

99 S. Almaden Road, Suite 600 San Jose, CA 95113

January 17, 2022

Subject: Bid Package #3

LEAD Elementary School HVAC Replcmt-DSA 01 119699

San Mateo - Foster City School District

ADDENDUM NO. 1

CHANGES AND/OR CLARIFICATIONS OF THE DRAWINGS AND SPECIFICATIONS ARE AS FOLLOWS FOR THE LEAD ELEMNATRY SCHOOL DSA PROJECT ASSOCIATED WITH BID PACKAGE NO.3. PLEASE NOTE THAT THIS ADDEDUM IS BEING ISSUED IN A COMBINED PACKAGE IN TWO PARTS.

- Part 1. Cover section addressing all four projects with overlapping information impacting each campus project.
- Part 2. Addendum documentation exclusively for LEAD Elementary School Project.

Part 1. Cover section addressing all four projects with overlapping information impacting each campus project.

There are no overall comments for the LEAD Elementary School project.

Part 2. Addendum 4 Items for LEAD Elementary School

Review posted Addendum No. 1 documents as prepared by Aedis Architects, attached.

END OF ADDEDUM #1



January 17, 2022

Aedis Architects 387 S. First St., Suite 300 San Jose, CA 95113

Subject: LEAD Elementary School Electrical Service Upgrade

San Mateo - Foster City School District

Aedis Project No. 2021011.09 DSA Application #01-119699

ADDENDUM NO. 1

CHANGES AND/OR CLARIFICATIONS OF THE DRAWINGS AND SPECIFICATIONS ARE AS FOLLOWS:

GENERAL

ITEM NO. 1.1: REFERENCE PLAN

<u>Add:</u> Utility survey for reference only per attached LEAD Campus Utility Survey

SPECIFICATIONS

ITEM NO. 1.2: TABLE OF CONTENTS

Add: 09 91 14 EXTERIOR PAINTING
Add: 09 91 24 INTERIOR PAINTING

<u>Add:</u> 31 23 16 TRENCHING

Add: 32 17 23 PAVEMENT MARKINGS

ITEM NO. 1.3: SECTION 09 91 14 – EXTERIOR PAINTING

Add: The specification per the attached 09 91 14 Exterior Painting.

ITEM NO. 1.4: SECTION 09 91 24 – INTERIOR PAINTING

Add: The specification per the attached 09 91 24 Interior Painting.

ITEM NO. 1.5: SECTION 31 23 16 - TRENCHING

Add: The specification per the attached 31 23 16 Trenching.

ITEM NO. 1.6: SECTION 32 17 23 – PAVEMENT MARKINGS

Add: The specification per the attached 32 17 23 Pavement Markings.

LEAD Elementary School Electrical Service Upgrade San Mateo – Foster City School District Aedis Project No. 2021011.09

ITEM NO. 1.7: SECTION 32 31 13 - CHAIN LINK FENCES AND GATES

Add: 2.4 SWING GATES D. Hardware

Item 5.: Panic Hardware: CD 990AX-L-WH-6280 SNB with Gate closer/Hinge:

SureClose Pivot: SM AT90W"

DRAWINGS

ARCHITECTURAL

ITEM NO. 1.8: DRAWING SHEET T1 – TITLE SHEET

Revise: General Notes 7 to read as "ALL EXISTING FINISHES OR MATERIALS DAMAGED OR

DEMOLISHED DUE TO NEW CONSTRUCTION SHALL BE RESTORED TO THEIR

ORIGINAL STATE, INCLUDING BUT NOT LIMITED TO REINSTALLING OR REPLACING EXISTING CHAINLINK FENCING AS REQUIRED AND RESTRIPING PAVING IN KIND".

ITEM NO. 1.9: DRAWING SHEET A1.01 – OVERALL & ENLARGED SITE PLANS

<u>Add:</u> General Note #F per Attached AD1-A1.01

Revise: Trench & striping graphics in plan per attached AD1-A1.01

Add: Site Plan Keynotes #19 & #20 and associated tags in plan per attached AD1-A1.01

ITEM NO. 1.10: DRAWING SHEET A8.10 – EXTERIOR DETAILS

Revise: Detail 2/A8.10 Typical chain link Gate (Single) per attached AD1-A8.10A

Revise: Detail 5/A8.10 Concrete Patch per attached AD1-A8.10B

Revise: Detail 6/A8.10 Asphalt/Concrete Joint per attached AD1-A8.10B

ELECTRICAL

ITEM NO. 1.11: DRAWING SHEET EO.1 – ELECTRICAL COVER SHEET

Revise: Wiring & Conduit Run Symbols per attached AD1-E0.1.

Add: General Note #25 per attached AD1-E0.1.

ITEM NO. 1.12: DRAWING SHEET E1.1 – ELECTRICAL SITE PLAN

Revise: General Note #2 per attached AD1-E1.1.

Add: General Note #11 per attached AD1-E1.1

Revise: Sheet Notes #3 and #11 per attached AD1-E1.1.

Add: Sheet Note #19 per attached AD1-E1.1.

Revise: Conduit Schedule tags #17, 18, 19 and 20 and associated tags in plan per attached

AD1-E1.1.

Revise: Pull box tag on site plan per attached AD1-E1.1.

Revise: Conduit routing and conduit requirements on site plan 1/E1.1 per attached AD1-

E1.1.

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Revise: Conduit routing and conduit requirements on enlarged site plan 2/E1.1 per

attached AD1-E1.1.

Revise: Conduit routing and conduit requirements on enlarged site plan 4/E1.1 per

attached AD1-E1.1.

<u>ITEM NO. 1.13:</u> <u>DRAWING SHEET E3.1 – DEMO SINGLE LINE DIAGRAM</u>

Revise: Existing main switchboard and circuit breakers per attached AD1-E3.1.

ITEM NO. 1.14: DRAWING SHEET E3.2 – NEW SINGLE LINE DIAGRAM

Revise: New Single Line Diagram per attached AD1-E3.2. **Add:** Feeder Schedule #13 & #14 per attached AD1-E3.2.

<u>ITEM NO. 1.15:</u> <u>DRAWING SHEET E4.4 – ELECTRICAL DETAILS</u>

<u>Revise:</u> Detail 3/E4.4 Note #1 per attached AD1-E4.4 <u>Add:</u> Detail 3/E4.4 Note #5 per attached AD1-E4.4.

LEAD Elementary School Electrical Service Upgrade San Mateo – Foster City School District Aedis Project No. 2021011.09



Aedis Architects
June Yip, Principal



Electrical, American Consulting Engineers Electrical Sammy Fernandez

Division of the State Architect

LEAD Elementary School Electrical Service Upgrade San Mateo – Foster City School District Aedis Project No. 2021011.09

Attachments:

General:

LEAD Campus Utility Survey (1 Page)

Specifications:

09 91 14 Exterior Painting (10 pages)

09 91 24 Interior Painting (8 pages)

31 23 16 Trenching (5 pages)

32 17 23 Pavement Markings (2 Pages)

Drawings:

ARCHITECURAL

SHEET AD1-A1.01

SHEET AD1-A8.10A

SHEET AD1-A8.10B

ELECTRICAL

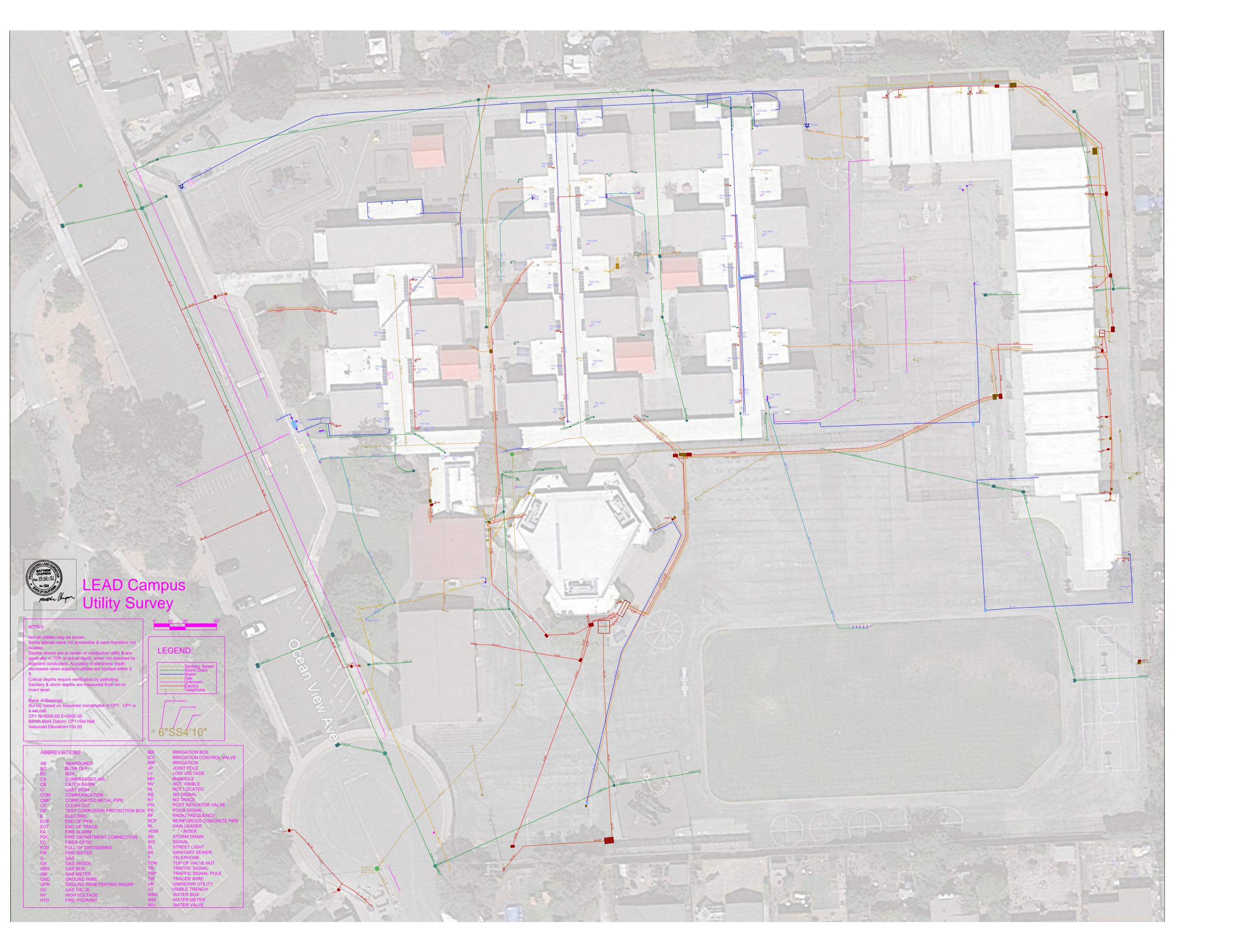
SHEET AD1-E0.1

SHEET AD1-E1.1

SHEET AD1-E3.1

SHEET AD1-E3.2

SHEET AD1-E4.4



SECTION 099114 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Surface preparation and application of paint systems on exterior substrates.
 - a. Concrete.
 - b. Fiber-cement board.
 - c. Concrete masonry units (CMUs).
 - d. Steel and iron.
 - e. Galvanized metal.
 - f. Aluminum (not anodized or otherwise coated).
 - g. Stainless steel.
 - h. Wood.
 - i. Fiberglass.
 - j. Plastic.
 - k. Portland cement plaster (stucco).

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include preparation requirements and application instructions.
 - 2. Indicate VOC content.
- B. Samples: For each type of topcoat product.
- C. Samples for Initial Selection: For each type of topcoat product.
- D. Samples for Verification: For each type of paint system and each color and gloss of topcoat.
 - 1. Submit Samples on rigid backing, 8 inches (200 mm) square.
 - 2. Apply coats on Samples in steps to show each coat required for system.
 - 3. Label each coat of each Sample.
 - 4. Label each Sample for location and application area.
- E. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in the Exterior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

1.3 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Paint: 5 percent, but not less than 1 gal. (3.8 L) of each material and color applied.

1.4 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 - 1. Architect will select one surface to represent surfaces and conditions for application of each paint system.
 - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
 - b. Other Items: Architect will designate items or areas required.
 - 2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
 - 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.6 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
- B. Do not apply paints in snow, rain, fog, or mist; when relative humidity exceeds 85 percent; at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Kelly-Moore Paint Company Inc.: District Standard
- B. Source Limitations: Obtain paint from single source from single manufacturer.

2.2 PAINT GENERAL

- A. Material Compatibility:
 - 1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, provide products recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- B. Colors: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Concrete: 12 percent.
 - 2. Fiber-Cement Board: 12 percent.
 - 3. Masonry (Clay and CMUs): 12 percent.
 - 4. Wood: 15 percent.
 - 5. Portland Cement Plaster: 12 percent.
 - 6. Gypsum Board: 12 percent.
- C. Portland Cement Plaster Substrates: Verify that plaster is fully cured.
- D. Exterior Gypsum Board Substrates: Verify that finishing compound is sanded smooth.

- E. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- F. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:
 - 1. SSPC-SP 2.
 - 2. SSPC-SP 3.
 - 3. SSPC-SP 7/NACE No. 4.
 - 4. SSPC-SP 11.
- G. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- A. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal with Krud Kutter Metal Clean and Etch to dissolve passivator and use mechanical methods as

necessary,to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.

B. Aluminum Substrates: Remove loose surface oxidation.

C. Wood Substrates:

- 1. Scrape and clean knots. Before applying primer, apply coat of knot sealer recommended in writing by topcoat manufacturer for exterior use in paint system indicated.
- 2. Sand surfaces that will be exposed to view, and remove sanding dust.
- 3. Prime edges, ends, faces, undersides, and backsides of wood.
- 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- D. Plastic Trim Fabrication Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.

3.3 INSTALLATION

- A. Apply paints in accordance with manufacturer's written instructions.
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable items same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed items with prime coat only.
 - 3. Paint both sides and edges of exterior doors and entire exposed surface of exterior door frames.
 - 4. Paint entire exposed surface of window frames and sashes.
 - 5. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
 - 6. Primers specified in the Exterior Painting Schedule may be omitted on items that are factory primed or factory finished if compatible with intermediate and topcoat coatings and acceptable to intermediate and topcoat paint manufacturers.
 - 7. For previously painted or factory primed surfaces where bare substrate is exposed, spot prime with manufacturer recommended primer.
 - 8. Previously painted surfaces may require full prime and is subject to field inspection recommendation.
- B. Tint undercoats same color as topcoat, but tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

- E. Painting Fire Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
 - 1. Paint the following work where exposed to view:
 - a. Equipment, including panelboards.
 - b. Uninsulated metal piping.
 - c. Uninsulated plastic piping.
 - d. Pipe hangers and supports.
 - e. Metal conduit.
 - f. Plastic conduit.
 - g. Tanks that do not have factory-applied final finishes.

3.4 FIELD QUALITY CONTROL

- A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.
 - 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written instructions, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written instructions.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
 - 1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
 - 2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
 - 3. Allow empty paint cans to dry before disposal.
 - 4. Collect waste paint by type and deliver to recycling or collection facility.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 EXTERIOR PAINTING SCHEDULE

- A. Concrete Substrates, Nontraffic Surfaces:
 - 1. Latex System:
 - a. Prime Coat: Primer, alkali resistant, water based.
 - 1) KM 247 Acryshield Masonry Primer
 - 2) Or approved equal
 - b. Prime Coat, Latex: Exterior, matching topcoat.
 - c. Intermediate Coat: Latex, exterior, matching topcoat.
 - d. Low-Sheen Topcoat: Latex, exterior, low sheen
 - 1) KM 1210 Premium Professional Exterior 100% Acrylic Low Sheen
 - 2) Or approved equal
- B. Cement Board Substrates:
 - 1. High-Build Latex System: Dry film thickness of not less than 10 mils (0.25 mm).
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
 - c. Topcoat: Latex, exterior, high build.
 - 1) KM 1128 Kel-Seal Urethane Acrylic Elastomeric Coating
 - 2) Or approved equal
- C. CMU Substrates:
 - 1. Latex System:
 - a. Prime Coat: Block filler, latex, interior/exterior.
 - 1) KM 521 Premium Professional Block Filler
 - 2) Or approved equal
 - b. Intermediate Coat: Latex, exterior, matching topcoat.
 - c. Low-Sheen Topcoat: Latex, exterior, low sheen
 - 1) KM 1210 Premium Professional Exterior 100% Acrylic Low Sheen
 - 2) Or approved equal

- d. Semigloss Topcoat: Latex, exterior, semigloss
 For use at trash enclosures and loading docks unless otherwise noted
 - 1) KM 1215 Premium Professional Exterior 100% Acrylic Semi-Gloss Enamel
 - 2) Or approved equal

D. Steel and Iron Substrates:

- 1. Alkyd System:
 - a. Alkyd Prime Coat: Primer, alkyd, anticorrosive, for metal.
 - 1) Rust-Oleum CV740 Alkyd Metal Primer Low VOC
 - 2) Or approved equal
 - b. Shop Prime Coat: Shop primer specified in Section where substrate is specified.
 - c. Surface-Tolerant Prime Coat: Primer, metal, surface tolerant.
 - 1) Rust-Oleum CV740 Alkyd Metal Primer Low VOC
 - 2) Or approved equal
 - d. Intermediate Coat: Exterior, alkyd enamel, matching topcoat.
 - e. Semigloss Topcoat: Alkyd, exterior, semigloss
 - 1) KM 1998 Epic Water Urethane Modified Alkyd Semi-Gloss Enamel
 - 2) Or approved equal

E. Galvanized-Metal Substrates:

- 1. Water-Based Light Industrial Coating System:
 - a. For use at handrails unless otherwise noted
 - b. Acrylic Prime Coat: Primer, galvanized, water based.
 - 1) KM 5725 DTM Acrylic Metal Primer/Finish
 - 2) Or approved equal
 - c. Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
 - d. Semigloss Topcoat: Light industrial coating, exterior, water based, semigloss
 - 1) KM 5885 DTM High Performance Acrylic Semi-Gloss Enamel
 - 2) Or approved equal

- e. Intermediate Coat: Exterior, alkyd enamel, matching topcoat.
- f. Semigloss Topcoat: Alkyd, exterior, semigloss
 - 1) KM 1998 Epic Water Urethane Modified Alkyd Semi-Gloss Enamel
 - 2) Or approved
- F. Aluminum Substrates:
 - 1. Latex System:
 - a. Prime Coat: Primer, quick dry, for aluminum.
 - 1) KM 5725 DTM Acrylic Metal Primer/Finish
 - 2) Or approved equal
 - b. Intermediate Coat: Latex, exterior, matching topcoat.
 - c. Semigloss Topcoat: Latex, exterior, semigloss
 - 1) KM 5885 DTM High Performance Semi-Gloss Enamel
 - 2) Or approved
- G. Wood Substrates: Wood trim, Doors.
 - 1. Latex over Latex Primer System:
 - a. Prime Coat: Primer, latex for exterior wood.
 - 1) KM 295 Kel-Bond Universal Primer
 - 2) Or approved equal
 - b. Intermediate Coat: Latex, exterior, matching topcoat.
 - c. Semigloss Topcoat: Latex, exterior, semigloss
 - 1) KM 1215 Premium Professional Exterior 100% Acrylic Semi-Gloss
 - 2) Or approved equal
- H. Plastic Trim Fabrication Substrates:
 - 1. Latex System:
 - a. Water-Based Prime Coat: Primer, bonding, water based.
 - 1) KM 287 Kel-Bond Adhesion Plus Primer

- 2) Or approved equal
- b. Solvent-Based Prime Coat: Primer, bonding, solvent based.
 - 1) KM 287 Kel-Bond Adhesion Plus Primer
 - 2) Or approved equal
- c. Intermediate Coat: Latex, exterior, matching topcoat.
- d. Semigloss Topcoat: Latex, exterior, semigloss
 - 1) KM 1215 Premium Professional Exterior 100% Acrylic Semi-Gloss
 - 2) Or approved equal
- I. Portland Cement Plaster Substrates:
 - 1. Latex System:
 - a. Latex Prime Coat: Latex, exterior, matching topcoat.
 - b. Alkali-Resistant Prime Coat: Primer, alkali resistant, water based.
 - 1) KM 247 Acryshield Masonry Primer
 - 2) Or approved equal
 - c. Intermediate Coat: Latex, exterior, matching topcoat.
 - d. Low-Sheen Topcoat: Latex, exterior, low sheen
 - 1) KM 1210 Premium Professional Exterior Low Sheen
 - 2) Or approved equal

END OF SECTION 099114

SECTION 099124 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on interior substrates.
 - 1. Steel and iron.
 - 2. Galvanized metal.
 - 3. Aluminum (not anodized or otherwise coated).
 - 4. Wood.
 - 5. Gypsum board.
 - 6. Acoustic panels and tiles.
- B. Related Requirements:
 - 1. Section 081416 "Flush Wood Doors" for field-finished doors

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
 - Indicate VOC content.
- B. Samples for Initial Selection: For each type of topcoat product.
- C. Samples for Verification: For each type of paint system and in each color and gloss of topcoat.
 - 1. Submit Samples on rigid backing, 8 inches (200 mm) square.
 - 2. Apply coats on Samples in steps to show each coat required for system.
 - 3. Label each coat of each Sample.
 - 4. Label each Sample for location and application area.
- D. Product List: Use same designations indicated on Drawings and in the Interior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

1.3 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Paint: 5 percent, but not less than 1 gal. (3.8 L) of each material and color applied.

1.4 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Architect will select one surface to represent surfaces and conditions for application of each paint system.
 - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
 - b. Other Items: Architect will designate items or areas required.
 - 2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
 - 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F (7 deg C).
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.6 FIELD CONDITIONS

- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F (10 and 35 deg C).
- B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures of less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Kelly-Moore Paint Company Inc.: District Standard

B. Source Limitations: Obtain paint from single source from single manufacturer.

2.2 PAINT, GENERAL

- A. Material Compatibility:
 - 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- B. Colors: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
 - 1. Concrete: 12 percent.
 - 2. Fiber-Cement Board: 12 percent.
 - 3. Masonry (Clay and CMUs): 12 percent.
 - 4. Wood: 15 percent.
 - 5. Gypsum Board: 12 percent.
 - 6. Plaster: 12 percent.
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- D. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- E. Proceed with coating application only after unsatisfactory conditions have been corrected.
 - 1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions applicable to substrates and paint systems indicated.

- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
 - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:
 - 1. SSPC-SP 2.
 - 2. SSPC-SP 3.
 - 3. SSPC-SP 7/NACE No. 4.
 - 4. SSPC-SP 11.
- E. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- F. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal with Krud Kutter Metal Clean and Etch to dissolve passivator and use mechanical methods as necessary,to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints..
- G. Aluminum Substrates: Remove loose surface oxidation.
- H. Wood Substrates:
 - 1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
 - 2. Sand surfaces that will be exposed to view, and dust off.
 - 3. Prime edges, ends, faces, undersides, and backsides of wood.
 - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.

3.3 INSTALLATION

- A. Apply paints according to manufacturer's written instructions.
 - 1. Use applicators and techniques suited for paint and substrate indicated.
 - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.

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- 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
- 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- 5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- 6. For previously painted or factory primed surfaces where bare substrate is exposed, spot prime with manufacturer recommended primer.
- 7. Previously painted surfaces may require full prime and is subject to field inspection and recommendations.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- E. Painting Fire-Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
 - 1. Paint the following work where exposed in occupied spaces:
 - a. Equipment, including panelboards.
 - b. Uninsulated metal piping.
 - c. Uninsulated plastic piping.
 - d. Pipe hangers and supports.
 - e. Metal conduit.
 - f. Plastic conduit.
 - g. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
 - h. Other items as directed by Architect.
 - 2. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

3.4 FIELD QUALITY CONTROL

- A. Dry-Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry-film thickness.
 - 1. Contractor shall touch up and restore painted surfaces damaged by testing.
 - 2. If test results show that dry-film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply

additional coats as needed to provide dry-film thickness that complies with paint manufacturer's written recommendations.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
 - 1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
 - 2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
 - 3. Allow empty paint cans to dry before disposal.
 - 4. Collect waste paint by type and deliver to recycling or collection facility.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.6 INTERIOR PAINTING SCHEDULE

- A. Galvanized-Metal Substrates:
 - 1. Institutional Low-Odor/VOC Latex System:
 - a. Prime Coat: Primer, galvanized, water based.
 - 1) KM 5725 DTM Acrylic Metal Primer/Finish
 - 2) Or approved equal
 - b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
 - c. Topcoat: Latex, interior, institutional low odor/VOC, semigloss
 - 1) KM 1050 Premium Professional Low VOC Interior Semi-Gloss Enamel
 - 2) Or approved equal
- B. Aluminum (Not Anodized or Otherwise Coated) Substrates:
 - 1. Latex System:

- a. Prime Coat: Primer, quick dry, for aluminum.
 - 1) KM 5725 DTM Acrylic Metal Primer/Finish
 - 2) Or approved equal
- b. Intermediate Coat: Latex, interior, matching topcoat.
- c. Topcoat: Latex, interior, semigloss
 - 1) KM 5885 DTM High Performance Acrylic Semi-Gloss Enamel
 - 2) Or approved equal
- C. Wood Substrates: Doors.
 - 1. Latex over Latex Primer System:
 - a. Prime Coat: Primer, latex, for interior wood.
 - 1) KM 973 Acrplex Low VOC Interior Enamel Undercoat
 - 2) Or approved equal
 - b. Intermediate Coat: Latex, interior, matching topcoat.
 - c. Topcoat: Latex, interior, semigloss
 - 1) KM 1050 Premium Professional Low VOC Interior Semi-Gloss Enamel
 - 2) Or approved equal
- D. Gypsum Board and Plaster Substrates:
 - 1. Latex over Latex Sealer System:
 - a. Prime Coat: Primer sealer, latex, interior.
 - 1) KM 971 Acryplex Low VOC Interior PVA Primer/Sealer
 - 2) Or approved equal
 - b. Prime Coat: Latex, interior, matching topcoat.
 - c. Intermediate Coat: Latex, interior, matching topcoat.
 - d. Topcoat: Latex, interior, flat. At all ceilings, unless otherwise noted.
 - 1) KM 1005 Premium Professional Low VOC Interior Flat
 - 2) Or approved equal
 - e. Topcoat: Latex, interior. At all walls, unless otherwise noted.

1)

- 2) KM 1010 Premium Professional Low VOC Interior Eggshell Enamel
- 3) Or approved equal
- E. Acoustic Panels and Tiles:
 - 1. Latex, Flat System:
 - a. Prime Coat: Latex, interior, matching topcoat.
 - b. Topcoat: Latex, interior, flat
 - 1) KM 1002 Ceiling Paint Interior Flat
 - 2) Or approved equal

END OF SECTION 099124

SECTION 312316 - TRENCHING

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes excavating trenches for utilities from outside building to final connection point or public right-of-way or utility; compacted fill from top of utility bedding to subgrade elevations; and backfilling and compaction.
- B. Related Sections:
- 1. Section 03 30 00 Cast-in-Place Concrete.
- 1.2 REFERENCES
 - A. The project Soils Report and any supplements to the Soils Report.
- 1.3 DEFINITIONS
 - A. Utility: Any buried pipe, duct, conduit, or cable.
- 1.4 FIELD MEASUREMENTS
 - A. Verify field measurements prior to fabrication.
- 1.5 COORDINATION
 - A. Verify Work associated with lower elevation utilities is complete before placing higher elevation utilities.
 - B. Verify elevations of existing facilities prior to placing new Work.

PART 2 PRODUCTS

2.1 FILL MATERIALS

A. Fill and Structural Fill shall be: As specified in the project Soils Report and any supplements to the Soils Report.

2.2 ACCESSORIES

A. Filter Fabric: Non-biodegradable, woven as manufactured by TC Mirafi, Tenax

Corp., Tensar Earth Technologies, Inc. or equal.

PART 3 EXECUTION

3.1 LINES AND GRADES

A. Grades

- 1. Pipes shall be laid true to the lines and grades indicated.
- 2. The grade alignment of the pipe shall be maintained by the use of a string line parallel with the grade line and vertically above the centerline of the pipe. This line shall be established on level batter boards at intervals of not more than 25 feet. Batter boards shall span the trench and be rigidly anchored to substantial posts driven into the ground on each side of the trench. Three adjacent batter boards must be set before laying pipe to provide a check on the grades and line. Elevation and position of the string line shall be determined from the elevation and position of offset points or stakes located along the pipe route. Pipe shall not be laid using side lines for line or grade.
- 3. As an alternative means of establishing alignment and grade, a "Laser-Beam" instrument may be utilized with a competent operator.

B. Location of Pipe Lines:

- 1. The location and approximate depths of the proposed pipe lines are shown on the Drawings.
- 2. An underground locate service shall be enlisted to discover the location of existing utilities regardless if they are shown on the drawings.
- 3. The Architect/Engineer reserves the right to make changes in lines, grades, and depths of pipe lines and manholes when such changes are necessary.

3.2 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.
- B. Protect plant life, lawns, and other features remaining as a portion of final landscaping.
- C. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- D. Maintain and protect above and below grade utilities which are to remain.
- E. Cut out soft areas of subgrade not capable of compaction in place. Backfill and compact to density equal to or greater than requirements for subsequent backfill material.

3.3 EXCAVATING

- A. Excavate subsoil required for utilities.
- B. Cut trenches sufficiently wide to enable installation and allow inspection. Remove water or materials that interfere with Work.
- C. Do not interfere with 45 degree bearing splay of foundations.
- D. Hand trim excavation. Hand trim for bell and spigot pipe joints. Remove loose matter.
- E. Remove lumped subsoil, boulders, and rock as directed by the Soils Engineer or other inspector.
- F. Correct over excavated areas with backfill and compact replacement as specified for authorized excavation.
- G. Stockpile excavated material on site. Remove excess material not being used from site.

3.4 TRENCHING

A. Excavations:

- 1. Excavation shall be dug so that the pipe can be laid and jointed properly. The trench shall be made so that the pipe can be laid to the alignment and depth as shown on the Drawings, and it shall be excavated only so far in advance of pipe laying as permitted by the Architect/Engineer. The excavation shall not be more than two feet wider at the bottom than the outside diameter of the pipe or structure. If there is no interference with construction, or adjacent property, and if soil permits, the Contractor at his own expense shall be permitted to slope the side walls of the excavation starting at a point two (2) feet above the top of pipe.
- 2. The trench shall be excavated to the depth required so as to provide a uniform and continuous bearing and support for the pipe on bedding material at every point between joints, except where pipe slings or other lifting tackle are withdrawn.
- 3. Excavation Below Grade:
 - 1) Where excavation indicates that the subsurface materials at the bottom of the trench are in a loose or soft state, the Contractor shall be advised to excavate to a depth where suitable material is encountered, as directed by the Architect/Engineer.

- Where the bottom of the trench has been excavated by mistake to a greater depth than required, the Contractor shall refill this area using approved material. No additional compensation shall be given to the Contractor. Refilling with earth to bring the bottom of the trench to the proper grade will not be permitted.
- 4. Excavation within 24 inches of existing utilities shall be governed by specifications of the Owner of the respective utility. The Contractor shall obtain these specifications and follow the same at no extra cost.
- 5. Excavation and shoring shall adhere to the requirements and safety standards set by OSHA.
- B. Trenching in Advance of Pipe Laying: The trench for the pipe lines shall not be opened for a distance of more than 200 feet at any one time, unless authorized by the Architect/Engineer. At no time will the Contractor be permitted to leave more than 50 feet of trench open at the end of a working day. Adequate protection of open trench shall be provided by the Contractor and the Contractor shall be responsible therefore.

3.5 SHEETING AND BRACING

A. General:

- 1. Sheeting and bracing of all excavations shall conform to the latest statutes of the State of California governing safety of workers in the construction industry. When necessary, in the opinion of the Contractor, adequate sheeting and bracing shall be installed to prevent ground movement that may cause damage or settlement to adjacent structures, pipelines and utilities. Any damage due to settlement because of failure to use sheeting or because of inadequate bracing, or through negligence or fault of the Contractor in any other manner, shall be repaired at the Contractor's expense.
- 2. Sides of trenches in unsuitable, loose or soft material, five feet or more in depth, shall be shored, sheeted, braced, sloped, or otherwise supported by means of sufficient strength to protect employees working within them.

B. Sheeting Requirements:

- 1. Where excavations are made with vertical sides which require supporting, the sheeting and bracing shall be of sufficient strength to sustain the sides of the excavations and to prevent movement which could in any way injure the Work, or adjacent structures, or diminish the working space sufficiently to delay the Work. Special precautions shall be taken where there is additional pressure due to the presence of other structures.
- 2. It shall be the Contractor's responsibility to select sheeting and bracing of sufficient dimensions and strength and type to adequately support the sides of trenches and excavations.
- 3. Sheeting and bracing shall be removed before the completion of the Work.

3.6 BACKFILLING

- A. Backfill trenches to contours and elevations shown on the drawings.
- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, or spongy subgrade surfaces.
- C. Fill materials shall be as specified in the Soils Report and any supplements to the Soils Report.
- D. Employ a placement method that does not disturb or damage utilities in trench. Jetting of backfill materials to achieve compaction shall not be permitted.
- E. Maintain optimum moisture content of fill materials to attain required compaction density.
- F. Remove surplus fill materials from site.

3.7 TOLERANCES

- A. Top Surface of Backfilling Under Paved Areas: Plus or minus 0.05 feet from required elevations.
- B. Top Surface of General Backfilling: Plus or minus 1/10 feet from required elevations.

3.8 FIELD QUALITY CONTROL

- A. Compaction testing will be performed by the project Soils Engineer.
- B. If tests indicate Work does not meet specified requirements, remove Work, replace, compact, and retest.

3.9 PROTECTION OF FINISHED WORK

C. Reshape and re-compact fills subjected to vehicular traffic during construction.

END OF SECTION

SECTION 321723 - PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Painted markings applied to asphalt paving.
 - 2. Painted markings applied to concrete surfaces.

1.3 ACTION SUBMITTALS

- A. Product Data: Include technical data and tested physical and performance properties.
 - 1. Pavement-marking paint, acrylic.
- B. Shop Drawings:
 - 1. Indicate areas to be re-striped.
- C. Samples: For each exposed product and for each color and texture specified; on rigid backing, 8 inches (200 mm) square.

1.4 FIELD CONDITIONS

A. Environmental Limitations: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 55 deg F (12.8 deg C) for water-based materials, and not exceeding 95 deg F (35 deg C).

PART 2 - PRODUCTS

2.1 PAVEMENT-MARKING PAINT

- A. Pavement-Marking Paint, Acrylic: Acrylic, waterborne emulsion, lead and chromate free, ready mixed, complying with FS TT-P-1952F, Type II, with drying time of less than three minutes.
 - 1. Color: White.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that pavement-marking substrate is dry and in suitable condition to begin pavement marking in accordance with manufacturer's written instructions.
- B. Proceed with pavement marking only after unsatisfactory conditions have been corrected.

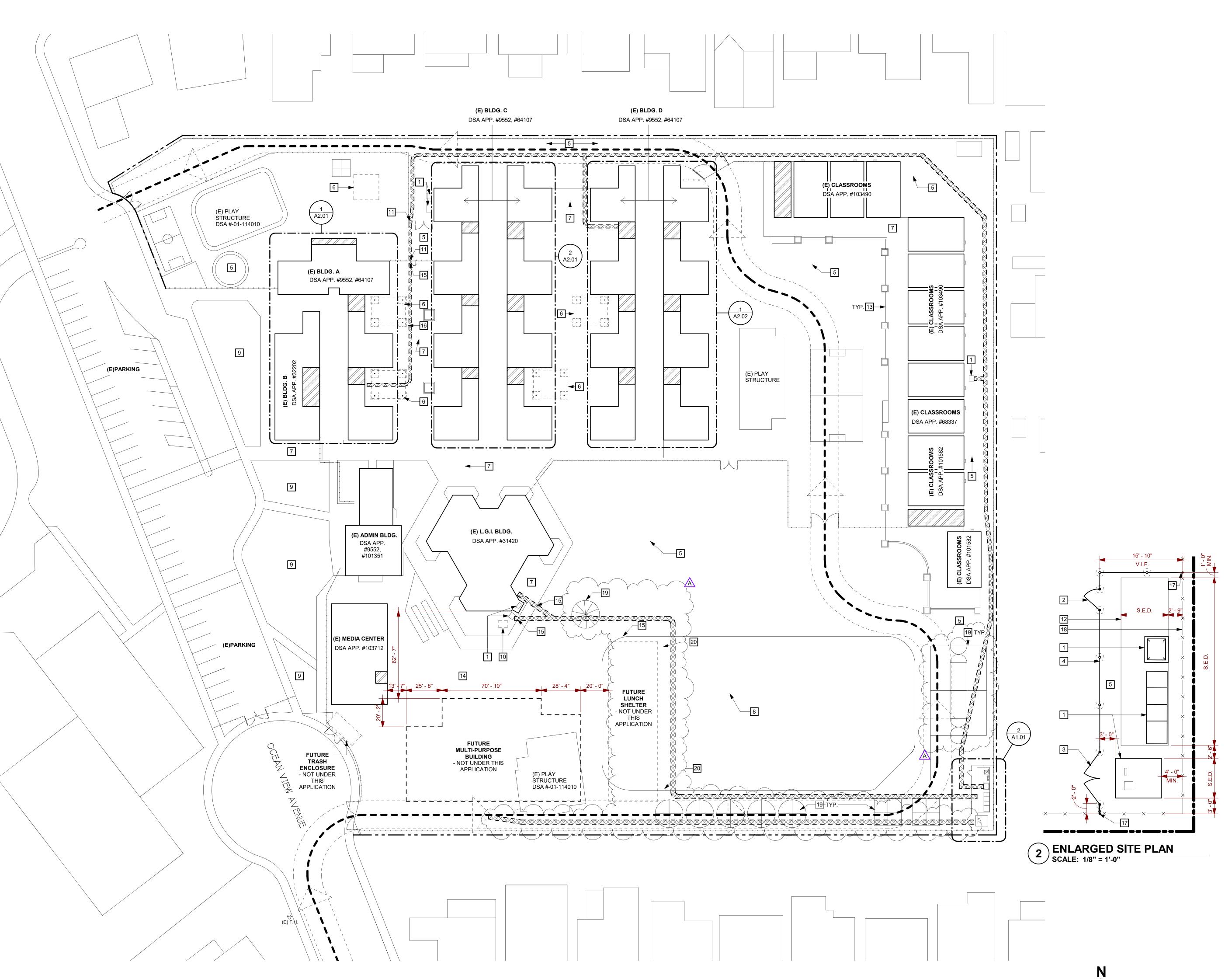
3.2 PAVEMENT MARKING

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect.
- B. Sweep and clean surface to eliminate loose material and dust.
- C. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils (0.4 mm).
 - 1. Apply graphic symbols and lettering with paint-resistant, die-cut stencils, firmly secured to asphalt paving or concrete surface. Mask an extended area beyond edges of each stencil to prevent paint application beyond stencil. Apply paint so that it cannot run beneath stencil.

3.3 PROTECTING AND CLEANING

- A. Protect pavement markings from damage and wear during remainder of construction period.
- B. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 321723



1 SITE PLAN
SCALE: 1" = 30'-0"

GENERAL SHEET NOTES

SITE PLAN KEYNOTES

6 (E) SHADE STRUCTURE, DSA APP.# 01-116160

ADJACENT. SEE DETAIL 6/A8.10 SIM.

17 CONNECT NEW FENNCING TO (E) POLE 18 (E) CHAIN LINK FENCE TO REMAIN

(19 (E) STRIPING TO REMAIN

13 (E) CONCRETE STEPS BETWEEN PLANTER BOXES

14 ROUTE ELECTRICAL CONDUIT 36" MIN. CLR. OF FUTURE CONSTRUCTION
15 PAVING TRANSITION, SEE DETAIL 5/A8.10, 8/A8.10 SIM. AND 9/A8.10 AS OCCURS

16 FOR EXCAVATION PARALLEL TO (E) FOOTING SEE DET. 8/S5.01

(E) ELECTRICAL EQUIPMENT, S.E.D.

5 (E) ASPHALT TO REMAIN

7 (E) CONCRETE WALKWAY 8 (E) TURF TO REMAIN 9 (E) PLANTER TO REMAIN

DÉTAIL 2/A8.10 SIM.

12 CONCRETE PAD, S.E.D.

2 4'-0" W GATE, SEE DETAIL 2/A8.10
3 10'W DOUBLE GATE, SEE DETAIL 3/A8.10
4 CHAIN LINK FENCE, SEE DETAIL 2/A8.10 SIM.

- A CONTRACTOR TO VERIFY THAT ALL BARRIERS IN THE PATH OF TRAVEL HAVE BEEN REMOVED OR WILL BE REMOVED UNDER THIS PROJECT AND PATH OF TRAVEL COMPLIES WITH CBC 11B-206.
- B CONTRACTOR SHALL MAINTAIN FIRE LANE ACCESS THROUGHOUT PROJECT.
- C DO NOT INTERRUPT EXISTING UTILITY SERVICES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AND COORDINATED WITH THE OWNER.
- D PROTECT EXISTING & NEW STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, TREES AND
- SHRUBS FROM DAMAGE DURING CONSTRUCTION.
- E PATCH & REPAIR AREA AFFECTED BY THE WORK TO MATCH EXISTING ADJACENT SURFACE

10 REMOVE (E) ELECTRICAL EQUIPMENT AND CONCRETE PAD COMPLETELY, S.E.D PATCH FLUSH TO

11 (E) CHAIN LINK FENCE TO REMAIN, REPLACE IN-KIND AS REQUIRED FOR CONSTRUCTION ACCESS, SEE

20 COORDINATE TRENCH ROUTE WITHOUT IMPACTING FUTURE SHADE STRUCTURE FOUNDATION, SEE DETAIL 8/S5.01

ALL EXISTING FINISHES OR MATERIALS DAMAGED OR DEMOLISHED DUE TO NEW CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL STATE, INCLUDING BUT NOT LIMITED TO REINSTALLING OR REPLACING EXISTING CHAINLINK FENCING AS REQUIRED AND RESTRIPING PAVING IN KIND.

S.E.D. FOR TRENCH ROUTING, SEE ARCHITECTURAL SITE PLAN FOR STRIPING AT EXISTING PAVING.

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LEAD ELEMENTARY
SCHOOL
ELECTRICAL
SERVICE UPGRADE

SAN MATEO-FOSTER CITY

SAN MATEO-FOSTER CIT SCHOOL DISTRICT

CONSULTANT

STAMP

ST

STATE
DSA FILE NUMBER 41-26
APPL # 01-119699

REVISIONS

No. Description Date

Addendum 1 01/17/2022

MILESTONES

DD 07/21/21
90% CD

DSA SUB 08/25/21
BACKCHECK 10/18/21

OVERALL &
ENLARGED SITE

ENLARGED SITE

O1/17/2022

JOB# 2021011.09

SHEET# A D 1

GRAPHIC KEY

EXISTING CONSTRUCTION TO REMAIN

EXISTING TOILET ROOMS

EXISTING COVERED STRUCTURE

TRENCH FOR ELECTRICAL WORK, S.E.D. , 8/S5.01 & DETAILS ON SHEET A8.10

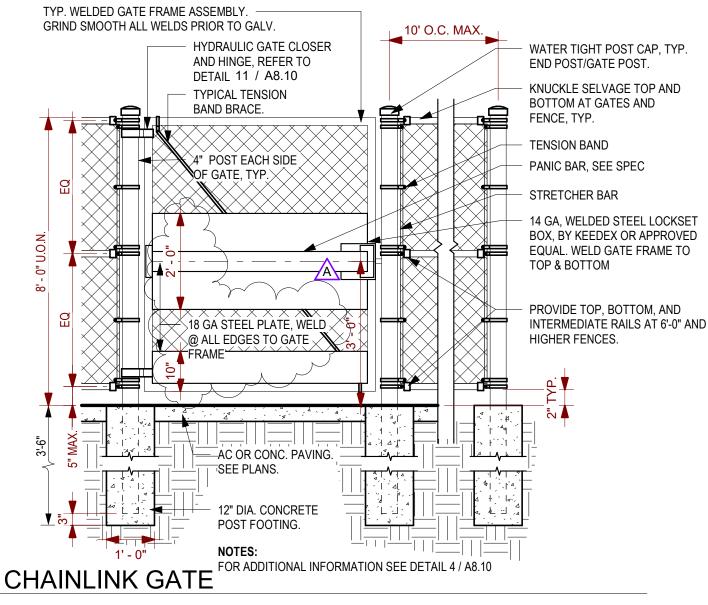
PROPERTY LINE

- X- - X- - X - EXISTING CHAIN LINK FENCE

—•—• CHAIN LINK FENCE

(E) FIRE DEPARTMENT ACCESS

EXISTING FIRE HYDRANT
(E) F.H.



1/2" = 1'-0"

2





LEED ELEMENTARY SCHOOL - HVAC REPLACEMENT

SAN MATEO FOSTER CITY SCHOOL DISTRICT

SHEET

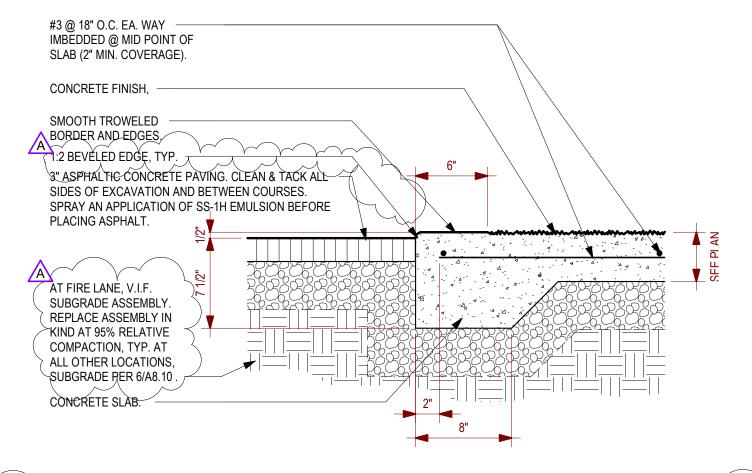
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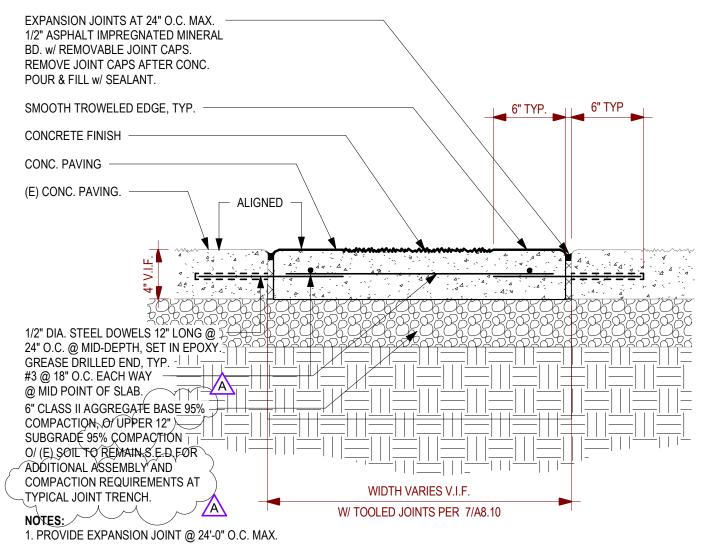
AD1-A8.10A

387 S. 1st Street, Suite 300 San Jose, CA., 95113

tel: (408) 300 - 5160 fax: (408) 300 - 5121

DATE 01/17/2022





ASPHALT/CONCRETE JOINT

1 1/2" = 1'-0"

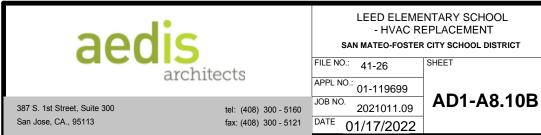
5

CONCRETE WALKWAY PATCH

1 1/2" = 1'-0"

6





SYMBOL LIST:

EI.I	PLAN, DETAIL OR SECTION DESIGNATION.
201	ROOM NUMBER.
	SHEET REFERENCE SYMBOL - SEE ASSOCIATED NOTE ON SAME SHEET.
3	
(CH)	FEEDER SCHEDULE SYMBOL.
	MECHANICAL EQUIPMENT TAG.
A	INDICATES FIXTURE TYPE
LUMINAI	RE SYMBOLS
	LUMINAIRE - SEE SCHEDULE.
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	POLE MOUNTED LUMINAIRE - SEE SCHEDULE.
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⊗ ⊗ (⊕) ⊕° TYPICA	EXIT LIGHT SINGLE FACE (WITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE
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SWITCH SWITCH	EXIT LIGHT SINGLE FACE (WITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX JON. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX,
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	EXIT LIGHT SINGLE FACE (WITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX, a = CIRCUIT CONTROLLED. THREE WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. FOUR WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. MOTOR RATED SWITCH WALL MOUNTED LOW VOLTAGE "DATALINE SWITCH = 48" FROM TOP OF BOX, UON,
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	EXIT LIGHT SINGLE FACE (WITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX, a = CIRCUIT CONTROLLED. THREE WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. FOUR WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. MOTOR RATED SWITCH WALL MOUNTED LOW YOLTAGE "DATALINE SWITCH = 48" FROM TOP OF BOX, UON, a = CIRCUIT CONTROLLED LIGHTING OCCUPANCY SENSOR
	EXIT LIGHT SINGLE FACE (WITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX, a = CIRCUIT CONTROLLED. THREE WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. FOUR WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. MOTOR RATED SWITCH WALL MOUNTED LOW VOLTAGE "DATALINE SWITCH = 48" FROM TOP OF BOX, UON, a = CIRCUIT CONTROLLED LIGHTING OCCUPANCY SENSOR MOTION DETECTOR POWER PACK ONE CIRCUIT WALL SWITCH WITH BUILT IN OCCUPANCY SENSOR. CONNECT SWITCHING TO LIGHTING FIXTURES AS REQUIRED. MOUNT AT +48"AFF TO THE TOP
TYPICA SWITCH \$ \$ a \$ 3 \$ 4 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	EXIT LIGHT SINGLE FACE (WITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX, a = CIRCUIT CONTROLLED. THREE WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. FOUR WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. MOTOR RATED SWITCH WALL MOUNTED LOW VOLTAGE "DATALINE SWITCH = 48" FROM TOP OF BOX, UON, a = CIRCUIT CONTROLLED LIGHTING OCCUPANCY SENSOR MOTION DETECTOR POWER PACK ONE CIRCUIT WALL SWITCH WITH BUILT IN OCCUPANCY SENSOR. CONNECT SWITCHING TO LIGHTING FIXTURES AS REQUIRED. MOUNT AT +48"AFF TO THE TOP OF THE SWITCH BOX, UON.
TYPICA SWITCH \$ \$ 4 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	EXIT LIGHT SINGLE FACE (MITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SMITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SMITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SMITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SMITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. THREE WAY SMITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. MOTOR RATED SMITCH WALL MOUNTED LOW VOLTAGE "DATALINE SMITCH = 48" FROM TOP OF BOX, UON, a = CIRCUIT CONTROLLED LIGHTING OCCUPANCY SENSOR MOTION DETECTOR POWER PACK ONE CIRCUIT WALL SMITCH WITH BUILT IN OCCUPANCY SENSOR. CONNECT SMITCHING TO LIGHTING FIXTURES AS REQUIRED. MOUNT AT +448"AFF TO THE TOP OF THE SMITCH BOX, UON. *ACLE SYMBOLS CONVENIENCE RECEPTACLE - DUPLEX AT + 18" AFF
TYPICA SWITCH \$ \$ 4 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	EXIT LIGHT SINGLE FACE (MITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX, a = CIRCUIT CONTROLLED. THREE WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. FOUR WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. MOTOR RATED SWITCH WALL MOUNTED LOW VOLTAGE "DATALINE SWITCH = 48" FROM TOP OF BOX, UON, a = CIRCUIT CONTROLLED LIGHTING OCCUPANCY SENSOR MOTION DETECTOR POWER PACK ONE CIRCUIT WALL SWITCH WITH BUILT IN OCCUPANCY SENSOR. CONNECT SMITCHING TO LIGHTING FIXTURES AS REQUIRED. MOUNT AT +48"AFF TO THE TOP OF THE SWITCH BOX, UON. "ACLE SYMBOLS CONVENIENCE RECEPTACLE - DUPLEX AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX U.ON. GFCI CONVENIENCE RECEPTACLE - DUPLEX AT + 18" AFF
NOTION SWITCH \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	EXIT LIGHT (DOUBLE FACE) (WITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX, a = CIRCUIT CONTROLLED. THREE WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. FOUR WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. MOTOR RATED SWITCH WALL MOUNTED LOW VOLTAGE "DATALINE SWITCH = 48" FROM TOP OF BOX, UON, a = CIRCUIT CONTROLLED LIGHTING OCCUPANCY SENSOR MOTION DETECTOR POWER PACK ONE CIRCUIT WALL SWITCH WITH BUILT IN OCCUPANCY SENSOR, CONNECT SWITCHING TO LIGHTING FIXTURES AS REQUIRED, MOUNT AT +40"AFF TO THE TOP OF THE SWITCH BOX, UON. **ACLE SYMBOLS* CONVENIENCE RECEPTACLE - DUPLEX AT + 18" AFF AND NOT LESS THAN IS" FROM BOTTOM OF BOX U.O.N. RECEPTACLE - DUBLE DUPLEX AT + 18" AFF
TYPICA SWITCH \$ \$ a \$ \$ 4 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	EXIT LIGHT (DOUBLE FACE) (WITH ARROW) - SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW) - SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX ION. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX ION. SINGLE POLE SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX ION. FOUR WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX ION. MOTOR RATED SWITCH WALL MOUNTED LOW VOLTAGE "DATALINE SWITCH = 48" FROM TOP OF BOX, ION, a = CIRCUIT CONTROLLED LIGHTING OCCUPANCY SENSOR MOTION DETECTOR POWER PACK ONE CIRCUIT WALL SWITCH WITH BUILT IN OCCUPANCY SENSOR. CONNECT SWITCHING TO LIGHTING FIXTURES AS REQUIRED. MOUNT AT +48" AFF TO THE TOP OF THE SWITCH BOX, ION. SACLE SYMBOLS CONVENIENCE RECEPTACLE - DUPLEX AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX ION. RECEPTACLE - DOUBLE DUPLEX AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX ION. SINGLE RECEPTACLE - DUPLEX AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX ION. SINGLE RECEPTACLE - NEMA 5-20R ION, AT + 18" AFF
● PICA	EXIT LIGHT SINGLE FACE (WITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES SWITCHING DESIGNATION NDICATES CIRCUIT NUMBER SYMBOLS SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. SINGLE POLE SWITCH, + 48" AFF TO THE TOP OF THE OUTLET BOX UON. FOUR WAY SWITCH + 48" AFF TO THE TOP OF THE OUTLET BOX UON. MOTOR RATED SWITCH WALL MOUNTED LOW VOLTAGE "DATALINE SWITCH = 48" FROM TOP OF BOX, UON, a = CIRCUIT CONTROLLED LIGHTING OCCUPANCY SENSOR MOTION DETECTOR POWER PACK ONE CIRCUIT AND SIXTURES AS REQUIRED, MOUNT AT +48" AFF TO THE TOP OF THE SWITCH BOX, UON. **ACLE SYMBOLS** CONVENIENCE RECEPTACLE - DUPLEX AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX U.ON. RECEPTACLE - DOUBLE DUPLEX AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX U.ON. SINGLE RECEPTACLE - NEMA 5-20R UON, AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX U.ON. SINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE, 5 NINGLE RECEPTACLE - NEMA 1-21 - 200 VOLT, THREE PHASE,
S → PICA	EXIT LIGHT SINGLE FACE (NITH ARROW)- SEE SCHEDULE. EXIT LIGHT (DOUBLE FACED WITH ARROW)- SEE SCHEDULE. EMERGENCY BATTERY PACK EXIT LIGHT INSTALL AS DIRECTED. L LUMINAIRE NOMENCLATURE INDICATES SWITCHING DESIGNATION NDICATES SWITCH, 4 48" AFF TO THE TOP OF THE OUTLET BOX ION. SINGLE POLE SWITCH, 4 48" AFF TO THE TOP OF THE OUTLET BOX ION. SINGLE POLE SWITCH, 4 48" AFF TO THE TOP OF THE OUTLET BOX ION. FOUR WAY SWITCH 4 48" AFF TO THE TOP OF THE OUTLET BOX ION. FOUR WAY SWITCH 4 48" AFF TO THE TOP OF THE OUTLET BOX ION. MOTOR RATED SWITCH MALL MOUNTED LOW VOLTAGE "DATALINE SWITCH *48" FROM TOP OF BOX, ION, a = CIRCUIT CONTROLLED LIGHTING OCCUPANCY SENSOR MOTION DETECTOR POWER PACK ONE CIRCUIT WALL SWITCH WITH BUILT IN OCCUPANCY SENSOR. CONNECT SWITCHING TO LIGHTING FIXTURES AS REQUIRED. MOUNT AT 448"AFF TO THE TOP OF THE SWITCH BOX, ION. GEOLOGICAL SWITCH BOX, ION. **ACLE SYMBOLS** CONVENIENCE RECEPTACLE - DUPLEX AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX ION. RECEPTACLE - DOUBLE DUPLEX AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX ION. SINGLE RECEPTACLE - NEMA L21 - 208 VOLT, THREE PHASE, 5 MIRE, AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX ION. SINGLE RECEPTACLE - NEMA L21 - 208 VOLT, THREE PHASE, 5 MIRE, AT + 18" AFF AND NOT LESS THAN 15" FROM BOTTOM OF BOX ION. SINGLE RECEPTACLE - NEMA L21 - 208 VOLT, THREE PHASE, 5 MIRE, AT + 18" AFF ION AND NOT LESS THAN 15" FROM BOTTOM OF BOX ION. DOUBLE DUPLEX RECEPTACLE WITH (1) CONTROLLED DUPLEX AND (1) UNCONTROLLED DUPLEX, AT +18" AFF

POWER DI	STRIBUTION SYMBOLS
_	PANELBOARD - SURFACE OR FLUSH MOUNTED.
LCP	LIGHTING CONTROL CABINET.
EM	EMERGENCY POWER INVERTER.
(JUNCTION BOX - CEILING OR WALL MOUNTED, SIZE PER CEC, TAPE AND TAG WIRES.
	MAIN SWITCHBOARD OR DISTRIBUTION PANEL.
∕ M′	MOTOR
30⊠₁	RATING AS INDICATED.
60 _□	UNFUSED DISCONNECT SWITCH - RATING AS INDICATED.
100	FUSED DISCONNECT SMITCH - SIZE FUSES PER MOTOR MANUFACTURER'S RECOMMENDATIONS. RATING AS INDICATED.
$^{\rm I\hspace{1em}I} \boxtimes$	MAGNETIC STARTER - NEMA SIZE INDICATED.
	TRANSFORMER - SEE SINGLE LINE FOR REQUIREMENTS.
≠ ±	GROUND ROD.
P	IN-GRADE ELECTRICAL PULL BOX WITH TRAFFIC RATED LID.
L	IN-GRADE LIGHTING PULL BOX WITH TRAFFIC RATED LID.
C	IN-GRADE COMMUNICATION PULL BOX WITH TRAFFIC RATED LID.
EVI	SINGLE EV CHARGER FOR BUS
EV2	DOUBLE EV CHARGER FOR CAR
POWER DIS	STRIBUTION SINGLE LINE SYMBOLS
	DRAM-OUT CIRCUIT BREAKER.
	CIRCUIT BREAKER. FUSED SMITCH.
	TOSED SATION.
€₩	"PG&E" METER W/ CURRENT TRANSFORMER.
****	TRANSFORMER.
	NORMALLY OPENED, AUXILIARY CONTACT.
— <u>/</u>	NORMALLY CLOSED, AUXILIARY CONTACT.
	AUTOMATIC TRANSFER SWITCH.
	EMERGENCY GENERATOR.
MIRING & C	CONDUIT RUN SYMBOLS
	CONDUIT - CONCEALED IN WALLS OR CEILING. CONDUIT - EXPOSED.
	CONDUIT - UNDERGROUND OR BELOW FLOOR.
	EXISTING CONDUIT, CABLES OR DEVICE
#10	CONDUIT - HOME RUN TO PANEL, TERMINAL CABINET, ETC. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AMG WIRES. CROSSHATCH WITH SUBSCRIPT "G" INDICATES GREEN GROUND WIRE. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSSHATCHES WITH "#10" INDICATES WIRE SIZE OTHER THAN #12'S.
	FLEX CONDUIT WITH CONNECTION.
─ •	CONDUIT - STUB UP. CONDUIT - STUB DOWN.

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	CONDUIT - CONCEALED IN WALLS OR CEILING.
}	CONDUIT - EXPOSED.
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*10	CONDUIT - HOME RUN TO PANEL, TERMINAL CABINET, ETC. RUNS MARKEI WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES. CROSSHATI WITH SUBSCRIPT "G" INDICATES GREEN GROUND WIRE. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE. CROSSHATCHES WITH "#10" INDICATES WIRE SIZE OTHER THAN #12'S.
	FLEX CONDUIT WITH CONNECTION.
•	CONDUIT - STUB UP.
•	CONDUIT - STUB DOWN.
	CONDUIT EMERGENCY SYSTEM.
E	CAPPED CONDUIT.
	CONDUIT CONTINUATION.

MATTST	OPPER DIGITAL LIGHTING MANAGEMENT CONTROLS
LCP	WATTSTOPPER LMCP24
LMRC 101	WATTSTOPPER LMRC-IOI
LMRC 211	WATTSTOPPER LMRC-2II
LMRC 212	WATTSTOPPER LMRC-212
LMRC 213	WATTSTOPPER LMRC-213
©	WATTSTOPPER LMDC-100, CEILING MOUNT
Φ_{101}	WATTSTOPPER LMDW-101, + 48" AFF TO TOP OF THE BOX, UON.
<u>0</u>	WATTSTOPPER LMLS-500, CEILING/WALL MOUNT
\$101	WATTSTOPPER LMSM-101, + 48" AFF TO TOP OF THE BOX, UON.

WATTSTOPPER LMSW-102, + 48" AFF TO TOP OF THE BOX, UON.

COMMUNICA	ATIONS SYMBOLS
	19" FLOOR MOUNTED DATA RACK.
∇	DATA/TEL STATION AT +18" AFF UON WITH (1) DATA OUTLET. CONNECT DATA/TEL OUTLETS OUTLETS PER THE DATA/TEL RISER DIAGRAM. STUB CONDUIT INTO AVAILABLE CEILING SPACE.
$ abla^{(2)}$	DATA/TEL STATION AT +18" AFF UON WITH (2) DATA OUTLETS. CONNECT DATA/TEL OUTLETS OUTLETS PER THE DATA/TEL RISER DIAGRAM. STUB CONDUIT INTO AVAILABLE CEILING SPACE.
MAP	(2) DATA OUTLETS FOR WIRELESS ACCESS POINT EQUIPMENT TO BE MOUNTED IN CEILING CHASE.
(9 4	INTERIOR SPEAKER WALL MOUNTED AT + 8'-0" AFF UON. CONNECT SPEAKER PER THE PA/CLOCK RISER DIAGRAM
⑤	CEILING MOUNTED SPEAKER. CONNECT SPEAKER PER THE PA/CLOCK RISER DIAGRAM
©	FLUSH MOUNTED EXTERIOR SPEAKER AT +8'-0" AFF UON. CONNECT EXTERIOR SPEAKER PER THE PA/CLOCK RISER DIAGRAM.
	COMBINATION FLUSH MOUNTED CLOCK/SPEAKER DEVICE AT +8'-0" AFF UON. CONNECT CLOCK/SPEAKER PER THE PA/CLOCK RISER DIAGRAM. PROVIDE $\frac{3}{4}$ "C TO ACCESSIBLE CEILING.
B	HDMI DEVICE. CONNECT PER A $4\frac{\ }{6}$ " EXTRA DEEP BOX WITH A 2 GANG RING THROUGH $1\frac{1}{4}$ "C TO CEILING.
<u>FIRE ALAR</u>	M SYMBOLS
FACP	FIRE ALARM CONTROL PANEL.
RPS	REMOTE POWER SUPPLY.

FACP	FIRE ALARM CONTROL PANEL.
RP5	REMOTE POWER SUPPLY.
AMP	EVAC SPEAKER AMPLIFIER.
FATC	FIRE ALARM TERMINAL CABINET.
ANN	REMOTE FIRE ALARM ANNUNCIATOR.
②	SMOKE DETECTOR
	PULL STATION
園	HORN STROBE

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BEANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30.

- I. ALL PERMANENT EQUIPMENT AND COMPONENTS.
- 2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g., HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLE HAVING A FLEIXBLE
- 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LINGITUDINAL DIRECTIONS:

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OF ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., SMACNA OR OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEM. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

- MP□ MD□ PP□ E図 OPTION I: DETAILED ON THE APPROVED DRAWINGS WITH
- PROJECT SPECIFIC NOTES AND DETAILS. MP | MD | PP | E | - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM #) #

GENERAL NOTES:

- THE CONTRACTOR SHALL BE LICENSED BY THE STATE OF CALIFORNIA C-IO AND SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
- 2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
- 3. PRIOR TO SUBMITTING A BID THE CONTRACTOR SHALL VISIT THE SITE, REVIEW THE EXISTING CONDITIONS AND ALLOW FOR LABOR, MATERIAL AND COORDINATION THAT IS NECESSARY TO PROVIDE A COMPLETE INSTALLATION OF EACH SYSTEM. THE

CONTRACTOR SHALL OBTAIN AND BE FAMILIAR WITH ALL OTHER TRADES. THE

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED

OUT ON ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR

- COORDINATION BETWEEN OTHER TRADES ON PROJECT. 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY, PERSONAL, PROPERTY DAMAGE, TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.
- 5. THE CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. THE CONTRACTOR SHALL AT THE CONCLUSION OF THE PROJECT PROVIDE ACCURATE "AS-BUILT" DRAWINGS. "AS-BUILT" DRAWINGS SHALL SHOW ACTUAL CHANGES TO ORIGINAL ELECTRICAL DRAWING, SHOW LOCATIONS OF PULL BOXES, CONDUIT RUNS AND WIRING CHANGES. THE CONTRACTOR SHALL PROVIDE ONE (I) HARDCOPY SET OF DOCUMENT DRAWINGS AND ONE (I) SET OF DOCUMENT DRAWINGS IN ELECTRONIC CAD FILE THAT REPRESENTS THE ACTUAL "AS-BUILTS". CAD FILES SHALL BE AUTOCAD 2020 FORMAT.
- 6. ALL MATERIALS PROVIDED TO THE PROJECT SHALL BE NEW. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
- 7. THE CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
- 6. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED "CUTTING, PATCHING, EXCAVATION, BACKFILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK. THE CONTRACTOR SHALL CONTACT "UNDERGROUND SERVICES ALERT" FOR LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF UNDERGROUND WORK.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.
- 10. ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS. ALL EXTERIOR CONDUITS SHALL BE "RSG" UNLESS OTHERWISE NOTED ON DRAWINGS.
- II. ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE AS A MINIMUM: TWO (2) #12'S MITH ONE (1) #12 GROUND. "TICK" MARKS SHOWN ON CIRCUITRY ARE FOR "ROUGH" ESTIMATING ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODE.
- 12. COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
- 13. SEE ARCHITECTURAL DOCUMENTS FOR EXACT PLACEMENT OF LIGHTING FIXTURES AND DEVICES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF CEILING TYPES FROM ARCHITECTURAL DOCUMENTS AND PROVIDE AND INSTALL ALL REQUIRED FIXTURE MOUNTING HARDWARE. PROVIDE AND INSTALL U.L. LISTED FIRE STOP ENCLOSURES FOR ALL RECESSED FIXTURES IN FIRE RATED CEILINGS.
- 14. THE CONTRACTOR SHALL PROVIDE IN EVERY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
- 15. POWER FEEDERS MAY NOT BE SHOWN ON THE DRAWINGS, REFER TO THE SINGLE LINE DIAGRAM FOR CONDUIT AND FEEDER INFORMATION. ALL DRAWINGS ARE DIAGRAMMATIC INDICATING LOCATION OR POSITION OF EQUIPMENT. FIELD VERIFY CONDITIONS PRIOR TO INSTALLATION OF ANY WORK.
- 16. MANUFACTURER'S RECOMMENDATIONS FOR CONDUCTOR SIZING, CIRCUIT BREAKER OR FUSE PROTECTION OF ELECTRICALLY OPERATED EQUIPMENT MAY DIFFER FROM THOSE INDICATED ON DRAWINGS. CONTRACTOR SHALL CONFIRM RATINGS PRIOR TO ORDERING EQUIPMENT. PROVIDE ELECTRICAL PROTECTION TO EQUIPMENT IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS AND PER NATIONAL ELECTRICAL CODE REQUIREMENTS.
- 17. CONTRACTOR SHALL REVIEW EQUIPMENT REQUIREMENTS OF OTHER TRADES AND PROVIDE POWER CIRCUITS AND CONNECTIONS TO ELECTRICALLY OPERATED EQUIPMENT.
- 18. EFFECTIVELY BOND ELECTRICAL CABINETS, ENCLOSURES AND CONDUIT RACEWAYS TO CODE APPROVED GROUND AS PART OF THE CONTINUOUS GROUNDING SYSTEM.
- 19. MEASEURE THE 3-PHASE AND PHASE TO NEUTRAL SERVICE VOLTAGE FOR 208/120V PANELS PRIOR TO ENERGIZING ANY PANELS OR EQUIPMENT. AVOID ENERGIZING 208/120V PANELS PHASE TO NEUTRAL VOLTAGE ABOVE 130 VOLTS. TRANSFORMER TAP SETTING
- 20. MEASURE THE I-PHASE AND PHASE TO NEUTRAL SERVICE VOLTAGE FOR 240/120V PANELS PRIOR TO ENERGIZING ANY PANELS OR EQUIPMENT. AVOID ENERGIZING 240/120V PANELS PHASE TO NEUTRAL VOLTAGE ABOVE 130 VOLTS.
- 21. DO NOT SUBSTITUTE SPECIFIED MATERIAL OR EQUIPMENT WITHOUT FIRST OBTAINING APPROVAL FROM THE OWNER OR HIS REPRESENTATIVE.
- 22. IDENTIFY ALL ABOVE CEILING JUNCTION BOXES COVERS WITH PANEL AND CIRCUITS IN LEGIBLE PRINT USING BLACK INDELIBLE INK. ABOVE CEILING JUNCTION BOXES SHALL ALSO BE LABELED AT THE REAR INTERIOR BOX WITH AN INDELIBLE BLACK MARKER.
- 23. LABEL ALL WALL AND/OR WIREMOLD MOUNTED OUTLET DEVICES WITH PANEL CIRCUIT IDENTIFICATION WITH BOLD TYPE-PRINTED LABELING. BLACK LETTERING ON WHITE BACKGROUND PREFERRED.
- 24. DERATE CONDUCTORS IN RACEWAYS IN ACCORDANCE WITH NEC CODE REQUIREMENTS. PANEL FEEDERS TO WIREMOLDS CAN ENTER AT VARIOUS LOCATIONS TO LIMIT CONDUCTOR CIRCUITS PER WIREMOLD CAPACITIES.
- 25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL NEW PENETRATIONS. REFER TO ARCHITECT'S PAINTING SECTION FOR REQUIREMENTS.

SHEET NO.	SHEET TITLE
EO.1	ELECTRICAL COVER SHEET
E1.1	ELECTRICAL SITE PLAN
E2.1	NEW FLOOR PLAN - BLDGS A, B, & C
E2.2	NEW FLOOR PLAN - BLDG D
E3.1	DEMOLITION SINGLE LINE DIAGRAM
E3.2	NEW SINGLE LINE DIAGRAM
E3.3	PANEL SCHEDULES
E4.1	ELECTRICAL DETAILS
E4.2	ELECTRICAL DETAILS
E4.3	ELECTRICAL DETAILS
E4.4	ELECTRICAL DETAILS

ABBREVIATIONS

ABV ABOVE AMP FRAME OR AMP FUSE ABOVE FINISHED FLOOR ARCHITECTURAL AMP SWITCH AMP TRIP AUTOMATIC TRANSFER SMITCH BKR BREAKER BUILDING CONDUIT BLDG CABLE TELEVISION CB CIRCUIT BREAKER CANDELAS CD CKT CIRCUIT CENTER LINE CEILING CO CONDUIT ONLY CTR (D) DET CENTER DEMOLISH DETAIL DIMENSION DISTR DISTRIBUTION DMG DRAWING EXISTING EMERGENCY EQUIPMENT FIRE ALARM FIRE ALARM CONTROL PANEL FACP FUTURE FINISH FLOOR G, GND GROUND HEIGHT HORSEPOWER INTERCOM INTERMEDIATE DISTRIBUTION FRAME JUNCTION BOX KILOAMPERE INTERRUPTING CAPACITY KILOVOLT ΚV KILOVOLT AMPERES KILOWATT LTG LIGHTING MCM THOUSAND CIRCULAR MILS MAIN DISTRIBUTION FRAME MECHANICAL MECH MANHOLE MTD MOUNTED MOUNTING NEW NORMALLY CLOSED NOT IN CONTRACT NOT IN ELECTRICAL CONTRACT NUMBER/ NORMALLY OPEN NOT TO SCALE ON CENTER POLE CIRCUIT BREAKER PUBLIC ADDRESS PULL BOX POWER FACTOR PHASE PANEL EXISTING TO BE RELOCATED READ REQUIRED REQT REQUIREMENT(S) ROOM RM RIGID STEEL CONDUIT SWITCHBOARD TERMINAL CABINET

TELEPHONE TYPICAL

WEATHERPROOF

TRANSFORMER

YOLT

UON

UNLESS OTHERWISE NOTED

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fax: (408)-300-5121 PROJECT LEAD ELEMENTARY

SCHOOL **ELECTRICAL** SERVICE UPGRADE

SAN MATEO-FOSTER CITY SCHOOL DISTRICT

CONSULTANT





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ADDENDUM 1 01/17/2022

MILESTONES

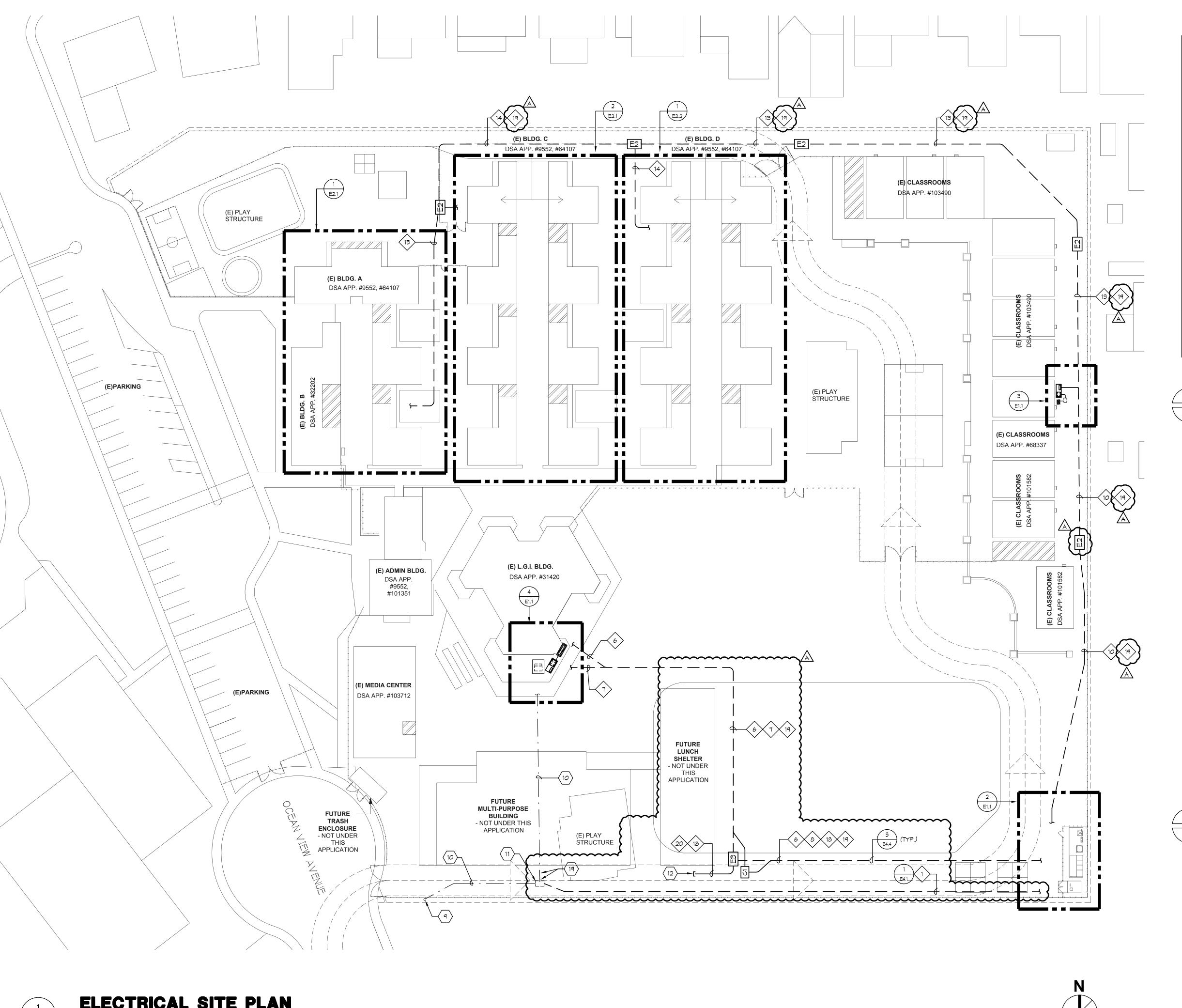
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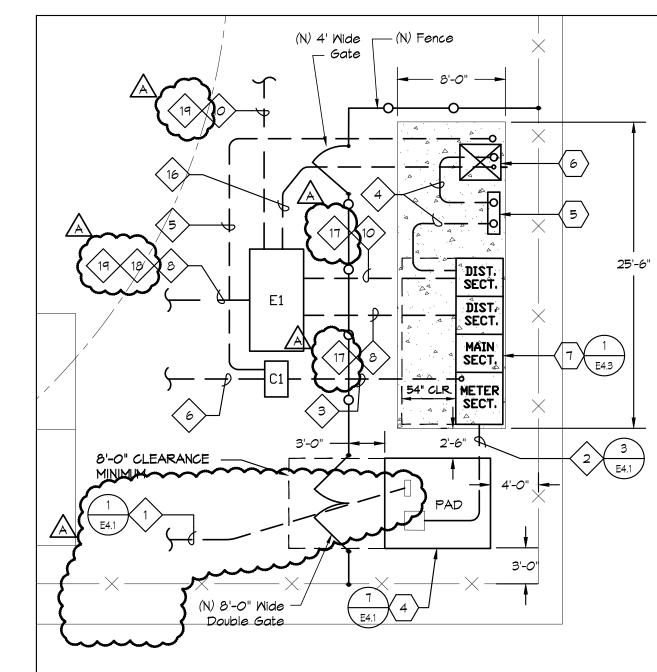
DSA SUB BACKCHECK

90% CD

SHEET

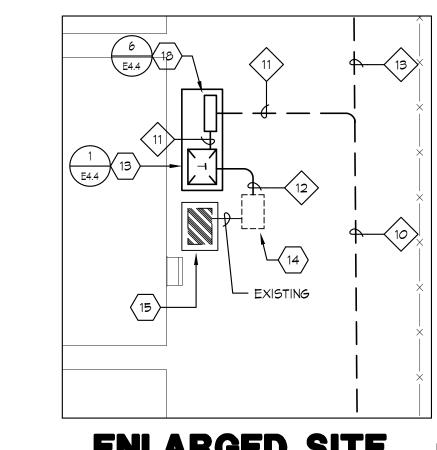
ELECTRICAL COVER SHEET





ELECTRICAL SWITCHGEAR DIMENSIONS

E1.1 | SCALE: 1/8"=1'-0"



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SITE PLAN

DD

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SCHOOL

ELECTRICAL

ENLARGED SITE PLAN

ELECTRICAL SWITCHGEAR DIMENSIONS

E1.1 | SCALE: 1/8"=1'-0"

ELECTRICAL SITE PLAN SCALE: 1" = 30'-0"

GENERAL NOTES:

CONTRACTOR SHALL COORDINATE UNDERGROUND REQUIREMENTS WITH ALL OTHER TRADES TO AVOID CONFLICTS. ~~~~~~~<u>/</u>A) ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION C THE UNDERGROUND CONDUITS AND CABLING.

- 3. CONTRACTOR TO SITE SURVEY EXISTING CONDITIONS AND LOCATIONS OF EXISTING UNDERGROUND SYSTEMS, WHERE NEW TRENCH WORK OCCURS PRIOR TO BIDDING. CONTRACTOR SHALL TAKE PROPER PRECAUTIONS TO ENSURE EXISTING UNDERGROUND SYSTEMS/CONDUIT/PIPES ARE NOT DAMAGED DURING INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR ANY REPAIRS REQUIRED IN THE EVENT THE EXISTING UNDERGROUND SYSTEMS ARE DAMAGED AS A RESULT OF THE NEW ELECTRICAL TRENCH WORK.
- 4. INSTALL PG &E PRIMARY TRENCH PER 1/ E4.1.
- 5. INSTALL PG &E SECONDARY TRENCH PER 3/ E4.1.
- 6. PG &E TRANSFORMER PAD SHALL BE PER 2/ E4.1.
- 7. ALL ON SITE TRENCH SHALL BE INSTALLED PER 3/ E4.4.
- 8. SEE THE DEMO SINGLE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS. 9. SEE NEW SINGLE LINE DIAGRAM FOR FEEDER CABLE AND CONDUIT
- REQUIREMENTS.
- 10. THE CONTRACTOR SHALL MANDREL THROUGH THE ENTIRE PG&E CONDUIT SYSTEM. COORDINATE WITH PG &E FOR ADDITIONAL REQUIREMENTS AND

CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE SHUTDOWN AND

DEMOLITION OF THE EXISTING SERVICE WITH THE NEW SERVICE CUTOVER.

PULLBOX SCHEDULE:

- NEW 4'-6"X8'-6" ELECTRIC / POWER PULLBOX WITH TRAFFIC RATED LID. LABEL LID 'POWER'.
- NEW B2436 ELECTRIC / POWER PULLBOX WITH TRAFFIC RATED
- LID. LABEL LID 'POWER'. NEW 3'X5' ELECTRIC / POWER PULLBOX WITH TRAFFIC RATED LID.
- NEW B2436 COMMUNICATIONS PULLBOX WITH TRAFFIC RATED LID.

SHEET NOTES:

- $\langle 1 \rangle$ NEW PG & POLE WITH NEW PG & PRIMARY RISER.
- $\left\langle 2 \right
 angle$ existing 1600a main switchboard to be converted to distribution
- PANEL "DP3". \langle 3 \rangle EXISTING PG&E TRANSFORMER TO BE REMOVED BY PG&E. DEMOLISH EXISTING $^\prime$ TRANSFORMER PAD AND PATCH SURFACE TO MATCH EXISTING. REFER TO

 $\langle 15 \rangle$ EXISTING DISTRIBUTION PANEL FOR PORTABLES.

SEAL THE PENETRATION HOLE INSIDE PULL BOX.

 $\langle 16 \rangle$ STUB SIGNAL INSIDE THE BUILDING'S ACCESSIBLE CEILING SPACE. BUILDING.

 \langle 17 angle NEW 600-3P, NEMA-3R, 600V, HEAVY DUTY, UNFUSED DISCONNECT SMITCH

 $\langle 18 \rangle$ NEW 400-3P, NEMA-3R, 600V, HEAVY DUTY, UNFUSED DISCONNECT SMITCH.

 $\left(19\right)$ AFTER THE REMOVAL OF THE PRIMARY PG &E CABLES, CONTRACTOR SHALL

REMOVE EXISTING UNDERGROUND CONDUIT PENETRATED INTO THE PULL BOX.

 \bigvee_{A}

- ARCHITECT DRAWINGS FOR ADDITIONAL REQUIREMENTS. $\langle 4 \rangle$ NEW PG &E TRANSFORMER PAD.
- (5) FUTURE PV DISCONNECT SMITCH.
- 6 FUTURE PV DISTRIBUTION PANE;L.
- \langle 7 \rangle NEW 2500A MAIN SMITCHBOARD.
- \langle 8 \rangle NEW 300 KVA TRANSFORMER 'TDP3'.

13 NEW 225KVA TRANSFORMER 'TDP1'.

- (9) EXISTING PG &E POLE WITH PRIMARY RISER. RISER TO BE DECOMMISSIONED/REMOVED BY PG &E.
- $\langle 10 \rangle$ EXISTING PG &E PRIMARY CONDUIT TO REMAIN. PRIMARY CONDUCTORS TO BE
- REMOVED BY PG &E. ackslash existing PG&E PRIMARY PULL BOX TO REMAIN IN PLACE AND BE REUSED.
- $\langle 12 \rangle$ STUB AND CAP UNDERGROUND CONDUIT FOR FUTURE BUILDING.
- EXISTING IN-GRADE ELECTRICAL PULL BOX. STUB NEW CONDUIT INTO EXISTING BOX AS REQUIRED.

CONDUIT SCHEDULE:

1 > (N) (1) 4"C - PG &E PRIMARY

2 (N) (7) 5"C - PG & SECONDARY

(3) (N) (1) 1"C - PG#E COMMUNICATIONS

 $\left\langle 4 \right\rangle$ (N)(2)3"C - FUTURE PV DISTRIBUTION PANEL.

 $\langle 5 \rangle$ (N) (1) 2"C - FUTURE PV COMMUNICATIONS

 $\langle 6 \rangle$ (N)(1)1"C - PG \neq COMMUNICATIONS (N) (1) 2"C - FUTURE PV COMMUNICATIONS

 $\langle 7 \rangle$ (N) (2) $2\frac{1}{2}$ "C - XFMR 'TDP3'

 $\langle \delta \rangle$ (N) (2) $2\frac{1}{2}$ "C - XFMR 'TDP3'

(N) (4) 4"C - FUTURE MULTI-USE (9) (N) (1) 3"C - DISTRIBUTION PANEL 'DP3"

 $\langle 10 \rangle$ (N) (1) 4"C - XFMR 'TDP1"

√ (N) (3) 4"C - XFMR 'TDP2" (11) (N) (1) 4"C - XFMR 'TDP1'

(12) (N) (2) 3"C - DISTRIBUTION PANEL 'DP1'

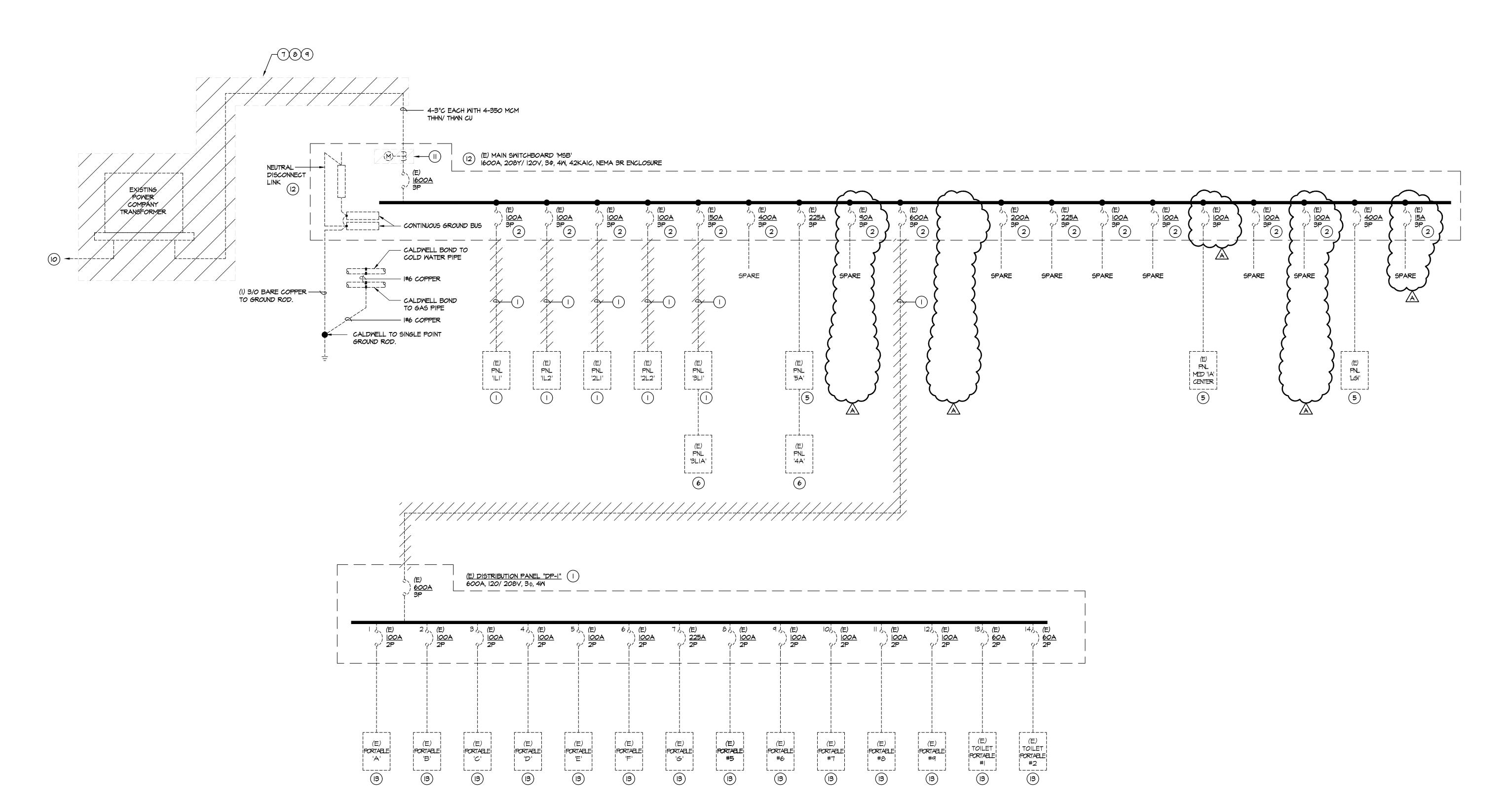
(N) (3) 4"C - XFMR 'TDP2'

(14) (N) (3) 4"C - XFMR 'TDP2' ✓ (N) (2) 4"C - PANEL 'DM'

(N) (2) 3"C - PANEL 'BM' (N) (3) 4"C - SPARE **_____** (20) (N) (4) 4"C - FUTURE MULTI-USE

 $\langle 16 \rangle$ (N) (7) $2\frac{1}{2}$ "C - FUTURE PV (N) (2) $2\frac{1}{2}$ "C - FUTURE PV $\langle 19 \rangle$ (N) (1) 2"C - FUTURE EV

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GENERAL NOTES:

- 2. SEE NEW SINGLE LINE DIAGRAM FOR ADDITIONAL REQUIREMENTS.
- 3. COORDINATE WITH THE PG&E UTILITY COMPANY FOR THE DISCONNECTING AND REMOVAL OF ALL ASSOCIATED EQUIPMENT AND CABLES.

DEMOLITION NOTES:

- DISCONNECT PANEL FROM EXISTING FEEDER AND REMOVE FEEDER BACK TO THE MAIN SMITCHBOARD.
- (2) TURN OFF CIRCUIT BREAKER AND LABEL AS SPARE.
- LABEL AS SPARE. IF A BUILDING OR PANEL IS CONNECTED, PROVIDED APPROPRIATE LABEL.
- 4 EXISTING PANEL / FEEDER TO REMAIN CONNECTED TO THE EXISTING MAIN SWITCHBOARD. CONFIRM WHICH BUILDING/ PANEL CIRCUIT BREAKER FEEDS AND PROVIDE APPROPRIATE LABEL.
- (6) EXISTING PANEL / FEEDER TO REMAIN.
- REMOVED BY PG&E. COORDINATE REMOVAL WITH PG&E.

7) EXISTING PG & E TRANSFORMER TO BE DISCONNECTED AND

- (O) EXISTING PG & E UTILITY POLE TO REMAIN.
- EXISTING PG&E METER, CT'S AND PT'S TO BE DISCONNECTED AND REMOVED BY PG&E. COORDINATE REMOVAL WITH PG&E.
- (2) EXISTING MAIN SWITCHBOARD TO BE CONVERTED TO DISTRIBUTION PANEL 'DP3'. DISCONNECT AND REMOVE EXISTING MAIN CIRCUIT BREAKER. DISCONNECT THE EXISTING MAIN BONDING JUMPER FROM THE GROUND BUS TO THE NEUTRAL

- (3) VERIFY THAT NOTHING IS CONNECTED TO THE CIRCUIT BREAKER. IF NOTHING IS CONNECTED, TURN OFF BREAKER AND
- 5 EXISTING PANEL / FEEDER TO REMAIN CONNECTED TO THE EXISTING MAIN SMITCHBOARD.

- 8 EXISTING PG&E PRIMARY CONDUCTORS TO BE REMOVED BY PG&E. COORDINATE REMOVAL WITH PG&E.
- EXISTING PG & E SECONDARY CONDUCTORS AND GROUNDING CONDUCTORS TO BE REMOVED BY PG & E. COORDINATE REMOVAL WITH PG&E.

- (3) EXISTING PANEL / FEEDER TO REMAIN CONNECTED TO THE EXISTING DISTRIBUTION PANEL.

I. SEE ELECTRICAL SITE PLAN AND ENLARGED SWITCHGEAR PLAN FOR ADDITIONAL REQUIREMENTS.

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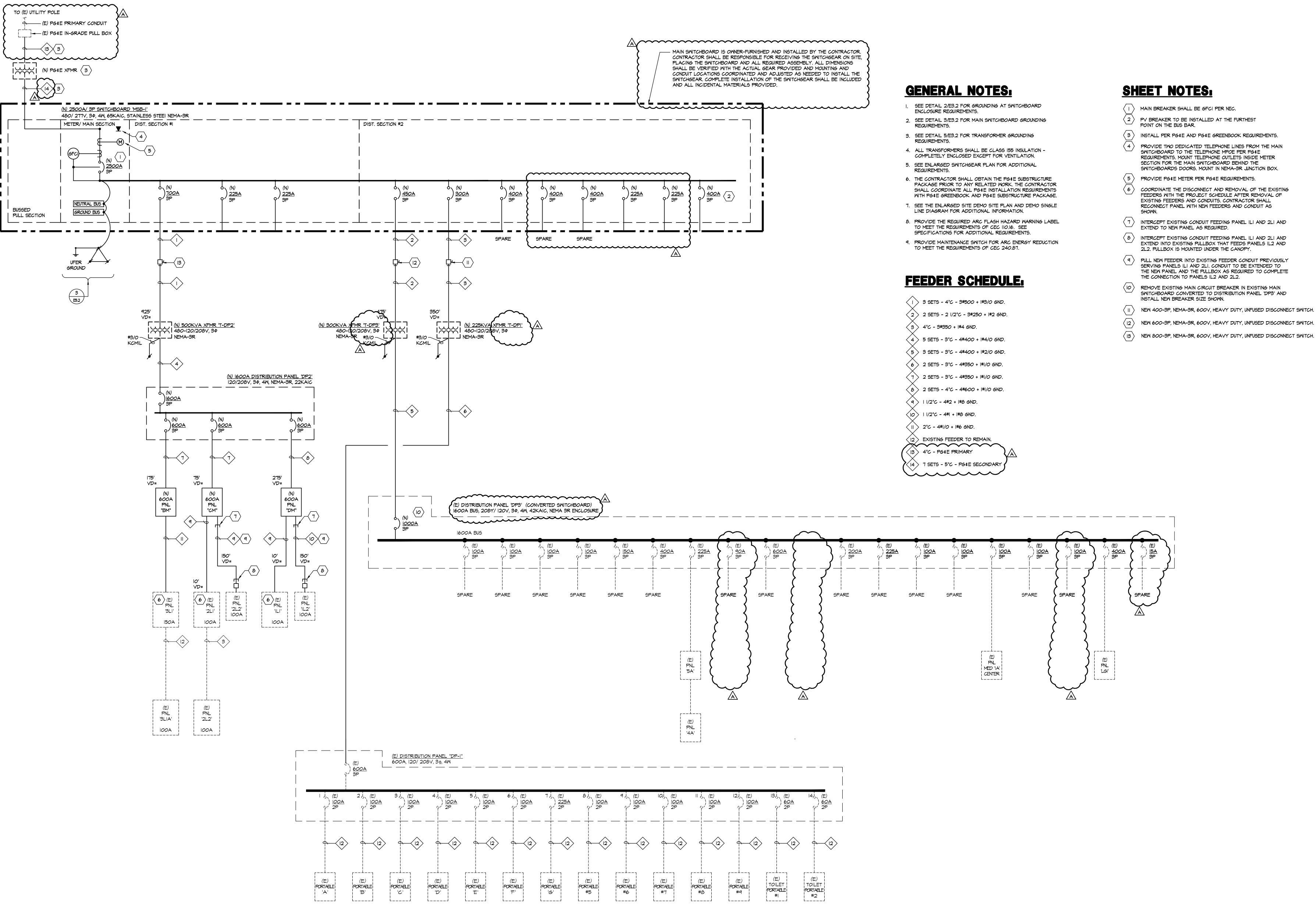
SHEET

DEMO SINGLE LINE DIAGRAM

AD1-**E3.1**



E3.1 NOT TO SCALE



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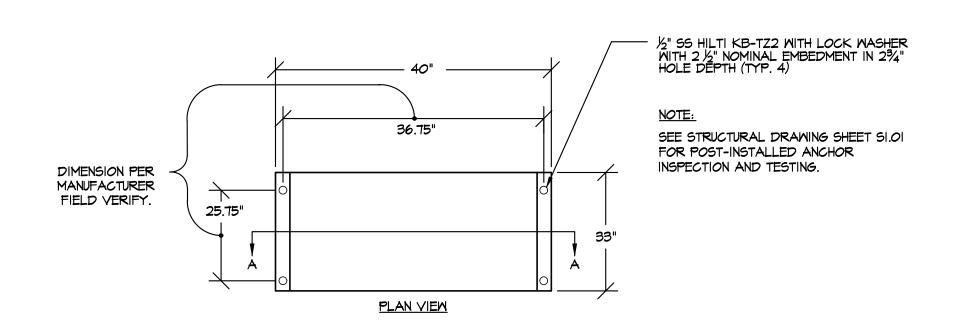
MILESTONES 90% CD

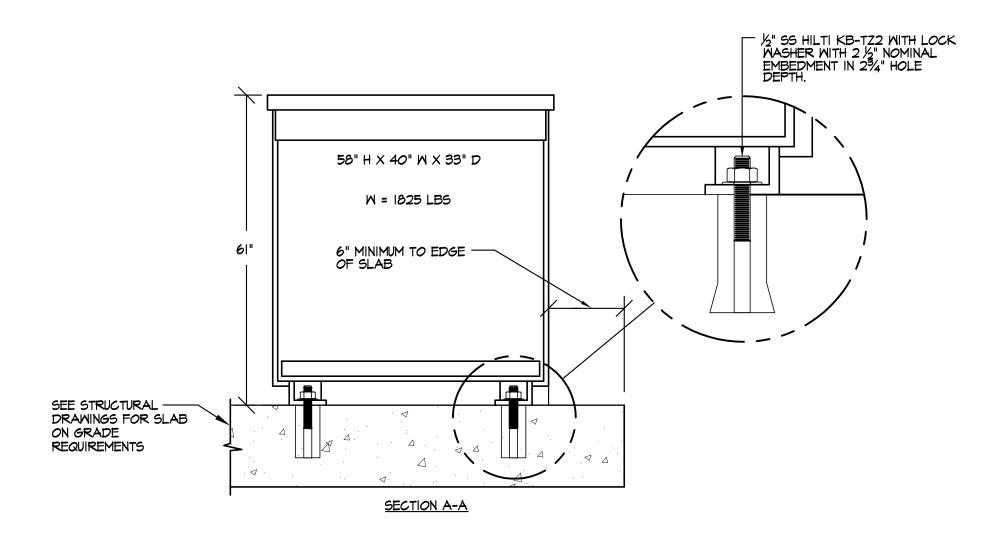
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NEW SINGLE LINE DIAGRAM

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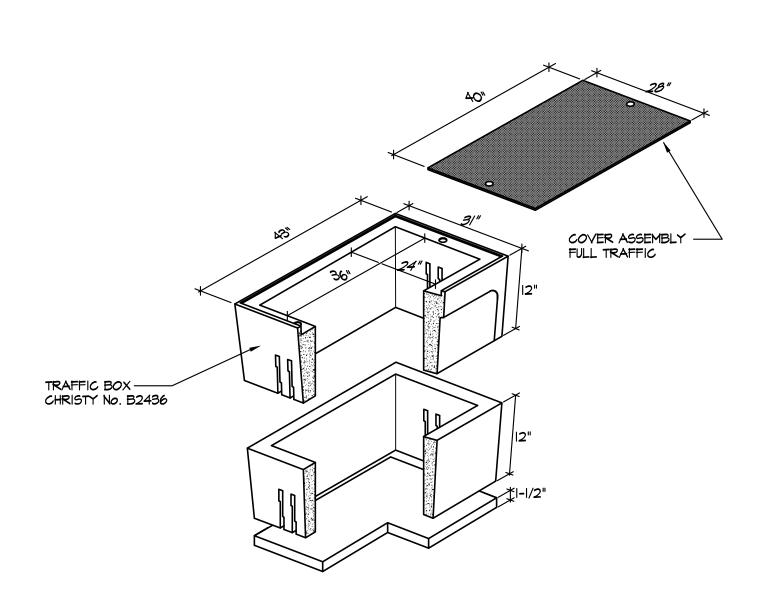
AD1-**E3.2**





DISTRIBUTION TRANSFORMER INSTALLATION DETAIL (225 KVA)

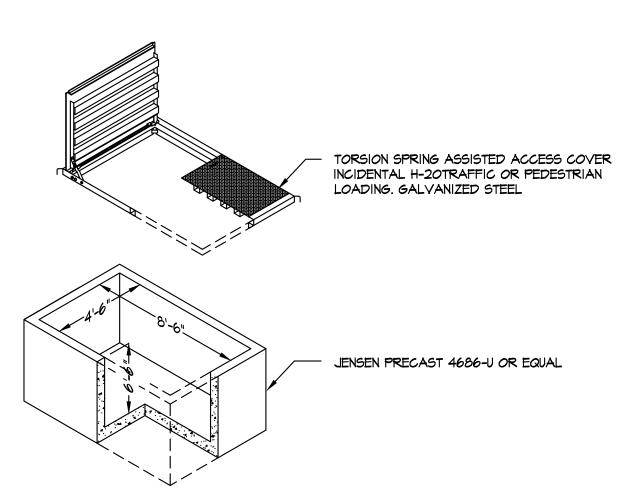




- HIGH DENSITY REINFORCED CONCRETE BOX WITH NON-SETTING SHOULDERS POSITIONED TO MAINTAIN GRADE AND FACILITATE BACK FILLING. APPROXIMATE DIMENSIONS SHOWN.
- 2. ALL CONDUITS SHALL ENTER FROM SIDES OF PULL BOX. CONTRACTOR SHALL PROVIDE PULL BOX EXTENSION AS REQUIRED. NO CONDUITS SHALL BE ALLOWED FROM THE BOTTOM OF THE PULL BOX.
- 3. CONTRACTOR SHALL STACK CONDUITS AS REQUIRED TO MEET THE NEC CODE REQUIREMENTS.
- 4. PROVIDE BELL ENDS ON ALL CONDUIT.
- 5. ALL PENETRATIONS INTO BOXES SHALL BE SEALED WITH GROUT.
- 6. PROVIDE BASE WITH DRAIN. PROVIDE DRAIN ROCK.

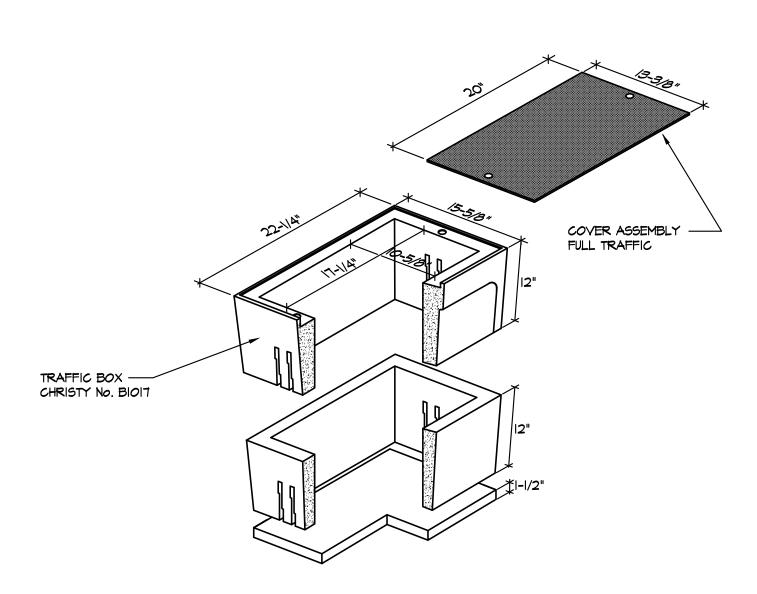
B2436 ELECTRICAL VAULT

(FULL TRAFFIC COVER) NOT TO SCALE



- HIGH DENSITY REINFORCED CONCRETE BOX WITH NON-SETTING SHOULDERS POSITIONED TO MAINTAIN GRADE AND FACILITATE BACK FILLING. APPROXIMATE DIMENSIONS SHOWN.
- 2. ALL CONDUITS SHALL ENTER FROM SIDES OF PULL BOX. NO CONDUITS SHALL BE ALLOWED FROM THE BOTTOM OF THE PULL BOX.
- 3. CONTRACTOR SHALL STACK CONDUITS AS REQUIRED TO MEET THE NEC CODE
- 4. PROVIDE BELL ENDS ON ALL CONDUIT.
- 5. ALL PENETRATIONS INTO BOXES SHALL BE SEALED WITH GROUT.
- 6. PROVIDE BASE WITH DRAIN. PROVIDE DRAIN ROCK.

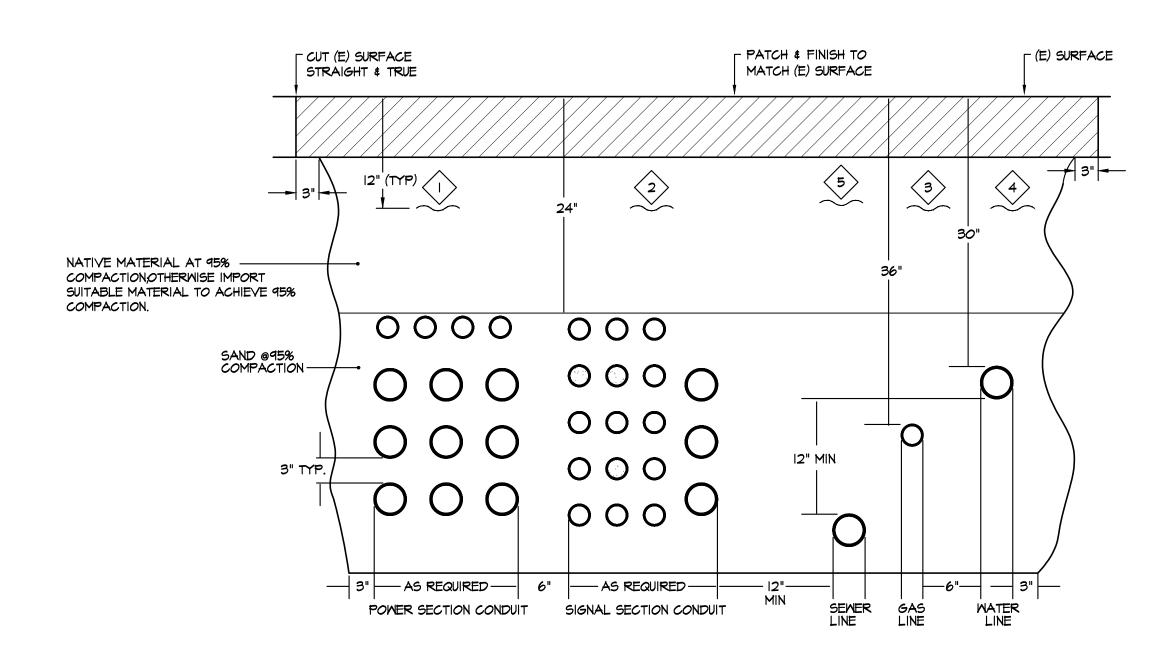


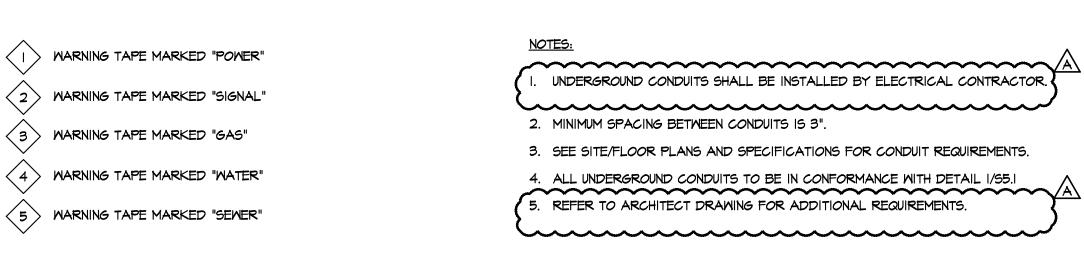


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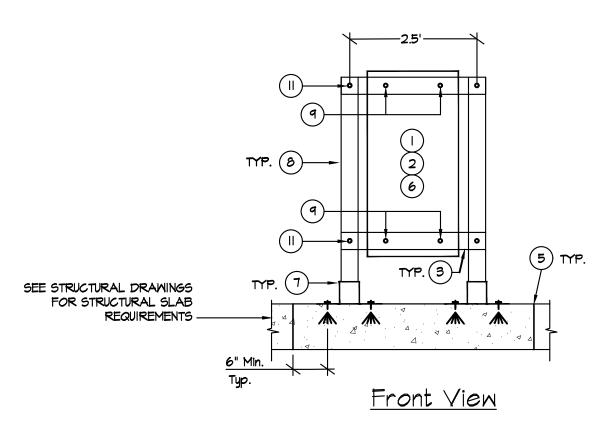


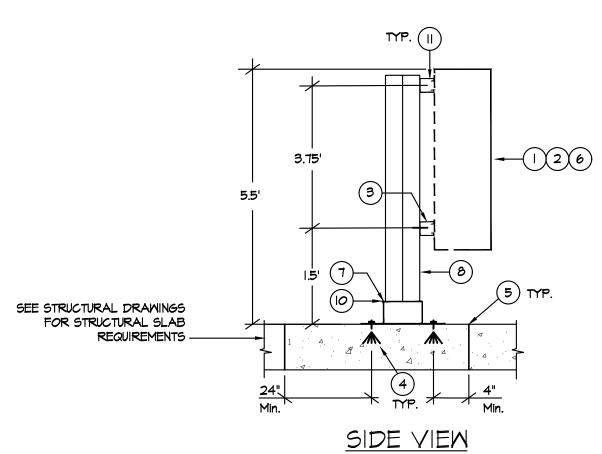
(FULL TRAFFIC COVER)





TYPICAL JOINT TRENCH & DUCT BANK DETAIL





- DISCONNECT (MAX WEIGHT 200 LBS).
- (2) TYPE 3R DISCONNECT.
- (3) PROVIDE UNISTRUT PIOOO MINIMUM 12 GA GALV STEEL.
- PROVIDE STAINLESS STEEL 1/2" X 2 3/8" NOMINAL EMBEDMENT HILTI KNIK BOLT TZ2 EXPANSION ANCHOR (ICC-ES-ESR 4266), IN 2-5/8" DEEP
- HOLE. (4) ANCHOR BOLTS PER POST BASE. 5 SLAB EDGE WHERE OCCURS.
- (6) DIMENSIONS OF DISCONNECT 29"H X 19"W X 8.5"D
- (7) PROVIDE UNISTRUT FLOOR SUPPORT P2013A SQ POST BASE.
- (8) PROVIDE DOUBLE UNISTRUT PIOOI HS MINIMUM 12 GA GALV STEEI.
- PROVIDE HEX HEAD CAP SCREWS 3/8"X2" WITH HEX NUTS AND WASHERS.

 (4) CAP SCREWS ARE FOR ATTACHMENT OF PANEL TO REAR STRUTS.
- PROVIDE (2) 1/2" GALV BOLTS FROM P2073A SQ POST BASE INTO VERTICAL UNISTRUT PIOOI. PROVIDE EACH BOLT WITH PIOIO NUT INSIDE STRUT. TYPICAL FOR BOTH P2073A SQ POST BASE.
- (II) PROVIDE 1/2" P GALV BOLT FASTENERS AT EACH INTERSECTION.

DISCONNECT INSTALLATION ON **UNISTRUT DETAIL**



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