ADDENDUM SIX
GATEWAY SCULPTURES AT BLUE GOOSE HOLLOW
CONTRACT NO. D-16-006-201
CITY OF CHATTANOOGA, TENNESSEE

The following changes shall be made to the Contract Documents, Specifications, and Drawings:

I. **Bid Date**

1. The bid date is extended to January 18th, 2017. Bid opening time and place are unchanged.

II. **Revised Drawings**

1. Revised drawings are included for the concrete foundations, replacing Sheets S1 & S2.

III. Revised Bid Schedule

1. A revised bid schedule is included in this Addendum.

IV. **Revised Specifications**

1. Revised Section 1010 is included.

January 10, 2018

/s/ Justin C. Holland, Administrator
City of Chattanooga
Department of Public Works

1.0 CODES AND STANDARDS:

1.1 "International Building Code", 2012.

1.2 "Minimum Design Loads for Buildings and other Structures" SEI/ASCE 7-10.

1.3 "Building Code Requirements for Structural Concrete (ACI 318-11)" American Concrete Institute 2011.

1.4 "Manual of Standard Practice", Concrete Reinforcing Steel Institute, latest edition.

1.5 "Specification for Structural Steel Buildings (AISC 360-05)" American Institute of Steel Construction, 2011 - 14th Edition

1.6 "Structural Welding Code - Steel (AWS D1.1-04)" and "Structural Welding Code - Reinforcing Steel (AWS D1.4-98)", American Welding Society.

2.0 DESIGN LOADS:
Project Located in: City of Chattanooga, County of Hamilton, State of Tennessee.

2.1 Gravity Loads:

Sculpture Dead Load: Per Paley Studios LTD/ Jensen/BRV Engineering, PLLC drawings titled, "Sculptures for Tennessee Riverpark Extension" and dated 4/24/2017. Stamped by Stephen H. Rudnicki TN PE #120630

2.2 Risk Category = I

2.3 Wind Loads per ASCE 7-10 (3-second gust)

Main Wind Force Resisting System:

Wind loading and resisting system design per Paley Studios LTD/ Jensen/BRV Engineering, PLLC

3.0 FOUNDATIONS:

3.1 Foundation design is based on geotechnical report # 41-17415 by GEOServices Chattanooga, TN dated July 17, 2017. This report is available for inspection at the office of the architect or owner. The recommendations contained in this report are herein made part of the requirements of these contract documents.

3.2 Footings shall bear on strata capable of sustaining a minimum bearing pressure of 2500 psf.

3.3 Foundation design is based on reactions provided by Paley Studios LTD/ Jensen/BRV Engineering, PLLC, dated 4/24/2017 and Stamped by Stephen H. Rudnicki TN PE #120630.

3.4 Top of footing (T/FTG) elevations are shown on the drawings or are to be determined by the Contractor in the field in accordance with the guidelines set forth in the drawings.

3.5 Bottom of exterior footings, grade beams and walls shall bear at a minimum depth of 1'-0" U.N.O., below final grade for frost protection.

3.6 Testing and Inspection:
a. All areas to have slabs on grade shall be proof rolled in accordance with and under observation of the Geotechnical Engineer and approved prior to preparation for concrete placement.

b. All foundation bearing strata shall be inspected and approved by the Geotechnical Engineer prior to any concrete placement.

c. Geotechnical Engineer shall be the sole judge as to suitability of all foundation and/or slab bearing strata.

d. Footing bearing elevations shall be adjusted in the field as required to meet the design bearing pressures by additional excavation or compaction and/or backfilling or by other means acceptable to the Geotechnical Engineer.

3.7 Undercutting to remove existing fill beneath footings and slab shall be performed at the direction of the Geotechnical Engineer.

3.8 Engineered Fill: All fill material shall be selected in accordance with the Geotechnical Report Material shall be a clean, low plastic soil with a plasticity index less than 30 (less than 15 is preferred), liquid limit less than 50, and unit weight of 120 pcf (+ 5 pcf)

3.9 Compaction: All fill shall be placed in loose lifts not exceeding 8 inches in thickness and compacted to a minimum of 96 percent Standard Proctor (ASTM D-698) except that the top 12 inches shall be compacted to a minimum of 98 percent Standard Proctor. Moisture shall be controlled to within 3 percent above or below optimum content.

3.10 Remove all topsoil and organic materials. The stripping should extend at least 10' beyond the proposed construction limits.

3.11 Contractor shall review all construction considerations as outlined in the Geotechnical report and bid accordingly.

4.0 CONCRETE:

4.1 Concrete Strength:
All concrete shall be in accordance with the American Concrete Institute (ACI) 301 and 318.

4.2 Concrete shall have a 28 day compressive strength and density as follows:
a. Footings, Grade Beams, and Interior Slab-on-grade.....3,000psi, Density = ±145pcf
b. Pile Caps.....4,000psi, Density = ±145pcf

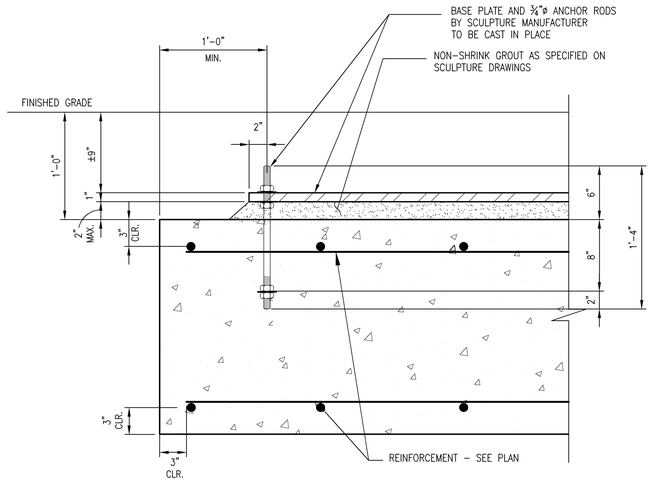
4.3 Concrete Mix Designs:
a. Submittals: Submit written reports of each proposed concrete mix not less than 15 days prior to the start of work.
b. Mix designs, including water, cement ratios and slumps, shall be prepared in accordance with ACI 301-05, Section 4, Cement shall conform to ASTM C 150 Type 1 or at contractor's option, ASTM C 595 Type IP where fly ash is permitted. Normal weight aggregate shall conform to ASTM C 33 and light weight aggregate shall conform to ASTM C 330. No admixtures containing calcium chloride shall be permitted in any concrete.
c. Aggregate size shall be #67 stone for supported slabs or other formed concrete elements; #57 stone for slabs on grade and footings or other concrete elements formed from and poured against earth; #89 stone for masonry grout.
d. Water reducing admixture shall be used in all concrete.
e. Air entraining admixture in accordance with ACI 301 shall be used in all concrete exposed freezing and thawing during construction or service conditions.
f. Concrete subjected to freezing/thawing shall have a maximum water/cement ratio of 0.45 and shall contain the amount of air entraining agent specified in ACI 301-05 Section 4.

4.4 Curing:
See specifications for curing method options and apply within two (2) hours after completion of finishing to all concrete flatwork and walls, U.N.O., other than footings and grade beams.

4.5 Use a non-corrosive, non-chloride accelerating admixture in concrete exposed to temperatures below 40 degrees. Uniformly heat the water and aggregates to a temperature of not less than 50 degrees. Place and cure concrete in accordance with ACI 306.

4.6 When hot weather conditions exist, place and cure concrete in accordance with ACI 301. Cool ingredients before mixing to maintain concrete temp. at time of placement below 90 degrees.

4.7 Reinforcing in all abutting concrete, including footings shall be continuous through or around all corners or intersections. Dowels or splices shall be equal in size and spacing to the reinforcing in the abutting members.



SECTION 1-1
SCALE: 1 1/2" = 1'-0"
TYP. @ 3/4" BOLTS

4.8 Refer to architectural drawings for door and window openings, drips, reglets, washes, masonry anchors, brick ledge elevations, slab depressions and miscellaneous embedded plates, bolts, anchors, angles, etc.

4.9 Refer to plumbing, mechanical and electrical drawings for underfloor, perimeter and other drains and for sleeves, outlet boxes, conduit, anchors, etc. The various trades are responsible for their items.

4.10 Base plates, anchor bolts, support angles and other steel exposed to earth or granular fill shall be covered with a minimum of 3" of concrete.

4.11 Tolerance for anchor bolts and other embedded items shall be per the AISC Code of Standard Practice Section 7.5.

4.12 Unless otherwise shown in the architectural drawings, provide ¾" chamfers at all column, wall, slab or beam edges that are exposed to view in the finished structure.

4.13 Concrete cover for cast-in-place concrete reinforcement:
Concrete cast against & permanently exposed to earth:.....3 Inches
Concrete exposed to earth or weather:
No. 6 through No. 18 Bars:.....2 Inches
No. 5 Bar and smaller:.....1½" Inches
Concrete not exposed to weather or in contact with ground:
Slabs, Walls, Joists:
No. 11 Bar and smaller:.....¾" Inches
Beams, Columns:
Primary Reinforcement, Ties, Stirrups:.....1½" Inches

5.0 REINFORCING STEEL:

5.1 Reinforcing shall be domestic new billet steel conforming to ASTM A615, Grade 60 or 60S including stirrups and ties, except that reinforcing which is required to be welded shall conform to ASTM A706.

5.2 Field bending of concrete reinforcing steel is not permitted.

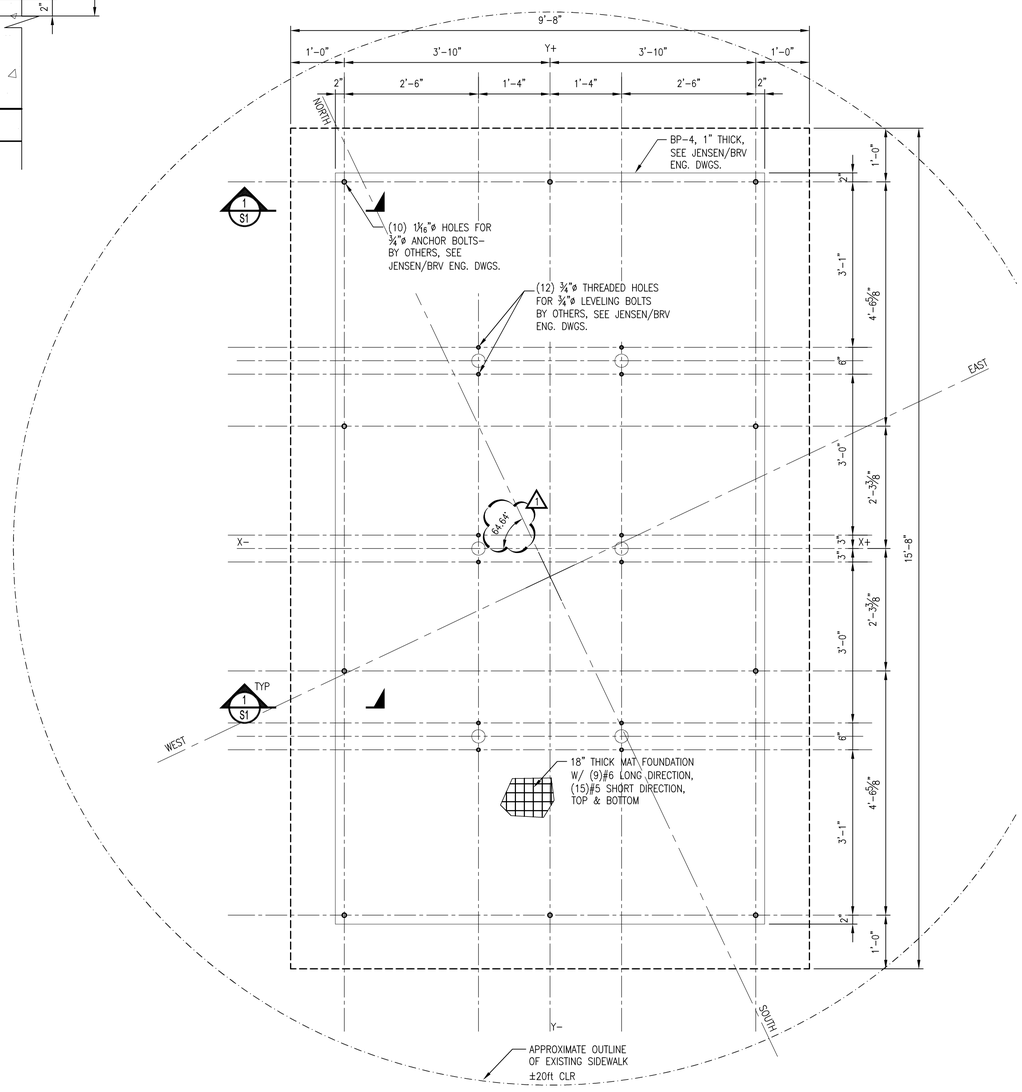
5.3 Bar Splices:

	f'c = 3,000psi		f'c = 4,000psi		f'c = 5,000psi	
Bar Size	Ld (in)	Class "B" Lap Splice (in)	Ld (in)	Class "B" Lap Splice (in)	Ld (in)	Class "B" Lap Splice (in)
#3	17	22	15	19	13	17
#4	22	29	19	25	17	23
#5	28	36	24	31	22	28
#6	33	43	29	37	26	34
#7	48	63	42	54	38	49
#8	55	72	48	62	43	56

1. Values are based on normal weight concrete.
2. Ld = minimum embed of rebar
3. Class "B" lap splice refers to minimum distance bars must be lapped for a full tension splice.

6.0 CONSTRUCTION AND SAFETY:

6.1 Woods Engineering P.A.'s responsibility is limited to the details and information shown on these drawings. It is the responsibility of the Contractor to provide adequate safety measures required by local codes as well as OSHA Standards for the Construction Industry.
This should include, but not be limited to the following:
Shoring to protect new as well as existing structures.
Necessary Scaffolding.
Material Handling Equipment.
Trench Boxing.



FOUNDATION PLAN
LOCATION 1A
SCALE: 3/4" = 1'-0"

WOODSENGINEERING
Consulting Structural Engineers
730 Cherry St. Suite 201
Chattanooga, TN 37402
Phone: 423.771.4430
www.woodseng.com

REBECCA LIND BROOKS
REGISTERED ENGINEER
No. 115614
STATE OF TENNESSEE
10.9.17

Release Dates

08.16.17	ISSUED FOR PRICING
	-
10.03.17	CONSTRUCTION
	DOCUMENTS
01.09.18	REVISION #1
	DIMENSION CHANGES

SCULPTURE 1A
FOUNDATION PLAN
& DETAILS

Paley Sculpture Foundation
Tennessee Riverwalk
Chattanooga, TN

File name:
17-2592_S1.1.dwg

S1

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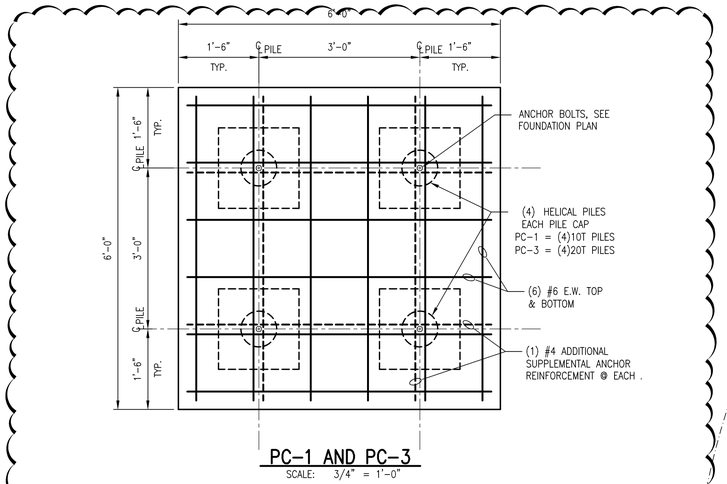
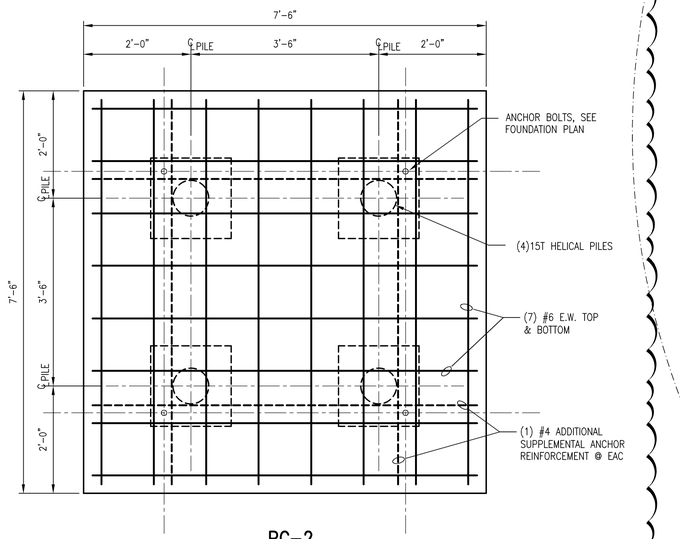


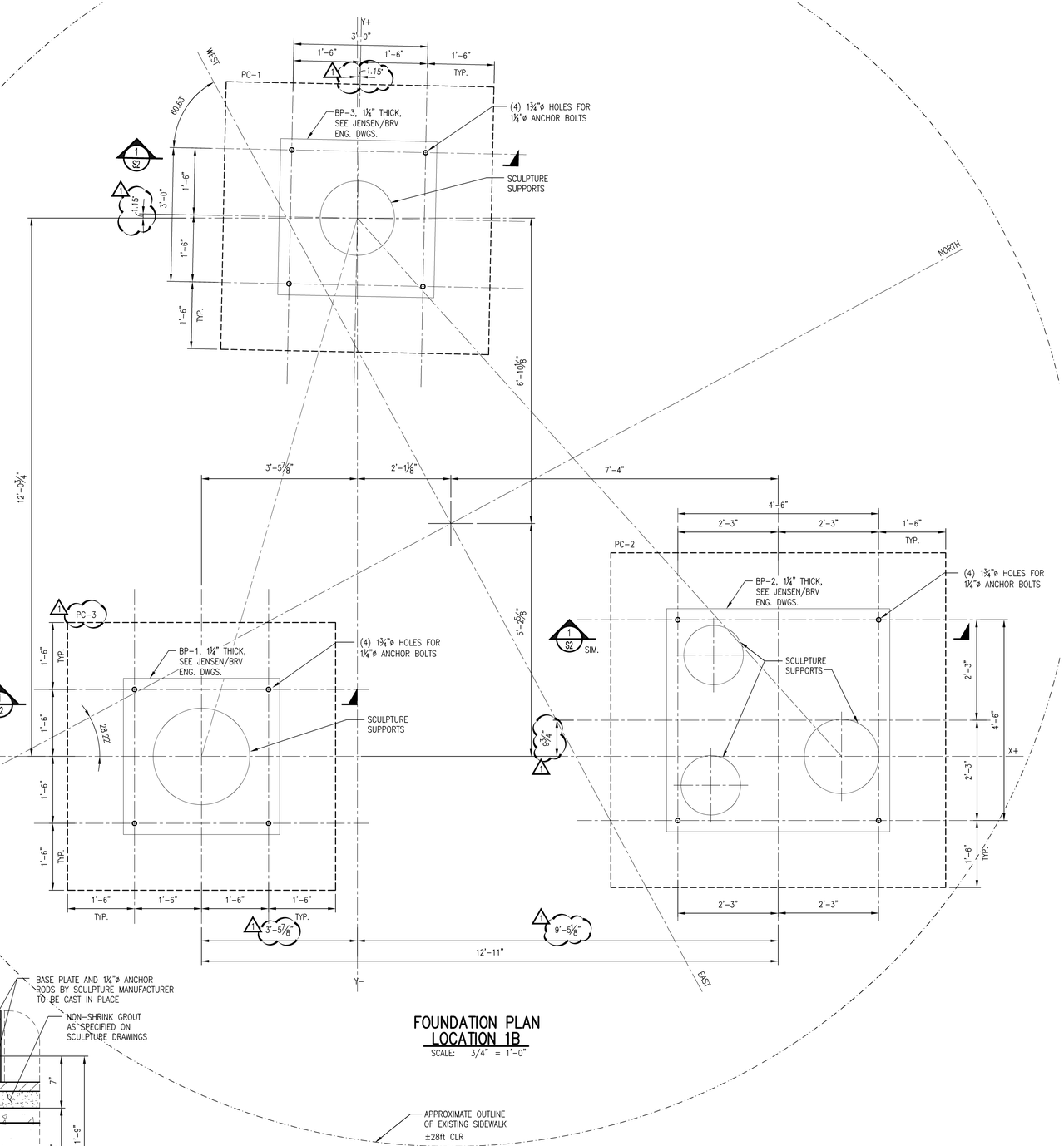
PC-1 AND PC-3

SCALE: 3/4" = 1'-0"



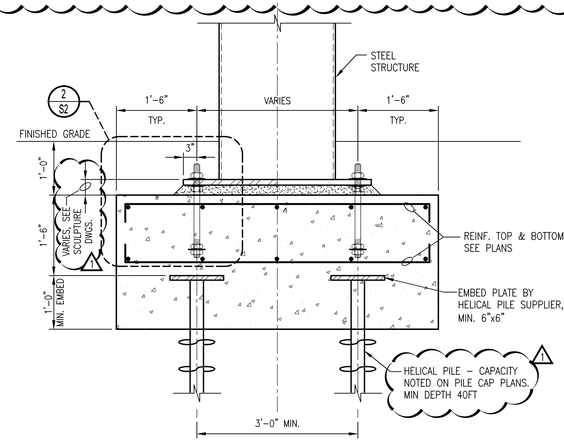
PC-2

SCALE: 3/4" = 1'-0"



FOUNDATION PLAN LOCATION 1B

SCALE: 3/4" = 1'-0"



SECTION 1–1

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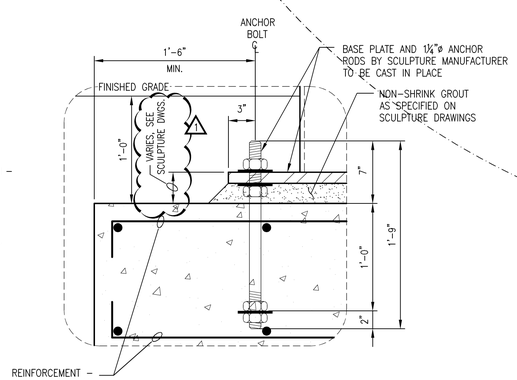
TYP. @ 1 1/4" BOLTS



SECTION 2–2

SCALE: 1 1/2" = 1'-0"
TYP. @ 1 1/4" BOLTS

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Release Dates

08.16.17	ISSUED FOR PRICING
	-
10.03.17	CONSTRUCTION
	DOCUMENTS
01.09.18	REVISION #1
	DIMENSION CHANGES

SCULPTURE 1B - FOUNDATION PLAN & DETAILS

Paley Sculpture Foundation

Tennessee Riverwalk
Chattanooga, TN

File name:
17-2592_S1.1.dwg

S2

BID SCHEDULE

GATEWAY SCULPTURES AT BLUE GOOSE HOLLOW

CONTRACT NUMBER D-16-006-201

CHATTANOOGA, TENNESSEE

DESCRIPTION

The project consists of securing all necessary construction permits, installing erosion control measures, excavating for construction of foundations, installing twenty four (24) helical piers to an approximate depth of 40', constructing three isolated reinforced concrete pier caps and setting anchor bolts, and constructing one reinforced concrete mat foundation and setting anchor bolts. After the sculptures are installed (by others), backfill foundation excavations with #57 stone to 4" below finished grade, install weed control fabric, install a 4" layer of decorative landscaping stone, repair any damaged site elements, clean work site, and restore the area to pre-construction conditions.

TOTAL PROJECT BID

TOTAL PROJECT BID $ _____

$ _____

Note: ***Dollar amounts are to be shown in both words and figures. In case of discrepancy, dollar amounts shown in words will govern.***

Contractor certifies that he has reviewed the plans and specifications, and that all items of work not specifically listed in the Bid Schedule are included in the prices for the various items listed on the Bid Schedule.

BIDDER: **DATE:**

BY: **(Signature)** **TITLE:**

ADDRESS:

CITY: **STATE:** **ZIP CODE:**

TELEPHONE NUMBER:

Bid Schedule **Rev. 1/10/17**

Contract Number D-16-006-201

Gateway Sculptures at Blue Goose Hollow

City of Chattanooga

CONTRACT NUMBER D-16-006-201					
Item No.	**Description**	**Estimated Qty.**	**Unit**	**Unit Price**	**Total Price**
BASE BID					
717	Mobilization	1	LS		
00 00 23	Removal of Structures & Obstructions	1	LS		
00 00 98	Erosion Control	1	LS		
00 00 98.1	Maintaining Erosion Control Devices	1	LS		
02 22 20	Excavation for foundations	58	CY		
02 22 21	Stripping Topsoil	13	CY		
00 00 73	4" Layer Decorative Rock	26	TON		
00 00 98	No. 57 Backfill	32	TON		
31 26 01	Steel Helical Piers & Embed Plates, 10-ton	4	EA		
31 26 02	Steel Helical Piers & Embed Plates, 15-ton	4	EA		
31 26 03	Steel Helical Piers & Embed Plates, 20-ton	4	EA		
31 26 10	Steel Helical Piers (Additional Length Over 40' Depth, 7' Section)	12	EA		
31 26 11	Steel Helical Piers (Length Under 40' Depth, 7' Section, ***DEDUCT***)	12	EA		
03 31 00	Class A Concrete	21	CY		
03 24 00	Steel Bar Reinforcement	1700	LB		
1413	Repair Pavers, Edge Restraint Curb, Subsurface Drainage	100	SF		

D-16-006-201 TOTAL BASE BID $ _____

SECTION 01010
SUMMARY OF WORK

PART 1 – GENERAL

1.1 Section Includes

A. Description of Work

B. Items regulating the execution of the Work

1.2 Description of the Work

A. The work covered by this Contract consists of, but is not limited to:

The project consists of securing all necessary construction permits, installing erosion control measures, excavating for construction of foundations, installing twelve (12) helical piers to an approximate depth of 40' and required capacities, constructing three isolated reinforced concrete pier caps and setting anchor bolts, and constructing one reinforced concrete mat foundation and setting anchor bolts. After the sculptures are installed (by others), backfill foundation excavations with #57 stone to 4" below finished grade, install weed control fabric, install a 4" layer of decorative landscaping stone, repair any damaged site elements, clean work site, and restore the area to pre-construction conditions.

B. The City Engineer reserves the right to substitute, add, delete, increase, decrease in any form or fashion as necessary the scope of work under the provisions of this Contract, including the projects noted above.

C. This project shall be assigned a unique project number by the Engineer. The Contractor shall execute this project in complete compliance with the requirements of this contract. All records of the Contractor shall conspicuously identify them to be associated with the unique project number assigned by the Engineer.

D. The work covered under this project shall consist of furnishing all materials, equipment and labor for the full depth reclamation of designated streets including but not limited to mobilization, parking sign placement, public notification, placement of traffic control devices per MUTCD, cleaning and conditioning of the roadways, repair of base failures as needed, the adjustment of sanitary manholes and other publicly owned structures as required, milling as directed, cement and water addition, grading, compaction, saw cutting and installation of traffic signal loop wires where required and placement of temporary and permanent pavement markings as required.

E. The Engineer shall provide a set of standard City details, as needed, which shall be applicable to this project. The Contractor shall be called in for a Pre-

Construction meeting at which time the Engineer shall issue notice to proceed. The Contractor shall have ten (10) days or an agreed to start date to start construction.

1.3 Items regulating the Execution of the Work.

A. Attention to Work

For this project, the Contractor shall give his personal attention to and shall supervise the work to the end that it shall be prosecuted faithfully; and, when he is not personally present on the work, he shall at all times be represented by a competent superintendent or foreman who shall be present at the work and who shall receive and obey all instruction or orders given under this Contract, and who shall have full authority to execute the same, and to supply materials, tools and labor without delay, and who shall be the legal representative of the Contractor. The Contractor shall be liable for the faithful observance of any instructions delivered to him or to his authorized representatives.

B. Access to Work

The Contractor shall at all times provide proper facilities for access and inspection of the work by representatives of the Owner and of such official Governmental agencies as may be designated by the Owner as having jurisdictional rights to inspect the work.

C. No Parking Signs

The Contractor shall place "NO PARKING" signs 48 hours prior to beginning work at a project location. The Contractor shall notify the City's designated Inspector/ Project Manager when the signs have been placed and if vehicles have not been moved at such time as work is scheduled to begin. No additional cost shall be paid to the Contractor while the Owner is making arrangements to get the vehicle moved or towed.

D. Work on State Highway

Where the work on this project encroaches upon the right-of-way of any State or Interstate Highway right-of-way, the owner will execute a contract with proper authorities for the proposed work.

The Contractor shall notify the proper authorities prior to entering upon such right-of-way and shall be responsible for all damage and for satisfying the requirements of these authorities.

E. Work on Private Property

Where the work on this project encroaches upon private property, the Owner shall provide easements and/or right-of-entry in or onto said property. Work performed in such easements is subject to the provisions of the easement agreement on file with the City of Chattanooga Engineering Department.

The Contractor shall be responsible for obtaining any additional agreements which may be deemed necessary for the storage of equipment or materials outside of public easements or rights of ways for this project. The Contractor shall obtain

a written agreement between the Contractor and Land Owner and forward it to the Engineer prior to use of said property.

The Contractor shall be responsible for the preservation of and shall use every precaution to prevent damage to all trees, shrubbery, fences, culverts, mailboxes, bridges, pavements, driveways, sidewalks, houses or building and all water, sewer, gas, telephone and electric lines thereto and all other private and public property along or adjacent to the work.

Any damage that occurs will be restored to a like condition as existed prior to construction, in the Contract Documents, unless otherwise indicated or specified.

Forty-eight (48) hours prior to construction on any easement or streets the Contractor shall notify in writing the affected property owners in the area. This notification shall include the Contractor's name and the name and phone number of the contact person.

F. Monthly Job Site Meetings

Once a month, on a date mutually agreed upon by the Contractor and the Engineer, a job site meeting shall be held for review of the Project, including, but not limited to: The construction schedule, traffic control, pending submittals, and any other issues that may arise. This meeting shall be used to review the contractor's monthly applications for payment.

G. Contract Working Hours

All work shall be performed during regular working hours unless mutually agreed upon and approved in writing by the City Engineer. The Contractor will not permit overtime work or the performance of work on Sunday or any legal holiday without the Owner's written consent given after prior 24 hour written notice to the Engineer. Saturday work shall also require prior 24 hour written notice. Regular working hours are Monday through Saturday from 7:00 A.M. to 8:00 P.M. The actual costs of the Owner's and Engineer's inspection of the work performed outside of regular working hours will be billed to the Contractor and deducted from the Contractor's application for payment as they occur.

END OF DOCUMENT