FULTON COUNTY PURCHASING DEPARTMENT

Winner 2000 - 2005 Achievement of Excellence in Procurement Award
National Association of Purchasing Management

Jerome Noble, Director

FULTON COUNTY

November 30, 2005

RE: **RFP#05RFP47781K-JD**
Design Build Services for Deep Creep Inflow and Infiltration Reduction Phase I-Project S108

Dear Proposers:

Attached is one (1) copy of Addendum 2, hereby made a part of the above referenced Request for Proposal (RFP).

Except as provided herein, all terms and conditions in the RFP referenced above remain unchanged and in full force and effect.

Sincerely,

Joyce Daniel

Joyce Daniel
Assistant Purchasing Agent

This Addendum forms a part of the contract documents and **modifies** the original RFP documents as noted below:

Changes to #05RFP47781J-JD:

1. Bid Schedule A: Proposer shall provide a detailed breakdown costs in a format showing each resource and level of resource that is to be provided in performing Schedule A tasks using a unit measure, such as per Linear Foot, Vertical Foot, Hour, etc., that may apply to each. The fee proposal shall be based on the scope of work described herein and shall not be qualified or subject to exceptions. Smoke tests, dye tests, flow monitoring, isolation flow monitoring, manhole assessment, and other field investigation work shall be priced by unit prices. The unit prices shall include all labor, material, equipment, services and Other Direct Costs as may be required to plan and perform the field work complete and analyze the data resulting from the field work. As such, the Proposer shall complete the attached Revised Cost Schedule and shall submit with the cost proposal.

2. Pursuant to Schedule A costs on Page 16, the markup allowed by the Design/Builder has changed for work performed under Schedule A from 7% to 5%.

3. Bid Schedule B: The unit costs shall include all costs to furnish all overhead, mobilization, labor, materials, services and equipment to accomplish repairs and construction accordingly.

4. Bid Schedule B, Item 9: All flow bypass and diversion pumping system SETUP line items shall also include the system removal scope.

5. Bid Schedule C: The unit costs shall include all costs to furnish all overhead, mobilization, labor, materials, services and equipment to install flow meters.

6. The DESIGN/BUILDER shall furnish and maintain a field office trailer measuring approximately 30 feet by 10 feet and equipped with the following for the duration of the project field work:

- Two desks and 2 chairs at each desk.
- One conference table with 6 chairs.
- One legal size, fire-resistant, four-drawer filing cabinet.
- One printer/fax/flatbed copier (all-in-one) HP model or equivalent
- Utilities, including power, HVAC, two phone lines, drinking water, toilet, and cable or DSL modem.

In lieu of a trailer, the Design/Builder may lease office space with the same

requirements listed above. The cost of this field office shall include rent for the facilities and/or any necessary easements. The cost of this field office shall be covered in item 12.c. of the Schedule B of the attached Revised Cost Schedule.

7. General Instructions, Section 1.25, MINIMUM PARTICIPATION REQUIREMENT (PRIME CONTRACTORS), 2nd Paragraph: Revised to read as follows"Construction contracts shall be exempt from the requirements of this requirement."

8. DESIGN/BUILDER shall make available first aid supplies and provisions for medical care for all employees at the construction site prior to the beginning to work on site. The Contractor shall provide at least one person on-site during work hours who holds certification in first-aid and CPR training from the American Red Cross, the American Heart Association or from an organization whose training is deemed equivalent by one of these organizations (and this equivalency is stated in writing). The certificate(s) shall state the date of issue and the length of validity.

9. When a direct reading instrument is being used, the DESIGN/BUILDER shall perform a daily functional test to verify that the instrument is maintaining calibration. If the instrument fails the functional test (readings > ± 10% of the test gas concentration) it must be taken out of service and re-calibrated. Results of daily functional tests must be documented. Documentation shall consist of: name of person performing the test, date of testing, test gas concentration, test results, and any corrective actions taken.

10. The project Focus Area is estimated to include more than 47 miles of sewer pipe from 8 inches to 60 inches in diameter and more than 904 manholes. The DESIGN/BUILDER shall anticipate a variation of up to 15% in the size of the sewer system within the project Focus Area, and shall complete the work in accordance with the requirements the Contract within the required project schedule.

11. Regardless of the actual quantities of work performed under this contract, the contract unit prices under Task B and Task D shall not change.

12. The DESIGN/BUILDER shall anticipate a variation of up to 15% in the size of the sewer system within the project Focus Area (more than 47 miles of sewer pipe from 8 inches to 60 inches in diameter and more than 904 manholes), and shall complete the work in accordance with the requirements of the Contract within the prices proposed for Tasks A, C, E, F G and H.

13. The DESIGN/BUILDER shall submit a summary report for work performed under Task A, Research of Records, within 30 days from the date of Notice to Proceed.

14. The DESIGN/BUILDER will be required to provide and completely install two (2) ADS Model 4000 flow meters or approved equal, for the DEEP CREEK I&I PHASE I Focus Area within 45 calendar days from the issuance of Notice to Proceed. The DESIGN/BUILDER must maintain each meter to ensure its accuracy pursuant to manufacturer's specifications. The DESIGN/BUILDER must submit to the County readings from each flow meter on a monthly basis until the project is handed over to the OWNER (Fulton County)._ All costs associated with installation, maintenance, data collection, and data reporting are included in Schedule C, Item 1 "ADS Model 4000 FLOW METERS".

15. The DESIGN/BUILDER shall monitor the rainfall within the project Focus Area as part of the flow monitoring task under Task B.

16. As part of Task C, Work Order Development, the Design/Builder shall include a detailed basis and justification for the scope of work proposed in each work order. Each work order shall be complete to include all work necessary to complete the proposed repair work to the sewer system to reduce the I & I. Any subcontractors that will execute the work or participate in the work described in the work order will review the work order prior to it being presented to the county for consideration.

17. Each work order will contain appropriate references to the Project Construction Quality Plan (CQAP or also referred to as "Inspection & Test Plan") prepared in accordance with the attached Specification Section 01440 for all project field activities. The DESIGN/BUILDER shall comply with the requirements of attached Specification Section 01440.

18. The DESIGN/BUILDER shall comply with attached Specification Section 01300 and shall submit a Submittal Register at the Preconstruction Meeting in accordance with Section 01300.

19. Contractor shall construct, maintain and remove temporary access roads as required to initiate and execute the work in accordance with the Contract requirements. Temporary access roads shall include, but not limited to, access means for personnel, equipment, material and services under various weather conditions to access any part of the Project Focus Area to execute the work.

The temporary access road shall be 12 feet wide and 6 inches deep consisting of geo-fabric and surge stone. A stabilization geo-fabric shall be placed beneath the surge stone. The Design/Builder shall grade the surface to be flat and level. All costs associated with furnishing and maintaining necessary access to the work areas, including site preparation, construction and maintenance of temporary access roads shall be included in the bid unit price for Temporary Access Roads. The measurement for the Temporary Access Roads line item will be based on the length of the center line of the access road. All costs for the installation of the Temporary Access Road shall be included in Item 12.d "TEMPORARY ACCESS ROAD" of the attached Revised Cost Schedule.

Response to Questions and Requests:

1. Page 5 - "Request for Proposal Number should be **#05RFP47781K-JD**"

2. Can an alternate bid be turned in for a product that is currently being evaluated for approval?

   Answer: The proposer shall submit costs that are associated and in compliance with the RFP specifications.

3. Is the Manhole Product Matrix going to be used for this project?

   Answer: The Department of Public Works and Parsons PM Team will evaluate all proposed products that are in compliance with the specifications of this RFP.

4. It was indicated in the meeting that upon successful completion of a demonstration and the required submittals that a determination of product approval would be given in a week or so. How will the manufacturer be notified of acceptance or non-acceptance?

   Answer: All products submitted to be considered for approval for use on this project must meet the County's requirements. Once all information is submitted, the County will issue its results within one week.

5. Would you consider a separate bid line item for both the cement type manhole rehabilitation and the cured in place type rehabilitation?

   Answer: SewperCoat is an approved sewer lining product. Please Complete the attached revised cost schedule.

6. All manhole rehab products in the product matrix require a 10 year warranty, does this apply to the Flex Seal Chimney Product mentioned in the specifications.

   Answer: No. A one year warranty is required for Flex Seal Chimney products. All cured-in-place manhole liners shall have a ten (10) year warranty. The warranties referenced in this addendum include materials and labor for complete removal and reinstallation of the product.

7. This RFP due date of November 28, 2005 will be impossible to meet with the requirements of original signed and sealed Exhibits in the Contract Compliance section of this RFP. This requirement normally takes more that a week to have all exhibits back in our hands. This bid date is the Monday after a 4 day holiday and would require our complete RFP package to be completed ready for delivery by November 23, 2005.
   Southeast Pipe Survey is asking for a minimum of one week to 10 days delay in the due date of this RFP.

   Answer: RFP due date is changed to December 5, 2005 at 11:00 A.M.

8. In item 3, A thru J on the RFP document there are items listed for Manhole preconditioning Will there be a line item added for manhole rehabilitation?

   Answer: All work performed under the Schedule A line items includes any cleaning or preparation necessary to implement the work. No additional line item is necessary.

9. Statement: On previous RFP's on similar projects manhole preconditioning has been a pre-requisite to manhole rehabilitation. It appears that the line items have been left off.

   Answer: Reference RFP changes.

10. Article 20 – Accuracy of Work – Line 2: Change "errors and omissions" to "negligent errors and omissions".

    Answer: This request is denied.

11. Article 22 – Indemnification – line 6: Change "intentional" to "wrongful" in sub item (2).

    Answer: This request is denied.12. Lines 7-8: Delete "representatives, agents".

    Answer: This request is denied.

12. Lines 8-9: Change sub item 4 to "the negligent performance of DESIGN/BUILDER's obligations under this Agreement."

    Answer: This request is denied.

Attachments:

Revised Cost Schedule

Section 01300 – Submittals

Section 01440 – Contractors Quality Control

ACKNOWLEDGEMENT OF ADDENDUM NO. 2

The undersigned proposer acknowledges receipt of this addendum by returning one (1) copy of this form with the proposal package to the Purchasing Department, Fulton County Public Safety Building, 130 Peachtree Street, Suite 1168, Atlanta, Georgia 30335 by the RFP due date and time **Monday, December 5, 2005 no later than 11:00 A.M.**

This is to acknowledge receipt of Addendum No. 2, _____ day of _____, 2005.

_____
Legal Name of Bidder

_____
Signature of Authorized Representative

_____
Title

REVISED COST SCHEDULE

SCHEDULE A – ENGINEERING AND INVESTIGATIVE SERVICES COSTS

Task A	Research of Records	$_____
Task B	Field Investigation and Analysis	$_____
1	Manhole Assessment	$_____ /Manhole
3	Smoke Testing	$_____ /LF*
Task C	Work Order Development	$_____
Task D	Sewer Repairs	$ Incl. in Schedule B ($800,000)
Task E	Prioritization Report	$_____
Task F	Final Report & Documentation of I/I Reduction	$_____
Task G	Project Schedule	$_____
Task H	Progress Meetings and Meeting Minutes	$_____

SCHEDULE B – CONSTRUCTION/REPAIR COSTS

The line items in Schedule B reflect the anticipated work the County expects to encounter on this project. In the case that additional items are required to make sewer repairs, the Contractor will submit an estimate for such work or equipment for the Construction Manager's review and acceptance. All such items will be paid from Schedule B funds.

	ITEM	UNIT COST
ITEM	**1 - SEWER EASEMENT CLEARING**	
a.	LIGHT	$_____ /LF.
b.	MEDIUM	$_____ /LF.
c.	HEAVY	$_____ /LF.
ITEM	**2 - SEWER PRECONDITIONING**	
a.	42" SEWER	$_____ /LF.
b.	31" SEWER	$_____ /LF.
c.	27" SEWER	$_____ /LF.
d.	24" SEWER	$_____ /LF.
e.	21" SEWER	$_____ /LF.
f.	19" SEWER	$_____ /LF.
g.	18" SEWER	$_____ /LF.
h.	16" SEWER	$_____ /LF.
i.	15" SEWER	$_____ /LF.
j.	12" SEWER	$_____ /LF.
k.	10" SEWER	$_____ /LF.
l.	8" SEWER	$_____ /LF.

ITEM	3 - MANHOLE PRECONDITIONING		UNIT COST	
a.	6-10 FEET DEEP	*(48" diameter)*	$ _____	/VF.
b.	11-15 FEET DEEP		$ _____	/VF.
c.	16-20 FEET DEEP		$ _____	/VF.
d.	21-25 FEET DEEP		$ _____	/VF.
e.	> 25 FEET DEEP		$ _____	/VF.
f.	6-10 FEET DEEP	*(60" diameter)*	$ _____	/VF.
g.	11-15 FEET DEEP		$ _____	/VF.
h.	16-20 FEET DEEP		$ _____	/VF.
i.	21-25 FEET DEEP		$ _____	/VF.
j.	> 25 FEET DEEP		$ _____	/VF.

ITEM	4 - EROSION & SEDIMENT CONTROL		
a.	CONSTRUCTION EXITS	$ _____	/EA.
b.	EARTH FILL (FOR SINK HOLES & WASHOUT AREAS)	$ _____	/CY.
c.	SEDIMENT BARRIERS	$ _____	/LF.
d.	REINFORCED ROCK FILTER DAMS	$ _____	/EA.
e.	ROCK FILTER DAMS	$ _____	/EA.
f.	SEDIMENT TRAPS	$ _____	/EA.
g.	ORGANIC MATERIAL FIBER BLANKETS	$ _____	/SY.
h.	TREE PROTECTION FENCING	$ _____	/LF.
i.	RIP RAP	$ _____	/SY.
j.	GRASSING	$ _____	/SY.
k.	TEMPORARY STREAM CROSSING	$ _____	/EA.
l.	REINFORCED SILT FENCE	$ _____	/LF.
m.	SODDING	$ _____	/SY.

ITEM	5 - BEAVER DAM REMOVAL or RELOCATION		
		_____	/EA.

ITEM	6 - SEWER REHABILITATION CURED-IN-PLACE		
I.	STRUCTURAL PIPE LINING		
a.	42" GRAVITY SEWER	$ _____	/LF.
b.	31" GRAVITY SEWER	$ _____	/LF.
c.	27" GRAVITY SEWER	$ _____	/LF.
d.	24" GRAVITY SEWER	$ _____	/LF.
e.	21" GRAVITY SEWER	$ _____	/LF.
f.	19" GRAVITY SEWER	$ _____	/LF.
g.	18" GRAVITY SEWER	$ _____	/LF.
h.	16" GRAVITY SEWER	$ _____	/LF.
i.	15" GRAVITY SEWER	$ _____	/LF.
j.	12" GRAVITY SEWER	$ _____	/LF.
k.	10" GRAVITY SEWER	$ _____	/LF.
l.	8" GRAVITY SEWER	$ _____	/LF.

ITEM	**7 – CCTV**		**UNIT COST**	
a.	CCTV		$ _____	/LF.
b.	REVIEW OF CCTV DATA		$ _____	/LF.
ITEM	**8 – SPOT REPAIRS**			
	CURED-IN-PLACE STRUCTURAL			
I.	**SPOT REPAIR (15 feet length)**			
a.	42" GRAVITY SEWER		$ _____	/EA.
b.	31" GRAVITY SEWER		$ _____	/EA.
c.	27" GRAVITY SEWER		$ _____	/EA.
d.	24" GRAVITY SEWER		$ _____	/EA.
e.	21" GRAVITY SEWER		$ _____	/EA.
f.	19" GRAVITY SEWER		$ _____	/EA.
g.	18" GRAVITY SEWER		$ _____	/EA.
h.	16" GRAVITY SEWER		$ _____	/EA.
i.	15" GRAVITY SEWER		$ _____	/EA.
j.	12" GRAVITY SEWER		$ _____	/EA.
k.	10" GRAVITY SEWER		$ _____	/EA.
l.	8" GRAVITY SEWER		$ _____	/EA.
II.	**EXTERNAL POINT REPAIR**			/EA.
a.	42" GRAVITY SEWER		$ _____	/EA.
b.	31" GRAVITY SEWER		$ _____	/EA.
c.	27" GRAVITY SEWER		$ _____	/EA.
d.	24" GRAVITY SEWER		$ _____	/EA.
e.	21" GRAVITY SEWER		$ _____	/EA.
f.	19" GRAVITY SEWER		$ _____	/EA.
g.	18" GRAVITY SEWER		$ _____	/EA.
h.	16" GRAVITY SEWER		$ _____	/EA.
i.	15" GRAVITY SEWER		$ _____	/EA.
j.	12" GRAVITY SEWER		$ _____	/EA.
k.	10" GRAVITY SEWER		$ _____	/EA.
l.	8" GRAVITY SEWER		$ _____	/EA.
ITEM	**9 - REHABILITATE MANHOLES**			
I.	**CURED-IN-PLACE**			
	Poly-TriPlex			
a.	6-10 FEET DEEP	***(48" diameter)***	$ _____	/VF.
b.	11-15 FEET DEEP		$ _____	/VF.
c.	16-20 FEET DEEP		$ _____	/VF.
d.	21-25 FEET DEEP		$ _____	/VF.
e.	> 25 FEET DEEP		$ _____	/VF.
f.	6-10 FEET DEEP	***(60" diameter)***	$ _____	/VF.
g.	11-15 FEET DEEP		$ _____	/VF.
h.	16-20 FEET DEEP		$ _____	/VF.
i.	21-25 FEET DEEP		$ _____	/VF.
j.	> 25 FEET DEEP		$ _____	/VF.

	SewperCoat		UNIT COST	
k.	6-10 FEET DEEP	*(48" diameter)*	$	/VF.
l.	11-15 FEET DEEP		$	/VF.
m.	16-20 FEET DEEP		$	/VF.
n.	21-25 FEET DEEP		$	/VF.
o.	> 25 FEET DEEP		$	/VF.
p.	6-10 FEET DEEP	*(60" diameter)*	$	/VF.
q.	11-15 FEET DEEP		$	/VF.
r.	16-20 FEET DEEP		$	/VF.
s.	21-25 FEET DEEP		$	/VF.
t	> 25 FEET DEEP		$	/VF.
u.	VACUUM TESTING		$	/EA.
v.	FLEX-SEAL UTILITY SEALANT		$	/EA.

III.	NEW MANHOLES/REPLACEMENT MANHOLES			
a.	6-10 FEET DEEP	*(48" diameter)*	$	/VF.
b.	11-15 FEET DEEP	*(48" diameter)*	$	/VF.
c.	16-20 FEET DEEP	*(48" diameter)*	$	/VF.
d.	21-25 FEET DEEP	*(48" diameter)*	$	/VF.
e.	> 25 FEET DEEP	*(48" diameter)*	$	/VF.
f.	6-10 FEET DEEP	*(60" diameter)*	$	/VF.
g.	11-15 FEET DEEP	*(60" diameter)*	$	/VF.
h.	16-20 FEET DEEP	*(60" diameter)*	$	/VF.
i.	21-25 FEET DEEP	*(60" diameter)*	$	/VF.
j.	> 25 FEET DEEP	*(60" diameter)*	$	/VF.

ITEM	9 - FLOW BYPASS & DIVERSION PUMPING		
a.	PIPES > 18" SETUP	$	/EA.
b.	PIPES >18" HOURS OF OPERATION (100 HOURS)	$	/HR.
c.	PIPES < 18" SETUP	$	/EA.
d.	PIPES < 18" HOURS OF OPERATION (100 HOURS)	$	/HR.

ITEM	10 - PIPELINE REPAIR		
I.	SEWER REPLACEMENT		
	0' to 5.9' DEEP		
a.	SEWER REPLACEMENT --- 42" with DIP	$	/LF.
b.	SEWER REPLACEMENT --- 31" with DIP	$	/LF.
c.	SEWER REPLACEMENT --- 27" with DIP	$	/LF.
d.	SEWER REPLACEMENT --- 24" with DIP	$	/LF.
e.	SEWER REPLACEMENT --- 21" with DIP	$	/LF.
f.	SEWER REPLACEMENT --- 19" with DIP	$	/LF.
g.	SEWER REPLACEMENT --- 18" with DIP	$	/LF.
h.	SEWER REPLACEMENT --- 16" with DIP	$	/LF.
i.	SEWER REPLACEMENT --- 15" with DIP	$	/LF.

j.	SEWER REPLACEMENT --- 12" with DIP	$ _____	/LF.
k.	SEWER REPLACEMENT --- 10" with DIP	$ _____	/LF.
l.	SEWER REPLACEMENT --- 8" with DIP	$ _____	/LF.
m.	SEWER COATING (FOR AERIALS)	$ _____	/SF.
	6' to 9.9' DEEP		
n.	SEWER REPLACEMENT --- 42" with DIP	$ _____	/LF.
o.	SEWER REPLACEMENT --- 31" with DIP	$ _____	/LF.
p.	SEWER REPLACEMENT --- 27" with DIP	$ _____	/LF.
q.	SEWER REPLACEMENT --- 24" with DIP	$ _____	/LF.
r.	SEWER REPLACEMENT --- 21" with DIP	$ _____	/LF.
s.	SEWER REPLACEMENT --- 19" with DIP	$ _____	/LF.
t.	SEWER REPLACEMENT --- 18" with DIP	$ _____	/LF.
u.	SEWER REPLACEMENT --- 16" with DIP	$ _____	/LF.
v.	SEWER REPLACEMENT --- 15" with DIP	$ _____	/LF.
w.	SEWER REPLACEMENT --- 12" with DIP	$ _____	/LF.
x.	SEWER REPLACEMENT --- 10" with DIP	$ _____	/LF.
y.	SEWER REPLACEMENT --- 8" with DIP	$ _____	/LF.
	10' to 13.9' DEEP		
z.	SEWER REPLACEMENT --- 42" with DIP	$ _____	/LF.
aa.	SEWER REPLACEMENT --- 31" with DIP	$ _____	/LF.
bb.	SEWER REPLACEMENT --- 27" with DIP	$ _____	/LF.
cc.	SEWER REPLACEMENT --- 24" with DIP	$ _____	/LF.
dd.	SEWER REPLACEMENT --- 21" with DIP	$ _____	/LF.
ee.	SEWER REPLACEMENT --- 19" with DIP	$ _____	/LF.
ff.	SEWER REPLACEMENT --- 18" with DIP	$ _____	/LF.
gg.	SEWER REPLACEMENT --- 16" with DIP	$ _____	/LF.
hh.	SEWER REPLACEMENT --- 15" with DIP	$ _____	/LF.
ii.	SEWER REPLACEMENT --- 12" with DIP	$ _____	/LF.
jj.	SEWER REPLACEMENT --- 10" with DIP	$ _____	/LF.
kk.	SEWER REPLACEMENT --- 8" with DIP	$ _____	/LF.
	14' to 18' DEEP		
ll.	SEWER REPLACEMENT --- 42" with DIP	$ _____	/LF.
mm.	SEWER REPLACEMENT --- 31" with DIP	$ _____	/LF.
nn.	SEWER REPLACEMENT --- 27" with DIP	$ _____	/LF.
oo.	SEWER REPLACEMENT --- 24" with DIP	$ _____	/LF.
pp.	SEWER REPLACEMENT --- 21" with DIP	$ _____	/LF.
qq.	SEWER REPLACEMENT --- 19" with DIP	$ _____	/LF.
rr.	SEWER REPLACEMENT --- 18" with DIP	$ _____	/LF.
ss.	SEWER REPLACEMENT --- 16" with DIP	$ _____	/LF.
tt.	SEWER REPLACEMENT --- 15" with DIP	$ _____	/LF.
uu.	SEWER REPLACEMENT --- 12" with DIP	$ _____	/LF.
vv.	SEWER REPLACEMENT --- 10" with DIP	$ _____	/LF.
ww.	SEWER REPLACEMENT --- 8" with DIP	$ _____	/LF.
		UNIT COST	
II.	**PIPE BURSTING**		
	0' to 5.9' DEEP		
a.	PIPE BURSTING --- 42"	$ _____	/LF.
b.	PIPE BURSTING --- 31"	$ _____	/LF.
c.	PIPE BURSTING --- 27"	$ _____	/LF.

d.	PIPE BURSTING --- 24"	$ _____	/LF.
e.	PIPE BURSTING --- 21"	$ _____	/LF.
f.	PIPE BURSTING --- 19"	$ _____	/LF.
g.	PIPE BURSTING --- 18"	$ _____	/LF.
h.	PIPE BURSTING --- 16"	$ _____	/LF.
i.	PIPE BURSTING --- 15"	$ _____	/LF.
j.	PIPE BURSTING --- 12"	$ _____	/LF.
k.	PIPE BURSTING --- 10"	$ _____	/LF.
l.	PIPE BURSTING --- 8"	$ _____	/LF.
	6' to 9.9' DEEP		
m.	PIPE BURSTING --- 42"	$ _____	/LF.
n.	PIPE BURSTING --- 31"	$ _____	/LF.
o.	PIPE BURSTING --- 27"	$ _____	/LF.
p.	PIPE BURSTING --- 24"	$ _____	/LF.
q.	PIPE BURSTING --- 21"	$ _____	/LF.
r.	PIPE BURSTING --- 19"	$ _____	/LF.
s.	PIPE BURSTING --- 18"	$ _____	/LF.
t.	PIPE BURSTING --- 16"	$ _____	/LF.
u.	PIPE BURSTING --- 15"	$ _____	/LF.
v.	PIPE BURSTING --- 12"	$ _____	/LF.
w.	PIPE BURSTING --- 10"	$ _____	/LF.
x.	PIPE BURSTING --- 8"	$ _____	/LF.
	10' to 13.9' DEEP		
y.	PIPE BURSTING --- 42"	$ _____	/LF.
z.	PIPE BURSTING --- 31"	$ _____	/LF.
aa.	PIPE BURSTING --- 27"	$ _____	/LF.
bb.	PIPE BURSTING --- 24"	$ _____	/LF.
cc.	PIPE BURSTING --- 21"	$ _____	/LF.
dd.	PIPE BURSTING --- 19"	$ _____	/LF.
ee.	PIPE BURSTING --- 18"	$ _____	/LF.
ff.	PIPE BURSTING --- 16"	$ _____	/LF.
gg.	PIPE BURSTING --- 15"	$ _____	/LF.
hh.	PIPE BURSTING --- 12"	$ _____	/LF.
ii.	PIPE BURSTING --- 10"	$ _____	/LF.
jj.	PIPE BURSTING --- 8"	$ _____	/LF.
	14' to 18' DEEP		
kk.	PIPE BURSTING --- 42"	$ _____	/LF.
ll.	PIPE BURSTING --- 31"	$ _____	/LF.
mm.	PIPE BURSTING --- 27"	$ _____	/LF.
nn.	PIPE BURSTING --- 24"	$ _____	/LF.
oo.	PIPE BURSTING --- 21"	$ _____	/LF.
pp.	PIPE BURSTING --- 19"	$ _____	/LF.
qq.	PIPE BURSTING --- 18"	$ _____	/LF.
rr.	PIPE BURSTING --- 16"	$ _____	/LF.
ss.	PIPE BURSTING --- 15"	$ _____	/LF.
tt.	PIPE BURSTING --- 12"	$ _____	/LF.
uu.	PIPE BURSTING --- 10"	$ _____	/LF.
vv.	PIPE BURSTING --- 8"	$ _____	/LF.

ITEM	11 – LATERAL RECONNECTION	UNIT COST	
a.	0-5 FEET DEEP	$_____	/EA.
b.	6-10 FEET DEEP	$_____	/EA.
c.	11-15 FEET DEEP	$_____	/EA.
d.	16-20 FEET DEEP	$_____	/EA.
e.	21-25 FEET DEEP	$_____	/EA.

ITEM	12 – Additional Items		
a.	#57 STONE	$_____	/TON.
b.	INSTALL GEOSYNTHETIC FABRIC (6 oz/SY)	$_____	/SY
c.	Field Office	$_____	/EA.
d.	TEMPORARY ACCESS ROAD	$_____	/LF.

SCHEDULE C – FLOW METER INSTALLATION COSTS

ITEM		QUANTITY	UNIT COST	TOTAL
	1 – ADS Model 4000 FLOW METERS (Installation, Maintenance, Data Collection & Reporting)	7		

Note: Unit Costs are to be based on Section 01025- Measurements and Payments.

PLEASE COMPLETE AS DIRECTED AND INSERT IN YOUR SEPARATE SEALED COST PROPOSAL

Investigation Cost (Total from Schedule A)	$_____
Sewer Repair Costs (Schedule B Unit Costs)	$ 800,000.00*
Flow Meter Installation (Total from Schedule C)	$_____
TOTAL CONTRACT	**$**_____

** Funds approved through work order process*

PROJECT #S220 – DEEP CREEK I&I

SECTION 01300
SUBMITTALS

PART 1 GENERAL

1.1 GENERAL

A. Inquiries: Direct to Construction Manager regarding procedure, purpose, or extent of Submittal.

B. Timeliness: Schedule and make submissions in accordance with requirements of individual Specification sections and in such sequence as to cause no delay in Work or in work of other contractors.

C. Stamp each submittal with uniform approval stamp before submitting to Engineer or Construction Manager.

1. Stamp to include Project name, submittal number, Specification number, Contractor's reviewer name, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with Contract Documents. Submittals shall contain the following certification signed by the Contractor, "*I certify that the information contained in or accompanying this (report, plan, submittal, or item) is true, accurate, and complete. As to (the) (those) identified portion(s) of this (report, plan, submittal, or item) for which I cannot personally verify (its) (their) truth and accuracy, I certify as the Contractor's official having supervisory responsibility for the person(s) who, acting under my instructions, made the verification, that this information is true, accurate, and complete.*" All areas not in conformance or which differ shall be highlighted or otherwise noted
2. Engineer or Construction Manager will not review submittals that do not bear Contractor's approval stamp and will return them without action.

D. Complete, sign, and transmit with each submittal package, one Transmittal of Contractor's Submittal

E. Identification of Submittals:

1. Complete, sign, and transmit with each Submittal package, one Transmittal of Contractor's Submittal Form attached at the end of this section.
2. Identify each Submittal with the following numbering and tracking system:
   a. Sequentially number each Submittal.
   b. Resubmission of a Submittal will have original number with sequential alphabetic suffix.
3. Format: Orderly, indexed with labeled tab dividers.
4. Show date of submission.
5. Show Project title and County's contract identification and contract number.
6. Show names of Contractor or Supplier, and manufacturer as appropriate.

7. Identify, as applicable, Contract Document section and paragraph to which Submittal applies.
8. Identify Submittal type; submit only one type in each Submittal package.
9. Identify and indicate each deviation or variation from Contract Documents.

F. Resubmissions: Clearly identify each correction or change made.

G. Incomplete Submittal Submissions:

1. Construction Manager will return the entire Submittal for Contractor's revision/correction and resubmission.
2. Submittals which do not clearly bear Contractor's specific written indication of Contractor review and approval of Submittal or which are transmitted with an unsigned or uncertified submission form or as may otherwise be required will be returned to Contractor un-reviewed.

H. Non-specified Submissions: Submissions not required under these Contract Documents and not shown on submissions will not be reviewed and will be returned to Contractor.

I. Construction Manager's Review: Construction Manager will act upon Contractor's Submittal and transmit response to Contractor not later than 10 work days after receipt, unless otherwise specified. Re-submittals will be subject to the same review time.

J. Schedule Delays: No adjustment of Contract Times or Price will be allowed due to delays in progress of Work caused by rejection and subsequent resubmission of Submittals, including multiple resubmissions.

1.2 SHOP DRAWINGS AND SAMPLES

A. Copies:

1. Shop Drawings and Product Data: Six.
2. Samples: Two.

B. General: Submit to Construction Manager as required by individual Specification sections.

C. Identify and Indicate:

1. Pertinent Drawing sheet(s) and detail number(s), products, units and assemblies, and system or equipment identification or tag numbers.
2. Critical field dimensions and relationships to other critical features of Work.
3. Samples: Source, location, date taken, and by whom.
4. Each deviation or variation from Contract Documents.

D. Design Data: When specified, provide Project-specific information as required and as necessary to clearly show calculations, dimensions, logic and assumptions, and referenced standards and codes upon which design is based.

E. Preparation:

1. Format: Whenever possible, schedule for and combine Shop Drawings and Samples required for submission in each Specification section or division into a single Submittal package. Also combine product data for like items into a single Submittal package.
2. Present in a clear and thorough manner and of sufficient detail to show kind, size, arrangement, and function of components, materials, and devices and compliance with Contract Documents. Identify details by reference to sheet and detail, and schedule or room numbers shown on Drawings.
3. Reproducible Copy:
    a. Preferred Minimum Sheet Size: 8-1/2- by 11-inch and 11- by 17-inch pages, suitable for photocopying.
    b. Larger than 11- by 17-Inch Sheets: 22-inch by 34-inch preferred, Mylar or sepias suitable for copying in a blueprint machine.
4. Product Data: Clearly mark each copy to identify pertinent products or models and show performance characteristics and capacities, dimensions and clearances required, wiring or piping diagrams and controls, and external connections, anchorages, and supports required.
5. Equipment and Component Titles: Identical to title shown on Drawings.
6. Manufacturer's standard schematic drawings and diagrams as follows:
    a. Modify to delete information that is not applicable to Work.
    b. Supplement standard information to provide information specifically applicable to Work.

F. Shop Drawing Disposition: Engineer will review, mark, and stamp as appropriate and distribute marked-up copies as noted:

1. Accepted as Submitted (for incorporation in Work):
    a. One copy furnished County.
    b. One copy retained in Engineer's file.
    c. Two copies retained in Construction Manager's file.
    d. Remaining copies returned to Contractor appropriately annotated.
    e. Contractor may begin to implement activities to incorporate specific product(s) or Work covered by Submittal.
2. Accepted as Noted (for incorporation in Work):
    a. One copy furnished County.
    b. One copy retained in Engineer's file.
    c. Two copies retained in Construction Manager's file.
    d. Remaining copies returned to Contractor appropriately annotated.
    e. Contractor may begin to implement activities to incorporate product(s) or Work covered by Submittal, in accordance with Construction Manager's notations.
3. Rejected:
    a. One copy retained in Engineer's file.
    b. Two copies retained in Construction Manager's file.
    c. Remaining copies returned to Contractor appropriately annotated.
    d. Contractor shall make corrections or develop replacement and resubmit (in same manner and quantity as specified for original submission).
    e. Submittal is rejected.
4. Incomplete:
    a. One copy retained in Engineer's file.
    b. Two copies retained in Construction Manager's file.
    c. Remaining copies returned to Contractor appropriately annotated.
    d. Contractor shall complete and resubmit or submit missing portions.

e. Submittal is not accepted.

G. Sample Disposition: Same as Shop Drawing disposition; samples will not be returned.

1.3 ADMINISTRATIVE SUBMITTALS

A. Copies: Submit four.

B. Description: Submittals that are not Shop Drawings or Samples, or that do not reflect quality of product or method of construction. May include, but not limited to those Submittals identified below.

C. Submittal Register:

1. Within 10 calendar days from the Notice to Proceed (NTP) date, the Contractor shall prepare and submit a Submittal Register that presents a comprehensive list of submittals and a submittal schedule for the project in accordance with the Contract requirements. The Contractor shall also submit an electronic copy of the Submittal register in a format and software specified by the Construction Manager.
2. The Submittal register shall include, but not limited, to the following information:
   a. Submittal Number
   b. Submittal Type (Administrative, Shop Drawings, etc.)
   c. Submittal Title
   d. Submittal Description
   e. Specification Reference
   f. Planned Submittal Date
   g. Date Approval Needed
   h. Submittal Disposition (Approved/Resubmit/Disapproved)
   i. Re-submittal Date (If applicable)
   j. Final Action
3. The Submittal register shall be updated to incorporate any changes in the project scope including, but not limited, changes in Contract requirements.
4. The Contractor shall maintain the Submittal register current and shall submit a current Submittal Register at each project Progress Meeting to the Construction Manager.

D. Applications for Payment.

E. Construction Photographs: In accordance with the Contract Documents.

F. Progress Reports and Quantity Charts: In accordance with the Contract Documents.

G. Schedules:

1. Progress Schedule(s): In accordance with the Contract Documents.
2. Schedule of Values: As approved by Construction Manager.
3. Schedule of Submittal Submissions:
   a. Prepare and submit, preliminary list of submissions grouped by Contract Document article/paragraph number or Specification section number, with identification, numbering and tracking system as specified under

Paragraph Identification of Submittals and as approved by Construction Manager.

b. Include only the following required submissions:
   1) Shop Drawings and samples.
   2) Training plans.
   3) Test procedures.
   4) Operation and Maintenance Manuals.
   5) Record documents.
   6) Specifically required certificates, warranties, and service agreements.

c. Coordinate with progress schedule and prepare submissions to show for each Submittal, at a minimum, the following:
   1) Estimated submission date to Construction Manager.
   2) Specifically requested and clearly identified Construction Manager review time if shorter than that set forth herein, with justification for such request and critical dates Submittals will be needed from Construction Manager.
   3) For first 6-month period from the date the Contract Times commence or following any update or adjustment of the submissions, the estimated submission date shall be week, month, and year; for submissions beyond 6-month time period, show closest month and year.

d. Submit to Construction Manager monthly (i) updated list if changes have occurred, otherwise submit a written communication confirming existing list, and (ii) adjusted submissions reflecting submission activity planned for forthcoming 6-month time period and beyond. Coordinate with progress schedule updates.

H. Submittals Required by Laws, Regulations, and Governing Agencies: Submit promptly notifications, reports, certifications, payrolls, and otherwise as may be required, to Construction Manager for approval before submitting to the applicable federal, state, or local governing agency or their representative.

I. Disposition: Construction Manager will review, stamp, and indicate requirements for resubmission or acceptance on Submittal as follows:

1. Accepted:
   a. Schedules: Acceptance will indicate that schedules provide for the orderly progression of the Work to completion within any specified milestones and the Contract Times, but such acceptance will neither impose on Construction Manager responsibility for the sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefore.
   b. Acceptance of other Administrative Submittals will indicate that Submittal conforms to intent of Contract Documents as to form and substance.
   c. Contractor may proceed to perform Submittal related Work.
   d. One copy furnished County.
   e. One copy retained in Engineer's file.
   f. Two copies retained in Construction Manager's file.
   g. Remaining copies returned to Contractor appropriately annotated.
2. Rejected as Noted:
   a. One copy retained in Engineer's file

b. Two copies retained in Construction Manager's file.
c. Remaining copies returned to Contractor appropriately annotated.
d. Contractor shall revise/correct or develop replacement and resubmit.

1.4 QUALITY CONTROL SUBMITTALS

A. Certificates:

1. Manufacturer's Certificate of Compliance:
   a. When specified in individual Specification sections or where products are specified to a recognized standard or code, submit prior to shipment of product or material to the site.
   b. Construction Manager may permit use of certain materials or assemblies prior to sampling and testing if accompanied by accepted certification of compliance.
   c. Signed by product manufacturer certifying that materials, manufacture, and product specified conforms to or exceeds specified requirements and intent for which product will be used. Submit supporting reference data, affidavits, and certifications as appropriate.
   d. May reflect recent or previous test results on material or product, but must be acceptable to Construction Manager.
2. Certificates of Successful Testing or Inspection: Submit when testing or inspection is required by laws and regulations or governing agency or specified in the individual specification sections.

B. Statements of Qualification: Evidence of qualification, certification, or registration. As required in these Contract Documents to verify qualifications of professional land surveyors, engineers, materials testing laboratories, specialty Subcontractors, trades, specialists, consultants, installers, and other professionals.

C. Field Samples: Provide as required by individual Specifications and as may be required by Construction Manager during progress of Work.

D. Written Test Reports of Each Test and Inspection: As a minimum, include the following:

1. Date of test and date issued Project title and number, testing laboratory name, address, and telephone number, and name and signature of laboratory inspector.
2. Date and time of sampling or inspection and record of temperature and weather conditions.
3. Identification of product and Specification section, location of sample, test or inspection in the Project, type of inspection or test with referenced standard or code, certified results of test.
4. Compliance with Contract Documents, and identifying corrective action necessary to bring materials and equipment into compliance.
5. Provide an interpretation of test results, when requested by Construction Manager.

E. Disposition: Engineer will review, stamp, and indicate requirements for resubmission or acceptance on Submittal as follows:

1. Accepted:

a. Acceptance will indicate that Submittal conforms to intent of Contract Documents as to form and substance.
b. Contractor may proceed to perform Submittal related Work.
c. One copy furnished County.
d. One copy retained in Engineer's file.
e. Two copies retained in Construction Manager's file.
f. Remaining copies returned to Contractor appropriately annotated.

2. Rejected as Noted:
a. One copy retained in Engineer's file.
b. Two copies retained in Construction Manager's file.
c. Remaining copies returned to Contractor appropriately annotated.
d. Contractor shall revise/correct or develop replacement and resubmit.

1.5 CONTRACT CLOSEOUT SUBMITTALS

A. General: In accordance with the Contract Documents.

B. Disposition: Construction Manager will review, stamp, and indicate requirements for resubmission or acceptance on Submittal as follows:

1. Accepted:
a. Acceptance will indicate that Submittal conforms to intent of Contract Documents as to form and substance.
b. Contractor may proceed to perform Submittal related Work.
c. One copy furnished County.
d. Two copies retained in Construction Manager's file.
e. Remaining copies returned to Contractor appropriately annotated.

2. Rejected as Noted:
a. Two copies retained in Construction Manager's file.
b. Remaining copies returned to Contractor appropriately annotated.
c. Contractor shall revise/correct or develop replacement and resubmit.

1.6 SUPPLEMENTS

A. The supplements listed below, following "END OF SECTION," are part of this Specification.

1. Forms: Transmittal of Contractor's Submittal

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

<<LOGO>>

TRANSMITTAL OF CONTRACTOR'S SUBMITTAL
(ATTACH TO EACH SUBMITTAL)

DATE:_____

TO:_____

_____

_____

_____

_____

Submittal No.:_____

☐ New Submittal ☐ Re-submittal

Previous Submittal No.:_____

Project:_____

Project No.:_____

Specification Section No.:_____

(Cover only one section with each transmittal)

Schedule Date of Submittal:

_____

FROM:_____

Contractor

_____

_____

_____

SUBMITTAL TYPE:

☐ Shop Drawing ☐ Administrative ☐ Sample
☐ Quality Control ☐ Contract Closeout ☐ "Or-Equal"/Substitute

The following items are hereby submitted:

Number of Copies	Description of Item Submitted (Type, Size, Model Number, Etc.)	Spec. Para. No.	Drawing or Brochure Number	Contains Variation to Contract	
				No	Yes

Contractor hereby certifies that (i) Contractor has complied with the requirements of Contract Documents in preparation, review, and submission of designated Submittal and (ii) the Submittal is complete and in accordance with the Contract Documents and requirements of laws and regulations and governing agencies.

By: _____
Contractor (Authorized Signature)

PROJECT #S220 – DEEP CREEK I&I

SECTION NO. 01440

CONTRACTORS QUALITY CONTROL

PART 1 GENERAL

1.01 REFERENCES

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

   a. American Society for Testing and Materials (ASTM):

1.02 SUBMITTALS

A. A plan to identify personnel, procedures, control, instructions, test, records, and forms to be used for quality control.

B. A report containing record of quality control operations, activities, and tests performed shall be submitted to Construction Manager daily.

C. Weekly Quality Control Reports.

PART 2 - PRODUCTS (Not Used)

PART 3 EXECUTION

3.01 GENERAL

A. The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract requirements. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product, which complies with the Contract Documents. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence.

3.02 QUALITY CONTROL PLAN

A. General: The Contractor shall furnish for review by Construction Manager, not later than 15 calendar days after receipt of Notice to Proceed, a Construction Quality Control (CQC) Plan proposed to monitor quality of the work. The plan shall identify personnel, procedures, control, instructions, test, quality criteria, records, and forms to be used. Construction will be permitted to begin only after acceptance of the CQC Plan.

B. Content of the CQC Plan:

   a. The CQC plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by Contractors, fabricators, suppliers

and purchasing agents:

i. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system specified hereinafter for all aspects of the work specified. Contractor's staff shall include a CQC System Manager who shall report to the Contractor's Construction Manager or someone higher in the Contractor's organization. Construction Manager in this context shall mean the individual with responsibility for the overall management of the project including quality and production.

ii. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a quality control (QC) function.

iii. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of Contractors, suppliers and purchasing agents. These procedures shall be in accordance with Section 01300, SUBMITTALS.

iv. Quality control submittal registers.

v. Procedures for correcting nonconforming work.

vi. Testing requirements and acceptance criteria associated with the project.

C. Acceptance of Plan: Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicted on satisfactory performance during the construction. Construction Manager reserves the right to require the Contractor to make changes in his CQC plan and operations, as necessary, to obtain the quality specified.

D. Notification of Changes: After acceptance of the CQC plan, the Contractor shall notify Construction Manager in writing a minimum of 7 calendar days prior to any proposed change. Proposed changes are subject to acceptance by Construction Manager.

3.03 PRE-CONSTRUCTION OR KICKOFF MEETING

A. During the Preconstruction Conference or prior to acceptance by Construction Manager of the CQC Plan, the Contractor shall meet with Construction Manager and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work and the interrelationship of Contractor's management and control with Construction Manager. There may be occasions when subsequent conferences will be called, by either party, to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.04 SUBMITTAL REVIEW

A. Contractor's CQC organization shall be responsible for certifying that all submittals are in compliance with the Contract Documents.

3.05 CONTROL

A. Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of second-tier Contractors and suppliers, complies with the requirements of the Contract Documents. The controls shall be adequate to cover all construction operations, including both onsite and offsite fabrication, and will be keyed to the proposed construction sequence. The controls shall include at least three phases of control to be conducted by the CQC System Manager for all definable features of work, as follows:

a. Preparatory Phase: The phase shall be performed prior to beginning work on each definable feature of work and shall include:

i. A review of applicable specifications.

ii. A review of the Contract Drawings.

iii. A check to assure that all materials and/or equipment have been tested, submitted, and approved.

iv. A check to assure that provisions have been made to provide required control inspection and testing.

v. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the Contract Documents.

vi. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approve submittal date, and are properly stored.

vii. A review of the appropriate activity hazard analysis to assure that both safety and health requirements are met.

viii. Discussion of procedures for constructing the work including repetitive activities. Document construction tolerances and workmanship standards for that phase of work.

ix. A check to ensure that any required submittals for the work to be performed has been accepted by Construction Manager.

x. Construction Manager shall be notified at least 48 hours in advance of beginning any of the required action of the preparatory phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the next QC report submitted. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet Contract Specifications.

b. Initial Phase: This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

i. A check of preliminary work to ensure that it is in compliance with Contract requirements. Review minutes of the preparatory meeting.

ii. Verification of control inspection and testing necessary to document full Contract compliance.

iii. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards.

iv. Resolve all differences.

v. Check health and safety to include compliance with and upgrading of the health and safety plan and activity hazard analysis. Review the activity hazard analysis with each worker.

vi. Construction Manager shall be notified at least 48 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the next QC report submitted. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

vii. The initial phase should be repeated for each new crew to work onsite, or anytime acceptable specified quality standards are not being met.

c. Follow-Up Phase: Daily checks shall be performed to assure continuing compliance with Contract requirements, including control testing, until completion of the particular definable feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work, which may be affected by the deficient work. The Contractor shall not build upon, conceal, or fail to repair nonconforming work.

3.06 TESTS

A. Testing Procedure: The Contractor shall perform tests specified or required to verify that control measures are adequate to provide a product which conforms to Contract requirements. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a testing laboratory. A list of tests to be performed shall be furnished as a part of the CQC plan. The list shall give the test name, frequency, specification paragraph containing the test requirements, the personnel, and laboratory responsible for each type of test, and an estimate of the number of tests required. The Contractor shall perform the following activities and record and provide the following data:

a. Verify that testing procedures comply with Contract requirements.

b. Verify that facilities and testing equipment are available and comply with testing standards.

c. Check test instrument calibration data against certified standards.

d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.

e. Results of all tests taken, both passing and failing tests, shall be recorded for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test will be given. Actual test reports may be submitted later, if approved by the Contractor, with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to Construction Manager. Failure to submit timely test reports, as stated, may result in non payment for related work performed and disapproval of the test facility for this Contract.

B. Offsite Testing Laboratories:

a. Capability Check: Construction Manager reserves the right to check laboratory equipment in any proposed laboratory for compliance with the standards set forth in the Contract Documents and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing solid, concrete, asphalt, and steel shall meet criteria detailed in ASTM D3740 and ASTM E329.

C. Onsite Testing Laboratories: Construction Manager reserves the right to utilize the Contractor's onsite testing laboratory and equipment to make assurance tests and to check the Contractor's testing procedures, techniques, and test results at the Contractor's sole expense.

D. Furnishing or Transportation of Samples for Testing: Samples of materials for test verification and acceptance testing by Construction Manager shall be delivered to Construction Manager shall be delivered to Construction Manager. Coordination for each specific test, exact delivery location, and dates shall be made Construction Manager.

3.07 DOCUMENTATION

A. Content of Quality Report: The Contractor shall maintain current records of quality control operations, activities, and tests performed, test results, including the work of subcontractors and suppliers. These records shall be in a form approved by Construction Manager and shall include factual evidence that required quality control activities and/or tests have been performed, including but not limited to the following:

a. Construction Manager/Contractor area of responsibility.

b. Operating plant/equipment with hours worked, idle, or down for repair.

c. Work performed each day, giving location, description, and by whom.

d. Test and/or control activities performed with results and references to Specifications and QC plan requirements. The QC phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.

e. Material received with statement as to its acceptability in storage.

f. Identify submittals reviewed, with Contract reference, by whom, and action taken.

g. Offsite surveillance activities, including actions taken.

h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.

i. List instructions given/received and conflicts in Drawings and/or Specifications.

j. Contractor's verification statement. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in a work and workmanship comply with the Contract Documents.

k. Indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered.

B. Frequency of Reporting: The original and one copy of the records in report form shall be furnished to Construction Manager for each week period of work. As a minimum, one report shall be prepared and submitted for every 7-day period. All calendar days shall be accounted for throughout the life of the Contract. The reports shall be submitted within 24 hours following the 7-day period reported. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies or reports prepared by all subordinate quality control personnel.

3.08 NOTIFICATION OF NONCOMPLIANCE

A. Construction Manager will notify the Contractor of any noncompliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. If the Contractor fails or refuses to comply promptly, Construction Manager may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time, or for excess costs or damages by the Contractor.

END OF SECTION # 01440