May 21, 2018
IDEA PUBLIC SCHOOLS – IDEA Brownsville Robindale Phase I

GOMEZ MENDEZ SAENZ, INC.
1150 PAREDES LINE RD.
BROWNSVILLE, TEXAS 78526
(956) 546-0110

ADDENDUM NO. 1

A. PURPOSE AND INTENT
This addendum is issued for the purpose of modifying the plans and specifications for the IDEA PUBLIC SCHOOLS – IDEA Brownsville Robindale Phase I

This addendum shall become part of the contract and all CONTRACTORS shall be bound by its content. All aspects of the specifications and drawings not covered herein shall remain the same.

The General Conditions and the Special Conditions of the specifications shall govern all parts of the work and apply in full force to this Addendum.

B. SCOPE

I. CLARIFICATIONS:

1. N/A

II. SPECIFICATIONS:

1. Section 09511 Special Ceilings
   This section will be added and be part of the contract documents.
2. Section 06200 Finish Carpentry – Part 2 Products, Materials, ADD *Underlayment, Sharkskin Ultra SA*
   Kirsch Building Products LLC 1464 Madera Rd., Suite 387 Simi Valley, California 93065
3. Section 07210 Roof and Deck Insulation – Part 2 Products, 2.02 Materials, ADD *Item E. Nailable Roof Insulation, ACFoam Nail Base Thermally efficient closed-cell ACFoam-II insulation board bonded to min 19/32" CDX plywood. 3" Composite Thickness with an LTTR Value of 15.0.*
   Atlas Roofing Corporation (770) 952-1442, 2000 Riveredge Parkway, Suite 800, Atlanta GA. 30328, roof.atlasroofing.com
4. Section 14240 – Machine Room-Less Hydraulic Elevators
   Subject to compliance with this section: *ThyssenKrupp Elevator enduraMRL, shall be an approved manufacturer and product.*

III. PLANS:

1. Sheet A2.09 – Roof Plan
    a. ADD Gutter and Downspout at back side of Entry Wall. Replace Sheet A2.09 previously issued with Sheet A2.09 included in this addendum.
2. Sheet A2.12 – VCT Pattern and Accent Walls
    b. REVISED Panel Signage at Offices and Support Spaces. Replace Sheet A2.12 previously issued with Sheet A2.12 included in this addendum.
3. Sheet A4.09 – Building Section
    c. REVISED Section Notes. Replace Sheet A4.09 previously issued with Sheet A4.09 included in this addendum.
4. Sheet A4.10 – Building Section
    d. REVISED Section Notes. Replace Sheet A4.10 previously issued with Sheet A4.10 included in this addendum.

Civil Addendum Items: See Attached Information (8 Pages)
Landscape Addendum Items: See Attached Information (7 Pages)
MEP Addendum Items: See Attached Information (25 Pages)

End of Addendum 1

SECTION 09511 SPECIAL CEILINGS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Field formed curved metal panel ceiling system including suspension systems and accessories.

B. Related Sections:

1. Division 9 Sections: Acoustical Panel Ceilings.
2. Division 15 Sections: Mechanical air grilles, diffusers, and fire sprinklers.
3. Division 16 Sections: Lighting fixtures.

1.02 SUBMITTALS

A. Product Data: Manufacturer's published literature.

B. Shop Drawings:

1. Reflected Ceiling Plan(s): Indicate curved metal panel ceiling layout, ceiling mounted items and penetration locations.
2. Suspension System and Component Layout: Clearly delineate all components of the system.
3. Details of system assembly and connections to building components. Include interfacing details with ceiling-mounted items including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, and special moldings. Indicate flexible radius carriers where required in curves and slopes, with support by structural members or braces.

C. Samples:

1. Ceiling Panel: 2 pieces, minimum 10 inch (254 mm) of each type and finish. Provide each piece with formed edge.
2. Curved Suspension: Minimum 10 inch (254 mm) piece of each type and finish.
3. Color Samples: Manufacturers standard colors (finishes) for Architect's selection.
4. Suspension system components and moldings/trim.
5. Acoustical material sample.

D. Certificates:

1. Data substantiating manufacturer and installer qualifications.
2. Certified data attesting fire rated materials comply with specifications.

E. Installation Instructions: Manufacturer's installation instructions and maintenance data. Include requirements for suspending curved metal panel ceiling system from structure.

F. Calculations by a Professional Engineer, registered in the State where project is located, to include, but not be limited to, computations for the suspension system framing and anchorage assemblies. Calculations shall be signed and sealed by the registered Professional Engineer for record.

G. Maintenance Data: For finishes to include in maintenance manuals.

1.03 QUALITY ASSURANCE

A. Manufacturer/Installer Qualifications:

1. Provide curved metal panel system components produced by a single manufacturer with resources to provide consistent quality in appearance and physical properties, without delaying the work.
2. Provide suspension system components produced by a single manufacturer to provide compatible components for a complete curved metal panel ceiling system installation.
3. Perform installations using a firm with installers having no less than 3 years of successful experience on projects of similar size and requirements.

B. Regulatory Requirements:

1. Fire Rating Performance Characteristics: The system shall provide a flame spread of 0 – 25 minimum, per ASTM E 84.
2. Structural Criteria: In compliance with requirements of Authorities having Jurisdiction.

   a. UBC Standard 25-2, “Metal Suspension Systems for Acoustical Tile and for Lay-in Panel Ceilings.”.

3. Installation Standard for Suspension System: Comply with ASTM C 636.

C. Mock-Up: Prior to beginning installation erect a mock-up section, where directed, using all system components.

1. Approved mock-ups may become part of the completed Work if undisturbed at time of Substantial Completion.

D. Pre-installation Conference: Conduct a conference, prior to start of installation, to review system requirements, shop drawings, and all coordination needs.

1. Record discussion including agreement or disagreement on matters of significance; furnish copy of recorded discussions to each participant.

1.04 DELIVERY, STORAGE AND HANDLING

A. Deliver system components in manufacturer’s original unopened packages, clearly labeled.

B. Store components in fully enclosed dry space. Carefully place on skids, to damage from moisture and other construction activities.

C. Handle components to prevent damage to surfaces and edges, and to prevent distortion and other physical damage.

1.05 PROJECT / SITE CONDITIONS

A. Begin system installations only after spaces are enclosed and weather tight, and after all wet work and overhead work have been completed.

B. Prior to starting installations, allow materials to reach ambient room temperature and humidity intended to be maintained for occupancy.

1.06 EXTRA MAINTENANCE MATERIAL

A. Provide extra material, matching installed curved metal panel components and suspension system components, in manufacturer's original packages clearly labeled.
1. Provide 3 full panels of each color and perforation pattern installed.
2. Provide 24 feet (7315 mm) of suspension grid main tee.
3. Provide 8 feet (2438 mm) of cross runner grid tee.

B. Deliver extra stock and access tools to owner's representative.

PART 2 - PRODUCTS

2.01 MANUFACTURER / PRODUCT

A. Axiom-Classic Custom Perimeter Trim; Armstrong World Industries, Inc.

2.02 CUSTOM PERIMETER TRIM

A. Components: Edge trim system for suspended ceiling system, extruded aluminum alloy 6063 trim channel

1. Axiom Trim Channel: 6" wide face with 3/4 inch horizontal legs, straight or curved sections with special bosses formed for attachment to the Axiom tee-bar connection clip or hanging clip; commercial quality, extruded aluminum, factory-finished in factory-applied baked polyester paint. Architect to select from manufacturer's standard finish colors.
2. Axiom Outside Corner Posts (Straight Only): Commercial quality extruded aluminum sections formed to match the Axiom trim channel profile; pre-assembled with built-in splice plates that connect to straight Axiom sections; 7/8 inch x 7/8 inch x 6"; factory-finished in factory-applied baked polyester paint. Architect to select

from manufacturer's standard finish colors.
a. AX6OSCP – 6" Axiom Classic Outside Corner Post

3. Axiom Inside Corners (Straight Only): Commercial quality extruded aluminum sections formed to match the Axiom trim channel profile that connect to straight Axiom sections, 12 inch x 3/4 inch x 6" factory-finished in factory-applied baked polyester paint. Architect to select from manufacturer's standard finish colors.
   a. AX6QSIS – 6" inside corner

4. Accessories:
   a. AXHGC – Hanging clip, commercial quality aluminum, unfinished, used to align grid members that extend beyond the lower edge of the trim.
   b. AX2HGC – Hanging clip, commercial quality aluminum, unfinished, used when suspension wires must be attached directly to the trim sections.
   c. AXSPLICE – Splice with set screws, galvanized steel, unfinished, used to attached factory-mitered inside corners
   d. AX4SPLICE – Splice with set screws, galvanized steel, unfinished, used to attach joints between sections of trim.
   e. AXTBC – T-bar Connector Clip, galvanized steel, unfinished, used to attach channel trim to supporting suspension members.
   f. AXSPTHDC – Perimeter Trim Hold Down Clip used to secure cut edges of metal panels at the Axiom trim.
   g. AXBTSTR – Drywall Bottom Trim Straight, extruded aluminum, 120 inches x 1-9/64 inch x 27/32 inch, used to finish edges of 5/8 inch drywall that is applied to the bottom surface of the Axiom.
   h. AXBTCUR – Drywall Bottom Trim Curved, extruded aluminum, 120 inches x 1-9/64 inch x 27/32 inch, used to finish edges of 5/8 inch drywall that is applied to the bottom surface of the Axiom.

2.03 ACCESSORY MATERIALS

A. Metal Suspension System Standard: Provide manufacturer's standard metal suspension systems of types, structural classifications; and finishes indicated that comply with applicable requirements in ASTM C 635.

B. Suspension Grid Main Tee Splice: Manufacturer's standard splice.

C. Wall Moldings / Trim: Perimeter trim to match radius of ceiling system.

D. Finishes and Colors, General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

E. Acoustic Material: Non-woven black fabric with 1 inch (25 mm) thick glass fiber, 1 1/2 pcf (24 kg/cu. m) density, enclosed in black polyethylene

of sizes to completely fill ceiling panel.

F. Lighting Fixtures and HVAC diffusers: Provide trim for penetrations for light fixtures and supports

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates and areas receiving curved metal panel ceiling system for conditions that might adversely affect the installation.

B. Verify that all work above ceiling system has been satisfactorily completed prior to start of ceiling installations.

C. Do not start ceiling installations until all unsatisfactory conditions affecting ceiling systems have been corrected.

3.02 PREPARATION

A. Provide layouts for inserts, clips and other support items required to be installed by other trades. Furnish inserts, clips and related items to other trades in a timely manner to preclude construction delays.

B. Coordinate with other trades for proper installation of inserts and related items.

C. Verify ceiling layouts by actual field measurements.

1. Establish ceiling layout to balance borders and minimize out-of-square conditions. Coordinate all work that penetrates metal panels.

3.03 INSTALLATION

A. Install curved grid metal ceiling system in accordance with manufacturer's printed installation instructions, submittals, applicable industry standards, and governing regulatory requirements for the work.

B. Suspension System Installation: Install in accordance with ASTM C 636.

1. Main Runners: Install curved main runners at a spacing of 24 inches (610 mm). Suspend main runners using threaded rods or hanger wires spaced at maximum 48 inches (1219mm) on-centers and within 12 inches (305 mm) of walls. Splice ends of each curved main runner with manufacturer's standard splice component.
2. Assemble curved tee grid suspension system by connecting 24 inch cross runners to suspended curved main runners to form a mounting grid for the ceiling panel. Cross runner spacing to be 48 inches (1219 mm) on center along curved main runner.
3. Install seismic bracing in accordance with ASTM E 580 and as required by approved shop drawings to comply with structural requirements as determined by the Structural Engineer.

C. Panel Installation:

1. Install metal ceiling panels by snap locking long edges of panels into curved main runners. Start both sides of panel into main runner track on one end of panel only, and progressively snap in to track along panel length until full panel is engaged.
2. Panel edge interlock design will hold metal panel in final position with curved main runner leaving a 1/4 inch (6 mm) reveal between panel edges and between panel ends.
3. Install Snap-In continuous spline on all curved main runners, between installed panels and along edge of perimeter panels.

D. Install acoustical material to completely fill each ceiling panel.

E. Install custom panels and trim pieces for dropped soffit returns, and other required locations, with neat, tight joints and to comply with approved details.

F. Install specified perimeter trim edge molding at all locations required to conceal edges of ceiling system.

G. Install air distribution devices and lighting fixtures at indicated locations.

1. Support devices and fixtures from building structure above, independent from ceiling suspension system.
2. Field fabricate ceiling panels to accommodate air distribution devices.

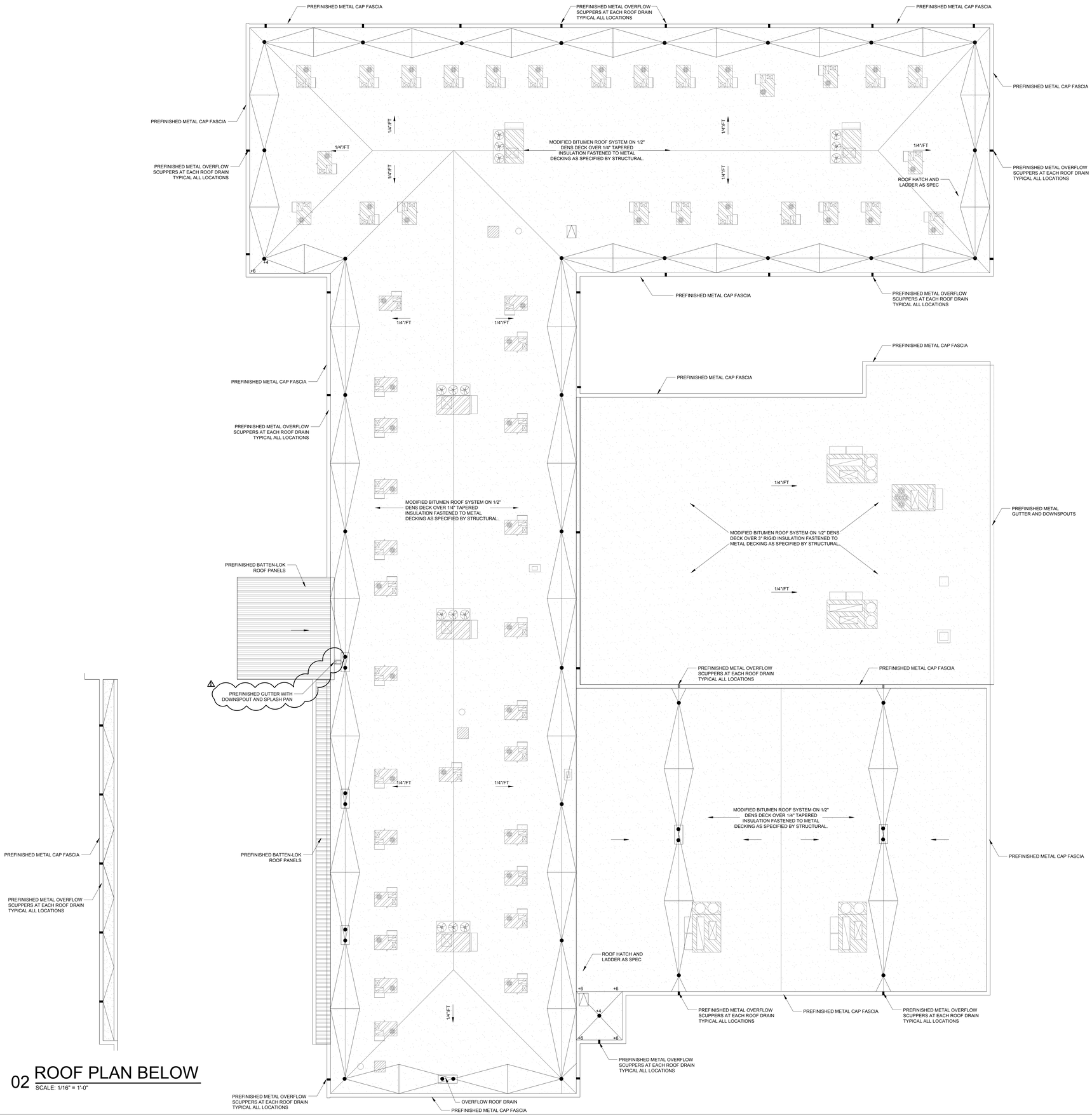
3.04 ADJUST AND CLEAN

A. Adjust components to provide uniform tolerances.

B. Clean exposed surfaces of curved metal panel ceilings, including trim and edge moldings. Comply with manufacturer's written instructions for touchup of minor finish damage. Remove and replace work that cannot be successfully repaired to permanently eliminate evidence of damage, including distorted, dented and bent panel units.

C. Clean exposed surfaces with non-solvent, non-abrasive commercial type cleaner as approved by the curved metal panel ceiling system manufacturer.

END OF SECTION 09511



01 ROOF PLAN

SCALE: 1/16" = 1'-0"

PLAN NORTH

GENERAL ROOF NOTES:

1.) ALL PENETRATIONS SHALL BE COORDINATED WITH MECHANICAL SUBCONTRACTOR AND SHALL BE PERFORMED BY THE ROOFING CONTRACTOR

2.) PROVIDE WALKWAY SYSTEM AT ALL ROOF TOP EQUIPMENT

3.) PROVIDE POSITIVE DRAINAGE IN AND AROUND ALL ROOF TOP EQUIPMENT SO AS TO DRAIN INTO AREA ROOF DRAINS

4.) PROVIDE POSITIVE DRAINAGE TOWARDS DRAINS BY USE OF CRICKETS

5.) NOTE ALL ROOF PENETRATIONS SHALL BE COORDINATED WITH MECHANICAL / ELECTRICAL SUBCONTRACTOR AND THE ROOFING SUBCONTRACTOR

6.) PROVIDE PRE-MANUFACTURED CONCRETE SPLASH BLOCKS AT EACH ROOF DOWN SPOUT LOCATION AND OR AT EACH ROOF DRAIN NOZZLE OUTLET. SECURE SPLASH BLOCKS TO EITHER GROUND OR BUILDING

7.) REFER TO WALL SECTIONS (4.00 SERIES) FOR ADDITIONAL ROOF NOTES

8.) COORDINATE ALL DOWN SPOUT LOCATIONS SO AS TO ASSURE THAT NO DOWN SPOUTS ARE LOCATED OVER DOOR / WINDOW OPENINGS OR OTHER KEY BUILDING ELEMENTS

9.) CONTRACTOR TO PROVIDE AND COORDINATE ALL PIPING & ACCESSORIES WITH MEP ENGINEERS PRIOR TO COMMENCING ANY ROOF DRAINAGE PIPING

02 ROOF PLAN BELOW

SCALE: 1/16" = 1'-0"

No.	REVISIONS	BY
1	ADDENDA#1	RB

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IDEA-BROWNSVILLE ROBINDALE CAMPUS PHASE I

IDEA Public Schools

BROWNSVILLE, TEXAS

REGISTERED ARCHITECT DAVID A. MONREAL 19556 STATE OF TEXAS
5/11/2018

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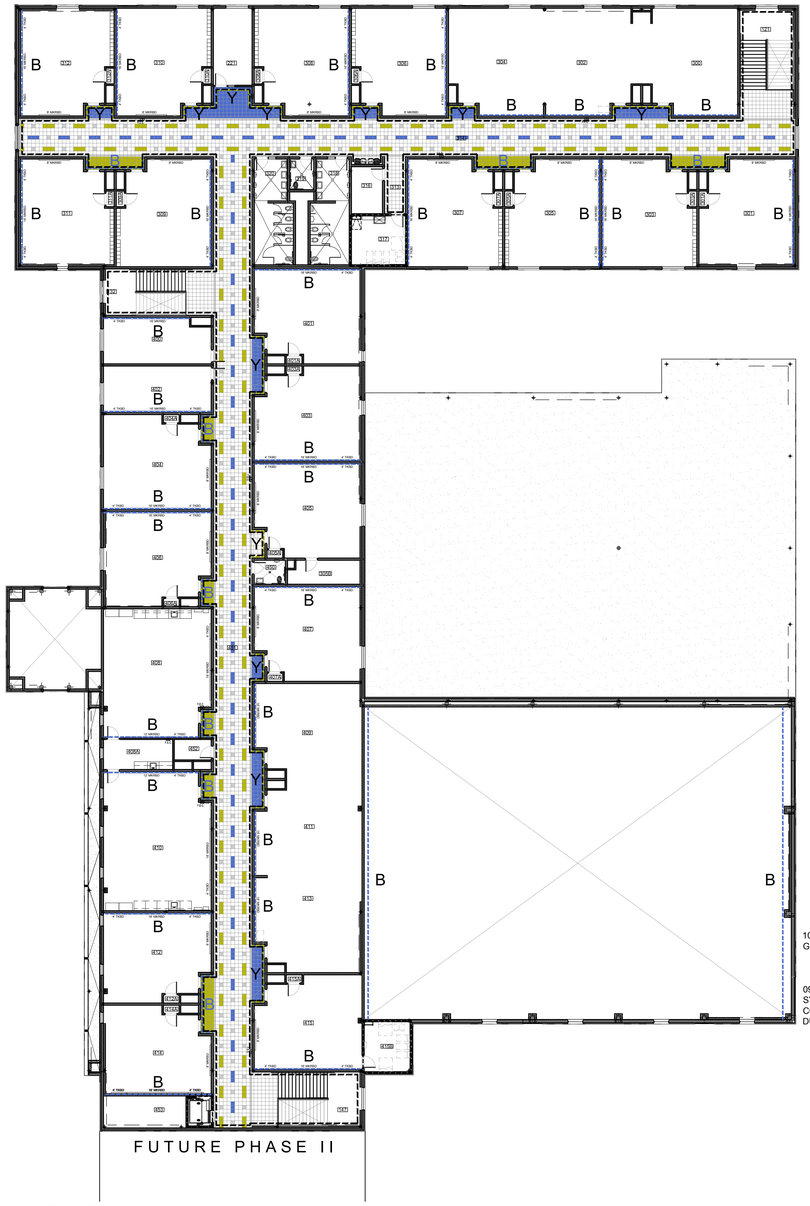
Architects-Planners
Interior Designers

Date: May 11, 2018
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: JA, RB
Job No. IDEA Robindale Phase I
Sheet: A2.09



2ND FLOOR

02 DUROPLEX COATING PLAN

SCALE: 3/32" = 1'-0"

PLAN NORTH

– – – – – DENOTES 4'-0" PAINTED WAINSCOT WITH DUROPLEX COATING SYSTEM AS SPECIFIED

GENERAL NOTES:

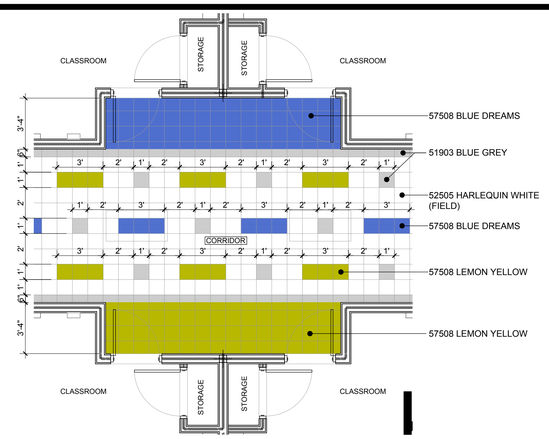
1.) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION

2.) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS

3.) REFERENCE ROOM FINISH SCHEDULE ON SHEET A2.02 FOR ROOM FINISH INFORMATION

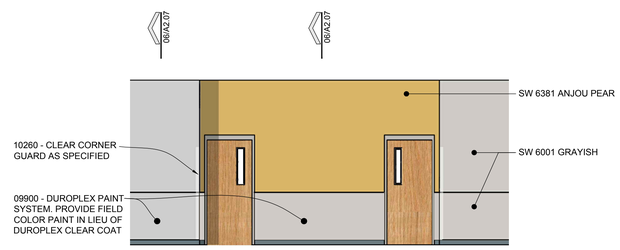
4.) PROVIDE FOR UP TO FOUR VCT COLORS IN CORRIDORS REFER TO 02/A2.07
5.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION

Y = DENOTES YELLOW ACCENT WALL SW 6381 ANJOU PEAR REFER TO 04/A2.12
B = DENOTES BLUE ACCENT WALL SW 6961 BLUE BEYOND REFER TO 05/A2.12



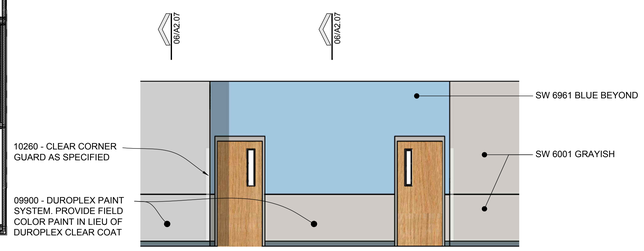
03 TYPICAL VCT PATTERN

SCALE: 1/4" = 1'-0"



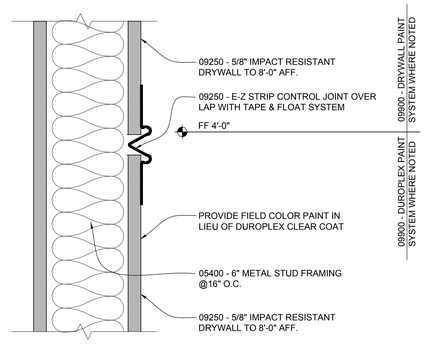
04 TYPICAL WALL ELEVATION

SCALE: 1/4" = 1'-0"



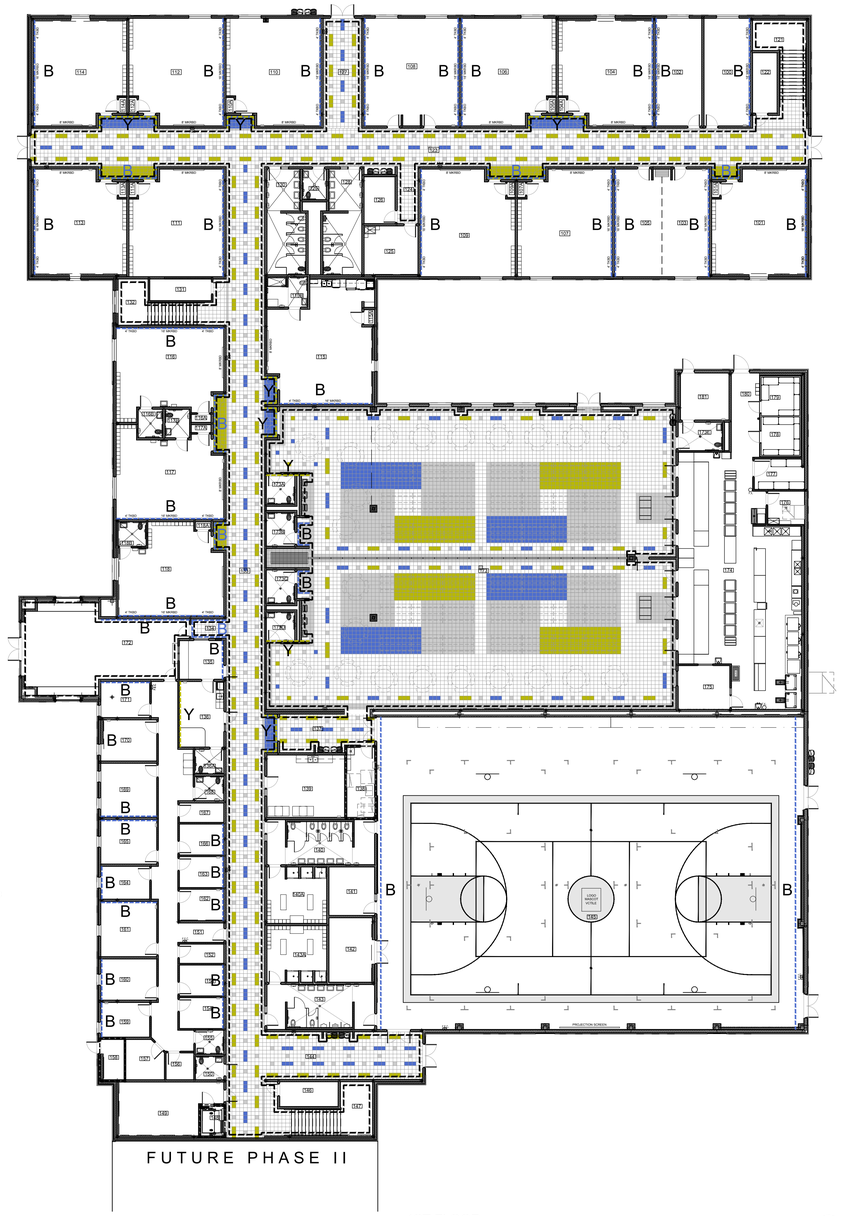
05 TYPICAL WALL ELEVATION

SCALE: 1/4" = 1'-0"



06 DUROPLEX TERMINATION DETAIL

NOT TO SCALE



1ST FLOOR

01 DUROPLEX COATING PLAN

SCALE: 3/32" = 1'-0"

PLAN NORTH

– – – – – DENOTES 4'-0" PAINTED WAINSCOT WITH DUROPLEX COATING SYSTEM AS SPECIFIED

GENERAL NOTES:

1.) GENERAL CONTRACTOR TO CONTACT ARCHITECTS OFFICE IF ANY FLOOR TILE DESIGN IS UNCLEAR REGARDING SIZE, COLOR, OR LOCATION

2.) PROVIDE TRANSITION STRIPS AT ALL DISSIMILAR FLOOR CONDITIONS

3.) REFERENCE ROOM FINISH SCHEDULE ON SHEET A2.01 FOR ROOM FINISH INFORMATION

4.) PROVIDE FOR UP TO FOUR VCT COLORS IN CORRIDORS REFER TO 02/A2.07
5.) ALLOW FOR ONE ACCENT WALL IN EACH CLASSROOM, LAB, AND OFFICES NOTED ON THIS PLAN BY THE FOLLOWING DESIGNATION

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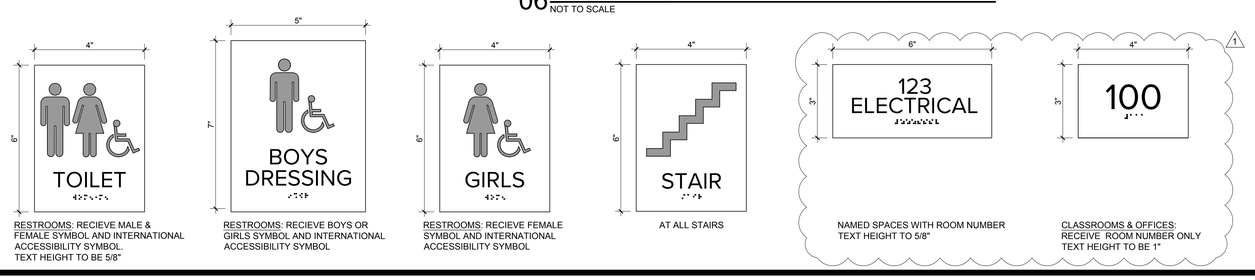
B = DENOTES BLUE ACCENT WALL SW 6961 BLUE BEYOND REFER TO 05/A2.12



RESTROOMS: RECIEVE MALE & FEMALE SYMBOL AND INTERNATIONAL ACCESSIBILITY SYMBOL. TEXT HEIGHT TO BE 5/8"

RESTROOMS: RECIEVE BOYS OR GIRLS SYMBOL AND INTERNATIONAL ACCESSIBILITY SYMBOL

RESTROOMS: RECIEVE FEMALE SYMBOL AND INTERNATIONAL ACCESSIBILITY SYMBOL

AT ALL STAIRS

NAMED SPACES WITH ROOM NUMBER TEXT HEIGHT TO 5/8"

CLASSROOMS & OFFICES: RECEIVE ROOM NUMBER ONLY TEXT HEIGHT TO BE 1"

VCT PATTERN AND ACCENT WALLS

No.	REVISIONS	BY
1	ADDENDA#1	RB

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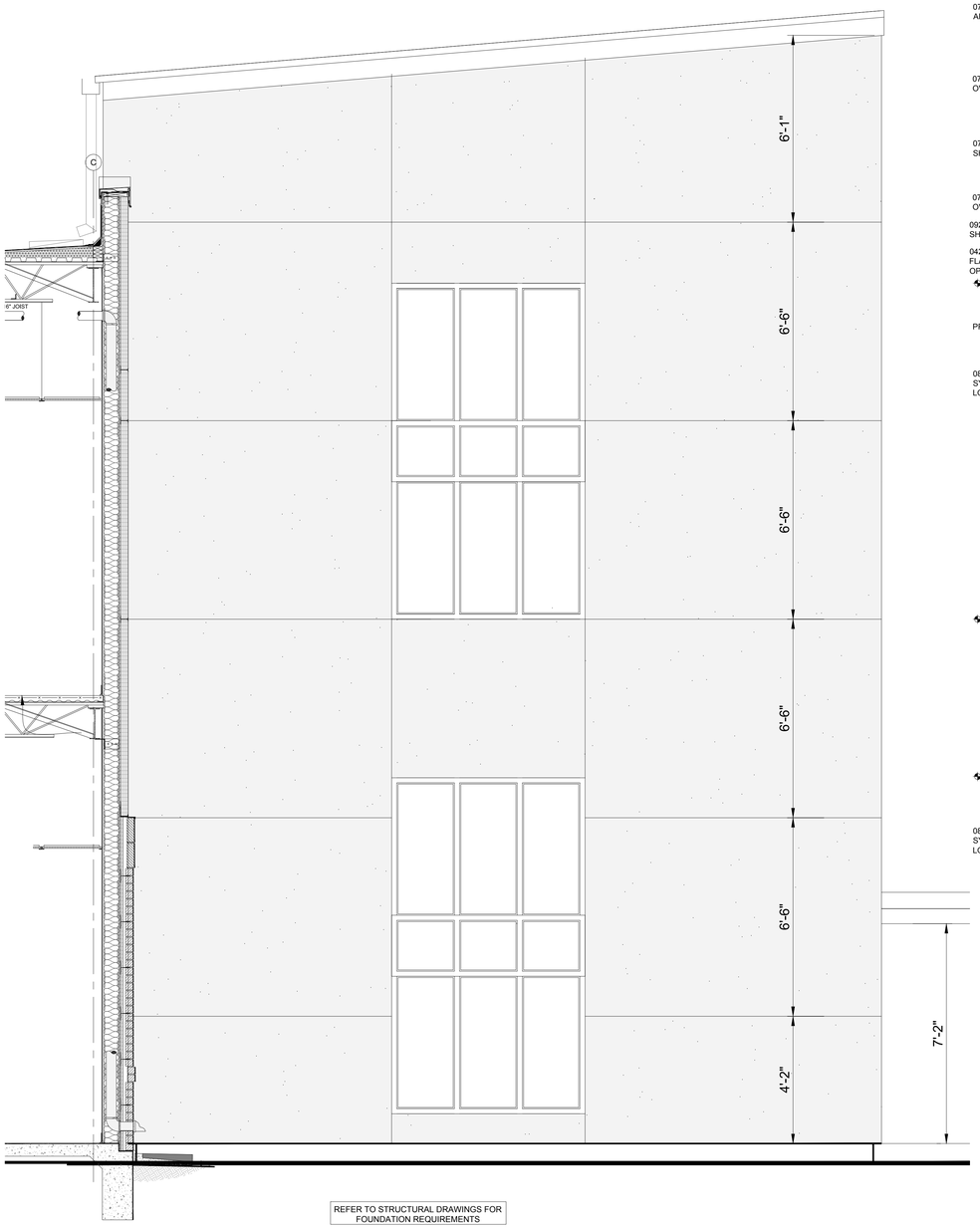
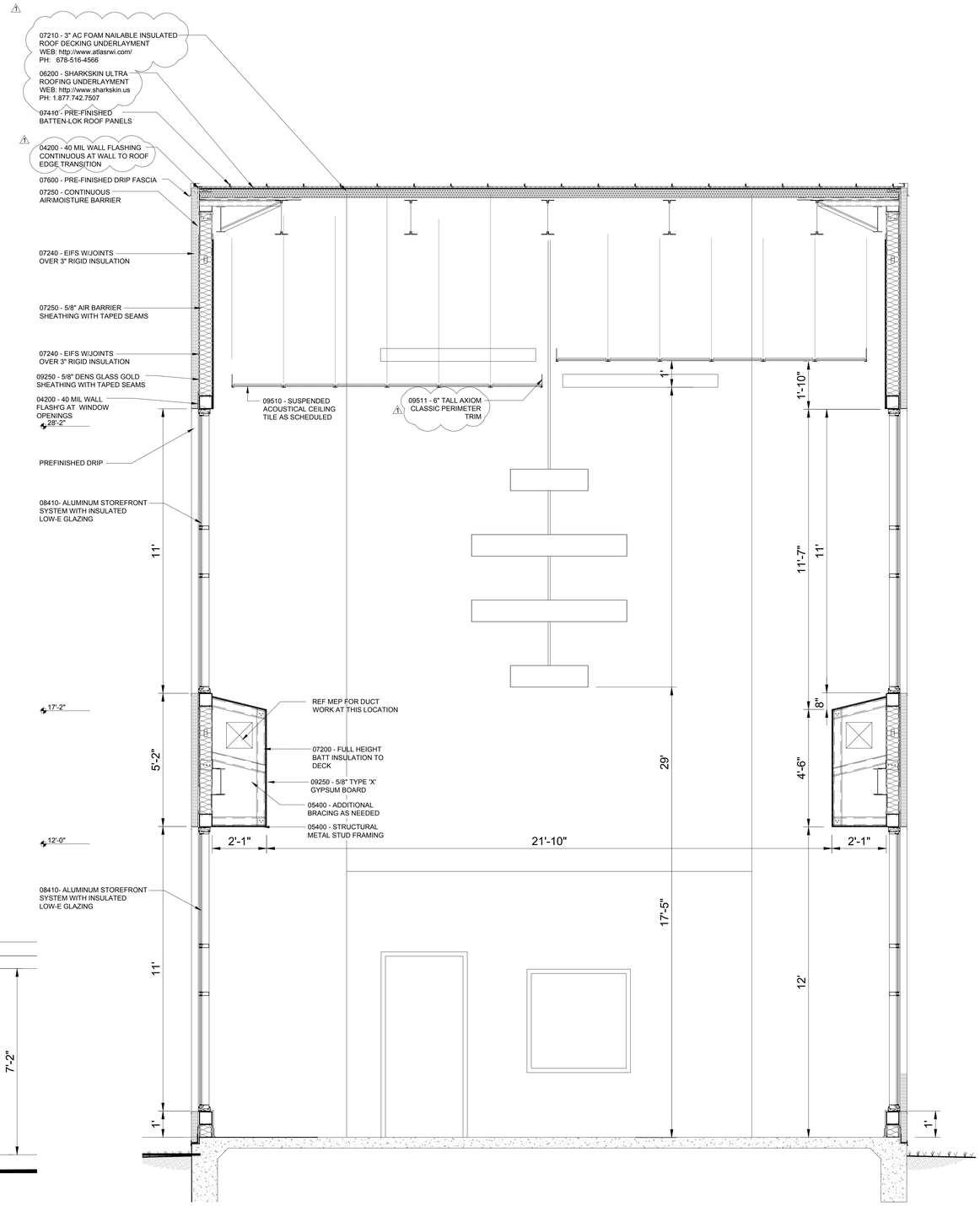


REFER TO STRUCTURAL DRAWINGS FOR FOUNDATION REQUIREMENTS

03 ELEVATION ENLARGEMENT

SCALE 3/4" = 1'-0"

ELEVATOR SHAFT AND PUMP ROOM WALLS TO BE **1 HR FIRE RATED**



02 PARTIAL BUILDING SECTION

SCALE 3/4" = 1'-0"

ELEVATOR SHAFT AND PUMP ROOM WALLS TO BE **1 HR FIRE RATED**

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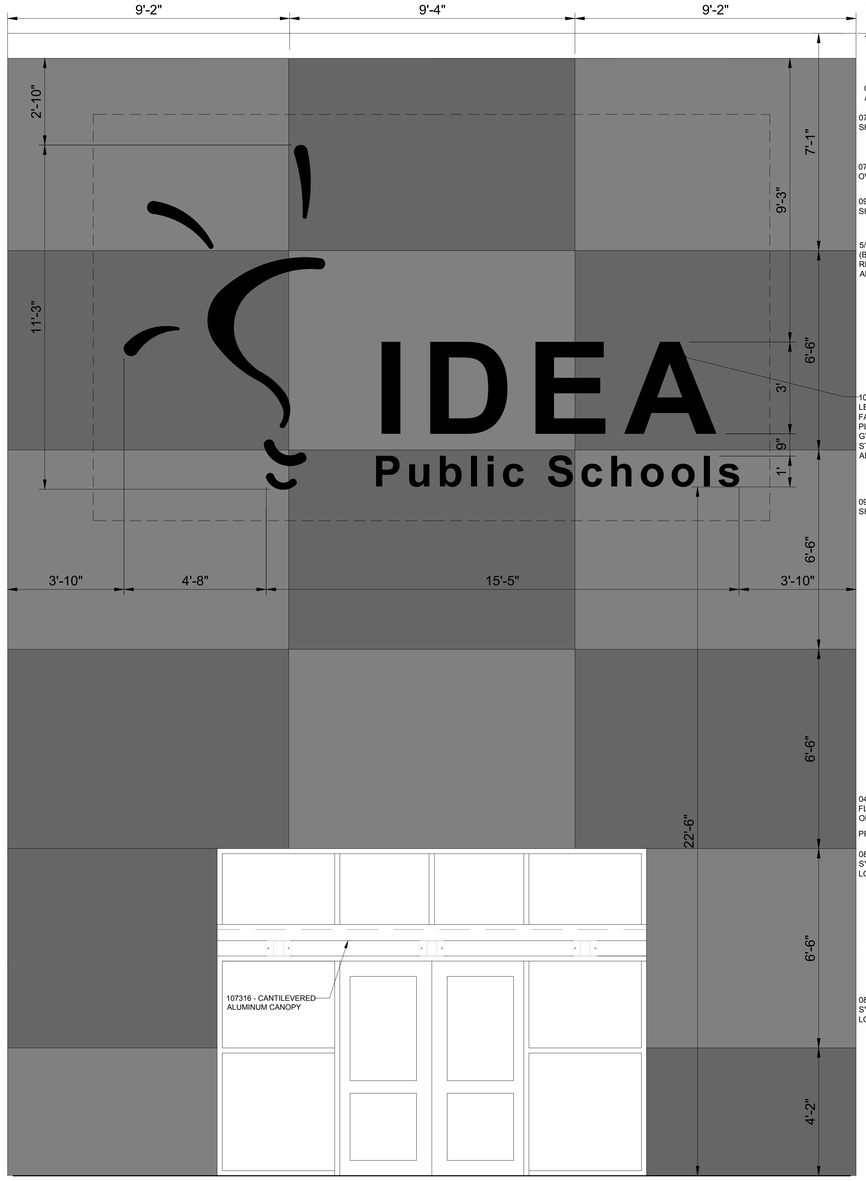
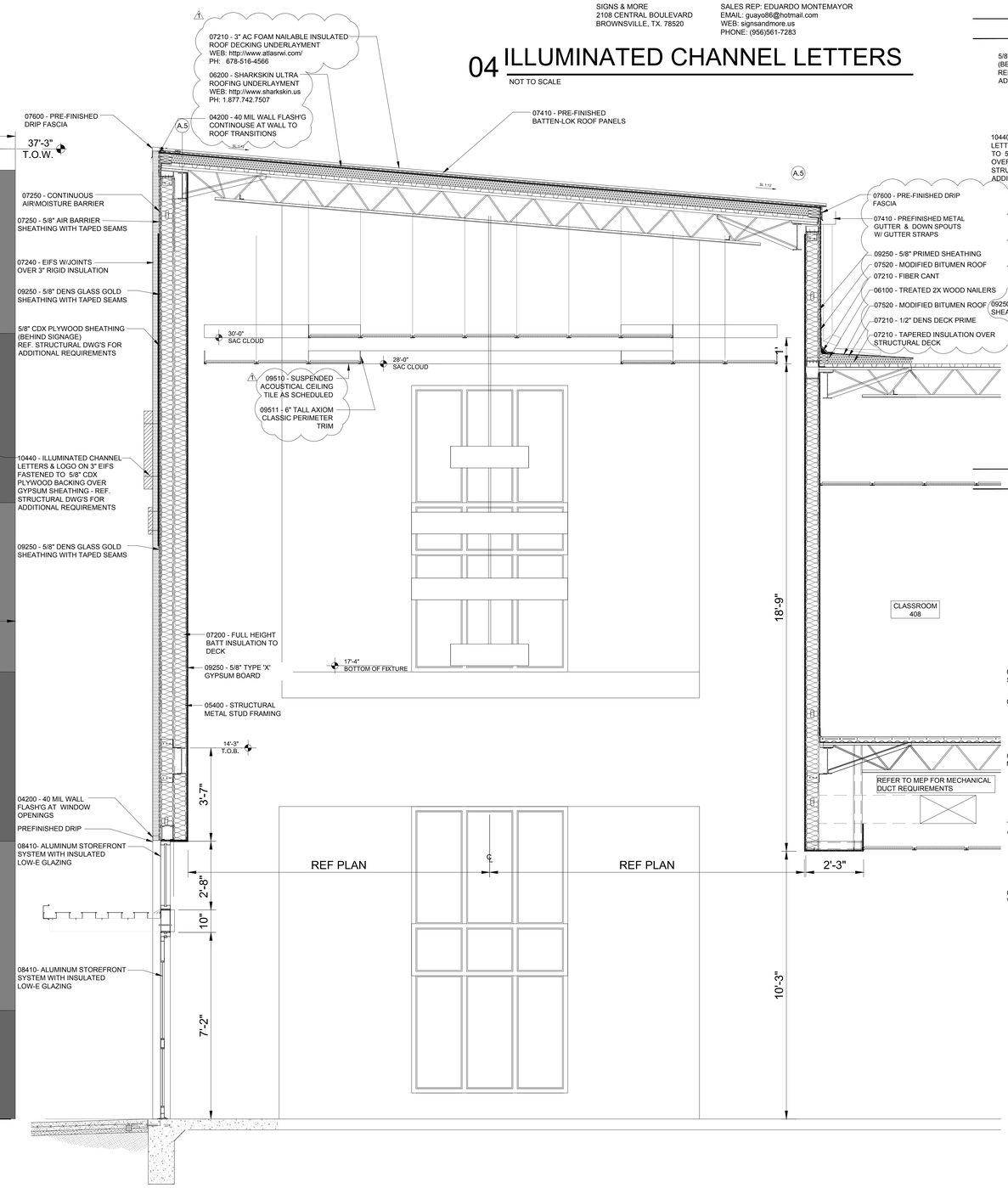


03 ELEVATION ENLARGEMENT

SCALE 3/4" = 1'-0"

ELEVATOR SHAFT AND PUMP ROOM WALLS TO BE **1 HR FIRE RATED**



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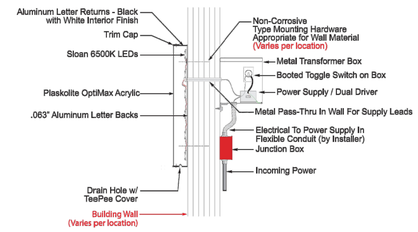
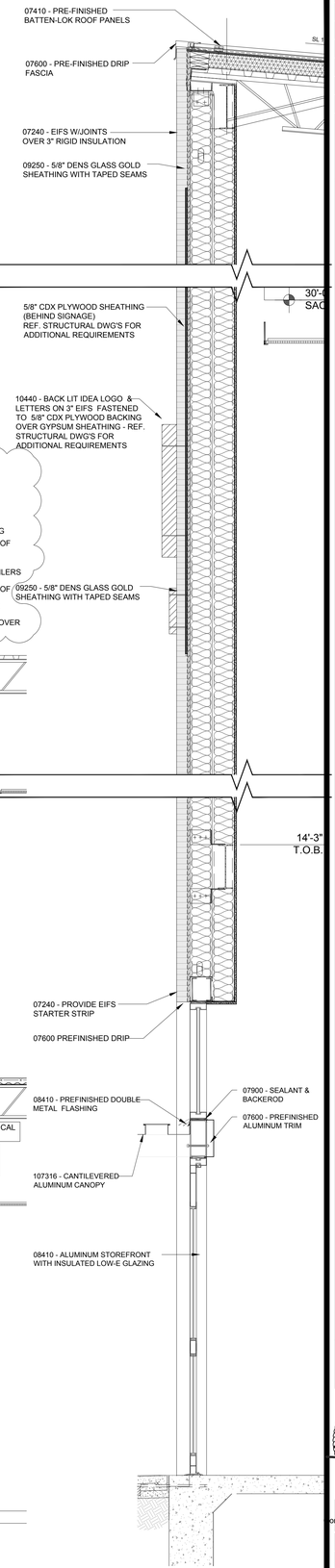


SIGNS & MORE
2108 CENTRAL BOULEVARD
BROWNSVILLE, TX. 78520

SALES REP: EDUARDO MONTEMAYOR
EMAIL: guayo86@hotmail.com
WEB: signsandmore.us
PHONE: (956)561-7283

04 ILLUMINATED CHANNEL LETTERS

NOT TO SCALE



01 WALL SECTION

SCALE 3/4" = 1'-0"

ELEVATOR SHAFT AND PUMP ROOM WALLS TO BE **1 HR FIRE RATED**

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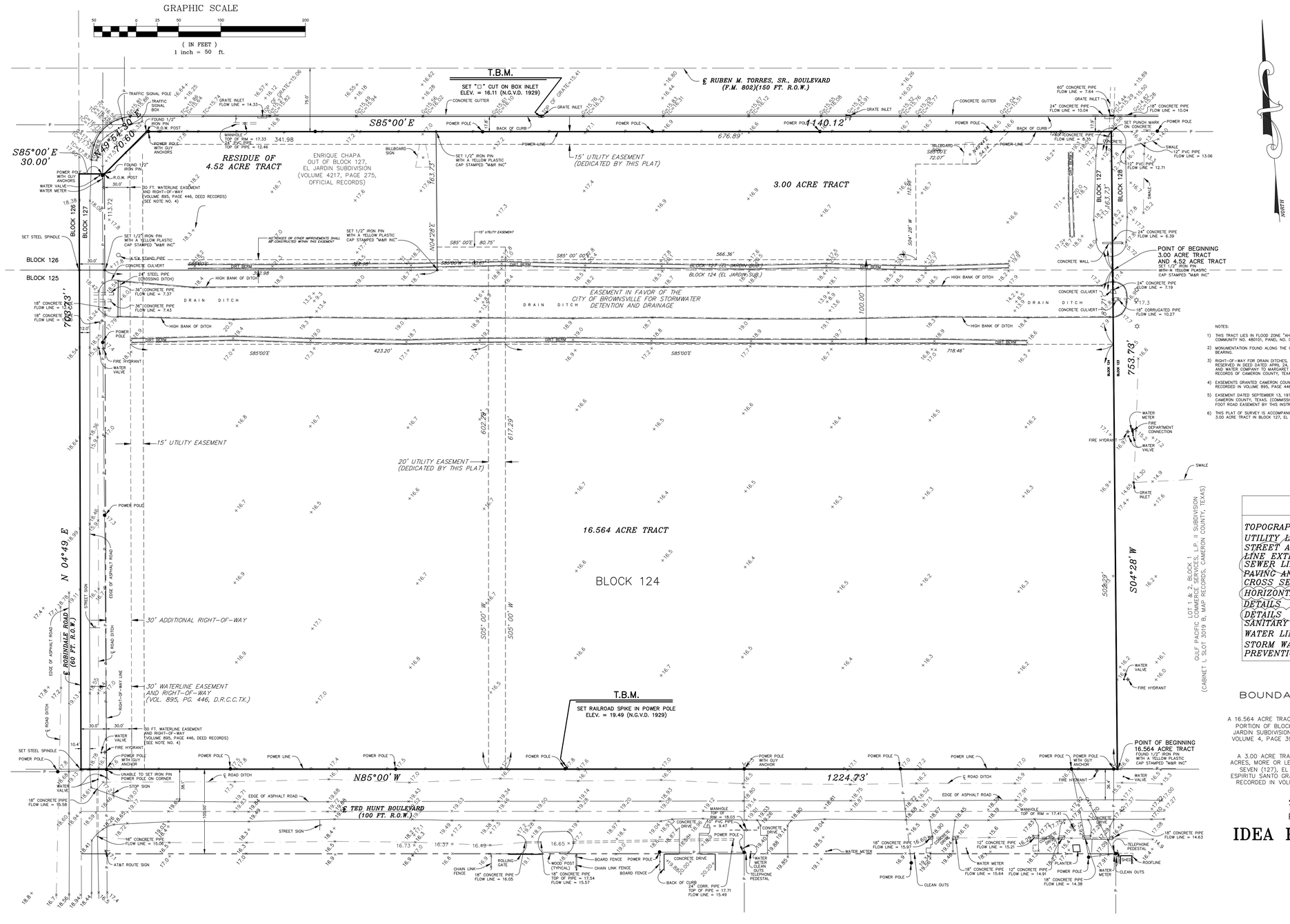
Sheet: A4.10



NOTES:

1) THIS TRACT LIES IN FLOOD ZONE "AH" (ELEV. 18) PER THE F.I.A. FLOOD INSURANCE RATE MAP OF COMMUNITY NO. 480101, PANEL NO. 0350 B, REVISED SEPTEMBER 15, 1983.

2) MONUMENTATION FOUND ALONG THE CENTERLINE OF ROBINDALE ROAD WAS USED AS THE BASIS OF BEARING.

3) RIGHT-OF-WAY FOR DRAIN DITCHES, CANALS AND LATERALS, ROADWAYS, PIPELINES AND UTILITIES AS RESERVED IN DEED DATED APRIL 24, 1926, FILED APRIL 24, 1926, EXECUTED BY SAN BENITO LAND AND WATER COMPANY TO MARGARET C. EVANS, RECORDED IN VOLUME 145, PAGE 623, OF THE DEED RECORDS OF CAMERON COUNTY, TEXAS.

4) EASEMENTS GRANTED CAMERON COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT NUMBER FIVE (5), RECORDED IN VOLUME 895, PAGE 446, DEED RECORDS, CAMERON COUNTY, TEXAS.

5) EASEMENT DATED SEPTEMBER 13, 1977, RECORDED IN VOLUME 1095, PAGE 254, DEED RECORDS, CAMERON COUNTY, TEXAS. (COMMISSIONERS COURT OF CAMERON COUNTY CLOSED AND ABANDONED 40 FOOT ROAD EASEMENT BY THIS INSTRUMENT)

6) THIS PLAT OF SURVEY IS ACCOMPANIED BY A NARRATIVE METES AND BOUNDS DESCRIPTION OF THE 3.00 ACRE TRACT IN BLOCK 127, EL JARDIN SUBDIVISION.

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BOUNDARY AND TOPOGRAPHIC SURVEY OF

A 16.564 ACRE TRACT OF LAND, MORE OR LESS, OUT OF THE NORTH PORTION OF BLOCK ONE HUNDRED AND TWENTY FOUR (124), EL JARDIN SUBDIVISION, AS PER MAP OR PLAT THEROF RECORDED IN VOLUME 4, PAGE 39, MAP RECORDS OF CAMERON COUNTY, TEXAS.

AND

A 3.00 ACRE TRACT, MORE OR LESS, OUT OF THE SOUTH 4.52 ACRES, MORE OR LESS, OUT OF BLOCK ONE HUNDRED AND TWENTY SEVEN (127), EL JARDIN SUBDIVISION OF SHARES 19 AND 27, ESPIRITU SANTO GRANT, ACCORDING TO THE MAP OR PLAT THEROF RECORDED IN VOLUME 4, PAGE 39, MAP RECORDS OF CAMERON COUNTY, TEXAS.

SCALE: 1"= 50'

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PROPOSED IMPROVEMENTS LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	PROP. FIRE HYDRANT	— F — —	PROP. FIRE LINE
W	PROP. WATER METER WITH BACK FLOW PREVENTOR	— ST — —	PROP. STORM SEWER LINE
	PROP. WATER VALVE	CO	PROP. CLEAN-OUT
— S — —	PROP. SANITARY SEWER LINE		PROP. FITTING
— W — —	PROP. WATER LINE		PROP. SANITARY SEWER MANHOLE
— DW — —	PROP. DOMESTIC WATER LINE	W	PROP. WATER METER WITH BACK FLOW PREVENTOR
—GAS— —	PROP. GAS LINE		

NOTES:

1- ALL SANITARY SEWER LINES TO BE PVC SDR-35

2- ALL WATERLINES 4" AND LARGER SHALL BE PVC C900 DR-25 PIPE.

3- WATERLINE SMALLER THAN 4" SHALL BE PVC SCH 40 PIPE.

4- SEE MEP DRAWINGS FOR EXACT POINT OF CONNECTION FOR WATER (W) FIRE (F) AND SEWER (S) LINES AT BUILDINGS.

5- GATE VALVES SHALL BE INSTALLED ON ALL WATERLINES GOING INTO BUILDINGS.

6- 4" SANITARY SEWER LINES ARE TO BE INSTALLED AT 1% SLOPE OR GREATER WITH CLEAN OUTS AT SPACING REQUIRED BY CODE. NOT ALL REQUIRED CLEAN OUTS ARE SHOWN HEREON. 6" SANITARY SEWER LINES ARE TO BE INSTALLED AT 0.5% SLOPE OR GREATER WITH CLEAN OUTS AT SPACING REQUIRED BY CODE. NOT ALL REQUIRED CLEAN OUTS ARE SHOWN HEREON. 8" SANITARY SEWER LINES ARE TO BE INSTALLED AT 0.40% SLOPE WITH MANHOLES AS SHOWN HEREON. CLEAN OUTS ARE NOT REQUIRED EXCEPT WHERE SHOWN AT ENDS OF LINES FOR FUTURE EXTENSION.

7- PROP. CONNECTION TO EXISTING WATER LINE AND SANITARY SEWER LINE PER BROWNSVILLE PUBLIC UTILITIES BOARD REQUIREMENTS

8- PROP. RELOCATE EXISTING FIRE HYDRANT. CONTRACTOR TO COORDINATE WITH BROWNSVILLE PUBLIC UTILITY BOARD ON INSTRUCTIONS FOR RELOCATION.

CONTRACTOR SHALL VERIFY ELEVATION OF SANITARY SEWER LINE AND WATER LINE TO BUILDINGS PRIOR TO CONSTRUCTION AND AT POINT OF CONNECTION AND PLAN ELEVATIONS

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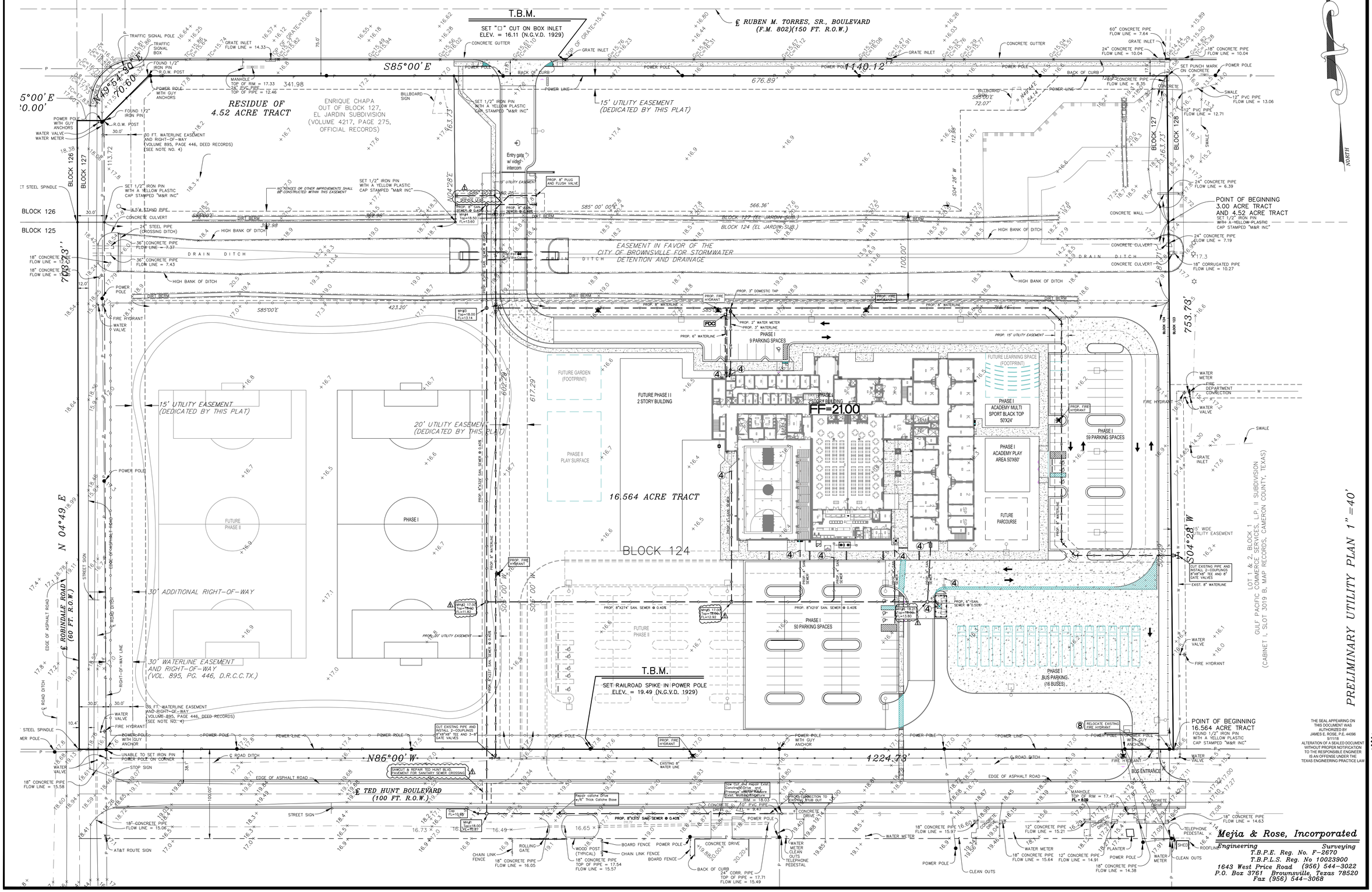

PRELIMINARY UTILITY PLAN 1"=40'

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SYMBOL	DESCRIPTION		
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	PROP. WATER VALVE	CO	PROP. CLEAN-OUT
— S — —	PROP. SANITARY SEWER LINE		PROP. FITTING
— W — —	PROP. WATER LINE		PROP. SANITARY SEWER MANHOLE
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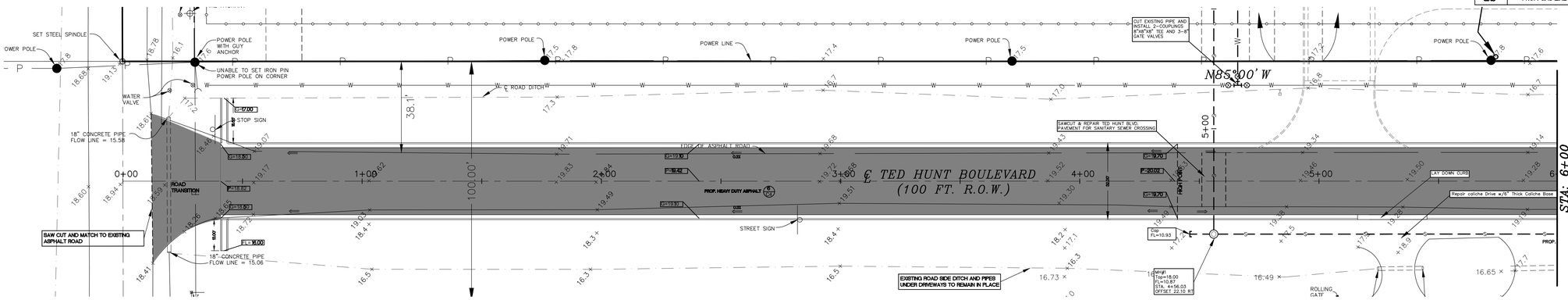

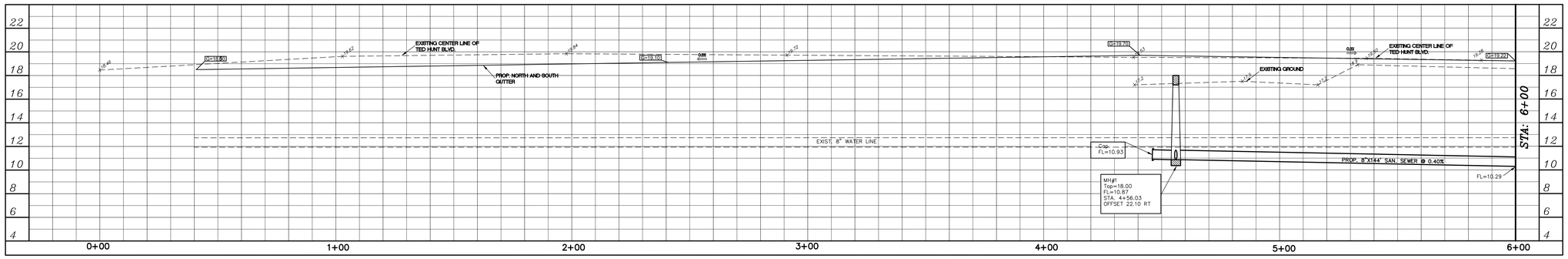

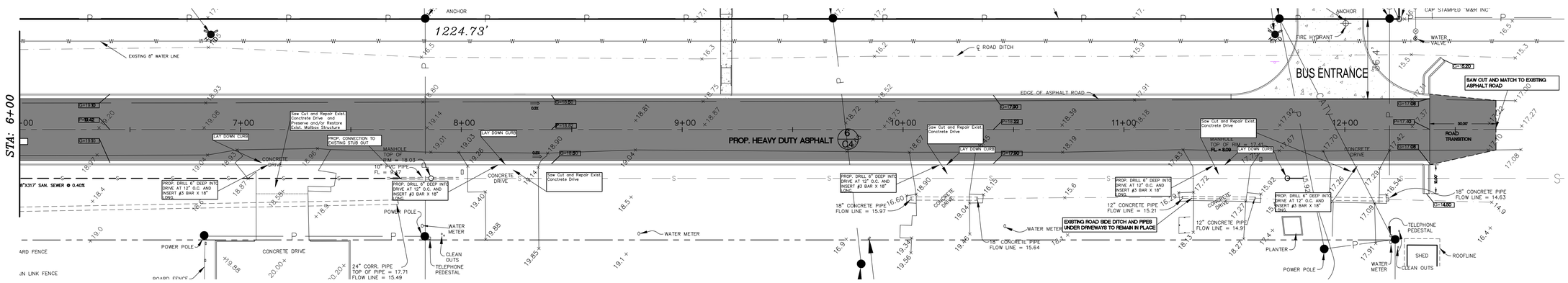

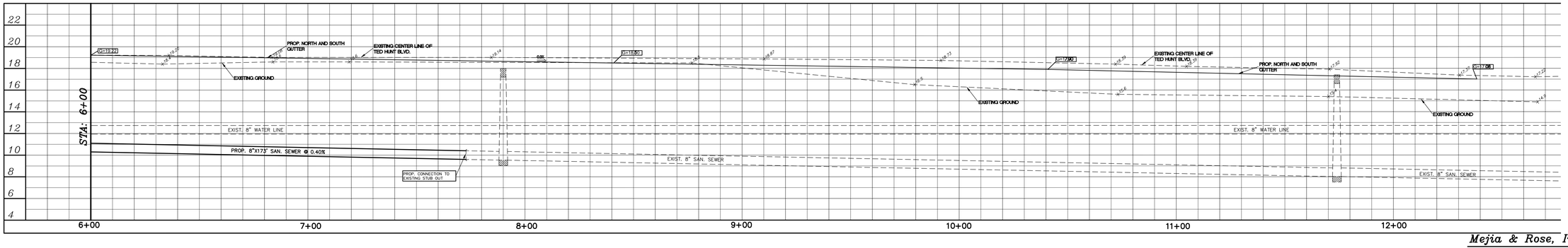

STREET AND SEWER LINE EXTENSION PROFILE H 1"=20' V 1"=4'

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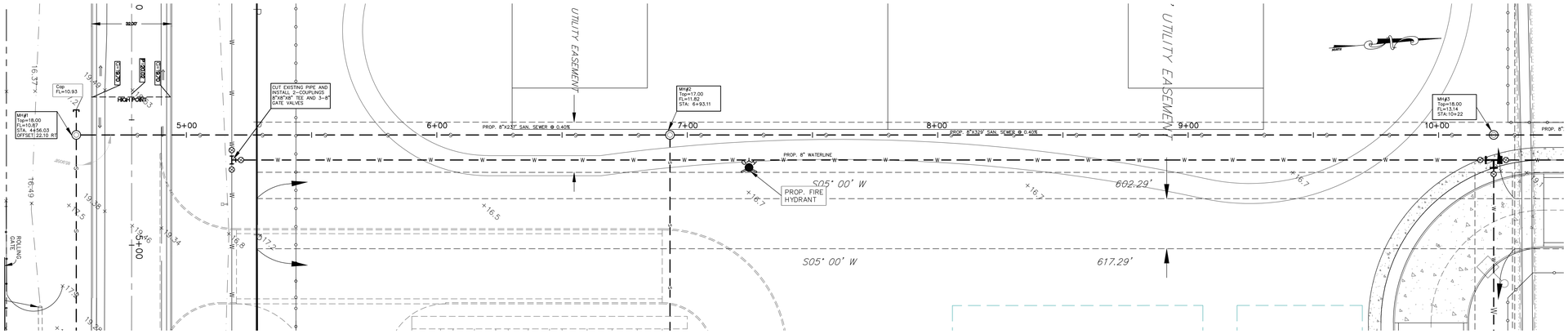
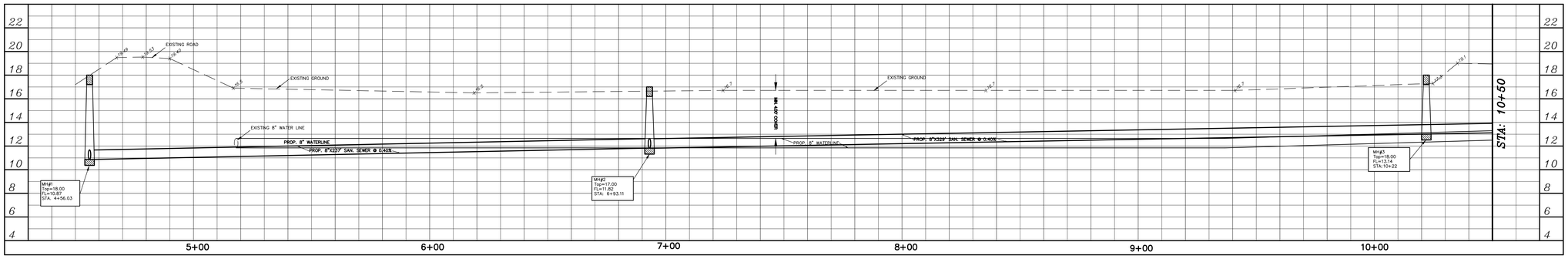
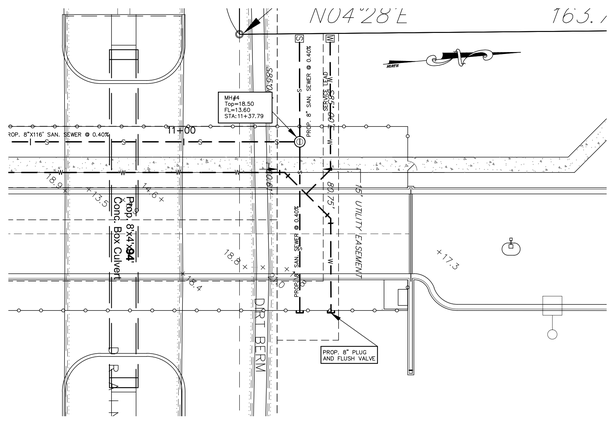
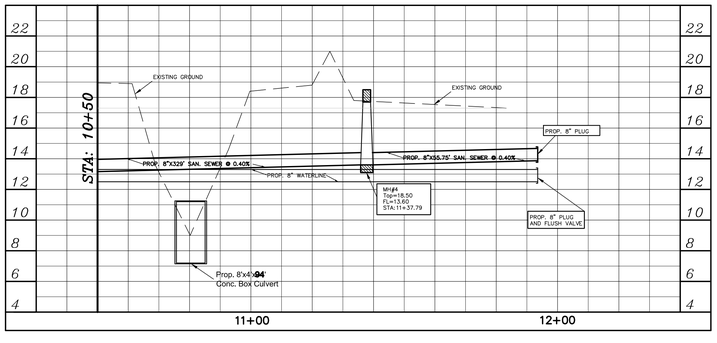
Job No.	20010
Sheet:	C-2.1 OF C-7









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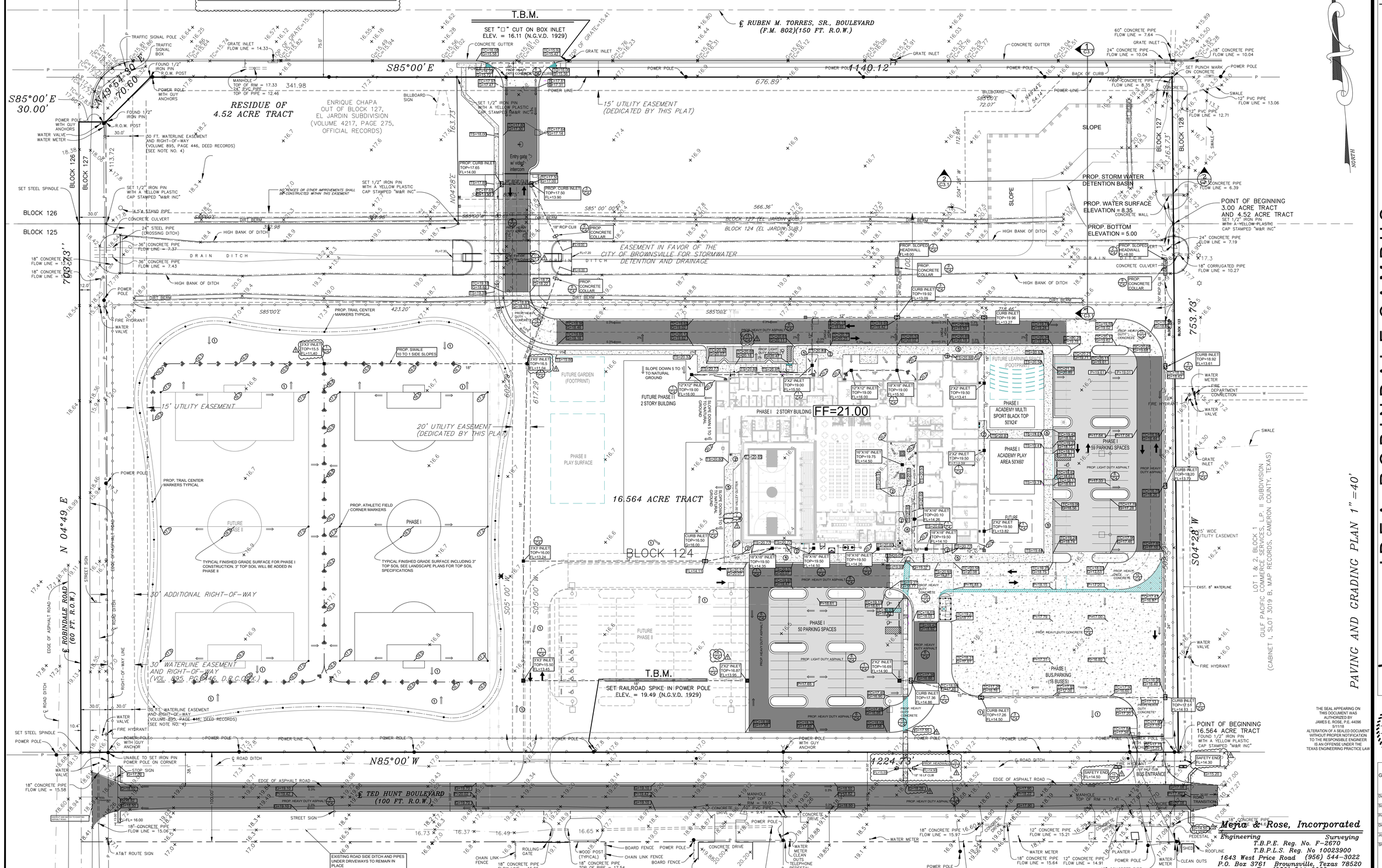
Project Architect: David Monreal, AIA
Drawn By: S.S
Job No. 20010
Sheet: C-2.2 OF C-7

LEGEND

- INDICATES PROPOSED GROUND SURFACE SPOT ELEVATION
- INDICATES PROPOSED DIRECTION OF GRADE
- INDICATES SIDEWALK TRENCH UNDER DRAIN
- INDICATES PROPOSED SWALE
- 17.2 INDICATES TYPICAL PROPOSED FINISHED GROUND SURFACE CONTOUR
- TC=25.75 INDICATES PROPOSED TOP OF CURB ELEV.
- TS=25.85 INDICATES PROPOSED TOP OF SIDEWALK ELEV.
- PS=25.75 INDICATES PROPOSED PAVEMENT ELEVATION
- GS=25.75 INDICATES PROPOSED GUTTER ELEVATION

GRADING PLAN NOTES

1. GRADE ALL AREAS (SMOOTH AND FINELY GRADED AS NEEDED TO RECIEVE HYDROMULCHING OR SOD) TO DRAIN TO THE NEAREST DRAINAGE OUTLET OR SWALE
2. SIDEWALK TO MATCH FINISHED FLOOR OR DOORWAYS. SLOPE AWAY FROM BUILDING @ 2% SLOPE
3. ALL DEBRIS AND EXCESS EARTH MATERIAL GENERATED BY THE SITEWORK OPERATIONS WILL BECOME PROPERTY OF THE CONTRACTOR TO BE REMOVED FROM THE SITE AND PROPERLY DISPOSED AT HIS EXPENSE.
5. NO SIDEWALKS SHALL HAVE A CROSS SLOPE GREATER THAN 2% OR LONGITUDINAL SLOPE GREATER THAN 5%.
6. EXCEPT WHERE SPECIFICALLY SHOWN ON PLANS. STORM SEWER PIPE 12" TO 60" DIAMETER SHALL BE: REINFORCED CONCRETE PIPE (CLIII RUBBER GASKETED) OR ADS HP HIGH PERFORMANCE POLYPROPYLENE PIPE WITH WATER TIGHT FITTINGS. STORM SEWER PIPE 4" TO 10" DIAMETER SHALL BE: CORRUGATED POLYETHYLENE PIPE SMOOTH INTERIOR ADS N-12 HQ PIPE WITH WATER TIGHT FITTINGS OR APPROVED EQUAL MEETING AASHTO DESIGNATION M252-921 OR PVC SDR 35 PIPE. ALL STORM SEWER PIPE SHALL BE BEDDED IN SAND, SAME AS SANITARY SEWER AND WATER LINE PIPE.
7. BACKFILL ALL CURB & GUTTER, PAVEMENT EDGES AND SIDEWALKS TO 3" BELOW TOP OF CURB OR SIDEWALK AND SLOPE TO EXISTING GROUND AT 10 TO 1.
8. NO IRRIGATION SPRINKLER HEADS OR PIPING SHALL BE INSTALLED IN ANY AREA UNTILL FINAL GRADING IN THAT AREA HAS BEEN COMPLETED AND APPROVED BY SITEWORK ENGINEER.



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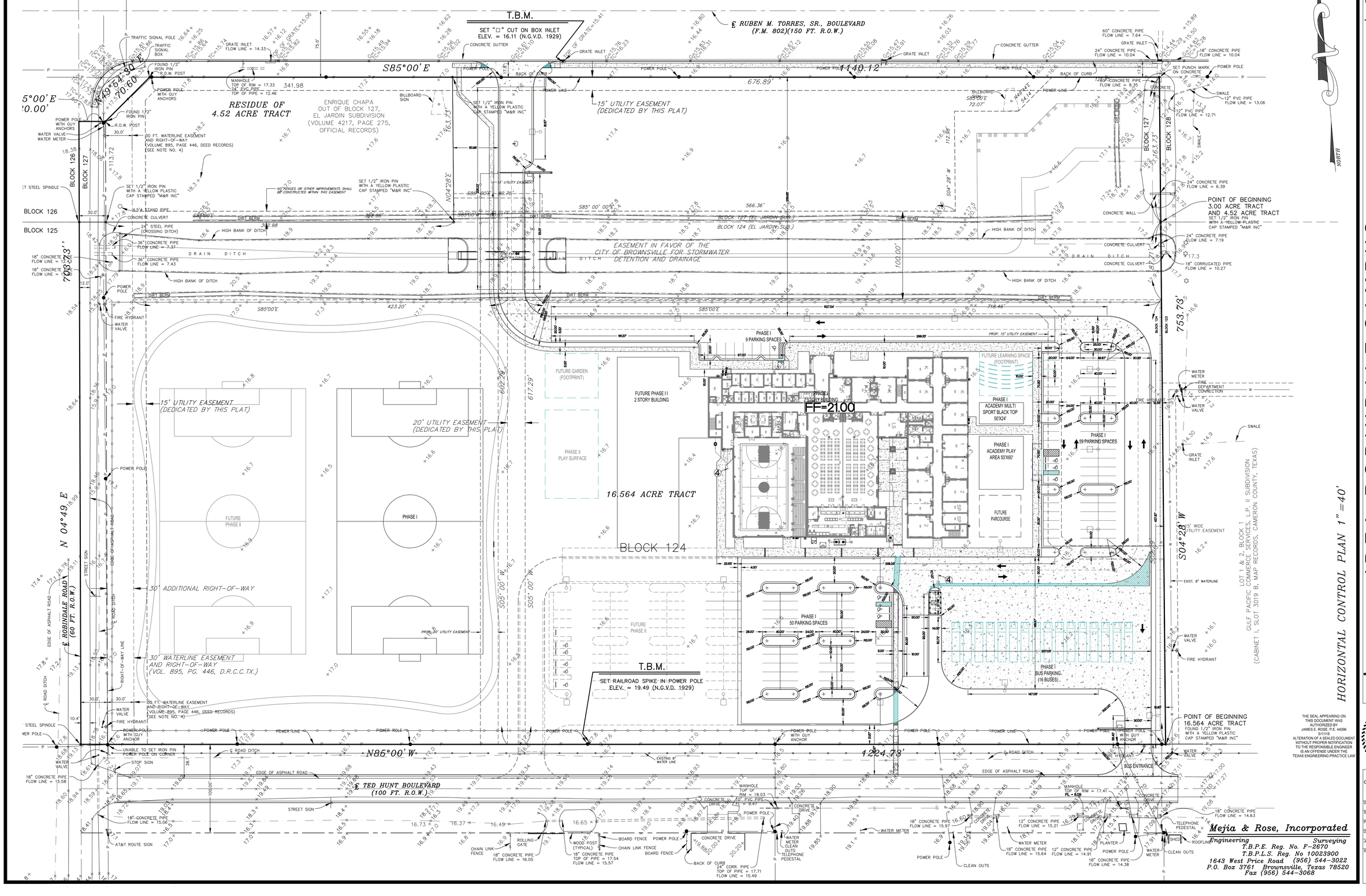

HORIZONTAL CONTROL PLAN 1"=40'

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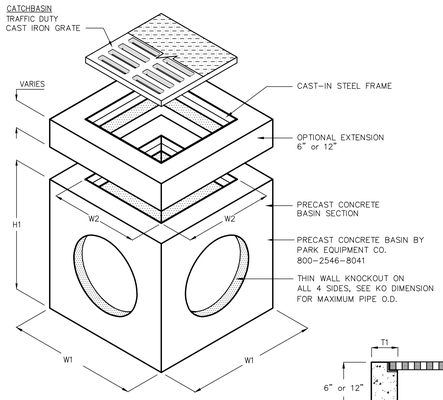
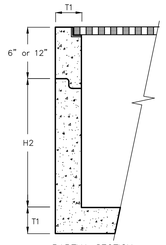


MODEL #		DIMENSIONS							
CATCH BASIN	JUNCTION BOX[2]	W1	W2	H1	H2	T1	KO	GRATE SIZE	WEIGHT LBS
CB12[1]	JB12	15"	10"	21"	18"	2"	10"	12"x12"x1"	180
16"X16" CB18	JB18	24"	16"	34"	30"	4"	15"	18"x18"x1"	1,000
18"X18" CB20	JB20	26"	18"	34"	30"	4"	17"	20"x20"x1"	1,335
CB24	JB24	32"	22"	41"	36"	5"	22"	24"x24"x2"	2,245
2'X2' CB27	JB27	37"	25"	42"	36"	6"	24"	27"x27"x2"	2,875
CB30	JB30	42"	30"	42"	36"	6"	30"	32"x32"x2"	3,675
3'X3' CB36	JB36	48"	36"	42"	36"	6"	32"	38"x38"x2"	4,585

1. CB12 CATCHBASIN IS RATED FOR PEDESTRIAN LOADING. ALL OTHERS ARE TRAFFIC DUTY.
2. ALL JUNCTION BOXES ARE STANDARD PEDESTRIAN DUTY OR OPTIONAL TRAFFIC DUTY.



PARTIAL SECTION

SPECIFICATIONS

CONCRETE : Class 1 concrete with of design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth.

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

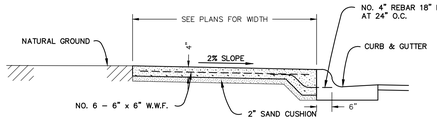
C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

PARK EQUIPMENT COMPANY

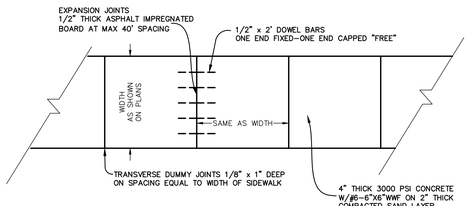
TEL (713) 937-7602
FAX (713) 937-4254
WATS (800) 256-8041

THE 4'x4' GRATE INLETS AT COORDINATES N 893.73, E 47.00 AND N 898.73, E 400.42 ARE TO BE PARK MODEL C8-98 OR APPROVED EQUAL WITH TRAFFIC DUTY CAST IRON GRATE.

1 PRECAST CONCRETE CATCHBASIN "AREA DRAINS" (AD)

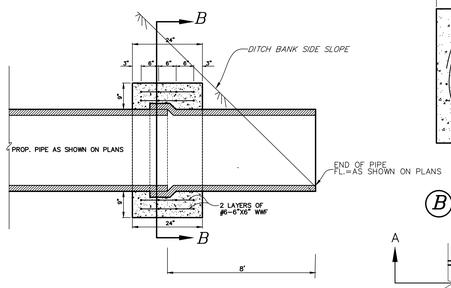


4 SIDEWALK ADJACENT TO CURB AND GUTTER

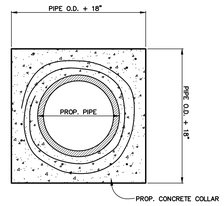


5 SIDEWALK DETAIL

(N.T.S)

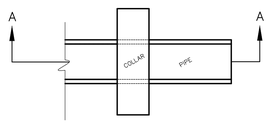


A PROFILE



B SECTION

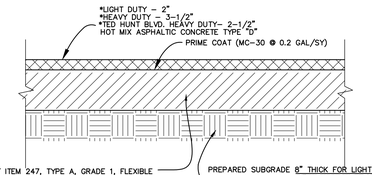
NOT TO SCALE



PLAN VIEW

9 CONCRETE COLLAR

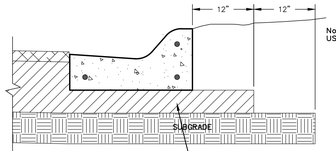
N.T.S.



TXDOT ITEM 247, TYPE A, GRADE 1, FLEXIBLE BADE (CRUSHED LIMESTONE) COMPACTED TO 95% OF MODIFIED PROCTOR (ASTM D1557) MAXIMUM DRY DENSITY AT OR WITHN 3% POINTS ABOVE OR BELOW OPTIMUM MOISTURE CONTENT.
8" THICK FOR LIGHT DUTY PAVEMENT AND 9-1/2"" THICK FOR HEAVY DUTY PAVEMINT.
*TED HUNT BLVD. HEAVY DUTY- 10" THICK

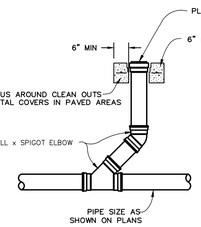
PREPARED SUBGRADE 8" THICK FOR LIGHT DUTY AND 12" THICK FOR HEAVY DUTY
PREPARED SUBGRADE 12" HEAVY DUTY FOR TED HUNT BLVD.
LIME TREATMENT OF THE SUBGRADE SOILS SHOULD BE ~~IN ACCORDANCE WITH TxDOT~~ 2014 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES, ITEM 260, LIME TREATMENT (ROAD-MIXED). LIME TREATMENT SUBGRADE SOILS SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN THE RANGE OF TWO PERCENTAGE POINTS BELOW THE OPTIMUM MOISTURE CONTENT TO TWO PRECENTAGE POINTS ABOUVE THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557
APPLICATION RATE FOR LIME TREATED SUBGRADE SHALL BE 36LB/SY FOR 8" THICK AND 54LB/SY FOR 12" THICK

6 ASPHALT PAVEMENT



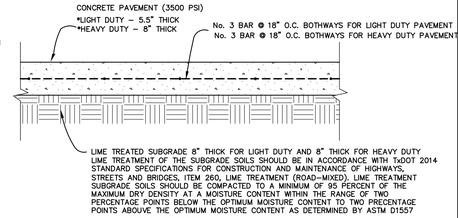
APPROXIMATE 2.5" THICK FLEX. BASE UNDER CURB AND GUTTER FOR LIGHT DUTY PAVEMENT (7.5" THICK FOR HEAVY DUTY PAVEMENT)

PAVEMENT AT CURB & GUTTER SECTION



11 CLEANOUT

(N.T.S.)

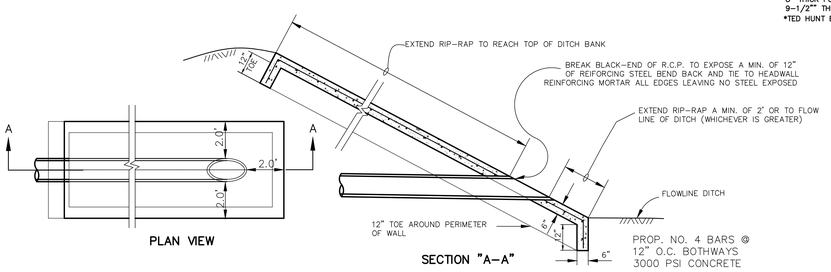


LIME TREATED SUBGRADE 8" THICK FOR LIGHT DUTY AND 8" THICK FOR HEAVY DUTY
LIME TREATMENT OF THE SUBGRADE SOILS SHOULD BE IN ACCORDANCE WITH TxDOT 2014 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES, ITEM 260, LIME TREATMENT (ROAD-MIXED). LIME TREATMENT SUBGRADE SOILS SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN THE RANGE OF TWO PERCENTAGE POINTS BELOW THE OPTIMUM MOISTURE CONTENT TO TWO PRECENTAGE POINTS ABOUVE THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557

CONCRETE PAVEMENT:
CONCRETE WITH DESIGN COMPRESSIVE STRENGTH OF 3500 PSI AT 28 DAYS.
SLUMP AT POINT OF PLACEMENT SHALL NOT EXCEED 5 INCHES
AIR CONTENT AT POINT OF PLACEMENT 3 TO 5 PERCENT
ALL EXPOSED CONCRETE SURFACES, (SIDEWALKS, CONCRETE PAVEMENT, CURB & GUTTER, ETC.) SHALL BE TREATED WITH CURING COMPOUND, RESIN BASE ASTM C 309, TYPE 2 WITH PIGMENTED TINT OF FUGITICE DYE,

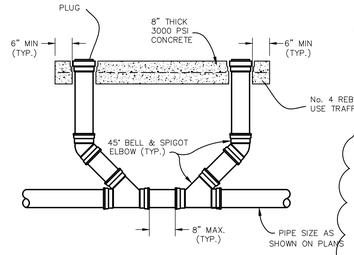
10 CONCRETE PAVEMENT

N.T.S.



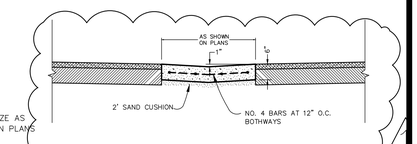
2 TYPICAL CONCRETE RIP-RAP HEADWALL DETAIL

N.T.S.



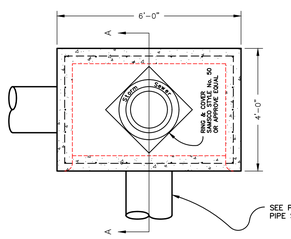
12 TWO-WAY CLEANOUT

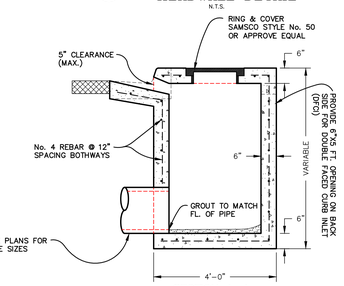
(N.T.S.)



14 CONCRETE VALLEY GUTTER

N.T.S.

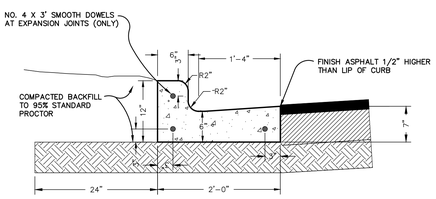




NOTES:
1. PRECAST INLETS MY BE USED SUBJECT TO ENGINEER'S APPROVAL.
2. CONCRETE FOR GRATE INLET SHALL HAVE A MINIMUM COMPRESSIVE STRENGHT OF 3,500 P.S.I. AT 28 DAYS
3. BASE AND REINFORCING SHALL EXTEND AT LEAST 6" BEYOND OUTSIDE OF PRECAST BOXES.
4. CONTACT POINT BETWEEN BASE AND PRECAST BOX WALLS SHALL BE GROUTED INSIDE AND OUTSIDE.

3 CURB INLET DETAIL

(CI)
N.T.S.



7 CURB & GUTTER DETAIL

SCALE: 1" = 1'

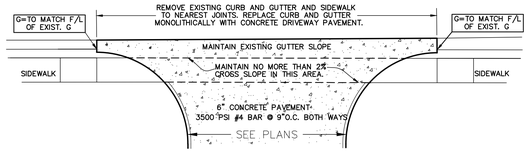
NOTE:

Expansion joints will be placed at curb returns, inlets, and end of each pour with intervals not to exceed 40 L.F. Joints will consists of 1/2" pre-molded expansion joint material with 3 - 36" x 1/2" dowels, one end greased and wrapped. Care must be taken that the dowels are staight and laid parallel with curb and no concrete "plugs" or other material be allowed through the dowel holes or expansion material that would prevent joint from operating as an expansion joint. Expansion joint material shall be pre-molded asphalt impregnated expansion joint material conforming to ASTM D 994 (NOT WOOD FIBER TYPE)

Dummy joints shall be 2" deep and placed at 10 ft. intervals.

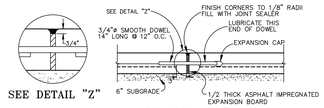
Concrete shall be 3000 psi conforming to the requirement of "Reinforced Concrete Structures", when not shown on the drawings, and shall also contain 1.5 lbs. of fibermess per cubic yard.

All exposed concrete surfaces, (sidewalks, concrete pavement, curb & gutter, etc.) shall be treated with curing compound, resin base ASTM C 309, Type 2 with pigmented tint of fugitive dye.



8 CONCRETE DRIVEWAY ENTRANCE DETAIL

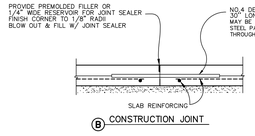
N.T.S.



SEE DETAIL "Z"

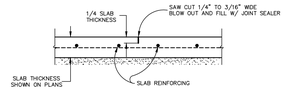
A EXPANSION JOINT

SAME FOR REINFORCED AND UNREINFORCED PAVEMENT
AND
CONCRETE SIDEWALKS
(USE 1/2" DOWEL ON 4" THICK SIDEWALK)



B CONSTRUCTION JOINT

NOTE: CONSTRUCTION JOINTS TO BE USED AT END OF EACH CONCRETE POUR



C CONTROL JOINT

NOTE: FOR ALL CONC. JOINTS
JOINT SEALING COMPOUND SHALL BE A SINGLE COMPONENT, COLD APPLIED, SELF-LEVELING POURABLE GRADE EXPANSION JOINT SEALANT MEETING THE REQUIREMENTS OF A.S.T.M. SPECIFICATION C-920 TYPE "E" GRADE "P" CLASS 25 (SONOLASTIC SL-1 SONNEBORNE OR APPROVED EQUAL.)

13 CONCRETE PAVEMENT JOINTING DETAILS

A EXPANSION JOINT SPACING SHALL NOT EXCEED 75 FEET IN EITHER DIRECTION
B CONSTRUCTION AND/OR C CONTROL JOINT SPACING SHALL NOT EXCEED 15 FEET IN EITHER DIRECTION

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JAMES E. ROSE, P.E. 44096 5/11/18
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

STATE OF TEXAS
JAMES E. ROSE
44096
LICENSED
PROFESSIONAL ENGINEER

Mejia & Rose, Incorporated
Engineering Surveying
T.B.P.E. Reg. No. F-2670
T.B.P.L.S. Reg. No 10023900
1643 West Price Road (956) 544-3022
P.O. Box 3761 Brownsville, Texas 78520
Fax (956) 544-3068

No.	REVISIONS	BY
1	5-18-18	M&R

GMS ARCHITECTS
1150 Paredes Line Rd.
Brownsville TX 78526
(956) 546-0110
fax (956) 546-0196

IDEA-ROBINDALE CAMPUS
PHASE I
BROWNSVILLE, TEXAS

IDEA Public Schools

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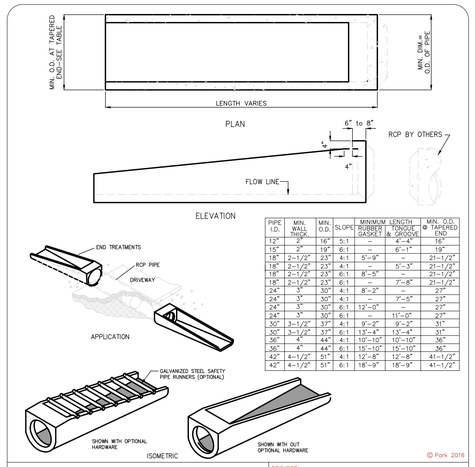
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	MAY, 2018
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	S.S
Job No.	20010
Sheet:	C-4 OF C-7



PIPE I.D.	MIN. WALL THICK.	MIN. O.D.	SLOPE	MINIMUM RUBBER GASKET	LENGTH TONGUE & GROOVE	MIN. O.D. @ TAPERED END
12"	2"	16"	5:1	–	4'-4"	16"
15"	2"	19"	6:1	–	6'-1"	19"
18"	2-1/2"	23"	4:1	5'-9"	–	21-1/2"
18"	2-1/2"	23"	4:1	–	5'-3"	21-1/2"
18"	2-1/2"	23"	6:1	8'-5"	–	21-1/2"
18"	2-1/2"	23"	6:1	–	7'-8"	21-1/2"
24"	3"	30"	4:1	8'-2"	–	27"
24"	3"	30"	4:1	–	7'-5"	27"
24"	3"	30"	6:1	12'-0"	–	27"
24"	3"	30"	6:1	–	11'-0"	27"
30"	3-1/2"	37"	4:1	9'-2"	9'-2"	31"
30"	3-1/2"	37"	6:1	13'-4"	13'-4"	31"
36"	4"	44"	4:1	10'-10"	10'-10"	36"
36"	4"	44"	6:1	15'-10"	15'-10"	36"
42"	4-1/2"	51"	4:1	12'-8"	12'-8"	41-1/2"
42"	4-1/2"	51"	6:1	18'-9"	18'-9"	41-1/2"

© Park 2016

Specifications

CONCRETE : Class I/II concrete with design strength of 4500 PSI at 28 days. Unit is of monolithic construction

REINFORCEMENT: Grade 60 reinforced. Steel rebar conforming to ASTM A615 on required centers or equal.

Installation Data

Stabilized sand shall be used for bedding and backfill of all safety end treatment sections. The bedding shall surround the section for a minimum thickness of inches or to the limits of excavation and shall taper to a minimum of 12 inches at the top of the section for a depth of 12 inches.

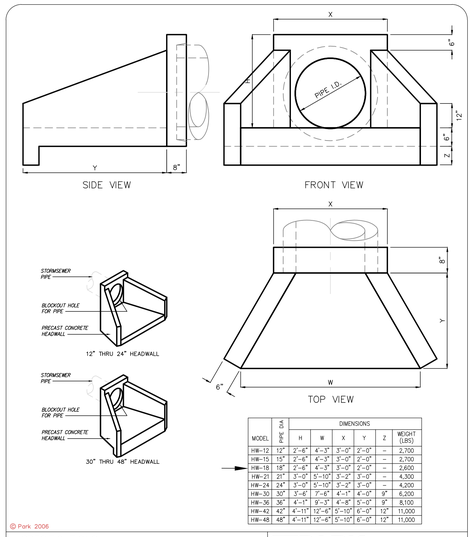
PROJECT :
CUSTOMER :
ARCHITECT :
ENGINEER :
ORDER # :
DATE :

888.611.PARK
www.park-usa.com
PARK ENVIRONMENTAL EQUIPMENT
DESIGN FOR WATER

PRECAST CONCRETE SAFETY END TREATMENT

DRAN.	DRN	CHK	DWG. NO.	REV.
SHEET PRECAST 1			SET-3	A
DATE 04/16				

15 (N.T.S)



MODEL	PIPE DIA.	DIMENSIONS H	W	X	Y	Z	WEIGHT (LBS)
HW-12	12"	2'-6"	4'-3"	3'-0"	2'-0"	–	2,700
HW-15	15"	2'-6"	4'-3"	3'-0"	2'-0"	–	2,700
HW-18	18"	2'-6"	4'-3"	3'-0"	2'-0"	–	2,600
HW-21	21"	3'-0"	5'-10"	3'-2"	2'-0"	–	4,300
HW-24	24"	3'-0"	5'-10"	3'-2"	2'-0"	–	4,200
HW-30	30"	3'-6"	7'-6"	4'-1"	4'-0"	9"	6,200
HW-36	36"	4'-1"	9'-3"	4'-8"	5'-0"	9"	8,100
HW-42	42"	4'-11"	12'-6"	5'-10"	6'-0"	12"	11,000
HW-48	48"	4'-11"	12'-6"	5'-10"	6'-0"	12"	11,000

© Park 2006

SPECIFICATIONS

CONCRETE : Class 1 concrete with of design strength of 4500 PSI at 28 days. Unit is of monolithic construction including walls and floor.

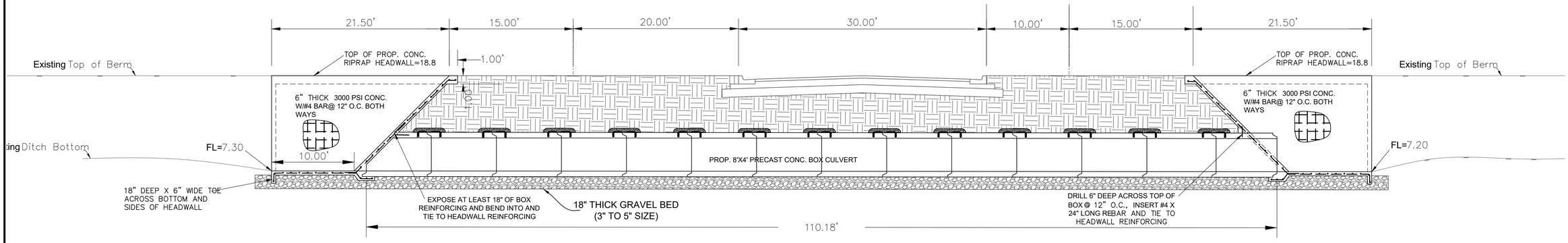
REINFORCEMENT: Grade 60 reinforced. No. 4 steel rebar to conform to ASTM A615 on required centers or equal.

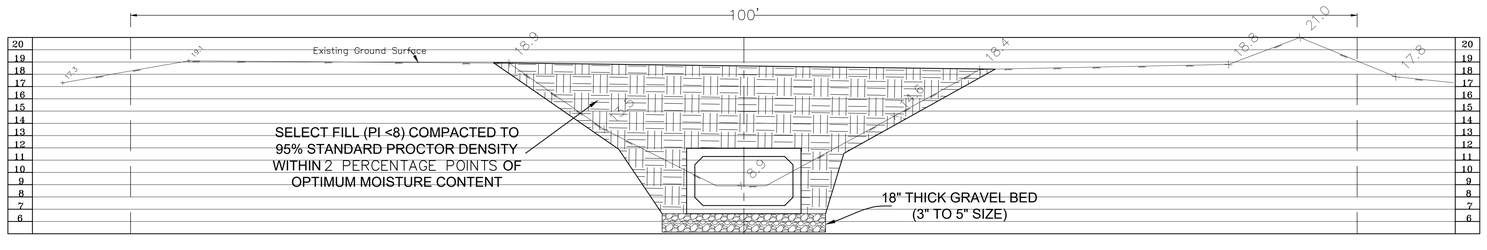
PARK ENVIRONMENTAL EQUIPMENT 888-611-PARK www.park-USA.com
"Expect the Best"

CONCRETE HEADWALL FOR STORMWATER PIPING

SCALE NONE	DWG. NO.	REV.
DATE 01/06	HW-1	A

16 (N.T.S)





CROSS SECTION

SCALE: 1"=5' V
1"=5' H

17 CONCRETE BOX CULVERT DETAIL

SCALE: 1"=5' V
1"=5' H

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JAMES E. ROSE, P.E. 44096 5/1/18
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE LAW

STATE OF TEXAS
JAMES E. ROSE
44096
LICENSED PROFESSIONAL ENGINEER

DETAILS

Mejia & Rose, Incorporated
Engineering Surveying
T.B.P.E. Reg. No. F-2670
T.B.P.L.S. Reg. No 10023900
1643 West Price Road (956) 544-3022
P.O. Box 3761 Brownsville, Texas 78520
Fax (956) 544-3068

No.	REVISIONS	BY
1	5-18-18	M&R

GMS ARCHITECTS
1150 Paredes Line Rd.
Brownsville TX 78526
(956) 546-0110
fax (956) 546-0196

IDEA-ROBINDALE CAMPUS
PHASE I
BROWNSVILLE, TEXAS

IDEA Public Schools

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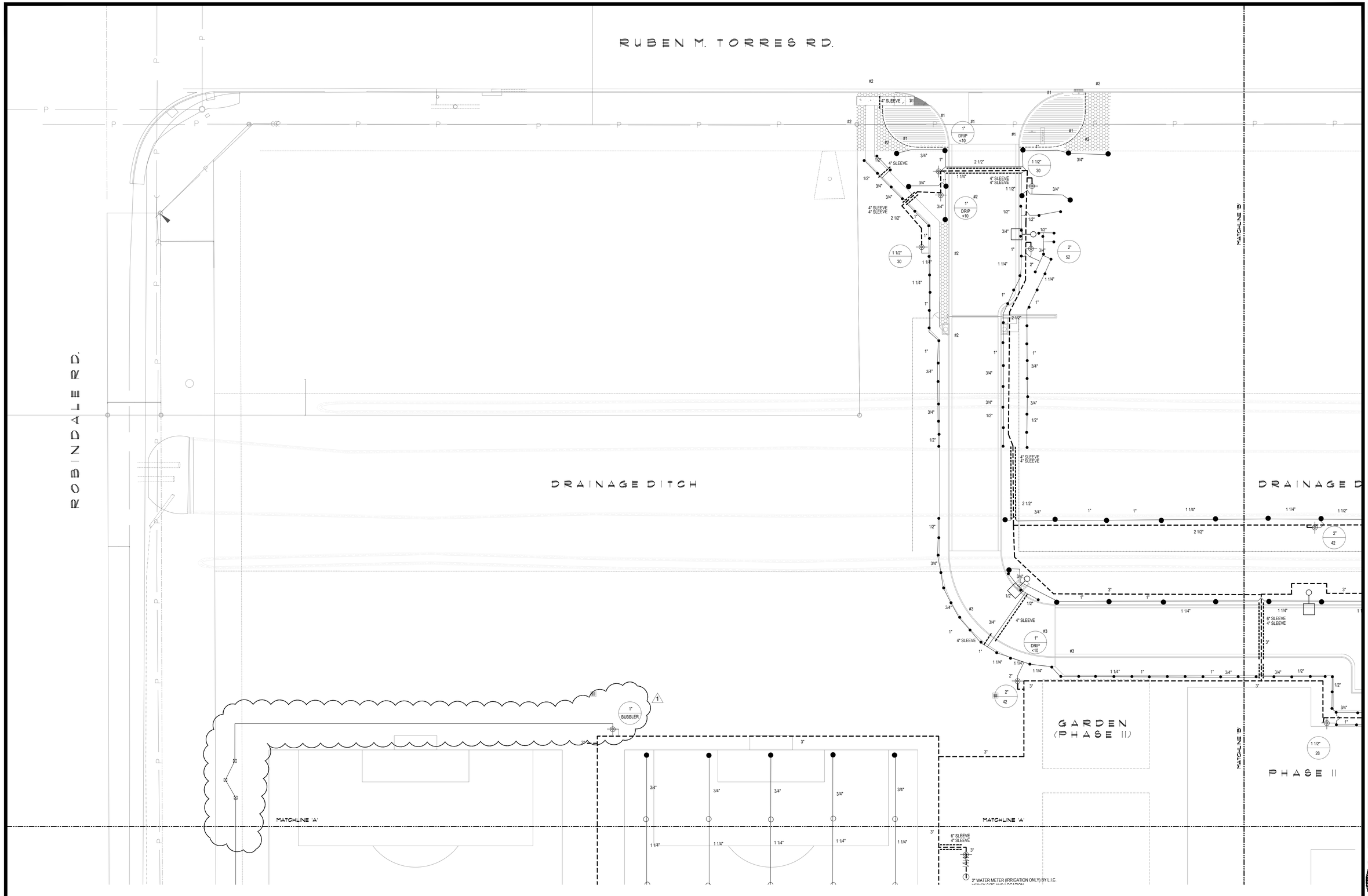
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	MAY, 2018
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	S.S
Job No.	20010
Sheet:	C-4.1 OF C-7



MP ● RAINBIRD R-VAN SERIES ROTARY NOZZLE

⊠ RAINBIRD 1404 BUBBLER HEAD

● RAINBIRD 5000 PC - ROTORS

○ RAINBIRD 5000 FC - ROTORS

▲ RAINBIRD QUICK COUPLER VALVE (33-DLRC) QUICK COUPLERS SHALL BE CONNECTED TO MAINLINE ADD ONE ZONE THAT ACTIVATES MASTER VALVE AND ACTIVATES THE QUICK COUPLERS, LABEL ON COLORED ZONING DIAGRAM - LOCATED ALONG MAINLINE 200' SPACING

RAINBIRD PEB SERIES ELECTRIC VALVE

CONTROLLER (ESP-LXD TWO WIRE) WITH FLOW CONTROL MANAGEMENT (ADD FLOW SENSOR TO METERS)

WATER METER (AS SIZED)

BACKFLOW PREVENTER (AS SIZED)

CLASS 200 PVC LATERAL PIPING

CLASS 200 PVC MAINLINE

SCH. 40 PVC SLEEVING (AS SIZED)

VALVE SIZE

GPM

DRIPLINE (BED)

DRIPLINE (LAWN)

XXX
RAIN

RAINBIRD DRIPLINE XFS
(18" LATERAL SPACING, 12" EMITER SPACING)
XF SERIES TIE DOWN STAKES (TDS-050) @ 36" O.C. & TWO ON EACH TEE/ELBOW
PVC LATERAL PIPING SIZED AS REQUIRED
RAINBIRD DRIP CONTROL ZONE KIT XCZ-100-PRB-COM (EACH DRIP ZONE)
1" BALL VALVE WITH REGULATED PRESSURE AND 200 MESH FILTRATION
(1) DRIP SYSTEM OPERATION INDICATOR (OPERIND) PER IRRIGATION ZONE
INSTALL ALL EQUIPMENT ACCORDING TO
MANUFACTURERS SPECIFICATIONS
ALL VALVE BOXES SHALL BE RAINBIRD VB-STD OR APPROVED EQUAL
ALL VALVE BOXES SHALL HAVE FILTER FABRIC AND 4" OF GRAVEL AT BASE

DESIGN PRESSURE 60 PSI

ELECTRICAL SPLICES AT EACH VALVE AND CONTROLLER ONLY.

IRRIGATION IN TEXAS IS REGULATED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) MC-178/ P.O.BOX 13087, AUSTIN, TX 78711-3087. TECQ'S WEBSITE IS: www.tceq.state.tx.us

BUBBLER PIPING CHART

NUMBER OF BUBBLERS	SIZE OF PIPE
1 - 5	½"
6 - 10	¾"
11 - 20	1"
21 - 30	1 ¼"
31 - 40	1 ½"

IRRIGATION PLAN
SCALE: 1"=20'-0"

W — E

No.	REVISIONS	BY
1	ADDENDUM #1 5/18/18	

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IDEA-ROBINDALE CAMPUS PHASE I
BROWNSVILLE, TEXAS

IDEA Public Schools

5/18/18

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Interior Designers

Date: 5/18/18
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB
Job No. IDEA Robindale Phase I
Sheet: L1.01

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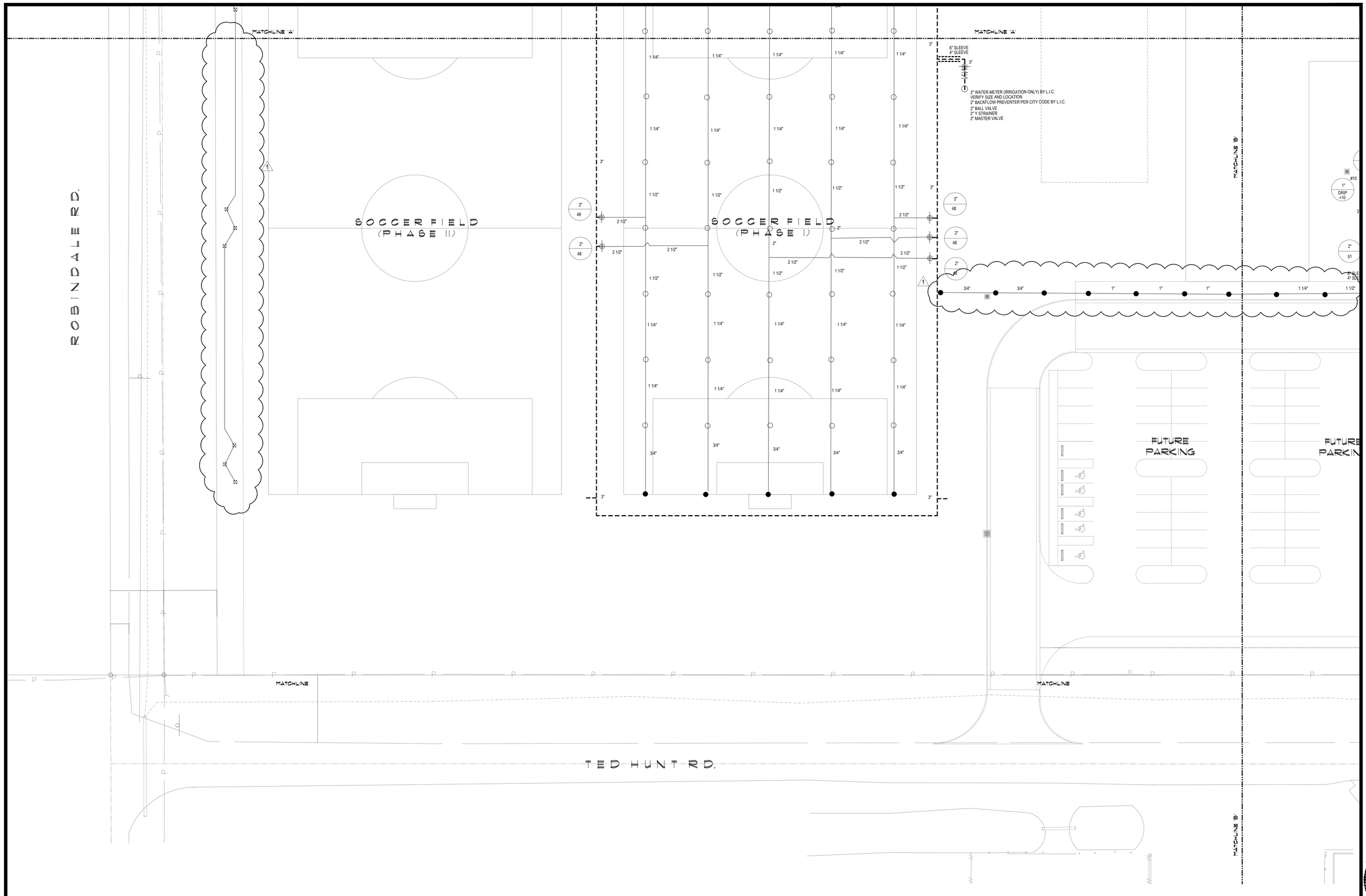

MP ● RAINBIRD R-VAN SERIES ROTARY NOZZLE

⊠ RAINBIRD 1404 BUBBLER HEAD

● RAINBIRD 5000 PC - ROTORS

○ RAINBIRD 5000 FC - ROTORS

▲ RAINBIRD QUICK COUPLER VALVE (33-DLRC) QUICK COUPLERS SHALL BE CONNECTED TO MAINLINE ADD ONE ZONE THAT ACTIVATES MASTER VALVE AND ACTIVATES THE QUICK COUPLERS, LABEL ON COLORED ZONING DIAGRAM - LOCATED ALONG MAINLINE 200' SPACING

RAINBIRD PEB SERIES ELECTRIC VALVE

CONTROLLER (ESP-LXD TWO WIRE) WITH FLOW CONTROL MANAGEMENT (ADD FLOW SENSOR TO METERS)

WATER METER (AS SIZED)

BACKFLOW PREVENTER (AS SIZED)

CLASS 200 PVC LATERAL PIPING

CLASS 200 PVC MAINLINE

SCH. 40 PVC SLEEVING (AS SIZED)

VALVE SIZE

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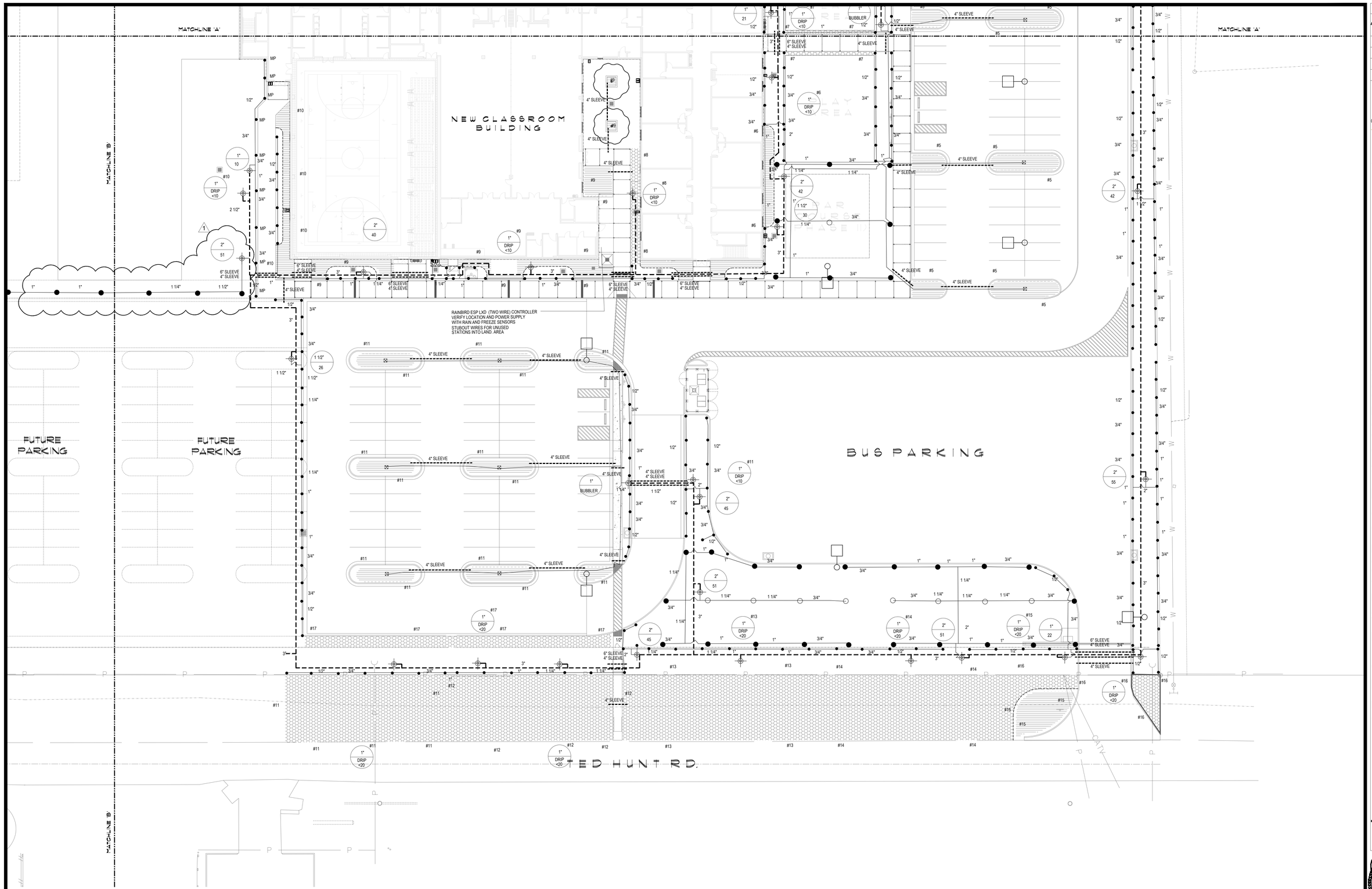

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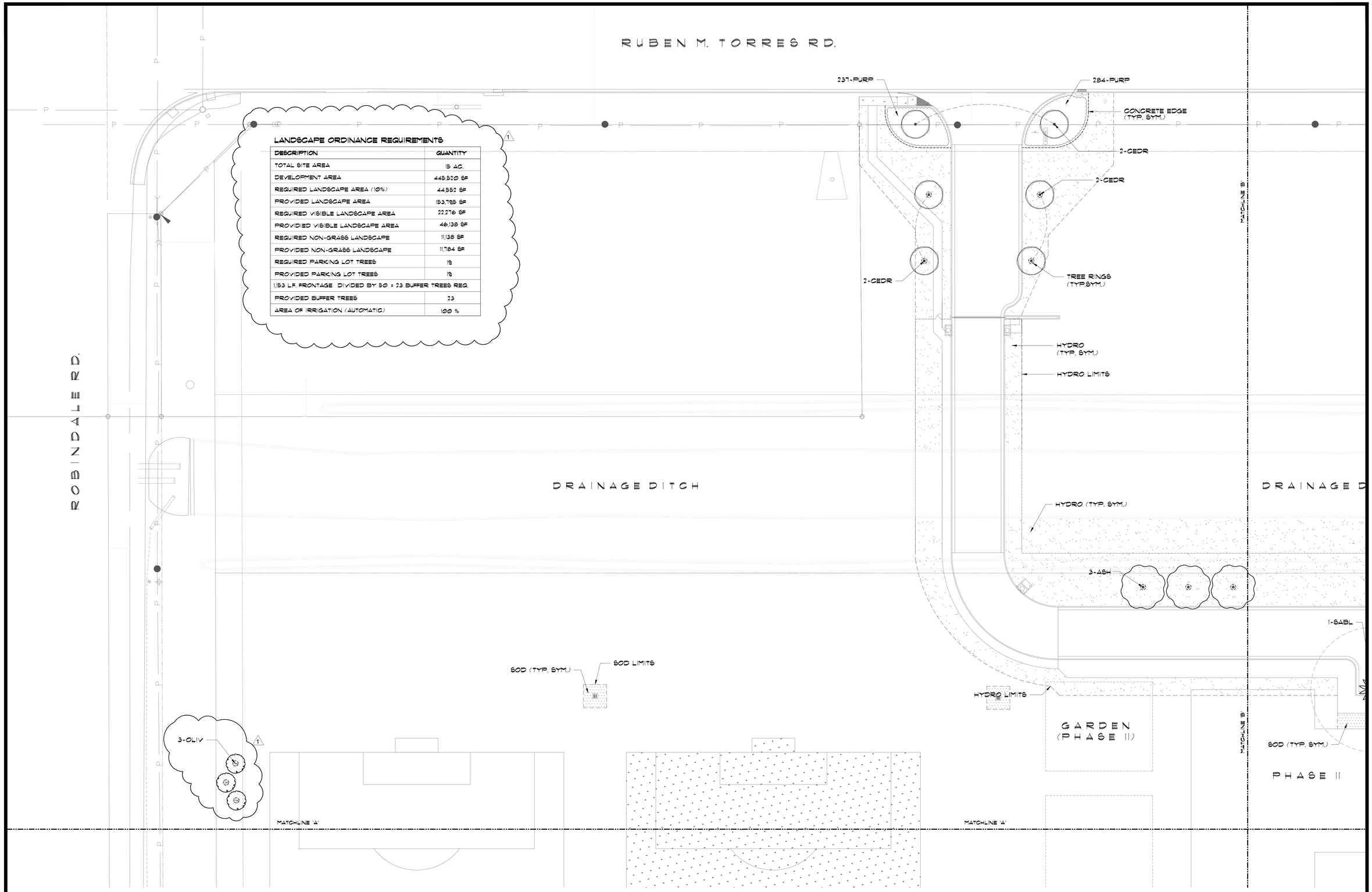

LANDSCAPE ORDINANCE REQUIREMENTS

DESCRIPTION	QUANTITY
TOTAL SITE AREA	15 AC.
DEVELOPMENT AREA	445,520 SF
REQUIRED LANDSCAPE AREA (10%)	44,552 SF
PROVIDED LANDSCAPE AREA	153,795 SF
REQUIRED VISIBLE LANDSCAPE AREA	22,276 SF
PROVIDIED VISIBLE LANDSCAPE AREA	46,138 SF
REQUIRED NON-GRASS LANDSCAPE	11,138 SF
PROVIDED NON-GRASS LANDSCAPE	11,784 SF
REQUIRED PARKING LOT TREES	19
PROVIDED PARKING LOT TREES	19
1,153 L.F. FRONTAGE DIVIDED BY 50 = 23 BUFFER TREES REQ.	
PROVIDED BUFFER TREES	23
AREA OF IRRIGATION (AUTOMATIC)	100 %

LANDSCAPE PLAN
SCALE: 1"=20'-0"

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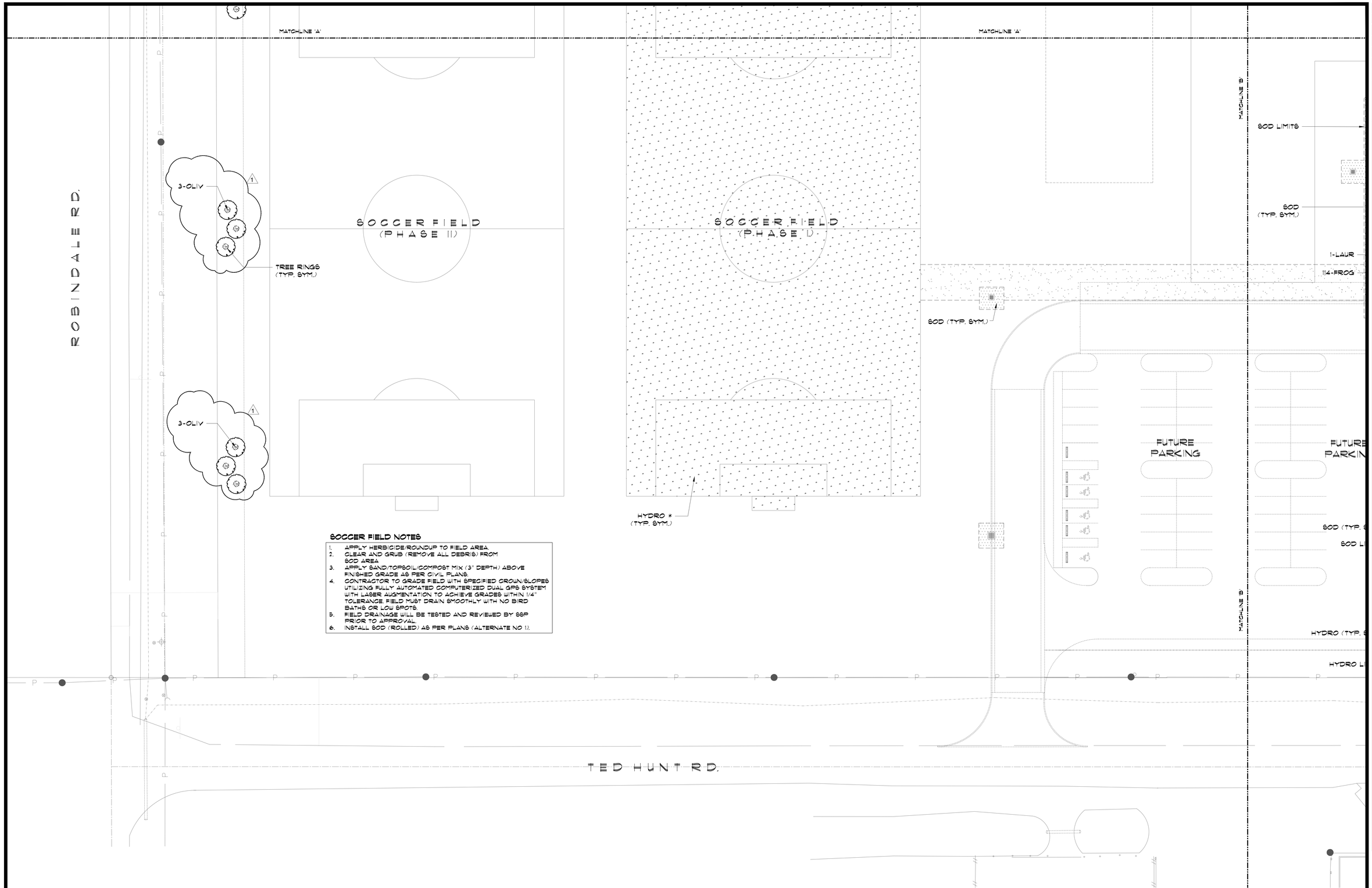

SOCCER FIELD NOTES

1. APPLY HERBICIDE/ROUNDUP TO FIELD AREA.
2. CLEAR AND GRUB (REMOVE ALL DEBRIS) FROM SOD AREA
3. APPLY SAND/TOPSOIL/COMPOST MIX (3" DEPTH) ABOVE FINISHED GRADE AS PER CIVIL PLANS.
4. CONTRACTOR TO GRADE FIELD WITH SPECIFIED CROWN/SLOPES UTILIZING FULLY AUTOMATED COMPUTERIZED DUAL GPS SYSTEM WITH LASER AUGMENTATION TO ACHIEVE GRADES WITHIN 1/4" TOLERANCE. FIELD MUST DRAIN SMOOTHLY WITH NO BIRD BATHS OR LOW SPOTS.
5. FIELD DRAINAGE WILL BE TESTED AND REVIEWED BY SSP PRIOR TO APPROVAL.
6. INSTALL SOD (ROLLED) AS PER PLANS (ALTERNATE NO 1).

LANDSCAPE PLAN
SCALE: 1"=20'-0"

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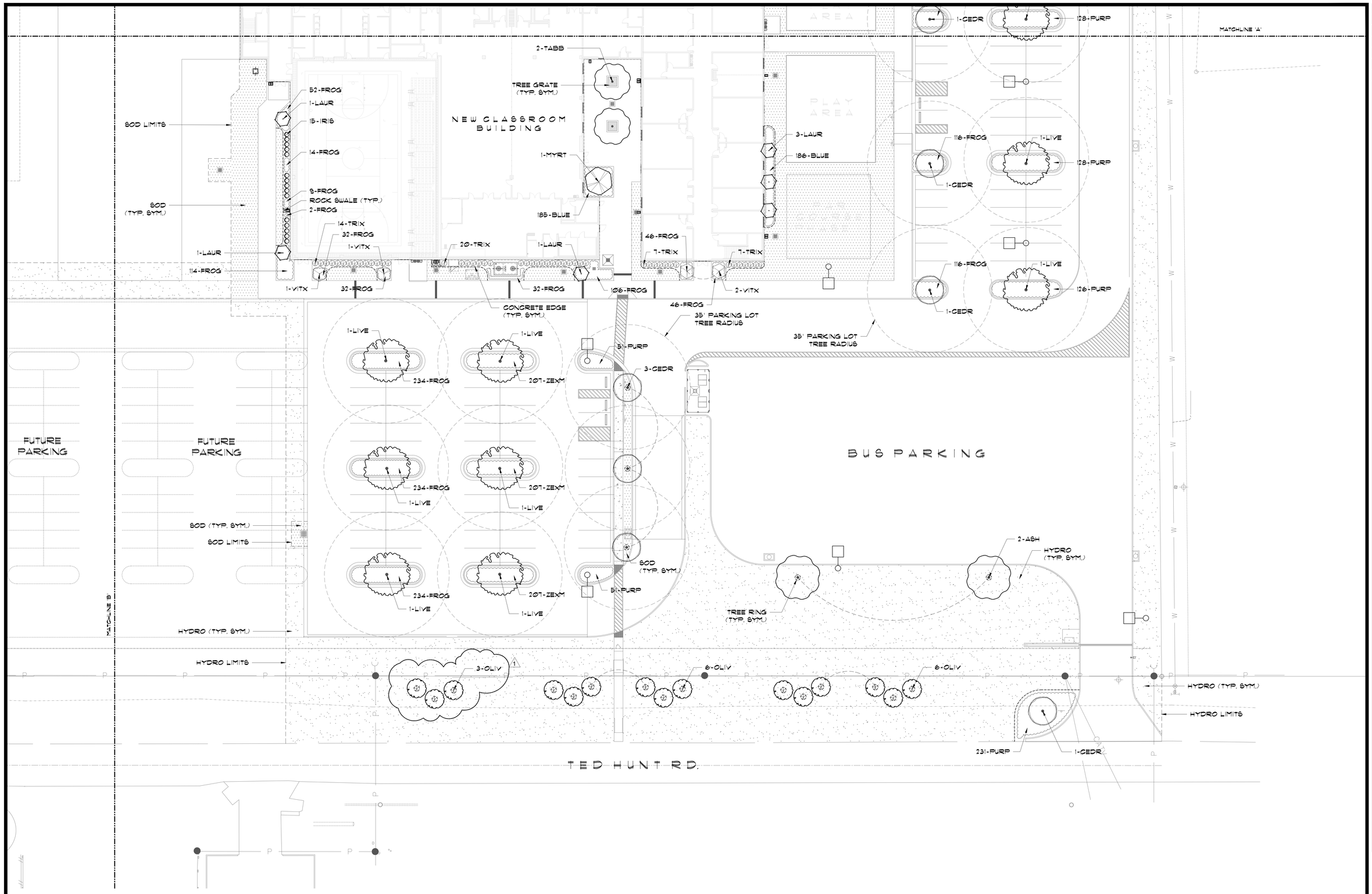

LANDSCAPE PLAN
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PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	TYPE	SIZE	SPACING	QTY
	PALMS/CYCADS					
SABL	SABAL TEXANA	TEXAS SABAL PALM	B/B	6-8' TRUNK	A.S.	2
	TREES					
ASH	FRAXINUS B. 'FAN TEX'	'FAN TEX' ASH	B/B	3" CAL. - 10'H X 6'W	A.S.	14
CEDR	ULMUS CRASSIFOLIA	CEDAR ELM (CONT. GROWN)	36" BOX	3-4" CAL. 14' H x 11' W	A.S.	14
LAUR	SOPHORA SECUNDIFLORA	MOUNTAIN LAUREL (CONT. GRN)	24" BOX	MULTI-TRUNK - 6'-0" HT	A.S.	13
LIVE	QUERCUS VIRGINIANA	LIVE OAK (CONTAINER GROWN)	36" BOX	4-5" CAL. 18' HT x 14' W	A.S.	10
MYRT	LAGERSTROEMIA X 'NATCHEZ'	'NATCHEZ' CRAPE MYRTLE	45 GAL	12'HT X 6'W MULTI	A.S.	1 1
OLIV	CORDIA BOISSIERI	WILD OLIVE	B/B	3" CAL. 8' HT X 4' W	A.S.	24
PERS	DIOSPYROS TEXANA	TEXAS PERSIMMON	B/B	3" CAL. 12' HT X 6' W	A.S.	3
TABB	TABEBUIA IMPETIGINOSA	PURPLE TABEBUIA	30 GAL	3-4" CAL. 10'H X 6' W	A.S.	2
VITX	VITEX AGNUS-CASTUS	CHASTE TREE	15 GAL	2-3" CAL. 6' HT	A.S.	4
	SHRUBS					
BULB	BULBINE FRUTESCENS	ORANGE BULBINE	1 GAL	12"HT-BUSHY	18" O.C.	200
IRIS	DIETES IRIDIOIDES	WHITE AFRICAN IRIS	3 GAL	18"HT-BUSHY	A.S.	15
MIST	EUPATORIUM GREGGII	PURPLE MIST FLOWER	1 GAL	12"HT-BUSHY	A.S.	328
TRIX	TRIXIS INULA	MEXICAN TRIXIS	3 GAL	12"HT-BUSHY	A.S.	47
	GROUND COVERS					
BLUE	SALVIA FARINACEA	BLUE SAGE	3 GAL	12"HT-BUSHY	12" O.C.	512
FROG	PHYLA INCISA	TEXAS FROG FRUIT	QTS.	12"HT-BUSHY	18" O.C.	2,272
PURP	LANTANA MONTEVIDENSIS	PURPLE TRAILING LANTANA	1 GAL	12"HT-BUSHY	18" O.C.	1,362
WOOL	STEMODIA LANATA	WOOLY STEMODIA		12"HT-BUSHY	12" O.C.	212
ZEXM	WEDELIA TEXANA	ORANGE ZEXMENIA	1 GAL	12"HT-BUSHY	12" O.C.	621
	GRASS					
HYDRO	CYNODON DACTYLON	COMMON BERMUDA HYDROMULCH			124,800 S.F.	
SOD	CYNODON DACTYLON	# 1 CERTIFIED '419' HYBRID BERMUDA SOD			1,874 S.Y.	

NOTE: CONTAINER GROWN MATERIAL SHALL BE GLEN FLORA FARMS OR APPROVED EQUAL.

MATERIAL SCHEDULE

DESCRIPTION	NOTES	QUANTITY
PREMIUM COMPOST	2" LAYER PREMIUM COMPOST (EARTHWISE ORGANICS MIX)	65 C.Y.
SCREENED TOP SOIL	8" FOR ALL PLANTING BEDS	288 C.Y.
MULCH (HARDWOOD)	2" MIN. FOR ALL PLANTING BEDS AND WATERING BASINS (TEXAS NATIVES HARDWOOD)	1,060 BAGS
HERBICIDE	ALL PLANTING BED AREAS AS SPECIFIED	11,784 S.F.
FERTILIZER	ALL PLANT MATERIAL PER DETAILS	--
PLANTING TABLETS	PER DETAILS / AS SPECIFIED	--
PRE-EMERGENT	ALL PLANTING BED AREAS AS SPECIFIED	11,784 S.F.
GUYING / STAKING	ALL TREES/PALMS PER DETAILS	--
CONCRETE EDGE	5" EXTRUDED COLORED CONCRETE EDGING PER PLANS/DETAILS	672 L.F.
ROCK SWALE	18" WIDE ROCK SWALE PER DETAILS AT RAIN GUTTER LOCATIONS	100 S.F.
TREE RINGS	(36" DIA.) 4x8" EXTRUDED CONCRETE EDGING PER PLANS/DETAILS	36
TREE GRATE	NEENAH FOUNDRY 60" R-8746-A CAST IRON TREE GRATE W/ 18" OPENING INCLUDE TYPE 8500 TREE GRATE FRAME (R8500-0606) AND STEEL CHANNEL SUPPORT (99920606).	2
IRRIGATION SYSTEM	COMPLETE AUTOMATIC IRRIGATION SYSTEM BY LICENSED CONTR.	--

NOTE: CONTRACTORS MUST REVIEW TECHNICAL SPECIFICATIONS FOR ADDITIONAL PRODUCT INFORMATION AND PROJECT REQUIREMENTS.

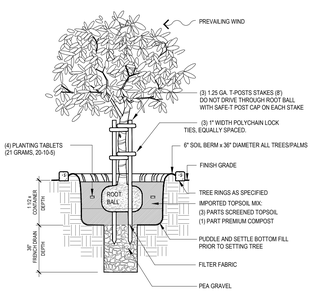
MATERIAL SCHEDULE - SOCCER FIELD

DESCRIPTION	NOTES	QUANTITY
HERBICIDE	ALL LANDSCAPE AREAS (ROUNDUP OR APPROVED EQUAL	49,500 S.F.
CLEAR/GRUB/SITE PREP	CLEAR ALL DEBRIS FROM TOP LAYER OF EXISTING SITE	49,500 S.F.
GRADING	GRADING & LASER LEVELING	49,500 S.F.
TOPSOIL/SAND MIX *	70/20/10 SAND/TOPSIL/COMPOST MIX (3" - ADD TO FINISHED GRADE AS PER CIVIL PLANS	460 C.Y.
HYDROMULCH	'PAN-AM' HYBRID BERMUDA HYDROMULCH	50,000 S.F.
MAINTENANCE	90 DAY MAINTENANCE OF FIELDS WITH REEL MOWERS & FERTILIZATION	1

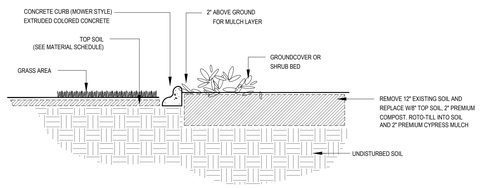
* EARTHWISE ORGANICS (956) 778-8540 OR APPROVED EQUAL
* MATHIS SAND - WRIGHT MATERIALS PLANT 1 (361) 387-0283

LANDSCAPE CONSTRUCTION NOTES

1. WORK UNDER THIS CONTRACT INCLUDES SITE REVIEW AND COORDINATION WITH EXISTING CONDITIONS, SITE CLEANUP, EXCAVATION, BED PREP, TILLING, PLANTING, STAKING, EDGING, IRRIGATION, MAINTENANCE, AND GUARANTEE.
2. LANDSCAPE CONTRACTOR SHALL FIELD VERIFY ALL QUANTITIES AND DIMENSIONS PRIOR TO BIDDING. QUANTITIES SHOWN IN SCHEDULE ARE FOR CONVENIENCE ONLY.
3. NOTIFY SSP DESIGN PRIOR TO BID OF ANY DISCREPANCIES IN DRAWINGS/DETAILS OR INSUFFICIENT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS.
4. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES. SPOTTING OF ALL UTILITIES IS REQUIRED.
5. NOTIFY AND MEET WITH SSP DESIGN PRIOR TO ANY CONSTRUCTION FOR VERIFICATION/INTERPRETATION OF PLANS.
6. LANDSCAPE CONTRACTOR SHALL VERIFY ALL PROPERTY BOUNDARIES AND LIMITS OF WORK WITH GENERAL CONTRACTOR/CIVIL ENGINEER. DO NOT BEGIN LANDSCAPE CONSTRUCTION UNTIL ALL BOUNDARIES, EASEMENTS AND RIGHTS-OF-WAY HAVE BEEN VERIFIED IN THE FIELD.
7. LANDSCAPE CONTRACTOR SHALL STAKE OUT ALL BEDS, TREES, PALM LOCATIONS PRIOR TO INSTALLATION FOR APPROVAL BY SSP DESIGN.
8. LANDSCAPE CONTRACTOR TO COORDINATE WITH SSP DESIGN TO ENSURE PROPER PLACEMENT OF PLANT MATERIAL AND IRRIGATION EQUIPMENT.
9. LANDSCAPE CONTRACTOR TO INSTALL EXTRUDED CONCRETE EDGING AS SHOWN ON PLANS.
10. LANDSCAPE CONTRACTOR TO SUPPLY/INSTALL 36" DIA. TREE RINGS AS SHOWN ON PLANS/DETAILS.
11. NOTIFY SSP DESIGN PRIOR TO PLANTING OPERATIONS FOR APPROVAL OF ALL PLANT MATERIAL ON SITE. ANY PLANT MATERIAL NOT APPROVED BY SSP DESIGN WILL BE SUBJECT TO REJECTION.
12. IRRIGATION CONTRACTOR SHALL SUPPLY AND INSTALL COMPLETE AUTOMATIC IRRIGATION SYSTEM INCLUDING WATER METER, BACKFLOW DEVICE, CONTROLLER, MAINLINE, SLEEVES, LATERALS, AND POP-UP HEADS, TO COVER ALL LANDSCAPE AREAS PER PLANS/DETAILS. IRRIGATION SYSTEM SHALL BE INSTALLED BY A TEXAS LICENSED IRRIGATOR ONLY.
13. LANDSCAPE CONTRACTOR SHALL REMOVE ALL EXISTING GRASS/WEEDS BY HERBICIDING PRIOR TO BED PREP AND SOIL REPLACEMENT.
14. LANDSCAPE CONTRACTOR SHALL REMOVE 12" OF EXIST'G SOIL WITHIN ALL BED AREAS AND REPLACE WITH IMPORTED TOP SOIL/PREMIUM COMPOST MIX.
15. LANDSCAPE CONTRACTOR SHALL CONSTRUCT 6"X36" WATERING BASINS AROUND ALL TREES/PALMS WITH A MIN. 2" LAYER OF CYPRESS MULCH.
16. LANDSCAPE CONTRACTOR SHALL LOOSEN / GRADE ALL LAWN AREAS PRIOR TO HYDRO-MULCHING/SODDING TO ENSURE PROPER DRAINAGE AND UNIFORM SURFACE.
17. LANDSCAPE CONTRACTOR SHALL REMOVE ALL EXISTING GRASS AND WEEDS BY HERBICIDING, DISKING, FLOATING AND LIGHT GRADING OF ENTIRE PROJECT AREA PRIOR TO SODDING/HYDROMULCHING.
18. LANDSCAPE CONTRACTOR SHALL ESTABLISH AND MAINTAIN ALL PLANT MATERIAL FOR 90 DAYS AFTER SUBSTANTIAL COMPLETION AND SHALL GUARANTEE ALL TREES/PALMS FOR A PERIOD OF ONE YEAR.
19. IRRIGATION CONTRACTOR SHALL GUARANTEE ALL SYSTEM COMPONENTS FOR A PERIOD OF ONE YEAR.
20. SEE SPECIFICATIONS FOR FURTHER INSTRUCTIONS/REQUIREMENTS.



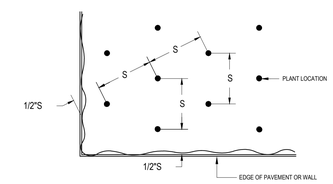
1 TREE PLANTING DETAIL
NOT TO SCALE



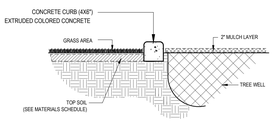
NOTES:
1. CONCRETE CURBING TO HAVE 1 1/2" DEEP CONTRACTION JOINTS @ 5'-0" SPACING.
2. CONCRTE CURBING TO HAVE TAPERED DRAINAGE POINTS AT 10' O.C.
3. 2500-3000 PSI COMPRESSIVE STRENGTH, 490 PSI FLEXURAL STRENGTH.
4. USE HALF-INCH POLYPROPYLENE FIBER REINFORCEMENT.
5. NATURAL FINISH AND TEXAS BUFF COLOR.
6. EQUAL TO 'CURB APPEAL' EDGING (956-867-8350).

2 CONCRETE EDGE DETAIL
NOT TO SCALE

NOTE:
1. S = SPACING, (REFER PLANT LIST FOR AMOUNT OF SPACING.)
2. USE SPACING LAYOUT FOR SHRUBS, GROUNDCOVERS AND ANNUALS.

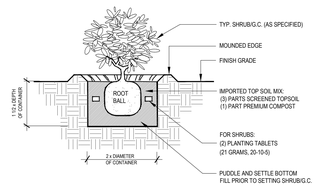


3 TRIANGULAR PLANT SPACING DIAGRAM
NOT TO SCALE

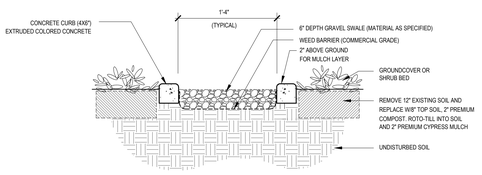


NOTES:
1. CONCRETE CURBING TO HAVE 1 1/2" DEEP CONTRACTION JOINTS @ 5'-0" SPACING.
2. CONCRTE CURBING TO HAVE TAPERED DRAINAGE POINTS AT 10' O.C.
3. 2500-3000 PSI COMPRESSIVE STRENGTH, 490 PSI FLEXURAL STRENGTH.
4. USE HALF-INCH POLYPROPYLENE FIBER REINFORCEMENT.
5. NATURAL FINISH AND TEXAS BUFF COLOR.
6. EQUAL TO 'CURB APPEAL' EDGING (956-867-8350).

4 TREE RING DETAIL
NOT TO SCALE

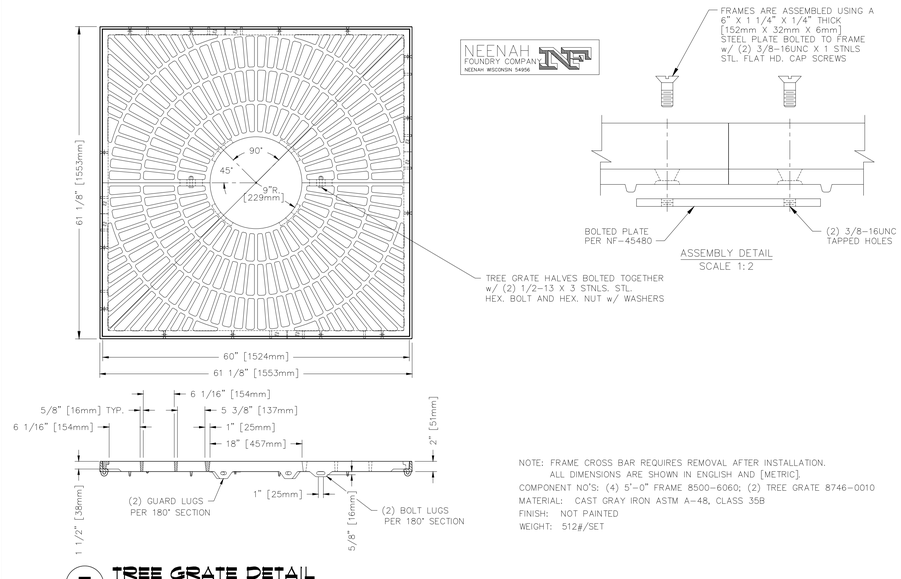


5 SHRUB/G.C. PLANTING DETAIL
NOT TO SCALE



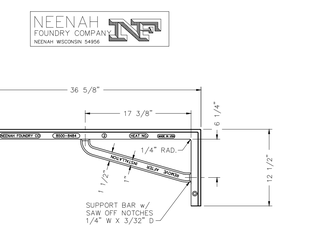
NOTES:
1. CONCRETE CURBING TO HAVE 1 1/2" DEEP CONTRACTION JOINTS @ 5'-0" SPACING.
2. CONCRTE CURBING TO HAVE TAPERED DRAINAGE POINTS AT 10' O.C.
3. 2500-3000 PSI COMPRESSIVE STRENGTH, 490 PSI FLEXURAL STRENGTH.
4. USE HALF-INCH POLYPROPYLENE FIBER REINFORCEMENT.
5. NATURAL FINISH AND TEXAS BUFF COLOR.
6. EQUAL TO 'CURB APPEAL' EDGING (956-867-8350).

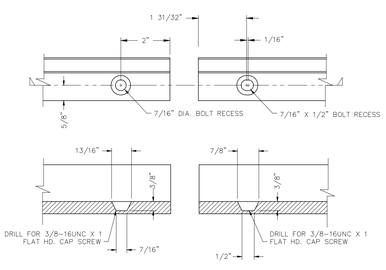
6 ROCK SWALE DETAIL
NOT TO SCALE



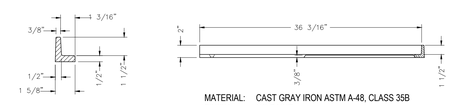
NOTE: FRAME CROSS BAR REQUIRES REMOVAL AFTER INSTALLATION.
ALL DIMENSIONS ARE SHOWN IN ENGLISH AND [METRIC].
COMPONENT NO'S: (4) 5'-0" FRAME 8500-6060; (2) TREE GRATE 8746-0010
MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NOT PAINTED
WEIGHT: 512#/SET

7 TREE GRATE DETAIL
SCALE: NTS





FRAME BOLT HOLE/SLOT DETAIL



MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT
WEIGHT: 21#

TYPICAL FRAME SECTION

NOTE:
USE STEEL CHANNEL SUPPORT R-8500 (99920606) FOR 5' X 5' TREE GRATE

8 TREE GRATE FRAME DETAIL
SCALE: NTS

No.	REVISIONS	BY
1	ADDENDUM #1 5/18/18	

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IDEA-ROBINDALE CAMPUS
PHASE I
BROWNSVILLE, TEXAS

IDEA Public Schools

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: 5/18/18
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: RB
Job No. IDEA Robindale Phase I
Sheet: L2.05

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108611
LICENSED
PROFESSIONAL ENGINEER

May 18, 2018
Idea – Brownsville Robindale Campus Phase I

ADDENDUM NO. 1

A. PURPOSE AND INTENT

This addendum is issued for the purpose of modifying the plans and specifications for the project referenced above.
This addendum shall become part of the contract and all contractors shall be bound by its content.
All aspects of the specifications and drawings not covered herein shall remain the same.
The General Conditions and the Special Conditions of the specifications shall govern all parts of the work and apply in full force to this addendum.

B. SCOPE

I. Drawings:

1) Sheet MEP1.01:
   a) Fire Riser Room enlargement has been revised. See attached sheet.

2) Sheet M3.02:
   b) First Floor Mechanical Plan: Revise condensate piping to be routed inside the plan east wall of custodian room 138 to avoid conflict with counter top. Stub-out low with condensate piping and discharge into floor sink below counter top.

3) Sheet E2.01:
   a) Revised Electrical Legend. See attached sheet.

4) Sheet E3.01:
   b) Revised First Floor Lighting Plan. See attached sheet.

5) Sheet E3.02:
   a) Revised First Floor Lighting Plan. See attached sheet.

6) Sheet E3.03:
   a) Revised Second Floor Lighting Plan. See attached sheet.

7) Sheet E3.04:
   a) Revised Second Floor Lighting Plan. See attached sheet.

8) Sheet E3.05:
   a) Revised Canopy Lighting Plan. See attached sheet.

9) Sheet E4.01:
   a) Revised First Floor Electrical Plan. See attached sheet.

10) Sheet E4.02:
   b) Revised First Floor Electrical Plan. See attached sheet.

11) Sheet E4.03:
   c) Revised Second Floor Electrical Plan. See attached sheet.

12) Sheet E4.04:
   d) Revised Second Floor Electrical Plan. See attached sheet.

13) Sheet E4.05:
   a) Revised Electrical Plan. See attached sheet.

14) Sheet E6.01:
   a) Revised Electrical Schedule. See attached sheet.

15) Sheet P2.01
   a) Revised water connection for exterior drinking fountains. See attached sheet.

16) Sheet P2.02:
   a) Revised grease trap location. See attached sheet.
   b) Revised stub outs at Classroom 115 and Kitchen. See attached sheet.
   c) Revised cleanout at Corridor 133. See attached sheet.

17) Sheet P2.03:
   a) Revised plumbing keynote at IDF 316. See attached sheet.

18) Sheet P3.01:
   a) Revised drinking fountain designation at multiple locations. See attached sheet.
   b) Revised sanitary routing at Toilet 136A. See attached sheet.

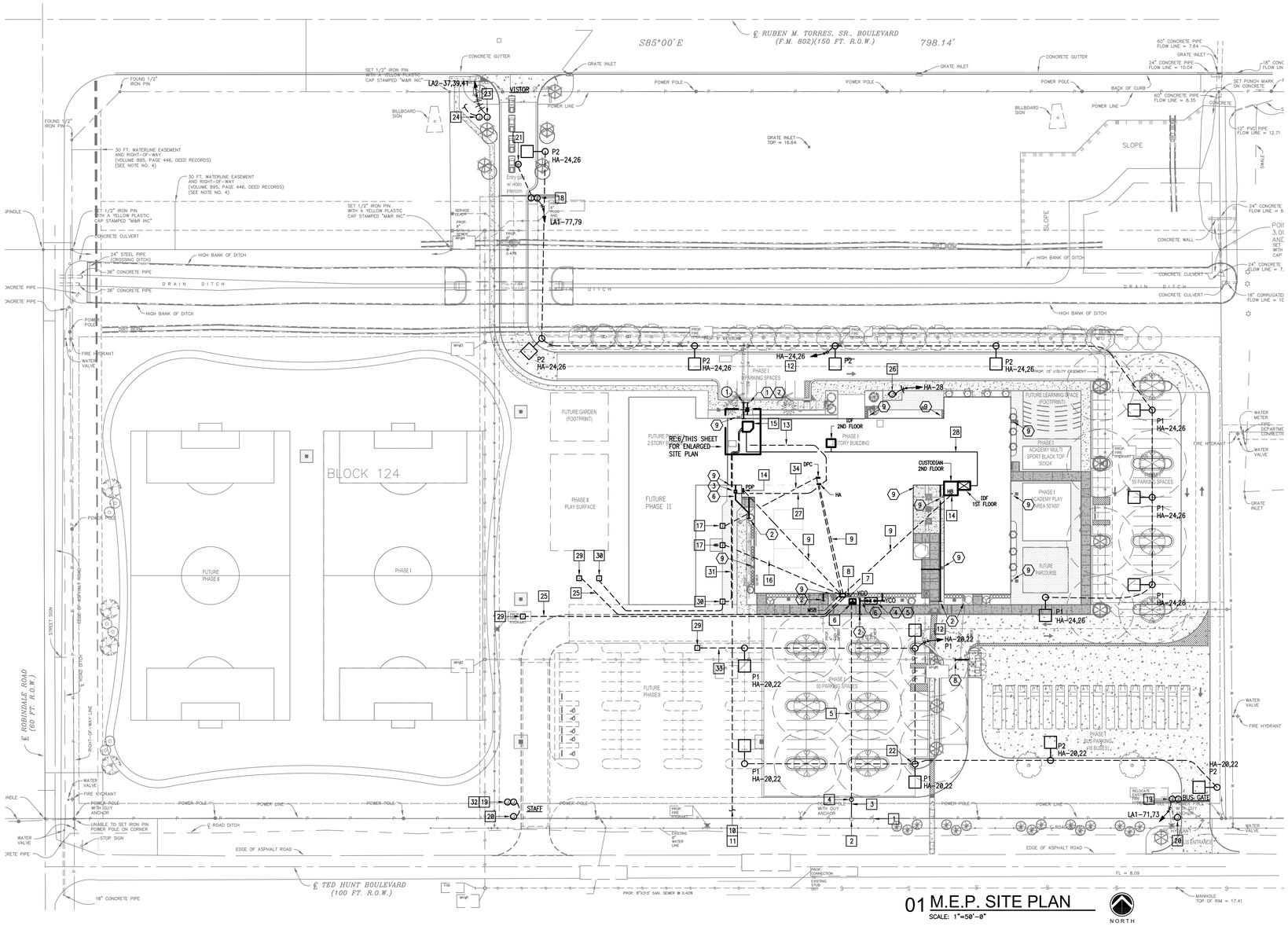
19) Sheet P3.02:
    a) Revised drinking fountain designation at Corridor. See attached sheet.

20) Sheet P4.01:
    a) Revised drinking fountain designation at Cafeteria. See attached sheet.
    b) Revised Grease Trap location. See attached sheet.
    c) Revised sewer routing serving catch basin. See attached sheet.
    d) Revised plumbing keynotes. See attached sheet.

21) Sheet P5.01:
    a) Revised roof plan. See attached sheet.

22) Sheet P6.01:
    a) Revised plumbing fixture schedule. See attached sheet.

23) Sheet P6.03:
    a) Revised plumbing details. See attached sheet.



01 M.E.P. SITE PLAN

SCALE: 1"=50'-0"

GENERAL NOTES:

1. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.
2. FIELD VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK.
3. COORDINATE ELECTRICAL AND PLUMBING WITH GENERAL CONSTRUCTION.
4. PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
5. FIELD VERIFY/SPOT EXACT LOCATIONS AND EXISTING CONDITIONS OF EXISTING PLUMBING, AND ELECTRICAL. IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE AND WORKABLE SYSTEMS. SHOULD BIDDER FIND OMISSIONS OR DISCREPANCIES IN THE PLANS, BIDDER SHALL NOTIFY THE ENGINEER PRIOR TO THE BID DATE AND A WRITTEN CLARIFICATION WILL BE ISSUED.
6. DAMAGED ITEMS SHALL BE REPAIRED AT NO ADDITIONAL COST TO OWNER. CONTRACTORS ARE REQUIRED TO SEARCH AND INVESTIGATE FOR EXISTING UTILITIES BEFORE EXCAVATING.
7. ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID PROPOSAL.
8. PROVIDE J-BOXES (POLYMER CONCRETE) AS REQUIRED FOR PULL WIRING.
9. ELECTRICAL WIRING SHALL NOT BE SPLICED BELOW GRADE.
10. PERFORM ALL WORK PER LATEST VERSION OF NATIONAL ELECTRICAL CODE, AND APPLICABLE LOCAL CODES AND ORDINANCES, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
11. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
12. CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
13. NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
14. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
15. SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS, A/C ROOMS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
16. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING PHASE.
17. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
18. MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
19. AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.
20. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND PLUMBING CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
21. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
22. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
23. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
24. WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.
25. SLEEVE ALL EXTERIOR WALL PENETRATIONS.
26. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.

FIRE SUPPRESSION KEYED NOTES:

1. PROVIDE NEW 6" FIRE SPRINKLER LINE. REFER TO CIVIL DRAWING FOR FIRE LINE CONTINUATION. VERIFY SIZE OF FIRE SPRINKLER LINE BY MEANS OF CALCULATION AND COORDINATE WITH GENERAL CONTRACTOR. COORDINATE FREE STANDING FDC AND PROVISION OF BACKFLOW PREVENTER WITH CIVIL. REFER TO PLUMBING SHEETS AND SPECIFICATIONS FOR MORE INFORMATION. FIRE SPRINKLER SYSTEM SHALL BE SIZED TO SERVE BUILDINGS UNDER THIS CONTRACT AND A FUTURE TWO STORY CLASSROOM WING OF AN APPROXIMATE 35,000 SQ.FT AREA. PROVIDE HEADERS, VALVES, BRANCHES, ETC. AS NECESSARY TO ACCOMMODATE FUTURE ADDITION.
2. PROVIDE DEDICATED FIRE SPRINKLER LINE FROM FIRE RISER ROOM TO END OF HALLWAY. FIRE SPRINKLER LINE SHALL BE SIZED TO SERVE FUTURE TWO STORY CLASSROOM WING OF AN APPROXIMATE 35,000 SQ.FT AREA. PROVIDE HEADERS, VALVES, BRANCHES, ETC. AS NECESSARY TO ACCOMMODATE FUTURE ADDITION. COORDINATE WITH A/E TEAM DURING SHOP DRAWING SUBMITTAL PHASE.

ELECTRICAL KEYED NOTES:

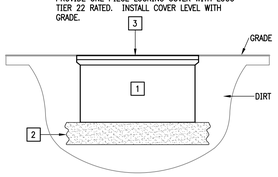
1. EXISTING ELECTRIC 3ø UTILITY OVERHEAD SERVICE LINES.
2. EXISTING ELECTRIC UTILITY POWER POLE.
3. PROVIDE NEW OVERHEAD UTILITY POWER LINE.
4. PROVIDE NEW ELECTRIC UTILITY POWER POLE WITH RISER DIP POLE.
5. PROVIDE NEW UNDERGROUND PRIMARY ELECTRIC CONDUITS WITH 2" RED CONCRETE. CONDUCTORS BY ELECTRICAL UTILITY.
6. PROVIDE NEW ELECTRIC UTILITY PAD MOUNT TRANSFORMER CONCRETE PAD.
7. PROVIDE NEW UNDERGROUND SECONDARY ELECTRIC LINE AND WITH 2" RED CONCRETE TOPPING.
8. PROVIDE NEW ELECTRIC UTILITY SERVICE METER.
9. PROVIDE NEW FEEDER TO NEW PANELBOARDS.
10. PROVIDE 4" TELEPHONE RACEWAY WITH PULLWIRE TO EXISTING TELEPHONE PEDESTAL. ROUTE TO BUILDING & TERMINATE IN M.D.F. ROOM. PRIOR TO TRENCHING COORDINATE TERMINATION POINT WITH AT&T.
11. PROVIDE 4" CCTV RACEWAY WITH PULLWIRE. CAP BELOW GRADE AT PROPERTY LINE, & ROUTE TO BUILDING & TERMINATE IN M.D.F. ROOM. PRIOR TO TRENCHING COORDINATE TERMINATION POINT WITH TIME WARNER.
12. SWITCH EXTERIOR POLE LIGHTS THROUGH LIGHTING CONTROL RELAY PANEL. BRANCH CIRCUIT: 1" - 2#8 & #10G. SEE CORRESPONDING PANEL SCHEDULE.
13. PROVIDE 1-1" RACEWAY WITH PULLWIRE - (ELEVATOR SERVICE ALERT PANEL)
14. RISE UP AT NEAREST WALL CAVITY UP TO PANELBOARDS.
15. RACEWAYS TO RISE AT MDF WIREWAY. SEE ENLARGED IDF ELECTRICAL PLANS ON SHEETS E4.02.
16. PROVIDE 2-4" RACEWAYS WITH PULLWIRE FROM SWITCHBOARD "MSB" FOR FUTURE USE.
17. PROVIDE NEW 36"X36" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "ELECTRICAL" COVER LOGO - SEE DETAIL.
18. CONNECT ELECTRIC PUMP/DRIVE UNIT (208V, 1ø); BRANCH CIRCUIT: 2" - 2#4 & #8G (208V). PROVIDE 3/4" X 10' COPPER CLAD GROUND ROD WITHIN 3'-0" OF GATE OPERATOR. COORDINATE EXACT LOCATION OF COMPONENTS WITH ARCHITECT PRIOR TO ANY ROUGH-IN. GATE CONTRACTOR SHALL PROVIDE ALL INTERNAL WIRING INCLUDING SAFETY LOOPS & PHOTO EYES. SEE DETAIL ON SHEET E9.03.
19. CONNECT ELECTRIC DRIVE UNIT (208V, 1ø); BRANCH CIRCUIT: 2" - 2#4 & #8G. PROVIDE 3/4" X 10' COPPER CLAD GROUND ROD WITHIN 3'-0" OF GATE OPERATOR. COORDINATE EXACT LOCATION OF COMPONENTS WITH ARCHITECT PRIOR TO ANY ROUGH-IN. GATE CONTRACTOR SHALL PROVIDE ALL INTERNAL WIRING INCLUDING SAFETY LOOPS & PHOTO EYES. SEE DETAIL ON SHEET E9.03.
20. ACCESS CONTROL PEDESTAL. SEE DETAIL ON SHEET E9.03.
21. PROVIDE VIDEO DOOR STATION. SEE DETAIL ON SHEET E9.03.
22. PROVIDE POLE LIGHTS AS SCHEDULED - TYPICAL. SEE DETAIL.
23. CONNECT MARQUEE SIGN; BRANCH CIRCUIT: 2"-6 #4 & #8G; 3 BRANCH CIRCUITS.
24. PROVIDE 1" RACEWAY WITH PULLWIRE AND J-BOX (SIGN CONTROLS). STUB-UP 6" AFF AT MDF WIREWAY.
25. PROVIDE 1-4" RACEWAYS WITH PULLWIRE FROM SWITCHBOARD "MSB" FOR FUTURE USE.
26. PROVIDE FLAG POLE LIGHTING - SEE DETAIL. SWITCH LIGHTS THROUGH THE LIGHTING CONTROL RELAY PANEL; BRANCH CIRCUIT: 1" - 2#10 & #10G.
27. PROVIDE 1-1" RACEWAY WITH PULLWIRE - (INTERCEPTOR SERVICE ALERT PANEL)
28. PROVIDE 4" RACEWAY WITH PULLWIRE (FIBER OPTIC CABLE). ROUTE ABOVE ACCESSIBLE CEILING SPACE. PROVIDE TO EACH IDF ROOM 1ST AND SECOND FLOOR. SEE DETAIL.
29. PROVIDE NEW 24"X24" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "ELECTRICAL" COVER LOGO - SEE DETAIL.
30. PROVIDE NEW 36"X36" TIER 22 RATED POLYMER CONCRETE PULL BOX WITH "COMMUNICATIONS" COVER LOGO - SEE DETAIL.
31. 1-2" RACEWAY WITH PULLWIRE - (F.A. RACEWAYS)
    1-2" RACEWAY WITH PULLWIRE - (INTERCOM)
    1-2" RACEWAY WITH PULLWIRE - (INTRUSION)
    1-4" RACEWAY WITH PULLWIRE - (DATA)
32. PROVIDE CONDUIT TO PANEL LA1 FOR FUTURE GATE.
33. PROVIDE 1-1/4" ELECTRICAL CONDUIT FOR FUTURE LIGHTING.
34. PROVIDE 1'-4" WITH PULLWIRE FROM PANEL DPC.

PLUMBING KEYED NOTES:

1. PROVIDE 3" DOMESTIC WATER LINE. SEE CIVIL DRAWINGS FOR CONNECTION AND CONTINUATION.
2. PROVIDE 4" SANITARY SEWER LINE. PROVIDE TWO WAY YARD CLEANOUT (NOT SHOWN FOR CLARITY). SEE CIVIL DRAWINGS FOR CONNECTION AND CONTINUATION.
3. APPROXIMATE LOCATION OF OIL/WATER SEPARATOR. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR.
4. APPROXIMATE LOCATION OF GREASE INTERCEPTOR. COORDINATE EXACT LOCATION WITH GENERAL CONTRACTOR.
5. PROVIDE GREASE INTERCEPTOR (GT-1). PROVIDE TIGHT-SEAL COVERS. PRIOR TO INSTALLATION COORDINATE PIPING SLOPE, TRENCHING AND BACKFILLING WITH CIVIL. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR TO AVOID CONFLICT WITH CURBS AND SIDEWALKS. SEE ASSOCIATED DETAIL ON DETAIL SHEET FOR MODEL No. & MANUFACTURER.
6. PROVIDE SAMPLE WELL AS PER DETAIL.
7. PROVIDE LINE SIZE VALVE IN QUAZITE BOX.
8. PROVIDE 4" SANITARY SEWER WITH FLOOR DRAIN AT DUMPSTER CATCH BASIN AS PER DETAIL. REFER TO DETAIL SHEET. REFER TO CIVIL FOR SEWER LINE CONTINUATION.
9. SPLASH BLOCK DISCHARGING AT THIS APPROXIMATE LOCATION. REFER TO PLUMBING PLAN FOR MORE INFORMATION.

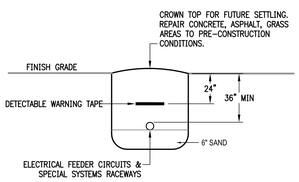
KEYED NOTES:

1. PROVIDE POLYMER CONCRETE PULL BOX TIER 22 RATED. COMPLYING WITH ANSI/SCTE 77 AND NEC 314.30.
2. PROVIDE 8" OF GRAVEL OR CRUSHED ROCK.
3. PROVIDE ONE PIECE LOCKING COVER WITH LOGO TIER 22 RATED. INSTALL COVER LEVEL WITH GRADE.



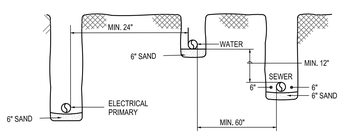
02 POLYMER CONCRETE PULLBOX DETAIL

SCALE :NONE



03 BURIAL DETAIL FOR ELECTRICAL RACEWAYS

SCALE :NONE



04 TRENCHING DETAIL

SCALE :NONE

CLEAR TRENCH OF ALL ROCKS AND DEBRIS BEFORE ADDING SAND CUSHION.

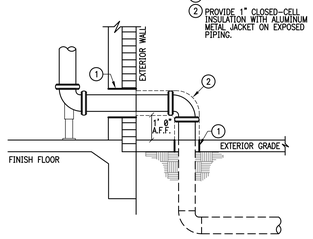
COMPACT TRENCH FILL TO 95% PROCTOR DENSITY.

MAINTAIN A MINIMUM OF 60 INCHES UNDISTURBED EARTH BETWEEN PARALLEL WATER AND SEWER LINES OR SUPPORT WATER LINE ON SEPARATE SHELF A MINIMUM OF 12" ABOVE SEWER LINE.

MAINTAIN A MINIMUM OF 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND SEWER. MAINTAIN A MINIMUM OF 12" VERTICALLY OR 24" HORIZONTALLY BETWEEN ELECTRICAL PRIMARY AND WATER LINES, GAS LINES, TELEPHONE RACEWAYS AND CABLE RACEWAYS.

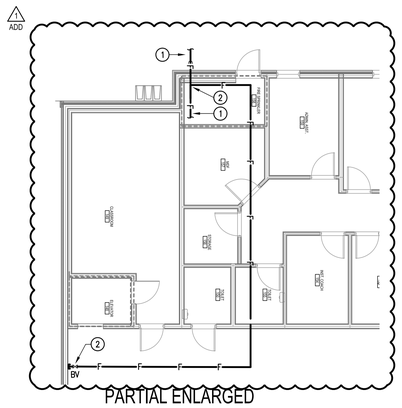
KEYED NOTES

1. SLEEVE.
2. PROVIDE 1" CLOSED-CELL INSULATION WITH ALUMINUM METAL JACKET ON EXPOSED PIPING.



05 FIRE RISER ENTRANCE DETAIL

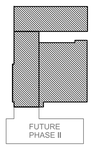
SCALE :NOT TO SCALE



06 PARTIAL ENLARGED M.E.P. SITE PLAN

SCALE :NOT TO SCALE

NORTH



KEYPLAN

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LICENSED PROFESSIONAL ENGINEER
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TEXAS REGISTERED ENGINEERING FIRM F-15998

No.	REVISIONS	BY
1	MAY 18, 2018	

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IDEA-BROWNSVILLE ROBINDALE CAMPUS
IDEA PHASE I
IDEA Public Schools
BROWNSVILLE, TEXAS

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 10, 2018
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Robindale Phase I
Sheet: MEP1.01

SCOPE OF WORK

1. GENERAL: THE "IDEA ROBINDALE PHASE I" CONSISTS OF NEW TWO-STORY BUILDING, APPROXIMATE 70,000 S.F. THIS BUILDING WILL GENERALLY BE OPERATED FROM 7:00AM TO 6:00PM. (MONDAY THROUGH FRIDAY) WITH OCCASIONAL AFTER HOURS AND WEEKENDS USE.

2. ELECTRICAL: PROVIDE ALL MATERIALS AND LABOR ASSOCIATED WITH COMPLETE OPERATIONAL ELECTRICAL DISTRIBUTION SYSTEM. MAJOR ITEMS OF WORK INCLUDE, BUT ARE NOT LIMITED TO:

(a) ELECTRICAL SERVICE:
(i) PROVIDE A NEW UNDERGROUND ELECTRICAL SERVICE; IT SHALL CONSIST OF UNDERGROUND ELECTRICAL RACEWAYS AND CONCRETE PAD FOR UTILITY FURNISHED TRANSFORMER.
(ii) UTILITY COMPANY SHALL PROVIDE MEDIUM VOLTAGE CONDUCTORS AND PAD TRANSFORMER.
(iii) SINGLE PHASE PROTECTION: PROVIDE AS NOTED ON SWITCHBOARD AND PANELS SCHEDULES.

(b) LIGHTING SYSTEMS: INTERIOR AND EXTERIOR LIGHTING SYSTEM SHALL CONSIST OF LED TYPE.

(c) LIGHTING CONTROLS (SWITCHES, OCCUPANCY SENSORS, DAYLIGHT SENSORS, ETC.): PROVIDE AS NOTED ON PLANS SPECIFICATIONS. IN SOME CASES, THEY WILL BE CEILING MOUNTED AND OTHERS WALL MOUNTED. IT'S THE INTENT FOR THEM TO BE WIRED TO AUTOMATICALLY CONTROL THE LUMINARES IN THEIR RESPECTIVE AREAS.

(d) COMMISSIONING: PROVIDE FOR THE LIGHTING EQUIPMENT AND LIGHTING CONTROLS AS REQUIRED PER IECC 2015.

(e) POWER SYSTEMS: PROVIDE MISCELLANEOUS DUPLEX RECEPTACLES, ISOLATED GROUND RECEPTACLES FOR COMPUTER TERMINALS, DUPLEX RECEPTACLES FOR FLAT SCREENS CONNECTIONS, AND POWER FOR MARQUEE/BUILDING SIGNS, BANKING, H.V.A.C. AND PLUMBING EQUIPMENT.

(f) FIRE ALARM SYSTEM:
(i) PROVIDE AN ADDRESSABLE CONTROL PANEL WITH VOICE EVACUATION, CELL/WIRELESS MONITORING, MANUAL AND AUTOMATIC INITIATION DEVICES. MONITORING AND INTERFACING WITH ELEVATOR, FIRE SPRINKLE TAMPER AND FLOW SWITCHES. INDICATING DEVICES SHALL ALSO BE PROVIDED TO COMPLY WITH TDLR.
(ii) FULLY COORDINATE WITH THE ELEVATOR CONTRACTOR FOR THE FIRE ALARM INTERFACING.
(iii) FULLY COORDINATE WITH THE FOOD SERVICE CONTRACTOR FOR THE KITCHEN HOOD FIRE SUPPRESSION INTERFACING.

(g) COMMUNICATION AND DATA PROCESSING EQUIPMENT: PROVIDE ROUGH-INS ONLY. CABLING, CONNECTORS, PATCH PANELS, RACKS, ETC. BY OWNER.

(h) MULTIMEDIA SYSTEM: PROVIDE ROUGH-INS FOR MULTIMEDIA OUTLET AND FLAT SCREENS. CONNECTORS, CABLING AND OUTLETS BY OWNER.

(i) SCHOOL INTERCOM SYSTEM: PROVIDE SPEAKERS AND CALL-IN SWITCHES IN CLASSROOMS AND OFFICES. HALLWAYS AND BUILDING EXTERIOR WALLS WITH SPEAKERS TO TRANSMIT GENERAL ANNOUNCEMENTS.

(j) GYMNASIUM SOUND SYSTEM: PROVIDE CENTRAL SPEAKER, MICROPHONE OUTLETS, MICROPHONE, MICROPHONE STANDS, AND WIRING. SEE SPECIFICATIONS.

(k) CAFETERIA SOUND SYSTEM: PROVIDE PENDANT MOUNTED SPEAKERS, MICROPHONE OUTLETS, MICROPHONE, MICROPHONE STANDS, AND WIRING. SEE SPECIFICATIONS.

(l) INTRUSION DETECTION SYSTEM: IT SHALL CONSIST OF A CONTROL PANEL WITH WIRELESS/RADIO MONITORING, KEYPADS, GLASS BREAK SENSORS, MOTION DETECTORS AND MAGNETIC CONTACTS AS NOTED ON DRAWINGS.

(m) BUILDING ACCESS: PROVIDE POWER TO VEHICLE AND PEDESTRIAN GATES, RECEPTION AREA ENTRANCE DOOR MAGNETIC STRIKES AND INTERCOM AND CAMERA AT VEHICLE GATES ENTRANCE.

ABBREVIATIONS:

A	AMPS	EF	EXHAUST FAN	MECH	MECHANICAL
ABC	ABOVE CEILING LINE	EMS	ENERGY MANAGEMENT SYSTEM	MS	MOTOR STARTER
AC	ABOVE COUNTER BACKSPLASH	EXT.	EXTERNAL OR EXTERIOR	NTS	NOT TO SCALE
ACCU	AIR COOLED CONDENSING UNIT	FACP	FIRE ALARM CONTROL PANEL	OA	OUTSIDE AIR
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT	OAU	OUTSIDE AIR UNIT
AFF	ABOVE FINISHED FLOOR	FD	FIRE DAMPER	P	POLE(S)
B.	BOTTOM	FS	FLAT SCREEN	PA	PUBLIC ADDRESS
BLC.	BELOW CEILING LINE	G.	GROUND	PH	PHASE
C.	CONDUIT OR COMMON	GA.	GAGE	RM.	ROOM
CLG.	CEILING	GALV.	GALVANIZED	SS	STAINLESS STEEL
COMB.	COMBINATION	GRND.	GROUND	TSTAT	THERMOSTAT
COND.	CONDUIT	HP	HORSEPOWER	UG	UNDERGROUND
CU.	COPPER	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	UNO	UNLESS OTHERWISE NOTED
DDC	DIRECT DIGITAL CONTROLS			V	VOLTS
DISC.	DISCONNECT	IG	ISOLATED GROUND	VAV	VARIABLE AIR VOLUME
EDH	ELECTRIC DUCT HEATER	INT.	INTRUSION DETECTION	VFD	VARIABLE FREQUENCY DRIVE
				WACU	WALL AIR CONDITIONING UNIT.
				W	WIRE

KITCHEN BELL SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	KITCHEN DOOR BELL PUSH BUTTON – EDWARDS MODEL #852 W/ STAINLESS STELL WALL PLATE. PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED TO TRANSFORMER ABOVE ACCESSIBLE CLG.	48"AFF
T	KITCHEN DOOR BELL TRANSFORMER – EDWARDS MODEL #592 (120V–24V).	12" ABC
B	KITCHEN DOOR BELL CHIME – EDWARDS MODEL #340A-C5 (24V). PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED TO TRANSFORMER ABOVE ACCESSIBLE CLG.	12" BLC

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

GENERAL SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DISCONNECT SWITCH – NON FUSED	AS REQUIRED
	DISCONNECT SWITCH – FUSED	AS REQUIRED
	COMBINATION MOTOR STARTER/DISCONNECT SWITCH	AS REQUIRED
	MOTOR STARTER	AS REQUIRED
	EQUIPMENT CONNECTION	AS REQUIRED
	MOTOR CONNECTION	AS REQUIRED
	EMT PENETRATION	12"ABC
	ELECTRICAL PANELBOARD – SURFACE MOUNTED	AS REQUIRED
	ELECTRICAL PANELBOARD – RECESSED/FLUSH MOUNTED	AS REQUIRED
	UNDERGROUND RACEWAY	AS REQUIRED
	CONCEALED RACEWAY	AS REQUIRED
	CONDUIT OR EMT HOMERUN TO PANELBOARD CONCEALED IN WALLS OR ABOVE CEILING. LONG CROSSMARKS DENOTE NUMBER OF "HOT" CONDUCTORS SHORT CROSSMARKS INDICATE NEUTRALS AND DOTS INDICATE NUMBER OF GROUND CONDUCTORS. ARROW INDICATES HOME RUN TO ELECTRICAL PANEL.	AS REQUIRED
SPD	SURGE PROTECTION DEVICE	– – – –

DOOR ACCESS SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
P	DOOR POWER SUPPLY – CONNECT TO NEAREST 120V NON-GFCI CIRCUIT.	12" ABC
ES	CONNECT DOOR ELECTRIC STRIKE – PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED TO POWER SUPPLY ABOVE ACCESSIBLE CLG.	12" ABC
RB	CONNECT DOOR RELEASE BUTTON – BOSCH MODEL #47107). PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED TO POWER SUPPLY ABOVE ACCESSIBLE CLG.	48"AFF
MS	CONNECT SLIDE GATE AUDIO/MASTER MASTER STATION – PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED INTO ACCESSIBLE CLG. SEE DETAIL	4" ACB

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
REFER TO DOOR ACCESS SYSTEM DETAIL.

LUTRON CONTROL SYMBOLS:

	DIMMING WALLSTATION – LUTRON PX-2BRL-GWH-I01	48"AFF
	WALLSTATION – LUTRON QSWS2-3BRLJ-WH	48"AFF
	WALLSTATION – LUTRON QSWS2-5BRLJ-WH	48"AFF
	KEYED WALLSTATION – LUTRON QSWS2-KS13MOC-WH	48"AFF
	OCCUPANCY SENSOR – LUTRON LUT-WSPSM24V-360-CPN6111	CLG.
TC	TIME CLOCK – LUTRON QSGR-TC-3S-WH-CPN5825	---
ESI	CONTROLLER INTERFACE – LUTRON QSE-CI-AP-D	ABV. CLG.
ESN	ENERGI SAVR NODE – LUTRON QSN-4T16-S	AS REQUIRED

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE. REFERENCE LIGHTING CONTROL SCHEMATIC DETAILS FOR ALL LUTRON CONTROLS WIRING REQUIREMENTS.

LIGHTING SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	2'X4' LIGHT FIXTURE – TYPE AS NOTED	– – – –
	EMERGENCY 2'X4' LIGHT FIXTURE-TYPE AS NOTED CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	– – – –
	SURFACE/WRAPAROUND LIGHT FIXTURE	– – – –
	SURFACE/WRAPAROUND EMERGENCY LIGHT FIXTURE CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	– – – –
	SINGLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
	DOUBLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
ADD	EMERGENCY LIGHTING UNIT	8'–0"AFF
	WALL MOUNT LIGHT FIXTURE – TYPE AS NOTED	
RT	REMOTE EMERGENCY BATTERY PACK WITH REMOTE TEST SWITCH	ABV. CLG. 12" BLC

NOTES:
1.) REFERENCE LIGHT FIXTURE SCHEDULE FOR ALL MOUNTING HEIGHTS.

WIRING DEVICES SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
S	SINGLE POLE TOGGLE SWITCH – HUBBELL MODEL #HBL1221X	48"AFF
S_3	THREE WAY TOGGLE SWITCH – HUBBELL MODEL #HBL1223X	48"AFF
S_4	FOUR WAY TOGGLE SWITCH – HUBBELL MODEL #HBL1224X	48"AFF
S_K	KEYED TOGGLE SWITCH CORBIN TYPE – HUBBELL MODEL #HBL1221RKLX	48"AFF
S_{VS}	VACANCY DIMMING WALL SENSOR SWITCH – LUTRON MODEL #MS-Z101-V-WH. PROVIDE 0-10V SIGNAL WIRE IN RACEWAY FROM SWITCH TO EACH CONTROLLED LIGHT FIXTURE.	48"AFF
S_{2b}	2-BUTTON CONTROL STATION – LUTRON MODEL #QSWS2-2BI-WH	48"AFF
S_T	1P TOGGLE SWITCH-THERMAL TYPE – SQUARE "D" CLASS 2510 W/ RED PILOT LIGHT & HANDLE GUARD/LOCK OFF	AS REQUIRED
S_{DS}	DIGITAL SWITCH – MODEL #CH1 X X PWH	48"AFF
S_{EF}	EXHAUST FAN TIMER SWITCH – SENSOR SWITCH MODEL #PTS 720 X	48"AFF
PC	DIGITAL OUTDOOR PHOTO CELL WALL MOUNTED – LC&D SEE DETAIL	12' AFF
OS_C	STANDARD RANGE LOW VOLTAGE DUAL TECH CEILING VACANCY SENSOR – LUTRON MODEL #LOS-CDT-500-WH. PROVIDE A POWER PACK – LUTRON MODEL #PP-DV	CLG.
OS_E	EXTENDED RANGE LOW VOLTAGE DUAL TECH CEILING VACANCY SENSOR – LUTRON MODEL #LOS-CDT-1000-WH. PROVIDE A POWER PACK – LUTRON MODEL #PP-DV	CLG.
OS_H	HIGH BAY LOW VOLTAGE DUAL TECH CEILING VACANCY SENSOR – LUTRON MODEL #LOS-WSPSM24V-360-CPN611. PROVIDE A POWER PACK – LUTRON MODEL #PP-DV	CLG.
PP	POWER PACK FOR EXISTING FAN – LUTRON MODEL #PP-DV. INTERFACE WITH ROOM OCCUPANCY SENSOR.	ABV. CLG.

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

WIRING DEVICES SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DUPLEX TAMPER RESISTANT RECEPTACLE – HUBBELL MODEL #8300XTR	18"AFF
GFCI	DUPLEX RECEPTACLE TAMPER RESISTANT W/ GROUND FAULT INTERRUPTING TYPE – HUBBELL MODEL #CGFTRST20X	18"AFF
GFCI WCP	DUPLEX RECEPTACLE TAMPER RESISTANT W/ GROUND FAULT INTERRUPTING TYPE – HUBBELL MODEL #CGFTRST20X AND WHILE IN USE WEATHERPROOF COVER – PASS & SEYMOUR MODEL #WUC10-CAGH	18"AFF
AC	DUPLEX RECEPTACLE TAMPER RESISTANT – HUBBELL MODEL #8300XTR MOUNT @ +4" HORIZONTALLY ABOVE COUNTER BACKSPLASH (U.N.O.)	4"ACB
IG	DUPLEX RECEPTACLE ISOLATED GROUND TYPE – HUBBELL MODEL #CR5352IG	18"AFF
FS	DUPLEX RECEPTACLE FOR FLAT SCREEN – HUBBELL MODEL #CR5352X	84"AFF
	SPECIAL RECEPTACLE – TYPE AS NOTED	18"AFF
	JUNCTION BOX W/ BLANK STAINLESS STEEL COVERPLATE	AS REQUIRED
USB	DUPLEX TAMPER RESISTANT RECEPTACLE AND USB RECEPTACLE COMBINATION – HUBBELL MODEL #USB20X2X	18"AFF
WB	DUPLEX RECEPTACLE FOR WHITE BOARD PROJECTOR – HUBBELL MODEL #CR5352X	AS REQUIRED
	POLYMER CONCRETE PULL BOX W/ LOGO COVER – SEE DETAIL	AS REQUIRED
PP	TELE-POWER POLE W/ WIRING DEVICES AS NOTED	– – – –
	CLOCK HANGER FOR SINGLE FACE CLOCK – HUBBELL MODEL #HBL5235 ("2" INDICATES DUAL SIDED CLOCK)	9'–0"AFF

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
18" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
AC INDICATES 4" ABOVE COUNTER TO BOTTOM OF DEVICE.
U.N.O. INDICATES UNLESS NOTED OTHERWISE.

FLOOR BOX SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	FLOOR BOX W/ COVER PLATES FOR WIRING DEVICES AS INDICATED. PROVIDE SPECIAL SYSTEMS RACEWAYS, TWO – 1.5" OR AS NOTED ON ELECTRICAL DRAWINGS. PROVIDE BLANK COVERS FOR UNUSED COMPARTMENTS – HUBBELL MODEL #HBLCFB5018ASE/HBLTCGNTBKSW.	FLOOR ADD
	FLOOR BOX W/ COVER PLATES FOR WIRING DEVICES AS INDICATED. PROVIDE SPECIAL SYSTEMS RACEWAYS, 1 – 1.5" (DATA). PROVIDE BLANK COVERS FOR UNUSED COMPARTMENTS – HUBBELL MODEL #CFB4G30/24GCCVRALUC.	FLOOR

NOTES:
1.) TOP OF FLOOR BOX TO BE FLUSH WITH FINISHED FLOOR. SEE ARCHITECTURAL DRAWINGS FOR FLOOR TYPES.

FIRE ALARM SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
PS	FIRE ALARM MANUAL PULLSTATION – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	48"AFF
AV AV	FIRE ALARM STROBE HORN CEILING OR WALL MOUNTED – PROVIDE 15/75 CANDELA U.N.O. – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
SS SS	FIRE ALARM SPEAKER STROBE CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
SS WP	FIRE SPRINKLER RISER ALARM SPEAKER STROBE (WEATHER PROOF) – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
V V	FIRE ALARM STROBE LIGHT CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
SD H SD	FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	CLG.
HD H HD	FIRE ALARM HEAT DETECTOR CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	CLG.
DD	FIRE ALARM H.V.A.C. DUCT SMOKE DETECTOR W/ SHUNT TRIP RELAY – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE. PROVIDE A REMOTE TEST SWITCH.	– – – –
F	FIRE SPRINKLER FLOW SWITCH	– – – –
TS	FIRE SPRINKLER TAMPER SWITCH – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	– – – –
	FIRE ALARM CONTROL/VOICE EVACUATION PANEL (FLUSH MOUNTED)	– – – –
	FIRE ALARM ANNUNCIATOR PANEL (SURFACE MOUNTED)	– – – –

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

SPECIAL SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
HDS ADD	3-GANG FLAT SCREEN OUTLET – PROVIDE LARGE CAPACITY WALL BOX HUBBEL MODEL NO. HBL263 WITH 1.5" RACEWAY STUBBED INTO ACCESSIBLE CLG., PULL WIRE, MUD RING AND HBL981 LOW VOLTAGE DIVIDER.	72"AFF
HMM	MULTIMEDIA OUTLET – PROVIDE 2-GANG MUD RING SECURED TO METAL STUDS WITH METAL STRAP WITH 1.5" RACEWAY STUBBED INTO ACCESSIBLE CLG. W/ PULL WIRE. AND MUD RING.	18"AFF
▽	DATA OUTLET – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE – SEE DETAIL.	18"AFF
▽WIFI	WIRELESS ACCESS POINT – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE – SEE DETAIL.	CEILING
▼	DATA OUTLET/VOICE OVER IP – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE – SEE DETAIL.	18"AFF
▼	TELEPHONE OUTLET – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE – SEE DETAIL.	18"AFF

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

INTRUSION DETECTION SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
MD	INTRUSION DETECTION MOTION DETECTOR FULL COVERAGE TYPE – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	9'–0"AFF
MD H	INTRUSION DETECTION MOTION DETECTOR HALLWAY COVERAGE TYPE – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	9'–0"AFF
GB	INTRUSION DETECTION GLASS BREAK SENSOR	ABV. CLG.
KP	INTRUSION DETECTION KEYPAD PROVIDE WITH STI COVER – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	48"AFF
DC	INTRUSION DETECTION DOOR MAGNETIC CONTACT – PROVIDE WITH 1/2"C AND PULLWIRE.	– – – –
S	INTRUSION DETECTION INDOOR SIREN – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
S WP	INTRUSION DETECTION OUTDOOR SIREN – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	10'–0"AFF ADD

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

INTERCOM SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
S	INTERCOM OUTDOOR HORN WEATHER PROOF – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	9'–6"AFF
IC	INTERCOM BUTTON – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE .	48"AFF
S	INTERCOM SPEAKER CEILING MOUNT	CLG.
H	INTERCOM ADMINISTRATION CONTROL STATION HANDSET – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE STUBBED INTO ACCESSIBLE CLG.	18"AFF

NOTES:
1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

CAFETERIA & GYMNASIUM SOUND SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
S	SPEAKER SPHERE – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE.	– – – –
M	MICROPHONE OUTLET – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE.	18"AFF
AT	ASSISTIVE LISTENING TRANSMITTER	24"BLC
	AMPLIFIER (FLUSH MOUNTED)	– – – –
S	CAFETERIA SPEAKER	CLG.

NOTES:
1.) 18" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

No.	REVISIONS	BY
1	MAY 18, 2018	

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IDEA PHASE I
IDEA Public Schools
BROWNSVILLE, TEXAS

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
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Drawn By: ETHOS
Job No.: IDEA Robindale Phase I
Sheet:

E2.01

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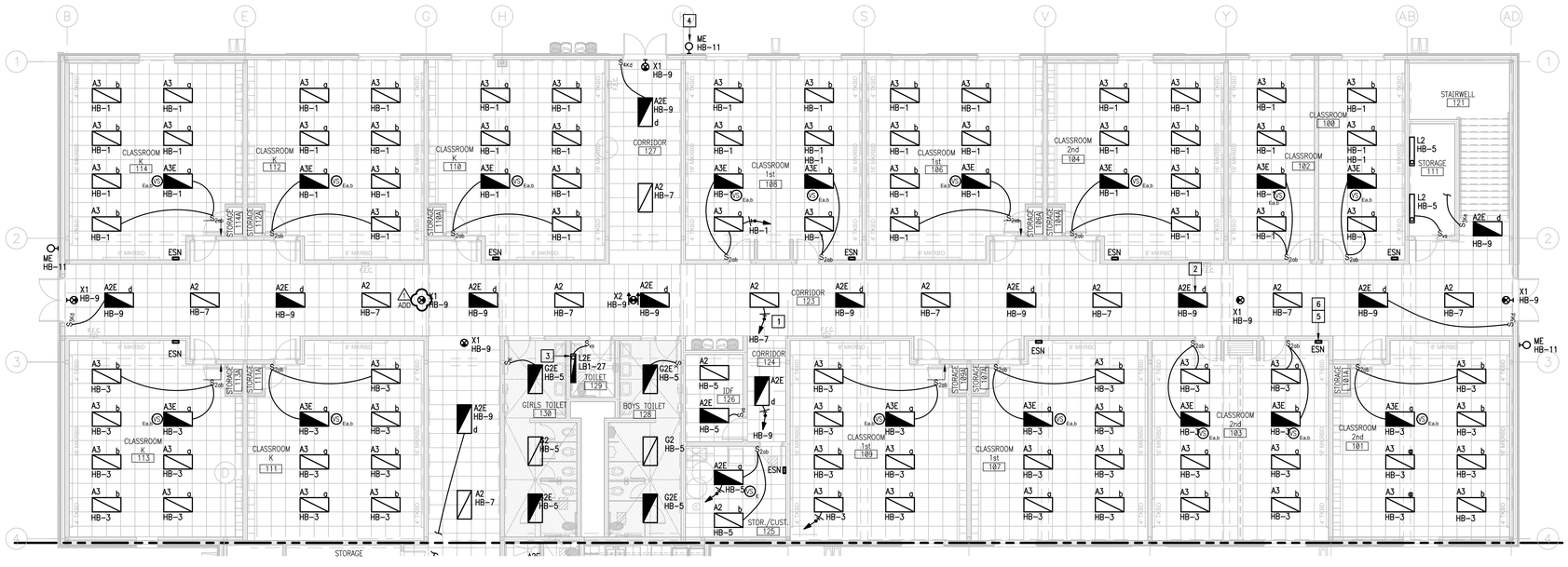
GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY OCCUPANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0-10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. ADD EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
2. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.
3. MOUNT FIXTURE TYPE "L2E" AT 24" ABOVE MIRROR–TYPICAL.
4. MOUNT LIGHT FIXTURE TYPE "ME" AT 8'–0"AFF TO CENTER OF FIXTURE – TYPICAL.
5. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
6. PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING. SEE DETAIL 02/E8.05. CONNECT TO NEAREST 277V CIRCUIT – TYPICAL.



01 LIGHTING PLAN (1ST FLOOR)

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

NORTH

No.	REVISIONS	BY
1	MAY 18, 2018	

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FUTURE PHASE II

KEYPLAN

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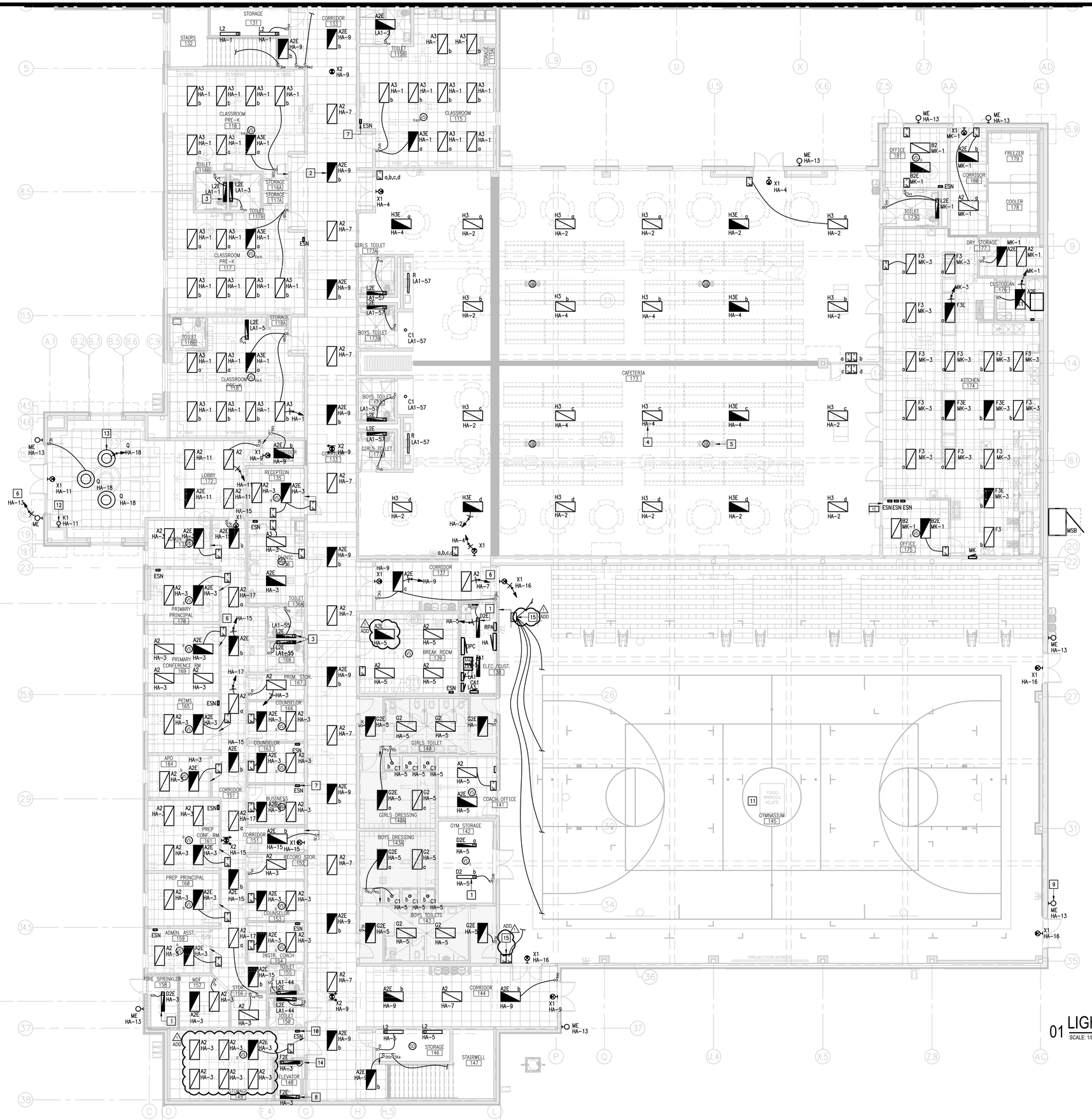

01 LIGHTING PLAN (1ST FLOOR)

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

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY OCCUPANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0–10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL. (ADD)

KEYED NOTES:

1. PROVIDE UNISTRUT/THREADED ROD AND SUSPEND LIGHT FIXTURE AT 9'-0"AFF. COORDINATE INSTALLATION WITH HVAC DUCT WORK.
2. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.
3. MOUNT FIXTURE TYPE "L2E" AT 24" ABOVE MIRROR – TYPICAL.
4. SEE DETAIL 02/E9.03 FOR MOUNTING.
5. SURFACE MOUNT TO STRUCTURE STEEL JOIST – TYPICAL FOR THIS ROOM.
6. VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
7. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
8. SEE ARCHITECTURAL DRAWINGS OF THE ELEVATOR PIT/SHAFT FOR THE EXACT LOCATION.
9. MOUNT LIGHT FIXTURE TYPE "ME" AT 8'–0"AFF TO CENTER OF FIXTURE – TYPICAL.
10. PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING. SEE DETAIL 02/E8.05. CONNECT TO NEAREST 277V CIRCUIT – TYPICAL.
11. SEE SHEET E3.04 FOR LIGHTING.
12. PROVIDE EMERGENCY LIGHT FIXTURE WALL MOUNTED AT 8'–5" AFF.
13. SUSPEND LIGHT FIXTURES TYPE "Q" TO BOTTOM AFF AS NOTED.
14. PROVIDE 3–WAY LIGHT SWITCH LOCATED 4'–0" ABOVE BOTTOM LANDING NEXT TO TOP RUNG OF LADDER AND 3–WAY LIGHT SWITCH LOCATED 4'–0" ABOVE THE CONTROLLER LANDING FLOOR.
15. PROVIDE CLEAR LOCKING COVER. (ADD)

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IDEA-BROWNSVILLE ROBINDALE CAMPUS PHASE I

BROWNSVILLE, TEXAS

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5.10.2018

FUTURE PHASE II

KEYPLAN

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Date: May 10, 2018
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No.: IDEA Robindale Phase I
Sheet: E3.02

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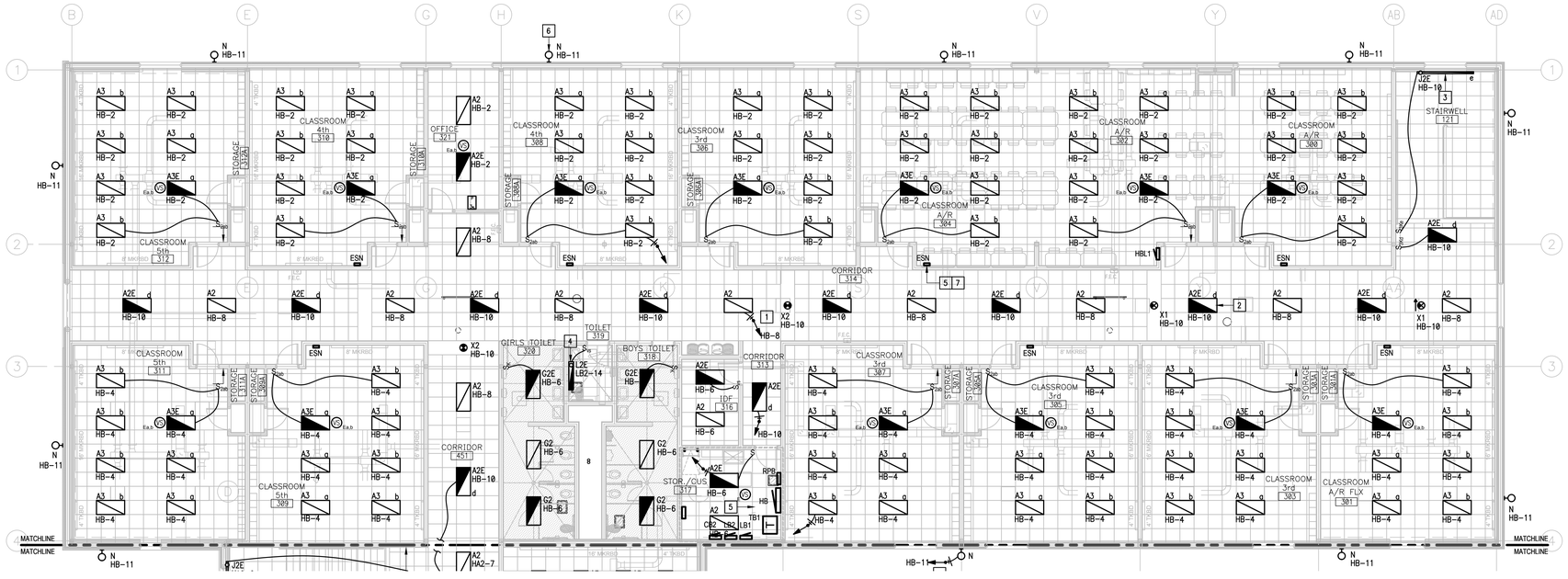
GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY OCCUPANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0–10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. ADD EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
2. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.
3. MOUNT FIXTURE TYPE "J2E" AT 15'–4" A.F.F. TO CENTER OF FIXTURE – TYPICAL.
4. MOUNT FIXTURE TYPE "L2E" AT 24" ABOVE MIRROR – TYPICAL.
5. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
6. MOUNT LIGHT FIXTURE TYPE "N" AT 20'–9"AFF TO CENTER OF FIXTURE – TYPICAL.
7. PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING. SEE DETAIL 02/E8.05. CONNECT TO NEAREST 277V CIRCUIT – TYPICAL.



01 LIGHTING PLAN (2ND FLOOR)

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

NORTH

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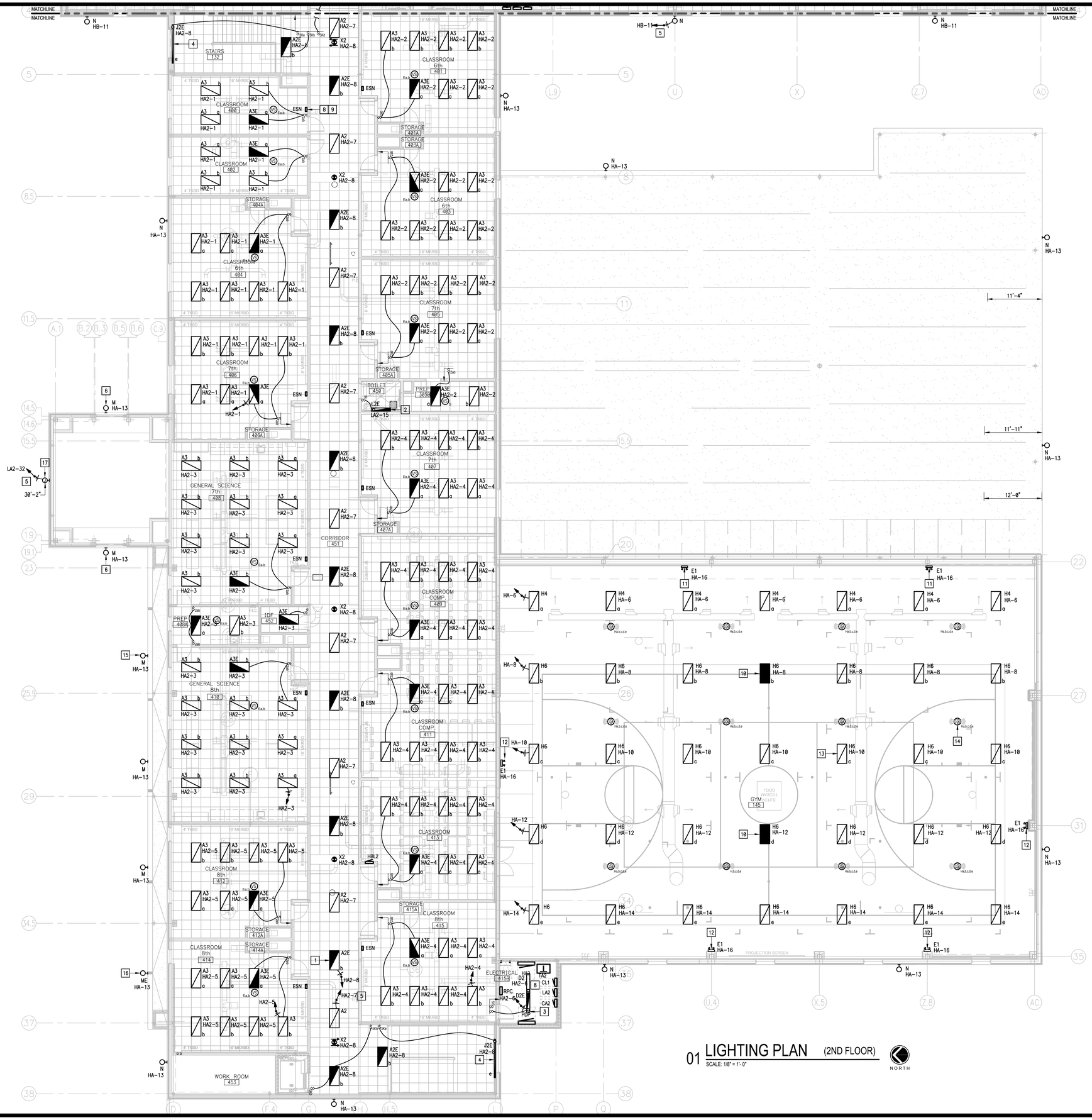
Date:	May 10, 2018
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Robindale Phase I
Sheet:	E3.03



01 LIGHTING PLAN (2ND FLOOR)

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

NORTH

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY OCCUPANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0–10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. ADD EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.
2. MOUNT FIXTURE TYPE "L2E" AT 24" ABOVE MIRROR – TYPICAL.
3. PROVIDE UNISTRUT AND THREADED ROD TO SUSPEND LIGHT FIXTURE AT 9'–0" AFF. COORDINATE INSTALLATION WITH HVAC DUCT WORK.
4. MOUNT FIXTURE TYPE "J2E" AT 15'–4" A.F.F. TO CENTER OF FIXTURE – TYPICAL.
5. VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.
6. MOUNT LIGHT FIXTURE TYPE "M" AT 15'–4" AFF TO CENTER OF FIXTURE (U.N.O.).
7. MOUNT LIGHT FIXTURE TYPE "N" AT 20'–9" AFF TO CENTER OF FIXTURE (U.N.O.) – TYPICAL.
8. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
9. PROVIDE LIGHTING CONTROL PANEL (ESN) 12" ABOVE CEILING. SEE DETAIL 02/E8.05. CONNECT TO NEAREST 277V CIRCUIT – TYPICAL.
10. NIGHT LIGHT TO REMAIN UNSWITCHED.
11. MOUNT FIXTURE TYPE "E1" AT 80" ABOVE TOP OF BLEACHERS.
12. MOUNT FIXTURE TYPE "E1" AT 12'–0" A.F.F. (U.N.O.) TO TOP OF FIXTURE.
13. SEE DETAIL 01/E9.03 FOR MOUNTING.
14. PROVIDE CLASS II #18 WIRING IN 1/2" RACEWAY TO BETWEEN VACANCY SENSORS AND POWER PACKS AS PER MANUFACTURER INSTRUCTION TO OBTAIN SWITCHING SCHEMES AS NOTED.
15. MOUNT LIGHT FIXTURE TYPE "M" AT 13'–4" AFF TO CENTER OF FIXTURE (U.N.O.) – TYPICAL.
16. MOUNT LIGHT FIXTURE TYPE "ME" AT 13'–4" AFF TO CENTER OF FIXTURE (U.N.O.).
17. CONNECT PRE-WIRED LOGO SIGN ABOVE CANOPY. COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER. COORDINATE POWER SUPLY LOCATION (ACCESSIBLE) WITH SIGH CONTRACTOR.

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Date: May 10, 2018
Scale: As Noted
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Drawn By: ETHOS
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Sheet: E3.04

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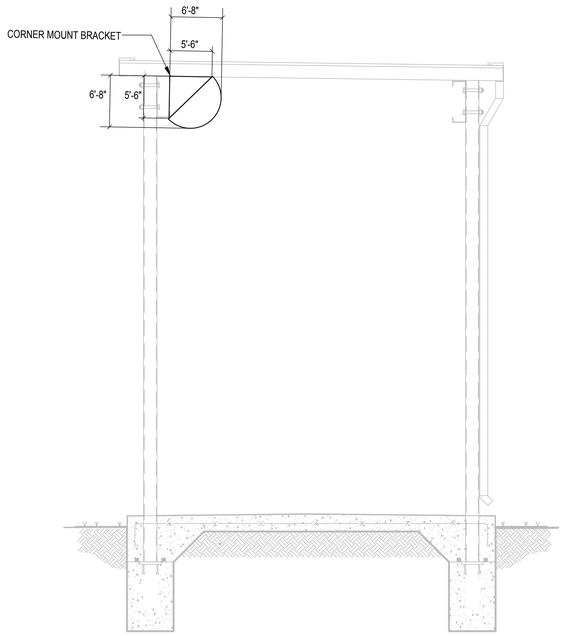


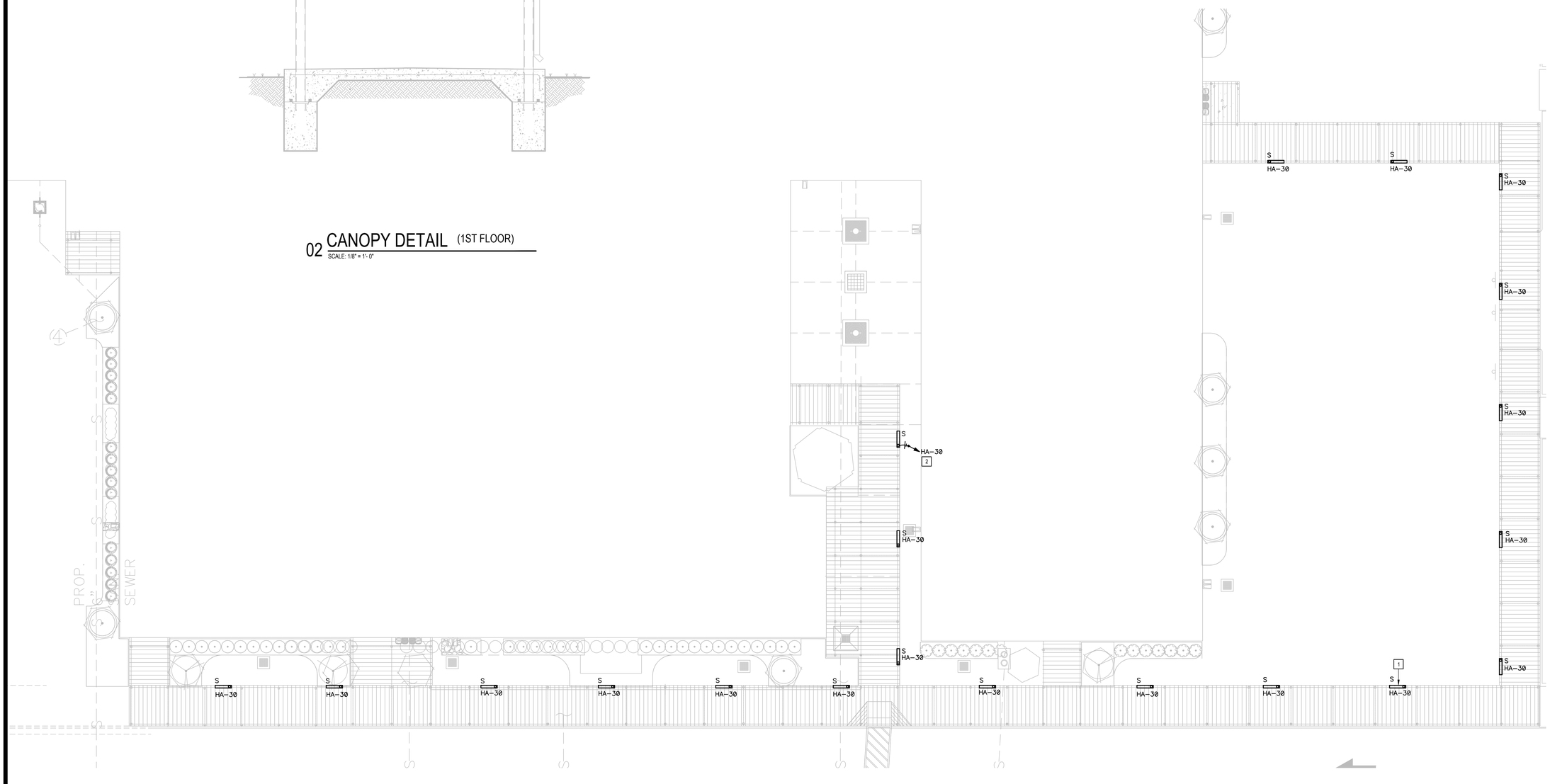
02 CANOPY DETAIL (1ST FLOOR)
SCALE: 1/8" = 1'- 0"

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY OCCUPANCY SENSORS.
3. MULTIPLE OCCUPANCY SENSORS CONTROLLING A SINGLE OR MULTIPLE SWITCH SCHEME AND POWER PACKS SHALL BE CONNECTED WITH CLASS II #18 WIRING IN 1/2" RACEWAY.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY LIGHTING MANAGEMENT PANEL.
5. PROVIDE 0–10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE DRIVER AND WALL SWITCH.
6. ADD EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. SECURE TO CANOPY HORIZONTAL STRUCTURAL STEEL – SEE DETAIL – TYPICAL.
2. VIA CORRESPONDING LIGHTING CONTROL RELAY PANEL.



01 CANOPY LIGHTING PLAN (1ST FLOOR)
SCALE: 3/32" = 1'- 0"

NORTH

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Job No.	IDEA Robindale Phase I
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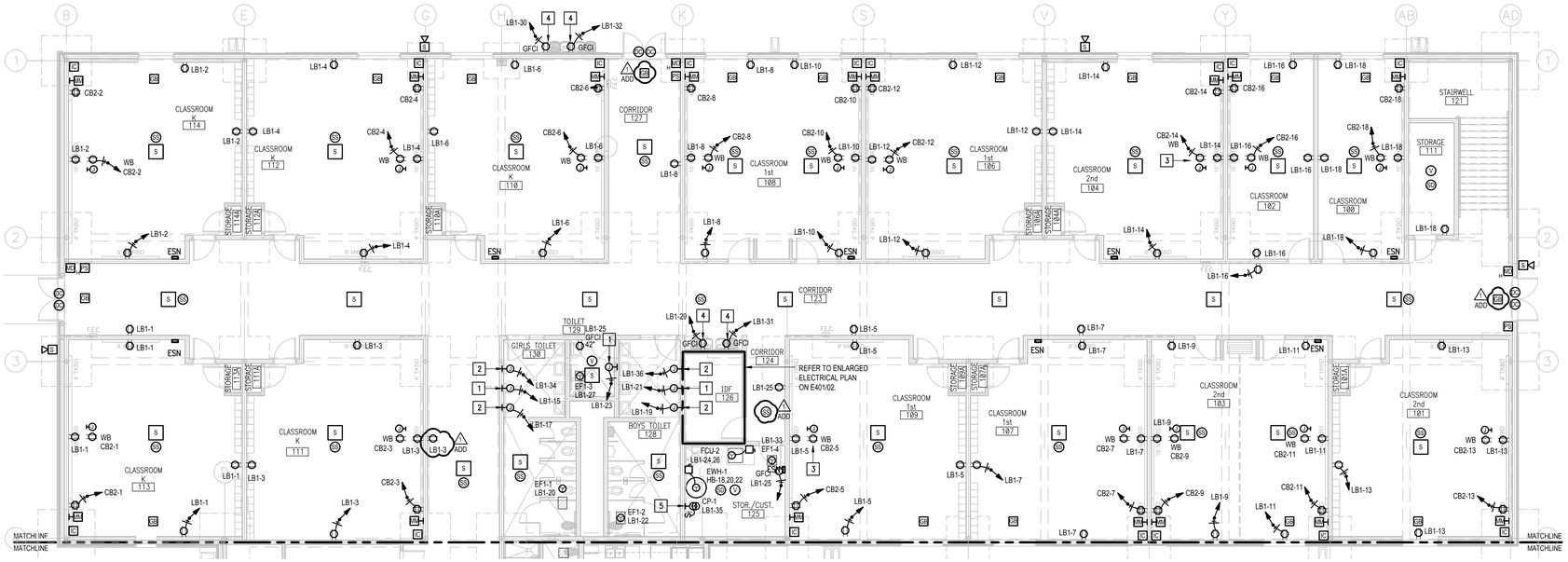
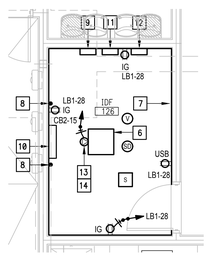


01 ELECTRICAL PLAN (1ST FLOOR)

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

NORTH



02 ELECTRICAL PLAN (ENLARGED IDF ROOM 126)

SCALE: 1/4" = 1'-0"

NORTH

GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY(INCLUDING LIGHTING BRANCH CIRCUITS).
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J–HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
7. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
8. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
9. PROVIDE 1–2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
10. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
11. ADD EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B–750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" – 2#10 & #10G. MOUNT @ +40" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
2. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B–750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" – 2#10 & #10G. MOUNT @ +40" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
3. PROVIDE ELECTRICAL RECEPTACLE FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR – TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J–BOX PER MANUFACTURERS PUBLISHED TEMPLATES – SEE DETAILS.
4. CONNECT ELECTRIC DRINKING FOUNTAIN; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. ROUGH–IN AT 17–7/16" TO CENTER OF J–BOX – TYPICAL. COORDINATE WITH PLUMBING CONTRACTOR.
5. CONNECT VIA CORRESPONDING RELAY PANEL.
6. DATA RACK – PROVIDED BY OWNER.
7. PROVIDE 3/4" X 4', PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A–D INT–APA). MOUNT AT 24" AFF.
8. PROVIDE GROUND BUS BAR. REFER TO GROUNDING ELECTRICAL RISER DIAGRAM.
9. PROVIDE INTRUSION DETECTION SYSTEM POWER SUPPLY; BRANCH CIRCUIT: 1/2 – 2#12 & #12G.
10. PROVIDE 6"H X 6"D (WIDTH AS REQUIRED) SURFACE MOUNTED WIREWAY WITH HINGED COVER. ROUTE SPECIAL SYSTEMS RACEWAYS TO THIS LOCATION – SEE SITE PLAN AND DETAIL.
11. PROVIDE FIRE ALARM POWER SUPPLY, BRANCH CIRCUIT: 1/2" – 2–#12 & #12G.
12. PROVIDE INTERCOM SYSTEM SWITCHING MODULES WALL MOUNTED.
13. PENDANT MOUNTED SEE DETAIL, FIELD CONFIRM EXACT LOCATION WITH OWNER/IT SUBCONTRACTOR.
14. PROVIDE SPECIAL RECEP FOR IDF–UPS(NEMA L5–30P); BRANCH CIRCUIT: 3/4" – 2#10 & #10G.

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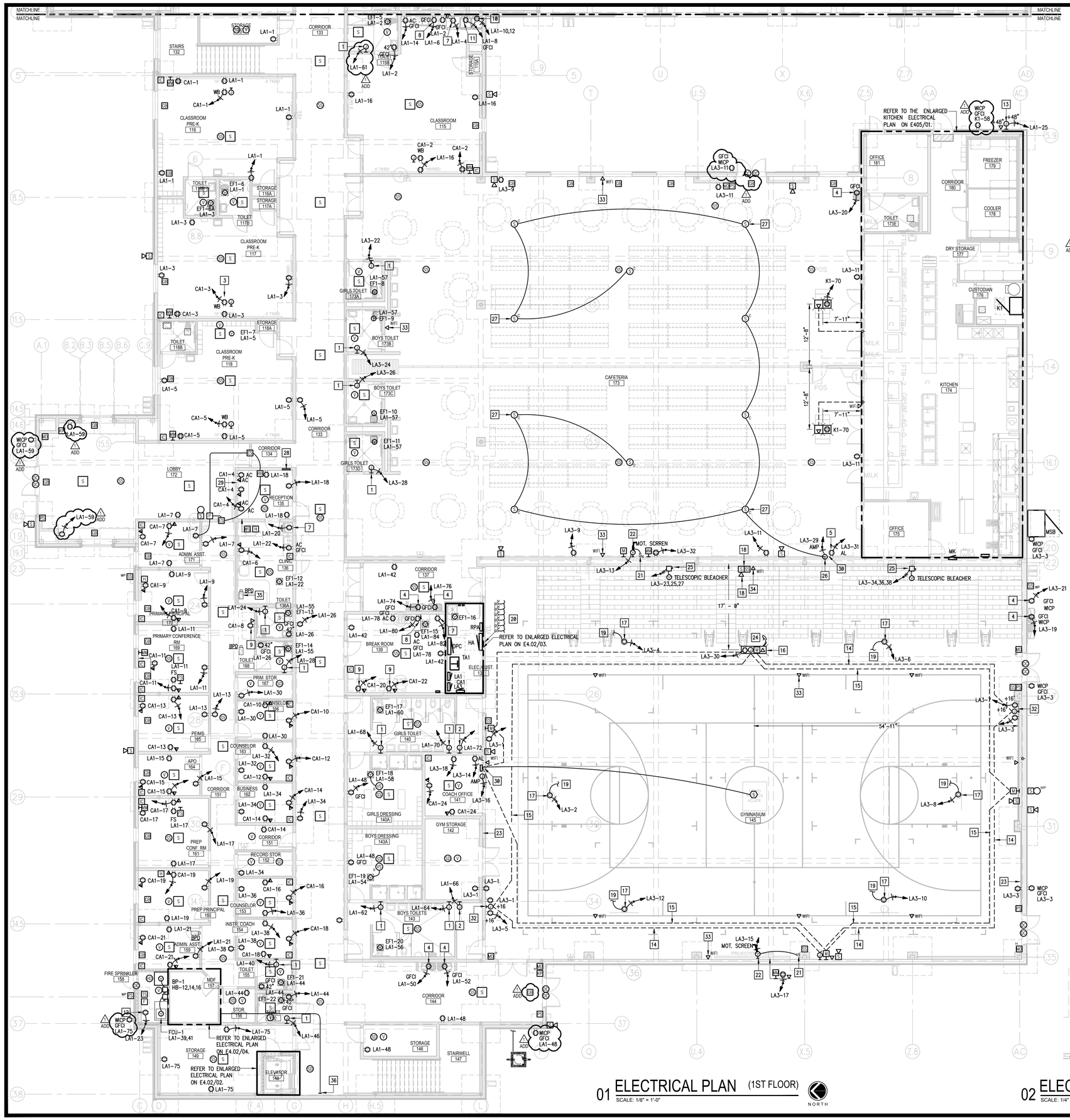
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Robindale Phase I
Sheet:	E4.01



01 ELECTRICAL PLAN (1ST FLOOR)

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

NORTH

GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY(INCLUDING LIGHTING BRANCH CIRCUITS).
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
7. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
8. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
9. PROVIDE 1–2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
10. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
11. ADD EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

44 ELEVATOR CONTROLS CONNECTION; BRANCH CIRCUIT: 1/2" RACEWAY – 2#12 & #12G. COORDINATE THE J-BOX EXACT LOCATION WITH THE ELEVATOR SUPPLIER.

45 SEE ARCHITECTURAL DRAWINGS OF THE ELEVATOR PIT/SHAFT FOR THE EXACT LOCATION.

46 CONNECT ELEVATOR SUMP PUMP. COORDINATE SWITCH LOCATION WITH ELEVATOR EQUIPMENT SUPPLIER.

47 ELEVATOR TELEPHONE ROUGH-IN. PROVIDE A J-BOX WITH A 3/4" RACEWAY & PULL WIRE STUBBED NEAR THE TELECOM ROOM. COORDINATE THE J-BOX EXACT LOCATION WITH THE ELEVATOR SUPPLIER.

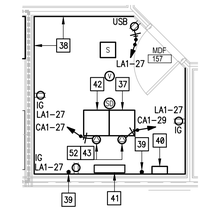
48 ELEVATOR FIRE ALARM ROUGH-IN. PROVIDE A J-BOX WITH A 3/4" RACEWAY & PULL WIRE STUBBED NEAR THE ELECTRICAL ROOM. COORDINATE THE J-BOX EXACT LOCATION WITH THE ELEVATOR SUPPLIER.

49 ELEVATOR LIGHTING CONNECTION. PROVIDE A 30A, 2PNF, 240 V NEMA 1 DISCONNECT; BRANCH CIRCUIT: 1/2" RACEWAY – 2#12 & #12G.

50 NO DUCTWORK OR PIPING TO BE ROUTED ABOVE ELECTRICAL GEAR. COORDINATE WITH OTHER TRADES – TYPICAL.

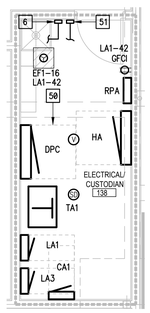
51 CONNECT ELEVATOR SERVICE ALERT PANEL PROVIDED BY PLUMBING CONTRACTOR INSTALLED BY ELECTRICAL CONTRACTOR; BRANCH CIRCUIT: 1/2" – 2#12 & #12G, LA3–44. SIGNAL WIRING TERMINATIONS AND INSTALLATIONS SHALL BE BY ELECTRICAL CONTRACTOR. PROVIDE A 6"X6"X6" NEMA 6XP SUBMERSIBLE J-BOX FOR WIRING IN ELEVATOR PIT. COORDINATE EXACT LOCATION OF ALL COMPONENTS WITH PLUMBER & ELEVATOR EQUIPMENT SUPPLIER PRIOR TO ANY ROUGH-IN.

52 PENDANT MOUNTED SEE DETAIL, FIELD CONFIRM EXACT LOCATION WITH OWNER/IT SUBCONTRACTOR.



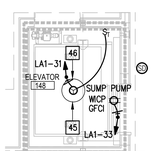
ENLARGED MDF
04 ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

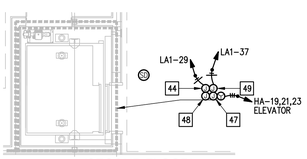


ENLARGED
03 ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"



(FIRST FLOOR)



(SECOND FLOOR)

02 ELECTRICAL PLAN (ELEVATOR)

SCALE: 1/4" = 1'-0"

NORTH

KEYED NOTES:

1. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B–750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" C 2#10 & #10G. MOUNT @ +40" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
2. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B–750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" CC 2#10 & #10G. MOUNT @ +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
3. PROVIDE ELECTRICAL OUTLET FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR – TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J–BOX PER MANUFACTURERS PUBLISHED TEMPLATES – SEE DETAILS.
4. CONNECT ELECTRIC DRINKING FOUNTAIN; BRANCH CIRCUIT: 1/2" C 2#12 & #12G. ROUGH–IN AT 17–7/16" TO CENTER OF J–BOX. COORDINATE WITH PLUMBING CONTRACTOR. – TYPICAL
5. PROVIDE ASSISTIVE LISTENING TRANSMITTER; MOUNT AT 16' AFF. SHARE CIRCUIT WITH AMPLIFIER. PROVIDE DUPLEX RECEPTACLE 16' AFF.
6. CONNECT INTERCEPTOR SERVICE ALERT PANEL PROVIDED BY PLUMBING CONTRACTOR INSTALLED BY ELECTRICAL CONTRACTOR; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. LA3–46 PROVIDE A 1/2" RACEWAY FROM SERVICE ALERT PANEL TO SOLID INTERCEPTOR FOR WIRING. COORDINATE EXACT LOCATIONS WITH PLUMBER.
7. CONNECT REFRIGERATOR; BRANCH CIRCUIT: 1/2 C 2#12 & #12G.
8. CONNECT DISH WASHER; BRANCH CIRCUIT: 1/2" C 2#12 & #12G.
9. CONNECT COPY MACHINE; BRANCH CIRCUIT: 1/2" C 2#2 & 12G.
10. PROVIDE SPECIAL RECEPTACLE FOR CLOTHES DRYER (NEMA 10–30R); BRANCH CIRCUIT: 3#10 & #10G.
11. CONNECT CLOTHES WASHER; BRANCH CIRCUIT: 1/2" C 2#12 & #12G.
12. CONNECT FLOW SWITCH; BRANCH CIRCUIT: 1/2" C 2#2 & 12G.
13. CONNECT IRRIGATION CONTROLLER; BRANCH CIRCUIT: 1/2" C 2#12 & #12G
14. 3/4" RACEWAY W/ PULLWIRE (SCOREBOARD CONTROLS RACEWAY).
15. 1–1/4" RACEWAY W/ PULLWIRE (P.A. SYSTEM RACEWAY).
16. INSTALL DEVICES INSIDE FLUSH MOUNTED FLOORBOX. COORDINATE THE SCORE KEEPERS TABLE EXACT LOCATION PRIOR TO ROUGH–IN (COVER PLATE FLUSH MOUNTED).
17. ATTACH RECEPTACLE FLUSH TO THE CEILING TILE & CONNECT MOTORIZED BACKSTOP. VERIFY POINT OF CONNECTION W/ BACKSTOP SUPPLIER PRIOR TO ROUGH–IN.
18. MOUNT AT 80" ABOVE TOP OF BLEACHERS.
19. TO MOTORIZED BACKBOARD KEYED SWITCH – SEE DETAIL. FURNISHED BY BACKSTOP SUPPLIER; INSTALLED & CONNECTED BY ELECTRICAL CONTRACTOR.
20. TO CONTROL MOTORIZED BACKBOARDS.
21. PROVIDE BACK BOX FOR MOTORIZED PROJECTION SCREEN SWITCH. PROVIDE 1/2" RACEWAY WITH PULLWIRE TO MOTORIZED SCREEN LOCATION.
22. CONNECT MOTORIZED PROJECTION SCREEN BELOW BEAM; BRANCH CIRCUIT: 1/2" C 2#12 & #12G. SEE ARCHITECT DRAWINGS FOR EXACT LOCATION.
23. PROVIDE AN EXTENSION RING ON WIRING DEVICES LOCATED ON THIS WALL TO INSTALL FLUSH MOUNTED WITH PROTECTIVE PADDING.
24. 1–1/4" RACEWAY W/ PULLWIRE (DATA). TERNIMATE AT MDF WIREWAY IN ROOM.
25. CONNECT MOTORIZED TELESCOPIC BLEACHERS. COORDINATE EXACT POINT OF CONNECTION AND LOCATION OF SAFETY SWITCH BELOW BLEACHERS WITH EQUIPMENT SUPPLIER PRIOR TO ANY ROUGH–IN. SEE CONNECTION SCHEDULE.
26. PROVIDE FLUSH MOUNTED AMPLIFIER FACING CAFETERIA ROOM SIDE. PROVIDE SINGLE CHANNEL PASSIVE LAPTOP DIRECT BOX, RAPCO HORIZON # LTIBLOX.
27. PROVIDE PENDANT MOUNTED CAFETERIA SPEAKER – TYPICAL.
28. PROVIDE FIRE ALARM CONTROL PANEL WITH EMERGENCY VOICE SYSTEM; BRANCH CIRCUIT: 1/2" C 2#12 & #12G, LA1–43. PROVIDE TWO TELEPHONE CONNECTIONS.
29. PROVIDE SLIDE GATES GANGABLE BOXES BELOW KNEE SPACE – SEE DETAIL @5/E9.03.
30. PROVIDE FLUSH MOUNTED AMPLIFIER FACING OFFICE ROOM SIDE. BRANCH CIRCUIT 1/2" C 2 #12 & 1 #12G, LA3–21.
31. CONNECT SHOT CLOCK BELOW BEAM; BRANCH CIRCUIT: 1/2 C 2#12 & #12G. SEE ARCHITECT DRAWINGS FOR EXACT LOCATION.
32. CONNECT SCOREBOARD ABOVE BEAM; BRANCH CIRCUIT: 1/2 C 2#12 & #12G.
33. MOUNT AT 15' AFF. STUB–OUT CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE TO ALLOW FOR CABLING TO MDF/IDF ROOM – TYPICAL.
34. MOUNT AT 80" ABOVE TOP OF BLEACHERS. STUB–OUT CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE TO ALLOW FOR CABLING TO MDF/IDF ROOM.
35. CONNECT BYPASS DAMPER(LABELED "BPD") STEP–DOWN TRANSFORMER TO NEAREST 120V NON–GFCI CIRCUIT. BRANCH CIRCUIT: 1/2" – 2#12 & #12G. BYPASS DAMPER TO BE CONNECTED BY HVAC CONTROLS CONTRACTOR – TYPICAL.
36. PROVIDE 4" DATA RACEWAY ABOVE CEILING (FUTURE PHASE II).
37. DATA RACK – PROVIDED BY OWNER.
38. PROVIDE 3/4" X 4', PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A–D INT–APA). MOUNT AT 24" AFF.
39. PROVIDE GROUND BUS BAR. REFER TO GROUNDING ELECTRICAL RISER DIAGRAM.
40. PROVIDE INTRUSION DETECTION SYSTEM CONTROL PANEL; BRANCH CIRCUIT: 1/2 – 2#12 & #12G, CA1–26. PROVIDE A WIRELESS COMMUNICATOR.
41. PROVIDE 6"H X 6"D (WIDTH AS REQUIRED) SURFACE MOUNTED WIREWAY WITH HINGED COVER. ROUTE SPECIAL SYSTEMS RACEWAYS TO THIS LOCATION – SEE SITE PLAN AND DETAIL.
42. INSTALL AND CONNECT INTERCOM SYSTEM CARD CAGE ON RACK. RACK PROVIDED BY CONTRACTOR.
43. PROVIDE SPECIAL RECEP FOR IDF–UPS(NEMA L5–30P); BRANCH CIRCUIT: 3/4" – 2#10 & #10G.

No.	REVISIONS	BY
1	MAY 18, 2018	

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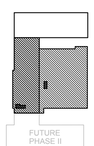
IDEA-BROWNSVILLE CAMPUS PHASE I

IDEA Public Schools

BROWNSVILLE, TEXAS



KEYPLAN

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED
PROFESSIONAL ENGINEER
5.10.2018

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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 10, 2018
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Robindale Phase I
Sheet: E4.02

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PHONE: 956-230-3435
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ENGINEERING FIRM
F-15998

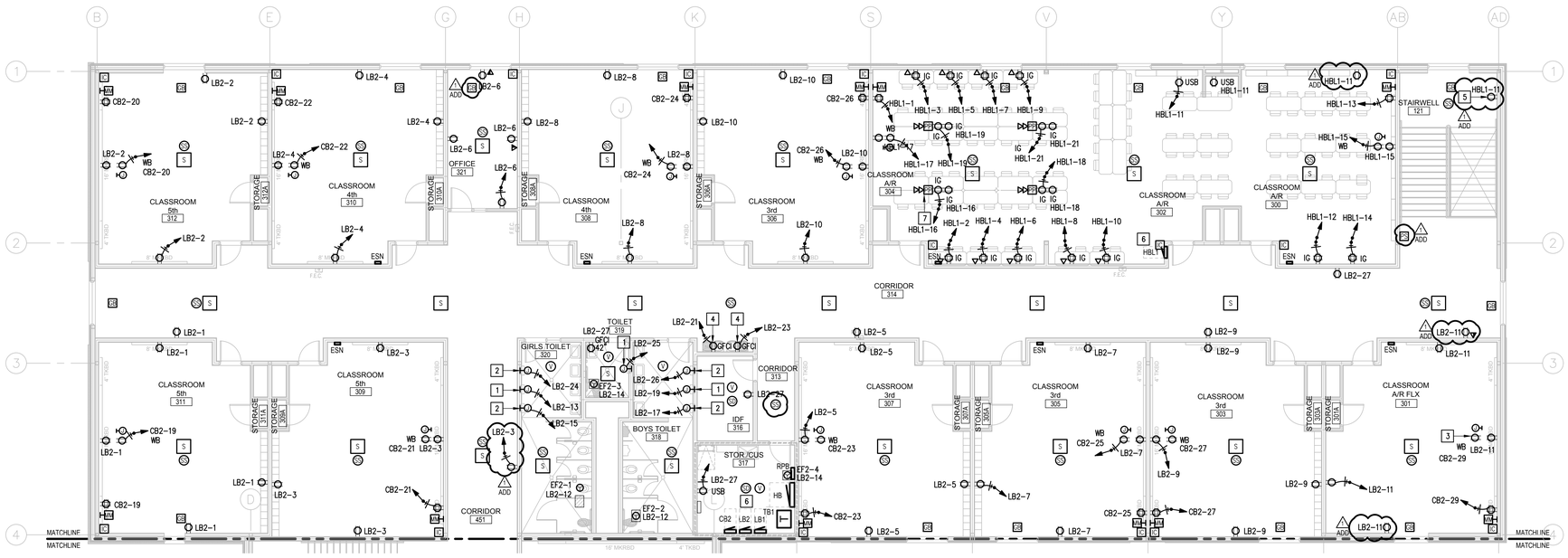
No.	REVISIONS	BY
1	MAY 18, 2018	

GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY(INCLUDING LIGHTING BRANCH CIRCUITS).
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
7. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
8. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
9. PROVIDE 1-2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
10. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
11. ADD EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B-750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" – 2#10 & #10G. MOUNT @ +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
2. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B-750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" – 2#10 & #10G. MOUNT @ +40" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
3. PROVIDE ELECTRICAL OUTLET FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR – TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J-BOX PER MANUFACTURERS PUBLISHED TEMPLATES – SEE DETAILS.
4. CONNECT ELECTRIC DRINKING FOUNTAIN; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. ROUGH-IN AT 17-7/15" TO CENTER OF J-BOX. COORDINATE WITH PLUMBING CONTRACTOR.
5. MOUNTING HEIGHT TO BE FROM TOP OF LANDING.
6. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE ELECTRICAL GEAR. COORDINATE WITH OTHER TRADES – TYPICAL.
7. CONNECT TELE-POWER POLE. TELE-POWER POLE SHALL BE HUBBELL DUAL COMPARTMENT MODEL #SP11001CCXCI. FURNISH WITH (2) IG DUPLEX RECEPTACLES AND (2) OUTLET SPACES FOR COMMUNICATIONS CONNECTORS – TYPICAL.



01 ELECTRICAL PLAN (2ND FLOOR)
SCALE: 1/8" = 1'- 0"

NORTH

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IDEA-BROWNSVILLE ROBINDALE CAMPUS
PHASE I
BROWNSVILLE, TEXAS

IDEA Public Schools

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
5.10.2018

FUTURE PHASE II

KEYPLAN

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ENGINEERING FIRM
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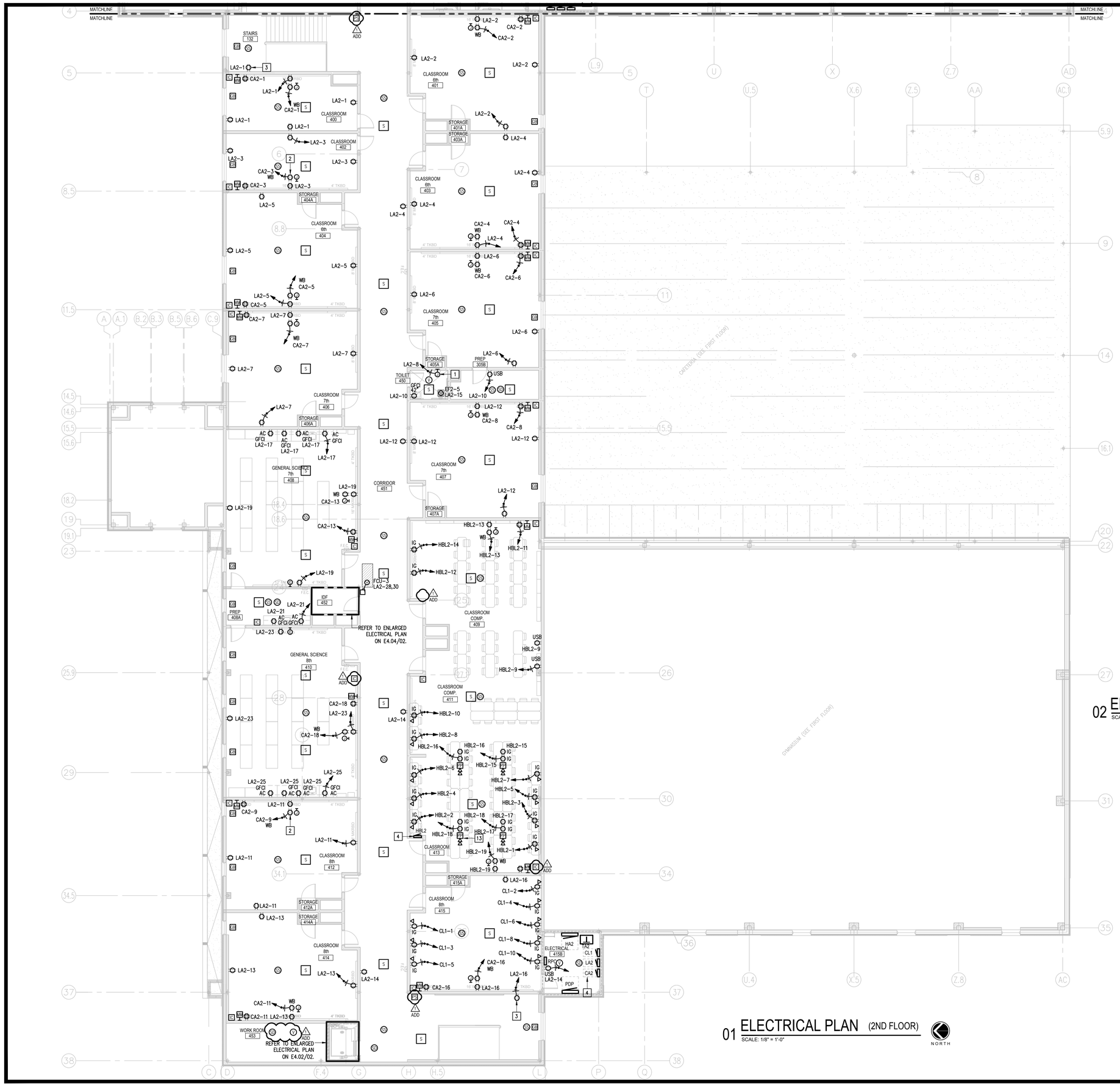
Architects-Planners
Interior Designers

Date:	May 10, 2018
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Robindale Phase I
Sheet:	E4.03



01 ELECTRICAL PLAN (2ND FLOOR)

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

NORTH

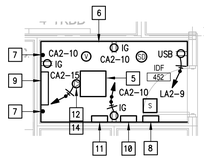
GENERAL NOTES:

1. PROVIDE BRANCH CIRCUITS 3/4" – 2#12 & #12G (U.N.O.).
2. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
3. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
4. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY(INCLUDING LIGHTING BRANCH CIRCUITS).
5. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
6. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
7. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
8. PROVIDE EACH ISOLATED GROUND CIRCUIT HOMERUN WITH A "HOT", DEDICATED NEUTRAL, ISOLATED GROUND (IG) AND A SHARED MECHANICAL GROUND.
9. PROVIDE ISOLATED GROUND (IG) RECEPTACLES WITH 4 INSULATED CONDUCTORS, "HOT", NEUTRAL, ISOLATED GROUND (IG) AND EQUIPMENT GROUND THAT CONNECTS TO THE BOX ENCLOSURE. PROVIDE ISOLATED GROUND CONDUCTOR WITH A YELLOW TRACER.
10. THERE SHALL BE NO SPLICES IN THE ISOLATED GROUND (IG) FEEDING THE (IG) BUSS.
11. PROVIDE 1-2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
12. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.

ADD 11. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK B-750 (NO SUBSTITUTION). BRANCH CIRCUIT: 3/4" C 2#10 & #10G. MOUNT @ +40" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
2. PROVIDE ELECTRICAL OUTLET FLUSH MOUNTED TO THE WALL ABOVE WHITE BOARD FOR PROJECTOR – TYPICAL. INSTALL OUTLET AND SPECIAL SYSTEMS J-BOX PER MANUFACTURERS PUBLISHED TEMPLATES – SEE DETAILS.
3. MOUNTING HEIGHT TO BE FROM TOP OF LANDING.
4. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE ELECTRICAL GEAR. COORDINATE WITH OTHER TRADES – TYPICAL.
5. DATA RACK – PROVIDED BY OWNER.
6. PROVIDE 3/4" X 4', PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A-D INT-APA). MOUNT AT 24" AFF.
7. PROVIDE GROUND BUS BAR. REFER TO GROUNDING ELECTRICAL RISER DIAGRAM.
8. PROVIDE INTRUSION DETECTION SYSTEM POWER SUPPLY; BRANCH CIRCUIT: 1/2 – 2#12 & #12G.
9. PROVIDE 6"H X 6"D (WIDTH AS REQUIRED) SURFACE MOUNTED WIREWAY WITH HINGED COVER. ROUTE SPECIAL SYSTEMS RACEWAYS TO THIS LOCATION – SEE SITE PLAN AND DETAIL.
10. PROVIDE FIRE ALARM POWER SUPPLY, BRANCH CIRCUIT: 1/2" – 2-#12 & #12G.
11. PROVIDE INTERCOM SYSTEM SWITCHING MODULES WALL MOUNTED.
12. PROVIDE SPECIAL RECEPTACLE FOR IDF-UPS(NEMA L5-30P); BRANCH CIRCUIT: 3/4" – 2#10 & #10G.
13. CONNECT TELE-POWER POLE. TELE-POWER POLE SHALL BE HUBBELL DUAL COMPARTMENT MODEL #SP110011CCXCI. FURNISH WITH (2) IG DUPLEX RECEPTACLES AND (2) OUTLET SPACES FOR COMMUNICATIONS CONNECTORS – TYPICAL.
14. PENDANT MOUNTED SEE DETAIL, FIELD CONFIRM EXACT LOCATION WITH OWNER/IT SUBCONTRACTOR.



02 ELECTRICAL PLAN (ENLARGED IDF ROOM 242)

SCALE: 1/4" = 1'-0"

NORTH

No.	REVISIONS	BY
1	MAY 18, 2018	

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IDEA-BROWNSVILLE ROBINDALE CAMPUS PHASE I

IDEA Public Schools

BROWNSVILLE, TEXAS

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5.10.2018

FUTURE PHASE II

KEYPLAN

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Architects-Planners
Interior Designers

Date:	May 10, 2018
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Robindale Phase I
Sheet:	E4.04

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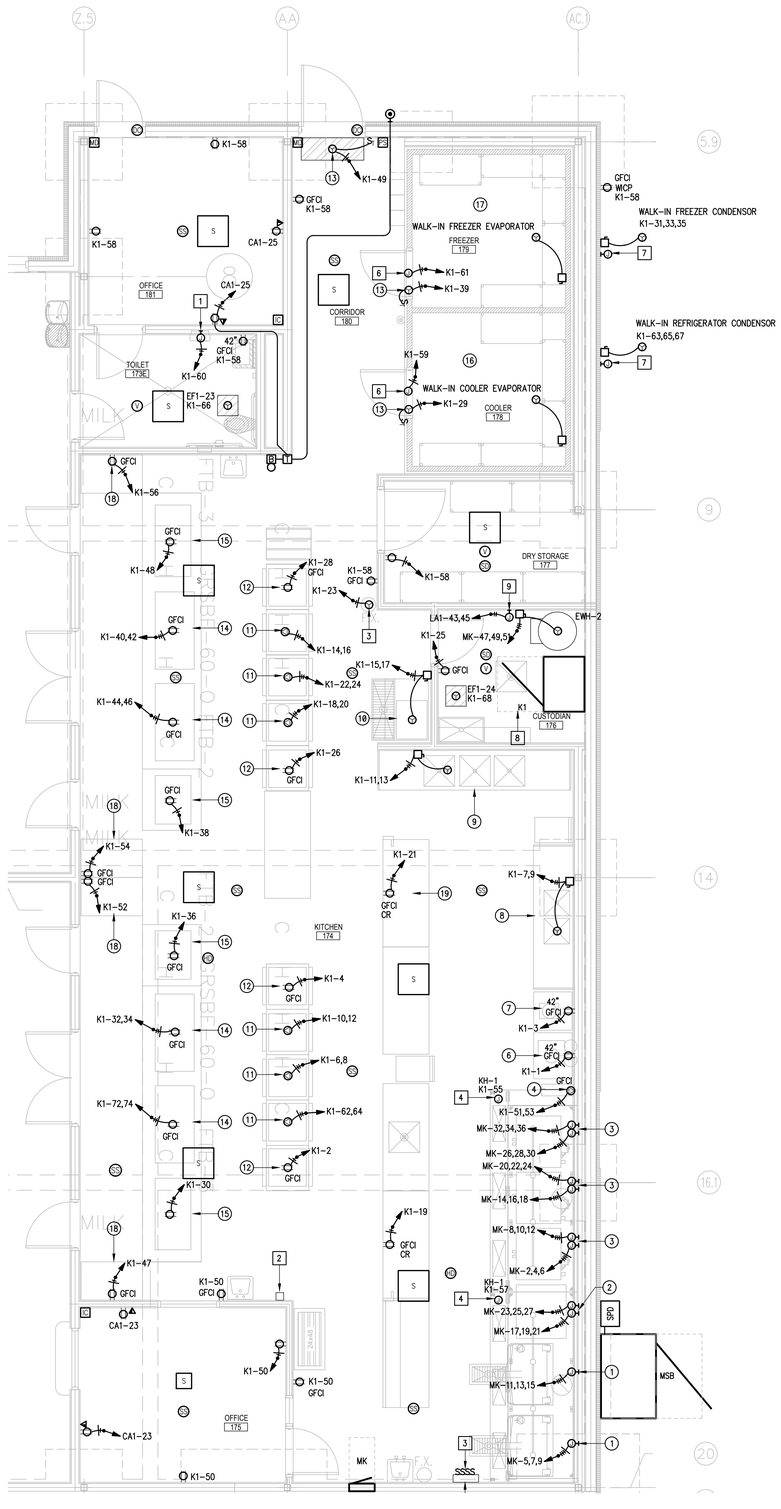
FOOD SERVICE EQUIPMENT CONNECTION SCHEDULE:

ITEM #	ITEM DESCRIPTION	LOAD	VOLTAGE	CONNECTION REQUIRED	BRANCH CIRCUIT
1	40 GAL. BRAISER (2)	12 KW	480V/3PH/60HZ	PROVIDE A HARDWIRE CONNECTION. INSTALL WALL MOUNTED AT 24"AFF.	3/4" – 4#12 & #12G
2	COMBI OVEN/STEAMER (1)	24 KW	480V/3PH/60HZ	PROVIDE J–BOX IN WALL AT 18"AFF BRANCH TO CONNECTION ON EQUIPMENT. FIELD COORDINATE MOUNTING HEIGHT.	3/4" – 4#8 & #10G
3	DBL. DECK CONV. OVEN (3)	12.5KW EA.	480V/3PH/60HZ TWO CONNECTIONS	PROVIDE (2) J–BOXES IN WALL AT (1)– 18"AFF & (1)– 36"AFF BRANCH TO CONNECTION ON EQUIPMENT. FIELD COORDINATE MOUNTING HEIGHT.	3/4" – 4#12 & #12G EACH
4	HOT WATER DISPENSER (1)	5KW	208V/1PH/60HZ	PROVIDE A L6–30R RECEPTACLE. INSTALL WALL MOUNTED.	3/4" – 3#10 & #10G
5	KITCHEN EXHAUST HOOD (2)	2HP KEF–1	480V/3PH/60HZ	KEF–1 CONNECT TO INTEGRAL DISCONNECT	3/4" – 3#12 & #12G
		1.5HP KSF–1	480V/3PH/60HZ	KSF–1 CONNECT TO INTEGRAL DISCONNECT PROVIDE INTERLOCK WIRING BETWEEN FANS AND SUPPLY FAN AND CONTROLS PANELS. MAGNETIC STARTERS FURNISHED BY DIV. 23.	3/4" – 3#12 & #12G
6	MEAT SLICER (1)	.6 KW	208V/1PH/60HZ	PROVIDE A 20A DUPLEX RECEPTACLE WALL MOUNTED.	3/4" – 3#12 & #12G
7	VEGGIE ROBOT COUPE (1)	.9 KW	120V/1PH/60HZ	PROVIDE A 20A DUPLEX RECEPTACLE WITH CORD REEL. INSTALL CEILING MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G
8	2–COMPARTMENT SINK W/DISPOSAL (1)	1.5HP	208V/3PH/60HZ	PROVIDE A 30A, 3PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL AT 18"AFF. CONNECT SOLENOID VALVE AND CONTROL SWITCH.	3/4" – 3#12 & #12G
9	3–COMPARTMENT SINK W/DISPOSAL (1)	1.5HP	208V/3PH/60HZ	PROVIDE A 30A, 3PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL AT 18"AFF. CONNECT SOLENOID VALVE AND CONTROL SWITCH.	3/4" – 3#12 & #12G
10	ICE MACHINE (1)	2.5KW	208V/1PH/60HZ	PROVIDE A 30A, 2PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL WALL MOUNTED AT +48" A.F.F.	3/4" – 3#12 & #12G
11	HOT FOOD PASS THRU CABINET (6)	1.5KW	208V/1PH/60HZ	PROVIDE A L14–20R RECEPTACLE. INSTALL PENDANT MOUNTED. SEE DETAIL.	3/4" – 3#12 & #12G
12	PASS THRU REFRIGERATOR (4)	1.3KW	120V/1PH/60HZ	PROVIDE A 20A DUPLEX RECEPTACLE. INSTALL PENDANT MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G
13	AIR CURTAIN (3)	1.2KW	120V/1PH/60HZ	PROVIDE THERMAL SWITCH AT 8'–0"AFF.	3/4" – 2#12 & #12G
14	HOT FOOD SERVING UNIT (4)	.9KW	120V/1PH/60HZ	PROVIDE A 30A SPECIAL RECEPTACLE. INSTALL PEDESTAL MOUNTED. SEE DETAIL.	3/4" – 3#10 & #10G
15	FROST TOP SERVING UNIT (4)	6.7A	208V/1PH/60HZ	PROVIDE A 20A DUPLEX RECEPTACLE. INSTALL PEDESTAL MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G
16	WALK–IN REFRIGERATOR EVAPORATOR (1)	1.0A	208V/1PH/60HZ	PROVIDE A 30A, 2PNF, 240V, NEMA 4X SS DISCONNECT. COORDINATE LOCATION WITH SUPPLIER. POWER AND CONTROL CIRCUIT OBTAINED FROM CONDENSER.	3/4" – 2#12 & #12G
	WALK–IN REFRIGERATOR CONDENSER (1)	8.3A	208V/3PH/60HZ	PROVIDE A 30A, 3PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL WALL MOUNTED. PROVIDE POWER AND CONTROL CIRCUIT TO EVAPORATOR.	3/4" – 3#12 & #12G
17	WALK–IN FREEZER EVAPORATOR (1)	8.2A	208V/1PH/60HZ	PROVIDE A 30A, 2PNF, 240V, NEMA 4X SS DISCONNECT. COORDINATE LOCATION WITH SUPPLIER. POWER AND CONTROL CIRCUIT OBTAINED FROM CONDENSER.	3/4" – 2#12 & #12G
	WALK–IN FREEZER CONDENSER (1)	14.8A	208V/3PH/60HZ	PROVIDE A 30A, 3PNF, 240V, NEMA 4X SS DISCONNECT. INSTALL WALL MOUNTED. PROVIDE POWER AND CONTROL CIRCUIT TO EVAPORATOR.	3/4" – 3#12 & #12G
18	MILK COOLER (2)	.6KW	120V/1PH/60HZ	PROVIDE 20A DUPLEX RECEPTACLE. INSTALL WALL MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G
19	CAN OPENER (2)	.2KW	120V/1PH/60HZ	PROVIDE 20A DUPLEX RECEPTACLE. INSTALL PENDANT MOUNTED. SEE DETAIL.	3/4" – 2#12 & #12G

NOTES:

1.) 48" AFF INDICATES TO TOP OF DEVICE;
18" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
NOTE: VERIFY ELECTRICAL REQUIREMENTS WITH KITCHEN EQUIPMENT SUPPLIER PRIOR TO ROUGH–IN.



01 ELECTRICAL PLAN (ENLARGED KITCHEN ROOM 148)

SCALE: 1/4" = 1'-0"

NORTH

GENERAL NOTES:

1. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS.
2. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
3. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
4. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY(INCLUDING LIGHTING BRANCH CIRCUITS).
5. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
6. PROVIDE J–HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE, INTERCOM AND DATA CABLING.
7. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
8. PROVIDE 1–2" RACEWAY (SLEEVE) 12" ABOVE CEILING AT ALL CLASSROOMS, RESTROOMS, OFFICES, ETC. DOORS THAT LEAD TO CORRIDORS (FLOOR TO CEILING WALLS) FOR SPECIAL SYSTEMS WIRING.
9. USE TAMPER RESISTANT RECEPTACLES THROUGHOUT.
10. ADD EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE BOBRICK: B–750 (NO SUBSTITUTIONS). BRANCH CIRCUIT: 3/4" RACEWAY – 2#10 & #10G. MOUNT AT +48" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
2. PROVIDE JUNCTION BOX FOR FIRE SUPPRESSION SYSTEM 120/1ø/10A ABOVE CEILING; BRANCH CIRCUIT: 3/4" – 2#12 & #12G. COORDINATE WITH FIRE SUPPRESSION SYSTEM CONTRACTOR FOR ALL REQUIREMENTS AND FINAL LOCATIONS. PROVIDE RECESSED MOUNTED OCTAGON J–BOX AND 3/4" RACEWAY FOR PULL STATION AT 48"AFF. FIRE SUPPRESSION SYSTEM IS TO BE INTERCONNECTED TO BUILDING FIRE ALARM SYSTEM.
3. TO CONTROL KITCHEN HOODS FANS AND LIGHTS.
4. CONNECT KITCHEN HOOD LIGHTS; BRANCH CIRCUIT: 3/4" – 2#12 & #12G.
5. CONNECT KITCHEN HOOD CONTROL PANEL.
6. CONNECT COOLER/FREEZER LIGHTS, DOOR HEATER AND PRESSURE RELIEF PORT; BRANCH CIRCUIT: 3/4" – 2#12 & #12G.
7. PROVIDE WEATHERPROOF J–BOX AND 3/4" RACEWAY WITH PULLWIRE BACK TO THE COOLER & FREEZER LOCATION. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR EXACT LOCATION.
8. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE ELECTRICAL GEAR. COORDINATE WITH OTHER TRADES – TYPICAL.
9. CONNECT HEAT TRACE CABLE; CONNECT VIA LIGHTING CONTROL PANEL.

No.	REVISIONS	BY
1	MAY 18, 2018	

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Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Robindale Phase I
Sheet: E4.05

EQUIPMENT CONNECTION SCHEDULE:

DESIGN	HP/KW	FLA	MCA	MOCP	VOLTAGE	DISCONNECT	BRANCH CIRCUIT
RTU-A-(RM #)	–	–	13	15	480V/3PHASE	(1) NONE.	1/2" – 3#12 & #12G
RTU-B-(RM #)	–	–	18	20	480V/3PHASE	(1) NONE.	1/2" – 3#12 & #12G
RTU-C-(RM #)	–	–	18	20	480V/3PHASE	(1) NONE.	1/2" – 3#12 & #12G
RTU-D-(RM #)	–	–	104	110	480V/3PHASE	200A, 3PNF, 600V, NEMA 3R.	1.25" – 3#2 & #6G
RTU-E-(RM #)	–	–	26	30	480V/3PHASE	(1) NONE.	3/4" – 3#10 & #10G
RTU-F-(RM #)	–	–	23	25	480V/3PHASE	(1) NONE.	3/4" – 3#10 & #10G
RTU-G-(RM #)	–	–	104	110	480V/3PHASE	200A, 3PNF, 600V, NEMA 3R.	1.25" – 3#2 & #6G
RTU-H-(RM #)	–	–	49.8	50	480V/3PHASE	60A, 3PNF, 600V, NEMA 3R.	3/4" – 3#8 & #10G
RTU-OA1	–	–	64	80	480V/3PHASE	100A, 3PNF, 600V, NEMA 3R.	1.25" – 3#4 & #8G
RTU-OA2	–	–	64	80	480V/3PHASE	100A, 3PNF, 600V, NEMA 3R.	1.25" – 3#4 & #8G
RTU-OA3	–	–	64	80	480V/3PHASE	100A, 3PNF, 600V, NEMA 3R.	1.25" – 3#4 & #8G
RTU-OA4	–	–	64	80	480V/3PHASE	100A, 3PNF, 600V, NEMA 3R.	1.25" – 3#4 & #8G
RTU-OA5	–	–	45	60	480V/3PHASE	60A, 3PNF, 600V, NEMA 3R.	1" – 3#6 & #10G
FCU-1	1/2 HP	–	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1.	1/2" – 2#12 & #12G
ACCU-1	–	–	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R.	1/2" – 2#12 & #12G
FCU-2	1/2 HP	–	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1.	1/2" – 2#12 & #12G
ACCU-2	–	–	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R.	1/2" – 2#12 & #12G
FCU-3	1/2 HP	–	5	15	208V/1PHASE	30A, 2PNF, 240V, NEMA 1.	1/2" – 2#12 & #12G
ACCU-3	–	–	12.4	20	208V/1PHASE	30A, 2PNF, 240V, NEMA 3R.	1/2" – 2#12 & #12G
EWH-1	24 KW	28.9	–	40	480V/3PHASE	60A, 3PNF, 600V, NEMA 1.	3/4" – 3#8 & #10G
EWH-2	54 KW	64.9	–	80	480V/3PHASE	100A, 3PNF, 600V, NEMA 1.	1.25" – 3#4 & #8G
CP-1	1/12 HP	–	–	20	120V/1PHASE	(3) THERMAL SWITCH.	1/2" – 2#12 & #12G
TELESCOPIC BLEACHER	2-1/2 HP	5.4	–	20	208V/3PHASE	30A, 3PNF, 240V, S/N, NEMA 1.	1/2" – 4#12 & #12G
SUMP PUMP	1/3HP	7.2	–	20	120V/1PHASE	(3) THERMAL SWITCH.	1/2" – 2#12 & #12G
ELEVATOR	30 HP	41.0	50	100	480V/3PHASE	(2) BUSSMANN POWER MODULE SWITCH.	1.25" – 4#3 & #3G
ALTERNATE #4							
BP-1 (BOOSTER PUMP)	3 HP	9.6	–	30	480V/3PHASE	30A, 3PNF, 600V, NEMA 1.	3/4" – 3#10 & #10G

(1) MEANS OF DISCONNECT IS THE CIRCUIT BREAKER (WITHIN SIGHT).

(2) BUSSMAN: PS1, RATED FOR 100A, SHUNT TRIP, CONTROL POWER TRANSFORMER, FIRE SAFETY INTERFACE, KEY TO TEST SWITCH, PILOT LIGHT, MECHANICAL INTERLOCK AUXILIARY CONTACT, PHASE FAILURE/UNDER VOLTAGE RELAY, NEMA 1 ENCLOSURE.

(3) EATON MANUAL STARTER "MS" SERIES.

NOTE: LOCATE EQUIPMENT MEANS OF DISCONNECT WITHIN EQUIPMENT SIGHT. DO NOT INSTALL ON EQUIPMENT, BELOW DUCTWORK OR PLUMBING LINES.

EXHAUST FAN CONNECTION SCHEDULE:

DESIGNATION	HP/WATTS	FLA	VOLTAGE	CONNECTION FOR EACH	BRANCH CIRCUIT
EF1-1	190 W	1.6	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" – 2#12 & #12G
EF1-2	190 W	1.6	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" – 2#12 & #12G
EF1-3	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-4	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-5	54.5 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-6	57.3 W	0.5	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-7	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-8	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-9	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-10	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-11	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-12	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-13	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-14	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-15	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-16	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-17	195 W	0.2	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" – 2#12 & #12G
EF1-18	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-19	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-20	195 W	0.2	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" – 2#12 & #12G
EF1-21	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-22	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-23	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF1-24	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF2-1	195 W	1.6	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" – 2#12 & #12G
EF2-2	195 W	1.6	120V/1PHASE	CONNECT AT CEILING. INTERLOCKING BY HVAC CONTROLS CONTR.	1/2" – 2#12 & #12G
EF2-3	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF2-4	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G
EF2-5	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. SWITCH VIA OCCUPANCY SENSOR.	1/2" – 2#12 & #12G

LUMINAIRE SCHEDULE

CALLOUT	LAMP	DESCRIPTION	DRIVER	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTES	LUMENS
A2	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L EZ1 LP840 LSI: LPASC24 LED 40L UNV DIM1 40 U	34	277V 1P 2W		4032
A2E	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L EZ1 LP840 EL14L LSI:LPASC24 LED 40L UNV DIM1 40 EM U	34	120V 1P 2W 277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4032
A3	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 48L EZ1 LP840 LSI:LPASC24 LED 48L UNV DIM1 40 U	45	277V 1P 2W		5234
A3E	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 48L EZ1 LP840 EL14L LSI:LPASC24 LED 48L UNV DIM1 40 EM U	45	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	5234
ADD B2	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L EZ1 LP840 LSI: LPEC24 LED HO NW UE	34	277V 1P 2W	PROVIDE LAMPS CENTER MOUNTED.	4032
B2E	LED	2'X4' LAY-IN INDIRECT TROFFER	0-10V	RECESSED	LITHONIA: 2BLT4 40L EZ1 LP840 EL14L LSI: LPEC24 LED HO NW UE EM	34	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4032
C1	LED	6" LENSED DOWN LIGHT	0-10V	CEILING	LITHONIA: LDN6 35/05 LO6AR 277 VANTAGE: A6VACLED 2 07 35 C601 SCL MD WHT	12	120V 1P 2W 277V 1P 2W		662
D2	LED	4' WRAPAROUND	0-10V	CHAIN/SURFACE	LITHONIA: SBL 40L EZ1 LP840 LSI: NA10 LED SS NW UE	32	277V 1P 2W		3994
D2E	LED	4' WRAPAROUND	0-10V	CHAIN/SURFACE	LITHONIA: SBL4 40L EZ1 EL14L LP840 LSI: NA10 LED SS NW UE EM	32	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	3994
E1	INC.	EMERGENCY LIGHTING UNIT		WALL	LITHONIA: IND12100 W H5012S SEL ELA WG2M MULE: NM4 12 100 2 12V(SBH) SD NC TD	20	277V 1P 2W	PROVIDE WITH A WIREGUARD, SELF-DIAGNOSTICS, LOAD DISCONNECT, & TIME DELAY.	2950
F2E	LED	4' WRAPAROUND	0-10V	SURFACE	KENALL: MLHA8 48 F WW PP 45L40K DV LEL LUMINAIRE LED: VPF84-50W-4000K-120-277-CP-GRY-DIM-EMB310ST	45	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	5072
F3	LED	24" X 48" SEALED LAY-IN TROFFER	0-10V	RECESSED	LITHONIA: 2GTL F4 48L FN PCL12187 SWL EZ1 ABC LP840 LSI: 2T GA24 LED SS NW UE TG PC187	47	277V 1P 2W	PROVIDE WITH .187" POLYCARBONATE DIFFUSER AND WITH AN ALUMINUM DOOR & ADDITIONAL GASKETING.	2950
F3E	LED	24" X 48" SEALED LAY-IN TROFFER	0-10V	RECESSED	LITHONIA: 2GTL F4 48L FN PCL12187 SWL EZ1 EL14L ABC LP840 LSI: 2T GA24 LED SS NW UE TG EM PC187	47	277V 1P 2W	PROVIDE WITH .187" POLYCARBONATE DIFFUSER AND WITH AN ALUMINUM DOOR & ADDITIONAL GASKETING.	2950
G2	LED	2'X4' FLANGED TROFFER	0-10V	RECESSED	LITHONIA: 2GLT F 4 40L GZ1 LP840 LSI: GA24 LED SS NW UE FK24	39	277V 1P 2W		4290
G2E	LED	2'X4' FLANGED TROFFER	0-10V	RECESSED	LITHONIA: 2GLT F 4 40L GZ1 LP840 EL14L LSI: GA24 LED SS NW UE EM FK24	39	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	4290
H3	LED	24" X 48" HIGH BAY	0-10V	SURFACE	LITHONIA: IBH 15000LW SEF PFL GND MVOLT OZ10 40K 80CRI DWH GE: ABV2 0 18 T 48 9D Q V ST K Q W	137	277V 1P 2W	PROVIDE WITH A .125 POLYCARB LENS AND A WIRE GUARD.	14218
H3E	LED	24" X 48" HIGH BAY	0-10V	SURFACE	LITHONIA: IBH 15000LW SEF PFL GND MVOLT OZ10 40K 80CRI PS10250 DWH GE: ABV2 0 18 T 48 9D Q V ST K Q W EL5	137	277V 1P 2W	PROVIDE WITH A .125 POLYCARB LENS AND A WIRE GUARD.	14218
H4	LED	24" X 48" HIGH BAY	0-10V	SURFACE	LITHONIA: IBH 15000LW SEF PFL GND MVOLT OZ10 40K 80CRI DWH WGIBG24 GE: ABV2 0 18 T 48 9D Q V ST K Q W	137	277V 1P 2W	PROVIDE WITH A .125 POLYCARB LENS AND A WIRE GUARD.	14218
H6	LED	24" X 48" HIGH BAY	0-10V	SURFACE	LITHONIA: IBH 24000LW SEF PFL GND MVOLT OZ10 40K 80CRI DWH WGIBG24 GE: ABV2 0 24 T 48 9D Q V ST K Q W	137	277V 1P 2W	PROVIDE WITH A .125 POLYCARB LENS AND A WIRE GUARD.	23643
J2E	LED	8' LINEAR	0-10V	RECESSED	FINELITE: HP4R-H-80-40-F-277V-SC-VF FORCAST: SRT-44-FG-95-40K-8-UNV-WH-EMLED	56	277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	5808
K1	(2) XENON	EMERGENCY LIGHTING UNIT		WALL	LITHONIA: AFN _ X PREM MULE LIGHTING: MAKO-3 X SD	2	277V 1P 2W	PROVIDE WITH A NI-CAD BATTERY PACK & SELF DIAGNOSTICS. STANDARD FINISH TO BE SELECTED AT A LATER DATE.	0
L2	LED	WALL BRACKET	0-10V	WALL	LITHONIA, WL4 40L SLD LP840 LSI: W44 4 HO NW UE	40	277V 1P 2W		2950
L2E	LED	WALL BRACKET	0-10V	WALL	LITHONIA, WL4 40L SLD LP840 EL7L LSI: W44 4 HO NW UE EM	40	120V 1P 2W 277V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	2950
M	LED	WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 1 10A700/40K SR4 MVOLT X RAYON: T650LED DL 30 UN112 40 WT	22	277V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS.	2655
ME	LED	WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 1 10A700/40K SR4 MVOLT ELCW X RAYON: T650LED DL 30 UN112 40 WT EM	22	277V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS AND WITH AN EMERGENCY BATTERY PACK. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	2655
N	LED	WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 2 10A700/40K SR4 MVOLT X RAYON: T650LED DL 45 UN112 40 WT MTO	45	277V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	3404
P1	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	LITHONIA: DSX1 LED 60C 1000 40K T5W 480 RPA PIRH/ KW: RTAP308.0-7-X-DMX-BC-VD LSI: XALM-5W-LED-HO-40-UE	209	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM (CUT TO 27') & RATED FOR 120MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE. ADD	25014
ADD P2	LED	ARCHITECTURAL AREA LUMINAIRE	0-10V	POLE	LITHONIA: DSX1 LED 60C 1000 40K T3M 480 RPA PIRH/ KW: RTAP308.0-7-X-DMX-BC-VD LSI:XALM 3 LED HO 40 UE	209	480V 2P 2W	PROVIDE FIXTURE UL LISTED FOR WET LOCATIONS AND WITH A MOTION SENSOR. POLE SHALL BE 30 FOOT ROUND TAPERED ALUMINUM (CUT TO 27') & RATED FOR 120MPH WINDS. PROVIDE POLE WITH A VIBRATION DAMPER. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE. ADD	20295
ADD Q	LED	DECORATIVE PENDANT	0-10V	PENDANT	TO BE SELECTED AT A LATER DATE.	290	277V 1P 2W	PROVIDE AN ALLOWANCE OF $12,000 FOR THE PURCHASE OF THIS FIXTURE.	29580
R	LED	4" LINEAR LUMINAIRE	0-10V	RECESSED	FINELITE: HP-4 R-4'-B-840-F-277-SC-VF CORONET: LRS4-4-4-40-LTG1-UNV-DB-E-NT-SD	19	120V 1P 2W		1916
S	LED	SURFACE CORNER MOUNT	DRIVER	SURFACE	KENALL: MLHA8-48-R-LG-PP-45L40K-DCC-277-CMB	45	277V 1P 2W	PROVIDE CORNER MOUNT BRACKET.	5072
X1	LED	SINGLE SIDED EXIT SIGN		WALL/CEILING	BEGHELLI: FTZ-SA-LR1-UWW MULE LIGHTING: WLCX-1-R-W-U-SD	3	277V 1P 2W	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.	0
X2	LED	DOUBLE SIDED EXIT SIGN		WALL/CEILING	BEGHELLI: FTZ-SA-LR2-UWW MULE LIGHTING: WLCX-2-R-W-U-SD	5	277V 1P 2W	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.	0

GENERAL NOTES:
1. OTHER LIGHT FIXTURE AND BALLAST MANUFACTURERS THAN THOSE LISTED ON THIS SCHEDULE ARE REQUIRED TO OBTAIN PRIOR APPROVAL BY SUBMITTING CUT SHEETS OF THEIR SUBSTITUTIONS AT LEAST (10) DAYS PRIOR TO BID. CUT SHEETS SHALL INDICATE/HIGHLIGHT PHOTOMETRIC CURVE, EFFICIENCY & CONSTRUCTION FOR DIRECT COMPARISON WITH SPECIFIED FIXTURES AND BALLAST.
2. EXTRA MATERIALS: SEE SPECIFCATIONS.
3. EMERGENCY BATTERY PACKS SHALL BE COMPLETE FACTORY INSTALLED WITH NI-CAD BATTERY, CHARGER INDICATING LIGHT, ELECTRONIC CIRCUITRY, 1400 LUMENS OUTPUT, 90 MINUTES DURATION & FIVE FULL YEARS WARRANTY.
4. FURNISH ALL 2' X 4' LAY-IN LIGHT FIXTURES WITH INTEGRAL CEILING CLIPS.

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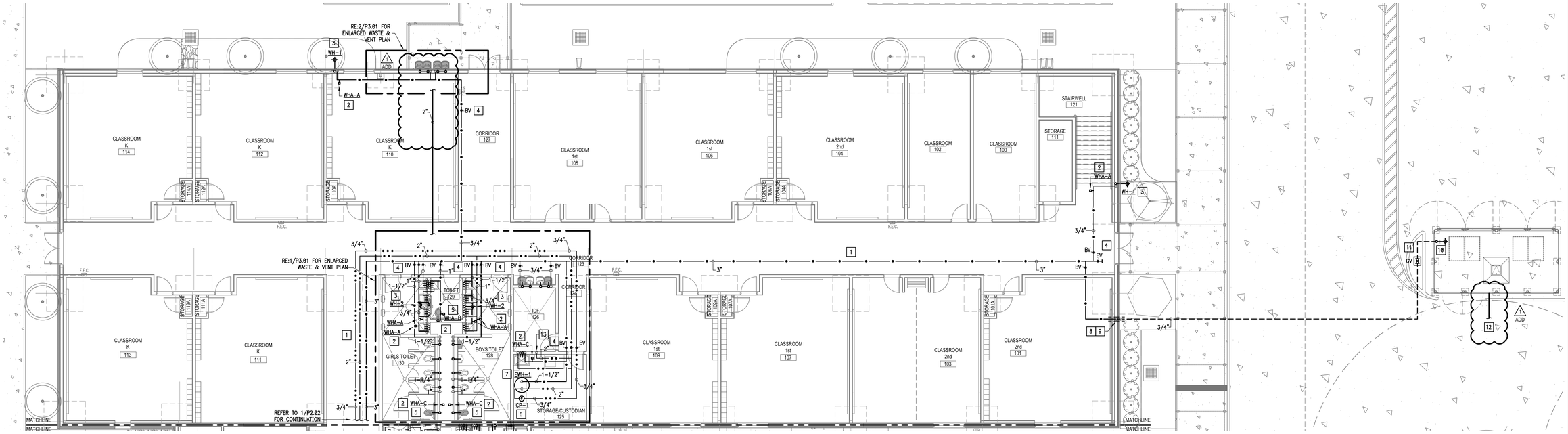
1	MAY 18, 2018	

PLUMBING KEYED NOTES:

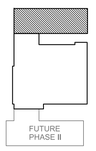
1. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET – TYPICAL.
2. PROVIDE WATER HAMMER ARRESTOR (WHA), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
3. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA – TYPICAL.
4. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
5. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR.
6. PROVIDE CIRCULATING PUMP CP-1 AS SCHEDULED. REFER TO SCHEDULES SHEET AND DETAILS FOR MORE INFORMATION.
7. PROVIDE ELECTRIC WATER HEATER AS SCHEDULED.
8. SLEEVE ALL GRADE BEAMS, FLOOR SLABS AND MASONRY WALL PENETRATIONS PER DETAIL WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT.
9. PROVIDE 1" CLOSED-CELL INSULATION WITH METAL JACKET ON EXPOSED PIPING. PENETRATE EXTERIOR WALL AS LOW AS POSSIBLE. TURN DOWN TO UNDERGROUND.
10. PROVIDE PEDESTAL HOSE BIBB AT DUMPSTER AREA. REFER TO DETAIL SHEET FOR MODEL NUMBER. COORDINATE COLOR OF PEDESTAL WITH OWNER AND ARCHITECT. SERVE PEDESTAL HOSE BIBB WITH 3/4" WATER LINE. PROVIDE TRANSITION FITTINGS AS NECESSARY. PRIOR INSTALLATION, COORDINATE EXACT LOCATION OF PEDESTAL WITH OWNER. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR TO AVOID CONFLICT WITH CURBS AND SIDEWALKS.
11. PROVIDE LINE SIZE VALVE IN QUAZITE BOX.
12. REFER TO MEP SITE PLAN FOR CONTINUATION.
13. RUN HOT WATER PIPING UP TO 2ND FLOOR AT THIS APPROXIMATE LOCATION.



01 PLUMBING PLAN (1ST FLOOR)

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

NORTH



KEYPLAN

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IDEA-BROWNSVILLE ROBINDALE CAMPUS
PHASE I
BROWNSVILLE, TEXAS

IDEA Public Schools

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Date:	May 10, 2018
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Robindale Phase I
Sheet:	P2.01

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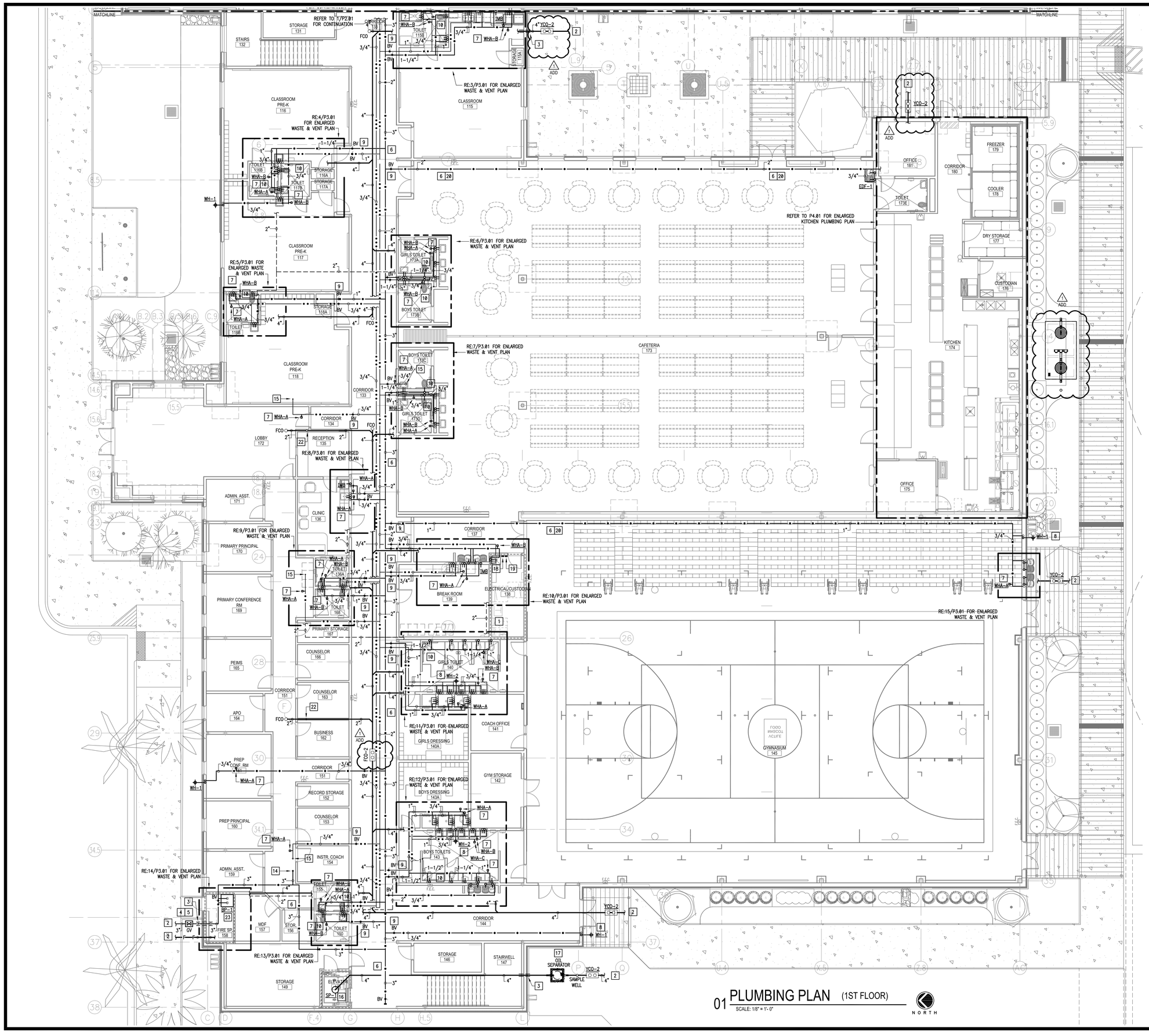

01 PLUMBING PLAN (1ST FLOOR)

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

PLUMBING KEYED NOTES:

1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. REFER TO MEP SITE PLAN FOR CONTINUATION.
3. SLEEVE ALL GRADE BEAMS, FLOOR SLABS AND MASONRY WALL PENETRATIONS PER DETAIL WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT.
4. PROVIDE GATE VALVE IN QUAZITE BOX. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
5. PROVIDE 1" CLOSED-CELL INSULATION WITH METAL JACKET ON EXPOSED PIPING. PENETRATE EXTERIOR WALL AS LOW AS POSSIBLE. TURN DOWN TO UNDERGROUND.
6. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET – TYPICAL.
7. PROVIDE WATER HAMMER ARRESTOR (WHA), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
8. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA – TYPICAL.
9. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
10. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR.
11. FIRE SPRINKLER RISER LOCATION. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
12. PROVIDE FIRE SPRINKLER LINE WITH BACK FLOW PREVENTER ON RISER. REFER TO CIVIL DRAWING FOR FIRE LINE CONTINUATION. VERIFY SIZE OF FIRE SPRINKLER LINE BY MEANS OF CALCULATION AND COORDINATE WITH GENERAL CONTRACTOR.
13. COORDINATE FREE STANDING FDC AND PROVISION OF BACK FLOW PREVENTER WITH CIVIL.
14. RUN COLD WATER PIPING UP TO 2ND. FLOOR AT THIS APPROXIMATE LOCATION
15. RUN HOT WATER PIPING UP TO 2ND FLOOR AT THIS APPROXIMATE LOCATION.
16. PROVIDE SUMP PUMP SP-1 FOR ELEVATOR PIT. SEE ASSOCIATED DETAIL ON DETAIL SHEET. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS AND STRICTLY IN ACCORDANCE WITH TDLR AND IPC REQUIREMENTS.
17. PROVIDE OIL/WATER SEPARATOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
18. PROVIDE SUMP PUMP ALARM PANEL. FURNISHED BY PLUMBING CONTRACTOR AND INSTALLED AND WIRED BE ELECTRICAL CONTRACTOR. COORDINATE WITH ELECTRICAL CONTRACTOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
19. PROVIDE OIL/WATER SEPARATOR HIGH OIL ALARM PANEL.. FURNISHED BY PLUMBING CONTRACTOR AND INSTALLED AND WIRED BE ELECTRICAL CONTRACTOR. COORDINATE WITH ELECTRICAL CONTRACTOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
20. PAINT ALL EXPOSED PIPING TO MATCH ARCHITECTURAL FINISHES. COORDINATE COLOR WITH ARCHITECT.
21. STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS. (TYPICAL).
22. 2" SANITARY SEWER PIPING DOWN FROM 2ND FLOOR.
23. PROVIDE BOOSTER PUMP BP-1 AS SCHEDULED (ALTERNATE #4).

No.	REVISIONS	BY
1	MAY 18, 2018	

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FUTURE PHASE II

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Date:	May 10, 2018
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Robindale Phase I
Sheet:	P2.02

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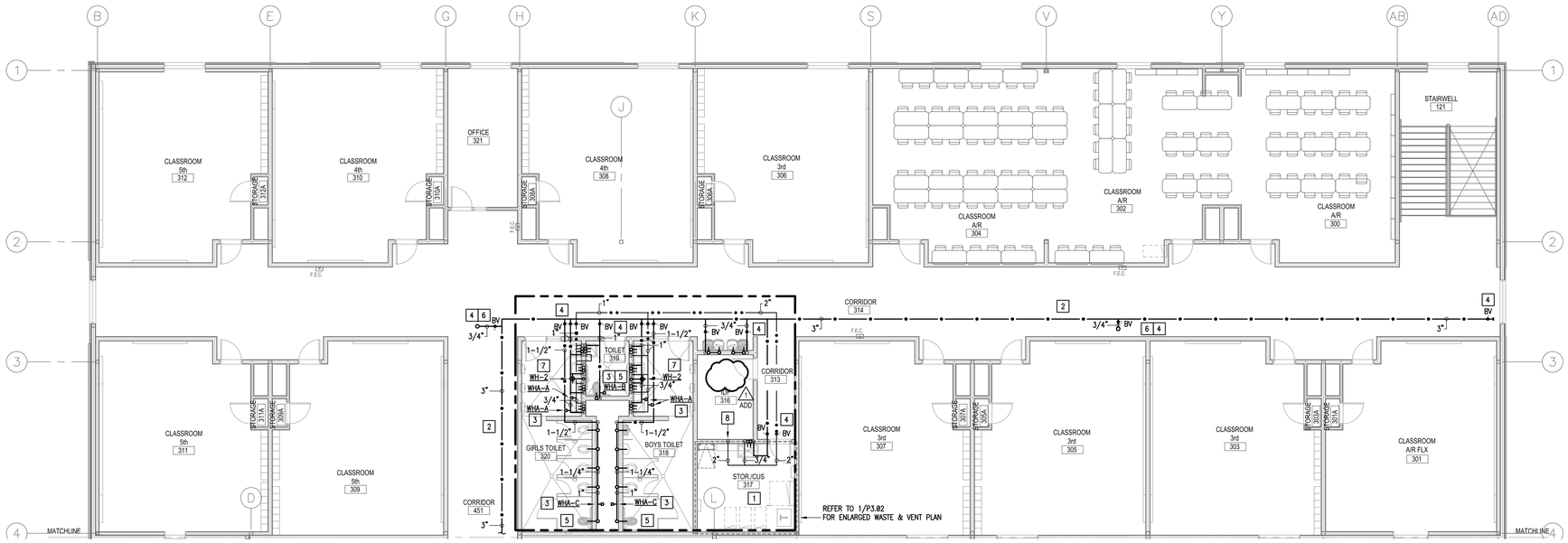

01 PLUMBING PLAN (2ND FLOOR)

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

NORTH

PLUMBING KEYED NOTES:

1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET – TYPICAL.
3. PROVIDE WATER HAMMER ARRESTOR (WHA), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
4. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
5. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR.
6. PROVIDE DOMESTIC WATER PIPING TO ROOF MOUNTED PIPE CHASE BOX AND CONNECT HOSE BIBB. COORDINATE WITH ELECTRICAL CONTRACTOR.
7. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA – TYPICAL.
8. HOT WATER PIPING UP FROM 1ST FLOOR.

No.	REVISIONS	BY
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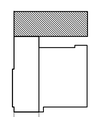
IDEA Public Schools
BROWNSVILLE, TEXAS



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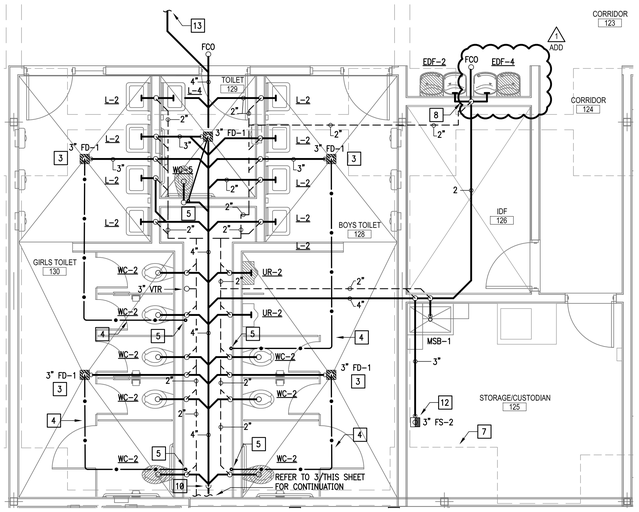
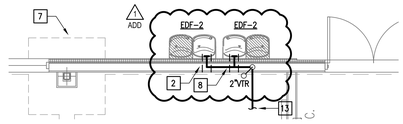
Date: May 10, 2018
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Robindale Phase I
Sheet: P2.03



01 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'-0"
NORTH



02 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'-0"
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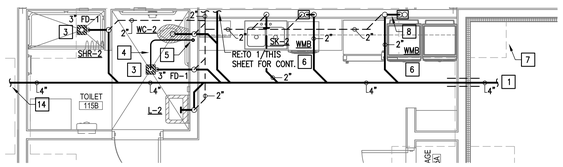
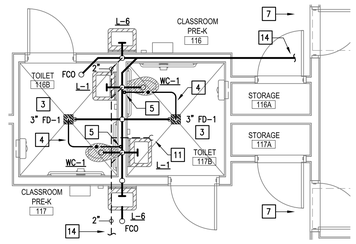


03 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'-0"
NORTH



04 WASTE & VENT PLAN (1ST FLOOR)
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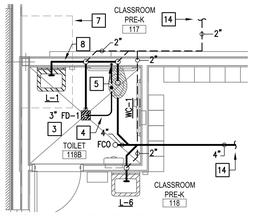
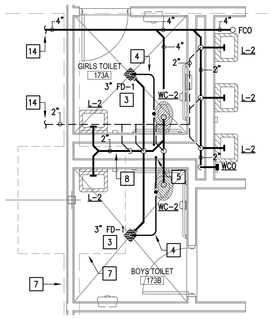
NORTH



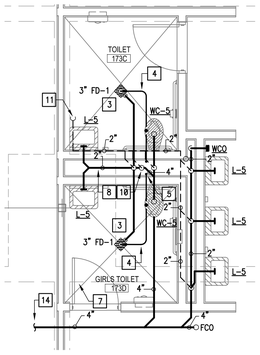
05 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'-0"
NORTH

KEYED NOTES:

1. REFER TO MEP SITE PLAN FOR CONTINUATION.
2. SLEEVE ALL GRADE BEAMS, FLOOR SLABS AND MASONRY WALL PENETRATIONS PER DETAIL WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT.
3. PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
4. PROVIDE 1/2" SOFT DRAWN COPPER FROM TRAP-PRIMER. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
5. CONNECT TO FLUSH VALVE TRAP-PRIMER (WC). SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
6. DISHWASHING MACHINE MUST DISCHARGE BY MEANS OF AN AIR GAP TO PREVENT SEWAGE FROM BACKING UP INTO THE DISHWASHING COMPARTMENT IN THE EVENT OF A STOPPAGE IN THE DRAINAGE SYSTEM.
7. STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS. (TYPICAL).
8. ROUTE ABOVEGROUND THROUGH METAL STUD WALL.
9. PROVIDE 2" SANITARY SEWER PIPING DOWN FROM 2ND FLOOR.
10. PROVIDE 4" SANITARY SEWER PIPING DOWN FROM 2ND FLOOR.
11. PROVIDE 2" VENT PIPING UP TO 2ND FLOOR.
12. PROVIDE FLOOR SINK TO COLLECT RTU CONDENSATE. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
13. REFER TO SHEET P2.01 FOR CONTINUATION
14. REFER TO SHEET P2.02 FOR CONTINUATION
15. CONNECT TO LAVATORY P-TRAP TRAP PRIMER ZURN Z1021 OR APPROVED EQUAL.



06 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'-0"
NORTH



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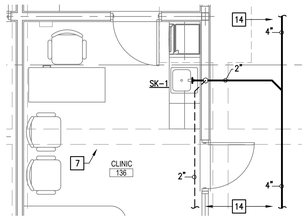

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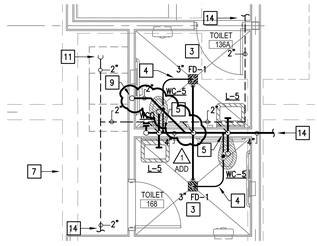
NORTH



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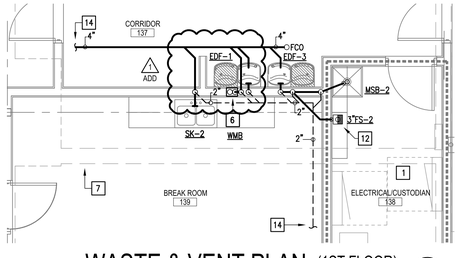

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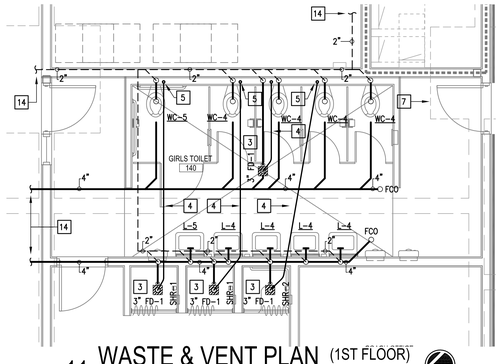
NORTH



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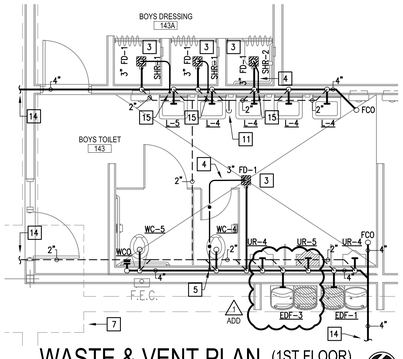

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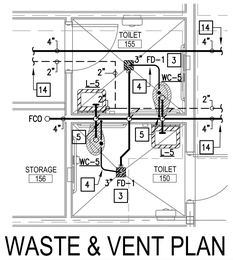
NORTH



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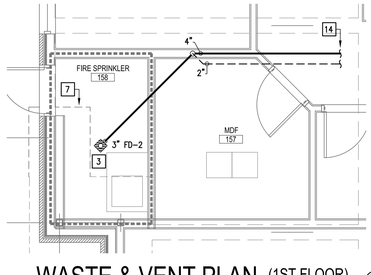
SCALE: 1/4" = 1'-0"
NORTH



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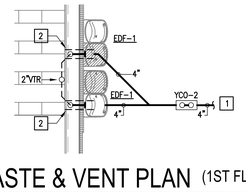
SCALE: 1/4" = 1'-0"
NORTH



15 WASTE & VENT PLAN (1ST FLOOR)
SCALE: 1/4" = 1'-0"
NORTH

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1	MAY 18, 2018	

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IDEA-BROWNSVILLE ROBINDALE CAMPUS
IDEA PHASE I
IDEA Public Schools
BROWNSVILLE, TEXAS

STATE OF TEXAS
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FUTURE PHASE II
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Date: May 10, 2018
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Robindale Phase I
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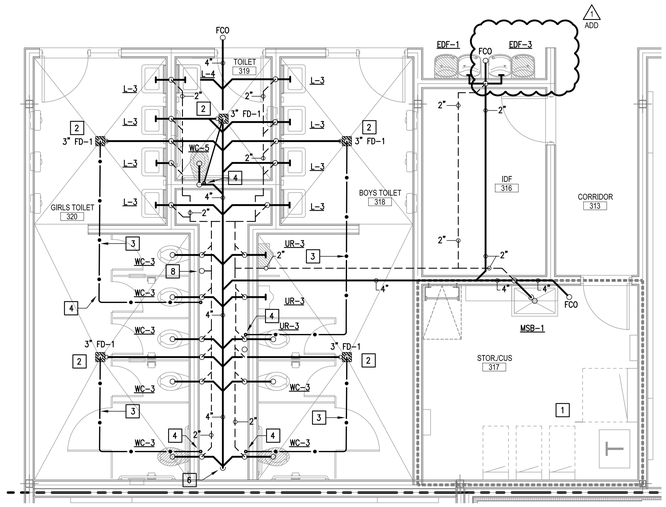
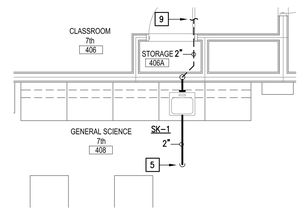
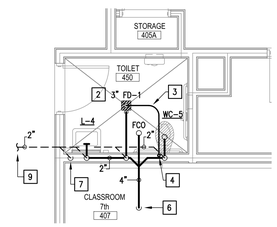


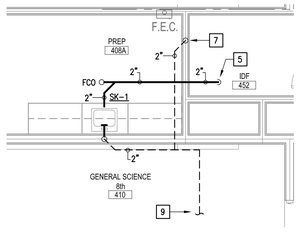
01 WASTE & VENT PLAN (2ND FLOOR)
SCALE: 1/4" = 1'- 0"
NORTH



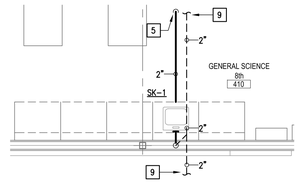
02 WASTE & VENT PLAN (2ND FLOOR)
SCALE: 1/4" = 1'- 0"
NORTH



03 WASTE & VENT PLAN (2ND FLOOR)
SCALE: 1/4" = 1'- 0"
NORTH



04 WASTE & VENT PLAN (2ND FLOOR)
SCALE: 1/4" = 1'- 0"
NORTH



05 WASTE & VENT PLAN (2ND FLOOR)
SCALE: 1/4" = 1'- 0"
NORTH

KEYED NOTES:

1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
3. PROVIDE 1/2" SOFT DRAWN COPPER FROM TRAP-PRIMER. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
4. CONNECT TO FLUSH VALVE TRAP-PRIMER (WC OR UR). SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL.)
5. PROVIDE 2" SANITARY SEWER PIPING DOWN TO FIRST FLOOR.
6. PROVIDE 4" SANITARY SEWER PIPING DOWN TO FIRST FLOOR.
7. PROVIDE 2" VENT UP FROM 1ST FLOOR
8. PROVIDE 4" VENT UP THRU ROOF.
9. REFER TO SHEET P2.04 FOR CONTINUATION.

No.	REVISIONS	BY
1	MAY 18, 2018	

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FUTURE PHASE II
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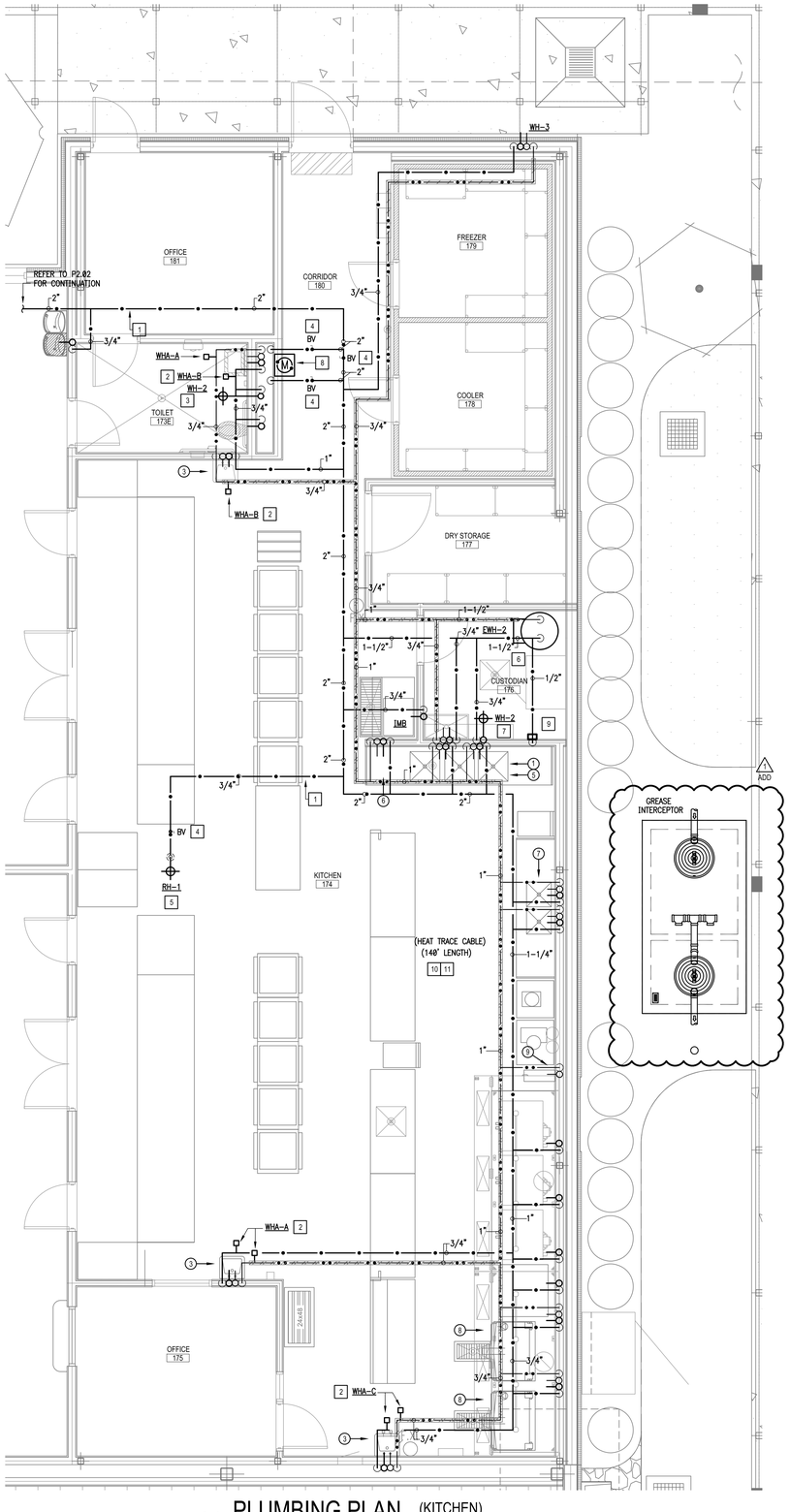
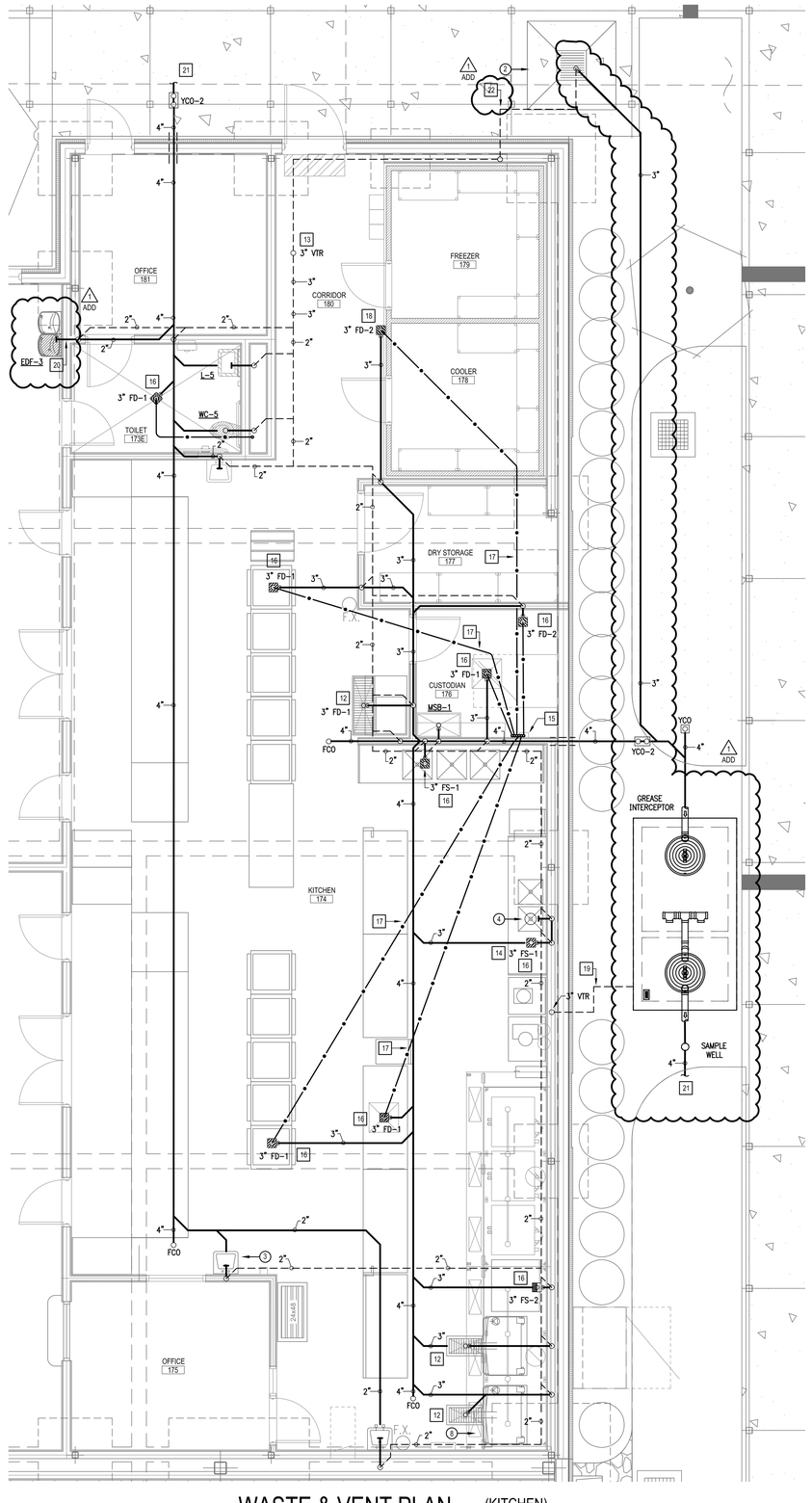
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	May 10, 2018
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No:	IDEA Robindale Phase I
Sheet:	P3.02



01 PLUMBING PLAN (KITCHEN)

SCALE: 1/4" = 1'- 0"



02 WASTE & VENT PLAN (KITCHEN)

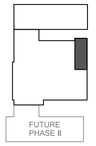
SCALE: 1/4" = 1'- 0"

PLUMBING KEYED NOTES:

1. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET – TYPICAL.
2. PROVIDE WATER HAMMER ARRESTOR (WHA), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
3. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA – TYPICAL.
4. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
5. PROVIDE ROOF HYDRANT AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAILS SHEET. (TYPICAL)
6. PROVIDE ELECTRIC WATER HEATER AS SCHEDULED AND AS SHOWN ON DETAIL. REFER TO PLUMBING SCHEDULES AND DETAILS SHEETS FOR MORE INFORMATION.
7. PROVIDE WALL HYDRANT IN JANITOR ROOM. COORDINATE MOUNTING HEIGHT WITH OWNER DURING CONSTRUCTION
8. PROVIDE 2" WATER METER MODEL DLJ-200 OR APPROVED EQUAL. INSTALL METER WITHIN THE WALL WITH AN ACCESS DOOR FACING THE KITCHEN. LABEL ACCESS DOOR "WATER SUB-METER". PROVIDE LINE SIZE ISOLATION VALVES AT THE INLET AND AT THE OUTLET OF METER. COORDINATE EXACT LOCATION WITH OWNER PRIOR INSTALLATION.
9. PROVIDE ELECTRONIC TRAP PRIMER SIOUX CHIEF 695-ES10 OR APPROVED EQUAL. PROVIDE SURFACE MOUNT CABINET WITH ACCESS DOOR. PROVIDE A COPPER DISTRIBUTION MANIFOLD WITH 5 OUTLETS, AND CAP UNUSED OUTLETS. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
10. PROVIDE HEAT MAINTENANCE SYSTEM AS INDICATED. HEAT TRACE SHALL BE THERMON MODEL HSX WARM TRACE OR APPROVED EQUAL. CONTACT RYAN MONTGOMERY WITH INDUSTRIAL SYSTEMS INC. AT 210-493-4200.
11. ESTIMATED HEAT TRACE CABLE LENGTH. CONTRACTOR TO FIELD VERIFY PRIOR ORDERING AND INSTALLATION OF HEAT TRACE CABLE SYSTEM. COORDINATE WITH HEAT TRACE CABLE MANUFACTURER.
12. THROUGH SPECIFIED BY ARCHITECT. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT SUPPLIER AND GENERAL CONTRACTOR.
13. PROVIDE 3" VENT UP TO 3" VENT THRU ROOF.
14. PROVIDE SANITARY SEWER CONNECTION FOR DISPOSER.
15. CONNECT TO ELECTRONIC TRAP-PRIMER. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
16. PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
17. 1/2" SOFT DRAWN COPPER FROM TRAP-PRIMER. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
18. PROVIDE FLOOR DRAIN TO COLLECT WALK-IN COOLER/FREEZER CONDENSATION. COORDINATE WITH KITCHEN EQUIPMENT CONTRACTOR.
19. PROVIDE 2" VENT PIPING UNDERGROUND TO SERVE GT-1. (ADD 1)
20. ROUTE ABOVEGROUND THROUGH METAL STUD.
21. REFER TO MEP SITE PLAN FOR CONTINUATION. (ADD 1)
22. PROVIDE 2" VENT PIPING UNDERGROUND TO SERVE CATCH BASIN. (ADD 1)

KITCHEN EQUIPMENT SCHEDULE

DESIG.	DESCRIPTION	WATER CONNECTIONS		
		HW	CW	ROUGH-IN
1	THREE COMPARTMENT SINK & FAUCETS. SPECIFIED BY ARCHITECT.	3/4"	3/4"	8" O.C. 16" A.F.F.
2	CATCH BASIN SPECIFIED BY ARCHITECT, RE: SEE DETAIL SHEET FOR MORE INFO.	--	--	-- --
3	HAND SINK. SPECIFIED BY ARCHITECT. PROVIDE POINT OF USE THERMOSTATIC VALVE LEONARD #270LF-BRKT-BV OR EQUAL.	3/4"	3/4"	8" O.C. 16" A.F.F.
4	DISPOSER - CONNECT 1/2"CW THRU SOLENOID VALVE VACUUM BRKR. & FLOW CONTROL, CONNECT WASTE LINE.	--	--	-- --
5	PRE-RINSE UNIT SPECIFIED BY ARCHITECT. COORDINATE LOCATION WITH KITCHEN EQUIPMENT SUPPLIER.	--	--	-- --
6	HOSE REEL SPECIFIED BY ARCHITECT. INSTALL CONCEALED PIPING REEL INSTALLATION KIT FURNISHED BY KITCHEN EQUIPMENT SUPPLIER. CONNECT HOT AND COLD WATER AS PER MANUFACTURER'S RECOMMENDATIONS.	3/4"	3/4"	-- --
7	TWO COMPARTMENT SINK & FAUCETS. SPECIFIED BY ARCHITECT.	3/4"	3/4"	8" O.C. 16" A.F.F.
8	BRAISING PAN - CONNECT HOT AND COLD WATER TO DOUBLE PANTRY DECK MOUNTED FAUCET AS PER MANUFACTURER'S RECOMMENDATIONS.	3/4"	3/4"	8" O.C. 42" A.F.F.
9	HOT WATER DISPENSER - CONNECT WATER LINES AS PER MANUFACTURER'S RECOMMENDATIONS.	3/4"	3/4"	-- --



KEYPLAN

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No.	REVISIONS	BY
1	MAY 18, 2018	

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STATE OF TEXAS
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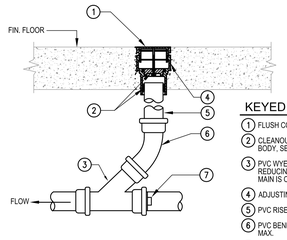
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	May 10, 2018
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	ETHOS
Job No.	IDEA Robindale Phase I
Sheet:	P4.01

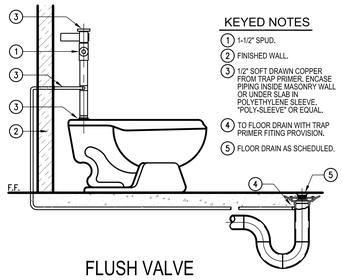


KEYED NOTES

1. FLUSH COVER
2. CLEANOUT PLUG AND BODY, SEE SPECS.
3. PVC WYE (WYE WITH REDUCING BRANCH IF MAIN IS OVER 4")
4. ADJUSTING COLLAR
5. PVC RISER
6. PVC BEND FULL SIZE, 4" MAX.
7. PLUG IF END OF LINE

01 FLOOR CLEANOUT DETAIL

SCALE : NOT TO SCALE

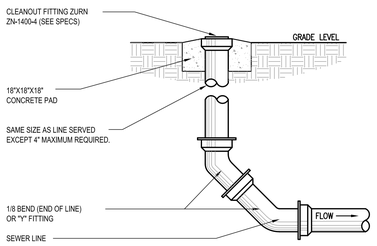


KEYED NOTES

1. 1-1/2" SPUD.
2. FINISHED WALL.
3. 1/2" SOFT DRAWN COPPER FROM TRAP PRIMER. ENCASE PIPING INSIDE MASONRY WALL OR UNDER SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
4. TO FLOOR DRAIN WITH TRAP PRIMER FITTING PROVISION.
5. FLOOR DRAIN AS SCHEDULED.

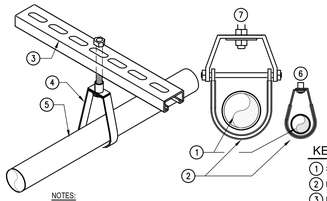
02 FLUSH VALVE TRAP PRIMER DETAIL

SCALE : NOT TO SCALE



03 YARD CLEANOUT DETAIL

SCALE : NOT TO SCALE



NOTES:
1. PROVIDE PLASTIC COATED HANGERS: COOPER B-LINE
2. MODEL: B3100C OR APPROVED EQUAL FOR CLEVIS
3. HANGERS, MODEL: B3172C OR APPROVED EQUAL FOR BAND HANGERS.

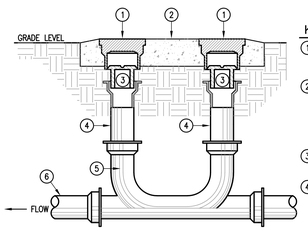
KEYED NOTES

1. SCHEDULED PIPE.
2. PLASTIC COATING.
3. UNI-STRUT.
4. PIPE HANGER.
5. DOMESTIC WATER LINE. COPPER DRAIN LINE FROM AHU'S.
6. BAND HANGER.
7. CLEVIS HANGER.

04 DOMESTIC WATER LINE PIPING SUPPORT DETAIL

SCALE : NOT TO SCALE

ADD



KEYED NOTES

1. PROVIDE "HEAVY DUTY" NICKLE BRONZE COVER FOR ALL EXTERIOR CLEANOUTS.
2. 48"X24"X18" DEEP CONCRETE CLEANOUT BOX (BOX IS INDEPENDANT OF PIPE AND THEREFORE IS FREE TO MOVE WITH THE SETTLEMENT OF GRADE)
3. CLEANOUT FITTING ZURN ZN-1400-4 (SEE SPECS).
4. SAME SIZE AS LINE SERVED EXCEPT 4" MAXIMUM REQUIRED. SHORT LENGTH OF C.I. PIPE FURNISHED WITH CLEANOUT BOX.
5. DOUBLE 2-WAY CLEANOUT.
6. SEWER LINE.

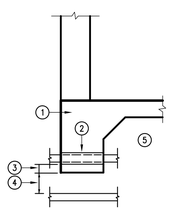
05 2-WAY YARD CLEANOUT DETAIL

SCALE : NOT TO SCALE

KEYED NOTES

1. GRADE BEAM.
2. GALV. SCH.40 STEEL SLEEVE. SIZE PER SPECS. CENTER PIPE IN SLEEVE.
3. PIPING PASSING HORIZ. THROUGH GRADE BEAM SHALL BE LOCATED NO LESS THAN 6" ABOVE BOTTOM OF BEAM.
4. PIPING PASSING HORIZ. UNDER GRADE BEAM SHALL BE LOCATED A MINIMUM OF 6" BELOW BEAM. PROVIDE A SLEEVE.
5. COORDINATE LOCATIONS OF PIPING IN 3,4,5, ABOVE AS RELIEVING ARCHES OR ADDITIONAL CONCRETE MAY BE REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF BEAM.

ADD



06 GRADE BEAM SLEEVE DETAIL

SCALE : NOT TO SCALE

PUMP SCHEDULE (ALTERNATE # 4)

MARK	TYPE	LOCATION	GPM	HEAD FT WG	MOTOR HP (QTY)	MOTOR RPM	MIN. PUMP EFFICIENCY	ELECTRICAL V-PH-HZ	ELECTRICAL MOCP	ELECTRICAL AMPS	NOTES	MANUFACTURER AND MODEL
BP-1	DUPLEX END SUCTION	FIRE RISER 128	175	70	3 (2)	3500	65%	460-3-60	30.0	9.6	ALL	BELL & GOSSETT AQUABOOST 2B304B-VS

NOTES:
1. PROVIDE TEFC, PREMIUM EFFICIENCY, NON-OVERLOADING MOTORS.
2. THE DOMESTIC BOOSTER SYSTEM SHALL BE NSF-61 APPROVED
3. THE SYSTEM WILL BE SUPPLIED WITH SINGLE POINT POWER CONNECTION POINT
4. DIV. 26 TO PROVIDE SAFETY DISCONNECT. COORDINATE WITH ELECTRICAL CONTRACTOR.
5. PROVIDE BLADDER TANK WESSELS MODEL FXA-85 OR APPROVED EQUAL.

CIRCULATING PUMP SCHEDULE

MARK	TYPE	SERVES	LOCATION	GPM	HEAD FT WG	MIN. HP	RPM	CONN. SIZE (IN.)	IMPELLER DIA. (IN.)	ELEC. V-PH-HZ	WEIGHT (LBS)	NOTES	MANUFACTURER AND MODEL
CP-1	CIRCULATING PUMP	EWH-1	STOR/CUST 125	5	20	1/12	3300	3/4	3	120-1-60	13	ALL	BELL & GOSSETT PL-30B

NOTES:
1. PROVIDE BRONZE BOOSTER BODY.
2. PUMPS SHALL BE OPERATED AND CONTROLLED THRU THE LIGHTING RELAY PANEL AND THRU AQUASTAT. COORDINATE WITH ELECTRICAL CONTRACTOR.
3. REFER TO DETAIL SHEET FOR MORE INFORMATION.

GENERAL NOTES:

1. ALL PLUMBING WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AS ADAPTED AND AMENDED BY THE INSPECTING AUTHORITIES.
2. DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.
3. ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID CONFLICT WITH THE WORK OF OTHER TRADES. COORDINATE WITH MECHANICAL, ELECTRICAL AND STRUCTURAL FOR PROPER CLEARANCES.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASING AND SEQUENCE OF CONSTRUCTION WORK.
5. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR.
6. SLEEVE ALL OUTSIDE WALLS, FOUNDATION GRADE BEAMS, INTERIOR WALL PENETRATIONS, AND FIRE SEAL ALL PENETRATION THROUGH FIRE WALLS AND FLOORS WHETHER SHOWN ON PLANS OR NOT.
7. PROVIDE MINIMUM 15' OF SEPARATION BETWEEN HVAC INTAKES AND VENT THRU ROOFS.
8. RECORD INVERT ELEVATIONS OF ALL YARD CLEAN OUT (YCO) ON "AS-BUILT" DRAWINGS.
9. PROVIDE SHUT-OFF VALVES (STOPS) ON ALL ROUGH-INS TO FIXTURES AND EQUIPMENTS.
10. PROVIDE WATER HAMMER ARRESTORS AS INDICATED ON THE DRAWINGS. AIR CHAMBERS NOT AN APPROVED SUBSTITUTE.
11. PROVIDE ANY BACKFLOW PREVENTION DEVICE REQUIRED BY CODE OR LOCAL AUTHORITIES. CONTRACTOR SHALL VERIFY THIS WITH CITY AND LOCAL AGENCIES AND INCLUDE COST IN BID. CONTRACTOR TO HAVE BACK FLOWS CERTIFIED.
12. REFER TO PLUMBING FIXTURE ROUGH-IN SCHEDULE FOR INDIVIDUAL PIPE CONNECTIONS TO FIXTURES.
13. PRIOR TO POURING FOUNDATION AND ERECTING CMU WALLS, COORDINATE INSTALLATION OF PLUMBING FIXTURE CARRIERS WITH GENERAL CONTRACTOR.
14. METAL STUDS AT DRY WALLS SHALL NOT BE CUT THRU HORIZONTAL DIRECTION. COORDINATE WITH DRY WALL CONTRACTOR.

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	DESCRIPTION	CONNECTIONS WASTE	VENT	CW	HW	NOTES	REMARKS
WH-1	ZURN # Z1300-SS-34UN HYDRANT	ENCASED NON-FREEZE ANTI-SIPHON WALL HYDRANT, BRONZE, NON-TURNING OPERATING ROD STOP VALVE IN SUPPLY, KEY OPERATED CONTROL VALVE, STAINLESS STEEL BOX WITH HINGED COVER.	–	–	3/4"	–		
WH-2	ZURN # Z1350 HYDRANT	ENCASED MODERATE CLIMATE WALL HYDRANT FOR NARROW WALL, CHROME, SCREWDRIVER OPERATED STOP VALVEIN SUPPLY, KEY OPERATED CONTROL						
WH-3	WOODFORD # B22 WALL FAUCET	ENCASED FREEZELESS WALL FAUCET, CHROME, HANDLE OPERATED, STOP VALVE IN SUPPLY, VALVE OPERATED CONTROL, CHROME BOX WITH HINGED COVER.	–	–	3/4"	3/4"		
HB-1	WOODFORD 24	WALL FAUCET WITH ANTI-SIPHON VACUUM BREAKER,3/4" INLET AND 3/4" MALE HOSE THREAD, FLUSH MOUNTED, POLISHED BRASS, FOR MILD CLIMATE AREAS.	–	–	3/4"	–		
FD-1	ZURN # ZN415B-P	BODY ASSEMBLY WITH TYPE B STRAINER, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET INVERTED MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TRAP PRIMER CONNECTION.	3"	2"	–	–		
FD-2	ZURN # ZN415I	BODY ASSEMBLY WITH TYPE I STRAINER, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET INVERTED MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TRAP PRIMER CONNECTION.	3"	2"	–	–		
FS-1	MIFAB FS1730-FL-1. # Z1023 TRAP PRIMER CONNECTION DAPTER	BOTTOM OUTLET CAST IRON BODY, 12" SQUARE NICKEL BRONZE FULL GRATE AND RIM, ANCHOR FLANGE, 8" DEEP SUMP WITH A.R.E. INTERIOR, ALUMINUM DOME BOTTOM STRAINER. PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR AREAS.	4"	2"	–	–		
FS-2	MIFAB FS1730-FL-150. # Z1023 TRAP PRIMER CONNECTION DAPTER	BOTTOM OUTLET CAST IRON BODY, 12" SQUARE NICKEL BRONZE HALF-GRATE AND RIM, ANCHOR FLANGE, 8" DEEP SUMP WITH A.R.E. INTERIOR, ALUMINUM DOME BOTTOM STRAINER. PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR AREAS.	4"	2"	–	–		
RD-1	MIFAB 1200-W	15" DIA. LARGE SUMP ROOF DRAIN, GALV. SUMP RECEIVER CAST IRON DRAIN BODY, C.I. WATERPROOFING MEMBRANE CLAMP RING WITH INTEGRAL GRAVEL STOP,OVERFLOW STANDPIPE, SELF-LOCKING POLYETHYLENE DOME STRAINER.	SEE PLANS					
RD-2	MIFAB 1270	15" DIA. COMBINED LARGE SUMP ROOF DRAIN W/ SECONDARY OVERFLOW, 24"X42" GALV. SUMP RECEIVER, CAST IRON DRAIN BODIES, C.I. WATERPROOFING MEMBRANE CLAMP RINGS WITH INTEGRAL GRAVEL STOP, OVERFLOW STANDPIPE, TWO SELF-LOCKING POLYETHYLENE DOME STRAINERS.	SEE PLANS					
WMB	GUY GRAY B200	GALVANIZED STEEL WASHING MACHINE BOX, FURNISHED WITH QUARTER TURN BALL VALVE AND TWO 1/2" MIP/SWEAT CONNECTION VALVE AND A 1-1/2" OR 2" THREADED DRAIN OUTLET & LOCKING	1-1/2" OR 2"	–	3/4"	3/4"		
EDF-1	ELKAY VRCTLBSC LKAPREZL APRON ZURN Z-1225 CARRIER	BI-LEVEL ELECTRIC DRINKING FOUNTAIN, FRONT AND SIDE TOUCH CONTROLS, 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P-TRAP, APRON AND CARRIER. FOR ADULT STANDARD & ADA MOUNTING. OUTDOOR RATED, VANDAL RESISTANT.PROVIDE WATER SENTRY FILTER 51300C	2"	2"	3/4"	–		SEE ARCHITECTURAL
EDF-2	ELKAY VRCTLBSC LKAPREZL APRON ZURN Z-1225 CARRIER	BI-LEVEL ELECTRIC DRINKING FOUNTAIN, FRONT AND SIDE TOUCH CONTROLS, 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P-TRAP, APRON AND CARRIER FOR ELEMENTARY MOUNTING. PROVIDE WATER SENTRY FILTER 51300C.	2"	2"	3/4"	–		SEE ARCHITECTURAL
EDF-3	ELKAY VRCTLBWSK LKAPREZL APRON ZURN Z-1225 CARRIER	BI-LEVEL ELECTRIC DRINKING FOUNTAIN W/ ELECTRONIC BOTTLE FILLER BUTTON MECHANICAL FRONT BUBBLER ACTIVATION. 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P-TRAP, APRON AND CARRIER. FOR ADULT STD & ADA MOUNTING. VANDAL RESISTANT. PROVIDE WATER SENTRY FILTER 51300C.	2"	2"	3/4"	–		SEE ARCHITECTURAL
EDF-4	ELKAY VRCTLBWSK LKAPREZL APRON ZURN Z-1225 CARRIER	BI-LEVEL ELECTRIC DRINKING FOUNTAIN W/ ELECTRONIC BOTTLE FILLER BUTTON MECHANICAL FRONT BUBBLER ACTIVATION. 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P-TRAP, APRON AND CARRIER. FOR ELEMENTARY STD & ADA MOUNTING. OUTDOOR RATED, VANDAL RESISTANT. PROVIDE WATER SENTRY FILTER 51300C.	2"	2"	3/4"	–		SEE ARCHITECTURAL
RH-1	JAY R. SMITH 5906	NON-FREEZE ROOF HYDRANT WITH GALV. CASING AND ADJUSTABLE FLOW WHEEL LOCK HANDLE WITH DECK FLANGE AND UNDEER DECK CLAMP.	2"	–	3/4"	–		
MSB-1	FIAT TSB 3003 MOP BASIN #832-AA HOSE & BRACKET #838-AA FAUCET #889-CC MOP BRACKET #MSG 3624 WALL GUARD #1453-BB STRAINER	36X24X12 PRECAST TERRAZO MOP SERVICE BASIN WITH HOSE AND HOSE BRACKET, FAUCET, MOP BRACKET, WALL GUARD AND STRAINER.	3"	2"	3/4"	3/4"		
MSB-2	FIAT TSB 3000 MOP BASIN #832-AA HOSE & BRACKET #838-AA FAUCET #889-CC MOP BRACKET #MSG 2424 WALL GUARD #1453-BB STRAINER	24X24X12 PRECAST TERRAZO MOP SERVICE BASIN WITH HOSE AND HOSE BRACKET, FAUCET, MOP BRACKET, WALL GUARD AND STRAINER.	3"	2"	3/4"	3/4"		
SHR-1	LEONARD AQUATROL 4500-H-06-1.5GPM-VS 515P(G)-30-D2L ADA RATED SHOWER	CONCEALED MOUNTED PRESSURE BALANCING VALVE ASSE 1016 LISTED WITH LOW FLOW INSTITUTIONAL 1.5GPM SHOWERHEAD AND VANDAL RESISTANT SCREWS. HIGH SCHOOL STANDARD MOUNTING.	3"	2"	3/4"	3/4"		
SHR-2	LEONARD AQUATROL 4500-H-06-1.5GPM-VS 515P(G)-30-D2L ADA RATED SHOWER	CONCEALED MOUNTED PRESSURE BALANCING VALVE ASSE 1016 LISTED WITH LOW FLOW INSTITUTIONAL 1.5GPM SHOWERHEAD AND VANDAL RESISTANT SCREWS. PROVIDE HAND SHOWER, DIVERTER VALVE, STAINLESS STEEL SEAT AND GRAB BARS. HIGH SCHOOL ADA MOUNTING.	3"	2"	3/4"	3/4"		
IMB	GUY GRAY BIM875	VALVE, STAINLESS STEEL BOX WITH HINGED COVER GALVANIZED STEEL ICE MACHINE BOX, FURNISHED WITH 1/2" FIP INLET X 1/4" OD OUTLET COMPRESSION ANGLE VALVE.	–	–	3/4"	–		

ELECTRIC WATER HEATER SCHEDULE

MARK	LOCATION	SERVING	GALLON CAPACITY	KW	NUMBER OF ELEMENTS	RECOVERY IN GPH AT 120F RISE	ELECT. V/P/H	MANUFACTURER & MODEL	NOTES
EWH-1	STOR/CUST 125	SEE PLANS	100	24	6	83	480/3/60	RHEEM E100A-24-G	ALL
EWH-2	CUSTODIAN 176	KITCHEN	120	54	9	186	480/3/60	RHEEM E120A-54-G	ALL

NOTES:
1. MANUFACTURER & MODEL NUMBER ARE "OR APPROVED EQUAL".
2. PROVIDE IMMERSION TYPE THERMOSTAT.
3. EWH-1: PROVIDE HOTWATER CIRCULATING PUMP. REFER TO PUMP SCHEDULE FOR MORE INFORMATION.
4. EWH-2: PROVIDE HEAT TRACE CABLE SYSTEM. REFER TO PLUMBING PLANS FOR MORE INFORMATION HEAT TRACE CABLE SHALL BE CONTROLLED THROUGH THE LIGHTING CONTROL SYSTEM. COORDINATE WITH ELECTRICAL CONTRACTOR.

PLUMBING SYMBOLS LEGEND

	COLD WATER SUPPLY	WCO	WALL CLEANOUT
	HOT WATER SUPPLY		*GATE VALVE (GV)
G	GAS LINE		*BALL VALVE
	SOIL & WASTE LINE - ENLARGED PLANS		VALVE IN RISER TYPE AS NOTED
	VENT LINE - ENLARGED PLANS	WC	WATER CLOSET
AW	ACID WASTE LINE - ENLARGED PLANS	UR	URINAL
GW	GREASE WASTE LINE - ENLARGED PLANS	L	LAVATORY
F	FIRE SPRINKLER LINE	SK	SINK
FCO	FLOOR CLEANOUT	EDF	ELECTRIC DRINKING FOUNTAIN
FCO-2	FLOOR CLEANOUT - 2 WAY	MSB	MOP SERVICE BASIN
FD FD	FLOOR DRAIN (FD) WITH DEEP SEAL TRAP	EESHR	EMERGENCY EYE/SHOWER
HDC	HUB DRAIN WITH DEEP SEAL TRAP	TP	TRAP PRIMER
	FLOOR SINK	EWH	ELECTRIC WATER HEATER
YCO	YARD CLEANOUT	VTR	VENT THRU ROOF
YCO-2	YARD CLEANOUT - 2 WAY	CO	CLEANOUT
WH	WALL HYDRANT	A.F.F.	ABOVE FINISH FLOOR
	TRAP PRIMER	ADT	ACID DILUTION TANK
	*WATER HAMMER	GT	GREASE TRAP

* PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA.

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	DESCRIPTION	CONNECTIONS WASTE	VENT	CW	HW	NOTES	REMARKS
WC-1	AMERICAN STD. 2282.001 SLOAN ROYAL #111-1.28 SEAT 5001Q.055	10-1/4" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR PRE-K ADA MOUNTING.	4"	2"	1"	–	1,2,3	12" TO TOP OF SEAT
WC-2	AMERICAN STD. 2599.001 SLOAN ROYAL #111-1.28 SEAT 5901.100	14" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR ELEMENTARY STANDARD AND ADA MOUNTING.	4"	2"	1"	–	1,2,3	14" TO TOP OF SEAT
WC-3	AMERICAN STD. 2599.001 SLOAN ROYAL #111-1.28 SEAT (1" THICK) 5901.100	14" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR JR. HIGH STANDARD AND ADA MOUNTING.	4"	2"	1"	–	1,2,3	15"-17" TO TOP OF SEAT
WC-4	AMERICAN STD. 3451.001 SLOAN ROYAL #111-1.28 SEAT 5901.100	15" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR ADULT STANDARD MOUNTING.	4"	2"	1"	–	1,3	15" TO TOP OF RIM
WC-5	AMERICAN STD. 3461.001 SLOAN ROYAL #111-1.28 SEAT 5901.100	16-1/2" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR ADULT ADA MOUNTING.	4"	2"	1"	–	1,2,3	17"-19" TO TOP OF SEAT
UR-1	AMERICAN STD. 6590.001 SLOAN ROYAL #186-0.5 ZURN #Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR ELEMENTARY STANDARD MOUNTING	3"	2"	3/4"	–	2,3	21" TO RIM OF BASIN
UR-2	AMERICAN STD. 6590.001 SLOAN ROYAL #186-0.5 ZURN #Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR ELEMENTARY ADA MOUNTING	3"	2"	3/4"	–	2,3	14" TO RIM OF BASIN
UR-3	AMERICAN STD. 6590.001 SLOAN ROYAL #186-0.5 ZURN # Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR JR HIGH STANDARD AND ADA MOUNTING	3"	2"	3/4"	–	2,3	16-21" TO RIM OF BASIN
UR-4	AMERICAN STD. 6590.001 SLOAN ROYAL #186-0.5 ZURN # Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR ADULT STANDARD MOUNTING	3"	2"	3/4"	–	3	22" TO RIM OF BASIN
UR-5	AMERICAN STD. 6590.001 SLOAN ROYAL #186-0.5 ZURN # Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR ADULT ADA MOUNTING	3"	2"	3/4"	–	2,3	17" TO RIM OF BASIN
L-1	KOHLER K1729-0 K-15597-F-CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P-TRAP W/CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270-LF-BRKT-BV	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR PRE-K ADA MOUNTING. THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES.	2"	2"	3/4"	3/4"	4	24" FROM FLOOR TO RIM
L-2	KOHLER K1729-0 K-15597-F-CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P-TRAP W/CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270-LF-BRKT-BV	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR ELEMENTARY STANDARD AND ADA MOUNTING. THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES.	2"	2"	3/4"	3/4"	4	30" FROM FLOOR TO RIM
L-3	KOHLER K1729-0 K-15597-F-CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P-TRAP W/CLEAN OUT TRUEBRO KIT LEONARD # 270-LF-BRKT-BV 0.5GPM AERATOR	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES, WITH WALL MOUNTED BRACKET CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR JR HIGH ADA AND STANDARD MOUNTING	2"	2"	3/4"	3/4"	4	32" FROM FLOOR TO RIM
L-4	KOHLER K1729-0 K-15597-F-CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P-TRAP W/CLEAN OUT TRUEBRO KIT LEONARD # 270-LF-BRKT-BV 0.5GPM AERATOR	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES, WITH WALL MOUNTED BRACKET CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR ADULT STANDARD MOUNTING	2"	2"	3/4"	3/4"	4	32" FROM FLOOR TO RIM
L-5	KOHLER K1729-0 K-15597-F-CP ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P-TRAP W/CLEAN OUT TRUEBRO KIT LEONARD # 270-LF-BRKT-BV 0.5GPM AERATOR	19" X 17" WALL MOUNTED WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERFLOW AND CONCEALED ARMS SUPPORT, HOLES 4" ON CENTER FOR SINGLE LEVER FAUCET, THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES, WITH WALL MOUNTED BRACKET CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR ADULT ADA MOUNTING	2"	2"	3/4"	3/4"	4	34" FROM FLOOR TO RIM
L-6	ELKAY LUSTERTONE DRKAD222055C FAUCET LKD2439C BUBBLER LK111A1A STRAINER LK35 ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P-TRAP W/CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270-LF-BRKT-BV	22" X 19.5" TOP MOUNT, SINGLE BOWL CLASSROOM SINK WITH 2-HANDLE FAUCET, GOOSENECK AND BUBBLER. CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE AND CARRIER FOR PRE-K ADA MOUNTING. THERMOSTATIC POINT OF USE MIXING VALVE, SET AT NO MORE THAN 110 DEGREES. PROVIDE ALL NECESSARY MOUNTING HARDWARE.	2"	2"	3/4"	3/4"	4	24" FROM FLOOR TO RIM
SK-1	ELKAY LRAD-1919-60-1 SINK CHICAGO FAUCET .5 GPM # 1100-GN2AE3-317ABCP LK-335 DRAIN LEONARD # 270-LF-BRKT-BV 0.5GPM AERATOR	19" x 19" SINGLE COMPARTMENT, 18 GAUGE TYPE 302 STAINLESS STEEL, SELF-RIMMING SINK WITH 6"DEEP BOWL, FULLY COATED UNDERSIDE, TWO HANDLE DECK MOUNT GOOSE NECK FAUCET, 3.5" DRAIN WITH CUP STRAINER, 1-1/2" 17 GAUGE CHROME PLATED TAILPIECE AND P-TRAP WITH CLEANOUT AND CHROME PLATED SUPPLY STOPS WITH STAINLESS STEEL FLEXIBLE CONNECTORS AND POINT-OF-USE THERMOSTATIC VALVE.	2"	2"	3/4"	3/4"	4	SEE ARCHITECTURAL
SK-2	ELKAY # LRAD-3321-3 CHICAGO FAUCET 0.5 GPM # 1100-GN2AE3-317ABCP DRAIN # LKAD18 17 GA. DRAIN AND 17 GA. P-TRAP W/CLEAN OUT TRUEBRO KIT 0.5GPM AERATOR LEONARD # 270-LF-BRKT-BV	33" X 22" DOUBLE COMPARTMENT SINK, #18 GAUGE, TYPE 304 NICKEL BEARING STAINLESS STEEL. 6" DEEP, TOP MOUNTED INSTALLATION ON 4"CENTER HOLES,OFF-CENTER DRAIN OPENINGS.DUAL HANDLE, TOP MOUNTED MIXING FAUCET WITH STAINLESS STEEL ESCUTCHEON. PROVIDE CHROME PLATED STOPS AND FLEXIBLE STAINLESS STEEL RISERS. CHROME PLATED DRAIN GRID & TAILPIECE.	2"	2"	3/4"	3/4"	4	SEE ARCHITECTURAL

NOTES:
1. INSTALL FLUSH VALVE ON THE WIDE SIDE OF STALL.
2. PROVIDE ADA APPROVED FLUSH VALVE HANDLE FOR ALL ADA PLUMBING FIXTURES.
3. REFER TO PLUMBING PLAN FOR FIXTURES THAT WILL REQUIRE TRAP PRIMER CONNECTIONS.
4. PROVIDE TRUEBRO LAVATORY GUARD MODEL #103 COLOR WHITE. COVER SHALL BE SECURED WITH SNAP-SLIP FLUSH REUSABLE FASTENERS.

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TEXAS REGISTERED ENGINEERING FIRM F-15998

No.	REVISIONS	BY
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LICENSED
5.10.2018

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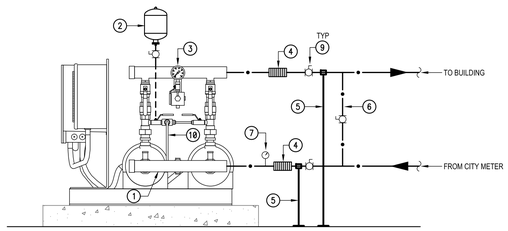
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 10, 2018
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Robindale Phase I
Sheet: P6.01



KEYED NOTES:

1. PROVIDE 1/4" TAP ON THE SUCTION MANIFOLD FOR LOW-SUCTION PRESSURE SWITCH.
2. PROVIDE TANK.
3. PROVIDE DISCHARGE GAUGE.
4. PROVIDE VIBRATION ELIMINATOR.
5. ANCHOR PIPE SECURELY.
6. PROVIDE BYPASS LINE. KEEP THIS VALVE CLOSED DURING NORMAL OPERATION. DO NOT INSTALL A CHECK VALVE.
7. PROVIDE SUCTION GAUGE.
8. PROVIDE CONTROLLER: AQUAVAR CPC.
9. PROVIDE ISOLATION VALVE.
10. PROVIDE COPPER PIPING AND ROUTE TO DRAIN.

01 BOOSTER PUMP DETAIL

SCALE : NOT TO SCALE

SPECIFICATIONS FOR: GT-1

CONCRETE : CLASS 1 CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR, FIRST STAGE OF WALL AND BAFFLE WITH SECTIONAL RISER TO REQUIRED DEPTH. (MONOLITHIC BAFFLE REQUIRED, SLIDE-IN TYPE IS NOT ACCEPTABLE)

REINFORCEMENT: GRADE 60 REINFORCED WITH STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.

C.I. CASTINGS: MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 30. MANHOLE SHALL HAVE 24 INCH INSIDE DIAMETER AND BE TRAFFIC DUTY.

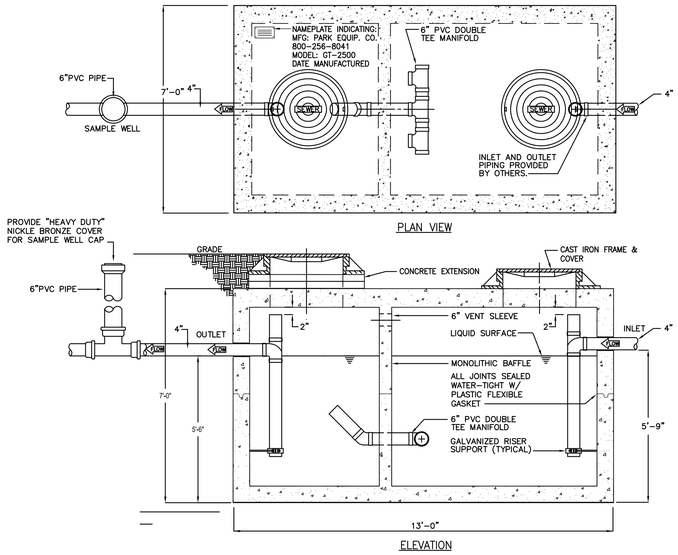
ENGINEERING DATA: INTERCEPTOR IS STRUCTURALLY AND HYDRAULICALLY ENGINEERED CONFORMING TO UNIFORM PLUMBING CODE.

NOMINAL LIQUID CAPACITY AS INDICATED ON PLAN. SHOP DRAWINGS SHALL INCLUDE COMPLETE STRUCTURAL & BOUYANCY CALCULATIONS CERTIFIED BY A REGISTERED ENGINEER.

FIELD EXCAVATION AND PREPARATION SHALL BE COMPLETED PRIOR TO DELIVERY OF INTERCEPTOR. USE DIMENSIONAL DATA AS SHOWN.

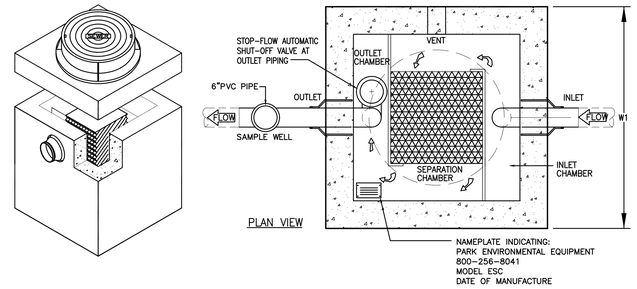
GREASE INTERCEPTOR SCHEDULE

MODEL NO.	CAPACITY USGal	GREASE CAP. (LBS)	EMPTY WT (LBS)	LENGTH L	WIDTH W	HEIGHT H	INLET FL1	OUTLET FL2
GT-2500	2,500	5,700	27,000	13'-0"	7'-0"	7'-0"	5'-9"	5'-6"



02 GREASE INTERCEPTOR DETAIL

SCALE : NOT TO SCALE



PARK ESC SEPARATOR

LOCAL CODES TYPICALLY USE THE ASME A17.1/CSA B 44-07 - "SAFETY CODE FOR ELEVATORS AND ESCALATORS" FOR ELEVATOR DESIGNS. THE ASME STANDARD REQUIRES THAT EACH ELEVATOR SHAFT HAVE A PUMP/DRAIN CAPABLE OF REMOVING A MINIMUM OF 3000 GAL/HR (50 GAL/MIN) OF WATER PER SHAFT.

THIS WASTEWATER SHOULD BE TREATED PRIOR TO DISCHARGING INTO THE LOCAL SEWER. THE PARK ELEVATOR SEPARATOR IS DESIGNED FOR THIS PURPOSE.

SERIES ESC COALESCING PLATE SEPARATORS ARE DESIGNED TO RECEIVE OILY WASTEWATER BY GRAVITY OR PUMP FLOW AND PROCESS IT ON A ONCE-THRU OR CIRCULATING BASIS. THERE ARE NO MOVING PARTS TO FAIL OR THAT REQUIRE EXPENSIVE MAINTENANCE.

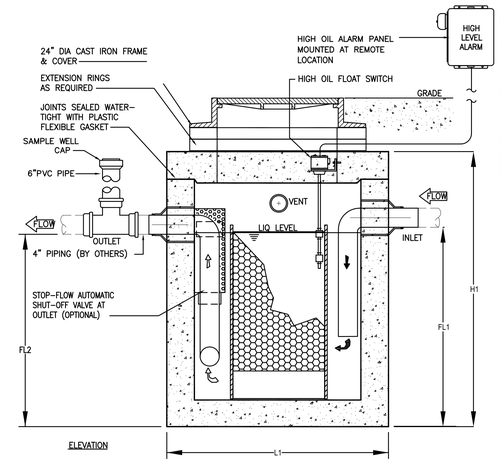
GUARANTEED PERFORMANCE
PRE-ENGINEERED COALESCING MEDIA PACKS ARE UTILIZED FOR ENHANCED SEPARATION WHICH PROVIDE SUPERIOR PERFORMANCE COMPARED TO OTHER SEPARATORS WHICH DEPEND ON BAFFLES ONLY.

APPLICATIONS
THE PARK ESC SEPARATOR IS SPECIFICALLY DESIGNED FOR ELEVATOR SUMPS WHICH ARE SUBJECT TO CONTAMINATION FROM THE ELEVATOR EQUIPMENT. THE SEPARATOR WILL REMOVE HYDRAULIC AND LUBRICATION OILS WHICH COULD BE HARMFUL TO THE CITY SEWER.

FAIL-SAFE DESIGN
AN AUTOMATIC STOP-VALVE IS BUILT INTO THE SEPARATOR WHICH STOPS FLOW WHEN SEPARATOR REACHES MAXIMUM OIL CAPACITY.

MAINTENANCE
THE PARK ESC SEPARATOR ONLY REQUIRES MINIMAL MAINTENANCE. OILS ARE REMOVED FROM THE SEPARATOR BY A LICENSED WASTE DISPOSAL COMPANY.

CALL US
CONTACT OUR ENGINEERING DEPT. ⊕ FOR SPECIFIC PERFORMANCE INFORMATION.



ELEVATOR SEPARATOR SCHEDULE

MODEL NO.	CAPACITY USGal	OIL SPILL CAP (GAL)	FLOW RATE (GPM)	ELEVATOR SHAFTS	EMPTY WT (LBS)	LENGTH L1	WIDTH W1	HEIGHT H1	INLET FL1	OUTLET FL2
ESC-100	100	50	50	1	3000	37"	37"	54"	45"	42"

OTHER SIZES ARE AVAILABLE. CONTACT US FOR MORE INFORMATION

03 OS-1 OIL SEPARATOR DETAIL

SCALE : NOT TO SCALE

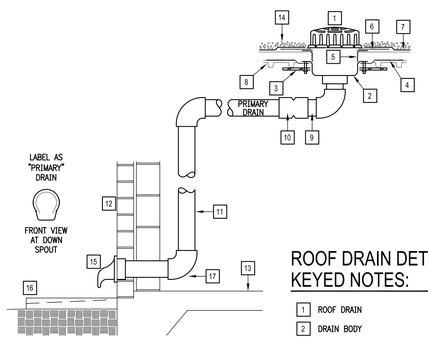
SPECIFICATIONS FOR: OS-1

CONCRETE : Class 1 concrete with of design strength of 4500 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth. Rated for H-20 Loading.

REINFORCEMENT: Grade 60 reinforced. No. 4 steel rebar to conform to ASTM A615 on required centers or equal. Bar bending and placement shall conform the latest ACI standards.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30.

ADD

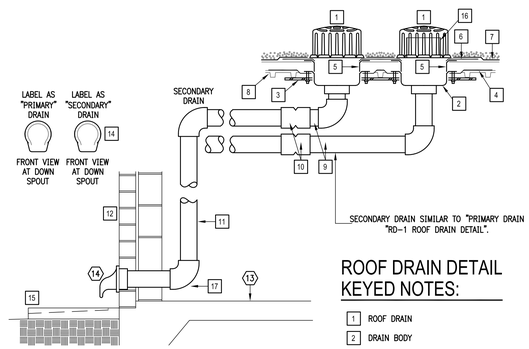


04 RD-1 PRIMARY ROOF DRAIN DETAIL

SCALE : NOT TO SCALE

ROOF DRAIN DETAIL KEYED NOTES:

1. ROOF DRAIN
2. DRAIN BODY
3. UNDER DECK CLAMP
4. ROOF SUMP RECEIVER
5. EXTENSION COLLAR
6. 4# LEAD FLASHING-EXTEND MINIMUM 12" FROM DRAIN BODY
7. COUNTER FLASHING
8. ROOF DECK
9. MINIMUM 1/4" PER FEET SLOPE ON HORIZONTAL RUNS
10. RUBBER "O" RINGS TYPE EXPANSION COUPLING WITHIN 4 FEET OF EACH ROOF DRAIN.
11. RAIN WATER CONDUCTOR INSIDE PIPE CHASE
12. WALL
13. FLOOR
14. ROOF
15. PROVIDE DOWNSPOUT NOZZLE EQUAL TO JOSAM 2510.
16. SPLASH BLOCK (GENERAL CONTRACTOR)
17. FILL BLOCK WITH CONCRETE AT ELBOW AREA

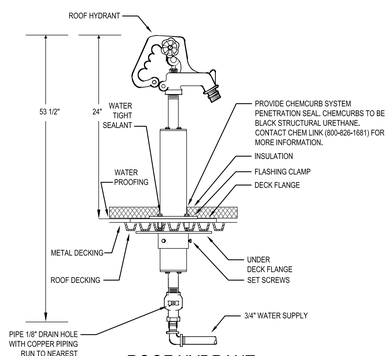


05 RD-2 COMBINATION WITH SECONDARY ROOF DRAIN DETAIL

SCALE : NOT TO SCALE

ROOF DRAIN DETAIL KEYED NOTES:

1. ROOF DRAIN
2. DRAIN BODY
3. UNDER DECK CLAMP
4. ROOF SUMP RECEIVER
5. EXTENSION COLLAR
6. 4# LEAD FLASHING-EXTEND MINIMUM 12" FROM DRAIN BODY
7. COUNTER FLASHING
8. ROOF DECK
9. MINIMUM 1/4" PER FEET SLOPE ON HORIZONTAL RUNS
10. EXPANSION COUPLING WITHIN 4 FEET OF EACH ROOF DRAIN.
11. RAIN WATER CONDUCTOR INSIDE PIPE CHASE
12. WALL
13. FLOOR
14. PROVIDE DOWNSPOUT NOZZLE EQUAL TO JOSAM 25010.
15. SPLASH BLOCK (GENERAL CONTRACTOR)
16. ADJUSTABLE STANDPIPE.
17. FILL BLOCK WITH CONCRETE AT ELBOW AREA



06 ROOF HYDRANT DETAIL

SCALE : NOT TO SCALE

ethos engineering
119 W. VAN BUREN AVE. STE.101
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No.	REVISIONS	BY
1	MAY 18, 2018	

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IDEA-BROWNSVILLE ROBINDALE CAMPUS
IDEA PHASE I
IDEA Public Schools
BROWNSVILLE, TEXAS

STATE OF TEXAS
CESAR A. GONZALEZ
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5.10.2018

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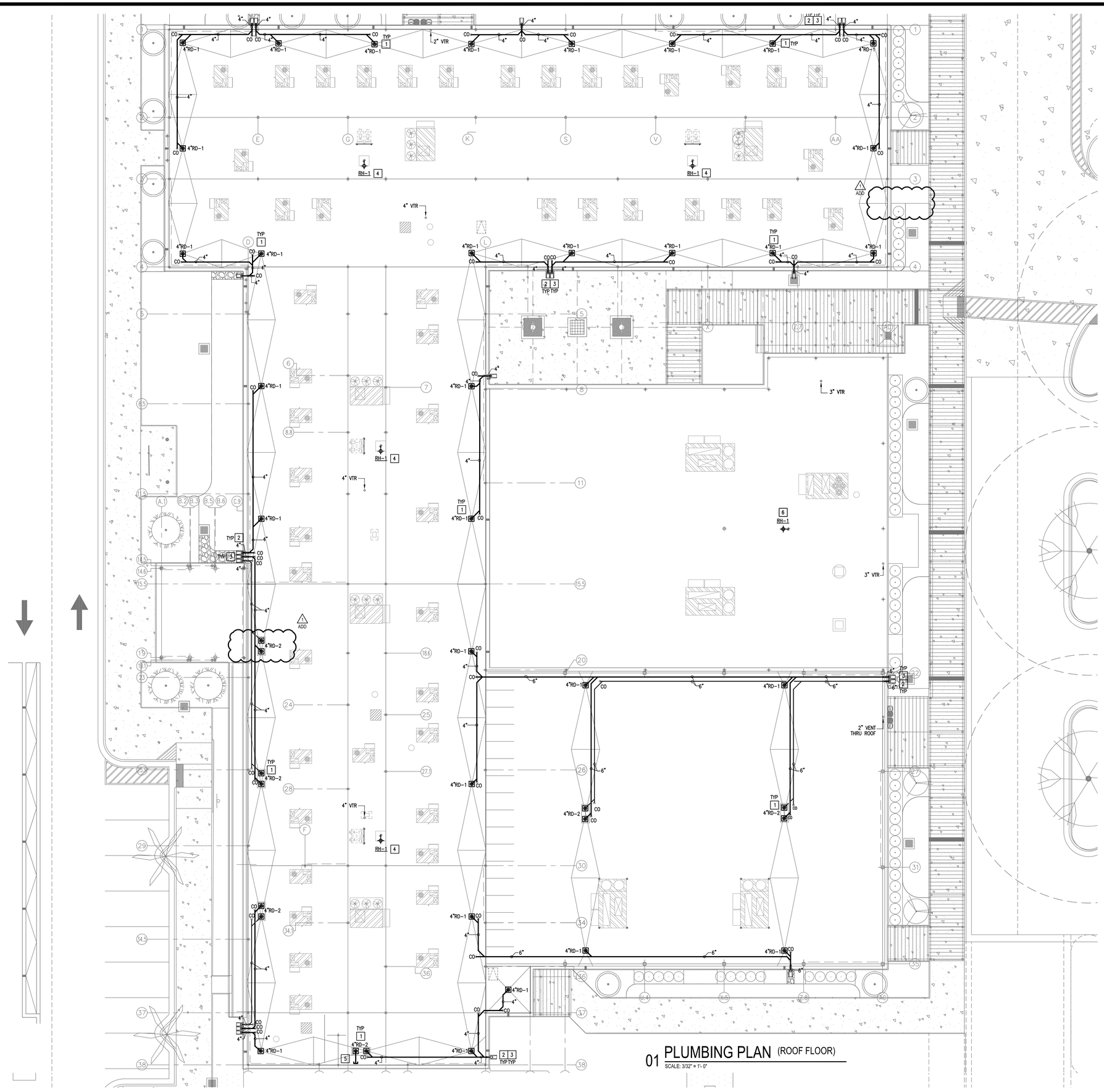
Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: May 10, 2018
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: ETHOS
Job No. IDEA Robindale Phase I
Sheet: P6.03



01 PLUMBING PLAN (ROOF FLOOR)
SCALE: 3/32" = 1'- 0"

GENERAL NOTES:

1. ALL HORIZONTAL LEADERS TO BE A MINIMUM OF 1/8" PER FOOT SLOPE.
2. ALL VERTICAL LEADER LINES DOWN AND CONCEALED IN PLUMBING CHASE UNLESS OTHERWISE NOTED. REFER TO DRAWINGS.
3. COORDINATE ROOF DRAIN PIPING WITH GENERAL CONTRACTOR AND HVAC CONTRACTOR.
4. PROVIDE INSULATION ON ALL ABOVE GROUND STORM LINES. REFER TO SPECIFICATIONS FOR DETAILS.
5. STORM DRAIN PIPING AND SEWER PIPING SHOWN ON THIS PLAN TO BE INSTALLED UNDER THE ROOF AND ABOVE THE CEILING OF SECOND FLOOR.

KEYED NOTES:

1. PROVIDE ROOF DRAIN AS SCHEDULED. SEE ASSOCIATED DETAILS ON THIS SHEET. (TYPICAL)
2. DROP STORM PIPING IN PIPE CHASE. REFER TO ARCHITECTURAL SHEET AND COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. SEE ASSOCIATED DETAILS ON THIS SHEET. (TYPICAL)
3. PROVIDE SPLASH BLOCK AS SHOWN.
4. PROVIDE DOMESTIC WATER PIPING TO CONNECT HOSE BIBB AT PIPE CHASE VAULT HOUSING PROVIDED BY DIVISION 26. PROVIDE HOSE BIBB AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAILS SHEET. (TYPICAL)
5. CAP SECONDARY ROOF DRAIN FOR FUTURE ADDITION OF BUILDING WHICH WILL ELIMINATE THE GUTTER OVERFLOW SYSTEM INSTALLED ON THIS PHASE. REFER TO ARCHITECTURAL ROOF PLAN.
6. PROVIDE ROOF HYDRANT AS SCHEDULED. SEE ASSOCIATED DETAILS ON DETAIL SHEET (TYPICAL).

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FUTURE PHASE II
KEYPLAN

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