PROFESSIONAL SERVICES AGREEMENT
AMENDMENT NO. 2

HYDROSCIENCE ENGINEERS INC.
ON CALL CIVIL ENGINEERING
TASK ORDER - CONTRACT 2012-15, 2013 CITYWIDE SEWER REHABILITATION PROJECT

On-Call Civil Engineering Professional Services Agreement, hereinafter referred to as the “Agreement”, dated June 21, 2013, by and between the City of Pittsburg, hereinafter referred to as "City", and Hydroscience Engineers Inc., hereinafter, referred to as "Consultant" is amended as set forth herein.

Witnesseth:

WHEREAS, the Consultant has been selected to perform the scope of services for design of Contract 2012-15, 2013 Citywide Sewer Rehabilitation Project as a task order (the "Task Order") in accordance with the Agreement; and

WHEREAS, on July 29, 2013, the City executed Amendment No. 1 to the Agreement to allow for increased fees for the Task Order, which will be above the maximum allowed per the Agreement in order to provide for additional services requested by the City; and

WHEREAS, Amendment No. 1 authorized a design fee of $388,073; and

WHEREAS, the City has a need for additional professional engineering services at an additional cost of $123,900.

NOW THEREFORE, City and Consultant agree as follows:

ARTICLE 1 – The Consultant has submitted a proposal for the additional scope of work in the amount of $123,900 (attached as Exhibit A).

ARTICLE 2 - For purposes of the Agreement, the Consultant’s fee shall be authorized above the existing maximum fee of $388,073.

ARTICLE 3 - The total fee for the Task Order after execution of Amendment Number 2 shall be $511,973. The remainder of the Agreement shall continue in effect unchanged.
IN WITNESS WHEREOF, the parties have executed this Amendment on the respective dates written below.

CITY: CITY OF PITTSBURG

Joe Sbranti, City Manager          Date

CONSULTANT: HYDROSCIENCE ENGINEERS

Name/Title          Date
EXHIBIT A
Amendment 2
Additional Engineering Services for
FY 2012/2013 Citywide Sewer System Rehabilitation Projects

ADDITIONAL WORK
The City wishes to replace water pipelines and additional sewers, and re-pave local streets in the Project 20 area. The City also wishes to add rehabilitation of Manhole 2161 to the overall project (new Project 37) and replacement or repair of three additional sewer reaches in Castlewood Drive (new Project 38), Valle Vista Place (new Project 39) and Ventura Drive (new Project 40). The changes are shown in the attached figures and are described below:

Water System Improvements (Project 20)

- Replace existing 8- and 10-inch water pipeline with new 16-inch water transmission pipeline in Cornwall Street between Central Avenue and Parkside Drive (approximately 600 linear feet). It is assumed that the new pipeline will utilize an existing casing beneath Union Pacific Railroad (UPRR) for installation within the UPRR right-of-way. Connect to existing 16-inch pipelines in Parkside Drive and in Central Avenue
- Construct new 8-inch water distribution pipeline in Cornwall Street between Central Avenue and Leslie Drive (approximately 400 linear feet)
- Replace existing 6-inch water distribution pipeline in Central Avenue between Cornwall Street and the west end with a new 12-inch water distribution pipeline (approximately 550 linear feet)
- Replace existing 3-inch water distribution pipeline with new 8-inch water distribution pipeline in Locust Drive from Central Avenue to end (approximately 225 linear feet)
- Replace existing 4-inch water distribution pipeline with new 8-inch water distribution pipeline in Parkside Lane from Central Avenue to end (approximately 350 linear feet)
- Replace existing 3-inch water distribution pipeline with new 8-inch water distribution pipeline in Loma Vista Way from Central Avenue to end (approximately 225 linear feet)
- Replace existing 4-inch water distribution pipeline with new 8-inch water distribution pipeline in Woodview Road from Central Avenue to end (approximately 275 linear feet)
- Construct new 12-inch water service to Signode property from west end of Central Avenue to existing meter vault (approximately 400 linear feet)
- Abandon 8- 10- and 12-inch water pipelines in BNSF right-of-way. It is assumed that the lines will be abandoned by cutting and capping the ends from outside the right-of-way
• Construct new, approximately 6-inch water service to 1160 Railroad Avenue (approximately 250 linear feet)
• Abandon 8- and 10-inch water pipelines and remove vault on east side of 1160 Railroad Avenue
• Abandon 3-inch water distribution mains in backyard easements of 96 Loma Vista Way and 97 Locust Drive
• Abandon 4-inch water distribution mains in backyard easements of 81 Woodview Road and 80 Parkside Lane
• Prepare encroachment permit application for removal and replacement of water pipelines beneath UPRR. It is assumed that an existing casing exists and can be re-used

Water services will be transferred from existing distribution pipelines to the new distribution pipelines. New water laterals will be installed between the new distribution pipelines and the existing water meters

**Sewer System Improvements (Project 20)**

• Replace existing 6-inch sewer in Cornwall Street with new 8-inch sewer (approximately 400 linear feet)
• Replace existing 6-inch sewer in Parkside Lane with new 8-inch sewer (approximately 350 linear feet)
• Replace existing 6-inch sewer in Woodview Road with new 8-inch sewer (approximately 275 linear feet)

**Paving (Project 20)**

• Re-pave all streets in Project 20 area south of the BNSF Railway. Paving will be from lip of gutter to lip of gutter. Streets included are:
  - Central Avenue from Railroad Avenue to its west end
  - Cornwall Street from Central Avenue across Leslie Drive to UPRR
  - Locust Street
  - Parkside Lane
  - Loma Vista Way
  - Woodview Road

**Other Sewer System Improvements**

• New Project 37 (2185 Sugartree Drive) – Reconstruct Manhole 2161 bench to eliminate a flow obstruction and to provide a smooth transition for sewer 2093-2161, which joins from the side
• New Project 38 (Castlewood) – Replace approximately 210 linear feet of sagged, 6-inch ACP sewer with new 8-inch PVC sewer to eliminate a flow bottleneck
• New Project 39 (Valle Vista) – Replace approximately 60 linear feet of sagged 6-inch ACP sewer with new PVC sewer

*City of Pittsburg
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• New Project 40 (Ventura) – Replace approximately 35 linear feet of sagged 6-inch ACP sewer with new PVC sewer
ADDITIONAL SCOPE OF SERVICES

This scope of services amends the scope of services in the Agreement to include design, bid and office engineering services associated with the additional work described above.

Task 0 – Project Management

This task includes extended project management activities associated with the work of this amendment. It is anticipated that the overall project duration will be extended by approximately 5 months by this additional work.

Task 1 – Design

Subtask 1.1 Surveying and Mapping

Surveying subconsultant will perform additional surveying and mapping for Project 20 and new surveying for Projects 38 through 40 using field survey and/or aerial surveys as appropriate.

Mapping corridors for pipelines in public streets will be approximately 100 feet wide for Project 20 and approximately 120 feet wide for Projects 38 through 40 extending to the fronts of buildings, and will extend approximately 50 to 150 feet beyond the ends of the applicable sewer reaches. Mapping will include improvements in the public right of way. For public street improvements, mapping behind sidewalk will be limited to front building corners, driveways, walkways, fences, sewer cleanouts and water meters in order to minimize disruption of private property.

Mapping corridors for pipelines on private property will be limited to those areas likely to be affected by construction. Improvements to be mapped will include paving, fences, visible utilities, trees, landscaping, building corners, garages and outbuildings, pools, playsets, fixed barbeques, utility vaults, sewer manholes and cleanouts and other similar improvements. Mapping will identify available access routes to the work areas.

Perform a supplemental survey of surface marks placed by utility representatives pursuant to Underground Services Alert call for utility potholing. Survey ground locations and ground surface elevations for up to 9 additional completed utility potholes within the identified mapping corridors. This will be performed after the initial mapping effort and will require a separate mobilization for the survey crew.

All base mapping will be prepared for plotting at a scale of 1" = 40' using California State Plane coordinates. Contour interval will be 1 foot. Map data will be 3D data in AutoCAD 2007 or newer version.
Survey rim and invert elevations of storm and sanitary sewer manholes, catch basins and rodding inlets in the mapping corridors. Prepare sketches (dip sheets) of all such structures showing the orientation, sizes and invert elevations of all pipelines entering and leaving such structures, including a north arrow to permit easy orientation of the pipelines.

Perform a control survey for mapping and provide intervisible semi-permanent monuments (nails and shiners, P-K nails, or similar) at an interval of no more than 1,000 feet for use by the contractor to lay out the work. Surveyor will deliver a summary and diagram of the final ground control network. A table of control point coordinates will be provided for inclusion with the contract documents, along with the datum and primary control used and the appropriate conversion factor between ground and grid distances.

It is assumed that survey mapping can be developed from nearby City monuments that have been referenced to the City's current horizontal and vertical datum using data provided by the City. Survey does not included legal descriptions for delineation of property lines on mapping. City will procure rights-of-entry for survey crews to enter onto private property where needed.

It is assumed that the new water service to the Signode Property will not require an easement.

No additional surveying will be performed for Project 37 (Manhole 2161, Sugartree Drive). Work at this manhole will be shown on atlas maps and described in the specifications volume similar to the other manhole-only projects described in the Contingency Authorization dated August 19, 2013.

Subtask 1.2 Utility Investigation

Perform a utility investigation to identify buried utilities in the additional project areas that have not been identified to-date. This will begin by contacting known utility providers in the project area and requesting maps showing the locations of their utilities, and plotting the utilities on the drawings. Adjust plotted locations of utilities based on the findings of utility potholing (performed by the utility potholing subconsultant), the associated Underground Services Alert markings, visible trenches, vaults, valves and other surface evidence. Additional mapping will be required from the following agencies:

- PG&E Gas
- PG&E Electric
- AT&T Telephone
- Comcast Television
- Stanpac Hot Fuel Oil
- Associated/Getty Petroleum
Utility potholing subcontractor will perform up to 9 additional potholes to confirm the horizontal location and depth of selected utilities in the vicinity of the work. This work will include excavation marking and notification of Underground Services Alert, vacuum potholing, noting thicknesses of pavement and pavement base material, identification of utility sizes and materials, depth measurements, placement of markings and markers for subsequent location by the surveying subconsultant, backfilling with native material and surface restoration.

Pavement repair, where needed, will consist of a single 6-inch lift of hot asphalt with all pavement repairs performed in a single day (temporary cold asphalt patch will be used as an interim pavement where needed).

It is assumed that potholing crews will be given a no-cost encroachment permit by the City, and that traffic control measures for this effort will consist of cones placed around the field vehicles and work areas. The City will procure rights-of-entry for the potholing subcontractor to enter onto private property where needed.

Subtask 1.3 Geotechnical Investigation

No additional geotechnical investigation will be performed for the work of this amendment.

Subtask 1.4 Design Improvements/Prepare Contract Documents

Design of these additional improvements will be identical to the other work of this contract, and will incorporated into the other contract documents for bid as a single construction contract. The additional drawings and specifications will first be delivered to the City as a supplemental review submittal, 65% complete, consisting of:

- Plan and profile views of the additional improvements (6 new sheets)
- Revised plan and profile drawings for Project 20 showing water improvements
- Specification Section 02770, describing water line and service construction
- Revised engineer’s construction cost estimate for all work of the project

It is anticipated that the City will review this supplemental submittal and the already-completed 65% submittal for the other work concurrently and will deliver one set of review comments addressing the entire project.

The 90% and 100% submittals will show all improvements, including the additional work of this Amendment 2.
Consultant will prepare an encroachment permit application for the City to submit to UPRR.

Consultant will attend one meeting with Signode and City representatives to identify preferred alignment for new water service and appurtenances.

City will procure timely rights-of-entry for the Consultant to enter onto private property where needed.

Subtask 1.5 Opinion of Probable Construction Cost

The additional work will be included in all engineering construction cost estimates.

Task 2 – Bid Period Services

Subtask 2.1 Bid Assistance

Bid assistance will be unchanged.

Task 3 – Engineering Services During Construction

Subtask 3.1 Office Engineering

Provide office engineering services to the City during construction of the work. Services include: attendance of the project manager or project engineer at the pre-construction meeting; attendance at up to three construction meetings or field visits; review of up to a total of 10 additional contractor submittals, resubmittals; requests for information, and/or contract change orders, up to the subtask budget given in the table below.

Subtask 3.2 Record Drawings and GIS Data

Prepare record drawings and ArcGIS shape files for the additional work.

Task 4 – Additional Services as Requested

Task 4 includes additional services as requested by the City. No work shall be performed on additional services unless specifically authorized in writing by City prior to performing the services.

Subtask 4.1 Additional Services

Provide additional engineering services as requested by the City. Work on this subtask shall be limited to the amount of the authorized subtask budget.
BUDGET AND COMPENSATION

The total budget for the work of Amendment 2 is $123,900. Estimated budgets by Task and/or Subtask for the work of Amendment 2 are as described in the following table. Labor hours represent labor hours by Consultant. Expenses include subconsultant services, travel, outside printing and reproduction, and other direct costs.

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Compensation shall be made on a time-and-materials basis as described in the Agreement, Section 5 “Measurement and Payment”.

TIME OF COMPLETION

The time to complete the revised 65% submittal shall be 90 calendar days from receipt by Consultant of Authorization by the City. The remainder of the work shall proceed according to the duration in the original schedule from the date of the revised 65% submittal onward.
AMENDMENT 2
PROJECTS 38 & 39
LOCATIONS
1" = 200'

Legend
- SEWER MAIN • SS-MH • SS-I
- PARCEL ▲ SS-CO ○ SS-END —— CTP

SHEET 79  SEWER SYSTEM
REV. 11-20-2012  F14C1_43 SYSTEM