ADDENDUM THREE

CITY OF PHARR

PHARR NEW AQUATIC CENTER

March 28, 2012

PROJECT MANUAL AND SPECIFICATIONS:

1. Section 001116: INVITATION TO BID: To allow more time for bidders to adequately prepare their bids the date for opening bids has been extended until 3:00 PM on Thursday, April 5, 2012. Bids will be received at the City Clerk's office in the City Hall building at 118 S. Cage, Pharr, Texas 78577. Location of the opening of bids will be announced on a board in the Lobby.
2. Section 004114, BID PROPOSAL FORM has been revised. See attached Section.
3. Section 012100, Allowances, has been revised. See attached Section.
4. Section 012300, ALTERNATES has been revised. See attached Section.
5. Section 055213, PIPE AND PIPE RAILINGS was inadvertently left out of the Project Manual. See attached Section.
6. Section 099600, HIGH PERFORMANCE COATINGS, has been added to cover painting of the project. See attached Section.
7. Section 131570, AQUATIC PLAY FEATURES: three manufacturers submitted for approval as equals for the equipment in this section. None of the manufacturers were approved as equals. Because these manufacturers have products of potential value to the project, separate alternates have been made for the three company's water features and slides: Alternate 3, Whitewater West, Alternate 4, SplashTacular and Alternate 5, Vortex. See Section 12300 and 004114, BID PROPOSAL FORM.

DRAWINGS:

1. The following drawings have been added: SD101, DECK GRADING PLAN. This sheet was on the index but inadvertently left out of the printing.
2. The following sheets have been reissued, replacing the original issued sheets: SD102, AQ210, AQ240.
3. See attached Mechanical, Electrical and Plumbing items.

End of Addendum No. Three (Following MEP attachment)

CITY OF PHARR
NEW PHARR AQUATIC CENTER

SECTION 004114 - BID PROPOSAL FORM

Instructions to Bidders: Bidder is to complete all blank spaces of this form. Enter None, No Bid, Not Applicable, if necessary. Amounts shall be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.

Project:
City of Pharr
New Pharr Aquatic Center
March 15, 2012

To: City of Pharr

PART 1 - BIDDER INFORMATION (Print)

1.1 Bidder Name: _____

1.2 Bidder Address: Street Address: _____
City: _____ State: _____ Zip: _____
Phone #: ( ) _____ Fax #: ( ) _____
e-mail_____

1.3 Bidder is a/an (mark one):

_____Individual
_____Partnership
_____State of _____ Corporation
_____Foreign (Out of State) Corporation
_____Joint Venture
_____Other: _____

PART 2 - BIDDER REPRESENTATIONS

2.1 Bidder, having carefully examined the site of the proposed work and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of labor, hereby proposes to furnish all permits, fees, temporary utilities, utility locates, equipment, labor, materials and supplies, all insurance and bonding requirements, and jobsite cleanup, as required to complete work in accordance with the Contract Documents, at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents.

2.2 Bidder understands that the City of Pharr reserves the right to reject any or all bids and to waive any informality in the bidding.

2.3 Modifications of the Bid Form or failure to properly complete the Bid Form by the Contractor may be grounds for disqualification of the Contractor's proposal.

2.4 Bidder agrees that this bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving bids.

2.5 Upon receipt of written Notice of Acceptance of this bid, Bidder will execute the City of Pharr formal contract within ten (10) days.

2.6 Bidder has included in his Bid all Allowances listed in the Section 012100, ALLOWANCES:
   A. $20,000.000 for the Allowance No.1, two custom exhaust hoods, Ansul fire suppression and stainless steel wall covering for the concession area.
   B. $40,000.00 for the Allowance No. 2, The Evacuator, a system for source removal of chloramines from the Natatorium.

2.7 The undersigned Bidder proposes to construct the entire project and to perform and fulfill all obligations incident thereto in strict accordance with and within the time(s) provided by the terms

and conditions of the Contract Documents for the above described work and Project, including any and all Addenda thereto, for the total lump sum of:
(written out) _____ Dollars
(numerical) $_____ Dollars

2.7 Add Alternates as described in Section 012300 Alternates:
2.7.1 For the construction of the enclosed flume body slide at the Leisure Pool, Add Alternate No. 1:
(written out)_____
(numerical)_____
2.7.2 For the construction of the Lazy River, Add Alternate No. 2:
(written out)_____
(numerical)_____
2.7.3 For the construction of WhiteWater West Industries water features and waterslides (indicate Add or Deduct), Alternate No. 3:
(written out)_____
(numerical)_____
2.7.4 For the construction of the SplashTacular Waterslides and Waterpark Attractions water features and waterslides (indicate Add or Deduct), Alternate No. 4:
(written out)_____
(numerical)_____
2.7.5 For the construction of the Vortex Aquatic Structures International Inc. water features and water slides, Alternate No. 5:
(written out)_____
(numerical)_____

2.8 The prices specified include all taxes and duties of any kind levied by federal, state, municipal, or other government authority, which either party is required to pay with respect to the materials or services covered by this Agreement.

2.9 Bidder acknowledges receipt of the following addenda: 1,2,3,4_____ (If none, so state).

2.10 Completion Date: Bidder hereby agrees to complete the Work of these Contract Documents by the following dates:

Council Award, April 10 or April 17, 2012
Date of Notice to Proceed: April 19, 2012
Substantial Completion: October 19, 2012 (183 days construction period).
The completion dates shall not be adjusted for the award of bid alternates.

2.11 Submitted by:

By_____Date_____

Witness_____Date_____

Seal

END OF SECTION 004114

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements governing the following:

1. Lump-sum allowances.
2. Testing and inspecting allowances.

B. See Division 01 Section "Quality Requirements" for procedures governing the use of allowances for testing and inspecting.

1.2 SELECTION AND PURCHASE

A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.

B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

C. Purchase products and systems selected by Architect from the designated supplier.

1.3 SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.

C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.4 COORDINATION

A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.5 LUMP-SUM ALLOWANCES

A. Allowance shall include cost to Contractor of specific products and materials selected by Architect under allowance and shall include taxes, freight, and delivery to Project site.

B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.6 TESTING AND INSPECTING ALLOWANCES

A. Testing and inspecting allowances include the cost of engaging testing agencies, actual tests and inspections, and reporting results.

B. The allowance does not include incidental labor required to assist the testing agency or costs for retesting if previous tests and inspections result in failure. The cost for incidental labor to assist the testing agency shall be included in the Contract Sum.

C. Costs of services not required by the Contract Documents are not included in the allowance.

D. At Project closeout, credit unused amounts remaining in the testing and inspecting allowance to Owner by Change Order.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

A. Allowance No. 1: For the labor and material to provide the two Captive air custom hoods and stainless steel wall coverings in the concession area as indicated on Sheet EQ100, Items H-1, H-2, 39 (Ansul system) and 40, an allowance of $20,000.00 shall be included in the bid price as indicated on the Bid Proposal Form, 004114-2.

B. Allowance No. 2: For the additional labor and material costs to provide the Paddock Evacuator system as a part of the gutter on approximately 85 feet of the West side of the Competition Pool, the ducts to the exterior of the building and connections to the back of the gutter routed to the exterior of the building with two new inline exhaust fans, an allowance of $40,000.00 shall be included in the bid price. See attached drawing.

END OF SECTION 012100

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDE

A. Add Alternate No. 1: Add the enclosed flume body slide to the Leisure Pool. This work includes all of the work as specified in Section 131650 – Fiberglass Waterslides pertaining to the enclosed flume body slide. Provide all of the slides on the project from the same manufacturer.

B. Add Alternate No. 2: Add the Lazy River, including piping, pumps, filters, water treatment, water slide and all associated work, decks and play features as described on the AQ Aquatics sheets, but especially on AQ140, AQ141, AQ240, AQ340 AND AQ540.. Delete the base bid irrigation and turf in the Lazy River location.

C. Alternate No. 3: Provide the WhiteWater West Industries Custom HS500WB Water Feature and associated features and accessories in lieu of the specified Waterplay Solutions Corp. water features AND waterslides in the leisure pool and other pools. Provide the proposed design, price quotation from the manufacturer and complete equipment list with flows and pump requirements for evaluation of this alternate.

D. Alternate No. 4: Provide the SplashTacular Waterslides and Waterpark Attractions Water Feature AND waterslides, associated features and accessories in lieu of the specified Waterplay Solutions Corp. water features AND waterslides in the leisure pool and other pools. Provide the proposed design, price quotation from the manufacturer and complete equipment list with flows and pump requirements for evaluation of this alternate.

E. Alternate No. 5: Provide the Vortex Aquatic Structures International Inc. Water Feature AND waterslides, associated features and accessories in lieu of the specified Waterplay Solutions Corp. water features AND waterslides in the leisure pool and other pools. Provide the proposed design, price quotation from the manufacturer and complete equipment list with flows and pump requirements for evaluation of this alternate.

1.02 RELATED REQUIREMENTS

A. Specified elsewhere:

1. Bid form: quotation of cost of each Alternate.

2. Owner-Contractor Agreement: Alternates accepted by Owner for incorporation into Work.

3. Sections of Specifications identified in each Alternate.

1.03 PROCEDURES

A. Alternates will be exercised at option of Owner.

B. Coordinate related work and modify surrounding work required to complete Work, including changes under each Alternate, when acceptance is designated in Owner-Contractor Agreement.

C. Alternate Bids shall include all materials, labor, and contractor's mark-ups for profit, overhead, bonds, and insurance.

PART 2 - PRODUCTS

NOT APPLICABLE

PART 3 - EXECUTION

NOT APPLICABLE

END OF SECTION 012300

SECTION 055213 - PIPE AND TUBE RAILINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
   1. Steel pipe railings.

1.2 PERFORMANCE REQUIREMENTS

A. Structural Performance: Provide railings capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

   1. Handrails:

      a. Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.
      b. Concentrated load of 200 lbf (0.89 kN) applied in any direction.
      c. Uniform and concentrated loads need not be assumed to act concurrently.

   2. Top Rails of Guards:

      a. Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.
      b. Concentrated load of 200 lbf (0.89 kN) applied in any direction.
      c. Uniform and concentrated loads need not be assumed to act concurrently.

   3. Infill of Guards:

      a. Concentrated load of 50 lbf (0.22 kN) applied horizontally on an area of 1 sq. ft. (0.093 sq. m).
      b. Uniform load of 25 lbf/sq. ft. (1.2 kN/sq. m) applied horizontally.
      c. Infill load and other loads need not be assumed to act concurrently.

B. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1.3 SUBMITTALS

A. Product Data: For mechanically connected railings, grout, anchoring cement, and paint products.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

   1. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

C. Samples: For each exposed finish required.

D. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, according to ASTM E 894 and ASTM E 935.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Steel Pipe and Tube Railings:

a. Pisor Industries, Inc.
b. Sharpe Products.
c. Wagner, R & B, Inc.; a division of the Wagner Companies.
d. Local fabrication acceptable.

2.2 METALS

A. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails, unless otherwise indicated.

B. Steel and Iron:

1. Tubing: ASTM A 500 (cold formed).
2. Pipe: ASTM A 53/A 53M, Type F or Type S, Grade A, Standard Weight (Schedule 40), unless another grade and weight are required by structural loads.
3. Plates, Shapes, and Bars: ASTM A 36/A 36M.
4. Castings: Either gray or malleable iron, unless otherwise indicated.

a. Gray Iron: ASTM A 48/A 48M, Class 30, unless another class is indicated or required by structural loads.
b. Malleable Iron: ASTM A 47/A 47M.

2.3 MISCELLANEOUS MATERIALS

A. Fasteners: Provide concealed fasteners, unless unavoidable or standard for railings indicated.
1. Steel Railings: Plated steel fasteners complying with ASTM B 633, Class Fe/Zn 25 for electrodeposited zinc coating.

B. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

C. Shop Primers: Provide primers that comply with Division 09 painting Sections.

D. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79.

E. Zinc-Rich Primer: Complying with SSPC-Paint 20 or SSPC-Paint 29 and compatible with topcoat.

F. Grout and Anchoring Cement: Factory-packaged, nonshrink, nonmetallic grout complying with ASTM C 1107; or water-resistant, non-shrink anchoring cement; recommended by manufacturer for exterior use.

2.4 FABRICATION

A. General: Fabricate railings to comply with design, dimensions, and details indicated, but not less than that required to support structural loads.

B. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.

C. Welded Connections for Aluminum Pipe: Fabricate railings to interconnect members with concealed internal welds, using manufacturer's standard system of sleeve and socket fittings.

D. Non-welded Connections: Connect members with concealed mechanical fasteners and fittings.

E. Form changes in direction by bending or by inserting prefabricated elbow fittings.

F. Form curves by bending in jigs to produce uniform curvature; maintain cross section of member throughout bend without cracking or otherwise deforming exposed surfaces.

G. Close exposed ends of railing members with prefabricated end fittings.

H. Provide wall returns at ends of wall-mounted handrails, unless otherwise indicated.

I. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work, unless otherwise indicated.

2.5 FINISHES

A. Steel and Iron:
1. Shop-Primed Steel Finish: Prepare to comply with SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning" and apply primer to comply with SSPC-PA 1.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation.

1. Set posts plumb within a tolerance of 1/16 inch in 3 feet (2 mm in 1 m).
2. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet (5 mm in 3 m).

B. Anchor posts in concrete by inserting into preset steel pipe sleeves and grouting annular space.

C. Anchor posts to metal surfaces with oval flanges.

D. Anchor railing ends to concrete and masonry with round flanges connected to railing ends and anchored to wall construction with anchors and bolts.

E. Attach handrails to wall with wall brackets.

1. Use type of bracket with flange tapped for concealed anchorage to threaded hanger bolt.
2. For steel-framed partitions, fasten to steel framing or concealed steel reinforcements using self-tapping screws of size and type required to support structural loads.

3. For steel-framed partitions, fasten brackets with toggle bolts installed through flanges of steel framing or through concealed steel reinforcements.

F. Adjusting and Cleaning:

1. Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting.
2. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

END OF SECTION 055213

SECTION 099600 - HIGH-PERFORMANCE COATINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes surface preparation and application of high-performance coating systems.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples for Initial Selection: For each type of finish-coat product indicated.

C. Product List: For each product indicated. Cross-reference products to coating system and locations of application areas. Use same designations indicated on Drawings and in schedules.

D. LEED Submittals: For Credit EQ 4.2, manufacturers' product data for coatings, including printed statement of VOC content and chemical components.

1.3 QUALITY ASSURANCE

A. Master Painters Institute (MPI) Standards:

1. Products: Complying with MPI standards indicated and listed in "MPI Approved Products List."
2. Preparation and Workmanship: Comply with requirements in "MPI Architectural Painting Specification Manual" for products and coating systems indicated.

B. Mockups: Apply benchmark samples of each coating system indicated 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 type of coating and substrate.

   a. Wall and Ceiling Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
   b. Other Items: Architect will designate items or areas required.

2. Apply benchmark samples after permanent lighting and other environmental services have been activated.
3. Final approval of color selections will be based on benchmark samples.

   a. If preliminary color selections are not approved, apply additional benchmark samples of additional colors selected by Architect at no added cost to Owner.

PART 2 - PRODUCTS

2.1 HIGH-PERFORMANCE COATINGS, GENERAL

A. Material Compatibility:

1. Provide materials for use within each coating 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. Provide products of same manufacturer for each coat in a coating system.

B. Chemical Components of Interior Paints and Coatings: Provide products that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24) and the following chemical restrictions:

1. Flat Paints and Coatings: VOC content of not more than 50 g/L.
2. Nonflat Paints and Coatings: VOC content of not more than 150 g/L.
3. Anticorrosive Coatings: VOC content of not more than 250 g/L.
4. Stains: VOC content of not more than 250 g/L.
5. Aromatic Compounds: Paints and coatings shall not contain more than 1.0 percent by weight of total aromatic compounds (hydrocarbon compounds containing 1 or more benzene rings).
6. Restricted Components: Paints and coatings shall not contain any of the following:

    a. Acrolein.
    b. Acrylonitrile.
    c. Antimony.
    d. Benzene.
    e. Butyl benzyl phthalate.
    f. Cadmium.
    g. Di (2-ethylhexyl) phthalate.
    h. Di-n-butyl phthalate.
    i. Di-n-octyl phthalate.
    j. 1,2-dichlorobenzene.
    k. Diethyl phthalate.
    l. Dimethyl phthalate.
    m. Ethylbenzene.
    n. Formaldehyde.
    o. Hexavalent chromium.
    p. Isophorone.
    q. Lead.
    r. Mercury.
    s. Methyl ethyl ketone.
    t. Methyl isobutyl ketone.
    u. Methylene chloride.
    v. Naphthalene.
    w. Toluene (methylbenzene).
    x. 1,1,1-trichloroethane.
    y. Vinyl chloride.

C. Colors: As selected by Architect from manufacturer's full range.

2.2 BLOCK FILLERS

A. Epoxy Block Filler: MPI #116.

1. VOC Content: Minimum E Range of E1.

2.3 METAL PRIMERS

A. Epoxy Zinc Primer: MPI #20.

1. VOC Content: Minimum E Range of E1.

2.4 EPOXY COATINGS

A. Epoxy, Cold-Cured, Gloss: MPI #77.

1. VOC Content: Minimum E Range of E1.

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 work.

1. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

a. Concrete: 12 percent.
b. Masonry (Clay and CMU): 12 percent.
c. Gypsum Board: 12 percent.

2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
3. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
4. Coating application indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates indicated.

B. Remove plates, machined surfaces, and similar items already in place that are not to be coated. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and coating.

1. After completing coating operations, reinstall items that were removed; use workers skilled in the trades involved.

C. Clean substrates of substances that could impair bond of coatings, including dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers as required to produce coating systems indicated.

D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.

E. Clay Masonry Substrates: Remove efflorescence and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.

F. CMU Substrates: Remove efflorescence and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.

G. Steel Substrates: Remove rust and loose mill scale using methods recommended in writing by coating manufacturer.

H. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied coatings.

I. Aluminum Substrates: Remove surface oxidation.

J. Wood Substrates:

1. Scrape and clean small, dry, seasoned knots, and apply a thin 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 back sides 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 APPLICATION

A. Apply high-performance coatings according to manufacturer's written instructions.

1. Use applicators and techniques suited for coating and substrate indicated.
2. Coat surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, coat surfaces behind permanently fixed equipment or furniture with prime coat only.
3. Coat back sides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.

B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of the same material are to be applied. Tint undercoats to match color of finish coat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.

C. If undercoats or other conditions show through final coat, apply additional coats until cured film has a uniform coating finish, color, and appearance.

D. Apply coatings to produce surface films without cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Produce sharp glass lines and color breaks.

3.4 CLEANING AND PROTECTION

A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.

B. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.

C. Protect work of other trades against damage from coating operation. Correct damage by cleaning, repairing, replacing, and recoating, 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 coated surfaces.

3.5 EXTERIOR HIGH-PERFORMANCE COATING SCHEDULE

A. CMU Substrates:

1. Epoxy Coating System:

a. Block Filler: Epoxy block filler, MPI #116.
b. Intermediate Coat: Not required.
c. Topcoat: Epoxy, cold-cured, gloss, MPI #77.

B. Steel Substrates:

1. High-Build Epoxy Coating System:

a. Prime Coat: Cold-curing epoxy primer, MPI #101.
b. Intermediate Coat: High-build epoxy marine coating, low gloss, MPI #108.
c. Topcoat: Epoxy, cold-cured, gloss, MPI #77.

3.6 INTERIOR HIGH-PERFORMANCE COATING SCHEDULE

A. CMU Substrates:

1. Epoxy Coating System:

a. Prime Coat: Epoxy block filler, MPI #116.
b. Intermediate Coat: Epoxy, cold-cured, gloss, MPI #77.
c. Topcoat: Epoxy, cold-cured, gloss, MPI #77.

B. Steel Substrates:

1. High-Build Epoxy Coating System:

a. Prime Coat: Epoxy zinc primer, MPI#20.
b. Intermediate Coat: High-build epoxy marine coating, low gloss, MPI #108.
c. Topcoat: Epoxy, cold-cured, gloss, MPI #77.

C. Galvanized-Metal Substrates:

1. Epoxy Coating System:

a. Prime Coat: Cold-curing epoxy primer, MPI #101.
b. Intermediate Coat: Epoxy, cold-cured, gloss, MPI #77.
c. Topcoat: Epoxy, cold-cured, gloss, MPI #77.

D. Gypsum Board Substrates:

1. High-Performance Architectural Latex Coating System:

a. Prime Coat: Interior latex primer/sealer, MPI #50.
b. Intermediate Coat: High-performance architectural latex matching topcoat.
c. Topcoat: High-performance architectural latex, eggshell finish, MPI #139, Gloss Level 3.

END OF SECTION 099600

LEDUC ENGINEERING, LLC
MECHANICAL
ELECTRICAL
PLUMBING

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3/21/12

New Pharr Aquatic Center
Pharr Municipal Water Park
1212 Fir Rd.
Pharr, TX 78577

ADDENDUM #1

1. Changed AHU-1 and CU-1 on building "A" from a 5 Ton unit to a 7.5 Ton unit. Sheet M101
2. Redistribute CFM to supply grills on building "A" sheet M101.
3. Added two Captive Air kitchen supply fans to kitchen hoods.
4. Specify new AHU-1 and CU-1 on equipment schedules sheet M103.
5. Specify new KEFs and KSFs on fan schedule sheet M103.
6. Modify the electrical circuits for the AHU-1 and CU-1 sheet E103.
7. Added the electrical circuits for both KSFs sheet E103.
8. Modify electrical panel '3L' to new AHU-1, CU-1, and KSFs sheet E106.
9. Modify electrical riser with new disconnect and conduit size for AHU-1 and CU-1 sheet E108.
10. Clarification of plumbing fixture schedule sheet P104.

LEDUC ENGINEERING, LLC
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ELECTRICAL
PLUMBING

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3/21/12

New Pharr Aquatic Center
Pharr Municipal Water Park
1212 Fir Rd.
Pharr, TX 78577

ADDENDUM #2

1. Changed AHU-1 and CU-1 on building "A" from a 5 Ton unit to a 7.5 Ton unit. Sheet M101
2. Redistribute CFM to supply grills on building "A" sheet M101.
3. Added two Captive Air kitchen supply fans to kitchen hoods.
4. Specify new AHU-1 and CU-1 on equipment schedules sheet M103.
5. Specify new KEFs and KSFs on fan schedule sheet M103.
6. Modify the electrical circuits for the AHU-1 and CU-1 sheet E103.
7. Added the electrical circuits for both KSFs sheet E103.
8. Modify electrical panel '3L' to new AHU-1, CU-1, and KSFs sheet E106.
9. Modify electrical riser with new disconnect and conduit size for AHU-1 and CU-1 sheet E108.
10. Clarification of plumbing fixture schedule sheet P104.

LEDUC ENGINEERING INC.

STATE OF TEXAS
J. A. GUADARRAMA SIERRA
107961
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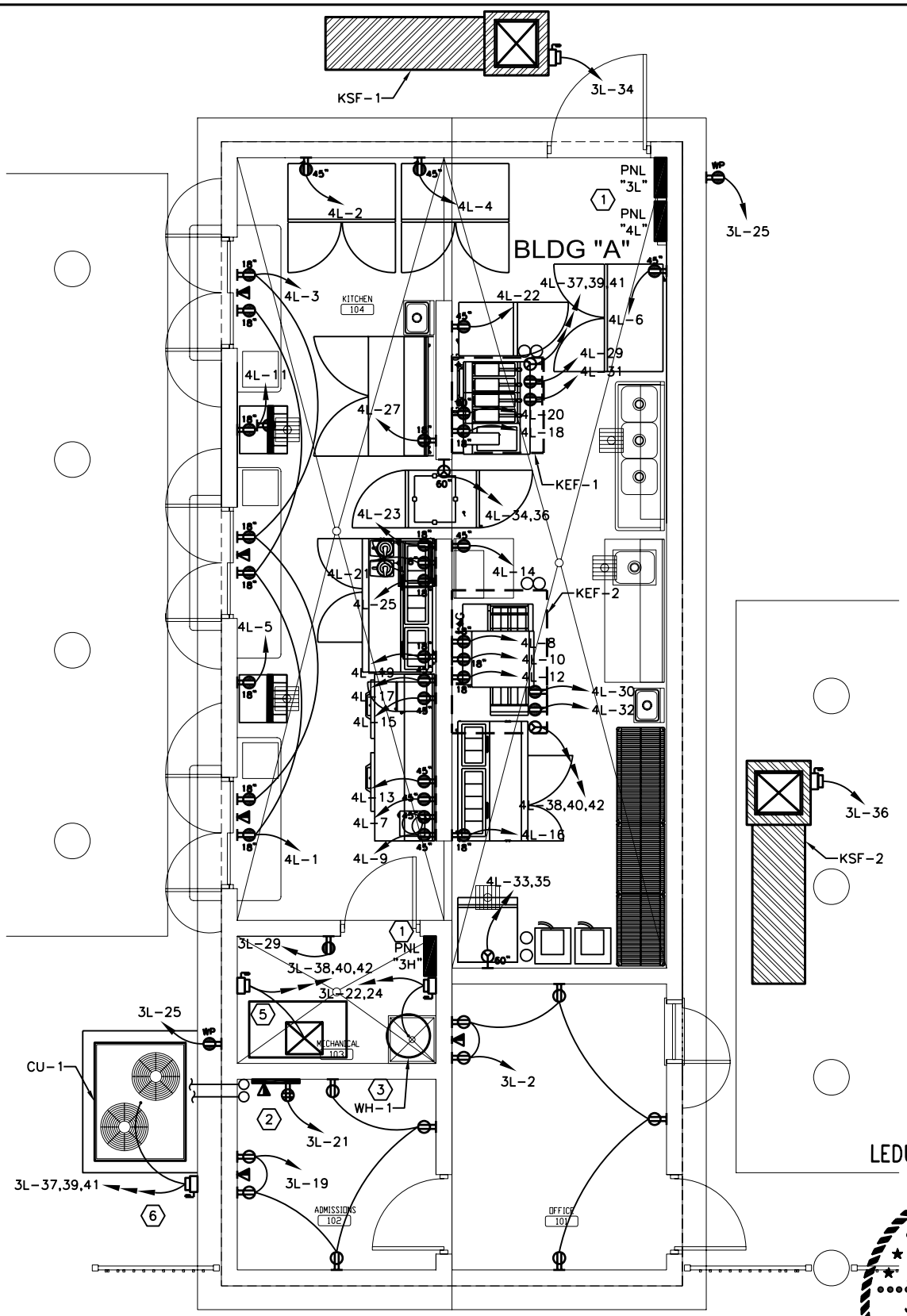

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ELECTRICAL POWER PLAN

SCALE: NOT TO SCALE

1 ADDENDUM 1: 03/21/2012

F-8517

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PROJECT:

PHARR
SWIMMING POOLS
PHARR TX.

DRAWN:	LEDUCCAD
CHECKED:	H.LEDUC
JOB NO.	1160
DATE:	03/21/12
DRAWING NO.	E103

PANEL '3L'

SERVICE: 120/208V3ø,4-WIRE
MAIN BREAKER RATING: 400A
MAIN LUGS/BUS RATING: 400A
A.I.C. RATING: 22,000

NEUTRAL BUS REQ'D: 100%
GROUND BUSS REQ'D: 100%
FEED: BOTTOM
MOUNTING: SURFACE

SOURCE: MDP "L"
ENCLOSURE: NEMA-1
LOCATION: KITCHEN

SERVING	BRKR SIZE	VOLTS-AMPS A	VOLTS-AMPS B	VOLTS-AMPS C			VOLTS-AMPS A	VOLTS-AMPS B	VOLTS-AMPS C	BRKR SIZE	SERVING
HAND DRYES FAMILY CHANGES 108	20/1	1500			1	2	900			20/1	REC.: OFFICE
HAND DRYES (MEN'S R.R.)	20/1		1500		3	4		1080		20/1	REC.: ADMISSION 111
HAND DRYES (MEN'S R.R.)	20/1			1500	5	6			1080	20/1	REC.: ADMISSION 112
REC: MEN'S R.R.	20/1	900			7	8	900			20/1	REC: WOMEN'S R.R.
REC: FAMILY CHANGE 108	20/1		1000		9	10		1000		20/1	REC: FAMILY CHANGE 106
REC.: JANITOR 109, MACHANICAL 103	20/1			360	11	12			1000	20/1	REC: FAMILY CHANGE 107
EF-1	20/1	865			13	14	1500			20/1	HAND DRYES (WOMEN'S R.R.)
EF-2	20/1		865		15	16		1500		20/1	HAND DRYES (WOMEN'S R.R.)
BUS SPACE ONLY	---			---	17	18			1500	20/1	HAND DRYES FAMILY CHANGES 106
REC.: ADMISSION OFFICE	20/1	1080			19	20	1500			20/1	HAND DRYES FAMILY CHANGES 107
REC.: TELEPHONE SYSTEM	20/1		500		21	22		2250		30/2	WH-1
REC.: PARKING AREA	20/1			720	23	24			2250		
REC.: EXTERIOR CONCESSION STAND	20/1	360			25	26	2250			30/2	WH-2
CEILING FAN ON ADMISSIONS	20/2		1500		27	28		2250			
				1500	29	30			2250	30/2	WH-3
PANEL "4L"	225/3	21590			31	32	2250				
			21590		33	34		1000		20/1	KSF-1
				21590	35	36			1000	20/1	KSF-2
CU-1	50/3	---			37	38	6873			80/3	AHU-1
			---		39	40		6873			
				---	41	42			6873		
		26295	26955	25670			16173	15953	15953		

CALCULATIONS			
CATEGORY	CONN LOAD KVA	DESIGN LOAD FACT.	DESIGN LOAD KVA
HVAC	20.6	1.25	25.8
RECEPTACLES	10.9	1.0/0.5	10.9
EQUIPMENT	28.7	0.65	18.6
PANEL	64.8	1.0	64.8
TOTAL	125.0		120.1

CALCULATIONS			NOTES
PHASE	VA	AMPS	
"A"	42468	353.9	
"B"	42908	357.6	
"C"	41623	346.9	
FEEDER:			

1

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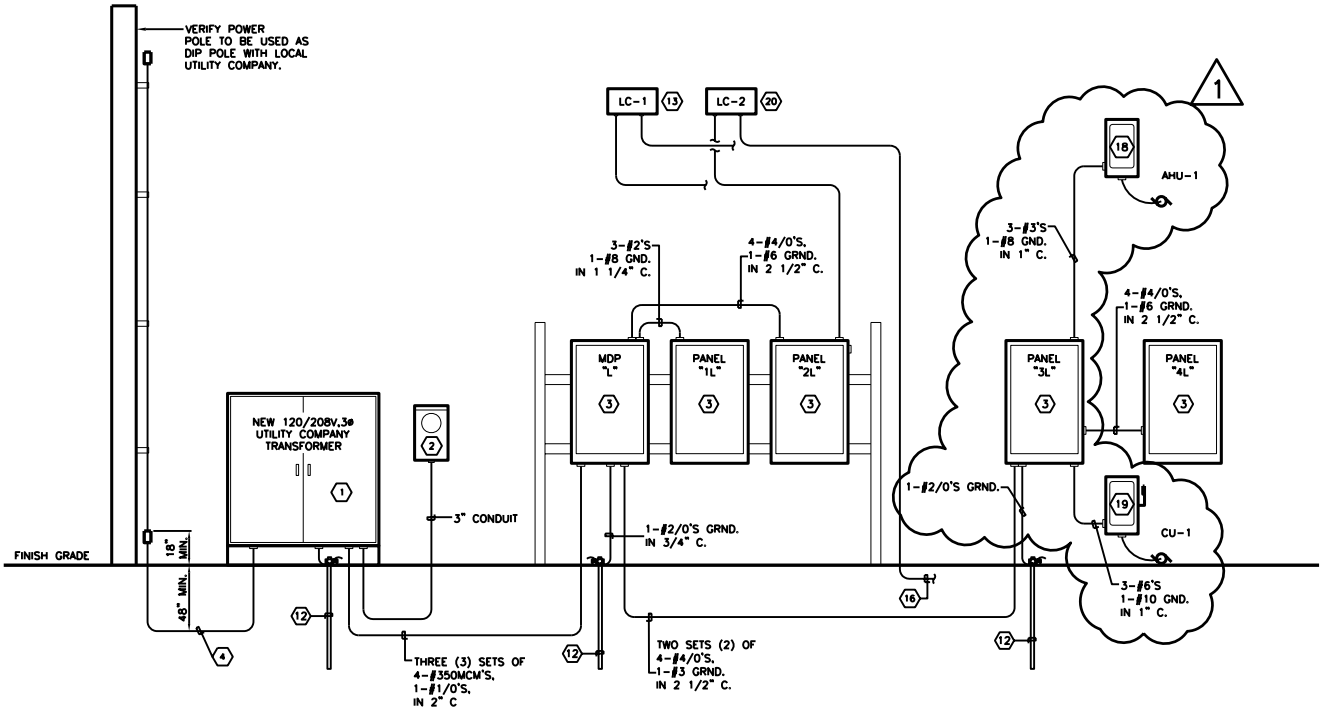
PROJECT:
PHARR
SWIMMING POOLS
PHARR TX.

DRAWN: LEDUCCAD
CHECKED: H.LEDUC
JOB NO. 1160
DATE: 03/21/12
DRAWING NO.
E106



120/208V,3ϕ,3-WIRE

ELECTRICAL RISER DIAGRAM

NOT TO SCALE

RISER KEY NOTES:

(18) PROVIDE AND INSTALL A 120/208V, 100A, 3-POLE, 80 A FUSED NEMA-4X, DISCONNECT.

(19) PROVIDE AND INSTALL A 120/208V, 60A, 3-POLE, 50A FUSED NEMA-4X, DISCONNECT.

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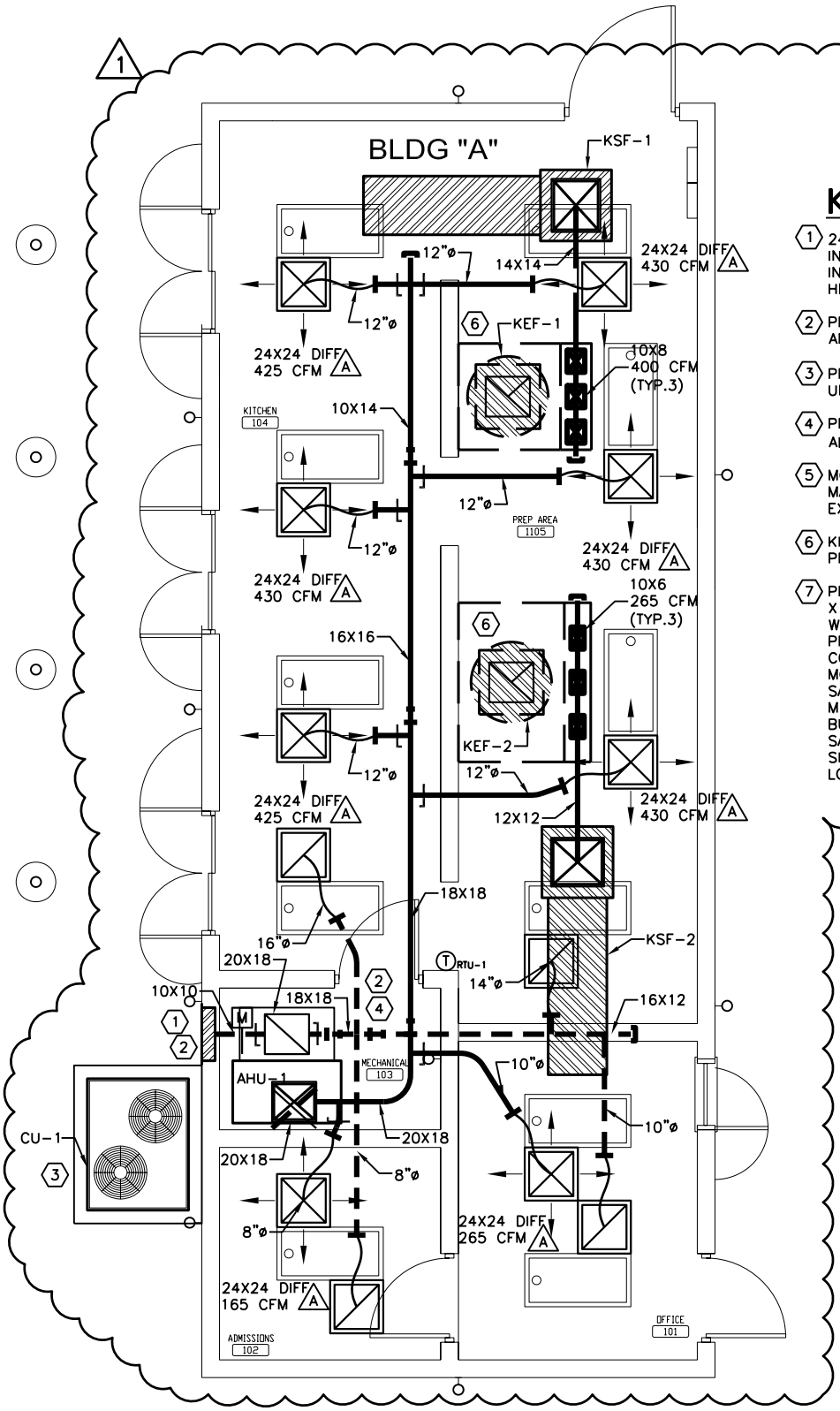
PROJECT:
PHARR SWIMMING POOLS
PHARR TX.

DRAWN:	LEDUCCAD
CHECKED:	H.LEDUC
JOB NO.	1160
DATE:	03/21/12
DRAWING NO.	E108



KEY NOTES:

1. 24"X18" WIND-DRIVEN RAIN RESISTANT STATIONARY INTAKE LOVER, RUSKIN MODEL: EME520DD WITH INSECT SCREEN. CONTRACTOR SHALL VERIFY EXACT HEIGHT WITH ARCHITECTURAL DRAWINGS.
2. PROVIDE MANUAL VOLUME DAMPERS ON RETURN, AND OUTSIDE AIR DUCT.
3. PROVIDE 4" CONCRETE PAD FOR CONDENSING UNIT.
4. PROVIDE AIRTIGHT RETURN AIR PLENUM BOX FOR ALL AHU'S.
5. MOUNT EXHAUST FAN AS PER ARCHITECTS AND MANUFACTURE RECOMMENDATIONS. FIELD VERIFY EXACT REQUIREMENTS PRIOR TO INSTALLATION.
6. KITCHEN EXHAUSTS FAN AND DUCTWORK TO BE PROVIDED BY KITCHEN EQUIPMENT SUPPLIE.
7. PROVIDE AND INSTALL A BIG ASS FANS POWERFOIL X PLUS MODEL. THE FAN SHALL BE EQUIPPED WITH 10 HIGH VOLUME, LOW SPEED AIRFOILS OF PRECISION ALUMINUM ALLOY. A STRUCTURAL CONNECTION BETWEEN THE FAN ASSY AND UPPER MOUNTING SYSTEM IS REQUIRED ALONG WITH A SAFETY CABLE THAT PROVIDES AN ADDITIONAL MEANS OF SECURING THE FAN ASSY TO THE BUILDING STRUCTURE. FIELD CONSTRUCTION OF SAFETY CABLES IS NOT PERMITTED. THE FAN SHALL BE CONTROL VIA A REMOTE WALL CONTROL LOCATED AT OFFICE 101.

MECHANICAL PLAN

SCALE: NOT TO SCALE

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PROJECT:
PHARR
SWIMMING POOLS
PHARR TX.

DRAWN:	LEDUCCAD
CHECKED:	H.LEDUC
JOB NO.	1160
DATE:	03/21/12
DRAWING NO.	M101

AIR HANDLING UNIT SCHEDULE

UNIT NO.	NOMINAL TONS	TYPE	FUEL	O.A. CFM	CFM	E.S.P.	HEATING			BLOWER			MCA	MOCP	REF. SPEC. CARRIER MODEL
							KW	ELEC. CHAR.	F.L.A.	HP	ELEC. CHAR.	F.L.A.			
AHU-1	7.5	VERT.	ELEC.	525	3000	.4	25.0	208V/3ø	52.1	2.4	208V/3ø	5.2	71.7	80	40RUA-08

CONDENSING UNIT SCHEDULE

UNIT NO.	TOTAL COOL. CAP (kBTUH)	SENS. COOL. CAP (kBTUH)	ENTERING db/wb(°F)	O.A. TEMP (°F)	ELECTRICAL CHARACTERISTICS	COMPRESSOR R.L.A.	FAN MOTOR F.L.A. (ea.)	MCA	MOCP	EER (SEER)	REF. SPEC. CARRIER MODEL
CU-1	94.0	72.1	80/67	98	208V/3ø	25.0	1.5	34.2	50	11.2	38AUZ-08

EXHAUST FAN SCHEDULE

SYSTEM	TAG	TYPE	CFM	ESP	HP	RPM	ELEC. CHAR.	REF. SPEC. DAYTON MODEL	REMARKS
WOMENS R.R.	EF-1	WALL	2500	0.375	1/3	1075	120V/1ø	4C363	1,2,3
MENS R.R.	EF-2	WALL	2500	0.375	1/3	1075	120V/1ø	4C363	1,2,3
POOL	EF-3	WALL	13000	0.050	1-1/2	792	120V/1ø	1WDC2	1,3,4
POOL	EF-4	WALL	13000	0.050	1-1/2	792	120V/1ø	1WDC2	1,3,4
PREP AREA	KEF-1	ROOF	1500	---	---	---	208V/3ø	BY OTHER	5,6,7,8,9,10,11
PREP AREA	KEF-2	ROOF	1000	---	---	---	208V/3ø	BY OTHER	5,6,7,8,9,10,12
PREP AREA	KSF-1	ROOF	1200	---	---	---	120V/1ø	BY OTHER	5,6,7,9,11
PREP AREA	KSF-1	ROOF	800	---	---	---	120V/1ø	BY OTHER	5,6,7,9,12

NOTES:
1. PROVIDE A DAYTON SCREEN GAURD FOR EXHAUST FAN MODEL# 1WBU3
2. WALL SWITCH
3. FAN SPEED CONTROL
4. INTERLOCK WITH RTU AND PROVIDE AN OVERRIDE SWITCH.
5. FLEX DUCT CONNECTORS
6. BACKDRAFT DAMPER
7. HINGED BASE
8. SWITCH AT HOOD
9. GREASE TERMINATOR
10. EXHAUST EXTENSION
11. INTERLOCK KEF-1 AND KSF-1
12. INTERLOCK KEF-2 AND KSF-2

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PROJECT:
PHARR
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PHARR TX.

DRAWN: LEDUCCAD
CHECKED: H.LEDUC
JOB NO. 1160
DATE: 03/21/12
DRAWING NO.
M103

1

PLUMBING FIXTURE SCHEDULE

DESIGNATION	DESCRIPTION	SPECIFICATION
WC-1	WATER CLOSET	AMERICAN STANDARD 3351.128 AFWALL FLOWISE, WALL-MOUNTED. FLUSH VALVE TOILET, 1.28 GALLON PER FLUSH, ELONGATED BOWL, SLOAN #111-SMO FLUSH VALVE SIDE MOUNT SENSOR OPERATED WATER CLOSET FLUSHOMETER, 5901.100 AMERICAN STANDARD OPEN FRONT SEAT.
WC-1A	WATER CLOSET (HANDICAPPED)	AMERICAN STANDARD 3351.128 AFWALL FLOWISE, WALL-MOUNTED. FLUSH VALVE TOILET, 1.28 GALLON PER FLUSH, ELONGATED BOWL, SLOAN #111-SMO FLUSH VALVE SIDE MOUNT SENSOR OPERATED WATER CLOSET FLUSHOMETER, 5901.100 AMERICAN STANDARD OPEN FRONT SEAT.
L-1	LAVATORY	AMERICAN STANDARD 0.355.034 LUCERNE (FOR CONCEALED ARMS). VITREOUS CHINA WALL HUNG, WHITE, WITH EXTRA RIGHT-HAND HOLE, ELKAY FAUCET LK422L4. 4 3/4" SPOUT, C.P. RIDGID SUPPLIES W/CROSS ARM STOPS. GRID DRAIN, C.P. BRASS "P" TRAP W/C.P.
L-1A	LAVATORY (HANDICAPPED)	AMERICAN STANDARD 0.355.034 LUCERNE (FOR CONCEALED ARMS). VITREOUS CHINA WALL HUNG, WHITE, WITH EXTRA RIGHT-HAND HOLE, ELKAY FAUCET LK422L4. 4 3/4" SPOUT, C.P. RIDGID SUPPLIES W/CROSS ARM STOPS. GRID DRAIN, C.P. BRASS "P" TRAP W/C.P.
EWC-1A	ELECTRIC WATER COOLER (HANDICAPPED)	ELKAY MODEL #EZSTL8C, SELF-CONTAINED WALL HUNG, TWO LEVEL ELECTRIC REFRIGERATED WATER COOLER WITH BUT NOT LIMITED TO: SELF-CLOSING CONTROLS ON FRONT, LEFT, AND RIGHT OF UNIT, FLEXI-GUARD SAFETY BUBBLERS, HERMETICALLY SEALED RECIPROCATING COMPRESSOR, 120 VOLT, STAINLESS STEEL CABINET. 8.00 GPH OF 50 deg DRINKING WATER BASED ON 80 deg INLET WATER TEMPERATURE. FURNISH WITH CONCEALED PLATE TYPE SYSTEM WITH TOP AND BOTTOM PLATES ZURN #Z-1225 COMPLETE WITH STEEL UPRIGHTS WITH WELDED FEET, ADJUSTABLE MOUNTING PLATES, AND MOUNTING HARDWARE. MOUNT AT A.D.A. HEIGHT AS INDICATED ON ARCHITECTURAL DRAWINGS.
MS-1	MOP SINK	FIAT MODEL #TSB-100, 24"x24"x12", ONE PIECE PRECAST TERRAZZO (3000 PSI COMPRESSIVE STRENGTH), 12" HIGH WITH 2" WIDTH MIN. SHOULDERS WITH STAINLESS STEEL CAPS AND 1/2" PITCH TOWARD INSIDE, DRAIN BODY SHALL BE STAINLESS STEEL CAST INTEGRAL WITH CAULKED LEAD CONNECTION, STAINLESS STEEL THRESHOLD. FURNISH WITH CHROME PLATED WALL FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, WALL FLANGES, PAIL HOOK, 3/4" HOSE THREAD ON SPOUT (FIAT #830-AA), AND 60"x3/4" DIA PLAIN END REINFORCED RUBBER HOSE WITH HOSE BRACKET (FIAT #832-AA), AND MOP HANGER (FIAT #889-CC).

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PHARR
SWIMMING POOLS
PHARR TX.

DRAWN: LEDUCCAD
CHECKED: H.LEDUC
JOB NO. 1160
DATE: 03/21/12
DRAWING NO.
P104