBER 6, 2021
DATE

PROJECT TITLE
PARKWOOD-UPJOHN
ELEMENTARY SCHOOL
REMODEL AND SITE
IMPROVEMENTS

OWNER
KALAMAZOO PUBLIC
SCHOOLS
KALAMAZOO, MICHIGAN

SHEET TITLE
SECOND FLOOR OVERALL POWER PLAN

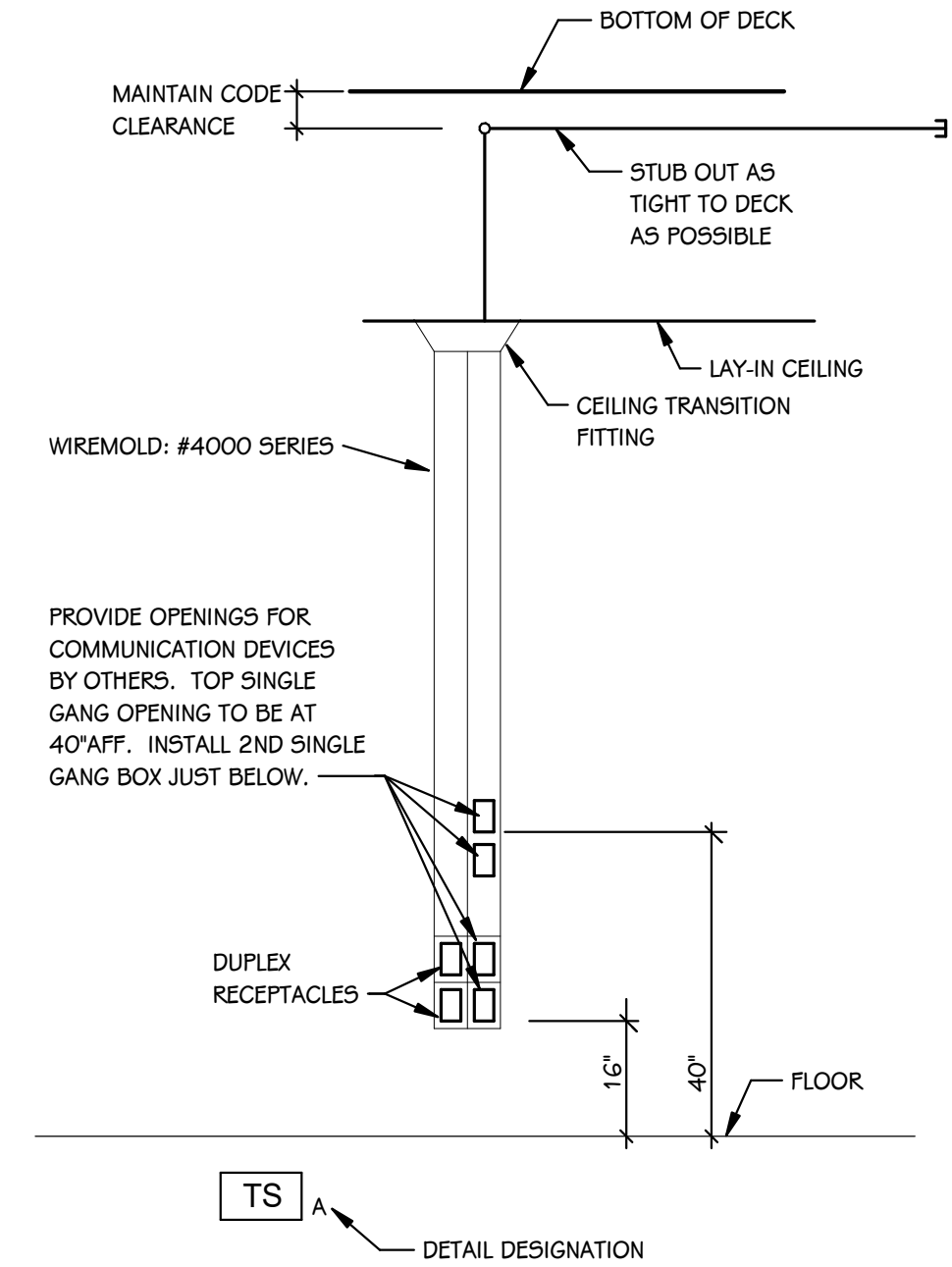
SHEET NUMBER
E 102
18-526.00

DATE
NOVEMBER 1, 2021

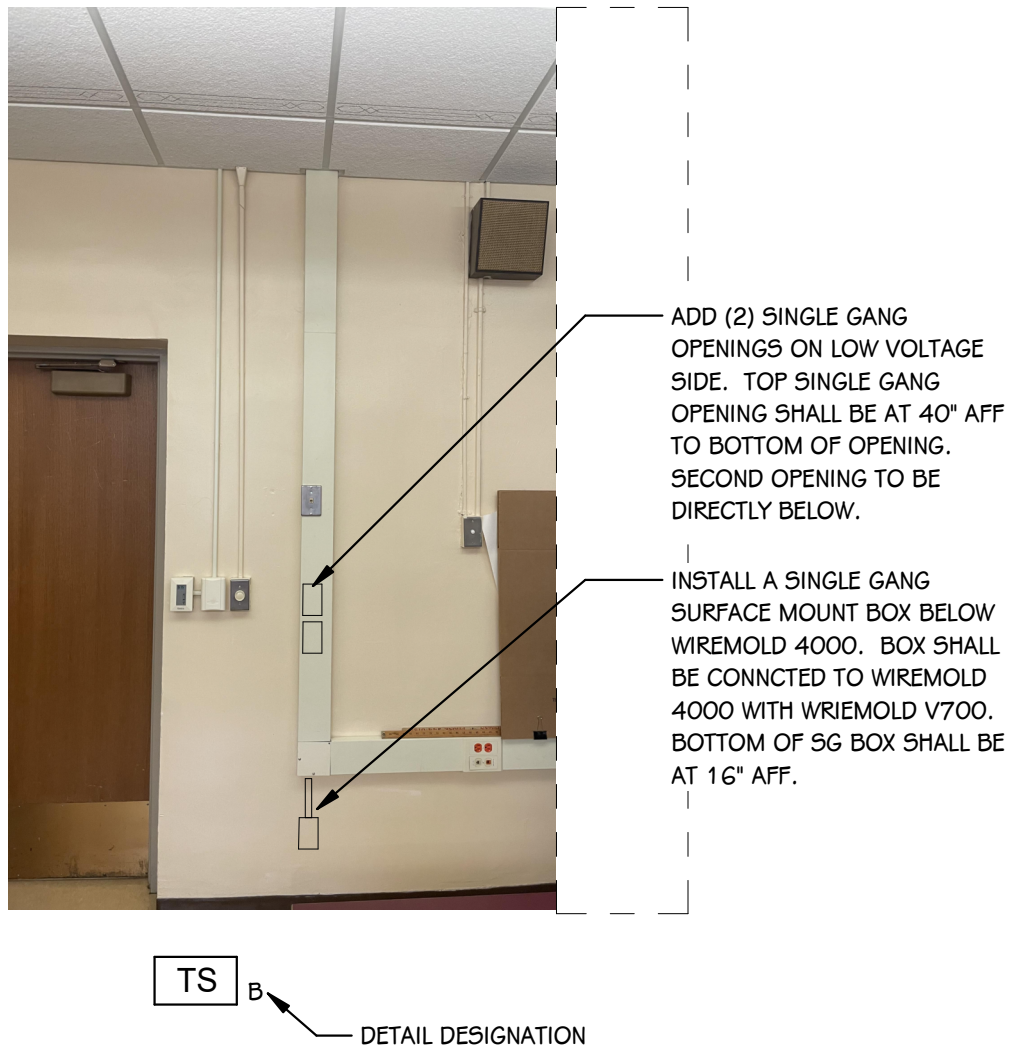
TowerPinkster

Architecture · Engineering · Interiors

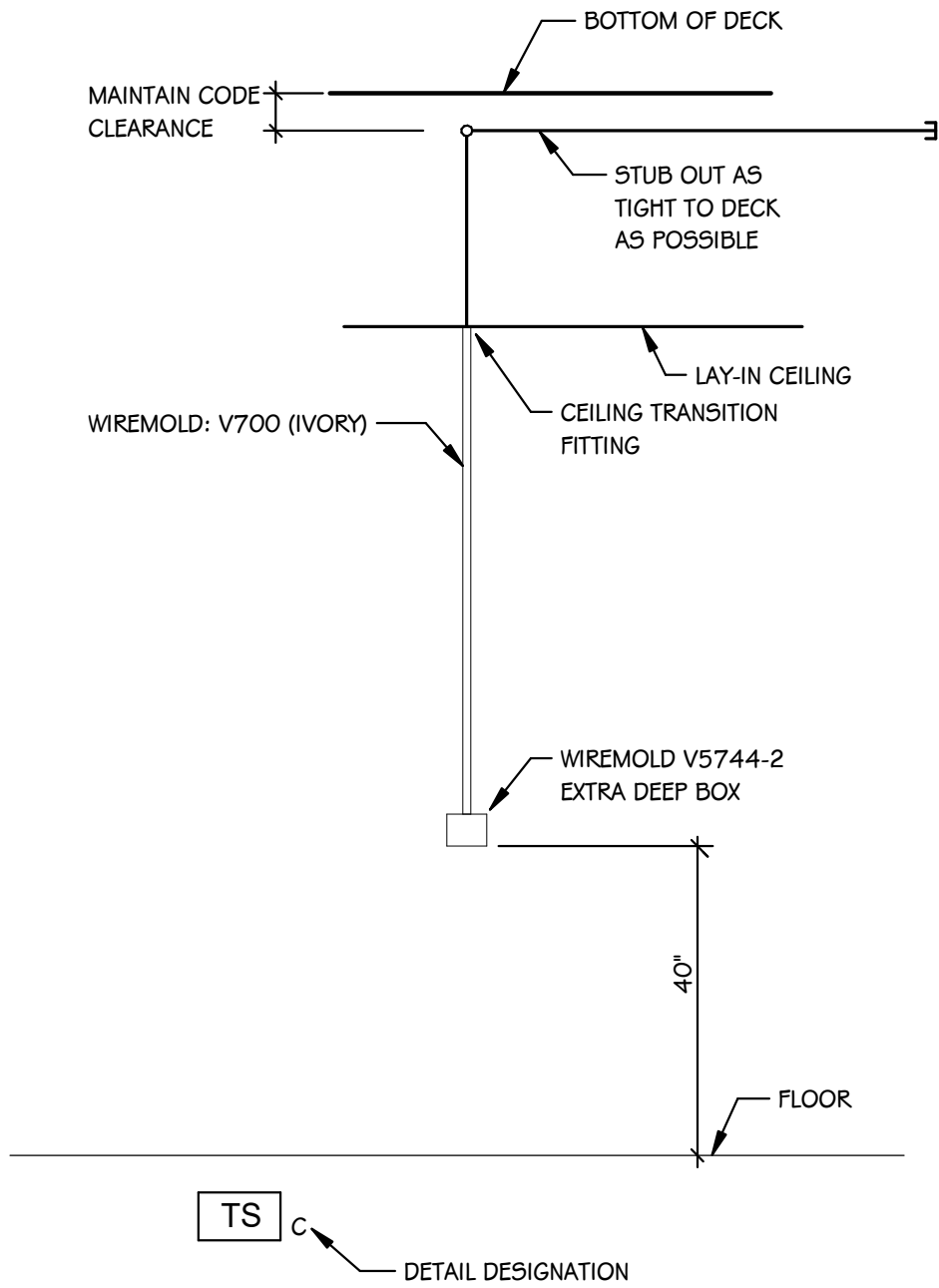
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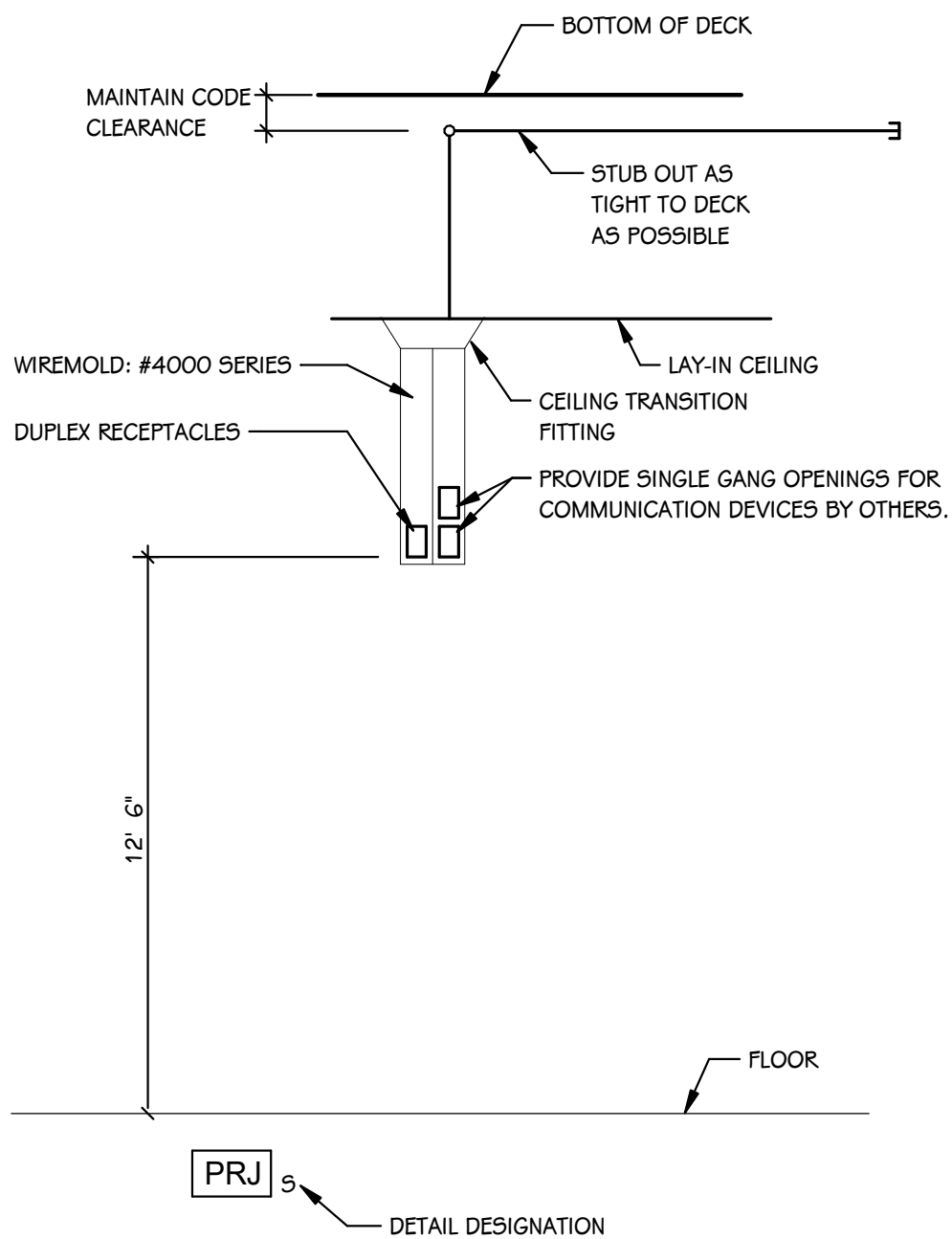
TS-A ROUGH-IN DETAIL
SCALE: NONE



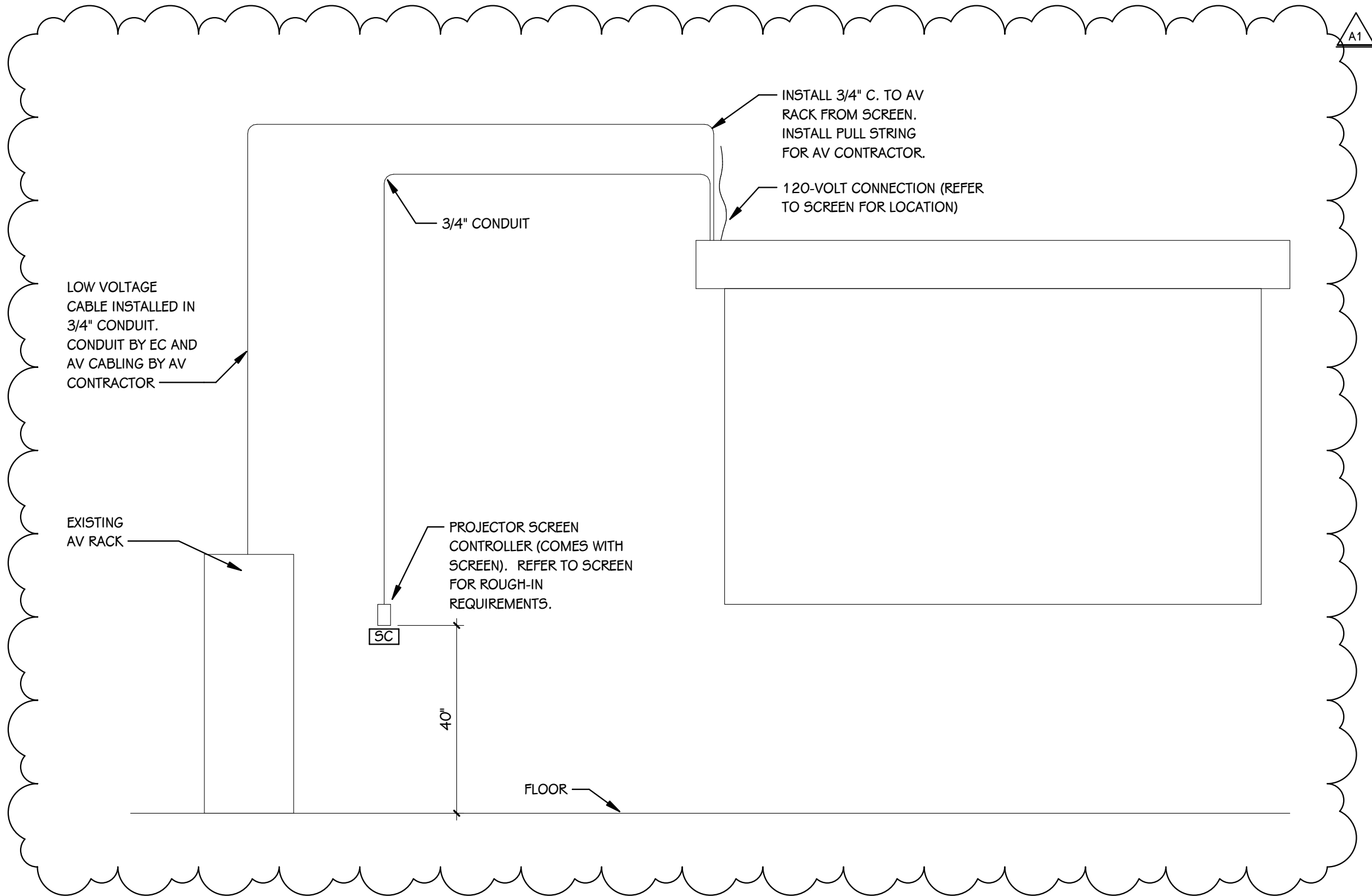
TS-B ROUGH-IN DETAIL
SCALE: NONE



TS-C ROUGH-IN DETAIL
SCALE: NONE



PLATFORM PROJECTOR ROUGH-IN DETAIL
SCALE: NONE



PROJECTOR SCREEN DETAILS
SCALE: NONE