



[PROJECT NAME]

SECTION 13 34 23 - PRE-ENGINEERED RESTROOM BUILDING

Specification Date: 2/13/2020

SECTION 1: BUILDING SUPPLIER SCOPE

1.1 SUMMARY

A. The work shall include furnishing the sealed architectural, structural, mechanical, and electrical plan sets and furnishing the structural, mechanical, and electrical building components as a complete, pre-designed restroom building package as shown on drawings and as specified herein.

1.2 GENERAL REQUIREMENTS

- A. Packaged restroom building design and engineering and furnishing all specified building package components shall be supplied by Romtec, Inc., or pre-approved alternate, hereafter designated as the *building supplier*.
- B. The *building supplier* shall be a single source design, engineering, and manufacturing firm who shall meet all the following requirements.
- C. The packaged restroom building shall be a current standard product of building supplier.
- D. **Building supplier** shall be regularly engaged in and have at least ten (10) years of experience in packaged restroom building engineering, design, supply, and construction.
- E. The *building supplier* must meet or exceed the product specifications. The Romtec, Inc. building package is an approved guide and example.
- F. Alternate *building suppliers* shall demonstrate that they have designed, engineered, produced, delivered, and constructed at minimum ten (10) functioning site-built restroom buildings of similar type. Project completion dates and a reference contact from the owner of each project must be provided.
- G. Alternate *building suppliers* must disclose all instances of any prior municipal reviewer or landscape architect's rejection of the same or similar product as an "or equal" to the specified basis of design building package.
- H. Bidders who propose and alternate *building supplier* other than Romtec, Inc. are required to provide a complete submittal package minimum of ten (10) calendar days prior to the bid opening date with full sealed plan sets, calculations, and all pre-engineered structural items.
- I. Any products proposed as "or equal" that are not as specified must be specifically listed in the alternate *building supplier* submittal package and accompanied by manufacturers data sheets for review. These products will be approved or denied prior to the bid opening. Incomplete submittals will be rejected and returned to the bidder.
- J. The building and its concrete footings, foundation, and slab are to be engineered by the *building supplier* to meet site-specific conditions, including wind and snow loading, local frost depth, and ground conditions.
- K. Fasteners that are normally included with individual components, as we all any atypical fasteners, shall be supplied by *building supplier*.
- L. Building is to be designed and constructed to meet local codes and approvals for permanent structures. Any building that is temporary, permanently relocatable, prefabricated modular, an offsite constructed product, or constructed of precast material is not an accepted equal to permanent, onsite, conventional construction.
- M. No approval by any external entity will override the local building authority's codes and inspections. Seals meant for modular homes and production plant certifications will not be allowed in lieu of sealed plans from a licensed engineer and conventional inspection during construction.
- N. Building sidings, treatments, and roofing are to be as specified. Precast buildings with painted textures are not considered architecturally equivalent.
- O. The *building supplier* shall provide complete, code-compliant building plans including plans, elevations, sections, and details, under seal of a National Kitchen and Bathroom Association (NKBA) certified technical designer.
- P. The *building supplier* shall provide complete structural calculations meeting code for design loads and seismic design under seal of a professional Engineer with current license in the state of *State*.
- Q. The reviewing authority reserves the right to review or reject all submittals at its sole discretion.
- R. All work and materials shall comply with current industry building codes and regulations for the state of *State*.
- S. Americans with Disabilities Act Accessibility Guidelines (ADAAG) will be followed in design, manufacture, and construction.

1.3 DESIGN & SUBMITTAL DOCUMENTATION

- A. The *building supplier* work shall include the design of the architectural, mechanical, structural, and electrical components that will be required for this building.
- 3. The building will be designed as a complete building package to be delivered to the job site for construction on-site by the contractor.

- C. Within one (1) week of contract award, the *building supplier* shall submit the packaged restroom building preliminary Scope of Supply and Design Submittal (SSDS), including the building plan view and elevation drawings.
- D. The *building supplier* will provide complete submittal documentation in the *building supplier's* standard electronic submittal format for review.
- E. The preliminary SSDS will be reviewed by relevant parties and returned to the *building supplier* with any required revisions to the terms, product data sheets, and/or building plan view and elevation drawings noted as comments.
- F. The *building supplier* shall make any required corrections or revisions and resubmit the preliminary SSDS until the preliminary SSDS is approved by the relevant parties.
- G. Once the preliminary SSDS has been approved, the *building supplier* will provide full sealed plan sets stamped by an engineer licensed in the state that the building is located for review by the permitting authority.
- H. Up to three (3) wet stamped sets of the plans and structural calculations shall be provided by *building supplier* before any additional fees apply. Standard plan set size is 11" x 17".
- I. Permitting authority will review the full sealed plan set and return with any required revisions or corrections noted as comments.
- J. Building supplier shall provide one full round of sealed plan revisions in response to permitting authority comments before any additional fees are allowed.
- K. The following sections shall be included in the *building supplier*'s preliminary Scope of Supply and Design Submittal. Incomplete submittals will be rejected and returned to the bidder.
 - 1. INTRODUCTION
 - 2. BUILDING DESIGN,
 - (a) SUPPLIED ITEMS
 - (b) EXCLUDED ITEMS
 - (c) PLAN VIEW AND ELEVATION DRAWINGS
 - 3. PRODUCT DATA
 - 4. WARRANTY & LIMITATIONS

Note: Overall site plan is not part of building supplier's scope.

1.4 WARRANTY

- A. The building package and all associated components provided by *building supplier* shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date of delivery of the building package, or, if delivery is delayed for any reason beyond *building supplier's* control, the date that the building and all its associated components were ready to deliver.
- B. **Building supplier** shall pass through to owner all relevant manufacturers warranties for individual products and components of the building package.

SECTION 2: BUILDING PACKAGE PRODUCTS

2.1 APPROVED BUILDING SUPPLIERS

A. Romtec, Inc.,

18240 North Bank Road, Roseburg, OR 97470

Tel: 541-496-3541; Fax: 541-496-0803; Email: travis.olson@romtec.com

Web: www.Romtec.com

B. Requests for use of an alternate *building supplier* will be considered in accordance with provisions of Section 1.

2.2 BUILDING DESCRIPTION

- A. Refer to drawings for quantities, dimensions, locations, and installation methods for the materials and items described in this section.
- B. Building dimensions shall match what is indicated on drawings.

2.3 PLUMBING FIXTURES & ACCESSORIES

- A. The following plumbing fixtures and accessories shall be supplied by **building supplier**.
- B. Toilet shall be floor mount, top supply, white vitreous china.
 - 1. Flush valve shall be a chrome, manual lever with ADA compliant metal oscillating non-hold-open handle.
- C. Urinal shall be wall mount, top supply, back discharge, white vitreous china.
 - 1. Flush valve shall be a chrome, manual lever with ADA compliant metal oscillating non-hold-open handle.
- D. Lavatory shall be 19 in. x 17 in. white vitreous china and wall hung with anti-splash rim and concealed front overflow
 - 1. Faucets shall be deck mounted single hole single supply metering, sink faucet.
 - 2. Faucets shall be a 2.2gpm, pivot action lever style faucet.

- E. Grab bars shall be stainless steel.
- F. Freestanding, stainless steel, 36-gallon trash receptacle with no lid.
- G. Mirror shall be 18" x 36", framed with one-piece, roll-formed stainless steel with 3/4" face and neatly mitered corners.
- H. Toilet paper dispenser shall be stainless steel, wall mount with two-roll capacity.
- I. Surface-mounted napkin disposal shall be fabricated of 22-gauge stainless steel with exposed surfaces in satin finish. Top attached by piano hinge.
- J. Surface-mounted towel dispenser shall be fabricated of type heavy duty, 22 gauge stainless steel with exposed surfaces in satin finish. Refill indicator on face of cabinet. Tumbler lock to secure hinged front panel. Towel dispenser capacity 525 multi-fold or 400 C-fold towels.
- K. Surface-mounted toilet seat cover dispenser shall be fabricated of 22-gauge stainless steel with exposed surfaces in satin finish with welded construction. Door with piano hinge and tumbler lock. Capacity 500 toilet seat covers.
- L. Surface-mounted liquid soap dispenser shall be fabricated of 20-gauge satin finish stainless steel. Dispenser shall have completely concealed mounting, vandal resistant filler hole cover and sight gauge. Push-in corrosion-resistant liquid soap valve. Capacity: 40-oz. liquid soap.
- M. Soap/Sanitizer Dispenser shall be Bradley Corp. Diplomat Series Model 6A01, surface-mounted automatic foam soap/sanitizer dispenser, with face formed with contemporary contours, radii, and finish matching related accessories in manufacturer's designer series. Capacity 27 oz (800 ml). Equipped with hinged cover and completely concealed mounting plate. Vandal resistant filler hole cover and sight gauge. Corrosion-resistant foam soap/sanitizer valve.
- N. Surface mounted baby changing station shall be solid light grey (9631) molded bacterial-resistant, high density polyethylene. Steel to steel support hinges with pneumatic gas shock mechanism. Unit shall have integrated liner dispenser and bag hooks. Unit shall have an anti-microbial safety belt. Unit shall be operable with less than 5lbs. of force and complies with ASTM F2285 Standard.
- O. Utilitub17 with legs and ADA faucet in the mechanical room.
- P. Drinking fountain shall include bi-level electric water cooler with bottle filling station. VRCTLDDWS shall deliver non-chilled drinking water. Units shall be stainless steel construction and include vandal-resistant bubbler. Bottle filling unit shall include an automatic 20-second shut-off timer. Shall include Green Ticker™ displaying count of plastic bottles saved from waste. Bottle filler shall provide 1.1 1.5 gpm flow rate with laminar flow to minimize splashing. Unit shall meet ADA guidelines. Unit shall be lead-free design which is certified to NSF/ANSI 61 and 372 and meets federal and state low-lead requirements. Unit shall be certified to UL399 and CAN/CSA 22.2 No. 120.
- Q. Bradley phenolic restroom partitions shall be supplied by *building supplier*.
 - Solid Phenolic core is composed of compressed cellulose fibers impregnated with resins. The surface laminate is fused to the resin-impregnated core. All edges are machined and finished smooth with a 15degree beveled edge. Materials shall be non-absorbent, impact and graffiti resistant. Materials shall be impervious to steam, soaps/detergents, and mildew.
 - 2. Partition color shall be *Graphite Grafix (006F)*.

2.4 ELECTRICAL

- A. The following electrical fixtures shall be supplied by *building supplier*.
- B. Light fixtures shall be supplied by *building supplier*.
 - 1. Exterior lights to be LED downlights with cast-aluminum housing with corrosion-resistant paint in dark bronze. Polycarbonate lens.
 - 2. Exterior wall mounted, Lithonia, LED vaportight light fixtures that have cast-aluminum housing with corrosion-resistant paint in an industrial grey finish. Sealed gasket protects against moisture and dust.
 - 3. Exterior lights controlled by photocell.
 - 4. Interior surface mount, 48" LED light fixtures.
 - 5. Restroom lights controlled by motion sensor.
 - 6. Mech room lights controlled by switch (switches by installer).
- C. Electric tank, 20-gallon, 2.5kw water heater supplied by *building supplier*.
- D. Surface mount, 1000 2750-Watt wall heater in mechanical room only shall be supplied by *building supplier*.
- E. Broan #771, ceiling exhaust fans shall be supplied by *building supplier*.
- F. Wall mount, white, Bradley hand dryer with 15 second dry time supplied by *building supplier*.
- G. Main breaker panel shall be supplied by *building supplier*.
 - 1. Breaker Panel shall be 100 Amp, single-phase, indoor.

<u>Note</u>: Breaker panel shall be sized to accept only the loads of the **building supplier** electrical fixture package.

The **building supplier** should modify the main breaker panel as needed to be most efficient based on any design changes.

2.5 STRUCTURE

A. Concrete Masonry Units (CMU) shall be supplied by building supplier.

- 1. Walls shall be constructed of 8"W x 16"L x 8"H split-face mortar joint concrete masonry units (concrete blocks).
- 2. Blocks shall be manufactured to ASTM C90 designation for load bearing concrete masonry units.
- 3. Block color to be *Gray*.
- B. Rain Guard anti-graffiti coating shall be supplied by *building supplier*.
- C. Inside face of all exterior walls shall have rigid insulation finished with white FRP panels supplied by building supplier.
- D. Exterior wall finish shall be fiber cement lap siding above stone veneer accent.
 - 1. Siding shall be mounted over OSB sheathing supplied by *building supplier*.
 - 2. Stone veneer color shall be selected by *owner* from the manufacturer's standard color chart.
- E. Sanitary tile cove base on interior restroom walls to be supplied by *building supplier*.
- F. Polycarbonate gable windows shall be supplied by *building supplier*.
 - 1. Windows shall include pre-assembled steel frame with 1/8" thick polycarbonate with translucent pebble finish.
 - 2. Steel frames shall be primed and painted black.
- G. Kick proof wall vents for natural ventilation shall be supplied by *building supplier*.
 - 1. Pre-assembled steel frame with 10-gauge, 1" square lock joint wire weave mesh and interior louver with integral insect screen.
 - 2. Vents shall be primed and painted *black*.
- H. Wire weave gable vents for natural ventilation shall be supplied by *building supplier*.
 - 1. Pre-assembled steel frame with 10-gauge, 1" square lock joint wire weave mesh integral insect screen.
 - 2. Steel frame shall be primed and painted *black*.
- I. Door system components shall be supplied by *building supplier*.
 - 1. Doors shall be Steelcraft® SL18 standard laminated honeycomb core and 18-gauge galvanized steel.
 - 2. Door frame shall be pre-welded Steelcraft® 3-Sided flush frame, 16-gauge galvannealed A-60 steel.
 - 3. Doors and frames shall be powder coated with undercoating (color to be selected by owner).
 - 4. Masonry door clips (3/16" dia.) for door frame shall be fitted between the doorframe and concrete blocks to bond frame to wall. Door clips shall allow full internal grouting of the frame during installation.
 - 5. Hinges shall meet ANSI A5112 with non-removable pin and two ball bearings.
 - 6. Hager 5100 Series Grade 1 door closer shall be constructed of cast iron.
 - 7. Door closure shall be LCN-4111, grade 1, heavy duty closure with cast iron body, full complement bearing, double heat-treated pinion journal.
 - 8. Door shall have 0.038" gauge, stainless steel protection plates.
 - 9. Doors shall have aluminum alloy 6063, T5 temper mill finish saddle thresholds, model 424E.
 - 10. Doors shall have aluminum alloy 6063, T5 temper synthetic rubber polymer blend neoprene sweeps, model 200NA, anodized aluminum finish.
 - 11. Doors shall have pull handles with stainless steel plates and deadbolt locks.
 - 12. Restroom doors shall have Hager 3700 series interconnected locks with occupancy indicator.
 - 13. Door lock shall be Grade 2, standard duty commercial cylindrical lever locks with no exposed mounting screws.
 - (i) Hager 341C latch protection plate with lock cut out.
 - 14. Restroom doors to have 18" x 18" louvered vents.
 - 15. Restroom doors to have magnetic locking system.
 - (i) Magnet locks, Hager 2942
 - (ii) Hager 2903, with constant power for fail safe and fail secure locking devices.
 - (iii) Exit switch, Hager 2977
 - (iv) PIR egress sensor, Hager 2-679-0612
 - (v) Intermatic digital in-wall timer, ST01 Series.

2.6 ROOFING

- A. The following roof components shall be supplied by *building supplier*.
 - 1. Glulam beam shall be 24F-V4 and architectural grade.
 - 2. Tongue & groove decking shall be 2x6 V-edge deck boards, select deck Douglas fir.
- B. Roof system shall consist of prefabricated structural insulated panels.
 - 1. Panels shall be constructed of expanded polystyrene foam, OSB and urethane adhesives.
 - 2. Interior finish shall be white FRP.
- 2. Roof system shall consist of wood truss package.
 - 1. Building supplier shall provide batt insulation.
- 2. Roofing shall be Fabral, 26-gauge, Horizon 16, standing seam panels, with 16 in. coverage width.
 - 1. Roofing package shall include inside and outside foam closures, matching trim (eaves, gables, and ridge) and fasteners, sheet metal flashing (all sides), and 30# felt (under metal).
 - 2. Roofing color to be selected by the *owner* from the manufacturers standard color chart.

- E. Roofing to be Fabral, 29 gauge, Grand-Rib 3 roof panels with exposed fasteners.
 - 1. Roofing package shall include inside and outside foam closures, matching trim (eaves, gables and ridge) and fasteners, sheet metal flashing (all sides), and 30# felt (under metal).
 - 2. Roofing color to be selected by the *owner* from the manufacturers standard color chart.
- F. Architectural Composition roofing shall have a 5-5/8 in. exposure and a nominal size of 13-1/4 in. x 39-3/8 in.
 - 1. Roofing color to be selected by the *owner* from the manufacturers standard color chart.

2.7 DELIVERY, STORAGE, AND HANDLING

- A. The *building supplier* freight shall be based on delivering the product on a 48' to 53' flatbed or van truck and trailers, or as close to those dimensions as can legally access the site. Overall dimensions of the truck and trailers allowed to access the site are: 70' overall length, 102" wide and 168" high.
- B. **Building supplier** shall deliver organized building package components in stages as shrink-wrapped pallets that correspond to a typical sequence of construction. A bill of material stating the stages of palletized components shall be included with every delivery.
 - 1. Stage 1 pallets shall include structural components such as block, frames, vents, beams, connectors, trusses, etc.
 - Stage 2 pallets shall include second stage structural components such as filler wall material, windows, skylights, roofing, etc.
 - 3. Stage 3 pallets shall include structural finish components such as siding material, tile, doors etc.
 - 4. Stage 4 pallets shall include plumbing and electrical fixtures and other finish materials such as toilets, sinks, drinking fountains, electrical fixtures, accessories, etc.

SECTION 3: BUILDING INSTALLER SCOPE

The installing contractor or subcontractor, hereafter designated as the *building installer*, is responsible for building package installation. *Building installer* work will generally include foundation/pad construction and building package assembly/construction.

<u>Note</u>: **Building supplier's** scope is separate from the **building installer's** scope. Romtec, Inc., is the approved **building supplier**, not a designated **building installer**.

3.1 CONSTRUCTION SUBMITTALS

A. If required by *owner* and/or reviewing authority, *building installer* shall submit product data sheets and relevant information about the specified *building installer* supplied products below for review and approval.

3.2 WARRANTY

- A. **Building installer's** work shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date that installation work for the building package is completed, including any relevant final punch list. In the event that final acceptance of the completed building is delayed for reasons beyond **building installer's** control, the warranty shall be one (1) year from the completion of **building installer's** installation work and demobilization.
- B. **Building installer** shall pass through to owner all relevant manufacturers warranties for individual products and components supplied by **building installer**.

3.3 STRUCTURE

- A. Masonry (concrete) grout shall be supplied and installed by *building installer*.
 - 1. Grout shall have a minimum compressive strength of 2,500 psi at 28 days, 9+/-1" slump, with max ½" aggregate.
 - 2. Fine or coarse grout may be used in accordance with 2009 UBC.
 - 3. All CMU block must be fully grouted and may not be wetted.

<u>Note</u>: If required for installation, **building installer** will be responsible for providing appropriate equipment and labor for notching CMU block for bond beams, cutting CMU block to make any required shapes, and/or grinding CMU block for fixture mounting.

- B. Rebar for walls shall be supplied and installed by *building installer*.
 - 1. All walls shall have #4 and #5 rebar. See final approved plans for spacing.
 - 2. All rebar used in the building must meet ASTM A615 manufacturing standards and is to be placed per the final approved plans.
- C. Interior block wall finish shall be latex epoxy paint supplied and installed by *building installer*.
- D. Ceiling finish shall be supplied and installed by **building installer** per the final approved plans.
- E. Interior floors to be sealed concrete finish supplied by *building installer*.
- F. Sealant for all exposed wood shall be supplied and installed by *building installer*.

- G. Sealant for all exterior CMU block is required, to be supplied and installed by *building installer*.
- H. Doors and frames are factory primed to be painted on-site by *building installer*.
- I. Fiber cement siding is primed to be painted on-site by *building installer*.
 - 1. Siding shall be mounted over OSB sheathing (sheathing supplied by *building supplier*).
- J. Gutters and downspouts are supplied and installed by *building installer*.

3.4 ELECTRICAL

- A. Electrical rough-in, installation and trim shall be provided by *building installer*.
 - 1. All underground and/or overhead service to building shall be as specified in the final site plan.
 - 2. **Building installer** is responsible for all necessary wire, connectors, grounding, conduit, and related items to install the building package electrical components and meet all relevant national, state, and local codes.
 - 3. **Building installer** shall supply and install all switches and outlets required to complete the building package installation.

3.5 CAST IN-PLACE CONCRETE FOR BUILDING PACKAGE

- A. All equipment, labor, trades, and materials for cast-in-place concrete shall be provided by *building installer*.
 - 1. Includes all materials and labor for building package foundations/footings and interior slabs.
- B. Footings for the building package are to be dug by the *building installer* and poured on-site to meet local code for permanent structures. A prefabricated, modular mat placed on compacted base is not an accepted equal to a site specific, site poured, engineered foundation.
- C. Engineered fill shall be 3/4" minus crushed aggregate around footings, foundations, and slabs, or as required in the final approved plans.
- Slab vapor barrier shall be 6-mil continuous plastic under the concrete slab, or as required in the final approved plans.
- E. The foundation shall be installed as designed with all cast in-place concrete poured to dimensions specified, or as required in the final plans.
 - 1. Footings will be built to minimum 24" depth or greater if required by local frost depth or permitting authority.
 - 2. Minimum compressive strength of foundation concrete shall be 3,000 psi at 28 days, 4" +/-1" slump, with max 3/4" aggregate, cured in accordance with ACI 308, or as required in approved final plans.
 - 3. Slabs shall have a fine broom finish with joints required in flat work as shown on plans.
 - 4. Steel rebar shall be installed as specified in final plans.
- F. **Building installer** shall supply and install concrete slab sealer.
 - 1. Concrete slab sealer shall be a water-based, transparent curing, sealing and dust proofing compound with two (2) coats to be applied per manufacturer's instructions.

3.6 PLUMBING

- A. Plumbing rough-in, installation and trim within 10' of the building footprint shall be provided by building installer.
 - 1. All underground water service and sewer drain(s) from building to be as specified in final approved site plan.
 - 2. Building water shutoff valve, drain, and all rough piping shall be as shown on final building plans. Final installation location to be determined onsite.
 - 3. Install the building package plumbing fixtures per the final approved plans.
 - 4. Piping shall be installed per the final approved plans with minimum pipe sizing per 2009 Uniform Plumbing Code Section 610.
- B. Floor drains in the building shall be supplied and installed by *building installer*.
 - 1. All floor drains shall be as shown on final approved plans.

3.7 OTHER MATERIALS & EQUIPMENT

- 4. Unless otherwise specified, the following products and materials are supplied by building installer (if applicable).
 - 1. Building package installation
 - 2. Cast-in-place concrete foundations, footings, interior slabs
 - 3. Concrete slab & block sealer
 - 4. Mortar
 - 5. Concrete grout
 - 6. Rebar
 - 7. Latex epoxy paint
 - 8. Caulk for siding
 - 9. Plumbing rough in, installation and trim
 - 10. Electrical rough in, installation and trim

- 11. Switches & outlets
- 12. Typical fasteners; for example: roofing nails, staples, etc.
- 13. Fasteners not included in product packaging
- 14. Wood sealant for all decking, glulam beams, posts, and extensions
- 15. All other items within the building footprint indicated on final plans or required by building codes to complete installation of the building package which are not specifically stated as supplied by *building supplier*.

3.8 DELIVERY, STORAGE, AND HANDLING

- A. The *building installer* will be responsible for all equipment and labor required for off-loading of the delivered building package onsite.
- B. The *building installer* will assume responsibility for adequate protection and maintenance of delivered building package materials from weather, damage, and pilferage during installation work. Any failure to adequately protect building package materials that affects the warranty of those materials will be at *building installer's* expense.
- C. Building installer shall collect and maintain for final delivery to owner any operation & maintenance manuals included by individual product manufacturers with their respective product packaging. Any failure to collect, maintain, and/or deliver these O&M manuals to the owner that results in fees from building supplier for additional copies shall be at building installer's expense.

SECTION 4: CONTRACTOR SCOPE ITEMS

The items in this section may be provided by the same *building installer* as defined in Section 3 above (typically when a single entity is acting as both the *building installer* and *contractor*), or the items in this section may be provided by a separate entity such as a general contractor or site contractor, hereafter designated as *contractor* (typically when the *building installer* is a separate subcontractor). *Contractor* work will generally include site preparation and grading, excavations for structures, backfill and/or structural backfill, and any site or utility work outside the building package footprint.

Items in this section are generally to be completed prior to *building installer* beginning its installation work described in Section 3 above.

4.1 CONSTRUCTION SUBMITTALS

A. If required by *owner* and/or reviewing authority, *contractor* shall submit product data sheets and relevant information about the specified *contractor* supplied products below for review and approval.

4.2 WARRANTY

- A. **Contractor's** work shall be warranted against defects in materials and workmanship for a period of not less than one (1) year from the date of acceptance. Acceptance is the date that installation work for the building package is completed, including any relevant final punch list. In the event that final acceptance of the completed building is delayed for reasons beyond **contractor's** control, the warranty shall be one (1) year from the completion of **contractor's** installation work and demobilization.
- 3. *Contractor* shall pass through to owner all relevant manufacturers warranties for individual products and components supplied by *contractor*.

4.3 ELECTRICAL

- A. Incoming electrical utility lines to within approximately 10' of the building shall be provided by contractor.
 - 1. All underground and/or overhead service to building shall be as specified in the final site plan.
 - 2. Electric meter base and all rough wiring, switches, plugs and circuit breakers shall be as shown on final plans.
- B. Contractor supplies and installs the meter base and meter.

4.4 CAST IN-PLACE CONCRETE FOR BUILDING EXTERIOR

- A. All equipment, labor, trades, and materials shall be supplied by *contractor*.
 - 1. Includes all materials and labor for exterior/entry slabs and sidewalks.
- B. Refer to drawings for sidewalks and entry slabs.
 - 1. Minimum concrete compressive strength of 2,500 psi at 28 days, or as required in final approved plans.
 - 2. Remesh or rebar reinforcement shall be used in sidewalks.
 - 3. All sidewalks shall be finished with a fine broom with control joints installed per the final approved site plan.

4.5 PLUMBING

- A. Incoming plumbing to within approximately 10' of the building shall be provided by *contractor*.
 - 1. All underground water service and sewer drain(s) from building to be as specified in final approved site plan.
 - 2. Building water shutoff valve is to be supplied and installed by *contractor*.
 - 3. *Contractor* is responsible to ensure that incoming water pressure is sufficient to meet building package fixture demands.
 - 4. Minimum water pressure at toilet and urinal flush valves shall be 40 psi with minimum pipe sizing as per 2009 Uniform Plumbing Code Section 610, or as required in final approved plans.
- B. Water line drain valve shall be supplied and installed by *contractor*.
- C. Sewer line backflow check valve shall be supplied and installed by *contractor*.

4.6 OTHER MATERIALS & EQUIPMENT

- A. Unless otherwise specified, the following products and materials are supplied by *contractor*.
 - 1. All items not specifically listed as supplied by *building supplier* or *building installer*.
 - 2. Any item listed as supplied by "contractor" or "others".
- B. Unless specified in the plans or submittals, *contractor* supplies the following items (if applicable):
 - 1. Incoming electrical, water, sewer, and gas utilities.
 - 2. Asphalt paving
 - 3. Masonry pavers
 - 4. Sidewalks
 - 5. Landscaping
 - 6. Site grading
 - 7. Exterior/entry slabs
 - 8. Drain valves and backflow check valves
 - 9. Branch circuit breakers
 - 10. Irrigation Equipment
 - 11. Gutters and downspouts
 - 12. Fire alarm and fire suppression equipment
 - 13. Lighting equipment not attached to the building.
 - 14. All other items exterior of the building footprint indicated on final plans or required by building codes which are not specifically stated as supplied by *building supplier or building installer*.

4.7 DELIVERY, STORAGE, AND HANDLING

A. The *contractor* will assume responsibility for adequate protection and maintenance of the installed building package materials after completion of installation work by *building installer*. Any failure to adequately protect building package materials that affects the warranty of those materials will be at *contractor*'s expense.

SECTION 5: OWNER'S SCOPE

5.1 ONGOING MAINTENANCE

A. *Owner* is responsible for ongoing maintenance of the completed restroom building after completion of work by building installer and contractor.

5.2 SITE PLAN

A. **Owner** (or owner's site engineer) is responsible for providing the final approved site plan to **building supplier** and/or **building installer**.

5.3 SPECIAL INSPECTION

- A. If required, special inspection(s) services shall be provided by *owner*.
- B. If special inspection(s) are required by the permitting authority or relevant agency(ies), then the *building supplier*, *building installer*, and/or *contractor* shall provide reasonable assistance to the *owner* to accommodate the special inspection(s).