

Solicitation DACW09-02-B-0004

**Responses to bidder inquiries, unless incorporated into formal amendments to the contract, are not a part of the contract, and are provided for the bidder's convenience only. In some instances, the question and answer may represent a summary of the matters discussed rather than a word-for-word recitation. The availability or use of information provided in the responses to bidder inquiries is not to be construed in any way as a waiver of the provisions contained in the contract clauses or any other provision of the contract, the plans, specifications, or special provisions, nor to excuse the contractor from full compliance with those contract requirements. Bidders are cautioned that subsequent responses or contract amendments may affect or vary a response previously given.**

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1. Will this contract contain the "Buy American Act" and if so, is there a possibility for waiver.

Ans. This contract will have the Buy American Act in the contract clause. Refer to Section 00700, 52.225-11 (b) that discusses construction materials. The Buy American Act restrictions are waived for designated countries and NAFTA country construction materials.

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2. Section 13310 – 1.1. This paragraph referenced... "at the locations shown on the drawings,..." Please advise the drawing number where these locations are shown.

Ans. Refer to drawings C-25 and C-65

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3. Drawing E27 – Plan View of LCC1. This drawing shows Water Level Recorder, Balanced Beam Manometer, and an Electromagnetic Transducer. I am unable to find these items in the Specification. Please advise an acceptable Manufacturer and product number for this equipment.

Ans. Drawing to be amended to show this instrumentation furnished & installed by the Government.  
*See Amendment #0004.*

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4. Contract Time is 1278 calendar days for final completion. Is there Substantial completion days?

Ans. No, there are no specific milestones or substantial completion days for this contract.

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5. Is there any Pre-Bid Conference?

Ans. No. There is only a site visit scheduled for Nov 7, 10:00am at 2493 POMONA-RINCON ROAD, CORONA, CA (at the entrance to the facility) POC: Julie Martinez 909-898-6140

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6. Is there any Award period?

Ans. The "bid acceptance" period is normally 60 days.

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7. There appears to be no soils or geotechnical data furnished for the canal section Station 30+00 to 53+00. The data on rock elevations stop at Station 20+00. Is the contractor to bid this half of the project with no geotechnical data? Can any more data can be provided to allow us to analyze dewatering requirements, suitability of materials excavated, rock depths, water tables, and sieve analysis? If this information is not available, can the Corp. drill more holes, obtain this information, and distribute it to all the bidders, a month before the bid date?

Ans. There have been no investigations conducted by the Corps downstream of those shown in the plans. The Corps will not drill additional holes prior to bid date.

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- 8 Paragraph 1.4.1 of Specification Section 2130 indicates that 200-600 cfs is the expected low flow to contend with in the channel that our new canal will be constructed in. Looking at the USGS Calif. Hydrologic Data over many years, these are reasonable numbers as averages, but these averages are exceeded in many years. It is anticipated that with the completion of the Seven Oaks Dam that the Corp. is now in a much better position to maintain these flows from March 1, thru Sept. 30<sup>th</sup>. If flows exceed 600 cfs, in these months, and is not a 25-year storm, but our diversion, and work is washed out, is it a changed condition warranting both additional time and money? We don't know how much water will or can be stored in these reservoirs, that the Corp. has control over, what is the flow rate that we need to design for, everything above that should be a changed condition?

Ans. It is important to note that the drainage area above Seven Oaks Dam is about 177 sq. miles, which is less than 8% of the drainage area (2,255 sq. miles) above Prado. Therefore Seven Oaks only controls a small portion of the basin above Prado. In addition, Seven Oaks Dam has been turned over to the local sponsors and is no longer under our control.

Specification section 02130 will be revised to address the downstream releases from Prado Dam.  
*See Amendment #0002.*

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- 9 Paragraph 1.4.1 of Specification Section 2130 indicates that 200-600 cfs is the expected low flow to contend with, to construct the new channel in the existing river banks. Paragraph 3.1.2 of Specification Section 2200 indicates a permeability of 280 feet per day in the alluvium downstream of the embankment. This would indicate that an open surface ditch, plus dewatering is not practical to divert the water around the new concrete channel to be constructed from Stations 37+00 thru 53+00. A sheetpile cutoff with a sheetpile channel, fabric lined channel, or 96" pipe diversion could be done to keep water out of the work area, and enable sumps or wells to get the remaining water down to an acceptable work elevation. Could more information be furnished on existing pump tests in the area to verify permeabilities in these areas? Is there information on rock depth to 150' each side of the new channel to allow studies on sheet pile cutoffs, or pipe diversions to be made?

Ans. The backup data for the pump tests is available for review in the District Office. While the estimated permeability is based upon tests done immediately upstream of the dam, we believe these tests to be representative of what will be found in the vicinity of the drop structure. Additional data is available in the District office which indicates the depth to bedrock under the existing embankment and immediately downstream of the spillway.

*See Amendment #0002.*

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- 10 Can the site be made available a month ahead of the bid date, to enable contractors to dig/drill to obtain the geotechnical data needed to divert the river, and construct the channel?

Ans. The site can be made available for prospective bidders to perform geotechnical investigations under the following conditions:

- Coordinate with the Prado Resident Office, Fernando Cano or Bob Garda, 48 hours in advance for access to the site. Access would be limited to standard work hours, Monday through Friday. Submit a hazard analysis and layout of proposed work to the Prado Resident Office for approval prior to commencement of any work.
- A Corps of Engineers geologist or one of his representatives will observe the investigations. Contractor shall notify POC Dave Lukesh, (213) 452-3577, 72 hours in advance.
- Notify the Corps' Cultural Resources Specialist, Stephen Dibble, (213) 452-3849, 48 hours prior to commencing investigations.
- Activities shall not take place or interfere with Endangered Species in standing water or other sensitive locations. As long as the proposed activities occur outside of the active stream channel, and outside of vireo nesting season (which begins March 1), that should satisfy most environmental concerns.
- Standard requirements concerning equipment use must also be met (i.e., equipment must be properly tuned and maintained to minimize air pollution, avoid leaks/contamination of soil and groundwater, don't refuel within the river channel, etc.).
- Corps Safety Standards EM-385-1-1 shall apply.

*See Amendment #0002.*

However, please note that the Corps is looking to make a revision to the downstream drop structure configuration that may impact the amount of investigation needed downstream. This revision will be shown in the next drawing revision amendment. *See Amendment #0004.*

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- 11 Drawing C-25, and S-56 indicates that at Station 53+00 a 50' cut must be made below the river, and grouted stone be placed. Specification Section 2650 indicates that this is to be done in the dry. With a permeability of 280 ft/day, and 600 cfs flowing river, this probably can only be done with a sheet pile cofferdam. Is there information as to the elevation of rock in this area, and what types of material/ boulders/cobbles are likely to be found when driving sheet pile?

Ans. There have been no investigations conducted by the Corps downstream of those shown in the plans.

- 12 With a permeability of 280 ft/day it appears that any diversion to the river to enable the required channel construction would have to be connected to the concrete invert and 20' high walls of the existing outlet channel on Dwgs S-60, and C-5. Does the Corp. have an idea of how this connection is to be handled? Can we install a 10' high sheet pile wall and diversion channel over to a 96" pipe diversion? Can we have a weeks notice to be able to pull this wall out in case of flows over 600 cfs?

Ans. Specification section 02130 will be amended to more completely address Contractor's responsibility for downstream releases from Prado Dam.

Bidder should refer to the as-built drawings for the outlet channel details on the existing features to determine the type of connections needed. See response #19 for information regarding as-built drawings.

If the proposed diversion meets all the technical requirements, including incorporating all the environmental aspects, then the Contractor's submittal for diversion of water would be acceptable under paragraph 1.9 of section 02130.

As for advance notices, the Contractor would only receive notice that flows will exceed the defined thresholds, and would get only enough time to get personnel and equipment out of harm's way. See Amendment #0002.

- 13 Due to the high permeability of the gravels at Station 37+00 to 53+00, a river diversion with a lined channel, or thru a 96" pipe show the most promise. Paragraph 1.4.4 of Section 1410 indicates that endangered fish spawn in the channel from August to December. As the new concrete channel will not have sands and gravels to spawn in, after the project is completed, is this an issue during the construction of the project?

Ans. The design has been coordinated with the environmental resources and some measures have already taken place and others are scheduled to take place in the future.

- 14 The stilling basin at Station 18+00 thru 24+00 is excavated 30' below the water table. From the very few logs and sieve analysis data it appears that the permeability is very high, and could be up to the 280 ft/day. Wells and sumps would have doubtful success in this location. The alternative is to use a sheetpile cutoff, or a slurry wall. Can more information be provided as the rock line elevation, and materials down to the rock as to material type /boulders/cobbles.

Ans. There have been no investigations conducted by the Corps downstream of those shown in the plans.

- 15 Plans show details for the gate design yet the specifications refer to contractor-designed gates.

Ans. Drawings were provided to represent design intent for biddability purposes. Gates are to be designed by the contractor as required by the specifications.

- 16 Section 15095; Para 1.6.2 (3). What is the specific reference the text is referring to for the design parameter for the downpull on the gate.

Ans. A copy of the Hydraulic Design Criteria publication will be placed on the next amendment CD. A copy can also be obtain at [http://hlnet.wes.army.mil/library/publications/hydraulic\\_design\\_criteria/](http://hlnet.wes.army.mil/library/publications/hydraulic_design_criteria/), section 300 on "Gates and Valves". The file can also be obtained on the contracting web site, under Download/View Solicitation Files for Specifications. The file is contained in the Reference3.exe.

- 17 Paragraph 1.4 of Section 2130 indicates that the upstream cofferdam is to be constructed to elevation 525. If due to large storms, or the corps, or water district's operations, the reservoir level overtops this cofferdam, is it a changed condition?

Ans. Yes.

- 18 Paragraph 1.7.1 of Section 2130 indicates that the contractor will be paid for water damage only if storms exceed a 25 year storm. It is beyond the scope of a contractor's ability to model the system of storage of reservoirs in this river basin, or to try to understand or guess what the water district or Corp. might do under what conditions of what size storm. Please indicate whatever size flow rate the diversion is to be, and the contractor will design accordingly. The contractor doesn't care if it is 600 cfs, or 1000 cfs, in the non-flood season, as long as the limit of the release flows define what is a changed condition. The upstream cofferdam height is similar. Please tell us what height is required, and anything over this is a changed condition.

Ans. Specification Section 02130 will be revised to address the downstream releases from Prado Dam. See Amendment #0002.

- 19 Paragraph 3.2.6 of Section 2100 indicates the existing intake structure shall be abandoned as detailed. Are there mechanical items or gates that are to be removed? Can more detailed drawings be furnished of this structure?

Ans. The Government reserves the right to salvage any equipment or furnishings from the existing control house when it is decommissioned and the contractor shall remove and dispose of all remaining items from the structure.

Additional drawings have been compiled on a CD which consists of selected drawings from the original contract package for the Prado Dam construction; as-built drawings for the existing haul road; SR-71 bridge pier details. To receive a copy of this CD, please submit your name and mailing address in writing to:

USAED – Los Angeles District, ATTN: Steve Vaughn  
P. O. Box 532711, ED-DA  
Los Angeles, CA 90053-2325

Or fax your request to:  
Facsimile Number: 213-452-4248, ATTN: Steve Vaughn

Or email your request to: [stephen.h.vaughn@usace.army.mil](mailto:stephen.h.vaughn@usace.army.mil)  
subject: DACW09-02-B-004 – CD Request

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- 20 Highway SR-71 has piers that our channel is constructed around, as shown on Dwg. C-25. Can Drawings of the piers and footings be furnished to allow us to check for conflicts in a temporary diversion, and the new channel lining?

Ans. See response #19 above

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- 21 Does the Corp. have any information as to closest water lines and utilities that can be used at the contractor's staging area?

Ans. Check with the City of Corona Utilities Department.

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- 22 Can details of the existing outlet channel on Dwg S-60 be furnished, to allow details of a temporary diversion to be completed?

Ans. See response #19 above.

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- 23 Can a profile, construction limits, and details be provided of the new existing borrow area access road, on Dwg. C-21, be furnished. Were the culverts extended at Station 22+20? What is the elevation of the new existing road at these culverts? If the reservoir overtops the low point of the road at Station 22+20, which is approx. elev. 510, and hauls from borrow are cut off, is it a changed condition? Can the contractor raise the elevation of the low point to elevation 525, the same as the upstream cofferdam?

Ans. See response #19 above. The road can be modified to adapt to the contractor's operations as long as it conforms to all other criteria.

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- 24 Concrete channel lining, sheet pile, and grouted channel lining is noted to be removed on Dwg. C-25. Please provide the depth, and shade areas covered/locations on the drawings for these items? It is beyond the scope of a site investigation to try to locate buried concrete, sheetpile and grouted rock, under water, hidden by riparian vegetation, when not allowed to disturb the river due to endangered sucker spawning.

Ans. See response #19 above.

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- 25 What is the depth of asphalt in each of the paved roads to be removed?

Ans. See response #19 above

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- 26 On Drawing C-6, the existing power line over the corner of the spillway is shown to be removed and disposed of?

Ans. Drawing will be amended to show this portion to be protected in place. See Amendment #0004.

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- 27 Reference is made to Paragraph 3.1.1, of Spec. Section 2200 Cofferdam. Is the impervious cutoff to extend from the temporary earthfilled cofferdam round the access road which goes down into the regulating structure, thru the 20" boulders indicated on Log R83-15, to cut off water at elevations 525 to 500?

Ans. Refer to response to question #30 below.

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- 28 The photos furnished on the Corp. website show what appears to be concrete training walls upstream of the spillway. These walls are not shown on Dwg C-37. Can the Corp. furnish details of these walls, as they may help or hinder efforts to build a cutoff around the regulating intake structure?

[Ans. Training wall does not extend upstream of the spillway sill. As-constructed plans are made available to the contractors. See response #19 above.](#)

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- 29 Can the Corp. get data on the weekly water surface elevations of the reservoir over the last 30 years. This data is needed to give us an idea as to the risk of cofferdam overtopping, how important leakage thru the wall might be, and how long the wall should be.

[Ans. Historical weekly water surface elevations are provided in a text file on the contracting web site, under Download/View Solicitation Files for Specifications. The file is contained in the Reference3.exe.](#)

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- 30 Paragraph 3.1.1 of Specification Section 2200 indicates an "impervious cutoff" to be constructed. Is a hot roll sheet pile cutoff considered impervious by this specification? As this cutoff is temporary, shouldn't the risk of leakage and additional pumping be the contractor's risk? If not please define approximately what is meant by impervious?

[Ans. Provided that the specified material and procedure is used in constructing the cofferdam itself, and factor of safety achieved, the Corps will defer to the Contractor's RGE as to the design of, and even need for, the impervious cutoff.](#)

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- 31 Please confirm that waterstop is required in the center wall for the stilling basin, and that it isn't required for the center wall in the outlet conduit as well as not being required for the interior walls in the transition structure as shown on the bid drawings.

[Ans. Correct. The waterstop is required for the center wall of the stilling basin and not the conduit.](#)

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- 32 The offset dimension of 47.87 ft for the exterior wall of the stilling basin at station 19+41.35 as shown on the "Plan View" on Drawing S42 of the bid drawings appears to be incorrect. Please provide the correct dimension.

[Ans. Dimension to be revised. See Amendment #0004.](#)

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- 33 The elevation of 431.39 shown for the top of the stilling basin slab at station 19+22.69 on the "Profile Along Centerline of Stilling Basin Center Wall" on Sheet S42 appears to conflict with the elevation determined for station 19+22.69 using the curve data & elevation shown for station 19+44.18 as well as the elevation determined for station 19+22.69 using the formula shown for the curve down station.

[Ans. Profile to be corrected. See Amendment #0004.](#)

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- 34 Please confirm that the maximum wall widths for the Stilling Basin exterior walls as shown in the table labeled "Concrete & Reinforcing Schedule" on drawing S44 are correct. Using the geometry shown in the "Typical Section" on drawing S44 results in different maximum widths.

[Ans. Drawing to be corrected. See Amendment #0004.](#)

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- 35 The channel width for the stilling basin at the access road bridge is shown as 38'-0" on the section shown on drawing S46 and appears to be shown as 37'-9" on the "Plan View" shown on drawing S42 - which is correct?

[Ans. Dimensions on sheet S42 are correct. Dimension on sheet S46 to be revised. See Amendment #0004.](#)

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- 36 Section 02200, Page 6, Paragraph 3.1.1 – Cofferdam – States that the depth of bedrock is variable and not well defined. Is the Contractor to assume the elevation of bedrock based on information provided, or is it the Contractor's responsibility to perform exploratory work in order to better define and quantify the Rock Excavation.

[Ans. Note that the cited paragraph is referring to the area around the cofferdam.](#)

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- 37 Section 02200, Page 10, Paragraph 3.7 requires contractor to over-excavate at bottom of certain structures a depth of 2 feet and backfill with a lean mix not to exceed 100 cubic yards. Can you be more specific as to which structures this specification covers. How will the sub-excavation and lean mix be paid?

[Ans. See project drawings \(cross sections\) for where this condition can be expected. The drawings should also clarify how it will be paid.](#)

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- 38 Section 02200, Page 12, Paragraph 3.9 – How is payment made for removal of in-situ soils unsatisfactory for foundation of embankment, structures and roads?

[Ans. Excavation of unsatisfactory soils will be paid for using the appropriate Excavation, Soil pay item. Backfill will be paid for using an existing fill item appropriate for the area.](#)

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- 39 Section 01270, Page 7, Paragraph 1.4.7 and 1.4.8 – Payment for Excavation – Removal of Stone Protection and Gravel Blanket. States payment is based on quantity of material that meets the specified gradation for said material. Of the total amount of existing in-place material, what is the amount considered to be acceptable for reuse, assuming the Contractor removes and stockpiles the material carefully

*Ans. It is assumed that all of the materials will be acceptable for reuse.*

- 40 Bid Item 44 indicates a quantity of 50 Tons. Items 1 thru 15 in Paragraph 3.2.1 of Spec. Section 5120 are included in Bid Items 74 thru 79. This leaves only all other Structural Steel for Bid Item 44. This appears to be only be steel items on Dwg A-2, and S-39, which is way less than 50 Tons?

*Ans. Quantity to be revised to include intake and low-flow trash racks and air intake grill shown on A-2. See Amendment #0004.*

- 41 On drawing S5 section B there appears to be a wall on the upstream side of the second pour concrete from el. 484.5 up to el 498.0. If this is indeed a wall, there are no details anywhere to show it. If this is a wall, what are the longitudinal and transverse dimensions?

*Ans. There is a wall on the upstream side of the second pour concrete from elevation 484.5 up to elevation 500.0. The reinforcement is indicated in sections H/S18, D/S13, and E/S13.*

- 42 For the deck at 484.5 there is no plan view available. Is it possible to provide one to us?

*Ans. Elevation 484.5 is the soffit or ceiling of the conduits. A plan view is not necessary. Adequate information is presented in Sections G/S18 and H/S18.*

- 43 On drawing S3 detail of Excavation Limits The elevations given call for an 8 foot slab and a 7 foot grade beam, but dimension are detailed at 7.5 feet for both the grade beam and slab. Which is correct?

*Ans. Drawing to be revised. See Amendment #0004.*

- 44 On drawing S3, there is a wall shown on section A that is approximately 23 feet up stream of Sta. 10+00. There are no details of this wall. Can these details be provided?

*Ans. Refer to sheet S19.*

- 45 The estimating team is requesting the electronic files (actual Micro station files) for the grading package of the Prado Dam Embankment (IFB no. DACW09-02-B-004). We have registered on your website and received a copy of the plan set in the .cal extension but would like to further investigate the earthwork properties by evaluating the micro station files. We understand that the micro station files could be reference only.

*Ans. MicroStation drawings for the grading plans can be made available. Please note that, other than the original topo file, most files are 2-D files. To receive a copy of this CD, please submit your name and mailing address in writing to:*

*USAED – Los Angeles District, ATTN: Steve Vaughn  
P. O. Box 532711, ED-DA  
Los Angeles, CA 90053-2325*

*Or fax your request to:  
Facsimile Number: 213-452-4248, ATTN: Steve Vaughn*

*Or email your request to: [stephen.h.vaughn@usace.army.mil](mailto:stephen.h.vaughn@usace.army.mil)  
subject: DACW09-02-B-004 – Informational CD Request*

- 46 At this time in the bidding process, we are researching the possibilities of a digital file for the natural ground of the existing dam. We were wondering whether or not the file is available for prime contractors and if we could attain a copy of it.

*Ans. Yes. See response #45 above.*

- 47 In Section 00800 under paragraph 52.232-4001, it states that \$100,000 in funding has been set aside for the current fiscal year. What is the current fiscal year as referenced, 2002 or 2003? Additionally, could you please supply an anticipated funding schedule for the entire contract duration so the Contractor can adequately prepare a work plan and estimate based on the available funding?

Ans. Our fiscal year begins on 1 October and ends on 30 September. We are currently in fiscal year 2003. As the Government is still under the Continuing Resolution Authority, probably at least to the end of the current calendar year, a minimum amount of funds (the \$100,000) were designated to be set aside to enable us to open the bids. It is anticipated that Congress will authorize sufficient funds to be made available for this fiscal year's construction. For the remaining fiscal years' funding, we can only refer the bidder to the contract clause 52.232-4001 in section 0800. The Corps will request funds for the following year based in part on the contractor's forecast of expenditures specification under section 01200, paragraph 1.17.2, Forecasting of Future Progress Payments, which the Contractor needs to submit prior to the beginning of the next fiscal year.

- 48 Section 01200 paragraph 1.15.1.1 states that the Contractor will be responsible to obtain the NPDES permit for the project with the Government supplying a copy of the SWPPP. Section 01356 also states that the Contractor will be responsible to obtain the NPDES but indicates that the Contractor will have to prepare a SWPPP and provide the Government with a copy. Which organization is responsible to prepare the SWPPP?

Ans. Section 01200 will have to be modified to be consistent with 01356 for the Contractor to be responsible for preparing the SWPPP. *See Amendment #0004.*

- 49 Is the document entitled "Prado Dam Interim Water Control During Construction" available for review by the Contractor? If so, how do we obtain this document?

Ans. The document itself is still in draft form and not yet ready for release. As soon as the document is ready, we will make it accessible for review. However, please note that specification section 02130 is being revised to address the downstream releases from Prado Dam. *See Amendment #0002.*

- 50 On drawing sheet C-5, does the existing outlet channel get "protected in place", abandoned or demolished within this contract?

Ans. The existing outlet channel will be abandoned and backfilled once the new outlet works is operational within this contract. The intention of the note is to state that the concrete structure should remain intact and would not have to be demolished.

- 51 On the pre-bid job tour, it appears that the power line and gas line have already been relocated as part of another contract. If this is a correct assumption, will the old improvements be removed by the Contractor who performed the relocation or is the removal of items that may impact work within this contract the responsibility of the Prado Dam Contractor? If the utilities have not been relocated or are still in the process of being relocated when will this work be completed?

Ans. The power line and gas line relocations have been completed by the utility companies. The Contractor is expected to remove and dispose interfering portions of abandoned features.

- 52 On drawing sheet C-15 it states that the SAWPA will relocate their 36" sewer line upstream of the dam with their Contractor in the summer of 2004. Specification sections 02130 paragraph 1.3.1, 02316 paragraph 3.3.2 and 02531 paragraph 3.5.1 clearly state that the relocation work is part of the Prado Dam contract. Who is to relocate this sewer line and when will this work be performed?

Ans. Originally this relocation work in the basin was to be in the Corps' contract however SAWPA reevaluated the plan for the 36" sewer line and planned to do that work under a separate contract. The 60-inch sewer pipe encasement and the raising of the manholes are still a part of this package. *See Amendment #0004.*

- 53 Contractor requests that the electronic files be provided in Microstation format in order to allow a more detailed understanding of the original ground and design contours. We understand that this information would be for reference only and that all information derived and utilized from these files would be the responsibility of the Contractor. This request has been previously sent to another email address that we felt was incorrect. Therefore, we have requested this for a second time at this email address and apologize for the duplicate request if you have seen the first one.

Ans. See response #45 above.

- 54 Are all of the permits in place to allow the Contractor to divert the river downstream of the dam? If so, can we receive a copy of all of the permits obtained and a list of all of the permitting agencies? If not, could a list of the expected permits, requirements and contacts from all pertinent agencies be provided? Are there any special requirements for working upstream of the dam?

[Ans. Extensive coordination was made with Fish & Wildlife, Fish & Game, CA State Parks, & other resource agencies in the development of the Supplemental EIS and Project EIR for Prado Basin and Vicinity. All the requirements have been incorporated into the contract specifications or will be handled concurrently with Environmental staff.](#)

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- 55 Contractor respectfully requests that the bid date for this project be delayed to at least the 18<sup>th</sup> or 19<sup>th</sup> of December in order to allow more time to understand the project requirements and prepare a reasonable work plan and estimate.

[Ans. At this time we cannot say that the bid date can be delayed. Your request will be taken into consideration. See Amendment #0002.](#)

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- 56 What is the procedure for prospective bidders on the Prado Dam job to examine documents referred to in Specs.? Specifically, " Prado Dam Interim Water Control During Construction" and Phase II General Design Memorandum on the Santa Ana River ( Prado Dam ), the Draft Feature Design Memorandum No. 12 Prado Dam Outlet Works, pump test data , and ground water data.

[Ans. These documents are available for viewing at the Prado Resident Engineer's Office at 2493 POMONA-RINCON ROAD, CORONA, CA \(at the entrance to the facility\). Contact Fernando Cano or Bob Garda at 909-898-6140 to make arrangements to view the documents. Please note that changes are being incorporated into specification section 02130 to address downstream concerns. The Interim Water Control Manual is not available until about the 1<sup>st</sup> week in December. See Amendment #0002.](#)

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- 57 Foothill Engineering would like permission to perform drilling for add'l soil information at areas of concern downstream of supplied soil logs which terminate at the stilling basin. Other contractors have asked us to perform add'l soil investigations. Areas of our concern include: Sta.8+00 to 9+00, Sta. 21+00 to 23+00, Sta.35+00 to 37+00, and Sta.49+00 to 52+00. Exact locations can be given, and FDI will contact underground Alert as required. Our drill rig will be mounted upon rubber tires, and we will backfill holes. If by chance any additional soil information is available between Sta.30+00 & 52+00, please let us know of availability.

[Ans. See response #10 above. See Amendment #0002.](#)

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- 58 Bidder requests a copy of the following documents: Phase II GDM Santa Ana Mainstream Supplemental Environmental Impact Statement Dated Aug 1988 and the Prado Basin Supplemental Final Environmental Impact Statement / Environmental Impact Report dated Nov 2001.

[Ans. See response #56 above. See Amendment #0002.](#)

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- 59 Plan Sheet C-37 – Concrete cutoff wall as built shows a minimum depth of 5 feet. Note 2 states existing wall to be removed in area of conduit construction. For estimating purposes, can we assume the wall is embedded 5 feet and 3 feet thick?

[Ans. Refer to sheet 14 of the 1938 as-built drawing for more detail of the existing cutoff wall.](#)

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- 60 Plan sheets C-25 and C-26 show removal of 12" Grouted Stone channel lining and Concrete channel lining. During the Site Visit we were unable to determine the dimensions of said concrete and stone lining. Can the Contractor be provided the as-built drawings of the existing outlet channel to assist in take-off of quantity to be removed?

[Ans. As-built drawings are available for viewing. See response #19 above.](#)

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- 61 Plan sheet C-6 shows the Removal and disposal of the access road coming off the downstream face of the dam and another road heading in the direction of the spillway. What are the limits of removal, and are these access roads paved?

[Ans. The road down the face of the dam is paved. The limits of removal are defined by the limits of the new construction. Refer to sheets C-8 & C-27.](#)

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- 62 Plan sheet C-5 and C-6 – Removal of existing Concrete swales – Could typical sections be provided the contractor in order to quantify the volume of removal and disposal of the concrete swales?

[Ans. See response #19 above.](#)

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63 Plan sheet C-11, Note 2 specifies stripping 1' minimum of exposed alluvium. Does this apply to both the upstream and downstream face of the existing dam?

*Ans. Yes.*

64 Plan Sheet C-12 – Cross section shows 12” – 24” of existing gravel blanket. Detail showing benching requirements specify 18” – 30” of gravel blanket. What thickness should contractor assume for removal and reuse purposes.

*Ans. The rock protection was placed on the dam face at different thicknesses, depending on the area. For instance, as shown on the typical section the upper third was typically placed in an 18” thick layer & the bottom two-thirds in a typical 12” thick layer. Refer to the as-built drawing “Typical Embankment Sections”*

65 Bid Schedule – Items 12, 13, 29 and 30. Could these items be bid by the cubic yard rather than by the ton? The Contractor would not be required to add the cost of scales and the time it takes to weigh each load. Payment for removal could be based on measurement in stockpile, and payment for placement could be based on measurement in place.

*Ans. Weigh tickets will not be required for salvage stone. See specification section 02600, paragraph 3.4.2.*

66 Could you send us a copy of the sign-in sheet for the site visit conducted Thursday, November 7<sup>th</sup>?

*Ans. Copy of sign-in sheets provided on our contracting website <https://ebs.spl.usace.army.mil>, then go to the Advertised Solicitations and for DACW09-02-B-0004, click on Specifications portion of the View/Download Solicitation Files.*

67 The Outlet Channel subdrain sand filter/gravel drain material appears to terminate some distance up the trapezoidal side slopes (plan sheet C-29). How far up the trap side slopes does this subdrain material extend?

*Ans. Sheet C-2933. to be revised. See Amendment #0004.*

68 How will Corp define “rock excavation” for pay purposes since general definition defines “rock” as “either fresh, decomposed, or weathered in place bedrock and it is anticipated it can be mechanically excavated”, yet ripping will not be allowed within 3 feet of grade and blasting is not permitted.

*Ans. Wording in the specification to be amended to call everything "unclassified excavation". See Amendment #0004.*

69 Are the Corp quantities of excavation, embankment and concrete by stage available to bidders?

*Ans. Not available.*

70 Bid Item 11, Excavation, Borrow Areas, indicates a quantity of 409,400 C.Y. Specification section 01270-1.4.6 states that this item is for “Zone II material...” Bid Item 19, Embankment, Zone II Fill, indicates a quantity of 233,600 C.Y. Please clarify the apparent discrepancy in the Bid quantities.

*Ans. Specification section 01270-1.4.6 is correct and bid item 11 will be adjusted to represent only the quantity of Zone II material to be excavated and stockpiled from the borrow site. Costs for obtaining additional fill material required to meet lines & grades should be included in the relevant bid items. See Amendment #0004.*

71 Company plans to bid on the Prado Dam Project, and we have a few questions about meeting Small Business Enterprise criteria. The Special Provisions area leaves me to ask: (1) Do we advertise in the regular trade newspapers? Is there a time frame for this? (2) Should we request that a copy of Proof of Certification be submitted with the bid? What is the title? DBE Cert? Bottom Line: Should I use similar guidelines as CALTRANS requires?

*Ans. In the Los Angeles District, the Deputy for Small Business is Daniel Hanas. Phone number (213) 452-3937. Please contact him to discuss specific concerns as they relate to Small Business criteria.*

72 Could you please provide us with all available geology information for the bedrock on the Prado dam project. Specifically we are looking for information that may have been generated by mapping of any of the rock surfaces or previous excavations.

*Ans. In addition to the plans and specifications, additional information has been made available for review by the prospective bidders. In particular, the Phase II GDM with the Geotechnical Appendix, and the Draft Feature Design Memorandum No. 12 Prado Dam Outlet Works. See Amendment #0002.*

73 Could we please receive a copy of the pump test data performed on this project?

*Ans. The additional data is available but not in such a form that we could provide electronically. Refer to response #56. See Amendment #0002.*

74 Tutor-Saliba Corporation fully intends to pursue the Prado Dam project as a general contractor. As we have progressed in the quantity take-off stage of this very complex and challenging project, several questions have arisen which need to be addressed. We will be submitting inquiries to the Corps for clarification. However, we realize that the time left to complete such tasks before the December 10 bid date is inadequate for a project of this scope. We find that in order to submit the most comprehensive and thorough proposal we need additional time for preparation. Further complicating matters is the upcoming Thanksgiving holiday period. We strongly urge a bid postponement until early January 2003.

[Ans. See Amendment #0002.](#)

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75 What type of material is required for the 82,000cy of Levee fill? Please provide the gradation, moisture and compaction requirements for this material or a specification section and paragraph if this information has already been provided.

[Ans. Refer to specification section 02250.](#)

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76 Some sheets appear to be missing, particularly the grading contours downstream of the dam and outlet works.

[Ans. No grading contours are shown for the outlet channel. Plan & profile of the outlet channel is provided on sheets C-25 through C-27 as well as the cross sections on sheets C-62 & C-63.](#)

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77 Cement supplier would like to know the procedure for getting pre-approved as a supplier so they can provide a bid to the prime contractors.

[Ans. Instructions for certification of cementitious and pozzolonic material sources will be provided in an amendment. \*Pre-approved sources are no longer applicable. See Amendment #0003.\*](#)

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78 Please advise about the following items:

- 1: Frequency of Soil density testing/C.Y. ?
- 2: Set of Cylinders. How many concrete cylinders should be casted per C.Y. of concrete placement?
3. Is the contractor responsible for Inspections pertinent to masonry, structural steel/welding, reinforcing concrete? Continuous or periodic inspection? Please explain.

[Ans. Contractor is responsible for all quality control. Section 02212, paragraph 3.6 CONTRACTOR QUALITY CONTROL TESTING, and 02250, paragraph 1.5 GENERAL REQUIREMENTS FOR COMPACTED FILLS AND COMPACTED BACKFILLS address QC. With respect to QA, 02212 paragraph 1.5.2 Conduct of the Work addresses that. The Government will develop its own testing plan and conduct QA testing](#)

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79 Specification Section 15300-2.1.6.2; Conduit fill lines stated to be stainless steel, sch. 40. ASTM, A312, Grade TP304. Specification Section 15301 - 2.1 states that Filling Pipes to be stainless steel, sch. 40. ASTM A 312< Type 316. Which specification should be applied to the 3" and 4" fill lines detailed on contract drawing M-16.

[Ans. Either material would be adequate. Prefer to use Type 316.](#)

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80 Contract drawing M-17 detail 3, calls out for the 125# Iron Wedge Gate Valve to iron body with bronze trim. Specification 15301-2.2 states for the valves to be stainless steel wedge gate valves with bronze trim. Which of the above should be applied?

[Ans. Specification governs.](#)

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81 No pipe specification found references the 30" Air Vent lines or the 18" Float Well piping as detailed on contract drawing S-9. Please provide or clarify which contract material specification should be applied.

[Ans. All pipes are steel pipes as specified in Section 15895. Sheet S63 will be modified to call them out as steel.](#)

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82 No support system is indicated on drawing S-9 for the following lines routed inside the tower structure;

- a. 6 es. 30" Air Vent Lines
- b. 2 ea. 12" Air Vent Lines
- c. 1 ea. 18" Float Well line

Please indicate what support system is intended.

[Ans. The pipes are supported vertically from the concrete embedment below elevation 545. Laterally they are supported at elevation 545 and at elevation 590. No lateral support is required in between elevations 545 and 590.](#)

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83 Is it acceptable to perform non-Construction activities before 7AM and after 7PM such as equipment support and maintenance of dewatering?

[Ans. Yes.](#)

84 The deep excavation at station 52+00 of the Outlet Channel involves a Substantial dewatering problem. Specification section 2200 paragraph 3.1.2 mentions in general terms a permeability of 280 feet per day. Is there any information, such as a pump test, that applies specifically to the station 52+00 area?

[Ans. Refer to response #56 and Amendment #0002.](#)

85 There exists a substantial sheet piling and grouted armor stone structure in the Outlet Channel at stations 48+00 to 50+00. Are there any as-built drawings available for this structure?

[Ans. See response #19 above](#)

86 Are there as-built drawings available for the existing intake tower and access bridge that needs to be removed?

[Ans. See response #19 above](#)

87 Can there be any scheduled shut down of the outlet flow for periods of 48 hours so work can be performed more efficiently and less costly?

[Ans. Yes, depending on conditions and with coordination with Orange County Water District. As depicted in the Interim Water Control Plan, flows could be shut off for periods of time when the water elevation in the reservoir is at certain elevation range \(460 to 490\).](#)

88 Past COE projects have had provisions for estimated days of bad weather. Is it not going to be a provision for this contract?

[Ans. We will add language to specify the number of expected rain days each month. See Amendment #0006.](#)

89 The stationing show on the plan view and the elevation view on drawing number C-25 do not agree. Please provide correct information.

[Ans. Sheet C-25 will be amended to revise the profile grid. See Amendment #0004.](#)

90 Part 1.6 of section 01200 requires a security guard to be assigned at the entrance gate. Is this requirement only during working hours?

[Ans. No. The requirement is for 24 hours a day, 7 days a week.](#)

91 Part 1.8.4 of section 01200 requires the contractor to coordinate his work with Caltrans. What is the scope of the expansion of the 71/91 interchange and what is the schedule for this work taking place?

[Ans. It is anticipated that work on the 71 bridge widening would be completed by summer 03. At this time, we do not know what the Caltrans' schedule is for future work, nor have we seen detailed plans, other than preliminary alternatives for the area.](#)

92 Part 1.14 of section 01230. Can either the Safety or Occupational Health Technician, or the Safety and Occupational Health Professional have additional duties on the project?

[Ans. No.](#)

93 Can actual locations be identified for parts 1.4.4 and 1.4.4.1 of section 1410?

[Ans. This requirement covers the entire project area.](#)

94 Does part 1.5.5 of section 1410 relate to on site movement of material, or just off site movements?

[Ans. Off-site movements.](#)

95 Part 3.7 of section 1451. Is it required for the contractor to provide an onsite laboratory or can testing be done elsewhere?

[Ans. Based on other requirements throughout the specifications, the laboratory needs to be provided on-site. Section 01451 will be amended. See Amendment #0006.](#)

96 Part 3.7 of section 1451. Does not the COE already have an existing laboratory on site that we are required to maintain per part 1.5.1 of section 1200?

[Ans. True, the COE will have a laboratory on site for Quality Assurance testing only.](#)

97 Part 1.3 of section 1500. Is the use of those vehicles to be solely on the project site and not used as a personal mode of transportation to and from the project?

Ans. The vehicles will be used by project office staff for Government business only, not for personal use. The vehicles will be locked down every night in the Government's compound.

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98 Pages 00010-5 and 00010-6 are missing. Do these exist?

Ans. Pages 00010-5 & 6 were not used.

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99 Is there a General Table of Contents that list the various sections of the specifications prior to Section 01090?

Ans. Project Table of Contents will be amended to include those sections. See Amendment #0004.

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100 Is a bidder required to complete and submit any portion of Section 00600 with the bid documents?

Ans. Yes.

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101 Specification Section 03305 only references the use of a portable batch plant. Is it mandatory to set up a batch plant or can commercially ready mix concrete be used on the project?

Ans. An on-site plant is mandatory.

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102 Bid Item 56 – Accusonic Flow Meters – has a quantity of 16 each. In reviewing drawing it shows 16 each of 200 Khz flow meters and 16 each of 500 Khz flow meters. Please advise whether it is 16 or 32 each.

Ans. The original thought was to show there were 16 flow paths. In order for the meters the function, a pair of transducers is needed for each flow path. Bid item will be amended for this item to include all transducers as well as the flowmeter and transmitter as specified in section 13310. See Amendment #0004.

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103 In reviewing the contract terms the following issues are not addressed:

- a. Indemnification Language
- b. Force Majeur Clause
- c. Weather
- d. Third Party Insurance
- e. Liability Limits on Progress

The latest FARS contains new provisions such as Section 52.249.14 and 52.246.23 that address the above. Do these automatically become part of the contract?

Ans. Force Majeure and weather are covered in the applicable Default clause, FAR 52.249-10, in Section 00700 on pages 00700-83 and –84. Insurance is covered by Section 00800, page 00800-8 in clause 52.0028-4001. We will add language to specify the number of expected rain days each month.

As for the 2 FAR clauses referenced, they are not part of our contract automatically. FAR 52.249-14, excusable delays, is incorporated only in cost-reimbursable contracts and time & materials contracts. Prado is neither type. FAR 52.246-23, limitation of liability, does not get incorporated in construction contracts, contracts for Architect-Engineer services, information technology, nor maintenance of real property. (Refer to FAR 46.801 & 46.805)

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104 The limits of the sand filter and the gravel drain are different for the Typical Sections shown on Drawing C-29 and the Typical Channel Sections on Dwg. C-33 at the various station limits. According to Dwg. C-33 the sand filter and gravel drain under the low flow channel is only from Sta 42+00 to Sta 49+92, while Dwg C-29 indicates the same from Sta 24+12 to Sta 49+92. Please clarify which sections are correct for the sand filter and gravel drain under the low flow channel.

Ans. Sheet C-33 to be amended to provide dimension for sand & gravel drain along slope. See Amendment #0004.

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105 Contract Dwg C-31 indicates the requirement for a 6" perforated collector drain at the Runout Channel while Dwg C-27 does not indicate this requirement, but does indicate the 4" collector drain at the toe of the Outlet Channel. Please provide details for the 6" collector pipe indicating the requirement for cleanouts, etc.

Ans. That section with the 6" perforated pipe applies to the channel section between Sta.21+02.5 and 24+12.8 only. The weep holes are to be placed at 20' centers.

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106 Contract Dwg's C-29, C-32 & C-33 indicate the sand filter and drain rock to extend up the side on the channel for the 4" collector drain at the toe of the side walls but fail to provide a dimension. Please provide dimensions.

Ans. Sheet C-2933 to be revised. See Amendment #0004.

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107 The contract drawings call for cleanouts for the subdrainage system for the Outlet Channel but fail to indicate material type (PVC, cast iron, etc.). Please provide details.

*Ans. Specification section 02410 allows the Contractor to choose between the types listed, as long as it is consistent throughout the project.*

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108 Specification Section 02140 indicates the filter fabric is to conform with Section 02378 wherein it indicates filter fabric to be placed between the sand filter and gravel drain. What are the requirements at the interface of the sand filter and the subgrade and the interface of the concrete channel and the gravel drain? Filter fabric requirements are not indicated on the contract drawing details of the subdrainage system.

*Ans. Paragraph in 02410 states that if used, filter fabrics must conform to 02378.*

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109 On the Grading Plans, Dwg C-8, the Runout Channel is shown to approximately Sta 22+80. On Dwg C-10, the Runout Channel is continued starting at Sta 29+00. We are unable to find the Runout Channel from Sta 22+80 to Sta 29+00 on any other drawing. Please provide a Grading Plan for this area.

*Ans. No grading contours are shown for the outlet channel. Plan & profile of the outlet channel is provided on sheets C-25 through C-27 as well as the cross sections on sheets C-62 & C-63*

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110 The answer to our question (Question # 77) states that the certification requirements for cementitious materials will be provided via an amendment. Can you please tell me when this amendment will be issued? Given the fact that we are actively trying to bid on the project, we really need to obtain a copy of the amendment as soon as possible. It has been our experience that the supplier certification process is rather lengthy, thus time is of the essence. Is there any way that receipt of the amendment can be expedited?

*Ans. See Amendment #0003.*

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111 What is the Specification Section for the PCC Roadway Pavement?

*Ans. Language to be added to the specifications for the PCC pavement: After evaluation, the contractor-designed mix design as specified in Section 03305 is suitable for the roadway pavement.*

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112 Reference: Amendment No. 1, General Decision Number CA020036 (Labor Rates). Under Power Equipment Operators, your amendment shows the Labor Rate for Group 5 at \$30.43, for Group 7 at \$30.66, Group 9 at \$30.93, and Group 11 at \$31.04. Under the AGC Southern California Wage Scale (Master Labor Agreement), no rates are shown for these categories. What is the source for your Labor Rates for these categories? Which Labor Agreement should we follow? Please advise.

*Ans. The source of the General Decision of the Wage Rates is the Department of Labor. The Davis Bacon wage rates are the minimum wages that the contractor must pay under this contract. A contractor will need to pay more if it is under a legal obligation to pay more under a labor agreement that binds it.*

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113 In reviewing the spec for this section, I am finding contradicting information. You are calling for bullet resistant overhead sectional doors - there were no manufacturers listed for reference. Do you know of manufacturers of this product, or where these specs are derived from.

*Ans. The specification is supposed to be generic in nature. One of the manufacturer of the bullet resistant fiberglass material is Safeguard Security Services, Inc., San Antonio, TX: Phone: (210) 661-8306, (800) 880-8306, Fax: (210) 661-8308.*

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114 Section 13310- - 1.1. This paragraph references ... "at the locations shown on the drawings," ... Please advise the drawing number where these locations are shown.

*Ans. Refer to drawings C-25 and C-65*

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115 Drawing E27 – Plan View of LCC1. This drawing shows Water Level Recorder, Balance Beam Manometer, and an Electromagnetic Transducer. I am unable to find these items in the Specification. Please advise an acceptable Manufacturer and product number for this equipment.

*Ans. Drawing to be amended to show this instrumentation furnished & installed by the Government. See Amendment #0004.*

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116 The note on Plan sheet C-56 below the Cross Section of the downstream look of the conduit at Station 10+00 indicates the Lean Concrete Backfill on both sides of the conduit is to be placed from Station 10+00 to Station 14+00. Subsequent Cross Sections beyond station 11+40 do not indicate this same Lean Concrete Backfill. If the intention was to place the Lean Concrete Backfill to Station 14+00 then based on our takeoff the quantity of 7,200 cy is understated. Please advise.

*Ans. Quantity to be revised. After further review, the lean concrete backfill behind the wall is to be place from Sta.10+00 to Sta.11+40, not to Sta.14+00.. No change to the bid quantity.*

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117 On Contract Drawing Sheet S49 of 64, in General Notes: under Structural Steel item 4. It states that all Structural Steel shall be Galvanized? In the specification in section 05615 page 6, 2.3.7.1 it states that the stop logs will be galvanized where indicated? On page 7 of section 05615 under section 3.1.3 it states that the stop logs exposed surfaces are to be painted as called out in the painting section 09940? In section 09940 in part 3, 3.1.2 Ferrous Surfaces are to be painted? Please clarify if the stop logs are to be galvanized or painted?

Ans. On drawing S-49 Structural Steel Note 3 will be modified indicating all bolts to be stainless steel. Also, Note 4 referring to galvanizing to be deleted. In Section 05615 page 6, Section 2.3.7.1, sentence regarding galvanizing will be deleted. On page 7 of Section 05615 under Section 3.1.3, requirement for painting of exposed surfaces only will be deleted. In general, stop logs are to be painted per Section 09940, except as noted. Also, galvanized shall be eliminated from the Stop Log payment clause. *See Amendment #0004.*

118 Back up bars. Are back up bars required to be of the same material as the material being welded or is A36 OK?

Ans. Back up bars are required to be the same material as the material being welded.

119 If back up bars cannot be accessed after welding how do we deal with the requirement to remove back up bars?

Ans. All back-up bars shall be removed. Submit question with specific location if this is not possible.

120 Your answer to this question states that a revision to the design of the drop structure will be included in the next drawing revision package. Is a revision to this structure pending and if so when will the new package be issued?

Ans. Drawings are being revised and will be provided with the next drawing amendment.  
*See Amendment #0004.*

121 Part 2.2 in Section 2900 discusses the requirements to topsoil. Please define the following:

- a. What is the required depth of topsoil to be placed?
- b. Under what bid item does the furnishing and placing of the topsoil get paid?
- c. The specification states that the topsoil is come from the stripping operation. Bid Item #14 is 3,000 cubic yards and 6 inches over 147 acres (hydo seed area) requires approximately 120,000 cubic yards. Can this material be obtained from onsite sources or does the contractor have to import the 117,000 cubic yard difference?

Ans. The topsoil is to be placed 6 inches in depth and is paid under the Hydroseeding bid item. The stripping operation referred to in the specification section is the initial stripping of the top layer of soil from the excavation sites which would be stockpiled and later spread. Bid item 14 is the stripping of the abutment.  
*See Amendment #0004.*

122 Please identify where geotextile material is required?

Ans. Refer to specification sections 01356 and 02480.

123 Under what bid item is the pipe backfill work described in Part 3.3.2 of Section 02316 paid?

Ans. Specification 02316 will be amended. *See Amendment #0004.*

124 Please define the length of existing 36" SARI sewer pipe that needs to be backfilled per Part 3.3.2 of Section 02316.

Ans. Specification 02316 will be amended. *See Amendment #0004.*

125 Part 3.11.1 of Section 02200 states that the contractor is required to perform the required survey control. It gives the crew and the number of locations to assume but does not identify the number of times to allow. Are we to allow one time or more?

Ans. Survey requirement in 3.11 to be deleted from Section 02200. *See Amendment #0004.*

126 Are other construction joints allowed other than those shown (the foundation slab will be a 2,000 plus cubic yards pour)? If additional joints are not allowed then can the shift hours be extended in order to complete some of the large slab pours?

Ans. Locations of CJ's are shown on the plans. Additional joints would require approval of the Contracting Officer. The location of CJ shown on the foundation slab will require approximately 2000 CY pour which may require additional shift hours. A conditional extension of the shift hours to complete some of the large slab pours will have to be coordinated with the Contracting Officer. Note, water stop in the construction joint will be added on drawing S-4. *See Amendment #0004.*

127 In placement of the concrete can a pump be used? The specifications read as if you are only allowed to use a bucket or conveyor unless under special situations.

*Ans. Pump placement will be allowed. Certain mixture proportions especially those prepared for the foundation placement will unlikely have properties suitable for pumping.*

---

128 Part 3.1.2 of section 02100 states that utility relocations are not considered being an obstruction. If others do not relocate the existing 36" SARI sewer pipe in a timely manner it will become an obstruction. Please revisit this wording.

*Ans. The relocation of the SARI line will not be an issue. See Amendment #0004.*

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129 Under what bid item are the requirements of Section 13120 to be paid or is this considered part of the general requirements?

*Ans. This item is not associated with any specific item of work therefore it is a distributed cost.*

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130 Paragraph 1.10 of Section 01230 "Safety Requirements" states that no blasting will be allowed. Paragraph 3.2.5 of Section 02100 "Clear Site and Remove Obstructions" states that blasting will be allowed. Will blasting be permitted or not?

*Ans. Demolition blasting is allowed. Section 01230 to be amended. See Amendment #0004.*

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131 Paragraph 3.3.2 of Section 02200 "Excavation" requires that rock excavation be performed to within tolerance limits of plus/minus 1.5 inches of the lines shown on the drawings. Will pre-split blasting be allowed in an effort to meet this stringent requirement?

*Ans. 02200, paragraph 3.3 EXCAVATION, ROCK forbids blasting of the rock. The same paragraph is clear that in the opinion of the Corps, that due to the nature of the material, blasting will not be necessary.*

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132 Is curve information "Y8" for outside wall line of Regulating Transition Structure available?

*Ans. Curve data will be added on drawing S-39. See Amendment #0004.*

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133 The dimensions Tw for Section E-E given on Sheet S40 do not agree with those for connecting to Section F-F as given on Sheet S41 and also do not appear to match the plan as drawn on Sheet S39. Please clarify.

*Ans. Section E-E on drawing S-40 will be revised to show Tw varying from 63" to 56" to match Section F-F on Sheet S-41. See Amendment #0004.*

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134 In the bid schedule bid item No. 79 Low Flow Bulkheads call out a quantity of 2 ea. In section 01270 it outlines the items that will be paid for under this bid item but not the quantity? In section 15096 page 3, in 1.1 it states that there will be 1 Low Flow Maintenance Bulkhead, not two (2) as called out in the bid schedule. Is there two Low Flow Bulkheads or one? Is there two sets of Guides or one?

*Ans. One bulkhead and two sets of gate frames, guides, etc., as specified in section 15096. Measurement revised to lump sum. See Amendment #0004.*

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135 Are there any hazardous materials, i.e. - lead, asbestos, ballasts, etc.. in the Existing Intake Structure and Access Bridge that will have to be dealt with by the Contractor during demolition?

*Ans. There is red lead paint on the bridge and gates. Since the buildings/Dam was built in the 40's and leaded solder and paint, etc. was used at that time.*

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136 In section 01270, paragraphs 1.26 and 1.27, a definition of Structural and Miscellaneous Steel Measurement and Payment is defined. In section 05120, paragraphs 3.2.1 and 3.3 a list of this steel is illustrated. Section 01270, paragraphs 1.35, 1.36, 1.37, and 1.40 defines measurement and payment for various Gates and Stop Logs which includes Steel. In specification sections 15095, 15096, and 15097, the general information paragraphs define that steel is paid in these items. Specification section 5615 includes the steel of the stop logs in its own item. What is the scope of work included in Bid items 44-Structural Steel, 45- Miscellaneous Steel, 70 Generator and Storage Building, 74-Stoplogs, 75-Regulating Outlet Slide Gates, 76-Emergency Closure Gates, and 76-Low Flow Bulkhead.

*Ans. The structural steel items are itemized in Section 05120. Items that are not included in other bid items then fall into the Miscellaneous Steel category and are paid under that bid item.*

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137 In section 02200, paragraph 3.3.1, is both ripping and blasting not permitted in the last 3' or is ripping not allowed in the last 3' and blasting is not allowed anywhere in the excavation.

*Ans. Ripping of the rock will not be permitted within 3 feet of the finished surface of the subgrade. Blasting will not be allowed anywhere in the excavation.*

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138 Per paragraph 3.2.5 of section 02100, blasting will be allowed to remove the existing Intake Structure, Correct???

*Ans. Correct. Section 01230 to be amended. See Amendment #0004.*

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139 If we use foreign material in our offer, and it complies with the 6% requirements of Specification section 00700. paragraph 52.225-11, when do we the data to permit evaluation. With bid, when requested, or when we make our project submittals.

*Ans. Bidder should provide the information with their bids. However, failure to do so will not render the bid nonresponsive. It can be corrected after bid opening.*

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140 Please advise either the displacement of each pump or the flow rate that is required at 1800 RPM. Specification Section 11290, paragraph 2.1.4.3 and sheet M18 of the plans indicate that the capacity of each hydraulic pump shall be 25 GPM. Sheet M30 indicates the nominal size of each pump will be 15 GPM. Specification Section 11290, paragraph 2.1.4.4 states that the capacity of the system with one pump running will provide a gate lift speed of 1 foot per minute. Based on the cylinder dimensions given on drawing M30 (i.e. 28-inch bore, 7-inch rod and 178-inch stroke) in order to achieve this 1-fpm gate lift velocity each pump would need to produce approximately 30 GPM. And finally Specification Section 11290, paragraph 2.1.6 states that the pumps shall deliver a nominal 52 GPM.

*Ans. The basic requirement is the ability to lift each gate at a speed of 9 to 12 inches per minute. The actual capacity and dimensions of the hydraulic hoist required to operate the regulating gate needs to be finalized by the manufacturer/contractor as these dimensions obviously depend upon the final design and details of the gate. The contractor shall be responsible to design and furnish properly coordinated hydraulic hoist and control system. All three gates may be operated simultaneously at a slower speed. The actual pump capacity and oil tank dimensions will depend on the final design of the cylinders. Other requirements for sizing pump capacity mentioned in the specifications and drawings are based on a preliminary design, which may not apply for final design. The contractor shall be required to submit a detailed calculation to prove adequacy of pumps.*

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141 Please advise if the hydraulic fluid reservoir is to be made of Carbon Steel or Stainless Steel. Sheet M30 of the contract plans indicates a Stainless Steel reservoir with a nominal capacity of 500-gallons is required. Specification Section 11290, paragraph 2.1.5.1 states "The reservoir shall be made of steel with welded joints...etc."

*Ans. Refer to paragraph 2.1.5.1 of Specification Section 11290. Carbon Steel hydraulic fluid reservoir painted with epoxy based urethane shall be acceptable.*

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142 Please advise if a fixed displacement Vane Pump or Piston Pump is required. Specification Section 11290, paragraph 2.1.6 states that the pumps for the hydraulic system will be fixed displacement, Piston Type. Sheet M30 of the contract plans specifies a Vickers 35 VO or equal which is a fixed displacement, Vane Type pump.

*Ans. Refer to paragraph 2.1.6 of Specification Section 11290 and the answer/clarification provided for question no. 140 above. Selection of the actual pump type is left to the contractor. The contractor shall provide pump(s) suitable for the application and shall be responsible for proper operation of the pump(s) for the system flows and pressures.*

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143 Specification Section 11290, paragraph 1.3.2 states the maximum cylinder extend or retract time is 30 minutes. Please advise if all cylinders must extend or retract in 30 minutes simultaneously, or if the time of 30 minutes is only applicable when one cylinder is operating.

*Ans. Please refer to and the answer/clarification provided for question no. 140 above. It is again clarified that all cylinders may need to operate simultaneously at a slower speed.*

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144 Specification Section 11290, paragraph 2.1.9.3 (a) states that four way valves shall be lever operated. The hydraulic schematic found on sheet M18 does not show any manual or lever operated directional control valves. Please advise if the hydraulic circuit must include manual or lever operated directional control valves located in parallel with the proportional valves as a manual back up for gate operation?

*Ans. Please refer to paragraph 2.1.9.3 of Specification Section 11290. Yes. The hydraulic control circuit must include manual or lever operated valves for manual backup for gate operation. A typical hydraulic control schematic is shown in the specification drawings. The actual control circuit shall be developed by the contractor, which will depend on the final design of the system. The control circuit developed by the contractor shall be subject to review by USACOE.*

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145 Please clarify/advise if the cylinder is to be equipped with a position indication system or if gate position will be determined from some type of indication system physically mounted on the gate structure itself?

*Ans. The hydraulic cylinder should be equipped with a position indication system in accordance with the manufacturer's recommendations.*

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146 In section 11290, paragraph 2.1.3.1, “Option A” permits the use of rolled steel plate for the construction of the cylinder shell. We request that you consider removing this option as an acceptable method of manufacturing. Our experience as a cylinder manufacturer suggests that shells constructed from rolled steel plate produces a substantially lesser quality product than what would be produced utilizing the methods described in “Option B” or “Option C”. Specifically, shell strength will be lower due to the existence of high stress areas along the welded seam.

It is reasonable to assume that any company regularly engaged in the manufacture of hydraulic cylinders can easily conform to either “Option B” or “Option C”. By allowing “Option A”, machine shops with little or no experience in cylinder manufacture may quote lesser quality cylinders that will not conform to the level of quality required by the application. Manufacturing per “Option A” can be achieved at a lower cost and could result in a competitive disadvantage to reputable firms who prefer to provide engineered products of a high quality based on proven materials and standards of manufacture.

Ans. Please refer to paragraph 2.1.3.1 of Specification Section 11290. If the manufacturer uses Option A for fabrication of the cylinder shell, the contractor shall be required to produce all documentation to show that the cylinder shell is designed and manufactured to satisfy the requirements of ASME Boiler and Pressure Vessel Code. Joint efficiencies per the code shall be adopted. All butt welds shall be subject to 100% radiographic examination per the code. In addition the cylinder shell shall be subject to a hydrostatic pressure test after it is finally turned and honed per the provisions of the code. These provisions should alleviate any concerns regarding the shell strength.

The cylinder manufacturer shall provide evidence of adequate prior experience in manufacture of cylinders of similar size with welded rolled steel plates.

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147 In section 11290, paragraph 2.1.3.2, it is stated that the piston rod must be fabricated from stainless steel and has a ceramic coating. Our standard ceramic coating, Ceramax conforms to the description of the specifications. However, our standard is to use this coating on an alloy steel rod. If the ceramic coating is properly formulated and applied to the piston rod, the rod is completely protected from corrosion. (We have supplied over 50 such cylinders for similar applications to the Army Corps of Engineers since 1992, and have supplied tens of thousands to others throughout the world.) In addition to a cost saving, we believe that by using a carbon based alloy steel, you will receive enhance strength of the piston rod and increase its resistance to impact (hardness) without sacrificing the rods resistance to corrosion. With this said, we do not foresee that Bosch Rexroth or any other qualified cylinder manufacturer is at a competitive disadvantage if the use of stainless steel is required. Therefore, please advise if the use of a carbon steel piston rod is acceptable.

Ans. Please refer to paragraph 2.1.3.2, Specification Section 11290. Ceramic coated stainless steel piston rod shall be provided as specified.

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148 In section 11290, paragraph 2.1.3.10 allows leakage to exist over the piston seals. We request that you alter the seal design of the piston to include a more modern sealing system such as step seals or chevron seals. Furthermore, we suggest that you then prohibit the existence of any leaks across the piston seals during shop tests. Wear rings are an older technology that has been replaced with modern materials. With a modern sealing systems, most (if not all) reputable cylinder manufactures will prohibit any leaks across the piston seals. Again, most cylinder manufactures utilize systems very similar to either chevron seals or step seals on the piston.

Ans. Refer to paragraph 2.1.5.1 of Specification Section 11290. No leakage of oil across the piston seals shall be acceptable in the shop test. The cylinder manufacturer shall provide seals to satisfy this requirement in the shop as well as during the field test after installation and warranty the effective sealing for a period of five years after implementation. *See Amendment #0008.*

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149 Please clarify or detail the “Hoist Locking Device” described in paragraph 2.1.3.9 and represented on sheet M11 of 67. The drawing implies that a rod extends through the cylinder head into the piston. However, this does not seem possible or can we determine how this device would seal. Furthermore, is the locking mechanism fully automatic, or does it require an operator to physically lock the cylinder?

Ans. The arrangement of the locking device shown has been used in many similar installations. The device is normally kept in the unlocked position. In the locked position it is intended to hold the piston and the gate in the fully raised position when the oil beneath piston needs to be drained during maintenance operations. The rod of the locking device extends through the cylinder head to engage the piston. The locking device is engaged manually. Appropriate packing materials are normally used to accomplish proper sealing.

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150 Reference: Contractor's Inquiry Responses, Response # 112. Your response indicates that the source of the General Decision for Wage Rates is the Department of Labor. I have verified the labor rates for Groups 5, 7, 9 and 11, under the AGC Southern California Wage Scale, and it does not have any rates for the groups mentioned for Operating Engineers. It appears that the rates have been moved up several categories, in place of other groups that are blank in the AGC Southern California Wage Scale book. All other rates are the same, except in this area. Please double-check the labor rates.

Ans. Groups defined by other wage scale systems may or may not align with the Davis-Bacon group classifications. Classifications needed for work that are not included within the scope of the classifications listed in the DOL wage decision contained in the contract, may be added by the Wage and Hour Division, provided the work to be performed by the classification requested is not performed by any classification in the wage determination. The Operating Engineers are covered by this wage determination and as such, would be categorized in the groups as best defined in Section 00850, unless otherwise determined.

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151 Drawing Sheet No. C-37 of 73 shows Section A-A indicating the Contractor Designed Cut Off. This section shows the cut off wall extending 3 feet into the bedrock surface. Is this 3-foot toe into bedrock a requirement?

Ans. Provided that the specified material and procedure is used in constructing the cofferdam itself, and factor of safety achieved, the Corps will defer to the Contractor's RGE as to the design of, and even need for, the impervious cutoff.

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152 Specification Section 02200-3.1.1 Cofferdam states: "Prior to the Stage I excavation, a cofferdam shall be constructed as shown in the plans." It further states: "A Contractor-designed impervious cutoff shall be provided between the top of the existing ground surface and the bedrock." The question is, can the Contractor excavate to some elevation above the anticipated water level and then build the cut off wall? If this were allowed, it would reduce the area of the cut off wall. This would be a savings of both time and money and would still meet the objective of having the cut off wall. Please advise.

Ans. Provided that the specified material and procedure is used in constructing the cofferdam itself, and factor of safety achieved, the Corps will defer to the Contractor's RGE as to the design of, and even need for, the impervious cutoff.

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153 Section 01500, 1.4 and 1.5 (Concrete Testing Equipment). Has the concrete compression machine (CCM) intentionally left out in the list or we need to have the CCM at the site lab to break the cylinders? Or, is it the intention/option to transport the cylinders to subcontractor's office/lab for 7 and 28-day breaks?

Ans. Equipment listed in section 01500 is equipment to be supplied by the contractor to supplement the Government's existing laboratory facilities. However, please note that this equipment is for the exclusive use by the Contracting Officer for purposes of quality assurance/acceptance testing. The contractor is required to provide separate laboratory facilities.

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154 Are the areas marked as permanent disposal sites upstream and downstream of the dam required to be constructed to the contours indicated or can the contours be adjusted based on available unsuitable material? Is the work in these areas paid under the miscellaneous fill bid item - Bid Item No. 24?

Ans. The contours shown for the disposal area are required final contours and the additional fill required is paid under the Miscellaneous Fill bid item.

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155 Does Borrow Area C have to be constructed to the contours indicated or is it acceptable to leave the borrow area at an elevation between original ground and the final contours indicated?

Ans. Grading shown is the maximum allowable. It is acceptable to leave this borrow area at elevations somewhere between the original ground and the final contours. There are site gradient limitations and positive drainage requirements.

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156 Clarification to the requirement for the contractor regarding OC and QA is requested. How many separate testing labs is the contractor to furnish? One for the contractor for QC purposes and one for the owner for QA purposes or do we just provide one for QC purposes and the owner will use the existing lab for QA purposes.

Ans. Contractor provides own lab for QC purposes. The Government's lab building is already constructed and equipment will be installed from an existing inventory. Items listed in the specification section that the contractor is to provide, will be used to supplement the Government's facilities for its QA function.

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157 In the answer to question #30 – what does RGE stand for?

Ans. Registered Geotechnical Engineer.

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158 Per the answer to question #100 are we required to complete and submit the entire section 0600 with our bid?

Ans. Yes.

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159 Is the "Float Well Line" and "Float Well Intake Structure" as shown on sheet S63 measured and paid as Bid Item 34 – Concrete, Intake Tower Structure?

[Ans. The float well structure will be revised as a separate bid item. See Amendment #0006.](#)

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160 Amendment/Modification No. 0002, Section 02130, Paragraph 1.5.1 By-Pass Capacities states: "The Contractor shall plan for protecting downstream work against releases from the existing and/or new outlet works of up to 6,000 cfs from 15 November to 15 April, and 600 cfs from 16 April to 14 November," etc., etc. The question is, how can the Contractor work building a diversion within this area if there is always flow? Can the gates in the existing structure be closed for some period of time during the lowest flow duration so that the Contractor can construct his diversion by-pass? Please advise.

[Ans. Yes, depending on conditions and with coordination with Orange County Water District. As depicted in the Interim Water Control Plan, flows could be shut off for periods of time when the water elevation in the reservoir is at certain elevation range \(460 to 490\). The Interim Water Control Plan is now available on the web site.](#)

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161 In reference to specification 02531, page 13, paragraph 3.1.2.1. Could you please provide the Contractor with the referenced soils report "Preliminary Soils Investigation, Santa Ana Watershed Project Authority, Santa Ana River Interceptor Sewer, Reach IV-B, Corona Area, Riverside County, California".

[Ans. A copy of the report is located on the Amendment #4 CD under the NOTES menu, choose the REFERENCES item, and it is the "Soils Report for SARI Reach IV-B".](#)

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162 Drawing Sheet D-2. Under General Notes, Note 3 indicates that excavation to install the new 48" HDPE must be a minimum 1 foot below the invert of existing 60" AC Pipelines. The new HDPE pipe invert is approximately 15 feet above the invert of the existing 60" AC Pipe. Please expand on the intention of this note. It now indicates that the Contractor must excavate a minimum of 15 feet below the invert of the new HDPE Pipe in order to meet the requirements of this note. Is that your intention? Also, if this is a requirement, is there a special backfill material you are looking for from the bottom of this excavation up to the invert of the new 48" HDPE Pipe? Please advise.

[Due to the fact that no geotechnical information was available in the vicinity of the pipeline, it was necessary to require the Contractor to excavate to a more conservative depth and provide the bedding necessary to adequately support the pipe. The specifications also require the contractor to conduct a geotechnical assessment in the area to confirm the adequacy of the proposed design. Backfill and compaction of materials below the pipe bedding shall be compacted to 90% relative compaction and consist of select granular fill per spec section 02316 3.3. Note: if the Contractor's subsurface investigation concludes that the existing material below the proposed pipes is firm and non-yielding, and the Contracting Officer agrees, the Contractor could be allowed to modify the requirement of the over excavation to a shallower depth, to be determined](#)

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163 Drawing Sheet D-2. Drawing Sheet D-2 shows existing sheet pile approximate locations. What is the elevation of the top of these sheets, what type of sheet was installed, and to what depth? Without this information the Contractor has no way of knowing how much work and what type of work will be required to install the new dewatering systems or installation of the new 48" HDPE Pipe. Please advise.

[Ans. Prado Dam record drawings F-6, F-7 and F-9 indicate steel sheet piling and give a varying top elevation of 455.43 to 466.0 for the approach channel to the existing outlet and 475 for the remaining piles. However, the drawings do not specify the length of depth of the piles and only indicate an approximate location. To the best of our knowledge, the piles were cut off just below the ground surface. However field verification is still mandatory. The original drawings are available for viewing on the contracting website, under Download/View Solicitation Files for Specifications section. The file is named Reference4.pdf.](#)

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164 In reviewing the quantities for the various bid items we find Bid Item #63a ( 5 foot chain link fence) to be overstated by a factor of two and can not locate a location for Bid Item #63e (6 foot chain link gate (w=10')). Please verify the stated quantities on the bid schedule. Sheets C-15, C-17 and C-20 are the only drawings showing 5-foot fence.

[Ans. In addition to the fencing along the wing walls, 5-foot fencing is along the stilling basin walls. See sheet S43 & typical section on S44. The 6-foot chain link gate \(w=10'\) is located on sheet C-48.](#)

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165 Please advise if you intend to answer question 103.

[Ans. Yes, as soon as we get the proper information from the appropriate departments.](#)

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166 In reference to the new 48-inch sewer lines as part of Addenda 4, drawing D-1 shows the existing 60-inch sewer pipe, that runs underneath the existing outlet channel, being plugged. Drawing D-4 shows the new 48-inch sewer conduit, after passing through the existing outlet conduit, being capped and plugged as well. The drawings do not show a tie-in of the 48-inch conduit on the downstream side of the dam. According to specification section 02531, paragraph 3.5.1, the estimated peak flow rate for the sewer line in 2001 was 4-7 million gallons per day (mgd). If both the old 60-inch line and the new 48-inch lines are being capped and plugged, without any tie-in downstream, how is the 4-7 mgd of sewer to be handled?

[Ans. It is anticipated that SAWPA will have established a connection tie-in by the time the work in this contract gets to that point.](#)

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167 I need a clarification on the Stoplogs Specifications. Under the heading of the specifications of Division 5 Stoplogs are in section 05915. At the bottom of the pages Stoplogs are listed as 05615. Which section is it to be under?

[Ans. The title of the Stoplog specification section should have been numbered 05615 and not 05915. If we happen to modify the body of the specification in a later amendment, we will correct this numbering. See Amendment #0006.](#)

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168 Reference Question #90. If the site is locked, such as at night or on a weekend and there is a roving security guard on site for 24/7, is it still necessary to have a 24/7 gate guard?

[Ans. During non-duty hours, when all the gates are locked, it would not be necessary to be stationed at the gate. It is only during the normal duty hours that the guard would be used to control the entrance gate.](#)

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169 Bidder asks if the Corps could provide results of aggregate tests for the concrete mix design.

[Ans. The Corps' tests were performed on 3-inch aggregates, which is not in this contract. However, if the bidder still wants to view the data, it is available for review at the Resident Engineer's office.](#)

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170 Per section 02200 1.7 "Disposal of Excavated Material". Unsuitable material that shall be removed from site or wasted in the permanent disposal areas. Please define off-site. Does this allow the contractor to haul excess material that may not fit in the permanent disposal areas back to the borrow sites for disposal?

[Ans. Off-site means off the project site, including the borrow areas. The borrow areas cannot be used as disposal sites as they will be used in future projects.](#)

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171 Reference: Drawing Sheet D-4 of 7 sheets. Detail 6 on this sheet shows a 48" Knife Gate Valve and how to install and support it. There are two such valves as shown on this same sheet, Outlet Structure Plan View. The question is, the Specifications under Mechanical Section 15099 Page 3 describe 36" Knife Gate Valves, not 48" valves. Is this the correct section for these valves, or are they described in another section? Should this section be modified to describe 48" valves as shown on this drawing? Please advise.

[Ans. Specification section 15099 defines the requirements for the valve of the 36" low flow pipes in the new outlet works. The 48" valve for the SAWPA pipe is defined in specification section 15100.](#)

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172 In regards to this project, will blasting be allowed in the embankment excavation?

[Ans. No. See related responses to #68, 130, 131 & 137.](#)

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173 Bidder wants to know if the document "Prado Dam Interim Water Control During Construction" is available for pick up, or is it on the web?

[Ans. The Interim Water Control document is available for download from the web site. It is also available for viewing only at the Resident Engineer's Office.](#)

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174 Bidder says there are rumors buzzing that the bid opening is going to be put off again due to some small business something or other and wants to know if it's true.

[Ans. No.](#)

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175 In the instructions to bidders, section 52.216-1, it states, "the Government contemplates award of a Firm Fixed Price contract". Please clarify the definition of "Firm Fixed Price". It seems to contradict the unit price bid schedule and variation in quantities clauses in the special contract requirements.

[Ans. The unit prices are "firm-fixed", the quantities may vary.](#)

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176 After our initial quantity review for Bid Item 34b. "Concrete, Intake Tower Structure - Above Elev. 545' ", we are requesting clarification of the bid quantity of 3,800 C.Y.. Based on our quantity survey, we feel the actual volume of concrete is substantially less than the amount indicated. The quantity of concrete for Bid Item 34a, 19,700 C.Y. appears to be OK. The discrepancy for the total structure exceeds more than 10% in our opinion. Please provide clarification.

*Ans. We will review the concrete quantity and provide any changes by amendment. See Amendment #0006.*

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177 Drawing sheet A8 & A11 for the Regulating Intake Structure Access Tower requires metal studs, drywall, glazed tile, & steel doors & frames. Where are we to include the cost for Architectural Work since there is no Bid Item?

*Ans. Architectural features for the control tower such as the framed walls, steel studs, dry wall, and tile work, should be included in bid item 83. The steel doors & frames are included in the Miscellaneous Steel bid item. See Amendment #0006.*

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178 In Specification Section 15300 Part 3.2, Instrumentation Piping, the water pressure sensing system requires sensing tubing throughout the regulating conduits. There appears to be no depiction of this system in the contract drawings nor any means to determine the intent as to: how many sensing lines will be required for each conduit, how far down each conduit these lines are to be routed, how each sensing line is to terminate, depiction of the surface mounted plates, if these lines are to be externally routed or embedded in the conduit walls, and how the system draws water from the conduit. Is there forthcoming a specification on the pressure measurement instrumentation?

*Ans. The Instrumentation piping is required to obtain accurate water pressure head immediately upstream of the Regulating Outlet (RO) gates. The contractor shall propose the routing of the instrumentation piping (piezometer tubes) from the RO conduits to the hydraulic control platform at Elevation 512.0 in the gate room. The pressure piping taps shall be located at 45°, 135°, 225° and 315° positions around the RO conduit. The taps shall be located at minimum of 12-feet upstream of the gate transitions. The instrumentation piping shall be encased in the first stage concrete and routed to the gate room deck at Elevation 500.0. The piping shall be then routed to the Local Control Cabinet along the gate room wall. The pressure indicator/transmitter shall be mounted in the Local Control Cabinet and be designed to measure the average pressure from the four conduit tap locations through a manifold or other suitable device. The output signal from the pressure indicator/transmitter shall be routed to the EMCC cabinet in the control room. A digital panel meter shall be furnished and installed on the EMCC panel below the reservoir level digital panel meter to indicate the RO conduit pressure.*

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179 There appears to be no specification for the 30" and 18" piping and joint type associated with the Float Well. Is the Float Well piping both inside and outside of the intake structure to be considered as part of Bid Item No. 81?

*Ans. All pipes are steel pipes as specified in Section 15895. Sheet S63 will be modified to call them out as steel. A separate bid item will be added for the float well structure. See Amendment #0006.*

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180 Reference specification 15300, section 2.1.6.1, page 8 "Low flow outlet piping, including drain pipe". This section makes reference to the internal and portions of the external of the pipe to be painted with coal-tar enamel as per AWWA C203. Is it the intent of this spec section to be hot applied (475 degrees F) coal-tar or a coal-tar epoxy paint?

*Ans. Coal-tar based paints shall not be allowed. See Amendment #0008.*

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181 In specification section 01270 MEASUREMENTS AND PAYMENT there is no mention of the Float Well Intake Structure. What bid item is the structure concrete to be included in?

*Ans. A separate bid item will be added for the float well structure. See Amendment #0006.*

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182 Section 02480 MSE Walls. In section 1.3.3.2 the spec asks that the gauges be wired together to form one measuring point. This wording would remove the ability to use vibrating wire strain gauges, which are known for their robust and long term stability in civil engineering projects.

*Ans. Section will be amended to require the effects of bending be eliminated by wiring two gages together or "other appropriate means" See Amendment #0006.*

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183 Section 02480 MSE Walls. In section 1.3.3.6 it asks that the wiring be lead to a common vault at each wall. What plans show the location of the vault?

*Ans. Sheet S67 to be amended to show the location of the vault behind the wall. The intent is for it to be directly above the instrumented section of wall. See Amendment #0006.*

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184 Section 02480 MSE Walls. In the specification no mention has been made of reading frequency, both during and after the contract period. Is the reading of the instruments to be made by the corps personal or by the contractor? Section 3.5 mentions that the monitoring program will be put in place by the contractor. Are there any further details pertaining to reading frequency of the instruments, or other details which might help us develop a monitoring plan?

*Ans. Section will be amended to require the contractor to take the initial readings only. See Amendment #0006.*

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185 As - Builts include up to the year 1940, was there no work done to the dam after 1940, if so, when can we get those As - Builts?

*Ans. Most of the work done after 1940 was of a maintenance nature and was not recorded on drawings. We have no other drawing documentation available.*

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186 We have been unable to locate a manufacturer for the elevator described in the specifications. Please furnish a name of a manufacturer that can meet the specifications as stated in Spec. Section 14210.

*Ans. The Corps Guide Specifications, which were used in developing these project specifications, are generally developed with Industry's input. If there's a restriction that is impossible to meet, please submit the specific problem.*

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187 Specification Section 5120 Part 3.2.1 lists "low outlet pipes and valves" as being paid as structural steel. Bid Items 77 and 78 appear to cover the control and shut-off valves. Please clarify where the valves pay.

*Ans. In the Measurement & Payment section, we state that "Item listed in STRUCTURAL STEEL AND MISCELLANEOUS METAL pertaining to regulating outlets slide gates, emergency closure gates, and low-flow bulkheads shall, however, be excluded from payment for structural steel, and which shall be included with the respective items for payment."*

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188 Are there any existing soil tests available so that the contractor can determine if any of the material below the top 6 inches will be suitable for to be amended to make topsoil. This is per the Hydroseeding specification – Section 02900? Is there any other acceptable amendment process then is stated in the specifications.

*Ans. There were no specific tests made for topsoil. There should be enough material from all the excavations in the project area to meet the requirements.*

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189 The hydroseeding work has been separated by the first 62 acres and the remaining 85 acres. What is the significance of the first 62 acres? Does this represent a certain geographical area of the project?

*Ans. The quantity was estimated based on likely disturbed areas throughout project site, such as the mitigation fill, the disposal areas, the downstream & backslopes of the outlet channel, sectional restoration of disturbed areas in borrow areas, etc.*

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190 In reviewing the scope for Bid Item 34 B we are only able to come up with approximately 800 cubic yards rather than the 3800 cubic yards. Is this possibly a printing error? We would have fill in all the voids in order to get closer.

*Ans. We will review the concrete quantity and provide any changes by amendment. See Amendment #0006.*

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191 If a storm event and a resulting rise in the reservoir level should occur during the period of time when the existing outlet tower is being decommissioned and during the installation of the two SARI pipelines and the permanent plugs, there exists the possibility for an uncontrolled discharge to occur. Does the Corps have a procedure in mind to ensure that this would not occur?

*Ans. Abandonment of the structure can not commence without approval of the Contracting Officer and we would expect that the coordination of the construction schedule would preclude this potential problem.*

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192 Specification Section 03305 Part 3.3.2.4 states that ice may be used but only up to 50% by weight. Our calculations have determined that during the summer months that we will not be able to stay below the 65 degree maximum without a higher percentage of ice allowed. In past, Corps of Engineers projects the percentage of ice has been at 90 to 95%. Can the specification be changed to allow this higher percentage rather than resorting to the use of expensive liquid nitrogen?

*Ans. Specification will be revised to allow higher percentages with certain conditions, specifically that replacement rates greater than 50 percent will require test batches to confirm that mixing and uniformity requirements are met prior to use in the construction. See Amendment #0006.*

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- 193 General. Please confirm that the final structural configuration of the gates, bulkheads, and lifting beam can be different from the configuration shown on the bid drawings, except that all dimensions which interface with the concrete must not change.

Ans. The bidder's understanding of the intent of specification drawings is correct. Please refer to the paragraphs titled 'Specification Drawings' in sections 15095, 15096 and 15097 of the bid documents. This paragraph clearly states "The contractor shall be entirely responsible for all designs and shall prepare designs and shop drawings in conformity with the specifications and design criteria included in the solicitation." It is clarified again that the specification drawings are indicative of the general arrangement and give suggested pertinent features. The drawings are not good for fabrication or construction. The sizes of components and the welds are not based upon detailed structural analysis. Further the Bidder's attention is drawn to the statement in paragraph 1.5 of Section 15097 page 6 "The Government accepts no responsibility for their design adequacy or correctness of the dimensions." This statement shall be applicable to all equipment related to all gates, valves, bulkheads and appurtenances. The Contractor shall be fully responsible to provide the details and shall be responsible to verify adequacy of members and coordination with other structures.

The above clarification applies to all works related to furnishing, installation, painting and testing all equipment for the gates, valves, bulkheads, and overhead/under-hung crane and related hydraulic/electrical control systems included in this contract.

Final decision for acceptance of the Contractor's design and details shall rest with USACOE.

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- 194 Bonnetted Gate, Section 15097, Para 1.6.5, Item 17 (page 8): Is the bearing material to be "ORKOT TLM" as stated in Para 1.6.5 or Aluminum Bronze as stated in Para 2.1.6?

Ans. The bearing material shall be of bronze as stated in paragraph 2.1.2 in section 15097 and not ORKOT TLM. *See Amendment #0008.*

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- 195 Bonnetted Gate, Section 15097, Para 2.1.6 (page 14): Please confirm that the term "seat bars" used in the first line, term "slide gate leaf seats" used in the second line, and the term "seats" used in the third line, mean the same item and represent the bearing/sealing plates which are to be made of Aluminum Bronze and which are to be mounted on the upstream face of the gate downstream frame. Please also confirm that the Aluminum Bronze bearing plate will interface the flat skinplate made of 316 stainless steel (or clad steel), as appears to be stated in Para 2.1.3.

Ans. The terms seat bars, slide gate leaf seats and seats used in paragraph 2.1.6 in section 15097, refer to the bearing/sealing plates fastened to the frames of the slide gates. We understand that AMPCO 16 or 18 is not produced anymore. Therefore, the contractor may propose bronze of different composition conforming to relevant ASTM standards with proven performance record for high head sliding gate seats. The Bronze seats will interface with the skinplate.

Bidders are further advised to refer paragraph 2.1.3 of Section 15097. Skinplate material shall be 316L stainless steel and not 316 stainless steel. *See Amendment #0008.*

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- 196 Bonnetted Gate, Section 15097, Para 2.1.6: The hardness of the Al. Bronze pad is specified to be 180 to 200 BHN. What is the hardness required for the mating 316 stainless steel plate?

Ans. The mating skinplate shall be of Stainless steel type 316L. No special hardening is needed. *See Amendment #0008.*

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- 197 Bonnetted Gate, Section 15097, Para 2.1.6: Is it acceptable to substitute Al. Bronze with self-lubricating material such as Karon V or ORKOT to minimize maintenance and to lower the coefficient of friction? If so, can the 28 in. hydraulic cylinder size be reduced?

Ans. Self-lubricating material such as Karon V or ORKOT will not be acceptable, as they do not have proven long term performance record for high head regulating gate seats. *See Amendment #0008.*

The gate and hoist designer is required to submit a detailed design for the hoist taking into account all the forces for review.

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- 198 Sheet M 11: The mechanical position indicator scale appears to have been shown mounted on a wall. Considering the fact that the indicator stem would be attached to the gate and would come through a hole in the bonnet cover, wall mounting does not appear logical. The scale would need to be mounted on a plate attached to the bonnet cover. Please confirm.

Ans. The mechanical position indicator is to be mounted on the bonnet cover.

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199 Sheet M 11: The depiction of "clearance" indicated in the flow direction is not clear. Please clarify what clearance is being referred to.

[Ans. Refer to Sheet M 11: 'Clearance' is the distance between the side vertical edge of the skinplate and the interior side vertical surface of the gate slot frame.](#)

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200 Wheel Gate, Section 15095, Para 1.1 (page 3) and Para 1.6.2 (pages 6 and 7): It is stated that the gate shall be "lowered under unbalanced water pressure condition...". It is also stated that "...the gates, lifting beams, and accessories shall be designed for raising the gates under maximum unbalanced head." Under Para 1.6.2, 1. Design Data, the Operational Design Head is stated as 50 ft. measured from gate sill. Please confirm whether the maximum unbalanced head for gate lowering and raising shall be 50 ft. or the 96 ft. hydrostatic design head.

[Ans. In paragraphs 1.1 and 1.5.2 in section 15095, operating head on the bulkhead of 50 feet is correct. The reservoir water level needs to be lowered to EL.520 to expose the deck of the outlet structure in order to bring a crane for the deployment of the bulkhead. Both the emergency closure gates and the bulkhead are deployed when the reservoir level is at elevation 520 or below, which is 50 feet above the sill. However, as described in sections 15095 and 15096, the emergency closure wheeled gates shall be capable of closing under unbalanced head of 50 feet and the bulkhead, intended to be installed only for maintenance, shall be closed or opened under fairly balanced head.](#)

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201 Section 15095, Para 1.6.3.8, a: It is stated that "the provisions shall include the use of a self-aligning bearing...". However, sheet M22 shows a cylindrical bearing. We believe that, for the specified cylindrical wheels, self-aligning bearings must be used. Also, to minimize the friction to minimize the ballast required to be added to the gate weight to ascertain gravity closure of the gate, and to minimize the crane capacity for handling the gate, self-aligning spherical roller bearings are needed. Please confirm that spherical roller bearings are acceptable.

[Ans. Please refer to paragraph 1.6.3.8 \(a\) of section 15095. Spherical roller bearings will be acceptable provided they are of proven design of a reputed manufacturer.](#)

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202 Sheet M25: The details of pickup frame storage are not clear. Please confirm that the storage arrangement for the gate as well as the pickup frame in the slot can be revised subject to Government approval.

[Ans. Refer to Sheet M 25. The contractor may propose revised design for the storage arrangement of the gate and pickup frame but the proposal shall be subject to review and acceptance by USACOE.](#)

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203 Will the Los Angeles District make the electronic Micro station files available for the Regulating Outlet Gates – M11 through M16, Emergency Closure Gates – M21 through M25, Low Flow bulkhead gate M26 through M29 and the Stop logs – S49 through S52. These files are needed for the design and/or shop drawing generation.

[Ans. Yes.](#)

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204 Will the Los Angeles District provide the design maximum and minimum flow rates for the Regulating Outlet Gates?

[Ans. Yes.](#)

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205 What are the basic limits of the gate designers allowed for the gate design changes? Can we change sizes that are noted as minimums, if we can show that these minimums are not required, by sufficient load calculations?

[Ans. Please see the clarification given for 193 above. The contractor is allowed to use designed dimensions subject to standard industry practices. However, the minimum thickness of any structural steel member shall not be less than 3/8 inch.](#)

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206 Regulation Outlet Gates - please clarify the design options for the gate designer for the bearing pad or sliding gate seats. The specifications note aluminum bronze, or AMPCO 16 or 18, or ORKOT TLM (Reference section 15097 paragraphs 1.6.5 and 2.1.6) Please note that AMPCO 16 is not produced any more. The use of aluminum bronze with a friction coefficient of 0.6 will greatly increase the cost of the hydraulic cylinder cost. Other materials are available with less friction coefficient. If the other material is used, can the hydraulic cylinder size be reduced, provided calculations can show the requirements are not needed?

[Ans. For regulating outlet gates, the bearing pads or gate seats fastened to the frames shall be of bronze as specified in paragraph 2.1.2 of section 15097. The contractor may propose different composition of bronze conforming to ASTM standards instead of aluminum bronze provided they have proven performance record for high head slide gate applications.](#)

[Please note that the skinplate shall be of stainless steel type 316 L and the contact sliding surfaces of the skinplate and the bronze sliding seats shall be machined to 63 microns not 250 as shown on the drawings. Materials like Karon V or ORKOT TLM do not have proven long term dependable performance record for the high head regulating slide gate seats under similar heads and are, therefore, not acceptable. See Amendment #0008.](#)

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207 In Section 15095 1.6.2, Part 1 it shows the diameter of the gate wheels to be 24 inch Minimum. It also calls for 20 wheels, 10 per side. The gate is only 20 feet tall and wheels are on 24 inch centers. This will not work as there needs to be space between the wheels for some structure. Do we change the wheel count to 14 wheels 7 per side or do we cut down the diameter of the wheel, (now 24 inch's) that is called out as a minimum?

Ans. Refer to paragraph 1.6.2 of Section 15097. The bidder may propose either option subject to verification by detailed analysis and design, which is required to be submitted for the review and acceptance by USACOE.

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208 In Section 15097 Part 3 under 3.1 it gives the tolerances that we must meet and they seem normal and acceptable. In 3.2.1.5 "Gate Leakage" you require a leak rate that is only allows 2 gallons in ten minutes. That is 0.2 gallons per minute. With the tolerances you are allowing this cannot be accomplished. Please clarify witch of the two requirements governs?

Ans. Paragraph 3.1 of Section 15097 gives the standard tolerances, which should not be exceeded. It is always desirable to have a tight fit with no leakage. The contractor shall manufacture and install to tolerances required to limit the leakage to 0.1 gallons per minute per foot of sealing perimeter at the design head. The leakage criterion governs. *See Amendment #0008.*

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209 Reference 1.25.1 - You state that Concrete Reinforcement will be measured on the basis of Approved shop drawings or bar schedules and that splices indicated on the "Contract Drawings" where directed or "approved" will be measured for payment. Then in 1.25.2 - You state that Payment shall also include temporary support and spacing of the reinforcement. During our take off we have found several areas throughout this project that will require our temporary supports to be actually engineered for two reasons. One being a safety issue and the other is the enormous amount of weight that will need to be supported. We have also found several areas that will need to be lap spliced that are not shown on the "Contract Drawings" but are required due to constructability and safety reasons.

Our question is this: If we submit support reinforcing and the reviewing party decided that the support reinforcing is not necessary or is excessive and we know it is required, How will these problems be resolved and paid for? Do we include the cost for these items in our Unit Price based on Final Pay quantity or will the quantities be revised.

Ans. Cost of temporary supports required due to safety or weight limitations for reinforcement placement is included in the payment for reinforcing steel. Bidders unit price should accommodate the cost of these items.

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210 Where buried bars are used will they be allowed to encroach on the specified clearance?

Ans. Specified clearance is the clear distance from the edge of concrete to main reinforcing and should be maintained. When buried (carrier) bars are used, they can encroach in the specified clearance.

---

211 Notes in Specifications Section 1.25 indicate payment will be made for approved lap splices. What is the criteria for "approved" lap splices. Can these bars be spliced and approved with laps paid for at unit price?

- a. Inside verticals are shown one piece full height on most design schedules (J, K, L, M BARS)
- b. Exterior verticals (B, C, BARS) Too large to haul
- c. Vertical laps in notes 20 and 27 below.

Ans. Splices introduced strictly for contractor's placement convenience will not be considered lap splice and will not be included in payment.

Reinforcing details referenced above are constructible.

If the contractor requires additional laps for convenience, it may be reviewed on an individual basis but not will necessarily be included in payment.

We do not understand item C.

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212 Details on sheet S40 and S41 (RCB) sections show lap splices on main outside verticals. The length of lap is called out as 3'-6 min for invert bars and 4'-6 min at wall splice and roof deck. Is either 3'-6 or 4'-6 the minimum allowable lap, or does the lap chart for top and bott bars S12 apply?

Ans. The 3'-6" or 4'-6" lap splice noted on the drawings is the required lap splice length. The table on sheet S12 does not apply at this location. Note that the top slab and invert slab thickness will be revised for Section C-C. *See Amendment #0008.*

---

213 Stilling basin, sheet S44 cross section. Section A/S44 shows double curtain steel in center wall yet typical section only shows main steel in outside face with a 0" clearance call out. Should we assume detail A/S44 is correct with verticals doweling into the base slab?

Ans. Detail A/S44 is correct with vertical doweling into the base slab.

---

214 Stilling basin shows various location of laps on outside face verticals. Is it permissible to run "C" full height, providing the same amount of steel, but allowing the outside face wall to be pretied as a mat and supported on poured concrete?

[Ans. Yes, Detail must be submitted to contracting officer for approval, by successful bidder.](#)

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215 Pipe encasement cover detail E/C-53 doesn't show rebar. Is any reinforcing required?

[Ans. From Station 10+00.00 to station 12+66.27 requires 42" diameter \(D-1600\) Reinforced concrete pipe. No encasement reinforcing is required.](#)

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216 Is Sheet C-18 call out note 28 for 8" PCC Pad over 6" AB showing a roadway. Should this note be for BI 40? If so what are the total limits.

[Ans. Note 28 applies to the toe access road from Station 3+29.44 to the joint point with the north access road.](#)

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217 Assumed steel shown for Bridge items is included in Item 43 when shown pouring in a "rebar" item. All other steel and mesh is in Bridge Items.

[Ans. Please clarify the question.](#)

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218 Is it permissible to use Erico Qwik-Wedge system in lieu of welding on spiral cages sheet S35. Qwik wedge couplers are in accordance with the contract specifications and their use is accepted by Caltrans, per testing instructions (two couplers per splice).

[Ans. Drawing S35 shows three alternatives for bar spiral splice and spiral anchor. Eriko Qwik-wedge is not accepted.](#)

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219 Is there a reinforced approach slab at the entry to control house access bridge.

[Ans. There is no reinforced approach slab at the entry to control house Access Bridge.](#)

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220 At the stilling basin bridge both sides only have asphalt, no concrete approach slabs, see note 22 on sheet C-17. Is there an approach slab requirement?

[Ans. At the stilling basin bridge, both sides, there are not approach slabs.](#)

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221 Sheet S-6 plan view of all Intake Structure steel shows typical steel straight. Section G-18 shows right angles on top mat. Full typical section sheets E-16, E-17 show all steel straight. Clarify.

[Ans. Section G/S18 is a longitudinal section and sections F/S16 and E/S17 are transverse sections. In the longitudinal direction the right angle is required and in the transverse direction is not.](#)

---

222 Does wall steel go thru deck pours? See section S17 and note that steel for A,B,C/S12 appears to stop at the bottom of decks.

[Ans. Vertical reinforcement is continuous through the deck and horizontal reinforcement is not required within the deck.](#)

---

223 Limits of spacing in plan view for vertical hairpins shown in section E/S17 Clarify direction and location of spacing on sheet S6, and clearance to steel from top and bottom. Can vertical hairpins be eliminated when in contact with a vertical dowel.

[Ans. Longitudinal hairpins go north-south direction, transverse hairpins go east west. Vertical hairpins can be eliminated when in contact with a vertical dowel, as long as, they do not violate the required spacing shown on section.](#)

---

224 Blockouts detail 2/S22 and M11. Is there any special steel detail? Does the typical steel pass thru and pour in later or is it considered an opening. Note that anchor plate embed shown on M11, M12 does not show rebar. Placement of the side gate assembly is impossible as shown.

[Ans. Placement of the slide gate assembly is possible.](#)

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225 Exterior wall Section C/S12 at STA 10+00.0 note that there are no horizontals/ hairpins called out in the 16'-9 dimension. Assumed similar to Section A/S12

[Ans. The assumption is correct.](#)

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226 Note that main cross sections G,H/S18 are not correct. This section is cut nearly at centerline of structure and will not require slab with radius nosing. This detail should be on H/S18. Suggest correction of details.

[Ans. Sections G, and H/S18 are intended to apply for the limits shown on drawing S14.](#)

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227 Note section G,H/S18 verticals dowels to full height walls do not match size or spacing. Elev H/S18 shows #8@6 where section in plan D/S13 shows bundled #11 verts.

[Ans. Plan D/S13 shows #11 at 6" and Section H/S18 will show #11 at 6" dowels. Plan D/S13 shows #11 at 8" bundled and Section G/S18 will show #11 at 8" bundled dowels. Drawing S/18 will be revised to show these corrections. See Amendment #0007.](#)

228 Sections G,H/S18 verticals show a lap splice at elevation 500.0' We are assuming this would apply to all wall verticals going up to 520.0 as well.

[Ans. The assumption is correct.](#)

229 Wall horiz to bulkhead wall are shown as #11@6 in plans sect S13, S14 and #9@8 in section G/S18. Which note is correct?

[Ans. Section G/S18 will be revised show #11 at 6". See Amendment #0007.](#)

230 Wall horizontals elevations 500.0 to 545.0 in 40' x 144' area are shown in plan view on sheets S14 and S15. Are the 90 deg right angles standard hooks or horiz lap lengths per schedule S12?

[Ans. Unless noted otherwise the 90 degrees right angles are standard hooks.](#)

231 Vertical wall steel in the Intake Structure elev 500.0 to 545.0 is shown on the outside face. Hairpins will not capture all verticals not achieving containment. Are the verticals actually supposed to be placed on the inside?

[Ans. In some areas, hairpins will capture alternate vertical reinforcement only, and is correct as shown on drawing S15.](#)

232 Can verticals shown bundled be placed against horizontals rather than "stack"?

[Ans. Vertical bars shown bundled shall be placed as shown on drawings.](#)

233 Detail for what is required for steel if any, interrupted by low flow pipe or vents?

[Ans. Drawing S9 shows the wall and slab opening typical detail.](#)

234 Details sheet S20 show tower wall vertical details. CONFLICT in call out between spacings as shown. Which is correct, either the 6" or 12" spacing?

[Ans. The intent of the reinforcement call out outside the section is to show the lap splices staggered. The call outs are correct, and the final location of the bars \(2-#11 at 12"\), will be #11 at 6".](#)

235 Detail M/S20 shows the wall verticals and horizontals for the tower going down to Elevation 536.0. Note that the steel for beams shown on sheet S24 will conflict! A lap splice is necessary at Elev 545.0 to allow accurate placing of these vertical bars. Holding these verticals nearly 45' by template on formed decks presents a safety issue as well.

[Ans. Placement of the reinforcement is difficult at this location. A lap splice just above elevation 545 will not be allowed.](#)

236 Plan view of Access Tower sheet S10 shows the interior walls doweling from exterior with a lap splice. The plans as presented indicate the dowels stopping at the exterior curtain or hooking the outside curtain. Suggest dowels all stop before exterior wall verticals with a standard hook.

[Ans. The reinforcement shows on structural drawing is correct.](#)

237 What is the typical coverage to hairpins? Can they encroach on typical coverage? Do hairpins capture/go to the outside of mats?

[Ans. The hairpins can encroach on typical coverage and they shall capture/go to the outside of mats.](#)

238 Please clarify what bid item that the trash racks get paid under. Bid Item #44 – Structural Steel, Bid Item #45 – Miscellaneous Steel, or other.

[Ans. Trash racks are paid under Bid Item #44 – Structural Steel. Also see response #40.](#)

239 Specification Section 1500 – Quality Assurance Part 1.2.1 states that the contractor is to furnish continuously 4 individuals. If our schedule shows period of work shutdown, is it necessary to have these people assigned to the project?

[Ans. Yes.](#)

240 Bidder requests location/description of the seismic instrumentation called out on sheet E02.

[Ans. Instrumentation will be provided by USGS. See Amendment #0006.](#)

241 Per Spec Section 15895 - page 12 & 13 - Item 2.8.5 "Louvers"  
Reference is made to Section "07600" which is not included with the bid documents. Please issue Section 07600 or clarify the intent of the reference.

*Ans. Specification section 15895 will be amended. See Amendment #0007.*

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242 On drawing sheets A14 & A15 There are four metal vents indicated.  
On sheet A15 the detail references note 3 on A12. This note calls out 3" bullet resistance fiber glass louver and directs us to sheet S53. Also see Section 08110 Item 2.2 Bullet Resistant Fiberglass. It is unclear what type and size the louvers are based on this information. Please clarify the type of louver and size of louver required.

*Ans. The 4 vents shown on A14 are 8" x 8". The vents are metal vents primed and painted. The detail 1 shown on A15 and the Note 3 on A12 pertain to louvered vents in generator and storage building. The size and type are shown on the plans and modified Section 2.8.5 in the Specifications.*

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243 Morrow Meadows Corporation has been unable to locate or identify the "Multi-path Flow Meter" on the bid documents, other than reference to same in the specifications. There also appears to be a level transmitter associated with this flow meter.  
Please advise as to where these devices are physically located and provide the control logic for these devices as they relate to the valve control system. (Are these devices shown on the project plans. If so on which drawing?)

*Ans. Refer to drawings C-25 and C-65*

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244 Are the hydraulic power units, Nos. 1 & 2 and the throttling valves Nos. 1 & 2 located at the gate room and maintenance deck?

*Ans. Refer to Drawing M17. The hydraulic power units Nos. 1 and 2 are located in the gate room on the hydraulic control platform. Throttling valves Nos. 1 and 2 are located below the gate room deck at Elevation 470.0. The local control cabinets (LCC1 and LCC2) for operating the RO gates and throttling valves are located on the hydraulic control platform in the gate room.*

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245 Sheet C-21 shows Stockpile Area No. 3 between spillway and access road, but Sheet C-4 shows this area to be outside Contractor's work area. Which is correct?

*Ans. Sheet C-4 is correct. The area immediately upstream of the spillway cannot be obstructed in the event of a major event. Sheet C-21 will be amended to remove the Stockpile Area 3. See Amendment #0006.*

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246 Sheet M30, Equipment Schedule shows Equipment B-1 through C-5 to be on M10. There is no M10 in plans.

*Ans. Sheet cross references to be revised. On sheet M30, sheet references to M10 should be M20.*

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247 On sheets S65, S66 and S67, please clarify the instrumentation required. Sheet shows instrumentation for wall H=50' including inspection elements; however, S65 shows inspection elements in other wall heights. Are there instrumentation elements in addition to inspection elements in wall heights other than H=50'?

*Ans. Drawing and specification to be revised. See Amendment #0006.*

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248 Is it possible to obtain the latest Flow Data from the Outlet Works? From the most current to one year back.

*Ans. Flow data, as measured at the USGS gage downstream of the Hwy 71 bridge, can be obtained from the USGS. Data from the COE telemetry system has been compiled in a text file that is located on the contracting web site, under Download/View Solicitation Files for Specifications. The file is Reference5.txt. Data is also available from the following web sites:*

- [http://waterdata.usgs.gov/ca/nwis/discharge/?site\\_no=11074000&agency\\_cd=USGS](http://waterdata.usgs.gov/ca/nwis/discharge/?site_no=11074000&agency_cd=USGS) (Historical daily discharges from USGS)*
  - [http://waterdata.usgs.gov/ca/nwis/uv/?site\\_no=11074000&agency\\_cd=USGS](http://waterdata.usgs.gov/ca/nwis/uv/?site_no=11074000&agency_cd=USGS) (Real-time data from USGS)*
  - [http://www.spl.usace.army.mil/cgi-bin/cgiwrap/zinger/lats\\_form\\_time.cgi](http://www.spl.usace.army.mil/cgi-bin/cgiwrap/zinger/lats_form_time.cgi) (Another version of real-time data from COE)*
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249 Section 01451, Page 3 – Does the C.Q.C. Systems Manager have to be on the job at all times?

*Ans. Section 01451, Paragraph 3.4.2. "This CQC System Manager shall be on the site at all times during construction..."*

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250 Section 01320, 1.2, Page 2 - Can the person designated for project scheduling have other duties?

*Ans. Yes.*

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251 Section 01500 (Page 2) 1.2.1 – Second sentence: If additional personnel are required by the Corp for testing, who will pay for this?

[Ans. If additional personnel are required, it would be by modification.](#)

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252 Section 11290 Hydraulic System  
Section 14320 Underhung Crane  
Section 15095 Emergency Closure Gates  
Section 15097 Slide Gates  
Section 15099 Knife Gate Valve

All say list of tools, some say spare parts, to be included with bid. Please clarify if this information needs to be turned in with the bid.

[Ans. Specification section to be revised. See Amendment #0008.](#)

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253 Section 15080, Thermal Insulation – refers to 07840 firestopping. This section is not included in the specifications.

[Ans. Specification section to be revised. See Amendment #0007.](#)

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254 Section 15095, Closure Gates – reference made to a 50 ton mobile crane – who supplies this?

[Ans. The mobile crane is not supplied under this contract.](#)

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255 How is the float well sediment trap paid for?

[Ans. See response #159. The float well structure will be revised as a separate bid item. See Amendment #0006.](#)

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256 Can concrete pours be placed against undisturbed material?

[Ans. Refer to specification section 03305, paragraphs 3.2.3 and 3.2.4](#)

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257 Can construction joints be placed at locations other than where shown on the plans?

[Ans. No. See response #126.](#)

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258 Note on drawing A1 indicate “PIPE HAND RAILING – TYP-PRIMED AND PAINTED”. Specification Section 05120, page 9, paragraph 2.1.9.4, Finish, indicates “Handrails shall be galvanized after fabrication...”. Note on A10 indicates “TYPICAL STRINGER GALVANIZED STEEL LADDER”. Are all miscellaneous and structural metals, including handrails, stair/ladder stringers and embedded items galvanized after fabrication and will this be the finished surface? If not, will they be required to “Prime and Paint”, and what system will be used for each?

[Ans. In general hot-dipped galvanized surfaces where shown shall be the finish surface and shall not require painting, unless otherwise indicated. Non-galvanized surfaces shall be primed and painted per Section 09940.](#)

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259 Reference: Amendment 4 drawing S-12 note 3 splicing / U.N.O. SPLICES SHALL BE STAGGERED  
Our question: Does the specific location of lap splices of all verticals as shown in the contract drawings, single or bundled, preclude this note referencing a stagger requirement? This note has a major impact when pricing labor, especially in the Intake Structure where bars are shown lapping at specific elevations which are key to job progress.

[Ans. If splice location for single or bundled bars, is shown in the contract drawings, the note 3 on drawing S12 does not apply.](#)

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260 Reference: Previous question posted in "inquiry" list number 235

Our question: Are couplers in accordance with SPEC section 3200 permitted at this location?

[Ans. Section 3200 in our specifications says: "3.1.4. Splices of reinforcement shall conform to ACI 318/318R and shall be made only as required or indicated. Splicing shall be by lapping or by mechanical or welded butt connection; ... ". In this particular location a lap splice just above elevation 545 will not be allowed.](#)

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261 We are now in receipt of Amendment #6 for the above referenced project that includes 226 pages of specification changes and 14 pages of drawing changes. Also, of the current 259 questions posted on the C.O.E. website, there are numerous questions without responses. The complexity of this project, requiring extensive soil analysis along with the balancing of various types of excavations and embankments throughout the various stages, continues to be time consuming. The care and diversion of water and the dewatering analysis for the downstream outlet channel construction is far from being complete including the involvement of several of the subcontracting firms expressing an interest in that portion of the project.

We, along with several subcontractors and suppliers we have spoken with, wish to strongly urge the Corps to postpone the bid opening date for the Prado Dam Project for two weeks for us to properly evaluate the latest changes to the bid package and prepare the most comprehensive and thorough proposal possible.

*Ans. A forthcoming amendment will extend the bid date by only a week. See Amendment #0007.*

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262 We have just received Amendment 6 which has revised plans and specifications. However, there were no answers to the previously unanswered bidders questions. Are these questions going to be answered? It is very important that these questions are answered. Due to the revised plans and specifications in Amendment 6 and the still unanswered bidders questions, the date for the bid should be postponed until a later date to allow the contractors sufficient time to evaluate the new information.

*Ans. See response #261.*

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263 I would like to join others in requesting a bid date extension, if possible, due to recent Amendment # 6.

*Ans. See response #261.*

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264 Bidder asks if there's a US supplier for slag.

*Ans. One manufacturer is Holcim Inc. (734) 821-7029 p.o.c. is Gordon McClellan*

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265 Reference Section 03305 2.2.2 -Is it possible to get an electronic copy of the "Preliminary mixture-proportioning studies" for the Government Designed mixtures in paragraph 2.2.3 or are they available only at the District office?

*Ans. We do not have an electronic copy of this information. It can be viewed at the Resident Engineer's office. See also response #169.*

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266 Local cement suppliers have stated that they cannot meet the heat of hydration limitations of 70 cal/gram currently in the specifications. However, 80 cal/gram which is the industry minimum acceptable standard can be achieved. Can the requirements be changed to 80 cal/gram in order to limit the cost associated with cooling requirements for concrete containing cement that cannot achieve the 70 cal/gram requirements?

*Ans. No. There are a number of alternatives for construction of the massive elements in the project as specified. The contractor may use (1) a combination of low heat cement (70 cal/gm) in conjunction with fly ash; (2) a cement without the 70 cal/gm limitation, in conjunction with a GGBFS; or (3) a cement without the 70 cal/gm in conjunction with fly ash. Use of (3) would require placement at lower temperatures than allowed with the use of (1) or (2).*

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267 Local aggregate suppliers that were utilized for the preliminary test mixes have stated that they cannot meet the gradation requirements contained in the specifications for coarse aggregate and washed concrete sand. Can the gradations be modified to meet the local industry standards? If not, does the ACOE intend that the contractors develop an onsite processing plant to achieve the gradations contained within the specifications? Or can the contractor expect that modifications to the aggregate gradations can be made once the project is bid and test batches are produced?

*Ans. Gradations will be revised. See Amendment #0008.*

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268 Section 01270, Page 16, 1.18.2 Payment for Metal Beam Guardrail indicates painting is required. MBG details of sheet C50 do not indicate a finish and no specification was found. Is painting required for the Metal Beam Guardrail, what portions will be painted if any, and what system would be used?

*Ans. No painting required.*

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269 Section 05120.3.2.1 STRUCTURAL STEEL General. Lists items covered. We understand that Items 1 thru 4, although listed here, are paid for as Bid Item No. 75. We further understand that Items 5 thru 8 are paid for as Bid Item No. 76, Items 9 thru 12 are paid as Bid Item No. 79. Item 13 lists "Low flow outlet pipes and valves." We understand that the valves are paid for under Bid Items Nos. 77 and 78, but are unclear where the piping is paid. A. Are they considered "appurtenances" to the valves and paid under those Bid Items; or B. are they paid as structural steel, Bid Item 44; or C. are they paid as PIPING SYSTEMS, Bid Item No. 81?

[Ans. The low flow piping is the minimum discharge system piping and is included in the Piping Systems bid item.](#)

270 Section 05120.3.3 MISCELLANEOUS STEEL AND METALWORK. Lists items covered. We are unclear about Item No. 9, Air Vent Pipes, and Item No. 16, Float Well Pipes. Are these two items paid as A. Miscellaneous Steel and Metalwork, Bid Item 45; or B. are they paid as PIPING SYSTEMS, Bid Item No. 81? Section 01270.1.46 PIPING SYSTEMS specifically lists vent piping as being furnished and installed under Bid Item 81.

[Ans. Both are paid under the Miscellaneous Steel bid item.](#)

271 Drawing P-05 shows two portable sump pumps (PSP 1 and 2). Please clarify routing and materials to discharge the pumped water.

272 As built drawings show three major zones of embankment in the existing dam – Bid Item 13, "Select impervious", Bid Item 14, "Random material", and Bid Item 15, "Pervious". Is it possible to view the specified gradation of these zones?

[Ans. See Plate 46 of the Phase II GDM](#)

273 Drwg D-2 calls the 60" SARI pipe "AC". Is this Asbestos Cement pipe? Are any of the smaller sewer pipes we have to remove or cut Asbestos Cement? If not, what kind of pipe are they?

[Ans. Note 3 has a typo \(see detail 4 on D-6\) and there is no AC pipe that we are aware of. According to the Reach IV as-builts, the exist 60" upstream and through the dam is steel pipe, concrete encased and coated – most likely coal tar epoxy.](#)

274 On the first page of Amendment No.7, Box No. 11 indicates that the hour and date of bid offers is not extended, however, Box No. 14 indicates that the bid opening date has been changed to February 13, 2003. Could we please have some clarification on this matter.

[Ans. Box No. 11 was mis-checked on the SF-30. However, the bid date IS extended. The new bid date is clearly noted on SF-1442, noted in revised section 00100, noted on the web site, as well as box 14 of the SF-30.](#)

275 The Electrical Site Plan does not show a connection (conduit size, location, & ect.) to the utility company Point Of Connection (POC). The Single Line Diagram shows only the Utility Service Metering Section and an abbreviated line with "FROM UTILITY CO." pointing to it. What are the Utility Company's POC requirements? The Gage Station Electrical Plans on the Civil Drawings has a complete POC system to the Utility Company pole.

[Ans. Contractor to coordinate with utility company for POC requirements.](#)

276 The Electrical Site Plan shows a cross section of the duct bank. It references the Civil drawings for the re-bar configuration. The only re-bar configurations that we can find on the Civil drawings are for the outflow conduit and piping system. Please advise if re-bar is required in the electrical duct bank, and if so then please provide detail.

[Ans. No reinforcement required for duct bank.](#)

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**Reference is made to provision 52.0000-4010 (3) which states that “Written inquiries must be received by this office not later than 14 calendar days prior to bid opening date/date set for receipt of offers.” Inquiries below were received within the 14-day period prior to the bid opening and subsequently may or may not be addressed.**

277 Specification Section 02510, page 12, paragraph 2.4.3, Manufacturer’s Responsibility, requires valve certification information be included WITH OUR BID. This type of information would normally be taken care of during the submittal period, after award of the contract. Will the Government allow this information to be furnished after award, and during the submittal process, or must this information be included with our bid?

**Ans. That information should be included with the submittal. See Amendment #0008.**

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278 We are certified by the Metropolitan Water District of Southern California as SBE does that count? or who do we need to be certified with?

**Ans. If you were to bid as a prime contractor, you would complete the bid forms section 00600, which contains a small business self-certification. You don't need to be certified with anyone. If you were to win the award and some other bidder disputed your small business status, then the contracting officer would ask the Small Business Administration to make a ruling. As a subcontractor, you don't need to certify anything to us. However, the prime contractor would need your information to complete his subcontracting plan, which must be approved by the contracting officer before an award can be made. The FAR reference is 19.3 - Determination of Status as a Small Business, HUBZone Small Business or Small Disadvantaged Business Concern.**

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279 Reference is made to Sheet C-46, observation wells. I find 4 of the 8 obs. wells, as per Bid Schedule, on C-7 & C-8 as noted on detail. Please confirm locations of other 4 obs. wells.

**Ans. Two observation wells are required for each of the instrumented MSE walls.**

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280 Section 03305, paragraph 2.1.1.1. Is heat of hydration certification required of both cement mixtures?

**Ans. Yes.**

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281 Section 03305, paragraph 2.1.1.5. Can the delivered temperature of the cementitious materials be relaxed to 160 degrees.

**Ans. No.**

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282 Where can we view the complete set of geotechnical data for Prado? We will be in LA on Fri, 2/7 and will go to the site. Are there any cores available? We can easily go downtown to view data. Please advise.

**Ans. All the information we have available is located at the Resident Engineer's Office. There are no cores available.**

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283 The Contract documents address painting of Permanently Coated Ferrous Surfaces and Ferrous Surfaces Subject to Extended Period of Immersion, but do not provide a painting schedule. The Specifications could be interpreted to mean paint all ferrous metals including galvanized metal (Handrailing, Stairs, Etc.). The painting would include the Stop Logs & Gates, Guides, Mechanical Components, Etc.

Please provide a clarification to the painting requirements and a scope of work including a painting schedule.

**Ans. Refer to responses to #117 & #258.**

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284 As per IWC manual section 3-03 a. Green River Mobile Home Park, Contractor has to build a Levee Fill. Per section 2250 3.6.1, Compacted Levee Fill shall be required where indicated on the plan. The Green River Mobile Park is not shown on the plan. Is the Contractor to build Levee Fill on Green River Mobile Park? And if so, under what item does this get paid?

**Ans. Features further downstream than the work depicted on C-25, which may be referred to in the reference material, are not included in this contract.**

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285 It is our assumption that Bid Item No. 30, Gravel Blanket Protection, covers the cost of obtaining and placing gravel blanket at all locations shown on the plans. Is this assumption correct? If so, the Government’s quantity appears to be very low.

**Ans. Bid item 30 covers the downstream gravel blanket on the face of the dam.**

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286 In order to make the two (2) connections shown on Sheet D-2 at Stations 100+00 and at 200+00 we must "bypass flow as necessary" as noted on the Plans. Please clarify the following:  
Will we be anticipating nuisance flows resulting from the existing lines being diverted at an existing JS located upstream (by others)? If not, then what are the existing flows in the S.A.R.I. 36"/42" pipelines?

Ans. We do not understand the first question, but it does not matter where the flows are generated. What should be considered in the bid are the anticipated flows at the time the bypass is necessary – the flows to consider are: 10 mgd flow rate through Reach IV-A and 8 mgd flow rate through Reach IV-B. These flows are anticipated in the future when the connections are made. The bidder should also consider that peak flows of 150% of these values can exist for up to 2 hours during the day.

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287 Since the existing S.A.R.I 36"/42" diameter pipe will be abandoned from the tie-in points to the face of the Existing Outlet Works, where do we by-pass the flow to?

Ans. Until such time as the new pipeline can be put into service the existing pipeline system must be used to convey the SARI flows downstream for treatment in Orange County and Ocean discharge. When the connection of the new pipeline to the existing pipe is made, the flows must be diverted from upstream of the connection to downstream of the connection. The abandonment of the existing pipeline will not take place until the new pipeline is in service and accepted.

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288 Assuming a by-pass is installed on the existing S.A.R.I pipelines, and the Proposed 48" HDPE/RCP Sewer is installed, and the end is plugged as shown at STA 16+50 on Sheet D-4, how long must the by-pass be installed before flow can go into the Proposed 48" Sewer?

Ans. The extension of the 48-inch pipeline from Sta. 16+50 downstream to a reconnection with the existing SARI pipeline will be under a separate contract. It is expected that this downstream connection and the connections to Reach IV-A and Reach IV-B will be completed at the same time and the flows diverted from the bypasses at that time.

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289 Reference section 02531. What should be considered in the bid are the anticipated flows at the time the bypass is necessary

Ans. The flows to consider are: 10 mgd flow rate through Reach IV-A and 8 mgd flow rate through Reach IV-B. These flows are anticipated in the future when the connections are made. The bidder should also consider that peak flows of 150% of these values can exist for up to 2 hours during the day.

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290 Section 1200, page 9, refers to Orange County Water District as the owner of the water in the basin surrounding Prado Dam and indicates the contractor is responsible for procuring water to be used during construction. Orange Water District has indicated that it will NOT make water available for this project. Does the Corps have suggestions as to other sources of water that might be available for the project?

Ans. Check with the City of Corona Utilities Department as a source of both potable and recycled water. POC is Don Williams @ 909-736-2232. Another source for recycled water, although much farther away from the site, is the IEUA. The POC is Garth Morgan @ 909-357-0241.

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