

**LAS VIRGENES MUNICIPAL WATER DISTRICT  
CALABASAS TANK REHABILITATION PROJECT**

**ADDENDUM NO. 1**

**April 21, 2014**

The following clarifications, revisions, replacements, additions, and/or deletions shall be made a part of the above-referenced contract documents. Receipt of addenda shall be acknowledged by completing the acknowledgment on Page 9 of the contract documents.

**Revisions to the Specifications**

1. *Construction Specifications, Part 1 BID INFORMATION, FORMS, PROPOSAL AND GENERAL PROVISIONS*, Proposal, Pages 10, 11, and 12 are replaced with the attached "Schedule of Bid Items". Item 32 has been added, "Install Studs for Mounding Solar Panels and Concrete Pad for New Enclosures".
2. *Technical Specifications, Section 01 00 00, Part 1.3, Page 01 00 00-3. Add Part 1.3 BB after Part 1.3 AA as follows: "BB. Install Studs For Mounting Solar Panels and Concrete Pad for New Enclosures"*
3. The following paragraph shall be added to Specifications Section 09 91 10, "Total Removal and Replacement of Interior Reservoir Coatings", Section 3.03 Surface Preparation:
  - " 4. All contractors and subcontractors performing surface preparation and a coatings application shall be certified to either ISO 9001- 2008 or SSPC QP1 and QP2 prior to the start of work and shall remain certified during the performance of the work."
4. Modify Specifications Section 05 12 00-2, Part I B, Qualifications, as follows:
  - a. Minimum of 5 years experience in fabrication of structural steel ~~and participate in the AISC Certification program and is designated an AISC Certified Plant, Category {STD, SBR}~~ at time of bid.
  - b. Fabricator plant quality control and inspection program: Meet requirements of the Building Code and/or be approved by the project's governing authority to self perform ~~the Building Code required Special~~ Inspections.
  - ~~c. Use a professional engineer on fabrication staff."~~
5. *Technical Specifications, Section 01 00 00, Part 1.3 E, Page 01 00 00-2. Replace word "welded" with the word "welder".*
6. *Technical Specifications, Section 09 97 10, Part 1.08 A, Page 09 97 10-3. Replace the entire sentence with: "Refer to Manufacturer's recommendations for delivery storage and handling requirements."*

7. Technical Specifications, Section 09 97 10, Part 3.04 A, Page 09 97 10-12. *Delete the words "in accordance with the requirements of Section 15 01 00 Basic Civil Engineering Requirements and"*
8. Technical Specifications, Section 09 97 10, Part 1.07, Page 09 97 10-3. *Replace the table with the following table:*

<b>Submittal</b>	<b>Description</b>
Catalog Data	Submit coating manufacturer's technical and material safety data sheets for the products to be applied. Data sheets shall show the following information: A. Means and methods of surface preparation for existing coating removal. B. Percent solids by volume. C. Finish color and gloss level D. Minimum and maximum recommended dry film thickness per coat for prime, intermediate, and finish coats. E. Recommended surface preparation. F. Recommended thinners. G. Statement verifying that the specified prime coat is recommended by the manufacturer for use with the specified intermediate and finish coats. H. Application instructions including recommended equipment and temperature limitations. I. Curing requirements and instructions. J. Re-coat table at various temperatures.
Application Instructions	Required for each paint and coating. Include Surface Preparation Requirements. Identify flammability, toxicity, allergenic properties and any other characteristics requiring field precautions. Specific safety practices shall be stipulated.
O & M & Cleaning Instructions	Submit Operation and Maintenance Instruction per manufacturer's requirements and recommendations
Certificate of Compliance	Submit coating system and application certification that coatings comply with specified requirements and are suitable for intended application per manufacturer's requirements and recommendations
Material and Color Samples	Submit current manufacturer's color samples showing full range of available standard colors.
Applicator's quality assurance	Submit list of at least 5 completed projects of similar size and complexity. Include product name and location, name of owner, name of contractor, name of engineer, name of coating manufacturer, approximate area of coatings applied and date of completion
Inspection reports	Submit written third-party report from approved testing agency describing inspections made and actions taken to correct nonconforming work. Report nonconforming work not corrected.
Warranty	Furnish 1-year warranty from date of final acceptance

## Revisions to the Drawings

1. Drawing Sheet 4 of 7, Add No. 15 to the Scope of Contract Work as follows:

No.	Work Items	Comments /Notes
15	Install Studs For Mounting Solar Panels and Concrete Pad (24" x 96" x 6"; #5@12" at center) for New Enclosures	See Drawing No. 1422-010 C Sheet 4 of 4 "ADD STUDS FOR MOUNTING SOLAR PANELS CONCRETE PAD FOR NEW ENCLOSURES" for Details. The concrete pad shall be 24" wide, 96" long and 6" thick with #5 rebar @ 12" at center. The surface of the pad needs to match the tank's concrete base.

A copy of the Drawing No. 1422-010 C Sheet 4 of 4 is attached to the addendum.

**LAS VIRGENES MUNICIPAL WATER DISTRICT  
CALABASAS TANK REHABILITATION PROJECT**

**RESPONSES TO PLAN HOLDER QUESTIONS**

April 21, 2014

1. **Question.** Drawing Sheet 3 of 7: How to tie into the existing 16" water line? Will a tie in detail be provided?

**Answer.** Install a fire hydrant assembly, per LVMWD Standard PW-110, as indicated on the drawing. A copy of the standard detail is provided in the spec book. Tie in details are shown in Standard PW-131 (attached). Tie-in shall be performed as a hot tap.

2. **Question.** Drawing Sheet 3 of 7: How deep is the existing 16" water line?

**Answer.** Approximately 4 feet below ground surface.

3. **Question.** Bid Schedule Item 7, Other Structural Repairs: Does the 80 hours indicate man hours or crew of two's hours?

**Answer.** 80 hours of work by a certified welder, per Specifications 01 00 00, Section 1.3. (A typographical error exists; "welded" in this section should be "welder").

4. **Question.** Drawing Sheet 6 of 7, Detail 5: What is the dimension and material of the inner tank? How to take it out?

**Answer.** See Record Drawing 01260, which shows all known information. Inner tank has no roof and is steel. Thickness is not known. Removal is a means-and-methods issue, but cutting is required. Cut near floor (maximum 1/2-inch protrusion). Remaining steel surfaces must be suitable for painting.

5. **Question.** Specifications Section 02 51 30-3, Part 2.5 to 2.7 states that "Emulsified asphalt used in slurry seal shall be cationic quickset Type CQS-1H as per section 203-5.2 of the standard specifications". Can we substitute a slurry seal with an approved rubberized asphalt, or any other approved method not requiring a slurry seal?

**Answer.** Products that provide equivalent performance can be used, provided that the Contractor submits information demonstrating equivalent performance during the submittal process and product is accepted by owner and Engineer.

6. **Question.** Drawing Sheet 3 of 7, Regarding Temporary Water Tanks: Can we supply a bolted tank to meet the gallons and head pressure needed in place of trucking LVMWD tanks? What is the required volume and head pressure desired to size tank?

**Answer.** Yes, alternative means of providing equivalent water storage will be considered during the submittal process and needs to be approved by the Engineer. The alternative means shall be at no additional cost to LVMWD. The required volume is 52,500 gallons (5

tanks at 10,500 gallons each). Refer to Note 3 in Drawing Sheet 3 of 7. Minimum and maximum tank heights are 10 feet and 20 feet, respectively.

7. **Question.** Drawing Sheet 4 of 7, Security Fences: Can you please provide more details on the security fencing for the tank remediation project? Type of fencing, fencing detail drawing, area to be fenced?

**Answer.** Please refer to Specifications 32 31 13 for the fence requirements. See Drawing Sheet 4 of 7 for the area to be fenced. Height of the fence shall be a minimum of 8 feet, plus three-strand barb wire.

8. **Question.** Drawing Sheet 7 of 7, Gravel Berm: Please provide some direction on the gravel berm, maybe a picture of one or some publications on how to place the gravel berm?

**Answer.** Install the Gravel Berm using gravel bag shown in attached file: S-6-Gravel Bag Berm. Please refer to Drawing Sheet 7 of 7 Detail D for Gravel Berm dimensions.

9. **Question.** Drawing Sheet 3 of 7, Regarding Temporary Water Tanks: Please provide the full dimensions of the Water Districts Temporary Storage tanks and the weight.

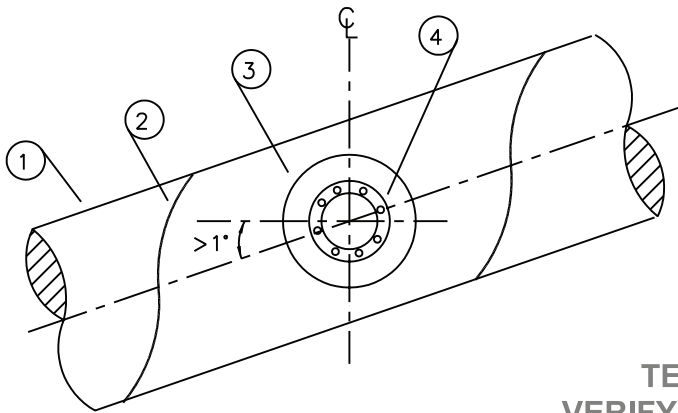
**Answer.** The temporary storage tanks are 12' diameter x13' high. Weight is not known.



Saik-Choon Poh, P.E.  
Project Engineer

Attachments:

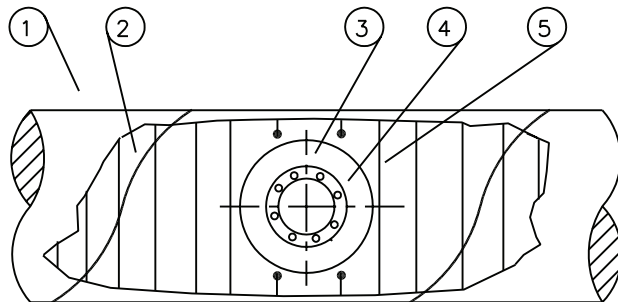
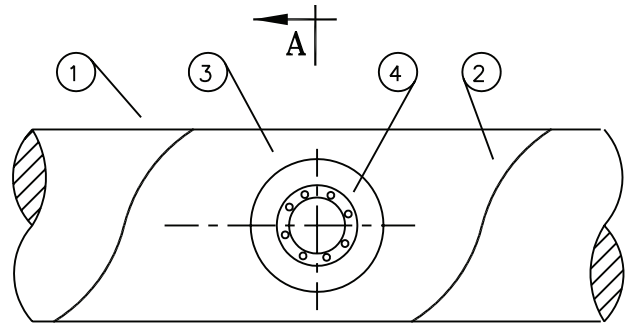
- (1) Standard Details PW-131 and PW-133
- (2) 00 00 00 Specifications for LVMWD Calabas8MG Tank\_ Page 10-13
- (3) Gravel Berm SC-06 Bag
- (4) 1422-010C\_Calabasas Tank Mounting Studs



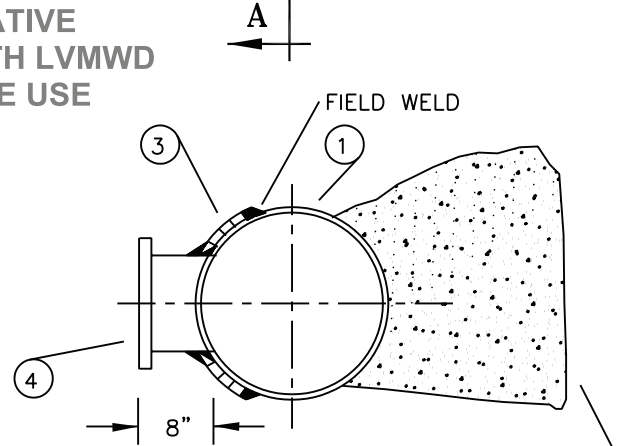
**FLANGE OUTLET**

**LONGITUDINAL ELEVATION  
STEEL PIPE PER AWWA C200**

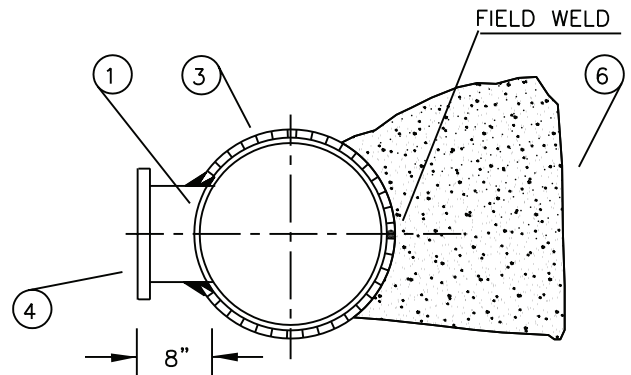
TENTATIVE  
VERIFY WITH LVMWD  
BEFORE USE



**FLANGE OUTLET DETAIL  
STEEL PIPE PER AWWA C303**



**SECTION "A-A"  
USING REINFORCEMENT COLLAR**



**SECTION "A-A"  
USING FULL WRAP SADDLE**

NOTES:

1. Where slope of water main exceeds 1%, install flanges with bolt holes straddling the vertical centerline as shown.

- ① Steel Pipe
- ② Longitudinal or helical Seam (no welding or cutting of seam).
- ③ Collar
- ④ Steel Nozzle CML/CMC and Flange (pipe cut to fit, see Note No.1).
- ⑤ Circumferential Reinforcement wire (must be spot welded to pipe prior to cutting).
- ⑥ Thrust Block (refer to Standard Drawing PW-133 for specifics).

**FLANGE OUTLET AND END ASSEMBLY DETAILS**

REVISIONS			
NO.	BY	DATE	APRVD.

\_\_\_\_\_  
PRINCIPAL ENGINEER

\_\_\_\_\_  
DATE

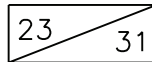
**PW-131**  
1 OF 2



**THRUST BLOCK SIZES**  
(MINIMUM BEARING AREA IN SQUARE FEET)

PIPE SIZE	ELBOWS <u>3</u> /								END ASSEMBLY OR TEE <u>4</u> /	
	90°		45°		22.5°		11.25°			
6"	9	11	5	6	3	3	3	3	6	8
8"	14	19	8	11	4	6	4	6	10	14
10"	23	31	13	17	7	9	7	9	17	22
12"	33	44	18	24	9	12	9	12	23	31

FOR CLASS 150 PIPE



FOR CLASS 200 PIPE

NOTES:

1. Table above denotes MINIMUM design standards for thrust block installation.
2. Sizes based on 1500 PSF bearing soil. Special design required for soils of lower bearing strength.
3. Figure 3
4. Figures 1 and 2

**TENTATIVE  
VERIFY WITH LVMWD  
BEFORE USE**

**THRUST BLOCK DETAILS**

REVISIONS						
NO.	BY	DATE	APRVD.			
					_____ PRINCIPAL ENGINEER	_____ DATE



**PROPOSAL TO  
LAS VIRGENES MUNICIPAL WATER DISTRICT  
FOR THE CALABASAS TANK REHABILITATION PROJECT**

Name of Bidder: \_\_\_\_\_

Business Address: \_\_\_\_\_

Phone No.: \_\_\_\_\_

The site of the work to be constructed and referred to herein is in the County of Los Angeles, California.

The work is to be in accordance with the specifications and contract documents and as shown on plans therefore entitled: Calabasas tank Rehabilitation.

TO THE GOVERNING BOARD OF LAS VIRGENES MUNICIPAL WATER DISTRICT.

In compliance with your notice inviting sealed proposals (bids) and other documents, the undersigned bidder proposes to perform the work and in a workmanlike manner, in strict conformity with the plans and specifications and other contract documents, including Addenda Nos. ^[\_\_\_\_], ^[\_\_\_\_], and ^[\_\_\_\_], on file in the office of the Secretary of the District for the contract unit prices herein.

**Schedule of Work and Prices for  
CALABASAS TANK REHABILITATION PROJECT**

Item No.	Description	Estimated Quantity	Unit Price	Extension
1	Mobilization, bonds and insurance.	Lump Sum	\$10,000	\$10,000
2	Optional one-year time extension, per Section 01 30 00, Part 1.7 F	Lump Sum	\$5,000	\$5,000
3	Exterior coating	Lump Sum		
4	Interior coating, including dehumidification	Lump Sum		
5	Rafter & beam connection welding	1500 EA		
6	Bracing rods replacement	175 EA		

<b>Item No.</b>	<b>Description</b>	<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Extension</b>
7	Other structural repairs	80 Hours		
8	Internal gusset plates	220 EA		
9	New tank drain connection	Lump Sum		
10	Removal of inner tank	Lump Sum		
11	Safety items (guardrails extensions, metal lath on ladder cage, new guardrail at roof hatch)	Lump Sum		
12	Replace flexible inlet/outlet connections and butterfly valves	2 EA		
13	Security fencing including new gate	Lump Sum		
14	Tree removal	1 EA		
15	Pavement replacement	8500 SF		
16	Ribbon drain and drainage berms	Lump Sum		
17	Lead containment and abatement plan	Lump Sum		
18	Door sheet with flush clean out	1 EA		
19	Temporary water storage	Lump Sum		
20	Cathodic protection system	Lump Sum		
21	Caulking around perimeter of tank	Lump Sum		
22	Remove water level target	Lump Sum		
23	Install larger roof hatches with tamper-resistant latches. Item includes relocating roof hatch nearest exterior ladder.	Lump Sum		

Item No.	Description	Estimated Quantity	Unit Price	Extension
24	Fiberglass interior ladders (one new and one replacement)	2 EA		
25	Install a water sampling port	Lump Sum		
26	Replace fine & coarse mesh screens in roof vent	Lump Sum		
27	Install a pressure gauge	Lump Sum		
28	Remove anti-vortex plates from Overflow Funnel	Lump Sum		
29	Replace 24" shell manway with 36"	1 EA		
30	Site Restoration	Lump Sum		
31	Record drawings. Provide red-lined set of all construction changes.	Lump Sum	\$1,000	\$1,000
32	Install Studs For Mounting Solar Panels and Concrete Pad for New Enclosures	Lump Sum		
<b>Total</b>			\$	

*In case of discrepancies, the total amount will govern. Bidders shall provide prices for all items. The project will be awarded to a single bidder. The District reserves the right to reject all bids.*

*It is understood the foregoing quantities are approximate only and are solely for the purpose of facilitating the comparison of bids. The Contractor's compensation will be computed upon the basis of the actual quantities in the complete work, whether they are more or less than those shown.*

*State manufacturer's name and product for each type of material upon which this proposal is based.*

*TYPE OF MATERIAL*

*MANUFACTURER / PRODUCT*

*Anodes*

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*Interior Coating*

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*Exterior Coating*

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Contractor shall submit to District the following information:

- (1) The name and location of the place of business of each subcontractor performing work, labor or render construction services and each subcontractor licensed by the State of California specially fabricating and installing improvements according to detailed drawings or the plans and specifications, in an amount in excess of one-half of one percent of the Contractor's total bid.
- (2) The portion of the work to be done by each subcontractor.

The contractor shall list only one subcontractor for each portion of the work identified in the bid.

DIVISION OF WORK OR TRADE	NAME OF SUBCONTRACTOR	LOCATION OF MILL, SHOP OR OFFICE
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- (3) The bidder shall describe method for Containment, Removal and Disposal for LEAD PAINT, including disposal site (add pages, if necessary)
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SIGNATURE OF AUTHORIZED  
OFFICER OF BIDDER:

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PRINTED NAME:

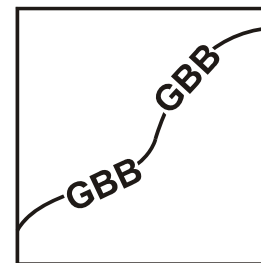
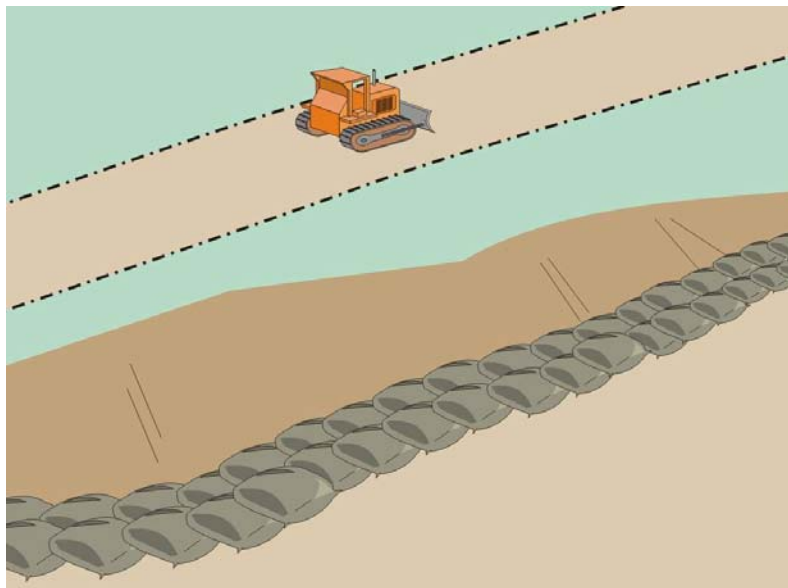
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DATED:

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**NOTE:** If Bidder is a corporation, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Bidder is a co-partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the co-partnership. If the Bidder is an individual, the signature shall be placed above. If a joint venture of a special partnership, the names of the general partners and special partners shall be submitted.

# Gravel Bag Berm



Standard Symbol

### BMP Objectives

- Soil Stabilization
- Sediment Control
- Tracking Control
- Wind Erosion Control
- Non-Storm Water Management
- Materials and Waste Management

**Definition and Purpose** A gravel bag berm consists of a single row of gravel bags that are installed end to end to form a barrier across a slope to intercept runoff, reduce its flow velocity, release the runoff as sheet flow and provide some sediment removal. Gravel bags can be used where flows are moderately concentrated, such as ditches, swales, and storm drain inlets (see BMP SC-10, Storm Drain Inlet Protection) to divert and/or detain flows.

### Standards and Specifications

#### **Materials**

- **Bag Material:** Bags shall be woven polypropylene, polyethylene or polyamide fabric, minimum unit weight 135 g/m<sup>2</sup> (four ounces per square yard), mullen burst strength exceeding 2,070 kPa (300 psi) in conformance with the requirements in ASTM designation D3786, and ultraviolet stability exceeding 70% in conformance with the requirements in ASTM designation D4355.
- **Bag Size:** Each gravel-filled bag shall have a length of 450 mm (18 in), width of 300 mm (12 in), thickness of 75 mm (3 in), and mass of approximately 15 kg (33 lb). Bag dimensions are nominal, and may vary based on locally available materials. Alternative bag sizes shall be submitted to the RE for approval prior to deployment.
- **Fill Material:** Gravel shall be between 10 mm and 20 mm (0.4 and 0.8 inch) in diameter, and shall be clean and free from clay balls, organic matter, and other deleterious materials. The opening of gravel-filled bags shall be between 13 kg and 22 kg (28 and 48 lb) in mass. Fill material is subject to approval by the RE.

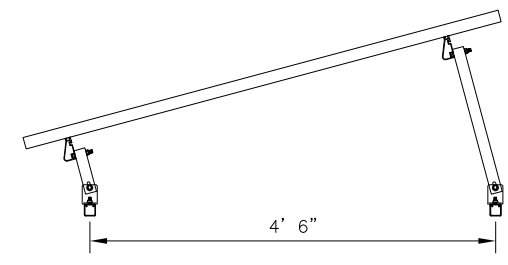
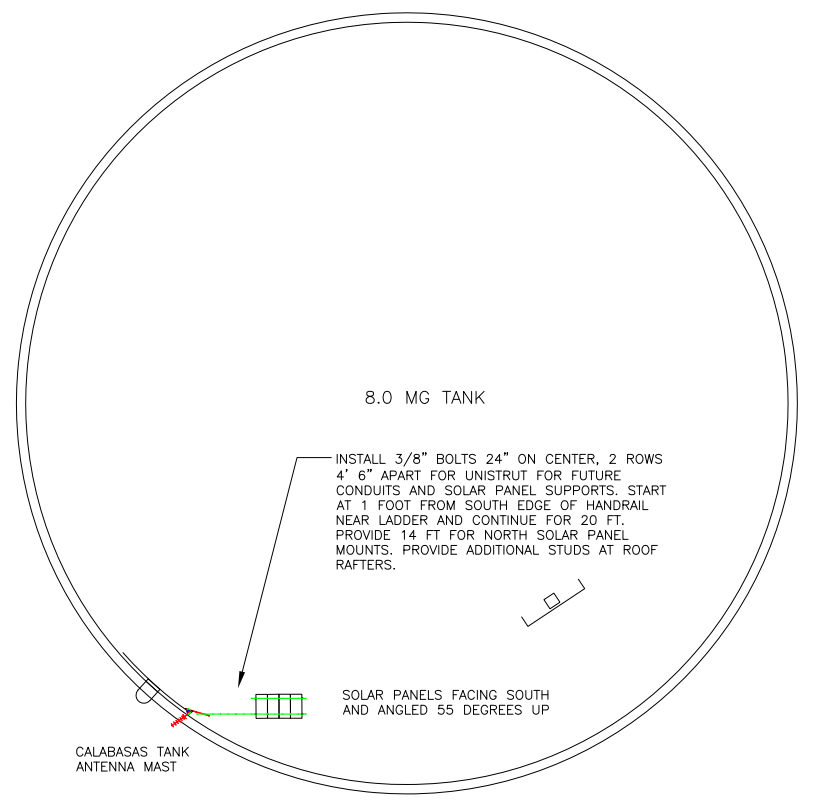
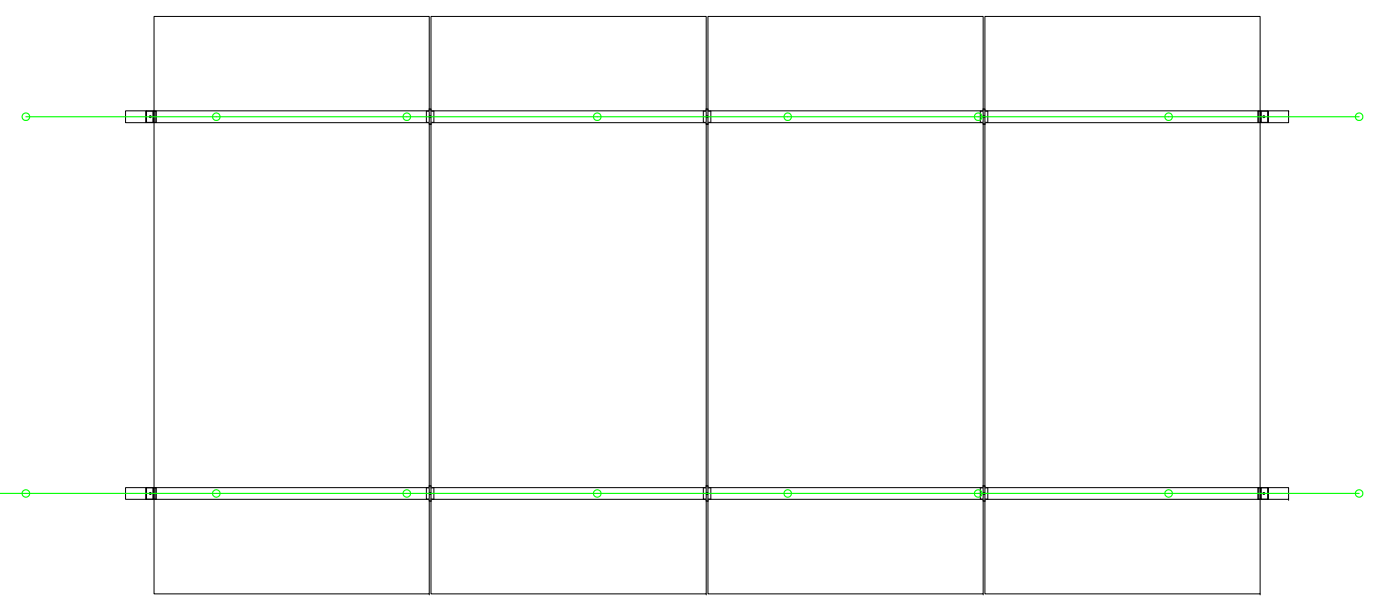
#### **Installation**

- When used as a linear control for sediment removal:

# Gravel Bag Berm

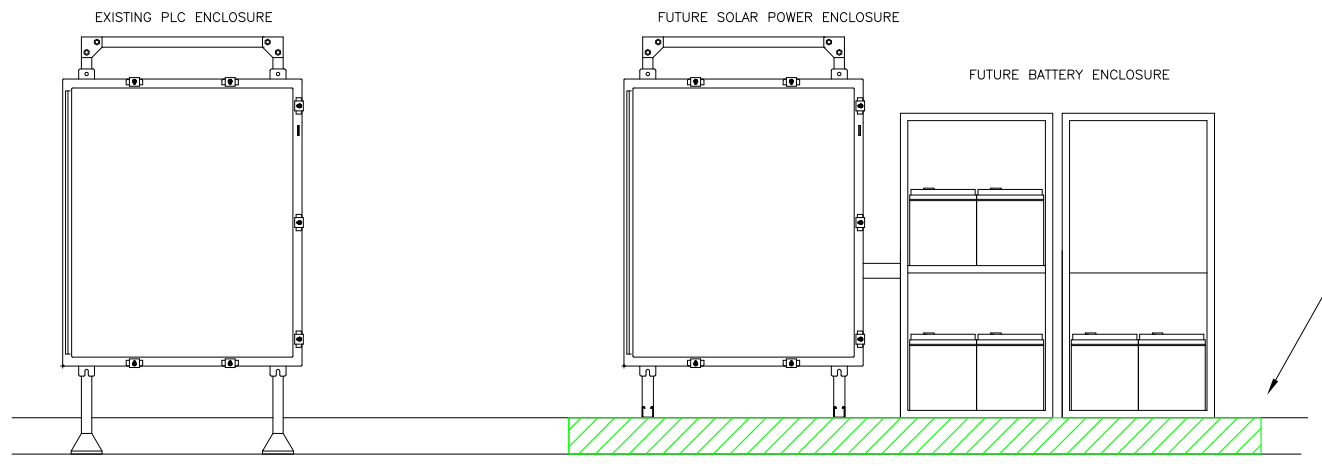
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- Install along a level contour.
- Turn ends of gravel bag row up slope to prevent flow around the ends.
- Generally, gravel bag barriers shall be used in conjunction with temporary soil stabilization controls up slope to provide effective erosion and sediment control.
- When used for concentrated flows:
  - Stack gravel bags to required height using a pyramid approach.
  - Upper rows of gravel bags shall overlap joints in lower rows.
- Requires Certificate of Compliance per Standard Specifications 6-1.07.



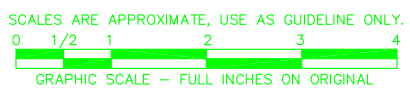
PROVIDE 3/8" STUDS IN TANK EXTERIOR WALL FOR FUTURE UNISTRUT TO PROVIDE ADDITIONAL SUPPORT FOR ENCLOSURES. 2 LOCATIONS NOT REQUIRED FOR BATTERY ENCLOSURES.

PROVIDE CONCRETE PAD FOR NEW SOLAR PANEL POWER ENCLOSURE AND NEW BATTERY ENCLOSURES. 24" WIDE AND 96" LONG, MATCH TO TANK CONCRETE BASE.



SITE PLAN

116-081.dwg



17526 Von Karman, Suite B  
Irvine, CA 92614 PH. (949) 250-8668  
2985 East Hillcrest Drive, Suite 101  
Thousand Oaks, CA 91362 PH. (805) 379-8668

LAS VIRGENES MUNICIPAL WATER DISTRICT  
CALABASAS TANK  
ADD STUDS FOR MOUNTING SOLAR PANELS  
CONCRETE PAD FOR NEW ENCLOSURES

ISSUE No.	ISSUE DATE	DRWN BY	DES'D BY	CHK'D BY	ISSUED FOR
1	04/15/14	JHK			

SHEET 4 OF 4  
DRAWING No. 1422-010C  
JOB No. 1422  
SCALE: NONE  
UNLESS NOTED OTHERWISE BY A SPECIFIC DETAIL