PBK
Architecture
Engineering
Planning
Technology
Facility Consulting

11 Greenway Plaza
Suite 2210
Houston, Texas 77046-1104
Telephone: 713/965-0608
Fax: 713/961-4571

ADDENDUM NO. 01
June 24, 2025

To Drawings and Specifications dated June 10, 2025.

PKG 3A – GPHS New Fieldhouse

Prepared by: PBK
11 Greenway Plaza, 22nd Floor
Houston, TX 77046-1104
PBK Project No: 240539

Notice to Bidders

A. Receipt of this Addendum shall be acknowledged on the Bid Form.
B. This Addendum forms part of the Contract documents for the above referenced project and shall be incorporated integrally therewith.
C. Each bidder shall make necessary adjustments and submit his proposal with full knowledge of all modifications, clarifications, and supplemental data included therein. Where provisions of the following supplemental data differ from those of the original Contract Documents, this Addendum shall govern.

GENERAL

Item No. 01 **Pre-proposal Conference Sign in Sheet –** Refer to Attachment

Item No. 02 **CSP 25-500 Phase 3A GPHS New Fieldhouse Bid Package Volume 01 –** Refer to revised pages.

1. Revisions to proposal time for Alternate Bid, Unit Prices, Subcontractors list and Small Business percentage form.
2. Alternate 1B added to the Alternates Proposal page and revision to alternate 2C.
3. Revisions to Alternate discrepancy:
   Base Proposal Reduction

Item No. 03 **Pre-proposal Questions**

Question 01: Can Contractors submit the following on July 15 at 3PM?
1. Unit prices
2. Alternates
3. Subcontractors listing
4. Small Business Percentage Form

i. Response: Yes.

Question 02: Base bid adjustment alternate is also labeled #05.
i. Response: Base bid alternate number has been revised to #06.

Question 03: What is the status of permit?
i. Response: Permit is approved and is waiting at City of Galena Park for Contractor to obtain and pay permit fees.

Question 04: When would Notice to Proceed be given?
i. Response: August 25, 2025 as outlined in Volume 01.

Question 05: Are there any other Contractors working at Galena Park HS?
i. Response: Phase 02 Contractor is wrapping up warranty period within next month.

Question 06: Bid Bond Form references a Proposal Bond form being part of the proposal documents, can a contractor use AIA form?
i. Response: Please use the AIA form for bid bond.

Question 07: How are qualification documents should be submitted?

i. Response: Documents shall be emailed to facilities@galenaparkisd.com.

Question 08: How is our cost proposal/bid containing cost information to be submitted?

i. Response: Bids can be certified mailed or must be hand-delivered to Sydney Mckay NOT the receptionist.

Question 09: On page 18 of Volume 01, there is a discrepancy between the documents regarding the percentage of bid bond. What is the correct percentage

i. Response: Bid Bond is 10%, this will be revised in Volume 01.

Question 10: Can Contractors walk the jobsite?

i. Response: Yes, please reach out to Galena Park ISD for access, the existing building sitting on New Fieldhouse site will be demolished and cleared prior to issuing NTP.

Question 11: What do you mean by substantial completion date and final completion date?

i. Response: June 10, 2026, is the Substantial Completion date and Final Completion includes the Warranty period.

Question 12: What happens if we have questions on July 7 and we get a late response?

i. Response: All questions pertaining to Qualification Documentation will be answered on or before July 8.

Question 13: How many addendums do you anticipate to issue?

i. Response: We anticipate issuing a total of 3 addenda, with final addendum scheduled for release on July 9,2025. However, bidders are advised to monitor Ion Wave regularly, as additional addenda may be issued if necessary.

Question 14: Do you expect us to submit a flash drive? What should be included in the flash drive?

i. Response: Please DO NOT include cost-related information on the flash drive. All Pre-Qualification documents can be submitted on a flash drive.

Question 15: Is the final signature on Ion Wave mandatory?

i. Response: No, Ion Wave is used for communication only.

Question 16: What is the lead time for DIRTT wall system?

i. Response: Contact Heather Kenney for additional information – hkenney@dirtt.com

Question 17: Spec section 11 66 13 is missing. Please Advise.

i. Response: Missing spec attached.

Question 18: Does the packet that is due 7/8/25 need to be submitted in the same format as the final proposal? 1 hard copy and 1 electronic copy in a sealed envelope?

i. Response: They are submitted digitally to facilities@galenaparkisd.com GPISD will have them printed and available for evaluation.

Question 19: Can you please send us the link where we can see the plans.

i. Response: Per the District's Bid Opportunity Detail, please refer to bidding documents here - https://galenaparkisd.ionwave.net/PublicDetail.aspx?bidID=287&SourceType=1

Question 20: Related to pages 34 & 35 of Vol. 1 RFP - Unit Rates and Subcontractor Listing: Please clarify what is meant by "line excluded from response total".

i. Response: The unit price should not be added to the total bid amount. It will be evaluated on its own-separate from the total cost.

Question 21: We are an approved vendor with Galena Park ISD. I was wondering if you have selected a testing lab for the construction materials testing for this project?

i. Response: Geotechnical studies were done by UES. UES is being considered as a potential CMT provider - pending final approval

Question 22: I'm a fire alarm sales rep for Johnson Controls and I am interested in bidding this project. Would you be able to point me towards the general contractors that will be bidding this, and if you have it, their contact information as well? Any help is greatly appreciated as I'm having issues accessing the bid package.

i. Response: Bidder's list attached for Contractor information.

Question 23: Where should questions about the project be directed to?

i. Response: Bidders shall email questions ONLY to facilities@galenaparkisd.com. Do not email Gloria Carlos as listed in the RFP.

SPECIFICATIONS

Item No. 1 Revision to Project Manual Cover Sheet

A. Revision to Board of Trustees and Superintendent of Schools:

Item No. 2 Revision to 01 23 00 Alternates:

A. Alternate No. 1 B: 23 09 23 – Direct Digital Controls – **Unify Energy Solutions**
   1. This Alternate shall establish the amount to adjust the Base Proposal for the cost of furnishing and installing Direct Digital Controls manufactured by Reliable Controls – Installed by **Unify Energy Solutions**. This alternate shall include the pricing for all materials and labor for proper completion. Refer to specs and drawings for additional information.

B. Alternate Number 2C: 23 52 16 – Condensing Boilers – **Patterson – Kelley**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Condensing Boilers, manufactured by **Patterson-Kelley – ~~Sonic~~ Solis model** as shown and scheduled on the drawings and as specified. Alternate boiler price shall include warranty as specified per 1.9.

Item No. 3 09 67 00 - Fluid Applied Flooring:

A. Issued specification in its entirety.

Item No. 4 11 66 13 - Exercise Equipment:

A. Issued specification in its entirety.

Item No. 5 Revision to 27 10 00 – Structured Cabling System:

A. 1.2 QUALITY ASSURANCE
   A. Acceptable manufacturers:
      2. Acceptable product manufacturers shall provide a complete category 6 solution as manufactured by Panduit **or Commscope** only. No other manufacturers will be allowed.

Item No. 6 27 42 20 – Smart Restroom Systems:

A. Issued specification in its entirety.
   1. Clarification of 'OL' and related devices indicated on sheet T-001 - Technology System Notes and Legends, TN-101 - 1st Floor Technology Plan, And TN-102 - 2nd Floor Technology Plan.

DRAWINGS

CIVIL

Item No. 01 C003 -Demolition Plan

A. 11'-6"x 20'-9" pavement and 11'-6" LF curb on both sides of the pavement to be removed at east of the fire lane.
B. 18'-6"x 8'-0" sidewalk to be removed.

Item No. 02 C101 -Site Plan

A. The direction of the gate swing changed towards the equipment yard.
B. Add conc. sidewalk width by 5'-3" on southeast corner of the building north of fire lane.
C. Handicap Ramps added. Item No. 06: Add 56'-0"x 2'-0" mow strip.

Item No. 03 C201 -Drainage and Utility Plan

A. Change 18" Storm sewer pipe length to 88LF from 98LF.

Item No. 04 C301 -Grading and Paving Plan

A. Updated grading as shown.

Item No. 05 C501 -Details

A. Mow strip and sidewalk ramps details added.

STRUCTURAL

Item No. 01 S-101 Foundation Plan

A. Adjusted column sizes at A-6 and A-7.
B. Adjusted footing sizes at E-5 and E-6.
C. Changed section provided along grid A.

Item No. 02 S-102 Second Floor Framing Plan

A. Adjusted beam sizes as shown on plan.
B. Adjusted beam spacing as shown on plan.

Item No. 03 S-103 Roof Framing Plan

A. Adjusted beam sizes as shown on plan.
B. Added camber values to beams bearing folding partitions as shown on plan.

Item No. 04 S-104 Pop-up Roof Framing Plan

A. Provided BOD elevations along perimeter.

Item No. 05 S-303SF General Foundation Notes and Typical Details

A. Provided footing information per finalized soil report.
B. Updated spread footing schedule as shown on the sheet.

Item No. 06 S-311 Foundation Details

A. Modified detail 1/S-311.

Item No. 07 S-320 Site Items Foundation Sections and Details

A. Modified detail 1/S-320.

Item No. 08 S-512 Composite Framing Details

A. Modified detail 6/S-512.

Item No. 09 S-524 Roof Framing Details

A. Modified detail 5/S-524.
B. Modified detail 6/S-524.
C. Modified detail 9/S-524.

Item No. 10 S-600 Typical Wind Bracing Elevations

A. Provided brace loads to each brace elevation.

DIRTT

Item No. 01 DW100.7 HIGHLIGHTED PLAN FIRST FLOOR

A. DIRTT walls thickness changes from 4” to 6” thick

Item No. 02 DW100.8 HIGHLIGHTED PLAN SECOND FLOOR

A. DIRTT walls thickness changes from 4” to 6” thick

Item No. 03 DW400.1 TYPICAL WALL DETAILS

A. Typical wall section for 4” and 6” DIRTT walls were added

ARCHITECTURAL

Item No. 01 G-000 COVERSHEET

A. Revision to Board of Trustees and replaced in its entirety.

Item No. 02 AS-100 OVERALL SITE PLAN

A. Added mow strip at new fence at the north side of the site by the existing field house
B. Added note to demolish portion of existing sidewalk and replace with sod
C. Reversed the swing direction of gate 1908F
D. Extended the new sidewalk on the south side out to the existing fence
E. Added curb cuts at relocated gate
F. Revised the radius of the fire lane and provided dimensions
G. Miscellaneous graphic cleanup (not clouded)

Item No. 03 A-101 LEVEL 1 – FLOOR PLAN

A. Added demountable partition wrap at column C/9, refer to DW-100.1.

B. Relocated F.E.C. at custodial 1906.
C. Revised partition dt-6 to be DT-4 at Staff RR 1926 and hydrotherapy.
D. Added 4” concrete base below lockers at south of freshman + JV lockers 1904 and soccer locker 1916.

Item No. 04 A-102 LEVEL 2 – FLOOR PLAN

A. Added callout for detail 10/A-701.
B. Added notes at operable partition pockets.
C. Added DT-2 partition at south side of elevator.
D. Revised partition DT-6 to be DT-4 at kitchen east wall and back of operable partition pocket.

Item No. 05 A-301 OVERALL ROOF PLANS

A. Callouts to 15/A-322 added to roof plan

Item No. 06 A-411 ENLARGED TOILET PLANS

A. Grab bars added to control wall and dimensions revised to show compliance with standard roll-in shower.

Item No. 07 A-422 ELEVATOR PLANS & SECTIONS

A. Added DT-2 partition at south side of elevator.
B. Added callout for detail 10/A-851.
C. Revised notes and on detail 03.
D. Added detail 06.

Item No. 08 A-501 EXTERIOR ELEVATIONS

A. Added 4” concrete curb under storefront windows.
B. Revised keynote legend.
C. Revised specification numbers on details 02, 03, & 04.

Item No. 09 A-621 WALL SECTIONS

A. Revised detail 01.

Item No. 10 A-711 WALL SECTION DETAILS

A. Revised detail 13.

Item No. 11 A-712 STOREFRONT DETAILS

A. Added detail 12.

Item No. 12 A-810 DOOR SCHEDULE

A. Revised door e1000a information.

Item No. 13 A-900 FINISH SCHEDULE

A. Updated Epoxy flooring to 09 67 00.FF1
B. Added new Epoxy flooring 09 67 00.FF2

Item No. 14 A-901 LEVEL 1 OVERALL FINISH PLAN

A. Updated finish flooring in the Athletic Locker Rooms
B. Updated floor finish legend

Item No. 15 A-902 LEVEL 2 OVERALL FINISH PLAN

A. Updated floor finish legend

MECH

Item No. 01 M-101 - 1ST FLOOR MECHANICAL PLAN

A. Missing thermostat added for FCU in Riser Rm-1907.
B. Added keynote 14 stating “ALL OUTDOOR REFRIGERANT PIPING SHALL BE WRAPPED WITH ALUMINUM JACKET. PROVIDE WALL SUPPORTS AT EVERY 3' INTERVALS” to refrigerant piping of ACCU-1907
C. Now showing housekeeping pad for ACCU-RISER RM-1907. Also added the following to keynote 13: “GC TO COORDINATE PAD DIMENSIONS AND LOCATIONS”

Item No. 02 M-102 – 2ND FLOOR MECHANICAL PLAN

A. Replace drawing in its entirety. Shifted RTU-2-02 to clean up the ductwork and hydronic piping on the second floor.
B. Added barometric damper symbol to RH-01.

Item No. 03 M-201 – MECHANICAL ENLARGED PLAN

A. Corrected B-01 dimensions on the enlarged plan.
B. Added the following line to keynotes 3, 4, 7, 8, 9, and 11: “GC TO COORDINATE PAD DIMENSIONS AND LOCATIONS”.
C. Now showing housekeeping pads for B-01, ACCU-1913, and ACCU-01.

Item No. 04 M-301 – ROOF MECHANICAL PLAN

A. Replace drawing in its entirety.
    1. Shifted RTU-2-02 to clean up the ductwork and hydronic piping on the second floor. Updated routing of hydronic piping and condensate drain line.

Item No. 05 M-501 – MECHANICAL SCHEDULES

A. Replace drawing in its entirety.
    1. Schedule notes 12,13 for the scroll air-cooled chiller schedule did not print in the permit set and now have been added. They included the following:
    2. Provide factory installed heat trace for evaporator. Electrical contractor shall provide separate 120/1/60 circuits to the evaporator.
    3. Provide unit with multiple refrigerant circuits.
B. Schedule notes 16-19 for the packaged outdoor air handling unit schedule did not print in the permit set and now have been added. They include the following:
    1. Provide access door on the opposite side of the piping connection.
    2. Provide with outside air intake rain hood.
    3. Provide 14" tall insulated and full perimeter fully welded wind rated curb with hold down brackets; structurally calculated to meet the wind requirements of the 2018 IBC rated for 155 mph, three second gust. Manufacturer to provide signed and sealed drawings by professional engineer of the rated assembly. Curb shall be provided by the manufacturer and not by others.
    4. Provide acoustical style roof curbs with BRD acoustical roof curb treatment; refer to detail and specification.
C. Updated RTU-1-01 and RTU-1-02 after the initial units were failing the ComCheck.

Item No. 06 M-502 – MECHANICAL SCHEDULES

A. Removed schedule note 5 from electric unit heater schedule requiring powder coated epoxy finish for corrosive environments.

ELEC

Item No. 01 E301 – ELECTRICAL ROOF PLAN

A. Updated location of RTU-2-02 to conform with mechanical.

Item No. 02 E701 – ELECTRICAL PANEL SCHEDULES

A. Updated breakers and load for RTU-2-01 and RTU-2-02 to conform with update mechanical loads

PLUMBING

Item No. 01 P101 – 1ST FLOOR PLUMBING PLAN

A. Shifted piping into new plumbing chase for sink in Training Room 1917 to match architectural background.
B. Updated piping serving showers in Coaches RR 1957A on level 2 to match architectural background.

Item No. 02 P102 – 2ND FLOOR PLUMBING PLAN

A. Shifted piping into relocated plumbing wet wall for RR 1964 and RR 1965 to match architectural background.
B. Updated piping serving showers in Coaches RR 1957A to match architectural background.

END OF ADDENDUM NO. 01

06/24/2025

PKG 3A – GPHS New Fieldhouse
GALENA PARK INDENDENT SCHOOL DISTRICT

GPISD Project Number: 002.3-2025
PBK Project Number: 240539

PRE-PROPOSAL CONFERENCE

SIGN-IN SHEET

Tuesday, June 24, 2025 at 10:00 A.M.

	Name	Company	Phone	Email
01	Pete Galyean	GTT Inc	281-441-8282	pgalyean@gttconstruction.com
02	Viri Salinas	Satterfield & Pontikes C	713-996-1300	VSalinas@satpon.com
03	Jesus Ratliff	C. A Walker Construc	832-974-6928	Bids@caWalker.net
04	Alexis Delgado	Division One Constr.	7136887330	bid@d1construction.com
05	Avinkar Paradkar	S&P	713-496-1300	houstonbids@satpon.com
06	TED Tou	Patriot	832 746 0934	ted@patriotllc.us
07	Sonia Malik	Dunhill	713 823-9216	smalik@dunhillconstruction.com
08	Chris Youmans	Bass Construction	281.342.2022	Bids@BassConstruction.com
09	Warren Parker	Bartlett Cocke	713-870-1489	Bidteam@BartlettCocke.com
10	Jaxson Lyness	Millennium	832-995-6148	Estimating@mps-team.com
11	Jake Crain	Crain Group	713-436-8727	bids@crain group.com
12	John Thomas	KNOI	346-456-9227	@ jthomas67@KNOIconstruction.com
13	Mitchell McCashland	M Scott Construction	281-250-3623	mitchell@mscottconstruction.com
14	Brandon Assencao	STP	713-496-1300	houstonbids@satpon.com
15	Pam Haynes	Gamma	7139630086	phaynes@gammaconst.com
16	Mark Nethercote	TXP	832-763-1601	mnethercote@texaspridedisposal.com
17				
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24				

PKG 3A – GPHS New Fieldhouse
GALENA PARK INDENDENT SCHOOL DISTRICT

GPISD Project Number: 002.3-2025
PBK Project Number: 240539

PRE-PROPOSAL CONFERENCE

SIGN-IN SHEET

Tuesday, June 24, 2025 at 10:00 A.M.

	Name	Company	Phone	Email
01	Alex Urbina	I.C.I Construction	281-355 5151	bids@iciconstructioninc.com
02	Jose E. Gonzalez	Bartlett Cocke General Contractors	346-718-0871	~~jgonzalez@~~ jgonzalez@bartlettcocke.com
03	Nestor Gonzalez	C.A. Walker	713-956-7070	bids@cawalker.net
04	Sydney Mckay	GPISD	x1020	SMcKay@galeoparkisd.com
05	Luis Pieraldi	E Contractors	713-493-2500	LPieraldi@econtractors.com
06	Daniella Guaimare	Dunhill Construction	281-4082748	dguaimare@dunhillconstruction.com
07	Roger Graham	Topwater	832-655-3051	roger@topwaterssllc.com
08	Brock Rhodes	STP	219 877 7126	BRHODES@SATPOH.COM
09	Shellie Natho	Bartlett Cocke	281. 725.8053	snatho@bartlettcocke.com
10	Marlon Alvarez	Accutek	713-837-6558	marlon.alvarez@myaccutek.com
11	EUGENE MARTINEZ	Accutek	713-391-5418	eugene.martinez@myaccutek.com
12	RAUL CALDEIRA	NASH	281-829-4815	BIDS@NASHINDUSTRIESINC.COM
13	PRASAD NUNNA	STERLING STRUCTURES	713-827-7447	bids@sterlingstructures.com
14	Leon Horn	American Fence	281-932-6598	leon.horn@americanfence.com
15	Rickey Trant	Comex Corp	281 479 2322	RickeyT@comexcorp.com
16	Cristian Rodriguez	Drymalla	979-732-5731	bid@drymalla.com
17	Connor McMorrow	AMSYS	612-859-7610	connor@AMSYS.com
18	Will Parr	MPS		Estimating@mps-team.com
19	Phillip Cano	Prime Contractors	281 999 0875	estimating@primecontractorsinc.com
20	Jason F. Garcia	ADS Custom Signs	713 943 0895	marilyn@artwingraphics.com
21	Billy Carroll	Cougar	346-353-4771	bcarroll@cougarusa.com
22	Mohammad Zaidi	Cougar USA	832-457-8047	mzaidi@cougarusa.com
23				
24				

Base Proposal Information

CSP #	25-500
Project:	Galena Park High School Phase 3A - New Fieldhouse
Type:	Competitive Sealed Proposal
Issue Date:	June 15, 2025
Question Deadline:	July 7, 2025 @ 10:00 AM
Response Deadline:	July 9, 2025

25-500 **PROPOSAL** Close Date and Time: July 15, 2025 @ 2:00 PM

Galena Park Independent School District (GPISD) is requesting **Competitive Sealed Proposals (CSP 25-500)** for Galena Park High School Phase 3A **(GPISD Project B104-002.3-2025**. **Proposals are due on July 15, 2025. Base Proposal at 2:00 PM and Alternate Proposal at 3:00 PM.** After which proposals will be opened publicly and read aloud at 3:00 PM at the GPISD Administration Building. Submissions must be delivered to the **Facility Planning & Construction Department** in the GPISD Administration Building, 14705 Woodforest Blvd., Houston, TX 77015, in a sealed envelope by the close date and time stated in this bid event. A Proposal Security in the amount of ten percent (10%) of the proposal amount is required.

The scope of work includes: Approximate Built up area 34,000 SF, two-story Field House including site works

A pre-proposal conference will be held at the **GPISD Administration Building**, on June 24, 2025 at 10:00 AM. Attendance is highly recommended.

Proposal Documents will be available on June 15, 2025 @ 10:00 AM on the district website, and on the GPISD eBid system https://galenaparkisd.ionwave.net.

GPISD reserves the right to reject any and all proposals, the right to negotiate with any proposers after submission of proposals, and at its discretion, may waive any formalities or minor irregularities regarding the proposals.

10. PROPOSAL BOND FOR BUILDING CONSTRUCTION CONTRACTS

Proposal Bond for Building Construction Contracts

A. Each individual Proposal package submitted must be accompanied by Bid Bond made payable to Owner in an amount of ten percent (10%) of the Proposal price (for Proposal bond purposes, the Proposal price shall include the base Proposal, plus all alternates; however, the Contract price shall be as awarded by Galena Park Independent School District). Proposal Bond shall be in the form of a Cashier's Check or a Proposal Bond, duly executed by proposer as principal and having as surety thereon, a corporate surety company duly authorized and admitted to do business in the State of Texas and licensed by the State of Texas to issue such bond, as a guarantee that the proposer will enter into a Contract and execute required Performance and Payment Bonds within ten (10) days of Galena Park Independent School District award of Contract.

B. Each Proposal must be accompanied by information establishing that the agent signing the bond is authorized to write the bond in the amount requested, and if applicable, that reinsurance requirements, have been met, including limits and ratings or other evidence of company solvency.

C. Proposer must demonstrate to Owner that he can secure required bonds, issued by a corporate surety company authorized and admitted to do business in the State of Texas and licensed in the State of Texas to issue such bond, which bonds shall be written in the form contained in the Project Manual without modification.

Alternate Proposal Lines

ALTERNATES PROPOSAL

Alternate No. 1 A: Direct Digital Controls – **Automated Logic Corporation**
(Response required)

$ _____

Alternate No. 1 B: Direct Digital Controls – **Unify Energy Solutions**
(Response required)

$ _____

Alternate No. 2A: Condensing Boilers - **RBI**
(Response required)

$ _____

Alternate No. 2B: Condensing Boilers - **Raypak**
(Response required)

$ _____

Alternate No. 2C: Condensing Boilers – **Patterson – Kelley – Solis model**
(Response required)

$ _____

Alternate No. 2D: Condensing Boilers - **Camus**
(Response required)

$ _____

Alternate No. 3A: Scroll Water Chillers Air-Cooled – **Trane - Extended Warranty**
(Response required)

$ _____

Alternate No. 3B: Scroll Water Chillers Air-Cooled **– Carrier- Extended Warranty**
(Response required)

$ _____

Alternate No. 3C: Scroll Water Chillers Air-Cooled **– JCI Extended Warranty**
(Response required)

$ _____

Alternate No. 4A: Packaged, Outdoor, Central-Station
Hydronic Air**-Handling Units – Carrier**
(Response required)

$ _____

Alternate No. 4B: Packaged, Outdoor, Central-Station
Hydronic Air-Handling Units – **Trane**
(Response required)

$ _____

Alternate No. 4C: Packaged, Outdoor, Central-Station
Hydronic Air-Handling Units **– JCI *(Response required)***

$ _____

Alternate 4D: 23 74 13.16 – Packaged, Outdoor, Central-Station
Hydronic Air-Handling Units **– Temtrol**
(Response required)

$ _____

Alternate No. 5: Provide metal stud partition assemblies and accessories in lieu of Integrated Interior Assemblies (Section 13 42 75) per guidelines listed below
(Response required)

$ _____

Base Proposal Reduction – **$** _____

- Item Notes: If there is a discount to the Base Proposal enter the amount here

Project Manual

for

PKG 3A – GPHS New Fieldhouse

PBK Project No.: 240539
Galena Park Project No.: 002.3-2025

for the

GALENA PARK INDEPENDENT SCHOOL DISTRICT

10 June 2025

Issue for Proposal

VOLUME 2

11 Greenway Plaza, 22nd Floor \\ Houston, Texas 77046 \\ P 713-965-0608 \\ F 713-961-4571 \\ PBK.com

Project Manual

for

PKG 3A – GPHS New Fieldhouse

PBK Project No.: 240539
Galena Park Project No.: 002.3-2025

for the

GALENA PARK INDEPENDENT SCHOOL DISTRICT

10 June 2025

Issue for Proposal

VOLUME 2

Project Manual

for

PKG 3A – GPHS New Fieldhouse

PBK Project No.: 240539
Galena Park Project No.: 002.3-2025

for the

GALENA PARK INDEPENDENT SCHOOL DISTRICT

10 June 2025

Issue for Proposal

VOLUME 2

Team

Architect
PBK
11 Greenway Plaza Blvd, 22nd Floor
Houston, Texas 77046
Phone: (713) 965-0608

Structural
Kubala Engineers
11 Greenway Plaza Blvd, Ste. 1510
Houston, Texas 77046
Phone: (713) 940-3343

Civil
DIG Engineers
11 Greenway Plaza Blvd, Ste. 1520
Houston, Texas 77046
Phone: (346) 308-9036

MEP
LEAF Engineers
11 Greenway Plaza Blvd, 15th Floor
Houston, Texas 77046
Phone: (713) 940-3300

Facilities
BEAM Professionals
11 Greenway Plaza Blvd, 15th Floor
Houston, Texas 77046
Phone: (713) 965-0608

Landscape
Edgeland Group
11 Greenway Plaza Blvd, 15th Floor
Houston, Texas 77046
Phone: (713) 460-0988

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes: Administrative and procedural requirements for alternates.

1.3 DEFINITIONS

A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain Work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
   1. Alternates described are part of the Work when enumerated in the Agreement.
   2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

A. Coordination: Revise or adjust affected adjacent Work as necessary to completely integrate Work of the alternate into Project.
   1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.

B. Notification: Forty-eight (48) hours following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.

C. Execute accepted alternates under the same conditions as other Work of the Contract.

D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the Work described under each alternate.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate Number 1: 23 09 23 – Direct Digital Controls – **Automated Logic Corporation**
   1. This Alternate shall establish the amount to adjust the Base Proposal for the cost of furnishing and installing Direct Digital Controls manufactured by Automated Logic Corporation; WEBCTRL® – Installed by **Automated Logic Corporation (ALC) – Houston**. This alternate shall include the pricing for all materials and labor for proper completion. Refer to specs and drawings for additional information.

B. Alternate No. 1 B: 23 09 23 – Direct Digital Controls – **Unify Energy Solutions**
   1. This Alternate shall establish the amount to adjust the Base Proposal for the cost of furnishing and installing Direct Digital Controls manufactured by Reliable Controls – Installed by **Unify Energy Solutions**. This alternate shall include the pricing for all materials and labor for proper completion. Refer to specs and drawings for additional information.

C. Alternate Number 2a: 23 52 16 – Condensing Boilers - **RBI**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Condensing Boilers, manufactured by **RBI – Flexcore model** as shown and scheduled on the drawings and as specified. Alternate boiler price shall include warranty as specified per 1.9.

D. Alternate Number 2b: 23 52 16 – Condensing Boilers - **Raypak**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Condensing Boilers, manufactured by **Raypak – XVERS model** as shown and scheduled on the drawings and as specified. Alternate boiler price shall include warranty as specified per 1.9.

E. Alternate Number 2c: 23 52 16 – Condensing Boilers – **Patterson - Kelley**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Condensing Boilers, manufactured by **Patterson-Kelley – ~~Sonic~~ Solis model** as shown and scheduled on the drawings and as specified. Alternate boiler price shall include warranty as specified per 1.9.

F. Alternate Number 2d: 23 52 16 – Condensing Boilers - **Camus**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Condensing Boilers, manufactured by **Camus – Avenger model** as shown and scheduled on the drawings and as specified. Alternate boiler price shall include warranty as specified per 1.9.

G. Alternate Number 3a: 23 64 23 – Scroll Water Chillers Air-Cooled – **Trane**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Scroll Water Chillers Air-Cooled, manufactured by **Trane** as shown and scheduled on the drawings and as specified. Alternate chiller price shall include (5) five-year parts, labor, refrigerant, etc. extended warranty (re: 1.10 Warranty) as well as (5) five-year Preventative Maintenance Service (re: 1.11 Preventative Maintenance Service); there are no chillers included in the base bid.

H. Alternate Number 3b: 23 64 23 – Scroll Water Chillers Air-Cooled – **Carrier**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Scroll Water Chillers Air-Cooled, manufactured by **Carrier** as shown and scheduled on the drawings and as specified. Alternate chiller price shall include (5) five-year parts, labor, refrigerant, etc. extended warranty (re: 1.10 Warranty) as well as (5) five-year Preventative Maintenance Service (re: 1.11 Preventative Maintenance Service); there are no chillers included in the base bid.

I. Alternate Number 3c: 23 64 23 – Scroll Water Chillers Air-Cooled – **JCI**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Scroll Water Chillers Air-Cooled, manufactured by **JCI** as shown and scheduled on the drawings and as specified. Alternate chiller price shall include (5) five-year parts, labor, refrigerant, etc. extended warranty (re: 1.10 Warranty) as well as (5) five-year Preventative Maintenance Service (re: 1.11 Preventative Maintenance Service); there are no chillers included in the base bid.

J. Alternate Number 4a: 23 74 13.16 – Packaged, Outdoor, Central-Station Hydronic Air-Handling Units – **Carrier**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Packaged, Outdoor, Central-Station Hydronic Air- Handling Units, manufactured by **Carrier** as shown and scheduled on the drawings and as specified; there are no Packaged, Outdoor, Central -Station Hydronic Air-Handling Units included in the base bid.

K. Alternate Number 4b: 23 74 13.16 – Packaged, Outdoor, Central-Station Hydronic Air-Handling Units – **Trane**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Packaged, Outdoor, Central-Station Hydronic Air- Handling Units, manufactured by **Trane** as shown and scheduled on the drawings and as specified; there are no Packaged, Outdoor, Central -Station Hydronic Air-Handling Units included in the base bid.

L. Alternate Number 4c: 23 74 13.16 – Packaged, Outdoor, Central-Station Hydronic Air-Handling Units – **JCI**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Packaged, Outdoor, Central-Station Hydronic Air- Handling Units, manufactured by **JCI** as shown and scheduled on the drawings and as specified; there are no Packaged, Outdoor, Central -Station Hydronic Air-Handling Units included in the base bid.

M. Alternate Number 4d: 23 74 13.16 – Packaged, Outdoor, Central-Station Hydronic Air-Handling Units – **Temtrol**
   1. This Alternate shall establish the amount to be added to the Base Proposal for the Contractor to furnish Packaged, Outdoor, Central-Station Hydronic Air- Handling Units, manufactured by **Temtrol** as shown and scheduled on the drawings and as specified; there are no Packaged, Outdoor, Central -Station Hydronic Air-Handling Units included in the base bid.

N. Alternate Number 5: Provide metal stud partition assemblies and accessories in lieu of Integrated Interior Assemblies (Section 13 42 75) per guidelines listed below:

   1. Provide gypsum board assemblies per Section 09 21 16.
      a. Partition: 25 ga. metal studs at 16" O.C., width to match width of assembly framing. One layer of 5/8" impact resistant type "x" gyp. board on each side with sound attenuation blanket, STC 45. Wall base to match scheduled flooring with continuous acoustical sealant on both sides.
   2. Wall Finish:
      a. Ceramic Wall tile up to 7’-0” at Corridor side.
         i. Manufacturer: Crossville Studios - Urbanology by Stile
         ii. Color: WT-3 Metropolis chiseled & WT-4 Titanium Chiseled
         iii. Size: 24”X48”
      b. Ceramic Wall tile at Restrooms.
         i. Manufacturer: WT-5, WT-6 & WT-7 Esmer - Raku
         ii. Color: White - Size: 3”x12” Matte
         iii. Color: Charcoal // Mustard - Size: 3”x12” Glossy
      c. Ceramic Wall tile at Stairwell (2-Story)
         i. Manufacturer: Crossville Studios - Urbanology by Stile
         ii. Color: WT-3 Metropolis chiseled & WT-4 Titanium Chiseled
         iii. Size: 24”X48”
      d. Glass Mirrors - Annealed Float Glass.

i. Clear, ASTM C1036, with copper and silver coatings, and protective overcoating.
    a. Thickness: 1/4 inch (6.4 mm).
    b. Edges: Arrised.
    c. Size: As indicated on Drawings.

3. Provide aluminum framed storefronts per Section 08 43 13 at all window and door locations.
    a. 6'-10" door frame with transom above – height to match scheduled ceiling
    b. 1 3/4" thick, plastic clad, solid core wood doors.
    c. Anodized aluminum frame, typical
    d. Window glazing and frame: Anodized aluminum frame, typical and 1/4" thick clear tempered glass
4. Tack boards – Vinyl mounted on resilient cork underlay, 1/2" thick.
    a. Basis of Design: Claridge Fabricork series #1550EW or comparable product.
    b. Fabric Wrapped Edge: Wrap edge of tackboard panel with fabric facing.
    c. Color and Pattern: Selected by Architect.
5. Marker Boards with multimedia finish and aluminum tray and trim (magnetic).
    a. 24-gauge porcelain enamel steel LCS 24 face sheet on 7/16 inch MDF core with 0.015 inch aluminum back sheet. Color: White & Magnetic.
6. Educational Casework:
    a. Manufactured plastic laminated casework, hardware and related accessories.
    b. Identification of casework components and related products by surface visibility.
        i. Balanced construction: High pressure laminate or cabinet liner shall be installed on both sides of core to restrict warpage in accordance with AWI Quality Standards Illustrated Section 400B-T-2.
        ii. Open Interiors: Open unit without solid door and drawer fronts, and units with full glass insert or acrylic doors.
        iii. Closed Interiors: Closed unit behind solid door, drawer fronts, and sliding solid doors.
        iv. Exposed Ends: Exterior side surface that is visible after installation.
        v. Other Exposed Surfaces: Faces of doors and drawers when closed and tops of cabinets less than 72 inches above finished floor.
        vi. Semi-Exposed Surfaces: Interior surfaces which are visible, bottoms of wall cabinets and tops of cabinets 72 inches or more above finished floor.
        vii. Concealed Surfaces: Any surface not visible after installation.
7. Electrical Work Scope:
    a. Refer to 26 05 00 - Common Work Results for Electrical
    b. Provide all work for electrical systems required in the project to be properly installed, tested and performing their intended function. Coordinate the work of this division with all other divisions to ensure that all components of the electrical system will be installed at the proper time and fit the available space. Locate and size all openings in work of other trades required for the proper installation of the electrical system components. Make all electrical connections to all equipment furnished by this division and any other division. Make all electrical connections from all 120 volt and greater dampers and switches to associated exhaust fan(s) furnished by any other division.
8. Plumbing Work Scope:

a. Refer to 22 05 00 – Common Work Results for Plumbing
b. Plumbing systems installed, and the work performed under Division 22 of the
c. Specifications, shall include, but are not necessarily limited to connection points for all systems from the site utilities shall be at 5’-0” from the exterior of the building unless specifically noted otherwise. Provide all work for plumbing and fire protection systems required in the project to be properly installed, tested, and performing their intended function.

9. Technology Work Scope:
   a. Refer to 27 00 00 - Basic Materials and Methods
   b. The Contractor shall be responsible for coordination and proper relation of his work to the building structure and to the work of all trades. Provide an extension of the existing installed systems interfaced with new systems in the newly constructed building, complete in every respect.

END OF SECTION 01 23 00

SECTION 09 67 00 - FLUID-APPLIED FLOORING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. The provisions of the General Conditions, Supplementary Conditions, Drawings, Specifications, and the Sections included under Division 01 General Requirements and References, are included as a part of this Section as though bound herein.

1.2 SUMMARY

A. Section Includes: Requirements including but not limited to:
   1. Fluid-applied, epoxy resin flooring system.
   2. Accessories necessary for a complete installation.

B. Related Sections:
   1. Section 01 61 16 - Volatile Organic Compound (VOC) Content Restrictions.

1.3 REFERENCE STANDARDS

A. ASTM D635 - Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position; 2022.

B. ASTM D4263 - Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method; 1983 (Reapproved 2018).

C. ASTM E648 - Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source; 2023.

D. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride; 2023.

E. ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes; 2019a.

F. NFPA 253 - Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source; 2023.

1.4 DEFINITIONS

A. Refer to Section 01 42 16 - Definitions for the following terms:
   1. Comparable Product.

1.5 SUBMITTALS

A. Product Data: Technical data for each type of product indicated include manufacturer's technical data, application instructions, and recommendations for each flooring component required.

B. Samples: Submit flooring system required, 6 inches (150 mm) square, applied to a rigid backing.
   1. Two samples indicating range of slip resistant textures
   2. Two samples of actual color and texture selected by Architect.

C. Reports and Certificates:
   1. Installer Certificates: Signed by manufacturer certifying that installers comply with specified requirements.

D. Maintenance Data: Submit data for flooring system to include in maintenance manuals.

1.6 QUALITY ASSURANCE

A. Regulatory Requirements:
   1. Building Code: Comply with applicable requirements of the IBC for interior floors.
   2. Fire Test Response Characteristics: Determined by testing identical products according to ASTM E648 or NFPA 253 by a qualified testing agency.
   3. Accessibility Requirements: Comply with applicable requirements.

4. Flammability: Self-extinguishing according to ASTM D635.

B. Installer Qualifications: Installer having minimum 5 years documented experience in the installation of epoxy floors and who is a manufacturer authorized representative trained and approved for installation of flooring systems required. Engage installer certified in writing by floor manufacturer as qualified to apply flooring systems indicated.

C. Source Limitations: Obtain primary flooring materials, including primers, resins, hardening agents, grouting coats, and topcoats, from single source from single manufacturer. Provide secondary materials, including patching and fill material, joint sealant, and repair materials, of type and from source recommended by manufacturer of primary materials.

D. Pre-Installation Conference: Conduct conference at site.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storage and mixing with other components.

1.8 FIELD CONDITIONS

A. Environmental Limitations: Comply with flooring manufacturer's written instructions for substrate temperature, ambient temperature, moisture, ventilation, and conditions affecting resinous flooring application.

B. Lighting: Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during resinous flooring application.

C. Close spaces to traffic during flooring application and for 24 hours after application unless manufacturer recommends a longer period.

1.9 WARRANTY

A. Manufacturer shall furnish a single, written warranty covering both material and workmanship for a period of (1) full year from date of installation, or provide a joint and several warranty signed on a single document by material manufacturer and applicator jointly and severally warranting the materials and workmanship for a period of (1) full year from date of installation. A sample warranty letter must be included with bid package or bid may be disqualified.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Subject to compliance with specification requirements, products by the listed manufacturers or fabricators may be submitted for use in the Work.
1. BASF Corporation: construction.basf.com.
2. Crossfield Products Corp.: www.crossfieldproducts.com.
3. Patcraft.
4. Sherwin-Williams Company (The), High Performance Flooring: industrial.sherwin-williams.com/na/us/en/resin-flooring.html.
5. Sika Corporation; Flooring: https://usa.sika.com/en/construction/floor-wall/flooring-systems.html.
6. Stonhard Group (The): www.stonhard.com.

B. Substitutions: Refer to Section 01 25 13 - Product Substitution Procedures.
1. Manufacturers and fabricators not listed must have a minimum of 5 years' experience manufacturing products meeting or exceeding the specifications and comply with Division 01 requirements regarding substitutions to be considered. Submit as a substitution.

2.2 DESCRIPTION

A. Regulatory Requirements:
1. Code Standards:

a. Refer to specification Section 01 41 00 - Regulatory Requirements for code requirements and code standards applicable to all materials and work necessary to complete the scope of work.

2.3 FLUID-APPLIED, EPOXY RESIN FLOORING SYSTEM (FF-1, FF-2)

A. Basis of Design Product:
   1. Traditional Flake as manufactured by Patcraft.

B. System Characteristics:
   1. Color:
      a. FF-1: F0130 Giant.
      b. FF-2: F0570 Astral.
   2. Pattern: As indicated on Drawings.
   3. Integral Cove Base: As indicated on Drawings.

C. System Components: Manufacturer's standard components that are compatible with each other and as follows:
   1. Prime Coat: 912 LV Epoxy Primer.
   2. Base Coat: 610 Self-Leveling Epoxy.
   3. Visual Layer: Decorative Flake.
   4. Top Coat: 670 Polyaspartic Coating.

PART 3 EXECUTION

3.1 PREPARATION

A. Prepare and clean substrates according to resinous flooring manufacturer's written instructions for substrate indicated. Provide clean, dry substrate for resinous flooring application.

B. Concrete Substrates: Provide sound concrete surfaces free of laitance, glaze, efflorescence, curing compounds, form release agents, dust, dirt, grease, oil, and other contaminants incompatible with resinous flooring.
   1. Remove existing floor covering, adhesives, and contaminates. Ensure existing concrete floor is ready to receive epoxy floor covering.
   2. Roughen concrete by Shot Blasting (mechanical preparation only) substrates complying with manufacturer's written instructions.
   3. Repair damaged and deteriorated concrete according to resinous flooring manufacturer's written instructions.
   4. Verify that concrete substrates are dry and moisture vapor emissions are within acceptable levels according to manufacturer's written instructions.
      a. Anhydrous Calcium Chloride Test: ASTM F1869. Proceed with application of resinous flooring only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1,000 sq. ft. (1.36 kg of water/92.9 sq. m) of slab area in 24 hours.
      b. Plastic Sheet Test: ASTM D4263. Proceed with application after testing indicates absence of moisture in substrates.
      c. Relative Humidity Test: Use in situ probes, ASTM F2170. Proceed with installation only after substrates have a maximum 75 percent relative humidity level measurement.
   5. Alkalinity and Adhesion Testing: Verify that concrete substrates have pH within acceptable range. Perform tests recommended by manufacturer. Proceed with application only after substrates pass testing.

C. Patching and Filling: Use patching and fill material to fill holes and depressions in substrates according to manufacturer's written instructions.
   1. Control Joint Treatment: Treat control joints and other nonmoving substrate cracks to prevent cracks from reflecting through resinous flooring according to manufacturer's written instructions.

D. Epoxy Materials: Mix components and prepare materials according to resinous flooring manufacturer's written instructions.

3.2 APPLICATION

A. Apply components of resinous flooring system according to manufacturer's written instructions to produce a uniform, monolithic wearing surface of thickness indicated.
   1. Coordinate application of components to provide optimum adhesion of resinous flooring system to substrate, and optimum intercoat adhesion.
   2. Cure resinous flooring components according to manufacturer's written instructions. Prevent contamination during application and curing processes.
   3. Expansion and Isolation Joint Treatment: At substrate expansion and isolation joints, comply with resinous flooring manufacturer's written instructions.

B. Primer/Waterproofing Membrane: Apply primer or waterproofing membrane over entire substrate surface in manufacturer's recommended thickness.
   1. Apply to integral cove base substrates.

C. Integral Cove Base: Apply cove base mix to wall surfaces before applying flooring. Apply according to manufacturer's written instructions and details, including those for taping, mixing, priming, troweling, sanding, and topcoating of cove base. Do not broadcast into cove. Mix quartz aggregates and add thixotropic and hand trowel. Round internal and external corners.

D. Quartz Granules: Broadcast Quartz into Undercoat. Scrape off and vacuum up excess aggregate.

E. Topcoats: Trowel or squeegee apply clear epoxy resin coat topcoats indicated for flooring system and at spreading rates recommended in writing by manufacturer and to produce wearing surface indicated.

3.3 CURING

A. Cure resinous flooring materials in compliance with manufacturer's directions, taking care to prevent contamination during stages of application and prior to completion of curing process. Close area of application for a minimum of 48 hours.

3.4 PROTECTION

A. Protect resinous flooring from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by resinous flooring manufacturer.

3.5 CLEANING

A. Cleaning: Remove temporary covering and clean resinous flooring just prior to final inspection. Use cleaning materials and procedures recommended by resinous flooring manufacturer.

END OF SECTION 09 67 00

SECTION 11 66 13 - EXERCISE EQUIPMENT

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes: Requirements including but not limited to:
   1. Exercise equipment.
      a. Athletic Edge Treatment Table - Custom
      b. Athletic Edge Taping Station – Custom
      c. Hausmann Mammoth 3-Section Hi-Lo Table
      d. Sammons Preston Crutch Rack Storage - Medco
      e. Wall Mounted Weight Rack
      f. Liberty Hardware Double Prong Hook
      g. StoreMoreStore Should Pad Storage rack
      h. Uline 18”x36” Lockable Metal Shelving
      i. Jersey wardrobe Cabinet
      j. Huskey Movable Island
   2. Accessories necessary for a complete installation

1.3 REFERENCE STANDARDS

A. ANSI A208.1 - American National Standard for Particleboard; 2022.

B. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2019.

C. ASTM A47/A47M - Standard Specification for Ferritic Malleable Iron Castings; 1999, with Editorial Revision (2022).

D. ASTM A391/A391M - Standard Specification for Grade 80 Alloy Steel Chain; 2021.

E. ASTM A413/A413M - Standard Specification for Carbon Steel Chain; 2021.

F. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2023.

G. ASTM A513/A513M - Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing; 2020a.

H. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2023.

I. ASTM B179 - Standard Specification for Aluminum Alloys in Ingot and Molten Forms for Castings from All Casting Processes; 2018.

J. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021a.

K. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2021.

L. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric); 2021.

M. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink); 2020.

1.1 PERFORMANCE REQUIREMENTS

A. Comply with requirements of ASTM F2276-10 “Standard Specification for Fitness Equipment”.

1.2 SUBMITTALS

A. Product Data: Technical data for each type of product, including assembly, disassembly, and storage instructions for removable equipment and to indicate the performance, fabrication procedures, product variations, and accessories
   1. If applicable, include assembly, disassembly, and storage instructions for removable equipment.
   2. Motors: Show nameplate data, ratings, characteristics, and mounting arrangements.

B. Shop Drawings: Submit plans, elevations, sections, details, and attachments to other work.
   1. Include details of field assembly for removable equipment, connections, installation, mountings, floor inserts, attachments to other work, and operational clearances.
   2. Include transport and storage accessories for removable equipment.

C. Coordination Drawings: Court layout plans, drawn to scale, and coordinated with floor inserts, game lines, and markers applied to finished flooring.

D. Product Certificates: For each type of exercise equipment.

E. Operation and Maintenance Data: For exercise equipment to include in emergency, operation, and maintenance manuals.

1.3 FIELD CONDITIONS

A. Environmental Limitations: Do not install exercise equipment until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

B. Field Measurements: Verify position and elevation of power connections and layout for exercise equipment.

1.4 COORDINATION

A. Coordinate installation of power connections with structural floors and finish flooring installation.

B. Coordinate layout and installation of overhead and wall supported exercise equipment and suspension system components with other construction including lighting fixtures, HVAC equipment, fire suppression system components, and partition assemblies.

1.5 WARRANTY

A. Written warranty in which manufacturer agrees to repair or replace components of gymnasium equipment that fail in materials or workmanship within specified warranty period.
   1. Failures include, but are not limited to, the following:
      a. Basketball backboard failures including glass breakage.
      b. Faulty operation of basketball backstops.
   2. Warranty Period: years from date of Substantial Completion.

PART 2 PRODUCTS

2.1 MATERIALS

A. Aluminum: Alloy and temper recommended by manufacturer for use and finish type indicated.
   1. Extruded Bars, Profiles, and Tubes: ASTM B221 (ASTM B221M)
   2. Cast Aluminum: ASTM B179
   3. Flat Sheet: ASTM B209/B209M

B. Steel: Comply with the following:
   1. Steel Plates, Shapes, and Bars: ASTM A36/A36M.
   2. Steel Tubing: ASTM A500/A500M or ASTM A513/A513M, cold formed.
   3. Steel Sheet: ASTM A1011/A1011M.

C. Support Cable: 1/4 inch (6 mm) diameter, 7x19 galvanized stranded steel wire rope with breaking strength of 7000 lb (3175 kg). Provide fittings complying with wire rope manufacturer's written instructions for size, number, and installation method.

D. Support Chain and Fittings: For chains used for overhead lifting, provide Grade 80 heat treated alloy steel chains, complying with ASTM A391/A391M, with commercial quality, hot dip galvanized or zinc plated steel connectors and hangars.

E. General Purpose Chain: For chains not used for overhead lifting, provide carbon steel chain, complying with ASTM A413/A413M, Grade 30 proof coil chain or other grade recommended by gymnasium equipment manufacturer. Provide coating type, chain size, number, and installation method complying with manufacturer's written instructions.

F. Castings and Hangers: Malleable iron, complying with ASTM A47/A47M; grade required for structural loading.

G. Softwood Plywood: DOC PS 1, exterior.

H. Particleboard: ANSI A208.1.

I. Equipment Wall Mounted Board: Wood, finish, size, and quantity as required to mount exercise equipment according to manufacturer's written instructions.

J. Anchors, Fasteners, Fittings, and Hardware: Corrosion resistant or non-corrodible units; concealed; .

K. Grout: Non-shrink, non-metallic, pre-mixed, factory packaged, non-staining, non-corrosive, nongaseous grout, complying with ASTM C1107/C1107M with minimum strength recommended in writing by exercise equipment manufacturer.

2.2 PRODUCTS

A. Athletic Edge Treatment Table - Custom
   1. Description: Aluma Elite Treatment Table Custom
      a. A4359 – Lift Back and Split Leg Cushions
      b. A42740 – 1 Storage Cabinet with sliding drawers
         1) Cabinet Location - head end
         2) Drawer Location – Left
      c. Upholstery Color – Black
      d. Standard Frame – Black
      e. Standard Accent Color – Yellow
      f. Item# D55194201
      g. Qty: Ref Schedule on AQ-101

B. Athletic Edge Taping Station – Custom
   1. Description: Athletic Edge Taping Station – Custom
      a. Height – 42”
      b. Depth – 42”
      c. Number of Seats – 4 Seats and 3 Centers 18’ long
      d. TTS Model-Standard Center Cabinet
      e. TSFO-D3-1/2 Drawer Pull out
      f. Center Cabinet Front Option – CCFO-D2-Open Cubby
      g. Upholstery – Black
      h. Laminate top Color – Slate Grey
      i. Qty: Ref Schedule on AQ-101

C. Hausmann Mammoth 3-Section Hi-Lo Treatment Table
   1. Vendor: Alert Services
   2. Item # D2497703
   3. Qty: Ref Schedule on AQ-101

D. Sammons Preston Crutch Storage Rack
   1. Vendor: Medco
   2. Item # 081186501
   3. Qty: Ref Schedule on AQ-101

E. Wall Mounted Weight Rack
   1. Vendor: Medco
   2. Item # 081031111
   3. Qty: Ref Schedule on AQ-101

F. Double Prong Helmet Hooks
   1. Vendor: Liberty Hardware
   2. Item # B46114Q-SN-C5
   3. Qty: Ref Schedule on AQ-101

G. Shoulder Pad Storage rack
   1. Vendor: STOREMORESTORE
   2. Item # SMS-08-V42-FB-1530-42SS
   3. Qty: Ref Schedule on AQ-101

H. Uline 18”x36” Lockable Metal Shelving
   1. Vendor: Uline
   2. Security Cart: H-2656
   3. Qty: Ref Schedule on AQ-101

I. Jersey Wardrobe Cabinet
   1. Vendor: SCHOOLLOCKERS
   2. Description: Small Stadium Locker with Shelf
   3. Item # SL-1-181872-SHELF-G2026029
   4. Qty: Ref Schedule on AQ-101

J. Huske Movable Island
   1. Vendor: Huskey
   2. Tool Storage: H46X18MWC9BLK
   3. Qty: Ref Schedule on AQ-101

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions for compliance with requirements for exercise equipment layout, alignment of mounting substrates, installation tolerances, operational clearances, and other conditions affecting performance of the Work.
   1. Verify critical dimensions.
   2. Examine supporting structure, subfloors, and footings below finished floor.
   3. Examine wall assemblies, where reinforced to receive anchors and fasteners, to verify that locations of concealed reinforcements are clearly marked. Locate reinforcements and mark locations.

B. Proceed with installation after correcting unsatisfactory conditions.

3.2 INSTALLATION

A. Comply with manufacturer's written installation instructions. Complete equipment field assembly where required.

B. Unless otherwise indicated, install exercise equipment after other finishing operations, including painting, are completed.

C. Permanently Placed Exercise Equipment and Components: Install rigid, level, plumb, square, and true; anchored securely to supporting structure; positioned at locations and elevations indicated; in proper relation to adjacent construction; and aligned with court layout.
   1. Floor Insert Location: Coordinate location with application of game lines and markers, .
   2. Floor Insert Elevation: Coordinate installed heights of floor insert with installation of finish flooring and floor-plate type.
   3. Operating Exercise Equipment: Verify clearances for movable components of exercise equipment throughout entire range of operation and for access to operating components.

D. Anchoring to In Place Construction: Use anchors and fasteners where necessary to secure built in and permanently placed exercise equipment to structural support and to properly transfer load to in place construction.

E. Connections: Connect electric operators to building electrical system.

3.3 ADJUSTING

A. Adjust movable components of exercise equipment to operate safely, smoothly, easily, and quietly, free from binding, warp, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Lubricate hardware and moving parts.

3.4 CLEANING

A. After completing exercise equipment installation, inspect components. Remove spots, dirt, and debris and touch up damaged shop applied finishes according to manufacturer's written instructions.

B. Replace exercise equipment and finishes that cannot be cleaned and repaired, in a manner approved by Architect, before time of Substantial Completion.

3.5 DEMONSTRATION

A. Engage a factory authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain exercise equipment.

END OF SECTION 11 66 13

SECTION 27 42 20 - ADD #1

SMART RESTROOM SYSTEM

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section includes smart restroom systems with the following subsystems/components:
1. Cloud-based Business Intelligence Software and Mobile App.
2. Stall Occupancy System
3. Throughput Counters
4. Ancillary Equipment
5. Conductors and Cables.

B. Related requirements:
1. Section 08 31 00 - Access Doors and Panels
2. Section 10 28 00 - Toilet, Bath, and Laundry Accessories
3. Section 26 05 19 - Low Voltage Electrical Power Conductors and Cables
4. Section 26 05 33 – Raceway and Boxes for Electrical Systems
5. Section 27 10 00 – Structured Cabling System

1.03 ACTION SUBMITTALS

A. Product Data: For each type of product. Product data submittal shall clearly identify any/all options (colors, features, functions, etc.) to be provided for the project.

B. Shop Drawings:
1. Include plans, elevations, sections, and mounting details.
2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
3. Include scaled drawings for indicator lights, wall-mounted tablets and any other devices that will be mounted in areas visible to the public.
4. Include diagrams for power, signal, and communications wiring.
   a. Identify terminals to facilitate installation, operation, and maintenance.
   b. Single-line diagram showing interconnection of components.
   c. Cabling diagram showing cable routing.
5. Provide details of all types of wireless connectivity. Provide specific information on frequency band usage and any expectation of connectivity to be provided by the Owner. Details shall include proposed security provisions to protect data transmissions.

1.04 INFORMATIONAL SUBMITTALS

A. Coordination Drawings:
1. Reflected ceiling plans, drawn to scale, on which ceiling-mounted items including smart

restroom devices, luminaires, diffusers, grilles, speakers, sprinklers, access panels, and special moldings are shown and coordinated with each other, using input from installers of the items involved.

2. Elevation drawings, drawn to scale, on which wall-mounted items including survey tablets, digital signage, luminaires, windows, doors, access panels, wall finishes, and trims are shown and coordinated with each other, using input from installers of the items involved.

B. Qualification Data:
   1. Installers.
   2. Testing personnel
   3. Training personnel

C. Field quality-control reports.

1.05 CLOSEOUT SUBMITTALS

A. Record Drawings:
   1. In addition to items specified in Section 01 78 39 “Project Record Documents,” include the following:
      a. Updates to Shop Drawings which denote actual installed conditions.
      b. Particular emphasis shall be placed on documenting the locations of devices and power/data circuits installed behind finished surfaces.

B. Operation and Maintenance Data:
   1. In addition to any items specified in Section 01 78 23 "Operation and Maintenance Data," include the following:
      a. A record of Owner's equipment-programming option decisions.
      b. Plans, drawn to scale, indicating location, designation, and connection of smart restroom system components.

C. Software Operational Documentation:
   1. Software operating and upgrade manuals.
   2. Device address list.
   3. Screenshots of final display arrangements/dashboards.

1.06 QUALITY ASSURANCE

A. Installer Qualifications: An authorized representative(s) who is trained and approved by manufacturer(s).

1.07 COORDINATION

A. Ceilings: Coordinate layout and installation of ceiling-mounted smart restroom devices with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies. Installation of in-ceiling or above-ceiling devices must allow for maintenance access. Where installations occur in hard ceilings, provide devices that may be removed from below ceiling, or provide ceiling access panels to support maintenance access from above ceilings. Coordinate ceiling access panels/placements with the Architect and the ceiling work of other disciplines.

B. Power: Coordinate all power requirements with electrical work. Ensure all electrical connections are accessible for disconnect and maintenance purposes.

C. Communications: Proposed communications schemes must be coordinated with and approved

by the Owner's IT Department. Whether communications include the use of Owner's public/private Wi-Fi, contracted Wi-Fi vendor, establishing a new dedicated Wi- Fi system, Bluetooth, cellular data, hardwired connections to Owner's network, or a combination thereof, such communications schemes must meet the Owner's approval. Refer to the Contract Drawings for proposed communications schemes. Deviations must be fully coordinated and approved by the Owner.

D. Screen Designs: Coordinate all screen layouts (i.e., survey tablets, Business Intelligence Software (BIS) dashboards, and Mobile App screen layouts) directly with the Owner. Owner's approval must be obtained prior to deployment.

PART 2 - PRODUCTS

2.01 SYSTEM DESCRIPTION

A. Equipment: Modular, using solid-state components, and rated for continuous duty unless otherwise indicated. Select equipment for normal operation on input power supplied at 110 to 130 V, 60 Hz without requirement of any external power conditioning equipment.

B. Software: Business Intelligence Software (BIS): None required for sensors in standalone mode.

C. Coordinate features and select subsystems/components to form a fully integrated system. Match components and subsystems for optimum performance of specified functions.

2.02 FUNCTIONAL DESCRIPTION

A. Business Intelligence Software: None required for sensors in standalone mode.

B. Restroom and/or Stall Occupancy: Each restroom and/or stall will be equipped with a combination sensor/indicator light installed at those locations designated on the Contract Drawings. Persons entering and exiting the stalls shall be detected by the sensor and shall cause the light to toggle between green/blue and red. The sensor shall be designed/configured to not trigger as a result of routine personnel movements in the corridor outside the restroom and/or stalls. In addition, multiple persons entering/exiting a restroom and/or stall, e.g., caretaker and child, shall be detected as a singular event. The lights shall be placed in a manner to provide a clear indication to personnel as to which restrooms and/or stalls are occupied. Data received from the sensors/lights shall be populated into the BIS so that occupancy for the individual restrooms and/or stalls can be tracked in real time.

C. Throughput Counting: Sensors shall be installed in the entries and exits of each restroom to track the movement of patrons to/from each individual restroom. The sensors will be used to support the following functions:
   1. Each restroom shall be configured with a threshold value associated with throughput. The threshold shall be configurable by the Owner and may vary based upon the size of each restroom.

2.03 BUSINESS INTELLIGENCE SOFTWARE – N/A

A. Web-hosted application that can be accessed by authorized users from a variety of web browsers/devices.

B. The basis of design for smart bathroom installations at the high school is a standalone sensor

system for restroom occupancy indication only.

2.04 STALL OCCUPANCY SYSTEM

A. Occupancy Sensors/Indicator Lights: Ceiling or wall-mounted LED lights with integrated sensors that connect wirelessly to the system hub. Sensors/lights shall be powered via Zurn Z-PWRSUP-W1 mounted in Raco 260 electrical box in plenum that shall provide 12VDC power to daisy-chained power connections on sensors/lights.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide the Z-LIGHT-W1 system provided by Zurn Industries, LLC.
   2. Sensor/Light: Mounting: Units shall be ceiling or wall-mounted with consideration of the ceiling heights required under this project (typically 10') and the top of the sensor shall not exceed 8' 6" after finished floor. Sensors shall communicate via a wireless meshed network back to the system hub.
   3. LED Light Color: Green/Red and Blue/Red (for handicapped stalls).
   4. Power Supply: The system shall be powered via Z-PWRSUP-W1 12VDC power supplies to support up to 40 connected devices.
   5. Internet Reporting Device with Smart Hub: System shall interface with the BIS via the cloud.
   6. The system shall provide the following capabilities:
      a. Provide all local wireless communications equipment, communications gateways, power supplies and cabling, data services, cloud-hosting services, and licensing required to collect data from the sensors identified above and to control the associated status lights.
      b. Provide an application programming interface (API) and associated support/development services, if necessary, to allow information collected from the sensors to be shared with the Owner's existing Smart Restroom System should there be one existing.
      c. Provide all data services, hosting services, licensing, and maintenance support services, etc., required to provide a fully functional expansion to the TRAX smart restroom system. Such services must meet the performance period, licensing, and support service requirements identified within Part 3 of this specification section.

2.05 ANCILLARY EQUIPMENT

A. Provide all ancillary equipment required to provide fully functional smart restroom installations. Such equipment shall vary by manufacturer and specific system requirements. Ancillary equipment for this project includes, but is not necessarily limited to, the following:

   1. Network Equipment: Provide connections to all PoE network switches required to support the proposed solution.
   2. Power Supplies: Provide power supplies as needed to support the proposed solution. Coordinate power supply connections with electrical outlets.
   3. Specialty Cables: Provide any/all specialty cable required to interconnect system components.

2.06 CONDUCTORS AND CABLES

A. Provide cables that fully comply with manufacturer's recommendations.

B. Refer to Section 27 10 00 "Structured Cabling System" for "Category" cabling to be used for smart restroom system ethernet hubs where indicated.

C. Conductors: Jacketed, twisted pair and twisted multipair, untinned solid copper. Sizes as recommended by system manufacturer, but no smaller than No. 24 AWG.

D. Insulation: Thermoplastic, not less than 1/32 inch thick.

E. Plenum Cable: Listed and labeled for plenum installation.

2.07 RACEWAYS

A. If required, smart restroom system raceways and boxes shall comply with requirements in state and local codes.

B. Outlet boxes shall be not less than 2 inches wide, 3 inches high, and 2-1/2 inches deep.

PART 3 - EXECUTION

3.01 WIRING METHODS

A. Wiring Method: Conceal conductors and cables in accessible ceilings, walls, and floors where possible.
   1. Install plenum cable in environmental air spaces, including plenum ceilings.

B. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii.

3.02 INSTALLATION OF RACEWAYS

A. Comply with state and local regulatory requirements for installation of conduits and wireways.

B. Install manufactured conduit sweeps and long-radius elbows whenever possible.

3.03 INSTALLATION OF CABLES

A. Comply with NECA 1.

B. General Requirements:
   1. Terminate conductors; no cable shall contain unterminated elements. Make terminations only at outlets and terminals.
   2. Refer to Section 27 10 00 “Structured Cabling System” for termination requirements associated with “Category” cabling to be used for smart restroom systems.
   3. Splices, Taps, and Terminations: Arrange on numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures. Cables may not be spliced.
   4. Secure and support cables at intervals not exceeding 30 inches and not more than 6 inches from cabinets, boxes, fittings, outlets, racks, frames, and terminals.
   5. Do not install bruised, kinked, scored, deformed, or abraded cable. Do not splice cable between termination, tap, or junction points. Remove and discard cable if damaged during installation and replace it with new cable.
   6. Cold-Weather Installation: Bring cable to room temperature before de-reeling. Heat lamps shall not be used.

C. Open-Cable Installation:

1. Suspend cable not in a wireway or pathway a minimum of 8 inches above ceiling by cable supports not more than 60 inches apart.
2. Cable shall not be run through structural members or be in contact with pipes, ducts, or other potentially damaging items.

D. Separation of Wires: Separation requirements for data cabling described in section 27 10 00 “Structured Cabling System” shall apply to all data cabling required for the smart restroom systems.

3.04 INSTALLATION

A. Identification of Conductors and Cables: Color-code conductors and apply wire and cable marking tape to designate wires and cables so they identify media in coordination with system wiring diagrams.

3.05 GROUNDING

A. Ground cable shields and equipment to eliminate shock hazard and to minimize ground loops, common-mode returns, noise pickup, cross talk, and other impairments.

3.06 SOFTWARE PROGRAMMING

A. Programming: Fully brief Owner on available programming options, e.g., alert threshold settings, user account privileges, mobile app management functions, etc. Record Owner's decisions and set up initial system configuration. Prepare a written record of decisions, implementation methodology and final results.

B. User Interfaces/Dashboard Layouts: Based upon the unique features of the smart restroom system, fully brief Owner on the available options for presenting information via the various display screens, user interfaces, and dashboards. After initial requirements are identified and the owner requires it for full functionality of the system, provide customized layouts for the Owner’s review and approval. Up to three (3) review iterations should be anticipated. As a minimum, the customized screen layouts shall include the following:
1. One (1) dedicated dashboard for each restroom included in the project.
2. Five (5) overview dashboards that convey overall status of all restrooms, supplies, and cleaning status.

3.07 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.

B. Tests and Inspections:
1. Schedule tests with at least seven days' advance notice.
2. After installing smart restroom systems and after electrical circuitry has been energized, test for compliance with requirements.
3. Operational Tests:
    a. BIS Platform Test – N/A
        1) Verify URL and Database Setup

2) Verify all data APIs are active and triggering effectively
3) Verify all user information has been accurately entered into the BIS
4) Verify report generation

b. Throughput Test
1) Demonstrate input/output to be accurate
2) Verify network is active
3) Verify data APIs are active
4) Verify throughput counting alerts are activated.
5) Verify throughput thresholds can be adjusted and the alert activations coincide with new thresholds.

c. Stall Occupancy System Test
1) Verify API is active
2) Verify network is active
3) Demonstrate all lights/sensors are functional and trigger events through light changes and via API
4) Verify map on URL accurately reflects stall numbers and visualizations of opens/closes are accurate

d. Mobile App/Activity
1) Verify API is active
2) Verify presence duration threshold timer is properly configured.
3) Verify mobile device presence restarts throughput counter at the end of the threshold period.
4) Verify mobile device presence does not restart the throughput counter if duration is less than the threshold period.
5) Verify presence thresholds can be adjusted and the resetting of throughput counters coincide with new thresholds.

C. Inspection: Verify that units and controls are properly labeled, and interconnecting wires and terminals are identified.

D. Smart restroom systems will be considered defective if they do not pass tests and inspections.

E. Prepare test and inspection reports.

3.08 STARTUP SERVICE

A. Engage a factory-authorized service representative to perform startup service and initial system programming].

1. Verify that device installations comply with manufacturer's submittal and installation requirements.
2. Complete installation and startup check according to manufacturer's written instructions.

3.09 ADJUSTING

A. On-Site Assistance: Engage a factory-authorized service representative to provide on- site assistance in adjusting devices, controls, and software settings to meet occupancy conditions.

B. Occupancy Adjustments: When requested within three (3) months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to one visit to Project site during other-than-normal occupancy hours for this purpose.

3.10 DEMONSTRATION

A. Comply with the applicable provisions of Division 01 specifications including, but not limited to, Section 01 79 00 Demonstration and Training.

B. Engage a factory-authorized service representative to train Owner's System Administrator and IT Staff, Custodial Supervisors, custodians, and maintenance personnel to adjust, operate, and maintain the smart restroom systems. Training shall cover all deployed technologies.

C. All training shall take place at the Field House over a two-day period. Training shall be conducted by qualified personnel fully conversant on the equipment, materials, software, and overall operation of the installed systems. Multiple sessions for each training module shall be scheduled to accommodate both day and night shifts during their normal working hours. Each training shall contain both lecture discussions and hands-on demonstrations.

D. In addition to module-specific training guides, training materials shall include system documentation, as-built drawings, and O&M manuals.

E. As a minimum, training modules shall include:
   1. Maintenance and IT Technical Support Staff (minimum of 2 hours/session)
      a. Site visit to provide orientation of device locations
      b. First level trouble shooting
      c. Equipment restarting
      d. Network Connectivity repair
      e. Threshold setup
   2. Custodian Training (minimum of 1 hour/session) – ONLY if customer survey and/or custodial tablets are being utilized in the project.
      a. How to operate/interact with tablets
      b. How to view dashboards
      c. How to use mobile devices
   3. Custodial Supervisor Training (minimum of 2 hours/session) - ONLY if customer survey and/or custodial tablets and/or BIS solutions are being utilized in the project.
      a. Custodian Training (described above)
      b. Reports and business intelligence review
      c. Mobile device use and threshold restarting
      d. Customer survey feedback alerts/data review
      e. Predictive analytics overview
      f. Dashboard reviews
   4. Administrator Training (minimum of 3 hours/session)
      a. Maintenance and IT Technical Support Staff Training (described above)
      b. Custodian Training (described above)
      c. Custodial Supervisor Training (described above)
      d. Administrative rights and access to BIS portal
      e. User rights set up/configuration
      f. Alerts set up/configuration

3.11 SYSTEM WARRANTY

A. Comply with the applicable provisions of Division 01 specifications including, but not limited to, Section 01 77 00 Closeout Procedures.

B. The Contractor shall warrant the smart restroom systems against defects in materials and

workmanship, including any required parts and labor, during the one (1) year warranty period from date of smart restroom final acceptance or beneficial use, whichever occurs first, of the completed smart restroom system at no additional cost to the project.

1. Stall indicator lights shall be warranted for a period of five (5) years from date of final acceptance or beneficial use, whichever occurs first.

C. During the warranty period, all software updates and bug fixes shall be provided to the Owner at no additional cost as a part of the annual Service Level Agreement (SLA).

3.12 MAINTENANCE SUPPORT

A. The Work includes a one-year Service Level Agreement (SLA) which coincides with the warranty period. The SLA shall include both hardware and software licensing and support in accordance with the following:

1. 24/7/365 technical support for all troubleshooting and questions. The technical support services shall include a Help Desk that includes the following:
   a. The Help Desk shall be based in North America to provide toll-free telephone support to Owner's personnel.
   b. In the event all lines are busy, the Help Desk shall include an answering service.
   c. The Help Desk shall issue a return email or issue a call to provided telephone number(s) within the time frames identified later in this section.
   d. Upon receipt of a request for assistance by either phone or email, a case number notification will be issued to the Owner's designated representative.
2. All technical support requests will be recorded and tracked through completion.
3. Requests for technical support shall be responded to in a timely manner. The Contractor shall respond (i.e. telephone call, email reply) to all such requests. Issues or problems shall be assigned to appropriate specialists/service personnel and resolved in the time frames set out below.

Severity Level	Definition	Minimum Response Times	Maximum Resolution Times
1. System Down	Mainframe, server or back end systems failure	Immediate	Within 4 hours
2. Critical	Business outage or significant customer impact that threatens future productivity	Within 2 hours	Within 8 hours
3. Urgent	High-impact problem where production is proceeding, but in a significantly impaired fashion; there is a time-sensitive issue important to long term productivity that is not causing an immediate work stoppage; or there is significant customer concern.	Within 4 hours	Within 8 hours
4. Important	Important issue that does not have significant current productivity impact	Within 1 business day	Within 24 hours

5. Monitor	Issue requiring no further action beyond monitoring for follow-up, if needed	1-2 business days	
6. Informational	Request for information only	1-2 business days	

4. If technical support requests cannot be resolved remotely or over the phone, the Contractor shall provide “on-call” corrective maintenance services for all installed hardware and software. Qualified maintenance personnel shall respond on-site, if required, on the next business day following the service request. This service shall include all labor, material, travel expenses, and incidentals at no additional cost to the Owner.

5. The Contractor shall maintain complete logs of all maintenance activities including service calls, corrective maintenance, component failures, etc. The maintenance logs shall be made available to the Owner upon request.

3.13 SPARE PARTS

A. As a requirement of Project Closeout, the following materials shall be turned over to the Owner for storage on site.

1. A minimum of 10 or 10% (whichever is greater) stall **sensor/**indicator light assemblies
2. A minimum of 1 or 10% (whichever is greater) stall occupancy system controller/hub
3. A minimum of 1 or 10% (whichever is greater) customer survey tablet with loaded application(s)
4. A minimum of 1 or 10% (whichever is greater) BLE Beacon

B. Any spare parts used by the Contractor to replace defective components during the warranty period shall be immediately replaced and returned to the Owner’s spare equipment stock at no cost to the Owner.

END OF SECTION
27 42 20

SECTION 27 42 20 - ADD #1

SMART RESTROOM SYSTEM

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section includes smart restroom systems with the following subsystems/components:
1. Cloud-based Business Intelligence Software and Mobile App.
2. Stall Occupancy System
3. Throughput Counters
4. Ancillary Equipment
5. Conductors and Cables.

B. Related requirements:
1. Section 08 31 00 - Access Doors and Panels
2. Section 10 28 00 - Toilet, Bath, and Laundry Accessories
3. Section 26 05 19 - Low Voltage Electrical Power Conductors and Cables
4. Section 26 05 33 – Raceway and Boxes for Electrical Systems
5. Section 27 10 00 – Structured Cabling System

1.03 ACTION SUBMITTALS

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1. Include plans, elevations, sections, and mounting details.
2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
3. Include scaled drawings for indicator lights, wall-mounted tablets and any other devices that will be mounted in areas visible to the public.
4. Include diagrams for power, signal, and communications wiring.
   a. Identify terminals to facilitate installation, operation, and maintenance.
   b. Single-line diagram showing interconnection of components.
   c. Cabling diagram showing cable routing.
5. Provide details of all types of wireless connectivity. Provide specific information on frequency band usage and any expectation of connectivity to be provided by the Owner. Details shall include proposed security provisions to protect data transmissions.

1.04 INFORMATIONAL SUBMITTALS

A. Coordination Drawings:
1. Reflected ceiling plans, drawn to scale, on which ceiling-mounted items including smart

restroom devices, luminaires, diffusers, grilles, speakers, sprinklers, access panels, and special moldings are shown and coordinated with each other, using input from installers of the items involved.

2. Elevation drawings, drawn to scale, on which wall-mounted items including survey tablets, digital signage, luminaires, windows, doors, access panels, wall finishes, and trims are shown and coordinated with each other, using input from installers of the items involved.

B. Qualification Data:
   1. Installers.
   2. Testing personnel
   3. Training personnel

C. Field quality-control reports.

1.05 CLOSEOUT SUBMITTALS

A. Record Drawings:
   1. In addition to items specified in Section 01 78 39 “Project Record Documents,” include the following:
      a. Updates to Shop Drawings which denote actual installed conditions.
      b. Particular emphasis shall be placed on documenting the locations of devices and power/data circuits installed behind finished surfaces.

B. Operation and Maintenance Data:
   1. In addition to any items specified in Section 01 78 23 "Operation and Maintenance Data," include the following:
      a. A record of Owner's equipment-programming option decisions.
      b. Plans, drawn to scale, indicating location, designation, and connection of smart restroom system components.

C. Software Operational Documentation:
   1. Software operating and upgrade manuals.
   2. Device address list.
   3. Screenshots of final display arrangements/dashboards.

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A. Installer Qualifications: An authorized representative(s) who is trained and approved by manufacturer(s).

1.07 COORDINATION

A. Ceilings: Coordinate layout and installation of ceiling-mounted smart restroom devices with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies. Installation of in-ceiling or above-ceiling devices must allow for maintenance access. Where installations occur in hard ceilings, provide devices that may be removed from below ceiling, or provide ceiling access panels to support maintenance access from above ceilings. Coordinate ceiling access panels/placements with the Architect and the ceiling work of other disciplines.

B. Power: Coordinate all power requirements with electrical work. Ensure all electrical connections are accessible for disconnect and maintenance purposes.

C. Communications: Proposed communications schemes must be coordinated with and approved

by the Owner's IT Department. Whether communications include the use of Owner's public/private Wi-Fi, contracted Wi-Fi vendor, establishing a new dedicated Wi- Fi system, Bluetooth, cellular data, hardwired connections to Owner's network, or a combination thereof, such communications schemes must meet the Owner's approval. Refer to the Contract Drawings for proposed communications schemes. Deviations must be fully coordinated and approved by the Owner.

D. Screen Designs: Coordinate all screen layouts (i.e., survey tablets, Business Intelligence Software (BIS) dashboards, and Mobile App screen layouts) directly with the Owner. Owner's approval must be obtained prior to deployment.

PART 2 - PRODUCTS

2.01 SYSTEM DESCRIPTION

A. Equipment: Modular, using solid-state components, and rated for continuous duty unless otherwise indicated. Select equipment for normal operation on input power supplied at 110 to 130 V, 60 Hz without requirement of any external power conditioning equipment.

B. Software: Business Intelligence Software (BIS): None required for sensors in standalone mode.

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2.02 FUNCTIONAL DESCRIPTION

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C. Throughput Counting: Sensors shall be installed in the entries and exits of each restroom to track the movement of patrons to/from each individual restroom. The sensors will be used to support the following functions:
   1. Each restroom shall be configured with a threshold value associated with throughput. The threshold shall be configurable by the Owner and may vary based upon the size of each restroom.

2.03 BUSINESS INTELLIGENCE SOFTWARE – N/A

A. Web-hosted application that can be accessed by authorized users from a variety of web browsers/devices.

B. The basis of design for smart bathroom installations at the high school is a standalone sensor

system for restroom occupancy indication only.

2.04 STALL OCCUPANCY SYSTEM

A. Occupancy Sensors/Indicator Lights: Ceiling or wall-mounted LED lights with integrated sensors that connect wirelessly to the system hub. Sensors/lights shall be powered via Zurn Z-PWRSUP-W1 mounted in Raco 260 electrical box in plenum that shall provide 12VDC power to daisy-chained power connections on sensors/lights.
   1. Basis-of-Design Product: Subject to compliance with requirements, provide the Z-LIGHT-W1 system provided by Zurn Industries, LLC.
   2. Sensor/Light: Mounting: Units shall be ceiling or wall-mounted with consideration of the ceiling heights required under this project (typically 10') and the top of the sensor shall not exceed 8' 6" after finished floor. Sensors shall communicate via a wireless meshed network back to the system hub.
   3. LED Light Color: Green/Red and Blue/Red (for handicapped stalls).
   4. Power Supply: The system shall be powered via Z-PWRSUP-W1 12VDC power supplies to support up to 40 connected devices.
   5. Internet Reporting Device with Smart Hub: System shall interface with the BIS via the cloud.
   6. The system shall provide the following capabilities:
      a. Provide all local wireless communications equipment, communications gateways, power supplies and cabling, data services, cloud-hosting services, and licensing required to collect data from the sensors identified above and to control the associated status lights.
      b. Provide an application programming interface (API) and associated support/development services, if necessary, to allow information collected from the sensors to be shared with the Owner's existing Smart Restroom System should there be one existing.
      c. Provide all data services, hosting services, licensing, and maintenance support services, etc., required to provide a fully functional expansion to the TRAX smart restroom system. Such services must meet the performance period, licensing, and support service requirements identified within Part 3 of this specification section.

2.05 ANCILLARY EQUIPMENT

A. Provide all ancillary equipment required to provide fully functional smart restroom installations. Such equipment shall vary by manufacturer and specific system requirements. Ancillary equipment for this project includes, but is not necessarily limited to, the following:

   1. Network Equipment: Provide connections to all PoE network switches required to support the proposed solution.
   2. Power Supplies: Provide power supplies as needed to support the proposed solution. Coordinate power supply connections with electrical outlets.
   3. Specialty Cables: Provide any/all specialty cable required to interconnect system components.

2.06 CONDUCTORS AND CABLES

A. Provide cables that fully comply with manufacturer's recommendations.

B. Refer to Section 27 10 00 "Structured Cabling System" for "Category" cabling to be used for smart restroom system ethernet hubs where indicated.

C. Conductors: Jacketed, twisted pair and twisted multipair, untinned solid copper. Sizes as recommended by system manufacturer, but no smaller than No. 24 AWG.

D. Insulation: Thermoplastic, not less than 1/32 inch thick.

E. Plenum Cable: Listed and labeled for plenum installation.

2.07 RACEWAYS

A. If required, smart restroom system raceways and boxes shall comply with requirements in state and local codes.

B. Outlet boxes shall be not less than 2 inches wide, 3 inches high, and 2-1/2 inches deep.

PART 3 - EXECUTION

3.01 WIRING METHODS

A. Wiring Method: Conceal conductors and cables in accessible ceilings, walls, and floors where possible.
   1. Install plenum cable in environmental air spaces, including plenum ceilings.

B. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii.

3.02 INSTALLATION OF RACEWAYS

A. Comply with state and local regulatory requirements for installation of conduits and wireways.

B. Install manufactured conduit sweeps and long-radius elbows whenever possible.

3.03 INSTALLATION OF CABLES

A. Comply with NECA 1.

B. General Requirements:
   1. Terminate conductors; no cable shall contain unterminated elements. Make terminations only at outlets and terminals.
   2. Refer to Section 27 10 00 “Structured Cabling System” for termination requirements associated with “Category” cabling to be used for smart restroom systems.
   3. Splices, Taps, and Terminations: Arrange on numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures. Cables may not be spliced.
   4. Secure and support cables at intervals not exceeding 30 inches and not more than 6 inches from cabinets, boxes, fittings, outlets, racks, frames, and terminals.
   5. Do not install bruised, kinked, scored, deformed, or abraded cable. Do not splice cable between termination, tap, or junction points. Remove and discard cable if damaged during installation and replace it with new cable.
   6. Cold-Weather Installation: Bring cable to room temperature before de-reeling. Heat lamps shall not be used.

C. Open-Cable Installation:

1. Suspend cable not in a wireway or pathway a minimum of 8 inches above ceiling by cable supports not more than 60 inches apart.
2. Cable shall not be run through structural members or be in contact with pipes, ducts, or other potentially damaging items.

D. Separation of Wires: Separation requirements for data cabling described in section 27 10 00 “Structured Cabling System” shall apply to all data cabling required for the smart restroom systems.

3.04 INSTALLATION

A. Identification of Conductors and Cables: Color-code conductors and apply wire and cable marking tape to designate wires and cables so they identify media in coordination with system wiring diagrams.

3.05 GROUNDING

A. Ground cable shields and equipment to eliminate shock hazard and to minimize ground loops, common-mode returns, noise pickup, cross talk, and other impairments.

3.06 SOFTWARE PROGRAMMING

A. Programming: Fully brief Owner on available programming options, e.g., alert threshold settings, user account privileges, mobile app management functions, etc. Record Owner's decisions and set up initial system configuration. Prepare a written record of decisions, implementation methodology and final results.

B. User Interfaces/Dashboard Layouts: Based upon the unique features of the smart restroom system, fully brief Owner on the available options for presenting information via the various display screens, user interfaces, and dashboards. After initial requirements are identified and the owner requires it for full functionality of the system, provide customized layouts for the Owner’s review and approval. Up to three (3) review iterations should be anticipated. As a minimum, the customized screen layouts shall include the following:
1. One (1) dedicated dashboard for each restroom included in the project.
2. Five (5) overview dashboards that convey overall status of all restrooms, supplies, and cleaning status.

3.07 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.

B. Tests and Inspections:
1. Schedule tests with at least seven days' advance notice.
2. After installing smart restroom systems and after electrical circuitry has been energized, test for compliance with requirements.
3. Operational Tests:
    a. BIS Platform Test – N/A
        1) Verify URL and Database Setup

2) Verify all data APIs are active and triggering effectively
3) Verify all user information has been accurately entered into the BIS
4) Verify report generation

b. Throughput Test
1) Demonstrate input/output to be accurate
2) Verify network is active
3) Verify data APIs are active
4) Verify throughput counting alerts are activated.
5) Verify throughput thresholds can be adjusted and the alert activations coincide with new thresholds.

c. Stall Occupancy System Test
1) Verify API is active
2) Verify network is active
3) Demonstrate all lights/sensors are functional and trigger events through light changes and via API
4) Verify map on URL accurately reflects stall numbers and visualizations of opens/closes are accurate

d. Mobile App/Activity
1) Verify API is active
2) Verify presence duration threshold timer is properly configured.
3) Verify mobile device presence restarts throughput counter at the end of the threshold period.
4) Verify mobile device presence does not restart the throughput counter if duration is less than the threshold period.
5) Verify presence thresholds can be adjusted and the resetting of throughput counters coincide with new thresholds.

C. Inspection: Verify that units and controls are properly labeled, and interconnecting wires and terminals are identified.

D. Smart restroom systems will be considered defective if they do not pass tests and inspections.

E. Prepare test and inspection reports.

3.08 STARTUP SERVICE

A. Engage a factory-authorized service representative to perform startup service and initial system programming].

1. Verify that device installations comply with manufacturer's submittal and installation requirements.
2. Complete installation and startup check according to manufacturer's written instructions.

3.09 ADJUSTING

A. On-Site Assistance: Engage a factory-authorized service representative to provide on- site assistance in adjusting devices, controls, and software settings to meet occupancy conditions.

B. Occupancy Adjustments: When requested within three (3) months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to one visit to Project site during other-than-normal occupancy hours for this purpose.

3.10 DEMONSTRATION

A. Comply with the applicable provisions of Division 01 specifications including, but not limited to, Section 01 79 00 Demonstration and Training.

B. Engage a factory-authorized service representative to train Owner's System Administrator and IT Staff, Custodial Supervisors, custodians, and maintenance personnel to adjust, operate, and maintain the smart restroom systems. Training shall cover all deployed technologies.

C. All training shall take place at the Field House over a two-day period. Training shall be conducted by qualified personnel fully conversant on the equipment, materials, software, and overall operation of the installed systems. Multiple sessions for each training module shall be scheduled to accommodate both day and night shifts during their normal working hours. Each training shall contain both lecture discussions and hands-on demonstrations.

D. In addition to module-specific training guides, training materials shall include system documentation, as-built drawings, and O&M manuals.

E. As a minimum, training modules shall include:
   1. Maintenance and IT Technical Support Staff (minimum of 2 hours/session)
      a. Site visit to provide orientation of device locations
      b. First level trouble shooting
      c. Equipment restarting
      d. Network Connectivity repair
      e. Threshold setup
   2. Custodian Training (minimum of 1 hour/session) – ONLY if customer survey and/or custodial tablets are being utilized in the project.
      a. How to operate/interact with tablets
      b. How to view dashboards
      c. How to use mobile devices
   3. Custodial Supervisor Training (minimum of 2 hours/session) - ONLY if customer survey and/or custodial tablets and/or BIS solutions are being utilized in the project.
      a. Custodian Training (described above)
      b. Reports and business intelligence review
      c. Mobile device use and threshold restarting
      d. Customer survey feedback alerts/data review
      e. Predictive analytics overview
      f. Dashboard reviews
   4. Administrator Training (minimum of 3 hours/session)
      a. Maintenance and IT Technical Support Staff Training (described above)
      b. Custodian Training (described above)
      c. Custodial Supervisor Training (described above)
      d. Administrative rights and access to BIS portal
      e. User rights set up/configuration
      f. Alerts set up/configuration

3.11 SYSTEM WARRANTY

A. Comply with the applicable provisions of Division 01 specifications including, but not limited to, Section 01 77 00 Closeout Procedures.

B. The Contractor shall warrant the smart restroom systems against defects in materials and

workmanship, including any required parts and labor, during the one (1) year warranty period from date of smart restroom final acceptance or beneficial use, whichever occurs first, of the completed smart restroom system at no additional cost to the project.

1. Stall indicator lights shall be warranted for a period of five (5) years from date of final acceptance or beneficial use, whichever occurs first.

C. During the warranty period, all software updates and bug fixes shall be provided to the Owner at no additional cost as a part of the annual Service Level Agreement (SLA).

3.12 MAINTENANCE SUPPORT

A. The Work includes a one-year Service Level Agreement (SLA) which coincides with the warranty period. The SLA shall include both hardware and software licensing and support in accordance with the following:

1. 24/7/365 technical support for all troubleshooting and questions. The technical support services shall include a Help Desk that includes the following:
   a. The Help Desk shall be based in North America to provide toll-free telephone support to Owner's personnel.
   b. In the event all lines are busy, the Help Desk shall include an answering service.
   c. The Help Desk shall issue a return email or issue a call to provided telephone number(s) within the time frames identified later in this section.
   d. Upon receipt of a request for assistance by either phone or email, a case number notification will be issued to the Owner's designated representative.
2. All technical support requests will be recorded and tracked through completion.
3. Requests for technical support shall be responded to in a timely manner. The Contractor shall respond (i.e. telephone call, email reply) to all such requests. Issues or problems shall be assigned to appropriate specialists/service personnel and resolved in the time frames set out below.

Severity Level	Definition	Minimum Response Times	Maximum Resolution Times
1. System Down	Mainframe, server or back end systems failure	Immediate	Within 4 hours
2. Critical	Business outage or significant customer impact that threatens future productivity	Within 2 hours	Within 8 hours
3. Urgent	High-impact problem where production is proceeding, but in a significantly impaired fashion; there is a time-sensitive issue important to long term productivity that is not causing an immediate work stoppage; or there is significant customer concern.	Within 4 hours	Within 8 hours
4. Important	Important issue that does not have significant current productivity impact	Within 1 business day	Within 24 hours

5. Monitor	Issue requiring no further action beyond monitoring for follow-up, if needed	1-2 business days	
6. Informational	Request for information only	1-2 business days	

4. If technical support requests cannot be resolved remotely or over the phone, the Contractor shall provide “on-call” corrective maintenance services for all installed hardware and software. Qualified maintenance personnel shall respond on-site, if required, on the next business day following the service request. This service shall include all labor, material, travel expenses, and incidentals at no additional cost to the Owner.

5. The Contractor shall maintain complete logs of all maintenance activities including service calls, corrective maintenance, component failures, etc. The maintenance logs shall be made available to the Owner upon request.

3.13 SPARE PARTS

A. As a requirement of Project Closeout, the following materials shall be turned over to the Owner for storage on site.

1. A minimum of 10 or 10% (whichever is greater) stall **sensor/**indicator light assemblies
2. A minimum of 1 or 10% (whichever is greater) stall occupancy system controller/hub
3. A minimum of 1 or 10% (whichever is greater) customer survey tablet with loaded application(s)
4. A minimum of 1 or 10% (whichever is greater) BLE Beacon

B. Any spare parts used by the Contractor to replace defective components during the warranty period shall be immediately replaced and returned to the Owner’s spare equipment stock at no cost to the Owner.

END OF SECTION
27 42 20

COVER SHEET
G-000
FOR BLUEBEAM LABELING OCR:

PBK

PKG 3A - GPHS NEW FIELDHOUSE

Galena Park ISD

1000 Keene St,
Galena Park, TX 77547

ISSUE FOR PROPOSAL

June 10, 2025

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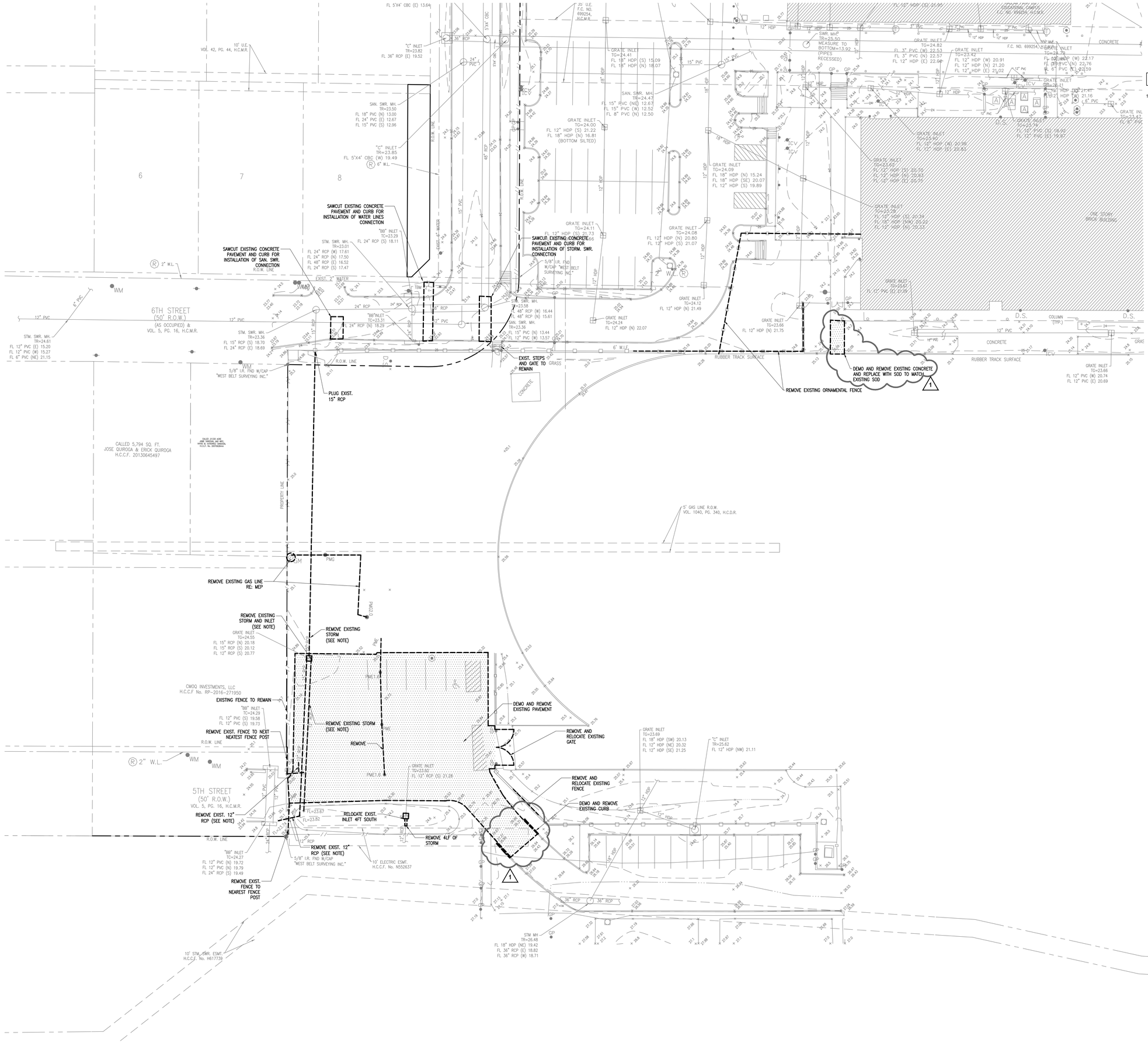

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PKG 3A - GPHS NEW FIELDHOUSE

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ISSUE FOR PROPOSAL

Galena Park ISD

RAJEEB K. RAJBHANDARI
116968
LICENSED
PROFESSIONAL ENGINEER
06/10/2025

JNG ENGINEERS F-18326

CLIENT	
DATE: June 24, 2025	PROJECT NUMBER: 240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 1	06/24/2025

CHECKED BY: RKR

DRAWN BY: KS

DEMOLITION PLAN

C 003

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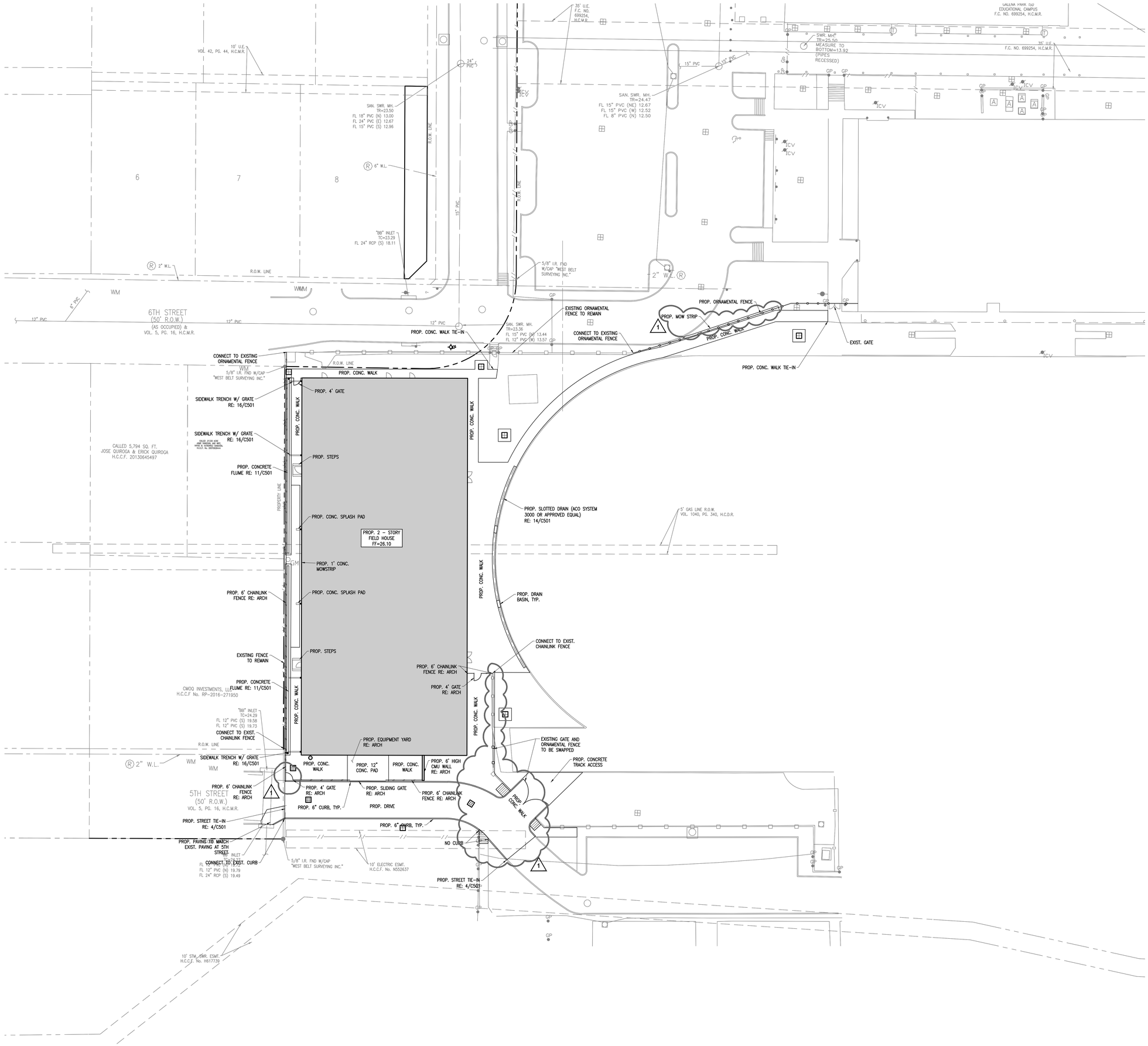

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PKG 3A - GPHS NEW FIELDHOUSE

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RAJEEB K. RAJBHANDARI
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LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
06/10/2025
DIG ENGINEERS
F-18326

CLIENT	
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DRAWING HISTORY

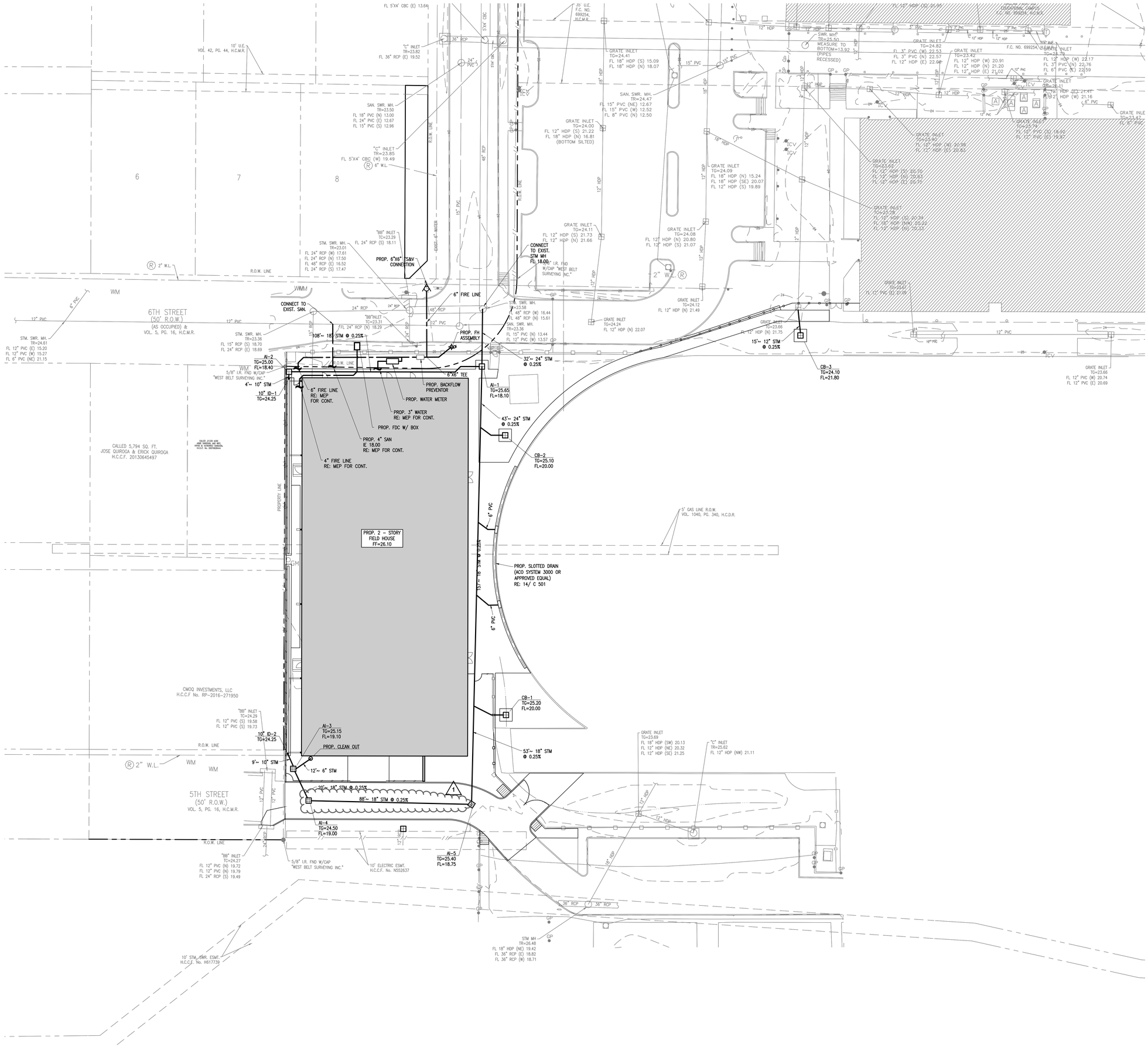
No.	Description	Date
1	Addendum 1	06/24/2025

CHECKED BY: RKR

DRAWN BY: KS

SITE PLAN

C 101



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PKG 3A - GPHS NEW FIELDHOUSE

CLIENT PROJECT NO. 240539

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STATE OF TEXAS
06/10/2025

DG ENGINEERS
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DATE: June 24, 2025	PROJECT NUMBER: 240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 1	06/24/2025

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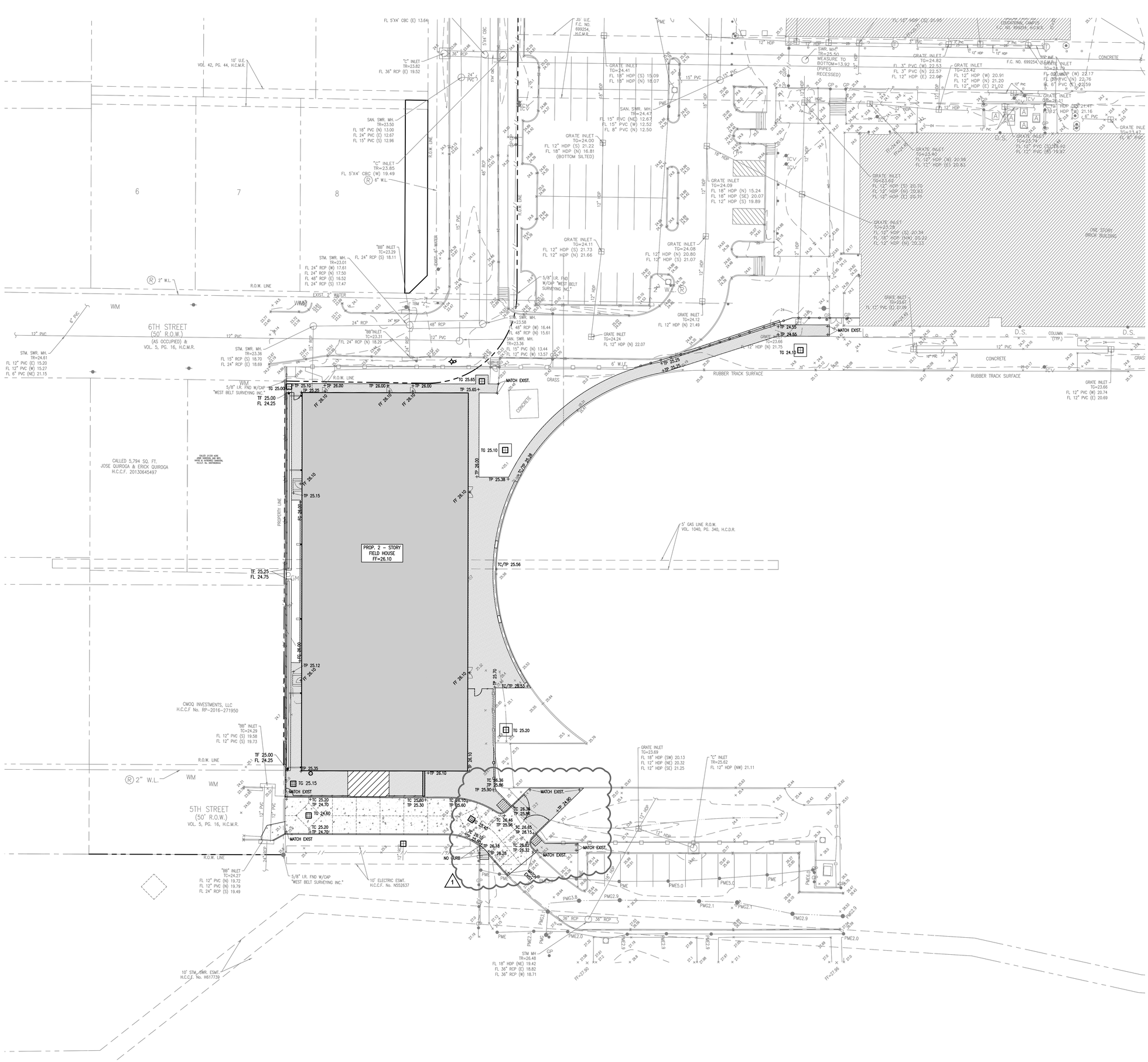
DRAINAGE AND UTILITY PLAN

C 201



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06/10/2025
DIG ENGINEERS
F-18326

CLIENT	
DATE June 24, 2025	PROJECT NUMBER 240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 1	06/24/2025

CHECKED BY:RKR

DRAWN BY: KS

GRADING &
PAVING PLAN

C 301

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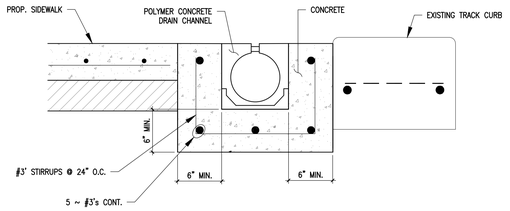
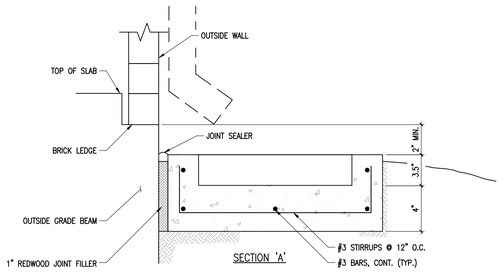


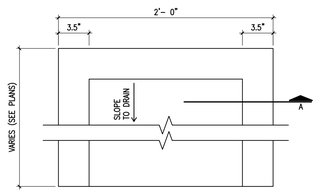
DETAILS NOTES:

1. THE SURFACE DRAINAGE SYSTEM SHALL BE SYSTEM 3000 AS MANUFACTURED BY ACO POLYMER PRODUCTS, INC., CHARDON, OH., OR APPROVED EQUAL.
2. CHANNELS SHALL BE MANUFACTURED FROM POLYESTER RESIN POLYMER CONCRETE.
3. THE SYSTEM SHALL BE 4.25 INCHES (108MM) NOMINAL INSIDE WIDTH WITH A 5.7 IN. (145MM) OVERALL WIDTH. THE CHANNEL SHALL BE 5.7 IN.(145MM) IN OVERALL DEPTH. THE MINIMUM SLOT DIMENSION SHALL BE 0.625 IN. (15MM). ALL CHANNELS SHALL BE INTERLOCKING WITH A MALE/FEMALE JOINT.
4. POLYMER CONCRETE SHALL HAVE MATERIAL PROPERTIES OF: COMPRESSIVE STRENGTH RANGE BETWEEN 14,000~14,500 PSI; FLEXURAL STRENGTH BETWEEN 3600~4500 PSI; TENSILE STRENGTH OF 1500 PSI. THE MATERIAL WATER ABSORPTION RATE SHALL NOT EXCEED 0.1% BY WEIGHT AND SHALL BE RESISTANT TO PROLONGED SALT EXPOSURE, AND REPETITIVE FROST CYCLES.
5. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. REFER TO PLANS FOR TRENCH AND CATCH BASIN LOCATION.

12 | ACO 3000 SLOTTED DRAIN

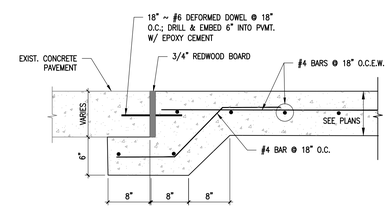


SECTION 'A'

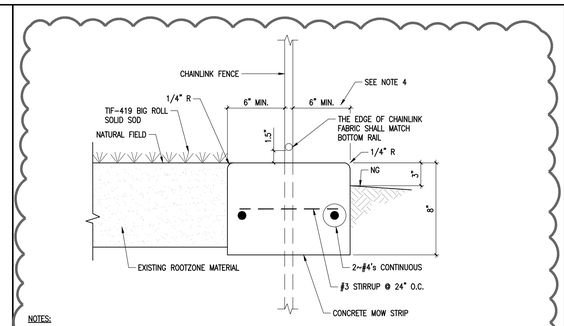


SPECIAL CONCRETE SPLASH PAD

8 | SPLASH PAD



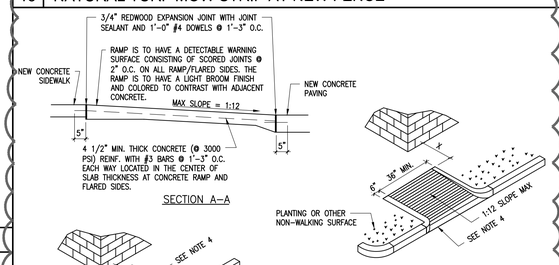
4 | EXIST. TO PROP. CONCRETE PAVEMENT



NOTES:

1. X~/T @ 60' O/C.
2. CONTROL JOINT @ 10' O/C.
3. POLE DIAMETER VARIES.
4. FENCE POST FACE SHALL BE CONSISTANLY 6" OFF FACE OF MOW STRIP ON THE FIELD SIDE. ANY VARIATION TO MOW STRIP WIDTH SHALL BE ON OUTSIDE OF THE FIELD.

15 | NATURAL TURF MOW STRIP AT NEW FENCE



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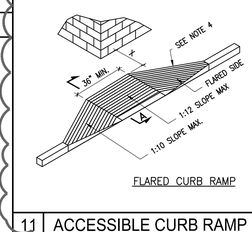


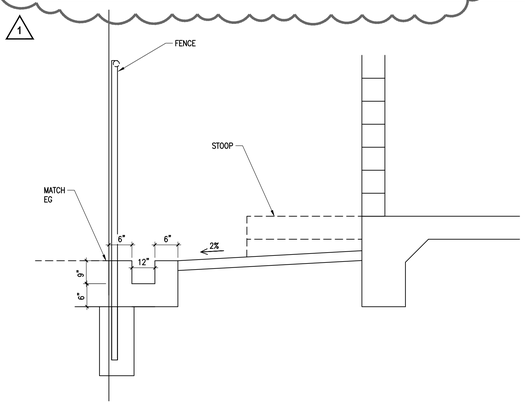
FLARED CURB RAMP

RETURNED CURB RAMP

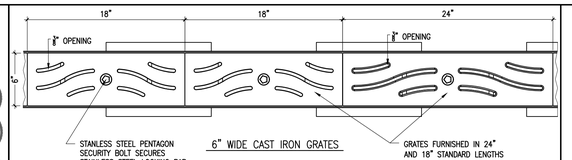
NOTES:

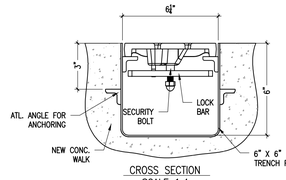
1. GROOVES TO BE 1/4" WIDE BY 1/4" DEEP AT 2" O.C.
2. FINISHED SURFACE TO BE ROUGHENED WITH A BROOM FINISH TO PREVENT SLIPPING, AND USE INTEGRALLY COLORED CONCRETE TO CONTRAST WITH COLOR OF ADJACENT CONCRETE.
3. IF X IS LESS THAN 48", THEN THE SLOPE OF THE FLARED SIDE SHALL NOT EXCEED 1:12 X MIN. SHALL BE 42".
4. RAMP IS TO BE ISOLATED ON ALL SIDES WITH EXPANSION JOINTS.

11 | ACCESSIBLE CURB RAMP



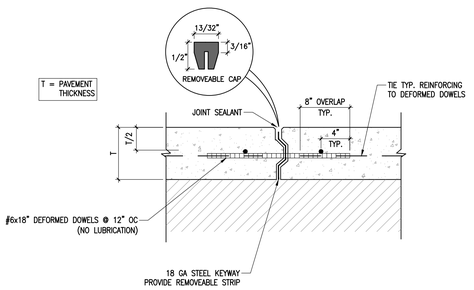
7 | SIDEWALK AT BACK OF BUILDING





CROSS SECTION
SCALE 1:4

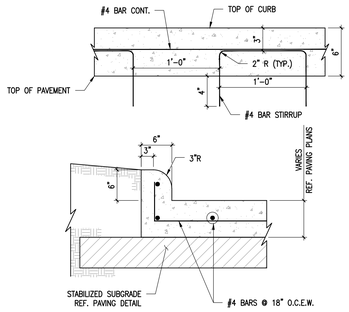
14 | SIDEWALK TRENCH GRATE @ DOWNSPOUT



NOTE:

1. SMOOTH DOWELS AND REINFORCING BARS TO BE SECURELY ANCHORED AND SHALL BE SUPPORTED BY AN APPROVED DEVICE TO PREVENT MOVEMENT DURING PAVING OPERATIONS.
2. STAKES TO SUPPORT FORMS SHALL BE DRIVEN A MINIMUM OF 2" BELOW THE TOP OF PAVEMENT.

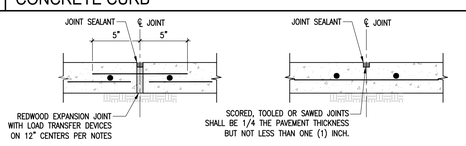
10 | LONGITUDINAL TIED JOINT (LT)



NOTES:

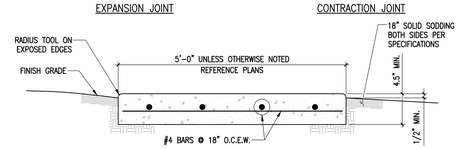
1. FOR NEW PAVEMENT STIRRUPS SHALL BE SET IN FRESH CONCRETE AND SECURED.
2. FOR NEW CURB ON EXISTING PAVEMENT STIRRUPS SHALL BE DRILLED AND EPOXIED INTO THE EXISTING PAVEMENT.
3. MIN COVER ON ALL REINFORCING STEEL SHALL BE 2".
4. PLACE 3/4" INCH PREFORMED EXPANSION JOINTS THROUGH CURB AND GUTTERS AT LOCATIONS OF EXPANSION JOINTS IN PAVEMENT, AT END OF RADIUS RETURNS AT STREET INTERSECTIONS AND DRIVEWAYS, AND AT CURB INLETS. MAXIMUM SPACING SHALL BE 60' CENTERS.
5. PLACE 1/4" TOOLED JOINTS THROUGH CURB AND GUTTERS AT LOCATIONS OF SAWED JOINTS IN PAVEMENT.

6 | CONCRETE CURB



EXPANSION JOINT

CONTRACTION JOINT

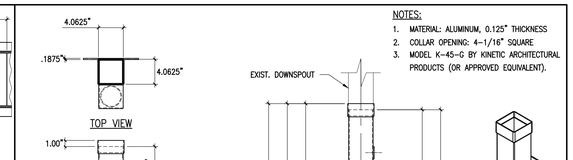


SIDEWALK SECTION

NOTES:

1. SLOPE TRANSVERSE SURFACE 2% (1:50) IN DIRECTION OF GENERAL SITE AREA DRAINAGE.
2. RUNNING SLOPE IN THE DIRECTION OF TRAVEL SHALL NOT EXCEED 5% (1:20).
3. FLOAT EDGES 1/4" MAXIMUM AT CONTROL JOINTS.
4. USE REDWOOD BOARD EXPANSION JOINT w/ #4 SMOOTH BAR w/ LOAD KEY (10" LONG).
5. REDWOOD BOARD EXPANSION JOINTS ON 15 FOOT CENTERS MAXIMUM.
6. CONTROL JOINT SPACING NOT TO EXCEED FIVE (5) FEET. SCORED, TOOLED OR SAWN JOINTS SHALL BE 1/4 THE PAVEMENT THICKNESS BUT NOT LESS THAN ONE (1) INCH.
7. SIDEWALK JOINTS SHALL ALIGN WITH PAVING JOINTS WHEN SIDEWALK IS ADJACENT TO PAVING.

2 | CONCRETE SIDEWALK



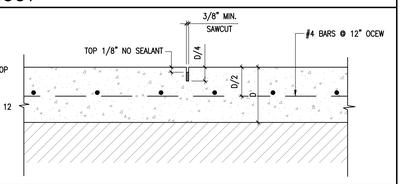
NOTES:

1. MATERIAL: ALUMINUM, 0.125" THICKNESS
2. COLLAR OPENING: 4~1/16" SQUARE
3. MODEL K~45~G BY KINETIC ARCHITECTURAL PRODUCTS (OR APPROVED EQUIVALENT).

13 | DOWNSPOUT BOOT

NOTE:

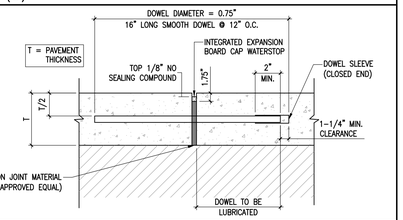
1. SAWCUTS 1/4" WIDE ARE TO BE SEALED WITH SILICONE JOINT SEALING COMPOUND UP TO 1/8" BELOW TOP OF PAVEMENT. SEE SPECIFICATIONS FOR REQUIRED JOINT SEALANT.
2. COMPLETE SAWCUT JOINTS WITHIN 12 HOURS OF CONCRETE PLACEMENT.



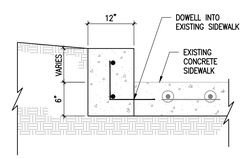
9A | SAWCUT JOINT (S)

NOTE:

1. DOWELS SHALL BE SUPPORTED BY AN APPROVED DEVICE.



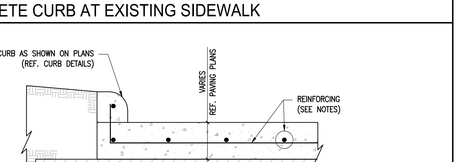
9 | EXPANSION JOINT (X)



NOTES:

1. FOR NEW CURB ON EXISTING PAVEMENT STIRRUPS SHALL BE DRILLED AND EPOXIED INTO THE EXISTING PAVEMENT.
2. MIN COVER ON ALL REINFORCING STEEL SHALL BE 2".
3. PLACE 3/4" INCH PREFORMED EXPANSION JOINTS THROUGH CURB AND GUTTERS AT LOCATIONS OF EXPANSION JOINTS IN PAVEMENT, AT END OF RADIUS RETURNS AT STREET INTERSECTIONS AND DRIVEWAYS, AND AT CURB INLETS. MAXIMUM SPACING SHALL BE 60' CENTERS.
4. PLACE 1/4" TOOLED JOINTS THROUGH CURB AND GUTTERS AT LOCATIONS OF SAWED JOINTS IN PAVEMENT.

5 | CONCRETE CURB AT EXISTING SIDEWALK



NOTES:

1. AREAS TO RECEIVE PAVING SHALL BE STRIPPED OF THE ORGANIC TOPSOIL TO A DEPTH OF AT LEAST 6~INCHES AND TO A DEPTH AS NECESSARY TO OBTAIN THE DESIRED FINISH GRADE. AFTER REMOVAL OF THE TOPSOIL THE EXPOSED SUBGRADE SHALL BE PROOFROLLED WITH A 15~TON ROLLER TO DETECT ANY WET, SOFT, OR UNSTABLE SOILS. WET, SOFT OR UNSTABLE SOILS SHALL BE TREATED WITH SUITABLE DRYING OR STABILIZING AGENTS OR REMOVED AND REPLACE WITH PROPERLY COMPACTED FILL AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
2. IF IT IS NECESSARY TO PLACE FILL IN ORDER TO BRING THE PAVEMENT SUBGRADE TO THE REQUIRED ELEVATION, SUITABLE EARTH FILL OR SELECT FILL SHALL BE UTILIZED. SUITABLE EARTH FILL AND SELECT FILL SHALL BE FREE OF ORGANICS, DELETERIOUS SUBSTANCES AND BE A CLAYEY SAND OR INACTIVE LEAN CLAY WITH A MAXIMUM LIQUID LIMIT OF 35 AND PLASTICITY INDEX RANGE OF 8 TO 20. FILL MATERIAL SHALL BE PLACED IN 8~INCH THICK LOOSE LIFTS AND COMPACTED TO AN IN~PLACE DENSITY EQUAL TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN +/~2% OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698.
3. REFERENCE PAVING PLANS FOR SUBGRADE STABILIZATION REQUIREMENTS.
4. CONCRETE PAVEMENT SHALL CONSIST OF NOT LESS THAN 5.5 SACKS OF CONCRETE PER CUBIC YARD AND OBTAIN A 28~DAY COMPRESSIVE STRENGTH OF AT LEAST 3,500 PSI. REFERENCE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
5. REINFORCING SHALL CONSIST OF THE THE FOLLOWING
   - 5~INCH THICK PAVING ~ #4 BARS AT 18" O.C.E.W.
   - 6~INCH THICK PAVING ~ #4 BARS AT 12" O.C.E.W. OR #5 BARS AT 18" O.C.E.W.
   - 7~INCH AND 8~INCH THICK PAVING ~ #5 BARS AT 18" O.C.E.W.

1 | CONCRETE PAVEMENT

PBK
www.pbk.com
TX FIRM: BR 1608
HOUSTON, TX
713~865~0008

PKG 3A - GPHS NEW FIELDHOUSE

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

1000 Keene St.
Galena Park, TX 77547

Galena Park ISD

RAJEEB K. RAJBHANDARI
116968
LICENSED
PROFESSIONAL ENGINEER
06/10/2025
ENGINEERS F-18326

CLIENT	
DATE: June 24, 2025	PROJECT NUMBER: 240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 1	06/24/2025

CHECKED BY: RKR

DRAWN BY: KS

DETAILS

C 501

FOUNDATION PLAN
S-101

FOR BLUEBEAM LABELING/DOOR:

0"
1"

FOUNDATION PLAN NOTES

1. REFER TO PLAN FOR TOP OF STRUCTURAL CONCRETE ELEVATIONS (TOSC EL). ALL ELEVATIONS SHOWN ON THE PLAN ARE BASED ON A LEVEL ONE REFERENCE ELEVATION = 0'-0". THIS REFERENCE ELEVATION IS EQUIVALENT TO THE LEVEL ONE MEAN SEA LEVEL ELEVATION = REF CIVIL SHOWN IN THE CIVIL AND ARCHITECTURAL DRAWINGS AND IS NOT INTENDED TO ESTABLISH THE ACTUAL SEA LEVEL ELEVATION OF ANY PORTION OF THE STRUCTURE.

2.1. 5" THICK CONCRETE SLAB ON GRADE REINFORCED WITH #3@9" OC EACH WAY OR #4@14" OC EACH WAY, ON 2 3/4" CHAIRS FOR #3 BARS, 2 1/2" CHAIRS FOR #4 BARS SPACED AT 36" OC EACH WAY. PLACE THE SLAB ON 15 MIL WATER VAPOR BARRIER OVER COMPACTED SELECT FILL (SOIL REPORT) FOR SLAB JOINT DETAILS REFER TO 1/S-301 AND 2/S-301.

2.2. 6" THICK CONCRETE SLAB ON GRADE REINFORCED WITH #4@14" OC EACH WAY, ON 3 1/2" CHAIRS FOR #4 BARS SPACED AT 36" OC EACH WAY. PLACE THE SLAB ON 15 MIL WATER VAPOR BARRIER OVER COMPACTED SELECT FILL (SOIL REPORT) FOR SLAB JOINT DETAILS REFER TO 1/S-301 AND 2/S-301.

2.3. 10" THICK CONCRETE SLAB ON GRADE REINFORCED WITH #4@12" OC EACH WAY, TOP & BOTTOM ON 3" CHAIRS FOR BOTTOM LAYER, TOP AS REQ'D, SPACED AT 36" OC EACH WAY. PLACE THE SLAB ON 15 MIL WATER VAPOR BARRIER OVER COMPACTED SELECT FILL (SOIL REPORT) FOR SLAB JOINT DETAILS REFER TO 1/S-301 AND 2/S-301.

2.4. 5 1/2" THICK CONCRETE SLAB ON GRADE AT THE POLISHED CONC AREAS REINFORCED WITH #3@10" OC EACH WAY ON 3 1/4" CHAIRS FOR #3 BARS SPACED AT 36" OC EACH WAY. PLACE THE SLAB ON 15 MIL WATER VAPOR BARRIER OVER COMPACTED SELECT FILL (SOIL REPORT) FOR SLAB JOINT DETAILS REFER TO 1/S-301 AND 2/S-301.

3.1. TOP OF INTERIOR GRADE BEAM ELEVATION SHALL BE = -1'-0" UON.
TOP OF PERIMETER GRADE BEAM ELEVATION SHALL BE = -1'-0" UON.

3.2. TOP OF INTERIOR/ EXTERIOR PLINTH ELEVATION SHALL BE = -1'-0" UON.
TOP OF INTERIOR PIER ELEVATION WITHOUT PLINTH SHALL BE = -1'-0" UON.
TOP OF INTERIOR PIER ELEVATION WITH PLINTH SHALL BE = -3'-6" UON.
TOP OF INTERIOR PIER ELEVATION WITH GRADE BEAM SHALL BE = -3'-6" UON.
TOP OF EXTERIOR PIER ELEVATION SHALL BE = -3'-6" UON.

4. REFER TO ARCHITECTURAL DRAWINGS FOR EXTENTS AND DIMENSIONS OF RAISED OR DEPRESSED SLAB AREAS, SLOPES, CURBS, AND DRAINS. REFER TO TYPICAL DETAILS FOR REINFORCEMENT REQUIREMENTS.

5. GC COORDINATE ALL PENETRATIONS AND UNDERGROUND UTILITIES WITH MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. REFER TO TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT REQUIREMENTS.

6. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES.

7. GC COORDINATE ALL SLAB EDGE DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.

8. PROVIDE (2) - #5 x 5'-0" LONG BAR IN SLAB AT RE-ENTRANT CORNERS TYPICAL, INCLUDING RE-ENTRANT CORNERS AROUND THE PERIMETER OF THE BUILDINGS, FLOOR RECESSES AND OPENINGS.

9. GC COORDINATE ALL THE SIZE AND EXTENT OF ALL BRICK LEDGES SHOWN ON PLAN OR DETAILS WITH ARCHITECTURAL DRAWINGS.

10. REF S0.xx SERIES DRAWINGS FOR GENERAL NOTES AND TYP DETAILS

11. REF S3.xx SERIES DRAWINGS FOR FOUNDATION AND SLAB-ON-GRADE DETAILS.

12. REF S4.xx SERIES DRAWINGS FOR CMU DETAILS.

13. REF S5.xx SERIES DRAWINGS FOR STEEL DETAILS.

14. REF S6.xx SERIES DRAWINGS FOR STEEL BRACE ELEVATIONS AND DETAILS.

15. REFER TO ARCH AND PLUMBING DRAWINGS FOR THE SIZE, NUMBER AND LOCATION OF ALL THE TRENCHES, AND FLOOR DRAINS. REF 10/S-301 FOR TRENCH DETAIL AND REF 4/S-301 FOR FLOOR DRAIN DETAIL.

16. AT INTERIOR CMU WALL LOCATIONS, WHERE THE GRADE BEAM IS NOT SHOWN, PROVIDE SLAB TURNDOWN PER DETAIL 4/S-313 TYPICAL. AT INTERIOR GLAZING LOCATIONS, WHERE THE GRADE BEAM IS NOT SHOWN, PROVIDE TURNDOWN SIMILAR TO DETAIL 4/S-313; TYPICAL.

17. PIERS / FOOTINGS WITHOUT CENTERLINES SHOWN ON PLANS, SECTIONS AND/OR DETAILS SHALL BE LOCATED AS FOLLOWS:

A. COLUMNS AND PILASTERS: CENTERLINE OF THE COLUMN.
B. GRADE BEAMS AND WALLS: CENTERLINE OF THE GRADE BEAM OR WALL.
C. ALONG THE LENGTH OF GRADE BEAMS AND WALLS: INTERMEDIATE PIERS/FOOTINGS SHALL BE SPACED EQUALLY BETWEEN PIERS/FOOTINGS THAT ARE DIMENSIONALLY SET ON PLAN OR AS NOTED ABOVE.
D. PIERS SUPPORTING SLABS ON CARTON FORMS: UNLESS NOTED OTHERWISE, PIERS NOT DIMENSIONED SHALL BE SPACED EQUALLY BETWEEN PIERS THAT ARE DIMENSIONALLY SET ON PLAN.

18. GC TO COORDINATE THE LOCATION OF ALL CONCRETE CURBS WITH ARCH DRAWINGS. REF 7/S-301 FOR DETAIL TYPICAL.

19. GC COORDINATE THE LOCATION OF ALL CANOPY COLUMNS WITH ARCH DRAWINGS.

20. INDICATES STRUCTURAL CMU THAT ARE PART OF THE STRUCTURAL LATERAL FORCE RESISTING SYSTEM AND SUPPORTS GRAVITY LOADS. REFER TO ARCH DRAWINGS FOR THE LOCATION OF ALL NON-STRUCTURAL CMU. A 3/8" VERTICAL CONTROL JOINT SHALL BE PROVIDED WHEREVER STRUCTURAL AND NON-STRUCTURAL CMU ABUT.

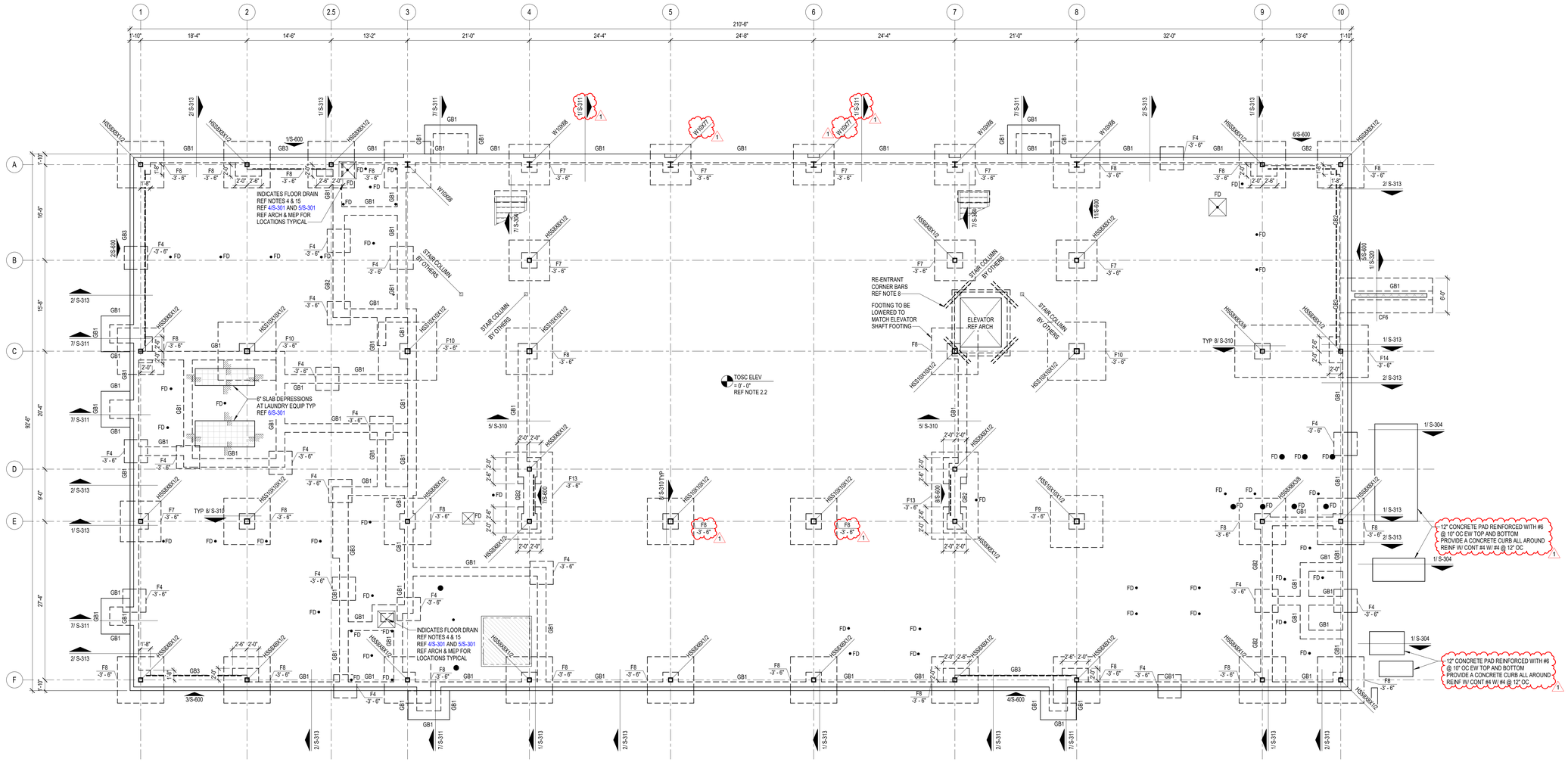
21. INDICATES NON-STRUCTURAL CMU THAT ARE NOT PART OF THE STRUCTURAL LATERAL FORCE RESISTING SYSTEM AND ARE NOT DESIGNED TO SUPPORTS GRAVITY LOADS. REFER TO ARCH DRAWINGS FOR THE LOCATION OF ALL NON-STRUCTURAL CMU. A 3/8" VERTICAL CONTROL JOINT SHALL BE PROVIDED WHEREVER STRUCTURAL AND NON-STRUCTURAL CMU ABUT.

22. IT CAN BE COMMON PRACTICE FOR STEEL STUB-UPS WITH STRUCTURAL STEEL SILL SUPPORT MEMBERS TO BE PROVIDED AT LONG FIRST FLOOR WINDOW SILLS (REF DETAIL 3/S-311); HOWEVER, FOR FIRST FLOOR WINDOWS, 8'-0" AND NARROWER, THE GC SHALL PROVIDE PRE-ENGINEERED COLD-FORM SILL SUPPORTS UTILIZING COLD-FORM FRAMING ONLY. THESE COLD-FORM SILL SHALL BE DESIGNED BY THE DRYWALL SUBCONTRACTOR'S ENGINEER AND SUBMITTED IN THE SHOP DRAWINGS FOR REVIEW. WHERE FIRST FLOOR WINDOW SILLS EXCEED 8'-0" THE CONTRACTOR SHALL PROVIDE MISCELLANEOUS STRUCTURAL STEEL PER 3/S-311 TYPICAL.

23. IT CAN BE COMMON PRACTICE FOR STEEL STUB-UPS WITH STRUCTURAL STEEL SILL SUPPORT MEMBERS TO BE PROVIDED AT LONG FIRST FLOOR WINDOW SILLS (REF DETAIL 3/S-311); HOWEVER, FOR FIRST FLOOR WINDOWS, 8'-0" AND NARROWER, THE GC SHALL PROVIDE PRE-ENGINEERED COLD-FORM SILL SUPPORTS UTILIZING COLD-FORM FRAMING ONLY. THESE COLD-FORM SILL SHALL BE DESIGNED BY THE DRYWALL SUBCONTRACTOR'S ENGINEER AND SUBMITTED IN THE SHOP DRAWINGS FOR REVIEW. WHERE FIRST FLOOR WINDOW SILLS EXCEED 8'-0" THE CONTRACTOR SHALL PROVIDE MISCELLANEOUS STRUCTURAL STEEL PER 3/S-311 TYPICAL.

24. PROVIDE STRUCTURAL GEO-FOAM WITH 4" CONCRETE TOPPING SLAB WITH WWF OVER SLAB ON GRADE FOR HATCHED AREAS. GEO-FOAM AND TOPPING SLAB BY MANUFACTURER - REF ARCH AND GENERAL NOTES. GC NOTE: ORIGINAL BASE / FLAT SLAB EXTENDS CONTINUOUS BELOW PLATFORM AND STAIRS. PROVIDE GEO-FOAM FILL BELOW PLATFORM WITH 4" CONCRETE TOPPING SLAB WITH 6x6x2.9x2.9 W.W.M. AT MID-HEIGHT OF SLAB. ADDITIONALLY PROVIDE 4" CONCRETE WALLS WITH #4 BARS AT 12" OC EACH WAY - DRILL AND EPOXY 4" INTO BASE/ FLAT SLAB WITH HILTI HY-200 V3 ADHESIVE.

25. REFER TO S-300 FOR CONCRETE FINISHES NOTES.



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

Kubala ENGINEERS
Ph: (800)246-3674
www.kubalaengineers.com
TX. REG. NO. F-23612

Plot Stamp:
6/24/2025 10:39:23 AM

PBK
www.pbk.com
TX FIRM: BR 1608
HOUSTON, TX
713-366-0608

PKG 3A GPHS - Fieldhouse

1000 Keene St,
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JOHN R. KUBALA
106120
LICENSED PROFESSIONAL ENGINEER
06/10/2025
Kubala Engineers
F-23612

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
06/10/2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI
DRAWN BY: CML

FOUNDATION PLAN

S-101

SECOND FLOOR FRAMING PLAN
S-102
FOR BLUEBEAM LABELING/OCR:

0"
1"

GC PLEASE NOTE:

WHERE HORIZONTAL H WIND FORCES ARE INDICATED ON THE STRUCTURAL PLANS AS "H=XX/X K (ASD)," IN CONJUNCTION WITH BRACE FRAMES, THE GENERAL CONTRACTOR IS REQUIRED TO ASSUME AN H LOAD OF 80 KIPS (ASD) ALONG THE ENTIRE GRID LINE OF BRACE FRAMES AT THE SECOND FLOORS, THIRD FLOORS, AND MEZZANINES. ADDITIONALLY, FOR HORIZONTAL H WIND FORCES INDICATED AS "H=XX/X K (ASD)" IN CONJUNCTION WITH BRACE FRAMES AT THE ROOFS, THE GENERAL CONTRACTOR SHOULD ASSUME AN H LOAD OF 65 KIPS (ASD) ALONG THE ENTIRE GRID LINE. THE GC HOLDS THE RESPONSIBILITY FOR DESIGNING CONNECTIONS THAT CAN ACCOMMODATE THESE SPECIFIED LOAD ASSUMPTIONS. FOR FURTHER GUIDANCE ON CONNECTION DESIGN, PLEASE REFER TO CONNECTION GENERAL NOTE SHEET S-500. TYPICAL ALL AREAS.

COMPOSITE FLOOR DECK AND METAL ROOF DECK LEGEND

COMPOSITE FLOOR DECK TYPES

FLOOR DECK TYPE 1:
4 1/2" NWC ON 3.0 VLI 20 GA (GALV) (G90) COMPOSITE STEEL DECK (7 1/2" TOTAL SLAB THICKNESS). COMPOSITE SLAB SHALL BE REINFORCED WITH WWR 6x6-W2.9xW2.9, U.N.O.

METAL ROOF DECK TYPES

ROOF DECK TYPE 1:
1.0 CSV 20 GA (GALV.) (G90) VENTED MTL DECK.

ROOF DECK TYPE 2:
1.5B 20 GA (GALV.) (G90) MTL DECK.

NOTES:

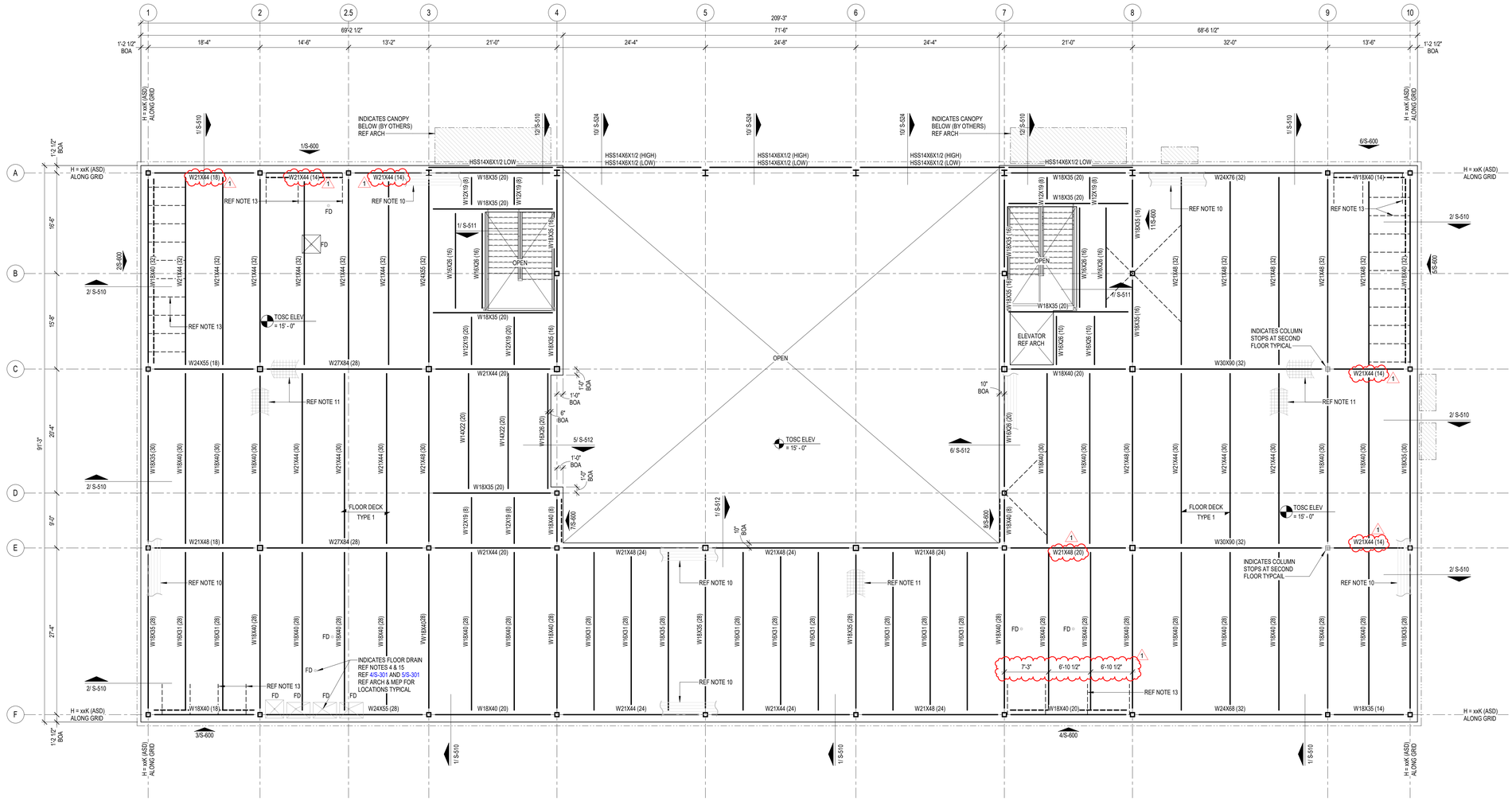
1. STEEL DECK SHALL BE PLACED WITH TWO-SPAN CONDITION MINIMUM. NO SINGLE SPANS ARE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
2. REF SLABS FORM DECK (AT FLOORS) GENERAL NOTES AND METAL DECK SCHEDULE ON SHEET S-504 FOR MORE INFORMATION REGARDING FLOOR DECK REQUIREMENTS.
3. REF METAL ROOF DECKING GENERAL NOTES AND METAL DECK SCHEDULE ON SHEET S-506 FOR MORE INFORMATION REGARDING ROOF DECK REQUIREMENTS.

COMPOSITE FLOOR PLAN NOTES

1. REF PLAN FOR TOP OF SLAB ELEVATION.
2. ALL ELEVATIONS ARE BASED ON TOSC EL = 0'-0".
3. STEEL DECK SHALL BE PLACED WITH A TWO-SPAN CONDITION MINIMUM. NO SINGLE SPANS ARE ALLOWED WITHOUT WRITTEN APPROVAL OF ENGINEER-OF-RECORD.
4. COMPOSITE BEAM CONSTRUCTION IS UNSHORED.
5. DETAILING OF ALL MEMBER CONNECTIONS TO THE SUPPORTS SHALL BE PERFORMED TO SATISFY LATEST OSHA ERECTION REQUIREMENTS.
6. TOS EL = BOTTOM OF DECK.
7. UNLESS SHOWN OTHERWISE, STEEL BEAMS OR JOISTS ARE CENTERED ON AND EQUALLY SPACED BETWEEN COLUMN CENTERLINES.
8. ALL STRUCTURAL STEEL THAT IS PERMANENTLY EXPOSED TO THE EXTERIOR OR IS PERMANENTLY IN UNCONDITIONED SPACE SHALL BE HOT-DIPPED GALVANIZED.
9. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR PENETRATIONS NOT SHOWN. REFER TO TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT REQUIREMENTS AT OPENINGS.
10. PROVIDE ADDITIONAL (5) - #5 CONT BARS IN COMPOSITE SLAB ALONG FULL PERIMETER OF SLAB AND AROUND OPENINGS. EXTEND BARS 10'-0" PAST CORNERS OF OPENINGS. PROVIDE STD HOOK AT TERMINATION ENDS. ALL LAPS IN REINFORCING SHALL BE WITH MECHANICAL COUPLERS OR 20'-0" LAP SPLICE TYPICAL. REFER TO DETAIL 1/S-504.
11. PROVIDE 6'-0" WIDE EXTRA LAYER OF WWF AT 3/4" CLR. FROM TOSC OVER EVERY SINGLE BEAM THAT RUNS BETWEEN COLUMNS IN ADDITION TO EVERY GIRDER BEAM TYPICAL.

COMPOSITE FLOOR PLAN NOTES

12. CONTRACTOR TO VERIFY ALL SLAB EDGE DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
13. INDICATES WIND BRACE BEAM BOTTOM FLANGE BRACING PER 2/S-505 TYPICAL ALONG ENTIRE GRID AT ALL BRACE FRAMES. AT LOCATIONS WHERE BEAM SPACING EXCEEDS 4'-0" OC, REF 1/S-505.
14. REF S0.XX SERIES DRAWINGS FOR GENERAL NOTES AND TYP DETAILS.
15. REF S4.XX SERIES DRAWINGS FOR CMU DETAILS.
16. REF S5.XX SERIES DRAWINGS FOR STEEL FRAMING DETAILS.
17. REF S6.XX SERIES DRAWINGS FOR STEEL BRACE ELEVATIONS AND DETAILS.
18. ⊠⊠⊠⊠⊠ ALL CMU SHOWN ON PLAN ARE PART OF THE STRUCTURAL LATERAL FORCE RESISTING SYSTEM AND SUPPORTS GRAVITY LOADS. NON-STRUCTURAL CMU EXISTS IN OTHER LOCATION (REF ARCH DRAWINGS). A 3/8" VERTICAL CONTROL JOINT SHALL BE PROVIDED WHEREVER STRUCTURAL AND NON-STRUCTURAL CMU ABUT.
19. INDICATES PLAN DIAGONAL STRUT WT5X15. COPE WEB AT BEAMS AND OVERLAP FLANGE 4". WELD TO TOP FLANGE AND COLUMNS WITH 5/16" FILLET WELD 3-SIDES TYPICAL.
20. GC SHALL COORDINATE LOCATION OF FOLDING PARTITIONS WITH ARCH DRAWINGS. REF DETAIL 1/S-509.
21. REF DETAIL -/---513 FOR ADDITIONAL REINFORCEMENT UNDER INTERIOR CMU WALLS PARALLEL TO DECK SPAN. GC TO COORDINATE THE LOCATION OF ALL CMU WALLS WITH ARCH DRAWINGS.
22. PROVIDE MISCELLANEOUS STEEL PER 12/S-501 ABOVE AND BELOW ANY WINDOW THAT DOES NOT ALIGN WITH THE BACK-UP, UNO, TYPICAL. LOOSE LINTELS REQUIRED BELOW WINDOW SHALL BE INVERTED (DOG LEG DOWN) TYPICAL.



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

Kubala ENGINEERS
Ph: (800)245-3674
www.kubalaengineers.com
TX. REG. NO. F-23612

Plot Stamp:
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TX FIRM: BR 1608
HOUSTON, TX
713-366-0608

PKG 3A GPHS - Fieldhouse

1000 Keene St,
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JOHN R. KUBALA
106120
LICENSED PROFESSIONAL ENGINEER
06/10/2025
Kubala Engineers
F-23612

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
06/10/2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI
DRAWN BY: CML

SECOND FLOOR FRAMING PLAN

S-102

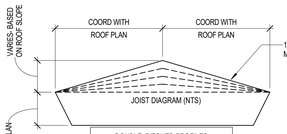
ROOF FRAMING PLAN
S-103
FOR BLUEBEAM LABELING/OCR

GC PLEASE NOTE:

WHERE HORIZONTAL H WIND FORCES ARE INDICATED ON THE STRUCTURAL PLANS AS "H=X/X K (ASD)," IN CONJUNCTION WITH BRACE FRAMES, THE GENERAL CONTRACTOR IS REQUIRED TO ASSUME AN H LOAD OF 80 KIPS (ASD) ALONG THE ENTIRE GRID LINE OF BRACE FRAMES AT THE SECOND FLOORS, THIRD FLOORS, AND MEZZANINES. ADDITIONALLY, FOR HORIZONTAL H WIND FORCES INDICATED AS "H=X/X K (ASD)" IN CONJUNCTION WITH BRACE FRAMES AT THE ROOFS, THE GENERAL CONTRACTOR SHOULD ASSUME AN H LOAD OF 65 KIPS (ASD) ALONG THE ENTIRE GRID LINE. THE GC HOLDS THE RESPONSIBILITY FOR DESIGNING CONNECTIONS THAT CAN ACCOMMODATE THESE SPECIFIED LOAD ASSUMPTIONS. FOR FURTHER GUIDANCE ON CONNECTION DESIGN, PLEASE REFER TO CONNECTION GENERAL NOTE SHEET S-500. TYPICAL ALL AREAS.

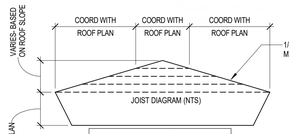
GC PLEASE NOTE:

1. FOR THE BASE BID OF THIS PROJECT, THE GC SHALL ACCOUNT FOR 100% OF THE BEAMS, GIRDERS, AND PURLINS, CROSSING A HIP, VALLEY, AND RIDGE ROOF LINES TO BE BENT AND HAVE FULL CAPACITY MOMENT CONNECTIONS AT EACH LOCATION. CHANGES IN ROOF DECK SLOPE LOCATIONS ARE DEFINED AS WHEN A GIRDER BEAM OR PURLIN BEAM PASSES THROUGH A RIDGE LINE, HIP LINE, OR VALLEY LINE. THE BEND LOCATIONS VARY BASED ON WHERE THE ROOF DECK SLOPE CHANGE INTERSECTS WITH A PURLIN OR MAIN GIRDER BEAM. THE GC MUST COORDINATE WITH ROOF FRAMING PLANS AND ACCOUNT FOR THE FULL NUMBER OF ADDED MOMENT CONNECTIONS REQUIRED TO CREATE THE ROOF DECK SLOPES NEEDED FOR PROPER DRAINAGE.
2. FOR THE BASE BID OF THIS PROJECT, THE GC SHALL ACCOUNT FOR 100% OF THE JOISTS, CROSSING A HIP, VALLEY, AND RIDGE ROOF LINES TO BE DOUBLE OR TRIPLE PITCHED AS NEEDED AT EACH LOCATION. CHANGES IN ROOF DECK SLOPE LOCATIONS ARE DEFINED AS WHEN A JOIST PASSES THROUGH A RIDGE LINE, HIP LINE, OR VALLEY LINE. THE BEND LOCATIONS VARY BASED ON WHERE THE ROOF DECK SLOPE CHANGE INTERSECTS WITH JOIST. THE GC MUST COORDINATE WITH ROOF FRAMING PLANS AND ARCHITECTURAL DRAWINGS.
3. GC TO PROVIDE CONT 4X4X1/4 THICK BENT PLATE ALONG THE RIDGE, HIP, AND VALLEY LINES TO SUPPORT DECKING AT WRAP TYPICAL.
4. THE GENERAL CONTRACTOR IS REQUIRED TO PROVIDE A BRICK RELIEF ANGLE AT ANY POINT WHERE THE BRICK EXTENDS BEYOND THE ELEVATION OF 30'-0" AND IS SUPPORTED BY A CONCRETE MASONRY UNIT (CMU) BACKUP. PLEASE REFER TO DETAIL 7/S-402. THE BRICK RELIEF ANGLE SHOULD BE INSTALLED AT THE SECOND AND THIRD FLOORS WITHIN THE CLASSROOM AREAS AND ROTUNDA AS INDICATED IN COMPOSITE DETAILS AND SECTION CUTS ON PLANS.



DOUBLE PITCHED JOIST PROFILE

MINIMUM JOIST LOADING SHALL MEET THE SJI LOAD TABLE CAPACITY OF THE JOIST SIZE PROVIDED IN THE STRUCTURAL DRAWINGS BASED ON JOIST SPAN, TYPICAL UNO. JOIST DESIGNER DESIGN FOR ANY AND ALL ADDITIONAL LOADS NOTED IN STRUCTURAL DRAWINGS.



TRIPLE PITCHED JOIST PROFILE

MINIMUM JOIST LOADING SHALL MEET THE SJI LOAD TABLE CAPACITY OF THE JOIST SIZE PROVIDED IN THE STRUCTURAL DRAWINGS BASED ON JOIST SPAN, TYPICAL UNO. JOIST DESIGNER DESIGN FOR ANY AND ALL ADDITIONAL LOADS NOTED IN STRUCTURAL DRAWINGS.

JOIST DESIGNATIONS, SHOWN ON THE FRAMING PLANS, FOLLOWED BY THE DESIGNATION "CL" SUPPORT A CONCENTRATED DEAD LOAD. THE JOIST SIZES DESIGNATED ON THE FRAMING PLANS DO NOT TAKE INTO ACCOUNT THIS CONCENTRATED DEAD LOAD. THE JOIST MANUFACTURER SHALL DESIGN SPECIAL JOISTS TO SUPPORT THIS CONCENTRATED DEAD LOAD IN ADDITION TO THE TOTAL LOAD CAPACITY PROVIDED IN THE SJI LOAD TABLES FOR THE JOISTS SPECIFIED ON THE FRAMING PLANS. JOISTS SUPPORTING THESE CONCENTRATED DEAD LOADS SHALL BE FABRICATED SYMMETRICALLY ABOUT THEIR CENTERLINE. DESIGN JOISTS FOR THE FOLLOWING "CL" DESIGNATIONS WHERE SHOWN ON THE FRAMING PLANS:

1. CL1 - XXXX POUNDS LOCATED X'-X" FROM THE FACE OF THE SUPPORTING PANEL ADJACENT TO HIGH ROOF.
2. CL2 - XXXX POUNDS LOCATED X'-X" FROM THE CENTERLINE OF THE SUPPORTING STEEL BEAM.

COMPOSITE FLOOR DECK AND METAL ROOF DECK LEGEND

COMPOSITE FLOOR DECK TYPES

FLOOR DECK TYPE 1:
4 1/2" NWC ON 3.0 VLI 20 GA (GALV) (G90) COMPOSITE STEEL DECK (7 1/2" TOTAL SLAB THICKNESS). COMPOSITE SLAB SHALL BE REINFORCED WITH WWR 6x6-W2.9xW2.9, U.N.O.

METAL ROOF DECK TYPES

ROOF DECK TYPE 1:
1.0 CSV 20 GA (GALV.) (G90) VENTED MTL DECK.

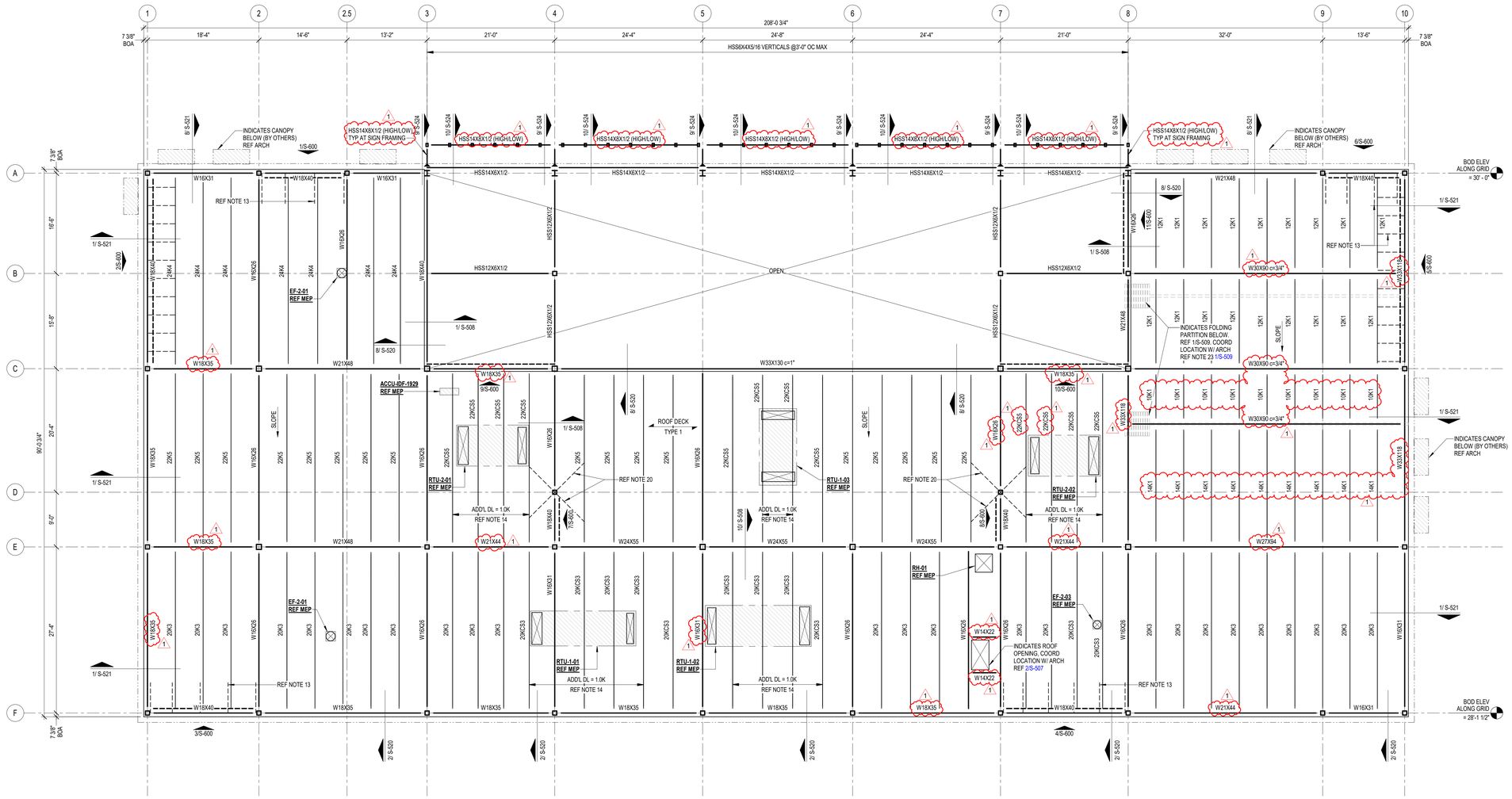
ROOF DECK TYPE 2:
1.5B 20 GA (GALV.) (G90) MTL DECK.

NOTES:

1. STEEL DECK SHALL BE PLACED WITH TWO-SPAN CONDITION MINIMUM. NO SINGLE SPANS ARE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
2. REF SLABS FORM DECK (AT FLOORS) GENERAL NOTES AND METAL DECK SCHEDULE ON SHEET S-504 FOR MORE INFORMATION REGARDING FLOOR DECK REQUIREMENTS.
3. REF METAL ROOF DECKING GENERAL NOTES AND METAL DECK SCHEDULE ON SHEET S-506 FOR MORE INFORMATION REGARDING ROOF DECK REQUIREMENTS.

ROOF PLAN NOTES

1. REF PLAN FOR TOP OF SLAB ELEVATION.
2. ALL ELEVATIONS ARE BASED ON TOSC EL = 0'-0".
3. TOP OF ROOF STRUCTURE IS SLOPED FOR DRAINAGE. REF ELEVATIONS NOTED ON PLAN. SLOPES SHALL BE UNIFORM BETWEEN COLUMN CENTERLINES UNLESS SHOWN OTHERWISE.
4. JOIST MFR NOTE:
BRIDGING NOT SHOWN ON PLAN. MANUFACTURER SHALL PROVIDE STANDARD BRIDGING COMPLYING WITH SJI SPECIFICATIONS OF LATEST ADOPTION, TYPICAL FOR GRAVITY AND UPLIFT LOADS SUPERIMPOSED ON ALL JOISTS. DIAGONAL BRIDGING SHALL BE PROVIDED BETWEEN ADJACENT JOISTS WHENEVER BOTTOM CHORD HORIZONTAL BRIDGING IS CONTINUOUS.
5. REFER TO THE ROOF DIAPHRAGM CONNECTION SCHEDULE FOR DECK ATTACHMENT TO ROOF FRAMING MEMBERS AND DECK FASTENER TYPE, SIZE AND SPACING.
6. REF ARCH FOR TOP OF WALL ELEVATIONS.
7. DETAILING OF ALL MEMBER CONNECTIONS TO THE SUPPORTS SHALL BE PERFORMED TO SATISFY LATEST OSHA ERECTION REQUIREMENTS.
8. TOS EL = BOTTOM OF DECK.
9. UNLESS SHOWN OTHERWISE, STEEL BEAMS OR JOISTS ARE CENTERED ON AND EQUALLY SPACED BETWEEN COLUMN CENTERLINES.
10. ALL STRUCTURAL STEEL THAT IS PERMANENTLY EXPOSED TO THE EXTERIOR OR IS PERMANENTLY IN UNCONDITIONED SPACE SHALL BE HOT-DIPPED GALVANIZED.
11. GC COORDINATE ALL PENETRATIONS AND UNDERGROUND UTILITIES WITH MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS. REFER TO TYPICAL DETAILS FOR ADDITIONAL REINFORCEMENT REQUIREMENTS.
12. CONTRACTOR TO VERIFY ALL SLAB EDGE DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
13. INDICATES WIND BRACE BEAM BOTTOM FLANGE BRACING PER 4/S-508. PROVIDE BFB ALONG THE ENTIRE GRID LINE WHERE A BRACE IS PRESENT IN AT LEAST ONE BAY. THIS INCLUDES THE BRACED FRAME BAY AS WELL AS ALL OTHER BAYS ALONG THAT GRID LINE WHERE A BRACE IS LOCATED. NOT ALL DASHED LINES ARE SHOWN ON THE PLAN FOR CLARITY.
14. REF DETAIL 5/S-507 WHERE ROOF TOP EQUIPMENT REQUIRES A STRUCTURAL CURB. JOISTS THAT ARE SUPPORTING ROOF TOP EQUIPMENT SHALL BE DESIGNED FOR AN ADDITIONAL CONCENTRATED DEAD LOAD (AS SHOWN ON PLAN AT ANY POINT ALONG JOIST SPAN). GC SHALL COORDINATE WITH MEP, ARCHITECTURE AND EQUIPMENT CUTSHEETS FOR FINAL WEIGHT, DIMENSIONS, LOCATION, ETC.
15. —— – – —— INDICATES PIPING RUN, REF MEP DRAWINGS; GC SHALL COORDINATE GIVEN LOAD WITH JOIST MANUFACTURER. REF SHEET S-011.
16. REF S0.XX SERIES DRAWINGS FOR GENERAL NOTES AND TYP DETAILS
17. REF S4.XX SERIES DRAWINGS FOR CMU DETAILS.
18. REF S5.XX SERIES DRAWINGS FOR STEEL FRAMING DETAILS.
19. REF S6.XX SERIES DRAWINGS FOR STEEL BRACE ELEVATIONS AND DETAILS.
20. INDICATES COLUMN BRACING PER 5/S-502. TYPICAL AT COLUMNS UNBRACED BY FRAMING MEMBER ABOUT THEIR LOCAL AXIS. NOT ALL SHOWN ON PLAN FOR MORE CLARITY.
21. INDICATES PLAN DIAGONAL STRUT WT5X15. COPE WEB AT BEAMS AND OVERLAP FLANGE 4". WELD TO TOP FLANGE AND COLUMNS WITH 5/16" FILLET WELD 3-SIDES TYPICAL.
22. UPLIFT X-BRIDGING NOT SHOWN ON PLANS FOR CLARITY. GC SHALL PROVIDE X-BRIDGING BETWEEN ADJACENT WF BEAMS AT ROOF PER DETAIL 3/S-507.
23. GC SHALL COORDINATE LOCATION OF FOLDING PARTITIONS WITH ARCH DRAWINGS. JOISTS ABOVE FOLDING PARTITION SHALL BE DESIGNED FOR ADD'L DL= 2.0 K (PERP.) OR DL= 0.5 KLF (PARALLEL) (DEF. FROM DL SHALL NOT EXCEED 3/8"). END JOISTS ABOVE FOLDING PARTITION SHALL BE DESIGNED FOR STACKED END LOAD EQUAL TO 9000 POUNDS FOR BOTH ENDS (DEF. FROM DL SHALL NOT EXCEED 3/8"). REF DETAIL 1/S-509.
24. PROVIDE MISCELLANEOUS STEEL PER 12/S-501 ABOVE AND BELOW ANY WINDOW THAT DOES NOT ALIGN WITH THE BACK-UP, UNO, TYPICAL. LOOSE LINTELS REQUIRED BELOW WINDOW SHALL BE INVERTED (DOG LEG DOWN) TYPICAL.
25. ALL JOISTS LOCATED BENEATH ROOFTOP UNITS AND THE ADJACENT JOISTS ON EACH SIDE THAT ARE NOT ENTIRELY POSITIONED UNDER THE ROOFTOP UNIT MUST BE DESIGNED TO SUPPORT A DEAD LOAD OF 2.0 KIPS,UNO ON PLANS. GC MUST COORDINATE LOCATION OF RTU'S WITH MEP DRAWINGS.



1 ROOF FRAMING PLAN
1/8" = 1'-0"

Kubala ENGINEERS
Ph: (800)248-3674
www.kubalaengineers.com
TX. REG. NO. F-23612

PBK
www.pbk.com
TX FIRM: BR 1608
HOUSTON, TX
713-965-0608

PKG 3A GPHS - Fieldhouse

1000 Keene St,
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

JOHN R. KUBALA
106120
06/10/2025
Kubala Engineers
F-23612

CLIENT	
Galena Park ISD	
DATE 06/10/2025	PROJECT NUMBER 240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI
DRAWN BY: CML

ROOF FRAMING PLAN

S-103

Plot Stamp:
6/24/2025 10:39:23 AM

POP-UP ROOF FRAMING PLAN
S-104

FOR BLUEBEAM LABELING/DOCR:

0"
1"

GC PLEASE NOTE:

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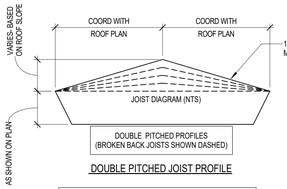
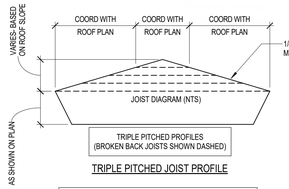


DOUBLE PITCHED PROFILES (BROKEN BACK JOISTS SHOWN DASHED)

DOUBLE PITCHED JOIST PROFILE

MINIMUM JOIST LOADING SHALL MEET THE SJI LOAD TABLE CAPACITY OF THE JOIST SIZE PROVIDED IN THE STRUCTURAL DRAWINGS BASED ON JOIST SPAN, TYPICAL UNO. JOIST DESIGNER DESIGN FOR ANY AND ALL ADDITIONAL LOADS NOTED IN STRUCTURAL DRAWINGS.



TRIPLE PITCHED PROFILES (BROKEN BACK JOISTS SHOWN DASHED)

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2. CL2 - XXXX POUNDS LOCATED X-X" FROM THE CENTERLINE OF THE SUPPORTING STEEL BEAM.

COMPOSITE FLOOR DECK AND METAL ROOF DECK LEGEND

COMPOSITE FLOOR DECK TYPES

FLOOR DECK TYPE 1:
4 1/2" NWC ON 3.0 VLI 20 GA (GALV) (G90) COMPOSITE STEEL DECK (7 1/2" TOTAL SLAB THICKNESS). COMPOSITE SLAB SHALL BE REINFORCED WITH WWR 6x6-W2.9xW2.9, U.N.O.

METAL ROOF DECK TYPES

ROOF DECK TYPE 1:
1.0 CSV 20 GA (GALV.) (G90) VENTED MTL DECK.

ROOF DECK TYPE 2:
1.5B 20 GA (GALV.) (G90) MTL DECK.

NOTES:

1. STEEL DECK SHALL BE PLACED WITH TWO-SPAN CONDITION MINIMUM. NO SINGLE SPANS ARE ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
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3. REF METAL ROOF DECKING GENERAL NOTES AND METAL DECK SCHEDULE ON SHEET S-506 FOR MORE INFORMATION REGARDING ROOF DECK REQUIREMENTS.

ROOF PLAN NOTES

1. REF PLAN FOR TOP OF SLAB ELEVATION.
2. ALL ELEVATIONS ARE BASED ON TOSC EL = 0'-0".
3. TOP OF ROOF STRUCTURE IS SLOPED FOR DRAINAGE. REF ELEVATIONS NOTED ON PLAN. SLOPES SHALL BE UNIFORM BETWEEN COLUMN CENTERLINES UNLESS SHOWN OTHERWISE.
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BRIDGING NOT SHOWN ON PLAN. MANUFACTURER SHALL PROVIDE STANDARD BRIDGING COMPLYING WITH SJI SPECIFICATIONS OF LATEST ADOPTION. TYPICAL FOR GRAVITY AND UPLIFT LOADS SUPERIMPOSED ON ALL JOISTS. DIAGONAL BRIDGING SHALL BE PROVIDED BETWEEN ADJACENT JOISTS WHENEVER BOTTOM CHORD HORIZONTAL BRIDGING IS CONTINUOUS.
5. REFER TO THE ROOF DIAPHRAGM CONNECTION SCHEDULE FOR DECK ATTACHMENT TO ROOF FRAMING MEMBERS AND DECK FASTENER TYPE, SIZE AND SPACING.
6. REF ARCH FOR TOP OF WALL ELEVATIONS.
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12. CONTRACTOR TO VERIFY ALL SLAB EDGE DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
13. INDICATES WIND BRACE BEAM BOTTOM FLANGE BRACING PER 4/S-508. PROVIDE BFB ALONG THE ENTIRE GRID LINE WHERE A BRACE IS PRESENT IN AT LEAST ONE BAY. THIS INCLUDES THE BRACED FRAME BAY AS WELL AS ALL OTHER BAYS ALONG THAT GRID LINE WHERE A BRACE IS LOCATED. NOT ALL DASHED LINES ARE SHOWN ON THE PLAN FOR CLARITY.
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15. ——— - ——— INDICATES PIPING RUN. REF MEP DRAWINGS; GC SHALL COORDINATE GIVEN LOAD WITH JOIST MANUFACTURER. REF SHEET S-011.
16. REF S0.XX SERIES DRAWINGS FOR GENERAL NOTES AND TYP DETAILS
17. REF S4.XX SERIES DRAWINGS FOR CMU DETAILS.
18. REF S5.XX SERIES DRAWINGS FOR STEEL FRAMING DETAILS.
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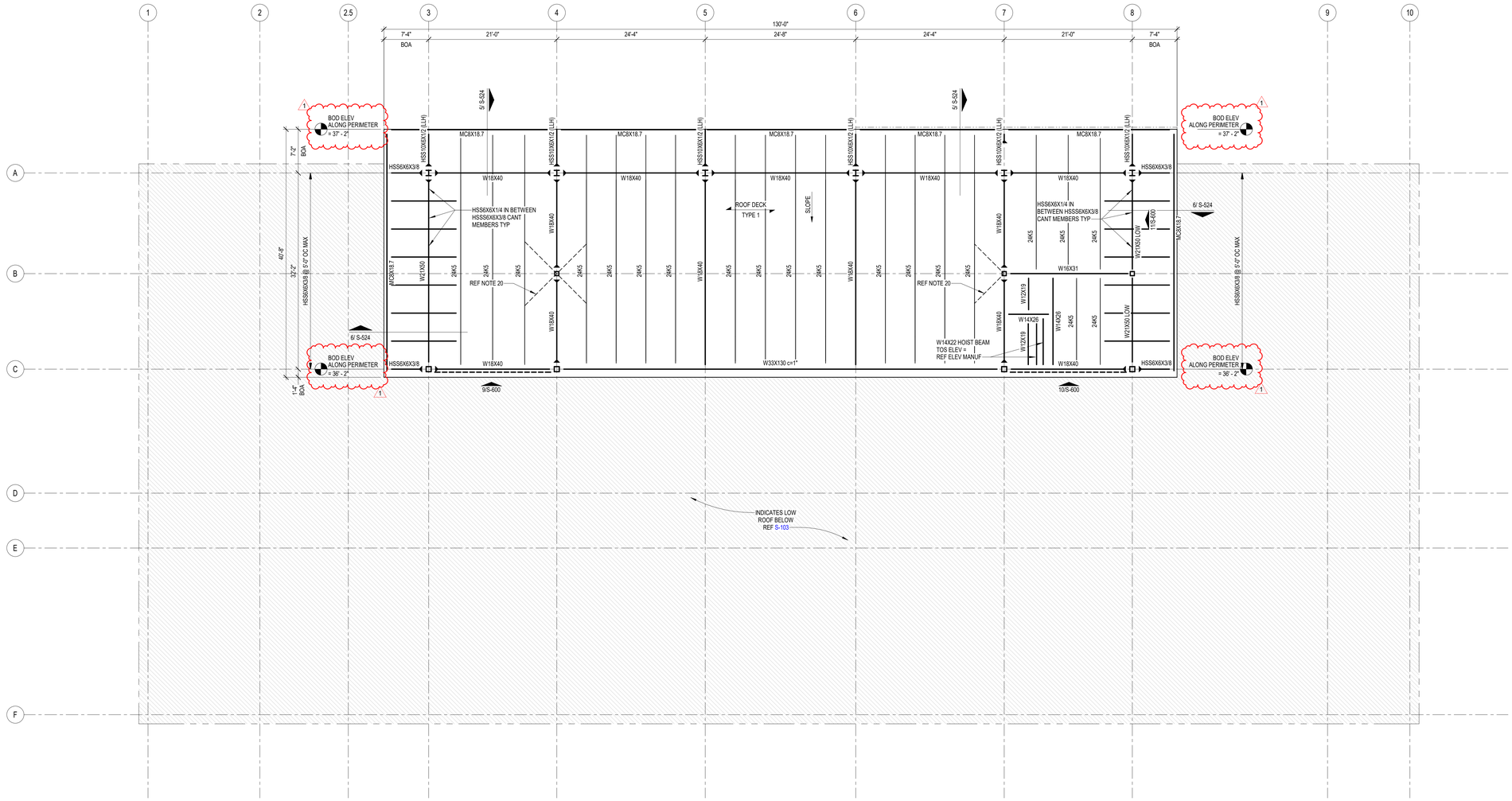
20. INDICATES COLUMN BRACING PER 5/S-502. TYPICAL AT COLUMNS UNBRACED BY FRAMING MEMBER ABOUT THEIR LOCAL AXIS. NOT ALL SHOWN ON PLAN FOR MORE CLARITY.
21. INDICATES PLAN DIAGONAL STRUT WTSX15, COPE WEB AT BEAMS AND OVERLAP FLANGE 4", WELD TO TOP FLANGE AND COLUMNS WITH 5/16" FILLET WELD 3-SIDES TYPICAL.
22. UPLIFT X-BRIDGING NOT SHOWN ON PLANS FOR CLARITY. GC SHALL PROVIDE X-BRIDGING BETWEEN ADJACENT WF BEAMS AT ROOF PER DETAIL 3/S-507.
23. GC SHALL COORDINATE LOCATION OF FOLDING PARTITIONS WITH ARCH DRAWINGS. JOISTS ABOVE FOLDING PARTITION SHALL BE DESIGNED FOR ADD'L DL= 2.0 K (PERP.) OR DL= 0.5 K/F (PARALLEL) (DEF. FROM DL SHALL NOT EXCEED 3/8"). END JOISTS ABOVE FOLDING PARTITION SHALL BE DESIGNED FOR STACKED END LOAD EQUAL TO 9000 POUNDS FOR BOTH ENDS (DEF. FROM DL SHALL NOT EXCEED 3/8"). REF DETAIL 1/S-509.
24. PROVIDE MISCELLANEOUS STEEL PER 12/S-501 ABOVE AND BELOW ANY WINDOW THAT DOES NOT ALIGN WITH THE BACK-UP, UNO, TYPICAL. LOOSE LINTELS REQUIRED BELOW WINDOW SHALL BE INVERTED (DOG LEG DOWN) TYPICAL.
25. ALL JOISTS LOCATED BENEATH ROOFTOP UNITS AND THE ADJACENT JOISTS ON EACH SIDE THAT ARE NOT ENTIRELY POSITIONED UNDER THE ROOFTOP UNIT MUST BE DESIGNED TO SUPPORT A DEAD LOAD OF 2.0 KIPS,UNO ON PLANS. GC MUST COORDINATE LOCATION OF RTU'S WITH MEP DRAWII 'GS.



1 POP-UP ROOF FRAMING PLAN
1/8" = 1'-0"

Kubala ENGINEERS
Ph: (800)249-3674
www.kubalaengineers.com
TX. REG. NO. F-23612

Plot Stamp:
6/24/2025 10:39:24 AM

PBK
www.pbk.com
TX FIRM: BR 1608
HOUSTON, TX
713.665.0606

PKG 3A GPHS - Fieldhouse

1000 Keene St,
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JOHN R. KUBALA
106120
LICENSED PROFESSIONAL ENGINEER
06/10/2025
Kubala Engineers
F-23612

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
06/10/2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI
DRAWN BY: CML

POP-UP ROOF FRAMING PLAN

S-104

GENERAL FOUNDATION NOTES AND TYP DETAILS
S-303SF

FOR BLUEBEAM LABELING/OCR:

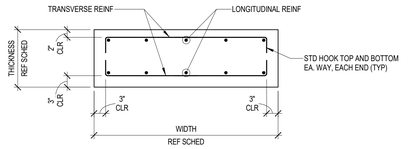
0"
1"

FOOTINGS:

1. FOOTING DESIGN IS BASED UPON THE FOLLOWING CRITERIA. REFER TO TYPICAL FOOTING DETAIL FOR FOOTING SCHEDULE AND REINFORCING. DISTRIBUTION OF FOOTING TYPES AS INDICATED ON PLANS.

a.	NET ALLOWABLE SOIL BEARING PRESSURE	3,900 PSF
b.	MINIMUM FOOTING BEARING DEPTH	2.0 FT BELOW FINAL EXTERIOR GRADE
c.	MINIMUM COLUMN FOOTING	30 INCHES
d.	COEFFICIENT OF BASE FRICTION AT FOOTING BASE	0.25
e.	BEARING STRATUM	LEAN CLAY/SANDY LEAN CLAY/FAT CLAY

2. FOOTINGS NOT SPECIFICALLY LOCATED ON THE PLAN SHALL BE LOCATED ON CENTERLINE OF THE COLUMN ABOVE, WHERE NO COLUMN OCCURS, LOCATE FOOTING ON CENTERLINE OF WALL OR BEAM.
3. PROVIDE DOWELS FROM FOOTINGS INTO CONCRETE ABOVE PER THE TYPICAL FOOTING DETAIL.
4. ELEVATION OF TOP OF FOOTING IS NOTED ON DRAWINGS.
5. REFERENCE PLANS AND FOOTING SCHEDULE FOR FOOTING SIZE, REINFORCING, AND DEPTH OF BEARING STRATUM.
6. ALL FOOTINGS SHALL BE INSPECTED BY A REPRESENTATIVE OF THE PROJECTS GER IN ORDER TO ENSURE THAT THE BEARING STRATUM IS PROPER AND IN ACCORDANCE WITH THE RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT.
7. USE TEMPLATES TO SET DOWELS AND ANCHOR BOLTS IN FOOTINGS. PROVIDE DETAILS OF THE TEMPLATES IN THE FOOTING SHOP DRAWINGS. REMOVE THE TEMPLATE COMPLETELY FROM THE TOP OF THE FOOTING PRIOR TO SUPERSTRUCTURE CONSTRUCTION.
8. UNLESS REQUIRED BY THE PROJECT'S GER TO BE FORM-SIDED, THE FOOTING EXCAVATIONS SHALL BE MADE TO NEAT LINES AND SHALL BE FREE OF LOOSE OR WET MATERIALS. CONCRETE CAN BE PLACED DIRECTLY AGAINST THE SOIL WITHOUT FORMING.
9. PLACE CONCRETE IN FOOTING EXCAVATION WITHIN 8 HOURS OF FINAL EXCAVATION OR AS SPECIFIED IN THE GEOTECHNICAL REPORT.



REINF DIAGRAM

SPREAD FOOTING SCHEDULE

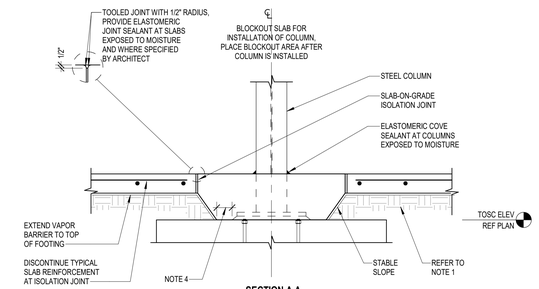
MARK	WIDTH (FT-IN)	LENGTH (FT-IN)	THICKNESS (FT-IN)	LONGITUDINAL TOP REINF	LONGITUDINAL BOT REINF	TRANSVERSE TOP REINF	TRANSVERSE BOT REINF	REMARKS
F4	4' - 0"	4' - 0"	1' - 6"	#5 @ 12" OC	#6 @ 12" OC	#5 @ 12" OC	#6 @ 12" OC	
F7	7' - 0"	7' - 0"	1' - 6"	#5 @ 12" OC	#7 @ 12" OC	#5 @ 12" OC	#7 @ 12" OC	
F8	8' - 0"	8' - 0"	1' - 6"	#5 @ 12" OC	#7 @ 12" OC	#5 @ 12" OC	#7 @ 12" OC	
F9	9' - 0"	9' - 0"	1' - 6"	#5 @ 12" OC	#7 @ 10" OC	#5 @ 12" OC	#7 @ 10" OC	
F10	10' - 0"	10' - 0"	1' - 6"	#5 @ 12" OC	#7 @ 10" OC	#5 @ 12" OC	#7 @ 10" OC	
F13	15' - 0"	8' - 0"	1' - 6"	#7 @ 10" OC	#7 @ 10" OC	#7 @ 10" OC	#7 @ 10" OC	
F14	23' - 0"	9' - 0"	1' - 6"	#7 @ 10" OC	#7 @ 10" OC	#7 @ 10" OC	#7 @ 10" OC	

1

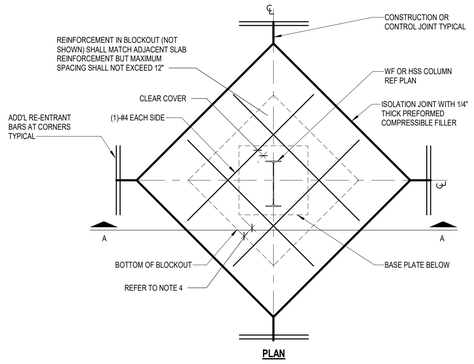
CONTINUOUS FOOTING SCHEDULE

TYPE	WIDTH	THICKNESS	LONGITUDINAL TOP REINF	LONGITUDINAL BOT REINF	TRANSVERSE TOP REINF	TRANSVERSE BOT REINF	REMARKS
CF6	6' - 0"	1' - 6"	#7 @ 12" OC	#7 @ 12" OC	#7 @ 12" OC	#7 @ 12" OC	

1 TYPICAL FOOTING REINF DIAGRAM AND SCHEDULE
NO SCALE



SECTION A-A

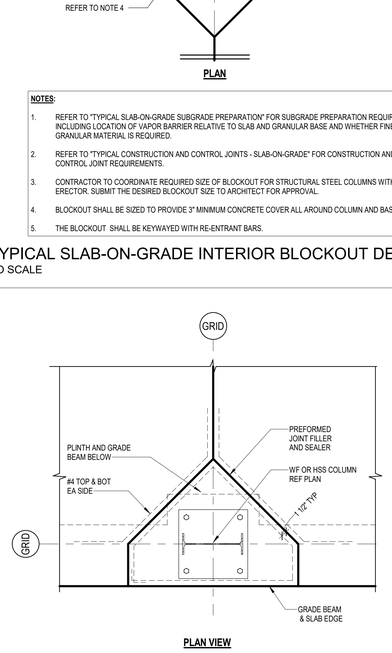


PLAN

NOTES:

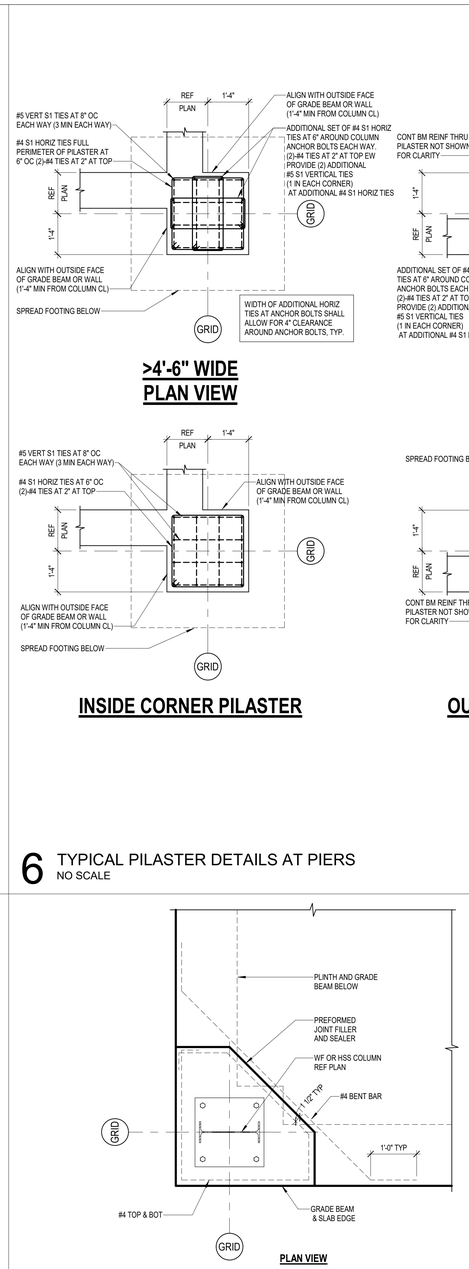
1. REFER TO "TYPICAL SLAB-ON-GRADE SUBGRADE PREPARATION" FOR SUBGRADE PREPARATION REQUIREMENTS INCLUDING LOCATION OF VAPOR BARRIER RELATIVE TO SLAB AND GRANULAR BASE AND WHETHER FINE-GRADE GRANULAR MATERIAL IS REQUIRED.
2. REFER TO "TYPICAL CONSTRUCTION AND CONTROL JOINTS - SLAB-ON-GRADE" FOR CONSTRUCTION AND CONTROL JOINT REQUIREMENTS.
3. CONTRACTOR TO COORDINATE REQUIRED SIZE OF BLOCKOUT FOR STRUCTURAL STEEL COLUMNS WITH STEEL ERECTOR. SUBMIT THE DESIRED BLOCKOUT SIZE TO ARCHITECT FOR APPROVAL.
4. BLOCKOUT SHALL BE SIZED TO PROVIDE 3" MINIMUM CONCRETE COVER ALL AROUND COLUMN AND BASE PLATE.
5. THE BLOCKOUT SHALL BE KEYWAYED WITH RE-ENTRANT BARS.

2 TYPICAL SLAB-ON-GRADE INTERIOR BLOCKOUT DETAIL
NO SCALE



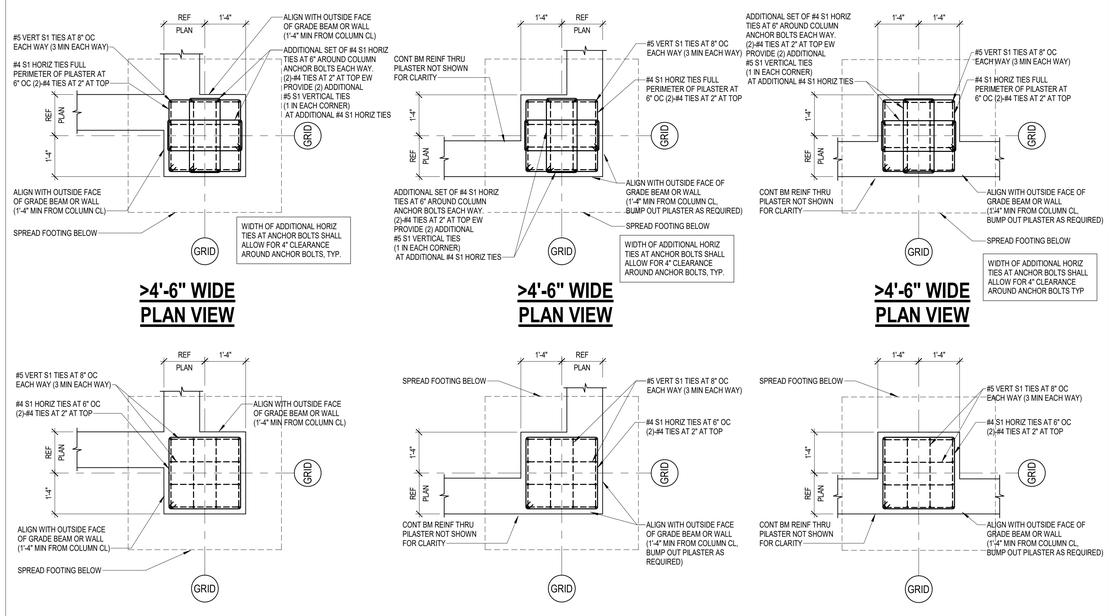
PLAN VIEW

4 TYPICAL SLAB-ON-GRADE PERIMETER BLOCKOUT DETAIL
NO SCALE



PLAN VIEW

5 TYPICAL SLAB-ON-GRADE CORNER BLOCKOUT DETAIL
NO SCALE



6 TYPICAL PILASTER DETAILS AT PIERS
NO SCALE

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713-365-0608

PKG 3A GPHS - Fieldhouse

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
06/10/2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI
DRAWN BY: CML

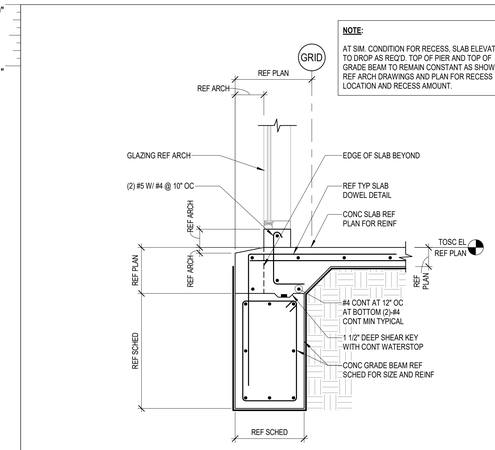
GENERAL FOUNDATION NOTES AND TYP DETAILS

S-303SF

Plot Stamp:
6/24/2025 10:39:24 AM

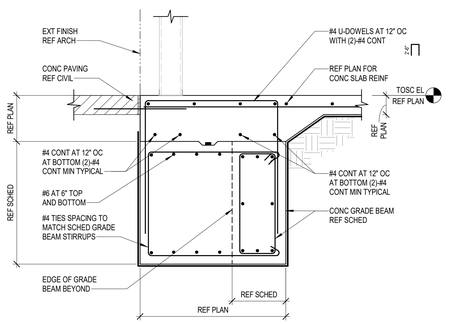
FOUNDATION DETAILS
S-311
FOR BLUEBEAM LABELING/OCR:

0"
1"



NOTE:
AT SIM. CONDITION FOR RECESS, SLAB ELEVATION TO DROP AS REQ'D. TOP OF PIER AND TOP OF GRADE BEAM TO REMAIN CONSTANT AS SHOWN. REF ARCH DRAWINGS AND PLAN FOR RECESS LOCATION AND RECESS AMOUNT.

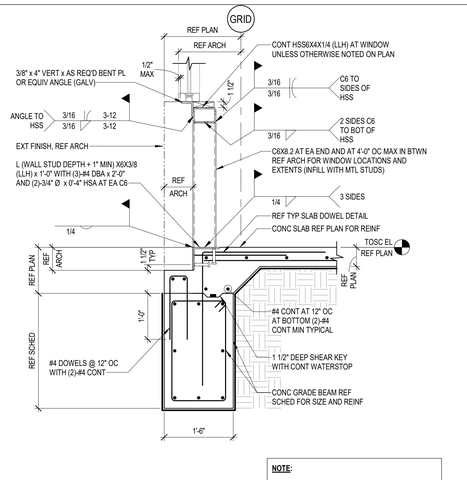
1 EXTERIOR GRADE BEAM AT STOREFRONT
3/4" = 1'-0" 1



NOTE:
AT SIM. CONDITION FOR RECESS, SLAB ELEVATION TO DROP AS REQ'D. TOP OF PIER AND TOP OF GRADE BEAM TO REMAIN CONSTANT AS SHOWN.

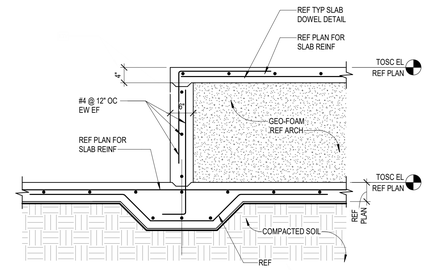
REF ARCH DRAWINGS AND PLAN FOR RECESS LOCATION AND RECESS AMOUNT.

2 EXTERIOR WIDENED GRADE BEAM
3/4" = 1'-0"

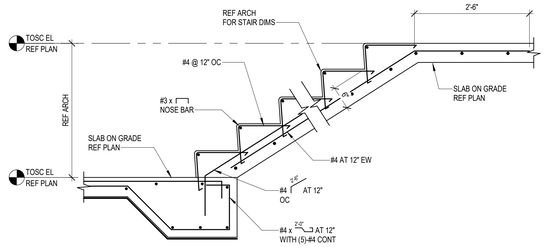


NOTE:
AT SIM CONDITION FOR RECESS, SLAB ELEVATION TO DROP AS REQ'D. TOP OF PIER AND TOP OF GRADE BEAM TO REMAIN CONSTANT AS SHOWN. REF ARCH DRAWINGS AND PLAN FOR RECESS LOCATION AND RECESS AMOUNT.

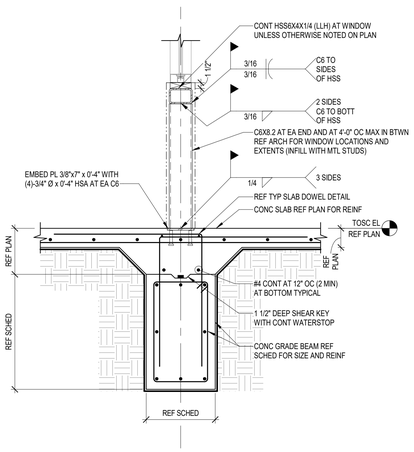
3 FOUNDATION SECTION
3/4" = 1'-0"



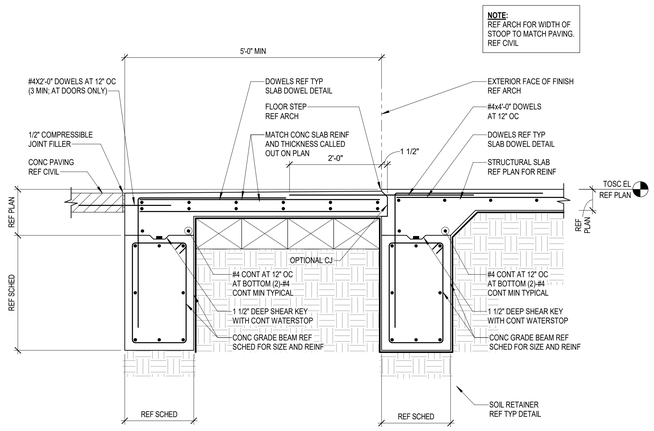
4 SECTION AT PLATFORM
3/4" = 1'-0"



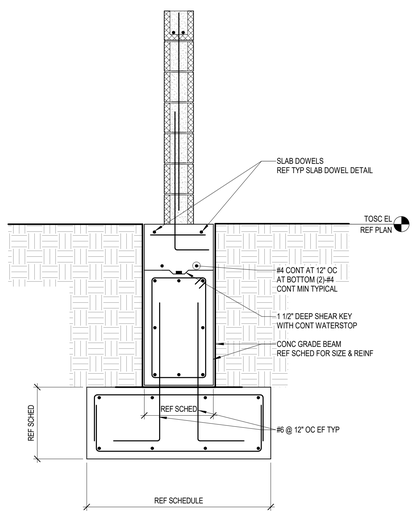
5 TYPICAL STAIR REINFORCING DEATIL
3/4" = 1'-0"



6 INTERIOR STOREFRONT SUPPORT
3/4" = 1'-0"



7 TYPICAL CONC SLAB-ON-GRADE STOOP AT EXTERIOR DOORS
3/4" = 1'-0"



8 EXTERIOR WIDENED GRADE BEAM
3/4" = 1'-0"

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CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

JOHN R. KUBALA
106120
06/10/2025
Kubala Engineers
F-23612

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
06/10/2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI
DRAWN BY: CML

FOUNDATION DETAILS

S-311

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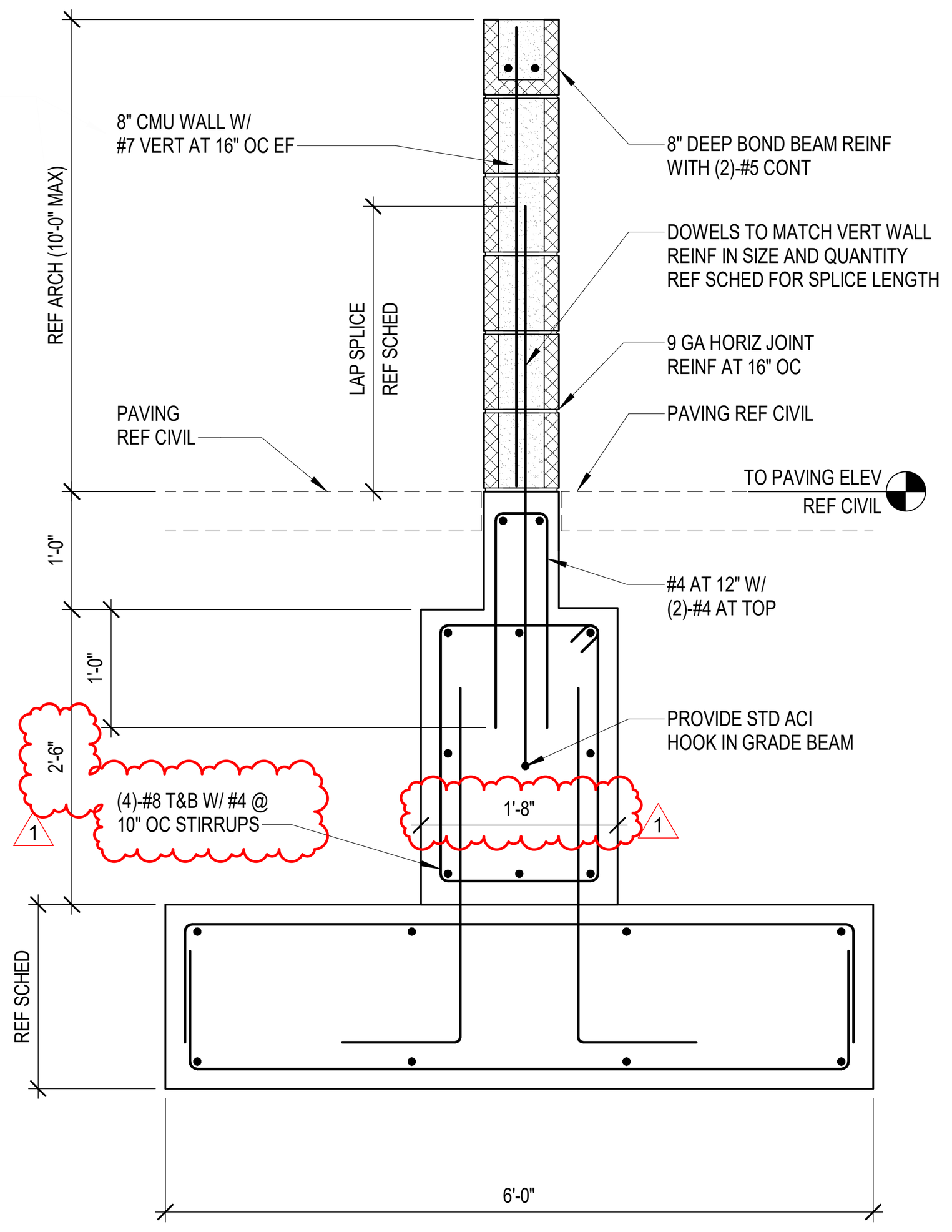
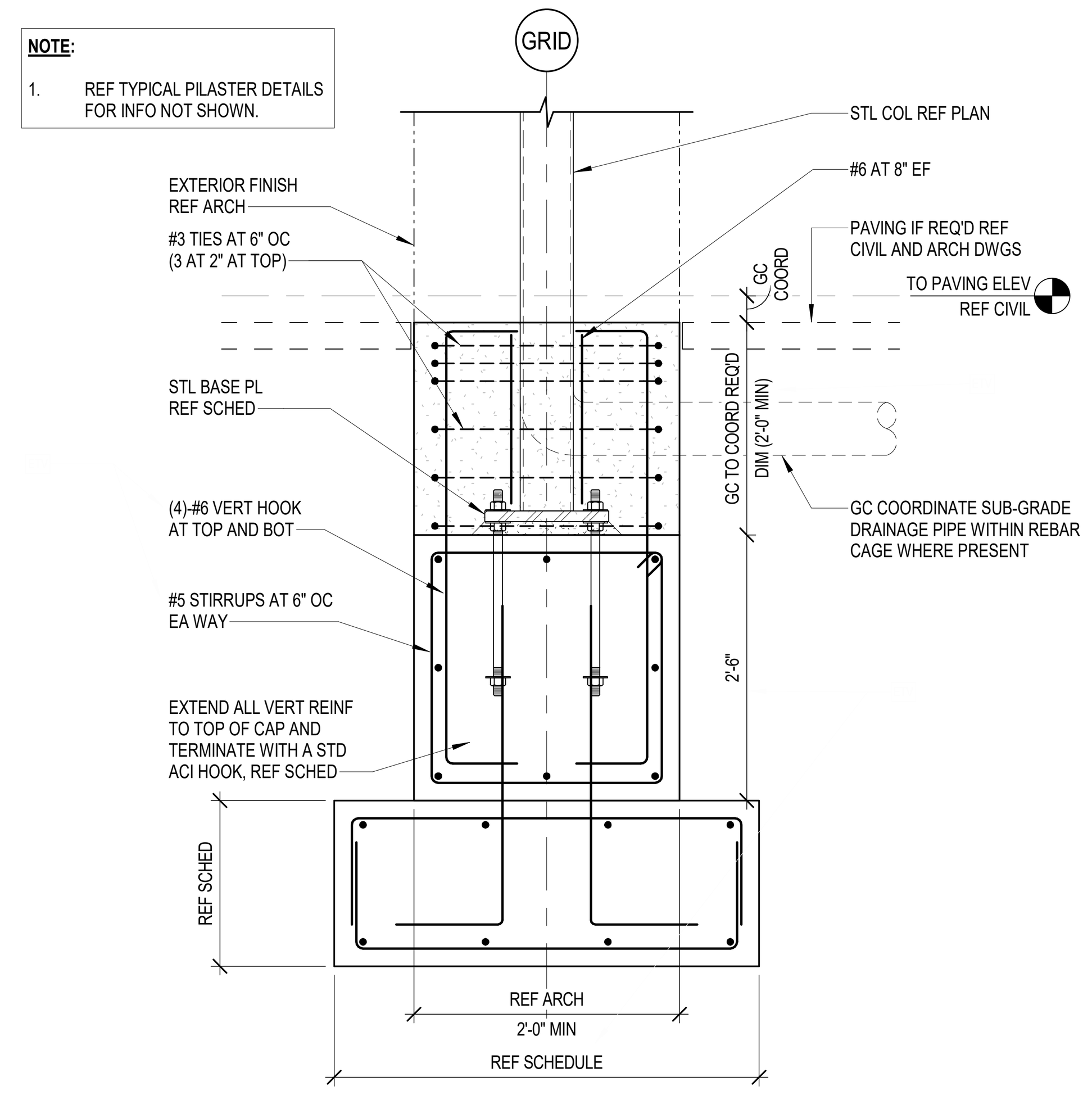
TX. REG. NO. F-23612

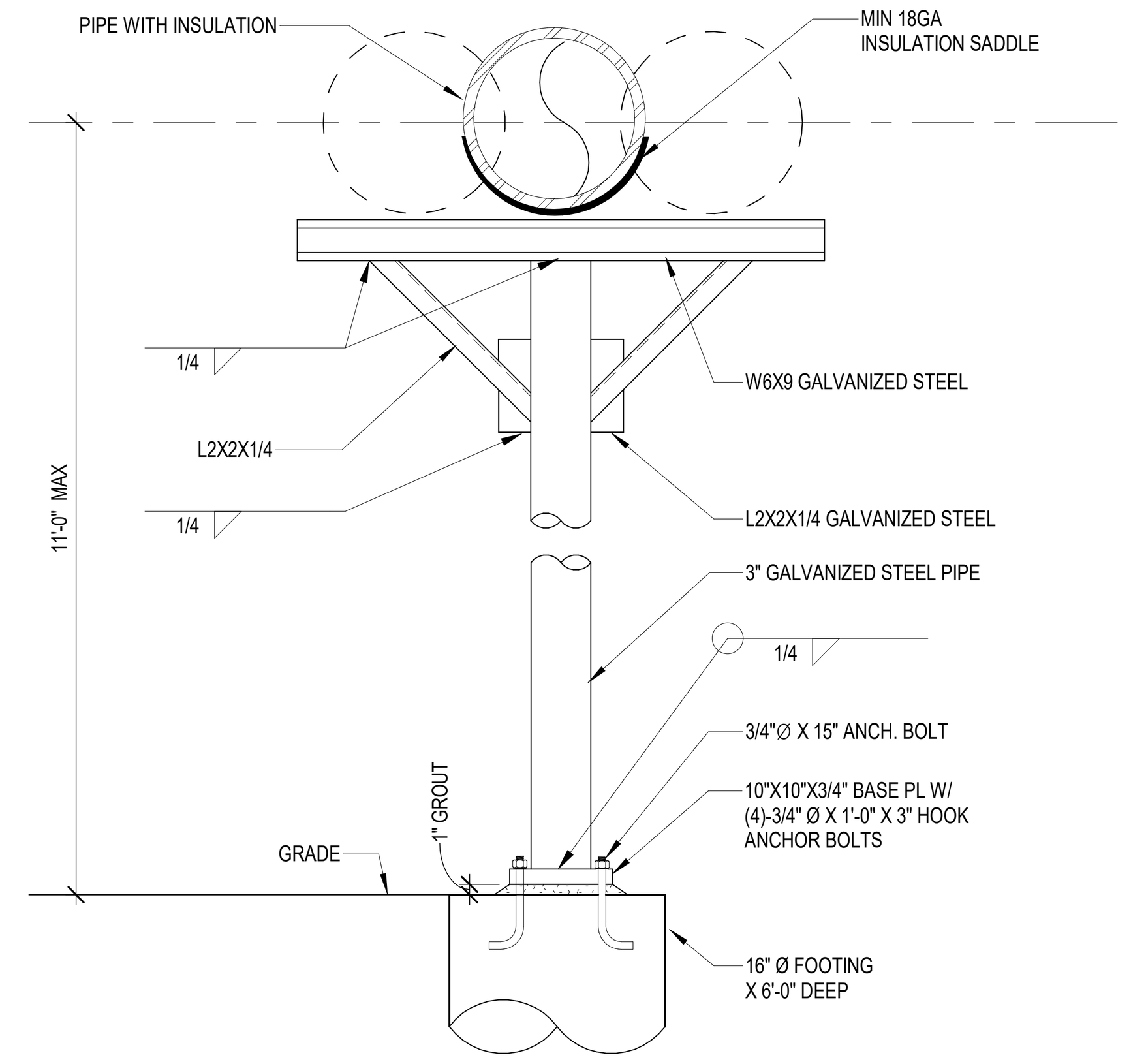
SITE ITEMS FOUNDATION SECTIONS AND DETAILS
S-320
FOR BLUEBEAM LABELING/OCR



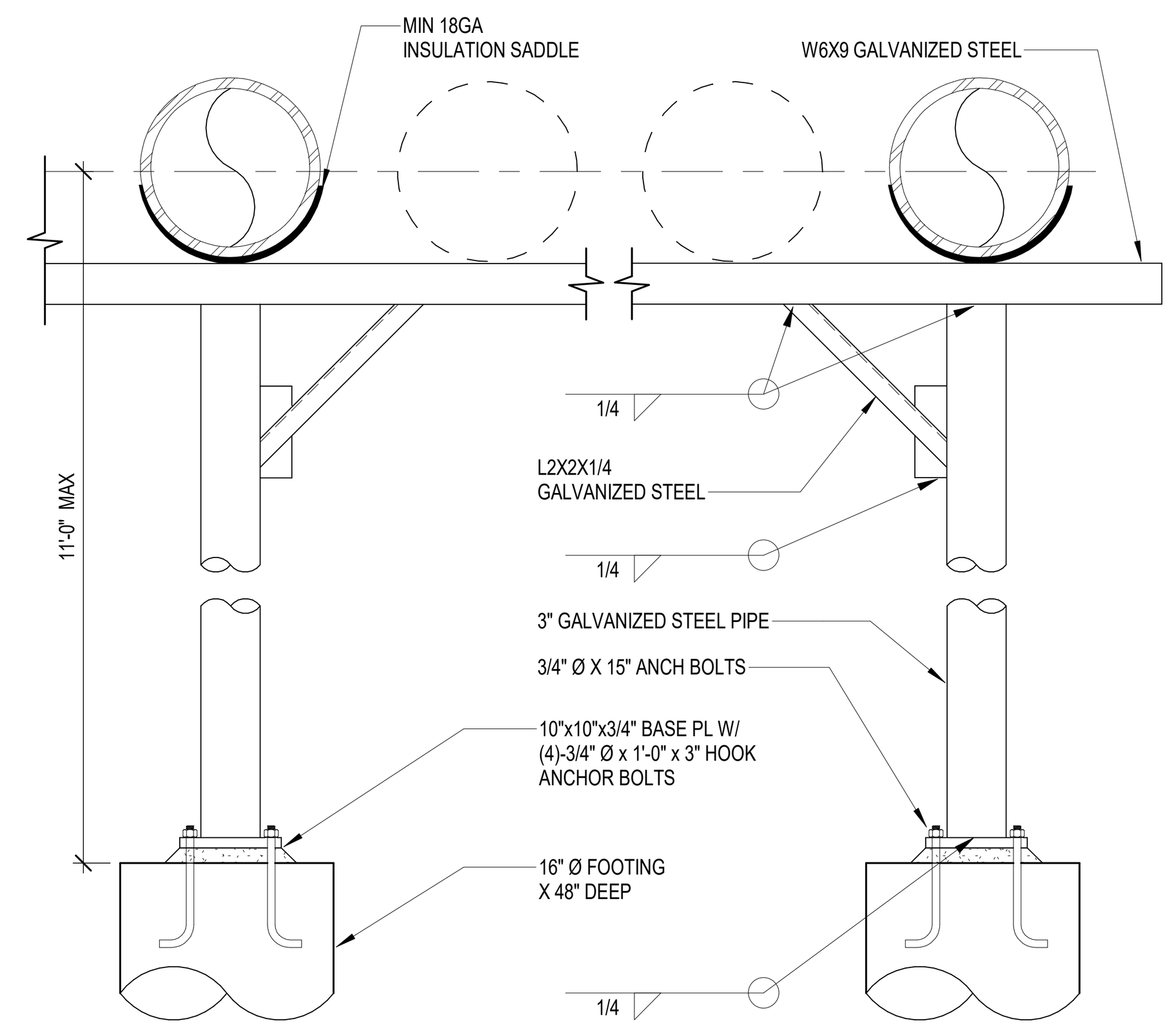
1 SCREEN WALL AT MECH YARD
3/4" = 1'-0"



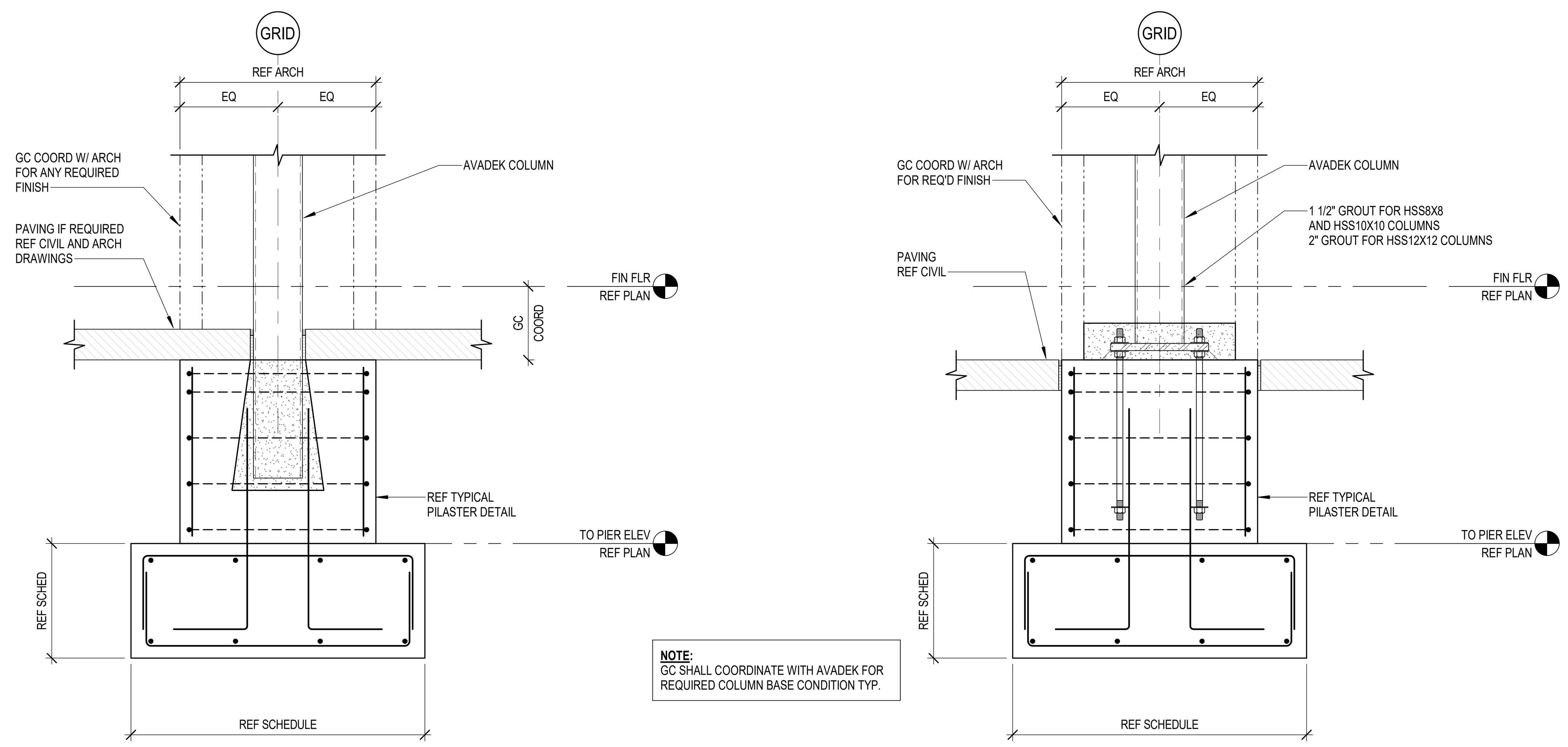
2 EXTERIOR COLUMN DETAIL
3/4" = 1'-0"



3 SINGLE COLUMN PIPE STANCHION DETAIL
NO SCALE



4 DOUBLE PIPE STANCHION PIPE SUPPORT DETAIL
NO SCALE



5 TYP AVADEK CANOPY COLUMN DETAIL
3/4" = 1'-0"

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CLIENT PROJECT NO: 240539
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Galena Park ISD

KEY PLAN
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STATE OF TEXAS
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06/10/2025
Kubala Engineers
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CLIENT	
Galena Park ISD	
DATE 06/10/2025	PROJECT NUMBER 240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI
DRAWN BY: CML

SITE ITEMS FOUNDATION SECTIONS AND DETAILS

S-320

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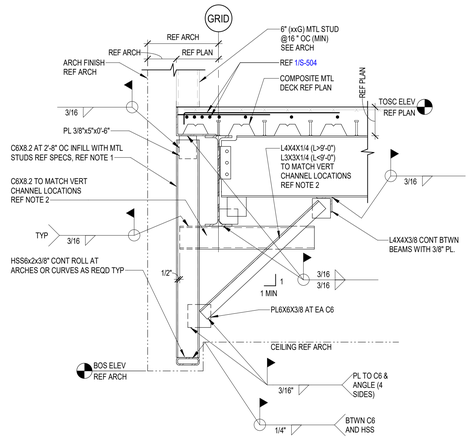
COMPOSITE FRAMING DETAILS
S-512
FOR BLUEBEAM LABELING/OCR:



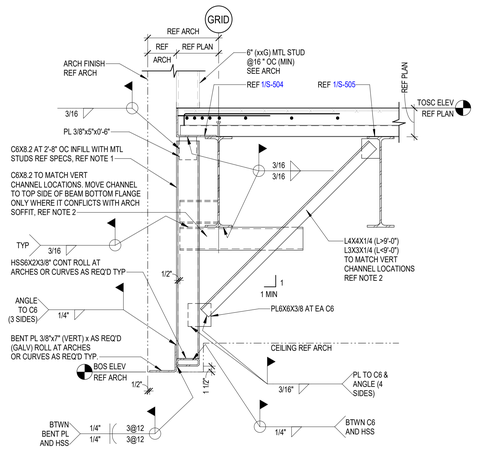
NOTES:

1. LOCATE FIRST VERT CHANNEL AT 6" MAX. FROM EACH END OF OPENING AN EACH SIDE OF COLUMN FACE.
2. LOWER END OF THE DIAGONAL ANGLE SHALL BE PLACED LESS THAN 6" ABOVE THE TUBE. RAISE THIS END UP ONLY TO AVOID CONFLICTING WITH THE CEILING.
3. AT JOISTS, PROVIDE JOIST CHORD STRENGTHENING BRACING WHERE BRACING IS NOT AT JOIST TOP CHORD PANEL POINT.

NOTES:

FOR OPENINGS LESS THAN 8'-0" WIDE
REFER TO LOOSE LINTEL SCHEDULE.

1 TYPICAL WINDOW SUPPORT OVER OPENINGS GREATER THAN 8'-0"
3/4" = 1'-0"



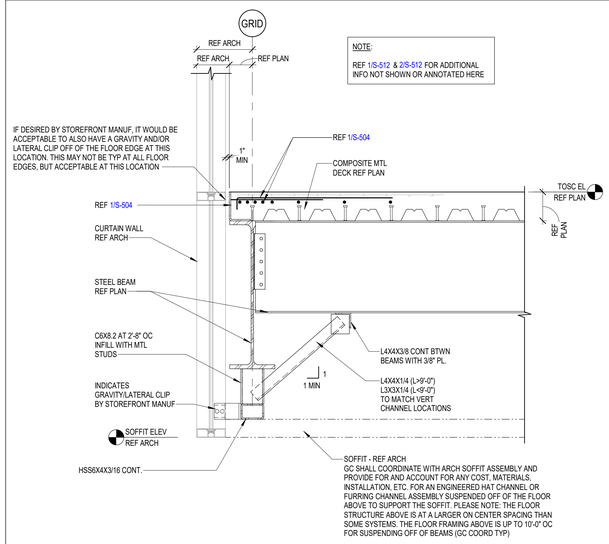
NOTES:

1. LOCATE FIRST VERT CHANNEL AT 6" MAX. FROM EACH END OF OPENING AN EACH SIDE OF COLUMN FACE.
2. LOWER END OF THE DIAGONAL ANGLE SHALL BE PLACED LESS THAN 6" ABOVE THE TUBE. RAISE THIS END UP ONLY TO AVOID CONFLICTING WITH THE CEILING.
3. AT JOISTS, PROVIDE JOIST CHORD STRENGTHENING BRACING WHERE BRACING IS NOT AT JOIST TOP CHORD PANEL POINT.

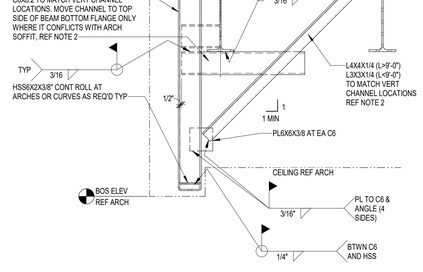
NOTES:

FOR OPENINGS LESS THAN 8'-0" WIDE
REFER TO LOOSE LINTEL SCHEDULE.

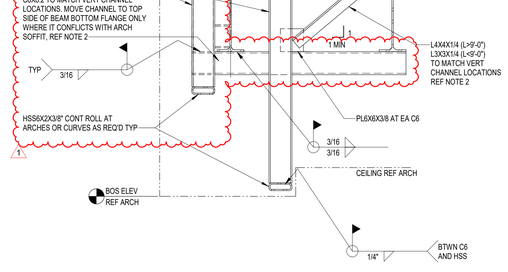
2 TYPICAL MASONRY SUPPORT OVER OPENINGS GREATER THAN 8'-0"
3/4" = 1'-0"



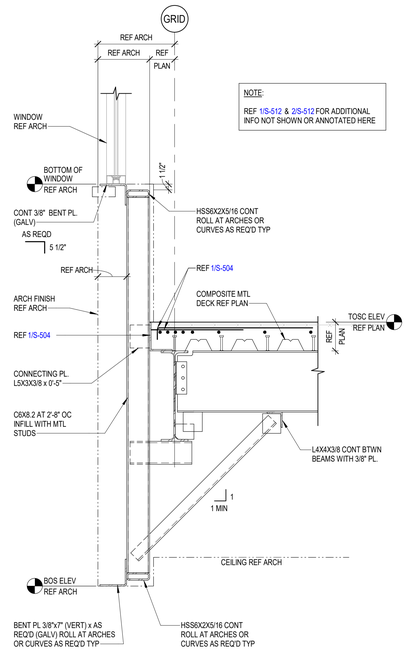
3 TYPICAL CURTAINWALL SUPPORT AT SECOND FLOOR
3/4" = 1'-0"



5 TYPICAL GLAZING SUPPORT OVER OPENINGS
3/4" = 1'-0"



6 TYPICAL GLAZING SUPPORT OVER OPENINGS
3/4" = 1'-0"



4 HANGING BRICK DETAIL
3/4" = 1'-0"

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CLIENT PROJECT NO: 240539

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Galena Park ISD
BUILDING NATIONAL PRIDE

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NORTH: PLAN TRUE

STATE OF TEXAS
JOHN R. KUBALA
106120
LICENSED PROFESSIONAL ENGINEER
06/10/2025
Kubala Engineers
F-23612

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
06/10/2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI
DRAWN BY: CML

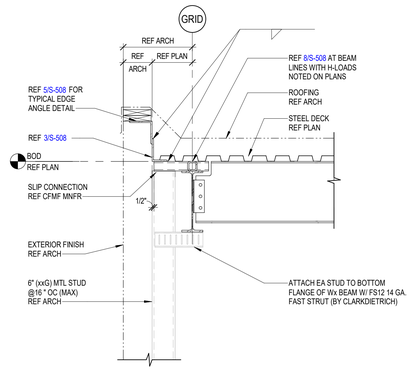
COMPOSITE FRAMING DETAILS

S-512

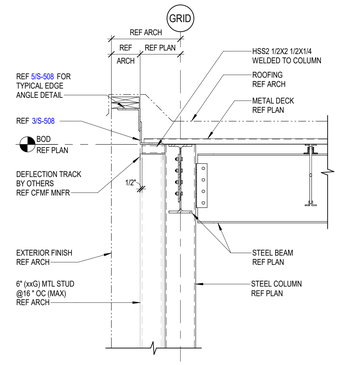
ROOF FRAMING DETAILS
S-524

FOR BLUEBEAM LABELING/OCR:

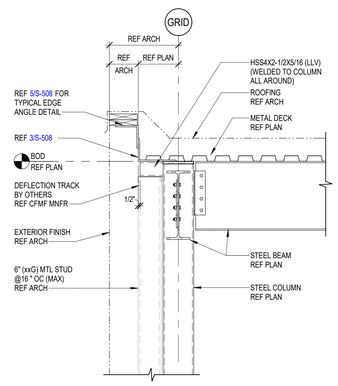
0"
1"



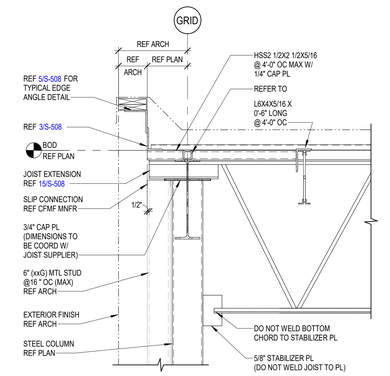
1 TYPICAL ROOF SECTION
3/4" = 1'-0"



2 TYPICAL ROOF SECTION AT COLUMN
3/4" = 1'-0"



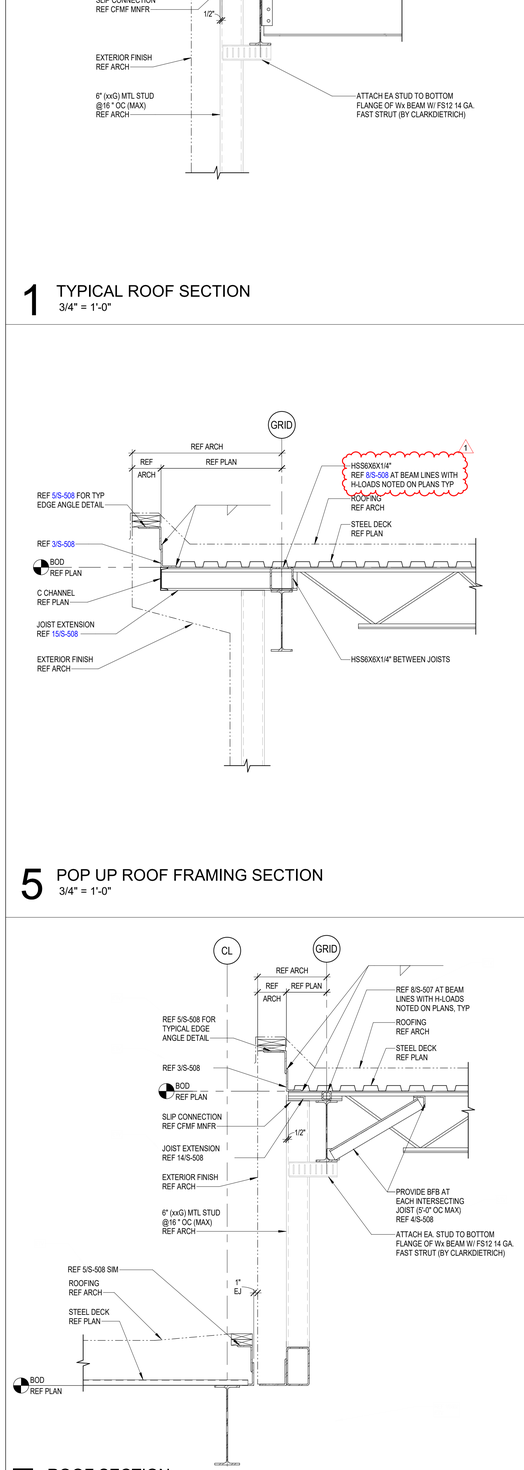
3 TYPICAL ROOF SECTION AT COLUMN
3/4" = 1'-0"



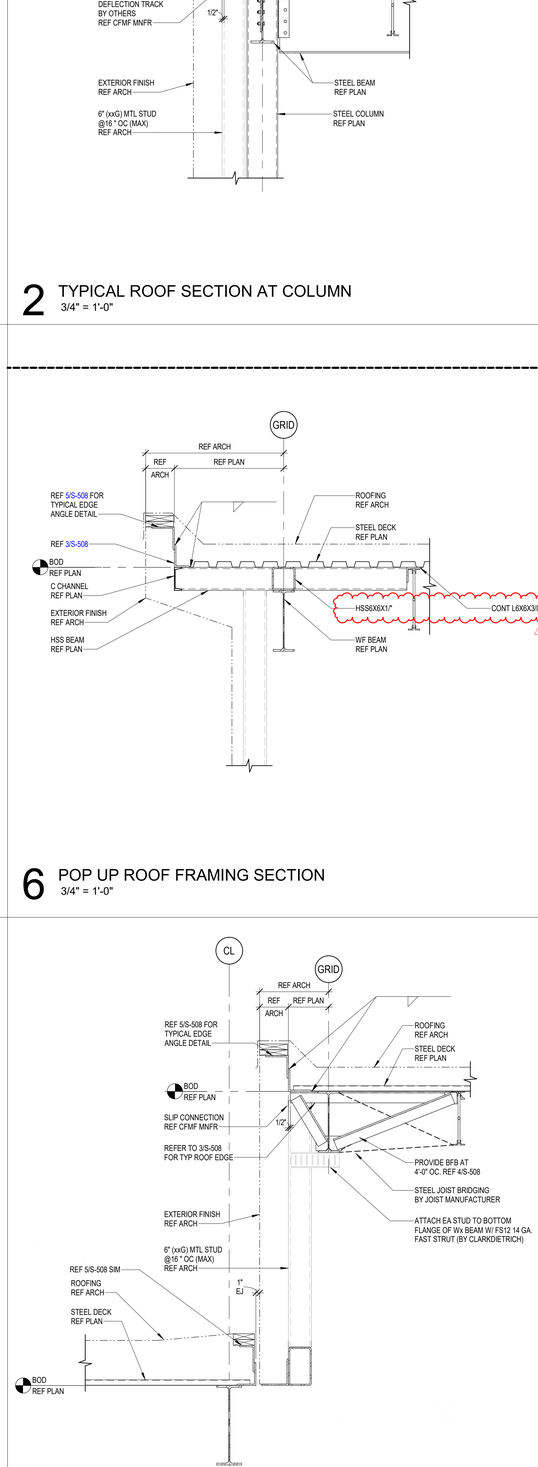
4 ROOF SECTION
3/4" = 1'-0"

5 POP UP ROOF FRAMING SECTION
3/4" = 1'-0"

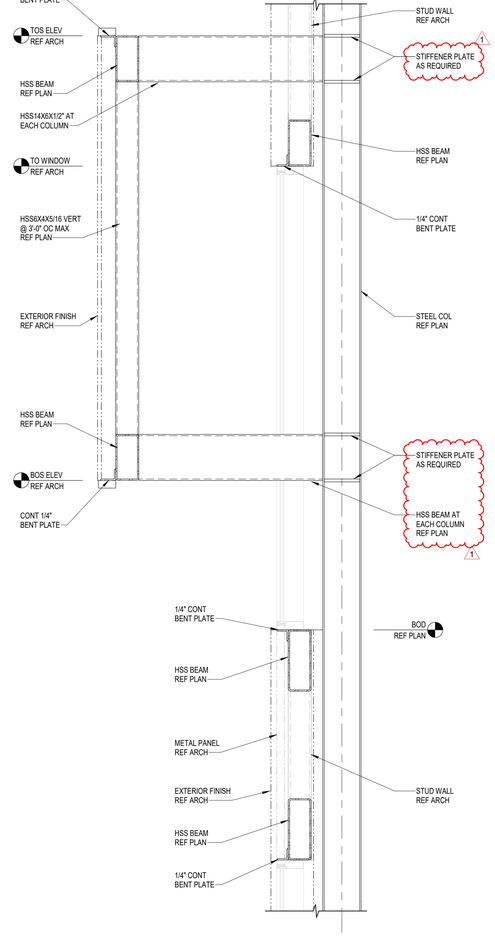
6 POP UP ROOF FRAMING SECTION
3/4" = 1'-0"



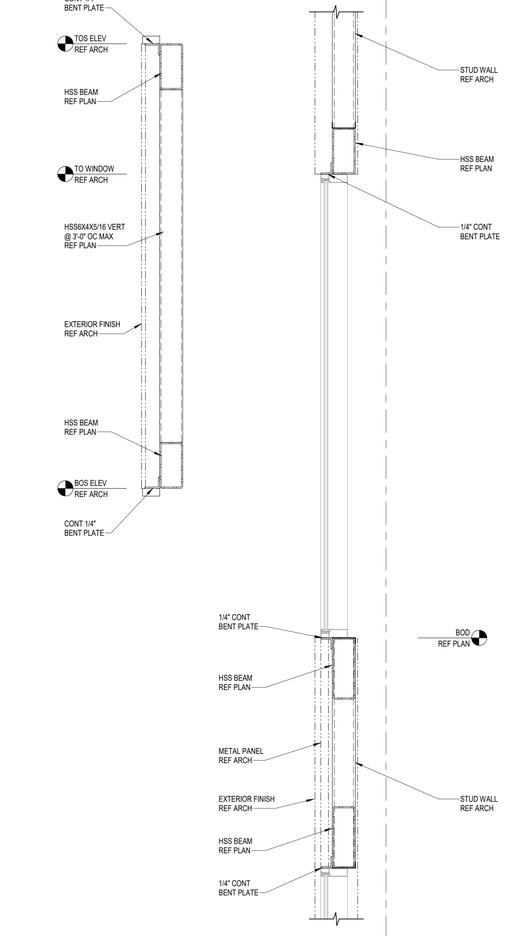
7 ROOF SECTION
3/4" = 1'-0"



8 ROOF SECTION
3/4" = 1'-0"



9 FRAMING SECTION
3/4" = 1'-0"



10 FRAMING SECTION
3/4" = 1'-0"

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CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD
EXCELLENCE IN ALL WE DO

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JOHN R. KUBALA
106120
LICENSED PROFESSIONAL ENGINEER
06/10/2025
Kubala Engineers
F-23612

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
06/10/2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI

DRAWN BY: CML

ROOF FRAMING DETAILS

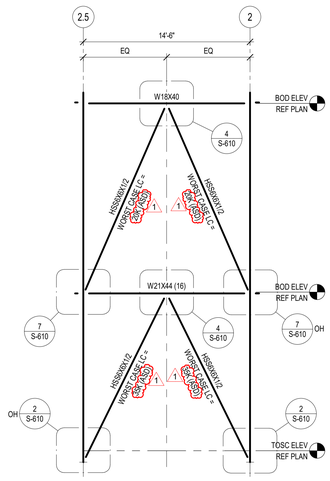
S-524

Plot Stamp:
6/24/2025 10:39:27 AM

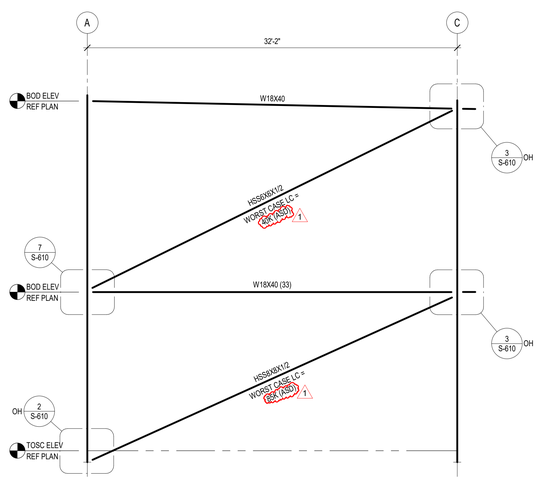
TYPICAL WIND BRACING ELEVATIONS
S-600

FOR BLUEBEAM LABELING/OCR:

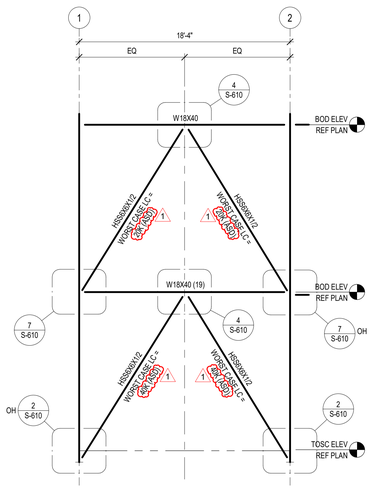
0"
1"



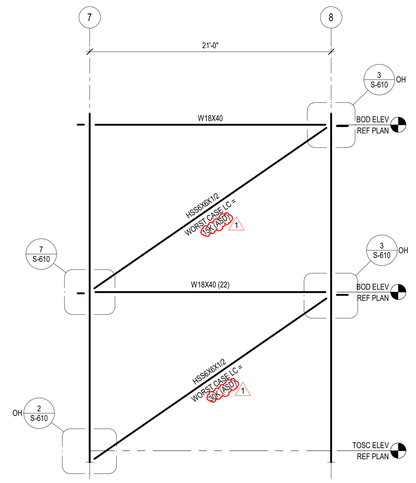
1 BRACE ELEVATION
3/16" = 1'-0"



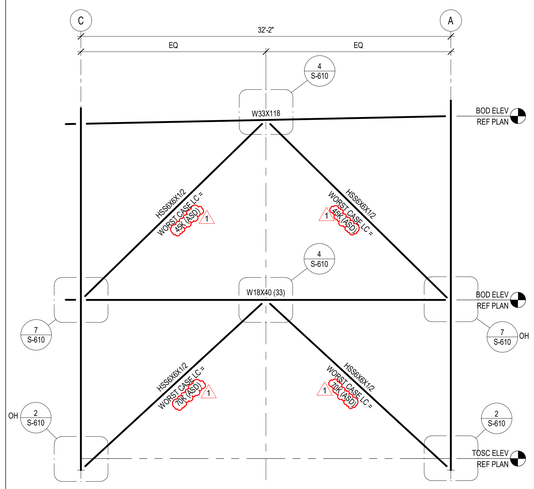
2 BRACE ELEVATION
3/16" = 1'-0"



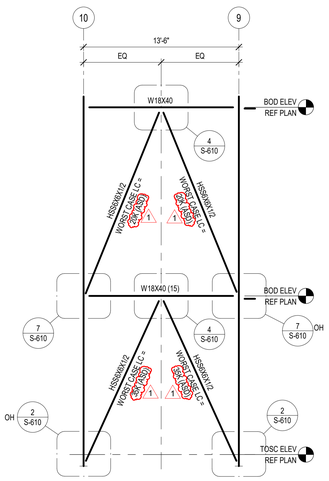
3 BRACE ELEVATION
3/16" = 1'-0"



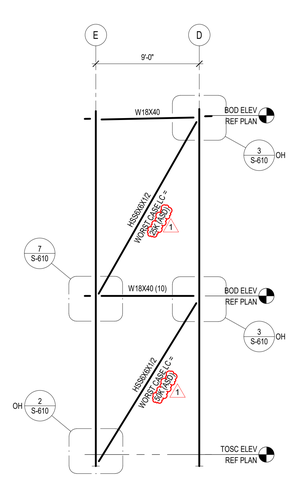
4 BRACE ELEVATION
3/16" = 1'-0"



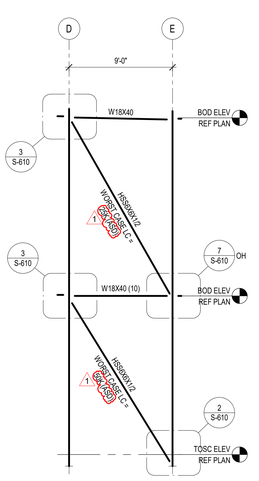
5 BRACE ELEVATION
3/16" = 1'-0"



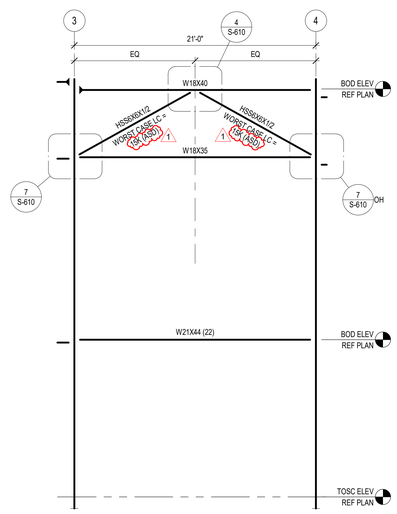
6 BRACE ELEVATION
3/16" = 1'-0"



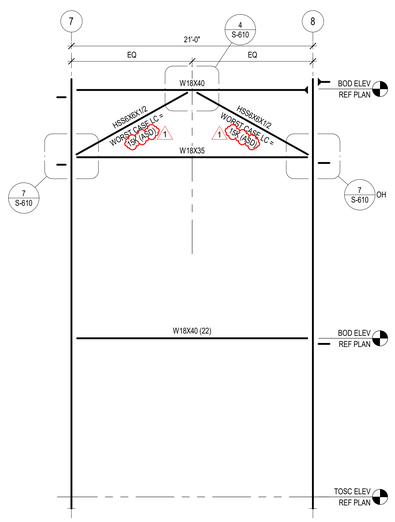
7 BRACE ELEVATION
3/16" = 1'-0"



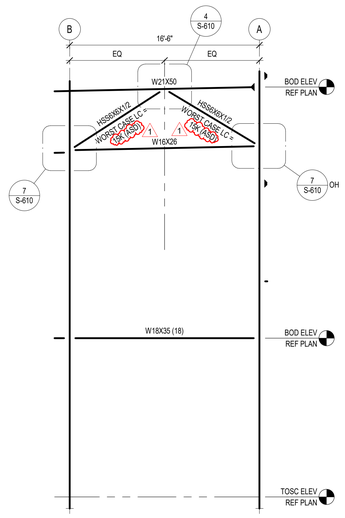
8 BRACE ELEVATION
3/16" = 1'-0"



9 BRACE ELEVATION
3/16" = 1'-0"



10 BRACE ELEVATION
3/16" = 1'-0"



11 BRACE ELEVATION
3/16" = 1'-0"

PBK
www.pbk.com
TX FIRM: BR 1608
HOUSTON, TX
713-366-0608

PKG 3A GPHS - Fieldhouse

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
JOHN R. KUBALA
106120
LICENSED PROFESSIONAL ENGINEER
06/10/2025
Kubala Engineers
F-23612

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
06/10/2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 01	06/25/2025

CHECKED BY: SI

DRAWN BY: CML

TYPICAL WIND BRACING ELEVATIONS

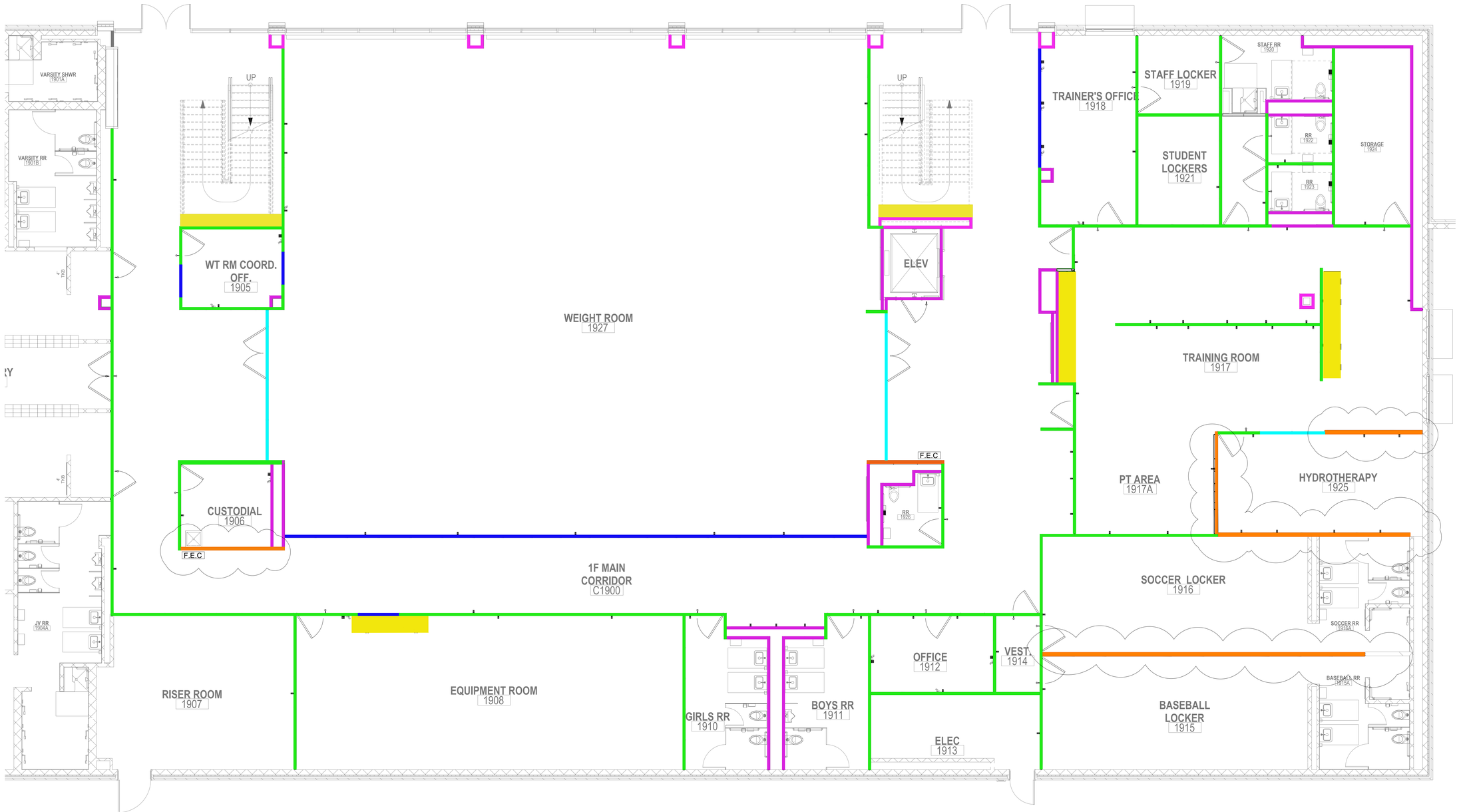
S-600

Kubala ENGINEERS
Ph: (800)246-3074
www.kubalaengineers.com
TX. REG. NO. F-23612

Plot Stamp:
6/24/2025 10:39:29 AM

COLOR LEGEND

- 4" GLASS WALL
- 4" SOLID WALL
- 4" SOLID + GLASS WALL
- 4" FURRING WALL
- 6" SOLID WALL
- DIRTT CASEWORK



1 FLOOR PLAN
DW-100.7

NOT TO SCALE

DIRTT

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☑ ANODIZED ALUMINUM
- ☐ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☑ SILVER
- ☐ BLACK

PVC/GLASS WIPE COLOR:
- ☑ SILVER
- ☐ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☑ CARPET
- ☐ HARD SURFACE

WALL HEIGHT: 10'-0"
LOW WALL: 4'-0"
WEIGHT ROOM 25'-0"

CEILING TYPE:
- ☐ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

DRAWING INDEX

Project Name:
GALENA PARK HIGH SCHOOL
FIELD HOUSE
LEVEL 1

Project Address:
1000 KEENE ST
GALENA PARK, TX
77547

DIRTT CONSULTANT SET

-	04JUN25	95% CD	KA
1	09JUN25	95% CD (Rev 1)	KA
2	10JUN25	95% CD (Rev 2)	KA
3	23JUN25	Addendum #1	KA

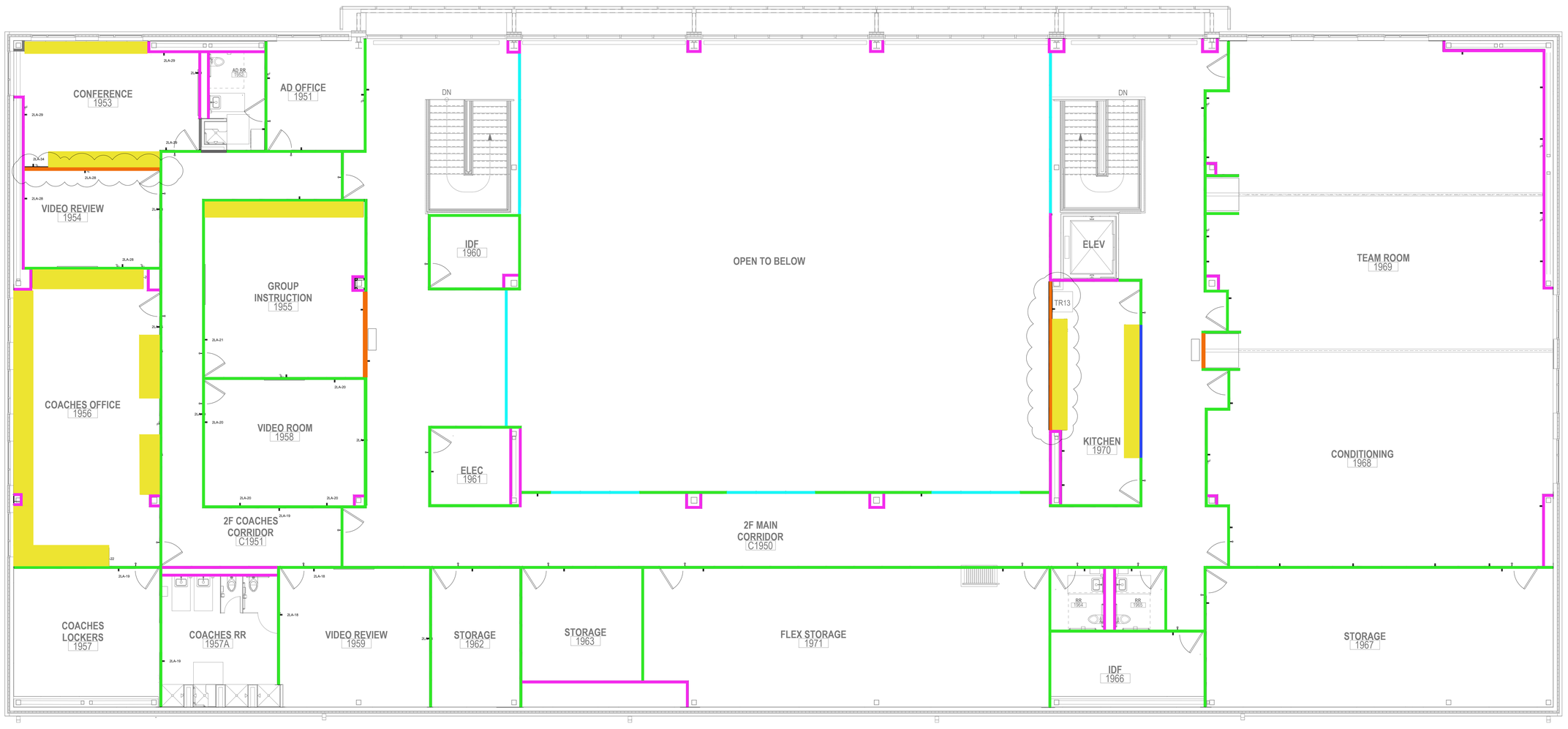
Project:	148501
Drawn by:	KA
Scale:	AS NOTED
Plot Date:	2025/06/25
Contact:	HEATHER KENNEY
Contact Number:	346-465-4114

HIGHLIGHTED PLAN
FIRST FLOOR

DW-100.7

COLOR LEGEND

- 4" GLASS WALL
- 4" SOLID WALL
- 4" SOLID + GLASS WALL
- 4" FURRING WALL
- 6" SOLID WALL
- DIRTT CASEWORK



1 FLOOR PLAN
DW-100.8

NOT TO SCALE

DIRTT

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE:
- ☐ CURVILINEAR
- ☑ RECTILINEAR
- ☐ BLADE
- ☐ EVIL TWIN
- ☐ INSPIRE

FRAME FINISH:
- ☑ ANODIZED ALUMINUM
- ☐ POWDER-COATED
- ☐ VENEER

BASE TRIM COLOR:
- ☑ SILVER
- ☐ BLACK

PVC/GLASS WIPE COLOR:
- ☑ SILVER
- ☐ BLACK

REVEAL:
- ☑ CLASSIC
- ☐ ENZO

COPLANAR:
- ☑ NO
- ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE:
- ☑ CARPET
- ☐ HARD SURFACE

WALL HEIGHT: 10'-0"
WEIGHT ROOM: 25'-0"

CEILING TYPE:
- ☐ DRYWALL BULKHEAD
- ☐ CORNICE RAIL
- ☐ LOW WALL
- ☑ GRID

GRID TYPE:
- ☐ 9/16"
- ☑ 15/16"

TILE TYPE:
- ☑ FLUSH
- ☐ CONCEALED
- ☐ TEGULAR

SEISMIC REQUIRED:
- ☑ NO
- ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

DRAWING INDEX

Project Name:

GALENA PARK HIGH SCHOOL
FIELD HOUSE
LEVEL 2

Project Address:

1000 KEENE ST
GALENA PARK, TX
77547

DIRTT CONSULTANT SET

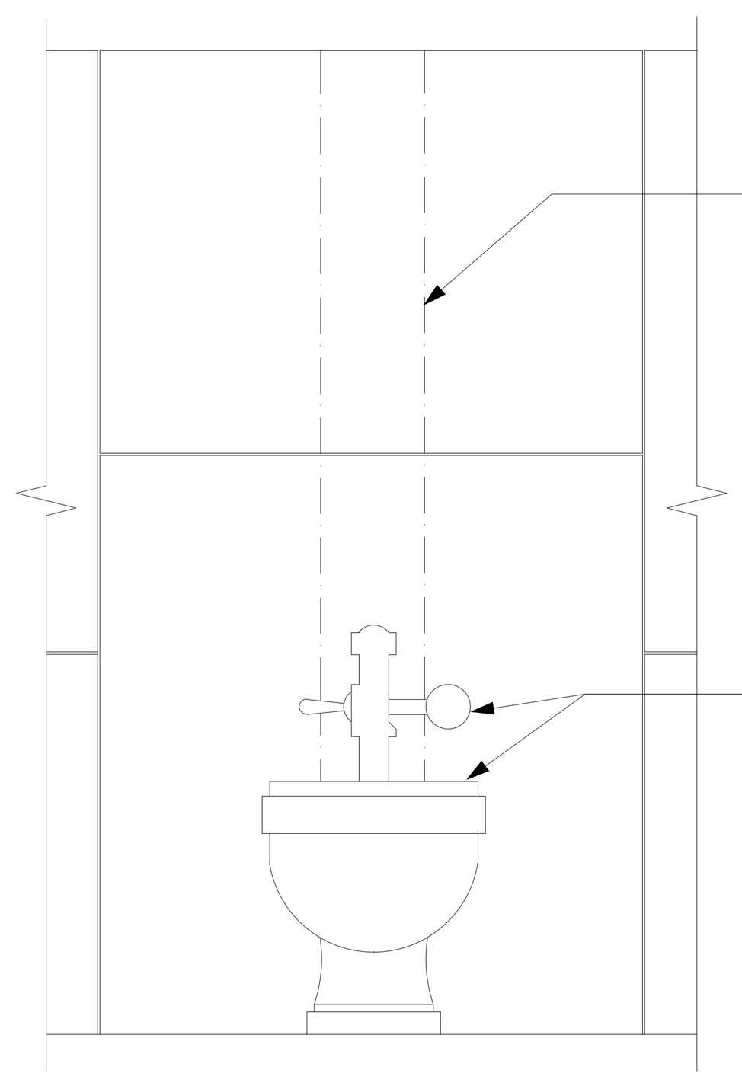
-	04JUN25 95% CDS	KA
1	09JUN25 95% CDS (Rev 1)	KA
2	10JUN25 95% CDS (Rev 2)	KA
3	23JUN25 Addendum #1	KA

Project:	148501
Drawn by:	KA
Scale:	AS NOTED
Plot Date:	2025/06/24
Contact:	HEATHER KENNEY
Contact Number:	346-465-4114

HIGHLIGHTED PLAN
SECOND FLOOR

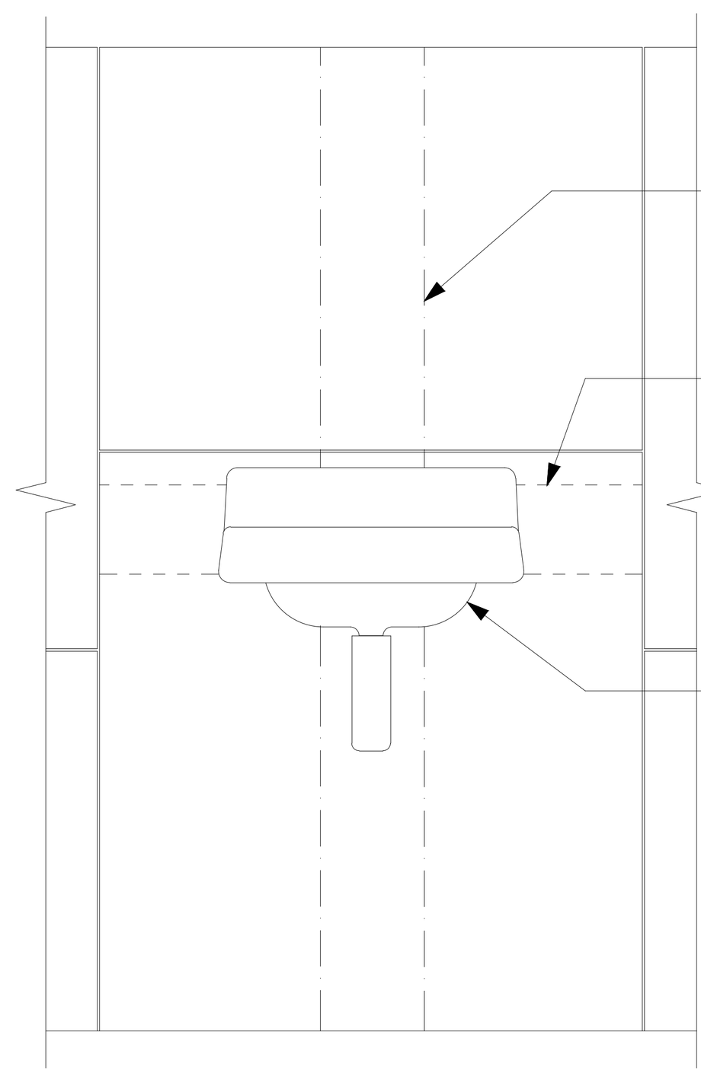
DW-100.8

WATER CLOSET AT DIRTT WALL



1 WATER CLOSET AT DIRTT WALL
DW-400.1 NOT TO SCALE

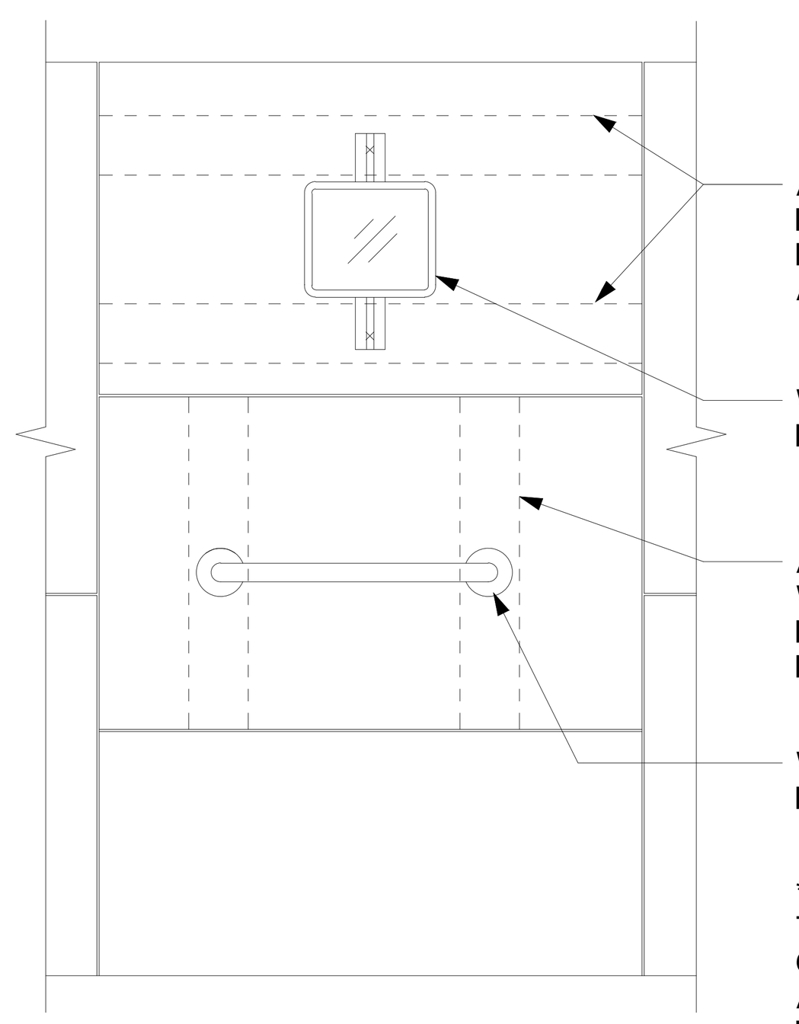
WALL HUNG LAVATORY AT DIRTT WALL



2 WALL HUNG LAVATORY AT DIRTT WALL
DW-400.1 NOT TO SCALE

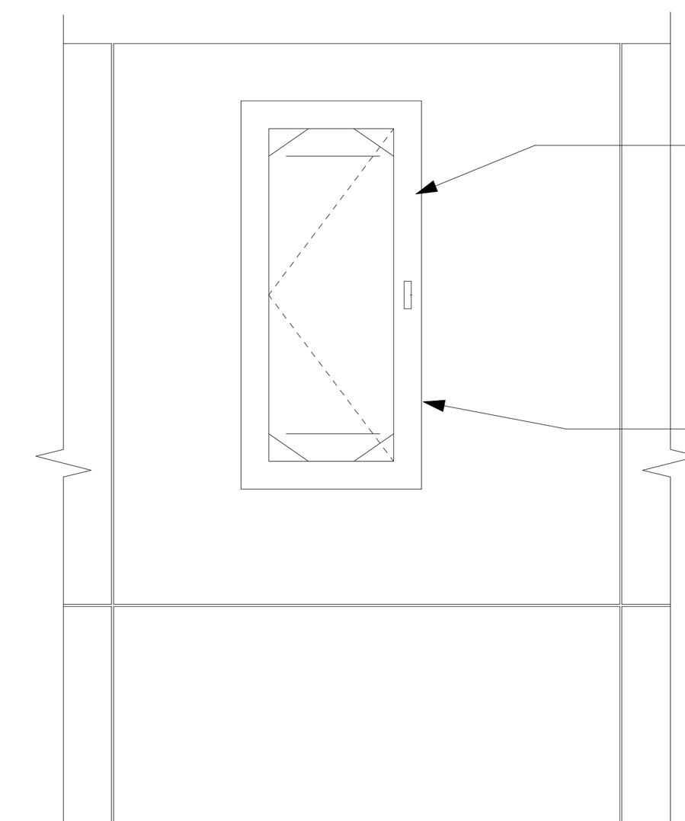
WALL HUNG EQUIPMENT & ACCESSORIES AT DIRTT WALL

TYPICALLY PROVIDED FOR ITEMS THAT CANNOT BE HUNG FROM A REVEAL SUCH AS: MONITORS, WALL MOUNTED WORK STATIONS AND GRAB BARS. IN WALL BLOCKING IS ADJUSTED AND MAY BE ORIENTED HORIZONTALLY OR VERTICALLY.



*ACCESSORY AND EQUIPMENT TYPES SHOWN FOR REFERENCE ONLY. SEE EQUIPMENT SCHEDULE AND SPECIFICATIONS FOR MORE INFORMATION.

3 WALL HUNG EQUIPMENT AT DIRTT WALL
DW-400.1 NOT TO SCALE



4 FIRE EXTINGUISHER CABINET AT DIRTT WALL
DW-400.1 NOT TO SCALE

GENERAL NOTES

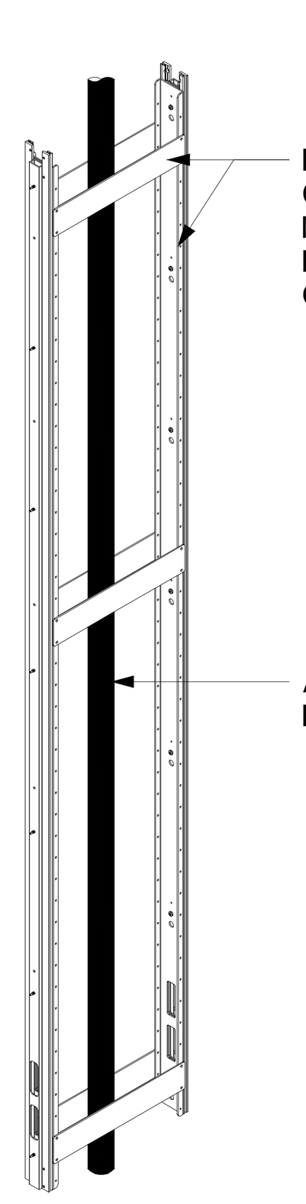
1. SEE SPECIFICATION 13 42 75 INTEGRATED INTERIOR ASSEMBLIES FOR MORE INFORMATION.
2. SEE ARCHITECTURAL AND ENGINEERING DRAWINGS AND SPECIFICATIONS FOR MORE INFORMATION.
3. MATERIALS AND/OR ASSEMBLIES ON THIS SHEET INDICATING THAT THEY ARE "**PROVIDED BY DIRTT**" SHALL BE INCLUDED IN THE MATERIAL COSTS CAPTURED BY DIRTT.
4. MATERIALS AND/OR ASSEMBLIES ON THIS SHEET INDICATING THAT THEY ARE "**INSTALLED ON SITE**" SHALL BE INCLUDED IN THE LABOR COSTS OF THE **D**IRTT **C**ERTIFIED **C**ONTRACTOR (**DCC**).
5. MATERIALS AND/OR ASSEMBLIES ON THIS SHEET INDICATING "**PROVIDED BY AND FACTORY ASSEMBLED BY DIRTT**" WILL ARRIVE ON SITE FULLY ASSEMBLED WITHIN DIRTT FRAMES. MATERIAL AND LABOR COSTS SHALL BE CAPTURED BY DIRTT.
6. MATERIALS, ASSEMBLIES AND/OR LABOR ON THIS SHEET INDICATING "**BY CONTRACTOR**" ARE NOT PROVIDED BY DIRTT OR THE DIRTT CERTIFIED CONTRACTOR AND SHALL BE INCLUDED IN THE SCOPE OF THE APPROPRIATE BIDDER.
7. MATERIALS AND/OR ASSEMBLIES ON THIS SHEET INDICATING THAT THEY ARE "**PROVIDED BY DIRTT AND INSTALLED BY CONTRACTOR**" SHALL BE INCLUDED IN DIRTT'S MATERIAL COSTS AND LABOR SHALL BE INCLUDED IN THE COSTS OF THE APPROPRIATE BIDDER.

ABBREVIATIONS

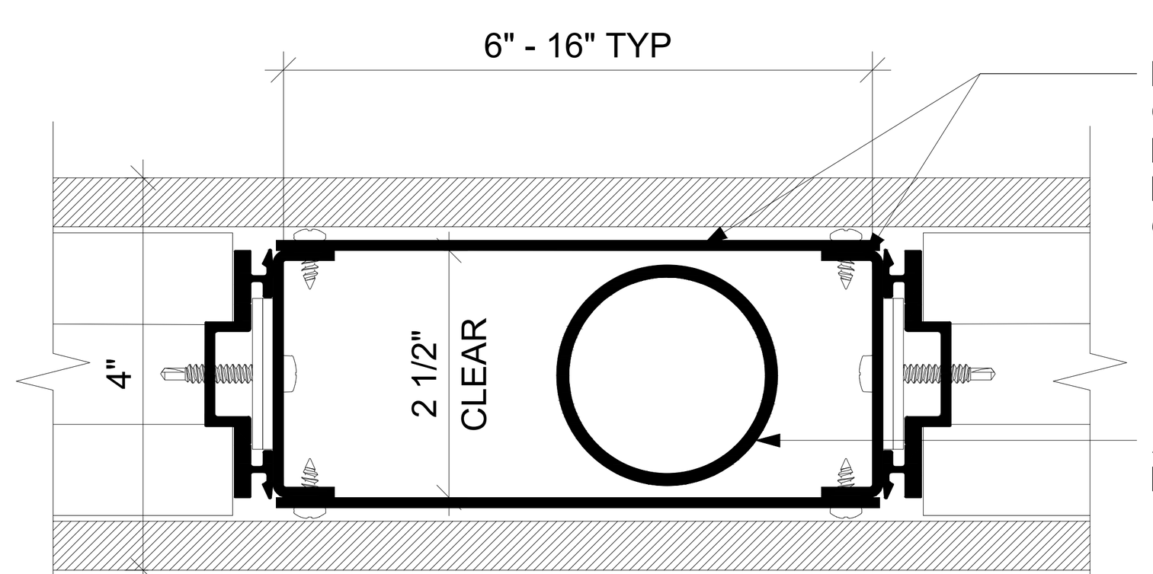
CCF CLOSED CELL FOAM
DCC DIRTT CERTIFIED CONTRACTOR

DEFINITIONS

DIRTT CERTIFIED CONTRACTOR: PERSON OR COMPANY THAT HAS BEEN TRAINED BY DIRTT TO CONSTRUCT AND/OR INSTALL DIRTT SOLUTIONS.



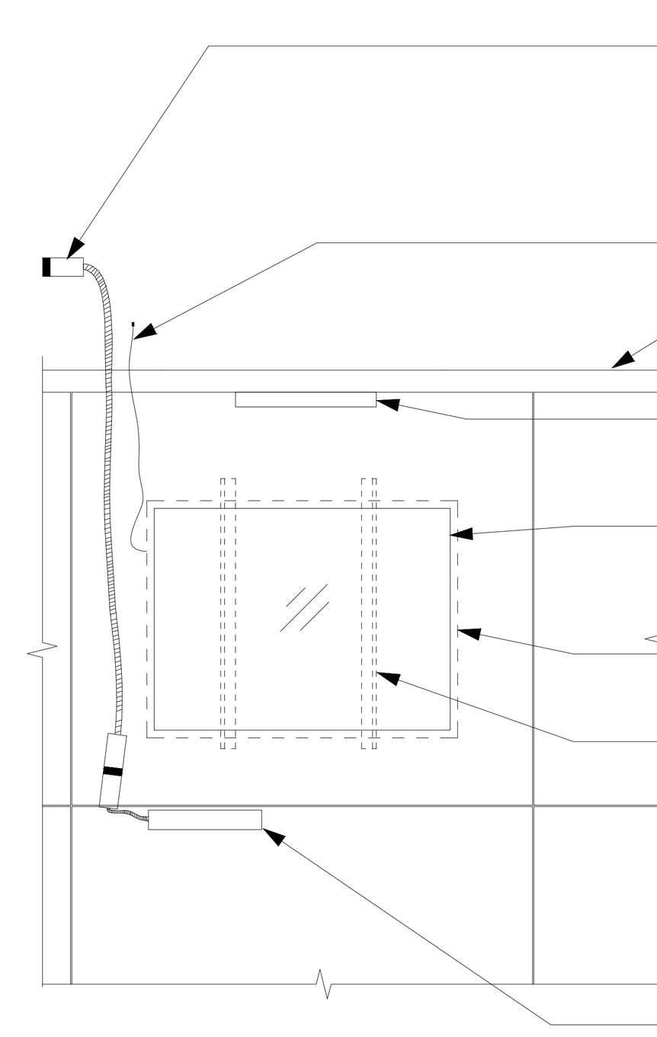
5 MECHANICAL CHASE - 4 INCH WALL ISO
DW-400.1 NOT TO SCALE



6 MECHANICAL CHASE - 4 INCH WALL ISO
DW-400.1 NOT TO SCALE

RECESSED TV/DISPLAY MONITOR AT DIRTT WALL - POWER CHASSIS MODULAR

TYPICALLY PROVIDED FOR ITEMS SUCH AS: TELEVISIONS OR MONITORS THAT ARE TO BE LOCATED BEHIND GLASS. USEFUL FOR LOCATIONS WHERE HEADWALLS AND FOOTWALLS ARE BACK TO BACK.

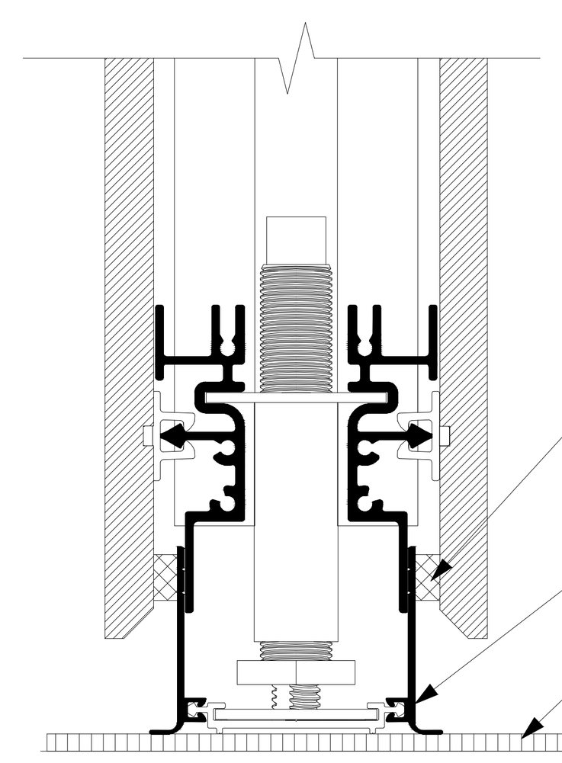


*TV/DISPLAY MONITOR MOUNTING HARDWARE BY CONTRACTOR.

7 RECESSED TV DISPLAY MONITOR IN DIRTT WALL W/ POWER CHASIS
DW-400.1 NOT TO SCALE

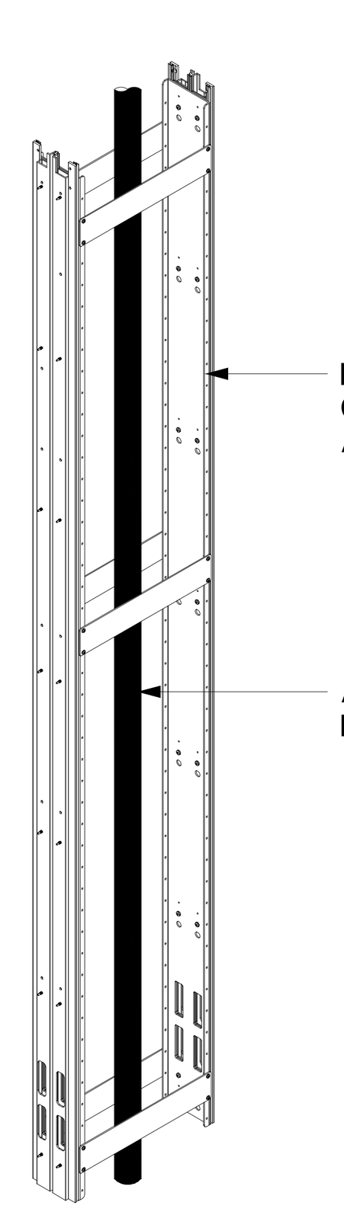
ARCHITECTURAL - PREFAB WALLS

ALL WALLS LABELED OR TAGGED AS DIRTT AND/OR DEMOUNTABLE PARTITIONS

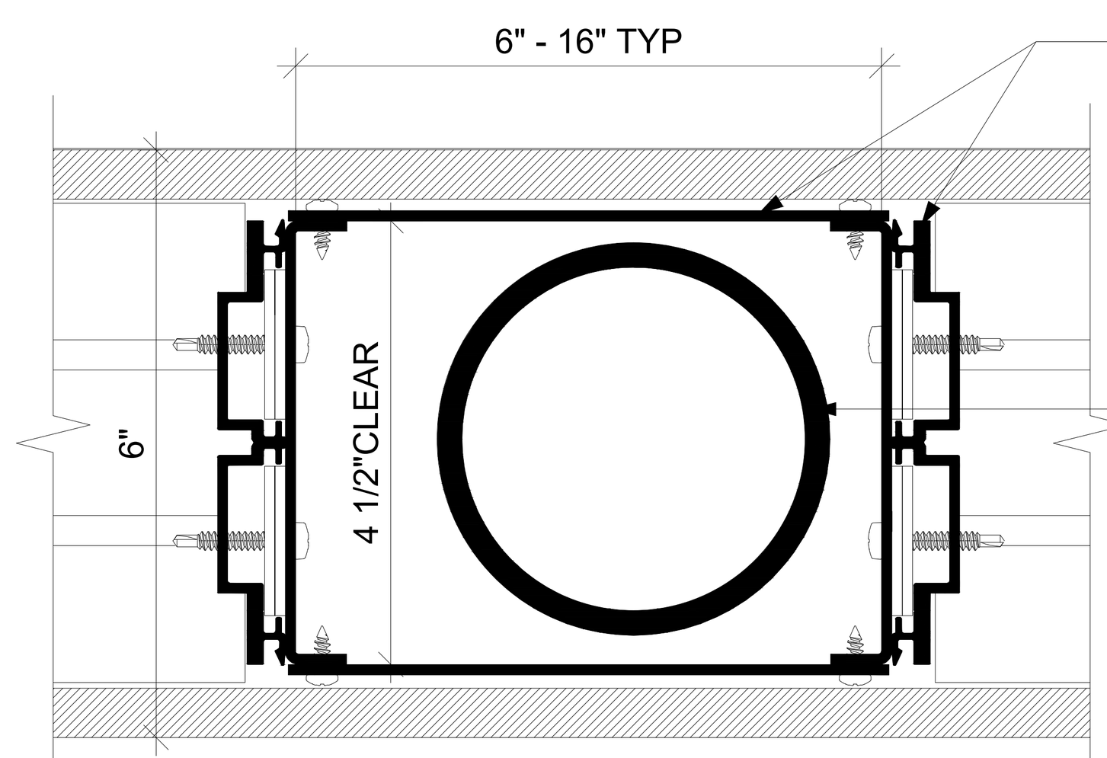


8 DIRTT WALL WITH STANDARD BASE - SECTION
DW-400.1 NOT TO SCALE

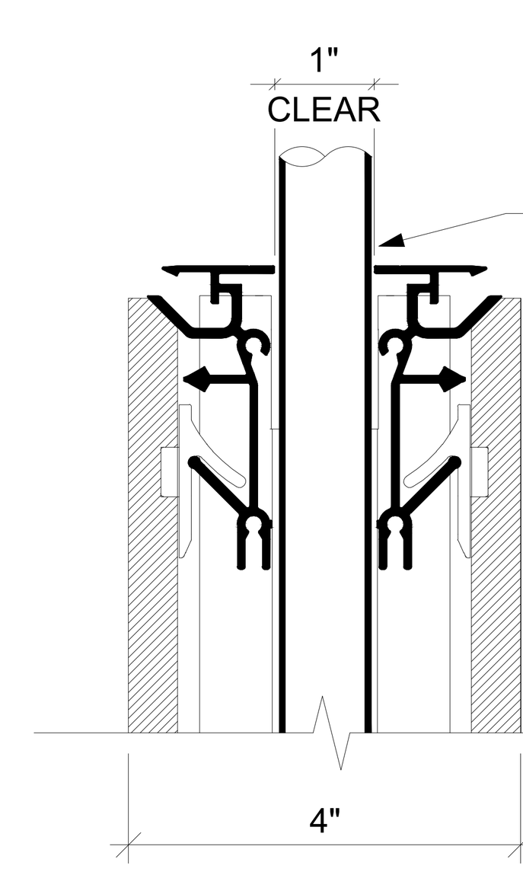
3 PLUMBING CLEARANCE TOP OF 6 INCH WALL SECTION
DW-400.1 NOT TO SCALE



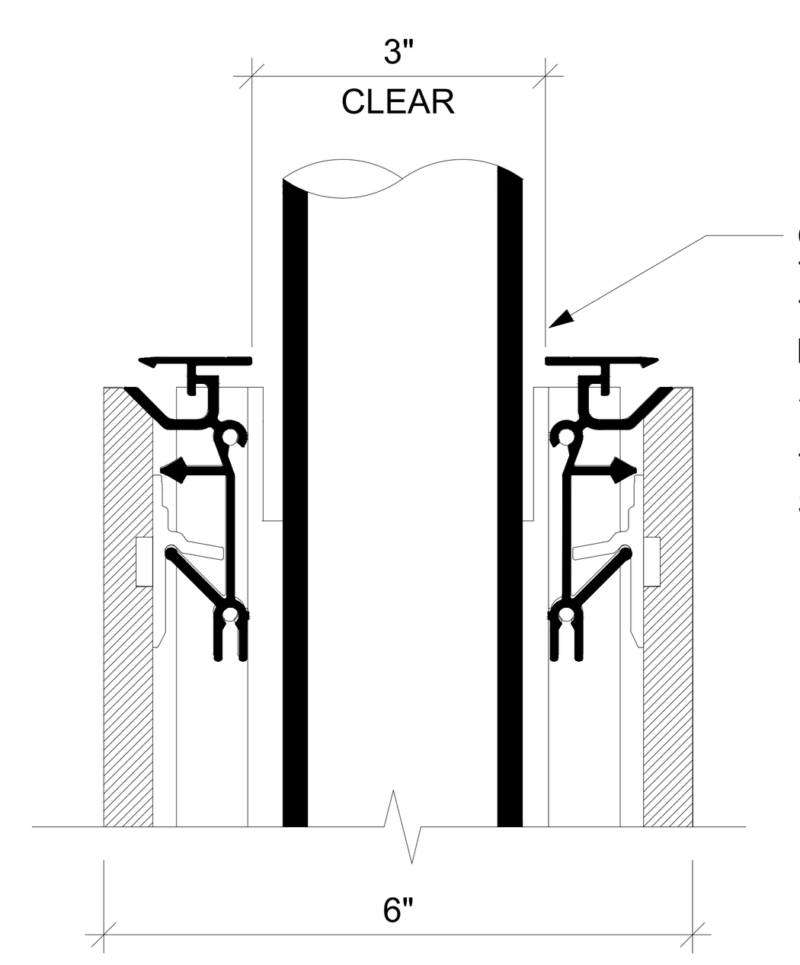
9 MECHANICAL CHASE - 6 INCH WALL ISO
DW-400.1 NOT TO SCALE



10 MECHANICAL CHASE - 6 INCH WALL ISO
DW-400.1 NOT TO SCALE



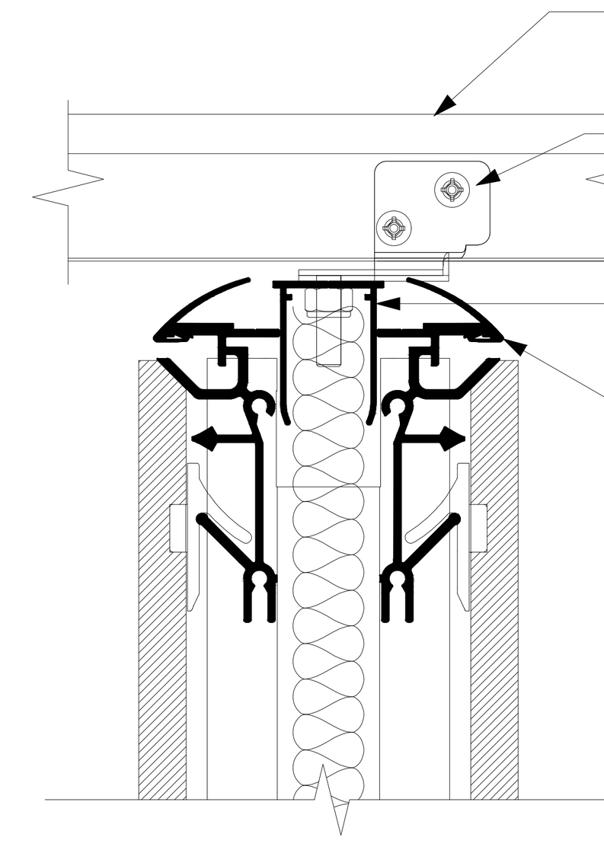
11 PLUMBING CLEARANCE TOP OF 4 INCH WALL SECTION
DW-400.1 NOT TO SCALE



12 PLUMBING CLEARANCE TOP OF 4 INCH WALL SECTION
DW-400.1 NOT TO SCALE

ARCHITECTURAL - PREFAB WALLS

ALL WALLS LABELED OR TAGGED AS DIRTT AND/OR DEMOUNTABLE PARTITIONS



13 DIRTT WALL UNDER LAY-IN CEILING HEADER - SECTION
DW-400.1 NOT TO SCALE

DIRTT

PROJECT DETAILS/NOTES:

FRAME AND TRIM DETAILS

EXTRUSION PROFILE / WALL TYPE: ☐ CURVILINEAR ☑ RECTILINEAR ☐ BLADE ☐ EVIL TWIN ☐ INSPIRE

FRAME FINISH: ☑ ANODIZED ALUMINUM ☐ POWDER-COATED ☐ VENEER

BASE TRIM COLOR: ☑ SILVER ☐ BLACK

PVC/GLASS WIPE COLOR: ☑ SILVER ☐ BLACK

REVEAL: ☑ CLASSIC ☐ ENZO

COPLANAR: ☑ NO ☐ YES

FLOOR, CEILING, AND SEISMIC DETAILS

FLOOR TYPE: ☑ CARPET ☐ HARD SURFACE

WALL HEIGHT: 10'-0"
LOW WALL: 4'-0"
WEIGHT ROOM 25'-0"

CEILING TYPE: ☐ DRYWALL BULKHEAD ☐ CORNICE RAIL ☐ LOW WALL ☑ GRID

GRID TYPE: ☐ 9/16" ☑ 15/16"

TILE TYPE: ☑ FLUSH ☐ CONCEALED ☐ TEGULAR

SEISMIC REQUIRED: ☑ NO ☐ YES

HARDWARE REQUIREMENTS:

DOORS:
REFERENCE DOOR SCHEDULE FOR FURTHER DETAILS

ELECTRICAL PROVISION REQUIRED - SEE ELECTRICAL SHOP DRAWINGS

DATA PROVISION REQUIRED - SEE PON SHOP DRAWINGS

CASEWORK PROVISIONS REQUIRED - SEE CASEWORK SHOP DRAWINGS

ADDITIONAL NOTES:

DRAWING INDEX

Project Name:
GALENA PARK HIGH SCHOOL FIELD HOUSE LEVEL 1

Project Address:
1000 KEENE ST
GALENA PARK, TX
77547

DIRTT CONSULTANT SET

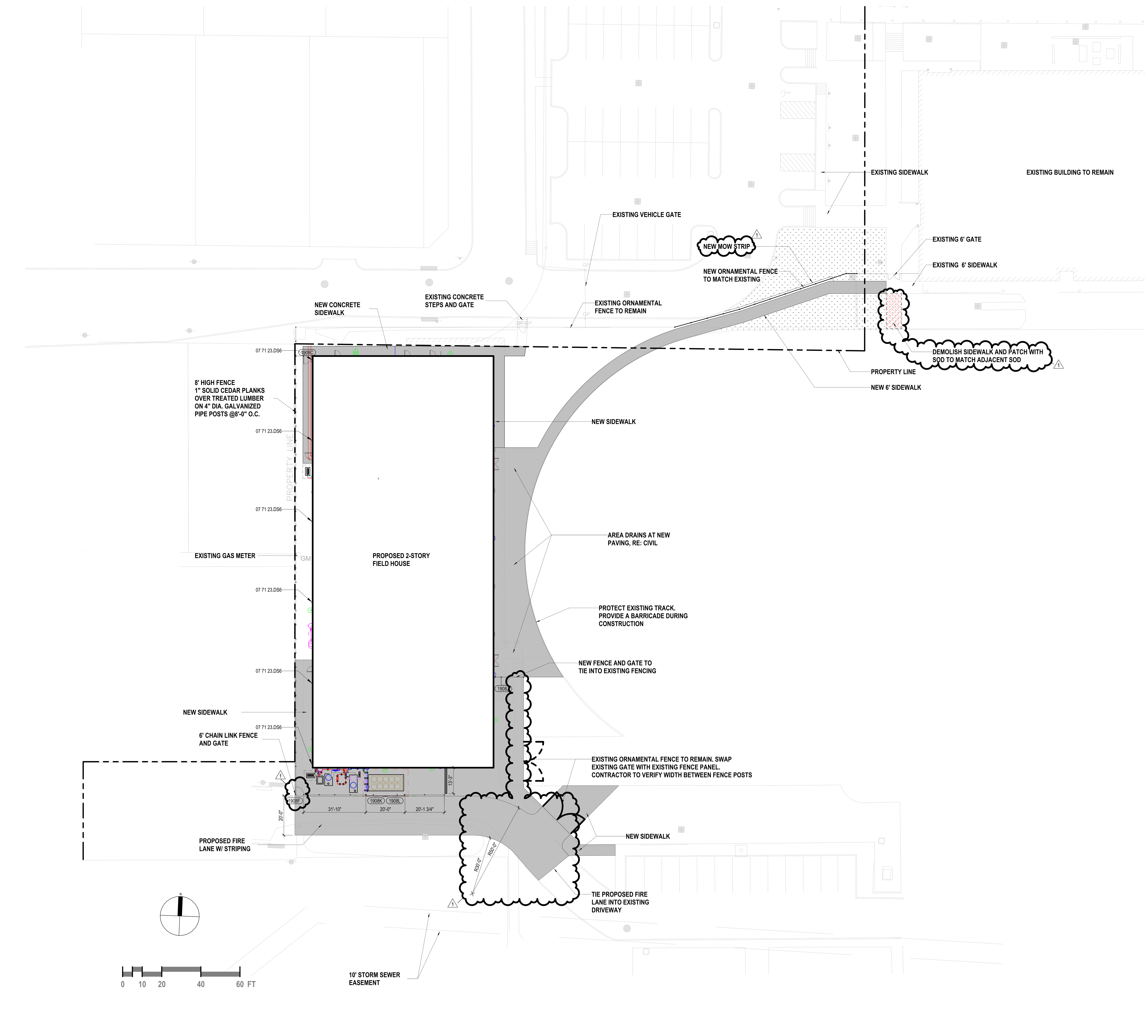
-	04JUN25	95% CD	KA
1	09JUN25	95% CD (Rev 1)	KA
2	10JUN25	95% CD (Rev 2)	KA
3	23JUN25	Addendum #1	KA

Project:	148501
Drawn by:	KA
Scale:	AS NOTED
Plot Date:	2025/06/24
Contact:	HEATHER KENNEY
Contact Number:	346-465-4114

TYPICAL WALL DETAILS

DW-400.1

OVERALL SITE PLAN
AS-100
FOR BLUEBEAM LABELING/OCR



1 SITE PLAN
1" = 20'-0"

GENERAL SITE PLAN NOTES

1. REFER TO CIVIL DOCUMENTS.
2. COORDINATE ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL, LANDSCAPE, AND OR STRUCTURAL DOCUMENTS.
3. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1% MINIMUM, 2% MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
4. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5% FOR A HORIZONTAL DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O.
5. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS.
6. VERIFY AND CONFIRM ALL JOINT LAYOUTS AT ALL CONCRETE SIDEWALKS WITH ARCHITECT PRIOR TO POURING OF CONCRETE.
7. PROVIDE AND INSTALL CONCRETE SIDEWALK EXPANSION JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT 50 FEET ON-CENTER MAX. U.N.O.
8. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT AREAS NOT SPECIFICALLY INDICATED AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.
9. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION OF SITE SIGNAGE.

KEYNOTE LEGEND

NUMBER	DESCRIPTION
07 71 23.DS6	6"X 6" PRE-FINISHED METAL DOWNSPOUT W/ HEAVY GAUGE BOOT, RE: CIVIL

GATE SCHEDULE

MARK	SIZE		MTL	HARDWARE SET	REMARKS
	W	H			
1908C	4'-0"	6'-0"	Metal - ChainLink	PAD LOCK	
1908F	4'-0"	6'-0"	Metal - ChainLink	PAD LOCK	
1908J	4'-0"	6'-0"	Metal - ChainLink	PAD LOCK	Knox Box
1908K	10'-0"	6'-0"	Metal - ChainLink	PAD LOCK	
1908L	10'-0"	6'-0"	Metal - ChainLink	PAD LOCK	

PBK
www.pbk.com
TX FIRM: BR 1608
HOUSTON, TX
713-965-0608

PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

REGISTERED ARCHITECT
JAN LEPICOVSKY
25572
STATE OF TEXAS
6/10/2025

CLIENT	
Galena Park ISD	
DATE: June 10, 2025	PROJECT NUMBER: 240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: TC
DRAWN BY: JA

OVERALL SITE PLAN

AS-100

Plot Stamp:
6/24/2025 3:40:22 PM

LEVEL 1 - FLOOR PLAN
A-101
FOR BLUEBEAM LABELING/OCR:

0"
1"

GENERAL ARCH PLAN NOTES

1. DO NOT SCALE DRAWINGS, WRITTEN DIMENSIONS TAKE PRECEDENCE, CONTACT ARCHITECT IF CLARIFICATION IS NECESSARY IN ORDER TO DETERMINE THE INTENT OF THE CONTRACT DOCUMENTS.
2. DRAWINGS NOTED AS "N.T.S" OR "NTS" ARE NOT TO SCALE.
3. ALL DIMENSIONS ARE TO STRUCTURAL COLUMN LINES OR THE SURFACE OF PARTITION ASSEMBLY U.N.O.
4. FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE COMMENCING WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH AFFECTED WORK.
5. NOTES OR DIMENSIONS NOTED AS "TYPICAL" OR "TYP." OR "TYP" SHALL APPLY TO CONDITIONS THAT ARE THE SAME OR SIMILAR.
6. DIMENSIONS NOTED AS "FIELD VERIFY" OR "V.I.F." OR "VIF" SHALL BE MEASURED AND CONFIRMED AT THE PROJECT SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCH. BEFORE INCORPORATING INTO THE WORK.
7. DIMENSIONS NOTED AS "CLEAR" OR "CLEAR INSIDE" OR "CLR" REQUIRE SPECIFIC COORDINATION AMONG DISCIPLINES AND OR MANUFACTURERS.
8. REFER TO PARTITION TYPES ON A-800 SERIES SHEETS FOR PARTITIONS LABELED ON THIS PLAN.
9. REFER TO DW SERIES SHEETS FOR PARTITIONS NOT LABELED ON THIS PLAN.
10. ALIGN FINISHED FACE OF WALLS WHERE WALL PARTITIONS OF DIFFERING THICKNESS ABUT AND OR ADJOIN IN THE SAME PLANE.
11. PROVIDE AND INSTALL CONTINUOUS REVEAL TRIM AT JOINT WHERE GYPSUM BOARD WALL PARTITIONS ABUT AND OR ADJOIN MASONRY WALL PARTITIONS IN THE SAME PLANE.
12. ALL INTERIOR CMU OUTSIDE CORNERS SHALL HAVE BULLNOSE U.N.O.
13. ALL DOORS SHALL BE SET 4 INCHES OFF THE ADJACENT PERPENDICULAR WALL ON THE HINGE SIDE OF THE DOOR U.N.O., NOTIFY ARCH. OF ANY DOOR-RELATED CONFLICTS, INCLUDING BUT NOT LIMITED TO CONFLICTS CONCERNING ACCESSIBILITY STANDARDS.
14. ALL DOOR THRESHOLDS AT ALL EXTERIOR DOORS SHALL BE SET IN FULL BED OF SEALANT.
15. COORDINATE ALL ROOF DRAIN LEADER LOCATIONS WITH FLOOR PLAN PRIOR TO FLOOR SLAB CONSTRUCTION.
16. ALL FLOOR SLOPES TO FLOOR DRAINS SHALL NOT EXCEED 1:48.
17. PROVIDE AND INSTALL SELF-LEVELING UNDERLAYMENT WHERE UNEVEN FLOOR SLAB EXISTS PRIOR TO INSTALLATION OF FLOOR FINISHES.
18. COORDINATE HOUSEKEEPING PAD LOCATIONS AND DIMENSIONS WITH EQUIPMENT TO BE INSTALLED.
19. ALL REQUIRED ACCESSIBLE CLEARANCES FOR ALL ITEMS, INCLUDING BUT NOT LIMITED TO ALL COUNTER TOPS, ALL PLUMBING FIXTURES, ALL DRINKING FOUNTAINS, ALL ELECTRIC WATER COOLERS, ALL LAVATORIES, ALL URINALS, ALL TOILETS SHALL BE STRICTLY ENFORCED.
20. APPLY BITUMINOUS COATING TO ALL CONCEALED STRUCTURAL STEEL MEMBERS AT ALL EXTERIOR CANOPY LOCATIONS.
21. REFER TO OTHER DISCIPLINE DOCUMENTS FOR ADDITIONAL SCOPE OF WORK.

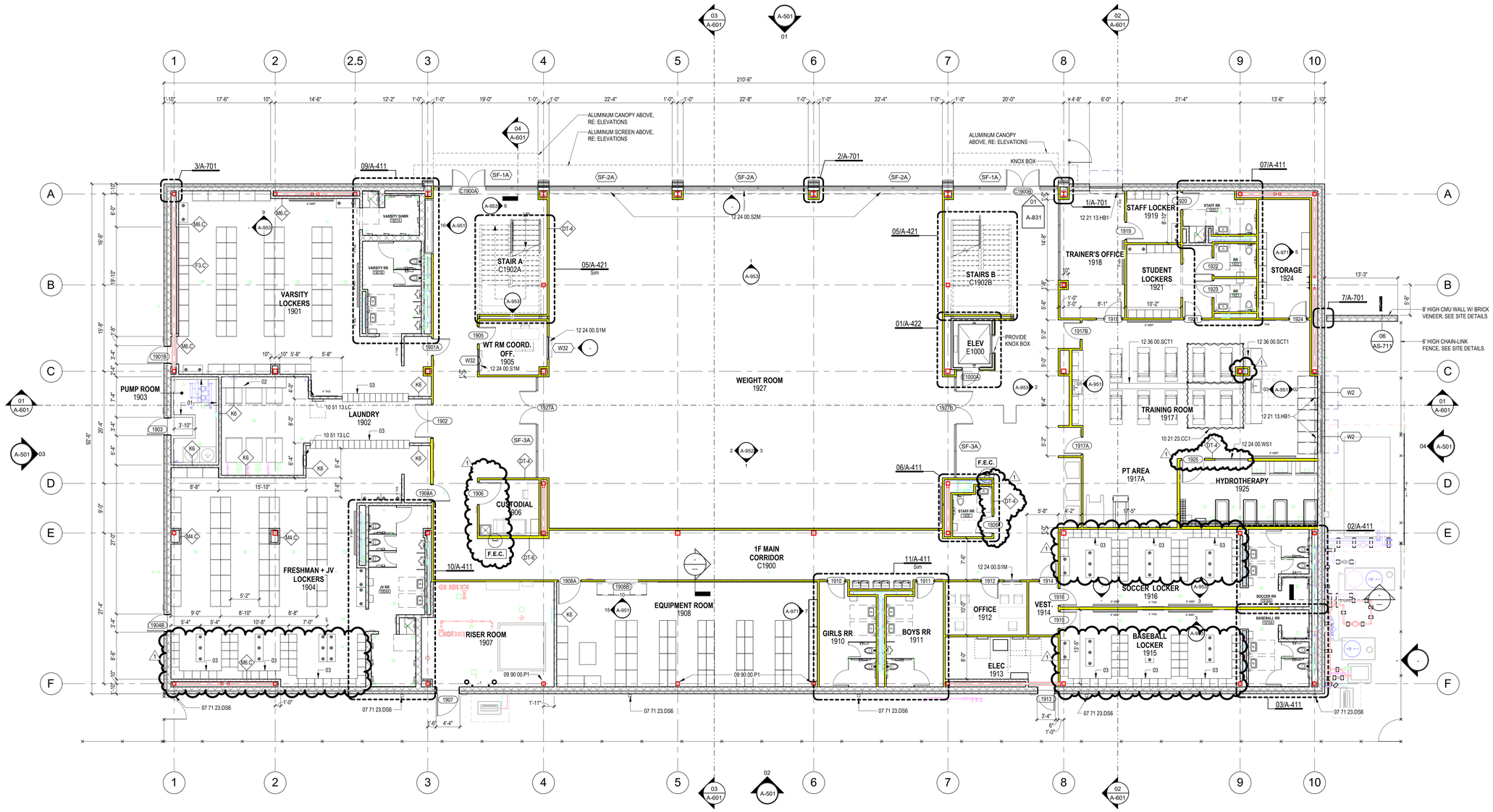
KEYNOTE LEGEND

NUMBER	DESCRIPTION
01	4" X 4" CONCRETE CURB
02	DRAINAGE TROUGH RECESSED IN SLAB, RE: STRUCT.
03	4" CONCRETE BASE UNDER LOCKERS
07 71 23.DS6	6"X 6" PRE-FINISHED METAL DOWNSPOUT W/ HEAVY GAUGE BOOT, RE: CIVIL
09 90 00.P1	PAINT TYPE 1 - [FIELD]
10 21 23.CC1	CUBICLE CURTAIN, TYPE 1 - STANDARD
10 51 13.LC	LAUNDRY CHUTE W/ SLOPED HOOD
12 21 13.HB1	HORIZONTAL BLINDS, TYPE 1 - 2" FAUX WOOD BLINDS
12 24 00.S1M	MANUAL WINDOW SHADE UNIT MOUNTED BETWEEN JAMBS
12 24 00.S2M	MOTORIZED WINDOW SHADE UNIT MOUNTED [RECESSED IN CEILING or BETWEEN JAMBS or TO FACE OF GLAZING SYSTEM]
12 24 00.WS1	MANUAL WINDOW SHADE UNIT
12 36 00.SCT1	SOLID SURFACING COUNTERTOP

FLOOR PLAN LEGEND

- **10 65 13.4PSSM** METAL SHELVING, 72" H — SHELF LENGTH, SHELF WIDTH
- **10 11 00.MBP** PORCELAIN-ENAMEL MARKERBOARD — LENGTH
- **10 11 00.TKB** TACKBOARD — LENGTH
- CR — CARD READER, REFER TO TECHNOLOGY
- OP — LV AUTOMATIC OPERATOR, REFER TO TECHNOLOGY
- F.E.C. — **10 44 00.FE#** FIRE EXTINGUISHER CABINET
- A.E.D. — **10 43 00.AED** AUTOMATED EXTERNAL DEFIBRILLATOR
- **11 52 00.PC1** PROJECTOR, CEILING MOUNTED (OFOI)

NOTE:
1. REFER TO DW SERIES SHEETS FOR DEMOUNTABLE PARTITION INFORMATION.
2. DOORS AND WINDOWS LOCATED WITHIN DEMOUNTABLE PARITIONS ARE INCLUDED WITH THOSE PARTITIONS AND SHOWN FOR REFERENCE ONLY.
3. MILLWORK ADJACENT TO DEMOUNTABLE PARTITIONS IS INCLUDED WITH THOSE PARTITIONS AND SHOWN FOR REFERENCE ONLY.
4. REFERENCE SCOPE PLAN FOR DIRTT PARTITION SCOPE AND ALTERNATE 1- CONVENTIONAL CONSTRUCTION



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

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PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

TRUE

REGISTERED ARCHITECT
JAN LEPICZKY
25572
STATE OF TEXAS

6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: JL
DRAWN BY: JL

LEVEL 1 - FLOOR PLAN

A-101

LEVEL 2 - FLOOR PLAN
A-102
FOR BLUEBEAM LABELING/OCR:

0"
1"

GENERAL ARCH PLAN NOTES

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KEYNOTE LEGEND

NUMBER	DESCRIPTION
05 50 00.LDR	STEEL LADDER
10 22 39.MBD	MARKERBOARD PANEL FACING
12 21 13.HB1	HORIZONTAL BLINDS, TYPE 1 - 2" FAUX WOOD BLINDS
12 24 00.S2M	MOTORIZED WINDOW SHADE UNIT MOUNTED [RECESSED IN CEILING or BETWEEN JAMBS or TO FACE OF GLAZING SYSTEM]

FLOOR PLAN LEGEND

10 65 13.4PSSM
METAL SHELVING, 72" H
SHELF LENGTH
SHELF WIDTH

10 11 00.MBP
PORCELAIN-ENAMEL MARKERBOARD
LENGTH

10 11 00.TKB
TACKBOARD
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CR — CARD READER
REFER TO TECHNOLOGY

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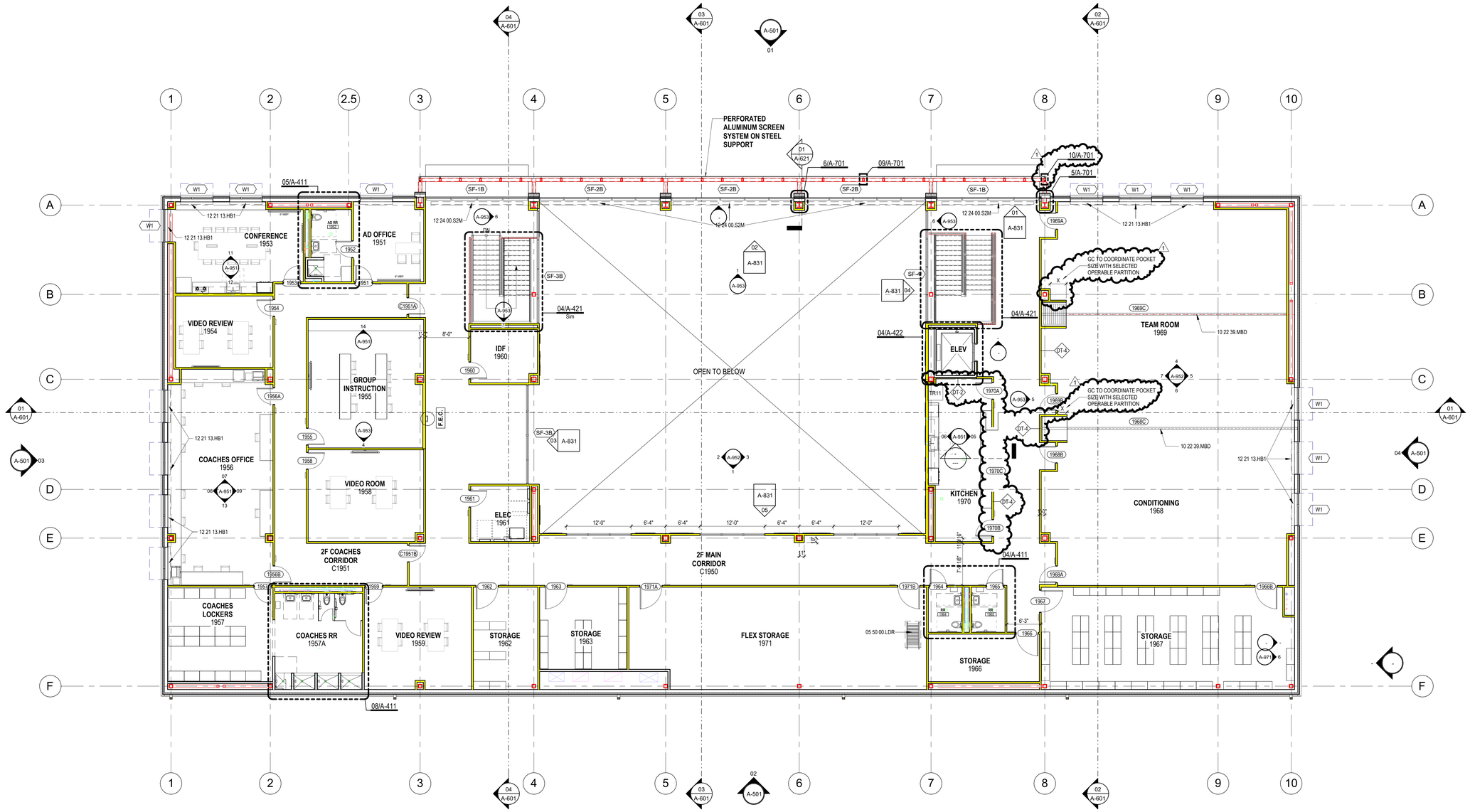

1 LEVEL 2 - FLOOR PLAN
1/8" = 1'-0"

Plot Stamp:
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PKG 3A - GPHS NEW FIELDHOUSE

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CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

TRUE

REGISTERED ARCHITECT
JAN LEPICZKY
25572
STATE OF TEXAS
6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: Checker
DRAWN BY: Author

LEVEL 2 - FLOOR PLAN

A-102

OVERALL ROOF PLAN
A-301
FOR BLUEBEAM LABELING/OCR

1. CONTRACTOR SHALL REVIEW AND COORDINATE WITH ARCHITECTURAL, MEP, AND STRUCTURAL DOCUMENTS TO ASCERTAIN EXACT CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. ALL WORK SHALL BE IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS AND NRCA STANDARDS.
2. DIMENSIONS, DETAILS, EQUIPMENT SIZE AND LOCATION SHOWN IN THESE CONSTRUCTION DOCUMENTS ARE FOR CONVEYANCE OF DESIGN INTENT ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF EXISTING CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN AND CONFIRM.
3. INDICATED ROOF HEIGHTS ARE GENERAL IN NATURE. RE: STRUCTURAL FOR FRAMING HEIGHTS.
4. REFER TO NOMENCLATURE FOR TYPE OF ROOF SYSTEM. AREAS ARE MARKED WITH DESIGNATED LETTER ON ROOF PLAN.
5. NOTE THAT THE DETAILS DRAWN ARE GENERIC IN NATURE AND ARE NOT NECESSARILY LOCATED AND KEYED TO THE ROOF PLANS.
6. ALL NEW / EXISTING CRICKETS AND TAPERED INSULATION SHALL BE INSTALLED WITH A FINISHED 1/2" PER FOOT MIN. SLOPE. CRICKET THE UP SLOPE SIDE OF ALL SQUARE CURBS AND PROJECTIONS OVER 20" IN WIDTH.
7. ALL CURB MOUNTED HVAC UNITS, EQUIPMENT, ETC. SHALL HAVE A MINIMUM 10" CURB HEIGHT.
8. WORK TO ANY UTILITY CONDUIT OR PIPE SHALL BE PERFORMED BY SPECIFIC LICENSED SUBCONTRACTORS SPECIALIZING IN HVAC, PLUMBING AND ELECTRICAL WORK. PERMITS AND INSPECTIONS ARE REQUIRED.
9. UNLESS INDICATED OTHERWISE ON THE CONSTRUCTION DOCUMENTS, ALL EXISTING JOINTS / AREA DIVIDERS / CURB MOUNTED EQUIPMENT / SKYLIGHTS SHALL BE MIN. 10" ABOVE ROOF DECK.
10. ALL SOIL STACK FLASHING SHALL BE A MIN. 10" ABOVE FINISHED ROOF SURFACE. COUPLE PVC PIPE ABOVE DECK AND COUPLE CAST IRON PIPE BELOW DECK. PROPERLY SUPPORT PIPE BELOW ROOF DECK FROM LATERAL MOVEMENT.
11. ALL PIPING/ CONDUITS/ ETC. SHALL BE A MIN. 10" ABOVE ROOF SURFACE. PROVIDE PORTABLE PIPE HANGERS WITH PROTECTION PADS AS SPECIFIED. MEP CONTRACTORS SHALL PROVIDE SUPPORTS FOR UTILITY LINES.
12. PROVIDE "MERCURY" GAS LINE TEST (COORDINATE WITH OWNER AND ARCHITECT FOR WITNESS OF THE TEST). REPAIR ANY FOUND LEAKS AND RETEST AS REQUIRED.
13. PROVIDE SHEET METAL HOODED (WITH METAL FACE CLOSURE) CAPS, WOOD CURB, BOX COVER AT ALL GAS AND WATER PIPE ROOF PENETRATIONS AS DETAILED AND SPECIFIED. PROVIDE POSITIVE SLOPE AWAY FROM FACE COVER.
14. PROVIDE WALKWAY PROTECTION PADS AS SPECIFIED AROUND ALL ROOF HATCHES, HVAC ROOFTOP UNITS, DOORS THAT OPEN ONTO ROOF AND AT TOP AND BOTTOM OF ALL ROOF TOP ACCESS LOCATIONS.
15. ISOLATE ALL HEAT PIPES / FLUES AS DETAILED AND RECOMMENDED AND OUTLINED IN THE NRCA MANUAL FOR HOT STACK FLASHING AND AS DETAILED.
16. ALL OUTSIDE AIR INTAKES SHALL BE COVERED TO ELIMINATE ODORS AND FUMES FROM ENTERING INTO THE BUILDING DURING CONSTRUCTION WORK.
17. AFTER SUBSTANTIAL COMPLETION, THE GENERAL CONTRACTOR SHALL EXAMINE AND CLEAN NEW DRAIN LINES AND NEW AND EXISTING (AS APPLICABLE) GUTTERS OF DEBRIS AND BLOCKAGE, FLUSH WITH WATER TO ENSURE THAT DRAINS AND GUTTERS FLOW FREELY.
18. PRIOR TO COMMENCEMENT OF WORK, COORDINATE WALK OF ENTIRE ROOF WITH ROOFING MANUFACTURER'S TECHNICAL REPRESENTATIVE TO IDENTIFY AND LOCATE ALL AREAS OF HIGH SLOPE OR OTHER CONDITIONS WHICH MIGHT REQUIRE SPECIAL PROCEDURES FOR SYSTEM ATTACHMENT.
19. REFER TO MEP DRAWINGS FOR SIZE AND LOCATION OF NEW ROOF DECK PENETRATIONS AND ROOF TOP EQUIPMENT.
20. INSTALL NEW SPLASH PAN AT ALL LOCATIONS WHERE ROOF DRAINAGE DISCHARGES ONTO ROOF AREA. INSTALL NEW SPLASH BLOCKS WHERE ROOF DRAINAGE DISCHARGES ON GROUND.
21. REFER TO GENERAL DETAILS FOR TYPICAL SPLASH PAN, ROOF DRAIN AND OVERFLOW DRAIN DETAILS.
22. GENERAL CONTRACTOR TO ENSURE ALL ROOFTOP PENETRATIONS (SOIL STACKS, VENTS, ETC.) ARE INSTALLED MIN. 4'-0" FROM OTHER DECK PENETRATIONS, RISE WALLS, AND ROOF EDGE. MECHANICAL EQUIPMENT TO BE LOCATED MIN. 10'-0" FROM PERIMETER EDGE AND NO CLOSER THAN 4'-0" FROM RISE WALLS, OR ANY OTHER ROOF PENETRATION.
23. LOCATE PERIMETER DRAINS MAX. 6'-0" FROM EDGE TYPICAL UNLESS SHOWN OTHERWISE. (GENERAL CONTRACTOR TO COORDINATE WITH ROOFING AND PLUMBING CONTRACTOR.)
24. THROUGH WALL BASE FLASHING MIN. HEIGHT 10" AND MAX. HEIGHT 20" FROM FINISH DECK. DO NOT STEP THROUGH WALL FLASHING CLOSER THAN 5'-0" FROM CORNERS.
25. GENERAL CONTRACTOR SHALL COORDINATE LOCATION AND ORIENTATION OF ROOF HATCH AND ACCESS LADDER.
26. GENERAL CONTRACTOR SHALL COORDINATE ALL TOP OF STEEL TO TOP OF BLOCKING AND SUBSTRATE BOARD DIMENSIONS IN FIELD PRIOR TO ORDERING MATERIALS. NO ADDITIONAL COMPENSATION WILL BE GRANTED FOR FAILURE TO COORDINATE THESE DIMENSIONS.
27. GENERAL CONTRACTOR SHALL VERIFY ROOF SLOPES WILL PROPERLY DRAIN AS SHOWN. TAPERED INSULATION HATCHING SHOWN IS NOT INTENDED TO ILLUSTRATE THE ENTIRE LIMITS OF TAPERED INSULATION. ROOF AREAS NOT SLOPED BY STRUCTURE SHALL BE SLOPED WITH TAPERED INSULATION TO ACHIEVE PROPER DRAINAGE.
28. PROVIDE ONE WAY MOISTURE VENTS AT ALL LIGHTWEIGHT CONCRETE OR GYPSUM OVER POUR AREAS AS RECOMMENDED BY THE ROOFING SYSTEM MANUFACTURER.
29. PAINT ALL EXPOSED GAS PIPE.

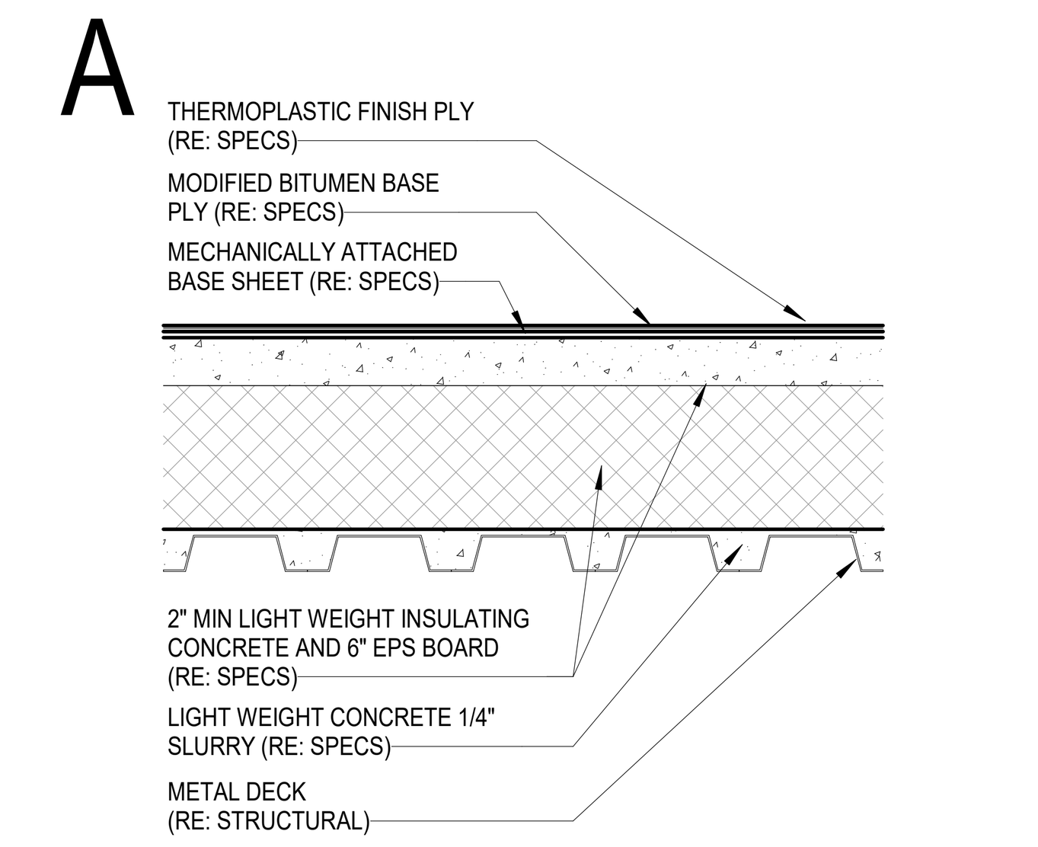
30 GENERAL NOTES (NEW)
N.T.S.

KEYNOTE LEGEND

NUMBER	DESCRIPTION
05 50 00.LDR	STEEL LADDER
07 72 33.RS1	ROOF HATCH

NEW ROOF DRAIN
EXIST. ROOF DRAIN
OVERFLOW DRAINS (OF)
FLANGE VENT
PITCH PAN
VENT THROUGH ROOF
WALL DRAIN
CURB MOUNTED VENT
CURB MOUNTED INTAKE
ABANDONED CURB TO BE REMOVED / PATCHED
A ABANDON EQUIP.
GUY WIRE
POWER VENT
HEATER VENT
BOILER VENT
TURBINE VENT
PB PIPE BOX
GOOSE NECK VENT
AC CURB MOUNTED AC
SPLASH BLOCK
SPLASH PAN
A/C ON POSTS
ROOF HATCH
SL SKYLIGHTS
ANTENNA
SATELLITE DISH
S SCUPPER
G GUTTER
DS DOWNSPOUT
WALL LADDER
SWING LADDER
EXHAUST AND SUPPLY FAN ON SINGLE CURB
RIDGE LINE
EXISTING AREA TO REMAIN -NIC
NEW TAPERED INSULATION / CRICKET
NEW LT. WT. CONCRETE INSULATION/ CRICKET
A1 ROOF AREA DESIGNATION
TAPERED LIGHT WEIGHT CONCRETE
DESIGNATES EXTENTS OF WORK IDENTIFIED BY KEYED NOTES
AD AREA DIVIDER
EJ EXPANSION JOINT
C CONDENSATE LINE
W WATER LINE
E ELEC. LINE
G GAS LINE

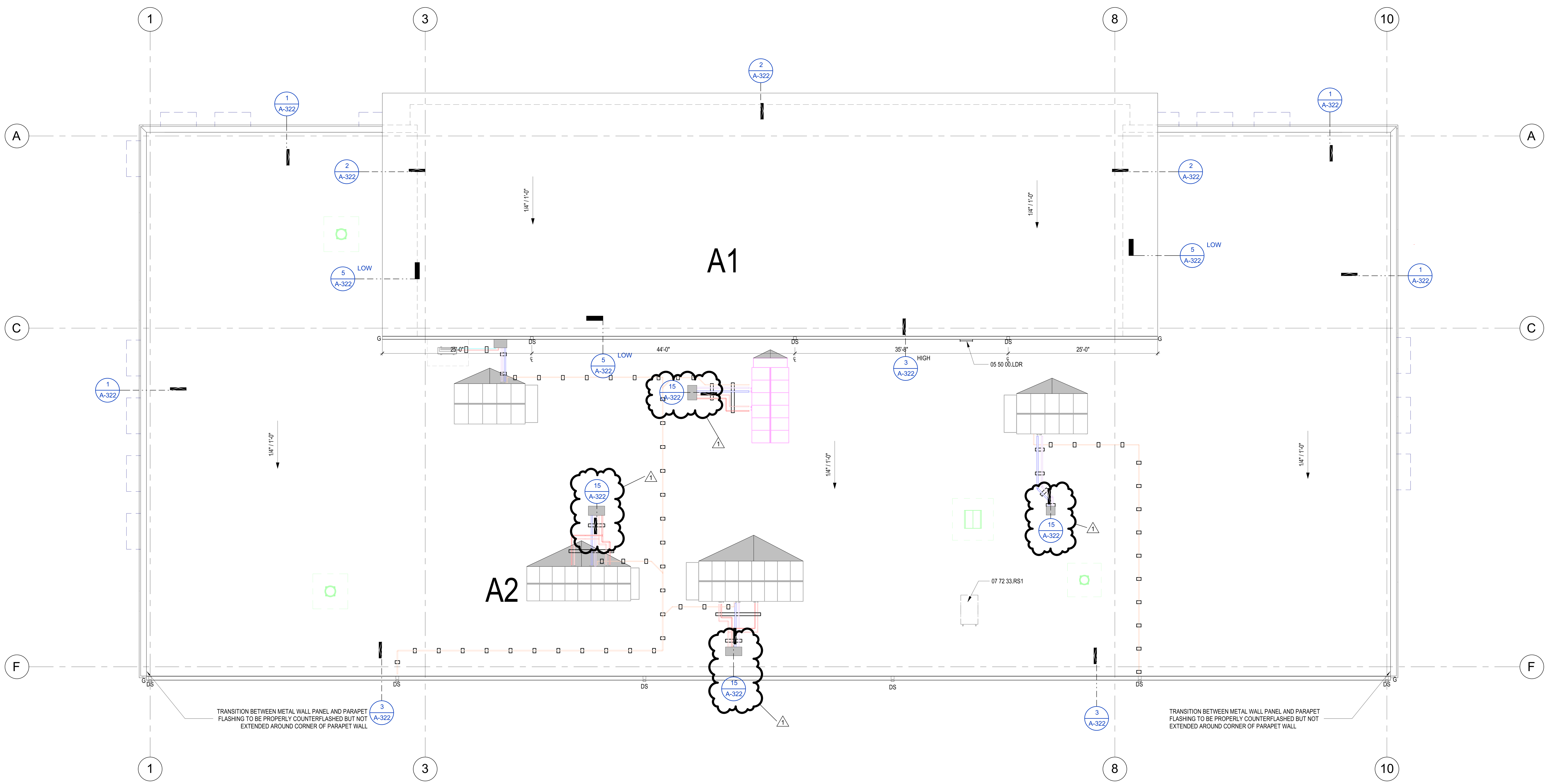
26 ROOFING - LEGEND (DEMO/EXIST)
N.T.S.



25 ROOFING (MB) - NOMENCLATURE
N.T.S.

ROOF SCHEDULE

MARK	AREA	NOMENCLATURE	Comments
A1	5,274 SF	A	
A2	15,000 SF	A	
Grand total	20,274 SF		



6 OVERALL ROOF PLAN
1/8" = 1'-0"

Plot Stamp:
6/24/2025 9:36:26 AM

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TX FIRM: BR 1608
HOUSTON, TX
713-965-0608

PKG 3A - GPHS NEW FIELDHOUSE
1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

6/10/2025

CLIENT
Galena Park ISD

DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

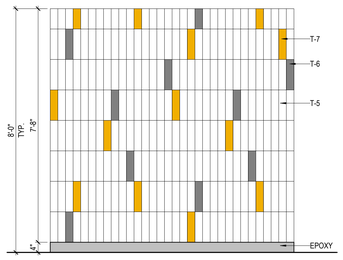
CHECKED BY: SL & BG
DRAWN BY: DAS

OVERALL ROOF PLAN

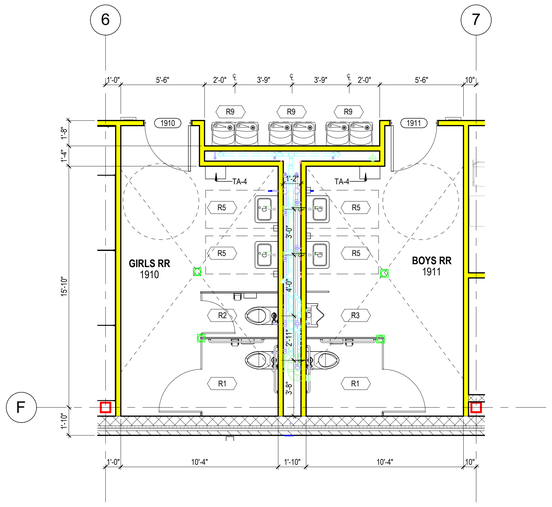
A-301

ENLARGED TOILET PLANS
A-411
FOR BLUEBEAM LABELING/DOOR:

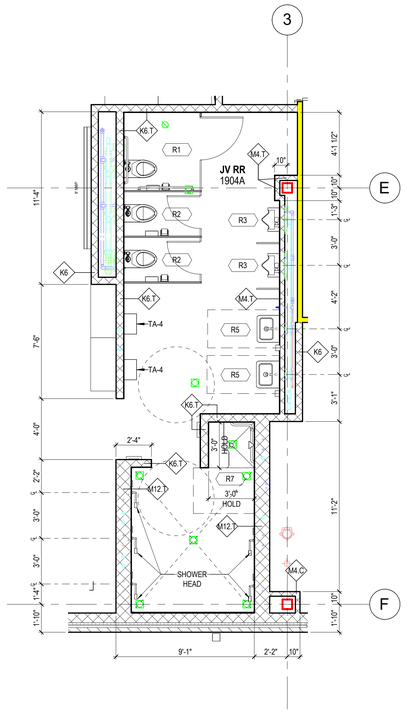
0"
1"



12 RESTROOM TILE TYP.
1/2" = 1'-0"



11 1910 & 1911 - ENLARGED RESTROOMS
1/4" = 1'-0"



10 1904A - JV ENLARGED RESTROOM
1/4" = 1'-0"

KEYNOTE LEGEND

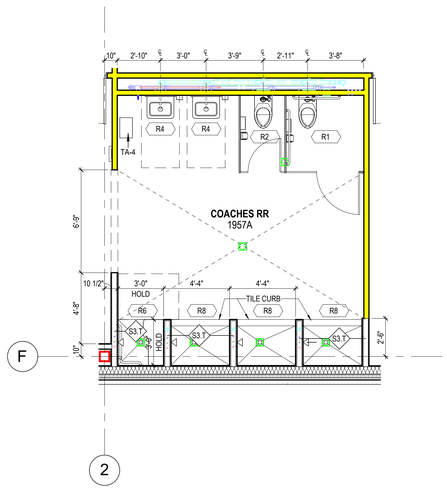
NUMBER	DESCRIPTION
08 43 13.SFI	INTERIOR ALUMINUM-FRAMED STOREFRONT SYSTEM
10 12 00.DCR	RECESSED DISPLAY CASE
10 51 13.B	VARSITY SINGLE-TIER LOCKER, 22"x34"

TOILET ACCESSORIES

LABEL	DESCRIPTION	NOTES
TA1C	SOAP DISPENSER, COUNTER-MOUNTED, TYPICAL	
TA1W	SOAP DISPENSER, WALL-MOUNTED, TYPICAL	
TA2	LAVATORY MIRROR, TYPICAL	NOTE 5
TA2F	FULL-LENGTH MIRROR	
TA3	TOILET PAPER DISPENSER, TYPICAL	
TA4	PAPER TOWEL DISPENSER, TYPICAL	
TA5	GRAB BARS, AT TYPICAL WHEELCHAIR ACCESSIBLE WATERCLOSET, TYPICAL	
TA6	SANITARY NAPKIN/TAMPON VENDOR, TYPICAL	
TA7	SANITARY NAPKIN DISPOSAL, TYPICAL	
TA8	SHELF WITH MOP AND BROOM HOLDERS AND HOOKS, TYPICAL	
TA9	GRAB BARS, ACCESSIBLE SHOWER, TYPICAL	
TA10A	FOLDING BENCH, ADULT HEIGHT	
TA11	CLOTHING HOOK, TYPICAL	NOTE 6
TA12	SHOWER CURTAINS, RODS AND HOOKS, TYPICAL	
TA13	ELECTRIC HAND DRYER, TYPICAL	
TA14	PAPER TOWEL DISPENSER/WASTE RECEPTACLE, TYPICAL	
TA15	GRAB BARS, AT AMBULATORY ACCESSIBLE WATERCLOSET	
TA16C	BABY CHANGING STATION	
TA16A	ADULT CHANGING STATION	
TA17R	TRASH RECEPTACLE, RECESSED	
TA17U	TRASH RECEPTACLE, UNDERCOUNTER	
TA18	VERTICAL GRAB BAR (AT ACCESSIBLE ICC A117.1 TOILETS)	
TA19	WATERCLOSET COVER DISPENSER	
TA20	FOLDING UTILITY SHELF	

NOTES:
1. ALL TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED U.N.O.
2. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
3. VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ALL APPLICABLE ACCESSIBILITY REQUIREMENTS.
4. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE, VERIFY ALL PATTERNS WITH ARCHITECT.
5. ALIGN MIRROR ON CENTER OF LAVATORY.
6. ONE (1) HOOK SHALL BE INSTALLED INSIDE DOOR AT EACH TOILET PARTITION. ONE HOOK INSIDE DOOR AT SINGLE TOILET ROOMS AND ONE HOOK AT EACH SHOWER.

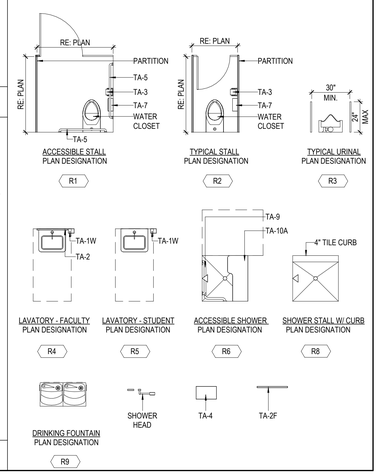
09 1901A & 1901B - VARSITY ENLARGED RR
1/4" = 1'-0"

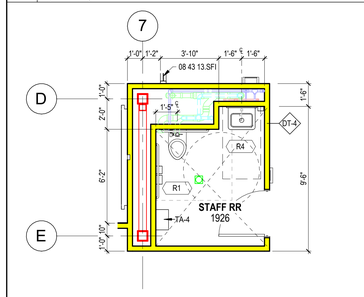


08 1957A - ENLARGED COACHES RESTROOM
1/4" = 1'-0"

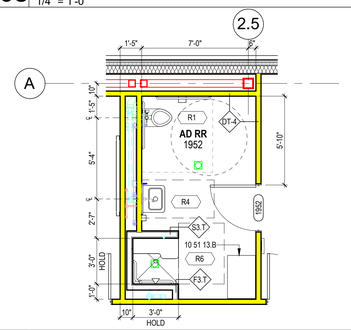
07 A124 - ENLARGED TRAINER STAFF RR
1/4" = 1'-0"

ENLARGED TOILET PLAN LEGEND

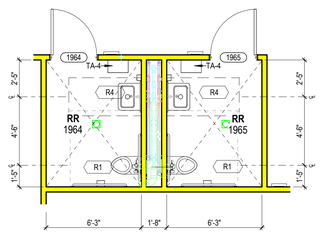




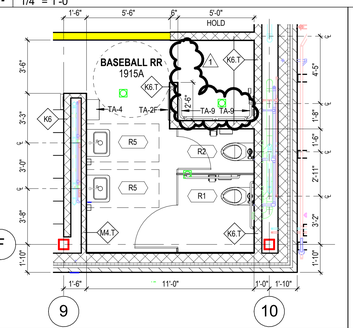
06 1926 - ENLARGED RESTROOM
1/4" = 1'-0"



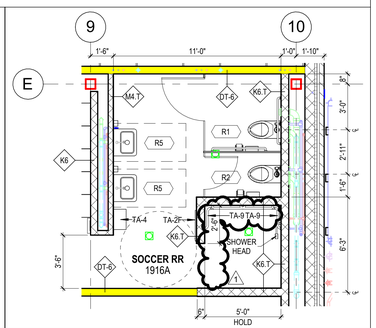
05 1952 - ENLARGED AD RR
1/4" = 1'-0"



04 1964 & 1965 - ENLARGED RESTROOMS
1/4" = 1'-0"



03 1915A - ENLARGED BASEBALL RESTROOM
1/4" = 1'-0"



02 1916A - SOCCER RESTROOM
1/4" = 1'-0"

Plot Stamp:
6/24/2025 3:40:35 PM

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PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

NORTH: PLAN TRUE

REGISTERED ARCHITECT
JAN LEPICOVSKY
25572
STATE OF TEXAS

6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

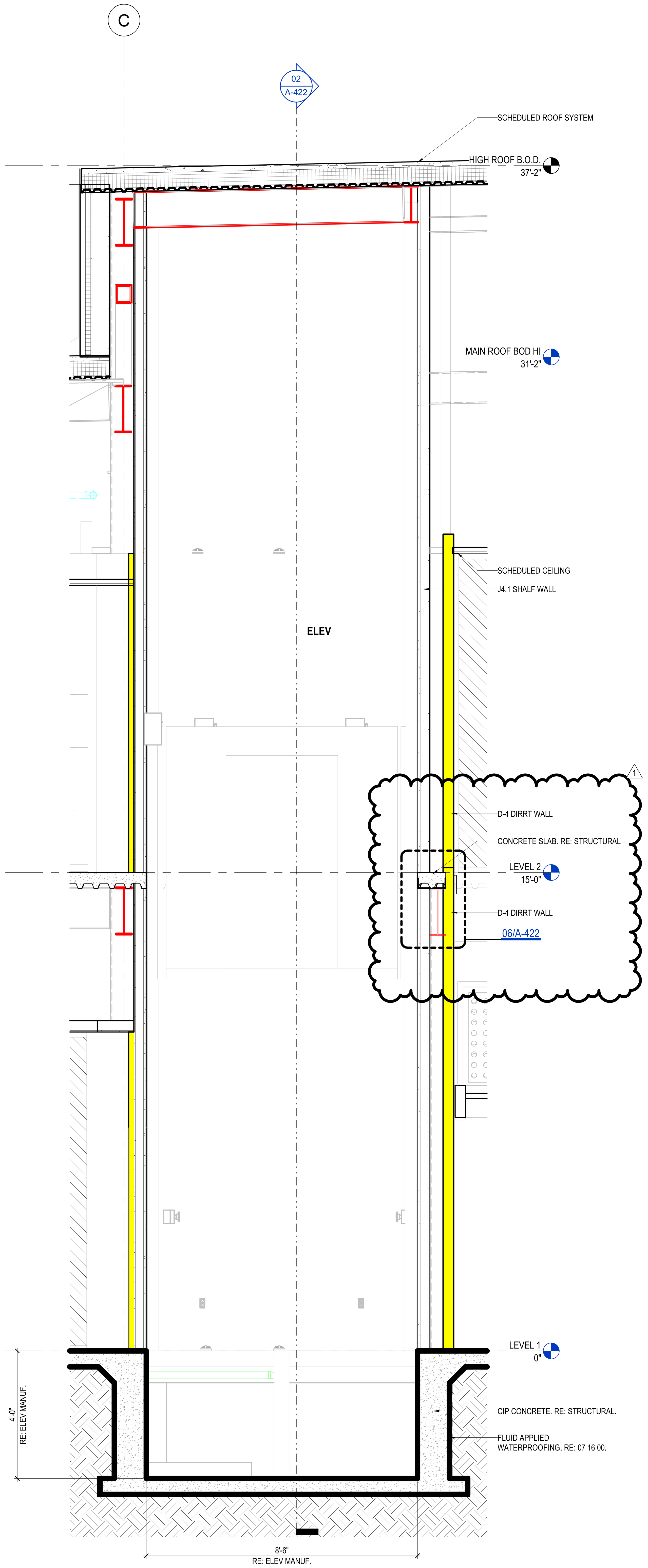
No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: JL
DRAWN BY: JL

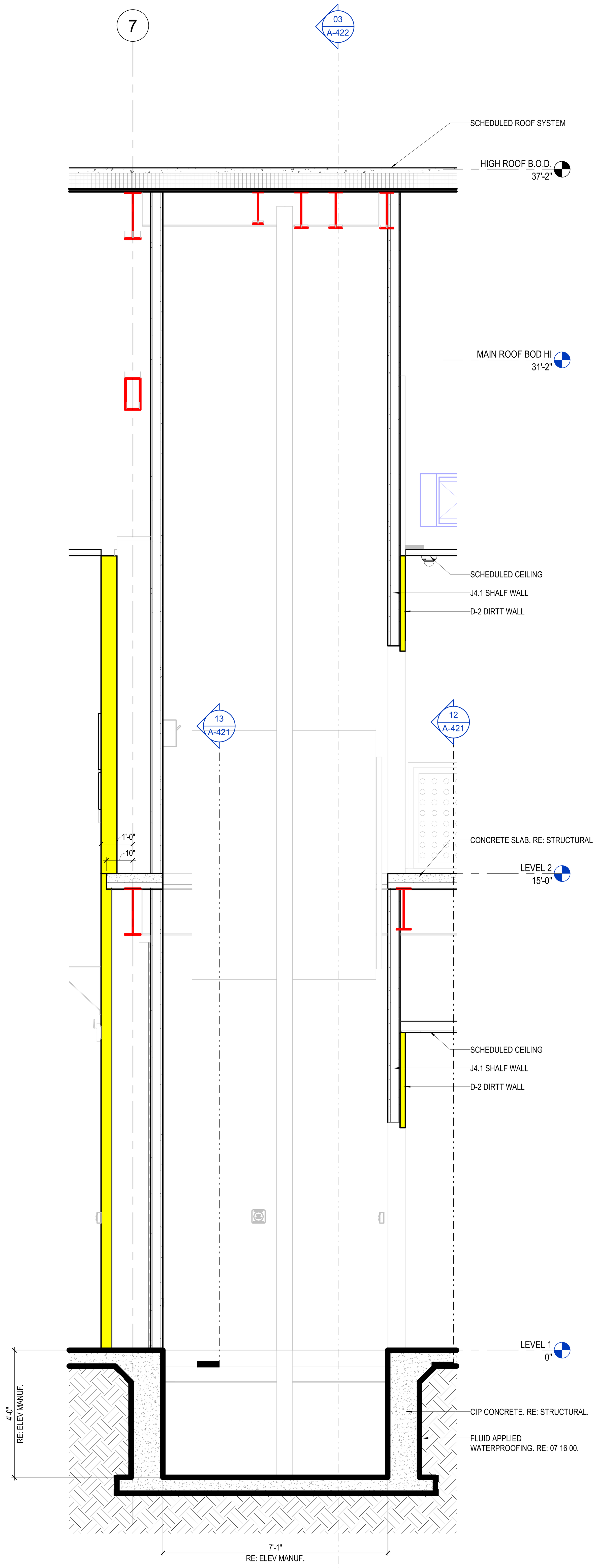
ENLARGED TOILET PLANS

A-411

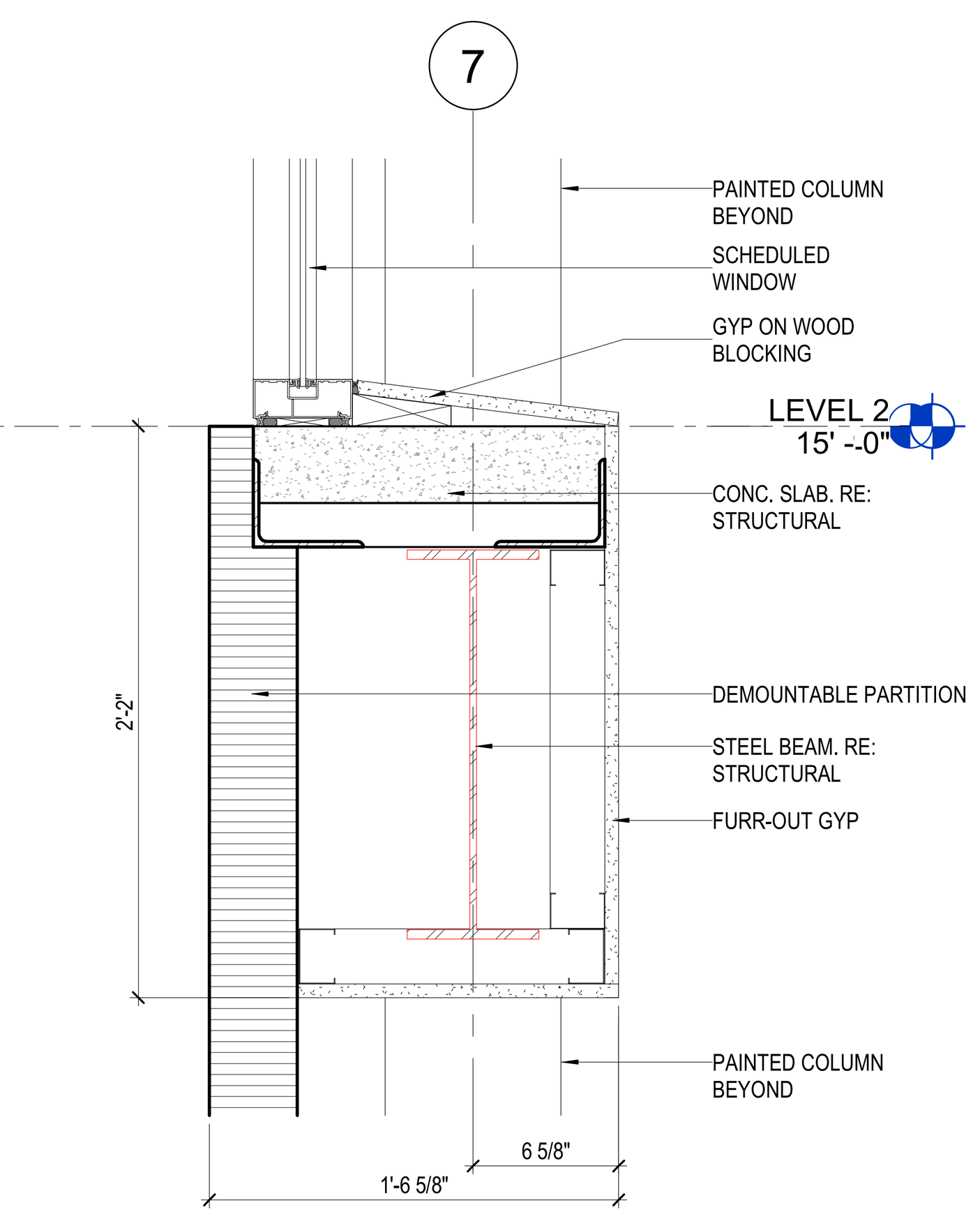
ELEVATOR PLANS & SECTIONS
A-422
FOR BLUEBEAM LABELING/OCR.



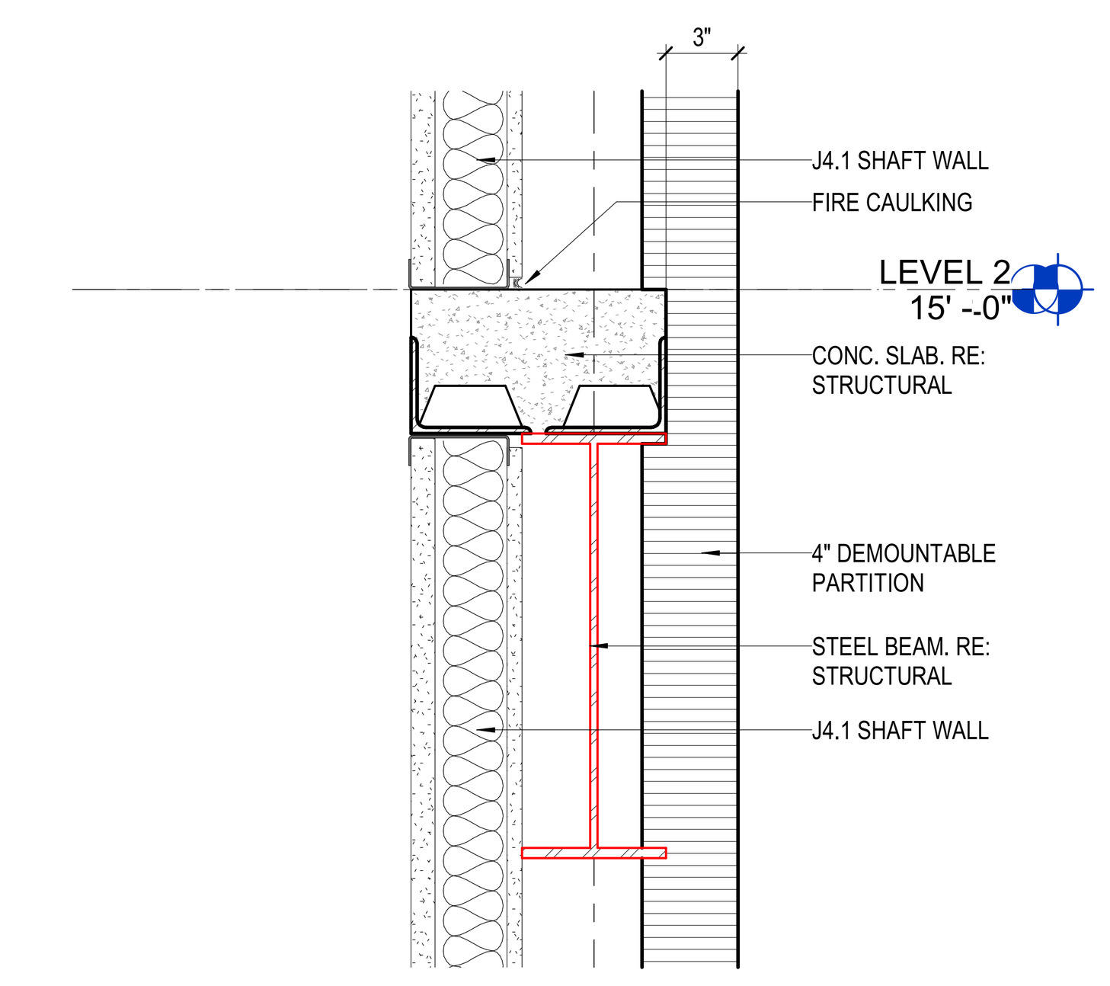
03 SECTION @ ELEVATOR
1/2" = 1'-0"



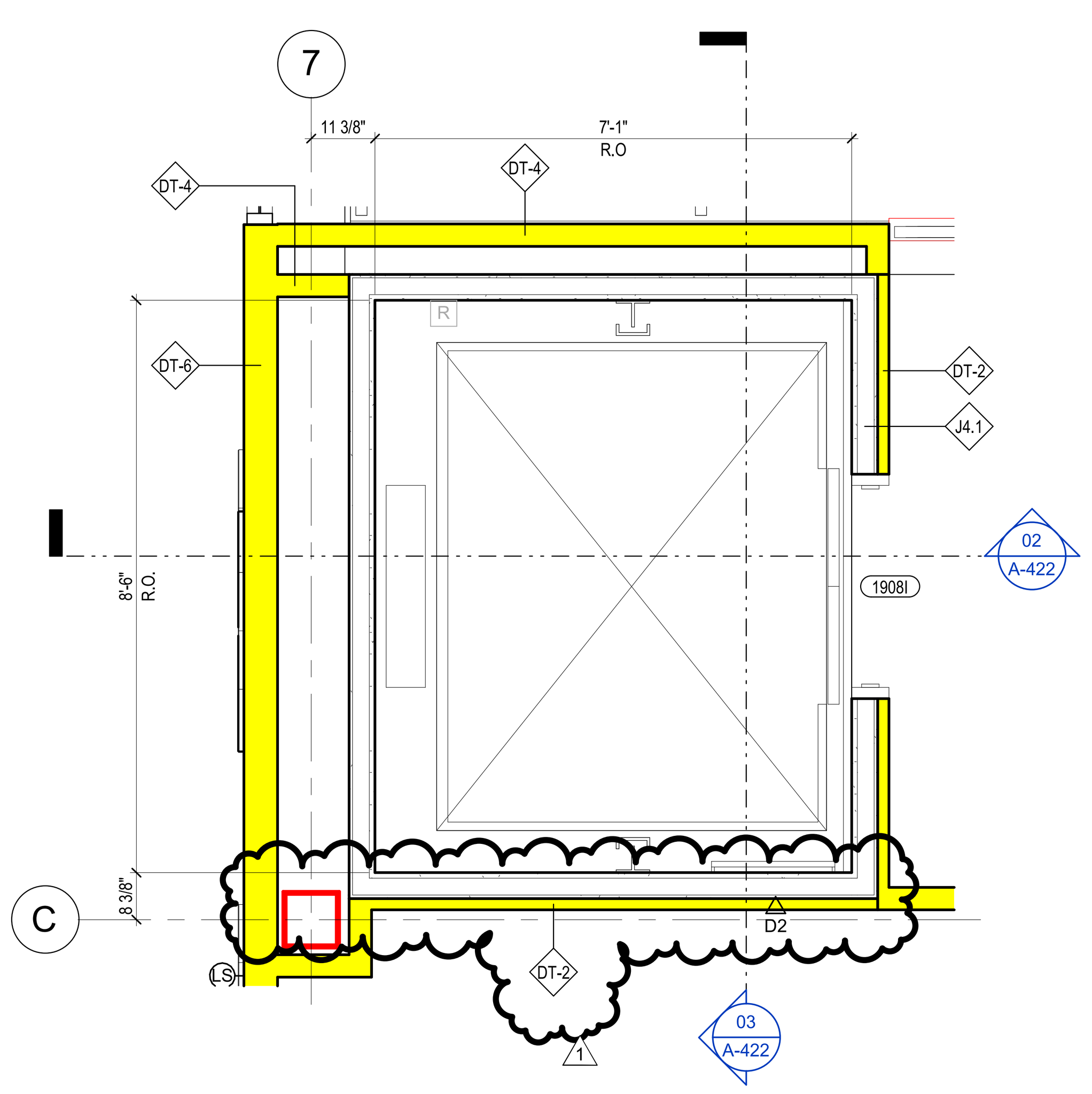
02 SECTION @ ELEVATOR
1/2" = 1'-0"



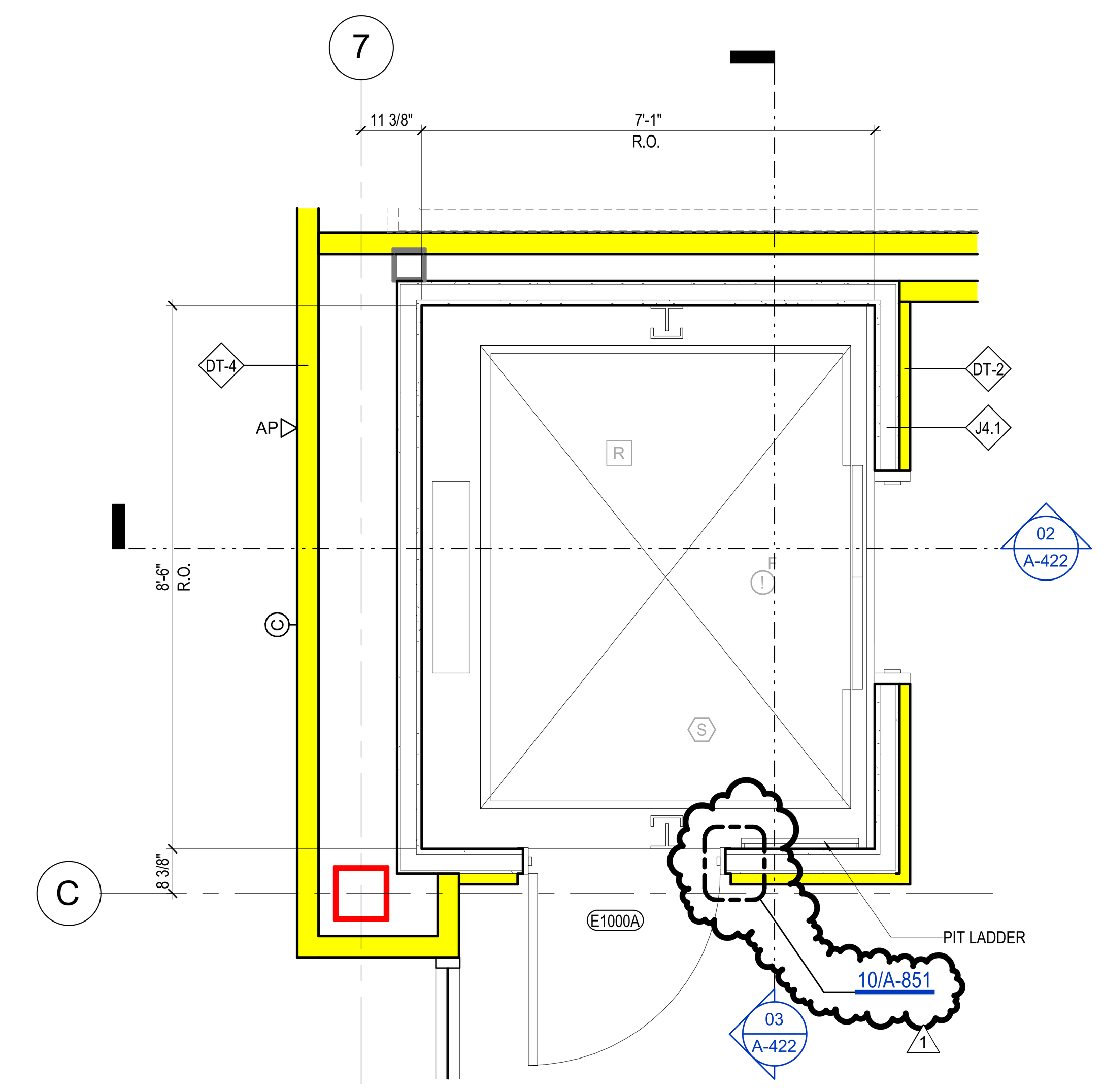
07 STAIR DETAIL
1 1/2" = 1'-0"



06 ELEVATOR DETAIL
1 1/2" = 1'-0"



04 LEVEL 2 - ELEVATOR PLAN
1/2" = 1'-0"



01 LEVEL 1 - ELEVATOR PLAN
1/2" = 1'-0"

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PKG 3A - GPHS NEW FIELDHOUSE
1000 Keene St.
Galena Park, TX 77547
CLIENT PROJECT NO: 240539
ISSUE FOR PROPOSAL

TRUE

6/10/2025

CLIENT	
Galena Park ISD	
DATE June 10, 2025	PROJECT NUMBER 240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: Checker
DRAWN BY: Author

ELEVATOR PLANS & SECTIONS

A-422

Plot Stamp:
6/25/2025 9:13:22 AM

EXTERIOR ELEVATIONS

A-501

FOR BLUEBEAM LABELING/OCR:

0"
1"

EXTERIOR MATERIALS LEGEND

04 20 00.BK1
BRICK TYPE 1
Modular, Running Bond
KB&T, Galena Park Blend Velour

04 20 00.BK2
BRICK TYPE 2
Modular, Running Bond
KB&T, 500 Manganese Velour

04 20 00.CV1
CMU VENEER
8" x 16", Running Bond
Best Block, Grey Granite

07 42 13.MPU-1
METAL WALL PANEL
Berridge FW-12, Dark Bronze

07 42 13.MPU-2
METAL WALL PANEL
Berridge FW-12, Shasta White

07 42 13.16 MPP1
PERFORART
Pre Finished Aluminum Plate

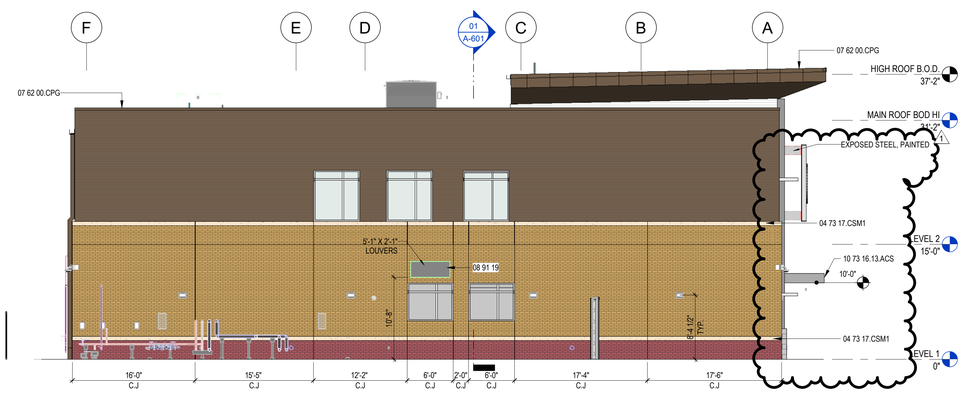
04 73 17.CSM
CALCIUM SILICATE STONE UNITS
Oak Ridge

GENERAL ELEVATION NOTES

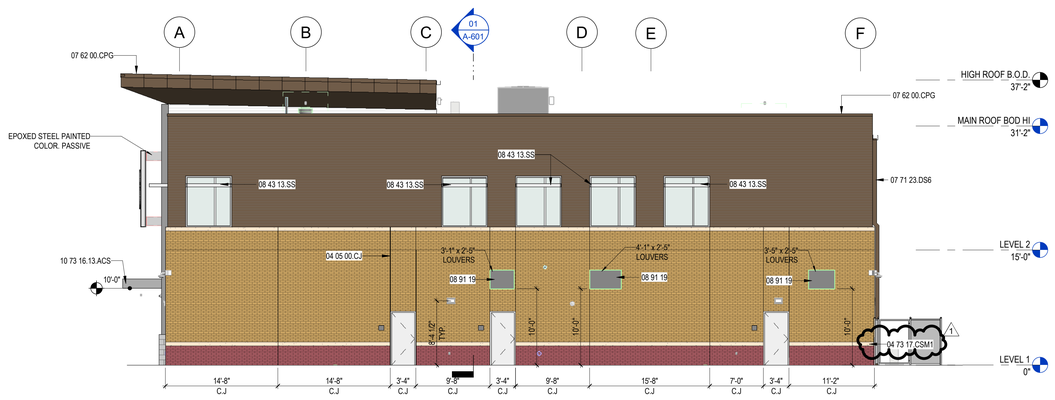
1. ALL BUILDING EXPANSION JOINT TO BE 1" UNLESS OTHERWISE NOTED.
2. CONTROL JOINT IN MASONRY VENEER TO BE 3/8" TYPICAL UNLESS OTHERWISE NOTED. EXTEND FULL HEIGHT OF WALL.
3. 1/2" EXPANSION JOINT FILLER ON BOTH ENDS OF ALL STEEL LINTEL ANGLES.
4. EXPOSED EXTERIOR STRUCTURAL STEEL TUBE MEMBERS SHALL BE PAINTED P-9.
5. STEEL MASONRY LINTELS SHALL BE GALVANIZED.
6. EXPOSED CONCRETE WALLS, COLUMNS, AND BEAMS SHALL BE RUBBED GROUT FINISH.
7. MASONRY WEEP AT 16" O.C. MAXIMUM.
8. EXTERIOR ALUMINUM STOREFRONT SYSTEM SHALL HAVE ALUMINUM SUB-SILLS WITH END DAMS.
9. EXTERIOR ALUMINUM STOREFRONT SYSTEM SHALL HAVE CONTINUOUS ALUMINUM BACKFILLERS WITH CONTINUOUS PERIMETER ALUMINUM ANGLE.
10. FLEXIBLE MEMBRANE FLASHING AT WINDOWS SILLS AND LINTELS SHALL HAVE PRE-FORMED END DAMS.
11. MASONRY VENEER CONTROL JOINTS SHALL BE 3/8" AT INSIDE CORNERS. AT DISTANCES NOT TO EXCEED 2'-4" FROM OUTSIDE CORNERS, AND AT 30'-0" O.C. MAXIMUM. UNLESS NOTED OTHERWISE. REFERENCE EXTERIOR ELEVATIONS.
12. GUTTERS, CONDUCTOR HEADS, AND DOWNSPOUTS SHALL BE PRE-FINISHED SHEET METAL. COLOR SELECTED BY ARCHITECT.
13. DOWNSPOUTS SHALL HAVE 16 GAUGE PRE-FINISHED DOWNSPOUT BOOTS TO 6'-0" ABOVE FINISH GRADE. COLOR SELECTED BY ARCHITECT.
14. DOWNSPOUTS AND/OR ROOF DRAINS SHALL BE CONNECTED TO STORM DRAIN SYSTEM UNLESS OTHERWISE NOTED. REFERENCE CIVIL FOR STORM DRAIN CONNECTION DETAILS AND LOCATIONS.
15. CONTRACTOR SHALL PROVIDE MOCK-UP FOR EACH EXTERIOR CONDITION AND CONSTRUCTION ASSEMBLY TYPE. INCLUDE A 2X2 WINDOW MOCK-UP. MOCK-UP SHALL INCLUDE METAL FLASHINGS, VERTICAL AND HORIZONTAL FLEXIBLE MEMBRANE FLASHINGS, AND WINDOW INSTALLATIONS AS DETAILED IN CONSTRUCTION DOCUMENTS. MOCK-UP SHALL BE A MINIMUM OF 8'-0" TALL X 16'-0" LONG WITH AN EXTERIOR CORNER, INTERIOR CORNER, AND VERTICAL CONTROL JOINTS. COORDINATE LOCATION OF MOCK-UP PANEL WITH ARCHITECT PRIOR TO CONSTRUCTION.

KEYNOTE LEGEND

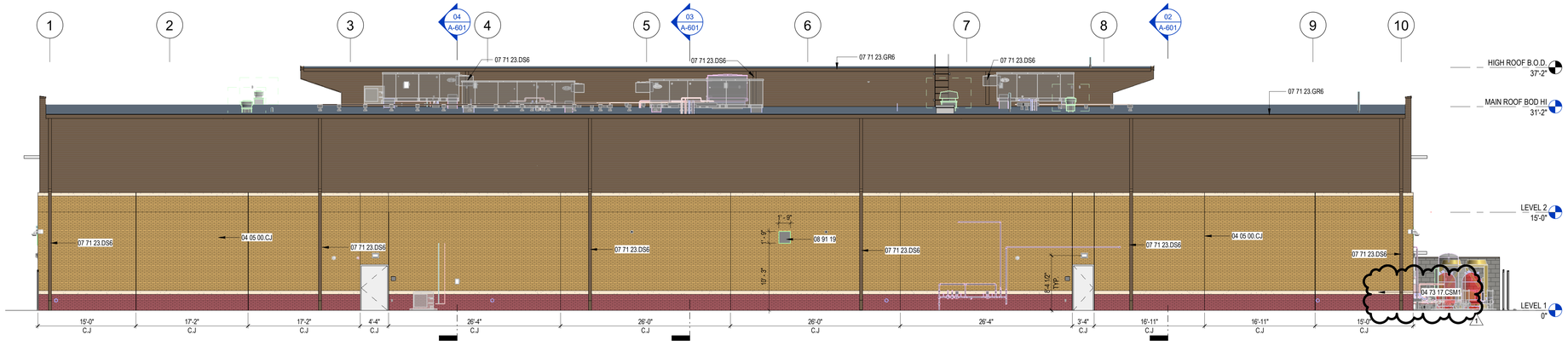
NUMBER	DESCRIPTION
04 05 00.CJ	MASONRY CONTROL JOINT
04 20 00.CV1	CONCRETE MASONRY UNIT VENEER, TYPE 1
1 04 73 17.CSM1	THIN MANUFACTURED STONE, TYPE 1 - [DESCRIPTOR]
04 73 17.CSMU1	MANUFACTURED STONE MASONRY UNIT, TYPE 1 - [DESCRIPTOR]
07 42 13.16.MPP1	1/8" PRE-FINISHED ALUMINUM PLATE LASER CUT W/ SHADOW PERFORATIONS
07 42.13.MPU-1	UNINSULATED METAL WALL PANEL, TYPE 1 - CONCEALED FASTENER
07 62 00.CPG	PRE-FINISHED METAL COPING
07 71 23.DS6	6"X 6" PRE-FINISHED METAL DOWNSPOUT W/ HEAVY GAUGE BOOT, RE: CIVIL
07 71 23.GR6	6" X 6" PRE-FINISHED METAL GUTTER
08 43 13.SS	SUNSHADE OUTRIGGER SYSTEM, 30" DEPTH
08 91 19	FIXED LOUVERS (Architectural - PBK Architects)
10 73 16.13.ACS	ALUMINUM CANOPY SYSTEM



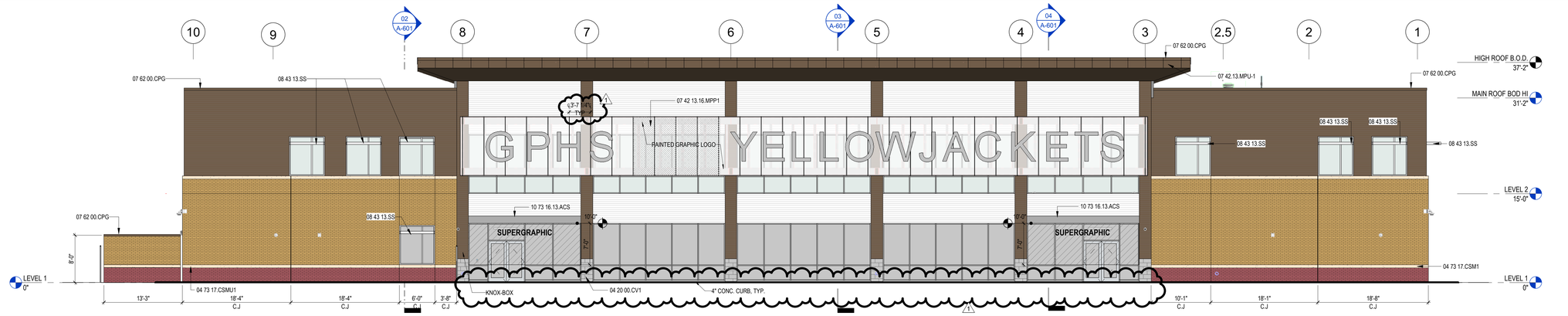
04 SOUTH ELEVATION
1/8" = 1'-0"



03 NORTH ELEVATION
1/8" = 1'-0"



02 WEST ELEVATION
1/8" = 1'-0"



01 EAST ELEVATION
1/8" = 1'-0"

Plot Stamp:
6/25/2025 10:11:52 AM

PKG 3A - GPHS NEW FIELDHOUSE

1100 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

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713.963.8008

Galena Park ISD

REGISTERED ARCHITECT
IAN LEPICOVSKY
29572
STATE OF TEXAS

6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: T.C
DRAWN BY: S.M

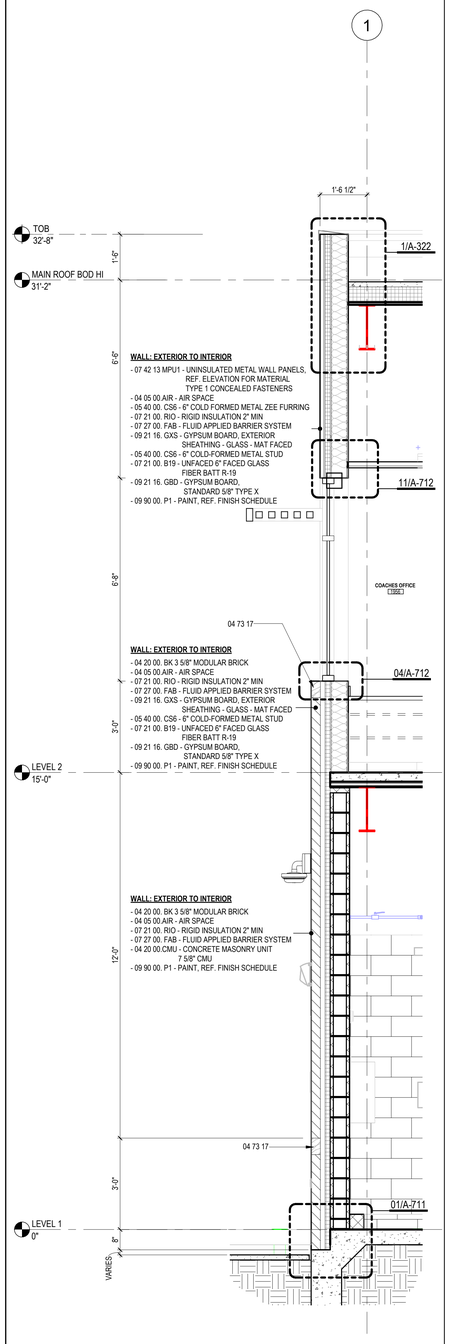
EXTERIOR ELEVATIONS

A-501

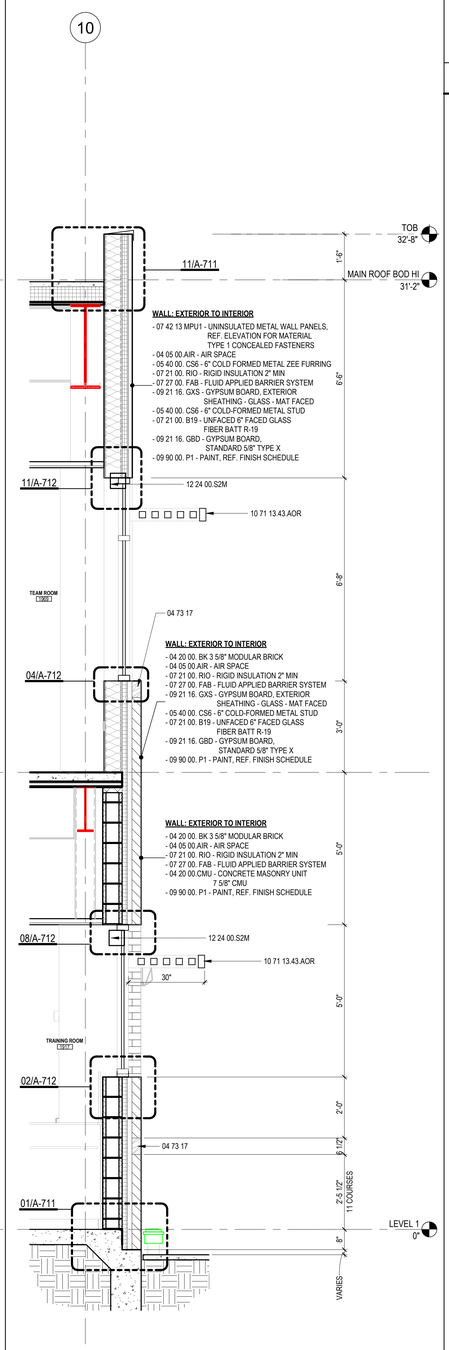
WALL SECTIONS
A-621

FOR BLUEBEAM LABELING/OCR:

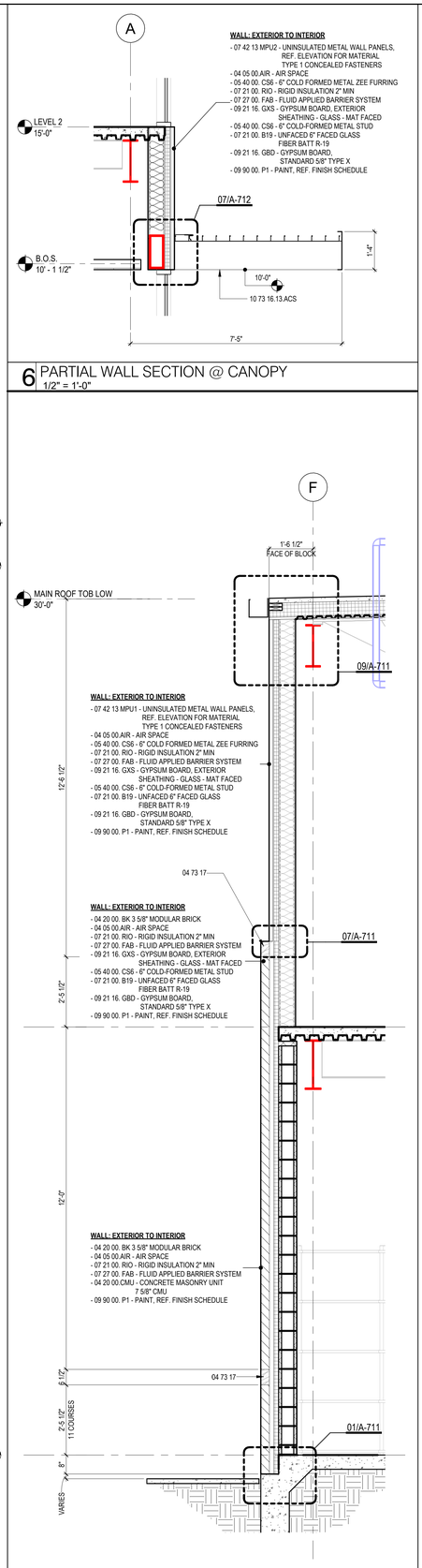
0"
1"



05 WALL SECTION @ NORTH WALL
1/2" = 1'-0"

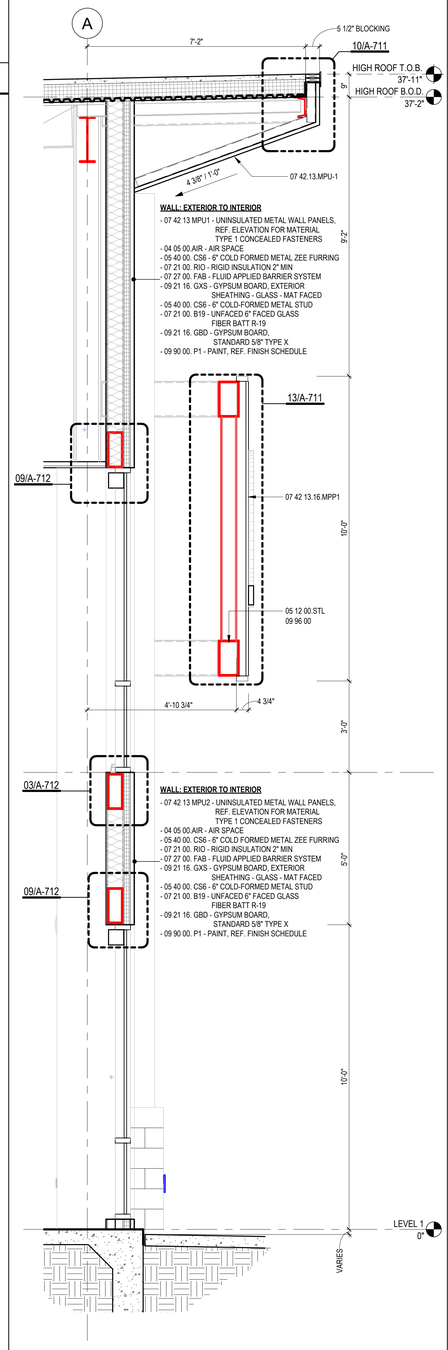


04 WALL SECTION @ SOUTH WALL
1/2" = 1'-0"

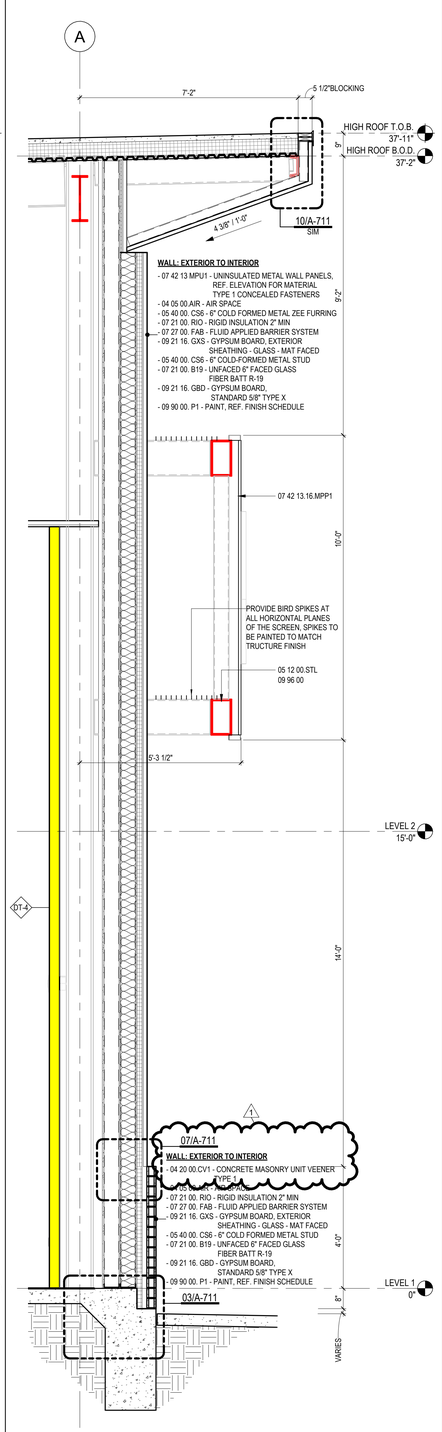


6 PARTIAL WALL SECTION @ CANOPY
1/2" = 1'-0"

03 WALL SECTION @ WEST WALL
1/2" = 1'-0"



02 WALL SECTION @ WEIGHT ROOM
1/2" = 1'-0"



01 WALL SECTION @ PILASTER
1/2" = 1'-0"

KEYNOTE LEGEND

NUMBER	DESCRIPTION
04 73 17	
05 12 00.STL	STEEL FRAMING, REFER TO STRUCTURAL
07 42 13.16.MPP1	1/8" PRE-FINISHED ALUMINUM PLATE, LASER CUT STANDARD PERFORATIONS
07 42.13.MPU-1	UNINSULATED METAL WALL PANEL, TYPE 1 - CONCEALED FASTENER
09 96 00	HIGH PERFORMANCE COATINGS (Architectural - PBK Architects)
10 71 13.43.AOR	ALUMINUM OUTRIGGER
10 73 16.13.ACS	ALUMINUM CANOPY SYSTEM
12 24 00.S2M	MOTORIZED WINDOW SHADE UNIT MOUNTED [RECESSED IN CEILING or BETWEEN JAMBS or TO FACE OF GLAZING SYSTEM]

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PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

REGISTERED ARCHITECT
JAN LEPICOVSKY
25572
STATE OF TEXAS

6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: TC

DRAWN BY: LG

WALL SECTIONS

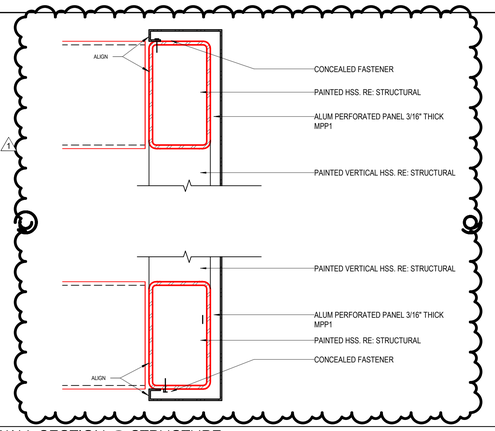
A-621

Plot Stamp:
6/24/2025 3:40:53 PM

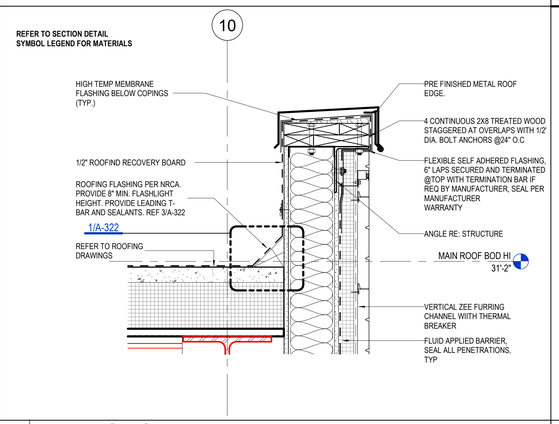
0"
1"

SECTION DETAIL SYMBOL LEGEND

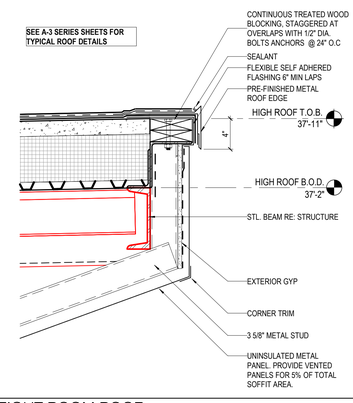
- **09 21 16.GBD** - 5/8" GYP. BD.
- **05 40 00.CS6** - 6" CFMF @16" O.C, GAUGE AND SPACING PER SPECS
- **07 21 00** - BATT INSULATION
- **06 16 00.GXS** - 1/2" SHEATHING
- INTERIOR / EXTERIOR
- **04 20 00** - CMU BLOCK
- 4" HIGH CMU STARTER COURSE
- **07 42.13** UNINSULATED METAL PANEL WALL SYSTEM
- **09 24 00** 7/8" 3 LAYER CEMENT PLASTER SYSTEM
- **04 20 00** FACE BRICK MODULAR
- **04 43 00** FACE STONE
- **04 05 00.TIE** GALVANIZED MASONRY ANCHORS AND TIES @16" O.C
- **04 05 00.CDP** CAVITY PROTECTION DEVICE
- **04 05 00.TIE** GALVANIZED MASONRY ANCHORS AND TIES @16" O.C
- **04 05 00.TIE** GALVANIZED MASONRY ANCHORS AND TIES @16" O.C
- **07 21 00.PIF** 2" RIGID INSULATION
- **07 92 00.WSJ** BED OF SEALANT
- SELECT FILL



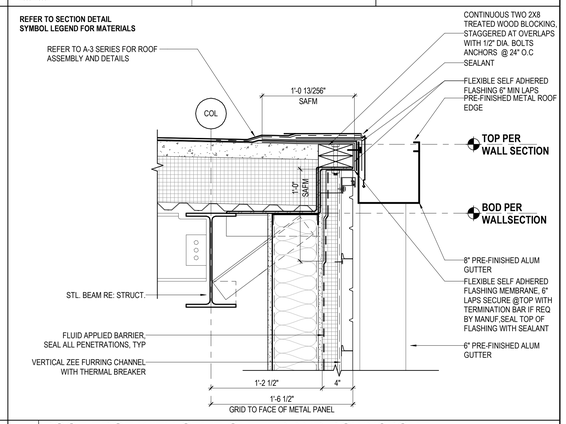
13 WALL SECTION @ STRUCTURE
1 1/2" = 1'-0"



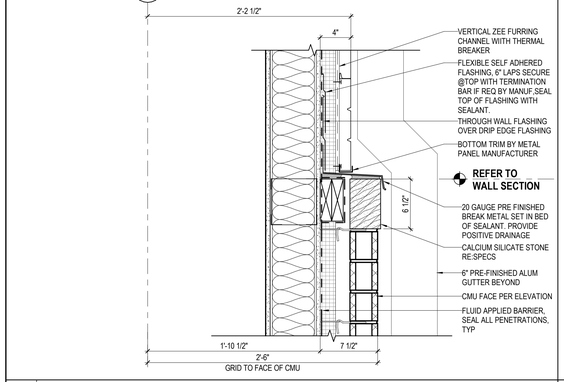
11 PARAPET CAP STUD @METAL PANEL
1 1/2" = 1'-0"



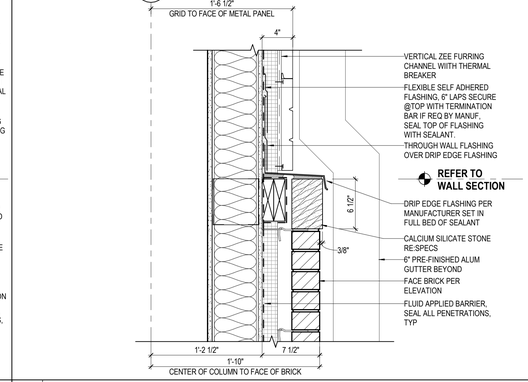
10 WALL SECTION @ WEIGHT ROOM ROOF
1 1/2" = 1'-0"



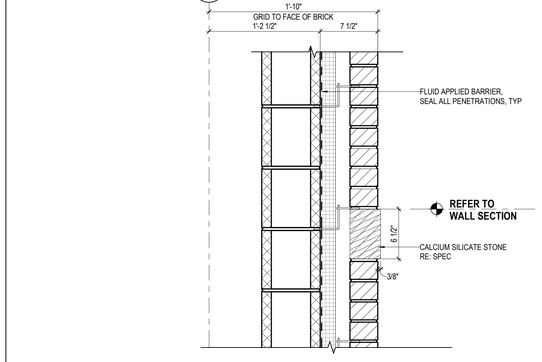
09 ROOF EDGE WITH CFMF GUTTER AND DOWNSPOUT
1 1/2" = 1'-0"



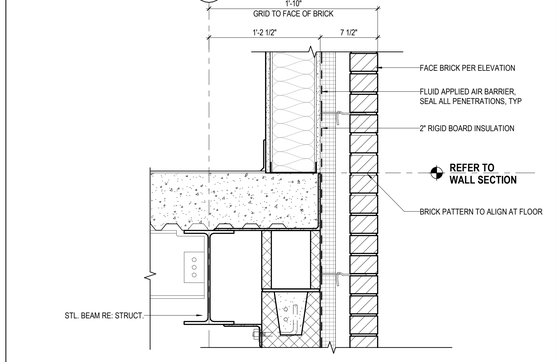
08 CMU TRANSITION TO METAL PANEL
1 1/2" = 1'-0"



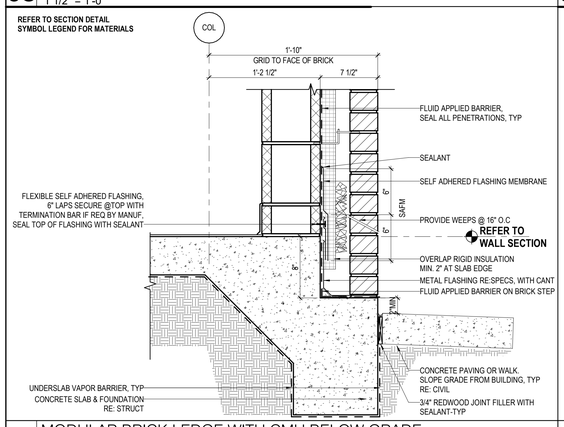
07 BRICK TRANSITION TO METAL PANEL
1 1/2" = 1'-0"



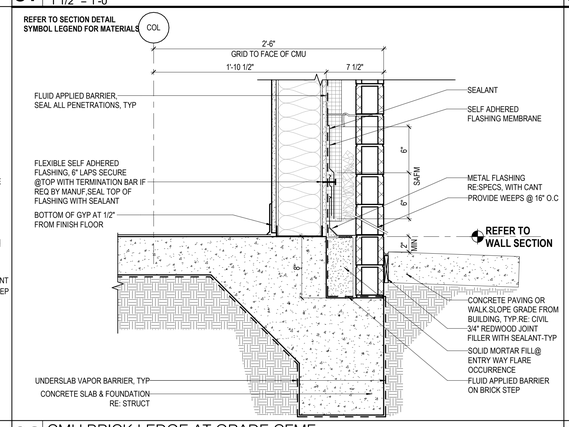
06 BRICK WALL WITH STONE @CMU
1 1/2" = 1'-0"



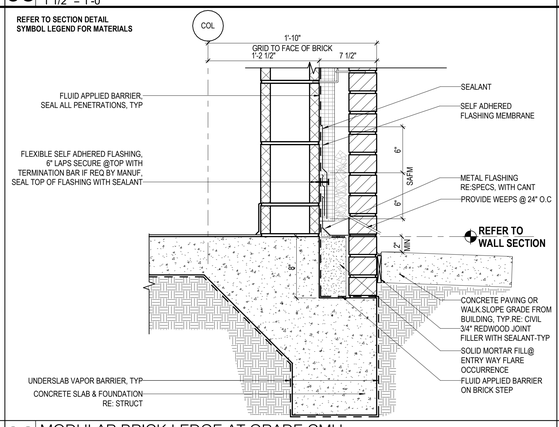
05 SLAB EDGE WITH CFMF AND BRICK
1 1/2" = 1'-0"



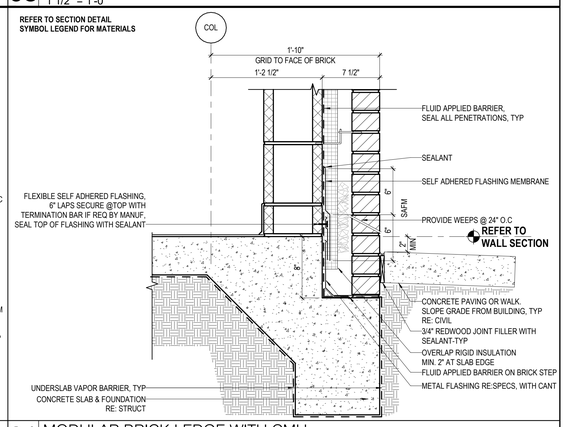
4 MODULAR BRICK LEDGE WITH CMU BELOW GRADE
1 1/2" = 1'-0"



03 CMU BRICK LEDGE AT GRADE CFMF
1 1/2" = 1'-0"



02 MODULAR BRICK LEDGE AT GRADE CMU
1 1/2" = 1'-0"



01 MODULAR BRICK LEDGE WITH CMU
1 1/2" = 1'-0"

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PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

REGISTERED ARCHITECT JAN LEPICOVSKY 25571 STATE OF TEXAS

6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

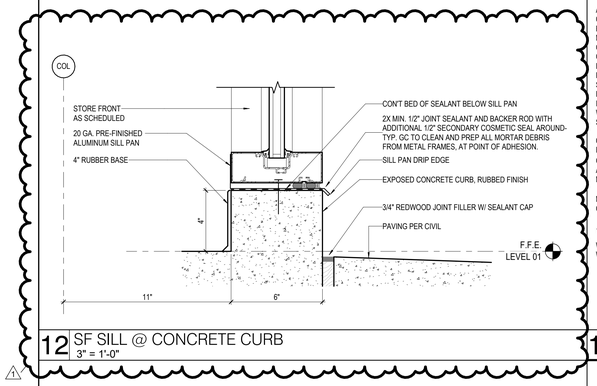
CHECKED BY: TC
DRAWN BY: LG

WALL SECTION DETAILS

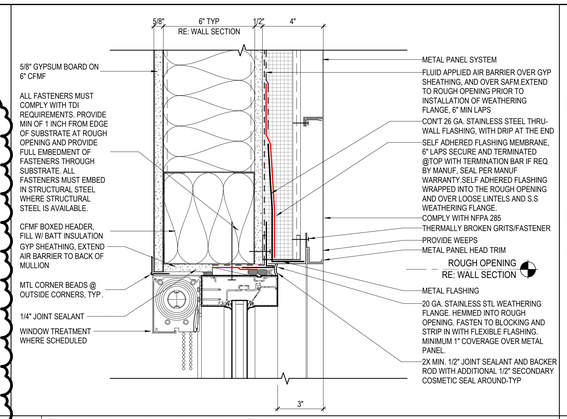
A-711

Plot Stamp:
6/25/2025 10:21:21 AM

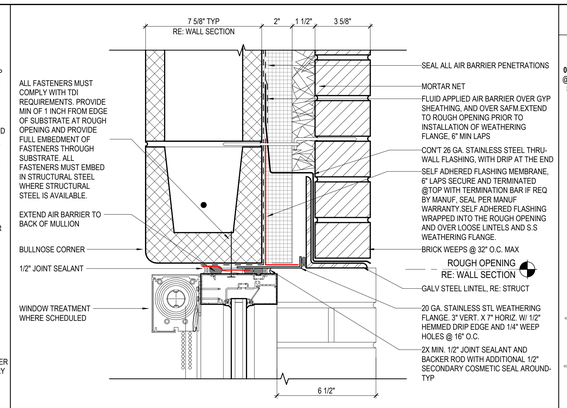
STOREFRONT DETAILS
A-712
FOR BLUEBEAM LABELING/OCR:



12 SF SILL @ CONCRETE CURB
3" = 1'-0"

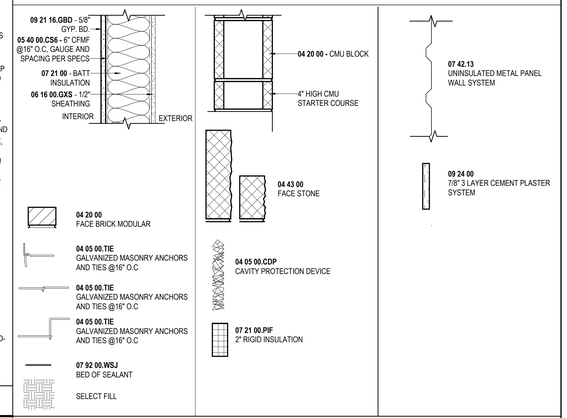


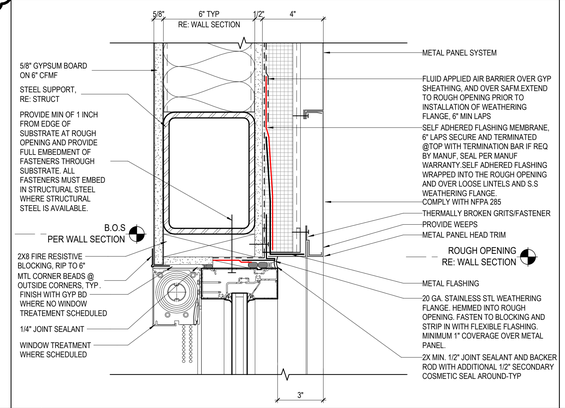
11 SF HEAD @ METAL PANEL CFMF
3" = 1'-0"



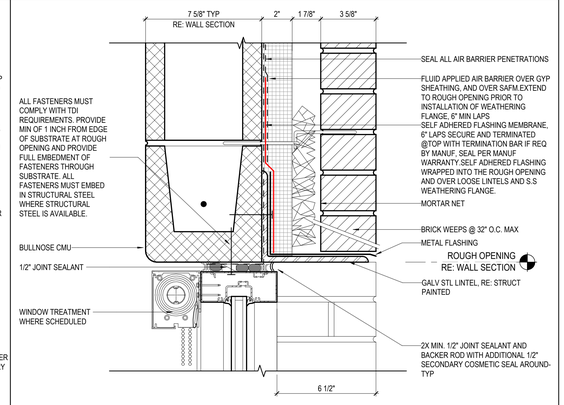
10 SF HEAD @ BRICK CMU LOOSE LINTEL
3" = 1'-0"

SECTION DETAIL SYMBOL LEGEND

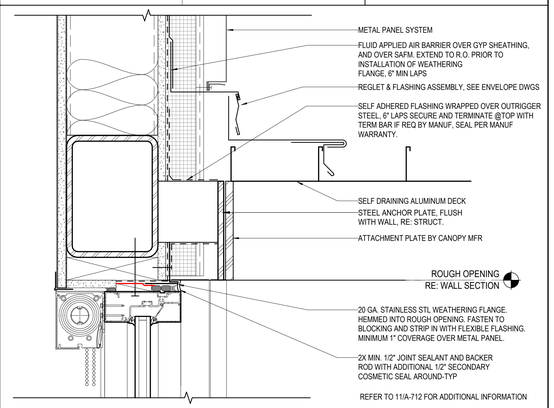




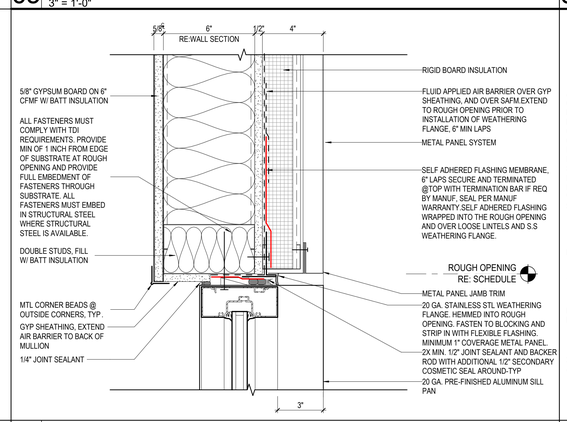
09 SF HEAD @ METAL PANEL CFMF STRUCTURE
3" = 1'-0"



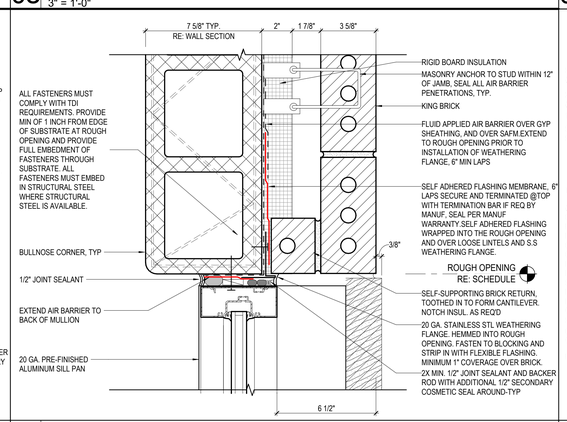
08 SF HEAD @ BRICK CMU STRUCT LINTEL
3" = 1'-0"



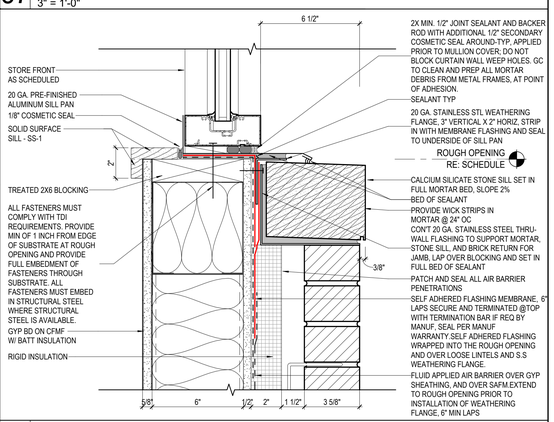
07 SF HEAD @ CANOPY W/ MTL PANEL
3" = 1'-0"



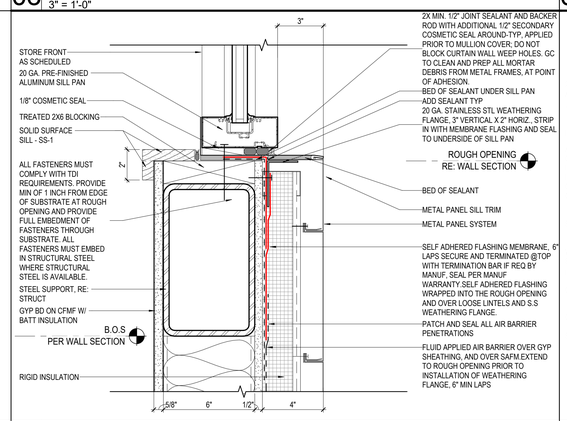
06 SF JAMB @ METAL PANEL CFMF JAMB STUDS
3" = 1'-0"



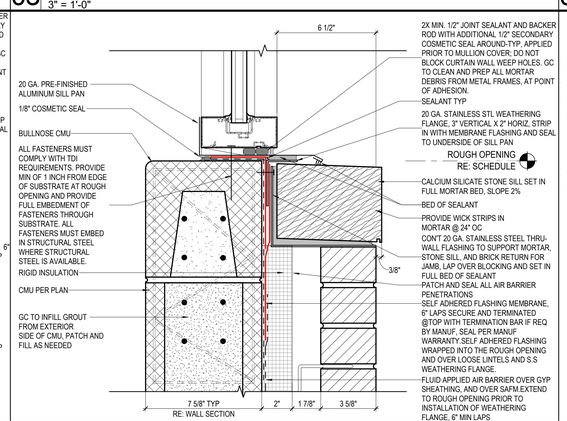
05 SF JAMB @ BRICK CMU
3" = 1'-0"



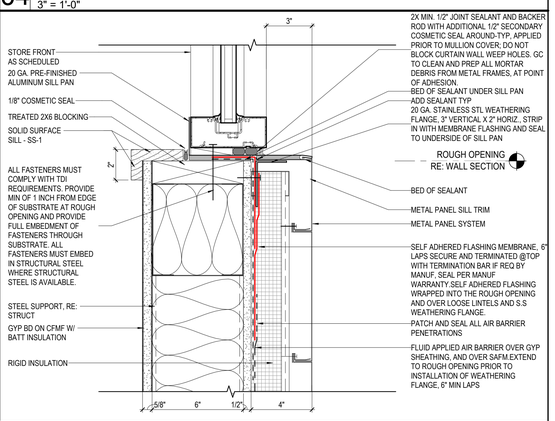
04 SF SILL @ BRICK CFMF
3" = 1'-0"



03 SF SILL @ METAL PANEL CFMF STL POST
3" = 1'-0"



02 SF SILL @BRICK CMU
3" = 1'-0"



01 SF SILL @ METAL PANEL CFMF
3" = 1'-0"

PKG 3A - GPHS NEW FIELDHOUSE

PBK
HOUSTON, TX
713-865-6908
www.pbk.com
TX FIRM: BR 1658
1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539
ISSUE FOR PROPOSAL

Galena Park ISD

REGISTERED ARCHITECT JAN LEPICOVSKY 25572 STATE OF TEXAS

6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: TC
DRAWN BY: LG

STOREFRONT DETAILS

A-712

Plot Stamp:
6/24/2025 3:40:56 PM

DOOR SCHEDULE
A-810
FOR BLUEBEAM LABELING/OCR:

0"
1"

1. BIG NOTE
2. BIG NOTE

DOOR SCHEDULE

DOOR			PANEL			FRAME			GENERAL			
NUMBER	WIDTH	HEIGHT	TYPE	MATL	FINISH	TYPE	MATL	FINISH	FIRE RATING	STC	HARDWARE SET	REMARKS
LEVEL 1												
1901A	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			111	BY DEMOUNTABLE WALL MFR
1901B	3'-0"	6'-10"	F	08_Hollow Metal Doors, HM	09_Paint, PT-1	001	08_Hollow Metal Doors, HM	09_Paint, PT-1			102	
1902	6'-0"	6'-10"	NV-1	08_Hollow Metal Doors, HM	09_Paint, PT-1	001	08_Hollow Metal Doors, HM	09_Paint, PT-1			101	
1903	3'-0"	6'-10"	F	08_Hollow Metal Doors, HM	09_Paint, PT-1	001	08_Hollow Metal Doors, HM	09_Paint, PT-1			104	
1904A	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			111	BY DEMOUNTABLE WALL MFR
1904B	3'-0"	6'-10"	F	08_Hollow Metal Doors, HM	09_Paint, PT-1	001	08_Hollow Metal Doors, HM	09_Paint, PT-1			102	
1905	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			107	BY DEMOUNTABLE WALL MFR
1906	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
1907	4'-0"	6'-10"	F	08_Hollow Metal Doors, HM	09_Paint, PT-1	001	08_Hollow Metal Doors, HM	09_Paint, PT-1			104	
1908A	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			103	
1908B	6'-0"	4'-0"	OHCS	Stainless Steel	Stainless Steel		AL-2	AL-2			114	
1910	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			111	BY DEMOUNTABLE WALL MFR
1911	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			111	BY DEMOUNTABLE WALL MFR
1912	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			107	BY DEMOUNTABLE WALL MFR
1913	3'-0"	6'-10"	F	08_Hollow Metal Doors, HM	09_Paint, PT-1	001	08_Hollow Metal Doors, HM	09_Paint, PT-1			104	
1914	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			111	BY DEMOUNTABLE WALL MFR
1915	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			111	BY DEMOUNTABLE WALL MFR
1916	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			111	BY DEMOUNTABLE WALL MFR
1917A	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	
1917B	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	
1918	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	012	AL-2	AL-2			108	
1919	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			111	BY DEMOUNTABLE WALL MFR
1920	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			110.1	BY DEMOUNTABLE WALL MFR
1921	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			111	BY DEMOUNTABLE WALL MFR
1922	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			110	
1923	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			110	
1924	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
1925	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	
1926	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			110.2	BY DEMOUNTABLE WALL MFR
1927A	6'-0"	7'-0"	FG-1	AL-1	ALUM	RE ELEV	AL-1	AL-1			113.1	
1927B	6'-0"	7'-0"	FG-1	AL-1	ALUM	RE ELEV	AL-1	AL-1			113.1	
C1900A	6'-0"	7'-0"	FG-1	AL-1	AL-1	RE ELEV	AL-1	AL-1			113	2
C1900B	6'-0"	7'-0"	FG-1	AL-1	AL-1	RE ELEV	AL-1	AL-1			113	2
E1000A	3'-0"	6'-10"	F	08_Hollow Metal Doors, HM	09_Paint, PT-1	001	08_Hollow Metal Doors, HM	08_Hollow Metal Doors, HM	45 Minute		115	ELEVATOR MACHINE ACCESS
34												
LEVEL 2												
1951	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			107	BY DEMOUNTABLE WALL MFR
1952	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			110	BY DEMOUNTABLE WALL MFR
1953	3'-0"	6'-10"	FG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			109	BY DEMOUNTABLE WALL MFR
1954	3'-0"	6'-10"	NV-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	BY DEMOUNTABLE WALL MFR
1955	3'-0"	6'-10"	NV-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	BY DEMOUNTABLE WALL MFR
1956A	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			107	BY DEMOUNTABLE WALL MFR
1956B	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			107	BY DEMOUNTABLE WALL MFR
1957	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	BY DEMOUNTABLE WALL MFR
1958	3'-0"	6'-10"	NV-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	BY DEMOUNTABLE WALL MFR
1959	3'-0"	6'-10"	NV-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	BY DEMOUNTABLE WALL MFR
1960	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
1961	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
1962	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
1963	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			103	BY DEMOUNTABLE WALL MFR
1964	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			110.3	BY DEMOUNTABLE WALL MFR
1965	3'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			110.3	BY DEMOUNTABLE WALL MFR
1966	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
1966B	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
1967	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
1968A	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			107	BY DEMOUNTABLE WALL MFR
1968B	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			107	BY DEMOUNTABLE WALL MFR
1969A	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			107	BY DEMOUNTABLE WALL MFR
1969B	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			107	BY DEMOUNTABLE WALL MFR
1970A	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	
1970B	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			108	
1970C	12'-0"	5'-2"	OHCG	Stainless Steel	Stainless Steel		AL-2	AL-2			114	
1971A	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
1971B	4'-0"	6'-10"	F	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			106	BY DEMOUNTABLE WALL MFR
C1951A	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			112	BY DEMOUNTABLE WALL MFR
C1951B	3'-0"	6'-10"	HG-1	Wood	TF-1 (Thermafoil)	001	AL-2	AL-2			112	BY DEMOUNTABLE WALL MFR
30												
Grand Total: 64												

DOOR SCHEDULE REMARKS

1. ELEC. DOOR OPENER W/ HC BUTTON ON INSIDE AND OUTSIDE OF DOOR
2. ELEC. CONTROLLED ACCESS HARDWARE WITH CARD READER
3. ELEC. CONTROLLED ACCESS HARDWARE WITH PUSH-BUTTON
4. ELEC. CONTROLLED ACCESS HARDWARE, ROUGH-IN ONLY
5. DOOR BUZZER
6. DOOR CHIME ON OPEN
7. MAGNETIC HOLD-OPEN, CONNECT TO FIRE ALARM
8. MAGNETIC HOLD-OPEN, CONNECT TO SECURITY SYSTEM
9. SOUND DOOR

OPERABLE WALLS, OVERHEAD DOORS AND GRILLES

10. SOUND RATED DOOR ASSEMBLY, STC AS SPECIFIED
11. WINDSTORM DOOR HARDWARE SHALL BE TESTED AS PART OF A COMPLETE DOOR OPENING ASSEMBLY. THE TESTED DOOR OPENING ASSEMBLY SHALL INCLUDE DOOR HARDWARE. THE ENTIRE DOOR OPENING, INCLUDING DOOR HARDWARE, SHALL BE BY DOOR MANUF.
12. ACOUSTICAL GLASS TO MEET FIRE DOOR ASSEMBLY REQUIREMENTS FOR FIRE RATING INDICATED
13. MANUAL OPERATION
14. ELEC MOTOR OPERATION WITH KEY SWITCH CONTROL, KEY SWITCH ON ONE SIDE OF DOOR ONLY
15. ELEC MOTOR OPERATION WITH KEY SWITCH CONTROL, KEY SWITCH ON BOTH SIDES OF DOOR
16. ELEC MOTOR OPERATION WITH PUSH-BUTTON CONTROL ON ONE SIDE OF DOOR ONLY
17. AUTOMATIC OPEN ON FIRE ALARM ACTIVATION U.N.O.
18. AUTOMATIC CLOSE ON FIRE ALARM ACTIVATION

PBK
www.pbk.com
TX FIRM: BR 1658
HOUSTON, TX
713-865-6908

PKG 3A - GPHS NEW FIELDHOUSE
1000 Keene St.
Galena Park, TX 77547
CLIENT PROJECT NO: 240539
ISSUE FOR PROPOSAL

Galena Park ISD

JAN LEPICZKY 25572 REGISTERED ARCHITECT STATE OF TEXAS
6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: TC
DRAWN BY: Author

DOOR SCHEDULE

A-810

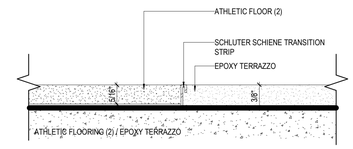
Plot Stamp:
6/24/2025 3:40:57 PM

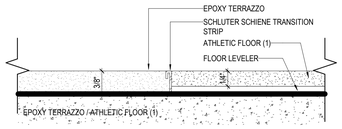
FINISH SCHEDULE
A-900

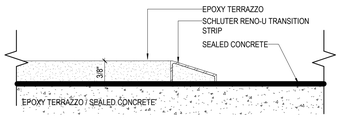
FOR BLUEBEAM LABELING/OCR:

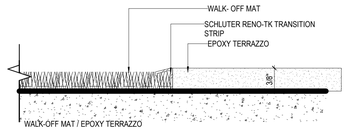
2405398 GP FIELD HOUSE - INTERIOR SCHEDULE OF FINISHES

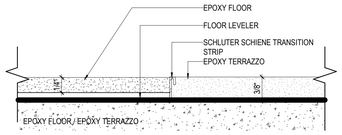
ITEM	MANUFACTURER	DESCRIPTION	COLOR	SIZE	LOCATION	NOTES
CONCRETE FINISHING						
03 35 00.SC1					REF TO FINISH FLOOR PLAN	SEALED CONCRETE
STAIR SYSTEM						
05 52 00.MRP		SLAT STEEL RAILING SYSTEM	ARCH TO SELECT STAINLESS STEEL FINISH		RAILING	
05 52 00.CDP		STEEL CANE DETECTION RAILING SYSTEM	ARCH TO SELECT STAINLESS STEEL FINISH		CANE DETECTION	
05 73 00.IM1	MCNICOLS	PERFORATED METAL	PRMARY MATERIAL: CARBON STEEL, ARCH TO SELECT POWDER COATED FINISH	GAUGE: 16; HOLE PATTERN: 1/2" HEX ON 9/16" CTRS	PERFORATED METAL INILL PANEL AND STAIR RISER	
TRIMS / TRANSITIONS / DOSINGS						
05 75 00.DT1	SCHLUTER	JOLLY	AT, SATIN NICKEL ANODIZED ALUMINUM		TILE EDGES	
05 75 00.MT1	SCHLUTER	RENO-RAMP	AE, SATIN ANODIZED ALUMINUM		RAMP TRANSITION	
05 75 00.MT2	SCHLUTER	RENO-T	AT, SATIN NICKEL ANODIZED ALUMINUM		SAME HEIGHT TRANSITION	
05 75 00.MT3	SCHLUTER	RENO-TK	AT, SATIN NICKEL ANODIZED ALUMINUM		TILE TO CARPET	
05 75 00.MT4	SCHLUTER	DILEX-AHK	AT, SATIN NICKEL ANODIZED ALUMINUM		TILED FLOOR TO WALL COVE	WALL TILE TO FLOOR TILE
TILE						
09 30 00.T1	NOT IN USE	NOT IN USE				GROUT:
09 30 00.T2	NOT IN USE	NOT IN USE				GROUT:
09 30 00.T3	CROSSVILLE STUDIOS	URBANOLOGY BY STILE	COLOR: METROPOLIS CHISELED	24" X 48"	WALL TILE	GROUT:
09 30 00.T4	CROSSVILLE STUDIOS	URBANOLOGY BY STILE	COLOR: TITANIUM CHISELED	24" X 48"	WALL TILE	GROUT:
09 30 00.T5	EMSER	RAKU	COLOR: WHITE	3" X 12" MATTE	RESTROOM & SHOWER WALL TILE	GROUT:
09 30 00.T6	EMSER	RAKU	COLOR: CHARCOAL	3" X 12" GLOSSY	RESTROOM & SHOWER WALL TILE	GROUT:
09 30 00.T7	EMSER	RAKU	COLOR: MUSTARD	3" X 12" GLOSSY	RESTROOM & SHOWER WALL TILE	GROUT:
ACOUSTICAL CEILINGS						
09 51 00.ACP1	ARMSTRONG - ACOUSTIC CEILING PANEL/TILE	OPTIMA	WHITE	24'X24", 15/16", 3152	HIGH NRC	RE: RCPS
09 51 00.ACP2	NOT IN USE	NOT IN USE				
09 51 00.ACS1	ARMSTRONG - ACOUSTIC CEILING SYSTEM	PRELUDE XL	WHITE	15/16"	FIELD ACS	RE: RCPS
09 51 00.XCT6	ARMSTRONG CEILINGS	AXIOM CLASSIC	WHITE	6"	CEILING CLOUDS	RE: RCPS
LINEAR WOOD CEILINGS						
09 54 26.WCS1	9 WOOD	1100 CROSS PIECE GRILLE	SPECIES: WESTERN HEMLOCK; FINISH: DRIFTWOOD STAIN	1"X4" WITH 4" SPACING	ENTRANCE TO WEIGHT ROOM ON LVL 1	
LUXURY VINYL TILE						
09 65 00.RFT1	TARKETT	CONTOUR/ COLOR BEAM	C113 MOONLIGHT, EMBOSS: QUARRY	9" X 36"	FIELD	
09 65 00.RFT2	TARKETT	CONTOUR/ COLOR BEAM	C121 FLANNEL, EMBOSS: QUARRY	9" X 36"	ACCENT	
09 65 00.RFT3	TARKETT	CONTOUR/ COLOR BEAM	C120 ECLIPSE, EMBOSS: QUARRY	9" X 36"	ACCENT	
BOD: 1100 CROSS PIECE GRILLE; FINISH:						
09 65 13.RB1	JOHNSONITE	TRADITIONAL WALL BASE	CHARCOAL	4"	FIELD	
RUBBER STAIR TREAD & RUBBER TILE						
09 65 13.RSR	NOT IN USE	NOT IN USE				
09 65 19 RT1	NOT IN USE	NOT IN USE				
RESILIENT ATHLETIC FLOORING						
09 65 66.PRA1	TARKETT SPORTS	REPLAY	RA1 MELLOWED	18"MM THICKNESS, ROLLS	WEIGHT ROOM, FIELD	
09 65 66.PRA2	TARKETT SPORTS	REPLAY	517 CLOUD	18"MM THICKNESS, ROLLS	WEIGHT ROOM, ACCENT	
09 65 66.PRA3	TARKETT SPORTS	REPLAY	507 NIGHT	18"MM THICKNESS, ROLLS	WEIGHT ROOM, ACCENT	
TERRAZZO FLOORING						
09 66 00.TZE1	TERRAZZO & MARBLE	TERROXY	TBD		LEVEL 1 MAIN CORRIDOR	STAIR TREADS
09 66 00.TZE2	TERRAZZO & MARBLE	TERROXY	TBD		ACCENT	
EPOXY FLOORING						
09 67 00.FF1	PATCRAFT	RESIN FLAKE	STYLE: TRADITIONAL FLAKE, COLOR: F0130 GLINT		RESTROOMS AND TRAINING	
09 67 00.FF2	PATCRAFT	RESIN FLAKE	STYLE: TRADITIONAL FLAKE, COLOR: F0570 ASTRAL		LOCKER ROOMS	LOGO AT VARSITY LOCKER ROOM
CARPET						
09 68 00.CP1	NOT IN USE	NOT IN USE				
09 68 00.CP2	NOT IN USE	NOT IN USE				
09 68 00.CP3	TARKETT	ASSERTIVE ACTION 04837	STEELWORK 26202	POWERBOND RS	WALK OFF CARPET	
INTERIOR WALL PANELS						
ACOUSTICAL MATERIALS						
09 84 00.ARC1	ACOUFELT	SHAPES WALLTILE, HEXAGON	COLOR: TU60 TURMERIC	LARGE 24"W X 20.78" H, THICKNESS: 1"	WEIGHT ROOM	
09 84 00.ARC2	ACOUFELT	SHAPES WALLTILE, HEXAGON	COLOR: GR02 GREY	LARGE 24"W X 20.78" H, THICKNESS: 1"	WEIGHT ROOM	
09 84 00.ARC3	ACOUFELT	SHAPES WALLTILE, HEXAGON	COLOR: CH01 CHARCOAL	LARGE 24"W X 20.78" H, THICKNESS: 1"	WEIGHT ROOM	
PAINT						
09 90 00.P1	SHERWIN WILLIAMS		SW 7014 EIDER WHITE		FIELD	
09 90 00.P2	SHERWIN WILLIAMS		SW 7066 GRAY MATTERS		ACCENT	
09 90 00.P3	SHERWIN WILLIAMS		SW 7068 GRIZZLE GRAY		ACCENT, DOOR FRAMES, GYP CEILING AT WEIGHT ROOM	
09 90 00.P4	SHERWIN WILLIAMS		BRANDING GOLD		SPIRIT COLOR	CONFIRM WITH DISTRICT
09 90 00.P5	SHERWIN WILLIAMS		SW 6991 BLACK MAGIC		SPIRIT COLOR, EXPOSED STRUCTURE	
09 90 00.P6	SHERWIN WILLIAMS		SW7014 EIDER WHITE (EPOXY FINISH)		CMU WALLS WHERE INDICATED	
09 90 00.P7	SHERWIN WILLIAMS		SW 7066 GRAY MATTERS (EPOXY FINISH)			
09 90 00.P8	SHERWIN WILLIAMS		BRANDING GOLD (EPOXY FINISH)		SPIRIT COLOR	CONFIRM WITH DISTRICT
09 90 00.P9	SHERWIN WILLIAMS		SW 6991 BLACK MAGIC (EPOXY FINISH)			
SIGNAGE						
10 14 00.RID1	FORMICA		COLOR: TBD		ROOM SIGNAGE	TOP
10 14 00.RID2	FORMICA		COLOR: TBD		ROOM SIGNAGE	BOTTOM
TOILET COMPARTMENTS/PARTITIONS						
10 21 13.19.PTC1	SCRANTON	HINDY HIDERS	STAINLESS GRIP EX		RESTROOMS	
CORNER GUARDS/WALL PROTECTION						
10 26 00.CG1	KOROSEAL	KOROGARD	COLOR TO BE SELECTED DURING SUBMITTALS		WHERE APPLICABLE	
WINDOW TREATMENT						
12 21 13.HB1	HUNTER DOUGLAS	2" FAUX WOOD BLINDS			REF TO DRAWINGS	HORIZONTAL BLINDS
12 24 00.SB1	DRAPER	SUNBLOC SERIES			REF TO DRAWINGS	WINDOW SHADE BLACKOUT FABRIC
12 24 00.SF1	DRAPER	SHEERWEAVE SERIES			REF TO DRAWINGS	WINDOW SHADE FABRIC
SOLID SURFACE						
12 36 00.SCT1	WILSONART	SOLID SURFACE COUNTERTOPS	AVALANCHE MELANGE, 9175ML		COUNTERTOPS WHERE APPLICABLE	WILL BE PROVIDED THROUGH DIRTT
12 36 00 SCT2	WILSONART	SOLID SURFACE WINDOW SILLS	FROSTY WHITE, 1573SL		WINDOW SILLS	AT ALL WINDOWS EXCEPT CLERESTORY WINDOWS
MISC.						
10 51 13.AL	METAL LOCKERS				LOCKER ROOM	METAL LOCKERS
10 12 00.DCR	CLARIDGE	370 SERIES RECESSED DISPLAY CASE				

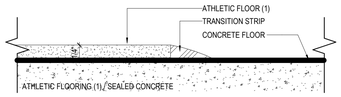




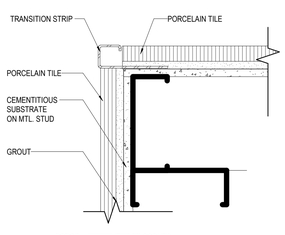








2 TYP INT FLOOR TRANSITIONS
12" = 1'-0"



PORCELAIN WALL TILE AT CORNER

1 INT WALL TRANSITIONS
12" = 1'-0"

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PKG 3A - GPHS NEW FIELDHOUSE

1100 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

REGISTERED ARCHITECT
JAY LEPICOVSKY
25977
STATE OF TEXAS

6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

CHECKED BY: Checker

DRAWN BY: Author

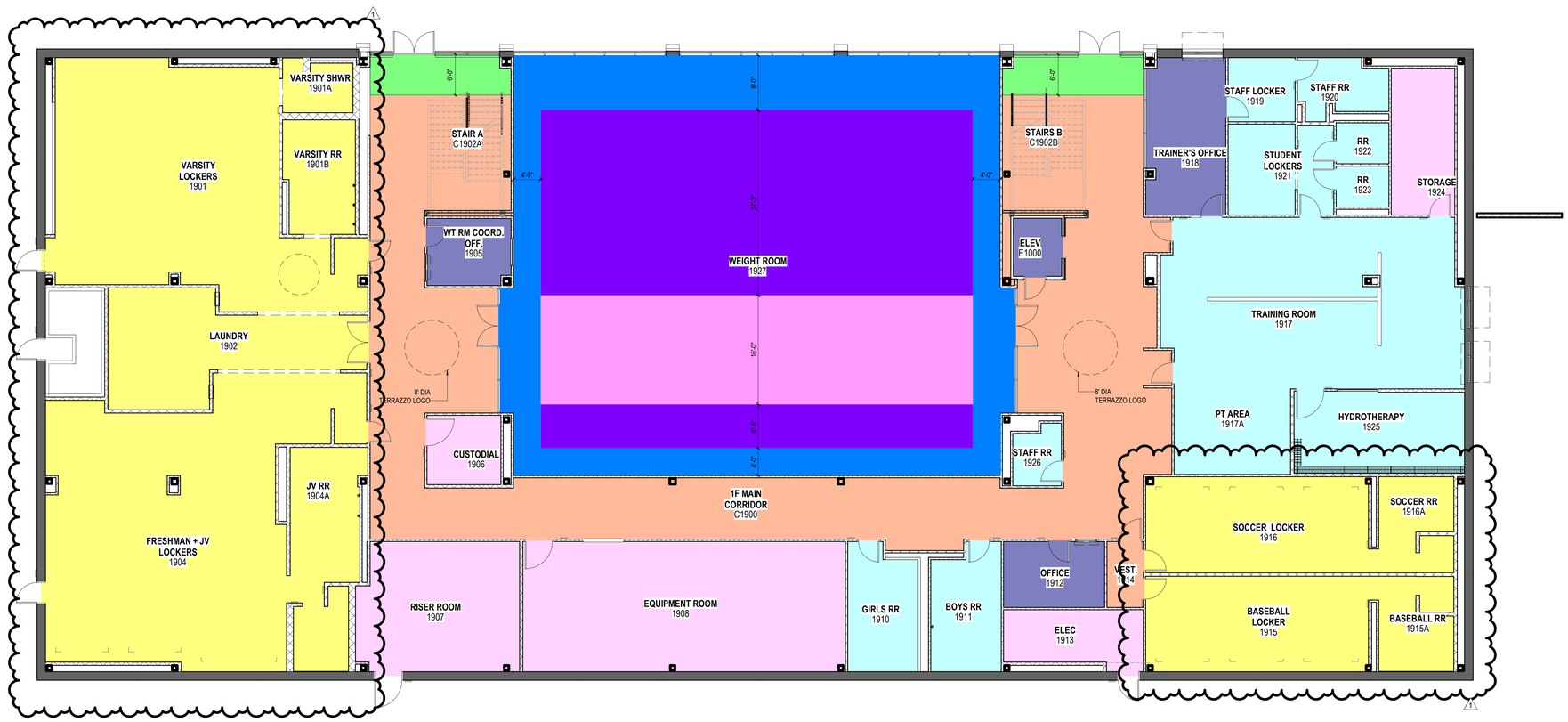
FINISH SCHEDULE

A-900

Plot Stamp:
6/25/2025 9:00:23 AM

LEVEL 1 - OVERALL FINISH PLAN
A-901
FOR BLUEBEAM LABELING/OCR:

0"
1"



01 LEVEL 1 - OVERALL FINISH PLAN
1/8" = 1'-0"

GENERAL FLOOR FINISH NOTES

1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
4. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
5. CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
6. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
7. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS U.N.O.. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCER STRIPS.
8. REFER TO AF201 FOR FLOOR TRANSITIONS AT THRESHOLD.
9. GENERAL CONTRACTOR TO SUBMIT FLOORING PATTERN LAYOUT WITH STRIPING COLORS AND STRIPING WIDTH AND NOTIFY ARCHITECT. CONTRACTOR SHALL NOT PROCEED WITH THE FLOORING INSTALLATION UNTIL LAYOUT IS APPROVED BY ARCHITECT.

KEYNOTE LEGEND

NUMBER	DESCRIPTION

FLOOR FINISH LEGEND

- 03 35 00.CS1 SEALED CONCRETE
- 09 65 00.RFT1 VINYL TILE
- 09 65 00.RFT2 VINYL TILE
- 09 65 00.RFT3 VINYL TILE
- 09 67 00.FF1 EPOXY FLOORING
- 09 67 00.FF2 EPOXY FLOORING
- 09 65 66.PRA1 RUBBER FLOORING, ROLLS
- 09 65 66.PRA2 RUBBER FLOORING, ROLLS
- 09 65 66.PRA3 RUBBER FLOORING, ROLLS
- 09 66 00.TZ1 TERRAZZO FLOORING
- 09 68 00.CP3 WALK- OFF

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PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

NORTH: PLAN = TRUE

REGISTERED ARCHITECT
JAN LEPICOVSKY
25577
STATE OF TEXAS

6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	2025-06-24

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DRAWN BY: Author

LEVEL 1 - OVERALL FINISH PLAN

A-901

Plot Stamp:
6/25/2025 9:04:59 AM

LEVEL 2 - OVERALL FINISH PLAN
A-902
FOR BLUEBEAM LABELING/OCR:

0"
1"

01 LEVEL 2 - OVERALL FINISH PLAN
1/8" = 1'-0"

GENERAL FLOOR FINISH NOTES

1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
4. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
5. CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
6. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
7. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS U.N.O.. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCER STRIPS.
8. REFER TO **AF201** FOR FLOOR TRANSITIONS AT THRESHOLD.
9. GENERAL CONTRACTOR TO SUBMIT FLOORING PATTERN LAYOUT WITH STRIPING COLORS AND STRIPING WIDTH AND NOTIFY ARCHITECT. CONTRACTOR SHALL NOT PROCEED WITH THE FLOORING INSTALLATION UNTIL LAYOUT IS APPROVED BY ARCHITECT.

KEYNOTE LEGEND

NUMBER	DESCRIPTION

FLOOR FINISH LEGEND

- **03 35 00.CS1** SEALED CONCRETE
- **09 65 00.RFT1** VINYL TILE
- **09 65 00.RFT2** VINYL TILE
- **09 65 00.RFT3** VINYL TILE
- **09 67 00.FF1** EPOXY FLOORING
- **09 67 00.FF2** EPOXY FLOORING
- **09 65 66.PRA1** RUBBER FLOORING, ROLLS
- **09 65 66.PRA2** RUBBER FLOORING, ROLLS
- **09 65 66.PRA3** RUBBER FLOORING, ROLLS
- **09 66 00.TZ1** TERRAZZO FLOORING
- **09 68 00.CP3** WALK- OFF

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PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

NORTH: PLAN TRUE

REGISTERED ARCHITECT
JAN LEPICOVSKY
25572
STATE OF TEXAS

6/10/2025

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date

CHECKED BY: Checker

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LEVEL 2 - OVERALL FINISH PLAN

A-902

Plot Stamp:
6/25/2025 9:06:13 AM

0"
1"

1ST FLOOR MECHANICAL PLAN
M-101

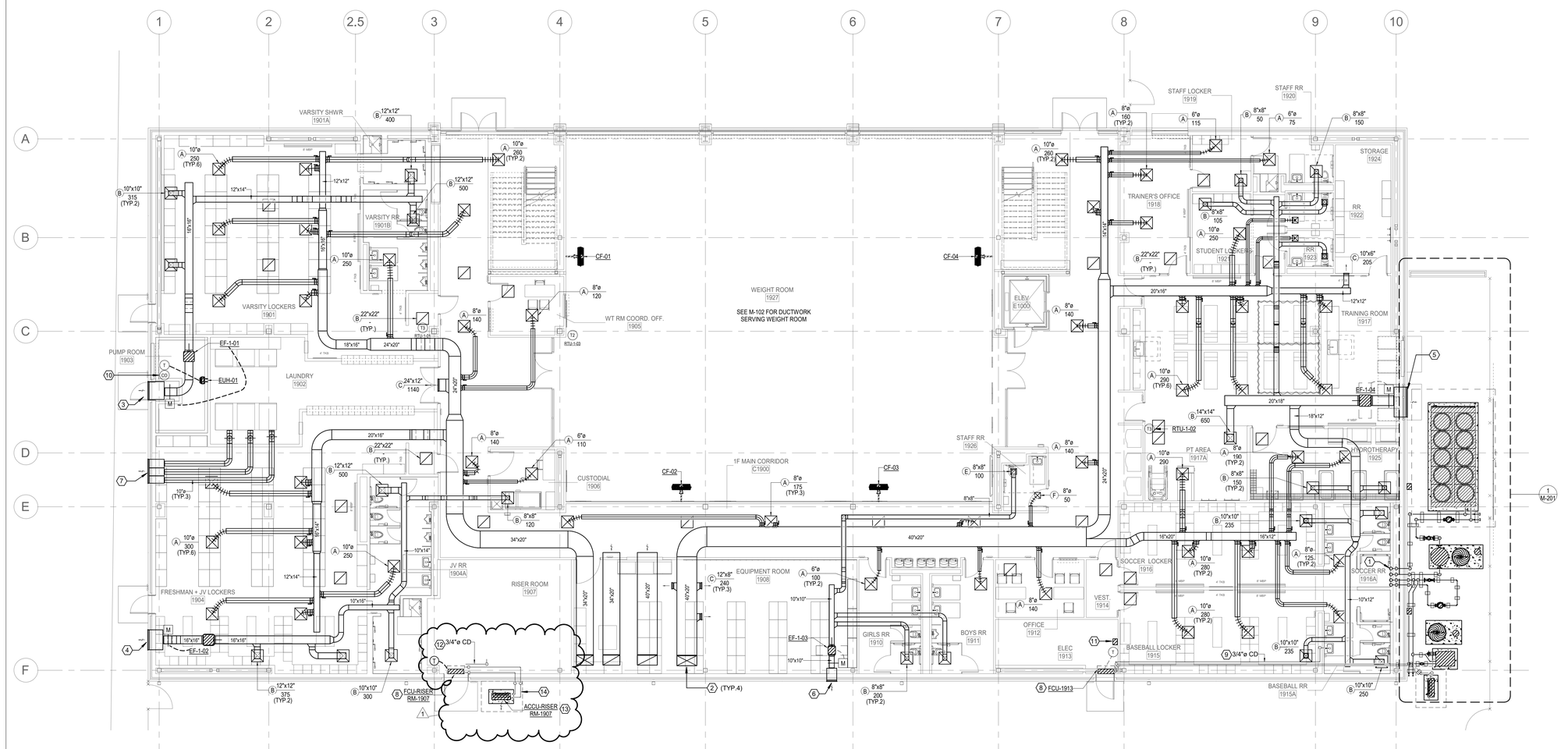
FOR BLUEBEAM LABELING/OCR:

MECHANICAL GENERAL NOTES:

1. COORDINATE TEMPERATURE SENSOR ROUGH-INS WITH DIRTT WALL SYSTEM MANUFACTURER.

MECHANICAL KEYED NOTES:

1. ROUTE CHWS/R & HWS/R PIPING FROM PLUMBING CHASE THROUGH FIRST FLOOR PLENUM SPACE AND UP TO 2ND FLOOR. SEE M-102 FOR CONTINUATION.
2. ROUTE SUPPLY AND RETURN DUCT UP TO 2ND FLOOR. SEE M-102 FOR CONTINUATION.
3. PROVIDE AMCA 550/540 LOUVER SIZED FOR 1530 CFM WITH A MINIMUM FREE AREA OF 3.05 FT². CONFIRM FINAL SIZE AND FINISH WITH ARCHITECT. VERIFY LOUVER IS AT LEAST 3 FT AWAY FROM ANY OPERABLE OPENING INTO THE BLDG.
4. PROVIDE AMCA 550/540 LOUVER SIZED FOR 1670 CFM WITH A MINIMUM FREE AREA OF 3.35 FT². CONFIRM FINAL SIZE AND FINISH WITH ARCHITECT.
5. PROVIDE AMCA 550/540 LOUVER SIZED FOR 2425 CFM WITH A MINIMUM FREE AREA OF 4.85 FT². CONFIRM FINAL SIZE AND FINISH WITH ARCHITECT.
6. PROVIDE AMCA 550/540 LOUVER SIZED FOR 500 CFM WITH A MINIMUM FREE AREA OF 1.0 FT². CONFIRM FINAL SIZE AND FINISH WITH ARCHITECT.
7. PROVIDE AMCA 550/540 LOUVER SIZED FOR 2400 CFM WITH A MINIMUM FREE AREA OF 4.8 FT². FOR THE DRYER EXHAUST OUTLET. PARTITION LOUVER PLENUM SUCH THAT EXHAUST SYSTEMS ARE COMPLETELY ISOLATED FROM ONE ANOTHER. APPLY FIRE WRAP TO ALL SIDES OF LOUVER. CONFIRM FINAL SIZE AND FINISH WITH ARCHITECT. DO NOT PROVIDE MESH SCREEN.
8. PROVIDE WALL MOUNTED FAN COIL UNIT. ROUTE REFRIGERANT TO ASSOCIATED OUTDOOR UNIT. REFRIGERANT PIPING SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATIONS. EXPOSED PIPING SHALL BE WRAPPED IN ALUMINUM JACKETING.
9. ROUTE 3/4"Ø CONDENSATE DRAIN LINE TO NEAREST LAVATORY TAIL-PIECE. REFER TO PLUMBING DRAWINGS FOR EXACT DRAIN LOCATION
10. CARBON MONOXIDE SENSOR; REFER TO SEQUENCE OF OPERATION FOR ADDITIONAL DETAILS.
11. PROPOSED LOCATION OF DDC PANEL. COORDINATE EXACT LOCATION WITH EMCS CONTRACTOR.
12. ROUTE 3/4" Ø CONDENSATE DRAIN LINE TO NEAREST FLOOR SINK IN RISER ROOM. REFER TO PLUMBING DRAWINGS FOR EXACT DRAIN LOCATION.
13. PROVIDE MINI SPLIT CONDENSING UNIT WITH 12" TALL HOUSEKEEPING PAD THAT EXTENDS AT MINIMUM 6" PAST ALL SIDES OF UNIT.GC TO COORDINATE PAD DIMENSIONS
14. ALL OUTDOOR REFRIGERANT PIPING SHALL BE WRAPPED WITH ALUMINUM JACKET. PROVIDE WALL SUPPORTS AT EVERY 3' INTERVALS.



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

Plot Stamp:
6/25/2025 10:33:45 AM

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LEAF ENGINEERS

PKG 3A - GPHS NEW FIELDHOUSE

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

1000 Keene St.
Galena Park, TX 77547

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
MITAL J. PATEL
111622
LICENSED
PROFESSIONAL ENGINEER

June 10, 2025
LEAF ENGINEERS
F-18672

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	06/24/2025

CHECKED BY: MP
DRAWN BY: CT

1ST FLOOR MECHANICAL PLAN

M-101

2ND FLOOR MECHANICAL PLAN
M-102
FOR BLUEBEAM LABELING/OCR:

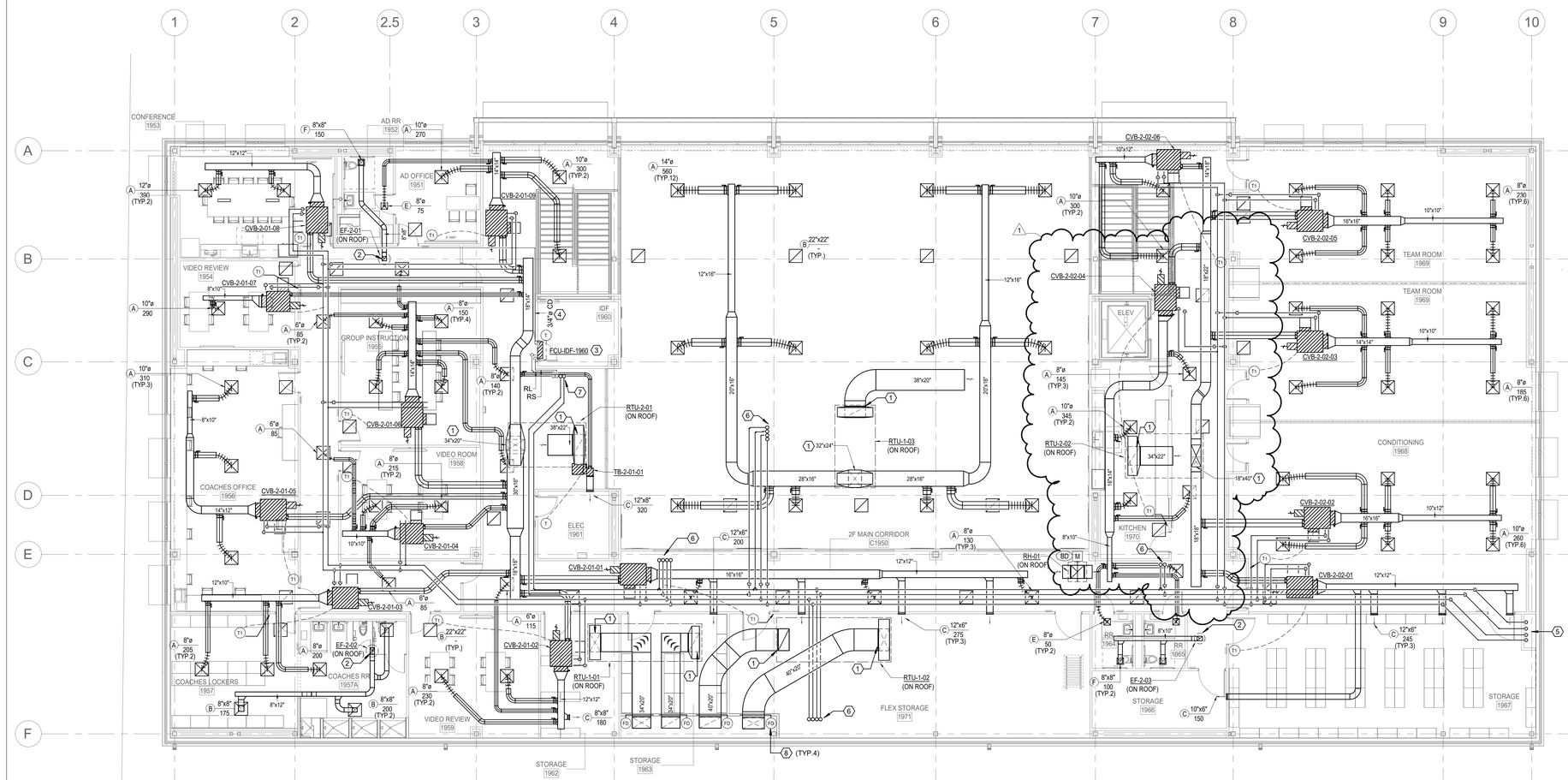
0"
1"

MECHANICAL GENERAL NOTES:

1. COORDINATE TEMPERATURE SENSOR ROUGH-INS WITH DIRTT WALL SYSTEM MANUFACTURER.

MECHANICAL KEYED NOTES:

1. ROUTE DUCT UP THROUGH ROOF TO ASSOCIATED ROOFTOP UNIT. PROVIDE TRANSITIONS AS REQUIRED TO MAKE CONNECTION.
2. ROUTE DUCT UP THROUGH ROOF TO ASSOCIATED ROOFTOP UNIT. PROVIDE TRANSITIONS AS REQUIRED TO MAKE CONNECTION.
3. PROVIDE WALL MOUNTED FAN COIL UNIT. ROUTE REFRIGERANT PIPING UP THROUGH ROOF TO ASSOCIATED OUTDOOR UNIT. REFRIGERANT PIPING SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATIONS. EXPOSED PIPING SHALL BE WRAPPED IN ALUMINUM JACKETING.
4. ROUTE 3/4"Ø CONDENSATE DRAIN LINE TO NEAREST LAVATORY TAIL-PIECE. REFER TO PLUMBING DRAWINGS FOR EXACT DRAIN LOCATION.
5. CHWS/R & HWS/R PIPING FROM LOWER LEVEL THRU CHASE; REFER TO M-101 SHEET FOR CONTINUATION.
6. HYDRONIC PIPING UP TO ROOF TO HYDRONIC AIR HANDLING UNIT; REFER TO ROOF PLAN M-301 FOR CONTINUATION.
7. CHWS/R, HWS/R & REFRIGERANT PIPING UP TO ROOF; REFER TO ROOF PLAN M-301 FOR CONTINUATION.
8. PROVIDE 1.5 HR RATED FIRE DAMPER FOR DUCTWORK AT CHASE PENETRATION.



1 **2ND FLOOR MECHANICAL PLAN**
SCALE: 1/8" = 1'-0"

Plot Stamp:
6/25/2025 10:33:47 AM

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LEAF ENGINEERS

PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St,
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
MITAL J. PATEL
111622
LICENSED
PROFESSIONAL ENGINEER
June 10, 2025
LEAF ENGINEERS
F-18672

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	06/24/2025

CHECKED BY: MP
DRAWN BY: CT

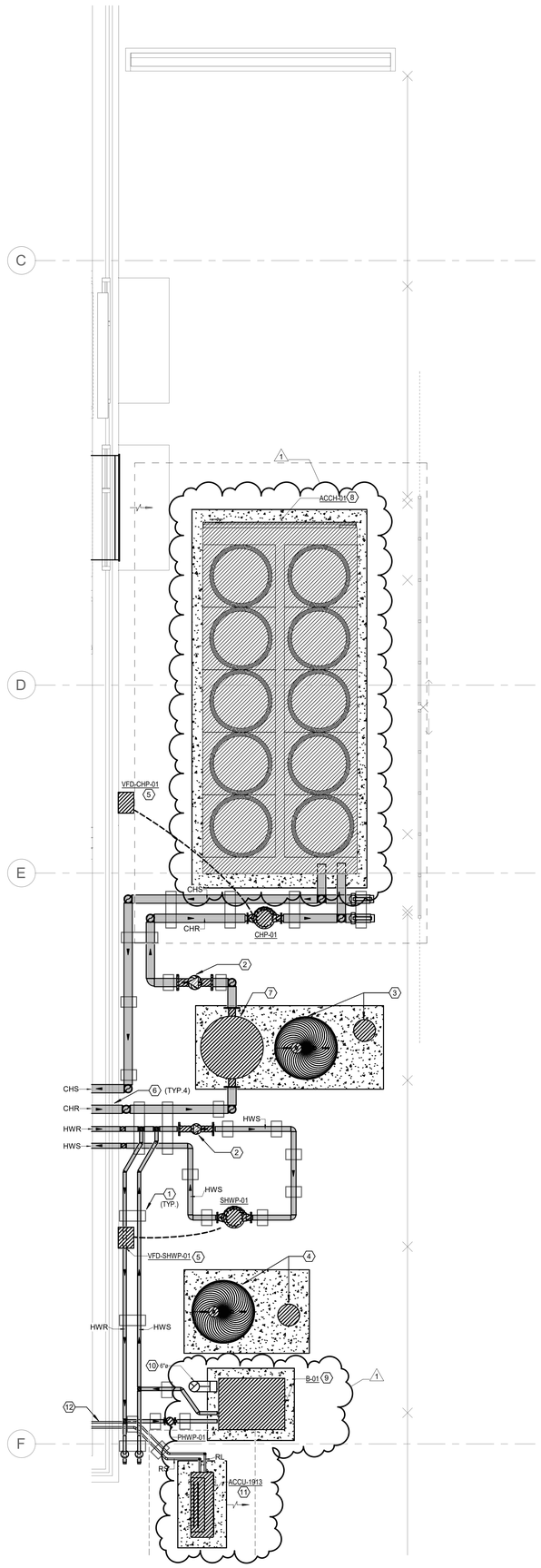
2ND FLOOR MECHANICAL PLAN

M-102

0"

1"

MECHANICAL ENLARGED PLANS
M-201
FOR BLUEBEAM LABELING/OCR:



MECHANICAL KEYED NOTES:

1. PROVIDE PIPE STANCHIONS.
2. COMBINATION AIR AND DIRT SEPARATOR.
3. INSULATED CHILLED WATER EXPANSION TANK AND CHEMICAL TREATMENT. PROVIDE WITH ALUMINUM JACKETING. PROVIDE WITH 12" TALL HOUSEKEEPING PAD THAT EXTENDS AT MINIMUM 6" PAST ALL SIDES. GC TO COORDINATE PAD DIMENSIONS AND LOCATION.
4. INSULATED HOT WATER EXPANSION TANK AND CHEMICAL TREATMENT. PROVIDE WITH ALUMINUM JACKETING. PROVIDE WITH 12" TALL HOUSEKEEPING PAD THAT EXTENDS AT MINIMUM 6" PAST ALL SIDES. GC TO COORDINATE PAD DIMENSIONS AND LOCATION.
5. PROVIDE VFD IN NEMA 3R ENCLOSURE.
6. CHWS/R & HWS/R PIPING TO PENETRATE THE BUILDING INTO PLUMBING CHASE AT ~ 5' AFF TO BE ABOVE DOMESTIC WATER LINES AND SANITARY LINES. SEE M-101 FOR CONTINUATION OF CHILLED AND HOT WATER LINES INTO 1ST FLOOR PLENUM SPACE.
7. 350 GALLON BUFFER TANK FOR CHILLED WATER SYSTEM. PROVIDE WITH 12" TALL HOUSEKEEPING PAD THAT EXTENDS AT MINIMUM 6" PAST ALL SIDES. GC TO COORDINATE PAD DIMENSIONS AND LOCATION.
8. AIR COOLED CHILLER. PROVIDE WITH A 12" TALL HOUSEKEEPING PAD THAT EXTENDS AT MINIMUM 6" PAST ALL SIDES. GC TO COORDINATE PAD DIMENSIONS AND LOCATION.
9. CONDENSING BOILER. PROVIDE WITH A 12" TALL HOUSEKEEPING PAD THAT EXTENDS AT MINIMUM 6" PAST ALL SIDES. GC TO COORDINATE PAD DIMENSIONS AND LOCATION. ROUTE CONDENSATE DRAIN LINE TO PROVIDED DRAIN. RE: CIVIL
10. TERMINATE 6" FLUE WITH RAIN CAP.
11. ROUTE UNIT'S REFRIGERANT PIPING TO ASSOCIATED INDOOR UNIT. REFRIGERANT PIPING SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATIONS. OUTDOOR PIPING SHALL BE WRAPPED IN ALUMINUM JACKETING. PROVIDE UNIT WITH 12" TALL HOUSEKEEPING PAD THAT EXTENDS AT MINIMUM 6" PAST ALL SIDES. GC TO COORDINATE PAD DIMENSIONS AND LOCATION.
12. REFRIGERANT PIPING TO PENETRATE THE BUILDING INTO PLUMBING CHASE. SEE M-101 FOR CONTINUATION OF REFRIGERANT PIPING INTO 1ST FLOOR PLENUM SPACE.

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

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PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
MITAL J. PATEL
111622
LICENSED PROFESSIONAL ENGINEER

June 10, 2025
LEAF ENGINEERS
F-16672

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	06/24/2025

CHECKED BY: MP
DRAWN BY: CT

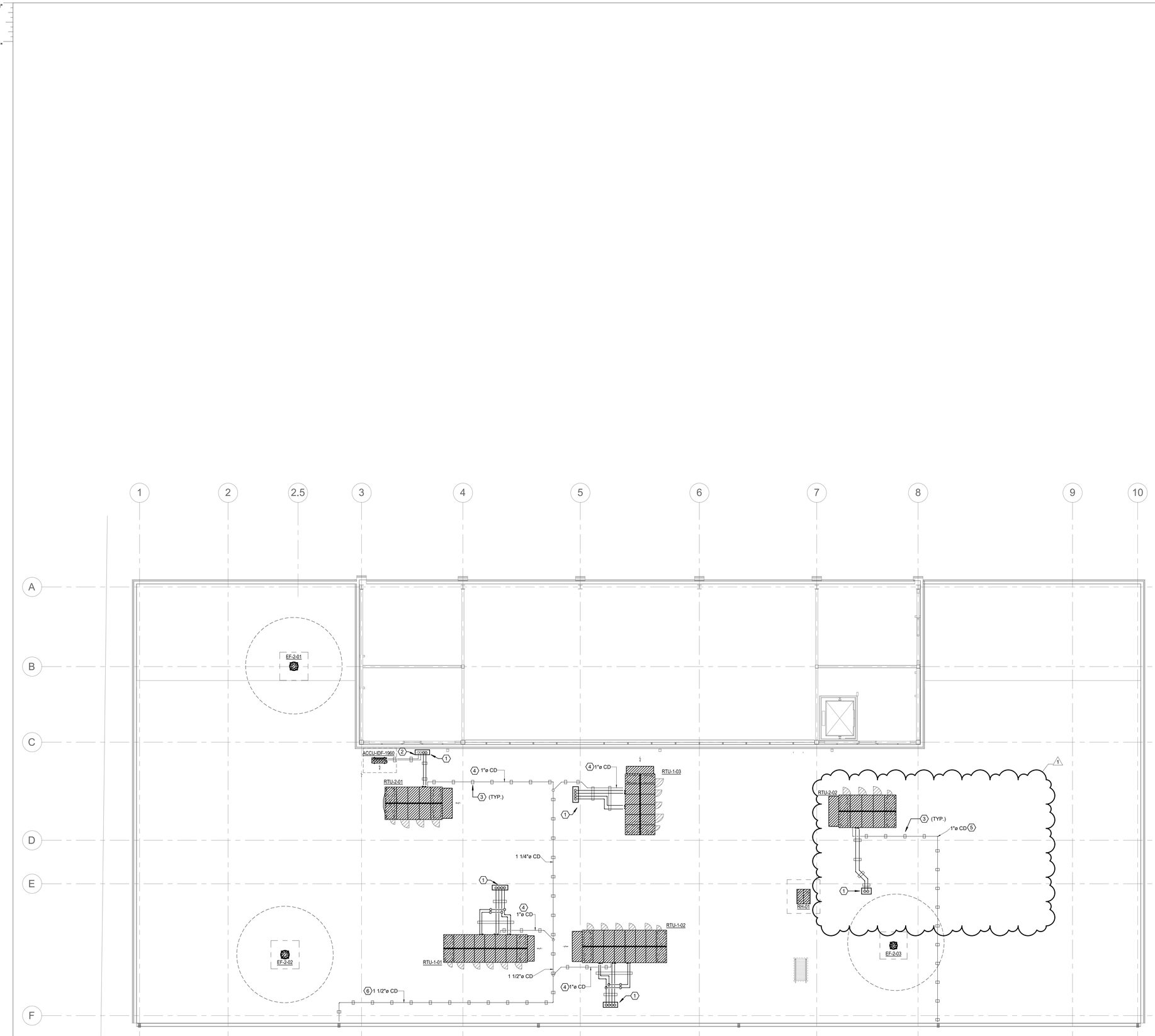
MECHANICAL ENLARGED PLANS

M-201

Plot Stamp:
6/25/2025 10:33:49 AM

ROOF MECHANICAL PLAN
M-301
FOR BLUEBEAM LABELING/OCR:

0"
1"



MECHANICAL KEYED NOTES:

1. HYDRONIC PIPING UP THROUGH ROOF TO ASSOCIATED UNIT. PROVIDE STAINLESS STEEL PIPING HOOD. REFER TO PIPING DIAGRAMS FOR ADDITIONAL DETAILS
2. ROUTE REFRIGERANT PIPING TO ASSOCIATED INDOOR UNIT. PROVIDE STAINLESS STEEL PIPING HOOD FOR PIPING ROOF PENETRATION.
3. PROVIDE PORTABLE PIPE SUPPORTS IN MAXIMUM HORIZONTAL SPACING OF 4'-0" INTERVALS. TYP.
4. ROUTE 1" RTU CONDENSATE DRAIN LINE TO MAIN CONDENSATE LINE LEADING TO NEAREST DOWNSPOUT.
5. ROUTE 1" RTU CONDENSATE DRAIN LINE TO NEAREST DOWNSPOUT.
6. ROUTE MAIN RTU CONDENSATE DRAIN LINE TO DOWNSPOUT INDICATED.

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

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LEAF ENGINEERS

PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St,
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
MITAL J. PATEL
111622
LICENSED
PROFESSIONAL ENGINEER
June 10, 2025
LEAF ENGINEERS
F-18672

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	06/24/2025

CHECKED BY: MP
DRAWN BY: CT

ROOF MECHANICAL PLAN

M-301

Plot Stamp:
6/25/2025 10:33:50 AM

MECHANICAL SCHEDULES
M-501
FOR BLUEBEAM LABELING/OCR

SCROLL WATER CHILLERS AIR-COOLED SCHEDULE

DESIGNATION	REFRIGERANT	COMPRESSOR TYPE	EVAPORATOR DATA								AMBIENT TEMP. (°F)	MAX. UNIT KW / TON (@ DESIGN CONDITIONS)	EER AT AHRI CONDITIONS		MANUFACTURER	MODEL NUMBER	DIMENSIONS (L x W x H) INCHES	WEIGHT (lbs)	ELECTRICAL DATA		
			CAPACITY (TONS)	E.W.T. (°F)	L.W.T. (°F)	GPM	MINIMUM EVAPORATOR FLOW RATE (GPM)	FOULING FACTOR	NO. OF PASS	MAX. P.D. (FEET)			FULL LOAD (EER)	IPLV (EER)					MCA	MOCP	VOLTS / Ø / HZ
ACCH-01	R-454B / R-32	SCROLL	110.0	56ºF	42ºF	189	175	0.0001	1.00	6.33	105ºF	1.23	10.30	16.94	TRANE	CGAM	205.2" x 88.4" x 92.5"	8,300	262	350	460 / 3 / 60

1. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA.
2. PROVIDE CHILLER WITH SINGLE POINT POWER CONNECTION, FACTORY MOUNTED NON-FUSED MOLDED CASE DISCONNECT SWITCH, AND FACTORY MOUNTED 120V RECEPTICLE.
3. CHILLER SHALL BE PROVIDED WITH BACNET INTERFACE CARD.
4. CONDENSER COILS SHALL BE FULLY DIPPED AND BAKED (E-COAT) WITH UV TOP COAT.
5. PROVIDE LOW AMBIENT HEAD PRESSURE CONTROL AS SPECIFIED.
6. CONTROL PANEL SHALL BE NEC409 AND UL508A COMPLIANT (HIGH SHORT CIRCUIT CURRENT RATING.)
7. PROVIDE COMPRESSOR SOUND BLANKETS; REFER TO SPECIFICATION 2.3.C FOR ULTRA LOW SOUND COMPRESSOR CONTROL REQUIREMENTS.
8. PROVIDE LOW SOUND CONDENSER FANS.
9. SOUND CRITERIA 30'-0" FROM THE COIL SIDE OF THE CHILLER: A-WEIGHTED SOUND PRESSURE LEVEL SHALL NOT EXCEED 70 DBA.
10. COMPRESSOR ACOUSTIC BLANKETS AND LOW SOUND FANS SHALL BE PROVIDED REGARDLESS IF SCHEDULED DBA IS MET WITHOUT.
11. ~~CONDENSER COILS SHALL BE ALUMINUM / COPPER. MICROCHANNEL IS NOT ALLOWED.~~
12. PROVIDE FACTORY INSTALLED HEAT TRACE FOR EVAPORATOR. ELECTRICAL CONTRACTOR SHALL PROVIDE SEPARATE 120/1/60 CIRCUIT TO THE EVAPORATOR.
13. PROVIDE UNIT WITH MULTIPLE REFRIGERANT CIRCUITS

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PACKAGED, OUTDOOR, CENTRAL-STATION HYDRONIC AIR HANDLING UNIT SCHEDULE

DESIGNATION	SERVICE	TYPE	ARRANGEMENT	MANUFACTURER	MODEL	DISCHARGE ARRANGEMENT	TYPE	DIMENSIONS(L x W x H)	WEIGHT(lbs)	SEE NOTE	INDOOR BLOWER DATA							
											TOTAL CFM	OUTSIDE AIR CFM	MIN. OUTSIDE AIR CFM	EST. ESP. (IN. WG.)	MOTOR H.P.	BRAKE HP	VFD H.P.	TYPE
RTU-1-01	1ST FLOOR	SINGLE ZONE VAV	HORIZONTAL DRAW-THRU	CARRIER	39MW	BOTTOM DISCHARGE	HYDRONIC	228" x 74" x 63"	4,600	1-19	5,970	3,200	3,200	1.0	7.5 HP	5.1 HP	7 1/2	DIRECT DRIVE-PLENUM FAN
RTU-1-02	1ST FLOOR	SINGLE ZONE VAV	HORIZONTAL DRAW-THRU	CARRIER	39MW	BOTTOM DISCHARGE	HYDRONIC	235" x 81" x 66"	4,800	1-19	7,180	3,000	3,000	1.0	7.5 HP	6.4 HP	7 1/2	DIRECT DRIVE-PLENUM FAN
RTU-1-03	WIEGHT ROOM	SINGLE ZONE VAV	HORIZONTAL DRAW-THRU	CARRIER	39MW	BOTTOM DISCHARGE	HYDRONIC	195" x 74" x 63"	3,800	1-19	6,720	1,600	480	1.0	(2) 5 HP	(2) 3.7 HP	10	DIRECT DRIVE-PLENUM FAN
RTU-2-01	2ND FLOOR	SINGLE DUCT VAV	HORIZONTAL DRAW-THRU	CARRIER	39MW	BOTTOM DISCHARGE	HYDRONIC	167" x 81" x 66"	3,600	1-19	7,695	1,200	480	1.0	(2) 3 HP	(2) 2.9 HP	7 1/2	DIRECT DRIVE-PLENUM FAN
RTU-2-02	2ND FLOOR	SINGLE DUCT VAV	HORIZONTAL DRAW-THRU	CARRIER	39MW	BOTTOM DISCHARGE	HYDRONIC	167" x 81" x 66"	3,600	1-19	6,755	1,600	640	1.0	(2) 3 HP	(2) 2.3 HP	7 1/2	DIRECT DRIVE-PLENUM FAN

DESIGNATION	MAIN COOLING COIL DATA									
	CFM OVER COIL	MAX. FACE VELOCITY (FPM)	GRAND SENSIBLE BTUH	GRAND TOTAL BTUH	EAT (°F DB)	EAT (°F WB)	LAT (°F DB)	GPM	EWT (°F DB)	LWT (°F DB)
RTU-1-01	5,970	500	210,503	364,362	87.6º	73.0º	55.0º	52	42.0º	56.0º
RTU-1-02	7,180	500	236,671	390,955	85.5º	71.3º	55.0º	56	42.0º	56.0º
RTU-1-03	6,720	500	198,029	299,017	[illegible]	68.6º	55.0º	43	42.0º	56.0º
RTU-2-01	7,695	500	214,472	308,135	80.8º	67.3º	55.0º	44	42.0º	56.0º
RTU-2-02	6,755	500	198,898	300,412	82.3º	68.6º	55.0º	43	42.0º	56.0º

DESIGNATION	RE-HEATING COIL DATA								PRE-HEATING COIL DATA								VOLTAGE / PH / HZ
	CFM OVER COIL	MAX. FACE VELOCITY (FPM)	GRAND TOTAL BTUH	EAT (°F DB)	LAT (°F DB)	GPM	EWT (°F DB)	LWT (°F DB)	CFM OVER COIL	MAX. FACE VELOCITY (FPM)	GRAND TOTAL BTUH	EAT (°F DB)	LAT (°F DB)	GPM	EWT (°F DB)	LWT (°F DB)	
RTU-1-01	5,970	750	286,794	40.5º	85.0º	14	140.0º	100.0º	5,970	750	110,646	37.8º	55.0º	6	140.0º	100.0º	480 / 3 / 60
RTU-1-02	7,180	750	294,516	47.0º	85.0º	15	140.0º	100.0º	7,180	750	78,084	44.9º	55.0º	4	140.0º	100.0º	480 / 3 / 60
RTU-1-03	6,720	750	203,904	56.9º	85.0º	10	140.0º	100.0º	NO PRE-HEAT COIL								480 / 3 / 60
RTU-2-01	NO RE-HEAT COIL								NO PRE-HEAT COIL								480 / 3 / 60
RTU-2-02	NO RE-HEAT COIL								NO PRE-HEAT COIL								480 / 3 / 60

1. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA.
2. ESTIMATED EXTERNAL STATIC PRESSURE INCLUDES LOSSES THROUGH DUCTWORK, AIR DEVICES, SOUND ATTENUATORS, ETC.
3. ROOFTOP UNIT INTERNAL STATIC PRESSURE SHALL INCLUDE LOSSES THROUGH COILS, CASING, INTERNAL DAMPERS, AND 0.75" W.G. FOR DIRTY FILTERS.
4. COOLING COILS SHALL HAVE A MINIMUM OF 6 ROWS AND A MAXIMUM OF 10 FINS PER INCH. PRESSURE DROP THROUGH COIL SHALL NOT EXCEED 15 FT. AT SCHEDULED GPM.
5. PROVIDE UNPOWERED 120V/15A GFCI CONVENIENCE OUTLET.
6. PROVIDE MERV 13 FILTERS.
7. PROVIDE FACTORY NEMA 3R ELECTRICAL PANEL MOUNTED ON UNIT FOR FIELD SUPPLIED VARIABLE FREQUENCY DRIVE. CONTRACTOR TO INSTALL VARIABLE FREQUENCY DRIVE IN THE NEMA 3R PANEL PROVIDED BY THE AHU MANUFACTURER.
8. COOLING COILS SHALL HAVE STAINLESS STEEL COIL CASINGS AND STAINLESS STEEL COIL SUPPORTS.
9. PROVIDE AIR HANDLERS WITH FACTORY MOUNTED AND TESTED UVC LIGHT SECTION DOWNSTREAM OF COOLING COIL WITH STAINLESS STEEL DRAIN PAN. PROVIDE WITH ACCESS DOOR KILL SWITCHES FOR THE UVC LIGHT.
10. PROVIDE FACTORY MOUNTED SHAFT GROUNDING KIT FOR AIR HANLDING UNIT MOTOR, NO EXCEPTIONS.
11. PROVIDE MODULATING MOTORIZED OUTSIDE AIR DAMPER. ACTUATOR BY CONTROLS CONTRACTOR.
12. ALL COILS SHALL BE FULLY DIPPED AND BAKED (E-COAT) WITH UV TOP COAT.
13. PROVIDE FLOAT SWITCH IN DRAIN PAN.
14. PROVIDE SMOKE DETECTOR IN THE RETURN AIR DUCT SYSTEM. (GREATER THAN OR EQUAL TO 2,000 CFM).
15. PROVIDE AIRFLOW MEASURING STATION (AFMS) AT OUTSIDE AIR INTAKE OPENING. AFMS SHALL BE DESIGNED TO OPERATE WITHOUT PRE-FILTRATION AND BE SPECIFICALLY DESIGNED TO OPERATE IN TURBULENT AIRSTREAMS.
16. PROVIDE ACCESS DOOR ON THE OPPOSITE SIDE OF THE PIPING CONNECTION.
17. PROVIDE WITH OUTSIDE AIR INTAKE RAIN HOOD.
18. PROVIDE 14" TALL INSULATED AND FULL PERIMETER FULLY WELDED WIND RATED CURB WITH HOLD DOWN BRACKETS; STRUCTURALLY CALCULATED TO MEET THE WIND REQUIREMENTS OF THE 2018 IBC. RATED FOR 155 MPH, THREE SECOND GUST. MANUFACTURER TO PROVIDE SIGNED AND SEALED DRAWINGS BY PROFESSIONAL ENGINEER OF THE RATED ASSEMBLY. CURB SHALL BE PROVIDED BY THE MANUFACTURER AND NOT BY OTHERS.
19. PROVIDE ACOUSTICAL STYLE ROOF CURBS WITH BRD ACOUSTICAL ROOF CURB TREATMENT; REFER TO DETAIL AND SPECIFICATION.

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CONDENSING BOILER SCHEDULE

DESIGNATION	TYPE	LOCATION	BURNER FUEL	MIN. OUTPUT (BTUH)	MIN. EFFICIENCY	FUEL CONSUMPTION (BTUH)	MANUFACTURER	MODEL NUMBER	GPM	E.W.T. (°F)	L.W.T. (°F)	FLUE SIZE (DIA.)	DIMENSIONS (L x W x H)	WEIGHT (LBS)	BOILER ELECTRICAL INFORMATION		CIRCULATING PUMP ELECTRICAL INFORMATION			
															MAX AMP	VOLT / Ø / HZ	DESIGNATION	MAX H.P.	FLA	VOLT / Ø / HZ
B-01	CONDENSING	MECH YARD	NAT. GAS	1,416,000	94%	1,500,000	CAMUS	AVENGER	47	100ºF	160ºF	6"	38" x 29.5" x 83"	1,530	8	120/1/60	PHWP-01	3/4	13.8	115/1/60

1. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA.
2. PROVIDE AUXILIARY PUMP AS REQUIRED BY MANUFACTURER TO CIRCULATE WATER AT BYPASS CONDITIONS. REFER TO ELECTRICAL DRAWINGS.
3. PROVIDE CATEGORY IV FLUE PIPE, INNER PIPE OF AL29-4C AND OUTER PIPE OF 430 STAINLESS STEEL.
4. PROVIDE WITH A CONDENSATE NEUTRALIZATION KIT WITH SCHEDULE 8-CPVC CONDENSATE PIPING.
5. CONDENSING BOILER HEAT EXCHANGER SHALL BE OF STAINLESS STEEL OR CAST IRON. COPPER HEAT EXCHANGERS ARE NOT ACCEPTABLE; REFER TO SPECIFICATION.
6. BOILER MANUFACTURER SHALL PROVIDE CONTROLS FOR BOILER SEQUENCING AND CONTROL. BAS SHALL INTERFACE TO BOILER CONTROL PANEL.
7. MANUFACTURER SHALL PROVIDE BACNET INTERFACE CARD ANY ACCESSORIES REQUIRED TO FACILITATE 2-WAY COMMUNICATION WITH THE BAS CONTRACTOR'S SYSTEM. THIS INCLUDES, BUT IS NOT LIMITED TO, FURNISHING, INSTALLING AND PROGRAMMING OF COMMUNICATION CARD (i.e. BACnet)
8. BOILER TO ENABLE RESPECTIVE CIRCULATING PUMP. IF SEPARATE POWER CONNECTION IS REQUIRED, THE BOILER REPRESENTATIVE IS RESPONSIBLE FOR PROVIDING LABOR + MATERIALS TO PROPERLY CONTROL.
9. FLUE PIPING SHALL BE PROVIDED AND SUBMITTED BY BOILER DISTRIBUTOR AFTER BOILER SUBMITTAL HAS BEEN APPROVED BY ENGINEER. FLUE PIPE SHALL NOT BE SUBMITTED BY ANY OTHER PARTY OTHER THAN THE BOILER SALES REPRESENTATIVE AWARDED THE PROJECT. FLUE PIPE SHALL BE INSTALLED BY MECHANICAL CONTRACTOR.
10. PROVIDE FIRE-TUBE BOILER RATED FOR OUTDOOR OPERATION.

HYDRONIC PUMP SCHEDULE

DESIGNATION	SERVICE	TYPE	NOTES	GPM	HEAD (FT. H20)	EFFICIENCY	RPM (MAX.)	MAX. BHP	MOTOR H.P.	MOTOR VOLTAGE	MANUFACTURER	MODEL NUMBER	MINIMUM NPSHR (FT.)
CHP-01	CH-01	SPLIT COUPLED VERTICAL IN-LINE	1-4	189	65'	69%	1,800	4.49	7.5	460 / 3 / 60	PENTAIRE	382B-SC	9.98
SHWP-01	BUILDING LOOP	SPLIT COUPLED VERTICAL IN-LINE	1-4	67	60'	57%	1,800	1.77	3	460 / 3 / 60	PENTAIRE	382B-SC	10.64

1. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA.
2. PROVIDE PUMP RATED FOR OUTDOOR ENVIRONMENT AND WITH TEFC MOTOR ENCLOSURE.
3. PROVIDE VARIABLE FREQUENCY DRIVE FOR SOFT START AND BALANCING PURPOSES.
4. GREASABLE BEARINGS WITH ALEMITE FITTINGS ARE TO BE PROVIDED. SEALED BEARIGNS ARE UNACCEPTABLE.

SINGLE DUCT AIR TERMINAL UNIT SCHEDULE

TAG	INLET SIZE	COOLING CFM		STATIC PRESSURE		NC LEVELS		VOLTAGE	MANUFACTURER	MODEL
		MAX	MIN	INLET	UNIT P.D.	RAD.	DISCH.			
TB-2-01-01	6	320	160	1	0.35	13	13	120 / 1 / 60	TITUS	DESV

1. MAXIMUM NC LEVEL SHALL NOT EXCEED 25 AT 1 IN. STATIC PRESSURE.
2. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA.
3. PROVIDE VOLUME CONTROL DAMPER, MULTI-POINT FLOW SENSOR, CONTROLLER ENCLOSURE, POWER TRANSFORMER.
   REFER TO AIR TERMINAL UNITS SPECIFICATION.
4. COORDINATE WITH DRAWINGS FOR RIGHT OR LEFT-HAND CASING CONFIGURATION PRIOR TO ORDERING.

SERIES FAN-POWERED AIR TERMINAL UNITS WITH HOT WATER HEAT SCHEDULE

TAG	INLET SIZE	COOLING CFM		STATIC PRESSURE		HOT WATER HEATING COIL							VOLTAGE (V / PH / HZ)	MANUFACTURER	MODEL
		MAX	MIN	INLET	UNIT P.D.	CFM	MAX. FACE VELOCITY (FPM)	TOTAL BTUH	EAT	LAT	GPM	EWT / LWT (°F)			
CVB-02-01-01	14	1,415	425	1	0.3	1415	750	31,939	64.1	85	1.6	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-01-02	10	755	227	1	0.3	755	750	20,385	64.1	85	1.0	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-01-03	8	610	183	1	0.3	610	750	16,470	64.1	85	0.8	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-01-04	8	600	180	1	0.3	600	750	16,200	64.1	85	0.8	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-01-05	10	930	279	1	0.3	930	750	25,110	64.1	85	1.3	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-01-06	12	1,050	315	1	0.3	1050	750	28,350	64.1	85	1.4	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-01-07	6	290	87	1	0.3	290	750	7,830	64.1	85	0.4	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-01-08	10	780	234	1	0.3	780	750	21,060	64.1	85	1.1	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-01-09	10	945	284	1	0.3	945	750	25,515	64.1	85	1.3	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-02-01	10	880	264	1	0.3	880	750	23,760	64.1	85	1.2	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-02-02	14	1,560	468	1	0.3	1560	750	42,120	64.1	85	2.1	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-02-03	12	1,110	333	1	0.3	1110	750	29,970	64.1	85	1.5	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-02-04	12	1,225	368	1	0.3	1225	750	33,075	64.1	85	1.7	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-02-05	12	1,380	414	1	0.3	1380	750	37,260	64.1	85	1.9	140 / 100	277 / 1 / 60	TITUS	DTFS-F
CVB-02-02-06	8	600	180	1	0.3	600	750	16,200	64.1	85	0.8	140 / 100	277 / 1 / 60	TITUS	DTFS-F

1. MAXIMUM NC LEVEL SHALL NOT EXCEED 35 AT 1 IN. STATIC PRESSURE.
2. PROVIDE FACTORY MOUNTED INDUCED AIR INLET SOUND SOUND ATTENUATOR. REFER TO SERIES FLOW FAN POWERED VARIABLE VOLUME UNITS WITH HOT WATER HEAT DETAIL.
3. PROVIDE FACTORY MOUNTED FUSED DISCONNECT SWITCH IN CONTROL PANEL.
4. HOT WATER COILS SHALL BE 1 OR 2 ROWS AND A MAXIMUM OF 10 FINS PER INCH. WATER PRESSURE DROP SHALL NOT EXCEED 5 FT AT SCHEDULED GPM AND AIR PRESSURE
   DROP THROUGH THE COIL SHALL NOT EXCEED 0.24" W.G.
5. COORDINATE WITH DRAWINGS FOR RIGHT OR LEFT-HAND CASING CONFIGURATION PRIOR TO ORDERING.

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PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
MITAL J. PATEL
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LICENSED
PROFESSIONAL ENGINEER

June 10, 2025
LEAF ENGINEERS
F-18672

CLIENT		
Galena Park ISD		
DATE June 10, 2025	PROJECT NUMBER 240539	
DRAWING HISTORY		
No.	Description	Date
1	ADDENDUM 1	06/24/2025

CHECKED BY: MP
DRAWN BY: CT

MECHANICAL SCHEDULES

M-501

Plot Stamp:
6/25/2025 10:33:50 AM

0"

1"

MECHANICAL SCHEDULES
M-502
FOR BLUEBEAM LABELING/OCR:

DUCTLESS MINI-SPLIT SYSTEM AIR-CONDITIONERS SCHEDULE

EVAPORATOR SECTION			
INDOOR EVAPORATOR DESIGNATION	**FCU-1913**	**FCU-IDF-1960**	**FCU-RISER RM-1907**
SERVICE	1913-ELEC	1960-IDF	1907-RISER ROOM
MANUFACTURER	MITSUBISHI	MITSUBISHI	MITSUBISHI
MODEL NUMBER	PKA	PKA	MSZ
TYPE	WALL MOUNTED	WALL MOUNTED	WALL MOUNTED
WEIGHT (LBS.)	28	28	28
NOTES	ALL	ALL	ALL
FAN DATA			
SUPPLY CFM (HIGH / MEDIUM / LOW) SPEED	455 / 385 / 310 / 265	455 / 385 / 310 / 265	455 / 385 / 310 / 265
COOLING / HEATING COIL	DX	DX	DX
NOMINAL TONNAGE	**1.5 TONS**	**1.5 TONS**	**1.5 TONS**
ENTERING AIR EVAP (DB/WB) °F - COOLING MODE	80°F / 67°F	80°F / 67°F	80°F / 67°F
ENTERING AIR EVAP (DB/WB) °F - HEATING MODE	-	-	70°F / 60°F
NOMINAL BTUH COOLING (BTUH)	18,000	18,000	18,000
NOMINAL BTUH HEATING (BTUH)	-	-	19,000
AIR-COOLED CONDENSER			
DESIGNATION	**ACCU-1913**	**ACCU-IDF-1960**	**ACCU-RISER RM-1907**
SERVES	FCU-1913	FCU-IDF-1960	FCU-RISER RM-1907
LOCATION	GROUND	ROOF	GROUND
MANUFACTURER	MITSUBISHI	MITSUBISHI	MITSUBISHI
MODEL NUMBER	PUY	PUY	MUZ
EFFICIENCY (SEER)	20.2	20.2	20.2
VOLTS/PH/HZ	**208 / 1 / 60**	**208 / 1 / 60**	**208 / 1 / 60**
MCA	11.0	11.0	11.0
MOCP	28	28	28
AMBIENT TEMPERATURE °F	105°F	105°F	105°F
WEIGHT (LBS.)	99	99	99

NOTES

1. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA.
2. ESTIMATED EXTERNAL STATIC PRESSURE INCLUDES LOSSES THROUGH PLENUM, AIR DEVICES, ETC.
3. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. PROVIDE REMOTE WALL MOUNTED PROGRAMMABLE THERMOSTAT WITH BACnet INTERFACE.
5. PROVIDE INVERTER DRIVEN COMPRESSOR.
6. INDOOR UNIT IS POWERED BY THE OUTDOOR UNIT. INTERCONNECTING POWER WIRING FROM OUTDOOR TO INDOOR UNIT IS BY ELECTRICAL CONTRACTOR. REFER TO ELECTRICAL DRAWINGS.
7. PROVIDE MATCHING CONDENSING UNIT FROM SAME MANUFACTURER.
8. MANUFACTURER SHALL PROVIDE A CONDENSATE PUMP. PUMP SHALL BE POWERED BY THE UNIT AND SHALL NOT START / STOP UNLESS THE UNIT IS ENERGIZED / DE-ENERGIZED.

HVAC FANS SCHEDULE

DESIGNATION	LOCATION	SERVICE	MANUFACTURER	MODEL NUMBER	NOTES	WEIGHTS (LBS)	FAN DATA						
							TYPE	DRIVE	CFM (LOW/HIGH)	STATIC PRESSURE (" W.G.)	MOTOR HP. (MIN.)	RPM (MAX.)	VOLT / Ø / HZ
EF-1-01	VARSITY LOCKERS	VARSITY LOCKERS	GREENHECK	SQ	1-3	76	CENTRIFUGAL	DIRECT	1,530	0.35	3/4	980	120 / 1 / 60
EF-1-02	JV LOCKERS	JV LOCKERS	GREENHECK	SQ	1-3	76	CENTRIFUGAL	DIRECT	1,670	0.35	3/4	1,065	120 / 1 / 60
EF-1-03	1909-GIRLS RR	RESTROOMS	GREENHECK	SQ	1-3	34	CENTRIFUGAL	DIRECT	450	0.35	1/10	1,520	120 / 1 / 60
EF-1-04	1914A-BBALL RR	LOCKERS AND RESTROOMS	GREENHECK	SQ	1-3	76	CENTRIFUGAL	DIRECT	2,500	0.35	3/4	1,130	120 / 1 / 60
EF-2-01	ROOF	AD OFFICE RR	GREENHECK	CUE	1-5	45	CENTRIFUGAL	DIRECT	150	0.25	1/10	1,030	120 / 1 / 60
EF-2-02	ROOF	COACH LOCKERS	GREENHECK	CUE	1-5	45	CENTRIFUGAL	DIRECT	575	0.30	1/10	1,460	120 / 1 / 60
EF-2-03	ROOF	RESTROOMS	GREENHECK	CUE	1-5	38	CENTRIFUGAL	DIRECT	200	0.25	1/15	1,390	120 / 1 / 60
CF-01	WEIGHT ROOM	WEIGHT ROOM	GREENHECK	CUE	1,6,7	50	CENTRIFUGAL	AXIAL	8674 / 9612	-	1/2	1,075	120 / 1 / 60
CF-02	WEIGHT ROOM	WEIGHT ROOM	GREENHECK	CUE	1,6,7	50	CENTRIFUGAL	AXIAL	8674 / 9612	-	1/2	1,075	120 / 1 / 60
CF-03	WEIGHT ROOM	WEIGHT ROOM	GREENHECK	CUE	1,6,7	50	CENTRIFUGAL	AXIAL	8674 / 9612	-	1/2	1,075	120 / 1 / 60
CF-04	WEIGHT ROOM	WEIGHT ROOM	GREENHECK	CUE	1,6,7	50	CENTRIFUGAL	AXIAL	8674 / 9612	-	1/2	1,075	120 / 1 / 60

1. REFERENCE ELECTRICAL DRAWINGS FOR ELECTRICAL DATA.
2. REFERENCE SPECIFICATIONS FOR SEQUENCE OF OPERATIONS.
3. FAN SHALL BE PROVIDED WITH GREENHECK VARI-FLOW® CONTROL AND ECM MOTOR. STARTER SHALL BE PROVIDED BY FAN MANUFACTURER. JUNCTION BOX AND VARI-FLOW TRANSFORMER SHALL BE FACTORY MOUNTED AND WIRED.
4. REFERENCE ARCHITECTURAL DRAWINGS FOR ROOF CURB DETAIL.
5. PROVIDE UPBLAST FAN DESIGNED TO WITHSTAND HIGH WIND SPEEDS UP TO 155 MPH.
6. PROVIDE WITH 2-SPEED FAN, TOTALLY ENCLOSED AND PERMANENTLY LUBRICATED MOTOR, OSCILLATING FAN, WITH WIRE GUARDS, OSHA COMPLIANT AND WALL BRACKET.
7. PROVIDE WALL MOUNTED CONTROLLER.

DIFFUSERS, REGISTERS & GRILLES SCHEDULE

DESIGNATION	MODEL NUMBER	NOISE CRITERIA (NC)	DESCRIPTION
A	TITUS TDCA-AA	25	24x24 MODULE SIZE, LAY-IN BORDER TYPE, 18"x18" NECK SIZE WITH ROUND DUCT CONNECTION SIZED AS INDICATED oN PLANS. NO OPPOSED BLADE DAMPER, ALL ALUMINUM CONSTRUCTION. FOR SHEETROCK CEILING INSTALLATION,PROVIDE WITH TITUS TRM ALUMINUM RAPID MOUNT FRAME.
B	TITUS PAR-AA	25	24x24 MODULE SIZE, LAY-IN BORDER TYPE, 22"x22" NECK SIZE UNLESS NOTED OTHERWISE, NO OPPOSED BLADE DAMPER, ALL ALUMINUM CONSTRUCTION. FOR SHEETROCK CEILING INSTALLATION, PROVIDE WITH TITUS TRM ALUMINUM RAPID MOUNT FRAME.
C	TITUS 300FS	25	DOUBLE DEFLECTION, 3/4" BLADE SPACING, FRONT BLADES PARALLEL TO SHORT DIMENSION, NO OPPOSED BLADEDAMPER, SURFACE MOUNTING BORDER TYPE WITH COUNTERSUNK HOLES. ALL ALUMINUM CONTSTRUCTION.
D	TITUS 350FL	25	3/4" BLADE SPACING, FRONT BLADES PARALLEL TO LONG DIMENSION, 35° FIXED DEFLECTION, NO OPPOSED BLADE DAMPER, SURFACE MOUNTING BORDER TYPE WITH COUNTERSUNK HOLES, ALL ALUMINUM CONSTRUCTION.
E	TITUS TDC-AA	25	12X12 MODULE SIZE, LAY-IN BORDER TYPE, 10"X10" NECK SIZE WITH ROUND DUCT CONNECTION SIZED AS INDICATED ON PLANS. NO OPPOSED BLADE DAMPER, ALL ALUMINUM CONSTRUCTION. FOR SHEETROCK CEILING INSTALLATION, PROVIDE WITH TITUS TRM ALUMINUM RAPID MOUNT FRAME.
F	TITUS PAR-AA	25	12X12 MODULE SIZE, LAY-IN BORDER TYPE, 10"x10" NECK SIZE UNLESS NOTED OTHERWISE, NO OPPOSED BLADE DAMPER, ALL ALUMINUM CONSTRUCTION. FOR SHEETROCK CEILING INSTALLATION, PROVIDE WITH TITUS TRM ALUMINUM RAPID MOUNT FRAME.

1. ALL DIFFUSER DESIGNATIONS MAY NOT BE USED ON PROJECT.
2. PROVIDE ROTO-TWIST CABLE OPERATED DAMPERS AT IN GYP BOARD CEILINGS.

HVAC GRAVITY VENTILATORS SCHEDULE

DESIGNATION	SERVICE	MANUFACTURER	MODEL	CFM	MAX. THROAT AREA (FT.²)/ THROAT SIZE (DIA./LxW)	P.D. (INCHES WG)	NOTES
RH-01	BUILDING RELIEF	GREENHECK	FGR	-	3.24 / 24" x 24"	-	1-4

1. MAXIMUM THROAT VELOCITY SHALL NOT EXCEED 600 FPM
2. PROVIDE STAINLESS STEEL BIRD SCREEN AND 12" PREFABRICATED ROOF CURB.
3. PROVIDE WITH GRAVITY WEIGHTED DAMPER SET TO OPEN AT 0.10" W.G.
4. PROVIDE ROOF HOOD DESIGNED TO WITHSTAND HIGH WIND SPEEDS UP TO 155 MPH.

ELECTRIC UNIT HEATER SCHEDULE

DESIGNATION	SERVICE	MANUFACTURER	MODEL	NOTES	BTUs	WEIGHT (LBS)	KW	AMPS	VOLT / Ø / HZ
EUH-1	PUMP ROOM	REZNOR	EUH	1-5	10,230	36	3.0	4.4	480 / 3 / 60

1. REFERENCE ELCTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS.
2. PROVIDE DIRECTIONAL LOUVER OUTLET.
3. PROVIDE ADJUSTABLE WALL MOUNTED THERMOSTAT AS INDICATED ON DRAWINGS.
4. UNIT HEATER SHALL BE FAN FORCED. RECOMMENDED MOUNTING HEIGHT: 9'-0"
5. NOT USED

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TX FIRM: BR 1608
HOUSTON, TX
713-366-0608

LEAF ENGINEERS

PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

KEY PLAN

NORTH: PLAN TRUE

STATE OF TEXAS
MITAL J. PATEL
111622
LICENSED
PROFESSIONAL ENGINEER

June 10, 2025
LEAF ENGINEERS
F-16672

CLIENT	
Galena Park ISD	
DATE: June 10, 2025	PROJECT NUMBER: 240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	06/24/2025

CHECKED BY: MP
DRAWN BY: CT

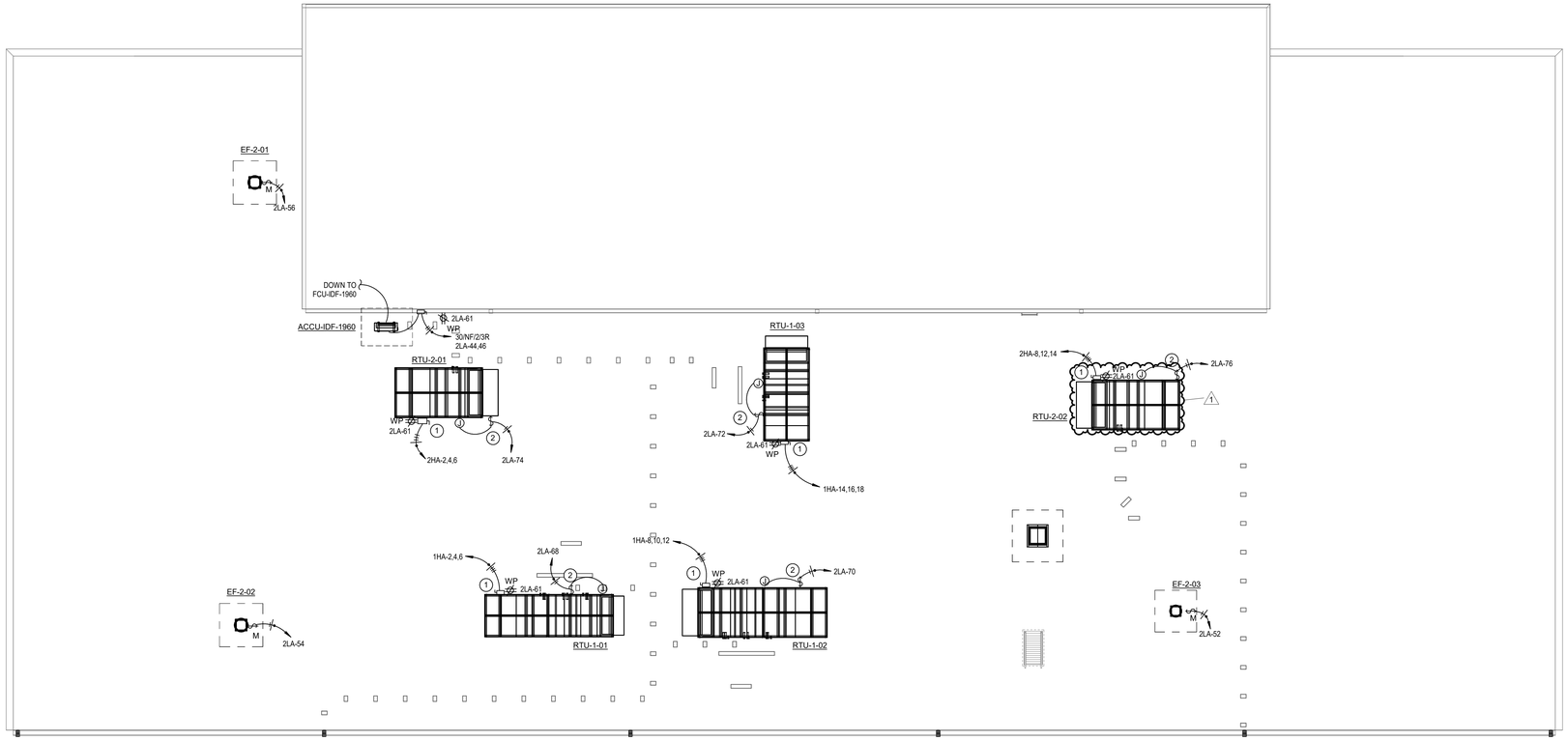
MECHANICAL SCHEDULES

M-502

Plot Stamp:
6/25/2025 10:33:50 AM

ELECTRICAL ROOF PLAN
E-301
FOR BLUEBEAM LABELING/OCR:

0"
1"



1 **ELECTRICAL ROOF PLAN**
SCALE: 1/8" = 1'-0"

POWER PLAN GENERAL NOTES:

1. FOR EQUIPMENT OR DEVICES SHOWN ON ARCHITECTURAL DRAWINGS THAT REQUIRE POWER AND NOT IDENTIFIED ON ELECTRICAL PLANS, ASSUME AT A MINIMUM A DUPELX OUTLET, A DEDICATED CIRCUIT WITH 2#12,1#12G,3/4"C, WITH HOMERUN TO NEAREST 120/208V PANEL. ITEMS SUCH AS BUT NOT LIMITED TO ROLL DOWN DOORS, COUNTER DOORS, OVERHEAD GRILLES, DISPLAY CASES, HAND DRYERS, WATER COOLERS, ICE MAKERS, GARBAGE DISPOSALS, OSCILLATING FANS, LCD's, PROJECTORS, DISHWASHERS, MOTORIZED PROJECTION SCREENS, ETC.
2. DATA/COMMUNICATION OUTLETS ARE SHOWN ON THIS DRAWING FOR COORDINATION PURPOSES ONLY. PROVIDE AND INSTALL ALL CONDUITS AND BACK BOXES REQUIRED BY LOW VOLTAGE SYSTEMS. COORDINATE WITH TS' DRAWINGS, DETAILS, ETC. AND ARCHITECTURAL DRAWINGS FOR EXACT QUANTITIES, LOCATIONS, AND REQUIREMENTS PRIOR TO ROUGH-IN.
3. CONTRACTOR TO PROVIDE CONNECTION FROM EXHAUST FANS TO ALL MOTORIZED BACKDRAFT DAMPERS AS REQUIRED, COORDINATE WITH MECHANICAL.
4. UNLESS OTHERWISE NOTED, ALL DISCONNECT SHOWN SHALL BE 30/NF/3 DISCONNECT.
5. CONTRACTOR SHALL NOTE THAT ALL 15 AMP AND 20 AMP NON-LOCKING TYPE RECEPTACLES THAT ARE NOT LOCATED WITHIN DEDICATED APPLIANCE SPACE AND ARE BELOW 66" ABOVE FINISHED FLOOR SHALL BE TAMPER RESISTANT TYPE RECEPTACLES. PER NEC 406.12.
6. FOR EACH DIRTT WALL CONTAINING ELECTRICAL DEVICES CONTRACTOR SHALL PROVIDE ONE HARDWIRED CONNECTION LOCATED ABOVE CEILING FOR EACH CIRCUIT LOCATED IN THAT WALL UNLESS OTHERWISE NOTED IN DRAWINGS. CONNECTION LOCATION SHALL BE COORDINATED WITH DIRTT SHOP DRAWINGS.
7. FOR EACH ROOM WITH CONTROLLED RECEPTACLES ONE 20 A POWER PACK COMPATIBLE WITH THE LIGHTING CONTROL SYSTEM SHALL BE PROVIDE FOR EACH CIRCUIT PROVIDING POWER TO CONTROLLED RECEPTACLES. BOTH SWITCHED AND UNSWITCHED POWER FOR THE CIRCUIT SHALL BE PROVIDED WITH A HARDWIRED CONNECTION AT EACH DIRTT WALL. ALL OTHER CONTROLLED RECEPTACLES SHALL BE SPLIT YOLK AND PROVIDED WITH BOTH SWITCHED AND UNSWITCHED POWER. SWITCHED RECEPTACLES SHALL BE CONTROLLED BY THE DIGITAL LIGHTING CONTROL SYSTEM AND SHALL A FOLLOW TIME CLOCK SCHEDULE PROVIDED BY OWNER.

POWER PLAN KEYED NOTES:

(1) EQUIPMENT STARTER DISCONNECT AND WEATHERPROOF RECEPTACLE ARE TO BE PROVIDED WITH THE UNIT. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL NOTE THAT THE WEATHERPROOF RECEPTACLE SHALL NOT BE POWERED FROM THE UNIT POWER.

(2) UVC LIGHT. ACCESS DOOR KILL SWITCH BY MECHANICAL. CONTRACTOR SHALL FIELD VERIFY MANUFACTURER ELECTRICAL REQUIREMENTS.

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HOUSTON, TX
713-366-0608

LEAF ENGINEERS

PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED
PROFESSIONAL ENGINEER
6/10/25

LEAF ENGINEERS
F-19672

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 1	2025-06-24

CHECKED BY: Checker
DRAWN BY: BB

ELECTRICAL ROOF PLAN

E-301

Plot Stamp:
6/24/2025 11:50:59 AM

ELECTRICAL PANEL SCHEDULES
E-701
FOR BLUEBEAM LABELING/DOCR:

0"
1"

Electrical...

AIC Rating: **65000**

Job: GPISD Field House

Volts - Phase: **480Y/277V-3PH 4W**

Job No.: 240539

DISTRIBUTI... **DPA**

Served From: UTILITY CO TRANSFORMER

Connected Load (KVA)

Cir. No.	Load Served	Amp/Poles	Wire and Conduit Size	Lighting	Conv. Outlets	Motors	Heating	Cooling	Others	Elect. Cooking	Spare/ Spaces	Elevators	Residential	Total KVA	Total Amps
1	2HA	225/3	SEE RISER	5.2	20.7	59.9	0.0	13.7	27.0	0.0				126.4	152.0
2	1HA	100/3	SEE RISER	7.2	0.0	9.6	3.0	0.0	0.0	0.0				19.8	23.9
3	ACCH-01	350/3	4#500, 1#3G, 3-1/2" C					217.7						217.7	261.9
4	RTU-01-01 (5 HP)	20/3	3#12, 1#12G, 1"C			6.3								6.3	7.6
5	RTU-01-02 (5 HP)	20/3	3#12, 1#12G, 1"C			6.3								6.3	7.6
6	RTU-01-03 (5 HP)	20/3	3#12, 1#12G, 1"C			6.3								6.3	7.6
7	XFMR 1TA	125/3	SEE RISER	1.9	17.7	17.8	0.0	0.0	34.7	0.0				72.0	86.6
8	SPACE													0.0	0.0
9	SPACE													0.0	0.0
10	SPACE													0.0	0.0
11	SPACE													0.0	0.0
12	SPACE													0.0	0.0
Total...				14.3	38.3	106.2	3.0	231.5	61.6	0.0	0.0	0.0	0.0	454.9	547.2
				--	--	--	--	--	--	--	--	--	--	--	--
Demand...				1.25	*	**	1.0	1.0	1.00	0.65	0.5	***	****	...	...
Total...				17.9	24.2	106.2	0.0	231.5	61.6	0.0	0.0	0.0	0.0	441.4	530.9

Largest... _____ KVA

* 100% of...
** 125% of...
*** Elevator...
****...
(1) PROVIDE METER MAIN, SEE ELECTRICAL RISER DIAGRAM FOR ADDITIONAL INFORMATION.

Date: 6/24/2025 | By: Designer

DISTRIBUTION PANEL:		DPA
MAINS (1)	TYPE:	MAIN BREAKER
	SIZE:	800 AMP
BUS SIZE	PHASE:	800 AMP
	NEUTRAL:	800 AMP
	GROUND:	PER NEC

Job: GPISD Field House | Job No. 240539 | AIC... **10000**

Mounting **SURFACE** | Main... **MLO** | Neutral **200%** | Voltage: **208Y/120V-3PH 4W** | Main... **100 AMPS** | Ground **Equipment Ground** | Lugs **FEED THRU**

PANEL: **1LG** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph.	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
					1664		0.00	WASHER #1-LAUNDRY	20/2	12	**1**	**A**	**2**	12	20/2	DRYER #1-LAUNDRY						790		0.00
					1664		0.00	-	-	-	**3**	**B**	**4**	-	-	-						790		0.00
					1664		0.00	WASHER #2-LAUNDRY	20/2	12	**5**	**C**	**6**	12	20/2	DRYER #2-LAUNDRY						790		0.00
					1664		0.00	-	-	-	**7**	**A**	**8**	-	-	-						790		0.00
					1664		0.00	WASHER #3-LAUNDRY	20/2	12	**9**	**B**	**10**	12	20/2	DRYER #3-LAUNDRY						790		0.00
					1664		0.00	-	-	-	**11**	**C**	**12**	-	-	-						790		0.00
							1.00	SPARE	20/1		**13**	**A**	**14**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**15**	**B**	**16**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**17**	**C**	**18**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**19**	**A**	**20**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**21**	**B**	**22**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**23**	**C**	**24**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**25**	**A**	**26**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**27**	**B**	**28**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**29**	**C**	**30**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**31**	**A**	**32**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**33**	**B**	**34**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**35**	**C**	**36**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**37**	**A**	**38**	10	30/3	SPD								0.00
							1.00	SPARE	20/1		**39**	**B**	**40**	-	-	-								0.00
							1.00	SPARE	20/1		**41**	**C**	**42**	-	-	-								0.00
0	0	0	0	0	9984	0	15.00	**TOTALS**								**TOTALS**	0	0	0	0	0	4742	0	12.00

LOAD SUMMARY

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description
0.0	0.0	0.0	0.0	0.0	14.7	0.0	27.0	Connected KVA
1.25	**	1.00	1.00	1.00	1.00	0.65	0.50	*Design Factors
0.0	0.0	0.0	0.0	0.0	14.7	0.0	13.5	Design KVA

Phase Load

Ph.	KVA
A	4.9
B	4.9
C	4.9

Panel Remarks:

*Input di...
**100% ...

	Con. KVA	Con. Amps		Des. KVA	Des. Amps
TOTAL	41.7	115.8		28.2	78.3

PANEL: **1LG**

Date: 6/24/2025 | By: Designer

Job: GPISD Field House | Job No. 240539 | AIC... **42000**

Mounting **SURFACE** | Main... **MCB (225A) (1)** | Neutral **100%** | Voltage: **480Y/277V-3PH 4W** | Main... **225 AMPS** | Ground **Equipment Ground** | Lugs **FEED THRU**

PANEL: **2HA** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph.	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
		1524					0.00	CVB-2-01-01	15/1	12	**1**	**A**	**2**	12	20/3	RTU-2-01			2632					
		803					0.00	CVB-2-01-02	15/1	12	**3**	**B**	**4**	-		(7.5 HP)			2632					
		803					0.00	CVB-2-01-03	15/1	12	**5**	**C**	**6**	-		-			2632					
		803					0.00	CVB-2-01-04	15/1	12	**7**	**A**	**8**	12	20/3	RTU-2-02			2632					
		803					0.00	CVB-2-01-05	15/1	12	**9**	**B**	**10**	-		(7.5 HP)			2632					
		1080					0.00	CVB-2-01-06	15/1	12	**11**	**C**	**12**	-		-			2632					
		803					0.00	CVB-2-01-07	15/1	12	**13**	**A**	**14**	12	15/3	CVB-2-02-03			1080					
		803					0.00	CVB-2-01-08	15/1	12	**15**	**B**	**16**	12	15/3	CVB-2-02-04			1080					
		803					0.00	CVB-2-01-09	15/1	12	**17**	**C**	**18**	12	15/3	CVB-2-02-05			1080					
		803					0.00	CVB-2-02-01	15/1	12	**19**	**A**	**20**	12	15/3	CVB-2-02-06			803					
		1524					0.00	CVB-2-02-02	15/1	12	**21**	**B**	**22**			SPACE								
							0.00	SPACE			**23**	**C**	**24**			SPACE								
0	0	10554	0	0	0	0	0.00	**TOTALS**								**TOTALS**	0	0	19833	0	0	0	0	

PANEL: **2HA** **2** **(Sectio...** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph.	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
2400							0.00	2ND FLOOR LTG	20/1	12	**25**	**A**	**26**	6	70/3	ELEVATOR			9412					
1300							0.00	2ND FLOOR CORR LTG	20/1	12	**27**	**B**	**28**	-	-	(25HP)			9412					
							0.00	SPACE			**29**	**C**	**30**	-	-	-			9412					
							0.00	SPACE			**31**	**A**	**32**			SPACE								
							0.00	SPACE			**33**	**B**	**34**			SPACE								
							0.00	SPACE			**35**	**C**	**36**			SPACE								
							0.00	SPACE			**37**	**A**	**38**			SPACE								
							0.00	SPACE			**39**	**B**	**40**			SPACE								
							0.00	SPACE			**41**	**C**	**42**			SPACE								
							0.00	SPACE			**43**	**A**	**44**	SEE	125/3	XFMR 2LA	500	6883	413	0	4576	8983	0	0.00
							0.00	SPACE			**45**	**B**	**46**	RISER	-	-	500	6883	413	0	4576	8983	0	0.00
3700	0	0	0	0	0	0	0.00	**TOTALS**									1500	20650	29476	0	13728	26950	0	0.00

LOAD SUMMARY

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description
5.2	20.7	59.9	0.0	13.7	27.0	0.0	0.0	Connected KVA
1.25	**	1.00	1.00	1.00	1.00	0.65	0.50	*Design Factors
6.5	15.3	59.9	0.0	13.7	27.0	0.0	0.0	Design KVA

Phase Load

Ph.	KVA
A	44.2
B	42.3
C	39.8

Panel Remarks:
(1) PROVIDE METER MAIN, SEE ELECTRICAL RISER DIAGRAM FOR ADDITIONAL INFORMATION.

*Input di...
**100% ...

	Con. KVA	Con. Amps		Des. KVA	Des. Amps
TOTAL	126.4	152.0		122.4	147.2

PANEL: **2HA**

Date: 6/24/2025 | By: Designer

Job: GPISD Field House | Job No. 240539 | AIC... **42000**

Mounting **SURFACE** | Main... **MCB (225A) (2)** | Neutral **100%** | Voltage: **480Y/277V-3PH 4W** | Main... **225 AMPS** | Ground **Equipment Ground** | Lugs **FEED THRU**

PANEL: **1HA** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph.	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
		943					0.00	SHWP-01	15/3	12	**1**	**A**	**2**	12	15/3	JP-1			305					
		943					0.00	-	-	-	**3**	**B**	**4**	-	-	-			305					
		943					0.00	-	-	-	**5**	**C**	**6**	-	-	-			305					
		1328					0.00	CHP-01	30/3	12	**7**	**A**	**8**	12	15/3	DWP-1			637					
		1328					0.00	-	-	-	**9**	**B**	**10**	-	-	-			637					
		1328					0.00	-	-	-	**11**	**C**	**12**	-	-	-			637					
							0.00	SPACE			**13**	**A**	**14**	12	15/3	EUH-01				1000				
							0.00	SPACE			**15**	**B**	**16**	-	-	-				1000				
							0.00	SPACE			**17**	**C**	**18**	-	-	-				1000				
							0.00	SPACE			**19**	**A**	**20**			SPACE								
							0.00	SPACE			**21**	**B**	**22**			SPACE								
							0.00	SPACE			**23**	**C**	**24**			SPACE								
0	0	6813	0	0	0	0	0.00	**TOTALS**								**TOTALS**	0	0	2825	3000	0	0	0	

PANEL: **1HA** **2** **(Sectio...** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph.	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
2400								1ST FLOOR LTG	20/1	12	**25**	**A**	**26**	12	20/1	WEIGHT ROOM LTG	3200							0.00
1300								1ST FLOOR CORR LTG	20/1	12	**27**	**B**	**28**	12	20/1	EXTEIOR LTG (1)	301							0.00
							0.00	SPACE			**29**	**C**	**30**			SPACE								0.00
							0.00	SPACE			**31**	**A**	**32**			SPACE								0.00
							0.00	SPACE			**33**	**B**	**34**			SPACE								0.00
							0.00	SPACE			**35**	**C**	**36**			SPACE								0.00
							0.00	SPACE			**37**	**A**	**38**			SPACE								0.00
							0.00	SPACE			**39**	**B**	**40**			SPACE								0.00
							0.00	SPACE			**41**	**C**	**42**			SPACE								0.00
							0.00	SPACE			**43**	**A**	**44**			SPACE								0.00
							0.00	SPACE			**45**	**B**	**46**			SPACE								0.00
							0.00	SPACE			**47**	**C**	**48**			SPACE								0.00
3700	0	0	0	0	0	0	0.00	**TOTALS**								**TOTALS**	3501	0	0	0	0	0	0	0.00

LOAD SUMMARY

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description
7.2	0.0	9.6	3.0	0.0	0.0	0.0	0.0	Connected KVA
1.25	**	1.00	1.00	1.00	1.00	0.65	0.50	*Design Factors
9.0	0.0	9.6	3.0	0.0	0.0	0.0	0.0	Design KVA

Phase Load

Ph.	KVA
A	9.8
B	5.8
C	4.2

Panel Remarks:
(1) PROVIDE BRANCH CIRUCIT METER FOR CIRCUIT, SEE ELECTRICAL RISER DIAGRAM METER 7

(2) PROVIDE METER MAIN, SEE ELECTRICAL RISER DIAGRAM FOR ADDITIONAL INFORMATION.

*Input di...
**100% ...

	Con. KVA	Con. Amps		Des. KVA	Des. Amps
TOTAL	19.8	23.9		21.6	26.0

PANEL: **1HA**

Date: 6/24/2025 | By: Designer

Job: GPISD Field House | Job No. 240539 | AIC... **10000**

Mounting **SURFACE** | Main... **MCB (225A) (3)** | Neutral **200%** | Voltage: **208Y/120V-3PH 4W** | Main... **225 AMPS** | Ground **Equipment Ground** | Lugs **FEED THRU**

PANEL: **2LA** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph.	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
	900						0.00	RECP - RR ELEC STOR	20/1	12	**1**	**A**	**2**	12	20/1	RECP - TEAM RM #1		900						0.00
	900						0.00	RECP - COND #1	20/1	12	**3**	**B**	**4**	12	20/1	RECP - TEAM RM #2		720						0.00
	720						0.00	RECP - COND #2	20/1	12	**5**	**C**	**6**	12	20/1	RECP - TEAM RM #3		900						0.00
	180						0.00	RECP - KITCH #1	20/1	12	**7**	**A**	**8**	12	20/1	RECP - MICRO #1 (1)						1200		0.00
	180						0.00	RECP - KITCH #2	20/1	12	**9**	**B**	**10**	12	20/1	RECP - MICRO #2 (1)						1200		0.00
	180						0.00	RECP - KITCH #3	20/1	12	**11**	**C**	**12**	12	20/1	RECP - FRIDGE (1)						900		0.00
	180						0.00	RECP - KITCH #4	20/1	12	**13**	**A**	**14**	12	20/1	RECP - SER COUNT #1		180						0.00
	180						0.00	RECP - SER COUNT #2	20/1	12	**15**	**B**	**16**	12	20/1	RECP - SER COUNT #3		500						0.00
	1260						0.00	RECP - STORAGE	20/1	12	**17**	**C**	**18**	12	20/1	RECP - VIDEO REV #1		900						0.00
	900						0.00	RECP - HALL, BATH	20/1	12	**19**	**A**	**20**	12	20/1	RECP - VIDEO RM		1080						0.00
	720						0.00	RECP - GROUP INST	20/1	12	**21**	**B**	**22**	12	20/1	RECP - COACH OFF #1		540						0.00
	720						0.00	RECP - COACH OFF #2	20/1	12	**23**	**C**	**24**	12	20/1	RECP - COACH OFF #3		540						0.00
	540						0.00	RECP - COACH OFF #4	20/1	12	**25**	**A**	**26**	12	20/1	RECP - PRINTER #1						1200		0.00
						1200	0.00	RECP - PRINTER #2	20/1	12	**27**	**B**	**28**	12	20/1	RECP - VIDEO REV #2		900						0.00
	1080						0.00	RECP - CONF	20/1	12	**29**	**C**	**30**	12	20/1	RECP - FLR BOX / TV		750						0.00
						500	0.00	RECP - CONF COUN #1	20/1	12	**31**	**A**	**32**	12	20/1	RECP - CONF COUN #2						500		0.00
						1200	0.00	RECP - CONF COUN #3	20/1	12	**33**	**B**	**34**	12	20/1	RECP - FRIDGE (2)						800		0.00
						500	0.00	MOTORIZD SHADES #5	20/1	12	**35**	**C**	**36**	12	20/1	RECP - CORRIDOR/ELEC		1080						0.00
						500	0.00	MOTORIZD SHADES #6	20/1	12	**37**	**A**	**38**	10	30/3	SPD								0.00
						500	0.00	MOTORIZD SHADES #7	20/1	12	**39**	**B**	**40**	-	-	-								0.00
						500	0.00	MOTORIZD SHADES #8	20/1	12	**41**	**C**	**42**	-	-	-								0.00
0	8640	0	0	0	4900	0	0.00	**TOTALS**								**TOTALS**	0	8990	0	0	0	5800	0	0.00

PANEL: **2LA** **2** **(Sectio...** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph.	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
					500		0.00	RECP-CON PROJ (2)	20/1	12	**43**	**A**	**44**	12	30/2	ACCU-IDF-1960						2288		0.00
					500		0.00	RECP-TEAM PROJ (2)	20/1	12	**45**	**B**	**46**	-	-	-						2288		0.00
					500		0.00	RECP-TEAM PROJ #2 (2)	20/1	12	**47**	**C**	**48**	12	30/2	ACCU-ELEC RM-1913						2288		0.00
	720						0.00	RECP-GP RECS IDF 1929	20/1	12	**49**	**A**	**50**	-	-	-						2288		0.00
					1200		0.00	RECP - IDF 1960	20/1	12	**51**	**B**	**52**	12	20/1	EF-2-03				420				0.00
					2000		0.00	RECP - IDF 1960 #2	30/1	12	**53**	**C**	**54**	12	20/1	EF-2-02				400				0.00
					2000		0.00	RECP - IDF 1960 #3	30/1	12	**55**	**A**	**56**	12	20/1	EF-2-01				420				0.00
					1200		0.00	RECP - IDF 1960 #4	20/1	12	**57**	**B**	**58**	12	30/2	ACCU-RISER RM-1907						2288		0.00
					1200		0.00	RECP - IDF 1960 #5	20/1	12	**59**	**C**	**60**	-	-	-						2288		0.00
	1080						0.00	RECP - ROOFTOP RECS	20/1	12	**61**	**A**	**62**	10	30/1	ELEV. CONTROL	1500							0.00
					1000		0.00	AV CIRUCIT	20/1	12	**63**	**B**	**64**	10	30/1	ELEV. CAB LIGHT						1750		0.00
					1000		0.00	AV CIRUCIT	20/1	12	**65**	**C**	**66**	12	20/1	RR 1965/1964 SENSR						400		0.00
	500						0.00	RECP - GROUP INST #2	20/1	12	**67**	**A**	**68**	12	20/1	RTU-1-01 UVC						500		0.00
					500		0.00	RECP - GROUP INST #3	20/1	12	**69**	**B**	**70**	12	20/1	RTU-1-02 UVC						500		0.00
	720						0.00	RECP - AD OFF/BATH	20/1	12	**71**	**C**	**72**	12	20/1	RTU-1-03 UVC						500		0.00
							1.00	SPARE	20/1		**73**	**A**	**74**	12	20/1	RTU-2-01 UVC						500		0.00
							1.00	SPARE	20/1		**75**	**B**	**76**	12	20/1	RTU-2-02 UVC						500		0.00
							1.00	SPARE	20/1		**77**	**C**	**78**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**79**	**A**	**80**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**81**	**B**	**82**		20/1	SPARE								1.00
							1.00	SPARE	20/1		**83**	**C**	**84**		20/1	SPARE								1.00
0	3020	0	0	0	11600	0	6.00	**TOTALS**								**TOTALS**	1500	0	1240	0	13728	4650	0	4.00

LOAD SUMMARY

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description
1.5	20.7	1.2	0.0	13.7	27.0	0.0	10.0	Connected KVA
1.25	**	1.00	1.00	1.00	1.00	0.65	0.50	*Design Factors
1.9	15.3	1.2	0.0	13.7	27.0	0.0	5.0	Design KVA

Phase Load

Ph.	KVA
A	21.1
B	21.7
C	21.3

Panel Remarks:
(1)GFI GROUND FAULT INTERRUPTOR
(2)LOCKABLE OPEN
(3) PROVIDE METER MAIN, SEE ELECTRICAL RISER DIAGRAM FOR ADDITIONAL INFORMATION.

*Input di...
**100% ...

	Con. KVA	Con. Amps		Des. KVA	Des. Amps
TOTAL	74.1	205.6		64.1	178.0

PANEL: **2LA**

Date: 6/24/2025 | By: Designer

Plot Stamp:
6/24/2025 11:51:00 AM

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TX FIRM: BR 1608
HOUSTON, TX
713-366-0608
LEAF ENGINEERS

PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
DONALD C. RICHARDS
61572
LICENSED PROFESSIONAL ENGINEER
LEAF ENGINEERS
F-18672

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	Addendum 1	2025-06-24

CHECKED BY: OT

DRAWN BY: BB

ELECTRICAL PANEL SCHEDULES

E-701

0"

1"

1ST FLOOR PLUMBING PLAN
P-101

FOR BLUEBEAM LABELING/OCR:

KEYNOTES - PLUMBING PLAN

1 6" WASTE DOWN FROM BREAK TANK OVERFLOW DRAIN PIT (2' X 4' X 2' WITH 1' CURB AFF), PROVIDE TRAP PRIMER. REFER TO THE PLUMBING DETAILS FOR ADDITIONAL INFORMATION.

2 2" WASTE DOWN FROM ABOVE.

3 4" WASTE DOWN.

4 2" WASTE DOWN, 2" VENT UP FROM PLUMBING FIXTURE, 3/4" HOT AND COLD WATER DOWN TO SERVE PLUMBING FIXTURE.

5 2" VENT UP.

6 2" WASTE DOWN FROM SHOWER DRAIN.

7 3" WASTE DOWN FROM FLOOR DRAIN, PROVIDE TRAP PRIMER.

8 4" WASTE DOWN FROM ABOVE.

9 2" WASTE DOWN AND 2" VENT UP FROM PLUMBING FIXTURE(S), 1" COLD WATER DOWN TO SERVE PLUMBING FIXTURE(S).

10 4" WASTE DOWN AND 2" VENT UP FROM PLUMBING FIXTURE(S), 1-1/4" COLD WATER DOWN TO SERVE PLUMBING FIXTURE(S).

11 3" WASTE DOWN AND 2" VENT UP FROM PLUMBING FIXTURE(S), 3/4" HOT AND COLD WATER DOWN TO SERVE PLUMBING FIXTURE(S).

12 2" WASTE DOWN.

KEYNOTES - PLUMBING PLAN

13 2" VENT UP FROM BELOW.

14 3/4" HOT WATER RETURN BALANCING VALVE (CONFIRM/ADJUST SETPOINT OF EACH INDIVIDUAL BALANCING VALVE TO FLOW MINIMUM OF 0.5 GPM AND ADJUST AS REQUIRED TO PROVIDE PROPER/NECESSARY BALANCING).

15 DOMESTIC GAS WATER HEATER AND CONCENTRIC VENT KIT SHALL BE PROVIDED BY PLUMBING CONTRACTOR. REFER TO PLUMBING DRAWINGS AND SPECIFICATIONS. PROVIDE 2" THICK, INSTALLED R-8, FIBERGLASS INSULATION FOR METAL INTAKE PIPING FOR CONDENSATION PREVENTION. REFER TO PLUMBING DETAILS FOR SEALED COMBUSTION CONCENTRIC VENT DETAIL. PROVIDE 4" WATER HEATER CONCENTRIC FLUE CAP (x2) AT EXTERIOR PENETRATION. CONTRACTOR SHALL REFER TO MANUFACTURER'S REQUIREMENTS FOR EXACT INSTALLATION NEEDS PRIOR TO COMMENCING ANY INSTALL WORK.

16 FIRE PUMP CONTROLLER PANEL.

17 JOCKEY PUMP CONTROLLER PANEL.

18 BYPASS VALVE (NORMALLY CLOSED).

19 3/4" COLD WATER DOWN TO SERVE CHEMICAL DISPENSING UNIT (FURNISHED BY OTHERS). CONTRACTOR SHALL PROVIDE LOCAL AHJ-APPROVED METHOD OF BACKFLOW PROTECTION AS REQUIRED FOR THE UNIT, REFER TO UNIT INSTALLATION REQUIREMENTS FOR ADDITIONAL INFORMATION.

20 DOMESTIC WATER PUMP, REFER TO PLUMBING EQUIPMENT SCHEDULES. COORDINATE EXACT LOCATION WITH OTHER EQUIPMENT TO MAINTAIN MANUFACTURER-REQUIRED CLEARANCES.

KEYNOTES - PLUMBING PLAN

21 FIRE PUMP, REFER TO PLUMBING EQUIPMENT SCHEDULES. COORDINATE EXACT LOCATION WITH OTHER EQUIPMENT TO MAINTAIN MANUFACTURER-REQUIRED CLEARANCES. MANUFACTURER SHALL PROVIDE WIRING FROM FIRE PUMP CONTROLLER TO FIRE PUMP.

22 JOCKEY PUMP, REFER TO PLUMBING EQUIPMENT SCHEDULES. COORDINATE EXACT LOCATION WITH OTHER EQUIPMENT TO MAINTAIN MANUFACTURER-REQUIRED CLEARANCES.

23 PROVIDE REGULATOR (STEP DOWN FROM 5 PSI TO 7"-1/4" W.C.) W/ SHUT-OFF VALVE ON EACH SIDE. CONTRACTOR SHALL COORDINATE EXACT EQUIPMENT INLET SIZE AND PRESSURE REQUIREMENTS PRIOR TO INSTALL. INDOOR GAS REGULATORS SHALL BE VENTED TO EXTERIOR AS REQUIRED.

24 3/4" COLD WATER DOWN TO WALL HYDRANT.

25 3/4" COLD WATER DOWN TO ICE MAKER WALL BOX.

26 3/4" COLD WATER DOWN TO HOSE BIBB.

27 3" VENT UP.

28 PROVIDE REGULATOR (STEP DOWN FROM 5 PSI TO 7"-1/4" W.C.) W/ SHUT-OFF VALVE ON EACH SIDE. CONTRACTOR SHALL COORDINATE EXACT EQUIPMENT INLET SIZE AND PRESSURE REQUIREMENTS PRIOR TO INSTALL.

29 EXTEND 1-1/2" COLD WATER MAKE-UP LINE TO SERVE MECHANICAL EQUIPMENT. REFER TO MECHANICAL DETAILS AND DRAWINGS FOR CONTINUATION/CONNECTION OF MAKE-UP WATER TO MECHANICAL EQUIPMENT.

30 3" COLD WATER UP.

KEYNOTES - PLUMBING PLAN

31 3/4" HOT AND COLD WATER DOWN TO WASHING MACHINE.

32 BREAK TANK, FIRE WATER BREAK TANK, 6" (x1) FIRE WATER FILL LINE FED FROM THE FIRE WATER FILL STATION. COORDINATE EXACT LOCATION WITH OTHER EQUIPMENT TO MAINTAIN MINIMUM MANUFACTURER-REQUIRED CLEARANCES.

33 1-1/4" GAS DOWN.

34 2" COLD WATER & 1-1/4" HOT WATER UP AND 3/4" HOT WATER RETURN DOWN FROM ABOVE.

35 1-1/4" COLD WATER & 1" HOT WATER UP AND 3/4" HOT WATER RETURN DOWN FROM ABOVE.

36 PROVIDE HEAT TRACING AT DOMESTIC COLD WATER LINE AND MAKE-UP WATER LINE AT THE UNCONDITION SPACE AND EXPOSED TO OUTSIDE CLIMATE.

37 3" WASTE DOWN FROM FLOOR SINK, PROVIDE TRAP PRIMER.

38 EYEWASH ARM SWIVEL RADIUS SHALL OPERATE FREE AND CLEAR OF ANY OBSTRUCTIONS. REFER TO MANUFACTURER INSTALLATION REQUIREMENTS FOR ADDITIONAL INFORMATION. THERMOSTATIC MIXING VALVE SHALL COMPLY WITH ASSE 1071.

GENERAL NOTES - PLUMBING PLAN

A. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.

B. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.

C. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.

D. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.

E. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.

F. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.

G. PROVIDE AND INSTALL A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.

H. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER AND INSTALLED BY THE PLUMBING CONTRACTOR.

I. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.

GENERAL NOTES - PLUMBING PLAN

J. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.

K. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 6" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.

L. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.

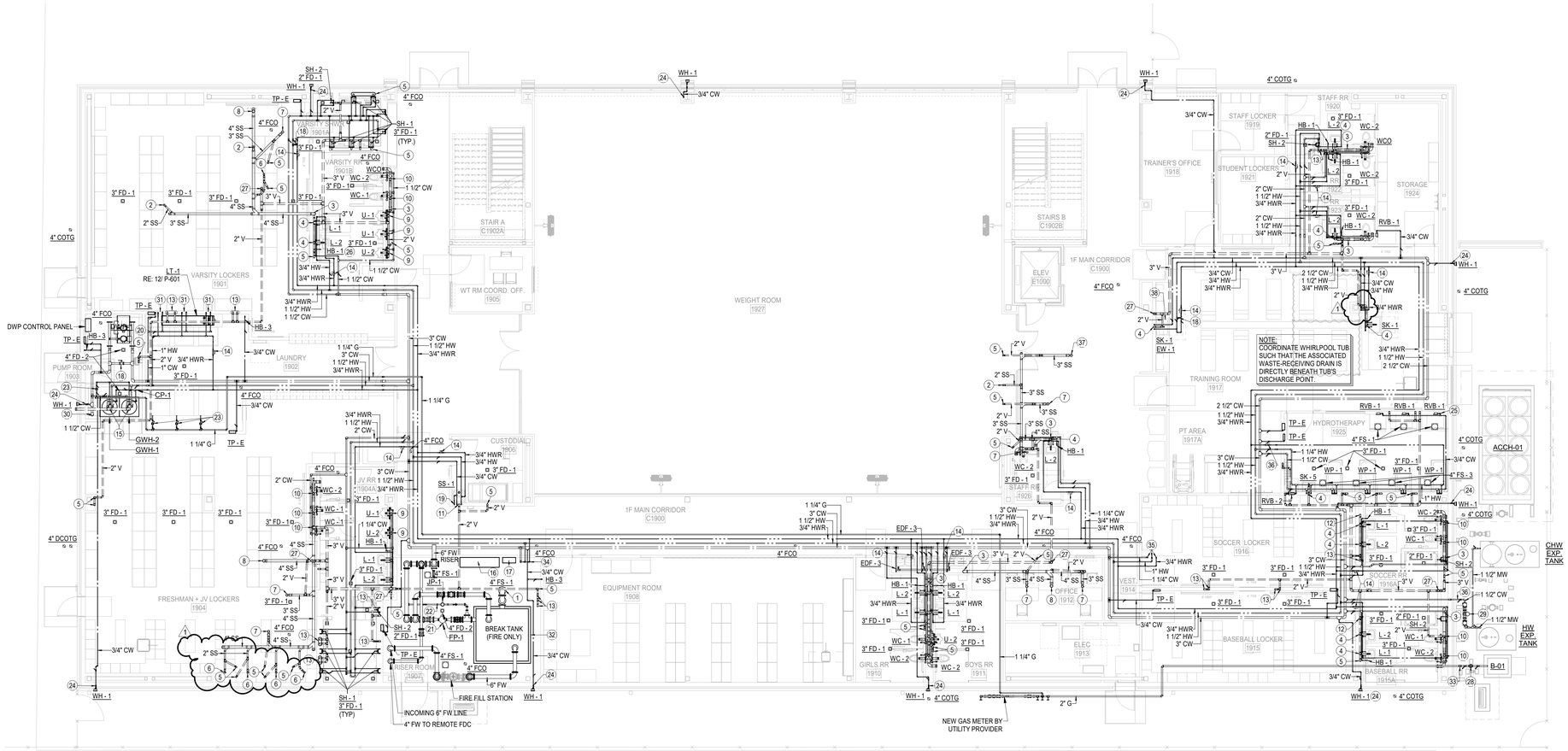
M. CONTRACTOR SHALL PROVIDE AND INSTALL A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-3, IN ALL MECHANICAL ROOMS.

N. CONTRACTOR SHALL PROVIDE AND INSTALL A HOSE BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-3.

O. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.

P. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

Q. ALL RVB-1 SHALL HAVE FILTER



1 **1ST FLOOR PLUMBING PLAN**
SCALE: 1/8" = 1'-0"

Plot Stamp:
6/24/2025 10:57:57 AM

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TX FIRM: BR 1608
HOUSTON, TX
713-366-0608

LEAF ENGINEERS

PKG 3A - GPHS NEW FIELDHOUSE

1000 Keens St,
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED PROFESSIONAL ENGINEER
June 10, 2025
LEAF ENGINEERS
F-18672

CLIENT	
Galena Park ISD	
DATE	PROJECT NUMBER
June 10, 2025	240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	06.25.2025

CHECKED BY: AA

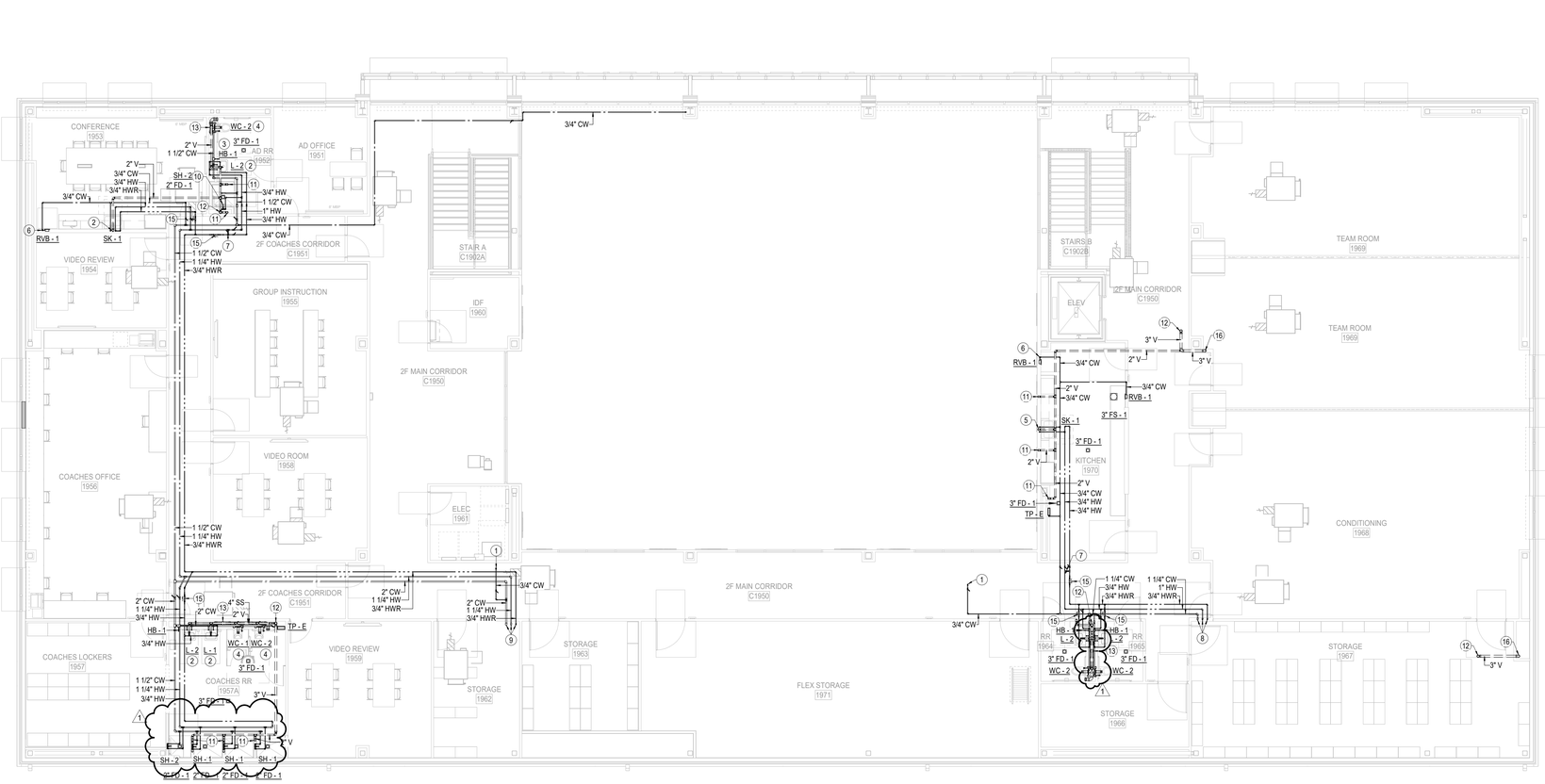
DRAWN BY: AA/TN

1ST FLOOR PLUMBING PLAN

P-101

2ND FLOOR PLUMBING PLAN
P-102
FOR BLUEBEAM LABELING/OCR:

0"
1"



1 **2ND FLOOR PLUMBING PLAN**
SCALE: 1/8" = 1'-0"

GENERAL NOTES - PLUMBING PLAN

A. THE CONTRACTOR SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION.

B. ALL FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE BY THE PLUMBING CONTRACTOR.

C. ALL PLUMBING PIPING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO ANY INSTALLATION OF ALL PLUMBING FIXTURES AND EQUIPMENT BY THE PLUMBING CONTRACTOR.

D. ALL FLOOR DRAINS AND FLOOR SINKS SHOWN ON THIS DRAWING SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION.

E. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.

F. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.

G. PROVIDE AND INSTALL A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.

H. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER AND INSTALLED BY THE PLUMBING CONTRACTOR.

I. FIXTURES DESIGNATED AS ADA-ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.

J. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.

K. FLOOR DRAINS AND FLOOR SINKS IN MECHANICAL ROOMS SHALL BE SET NOT LESS THAN 6" FROM HOUSEKEEPING PADS. RE: MECHANICAL DRAWINGS. DO NOT PLACE ON, OR IN, HOUSEKEEPING PAD, OR UNDERNEATH EQUIPMENT.

L. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.

M. CONTRACTOR SHALL PROVIDE AND INSTALL A TRAP PRIMER, TP-1, AND A HOSE BIBB, HB-3, IN ALL MECHANICAL ROOMS.

N. CONTRACTOR SHALL PROVIDE AND INSTALL A HOSE BIBB WITH WHEEL HANDLE IN ALL MECHANICAL ROOMS, HB-3.

O. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED AND HEAT TRACED TO PREVENT FREEZING.

P. ALL SANITARY 3" OR ABOVE SHALL BE INSPECTED BY A CAMERA PRIOR TO SUBSTANTIAL COMPLETION.

Q. ALL RVB-1 SHALL HAVE FILTER.

KEYNOTES - PLUMBING PLAN

1 3/4" COLD WATER UP TO NON-FREEZE ROOF HYDRANT.

2 2" WASTE DOWN, 2" VENT UP FROM PLUMBING FIXTURE, 3/4" HOT AND COLD WATER DOWN TO SERVE PLUMBING FIXTURE.

3 3/4" COLD WATER DOWN TO HOSE BIBB.

4 4" WASTE DOWN AND 2" VENT UP FROM PLUMBING FIXTURE(S), 1-1/4" COLD WATER DOWN TO SERVE PLUMBING FIXTURE(S).

5 2" WASTE DOWN AND 2" VENT UP FROM PLUMBING FIXTURE, 3/4" COLD/HOT WATER DOWN TO SERVE SINK AND DISHWASHER. PROVIDE WATTS "288A" VACUUM BREAKER PRIOR TO CONNECTION TO DISHWASHER. CONNECT INDIRECT WASTE FROM DISHWASHER TO HAND SINK.

6 3/4" COLD WATER DOWN TO REFRIGERATOR VALVE BOX.

7 SHUTOFF VALVE FOR HOT WATER RETURN BYPASS TO REMAIN IN THE CLOSED POSITION. VALVE SHALL BE OPENED MANUALLY ON AN AS NEEDED BASIS BY MAINTANCE PERSONNEL, AND SHALL BE CLOSED WHEN MAINTENANCE IS COMPLETED.

8 1-1/4" COLD WATER & 1" HOT WATER UP AND 3/4" HOT WATER RETURN DOWN FROM ABOVE.

9 2" COLD WATER & 1-1/4" HOT WATER UP AND 3/4" HOT WATER RETURN DOWN FROM ABOVE.

10 3/4" HOT AND COLD WATER DOWN TO SERVE PLUMBING FIXTURE(S).

11 2" VENT UP.

12 3" VENT THRU ROOF.

13 4" WASTE DOWN.

15 3/4" HOT WATER RETURN BALANCING VALVE (CONFIRM/ADJUST SETPOINT OF EACH INDIVIDUAL BALANCING VALVE TO FLOW MINIMUM OF 0.5 GPM AND ADJUST AS REQUIRED TO PROVIDE PROPER/NECESSARY BALANCING).

16 3" VENT UP.

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713-366-0608

LEAF ENGINEERS

PKG 3A - GPHS NEW FIELDHOUSE

1000 Keene St.
Galena Park, TX 77547

CLIENT PROJECT NO: 240539

ISSUE FOR PROPOSAL

Galena Park ISD

KEY PLAN
NORTH: PLAN TRUE

STATE OF TEXAS
DONALD C. RICHARDS
61525
LICENSED PROFESSIONAL ENGINEER
June 10, 2025
LEAF ENGINEERS
F-16672

CLIENT	
Galena Park ISD	
DATE: June 10, 2025	PROJECT NUMBER: 240539

DRAWING HISTORY

No.	Description	Date
1	ADDENDUM 1	06.25.2025

CHECKED BY: AA
DRAWN BY: AA/TN

2ND FLOOR PLUMBING PLAN

P-102

Plot Stamp:
6/24/2025 10:58:13 AM