

(ADD 4787)

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

1. 1ST COMMENT ON BIDDING SCHEDULE

Change Item 0002, "42" DIAMETER SEWER FORCE MAIN", from lump sum to unit price per linear foot and change the associated measurement and payment provisions in Section 15002 of the Specifications accordingly. The estimated quantity would be the length of the sewer force main.

2. 2ND COMMENT ON BIDDING SCHEDULE

Change Item 0003, "48" DIAMETER SEWER FORCE MAIN", from lump sum to unit price per linear foot and change the associated measurement and payment provisions in Section 15002 of the Specifications accordingly. The estimated quantity would be the length of the sewer force main.

3. 3RD COMMENT ON BIDDING SCHEDULE

Change Item 0004, "54" DIAMETER SEWER FORCE MAIN", from lump sum to unit price per linear foot and change the associated measurement and payment provisions in Section 15002 of the Specifications accordingly. The estimated quantity would be the length of the sewer force main.

4. 4TH COMMENT ON BIDDING SCHEDULE

Change Item 0005, "48" DIAMETER DRY WEATHER FLOW PIPE", from lump sum to unit price per linear foot and change the associated measurement and payment provisions in Section 15002 of the Specifications accordingly. The estimated quantity would be the length of the pipe.

5. 5TH COMMENT ON BIDDING SCHEDULE

Change Item 0006, "24" DIAMETER FRESH WATER INTAKE PIPE", from lump sum to unit price per linear foot and change the associated measurement and payment provisions in Section 15002 of the Specifications accordingly. The estimated quantity would be the length of the pipe.

6. 6TH COMMENT ON BIDDING SCHEDULE

Item 0007 is presently lump sum for "TEMPORARY DRY WEATHER FLOW PIPE". Change the description to include pipe diameter in inches and make this a

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by **Andy Studdard, Cost Engineering Branch**

unit price item per linear foot. The present Section 15005 would require the Contractor to design the temporary bypass pipe. See our comment 230 below, which says to include the design for the bypass pipe in the bid Plans and Specifications.

7. 7TH COMMENT ON BIDDING SCHEDULE

The description "*CONSTRUCTION DEWATERING*" for Item 0009 in the Bidding Schedule does not match the description "Construction Dewatering" in 02242-1.2 of the Specifications. (The description in the Bidding Schedule is all-capitals, whereas the description in the Specifications is title case, where only the first letter in each word is capitalized.)

8. 8TH COMMENT ON BIDDING SCHEDULE

The description "*TEMPORARY RETAINING STRUCTURES*" for Item 0010 in the Bidding Schedule does not match the description "*Temporary Retaining Structures*" in 02252-1.2 of the Specifications (all-capitals versus title case).

9. 9TH COMMENT ON BIDDING SCHEDULE

Take out the present lump sum Item 0011, "*TEMPORARY SHEET PILE DAM*" and replace it with one bid item for furnishing and installing the temporary sheet pile dam and another bid item for removing it. Let the item for furnishing and installing the dam be unit price per square foot of sheet pile. Let the item for removing the dam be lump sum and let it also cover removal of the associated butterfly gates (see our comment 10 below.) Change Section 02172 of the Specifications to include measurement and payment provisions for these two items.

10. 10TH COMMENT ON BIDDING SCHEDULE

Create a unit price item, per each, for furnishing and installing the four 66" x 66" electrically-operated butterfly control gates within the temporary sheet pile dam. Change Section 11285 of the Specifications to include measurement and payment provisions for that item.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

11. 11TH COMMENT ON BIDDING SCHEDULE

Create a separate unit price item, per each, for removing the temporary butterfly gates when they are no longer required on the project and delivering them to the S&WB facility as 02172-5.2 of the Specifications requires. Amend Section 11285 of the Specifications to include measurement and payment provisions for that item.

12. 12TH COMMENT ON BIDDING SCHEDULE

Change Item 0012, "*REMOVAL AND DISPOSAL OF CANAL SEDIMENT MATERIAL*" from lump sum to unit price per cubic yard, truck measure. Bidders cannot estimate removal and disposal costs unless they know the quantity. Make this a sub-divided item. Change the measurement and payment provisions in Section 02081 accordingly.

13. 13TH COMMENT ON BIDDING SCHEDULE

Take out the present lump sum Item 0013, "*STRUCTURAL EXCAVATION AND BACKFILL*", and replace it with two unit price items, per cubic yard, net section, one for structural excavation and one for structural backfill. Change Section 02201 of the Specifications to include measurement and payment provisions for those items. The bases for payment quantities would be the lines and grades shown on the drawings for structural excavation and for structural backfill, including any allowed tolerances.

14. 14TH COMMENT ON BIDDING SCHEDULE

Change proposed lump sum Item 0014, "*ROAD CONSTRUCTION*", to separate unit price items for each element of the road. Have separate items for road base course (per cubic yard, truck measure), road asphalt binder and wearing courses (per ton), and curbs of each size (per linear foot, if any). Create measurement and payment provisions in the Specifications accordingly. Let the designers calculate the quantities.

15. 15TH COMMENT ON BIDDING SCHEDULE

The description of Item 0015 in the Bidding Schedule is "*FURNISH & DELIVER STEEL H-PILING (HP14 X 73)*". Change that to "*FURNISH AND DELIVER STEEL H-*

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

PILING (HP14 X 73)" to match the description in payment paragraph 02315-9.1.

16. 16TH COMMENT ON BIDDING SCHEDULE

Take out the following items, which all relate to test piles:

- (a) Item 0017, "FURNISH AND DRIVE TEST PILE (HP14 X 73)"
- (b) Item 0018, "FURNISH AND INSTALL JACKING FRAME"
- (c) Item 0019, "COMPRESSION TEST"
- (d) Item 0020, "TENSION TEST"

To save much time during the construction phase for this project, **put out a separate contract for the test piles in advance.** Use the test results to determine the lengths of the service piles for this project.

This would not be unprecedented. A pile load test project for the Dwyer Canal intake culvert (DACW29-01-B-0076) is currently out for bids and another such project is planned for the Harvey Canal Sector Gate Complex.

17. 17TH COMMENT ON BIDDING SCHEDULE

Take out Item 0022 in the Bidding Schedule, which is for 510 linear feet of "TIMBER PILES". The Drawings show new timber piles in lengths of 30-feet and 45-feet. The 45-foot piles will cost more per linear foot than the 30-footers, so a single bid item cannot account for all timber piles. For each length designated on the Drawings, create one item for furnishing and delivering timber piles and another item for driving them.

Let the descriptions for the items for furnishing and delivering the piles include the designated lengths (30-feet or 45-feet) of the individual piles. Let the quantity be the number of piles of the designated length required. Let the unit be "EA." (each).

Let the descriptions for the items for driving timber piles also include the designated lengths of the individual piles. For each designated length, let the quantity be the total linear feet of all timber piles combined. Let the unit be "LF" (linear feet).

Change 02311-8 (measurement) and 02311-9 (payment) of the Specifications accordingly.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

18. 18TH COMMENT ON BIDDING SCHEDULE

The description of Item 0023 in the Bidding Schedule is "*FURNISH AND DELIVER STEEL PIPE PILES*". Change that to description to include the diameter of the pipe piles. Also, change the description in payment paragraph 02451-9.1 of the Specifications accordingly.

19. 19TH COMMENT ON BIDDING SCHEDULE

The description of Item 0024 in the Bidding Schedule is "*DRIVE STEEL PIPE PILES*". Change that to description to include the diameter of the pipe piles. Also, change the description in payment paragraph 02451-9.2 of the Specifications accordingly.

20. 20TH COMMENT ON BIDDING SCHEDULE

Change proposed lump sum Item 0025, "*CAST-IN-PLACE STRUCTURAL CONCRETE*", to separate unit price items per cubic yard for the different kinds of concrete structures, including I-walls, T-walls, sluice gate structures, suction basins, discharge basins, gate monoliths, and discharge tubes. For each type structure with a base slab, create one item for base slab concrete and one item for structural concrete. The price per cubic yard in each case would include all forming, all concrete, reinforcing steel, waterstops, joint material, and curing materials (but not cementitious painting). Create appropriate payment provisions in the Specifications accordingly. Let the Specifications say that concrete structures will not be measured for payment and that concrete quantities in the Bidding Schedule are based on the dimensions on the Drawings. Let the designers calculate the quantities.

21. 21ST COMMENT ON BIDDING SCHEDULE

Take out present Item 0026, "*TEMPORARY CONCRETE DAMS*". According the Section 03305, the Contractor is to design, install, maintain and finally remove two reinforced concrete dams in the locations and to the configurations shown in the plans. To save much time for submittals in the construction phase, take out the requirement for the Contractor to design the dams. Revise the Drawings to show the dam designs, including how they connect to the existing features. Create new unit price items (per cubic yard) for installing and for removing each dam. Amend 03305-6 to provide measurement and payment for those items.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

22. 22ND COMMENT ON BIDDING SCHEDULE

Take out lump sum Item 0028, "REPLACE SUCTION BASIN DECK". Create a new unit price item, per cubic yard, for construction of the concrete for the new suction basin deck (see our comment 20 above). Change the measurement and payment provisions of 03500-5 accordingly.

23. 23RD COMMENT ON BIDDING SCHEDULE

Take out lump sum Item 0029, "STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK". Section 05501 of the Specifications does not clearly state what that item would cover. *According to the very ambiguous 05501-12.2, it would cover all structural steel and miscellaneous metalwork not expressly paid for under any other item.* Create new unit price items (per pound) for furnishing and placing each classification of structural steel and metal shown on the Drawings. Amend Section 05501 to provide measurement and payment for those items. Let the designers determine the quantities.

24. 24TH COMMENT ON BIDDING SCHEDULE

Take out proposed lump sum Item 0031, "CHAIN LINK FENCE". Create a separate unit price item, per linear foot, for each designated permanent chain link fence height and include the fence height in the description for each such item. (For a designated fence height of 6-feet, the item description would be "PERMANENT 6-FOOT-HIGH CHAIN LINK FENCE".) Create separate bid items, per each, for each size permanent chain link fence gate. Also, create a separate item for the fence for the suction basin deck. Revise the measurement and payment provisions of 02831-7 of the Specifications accordingly.

25. 25TH COMMENT ON BIDDING SCHEDULE

Change the description of present Item 0032 from "VACUUM PUMPS AND ACCESSORIES" to "NEW VACUUM PUMPS AND ACCESSORIES" and modify 15004-16 of the Specifications so that this item only covers installation of the new vacuum pumps and accessories.

**REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch**

26. 26TH COMMENT ON BIDDING SCHEDULE

Create a new item, "REMOVAL OF EXISTING VACUUM PUMPS AND ACCESSORIES", and modify 15004-16 of the Specifications so that this item covers removing the existing vacuum pumps and accessories and hauling them to the Sewerage and Water Board's storage facility.

27. 27TH COMMENT ON BIDDING SCHEDULE

Create a new unit price item, per square foot, for furnishing and installing the precast concrete slab panels. Include the panel thickness in the description for the item. Change 03410-8 of the Specifications to cover measurement and payment for the panels. Do not cover the panels under the item "MODIFY TRASH SCREEN BAY" as per the present 03410-8.

28. 28TH COMMENT ON BIDDING SCHEDULE

Take out lump sum Item 0037, "STEEL SHEET PILE SEEPAGE CUT-OFF WALL". Create two new unit price items, per square foot, one for furnishing steel sheet piles for the cut-off wall and one for driving them. Create an additional unit price item, per linear foot, for cutting off and removing the tops of those sheet piles. (Measurement for that item would be along the wall line.) Amend Section 02145 as necessary to provide measurement and payment for those items.

29. 29TH COMMENT ON BIDDING SCHEDULE

Create a new unit price item, per acre, to cover fertilizing and seeding. Change measurement and payment paragraph 02935-11 of the Specifications accordingly. Let the bid quantity be to the nearest tenth of an acre.

30. 30TH COMMENT ON BIDDING SCHEDULE

Create a new unit price item, per square foot, to cover the waterproof paint (cementitious/acrylic) for the structural concrete. Amend Section 03301 to include measurement and payment provisions for that paint.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

31. 1ST COMMENT ON SPECIFICATIONS SECTION 00800 - SPECIAL CONTRACT REQUIREMENTS

Take out 00800-5.d, which says that the Government has quantity estimates for certain lump sum bid items and that the Contractor can obtain copies of those quantities by contacting the District Engineer. Subsection 00800-5, "PHYSICAL DATA", is based on FAR 52.236-4, and that FAR clause does not require the Government to furnish quantity estimates for lump sum items to the bidders. Let the bidders calculate their own quantities.

32. 2ND COMMENT ON SPECIFICATIONS SECTION 00800 - SPECIAL CONTRACT REQUIREMENTS

Take out the entire 00800-10, "WARRANTY OF CONSTRUCTION (FAR 52.246-21 APR 1984)" and replace it with the more recent "Warranty of Construction (FAR 52.246-21 Mar 1994)".

33. 1ST COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

In 01100-1.2, the anticipated adverse weather schedule is based on a 5-day work week. Subsection 01100-10 allows the Contractor to work 6-days per week.

34. 2ND COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

The second sentence of 01100-1.4 says that if the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph b, above, the Contracting Officer will convert any qualifying delays to calendar days. Change the reference from "paragraph b" to "paragraph 1.2". Subsection 01100-1 does not have such a paragraph b.

35. 3RD COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

Take out the last sentence of 01100-3.7.1, which says that payment for the safety fence will be included in the contract lump sum price bid for "Chain Link Fence". Distribute the cost of the safety fence among the existing bid items. Also, see our comment 24 above.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

36. 4TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

Take out the last sentence of 01100-3.7.2, which says that payment for the security fence will be included in the contract lump sum price bid for "CHAIN LINK FENCE". Distribute the cost of the security fence among the existing bid items (or create a separate bid item covering only the security fence). Also, see our comment 24 above.

37. 5TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

Leave out 01100-3.8, which gives requirements for means of escape for assembly, sleeping, and messing areas on floating plants. The Corps of Engineers Safety Manual, EM-385-1-1, already requires two means of escape for floating plants.

38. 6TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

Leave out 01100-3.9, Emergency Alarms and Signal, including all its subparagraphs. This project will not have any vessels subject to Coast Guard rules and regulations. At most, it could have some sectional barges.

39. 7TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

The last sentence of 01100-10 says that no work will be allowed on Sundays or Government Legal Holidays. Amend the clause by listing all the legal holidays.

40. 8TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

Paragraphs 01100-19.2 and 02413-5.1.2 both require the stockpiling of sheet piles for emergency closures. According to 02413-7.1, payment for installing and removing the emergency sheet piles would be under the "CHANGES" clause. However, **the cost of keeping sheet piles on hand would far exceed the cost of placing and removing them**, and the Contractor would have to pay for keeping them available whether he placed them or not. (The Contractor would either have to buy new sheet piles for this purpose or rent them.)

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

Amend the Specifications and the Bidding Schedule to provide payment for stockpiling the sheet piles. Give the quantity of sheet piles, including minimum lengths, and the shapes that would be acceptable (must they be hot-rolled or can they be cold-formed?).

41. 9TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

Leave out the first sentence of 01100-24.1, which says that the Contractor is to monitor local weather forecasts and schedule his operations in the discharge basin and discharge canal accordingly to minimize the extent of delays and damage to both temporary and permanent construction. Since the Contractor will not know in advance what the weather will be during the Contract period, he must base his bid on anticipated adverse weather delays as per 01100-1. His bid price would not include anything for disruptions for daily weather events.

42. 10TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

According to 01100-24.4, the Government will compensate the Contractor for damages to permanent work resulting from pumping station operations, and according to 01100-5, it would also compensate him if it fails to give him the required 15 minutes advance notice for moving equipment out of the work area. Amend the Specifications to also **compensate him for delays** due to pumping station operations. The Contractor would have the expenses of moving his equipment and standing by during each pumping station operation and then possibly removing water from the work area. His bid price cannot account for those expenses, because prior to submitting his bid, he won't know how many times the pumping station will operate, nor how long it will operate.

The monthly anticipated adverse weather delay schedule in 01100-1.1 could not apply to delays from pumping station operations, because rainfall elsewhere could make pumping necessary even if weather conditions at the job site were suitable. In addition, the schedule in 01100-1.1 is based on all types of adverse weather, including heat and cold, not just rainfall.

To prevent compensating the Contractor for every single delay due to pumping station operations, create a new schedule for **monthly anticipated pumping station operations**. Let the schedule be twofold, one part for the anticipated number of pumping station operations, and the other part for the total anticipated operating time in hours. Let the Government

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

compensate the Contractor whenever pumping station operations exceed either anticipated amount in that schedule. Let the designers consult with S&WB to create the schedule.

43. 11TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

The second sentence of 01100-17.2 says that documentation photographs shall be in color, 3 1/2" x 5" in size minimum and shall have glossy finish. Change that to require digital photographs for documentation.

44. 12TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

According to the second paragraph of 01100-27.2.3, the Contractor is to design the temporary retaining structure. Change that so that the Government designs the structure. See our comment 79 below.

45. 13TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

Paragraph 01100-28.2 says that the Contractor shall complete both connections to the existing sewer force main within a time period not to exceed 24 continuous hours. This requirement is not enforceable because the Specifications do not penalize the Contractor if he doesn't complete the connections on time.

46. 14TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

The first sentence of 01100-31.13 is presently as follows:

Before commencing any work under the contract whether on or adjacent of the rights-of-way of the Railroad companies, the Contractor and applicable subcontractors shall procure and keep in effect during the period of such work, at the Contractor's own cost and expense.

Amend that sentence by telling what the Contractor is to procure and keep in effect.

47. 15TH COMMENT ON SPECIFICATIONS SECTION 01100 - GENERAL PROVISIONS

According to 01100-32.1, the technician monitoring vibrations shall notify and Contractor when readings reach 0.2 inches per second and the

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

Contractor shall record the activity and location causing that reading. According to 01100-32.2, if readings reach 0.25 inches per second or greater, the Contractor shall suspend construction until vibrations are below the acceptable limit of 0.2 inches per second. If the acceptable limit is 0.2 inches per second, then require the Contractor to reduce the vibrations when the readings reach that threshold, rather than allowing vibrations to reach 0.25 inches per second.

48. 1ST COMMENT ON SPECIFICATIONS SECTION 01300 - SUBMITTAL PROCEDURES

The first sentence of 01300-5 says that the Contractor shall submit all items listed on the Submittal Register (ENG Form 4288) or specified in the other sections of these specifications. Amend ENG Form 4288 as necessary to include all submittals required by the Specifications. Do not require the Contractor to search the Specifications for submittals not listed in ENG Form 4288.

49. 2ND COMMENT ON SPECIFICATIONS SECTION 01300 - SUBMITTAL PROCEDURES

Leave out the 4th sentence of 01300-5, which says that submittals shall be made in the respective number of copies and to the respective area office address listed in the paragraph entitled "SITE VISIT ASSISTANCE" in Section 00100. The Specifications do not have a Section 00100 and do not have a paragraph "SITE VISIT ASSISTANCE" in any other section. Paragraph 01100-16, "PRE-BID SITE VISIT" doesn't have any requirements for submittals either.

To be perfectly clear, amend 01300-5 to simply tell where to send submittals. Paragraph 01300-9 already tells how many copies to submit.

50. 3RD COMMENT ON SPECIFICATIONS SECTION 01300 - SUBMITTAL PROCEDURES

The third sentence of 01300-6 is presently as follows:

The Contractor shall complete columns "a," "b," and "r" thru "w" and return 4 completed copies to the Contracting Officer for approval within 14 calendar days after Notice to Proceed for approval.

Change that sentence to the following:

The Contractor shall complete columns "a," "b," and "r" thru "w" and return 4 completed copies to the Contracting Officer for approval within 14 calendar days after Notice to Proceed.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

51. 4TH COMMENT ON SPECIFICATIONS SECTION 01300 - SUBMITTAL PROCEDURES

According to the third sentence of 01300-7, the Government would have a minimum of 30 days to review and approve each submittal, and the Contractor is to indicate that allowed time on the register. Amend 01300-7 to state the maximum time the Government can take to act on each submittal.

52. 5TH COMMENT ON SPECIFICATIONS SECTION 01300 - SUBMITTAL PROCEDURES

The first sentence of 01300-9 says that the Contractor shall submit four (4) copies of all submittals. Does that mean an original plus three **copies**, or an original plus four copies? Change 01300-9 to indicate which is correct.

53. COMMENT ON SPECIFICATIONS SECTION 01352 - ENVIRONMENTAL PROTECTION

In the "POLLUTION PREVENTION PLAN" at the end of Section 01352, check for missing words in the second sentence of paragraph "a", which is as follows:

The work generally consists of providing Hurricane Frontal Protection by constructing a reinforced concrete across the entire width of the London Avenue Outfall Canal.

The sentence doesn't say what type of reinforced concrete structure is to be constructed.

54. COMMENT ON SPECIFICATIONS SECTION 01451 - CONTRACTOR QUALITY CONTROL

The 4th sentence 01451-3.7.1 says that the Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. Amend Section 01451 by listing the approved testing laboratories in the area. The Contractor will need this information to determine laboratory costs for bidding purposes.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

55. COMMENT ON SPECIFICATIONS SECTION 01501 - ROAD CONSTRUCTION

The first sentence of 01501-1, "SCOPE", says that the work required by this section shall generally consist of the construction of a portion of bituminous roadway. Amend 01501 by identifying that roadway.

56. 1ST COMMENT ON SPECIFICATIONS SECTION 02070 - DEMOLITION

The second sentence of 02070-1 says that demolition includes but is not limited to timber decking, steel support I-beams, and a host of other materials. Take out the phrase "but is not limited to" in that sentence. Amend 02070 by specifically listing and describing all items to be demolished and/or removed. Subsection 02070-5 already has a general list, but it lacks details.

57. 2ND COMMENT ON SPECIFICATIONS SECTION 02070 - DEMOLITION

According to 02070-5.5, the Contractor is to remove selected existing timber piles as required. The notes on **Drawing 20** indicate that the existing timber piles are of various lengths (depending on the location) and that the Contractor is to cut all of them off 4-inches below the new stabilization slab of the new structure, except that he is to completely remove any of them in the way of the new foundation piles. Information on Drawings 60 and 61 indicate that the Contractor is to cut holes in existing concrete slabs to remove the tops of timber piles down to 2-feet below the slabs.

Since at bidding time the Contractor won't know which existing piles to remove and which to cut off, a lump sum item for demolition cannot cover that work. Create two separate unit price items, per each, for cutting off the existing piles. One of those items would be for cutting off piles to 4-inches below the new stabilization slab. The other item would be for cutting off piles to 2-feet below the bottom of existing slabs, including cutting holes in those slabs. Let the bid quantity for each item be, say, 90% of the total number of existing timber piles that are to be cut off (according to the Drawings, many of them are to be left in place).

Amend the Specifications to give details on how to remove the existing piles. According to notes on Drawing 20, they vary in length from 30-feet to 75-feet, so a single payment item cannot cover removing them. Create separate sub-divided items for removing piles of each designated length. For each of those sub-divided items, allow a bid quantity of, say, 5 each

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

for each subitem (or let the designers check pile locations on the Drawings and determine the quantities).

To reduce the number of piles that must be removed, allow the Contractor to move any H-pile up to one foot from the location on the Drawings in order to miss an existing timber pile. The designers can determine whether such a slight alignment shift would be structurally sound.

58. 3RD COMMENT ON SPECIFICATIONS SECTION 02070 - DEMOLITION

Take out the last sentence of 02070-7.1, which says that payment for removal of the existing suction basin deck would be included in the Contract price for "REPLACE SUCTION BASIN DECK". Let the "DEMOLITION" item cover removal of the existing suction basin deck, along with all other demolition.

59. 1ST COMMENT ON SPECIFICATIONS SECTION 02081 - REMOVAL AND DISPOSAL OF CANAL SEDIMENT MATERIAL

According to the first sentence of 02081-5, the Contractor would take only one composite sample for testing for all canal sediment material above the existing concrete liner. Change Section 02081 to require one composite sample for each designated quantity of removed material (say one test for every 100 cubic yards, or so). Our comment 12 above says to measure canal sediment material removal by the cubic yard.

60. 2ND COMMENT ON SPECIFICATIONS SECTION 02145 - STEEL SHEET PILE SEEPAGE CUT-OFF WALL

The paragraphs in Section 02145 are not in correct numerical order. Beginning near the middle of page 02145-2, paragraph 2.1 follows directly after paragraph 4.2, starting an entirely new numerical sequence. At the end of the Section on page 02145-3, paragraph 5 follows directly after paragraph 3.6.

61. 3RD COMMENT ON SPECIFICATIONS SECTION 02145 - STEEL SHEET PILE SEEPAGE CUT-OFF WALL

In the first sentence of 02145-3.5 (present paragraph numbering), replace the phrase "seal he holes" with "seal the holes".

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

62. COMMENT ON SPECIFICATIONS SECTION 02172 - TEMPORARY SHEET PILE DAM

Paragraph 02172-2 has six subheadings listing other parts of the Specifications that have details on the temporary sheet pile dam. Add a new subheading listing 01100-25, which also has details on the sheet pile dam.

63. 1ST COMMENT ON SPECIFICATIONS SECTION 02201 - STRUCTURAL EXCAVATION AND BACKFILL

Take out the second sentence of 02201-1, which says that the work required by this section shall consist of the excavation, removal and disposal of all excavated material not expressly designated for removal under any other section. Show the limits of structural excavation and backfill on the Drawings. Do not designate structural excavation as any excavation not covered elsewhere.

64. 2ND COMMENT ON SPECIFICATIONS SECTION 02201 - STRUCTURAL EXCAVATION AND BACKFILL

According to 02201-4.1, gradation for granular material is to be as follows:

<u>U. S. Sieve</u>	<u>Percent Passing (By Weight)</u>
1/2"	100%
No. 10	75 - 100%
No. 200	0-15%

That differs slightly from the gradation in 1003.07 of the *Louisiana Standard Specifications for Roads and Bridges (2000 Edition)*, which is as follows:

<u>U. S. Sieve</u>	<u>Percent Passing</u>
1/2"	100%
No. 10	75 - 100%
No. 200	0-10%

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

65. 3RD COMMENT ON SPECIFICATIONS SECTION 02201 - STRUCTURAL EXCAVATION AND BACKFILL

The second sentence of 02201-5.3 says that the minimum frequency for density testing shall be one density test per lift of fill. Change that to require a testing rate based on a designated number of square feet of fill per lift, say one test per 10,000 square feet of fill per lift or fraction thereof.

66. 4TH COMMENT ON SPECIFICATIONS SECTION 02201 - STRUCTURAL EXCAVATION AND BACKFILL

Take out the present 02201-9, which would pay for structural excavation and backfill as one lump sum item. Amend Section 02201 to provide unit price items for structural excavation and for structural backfill. See our comment 13 above.

67. 1ST COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

Paragraph 02242-1.3.1 is presently as follows:

1.3.1 Dewatering defines the lowering of the ground water below the slopes and bottom of the excavation to ensure dry, firm working conditions and the reduction to safe levels of any hydrostatic uplift pressures in any confined foundation strata and/or aquifers which is necessary to ensure the stability and integrity of the foundation.

Eliminate unnecessary wordiness by reducing that paragraph to the following:

1.3.1 Dewatering is the control of ground water to ensure dry, firm working conditions.

68. 2ND COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

Paragraph 02242-1.3.2 is presently as follows:

1.3.2 Dewatering system defines the machinery, equipment, and appurtenances necessary for and related to the accomplishment of dewatering, and the collection and disposal of all surface water within the protected area.

Change that paragraph to the following:

1.3.2 The dewatering system is the machinery, equipment, and appurtenances for dewatering and for collecting and disposing of all surface water within the protected area.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

69. 3RD COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

Paragraph 02242-1.3.5 is presently as follows:

1.3.5 Rewatering is defined as the controlled process of placing water in the completed structure and/or excavation to its naturally occurring elevation at a specified rate when the construction is completed and the dewatering system is no longer required.

Change that paragraph to the following:

1.3.5 Rewatering is the controlled process of placing water in the structure or excavation to its naturally occurring elevation.

70. 4TH COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

Take out the second sentence of 02242-1.5, which says that the professional engineer (for the dewatering system) shall be present at the Contractor Quality Control preparatory and initial inspections. Such a requirement would be unenforceable.

71. 5TH COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

According to the first sentence of 02242-1.6.2, the Contractor must lower the groundwater to at least 3 feet below all earth slopes and excavation bottoms. Verify the necessity for drawing down the water so low. To prevent over-pumping, which could possibly damage structures in the area, amend Section 02242 by setting minimum elevation limits for lowered groundwater, both directly beneath the excavation and at specified distances from the excavation. The designers can determine the minimum elevations for the groundwater. Require the Contractor to set piezometers at specified distances to check the groundwater elevations.

72. 6TH COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

The second sentence of 02242-1.6.9 says that the Contractor is to take at least two piezometer readings per 24-hour period based on a 7-day week. Taking readings 7-days per week would violate 01100-10, which prohibits work on Sundays and holidays.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

73. 7TH COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

In 02242-1.7, the first sentence requires submittals to be in accordance with Section 01300, and the second sentence requires the Contractor to submit an original and 6 copies of its dewatering design package. The present 01300-9 only requires four copies of all submittals (but see our comment 52 above).

74. 8TH COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

Take out 02242-1.8.3, which says that the Contractor is to lower and maintain the water table in pervious and semi-pervious strata at least 3 feet below the bottom of the excavation, but not more than 6 feet within the confines of the temporary retaining structures or excavated area. Our comment 71 above already says to set minimum elevation limits for lowered groundwater.

75. 9TH COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

The 5th sentence of 02242-3.1 says that if the Contracting Officer directs flooding of the work area, the Contractor will be compensated for damages in accordance with the applicable requirements of the General Provision entitled "DAMAGES TO WORK", and the Contract Clause entitled "CHANGES". If that is the case, then the Contractor would be due compensation each time the pumping station operates on 15 minutes notice as per 01100-24. (Allowing the S&WB to operate the pumping station is tantamount to ordering flooding of the area.)

Note—The title of the present General Provision 2 is "DAMAGE TO WORK", not "DAMAGES TO WORK" as referenced in 02242-3.1.

76. 10TH COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

Amend Section 02242 to explain how the CERTIFICATE OF ANALYSIS (for chemicals) on page 02242-8 relates to the dewatering system. The text for Section 02242 does not require chemical analysis for dewatering.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

77. 11TH COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

Amend Section 02242 to explain how the METHODOLOGY table (for chemical analysis) on page 02242-9 relates to dewatering.

78. 12TH COMMENT ON SPECIFICATIONS SECTION 02242 - DEWATERING

Amend Section 02242 to explain how Monitor Well P-5 on page 02242-10 relates to the overall dewatering system. The text of Section 02242 doesn't say anything about that monitor well.

79. COMMENT ON SPECIFICATIONS SECTION 02252 - TEMPORARY RETAINING STRUCTURES

Section 02252 would require the Contractor to design the temporary retaining structure and to submit that design to the Contracting Officer for approval before beginning work. For bidding purposes, let the Government design the temporary retaining structure. Revise Section 02252 accordingly and show the design on the Drawings.

The Contractor cannot base his bid on his own design for a temporary retaining structure, because he wouldn't know in advance whether the Government would accept that design. (The plans and Specifications for the Pumping Station 6 fronting protection project, DACW29-98-B-0112, had designs for the cofferdams for that project.)

ER 1110-2-8152, "PLANNING AND DESIGN OF TEMPORARY COFFERDAMS AND BRACED EXCAVATIONS", requires that the Government design the cofferdams and braced excavations in the same manner as permanent features. Paragraph 5 of that publication is as follows:

5. Policy

Construction cofferdams on major civil works projects shall be planned, designed, reported, approved, specified, and inspected by the government in the same manner as for permanent project features. Construction cofferdams shall be designed or reviewed by engineers experienced in this area. Use of experienced consultants in this specialized field should be considered for important cofferdam structures. Performance specifications for contractor-furnished dewatering systems can be developed based on the government's design and associated

**REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch**

criteria. For uniformity in bidding, contract plans and specifications will include the major features developed from the approved criteria and design. Alternate contractor-proposed designs will meet the approved government design criteria and will be reviewed and approved by the government. Deviation from this policy will be made only in consultation with and approval by CECW-E.

80. 1ST COMMENT ON SPECIFICATIONS SECTION 02311 - ROUND TIMBER PILES

The second sentence of 02311-5 says that handling of treated piles shall be in accordance with AWWA M-4. That publication is not included in the referenced AWWA Standards in 02311-2.2.

81. 2ND COMMENT ON SPECIFICATIONS SECTION 02311 - ROUND TIMBER PILES

Take out the last sentence of 02311-7.2.2, which says that piles shall be driven to the lengths shown on the drawings. The first sentence of 02311-7.2.2 already says that the piles are to be accurately placed as shown on the Drawings.

82. 3RD COMMENT ON SPECIFICATIONS SECTION 02311 - ROUND TIMBER PILES

In 02311-8, take out the 4th and 5th sentences, which are as follows:

Pulled piles shall be measured for payment on the basis of lengths along the axis of the pile pulled above the cut-off elevation. Redriving of piles will be measured in accordance with the provisions stated hereinabove for originally driving the piles.

Also take out 02311-9.2.1, which is as follows;

9.2.1 Inspection Piles. Each timber pile pulled at the direction of the Contracting Officer for inspection and found to be in good condition, will be paid for at the applicable unit price for driving the pile in its original driven position plus 50 percent of the contract unit price for the length of pile pulled which shall constitute payment for pulling. Payment for a pulled pile shall include backfilling the pile hole if required. Undamaged pulled piles when redriven acceptably will be paid for at 50 percent of the contract unit price for furnishing and driving the measured length of piles redriven, which price and payment shall constitute payment for redriving only. Pulled piles which are damaged through no fault of the Contractor shall be replaced by a new pile which will be paid for at the contract unit price for the length acceptably driven.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

Let the Government issue a "CHANGE" order for each pile pulled for inspection. The Contractor's **bid price could not account for pulling piles for inspection** because at bid time he would not know how many piles the Government would order pulled. The cost of pulling a pile would have nothing to do with the cost for driving it—these would be entirely separate operations using different types equipment for different lengths of time. The Contractor wouldn't necessarily have all equipment for pulling at the site, unless the Government ordered a pile pulled. For timber piles, the Specifications require submittals of descriptions of the driving equipment for approval but do not require submittals for pulling equipment.

In addition, pulling itself could damage a pile not previously damaged by driving. The Specifications limit the amount of hammer energy for driving timber piles to 15,000 foot-pounds (02311-7.1.1) but do not limit the capacity of pulling equipment.

83. 1ST COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

Leave out the second sentence of 02315-7.1, which says that final approval of the proposed hammer and driving system is subject to the satisfactory completion and approval of pile tests. As per our comment 16 above, do not require pile tests for this project.

84. 2ND COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

Take out the second sentence of 02315-5.2, which says that lengths of piles shall be determined as specified in paragraph 7.2.1. As per our comment 16 above, let the Drawings show the pile lengths as determined from pile tests conducted under an advance contract.

85. 3RD COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

Take out 02315-7.2.1, which says that the pile quantities in the bidding schedule are for bidding purposes only and that the Contracting Officer will determine the actual pile lengths from the results of pile load tests. Let the bidding schedule and the Drawings have the actual pile lengths as determined from advance pile tests.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

86. 4TH COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

In the 8th line from the top of 02315-7.2.3, verify the phrase "*length of bounce pressure hose*" in the list of data the Contractor is to furnish.

87. 5TH COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

Leave out the 5th sentence of 02315-7.2.3, which would require permanent and test piles to be driven with hammers of the same model and manufacturer, same energy and efficiency, and using the same driving system. From above, don't require test piles for this project.

88. 6TH COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

Leave out the 3rd, 4th, and 5th sentences of 02315-7.2.5, which are as follows:

The Contracting Officer may require the Contractor to pull certain selected piling after driving for inspection to determine the condition of the pile. Any pile so pulled and found to be damaged to such an extent as, in the opinion of the Contracting Officer, would impair the usefulness in the complete structure, shall be removed from the site of work and the Contractor shall furnish and drive a new pile to replace the damaged pile. Piling pulled and found to be in satisfactory condition as determined by the Contracting Officer shall be redriven.

Let the Government use "CHANGE" orders to direct pulling piles for inspection.

89. 7TH COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

Leave out the 16th, 17th, and 18th sentences of the overly long 02315-7.2.3, which are as follows:

The Contracting Officer may require that any pile be pulled for inspection. Piles pulled at the direction of the Contracting Officer and found to be in suitable condition shall be redriven at a location directed by the Contracting Officer and payment therefore will be made in accordance with paragraph 9.4.1. Piles pulled at the request of the Contracting Officer and found to be damaged shall be replaced by new piles at the Contractor's expense.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

90. 8TH COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

The first sentence of 02315-8.1 is presently as follows:

Permanent piles will be measured for payment for furnishing and delivering by the linear foot of piles required as determined by the Contracting Officer and furnished to the Contractor.

Replace that sentence with the following:

Permanent piles furnished and delivered to the site will be measured for payment by the linear foot.

91. 9TH COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

Paragraph 02315-9.1 is presently as follows:

9.1 Furnishing and Delivering. Payment for furnishing and delivering the required lengths of permanent H-piles will be made at the contract unit price per linear foot for "FURNISH AND DELIVER STEEL H-PILING (HP 14 X 73)", with price and payment constituting full compensation for all costs of furnishing and delivering piles to the work site.

Replace that paragraph with the following:

9.1 Furnishing and Delivering. Payment for furnishing and delivering permanent H-piles to the site will be made at the contract unit price per linear foot for "FURNISH AND DELIVER STEEL H-PILING (HP 14 X 73)".

92. 10TH COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

The first five words of 02315-9.2 are "*Payment for driving permanent piles*". Replace those words with "*Payment for driving permanent H-piles*"

93. 11TH COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

Leave out the entire 02315-9.3, which says that costs of cutting piles and removing the cutoff portions from the site shall be included in the applicable contract unit price for the payment item covered in paragraph 9.1. Paragraph 02315-9.2 already covers cutting off piles at the cutoff elevation.

94. 12TH COMMENT ON SPECIFICATIONS SECTION 02315 - STEEL H-PILING

Take out 02315-9.4.1, which is as follows:

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

9.4.1 Undamaged Piles. Piles pulled at the direction of the Contracting Officer and found to be undamaged will be paid for as follows:

(a) The cost of furnishing and delivering piles will be included in the contract unit price per linear foot for "FURNISH & DELIVER STEEL H-PILING (HP 14 X 73)".

(b) The cost of driving piles will be included in the contract unit price per linear foot for "DRIVE STEEL H-PILING (HP 14 X 73)".

(c) The cost of pulling piles will be paid for at the applicable contract unit price for linear foot for "DRIVE STEEL H-PILING (HP 14 X 73)".

(d) The Contractor will be paid for redriving H-piles at the contract unit price per linear foot for "DRIVE STEEL H-PILING (HP 14 X 73)".

Use a "CHANGE" order for each pile pulled for inspection. The cost per linear foot for pulling piles would not be the same as the cost for driving them. The Contractor could not account for pulling piles in his bid price, because he wouldn't know how many piles the Government would order pulled.

95. COMMENT ON SPECIFICATIONS SECTION 02355 - PILE LOAD TESTS

Leave out the entire Section 02355, "PILE LOAD TESTS". As per numerous comments above, do not require pile load tests for this project.

96. 1ST COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Leave out the first sentence of 02411-8.1, which says that steel for sheet piling shall conform to the requirements of ASTM A 328. Paragraph 02411-8.1.1.2 allows substitute Z-piles conforming to ASTM-A-572, Grade 50.

97. 2ND COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Leave out the second sentence of 02411-8.1, which says that sheet piling shall be of the type and dimensions indicated on the drawings. Paragraph 02411-8.1.1 allows substitute sheet piles of different types than those shown on the Drawings.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

98. 3RD COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

The last sentence of 02411-8.1 says that piling is to have the properties equivalent to those listed in the table that follows. That table requires a nominal web thickness of 0.375 inch for PZ-22 sheet piles. Paragraph 02411-8.1.1 allows a minimum material thickness of only 0.335 inch for the Z-type sheet piling that can substitute for PZ-22's.

99. 4TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

The first sentence of 02411-8.1.1.1 allows substitute Z-piles conforming to **ASTM A 328** at a **maximum overall width of 27 inches**, whereas the first sentence of 02411-8.1.1.2 allows substitute Z-piles conforming to **ASTM-A-572**, Grade 50, at a **maximum overall width of only 26 inches**. Allow a maximum width of 27 inches for both types of steel. SZ21's and SZ22's from Shoreline Steel, which both meet the minimum section modulus and nominal depth requirements, have a nominal width of 26.75 inches.

100. 5TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Take out the 4th sentence of 02411-9.1.1, which is as follows:

Pilings shall be placed plumb with out-of-plumbness not exceeding 1/8 inch per foot of length and true to line.

That sentence is contradictory, first requiring pilings to be plumb and then allowing them to be out-of-plumb. Also, the first sentence of the 4th paragraph of 02411-9.1.2 allows sheet piles to be out of plumb 1/4-inch per foot in the plane of the wall and 1/8-inch per foot perpendicular to the plane of the wall.

101. 6TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Take out the third sentence of the present 02411-11.1, which is as follows:

The square footage will be determined by multiplying the number of piles acceptably driven below the cut-off elevation shown on the drawings times the theoretical driving width of each pile.

Replace that sentence with the following:

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

The square footage will be determined by multiplying the accumulative length of all piles acceptably driven below the cut-off elevation on the drawings times the theoretical driving width of each pile.

102. 7TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Take out 02411-11.3, which says that no measurement will be made for either driving or removing temporary steel sheet piling. As per our comment 9 above, use unit price per square foot for furnishing and placing the temporary sheet piling.

103. 8TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Take out 02411-11.4, which says that permanent sheet piles ordered pulled will be measured for payment by the square foot. The bidding schedule doesn't include any items for pulling sheet piles. Use change orders to cover the costs of permanent sheet piles ordered pulled.

104. 9TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Take out the present 02411-11.7, which says that measurement for tee sections, fabricated corners and other special sections shall be included in the price bid for "STEEL SHEET PILES (TYPE PZ-22)". Measurement is for determining quantities, not for determining unit prices. Insert a new paragraph in Section 02411 saying that the overall payment quantity for "STEEL SHEET PILES (TYPE PZ-22)" will include measured quantities of acceptably installed PZ-22's, tee sections, fabricated corners, and other special sections.

105. 10TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Take out the present first sentence of 02411-12.1, which says that payment for permanent steel sheet piling, acceptably installed and accepted according to the plans and these specifications will be made at the contract unit price per square foot for "STEEL SHEET PILES (TYPE PZ-22)". Insert a new sentence in that paragraph saying that payment for acceptably installed PZ-22's and associated tee sections, fabricated corners, and other special sections will be made at the Contract price per square foot for "STEEL SHEET PILES (TYPE PZ-22)".

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

106. 11TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Take out the present 02411-12.2, which says that payment for temporary sheet piling shall be per the contract lump sum price for "TEMPORARY SHEET PILE DAM". As per our comment 9 above, use unit price per square foot for furnishing and placing temporary sheet piles.

107. 12TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Take out the present 02411-12.3, which says that payment for tee sections, fabricated corners and other special sections acceptably installed and accepted according to the plans and these specifications shall be included in the price bid for "STEEL SHEET PILES (TYPE PZ-22)". Paragraph 02411-12.1, revised as per our comment 105 above would already account for all PZ-22's and associated sections and corners.

108. 13TH COMMENT ON SPECIFICATIONS SECTION 02411 - STEEL SHEET PILING

Leave out the entire 02411-12.4 (including all subparagraphs), which would set predetermined prices for cut-offs and splices not required under the original terms of the contract but which are necessary to construct the sheet pile structures as shown on the Drawings. Anything necessary to construct the project as shown on the Drawings would be required under the original terms of the contract. *The part to leave out includes the incorrectly numbered subparagraph 12.2.4, which is between subparagraphs 12.4.3 and 12.4.5.*

109. COMMENT ON SPECIFICATIONS SECTION 02413 - TEMPORARY FLOOD PROTECTION

Leave out the entire present Section 02413, which would require the Contractor to design a temporary flood protection system and keep on hand the materials and equipment necessary to implement that system, all at no additional cost to the Government. The present Section 02413 only allows payment (under the "CHANGES" clause) if the Contractor has to install the system due to impending high water.

The present 02413 would require the Contractor to stockpile emergency sheet piling but doesn't indicate the type or the quantity. Sheet piles are expensive, whether rented or purchased, and unless the Contractor receives direct payment for them at fair market prices, he is not likely

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

to furnish sheet piles that would be acceptable to the Government. This could jeopardize the public.

Create a new Section 02413 identifying the type, lengths, and quantities of sheet piles to keep on hand for temporary flood protection. Do not allow the Contractor to breach more of the protection system than the required sheet piles can cover. Create a **new unit price bid item** (per square foot) to cover the cost of purchasing and delivering the sheet piles. When the project is completed, let the Government keep the sheet piles for use on future projects. Payment for any closures would still be under the "CHANGES" clause.

110. 1ST COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

According to 02451-5.2 pipe piles are to be 12-inches outside diameter with ½" wall thickness. Verify that. Diameters are normally designated for the insides of pipes, not the outsides.

111. 2ND COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

Take out the second sentence of 02451-7.1.1.1, which says that the size and capacity of the hammer shall be as recommended by the manufacturer for the pile weights and soil formations to be penetrated. The Contractor cannot force a manufacturer to recommend a hammer size, no matter what the Specifications require. On past projects, pile manufacturers have informed us that they would not officially recommend a hammer size because they would be liable if the hammer failed to drive the piles properly. (In 02451-7.1.1.1, 'manufacturer' could mean either the pile manufacturer or the hammer manufacturer.)

112. 3RD COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

In the 8th line from the top of 02451-7.2.2, verify the phrase "*length of bounce pressure hose*" in the list of data the Contractor is to furnish.

113. 4TH COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

The 14th sentence of the extremely long 02451-7.2.2 says that piles damaged or impaired for use during driving shall be pulled and replaced with new piles or shall be cut off and abandoned and new piles driven as

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

directed by the Contracting Officer without additional cost to the Government. Take out the phrase "without additional cost to the Government" at the end of that sentence. Use **change orders** to cover all associated costs due to damaged or impaired piles. Amend Section 02451 to say that if the Contractor is not at fault for the damage, the Government will compensate him for his increased costs for redriving the original piles or for furnishing and driving new piles as directed.

114. 5TH COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

Take out the 15th sentence of 02451-7.2.2, which says that the Contracting Officer may require any pile pulled for inspection. Let the Government issue a "CHANGE" order for each pile pulled for inspection. The bid price cannot account for the pulling piles for inspection, because at bid time, the Contractor won't know how many piles the Government will order pulled.

115. 6TH COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

Take out the 16th sentence of 02451-7.2.2, which says that piles pulled at the direction of the Contracting Officer and found to be in suitable condition shall be redriven at a location directed by the Contracting Officer and payment therefore will be made in accordance with paragraph 9.2. Paragraph 02451-9.2 does not provide payment for pulling piles or for redriving them at other locations.

116. 7TH COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

Take out 3rd sentence of 02451-7.2.5, which would allow the Contracting Officer to require the Contractor to pull certain piles after driving for inspection to determine the condition of the piles. As per numerous cases above, let the Government issue a "CHANGE" order for each pile pulled for inspection.

117. 8TH COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

Take out 02451-9.3.1, which would pay for piles pulled for inspection and found to be okay at 50% of the price for driving the piles. Use change orders to set prices for pulling piles. The Contractor's cost for pulling a pile would likely exceed his cost for driving it.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

118. 9TH COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

The present 02451-9.3.2 is as follows:

Damaged Piles. When a pile is pulled for inspection and found to be damaged due to contractor negligence, no payment will be made for originally furnishing and driving such pile or for the operation of pulling and it shall be replaced by a new pile which will be paid for at the contract unit price for the length acceptably driven.

Since one item will cover furnishing piles and another item will cover driving them, replace that paragraph with the following, renumbering it as necessary:

Damaged Piles. When a pile pulled for inspection is found damaged due to contractor negligence, no payment will be made for furnishing, driving, or pulling that pile, and the Contractor shall replace it with a new pile. Payment for the new pile will be at the contract unit prices for furnishing and for driving piles.

119. 10TH COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

At the end of the last sentence of 02451-9.3.3, replace the phrase "contract unit price" with "contract unit prices".

120. 11TH COMMENT ON SPECIFICATIONS SECTION 02451 - STEEL PIPE PILES

The last sentence of 02451-9.4 says that all costs for filling voids around driven piles will be included in the contract unit price for driving piles covered in Paragraph 9.1. Paragraph 9.2 of this section covers pile driving.

121. COMMENT ON SPECIFICATIONS SECTION 03101 - FORMWORK FOR CONCRETE

The last sentence of 03101-9.2 says that the time for form removal depends on temperature, lift heights and type and amount of cementitious material in the concrete. Amend Section 03101 to give details on how those elements will effect the form removal time.

122. 1ST COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

Paragraph 03301-3.1 lists ACI 117/117R as a referenced publication. Section 03301 does not reference that publication.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

**123. 2ND COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

Paragraph 03301-3.1 lists ACI 214 as a referenced publication. Section 03301 does not reference that publication.

**124. 3RD COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

Paragraph 03301-3.7 lists CID A-A-1555, "*Water Paint, Powder (Cementitious, White and Colors)*" as a referenced publication. That publication is no longer valid. According to the numeric list of canceled commercial item descriptions published by GSA, it was canceled on 14 October 1999.

**125. 4TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

The first sentence of 03301-5.1.3 references ACI 318. That publication is not in the list of referenced ACI publications in 03301-3.1.

**126. 5TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

Take out second sentence of 03301-5.1.3, which says that Concrete work evaluated by structural analysis or by results of a load test shall be corrected in a manner satisfactory to the Contracting Officer. Amend the Specifications to **tell exactly what the Contractor is to do to correct concrete that does not meet strength requirements.** Note that due to the lengthy time for compression testing—28 days after placement normally, or 90 days after placement for concrete with pozzolan—any deficient concrete is likely to be covered by other structures or concrete before anybody knows it's deficient.

**127. 6TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

Paragraph 03301-3.2 lists ASTM C40 as a referenced publication. Section 03301 does not reference that publication.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

128. 7TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

Paragraph 03301-3.2 lists ASTM C87 as a referenced publication. Section 03301 does not reference that publication.

129. 6TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

Paragraph 03301-3.2 lists ASTM C117 as a referenced publication. Section 03301 does not reference that publication.

130. 7TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

Paragraph 03301-3.2 lists ASTM C123 as a referenced publication. Section 03301 does not reference that publication.

131. 8TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

Paragraph 03301-3.2 lists ASTM C131 as a referenced publication. Section 03301 does not reference that publication.

132. 9TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

Paragraph 03301-3.2 lists ASTM C142 as a referenced publication. Section 03301 does not reference that publication.

133. 10TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

Paragraph 03301-3.2 lists ASTM C192 as a referenced publication. Section 03301 does not reference that publication.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

134. 11TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE

Paragraph 03301-3.2 lists ASTM C295 as a referenced publication. Section 03301 does not reference that publication.

135. 12TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE

Paragraph 03301-3.2 lists ASTM C535 as a referenced publication. Section 03301 does not reference that publication.

136. 13TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE

Paragraph 03301-3.2 lists ASTM C666 as a referenced publication. Section 03301 does not reference that publication.

137. 14TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE

The heading for 03301-3.5 is "U.S. Army Corps of Engineers (USACE)", indicating that the acronym for referenced Corps of Engineers publications in Section 03301 is supposed to be "USACE". All of the Corps of Engineers references in the text of Section 03301 have the acronym "CRD-C", not "USACE". Change the heading for 03301-3.5 to "U.S. Army Corps of Engineers CRD-C Standards"

138. 15TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE

The 3rd sentence of 03301-4.1.1 references CRD-C 100. That publication is not in the list of referenced Corps of Engineers publications in 03301-3.5.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

**139. 16TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

According to 03301-4.1.2.1, air-entraining admixtures or other chemical admixtures that have been stored at the site more than 6 months or that have been subjected to freezing will be retested at the expense of the Contractor when directed by the Contracting Officer. Identify the methods required for retesting those materials. The Specifications do not require any initial testing for chemical admixtures when they first arrive at the site. According to 03301-6.2, a certificate of compliance from the manufacturer is all that's necessary (see 03301-6.2.2 and 03301-6.2.3).

**140. 17TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

The first sentence of 03301-7.1.1 references ASTM C 595. That publication is not in the list of referenced ASTM publications in 03301-3.2.

**141. 18TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

The first sentence of 03301-7.6 references CID A-A-1555. That publication is not valid. See our comment 124 above.

**142. 19TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

The second sentence of 03301-7.6 says that the cementitious paint finish shall be a Thoroseal base coat and a Thorocoat top coat. Thoroseal is a cement-based waterproofing coating. Thorocoat is an acrylic waterproof coating, not a cementitious paint coating. Either product can be applied directly to the concrete.

**143. 20TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

In 03301-8.2.1, the table showing required concrete strength is as follows:

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
 by Andy Studdard, Cost Engineering Branch

<u>Compressive Strength (psi)</u>	<u>Structure or Portion of Structure</u>
4,000 @ 28* days	All other concrete
3,000 @ 28* days	6" Thick Concrete Paving
2,500 @ 28* days	Stabilization Slab

For clarity, rearrange that table to the following:

<u>Compressive Strength (psi)</u>	<u>Structure or Portion of Structure</u>
2,500 @ 28* days	Stabilization Slab
3,000 @ 28* days	6" Thick Concrete Paving
4,000 @ 28* days	All other concrete

144. 21ST COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

In 03301-8.2.2, rearrange the table for the maximum water-cement ratio to the following:

<u>Water-Cementitious Ratio, by wt.</u>	<u>Structure or Portion of Structure</u>
0.64	Stabilization Slab
0.55	6" Thick Concrete Pavement
0.44	All other concrete

145. 22ND COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

The first sentence of 03301-8.5.2.1 says that representative samples for all concrete materials proposed for this project and a copy of this section of the contract specifications entitled "CAST-IN-PLACE STRUCTURAL CONCRETE" shall be delivered to the laboratory that performs the concrete proportioning at least 60 days (120 when pozzolan used) before concrete placement is expected to begin. That's too much time. **Allow no more than 30 days advance delivery time whether the Contractor plans to use pozzolan or not.** (If pozzolan really takes so much longer, amend 00800-1 to allow two separate overall required completion times, one for the project with pozzolan and one for the project without pozzolan.)

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
 by Andy Studdard, Cost Engineering Branch

146. 23RD COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

The second sentence of 03301-12.4 says that the concrete placing temperature shall not exceed 90 degrees F. Clarify whether that means (1) not to place concrete when the ambient air temperature is above 90 degrees, or (2) that the temperature of the concrete itself must not exceed 90 degrees.

147. 24TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

In 03301-13.2.1, the list of areas to receive cementitious paint finish is as follows:

<u>Type of Finish</u>	<u>Structure or Portion of Structure</u>
Cementitious Paint Finish	All exposed vertical walls and top surfaces of gate monoliths above Elevation (+/-)1.5; all exposed concrete vertical sides and tops of the east and west side canal walls above Elevation (+/-) 1.5; and all side faces of the force main support caps

That list is confusing—we can't tell whether the term "above Elevation (+/-)1.5" (the first case) applies to the vertical walls and the top surfaces of the gate monoliths or just to the top surfaces of the gate monoliths. Take out that list and create a new table for cementitious painting, showing the horizontal and vertical limits separately. Let that table also show the surface area of cementitious painting (for bidding purposes).

148. 25TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE STRUCTURAL CONCRETE

The first sentence of 03301-16.2.1.1 and the first sentence of 03301-16.2.2.2 both reference CRD-C 112. That publication is not in the list of referenced Corps of Engineers publications in 03301-3.5.

**REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch**

**149. 26TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

The second sentence of 03301-16.2.1.1 and the first sentence of 03301-16.2.2.2 both reference CRD-C 112. That publication is not in the list of referenced Corps of Engineers publications in 03301-3.5.

**150. 27TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

According to the second sentence of 03301-13.2.2, the cementitious paint finish could be applied immediately after the initial 7-day moist curing period. According to the 6th sentence of that same paragraph, structures to be finished must be structurally sound. The Contractor won't know if concrete is structurally sound until the Government performs final compression tests, and that will be at least 28 days after concrete placement. According to product information, Thorocoat is not to be applied until new concrete has cured a minimum of 28 days.

**151. 28TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

The 5th sentence of 03301-13.2.2 says that the cementitious paint finish shall be completed in the same day for any area. Cementitious paint finish cannot be completed in one day—ThoroSeal requires at least 24-hours drying time between coats.

**152. 29TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE**

The 7th sentence of 03301-13.2.2 says that the cementitious paint finish shall consist of dampening the surface ahead of the cementitious paint application with clean water. Verify that. According to the second sentence of 03301-7.6, the cementitious paint finish shall be a ThoroSeal base coat.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

153. 30TH COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE

The 8th sentence of 03301-13.2.2 says that as a base coat, cementitious paint shall be applied at a rate of two pounds per square yard of surface area. The 10th sentence of 03301-13.2.2 says that cementitious paint shall be prepared and applied in accordance with the manufacturer's written recommendations. The manufacturer's literature says to apply a first coat of Thoroseal at a rate of 4.5 square feet per pound and to allow 24 hours before applying a second coat at a rate of 9 square feet per pound.

154. 31ST COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE

The 12th sentence of 03301-13.2.2 says that two coats of acrylic emulsion paint shall be applied over the base coat. Applying one coat of Thoroseal as a base coat and then two coats of acrylic emulsion is not in accordance with the manufacturer's recommendations for Thoroseal. In addition, Section 03301 does not have any material requirements for acrylic emulsion paint. Thorocoat is a 100% acrylic waterproof coating that comes in smooth, fine, or coarse textures. The Specifications do not say which texture to use.

155. 32ND COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE

The first sentence of 03301-16.2.1.2 references ASTM C 70. That publication is not in the list of referenced ASTM publications in 03301-3.2.

156. 33RD COMMENT ON SPECIFICATIONS SECTION 03301 - CAST-IN-PLACE
STRUCTURAL CONCRETE

Take out the entire 03301-17, which would provide only lump sum payment for concrete. Use unit price, per cubic yard, for each classification of concrete. See our comment 20 above for more details.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

157. 1ST COMMENT ON SPECIFICATIONS SECTION 03305 - TEMPORARY CONCRETE DAMS

Revise 03305-1, which would require the Contractor to design, install, maintain, and finally remove two reinforced concrete dams. Require him to install and remove the dams, not to design or maintain them. See our comment 21 above.

158. 2ND COMMENT ON SPECIFICATIONS SECTION 03305 - TEMPORARY CONCRETE DAMS

Take out 03305-2, which would require the Contractor to submit design calculations for the temporary dams. Let the Government design those dams.

159. 3RD COMMENT ON SPECIFICATIONS SECTION 03305 - TEMPORARY CONCRETE DAMS

Take out 03305-4, which would require the Contractor to submit design calculations and layouts for the temporary dams. Put the designs and layout on the bid Drawings.

160. 1ST COMMENT ON SPECIFICATIONS SECTION 03410 - PRECAST CONCRETE SLAB PANELS

Paragraph 03410-3.2 lists *ASTM C 1107-99* as a referenced publication. Section 03410 does not reference that publication.

161. 2ND COMMENT ON SPECIFICATIONS SECTION 03410 - PRECAST CONCRETE SLAB PANELS

To save much time during the Construction phase, leave out 03410-5, 03410-5.1, and 03410-5.2, which would require the Contractor to design the precast slab panels and submit the design details to the Contracting Officer for approval. Revise the Specifications and the Drawings to include designs for those panels. The Government would not save anything by letting the Contractor design permanent features of the work.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

162. 3RD COMMENT ON SPECIFICATIONS SECTION 03410 - PRECAST CONCRETE SLAB PANELS

According to 03410-6.4.2, non-shrink grout is to conform to Section 1018.26 of the LSSRB. Change that to Section 1018.27 of the LSSRB. Section 1018.26 covers mix release agents for asphalt.

163. COMMENT ON SPECIFICATIONS SECTION 03500 - REPLACE SUCTION BASIN DECK

Revise 03500-5 to pay for new suction basin concrete by the cubic yard and to let the "Demolition" item cover removing the existing suction basin. See our comments 20 and 56 above.

164. COMMENT ON SPECIFICATIONS SECTION 03500 - REPLACE SUCTION BASIN DECK

Revise 03500-5 to pay for new suction basin concrete by the cubic yard and to let the "Demolition" item cover removing the existing suction basin.

165. COMMENT ON SPECIFICATIONS SECTION 03501 - MODIFY TRASH SCREEN BAY

According to 03501-5, the lump sum item "MODIFY TRASH SCREEN BAY", would cover removing the existing chain link fence, removing the existing trash screen, preparing the bay for installation of a concrete top, and backfilling the resulting installation. Amend Section 03501 to describe how to do all of that work. In particular, the Contractor would need to know exactly how to prepare the bay for installation of the concrete cap and how to backfill the resulting installation, including the type of backfill material to use. Create a new payment item (cubic yard, truck measure) and measurement and payment provisions for the backfill material

166. 1ST COMMENT ON SPECIFICATIONS SECTION 04051 - MASONRY

Paragraph 04051-6.4 says that all brick shall be laid in a bond matching the existing. Change that sentence to say that brick shall be laid in the bond pattern indicated on the plans (show the pattern on the plans).

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

167. 2ND COMMENT ON SPECIFICATIONS SECTION 04051 - MASONRY

Take out 04051-7, which says that no measurement or payment will be made for masonry work and that payment shall be distributed among the appropriate bid items. No other items are appropriate for masonry. Measure and pay for masonry by the cubic yard as calculated from dimensions shown on the Drawings. Create two separate items, one for building brick and one for glazed brick. Let the designers calculate the quantities and put them in the bid schedule.

168. 1ST COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Paragraph 05501-2.2 lists the AWS Structural Welding Code *D1.1 Rev 1-90* as a referenced publication. That version of the code is outdated. Use *AWS D.1.1 2000*. Verify that the references to *AWS D.1.1* in 05501-4.5, 05501-6.4, 05501-7.1, 05501-7.3, 05501-7.4, 05501-7.5, 05501-7.6.1, and 05501-7.7 all cite the correct section of the 2000 version of that publication.

169. 2ND COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Paragraph 05501-2.3 lists ASTM B429 as a referenced publication. Section 05501 does not reference that publication.

170. 3RD COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The first and second sentences of 05501-4.5 reference *AWS D1.5*. That publication is not in the list of applicable AWS publications in 05501-2.2.

171. 4TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Paragraphs 05501-5.7 and 05501-5.8 both reference "*ASTM 276*". Change the reference to "*ASTM A276*" in both cases.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

172. 5TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Paragraph 05501-5.10 references "ASTM 193". Change that reference to "ASTM A193".

173. 6TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The first sentence of 05501-5.12.1 references Federal Specification FF-B-575. That publication is not in the list of applicable publications in 05501-2.

174. 7TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The first sentence of 05501-5.12.2 references Federal Specification FF-N-836. That publication is not in the list of applicable publications in 05501-2.

175. 8TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The first sentence of 05501-5.12.3 references Federal Specification FF-W-92. That publication is not in the list of applicable publications in 05501-2.

176. 9TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Paragraph 05501-6.1 references the *American Institute of Steel Construction "Code of Standard Practice and Specifications, for Design, Fabrication and Erection of Structural Steel for Buildings"*. That publication is not in the list of applicable publications in 05501-2.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

177. 10TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The second sentence of 05501-6.4 references AWS D1.5. That publication is not in the list of referenced AWS publications in 05501-2.2.

178. 11TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Paragraph 05501-6.5 references the "AA Specifications for Aluminum Structures". Those specifications are not in the list of applicable publications in 05501-2.

179. 12TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Paragraph 05501-7.6.2 allows the Government to require the Contractor to remove coupons from the completed work and test them for soundness. According to the last sentence of 05501-7.6.2, the expense for removing and testing coupons and repairing the cut area shall be assigned to the Government or the Contractor in accordance with the "Inspection and Acceptance" paragraph of the GENERAL PROVISIONS of the contract. The General Provisions (Section 01100) do not have an "Inspection and Acceptance" paragraph. Amend Section 05501 to clearly state that the **Government will pay** all costs if the **coupons pass** the tests and the **Contractor will pay** if they **fail** the tests.

180. 13TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The second sentence of 05501-7.4 references the "ASME Boiler and Pressure Vessel Code". That code is not in the list of applicable publications in 05501-2.

181. 14TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The last sentence of 05501-8.1 says that installation of high strength bolts shall conform to the applicable provisions of the RCRBSJ

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

Specification for Structural Joints using ASTM A 325. The RCRBSJ specification is not in the list of applicable publications in 05501-2.

182. 15TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The 4th sentence of 05501-8.2.2 references ANSI B4.1. That publication is not in the list of applicable publications in 05501-2.

183. 16TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The last sentence of 05501-8.2.2 says that fitted bolts shall be fitted in reamed holes by selective assembly to provide an LN-2 fit. Amend the Specifications to include a description of an LN-2 fit, or cite a publication that describes the fit.

184. 17TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The first sentence of 05501-8.3 references the "AA Specifications for Aluminum Structures". Those specifications are not in the list of applicable publications in 05501-2. Also, see our comment 178 above.

185. 18TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

The second sentence of 05501-10.1.2 says that coatings two ounces or heavier shall be re-galvanized with a suitable low melting zinc base alloy similar to the recommendation of the American Hot-Dip Galvanizer's Association. Identify the publication that has the recommendations of the American Hot-Dip Galvanizer's Association and list it in 05501-2.

186. 19TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Paragraph 05501-11.1 references the *American Institute of Steel Construction "Code of Standard Practice and Specifications, for Design, Fabrication and Erection of Structural Steel for Buildings"*. That

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

publication is not in the list of applicable publications in 05501-2. Also, see our comment 176 above.

187. 20TH COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Take out 05501-12.1, which says that payment for structural steel, grid reinforced decking and miscellaneous metalwork to replace the suction basin deck will be made at the contract lump sum price for "REPLACE SUCTION BASIN DECK". Create separate unit price items to cover the work (per pound for structural steel or aluminum and per square foot for grid reinforced decking). Amend Section 05501 to include measurement and payment provisions for those items.

188. 21ST COMMENT ON SPECIFICATIONS SECTION 05501-STRUCTURAL STEEL AND MISCELLANEOUS METAL WORK

Take out 05501-12.2, which says that payment for all other structural steel and miscellaneous metalwork required to complete this item not expressly paid for under any other item will be made at the contract lump sum price for "Structural Steel and Miscellaneous Metalwork". See our comment 23 above.

189. 1ST COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

Paragraph 09940-3.1 lists as an applicable publication the *ACGIH-02 1991-1992 "Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environmental and Biological Exposure Indices"*. Verify whether that very old publication is still valid. If it's not, take out the references to it in the last two sentences of 09940-6.1.

190. 2ND COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

Paragraph 09940-3.1 also lists as an applicable publication the *"ACGIH-03 Guidelines to the Selection of Chemical Protective Clothing, Volumes I and II"*. Verify whether that publication is valid. If it's not, take out the references to it in the last sentence of 09940-6.3.2.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

191. 3RD COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

Paragraph 09940-3.2 lists as an applicable publication the ANSI Standard Z87.1-79, "*Occupational and Educational Eye and Face Protection*". That is not a current ANSI publication.

192. 4TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

Paragraph 09940-3.2 lists as an applicable publication the NIOSH Publication Number 84-100, "*NIOSH Manual of Analytical Methods*". That publication came out in 1984 and is no longer valid. Since then, NIOSH has had numerous publications with the same title but different numbers. The latest version is Number 98-119

193. 5TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

Paragraph 09940-3.6 lists as an applicable publication the ANSI Standard Z358.1-81, "*Emergency Eyewash and Shower Equipment*". That is not a current ANSI publication.

194. 6TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

In the first sentence of 09940-6.2.4, take out the reference to *ANSI Standard Z87.1*, which is not a current publications. See our **comment 191** above.

195. 7TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

In the last sentence of 09940-6.4.2, take our the reference to *ANSI Standard Z 358.1*, which is not a current publications. See our **comment 193** above.

196. 8TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

The 4th sentence of 09940-6.1.8 says that the laboratory shall be accredited by American Industrial Hygiene Association (AIHA) as described in paragraph 6.1.8. The reference to paragraph 6.1.8 is incorrect, because that sentence is part of that same paragraph. In addition, no

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

other paragraph in Section 09940 describes how the AIHA is to accredit laboratories, so a correct reference is not possible.

197. 9TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

Paragraph 09940-6.1.9 references *paragraph 6.7.2*. Section 09940 does not have that referenced paragraph.

198. 10TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

The next-to-last sentence of 09940-6.1.10 says that the Contractor's worker hazard communication program will describe procedures on how the Government's on-site representative will be informed of any chemical product containers furnished by the Government that are improperly labeled. Take out that requirement, since the Contractor would have no control over how the Government informs its representative of improperly labeled containers.

199. 11TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

The 4th sentences of 09940-6.2.4 references *paragraph 6.1.8.6.3*. Section 09940 does not have that referenced paragraph.

200. 12TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

The first sentence of 09940-10 references the "*Louisiana Standard Specifications for Roads and Bridges, 1992 Edition*". Change that reference to the 2000 edition.

201. 13TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

The last sentence of 09940-11.1 says that primer shall be TNE MEC 90-97 TNE MEC-ZINC COAT or approved equal. Amend the Specifications to tell what properties the substitute paint must equal to be approved.

**REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch**

202. 14TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

According to the second sentence of 09940-12, the exterior coating for the steel pipe piles shall extend from the top of the pile to the discharge canal bottom. Most likely, the pipe pile supplier will have the piles painted before delivering them to the site. To keep from confusing the painters (which has happened on some recent projects) specify the length of each pile to paint in feet.

203. 15TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

For the two-coat epoxy, 09940-13(1) requires a prime coat of Tnemec Hi-Build Epoxoline Primer-Red Series 66-1211 or approved equal. Amend the Specifications to tell what properties the substitute paint must equal to be approved.

204. 16TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

For the two-coat epoxy, 09940-13(1) requires a finish coat of Tnemec Hi-Build Epoxoline Series 66 or approved equal. Amend the Specifications to tell what properties the substitute paint must equal to be approved.

205. 17TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

Both sentences of 09940-14 reference United States Military Specification MIL-P-735. That publication is not in the list of applicable publications in 09940-3.

206. 18TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

The first sentence of 09940-15 says that all machined ferrous surfaces of the discharge pipes shall be sealed using Permatex or an approved equal. Amend the Specifications to tell what properties the substitute sealant must equal to be approved.

207. 19TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

According to 09940-16.2, the Contractor must provide set mark pipe markers of style number B7 as manufactured by Seton Identification Products or an

**REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch**

approved equal. Identify the properties the substitute markers must equal to be approved.

208. 20TH COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

Paragraph 09940-17 covers cleaning and preparation of surfaces to be painted, and 09940-17.1 gives requirements for ferrous surfaces. Amend 09940-17 to also give cleaning and preparation requirements for aluminum surfaces which are to be painted. Note that 09940-14 requires one coat of zinc chromate primer for aluminum surfaces placed in contact with steel. Also, amend 09940 to address the painting requirements for any other aluminum surfaces. If no other aluminum surfaces are to be painted, let the Specifications state so.

209. 21ST COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

The 10th sentence of 09940-17.1 says that all abrasives used in sandblasting operations shall contain less than 1% silica. That's impossible, because sand is silica.

210. 22ND COMMENT ON SPECIFICATIONS SECTION 09940 - PAINTING

The next-to-last sentence of 09940-16 references "ANSI A13.1-1981". That publication is not in the list of applicable ANSI publications in 09940-3.2.

211. 1ST COMMENT ON SPECIFICATIONS SECTION 11285 - SLUICE GATES, BUTTERFLY GATES, OPERATORS AND FLOOR STANDS

The list of applicable AGMA publications in 11285-3.2 does not include the title of the listed AGMA publication 420.04.

212. 2ND COMMENT ON SPECIFICATIONS SECTION 11285 - SLUICE GATES, BUTTERFLY GATES, OPERATORS AND FLOOR STANDS

The list of applicable AGMA publications in 11285-3.2 does not include "AGMA218/2001" and "AGMA 440/6034", both as referenced in 11285-10.1.1 and 11285-10.2.1.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

213. 3RD COMMENT ON SPECIFICATIONS SECTION 11285 - SLUICE GATES, BUTTERFLY GATES, OPERATORS AND FLOOR STANDS

The second sentence of 11285-10.1.1 says that actuators for sluice gates shall meet the latest revision of the applicable AWWA specification. Paragraph 11285-3, which lists applicable publications, does not include any AWWA specifications

214. 4TH COMMENT ON SPECIFICATIONS SECTION 11285 - SLUICE GATES, BUTTERFLY GATES, OPERATORS AND FLOOR STANDS

The second sentence of 11285-10.1.1 says that actuators for temporary butterfly gates shall meet the latest revision of the applicable AWWA specification. Paragraph 11285-3 does not list any AWWA specifications as applicable publications.

215. 5TH COMMENT ON SPECIFICATIONS SECTION 11285 - SLUICE GATES, BUTTERFLY GATES, OPERATORS AND FLOOR STANDS

The next-to-last sentence of 11285-13 says that lubricants shall be as recommended by the floor stand manufacturer and shall be submitted by manufacturer's name and number as part of the shop drawings. Since other parts also require lubricants, amend Section 11285 to say that all lubricants shall be as recommended by the respective manufacturer of the machinery or equipment. (Paragraph 11285-9.1.4 requires lubricants for the stem covers, 11285-9.2.3 requires lubricants for the shaft bearing housings for the gate frames, and 11285-10.1.2 requires lubrication for the sluice gate motors, among several others.)

216. 6TH COMMENT ON SPECIFICATIONS SECTION 11285 - SLUICE GATES, BUTTERFLY GATES, OPERATORS AND FLOOR STANDS

The next-to-last sentence of 11285-15.2 references *Mil. Spec. "MIL-C-16173"*. That Specification is not in the list of applicable publications in 11285-3.

217. COMMENT ON SPECIFICATIONS SECTION 11286 - HINGED CREST GATES

We have no comments on Section 11286, because the designers informed everyone at the plan-in-hand visit that the final design will not include crest gates.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

218. 1ST COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

In the list of applicable AWWA publications in 15002-3.1, verify the designation "C-205-00" for the specification "Cement Mortar Protective Lining and Coating for Steel Water Pipe - 4 Inches and Larger - Shop Applied". The AWWA's website designates that specification as "C-205-95".

219. 2ND COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

Paragraph 15002-6.2 includes subheadings that are supposed to contain supplementary details required under A.W.W.A. C200, Section IIID. Check for missing details in most, but not all, of those subheadings. For example, 15002-6.2(1) has the words "Standard Used: AWWA C200", which is okay, because it identifies the type of information required (a Standard) and then gives that information (AWWA C200). However, 15002-6.2(2) and 15002-6.2(5) both have only the words "See above", and are not okay, because they don't say what information to look for above. Likewise, 15002-6.2(6), 15002-6.2(7), 15002-6.2(11), and 15002-6.2(19), all have only the words "Not required", and are not okay, because they don't say what information is not required. (No list is really necessary for information not required.)

Amend 15002-6.2 to tell what type of information is required in the following: 15002-6.2(2), 15002-6.2(5), 15002-6.2(6), 15002-6.2(7), 15002-6.2(8), 15002-6.2(9), 15002-6.2(10), 15002-6.2(11), 15002-6.2(13), 15002-6.2(14), 15002-6.2(15), 15002-6.2(17), and 15002-6.2(19).

220. 3RD COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

The second sentence of 15002-6.2(20) says that in lieu of hydrostatically testing fittings and specials to 150 psi, the manufacturer may use other testing methods, such as dye-check, magnetic-particle, radiograph, ultrasonic or equivalent. Amend Section 15002 to tell how to determine if fittings and specials are acceptable based on each of those other forms of testing

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

221. 4TH COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

According to 15002-11.1, the Contractor would receive no additional payment for installing steel manholes at locations shown on the Drawings. Change Section 15002 to provide measurement (per each) and payment for installing steel manholes in the pipes. Create a separate pay item (in the Bidding Schedule) for each size manhole. Bidders could overlook the manholes if they aren't in the bidding schedule.

222. 5TH COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

Paragraph 15002-13 would require the Contractor to drill a 2 1/2" diameter holes at various locations and furnish and install tapped plate over these holes. Amend Section 15002 to give tell how many such holes are required. Add a unit price payment item (per each) to cover the cost of those holes and amend Section 15002 to include measurement and payment provisions for them.

223. 6TH COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

According to 15002-14, the Contractor would have to furnish and install dished heads for testing purposes and include the cost of them in the lump sum prices for the respective water pipes. Amend Section 15002 to give material requirements for dished heads and to tell how to install and remove them. Also tell how many dished heads of each size are required. Create new payment items for each size dished head so that the Contractors don't overlook them when preparing bids.

224. 7TH COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

For all joints, the first two sentences of 15002-17 would require a prime coat of TNE MEC 90-97 TNE MEC-ZINC Coating or approved equal plus a coat of coal tar epoxy. The last sentence of 15002-17 says that preparation shall be according to the Manufacturer's recommendations. Clarify whether that is to be the pipe manufacturer or the paint manufacturer.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

225. 8TH COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

The last sentence of 15002-20 is presently as follows:

He shall provide all the equipment and all the labor required for filling and emptying the pipe, measuring the pressure and leakage, the Sewerage and Water Board will provide the water free of charge.

Replace that sentence with the following:

The Contractor shall provide all the equipment and labor necessary for filling and emptying the pipe and measuring the pressure and leakage. The Sewerage and Water Board will provide the water free of charge.

226. 9TH COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

The last sentence of 15002-20.1 says that during the 24-hour pipe-testing period, the total leakage shall not exceed 50 gallons per inch of internal diameter for each mile of pipe. Since all pipe lengths on this project will be only a small fraction of a mile, express the leakage allowed in terms of gallons per inch of internal diameter **per foot of pipe.**

227. 10TH COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

Leave out 15002-2.3, which would require the Contractor at his own expense to repair all leaks discovered during the leakage tests or at any time up to 45 days after final acceptance of the entire project, even if the leakage is within the permissible limits allowed by the tests. If no leaking whatsoever is to be allowed, then revise 15002-2.1 accordingly. Otherwise, use a change order to cover the costs of repairing leaks that are within permissible limits.

228. 11TH COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

Take out the present 15002-23, which would provide for no measurement for the various water pipes. Measure pipes by the linear foot. See our comments 1 through 6 above.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

229. 12TH COMMENT ON SPECIFICATIONS SECTION 15002 - INSTALLATION OF WELDED STEEL PIPE

Take out the present 15002-24, which would provide for lump sum payment for the various pipes and related materials. Use unit price items as per our comments 1 through 6 above and as per our previous comments on this section of the Specifications.

230. COMMENT ON SPECIFICATIONS SECTION 15005 - TEMPORARY DRY WEATHER FLOW PIPE

This Section would require the Contractor to design, furnish, install, and remove a dry weather flow pipe to divert canal flow around the work area. Take out the requirement for the Contractor to design that pipe. **Amend the Specifications and the Drawings to include the design.** The present Specifications don't give a minimum required capacity for the dry weather flow pipe and thus don't have enough information for designing it.

231. 1ST COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

Amend Section 16001 to include a list of applicable publications. The Section references publications from several sources, including ASTM, ANSI, NEC, NEMA, UL, ICEA, AEIC, and Federal Specifications.

232. 2ND COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

Paragraph 16001-1.1.1 says to change Transformer T3, Primary Continuous Overload trip setting to 40 amp, but 16001-1.1.2 says to remove existing transformer T3 and replace it with a 300 KVA dry type. Verify that the Contractor is to change the trip setting for T3 and also to remove that transformer.

233. 3RD COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

The second sentence of 16001-1.1.1 says to return vacuum pump motor starters as specified in 1.1 (b) above. Section 16001 does not have a subparagraph 1.1 (b) above subparagraph 1.1.1.

**REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch**

234. 4TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

According to 16001-12.6, concrete encasement for conduits is to extend a minimum of 6" above grade. Give the meaning of the term "6" above grade".

235. 5TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

Paragraph 16001-12.7 would require the Contractor to use a single manufacturer (Carlton) for PVC conduit and plastic spacers. Other manufacturers also produce those type materials.

236. 6TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

Amend 16001-12.13 to give the quantities (per each) for each size manhole.

237. 7TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

The second sentence of 16001-13.6 says that field threads for conduits shall be painted with cold-galv. paint for galv. steel conduit. Amend 16001-13.6 to give material requirements for the paint, and replace the abbreviation "galv." with the word "galvanized" in each case.

238. 8TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

The last sentence of 16001-13.8 says that all cuts and drilled holes shall be treated with cold-galvo compound. Give the material requirements or a brand name for that compound and tell how to apply it.

239. 9TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

Check for missing words in the first sentence of 16001-16.2, which is as follows:

Junction or pull boxes over 150 cubic inches in size construction same as cabinets.

REVIEW OF PLANS AND SPECIFICATIONS
LAKE PONTCHARTRAIN LOUISIANA AND VICINITY, HIGH LEVEL PLAN
LONDON AVENUE OUTFALL CANAL, PARALLEL PROTECTION
FRONTING PROTECTION AT PUMPING STATION NO. 3
ORLEANS PARISH, LOUISIANA
by Andy Studdard, Cost Engineering Branch

240. 10TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

The 3rd sentence of 16001-16.2 says that all junction boxes shall be coated inside and out to prevent oxidation. Amend Section 16001 to tell what type coating material to use and how to apply it.

241. 11TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

The last sentence of 16001-18.1.1 says that submittals shall show compliance with all guaranteed test values. Amend 16001-18.1.1 to fully explain the term "*guaranteed test values*".

242. 12TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

According to 16001-24.5, motor frames shall be grounded through the rigid conduit system and a separate grounding conductor through flexible "Sealtitell" conduit. Verify the product "Sealtitell" conduit. We couldn't find it on the internet.

243. 13TH COMMENT ON SPECIFICATIONSECTION 16001 - ELECTRICAL WORK

Take out 16001-33, which would provide payment for all electrical work under a single lump sum item. Create separate unit price items (per each) for furnishing and installing receptacles, lights, motors, consoles, transformers, and the like. Create additional unit price items (per foot) for furnishing and installing wires, cables, and conduits of each size. Also, create unit price items (per each) for moving existing facilities to the S&WB yard.

244. COMMENT ON DRAWING 57

Drawing 57 is too light overall to clearly show the work. Improve the contrast on that Drawing by using much darker print for the permanent piles and the piles that are to be removed.

245. COMMENT ON DRAWING 80

Drawing 80 is also too light to clearly show the work. Show more contrast between the new work and the existing conditions.