

BID NUMBER ITB CM 17-035

TO: CITY OF LONG BEACH
CITY CLERK
ATTN: MICHELLE KING
333 West Ocean Boulevard, Plaza Level
Long Beach, California 90802



INVITATION TO BID

Prefabricated Restroom Building

CONTRACT NO. 34567

1. COMPLETE CONTRACT:

This Invitation to Bid, together with THE NOTICE INVITING BIDS, the entire Bid (including Specifications), or any items(s) thereof, the signature page, Instructions to Bidders, General Conditions, Special Conditions, Bid Section, Addendums, and when required, CONTRACTOR'S BOND shall become the Contract upon its acceptance by the City Manager or designee on behalf of the City of Long Beach, Contractor will be provided with a copy of the executed Contract. All materials or services provided by the Contractor shall comply with the City Charter, and all applicable Federal, State and City Laws.

2. SERVICES TO BE PROVIDED BY THE CONTRACTOR:

Contractor shall upon acceptance of this Bid by the City, furnish the goods and services herein specified according to the terms and conditions set forth herein.

3. AMOUNT TO BE PAID:

The City shall pay Contractor for the goods or services as described in the section entitled "PAYMENT" in the Instructions to Bidders.

4. CHOICE OF ALTERNATE PROVISIONS; OPTIONS; NOTIFICATION:

When alternative provisions are requested, or options are offered, Contractor will be notified as to which provision, or option, is being accepted at the same time that he is notified that he is the successful Bidder.

5. DECLARATION OF NON-COLLUSION:

The undersigned certifies or declares under penalty of perjury that this Bid is genuine and not sham or collusive, or made in the interest or on behalf of any person or entity not herein named; that the Bidder has not directly or indirectly induced or solicited any other Bidder to submit a sham bid, or any other person or entity to refrain from bidding, and that the Bidder has not in any manner sought by collusion to secure to himself any advantage over other Bidders.

BIDDER MUST COMPLETE AND SIGN BELOW:

(Signature of Corporate Officers or persons authorized to sign bids and contracts on behalf of the Contractor – refer to page 2 Instructions Concerning Signatures.)

EXECUTED AT: Minden, NV ON THE 21st DAY OF February, 20 17
CITY STATE MONTH

COMPANY NAME: The Public Restroom Company TIN: [REDACTED]
(FEDERAL TAX IDENTIFICATION NUMBER)

STREET ADDRESS: 2587 Business Parkway CITY: Minden STATE: NV ZIP: 89423

PHONE: 888-888-2060 FAX: 888-888-1448

S/ Chas E Kaufman / Pres President
(SIGNATURE) (TITLE)

Charles E. Kaufman chuck@publicrestroomcompany.com
(PRINT NAME) (EMAIL ADDRESS)

S/ Chas E Kaufman / Secy Secretary
(SIGNATURE) (TITLE)

Charles E. Kaufman chuck@publicrestroomcompany.com
(PRINT NAME) (EMAIL ADDRESS)

ALL SIGNATURES MUST BE NOTARIZED FOR ALL COMPANIES LOCATED OUTSIDE THE STATE OF CALIFORNIA.
NO OUT-OF-STATE BID WILL BE CONSIDERED UNLESS A NOTARIAL ACKNOWLEDGMENT IS ATTACHED.
NOTARIES ARE NOT REQUIRED FOR CALIFORNIA BIDDERS.

IN WITNESS WHEREOF the City of Long Beach has caused this contract to be executed as required by law as of the date stated below.

THE CITY OF LONG BEACH

BY [Signature]
Director of Financial Management

3/20/17
Date

APPROVED AS TO FORM 3/24, 20 17

CHARLES PARKIN
CITY ATTORNEY

[Signature]
Deputy

BID NUMBER ITB CM 17-035

The City of Long Beach is committed to provide maximum opportunities for Disadvantaged, Minority, Women and Long Beach Business Enterprises (DBEs, MBEs, WBEs and Local) to compete successfully in supplying our needs for products and services.

The following information is submitted regarding the Bidder:

Legal Form of Bidder:
Corporation State of NV
Partnership State of _____
General Limited
Joint Venture
Individual DBA _____

Limited Liability Company State of _____

Composition of Ownership (more than 51% of ownership of the organization): **OPTIONAL**
Ethnic (Check one):
 Black Asian Other Non-white
 Hispanic American Indian Caucasian
Non-ethnic Factors of Ownership (check all that apply):
 Male Yes - Physically Challenged Under 65
 Female No - Physically Challenged Over 65
Is the firm certified as a Disadvantaged Business: Yes No
Has firm previously been certified as a minority-owned and/or woman-owned business enterprise by any other agency?
 Yes No
Name of certifying agency: _____

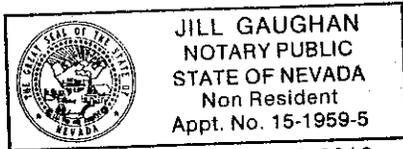
ATTACHED NOTARIAL CERTIFICATE

ACKNOWLEDGMENT

State of Nevada

County of Douglas

The attached document Invitation to Bid
was acknowledged before me on this 21st day of February 2017,
by Charles Kaufman



My Appt. Expires May 25, 2019

(Notary Stamp)

Jill Gaughan
Signature of Notary

INSTRUCTIONS CONCERNING SIGNATURES

Please use the proper notary form, which applies to your type of organization on all Bid documents, attachments and bonds requiring a signature by officers of your company.

NOTE: FAILURE TO COMPLY MAY RESULT IN DISQUALIFICATION OF YOUR BID.

INDIVIDUAL (Doing Business As)

- a. The only acceptable signature is the owner of the company. (Only one signature is required.)
- b. The owner's signature must be notarized if the company is located outside of the state of California.

PARTNERSHIP

- a. The only acceptable signature(s) is/are that of the general partner or partners.
- b. Signature(s) must be notarized if the partnership is located outside of the state of California.

CORPORATION

- a. Two (2) officers of the corporation must sign.
- b. Each signature must be notarized if the corporation is located outside of the state of California.

OR

- a. The signature of one officer or the signature of person other than an officer is acceptable if the Bid is accompanied by a certified corporate resolution granting authority to said person to execute contracts on behalf of the corporation.
- b. Signature(s) must be notarized if the corporation is located outside of the state of California.

LIMITED LIABILITY COMPANY

- a. The signature on the Bid must be a member or, if the Articles provide for a manager, must be the manager. (Only one signature is required.)
- b. Signature must be notarized if the company is located outside of the state of California.

THIS INFORMATION IS AVAILABLE IN AN ALTERNATIVE FORMAT BY CONTACTING 562-570-6200.

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

~~State of California~~ State of Nevada *CEV*
County of Douglas

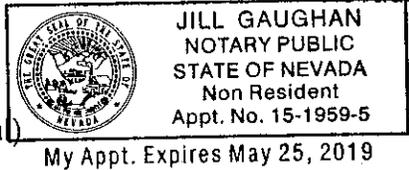
On February 21, 2017 before me, Jill Gaughan, Notary Public
(insert name and title of the officer)

personally appeared Charles E. Kaufman, President,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of ~~California~~ Nevada that the foregoing paragraph is true and correct. *CEV*

WITNESS my hand and official seal.

Signature *Jill Gaughan* (Seal)



OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

- INDIVIDUAL
- CORPORATE OFFICER
President
- PARTNER(S) LIMITED GENERAL
- ATTORNEY-IN-FACT
- TRUSTEE(S)
- GUARDIAN/CONSERVATOR
- OTHER:

DESCRIPTION OF ATTACHED DOCUMENT

Bid Number ITB CM 17-035/City of Long Beach, CA

TITLE OR TYPE OF DOCUMENT

NUMBER OF PAGES

02/21/2017

DATE OF DOCUMENT

SIGNER IS REPRESENTING:

NAME OF PERSON(S) OR ENTITY(IES):
The Public Restroom Company

SIGNER(S) OTHER THAN NAMED ABOVE

INSTRUCTIONS TO BIDDERS

1. PREPARATION OF BID:

The preparation of the Bid, including visits to the Site prior to submittal of the Bid, shall be at the expense of Bidder. All prices and notations must be typewritten or written in ink. Any markings in pencil shall not form part of the Bid and shall be disregarded by the City. Any changes or corrections in the Bid must be initialed in ink by the person signing the Bid. Bidder shall state brand name or make of each item bid. If not bidding on item as described, the manufacturer's name and catalog number of the substitute must be given. Bidder shall also attach specifications and furnish other data to establish the suitability of the substitute. Bidder shall quote separately on each item. Bidder shall quote his lowest price and best delivery date as no changes are permitted after the bid opening. Cash discounts offered for payment within fourteen (14) days or less will not be considered when evaluating bids. No telephonic, telegraphic or fax Bids are acceptable.

NOTE: ALL PAGES OF THE INVITATION TO BID MUST BE RETURNED.

2. EXAMINATION OF BID:

Bidder is responsible for examining the Invitation to Bid and submitting its Bid complete and in conformance with these instructions.

3. CONDITIONS OF WORK:

Bidder shall carefully examine the Site to become fully informed regarding all existing and expected conditions and matters, which could affect performance, cost or time of the Work.

4. DISCREPANCIES IN BID DOCUMENTS:

If Bidder finds discrepancies in or omissions from the Invitation to Bid, if the intent of the Invitation is not clear, or if provisions of the Specifications restrict Bidder from bidding, he may request in writing that the deficiency(s) be modified. Such request must be received by the City Purchasing Agent at least five (5) working days before bid opening date. Bidders will be notified by Addendum of any approved changes in the Invitation to Bid.

5. ORAL STATEMENTS:

The City of Long Beach shall not be bound by oral statements made by any employee or agent concerning this Invitation to Bid. If Bidder requires specific information, Bidder must request it in writing and obtain a reply in writing from the City.

6. BRAND NAMES AND SPECIFICATIONS:

The detailed specifications and/or brand names stated are descriptive only and indicate quality, design and construction of items required. Offers will be considered to supply articles substantially the same as those described herein but with minor variations. Bidders must describe variations in the Bid. Substitute items must be equal in quality, utility and performance. The phrase "or approved equal" throughout the specifications means that the City in its sole and absolute discretion shall make the final determination whether or not the substitute items are equal.

7. AWARD:

Bid shall be subject to acceptance by the City for a period of three (3) months unless a lesser period is prescribed in the quotation by Bidder. The City reserves the right to award all items to one Bidder, or to award separate items or groups of items to various Bidders, or to increase or decrease the quantities of any item. Bidder may submit alternate prices or name a lump sum or discount conditional on two or more items being awarded to him.

The City's purchases of goods and services are based on the City's actual needs and requirements. The City is obligated under this contract/purchase order to purchase and pay for only those goods and services that the City needs and requires, and that the City actually orders and receives. Any dollar amount identified as a "not to exceed:" amount in any City document is not a guaranteed payment amount to any contractor or service provider. Furthermore, the City may determine that its needs and requirements may be met by City labor or by a second contractor or service provider, even after an award is made to one contractor or service provider. An award is not a promise or guarantee of exclusivity.

Bidders are cautioned that comments and statements, whether oral or written, made by City employees regarding the validity of Bids, the waiver of deviations from Specifications, the possibility or probability of an award being made to a particular Bidder, and other similar matters are NOT binding on the City. Bidders should not order materials, obtain financing or take other actions based on such comments and statements. Only authorization of a Contract by the City Council or issuance of a Purchase Order is conclusive and binding on the City with respect to this Bid and its resulting Contract or Purchase Order. However, prior to authorization by the City Council or issuance of the Purchase Order, Bidders may rely on: (1) approval of an "equal" or "substitute" item which will be issued in writing, and (2) written notice of intent to award by the City Council, which is often issued prior to the authorization by the City Council so that a Bidder can order materials that have a long lead time.

8. PAYMENT:

Payment terms are NET/30 unless Bidder otherwise quotes. All Cash Discounts shall be taken and computed from the date of delivery or completion and acceptance of the material, or from date of receipt of invoice, whichever occurs last. Invoices must be submitted as specified at the time of shipping authorization. Partial payments may be made by the City on delivery & acceptance of goods and on receipt of goods and on receipt of Contractor's invoice.

In the event the Contract to be awarded hereunder, including specifications and other documents incorporated therein by reference, provides for the withholding of moneys by the City to ensure performance of such Contract, Contractor may deposit with the City, as a substitute for said withheld moneys, securities listed in Section 16430 of the California Government Code or bank or savings and loan certificates of deposit, or both, equivalent to the amount withheld, provided Contractor requests permission to make such substitution and bears all expenses in connection therewith.

9. SAFETY APPROVAL:

Where required by City Regulations, any items delivered must carry Underwriters Laboratories Approval or City of Long Beach City Safety Officer approval. Failure to so comply will be cause to reject Bid. Also, any equipment must conform with the Safety Orders of the California Division of Industrial Safety and OSHA regulations.

10. BUSINESS LICENSE:

The Long Beach Municipal Code (LBMC) requires all businesses operating in the City of Long Beach to pay a business license tax. In some cases the City may require a regulatory permit and/or evidence of a State or Federal license. Prior to issuing a business license, certain business types will require the business license application and/or business location to be reviewed by the Development Services, Fire, Health, and/or Police Departments. For more information, go to www.longbeach.gov/finance/business_license.

INSTRUCTIONS TO BIDDERS

11. PUBLIC WORK AND PREVAILING WAGES:

The Contractor to whom the contract is awarded, along with its subcontractors, shall pay not less than the general prevailing rate of per diem, holiday and overtime wages established by the Department of Industrial Relations (DIR) of the State of California for the locality in which the public work is to be performed for each craft, classification or type of worker needed to execute the contract. Refer to the California DIR's website, <http://www.dir.ca.gov/dlsr> for such prevailing wages and additional information.

Ethnic Factors of Ownership: (more than 51%)
Black () American Indian ()
Hispanic () Other Non-white ()
Asian () Caucasian ()

Certified by: n/a
Valid thru: _____
Dollar value of participation: \$ _____

The Director of Public Works of the City by and on behalf of the City Council has obtained from the Director of the Department of Industrial Relations of the State of California the general prevailing rate of per diem wages and the general prevailing rate of holiday and overtime work in the locality in which the public work is to be performed for each craft, classifications or type of workers needed to execute the Contract, and the same is on file with the City Engineer, 9th floor, City Hall, 333 W. Ocean Boulevard, Long Beach, California 90802. It shall be mandatory upon the Contractor to whom the Contract is awarded, and his Subcontractors to pay not less than the said prevailing rate of wages to all workers employed by Contractor or said Subcontractors in the execution of the Contract.

16. BID SUBMITTAL AND WITHDRAWAL OF BIDS:

Each Bid must be delivered to the location and received on or before the due date and time stated herein. Bids will not be accepted after the date and time stated herein. Bids may be withdrawn without prejudice providing the written request is received by the City Clerk no later than the time set for opening Bids. Withdrawals will be returned to Bidder unopened.

SUBMIT TO:
CITY OF LONG BEACH
CITY CLERK - ATTN: MICHELLE KING
333 W OCEAN BLVD/PLAZA LEVEL
LONG BEACH CA 90802

12. RIGHT TO REJECT:

The City reserves the right to reject at any time any or all Bids, or parts thereof, and to waive any variances, technicalities and informalities which do not impair the quality, utility, durability or performance of the items.

BID DUE DATE: JANUARY 26, 2017
TIME: 11:00 am

IF BIDDER HAS ANY QUESTIONS REGARDING THIS INVITATION TO BID PLEASE CONTACT THE FOLLOWING CITY PERSONNEL.

13. SAMPLES:

Samples of Items when requested or required must be furnished to the City free of expense to the City and, if not destroyed by tests, will upon request be returned at Bidder's expense.

MICHELLE KING (562) 570-6020
BUYER TELEPHONE NUMBER

14. PRICES:

Prices shall be in accordance with those extended to other governmental agencies. In case of error in extension of prices, unit price will govern. All prices must be firm for the Contract term unless the City specifically provides for adjustment.

17. BID OPENING PROCEDURES:

All bids are publicly opened and read in the Purchasing offices at the date and time noted on the Invitation to Bid.

Bid results are posted on the City's online system as soon as they have been reviewed for responsiveness. Bids are awarded to the lowest responsible and responsive bidder meeting the City's specifications. Bid results will not be given out via telephone, City email, or facsimile.

15. CITY'S POLICY FOR MINORITY AND WOMEN-OWNED BUSINESSES:

The City of Long Beach is committed to providing maximum opportunities for Disadvantaged, Minority, Women and Long Beach Business Enterprises (DBEs, MBEs, WBEs and Local) to compete successfully in supplying our needs for products and services.

CAUTION: Only the City Council has authority to make an award, and a contract is not in effect until the City Council makes an award and contract documents (including insurance and bonds) are signed, submitted and approved.

Bid protest procedures may be obtained from the Buyer. Protests must be submitted within five (5) business days after the date on which the bids were opened.

SUBCONTRACTORS

To assist the City in maintaining records of its Minority and Women Outreach Program, Bidder is requested to provide the following information. Answers are optional, and failure to answer will not disqualify Bid. If additional space is required, Bidder shall attach a separate sheet.

18. INTER-AGENCY PARTICIPATION:

IF OTHER AGENCIES EXPRESS AN INTEREST IN PARTICIPATING IN THIS BID, WOULD YOU SUPPLY THE SAME ITEMS.

YES CEK NO _____

(If yes, any agency electing to participate in this Bid will order its own requirements without regard to the City of Long Beach. The City of Long Beach assumes no liability or payment guarantee on any units sold to participating agencies.)

The following Minority- or Woman-owned subcontractors are to be utilized to provide equipment, material, supplies and/or services for this Contract requirement:

Company Name: None

Address: _____

Commodity/Service Provided: _____

Circle appropriate designation: MBE WBE

19. AMERICANS WITH DISABILITIES ACT:

INSTRUCTIONS TO BIDDERS

Contractor shall have and be allocated the sole responsibility to comply with the Americans with Disabilities Act of 1990 ("ADA") with respect to performance hereunder and contractor shall defend, indemnify and hold the City, its officials and employees harmless from and against any and all claims of failure to comply with or violation of the ADA as said claim relates to this Contract.

20. EQUAL BENEFITS ORDINANCE:

Bidders/Proposers are advised that any contract awarded pursuant to this procurement process shall be subject to the applicable provisions of Long Beach Municipal Code section 2.73 et seq., the Equal Benefits Ordinance. Bidders/Proposers shall refer to Attachment/Appendix for further information regarding the requirements of the Ordinance.

All Bidders/Proposers shall complete and return, with their bid/proposal, the Equal Benefits Ordinance Compliance form contained in the Attachment/Appendix. Unless otherwise specified in this procurement package, Bidders/Proposers do not need to submit supporting documentation verifying with their bids/proposals. However, supporting documentation verifying that the benefits are provided equally shall be required if the Bidder/Proposer that is selected for award of a contract.

CONTRACT – GENERAL CONDITIONS

1. Acceptance of the offer contained in this Contract is expressly limited to the terms and conditions of such offer as herein stated.
2. No charges for taxes, transportation, boxing, packaging, crating or returnable containers will be allowed and paid by the City unless separately stated hereon. All sales, use, excise or similar taxes to be paid by the City must be itemized separately hereon and on invoices. The City is exempt from payment of Federal Excise Tax under Certificate No. 95-73 0502K and none shall be charged to the City.
3. The City's obligation to pay the sum herein stated for any one fiscal year shall be contingent upon the City Council of the City appropriating the necessary funds for such payment by the City in each fiscal year during the term of this Contract. For the purposes of this section a fiscal year commences on October 1 of the year and continues through September 30 of the following year. In the event that the City Council of the City fails to appropriate the necessary funds for any fiscal year, then, and in that event, the Contract will terminate at no additional cost or obligation to the City.
4. Contractor shall deliver the materials, equipment, supplies or services, or cause the work to be performed, within the time and in the manner specified in the Contract. Times and dates stated herein are of the essence. If at any time Contractor has reason to believe that deliveries will not be made as scheduled, written notice setting forth the cause of the anticipated delay shall be given immediately to the City. Deliveries must be prepaid. C.O.D. shipments will not be accepted.
5. The City reserves the right at any time to make changes in drawings and specifications, in methods of shipment and packaging and in place of delivery as to any articles covered by this Contract. In such event there will be made an equitable adjustment in price and time of performance mutually satisfactory to Contractor and the City; but any claim by Contractor for such an adjustment must be made within thirty (30) days of such change.
6. Contractor warrants that the goods, machinery or equipment delivered or the work performed hereunder shall conform to the specifications, drawings, samples or other description specified by the City and shall be fit and sufficient for the purpose intended, merchantable, of good material and workmanship, in good working order and free from defect or faulty workmanship for a period of ninety (90) days. When defective goods, machinery, or equipment or faulty workmanship is discovered which requires repair or replacement pursuant to this warranty, Contractor shall provide all labor, materials, parts and equipment to correct such defect at no expense to the City.
7. Contractor shall defend, indemnify and hold the City, its officials and employees harmless from any and all loss, damage, liability, demands, claims, causes of action, costs and expenses (including reasonable attorney' fees) for injuries to persons (including death) or damage or destruction of property connected with or arising from the negligent acts or omissions of Contractor, its officers, agents and employees in the performance of this Contract
8. The City reserves the right to terminate this Contract at any time in whole or in part even though Contractor is not in default hereunder. In such event there will be made an equitable adjustment of the terms that is mutually satisfactory to the City and Contractor. Upon receipt of any notice of such termination, Contractor shall, unless such notice otherwise directs, immediately discontinue all work on the Contract and deliver, if and as directed, to the City all completed and partially completed articles, work in process and materials purchased or acquired for performance of the Contract. The provisions of this section shall not limit or affect the right of the City to terminate this Contract immediately upon written notice of breach.
9. The City reserves the right to cancel this Contract or any part thereof and reject delivery of goods if delivery is not undertaken and completed when specified and in accordance with specifications. Contractor shall be charged for any direct losses, but not any consequential damages, sustained by the City by reason of such delay or failure, excepting losses caused by a delay for reasons beyond Contractor's reasonable control. Direct losses shall include any costs to the city in excess of the Contract price of obtaining goods from other sources similar to those cancelled or rejected hereunder.
10. The City shall pay to Contractor the price(s) specified in the Contract on delivery of the materials, equipment, supplies or services and acceptance thereof by the City Manager or his designee, or upon completion of the work to be performed and accepted thereof, as specified in the Contract. Defective articles or articles not in accordance with the City's specifications shall be held for Contractor's instructions at Contractor's risk, and if Contractor so directs will be returned at Contractor's expense.
11. No return or exchange of material, equipment or supplies shall be permitted without written approval of the City Purchasing Agent.
12. All royalties for patents, or changes for the use of patents, which may be involved in any article to be furnished under this Contract shall be included in the Contract price.
13. In cases where a price subject to escalation has been agreed upon, the price escalation shall be shown as a separate item on the invoice. Unless an escalator clause has been shown as a specific part of this Contract Contractor shall not be entitled to reimbursement for costs incurred due to escalation.

CONTRACT – GENERAL CONDITIONS

14. All materials, supplies and equipment provided under this Contract shall be in full compliance with the Safety Orders and Regulations of the Division of Industrial Safety of the State of California, Title 8, California Code of Regulations (CAL/OSHA) and all applicable OSHA regulations as well as all other applicable California Code of Regulations. Contractor shall indemnify and hold the City, its officials, and employees harmless for, of and from any and all loss, including but not limited to fines, penalties and corrective measures, the City may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Contract.
15. Contractor shall keep confidential and not disclose to others or use in any way to the detriment of the City confidential business or technical information that the City may disclose in conjunction with this Contract or Contractor may learn as a result of performing this Contract.
16. This Contract shall not be assigned in whole or in part, nor any duties delegated without the City's prior written approval.
17. The remedies herein reserved shall be cumulative and additional to any other remedies at law or in equity. The waiver of any breach of this Contract shall not be held to be a waiver of any other or subsequent breach. The City's failure to object to provisions contained in any communication from Contractor shall not be deemed an acceptance of such provisions or a waiver of the provisions of this Contract.
18. This Contract shall not be amended or modified, except by written agreement signed by the parties and expressly referring to this Contract.
19. Contractor shall indemnify, hold harmless and defend the City, its officials and employees from any damage, claim, loss, cost, liability, cause of action or expense, including reasonable attorney's fees, whether or not reduced to judgment, arising from any infringement or claimed infringement of any patent, trademark or copyright, or misappropriation of confidential information or trade secrets of any third party and based on the manufacture, sale or use of goods, machinery or equipment supplied hereunder.
20. Contractor shall furnish further itemization and breakdown of the Contract price when requested by the City.
21. Contractor, in the performance of any work or the furnishing of any labor under this Contract, shall be considered as an independent contractor. Contractor, his agents and employees shall not be considered as employees of the City.
22. Contractor and subcontractor(s) shall not discriminate against any person in the performance of this Contract and shall comply with applicable federal, state and city equal employment opportunity laws, ordinances, rules and regulations. Contractor and subcontractor(s) shall not discriminate against any employee or applicant for employment or against any subcontractor on the basis of race, color, religion, national origin, sex, sexual orientation, AIDS, HIV status, age, disability, or handicap, subject to federal and state laws, rules and regulations.
23. Contractor shall comply with all applicable federal, state and local laws pertaining to the subject matter hereof.
24. Contractor shall submit samples of all documents that Contractor may require the City to execute to complete this transaction. By accepting these samples as part of the bid or by awarding the Contract to a Contractor who has submitted said samples, the City does not agree to the terms stated in said samples. This Invitation to Bid and Contractor's bid shall take priority over said samples and this Invitation and Contractor's bid shall become the Contract between the City and the Contractor.
25. All quantities stated herein are only ESTIMATES. The City reserves the right to increase or decrease these estimated quantities based on its actual needs and funds available.
26. The City reserves the right to exercise, at its option, an increase in expenditures by ten (10) percent annually, but the City does not guarantee such an increase.
27. Contractor shall cooperate with the City in all matters relating to taxation and the collection of taxes, particularly with respect to the self-accrual of use tax. Contractor shall cooperate as follows: (i) for all leases and purchases of materials, equipment, supplies or other tangible personal property totaling over \$100,000 shipped from outside California, a qualified Contractor shall complete and submit to the appropriate governmental entity the form in Appendix "A" attached hereto; and (ii) for construction contracts and subcontracts totaling \$5,000,000 or more, Contractor shall obtain a sub-permit from the California Board of Equalization for the Work site. "Qualified" means that the Contractor purchased at least \$500,000 in tangible personal property that was subject to sales or use tax in the previous calendar year.

In completing the form and obtaining the permit(s), Contractor shall use the address of the Work site as its business address and may use any address for its mailing address. Copies of the form and permit(s) shall also be delivered to the Purchasing Agent. The form must be submitted and the permit(s) obtained as soon as Contractor receives a notice of award. Contractor shall not order any materials or equipment over \$100,000 from vendors outside California until the form is submitted and the permit(s) obtained and, if

CONTRACT – GENERAL CONDITIONS

Contractor does so, it shall be a material breach of the Agreement. In addition, Contractor shall make all purchases from its Long Beach sales office and the Long Beach sales office of its vendors if those vendors have a Long Beach office and all purchases made by Contractor under this Agreement which are subject to use tax of \$500,000 or more shall be allocated to the City of Long Beach. Contractor shall require the same form and permit(s) from its subcontractors.

Contractor shall not be entitled to and by signing this Contract waives any claim or damages for delay against City if Contractor does not timely submit these forms to the appropriate governmental entity. Contractor may contact Julissa Jose-Murray at 562-570-6869 for assistance with the form.

28. The California Integrated Waste Management Act (Public Resources Code, Sec. 40000 et seq.) requires governmental entities to achieve fifty (50) percent diversion of waste. In conjunction with the City's Integrated Resources Bureau, the City is currently developing an Environmentally Preferable Product (EPP) procurement plan. These guidelines enable the City Purchasing Agent to greatly expand procurement programs by moving beyond a singular consideration of "recycled-content". EPP procurement facilitates the purchase of products that qualify within a broad range of "environmentally preferable" criteria, such as: minimal packaging; energy savings; non-toxic; manufactured from sustainably-harvested materials. Contractor shall monitor products that fall within the EPP guidelines and document all criteria that qualifies the product as an EPP. Documentation from the manufacturer will be acceptable and may be required during the term of the Contract.

29. NOTICE TO BIDDERS REGARDING THE PUBLIC RECORDS ACT:

Responses to this Invitation to Bid become the exclusive property of the City of Long Beach. All Bids submitted in response to this Invitation to Bid are a matter of public record and shall be regarded as public records. Exceptions will be only those elements in each Bid that are defined by the Bidder as business or trade secrets and are marked as "Trade Secrets", "Confidential" or "Proprietary".

The City shall not be liable or responsible in any way for disclosure of any records not marked as "Trade Secrets", "Confidential" or "Proprietary". The City shall not be liable or responsible in any way for disclosure of any records so marked if disclosure is deemed to be required by law or by a court order.

30. NOTE: FAILURE TO COMPLY WITH THESE ADDITIONAL CONDITIONS WILL DISQUALIFY A BIDDER. NOTICE OF INTENTION TO APPLY FOR WAIVER OF ALL OR A PORTION OF THESE INSURANCE REQUIREMENTS MUST BE IN COMPLIANCE WITH CITY OF LONG BEACH ADMINISTRATIVE REGULATION 8-27 (AR 8-27). NOTE THAT COMPLIANCE WITH THE CITY'S INDEMNIFICATION IS MANDATORY FOR A RESPONSIVE BIDDER.

THE FOLLOWING ADDITIONAL CONDITIONS APPLY TO ALL BIDS:

INSURANCE: As a condition precedent to the effectiveness of this Contract, Contractor shall procure and maintain at its expense, until completion of performance and acceptance by City, from an insurer admitted (licensed) in the State of California with a current financial responsibility rating of A (Excellent) or better and a current financial size category (FSC) of V (capital surplus and conditional surplus funds of greater than \$10 million) or greater rating as reported by A.M. Best Company or equivalent, unless waived in writing by City's Risk Manager, or non-admitted in the State of California with a current financial responsibility rating of A (Excellent) or better and a current financial size category (FSC) of VIII (capital surplus and conditional surplus funds of greater than \$100 million) or greater rating as reported by A.M. Best Company or equivalent, unless waived in writing by City's Risk Manager.

- (a) Commercial general liability insurance or self-insurance equivalent in coverage scope to ISO CG 00 01 10 93 naming the **City of Long Beach, and its boards, officials, employees, and agents** as additional insureds on a form equivalent in coverage scope to ISO CG 20 10 11 85 from and against claims, demands, causes of action, expenses, costs, or liability for injury to or death of persons, or damage to or loss of property arising out activities performed by or on behalf of the Contractor in an amount not less than One Million Dollars (US \$1,000,000) per occurrence and Two Million Dollars (US \$2,000,000) in general aggregate.
- (b) Workers' compensation coverage as required by the Labor Code of the State of California and Employer's liability insurance with minimum limits of One Million Dollars (US \$1,000,000) per accident or occupational illness. The policy shall be endorsed with a waiver of the insurer's right of subrogation against the **City of Long Beach, and its boards, officials, employees, and agents**.
- (c) Automobile liability insurance equivalent in coverage scope to ISO CA 00 01 06 92 in an amount not less than Five Hundred Thousand Dollars (US \$500,000) combined single limit (CSL) per accident for bodily injury and property damage covering Symbol 1 ("all autos").

Any self-insurance program or self-insurance retention must be approved separately in writing by the City's Risk Manager or designate and shall protect the **City of Long Beach, and its boards, officials, employees, and agents** in the same manner and to the same extent as they would have been protected had the policy or policies not contained retention provisions. Each insurance policy shall be endorsed to state that coverage shall not be suspended, voided, or canceled by either party except after thirty (30) days prior written notice to the City of Long Beach, and shall be primary and not contributing to any other insurance or self-insurance maintained by the City of Long Beach.

CONTRACT – GENERAL CONDITIONS

Any subcontractors of all tiers which Contractor may use in the performance of this Contract shall be required to maintain insurance in compliance with the provisions of this section. The additional insured endorsement form number applicable to subcontractors with respect to the general liability insurance shall be the ISO CG 20 26 11 85 form or its equivalent.

Contractor shall deliver to the City of Long Beach certificates of insurance and original endorsements for approval as to sufficiency and form prior to the start of performance hereunder. The certificates and endorsements for each insurance policy shall contain the original signature of a person authorized by that insurer to bind coverage on its behalf. "Claims-made" policies are not acceptable unless the City's Risk Manager determines that "Occurrence" policies are not available in the market for the risk being insured. In a "Claims-made" policy is accepted, it must provide for an extended reporting period of not less than one hundred eighty (180) days. Such insurance as required herein shall not be deemed to limit Contractor's liability relating to performance under this Contract. The City of Long Beach reserves the right to require complete certified copies of all said policies at any time. Any modification or waiver of the insurance requirements herein shall be made only with the approval of the City's Risk Manager. The procuring of insurance shall not be construed as a limitation on liability or as full performance of the indemnification provisions of this Contract.

To the extent more stringent insurance requirements apply in accordance with the City of Long Beach's Administrative Regulation 8-27 (AR 8-27) and its amendments, the currently in-force AR 8-27 regulations and requirements supersede and replace any insurance requirements stated herein.

INDEMNITY: To the extent allowed by law, Contractor shall defend, indemnify, and hold harmless the City, its Commissions and Boards, and their officials, employees, and agents from and against any and all demands, claims, causes of action, liability, loss, liens, damage, costs, and expenses (including attorney's fees) arising from or in any way connected or alleged to be connected with Contractor's performance of the performance under the Contract or the work under or related to the Contract and from any act or omission, willful misconduct, or negligence (active or passive) by or alleged to be by Contractor, its employees, agents, or subcontractors either as a sole or contributory cause, sustained by any person or entity (including employees or representatives of City or Contractor). The foregoing shall not apply to claims or causes of action caused by the sole negligence or willful misconduct of the City, its Commissions and Boards, or their officials, employees, or agents.

In addition to Contractor's duty to indemnify, Contractor shall have a separate and wholly independent duty to defend Indemnified Parties at Contractor's expense by legal counsel approved by City, from and against all Claims, and shall continue this defense until the Claims are resolved, whether by settlement, judgment or otherwise. No finding or judgment of negligence, fault, breach, or the like on the part of Contractor shall be required for the duty to defend to arise. City shall notify Contractor of any Claim, shall tender the defense of the Claim to Contractor, and shall assist Contractor, as may be reasonably requested, in the defense.

If a court of competent jurisdiction determines that a Claim was caused by the sole negligence or willful misconduct of Indemnified Parties, Contractor's costs of defense and indemnity shall be (1) reimbursed in full if the court determines sole negligence by the Indemnified Parties, or (2) reduced by the percentage of willful misconduct attributed by the court to the Indemnified Parties.

The provisions of this Section shall survive the expiration or termination of this contract.

THE FOLLOWING ADDITIONAL CONDITIONS APPLY ONLY IN CASES WHERE CONTRACTOR IS TO PERFORM WORK FOR THE CITY OR ON CITY PROPERTY:

Before execution of a Contract, the bidder shall file two surety bonds with the City of Long Beach subject to the approval of the City Engineer and City Attorney. The bonds shall be on forms provided by the City or acceptable to the City Attorney. The Payment Bond (Material and Labor Bond) shall satisfy claims of material suppliers and mechanics and laborers employed by the contractor on the Work. This bond shall be maintained by the contractor in full force and effect until the work is accepted by the City of Long Beach and until all claims for materials and labor are paid, and shall otherwise comply with the Civil Code. The Performance Bond shall guarantee faithful performance of all work within the time and manner prescribed, free from original or developed defects. This bond shall remain in effect as prescribed within the Contract, until the end of all warranty periods.

If at any time during the progress of the Work, Contractor shall allow any indebtedness to accrue for labor, equipment or materials, or which may become a claim against the City, Contractor shall immediately upon request from the City pay such claim or indebtedness or cause such lien to be dissolved and discharged by giving a bond or otherwise and, in case of his failure so to do, the City may withhold any money due Contractor until such claim or indebtedness is paid or may apply such money toward the discharge thereof, or in such event the City may, at its option, declare this Contract to be terminated, take possession and control of the Work, and complete the same or cause the same to be completed according to the specifications. Contractor shall pay to the City the difference between the Contract price and the actual cost to the City in completing or causing the Work to be completed.

Contractor shall carry on the Work at its own risk until the same is fully completed and accepted and shall, in case of any accident, destruction or injury to the Work or materials before its final completion and acceptance, repair or replace the Work or materials so injured, damaged and destroyed, at his own expense and to the satisfaction of the City. When materials and equipment are furnished

CONTRACT – GENERAL CONDITIONS

by others for installation or erection by Contractor, Contractor shall receive, unload, store and handle same at the Site and become responsible therefore as though such materials and equipment were being furnished by Contractor under the Contract.

Contractor shall list the name and location of the place of business of each Subcontractor who will perform work, labor or services for Contractor, or who specially fabricates and installs a portion of the Work or improvement in an amount in excess of one-half of one percent of Contractor's total contract cost. The Subcontractor list shall be submitted with Contractor's Bid.

SPECIFICATIONS

PROJECT OVERVIEW

Furnish & Deliver One (1) Prefabricated Restroom Building to the City of Long Beach

BID TIMELINE – All times are Pacific Time

Bid release date: January 9, 2017
Questions due to the City: January 13, 2017 11:00 am
Response from City to bidder: January 19, 2017 by 4:30 pm
Bid due date: January 26, 2017 by 11:00 am

BID SUBMISSION INSTRUCTIONS:

It is recommended that bidders visit the City's website www.longbeach.gov/purchasing on a regular basis for any addenda to the bid.

The following documents shall be submitted as general attachments. Bidders that do not include these items will be deemed non-responsive and their bids will be rejected.

- Signed Bid Cover Page
- California All Purpose Acknowledgment, Notarized (if applicable)
- Debarment Certification Form (Attachment A)
- Reference List (Attachment B)
- W-9 Form (Attachment C)
- Equal Benefits Ordinance (EBO) (Attachment D)
- Insurance Requirement (Attachment E)
- Secretary of State Certification Print-Out (Attachment F)

METHOD OF SUBMISSION:

Electronic Bids shall be submitted via the City's secure online bidding system. All required sections of the Bid must be submitted via the website. Bidder is solely responsible for "on time" submission of their electronic bid. The Bid Management System will not accept late bids and no exceptions shall be made. Bidders will receive an e-bid confirmation number with a time stamp from the Bid Management System indicating that their bid was submitted successfully. The City will only receive those bids that were transmitted successfully.

When bids on certain items are labeled "optional", bidders shall indicate "no bid" or "N/A" in the space provided for an item for which no bid is being offered.

Bid cover page shall be signed in ink and included with the electronic bid submission as a general attachment. Digital and stamped signatures shall not be accepted.

Pricing shall be submitted electronically on the Line Items tab and all pages of the bid document shall be uploaded as a general attachment.

Submit bid online at: <http://www.planetbids.com/portal/portal.cfm?CompanyID=15810>

SPECIFICATIONS

In addition to the electronic submission, bidders shall submit the following original document(s) with wet signature(s) in a sealed envelope to the address shown below:

1. Original bid cover page
2. A notarized California All-Purpose Acknowledgement Form (for all companies located outside the State of California)

City of Long Beach
C/O City Clerk
Attn: Michelle King
333 West Ocean Boulevard, Plaza Level
Long Beach, CA 90802

Documents shall be clearly labeled in a sealed envelope as follows:

ITB CM 17-035 PREFABRICATED RESTROOM BUILDING

Electronic Bids and required hard copy forms must be received by 11:00 AM Pacific Time, January 26, 2017. Bids and required hard copy forms that do not arrive by the specified date and time WILL NOT BE ACCEPTED. Bidders may submit their bid any time prior to the above stated deadline.

Note: E-Bids are sealed and cannot be viewed by the City until the closing date and time. If you need to withdraw your bid, you may do so any time before the bid deadline, by going back into the system and selecting "withdraw".

All questions must be submitted in writing and emailed to purchasingbids@longbeach.gov attention Michelle King with the bid number in the subject line of the email message.

REFERENCES

Bidder shall furnish a list of five (5) current customers, including company name, street address, telephone number and contact person, for whom Bidder has provided similar items and quantities. The City intends to contact these customers to determine product reliability, performance and other information. Failure to include customer's references will result in rejection of bids. See Reference Information form attachment.

SPECIFICATIONS

AWARD

The City prefers to award to a single contractor but reserves the right to award contracts to multiple vendors. The City reserves the right in its sole discretion to award all items to one bidder, or to award separate items or groups of items to various bidders, or to increase or decrease the quantities of any item. The City reserves the right to reject at any time any or all bids.

RIGHT TO REJECT BID

The City reserves the right, in its discretion, to reject any and all Bids and, to the extent not prohibited by law, to waive any minor irregularity or informality in any Bid that does not affect the validity of the Bid or does not give the bidder a competitive advantage over other bidders.

BID PROTEST PROCEDURES

Who May Protest

Only a bidder who has actually submitted a bid proposal is eligible to protest a bid. The City will not accept or entertain bid protests from manufacturers, vendors, suppliers, subcontractors or the like. A bidder may not rely on the bid protest submitted by another bidder, but must timely pursue its own protest.

Time for Protest

A bidder desiring to protest a bid shall file the protest within five (5) business days of the electronic notification of intent to award. The City Purchasing Agent must receive the protest by the close of the business on the fifth (5th) business day following posting of notification of intent to award the contract.

Form of Protest

The protest must be in writing and signed by the individual who signed the bid or, if the bidder is a corporation, by an officer of the corporation, and addressed to the City Purchasing Agent. A protest shall not be made by e-mail or fax and the City will not accept such. A protest must set forth a complete and detailed statement of the grounds for the protest and include all relevant information to support the grounds stated, must refer to the specific portion(s) of the contract documents upon which the protest is based, and shall include a valid e-mail address, street address, and phone number sufficient to ensure the City's response will be received.

Once the protest is received by the City Purchasing Agent, the City will not accept additional information on the protest unless the City itself requests it. In that case, the additional information must be submitted within three (3) business days after the request is made and must be received by the City Purchasing Agent by the close of the business on the third (3rd) business day.

The City Purchasing Agent or designee will respond, by e-mail or regular mail to the addresses provided in the protest, with a decision regarding the protest within five (5) business days following receipt of the protest or, if applicable, the receipt of requested additional information.

The decision of the City Purchasing Agent shall be final and conclusive.

The procedure and time limits set forth herein are mandatory and are the bidder's sole and exclusive remedy in the event of bid protest. The bidder's failure to comply with these procedures shall constitute

SPECIFICATIONS

a waiver of any right to further pursue a bid protest, including filing a Government Code Claim or initiation of legal proceedings.

ADDITIONAL REQUIREMENTS FROM FUNDING SOURCE

Any Contract arising from this procurement process may be funded in whole or in part by various granting agencies. Pursuant to said grants, the Awarded Vendor is required to comply with (and to incorporate into its agreements with any sub-vendors) the following provisions in the performance of the Contract, as applicable.

ORDER OF PRECEDENCE

In the event of conflicts or discrepancies between these grant funding provisions and any other Contract document, the Federal grant provisions shall take precedence.

ACCESS TO CONTRACTOR'S RECORDS

The Awarded Vendor shall provide the City, the Office of State and Local Government Coordination and Preparedness, the Comptroller General of the United States, or any of their authorized representatives, access to any books, documents, papers, and records of the Awarded vendor which are directly pertinent to the work performed under the Contract for the purposes of making audit, examination, excerpts or transcriptions.

AMERICANS WITH DISABILITIES ACT

The Awarded Vendor hereby certifies that it will comply, as applicable, with the Americans with Disabilities Act of 1990 ("ADA"), 42 USC §§ 12101 et seq., and its implementing regulations, including Subtitle A, Title II of the ADA. The Awarded Vendor will provide, as applicable, reasonable accommodations to allow qualified individuals with disabilities to have access to and to participate in its programs, services and activities in accordance with the provisions of the ADA. The Awarded Vendor will not discriminate against persons with disabilities or against persons due to their relationship to or association with a person with a disability. Any contract entered into by the Awarded Vendor (or any subcontract thereof), relating to this Agreement, shall be subject to the provisions of this paragraph.

COMPLIANCE WITH CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The Awarded Vendor shall comply with the requirements of §§ 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C §§ 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5).

COMPLIANCE WITH COPELAND "ANTI-KICKBACK" ACT

The Awarded Vendor shall comply with the requirements of the Copeland "Anti-Kickback" Act (18 U.S.C. § 874) as supplemented in the Department of Labor regulations (29 CFR Part 3).

COMPLIANCE WITH DAVIS-BACON ACT

The Awarded Vendor shall comply with the requirements of the Davis-Bacon ACT (40 U.S.C. §§ 276 to 276-a7) as supplemented by Department of Labor regulations (29 CFR Part 5) where applicable and shall provide the City with all applicable payroll records on a weekly basis.

SPECIFICATIONS

COPYRIGHT

The Awarded Vendor acknowledges the existence of requirements and regulations of the awarding Federal agency relating to copyrights and right in data, including, but not limited to those set forth in 44 CFR Part 13.34 which states: "The Federal awarding agency reserves royalty-free, nonexclusive, and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, for Federal Government purposes: (a) The copyright in any work developed under a grant, subgrant, or contract under a grant or subgrant; and (b) Any rights of copyright to which a grantee, subgrantee or a contractor purchases ownership with grant support." The Awarded Vendor shall comply with 25 CFR 85.34

DRUG-FREE WORKPLACE

The Awarded Vendor hereby certifies that it shall provide or shall continue to provide a drug-free workplace as required by the Drug-Free Workplace Act of 1988 (41 U.S.C. § 701), and implemented at 44 CFR Part 17.

ENERGY EFFICIENCY

The Awarded Vendor shall comply with all mandatory standards and policies relating to energy efficiency that are contained in the State of California's energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L.94-163, 89 Stat. 871).

ENVIRONMENTAL LEGISLATION

The Awarded Vendor shall comply with all applicable standards, orders or requirements issued under § 306 of the Clean Air Act (42 U.S.C. 1857 (h)), § 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15).

MINORITY, WOMEN, AND OTHER BUSINESS ENTERPRISE OUTREACH

In accordance with CalOES/Grantor directives, as applicable, firms who represent small business enterprises (SBEs), minority business enterprises (MBEs) and women business enterprises (WBEs) are encouraged to participate in competition for this opportunity. Any such enterprise shall include the appropriate SBE/MBE/WBE certification along with its proposal. The Awarded Vendor agrees that, to the extent contractors or subcontractors are utilized, the Awarded Vendors shall use small, minority, women-owned, or disadvantaged business concerns and contractors or subcontractors to the extent practicable and shall take the affirmative steps as set forth in 44 CFR §13.36(e).

NATIONAL PRESERVATION ACTS

The Awarded Vendor shall assist City (if necessary) in assuring compliance with § 106 of the National Historic Preservation Act of 1966 (16 U.S.C. § 470), Executive Order 11593 (identification and protection of historic properties), the Archeological and Historical Preservation Act of 1974 (16 U.S.C. § 469 a-1 et seq.), and the National Environmental Policy Act of 1969 (42 U.S.C. § 4321)

NONDISCRIMINATION; EQUAL EMPLOYMENT OPPORTUNITY

The Awarded Vendor hereby assures the City that in performing its obligations pursuant to the Contract, it will comply with all applicable nondiscrimination requirements as set forth in 44 CFR Part 13.36. In addition, the Awarded Vendor shall comply with Executive Order 11246 of September 24, 1965, entitled "Equal Opportunity Employment," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60), and where applicable to the nondiscrimination provisions of the Omnibus Crime Control and Safe Street Acts of 1968 (42 U.S.C. § 3789d), the Victims of Crimes Act (42 U.S.C. § 10604(e)), the Juvenile Justice and Delinquency Prevention Act (42 U.S.C. § 5672(b)), the Civil Rights Act of 1964 (42 U.S.C. § 2000d), the

SPECIFICATIONS

Rehabilitation Act of 1973 (29 U.S.C. § 794), the Americans with Disabilities Act of 1990 (42 U.S.C. §§ 12131-34), the Education Amendments of 1972 (20 U.S.C. §§ 1681, 1683, 1685-86), and the Age Discrimination Act of 1975 (42 U.S.C. §§ 6101-07), see Executive Order 13279 (equal protection of the laws for faith-based and community organizations). This provision must be incorporated by Awarded Vendor into any subcontract exceeding \$10,000.

PATENT RIGHTS

The Awarded Vendor acknowledges the existence of requirements and regulations of the awarding Federal agency relating to patent rights with respect to any discovery or invention which arises or is developed in the course or under this Contract, including, but not limited to those regulations and requirements set forth in 44 CFR Part 13.36. Any discovery or invention that arises during the course of this Contract shall be immediately reported to the Department's project management team. The awarding Federal agency shall determine how rights in the invention/discovery shall be allocated consistent with "Government Patent Policy" and 37 CFR Part 401.

PAYMENTS, REPORTS, RECORDS, RETENTION AND ENFORCEMENT

The Awarded Vendor acknowledges the requirements and regulations set forth in 44 CFR Parts 13.36 through 13.42 and 49 CFR Part 18 and agrees to cooperate with the City in order to allow the City to comply with said requirements. The Awarded Vendor shall retain all of its records relating to the project for a period of five (5) years after City makes final payment to the Awarded Vendor and all other pending matters are closed.

PUBLICATIONS

All publications created and/or published with funding under any contract arising from this RFP shall prominently contain the following statement: "This document was prepared under a grant from FEMA's Grant Programs Directorate, U.S. Department of Homeland Security. Points of view or opinions in this document are those of the author(s) and do not necessarily represent the official position or policies of FEMA's Grant Programs Directorate or the U.S. Department of Homeland Security."

RIGHTS TO DATA

The Grantor and the City shall have unlimited rights or copyright license to any data first produced or delivered under this Agreement. "Unlimited rights" means the right to use, disclose, reproduce, prepare derivative works, distribute copies to the public and perform and display publicly, or permit others to do so; as required by 48 CFR 27.401. Where the data are not first produced under this Contract or are published copyrighted data with the notice of 17 U.S.C § 401 or 402, the Grantor acquires the data under copyright license as set forth in 48 CFR 27.404(f) (2) instead of unlimited rights (4 CFR 27.404(a)).

RIGHTS TO USE INVENTIONS

City and all grantors and/or awarding Federal Agency shall have an unencumbered right, and a non-exclusive, irrevocable, royalty-free license, to use, manufacture, improve upon and all others to do so for all governmental purposes, any Invention developed under the Contract.

SYSTEM FOR AWARD MANAGEMENT (SAM)

In accordance with Executive Orders 12549 and 12689 concerning suspension and debarment, contracts must prohibit contractors from awarding any subcontract to persons (individuals or organizations) listed as having an active exclusion of the Federal system for Awards Management Database (www.sam.gov).

SPECIFICATIONS

REGISTRATION WITH CALIFORNIA SECRETARY OF STATE WEBSITE

Awarded vendors/contractors must be registered with the California Secretary of State prior to contract execution. For more information, please consult: <http://www.sos.ca.gov>

See Attachment F. Please include a printout of your business entity from the website.

INSURANCE

See Requirements on page 9, Section 30 and Attachment E.

FUTURE AMENDMENTS

The City reserves the right to change any portion of the work required, to add and/or delete items, or amend such other terms and conditions that may become necessary. Any such revisions shall be accomplished by written amendment to the contract and executed by the Contractor and the City.

DELIVERY REQUIREMENT

City of Long Beach requires delivery of engineered and foundation plans within 10 business days of receipt of purchase order (ARO). Please state number of delivery days 10* *CEV*

City of Long Beach requires delivery of the completed prefabricated building within 60 business days of receipt of purchase order (ARO) Please state number of delivery days 60* *CEV*

* From State Of California Housing and Community Development approved plans and calculations

PAYMENT TERMS

Net Invoice ; 1/2 % discount in 10 days.

VENDOR CONTACT INFORMATION

Name of a person that will be the City's contact for order placement, order problems or special needs, etc. (must have a person's name).

Contact Name: Chad Kaufman

Contact Direct Phone: 888-888-2060 ext. 109

Contact Fax: 888-888-1448

Contact E-mail: chad@publicrestroomcompany.com

VENDOR'S EMPLOYEES

Specify the number of current full-time employees residing in Long Beach 0

BID SECTION

Description	Quantity	Cost
Prefabricated Restroom Building	1 EA	To be input electronically
Provide five (5) sets of full and complete plans for the building and the foundation for City permit approval	5 EA	To be input electronically
Delivery (no tax on delivery)	1 LT	To be input electronically
Tax (10% LBC)	1 LT	To be input electronically



City of Long Beach

Department of Financial Management
Division of Procurement
333 W Ocean Blvd. 7th floor, Long Beach, California 90802
p 562.570.6020
Michelle.King@Longbeach.gov

February 16, 2017

ADDENDUM #3

NOTICE TO BIDDERS

**ITB CM 17-035
Prefabricated Restroom**

This addendum changes and supersedes the language in the original ITB. Please acknowledge receipt of this addendum by signing and submitting with your bids. Any bidder who fails to submit this addendum may be disqualified.

1. Question: Can the prefabricated restroom building for the tidelands restroom project be made from precast concrete panels instead of CMU?

Answer: No, the City is requiring CMU

2. Question: Is this project subject to the Davis-Bacon Act?

Answer: No

3. Question: Are there "Buy American" requirements for this project?

Answer: No

4. Question: Can monthly payments be made by the City to the vendor during the building of this project since it is bonded?

Answer: The City will allow progress payments agreed upon with the Project Manager during the construction of the building up to 50%. The final 50% will be paid after the delivery of the building. The City is a Net 30.

Prepared By: Michelle King Date: February 16, 2017
Buyer II

Acknowledged By: Public Restroom Company
Company Name

Charles E. Kaufman
Print Name

President
Title

Charles E Kaufman
Signature

02/21/2017
Date



City of Long Beach

Department of Financial Management
Division of Procurement
333 W Ocean Blvd. 7th floor, Long Beach, California 90802
p 562.570.6020
Michelle.King@Longbeach.gov

February 8, 2017

ADDENDUM #2

NOTICE TO BIDDERS

ITB CM 17-035
Prefabricated Restroom

This addendum changes and supersedes the language in the original ITB. Please acknowledge receipt of this addendum by signing and submitting with your bids. Any bidder who fails to submit this addendum may be disqualified.

The City of Long Beach will be adding additional quantities to this bid and modifying the specifications via addendum to follow. In order to provide adequate time for bidders to prepare their bids, the dates have been extended as follows:

Questions due to the City:	February 10, 2017 by 4:00 pm
Responses from City to Bidders:	February 16, 2017 by 4:00 pm
Bid due date:	February 23, 2017 by 11:00 am

1. Question: Written specifications call for Anti-Graffiti coating on the exterior. Prints specify tile to be installed "by others". If the intent is to tile over the CMU after the building arrives, is the Anti-Graffiti coating needed?

Answer: Tiling will only be done at certain areas of the building. Pre-Fab company will need to apply Anti-Graffiti coating to ALL exposed CMU except for the areas where tile occurs.

2. Question: There is a sola-tube located directly on a mod line over the storage area. Can this sola-tube be re-located or eliminated?

Answer: Sola-Tube can be relocated.

3. Question: Detail drawings show a mesh vent screen in a wood frame. Written specs call for "1in thick" mesh mounted in a fiberglass molding. Our typical construction would be #304 stainless vent screens in a wood frame. Is this acceptable?

Answer: Stainless vent screen in a STEEL frame will be acceptable.

4. Question: Detail drawing shows R-25 insulation in roof. Written specs call for R-19. Our typical construction on a metal framed roof utilizes spray in foam insulation. Is this acceptable?

Answer: Spray on foam is acceptable as long as the R value is R-25 or more.

5. Question: The 3' overhang on all sides will require oversize freight charges. Would it be acceptable to shorten those overhangs to approximately 18"?

Answer: Keep 3'-0" overhangs.

6. Question: The specified roof tile is a clay-on-metal product that is not suitable for shipping by truck due to wind loads. This type of tile roof typically requires site installation. We have been using a synthetic product called Brava Tile which can be installed here. Is this acceptable?

Answer: Use the Decra Clay-Capri Mission Tile or equal.

7. Question: What type of building is it? It does not state in the spec. If so where does it state it?

Answer: The building type is VB.

8. Question: Public Restroom Company is hereby requesting to be added as an or-equal, approved manufacturer/supplier, via addendum, for the specified prefabricated restroom. We have completed many projects for the City of Long Beach and provided the prefabricated buildings for the previous Tidelands project at Coronado, 8th Place, and Cherry Avenue as well as Chittick Field, Seaside Park, and Bixby Park.

Answer: Modify Section 131200, 2.1A to add Public Restroom Company is an approved Prefabricated Restroom Manufacturer. Company Contact information is as follows:

Public Restroom Company
2587 Business Parkway
Minden, NV 89423
(888) 888-2060

Additional Requirements/Clarifications:

1. The prefabricated restroom building must comply with California Assembly Bill 1732. Further, the Prefabricated Restroom Manufacturer is to verify that the proposed restroom layout meets all current code requirements for accessibility. Bid shall include any additional costs required to meet all applicable permit and code requirements.

2. Exterior finishes will be consistent with existing single occupancy restroom facilities at Marine Stadium in Long Beach, CA. The final finish schedule will be issued within 10 days of bid award.

The City has REVISED documents within the bid as stated below:

- The City has replaced Section 131200 with a REVISED Section 131200 which is included in this addendum.
- The City has replaced the drawing with a REVISED drawing with ADA requirements which is included in this addendum.
- The City has revised the Bid Section. The quantity may be increased to three (3). The REVISED Bid Section is included in this addendum.
- The City has revised the Delivery Requirements. The REVISED section which is included in this addendum
 - The 2 additional locations for delivery of the additional buildings are:
 - Drake-Chavez Park, 903 Fairbanks Avenue, Long Beach, CA 90813
 - Houghton Park Community Center, 6301 Myrtle Ave., CA 90805

Prepared By: Michelle King Date: February 8, 2017
Buyer II

Acknowledged By: Public Restroom Company
Company Name

Charles E. Kaufman
Print Name

President
Title

Charles E. Kaufman
Signature

02/21/2017
Date

**SECTION 131200 REVISED
PREFABRICATED RESTROOM BUILDING**

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. This section describes typical basis of design, construction, and installation of a pre-fabricated modular restroom building, with integral concrete mat foundation and does not follow standard outline format of The Construction Specifications Institute (CSI).
- B. This outline Specification shall be used along with the complete relating specification sections. The related sections establish standards, relative codes and basic requirements for the products outlines in Section 131200

1.2 BUILDING CODES AND DESIGN

- A. The building shall be designed and installed in compliance with the codes designated by the State of California Department of Housing and Community Development as follows:
 - 1. 2008 NEC
 - 2. 2009 UPC, UMC
 - 3. 2010 CBC, California Title 24, California Energy Code, Cal Green
- B. The Prefabricated Restroom Manufacturer shall provide full and complete engineered plans for the building and the foundation design. A Structural Engineer licensed in the State of California shall stamp the plans.
- C. Plans shall bear the stamp of the State of California Department of Housing and Community Development. The building, prior to shipment from manufacturing facility, shall have a State of California Department of Housing and Community Development insignia affixed to the building per Department regulations.

1.3 QUALITY ASSURANCE

- A. The Prefabricated Restroom shall be sold, designed, manufactured, and shipped from a single source location (Prefabricated Restroom Manufacturer) to the City. This is to facilitate the ability for City Officials and/or General Contractor to travel to one location to examine the sales office and manufacturing facility, if deemed necessary. For this reason, assignment of subcontract, subcontractor's substitution, or outsourcing is not allowed.
- B. The Prefabricated Restroom Manufacturer supplier shall be an experienced in performing Work of this Section.
- C. The Prefabricated Restroom Manufacturer shall be licensed with the California Department of Housing Division, prior to bid, as a dealer and manufacturer to construct and install closed wall modular buildings.

**SECTION 131200 REVISED
PREFABRICATED RESTROOM BUILDING**

- D. The Prefabricated Restroom Manufacturer shall possess a Class B General Contractor's license in the State of California.

1.4 INSURANCE REQUIREMENTS

A. Product Liability

- 1. The Prefabricated Restroom Manufacturer is responsible for incorporating all applicable codes and compliances as set forth by the State and any special local requirements. As such, the Prefabricated Restroom Manufacturer shall provide a certificate of product liability insurance covering personal injury and property damage.

1.5 BIDDER QUALIFICATIONS/REQUIREMENTS

- A. Requests for "or equal" must be submitted to City in accordance with the Item Equivalency provisions. Requests shall be submitted with the following:

- 1. Copy of submitting company's California HCD manufacturer's license.
- 2. Copy of submitting company's California Class B contractor's license.
- 3. Copy of submitting company's California HCD dealer's license.
- 4. Copy of salesperson's California HCD sales license.
- 5. Floor plan with complete dimensions.
- 6. Elevations of all four sides.
- 7. Details.
- 8. Specifications.
- 9. A list of each and every deviation from the bid specifications.
- 10. A list of the last five completed projects of similar design complete with names and phone numbers of general contractors, governing agencies along with their respective contacts, start and completion dates and project costs.

1.6 SUBMITTALS

- A. Submit four (4) sets of shop drawings including floor plans, elevations, design criteria, construction details/sections, schedules and schematics, and two (2) sets of structural calculations signed and sealed by a Structural Engineer licensed to practice in the State of California, responsible for their preparation, along with a State of California Department of Housing and Community Development approval stamp.

PART 2 – BUILDING SPECIFICATIONS

2.1 MANUFACTURER

**SECTION 131200 REVISED
PREFABRICATED RESTROOM BUILDING**

- A. There are several manufacturers that can design and construct similar prefabricated buildings shown in the drawings and specifications. Other manufacturers may be submitted in accordance with the Item Equivalency provisions. The Owner has incorporated the standards of the following manufacturer as the basis of design for this project:

Restroom Facilities Ltd
1707 Colt Circle
Marble Falls, TX 78654
(800) 447-6570

Other acceptable Prefabricated Restroom Manufacturers are:

1. Super Secur Manufacturing.
 2. Romtec, Inc.
 3. Or approved equal.
- B. It is the General Contractor's responsibility to provide a completed project and agree to the following scope of work with its selected Prefabricated Restroom Manufacturer.

2.2 FLOOR / FOUNDATION

- A. The floor/foundation for the modular restroom shall be a prefabricated 8-inch thick monolithic 5,000psi concrete mat slab shipped integral with the restroom building. The slab reinforcing shall be #3 and #5 grade 60 deformed rebar, placed and tied per the structural engineered drawings continuously throughout. #3 grade 60 vertical rebar for CMU walls shall be incorporated into the slab reinforcing rebar to a minimum length of 18", bent to vertical 90 degrees and extended above the concrete slab a minimum of 24". Doweling of the vertical CMU reinforcing steel into the mat slab in any way is not permitted. The slab shall be designed to allow relocation of the slab and building intact at any future date with built-in lifting hardware.
- B. Concrete shall cure for a minimum of 14 days before moving and have a minimum 28-day compressive strength of 5,000 psi.
- C. The floor/foundation shall contain a concrete encased electrode consisting of 20' of bare copper conductor (No. 4 AWG) located near the bottom of the foundation, and encased in a minimum of 2" of concrete. Stub the ground conductor up through the foundation near the panel board location.
- D. A 6-mil thick vapor and moisture barrier shall be placed on the leveled building pad prior to setting of the building. Barrier shall extend at least 12" beyond building footprint.

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PREFABRICATED RESTROOM BUILDING**

- E. Concrete forming, reinforcement, specifications and placement must meet the requirement here in outlined and the following sections of the specifications which even is more stringent:

1. Section 03100 Concrete Forming and Accessories
2. Section 03200 Concrete Reinforcement
3. Section 03300 Cast – In – Place Concrete

2.3 WALL SYSTEMS

- A. Walls to 7'-4" above finish floor (AFF) shall be hollow load-bearing concrete masonry units and shall conform to UBC Standard 21-4, Grade N, and ASTM C-90. All concrete masonry units shall be medium weight. Wall system to be solid grout filled and to receive steel reinforcement throughout.
- B. Walls above 7'-4" shall be fabricated with galvanized 16-gauge, welded in place, and structural steel studs with top and bottom channels. Bottom channel to be welded to steel wall cap. Each weld shall be painted with a minimum of three coats of rust inhibiting paint.

2.4 INTERIOR FINISHES

- A. Restroom and Chase floors to receive a medium broom finish with no more than a 0.60 coefficient of friction and receive high solids, non-yellowing curing and sealing compound.
- B. Restroom and Chase walls to 7'-4" above finish floor (AFF) to be CMU block, precision finish. To receive one coat of prime & fill acrylic block filler, one coat of 100% acrylic primer and two finish coats of 100% acrylic semi-gloss enamel paint. Specified color.
- C. Restroom walls above 7'-4" to be Class "A" rated fiberglass reinforced concrete (FRC) panels. Panels to be blind fastened, filled and sanded, with a light texture finish. To receive two coats of semi-gloss exterior grade paint over two coats of exterior grade primer. Specified color.
- D. Chase walls above 7'-4" to be 5/8" structural rated, exterior grade OSB glued and screwed to gable wall framing. To receive one coat of 100% acrylic primer. Color of primer to be Gray.
- E. Restroom and Chase ceilings to be Class "A" rated fiberglass reinforced concrete (FRC) panels. Panels to be blind fastened, filled and sanded, with a

**SECTION 131200 REVISED
PREFABRICATED RESTROOM BUILDING**

light texture finish. To receive two coats of semi-gloss exterior grade paint over two coats of exterior grade primer. Specified color.

- F. Provide R-19 Batt Insulation at roof and eaves.

2.5 DOORS & SKYLIGHTS

- A. Restroom and Chase Doors:
 - 1. Section 081250: Aluminum and Fiberglass Doors
- B. Hinges:
 - 1. Section 087100: Door Hardware – Continuous Hinges
- C. Door hardware:
 - 1. Section 087100: Door Hardware – Continuous Hinges
- D. Skylights:
 - 1. Section 086250: Tubular Daylighting Device

2.6 ROOF

- A. Roof structure to be 5/8" exterior grade structural OSB over 6", 20-gauge galvanized "C" channel on 16" centers, nominal. Perimeter wall caps to be 3/16" tube steel anchored to block walls with 20" threaded rod on 16" centers. All rafters to beam connections to be welded. Wall cap to receive one coat of DTM acrylic urethane gray primer and two finish coats of DTM acrylic urethane tint base. Specified color as noted on Plans.
- B. Roof finish:
 - 1. Section 073140: Stone Coated Metal Roof Tile
- C. Fascia trim:
 - 1. Section 076200: Sheet Metal Flashing and Trim
- D. Soffits to be Class "A" rated fiberglass reinforced concrete (FRC) panels. Panels to be blind fastened, filled and sanded, with a light texture finish. To receive two coats of semi-gloss exterior grade paint over two coats of exterior grade primer. Specified color as noted on Plans.

2.7 EXTERIOR FINISHES

- A. Exterior of block to be precision. Exterior block finish:
 - 1. Section 099623: Graffiti-Resistant Coatings
- B. Exterior finish above 7'-4" to be Class "A" rated fiberglass reinforced concrete (FRC) panels. Panels to be blind fastened, filled and sanded, with a light

**SECTION 131200 REVISED
PREFABRICATED RESTROOM BUILDING**

texture finish. To receive two coats of semi-gloss exterior grade paint over two coats of exterior grade primer. Specified color as noted on Plans.

2.8 VENTILATION

- A. Vent screens shall be 1" thick mesh grating panels with 1 ½" squares. Panels to be molded in one piece of fiberglass rovings combined with a vinyl ester thermosetting resin system. The resin is UV inhibited and includes a surface veil on all exposed surfaces for enhanced corrosion and UV protection. Specified color.

2.9 ACCESSORIES AND SIGNAGE

- A. All wall mounted toilet accessories to be installed with stainless steel tamper-resistant screws.
- B. Accessories are as follows (or equal):
1. Grab Bars (36 inch and 48 inch Stainless Steel):
 - a. Bobrick #B6806.36.
 - b. Bobrick #B6806.48.
 - c. Bradley.
 - d. American Specialties, Inc.
 - e. Or approved equal.
 2. Toilet Paper Holder (Surface Mounted Single Jumbo Roll):
 - a. Bobrick #B-2890
 - b. Bradley.
 - c. American Specialties, Inc.
 - d. Or approved equal.
 3. Cane Detectable Barrier (Stainless Steel):
 - a. American Specialties, Inc.
 - b. Lido Designs, Inc. DBA BuyRailings.com
 - c. Or approved equal.
- C. Signage to be in compliance with California Title 24 and ADA for restroom entrances.

2.10 PLUMBING

- A. Plumbing drain, waste, and vent piping shall be schedule 40 PVC with solvent welded connections. All vents through the roof shall be cast iron and capped.
- B. Water lines shall be Type L copper above ground and Type K copper below ground. Water supply in building shall have a built-in valve combo including a pressure-reducing valve to 125 psi, an in-line 10-micron filter, and two 125 psi pressure gauges.

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- C. Incoming water service shall be a 1-1/2" line, 50 gpm and 60psi minimums.
 - D. Each fixture shall be isolated with a ball valve or plumbing fixture flush valve. All flush valves and P-traps shall be concealed in chase.
 - E. Plumbing fixtures shall be stainless steel as follows (or equal):
 - 1. Water Closet: Acorn Dura-Ware 2120 W-3-CN-HS-OFLS (or equal)
 - 2. Accessible Water Closet: Acorn Dura-Ware 2120 W-3-ADA-SPS (or equal)
 - 3. Flush Valve: Zurn Z-6144-WS1-9L-L3 (or equal)
 - 4. Lavatory: Acorn Dura-Ware 1953-ADA-1-CSG (or equal)
 - 5. Metering Faucet: Chicago Faucets 333-665PSHCP (or equal)
 - F. A single hose bibb shall be in the plumbing chase and shall be installed with a vacuum breaker, to code. Hose bibb to be Woodford 24 - 3/4" or approved equal.
 - G. Floors shall drain to an integral floor drain with trap primers. Floor drains to be Zurn Z415-90-2NH w/ 5" B strainer or approved equal.
- 2.11 ELECTRICAL
- A. Building shall have a 125 amp, 120/240V, 1-phase, 3-wire, 12-space/24-circuit, NEMA type 1 load center with snap-in breakers. Panel to be a Siemens P1224L1125CU or approved equal.
 - B. Chase lights shall be Kenall ES5-48-50L40K-DCC-DV-2H-PP or approved equal, 50 watt LED, 6"Wx48"L, with painted 20 gauge stainless steel housing and a UV stabilized, high impact extruded pearlescent polycarbonate lens. Lens to be a smooth exterior and linear prismatic interior. To be controlled by a Leviton 1221-21 or approved equal single pole switch. Color of switch and plate to be White.
 - C. Chase lights to be controlled by an Intermatic T101 or equal time clock located in mechanical chase.
 - H. Building shall have one Leviton 7899W or approved equal, 20 amp, 125 volt, GFI duplex receptacle located in chase. Color of cover plate to be White.
 - I. Building shall be fitted with integral cast in-ground wires to code, a buried secondary ground rod to code, and a lightning rod properly grounded.
- 2.12 EXTERNAL UTILITY CONNECTIONS
- A. All utilities (water, sewer and electrical) shall be connected to point of connection per Plans.

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PREFABRICATED RESTROOM BUILDING**

- B. Flexible Connections: Due to a chance of total and differential settlements, flexible utility connections will be necessary. Ball joints, and sleeve-type or other flexible couplings shall be used when connecting existing utility stub-outs to the building system, as required

PART 3 – EXECUTION

3.1 INSTALLATION / SCOPE OF WORK

- A. General Contractor must prepare the site in accordance with the following scope of work herein outlined and coordinate any required on site inspections. After the site prep has been completed, the building supplier's site installation crew will arrive to perform the installation. They will then verify, with the General Contractor's site supervisor, elevation, offsets, location and access.
- B. Survey Stakes: Provide ten foot offset stakes and locate front corners of building, existing utilities, and inverts within the area of construction. Locate and mark final slab elevation.
- C. Subgrade Pad: Preparing the site is fairly simple. Detailed instructions to prepare the building site are as follows:
 - 1. Excavate down ten inches below the finish floor elevation (the slab is eight inches thick on top of a two inch sand bed).
 - 2. If soils are poor, it may be necessary to import six inches of Class II base rock. (This is not necessary if native soils will compact)
 - 3. Compact to 95%, or to local code requirement.
 - 4. Compact one foot over in all directions (over build).
 - 5. Supply approximately five cubic yards of clean sand, on side of site, for fine grading.
 - 6. Excavate and backfill trenches for underground plumbing and utility kit.
 - 7. Depending on weather, all irrigation should be turned off prior to delivery to allow the surrounding soils to dry and bear the weight of the truck and crane.
 - 8. Check corner locations against plans for proper sizing.
 - 9. Verify finish floor elevation for concrete slab (shipped fully attached to the building.)
 - 10. Excavate one foot perimeter footing if required by local code to specified depth.
- D. Site Access and Storage:
 - 1. Provide suitable safe clear access to allow a crane (up to 110 tons), and the building on a semi-trailer (up to 40 tons) to reach site (14' width, 70' length, and 14' in height). If path to site is over existing utilities, sidewalks, or other damageable areas, proper marking, plating or other appropriate protection must be provided at no additional cost to the City.

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PREFABRICATED RESTROOM BUILDING**

Remove any overhead obstructions (i.e. power lines, trees). Obtain Engineer's approval for road closures or any special access that may be required but at no additional cost to the City.

- E. Utilities: Bring water, sewer, and power (if applicable) utilities into point of connection Christy boxes (supplied by the Prefabricated Restroom Manufacturer), within 6' of the building line at the location shown on our plan.
 - 1. Water: Prefabricated Restroom Manufacturer will furnish and install a water point of connection (isolation valve), from mechanical chase to a Christy box six feet from the building line. General Contractor must connect service to valve.
 - 2. Sewer: Prefabricated Restroom Manufacturer will furnish and install a sewer point of connection from mechanical chase to a Christy box six feet from the building line. General Contractor must connect service.
 - 3. Electrical: Prefabricated Restroom Manufacturer will furnish and install a PVC conduit and a Christy box to the point of connection six feet from the building line. General Contractor to pull the electrical service line through the conduit and connect to the main panel lugs inside the building. All electrical inside the building will be furnished and installed by the Prefabricated Restroom Manufacturer, except as noted above in exclusions.
 - 4. Testing and repair of leaks is the responsibility of the General Contractor.
 - 5. Note that a minimum 1½" line with 25 gpm at 60 psi pressure minimum is required to ensure that water closets will operate as designed.

- F. Permits and Fees: All building permits and fees shall be borne by General Contractor.

- G. Inspections: Schedule inspections with adequate notice to ensure that the underground plumbing and electrical work is approved prior to placement of building. Schedule final inspection by building officials immediately following the Prefabricated Restroom Manufacturer's completion of installation. Schedule re-inspections immediately following Prefabricated Restroom Manufacturer's conclusion of any correction items.

- H. Site Clean Up and Debris Removal: Provide an on-site trash bin for disposal of one pick up load of debris. Remove all excess spoils.

- I. All rough and final grading shall be by General Contractor.

- J. Soils Information: See Division F – Permits & Attachments.

3.2 CLOSE-OUT DOCUMENTS & WARRANTY

**SECTION 131200 REVISED
PREFABRICATED RESTROOM BUILDING**

- A. The building supplier shall provide two (2) sets of as-built drawings (one (1) set of bond prints and one (1) set of mylars) for the building and two (2) two copies of maintenance manuals with all associated parts cut sheets, sources for replacement, and maintenance guidelines.
- B. Keys:
 - 1. Section 087100 – Door Hardware: Keying Requirements
- C. Each manual shall include a five (5) year warranty for building construction.

END OF SECTION

REVISED DELIVERY REQUIREMENT

1st Building

City of Long Beach requires delivery of the engineered and foundation plans within 10 business days after receipt of purchase order (ARO). Please state number of delivery days 10* *CEV*

City of Long Beach requires delivery of the completed prefabricated building within 60 business days after receipt of purchase order (ARO) Please state number of delivery days 60* *CEV*

2nd Building

City of Long Beach requires delivery of engineered and foundation plans within 10 business days after receipt of purchase order (ARO). Please state number of delivery days 10* *CEV*

City of Long Beach requires delivery of the completed prefabricated building within 90 business days after receipt of purchase order (ARO) Please state number of delivery days 90* *CEV*

3rd Building

City of Long Beach requires delivery of engineered and foundation plans within 10 business days after receipt of purchase order (ARO). Please state number of delivery days 10* *CEV*

City of Long Beach requires delivery of the completed prefabricated building within 90 business days after receipt of purchase order (ARO) Please state number of delivery days 90* *CEV*

* From State of California Housing and Community Development approved plans and calculations *CEV*

REVISED - BID SECTION

The City of Long Beach will be purchasing one (1) Prefabricated Restroom Building and may be adding two (2) additional buildings.

1st Building

Description	Quantity	Cost
Prefabricated Restroom Building	1 EA	To be input electronically
Provide five (5) sets of full and complete plans for the building and the foundation for City permit approval	5 EA	To be input electronically
Delivery (no tax on delivery)	1 EA	To be input electronically
Tax (9.75% LBC)	1 EA	To be input electronically

2nd Building

Description	Quantity	Cost
Prefabricated Restroom Building	1 EA	To be input electronically
Provide five (5) sets of full and complete plans for the building and the foundation for City permit approval	5 EA	To be input electronically
Delivery (no tax on delivery)	1 EA	To be input electronically
Tax (9.75% LBC)	1 EA	To be input electronically

3rd Building

Description	Quantity	Cost
Prefabricated Restroom Building	1 EA	To be input electronically
Provide five (5) sets of full and complete plans for the building and the foundation for City permit approval	5 EA	To be input electronically
Delivery (no tax on delivery)	1 EA	To be input electronically
Tax (9.75% LBC)	1 EA	To be input electronically

**SECTION 031000
CONCRETE FORMING AND ACCESSORIES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes
 - 1. Formwork for cast-in place concrete, with shoring, bracing and anchorage.
 - 2. Openings for other work.
 - 3. Form accessories.
 - 4. Form stripping.

- B. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other documents.

- C. Related Sections:
 - 1. Section 033000 - Cast-in-Place Concrete: Supply of concrete accessories for placement by this section.

1.2 REFERENCES

- A. American Concrete Institute (ACI):
 - 1. ACI 301 - Structural Concrete for Buildings.
 - 2. ACI 318 - Building Code Requirements for Reinforced Concrete.
 - 3. ACI 347 - Recommended Practice For Concrete Formwork.

- B. United States Department of Commerce Product Standard (PS):
 - 1. PS 1 - Construction and Industrial Plywood.

1.3 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Procedures for submittals.
 - 1. Product Data: Provide data on void form materials and installation requirements. Submit data on form-coating materials.
 - 2. Shop Drawings: Indicate pertinent dimensions, materials, bracing, and arrangement of joints and ties.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with ACI 347.

**SECTION 031000
CONCRETE FORMING AND ACCESSORIES**

- B. Where necessary, design formwork under direct supervision of a Professional Engineer experienced in design of formwork and licensed in State where Project is located at no additional cost to the City.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 - Product Requirements: Transport, handle, store, and protect products.
- B. Deliver void forms and installation instructions in manufacturer's packaging.
- C. Store off ground in ventilated and protected manner to prevent deterioration from moisture.

1.6 ENVIRONMENTAL REQUIREMENTS

- A. Environmental Impact:
 - 1. Formwork: Reuse forms to greatest extent possible without damaging structural integrity of concrete and without damaging aesthetics of exposed concrete.

PART 2 - PRODUCTS

2.1 WOOD FORMS

- A. Forms for Exposed Finish Concrete: Plywood panels, to provide continuous, straight, smooth, exposed surfaces. Furnish in largest practicable sizes to minimize number of joints and to conform to joint system shown on drawings.
 - 1. Plywood complying with U.S. Product Standard PS-1 "B-B (Concrete Form) Plywood," Class I, Exterior Grade or better, mill-oiled and edge-sealed, with each piece bearing legible inspection trademark.
- B. Forms for Unexposed Finish Concrete: Plywood, lumber, metal, or other acceptable material. Provide lumber dressed on at least 2 edges and one side for tight fit.
- C. Lumber: Construction grade; with grade stamp clearly visible.

2.2 PREFABRICATED FORMS

**SECTION 031000
CONCRETE FORMING AND ACCESSORIES**

- A. Preformed Steel Forms: Minimum 16 gage, well matched, tight fitting, stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.
- B. Void Forms (Carton Forms): Moisture resistant treated paper faces, biodegradable, structurally sufficient to support weight of wet concrete mix until initial set. Thickness indicated on drawings.
- C. Tubular Column Type: Metal or fiberglass-reinforced plastic. Provide units with sufficient wall thickness to resist wet concrete loads without deformation.

2.3 ACCESSORIES

- A. Form Ties: Factory-fabricated, removable or snap-off type, metal, of fixed or adjustable length as applicable, with cone ends. Designed to prevent form deflection and to prevent spalling concrete upon removal. Back break dimension, 1-1/2 inch from exposed concrete surface. Provide ties that, when removed, will leave holes not larger than 1 inch diameter in concrete surface.
- B. Form Release Agent: 100 percent biodegradable colorless agent which will not stain concrete, or absorb moisture, or impair natural bonding or color characteristics of subsequent coatings intended for use on concrete surfaces. Zero VOC.
 - 1. Envirolux by Conspec,
 - 2. SMD-10 Soy Form Release by Strategic Market Development
 - 3. Bio-Form by Leahy-Wolf,
 - 4. Or equal as permitted in Section 016000 - Product Requirements: Product options and substitutions.
- C. Corners: Chamfered, wood strip 3/4 x 3/4 inch size; maximum possible lengths.
- D. Dovetail Anchor Slot: Galvanized steel, 22 gage thick, foam filled, release tape sealed slots, anchors for securing to concrete formwork.
- E. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required, of sufficient strength and character to maintain formwork in place while placing concrete.
- F. Waterstops (Rubber/PVC): Rubber or Polyvinyl chloride, minimum 1,750 tensile strength, minimum 50 degrees F to plus 175 degrees F working temperature range, width as indicated on Drawings, maximum possible lengths, ribbed profile, preformed corner sections, heat welded jointing.

**SECTION 031000
CONCRETE FORMING AND ACCESSORIES**

PART 3 - EXECUTION

3.1 FORMWORK INSTALLATION

- A. Install formwork, shoring and bracing to achieve design requirements, in accordance with requirements of ACI 347R.
- B. Provide bracing to ensure stability of formwork. Shore or strengthen formwork subject to overstressing by construction loads.
- C. Arrange and assemble formwork to permit dismantling and stripping. Do not damage concrete during stripping. Permit removal of remaining principal shores.
- D. Align joints and make watertight. Furnish in largest available sizes to minimize number of joints and to conform to joint system indicated on Drawings.
- E. Obtain the Engineer's approval before framing openings in structural members which are not indicated on Drawings.
- F. Provide chamfer strips on external corners of concrete members, to produce uniform, smooth lines and tight edge joints.
- G. Install void forms in accordance with manufacturer's published instructions. Protect forms from moisture or crushing.

3.2 FORM RELEASE AGENT APPLICATION

- A. Apply form release agent on formwork in accordance with manufacturer's published instructions.
- B. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
- C. Do not apply form release agent where concrete surfaces will receive special finishes or applied coverings which are effected by agent. Soak inside surfaces of untreated forms with clean water. Keep surfaces coated prior to placement of concrete.

3.3 INSERTS, EMBEDDED PARTS, AND OPENINGS

- A. Provide formed openings where required for items to be embedded in passing through concrete work.

**SECTION 031000
CONCRETE FORMING AND ACCESSORIES**

- B. Locate and set in place items which will be cast directly into concrete.
- C. Coordinate with work of other sections in forming and placing openings, slots, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.
- D. Install accessories in accordance with manufacturer's published instructions, straight, level, and plumb. Ensure items are not disturbed during concrete placement.
- E. Provide temporary ports or openings in formwork where required to facilitate cleaning and inspection. Locate openings at bottom of forms to allow flushing water to drain.
- F. Close temporary openings with tight fitting panels, flush with inside face of forms, and neatly fitted so joints will not be apparent in exposed concrete surfaces.
- G. Install waterstops in accordance with manufacturer's published instructions continuous without displacing reinforcement. Seal joints watertight.

3.4 FORM CLEANING

- A. Clean forms as erection proceeds, to remove foreign matter within forms.
- B. Clean formed cavities of debris prior to placing concrete.
- C. Flush with water or use compressed air to remove remaining foreign matter. Ensure that water and debris drain to exterior through clean-out ports.
- D. During cold weather, remove ice and snow from within forms. Do not use de-icing salts. Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure. Use compressed air or other means to remove foreign matter.

3.5 CONSTRUCTION

- A. Site Tolerances:
 - 1. Construct formwork to maintain tolerances required by ACI 301 and ACI 347.
 - 2. Camber slabs and beams 1/4 inch per 10 feet in accordance with ACI 301.

3.6 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Field inspection and testing.

**SECTION 031000
CONCRETE FORMING AND ACCESSORIES**

- B. Inspect erected formwork, shoring, and bracing to ensure that work is in accordance with formwork design, and that supports, fastenings, wedges, ties, and items are secure.

3.7 FORM REMOVAL

- A. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads.
- B. Loosen forms carefully. Do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
- C. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged. Discard damaged forms.

END OF SECTION

**SECTION 032000
CONCRETE REINFORCEMENT**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Reinforcing steel bars.
 - 2. Steel wire fabric.
 - 3. Reinforcement accessories.

- B. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other documents.

- C. Related Sections:
 - 1. Section 031000 - Concrete Forming and Accessories: Coordination between formwork and reinforcing.
 - 2. Section 033000 - Cast-in-Place Concrete: Coordination between concrete placement and reinforcing.

1.2 REFERENCES

- A. American Concrete Institute (ACI):
 - 1. ACI 301 - Structural Concrete for Buildings.
 - 2. ACI 318 - Building Code Requirements For Reinforced Concrete.
 - 3. ACI SP-66 - American Concrete Institute - Detailing Manual.

- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM A 184 - Fabricated Deformed Steel Bar Mats for Concrete Reinforcement.
 - 2. ASTM A 615 - Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
 - 3. ASTM A 704 - Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.

- C. American Welding Society (AWS):
 - 1. AWS D1.4 - Structural Welding Code for Reinforcing Steel.

- D. Concrete Reinforcing Steel Institute (CRSI):
 - 1. CRSI - Manual of Practice.
 - 2. CRSI 63 - Recommended Practice For Placing Reinforcing Bars.
 - 3. CRSI 65 - Recommended Practice For Placing Bar Supports, Specifications and Nomenclature.

**SECTION 032000
CONCRETE REINFORCEMENT**

1.3 SUBMITTALS

- A. Section 013300 – Submittal Procedures: Procedures for submittals.
 - 1. Shop Drawings: Indicate bar sizes, spacings, locations, and quantities of reinforcing steel [and wire fabric, bending and cutting schedules, and supporting and spacing device. Include special reinforcement required for openings through concrete structures.
 - 2. Assurance/Control Submittals;
 - a. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
 - b. Submit certified copies of mill test report of reinforcement materials analysis.
 - c. Welder's Certificates.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with CRSI 63, 65 and Manual of Practice ACI 301, ACI SP-66, ACI 318, and ASTM A 184.
- B. Reinforcement design shall be provided by the Structural Engineer of Record, experienced in design of this work and licensed in the State where the Project is located.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Resource Management
 - 1. Recycled Content
 - a. Steel Products: Post-consumer recycled content plus one half of pre-consumer recycled content not less than 75 percent.

PART 2 - PRODUCTS

2.1 STEEL REINFORCEMENT

- A. Reinforcing Steel: ASTM A 615, 60 ksi yield grade; deformed billet steel bars, unfinished.
- B. Reinforcing Steel Mat: ASTM A 704, ASTM A 615, 60 ksi yield grade; steel bars or rods, unfinished.
- C. Reinforcing Steel Mesh: ASTM A185; 6X6, w 1.4 X w 1.4.

**SECTION 032000
CONCRETE REINFORCEMENT**

2.2 ACCESSORIES

- A. Tie Wire: Minimum 16 gage annealed type.
- B. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for strength and support of reinforcement during concrete placement conditions including load bearing pad on bottom to prevent vapor barrier puncture.
- C. Special Chairs, Bolsters, Bar Supports, Spacers Adjacent to Weather Exposed Concrete Surfaces: Plastic coated steel type(CRSI, Class 1) or stainless steel protected(CRSI, Class 2); size and shape as required.

2.3 FABRICATION

- A. Fabricate concrete reinforcing in accordance with ACI SP-66 and ACI 318.
- B. Weld reinforcement in accordance with AWS D1.4.
- C. Locate reinforcing splices not indicated on drawings, at point of minimum stress. Review location of splices with the Engineer.

PART 3 - EXECUTION

3.1 PLACEMENT

- A. Place, support and secure reinforcement against displacement. Do not deviate from required position.
- B. Do not displace or damage vapor barrier.
- C. Accommodate placement of formed openings.
- D. Maintain concrete cover around reinforcing in accordance with ACI 318.

END OF SECTION

**SECTION 033000
CAST-IN-PLACE CONCRETE**

PART 1 - GENERAL

1.1 SUMMARY

- A. Includes all labor, materials and appliances, and perform all operations in connection with the installation of Concrete Work, and all related work incidental to the completion thereof, as shown on the drawings, complete, in strict accordance with the drawings and as specified herein. Section Includes:
 - 1. Cast-in-place site concrete.
 - 2. Expansion and contraction, control joints in CIP concrete.
 - 3. Concrete curing and protection.
 - 4. Non-shrink grout including installation and forming.
 - 5. Testing related services.

- B. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents and References in Section 1.2.

- C. Related Sections: Related work specified elsewhere includes but may not be limited to
 - 1. Section 031000 - Concrete Forming and Accessories.
 - 2. Section 032000 - Concrete Reinforcement.

1.2 REFERENCES

- A. General:
 - 1. The publications listed below form a part of this specification to the extent referenced.
 - 2. Where a date is given for reference standards, the edition of that date shall be used. Where no date is given for reference standards, the latest edition available on the date of Notice Inviting Bids shall be used.

- B. American Association of State Highway and Transportation Officials (AASHTO)
 - 1. AASHTO M182, "Standard Specification for Burlap Cloth Made from Jute or Kenaf and Cotton Mats."

- C. Unless otherwise shown or specified, the work shall conform to the following standards and recommendations of the American Concrete Institute (ACI), latest editions adopted:
 - 1. ACI 117, "Standard Specification for Tolerances for Concrete Construction and Materials."
 - 2. ACI 121R, "Quality Assurance Systems for Concrete Construction."

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3. ACI211.1, "Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete.
 4. ACI 212.2R, "Guide for Use of Admixtures in Concrete."
 5. ACI 214, "Recommended Practice for Evaluation of Strength Test Results of Concrete."
 6. ACI 301, "Specification for Structure /Concrete."
 7. ACI 302.1R, "Guide for Concrete Floor and Slab Construction."
 8. ACI 304R, "Guide for Measuring, Mixing, Transporting, and Placing Concrete."
 9. ACI 304.2-R, "Placing Concrete by Pumping Methods."
 10. ACI 305, "Hot Weather Concreting."
 11. ACI 306, "Cold Weather Concreting."
 12. ACI 306.1 "Standard Specification for Cold Weather Concreting."
 13. ACI 308, "Standard Practice for Curing Concrete."
 14. ACI 309R, "Guide for Consolidation for Concrete."
 15. ACI 315, "Details and Detailing of Concrete Reinforcement."
 16. ACI 318, "Building Code Requirements for Structural Concrete."
 17. ACI 347, "Guide to Formwork for Concrete."
 18. ACI 347.2R "Guide for Shoring/Reshoring of Concrete Multistory Buildings."
 19. ACI 503.2, "Standard Specification for Bonding Plastic Concrete to Hardened Concrete with a Multi-Component Epoxy Adhesive."
 20. ACI SP-15, "Field Reference Manual" which includes ACI 301 "Specifications for Structural Concrete for Buildings" and reference standards specified therein.
- D. American Welding Society (AWS)
1. AWS D1.4, "Structural Welding Code Reinforcing."
- E. American Society for Testing and Materials (ASTM).
1. ASTM A615, "Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement."
 2. ASTM C31, "Standard Practice for Making and Curing Concrete Test Specimens in the Field."
 3. ASTM C33, "Standard Specification for Concrete Aggregates."
 4. ASTM C39, "Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens."
 5. ASTM C42, "Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete."
 6. ASTM C94, "Standard Specification for Ready-Mixed Concrete."
 7. ASTM C109, "Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)"
 8. ASTM C114, "Standard Test Method for Chemical Analysis of Hydraulic Cement."
 9. ASTM C138, "Standard Test Method for Unit Weight, Yield, and Air Content of Concrete (Gravimetric) of Concrete."

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CAST-IN-PLACE CONCRETE

10. ASTM C143, "Standard Test Method for Slump of Hydraulic Cement-Cement Concrete."
11. ASTM C150, "Standard Specification for Portland Cement."
12. ASTM C156, "Standard Test Method for Water Retention by Concrete Curing Materials."
13. ASTM C171, "Standard Specification for Sheet Materials for Curing Concrete."
14. ASTM C173, "Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method."
15. ASTM C231, "Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method."
16. ASTM C260, "Standard Specification for Air Entraining Admixtures for Concrete."
17. ASTM C309, "Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete."
18. ASTM C311, "Standard Test Methods for Sampling and Testing Fly Ash or Natural Pozzolans for Use as a Mineral Admixture in Portland-Cement Concrete."
19. ASTM C387, "Standard Specification for Packaged, Dry, Combined Materials for Mortars and Concrete."
20. ASTM C457, "Standard Test Method for Microscopical Determination of Parameters of the Air-Void System in Hardened Concrete."
21. ASTM C494, "Standard Specification for Chemical Admixtures for Concrete."
22. ASTM C618, "Standard Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete."
23. ASTM C920, "Standard Specification for Elastomeric Joint Sealants."
24. ASTM C685, "Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing."
25. ASTM C989, "Standard Specification for Ground Granulated Blast-Furnace Slag for Use in Concrete and Mortars."
26. ASTM C1260, "Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)."
27. ASTM C1567, "Standard Test Method for Potential Alkali Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)."
28. ASTM E154, "Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Slabs, On Walls, or as Ground Cover."
29. ASTM E1155, "Standard Test Method for Determining F Floor Flatness and FL Floor Levelness Numbers"
30. ASTM D2240, "Standard Test Method for Rubber Property-Durometer Hardness."

- F. Concrete Reinforcing Steel Institute (CRSI),
1. CRSI "Manual of Standard Practice."

**SECTION 033000
CAST-IN-PLACE CONCRETE**

1.3 DELIVERY, STORAGE, AND HANDLING

- A. Section 016000 - Product Requirements: Transport, handle, store, and protect Products.
- B. Deliver materials in unopened containers with labels identifying contents.
- C. Store powdered materials in dry area and in manner to prevent damage. Protect liquid materials from freezing or exceeding maximum storage temperatures set by product manufacturer.

1.4 PROJECT CONDITIONS OR SITE CONDITIONS

- A. Jobsite Requirements:
 - 1. Conform to ACI 305 R when placing concrete during hot weather.
 - 2. Conform to ACI 306 R when placing concrete during cold weather.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

- A. Concrete:
 - 1. Concrete shall be in accordance with ASTM C94. If a conflict exists between ASTM C94 and these specifications, these specifications shall govern.
- B. Portland Cement: ASTM C150 – Type II unless otherwise specified or approved by the Engineer.
 - 1. Assume full responsibility for the quality and soundness of cement. Cement is to be of one type and from the same mill; it is to be of uniform color for all concrete with permanently exposed concrete finishes.
- C. Liquid admixtures: All admixtures shall be used in conformance with the manufacturer's recommendations. When air entraining admixtures, water reducing admixtures, high range water reducing admixtures, and non-corrosive accelerating admixtures are used in any combination, all products shall be from the same manufacturer or the ready-mix concrete producer shall certify that they are compatible. The following admixtures are permitted when approved in writing prior to use or are required as specified herein and shall be used in strict accordance with the manufacturer's specifications or recommendations:
 - 1. Calcium chloride: Conform to ACI 301. The water soluble chloride ion level shall not exceed 0.3 percent by weight of cement.

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2. Air-entraining admixtures: ASTM C260 shall be used to achieve the specified air content in all permanently exposed exterior concrete. For steel hard trowel interior slab finish, do not use air entrainment admixtures. The total air entrainment (entrained and entrapped air) must not exceed 3 percent. For steel trowel exterior slab finish, comply with ACI 318 and ACI 302.
 - a. Euclid: AEA-92 or Air Mix 200.
 - b. BASF: Micro-Air, MBVR-Standard, and MB AE 90.
 - c. Sika: Sika AEA-14, Sika AEA-15, and Sika Air.
 - d. W.R. Grace: Darex EH, Darex II AEA, Daravair AT60, Daravair 1400, and Daravair 1000.
 - e. Or approved equal.

3. Water-reducing admixtures: Conform to ASTM C494, Type A, containing not more chloride ions than allowed in paragraph C., above.
 - a. Euclid: Eucon WR series or Eucon MR.
 - b. BASF: Masterpave, Masterpave N, PolyHeed 997, Pozzolith 220N, and Glenium 7500.
 - c. W.R. Grace: Daracem 55 and Daracem 65, WRDA 82 and WRDA with HYCOL.
 - d. Sika: Sikament HP, Plastocrete 161, and Sikament 686.
 - e. General Resource Technology: Polychem 400 NC and Polychem 1000.
 - f. Or approved equal.

4. Water-reducing/accelerating admixtures: Conform to ASTM C494, Type C or E having long-term test results showing non-rusting on metal deck and reinforcing steel.
 - a. Euclid: Accelguard series.
 - b. BASF: Pozzutec 20+, Pozzolith NC 534, and Rheocrete CNI.
 - c. Sika: Sika Rapid-1 and Plasocrete 161FL.
 - d. W.R. Grace: Lubricon NCA, Polarset, and DCI.
 - e. Or approved equal.

5. Water-reducing/retarding admixtures: Conform to ASTM C494, Type D containing not more than 1 percent chloride ions.
 - a. Euclid: Eucon Retarder series.
 - b. BASF: Delvo Stabilizer, Masterpave series, and Pozzolith 100XR, 200N, 220N and 322N.
 - c. Sika: Plastimet.
 - d. W.R. Grace: Daratard 17, WRDA-64, and WRDA-82.
 - e. Or approved equal.

6. High-range/water-reducing (HRWR) admixtures: Conform to ASTM C494, Type F or G super plasticizers containing 1 percent maximum chloride ions may be used with low slump (3 inches maximum) concrete to

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produce flowable concrete (up to 8 inches slump) with early strength gain and 28-day strengths equal to reference concrete. HRWR admixture may be used providing not more than 60 minutes is allowed from addition of admixture to final placement of concrete. HRWR admixture shall be used in concrete with a maximum water/ cement ratio of 0.50 or less and is suggested in the following:

- a. In pumped concrete.
 - b. In concrete topping slabs
 - c. In lieu of the specified water-reducing admixture (Type A) where confinement of placing due to heavy reinforcement or narrow space requires flowable concrete.
 - d. Where more than 30 minutes is required between the addition of admixtures to final placement of the concrete, a combination of water-reducing, set controlling admixtures (ASTM C494, Types A, D, & E) as in Master Builders Company "Synergized Performance System" may be used.
 - 1) Euclid: Eucon 37 or Eucon 537.
 - 2) BASF: Rheobuild 1000, Glenium 3000 NS, and Glenium 3400NV.
 - 3) Sika: Sikament 300, Viscocrete 2100, and Sikament 686.
 - 4) W.R. Grace: Daracem 100, ADVA Cast 530, Mira 92, and ADVA Cast 575.
 - 5) Or approved equal.
- D. Fly ash: Conform to ASTM C618. The use of a quality fly ash will be permitted as a cement-reducing admixture (minimum 15 percent and maximum 25 percent). Fly ash used in concrete shall be from a single source and of a single class in combination with Portland cement of a single source and single class unless otherwise approved by the Engineer. The fly ash shall meet all of the requirements of ASTM C618, Class C or Class F, with the following special requirements: The loss on ignition in Table 1 shall not exceed 3 percent. Compliance to Table 1A shall apply. The amount retained on the 325 sieve in Table 2 shall not exceed 34 percent. Where a Type II low-alkali cement is specified, the total C₃A shall be less than 8 percent of total cementitious material. The chemical analysis of the fly ash shall be reported in accordance with ASTM C311. Quality assurance testing and reports for a minimum of six months shall be submitted by the fly ash supplier. The option to use fly ash must be approved prior to use.
- E. Granulated Blast Furnace Slag is an alternative to fly ash and shall conform to ASTM C989 Grade 100 Or 120. Granulated blast furnace slag may be used as a substitute for a maximum of 30 percent of Portland cement.
- F. Certification: Certification of the above requirements is required from the admixture manufacturer prior to mix design review and approval by the Engineer. Upon request by the Engineer, a qualified representative is to be

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provided to assure proper use of admixtures. Use of admixtures, other than listed above will be permitted only when approved by the Engineer.

G. Aggregates:

1. Normal-weight concrete - ASTM C33. For slabs, also conform to combined aggregate grading recommendations of ACI 302 and ACI 302.1R, unless otherwise permitted by the Engineer.
2. All concrete exposed to the weather shall conform to the limits of deleterious substances and physical properties of Table 3, ASTM C 33.
3. Local aggregates: Local aggregates not complying with ASTM C33 but which have been shown by special test or actual service to produce concrete of adequate strength and durability may be used when acceptable to the Engineer.
4. The nominal size of an aggregate particle shall not exceed:
 - a. 20 percent of the narrowest dimension between sides of forms.
 - b. 33 percent of the depth of slabs.
 - c. 75 percent of the dimension between reinforcing bars.
 - d. 75 percent of the dimension between reinforcing bars and forms.
5. Maximum size of coarse aggregates and minimum cementitious contents: ACI 301 and ACI 302.1R.
6. Concrete aggregate alkali-silica reactivity (ASR) shall be tested in accordance with ASTM C1260 with a 14-day expansion (no supplementary cementing materials) or ASTM C1567 (with supplementary cementing materials) of less than 0.1 percent. Materials (cement, supplementary cementing materials, and aggregates) to be used in the concrete shall be tested. Coarse aggregates and fine aggregates shall be individually tested. If two grades of coarse aggregates are blended they shall be individually tested.
7. Abrasive aggregates non-slip finishes: Fused aluminum oxide grits, or crushed emery, as abrasive for non-slip finish with emery aggregate containing not less than 40 percent aluminum oxide and not less than 25 percent ferric oxide. Use material that is factory-graded, packaged, rustproof, non-glazing, and unaffected by freezing, moisture, and cleaning materials.

H. Water:

1. Clean, potable, and free of injurious amounts of oil, acid, alkali, organic or other deleterious matter not detrimental to concrete; drinkable.
2. Water shall contain no more than 650 parts per million of chlorides as Cl or more than 1000 parts per million of sulfates as SO₄. In no case shall the water contain an amount of impurities that will cause a change in the setting time of Portland cement of neither more than 25 percent nor a reduction in compressive strength of mortar at 14 days of more than 5 percent when compared to the results obtained with distilled water when tested in accordance with ASTM C109.

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CAST-IN-PLACE CONCRETE**

3. Water used for curing shall not contain impurities in amounts to cause discoloration of the concrete or mortar or to produce etching of the surface.
4. Recycled water shall conform to ASTM C94.

2.2 CURING/SEALING/HARDENERS

- A. Dissipating liquid membrane-forming compounds for curing concrete; Conform to ASTM C309, Type 1. Curing compound shall be compatible with floor sealer or finish used. Low VOC.
1. Euclid: VOX Kurex DR VOX series; waterborne products.
 2. W.R. Meadows: 1100-Clear series.
 3. Edoco: Burke Aqua Resin Cure.
 4. L&M Construction Chemicals: Cure R.
 5. BASF: Kure 200W
 6. Or approved equal.

2.3 VAPOR BARRIER/RETARDER

- A. Provide cover over prepared soil, above aggregate subbase material at slabs-on-grade, where shown on the plans. Use only materials which are resistant to decay when coated in accordance with ASTM E154.
1. Vapor Retarder: Polyethylene sheet not less than 10 mils thick, or
 2. Vapor Barrier:
 - a. Stego: Stego Wrap Vapor Barrier 10 –mil
 - b. Fortifiber: Moistop and Moistop Ultra 10.
 - c. Insulation Solution Viper Vaporcheck 10.
 - d. Or approved equal
 3. Vapor Barrier:
 - a. Stego: Stego Wrap Vapor Barrier 15 –mil
 - b. Fortifiber: Moistop and Moistop Ultra 15.
 - c. W.R. Grace: Florprufe 120.
 - d. Insulation Solution Viper Vaporcheck 16
 - e. Or approved equal

2.4 PROPORTIONING

- A. Aggregate gradation: For slabs, also conform to combined aggregate grading recommendations of ACI 302.1R, unless otherwise permitted. For all other concrete not otherwise noted the coarse aggregate gradation shall conform to ASTM C33 size no. 57 or larger.

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- B. Durability: Conform to ACI 301.
1. All concrete exposed to potentially destructive weathering, such as freezing and thawing, or to de-icer chemicals is to be air-entrained, 6 percent \pm 1percent, a minimum six sacks cementitious per cubic yard of concrete, 0.45 maximum water-cementitious ratio, and, 4 inch maximum slump.
 2. Water-cement ratio: For concrete subject to freezing and thawing or deicer chemicals, the water-cement ratio shall not exceed 0.53 by weight including any water added to meet specified slump in accordance with the requirements of ASTM C94 unless otherwise noted.
- C. Slump: Conform to ACI 301.
1. 3 ½ inch maximum for consolidation by vibration
 2. 5 inch maximum for consolidation by other methods
 3. 8 inch maximum for flowable concrete. Concrete containing HRWR admixture (super plasticizer): 3 inch maximum before addition of HRWR
 4. Where field conditions require slump to exceed that specified above, the increased slump shall be obtained by the use of a superplasticizer only, and the Contractor shall obtain written approval from the Engineer who may require an adjustment to the mix.
- D. Slab-On-Grade
1. Concrete shall conform to ACI 302.1R except that the minimum 28-day compressive strength shall be 3,000 psi.
 2. The minimum cementitious content shall be in accordance with ACI 302.1R Table 6.2.
 3. The maximum water-cementitious ratio shall be 0.48.
 4. The maximum water content shall not be greater than 250 lbs per cubic yard of concrete.
 5. The air content shall be less than 3 percent.
- E. Production of concrete: Conform to ACI 301:
1. Cast-in-place concrete used in the work shall be produced at a single off-site batching plant or may be produced at an on-site batch plant.
 2. All concrete shall be proportioned conforming to the approved mix designs and of the materials contained in those approved mixes. A certified copy of the design weights for each mix shall be kept at the producing plant for each class of concrete used on the project.
 3. Plant equipment and facilities are to conform to the "Check List for Certification of Ready-Mixed Concrete Production Facilities" of the National Ready-Mixed Concrete Association (NRMCA) and have NRMCA or approved certification within the past year.
 4. Coarse aggregates shall be washed and, if necessary, shall be uniformly moistened just before batching. Each size of coarse aggregate shall be batched from separate bins as required to produce the combined grading requirements.

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5. Prior to adding a high-range water reducer (super plasticizer), slump shall not exceed the working limit. The high-range water reducing admixture shall be accurately measured and pressure-injected into the mixer as a single dose. If added at the jobsite, the field dispensing system shall conform to the same requirements as a plant system and tested prior to each day's operation. After the addition of the high-range water reducer, the concrete shall be mixed at mixing speed for a minimum of 5 minutes.
6. Ready-mixed and on-site batched concrete shall be batched, mixed, and transported in accordance with ASTM C94.
 - a. Truck mixers and their operation shall ensure that the discharged concrete is uniformly within acceptable limits of consistency, mix, and grading. All mechanical details of the mixer, such as water-measuring and discharge apparatus, conditions of the blades, speed of rotation, general mechanical condition of the unit, and clearance of the drum shall be checked before the use of the unit will be permitted.
 - b. Truck mixers shall be equipped with approved revolution counters by which the number of revolutions of the drum or blades may readily be verified. The water tank system of the truck shall be equipped with gauges that permit accurate determination of the tank contents.
 - c. Each batch of concrete shall be mixed in a truck mixer for not less than 80 revolutions of the drum or blades and at the rate of rotation designated as mixing speed by the manufacturer of the equipment. Additional mixing, if any, shall be at the speed designated as the agitating speed by the manufacturer of the equipment. All materials, including mixing water but excluding any high-range water reducers added onsite, shall be in the mixer drum before actuating the revolution counter for determining the number of revolutions of mixing.
 - d. The concrete producer shall furnish duplicate delivery tickets, one for the Contractor and one given to the Owner's Representative for each batch of concrete. The information provided on the delivery ticket shall include the quantity of materials batched including the amount of free water in the aggregate and any water added onsite. Show the date, time of day batched, and if ready-mixed the time of discharge from the truck. The quantity of water that can be added at the site without exceeding the maximum water-cementitious ratio specified shall be noted on the delivery ticket.
7. Concrete produced by on-site volumetric batching and continuous mixing if approved shall conform to ASTM C685.
8. For concrete produced on site with a central batch plant, mixing shall be done in an approved batch mixer.
 - a. The Contractor shall maintain and operate the on-site batch plant and transportation equipment in a manner that will produce the results specified in this section.

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- b. The Engineer reserves the right to reject the proposed on-site plant if, in his/her opinion, the on-site plant will interfere with other operations or impair the quality of the concrete.
 - c. The quantities of cement, pozzolanic materials, and aggregates used in each batch shall be determined by automatic weighing. The quantity of water shall be determined by weighing or volumetric measurement.
 - d. The weighing equipment for aggregates shall be readily adjustable both to compensate for variation in moisture content of the aggregates and for changing mix proportions. Moisture-sensing devices shall automatically compensate the aggregate weights for changes in moisture content. The charging of weigh hoppers directly from aggregate handling equipment such as front-end loaders will not be permitted.
 - e. Mixers in centralized batching and mixing plants shall be arranged so that mixing actions can be observed from a location convenient to the mixing-plant operator's station.
 - f. Equipment shall be provided that discharges pozzolanic material into the cement hopper only after the addition of the Portland cement. Pozzolanic materials shall be stored in such a manner as to permit ready access for the purpose of inspection and sampling and be suitably protected against contamination of moisture. Should any pozzolan show evidence of contamination or be otherwise unsuitable, the Engineer will reject it and require that it be removed from the site.
 - g. Dispensers for admixtures shall have the capacity of the full quantity of the properly diluted solution required for each batch. They shall be maintained in a clean and freely operating condition. Admixtures shall be added to the premeasured water for the batch or shall be discharged into the batch by flowing automatically and uniformly into the stream of mixing water from the beginning to end of its flow into the mixer. Equipment for measurement shall give visual confirmation of the accuracy of the measurement for each batch.
 - h. The central batch mixer shall be rotated at a speed recommended by the manufacturer and mixing shall be continued for a minimum of 1-1/2 minutes after all materials are in the drum.
 - i. Each stationary mixer shall be equipped with a mechanically operated timing and signaling device that will indicate and ensure the completion of the required mixing period and will count the batches.
 - j. All concrete shall be mixed until there is a uniform distribution of the materials and shall be discharged completely before the mixer is recharged.
9. The Engineer may increase the mixing time when the charging and mixing operations fail to produce a delivered batch in which variations of consistency, mix, or grading are within the limits specified.
10. Variations in consistency during the discharge of a single batch shall not exceed 1 inch of slump, except that a greater variation will be permitted if

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the slump of the concrete decreases and no water is added. Variations in mix and in grading of different parts of the delivered batch shall be within limits stated in ASTM C94.

11. Water shall be introduced prior to, during, and following mixer-charging operations.
12. When a mixer produces unsatisfactory results, it shall be repaired promptly and effectively, or it shall be replaced.
13. Mixers shall not be loaded in excess of their rated capacity.
14. Overmixing, such as to require addition of water to preserve the required consistency or to reduce slump, will not be permitted.
15. All other concrete: Conform to ACI 301
16. Use of accelerating admixtures in cold weather and retarding admixtures in hot weather shall not relax placement requirements specified herein.
17. All concrete placed at ambient temperatures below 50 degrees F is to contain an approved accelerator. The concrete temperature when delivered at the site shall be at least 50 degrees F.
18. All concrete placed at ambient temperatures above 80 degrees F is to contain an approved retarder.
19. All concrete required to be air-entrained is to contain an approved air-entraining admixture.
20. When improved workability, pumpability, lower water-cement ratio, or high ultimate and/or early strength is required, the HRWR admixture (super plasticizer) may be used.
21. Ensure air content for slabs with steel trowel finish is less than 3.0 percent.
22. The concrete shall be of such consistency and composition that it can be worked readily into the corners and angles of the forms and around reinforcement without permitting materials to segregate or free water to collect on the surfaces. Within the limiting requirements, adjust the consistency of the concrete as may be necessary to produce mixtures which will be placeable with reasonable methods of placing and compacting. Maintain on the job at all times adequate extra cement to be used at rate of 1/2 sack cement per cubic yard concrete for each 2" slump increase for corrections due to wetness desired or obtained. No water shall be added to concrete except with the approval of the City inspector.
23. No water shall be added to concrete except with the approval of the City inspector. The water-cementitious ratio stated on the approved mix designs shall not be exceeded unless approved by the Engineer. Re-tempered concrete shall be mixed for not less than 80 revolutions of the drum or blades and at the rate of rotation designated as mixing speed by the manufacturer of the equipment.
24. Adjustments to concrete mixes: Mix design adjustments may be requested by Contractor when characteristics of materials, job conditions, weather, test results, or other circumstances warrant at no additional cost to City. Laboratory test data for revised mix design and strength results must be submitted and accepted before using in work.

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2.5 FORMWORK

- A. Section 031000: Concrete Forming and Accessories

2.6 REINFORCING MATERIALS

- A. Section 032000: Concrete Reinforcement

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

- A. Install all cast-in-place concrete work in accordance with ACI 301 except as herein specified.
- B. All bearing materials shall be inspected by the Engineer prior to placing concrete. The Engineer shall be the sole judge as to the suitability of the bearing material.
- C. Compact stone base aggregate to thickness indicated on drawings. Proof roll stone screenings topping to provide smooth hard surface on which to place slab. Surface should not show footprints or truck tracks when driven over.
- D. Immediately before placing concrete, spaces to be occupied by concrete shall be free from standing water, ice, mud, and debris.
- E. Concrete shall not be deposited under water or where water in motion may injure the surface finish of the concrete.
- F. Immediately before placing concrete for exterior sidewalk, curb and gutter, pavements, and slab-on-grade, subbases and compacted subgrades shall be thoroughly moistened, but not muddied, by sprinkling with water. Surfaces shall be kept moist by frequent sprinkling, as required, up to the time of placing of concrete.
- G. Forms and the reinforcement shall be thoroughly cleaned of ice and other coatings. Remove surplus form releasing agent from the contact face of forms.
- H. Notify all trades concerned and the Owner's Representative sufficiently in advance of the scheduled time for concrete placement to permit installation of all required work by other trades.
- I. Before placing concrete, all required embedded items, including dovetail anchor slots, anchors, inserts, curb angles, metal frames, fixtures, sleeves, drains, stair nosings, accessory devices for Mechanical and Electrical installations shall be properly located, accurately positioned and built into the construction, and maintained securely in place.
- J. Build into construction all items furnished by the Owner and other trades. Provide all offsets, pockets, slabs, chases and recesses as job conditions require.
- K. Place and properly support reinforcing steel and anchor bolts.

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- L. The alignment, orientation, spacing, and embedment length of mechanical load transfer devices in slab-on-grade and pavements shall conform to dimensions and tolerances shown on the drawings.
- M. The Engineer and City Inspector shall be notified when the first concrete pour is scheduled.

3.2 INSTALLATION - FORMWORK

- A. Section 031000 - Concrete Forming and Accessories
- B. Construction and Contraction Joints: Conform to ACI 301 and recommendations of ACI 302.1R.

3.3 REINFORCEMENT

- A. Placement: Section 032000 - Concrete Reinforcement

3.4 METHODS OF PLACEMENT AND PLACING CONCRETE

- A. Placement: Conform to ACI 301:
 - 1. Maintain concrete cover around reinforcing as per Section 3.3 above and ACI 301.
 - 2. The methods and equipment used for transporting concrete to the site work and the time that elapses during transportation shall not cause segregation of coarse aggregate or slump loss in excess of 1 inch when measured at the point of discharge.
 - 3. Concrete shall be placed within 90 minutes after the water has been added to the cement and aggregates. Concrete shall be placed prior to initial concrete set.
 - 4. Placing of concrete will not be permitted during rainfall or when rain appears imminent. If rain should fall subsequent to placement, the concrete shall be completely protected until curing is complete.
 - 5. Cold-Weather Placement: Comply with provisions of ACI 306.1 "Standard Specifications for Cold-Weather Concreting" and as follows.
 - a. When air temperature has fallen to or is expected to fall below 40 deg F (4 deg C), uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F (10 deg C) and not more than 80 deg F (27 deg C) at point of placement.
 - b. When necessary, arrangements for heating, covering, insulating, or housing the concrete work shall be made in advance of placement and shall be adequate to maintain the required temperature during the first 24 hours.

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- c. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise accepted in mix designs.
 - d. Concrete shall not be placed on frozen ground or placed when the ambient temperature is 40 deg F or less and dropping.
 - e. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 - f. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures using vented heaters and insulating blankets.
 - g. Vent heater exhaust gases that contain carbon dioxide outside of enclosed areas.
 - h. Concrete temperatures shall be maintained above 50 degrees F for the first 7 days of curing.
6. Hot-Weather Placement: When hot weather conditions exist that would impair quality and strength of concrete, place concrete complying with ACI 305R "Standard Specification for Hot-Weather Concreting" and as specified.
- a. Cool ingredients before mixing to maintain concrete temperature at time of placement to below 90 deg F (32 deg C). Mixing water may be chilled or chopped ice of a size that will melt completely during mixing may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - b. Reject any concrete that has a temperature at the point of placement above 90 deg F, unless approved otherwise by the Engineer. When air temperatures are between 80 and 90 deg F the maximum mixing and delivery time is reduced to 75 minutes. When air temperatures exceed 90 deg F, the maximum mixing and delivery time is reduced to 60 minutes.
 - c. Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedding in concrete.
 - d. Fog spray forms, reinforcing steel, and subgrade just before placing concrete. Keep subgrade moisture uniform without puddles or dry areas.
 - e. Use water-reducing retarding admixture when required by high temperatures, low humidity, or other adverse placing conditions, as acceptable to the Engineer.
 - f. Spray evaporative retardants, wind breaks, misters, or shade concrete when the rate of surface evaporation when calculated in accordance with ACI 305.5 exceeds 0.2 lb/sq. foot per hour.

B. Depositing Concrete

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1. Deposit concrete as near its final position as possible to avoid segregation due to rehandling or flowing. Hoppers, tremies, pump line, ducts, chutes, or other methods approved by the Engineer shall be used to deposit concrete in its final position within the specified time limits and without segregation of the mix.
2. The sequence of concrete placement and the number, type, position, and design of joints shall be approved by the Engineer prior to concrete placement.
3. Place floor slabs-on-grade by "strip cast" method.
4. Concrete shall be deposited as nearly as practical in its final position to avoid segregation due to re-handling or flowing. No concrete shall have a free fall of over three feet from truck, mixer, or buggies.
5. The concreting shall be carried on at such a rate that the concrete is plastic at all times and flows readily into the spaces between reinforcing bars. No concrete that has partially hardened or been contaminated by foreign materials shall be deposited in the work.
6. When concreting is started, it shall be carried on as a continuous operation until the placing of the section is completed.
7. Except as intercepted by joints, concrete shall be placed in continuous layers. The depth of layers shall not exceed 20 inches. Succeeding layers shall be placed while the previous layer is still plastic. Concrete placement shall begin at the lowest point in each section of concrete to be placed.
8. Protect adjacent surfaces from concrete drippings, spillage, and splashes. Hardened or partially hardened splashes or accumulations of concrete on forms or reinforcement shall be removed before the work proceeds. Clean all damaged surfaces immediately.
9. All conveyances shall be thoroughly cleaned at frequent intervals during the placement of the concrete, and before the beginning a new run of concrete all hardened concrete and foreign materials shall be removed from the surfaces.
10. The Superintendent or Foreman in charge of concrete work shall mark on the drawings the time and date of the placing of each concrete pour. Locations where concrete test cylinders are made shall also be noted on the drawings. Such drawings shall be kept on file at the job until its completion and shall be subject to the inspection of the Engineer at all times.

C. Conveyor Belts and Chutes

1. Chutes or conveyor belts shall not be used except as approved by the Engineer.
2. Concrete shall be conveyed from the mixer to the place of final deposit by methods that will prevent separation and loss of material.
3. Chutes longer than 50 feet and conveyor belts longer than 110 feet will not be permitted.

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4. Equipment for conveying and chuting concrete shall be of such size and design as to insure a practically continuous flow of concrete at the delivery point without separation of material.
5. Provide runways or other means for wheeled equipment to convey concrete to point of deposit. Construct runways so that supports will not bear upon reinforcement or fresh concrete.
6. The minimum slope of chutes shall enable concrete of the specified consistency to readily flow.
7. Ends of chutes, hopper gates, and other points of concrete discharge throughout the conveying, hoisting, and placing system shall be designed and arranged so that concrete passing from them will not fall separated into whatever receptacle immediately receiving the concrete. Adequate headroom provision must be made at such points for a vertical drop and for proper baffling.
8. If a conveyor belt is used, it shall be wiped clean by a device operated so that none of the mortar adhering to the belt will be wasted.

D. Pumping of Concrete

1. The type and operation of a concrete pump shall be subject to the approval of the Engineer. The equipment used in placing the concrete and the method of its operation shall introduce the concrete into the forms without high velocity.
2. During pumping, the Contractor shall have on-site a standby placing system, acceptable to the Engineer, to ensure that in the event of breakdown of the primary placing equipment, the concrete placement can continue without cold joints.
3. The minimum diameter of the hose or conduit shall be 4 inches unless otherwise approved by the Engineer. Aluminum conduits shall not be used for conveying the concrete. Pumping equipment, hoses, and conduits that are not functioning properly shall be replaced.

E. Consolidation

1. All concrete shall be thoroughly consolidated by internal mechanical vibrators during the placing operation and shall be thoroughly worked around the reinforcement and embedded fixtures and into corners of the forms.
2. Concrete for slabs 8 inches thick or less may be consolidated with vibrating screeds. Slabs between 8 to 12 inches thick shall be compacted with internal vibrators and (optionally) with vibrating screeds.
3. Concrete shall be consolidated by vibration to the maximum practicable density. The concrete shall be free from pockets of coarse aggregate and entrapped air.
4. Vibrators shall have a minimum diameter of 3 inches with a frequency of at least 7000 vibrations per minute and with an amplitude adequate to consolidate the concrete in the section being placed.
5. Forms shall contain sufficient windows or shall be limited in height to allow visual observation of the concrete during placement. Sufficient illumination

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shall be provided in the interior of forms so that at the places of concrete deposition the concrete shall be visible from the deck or runway.

6. Vibrators shall not be secured to forms or reinforcement.
 7. Keep a minimum of two standby vibrators in operable condition on the job during concreting operations.
 8. Consolidation shall be carried on continuously with the placing of concrete.
 9. The number of vibrators employed shall be sufficient to consolidate the concrete within 15 minutes after it is deposited in the forms.
 10. When consolidating each layer of concrete, the vibrator shall be operated at regular and frequent intervals 18 to 30 inches apart.
 11. The vibrator shall be kept in nearly a vertical position as practicable. The use of vibrators to shift or drag concrete after deposition will not be permitted. Vibrators shall not be laid horizontally or laid over.
 12. The vibrator head shall penetrate 6 to 8 inches into the preceding layer and then be withdrawn at a slow rate. The top part of each layer shall be re-vibrated systematically at the latest time the concrete can be made plastic by means of vibration.
 13. Concrete shall not be placed until the previous layer has been vibrated.
 14. Unless directed otherwise by the Engineer, the top 2 feet of walls shall be re-vibrated approximately 1 hour after placement of concrete and while a running vibrator will still sink under its own weight into the concrete and liquefy it momentarily.
- F. Protection of cast concrete: Conform to ACI 301.
- G. Repair of surface defects: ACI 301.
1. Inspect concrete surfaces and surfaces to be painted immediately upon removal of forms Irregularities shall be immediately rubbed or ground to secure a smooth, uniform, and continuous surface.
 2. Clean surfaces of tie holes. Tie holes shall be filled solid with patching mortar.
 3. Surfaces to be smoothed shall not be plastered or coated.
 4. Patch imperfections as needed or as directed by the Engineer. Repairs in accordance with Section 3.8 shall not be made until the surface has been inspected and repair methods have been approved by the Engineer.

3.5 FINISHING

- A. Finishing of formed surfaces: ACI 301:
1. Tops of forms:
 - a. Strike concrete smooth at tops of forms.
 - b. Float to texture comparable to formed surfaces.
 2. Formed surfaces:
 - a. Finished formed surfaces shall conform accurately to the shape, alignment, grades, and sections shown on the drawings or prescribed by the Engineer.

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- b. Surfaces shall be free from fins, bulges, ridges, honeycombing, or roughness of any kind and shall present a finished, smooth, continuous hard surface.
 - c. Permanently exposed surfaces: ACI 301 - "Smooth Form Finish" with the fins ground smooth and air holes shall be filled with a non-shrink mortar. The color of the patch material shall match the color of the surrounding concrete. Surfaces in unfinished areas unexposed to public view: ACI 301- "Rough Form Finish".
- B. Slabs: Minimum slab surface tolerance must satisfy ACI 301 and ACI 302.1R as measured in accordance with ASTM E1155.
- 1. Slabs-on-grade:
 - a. For exposed slabs, install semi-rigid epoxy sealant in construction and contraction joints after slab has a minimum of 60 days or otherwise approved by the Engineer.
 - b. Separate slabs-on-grade from vertical surfaces with 1/2 inch-thick joint filler. Extend joint filler from bottom of slab to within 1/8 inch of finished slab surface.
 - c. Allowable tolerance for slab on grade surfaces, measured in accordance with ACI 117 and ASTM E1155, shall meet or exceed an overall value of FF35/FL25, with minimum local value of FF24/FL17.
 - d. FF25 & FL20 overall and FF20 & FL15
 - 2. Concrete Finishes:
 - a. The following will not be permitted on slab or floor finishes:
 - 1) Dusting dry cement or sand on the surface to absorb excess moisture.
 - 2) Use of a mortar finishing coat.
 - 3) Excessive troweling or manipulation that brings water or a large amount of fines to the surface.
 - 4) Use of a Fresno.
 - 5) Addition of water to the surface during the finishing operation.
 - 6) Use of the floor during construction in a manner that leads to marring or staining the finish.
 - b. Floor Slabs: Steel trowel finish unless otherwise noted on the plans. As soon as the moisture sheen has disappeared from the floated surface and the concrete has hardened sufficiently to prevent drawing moisture and fine materials to the surface, the surface shall be steel troweled to produce a smooth, hard, uniform finish. Final steel troweling shall be conducted after the concrete is hard enough that no mortar accumulates on the trowel when manipulated with heavy pressure. Machine finishing may be used for troweling.
 - c. Exposed concrete slabs shall be sealed or sealed and hardened using a liquid compound compatible with the curing method used as described in: 3.7 Curing, Protection, Liquid Hardeners and Sealers of this Section.
 - d. Exterior Concrete Finishes: Unless otherwise noted on the drawings, floors, walkways, and roof finishes shall be sloped a minimum 0.125

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inch per foot to drain water. A light steel trowel with medium broom finish unless otherwise noted on the plans. Apply exterior sealer to surfaces exposed to deicer chemicals that is compatible with the curing method used.

- e. Exposed Ramps, Landings and Stair Treads: A light steel trowel with medium broom finish unless otherwise noted on the plans. Surfaces shall be sealed or sealed and hardened using a liquid compound compatible with the curing method used.
- f. A heavy broom finish shall be provided on disabled person ramps.

3.6 CURING, PROTECTION, LIQUID HARDENERS AND SEALERS

A. Temperature, Wind, and Humidity

- 1. When concrete slabs and other unformed concrete is placed in warm, dry, dusty, or windy conditions, concrete surfaces shall be protected from rapid drying by use of windbreaks, shading, fogging with properly designed nozzles, or a combination of these measures. Hot weather concreting procedures provided in ACI 305R shall be used when ambient conditions dictate.
- 2. Cold weather concreting procedures provided in ACI 306R shall be used when ambient conditions dictate.
- 3. Changes in air temperature immediately adjacent to the concrete during and immediately following the 7-day initial curing period shall be kept as uniform as possible and shall not exceed 5 deg. F in any 1 hour or 50 deg. F. in any 24-hour time period.

B. Curing Compound

- 1. All curing methods shall be placed immediately after final finishing (i.e., within two hours). Contractor's attention is directed to the fact that experience shows the most important time of curing is from three to four hours after placing and extending five to six hours thereafter. It is extremely important, therefore, to prevent loss of moisture, particularly during this period when concrete is especially vulnerable to plastic shrinkage cracks. All exposed surfaces of concrete including floor slabs, whether or not they receive a finish flooring, shall be protected from premature drying for a minimum of seven days.
- 2. Apply the specified curing compound in strict accordance with manufacturer's written instructions. Curing compound shall not be diluted by the addition of solvents or thinners, nor shall it be altered in any other manner. Curing compound that has become chilled and is too viscous for satisfactory application shall be heated by steam or hot water bath until it has proper fluidity. The temperature of the compound shall not exceed 100 °F. Curing compound shall not be heated by direct exposure of the container to fire.
- 3. When used on an unformed concrete surface, application of the first coat of curing compound shall commence immediately after finishing

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operations have been completed. When curing compound is used on a formed concrete surface, the surface shall first be moistened with a fine spray of water immediately after the forms have been removed. The spray shall be continued until the surface does not readily absorb further water. As soon as the surface film of water has disappeared and the surface is almost dry, the first coat of curing compound shall be applied. In the event that application is delayed on either formed or unformed surfaces, the surface shall be kept continuously moist until the compound has been applied or the specified period of water curing has elapsed.

4. Surfaces shall be sprayed uniformly with 2 coats of curing compound. Each coat shall provide a minimum coverage of 1 gallon per 250 square feet of surface. As soon as the first coat has become dry, a second coat shall be applied in the same manner. The direction of application of the second coat shall be perpendicular to the first coat. The curing compound shall be sprayed using approved pneumatic or pump driven equipment having the following characteristics:
 - a. Separate lines to the nozzle for material and for compressed air
 - b. A filtering system for the removal or entrapment of contaminants
 - c. A constant application pressure
 5. Curing compound shall not be used on any concrete surface specified to receive additional concrete, coatings, grout, and chemical treatment
- C. Protection
1. Freshly placed concrete shall be protected against wash by rain.
 2. Dust control shall be provided in the surrounding areas during placement. If, in the opinion of the Engineer, these conditions are not satisfactory met, concrete shall not be placed.
 3. During the first 2 day period of curing, no traffic on or loading of the floors will be permitted.
 4. The contractor shall allow no traffic and take precautions to avoid damage to the membrane of the curing compound for a period of not less than 28 days. Damage shall be repaired immediately to the satisfaction of the Engineer.
 5. Special care shall be taken to prevent avoid damaging the surfaces and joints due to load stresses from construction equipment, heavy shock, and excessive vibration. During construction activities, concrete shall be protected against damage with plywood or other approved materials until final acceptance by the Engineer.
 6. Precautions shall be taken to prevent overloading floors, pavements, slabs, beams, and other members. The Contractor shall comply with the Engineer's instructions regarding the loads that will be permitted on these members during construction.
 7. Self-supporting structures shall not be loaded in such a way to overstress the concrete.
- D. All floor slabs shall be cured using products and methods compatible with selected floor adhesives, toppings, and other finish materials.

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- E. Penetrating Liquid Floor Treatment: Prepare, apply, and finish penetrating liquid floor treatment according to manufacturer's written instructions.
 - 1. Remove curing compounds per the manufacturer's instructions after curing is complete as required to ensure compatibility of any finish treatments, paints, or coatings.
 - 2. Remove sealers, oil, dirt, laitance, and other contaminants and complete surface repairs.
 - 3. Apply liquid in accordance with manufacturer's instructions and until surface is saturated, scrubbing into surface until a gel forms; rewet; and repeat brooming or scrubbing. Rinse with water to remove excess material until surface is dry. Apply a second coat in a similar manner if surface is rough or porous.
- F. Sealing Coat: Uniformly apply a continuous sealing coat of curing and sealing compound to hardened concrete by power spray or roller according to manufacturer's written instruction.

3.7 PATCHING AND REPAIR

- A. Concrete will be considered by the Engineer as not conforming to the intent of the drawings and specifications for the following reasons:
 - 1. Concrete is not formed as shown on the drawings.
 - 2. Concrete is not in true alignment or level.
 - 3. Concrete which exhibits a defective surface.
 - 4. Concrete with defects that reduce the structural integrity of a member or members.
 - 5. Concrete jointed slabs with uncontrolled random cracking.
- B. Non-conforming concrete to required thickness, lines, details, and elevations will be rejected by the Engineer and shall be modified or replaced with concrete that conforms to the contract requirements without a claim by the Contractor for additional cost or extension of contract time.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of City Engineer for each individual area. Should the City Engineer grant permission for the Contractor to attempt restoration of a defective area by patching or other repair methods, such permission shall not be considered a waiver of the Engineer's right to require complete removal of the defective area if, in the Engineer's opinion, the restoration does not provide the structural or aesthetic integrity of the member or members.
- D. All repairs of defective areas shall conform to ACI 301. On areas requiring treatment of defects and until such repairs have been completed, only water cure will be permitted
- E. At any time prior to final acceptance, concrete found to be defective, damaged, or not in accordance with the specifications shall be repaired or removed and replaced with acceptable concrete.
- F. If approved by the Engineer, repair or replace concrete with excessive honeycombing due to improper placement.

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1. Honeycombed areas shall be removed down to solid concrete a minimum of 1 inch over the entire area. Feathered edges will not be permitted. If chipping is necessary, the edges shall be perpendicular to the surface or slightly undercut.
 2. Laitance and soft material shall be removed prior to patching with a pea gravel concrete mix and bonding agent approved by the Engineer.
 3. The area to be patched and an area at least 6 inches wide surrounding it shall be dampened to prevent absorption of water from the patching materials.
 4. If a cement slurry bonding grout is approved, the heavy-cream consistency grout shall then be rigorously brushed into the surface. The concrete patch material shall be installed prior to the bonding grout skimming over or drying.
 5. If approved, a bonding admixture, bonding compound, or epoxy adhesive may be used in strict accordance with the manufacturer's preparation and application recommendations. Comply with ACI 301 and ACI 503.2 for standard specifications for bonding plastic concrete to hardened concrete with a multiple component epoxy adhesive.
 6. The repair concrete shall be thoroughly consolidated in place and struck off so as to leave the patch slightly higher than the surrounding surface. The concrete shall be left undisturbed for at least 1 hour to permit initial shrinkage then finished.
 7. The patched area shall be kept damp for 7 days.
 8. The color of the patch material shall match the color of the surrounding concrete. Repairs shall be made promptly while the base concrete is less than 28 days old.
 9. Metal tools shall not be used in finishing a patch in a formed wall that will be exposed.
- G. Areas requiring patching shall not exceed 2 sq. ft. per 1000 sq. ft. of surface area and shall be widely dispersed. Areas showing excessive defects as determined by the Engineer shall be removed and replaced.
- H. High spots identified in the floor flatness and levelness survey may be removed with bump grinding. Areas to be ground shall not exceed more than 10 percent of any one slab nor more than 5 percent of the total slab-on-grade area. There are no limitations for exterior concrete pavement areas requiring grinding.
- I. If approved by the Engineer, concrete slab random cracking may be routed and sealed. The number of interior/exterior slabs to be routed and sealed shall not exceed more than 20 feet of any one slab nor more than 5 percent of the total number of slab-on-grade/pavement slabs. Slabs with more than one structural crack or with multiple cracks within a slab shall be removed and replaced. If random cracks are attributed to non-working sawcut control joints, uncracked joints parallel to the cracking shall be filled with a structural epoxy.
- J. Interior slab-on-grade subjected to lift truck traffic shall be routed and sealed with a semi-rigid epoxy sealant. Exterior slabs may be routed and sealed with the flexible joint sealant to be installed in pavement joints.

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3.8 ACCEPTANCE OF STRUCTURE

- A. Comply with ACI 301 and modifications in this section.
- B. Completed concrete work, which meets all applicable requirements, will be accepted without qualification.
- C. Completed concrete work which fails to meet one or more requirements but which has been repaired to bring it into compliance will be accepted without qualification.
- D. Completed concrete work which fails to meet one or more requirements and which cannot be brought into compliance may be accepted or rejected by the City Engineer. In this event, modifications may be required to assure that remaining work complies with the requirements.
- E. The costs of any additional tests or analysis, including additional architectural and engineering services, performed to prove the adequacy of the concrete work, shall be borne by the Contractor without extension of contract time.

3.9 MISCELLANEOUS CONCRETE

- A. Curbs: Provide monolithic finish to interior surface of curbs by stripping forms while concrete is still green and steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.
- B. Equipment bases and foundations: Provide machine and equipment bases and foundations as shown on drawings. Set anchor bolts for machines and equipment with template at correct elevations, complying with certified diagrams or templates of manufacturer furnishing machines and equipment.

3.10 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Field testing and inspection.
- B. Requirements:
 - 1. Provide and maintain an adequate program of quality control for the materials, production methods, and workmanship to assure conformance of all work to the project contract documents. ACI 121R outlines the essential elements of the Material Control portion of the QA program.
 - 2. All materials, equipment, and methods shall be subject to verification inspections and/or testing as specified herein; ACI 121R.

END OF SECTION

**SECTION 055000
METAL FABRICATIONS**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Miscellaneous framing and supports.

- B. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.

1.2 REFERENCES

- A. American Institute of Steel Construction (AISC):
 - 1. Specifications for the Design, Fabrication and Erection of Structural Steel for Building

- B. American National Standards Institute (ANSI):
 - 1. ANSI A14.3, "Ladders, Fixed, Safety Requirements."

- C. American Society for Testing and Materials (ASTM):
 - 1. ASTM A36, "Structural Steel."
 - 2. ASTM A53, "Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless."
 - 3. ASTM A123, "Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products."
 - 4. ASTM A153, "Zinc Coating (Hot-Dip) on Iron and Steel Hardware."
 - 5. ASTM A307, "Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength."
 - 6. ASTM A500, "Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes."
 - 7. ASTM A568, "Specification for General Requirements for Steel Sheet, Carbon, and High-Strength, Low Alloy Hot-Rolled and Cold Rolled."
 - 8. ASTM A627, "Specification for Homogeneous Tool-Resisting Steel Bars for Security Applications."
 - 9. ASTM A780, "Practice for Repair of Damaged and Uncoated Areas of Hot-Dipped Galvanized Coatings."
 - 10. ASTM B221, "Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tube."

- D. American Welding Society (AWS):
 - 1. AWS D1.1 - Structural Welding Code.

- E. Steel Structures Painting Council Specification (SSPC):

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METAL FABRICATIONS**

1. Steel Structures Painting Manual.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Steel plates, angles, and other structural shapes shall conform to ASTM A36.
- B. Steel pipe shall conform to ASTM A53, Grade B, Schedule 40.
- C. Galvanized steel pipe and tube shall conform to ASTM A53.
- D. Steel Tubing shall conform to ASTM A500.
- E. Sheet Steel, Galvanized: ASTM A446.
- F. North American Specification for Design of Code- Formed Steel : AISI S100
- G. North American Specification for Cold – Formed Steel Framing – Wall Stud Design
- H. Anchors and Fasteners for Aluminum: Stainless steel.
- I. Welding Materials: AWS D1.1; type required for materials being welded.
- J. Anchors
 1. Threaded Type Concrete Inserts: Galvanized malleable iron or cast steel capable of receiving 3/4 inch diameter machine bolts.
 2. Slotted Type Concrete Inserts: Welded box type fabricated with minimum 1/8 inch thick galvanized pressed steel plate with slot to receive 3/4 inch diameter square head bolt and knockout cover.
 3. Expansion Shield for Masonry Anchorage: FS FF-2-325.
 4. Toggle Bolts: FS FF-B-588.
- K. Fasteners
 1. Bolts, Nuts and Washers for Exterior Locations: ASTM A307, galvanized in accordance with ASTM A153.
 2. Bolts, Nuts and Washers for Interior Locations: ASTM A307, Grade A, regular hexagon head.
 3. Bolts, Round Head: ANSI B-18.5
 4. Wood Screws, Flat Head Carbon Steel: ANSI B-18.6.1.
 5. Plain Washers, Helical Spring Type Carbon Steel: FS FF-W-84.
- L. Primers:

**SECTION 055000
METAL FABRICATIONS**

1. Primer for Painting: One of following:
 - a. Tnemec, No. 99 red primer.
 - b. Chessman-Elliott Company: Ceco No. 15 Primox.
 - c. Rowe Products, Inc.: No. 7-C-19.
 - d. Or approved equal as permitted in Section 016000 – Product Substitutions.
2. Touch-Up Primer for Galvanized Surfaces: FS TT-P-641.

2.2 FABRICATION

- A. Fabricate steel items according to approved shop drawings and to applicable portions of AISC Specifications. Conceal welds where possible; grind exposed welds smooth and flush with adjacent finished surface. Ease exposed edges to small uniform radius.

2.3 ROUGH HARDWARE

- A. Furnish bent or otherwise custom fabricated bolts, plates, anchors, hangers, dowels, and other miscellaneous steel and iron shapes as required for framing and supporting woodwork, and for anchoring or securing woodwork to concrete or other structures. Straight bolts and other stock rough hardware items are specified in Division 6 sections.
- B. Fabricate items to sizes, shapes, and dimensions required. Furnish malleable-iron washers for heads and nuts which bear on wood structural connections; elsewhere, furnish steel washers.

2.4 FINISHES, GENERAL

- A. Comply with NAAMM "Metal Finishes Manual" for recommendations relative to application and designations of finishes.
- B. Finish metal fabrications after assembly.

2.5 STEEL AND IRON FINISHES

- A. Galvanizing: For those items indicated for galvanizing, apply zinc-coating by the hot-dip process compliance with the following requirements:
 1. ASTM A153 for galvanizing iron and steel hardware.
 2. ASTM A123 for galvanizing both fabricated and unfabricated iron and steel products made of uncoated rolled, pressed, and forged shapes, plates, bars, and strip 0.0299 inch thick and heavier.

**SECTION 055000
METAL FABRICATIONS**

- B. Preparation for Shop Priming: Prepare uncoated ferrous metal surfaces to comply with minimum requirements indicated below for SSPC surface preparation specifications and environmental exposure conditions of installed metal fabrications:
 - 1. Interiors (SSPC Zone 1A): SSPC-SP3 "Power Tool Cleaning":
- C. Apply shop primer to uncoated surfaces of metal fabrications, except those with galvanized finish or to be embedded in concrete, sprayed-on fireproofing, or masonry, unless otherwise indicated. Comply with requirements of SSPC-PA1 "Paint Application Specification No. 1" for shop painting.

2.6 SHOP PAINTING AND PROTECTIVE COATING

- A. Conform to Steel Structures Painting Council Specification 15-68T, Type 1, including preparation for painting.
- B. Hot-Dip galvanizing and zinc coatings applied on products fabricated from rolled, pressed, and forged steel shapes, plates, bars and strips shall comply with ASTM Specification A123. Galvanized surfaces for which a shop coat of paint is specified shall be chemically treated to provide a bond for the paint. Except for bolts and nuts, all galvanizing shall be done after fabrication.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Fastening to In-Place Construction: Provide anchorage devices and fasteners where necessary for securing miscellaneous metal fabrications to in-place construction; include threaded fasteners for concrete and masonry inserts, toggle bolts, through-bolts, lag bolts, wood screws, and other connectors as required.
- B. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installation of miscellaneous metal fabrications. Set metal fabrication accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- C. Field Welding: Comply with AWS Code for procedures of manual shielded metal-arc welding, appearance and quality of welds made, methods used in correcting welding work, and the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.

**SECTION 055000
METAL FABRICATIONS**

2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.
4. At exposed connections, finish exposed welds and surfaces smooth and blended so that no roughness shows after finishing and contour of welded surface matches those adjacent.

3.2 INSTALLATION - SECURITY GRILLES

- A. Securely fasten to structural framing around opening with tamper-proof fasteners.

3.3 ADJUSTING AND CLEANING

- A. Touch-Up Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same material as used for shop painting to comply with SSPC-PA 1 requirements for touch-up of field painted surfaces.
 1. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.
- B. For galvanized surfaces clean welds, bolted connections and abraded areas and apply galvanizing repair paint to comply with ASTM A780.

END OF SECTION

**SECTION 073140
METAL ROOF TILE**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Formed metal roofing panels with colored stone chip finish and associated metal flashings.
- B. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.
- C. Related Sections:
 - 1. Section 076200 – Sheet Metal Flashing and Trim
 - 2. Section 086250 – Tubular Daylighting Device

1.2 REFERENCES

- A. Fire-Test-Response Characteristics: ASTM E108 – Test for Fire Resistance of Roof Covering Materials, for application and slopes indicated.
 - 1. Fire-Test Exposure: Class A.
- B. ASTM A792/A792M: Sheet Steel, Aluminum-Zinc Alloy Coated by the Hot Dip Process, Structural (physical) Quality.
- C. UL 1897 and UL 580: Wind Uplift Resistance of Roof Assemblies.
- D. ASTM C920: Specification for Elastomeric Joint Sealants.
- E. Impact Resistance: UL 2218, Class 4.
- F. Appraisal Certificates:
 - 1. International Code Council, Whittier California, Report Nos. ICC ESR-1754.
 - 2. Underwriters Laboratories, Inc., Northbrook, Illinois, USA File No. R14710.

1.3 WARRANTY

- A. Manufacturing Warranty: Written, transferable, limited warranty provided by Metal Roof Tile Manufacturer covering manufacturing defects/excessive granule loss. Refer to warranty for specifics.
 - 1. Warranty Period: 50 years from date of Substantial Completion.

PART 2 - PRODUCTS

**SECTION 073140
METAL ROOF TILE**

2.1 MANUFACTURERS

- A. Subject to compliance with project requirements, manufacturers offering Products which may be incorporated in the Work include the following:
1. Decra Roofing Systems.
 2. Gerard Roofing Technologies.
 3. Metro Roof Products.
 4. Or approved equal.

2.2 MATERIALS

- A. Metal Tile: interlocking panels, with an interlocking nose, resembling barrel roofing tile.
1. Material: Pressure formed, Aluminum-Zinc Alloy Coated Steel with 5, 3-1/4 inch raised barrels.
 2. Finish: Ceramic coated colored stone chip finish.
 3. Thickness: 26 Gauge, .0179 inches
 4. Steel: Grade 37
 5. Size: 17 inches wide by 44-1/4 inches long
 6. Exposure: 14-1/2 inches wide by 39-1/2 inches long
 7. Weight: 160 pounds per square.
 8. Color: as noted on Plans.
- B. Flashing:
1. Valley: Aluminum-Zinc Alloy Coated Steel sheet, 26 Gauge, .0179 inches. Pressure formed into a valley, ASTM A792/A792M, 17 inches wide, 3-1/4 inches center up-stand.
 2. Fascia Metal: Bird Stop - Eave - Aluminum-Zinc Alloy Coated Steel sheet, 26 Gauge, .0179 inches. Pressure formed to match roofing material, color, and finish to be applied at eave closure.
 3. Pipe Jack Flashing: Aluminum-Zinc Alloy Coated Steel, 26 Gauge, .0179 inches. Clean, prime and paint to match roof material.
 4. Underpan - Aluminum-Zinc Alloy Coated Steel sheet, 26 Gauge, .0179 inches. Pressure formed to counter flash roof penetrations matching tile material profile.
- C. Hip & Ridge: Hip & Ridge covers, bird stop, rakes and other trim required, matching tile material, color, and finish.
1. Hips / Ridges and Rakes – Barrel Hip & Ridge.
 2. End Cap - Aluminum-Zinc Alloy Coated Steel sheet, 26 Gauge, .0179 inches. Circular cap to match roofing material, color, and finish to be applied at open end of hip & ridge at eaves.
 3. Ridge Bird Stop: Ridge - Aluminum-Zinc Alloy Coated Steel sheet, 26 Gauge, .0179 inches. Pressure formed angle to match roofing material, color, and finish to be applied along both sides of the ridge.

2.3 ACCESSORIES

**SECTION 073140
METAL ROOF TILE**

- A. Sheet Metal Materials: Aluminum-Zinc Alloy Coated Steel sheet: ASTM A 792/A 792M, Class AZ50 coating designation; minimum Grade 37.
- B. Felt Underlayment: ASTM D 226, Type I, No. 15 or ASTM D 226, Type II, No. 30, non-perforated, asphalt-saturated organic felt. As required by local building code.
- C. Sealant: One-part elastomeric polyurethane, sealant as recommended in writing by panel manufacturer. Where sealant will be exposed, provide in color to match panels.
 - 1. Standard: ASTM C920-86.
- D. Fasteners: Screws - Minimum No. 9 hex (1/4 inch diameter) by 1-1/2 inches long minimum, corrosion resistant, black or color coordinated to match the panels where visible.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Clean substrate of any projects and substances detrimental to metal panel roofing. Cover knotholes or other minor voids in substrate with sheet metal flashing secured with roofing nails.
- B. Coordinate installation of metal panels with flashing and other adjoining work to ensure proper sequencing. Do not install roofing until vent stacks and other penetrations through roofing have been installed, are securely fastened and flashing is in place.

3.2 INSTALLATION

- A. General: Comply with manufacturers written instructions for products and applications indicated, unless more stringent requirements apply.
- B. Underlayment: Apply number of plies required by governing code, but at least one ply, with each ply overlapping ply below a minimum 6 inches and ends lapped at least 18 inches.
- C. Valleys: Install in accordance with manufacturers instructions with a minimum 6 inch overlap in direction of flow.
- D. Flashing: Install as indicated on approved submittals and in accordance with manufacturers written instructions.

**SECTION 073140
METAL ROOF TILE**

- E. Tile Panels: Install Metal Roof Tile, accessories, flashing, and hip & ridge level and plumb. Use fasteners per above specifications.
 - 1. Install each Metal Roof Tile Panel with alternating courses staggered in accordance with manufacturer's instructions. Do not create a pattern.
 - 2. Fasten each panel with minimum four (4) fasteners horizontally along the back flange of each panel at pre-punched tabs. Review manufacturer's instructions for fastening order.
 - 3. First course of panels positioned at eave will require four (4) fasteners in the nose of the panel; use specified fasteners with color finish matching the panel color.

- F. Cut metal roof tile panels into each side of valleys in accordance with the manufacturer's instructions straight and true to the line of the valley.

- G. Hip & Ridge: Install Hip & Ridge metal roof tile panels along hips, ridges and rakes as indicated on approved submittals and in accordance with manufacturers written instructions. Bend and fold exposed ends of hips and ridges and neatly, cap with an end cap or a piece of similar material.

3.3 CLEANING AND PROTECTION

- A. Damaged Units: Replace panels and other components of the work that have been dented, damaged or have deteriorated beyond successful repair by finish touchup with acrylic coating and stone chip granules.

- B. Cleaning: After completing installation, remove any debris from the roof.

- C. Foot Traffic: Avoid walking on side laps. Foot traffic should be kept to the tile pans or low points, not on the high points, to prevent denting of panels.

END OF SECTION

SECTION 076200
SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Flashings and counterflashings , and fabricated sheet metal items.
 - 2. Sheet metal accessories.

- B. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

- B. Federal Specifications (FS):
 - 1. FS TT-C-494 - Coating Compound, Bituminous, Solvent Type, Acid Resistant.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Pre-Finished Aluminum Sheet: ASTM B209, 3003 alloy, H14 temper; 0.025 inch minimum thickness; finish shop pre-coated with PVDF (polyvinylidene fluoride)] coating; color as indicated on Drawings.

2.2 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.

- B. Fabricate cleats of same material as sheet, interlocking with sheet.

- C. Form pieces in longest possible lengths.

- D. Hem exposed edges on underside 1/2; miter and seam corners.

**SECTION 076200
SHEET METAL FLASHING AND TRIM**

- E. Form material with flat lock seams, except where otherwise indicated. At moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.
- F. Tin edges of copper sheet to be soldered. Solder shop formed metal joints. After soldering, remove flux. Wipe and wash solder joints clean. Weather seal joints.
- G. Fabricate gutters to profile and size indicated on Drawings.
- H. Fabricate downspouts to profile and size indicated on Drawings.
- I. Fabricate accessories in profile and size to suit gutters and downspouts.
 - 1. Anchorage Devices: Type recommended by fabricator.
 - 2. Gutter Supports: Brackets.
 - 3. Downspout Supports: Straps.
- J. Seal metal joints.

2.3 FACTORY FINISHING

- A. PVDF (polyvinylidene fluoride) coating: Multiple coat, thermally cured, fluoropolymer system conforming to AAMA 605.2.
- B. Primer Coat: Finish concealed side of metal sheets with primer compatible with finish system, as recommended by finish system manufacturer.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Secure flashings in place using concealed fasteners.
- B. Apply plastic cement compound between metal flashings and felt flashings.
- C. Fit flashings tight in place. Make corners square, surfaces true and straight in planes, and lines accurate to profiles.
- D. Seal metal joints watertight.

END OF SECTION

**SECTION 079200
JOINT SEALANTS**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Preparing sealant substrate surfaces.
 - 2. Sealant and backing.

- B. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other documents.

- C. Related Sections:
 - 1. Section 033000 - Cast-In-Place Concrete: Sealants used in conjunction with concrete.

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM C717 - Standard Terminology of Building Seals and Sealants.
 - 2. ASTM C834 - Specification for Latex Sealants.
 - 3. ASTM C920 - Specification for Elastomeric Joint Sealants.
 - 4. ASTM D1056 - Flexible Cellular Material- Sponge or Expanded Rubber.

- B. Federal Specifications (FS):
 - 1. FS SS-S-200 - Sealing Compounds, Two Component, Elastomeric, Polymer Type, Jet-Fuel Resistant, Cold Applied.
 - 2. FS TT-S-1657 - Sealing Compound, Single Component Butyl Rubber Based Solvent Release Type (for Buildings and other Types of Construction).

1.3 WARRANTY

- A. Section 017704 - Closeout Procedures and Training: Procedures for closeout submittals.

- B. Warranty:
 - 1. Submit written warranty signed by sealant manufacturer agreeing to replace sealants and accessories which fail because of loss of cohesion or adhesion or which do not cure.
 - 2. Warranty Period: 5 years or longer per the manufacturers' standard warranties.

**SECTION 079200
JOINT SEALANTS**

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with project requirements, manufacturers offering specified items which may be incorporated into the work include the following:
1. Bostik, Inc.
 2. Dow Corning.
 3. GE Silicones.
 4. Mameco International.
 5. W.R. Meadows, Inc.
 6. Nomaco, Inc.
 7. Pecora Corporation.
 8. Sika Corporation.
 9. Sonneborn Building Products Div. ChemRex, Inc.
 10. Tremco.
 11. USG Corp.
 12. Or approved equal.

2.2 BUILDING SEALANTS (See Sealant Schedule at the end of this Section for specific use of sealants.)

- A. Urethanes:
1. Type 1: Two-Part Urethane: Self-Leveling, ASTM C920, Type M, Grade P, Class 25.
 - a. Chem-Calk CC-550, by Bostik.
 - b. Vulkem 245, by Mameco.
 - c. Vulkem 255, Wide-Joint, by Mameco.
 - d. NR-200 Urexpan, by Pecora Corporation.
 - e. Or approved equal.
 2. Type 2: Two-Part Urethane: Non-Sag, ASTM C920, Type M, Grade NS, Class 25.
 - a. Chem-Calk 500, by Bostik.
 - b. Vulkem 227, by Mameco.
 - c. Sonolastic NP 2, by Sonneborn Building Products, ChemRex Inc.
 - d. Or approved equal.
 3. Type 3: One-Part Urethane: Self-Leveling, ASTM C920, Type S, Grade P, Class 25.
 - a. Vulkem 45, by Mameco.
 - b. Urexpan NR-201, by Pecora Corporation.
 - c. Sonolastic SL1, by Sonneborn Building Products, ChemRex Inc.
 - d. Sikaflex 1C-SL by Sika.
 - e. Or approved equal.

**SECTION 079200
JOINT SEALANTS**

4. Type 4: One-Part Urethane: Non-Sag, ASTM C920, Type S, Grade NS, Class 25.
 - a. Chem-Calk 900, by Bostik.
 - b. Vulkem 116, by Mameco.
 - c. Sonolastic NP I, by Sonneborn Building Products, ChemRex Inc.
 - d. Or approved equal.
- B. Silicones:
1. Type 1: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 50.
 - a. 795 Silicone Building Sealant, by Dow Corning.
 - b. 864 Architectural Silicone Sealant, by Pecora Corporation.
 - c. Or approved equal.
 2. Type 2: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 25.
 - a. 999-A Silicone Building & Glazing Sealant, Dow Corning.
 - b. Construction 1200 Sealant, General Electric Company.
 - c. Or approved equal.
 3. Type 3: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 25. Vertical Surfaces Only.
 - a. Construction 1200 Sealant, General Electric Company.
 - b. 999-A, Dow Corning.
 - c. 860 Glaziers and Contractors Silicone Sealant, by Pecora Corporation. (colors only)
 - d. Or approved equal.
 4. Type 4: One-Part Silicones: ASTM C920, Type S, Grade NS, Class 25 or 50.
 - a. 786 Mildew Resistant Silicone Sealant, Dow Corning.
 - b. SCS 1700 Sanitary Sealant, General Electric.
 - c. 898 Silicone Sanitary Sealant, Pecora Corporation.
 - d. Or approved equal.
- C. Acoustical Sealants:
1. Type 1: AC-20 FTR Acoustical and Insulation Sealant, by Pecora Corporation.
 2. Type 2: 60+ Unicrylic, by Pecora Corporation.
 3. Type 3: Sheetrock Acoustical Sealant, by United States Gypsum.
 4. Or approved equal.
- D. Butyls:
1. Type 1: One-Part Butyl, Non-Sag, FS TT-S-1657.
 - a. Chem-Calk 300, by Bostik.
 - b. BC-158 Butyl Rubber, by Pecora Corporation. (ASTM C1085)
 - c. Or approved equal.
- E. Preformed Compressible & Non-Compressible Fillers:
1. Type 1: Backer Rod - Closed cell polyethylene foam:
 - a. HBR Backer Rod, by Nomaco.
 - b. #92 Greenrod, by Nomaco.

**SECTION 079200
JOINT SEALANTS**

- c. Sonofoam Closed-Cell Backer Rod, Sonneborn Building Products, ChemRex Inc.
 - d. Or approved equal.
 - e. Or approved equal.
- F. Bond Breaker Tape: Polyethylene tape of plastic as recommended by sealant manufacturer, to be applied to sealant-contact surfaces where bond to substrate of joint filler must be avoided for proper performance of sealant

2.3 PAVING SEALANTS

- A. Type 1: Two-Part Urethane: Self-Leveling, ASTM C920, Type M, Grade P, Class 25.
 - 1. Vulkem 202, by Mameco. (Jet Fuel Resistant) (FS SS-S-200D, Type H only)
 - 2. NR-300 Urexpan, by Pecora Corporation. (FS SS-S-200E)
 - 3. Or approved equal
- B. Type 2: One-Part Urethane: Self-Leveling, ASTM C920, Type S, Grade P, Class 25.
 - 1. Sonomeric 1 Sealant, by Sonneborn Building Products, ChemRex Inc. (FS SS-S-200E)
 - 2. Vulkem 45, by Mameco.
 - 3. Or approved equal

2.4 COLORS

- A. Generally use sealant colors matching color of material joint is located in.
- B. Where a joint occurs between two materials of differing colors and Contractor cannot determine which material to match, contact the Engineer for selection.

2.5 ACCESSORIES

- A. Joint Cleaner: Provide type of joint cleaning compound recommended by sealant manufacturer for joint surfaces to be cleaned.
- B. Primer: As recommended by sealant manufacturer.
- C. Masking tape and similar accessories to protect surfaces from damage.

**SECTION 079200
JOINT SEALANTS**

PART 3 - EXECUTION

3.1 PREPARATION

- A. Prepare and size joints in accordance with manufacturer's instructions. Clean substrates of dirt, laitance, dust, or mortar using solvent, abrasion, or sandblasting as recommended by manufacturer. Remove loose materials and foreign matter which might impair adhesion of sealant.
- B. Verify that joint backing and release tapes are compatible with sealant. Verify sealant is suitable for substrate. Verify that sealant is paintable if painted finish is indicated.
- C. Protect materials surrounding work of this Section from damage or disfiguration.

3.2 INSTALLATION

- A. Install sealant in accordance with manufacturer's published instructions.
- B. Prime or seal joint surfaces where recommended by sealant manufacturer. Do not allow primer or sealer to spill or migrate onto adjoining surfaces.
- C. Install backer rod and bond breaker tape where required by manufacturer.
- D. Install preformed compressible and non-compressible fillers in accordance with manufacturer's published instructions.
- E. Install sealants to depths recommended by sealant manufacturer in uniform, continuous ribbons free of air pockets, foreign embedded matter, ridges, and sags, "wetting" joint bond surfaces equally on both sides.
- F. Tool joints concave unless shown otherwise. Where horizontal joints are between a horizontal surface and a vertical surface, fill joint to form slight cove so that joint will not trap moisture and foreign matter. Dry tool joints. Do not use soap, water, or solvent to tool joints.
- G. Epoxy Floor Joint Sealant: Install sealant at floor construction and control joints in accordance with manufacturer's published instructions and initially under manufacturer's supervision.

3.3 CURING

- A. Cure sealants in compliance with manufacturer's published instructions.

**SECTION 079200
JOINT SEALANTS**

3.4 CLEANING

- A. Remove excess and spillage of sealants promptly as the work progresses, using materials and methods as recommended by sealant and substrate manufacturers. Clean adjoining surfaces to eliminate evidence of spillage without damage to adjoining surfaces or finishes.

3.5 SEALANT SCHEDULE

A. Exterior Joints:

- 1. Perimeters of exterior openings where frames and other penetrations meet exterior facade of building: precast concrete, brick, CMU, polymer reinforced concrete.
 - a. Sealant Urethane Type 2
 - b. Sealant Silicone Type 1 (for prefinished materials only)
- 2. Expansion and control joints in exterior surfaces of cast-in-place concrete walls, precast architectural wall panels.
 - a. Sealant Urethane Type 2
 - b. Sealant Urethane Type 4
 - c. Preformed Compressible & Non-Compressible Filler Type 1
- 3. Expansion and control joints in exterior surfaces of unit masonry walls and polymer reinforced concrete, including at metal panels.
 - a. Sealant Urethane Type 2
- 4. Coping joints, coping-to-facade joints, cornice and wash, or horizontal surface joints not subject to foot or vehicular traffic.
 - a. Sealant Urethane Type 2
 - b. Sealant Urethane Type 4
 - c. Sealant Silicone Type 1 (for prefinished materials only)
- 5. Exterior joints in horizontal wearing and non-wearing surfaces.
 - a. Sealant No. Urethane Type 1
 - b. Sealant No. Urethane Type 3
 - c. Preformed Compressible & Non-Compressible Filler Type 1
- 6. Paving joints and curbs.
 - a. Sealant Urethane Type 4
 - b. Paving Sealant Type 2
- 7. Setting bed for threshold and saddles.
 - a. Sealant Acoustical Type 1
- 8. Painted metal lap or flashing joints.
 - a. Sealant Silicone Type 1

B. Interior Joints:

- 1. Seal interior perimeters of exterior openings.
- 2. Expansion and control joints on interior of exterior cast-in-place concrete walls.
- 3. Expansion and control joints on interior of exterior precast, architectural wall panels.

**SECTION 079200
JOINT SEALANTS**

4. Expansion and control joints on interior of exterior masonry walls.
5. Perimeters of interior hollow metal and aluminum frames.
6. Interior masonry vertical control joints and intersecting masonry walls; CMU-to-CMU, CMU-to-concrete.
7. Joints at intersection of exterior masonry walls and interior gypsum board partitions.
8. For all of the above interior joints:
 - a. Sealant Urethane Type 2
 - b. Sealant Urethane Type 4
 - c. Sealant Silicone Type 1 (for prefinished materials only)
9. Exposed interior control joints in drywall and concealed joints.
 - a. Sealant Acrylic, Latex, Type 1
 - b. Sealant Acoustical Type 1
 - c. Sealant Acoustical Type 3
 - d. Sealant Butyl Type 1
10. Joints at tops of non-load bearing masonry walls at underside of cast-in-place concrete.
 - a. Sealant Urethane Type 2
 - b. Sealant Urethane Type 4
11. Perimeter of bath fixtures: sinks, tubs, urinals, waterclosets, basins, vanities, etc.
 - a. Sealant Silicone Type 4
12. Interior expansion and control joints in floor surfaces exposed to foot traffic.
 - a. Sealant Urethane Type 2
 - b. Sealant Urethane Type 4
 - c. Preformed Compressible & Non-Compressible Filler Type 1

END OF SECTION

**SECTION 081250
ALUMINUM AND FIBERGLASS DOORS**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Aluminum fiberglass reinforced polyester (FRP) doors as indicated
 - 2. Fiberglass Frames.
- B. Related Documents: The Contract Documents, as defined in Section 011000 – Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.
- C. Related Sections:
 - 1. Section 087100: Door Hardware.

1.3 QUALITY ASSURANCE

- A. Supply hardware to door manufacturer for installation on doors prior to shipment. Provide and distribute copies of Shop Drawings to hardware supplier and obtain hardware supplier's verification of details and dimensions.
- B. Comply with the following as a minimum requirement:
 - 1. ASTM D 256 - Determining Izod Pendulum Impact Resistance of Notched Specimens of Plastic.
 - 2. ASTM D 570 - Water Absorption of Plastics.
 - 3. ASTM D 1242 - Resistance of Plastic Materials to Abrasion.
 - 4. ASTM D 2583 - Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.

1.4 WARRANTY

- A. Manufacturer shall provide a 5 year material warranty.
- B. Installer shall provide a 2 year labor warranty.

PART 2 - PRODUCTS

2.1 DOOR AND PANEL TYPES

- A. Manufacturers:
 - 1. Special-Lite, Inc., SL-17 FRP Flush Door
 - 2. United States Aluminum, FRP Flush Panel Door.
 - 3. Commercial Door Systems, F200 Narrow Stile FRP door.
 - 4. Or approved equal.

2.2 MATERIALS

- A. Stiles and rails shall be aluminum alloy with steel tie rod connections.

**SECTION 081250
ALUMINUM AND FIBERGLASS DOORS**

- B. Face sheets shall be full thickness color-bonded fiberglass-reinforced polyester with a pebble-like finish.
- C. Core shall be poured in place urethane foam to provide an integral door assembly.

2.3 DOOR CONSTRUCTION

- A. Doors: 1-3/4 inches thick, constructed of aluminum alloy rails and stiles, joined with steel tie rods.
- B. Core: Foamed-in-place urethane.
- C. Face Sheets: Fiberglass-reinforced polyester, 0.120 inch thick, with pebble-like finish. Color shall be permanently bonded through the full thickness of the fiberglass face sheet.
- D. Provide reinforcement for finish hardware items. Mortise, drill, and tap to template requirements for mortise type hardware. Reinforcement shall be installed before foam core is installed.

2.4 FRAMES

- A. General: Provide pultruded fiberglass frames for doors, where indicated.
- B. Frames: Comply with the requirements of grade specified for corresponding doors. Frames for E-P (premier) series fiberglass doors to be manufactured from 0.1875 inch (4.8 mm) thick fiberglass pultrusions. Profile must be of standard hollow type to permit installation into new concrete or blocked walls, as well as slipon drywall situations. Solid (foam filled) or boxed frames will not be accepted.
- C. Door Silencers: Except on weather-stripped frames, fabricated stops to receive three silencers on strike jambs of single-door frames and two silencers on heads of double-door frames.
- D. Supports and Anchors: Fabricated from no less than 0.125 inch (3.18 mm) thick pultruded fiberglass material.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install doors in accordance with manufacturer's instructions and as indicated on the Drawings.
- B. Install doors plumb, level, square, true to line, and without warp or rack.
- C. Anchor frames securely in place.
- D. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Engineer.

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ALUMINUM AND FIBERGLASS DOORS**

- E. Remove and replace damaged components that cannot be successfully repaired as determined by Engineer.
- 3.2 ADJUSTING AND CLEANING
- A. Adjust doors, hinges, and locksets for smooth operation without binding.
 - B. Remove rubbish, waste and debris and legally dispose of off the Project site.

END OF SECTION

**SECTION 086250
TUBULAR DAYLIGHTING DEVICE**

PART 1 - GENERAL

1.1 SUMMARY

- A. Tubular daylighting device, consisting of roof dome, reflective tube, and diffuser assembly; configuration as indicated on the drawings.
- B. Accessories.

1.2 RELATED SECTIONS

- A. Section 073140 – Metal Roof Tile.
- B. Section 076200 – Sheet Metal Flashing and Trim.

1.3 REFERENCES

- A. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
- B. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2008a.
- C. ASTM A 463/A 463M - Standard Specification for Steel Sheet, Aluminum Coated, by the Hot Dip Process; 2006.
- D. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc Coated (Galvanized), by the Hot Dip Process; 2007.
- E. ASTM E 283 - Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen; 2004.
- F. ASTM E 308 - Standard Practice for Computing the Colors of Objects by Using the CIE System; 2006.
- G. ASTM E 330 - Structural Performance of Exterior Windows, Curtain Walls and Doors; 2002.
- H. ASTM E 547 - Test Method for Water Penetration of Exterior Windows, Skylights, Doors and Curtain walls by Cyclic Air Pressure Difference; 2000.

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- I. ASTM D 635 - Test Method for Rate of Burning and/or Extent of Time of Burning of Self-Supporting Plastics in a Horizontal Position; 2006.
- J. ASTM D-1929 - Test Method for Ignition Properties of Plastics; 1996 (2001).
- K. ICC AC-16 - Acceptance Criteria for Plastic Skylights; 2008.

1.4 PERFORMANCE REQUIREMENTS

- A. Completed tubular daylighting device assemblies shall be capable of meeting the following performance requirements:
 - 1. Air Infiltration Test: Air infiltration will not exceed 0.30 cfm/sf aperture with a pressure delta of 1.57 psf across the tube when tested in accordance with ASTM E 283.
 - 2. Water Resistance Test: No uncontrolled water leakage at 10.5 psf pressure differential with water rate of 5 gallons/hour/sf when tested in accordance with ASTM E 547.
 - 3. Uniform Load Test:
 - a. No breakage, permanent damage to fasteners, hardware parts, or damage to make system inoperable or cause excessive permanent deflection of any section when tested at a Positive Load of 150 psf (7.18 kPa) or Negative Load of 60 psf (2.87 kPa) in accordance with ICC AC-16 Section A, or Negative Load of 70 psf (3.35 kPa) if tested per ICC AC-16 Section B.
 - b. All units shall be tested with a safety factor of (3) for positive pressure and (2) for negative pressure, acting normal to plane of roof in accordance with ASTM E 330.
 - 4. Fire Testing:
 - a. When used with the Dome Edge Protection Band, all domes meet fire rating requirements as described in the 2006 International Building Code.
 - b. Self-Ignition Temperature - Greater than 650 degrees F per ASTM D-1929.
 - c. Smoke Density - Rating no greater than 450 per ASTM Standard E 84 in way intended for use. Classification C.
 - d. Rate of Burn and/or Extent - Maximum Burning Rate: 2.5 inches/min (62 mm/min) Classification CC-2 per ASTM D 635.
 - e. Rate of Burn and/or Extent - Maximum Burn Extent: 1 inch (25 mm) Classification CC-1 per ASTM D 635.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engaged in manufacture of tubular daylighting devices for minimum 15 years.

**SECTION 086250
TUBULAR DAYLIGHTING DEVICE**

1.6 WARRANTY

- A. Daylighting Device: Manufacturer's standard warranty for 10 years.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with project requirements, manufacturers offering items which may be incorporated in the Work include the following:
 - 1. Solatube International, Inc.
 - 2. Velux Inc.
 - 3. Or approved equal.
- B. Requests for substitutions will be considered in accordance with provisions of Section 016000 – Product Requirements.
- C. Requests for substitutions will be considered provided a lighting layout with photometric data is supplied to demonstrate light levels will meet original design intent.

2.2 TUBULAR DAYLIGHTING DEVICES

- A. Tubular Daylighting Devices General : Transparent roof-mounted skylight dome and self-flashing curb, reflective tube, and ceiling level diffuser assembly, transferring sunlight to interior spaces; complying with ICC AC-16.
- B. Brighten Up Series: Solatube Model 160 DS, 10 Inch (250 mm) Daylighting System, or approved equal.
 - 1. Roof Dome Assembly: Transparent, UV and impact resistant dome with flashing base supporting dome and top of tube.
 - a. Outer Dome Glazing: Type DA, 0.125 inch (3 mm) minimum thickness injection molded acrylic classified as CC2 material; UV inhibiting (100 percent UV C, 100 percent UV B and 98.5 percent UV A), impact modified acrylic blend.
 - b. Raybender 3000: Variable prism optic molded into outer dome to capture low angle sunlight and limit high angle sunlight.
 - c. LightTracker Reflector: Aluminum sheet, thickness 0.015 inch (0.4 mm) with Spectralight Infinity. Positioned in dome to capture low angle sunlight.
 - 2. Flashing Base: One piece, seamless, leak-proof flashing functioning as base support for dome and top of tube.
 - a. Base Material: Sheet steel, corrosion resistant, meeting ASTM A 653/A 653M or ASTM A 463/A 463M, 0.028 inch (0.7 mm) thick.
 - b. Base Flat: Flat Type F4, no pitch 4 inches (102 mm) high.

**SECTION 086250
TUBULAR DAYLIGHTING DEVICE**

- c. Metal Roof Flashing Kit: Type MR. Includes Butyl tape, flashing screws, speed nuts, corner washers and polyurethane sealant.
3. Roof Flashing Turret Extensions: Provide manufacturer's standard extensions for applications requiring:
 - a. Type T2: Additional lengths of 2 inches (50 mm) extension.
4. Tube Ring: Attached to top of base section; 0.090 inch (2.3 mm) nominal thickness injection molded high impact acrylic; to prevent thermal bridging between base flashing and tubing and channel condensed moisture out of tubing.
5. Reflective Extension Tube: Aluminum sheet, thickness 0.015 inch (0.4 mm).
 - a. Interior Finish: Spectralight Infinity high reflectance specular finish on exposed reflective surface Visible spectrum (400 nm to 760 nm) greater than 99 percent. Total solar spectrum (400 nm to 2500 nm) less than 80.2 percent.
 - b. Color: a* and b* (defined by CIE L*a*b* color model) shall not exceed plus 2 or be less than minus 2 as determined in accordance to ASTM E 308.
 - c. Tube Diameter: Approximately 10 inches (250 mm).
6. Reflective 30 degree Adjustable tube: Aluminum sheet, thickness .015 inch (0.4 mm)
 - a. Interior Finish: Spectralight Infinity high reflectance specular finish on exposed reflective surface Visible spectrum (400 nm to 760 nm) greater than 99 percent. Total solar spectrum (400 nm to 2500 nm) less than 80.2 percent.
7. Ceiling Ring: Injection molded impact resistant acrylic. Nominal thickness is 0.110 inches (2.8 mm).
8. Dual Glazed Diffuser Assembly as selected by Engineer:
 - a. Lower glazing with integral injection molded acrylic Dress Ring classified as CC2 material. Nominal thickness is 0.110 inches (2.8 mm):
 - 1) Classic Vusion Diffuser: Molded acrylic plastic classified as CC2 material (nominal thickness 0.090 inches (2.29 mm) with injection molded acrylic Diffuser Trim Ring. Type L4.
 - 2) JustFrost Decorative Fixture: Full-tempered glass lens (nominal thickness is 0.16 inches (4 mm)), and decorative metal fasteners. Type L9.
 - 3) TierDrop Decorative Fixture: Three layers of full-tempered frosted glass lens (nominal thickness is 0.16 inches (4 mm)). Bottom layer is continuous with two stepped full-tempered glass rings on top and decorative metal fasteners. Type L10.
 - 4) OptiView Decorative Fixture: Molded polycarbonate plastic Fresnel Lens classified as CC1 material (nominal thickness is 0.022 inches (0.61 mm)) with full-tempered frosted glass bezel (nominal thickness is 0.16 inches (4 mm)), and decorative metal fasteners. Type L11.

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TUBULAR DAYLIGHTING DEVICE**

- b. Upper glazing: PET GAG plastic with EPDM low density sponge seal to minimize condensation and bug, dirt, and air infiltration per ASTM E283. The nominal thickness is 0.039 inches (0.99 mm).
 - 1) Natural Effect Lens: Type LN
 - 2) Softening Effect Lens: Type LS.

2.3 ACCESSORIES

- A. Fasteners: Same material as metals being fastened, non-magnetic steel, non-corrosive metal of type recommended by manufacturer, or injection molded nylon.
- B. Sealant: Polyurethane or copolymer based elastomeric sealant as provided or recommended by manufacturer.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's printed instructions.
- B. After installation of first unit, field test to determine adequacy of installation. Conduct water test in presence of the Engineer. Correct if needed before proceeding with installation of subsequent units.

END OF SECTION

**SECTION 087100
DOOR HARDWARE**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Door hardware, including gate locking hardware for Cherry Ave Beach building.
- B. Related Divisions:
 - 1. Section 079200 – Joint Sealants.
 - 2. Section 081250 –Doors and Frames.
- C. Specific Omissions: Hardware for the following is specified or indicated elsewhere.
 - 1. Windows.
 - 2. Cabinets, including open wall shelving and locks.
 - 3. Signs.
 - 4. Toilet accessories, including grab bars.
 - 5. Installation.
 - 6. Rough hardware.

1.2 REFERENCES

- A. Use date of standard in effect as of Bid date.
 - 1. American National Standards Institute – ANSI 156.18 – Materials and Finishes.
 - a) ANSI A156.18 Materials and Finishes
 - 2. BHMA – Builders Hardware Manufacturers Association
 - 3. DHI – Door and Hardware Institute
 - 4. NFPA – National Fire Protection Association
 - a) NFPA 80 – Fire Doors and Windows
 - b) NFPA 105 – Smoke and Draft Control Door Assemblies
 - c) NFPA 252 – Fire Tests of Door Assemblies
 - 5. UL – Underwriters Laboratories
 - a) UL10C – Positive Pressure Fire Tests of Door Assemblies.
 - b) UL 305 – Panic Hardware
 - 6. WHI – Warnock Hersey Incorporated State of California Building Code
 - 7. Local applicable codes
- B. Abbreviations
 - 1. Manufacturers: see table at 2.1.A of this section

1.3 SUBMITTALS & SUBSTITUTIONS

**SECTION 087100
DOOR HARDWARE**

- A. Substitutions per Section 016000 – Product Requirements. Include product data and indicate benefit to the Project. Furnish operating samples on request. Engineer will make final determination of equivalency.
 - B. Items listed with no substitute manufacturers have been requested by Owner to meet existing standard.
 - C. Furnish as-built/as-installed schedule with closeout documents, including keying schedule, riser and point-to-point wiring diagrams, manufacturers' installation, adjustment and maintenance information, and supplier's final inspection report.
- 1.4 PROJECT CONDITIONS AND COORDINATION:
- A. Where exact types of hardware specified are not adaptable to finished shape or size of members requiring hardware, provide suitable types having as nearly as practical the same operation and quality as type specified, subject to Engineer's approval.
 - A. Coordination: Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents. Furnish related trades with the following information:
 - 1. Location of embedded and attached items to concrete.
 - 2. Location of wall-mounted hardware, including wall stops.
 - 3. Location of finish floor materials and floor-mounted hardware.
 - 4. At masonry construction, coordinate with the anchoring and fiberglass frame supplier prior to frame installation by placing a strip of insulation, wood, or foam, on the back of the hollow metal frame behind the rabbet section for continuous hinges, as well as at rim panic hardware strike locations, silencers, coordinators, and door closer arm locations. When the frame is grouted in place, the backing will allow drilling and tapping without dulling or breaking the installer's bits.
 - 5. Manufacturers' templates to door and frame fabricators.
- 1.7 WARRANTY
- A. Part of respective manufacturers' regular terms of sale. Provide manufacturers' written warranties:
 - 1. Locksets: Three years.
 - 2. Closers: Ten years mechanical.
 - 3. Hinges: One year.
 - 4. Other Hardware: Two years.
- 1.8 REGULATORY REQUIREMENTS
- A. Locate latching hardware between 34 inches to 44 inches above the finished floor, per California Building Code, Section 1008.1.9.2 and 1133B.2.5.2.

**SECTION 087100
DOOR HARDWARE**

- B. Handles, pull, latches, locks, other operating devices: readily openable from egress side without tight grasping, tight pinching, or twisting of the wrist to operate. California Building Code 1133B.2.5.2.
- C. Adjust doors to open with not more than 5.0-pounds pressure to open at exterior doors and 5.0-pounds at interior doors. As allowed per California Building Code, Section 1133B.2.5 and 1008.1.3, local authority may increase the allowable pressure for fire doors to achieve positive latching, but not to exceed 15-pounds.
 - 1. Door latch shall release when subjected to a 15-pound force.
 - 2. Door shall be set in motion when subjected to a 30-pound force.
 - 3. Once set in motion, door shall swing to a full-open position when subjected to a 5-pound force.
- D. Adjust door closer sweep periods so that from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the landing side of the door, per California Building Code Section 1133B.2.5.1. Adjust delayed action closers at accessible stalls for three to five second delay before regular sweep speed commences.
- E. Smooth surfaces at bottom 10 inches of push sides of doors, facilitating push-open with wheelchair footrests, per California Building Code Section 1133B.2.6.
- F. Door opening clear width at accessible stalls no less than 32 inches, measured from face of frame stop, or edge of inactive leaf of pair of doors, to door face with door opened to 90 degrees. Hardware projection not a factor in clear width if located above 30 inches and the hardware projects no more than 4 inches. California Building Code Section 1133B.2.2, 1133B.2.3, and 1008.1.1.
- G. Door opening clear height no less than 80 inches measured from top of sill to bottom of frame header stop. Projections into clear opening height not to exceed 2 inches. California Building Code Section 1133B.2.2 and 1008.1.1.
- H. Thresholds: floor or landing no more than 0.50 inches below the top of the threshold of the doorway. Change in level between 0.25 inches and 0.50 inches: beveled to slope no greater than 1:2 (50 percent slope). California Building Code Section 1133B.2.4.1.
- I. Floor stops: Do not locate in path of travel. Locate no more than 4 inches from walls, per DSA Policy #99-08 (Access).
- J. Pairs of doors: limit swing of inactive leaf to 90 degrees to protect persons reading wall-mounted tactile signage.
- K. Meet California Building Code Sections 1133B.2, and 1008.1.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

- A. Listed acceptable alternate manufacturers in accordance with the Item

**SECTION 087100
DOOR HARDWARE**

Equivalency provisions:

1. Continuous Hinges
 - a. (MAR) Markar.
 - b. Select.
 - c. Hager.
 - d. Or approved equal.
2. Key System
 - a. (SCH) Schlage.
 - b. Or approved equal.
3. Mechanical Locks
 - a. (SCH) Schlage.
 - b. Falcon.
 - c. Or approved equal.
4. Dead Bolts
 - a. (FAL) Falcon
 - b. or approved equal
5. Closers
 - a. (LCN) LCN
 - b. Or approved equal.
6. Push & Pull Plates
 - a. (TRI) Trimco.
 - b. Rockwood.
 - c. Or approved equal.
7. Kickplates
 - a. (TRI) Trimco.
 - b. Rockwood.
 - c. Or approved equal.
8. Stops & Holders
 - a. (TRI) Trimco.
 - b. Rockwood.
 - c. Or approved equal.
9. Overhead Stops
 - a. (GLY) Glynn-Johnson.
 - b. ABH.
 - c. Or approved equal.

2.2 HINGING METHODS:

SECTION 087100 DOOR HARDWARE

- A. Drawings typically depict doors at 90 degrees, doors will actually swing to maximum allowable. Use wide-throw conventional or continuous hinges as needed up to 8 inches in width to allow door to stand parallel to wall for true 180-degree opening. Advise Engineer if 8-inch width is insufficient.
- B. Conform to manufacturer's published hinge selection standard for door dimensions, weight and frequency, and to hinge selection as scheduled. Where manufacturer's standard exceeds the scheduled product, furnish the heavier of the two choices, notify Engineer of deviation from scheduled hardware.
- C. Continuous Hinges:
 - 1. Pinned steel/stainless steel type: continuous stainless steel, 0.25-inch diameter stainless-steel hinge pin, 316 alloy.
 - a. Use engineered application-specific wide-throw units as needed to provide maximum swing degree of swing, advise architect if required width exceeds 8 inches.

2.3 LOCKSETS, LATCHSETS, DEADBOLTS

- D. Mortise Locksets and Latchsets: as scheduled.
 - 1. Chassis: cold-rolled steel, handing field-changeable without disassembly.
 - 2. Universal lock case – 10 functions in one case.
 - 3. Floating mounting tabs automatically adjusts to fit a beveled door edge.
 - 4. Latchbolts: 0.75 inch throw stainless steel anti-friction type.
 - 5. Lever Trim: through-bolted, accessible design, cast lever or solid extruded bar type levers as scheduled. Filled hollow tube design unacceptable.
 - a. Spindles: security design independent breakaway. Breakage of outside lever does not allow access to inside lever's hubworks to gain wrongful entry.
 - b. Inside lever applied by screwless shank mounting – no exposed trim mount screws.
 - c. Levers rotate up or down for ease of use.
 - d. Vandalgard locks: locked lever freely rotates down while remaining securely locked. This feature prevents damage to internal lock components when subjected to excessive force.
 - 6. Furnish solid cylinder collars with wave springs. Wall of collar to cover rim of mortise cylinder.
 - 7. Thumbturns: accessible design not requiring pinching or twisting motions to operate.
 - 8. Deadbolts: stainless steel 1-inch throw.
 - 9. Electric operation: Manufacturer-installed continuous duty solenoid.
 - 10. Strikes: 16 gage curved steel, bronze or brass with 1 inch deep box construction, lips of sufficient length to clear trim and protect clothing.
 - 11. Scheduled Lock Series and Design: Schlage L series, 03L design or approved equal.

**SECTION 087100
DOOR HARDWARE**

2.6 CLOSERS

A. Surface Closers:

1. Full rack-and-pinion type cylinder with removable non-ferrous cover and cast iron body. Double heat-treated pinion shaft, single piece forged piston, chrome-silicon steel spring.
1. ISO 2000 certified. Units stamped with date-of-manufacture code.
2. Independent lab-tested 10,000,000 cycles.
3. Non-sized and adjustable. Place closers inside building, stairs and rooms.
4. Plates, brackets and special templating when needed for interface with particular header, door and wall conditions and neighboring hardware.
5. Advanced Variable Backcheck (AVB): where scheduled, these units commence backcheck at approximately 45 degrees.
6. Adjustable to open with not more than 5.0-pounds pressure to open at exterior doors and 5.0-pounds at interior doors. As allowed per California Building Code, Section 1133B.2.5 and 1008.1.3, local authority may increase the allowable pressure for fire doors to achieve positive latching, but not to exceed 15-pounds.
7. Separate adjusting valves for closing speed, latching speed and backcheck, fourth valve for delayed action where scheduled.
8. Extra-duty arms (EDA) at exterior doors scheduled with parallel arm units. EDA arms: rigid main and forearm, reinforced elbow.
9. Exterior door closers: tested to 100 hours of ASTM B117 salt spray test, furnish data on request.
10. Exterior doors: seasonal adjustments not required for temperatures form 120 degrees F to -30 degrees F, furnish checking fluid data on request.
11. Non-flaming fluid, will not fuel door or floor covering fires.
12. Pressure Relief Valves (PRV) not permitted.

B. High Security Closers: Removable heavy gage metal case. Cylinders independent test lab certified to exceed 10,000,000 cycles. Vandal and tamper resistant forged steel arm. Exposed fasteners: pinned TORX type.

1. Advanced Variable Backcheck (AVB): where scheduled, these units commence backcheck at approximately 45 degrees.

2.7 OTHER HARDWARE

- A. Overhead Stops: Non-plastic mechanisms and finished metal end caps. Field-changeable hold-open, friction and stop-only functions.**
- B. Kick Plates: Four beveled edges, .050 inches minimum thickness, height and width as scheduled. Sheet-metal screws of bronze or stainless steel to match other hardware. Number 316 stainless steel alloy.**
- C. Door Stops: Provide stops to protect walls, casework or other hardware.**

**SECTION 087100
DOOR HARDWARE**

1. Unless otherwise noted in Hardware Sets, provide wall type with appropriate fasteners. Where wall type cannot be used, provide floor type. If neither can be used, provide overhead type.
 2. Locate overhead stops for maximum possible opening. Consult with Owner for furniture locations. Minimum: 90deg stop / 95deg deadstop. Note degree of opening in submittal.
- D. Through-bolts: Do not use. Coordinate with fiberglass frames and doors; ensure provision of proper embedded blocking to support wood screws for mounting door closers.
1. Exception: surface-mounted overhead stops, holders, and friction stays.
- 2.8 FINISH:
- A. Generally: BHMA 626 Satin Chromium.
 1. Areas using BHMA 626: furnish push-plates, pulls and protection plates of BHMA 630, Satin Stainless Steel, unless otherwise scheduled.
 - B. Door closers: factory powder coated to match other hardware, unless otherwise noted.
 1. Provide manufacturer's "SRI" special rust-inhibiting epoxy undercoat.
- 2.9 KEYING REQUIREMENTS:
- A. Key System: Schlage Everest 29 or approved equal utility-patented keyway, interchangeable core. Utility patent protection to extend at least until 2029. Key blanks available only from factory-direct sources, not available from after-market key blank manufacturers. Initiate and conduct meeting(s) with Engineer to determine system keyway(s), keybow styles, structure and degree of geographic exclusivity. Do not order keys or cylinders without written confirmation of actual requirements from the Engineer.
 - B. Keys
 1. Factory registered master key system.
 2. Construction keying: furnish temporary keyed-alike cores. Remove at substantial completion and install permanent cylinders/cores in Owner's presence. Demonstrate that construction key no longer operates.
 3. Furnish 10 construction keys.
 4. Furnish 2 construction control keys.
 - C. Key Cylinders: furnish utility patented, 6-pin solid brass construction.
 - D. Cylinder cores: furnish keyed at factory of lock manufacturer where permanent records are maintained. Locks and cylinders same manufacturer.
 - E. Permanent keys: use secured shipment direct from point of origination to Owner.

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1. For estimate: 3 keys per change combination, 5 master keys per group, 5 grand-master keys, 3 control keys.
2. For estimate: VKC stamping plus "DO NOT DUPLICATE".
3. Bitting List: use secured shipment direct from point of origination to Owner upon completion.

PART 3 - EXECUTION

3.1 ACCEPTABLE INSTALLERS

- A. Can read and understand manufacturers' templates, suppliers' hardware schedule and printed installation instructions. Can readily distinguish drywall screws from manufacturers' furnished fasteners. Available to meet with manufacturers' representatives and related trades to discuss installation of hardware.

3.2 PREPARATION

- A. Ensure that walls and frames are square and plumb before hardware installation. Make corrections before commencing hardware installation. Installation denotes acceptance of wall/frame condition.
- B. Locate hardware per SDI-100 and applicable building, fire, life-safety, accessibility, and security codes.
 1. Notify Engineer of code conflicts before ordering material.
 2. Locate latching hardware between 34 inches to 44 inches above the finished floor, per California Building Code, Section 1008.1.9.2 and 1133B.2.5.2.
 3. Locate panic hardware between 36 inches to 44 inches above the finished floor.
 4. Where new hardware is to be installed near existing doors/hardware scheduled to remain, match locations of existing hardware.
- C. Overhead stops: before installing, determine proposed locations of furniture items, fixtures, and other items to be protected by the overhead stop's action.

3.3 INSTALLATION

- A. Install hardware per manufacturer's instructions and recommendations. Do not install surface-mounted items until finishes have been completed on substrate. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate for proper installation and operation. Remove and reinstall or replace work deemed defective by Architect.
 1. Gaskets: install jamb-applied gaskets before closers, overhead stops, rim strikes, etc; fasten hardware over and through these seals. Install sweeps across bottoms of doors before astragals, cope sweeps around bottom pivots, trim astragals to tops of sweeps.

SECTION 087100 DOOR HARDWARE

2. When hardware is to be attached to existing metal surface and insufficient reinforcement exists, use RivNuts, NutSerts or equal anchoring device for screws.
 3. Use manufacturers' fasteners furnished with hardware items, or submit Request for Substitution with Engineer.
 4. Replace fasteners damaged by power-driven tools.
- B. Locate floor stops no more that 4 inches from walls and not within paths of travel. See paragraph 2.2 regarding hinge widths, door should be well clear of point of wall reveal. Point of door contact no closer to the hinge edge than half the door width. Where situation is questionable or difficult, contact Engineer for direction.
- C. Core concrete for exterior door stop anchors. Set anchors in approved non-shrink grout.
- D. Locate overhead stops for minimum 90 degrees at rest and for maximum allowable degree of swing.
- E. Drill pilot holes for fasteners in wood doors and/or frames.
- F. Lubricate and adjust existing hardware scheduled to remain. Carefully remove and give to Owner items not scheduled for reuse.

3.4. ADJUSTING

- A. Adjust and check for proper operation and function. Replace units, which cannot be adjusted to operate freely and smoothly.
1. Hardware damaged by improper installation or adjustment methods: repair or replace to Engineer's satisfaction.
 2. Adjust doors to fully latch with no more than 1 pound of pressure.
 3. Adjust delayed-action closers on fire-rated doors to fully close from fully-opened position in no more than 10 seconds.
 4. Adjust door closers per 1.9 this section.

3.5 DEMONSTRATION

- A. Demonstrate mechanical hardware and electrical, electronic and pneumatic hardware systems, including adjustment and maintenance procedures.

3.6 PROTECTION/CLEANING:

- A. Cover installed hardware, protect from paint, cleaning agents, weathering, carts/barrows, etc. Remove covering materials and clean hardware just prior to substantial completion.
- B. Clean adjacent wall, frame and door surfaces soiled from installation / reinstallation process.

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DOOR HARDWARE**

3.7 SCHEDULE OF FINISH HARDWARE

A. See door schedule in drawings for hardware set assignments.

SpeXtra: 20835 or approved equal:

HwSet 02 inswinging std (non-accessible) restroom stall, wall stop

Qty		Description	Catalog Number	Finish	Mfr
1	EA	CONTINUOUS HINGE	FM-300-HT 316 alloy	630	MAR
1	EA	PRIVACY INDICATOR DEADBOLT	D271	626	FAL
1	EA	ONE WAY DEADBOLT	D241 (After Hours Bolt)	626	FAL
1	EA	FSIC CORE	23-030 EV29-T	626	SCH
1	EA	PUSH PLATE #316alloy	1001-11 CFDB	630	TRI
1	EA	PULL PLATE & HANDLE #316alloy	1017-3B & 1194-2	630	TRI
1	EA	SURFACE CLOSER	1261 EDA SRI	689	LCN
1	EA	KICK PLATE #316alloy	KO050 12" X 2"LDW	630	TRI
1	EA	KICK PLATE #316alloy	KO050 12" X 1.5"LDW	630	TRI
1	EA	ANTIVNDL WALLSTOP	1278 CX	630	TRI

one-way deadbolt will be locked/unlocked strictly by City staff; locate 6" above privacy lockset.

HwSet 05 outswinging accessible restroom stall, limited outswing

Qty		Description	Catalog Number	Finish	Mfr
1	EA	CONTINUOUS HINGE	FM-300-HT 316 alloy	630	MAR
1	EA	PRIVACY W/DB & IND	L9496T OCCUPIED/VACANT 03L L583-363	630	SCH
1	EA	ONE WAY DEADBOLT	D241	626	SCH
2	EA	FSIC CORE	23-030 EV29-T	626	SCH
1	EA	OH STOP	700S-SNB-1	630	GLY
1	EA	H-SEC SURFACE CLOSER	4511T AVB SRI ST	689	LCN
1	EA	MOUNTING PLATE	4510T-18	689	LCN
1	EA	KICK PLATE #316alloy	KO050 12" X 2"LDW	630	TRI

**SECTION 087100
DOOR HARDWARE**

1	EA	KICK PLATE #316alloy	KO050 12" X 2"LDW	630	TRI
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one-way deadbolt will be locked/unlocked strictly by City staff; locate 6" above privacy lockset. Use LCN's special template for interfacing the door closer and overhead stop.

HwSet 06 plumbing chase access, limited outswing

Qty	EA	Description	Catalog Number	Finish	Mfr
1	EA	CONTINUOUS HINGE	FM-300-HT 316 alloy	630	MAR
1	EA	CLASSROOM DEADBOLT	B663T TORX 37-016	626	SCH
1	EA	FSIC CORE	23-030 EV29-T	626	SCH
1	EA	PULL PLATE #316alloy	1017-3B CFDB	630	TRI
1	EA	OH STOP & HOLDER	81H	630	GLY
1	EA	KICK PLATE #316alloy	KO050 12" X 1"LDW	630	TRI
1	EA	KICK PLATE #316alloy	KO050 12" X 1.5"LDW	630	TRI

END OF SECTION

**SECTION 099100
PAINTING**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Surface preparation and field application of paints and finishes for interior and exterior surfaces.
 - 2. Schedule of Items to be painted.
 - 3. Exterior painting and finishing schedule.
 - 4. Interior painting and finishing schedule.

- B. Related Documents: The Contract Documents, as defined in Section 011000 - Summary of Work, apply to the Work of this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.

- C. Related Sections:
 - 1. Section 055000 - Metal fabrications:

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM E 84 - Test Method for Surface Burning Characteristics of Building Materials.

1.3 SUBMITTALS

- A. Section 013300 - Submittal Procedures: Procedures for submittals.
 - 1. Product Data: Submit product data for each type of paint specified.
 - a. Technical data sheets indicating manufacturer's catalog number, paint type description, and VOC content.
 - b. Painting Schedule listing surfaces to be painted with cross reference to the specific painting and finishing system and application. Identify each paint material by manufacturer's catalog number and general classification.
 - 2. Samples: Submit color brush-out sample for each paint color and sheen specified.
 - a. Three samples on 8 1/2 inch x 11 inch card stock for color and sheen verification.
 - b. Identify each sample by paint manufacturer, paint type, color, and sheen.
 - 3. Assurance/Control Submittals:

SECTION 099100 PAINTING

- a. Test Reports: Submit manufacturer's Material Safety Data Sheets (MSDS) for each paint type proposed.

1.4 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. Surface Burning Characteristics in Accordance with ASTM E-84 for Class I or A finish:
 - a. Flame Spread (Non-Combustible Surfaces): Less than 25.
 - b. Smoke Density (Non-Combustible Surfaces): Less than 450.
 - 2. Provide paint and coating materials that conform to Federal, State, and Local restrictions for Volatile Organic Compounds (VOC) content.

1.5 PROJECT CONDITIONS OR SITE CONDITIONS

- A. Environmental Requirements:
 - 1. Apply paint finishes only when moisture content of surfaces is within manufacturer's acceptable ranges for type of finish being applied.
 - 2. Surface temperatures or surrounding air temperature to be above 40 degrees F before applying alkyd finishes; above 45 degrees F for interior latex, and 50 degrees F for exterior latex work. Minimum for varnish and transparent finishes is 65 degrees F.
 - 3. Provide continuous ventilation and heating facilities to maintain temperatures above 45 degrees F for 24 hours prior to, during and 48 hours after application of finishes.
 - 4. Do not apply paint in areas where dust is being generated.
 - 5. Provide lighting level in areas being painted of 80 foot candles measured mid-height at substrate surface.

1.6 MAINTENANCE

- A. Section 017704 - Closeout Procedures and Training: Procedures for closeout submittals.
- B. Extra Materials:
 - 1. Provide one gallon of each color, type and sheen to the Engineer.
 - 2. Label each container with color, type, texture, room locations, in addition to the manufacturer's label.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

**SECTION 099100
PAINTING**

- A. Subject to compliance with project requirements, manufacturers offering specified items which may be incorporated in the work include the following:
1. Benjamin Moore and Company.
 2. Comex Group (Color Wheel/Frazees/Kwal/Parker).
 3. Duron Paints and Wallcoverings.
 4. Devco (ICI).
 5. Frazees.
 6. Pittsburgh Paints.
 7. Sherwin-Williams Company.
 8. Or approved equal.
- B. Section 016000 - Product Requirements: Product options and substitutions. Substitutions: permitted.

2.2 MATERIALS

- A. Paints:
1. Manufacturer's "Best Grade" for each type specified.
 2. Ready-mixed; pigments fully ground maintaining a soft paste consistency, capable of readily and uniformly dispersing to a complete homogeneous mixture.
 3. Providing good flowing and brushing properties and be capable of drying or curing free of streaks or sags.
 4. VOC limits (g/L) for exterior and interior paint applications:
 - a. Exterior- Steel-Shop Primed
 - 1) Top Coat – Non-Flat: 150
 - 2) Top Coat - Gloss: 250
 - b. Exterior- Steel - Galvanized
 - 1) Primer Coat: 200
 - 2) Top Coat - Non-Flat: 150
 - 3) Top Coat - Gloss: 250
 - c. Interior Wood – Transparent
 - 1) Stain: 250
 - 2) Varnish: 350
 - d. Interior Concrete, Concrete Block
 - 1) Block filler: 300
 - 2) Top Coat – Flat: 100
 - 3) Top Coat – Non-Flat: 150
 - 4) Top Coat – Gloss: 250
 - e. Interior Steel – Unprimed
 - 1) Rust Prime Coat: 400
 - 2) Top Coat – Non-Flat: 150
 - 3) Top Coat – Gloss: 250
 - f. Interior Steel – Primed
 - 1) Top Coat – Flat: 100

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- 2) Top Coat – Non-Flat: 150
 - 3) Top Coat – Gloss: 250
 - g. Interior Steel – Galvanized
 - 1) Top Coat – Non-Flat: 150
 - 2) Top Coat – Gloss: 250
 - h. Interior Plaster, Gypsum Board
 - 1) Undercoater: 200
 - 2) Top Coat - Flat: 100
 - 3) Top Coat – Non-Flat: 150
 - 4) Top Coat – Gloss: 250
 - i. Interior Exposed Structural Steel and Metal Deck
 - 1) Industrial Maintenance - Primer: 340
 - 2) Industrial Maintenance – Top Coat: 340
- B. Primers and Undercoaters: Manufactured by same manufacturer as finish coat materials.
- C. Paint Accessory Materials: Linseed oil, shellac, turpentine and other materials not specifically indicated herein but required to achieve the finishes specified of high quality and approved manufacturer.

2.3 EXTERIOR PAINT SYSTEMS

- A. Benjamin Moore:
- 1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: M04 Acrylic Metal Primer; MDF 2.0 mils.
 - b. Each Finish Coat: M29 DTM Acrylic Semi-Gloss; MDF 2.0 mils.
 - 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: M04 Acrylic Metal Primer; MDF 2.0 mils.
 - b. Each Finish Coat: M29 DTM Acrylic Semi-Gloss; MDF 2.0 mils.
- B. Comex Group (Color Wheel/Frazee/Kwal/Parker)
- 1. Ferrous Metal: Semi-Gloss, Water Base, Alky Primer/Acrylic Latex.
 - a. Primer: Ultra-Tech C309 Universal water-Based Metal Primer, MDF 1.96 mils.
 - b. Each Finish Coat: Ultra-Tech C218 (Southeast)/C229 (Southwest)/C206 (Midwest) Exterior 100% Acrylic Semi-Gloss Enamel, MDF 1.44 mils.
 - 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Ultra-Tech C309 Universal water-Based Metal Primer, MDF 1.96 mils.
 - b. Each Finish Coat: Ultra-Tech C218 (Southeast)/C229 (Southwest)/C206 (Midwest) Exterior 100% Acrylic Semi-Gloss Enamel, MDF 1.44 mils.

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- C. Duron:
1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Dura Clad Universal Acrylic Metal Primer, 33-105; MDF 2.4 mils. (MPI xx, Approved)
 - b. Each Finish Coat: Dura Clad DTM Acrylic Coating Gloss 95-30X, MDF 3.0 mils. (MPI 110-G6)
 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Dura Clad Acrylic Galvanized Metal Primer, 33-100; MDF 1.4 mils. (MPI 134, Approved)
 - b. Each Finish Coat: Dura Clad DTM Acrylic Coating Gloss 95-30X, MDF 3.0 mils. (MPI 110-G6)
- D. Devoe (ICI):
1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Mirrolac W/B DTM Primer DP85XX.
 - b. Each Finish Coat: Mirrolac W/B Semi-Gloss Enamel DP83XX.
 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Mirrolac W/B DTM Primer, DP85XX.
 - b. Each Finish Coat: Mirrolac W/B Semi-Gloss Enamel DP83XX.
- E. Frazee:
1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: 661F774Metal Prime; MDF 1.7 mils.
 - b. Each Finish Coat: 128 Satin Glide Semi Gloss Acrylic, 03-Series; MDF 1.4 mils.
 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: 661F774 Metal Prime, 33-100; MDF 1.4 mils.
 - b. Each Finish Coat: 128 Satin Glide Semi Gloss Acrylic , 03-Series; MDF 1.4 mils.
- F. Pittsburgh:
1. Ferrous Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: 90-709 DTM Interior/Exterior Primer; MDF 3.0 mils.
 - b. Each Finish Coat: 90-474 Acrylic Enamel Satin; MDF 3.0 mils.
 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: 90-709 DTM Interior/Exterior Primer; MDF 3.0 mils.
 - b. Each Finish Coat: 90-474 Acrylic Enamel Satin; MDF 3.0 mils.
- G. Sherwin-Williams:
1. Ferrous Metal: Semi-Gloss, Low VOC, Alkyd Primer/Acrylic Latex.
 - a. Primer: Pro-Cryl Universal Water-Based Primer, B66-310, MDF 3.0 mils.
 - b. Each Finish Coat: DTM Acrylic B66 Series; MDF 3.0 mils.
 2. Galvanized Metal: Semi-Gloss, Water Base, Alkyd Primer/Acrylic Latex.
 - a. Primer: Pro-Cryl Universal Water Based Primer, B66-310, MDF 3.0 mils.

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b. Each Finish Coat: DTM Acrylic B66 Series; MDF 3.0 mils.

H. Or approved equal.

2.4 INTERIOR PAINT SYSTEMS

A. Benjamin Moore:

1. Gypsum Board: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: 284 Moorecraft Superhide Interior Latex Primer/Undercoater; MDF 1.5 mils.
 - b. Each Finish Coat: Moorecraft Super-Hide Eggshell 286.
2. Masonry: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: Moorecraft Super Hide Interior/Exterior Latex Blockfiller 285; MDF 11.0 mils.
 - b. Each Finish Coat: Moorecraft Super-Hide Eggshell 286.
3. Metal: Satin, Water Base, Acrylic Latex.
 - a. Each Finish Coat: Moorecraft Super-Hide Eggshell 286.
4. Wood and Wood Doors : Satin, Water Base, Acrylic Latex.
 - a. Primer: 253 Moorecraft Latex Enamel Undercoater and Primer Sealer; 2.0 mils.
 - b. Each Finish Coat: Moorecraft Super-Hide Eggshell 286.
5. Concrete: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Moorecraft Super Hide Interior/Exterior Latex Blockfiller 285; MDF 11.0 mils.
 - b. Each Finish Coat: 276 Moorecraft Acrylic Latex; MDF 1.5 mils.
6. Ferrous Metal: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: M04 Acrylic Metal Primer; MDF 2.0 mils.
 - b. Each Finish Coat: 276 Moorecraft Acrylic Latex; MDF 1.5 mils.

B. Comex Group (Color Wheel/Frazer/Kwal/Parker):

1. Gypsum Board: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: Ultra-Tech C152 Interior Latex Primer-Sealer; MDF 1.12 mils.
 - b. Each Finish Coat: Ultra-Tech C106 Interior Latex Eggshell Enamel; MDF 1.36 mils.
2. Masonry: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: Ultra-Tech C302 Interior-Exterior Acrylic Block Filler; MDF 6.29 mils.
 - b. Each Finish Coat: Ultra-Tech C106 Interior Latex Eggshell Enamel; MDF 1.36 mils.
3. Metal: Satin, Water Base, Acrylic Latex.
 - a. Each Finish Coat: Ultra-Tech C141 Interior 100% Acrylic Low-Sheen Enamel; MDF 1.44 mils.
4. Wood and Wood Doors: Satin, Water Base, Acrylic Latex.

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- a. Primer: Ultra-Tech C312 Interior-Exterior 100% Acrylic Wood Primer; MDF 1.8 mils.
 - b. Each Finish Coat: Ultra-Tech C141 Interior 100% Acrylic Low-Sheen Enamel; MDF 1.44 mils.
 - 5. Concrete: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Ultra-Tech C302 Interior-Exterior Acrylic Block Filler; MDF 6.29 mils.
 - b. Each Finish Coat: Ultra-Tech C119 Interior Latex Semi-Gloss Enamel; MDF 1.6 mils.
 - 6. Ferrous Metal: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Ultra-Tech C309 Universal Water-Based Metal Primer; MDF 1.96 mils.
 - b. Each Finish Coat: Ultra-Tech C119 Interior Latex Semi-Gloss Enamel; MDF 1.6 mils.
- C. Duron:
- 1. Gypsum Board: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: Interior Latex Drywall Primer 04-124; Applied at a dry film thickness of not less than 1.6 mils (0.041 mm). (MPI 50, Approved)
 - b. Each Finish Coat: Acrylic Latex Eggshell (Low Sheen) Enamel 36 Series; MDF 1.4 mils. (MPI 44, Approved)
 - 2. Masonry: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: Block Kote Interior/Exterior Latex Block Filler 08-128; MDF 10.2 mils.
 - b. Each Finish Coat: Acrylic Latex Eggshell (Low Sheen) Enamel 36 Series; MDF 1.4 mils. (MPI 44, Approved)
 - 3. Metal: Satin, Water Base, Acrylic Latex.
 - a. Each Finish Coat: Ultra Deluxe Interior Acrylic Latex Eggshell (Low Sheen) Enamel 36 Series; MDF 1.4 mils.
 - 4. Wood and Wood Doors : Satin, Water Base, Acrylic Latex.
 - a. Primer: Interior Acrylic Enamel Undercoater 04-123; MDF 1.6 mils. (MPI 50, Approved)
 - b. Each Finish Coat: Ultra Deluxe Interior Acrylic Latex Eggshell (Low Sheen) Enamel 36 Series; MDF 1.4 mils.
 - 5. Concrete: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Block Kote Interior/Exterior Latex Block Filler 08-128; MDF 10.2 mils.
 - b. Each Finish Coat: Genesis Odor-Free Interior Latex Semi-Gloss Enamel, 83-Series, MDF 1.5 mils.
 - 6. Ferrous Metal: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Dura Clad Universal Acrylic Metal Primer, White 33-015; MDF x.x mils. (MPI 76, Approved)
 - b. Each Finish Coat: Genesis Odor-Free Interior Latex Semi-Gloss Enamel, 83-Series, MDF 1.5 mils.
- D. Devoe (ICI):
- 1. Gypsum Board: Eggshell, Water Base, Acrylic Latex.

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- a. Primer: Wonder-Tones Primer DR50801; MDF 1.5 mil.
 - b. Each Finish Coat: Wonder-Tone Eggshell Enamel DR34XX; MDF 1.5 mil.
 2. Masonry: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: Bloxfil 4000 Interior/Exterior Heavy Duty Acrylic Block Filler 4000-1000; 7.0-14.5 MDF
 - b. Each Finish Coat: Wonder-Tone Eggshell Latex Enamel DR34XX; MDF 1.5 mil.
 3. Metal: Satin, Water Base, Acrylic Latex.
 - a. Each Finish Coat: Mirrolac W/B Semi-Gloss Enamel DP83XX; MDF 1.5 mil.
 4. Wood and Wood Doors : Satin, Water Base, Acrylic Latex.
 - a. Primer: Wonder-Prime DR51701; MDF 1.5 mil.
 - b. Each Finish Coat: Devflex 4216HP High Performance Waterborne Acrylic Semi-Gloss Enamel; MDF 1.5 mil.
 5. Concrete: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Bloxfil 4000 Interior/Exterior Heavy Duty Acrylic Block Filler 4000-1000; 7.0-14.5 MDF
 - b. Each Finish Coat: Mirrolac W/B Semi-Gloss Latex Enamel DP83XX; MDF 1.5 mil.
 6. Ferrous Metal: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Mirrolac W/B DTM Primer DP85XX; MDF 1.5 mil.
 - b. Each Finish Coat: Mirrolac W/B Semi-Gloss DP83XX.
- E. Frazee:
1. Gypsum Board: Eggshell, Water Base, Acrylic Latex.
 - a. Primer :063 PVA Aqua Seal Drywall Vinyl Primer Sealer; MDF 1.4 mils.
 - b. Each Finish Coat: 026 Speed Sheen Interior Acrylic Eggshell Enamel; MDF 1.6 mils.
 2. Masonry: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: 262 Block Filler Latex Block Filler; MDF 10.2 mils.
 - b. Each Finish Coat: 026 Speed Sheen Interior Acrylic Eggshell Enamel; MDF 1.6 mils.
 3. Metal: Satin, Water Base, Acrylic Latex.
 - a. Each Finish Coat: 126 Mirro Glide Interior Low Sheen Acrylic Enamel; MDF 1.4 mils.
 4. Wood and Wood Doors : Satin, Water Base, Acrylic Latex.
 - a. Primer: 172 Grip N Seal Enamel Undercoater; MDF 2.2 mils.
 - b. Each Finish Coat: 126 Mirro Glide Interior Low Sheen Acrylic Enamel; MDF 1.4 mils.
 5. Concrete: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: 262 Block Filler Latex Block Filler; MDF 10.2 mils.
 - b. Each Finish Coat: 024 Speed Sheen Semi-Gloss Enamel; MDF 1.7 mils.
 6. Ferrous Metal: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: 661F774 Metal Prime Alkyd Metal Primer; MDF 1.7 mils.

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- b. Each Finish Coat: 123 Satin Glide Semi-Gloss Enamel; MDF 1.7 mils.
- F. Glidden(ICI):
- 1. Gypsum Board: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: ProMaster Interior Latex Primer-Sealer MP-5111; MDF 1.5 mil.
 - b. Each Finish Coat: ProMaster Interior Latex Eggshell MP-6800; MDF 1.5 mil.
 - 2. Masonry: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: Bloxfil 4000 Interior/Exterior Heavy Duty Acrylic Block Filler 4000-1000; MDF 11 mil
 - b. Each Finish Coat: ProMaster Interior Latex Eggshell MP-6800; MDF 1.5 mil.
 - 3. Metal: Satin, Water Base, Acrylic Latex.
 - a. Each Finish Coat: Devflex 4214HP High Performance Waterborne Acrylic Semi-Gloss Enamel; MDF 1.5 mil.
 - 4. Wood and Wood Doors : Satin, Water Base, Acrylic Latex.
 - a. Primer: Prime Interior 100% Acrylic Multi-Purpose Latex Stain Killer, PC 1000; MDF 1.5 mil.
 - b. Each Finish Coat: Devflex 4216 HP High Performance Waterborne Acrylic Semi-Gloss Enamel; MDF 1.5 mil.
 - 5. Concrete: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Bloxfil 4000 Interior/Exterior Heavy Duty Acrylic Block Filler 4000-1000; MDF 11 mil
 - b. Each Finish Coat: Devflex 4216 HP High Performance Waterborne Acrylic Semi-Gloss Enamel; MDF 1.5 mil.
 - 6. Ferrous Metal: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Devflex 4020 PF Direct to Metal Primer & Flat Finish; MDF 1.5 mil.
 - b. Each Finish Coat: Devflex 4216 HP High Performance Waterborne Acrylic Semi-Gloss Enamel; MDF 1.5 mil.
- G. Pittsburgh:
- 1. Gypsum Board: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: 6-2 Speedhide Latex Sealer; MDF 1.0 mils.
 - b. Each Finish Coat: 6-411 Speedhide Eggshell Latex; MDF 1.5 mils.
 - 2. Masonry: Eggshell, Water Base, Acrylic Latex.
 - a. Primer: 6-2 Speedhide Latex Sealer; MDF 1.0 mils.
 - b. Each Finish Coat: 6-411 Speedhide Eggshell Latex; MDF 1.5 mils.
 - 3. Metal: Satin, Water Base, Acrylic Latex.
 - a. Each Finish Coat: 90-474 DTM Acrylic Satin; MDF 1.5 mils.
 - 4. Wood and Wood Doors : Satin, Water Base, Acrylic Latex.
 - a. Primer: 6-855 Interior Water Base Undercoater; MDF 1.5 mils.
 - b. Each Finish Coat: 90-474 DTM Acrylic Satin; MDF 1.5 mils.
 - 5. Concrete: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: 6-7 Speedhide Block Filler; MDF 6.0 - 12.0 mils.

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- b. Each Finish Coat: 6-500 Speedhide Semi-Gloss Latex; MDF 1.2 mils.
 - 6. Ferrous Metal: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Each Finish Coat: 90-474 DTM Acrylic Satin; MDF 1.5 mils.
- H. Sherwin Williams:
 - 1. Gypsum Board: Low VOC, Eg-shell, Water Base, Acrylic Latex.
 - a. Primer: Harmony Latex Primer, MDF 1.6 mils.
 - b. Each Finish Coat: Harmony Latex Eg-Shel, MDF 1.6 mils.
 - 2. Masonry: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: ProMar Interior/Exterior Block Filler, B25W25; MDF 10.0 mils
 - b. Each Finish Coat: ProMar 200 Interior Latex Egg Shell: MDF 1.5 mils.
 - 3. Metal: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Each Finish Coat: DTM Acrylic S-G, B66W200; MDF 3.0 mils.
 - 4. Wood and Wood Doors : Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: PrepRite Classic Primer, B28W101, MDF 1.6 mils.
 - b. Each Finish Coat: ProClassic Waterborne S-G, MDF 1.4 mils.
 - 5. Concrete: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: ProMar Interior/Exterior Block Filler, B25W25; MDF 10.0 mils.
 - b. Each Finish Coat: ProClassic Waterborne S-G, MDF 1.4 mils.
 - 6. Ferrous Metal: Semi-Gloss, Water Base, Acrylic Latex.
 - a. Primer: Pro-Cryl Universal Water Based Primer, B66-310, MDF 3.0 mils.
 - b. Each Finish Coat: DTM Acrylic S-G, B66W200; MDF 3.0 mils.
- I. Or approved equal.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 017300 - Execution: Verification of existing conditions before starting work.
- B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.
- C. Report in writing to the Engineer prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected and approved by the Engineer.

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- D. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the City.

3.2 PREPARATION

- A. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, and conditions otherwise detrimental to formation of a durable paint film.
- B. Perform preparation and cleaning procedures in accordance with paint manufacturer's published instructions for each particular substrate condition.
 - 1. Provide barrier coats over incompatible primers or remove and reprime as required.
 - 2. Remove hardware, hardware accessories, machined surfaces, plates, lighting fixtures, and similar items in place and not to be painted or provide surface applied protection prior to surface preparation and painting operations. Reinstall all removed items after completion of paint work.
 - 3. Clean surfaces to be painted before applying paint or surface treatment. Remove oil and grease prior to mechanical cleaning.
- C. Ferrous Metals: Clean ferrous surfaces that are not galvanized or shop-coated, of oil, grease, dirt, loose mill scale and other foreign substances by solvent or mechanical cleaning.
 - 1. Touch-up shop-applied prime coats, where damaged or bare. Clean and touch-up with same type shop primer.
- D. Galvanized Surfaces: Clean free of oil and surface contaminants with non-petroleum based solvent. Apply coat of etching primer if required by paint manufacturer.
- E. Cementitious Materials: Prepare cementitious surfaces to be painted by removing efflorescence, chalk, dust, dirt, grease, oils, and by roughening as required to remove glaze.
 - 1. Determine alkalinity and moisture content of surfaces to be painted by performing appropriate tests.
 - a. If surfaces are found to be sufficiently alkaline to cause blistering and burning of finish paint, correct condition before application of paint.
 - 2. Do not paint over surfaces where moisture content exceeds that permitted in manufacturer's printed instructions.
 - 3. Clean floor surfaces scheduled to be painted with a commercial solution of muriatic acid, or other etching cleaner. Flush floor with clean water to neutralize acid, and allow to dry before painting.
- F. Wood: Clean wood surfaces to be painted of dirt, oil, and other foreign substances with scrapers, mineral spirits, and sandpaper, as required.

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Sandpaper smooth those finished surfaces exposed to view, and dust off. Scrape and clean small, dry, seasoned knots and apply a thin coat of white shellac or other recommended knot sealer, before application of priming coat. After priming, fill holes, and imperfections in finish surfaces with putty or plastic wood-filler. Sandpaper smooth when dried.

1. Prime, stain, or seal wood required to be job-painted immediately upon delivery to job. Prime edges, ends faces, undersides, and backsides of such wood, including cabinets and counters.
 2. Seal tops, bottoms, and cut-outs with a heavy coat of varnish or equivalent sealer immediately upon delivery to job.
- G. Gypsum Board: Fill minor defects with filler compound. Spot prime defects after repair.

3.3 APPLICATION

- A. Apply paint products in accordance with manufacturer's published instructions using application procedures approved for the particular application and substrate to the specified Minimum Dry Film Thickness (MDF). Apply each coat to uniform finish.
- B. Apply each coat slightly darker than preceding coat unless otherwise approved by the Engineer. Sand lightly between coats to achieve specified finish.
- C. Do not apply finishes on surfaces that are not dry.
- D. Number of coats and film thickness required is same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer.
- E. Apply additional coats when undercoats, stains, or other conditions show through final coat until paint film is of uniform finish, color, and appearance. Surfaces, including edges, corners, crevices, welds, and exposed fasteners to receive minimum dry film thickness equivalent to that of flat surfaces.
- F. Minimum Coating Thickness: Apply materials at not less than manufacturer's recommended spreading rate. Provide minimum dry film thickness (MDF) of the entire coating system as indicated in Painting and Finishing Schedule at end of this Section.
- G. Block Fillers: Apply block fillers to concrete masonry units at rate to provide complete coverage with pores filled.
- H. Prime Coats: Before application of finish coats, apply a prime coat of material as recommended by manufacturer to material scheduled to be painted or finished that has not been shop primed. Recoat primed and sealed surfaces

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where evidence of suction spots or unsealed areas in first coat appears, to assure a finish coat with no burn through or other defects due to insufficient sealing.

- I. Pigmented (Opaque) Finishes: Completely cover to provide an opaque, smooth surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, laps, brush marks, runs, sags, or other surface imperfections will not be acceptable.
- J. Hollow Metal Doors: Paint each door edge.
- K. Completed Work: Match the Engineer's approved field samples for color and sheen.

3.4 MECHANICAL AND ELECTRICAL EQUIPMENT

- A. Clean or replace identification markings on mechanical or electrical equipment when painted over or spattered.

3.5 FIELD QUALITY CONTROL

- A. Section 014000 - Quality Requirements: Field testing and inspection.
- B. Inspect painting and coating application for scheduled material, color, sheen, specified thickness (MDF), and coverage.

3.6 CLEANING

- A. As work proceeds and upon completion, promptly remove paint where spilled, splashed, or spattered.
- B. During progress of work keep premises free from any unnecessary accumulation of tools, equipment, surplus materials, and debris.
- C. Collect waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.
- D. Upon completion of work leave premises neat and clean.

3.7 PROTECTION

- A. Protect other surfaces from paint and damage. Repair damage as a result of inadequate or unsuitable protection.

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PAINTING**

3.8 COLOR SCHEDULE – See Drawings

3.9 SCHEDULE OF ITEMS TO BE PAINTED

A. Painted finishes shall be provided for, but not limited to, the following items. Refer to Drawings and Paint Color Schedule at end of this Section for designated finishes and colors of areas.

1. Exterior: All exterior surfaces including, but not limited to:
 - a. Metal flashing (if exposed from ground level) and downspout.
 - b. Metal gravelstops (vertical face).
 - c. Pipe Bollards, if not to receive plastic covers specified in Section 055000.
 - d. Wall louvers.
2. Interior: All interior surfaces as scheduled on Drawings including, but not limited to:
 - a. Metal opening frames and trim.
 - b. Gypsum wallboard.
 - c. Exposed concrete unit masonry.

B. Do not paint the following items:

1. Pre-finished items:
 - a. Aluminum, brass, bronze, stainless steel, and chrome plated steel.
 - b. Pre-finished items, such as toilet compartments, acoustical ceiling materials, mechanical, and electrical equipment.
 - c. UL, FM, and other code-required labels.
 - d. Equipment identification, performance rating, and name plates.
 - e. Finish hardware.
 - f. Factory finished metal wall panels, metal wall panel trim, and metal gravel stops.
2. Exposed items:
 - a. Exposed piping and conduit, hangers and supports.
 - b. Exposed fire protection piping, hangers and supports.

3.10 PAINTING AND FINISHING SCHEDULE

A. Interior Paint Systems:

1. Interior Gypsum Wallboard:
 - a. 1 coat Latex Wall Primer.
 - b. 1 coat Latex Eggshell Enamel
2. Interior Masonry:
 - a. 1 coat Latex Block Filler
 - b. 1 coat Latex Eggshell Enamel

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3. Interior Metal:
 - a. 2 coats Latex Satin
 4. Interior Wood (painted):
 - a. 1 coat Enamel Undercoat
 - b. 2 coats Alkyd Semi-Satin Enamel
- B. Exterior Paint Systems:
1. Cement Board Siding:
 - a. 1 coat Latex Primer.
 - b. 1 coat Latex Eggshell Enamel.
 2. Ferrous Metals:
 - a. Touch up Prime Coat.
 - b. Two tinted coats Exterior Alkyd Enamel Semi-Gloss Enamel.

END OF SECTION

**SECTION 099623
GRAFFITI-RESISTANT COATINGS**

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Surface preparation and field application of coatings for exterior surfaces
- B. Related Documents: The Contract Documents, as defined in Section 011000 – Summary of Work, apply to the Work in this Section. Additional requirements and information necessary to complete the Work of this Section may be found in other Documents.
- C. Related Sections:
 - 1. Section 099100 - Painting and Coating.

1.2 SUBMITTALS

- A. Certificate and Summary Statement: Before Substantial Completion, submit a certificate stating that coatings applied conform specified requirements.
- B. Maintenance Instructions: Furnish manufacturer's recommended graffiti removal instructions, and recommendations for recoating. Furnish names and addresses of cleaning firms and of suppliers of maintenance materials.
- C. Maintenance Material: Furnish five gallons of each product specified.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Company experienced in performing Work of this Section.
- B. Manufacturer's Observation: Start coating application under the observation of the coating manufacturer's technical representative. Notify Engineer, City Inspector and coating manufacturer at least 72 hours before starting installation.
- C. Preliminary Tests: Perform tests on each kind of surface to be treated to establish the actual application rates required to provide the surfaces resistant to defacing and meet warranty requirements. Tests shall demonstrate the coating does not yellow, darken, mottle, or discolor any treated surface and those surfaces to be treated are dry. Established application rates shall not be less than those recommended in the coating manufacturer's technical data for the kind and surface orientation of the material.
- D. Compliance with Regulations: Materials shall comply with the current rules and regulations of the local air quality management district, with the rules regarding volatile organic compounds, and with FDA rules and regulations for dangerous materials in coatings.
- E. Materials shall meet requirements of SCAQMD regarding emission of solvents and other pollutants.

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GRAFFITI-RESISTANT COATINGS**

1.4 WARRANTY

1. Manufacturer shall provide a 10 year material warranty.
2. Installer shall provide a three year application warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with project requirements, manufacturers offering specified items which may be incorporated in the work include the following:
1. Monopole, Inc.
 2. New Dimensions Solutions, LLC.
 3. Rainguard International.
 4. Or approved equal.

2.2 EXTERIOR COATING SYSTEMS

- A. Monopole, Inc.
1. Permashield Premium 5600 over Permashield Base 6100
 - a. Clear Flat
 2. Permashield Premium 5650 over Permashield Base 6100
 - a. Clear Flat
- B. New Dimensions Solutions, LLC.
1. ND Graffiti Shield System
 - a. Clear Flat
- C. Rainguard International.
1. VandlGuard System
 - b. Clear Flat
- D. Or approved equal.

2.3 PROPERTIES

- A. Coatings shall not darken or discolor the treated surfaces and shall be non-toxic, compatible with standard polymer type sealing materials, conforming to AQMD 1113, and certified by manufacturer as suitable over paint finish.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Section 017300 – Execution: Verification of existing conditions before starting work.
- B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.
- C. Report in writing to the Engineer prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work

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GRAFFITI-RESISTANT COATINGS**

until unsatisfactory conditions have been corrected and approved by the Engineer.

- D. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the City.

3.2 PREPARATION

- A. Remove dust, dirt, oil, grease, other deleterious substances and stain, and efflorescence and laitance from surfaces. Repair cracks and holes over 1/16 inch size. Spot prime cracks and holes 1/16 inch size and smaller and prime horizontal surfaces other than soffits with a heavy duty coating supplied by same coating manufacturer. Mask and protect adjoining surfaces and glass, unless coating is harmless and easily removed.

3.3 APPLICATION

- A. Install the anti-graffiti coating to surfaces as indicated on drawings.
- B. Application Rates: Apply a minimum of three coats or more as recommended by manufacturer published application instructions, in the quantity of coating and coverage rates per coat established by preliminary tests, except total quantity shall be not less than the rate recommended for the involved surface in manufacturer's technical data.
- C. Spray Application: Install each coat by airless spray with nominal 20 psi nozzle pressure. Obtain complete coverage of each coat. Indicate areas that are coated when application is stopped for lunch or at the end of the day.

3.4 CLEANING

- A. Remove rubbish, debris, and waste materials and legally dispose of off the Project site.

3.5 PROTECTION

- A. Protect the Work of this section until Substantial Completion.

END OF SECTION

**SECTION 131200
PREFABRICATED RESTROOM BUILDING**

PART 1 – GENERAL

1.1 DESCRIPTION OF WORK

- A. This section describes typical basis of design, construction, and installation of a pre-fabricated modular restroom building, with integral concrete mat foundation and does not follow standard outline format of The Construction Specifications Institute (CSI).
- B. This outline Specification shall be used along with the complete relating specification sections. The related sections establish standards, relative codes and basic requirements for the products outlines in Section 131200

1.2 BUILDING CODES AND DESIGN

- A. The building shall be designed and installed in compliance with the codes designated by the State of California Department of Housing and Community Development as follows:
 - 1. 2008 NEC
 - 2. 2009 UPC, UMC
 - 3. 2010 CBC, California Title 24, California Energy Code, Cal Green
- B. The Prefabricated Restroom Manufacturer shall provide full and complete engineered plans for the building and the foundation design. A Structural Engineer licensed in the State of California shall stamp the plans.
- C. Plans shall bear the stamp of the State of California Department of Housing and Community Development. The building, prior to shipment from manufacturing facility, shall have a State of California Department of Housing and Community Development insignia affixed to the building per Department regulations.

1.3 QUALITY ASSURANCE

- A. The Prefabricated Restroom shall be sold, designed, manufactured, and shipped from a single source location (Prefabricated Restroom Manufacturer) to the City. This is to facilitate the ability for City Officials and/or General Contractor to travel to one location to examine the sales office and manufacturing facility, if deemed necessary. For this reason, assignment of subcontract, subcontractor's substitution, or outsourcing is not allowed.
- B. The Prefabricated Restroom Manufacturer supplier shall be an experienced in performing Work of this Section.
- C. The Prefabricated Restroom Manufacturer shall be licensed with the California Department of Housing Division, prior to bid, as a dealer and manufacturer to construct and install closed wall modular buildings.

**SECTION 131200
PREFABRICATED RESTROOM BUILDING**

- D. The Prefabricated Restroom Manufacturer shall possess a Class B General Contractor's license in the State of California.
- 1.4 INSURANCE REQUIREMENTS
- A. Product Liability
 - 1. The Prefabricated Restroom Manufacturer is responsible for incorporating all applicable codes and compliances as set forth by the State and any special local requirements. As such, the Prefabricated Restroom Manufacturer shall provide a certificate of product liability insurance covering personal injury and property damage.
- 1.5 BIDDER QUALIFICATIONS/REQUIREMENTS
- A. Requests for "or equal" must be submitted to City in accordance with the Item Equivalency provisions. Requests shall be submitted with the following:
 - 1. Copy of submitting company's California HCD manufacturer's license.
 - 2. Copy of submitting company's California Class B contractor's license.
 - 3. Copy of submitting company's California HCD dealer's license.
 - 4. Copy of salesperson's California HCD sales license.
 - 5. Floor plan with complete dimensions.
 - 6. Elevations of all four sides.
 - 7. Details.
 - 8. Specifications.
 - 9. A list of each and every deviation from the bid specifications.
 - 10. A list of the last five completed projects of similar design complete with names and phone numbers of general contractors, governing agencies along with their respective contacts, start and completion dates and project costs.
- 1.6 SUBMITTALS
- A. Submit four (4) sets of shop drawings including floor plans, elevations, design criteria, construction details/sections, schedules and schematics, and two (2) sets of structural calculations signed and sealed by a Structural Engineer licensed to practice in the State of California, responsible for their preparation, along with a State of California Department of Housing and Community Development approval stamp.

PART 2 – BUILDING SPECIFICATIONS

2.1 MANUFACTURER

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PREFABRICATED RESTROOM BUILDING**

- A. There are several manufacturers that can design and construct similar prefabricated buildings shown in the drawings and specifications. Other manufacturers may be submitted in accordance with the Item Equivalency provisions. The Owner has incorporated the standards of the following manufacturer as the basis of design for this project:

Restroom Facilities Ltd
1707 Colt Circle
Marble Falls, TX 78654
(800) 447-6570

Other acceptable Prefabricated Restroom Manufacturers are:

1. Super Secur Manufacturing.
 2. Romtec, Inc.
 3. Or approved equal.
- B. It is the General Contractor's responsibility to provide a completed project and agree to the following scope of work with its selected Prefabricated Restroom Manufacturer.

2.2 FLOOR / FOUNDATION

- A. The floor/foundation for the modular restroom shall be a prefabricated 8-inch thick monolithic 5,000psi concrete mat slab shipped integral with the restroom building. The slab reinforcing shall be #3 and #5 grade 60 deformed rebar, placed and tied per the structural engineered drawings continuously throughout. #3 grade 60 vertical rebar for CMU walls shall be incorporated into the slab reinforcing rebar to a minimum length of 18", bent to vertical 90 degrees and extended above the concrete slab a minimum of 24". Doweling of the vertical CMU reinforcing steel into the mat slab in any way is not permitted. The slab shall be designed to allow relocation of the slab and building intact at any future date with built-in lifting hardware.
- B. Concrete shall cure for a minimum of 14 days before moving and have a minimum 28-day compressive strength of 5,000 psi.
- C. The floor/foundation shall contain a concrete encased electrode consisting of 20' of bare copper conductor (No. 4 AWG) located near the bottom of the foundation, and encased in a minimum of 2" of concrete. Stub the ground conductor up through the foundation near the panel board location.
- D. A 6-mil thick vapor and moisture barrier shall be placed on the leveled building pad prior to setting of the building. Barrier shall extend at least 12" beyond building footprint.

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PREFABRICATED RESTROOM BUILDING**

- E. Concrete forming, reinforcement, specifications and placement must meet the requirement here in outlined and the following sections of the specifications which even is more stringent:
 - 1. Section 03100 Concrete Forming and Accessories
 - 2. Section 03200 Concrete Reinforcement
 - 3. Section 03300 Cast – In – Place Concrete

2.3 WALL SYSTEMS

- A. Walls to 7'-4" above finish floor (AFF) shall be hollow load-bearing concrete masonry units and shall conform to UBC Standard 21-4, Grade N, and ASTM C-90. All concrete masonry units shall be medium weight. Wall system to be solid grout filled and to receive steel reinforcement throughout.
- B. Walls above 7'-4" shall be fabricated with galvanized 16-gauge, welded in place, and structural steel studs with top and bottom channels. Bottom channel to be welded to steel wall cap. Each weld shall be painted with a minimum of three coats of rust inhibiting paint.

2.4 INTERIOR FINISHES

- A. Restroom and Chase floors to receive a medium broom finish with no more than a 0.60 coefficient of friction and receive high solids, non-yellowing curing and sealing compound.
- B. Restroom and Chase walls to 7'-4" above finish floor (AFF) to be CMU block, precision finish. To receive one coat of prime & fill acrylic block filler, one coat of 100% acrylic primer and two finish coats of 100% acrylic semi-gloss enamel paint. Specified color.
- C. Restroom walls above 7'-4" to be Class "A" rated fiberglass reinforced concrete (FRC) panels. Panels to be blind fastened, filled and sanded, with a light texture finish. To receive two coats of semi-gloss exterior grade paint over two coats of exterior grade primer. Specified color.
- D. Chase walls above 7'-4" to be 5/8" structural rated, exterior grade OSB glued and screwed to gable wall framing. To receive one coat of 100% acrylic primer. Color of primer to be Gray.
- E. Restroom and Chase ceilings to be Class "A" rated fiberglass reinforced concrete (FRC) panels. Panels to be blind fastened, filled and sanded, with a

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PREFABRICATED RESTROOM BUILDING**

light texture finish. To receive two coats of semi-gloss exterior grade paint over two coats of exterior grade primer. Specified color.

- F. Provide R-19 Batt Insulation at roof and eaves.

2.5 DOORS & SKYLIGHTS

- A. Restroom and Chase Doors:
 - 1. Section 081250: Aluminum and Fiberglass Doors
- B. Hinges:
 - 1. Section 087100: Door Hardware – Continuous Hinges
- C. Door hardware:
 - 1. Section 087100: Door Hardware – Continuous Hinges
- D. Skylights:
 - 1. Section 086250: Tubular Daylighting Device

2.6 ROOF

- A. Roof structure to be 5/8" exterior grade structural OSB over 6", 20-gauge galvanized "C" channel on 16" centers, nominal. Perimeter wall caps to be 3/16" tube steel anchored to block walls with 20" threaded rod on 16" centers. All rafters to beam connections to be welded. Wall cap to receive one coat of DTM acrylic urethane gray primer and two finish coats of DTM acrylic urethane tint base. Specified color as noted on Plans.
- B. Roof finish:
 - 1. Section 073140: Stone Coated Metal Roof Tile
- C. Fascia trim:
 - 1. Section 076200: Sheet Metal Flashing and Trim
- D. Soffits to be Class "A" rated fiberglass reinforced concrete (FRC) panels. Panels to be blind fastened, filled and sanded, with a light texture finish. To receive two coats of semi-gloss exterior grade paint over two coats of exterior grade primer. Specified color as noted on Plans.

2.7 EXTERIOR FINISHES

- A. Exterior of block to be precision. Exterior block finish:
 - 1. Section 099623: Graffiti-Resistant Coatings
- B. Exterior finish above 7'-4" to be Class "A" rated fiberglass reinforced concrete (FRC) panels. Panels to be blind fastened, filled and sanded, with a light

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texture finish. To receive two coats of semi-gloss exterior grade paint over two coats of exterior grade primer. Specified color as noted on Plans.

2.8 VENTILATION

- A. Vent screens shall be 1" thick mesh grating panels with 1 ½" squares. Panels to be molded in one piece of fiberglass rovings combined with a vinyl ester thermosetting resin system. The resin is UV inhibited and includes a surface veil on all exposed surfaces for enhanced corrosion and UV protection. Specified color.

2.9 ACCESSORIES AND SIGNAGE

- A. All wall mounted toilet accessories to be installed with stainless steel tamper-resistant screws.
- B. Accessories are as follows (or equal):
 - 1. Grab Bars (36 inch and 48 inch Stainless Steel):
 - a. Bobrick #B6806.36.
 - b. Bobrick #B6806.48.
 - c. Bradley.
 - d. American Specialties, Inc.
 - e. Or approved equal.
 - 2. Toilet Paper Holder (Surface Mounted Single Jumbo Roll):
 - a. Bobrick #B-2890
 - b. Bradley.
 - c. American Specialties, Inc.
 - d. Or approved equal.
 - 3. Cane Detectable Barrier (Stainless Steel):
 - a. American Specialties, Inc.
 - b. Lido Designs, Inc. DBA BuyRailings.com
 - c. Or approved equal.
- C. Signage to be in compliance with California Title 24 and ADA for restroom entrances.

2.10 PLUMBING

- A. Plumbing drain, waste, and vent piping shall be schedule 40 PVC with solvent welded connections. All vents through the roof shall be cast iron and capped.
- B. Water lines shall be Type L copper above ground and Type K copper below ground. Water supply in building shall have a built-in valve combo including a pressure-reducing valve to 125 psi, an in-line 10-micron filter, and two 125 psi pressure gauges.

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- C. Incoming water service shall be a 1-1/2" line, 50 gpm and 60psi minimums.
- D. Each fixture shall be isolated with a ball valve or plumbing fixture flush valve. All flush valves and P-traps shall be concealed in chase.
- E. Plumbing fixtures shall be stainless steel as follows (or equal):
 - 1. Water Closet: Acorn Dura-Ware 2120 W-3-CN (or equal)
 - 2. Accessible Water Closet: Acorn Dura-Ware 2120 W-3-ADA-SPS (or equal)
 - 3. Flush Valve: Zurn Z-6144-WS1-9L-L3 (or equal)
 - 4. Lavatory: Acorn Dura-Ware 1953-ADA-1-CSG (or equal)
 - 5. Metering Faucet: Chicago Faucets 333-665PSHCP (or equal)
- F. A single hose bibb shall be in the plumbing chase and shall be installed with a vacuum breaker, to code. Hose bibb to be Woodford 24 - 3/4" or approved equal.
- G. Floors shall drain to an integral floor drain with trap primers. Floor drains to be Zurn Z415-90-2NH w/ 5" B strainer or approved equal.

2.11 ELECTRICAL

- A. Building shall have a 125 amp, 120/240V, 1-phase, 3-wire, 12-space/24-circuit, NEMA type 1 load center with snap-in breakers. Panel to be a Siemens P1224L1125CU or approved equal.
- B. Chase lights shall be Kenall ES5-48-50L40K-DCC-DV-2H-PP or approved equal, 50 watt LED, 6"Wx48"L, with painted 20 gauge stainless steel housing and a UV stabilized, high impact extruded pearlescent polycarbonate lens. Lens to be a smooth exterior and linear prismatic interior. To be controlled by a Leviton 1221-21 or approved equal single pole switch: Color of switch and plate to be White.
- C. Chase lights to be controlled by an Intermatic T101 or equal time clock located in mechanical chase.
- H. Building shall have one Leviton 7899W or approved equal, 20 amp, 125 volt, GFI duplex receptacle located in chase. Color of cover plate to be White.
- I. Building shall be fitted with integral cast in-ground wires to code, a buried secondary ground rod to code, and a lightning rod properly grounded.

2.12 EXTERNAL UTILITY CONNECTIONS

- A. All utilities (water, sewer and electrical) shall be connected to point of connection per Plans.

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- B. Flexible Connections: Due to a chance of total and differential settlements, flexible utility connections will be necessary. Ball joints, and sleeve-type or other flexible couplings shall be used when connecting existing utility stub-outs to the building system, as required

PART 3 – EXECUTION

3.1 INSTALLATION / SCOPE OF WORK

- A. General Contractor must prepare the site in accordance with the following scope of work herein outlined and coordinate any required on site inspections. After the site prep has been completed, the building supplier's site installation crew will arrive to perform the installation. They will then verify, with the General Contractor's site supervisor, elevation, offsets, location and access.
- B. Survey Stakes: Provide ten foot offset stakes and locate front corners of building, existing utilities, and inverts within the area of construction. Locate and mark final slab elevation.
- C. Subgrade Pad: Preparing the site is fairly simple. Detailed instructions to prepare the building site are as follows:
1. Excavate down ten inches below the finish floor elevation (the slab is eight inches thick on top of a two inch sand bed).
 2. If soils are poor, it may be necessary to import six inches of Class II base rock. (This is not necessary if native soils will compact)
 3. Compact to 95%, or to local code requirement.
 4. Compact one foot over in all directions (over build).
 5. Supply approximately five cubic yards of clean sand, on side of site, for fine grading.
 6. Excavate and backfill trenches for underground plumbing and utility kit.
 7. Depending on weather, all irrigation should be turned off prior to delivery to allow the surrounding soils to dry and bear the weight of the truck and crane.
 8. Check corner locations against plans for proper sizing.
 9. Verify finish floor elevation for concrete slab (shipped fully attached to the building.)
 10. Excavate one foot perimeter footing if required by local code to specified depth.
- D. Site Access and Storage:
1. Provide suitable safe clear access to allow a crane (up to 110 tons), and the building on a semi-trailer (up to 40 tons) to reach site (14' width, 70' length, and 14' in height). If path to site is over existing utilities, sidewalks, or other damageable areas, proper marking, plating or other appropriate protection must be provided at no additional cost to the City.

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PREFABRICATED RESTROOM BUILDING**

Remove any overhead obstructions (i.e. power lines, trees). Obtain Engineer's approval for road closures or any special access that may be required but at no additional cost to the City.

- E. Utilities: Bring water, sewer, and power (if applicable) utilities into point of connection Christy boxes (supplied by the Prefabricated Restroom Manufacturer), within 6' of the building line at the location shown on our plan.
1. Water: Prefabricated Restroom Manufacturer will furnish and install a water point of connection (isolation valve), from mechanical chase to a Christy box six feet from the building line. General Contractor must connect service to valve.
 2. Sewer: Prefabricated Restroom Manufacturer will furnish and install a sewer point of connection from mechanical chase to a Christy box six feet from the building line. General Contractor must connect service.
 3. Electrical: Prefabricated Restroom Manufacturer will furnish and install a PVC conduit and a Christy box to the point of connection six feet from the building line. General Contractor to pull the electrical service line through the conduit and connect to the main panel lugs inside the building. All electrical inside the building will be furnished and installed by the Prefabricated Restroom Manufacturer, except as noted above in exclusions.
 4. Testing and repair of leaks is the responsibility of the General Contractor.
 5. Note that a minimum 1½" line with 25 gpm at 60 psi pressure minimum is required to ensure that water closets will operate as designed.
- F. Permits and Fees: All building permits and fees shall be borne by General Contractor.
- G. Inspections: Schedule inspections with adequate notice to ensure that the underground plumbing and electrical work is approved prior to placement of building. Schedule final inspection by building officials immediately following the Prefabricated Restroom Manufacturer's completion of installation. Schedule re-inspections immediately following Prefabricated Restroom Manufacturer's conclusion of any correction items.
- H. Site Clean Up and Debris Removal: Provide an on-site trash bin for disposal of one pick up load of debris. Remove all excess spoils.
- I. All rough and final grading shall be by General Contractor.
- J. Soils Information: See Division F – Permits & Attachments.
- 3.2 CLOSE-OUT DOCUMENTS & WARRANTY

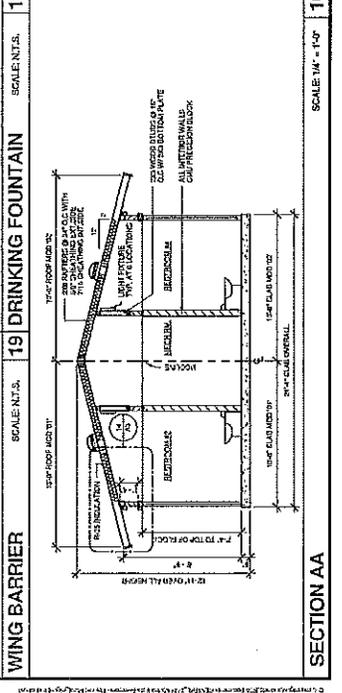
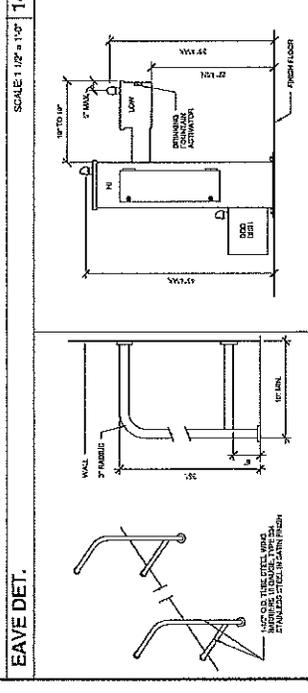
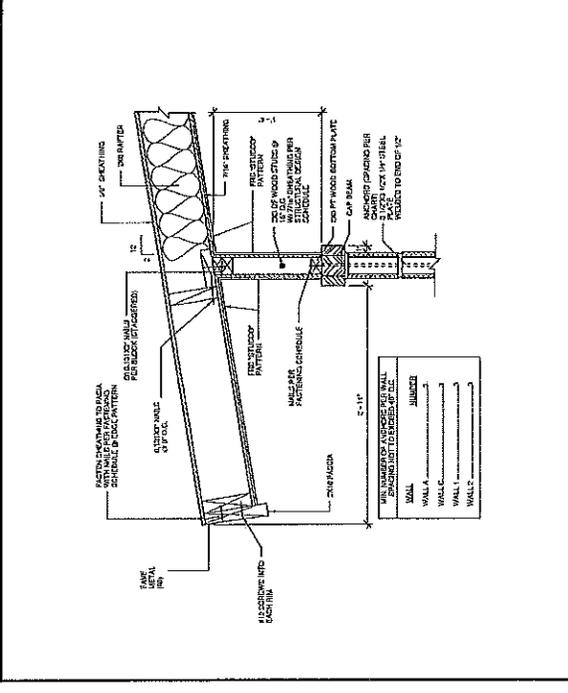
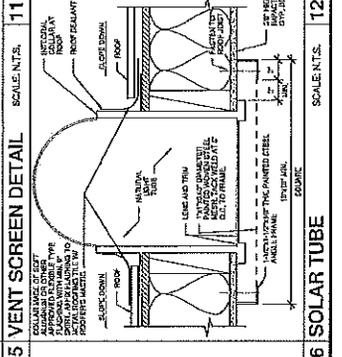
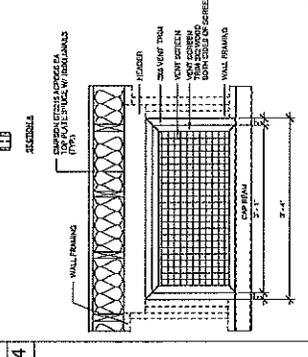
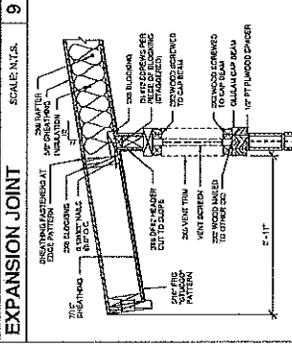
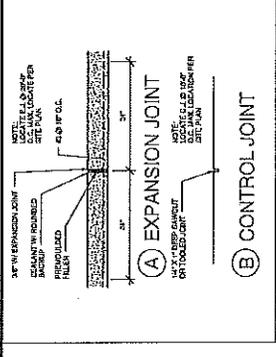
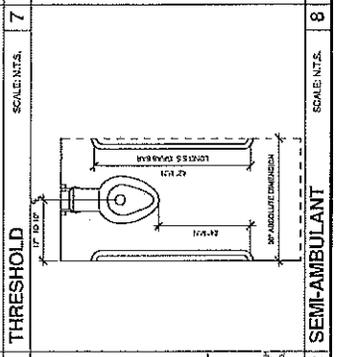
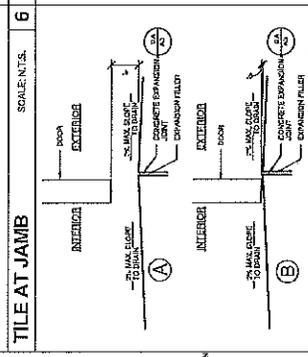
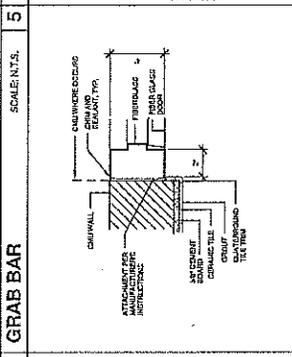
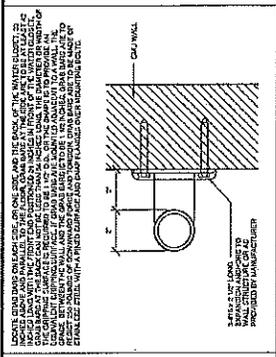
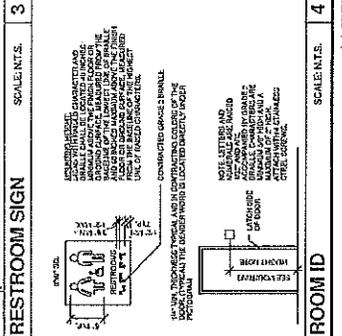
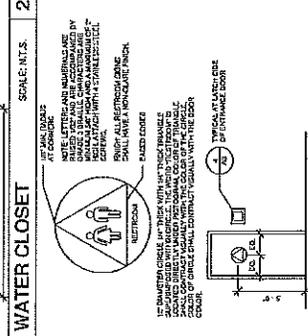
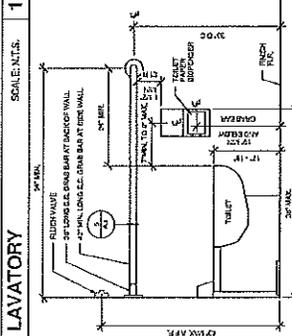
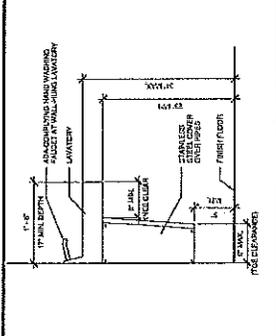
**SECTION 131200
PREFABRICATED RESTROOM BUILDING**

- A. The building supplier shall provide two (2) sets of as-built drawings (one (1) set of bond prints and one (1) set of mylars) for the building and two (2) two copies of maintenance manuals with all associated parts cut sheets, sources for replacement, and maintenance guidelines.

- B. Keys:
 - 1. Section 087100 – Door Hardware: Keying Requirements

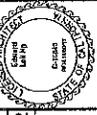
- C. Each manual shall include a five (5) year warranty for building construction.

END OF SECTION

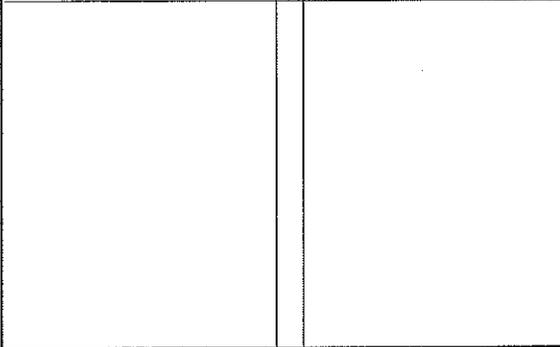
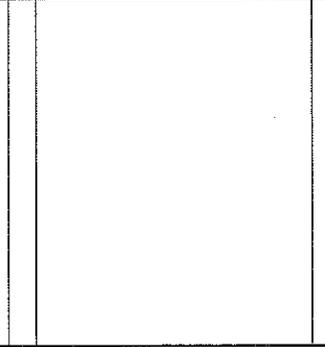
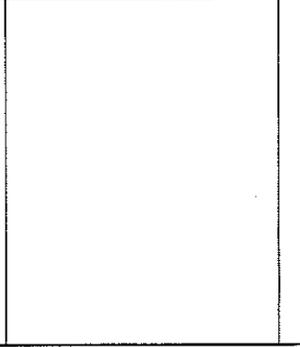
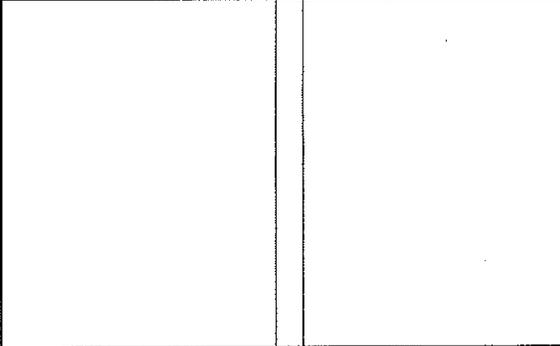
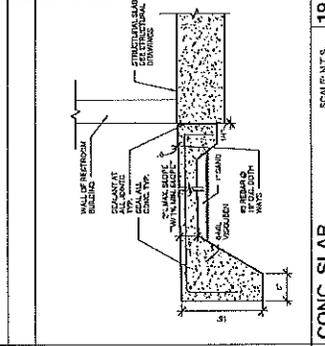
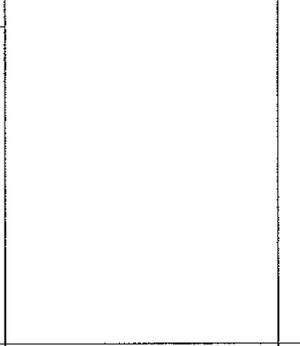
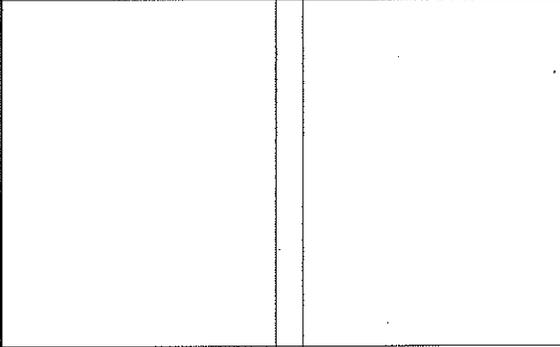
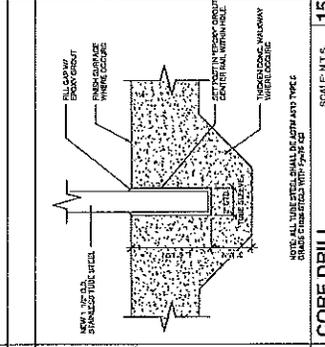
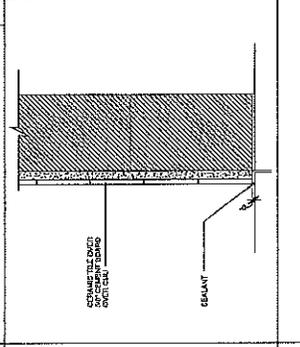
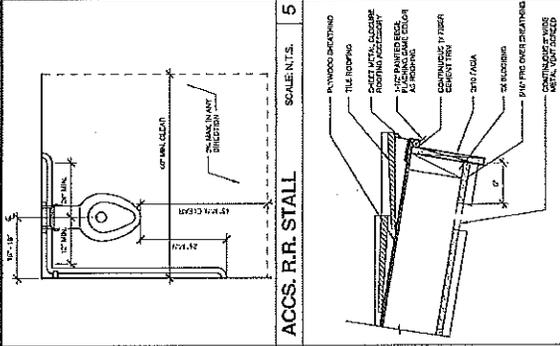
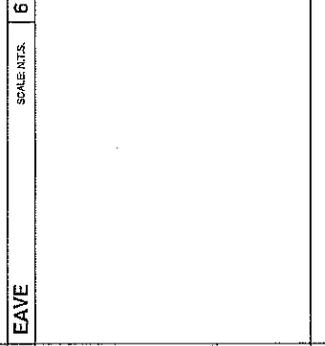
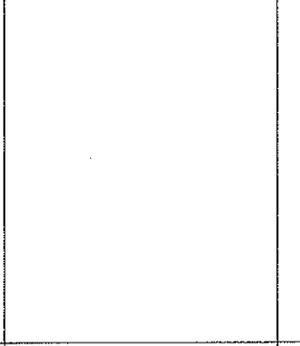
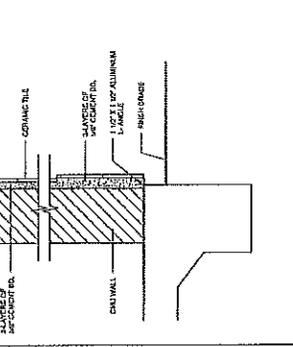
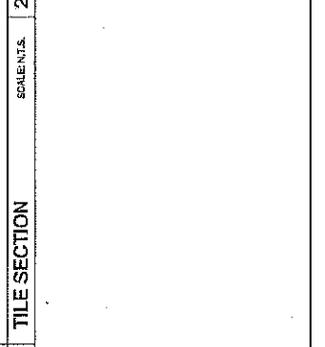
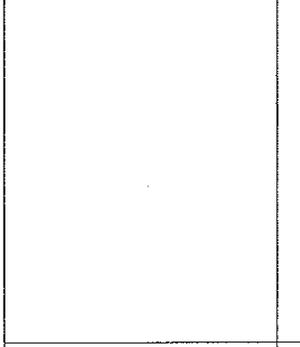


TIDELANDS BEACH RESTROOMS
MARINA VISTA - MV1
E. ELIOT STREET, LONG BEACH CA 90803

NO. 10	DATE	BY
NO. 11	DATE	BY
NO. 12	DATE	BY
NO. 13	DATE	BY
NO. 14	DATE	BY
NO. 15	DATE	BY
NO. 16	DATE	BY
NO. 17	DATE	BY
NO. 18	DATE	BY
NO. 19	DATE	BY
NO. 20	DATE	BY



NO. 1	DATE	BY
NO. 2	DATE	BY
NO. 3	DATE	BY
NO. 4	DATE	BY
NO. 5	DATE	BY
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NO. 20	DATE	BY



SCALE: N.T.S.

SCALE: N.T.S.

SCALE: N.T.S.

Attachment A

Debarment, Suspension, Ineligibility and Voluntary Exclusion Certification

Please read Acceptance of Certification and Instructions for Certification before completing

As a current or potential vendor for the City of Long Beach (City) your firm, through its business relationship with the City, may be the recipient of federal grant funds. As such, the City is required to document that neither your business entity or organization, nor any of your principals are debarred, suspended, ineligible, or have voluntarily been excluded from receiving federal grant funds. Consistent with Executive Order No. 12549 Title 2 CFR Part 180 Subpart C, all potential recipients of federal grant funds are required to comply with the requirements specified below. By submission of proposal/bid/agreement, the undersigned, under penalty of perjury, certifies that the participant, nor any of its principals in the capacity of owner, director, partner, officer, manager, or other person with substantial influence in the development or outcome of a covered transaction, whether or not employed by the participant:

- Are not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal department or agency;
- Have not, within a three (3) year period preceding this bid/agreement/proposal, been suspended, debarred, voluntarily excluded or declared ineligible by a federal agency;
- Do not presently have a proposed debarment proceeding pending;
- Have not, within a three (3) year period preceding this bid/agreement/proposal, been indicted or convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct;
- Have not, within a three (3) year period preceding this bid/agreement/proposal, had one or more public transactions (Federal, State, or local) terminated for cause or default.

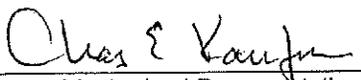
If reorganization, management turnover, or a shift or change of principals' status occurs, written notice must be submitted within 21 days. Subsequent disclosure of unfavorable information will be subject to thorough review and remedial action. Updated versions of this certification may be requested on a routine basis.

Where the potential prospective recipient of Federal assistance funds is unable to certify to any of the statement in this certification, such prospective participant shall attach an explanation to the applicable bid/agreement/proposal.

The Public Restroom Company
Business/Contractor/Agency

Charles E. Kaufman
Name of Authorized Representative

President
Title of Authorized Representative


Signature of Authorized Representative

02/21/2017
Date

r20141001

Acceptance of Certification

1. This bid/agreement/proposal or like document has the potential to be a recipient of Federal funds. In order to be in compliance with Code of Federal Regulations, the City requires this completed form. By signing and submitting this document, the prospective bidder/proposer is providing the certification and acknowledgement as follows:
2. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549.
3. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective recipient of Federal assistance funds knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
4. The potential recipient of Federal assistance funds agrees by submitting this bid/agreement/proposal or like document that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

Instructions for completing the form, Attachment –Debarment Certification

1. The City of Long Beach sometimes receives Federal funding on certain purchases/projects. To ensure that the City is in compliance with Federal regulations we require this form to be completed.
2. The City of Long Beach checks the System for Award Management at www.sam.gov to make sure that Consultants who are awarded City contracts and/or purchase orders are not debarred or suspended. Prospective Consultants should perform a search on this website for your company and or persons associated with your business.
3. If your business is in compliance with the conditions in the form, please have the appropriate person complete and sign this form and return with your bid/proposal/agreement.
4. If at anytime, your business or persons associated with your business become debarred or suspended, we require that you inform us of this change in status.
5. If there are any exceptions to the certification, please include an attachment. Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception, indicate to whom it applies, initiating agency and dates of action.
6. Note: Providing false information may result in criminal prosecution or administrative sanctions.

If you have any questions on how to complete this form, please contact the Purchasing Division in the City of Long Beach Business Relations Bureau at 562-570-6200

Rev 12.11.13



City of Long Beach
 Purchasing Division
 333 W Ocean Blvd/7th Floor
 Long Beach CA 90802

ATTACHMENT B

Reference Information Form

Client/Contractor Name City of Long Beach, CA/Thomasville Construction Inc.
 Project Manager/Contact Name Lorrie Viola E-mail lviola@civil-source.com Ph. No. 949-585-0477
 Address 2760 Studebaker Road, Long Beach, CA 90815
 Project Description Design, Build, & Install Prefabricated Restroom Building - Bixby Park, 130 Cherry Ave., Long Beach, CA
 Project Dates (Start and End) 1/2015-12/2015 Contract Term(s) 90 days from Contract Amount \$221,601
receipt of state approved plans

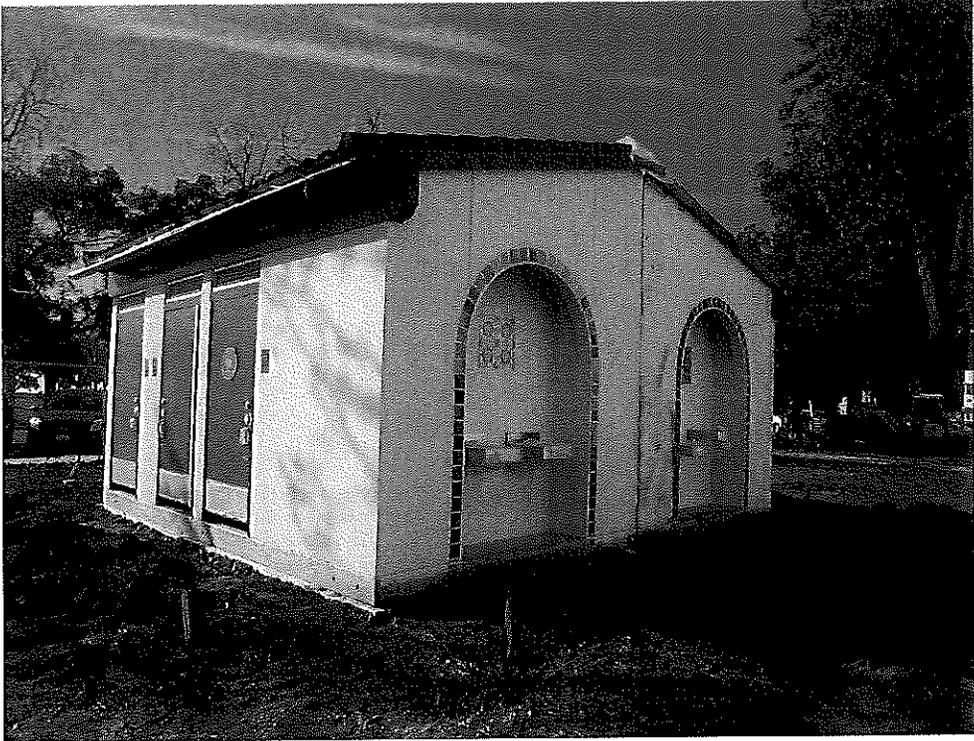
Client/Contractor Name City of Riverside, CA
 Project Manager/Contact Name Randy McDaniel E-mail rmcdaniel@riversideca.gov Ph. No. 951-826-2000
 Address 6927 Magnolia Avenue, Riverside, CA 92506
 Project Description Design, Build, & Install Prefabricated Restroom - Don Jones Park, 3995 Jefferson Street, Riverside, CA
 Project Dates (Start and End) 2/2015-9/2015 Contract Term(s) 90 days from Contract Amount \$114,282
receipt of state approved plans

Client/Contractor Name City of Rialto, CA
 Project Manager/Contact Name Perry Brents E-mail pbrents@rialtoca.gov Ph. No. 909-820-2525
 Address 150 S. Palm Avenue, Rialto, CA 92376
 Project Description Design, Build, & Install Restroom/Concession Building - Bud Bender Park, 235 Lilac Avenue, Rialto, CA
 Project Dates (Start and End) 9/2015-3/2016 Contract Term(s) 90 days from Contract Amount \$335,547
receipt of state approved plans

Client/Contractor Name City of Coachella, CA
 Project Manager/Contact Name Gordon Fisher E-mail gfisher@coachella.org Ph. No. 760-501-8130
 Address 1515 Sixth Street, Coachella, CA 92236
 Project Description Design, Build, & Install Prefabricated Restroom Building - Veterans Park, 1515 6th Street, Coachella, CA
 Project Dates (Start and End) 4/2016-10/2016 Contract Term(s) 90 days from Contract Amount \$274,146
receipt of state approved plans

Client/Contractor Name Riverside County Rec, Park & Open Space, CA
 Project Manager/Contact Name Marc Brewer E-mail mbrewer@rivcoparks.org Ph. No. 951-955-4316
 Address 4600 Crestmore Road, Riverside, CA 92509
 Project Description Design, Build, & Install Restroom/Shower Building - Mayflower Park, 4980 Colorado River Road, Blythe, CA
 Project Dates (Start and End) 5/2016-11/2016 Contract Term(s) 120 days from Contract Amount \$288,614
receipt of state approved plans

Project Reference Photos



Bixby Park, City of Long Beach, CA 12/2015



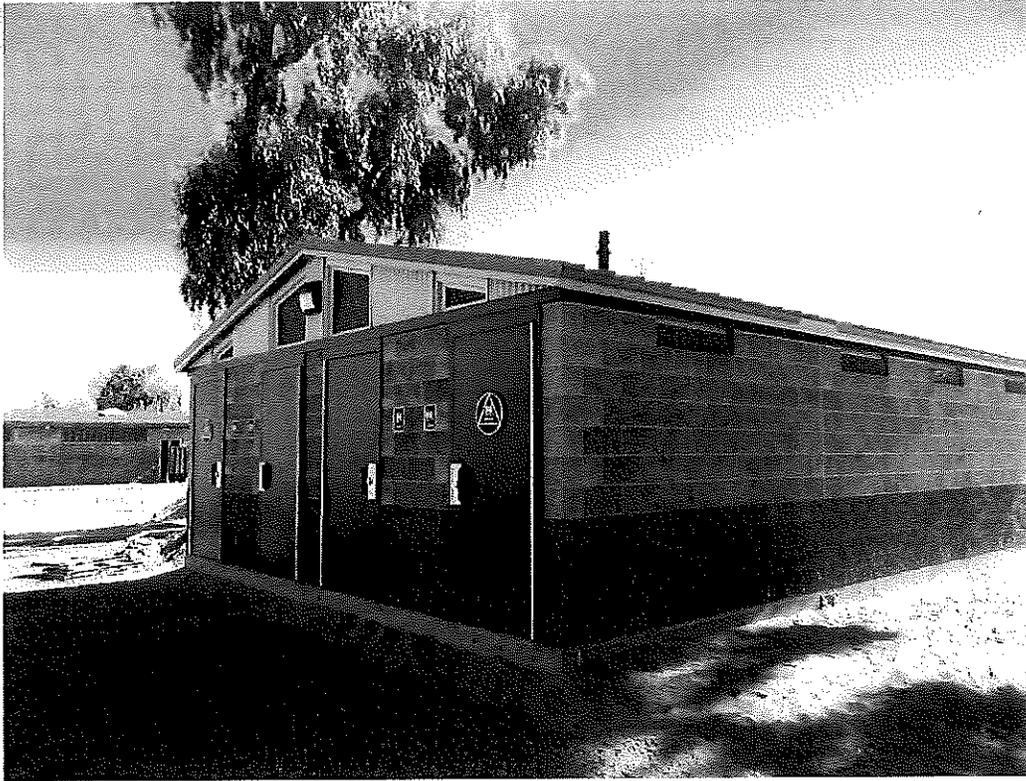
Don Jones Park, City of Riverside, CA 09/2015



Bud Bender Park, City of Rialto, CA - 03/2016



Veterans Park, City of Coachella, CA - 10/2016



Mayflower Park, County of Riverside, CA (Blythe, CA) - 11/2016

Attachment C

**W-9 Request for Taxpayer
Identification Number and Certification**

[Form must be signed and dated]

Request for Taxpayer Identification Number and Certification

Give Form to the
 requester. Do not
 send to the IRS.

Print or type
 See Specific Instructions on page 2.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank. PUBLIC RESTROOM COMPANY	
2 Business name/disregarded entity name, if different from above	
3 Check appropriate box for federal tax classification; check only one of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> C Corporation <input checked="" type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶ _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
5 Address (number, street, and apt. or suite no.) 2587 BUSINESS PKWY	Requester's name and address (optional)
6 City, state, and ZIP code MINDEN, NV 89423	
7 List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Social security number				
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or				
Employer identification number				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> <td style="width: 25%; border: 1px solid black; height: 20px;"></td> </tr> </table>				

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification Instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here	Signature of U.S. person ▶	Date ▶ 1/1/2017
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.
 Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at www.irs.gov/fw9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding? on page 2.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

Attachment D

EQUAL BENEFITS ORDINANCE DISCLOSURE

As a condition of being awarded a contract with the City of Long Beach ("City"), the selected Contractor/Vendor ("Contractor") may be required during the performance of the Contract, to comply with the City's nondiscrimination provisions of the Equal Benefits Ordinance ("EBO") set forth in the Long Beach Municipal Code section 2.73 et seq. The EBO requires that during the performance of the contract, the Contractor shall provide equal benefits to its employees with spouses and employees with domestic partners. Benefits include but are not limited to, health benefits, bereavement leave, family medical leave, membership and membership discounts, moving expenses, retirement benefits and travel benefits. A cash equivalent payment is permitted if an employer has made all reasonable efforts to provide domestic partners with access to benefits but is unable to do so. A situation in which a cash equivalent payment might be used if where the employer has difficulty finding an insurance provider that is willing to provide domestic partner benefits.

The EBO is applicable to the following employers:

- For-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements and other construction projects in the amount of \$100,000 or more
- For-profit entities that generate \$350,000 or more in annual gross receipts leasing City property pursuant to a written agreement for a term exceeding 29 days in any calendar year

Contractors who are subject to the EBO must certify to the City before execution of the contract that they are in compliance with the EBO by completing the EBO Certification Form, attached, or that they have been issued a waiver by the City. Contractors must also allow authorized City representatives access to records so the City can verify compliance with the EBO.

The EBO includes provisions that address difficulties associated with implementing procedures to comply with the EBO. Contractors can delay implementation of procedures to comply with the EBO in the following circumstances:

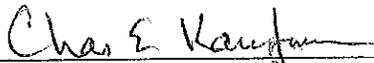
- 1) By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor/vendor submits evidence of taking reasonable measures to comply with the EBO; or
- 2) At such time that the administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor/vendor's infrastructure, not to exceed three months; or
- 3) Upon expiration of the contractor's current collective bargaining agreement(s).

Compliance with the EBO

If a contractor has not received a waiver from complying with the EBO and the timeframe within which it can delay implementation has expired but it has failed to comply with the EBO, the Contractor may be deemed to be in material breach of the Contract. In the event of a material breach, the City may cancel, terminate or suspend the City agreement, in whole or in part. The City also may deem the Contractor an irresponsible bidder and disqualify the Contractor from contracting with the City for a period of three years. In addition, the City may assess liquidated damages against the Contractor which may be deducted from money otherwise due the Contractor. The City may also pursue any other remedies available at law or in equity.

By my signature below, I acknowledge that the Contractor understands that to the extent it is subject to the provisions of the Long Beach Municipal Code section 2.73, the Contractor shall comply with this provision.

Printed Name: Charles E. Kaufman Title: President

Signature:  Date: 02/21/2017

Business Entity Name: The Public Restroom Company

EQUAL BENEFITS ORDINANCE CERTIFICATION OF COMPLIANCE

Section 1. CONTRACTOR/VENDOR INFORMATION

Name: The Public Restroom Company Federal Tax ID No. [REDACTED]
Address: 2587 Business Parkway
City: Minden State: NV ZIP: 89423
Contact Person: Charles E. Kaufman Telephone: 888-888-2060 ext. 101
Email: chuck@publicrestroomcompany.com Fax: 888-888-1448

Section 2. COMPLIANCE QUESTIONS

- A. The EBO is inapplicable to this Contract because the Contractor/Vendor has no employees. Yes No
- B. Does your company provide (or make available at the employees' expense) any employee benefits? Yes No
(If "yes," proceed to Question C. If "no," proceed to section 5, as the EBO does not apply to you.)
- C. Does your company provide (or make available at the employees' expense) any benefits to the spouse of an employee?
 Yes No
- D. Does your company provide (or make available at the employees' expense) any benefits to the domestic partner of an employee?
 Yes No (If you answered "no" to both questions C and D, proceed to section 5, as the EBO is not applicable to this contract. If you answered "yes" to both Questions C and D, please continue to Question E. If you answered "yes" to Question C and "no" to Question D, please continue to section 3.)
- E. Are the benefits that are available to the spouse of an employee identical to the benefits that are available to the domestic partner of an employee?
 Yes No
(If "yes," proceed to section 4, as you are in compliance with the EBO. If "no," continue to section 3.)

Section 3. PROVISIONAL COMPLIANCE

- A. Contractor/vendor is not in compliance with the EBO now but will comply by the following date:

_____ By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor/vendor submits evidence of taking reasonable measures to comply with the EBO; or

_____ At such time that the administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor/vendor's infrastructure, not to exceed three months; or

_____ Upon expiration of the contractor's current collective bargaining agreement(s).

- B. If you have taken all reasonable measures to comply with the EBO but are unable to do so, do you agree to provide employees with a cash equivalent? (The cash equivalent is the amount of money your company pays for spousal benefits that are unavailable for domestic partners.)
_____ Yes _____ No

Section 4. REQUIRED DOCUMENTATION

At time of issuance of purchase order or contract award, you may be required by the City to provide documentation (copy of employee handbook, eligibility statement from your plans, insurance provider statement, etc.) to verify that you do not discriminate in the provision of benefits.

Section 5. CERTIFICATION

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that I am authorized to bind this entity contractually. By signing this certification, I further agree to comply with all additional obligations of the Equal Benefits Ordinance that are set forth in the Long Beach Municipal Code and in the terms of the contract of purchase order with the City.

Executed this 21st day of February, 2017, at Minden, NV
Name Charles E. Kaufman Signature 
Title President Federal Tax ID No. 48-1289691



City of Long Beach
Purchasing Division
333 w. Ocean Blvd 7th Floor
Long Beach, CA 90802

ATTACHMENT E

INSURANCE REQUIREMENTS

Contractor shall submit proof of insurability from an insurance company with an: 8 rating (as specified in City AR 8-27) from AM Best Company with bid. Failure to submit this proof will disqualify the bid.

- Successful bidder shall obtain and maintain at its expense until completion of performance and acceptance by the City, from an insurer:
 - Admitted (Licensed) in the State of California with a current financial responsibility rating of an Excellent or better and a current financial size category (FSC) of V (Capital Surplus and Conditional Surplus Funds of greater than \$10 million) or greater rating as reported by AM Best Company or equivalent, unless waived in writing by the City's Risk Manager, or
 - Non-admitted in the State of California with a current financial responsibility rating of an Excellent or better and a current financial size category (FSC) of VIII (Capital Surplus Funds or greater than \$100 million) or greater rating as reported by AM Best Company or equivalent, unless waived in writing by City's Risk Manager.
 - Comprehensive General Liability naming City, its Officials, Employees, and Agents as additional insureds for injury to or death of persons or damage to or loss of property arising from or connected to vendor's performance here-under \$1,000,000 combined single limit for each occurrence and \$2,000,000 General Aggregate.
 - Automobile Liability: \$500,000 combined single limit per accident for bodily injury and property damage covering owned, non-owned and hired vehicles.
 - Worker's Compensation: As required by California Labor Code.
- Self-insurance of self-insured retention must be approved in writing by City and protect City in same manner and extent as if policies had not contained retention. Each policy must be endorsed to state that coverage shall not be cancelled by either party or reduced in coverage except after 30 days prior written notice to City. Vendor must furnish to City before performance certificates of insurance and original endorsements, with the original signature of one authorized by the insurer to bind coverage on its behalf, for approval as to sufficiency and form. This insurance shall not be deemed to limit vendor's liability hereunder.
- Contractor shall maintain at its expense, until completion of performance and acceptance by City, from an insurer:
 - Admitted (licensed) in the State of California with a current financial responsibility rating of A (Excellent) or better and a current financial size category (FSC) of V (capital surplus



City of Long Beach
Purchasing Division
333 w. Ocean Blvd 7th Floor
Long Beach, CA 90802

- and conditional surplus funds of greater than \$10 million) or greater rating as reported by A.M. Best Company or equivalent, unless waived in writing by City's Risk Manager, or
- o Non-admitted in the State of California with a current financial responsibility rating of A (Excellent) or better and a current financial size category (FSC) of VIII (capital surplus and conditional surplus funds of greater than \$100 million) or greater rating as reported by A.M. Best Company or equivalent, unless waived in writing by the City's Risk Manager.
 - All coverages for Subcontractors shall be subject to the requirements stated herein and shall be maintained at no expense to the City.
 - Contractor shall furnish the City with certificates of insurance and original endorsements providing coverage as required above. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.
 - Before any of Contractor's or Subcontractor's employees shall do any work on the City's property, Contractor shall furnish the City with the required certificates evidencing that such insurance is being maintained. Such certificates shall specify the date when such insurance expires. Such insurance shall be maintained until after the Work under the Contract has been completed and accepted.
 - Such insurance as required herein or in any other documents to be considered a part hereof shall not be deemed to limit Contractor's liability under this Contract.
 - Contractor shall defend, indemnify and hold harmless the City, its officials and employees from and against any and all liability for claims for bodily injury and property damage arising out of negligent acts, omissions or errors of any employee of Contractor at the Site.
 - Contractor shall list the name and location of the place of business of each Subcontractor who will perform work, labor or services for Contractor, or who specially fabricates and installs a portion of the Work or improvement in an amount in excess of one-half of one percent of Contractor's total contract cost. The Subcontractor list shall be submitted with Contractor's Bid.

By submitting a signature below, Bidder promises that insurance requirements can be provided as requested.

Printed Name: Charles E. Kaufman Title: President
Signature: Charles E. Kaufman Date: 02/21/2017



City of Long Beach
 Purchasing Division
 333 West Ocean Boulevard, 7th Floor
 Long Beach, CA 90802

Attachment F

Secretary of State Certification

Please provide print out showing your business is registered with the California Secretary of State. Individual and sole proprietor companies are exempt.

Awarded vendors/contractors must be registered with the California Secretary of State prior to contract execution. For more information, please consult:

www.sos.ca.gov/

Business Search

This search provides access to domestic stock, domestic nonprofit and qualified foreign corporations, limited liability company and limited partnership information of record with the California Secretary of State. For additional information about entity addresses and the names and addresses of the principals of the entity, order a copy of the last complete Statement of Information (for corporations and limited liability companies) or formation and amendment documents (for limited partnerships). For information on ordering certificates, copies of documents and/or status reports or to request a more extensive search, refer to [Information Requests](#).

Please note: This search is not intended to serve as a name availability search. For information on checking or reserving a name, refer to [Name Availability](#).

To conduct a search:

- Select the applicable search type.
- Enter the entity name or number you wish to search. Note: If entering the entity number of a corporation, the number must begin with the letter C.
- Select the Search button.
- For help with searching an entity name or number, refer to [Search Tips](#).

Search Type:
 Corporation Name Limited Liability Company/Limited Partnership Name Entity Number

Entity Name or Number:

Disclaimer: This tool allows you to search the Secretary of State's California Business Search database for abstracts of information for domestic stock, domestic nonprofit and qualified foreign corporations, limited liability companies and limited partnerships that have filed with this office. This search tool groups corporations separately from limited liability companies and limited partnerships and returns all entities for the search criteria in the respective groups regardless of the current status.

Although every attempt has been made to assure that the information contained in the database is accurate, the Secretary of State's office is not responsible for any loss, consequence, or damage resulting directly or indirectly from reliance on the accuracy, reliability, or timeliness of the information that is provided. All such information is provided "as is." For information on ordering copies of the official business entity records for a particular entity, please refer to [Information Requests](#).

Business Search - Entity Detail

The California Business Search is updated daily and reflects work processed through Monday, February 20, 2017. Please refer to document [Processing Times](#) for the received dates of filings currently being processed. The data provided is not a complete or certified record of an entity. Not all Images are available online.

C2492360 THE PUBLIC RESTROOM COMPANY

Registration Date:	01/21/2003
Jurisdiction:	NEVADA
Entity Type:	FOREIGN STOCK
Status:	ACTIVE
Agent for Service of Process:	HAROLD M JAFFE 3521 GRAND AVE OAKLAND CA 94610
Entity Address:	2587 BUSINESS PKWY MINDEN NV 89423
Entity Mailing Address:	2587 BUSINESS PKWY MINDEN NV 89423

A Statement of Information is due EVERY year beginning five months before and through the end of January.

Document Type	File Date	PDF
SI-NO CHANGE	02/02/2017	
SI-COMPLETE	04/24/2015	

* Indicates the information is not contained in the California Secretary of State's database.

- If the status of the corporation is "Surrender," the agent for service of process is automatically revoked. Please refer to California Corporations Code [section 2114](#) for information relating to service upon corporations that have surrendered.
- For information on checking or reserving a name, refer to [Name Availability](#).
- If the image of a Statement of Information is not available online, for information on ordering a copy of that statement refer to [Information Requests](#).
- For information on ordering certificates, status reports, certified copies of documents and copies of documents not currently available in the Business Search such as a filing that is not a Statement of Information or filings for other types of business entities, or to request a more extensive search for records, refer to [Information Requests](#).
- For help with searching an entity name, refer to [Search Tips](#).
- For descriptions of the various fields and status types, refer to [Frequently Asked Questions](#).

[Modify Search](#)

[New Search](#)

[Back to Search Results](#)



**State of California
Secretary of State**

**Statement of Information
(Foreign Corporation)**

FEES (Filing and Disclosure): \$25.00.

If this is an amendment, see instructions.

IMPORTANT – READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

F

FJ58075

FILED

In the office of the Secretary of State
of the State of California

FEB-02 2017

1. CORPORATE NAME

THE PUBLIC RESTROOM COMPANY

2. CALIFORNIA CORPORATE NUMBER

C2492360

This Space for Filing Use Only

No Change Statement (Not applicable if agent address of record is a P.O. Box address. See Instructions.)

3. If there have been any changes to the information contained in the last Statement of Information filed with the California Secretary of State, or no statement of information has been previously filed, this form must be completed in its entirety.

If there has been no change in any of the information contained in the last Statement of Information filed with the California Secretary of State, check the box and proceed to Item 13.

Complete Addresses for the Following (Do not abbreviate the name of the city. Items 4 and 5 cannot be P.O. Boxes.)

4. STREET ADDRESS OF PRINCIPAL EXECUTIVE OFFICE	CITY	STATE	ZIP CODE
5. STREET ADDRESS OF PRINCIPAL BUSINESS OFFICE IN CALIFORNIA, IF ANY	CITY	STATE	ZIP CODE
6. MAILING ADDRESS OF THE CORPORATION, IF DIFFERENT THAN ITEM 4	CITY	STATE	ZIP CODE

Names and Complete Addresses of the Following Officers (The corporation must list these three officers. A comparable title for the specific officer may be added; however, the preprinted titles on this form must not be altered.)

7. CHIEF EXECUTIVE OFFICER/	ADDRESS	CITY	STATE	ZIP CODE
8. SECRETARY	ADDRESS	CITY	STATE	ZIP CODE
9. CHIEF FINANCIAL OFFICER/	ADDRESS	CITY	STATE	ZIP CODE

Agent for Service of Process If the agent is an individual, the agent must reside in California and Item 11 must be completed with a California street address, a P.O. Box address is not acceptable. If the agent is another corporation, the agent must have on file with the California Secretary of State a certificate pursuant to California Corporations Code section 1505 and Item 11 must be left blank.

10. NAME OF AGENT FOR SERVICE OF PROCESS				
11. STREET ADDRESS OF AGENT FOR SERVICE OF PROCESS IN CALIFORNIA, IF AN INDIVIDUAL	CITY	STATE	ZIP CODE	

Type of Business

12. DESCRIBE THE TYPE OF BUSINESS OF THE CORPORATION

13. THE INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT.

02/02/2017

CHARLES E KAUFMAN

PRESIDENT

Charles E Kaufman

DATE

TYPE/PRINT NAME OF PERSON COMPLETING FORM

TITLE

SIGNATURE



**State of California
Secretary of State**

Statement of Information

(Foreign Corporation)

FEES (Filing and Disclosure): \$25.00.

If this is an amendment, see instructions.

IMPORTANT – READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

F

FB49480

FILED

In the office of the Secretary of State
of the State of California

JAN-22 2016

1. CORPORATE NAME

THE PUBLIC RESTROOM COMPANY

2. CALIFORNIA CORPORATE NUMBER

C2492360

This Space for Filing Use Only

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5. STREET ADDRESS OF PRINCIPAL BUSINESS OFFICE IN CALIFORNIA, IF ANY CITY STATE ZIP CODE

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8. SECRETARY ADDRESS CITY STATE ZIP CODE

9. CHIEF FINANCIAL OFFICER/ ADDRESS CITY STATE ZIP CODE

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10. NAME OF AGENT FOR SERVICE OF PROCESS

11. STREET ADDRESS OF AGENT FOR SERVICE OF PROCESS IN CALIFORNIA, IF AN INDIVIDUAL. CITY STATE ZIP CODE

Type of Business

12. DESCRIBE THE TYPE OF BUSINESS OF THE CORPORATION

13. THE INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT.

01/22/2016

JILL B GAUGHAN

MANAGER STATE CORPORATE LICENSING

DATE

TYPE/PRINT NAME OF PERSON COMPLETING FORM

TITLE

SIGNATURE



**State of California
Secretary of State**

**Statement of Information
(Foreign Corporation)**

FEES (Filing and Disclosure): \$25.00.

If this is an amendment, see instructions.

IMPORTANT – READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

F

F557501

FILED

In the office of the Secretary of State
of the State of California

APR-24 2015

1. CORPORATE NAME

THE PUBLIC RESTROOM COMPANY

2. CALIFORNIA CORPORATE NUMBER

C2492360

This Space for Filing Use Only

No Change Statement (Not applicable if agent address of record is a P.O. Box address. See instructions.)

3. If there have been any changes to the information contained in the last Statement of Information filed with the California Secretary of State, or no statement of information has been previously filed, this form must be completed in its entirety.

If there has been no change in any of the information contained in the last Statement of Information filed with the California Secretary of State, check the box and proceed to Item 13.

Complete Addresses for the Following (Do not abbreviate the name of the city. Items 4 and 5 cannot be P.O. Boxes.)

4. STREET ADDRESS OF PRINCIPAL EXECUTIVE OFFICE CITY STATE ZIP CODE
2587 BUSINESS PKWY, MINDEN, NV 89423

5. STREET ADDRESS OF PRINCIPAL BUSINESS OFFICE IN CALIFORNIA, IF ANY CITY STATE ZIP CODE

6. MAILING ADDRESS OF THE CORPORATION, IF DIFFERENT THAN ITEM 4 CITY STATE ZIP CODE

Names and Complete Addresses of the Following Officers (The corporation must list these three officers. A comparable title for the specific officer may be added; however, the preprinted titles on this form must not be altered.)

7. CHIEF EXECUTIVE OFFICER/ ADDRESS CITY STATE ZIP CODE
CHARLES E KAUFMAN 13300 ARROWSPRINGS DR, RENO, NV 89511

8. SECRETARY ADDRESS CITY STATE ZIP CODE
CHARLES E KAUFMAN 13300 ARROWSPRINGS DR, RENO, NV 89511

9. CHIEF FINANCIAL OFFICER/ ADDRESS CITY STATE ZIP CODE
CHARLES E KAUFMAN 13300 ARROWSPRINGS DR, RENO, NV 89511

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10. NAME OF AGENT FOR SERVICE OF PROCESS

HAROLD M JAFFE

11. STREET ADDRESS OF AGENT FOR SERVICE OF PROCESS IN CALIFORNIA, IF AN INDIVIDUAL CITY STATE ZIP CODE
3521 GRAND AVE, OAKLAND, CA 94610

Type of Business

12. DESCRIBE THE TYPE OF BUSINESS OF THE CORPORATION
MANUF & INSTALL RESTROOM BLDGS

13. THE INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT.

04/24/2015

JILL B GAUGHAN

MNGR CONTRACT COMPLIANCE & CORPORATE STATE LICENSI

DATE

TYPE/PRINT NAME OF PERSON COMPLETING FORM

TITLE

SIGNATURE



Building Better Places To Go.™

To Owner Bidding: Tidelands-Marina Vista, Drake-Chavez Park & Houghton Community Center, City of Long Beach, California

Bid Date: Thursday, February 23, 2017 @ 11:00 AM PT

Project Background:

Public Restroom Company has provided 6 public park restrooms for the City of Long Beach. One of the projects completed is 8th Street at Tidelands Beach where the building is almost the same sized but currently in this bid modified to comply with the current California building code and AB732 designation for all gender restrooms.

Our firm has the experience of building these building to the Long Beach approved specifications. Additionally, this project has strict guidelines for delivery timetables and we have proven we can meet them. There are many proprietary items in the specifications that we installed in the previous buildings that we build for our own account and which are not available from other restroom providers. Public Restroom Company has the experience and proven performance for this agency.

Public Restroom Company has for **48 years** focused on developing a park prefabricated restroom that solves the odor problem and most other vandalism issues through unique new components that all have a 50 year built in life. These new high-tech buildings utilize international technology to make the interiors non-absorbent, with stronger anti-vandal components. Our clients are truly amazed when each structure arrives and is finished in just days. The fit and finish is like the workmanship of olden times and the warranty spans 5-20 years. Our costs are about 30% below site construction costs yet the end building is the best built in America.

Special Payment and Billing Terms –No Deposits, Monthly Progress Billing, and then Pay When Paid:

PRC invoices for our design, engineering, and architectural plans when your order is received. Second we follow with our full submittal package. Then, we invoice on a monthly in plant percentage of completion supported by photographs, State third party inspection reports, and State certification. When the project is not through a state agency, a third party inspector provides the inspections in plant and in writing files the report with the general to resubmit to the CBO.

Our process for payments is that we invoice monthly per the above and expect to be paid by the General when he is paid monthly. In order to have the owner pay for offsite construction, PRC provides a special unrequested insurance policy naming the General and the Owner as recipients for up to \$200,000 per building module for any incident including on site vandalism. This special policy

has been approved by cities, towns, counties, and state nationwide for allowing payments for offsite work in plant to be processed as a result of our special policy.

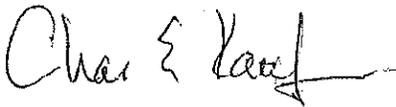
Delays in Payment and Project Stoppage:

In the event of project stoppage, additional fees may be assessed for re-mobilization, storage, crane costs, etc. *Our discounted project costs are based upon timely payments. Delays in payment could change delivery schedules and project costs by change order. PRC may not proceed with project if delay is due to payment until change order is signed and accepted by PRC.*

Commitment to be a reliable Subcontractor:

As principal of our company, I clearly understand the value of a reliable subcontractor you can count on. If your firm has already worked with us, you know about our history and performance. If you have not worked with us, and you would like more information, give me a call at (888) 888-2060, extension 101.

Thank you in advance for considering the professional, on time service of Public Restroom Company as your potential subcontractor.



Chuck Kaufman
President



FINAL PROJECT BID: TIDELANDS BEACH – MARINA VISTA, DRAKE-CHAVEZ & HOUGHTON PARKS, CITY OF LONG BEACH, CA (3 Prefabricated Restroom Buildings)

Bid Date: Thursday, February 23, 2017 @ 11:00 AM PST

Date: February 22, 2017

Project Ref #: 10120-2/9292-4/10155-0 2/22/2017

License # Contractor's License # 822966B

Dealers License # DL1109895

Manufacturer License # MF127700

DIR# 1000005303

Our Offer to Sell (Two Separate Bids):

1. Prefabricated Restroom Building Bids Delivered to Site Only:

CEV

Building #1 \$311,620

Building #2 \$278,869

Building #3 \$278,869

Public Restroom Company herein bids to *furnish (building only per bid plans and specifications or approved equal, delivered to site with all costs except installation including applicable taxes excluding retention.* (Retention is not allowed as this is materials or a product fully assembled before shipment to the site and therefore not subject to retention.)

Turnkey Installation of Building #1 - \$15,885 with retention allowed.

Turnkey Installation of Building #2 - \$15,885 with retention allowed.

Turnkey Installation of Building #3 - \$15,885 with retention allowed.

CEV

Public Restroom Company also includes in this two part quotation our turnkey installation package for this building. Our national factory authorized installation team will:

- a. Arrive onsite to confirm and verify the owner provided scope of work in preparation for installation including access to the site.
- b. Verify the building pad size, building corners, finished slab elevation, utility depth and location, meter size and distance from building, and compaction compliance.
- c. Excavate the utility trenches for placement of our prefabricated underground piping tree for plumbing and electrical, set the kit in place, provide the water test for inspection before backfilling, and then place the site adjacent coarse sand you provide to us alongside the building pad and screed it level for final building placement. We will need onsite water availability for wetting the sand bed before building placement to consolidate the pad.
- d. Set the building on the site pad.
- e. Connect the utility piping stub ups to the building piping stub down building points of connection for water, sewer, and electrical conduit to the building internal electrical panel.

2. Owner Final Tie In of Utilities and other site work:

The exterior utility connections for water, sewer and electrical 6' or less from the footprint of the building are by owner.



- 3. **Total Cost of building #1 with installation \$327,505**
- Total Cost of building #2 with installation \$294,754**
- Total Cost of building #3 with installation \$294,754**
- Grand Total of All 3 Buildings with installation \$917,013**

CK

OTHER BID CONDITIONS OR RESTRICTIONS:

Time Required for Completion of our Work In Plant and Installation:

PRC agrees to completion dates in bid. While site installation may be affected by local weather, in plant production will not change these dates.

Change orders:

If any change orders are granted, they may extend this time of in plant completion but those changes if any will not come from our work product from engineering or architectural plan review and only from client initiated modifications.

Exclusions/Exceptions:

1. Access issues for delivery of the building when the Owner/General Contractor has not provided a proper path to the final site. This exclusion covers sites whose access is limited by trees, inaccessible roadways, overhead power lines at location where crane will lift building, grade changes, berms, or uneven site grades, or when the path of travel is over improvements such as sidewalks, all of which are not within the scope of work by PRC.
2. If weather on site causes site delivery issues the delivery may have to be diverted to an offsite location and the additional costs will be a change order to the bid. Our staff works with the Owner/General Contractor in advance to make sure sound decisions for delivery are made to avoid this issue. But sometimes owners take risks for weather but this risk is clearly at the Owner/General Contractor risk, not PRC.
3. Sidewalks outside the building footprint.
4. Any trench plates needed for protection of site soils, sidewalks, or site utilities. Any site soils damage or other site improvements, if damaged during installation are by others.
5. Survey, excavation, and installation of the building pad and footings (if required) per PRC plans.
6. Soil conditions not suitable for bearing 1500 psf. If no soils testing report is available before bid, Owner/General Contractor must verify site supporting soils at a minimum of 1000 psf because that's the least we can place our structures on or Owner/General Contractor or engineer of record must design a foundation system to meet the imposed loads of site placement.
7. Improper water pressure, an undersized meter, or improper water volume flow to the building may necessitate a change order for the structure to install a 30 gallon

- pressure tank to provide the minimum flow rate and pressure. Building water service chlorination, post installation, is by others and not PRC.
8. Our crane costs, which are included herein, are based on a maximum 35' radius from the center pin of the crane to center point of the furthest building module roof. If additional distance requires a larger crane, additional costs will be assessed by change order to you.
 9. Building permits, a site survey, special inspection fees, minor trash removal, final utility connections to the onsite water, sewer and electrical are by others. Since the building is fully inspected and tested in plant, minor plumbing leaks (if water is not available when building site work installation is completed,) is by others.
 10. The Owner/General Contractor shall be responsible for minor site debris removal or a location for placement on site (nominally one pickup truck of shipping materials).
 11. Site Traffic Control, if applicable, shall be by General not PRC.

Our In Plant/Off-Site Construction Scheduling System:

PRC has several off-site manufacturing centers in the United States, strategically located, with the proper equipment and trained staff to fabricate our custom buildings to our high quality fit and finish standards. PRC manages quality control in our off-site production facility to comply with the approved drawings and provides an inspection certification and photos as required. When proprietary materials, which we have designed and fabricated, are part of the project, PRC supplies the manufacturing centers with these special parts or chemicals. We then schedule the in plant construction process to coordinate with your delivery date through our Operations Division field staff. We guaranty on time at cost delivery weather permitting.

Special Payment and Billing Terms –No Deposits, Monthly Progress Billing:

We will invoice for our design engineering and architectural plans to you and we expect to be paid for this scope of work before production begins. We will provide a schedule of construction progress values for our work in plant and on site. We will provide monthly progress billing based upon our completion of work off site in plant on a percentage of completion basis, supported by photographs and state inspection reports. We expect to be paid monthly the same as onsite progress payments are provided. We make sure our billing to you coincides with the monthly cut off for billing requirement.

In the event of project stoppage, additional fees may be assessed for re-mobilization, storage, crane costs, etc. *Our discounted project costs are based upon timely payments. Delays in payment could change delivery schedules and project costs.*

Special Insurance for owner protection for progress payments:

As PRC requires payment for each month of off-site construction, and since the building is not on owner property where their insurance will cover the building, we provide a special policy that insures the property even when paid for off-site until the building is finally accepted by the owner. The policy provides the Owner and General Contractor as additional insured during this period. PRC provides the Owner and General Contractor a policy rider to cover the building while it is being built off-site, while in transit to the job site, during and after it is installed on-



site until final acceptance. This special policy covers each building module (section) for up to \$200,000. This exceeds the cost of any building module we have offered for sale herein.

Term of Offer to Sell and General Contractor's Acceptance:

This offer is valid for acceptance within 30 days, or when a part of a public bid for the applicable duration imposed within the Owner's bid documents. Acceptance is by approving our post bid preliminary notice to begin drawings subject to final owner approval of our submittals and general contractor receipt of a contract from the owner or a purchase order/contract.

FINAL PROJECT BID: TIDELANDS BEACH – MARINA VISTA, DRAKE-CHAVEZ & HOUGHTON PARKS, CITY OF LONG BEACH, CA

Offered by: Public Restroom Company by

Chas E Kaufman
Charles E. Kaufman, President

This provides conditional acceptance of this preliminary purchase order for this building subject to acceptance of the submittals, furnished by Public Restroom Company. Once you accept the preliminary submittals, this shall become a final purchase agreement or at your discretion the final purchase order or a contract may be substituted with this attached.

Accepted by:

Authorized Signature

Date

Printed Name

Legal Entity Name and address



Bid Scope of Work by Party for: Tidelands – Marina Vista Park, Drake-Chavez Park & Houghton Community Center (3 Prefabricated Restroom Buildings)

Bid to Owner by Public Restroom Company

Bid Date: Thursday, February 23, 2017 @ 11:00 AM PT

Owner: City of Long Beach Project Ref#ITB CM 17-035

Owner Scope of work:

Owner Scope of Work Background:

Owner/General shall provide site survey to establish building corners and elevation of final floor slab, excavate building pad per PRC drawings or footings, locate footing sleeves for electrical, waste, and water, pour the footings (if required), furnish sand base adjacent to subgrade pad, and mark locations for utility POC's nominally up to 6' outside the building foundation.

Preparation of Building Pad:

Owner/General is responsible for providing the building subgrade pad or footings to frost depth per Public Restroom Company design specifications and owner bid documents. PRC will provide detailed drawings for the subgrade building pad, utilities POC's, and if required the footings, attached to this scope of work.

Owner/General verification of site access to allow Building Delivery:

1. Owner/General shall certify to PRC that suitable delivery path to the proposed building site in writing. Suitable access is defined as 14' minimum width, 16' minimum height, and with a sufficient turning radius for a crane and 70' tractor-trailer.
2. Our cost is based upon the crane we provide being able to locate within 35' from the building center and for the delivery truck to be no more than 35' from the crane's center picking point.
3. If the path to the building site traverses curbs, underground utilities, landscaping, sidewalks, or other obstacles that could be damaged, it is the Owner/General's responsibility for repair and all costs, if damage occurs.
4. If trench plating is required, the cost shall be the responsibility of the Owner/General's.
5. If unseen obstacles are present when site installation begins, it is the Owner/General's responsibility to properly mark them and notify PRC before installation in writing.

Installation Notice and Site Availability:

PRC will provide reasonable notice for delivery of the prefabricated building. The Owner/General shall make the site available during the delivery period. During the delivery period, on an improved site, stop site watering several days before delivery to minimize the impact on the soils for the heavy equipment needed for installation.

Caution:

If site is not ready for our field crew to perform their installation and if no notice of delay in readiness from Owner/General is received, PRC will provide a change order for re-

mobilization on a daily basis until the site is ready for us. Ready means that the site pad is completed, the corner required survey stakes are in place, the slab elevation stakes are in place, the location of the front of the building is confirmed on site, and access to the site is available from an improved roadway. Owner/General shall sign the change order before PRC will continue delivery.

Utility Connections:

Public Restroom Company will “turn-key” set the buildings including the hook up of utilities inside the building. PRC will use its own factory trained staff for the installation. Exterior connection of utilities outside the foundation is the responsibility of the Owner/General or their subcontractors.

1. Owner/General is responsible for 30 minute flushing water service to the building before connection to prevent particles from entering the plumbing system causing extensive clean out post connection.
2. Owner/General is responsible for the **final connections** of water, sewer, and electrical at the exterior of building POC's.
3. PRC provides a POC for water, a POC DWV waste line with a clean out your service connection, and an electrical schedule 80 PVC sleeve at an exterior POC.

Special Conditions, Permits, and Inspection Fees:

Follow any published specifications governing local building procedures for applicable building permit fees, health department fees, all inspection fees, site concrete testing fees, and compaction tests, if required by bid specifications. PRC is responsible for all required State inspections and final State insignia certification of the building, if applicable.

Jurisdiction for Off-site Work:

Jurisdiction, for permitting and inspection of this building shall be either the State agency who manages prefabricated building compliance in the state or the local CBO (when the State does not provide certification.) If the responsibility for building inspection is the local CBO, we will provide a certified plan set, calculations, and a third party engineer inspection written report for any and all work within the building that cannot be seen by the local official.

END OF SCOPE OF WORK BY OWNER/GENERAL

PUBLIC RESTROOM COMPANY SCOPE OF WORK:

Our In Plant/Off-Site Construction Scheduling System:

PRC has several off-site manufacturing centers in the United States, strategically located, that have the proper equipment and trained staff to fabricate our custom buildings to our high quality fit and finish standards. PRC manages quality control in our off-site production facility to comply with the approved drawings and provides an inspection certification and photos as required. When proprietary materials, which we have designed and fabricated, are part of the project, PRC supplies the manufacturing centers with these proprietary PRC components. PRC then schedules the in plant construction process to coordinate with your required delivery date through our Logistics Division field staff. We warrant on time at cost delivery weather permitting and other conditions affecting delivery.

Special Payment and Billing Terms:

We invoice for our design, engineering, and architectural plans when your order is received. Second we follow with our full submittal package. Then, we invoice on a monthly in plant percentage of completion supported by photographs, State third party inspection reports, and State certification. When the project is not through a state agency, a third party inspector provides the inspections in plant and in writing files the report with the Owner to resubmit to the CBO. Our process for payments is that we invoice monthly per the above and expect to be paid by the Owner when he is paid monthly. In order to have the owner pay for offsite construction, PRC provides a special unrequested insurance policy naming the Owner and the Owner as recipients for up to \$200,000 per building module for any incident including on site vandalism. This special policy has been approved by cities, towns, counties, and state nationwide for allowing payments for offsite work in plant to be processed as a result of our special policy.

Delays in Payment and Project Stoppage:

In the event of project stoppage, additional fees may be assessed for re-mobilization, storage, crane costs, etc. *Our discounted project costs are based upon timely payments. Delays in payment could change delivery schedules and project costs by change order. PRC may not proceed with project if delay is due to payment until change order is signed and accepted by PRC.*

Delivery and Installation:

Site Preparation for Building Placement and Site Underground Inspection:

PRC field staff, upon site arrival, will verify the required dimensions of the building pad and the corner locations/elevation fore compliance with PRC plans. PRC will also verify the delivery path from an accessible road or street and install, test, and have inspected the underground utilities to the point of connection nominally 6' from the exterior of the building. Then the site

pad will be covered with the coarse sand Owner/General provides for 2" of topping leveling for building placement.

Installation:

PRC will install the building turn-key, except for any exclusion (listed under "Exclusions," herein.)

Installation of Utilities Under the Prefabricated Building:

We fabricate off-site an underground utilities (water, and DWV piping and fittings) preassembled plumbing and electrical tree. Our site staff will set the underground tree in the excavated trench (excavation by Owner/general to the proper depth per local code) into code depth excavated trenches and our staff will install the coarse concrete sand to bed the piping per our submitted drawing..

The project POC's start nominally 6' from the building footprint where we pick up and connect your utility services to the building POC's. PRC provides all the under slab piping (including the driven electrical ground rod or lightning rod, if applicable.) The Owner/General brings the utility services to the POC within 6' of the building foundation.

Connection of Utilities Post Building Placement:

After placement of the building by PRC, our field staff will tie in the water and sewer connection "inside" the building only and terminate at a point of connection (POC) outside the building clearly marked for each utility service. The Owner/General is responsible for final utility point of service connections at the nominal 6' from building locations.

Electrical:

PRC provides the electrical conduit to the POC 6' from the building. The Owner/General pulls the electrical wire and ties it off on the electrical panel lugs inside the building.

Plumbing:

PRC provides the POC's for water and sewer to 6' from the building footprint and the Owner/General connects the water to our stub out location.

Sewer:

Some sites depending on the local jurisdiction will require an outside house trap which General shall install if needed. PRC will provide you with a sewer point of connection including a clean out to which Owner/general will terminate the site sewer service.

Testing of Water, Sewer, and Electrical in Plant and Final Site Utility Connection:

Before the building leaves the manufacturing center, PRC certifies a pressure water piping test, DWV, and the electrical connections for compliance with code. While the building is fully tested for leaks at the plant before shipment, road vibration may loosen some plumbing slip fittings and require tightening once the building services (water) is completed. Owner/General is responsible

for minor fitting tightening to handle small slip fitting leaks caused by transportation. It is critical for Owner/General to flush the incoming water serviced line for 30 minutes to clear all debris before connection.

Time of Completion:

PRC estimates our schedule to complete our scope of work from receipt of written notice to proceed together with signed approved architectural submittals from all authorities required to approve them. The period for the time to complete does not start until all authorities have approved the submittals and issued the permit. Our time of completion is listed on the final quotation sheet.

Exclusions/Exceptions:

1. Access issues for delivery of the building when the Owner/General contractor has not provided a proper path to the final site. This exclusion covers sites whose access is limited by trees, inaccessible roadways, overhead power lines at location where crane will lift building, grade changes, berms, or uneven site grades, or when the path of travel is over improvements such as sidewalks, all of which are not within the scope of work by PRC. Any site soils damage or other site improvements if damaged during installation are by Owner/General.
2. If weather on site causes site delivery issues the delivery may have to be diverted to an offsite location and the additional costs will be a change order to the bid. Our staff works with the Owner/General in advance to make sure sound decisions for delivery are made to avoid this issue. But sometimes Owner/General's take risks for weather but this risk is clearly at the Owner/General's risk not PRC.
3. Any trench plates needed for protection of site soils, sidewalks, or site utilities.
4. Sidewalks outside the building footprint.
5. Survey, excavation, and installation of the building pad and footings, if required, per our plans previously sent.
6. Soil conditions not suitable for bearing 1500 psf. If no soils testing report is available before bid, owner must verify site supporting soils at a minimum of 1000 psf are the least we can place our structures on or owner or engineer of record must design a foundation system to meet the imposed loads of site placement.
7. Improper water pressure, an undersized meter, or improper water volume flow to the building may necessitate a change order for the structure to install a 30 gallon pressure tank to provide the minimum flow rate and pressure. Building water service chlorination, post installation, is by Genreal, not PRC.
8. Building permits, a site survey, special inspection fees, minor trash removal, final utility connections to the onsite water, sewer and electrical are by others and since the building is fully inspected and tested in plant, minor plumbing leaks (if water is not available when building site work installation is completed,) is by others.
9. Our crane costs, which are included herein, are based on a maximum 35' radius from the center pin of the crane to center point of the furthest building module roof. If additional distance requires a larger crane, additional costs may be assessed by the crane company and a change order will be sent to the Owner/General.

10. The Owner/General shall be responsible for minor shrink wrap trash for building delivery protection and minor site debris removal or a location for placement on site (nominally one pickup truck of shipping materials.)
11. Site Traffic Control: If applicable, shall be by Owner not PRC.

Insurance and Prevailing Wage Certification:

PRC shall comply with the required insurance requirements, wage reports, and safety requirements for the project, including OSHA regulations.

Special Insurance to protect the Building before acceptance:

As PRC requires payment for each month of off-site construction, and since the building is not on owner property where their insurance will cover the building, we provide a special policy that insures the property even when paid for off-site until the building is finally accepted by the owner. The policy provides the owner as additional insured during this period.

PRC provides the Owner a policy rider to cover the building while it is being built off-site, while in transit to the job site, during and after it is installed on-site until final acceptance. This special policy covers each building module (section) for up to \$200,000. This exceeds the cost of any building module we have offered for sale herein.

Errors and Omissions Insurance:

Our firm employs licensed architects, engineers, and drafting staff to provide design of our buildings. Since these buildings are required to meet accessibility standards and building codes on site, and since we are the designer, we carry Errors and Omissions Insurance (E & O) to protect our clients from any errors. The policy covers a limit of up to \$2,000,000 per occurrence and is more clearly explained in the insurance certificates we provide after receipt of a purchase order.

WARRANTY

PUBLIC RESTROOM COMPANY (Company) herein warrants that all work under this contract will be free from faulty materials and improper workmanship, except from proper and usual wear, and agrees to replace or repair, without cost to the Owner, all work found to be improper or imperfect, upon proper notice to the address stated below. Our Warranty is valid for 5 years from date of acceptance but shall be extended to 20 years for structural failure.

Our extended warranties shall have no effect on any required Performance and Payment Bonds whose Surety shall assume no liability to the Company, the Owner, or any third parties should the Company fail for any reason to deliver acceptable maintenance warranties beyond the one year period. The warranty extension is solely between the owner and PRC and not the Owner contractor, bonding company, or architect/engineer of record.

Our warranty is enforceable only if all work performed by Company has been fully paid, including change orders, if applicable. Company has no responsibility for vandalism, neglect, abuse, or improper maintenance of the final completed building.

The warranties expressed herein are exclusive, and are in lieu of all other warranties expressed or implied, including those of merchantability and fitness. There are no warranties which extend beyond those described on the face of this Warranty. The foregoing shall constitute the full liability of the Company and be the sole remedy to the Owner. Our warranty is issued upon the completion of the project and also after final payment by Owner for the full amounts invoiced.

Term of Offer to Sell and Owner's Acceptance:

This offer is valid for acceptance within 30 days, or when a part of a public bid for the applicable duration imposed within the Owner's bid documents. Acceptance is by approving our post bid preliminary notice to begin drawings subject to final owner approval of our submittals and receipt of a contract or a purchase order/contract.

Special Notice of Possible Project Cost Increases as a Result of Late Payments:

In the event of delayed or late payment, PRC shall have the right to remedies including late charges, overall project total cost increases, and other damages as allowed by applicable law. The contract price quoted herein is a discounted price based upon our receipt of progress payments as invoiced on the agreed billing schedule of PRC. In the event of non-payment, PRC will provide a 5 day written notice to cure and if payment is still not received, the discounted price for the payment due may increase, to an undetermined amount, to cover work stoppage, remobilization, cancellation of materials and subsequent restocking charges, resale of the contracted building to another party, storage fees, additional crane fees, travel and per diem costs for field crews, and any other cost applicable to the project, as allowed by law. Interest if applicable to non-payment will be assessed at the maximum amount allowed by law or 18% whichever is greater.

Venue for Contract Jurisdiction:

Public Restroom Company requires all contracts accepted by our firm to hold that the venue for legal jurisdiction for this contract offer and acceptance shall be Douglas County, Nevada. In the event of your default, PRC shall be entitled to the full amount due including reasonable attorney fees, costs, storage, expenses of physical recovery, and statutory interest, as allowed by law.

No modifications to this offer shall be authorized unless confirmed in writing by the President of PRC.

END OF PRC SCOPE OF WORK

Modified 2-20-2017



State Of California
CONTRACTORS STATE LICENSE BOARD
ACTIVE LICENSE



License Number

822966

Entity

CORP

Business Name

THE PUBLIC RESTROOM COMPANY

Class/Class(es)

B

Expiration Date

08/31/2017

www.cslb.ca.gov



STATE OF CALIFORNIA
Business, Consumer Services and Housing Agency
Department of Housing and Community Development
Division of Codes and Standards
Occupational Licensing Program



P.O. Box 31
 Sacramento, CA 95812-0031
 Telephone (916) 323-9803

OCCUPATIONAL LICENSE

License Number	License Type	Issue Date	Expiration Date
DL1109895	Dealer New, Used	Jan 11, 2017	Jan 31, 2019

VALID ONLY WHEN DISPLAYED AT:

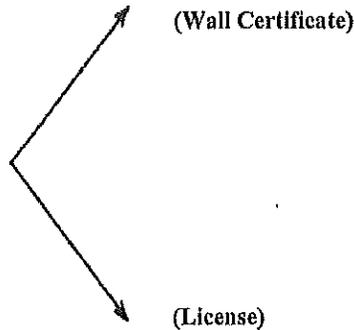
THE PUBLIC RESTROOM COMPANY
 2587 BUSINESS PKWY
 MINDEN, NV 89423

THE PUBLIC RESTROOM COMPANY
 3521 GRAND AVE
 OAKLAND, CA 94610

NOTE: THIS LICENSE SHALL BE POSTED IN A PLACE CONSPICUOUS TO THE PUBLIC.

The license described herein will expire on the date shown. Renewal of the license prior to the expiration date is the RESPONSIBILITY OF THE LICENSEE. Applications for renewal must be received by the Department before the expiration date. Expired licenses may be reinstated provided an application is submitted with renewal and reinstatement fees within 60 days of expiration. Licenses expired over 60 days may not be reinstated.

CUT WITH SCISSORS



<p>State of California Department of Housing and Community Development OCCUPATIONAL LICENSE License Number-DL1109895 Issued: Jan 11, 2017 Dealer Commercial Modular</p> <p>THE PUBLIC RESTROOM COMPANY 2587 BUSINESS PKWY MINDEN, NV 89423</p>	 <p>EXPIRES: Jan 31, 2019 New, Used</p>	<p>Is authorized to conduct business at any valid location licensed under:</p> <p>THE PUBLIC RESTROOM COMPANY 3521 GRAND AVE OAKLAND, CA 94610</p> <p>Signature.....</p>
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STATE OF CALIFORNIA
 Business, Consumer Services, and Housing Agency
 Department of Housing and Community Development
 Division of Codes and Standards
 Occupational Licensing Program
 P.O. Box 31
 Sacramento, CA 95812-0031
 Telephone (916) 323-9803



OCCUPATIONAL LICENSE

License Number	License Type	Issue Date	Expiration Date
MF1277003	Manufacturer Commercial Modular	Aug 28, 2015	Aug 31, 2017

THE PUBLIC RESTROOM COMPANY
 2587 BUSINESS PARKWAY
 MINDEN, NV 89423

VALID ONLY WHEN DISPLAYED AT:
 THE PUBLIC RESTROOM COMPANY
 2587 BUSINESS PARKWAY
 MINDEN, NV 89423

NOTE: THIS LICENSE SHALL BE POSTED IN A PLACE CONSPICUOUS TO THE PUBLIC.

The license described herein will expire on the date shown. Renewal of the license prior to the expiration date is the RESPONSIBILITY OF THE LICENSEE. Applications for renewal must be received by the Department before the expiration date. Expired licenses may be reinstated provided an application is submitted with renewal and reinstatement fees within 60 days of expiration. Licenses expired over 60 days may not be reinstated.

CUT WITH SCISSORS

(Wall Certificate)

THE PUBLIC RESTROOM CO

SEP 2 2015

(License)

State of California Department of Housing and Community Development OCCUPATIONAL LICENSE License Number - MF1277003 Issued: Aug 28, 2015 Manufacturer Commercial Modular THE PUBLIC RESTROOM COMPANY 2587 BUSINESS PARKWAY MINDEN, NV 89423		Is authorized to conduct business at the specified location licensed under: MF1277003 THE PUBLIC RESTROOM COMPANY 2587 BUSINESS PARKWAY MINDEN, NV 89423 Expires: Aug 31, 2017 Signature _____
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Public Works

Public Works Contractor (PWC) Registration Search

This is a listing of current and active PWC registrations pursuant to Division 2, Part 7, Chapter 1 (commencing with section 1720 of the California Labor Code.)
Enter at least one search criteria to display active registered public works contractor(s) matching your selections.

Registration Year:

PWC Registration Number:

Contractor Legal Name: Contractor License Lookup

License Number:

County:

Export as: Excel | PDF

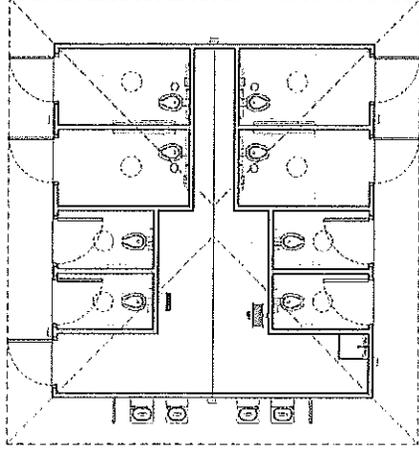
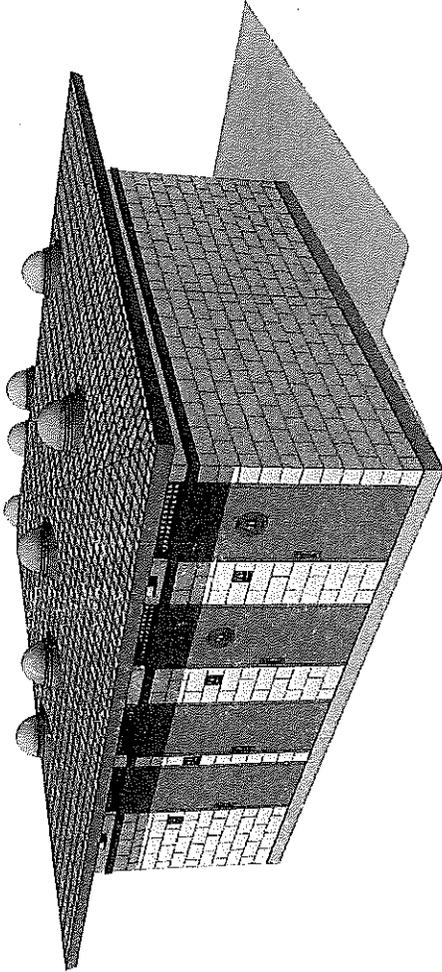
Search Results

One registered contractor found. 1

Details	Legal Name	Registration Number	County	City	Registration Date	Expiration Date
View	PUBLIC RESTROOM COMPANY	1000005303	OUT OF STATE	MINDEN	06/01/2016	06/30/2017

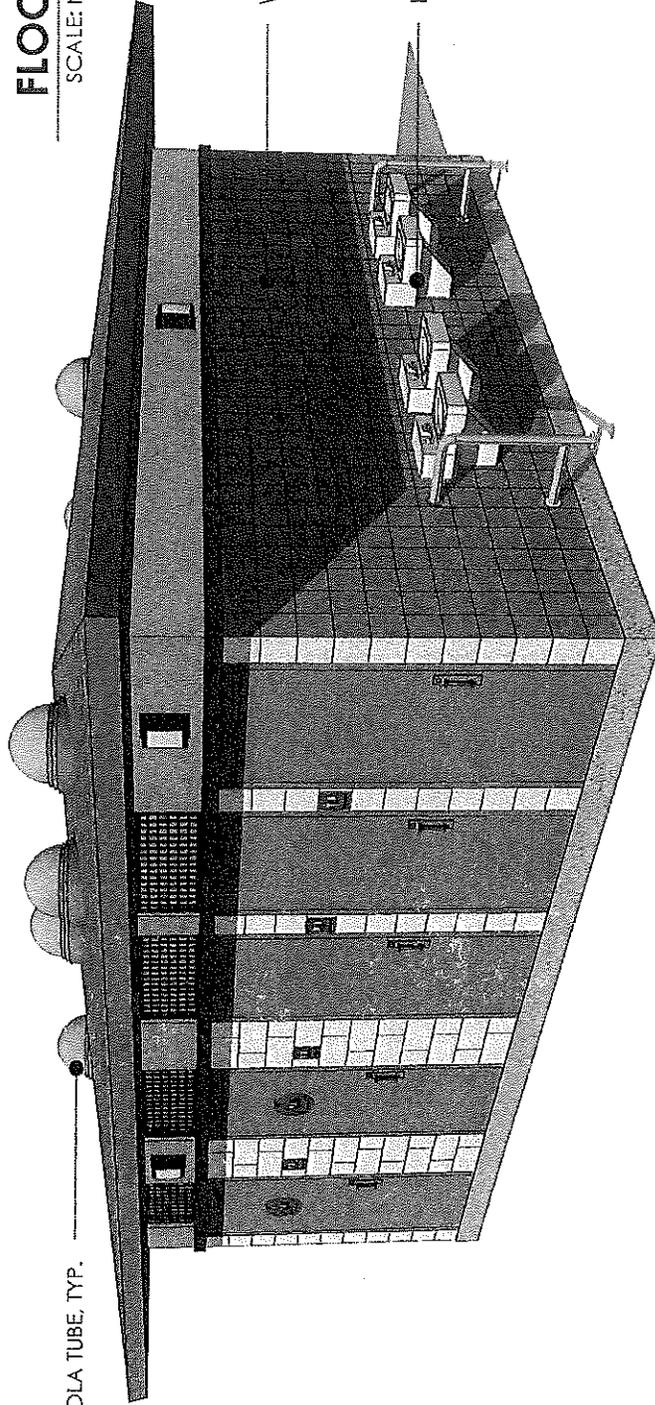
v2.20160101

PROJECT REF#: 10120-2/22/2017-2



FLOOR PLAN

SCALE: NOT TO SCALE

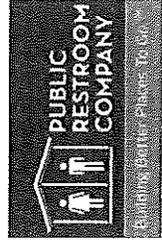


TIDELANDS BEACH – MARINA VISTA

RESTROOM BUILDING

LONG BEACH, CALIFORNIA

ARTIST IMPRESSION: 3D RENDERING ONLY FOR REPRESENTATION. COLORS AND MATERIALS ARE SUBJECT TO CHANGE

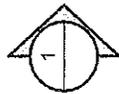
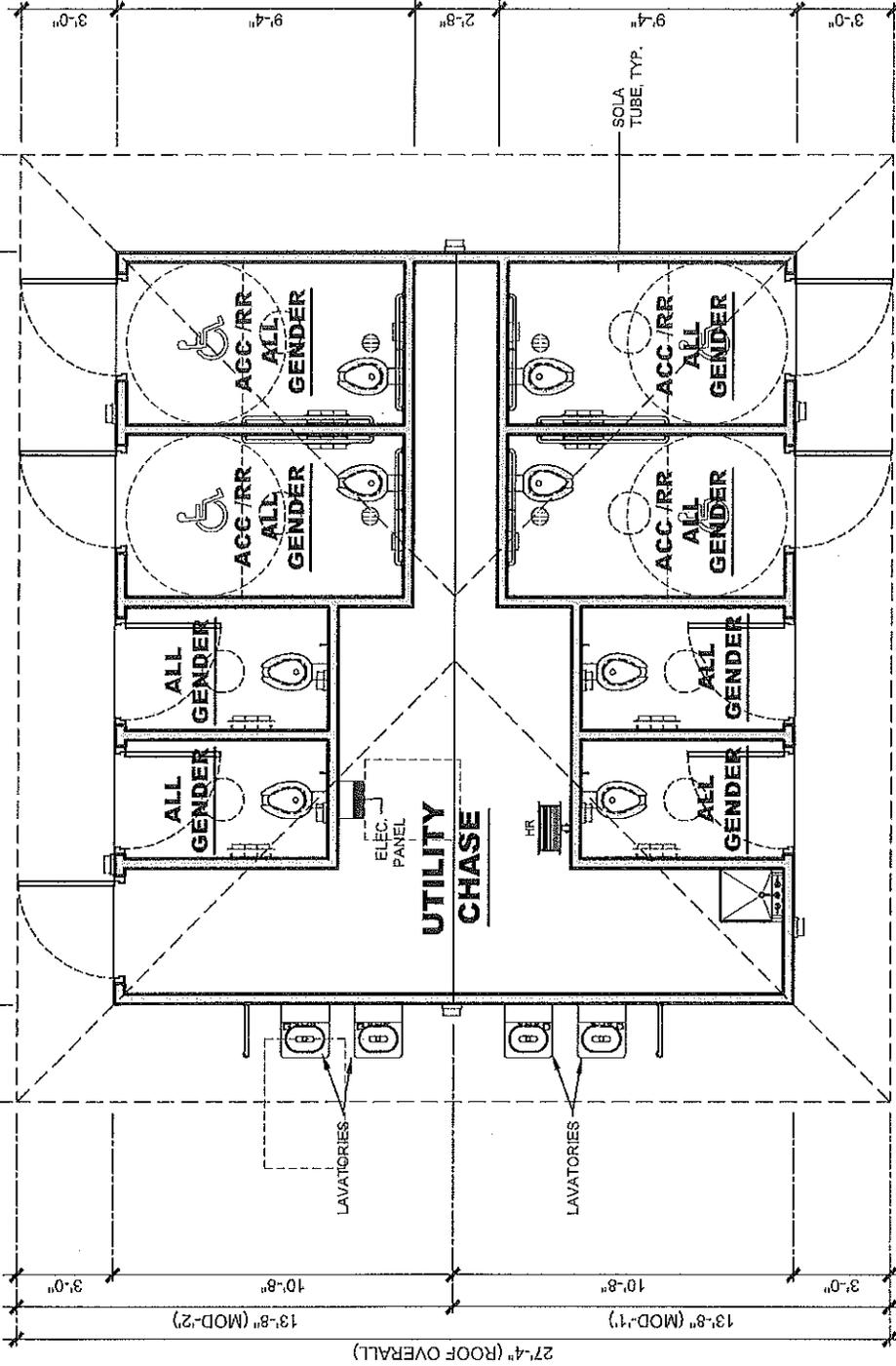
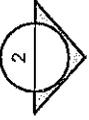


30 Years of Public Restrooms To Go
www.PublicRestroomCompany.com

2597 BUSINESS PARKWAY
MINDEN NEVADA, 89423
P: 888-888-2060 F: 888-888-1448

PROJECT REF#: 10120-2/22/2017-2

26'-4" (ROOF OVERALL)
23'-4" (BUILDING)

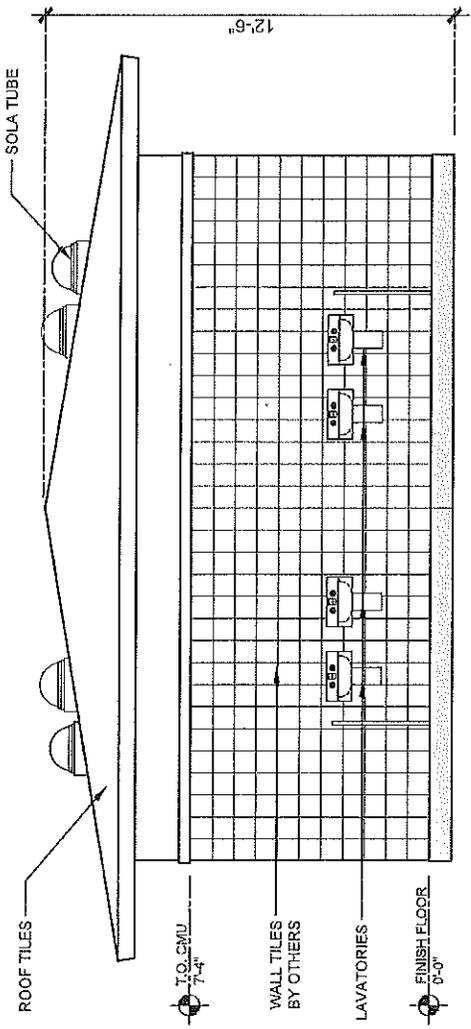


FLOOR PLAN

1 A-1
SCALE: 3/16"=1'-0"

<p>PUBLIC RESTROOM COMPANY Building Better Places To Go.SM PH: 888-888-2060 FAX: 888-888-1428</p>	<p>BUILDING TYPE: RESTROOM BUILDING</p>		<p>REVISION # 2</p>	<p>REVISION DATE: 2/22/2017 DRAWN BY: EOR</p>	<p>SHEET# A-1</p>
	<p>PROJECT: TIDELANDS BEACH RESTROOMS - MARINA VISTA LONG BEACH, CA</p>		<p>PROJECT #: 10120</p>	<p>START DATE: 1/18/2016 DRAWN BY: EOR</p>	<p>MAX. PERSON/HOUR: 360 S</p>

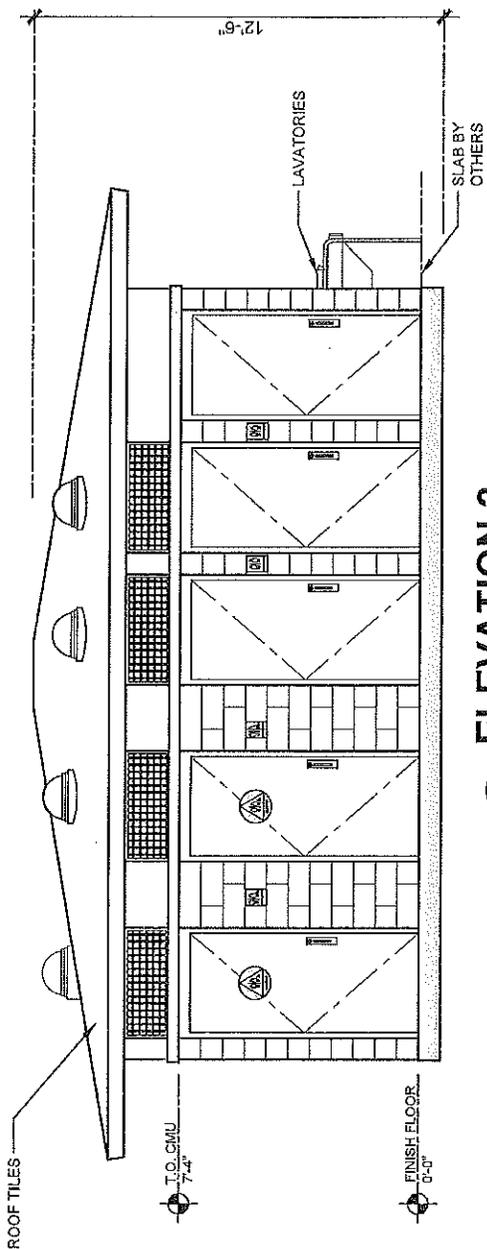
-NOT FOR CONSTRUCTION - PRELIMINARY DESIGN DRAWING ONLY - DO NOT SCALE, DIMENSIONS PRESIDE



ELEVATION 1

SCALE: 3/16"=1'-0"

1
A-2



ELEVATION 2

SCALE: 3/16"=1'-0"

2
A-2

PUBLIC RESTROOM COMPANY
Building Better Places To Go.SM

PH: 888-888-2060 | Fax: 888-888-4448

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BUILDING TYPE:

RESTROOM BUILDING

PROJECT:

**TIDELANDS BEACH RESTROOMS - MARINA VISTA
LONG BEACH, CA**

REVISION #

2

REVISION DATE:

2/22/2017
DRAWN BY: EOR

SHEET#

A-2

MAX. PERSON / HOUR:

360 S

START DATE:

1/18/2016

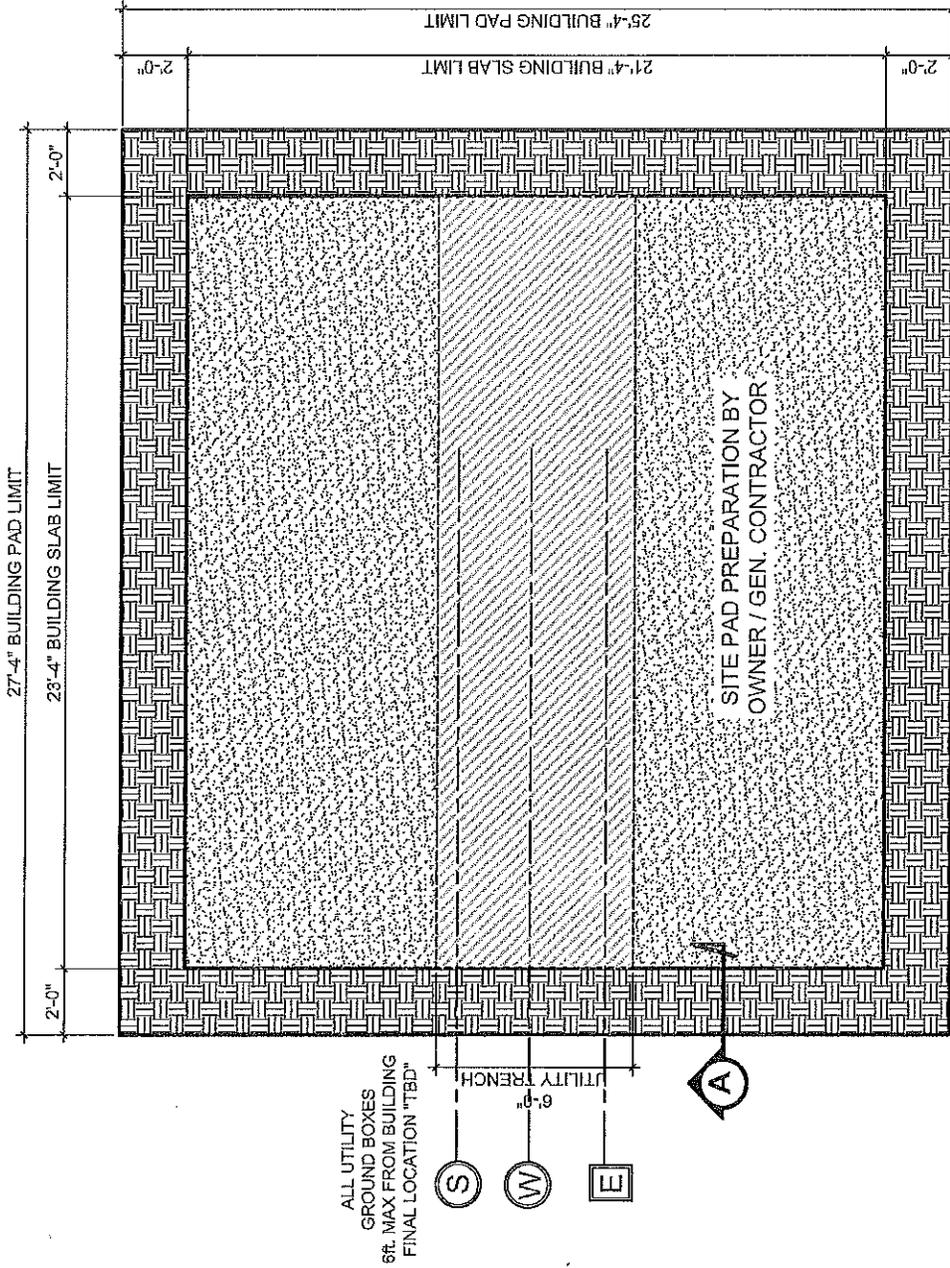
PROJECT #:

10120

DRAWN BY:

EOR

*NOT FOR CONSTRUCTION - PRELIMINARY DESIGN DRAWING ONLY - DO NOT SCALE, DIMENSIONS PRESIDE



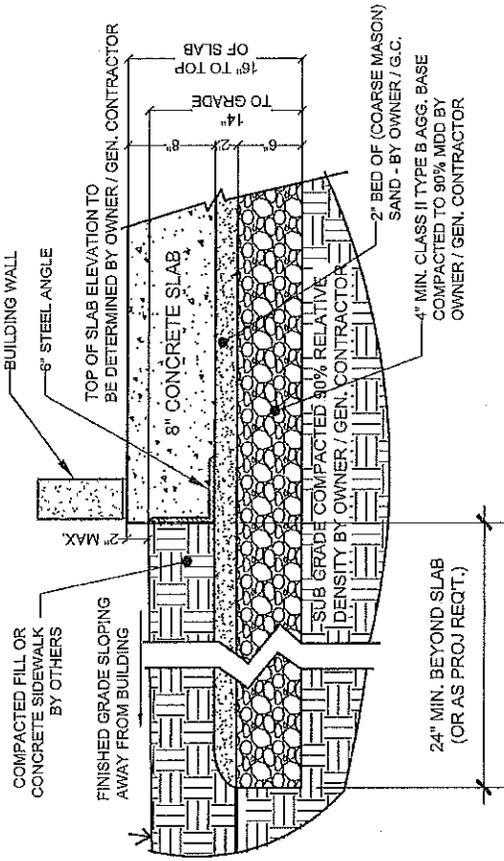
REQUIRED ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF FIELD VERIFIED BY OTHERS

PAD PREPARATION PLAN

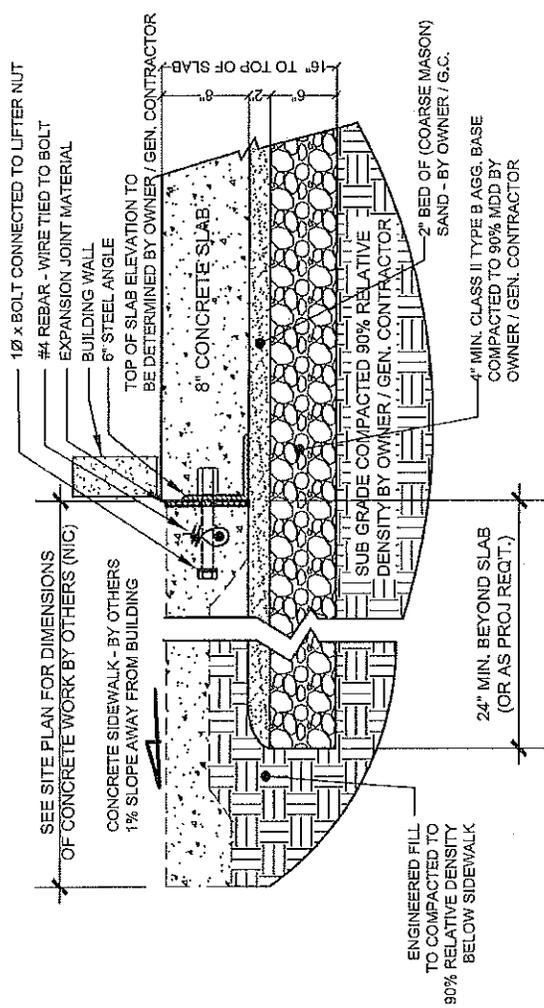
SCALE: NOT TO SCALE

SEE GENERAL SITE CONDITION LIABILITY NOTE ON "PAD PREPARATION RESPONSIBILITY" PAGE

 PUBLIC RESTROOM COMPANY Building Better Places To Go.	BUILDING TYPE: RESTROOM BUILDING		REVISION BY:	REVISION DATE:	REV.#:
	PROJECT: TIDELANDS BEACH - MARINA VISTA LONG BEACH, CA		DATE: 02-20-2017	PROJECT #: 10120	DRAWN BY: EVE
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SECTION DETAIL FOR "NO SIDEWALK"



SECTION DETAIL FOR "SIDEWALK"

**TYPICAL SUB-GRADE/
PAD SECTION DETAIL**



SEE GENERAL SITE CONDITION LIABILITY
NOTE ON "PAD PREPARATION
RESPONSIBILITY" PAGE

REVISION BY:	REVISION DATE:	REV. #:
RESTROOM BUILDING		DATE: 02-20-2017
TIDELANDS BEACH - MARINA VISTA		PROJECT #10120
LONG BEACH, CA		MAXIMUM PERSON AN HOUR: 360
BUILDING TYPE:		DRAWN BY: EVE
PROJECT:		MAXIMUM PERSON AN HOUR: 360
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PUBLIC RESTROOM COMPANY Building Better Places To Go. SM		
Pt: 888-888-2060 Fax: 888-888-1448 -NOT FOR CONSTRUCTION - PRELIMINARY DESIGN DRAWING ONLY - DO NOT SCALE, DIMENSIONS PRESIDE		

OWNER / GENERAL CONTRACTOR AND PUBLIC RESTROOM COMPANY RESPONSIBILITIES

PRC (PUBLIC RESTROOM COMPANY)

1. PUBLIC RESTROOM COMPANY (PRC) WILL PROVIDE FULL ARCHITECTURAL PLANS AND ENGINEERING CALCULATIONS, STAMPED BY STATE GOVERNING AGENCY SUITABLE FOR GENERAL CONTRACTOR TO FILE FOR REQUIRED BUILDING PERMIT.

2. PUBLIC RESTROOM COMPANY WILL FURNISH AND INSTALL UNDERGROUND UTILITIES (UNDER SLAB) EXTENDING 6 FEET (MAX) BEYOND THE BUILDING LINE, MIN. OF 24" - MAX OF 36" BELOW GRADE.

GENERAL PAD NOTES:

1. THE DIFFERENCE IN THE ELEVATION BETWEEN THE FINISH FLOOR OF RESTROOMS AND THE SIDEWALK OUTSIDE CAN NOT BE GREATER THAN 1/4" MAX.
2. THE STRUCTURAL DESIGN DETAILS HEREIN ARE SPECIFIC TO THE BUILDING SIZE AND MODULE CONFIGURATION SHOWN ON THE FLOOR PLANS OF THESE DRAWINGS.
3. PUBLIC RESTROOM COMPANY WILL PROVIDE LOCATION OF THIS BUILDING TO MEET ALL REQUIRED PROPERTY CODE SETBACKS PER LOCAL JURISDICTION.

1. OWNER / GEN. CONTRACTOR SHALL PREPARE BUILDING PAD PER DETAILS ON THIS SHEET AND **SCOPE OF WORK**.

2. OWNER / GEN. CONTRACTOR SHALL ATTACH SITE PLAN TO THE PUBLIC RESTROOM COMPANY'S DEPARTMENT OF HOUSING APPROVED DOCUMENTS AND FILE BUILDING PERMIT FOR PLUMBING PERMIT/INSPECTION UNDER BUILDING SLAB

3. OWNER / GEN. CONTRACTOR TO COORDINATE SEWER INVERT WITH THE PUBLIC RESTROOM COMPANY PRIOR TO BUILDING INSTALLATION, VERIFY & COORDINATE LOCATION OF EXISTING UTILITIES INCLUDING WATER METER SIZE, TYPE, AND LOCATION OF EXISTING UTILITIES COMING INTO THE BUILDING SUPPLIED BY PRC

4. OWNER / GEN. CONTRACTOR IS RESPONSIBLE FOR UTILITY CONNECTIONS AND WILL MAKE FINAL CONNECTIONS TO SEWER, WATER AND POWER.

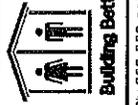
5. OWNER / GEN. CONTRACTOR TO PREPARE SITE FOR MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 1,500psf, WITH SUB-GRADE COMPACTED TO 90% M.I.D.

6. OWNER / GEN. CONTRACTOR TO SUPPLY AND STOCK PILE REQUIRED QUANTITY OF COARSE SAND WITHIN BUILDING PROXIMITY FOR USE BY PRC. (ELEVATION OF BASE TO BE DETERMINED AND VERIFIED BY THE GENERAL CONTRACTOR) PAD ELEVATION MUST BE LEVEL WITHIN 2% (±) AND COMPLY WITH ALL PERMISSIBLE CODES OF ACCESSIBILITY AND SAFETY. BEFORE BUILDING SET WET SAND FILL TO CONSOLIDATE AND / OR VIBRATE.

7. PROJECTS WITH FOOTINGS: OWNER / GEN. CONTRACTOR MUST PROVIDE SLEEVES IN FOOTINGS ACCORDING TO UTILITY LOCATION PLAN, AND PAD / FOUNDATION PLAN DIRECTION.

GENERAL SITE CONDITION LIABILITY NOTE:

PUBLIC RESTROOM COMPANY (PRC) PROVIDES BUILDING PAD PLAN DRAWINGS FOR PLACEMENT OF OUR BUILDING ON SITE PADS FOR **REFERENCE ONLY**. PRC DRAWINGS DO NOT INCORPORATE SITE DESIGN FOR LOCAL CODES, SOILS CONDITIONS, FOOTING REQUIREMENTS, AND/OR ANY OTHER CONTRIBUTING SITE FACTORS UP TO AN INCLUDING HIGH WATER TABLES. IT IS THE RESPONSIBILITY OF THE OWNER OR GENERAL CONTRACTOR TO PROVIDE A PROPER SITE DESIGN TO ACCOMMODATE THE BUILDING AS WELL AS PROVIDE PROPER SITE CRITERIA SO PRC MAY MODEL SEWER, WATER, AND ELECTRICAL DESIGNS WITHIN THE BUILDING. OUR BUILDING DESIGN INCLUDES AN 8" THICK REINFORCED CONCRETE SLAB AND ASSUMES FULL SLAB BEARING ON SOILS WITH A MINIMUM OF 1500 PSF BEARING CAPACITY. OUR BUILDING DESIGN SURCHARGE THE SOIL BENEATH THE MAT SLAB AT APPROXIMATE 208 PSF. ANY BUILDING FOUNDATION IN ADDITION TO THE INTEGRAL MAT SLAB ARE SHOWN FOR **REFERENCE ONLY** AND SHOULD BE VERIFIED BY A LICENSED SOILS ENGINEER TO CONFORM WITH REQUIRED CODES. **PRC ASSUMES NO LIABILITY FOR THE OWNER OR GENERAL CONTRACTOR ACCEPTANCE OF THESE TYPICAL DRAWINGS WITHOUT VERIFICATION BY A LICENSED SOILS / FOUNDATION ENGINEER.**



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BUILDING TYPE:

RESTROOM BUILDING

PROJECT:

**TIDELANDS BEACH - MARINA VISTA
LONG BEACH, CA**

REVISION BY:

REVISION DATE:

REV. #:

DATE: 02-20-2017

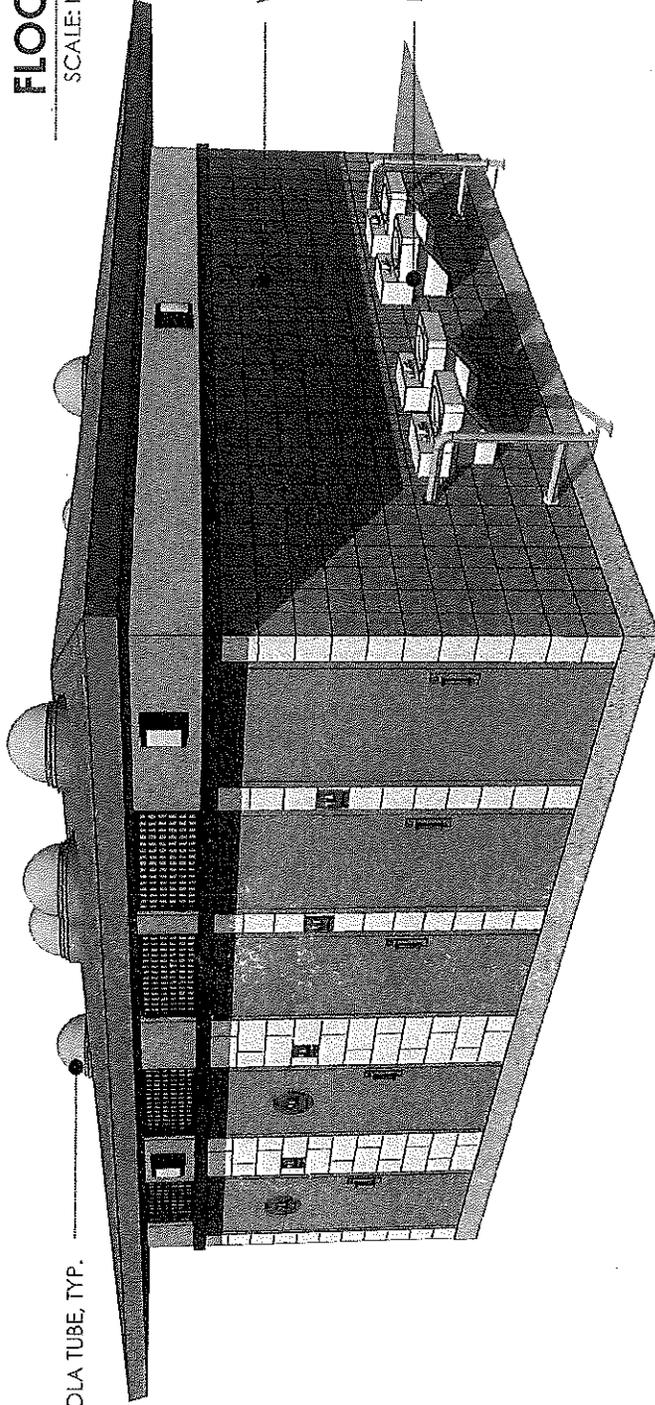
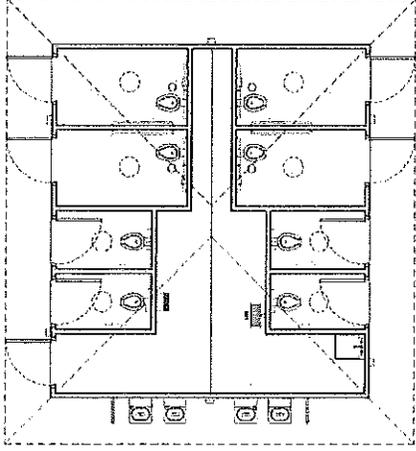
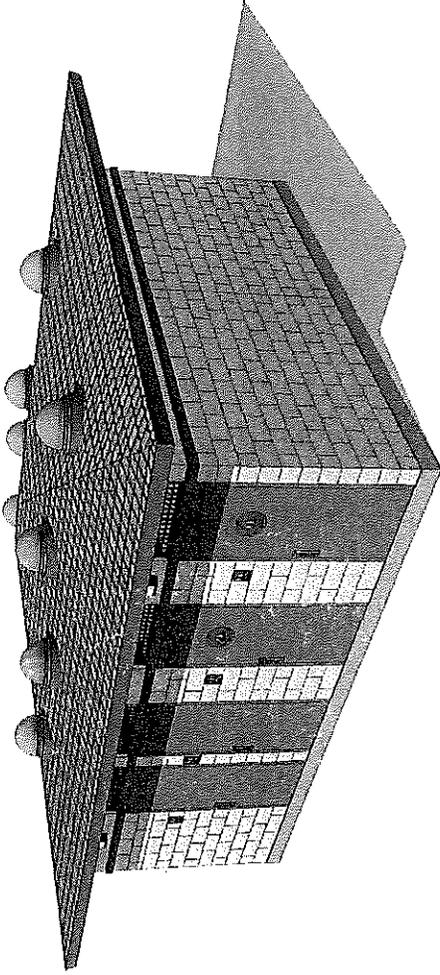
PROJECT #10120

MAXIMUM PERSON AN HOUR:

360

S

---NOT FOR CONSTRUCTION --- PRELIMINARY DESIGN DRAWING ONLY --- DO NOT SCALE, DIMENSIONS PRESIDE



SOLA TUBE, TYP.

WALL TILES BY OTHERS

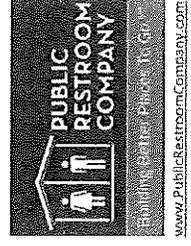
LAVATORIES

FLOOR PLAN

SCALE: NOT TO SCALE

DRAKE CHAVEZ PARK

LONG BEACH, CALIFORNIA



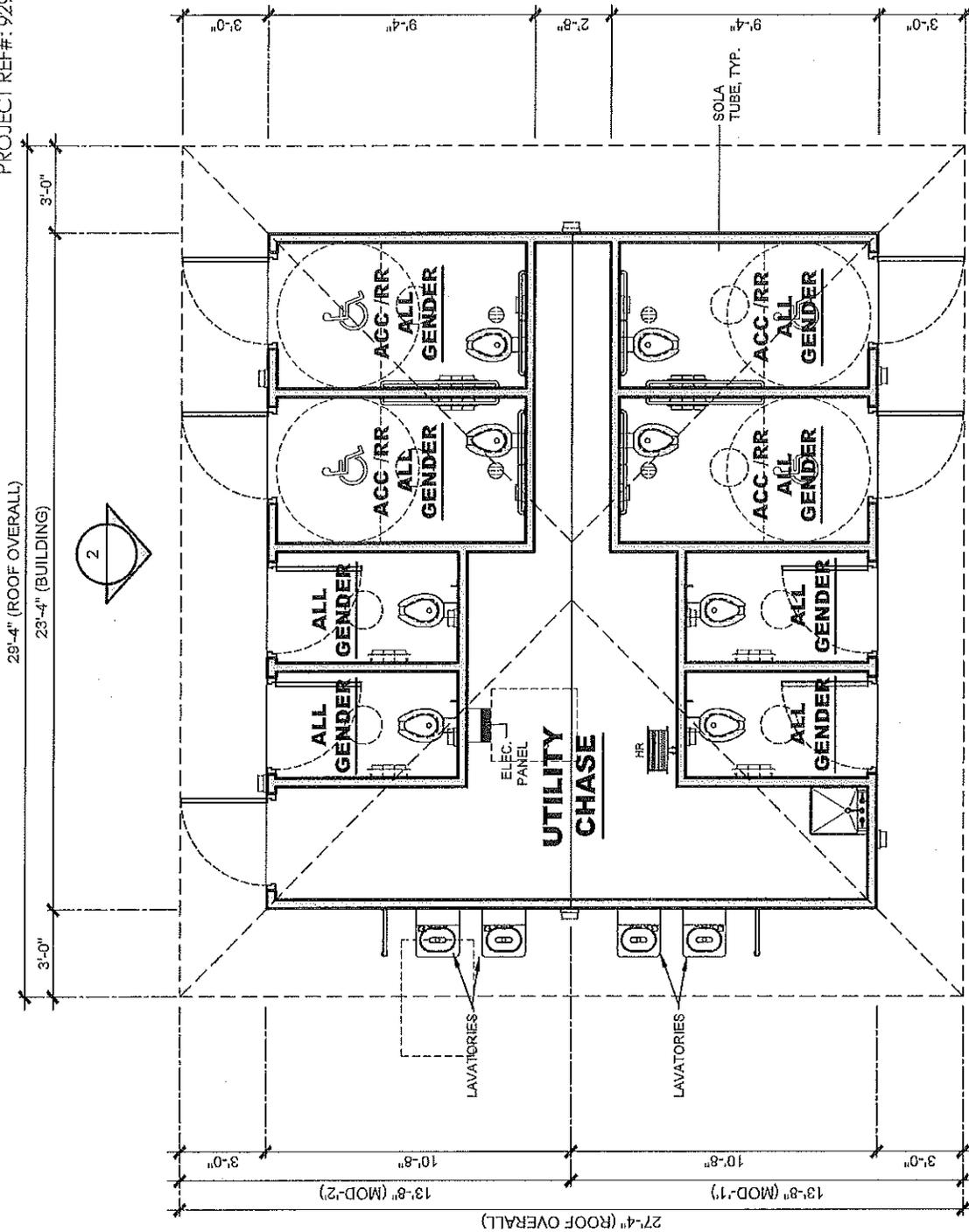
Building Better. Phobos To Go.
www.PublicRestroomCompany.com

RESTROOM BUILDING

ARTIST IMPRESSION: 3D RENDERING ONLY FOR REPRESENTATION. COLORS AND MATERIALS ARE SUBJECT TO CHANGE

2507 BUSINESS PARKWAY
MINDEN NEVADA 89423
P: 888-888-2040 F: 888-889-1448

PROJECT REF#: 9292-2/22/2017-4



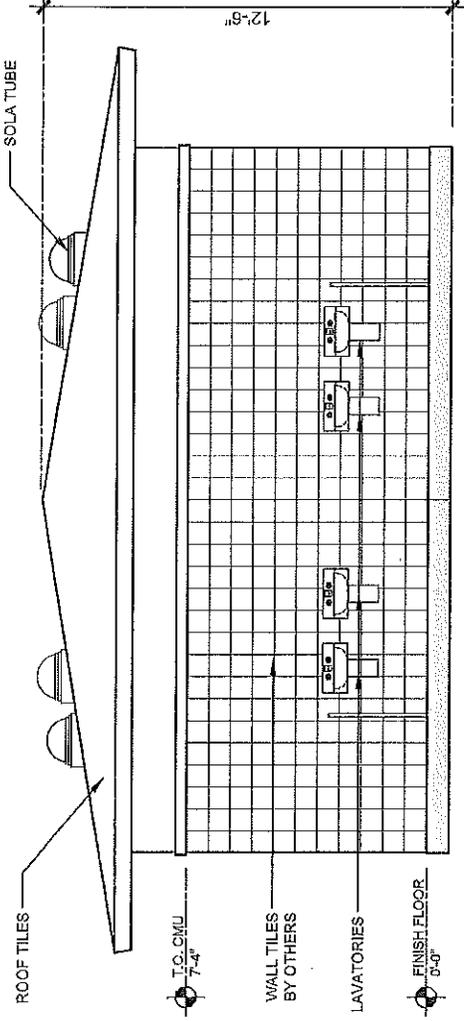
FLOOR PLAN

1 A-1 SCALE: 3/16"=1'-0"

 PUBLIC RESTROOM COMPANY Building Better Places To Go. SM PH: 888-888-2050 FAX: 888-888-4428	BUILDING TYPE: RESTROOM BUILDING		REVISION # 4	REVISION DATE: 2/22/2017	SHEET # A-1
	PROJECT: DRAKE CHAVEZ PARK LONG BEACH, CA		PROJECT #: 9292	START DATE: 9/6/2014 DRAWN BY: EOR	MAX. PERSON/HOUR: 360 S DRAWN BY: EOR

-NOT FOR CONSTRUCTION - PRELIMINARY DESIGN DRAWING ONLY - DO NOT SCALE, DIMENSIONS PRESIDE

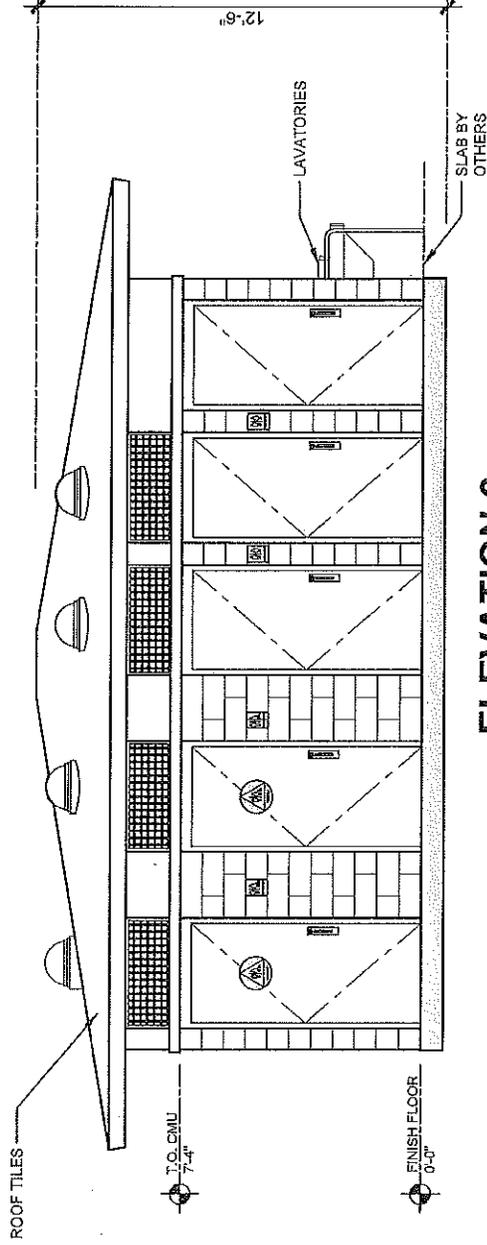
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ELEVATION 1

1
A-2

SCALE: 3/16"=1'-0"



ELEVATION 2

2
A-2

SCALE: 3/16"=1'-0"

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Building Better Places To Go.SM
PH: 888-885-2060 | FAX: 888-888-1448

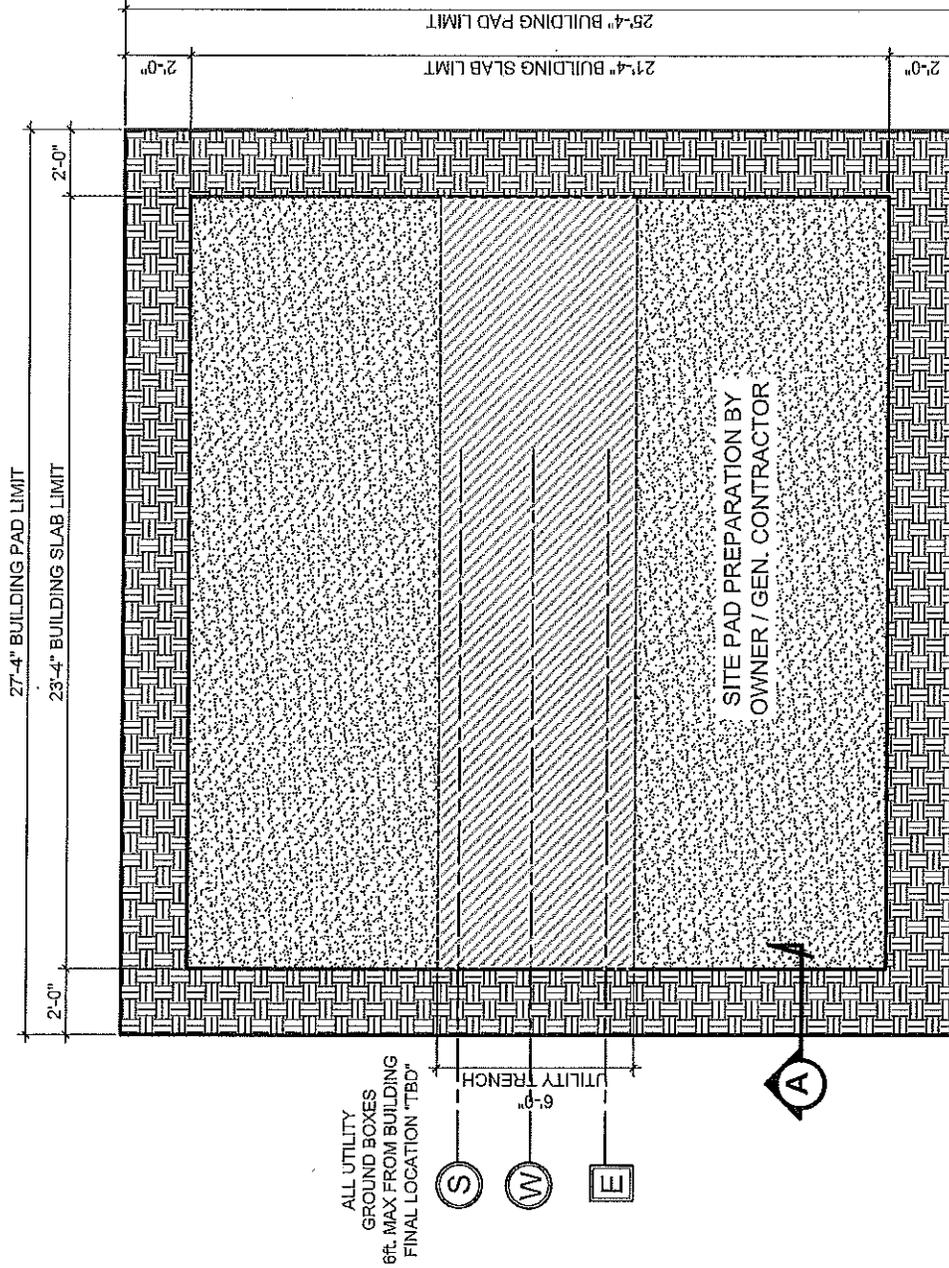
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BUILDING TYPE:
PROJECT:

RESTROOM BUILDING
DRAKE CHAVEZ PARK
LONG BEACH, CA

REVISION #	4	REVISION DATE:	2/22/2017	SHEET#	A-2
DRAWN BY:	EOB	START DATE:	9/6/2014	MAX. PERSON / HOUR:	360 S
DRAWN BY:	EOB	DRAWN BY:	EOB		

-NOT FOR CONSTRUCTION - PRELIMINARY DESIGN DRAWING ONLY - DO NOT SCALE, DIMENSIONS PRESIDE



REQUIRED ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF FIELD VERIFIED BY OTHERS

PAD PREPARATION PLAN

SCALE: NOT TO SCALE

SEE GENERAL SITE CONDITION LIABILITY NOTE ON "PAD PREPARATION RESPONSIBILITY" PAGE

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BUILDING TYPE:

RESTROOM BUILDING

PROJECT:

**TIDELANDS BEACH - DRAKE-CHAVEZ PARK
 LONG BEACH, CA**

REVISION BY:

REVISION DATE:

REV. #:

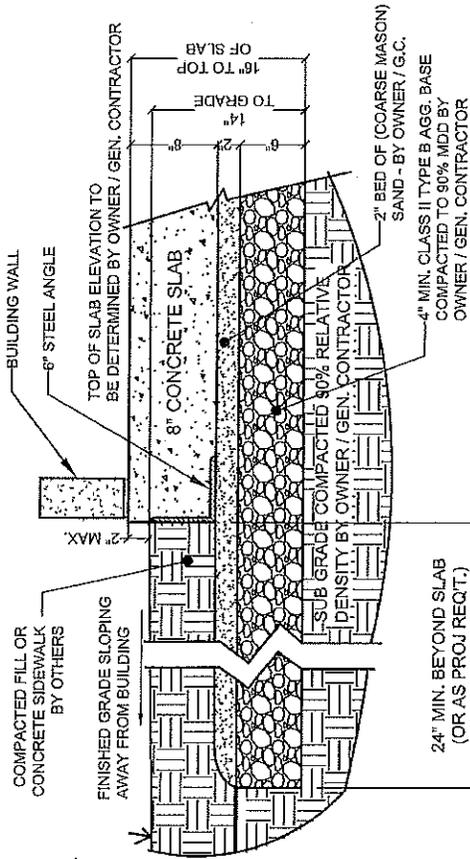
DATE: 02-22-2017

DRAWN BY: EVE

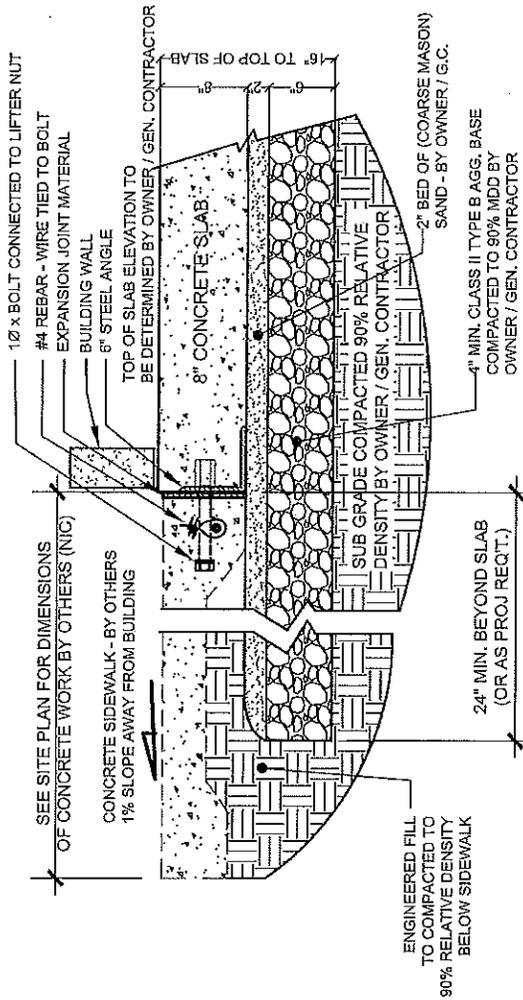
PROJECT #: 9292

MAXIMUM PERSON AN HOUR:

360 S



SECTION DETAIL FOR "NO SIDEWALK"



SECTION DETAIL FOR "SIDEWALK"

**TYPICAL SUB-GRADE/
PAD SECTION DETAIL**



SEE GENERAL SITE CONDITION LIABILITY
NOTE ON "PAD PREPARATION
RESPONSIBILITY" PAGE

REVISION BY:	REVISION DATE:	REV. #:
DATE: 02-22-2017		DRAWN BY: EYE
PROJECT #: 9292		MAXIMUM PERSON AN HOUR: 360 S
RESTROOM BUILDING		
TIDELANDS BEACH - DRAKE-CHAVEZ PARK LONG BEACH, CA		
BUILDING TYPE: RESTROOM BUILDING PROJECT: TIDELANDS BEACH - DRAKE-CHAVEZ PARK LONG BEACH, CA		
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OWNER / GENERAL CONTRACTOR AND PUBLIC RESTROOM COMPANY RESPONSIBILITIES

PRC (PUBLIC RESTROOM COMPANY)

1. PUBLIC RESTROOM COMPANY (PRC) WILL PROVIDE FULL ARCHITECTURAL PLANS AND ENGINEERING CALCULATIONS, STAMPED BY STATE GOVERNING AGENCY SUITABLE FOR GENERAL CONTRACTOR TO FILE FOR REQUIRED BUILDING PERMIT.

2. PUBLIC RESTROOM COMPANY WILL FURNISH AND INSTALL UNDERGROUND UTILITIES (UNDER SLAB) EXTENDING 6 FEET (MAX) BEYOND THE BUILDING LINE, MIN. OF 24" - MAX OF 36" BELOW GRADE.

GENERAL PAD NOTES:

1. THE DIFFERENCE IN THE ELEVATION BETWEEN THE FINISH FLOOR OF RESTROOMS AND THE SIDEWALK OUTSIDE CAN NOT BE GREATER THAN 1/4" MAX.
2. THE STRUCTURAL DESIGN DETAILS HEREIN ARE SPECIFIC TO THE BUILDING SIZE AND MODULE CONFIGURATION SHOWN ON THE FLOOR PLANS OF THESE DRAWINGS.
3. PUBLIC RESTROOM COMPANY WILL PROVIDE LOCATION OF THIS BUILDING TO MEET ALL REQUIRED PROPERTY CODE SETBACKS PER LOCAL JURISDICTION.

1. OWNER / GEN. CONTRACTOR SHALL PREPARE BUILDING PAD PER DETAILS ON THIS SHEET AND **SCOPE OF WORK**.

2. OWNER / GEN. CONTRACTOR SHALL ATTACH SITE PLAN TO THE PUBLIC RESTROOM COMPANY'S DEPARTMENT OF HOUSING APPROVED DOCUMENTS AND FILE BUILDING PERMIT FOR PLUMBING PERMIT/INSPECTION UNDER BUILDING SLAB

3. OWNER / GEN. CONTRACTOR TO COORDINATE SEWER INVERT WITH THE PUBLIC RESTROOM COMPANY PRIOR TO BUILDING INSTALLATION, VERIFY & COORDINATE LOCATION OF EXISTING UTILITIES INCLUDING WATER METER SIZE, TYPE, AND LOCATION OF EXISTING UTILITIES COMING INTO THE BUILDING SUPPLIED BY PRC

4. OWNER / GEN. CONTRACTOR IS RESPONSIBLE FOR UTILITY CONNECTIONS AND WILL MAKE FINAL CONNECTIONS TO SEWER, WATER AND POWER.

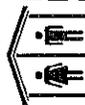
5. OWNER / GEN. CONTRACTOR TO PREPARE SITE FOR MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 1,500psf, WITH SUB-GRADE COMPACTED TO 90% M.D.D.

6. OWNER / GEN. CONTRACTOR TO SUPPLY AND STOCK PILE REQUIRED QUANTITY OF COARSE SAND WITHIN BUILDING PROXIMITY FOR USE BY PRC. (ELEVATION OF BASE TO BE DETERMINED AND VERIFIED BY THE GENERAL CONTRACTOR) PAD ELEVATION MUST BE LEVEL WITHIN 2% (±) AND COMPLY WITH ALL PERMISSIBLE CODES OF ACCESSIBILITY AND SAFETY. BEFORE BUILDING SET WET SAND FILL TO CONSOLIDATE AND / OR VIBRATE.

7. PROJECTS WITH FOOTINGS: OWNER / GEN. CONTRACTOR MUST PROVIDE SLEEVES IN FOOTINGS ACCORDING TO UTILITY LOCATION PLAN AND PAD / FOUNDATION PLAN DIRECTION.

GENERAL SITE CONDITION LIABILITY NOTE:

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BUILDING TYPE:

RESTROOM BUILDING

PROJECT:

**TIDELANDS BEACH - DRAKE-CHAVEZ PARK
LONG BEACH, CA**

REVISION BY:

REVISION DATE:

REV.#:

DATE: 02-22-2017

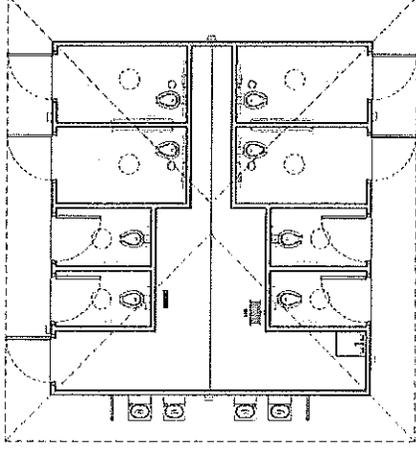
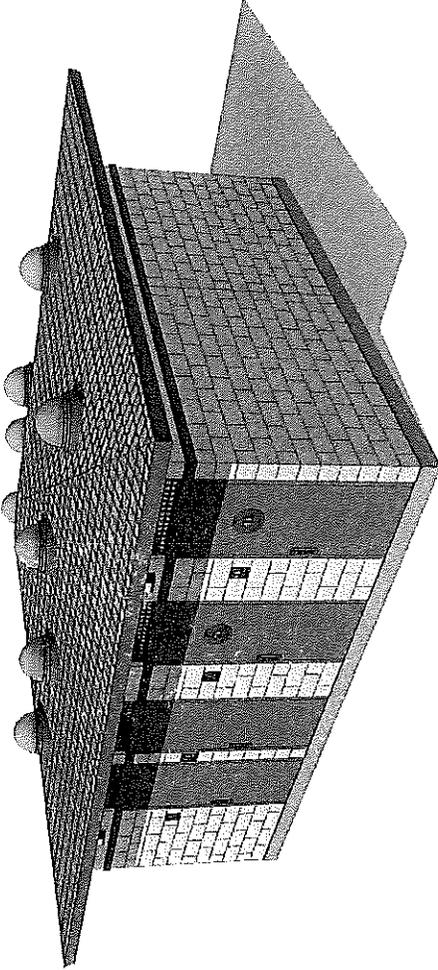
PROJECT #: 9292

DRAWN BY: EVE

MAXIMUM PERSON AN HOUR:

360 S

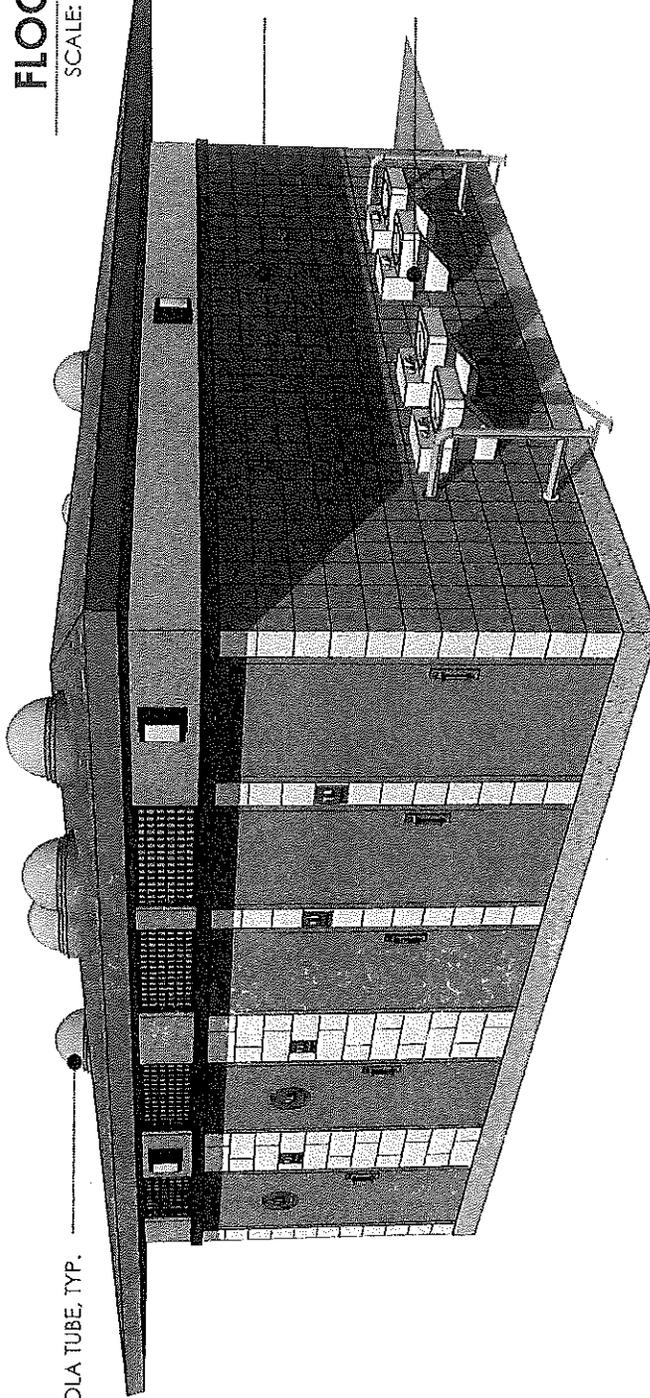
PROJECT REF#: 10155-2/22/2017-0



FLOOR PLAN

SCALE: NOT TO SCALE

SOLA TUBE, TYP.



WALL TILES BY OTHERS

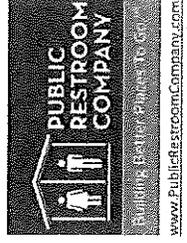
LAVATORIES

HOUGHTON PARK COMMUNITY CENTER

LONG BEACH, CALIFORNIA

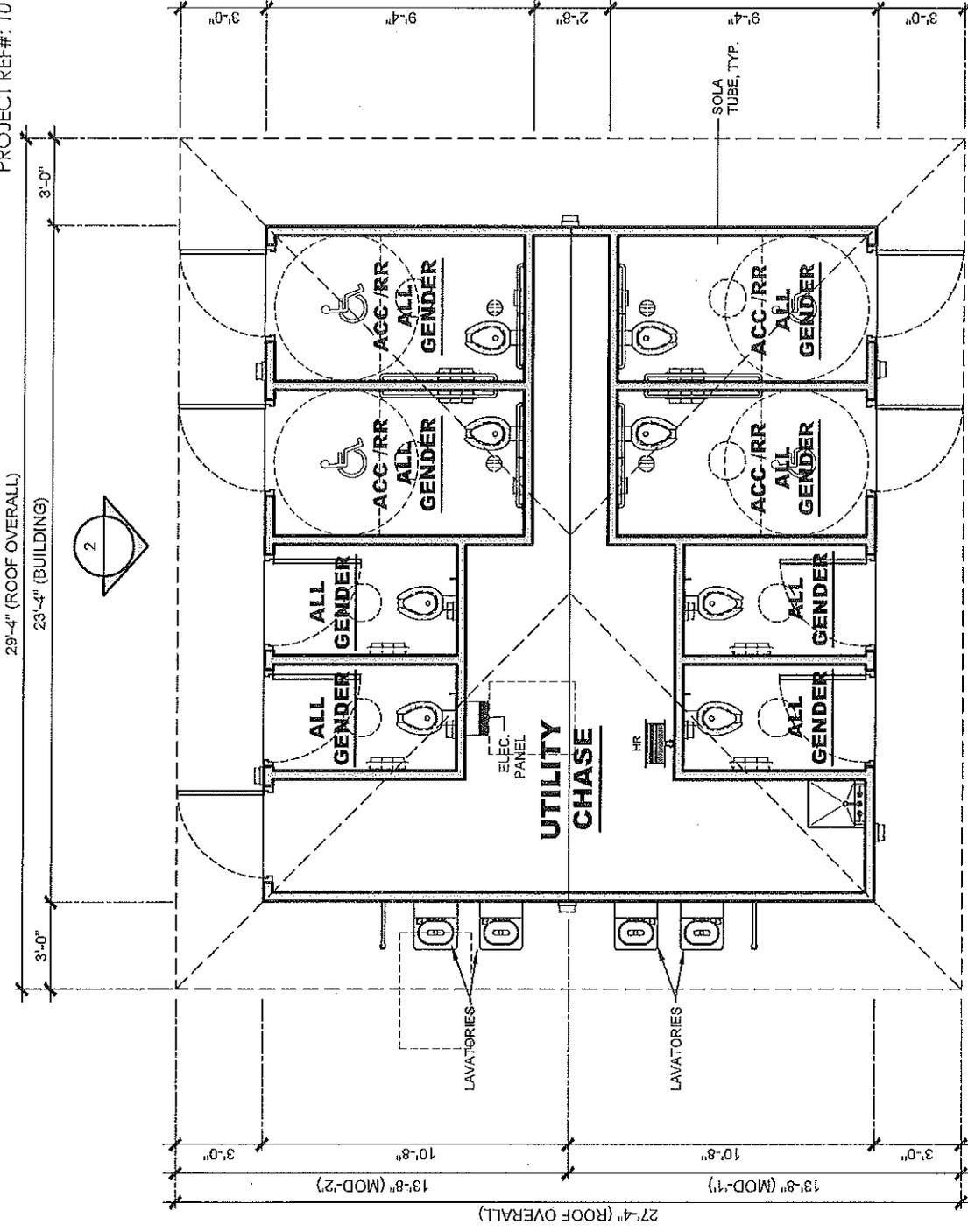
RESTROOM BUILDING

ARTIST IMPRESSION- 3D RENDERING ONLY FOR REPRESENTATION. COLORS AND MATERIALS ARE SUBJECT TO CHANGE



2597 BUSINESS PARKWAY
MINDEN NEVADA 89423
P: 888-888-2040 F: 888-888-1448

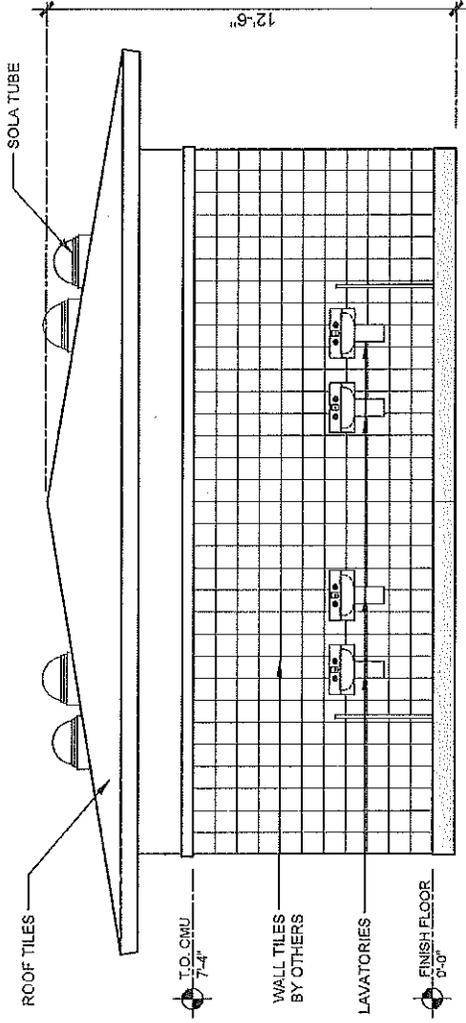
PROJECT REF#: 10155-2/22/2017-0



FLOOR PLAN
SCALE: 3/16"=1'-0"

 <p>PUBLIC RESTROOM COMPANY Building Better Places To Go.SM PH: 888-888-2060 FAX: 888-888-1428</p>	<p>BUILDING TYPE: RESTROOM BUILDING</p>		<p>REVISION #</p>	<p>REVISION DATE: 2/22/2017</p>	<p>SHEET #</p>
	<p>PROJECT: HOUGHTON PARK COMMUNITY CENTER LONG BEACH, CA</p>		<p>PROJECT #:</p>	<p>START DATE: 2/22/2017</p>	<p>MAX. PERSON / HOUR:</p>
		<p>10155</p>	<p>DRAWN BY: EOR</p>	<p>360 S</p>	

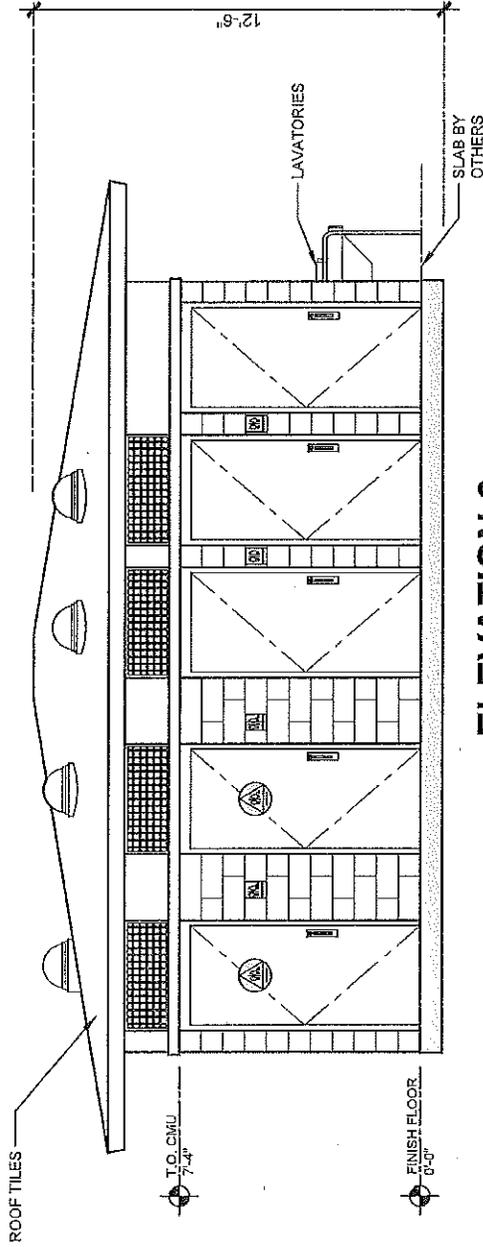
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ELEVATION 1

SCALE: 3/16"=1'-0"

1
A-2

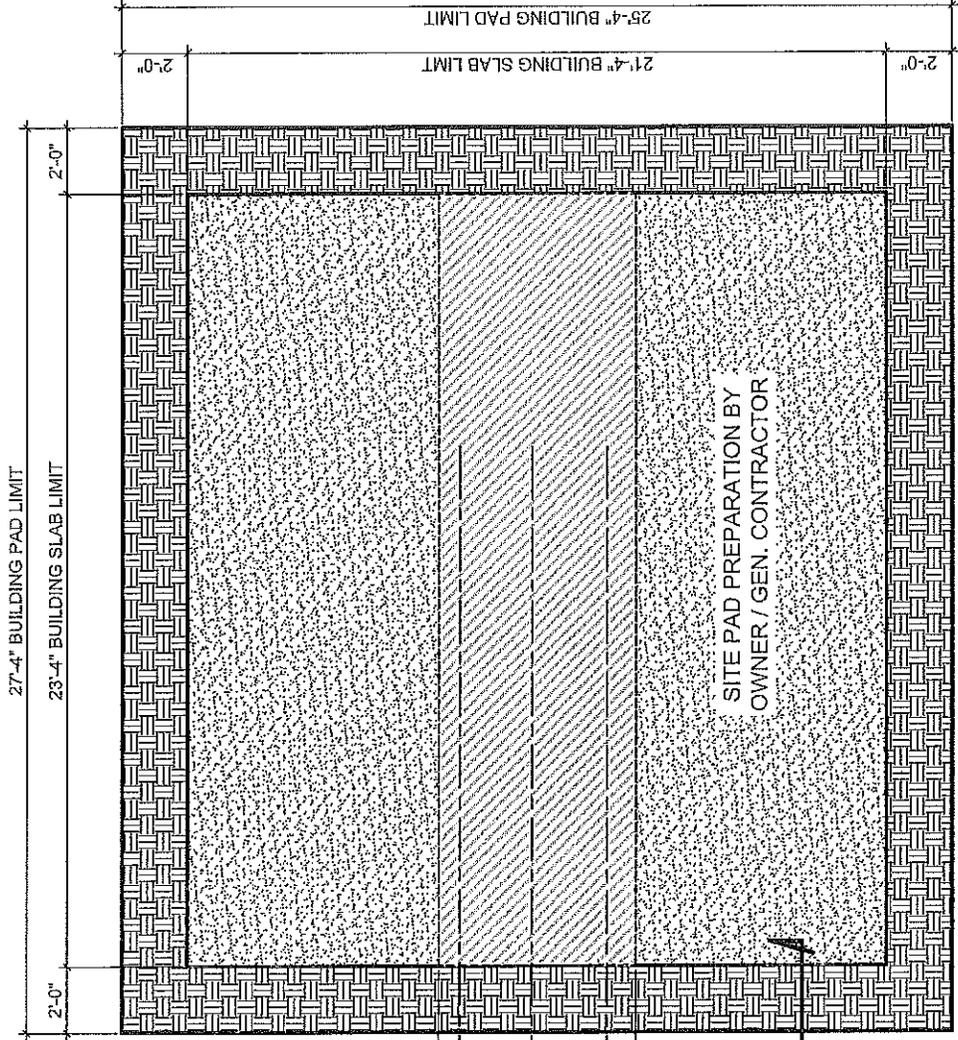


ELEVATION 2

SCALE: 3/16"=1'-0"

2
A-2

 <p>PUBLIC RESTROOM COMPANY Building Better Places To Go.SM PH: 888-888-2060 FAX: 888-888-1248</p>	<p>BUILDING TYPE: RESTROOM BUILDING</p>		<p>REVISION #</p>	<p>REVISION DATE: 2/22/2017</p>	<p>SHEET#</p>
	<p>PROJECT: HOUGHTON PARK COMMUNITY CENTER LONG BEACH, CA</p>		<p>PROJECT #: 10155</p>	<p>START DATE: 2/22/2017</p>	<p>A-2</p>
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<p>-NOT FOR CONSTRUCTION - PRELIMINARY DESIGN DRAWING ONLY - DO NOT SCALE, DIMENSIONS PRESIDE</p>			<p>DRAWN BY: EOR</p>		



ALL UTILITY
GROUND BOXES
6ft. MAX FROM BUILDING
FINAL LOCATION "TBD"

S W E

6'-0" UTILITY TRENCH

SITE PAD PREPARATION BY
OWNER / GEN. CONTRACTOR

REQUIRED ALLOWABLE SOIL
BEARING PRESSURE = 1500 PSF
FIELD VERIFIED BY OTHERS

PAD PREPARATION PLAN

SCALE: NOT TO SCALE

SEE GENERAL SITE CONDITION LIABILITY NOTE ON "PAD PREPARATION RESPONSIBILITY" PAGE

REVISION DATE:	DATE: 02-22-2017	REV. #:	
REVISION BY:	PROJECT #10155	DRAWN BY:	EVE
		MAXIMUM PERSON AN HOUR:	360
			S

BUILDING TYPE: **RESTROOM BUILDING**

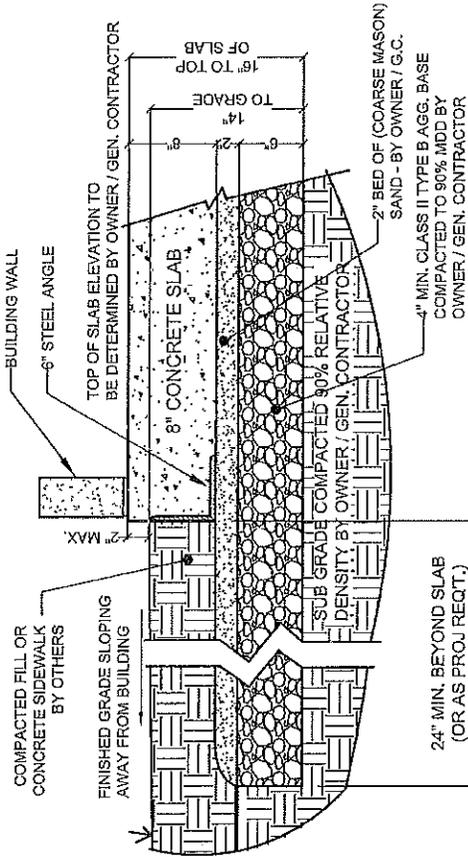
PROJECT: **TIDELANDS BEACH - HOUGHTON PARK COMM. CENTER
LONG BEACH, CA**

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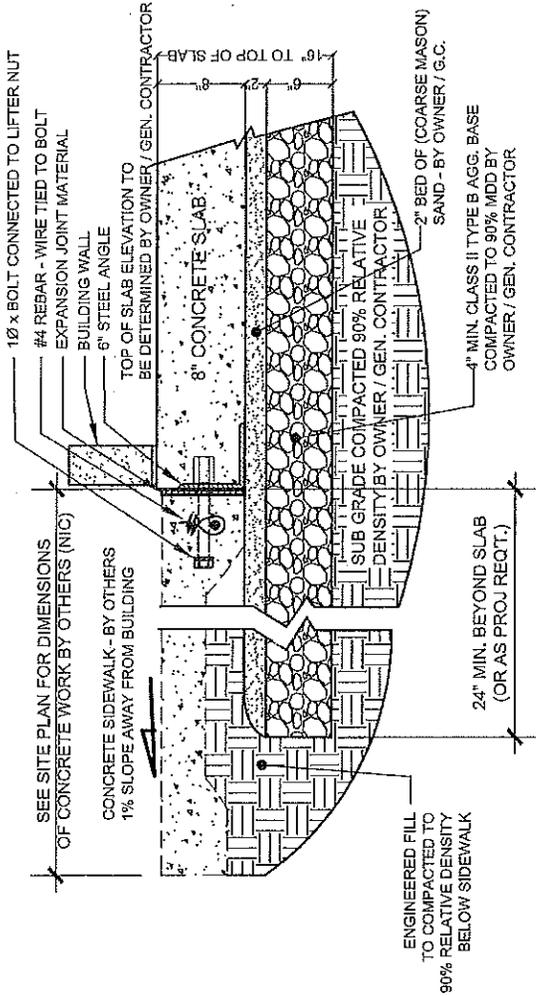
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SECTION DETAIL FOR "NO SIDEWALK"



SECTION DETAIL FOR "SIDEWALK"

**TYPICAL SUB-GRADE/
PAD SECTION DETAIL**



SEE GENERAL SITE CONDITION LIABILITY
NOTE ON "PAD PREPARATION
RESPONSIBILITY" PAGE

	BUILDING TYPE: RESTROOM BUILDING	REVISION BY:	REVISION DATE:	REV. #:
	PROJECT: TIDELANDS BEACH - HOUGHTON PARK COMM. CENTER LONG BEACH, CA	DATE: 02-22-2017 PROJECT #10155 MAXIMUM PERSON AN HOUR: 360	DRAWN BY: EVE	
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PH: 888-888-2060 FAX: 888-888-1448				

-NOT FOR CONSTRUCTION - PRELIMINARY DESIGN DRAWING ONLY - DO NOT SCALE, DIMENSIONS PRESIDE

OWNER / GENERAL CONTRACTOR AND PUBLIC RESTROOM COMPANY RESPONSIBILITIES

PRC (PUBLIC RESTROOM COMPANY)

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2. PUBLIC RESTROOM COMPANY WILL FURNISH AND INSTALL UNDERGROUND UTILITIES (UNDER SLAB) EXTENDING 6 FEET (MAX) BEYOND THE BUILDING LINE, MIN. OF 24" - MAX OF 36" BELOW GRADE.

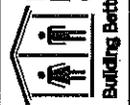
GENERAL PAD NOTES:

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3. OWNER / GEN. CONTRACTOR TO COORDINATE SEWER INVERT WITH THE PUBLIC RESTROOM COMPANY PRIOR TO BUILDING INSTALLATION, VERIFY & COORDINATE LOCATION OF EXISTING UTILITIES INCLUDING WATER METER SIZE, TYPE, AND LOCATION OF EXISTING UTILITIES COMING INTO THE BUILDING SUPPLIED BY PRC
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WRITTEN PERMISSION OF PUBLIC RESTROOM
COMPANY.

BUILDING TYPE:

RESTROOM BUILDING

PROJECT:

**TIDELANDS BEACH - HOUGHTON PARK COMM. CENTER
LONG BEACH, CA**

REVISION BY:

REVISION DATE:

REV. #:

DATE: 02-22-2017

PROJECT #10155

DRAWN BY:
EVE

MAXIMUM PERSON AN HOUR:

360 S

-NOT FOR CONSTRUCTION - PRELIMINARY DESIGN DRAWING ONLY - DO NOT SCALE, DIMENSIONS PRESIDE

SUBMITTAL SPECIFICATION SHEET

DESIGN LOADS

Date: <u>02/20/17</u>	Size: <u>21'4" x 23'4"</u>	Floor: <u>Mat Slab</u>
<u>Public Restroom Company</u>	Description: <u>3 Restroom buildings</u>	Wind: <u>90 C</u>
Location <u>Long Beach, CA</u>		Roof: <u>20</u>
Project: <u>Tidelands - Marina Vista, Drake-Chave & Houghton Community Center</u>	State Seal: <u>California DOH</u>	

TYPE OF BUILDING

Walls to 7'4"	Masonry
MVR - Wood	Wood framed walls above cap beam, wood rafter roof structure,

FLOOR SYSTEM

Type	Light weight concrete in primed 6x6 steel angle frame
Floor finish	
Entire bldg	Exposed concrete with light broom finish with water resistant coating
Fiberglass grates	Yes Provide grates for slab openings Qty (10)
Foundation Tie-Downs See note	No

Note: (Required for buildings that will be placed on concrete footings)

WALL SYSTEM (structural)

Framing

Exterior	4" CMU	Precision, all rows, gray
Interior	4" CMU	Precision, gray
Cap beam (all walls)		Glulam, painted or stained
Above cap beam (all walls)		2x3 wood framing
Vents (exterior RR walls)		Fibergrate 1-1/2" square fiberglass (8)
Vents (interior RR walls)		Sunvent Industries model #157 EX w/O.B Damper (8)
Vents (Mech)		Sunvent Industries model #157 EX w/O.B Damper
Sheathing (framed walls above cap beams)		7/16" OSB both sides - Note: paint one side of the OSB

WALL FINISHES - Exterior

CMU	Uncoated
Siding	Cement Board (sheet), painted - stucco pattern, above cap beam
Mod line trim	Backer rod & caulk, painted
Vent trim	2x2 wood - painted

WALL FINISHES - Interior

Restrooms	to cap beam	Block filler & regular paint
	Base	None
	Above cap beam	Regular Painted Cement Board - stucco pattern
Mechanical	to cap beam	Unpainted CMU but seal to 24" AFF
	Above cap beam	Regular Painted OSB
Behind Mop sink	to cap beam	Class A FRP bonded to 3/8" OSB with stainless steel batts

ROOF SYSTEM

Style:	Hip with 2/12 pitch, 36" overhang (Nom)
Roofing:	Decra - Villa Tile metal roofing
Underlayment:	Metal Sales ms-HT (high temp peel and stick) or equal
Framing:	2 x 8 wood rafters
Ceiling:	5/16" Cement Board Stucco Pattern
Roof vent:	10" turbine ventilator
Insulation:	4" rigid held tight to top sheathing with blocking
Sheathing: (top)	5/8" Plywood
Sheathing: (bottom)	3/4" OSB
Fascia - eave & rake:	2 x 10 KD SPF wrapped with 14 ga formed steel

SUBMITTAL SPECIFICATION SHEET

DOORS & HARDWARE

	Qty	Size	1 & 2 Type	3 Hinge	4 Lock	5 a Closer	5 b Pull plate	5 c Thresh	5 d Sweep	6 Notes
Restroom	8	3'x7'	FG	Cont	L9496L	yes	no	no	no	6a
Mechanical	1	3'x7'	FG	Cont	B663	yes	both sides	270A	321 SSN	6a
Skylights	10		Solatube 160DS							

1. DOOR TYPES:
 - a) FG: FIBERGLASS REINFORCED POLYESTER DOORS & FRAMES
2. ALL H.M. DOOR FRAMES:
 - WELDED WITH MASONRY ANCHORS.
 - 4-3/4" WIDE, TYPICAL
 - 4" MASONRY HEADERS
3. HINGE SPECS
 - a) CONT = PEMKO KCFM-83" HD CONTINUOUS GEAR HINGE
4. LOCKS
 - a) DEADBOLT: SCHLAGE B SERIES 626 WITH LARGE FORMAT TEMPORARY CORE
 - 1) B663J - KEY ONE SIDE, ADA TURN LEVER UNLOCKS ONLY
 - b) SCHLAGE MORTISE LEVER LOCKS
 - 1) L9496L - PRIVACY WITH OCCUPIED INDICATOR
5. HARDWARE SPECS:
 - a) CLOSER: LCN 1261 H SRI TORX
 - b) PULL PLATES:
 - 2) PULL PLATE: TRIMCO 1017-3 (BOTH SIDES)
 - c) THRESH: PEMKO
 - 1) #270A FOR NON TILED FLOORS
 - d) SWEEP: PEMKO 321 SSN
6. OTHER:
 - a) KICKPLATE ROCKWOOD K1050 12 x 34.5 US32D 316 SS (BOTH SIDES)

RESTROOM ACCESSORIES

ITEM	QTY	SIZE	MANUFACTURER / MODEL #	FINISH	NOTES
Grab bars at lavs	2		ASI type 75	S.S.	
Grab Bars	4	42"	Bobrick B-6806	S.S.	
Grab Bars	4	48"	Bobrick B-6806	S.S.	
Signs - ADA Pictogram 12" circle/triangle "All Gender RR"	4	12"	PRC		Aluminum Blue
Signs - rectangular room ID ADA - "All Gender RR"	4	6"x8"	PRC		Aluminum Blue
Signs - rectangular room ID non-ADA "All Gender RR"	4	6"x8"	PRC		Aluminum Blue
Toilet Paper Holders	8	3-roll	Royce Rolls TP-3	S.S.	
Riser for Mop sink	1		shop bullt		

MISC

Sight screens	None
Lifting brackets	None
Shrink wrap	Yes

SUBMITTAL SPECIFICATION SHEET

PLUMBING

Restrooms	
Fixture type	Stainless Steel
Toilets	Qty: 8 Acorn #1675-W-1-HET-FVBO-ADA 1.28-PFS
Seats	NONE
Flush valves	standard Zurn Z6143AV-HET-BG-7L
Lavs (wall hung)	Qty: 4 Acorn #1652-LRB-1-DMS-03-M
Faucets	Air control, single temp valve, deck mounted spout
Floor drains:	Qty: 8 Zurn ZN460-2NH-5B with Proflo PFP-2500 trap primer
Mop sink	Qty: 1 Mustee 63M 24x24
Faucet	A/S 8354.212.004
Mop hanger	Proflo PF 245

General	
Water heater	Yes Stiebel DHC-E 12 (240/12KW) with microprocessor control
Tempering valve	Yes Watts LFMMV
Pressure Gauge	Yes Proflo PFXPG100K
Check valve	Yes 2" Proflo PFX31SK (lead free)
Expansion tank	Yes Prep for 26 gallon, install Proflo PFXT5
Hose bib (interior)	Yes Woodford 24-PC in mechanical room
Hose bib (exterior)	Yes (2) Woodford B24
Hose reel	Yes Rapid Reel #1041-GH with hose bib and 75' hose
Water	Copper
Waste	PVC
Vent cap	Yes Smith 1748
Corp stop	Yes McDonald 73149B 2"

ELECTRICAL	
Service	100 amp 120/240 volt single phase
Meter base	no - if required, it should be by others
Panel	100 amp - main breaker Square D QO112M100
Breakers	Plug on Square D QO () Single pole 20 amp QO120
Raceway	Metallic (EMT in exposed areas & MC Cable where concealed)
Receptacles	(1) Dedicated GFCI Leviton GFNT2-I
Receptacles	(2) 20 amp WP GFCI Leviton W7899 / Red Dot CKMUV Covers
Switches	(2) Single pole (1 BYPASS) Leviton 1221-2I (1) Photocell Intermatic K4421M
Lights - Exterior	(8) LED canopy light Deco Lighting D533-LED-57-55-SL Controlled by photo cell Controlled by BYPASS SWITCH
Lights - RR	NONE
Lights - Mechanical	(2) 4 ft.-2 lamp- LED Greenlighting AL-42L Controlled by single pole switch
Wire for	(1) Water heater Stiebel DHC-E 12 (240/12kw)
Ship kit	Ground rod and acorn clamp



SMITH-EMERY LABORATORIES

An Independent Commercial Testing Laboratory

781 E. Washington Boulevard - 2nd Floor Los Angeles, California 90021 ♦ (213) 745-5333 ♦ Fax (213) 749-7232

PROJECT No.: 38879-1
LAB No.: T-13-103

August 02, 2013
*Revised and re-issued

CLIENT: CHUCK KAUFMAN
PUBLIC RESTROOM CO
*9390 GATEWAY DRIVE, SUITE 102
RENO, NV 89521

PROJECT: PUBLIC RESTROOM CO
CONCRETE TESTING

SUBJECT: Concrete Compression and Absorption Testing SAMPLE LOCATION: Ritchey Wood No 17878
STANDARD: ASTM C642 and C39
SOURCE: Delivered by Client.
SAMPLE: 4-in by 8-in cylinders
DATE MADE: 6/20/2013

Report of Tests:

COMPRESSION TEST (ASTM C 39)

Cylinders were stored in a moisture room then a compressive axial load was applied to molded cylinders until failure occurs

Sample Number	Date of Test	Age	Diameter In	Area, Sq. In.	Max. Load Pounds	Compressive Strength, PSI
1	7/19/2013	29	4.00	12.57	95,820	7,630
2	7/19/2013	29	4.00	12.57	99,760	7,940
3	7/19/2013	29	4.00	12.57	96,900	7,710
Average					97,493	7,760

WATER ABSORPTION TEST (ASTM C 642)

Samples were dried in a well ventilated oven for not less than 24 hours at 230 °F to 239 °F then cooled and weighed. The samples were then immersed in distilled water for 48 hours, then boiled for 5 hours and cooled. Samples were removed from water, surface damp dried and immediately reweighed.

Sample Number	Sample Weights (grams)			Absorption, %	Density PCF
	Submerged (D)	SSD (C)	Dry (A)		
4	1618.12	3263.60	3183.92	2.50	120.74
5	1625.50	3273.40	3191.74	2.56	120.86
6	1629.81	3267.86	3186.05	2.57	121.37
Average	1624.48	3268.29	3187.24	2.54	120.99

Respectfully submitted,
SMITH-EMERY LABORATORIES

G. Janeth Quintero
Registered Civil Engineer
Registration Expires: 12-31-14



- Materials Tested Comply With Specifications.
- Materials Tested Did Not Comply With Specifications.
- No Established Criteria For Acceptable Limits.

PUBLIC RESTROOM CO; SMITH-EMERY LABORATORIES



WARRANTY

All work performed by PUBLIC RESTROOM COMPANY (called "Company") shall be warranted to the Owner to be of good quality, free of faults and defects in material, workmanship, and title for 5 years from last date of installation if building is installed by Company or 1 year if building is installed by Owner or Owner's agent without on-site supervision by Company. Company warranty on building shell including exterior walls, concrete 8" slab/foundation, and roof system is warranted for 20 years structurally. The Company will repair or replace at their sole option any defects in work upon proper notice to the below stated address below.

Our extended warranties shall have no effect on any required Performance and Payment Bonds whose Surety shall assume no liability to the Company, the Owner, or any third parties should the Company fail for any reason to deliver acceptable maintenance warranties beyond the one year period. The warranty extension is solely between the owner and PRC and not the general contractor, bonding company, or architect/engineer of record.

This warranty applies only if all work performed by Company has been fully paid for, including change orders if applicable. Company has no responsibility for any neglect, abuse, or improper handling of building product.

The warranties expressed herein are exclusive, and are in lieu of all other warranties expressed or implied, including those of merchantability and fitness.

There are no warranties which extend beyond those described on the face of this Warranty. The foregoing shall constitute the full liability of the Company and be the sole remedy to the Owner.

Project Name: _____

Date of Installation: _____

Effective Date of Warranty Period for Components: _____

Effective Date of Warranty Period for Structural: _____

Warranty Contact: Chuck Kaufman, Public Restroom Company: 888-888-2060 extension 101

Approved: _____
Charles E. Kaufman, President

Accepted by Obligee: _____

Name and Title: _____



COMPANY PROFILE

OFFICE LOCATION, INFORMATION:

Public Restroom Company
2587 Business Parkway
Minden, NV 89423
Office: 888-888-2060
Fax: 888-888-1448

Officers: Charles E. Kaufman (Ext. 101) President, Secretary, Treasurer

Public Restroom Company Professional Design Staff:
Mark Duran, Chief of Design

Staff: 70 employees at this address including in house architectural, engineering, and management staff.

Main Office Property: 10.3 acre site with 43,000 square feet of manufacturing and 8,000 square feet of office class A.

Outsource Locations: Aumsville, Oregon 30,000 square feet manufacturing.

Years in Business and Qualified Employee: Charles Kaufman began the modular restroom industry 48 years ago and has pioneered critical answers that are the foundation of the state of the art buildings with our built in proprietary components and features that maintain our brand. Public Restroom Company began in 2002 to current date.

Email: chuck@publicrestroomcompany.com

HISTORY OF FIRM:

Chuck Kaufman, our owner and principal has specialized for over 48 years in the design and off-site construction of public restroom buildings for parks, golf courses, campgrounds and public recreation sites. The experience we have gained in completing \$100's of millions of specialized public restroom projects is unmatched by any other firm, worldwide. The data base of products, sub assemblies, and finishes that truly work in unsupervised parks is valuable in reducing owner vandalism, maintenance costs, and improving public safety. Our client base is architects, landscape architects, and government agencies, nationwide.

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WEBSITE ADDRESS:

www.publicrestroomcompany.com

DETAILS OF ENTITY BUSINESS STRUCTURE:

Nevada "S" Corporation
California Foreign Corporation
California Sales Tax #100154141

APPLICABLE BIDDER'S NAMES, LICENSES AND CERTIFICATIONS:

State of California Manufacturer Commercial Modular License #MF1277003
Expiration date: August 31, 2017

State of California Dealer Occupational License #DL1109895
Expiration date: January 31, 2017

State of California Contractors State License Board #822966 B
Expiration date: August 31, 2017

State of California Department of Industrial Relations Registration#1000005303
Expiration date: June 30, 2017

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Bid Results

Bidder Details

Vendor Name THE PUBLIC RESTROOM COMPANY
Address 2587 Business Parkway
 Minden, NV 89423
 United States
Respondee Charles E. Kaufman
Respondee Title President
Phone 888-888-2060 Ext. 101
Email chuck@publicrestroomcompany.com
Vendor Type NONE

Bid Detail

Bid Format Electronic
Submitted February 23, 2017 10:42:21 AM (Pacific)
Delivery Method Electronic Bid/10:38AM
Bid Responsive
Bid Status Submitted
Confirmation # 99309
Ranking 0

Respondee Comment

Buyer Comment

Attachments

File Title	File Name	File Type
Bid Number ITB CM 17-035 City of Long Beach CA	Bid Number ITB CM 17-035 City of Long Beach CA.pdf	General Attachment

Line Items

Discount Terms no discount

Type	Item Code	UOM	Qty	Unit Price	Line Total	Discount	Comment
Prefabricated Restroom Building #1							
1	Prefabricated Restroom Building	EA	1	\$276,315.0000	\$276,315.0000	\$276,315.0000	
2	Provide full and complete engineered plans for the building and the foundation plans for City permit approval.	EA	5	\$6,422.0000	\$32,110.0000	\$32,110.0000	
3	Delivery (no tax on delivery)	EA	1	\$10,026.0000	\$10,026.0000	\$10,026.0000	
4	Sales Tax (9.75%)	EA	1	\$9,054.0000	\$9,054.0000	\$9,054.0000	
Subtotal					\$327,505.0000	\$327,505.0000	
Prefabricated Restroom Building #2							
5	Prefabricated Restroom Building	EA	1	\$275,673.0000	\$275,673.0000	\$275,673.0000	

Bid Results

Type	Item Code	UOM	Qty	Unit Price	Line Total	Discount	Comment
6	Provide full and complete engineered plans for the building and the foundation plans for City permit approval.	EA	5	\$0.2000	\$1.0000	\$1.0000	
7	Delivery (no tax on delivery)	EA	1	\$10,026.0000	\$10,026.0000	\$10,026.0000	
8	Sales Tax (9.75%)	EA	1	\$9,054.0000	\$9,054.0000	\$9,054.0000	
				Subtotal	\$294,754.0000	\$294,754.0000	
Prefabricated Restroom Building #3							
9	Prefabricated Restroom Building	EA	1	\$275,673.0000	\$275,673.0000	\$275,673.0000	
10	Provide full and complete engineered plans for the building and the foundation plans for City permit approval.	EA	5	\$0.2000	\$1.0000	\$1.0000	
11	Delivery (no tax on delivery)	EA	1	\$10,026.0000	\$10,026.0000	\$10,026.0000	
12	Sales Tax (9.75%)	EA	1	\$9,054.0000	\$9,054.0000	\$9,054.0000	
				Subtotal	\$294,754.0000	\$294,754.0000	
				Total	\$917,013.0000	\$917,013.0000	