

DISPUTE REVIEW BOARD DECISION

March 4, 2000

Mr. Frank E. Proch
Project Engineer
AIM Engineering & Surveying, Inc.
20209 Cortez Boulevard
Brooksville, Florida 34601

Mr. Keith Driggers
Project Manager
Smith & Company, Inc.
18985 Cortez Boulevard
Brooksville, Florida 34601

RE: F.P.ID 254805-1-52-01, 254805-1-56-01, 254805-1-56-02 254816-1-56-01, 254816-1-56-02, 254816-1-52-01

Contract No: 20358 SR 50 and SR 45 (US 41) Hernando County, Florida

SUBJECT: Dispute Review Board Issue No. 1

Sanitary Sewer Bypass Pumping Dispute

Dear Sirs:

On February 29, 2000, at the request of the contractor, Smith & Company, Inc. (SCI) and the Florida Department of Transportation (FDOT), the Dispute Review Board (DRB) for this project held a hearing to determine if bypass pumping was included in the contract documents, or whether SCI was entitled to extra compensation for this item of work.

Written documentation was furnished the Board by SCI and FDOT prior to the hearing, with oral presentations being made by both parties during the hearing.

The Board was requested to determine "Entitlement" for this issue. Should entitlement in favor of the contractor be determined, the parties would negotiate time and value.

ISSUE:

SCI:

"Bypass pumping during construction of sanitary sewers is not clearly defined nor where payment is to be made."

FDOT:

"Payment for bypass pumping during construction of sanitary sewers should have been included in bid prices."

HISTORY: --

This contract includes the combining of two (2) separate projects, SR 50 and US 41, each having separate plans and technical special provisions. Bids were received on October 28, 1998 and awarded to SCI June 22, 1999. The contract was executed July 12, 1999.

Prior to the hearing, work involving bypass pumping had not been accomplished. During construction of roadway items, conflicts with the sanitary sewer design were discovered, resulting in a redesign of parts of the sanitary sewer system. To expedite construction, the City of Brooksville assumed the position of Designer of Record, replacing Coastal Design Consulting, Inc., the firm retained by Brooksville to design utility relocations on both of the original projects.

POSITIONS:

SCI:

"The Technical Special Provisions generally require a bypass system to preserve all existing sanitary sewer service, but make no provision for either the scope or payment of said bypass.

The plans indicate the need for a bypass system for an existing force main on SR 50, but remain silent in regards to the proposed gravity lines on both SR 50 an 45.

The plans give no indication as to method of payment for said bypass work. Smith & Company, Inc. believes that because of the omissions of the Technical Special Provisions and Plans in regards to bypass pumping for Sanitary Sewer that additional compensation is due for any bypass pumping and any other waste water diversion system required for construction."

FDOT:

In a memo of February 7, 2000 to AIM Engineering (FDOT), the City of Brooksville summarizes its position in the closing paragraph.

"In summary we feel that there was adequate information available for the Contractor to have included the necessary bypass pumping in either the unit cost price for installing new gravity sewer or in the unit cost price for the removal of the relevant existing gravity sewer."

FINDINGS:

The Technical Special Provisions for JPA Project No. 08002-6502 for SR 50 contain, in part, the following:

SECTION 1

Item 1.05.3 Pay item 1500-900-25: Remove and Dispose of Sewer Pipe (16" PVC, 12" PVC, 8" PVC, 6" PVC, 4" PVC, 2" PVC)

b) The work includes removal of all pavement, base or other obstruction, shoring, <u>bypass</u> <u>pumping</u>, disposal of surplus excavated materials, protecting of adjacent facilities and transportation and disposal of removed materials.

SECTION 1

Item 1.08.5 Pay item 1513-760-24 Adjust and Modify 16" PVC Sewer Pipe. (Force Main)
b) The work includes removal of all pavement, base or other obstruction, excavating, back filling, selected fill material, dewatering, bracing, sheeting, shoring, bypass pumping, disposal of surplus excavated materials, protecting of adjacent facilities and transportation and disposal of removed materials.

SECTION 3 (SANITARY SEWER)

Item 3.04.1 Maintaining Existing Service: It shall be the Contractors responsibility to preserve all existing sanitary sewer services without interruption during the repair or reconstruction of sanitary sewers. To achieve this end, the contractor shall be required to bypass waste water flow around the working area to an acceptable point of discharge.

Item 3.04.1.1 Pumping: The contractor shall construct a temporary watertight bulkhead at the first upstream manhole from the construction site to provide a pump wet well. The sewage shall be pumped from the temporary wet well around the construction to a downstream manhole. The bypass shall be watertight. The capacity of the pump and bypass system shall be approved by the Engineer. Operation of the bypass shall be 24 hours a day until the sewer is back in service.

The Technical Special Provisions for JPA Project No. 08010-6526 for SR 45 (US 41) contains, in part, the following:

SECTION 1:

Item 1.05. Pay Item 1500-900-25: Remove and Dispose of Sewer Pipe (18" PVC, 15" PVC, 8" PVC, 6" PVC)

b) The work includes removal of all pavement, base, or other obstruction, excavating, back filling, selected fill material, dewatering, bracing, sheeting, shoring, bypass pumping, disposal of surplus excavated materials protecting of adjacent facilities and transportation and disposal of removed materials.

Item 1.05.3 Pay Items 1513-160-316, 1513-160-318, 1513-160-320, and 1513-160-325: Furnish and Install 6", 8", 10", and 18" Class 150 (C-900) PVC Sewer Pipe (Gravity). This item is mute concerning bypass pumping.

Item 1.05.24 Pay Item 1831-9002: Remove and Dispose of Precast Sanitary Manhole:
b) The work includes all excavation, backfilling, select material, dewatering (if necessary) removal of pavement, sidewalk or other obstructions necessary for the erection of work, protection of existing facilities and transportation and legal disposal of concrete and materials removed.

SECTION 3 (SANITARY SEWER)

Item 3.04.1 Maintaining Existing Service: It shall be the Contractor's responsibility to preserve all existing sanitary sewer services without interruption during the repair or reconstruction of sanitary sewers. To achieve this end, the contractor shall be required to bypass wastewater flow around the working area to an acceptable point of discharge.

Item 3.04.1.1 Pumping: The contractor shall construct a temporary watertight bulkhead at the first upstream manhole from the construction site to provide a pump wet well. The sewage shall be pumped from the temporary wet well around the construction to a downstream manhole. The bypass shall be watertight. The capacity of the pump and bypass system shall be approved by the engineer. Operation of the bypass shall be 24 hours a day until the sewer is back in service.

- The Joint Project Agreement (JPA) plans have been revised in many areas of the project since construction began. Neither the bidding or revised plans adequately identified the quantity or location of service laterals.
- The special provisions contain two separate Technical Special Provisions. One for SR 50, and one for SR 45 (US 41).

The Board Finds:

• The specifications are clear that bypass pumping is required to maintain service while constructing the sanitary sewer.

- There are no pay items included in this contract for bypass pumping.
- The TCP specifications clearly identify the bypass pumping as a part of accomplishing the construction. Item 1.05.3, Item 1.08.5, Item 3.04.1, Item 3.04.1.1, Item 1.05.1(b), Item 3.04.1, Item 3.04.1.1.
- Although there was no indication in the plans or specifications as to the amount of flow (to be bypassed) that should be anticipated, it is industry practice to lift the covers of manholes and observe the percentage of full pipe flow and velocity. The City of Brooksville indicated at the hearing that one 8" trash pump should be sufficient to handle the flow that would be encountered.
- The Board feels that this is a reasonable assumption that should have been anticipated by the Contractor.
- There is some concern that the pipe may have sufficient infiltration during periods of rainfall so as to overwhelm even the Contractor's best assumption.
- The specification nor plans identify the service laterals by location or quantity.

• Therefore the Board Recommends:

Based upon information presented at the hearing and reviewing contract documents, the Board finds the specifications alert the contractor that bypass pumping cost, if required, will be included in various contract line items.

The Board finds that in the event that one 8" trash pump is insufficient to control the flow encountered that the Contractor be compensated for any additional measures required to bypass the flow.

Since the plans do not specify the location or size of laterals, and since it is impossible to determine the flow that might be encountered in these laterals, the Contractor should be compensated for any bypass pumping or temporary storage that may be required for those laterals not shown on the plans.

Submitted by the Dispute Review Board - Sanitary Sewer Bypass Pumping State Project No. 08002-3501, etc.

E.K. Richardson, Chairman, John H. Duke, Member, Lester C. Furney, Jr., Member

SIGNED FOR AND WITH THE CONCURRENCE OF ALL MEMBERS:

E.K. Richardson, Chairman