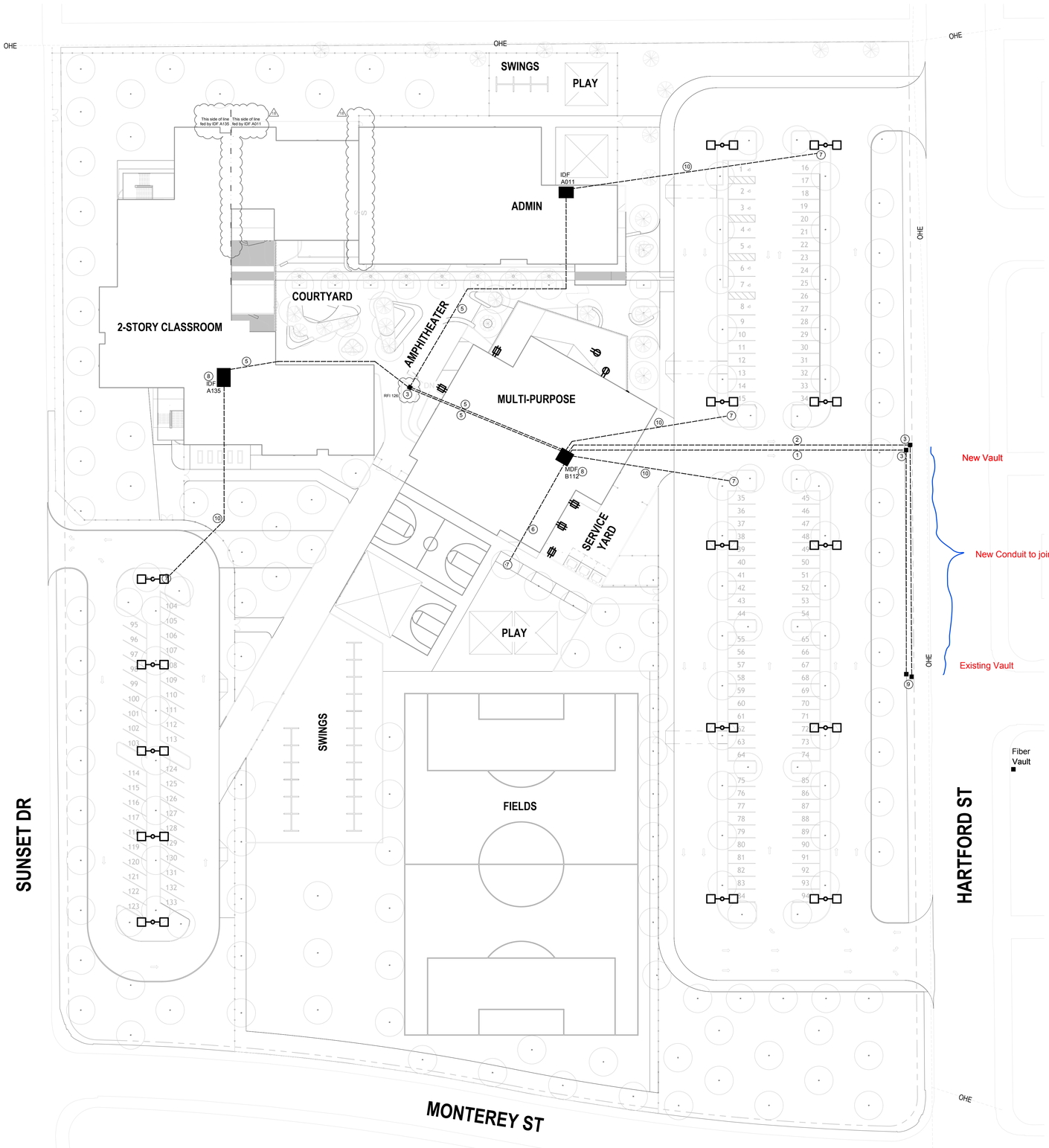

SITE PLAN SPECIAL SYSTEMS

0 32' 64' 96'

1/32" = 1'-0"

N

REFER TO TS101 FOR SPECIAL SYSTEMS DETAILS

Key Notes

APPLIES TO SITE PLAN

1. (2) 4" UG sched. 40 conduits. GC must coordinate exact location with engineered drawings supplied by CUSD prior to trenching. (2) 4" UG conduit (see Keynote 2) for Future shall be 36" from conduits. Terminate conduit in UG Vault (Keynote 3). Coordinate with provided requirements and work orders. See Trench Detail, UG Vault Detail, Site Notes this sheet & spec. 27 05 33. NOTE: Conduit depth will be 36" below finished grade. Coordinate with other site utilities.
2. (2) 4" UG sched. 40 PVC for for Future service. See Trench Detail & UG Vault Detail this sheet. See Site Notes this sheet & spec. 27 05 33. Conduit depth will be 36" below finished grade. Coordinate with other site utilities.
3. New UG Vault by CUSD. Use Utility Vault Company 444-LA with traffic rate communications lid (or equal). Weld "SPEC. SYS." in 2" letters on lid. See installation Detail on TS101. Vaults and UG conduit pathway heading South and then East to the property line shall be installed per requirements.
4. New UG Vault. Use Utility Vault Company 233-LA with traffic rate communications lid (or equal). Weld "SPEC. SYS." in 2" letters on lid. See installation Detail on TS101 for Keynote 3 and install using similar methods. Conduits sweep penetrate thru the side walls of the vault.
5. UG conduit Pathway MDF to IDF's. (6) 2" UG Sched. 40 PVC w/rigid steel radii wrapped in 20 mil tape. See Trench Detail on TS101. See 27 05 33. Coordinate with other site utilities. All UG cables are outdoor rated unless noted otherwise.
   One 2" c. w/12 strand SM FO cable for Data, VoIP, Access Control, Security Cameras.
   One 2" c. w/ (2) 18-4 for Security Intrusion.
   One 2" c. w/ (2) 18-2 for Paging.
   One 2" c. for Fire Alarm. See FA CD's
   Two 2" c. to remain empty for spares.
6. UG conduit Pathway for future building. (6) 2" Sched. 40 PVC w/rigid steel radii and risers wrapped in 20 mil tape. Conduits to remain empty. See Trench Detail on TS101. See 27 05 33. Coordinate with other site utilities.
7. Stub Pathway at this location. Seal all conduit with glued on caps. Place 3M Electronic Marker above conduit stubs. Show location on AS BUILT Record drawings. See 3M Detail on Ts101.
8. Refer to enlarged MDF and IDF floor plans on TA101, TA103, TA105 and TB101.
9. The existing connections, vaults and conduits must be protected from damage until the existing school is closed and service to the new school is activated. Pathway north TBD.
10. UG conduit for future security cameras in parking lot. Provide (2) 1.5" sched. 40 PVC with rigid steel radii wrapped in 20 mil tape. Place 3M Electronic Marker above conduit stubs. See Keynote 7. See Trench Detail on Ts101.

Site Notes:

1. The underground conduit runs shown are diagrammatic only. All special system conduits, underground or above ground, shall be a minimum of 48" from 480 volt high power lines and 24" from 240 volt high power lines. All underground conduits runs shall be Schedule 40 PVC. All sweeps 45° or tighter and all risers shall be rigid galvanized steel wrapped in 20 mil tape. Minimum depth of conduits shall be 24" below finished grade or slab (36" below finished grade). All above ground conduits runs shall be EMT. Coordinate with all T sheets for MDF/ IDF locations, related Details and Notes.

2. The Contractor shall perform a mandrel test of all UG conduits. The mandrill must be sized properly for the conduit size being tested. The mandrel must pull through the entire length of each conduit to pass the test. The test shall be documented in writing and forwarded to SSE, LLC. A written "Mandrel Test Passed" document shall be issued by SSE, LLC when all conduits have passed the mandrel test. The Contractor is responsible for all UG conduit repairs required to pass the mandrel test.

3. See Notes below for conduit types.

4. All conduits shall have a mule type Pull cord tied off at each end and bell ends. All conduit ends shall be labeled per the conduit specifications 27 05 33.

5. Special Systems Underground conduit Pathway Keynote 6 from the MDF B112 to stub out. This underground conduit pathway shall feed the future portable buildings. See sheet TS101 for 3M detail. See note 1 above.

6. Special Systems Underground conduit pathway from MDF B112 to the stub up at property line. The conduits shall stub up 24" AFG for pedestal. See Notes below. See note 1 above. See conduit schedule this sheet. ALL CONDUIT LOCATIONS AND STUB UPS SHALL BE CONFIRMED BY ENGINEERING DRAWINGS PRIOR TO INSTALLATION.

7. Special Systems Underground conduit Pathways shall not exceed 270° or (3) 90° sweeps/radii between pull points (vaults/pull boxes).

8. All conduit pathways shall terminate in the MDF or IDF locations shown on this sheet. Refer to Enlarged Floor Plans for MDF and IDF room layouts. All conduits shall have a mule type Pull cord tied off at each end and bell ends. All conduit ends shall be labeled per the conduit specifications 27 05 33. See this sheet for Trench and other related Details.

Notice to Contractor:

1. The Contractor is to provide all trenches, vaults, splice pits, backfill, conduit pull string, ¾" fire rated plywood mounting board, terminating cabinets and a #6 copper wire from mounting location to approved building ground prior to inspection. Conduit minimum
2. requirements: Straight section: -thick walled rigid (schedule 40) PVC E/W 2500 lb calibrated pull tape; Bends - rigid steel, wrapped in 20 mil tape, minimum 36" radius or as noted; Number of bends - 270° or (3) 90° sweeps maximum allowed between pull points.
3. All UG conduit raceways to be in place 30 days prior to requested service date.
4. UG conduit shall be at a minimum depth of 24" below finished grade. See Site Note 1 above.

Contractor responsibilities:

5. The Contractor is responsible for scheduling an inspection at (602) 235-3476 ten (10) working days in advance for trench/conduit and equipment place inspection.
6. For scheduling information contact Scheduler at (602) 235-3361. Scheduling will determine ready for service dates.
7. Contact immediately if conflicts or design changes occur.
8. The locations of underground obstructions shown or listed in the contract documents are approximate. Exact locations shall be determined by the Contractor.
9. Contractor is responsible for contacting Blue Stake before digging at (480) 283-1100. Please have a Job number ready to give Blue Stake.

SITE DESIGN NOTE: GC must coordinate with Irrigation designer and installer regarding conduit pathways, valve and controller panel locations. One data drop is required at each irrigation controller panel.

NOTE: All low voltage cable systems (including FA, EMS, HVAC, Etc.) must follow the low voltage pathways shown on the T sheets and must follow BICSI Guide Lines and Project Specifications 27 13 00 and 27 05 36. See J-hook/Sleeve Group Detail TD501.

Summary of Scope of Work for Special Systems:

The Division 26 Contractor shall supply and install all underground trenching, underground Schedule 40 PVC conduit, Mandrel Test, rigid steel sweeps, couplings, end bells for all underground conduits, vaults, pull boxes, back boxes (including specialty back boxes), pull string/mule tape, interior EMT conduits and sleeves entering and existing the MDF and IDF areas, grounding and bonding wiring from primary building ground to MDF/IDF Bus Bars and all Bus Bars, fire rated plywood backboards and other items required for a complete pathway for special systems and called for in the contract documents (See T sheets and Div. 27 - 28 Specs). Fire stop around the exterior of the conduits and sleeves entering and exiting the MDF and IDF areas, **only** if required per National, State and Local fire codes.

The Division 27 Contractor shall supply and install all wide based J-hooks or basket tray and the related connecting hardware and supports; cable; terminations; face plates; racks; cabinets; ladder tray; patch panels; LIU's; surge protection; UPS's; grounding and bonding from Bus Bar to special systems equipment (per UL code); MDF/IDF build outs; bushings for all interior conduits and sleeves; and other items required for a complete cabling and interior pathway for special systems and as called for in the contract documents (T sheets and Division 27 - 28 Specs). Fire stop may be required within the interior of the conduits and sleeves entering and exiting the MDF and IDF areas **to meet required** National, State and Local fire codes.

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SIGN / SEAL

OWP PROJECT NO. 2023_008

DATE OF ISSUE 11.05.2025

PROJECT PHASE / ISSUED FOR
PERMIT SET

REVISIONS

NUMBER	DESCRIPTION	DATE
1	Coordination	10/16/2026

PROJECT TEAM
ED STUDIO

DRAWN BY
Author VJS

SHEET CONTENTS / TITLE
SPECIAL SYSTEMS
OVERALL SITE PLAN

TS100

SSE Date: 10-16-26

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