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09-0540

AGREEMENT BETWEEN THE CITY OF HOUSTON AND CONTRACTOR

Owner: THE CITY OF HOUSTON, 901 Bagby Street, Houston, Texas 77002 (the City)
Contractor: Main Lane Industries, LTD
Address: 9201 Tavenor Lane, Houston, TX, 77075
Project No.: S50-C23150
The Project Title: Concrete Pavement Repair Service
The Project Location: City Wide Locations
The City Engineer is: Phil Golembiewski
(Address for Written Notice) **611 Walker, Houston, Texas 77002**
The Architect/Engineer is: N/A

THE OWNER AND THE CONTRACTOR AGREE AS SET FORTH BELOW:

ARTICLE 1 WORK OF THIS CONTRACT

- 1.1 The Contractor shall execute the Work in accordance with the provisions of the Contract Documents, except to the extent specifically indicated in the Contract Documents to be the responsibility of others, or as otherwise provided herein. Work shall be described in the Work Order. More than one Work Order may be issued at anytime under the Contract or no Work Orders may be issued under the Contract.

ARTICLE 2 CONTRACT TERM AND CONTRACT TIME

- 2.1 The effective date is the date of countersignature by the City Controller. The Contract Term shall begin on the date specified in the Notice to Proceed issued by the City Purchasing Agent and shall continue for a **three-year period. Upon expiration of the Initial Term, and so long as the City makes sufficient supplemental allocations, this Agreement will be automatically renewed for two successive one-year terms on the same terms and conditions.** If the Director/Chief of the City Department elects not to renew this Agreement, the City Purchasing Agent shall notify Contractor in written of non-renewal at least 30 days before the expiration of the then current term.
- 2.2 The Date of Commencement of the Work, as defined in General Conditions, is the date from which the Contract Time is measured, which date is established by the Work Order.
- 2.3 The Contractor shall achieve substantial completion of the Work during the Contract Time, subject to adjustments as provided in Contract Documents.
- 2.4 Contract Term shall not exceed five years, except as otherwise provided herein. During this time, City from time-to-time may issue Work Orders specifying the Work to be completed and Contract Time within which Contractor must achieve Substantial Completion.

- 2.4 Contract Term shall not exceed five years, except as otherwise provided herein. During this time, City from time-to-time may issue Work Orders specifying the Work to be completed and Contract Time within which Contractor must achieve Substantial Completion.
- 2.5 Should Contractor fail to achieve substantial completion of the Work within that Contract Time, the Contractor agrees to pay liquidated damages as stipulated in Supplementary Conditions.

**ARTICLE 3
THE CONTRACT PRICE**

- 3.1 The City's duty to pay money to the Contractor for any purpose under the Contract is limited in its entirety by this Article 3.
- 3.2 (1) The City's duty to pay money to Contractor under this Agreement is limited in its entirety by the provisions of this Section.

(2) In order to comply with Article II, Section 19 and 19a of the City's Charter and Article XI, Section 5 of the Texas Constitution, the City has appropriated and allocated the sum of **\$350,000.00** to pay money due under this Agreement (the "Original Allocation"). The executive and legislative officers of the City, in their discretion, may allocate supplemental funds for this Agreement, but they are not obligated to do so. Therefore, the parties have agreed to the following procedures and remedies:

(3) The City makes a supplemental allocation by sending a notice signed by the Director and the City Controller to Contractor in substantially the following form:

"NOTICE OF SUPPLEMENTAL ALLOCATIONS OF FUNDS"

TO: [_____]
 FROM: City of Houston, Texas (the "City")
 DATE: [Date of notice]
 SUBJECT: Supplemental allocation of funds for the purpose of the "[Cullen Boulevard Beautification Project]" between the City and (_____) countersigned by the City Controller on (Date of Countersignature) (the "Agreement").

I, (name of the City Controller), City Controller of the City of Houston, certify that the supplemental sum of \$_____, upon the request of the below-signed Director, has been allocated for the purposes of the Agreement out of funds appropriated for this purpose by the City Council of the City of Houston. This supplemental allocation has been charged to such appropriation.

The aggregate of all sums allocated for the purpose of such Contract, including the Original Allocation, and all supplemental allocations (including this one), as of the date of this notice, is \$_____.

REQUESTED:

SIGNED:

(Signature of the Director)
Director

(Signature of the City Controller)
City Controller of the City

(4) The City Council delegates to the Director the authority to approve up to **\$14,032,400.00** in Supplemental Allocations without further City Council approval.

(5) The Original Allocation plus all supplemental allocations are the Allocated Funds. The City shall never be obligated to pay any money under this Agreement in excess of the Allocated Funds. Contractor must assure itself that sufficient allocations have been made to pay for services it provides. If Allocated Funds are exhausted, Contractor's only remedy is suspension or termination of its performance under this Agreement, and it has no other remedy in law or in equity against the City and no right to damages of any kind.

- 3.3 Subject to all the terms and conditions of the Contract Documents, the City shall pay the Contract Price to the Contractor in current funds for the Contractor's performance of the Work, as provided in the Work Order.
- 3.4 The Contract Amount, for those unit price items of Work listed in the Fee Schedule for Demolition and Tree Planting Services is subject to adjustment at completion of the Work due to variation in quantities of units of work actually incorporated in the completed Work and other adjustments as provided in Contract Documents.

ARTICLE 4 PAYMENTS

- 4.1 The City shall make progress payments to the Contractor on account of the Contract Price included in the Work Order as provided in this Article 4 and elsewhere in the Contract Documents.
- 4.2 The City Engineer will issue a Certificate for Payment and the City will make a progress payment on the basis of such Certificate as provided in the General Conditions.
- 4.3 Final payment, constituting the entire unpaid balance of the Contract Price due under the Work Order, shall be made by the City to the Contractor as provided in the General Conditions.

ARTICLE 5 MISCELLANEOUS PROVISIONS

- 5.1 Where reference is made in this Agreement to a provision of the General Conditions or other Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.
- 5.2 The Contract may be terminated by the City or by the Contractor as provided in the General Conditions.
- 5.3 The Work may be suspended by the City as provided in the General Conditions.

**ARTICLE 6
ENUMERATION OF CONTRACT DOCUMENTS**

- 6.1 The basis for this Agreement is this executed Document 00510 - Agreement Between the City of Houston and Contractor. Other Contract Documents, except for Work Orders and Modifications issued after execution of this Agreement, are enumerated under this Article.
- 6.2 The General Conditions are Document 00700, current edition, **INCLUDING THE INDEMNITY PROVISIONS STATED IN PARAGRAPH 3.24.**
- 6.3 The Supplementary Conditions of the Contract are those stated in Document 00800.
- 6.4 The Specifications.
- 6.5 Reserved
- 6.6 The Addenda, issued separately, which applied to Contract Documents, if any, are as follows:

Letter of Clarification No. 1, dated, February 19, 2009
Letter of Clarification No. 2, dated, March 2, 2009

- 6.7 Attachments to this Agreement are as follows:

<u>Document</u>	<u>Title</u>
<input checked="" type="checkbox"/>	Fee Schedule
<input checked="" type="checkbox"/>	2006 Wage Rate for Engineering Construction
<input checked="" type="checkbox"/>	Scope of Services / Letters of Clarification
<input checked="" type="checkbox"/>	Equal Employment Opportunity Clause
<input checked="" type="checkbox"/>	Drug Policy Forms
<input checked="" type="checkbox"/>	General and Supplementary Conditions

This Agreement is effective as of the date of countersignature by the City Controller and is executed in three original copies of which one is to be retained by the City Controller and two are to be delivered to the Contractor.

CONTRACTOR: Main Lane Industries, LTD (If Joint Venture)

By: [Signature]
Name: Craig Kille
Title: PRESIDENT
Date: 6-2-2009
Federal I.D. No. 54-207-3440

By: _____
Name: _____
Title: _____
Date: _____

CITY OF HOUSTON, TEXAS

APPROVED:

By: [Signature]
[City Purchasing Agent]

SIGNED: Bill White
By: _____
[Mayor] anyanda Wilkerson

ATTEST/SEAL:

By: [Signature]
[City Secretary]

COUNTERSIGNED:
By: [Signature]
[Signature] City Controller

Date Countersigned:
6-26-09

This Ordinance has been reviewed as to form by the undersigned legal assistant and has been found to meet established Legal Department criteria. The Legal Department has not reviewed the content of these documents.

Date June 4, 2009

[Signature]
Legal Assistant

FEE SCHEDULE

BID ITEM	DESCRIPTION	UNIT	UNIT PRICE
1	Remove and replace slab, 8-10", 5,000 psi, 7-day. Includes backfill, expansion joints and adjustment / repair of inlets, manholes and water valves as needed.	cu. ft.	\$8.25
2	Additional cost to Item No. 1 for High Early Concrete	cu. ft.	\$0.45
3	6" concrete driveway and pavement with curbs per drawing 17201-1.	sq. ft.	\$6.80
4	Concrete curb and gutter, all types, to include rein-in-place.	ln. ft.	\$2.60
5	4-1/2" concrete sidewalks, to include rein-in-place.	sq. ft.	\$5.25
6	Remove and replace asphalt surfaces, to include sub-grade.	sq. ft.	\$3.00
7	Remove and replace base material	cu. ft.	\$2.10
8	Remove and replace curbs ONLY	ln. ft.	\$4.50
9	Saw cut concrete	ln. ft.	\$7.00
10	Wheelchair access ramp per drawing 02775-02	sq. ft.	\$12.00
11	Mudjacking, to include drilling holes and inserts	sq. ft.	\$1.00
12	Flagman Allowance for uniformed peace officers only, not to exceed	lump sum	\$36,000.00
13	Cost of Performance, Payment and Maintenance bonds for first year (should be invoiced with first work order)	lump sum	\$17,000.00
14	Retaining wall 18" - 24"	ln. ft.	\$30.00
15	Retaining wall 12" - 18"	ln. ft.	\$27.50

16	Remove and Replace Base Material - Flowable Base	cu. ft.	\$8.00
Year One, Group Two			
17	Time and Material for Items not provided for above. Invoices from Material Supplier verifying cost must accompany invoice before any work is performed under Item 17, a written firm job price estimate must be submitted to the City for approval.	Cost Plus Mark-up 15%	\$11,500.00 ANNUAL
Year Two, Group One			
1	Remove and replace slab, 8-10", 5,000 psi, 7-day. Includes backfill, expansion joints and adjustment / repair of inlets, manholes and water valves as needed.	cu. ft.	\$8.60
2	Additional cost to Item No. 1 for High Early Concrete	cu. ft.	\$0.45
3	6" concrete driveway and pavement with curbs per drawing 17201-1.	sq. ft.	\$7.00
4	Concrete curb and gutter, all types, to include rein-in-place.	ln. ft.	\$2.75
5	4-1/2" concrete sidewalks, to include rein-in-place.	sq. ft.	\$5.40
6	Remove and replace asphalt surfaces, to include sub-grade.	sq. ft.	\$3.00
7	Remove and replace base material	cu. ft.	\$2.20
8	Remove and replace curbs ONLY	ln. ft.	\$4.60
9	Saw cut concrete	ln. ft.	\$7.00
10	Wheelchair access ramp per drawing 02775-02	sq. ft.	\$12.25
11	Mudjacking, to include drilling holes and inserts	sq. ft.	\$1.00
12	Flagman Allowance for uniformed peace officers only, not to exceed	lump sum	\$36,000.00
13	Retaining Wall 18" - 24"	ln. ft.	\$30.00
14	Retaining Wall 12" - 18"	ln. ft.	\$27.50
15	Remove and Replace Base Material - Flowable Base	cu. ft.	\$8.25
16	Cost of Performance, Payment and Maintenance bonds for second year (should be invoiced with first work order)	lump sum	\$17,500.00
Year Two, Group Two			
17	Time and Material for Items not provided for above. Invoices from Material Supplier verifying cost must accompany invoice before any work is performed under Item 16, a written firm job price estimate must be submitted to the City for approval.	Cost Plus Mark-up 15%	\$11,500.00 ANNUAL
Year Three, Group One			

1	Remove and replace slab, 8-10", 5,000 psi, 7-day. Includes backfill, expansion joints and adjustment / repair of inlets, manholes and water valves as needed.	cu. ft.	\$8.90
2	Additional cost to Item No. 1 for High Early Concrete	cu. ft.	\$0.45
3	6" concrete driveway and pavement with curbs per drawing 17201-1.	sq. ft.	\$7.20
4	Concrete curb and gutter, all types, to include rein-in-place.	ln. ft.	\$2.90
5	4-1/2" concrete sidewalks, to include rein-in-place.	sq. ft.	\$5.55
6	Remove and replace asphalt surfaces, to include sub-grade.	sq. ft.	\$3.00
7	Remove and replace base material	cu. ft.	\$2.25
8	Remove and replace curbs ONLY	ln. ft.	\$4.70
9	Saw cut concrete	ln. ft.	\$7.00
10	Wheelchair access ramp per drawing 02775-02	sq. ft.	\$12.50
11	Mudjacking, to include drilling holes and inserts	sq. ft.	\$1.00
12	Flagman Allowance for uniformed peace officers only, not to exceed	lump sum	\$36,000.00
13	Retaining Wall 18" - 24"	ln. ft.	\$30.00
14	Retaining Wall 12" - 18"	ln. ft.	\$27.50
15	Remove and Replace Base Material - Flowable Base	cu. ft.	\$8.75
16	Cost of Performance, Payment and Maintenance bonds for third year (should be invoiced with first work order)	lump sum	\$18,000.00
Year Three, Group Two			
17	Time and Material for Items not provided for above. Invoices from Material Supplier verifying cost must accompany invoice before any work is performed under Item 16, a written firm job price estimate must be submitted to the City for approval.	Cost Plus Mark-up 15%	\$11,500.00 ANNUAL
Year Four, (Option Year One), Group One			
1	Remove and replace slab, 8-10", 5,000 psi, 7-day. Includes backfill, expansion joints and adjustment / repair of inlets, manholes and water valves as needed.	cu. ft.	\$8.90
2	Additional cost to Item No. 1 for High Early Concrete	cu. ft.	\$0.45
3	6" concrete driveway and pavement with curbs per drawing 17201-1.	sq. ft.	\$7.20
4	Concrete curb and gutter, all types, to include rein-in-place.	ln. ft.	\$2.90
5	4-1/2" concrete sidewalks, to include rein-in-place.	sq. ft.	\$5.55

6	Remove and replace asphalt surfaces, to include sub-grade.	sq. ft.	\$3.00
7	Remove and replace base material	cu. ft.	\$2.25
8	Remove and replace curbs ONLY	ln. ft.	\$4.70
9	Saw cut concrete	ln. ft.	\$7.00
10	Wheelchair access ramp per drawing 02775-02	sq. ft.	\$12.50
11	Mudjacking, to include drilling holes and inserts	sq. ft.	\$1.00
12	Flagman Allowance for uniformed peace officers only, not to exceed	lump sum	\$36,000.00
13	Retaining Wall 18" - 24"	ln. ft.	\$30.00
14	Retaining Wall 12" - 18"	ln. ft.	\$27.50
15	Remove and Replace Base Material - Flowable Base	cu. ft	\$8.75
16	Cost of Performance, Payment and Maintenance bonds for fourth year (should be invoiced with first work order	lump sum	\$18,000.00
Year Four, (Option Year One), Group Two			
17	Time and Material for Items not provided for above. Invoices from Material Supplier verifying cost must accompany invoice before any work is performed under Item 16, a written firm job price estimate must be submitted to the City for approval.	Cost Plus Mark-up 15%	\$11,500.00 ANNUAL
Year Five, (Option Year Two), Group One			
1	Remove and replace slab, 8-10", 5,000 psi, 7-day. Includes backfill, expansion joints and adjustment / repair of inlets, manholes and water valves as needed.	cu. ft.	\$8.90
2	Additional cost to Item No. 1 for High Early Concrete	cu. ft.	\$0.45
3	6" concrete driveway and pavement with curbs per drawing 17201-1.	sq. ft.	\$7.20
4	Concrete curb and gutter, all types, to include rein-in-place.	ln. ft.	\$2.90
5	4-1/2" concrete sidewalks, to include rein-in-place.	sq. ft.	\$5.55
6	Remove and replace asphalt surfaces, to include sub-grade.	sq. ft.	\$3.00
7	Remove and replace base material	cu. ft.	\$2.25
8	Remove and replace curbs ONLY	ln. ft.	\$4.70
9	Saw cut concrete	ln. ft.	\$7.00
10	Wheelchair access ramp per drawing 02775-02	sq. ft.	\$12.50
11	Mudjacking, to include drilling holes and inserts	sq. ft.	\$1.00
12	Flagman Allowance for uniformed peace officers only, not to exceed	lump sum	\$36,000.00

13	Retaining Wall 18" - 24"	In. ft.	\$30.00
14	Retaining Wall 12" - 18"	In. ft.	\$27.50
15	Remove and Replace Base Material - Flowable Base	cu. ft	\$8.75
16	Cost of Performance, Payment and Maintenance bonds for filth year (should be invoiced with first work order)	lump sum	\$18,000.00
Year Five, (Option Year Two), Group Two			
17	Time and Material for Items not provided for above. Invoices from Material Supplier verifying cost must accompany invoice before any work is performed under Item 16, a written firm job price estimate must be submitted to the City for approval.	Cost Plus Mark-up 15%	\$11,500.00

CITY OF HOUSTON
2006 Labor Classifications and Prevailing Wage Rates
For
Engineering Construction

Classification	Rate	Classification	Rate
Asphalt Distributor Operator	\$10.94	Milling Machine Operator - Fine Grade	\$13.17
Asphalt Paving Machine Operator	\$12.01	Mixer Operator	\$10.33
Asphalt Raker	\$11.13	Motor Grader Operator - Rough	\$13.13
Asphalt Shoveler	\$9.14	Motor Grader Operator	\$11.67
Broom or Sweeper Operator	\$11.19	Oiler	\$12.12
Bulldozer Operator	\$11.81	Painter - Structures	\$15.54
Carpenter - Rough	\$12.49	Pavement Marking Machine Operator	\$8.18
Concrete Finisher - Paving	\$11.38	Pile Driverman	\$12.22
Concrete Finisher - Structures	\$10.80	Pipe Layer	\$9.49
Concrete Paving Curbing Machine Operator	\$10.00	Reinforcing Steel Setter - Paving	\$15.14
Concrete Paving Finishing Machine Operator	\$13.07	Reinforcing Steel Setter - Structure	\$13.87
Concrete Paving Joint Sealer Operator	\$11.00	Roller Operator, Pneumatic - Self-propelled	\$9.91
Concrete Paving Saw Operator	\$12.75	Roller Operator, Steel Wheel, Flat Wheel/Tamping	\$10.43
Concrete Paving Spreader Operator	\$10.44	Roller Operator, Steel Wheel, Plant Mix Pavement	\$11.07
Concrete Rubber	\$9.00	Scraper Operator	\$9.92
Crane, Clamshell, Backhoe, Derrick, Dragline,		Servicer	\$10.96
Shovel Operator	\$12.71	Sign Installer - PGM	\$8.54
Crusher and Screening Plant Operator	\$11.29	Slip Form Machine Operator	\$11.07
Electrician	\$21.79	Spreader Box Operator	\$11.12
Flagger	\$9.42	Structural Steel Worker	\$12.13
Form Builder/Setter - Structures	\$10.50	Tractor Operator - Crawler Type	\$13.00
Form Liner - Paving and Curb	\$11.75	Tractor Operator - Pneumatic	\$10.07
Form Setter - Paving and Curb	\$10.51	Transit Mixer Truck Driver	\$11.00
Foundation Drill Operator - Crawler Mounted	\$15.00	Truck Driver, Lowboy-float	\$13.16
Foundation Drill Operator - Truck Mounted	\$12.73	Truck Driver, Single-Axle - Heavy	\$10.65
Front Loader Operator	\$10.65	Truck Driver, Single-Axle - Light	\$10.07
Laborer - Common	\$9.15	Truck Driver, Tandem Axle Semi-Trailer	\$10.25
Laborer - Utility	\$9.81	Work Zone Barricade Servicer	\$9.94
Manhole Builder	\$9.00	Welders - Receive rate prescribed for craft performing	
Mechanic	\$13.72	operation to which welding is incidental	

**City of Houston
Engineering Prevailing Wages
Classification Definitions
February 1, 2006**

DOL GENERAL DECISION: TX20030125
State: Texas Construction Type: Engineering
County: Harris County
DOL GENERAL DECISION: TX20030048

Date: July 1, 2005

Date: April 8, 2005

Asphalt Distributor Operator \$ 10.94 Rate

Drives distributor truck, sets spray bars and operates valves and levers to control distribution of bituminous material for highway surfacing. May oil, grease or otherwise service and make adjustments to equipment as needed. Performs other related duties.

Asphalt Paving Machine Operator \$ 12.01 Rate

Operates paving machine that spreads and levels asphaltic concrete on highway subgrade. Controls movement of machine, raises and lowers screed, regulates width of screed. May, oil, grease, service and make adjustments to equipment as needed. Performs other related duties.

Asphalt Raker \$ 11.13 Rate

Distributes asphaltic materials evenly over road surface by raking and brushing material to correct thickness; directs Laborers when to add or take away material to fill low spots or to reduce high spots. Performs other related duties.

Asphalt Shoveler \$ 9.14 Rate

A general term used on construction work covering many unskilled classifications requiring work of a physical nature. A laborer works with all crews doing everything from pick and shovel work to cleaning up lumber with hammer, shoveling and placing concrete, uses air tools, cleans concrete joints and fills joints with sealing compound from bucket or with hose and nozzle from a central source, applies coating of oil to inside face of forms, may help set and strip forms, unloads and transports reinforcing steel, cures newly poured concrete, helps lower pipe into ditch for pipelayers, builds fences, works with dirt crew keeping construction layout stakes out of the way of dirt moving equipment.

Broom or Sweeper Operator \$ 11.19 Rate

Operates a self-propelled machine to sweep and clean roadway surfaces. May oil grease, service and make adjustments to equipment as needed. Performs other related duties.

Bulldozer Operator \$ 11.81 Rate

Operates a crawler tractor with a bulldozer mounted in front of chassis to level, distribute and push earth or other material. May operate a ripper attachment to break up rock or other hard material. May use a push block on front of tractor to push load scrapers. May oil grease or otherwise service and make minor repairs to equipment as needed. Performs other related duties.

Carpenter, Rough \$ 12.49

Works from plans to build, assemble, fit together, align, plum, and set in place forms for molding concrete structures. Forms may be wood, steel, aluminum, fiberglass or any other type of material.

Checks form while concrete is placed. May install miscellaneous materials integral to concrete structures. May set precast concrete elements. Prepares for slipforming traffic rail and median barrier. May install permanent metal deck forms. May work with power tools Performs other related duties.

Concrete Finisher, Paving \$ 11.38

Finishes the exposed surfaces of fresh concrete paving, median barrier and every element of concrete structures to the final grade and contour structures to the final grade and contour with the use of straight edges and steel trowels. Operates bridge deck finishing machine. Finishes concrete curbs and gutters. Finishes exposed surface of concrete after forms have been removed by patching imperfections with fresh concrete, rubbing surface with abrasive stone, and directing others in removing excess or defective concrete with power tools. Performs other related duties.

Concrete Finisher, Structures \$ 10.80

A worker semi-skilled in concrete finishing who assists Concrete finisher by performing specific or general duties of lesser skill and keeping Concrete Finisher supplied with materials, tools, and supplies; cleaning working area an equipment; and holding materials and tools. Performs other related duties.

Concrete Paving Curbing Machine Operator \$ 10.00

Operates self - propelled machine(s) which may or may not travel on concrete paving forms, spreading and leveling fresh concrete to grade by use of augers and screeds. May oil, grease or otherwise service and make adjustments to equipment as necessary. Performs other related duties.

Concrete Paving Finishing Machine Operator \$ 13.07

Operates self - propelled machine(s) which may or may not travel on concrete paving forms, spreading and leveling fresh concrete to grade by use of augers and screeds. May oil, grease or otherwise service and make adjustments to equipment as necessary. Performs other related duties.

Concrete Paving Joint Sealer Operator \$ 11.00

Cleans and seals joints requiring a hot or cold sealing compound in concrete paving, sidewalks, driveway and approach slabs. May oil, grease or make necessary repairs adjustments to equipment as needed. Performs other related duties.

Concrete Paving Saw Operator \$ 12.75

Operates a water – cooled power saw with either or an abrasive blade to saw expansion and contraction joints in concrete paving. May also be used to saw asphaltic pavements. May oil grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Concrete Paving Spreader Operator \$ 10.44

Operates self - propelled machine(s) which may or may not travel on concrete paving forms, spreading and leveling fresh concrete to grade by use of augers and screeds. May oil, grease or otherwise service and make adjustments to equipment as necessary. Performs other related duties.

Concrete Rubber \$ 9.00

Finishes the exposed surface of concrete masonry after the forms have been removed by patching

holes and broken corners with fresh concrete, rubbing surface with abrasive stone to remove rough spots, and removing high spots and defective concrete with hand chisel and hammer or pneumatic chisel and powered abrasive stone. Performs other related duties.

Crane, Clamshell, Backhoe, Derrick, Dragline, Shovel Operator \$ 12.71

A worker who operates a lattice boom type crane can hoist and move materials, raise and lower heavy weights and perform other related operations. May be crawler type or rubber tired. May include placement of rock riprap, clamshell, dragline, pipe and pile driving operations. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Crusher and Screed Plant Operator \$ 11.29

Operates a crusher or screening plant through which rock is run to break it into crushed stone for construction or to control flow of materials not needed. May include minor repairs and may service and make necessary adjustments to equipment as needed. Performs other related duties.

Electrician \$ 21.79

Plans and directs the layout of metal electrical conduit, installs wiring systems, switch-panels, buss bars, works on overhead distribution systems and underground distribution systems. Performs other related duties.

Flagger \$ 9.42

A worker who directs traffic in or around a construction site. May use signs or devices to direct traffic. May help assemble, position and clean devices or equipment used to direct traffic. Must be able to effectively communicate with the public. May require certain level of training by TXDOT specifications. Performs other related duties.

Form Builder/Setter, Structures \$ 10.50

Works from plans to build, assemble, fit together, align, plum, and set in place forms for molding concrete structures. Forms may be wood, steel, aluminum, fiberglass or any other type of material. Checks forms while concrete is placed. May install miscellaneous materials integral to concrete structures. May set precast concrete elements. Prepares for slipforming traffic rail and median barrier. May install permanent metal deck forms. May work with power tools Performs other related duties.

Form Liner, Paving & Curb \$ 11.75

Fits together, aligns and sets to grade metal and wooden forms for placement of concrete paving and curbs. Works with survey crew to set stringline for paving, curb, and gutter curb. Performs other related duties.

Form Setter, Paving & Curb \$ 10.51

Fits together, aligns and sets to grade metal and wooden forms for placement of concrete paving and curbs. Works with survey crew to set stringline for paving, curb, and gutter curb. Performs other related duties.

Foundation Drill Operator, Crawler Mounted \$ 15.00

Operates a hole-drilling machine that is crawler mounted. May include geotechnical operations

such as soils nails, rock nails, tiebacks, anchors and jet grouting. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Foundation Drill Operator, Truck Mounted \$ 12.73

Operates a hole drilling machine that is mounted on the rear of a rubber tired vehicle or truck. May include soils nails, rock nails, tiebacks, anchors and jet grouting. Drive truck from location to location or may have laborer who drives truck. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Front End Loader Operator \$ 10.65

Operates a rubber tired, skid steer or crawler type tractor with an attached scoop type bucket on front end. Machine is used to load materials from stockpiles, excavation, charging batch plants, loading and unloading trucks. May be used with attachments in lieu of the bucket. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Laborer, Common \$ 9.15

A general term used on construction work covering many unskilled classifications requiring work of a physical nature. A laborer works with all crews doing everything from pick and shovel work to cleaning up lumber with hammer, shoveling and placing concrete, uses air tools, cleans concrete joints and fills joints with sealing compound from bucket or with hose and nozzle from a central source, applies coating of oil to inside face of forms, may help set and strip forms, unloads and transports reinforcing steel, cures newly poured concrete, helps lower pipe into ditch for pipelayers, builds fences, works with dirt crew keeping construction layout stakes out of the way of dirt moving equipment.

Laborer, Utility \$ 9.81

Performs a variety of manual duties, usually working in a utility capacity by working on multiple projects and tasks where demands require workmen with varied experience and ability to work without close direction. Unloads and transports reinforcing steel. May occasionally place and tie reinforcing steel. Directs common laborers in pouring concrete. Erects shoring and bracing. Assists in installation of pipe. Installs, operate and maintains dewatering systems. May assist equipment operators in positioning machines, verifying grades and signaling operators. Directs truck drivers and scraper operators to dumping positions to maintain grades as directed. Uses power tools and air tools. May work as lead man in a labor crew. His performance of a wide variety of construction jobs distinguishes him from a helper assigned to a specific craft. Installs and maintains erosion control. Is more or less a general utility construction worker. May be second step in learning a skill, and may later become a helper in a specific classification. Performs other related duties.

Manhole Builder \$ 9.00

Constructs a means of permanent access to water and sewer lines for maintenance purposes. This work consists of laying brick or concrete slab at bottom of ditch up to an approximate grade line near the surface of the ground. Brick or block is normally laid to form a nearly circular manhole. Brick or block is laid in by eyesight and is normally to a plumb line. Chipped or culled brick can be used quite often is. No effort may be made to keep mortar off the face of the brick and joints are not pointed. May apply coating of concrete to interior and exterior surface. Performs other related duties.

Mechanic \$ 13.72

Assembles, set up, adjusts and maintains and repairs all types of construction equipment and trucks. He may perform the duties of a welder in repair of equipment. Performs other related duties.

Milling Machine Operator, Fine Grade \$ 13.17

Operates a power-driven milling machine that planes material of the to roadbed and discharges the material into a hauling unit or a windrow. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Mixer Operator \$ 10.33

Performs a variety of manual duties, usually working in a utility capacity by working on multiple projects and tasks where demands require workmen with varied experience and ability to work without close direction. Unloads and transports reinforcing steel. May occasionally place and tie reinforcing steel. Directs common laborers in pouring concrete. Erects shoring and bracing. Assists in installation of pipe. Installs, operate and maintains dewatering systems. May assist equipment operators in positioning machines, verifying grades and signaling operators. Directs truck drivers and scraper operators to dumping positions to maintain grades as directed. Uses power tools and air tools. May work as lead man in a labor crew. His performance of a wide variety of construction jobs distinguishes him from a helper assigned to a specific craft. Installs and maintains erosion control. Is more or less a general utility construction worker. May be second step in learning a skill, and may later become a helper in a specific classification. Performs other related duties.

Motor Grader Operator, Rough \$ 13.13

Operates a motor grader. Equipment is used to grade excavation and embankment and to lay asphalt, base and other materials. May blade haul roads and do other general motor grader work, but does not perform finish grade work to close specification tolerances. This operator may be a learner in the first phase of learning the skills of motor grader work. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Motor Grader Operator \$ 11.67

Operates a motor grader. Equipment is used to grade excavation and embankment and to lay asphalt, base and other materials. May blade haul roads and do other general motor grader work, but does not perform finish grade work to close specification tolerances. This operator may be a learner in the first phase of learning the skills of motor grader work. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Oiler \$ 12.12

A learner or semi-skilled worker who under the direction of the watch engineer
May oil and grease or otherwise service all engines and necessary equipment as needed. He may clean and paint engine room as needed. Performs other related duties.

Painter, Structures \$ 15.54

Paints and stains structural steel and concrete surfaces of bridges, retaining walls, or other structures. Directs cleaning and abrasive blasting of surfaces prior to painting or staining. Performs other related duties.

Pavement Marking Machine Operator \$ 8.18

Operates machine used in laying paint stripes or markers on all types of paving. Loads machine with appropriate materials and may walk or ride on machine. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Piledriverman \$ 12.22

Sets in place, aligns, plumbs directs driving of timber, concrete, steel, pipe and any other type of piling. Sets, drives and pulls steel, concrete and other types of sheet piling. Rigs pile and leads and bracing. Signals operator. Splices piles before and after driving. Directs pile cutoff. May direct jetting or drilling equipment in connection with installing piles to grade. Performs other related duties.

Pipelayer \$ 9.49

Installs concrete, clay, steel, ductile iron, plastic, corrugated pipe and any other type of pipe for storm drainage, water lines, gas lines and sanitary sewer lines. Lays underground communication and electrical ducts. May install and set electrical ground boxes, hand holes, manholes, inlets and other structures. Caulks joints, make threaded and flanged connections. Installs valves and other accessories. Performs other related duties.

Reinforcing Steel Setter, Paving \$ 15.14

Works from plans to lay out and install reinforcing steel within forms or in mats of concrete paving. May direct unloading of material. Determines rigging required to complete work. Gives direction to reinforcing steel worker (helper) or common or utility laborers. May install miscellaneous materials integral to concrete structure or paving. May work with power tools. Performs other related duties.

Reinforcing Steel Setter, Structure \$ 13.87

Works from plans to lay out and install reinforcing steel within forms or in mats of concrete paving. May direct unloading of material. Determines rigging required to complete work. Gives direction to reinforcing steel worker (helper) or common or utility laborers. May install miscellaneous materials integral to concrete structure or paving. May work with power tools. Performs other related duties.

Roller Operator, Pneumatic, Self-Propelled \$ 9.91

Operates a self-propelled machine with either steel wheels pneumatic tires, which is used to compact and smooth all bituminous materials. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Roller Operator, Steel Wheel, Flat Wheel/Tamping \$ 10.43

Operates a self-propelled machine with either steel wheels or pneumatic tires which is used to compact earth fills, sub-grade, flexible base and all other types of materials except bituminous. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Roller Operator, Steel Wheel, Plant Mix Pavement \$ 11.07

Operates a self-propelled machine with either steel wheels pneumatic tires, which is used to compact and smooth all bituminous materials. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Scraper Operator \$ 9.92

Operates a self-contained wheeled tractor scraper both self loading or assisted by crawler tractors or other scrapers. Used to excavate and transport earth or other materials. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Servicer \$ 10.96

Drives a truck, which carries various fuels, oils, greases and filters. Must have knowledge of and is responsible for the correct oiling and greasing and changing of filters on equipment according to the manufacturers' specifications. Uses compressed air grease guns, wrenches and other tools. May make adjustments to clutches, brakes and other mechanical items. Keeps record of service preventive maintenance records. May have laborer assisting him. May require CDL if driving truck on public highways. Performs other related duties.

Sign Installer (PGM) \$ 8.54

Sets forms, reinforcing steel, anchor bolts and pours concrete for Sign foundations. Fabricates and erects pipe and angle Frameworks by bolting, welding or other means prior to installation of signs that are normally prefabricated. Works from plans in location and drilling holes for proper location and alignment of signs. May direct hoisting of signs into place. Fastens signs to framework by bolting and other means. Locates and sets lighting brackets. May perform other work associated with signing projects. Supervises sign erector helper. Performs other related duties.

Slip Form Machine Operator \$ 11.07

Cleans and seals joints requiring a hot or cold sealing compound in concrete paving, sidewalks, driveway and approach slabs. May oil, grease or make necessary repairs adjustments to equipment as needed. Performs other related duties.

Spreader Box operator \$ 11.12

Operates spreader box by adjusting hopper and strike off blade so that the gravel, stone or other material may be spread to a specific depth on road surface during seal coat and surface treatment operations. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Structural Steel Worker \$ 12.13

Works from plans to lay out and install reinforcing steel within forms or in mats of concrete paving. May direct unloading of material. Determines rigging required to complete work. Gives direction to reinforcing steel worker (helper) or common or utility laborers. May install miscellaneous materials integral to concrete structure or utility laborers. May install miscellaneous materials integral to concrete structure or paving. May work with power tools. Performs other related duties.

Tractor operator, Crawler Type \$ 13.00

Operates a crawler tractor with a bulldozer mounted in front of chassis to level, distribute and push earth or other material. May operate a ripper attachment to break up rock or other hard material. May use a push block on front of tractor to push load scrapers. May oil grease or otherwise service and make minor repairs to equipment as needed. Performs other related duties.

Tractor Operator, Pneumatic \$ 10.07

Operates a gasoline or diesel powered agricultural tractor that tows compaction rollers, plow, disc, water tanks, scrapers and other similar operations. May use other miscellaneous attachments. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

Traveling Mixer Operator \$ 11.00

Drives a gasoline or diesel truck upon which is mounted a concrete mixer. Operates concrete mixer and dumps concrete on the grade, into forms or into concrete pumps or buckets. Cleans mixer drum. May require CDL license for on highway use. May service and make necessary adjustments for proper operation of equipment. Performs other related duties.

Truck driver, lowboy-Float \$ 13.16

Drives a heavy-duty diesel powered truck to which is attached a trailer upon which heavy equipment is hauled. Driver is often required to operate heavy equipment to load or unload the lowboy. May require CDL license for on highway use. May service and make necessary adjustments for proper operation of equipment. Performs other related duties.

Truck driver, Single Axle, Heavy \$ 10.65

Drive a light capacity truck for transporting loads of construction material. The truck is of single rear axle type, may have various kinds of beds attached, such as dump, flat bed, tank, etc. May require CDL license for driving on highway. May services and make necessary adjustments for proper operation equipment. Performs other related duties

Truck driver, Single Axle, Light \$ 10.07

Drive a light capacity truck for transporting loads of construction material. The truck is of single rear axle type, may have various kinds of beds attached, such as dump, flat bed, tank, etc. May require CDL license for driving on highway. May services and make necessary adjustments for proper operation equipment. Performs other related duties

Truck Driver, Tandem Axle, Semi-Trailer \$ 10.25

Drives a diesel-powered tractor pulling a semi trailer hauling materials. Hauls dirt, rock, aggregates or other material. May require CDL license for driving on highway. May service and make necessary adjustments for proper operation of equipment. Performs other related duties.

Work Zone Barricade Servicer \$ 9.94

Fabricates, erects and maintains temporary traffic control devices, including arrow boards, signs, barricades, channelizing devices, barrels and all message boards. May operates a truck during traffic control operations.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

SCOPE OF SERVICES / LETTERS OF CLARIFICATION

All Documents and Sections that are not visible in the Technical Specifications can be viewed from the following Public Works and Engineering web link:

http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

PART 1 GENERAL SPECIFICATIONS

1.0 SCOPE OF WORK

- 1.1 Contractor shall provide all labor, materials, equipment, safety, insurance, transportation, and permits necessary to comply with all the City of Houston Building Codes, City of Houston Construction Standard Specifications and Construction Standard Details or their latest revision.
- 1.2 The project shall include driveways, wheelchair ramps, and street paving.
- 1.3 The project shall be constructed in accordance with the Technical Specification and the referenced Sections of the City of Houston Construction Standard Specifications and/or the referenced Details of the City of Houston Construction Standard Construction Details.
- 1.4 The work will be completed at various locations throughout the city, spanning the term of this contract.
- 1.5 The Project Manager will provide drawings and approximate measurements to the Contractor.
- 1.6 The Contractor will be responsible for the following:
 - 1.6.1 Reviewing assigned proposed plans
 - 1.6.2 Verifying all measurements and quantities
 - 1.6.3 Notifying department of any discrepancy
 - 1.6.4 Providing a written proposal utilizing all applicable bid items for the required work.
- 1.7 If there is a conflict or discrepancy between the proposed field measurements and the other data, it is the Contractor's responsibility to notify the Project Manager of such conflict or discrepancy with supporting calculation prior to commencing work on an assigned project. Any additional cost incurred after work commenced shall be at the expense of the Contractor.
- 1.8 There will be no mobilization item for this project, which is incidental to each work order to be issued at different site(s) upon the needs of the City maintenance requirement.
- 1.9 Projects undertaken under the scope of this contract will NOT require an Engineer's seal.
- 1.10 City of Houston to provide personnel for water on/off services within a reasonable time frame from receipt of request from contractor.
- 1.11 City of Houston to provide inlets, manholes, and water valves as required by Contractor to complete adjustments/repairs for Item #1 of Bid Form.

2.0 WORKSHOP

- 2.1 All work shall be performed and completed in a thorough, workmanlike manner and in accordance with the latest proven practices of the trade by thoroughly skilled and experienced workmen.
- 2.2 All work shall be performed and completed using the latest standard industrial practices, not withstanding any omissions from these specifications or drawings.
- 2.3 The concrete work shall conform to latest edition of ACI, ASTM Building Codes, City Ordinances, and all other applicable construction codes, specifications and details.
- 2.4 All materials furnished and all work performed under this contract must be satisfactory to the project manager.
- 2.5 Contractor shall remove all materials from the work site that do not conform to the applicable codes and shall replace them with materials that conform to the applicable codes.
- 2.6 The Contractor shall immediately correct any deficiencies discovered during work or after completion.

3.0 SAFETY AND FACILITY SECURITY

- 3.1 The Contractor shall submit the Hazard Communications Program / Contract Compliance form and all associated documentation to the Project Manager WITH EACH WORK ORDER.
- 3.2 All work shall be performed between the hours of 7:01 a.m. and 4:00 p.m., Monday through Friday, unless otherwise authorized. (Holidays as prescribed by City Council not included.)
- 3.3 The Contractor will be responsible for ensuring a safe work environment in accordance with rules and regulations of O.S.H.A., T.N.R.C.C. and other governmental agencies for all persons entering the work area, i.e. traffic cones or traffic signs for street construction and others applicable.
- 3.4 If it is necessary, for whatever reason, to stop work and leave an open excavation, adequate safety signs, barricades and/or steel plate shall be left in place.
- 3.5 All safety equipment used for the Project will be incidental to the unit price of the specified work.
- 3.6 Flagmen must be certified by Metropolitan Transit Authority of Harris County, Texas (METRO).

4.0 PERMITS

- 4.1 It is the Contractor's responsibility to obtain all necessary permits and pay all associated fees.

5.0 COMPLETION OF WORK ORDERS

- 5.1 The Contractor shall notify the Project Manager before the initiation of the project.

- 5.1.1 City personnel shall be authorized to observe all materials and work performed.
- 5.1.2 Such observation will not relieve the Contractor from any obligation to perform the work in accordance with the requirements of these specifications.

5.2 All concrete work shall be completed within the time and procedure schedule as specified in the work order (generally twenty-one (21) days from issuance of the work order).

5.3 Any extension of the original completion date must be with the prior approval of the Project Manager.

5.4 Any deficiency listed by the City representative shall be corrected before final acceptance of the work for each work order is granted and invoicing is approved for payment.

6.0 LIABILITY

6.1 All work shall be accomplished in such a manner as to prevent damage to the City of Houston facilities, equipment, roads, grounds, utilities, processes, etc., or to any other existing utilities.

6.2 The Contractor shall be liable for any damage to electrical, water, gas, etc. which occurs during the performance of work under this contract.

6.3 When such damage is due to the failure of the Contractor to take precautionary actions, or to exercise sound judgment, or fail to utilize proven construction practices, the Contractor shall restore, repair, or replace equipment.

6.3.1 The restoration, repair or replacement shall be to a state that it had been before the damage occurred without additional charge to the City of Houston.

6.4 No additional compensation for repairs will be allowed.

6.5 If necessary, actual costs of repairs, or replacement, may be withheld from contract payment by the City of Houston or the Contractor may issue a credit payment to the city.

7.0 SITE CLEAN UP

7.1 All rubbish and debris of every type, kind and nature resulting from the Contractor's activities shall be cleared up and removed from the project site or placed/moved to a part of the site, as designated by the project manager.

7.1.1 All ruts and depressions resulting from the Contractor's operations shall be filled in and leveled off to facilitate mowing the site.

7.1.2 Upon completion of the Contractor's work, including site clean up, the area shall be returned to the same or better condition.

7.1.3 No separate payment will be made for clean up and debris removal as described above.

8.0 WARRANTY

8.1 A warranty of one (1) year minimum shall be provided for both materials and workmanship.

8.2 The warranty period shall commence on the date the City of Houston officially accepts the completed work at each site.

8.3 Any warranty work is to be completed without cost to the City within ten (10) calendar days after written notification of a service problem.

9.0 TERMINATION OF CONTRACT

9.1 This Contract may be terminated by the City at its option, upon thirty (30) days notice in writing, if the materials, equipment / or services furnished do not conform to the standard(s) set forth herein; or if the deliveries and servicing of this Contract do not conform with the requirements detailed.

PART 2 TECHNICAL SPECIFICATIONS

1.0 GENERAL CONDITIONS

1.1 The Project's specifications listed in the Technical Specification contains modifying criteria related to working conditions, paid/unpaid items, etc. which supersede and/or represent an addendum to the respective City of Houston Standard Construction Specifications / Details. The most restrictive/critical rule between the two specifications of Technical Specification and Standard Construction Specifications will prevail for the construction requirement(s) of this project.

1.2 In addition to the Technical Specifications, the City of Houston Standard Construction Specifications is attached, as well as the Construction Detail(s) is attached. It is the Contractor's responsibility to verify the correct dimensions, materials, construction methods and other items referred in said Construction Specifications/Details for the specified bid items prior to bidding on this Project regardless of whether the documents are attached or not.

1.3 All wheelchair ramps must comply with current American with Disabilities Act (ADA) requirements, Standards for Accessible Design, Title III regulations 28 CFR Part 36, revised July 1, 1994, www.usdoj.gov/crt/stdspdf.htm

2.0 SEQUENCE OF WORK ORDER EXECUTION

2.1 The Project Manager will issue a drawing sketch and total cost estimation to the Contractor for their estimation of the complete scope of work required for completion of the project.

2.2 The Contractor must respond with their construction cost quotation within three (3) working days after receiving the drawing sketch and cost estimation from the department. The quotation must include a breakdown by fee schedule line item of each service to be provided,

the quantity, and the total cost for that line.

2.2.1 The Contractor will submit a completed **Hazard Communications Program / Contractor Compliance Form** with each cost quotation. **(ADDENDUM A)**

2.3 If the Contractor's construction cost quotation is acceptable, the Project Manager will issue a Work Order authorizing the Contractor to perform work at the site.

2.3.1 The schedule of project will be coordinated with City of Houston Project Manager so as not to interfere with City of Houston Water Production operations.

2.3.2 The Contractor will not commence work on the project until the Project Manager has approved the submitted schedule of work. Issuance of the Work Order is not sufficient to begin work. The Contractor must also obtain approval of the schedule of work prior to mobilization to the site.

2.4 The Contractor must start the construction within thirty (30) working days after the Work Order is issued. The specified response time includes the time required for building inspection, underground utility lines staking and material requisition. However, the Contractor agrees to start a specified construction work within five (5) working days or less if an emergency condition exists.

2.5 Existing utilities

2.5.1 It is the responsibility of the Contractor to contact all utility companies to field mark their underground lines in the area of the proposed concrete work prior to construction.

2.5.2 If a utility in an existing building is to be interrupted due to alteration work, the scheduled interruption must be coordinated with and be approved by the City of Houston Project Manager at least three (3) working days before the proposed construction.

3.0 *PRICING ADJUSTMENTS*

3.1 The contract prices shall not be adjusted during the entire term of the contract. Therefore, bidders, when preparing its bid, should take into account inflation and other market factors when pricing each contract year.

4.0 ADDITIONS & DELETIONS

4.1 The City, by written notice from the City Purchasing Agent to the Contractor, at anytime during the term of this contract, may add or delete like services to be performed. Any such written notice shall take effect on the date stated in the notice from the City. Equipment, locations and/or services added will be subject to the contract services and charges or rates as an item already specified in the fee schedule. In the event the additional service is not identical to any item already under contract, the charges therefore will then be the Contractor's normal and

customary charges or rates for the equipment, locations and/or services classified in the fee schedule.

5.0 ESTIMATED QUANTITIES NOT GUARANTEED

5.1 The estimated quantities specified herein are not a guarantee of actual quantities, as the City does not guarantee any particular quantity of concrete repair services during the term of this contract. The quantities may vary depending upon the actual needs of the user Department. The quantities specified herein are good faith estimates of usage during the term of this contract. Therefore, the City shall not be liable for any contractual agreements/obligations the Contractor enters into based on the City purchasing requiring all the quantities specified herein.

6.0 WARRANTY OF SERVICES

6.1 *Definitions:* "Acceptance" as used in this clause, means the act of an authorized representative of the City by which the City assumes for itself, approval of specific services, as partial or complete performance of the contract.

6.2 "Correction" as used in this clause, means the elimination of a defect.

6.3 Notwithstanding inspection and acceptance by the City or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this contract. The City shall give written notice of any defect or nonconformance to the Contractor within a one-year period from the date of acceptance by the City. This notice shall state either (1) that the Contractor shall correct or re-perform any defective or non-conforming services at no additional cost to the City, or (2) that the City does not require correction or re-performance.

6.4 If the Contractor is required to correct or re-perform, it shall be at no cost to the City, and any services corrected or re-performed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or re-perform, the City may, by contract or otherwise correct or replace with similar services and charge to the Contractor the cost occasioned to the City thereby, or make an equitable adjustment in the contract price.

6.5 If the City does not require correction or re-performance, the City shall make an equitable adjustment in the contract price.

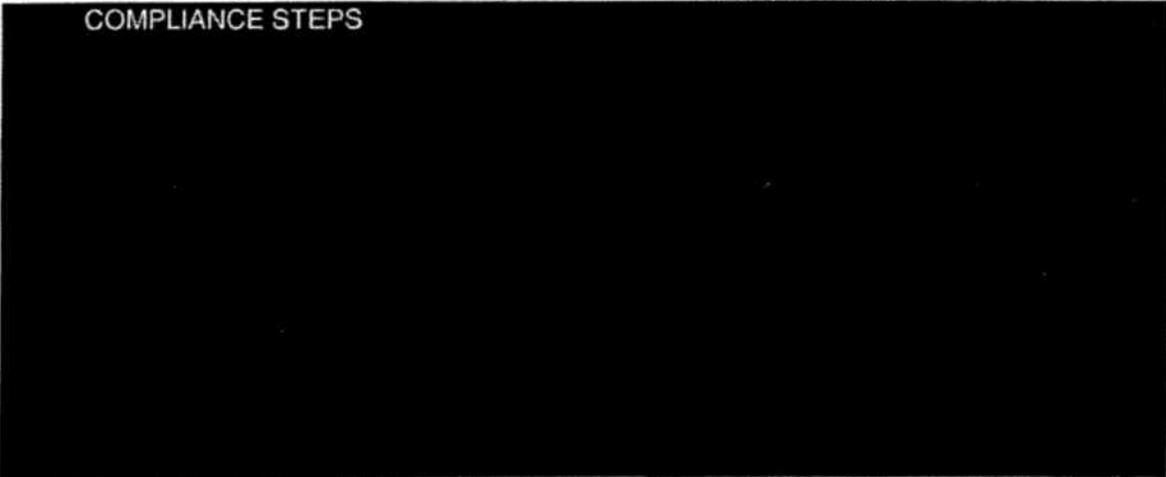
6.6 The minimum dollar amount of any work order shall be \$7,000.00. All work orders that have multiple sites will be within a ½-mile radius of the starting point.

**ADDENDUM A
CONTRACTOR COMPLIANCE FORM**

DEPT: Public Works and Engineering

LOCATION(S): _____

(NOTE: To be submitted/completed with each Work Order.)



COMPLIANCE STEPS

1.	Will contractor bring chemicals on City property?	<input type="checkbox"/>	<input type="checkbox"/>
2.	Have the chemicals been assessed for hazards? (Attach HCP-1)	<input type="checkbox"/>	<input type="checkbox"/>
3.	Has Safety/Risk Management approved usage?	<input type="checkbox"/>	<input type="checkbox"/>

City of Houston Standard Specifications
For
WORK ORDER CONTRACT FOR CONCRETE PAVEMENT REPAIR

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Table of Contents

Document Title: The following standard specifications are included in the bid package:

DIVISION 1 – GENERAL REQUIREMENTS

- 01110 Summary of Work
- 01145 Use of Premises
- 01255 Change Order Procedures
- 01270 Measurement and Payment
- 01312 Coordination and Meetings
- 01325 Construction Photographs
- 01330 Construction Schedule
- 01422 Submittal Procedures
- 01450 Reference Standards
- 01452 Inspection Services
- 01454 Testing Laboratory Services
- 01555 Traffic Control and Regulation
- 01576 Waste Material Disposal
- 01610 Basic Product Requirement
- 01725 Field Surveying
- 01770 Closeout Procedures
- 1785 Project Record Documents

DIVISION 2 – SITE WORK

(PWE web link)

http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

- 02086 Adjusting Manholes, Inlets, and Valve Boxes to Grade
- 02221 Removing Existing Pavements and Structures
- 02317 Backfill for Pavement Repair
- 02320 Backfill
- 02632 Cast-in-place Headwalls
- 02711 Hot-mix Asphalt Base Course
- 02712 Cement Stabilized Base Course
- 02741 Hot-mix Asphalt Concrete Pavement
- 02743 Tack Coat
- 02751 Concrete Paving
- 02752 Concrete Pavement Joints
- 02753 Concrete Pavement Curing
- 02754 Concrete Driveways
- 02771 Curb, Curb and Gutter, and Headers
- 02775 Concrete Sidewalks
- 02911 Topsoil
- 2922 Sodding

City of Houston Standard Specifications
For
WORK ORDER CONTRACT FOR CONCRETE PAVEMENT REPAIR

The following standard specifications are included in the bid package:

DIVISION 2 – SITE WORK

- 02952 Mudjacking (Slabjacking) Rigid Pavement
- 02953 Crack Sealing
- 02954 Sawed Joints

SECTION 01110
SUMMARY OF WORK

This text gives standard City of Houston provisions, as they may be appropriate to an individual Project. Determine Project requirements from City authorities in editing this text, and provide additional text as appropriate.

PART 1 GENERAL

1.0 SECTION INCLUDES

1.1 Summary of the Work including work by City, City furnished products, Work sequence, future Work, Contractor use of Premises, and City occupancy.

2.0 WORK COVERED BY CONTRACT DOCUMENTS

2.1 Work of the contract is for the construction of [CONCRETE IMPROVEMENTS].

3.0 CASH ALLOWANCES

3.1 Include the following specific Cash Allowances in the Contract Price under provision of General Conditions, **"REFER TO E-BID SYSTEM, VENDOR LOG IN, SEE DOCUMENT 00700"**

4.0 CITY FURNISHED PRODUCTS

4.1 Items Furnished by City for Installation and Final Connection by Contractor: Water meter.

4.2 Contractor's Responsibilities:

4.1.1 Arrange and pay for product delivery to site.

4.1.2 Receive and unload products at site; jointly with City, inspect for completeness or damage.

4.1.2.1 Handle, store, install, and finish products.

4.1.2.2 Repair or replace damaged items.

SECTION 01110
SUMMARY OF WORK

5.0 WORK SEQUENCE

5.1 Construct Work in phases during the construction period, coordinate construction schedule and operations with City:(**AS PER PWE, THIS SECTION WILL BE CLARIFIED AT THE PRE-BID MEETING, IF CONTRACTORS ARE UNSURE**)

5.1.1 Phase 1: [_____].

5.1.2 Phase 2: [_____].

5.1.3 Phase 3: [_____].

5.2 Coordination of the Work: Refer to Section 01312 - Coordination and Meetings, and Section 01230 – Alternates (**PWE web link**)
http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

6.0 CONTRACTOR USE OF PREMISES

6.1 Comply with procedures for access to the site and Contractor's use of rights-of-way as specified in Section 01145 - Use of Premises.

6.2 Construction Operations: Limited to City's rights-of-way provided by City.

6.3 Utility Outages and Shutdown: Provide notification to the City and private utility companies (when applicable) a minimum of 48 hours, excluding weekends and holidays, in advance of required utility shutdown. Coordinate all work as required.

7.0 WARRANTY

7.1 Comply with warranty requirements in accordance with Document 00700 - General Conditions. ""

*PART 2 PRODUCTS -*** Not Used****

*PART 3 EXECUTION -*** Not Used****

SECTION 01145
USE OF PREMISES

PART 1 GENERAL

1.0 SECTION INCLUDES

1.1 Section includes general use of the site including properties inside and outside of rights-of-way, work affecting road, ramps, streets and driveways and notification to adjacent occupants.

2.0 RIGHTS-OF-WAY

2.1 Confine access and operations and storage areas to rights-of-way provided by City as stipulated in Document 00700 – reference page 135, “Exhibit M”, web link, General Conditions; trespassing on abutting lands or other lands in the area is not allowed.

2.2 Contractor may make arrangements, at Contractor's cost, for temporary use of private properties, in which case Contractor and Contractor's surety shall indemnify and hold harmless the City against claims or demands arising from such use of properties outside of rights-of-way. Submit notarized copy of agreement between private property owner and Contractor prior to use of the area.

2.3 Obtain permits from City of Houston Parks and Recreation Department for storage of materials on esplanades and other areas within rights-of-way under that Department's jurisdiction. Submit copies of permits prior to use of the area.

2.4 Restrict total length which materials may be distributed along the route of the construction at any one time to 1,000 linear feet unless otherwise approved in writing by City Engineer.

3.0 PROPERTIES OUTSIDE OF RIGHTS-OF-WAY

3.1 Altering the condition of properties adjacent to and along rights-of-way will not be permitted.

3.2 Means, methods, techniques, sequences, or procedures which will result in damage to properties or improvements in the vicinity outside of rights-of-way will not be permitted.

3.3 Any damage to properties outside of rights-of-ways shall be repaired or replaced to the satisfaction of the City Engineer and at no cost to the City.

4.0 USE OF SITE

4.1 Obtain approvals of governing authorities prior to impeding or closing public roads or streets. Do not close more than two consecutive intersections at one time.

- 4.2 Notify City Engineer and City Traffic Management and Maintenance department at least 48 hours prior to closing a street or a street crossing. Permits for street closures are required in advance and are the responsibility of the Contractor.
- 4.3 Maintain access for emergency vehicles including access to fire hydrants.
- 4.4 Avoid obstructing drainage ditches or inlets; when obstruction is unavoidable due to requirements of the Work, provide grading and temporary drainage structures to maintain unimpeded flow.
- 4.5 Locate and protect private lawn sprinkler systems which may exist on rights-of-ways within the site. Repair or replace damaged systems to condition equal to or better than that existing at start of Work.
- 4.6 Perform daily clean-up of dirt outside the construction zone, and debris, scrap materials, and other disposable items. Keep streets, driveways, and sidewalks clean of dirt, debris and scrap materials. Do not leave building, roads, streets or other construction areas unclean overnight.

5.0 NOTIFICATION TO ADJACENT OCCUPANTS

- 5.1 Notify individual occupants in areas to be effected by the Work of the proposed construction and time schedule. Notification shall be not less than 72 hours or more than 2 weeks prior to work being performed within 200 feet of the homes or businesses. City Engineer will provide a sample door hanger showing form and content to be followed.
- 5.2 Include in notification names and telephone numbers of two company representatives for resident contact, who will be available on 24-hour call. Include precautions which will be taken to protect private property and identify potential access or utility inconvenience or disruption.
- 5.3 Submit proposed notification to City Engineer for approval. Consideration shall be given to the ethnicity of the neighborhood where English is not the dominant language. Notice shall be in an understandable language.

6.0 PUBLIC, TEMPORARY, AND CONSTRUCTION ROADS AND RAMPS

- 6.1 Construct and maintain temporary detours, ramps, and roads to provide for normal public traffic flow when use of public roads or streets is closed by necessities of the Work.
- 6.2 Provide mats or other means to prevent overloading or damage to existing roadways from tracked equipment or large or heavy trucks or equipment.
- 6.3 Construct and maintain access roads and parking areas as specified in Section 01504 - Temporary Facilities and Controls. **(PWE web link)**
http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

7.0 EXCAVATION IN STREETS AND DRIVEWAYS

- 7.1 Avoid needless hindering or inconveniencing public travel on a street or any intersecting alley or street for more than two blocks at any one time, except by permission of the City Engineer.
- 7.2 Obtain the City Traffic Management and Maintenance Department and City Engineer's approval when the nature of the Work requires closing of an entire street. Permits required for street closure are the Contractor's responsibility. Avoid unnecessary inconvenience to abutting property owners.
- 7.3 Remove surplus materials and debris and open each block for public use as work in that block is complete.
- 7.4 Acceptance of any portion of the Work will not be based on return of street to public use.
- 7.5 Avoid obstructing driveways or entrances to private property.
- 7.6 Provide temporary crossing or complete the excavation and backfill in one continuous operation to minimize the duration of obstruction when excavation is required across drives or entrances.
- 7.7 Provide barricades and signs in accordance with Section VI of the State of Texas Manual on Uniform Traffic Control Devices.

8.0 TRAFFIC CONTROL

- 8.1 Comply with traffic regulation as specified in Section 01555 - Traffic Control and Regulation.

9.0 SURFACE RESTORATION

- 9.1 Restore site to condition existing before construction to satisfaction of City Engineer.
- 9.2 Repair paved area per the requirements of Section 02951 - Pavement Repair and Resurfacing. **(PWE web link)**
http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html
- 9.3 Repair turf areas which become damaged, level with bank run sand conforming to Section 02317 Excavation and Backfill for Utilities, or topsoil conforming to Section 02911 - Topsoil, as approved by the City Engineer and resod in accordance with Section 02922 - Sodding. Water and level newly sodded areas with adjoining turf using steel wheel rollers appropriate for sodding. Do not use spot sodding or sprigging. **(PWE web link)**
http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

PART 2 PRODUCTS -*** Not Used***

PART 3 EXECUTION -*** Not Used***

SECTION 01255
CHANGE ORDER PROCEDURES

PART 1 GENERAL

1.0 SECTION INCLUDES

- 1.1 Procedures for processing Change Orders, including:
- 1.2 Assignment of a responsible individual for approval and communication of changes in the Work;
- 1.3 Documentation of change in Contract Price and Contract Time;
- 1.4 Change procedures, using proposals and construction contract modifications, work change directive, stipulated price change order, unit price change order, time and materials change order;
- 1.5 Execution of Change Orders;
- 1.6 Correlation of Contractor submittals.

2.0 REFERENCES

- 2.1 Rental Rate Blue Book for Construction Equipment (Data Quest Blue Book). Rental Rate is defined as the full unadjusted base rental rate for the appropriate item of construction equipment.

3.0 RESPONSIBLE INDIVIDUAL

- 3.1 Contractor shall provide a letter indicating the name and address of the individual authorized to execute change documents, and who shall also be responsible for informing others in Contractor's employ and Subcontractors of changes to the Work. The information shall be provided at the Preconstruction Conference.

4.0 DOCUMENTATION OF CHANGE IN CONTRACT PRICE AND CONTRACT TIME

- 4.1 Contractor shall maintain detailed records of changes in the Work. Provide full information required for identification and evaluation of proposed changes, and to substantiate costs of changes in the Work.
- 4.2 Contractor shall document each proposal for a change in cost or time with sufficient data to allow evaluation of the proposal.
- 4.3 Proposals shall include, as a minimum, the following information as applicable:

4.3.1 Quantities of items in the original Document 00405 - Schedule of Unit Price Work with additions, reductions, deletions, and substitutions.

(PWE web link)

http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

4.3.2 When Work items were not included in the Schedule of Unit Price Work, Contractor shall provide unit prices for the new items, with supporting information as required by the City Engineer.

4.3.3 Justification for any change in Contract Time.

4.3.4 Additional data upon request.

4.4 For changes in the Work performed on a time-and-material basis, the following additional information may be required:

4.4.1 Quantities and description of products and equipment.

4.4.2 Taxes, insurance and bonds.

4.4.3 Overhead and profit as noted in Document 00800 - Supplementary Conditions. **(PWE web link)**

http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

4.4.4 Dates and times work was performed, and by whom.

4.4.5 Time records and certified copies of applicable payrolls.

4.4.6 Invoices and receipts for products, rented equipment, and subcontracts, similarly documented.

4.5 For changes in the work performed on a time-and-materials basis, rental equipment will be paid as follows:

4.5.1 Rented equipment will be paid by actual invoice cost for the duration of time required to complete the extra work without markup for overhead and profit. If the extra work comprises only a portion of the rental invoice where the equipment would otherwise be on the site, the Contractor shall compute the hourly equipment rate by dividing the actual monthly invoice by 176. (One day equals 8 hours and one week equals 40 hours.)

4.5.2 Operating costs shall not exceed the estimated operating costs given in the Blue Book for the item of equipment. Overhead and profit will be allowed on operating cost.

4.6 For changes in the work performed on a time-and-materials basis using Contractor-owned equipment, use Blue Book rates as follows:

4.6.1 Contractor-owned equipment will be paid at the Blue Book Rental Rate for the duration of time required to complete the extra work without markup for overhead and profit. The Rental Rate utilized shall be the lowest cost combination of hourly, daily, weekly or monthly rates. Use 150 percent of the Rental Rate for double shifts (one extra shift per day) and 200 percent of the Rental Rate for more than two shifts per day. Standby rates shall be 50 percent of the appropriate Rental Rate shown in the Blue Book. No other rate adjustments shall apply.

4.6.2 Operating costs shall not exceed the estimated operating costs given in the Blue Book for the item of equipment. Overhead and profit will be allowed on operating cost. Operating costs will not be allowed for equipment on standby.

5.0 CHANGE PROCEDURES

5.1 Changes to Contract Price or Contract Time can only be made by issuance of a Change Order. Issuance of a Work Change Directive will be formalized into a Change Order. All changes will be in accordance with the requirements of - General Conditions, **“REFER TO E-BID SYSTEM, VENDOR LOG IN, SEE DOCUMENT 00700”**

5.2 The City Engineer will advise of minor changes in the Work not involving an adjustment to Contract Price or Contract Time as authorized by the General Conditions by issuing supplemental instructions.

5.3 Contractor may request clarification of Drawings, Specifications or Contract Documents or other information by using Document 00660 - Request for Information. Response by the City Engineer to a Request for Information does not authorize the Contractor to perform tasks outside the scope of the Work. All changes must be authorized as described in this section. **(PWE web link)**
http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

6.0 PROPOSALS AND CONTRACT MODIFICATIONS

6.1 The City Engineer may issue Document 00661 - Request for Proposal, I which includes a detailed description of a proposed change with supplementary or revised Drawings and Specifications. The City Engineer may also request a proposal in the response to a Request for Information. Contractor shall prepare and submit a proposal within 7 days or as specified in the request.

(PWE web link)

http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

6.2 The Contractor may propose an unsolicited change by submitting a proposal to the City Engineer describing the proposed change and its full effect on the Work, with a statement describing the reason for the change and the effect on the Contract Price and Contract Time including full documentation.

7.0 WORK CHANGE DIRECTIVE

7.1 City Engineer may issue a signed Work Change Directive instructing the Contractor to proceed with a change in the Work. A Work Change Directive will subsequently be incorporated in a Change Order.

7.2 The document will describe changes in the Work and will designate a method of determining any change in Contract Price or Contract Time.

7.3 Contractor shall proceed promptly to execute the changes in the Work in accordance with the Work Change Directive.

8.0 STIPULATED PRICE CHANGE ORDER

8.1 A stipulated price Change Order will be based on an accepted proposal including the Contractor's lump sum price quotation with Schedule of Values.

9.0 UNIT PRICE CHANGE ORDER

9.1 Where Unit Prices for the affected items of Work are included in the Bid Line Item Detail, the unit price Change Order will be based on the unit prices, subject to Articles 7 and 9 of the General Conditions, **"REFER TO E-BID SYSTEM, VENDOR LOG IN, SEE DOCUMENT 00700"**

9.2 Where unit prices of Work are not pre-determined in the Bid Line Item Detail, the Work Change Directive or accepted proposal will specify the unit prices to be used.

10.0 TIME-AND-MATERIAL CHANGE ORDER

10.1 Contractor shall provide an itemized account and supporting data after completion of change, within time limits indicated for claims in the General Conditions, **"REFER TO E-BID SYSTEM, VENDOR LOG IN, SEE DOCUMENT 00700"**

10.2 City Engineer will determine the change allowable in Contract Price and Contract Time as provided in the General Conditions, **"REFER TO E-BID SYSTEM, VENDOR LOG IN, SEE DOCUMENT 00700"**

10.3 Contractor shall maintain detailed records of work done on time-and-material basis as specified in paragraph 10.4, Documentation of Change in Contract Price and Contract Time.

10.4 Contractor shall provide full information required for evaluation of changes and shall substantiate costs for changes in the Work.

11.0 EXECUTION OF CHANGE DOCUMENTATION

11.1 City Engineer will issue Change Orders, Work Change Directives, or accepted proposal for signatures of parties as described in Document 00700 - General Conditions. **"REFER TO E-BID SYSTEM, VENDOR LOG IN, SEE**

DOCUMENT 00700"

12.0 CORRELATION OF CONTRACTOR SUBMITTALS

12.1 For Stipulated Price Contracts, Contractor shall promptly revise the Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item.

12.2 For Unit Price Contracts, the next monthly estimate of work after acceptance of a Change Order will be revised to include any new items not previously included and the appropriate unit rates.

12.3 Contractor shall promptly revise progress schedules to reflect any change in Contract Time, and shall revise schedules to adjust time for other items of work affected by the change, and resubmit for review.

12.4 Contractor shall promptly enter changes to the on-site and record copies of the Drawings, Specifications or Contract Documents as required in Section 01785 - Project Record Documents.

*PART 2 PRODUCTS -*** Not Used****

*PART 3 EXECUTION -*** Not Used****

SECTION 01270
MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.0 SECTION INCLUDES

1.1 Procedures for measurement and payment plus conditions for nonconformance assessment and nonpayment for rejected products.

2.0 AUTHORITY

2.1 Measurement methods delineated in Specification sections are intended to complement the criteria of this section. In the event of conflict, the requirements of the Specification section shall govern.

2.2 City Engineer will take all measurements and compute quantities accordingly.

2.3 Contractor shall assist by providing necessary equipment, workers, and survey personnel as required by City Engineer.

3.0 UNIT QUANTITIES SPECIFIED

3.1 Quantity and measurement estimates stated in the Agreement are for contract purposes only. Quantities and measurements supplied or placed in the Work and verified by City Engineer shall determine payment as stated in Article 9 of the General Conditions. **“REFER TO E-BID SYSTEM, VENDOR LOG IN, SEE DOCUMENT 00700”**

3.2 If the actual Work requires greater or lesser quantities than those quantities indicated in the Bid Form, provide the required quantities at the unit prices contracted, except as otherwise stated in Article 9 of the General Conditions.

4.0 MEASUREMENT OF QUANTITIES

4.1 Measurement by Weight: Reinforcing steel, rolled or formed steel or other metal shapes will be measured by CRSI or AISC Manual of Steel Construction weights. Welded assemblies will be measured by CRSI or AISC Manual of Steel Construction or scale weights.

4.2 Measurement by Volume:

4.2.1 Stockpiles: Measured by cubic dimension using mean length, width, and height or thickness.

4.2.2 Excavation and Embankment Materials: Measured by cubic dimension using the average end area method.

4.2.3 Measurement by Area: Measured by square dimension using mean length and width or radius.

4.2.4 Linear Measurement: Measured by linear dimension, at the item centerline or mean chord.

4.2.5 Stipulated Price Measurement: By unit designated in the agreement.

4.2.6 Other: Items measured by weight, volume, area, or lineal means or combination, as appropriate, as a completed item or unit of the Work.

5.0 PAYMENT

5.1 Payment Includes: Full compensation for all required supervision, labor, products, tools, equipment, plant, transportation, services, and incidentals; and erection, application or installation of an item of the Work; and Contractor's overhead and profit.

5.2 Total compensation for required Unit Price Work shall be included in Unit Price bid in the Bid Line Item Detail. Claims for payment as Unit Price Work, but not specifically covered in the list of unit prices contained in the Bid Line Item Detail, will not be accepted.

5.3 Interim payments for stored materials will be made only for materials to be incorporated under items covered in unit prices, unless disallowed in Supplementary Conditions.

5.4 Progress payments will be based on the City Engineer's observations and evaluations of quantities incorporated in the Work multiplied by the unit price.

5.5 Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities determined by City Engineer multiplied by the unit price for Work which is incorporated in or made necessary by the Work.

6.0 NONCONFORMANCE ASSESSMENT

6.1 Remove and replace the Work, or portions of the Work, not conforming to the Contract Documents.

6.2 If, in the opinion of City Engineer, it is not practical to remove and replace the Work, the City Engineer will direct one of the following remedies:

6.2.1 The nonconforming Work will remain as is, but the unit price will be adjusted to a lower price at the discretion of City Engineer.

6.2.2 The nonconforming Work will be modified as authorized by the City Engineer, and the unit price will be adjusted to a lower price at the discretion of City Engineer, if the modified work is deemed to be less suitable than originally specified.

6.2.3 Specification sections may modify the above remedies or may identify a specific formula or percentage price reduction.

6.3 The authority of City Engineer to assess the nonconforming work and identify payment adjustment is final.

7.0 NONPAYMENT FOR REJECTED PRODUCTS

7.1 Payment will not be made for any of the following:

7.1.1 Products wasted or disposed of in a manner that is not acceptable to City Engineer.

7.1.2 Products determined as nonconforming before or after placement.

7.1.3 Products not completely unloaded from transporting vehicle.

7.1.4 Products placed beyond the lines and levels of the required Work.

7.1.5 Products remaining on hand after completion of the Work, unless specified otherwise.

7.1.6 Loading, hauling, and disposing of rejected products.

SECTION 01312
COORDINATION AND MEETINGS

PART 1 GENERAL

1.0 SECTION INCLUDES

1.1 Section includes general coordination including pre-construction conference, site mobilization conference, and progress meetings.

2.0 RELATED DOCUMENTS

2.1 Coordination is required throughout the documents. Refer to all of the Contract Documents and coordinate as necessary.

3.0 CITY ENGINEER AND REPRESENTATIVES

3.1 The City Engineer may act directly or through designated representatives as defined in the General Conditions and as identified by name at the pre-construction conference.

4.0 CONTRACTOR COORDINATION

4.1 Coordinate scheduling, submittals, and Work of the various Specifications sections to assure efficient and orderly sequence of installation of interdependent construction elements.

4.2 Verify that utility requirement characteristics of operating equipment are compatible with existing or planned utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

4.3 Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

4.4 Conceal pipes, ducts, and wiring within the construction in finished areas, except as otherwise indicated. Coordinate locations of fixtures and outlets with finish elements.

4.5 Coordinate completion and clean up of Work for Substantial Completion and for portions of Work designated for City's partial occupancy.

4.6 Coordinate access to site for correction of nonconforming Work to minimize disruption of City's activities where City is in partial occupancy.

5.0 PRECONSTRUCTION CONFERENCE

5.1 City Engineer will schedule a pre-construction conference.

5.2 Attendance Required: City Engineer's representatives, Architect/Engineer, Contractor, and major Subcontractors.

5.3 Agenda:

5.3.1 Distribution of Contract Documents.

5.3.2 Designation of personnel representing the parties in Contract, and the Architect/Engineer.

5.3.3 Review of insurance.

5.3.4 Discussion of formats proposed by the Contractor for schedule of values, and construction schedule.

5.3.5 Procedures and processing of shop drawings and other submittals, substitutions, pay estimates or applications for payment, Requests for Information, Request for Proposal, Change Orders, and Contract closeout.

5.3.6 Scheduling of the Work and coordination with other contractors.

5.3.7 Review of Subcontractors.

5.3.8 Appropriate agenda items listed for Site Mobilization Conference, paragraph 6.3, when pre-construction conference and site mobilization conference are combined.

5.3.9 Procedures for testing.

5.3.10 Procedures for maintaining record documents.

6.0 SITE MOBILIZATION CONFERENCE

6.1 When required by the Contract Documents, City Engineer will schedule a conference at the Project site prior to Contractor occupancy.

6.2 Attendance Required: City Engineer representatives, Architect/Engineer, Special Consultants, Contractor's Superintendent, and major Subcontractors.

6.3 Agenda:

6.3.1 Use of premises by City and Contractor.

6.3.2 Safety and first aid procedures.

6.3.3 Construction controls provided by City.

6.3.4 Temporary utilities.

6.3.5 Survey and layout.

6.3.6 Security and housekeeping procedures.

6.3.7 Field office requirements.

7.0 PROGRESS MEETINGS

7.1 Project meetings shall be held at Project field office or other location as designated by the City Engineer. Meeting shall be held at monthly intervals, or more frequent intervals if directed by City Engineer.

7.2 Attendance Required: Job superintendent, major Subcontractors and suppliers, City Engineer representatives, and Architect/Engineer as appropriate to agenda topics for each meeting.

7.3 City Engineer or his representative will make arrangements for meetings, and recording minutes.

7.4 City Engineer or his representative will prepare the agenda and preside at meetings.

7.5 Contractor shall provide required information and be prepared to discuss each agenda item.

7.6 Agenda:

7.6.1 Review minutes of previous meetings.

7.6.2 Review of Work progress schedule submittal, and pay estimates, payroll and compliance submittals.

7.5.3 Field observations, problems, and decisions.

7.5.4 Identification of problems which impede planned progress.

7.5.5 Review of submittals schedule and status of submittals.

7.5.6 Review of RFI and RFP status.

7.5.7 Change order status.

7.5.8 Review of off-site fabrication and delivery schedules.

7.5.9 Maintenance of progress schedule.

7.5.10 Corrective measures to regain projected schedules.

7.5.11 Planned progress during succeeding work period.

7.5.12 Coordination of projected progress.

7.5.13 Maintenance of quality and work standards.

7.5.14 Effect of proposed changes on progress schedule and coordination.

7.5.15 Other item relating to Work.

SECTION 01325
CONSTRUCTION SCHEDULE

PART 1 GENERAL

1.0 GENERAL

1.1 Provide Construction Schedules for Work included in this Contract in accordance with requirements in this Section. Create a Construction Schedule using Critical Path Method (CPM) computer software capable of mathematical analysis of Precedence Diagramming Method (PDM) schedules. Provide printed activity listings and bar charts in formats described in this Section.

1.2 Combine activity listings and bar charts with a narrative report to form the Contractor's Construction Schedule submittal for the City Engineer.

2.0 SCHEDULING STAFF

2.1 Employ or retain services of an individual experienced in critical path scheduling for the duration of the Contract. This person shall cooperate with the City Engineer and shall update the Contractor's schedule at least monthly as required to indicate current status of the Work.

3.0 SUBMITTALS

3.1 Make Construction Schedule submittals for review by the City Engineer in accordance with requirements of Section 01330 - Submittal Procedures.

3.2 During the pre-construction meeting, as described in Section 01312 - Coordination and Meetings, provide sample bar charts and activity listings produced from the scheduling software proposed. Scheduling software is subject to approval of the City Engineer and must meet requirements provided in this Section. Review of the samples will be provided by the City Engineer within 7 days of the submittal.

3.3 Within 21 days of receipt of approval of the Contractor's format, or 30 days of the Notice to Proceed, whichever is later, submit a proposed Construction Schedule for review. The Construction Schedule submittal shall be based on the following:

3.3.1 The level of detail and number of activities required in the schedule are dependent on the project type.

3.3.1.1 For wastewater projects, the work shall be categorized by Work Type and Area Code in the schedule.

3.3.1.1.1 For wastewater rehabilitation projects, there are 6 work-type categories. An area code will be assigned for each Meter Service Area or Basin. The schedule shall include at least one activity for

each unique combination of work type and area code. Normal schedules of wastewater rehabilitation projects contain between 35 and 100 activities, depending on the number of basins and the work types involved in each basin.

3.3.1.1.2 For wastewater relief projects (line work), area codes will be assigned geographically.

3.3.1.1.3 For wastewater plant or facility work, other criteria may apply to the assignment of area codes, such as a combination of geographical and craft categories.

3.3.2 For projects with multiple types of tasks within the scope, these types of work shall be indicated separately within the schedule.

3.3.3 For projects with work at different physical locations or service areas, or different facilities within a site, each location or facility shall be indicated separately within the schedule. Work on each floor of a multi-story building shall be shown as separate tasks.

3.3.4 For projects with multiple crafts or significant subcontractor components, these elements shall be indicated separately within the schedule. Unless permitted by the City Engineer, tasks shall consist of work covered by only one division of the Project Manual.

3.3.5 Unless permitted by the City Engineer, each schedule task shall be the same as a schedule of values line item, and vice versa.

3.3.6 For projects with significant major equipment items or materials representing over 5 percent of the Total Contract Price, the schedule shall indicate dates when these items are to be purchased, when they are to be delivered, and when installed. Activities for testing, adjustment, and delivering O & M manuals shall be included.

3.3.7 No task except the acquisition of major equipment items shall represent more than one percent of the Total Contract Price for facility projects and 3 percent of the Total Contract Price for other projects. The duration of tasks may not exceed 40 calendar days.

3.3.8 For projects where operating **facilities** are involved, each period of work which will **impact** any process or operation shall be identified in the schedule and must be agreed to by the City Engineer and the facility operator prior to starting work in the area

3.3.9 Construction Schedule submittals shall include:

3.3.9.1 Printed bar charts which meet the criteria outlined in this Section and which are produced by the Contractor's approved scheduling software.

3.3.9.2 Activity listings which meet the criteria outlined in this Section and which are produced by the Contractor's approved scheduling software.

3.3.9.3 Predecessor/successor listing sorted by Activity ID which meets the criteria outlined in this Section and which is produced by the Contractor's approved scheduling software.

3.3.9.4 A logic network diagram shall be required with the first construction schedule submittal for facilities projects.

3.3.9.5 A graphic or tabular display of estimated monthly billings for the Work shall be prepared and submitted by the Contractor with the first schedule submittal. This information is not required in monthly updates, unless significant changes in work require resubmittal of the schedule for review. The display shall allocate units indicated in the bid schedule or the schedule of values to Construction Schedule activities. (Weighted allocations are acceptable, where appropriate). The dollar value associated with each allocated unit will be spread across the duration of the activity on a monthly basis. The total for each month and a cumulative total will be indicated. These monthly forecasts are only for planning purposes of the City Engineer. Monthly payments for actual work completed will be made by the City Engineer in accordance with Document 00700 - General Conditions. **"REFER TO E-BID SYSTEM, VENDOR LOG IN, SEE DOCUMENT 00700"**

3.3.9.6 A narrative report which shall provide the information outlined in this Section.

3.4 No payment will be made until the Construction Schedule and billing forecast are accepted by the City Engineer.

3.5 If the Contractor desires to make changes in his method of operating and scheduling, after approval of the original schedule has been given by the City Engineer, the Contractor shall notify the City Engineer in writing, stating the reasons for the change. If the City Engineer considers these changes to be of significant nature, the Contractor may be required to revise and resubmit for approval all or the affected portion of the Contractor's Construction Schedule to show the effect on the Work.

3.6 Upon written request from the City Engineer, the Contractor shall revise and submit for approval all or any part of the Construction Schedule submittal to reflect changed conditions in the Work or deviations made from the original plan and schedule.

3.7 The Contractor's Construction Schedule shall thereafter be updated with Actual Start and Actual Finish Dates, Percent Complete, and Remaining

Duration of each Activity and submitted monthly. The data date to be used in updating the monthly Construction Schedule shall be the same data date as is used in the monthly Application for Payment. This monthly update of the schedule shall be required before the monthly Application for Payment will be processed for payment.

(Section 4.0 removed, pertains to new construction only)

5.0 NARRATIVE SCHEDULE REPORT

5.1 The Narrative Report shall include a listing of the Activities Started This Month; Activities Completed This Month; Activities Continued This Month; Activities Scheduled to Start or Complete Next Month; Problems Encountered This Month; Actions Taken to Solve These Problems.

5.2 The narrative Schedule Report shall include a description of changes made to the Construction Schedule Logic (i.e., changes in Predecessors and Lags); Activities Added to the Schedule; Activities Deleted from the Schedule; any other changes made to the Schedule other than the addition of Actual Start Dates and Actual Finish Dates and changes of Data Date and Remaining Durations for re-calculation of mathematical analysis.

SECTION 01330
SUBMITTAL PROCEDURES

PART 1 GENERAL

1.0 SECTION INCLUDES

1.1 Submittal procedures for:

- 1.1.1 Schedule of Values.
- 1.1.2 Construction Schedules.
- 1.1.3 Shop Drawings, Product Data, and Sampler/
- 1.1.4 Operations and Maintenance Data.
- 1.1.5 Manufacturer's Certificates.
- 1.1.6 Construction Photographs.
- 1.1.7 Project Record Documents.
- 1.1.8 Video Tapes.
- 1.1.9 Design Mixes.

2.0 SUBMITTAL PROCEDURES

2.1 Scheduling and Handling:

- 2.1.1 Schedule submittals well in advance of the need for the material or equipment for construction. Allow time to make delivery of material or equipment after submittal is approved.
- 2.1.2 Develop a submittal schedule that allows sufficient time for initial review, correction, resubmission and final review of all submittals. The City Engineer will review and return submittals to the Contractor as expeditiously as possible but the amount of time required for review will vary depending on the complexity and quantity of data submitted. In no case will a submittal schedule be acceptable which allows less than 30 days for initial review by the City Engineer. This time for review shall in no way be justification for delays or additional compensation to the Contractor.
- 2.1.3 The City Engineer's review of submittals covers only general conformity to the Drawings, Specifications and dimensions which affect the layout. The Contractor is responsible for quantity determination. No quantities will be verified by the City Engineer. The Contractor is responsible for any errors, omissions or deviations

from the Contract requirements; review of submittals in no way relieves the Contractor from his obligation to furnish required items according to the Drawings and Specifications.

2.1.4 Submit 5 copies of documents unless otherwise specified in the following paragraphs or in the Specifications.

2.1.5 Revise and resubmit submittals as required. Identify all changes made since previous submittal.

2.1.6 The Contractor shall assume the risk for material or equipment which is fabricated or delivered prior to approval. No material or equipment shall be incorporated into the Work or included in periodic progress payments until approval has been obtained in the specified manner.

2.2 Transmittal Form and Numbering:

2.2.1 Transmit each submittal to the City Engineer with a Transmittal Form. A copy of the Transmittal Form is attached.

2.2.2 Sequentially number each transmittal form beginning with the number 1. Resubmittals shall use the original number with an alphabetic suffix (i.e., 2A for first resubmittal of Submittal 2 or 15C for third resubmittal of Submittal 15). Each submittal shall only contain one type of work, material, or equipment. Mixed submittals will not be accepted.

2.2.3 Identify variations from requirements of Contract Documents and identify product or system limitations.

2.2.4 For submittal numbering of video tapes, see paragraph 10.2 Video, page 43.

2.3 Contractor's Stamp:

2.3.1 Apply Contractor's stamp, certifying that the items have been reviewed in detail and are correct and in accordance with Contract Documents, except as noted by any requested variance.

2.3.2 As a minimum, Contractor's Stamp shall include:

2.3.2.1 Contractor's name.

2.3.2.2 Job number.

2.3.2.3 Submittal number.

2.3.2.4 Certification statement that the Contractor has reviewed the submittal and it is in compliance with the Contract Documents.

2.3.2.5 Signature line for Contractor.

3.0 SCHEDULE OF VALUES

3.1 Submit a Schedule of Values in accordance with Section 01292 - Schedule of Values. **(PWE web link)**
http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

4.0 CONSTRUCTION SCHEDULES

4.1 Submit Construction Schedules as provided in Project Manual.

5.0 SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

5.1 Submit shop drawings in accordance with Section 01340 - Shop Drawings, Product Data, and Samples. **(PWE web link)**
http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

6.0 OPERATIONS AND MAINTENANCE DATA

6.1 Submit Operations and Maintenance data in accordance with Section 01782 - Operations and Maintenance Data.

7.0 MANUFACTURER'S CERTIFICATES

7.1 When specified in Specification sections, submit manufacturers' certificate of compliance for review by City Engineer.

7.2 Contractor's Stamp, as described in paragraph 2.3, page 42, shall be placed on front page of the certification.

7.3 Submit supporting reference data, affidavits, and certifications as appropriate.

7.4 Certificates may be recent or previous test results on material or product, but must be acceptable to City Engineer.

8.0 CONSTRUCTION PHOTOGRAPHS

8.1 Submit Construction Photographs in accordance with Section 01321 - Construction Photographs. **(PWE web link)**
http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

9.0 PROJECT RECORD DOCUMENTS

9.1 Submit Project Record Documents in accordance with Section 01785 - Project Record Documents.

10.0 VIDEO

10.1 Submit television video tapes as required in Section 02533 - Acceptance Testing for Sanitary Sewers. **(PWE web link)**
http://pwecms.cityofhouston.net/forms-amp-policies/search_result-2.html

10.2 Transmittal forms for video tapes shall be numbered sequentially beginning with T01, T02, T03, etc.

11.0 DESIGN MIXES

11.1 When specified in Specifications, submit design mixes for review.

11.2 Contractor's Stamp, as described in paragraph 2.3, on page 42, shall be placed on front page of each design mix.

11.3 Mark each design mix to identify proportions, gradations, and additives for each class and type of design mix submitted. Include applicable test results on samples for each mix.

11.4 Maintain a copy of approved design mixes at mixing plant.

SECTION 01422
REFERENCE STANDARDS

PART 1 GENERAL

1.0 SECTION INCLUDES

1.1 Section includes general quality assurance as related to Reference Standards and a list of references.

2.0 QUALITY ASSURANCE

2.1 For Products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

2.2 Conform to reference standard by date of issue current on the date as stated in the General Conditions.

2.3 Request clarification from City Engineer before proceeding should specified reference standards conflict with Contract Documents.

3.0 SCHEDULE OF REFERENCES

- 3.1 AASHTO American Association of State Highway
and Transportation Officials
444 North Capitol Street, N.W.
Washington, DC 20001
- 3.2 ACI American Concrete Institute
P.O. Box 9094
Farmington Hills, MI 48333-9094
- 3.3 AGC Associated General Contractors of America
1957 E Street, N.W.
Washington, DC 20006
- 3.4 AI Asphalt Institute
Asphalt Institute Building
College Park, MD 20740
- 3.5 AITC American Institute of Timber Construction
333 W. Hampden Avenue
Englewood, CO 80110
- 3.6 AISC American Institute of Steel Construction
400 North Michigan Avenue
Eighth Floor,
Chicago, IL 60611

- 3.7 AISI American Iron and Steel Institute
1000 16th Street, N.W.
Washington, DC 20036
- 3.8 ASME American Society of Mechanical Engineers
345 East 47th Street
New York, NY 10017
- 3.9 ANSI American National Standards Institute
1430 Broadway
New York, NY 10018
- 3.10 APA American Plywood Association
Box 11700
Tacoma, WA 98411
- 3.11 API American Petroleum Institute
1220 L Street, N.W.
Washington, DC 20005
- 3.12 AREA American Railway Engineering Association
50 F Street, N.W.
Washington, DC 20001
- 3.13 ASTM American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103
- 3.14 AWWA American Wood-Preservers' Association
7735 Old Georgetown Road
Bethesda, MD 20014
- 3.15 AWS American Welding Society
P.O. Box 35104
Miami, FL 33135
- 3.16 AWWA American Water Works Association
6666 West Quincy Avenue
Denver, CO 80235
- 3.17 COH City of Houston
900 Bagby Street
P.O. Box 1562
Houston, TX 77251-1562
- 3.18 CLFMI Chain Link Fence Manufacturers Institute
1101 Connecticut Avenue, N.W.
Washington, DC 20036

- 3.19 CRSI Concrete Reinforcing Steel Institute
933 Plum Grove Road
Schaumburg, IL 60173-4758
- 3.20 EJMA Expansion Joint Manufacturers Association
707 Westchester Avenue
White Plains, NY 10604
- 3.21 FS Federal Standardization Documents
General Services Administration
Specifications Unit (WFSIS)
7th and D Streets, S.W.
Washington, DC 20406
- 3.22 ICEA Insulated Cable Engineer Association
P.O. Box 440
S. Yarmouth, MA 02664
- 3.23 IEEE Institute of Electrical and Electronics Engineers
445 Hoes Lane
P.O. Box 1331
Piscataway, NJ 0855-1331
- 3.24 ISA International Society of Arboriculture
303 West University
P.O. Box GG
Savoy, IL 61874
- 3.25 MIL Military Specifications
General Services Administration
Specifications Unit (WFSIS)
7th and D Streets, S.W.
Washington, DC 20406
- 3.26 NACE National Association of Corrosion Engineers
1440 South Creek Drive
Houston, TX 71084
- 3.27 NEMA National Electrical Manufacturers' Association
2101 L Street, N.W., Suite 300
Washington, DC 20037
- 3.28 NFPA National Fire Protection Association
Batterymarch Park
P.O. Box 9101
Quincy, MA 02269-9101
- 3.29 OSHA Occupational Safety Health Administration
U.S. Department of Labor
Government Printing Office
Washington, DC 20402

- 3.30 PCA Portland Cement Association
5420 Old Orchard Road
Skokie, IL 60077-1083
- 3.31 PCI Prestressed Concrete Institute
201 North Wacker Drive
Chicago, IL 60606
- 3.32 SDI Steel Deck Institute
Box 9506
Canton, OH 44711
- 3.33 SSPC Steel Structures Painting Council
4400 Fifth Avenue
Pittsburgh, PA 15213
- 3.34 TAC Texas Administrative Code
Texas Water Commission
P. O. Box 13087, Capitol Station
Austin, TX 78711-3087
- 3.35 TxDOT Texas Department of Transportation
11th and Brazos
Austin, TX 78701 2483
- 3.36 UL Underwriters' Laboratories, Inc.
333 Pfingston Road
Northbrook, IL 60062
- 3.37 UNI-BELL UNI-BELL Pipe Association
2655 Villa Creek Drive, Suite 155
Dallas, TX 75234

PART 2 PRODUCTS- Not Used******

PART 3 EXECUTION- Not Used******

SECTION 01450
CONTRACTOR'S QUALITY CONTROL

PART 1 GENERAL

1.0 SECTION INCLUDES

1.1 Quality assurance and control of installation and manufacturer's field services and reports.

2.0 MEASUREMENT AND PAYMENT

2.1 No payment will be made for this item. Include the cost of Contractor's quality control in overhead cost for this project.

3.0 QUALITY ASSURANCE/CONTROL OF INSTALLATION

3.1 Monitor quality control over suppliers, manufacturers, products, services, site conditions and workmanship, to produce Work of specified quality.

3.2 Comply fully with manufacturers' installation instructions, including each step in sequence.

3.3 Request clarification from City Engineer before proceeding should manufacturers' instructions conflict with Contract Documents.

3.4 Comply with specified standards as minimum requirements for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

3.5 Perform work by persons qualified to produce the specified level of workmanship.

4.0 REFERENCES

4.1 Obtain copies of standards and maintain at job site when required by individual Specification sections.

5.0 MANUFACTURERS' FIELD SERVICES AND REPORTS

5.1 When specified in individual Specification sections, provide material or product suppliers' or manufacturers' technical representative to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, operator training, test, adjust, and balance of equipment as applicable, and to initiate operation, as required. Conform to minimum time requirements for start-up operations and operator training if defined in Specification sections.

5.2 At the City Engineer's request, submit qualifications of manufacturer's representative to City Engineer 15 days in advance of required

representative's services. The representative shall be subject to approval of City Engineer.

5.3 Manufacturer's representative shall report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions. Submit report within 14 days of observation to City Engineer for review.

*PART 2 PRODUCTS -*** Not Used****
*PART 3 EXECUTION -*** Not Used****

SECTION 01452
INSPECTION SERVICES

PART 1 GENERAL

1.0 SECTION INCLUDES

1.1 Inspection services and references

2.0 INSPECTION

2.1 City Engineer will appoint an Inspector as a representative of the City to perform inspections, tests, and other services specified in individual specification Sections

2.2 Alternately, City Engineer may appoint, employ, and pay an independent firm to provide additional inspection or construction management services as indicated in Section 01454 - Testing Laboratory Services.

2.3 Reports will be submitted by the independent firm to City Engineer, Architect/Engineer, and City, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.

2.4 Assist and cooperate with the Inspector; furnish samples of materials, design mix, equipment, tools, and storage.

2.5 Notify City Engineer 24 hours prior to expected time for operations requiring services. Notify Architect/Engineer and independent firm when noted.

2.6 Sign and acknowledge report for Inspector.

*PART 2 PRODUCTS-***Not Used****

*PART 3 EXECUTION-*** Not Used****

SECTION 01454
TESTING LABORATORY SERVICES

PART 1 GENERAL

1.0 SECTION INCLUDES

1.1 Testing laboratory services and Contractor responsibilities related to those services.

2.0 REFERENCES

2.1 ASTM C 1077 - Standard Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation.

2.2 ASTM D 3666 - Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials.

2.3 ASTM D 3740 - Standard Practice for Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.

2.4 ASTM E 329 - Specification for Minimum Requirements for Agencies Engaged the Testing and/or Inspection of Materials Used in Construction.

2.5 ISO/TEC Guide 25 - General Requirements for the Competence of Calibration and Testing Laboratories.

3.0 SELECTION AND PAYMENT

3.1 The City will select, employ, and pay for services of an independent testing laboratory to perform inspection and testing identified in Part 3, Execution, of Individual Specification sections.

3.2 The Contractor shall employ and pay for services of an independent testing laboratory or laboratories to perform inspection and testing identified in Part 2, Products, of individual Specification sections.

3.3 Employment of a testing laboratory by the City shall not relieve Contractor of obligation to perform work in accordance with requirements of Contract Documents.

3.4 The Contractor will have the minimum 2-hour charge for testing laboratory time deducted from the estimate for payment if operations requiring testing or inspection are canceled without prior notification.

3.5 The Contractor will have the cost of retesting deducted from the estimate for payment whenever failed work must be removed and replaced and retested.

4.0 QUALIFICATION OF LABORATORY

4.1 Meet laboratory requirements of ASTM E 329 and applicable requirements of ASTM C 1077, ASTM D 3666, and ASTM D 3740.

4.2 Meet the ISO/TEC Guide 25 conditions for accreditation by the American Association for Laboratory Accreditation (A2LA) in specific fields of testing required in individual Specification sections.

4.3 Where a laboratory subcontracts any part of the testing services, such work shall be placed with a laboratory complying with the requirements of this Section.

5.0 LABORATORY REPORTS

5.1 The testing laboratory shall provide and distribute copies of laboratory reports to the distribution list provided by the City Engineer at the pre-construction conference.

5.2 One copy of each laboratory report distributed or faxed to the Contractor shall be kept at the site field office for the duration of the project.

5.3 Before close of business on the working day following test completion and review, reports which indicate failing test results shall be transmitted immediately via fax from the testing laboratory to the material supplier, Contractor, and City Engineer.

6.0 LIMITS ON TESTING LABORATORY AUTHORITY

6.1 Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.

6.2 Laboratory may not approve or accept any portion of the Work.

6.3 Laboratory may not assume any duties of the Contractor.

6.4 Laboratory has no authority to stop the Work.

7.0 CONTRACTOR RESPONSIBILITIES

7.1 Provide safe access to the Work and to manufacturer's facilities for the City Engineer and for testing laboratory personnel.

7.2 Provide to the testing laboratory a copy of the construction schedule and a copy of each update to the construction schedule.

- 7.3 Notify the City Engineer and the testing laboratory during normal working hours of the day previous to the expected time for operations requiring inspection and testing services. If the Contractor fails to make timely prior notification, then the Contractor shall not proceed with the operations requiring inspection and testing services.
- 7.4 Notify the Architect/Engineer 24 hours in advance if the Specification requires the presence of the Architect/Engineer for sampling or testing.
- 7.5 Request and monitor testing as required to provide timely results and to avoid delay to the Work. Provide samples to the laboratory in sufficient time to allow the required test to be performed in accordance with specified test methods before the intended use of the material.
- 7.6 Cooperate with laboratory personnel in collecting samples on site. Provide incidental labor and facilities for safe access to the Work to be tested; to obtain and handle samples at the site or at source of products to be tested; and to facilitate tests and inspections including storage and curing of test samples.

*PART 2 PRODUCTS -*** Not Used****

PART 3 EXECUTION

1.0 CONDUCTING TESTING

- 1.1 Laboratory sampling and testing specified in individual Specification sections shall conform to the latest issues of ASTM standards, TxDOT methods, or other recognized test standards as approved by the City Engineer.
- 1.2 The requirements of this section shall also apply to those tests for approval of materials, for mix designs, and for quality control of materials as performed by the testing laboratories employed by the Contractor.