- 5.7 Unit Prices. If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in a proposed Change Order that application of the agreed unit prices to the quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices and Contract Sum shall be equitably adjusted.
- 5.8 Owner-Initiated Changes. Without invalidating the Agreement and without notice to any Surety, Owner may, at any time, order additions, deletions or revisions in the Work. These will be authorized by a written amendment, a Field Directive, a Change Order, or a Work Directive Change, as the case may be. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided). A Work Directive Change may not change the Contract Sum or the Contract Time; but is evidence that the parties expect that the change directed or documented by a Work Directive Change will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Sum or Contract Time.
- **5.9** Unauthorized Work. Contractor shall not be entitled to an increase in the Contract Sum or an extension of the Contract Time with respect to any Work performed that is not required by the Contract Documents.
- 5.10 **Defective Work.** Owner and Contractor shall execute appropriate Change Orders (or written amendments) covering changes in the Work which are ordered by Owner, or which may be required because of acceptance of defective Work, without adjustment to the Contract Sum.
- 5.11 Estimates for Changes. At any time Architect/Engineer may request a quotation from Contractor for a proposed change in the Work. Within twenty-one (21) calendar days after receipt, Contractor shall submit a written and detailed proposal for an increase or decrease in the Contract Sum or Contract Time for the proposed change. Architect/Engineer shall have twenty one (21) calendar days after receipt of the detailed proposal to respond in writing. The proposal shall include an itemized estimate of all costs and time for performance that will result directly or indirectly from the proposed change. Unless otherwise directed, itemized estimates shall be in sufficient detail to reasonably permit an analysis by Architect/Engineer of all material, labor, equipment, subcontracts, overhead costs and fees, and shall cover all Work involved in the change, whether such Work was deleted, added, changed or impacted. Notwithstanding the request for quotation, Contractor shall carry on the Work and maintain the progress schedule. Delays in the submittal of the written and detailed proposal will be considered non-prejudicial.
- **5.12** Form of Proposed Changes. The form of all submittals, notices, Change Orders and other documents permitted or required to be used or transmitted under the Contract Documents shall be determined by the Owner. Standard Owner forms shall be utilized.
- 5.13 Changes to Contract Time. The Contract Time may only be changed pursuant to a Change Order or a written amendment to the Contract Documents. Any claim for an extension or shortening of the Contract Time shall be based on written notice delivered by the party making the claim to the other party. Notice of the extent of the claim with supporting data shall be delivered within fifteen (15) days from detection or beginning of such occurrence and

shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. The Contract time will be extended in an amount equal to time lost due to delays beyond the control of Contractor. Such delays shall include, but not be limited to, acts or neglect by Owner or others performing additional Work; or to fires, floods, epidemics, abnormal weather conditions or acts of God. Failure to deliver a written notice of claim within the requisite 15-day period shall constitute a waiver of the right to pursue said claim.

ARTICLE VI ROLE OF ARCHITECT/ENGINEER

6.1 General.

- A. <u>Retaining</u>. The Owner shall retain an Architect/Engineer (whether an individual or an entity) lawfully licensed to practice in Florida. That person or entity is identified as the Architect/Engineer in the Agreement and is referred to throughout the Contract Documents as if singular in number.
- B. <u>Duties</u>. Duties, responsibilities and limitations of authority of the Architect/Engineer as set forth in the Contract Documents shall not be restricted, modified or extended without written consent of the Owner and Architect/Engineer. Consent shall not be unreasonably withheld.
- C. <u>Termination</u>. If the employment of the Architect/Engineer is terminated, the Owner shall employ a successor Architect/Engineer as to whom the Contractor has no reasonable objection and whose status under the Contract Documents shall be that of the Architect/Engineer.
- **6.2** Administration. The Architect/Engineer will provide administration of the Agreement as described in the Contract Documents and will be an Owner's representative during construction until the date the Architect/Engineer approves the final Application for Payment. The Architect/Engineer will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.
- A. <u>Site Visits</u>. The Architect/Engineer will visit the site at intervals appropriate to the stage of construction, or as otherwise agreed with the Owner, to become generally familiar with the progress and quality of the portion of the Work complete, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. Unless specifically instructed by Owner, the Architect/Engineer will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Architect/Engineer will not have control over, charge of, or responsibility for, the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

- B. Reporting. On the basis of the site visits, the Architect/Engineer will keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and report to the Owner (1) known deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor, and (2) defects and deficiencies observed in the Work. The Architect/Engineer will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Architect/Engineer will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.
- **6.3** Interpretation of Project Plans and Specifications. The Architect/Engineer will be the interpreter of the requirements of the Project Plans and Specifications. Upon receipt of comments or objections by Contractor or Owner, the Architect/Engineer will make decisions on all claims, disputes, or other matters pertaining to the interpretation of the Project Plans and Specifications.
- **6.4 Rejection of Non-Conforming Work.** Upon consultation with Owner, the Architect/Engineer shall have the authority to reject Work which does not conform to the Project Plans and Specifications.
- 6.5 Correction of Work. The Contractor shall promptly correct all Work rejected by the Architect/Engineer for being defective or as failing to conform to the Project Plans and Specifications, whether observed before or after the Substantial Completion Date and whether or not fabricated, installed, or completed. The Contractor shall bear all costs of correcting such rejected Work, including compensation for Architect/Engineer's additional services made necessary thereby.
- which requests for information or response from the Architect/Engineer have the greatest urgency and those items which require prioritizing in response by the Architect/Engineer. The Contractor shall also identify the preferred time period for response and shall request a response time which is reasonably and demonstrably related to the needs of the Project and Contractor. In the event that Architect/Engineer claims that Contractor's expectations for a response are unreasonable, Owner shall require Architect/Engineer to communicate such claim to Contractor in writing together with the specific time necessary to respond and the date upon which such response will be made. In the event that Contractor believes that Architect/Engineer is not providing timely services or responses, Contractor shall notify Owner of same in writing not less than two (2) weeks before Contractor believes performance or response time from Architect/Engineer is required without risk of delaying the Project.

ARTICLE VII OWNER'S RIGHTS AND RESPONSIBILITIES

- 7.1 Project Site; Title. The Owner shall provide the lands upon which the Work under the Contract Documents is to be done, except that the Contractor shall provide all necessary additional land required for the erection of temporary construction facilities and storage of his materials, together with right of access to same. The Owner hereby represents to the Contractor that it currently has and will maintain up through and including the Substantial Completion Date, good title to all of the real property constituting the Project Site. Owner agrees to resolve, at its expense, any disputes relating to the ownership and use of the Project Site which might arise during the course of construction.
- 7.2 Project Plans and Specifications; Architect/Engineer. The parties hereto acknowledge and agree that Owner has previously entered into an agreement with Architect/Engineer. Pursuant to the terms of such agreement, the Architect/Engineer, as an agent and representative of Owner, is responsible for the preparation of Project Plans and Specifications which consist of drawings, specifications, and other documents setting forth in detail the requirements for the construction of the Project. All of such Project Plans and Specifications shall be provided either by Owner or the Architect/Engineer, and Contractor shall be under no obligation to provide same and shall be entitled to rely upon the accuracy and completeness of the Project Plans and Specifications provided by the Architect/Engineer and all preliminary drawings prepared in connection therewith. The Contractor will be furnished a reproducible set of all drawings and specifications reasonably necessary for the performance of Contractor's services hereunder and otherwise ready for printing. The Contractor shall be notified of any written modification in the agreement between Owner and Architect/Engineer.
- 7.3 Surveys; Soil Tests and Other Project Site Information. Owner shall be responsible for providing a legal description and certified land survey of the Project Site in a form and content and with such specificity as may be required by the Architect/Engineer and Contractor to perform their services. To the extent deemed necessary by Owner and Architect/Engineer, and solely at Owner's expense, Owner may engage the services of a geotechnical consultant to perform test borings and other underground soils testing as may be deemed necessary by the Architect/Engineer or the Contractor. Contractor shall not be obligated to provide such surveys or soil tests and shall be entitled to rely upon the accuracy and completeness of the information provided; subject, however, to the provisions of Section 2.4.S hereof. Owner shall provide Contractor, as soon as reasonably possible following the execution of the Contract Documents, all surveys or other survey information in its possession describing the physical characteristics of the Project Site, together with soils reports, subsurface investigations, utility locations, deed restrictions, easements, and legal descriptions then in its possession or control. Upon receipt of all surveys, soils tests, and other Project Site information, Contractor shall promptly advise Owner of any inadequacies in such information and of the need for any additional surveys, soils or subsoil tests. In performing this Work, Contractor shall use the standard of care of experienced contractors and will use its best efforts timely to identify all problems or omissions. Owner shall not be responsible for any delay or damages to the Contractor for any visible or disclosed site conditions or disclosed deficiencies in the Project Site which should have been identified by Contractor and corrected by Owner prior to the execution of the Contract Documents.

- 7.4 Information; Communication; Coordination. The Owner's Project Representative shall examine any documents or requests for information submitted by the Contractor and shall advise Contractor of Owner's decisions pertaining thereto within a reasonable period of time to avoid unreasonable delay in the progress of the Contractor's Contractor shall indicate if any such documents or requests warrant priority consideration. However, decisions pertaining to approval of the Project Schedule as it relates to the date of Substantial Completion, the Project Cost, Contractor's compensation, approving or changing the Contract Sum shall only be effective when approved by Owner in the form of a written Change Order or amendment to the Contract Documents. Owner reserves the right to designate a different Owner's Project Representative provided Contractor is notified in writing of any such change. Owner and Architect/Engineer may communicate with Subcontractors, materialmen, laborers, or suppliers engaged to perform services on the Project, but only for informational purposes. Neither the Owner nor the Architect/Engineer shall attempt to direct the Work of or otherwise interfere with any Subcontractor, materialman, laborer, or supplier, or otherwise interfere with the Work of the Contractor. Owner shall furnish the data required of Owner under the Contract Documents promptly.
- 7.5 Governmental Body. The Contractor recognizes that the Owner is a governmental body with certain procedural requirements to be satisfied. The Contractor has and will make reasonable allowance in its performance of services for such additional time as may be required for approvals and decisions by the Owner and any other necessary government agency.
- 7.6 Pre-Completion Acceptance. The Owner shall have the right to take possession of and use any completed portions of the Work, although the time for completing the entire Work or such portions may not have expired, but such taking possession and use shall not be deemed an acceptance of any Work not completed in accordance with the Contract Documents.

7.7 Ownership and Use of Drawings, Specifications and Other Instruments of Service.

- (1) The Architect/Engineer and the Architect/Engineer's consultants shall be deemed the authors and owners of their respective instruments of service, including the Project Plans and Specifications, and will retain all common law, statutory and other reserved rights, including copyrights. The Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers shall not own or claim a copyright in the instruments of service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be constructed as publication in derogation of the Architect/Engineer's or Architect/Engineer's consultants' reserved rights.
- (2) The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are authorized to use and reproduce the drawings and specifications provided to them solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Project Plans and Specifications or other instruments of service. The Contractor, Subcontractors, Subsubcontractors, and material or equipment suppliers may not use the

drawings or specifications on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner, Architect/Engineer and the Architect/Engineer's consultants.

- 7.8 Owner's Project Representative. Owner's Project Representative is Owner's Agent, who will act as directed by and under the supervision of the Owner, and who will confer with Owner/Architect/Engineer regarding his actions. The Owner's Project Representative's dealings in matters pertaining to the on-site Work shall, in general, be only with the Owner/Architect/Engineer and Contractor and dealings with Subcontractors shall only be through or with the full knowledge of Contractor.
- A. <u>Responsibilities</u>. Except as otherwise instructed in writing by Owner, the Owner's Project Representative will:
 - (1) Attend preconstruction conferences; arrange a schedule of progress meetings and other job conferences as required in consultation with Owner/Architect/Engineer and notify those expected to attend in advance; and attend meetings and maintain and circulate copies of minutes thereof;
 - (2) Serve as Owner/Architect/Engineer's liaison with Contractor, working principally through Contractor's superintendent, to assist in understanding the intent of the Contract Documents. As requested by Owner/Architect/Engineer, assist in obtaining additional details or information when required at the job site for proper execution of the Work;
 - (3) Report to Owner/Architect/Engineer whenever he believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents;
 - (4) Accompany visiting inspectors representing public or other agencies having jurisdiction over the project; record the outcome of these inspections and report to Owner/Architect/Engineer;
 - (5) Review applications for payment with Contractor for compliance with the established procedure for their submission and forward them with recommendations to Owner/Architect/Engineer; and
 - (6) Perform those duties as set forth elsewhere within the Contract Documents.
- B. <u>Limitations</u>. Except upon written instructions of Owner, Owner's Project Representative shall not:
 - (1) Authorize any deviation from the Contract Documents or approve any substitute materials or equipment;

- (2) Exceed limitations on Owner/Architect/Engineer's authority as set forth in the Contract Documents;
- (3) Undertake any of the responsibilities of Contractor, Subcontractors or Contractor's superintendent, or expedite the Work;
- (4) Advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents;
- (5) Advise on or issue directions as to safety precautions and programs in connection with the Work;
- (6) Authorize Owner to occupy the project in whole or in part; or
- (7) Participate in specialized field or laboratory tests.

ARTICLE VIII RESOLUTION OF DISAGREEMENTS; CLAIMS FOR COMPENSATION

- **8.1** Owner to Decide Disputes. The Owner shall reasonably decide all questions and disputes, of any nature whatsoever, that may arise in the execution and fulfillment of the services provided for under the Contract Documents, in accordance with the Procurement Ordinance.
- **8.2 Finality.** The decision of the Owner upon all claims, questions, disputes and conflicts shall be final and conclusive, and shall be binding upon all parties to the Contract Documents, subject to judicial review as provided in Section 8.5 below.
- 8.3 No Damages for Delay. If at any time Contractor is delayed in the performance of Contractor's responsibilities under the Contract Documents as the result of a default or failure to perform in a timely manner by Owner or Owner's agents or employees, Contractor shall not be entitled to any damages except for compensation specifically authorized in Article III. Contractor's sole remedy will be a right to extend the time for performance. Nothing herein shall preclude Contractor from any available remedy against any responsible party other than Owner. Contractor shall be responsible for liquidated damages for delay pursuant to Section 3 of the Agreement.
- **8.4** Permitted Claims Procedure. Where authorized or permitted under the Contract Documents, all claims for additional compensation by Contractor, extensions of time affecting the Substantial Completion Date, for payment by the Owner of costs, damages or losses due to casualty, Force Majeure, Project Site conditions or otherwise, shall be governed by the following:
 - (1) All claims must be submitted as a request for Change Order in the manner as provided in Article V.

- (2) The Contractor must submit a notice of claim to Owner's Project Representative and to the Architect/Engineer within fifteen (15) days of when the Contractor was or should have been aware of the fact that an occurrence was likely to cause delay or increased costs. Failure to submit a claim within the requisite 15-day period shall constitute a waiver of the right to pursue said claim.
- (3) Within twenty (20) days of submitting its notice of claim, the Contractor shall submit to the Owner's Project Representative its request for Change Order, which shall include a written statement of all details of the claim, including a description of the Work affected.
- (4) After receipt of a request for Change Order, the Owner's Project Representative, in consultation with the Architect/Engineer, shall deliver to the Contractor, within twenty (20) days after receipt of request, its written response to the claim.
- (5) In the event the Owner and Contractor are unable to agree on the terms of a Change Order, the Owner shall have the option to instruct the Contractor to proceed with the Work. In that event, the Owner shall agree to pay for those parts of the Work, the scope and price of which are not in dispute. The balance of the disputed items in the order to proceed will be resolved after completion of the Work, based upon completed actual cost.
- (6) The rendering of a decision by Owner with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment) will be a condition precedent to any exercise by Owner or Contractor of such right or remedies as either may otherwise have under the Contract Documents or by laws or regulations in respect of any such claim, dispute or other matter.
- 8.5 Contract Claims and Disputes. After completion of the process set forth in Section 8.4 above, any unresolved dispute under this Agreement shall be decided by the Purchasing Official in accordance with Section 2-26-63 of the Manatee County Code of Laws, subject to an administrative hearing process as provided in Section 2-26-64. The decision of the Board of County Commissioners in accordance with Section 2-26-64 of the Manatee County Code of Laws shall be the final and conclusive County decision subject to exclusive judicial review in circuit court by a petition for certiorari.
- **8.6** Claims for Consequential Damages. The Contractor and Owner waive claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes:
 - (1) damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article XIV. Nothing contained in this Section 8.6 shall be deemed to preclude an award of liquidated direct damages, when applicable, in accordance with the requirements of the Contract Documents.

ARTICLE IX INDEMNITY

9.1 Indemnity.

- A. <u>Indemnification Generally</u>. To the fullest extent permitted by law, the Owner, indemnify and hold harmless the Architect/Engineer, shall Contractor Architect/Engineer's consultants, and agents and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor or anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether such claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 9.1.
- B. <u>Claims by Employees</u>. In claims against any person or entity indemnified under this Section 9.1 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 9.1.A. shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.
- 9.2 Duty to Defend. The Contractor shall defend the Owner in any action, lawsuit mediation or arbitration arising from the alleged negligence, recklessness or intentionally wrongful conduct of the Contractor and other persons employed or utilized by the Contractor in the performance of the Work. So long as Contractor, through its own counsel, performs its obligation to defend the Owner pursuant to this Section, Contractor shall not be required to pay the Owner's costs associated with the Owner's participation in the defense.

ARTICLE X ACCOUNTING RECORDS; OWNERSHIP OF DOCUMENTS

- 10.1 Accounting Records. Records of expenses pertaining to all services performed shall be kept in accordance with generally accepted accounting principles and procedures.
- Inspection and Audit. The Contractor's records shall be open to inspection and 10.2 subject to examination, audit, and/or reproduction during normal working hours by the Owner's agent or authorized representative to the extent necessary to adequately permit evaluation and verification of any invoices, payments or claims submitted by the Contractor or any of its payees during the performance of the Work. These records shall include, but not be limited to, accounting records, written policies and procedures, Subcontractor files (including proposals of unsuccessful successful bidders), original estimates. estimating worksheets, correspondence, Change Order files (including documentation covering negotiated settlements), and any other supporting evidence necessary to substantiate charges related to the Contract Documents. They shall also include, but not be limited to, those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to costs associated with the Contract Documents. For the purpose of such audits, inspections, examinations and evaluations, the Owner's agent or authorized representative shall have access to said records from the effective date of the Contract Documents, for the duration of Work, and until three (3) years after the date of final payment by the Owner to the Contractor pursuant to the Contract Documents.
- 10.3 Access. The Owner's agent or authorized representative shall have access to the Contractor's facilities and all necessary records in order to conduct audits in compliance with this Article. The Owner's agent or authorized representative shall give the Contractor reasonable advance notice of intended inspections, examinations, and/or audits.
- 10.4 Ownership of Documents. Upon completion or termination of the Contract Documents, all records, documents, tracings, plans, specifications, maps, evaluations, reports, transcripts and other technical data, other than working papers, prepared or developed by the Contractor under the Contract Documents shall be delivered to and become the property of the Owner. The Contractor at its own expense may retain copies for its files and internal use.

ARTICLE XI PUBLIC CONTRACT LAWS

11.1 Equal Opportunity Employment.

A. <u>Employment</u>. The Contractor shall not discriminate against any employee or applicant for employment because of race, creed, sex, color, national origin, disability or age, and will take affirmative action to insure that all employees and applicants are afforded equal

employment opportunities without discrimination because of race, creed, sex, color, national origin, disability or age. Such action will be taken with reference to, but shall not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination, rates of training or retraining, including apprenticeship and on-the-job training.

- B. <u>Participation</u>. No person shall, on the grounds of race, creed, sex, color, national origin, disability or age, be excluded from participation in, be denied the proceeds of, or be subject to discrimination in the performance of the Agreement.
- 11.2 Immigration Reform and Control Act of 1986. Contractor acknowledges that it is responsible for complying with the provisions of the Immigration Reform and Control Act of 1986, located at 8 U.S.C. Section 1324, et seq., and regulations relating thereto. Failure to comply with the above statutory provisions shall be considered a material breach and shall be grounds for immediate termination of this Agreement.
- 11.3 No Conflict of Interest. The Contractor warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the Contractor to solicit or secure the Contract Documents, and that it has not paid or agreed to pay any person, company, corporation, individual, or firm other than a bona fide employee working solely for the Contractor, any fee, commission, percentage, gift or any other consideration, contingent upon or resulting from the award or making of the Contract Documents.
- A. <u>No Interest in Business Activity</u>. By accepting award of this Contract, the Contractor, which shall include its directors, officers and employees, represents that it presently has no interest in and shall acquire no interest in any business or activity which would conflict in any manner with the performance of services required hereunder, including without limitation as described in the Contractor's own professional ethical requirements. An interest in a business or activity which shall be deemed a conflict includes but is not limited to direct financial interest in any of the material and equipment manufacturers, suppliers, distributors, or contractors who will be eligible to supply material and equipment for the Project for which the Contractor is furnishing its services required hereunder.
- B. No Appearance of Conflict. The Contractor shall not knowingly engage in any contractual or professional obligations that create an appearance of a conflict of interest with respect to the services provided pursuant to the Contract Documents. The Contractor has provided the Affidavit of No Conflict, incorporated into the Contract Documents as Exhibit "C", as a material inducement for Owner entering into the Contract Documents. If, in the sole discretion of the County Administrator or designee, a conflict of interest is deemed to exist or arise during the term of the County Administrator or designee may cancel this Agreement, effective upon the date so stated in a written notice of cancellation, without penalty to the Owner.
- 11.4 Truth in Negotiations. By execution of the Contract Documents, the Contractor certifies to truth-in-negotiations and that wage rates and other factual unit costs supporting the compensation are accurate, complete and current at the time of contracting. Further, the original Contract Sum and any additions thereto shall be adjusted to exclude any significant sums where the Owner determines the Contract Sum was increased due to inaccurate, incomplete or non-current wage rates and other factual unit costs. Such adjustments must be made within one (1) year after final payment to the Contractor.

11.5 Public Entity Crimes. The Contractor is directed to the Florida Public Entity Crimes Act, Section 287.133, Florida Statutes, specifically section 2(a), and the Owner's requirement that the Contractor comply with it in all respects prior to and during the term of the Agreement.

ARTICLE XII FORCE MAJEURE, FIRE OR OTHER CASUALTY

12.1 Force Majeure.

- A. <u>Unavoidable Delays</u>. Delays in any performance by any party contemplated or required hereunder due to fire, flood, sinkhole, earthquake or hurricane, acts of God, unavailability of materials, equipment or fuel, war, declaration of hostilities, revolt, civil strife, altercation or commotion, strike, labor dispute, or epidemic, archaeological excavation, lack of or failure of transportation facilities, or any law, order, proclamation, regulation, or ordinance of any government or any subdivision thereof, or for any other similar cause to those enumerated, beyond the reasonable control and which with due diligence could not have been reasonably anticipated, shall be deemed to be events of Force Majeure and any such delays shall be excused. In the event such party is delayed in the performance of any Work or obligation pursuant to the Contract Documents for any of the events of Force Majeure stated in this Section 12.1, the date for performance required or contemplated by the Contract Documents shall be extended by the number of calendar days such party is actually delayed
- B. <u>Concurrent Contractor Delays</u>. If a delay is caused for any reason provided in 12.1.A. or as a result of an extension of time provided by Change Order, and during the same time period a delay is caused by Contractor, the date for performance shall be extended as provided in 12.1.A. but only to the extent the time is or was concurrent.
- C. <u>Notice</u>; <u>Mitigation</u>. The party seeking excuse for nonperformance on the basis of Force Majeure shall give written notice to the Owner, if with respect to the Contractor, or to the Contractor if with respect to the Owner, specifying it's actual or anticipated duration. Each party seeking excuse from nonperformance on the basis of Force Majeure shall use its best efforts to rectify any condition causing a delay and will cooperate with the other party, except that neither party shall be obligated to incur any unreasonable additional costs and expenses to overcome any loss of time that has resulted.
- 12.2 Casualty; Actions by Owner and Contractor. During the construction period, if the Project or any part thereof shall have been damaged or destroyed, in whole or in part, the Contractor shall promptly make proof of loss; and Owner and Contractor shall proceed promptly to collect, or cause to be collected, all valid claims which may have arisen against insurers or others based upon such damage or destruction. The Contractor shall diligently assess the damages or destruction and shall prepare an estimate of the cost, expenses, and other charges, including normal and ordinary compensation to the Contractor, necessary for reconstruction of the Project substantially in accordance with the Project Plans and Specifications. Within fifteen (15) days following satisfaction of the express conditions described in subsections (1), (2) and (3) below, the Contractor covenants and agrees diligently to commence reconstruction and to

complete the reconstruction or repair of any loss or damage by fire or other casualty to the Project to substantially the same size, floor area, cubic content, and general appearance as prior to such loss or damage:

- (1) Receipt by the Owner or the trustee of the proceeds derived from collection of all valid claims against insurers or others based upon such damage or destruction, and receipt of other sums from any source such that the funds necessary to pay the Project Cost and any additions to the Project Cost necessitated for repair or reconstruction are available;
- Written agreement executed by the Contractor and the Owner, by amendment to the Contract Documents or otherwise, authorizing and approving the repair or reconstruction and any additions to the Project Cost necessitated thereby, including any required adjustment to the Contract Sum; and
- (3) Final approval by the Owner of the Project Plans and Specifications for such repair or reconstruction and issuance of any required building permit.
- 12.3 Approval of Plans and Specifications. The Owner agrees to approve the plans and specifications for such reconstruction or repair if the reconstruction or repair contemplated by such plans and specifications is economically feasible, and will restore the Project, or the damaged portion thereof, to substantially the same condition as prior to such loss or damage, and such plans and specifications conform to the applicable laws, ordinances, codes, and regulations. The Owner agrees that all proceeds of any applicable insurance or other proceeds received by the Owner or the Contractor as a result of such loss or damage shall be used for payment of the costs, expenses, and other charges of the reconstruction or repair of the Project.
- 12.4 Notice of Loss or Damage. The Contractor shall promptly give the Owner written notice of any significant damage or destruction to the Project, defined as loss or damage which it is contemplated by Contractor will increase the Contract Sum or extend the Substantial Completion Date, stating the date on which such damage or destruction occurred, the then expectations of Contractor as to the effect of such damage or destruction on the use of the Project, and the then proposed schedule, if any, for repair or reconstruction of the Project. Loss or damage which the Contractor determines will not affect the Contract Sum or Substantial Completion Date will be reported to Owner and Architect/Engineer immediately, and associated corrective actions will be undertaken without delay.

ARTICLE XIII REPRESENTATIONS, WARRANTIES AND COVENANTS

13.1 Representations and Warranties of Contractor. The Contractor represents and warrants to the Owner that each of the following statements is presently true and accurate:

- A. The Contractor is a construction company, organized under the laws of the State of _______, authorized to transact business in the State of Florida, with ______ as the primary qualifying agent. Contractor has all requisite power and authority to carry on its business as now conducted, to own or hold its properties, and to enter into and perform its obligations hereunder and under each instrument to which it is or will be a party, and is in good standing in the State of Florida.
- B. Each Contract Document to which the Contractor is or will be a party constitutes, or when entered into will constitute, a legal, valid, and binding obligation of the Contractor enforceable against the Contractor in accordance with the terms thereof, except as such enforceability may be limited by applicable bankruptcy, insolvency, or similar laws from time to time in effect which affect creditors' rights generally and subject to usual equitable principles in the event that equitable remedies are involved.
- C. There are no pending or, to the knowledge of the Contractor, threatened actions or proceedings before any court or administrative agency, within or without the State of Florida, against the Contractor or any partner, officer, or agent of the Contractor which question the validity of any document contemplated hereunder, or which are likely in any case, or in the aggregate, to materially adversely affect the consummation of the transactions contemplated hereunder, or materially adversely affect the financial condition of the Contractor.
- D. The Contractor has filed or caused to be filed all federal, state, local, or foreign tax returns, if any, which were required to be filed by the Contractor, and has paid, or caused to be paid, all taxes shown to be due and payable on such returns or on any assessments levied against the Contractor.
- E. Neither Contractor nor any agent or person employed or retained by Contractor has acted fraudulently or in bad faith or in violation of any statute or law in the procurement of this Agreement.
- F. The Contractor shall timely fulfill or cause to be fulfilled all of the terms and conditions expressed herein which are within the control of the Contractor or which are the responsibility of the Contractor to fulfill. The Contractor shall be solely responsible for the means and methods of construction.
- G. It is recognized that neither the Architect/Engineer, the Contractor, nor the Owner has control over the cost of labor, materials, or equipment, over a Subcontractor's methods of determining bid prices, or over competitive bidding, market, or negotiating conditions.
- H. During the term of the Contract Documents, and the period of time that the obligations of the Contractor under the Contract Documents shall be in effect, the Contractor shall cause to occur and to continue to be in effect those instruments, documents, certificates, and events contemplated by the Contract Documents that are applicable to, and the responsibility of, the Contractor.
- I. The Contractor shall assist and cooperate with the Owner and shall accomplish the construction of the Project in accordance with the Contract Documents and the

Project Plans and Specifications, and will not knowingly violate any laws, ordinances, rules, regulations, or orders that are or will be applicable thereto.

- J. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective, and that Owner, representatives of Owner, governmental agencies with jurisdictional interests will have access to the Work at reasonable time for their observation, inspecting and testing. Contractor shall give Architect/Engineer timely notice of readiness of the Work for all required approvals and shall assume full responsibility, including costs, in obtaining required tests, inspections, and approval certifications and/or acceptance, unless otherwise stated by Owner.
- K. If any Work (including Work of others) that is to be inspected, tested, or approved is covered without written concurrence of Architect/Engineer, it must, if requested by Architect/Engineer, be uncovered for observation. Such uncovering shall be at Contractor's expense unless Contractor has given Architect/Engineer timely notice of Contractor's intention to cover the same and Architect/Engineer has not acted with reasonable promptness in response to such notice. Neither observations by Architect/Engineer nor inspections, tests, or approvals by others shall relieve Contractor from Contractor's obligations to perform the Work in accordance with the Contract Documents.
- L. If the Work is defective, or Contractor fails to supply sufficient skilled workers, or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof and terminate payments to the Contractor until the cause for such order has been eliminated. Contractor shall bear all direct, indirect and consequential costs for satisfactory reconstruction or removal and replacement with non-defective Work, including, but not limited to fees and charges of Architect/Engineers, architects, attorneys and other professionals and any additional expenses experienced by Owner due to delays to other Contractors performing additional Work and an appropriate deductive change order shall be issued. Contractor shall further bear the responsibility for maintaining schedule and shall not be entitled to an extension of the Contract time and the recovery of delay damages due to correcting or removing defective Work.
- M. If Contractor fails within seven (7) days after written notice to correct defective Work, or fails to perform the Work in accordance with the Contract Documents, or fails to comply with any other provision of the Contract Documents, Owner may correct and remedy any such deficiency to the extent necessary to complete corrective and remedial action. Owner may exclude Contractor from all or part of the site, take possession of all or part of the Work, Contractor's tools, construction equipment and machinery at the site or for which Owner has paid Contractor but which are stored elsewhere. All direct and indirect costs of Owner in exercising such rights and remedies will be charged against Contractor in an amount approved as to reasonableness by Architect/Engineer and a Change Order will be issued incorporating the necessary revisions.
- N. If within three (3) years after the Substantial Completion Date or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's

written instructions, either correct such defective Work or if it has been rejected by Owner, remove it from the site and replace it with non-defective Work. If Contractor does not promptly comply with the terms of such instruction, Owner may have the defective Work corrected/removed and all direct, indirect and consequential costs of such removal and replacement will be paid by Contractor. Failing payment by the Contractor and notwithstanding any other provisions of the Contract Documents to the contrary, Owner shall have the right to bring a direct action in the Circuit Court to recover such costs.

- **13.2** Representations of the Owner. To the extent permitted by law, the Owner represents to the Contractor that each of the following statements is presently true and accurate:
- A. The Owner is a validly existing political subdivision of the State of Florida.
- B. The Owner has all requisite corporate or governmental power and authority to carry on its business as now conducted and to perform its obligations under the Contract Documents and each Contract Document contemplated hereunder to which it is or will be a party.
- C. The Contract Documents and each Contract Document contemplated hereby to which the Owner is or will be a party has been duly authorized by all necessary action on the part of, and has been or will be duly executed and delivered by, the Owner, and neither the execution and delivery thereof nor compliance with the terms and provisions thereof or hereof: (a) requires the approval and consent of any other person or party, except such as have been duly obtained or as are specifically noted herein; (b) contravenes any existing law, judgment, governmental rule, regulation or order applicable to or binding on the Owner; or (c) contravenes or results in any breach of, default under, or result in the creation of any lien or encumbrance upon the Owner under any indenture, mortgage, deed of trust, bank loan, or credit agreement, the charter, ordinances, resolutions, or any other agreement or instrument to which the Owner is a party, specifically including any covenants of any bonds, notes, or other forms of indebtedness of the Owner outstanding on the date of the Contract Documents.
- D. The Contract Documents and each document contemplated hereby to which the Owner is or will be a party constitutes, or when entered into will constitute, a legal, valid, and binding obligation of the Owner enforceable against the Owner in accordance with the terms thereof, except as such enforceability may be limited by applicable bankruptcy, insolvency, or similar laws from time to time in effect which affect creditors' rights generally, and subject to usual equitable principles in the event that equitable remedies are involved.
- E. There are no pending or, to the knowledge of the Owner, threatened actions or proceedings before any court or administrative agency against the Owner which question the validity of the Contract Documents or any document contemplated hereunder, or which are likely in any case or in the aggregate to materially adversely affect the consummation of the transactions contemplated hereunder or the financial or corporate condition of the Owner.
- F. The Owner shall use due diligence to timely fulfill or cause to be fulfilled all of the conditions expressed in the Contract Documents which are within the control of the Owner or which are the responsibility of the Owner to fulfill.

- G. During the pendency of the Work and while the obligations of the Owner under the Contract Documents shall be in effect, the Owner shall cause to occur and to continue to be in effect and take such action as may be necessary to enforce those instruments, documents, certificates and events contemplated by the Contract Documents that are applicable to and the responsibility of the Owner.
- H. The Owner shall assist and cooperate with the Contractor in accomplishing the construction of the Project in accordance with the Contract Documents and the Project Plans and Specifications, and will not knowingly violate any laws, ordinances, rules, regulations, orders, contracts, or agreements that are or will be applicable thereto or, to the extent permitted by law, enact or adopt any resolution, rule, regulation, or order, or approve or enter into any contract or agreement, including issuing any bonds, notes, or other forms of indebtedness, that will result in the Contract Documents or any part thereof, or any other instrument contemplated by and material to the timely and effective performance of a party's obligations hereunder, to be in violation thereof.

ARTICLE XIV TERMINATION AND SUSPENSION

- 14.1 Termination for Cause by Owner. This Agreement may be terminated by Owner upon written notice to the Contractor should Contractor fail substantially to perform a material obligation in accordance with the terms of the Contract Documents through no fault of the Owner. In the event Owner terminates for cause and it is later determined by a court of competent jurisdiction that such termination for cause was not justified, then in such event such termination for cause shall automatically be converted to a termination without cause pursuant to Section 14.2.
- A. Nonperformance. If the Contractor fails to timely perform any of his obligations under the Contract Documents, including any obligation the Contractor assumes to perform Work with his own forces, or if it persistently or repeatedly refuses or fails, except in case for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or fails, without being excused, to maintain an established schedule (failure to maintain schedule shall be defined as any activity that falls thirty (30) days or more behind schedule) which has been adopted by the Construction Team, or it fails to make prompt payment to Subcontractors for materials or labor, or disregards laws, rules, ordinances, regulations, or orders of any public authority having jurisdiction, or otherwise is guilty of substantial violations of the Agreement the Owner may, after seven (7) days written notice, during which period the Contractor fails to perform such obligation, make good such deficiencies and perform such actions. The Contract Sum, or the actual Cost of the Project, whichever is less, shall be reduced by the cost to the Owner of making good such deficiencies, and the Contractor's compensation shall be reduced by an amount required to manage the making good of such deficiencies. Provided, however, nothing contained herein shall limit or preclude Owner from pursuing additional damages from Contractor as a result of its breach.
- B. <u>Insolvency</u>. If the Contractor is adjudged bankrupt, or if it makes a general assignment for the benefit of its creditors, or if a receiver is appointed on account of its

insolvency, then the Owner may, without prejudice to any other right or remedy, and after giving the Contractor and its surety, if any, fourteen (14) days written notice, and during which period the Contractor fails to cure the violation, terminate the Agreement. In such case, the Contractor shall not be entitled to receive any further payment. Owner shall be entitled to receive all costs and damages arising as a result of failure of Contractor to perform as provided in the Contract Documents, as well as reasonable termination expenses, and costs and damages incurred by the Owner may be deducted from any payments left owing the Contractor.

- C. <u>Illegality</u>. Owner may terminate the Agreement if Contractor disregards laws or regulations of any public body having jurisdiction.
- D. Rights of Owner. The Owner may, after giving Contractor (and the Surety, if there is one) seven (7) days written notice, terminate the services of Contractor for cause; exclude Contractor from the Project site and take possession of the Work and of all Contractor's tools, construction equipment and machinery at the Project site and use the same to the full extent they could be used (without liability to Contractor for trespass or conversion); incorporate in the Work all materials and equipment stored at the Project site or for which Owner has paid Contractor but which are stored elsewhere, and finish the Work as Owner may deem expedient. In such case, Contractor shall not be entitled to receive any further payment beyond an amount equal to the value of material and equipment not incorporated in the Work, but delivered and suitably stored, less the aggregate of payments previously made. If the direct and indirect costs of completing the Work exceed the unpaid balance of the Contract Sum, Contractor shall pay the difference to Owner. Such costs incurred by Owner shall be verified by Owner in writing; but in finishing the Work, Owner shall not be required to obtain the lowest quote for the Work performed. Contractor's obligations to pay the difference between such costs and such unpaid balance shall survive termination of the Agreement. In such event and notwithstanding any other provisions of the Contract Documents to the contrary, Owner shall be entitled to bring a direct action in the Circuit Court to recover such costs.
- 14.2 Termination without Cause by Owner. The Owner, through its County Administrator or designee, shall have the right to terminate the Agreement, in whole or in part, without cause upon sixty (60) calendar days written notice to the Contractor. In the event of such termination for convenience, the Owner shall compensate Contractor for payments due through the date of termination, and one subsequent payment to cover costs of Work performed through the date of termination, subject to the terms and conditions of Section 3.1. The Contractor shall not be entitled to any other further recovery against the Owner, including, but not limited to, anticipated fees or profit on Work not required to be performed, or consequential damages or costs resulting from such termination.
- A. <u>Release of Contractor</u>. As a condition of Owner's termination rights provided for in this subsection, Contractor shall be released and discharged from all obligations arising by, through, or under the terms of the Contract Documents, and the Payment and Performance Bond shall be released. Owner shall assume and become responsible for the reasonable value of Work performed by Subcontractors prior to termination plus reasonable direct close-out costs, but in no event shall Subcontractors be entitled to unabsorbed overhead, anticipatory profits, or damages for early termination.

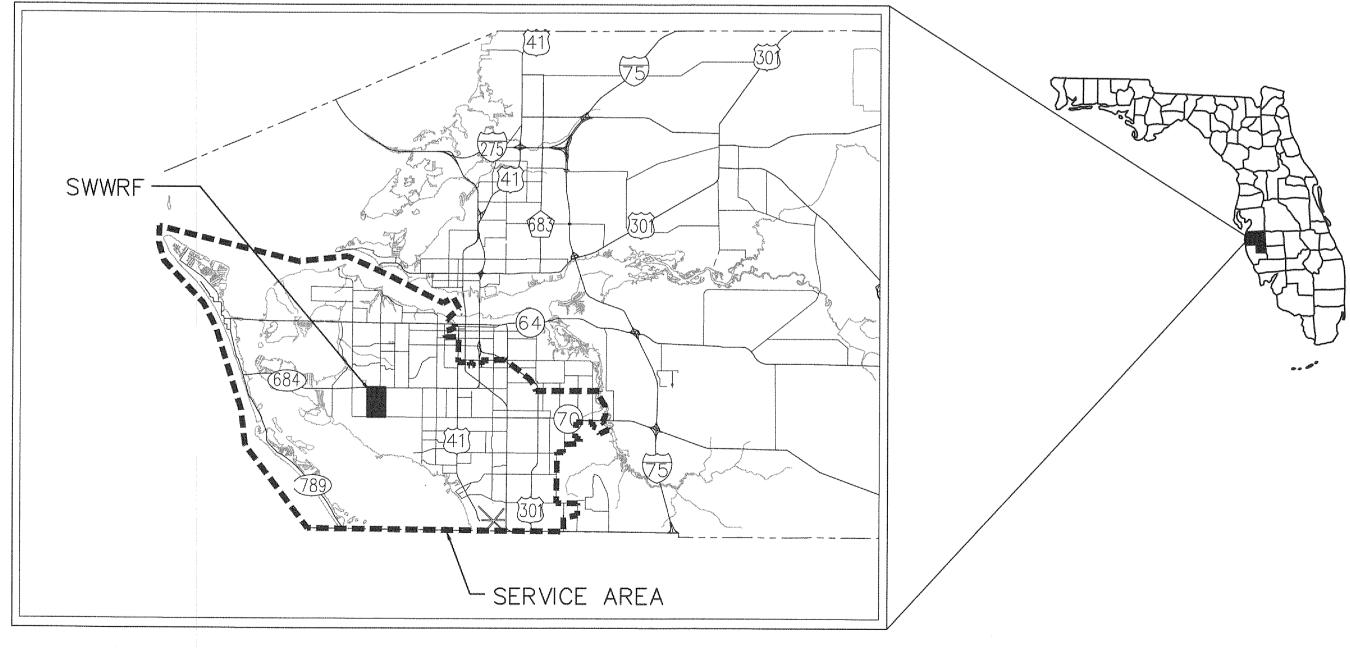
- B. <u>Waiver of Protest</u>. Contractor hereby waives any right to protest the exercise by Owner of its rights under this Section that may apply under the Procurement Ordinance.
- 14.3 Suspension without Cause. Owner may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety (90) days by written notice to Contractor, which will fix the date on which Work will be resumed. Contractor shall be allowed an increase in the Contract Sum or an extension of the Contract Time, or both, directly attributable to any suspension if Contractor makes an approved claim therefor.
- 14.4 Termination Based Upon Abandonment, Casualty or Force Majeure. If, after the construction commencement date (i) Contractor abandons the Project (which for purposes of this paragraph shall mean the cessation of all construction and other activities relating to the Project, excluding those which are necessary to wind down or otherwise terminate all outstanding obligations with respect to the Project, and no recommencement of same within one hundred twenty (120) days following the date of cessation), or (ii) the Project is stopped for a period of thirty (30) consecutive days due to an instance of Force Majeure or the result of a casualty resulting in a loss that cannot be corrected or restored within one hundred twenty (120) days (excluding the time required to assess the damage and complete the steps contemplated under Section 12.2), the Owner shall have the right to terminate the Agreement and pay the Contractor its compensation earned or accrued to date.
- 14.5 Vacation of Project Site; Delivery of Documents. Upon termination by Owner pursuant to Section 14.2 or 14.4, Contractor shall withdraw its employees and its equipment, if any, from the Project Site on the effective date of the termination as specified in the notice of termination (which effective date shall not be less than two (2) working days after the date of delivery of the notice), regardless of any claim the Contractor may or may not have against the Owner. Upon termination, the Contractor shall deliver to the Owner all original papers, records, documents, drawings, models and other material set forth and described in the Contract Documents.
- 14.6 Termination by the Contractor. If, through no act or fault of Contractor, the Work is suspended for a period of more than ninety (90) consecutive days by Owner or under an order of court or other public authority, or Owner fails to act on any Application for Payment or fails to pay Contractor any sum finally determined to be due; then Contractor may, upon fourteen (14) days written notice to Owner terminate the Agreement and recover from Owner payment for all Work executed, any expense sustained plus reasonable termination expenses. In lieu of terminating the Agreement, if Owner has failed to act on any Application for Payment or Owner has failed to make any payment as aforesaid, Contractor may upon fourteen (14) days written notice to Owner stop the Work until payment of all amounts then due.

MARS CHLORINATION AT THE SWWRF

COUNTY PROJECT # 6082190
ISSUED FOR BID
JULY 2015

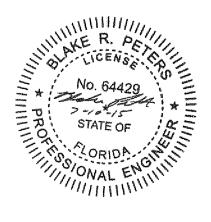


MANATEE COUNTY, FLORIDA



PROJECT VICINITY MAP





GENERAL NOTES:

- THESE PLANS ARE SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE EXISTING CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. CONTRACTORS ARE DIRECTED, TO CONDUCT WHATEVER INVESTIGATION THEY DEEM NECESSARY. PRIOR TO BIDDING, TO DETERMINE THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED.
- 2. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) AFFECTING HIS WORK.
- 3. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN WRITTEN CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
- 4. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, STORM DRAINS, SEWERS, UTILITIES, AND OTHER FACILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR ANY DAMAGES DUE TO HIS CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
- 5. WHERE IT IS NECESSARY TO DEFLECT PIPE EITHER HORIZONTALLY OR VERTICALLY, PIPE JOINT DEFLECTION SHALL NOT EXCEED 75% OF THE MANUFACTURERS' MAXIMUM RECOMMENDED DEFLECTION.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE EXISTING DRAINAGE SYSTEM WITHIN THE LIMITS OF THE PROJECT AREA FOR THE DURATION OF THE PROJECT.
- 7. THE CONTRACTOR SHALL PROVIDE CERTIFIED RECORD DRAWINGS AS OUTLINED IN THE SPECIFICATIONS. RED-LINE DRAWINGS SHALL BE CURRENT WITH EACH PAY APPLICATION SUBMITTED AND WILL BE CHECKED AS PART OF THE PAY APPLICATION REVIEW PROCESS. PAYMENT WILL NOT BE MADE TO CONTRACTOR WITHOUT APPROVED RED-LINE DRAWINGS.
- 8. FIELD CONDITIONS MAY NECESSITATE ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED PIPELINES TO AVOID CONFLICTS. NO ADDITIONAL PAYMENT SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND THE OWNER'S ENGINEER.
- 9. THE CONTRACTOR SHALL INCLUDE IN HIS BID; BY-PASS PUMPING FACILITIES, PUMPS, FITTINGS. LABOR, ETC. AS NECESSARY, BASED ON METHOD AND SEQUENCE OF CONSTRUCTION TO COMPLETE ALL WORK WHILE MAINTAINING THE EXISTING OPERATIONS AT ALL TIMES.
- 10. ALL PROPOSED WORK SHALL BE COORDINATED WITH MANATEE COUNTY UTILITIES DEPARTMENT
- 11. THE CONTRACTOR SHALL FURNISH SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL OF ALL PIPE CONNECTIONS, TRANSITIONS, AND SPECIALS PRIOR TO FABRICATION OR DELIVERY TO THE JOB SITE.
- 12. CONNECTIONS TO EXISTING FACILITIES SHALL BE ACCOMPLISHED IN A NEAT WORKMANLIKE MANNER. WHEN FIELD CONDITIONS INDICATE ANY VARIANCE FROM DETAILED METHODS, THE CONTRACTOR SHALL PROVIDE COMPREHENSIVE AND DETAILED DRAWINGS FOR OWNER REVIEW AND APPROVAL PRIOR TO MAKING THE CONNECTIONS.
- 13. UNLESS OTHERWISE INDICATED OR APPROVED, ALL BELOW GROUND DUCTILE IRON PIPE SHALL HAVE PUSH-ON OR MECHANICAL JOINTS, AND ALL ABOVE GROUND DUCTILE IRON PIPE SHALL HAVE FLANGED JOINTS. ALL JOINTS SHALL BE FULLY RESTRAINED.
- 14. ALL PIPELINES SHALL HAVE A MINIMUM COVER OF 36" BELOW EXISTING GRADE UNLESS OTHERWISE NOTED OR DIRECTED.
- 15. WATER SHALL NOT BE PERMITTED IN EXCAVATIONS AND TRENCHES DURING CONSTRUCTION. DEWATERING IS REQUIRED TO A MINIMUM OF 18" BELOW BOTTOM OF EXCAVATION.
- 16. THE CONTRACTOR SHALL NOT ALLOW ANY DISCHARGE OF RECLAIMED WATER TO LANDS AND OR ADJACENT WATER BODIES OR STORM DRAINS. ANY LEAKAGE MUST BE CONTAINED AND TRANSFERRED BY THE CONTRACTOR.
- 17. ALL BELOW-GRADE FITTINGS SHALL BE MECHANICAL JOINT DUCTILE IRON WITH CEMENT LINING FOR ALL PIPE 4-INCHES AND GREATER IN DIAMETER.
- 18. ALL EXPOSED PIPING SHALL BE PAINTED WITH DESIGNATED COLORS ASSOCIATED WITH THEIR USAGE AS PROVIDED IN THE SPECIFICATIONS.
- 19. ALL NEW PIPELINES SHALL BE FLUSHED, PRESSURE TESTED, AND APPROVED PRIOR TO TIE-INS TO EXISTING FACILITIES. THE CONTRACTOR WILL BE ALLOWED TO USE TEMPORARY PLUGS FOR
- 20. ALL CONCRETE THRUST BLOCKS INSTALLED FOR TESTING PURPOSES AND NOT REQUIRED FOR THE PIPELINE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL
- 21. CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL BE REQUIRED TO INSTALL ALL EROSION. SEDIMENT AND TURBIDITY CONTROL MEASURES PRIOR TO CONSTRUCTION OF ANY COMPONENTS ASSOCIATED WITH THE PROJECT. SEDIMENT CONTROL INCLUDES SILT DAMS.TRAPS, EROSION PROTECTION, AND ANY OTHER APPURTENANCES NEEDED BUT NOT NECESSARILY SHOWN ON THESE DRAWINGS.
- 22. CONTRACTOR SHALL PROVIDE PROTECTIVE MATTING, FUEL CONTAINMENT AND ALL OTHER MATERIALS, EQUIPMENT AND LABOR TO PROTECT THE STAGING AREA DURING CONSTRUCTION.
- 23. CONTRACTOR SHALL, PRIOR TO BEGINNING CONSTRUCTION, SUBMIT A "FUELING SPILL PREVENTION PLAN" THAT SHALL CLEARLY INDICATE HOW FUEL SPILLS WILL BE PREVENTED WHEN FUELING BOTH WITHIN AND OUTSIDE OF THE STAGING AREA.
- 24. CONTRACTOR SHALL SUBMIT A DEWATERING PLAN FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION. DEWATERING SHALL BE CONDUCTED IN ACCORDANCE WITH THE BMPS IDENTIFIED IN CHAPTER 4, 4.40 "DEWATERING" OF "THE FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL".
- 25. CONTRACTOR SHALL COORDINATE THE WORK SUCH THAT THE PLANT SHALL STAY IN OPERATION AT ALL TIMES.
- 26. LINE INACTIVATIONS SHALL BE CONDUCTED AT OFF PEAK TIMES AS DICTATED BY PLANT OPERATIONS STAFF.
- 27. ALL WORK, EQUIPMENT AND MATERIALS SHALL MEET OR EXCEED CURRENT MANATEE COUNTY STANDARDS UNLESS OTHERWISE NOTED HEREIN OR IN TECHNICAL SPECIFICATIONS.

RESTORATION AND MISCELLANEOUS NOTES

- 1. THE CONTRACTOR SHALL PROVIDE AN ASPHALT PATCH FOR TRENCH AREAS CONSTRUCTED IN EXISTING ROADWAYS. ADJUST ALL CASTINGS TO MATCH NEW PAVEMENT SURFACE.
- 2. THE CONTRACTOR SHALL REPLACE ALL EXISTING PAVING, STABILIZED EARTH, CURBS, SIDEWALKS, FENCES, LANDSCAPING AND OTHER IMPROVEMENTS WITH THE SAME OR BETTER TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.
- 3. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS OTHERWISE NOTED.
- 4. ALL EXISTING FENCES DISTURBED DURING CONSTRUCTION SHALL BE REPLACED AND REINSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER UNLESS SHOWN TO BE REMOVED ON CONSTRUCTION PLANS.
- 5. LIMITS OF PROPOSED ROADWAY OVERLAY SHOWN ARE APPROXIMATE. CONTRACTOR SHALL OVERLAY ALL DISTURBED AREAS OF ACCESS ROAD AS PART OF THIS PROJECT.
- CONTRACTOR SHALL RESTORE ALL IRRIGATION SYSTEM COMPONENTS TO PRE-CONSTRUCTION CONDITIONS.
- 7. CONTRACTOR SHALL RESTORE GRADE TO PRECONSTRUCTION ELEVATIONS UNLESS OTHERWISE

SURVEY NOTES

- 1. ELEVATIONS SHOWN ON THE PLANS REFERENCE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (N.G.V.D. - 1929). HORIZONTAL DATUM IS NORTH AMERICAN DATUM 1983/1999 ADJUSTED STATE PLANE COORDINATE SYSTEM (SPCS).
- 2. CONTRACTOR SHALL EMPLOY A PROFESSIONAL SURVEYOR, LICENSED IN THE STATE OF FLORIDA TO PERFORM CONSTRUCTION STAKING IN ACCORDANCE WITH RULE 61G17-6.004(3) OF THE FLORIDA ADMINISTRATIVE CODE.
- 3. THE LOCATIONS AND ELEVATIONS OF ALL EXISTING FACILITIES SHOWN WITHIN THE LIMITS OF CONSTRUCTION ARE PROVIDED BY URS AND THE 100% PLANS DATED JANUARY 2012 AS PART OF THE SECOND 10 MG RECLAIMED WATER STORAGE TANK AND HIGH SERVICE PUMP STATION AT THE SOUTHWEST WATER RECLAIMATION FACILITY PROJECT PREPARED BY URS CORPORATION.

UTILITY NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE FOLLOWING JURISDICTIONAL BODIES AND UTILITY COMPANIES:



MANATEE COUNTY TRANSPORTATION DEPT. GENE RIGGS 2904 12TH STREET COURT E BRADENTON, FL 34208 (941) 708-7509 Ext. 7509

MANATEE COUNTY UTILITIES OPERATIONS BOB CROUCH 4422-C 66TH STREET W. BRADENTON, FL 34210 (941) 792-8811 Ext 5075

FLORIDA POWER AND LIGHT LARRY RUSSO 125 12TH AVENUE EAST BRADENTON, FL 34208 (941) 723-4424

TECO/PEOPLES GAS TED FELEGY 8261 VICO CT. SARASOTA, FL 34240 (941) 342-4026

BRADENTON, FL 34208

VERIZON FLORIDA, INC.

1701 RINGLING BLVD.

SARASOTA, FL 34236

BRIGHTHOUSE NETWORK, LLC

(941) 748-3816 Ext. 24053

(941) 952-5616

WALTER KROL

5413 S.R. 64 E.

DON DURDEN

- 2. ALL BELOW GROUND DUCTILE IRON PIPE SHALL BE ENCASED IN A POLYETHYLENE WRAP IN ACCORDANCE WITH AWWA STANDARDS.
- 3. ALL VALVE BOXES AND COVERS SHALL BE PAINTED TO INDICATE THEIR TYPE OF SERVICE.
- 4. ADJUST ALL EXISTING MANHOLE FRAMES AND COVERS AND VALVE BOXES TO MATCH FINAL

STORM DRAINAGE NOTES:

- THE CONTRACTOR SHALL PHYSICALLY LOCATE EXISTING STORM INFRASTRUCTURE AT THE PROPOSED CONNECTIONS TO THE EXISTING INFRASTRUCTURE TO VERIFY THE SIZE, MATERIAL. LOCATION, ELEVATION, AND CONDITION OF THE EXISTING INFRASTRUCTURE PRIOR TO THE START AND PRIOR TO ORDERING PRE-CAST STRUCTURES.
- THE CONTRACTOR SHALL MAINTAIN THE FUNCTIONALITY OF THE EXISTING STORMWATER SYSTEMS THROUGHOUT CONSTRUCTION WITHOUT IMPEADING EXISTING DRAINAGE THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF THE STORM DRAIN SYSTEM WITHIN THE PROJECT LIMITS DURING THE CONSTRUCTION PERIOD. THE STORM DRAIN SYSTEM SHALL BE KEPT FREE FROM SEDIMENTAION AND DEBRIS. THE CONTRACTOR SHALL INSPECT THE STORM DRAIN SYSTEM AT A MINIMUM OF ONCE PER MONTH.
- THE CONTRACTOR SHALL CLEAN AND INSPECT ALL EXISTING STORM PIPES FROM OUTSIDE THE ROW TO BE CONNECTED INTO THE PROPOSED SYSTEM FOR A MIN. OF 20' UPSTREAM OF THE PROPOSED CONNECTION POINT. THE CONTRACTOR SHALL CLEAN AND INSPECT ALL EXISTING STORM PIPES WITHIN PUBLIC RIGHT-OF-WAYS UP TO THE NEXT EXISTING STORM STRUCTURE. THIS IS INCIDENTAL TO THE COST OF CONSTRUCTION.
- PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL CLEAN AND INSPECT EXISTING STORM PIPES DOWNSTREAM OF THE PROPOSED CONNECTION. THE EXISTING PIPES SHALL BE CLEAN AND FREE OF SEDIMENT AND DEBRIS DOWNSTREAM OF THE PROPOSED CONNECTION POINTS.
- 6. ALL RCP STORM PIPES WITH MORE THAN 2' OF COVER SHALL BE CLASS III, STORM PIPES WITH LESS THAN 2' OF COVER SHALL BE CLASS V.
- 7. CONTRACTOR SHALL ADHERE TO THE EXISTING STORM WATER PERMIT IN PLACE FOR THIS
- 8. SHOULD EXISTING CONDITIONS VARY FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR IS TO NOTIFY THE ENGINEER.
- 10. PROTECT EXISTING MONITORING WELL LOCATED WITHIN/ADJACENT TO THE PROJECT AREA.

9. POSITIVE DRAINAGE SHALL BE ESTABLISHED AWAY FROM THE PROPOSED STRUCTURE.

DEWATERING NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DEWATERING ACTIVITIES.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL AUTHORIZATIONS OR PERMITS ASSOCIATED WITH DEWATERING ACTIVITIES INCLUDING OBTAINING ANY APPLICABLE WATER TESTING AS NEEDED.
- CONTRACTOR SHALL PREPARE AND SUBMIT A DEWATERING PLAN SHOWING APPLICABLE BEST MANAGEMENT PRACTICES FOR REVIEW AND APPROVAL PRIOR TO ANY DEWATERING ACTIVITIES. THE PROPOSED DEWATERING PLAN SHALL ALSO INCLUDE THE PROPOSED POINT(S) OF DISCHARGE.
- APPLICABLE SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES INCLUDING. BUT NOT LIMITED TO TEMPORARY SEDIMENT TRAP(S), SETTLEMENT TANK(S), STAKED BALES, RIP RAP, SILT FENCE, FILTER BAGS, AND/OR ROCK CHECK DAMS, SHALL BE INSTALLED PRIOR TO ANY DEWATERING ACTIVITIES. THE CONTRACTOR SHALL MAINTAIN AND INSPECT DAILY.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR STABILIZING AND MAINTAINING ALL DEWATERING EQUIPMENT AND S.E.S.C. MEASURES.

DURING DEWATERING ACTIVITIES:

- 1. DEWATERING DISCHARGE FLOW RATES SHALL BE RESTRICTED SO AS TO AVOID EROSION OF SOILS, EROSION CONTROL MEASURES, OR TRANSPORT OF SEDIMENT.
- 2. THE CONTRACTOR SHALL PERFORM DAILY INSPECTIONS OF THE DEWATERING EQUIPMENT, DISCHARGE, SEDIMENT TRAP(S), SETTLEMENT TANK(S), AND/OR POND(S) FOR SIGNS OF EROSION, SILTATION, OR OTHER DAMAGE. SHOULD ANY EROSION, SILTATION, OR OTHER DAMAGE BE OBSERVED, THE CONTRACTOR SHALL IMMEDIATELY MAKE ADJUSTMENTS TO DEWATERING ACTIVITIES AS NEEDED TO PREVENT FURTHER DAMAGE AND SHALL REPAIR ANY DAMAGE WITHIN 24 HOURS OF OBSERVATION.

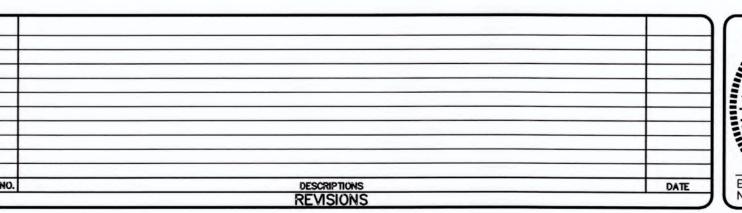
DEWATERING SEQUENCE:

- 1. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE START OF ANY CONSTRUCTION AND/OR DEWATERING ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL WORK IS COMPLETE.
- 2. FOLLOWING THE COMPLETION OF DEWATERING, THE CONTRACTOR SHALL REMOVE ALL WELL POINTS, PIPES, PUMPS, AND ANY ADDITIONAL DEWATERING EQUIPMENT FROM THE PROJECT SITE.
- 3. FOLLOWING THE REMOVAL OF DEWATERING EQUIPMENT, THE CONTRACTOR SHALL EXCAVATE ANY SEDIMENT OR MUCK ACCUMULATED WITHIN THE TEMPORARY SEDIMENT TRAP(S) SETTLEMENT TANK(S), AND/OR POND(S) AND DISPOSE OF SEDIMENT TO A QUALIFIED LAND FILL.
- 4. FOLLOWING REMOVAL OF SEDIMENT, THE CONTRACTOR SHALL REMOVE THE SETTLEMENT TANK(S) AND/OR FILL THE SEDIMENT TRAP(S) WITH CLEAN SANDY SOIL TO RESTORE THE NATURAL GRADE AND SOD OVER AS SOON AS PRACTICABLY POSSIBLE.

SOIL EROSION & SEDIMENTATION CONTROL NOTES:

- 1. ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE START OF ANY CONSTRUCTION, DEMOLITION, DEWATERING, OR MOBILIZATION ACTIVITIES, MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL WORK IS COMPLETE.
- 2. CONTRACTOR SHALL FOLLOW BEST MANAGEMENT PRACTICES THROUGHOUT DEMOLITION AND CONSTRUCTION.
- 3. HAY BALES AND/OR SILT SCREENS SHALL BE INSTALLED ADJACENT TO THE WORK AREAS TO PREVENT SEDIMENT TRANSPORT PRIOR TO THE COMMENCEMENT OF WORK.
- 4. INLET PROTECTION SHALL BE PLACED AT ALL EXISTING AND PROPOSED INLETS IN OR ADJACENT TO THE PROJECT AREA.
- 5. AS SOON AS PRACTICAL, ALL DRESSED SLOPES AND DISTURBED AREAS SHALL BE SODDED OR SEEDED AND MULCHED TO PREVENT EROSION
- 6. NO EXCAVATION SHALL EXTEND BELOW THE DEPTHS/ELEVATIONS SHOWN ON THE DRAWINGS OR IN THE SPECIFICATIONS WITHOUT PRIOR APPROVAL.
- 7. CONTRACTOR SHALL PREPARE AND SUBMIT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES AND PROVIDE APPROVED FDEP NOI TO CITY.
- 8. CONTRACTOR SHALL PREPARE AND SUBMIT A DISPOSAL PLAN FOR EXCAVATION MATERIAL INCLUDING THE LOCATION OF DISPOSAL SITE(S) AND DISPOSAL PLANS SHOWING APPLICABLE BEST MANAGEMENT PRACTICES FOR REVIEW AND APPROVAL PRIOR TO ANY EARTHWORK ACTIVITIES.

	DRAWING INDEX
SHEET	DESCRIPTION
GENERAL	
G-0.1	COVER
G-0.2	GENERAL NOTES AND DRAWINGS INDEX
G-0.3	LEGENDS AND ABBREVIATIONS
CIVIL	
C-0.1	EXISTING SITE AND HORIZONTAL CONTROL PLAN
C-0.2	PROPOSED SITE PLAN
MECHANIC	AL
M-0.1	CHEMICAL BUILDING MECHANCAL PLAN
M-0.2	CHEMCIAL FEED PUMP DETAILS
DETAILS	
D-0.1	DETAILS
D-0.2	DETAILS
D-0.3	EROSION CONTROL DETAILS
STRUCTUR	RAL
S-0.1	STRUCTRUAL NOTE, LEGEND AND ABBREVIATIONS
S-0.2	CHEMICAL BUILDING PLAN AND SECTION
S-0.3	STRUCTURAL SECTIONS
S-0.4	STRUCTURAL SECTIONS AND DETAILS
INSTRUME	NTATION
I-0.1	I&C SYSTEM GENERAL NOTES, LEGENDS AND ABBREVIATIONS
I-0.3	INSTRUMENTATION INSTALLATION DETAILS
I-0.4	CONTROL PANEL DETAILS
I-1.1	P&ID SODIUM HYPOCHLORITE STORAGE AND PUMPING
I-1.2	P&ID RCW TRANSMISSION MAIN CHEMICAL INJECTION
ELECTRICA	AL
E-0.1	OVERALL ELECTRICAL PLAN
E-0.2	CHEMICAL BUILDING ELECTRICAL PLAN

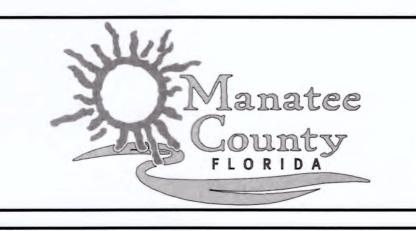






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MARS CHLORINATION SYSTEM AT THE SWWRF

GENERAL NOTES AND DRAWINGS INDEX

MCE PROJ. # DRAWN QES DESIGNED BRP CHECKED PROJ. MGR. BRP

HORIZONTAL AS SHOWN IG-0 VERTICAL: AS SHOWN

GENERAL ABBREVIATIONS

@ .	AT	LN.	LANE
ABW	AUTOMATIC BACKWASH	LP	LIGHT POLE
A/C	AIR CONDITIONER UNIT	LS	LICENSED SURVEYOR
AC	ACRES	MAS	MASONRY
AC	ASPHALTIC CONCRETE	MARS	MANATEE AGRICUTUAL REUSE SYSTEM
ABD	ABANDONED	MAX.	MAXIMUM
AL./ALUM.		MCC	MOTOR CONTROL CENTER
ANCH.	ANCHOR	MCMRS	
APPROX.	APPROXIMATE	MES	MITERED END SECTION
BLDG.	BUILDING	MG	MILLION GALLONS
BM.	BEAM	MGD	MILLION GALLONS PER DAY
BOT./BOTT.		WHW	MEAN HIGH WATER
(C)	CALCULATED DATA	MON. NaOCL	MONUMENT SODIUM HYPOCHLORITE
С	CHANNEL	NG	NATURAL GROUND
C.	CONDUIT	N.T.S.	NOT TO SCALE
C.B.	CATCH BASIN	NO.	NUMBER
CCR	CERTIFIED CORNER RECORD	NP.	NORMAL POOL
CHKR	CHECKERED	ø	DIAMETER/PHASE
CIR.	CIRCLE	0/A	OVERALL
CLF	CHAIN LINK FENCE	OPNG.	OPENING
Ę.	CENTERLINE	OR OR	OFFICIAL RECORDS BOOK
CMP	CORRUGATED METAL PIPE	(P)	PLAT BOOK
COL.	COLUMN	PCCP	PRE-STRESSED CONCRETE PIPE
CONN.	CONNECTOR/CONNECTION	PG	PAGE
CONC.	CONCRETE	PLCS.	PLACES
COR	CORNER	PLS	PROFESSIONAL LAND SURVEYOR
CPB	CONDOMINIUM PLAT BOOK	POB	POINT OF BEGINNING
C/T	CURB TIE	POC	POINT OF COMMENCEMENT
CU.	COPPER	POT	POTABLE
(D)	DEED DATA	PP	POWER POLE
D.	DEEP/DRAIN	PRM	PERMANENT REFERENCE MONUMENT
DB	DEED BOOK	PROP.	PROPOSED
DBL.	DOUBLE DESIGN HIGH WATER	PSM	PROFESSIONAL SURVEYOR & MAPPER
DHW.	DESIGN HIGH WATER	P/T	PAVEMENT TIE
DISCH.	DISCHARGE	P.V.	PLUG VALVE
DN.	DOWN	PVMT	PAVEMENT
DRWY E.W.	DRIVEWAY EACH WAY	R.	RADIUS/RISER/RELAY
EA.	EACH	RCP	REINFORCED CONCRETE PIPE
ECMP	ELLIPTICAL CORRUGATED METAL PIPE	REF.	REFERENCED
EL./ELEV.		REINF.	REINFORCED/REINFORCING
ELEC.	ELECTRICAL CONDUIT	REQ'D	REQUIRED
EP	EDGE OF PAVEMENT	RESTR.	RESTRAINED
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE	RLS	REGISTERED LAND SURVEYOR
ETC.	AND SO FORTH	RW;R/W	RIGHT-OF-WAY
EXIST.	EXISTING	SAN.	SANITARY
EXP.	EXPANSION	SEC.	SECTION
(F)	FIELD DATA	SGL	SINGLE
FCM	FOUND CONCRETE MONUMENT	SHW	SEASONAL HIGH WATER
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	SIR	SET IRON ROD 2" LB 6113
FF	FINISHED FLOOR	SND	SET NAIL & DISC LB 6113
FIR	FOUND IRON ROD	SPRK	SPRINKLER
FND	FOUND NAIL & DISC	SQ.	SQUARE
FOP	FOUND OPEN PIPE	SN.	SIGN
FPM	FLUORO RUBBER	SR	STATE ROAD
FPP	FOUND PINCHED PIPE	SSMH	SANITARY SEWER MANHOLE
FRRS	FOUND RAILROAD SPIKE	S/T	SIDEWALK TIE
F/T	FENCE TIE	STL.	STEEL
FT.	FOOT	STY	STORY
FTG.	FOOTING	S/W;SWK	SIDEWALK
FXC	FOUND X-CUT	SYM.	SYMBOL TEMPORARY REMOVE MARK
GALV.	GALVANIZED	TBM	TEMPORARY BENCH MARK
GDRL	GUARDRAIL	TOB	TOP OF BANK
GE	GRATE ELEVATION	T.&B.	TOP & BOTTOM
GEN	GENERATOR	TEL	TELEPHONE
GI	GRATED INLET	TEMP.	TEMPORARY
GPM	GALLONS PER MINUTE	THK	THICK TOE OF SLOPE
GRTG.	GRATING	TOS	
G.S.	GALVANIZED STEEL	TYP.	TYPICAL
GR./GRD.	GRADE	UG UP	UNDERGROUND GAS UTILITY POLE
GWP	GUY WIRE POLE	UT	UNDERGROUND TELEPHONE
HDWALL	HEADWALL		
H.R.	HANDRAIL	VCP VERT.	VITRIFIED CLAY PIPE VERTICAL
HWL	HIGH WATER LEVEL	W	WIDE FLANGE/WIDE/WATT
IE	INVERT ELEVATION	w W/	WITH
IN.	INCH	WF	WOOD FENCE
INV.	INVERT	W/L	WATER LINE
IP	IRON PIPE	W.L.	WATER LINE WATER LEVEL
IR	IRON ROD	W/M	WATER LEVEL WATER MAIN
J.B.	JUNCTION BOX	W.M.	WATER MAIN WATER METER
JT.	JOINT	W.P.	WEATHER PROOF
(L)	LEGAL DESCRIPTION DATA	W.S.	WALL SLEEVE/WATER STOP/WATER SERVICE
LB	LICENSED BUSINESS	11.J.	TE SEEL TE MITTER STOTE / WITTER SERVICE

FLOW ABBREVIATIONS

LO AA	ABBREVIA HUNS
AL	ALUM SOLUTION
AB	AERATION BASIN
AD	AEROBIC DIGESTER
AX	ANOXIC BASIN
BA	BLOWER AIR
BP	BYPASS
BW	BACKWASH
CA	COMPRESSED AIR
CCC	CHLORINE CONTACT CHAMBER
CCE	CHLORINATED EFFLUENT
CF	CLOTH FILTER
CLE	CLARIFIER EFFLUENT
CLG	CHLORINE GAS
CLS/CL2S	CHLORINE SOLUTION
D/DR	DRAIN
DAF	DISSOLVED AIR FLOTATION
DS	DEWATERED SLUDGE
EFF	EFFLUENT
EXP	EXPANSION
FBW	FILTER BACKWASH
FC	FINAL CLARIFIER
FE	FILTER EFFLUENT
FLE	FILTERED LAKE EFFLUENT
FLW	FLOCCULATED WATER
FM	FLOW METER
FW	FILTERED WATER
GBT	GRAVITY BELT THICKENER
GR	GRIT
HDW	HEADWORKS
INF	INFLUENT
IR	INTERNAL RECYCLE
HSBFP	HIGH SOLIDS BELT FILTER PRESS
ML	MIXED LIQUOR
OF	OVERFLOW
P	POLYMER
PD	PLANT DRAIN
PDFM	PLANT DRAIN FORCE MAIN
PS	PUMP STATION
PW	POTABLE WATER
RAS	RETURNED ACTIVATED SLUDGE
RCW	RECLAIMED WATER
REJ	REJECT
RML	RECIRCULATED MIXED LIQUOR
RW	REUSE WATER
SAM	SAMPLE
SB	SPLITTER BOX
22	SCHM

STORMWATER DRAINAGE

WASTE ACTIVATED SLUDGE

WASTE BACKWASH WATER

SAMPLE LINE

WASTEWATER

SANITARY SEWER THICKENED SLUDGE

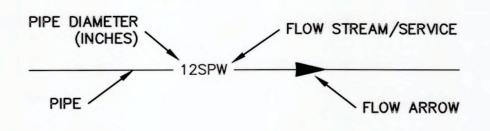
PIPING ABBREVIATIONS

ARV	AIR RELEASE VALVE
ABD	ABANDONED
BFV	BUTTERFLY VALVE
BPSV	BACK PRESSURE SUSTAINING VALVE
BV	BALL VALVE
СВ	CATCH BASIN
CO	CLEANOUT
CORP	CORPORATION
CV	CHECK VALVE
D.I.	DUCTILE IRON
DIA	DIAMETER
D.I.P.	DUCTILE IRON PIPE
ELEC.	ELECTRICAL
EXIST.	EXISTING
FHA	FIRE HYDRANT ASSEMBLY
FL	FLANGED
GS	GALVANIZED STEEL
GV	GATE VALVE
HB	HOSE BIBB
HDPE	HIGH DENSITY POLYETHYLENE
МН	MANHOLE
MJ	MECHANICAL JOINT
PE	PLAIN END
PS	PUMP STATION
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
RED.	REDUCER
SCH	SCHECULE
DR	DIAMETER RATIO
SS.	STAINLESS STEEL
TBR	TO BE REMOVED
UE	UNDERGROUND ELECTRIC
VERT.	VERTICAL
WM	WATER METER

LEGEND

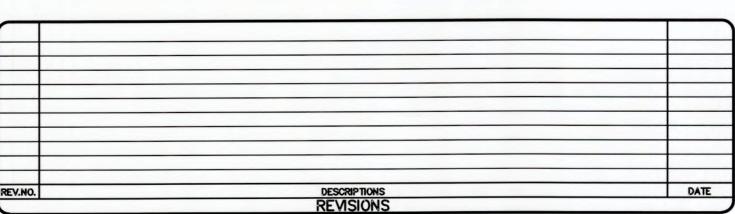
EXISTING		PROPOSED
8	PIPE 12" OR LARGER (ABOVE GROUND)	
=====	PIPE 12" OR LARGER (UNDERGROUND)	=====
	PIPE SMALLER THAN 12" (ABOVE GROUND)	
	PIPE SMALLER THAN 12" (UNDERGROUND)	
	GATE VALVE	\bowtie
	BUTTERFLY VALVE	7
101	BALL VALVE	101
$ \triangle $	PLUG VALVE	Δ
	REDUCER	\triangleright
Ö	MANHOLE	O _{M.H.}
□ _{C.B.}	CATCH BASIN	С.В.
0.0.	TOP OR TOE OF BANK	
///////////////////////////////////////	PIPING, STRUCTURES OR EQUIPMENT TO BE REMOVED	
25	CONTOURS	26
x x	CHAIN LINK FENCE	x x
	SILT FENCE	

PIPE IDENTIFICATION

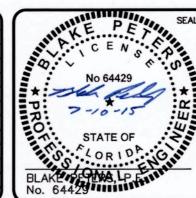


SECTION DESIGNATION

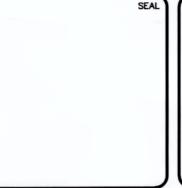
SHEET WHERE
SECTION IS SHOWN SECTION NAME (LETTER ONLY, NO NUMBER) A/M-7.2



LICENSED BUSINESS



WALL TIE WATER





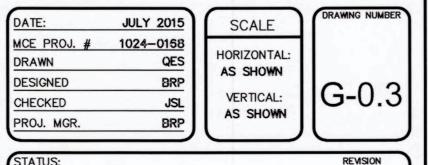
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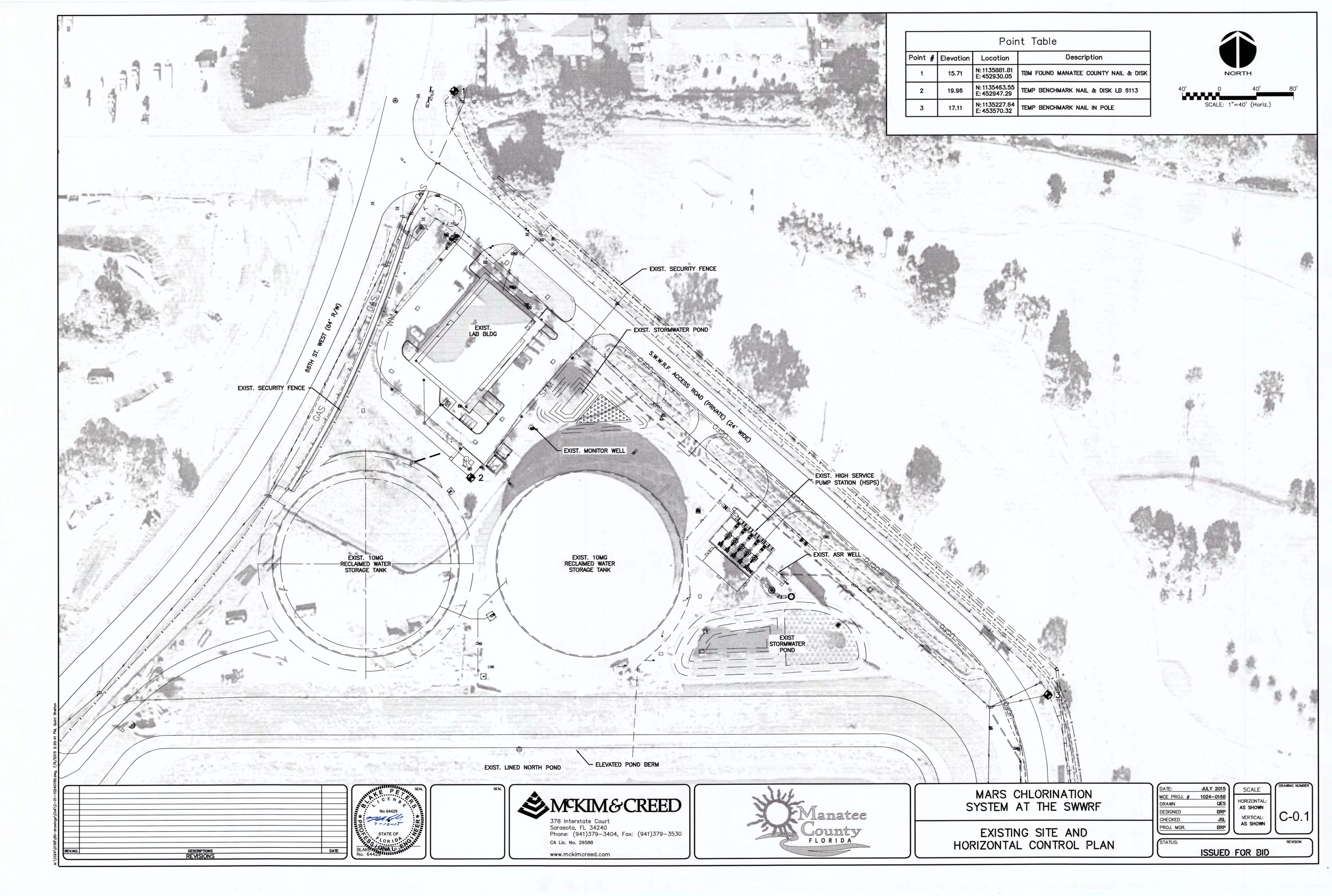
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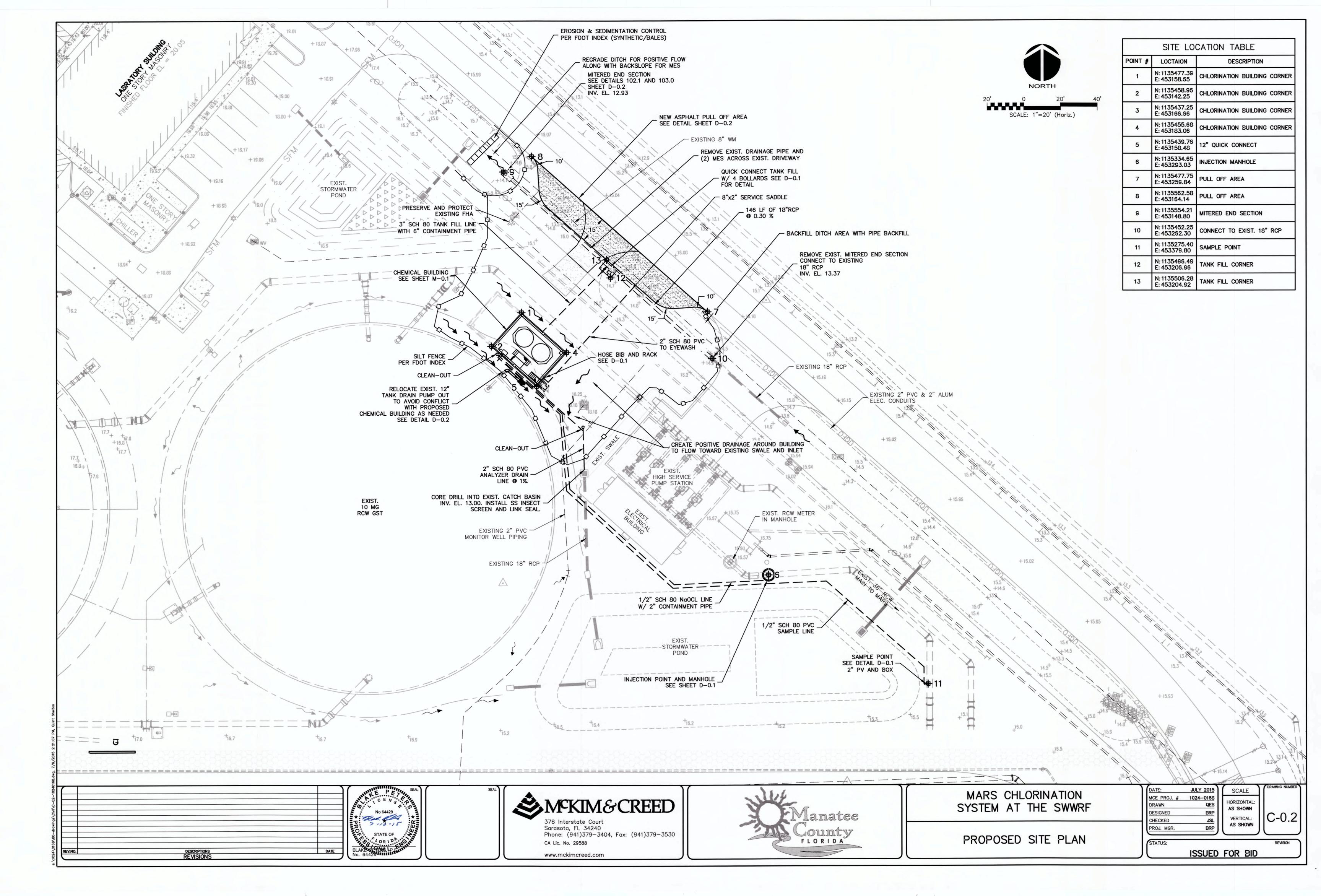


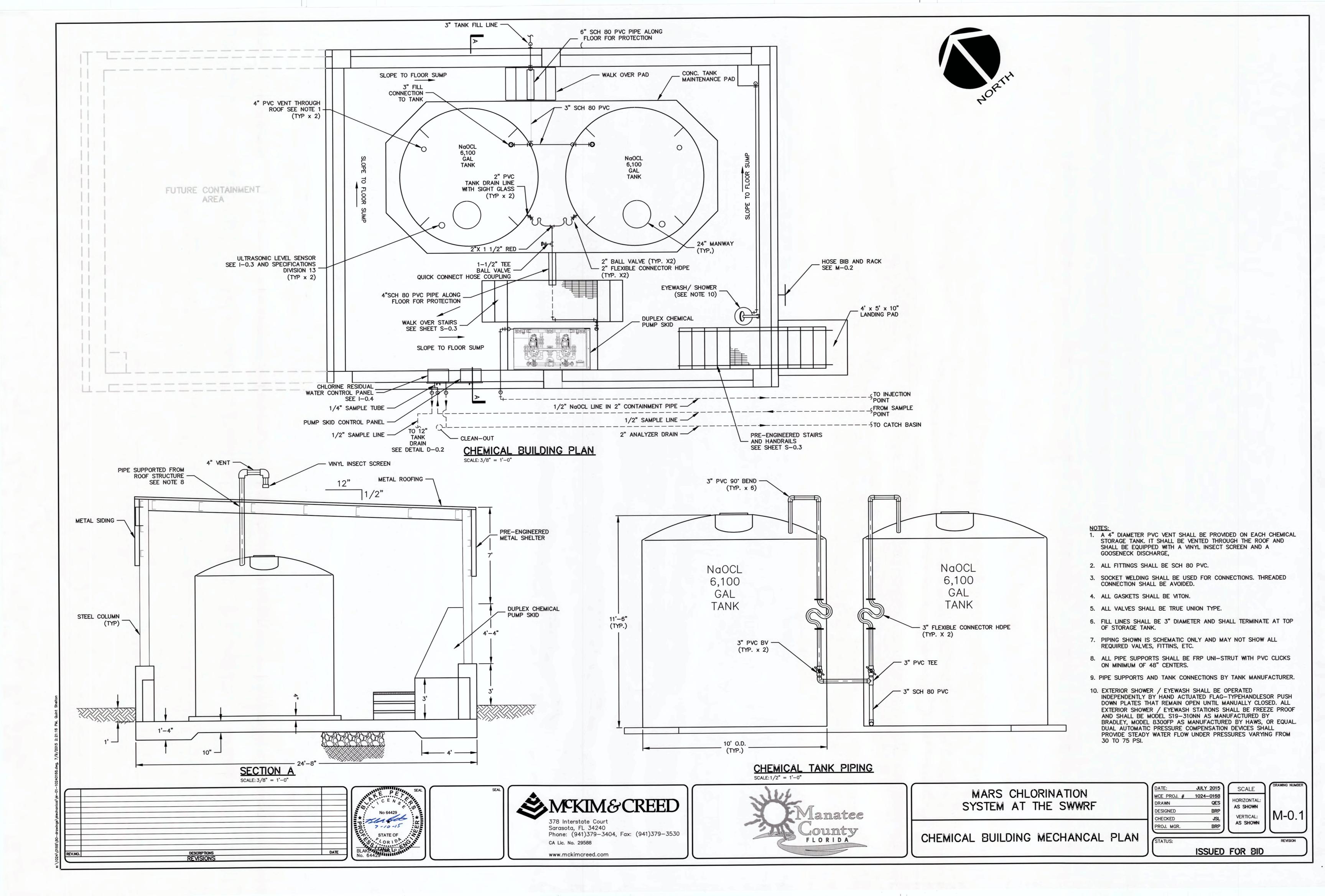
MARS CHLORINATION SYSTEM AT THE SWWRF

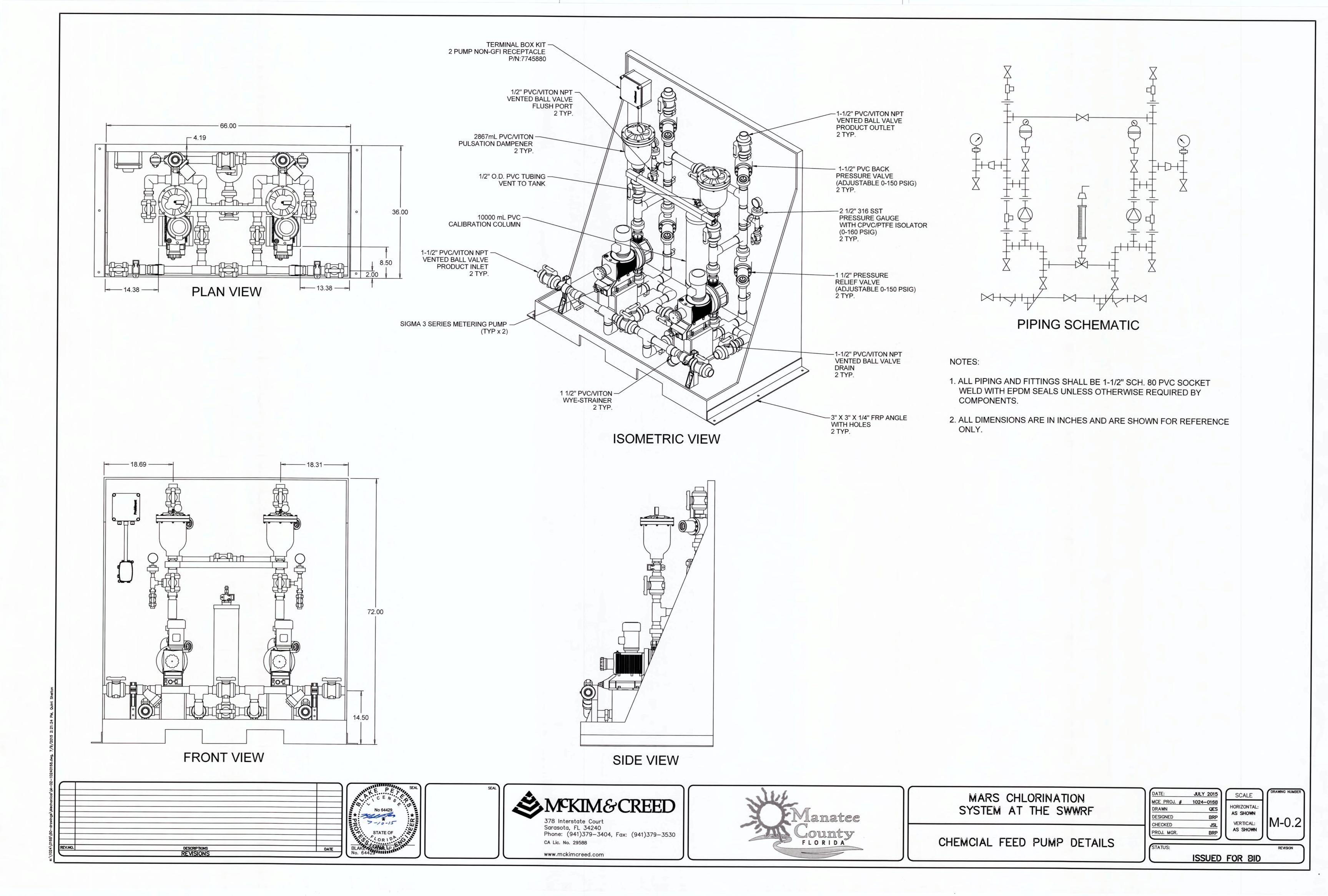
LEGENDS AND ABBREVIATIONS

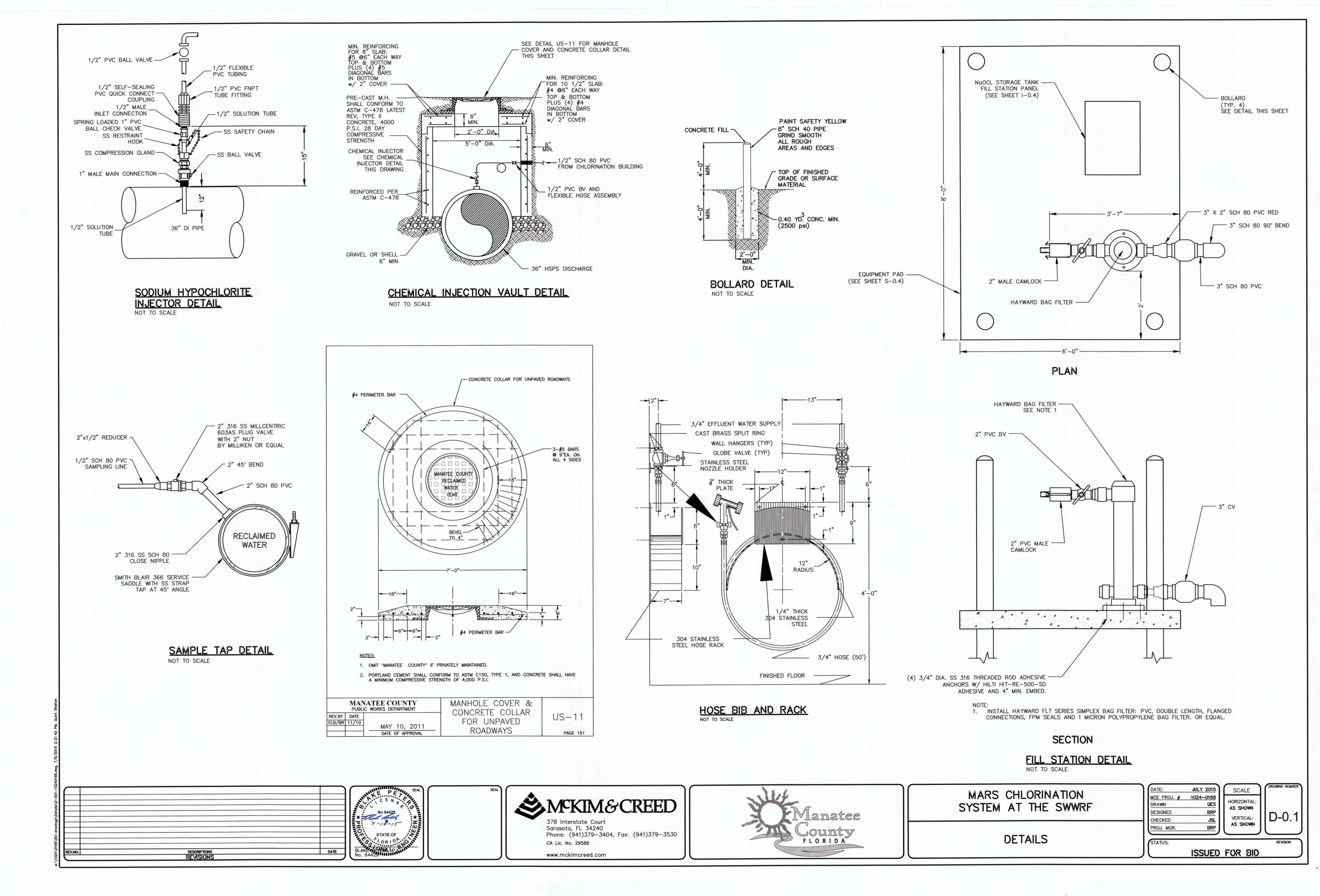


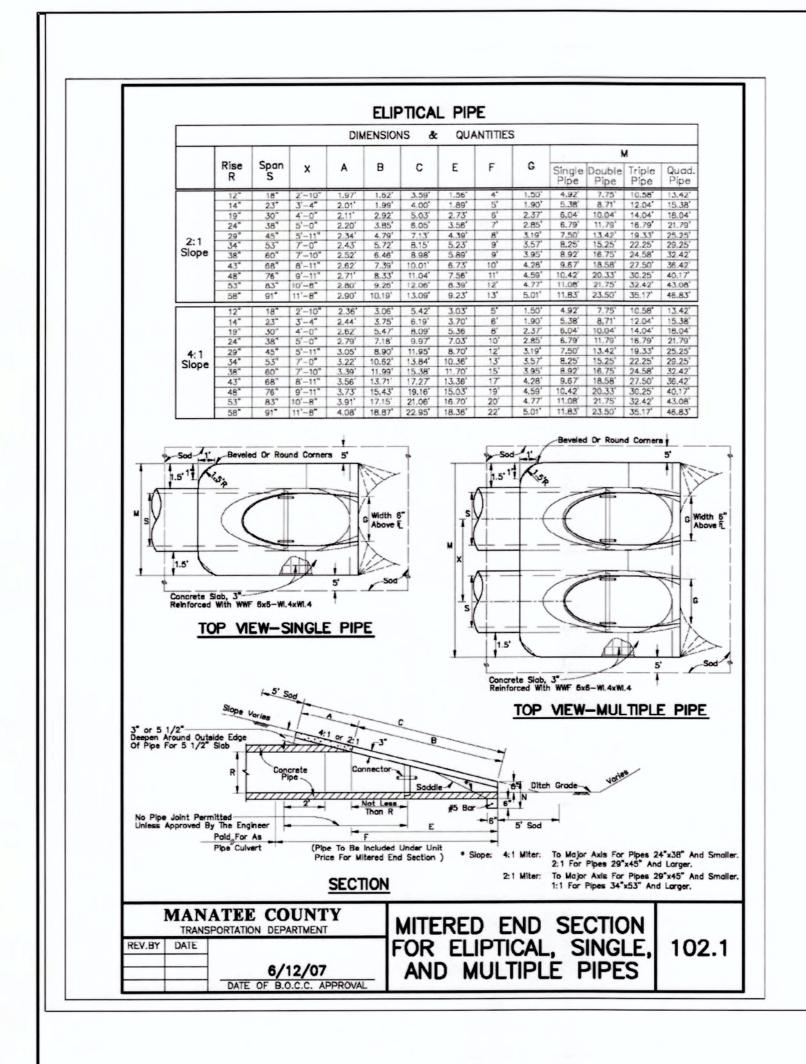












RECLAIMED WATER

×

5"

24"x 24"x 6" CONC. PAD TO BE INSTALLED AT EACH VALVE BOX.

FINISHED GRADE-7

-CONCRETE

DIRECTION

-CAST IRON LID

1. "WV" OR "RWV" TO BE IMPRESSED INTO THE NEWLY-POURED CONCRETE CURB, ALONG WITH IF NO CURB, INSTALL A

STEEL SCREW IN THE EDGE OF PAVEMENT WITH THE FOOTAGE FROM THE DISC TO THE VALVE.

BLUE DISC WITH "WV" OR PURPLE DISC DISTANCE IN FEET TO THE VALVE. WITH "RWV" AND A 1/8"x1" GALVANIZED

2. ALL EXISTING AND PROPOSED VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADES AS DETERMINED IN THE FIELD.

3. WATER VALVES SHALL NOT BE PLACED IN HANDICAPPED RAMPS.

4. PRECAST CONCRETE PADS & THRUST BLOCKS SHALL NOT BE USED.

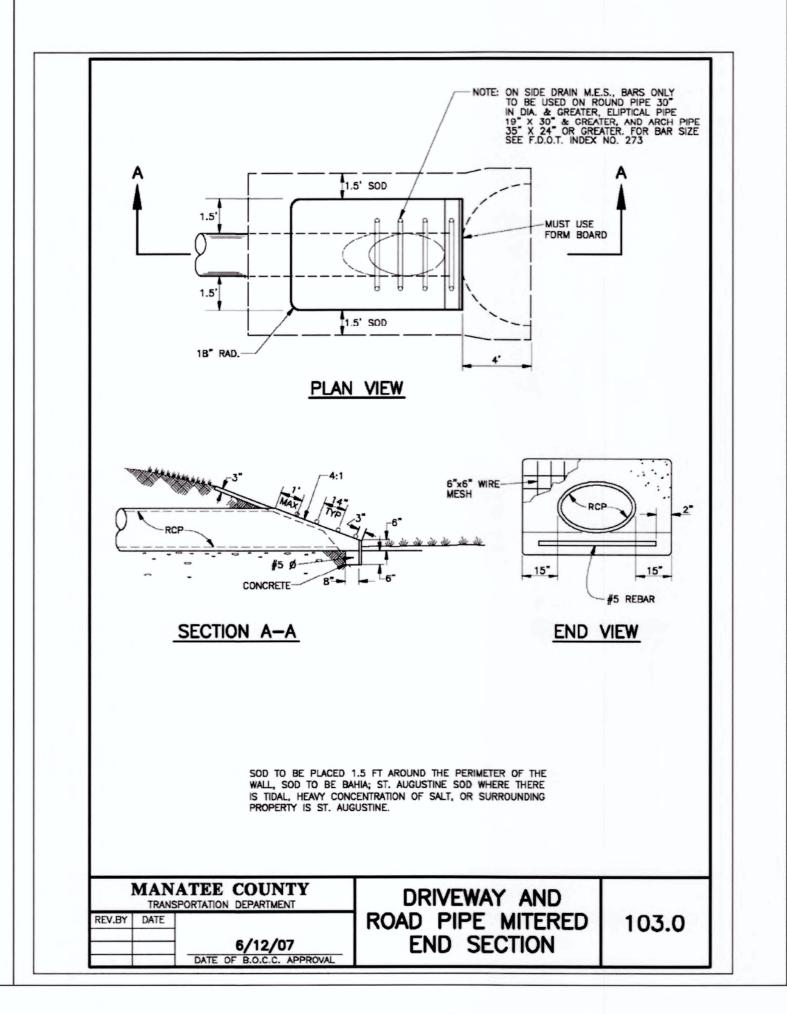
2" PLUG VALVE. BOX. ID AND TAG

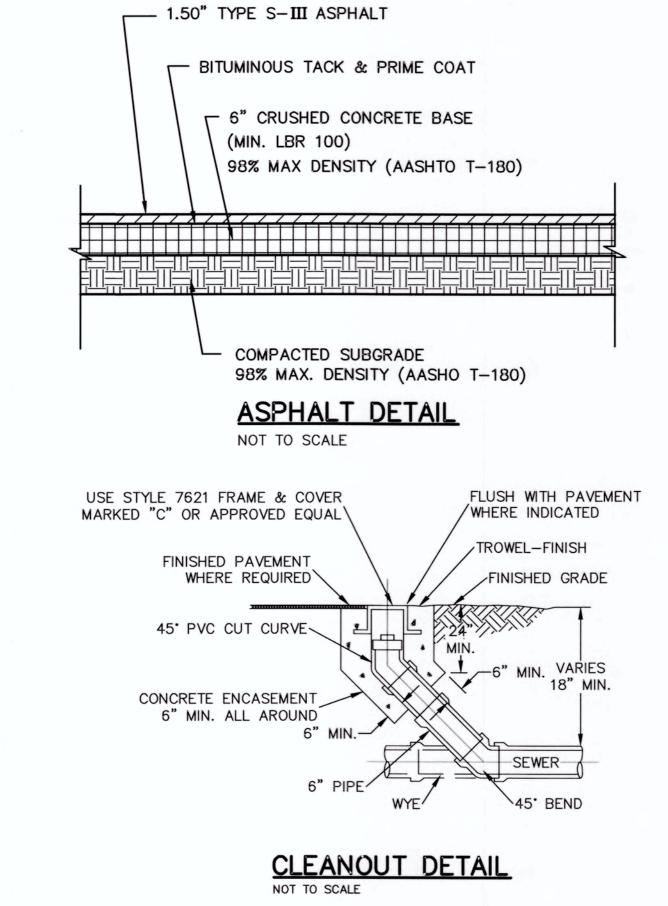
-ASPHALT SURFACE

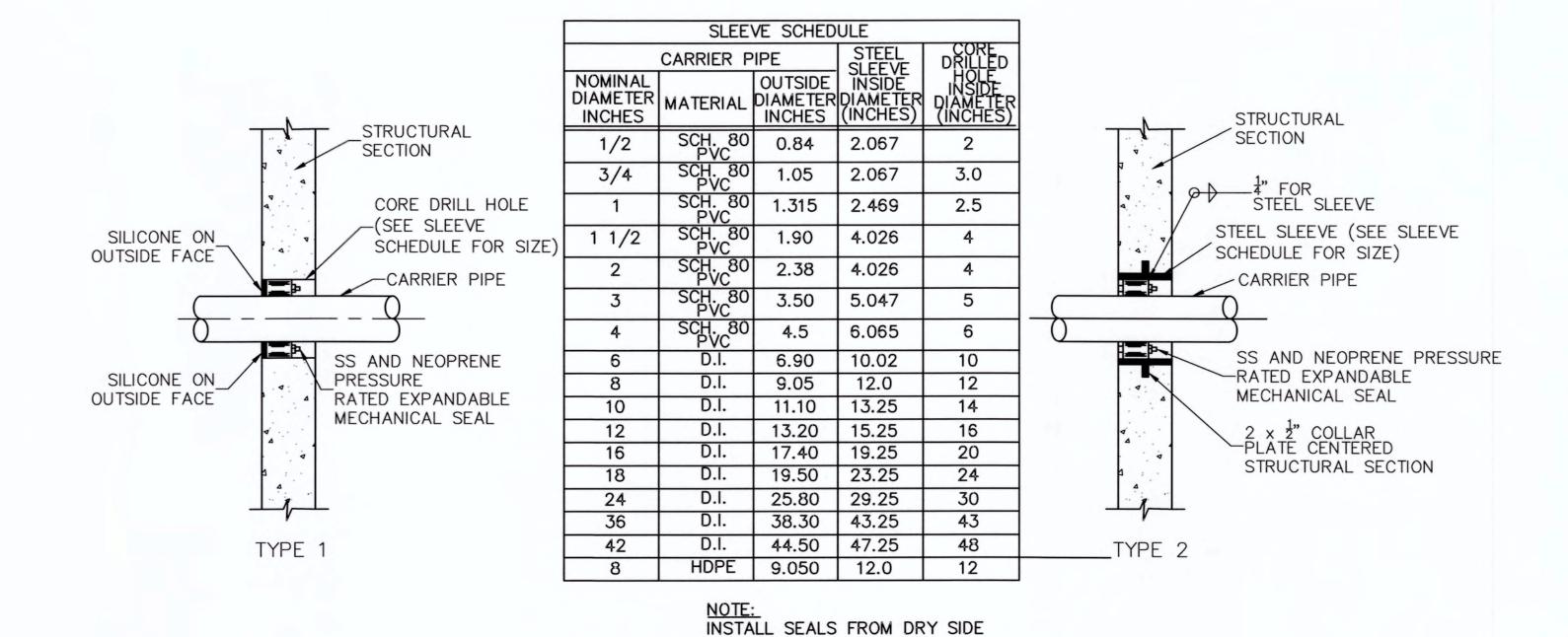
-WHERE REQUIRED, USE CAST OR DUCTILE IRON VALVE BOX EXTENSION WITH STAINLESS STEEL VALVE OPERATOR EXTENSION. ANCHOR EXTENSION TO OPERATING NUT WITH STAINLESS STEEL BOLT. STANDPIPE COLOR TO MATCH COLOR OF BOX LID.

- EA. WAY (8-TOTAL)

-ADJUSTABLE VALVE BOX AND LID. SIGMA VB243R OR APPROVED EQUAL.

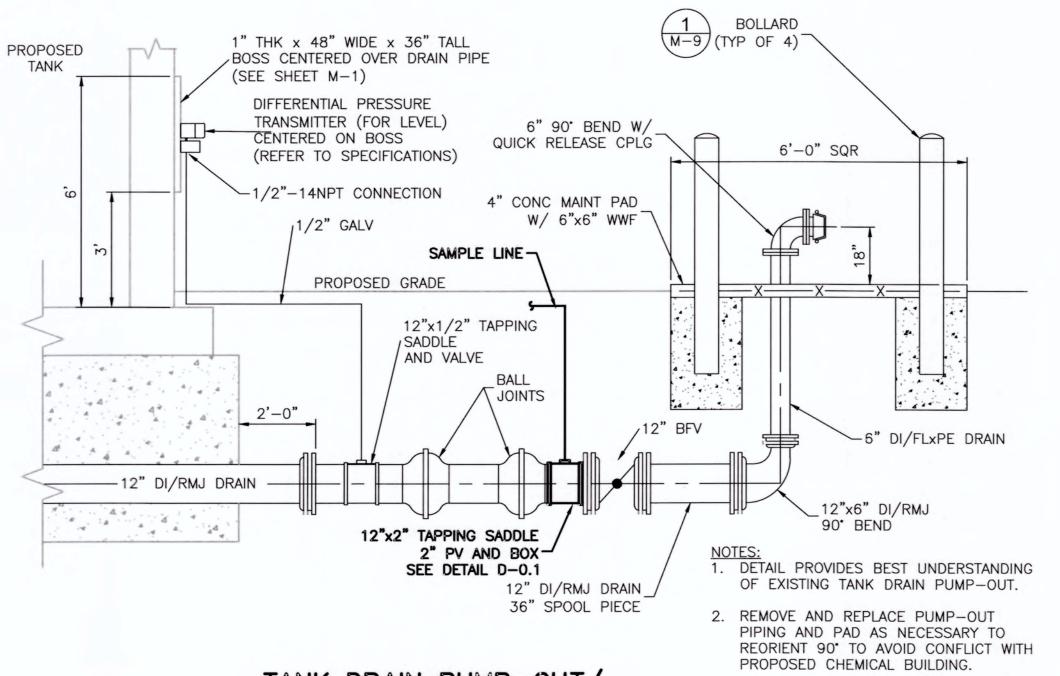






NON-SHRINK GROUT. LINK SEAL WALL PENETRATION

OF PENETRATION. WET SIDE FILLED WITH WATERPROOF



TANK DRAIN PUMP-OUT/ DIFFERENTIAL PRESSURE TRANSMITTER NOT TO SCALE

- 3. REUSE OR PROVIDE NEW D.I. FITTINGS AS REQUIRED FOR INSTALLATION.
- 4. PROVIDE NEW GASKETS ON ALL REASSEMBLED FITTINGS.

MARS CHLORINATION SYSTEM AT THE SWWRF

MCE PROJ. # 1024-016 DRAWN DESIGNED PROJ. MGR.

STATUS: ISSUED FOR BID

HORIZONTAL

AS SHOWN

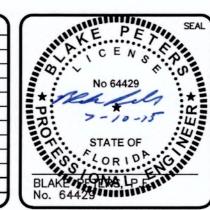
VERTICAL:

AS SHOWN

DESCRIPTIONS REVISIONS

5. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2".

FOR VALVES 16" AND LARGER, USE BUTTERFLY VALVES.
 PIPELINE DIRECTION TO BE IMPRESSED INTO NEWLY POURED CONCRETE PAD.

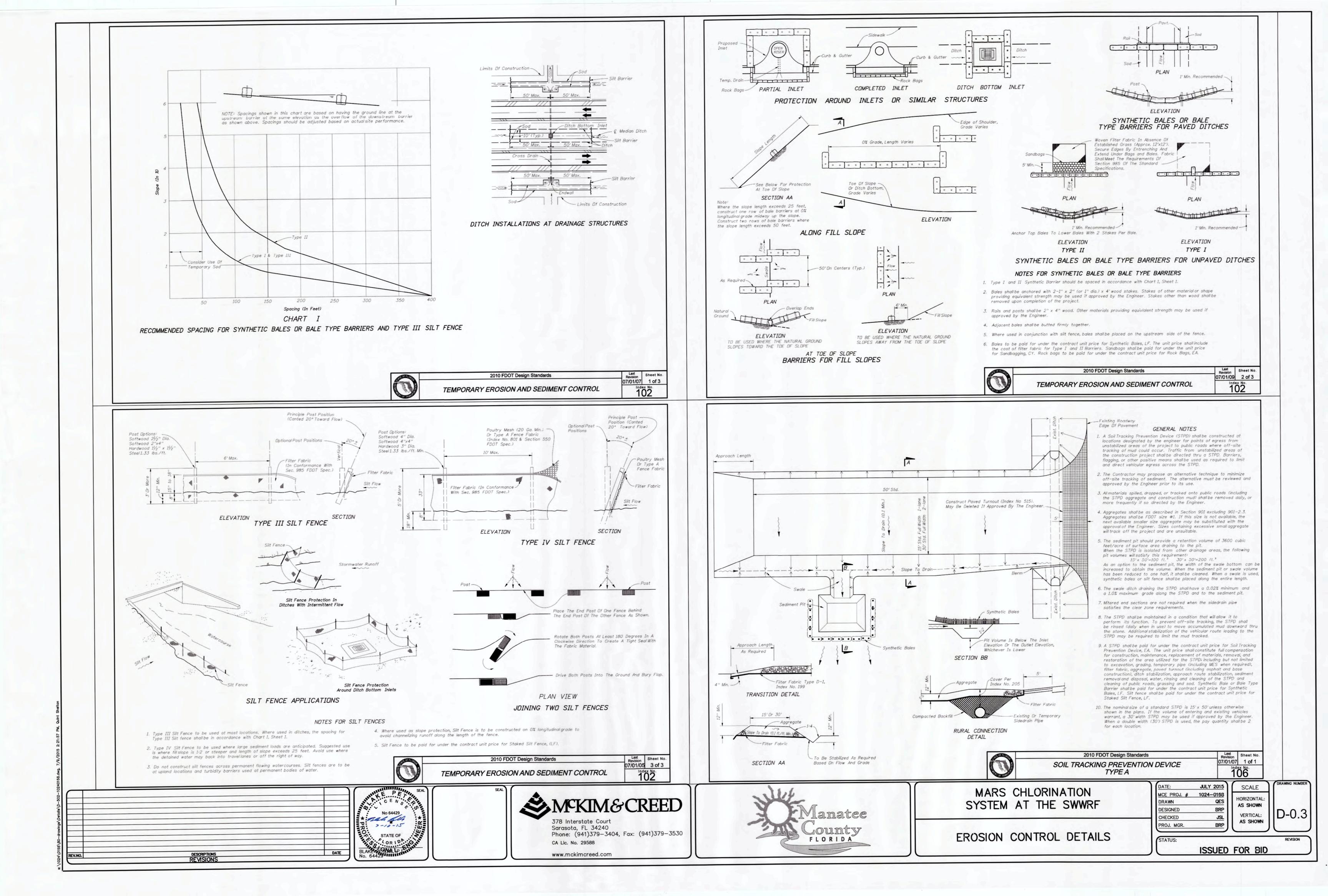




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DETAILS



GENERAL NOTES:

1.0 GENERAL

1.1 ALL WORK IS TO BE PERFORMED IN A GOOD, WORKMANLIKE AND PROFESSIONAL MANNER.

1.2 ALL CONSTRUCTION SHALL BE IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF THE FLORIDA STATE BUILDING CODE, 2010 EDITION, OR LOCAL BUILDING CODE REQUIREMENTS IF MORE STRINGENT.

1.3 THESE DRAWINGS DO NOT SHOW PROVISIONS FOR SAFETY DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO PROVIDE THE REQUIRED BRACING, SHORING, AND SAFETY DEVICES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.

2.0 COORDINATION

2.1 STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH AND COORDINATED WITH CIVIL, HVAC AND ELECTRICAL DRAWINGS AND OTHER CONTRACT DOCUMENTS.

2.2 COORDINATE THE EXACT SIZE AND LOCATION OF ALL SLEEVES AND OPENINGS THROUGH WALLS OR CONCRETE SLABS WITH CIVIL, HVAC, ELECTRICAL DRAWINGS AND OTHER CONTRACT DOCUMENTS.

2.3 ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND THOSE SHOWN ON THESE DRAWINGS ARE TO BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER BEFORE WORK PROCEEDS.

2.4 THE (*) SYMBOL ON "STRUCTURAL" DRAWINGS, INDICATES DIMENSIONS TO BE VERIFIED BY GENERAL CONTRACTOR BASED ON FURNISHED SHOP DRAWINGS FOR EQUIPMENT PRIOR TO CONSTRUCTION, INCLUDING ORDERING AND FABRICATING MATERIALS OR BASED ON EXISTING CONDITIONS WHEN APPLICABLE.

3.0 FOUNDATIONS

3.1 DESIGN ALLOWABLE SOIL BEARING PRESSURE - 1,500 PSF. CONTRACTOR IS RESPONSIBLE FOR HIRING GEOTECHNICAL ENGINEER TO VERIFY THIS VALUE PRIOR TO FOUNDATION CONSTRUCTION. IN AREAS WHERE THE SOIL DOES NOT YIELD THIS BEARING STRESS VALUE, ADJUSTMENT IN THE FOOTING DEPTHS AND FOUNDATION DIMENSION MAY BE MADE BY THE ENGINEER BEFORE WORK PROCEEDS. CONTRACTOR IS RESPONSIBLE FOR PERFORMING ANY SUCH ADJUSTMENTS.

3.2 FOOTING EXCAVATIONS AND FORMS SHALL BE REVIEWED BY AN OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE. THE REVIEW SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 17 OF THE FLORIDA STATE BUILDING CODE.

3.3 FOOTING ELEVATIONS SHALL NOT BE RAISED OR LOWERED WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER.

3.4 ALL EXCAVATIONS SHALL BE ADEQUATELY DEWATERED BEFORE PLACEMENT OF CONCRETE. NO CONCRETE OR CONCRETE FILL SHALL BE PLACED IN STANDING WATER. WATER ACCUMULATION SHALL BE PUMPED OUT.

3.5 ALL FILL BELOW FOUNDATIONS SHALL BE SELECT MATERIAL FREE FROM ROOTS, TRASH WOOD SCRAPS, AND OTHER EXTRANEOUS MATERIALS. PLACE FILL IN LIFTS NOT EXCEEDING THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER.

3.6 ALL FOOTINGS SHALL BE CENTERED UNDER THE SUPPORTING MEMBER UNLESS NOTED OTHERWISE.

3.7 ANCHOR BOLTS SHALL BE SET BY MEANS OF TEMPLATE. "FLOATING" ANCHOR BOLTS INTO PLACE IS PROHIBITED.

3.8 CONTRACTOR IS TO VERIFY THE ELEVATION AND LOCATION OF ALL EXISTING AND PROPOSED UTILITIES PRIOR TO CONSTRUCTION. ANY "KNOWN" UTILITY LINES DAMAGED WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE. IF ANY "UNKNOWN" UTILITY LINES ARE ENCOUNTERED WHEN EXCAVATING THE CONTRACTOR IS TO CEASE ALL EXCAVATION ACTIVITY UNTIL THE ENGINEER AND OWNER ARE NOTIFIED AND INSTRUCTIONS ARE PROVIDED ABOUT HOW TO PROCEED.

4.0 REINFORCING STEEL

4.1 BARS SHALL BE ROLLED FROM NEW BILLET-STEEL OF DOMESTIC MANUFACTURE CONFORMING TO "STANDARD SPECIFICATION FOR DEFORMED AND PLAIN BILLET STEEL BARS FOR CONCRETE REINFORCEMENT," ASTM A 615, GRADE

4.2 DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE "ACI DETAILING MANUAL," LATEST PUBLICATION.

4.3 REINFORCING STEEL IN PLACE SHALL BE REVIEWED BY THE OWNER'S CONSTRUCTION REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE. THE REVIEW SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 17 OF THE FLORIDA STATE

4.4 WELDED WIRE FABRIC SHALL CONFORM TO "STANDARD SPECIFICATION FOR WELDED STEEL WIRE FABRIC FOR CONCRETE REINFORCEMENT," ASTM A-185.

4.5 PLACE WELDED WIRE FABRIC AT CENTER OF SLABS-ON-GRADE, UNLESS NOTED OTHERWISE.

4.6 PROVIDE BARS AT CORNERS AND INTERSECTIONS OF WALLS & FOOTINGS OF THE SAME NUMBER AND SIZE AS LONGITUDINAL BARS, U.N.O. ON THE DRAWINGS.

4.7 FABRICATE CONTINUOUS BARS IN WALLS & FOOTINGS TO THE LONGEST PRACTICABLE LENGTHS.

4.8 REINFORCING STEEL SHALL NOT BE BENT AFTER BEING PARTIALLY EMBEDDED IN HARDENED CONCRETE.

4.9 BARS SHALL BE COLD BENT AND SHALL NOT BE HEATED FOR ANY REASON.

4.10 REINFORCING BARS SHALL NOT BE WELDED UNLESS NOTED OTHERWISE ON THE DRAWINGS.

4.11 LAP REINFORCING STEEL IN CONCRETE MINIMUM 50 BAR DIAMETERS, UNLESS NOTED OTHERWISE.

4.12 LAP SPLICED BARS IN CONCRETE ARE TO BE WIRE TIED.

5.0 CONCRETE

5.1 IN GENERAL CONCRETE SHALL DEVELOP 4,000 psi MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS. REFERENCE "DESIGN CRITERIA" THIS DWG. & PROJECT SPECIFICATIONS, FOR APPLICATION & SPECIFIC CONCRETE MIX DESIGN REQUIREMENTS.

5.2 CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318 & TO "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES" ACI 350 (LATEST EDITIONS).

5.3 PLACE 1/2 INCH EXPANSION JOINT MATERIAL BETWEEN EDGES OF SLABS AND VERTICAL SURFACES UNLESS NOTED OTHERWISE.

5.4 PROVIDE CONSTRUCTION OR CONTROL JOINTS IN SLABS & WALLS AT LOCATIONS SHOWN ON DRAWINGS, AT OFFSETS AND CHANGES IN DIRECTION AND AT THIRTY (30) FEET MAXIMUM.

5.5 CHAMFER EXPOSED EDGES OF CONCRETE 3/4 INCH, UNLESS NOTED OTHERWISE.

5.6 CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CURING OF ALL CONCRETE. CURING METHODS SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318, "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES" ACI 350 AND "STANDARD PRACTICE FOR CURING CONCRETE," ACI 308, LATEST EDITIONS.

5.7 UNLESS NOTED OTHERWISE DOWELS SHALL BE THE SAME NUMBER AND SIZE AS THE LARGEST VERTICAL BAR TO WHICH THEY ARE SPLICED.

5.8 REFERENCE PROJECT SPECIFICATIONS FOR REQUIRED

5.9 BONDING AGENT TO BE STRUCTURAL EPOXY ADHESIVE CONFORMING TO ASTM C-881 TYPE I AND II, GRADE 2, CLASS B AND C WITH A MINIMUM BOND STRENGTH OF 1900

5.10 CONTRACTOR SHALL SUBMIT REBAR SHOP DRAWINGS FOR APPROVAL TO OWNER PRIOR TO FABRICATION. DO NOT FABRICATE REINFORCING PRIOR TO RECEIPT OF APPROVED

5.11 CONCRETE COVER FOR REINFORCING, SURFACES CAST AGAINST EARTH 3", ALL OTHERS SURFACES 2".

6.0 GROUT

6.1 PROVIDE NON-SHRINK GROUT UNDER ALL BASE PLATES AND BEARING PLATES AND ELSEWHERE AS INDICATED ON DRAWINGS. NON-SHRINK GROUT SHALL CONFORM TO CORPS OF ENGINEERS SPECIFICATION CRD-C-588, TYPE D

6.2 GROUT SHALL BE NON-METALLIC AND NON-STAINING AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 7000 psi.

ABBREVIATIONS:

FTG. = FOOTING

GALV. = GALVANIZED

= HOOK

= INSIDE FACE

LLH = LONG LEG HORIZONTAL

NOT TO SCALE

LLV = LONG LEG VERTICAL

MFG. = MANUFACTURER

GA. = GAGE

JT. = JOINT

MAT'L = MATERIAL

MTL. = METAL

N.T.S.

NOM. = NOMINAL

N.S. = NEAR SIDE

O/F = OUTSIDE FACE ADD'L = ADDITIONAL 0/0 = OUT TO OUT= ALUMINUM OPNG. = OPENING B.O. = BOTTOM OF OPP. = OPPOSITE CLR = CLEARPLCS. = PLACES COL = COLUMN RAD. = RADIUSCONC. = CONCRETE REF. = REFERENCE CONT. = CONTINUOUS REINF. = REINFORCING DBL. = DOUBLE SPECS. = SPECIFICATIONS DIR. = DIRECTION S.S. = STAINLESS STEEL DWG. = DRAWING STD. = STANDARD EA. = EACHSTL. = STEEL E.O. = EDGE OFT&B = TOP & BOTTOM E.Q. = EQUALT/D = TURN DOWN THK. = THICKEXIST. = EXISTING EXP. = EXPANSION T.O. = TOP OFF.S. = FAR SIDE

T.O.S = TOP OF STEEL

U.N.O. = UNLESS NOTED OTHERWISE

TYP. = TYPICAL

DESIGN LOADS:

1. FLOOR LIVE LOAD 250 PSF 2. ROOF LIVE LOAD 30 PSF

3. STAIRS, PLATFORMS AND WALKWAYS 100 PSF

4. WND LOADS: A. ULTIMATE WINDSPEED 158 MPH

B. EXPOSURE CATEGORY C C. RISK CATEGORY III - IV

D. ENCLOSURE CLASSIFICATION: OPEN 5. DESIGN IN ACCORDANCE WITH ASCE 7-10 AND 2010

FLORIDA BUILDING CODE.

LEGEND:

ENLARGED PLAN AREA, CONC. WALL, PAD, ETC. **GROUT**

PROJECT NORTH

ELEVATIONS



NORTH

STATE OF LORIDA

MCKIM& CREED

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MARS CHLORINATION SYSTEM AT THE SWWRF

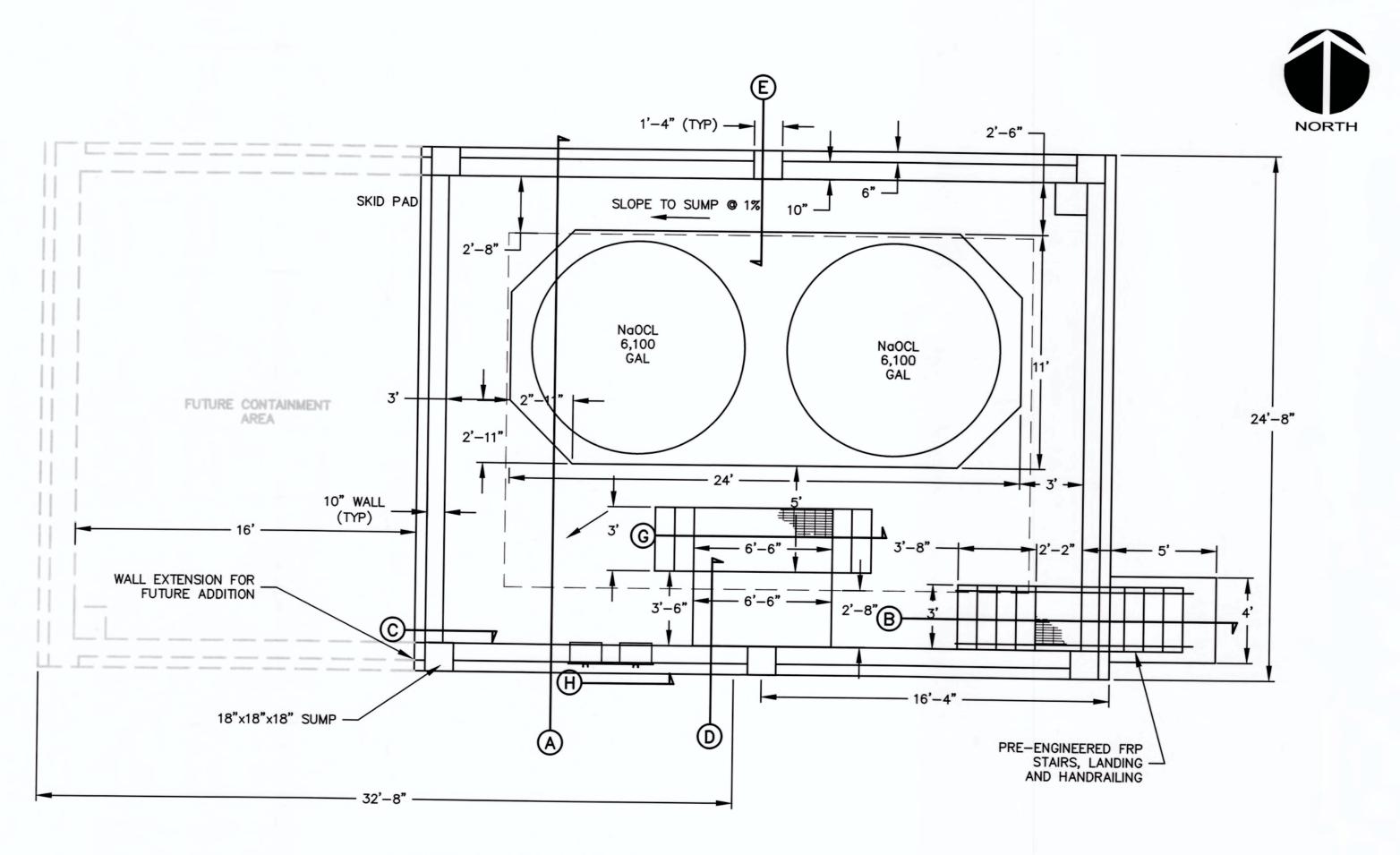
STRUCTRUAL NOTE, LEGEND AND **ABBREVIATIONS**

DATE:	JULT 2013
MCE PROJ. #	1024-0168
DRAWN	BFN
DESIGNED	HAH
CHECKED	JSL
PROJ. MGR.	BRP

SCALE HORIZONTAL: S-0. VERTICAL:

ISSUED FOR BID

REVISIONS



CHEMICAL BUILDING PLAN

- ASSUMED GRADE ELEVATION 0.0.
- 2. REFERENCE CIVIL DRAWINGS FOR LOCATION OF CHEMICAL BUILDING 3. CONTRACTOR IS RESPONSIBLE FOR PREPARING THE SUB-GRADE MATERIAL PER THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER TO BE HIRED BY THE CONTRACTOR.
- 4. CONTRACTOR SHALL OBTAIN A LETTER FROM GEOTECHNICAL ENGINEER CERTIFYING BEARING SOIL UNDER THE FOUNDATION CAN DEVELOP A MINIMUM 1,500 PSF BEARING CAPACITY.
- 5. PIPE AND EQUIPMENT LAYOUTS ARE SHOWN FOR GENERAL INFORMATION ONLY. REFERENCE CIVIL, MECHANICAL AND EQUIPMENT DRAWINGS FOR SIZES, LOCATIONS AND INFO REGARDING SLAB PENETRATIONS, PIPING AND MISCELLANEOUS EQUIPMENT.
- 6. TANK MANUFACTURER SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING SS316 ANCHOR BOLTS TO ANCHOR THE TANK TO FOUNDATION SLAB. TANK SHALL RESIST DESIGN WIND LOADS WITH NO DAMAGE TO TANK OR ANCHORS.
- 7. PRE-ENGINEERED METAL SHELTER SHALL BE DESIGNED FOR FUTURE EXPANSION AS SHOWN ON THE CHEMICAL BUILDING PLAN.
- 8. TWO 24"x24" PRE-FINISHED FIXED METAL WALL LOUVERS (RUSKIN MODEL ELF-837 OR APPROVED EQUAL) CENTERED BETWEEN COLUMNS. MATCH SIDING
- 9. PRE-ENGINEERED METAL SHELTER ROOF FRAMING AND ROOFING SHALL ACCOMMODATE PIPE SUPPORTS AND PIPE PENETRATIONS.
- 10. ALL CONCRETE AREAS INSIDE THE CONTAINMENT AREA AND TOP OF CONTAINMENT WALLS SHALL BE COATED WITH PROTECTIVE COATING IN ACCORDANCE WITH SPECIFICATIONS SECTION 09900.

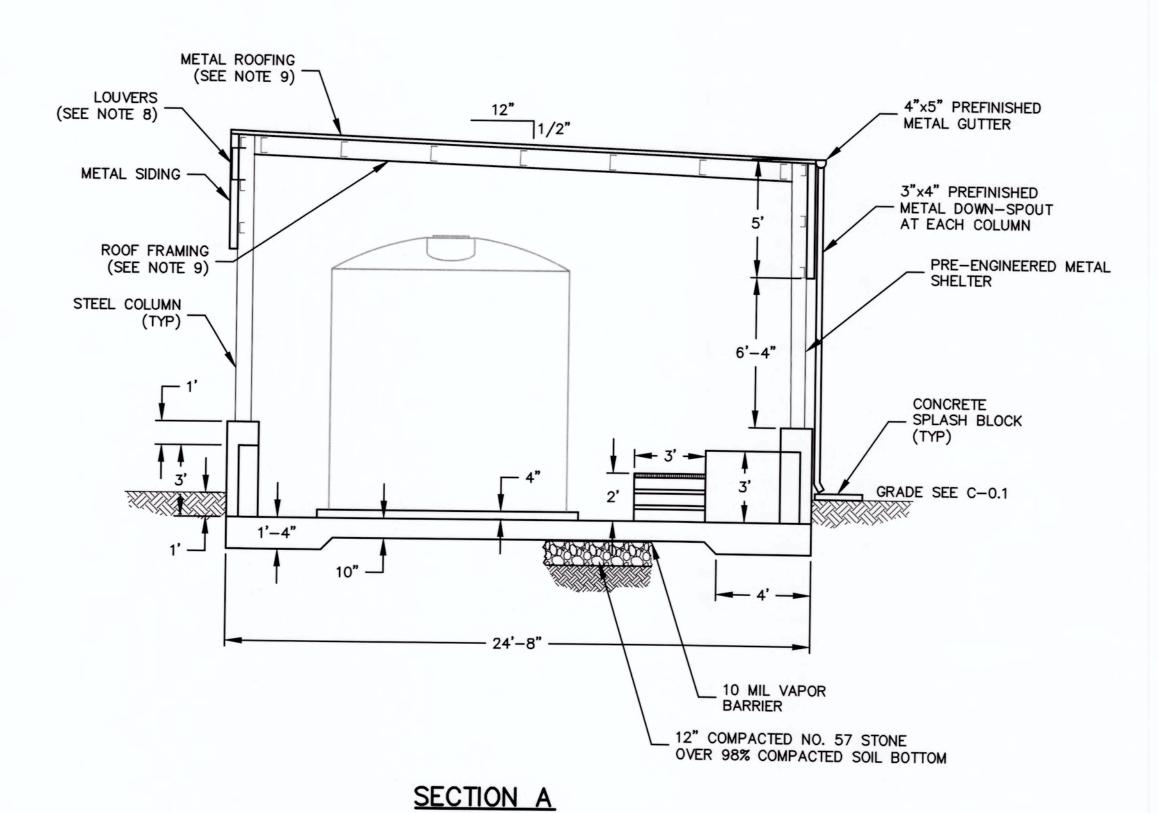


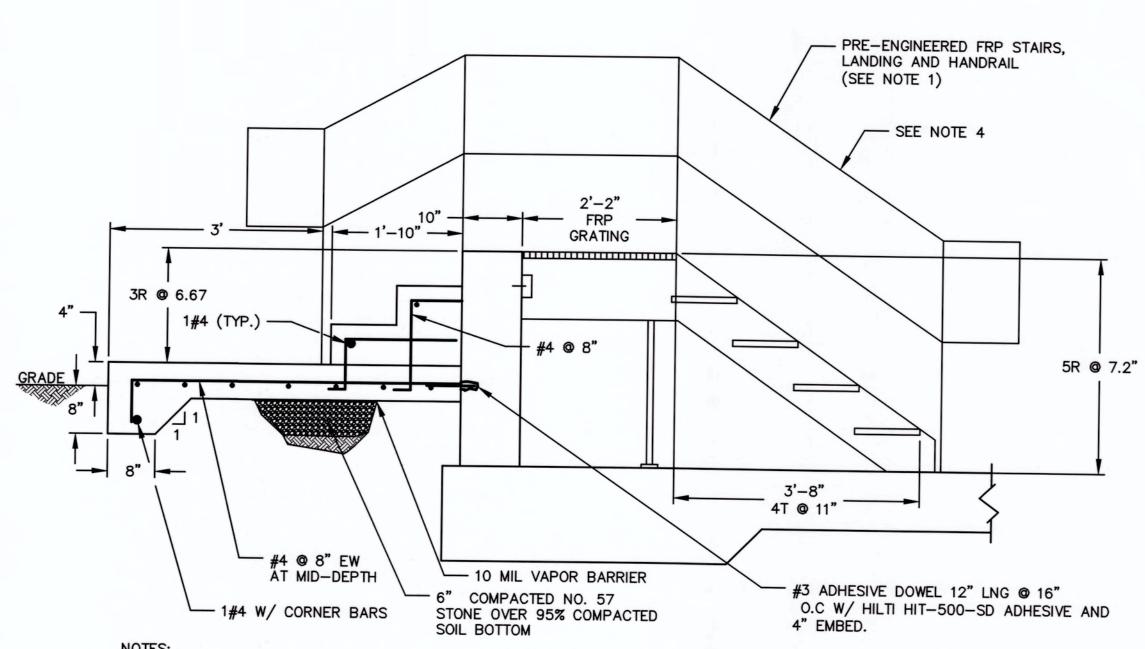


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ALL FRP MATERIALS SHALL BE RESISTANT TO CONTINUOUS IMMERSION IN STORED CHEMICALS.
 ALL CONNECTION HARDWARE SHALL BE SS316.

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

- 3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS, SIGNED AND SEALED BY FLORIDA PE, FOR REVIEW BY ENGINEER.
- 4. RAILING SHALL COMPLY WITH OSHA AND FLORIDA BUILDING CODE.

SECTION B

SCALE: 3/4" = 1'-0"

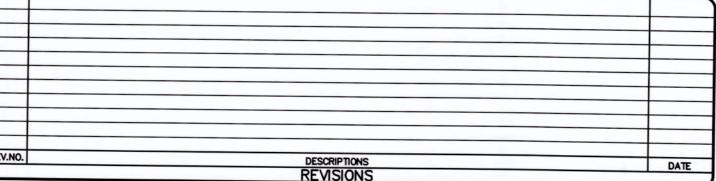
MARS CHLORINATION SYSTEM AT THE SWWRF

CHEMICAL	BUILDING	PLAN	AND	
	SECTION	/	71110	
	SECTION			

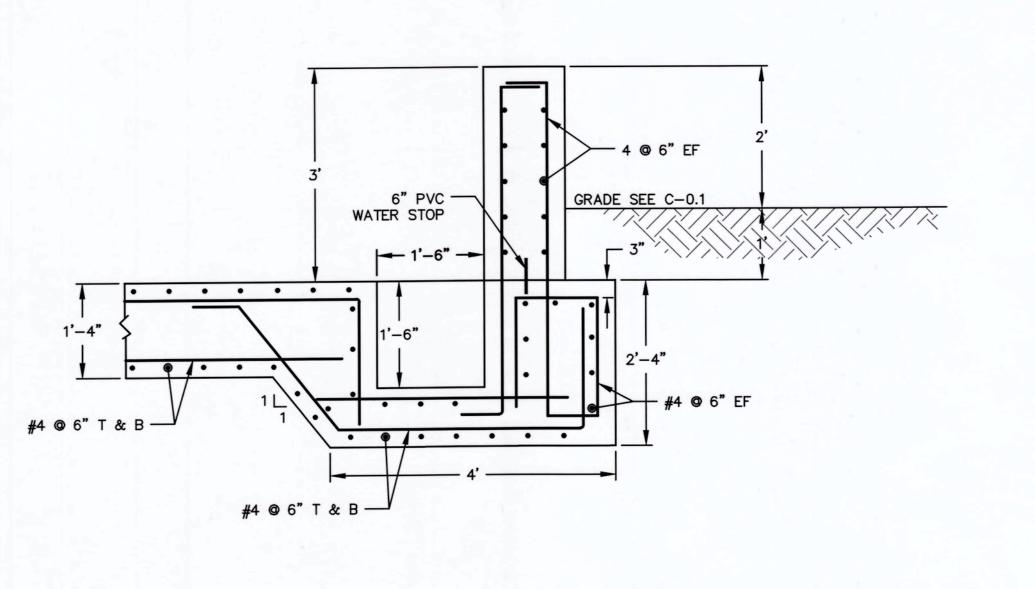
DATE:	JULY 2015
MCE PROJ. #	1024-0168
DRAWN	QES
DESIGNED	НАН
CHECKED	JSL
PROJ. MGR.	BRP

SCALE HORIZONTAL: AS SHOWN VERTICAL: AS SHOWN

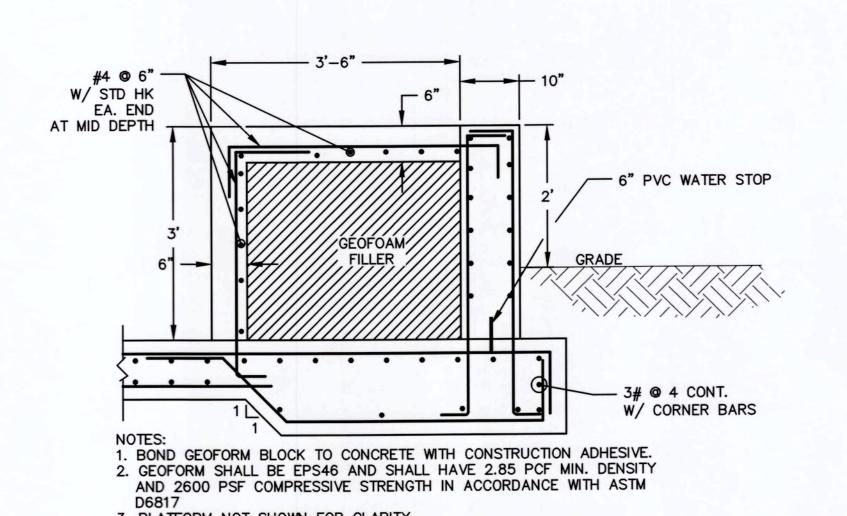
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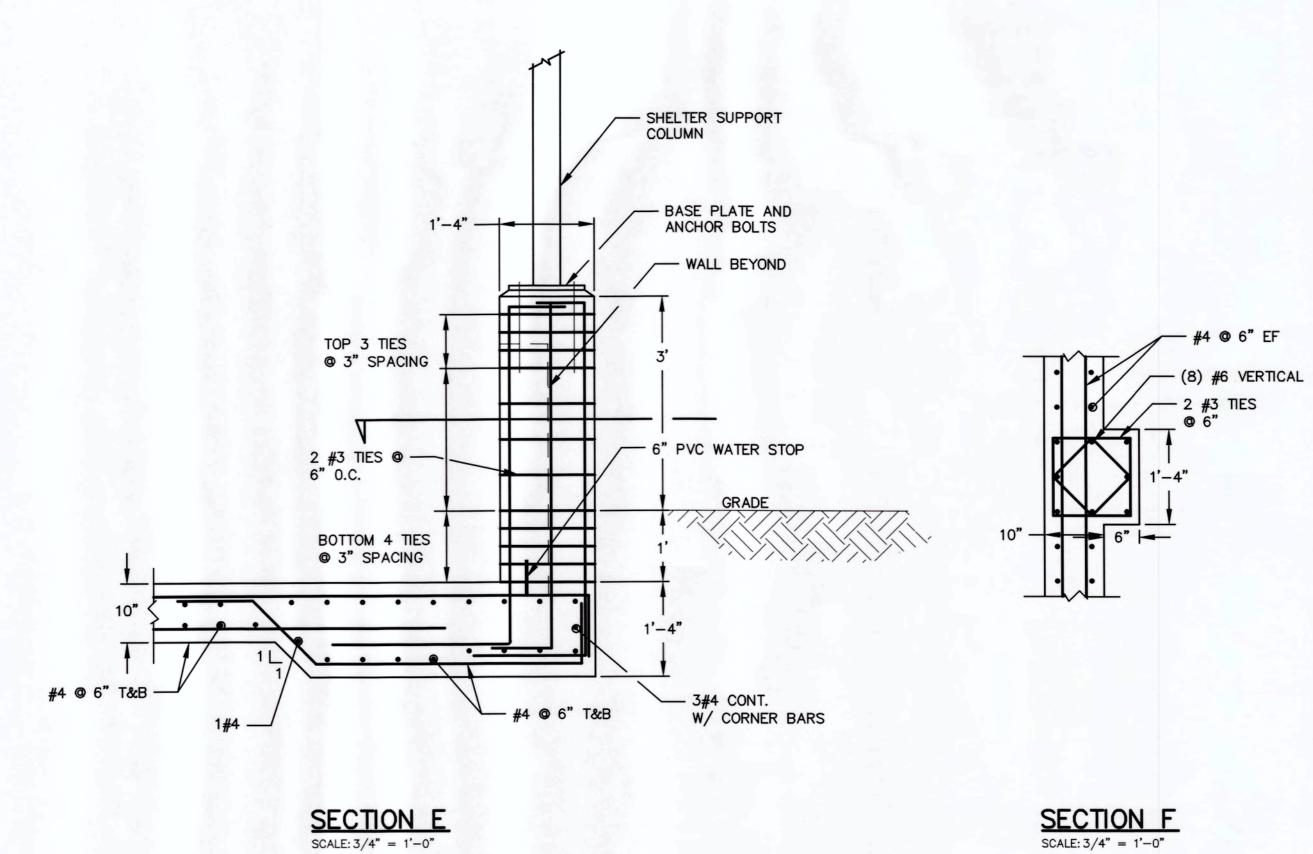
378 Interstate Court



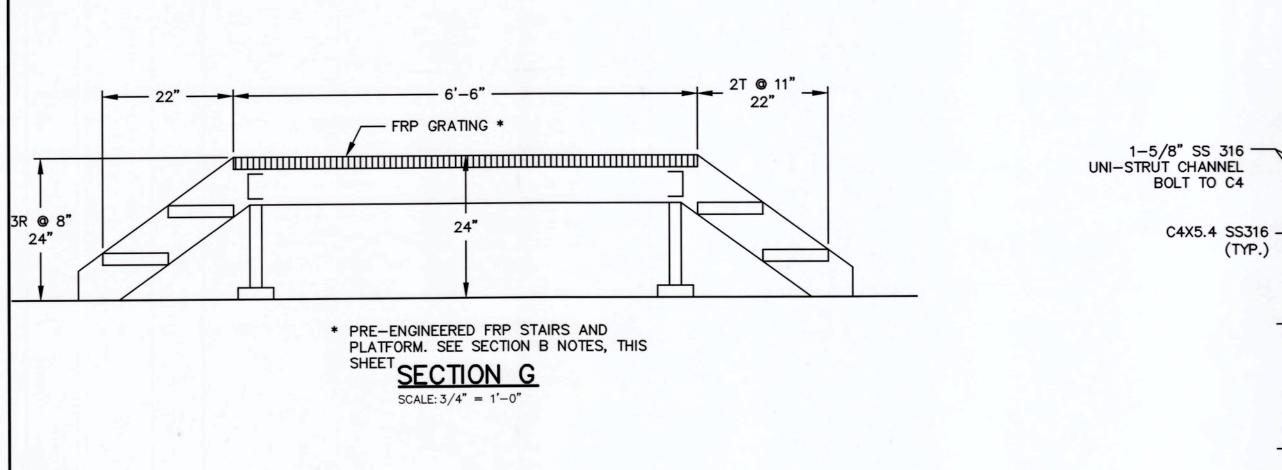
SCALE: 3/4" = 1'-0"

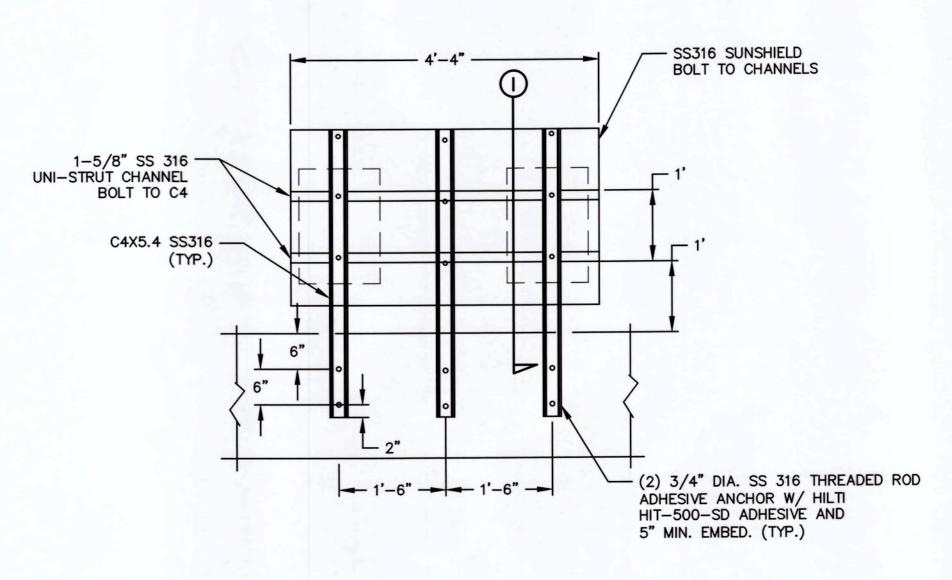


3. PLATFORM NOT SHOWN FOR CLARITY ..

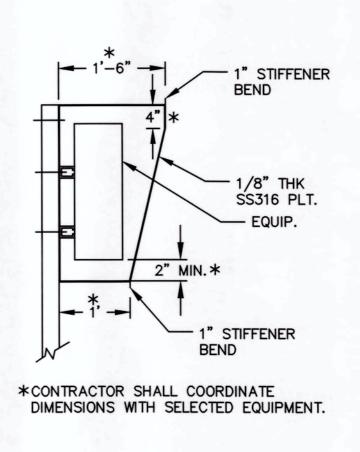


SECTION D SECTION C SCALE: 3/4" = 1'-0"

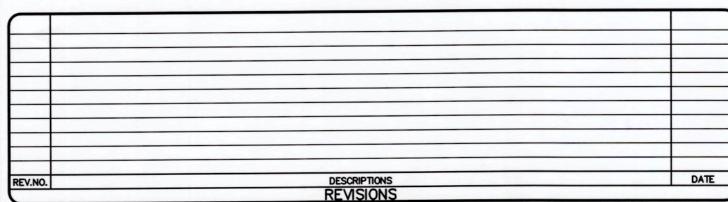


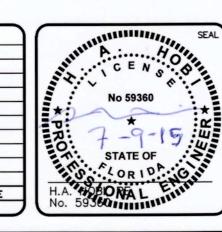


SECTION H SCALE: 3/4" = 1'-0"



SECTION SCALE: 3/4" = 1'-0"







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MARS CHLORINATION SYSTEM AT THE SWWRF

STRUCTURAL SECTIONS

DATE:	JULY 2015	SCALE
MCE PROJ. #	1024-0168	December 1
DRAWN	QES	HORIZONTAL: AS SHOWN
DESIGNED	НАН	AS SHUWN
CHECKED	JSL	VERTICAL:
PROJ. MGR.	BRP	AS SHOWN

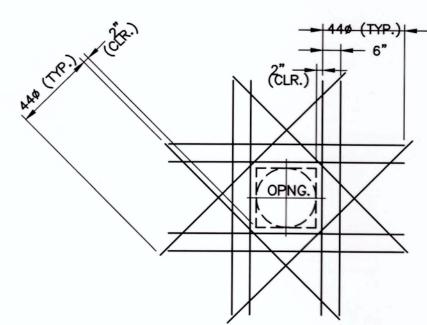
ISSUED FOR BID

S-0.3

SCALE: 3/4" = 1'-0"

1 - DETAIL-TYP. C.I.P. CONC. SLAB CONST. JT. (CJ) SCALE: 3/4" = 1'-0"

PROVIDE A WATERSTOP WHERE JOINT BORDERING SOIL AND/OR WATER. REFERENCE PROJECT SPECIFICATIONS FOR WATERSTOP REQUIREMENTS.



2 - DETAIL-TYP. RENIF. @ SLAB / WALL OPNG SCALE: 3/8" = 1'-0"

USE THIS DETAIL FOR PENETRATIONS 8" OR LARGER. FOR SMALLER OPENINGS BEND BARS IN FIELD PER ACI 350 LATEST

EDITION.

2. PLACE EXTRA BARS OF THE SAME SIZE AS THE INTERRUPTED BARS AT EACH SIDE OF

EACH SIDE SHALL EQUAL HALF THE

(TYP. EA. FACE).

3. Ø SYMBOL = BAR DIAMETERS.

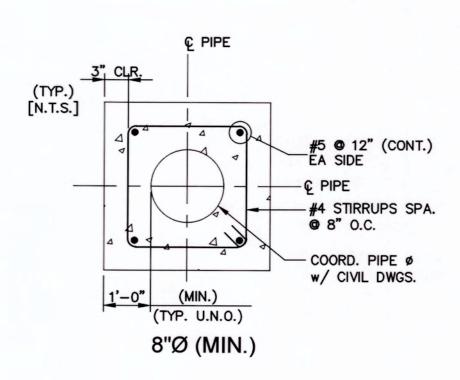
OPENINGS. QUANTITY OF EXTRA BARS AT

QUANTITY OF INTERRUPTED BARS, EXCEPT

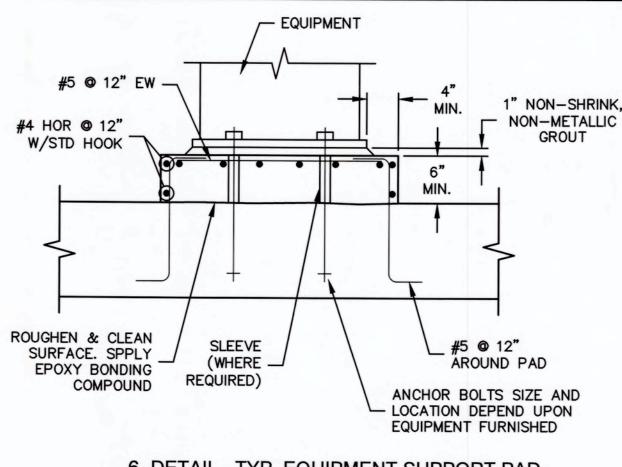
WHERE NOTED OTHERWISE. PROVIDE ONE

DIAGONAL BAR EACH SIDE OF OPENING,

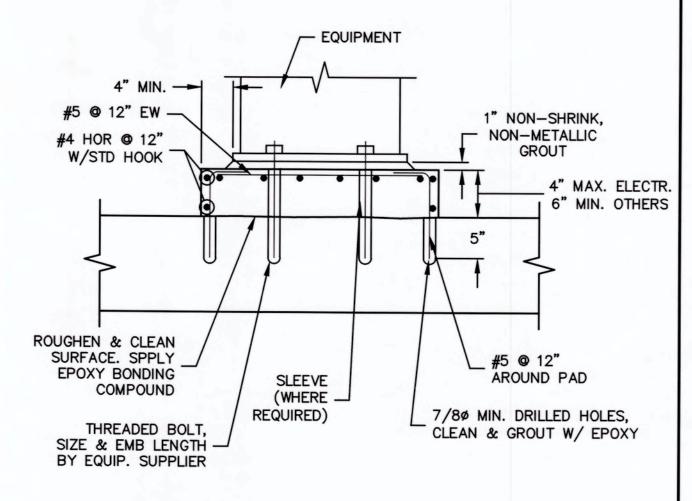
SIZE TO BE EQUAL TO MAIN REINFORCING.



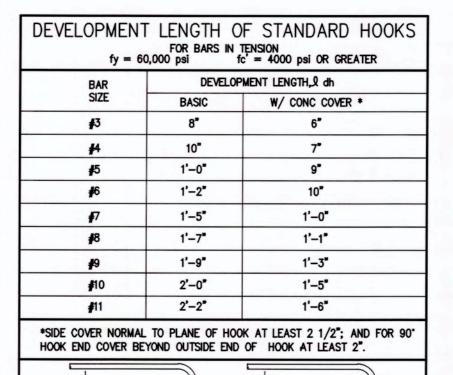
3- DETAIL - TYP. CONC.ENCASED PIPE SCALE: 1/2" = 1'-0"



6- DETAIL - TYP. EQUIPMENT SUPPORT PAD



7- DETAIL - TYP. EQUIPMENT SUPPORT PAD ON EXISTING CONCRETE SCALE: NTS



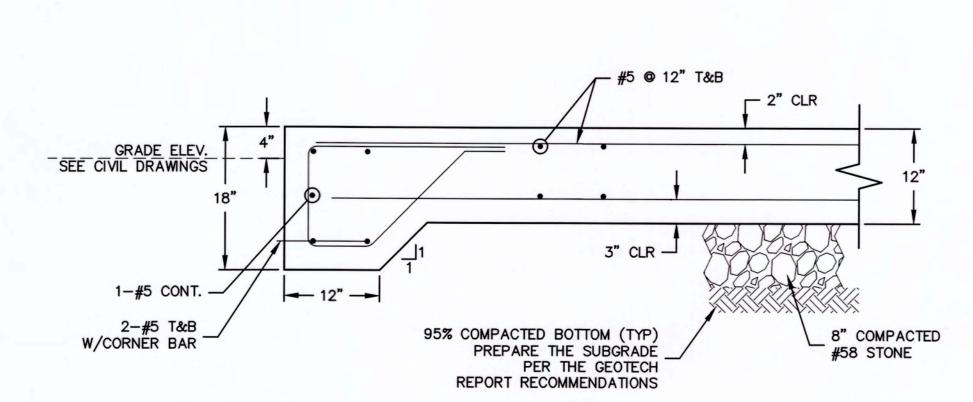
	fy = 60,000 psi	to	c' = 4000 psi OF	GREATER
BASIC DEVE	LOPMENT LENGTH	BAR	SPLIC	CE LENGTH
BASIC	CONFINEMENT *	SIZE	BASIC	CONFINEMEN
8"	8"	# 3	12"	12"
10*	8*	# 4	1'-3"	13"
1'-0"	9"	# 5	1'-7"	1'-4"
1'-3"	1'-0"	# 6	1'-11"	1'-7"
1'-5"	1'-1"	# 7	2'-2"	1'-10"
1'-7"	1'-3"	# 8	2'-6"	2'-1"
1'-9"	1'-4"	# 9	2'-10"	2'-4"
2'-0"	1'-6"	# 10	3'-2"	2'-7"
2'-2"	1'-8"	# 11	3'-6"	2'-10"

BAR ENCLOSED WITHIN TIES PER ACI 350-01 SECTION 12.17.2.4.

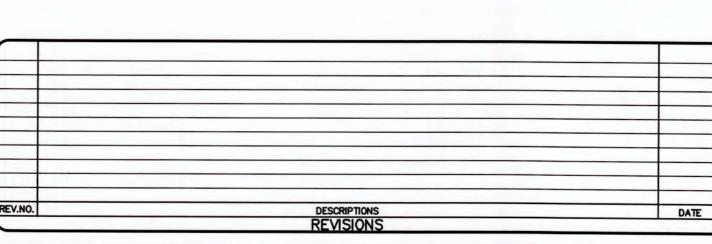
SCALE: N.T.S.

BASI	C DEVELOP	MENT LENG		BAR	OSI OR GREA	ASS B SPLI	CE LENGTH	
LEAR SPA	CING ≥2db	CLEAR SP	ACING <2db	SIZE	CLEAR SPA	ACING ≥2db	CLEAR SP	ACING <2db
BASIC	TOP *	BASIC	TOP *		BASIC	TOP *	BASIC	TOP *
1'-3"	1'-7"	1'-10"	2'-4"	# 3	1'-7"	2'-0"	2'-4"	3'-0"
1'-7"	2'-1"	2'-5"	3'-1"	# 4	2'-1"	2'-8"	3'-1"	4'-0"
2'-0"	2'-7"	3'-0"	3'-10"	# 5	2'-7"	3'-4"	3'-10"	5'-0"
2'-5"	3'-1"	3'-7"	4'-8"	# 6	3'-1"	4'-0"	4'-8"	6'-0"
3'-6"	4'-6"	5'-2"	6'-9"	#7	4'-6"	5'-10"	6'-9"	8'-9"
4'-0"	5'-2"	6'-0"	7'-9"	# 8	5'-2"	6'-8"	7'-9"	10'-0"
4'-6"	5'-9"	6'-8"	8'-8"	# 9	5'-9"	7'-6"	8'-8"	11'-3"
4'-11"	6'-5"	7'-5"	9'-8"	# 10	6'-5"	8'-4"	9'-8"	12'-6"
5'-5"	7'-1"	8'-2"	10'-8"	# 11	7'-1"	9'-2"	10'-8"	13'-9"

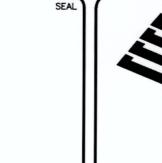
4 - SCHEDULE - REINF. BAR SPLICE REQUIREMENTS



5- DETAIL - TYP. EQUIPMENT PAD SCALE: NTS









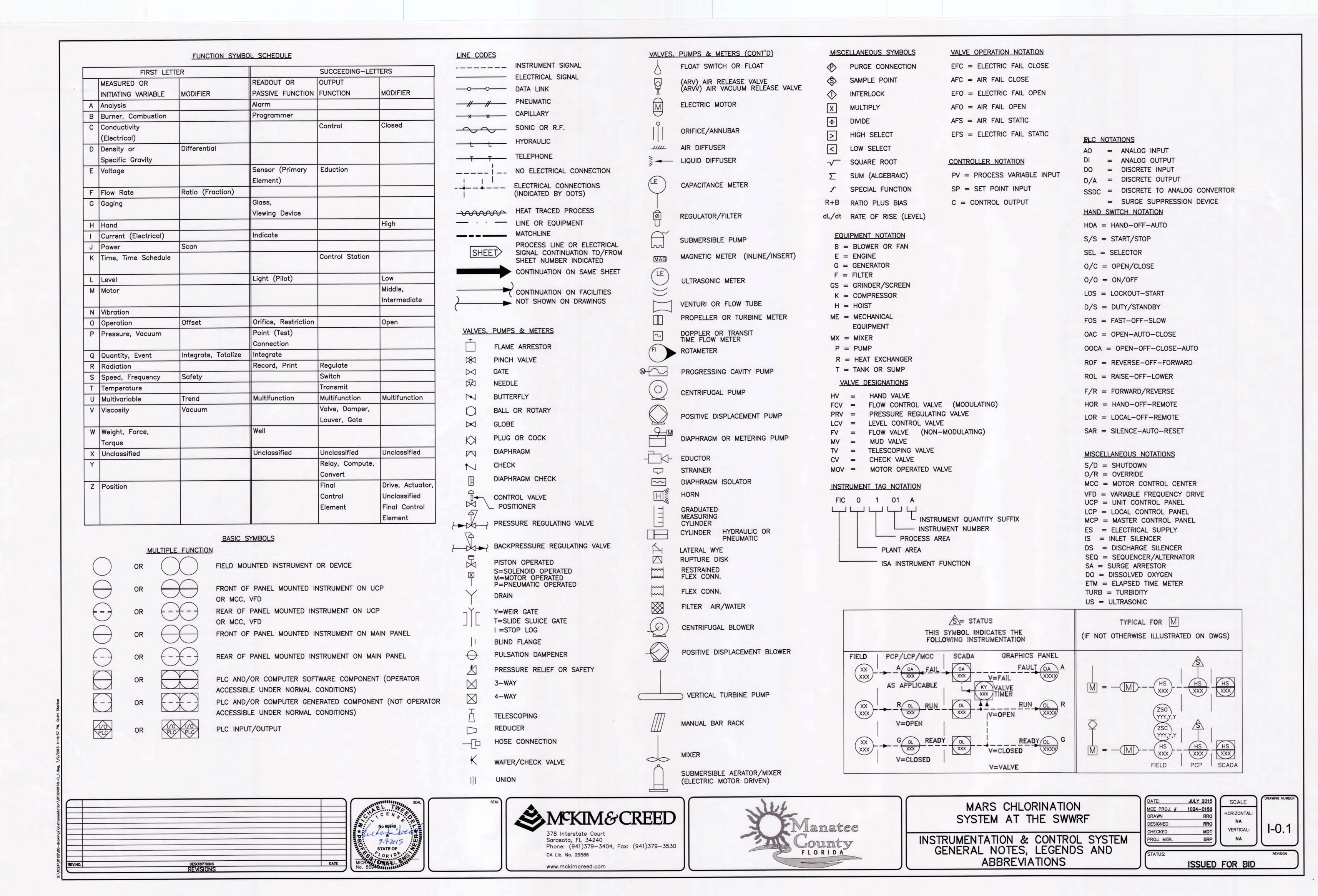
MARS	CHL	.ORIN	ATION
SYSTEM	AT	THE	SWWRF

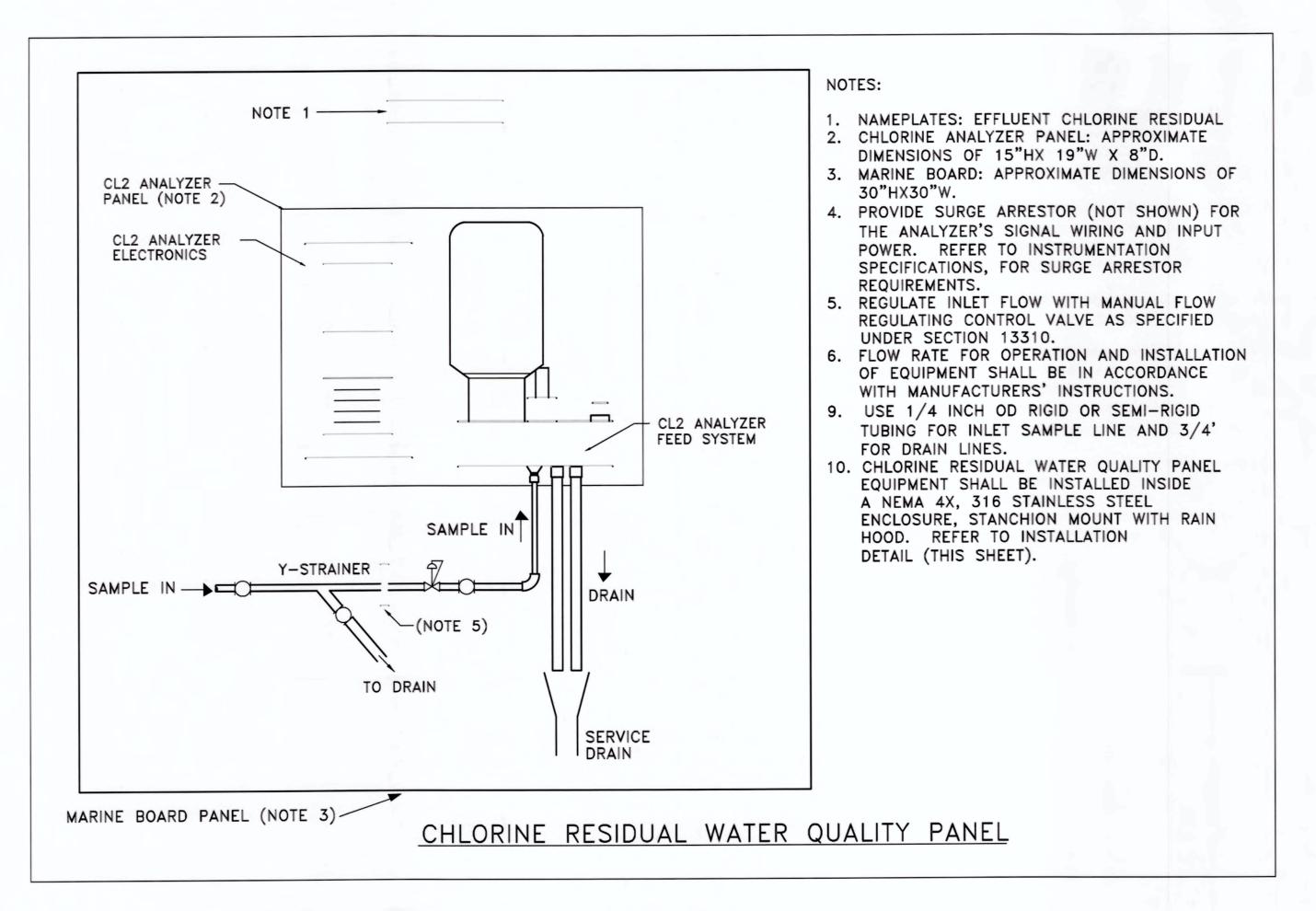
STRUCTURAL SECTIONS AND DETAILS

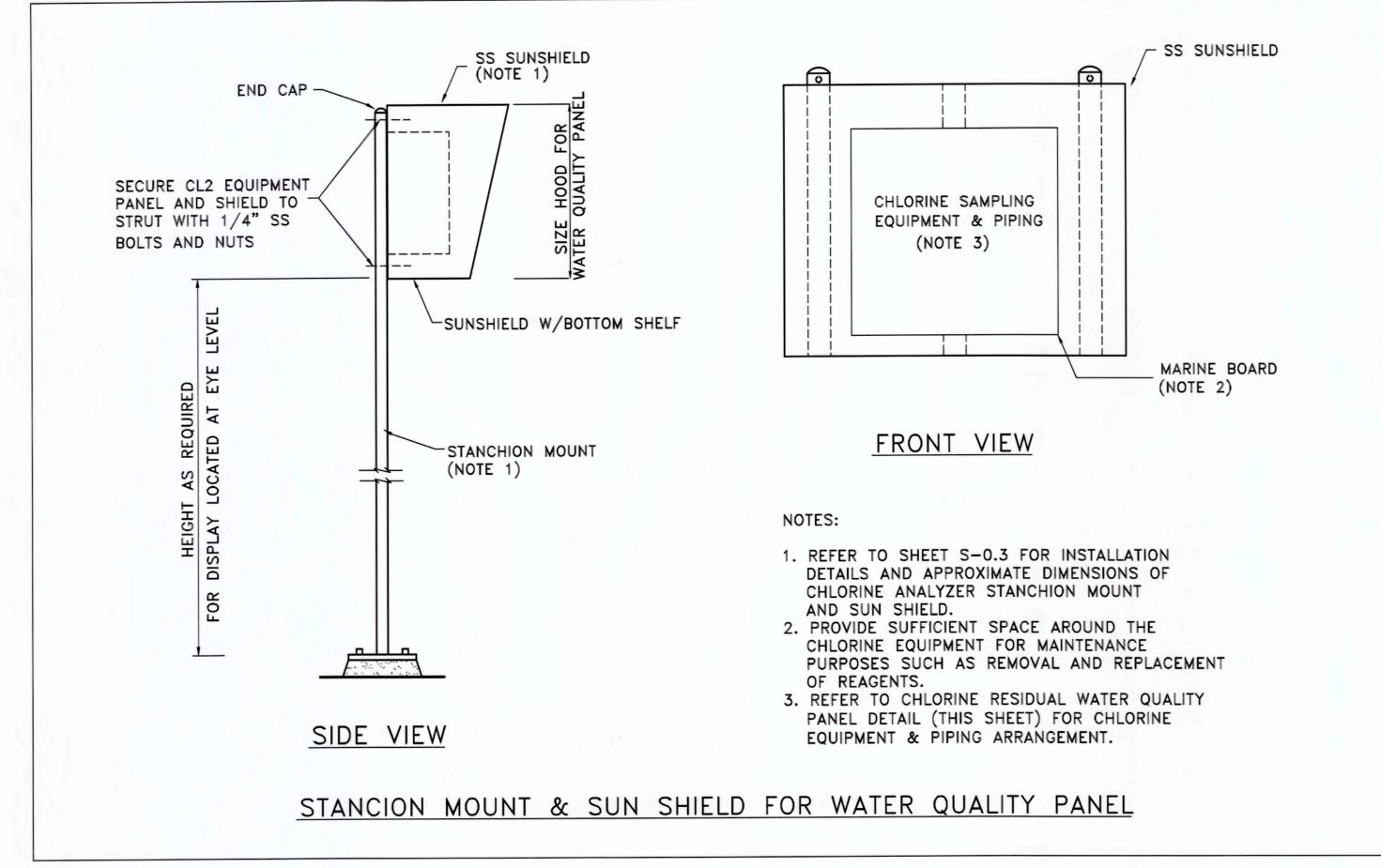
TE:	JULY 2015	SCALE	DRAWING NUMBER
E PROJ. #	1024-0168		
AWN	QES	HORIZONTAL:	
SIGNED	НАН	AS SHOWN	S-0.4
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OJ. MGR.	BRP	AS SHOWN	

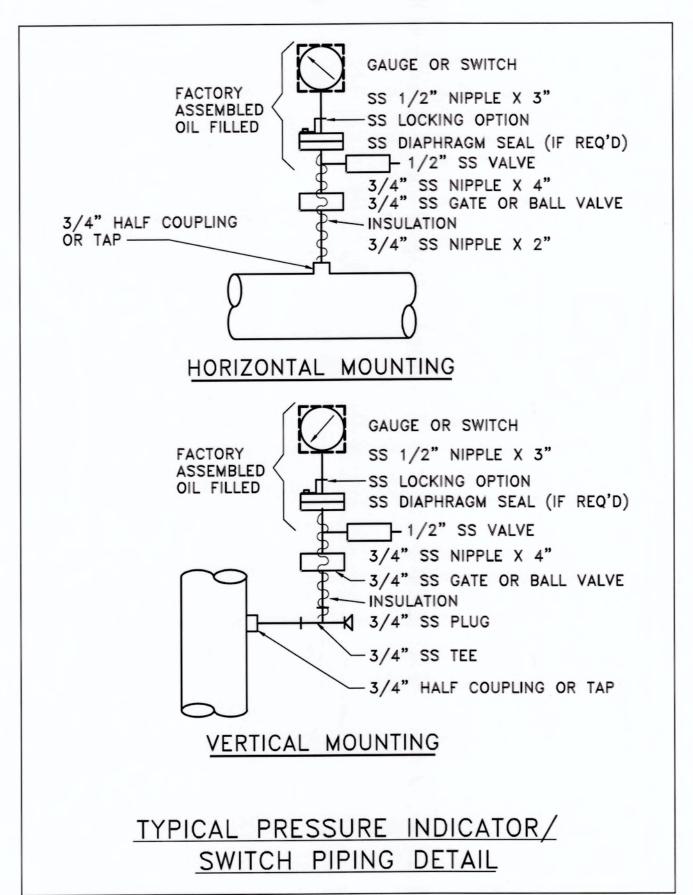
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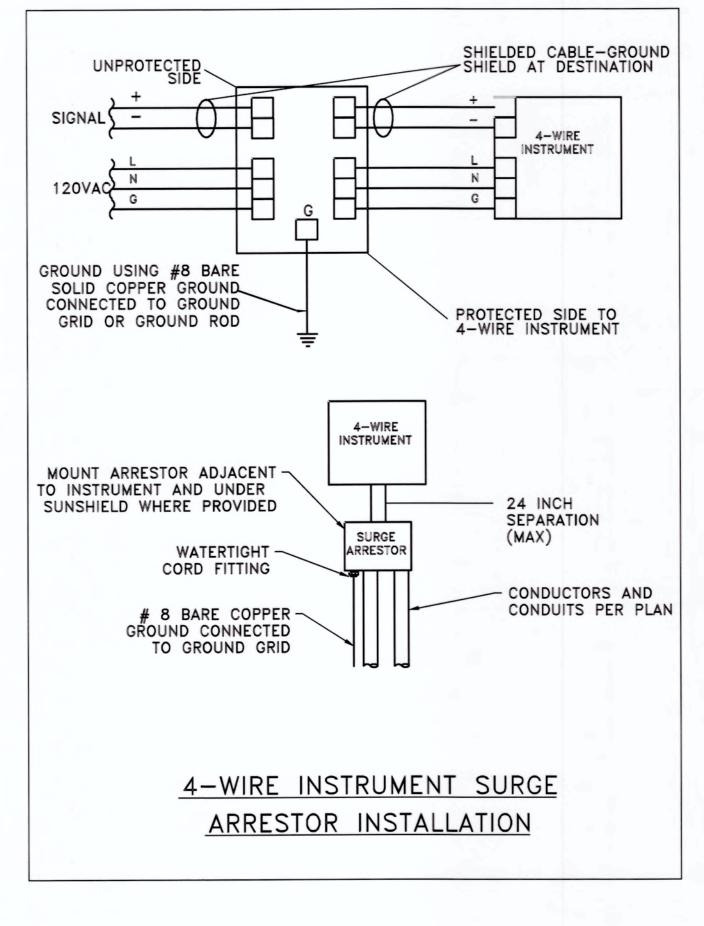
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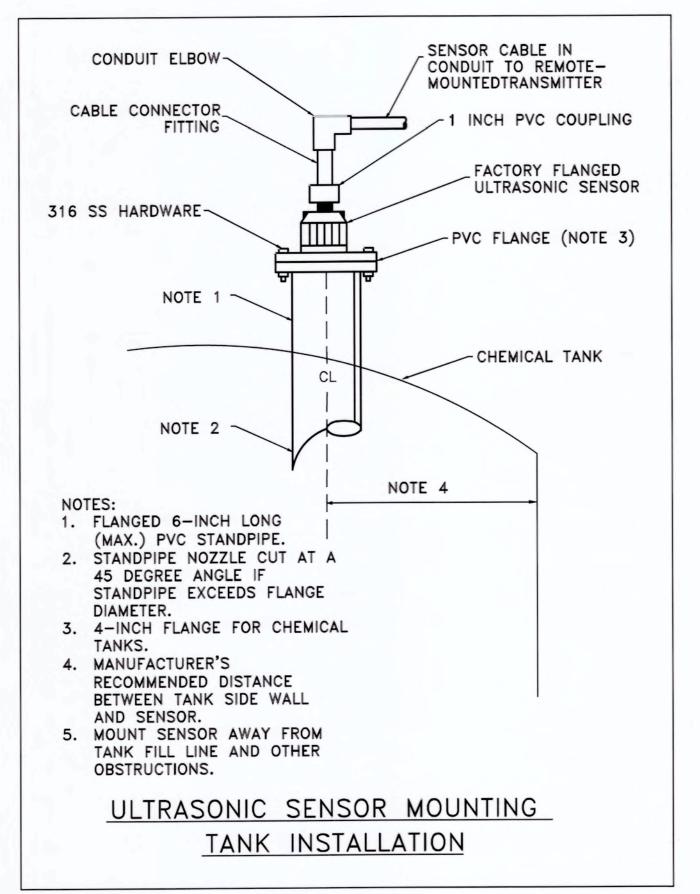


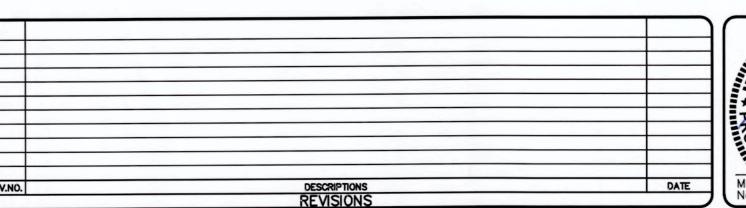


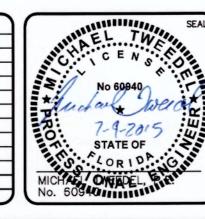














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MARS CHLORINATION SYSTEM AT THE SWWRF

INSTRUMENTATION INSTALLATION DETAILS

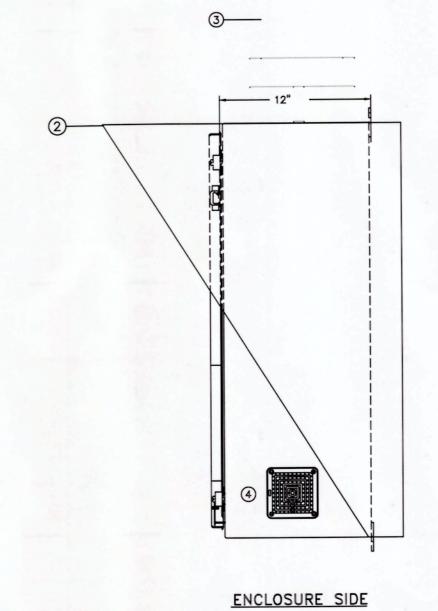
DATE:	JULY 2015	SCALE	
MCE PROJ. #	1024-0158		
DRAWN	RRO	HORIZONT	
DESIGNED	RRO	NA	
CHECKED	MDT	VERTICA	
PROJ. MGR.	BRP	NA	

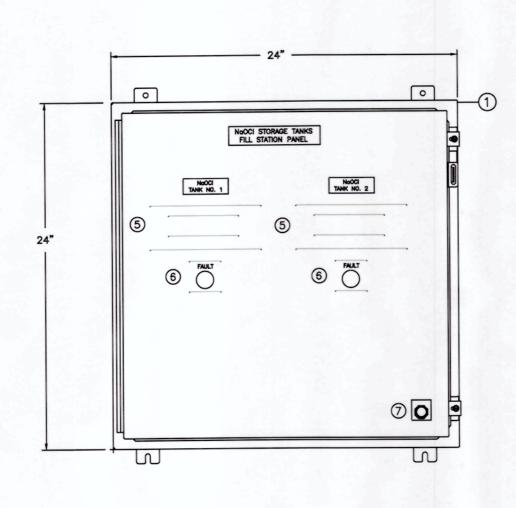
VERTICAL:

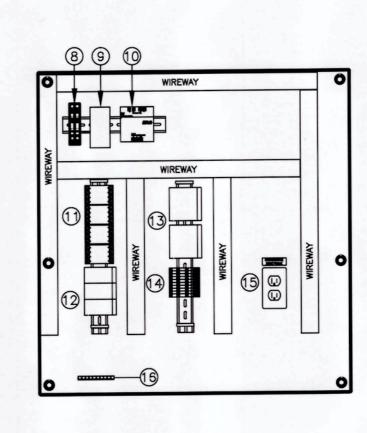
NA

VERTICAL:

NA







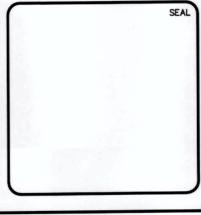
SUBPANEL LAYOUT

ENCLOSURE FRONT

NaOCI STORAGE TANKS FILL STATION PANEL NOT TO SCALE

- 1. ENCLOSURE, NEMA 4X, 316 STAINLESS STEEL, 24"H X 24" W X 10" D (APPROXIMATE), WITH 316 STAINLESS STEEL, WHITE POWERED COATED.
- 2. SUNSHIELD, 316 STAINLESS STEEL
- 3. ALARM BEACON LIGHT, NEMA 4X, RED 4. ALARM HORN, NEMA 4X
- 5. PROCESS DIGITAL DISPLAY, NEMA 4X
- 6. INDICATING LIGHT, NEMA 4X, AMBER
- 7. HORN SILENCE PUSHBUTTON, NEMA 4X, MOMENTARY
- 8. CIRCUIT BREAKERS 9. AC LINE SURGE SUPPRESSOR
- 10. 24VDC POWER SUPPLY
- 11. CONTROL RELAY, 120VAC COIL, DPDT
- 12. ANALOG SIGNAL SURGE SUPPRESSORS
- 13. SIGNAL ISOLATOR
- 14. TERMINALS
- 15. 120VAC GFCI OUTLET
- 16. GROUND CONNECTOR







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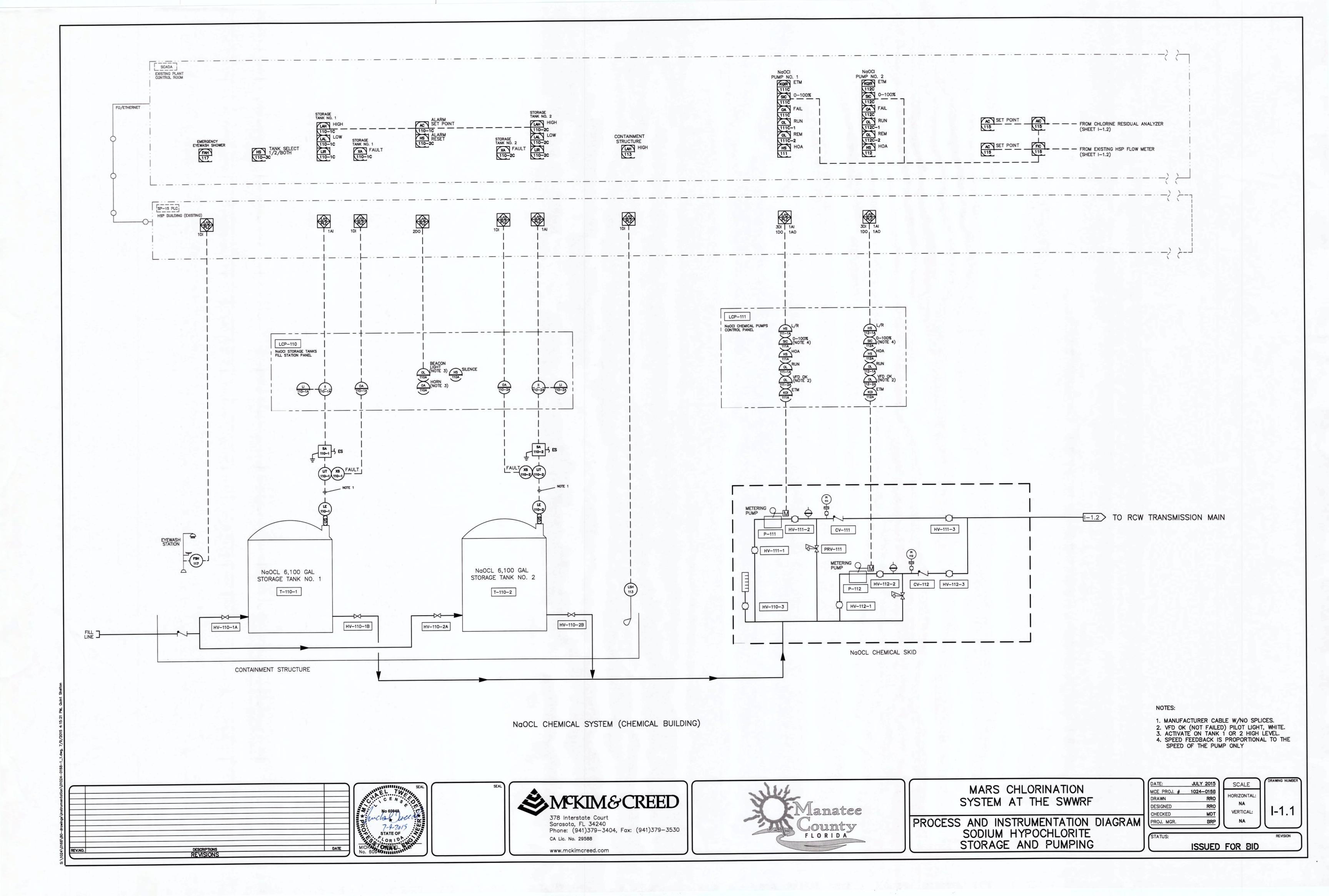


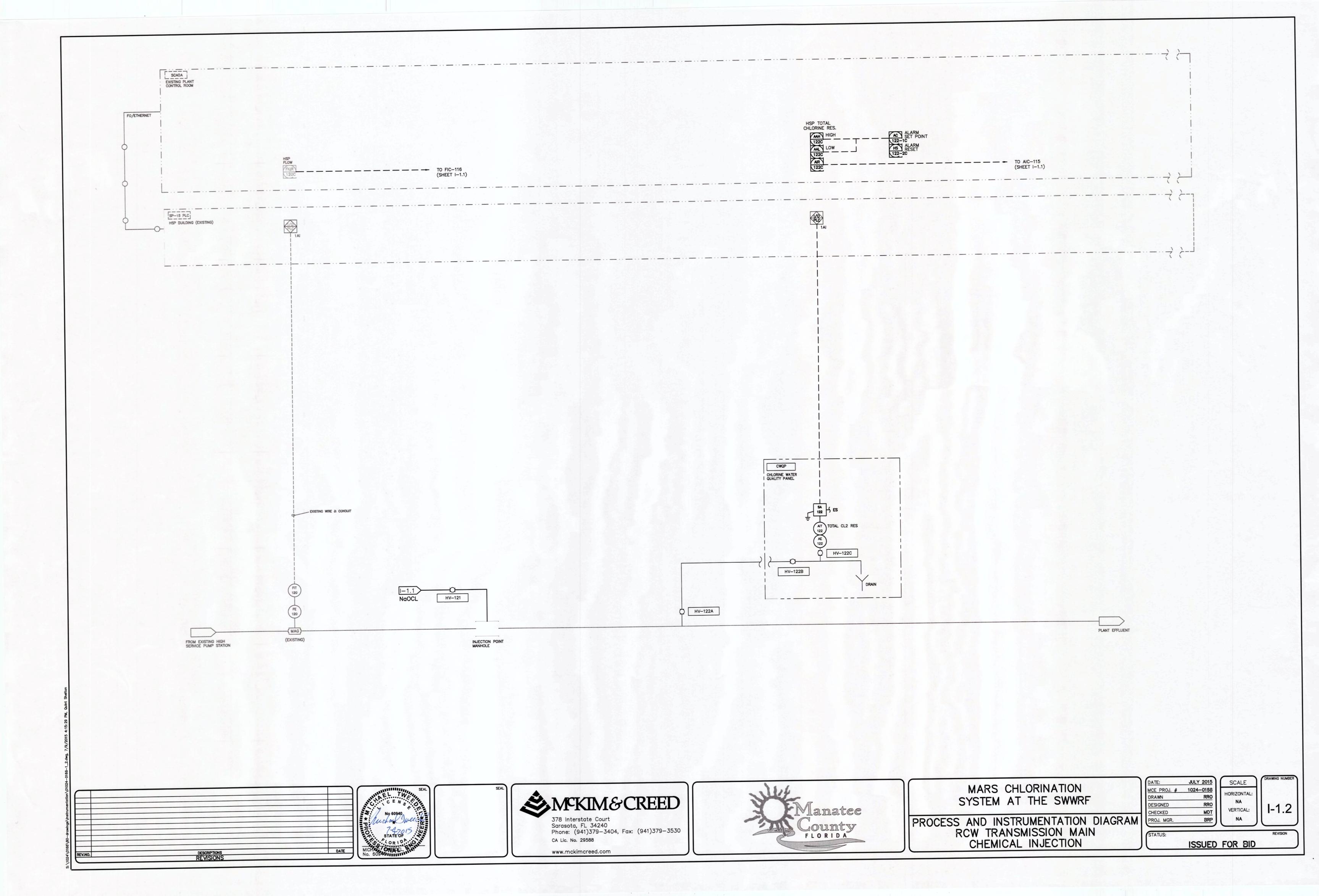
MARS CHLORINATION SYSTEM AT THE SWWRF

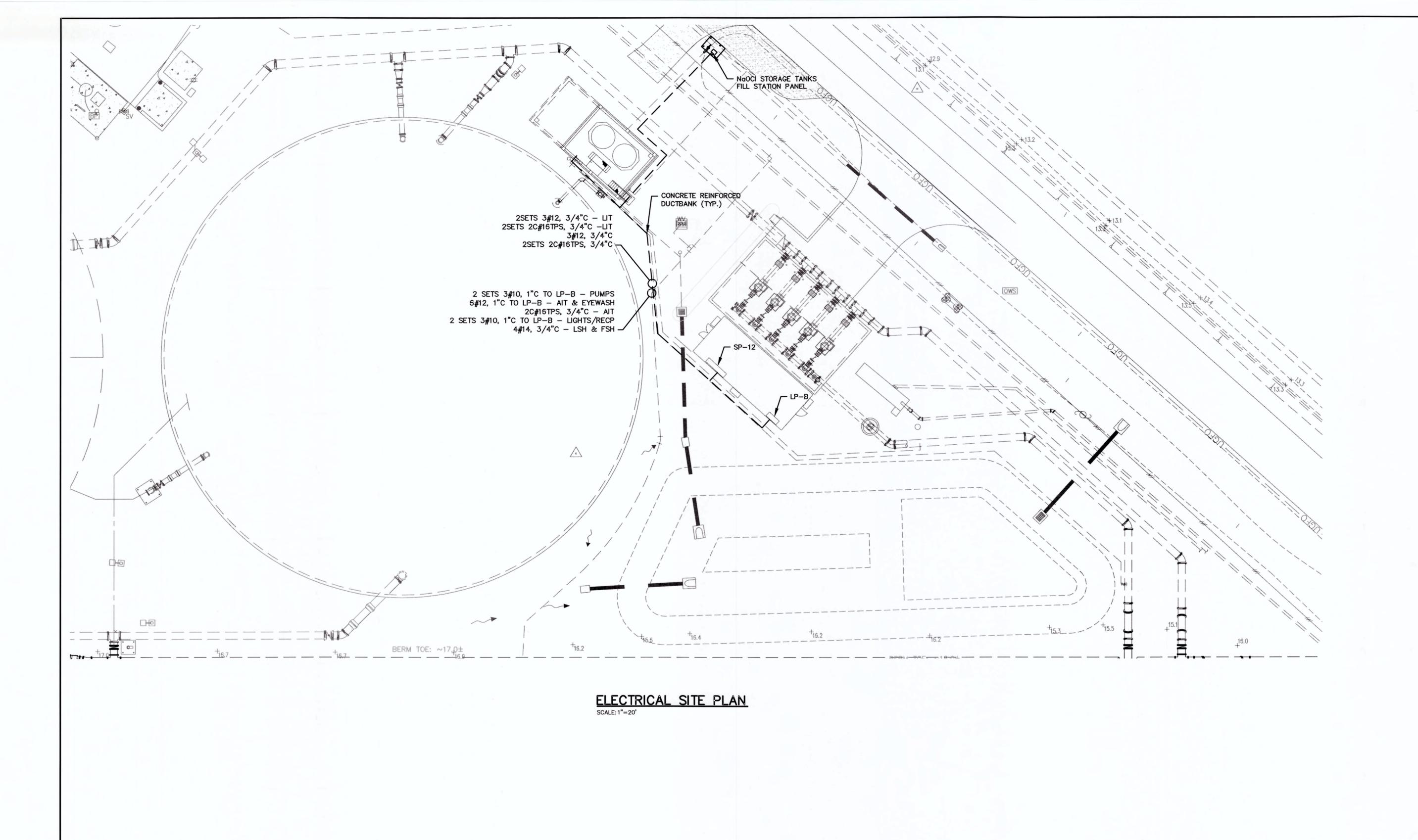
CONTROL PANEL DETAILS

DATE:	JULY 2015	1
MCE PROJ. #	1024-0158	t
DRAWN	RRO	1
DESIGNED	RRO	ı
CHECKED	MDT	1
PROJ. MGR.	BRP	ı

SCALE HORIZONTAL: VERTICAL:



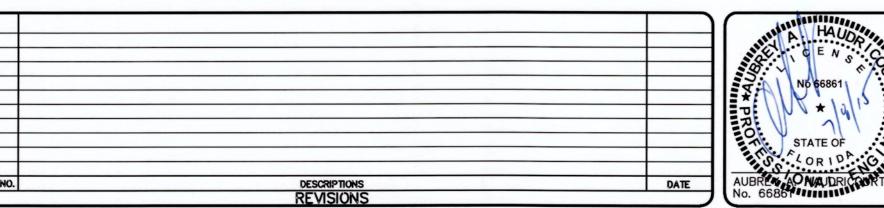






OVERALL ELECTRICAL PLAN

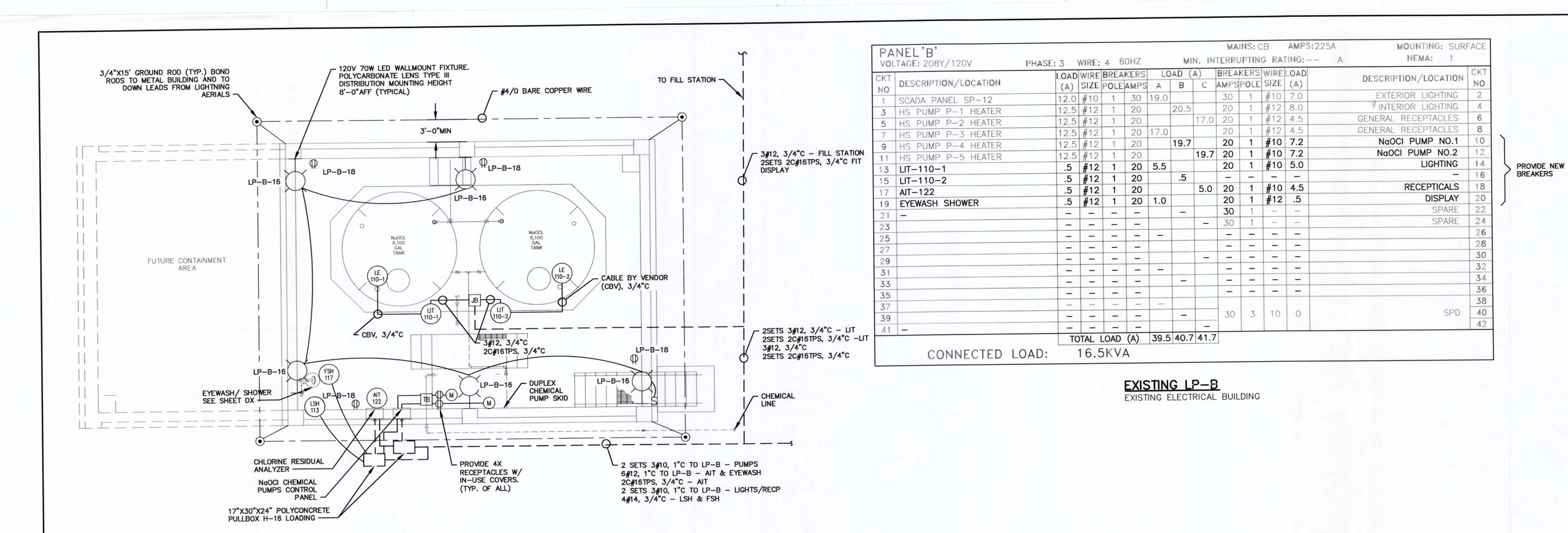
VERTICAL: AS SHOWN











CHEMICAL BUILDING PLAN SCALE: 1/4" = 1'-0"



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MARS CHLORINATION SYSTEM AT THE SWWRF

CHEMICAL BUILDING ELECTRICAL PLAN

DATE:	JULY 2015	(5
MCE PROJ. #	1024-0168	
DRAWN	AAH	HOI
DESIGNED	AAH	
CHECKED	JSL	V
PROJ. MGR.	BRP	A:

ORIZONTAL: VERTICAL: AS SHOWN