



State of Utah

GARY R. HERBERT  
Governor

GREGORY S. BELL  
Lt. Governor

Department of Administrative Services

KIMBERLY K. HOOD  
Executive Director

Division of Facilities Construction and Management

DAVID G. BUXTON  
Director

## ADDENDUM NO. 3

Date: June 23, 2010

To: Short-Listed Contractors

From: Darrell Hunting - Project Manager

Reference: Recreation Rehabilitation Phase 1 – Starvation State Park  
Division of Parks and Recreation – Duchesne County, Utah  
DFCM Project No. 08085510

Subject: **Addendum No. 3**

Pages	Addendum Cover Sheet	1 page
	Bureau of Reclamation Questions/Answers/Specifications	21 pages
	<u>Bureau of Reclamation Drawings</u>	<u>10 pages</u>
	Total	32 pages

**Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.**

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

**3.1 SCHEDULE CHANGES:** There are no Project Schedule changes.

**3.2 GENERAL ITEMS:** See attached Bureau of Reclamation documents and drawings.

## General Site

1. Is campsite #31 being rebuilt after it is demolished? If so what is the design?  
*Answer - Refer to drawing 1732, Note 4 regarding details for site 31.*
2. Please confirm there is no concrete slab under the sand at the horseshoe play area except to anchor the post and backstop.  
*Answer - Correct. Build to the design shown on drawing 1750, Section at Pit which shows dimensions and layout of concrete.*
3. Please confirm camp area 25 is similar to camp area 18 and is intended as an accessible camp ground?  
*Answer - Both are accessible campsites. Refer to drawing 1742 and 1744 for layout and design of each accessible campsite.*
4. Please confirm all existing tables will be removed by the DNR and placed by the DNR after construction is complete.  
*Answer - Yes*
5. Please identify extent of curbing to be removed for extension of East parking lot.  
*Answer - Drawings will be modified to show extent of curbing removed as well as extent of new curbing to be replaced.*
6. Please indicate thickness of sand for beach area  
*Answer - Approximately 2 feet deep*
7. Please indicate if volleyball nets are supplied by owner or contractor.  
*Answer - Owner*
8. What, if any, concrete prep is required under the new boat ramp concrete?  
*Answer - It is suspected that there is some kind of road base under the slab. Some of that will have been washed out over the years and some will be removed during concrete demolition. In any case it will have been disturbed and will need to have some of the base replaced and the entire area rolled (i.e. compacted). If conditions are significantly different then a change order will be issued.*
9. All the vegetation along the shoreline needs to be removed in order to place the sand. Do you have a location in the park for green waste?  
*Answer - No. See Section 01740 Article 3.04.*
10. No irrigation system or sod will be needed in campground area, just the day use area correct?  
*Answer - Correct*
11. Is the intent of the Rotomill tailings to be used on the one-way road or in the campground area? or both?  
*Answer - Either or both. This is just a way to dispose of old asphalt material without hauling it offsite. It is also intended to be a partial replacement for road base.*
12. Please verify accuracy of Note 2 on sheet 1752 indicates Epoxy anchors are to be installed by others.  
*Answer - Strike out the phrase "(furnished and installed by others)". This work is to be performed by the Contractor.*
13. Please indicate extent of new sod and demolition of existing grass and irrigation system. There are no lines or dimensions showing where the grass or new irrigations stops and starts.  
*Answer - A dashed line has been added to Drawing 66-400-1732 indicating the approximate boundaries. Also a dashed line has been added showing existing grass*

*removal on Drawing 66-400- 1731. The bid schedule has areas for both the sod and irrigation system.*

14. Please indicate the extent of grubbing and tree removal required on the beach prior to sand placement. Plans indicate grubbing is to be included but existing conditions are greater than what is shown on the drawings.

*Answer - Remove vegetation to the high water line (a permit is required to go below this line). Do not remove trees. Remove only what is within the sand beach outline.*

*Changes to Drawing 66-400-1732 have been made to clarify.*

15. I am bidding the utilities for the Starvation State Park project and had a question and comment. You have down that you would like curb stops on the 4" line. As far as I am aware of the biggest curb stop is 2", would it be ok to bid a Mueller A-2360 gate valve instead? I have attached a submittal for this.

*Answer - The terminology will be changed to shut-off valve which is understood to mean any manufactured water valve which can shut off the water supply and isolate any line in the system.*

## Restrooms

1. Please confirm ceiling finish for C2 is fire taped type x drywall with no paint.

*Answer - A C2 finish description will be added to drawings.*

2. Bottom of footing is 46" for the bathrooms. Frost is indicated at 30" per code review. Please advise what is wanted for bottom of footing.

*Answer - Refer to Building Elevation drawings for grading elevations. Design data is for reference only and minimums should be adhered to.*

3. Please confirm shower curbs are not required and finish of shower pans is concrete and will not require a shower pan liner. Please identify how to waterproof the shower floors if shower pans are not to be used.

*Answer - No shower curbs are required, shower bottom is concrete and will not require pan liner. The floor is concrete, walls are finished with a filler and paint coating to provide sufficient water-proofing.*

4. Please confirm the showers stalls have two (2) ea floor drains. (one in the shower and one in the "drying" area.)

*Answer - Only one drain is shown on the plans. The other symbol is a solatube type skylight which could have been mistaken for drain.*

5. Please confirm the Main bathroom areas (around the sinks) have one (1) ea floor drain.

*Answer - Drawings will be modified to clarify location of floor drains (near the center of the room). Each sink has a solatube type skylight over it.*

6. Please confirm the storage area between the bathrooms has one floor drain.

*Answer - Drawings will be modified to clarify location of floor drain. One floor drain has been added to each storage area.*

7. Please specify finish of ceiling or soffit of the exterior entry way to the bathrooms.

*Answer - Metal soffits will be called out on the drawings. Section 7471 indicates requirements for soffits.*

8. Existing toilets are wall mounted. Are wall mounted toilets wanted or are floor mounted acceptable?

- Answer - Utilize floor mounted toilets.*
9. The contract documents call out sliding aluminum windows in the spec and also sheet #1758. On sheet #1762 he shows hopper stile with wording that states slider. Which window type do I bid?
- Answer - Slider is required. The drawing symbol will be replaced to show a slider in elevation.*
10. Is the exterior split face CMU natural or colored?
- Answer - Colored. The color will be selected by State Parks.*
11. Is their water repellent additive in the mortar or block?
- Answer - No.*
12. Is there any loose fill insulation in the CMU walls?
- Answer - No.*

## Electrical

1. Please confirm both the Electric Hand dryers as well as the Electric water heaters are to receive power (not shown on the plans, but shown on the panel schedule). Please confirm a total of 4 electric hand dryers for this project.
- Answer - Fixed electrical items (such as hand dryers and outlets) are not required to show wires going to the item. Only switches and the lights they control show wires to indicate what lights are controlled by a specific switch. Symbols will be added to the legend to clarify locations of dryers for a total of 8 dryers (4 in each restroom). It shall be the electrician's responsibility to appropriately size wire and determine the best path to get the wire from the panelboard to the electrical item.*
2. Please confirm the electrical contractor is responsible to size equipment wire and conduit for this project.
- Answer - Yes, it is the responsibility of the contractor.*
3. Is rigid conduit required above ground only or is it required underground as well?
- Answer - Refer to specification Section 16130 – Raceways, for approved conduit in the applicable application.*
4. The electrical specifications 16120-1 Conductors 2.01 calls out for copper conductors with a note (do not substitute aluminum for copper). Does this apply to the direct burial for the campground power? Most direct burial is aluminum. The wire for the bathrooms should be copper. Please see if you can get this clarified.
- Answer - Most direct burial are aluminum because large utilities use it and they have the ability to fix any failure within hours should the conductor corrode through for any reason (an economic decision, labor versus the cost of materials up front). State Parks needs a conductor that is more reliable since it may take weeks to arrange for a contractor to come out and fix any problem. We know that copper is more expensive but the long term benefits outweigh the upfront expense. The requirement for copper conductors applies to direct burial conductors.*
5. We need to know the feeder size from the existing pad mount transformer to the new LP panel inside the restroom building
- Answer - This is to be sized by the Contractor.*
6. We need to know the location of the new LP panel inside the new building.

- Answer - This has been added to drawing.*
7. It is our understanding that the new LP panel will be in the 6 unit flush restroom with showers. How is the 6 unit flush restroom getting power? Is there another panel? How is it fed?  
*Answer - There is also to be a new panelboard in the new 6-unit flush restroom. The location of the panelboard has been added to the drawing and the Contractor is responsible to size it and determine all the circuits. The restroom with showers had additional detail shown in the drawings because of the distribution to the campground power pedestals.*
8. We also need to know where the meter base is located.  
*Answer - The location of the meter base will be determined by Moon Lake Electric or by the Contractor*
9. I would like to have a contact for Moon Lake Electric. This will enable us to coordinate an outage and know locations of existing power. They will also be able to tell us if he is providing the service to the panel.  
*Answer - No specific contact is available at this time. Contact Moon Lake Electric at 435-722-5400*
10. All the feeders to the pedestals have conductor sizes, but no conduit sizes. Are we determining conduit sizes or are you providing a new conduit/conductor schedule?  
*Answer - Yes, it is the responsibility of the contractor to determine the conduit size.*
11. The details show no locations for ground rods. In past projects with RV pedestals, it has been required that every pedestal have it own ground rod. Please clarify if these are needed at each pedestal.  
*Answer - See 551.76 of the 2008 NEC which states that ground is to take place at the service equipment (i.e. panelboard). Ground as shown on the drawings. The Contractor shall size the grounding system (several grounding rods may be required).*
12. There is no ground conductor size called out in the schedule. Are we required to size this per code, or are you supplying us with a ground conductor size?  
*Answer - It is the responsibility of the contractor to size.*
13. Sheet 1747 shows the electrical pedestals to be 100 amp but sheet 1748 show the breakers 150 amp. Please clarify which is correct.  
*Answer - The schematic shown on drawing 66-400-1748 (150 amp breakers serving the power pedestal circuits) is correct.*
14. The specification for the RV power pedestal has two options for the post, stainless or galvanized. Which post do you want?  
*Answer - The Model VNKJHAVT calls for a stainless steel earth-burial post.*
15. How do want the terminate the carry through electrical phase as noted on sheet 1747 note 1?  
*Answer - The circuit has been redrawn.*
16. 6 unit flush RR - There are no electrical panel details or location, also is there a meter/disconnect similar to Panelboard LP, if so what size?  
*Answer - See the answers to questions 6 and 8.*
17. 6 unit flush RR with Showers - Where is the desired location for Panelboard LP and the meter/disconnect?  
*Answer - See the answers to questions 6 and 8.*
18. Power Pedestals - How should the circuits alternate regarding the 2-pole 50 Amp 240 Volt receptacle 14-50R? Does this need to be re-drawn?

*Answer - The circuit has been redrawn.*

19. Feeder Cables - Please clarify that the feeder schedule on drawing 66-400-1747 refers to copper conductors in appropriately sized underground conduits.

*Answer - Cable is direct burial, not in conduit. Sizing is to be performed by the contractor.*

## Quantities

1. Should a discrepancy of count (qty or size) between the plans /specifications and the bid Schedule arise, what should the contractor's proposal reflect?

*Answer - Utilize the Bid Schedule. Note the changes in the answers to questions 3, 4 and 5 below which apply to Bid Schedule items 10, 41, and 53.*

2. Will the bid for the project be a lump sum price and paid that way or will items be paid on a unit price basis?

*Answer - It is intended that the items will be paid on a unit price bases. Each bidder should use the quantities listed in the bid schedule to determine the total amount even though those quantities may be different when measured in the field. How each item will be measured is specified at the beginning of each section that has a measurable item. Some items such as water hydrants are complex and are composed of several different elements. Be sure to read each measurement and payment article carefully. The Bid Schedule will refer you to the proper section.*

3. The crushed gravel item #10 does not seem to be enough quantity to cover the 6" of crushed base under the 3" of paving? Is the crushed gravel under paving paid in item #10, if not what does item #10 cover?

*Answer - It covers crushed gravel under concrete flat work as well as the road. Item 10 on the Bid Schedule will be changed to indicate 1760 cubic yards.*

4. Please advise if Camp Site 31 receives a new BBQ. If so, the total count of BBQ's is 12, NOT 11 AS INDICATED ON THE BID SCHEDULE.

*Answer - Schedule will be changed to reflect 12 grills.*

5. Please confirm no concrete curbing is required for this project.

*Answer - Drawings will be modified to add a curbing detail and locations of new curb in the boat parking area to the east. The Bid Schedule will be changed to indicate 223 cubic yards for bid item #53.*

## The Following are answers to questions in the Mandatory Site Meeting Minutes (Published in Addendum No. 2)

Starvation State Park Rehabilitation – DFCM Project # 08085510  
Mandatory Site meeting minutes

- 1- Coordination is critical in closing the campground or day use area. Nothing can be closed prior to July 6, 2010. It is requested that we keep any areas open as long as possible, but the contractor will have access to what ever areas they need to work in.
- 2- Contractor can camp on site; there will be no charge if they camp in closed construction area. Camping outside construction area will be charged normal prices.
- 3- Contractor will be required to follow all reclamation safety standards.
- 4- A drawing left off issued drawings was handed out at the meeting and will be posted on project web site ASAP.
- 5- DFCM will check and see if there was a Geo Tec survey performed and if this information is available to contractors. *A soils report has been performed but is not necessary for bid purposes. Designs have taken into account soil properties.*
- 6- This project is taxable and should be bid as such.
- 7- The main road can't be closed during the course of the project.
- 8- *A seed mix needs to be determined for seeding of areas disturbed by construction activities. It shall be the responsibility of the contractor to contact a seed company and obtain the appropriate seed mix. Local seed companies generally keep on record seed mix designs for the various regions in the state.*
- 9- The initial survey will be performed by the BOR.
- 10- The reservoir will drop approximately 12 feet by the end of September.
- 11- The curb will need to be removed at the bottom end of new loop road.
- 12- *We need to determine the gradation on the sand. Refer to the ASTM C33 standard as specified for concrete sand. Gradations and required material properties are found in the standard.*
- 13- Generally the beach campgrounds close around October 1 and other areas close around the end of October.
- 14- Boat parking is critical and there needs to be close coordination as to not close more boat parking that is absolutely necessary
- 15- The boat ramp will need to remain open for the duration of the project as it is the only developed ramp on the lake.
- 16- Contractors are required to provide portable restrooms.
- 17- DFCM needs to determine if there has been an asbestos survey on the restrooms. If there has not been one we need to get one before demo starts.
- 18- Parks will remove picnic tables and any signs that they want to keep from the construction area.
- 19- Contractors should figure there is 3" of asphalt in areas to be ground.
- 20- Hard hats and safety Vests, long pants and shirts required for all employees working on site.
- 21- *Contractor is to coordinate with Moon Lake Electric any needed upgrades and connections. Contractor will not be responsible-for Moon Lake charges for required upgrades. The specifications will be changed to reflect this decision made at the site visit.*
- 22- Campground power pedestal details are shown on the electrical details page.
- 23- *Location of main power connection needs to be verified. Drawings will be revised to show panelboard locations within each restroom. The new day use restroom shall obtain power from the same transformer as the existing restroom.*

- 24- The electrical requirements in the day use restroom needs to be verified, does not appear that the drawings indicate this. *The facility is a simple building and as such the contractor's electrician can lay out the electrical as necessary. The drawings will be changed to show a panelboard location, but circuits and appropriate wiring will be up to the electrician to meet code. The restroom with showers had additional detail shown in the drawings because of the distribution to the campground power pedestals.*
- 25- Is the day use restroom elevation changing, it appears to be in a hole. *Final elevations are shown on drawings 1736-1737 for top of foundation. Grading and finish concrete around the restroom shall meet ADA requirements and minimum design frost depths.*
- 26- It needs to be determined if the water heaters will be propane or electric. The State parks prefers propane, if it is determined that water heaters will be propane then propane will need to remain on site. *A draft plan had been prepared showing a proposed location of the propane tank to the west end of the campground loop, sites 1-2. Drawings will be revised to show this new location. The existing tank will be moved and the existing pad demolished. New on-demand propane water heaters will be called out in the drawings.*

**STARVATION STATE PARK, RECREATION REHABILITATION - PHASE I**

Bidders are required to fill in the schedule below in addition to the Proposal Form. The Total for the Schedule shall equal the amount entered on the Bid Form.

Only the items listed below shall be incorporated into the Schedule of Values.

See the Section 01271 entitled "Payment for Mobilization and Preparatory Work" which applies to Schedule item 1.

**BID SCHEDULE**

Item	Section	Work or material	Quantity and unit	Unit price	Amount
1.	01271	Mobilization and preparatory work	For the	lump sum of	\$ _____
2.	01272	Constructing a 6 Unit Restroom	For the	lump sum of	\$ _____
3.	01272	Constructing a 6 Unit Restroom with Showers	For the	lump sum of	\$ _____
4.	01272	Volleyball courts	2 Each	\$ _____	\$ _____
5.	01272	Horseshoes pits	3 Each	\$ _____	\$ _____
6.	01563	Erosion control and water pollution prevention measures	For the	lump sum of	\$ _____
7.	02220	Demolition	For the	lump sum of	\$ _____
8.	02230	Clearing, grubbing, and stripping topsoil	For the	lump sum of	\$ _____

Starvation State Park, Recreation Rehabilitation - Phase I

Item	Section	Work or material	Quantity and unit	Unit price	Amount
9.	02311	Grading	For the	lump sum of	\$ _____
10.	02316	Crushed-gravel	1760 Cu yd	\$ _____	\$ _____
11.	02316	Drain rock	35 Cu yd	\$ _____	\$ _____
12.	02316	Sand	5,000 Ton	\$ _____	\$ _____
13.	02371	Geotextile	3850 Sq ft	\$ _____	\$ _____
14.	02375	Riprap	770 Sq ft	\$ _____	\$ _____
15.	02514	1-inch shut-off valves	1 Each	\$ _____	\$ _____
16.	02514	2-inch shut-off valves	2 Each	\$ _____	\$ _____
17.	02514	4-inch shut-off valves	3 Each	\$ _____	\$ _____
18.	02514	1-inch stop and waste valves	38 Each	\$ _____	\$ _____
19.	02514	2-inch stop and waste valves	2 Each	\$ _____	\$ _____
20.	02515	1" HDPE pipe	1,250 Ln ft	\$ _____	\$ _____
21.	02515	2" HDPE pipe	490 Ln ft	\$ _____	\$ _____
22.	02515	4" HDPE pipe	1,750 Ln ft	\$ _____	\$ _____

Starvation State Park, Recreation Rehabilitation - Phase I

Item	Section	Work or material	Quantity and unit	Unit price	Amount
23.	02519	Disinfect water system	For the	lump sum of	\$ _____
24.	02530	Sanitary sewage system	For the	lump sum of	\$ _____
25.	02610	8" Corrugated metal pipe	200 Ln ft	\$ _____	\$ _____
26.	02610	12" Corrugated metal pipe	80 Ln ft	\$ _____	\$ _____
27.	02610	24" Corrugated metal pipe	30 Ln ft	\$ _____	\$ _____
28.	02610	8-Inch Diameter Metal Flared End Sections	18 Each	\$ _____	\$ _____
29.	02610	12-Inch Diameter Metal Flared End Sections	4 Each	\$ _____	\$ _____
30.	02610	24-Inch Diameter Metal Flared End Sections	2 Each	\$ _____	\$ _____
31.	02742	3-inch bituminous surfacing	9,310 Sq yd	\$ _____	\$ _____
32.	02742	Leveling courses	400 Sq yd	\$ _____	\$ _____
33.	02742	2-inch bituminous overlay	13,000 Sq yd	\$ _____	\$ _____
34.	02742	Paving Fabric	400 Sq yd	\$ _____	\$ _____

Starvation State Park, Recreation Rehabilitation - Phase I

Item	Section	Work or material	Quantity and unit	Unit price	Amount
35.	02742	Wheel stops	21 Each	\$ _____	\$ _____
36.	02763	Paint striping	6,150 Ln ft	\$ _____	\$ _____
37.	02811	Underground irrigation system	For the	lump sum of	\$ _____
38.	02822	6 Foot high chain link fence	90 Ln ft	\$ _____	\$ _____
39.	02846	Accessible Parking Signs	8 Each	\$ _____	\$ _____
40.	02846	Road Signs	4 Each	\$ _____	\$ _____
41.	02871	Grills	12 Each	\$ _____	\$ _____
42.	02871	Firerings Type 1	20 Each	\$ _____	\$ _____
43.	02871	Firerings Type 2	2 Each	\$ _____	\$ _____
44.	02873	Day use accessible hydrants	2 Each	\$ _____	\$ _____
45.	02873	Camp accessible hydrants	2 Each	\$ _____	\$ _____
46.	02873	Day use hydrants	1 Each	\$ _____	\$ _____
47.	02873	Camp hydrants	35 Each	\$ _____	\$ _____
48.	02875	12 by 12 shelters	26 Each	\$ _____	\$ _____
49.	02875	16 by 16 shelters	7 Each	\$ _____	\$ _____

Starvation State Park, Recreation Rehabilitation - Phase I

Item	Section	Work or material	Quantity and unit	Unit price	Amount
50.	02876	Bollards	32 Each	\$ _____	\$ _____
51.	02877	Park Benches	2 Each	\$ _____	\$ _____
52.	02934	Sod	4,200 Sq yd	\$ _____	\$ _____
53.	03300	Concrete	223 Cu yd	\$ _____	\$ _____
54.	03300	Boat Ramp Concrete	220 Cu yd	\$ _____	\$ _____
55.	16050	Electrical work	For the	lump sum of	\$ _____
				Total for Schedule	\$ _____

## SECTION 01272 - MEASUREMENT AND PAYMENT

### PART 1 GENERAL

#### 1.01 SUMMARY

- A. Measurement and payment for the various items of work listed in the bidding schedule and not described in a single section will be made in accordance with the following Measurement and Payment Article.

#### 1.02 MEASUREMENT AND PAYMENT

- A. Payment for Constructing a 6 Unit Restroom will be made at the lump sum price offered in the schedule.
1. Includes the cost of concrete and any other items that appear on the bid schedule that are part of the building.
- B. Payment for Constructing a 6 Unit Restroom with Showers will be made at the lump sum price offered in the schedule.
1. Includes the cost of concrete and any other items that appear on the bid schedule that are part of the building.
  2. Includes the cost of moving the propane tank to a new location, running a new underground gas line, and constructing a new pad and fence for the tank.
- C. Volleyball courts
1. Measurement: Each volleyball court provided.
    - a. Includes the cost of concrete to set the posts and make the border.
  2. Payment: Unit price per each volleyball court offered in the schedule.
- D. Horseshoes pits
1. Measurement: Each horseshoes pit provided.
    - a. Includes the cost of concrete.
  2. Payment: Unit price per each horseshoes pit offered in the schedule.

### PART 2 PRODUCTS

Not Used

### PART 3 EXECUTION

Not Used

**END OF SECTION**

## SECTION 02514 - VALVES

### GENERAL

### PAYMENT

- A. 1-inch shut-off valves:
  - 1. Payment: Unit price per each valve offered in the schedule.
    - a. Includes the cost of preparing and submitting all required submittals, and all other labor, equipment, and materials required by this Section.
- B. 2-inch shut-off valves:
  - 1. Payment: Unit price per each valve offered in the schedule.
    - a. Includes the cost of preparing and submitting all required submittals, and all other labor, equipment, and materials required by this Section.
- C. 4-inch shut-off valves:
  - 1. Payment: Unit price per each valve offered in the schedule.
    - a. Includes the cost of preparing and submitting all required submittals, and all other labor, equipment, and materials required by this Section.
- D. 1-inch stop and waste valves:
  - 1. Payment: Unit price per each valve offered in the schedule.
    - a. Includes the cost of preparing and submitting all required submittals, and all other labor, equipment, and materials required by this Section.
- E. 2-inch stop and waste valves:
  - 1. Payment: Unit price per each valve offered in the schedule.
    - a. Includes the cost of preparing and submitting all required submittals, and all other labor, equipment, and materials required by this Section.

### 1.01 WORK INCLUDED

- A. This item consists of furnishing and installing various valves.

### 1.02 SUBMITTALS

- A. RSN 02514A, Prior to purchase, submit in accordance with Section 01330 manufacturer's data for valves.

## **PRODUCTS**

### **2.00 DRAIN AND SHUT-OFF VALVES**

- A. **Shut-off** and stop and waste valves with ends made to connect to HDPE pipe.
- B. Provide access pipe for valve as indicated on the drawings.
- C. Provide valve extensions as indicated on the drawings.
- D. Provide marked valve covers.

## **EXECUTION**

### **3.00 INSTALLATION**

- A. Install each valve as per manufacturer's recommendation.

**END OF SECTION**

## SECTION 16050 - GENERAL ELECTRICAL REQUIREMENTS

### PART 1 GENERAL

#### 1.01 PAYMENT

##### A. Electrical Work:

1. Payment: Lump sum price bid offered in the schedule, which lump sum price shall include the cost of the following:
  - a. ~~Utility fees (Fees charged by the local electric utility to bring power into a certain location and to provide transformers etc.)~~ Utility fees will be paid for by the State of Utah.
  - b. Providing a complete grounding system.
  - c. Providing electrical conduit.
  - d. Furnishing and installing all brackets, fastenings, bolts, nuts, lockwashers, and other accessories, and drilling holes as required for mounting or installing electrical materials.
  - e. Electrical design where required.
  - f. Receptacles.
  - g. Wiring.
  - h. Lights.
  - i. Campground power pedestals.
  - j. Testing of complete electrical system.

B. Components shall be connected, energized, and properly functioning in order for payment to take place.

C. Concrete for transformer pads will be paid for under Section 03300.

#### 1.02 SUMMARY

##### A. Includes But Not Limited To

1. Provide labor, materials, and equipment necessary for completion of work of this Division as described in Contract Documents.

#### 1.03 SUBMITTALS

A. See Section 01330.

B. RSN 16050A, Submit names of licensed electricians that will be working on the project.

C. RSN 16050B, Product Data

1. Submit for following –
    - a. Wiring devices
    - b. Disconnects
    - c. Panelboards
    - d. Light fixtures
    - e. Campground power pedestals
  2. Provide following information for each item of equipment –
    - a. Catalog Sheets.
    - b. Assembly details or dimension drawings.
    - c. Installation instructions.
    - d. Manufacturer's name and catalog number
    - e. Name of local supplier.
  3. Do not purchase equipment before approval of product data.
- D. RSN 16050C, Shop Drawings, prior to installation
1. Panelboards
- E. RSN 16050D, Closeout Submittals
1. Operations & Maintenance Manual Data –
    - a. Modify and add to requirements of Section 01781 as follows –
      - 1) Provide operating and maintenance instructions for each item of equipment submitted under Product Data.
      - 2) Include copy of approved shop drawings.

#### **1.04 QUALITY ASSURANCE**

- A. Requirements of Regulatory Agencies
1. NEC and local ordinances and regulations shall govern unless more stringent requirements are specified.
  2. Material and equipment provided shall be new, meet standards of NEMA or UL, and bear their label wherever standards have been established and label service is available.

### **PART 2 PRODUCTS**

#### **2.01 CAMPGROUND POWER PEDESTALS**

- A. Provide Parkmate Model VNKJHAUT, as manufactured by Midwest Electric Products, Inc. or equal. The unit has a 50Amp 14-50R Receptacle with 2-Pole Non-GFI Breaker, a

30Amp R-32U Receptacle with 1-Pole Non-GFI Breaker, a 20Amp 5-20R2GFI Receptacle with 1-Pole Non-GFI Breaker, and a photo cell controlled light.

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

- A. Confirm dimensions, ratings, and specifications of equipment to be installed and coordinate these with site dimensions and with other Sections.

#### **3.02 FIELD QUALITY CONTROL**

- A. Site Tests
  - 1. Test systems and demonstrate equipment as working and operating properly. Notify the Government Inspector prior to test. Rectify defects at no additional cost to the Government.

#### **3.03 COORDINATION WITH LOCAL ELECTRICAL UTILITY**

- A. Coordinate upgrades and installation of new utility supplied equipment with the local electrical utility.

**END OF SECTION**

## SECTION 16120 - CONDUCTORS

### PART 1 GENERAL

#### 1.01 SUMMARY

- A. Includes But Not Limited To
  - 1. Quality of conductors used on Project except as excluded below.
- B. Related Sections
  - 1. Section 16050 - General Electrical Requirements

### PART 2 PRODUCTS

#### 2.01 COMPONENTS

- A. Conductors
  - 1. Copper (do not substitute aluminum for copper)-
    - a. Minimum size shall be No. 12 except where specified otherwise.
    - b. Conductor size No. 8 and larger shall be stranded.
  - 2. Insulation –
    - a. Conductor size No. 10 and smaller - 600V type THWN or XHHW (75 deg C)
    - b. Conductor Size No. 8 and larger - 600V Type THW, THWN, or XHHW (75 deg C).
    - c. Higher temperature insulation as required by NEC or local codes.
- B. High Voltage Power Cable
  - 1. Provided by Moon Lake Electric.

#### 2.02 ACCESSORIES

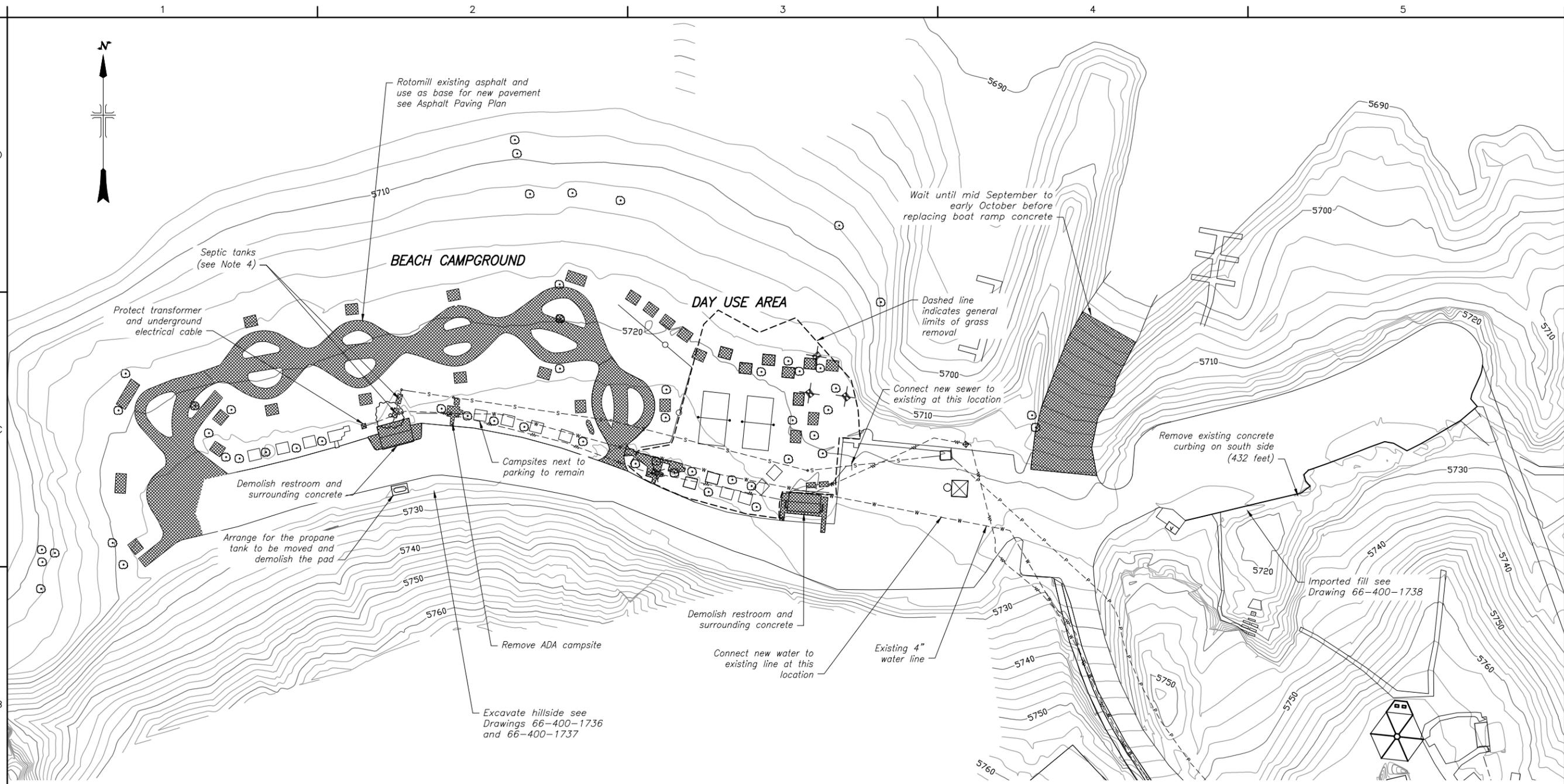
- A. Connectors
  - 1. Steel spring wire connectors or pressure type terminal lugs as specified.

## **PART 3 EXECUTION**

### **3.01 INSTALLATION**

- A. Install conductors in raceway unless indicated otherwise.
- B. Pulling Conductors
  - 1. Do not pull conductors into conduit until raceway system is complete and cabinets and outlet boxes are free of foreign matter and moisture.
  - 2. Do not use heavy mechanical means for pulling conductors.
  - 3. Only wire pulling lubricant may be used.
- C. Conductors shall be continuous between each piece of equipment.
- D. Make splices for conductors No. 8 and smaller with steelspring wire connections. Splice larger conductors with pressure type terminal lugs.
- E. Route circuits as shown on drawings.
- F. Where common neutral is run for two or three home run circuits, connect phase conductors to breakers in panel which are attached to separate phase legs in order that neutral conductors will carry only unbalanced current. Neutral conductors shall be of same size as phase conductors unless specifically noted otherwise.
- G. Run conductors of different voltage systems in separate conduits.
- H. Conductors size #10 and smaller shall be colored throughout. Color code conductors as follows
  - 1. Black - Phase A
  - 2. Red - Phase B
  - 3. Blue - Phase C
  - 4. Green - Ground
  - 5. White - Neutral

**END OF SECTION**

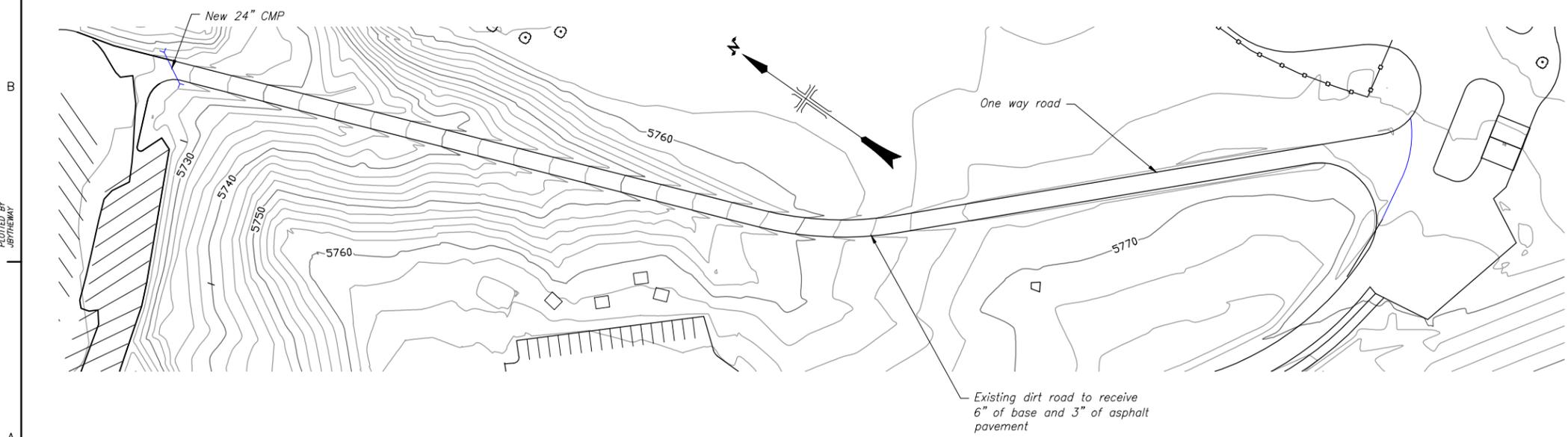
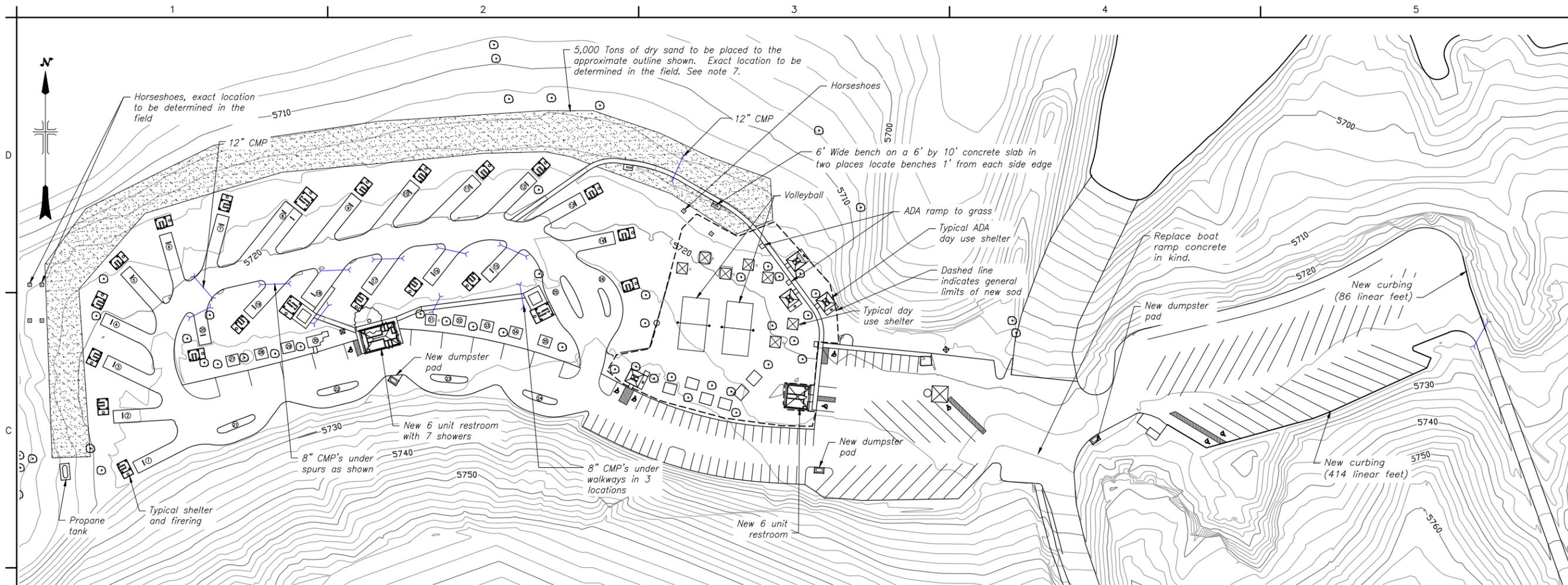


**NOTES**

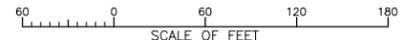
1. Utility lines shown are approximate.
2. Contact Moon Lake Electric to get exact locations of buried power lines and to disconnect power from demolition area.
3. Abandon existing water and sewer lines beyond connection points.
4. Pump out and remove existing septic tanks.
5. Remove existing grass in day use area after new features have been constructed and replace with new sod.
6. Rocks and boulders to be removed and stockpiled.
7. Restore rocks and boulders to new locations as directed after new features are constructed.
8. Preserve as much vegetation as possible during demolition and construction operations.
9. Saw cut old asphalt as per Drawing 66-400-1739

DATE AND TIME PLOTTED  
JUNE 22, 2010 16:12  
PLOTTED BY  
JBYTHEWAY

CAD SYSTEM  
AutoCAD 2010  
CAD FILENAME  
GENERAL\_3-RELDWG



- NOTES**
- Day use area to receive new sod and new sprinkler system.
  - Leave erosion control materials in place after construction is finished.
  - Seed campground area with native seed.
  - Place a day use concrete pad and grill at site 31, but no shelter and no shelter footings.
  - Earth quantities: 2460 cubic yards cut and 3430 cubic yards fill.
  - Boat ramp concrete is approximately 7" thick with #6 rebar 12" on center each way in the center of the slab. Apply a rake finish similar to the existing finish and duplicate construction joints. Add material to existing road base as needed and roll material to compact prior to placing the new slab.
  - Grubbing and grading is required prior to placement of sand. Remove vegetation to perimeter edge of sand placement; however, do not remove trees. Sand will be approximately 2 feet deep.
  - Move the Propane tank to the location shown and construct a new concrete pad and fence to duplicate the previous pad and fence. Contractor will determine the location of the new propane gas line.



DATE AND TIME PLOTTED  
JUNE 22, 2010 16:10  
PLOTTED BY  
JBYTHEWAY

CAD SYSTEM  
AutoCAD 2010  
CAD FILENAME  
GENERAL\_3-RELDWG

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

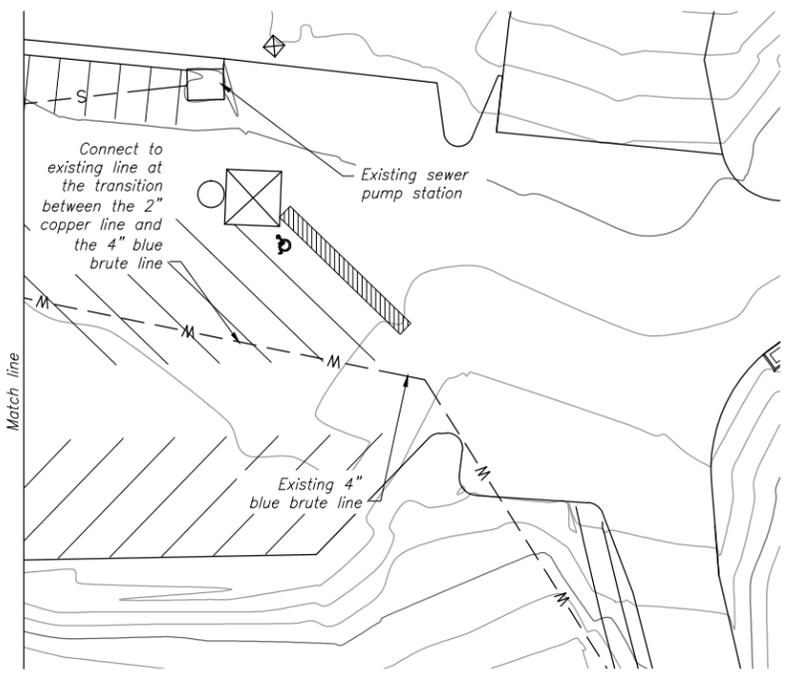
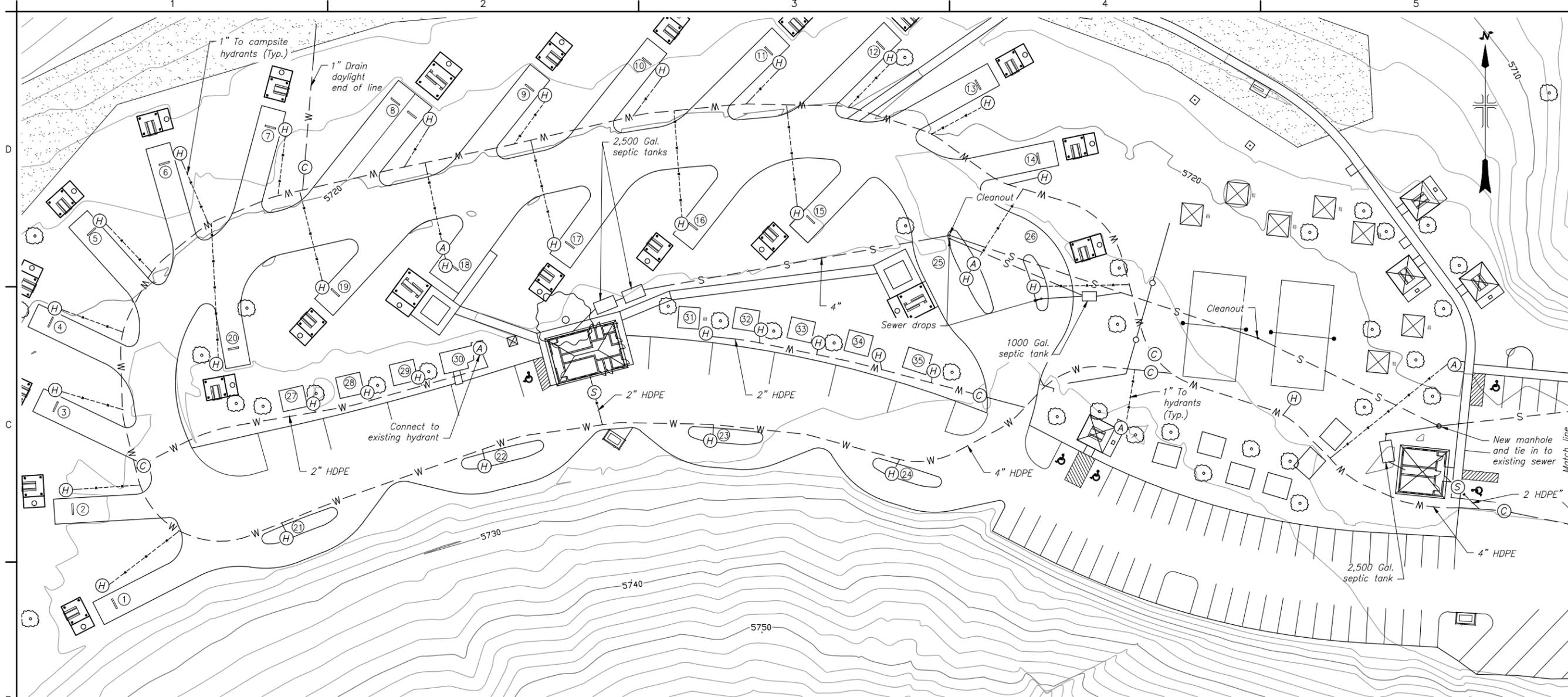
CENTRAL UTAH PROJECT  
BONNEVILLE UNIT - UTAH  
**STARVATION STATE PARK**  
RECREATION REHABILITATION - PHASE I  
FINISHED SITE PLAN

Changed Note 6, Added Note 7. Added concrete curb. Added and perimeter. Moved propane tank and added Note 8.  
2010-06-21  
400  
1  
JBYTHEWAY

DESIGNED	
DRAWN	
CHECKED	
TECH. APPR.	JAY BYTHEWAY-P.E.
ADMIN. APPROVAL	WAVE VIA MANAGER T.S.D.



ALWAYS THINK SAFETY



**EXPLANATION**

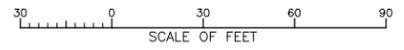
- (A) Accessible hydrant
- (S) Stop and waste valve
- W — Buried HDPE waterline
- (H) Hydrant/riser
- (C) Shut-off valve - same size as line
- (F) Fire hydrant

**NOTES**

1. Slope water lines to drain towards drains. Minimum grade of slope to be 1 percent. Daylight outlets of drains.
2. Water in the campground loops to be drained before the ground freezes each year.
3. Place sewer cleanouts every 50' and at bends in the line.
4. Slope sewer lines as per Utah onsite waste disposal guidelines.
5. New waterlines to be HDPE pipe.
6. Shut-off valves are any valve which can turn off the water to any line in the system.

**REFERENCE DRAWINGS**

SYMBOLS AND GENERAL NOTES .....	66-400-1729
EXISTING FEATURES .....	66-400-1730
WATER SYSTEM DETAILS .....	66-400-1753
TYPICAL UTILITY TRENCH	
CROSS SECTIONS .....	66-400-1755

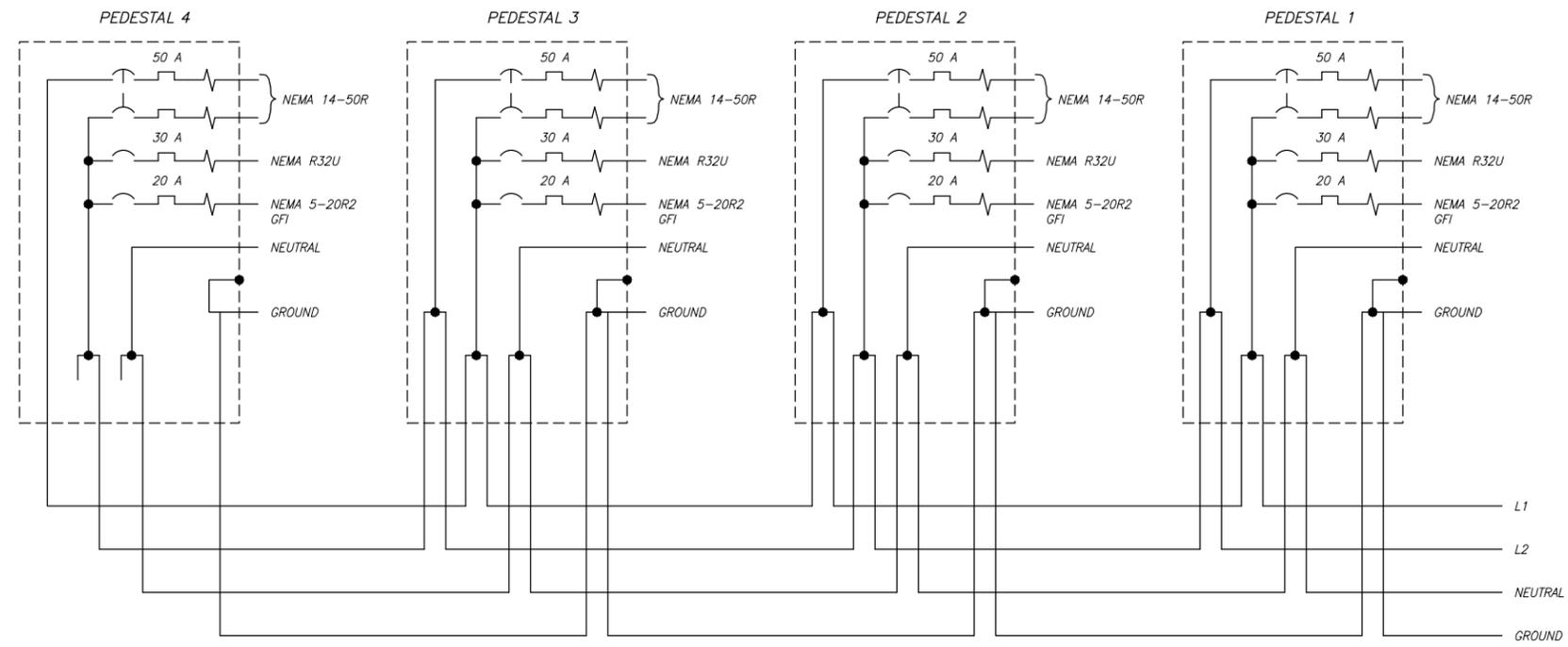


DATE AND TIME PLOTTED  
JUNE 22, 2010 16:14  
PLOTTED BY  
JBYHEWAY

CAD SYSTEM  
AutoCAD 2011  
CAD FILENAME  
GENERAL\_3-RELDWG

DESIGNED	
DRAWN	
CHECKED	
TECH. APPR.	JAY BYTHEWAY-P.E.
ADMIN. APPROVAL	
WAVE 104	
MANAGER T.S.D.	

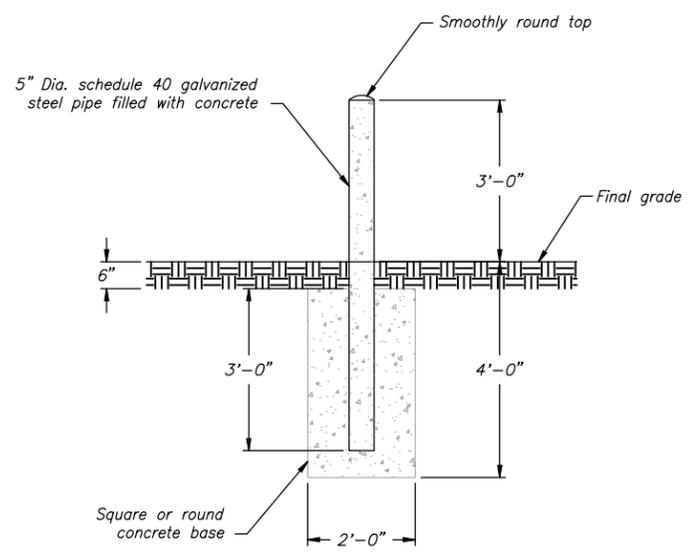
2010-06-22  
 400  
 1  
 Jay Bytheway  
 Changed symbol description from curb valve to shut-off valve. Added note 6.



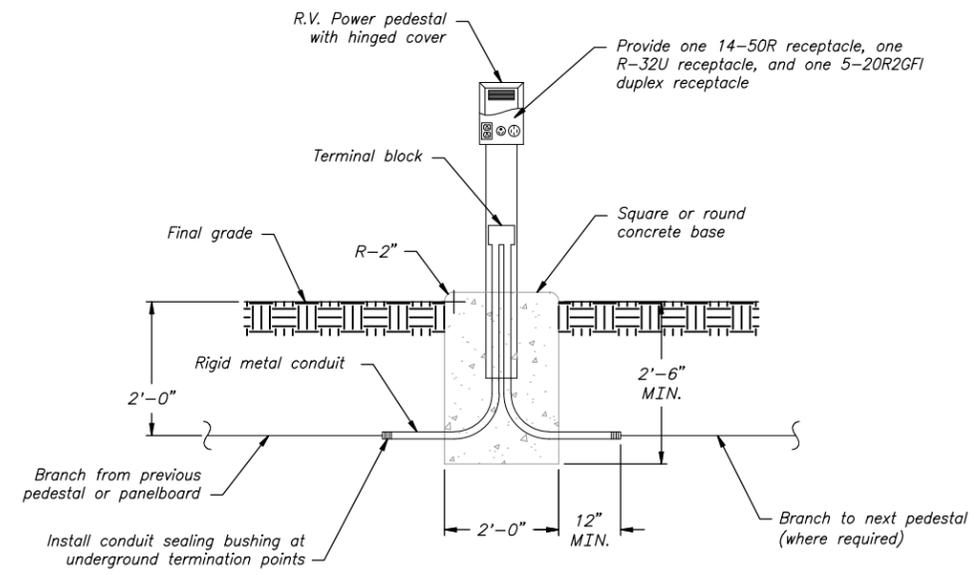
TYPICAL PEDESTAL INTERCONNECTION  
SEE NOTE 1

WIRE LENGTHS AND SIZES

STATIONS	WIRE SIZE (AWG/kcmil)	APPROX. LENGTH (FEET)
<b>CIRCUIT LP7</b>		
PANELBOARD - P22	4/0	61
P22 - P21	4/0	121
P21 - P1	4/0	114
P1 - P2	4/0	58
P2 - P3	4/0	58
<b>CIRCUIT LP8</b>		
PANELBOARD - P18	4/0	92
P18 - P19	4/0	69
P19 - P20	4/0	76
P20 - P4	4/0	86
P4 - P5	3/0	55
<b>CIRCUIT LP9</b>		
PANELBOARD - P17	3/0	74
P17 - P9	3/0	71
P9 - P8	3/0	69
P8 - P7	3/0	76
P7 - P6	3/0	61
<b>CIRCUIT LP10</b>		
PANELBOARD - P10	3/0	174
P10 - P11	3/0	67
P11 - P12	2/0	62
P12 - P13	2/0	58
<b>CIRCUIT LP11</b>		
PANELBOARD - P16	2/0	103
P16 - P15	1/0	68
P15 - P14	2/0	151
<b>CIRCUIT LP12</b>		
PANELBOARD - P23	3/0	102
P23 - P24	3/0	105
P24 - P25	2/0	118
P25 - P26	2/0	40



PIPE BOLLARD



R.V. POWER PEDESTAL - ELEVATION

NOTES

1. Alternate connection of pedestals between phase L1 and phase L2 as shown. Odd numbered pedestals connect to L1, even numbered pedestals connect to L2. Number of pedestals varies per circuit.
2. All electrical installations shall meet the 2008 edition of the National Electrical Code.
3. Wire lengths are horizontal approximations, and do not include allowances for splicing, connections, etc. Conductor sizes are approximate - the Contractor shall size all conductors.

REFERENCE DRAWING

CAMPGROUND LOOP ELECTRICAL DISTRIBUTION PLAN .....	66-400-1746
PANELBOARD DETAILS .....	66-400-1748

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

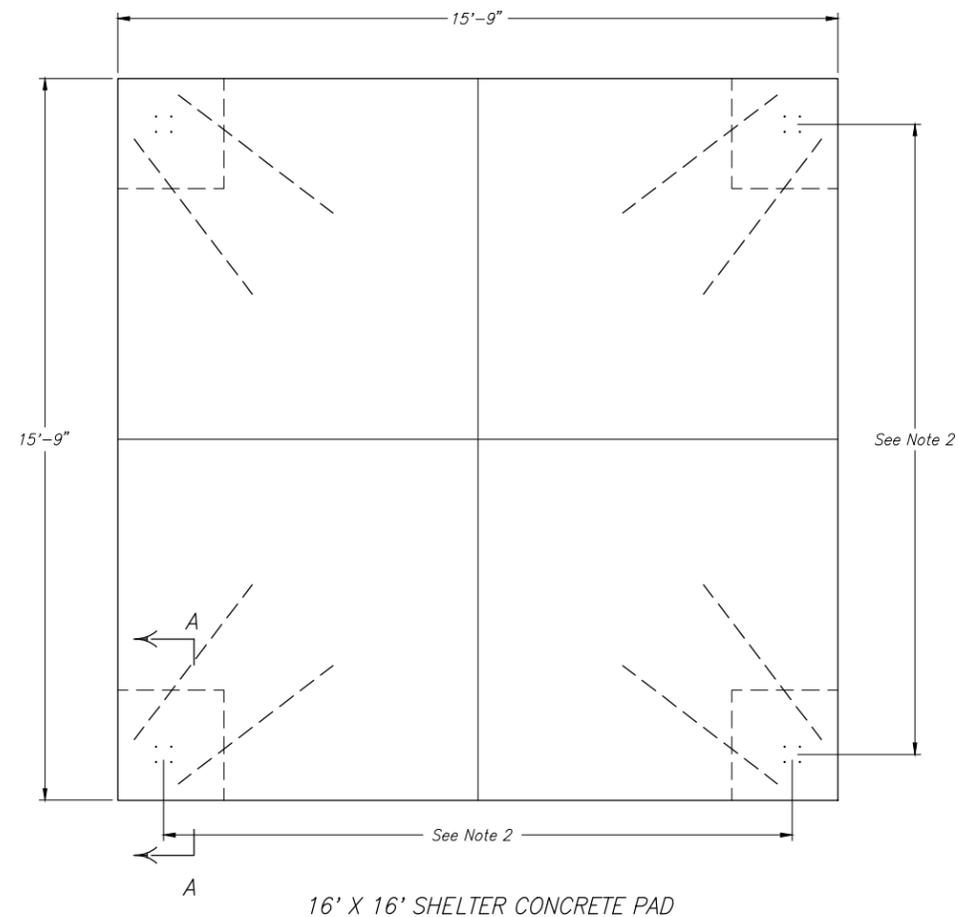
CENTRAL UTAH PROJECT  
BONNEVILLE UNIT - UTAH  
**STARVATION STATE PARK**  
RECREATION REHABILITATION - PHASE I  
POWER PEDESTAL DETAILS

Revised Typical Pedestal Interconnection Diagram  
REV. NO. 1  
2010-05-22  
JAY BYTHEWAY

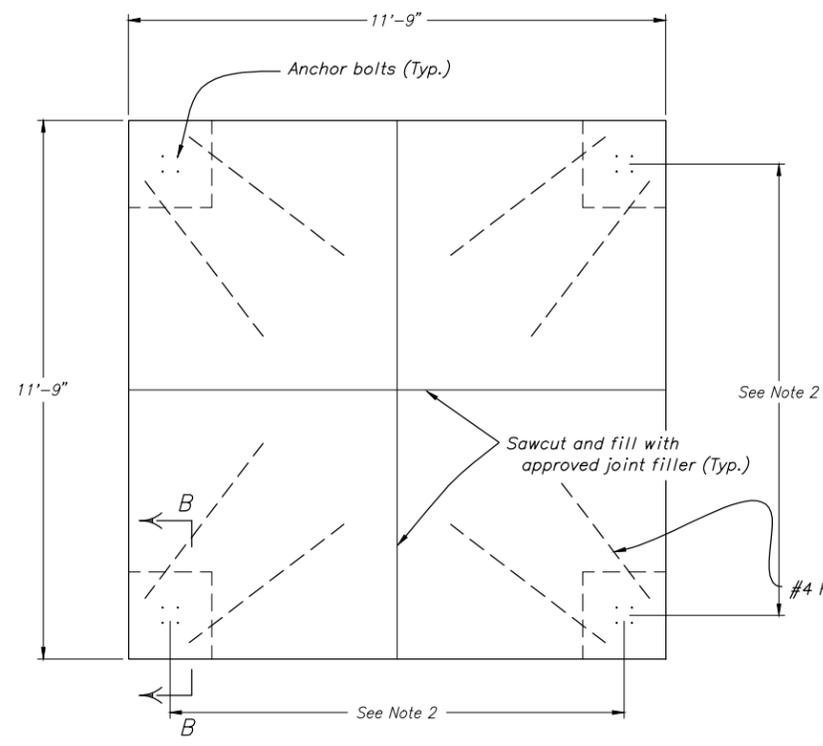
DESIGNED	
DRAWN	
CHECKED	
TECH. APPR.	JAY BYTHEWAY-P.E.
ADMIN. APPROVAL	
WITNE VIA	
MANAGER T.S.D.	

DATE AND TIME PLOTTED  
AWG/12/23 11:58 AM  
PLOTTED BY  
BIBHEWAY

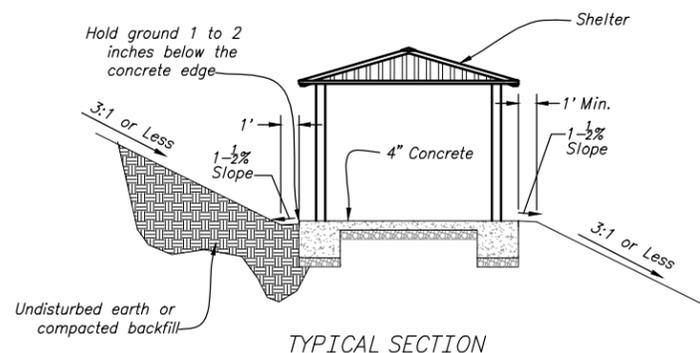
CAD SYSTEM  
AutoCAD 2011  
CAD FILENAME  
ELECTRICAL.DWG



16' X 16' SHELTER CONCRETE PAD



12' X 12' SHELTER CONCRETE PAD



TYPICAL SECTION

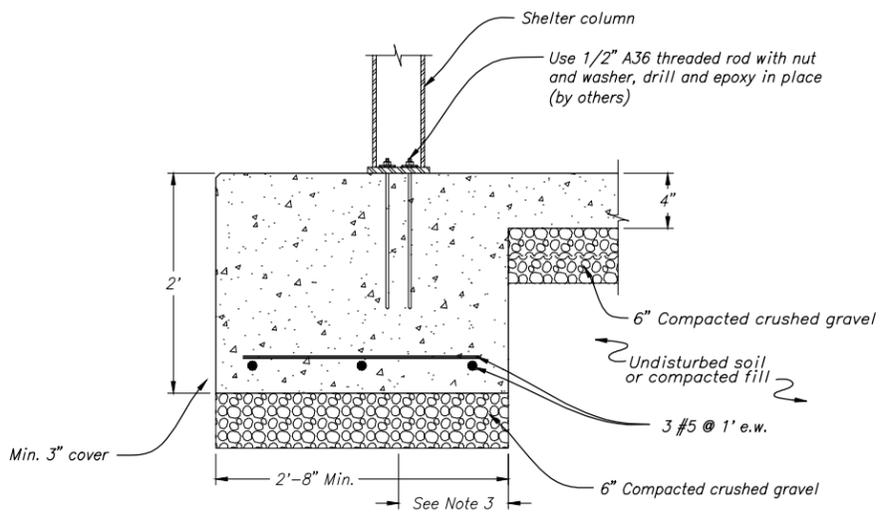
SPECIAL INSPECTION OF EPOXY ANCHORED BOLTS

The approved special inspector shall record the following:

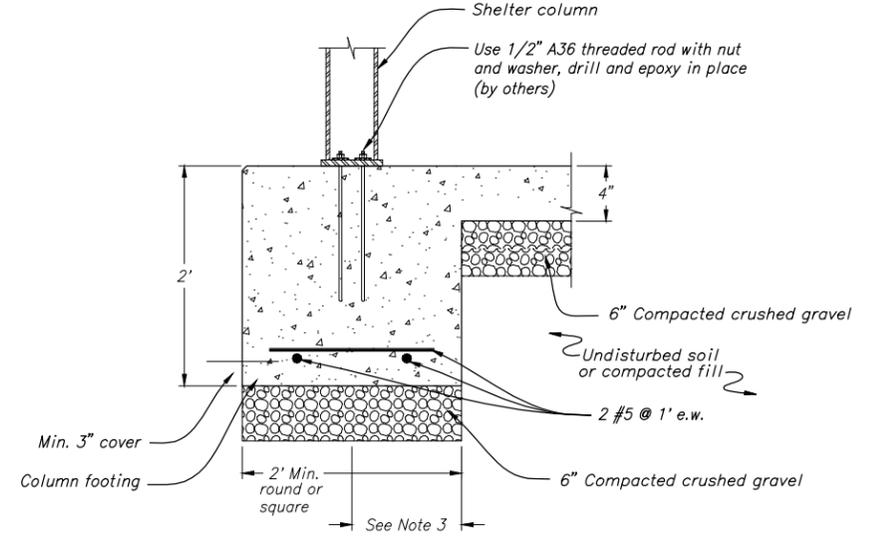
1. Adhesive product description, including the product name and expiration date.
2. Mixing procedure and use of proper nozzles.
3. Anchor bolt material, grade, diameter, length and cleanliness.
4. Required drill bit diameter.
5. Hole depth and cleanliness.
6. Installation description, including verification of concrete compressive strength by ASTM C 42 methods.
7. Substrate temperature.

NOTES

1. This drawing is not to scale.
2. Anchor bolts to be installed according to manufacturer's recommendations and centered on each footing.
3. Epoxy anchor bolts shall be 1/2" dia. Simpson Set or 1/2" dia. Hilti HY-150 epoxy anchors. Epoxy bolts shall be fully threaded, A36 or equivalent with a minimum of 6-1/2" embedment. Clean holes before installing anchors.
4. See Drawing No. 40-D-6263 for General Notes and Minimum Requirements for Detailing Reinforcement.



SECTION A-A



SECTION B-B

DATE AND TIME PLOTTED: JUNE 22, 2010 16:26  
 PLOTTED BY: JBYTHEWAY  
 CAD SYSTEM: AutoCAD 2010  
 CAD FILENAME: TYPICAL SHELTER PADS R1.DWG

ALWAYS THINK SAFETY  
 U.S. DEPARTMENT OF THE INTERIOR  
 BUREAU OF RECLAMATION  
 CENTRAL UTAH PROJECT  
 BONNEVILLE UNIT - UTAH

STARVATION STATE PARK  
 RECREATION REHABILITATION - PHASE I  
 TYPICAL SHELTER CONCRETE PADS AND SECTIONS

REVISED 2010-06-18  
 400  
 1  
 JBYTHEWAY

DESIGNED	
DRAWN	
CHECKED	
TECH. APPR.	JAY BYTHEWAY-P.E.
ADMIN. APPROVAL	WYNNE SZA MANAGER T.S.D.

**FINISH KEY DESCRIPTION**

- F – FLOOR**  
 F1 – Smooth finished concrete with clear sealer (Scofield Cementone or approved equal)
- W – WALL**  
 W1 – Unpainted block  
 W2 – Primer/filler and finish coat paint
- C – CEILING**  
 C1 – Waterproof plastic panelling (Parkland Plastics Duro-Therm panels or approved equal)  
 C2 – Fire taped type X drywall with no paint.
- S – SPECIAL FINISH**  
 S1 – Toilet partitions and accessories  
 S2 – Shower seat(s)

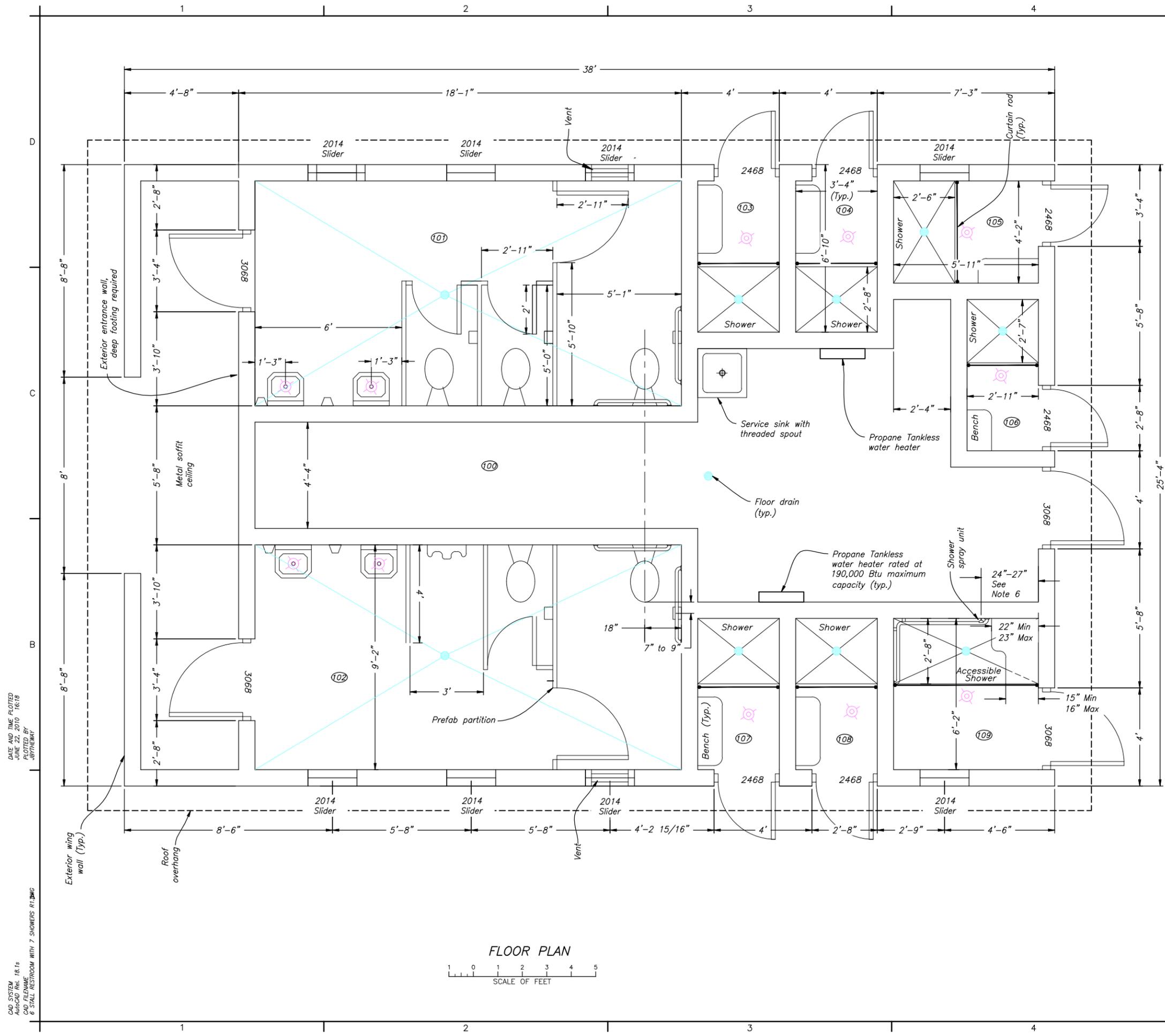
**FINISH SCHEDULE**

RM #	RM NAME	FLOOR FINISH	WALL FINISH	CELL. FINISH	SPECIAL FINISH
100	storage	F1	W1	C2	
101	women's	F1	W2	C1	S1
102	men's	F1	W2	C1	S1
103	shower	F1	W2	C1	S2
104	shower	F1	W2	C1	S2
105	shower	F1	W2	C1	S2
106	shower	F1	W2	C1	S2
107	shower	F1	W2	C1	S2
108	shower	F1	W2	C1	S2
109	accessible shower	F1	W2	C1	S2

- Solatube skylights
- Floor drain
- Hand dryer

**NOTES**

- Size windows to fit within 1 and 1/2 masonry units wide by 2 masonry units high.
- End of grab bar at accessible shower shall be located within 3" from edge of seat (in plan), and shall not extend past edge of seat.
- ADA shower seat shall be folding.
- Plumbing shall slope to drain for winterizing.
- Provide trap guard at each floor drain.
- At accessible shower, locate shower controls and shower spray unit 24" min. and 27" max. from shower side wall. See "Accessible Feature Dimensions" drawing for more information.



DATE AND TIME PLOTTED  
JUNE 22, 2010 16:18  
PLOTTED BY  
JBY@HWAY

CAD SYSTEM  
AutoCAD Rev. 18.1s  
CAD FILENAME  
6 STALL RESTROOM WITH 7 SHOWERS - R1.DWG

**FLOOR PLAN**  
SCALE OF FEET

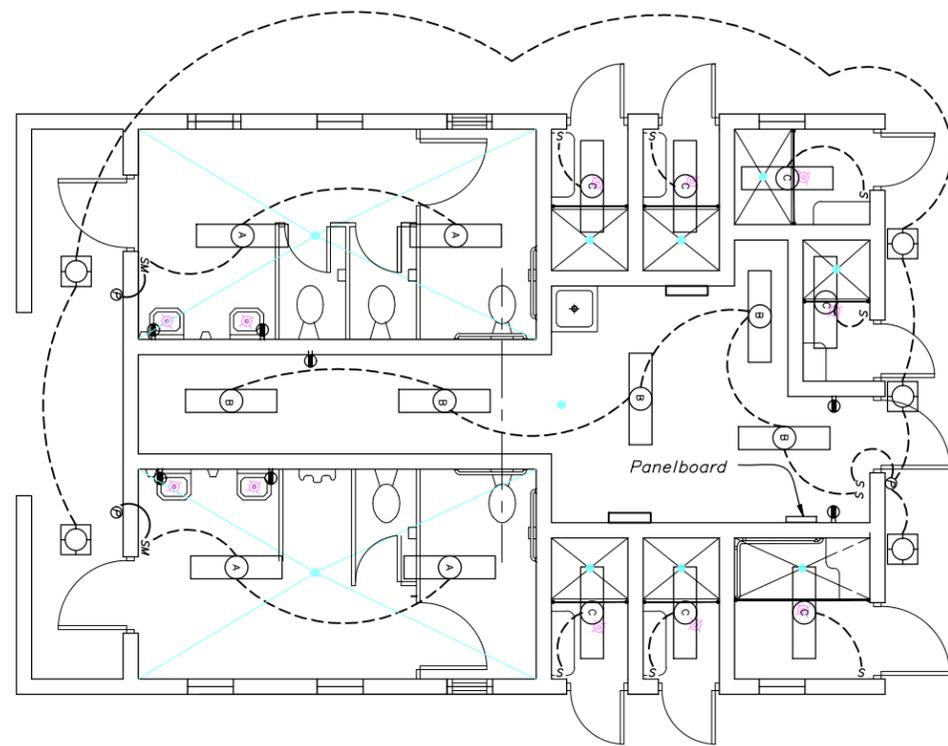
ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

CENTRAL UTAH PROJECT  
BONNEVILLE UNIT - UTAH  
**STARVATION STATE PARK**  
RECREATION REHABILITATION - PHASE I  
**SIX UNIT FLUSH RESTROOM WITH SHOWERS**

Added CS ceiling finish description.  
Changed drain symbol & added drain in storage room.  
Changed water heaters from electric to propane.  
REV NO 1  
DATE 2010-06-22  
BY JBY

DESIGNED \_\_\_\_\_  
 DRAWN \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 TECH. APPR. JAY BYTHEWAY-P.E.  
 ADMIN. APPROVAL \_\_\_\_\_  
 WRENE SR. MANAGER T.S.D.



ELECTRICAL SYMBOLS

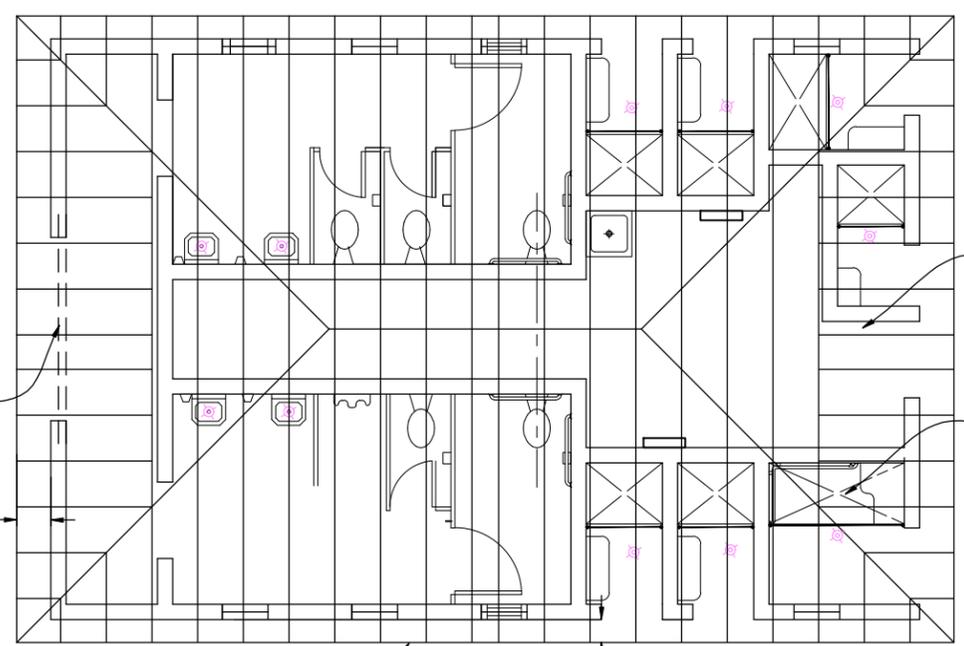
- Duplex outlet
- GFCI duplex outlet
- Single-pole switch
- Ceiling mounted lighting fixture  
Letter in symbol refers to fixture type.  
Refer to Lighting Schedule for details.
- Recessed compact fluorescent lighting fixture
- Photocell
- Motion sensor switch
- Hand dryer

LIGHTING SCHEDULE			
FIXTURE NUMBER	VOLTAGE	WATTS	DESCRIPTION
A	120	64	Vandal resistant, surface mounted, two 32 watt, 4' fluorescent lamps, wrap around lens, low temperature ballast.
B	120	64	Minimum 20 gauge metal housing, surface mounted, two 32 watt, 4' fluorescent lamps, wrap around lens, low temperature ballast.
C	120	64	Vandal resistant, surface mounted, two 32 watt, 4' fluorescent lamps, low temperature ballast, UL listed for wet locations.

ELECTRICAL PLAN

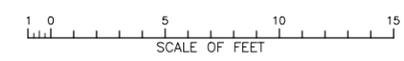
NOTES

1. The plan shown indicates the desired number of fixtures and approximate dimensions. Minor modifications to the plan will be allowed if submitted and approved.
2. A minimum of 1 s.f. of vent area is required for each 150 s.f. of projected roof area. A min. of 50% of the vent area will consist of turtle vents, with the remainder consisting of soffit vents.
3. Ventilate bathrooms and shower rooms in accordance with the International Mechanical Code.
4. Run new service cable from the same source as the demolished restroom.
5. Panelboard layout as per Drawing 66-400-1748.



See Note 2 for roof venting requirements

Kicker trusses 24" O.C.



ROOF FRAMING PLAN

DATE AND TIME PLOTTED  
JUNE 22, 2010 16:19  
PLOTTED BY  
JBYHEWY

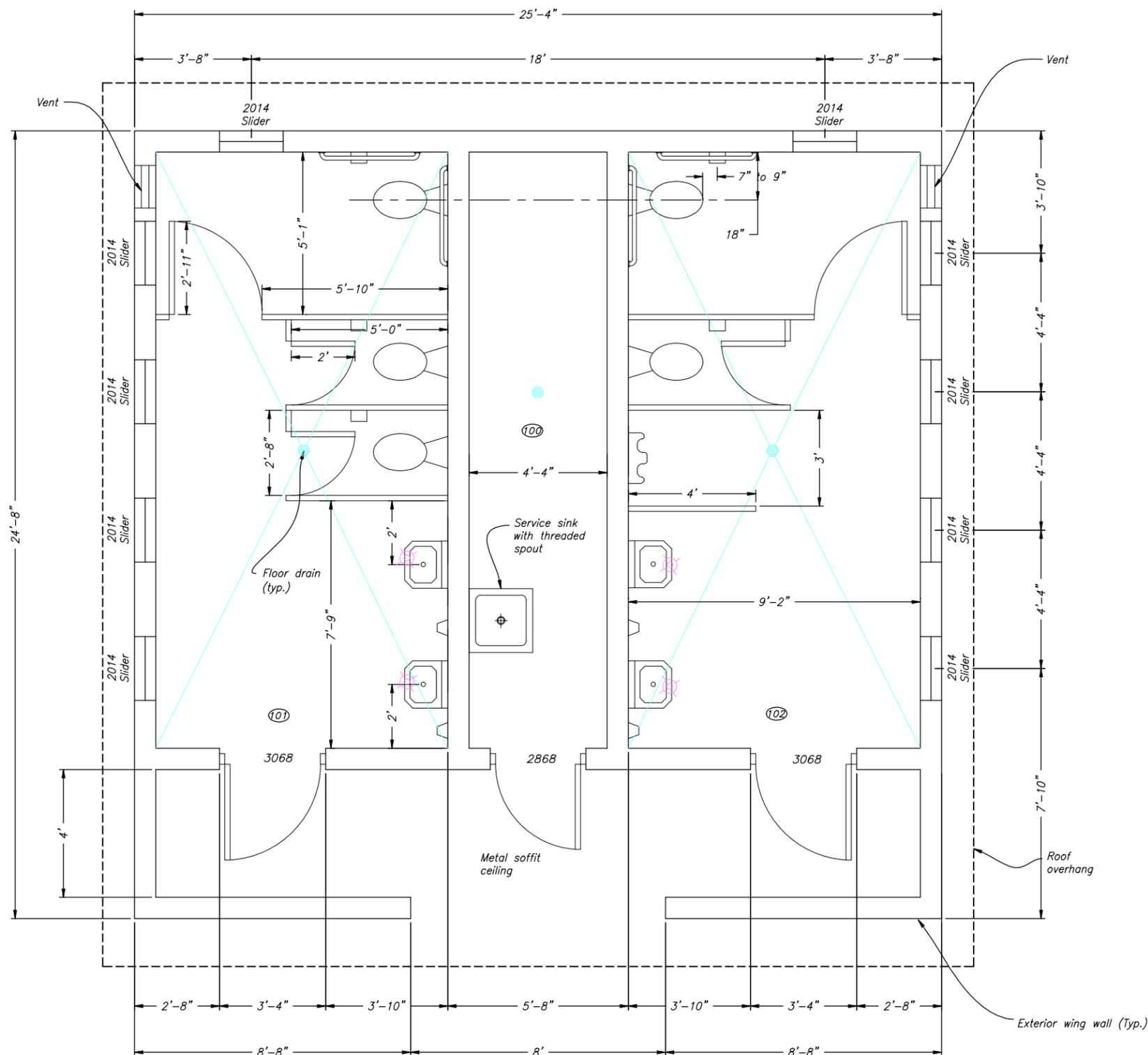
CAD SYSTEM  
AutoCAD Rev. 18.1s  
CAD FILENAME  
66-400-1757  
6 STALL RESTROOM WITH 7 SHOWERS - R.T.DWG

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
CENTRAL UTAH PROJECT  
BONNEVILLE UNIT - UTAH  
**STARVATION STATE PARK**  
RECREATION REHABILITATION - PHASE I  
**6 - UNIT FLUSH RESTROOM WITH SHOWERS**  
ROOF FRAMING AND ELECTRICAL PLANS

2010-06-22  
400  
1  
JBY  
Added notes 4 & 5. Added hand dryer symbol. Added panelboard location.

DESIGNED  
DRAWN  
CHECKED  
TECH. APPR. JAY BYTHEWAY-P.E.  
ADMIN. APPROVAL  
WINE, JKA  
MANAGER T.S.D.



FINISH KEY DESCRIPTION

F - FLOOR

F1 - Smooth finished concrete with clear sealer  
(Scofield Cementone or approved equal)

W - WALL

W1 - Unpainted block  
W2 - Primer/filler and finish coat paint

C - CEILING

C1 - Waterproof plastic panelling (Parkland Plastics  
Duro-Therm panels or approved equal)  
C2 - Fire taped type X drywall with no paint.

S - SPECIAL FINISH

S1 - Toilet partitions and accessories

FINISH SCHEDULE

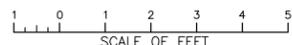
RM #	RM NAME	FLOOR FINISH	WALL FINISH	CEIL. FINISH	SPECIAL FINISH
100	storage	F1	W1	C2	
101	women's	F1	W2	C1	S1
102	men's	F1	W2	C1	S1

- Solatube skylights
- Floor drain
- Hand dryer

NOTES

- Size windows to fit within 1 and 1/2 masonry units wide by 2 masonry units high.
- Plumbing shall slope to drain for winterizing.
- Provide trap guard at each floor drain.

FLOOR PLAN



DATE AND TIME PLOTTED  
JUNE 22, 2010 16:24  
PLOTTED BY  
JBYTHEWAY

CAD SYSTEM  
AutoCAD Rev. 18.1s  
CAD FILENAME  
6 STALL RESTROOM RT.DWG

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
CENTRAL UTAH PROJECT  
BONNEVILLE UNIT - UTAH

STARVATION STATE PARK  
RECREATION REHABILITATION - PHASE I  
6-UNIT FLUSH RESTROOM

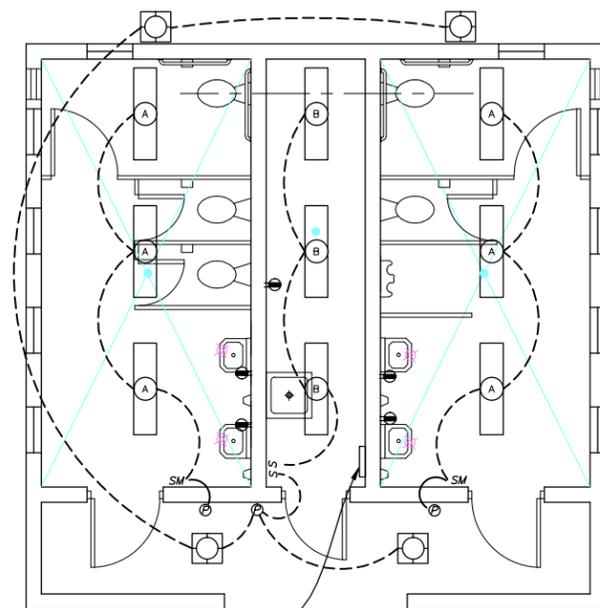
2010-06-22  
400  
1  
JBY  
Added C2 ceiling finish. Changed drain symbol  
Added hand dryer symbol.

DESIGNED  
DRAWN  
CHECKED  
TECH. APPR. JAY BYTHEWAY-P.E.  
ADMIN. APPROVAL  
MANAGER T.S.D.

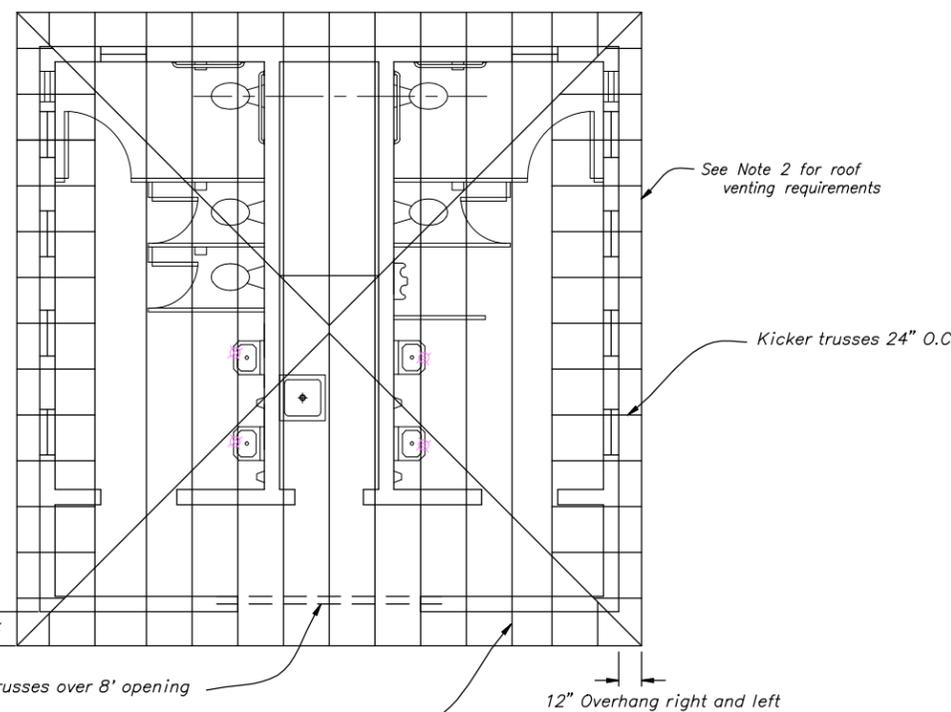
LIGHTING SCHEDULE			
FIXTURE NUMBER	VOLTAGE	WATTS	DESCRIPTION
A	120	64	Vandal resistant, surface mounted, two 32 watt, 4' fluorescent lamps, wrap around lens, low temperature ballast.
B	120	64	Minimum 20 gauge metal housing, surface mounted, two 32 watt, 4' fluorescent lamps, wrap around lens, low temperature ballast.
C	120	64	Vandal resistant, surface mounted, two 32 watt, 4' fluorescent lamps, low temperature ballast, UL listed for wet locations.

ELECTRICAL SYMBOLS

-  Duplex outlet
-  GFCI duplex outlet
-  Single-pole switch
-  Ceiling mounted lighting fixture  
Letter in symbol refers to fixture type.  
Refer to Lighting Schedule for details.
-  Recessed compact fluorescent lighting fixture
-  Photocell
-  Motion sensor switch
-  Hand dryer



ELECTRICAL PLAN



ROOF FRAMING PLAN

- NOTES
- The plan shown indicates the desired number of fixtures and approximate dimensions. Minor modifications to the plan will be allowed if submitted and approved.
  - A minimum of 1 s.f. of vent area is required for each 150 s.f. of projected roof area. A min. of 50% of the vent area will consist of turtle vents, with the remainder consisting of soffit vents.
  - Ventilate bathrooms and shower rooms in accordance with the International Mechanical Code.
  - Run new service cable from the same source as the demolished restroom.
  - Panelboard layout to be determined by the electrician.



DATE AND TIME PLOTTED  
JUNE 22, 2010 16:22  
PLOTTED BY  
JBYTHEWAY

CAD SYSTEM  
AutoCAD Rev. 18.1s  
CAD FILENAME  
6 STALL RESTROOM RT.DWG

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
CENTRAL UTAH PROJECT  
BONNEVILLE UNIT - UTAH

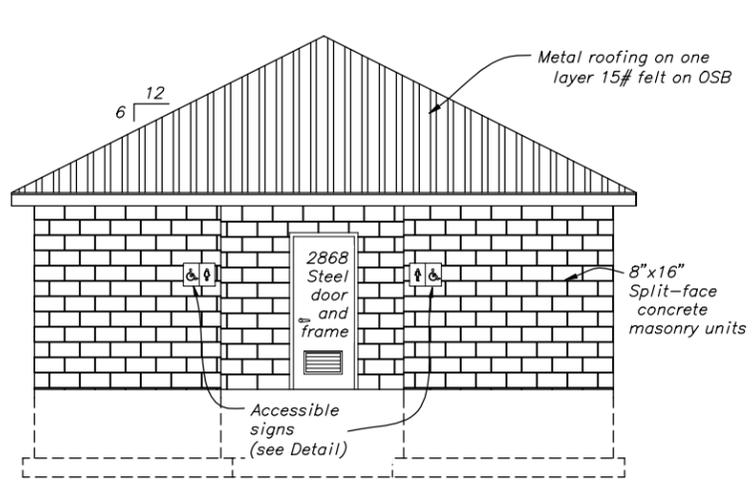
STARVATION STATE PARK  
RECREATION REHABILITATION - PHASE I  
6-UNIT FLUSH RR - ELECTRICAL AND  
ROOF FRAMING PLANS

2010-06-22  
400  
1  
JBY  
Added notes 4 & 5. Added hand dryer symbol.  
Added panelboard location.

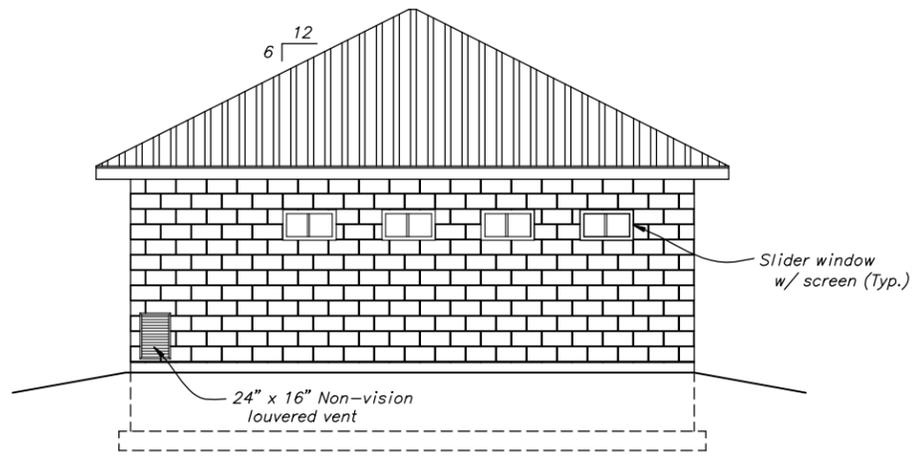
DESIGNED  
DRAWN  
CHECKED  
TECH. APPR. JAY BYTHEWAY-P.E.  
ADMIN. APPROVAL  
WYNN SK  
MANAGER T.S.D.

66-400-1761

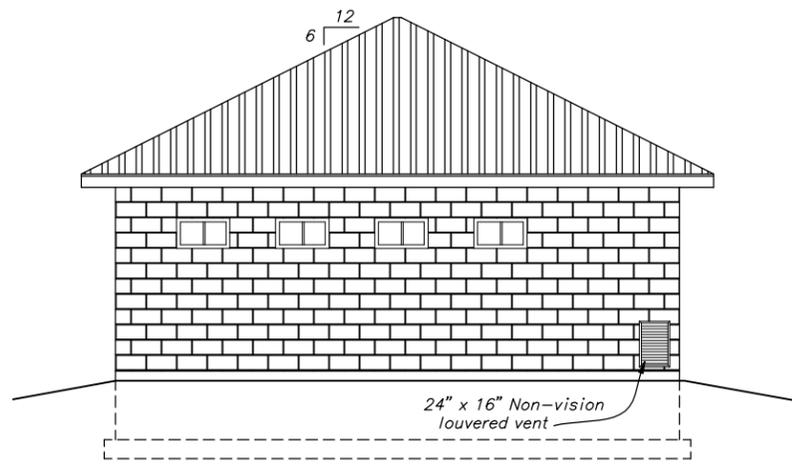
SHEET 1 OF 1



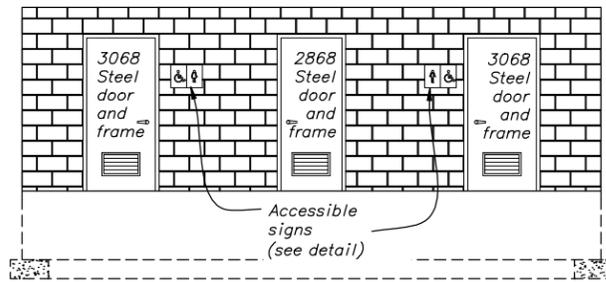
FRONT ELEVATION



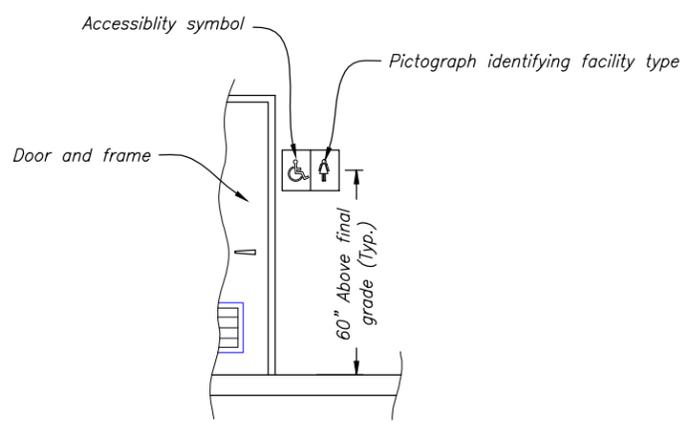
RIGHT ELEVATION



LEFT ELEVATION



EXTERIOR ENTRANCE WALL ELEVATION



ACCESSIBILITY SIGNAGE  
(NO SCALE)

**SIGNAGE NOTES**

1. Accessible facilities are required to be identified by the international symbol of accessibility.
2. Letters and sign shall have a width-to-height ratio between 3:5 and 1:1 and a stroke-to-width ratio between 1:5 and 1:10.
3. Characters and symbols shall contrast with their background a minimum of 70%—either light characters on a dark background or dark characters on a light background.
4. Letters and numbers on signs shall be raised  $\frac{1}{32}$  inch minimum and shall be sans serif characters. Raised characters or symbols shall be at least  $\frac{5}{8}$  inch high, but no higher than 2 inch. Symbols or pictographs on signs shall be raised  $\frac{1}{32}$  inch minimum.
5. Grade II braille underneath gender symbol.

**NOTES**

1. The plan shown indicates the desired number of fixtures and approximate dimensions. Minor modifications to the plan will be allowed if submitted and approved.
2. Comply with Americans with Disabilities Act (ADA) accessibility guidelines and the Architectural Barriers Act Accessibility Standards.



REAR ELEVATION

DATE AND TIME PLOTTED  
JUNE 22, 2010 16:23  
PLOTTED BY  
JBYHEWAY

CAD SYSTEM  
AutoCAD R14  
CAD FILENAME  
6 STALL RESTROOM RT.DWG

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION

CENTRAL UTAH PROJECT  
BONNEVILLE UNIT - UTAH  
**STARVATION STATE PARK**  
RECREATION REHABILITATION - PHASE I  
6-UNIT FLUSH RESTROOM - ELEVATIONS

2010-05-22  
400  
1  
JBY  
Replaced hopper window symbol with slider window

DESIGNED  
DRAWN  
CHECKED  
TECH. APPR. JAY BYHEWAY-P.E.  
ADMIN. APPROVAL  
WORKING FOR  
MANAGER T.S.D.