

BPC Central Small Diameter Package 1 Solicitation Number: CO-00293-FF Job No.: 18-4532

ADDENDUM 03 August 30, 2019

To Bidder of Record:

This addendum, applicable to work referenced above, is an amendment to the bid proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the bid proposal.

CHANGES TO THE SPECIFICATIONS

 Special Provisions to the Technical Specifications- Insert SPTS-12 (see Attachment B). Modified measurement and payment in Specification 801 – Tree and Landscape Protection to be non-separate pay item and incidental to the work.

CHANGES TO THE PLANS

- 1. Sheet 97- Remove Sheet 97 and replace with revised Sheet 97 attached to this Addendum.
 - Added Tree Protection Measures summary table.
 - Updated Tree Inventory Summary.

CLARIFICATIONS

1. Costs related to meeting the requirements of Specification 801- Tree and Landscape Protection shall be considered a non-separate pay item and incidental to the work.

END OF ADDENDUM

This Addendum, including this one (1) page, is <u>nine</u> (9) pages with attachments in its entirety.

Attachments: A-Spec 801

B- SPTS-12 from Special Provisions to the Technical Specifications

C- Plan Sheet 97.



ATTACHMENT A SPEC 801

ITEM 801

TREE AND LANDSCAPE PROTECTION

This item shall govern the placing of protection for trees and other landscape plant material or natural areas to be protected during construction. No site preparation work shall begin in areas where tree preservation and treatment measures have not been completed and approved. Where removal of trees is indicated on the drawings, they shall be marked as directed by the engineer or designated representatives. This item shall also govern the excavation, filling, trenching and boring around trees described on the plans, and for furnishing all materials, water, labor, tools, equipment and supplies required as specified by this item or as indicated on the plans.

Reference Standards: City of San Antonio Tree Preservation ordinance # 85262

MATERIALS:

LEVEL I FENCE PROTECTION (Detail 1.1.2):

Fabric: Fabric (4 foot height or 1.2 m) shall consist of orange plastic fencing as shown on the plans and shall be woven with 2-inch (50 mm) mesh openings such that in a vertical dimension of 23 inches (584 mm) along the diagonals of the openings there shall be at least seven meshes.

- 1. Installation Posts: Installation posts shall be a minimum of 72 inches (1.5 m) long and steel "T" shaped with a minimum weight of 1.3 pounds per linear foot (6.3 kg per meter).
- 2. Tie Wire: Wire for attaching the fabric to the t-posts shall be not less than No. 12 gauge galvanized wire. Sufficient fastening material shall be furnished to provide for the securing of the fabric to the "T" line posts.
- 3. Used Materials: Previously-used materials, meeting the above requirements and when approved by the Engineer, may be used.

LEVEL IIA FENCE PROTECTION (Detail 1.1.3):

Materials same as Level I

-OR-

LEVEL IIB FENCE PROTECTION (Detail 1.1.4):

- 1. Sleeve: 2x4 lumber to a height of 4 feet above the root crown.
- 2. 2x4 shall be utilized as called for on plan.
- 3. Tie Wire: Wire for securing the 2x4s shall not be less than No. 12 gauge.

OTHER MATERIALS:

1. Tree Dressing - Asphaltic Tree Wound Paint

CONSTRUCTION METHODS:

LEVEL I FENCE PROTECTION:

All trees and shrubs in the proximity of the construction site shall be protected prior to beginning any development activity.

Protective fencing shall be erected outside the dripline at locations shown in the plans or as directed by the Inspector and/or City Arborist or in accordance with the details shown on the plans at the drip line of trees (Root Protection Zone, RPZ) and/or landscape plant material including natural areas. Fencing shall be maintained and repaired by the contractor during site construction.

Protective fence locations in close proximity to street intersections or drives shall adhere to the City of San Antonio's site distance criteria.

The protective fencing shall be erected before site work commences and shall remain in place during the entire construction phase. Access to fenced areas will be permitted only with the approval of the engineer.

The installation posts will be placed every 6 feet (2 m) around the drip line or RPZ and embedded to 18 inches (457 mm) deep. Fabric attachment shall be attached to the installation posts by the use of sufficient wire ties to securely fasten the fabric to the "T" posts as to hold the fabric in a stable and upright position.

- 1. Do not clear, fill or grade in the RPZ of any tree.
- 2. Do not store, stockpile or dump any job material, soil or rubbish under the spread of the tree branches.
- 3. Do not park or store any equipment or supplies under the spread of the tree branches.
- 4. Do not set up any construction operations under the spread of the tree branches. (E.g. pipe cutting and threading, mortar mixing, painting or lumber cutting)
- 5. Do not nail or attach temporary signs, meters, switches, wires, bracing or any other item to the trees.
- 6. Do not permit runoff from waste materials including solvents, concrete washouts, asphalt tack coats (MC-30 oil), etc. to enter the RPZ. Barriers are to be provided to prevent such runoff substances from entering the RPZ whenever possible, including in an area where rain or surface water could carry such materials to the root system of the tree.

The contractor shall avoid cutting roots larger than one inch in diameter when excavation occurs near existing trees. Excavation in the vicinity of trees shall proceed with caution. The contractor shall contact the city inspector.

Remove all trees, shrubs or bushes to be cleared from protected root zone areas as directed by engineer by hand.

Trees damaged or lost due to contractor's negligence during construction shall be mitigated at the contractor's expense and to the engineer's satisfaction.

Any tree removal shall be approved by the city arborist prior to its removal.

Cover exposed roots at the end of each day with soil, mulch or wet burlap.

In critical root zone areas that cannot be protected during construction and where heavy traffic is anticipated, cover those areas with (8) inches of organic mulch to minimize soil compaction. This (8) inch depth of mulch shall be maintained throughout construction.

Water all trees, most heavily impacted by construction activities, deeply once a week during periods of hot dry weather. Spray tree crowns with water periodically to reduce dust accumulation on the leaves.

When installing concrete adjacent to the root zone of a tree, use a plastic vapor barrier behind the concrete to prohibit leaching of lime into the soil. See related specifications.

When an excavation or embankment is placed within the dripline of any tree greater than (8) inches in diameter, a Tree well shall be constructed to protect the tree as indicated, when the cut or fill exceeds (8) inches. See related specifications.

Where paving or filling is necessary within the dripline of any tree (8) inches or greater, a permeable pavement and aeration system must be installed as indicated. See related specifications.

CONSTRUCTION METHODS:

LEVEL II A FENCE PROTECTION:

Protective fencing shall be erected within the RPZ at locations shown in the plans or as directed by the Inspector and/or City Arborist or in accordance with the details shown on the plans at the drip line of trees (Root Protection Zone, RPZ) and/or landscape plant material including natural areas. Fencing shall be maintained and repaired by the contractor during site construction.

Fabric: Fabric (4 foot height or 1.2 m) shall consist of orange plastic fencing as shown on the plans and shall be woven with 2-inch (50 mm) mesh openings such that in a vertical dimension of 23 inches (584 mm) along the diagonals of the openings there shall be at least seven meshes.

- 1. Installation Posts: Installation posts shall be a minimum of 72 inches (1.5 m) long and steel "T" shaped with a minimum weight of 1.3 pounds per linear foot (6.3 kg per meter).
- 2. Tie Wire: Wire for attaching the fabric to the t-posts shall be not less than No. 12 gauge galvanized wire. Sufficient fastening material shall be furnished to provide for the securing of the fabric to the "T" line posts.
- 3. Used Materials: Previously-used materials, meeting the above requirements and when approved by the Engineer, may be used.

LEVEL II B FENCE PROTECTION:

Trunk protection shall be erected at locations shown in the plans or as directed by the Inspector and/or City Arborist shall be maintained and repaired by the contractor during site construction.

- 1. Installation Sleeve: 2x4 lumber to a height of 4 feet above the root crown.
- 2. Tie Wire for securing the 2x4s shall not be less than No. 12 gauge

MEASUREMENT:

Protective fencing will be measured by the linear foot of accepted work, complete in place for the duration of construction activity.

PAYMENT:

Tree and Landscape Protective Fencing will be paid for at the unit price bid per linear foot (meter), which price shall be full compensation for furnishing and placing all materials, manipulation, labor, tools, equipment and incidentals necessary to complete the work.

BID ITEMS

Item 801.1: Level I Protective Fencing - per linear foot (meter)

Item 801.2: Level IIA Protective Fencing - per linear foot (meter)

Item 801.3: Level IIB Protective Fencing - per linear foot (meter)

ATTACHMENT B SPECIAL PROVISIONS TO THE TECHNICAL SPECIFICATIONS (SPTS) - 12

O. Revision to SAWS Standard Specification Item No. 801 Tree and Landscape Protection

Under Measurement: The statement to be replaced currently reads as follows:

Protective fencing will be measured by the linear foot of accepted work, complete in place for the construction activity.

The above statement is to be replaced with the following:

Protective fencing will be incidental to the Project, complete in place for the construction activity.

Under Payment: The statement to be replaced currently reads as follows:

Tree and Landscape Protective Fencing will be paid for at the unit price bid per linear foot (meter), which price shall be full compensation for furnishing and placing all materials, manipulation, labor, tools, equipment and incidentals necessary to complete the work.

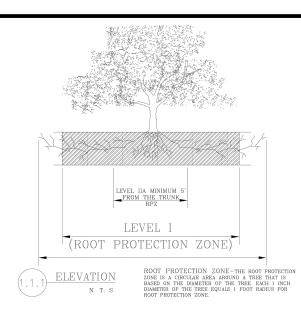
The above statement is to be replaced with the following:

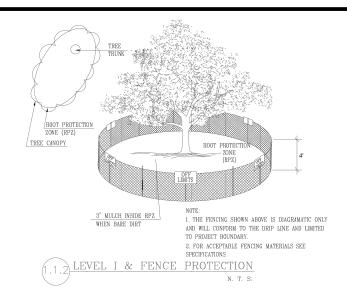
Tree and Landscape Protective Fencing will be a non-separate pay item and incidental to the work. This shall include cost for furnishing and placing all materials, manipulation, labor, tools, equipment and incidentals necessary to complete the work.

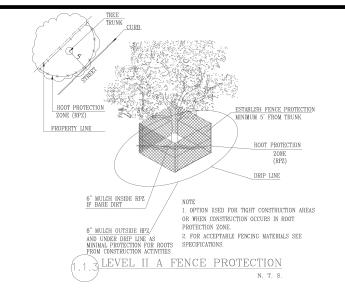
Bid Items: Delete this section in its entirety.

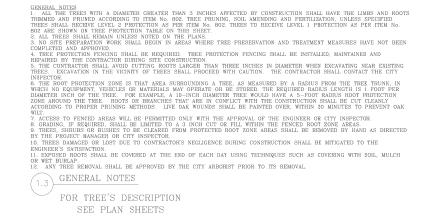
All other language in this specification 801 remains in full force.

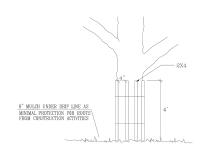
ATTACHMENT C PLAN SHEET 97











WRAP TREE TRUNK WITH 2"X4" STUDS AND ROPE OR BAND IN PLACE AS NEEDED TO PROTECT TREES IN WORK AREAS.

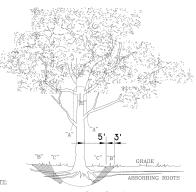


TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE TUNNELING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO TUNNEL WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE ENDINEER.





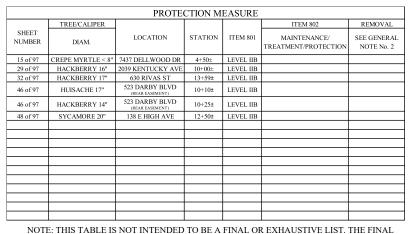




A" REMOVE BULKY TREE PARTS "SHRED" AND/OR HAUL SEPARATELY. "B" BEGIN EXCAVATION APPROX. 8 FROM THE TRUNK - CUT THRU ANCHOR ROOTS AT AN ANGLE - 3' TO 4^{\prime} DEEP

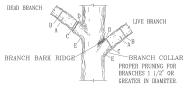
"C" USING TREE TRUNK AS A LEVER PUSH AT POINT "E" TO REMOVE TREE BOLE AND LARGE FEEDER ROOTS (4" TO 10" IN DIAM.)





DETERMINATION OF TREES TO BE PROTECTED WILL BE MADE BY THE COSA ARBORIST, OR DESIGNATED REPRESENTATIVE, PRIOR TO CONSTRUCTION ACTIVITIES. COSTS RELATED TO MEETING THE REQUIREMENTS OF SPECIFICATION 801-TREE AND LANDSCAPE PROTECTION SHALL BE CONSIDERED A NON-SEPARATE PAY ITEM AND INCIDENTAL TO THE WORK.

TREE PROTECTION TABLE



NOTE: DO NOT CUT FROM D to E.

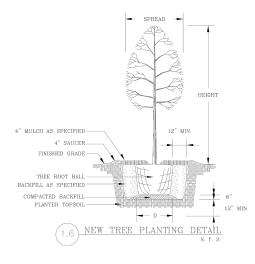
- A. FIRST CUT TO PREVENT THE BARK FROM BEING PEELED WHEN THE BRANCH FALLS.
 B. SECOND CUT TO REDUCE THE WEIGHT OF BRANCH.
- C. FINAL CUT ALLOW FOR HEALING COLLAR BUT NO STUBS
- D. BRANCH RIDGES INDENT PROPERLY BRANCH RIDGES WHICH ARE SITE FOR DECAY.

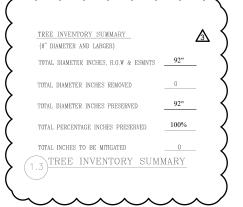
FOR QAKS ONLY: PAINT ALL WOUNDS OR CUTS WITH PRUNING PAINT WITHIN 20 MIN TO PREVENT THE SPREAD OF OAK WILT.

1.4 BRANCH PRUNING DETAIL



A MINIMUM BRANCH CLEARANCE OF 14 FEET ABOVE STREET ELEVATION MUST BE MAINTAINED FROM THE PROPERTY LINE TO THE CURB LINE AS PRESCRIBED BY PROJECT MANAGER.







Suite 350 San Antonio, TX 78232 (210) 447-6250								
3\	ADDENDUM NO. 3		JFM	IPT	8/29/19			
١٥.	Revision		Drawn	Approved	Date			
REVISIONS								
$\overline{\subseteq}$	SAWS 2018 BPC CENTRAL BASIN SMALL DIAMETER PACKAGE 1							

Registration No. F-5713 13750 San Pedro Avenue

COSA TREE PERSERVATION

	DETAILS				
DEVELOPER: SAN-ANTONIO-WATER-SYSTEM					
CONT.		BUDGET PROJ. 00-00-00			
SUBMITTED					
MAP No. 000	-000		SHEET		
SECT. No.			97		
DR. JFM CK.	JGM	JOB No.	OF 97		

(1.5) BRANCH CLEARANCE DETAIL