

Document 00911

NOTICE OF
ADDENDUM NO. 1

Date of Addendum: 3/16/15

PROJECT NAME: Minnetex Place and Almeda Genoa Place Drainage and Paving

PROJECT NO: WBS No. M-000289-0002-4

BID DATE: March 19, 2015 (NO CHANGES TO BID DATE)

FROM: Ravi Kaleyatodi, P.E., CPM, Senior Assistant Director
City of Houston, Public Works and Engineering Department
611 Walker St., 15th Floor
Houston, Texas 77002
Attn: Ellen Maas, P.E., Project Manager

TO: Prospective Bidders

The referenced Addendum forms a part of the Bidding Documents and will be incorporated into the Contract documents, as applicable.

Written questions regarding this Addendum may be submitted to the Project Manager following the procedures specified in Document 00200 – Instructions to Bidders. Immediately notify the City Engineer through the named Project Manager upon finding discrepancies or omissions in the Bid Documents.

This Addendum includes:

ADDENDUM SYNOPSIS

Changes to Project Manual
Changes to Construction Drawings
Clarification to the Bid Documents



DATED: 3/16/15



Ravi Kaleyatodi, P.E., CPM
Senior Assistant Director
Engineering Branch
Engineering and Construction Division

END OF DOCUMENT

Minnetex Place and Almeda Genoa Place Drainage and Paving
WBS No. M-000289-0002-4

ADDENDUM

Document 00910

ADDENDUM NO. 1

Date of Addendum: 3/16/15

PROJECT NAME: Minnetex Place and Almeda Genoa Place Drainage and Paving

PROJECT NO: WBS No. M-000289-0002-4

BID DATE: March 19, 2015

FROM: James T. Lincoln, P.E., City Engineer
City of Houston, Department of Public Works and Engineering
611 Walker Street, 15th Floor
Houston, Texas 77002
Attn: Ellen S. Maas, P.E., Project Manager

TO: Prospective Bidders

This Addendum forms a part of the Bidding Documents and will be incorporated into the Contract documents, as applicable. Insofar as the original Project Manual and Drawings are inconsistent, this Addendum governs.

This Addendum uses the change page method: remove and replace or add pages, or Drawing sheets, as directed in the change instructions below. Change bars (|) are provided in the outside margins of pages from the Project Manual to indicate where changes have been made; no change bars are provided in added Sections. Reissued Drawing Sheets show the Addendum number below the title block and changes in the Drawing are noted by a revision mark and enclosed in a revision cloud.



KIT Professionals, Inc.
TBPE Registration No. F-4997

00910-1
02-01-2004
Addendum No. 1

Document 00910

ADDENDUM NO. 1

Date of Addendum: 3/16/15

PROJECT NAME: Minnetex Place and Almeda Genoa Place Drainage and Paving

PROJECT NO: WBS No. M-000289-0002-4

BID DATE: March 19, 2015

FROM: James T. Lincoln, P.E., City Engineer
City of Houston, Department of Public Works and Engineering
611 Walker Street, 15th Floor
Houston, Texas 77002

Attn: Ellen S. Maas, P.E., Project Manager

TO: Prospective Bidders

This Addendum forms a part of the Bidding Documents and will be incorporated into the Contract documents, as applicable. Insofar as the original Project Manual and Drawings are inconsistent, this Addendum governs.

This Addendum uses the change page method: remove and replace or add pages, or Drawing sheets, as directed in the change instructions below. Change bars (|) are provided in the outside margins of pages from the Project Manual to indicate where changes have been made; no change bars are provided in added Sections. Reissued Drawing Sheets show the Addendum number below the title block and changes in the Drawing are noted by a revision mark and enclosed in a revision cloud.



KIT Professionals, Inc.
TBPE Registration No. F-4997

CHANGE IN BID DATE

No change to the bid date.

CHANGES TO PROJECT MANUAL

BIDDING REQUIREMENTS

1. Document 00010 – Table of Contents. Remove and replace entire document.
2. Document 00015 – List of Drawings. Remove and replace entire document.
3. Document 00210 – Supplementary Instructions to Bidders. Add entire document.
4. Document 00410 – BID FORM – PART B. Remove and replace entire document.
5. Specification 01110 – Summary of Work. Remove and replace entire document.
6. Specification 01506 – Diversion Pumping. Add entire document.

CHANGES TO DRAWINGS

1. Sheet No. 2 – Drawing Index. Replace entire sheet. Reason – Sheet Index updated to reflect deletion of Sheet No. 114 from the drawing set
2. Sheet No. 27 – Typical Roadway Sections (2 OF 3). Replace entire sheet.
Reason – Proposed reinforced concrete pavement and subgrade descriptions corrected.
3. Sheet No. 28 – Typical Roadway Sections (3 OF 3). Replace entire sheet.
Reason – Proposed reinforced concrete pavement and subgrade descriptions corrected.
4. Sheet No. 114 – Sign Notes and Details (4 of 4). Remove entire sheet. Blank Summary of Signs Table deleted.
5. Sheet No. 146B – Roadway Cross Sections 10 OF 10. Replace entire sheet.
Reason – Total cut and fill quantities corrected.

CLARIFICATIONS

QUESTIONS FROM PLAN HOLDERS

Q1. Do we need to show the new location of the private utility on as-built?
A1. Yes

Q2. What is the type of pedestrian fencing for temporary pedestrian access?
A2. Orange vinyl construction work fencing.

Q3. Will the City/EOR receive private utility relocation confirmation once the private utility relocation work is complete?

A3. Yes

Q4. Has the EOR done the subsurface utility research?

A4. Information provided on the plans is based on the record drawings provide to the City by the utilities.

Q5. In regards to HES concrete, the summary of work calls out the locations with stations. However, this work runs through an intersection at LEA road. Does the contractor need to extend the HES North & South along LEA to the End of Radius?

A5. See revised Document 01110 – Summary of Work in Addendum No. 1.

Q6. Sheet #27, typical roadway sections calls for Cottingham Rd between stations 1+00 to 15+66 to be 8" Pavement. However, the bid form does not include 8" paving. Please clarify.

A6. See revised plan sheets 27 of 157 and 28 of 157 in Addendum No. 1.

Q7. Clarification in regards to work zone, parallel versus perpendicular work activities is requested.

A7. Refer to General Notes sheet 104 of 157.

Q8. It seems that the unit of Item 10 Install Checker Plate on Bid Form – Part B in Project Manual should be SF instead of SY. Please clarify the unit of Item 10.

A8. See revised Document 00410 in Addendum No. 1.

Q9. Regarding Bid Form Part B in the Project Manual, would you please verify the quantities of Item 191 (Service stubs or reconnections with or without stack on sanitary sewer) and Item 203 (6-inch diameter sanitary sewer service lines)?

A9. See revised Document 00410 in Addendum No. 1.

Q10. Typical roadway section of Cottingham Rd. from sta 1+00 to sta 15+66 shows to RCP to be 8" thick (sheet 27/157) on plan note 38 sheet 5/157 and call out on Cottingham plan sheets is for 10" thick RCP; Please clarify and indicate at the same time the limits.

A10. See revised plan Sheet 27 of 157 in Addendum No. 1.

Q11. Bid Form - There are duplicities on the proposal items: 2-93, 2-114, 2-118; skip from item 150 to 154.

A11. See revised Document 00410 in Addendum No. 1.

Q12. Bid Form - Item 2 and item 36 are the same thing; item 26 and 36 are the same.

A12. See revised Document 00410 in Addendum No. 1.

Q13. Bid Form - traffic signalization items: Item 210 and items 247 thru 261 do not form part of the traffic signalization; these items need to be moved to a separate section or move them to the paving section. Same applies to items 17 thru 26 and 33 thru 36. All these item are part of pavement marking and signs. please clarify.

A13. See revised Document 00410 in Addendum No. 1.

Q14. Supplementary Instructions to Bidders, Section 10.0 regarding BID SUBMISSION adds the following Paragraph A.1 to this section. It reads as follows: City Secretary will receive Bids at 900 Bagby, Room P101, Houston, Texas until 10:30am., local time on February 13, 2015. Can you please confirm the bid location remains the same and that the bid date and time is March 19, 2015 at 10:30am local time?

A14. See revised Document 00210 in Addendum No. 1.

END OF ADDENDUM NO. 1



Ravi Kaleyatodi, P.E., CPM
Senior Assistant Director
Engineering Branch
Engineering and Construction Division

DATED: 3/16/15

END OF DOCUMENT

<u>Doc. No.</u>	<u>Document Title</u>	<u>Doc. Date</u>
-----------------	-----------------------	------------------

Document 00010

TABLE OF CONTENTS

NOTE: Bold capitalized Specification Sections are included in the City of Houston Department of Public Works and Engineering Standard Construction Specifications for Wastewater Collection Systems, Water Lines, Storm Drainage, Street Paving, and Traffic located here:

http://documents.publicworks.houstontx.gov/document-center/cat_view/88-engineering-and-construction/92-specifications/208-division-02-16-standard-specifications.html; and are

incorporated in Project Manuals by reference as if copied verbatim. Documents listed "for filing" are to be provided by Bidder and are not included in this Project Manual unless indicated for example only. The Document numbers and titles hold places for actual documents to be submitted by Contractor during Bid, post-bid, or construction phase of the Project. Specification Sections marked with an asterisk (*) are amended by a supplemental specification, printed on blue paper and placed in front of the Specification it amends. Documents in the 200, 300 and 400 series of Division 00, except for Document 00410B – Bid Form, Part B, are not part of the Contract.

<u>Doc. No.</u>	<u>Document Title</u>	<u>Doc. Date</u>
-----------------	-----------------------	------------------

INTRODUCTORY INFORMATION

00010	Table of Contents	08-01-2013
00015	List of Drawings.....	02-01-2004
00041	List of Prequalified Asbestos & Lead Abatement Contractors	03-21-2012
00042	List of Designated Subcontractors and Suppliers.....	02-01-2004

BIDDING REQUIREMENTS

INSTRUCTIONS TO BIDDERS

00200	Instructions to Bidders.....	03-01-2014
00210	Supplementary Instructions to Bidders.....	07-01-2013
00220	Request for Bid Information.....	06-11-2004

INFORMATION AVAILABLE TO BIDDERS

00320	Geotechnical Information	09-02-2005
00340	Environmental Information	09-14-2005

BID FORMS AND SUPPLEMENTS

00410	Bid Form, Parts A & B	08-01-2013
00430	Bidder's Bond (For filing; Example Form).....	02-01-2004
00450	Bidder's Statement of MWBE/PDBE/DBE/SBE Status.....	07-01-2013
00452	Contractor Submission List - Fair Campaign Ordinance	04-30-2004

<u>Doc. No.</u>	<u>Document Title</u>	<u>Doc. Date</u>
00453	Bidder's Statement of Residency	02-01-2004
00454	Affidavit of Non-interest	02-01-2004
00455	Affidavit of Ownership or Control.....	09-04-2007
00457	Conflict of Interest Questionnaire.....	02-28-2006
00459	Contractor's Statement Regarding Previous Contracts Subject to EEO.....	02-01-2004
00460	(POP-1) Pay or Play Acknowledgement Form	07-03-2012
00470	Bidder's MWSBE Participation Plan	08-01-2013
00471	Pre-bid Good Faith Efforts.....	07-01-2013
00472	Bidder's Goal Deviation Request	07-01-2013
 POST-BID PROCEDURES		
00495	Post-bid Procedures.....	08-01-2013
 CONTRACTING REQUIREMENTS		
 AGREEMENT		
00500	Form of Business	02-01-2004
00501	Resolution of Contractor	02-01-2010
00520	Agreement.....	07-01-2013
00570	Contractor's Revised MWSBE Participation Plan.....	08-01-2013
00571	Record of Post-Award Good Faith Efforts	08-01-2013
00572	Contractor's Request for Plan Deviation	08-01-2013
 BONDS AND CERTIFICATES		
00600	List of Proposed Subcontractors and Suppliers	07-01-2013
00601	Drug Policy Compliance Agreement	02-01-2004
00602	Contractor's Drug Free Workplace Policy (For filing)	
00603	Checklist for Drug Policy Submittal	02-09-2012
00604	History of OSHA Actions and List of On-the-job Injuries	02-01-2004
00605	List of Safety Impact Positions	02-01-2004
00606	Contractor's Certification of No Safety Impact Positions	02-01-2004
00607	Certification Regarding Debarment, Suspension, and Other Responsibility Matters	02-01-2004
00610	Performance Bond	05-17-2005
00611	Statutory Payment Bond	05-17-2005
00612	One-year Maintenance Bond	05-17-2005
00620	Affidavit of Insurance (with attached Certificates of Insurance).....	02-01-2004
00622	Name and Qualifications of Proposed Superintendent (For filing)	
00624	Affidavit of Compliance with Affirmative Action Program.....	02-01-2004
00630	(POP-2) Certification of Compliance with Pay or Play Program.....	07-03-2012

Doc. No.	Document Title	Doc. Date
00631	(POP-3) City of Houston Pay or Play Program – List of Subcontractors	07-03-2012
00633	Equal Employment Opportunity–Certification By Material Suppliers	02-01-2010
00642	Monthly Subcontractor Payment Reporting Form	02-01-2010
00646	Payment Notification Explanation of Withholding	02-01-2010
GENERAL CONDITIONS		
00700	General Conditions	01-01-2015
SUPPLEMENTARY CONDITIONS		
00800	Supplementary Conditions	11-01-2014
00805	Equal Employment Opportunity Program Requirements	05-01-2012
00808	Requirements for the City of Houston Program for Minority, Women, and Small Business Enterprises (MWSBE), and Persons with Disabilities Business Enterprises (PDBE) Program ..	08-01-2013
00820	Wage Scale for Engineering Construction	02-01-2015
00830	Trench Safety Geotechnical Information	02-01-2004
00840	Pay or Play Program Requirements	07-03-2012
ADDENDA AND MODIFICATIONS		
00910	Addendum	02-01-2004
00911	Notice of Addendum	02-01-2004
00931	Request for Information	02-01-2004
SPECIFICATIONS		
DIVISION 1 - GENERAL REQUIREMENTS		
01110	Summary of Work	03-26-2014
01145	Use of Premises	01-01-2011
01255	Change Order Procedures	08-01-2003
01270	Measurement and Payment	08-01-2003
01292	Schedule of Values	08-01-2003
01312	Coordination and Meetings	08-01-2003
01321	Construction Photographs	08-01-2003
01325	Construction Schedule	08-01-2003
01326	Construction Schedule (Bar Chart)	08-01-2003
01330	Submittal Procedures	08-01-2003
01340	Shop Drawings, Product Data, and Samples	08-01-2003
01351	Environmental Safety and Worker Protection	01-01-2011
01410	TPDES Requirements (with Attachments)	02-01-2011
01422	Reference Standards	08-01-2003

Doc. No.	Document Title	Doc. Date
01450	Contractor's Quality Control	08-01-2003
01452	Inspection Services	08-01-2003
01454	Testing Laboratory Services.....	08-01-2003
01502	Mobilization	08-01-2008
01504	Temporary Facilities and Controls.....	01-01-2011
01506	Diversion Pumping	08-01-2003
01520	Temporary Field Office.....	02-08-2012
01554	Traffic Control and Street Signs	07-01-2012
01555	Traffic Control and Regulation.....	01-01-2011
01562	Tree and Plant Protection.....	01-01-2011
01570	Storm Water Pollution Control.....	01-26-2012
01575	Stabilized Construction Access	02-01-2011
01576	Waste Material Disposal	08-01-2003
01578	Control of Ground and Surface Water.....	01-01-2011
01580	Project Identification Signs	08-01-2003
01581	Excavation in Public Way Permit Signs.....	08-01-2003
01610	Basic Product Requirements.....	01-01-2011
01630	Product Substitution Procedures.....	08-01-2003
01725	Field Surveying	01-01-2011
01731	Cutting and Patching.....	01-01-2011
01732	Procedure for Water Valve Assistance (with Attachments)	08-01-2003
01740S	Site Restoration.....	03-30-2010
*01740	Site Restoration.....	08-01-2003
01755	Starting Systems	08-01-2003
01770	Closeout Procedures.....	08-01-2003
01782	Operations and Maintenance Data.....	08-01-2003
01785	Project Record Documents	08-01-2003

DIVISION 2 - SITE WORK

02081	CAST-IN-PLACE CONCRETE MANHOLES.....	01-01-2011
02082	PRECAST CONCRETE MANHOLES	01-01-2011
02084	FRAMES, GRATES, RINGS, AND COVERS	08-01-2008
02085	VALVE BOXES, METER BOXES, AND METER VAULTS	01-01-2011
02086	ADJUSTING MANHOLES, INLETS, AND VALVE BOXES TO GRADE	01-01-2011
02087	BRICK MANHOLE FOR STORM SEWERS.....	10-01-2002
02105	CHEMICAL SAMPLING AND ANALYSIS	08-22-2014
02120	OFF-SITE TRANSPORTATION AND DISPOSAL	08-22-2014
02136	WASTE MATERIAL HANDLING, TESTING AND DISPOSAL	01-01-2011
*02221S	REMOVE EXISTING PAVEMENTS AND STRUCTURES.....	11-17-2012
02221	REMOVING EXISTING PAVEMENTS AND STRUCTURES.....	07-01-2009
02222	ABANDONMENT OF SEWERS	01-01-2011

<u>Doc.</u>	<u>Document Title</u>	<u>Doc. Date</u>
02233	CLEARING AND GRUBBING	01-01-2011
02260	TRENCH SAFETY SYSTEM	02-01-2011
*02315S	ROADWAY EXCAVATION.....	01-17-2013
02315	ROADWAY EXCAVATION.....	07-01-2009
02316	EXCAVATION AND BACKFILL FOR STRUCTURES	01-01-2011
02317	EXCAVATION AND BACKFILL FOR UTILITIES.....	01-01-2011
02318	EXTRA UNIT PRICE WORK FOR EXCAVATION AND BACKFILL	01-01-2011
02319	BORROW	01-01-2011
02320	UTILITY BACKFILL MATERIALS.....	01-01-2011
02321	CEMENT STABILIZED SAND.....	01-01-2011
02322	FLOWABLE FILL	08-01-2008
02330	EMBANKMENT	10-01-2002
02336	LIME-STABILIZED SUBGRADE.....	10-01-2002
02338	PORTLAND CEMENT STABLIZED SUBGRADE.....	10-01-2002
02447	AUGERING PIPE AND CONDUIT.....	10-01-2002
02448	PIPE AND CASING AUGERING FOR SEWERS	10-01-2002
02501	DUCTILE IRON PIPE AND FITTINGS.....	02-01-2011
02502	STEEL PIPE AND FITTINGS	01-01-2011
02503	COPPER TUBING	10-01-2002
02505	HIGH DENSITY POLYETHYLENE (HDPE) SOLID AND PROFILE WALL PIPE	02-01-2011
02506	POLYVINYL CHLORIDE PIPE.....	01-01-2011
*02511S	WATER LINES.....	10-21-2013
02511	WATER LINES	01-01-2011
02512	WATER TAP AND SERVICE LINE INSTALLATION	04-27-2012
*02513S	WET CONNECTIONS.....	11-17-2012
02513	WET CONNECTIONS.....	10-01-2002
02514	DISINFECTION OF WATER LINES	01-01-2011
02515	HYDROSTATIC TESTING OF PIPELINES	01-01-2011
02516	CUT, PLUG, AND ABANDONMENT OF WATER LINES	01-01-2011
02517	WATER LINE IN TUNNELS	10-01-2002
02520	FIRE HYDRANTS	05-05-2011
02521	GATE VALVES.....	01-01-2011
*02525S	TAPPING SLEEVES AND VALVES.....	11-17-2012
02525	TAPPING SLEEVES AND VALVES.....	01-01-2011
02526	WATER METERS	01-01-2011

<u>Doc. No.</u>	<u>Document Title</u>	<u>Doc. Date</u>
02527	POLYURETHANE COATINGS ON STEEL OR DUCTILE IRON PIPE	10-01-2002
02528	POLYETHYLENE WRAP	01-01-2011
02531	GRAVITY SANITARY SEWERS	01-01-2011
02533	ACCEPTANCE TESTING FOR SANITARY SEWERS	01-01-2011
02534	SANITARY SEWER SERVICE STUBS OR RECONNECTIONS ...	01-01-2011
02553	POINT REPAIR AND OBSTRUCTION REMOVALS	01-01-2011
02558	CLEANING AND TELEVISION INSPECTION.....	01-01-2011
02581	STREET LIGHTING CONDUIT.....	10-01-2002
02582	TRAFFIC SIGNAL POLE ASSEMBLIES	07-01-2009
02611	REINFORCED CONCRETE PIPE	02-01-2011
02612	PRECAST REINFORCED CONCRETE BOX SEWERS	10-01-2002
02621	GEOTEXTILE	10-01-2002
02631	STORM SEWERS.....	01-26-2012
02632	CAST-IN-PLACE INLETS, HEADWALLS, AND WINGWALLS.....	10-01-2002
02633	PRECAST CONCRETE INLETS, HEADWALLS, AND WINGWALLS	10-01-2002
02711	HOT MIX ASPHALT BASE COURSE	07-01-2009
02712	CEMENT STABILIZED BASE COURSE.....	10-01-2002
02713	RECYCLED CRUSHED CONCRETE BASE COURSE.....	07-01-2009
02714	FLEXIBLE BASE COURSE FOR TEMPORARY DRIVEWAYS.....	07-01-2009
02741	ASPHALTIC CONCRETE PAVEMENT	07-01-2009
02742	PRIME COAT.....	10-01-2002
02743	TACK COAT	10-01-2002
02751	CONCRETE PAVING	07-01-2009
02752S	SAW CUTTING	12-29-2009
*02752	CONCRETE PAVEMENT JOINTS	10-01-2002
02753	CONCRETE PAVEMENT CURING	10-01-2002
02754	CONCRETE DRIVEWAYS	09-01-2002
02761	COLORLED CONCRETE FOR MEDIANS AND SIDEWALKS	09-01-2002
02762	BLAST CLEANING OF PAVEMENT	10-01-2002
02764	RAISED PAVEMENT MARKERS.....	07-01-2012
02765	TEMPORARY AND REMOVABLE REFLECTORIZED PAVEMENT MARKINGS.....	07-01-2012
02767	THERMOPLASTIC PAVEMENT MARKINGS	07-01-2012
02771	CURB, CURB AND GUTTER, AND HEADERS.....	10-01-2002
02772	CONCRETE MEDIANS AND DIRECTIONAL ISLANDS.....	10-01-2002
02775	CONCRETE SIDEWALKS.....	10-01-2002
02811	LANDSCAPE IRRIGATION.....	10-01-2002
02821	CHAIN LINK FENCES AND GATES	06-28-2005
02893	TRAFFIC SIGNAL CONSTRUCTION	07-01-2009

<u>Doc. No.</u>	<u>Document Title</u>	<u>Doc. Date</u>
02911	TOPSOIL	10-01-2002
02912	TREE, PLANT, AND HARDSCAPE PROTECTION	07-01-2009
02915	TREE PLANTING	01-01-2011
02921	HYDROMULCH SEEDING	01-01-2011
02922	SODDING	07-01-2009
02951	PAVEMENT REPAIR AND RESTORATION	07-01-2009
02960	MILLING PAVEMENT	07-01-2009
02992	PORTLAND CONCRETE SACK SEGMENTED RETAINING WALL.....	08-09-2007
DIVISION 3 - CONCRETE		
03315	CONCRETE FOR UTILITY CONSTRUCTION	10-01-2002
DIVISION 4 - MORTAR		
04061	MORTAR	10-01-2002
04210	BRICK MASONRY FOR UTILITY CONSTRUCTION.....	10-01-2002
DIVISION 5 – METALS – Not Used		
DIVISION 6 - WOOD AND PLASTICS – Not Used		
DIVISION 7 - THERMAL AND MOISTURE PROTECTION – Not Used		
DIVISION 8 - DOORS AND WINDOWS – Not Used		
DIVISION 9 – FINISHES – Not Used		
DIVISION 10 – SPECIALTIES – Not Used		
DIVISION 11 – EQUIPMENT – Not Used		
DIVISION 12 – FURNISHINGS – Not Used		
DIVISION 13 - SPECIAL CONSTRUCTION – Not Used		
DIVISION 14 - CONVEYING SYSTEMS – Not Used		
DIVISION 15 – MECHANICAL – Not Used		
DIVISION 16 – ELECTRICAL		
16710	PULL BOXES	07-01-2009
16711	TRAFFIC SIGNAL CONDUIT	07-01-2009

<u>Doc. No.</u>	<u>Document Title</u>	<u>Doc. Date</u>
16715	VEHICLE SIGNAL HEADS.....	07-01-2009
16719	COUNTDOWN PEDESTRIAN SIGNAL MODULE	07-01-2009
16720	TRAFFIC SIGNAL CABLE	07-01-2009
16724	EMERGENCY VEHICLE PREEMPTION (EVP)	03-01-2015
16730	ITS CONTROLLER CABINET ASSEMBLY	07-01-2012
16731	MODEL 2070 CONTROLLER UNIT	07-01-2009
16732	UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEM FOR TRAFFIC SIGNAL CABINETS.....	07-01-2012
16733	MANAGED FIELD HARDENED ETHERNET SWITCH.....	07-01-2012
16734	WIMAX.....	07-01-2012
16738	WIRELESS COMMUNICATION SYSTEM.....	07-01-2009
16750	ACCESSIBLE PEDESTRIAN PUSH BUTTON STATION.....	07-01-2009
16751	WIRELESS MAGNETOMETER VEHICLE DETECTION SYSTEM	02-15-2015
16785	GPS SERIAL COMMUNICATIONS.....	07-01-2012

HARRIS COUNTY FLOOD CONTROL DISTRICT (HCFCD)
SPECIFICATIONS

02378	RIPRAP AND GRANULAR FILL	08-31-2005
-------	--------------------------------	------------

CENTERPOINT ENERGY
SPECIFICATIONS

007-371-08	INSTALLATION OF CONDUIT SYSTEM FOR THOROUGHFARE STREET LIGHTING	07-25-2007
------------	--	------------

Appendices

Appendix A - Geotechnical Investigation prepared by Geotest Engineering, Inc. - Report No. 1140195801 (dated April 30, 2014) (CD)

Appendix B – Trench Safety Letter prepared by Geotest Engineering, Inc. (dated April 30, 2014) (CD)

Appendix C - Phase I Environmental Site Assessment prepared by Geotest Engineering, Inc. – Report No. 1130018401 (dated October 22, 2013) (CD)

Appendix D - Phase II Environmental Site Assessment – Report No. 1130019801 (dated August 8, 2014) (CD)

<u>Doc. No.</u>	<u>Document Title</u>	<u>Doc. Date</u>
	Appendix E - Phase I Geologic Fault Study prepared by HVJ Associates, Inc. – Report No. HE1413020 (dated August 21, 2014) (CD)	
	Appendix F - SWPPP Report prepared by ASV Consulting Group, Inc. (dated November 14, 2014) (CD)	

END OF DOCUMENT

Document 00015

LIST OF DRAWINGS

Sheet No.	Drawing Title
1	COVER SHEET AND VICINITY MAP
2	DRAWING INDEX
3	GENERAL CONSTRUCTION & PRIVATE UTILITY NOTES
4	LEGEND & ABBREVIATIONS
5	PLAN & PROFILE KEY NOTES
6	SURVEY CONTROL MAP SHEET 1 OF 3
7	SURVEY CONTROL MAP SHEET 2 OF 3
8	SURVEY CONTROL MAP SHEET 3 OF 3
9	SURVEY CONTROL – SWING TIES 1 OF 5
10	SURVEY CONTROL – SWING TIES 2 OF 5
11	SURVEY CONTROL – SWING TIES 3 OF 5
12	SURVEY CONTROL – SWING TIES 4 OF 5
13	SURVEY CONTROL – SWING TIES 5 OF 5
14	PAVING AND BORING LOCATION 1 OF 2
15	PAVING AND BORING LOCATION 2 OF 2
16	WATER LINE LAYOUT
17	SANITARY SEWER LAYOUT
18	STORM SEWER LAYOUT
19	DRAINAGE AREA MAP–2–YR 1 OF 2
20	DRAINAGE AREA MAP–2–YR 2 OF 2
21	PROPOSED HOUSTORM ANALYSES 1 OF 2
22	PROPOSED HOUSTORM ANALYSES 2 OF 2
23	DRAINAGE AREA MAP–100–YR 1 OF 2
24	DRAINAGE AREA MAP–100–YR 2 OF 2
25	PROPOSED XPSWMM ANALYSIS
26	TYPICAL ROADWAY SECTIONS 1 OF 3
27	TYPICAL ROADWAY SECTIONS 2 OF 3
28	TYPICAL ROADWAY SECTIONS 3 OF 3
29	LINCOLNSHIRE ROAD – PLAN AND PROFILE – STA 1+00 TO STA 6+00
30	LINCOLNSHIRE ROAD – PLAN AND PROFILE – STA 6+00 TO STA 11+00
31	LINCOLNSHIRE ROAD – PLAN AND PROFILE – STA 11+00 TO STA 16+00
32	LINCOLNSHIRE ROAD – PLAN – STA 16+00 TO STA 21+00
33	LINCOLNSHIRE ROAD – PROFILE – STA 16+00 TO STA 21+00
34	LINCOLNSHIRE ROAD – PLAN AND PROFILE – STA 21+00 TO STA

00015-1

02-01-2004

Addendum No. 1

	26+00
35	LINCOLNSHIRE ROAD – PLAN AND PROFILE – STA 26+00 TO STA 28+21
36	GLENGARRY ROAD – PLAN AND PROFILE – STA 1+00 TO STA 6+00
37	GLENGARRY ROAD – PLAN AND PROFILE – STA 6+00 TO STA 11+00
38	GLENGARRY ROAD – PLAN AND PROFILE – STA 11+00 TO STA 16+00
39	GLENGARRY ROAD – PLAN – STA 16+00 TO STA 21+00
40	GLENGARRY ROAD – PROFILE – STA 16+00 TO STA 21+00
41	GLENGARRY ROAD – PLAN AND PROFILE – STA 21+00 TO STA 26+00
42	GLENGARRY ROAD – PLAN AND PROFILE – STA 26+00 TO STA 28+21
43	ALLISON ROAD – PLAN AND PROFILE – STA 1+00 TO STA 6+00
44	ALLISON ROAD – PLAN AND PROFILE – STA 6+00 TO STA 11+00
45	ALLISON ROAD – PLAN – STA 11+00 TO STA 16+00
46	ALLISON ROAD – PROFILE – STA 11+00 TO STA 16+00
47	ALLISON ROAD – PLAN AND PROFILE – STA 16+00 to 21+00
48	ALLISON ROAD – PLAN AND PROFILE – STA 21+00 to 26+00
49	ALLISON ROAD – PLAN AND PROFILE – STA 26+00 to 31+00
50	ALLISON ROAD – PLAN AND PROFILE – STA 31+00 to 36+00
51	ALLISON ROAD – PLAN AND PROFILE – STA 36+00 to 41+00
52	ALLISON ROAD – PLAN AND PROFILE – STA 41+00 to 46+00
53	ALLISON ROAD – PLAN AND PROFILE – STA 46+00 to 48+00
54	LEA ROAD – PLAN AND PROFILE – STA 1+00 TO STA 6+00
55	LEA ROAD – PLAN AND PROFILE – STA 6+00 TO STA 11+00
56	LEA ROAD – PLAN AND PROFILE – STA 11+00 TO STA 16+00
57	LEA ROAD – PLAN AND PROFILE – STA 16+00 TO STA 21+00
58	COTTINGHAM ROAD – PLAN – STA 1+00 TO STA 6+00
59	COTTINGHAM ROAD – PROFILE – STA 1+00 TO STA 6+00
60	COTTINGHAM ROAD – PLAN – STA 6+00 TO STA 11+00
61	COTTINGHAM ROAD – PROFILE – STA 6+00 TO STA 11+00
62	COTTINGHAM ROAD – PLAN – STA 11+00 TO STA 16+00
63	COTTINGHAM ROAD – PROFILE– STA 11+00 TO STA 16+00
64	COTTINGHAM ROAD – PLAN – STA 16+00 TO STA 21+00
65	COTTINGHAM ROAD – PROFILE – STA 16+00 TO STA 21+00
66	COTTINGHAM ROAD – PLAN – STA 21+00 TO STA END
67	COTTINGHAM ROAD – PROFILE – STA 21+00 TO STA END
68	HENDRICKSEN ROAD – PLAN AND PROFILE – STA 1+00 TO STA 6+00
69	HENDRICKSEN ROAD – PLAN AND PROFILE – STA 6+00 TO STA 11+00
70	HENDRICKSEN ROAD – PLAN AND PROFILE – STA 11+00 TO STA 16+00
71	HENDRICKSEN ROAD – PLAN AND PROFILE – STA 16+00 TO STA 21+00

72	ALMEDA GENOA – PLAN – CROSS STREET AT COTTINGHAM
73	ALMEDA GENOA – PROFILE– CROSS STREET AT COTTINGHAM
74	DRIVEWAY SCHEDULE 1 OF 2
75	DRIVEWAY SCHEDULE 2 OF 2
76	PAVEMENT DETAILS 1 OF 4
77	PAVEMENT DETAILS 2 OF 4
78	PAVEMENT DETAILS 3 OF 4
79	PAVEMENT DETAILS 4 OF 4
80	CONSTRUCTION SIGN DETAIL
81	STORM SEWER DETAILS SHEET 1 OF 3
82	STORM SEWER DETAILS SHEET 2 OF 3
83	STORM SEWER DETAILS SHEET 3 OF 3
84	JUNCTION BOX DETAIL 1 OF 2
85	JUNCTION BOX DETAIL 2 OF 2
86	WATER LINE DETAILS SHEET 1 OF 2
87	WATER LINE DETAILS SHEET 2 OF 2
88	SANITARY SEWER DETAILS SHEET 1 OF 3
89	SANITARY SEWER DETAILS SHEET 2 OF 3
90	SANITARY SEWER DETAILS SHEET 3 OF 3
91	TRAFFIC CONTROL MAP SHEET 1 OF 14
92	TRAFFIC CONTROL MAP SHEET 2 OF 14
93	TRAFFIC CONTROL MAP SHEET 3 OF 14
94	TRAFFIC CONTROL MAP SHEET 4 OF 14
95	TRAFFIC CONTROL MAP SHEET 5 OF 14
96	TRAFFIC CONTROL MAP SHEET 6 OF 14
97	TRAFFIC CONTROL MAP SHEET 7 OF 14
98	TRAFFIC CONTROL MAP SHEET 8 OF 14
99	TRAFFIC CONTROL MAP SHEET 9 OF 14
100	TRAFFIC CONTROL MAP SHEET 10 OF 14
101	TRAFFIC CONTROL MAP SHEET 11 OF 14
102	TRAFFIC CONTROL MAP SHEET 12 OF 14
103	TRAFFIC CONTROL MAP SHEET 13 OF 14
104	TRAFFIC CONTROL MAP SHEET 14 OF 14
105	SIGNING AND PAVEMENT MARKING LAYOUT SHEET 1 OF 3
106	SIGNING AND PAVEMENT MARKING LAYOUT SHEET 2 OF 3
107	SIGNING AND PAVEMENT MARKING LAYOUT SHEET 3 OF 3
108	PAVEMENT MARKING NOTES AND DETAILS (1 OF 3)
109	PAVEMENT MARKING NOTES AND DETAILS (2 OF 3)
110	PAVEMENT MARKING NOTES AND DETAILS (3 OF 3)
111	SIGN NOTES AND DETAILS (1 OF 4)
112	SIGN NOTES AND DETAILS (2 OF 4)
113	SIGN NOTES AND DETAILS (3 OF 4)

114	SIGN NOTES AND DETAILS (4 OF 4) - NOT IN USE
115	STREET LIGHTING LAYOUT SHEET 1 OF 3
116	STREET LIGHTING LAYOUT SHEET 2 OF 3
117	STREET LIGHTING LAYOUT SHEET 3 OF 3
118	TREE PROTECTION PLAN SHEET 1 OF 11
119	TREE PROTECTION PLAN SHEET 2 OF 11
120	TREE PROTECTION PLAN SHEET 3 OF 11
121	TREE PROTECTION PLAN SHEET 4 OF 11
122	TREE PROTECTION PLAN SHEET 5 OF 11
123	TREE PROTECTION PLAN SHEET 6 OF 11
124	TREE PROTECTION PLAN SHEET 7 OF 11
125	TREE PROTECTION PLAN SHEET 8 OF 11
126	TREE PROTECTION PLAN SHEET 9 OF 11
127	TREE PROTECTION PLAN SHEET 10 OF 11
128	TREE PROTECTION PLAN SHEET 11 OF 11
129	STORM WATER POLLUTION PREVENTION PLAN SHEET 1 OF 8
130	STORM WATER POLLUTION PREVENTION PLAN SHEET 2 OF 8
131	STORM WATER POLLUTION PREVENTION PLAN SHEET 3 OF 8
132	STORM WATER POLLUTION PREVENTION PLAN SHEET 4 OF 8
133	STORM WATER POLLUTION PREVENTION PLAN SHEET 5 OF 8
134	STORM WATER POLLUTION PREVENTION PLAN SHEET 6 OF 8
135	STORM WATER POLLUTION PREVENTION PLAN SHEET 7 OF 8
136	STORM WATER POLLUTION PREVENTION PLAN SHEET 8 OF 8
137	STORM WATER POLLUTION PREVENTION PLAN SHEET NOTES AND DETAILS
138	ROADWAY CROSS SECTIONS 1 OF 9
139	ROADWAY CROSS SECTIONS 2 OF 9
140	ROADWAY CROSS SECTIONS 3 OF 9
141	ROADWAY CROSS SECTIONS 4 OF 9
142	ROADWAY CROSS SECTIONS 5 OF 9
143	ROADWAY CROSS SECTIONS 6 OF 9
144	ROADWAY CROSS SECTIONS 7 OF 9
145	ROADWAY CROSS SECTIONS 8 OF 9
146	ROADWAY CROSS SECTIONS 9 OF 9
147	TRAFFIC SIGNAL - GENERAL NOTES
148	HARDWARE LEGEND
149	LEGEND, ABBREVIATIONS, AND GENERAL CONSTRUCTION NOTES
150	ALMEDA GENOA AT COTTINGHAM - SUMMARY OF QUANTITIES
151	PROPOSED TRAFFIC SIGNAL PLAN - ALMEDA GENOA RD AT COTTINGHAM ST.
152	TRAFFIC SIGNAL POLE SCHEDULE - ALMEDA GENOA RD AT COTTINGHAM ST.

153	CABLE SCHEMATIC – ALMEDA GENOA RD AT COTTINGHAM ST (HVC)
154	CABLE SCHEMATIC – ALMEDA GENOA RD AT COTTINGHAM ST (LVC)
155	PAVEMENT MARKING AND SIGNING – ALMEDA GENOA RD AT COTTINGHAM ST
156	UPS BATTERY BACK-UP SYSTEMS
157	TYPICAL WiMAX INSTALLATION DETAILS

END OF DOCUMENT

Document 00210

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

The following Paragraphs modify Document 00200 - Instructions to Bidders. Where a portion of the Instructions to Bidders is modified or deleted by these Supplementary Instructions, the unaltered portions of the Instructions to Bidders remains in effect.

2.0 – DEFINITIONS: Add the following Paragraphs to this Section:

- O. *Office of Business Opportunity (OBO)*: All references to Affirmative Action Contract Compliance Division (AACC) set forth in Document 00700 – General Conditions and in other documents of the Project Manual, shall refer to, and include, the Office of Business Opportunity.

3.0 - NOTICE TO BIDDERS: Add the following Paragraph to this Section:

- C. The City will award this contract to a “Local Business”, as that term is defined in Section 15-176 of the City of Houston Code of Ordinances (“the Code”):
 - If the bid of the Local Business is less than \$100,000 and is the lowest responsible bid or is within 5% of the lowest bid received, or
 - If the bid of the Local Business is more than \$100,000 and is the lowest responsible bid or is within 3% of the lowest bid received, and
 - Unless the Director determines that such an award would unduly interfere with contract needs, as provided in Section 15-181 of the Code.

If there is no bid of a Local Business that meets these criteria, the City will award the contract to the lowest responsible bidder.

4.0 – BID DOCUMENTS: Add the following Paragraphs to this Section:

A. Add the following Paragraph A.1:

- 1. Bid documents may only be obtained electronically at the City’s website:
<http://bidsets.publicworks.houstontx.gov/>.

D. Add the following Paragraph D.1:

- 1. Copies of the City Standard Specifications and Details may be acquired at no cost on the City’s website

http://documents.publicworks.houstontx.gov/document-center/cat_view/88-engineering-and-construction/92-specifications/208-division-02-16-standard-specifications.html

- E. The following plan rooms, whose names, addresses, phone and fax numbers were last updated on April 9, 2007, have been authorized by the City to display Bid Documents for examination:
(Note: The Bid Documents furnished to the plan rooms for examination can be in electronic format, in hard copies, or in any other formats pertaining to each City Contracting Division's discretion.)
1. AMTEK Information Services, Inc., 4001 Sherwood Lane, Houston, TX 77092, 713-956-0100, Fax 713-956-5340, Email: planroom@amtekusa.com
 2. Associated Builders & Contractors, Inc., (ABC), 3910 Kirby, Suite 131, Houston, TX 77098-4151, 713-523-6222, Fax 713-874-0747. Email: lori@abchouston.org
 3. Associated General Contractors (AGC-BB) Building Branch, 3825 Dacoma, Houston, TX 77092-8717, 713-843-3700, Fax 713-843-3701. Email: karla.s@agchouston.org
 4. Associated General Contractors, (AGC-HHUI), Highway, Heavy Utilities and Industrial Branch, 2400 Augusta St., Suite 180, Houston, TX 77057, 713-334-7100, Fax 713-334-7130. Email: houston@agctx.org
(Attention: Mel Keyser)
 5. Construction Information Network, 1225 North Loop West, Suite 550, Houston, TX 77008, 713-868-2233 ext. 329, Fax 866-852-2713. Email: paul.tilford@cnsx.com
 6. F. W. Dodge Corporation, 4101 Greenbriar, Suite 320, Houston, TX 77098, 713-529-4895, Fax 713-524-7639. Email: terrie_harris@mcgraw-hill.com
 7. Hispanic Contractors Association of Houston (HCA-GHA), 11 Parker Road, Suite 7, Houston, TX 77241, 713-699-2732 or 832-754-3705, Fax 713-695-1556, Email: hispaniccontractorsassociation@yahoo.com; or Randymagdalen@yahoo.com
 8. Houston Minority Business Development Center, 2900 Woodridge, Suite 124, Houston, TX 77087, 713-644-0821, Fax 713-644-3523. Email: gtamez@gacompanies.com

9. Reed Construction Data, 30 Technology Parkway South, Suite 100, Norcross, GA – 30092-8629. Tel. 1-800-424-3996 or 1-800-699-8640; Fax 1-800-317-0870 or 1-800-508-5370.
10. The Builders' Exchange of Texas, Inc., 3910 Kirby, Suite 131, Houston, TX 77098, 210-564-6900, Fax: 210-564-6921, Email: houston@bctx.com

F. Add the following Paragraph F.1:

1. Designation as a City Business or Local Business

To be designated as a City or Local Business for the purpose of the Hire Houston First Program, as set out in Article XI of Chapter 15 of the Houston City Code, a bidder or proposer must submit the Hire Houston First Application and Affidavit to the Director of the Mayor's Office of Business Opportunity (OBO) and receive notice that the designation has been approved prior to submission of a bid or proposal. Submit with your bid a valid official letter from OBO with your designation as a City or Local Business.

5.0 - EXAMINATION OF DOCUMENTS, SITE, AND LOCAL CONDITIONS: Insert the following paragraph:

A. Add the following Paragraph D.1:

1. Work will be performed in public right-of-way. The site may be examined at any time during daylight hours.

9.0 – PREPARATION OF BIDS: Add the following Paragraph I to this Paragraph:

- I. For math errors the City encounters in analyzing Bids, the following guidance will be used:

In the event of a conflict between: The Bid Price is:

- | | |
|---|---|
| 1. Individual Unit Price and Extension of that Unit Price | Individual Unit Price times Estimated Quantity |
| 2. A Unit Price extension and total of Unit Price Extensions | Sum of all Individual Unit Price Extensions |
| 3. Individual Alternate and total of Alternates | Sum of all Individual Alternates |
| 4. Individual subtotals for Stipulated Price, Base Unit Prices, Extra | Sum of Individual subtotals for Stipulated Price, Base Unit Prices, |

Unit Prices, Contractor Bonus, Extra Unit Prices, Contractor Bonus,
Cash Allowances, and Alternates; Cash Allowances and Alternates
and the Total Bid Price

10.0 – BID SUBMISSION: Add the following Paragraph A.1 to this Section:

A. Add the following Paragraph A.1:

1. City Secretary will receive Bids at 900 Bagby, Room P101, Houston, Texas until 10:30 a.m., local time on March 19, 2015.

15.0 – PREBID MEETING: Add the following Paragraph A.1 to this Section:

A. Add the following Paragraph A.1:

1. A Prebid Meeting will be held at 10:00 A.M. on Tuesday, March 3, 2015, in 15th Floor, Conference Room No. 1546B (Lobby Conf. Rm) at 611 Walker, Houston, Texas 77002.

END OF DOCUMENT

Document 00410B

BID FORM - PART B

1.0 TOTAL BID PRICE HAS BEEN CALCULATED BY BIDDER, USING THE FOLLOWING COMPONENT PRICES AND PROCESS (PRINT OR TYPE NUMERICAL AMOUNTS):

A. STIPULATED PRICE

(Total Bid Price; minus Base Unit Prices, Extra Unit Prices, Cash Allowance and All Alternates, if any)

\$ N/A

B. BASE UNIT PRICE TABLE:

UNIT PRICES - GENERAL ITEMS						
Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in Figures
1	01502	Mobilization	LS	1	\$200,000.00 ⁽¹⁾	\$200,000.00 ⁽¹⁾
2	01554	Install new Traffic Sign with post, foundation, and hardware	EA	37	\$	\$
3	01555	Flagman	LS	1	\$	\$
4	01555	Install low profile concrete barriers	LF	2,500	\$	\$
5	01555	Relocate low profile concrete barriers	LF	12,000	\$	\$
6	01555	Remove low profile concrete barriers	LF	2,500	\$	\$
7	01555	Traffic Control and Regulation	LS	1	\$	\$
8	01562	Tree and Plant Protection	LS	1	\$	\$
9	02915	Plant 3" tree with 65 gallon container	EA	74	\$	\$
10	01562	Install Checker Plate	SF	200	\$	\$
11	01562	Remove tree 0 to 11.99"	EA	218	\$	\$
12	01562	Remove tree 12.00" to 29.99"	EA	71	\$	\$
13	01110	Removal and Re-Installation of Custom Mail Boxes with 4 1/2" Reinforced Concrete Base	EA	5	\$	\$
14	02714	Flexible Base Course/temp Driveways Residential upto 12 feet Wide	EA	126	\$	\$
15	02714	Flexible Base Course/temp Driveways Commercial upto 24 feet wide	EA	7	\$	\$
16	02741	Temporary roadway (asphaltic concrete pavement - 6 inch base course and 1.5-inch surface course)	SY	12,000	\$	\$
17	01570	Sandbag Barrier	LF	2,500	\$	\$
18	01570	Reinforced Filter Fabric barrier	LF	1,500	\$	\$
19	01570	Filter Fabric Fence	LF	1,500	\$	\$
20	01575	Stabilized construction exit	EA	2	\$	\$

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

UNIT PRICES - GENERAL ITEMS						
Item No.	Spec No.	Item Description	Unit Measure	Unit Quantity	Unit Price (this column controls)	Total in Figures
21	02581	Conduit 2-inch Sch 40 PVC	LF	2,500	\$	\$
22	02581	Conduit 2-inch Sch 80 PVC	LF	800	\$	\$
23	02105	Prepatory Work for Sampling and Analysis within PPCA Limits	LS	1	\$	\$
24	02120	Transportation and Disposal of Class I Soils	CY	500	\$	\$
25	02120	Transportation and Disposal of Class II Soils	CY	500	\$	\$
26	02120	Transportation and Disposal of Contaminated Groundwater from PPCA	Gal	200	\$	\$
27	02921	Hydro-Mulch Seeding	Ac	3	\$	\$
28	02922	Sodding	SY	28,000	\$	\$
29	DWGS	Type III Barricade	EA	2	\$	\$
TOTAL UNIT PRICES - GENERAL ITEMS						\$ _____
30	02221	Remove and Dispose of Asphalt Pavement with or without Base (all thicknesses)	SY	27,610	\$	\$
31	02221	Remove & Dispose of Driveways, All Materials Remove/Dispose Conc driveway 6-inch thick/More	SY	5,230	\$	\$
32	02221	Removing and disposing of concrete pavements (including all thickness, w/ or w/o asphalt, including base & subgrade, w/ or w/o curb, all depths)	SY	160	\$	\$
33	02221	Remove/ Dispose Conc Sidewalk 4-inch thick/More	SY	30		
34	02221	Remove and Dispose of Miscellaneous Concrete Masonry	CY	60	\$	\$
35	02221	Remove and Dispose of Miscellaneous Concrete Masonry within Limits of PPCA	CY	5	\$	\$
36	02086	Adjust Existing Manhole Frame and Cover to New Grade	EA	1	\$	\$
37	01110	Remove, Relocate and/or Replacement of Existing Barbed Wire Fence to ROW (Including Gates)	LF	3,600	\$	\$
38	01110	Remove, Relocate and/or Replacement of Existing Wood Fence (Including Gates) to ROW	LF	2,200	\$	\$
39	01110	Remove, Relocate and/or Replacement of Existing Wrought Iron Fence (Including Gates) to ROW	LF	1,200	\$	\$
40	01110	Remove, Relocate and/or Replacement of Existing Chain Link Fence to ROW	LF	3,800	\$	\$
41	02315	Roadway Excavation	CY	34,300	\$	\$
42	02315	Embankment Fill	CY	6,900		
43	02336	Lime for Lime stabilized Subgrade (6%)	Ton	760	\$	\$
44	02336	Lime for Lime stabilized Subgrade (7%)	Ton	250		
45	02336	Lime Stabilized Subgrade 8-inch thick	SY	48,540	\$	\$
46	02751	Reinforced Concrete Pavement 7-inch thick	SY	30,780	\$	\$

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

UNIT PRICES - PAVING ITEMS						
Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in Figures
47	02751	High Early Strength Reinforced Con Pav 7-inch thick	SY	3,320	\$	\$
48	02751	Reinforced Concrete Pavement 10-inch thick	SY	7,730	\$	\$
49	02752S	Saw-Cutting	LF	513		
50	02754	Concrete Driveways including Excavation 6-inch thick	SF	32,590	\$	\$
51	02754	Concrete Driveways including Excavation 7-inch thick	SF	750	\$	\$
52	02771	Concrete Paving Header	LF	300	\$	\$
53	02762	Blast cleaning pavement markers 4-inch wide lines	LF	4,000	\$	\$
54	02762	Blast cleaning pavement markers 6-inch wide lines	LF	1,000	\$	\$
55	02762	Blast cleaning pavement markers 24-inch wide lines	LF	150	\$	\$
56	02762	Blast cleaning symbols	SF	350	\$	\$
57	02762	Removal of raised pavement markings	LS	1	\$	\$
58	02765	Temporary and removable reflectorized pavement marking (4-inch Yellow)	LF	6,000	\$	\$
59	02765	Temporary and removable reflectorized pavement marking (4-inch White)	LF	400	\$	\$
60	02765	Temporary and removable reflectorized pavement marking (6-inch White)	LF	300	\$	\$
61	02765	Temporary and removable reflectorized pavement marking (24-inch White)	LF	150	\$	\$
62	02764	Raised Pav Markers TY II Two Face Reflective (Y)	EA	1,000	\$	\$
63	02767	Thermoplastic Pavement Marking 4-inch wide Yellow (BRK)	LF	5,950	\$	\$
64	02767	Thermoplastic Pavement Markings 24-inch wide White (SLD)	LF	80	\$	\$
65	02764	Raised Pav Markers Ty II Two face Reflective (Y)	EA	300	\$	\$
66	02762	BLAST CLEANING OF ROADWAY LANE LINES, 4-IN	LF	1,000	\$	\$
67	02762	BLAST CLEANING OF ROADWAY LANE LINES, 8-IN	LF	157	\$	\$
68	02762	BLAST CLEANING OF ROADWAY LANE LINES, 24-IN	LF	187	\$	\$
69	02762	BLAST CLEANING OF SYMBOLS AND LEGENDS	SF	252	\$	\$
70	02764	REMOVE RAISED PAVEMENT MARKERS	LS	1	\$	\$
71	02764	RAISED PAVEMENT MARKER - TYPE II A-A	EA	48	\$	\$
72	02764	RAISED PAVEMENT MARKER - TYPE II C-R	EA	12	\$	\$
73	02767	THERMOPLASTIC PAVEMENT MARKINGS, 4-IN WHITE, DASHED	LF	40	\$	\$

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

UNIT PRICES - PAVING ITEMS						
Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in Figures
74	02767	THERMOPLASTIC PAVEMENT MARKINGS, 4-IN WHITE, SOLID	LF	410	\$	\$
75	02767	THERMOPLASTIC PAVEMENT MARKINGS, 6-IN WHITE, SOLID	LF	448	\$	\$
76	02767	THERMOPLASTIC PAVEMENT MARKINGS, 12-IN WHITE, SOLID	LF	444	\$	\$
77	02767	THERMOPLASTIC PAVEMENT MARKINGS, 24-IN WHITE, SOLID	LF	420	\$	\$
78	02767	THERMOPLASTIC PAVEMENT MARKINGS, 4-IN YELLOW, SOLID	LF	900	\$	\$
79	02767	THERMOPLASTIC PAVEMENT MARKINGS, SYMBOLIC ARROW OR SHARED ARROW, WHITE, SOLID	EA	9	\$	\$
80	02767	THERMOPLASTIC PAVEMENT MARKINGS WORD, "AHEAD, ONLY, RIGHT, LEFT, OR TURN" WHITE, SOLID	EA	2	\$	\$
81	02772	6-inch Concrete Median or Directional Island	SY	10	\$	\$
82	02771	6-Inch Doweled Curb	LF	13,420	\$	\$
83	02771	6-Inch Concrete Curb (Monolithic)	LF	300	\$	\$
84	02775	Sidewalk 4-1/2-inch thick	SF	107,530	\$	\$
85	02775	Curb Ramp	SF	3,050	\$	\$
86	02741	Speed Humps/Asphalt	LF	81	\$	\$
87	02711	Hot Mix Asphalt Concrete Pavement 3-inch thick	Ton	160	\$	\$
88	02711	Hot Mix Asphalt Base Course (Type A) / All Thickness	Ton	640	\$	\$
89	02752	Horizontal Dowel, 24-Inch	EA	50	\$	\$
90	02752	Street Pavement Expansion Joint with Load Transfer	LF	5,000		
91	02752	Preformed Expansion Joints	LF	10,500	\$	\$
92	02992	Portland Concrete Sack Segmented Retaining Wall (6" to 2')	SF	3,600	\$	\$
93	02992	Portland Concrete Sack Segmented Retaining Wall (2' to 4')	SF	500	\$	\$
TOTAL - PAVEMENT ITEMS						\$ _____

UNIT PRICES - STORM SEWER ITEMS						
Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in Figures
94	02221	Remove & Dispose of Existing Inlets	EA	2	\$	\$
95	Drawings	Remove & Dispost of Existing Guard Post	EA	2	\$	\$
96	Drawings	Remove & Dispose of Existing Guard Rail	LF	50	\$	\$
97	02221	Remove & Dispose Storm Pipe 18-inch Diameter and Less	LF	2,950	\$	\$
98	02221	Remove & Dispose Storm Pipe 18-inch Diameter and Less within limits of PPCA	LF	80	\$	\$
99	02221	Remove & Dispose of Existing 24-Inch Diameter RCP Storm Sewer and Leads	LF	1,330	\$	\$

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

100	02221	Remove & Dispose of Existing 24-Inch Diameter RCP Storm Sewer and Leads within limits of PPCA	LF	30	\$	\$
101	02221	Remove & Dispose of Existing 30-Inch Diameter RCP Storm Sewer and Leads	LF	50		
102	02221	Remove & Dispose of Existing 36-Inch Diameter RCP Storm Sewer and Leads	LF	320	\$	\$
103	02221	Remove & Dispose of Existing 4-ft X 6-ft RCB (Including Hand Rail)	LF	90	\$	\$
104	02221	Remove & Dispose of Existing 9-Foot X 7-Foot RCB	LF	30	\$	\$
105	02081 / 02082 / 02087	Type C Manhole for 42-Inch Diameter & Smaller Sewers	EA	33	\$	\$
106	02082	Extra Depth for Type C Manhole for 42-Inch Diameter & Smaller Sewers	VF	46	\$	\$
107	02081 / 02082 / 02087	Type C Manhole for 42-Inch Diameter & Smaller Sewers within PPCA Limits	EA	2		
108	02081 / 02082 / 02087	Type C Manhole for 48-inch to 72-inch Diameter Sewers	EA	19	\$	\$
109	02082	Extra Depth for Type C manhole for 48-inch to 72-inch storm sewers	VF	53	\$	\$
110	02081 / 02082 / 02087	Conflict Manhole for 42-Inch Diameter & Smaller	EA	1	\$	\$
111	02081 / 02082 / 02087	Manhole for Concrete Box Sewers	EA	7	\$	\$
112	02081	Junction Box - Cottingham Road (Station 1+86)	EA	1	\$	\$
113	02081	Junction Box - Cottingham Road (Station 6+60)	EA	1	\$	\$
114	02081	Junction Box - Cottingham Road (Station 8+47)	EA	1	\$	\$
115	02081	Junction Box - Cottingham Road (Station 12+59.50)	EA	1	\$	\$
116	02081	Junction Box - Cottingham Road (Station 13+07)	EA	1	\$	\$
117	02081	Junction Box - Cottingham Road (Station 13+40.50)	EA	1	\$	\$
118	02081	Junction Box - Cottingham Road (Station 15+50)	EA	1	\$	\$
119	02081	Junction Box - Cottingham Road (Station 22+14.60)	EA	1	\$	\$
120	02633	Type C-1 Inlet	EA	78	\$	\$
121	02633	Type C-1 Inlet within limits of PPCA	EA	2	\$	\$
122	02632 / 02633	Type A Grate Inlet	EA	5	\$	\$
123	02633	24-Inch Diameter Storm Sewer Lead	LF	1,270	\$	\$
124	02633	24-Inch Diameter Storm Sewer Lead within limits of PPCA	LF	90	\$	\$
125	02631	24-Inch Diameter Storm Sewer by Open Cut	LF	820	\$	\$
126	02631	30-Inch Diameter Storm Sewer by Open Cut	LF	470	\$	\$

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

UNIT PRICES - STORM SEWER ITEMS						
Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in Figures
127	02631	36-Inch Diameter Storm Sewer by Open Cut	LF	2,450	\$	\$
128	02631	36-Inch Diameter Storm Sewer by Open Cut within limits of PPCA	LF	230	\$	\$
129	02631	42-Inch Diameter Storm Sewer by Open Cut	LF	1,410	\$	\$
130	02631	48-Inch Diameter Storm Sewer by Open Cut	LF	1,430	\$	\$
131	02631	54-Inch Diameter Storm Sewer by Open Cut	LF	1,970	\$	\$
132	02631	60-Inch Diameter Diameter Storm Sewer by Open Cut	LF	1,090	\$	\$
133	02631	9-Foot by 7-Foot Box Storm Sewer by Open Cut	LF	2,030	\$	\$
134	02631	8-Foot by 4-Foot Box Storm Sewer by Open Cut	LF	30	\$	\$
135	02315	Reconstruction of Roadside Ditch	LF	3,650	\$	\$
136	04210	36-Inch Diameter Brick Plug	EA	1	\$	\$
137	04210	8-Foot X 4-Foot Brick Plug	EA	2	\$	\$
138	02221	Remove 9-Foot X 7-Foot Brick Plug	EA	1	\$	\$
139	HCFC 02378	Rip-Rap Gradation No. 2, 24-inch thick mat	SY	150	\$	\$
140	02731	SET (24-Inch) (3:1)	EA	6	\$	\$
141	02731	SET (24-Inch) (3:1) within Limits of PPCA	EA	2	\$	\$
142	02731	SET (36-Inch) (3:1)	EA	1	\$	\$
143	02731	SET (48-Inch) (3:1)	EA	2	\$	\$
144	02260	Trench safety system for Trench Excavations	LF	13,230	\$	\$
145	02260	Trench safety system for Trench Excavations within limits of PPCA	LF	320	\$	\$
TOTAL UNIT PRICES - STORM SEWER ITEMS						\$ _____

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

UNIT PRICES - WATER ITEMS						
Item No.	Spec No.	Item Description	Unit Measure	Unit Quantity	Unit Price (this column controls)	Total in Figures
146	02221	Remove/Dispose 4-inch diameter CI water line	LF	40	\$	\$
147	02221	Remove/Dispose 6-inch diameter CI water line	LF	160	\$	\$
148	02221	Remove/Dispose 8-inch diameter CI water line	LF	120	\$	\$
149	02221	Remove/Dispose 12-inch diameter CI water line	LF	60	\$	\$
150	02516	Cut, plug, and abandon existing 8-inch diameter water line	EA	4	\$	\$
151	02516	Cut, plug, and abandon existing 8-inch diameter water line within limits of PPCA	EA	1	\$	\$
152	02516	Cut, plug, and abandon existing 12-inch diameter water line	EA	2	\$	\$
153	02516	Cut, plug, and abandon existing 16-inch diameter water line	EA	2	\$	\$
154	02512	3/4-inch to 1-inch diameter water taps and copper service line with meter box, short side	EA	33	\$	\$
155	2512	3/4-inch to 1-inch diameter water taps and copper service line with meter box, long side	EA	43	\$	\$
156	02512	3/4-inch to 1-inch diameter water taps and copper service line with meter box, short side within limits of PPCA	EA	3	\$	\$
157	02512	3/4-inch to 1-inch diameter (water taps) copper service line with meter box, long side within limits of PPCA	EA	3	\$	\$
158	02512	1-1/2-inch to 2-inch diameter watertap and service line with meter box, short side	EA	2	\$	\$
159	02512	1-1/2-inch to 2-inch diameter watertap and service line with meter box, long side	EA	2	\$	\$
160	02511	6-Inch Diameter Water Line by Open-Cut	LF	750	\$	\$
161	02511	8-Inch Diameter Water Line by Open-Cut	LF	6,760	\$	\$
162	02511	8-Inch Diameter Water Line by Open-Cut Within limits of PPCA	LF	210	\$	\$
163	02511	8-Inch Diameter Water Line by Open-Cut with Restrained Joints	LF	100	\$	\$
164	02511	8-Inch Diameter DIP Water Line by Open-Cut with Restrained Joints	LF	610	\$	\$
165	02511	8-Inch Diameter Water Line by Trenchless Construction	LF	90	\$	\$
166	02511	8-Inch Diameter Water Line by Trenchless Construction within Limits of PPCA	LF	50	\$	\$
167	02511	8-Inch Diameter Water Line by Trenchless Construction with Restrained Joints	LF	50	\$	\$
168	02511	8-Inch Diameter DIP Water Line by Trenchless Construction with Restrained Joints	LF	170	\$	\$
169	02511	8-Inch Diameter DIP Water Line by Open-Cut with Restrained Joints within limits of PPCA	LF	40	\$	\$

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

UNIT PRICES - WATER ITEMS						
Item No.	Spec No.	Item Description	Unit Measure	Unit Quantity	Unit Price (this column controls)	Total in Figures
170	02511	12-Inch Diameter Water Line by Open-Cut	LF	3,590	\$	\$
171	02511	12-Inch Diameter Water Line by Open-Cut with Restrained Joints	LF	80	\$	\$
172	02511	12-Inch Diameter DIP Water Line by Open-Cut with Restrained Joints	LF	490	\$	\$
173	02511	12-Inch Diameter DIP Water Line by Trenchless Construction with Restrained Joints	LF	120	\$	\$
174	02511	12-Inch Diameter Water Line Trenchless Construction	LF	100	\$	\$
175	02511	16-Inch Diameter Water Line by Open-Cut with Restrained Joints	LF	100	\$	\$
176	02511	16-Inch Diameter DIP Water Line by Open-Cut with Restrained Joints	LF	70	\$	\$
177	02513	8-Inch Diameter Wet Connection	EA	3	\$	\$
178	02513	12-Inch Diameter Wet Connection	EA	2	\$	\$
179	02513	16-Inch Diameter Wet Connection	EA	2	\$	\$
180	02520	Fire Hydrant Assembly, All Depths, Including 6-Inch Diameter Gate Valve with Box	EA	29	\$	\$
181	02520	6-Inch Diameter Fire Hydrant Branch by Open-Cut	LF	300	\$	\$
182	02520	Remove and Salvage Existing Fire Hydrant	EA	12	\$	\$
183	02525	16-Inch by 8-Inch Tapping Sleeve and Valve with Box	EA	2	\$	\$
184	02525	16-Inch by 8-Inch Tapping Sleeve and Valve with Box within limits of PPCA	EA	1	\$	\$
185	02526	Relocate and re-install water meter with new box	EA	86	\$	\$
186	02511	6-Inch Diameter Plug and Clamp	EA	2	\$	\$
187	02260	Trench safety system for Trench Excavations	LF	13,050	\$	\$
188	02260	Trench safety system for Trench Excavations within limits of PPCA	LF	240	\$	\$
TOTAL UNIT PRICES - WATER ITEMS						\$ _____

Minnetex Place and Almeda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

UNIT PRICES - WASTEWATER ITEMS						
Item No.	Spec No.	Item Description	Unit Measure	Unit Quantity	Unit Price (this column controls)	Total in Figures
189	02221	Remove/Dispose Manholes all Sizes/Depths	EA	19	\$	\$
190	02221	Remove and Dispose 8 inch sewer line	LF	3,450	\$	\$
191	02221	Remove and Dispose 8 inch sewer line within PPCA Limits	LF	135	\$	\$
192	02221	Remove and Dispose 15-Inch sewer line	LF	760	\$	\$
193	02221	Remove and Dispose 30-Inch sewer line	LF	1,710	\$	\$
194	02531	8-inch Diameter Sanitary Sewer by open-cut	LF	5,910	\$	\$
195	02222	Abandon and fill manhole	EA	22	\$	\$
196	02222	Abandon and Fill 8-inch Diameter Sewer	LF	2,100	\$	\$
197	02222	Abandon and Fill 12-inch Diameter Sewer	LF	1,330	\$	\$
198	02222	Abandon and Fill 15-inch Diameter Sewer	LF	400	\$	\$
199	02531	8-inch Diameter Sanitary Sewer within limits of PPCA	LF	140	\$	\$
200	02531	8-inch Diameter Sanitary Sewer with Casing	LF	40	\$	\$
201	02531	15-inch Diameter Sanitary Sewer by open-cut	LF	1,340	\$	\$
202	02531	18-inch Diameter Sanitary Sewer by open-cut	LF	1,160	\$	\$
203	02531	36-inch Diameter Sanitary Sewer by open-cut	LF	1,710	\$	\$
204	02534	Reconnect Existing Sanitary Sewer to New Manhole	EA	9	\$	\$
205	02534	Service stubs or reconnections with or without stack on sanitary sewer	EA	122	\$	\$
206	02082	4-Foot Diameter Precast Concrete Manholes	EA	28	\$	\$
207	02082	4-Foot Diameter Precast Concrete Manholes within limits of PPCA	EA	1	\$	\$
208	02082	Extra Depth for 4-foot Dia. Sanitary Sewer Manhole	VF	64	\$	\$
209	02082	4-foot Diameter Corrosion-Resistant Manholes	EA	2	\$	\$
210	02082	Extra Depth for 4-foot Dia. Corrosion-Resistant Sanitary Sewer Manhole	VF	8	\$	\$
211	02082	5-Foot Diameter Precast Concrete Manholes	EA	2	\$	\$
212	02082	Extra Depth for 5-foot Dia. Sanitary Sewer Manhole	VF	16	\$	\$
213	02082	6-foot Diameter Corrosion-Resistant Manholes	EA	3	\$	\$
214	02082	Extra Depth for 6-foot Dia. Corrosion-Resistant Sanitary Sewer Manhole	VF	28	\$	\$
215	02082	7-Foot Diameter Precast Concrete Manholes	EA	1	\$	\$
216	02082	Extra Depth, 7-Foot Diameter Precast Concrete Manhole	VF	12	\$	\$
217	02534	6-inch diameter sanitary sewer service lines	LF	3,930	\$	\$

UNIT PRICES - WASTEWATER ITEMS						
Item No.	Spec No.	Item Description	Unit Measure	Unit Quantity	Unit Price (this column controls)	Total in Figures
218	02082	Manhole Drop; 8-inch diameter, all depths	EA	4	\$	\$
219	02082	Manhole Drop; 15-inch diameter, all depths	EA	1	\$	\$
220	02534	Install Clean-Out	EA	122	\$	\$
221	02534	Install Clean-Out within limits of PPCA	EA	4	\$	\$
222	02260	Trench safety system for Trench Excavations	LF	10,096	\$	\$
223	02260	Trench safety system for Trench Excavations within limits of PPCA	LF	248	\$	\$
TOTAL UNIT PRICES - WASTEWATER ITEMS						\$ _____

UNIT PRICES - TRAFFIC SIGNALIZATION						
Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in Figures
224	02775	CONCRETE WHEELCHAIR RAMP INCLUDING HEADERS, DOWELS EXPANSION JOINTS, STAINING AND DETECTABLE WARNING SURFACE	SF		\$	\$
225	02582	25-FT MAST ARM POLE ASSEMBLY WITH FOUNDATION	EA	1	\$	\$
226	02582	30-FT MAST ARM POLE ASSEMBLY WITH FOUNDATION	EA	2	\$	\$
227	02582	50-FT MAST ARM POLE ASSEMBLY WITH FOUNDATION	EA	1	\$	\$
228	02893-03	PEDESTRIAN PUSH BUTTON POLE WITH FOUNDATION	EA	1	\$	\$
229	02893-06	PEDESTAL POLE ASSEMBLY WITH SCREW-IN ANCHOR FOUNDATION	EA	3	\$	\$
230	02893-14	ELECTRICAL SERVICE PEDESTAL ASSEMBLY - ("SQUARE D" BREAKERS INCLUDED)	EA	1	\$	\$
231	02893	OVERHEAD STREET NAME SIGNS	EA	6	\$	\$
232	02893	SIGN, "LEFT TURN YIELD ON FLASHING YELLOW ARROW", R10-17T (24" X 30")	EA	8	\$	\$

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

UNIT PRICES - TRAFFIC SIGNALIZATION						
Item No.	Spec No.	Item Description	Unit Measure	Unit Quantity	Unit Price (this column controls)	Total in Figures
233	16710	TYPE "A" PULL BOX WITH APRON, GRAVEL AND GROUND ROD	EA	11	\$	\$
234	16710	TYPE "B" PULL BOX WITH APRON, GRAVEL AND GROUND ROD	EA	3	\$	\$
235	16710	TYPE "C" PULL BOX WITH APRON, GRAVEL AND GROUND ROD	EA	1	\$	\$
236	16711	CONDUIT, 1-IN SCH 80 PVC TRENCH	LF	120	\$	\$
237	16711	CONDUIT, 2-IN SCH 80 PVC TRENCH	LF	1,500	\$	\$
238	16711	CONDUIT, 2-IN SCH 80 PVC BORE	LF	300	\$	\$
239	16711	CONDUIT, 2-IN RMC	LF	100	\$	\$
240	16711	CONDUIT, 3-INCH SCH 80 PVC TRENCH	LF	100	\$	\$
241	16711	CONDUIT, 4-INCH SCH 80 PVC TRENCH	LF	250	\$	\$
242	16711	CONDUIT, 4-INCH SCH 80 PVC BORE	LF	400	\$	\$
243	16713	TRAFFIC SIGNAL PRE-FORMED LOOPS (6'x6')	EA	2	\$	\$
244	16713	TRAFFIC SIGNAL PRE-FORMED LOOPS (6'x30')	EA	1	\$	\$
245	16715	3-SECTION VEHICLE SIGNAL HEAD ASSEMBLY (RYG) (HORIZONTAL) (H3)	EA	8	\$	\$
246	16715	4-SECTION VEHICLE SIGNAL HEAD ASSEMBLY (<R<Y<Y<G) (VERTICAL) (V4LF)	EA	4	\$	\$
247	16715	4-SECTION VEHICLE SIGNAL HEAD ASSEMBLY (<R<Y<Y<G) (HORIZONTAL) (H4LF)	EA	4	\$	\$
248	16719	LED PEDESTRIAN SIGNAL HEAD ASSEMBLY (SYMBOLIC) (COUNTDOWN)	EA	8	\$	\$
249	16720	TRAFFIC SIGNAL CABLES, DETECTOR LEAD-IN CABLE 2/C-#14 AWG IMSA 50-2-1984	LF	2,900	\$	\$
250	16720	TRAFFIC SIGNAL CABLES, 3/C-#14 AWG SOLID CABLE	LF	900	\$	\$
251	16720	TRAFFIC SIGNAL CABLES, 5/C-#14 AWG SOLID CABLE	LF	900	\$	\$
252	16720	TRAFFIC SIGNAL CABLES, 7/C-#14 AWG SOLID CABLE	LF	2,000	\$	\$
253	16720	#4 XHHW SERVICE WIRE	LF	300	\$	\$
254	16724	EMERGENCY VEHICLE PREEMPTION SYSTEM	EA	1	\$	\$
255	16727	TRAFFIC SIGNAL SAW-CUT LOOP DETECTOR	LF	800	\$	\$
256	16730	ITS CONTROLLER CABINET ASSEMBLY (MODEL 340) (TYPE 2070L)	EA	1	\$	\$

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

UNIT PRICES - TRAFFIC SIGNALIZATION						
Item No.	Spec No.	Item Description	Unit Measure	Unit Quantity	Unit Price (this column controls)	Total in Figures
257	02893-10C	CONTROLLER CABINET FOUNDATION WITH APRON	EA	1	\$	\$
258	16732	UNINTERRUPTIBLE POWER SUPPLY	EA	1	\$	\$
259	16750	ACCESSIBLE PEDESTRIAN PUSH BUTTON STATION	EA	8	\$	\$
260	16785	GPS SERIAL COMMUNICATION MODULE	EA	1	\$	\$
261	16734	FIELD HARDENED ETHERNET SWITCH (SIX COPPER PORTS ONLY)	EA	1	\$	\$
262	16734	INSTALL WIMAX (INCLUDING CAT 5E CABLE)	EA	1	\$	\$
TOTAL UNIT PRICES - TRAFFIC SIGNALIZATION						\$ _____
TOTAL BASE UNIT PRICES:						\$ _____

Minnetex Place and Alameda Genoa Place Drainage and Paving
 Project No. WBS No. M-000289-0002-4

**BID FORM
 PART B**

C. EXTRA UNIT PRICE TABLE						
Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in Figures
263	02105	Extra Work for Sampling and Analysis within PPCA Limits	LS	1	\$ _____ \$32,000.00 (min) ⁽²⁾	\$ _____ \$32,000.00 (min) ⁽²⁾
264	02120	Extra Off-Site Transportation and Disposal of Class I soils	CY	500	\$ _____ \$30.00 (min) ⁽²⁾	\$ _____ \$15,000.00 (min) ⁽²⁾
265	02120	Extra Off-Site Transportation and Disposal of Class II soils	CY	500	\$ _____ \$35.00 (min) ⁽²⁾	\$ _____ \$17,500.00 (min) ⁽²⁾
266	02221	Remove Miscellaneous Concrete and Masonry	CY	100	\$ _____ \$50.00 (min) ⁽²⁾	\$ _____ \$5,000.00 (min) ⁽²⁾
267	02317	6-Inch Over Excavate trench bottom	LF	100	\$ _____ \$3.00 ⁽²⁾	\$ _____ \$300.00 (min) ⁽²⁾
268	02318	Excavation Around Obstacles	CY	100	\$ _____ \$10.00 (min) ⁽²⁾	\$ _____ \$1,000.00 (min) ⁽²⁾
269	02120	Excavation Around Obstacles within limits of PPCA	CY	100	\$ _____ \$10.00 (min) ⁽²⁾	\$ _____ \$1,000.00 (min) ⁽²⁾
270	02318	Extra Hand Excavation	CY	100	\$ _____ \$20.00 (min) ⁽²⁾	\$ _____ \$2,000.00 (min) ⁽²⁾
271	02120	Extra Hand Excavation within within limits of PPCA	CY	100	\$ _____ \$20.00 (min) ⁽²⁾	\$ _____ \$2,000.00 (min) ⁽²⁾
272	02318	Extra Machine Excavation	CY	100	\$ _____ \$10.00 (min) ⁽²⁾	\$ _____ \$1,000.00 (min) ⁽²⁾
273	02120	Extra Machine Excavation within limits of PPCA	CY	100	\$ _____ \$10.00 (min) ⁽²⁾	\$ _____ \$1,000.00 (min) ⁽²⁾
274	02318	Extra Placement of Backfill Material	CY	100	\$ _____ \$15.00 (min) ⁽²⁾	\$ _____ \$1,500.00 (min) ⁽²⁾
275	02120	Extra Placement of Backfill Material within limits of PPCA	CY	100	\$ _____ \$15.00 (min) ⁽²⁾	\$ _____ \$1,500.00 (min) ⁽²⁾
276	02318	Extra Placement of Granular Fill Material	CY	100	\$ _____ \$20.00 (min) ⁽²⁾	\$ _____ \$2,000.00 (min) ⁽²⁾
277	02120	Extra Placement of Granular Fill Material within limits of PPCA	CY	100	\$ _____ \$20.00 (min) ⁽²⁾	\$ _____ \$2,000.00 (min) ⁽²⁾
278	02318	Extra Cement Stabilized Sand	CY	100	\$ _____ \$25.00 (min) ⁽²⁾	\$ _____ \$2,500.00 (min) ⁽²⁾
279	03315	Extra Grade 60 Reinforcing Steel	LB	1,000	\$ _____ \$25.00 (min) ⁽²⁾	\$ _____ \$2,500.00 (min) ⁽²⁾

C. EXTRA UNIT PRICE TABLE						
Item No.	Spec Ref.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total in Figures
280	01555	Extra Placement of Temporary Driveways	EA	10	\$ _____ \$350.00 (min) ⁽²⁾	\$ _____ \$3,500.00 (min) ⁽²⁾
281	02511	Extra Water Fittings in Place	Ton	1	\$ _____ \$3,000.00 (min) ⁽²⁾	\$ _____ \$3,000.00 (min) ⁽²⁾
TOTAL UNIT PRICES - EXTRA WORK ITEMS						\$ _____

D. CASH ALLOWANCES			
Item No.	Spec Ref.	Base Unit Short Title	Cash Allowance in figures (1)
282	01110	City of Houston Street Cut Permits	\$3,500.00 ⁽¹⁾
283	01110	NPDES Permit	\$500.00 ⁽¹⁾
284	01110	CenterPoint Energy Remove and/or Install Street Lights	\$10,000.00 ⁽¹⁾
TOTAL CASH ALLOWANCES			\$14,000.00 ⁽¹⁾

E. ALTERNATES TABLE:						
Item No.	Spec Ref.	Alternate Short Title	Unit of Measure	Estimated Quantity	Unit Price (this column controls)	Total Price for Alternate in Figures
		N/A				
TOTAL ALTERNATES						\$ _____

F. TOTAL BID PRICE:

(Add Totals for Items A., B., C., D., and E. above)

\$ _____

2.0 SIGNATURES: By signing this Document, I agree that I have received and reviewed all Addenda and considered all costs associated with the Addenda in calculating the Total Bid Price.

Bidder:

(Print or type full name of your proprietorship, partnership, corporation, or joint venture.*)

****By:**

Signature

Date

Name:

(Print or type name)

Title

Address:

(Mailing)

(Street, if different)

Telephone and Fax Number:

(Print or type numbers)

* If Bid is a joint venture, add additional Bid Form signature sheets for each member of the joint venture.

** Bidder certifies that the only person or parties interested in this offer as principals are those named above. Bidder has not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding.

Note: This document constitutes a government record, as defined by § 37.01 of the Texas Penal Code. Submission of a false government record is punishable as provided in § 37.10 of the Texas Penal Code.

Footnotes for Tables B through E:

- (1) Fixed Unit Price determined prior to Bid. Cannot be adjusted by the Bidder.
- (2) Minimum Bid Price determined prior to Bid. Can be increased by the Bidder by crossing out the Minimum and noting revised price on the line above.
- (3) Maximum Bid Price determined prior to Bid. Can be decreased but not increased by Bidder by crossing out the Maximum and noting revised price on the line above. A Bid that increases the Maximum Bid Price may be found non-conforming and non-responsive.
- (4) Fixed Range Bid Price determined prior to Bid. Unit Price can be adjusted by Bidder to any amount within the range defined by crossing out prices noted and noting revised price on the line above.

Section 01110

SUMMARY OF WORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Summary of the Work including Work Covered by Contract Documents, Cash Allowances, City-furnished Products, Work Sequence, Contractor Use of Premises, Street Cut Ordinance, Warranty, and Additional Conditions for Substantial Completion.
- B. Justification: Project will construct storm drainage improvements to address and reduce the risk of structural flooding. Improvements include modification of street conveyance and sheet flow, and provide detention as needed for mitigation.

1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work of the Contract is for construction of Minnetex Place and Almeda Genoa Place and includes the installation of new storm sewer, storm sewer leads, storm manholes, inlets, and related appurtenances within City right-of-way throughout the project limits as identified in the Contract Drawings. Sanitary lines and services, sanitary manholes, and related appurtenances within City right-of-way throughout the project limits as identified in the Contract Drawings. The intent of the project is to construct concrete curb-and-gutter streets with sub-surface drainage, replace with new water and sewer lines as identified in the Contract Drawings. The project also includes replacing street pavement, driveways, curbs, sidewalks, wheelchair ramps, permanent signs, pavement markings, street lights, sanitary lines and services, sanitary manholes, water lines and services, and related appurtenances as identified in the Contract Drawings. Contractor will be required to install and maintain tree protection measures, storm water management devices and traffic control for the duration of the project.
- B. The project area is generally located in south central within the City of Houston. The project is generally bounded by Almeda Genoa Road to the north, Kier Road to the east, Allison Road to the south, and Lea Road to the west. The approximate locations of the project limits are as follows:
 - 1. Lincolnshire Road: From approximately 430 feet west of the intersection of Lea Road to Hendricksen Road
 - 2. Glengarry Road: From approximately 430 feet west of the intersection of Lea Road to Hendricksen Road
 - 3. Allison Road: From approximately 140 feet west of the intersection of Lea Road to Hendricksen Road (Paving, Drainage, Water & Wastewater)
 - 4. Allison Road: From Hendricksen Road east to Kier Road (Ditch Regrading)
 - 5. Lea Road: Allison Road to Almeda Genoa Road
 - 6. Cottingham Road: 120 feet south of Allison Road to Almeda Genoa Road
 - 7. MLK Boulevard: From Almeda Genoa Road north to approximately 370 feet north of Almeda Genoa Road
- C. The project consists of 7-inch and 10-inch reinforced concrete pavement with 6-inch curb, asphaltic concrete transition, storm sewer pipe ranging from 24-inch through 60-inch and 9-foot x 7-foot reinforced concrete box, including double 8-foot x 4-foot stub-out reinforced

01110-1

03-26-2014

Addendum No. 1

concrete box sewer of various sizes, 8, 15, 18 and 36-inch sanitary sewer lines, including all appurtenances, and 6-inch through 16-inch water lines, including all appurtenances. Construction methods for utilities include open cut and trenchless methods.

1. The construction of the pavement will include the removal of the existing asphalt pavement (with and without asphalt overlay) and replacement with 7-inch reinforced concrete pavement with 6-inch curbs, as shown on plans with Minnetex and Almeda Genoa Place Subdivision and 10-inch reinforced concrete pavement on ML King Boulevard and Cottingham Road. The proposed 7-inch concrete pavement will have 8-inch stabilized subgrade utilizing 6% lime (unless otherwise noted). The 10-inch reinforced concrete pavement will have 8-inch lime stabilized subgrade utilizing 7% lime. 5-foot sidewalks and curb ramps will be constructed as indicated in the Contract Drawings. 6-foot sidewalks will be installed on MLK north of Almeda Genoa. Contractor will be responsible to reference the Tree Protection Plan in conjunction with the Plan and Profile sheets in order to coordinate where checker plates are to be used in lieu of proposed sidewalk, as per provided detail. Pavement cuts and replacement will be in accordance with the City of Houston Street Cut requirements, and will require street cut permits. Contractor is to obtain all necessary permits related to the proposed construction activities. These include, but are not limited to, lane closures, street cut, driveway, and tree removal.

Throughout the project site, driveways and sidewalks will be built with reinforced concrete. All improved landscaping and materials shall be removed and made available to the property owners for their use at no separate cost to the City. Driveways and sidewalks shall be replaced and/or installed with the standard concrete paving as shown in the plans unless otherwise directed by the Project Manager. Decorative items such as brick sidewalks and pads, planters, etc. that do not conflict with the proposed street, sidewalk, or driveway adjacent to the proposed construction are not required to be removed. Contractor to identify all driveways with sensors prior to removing existing driveways. Contractor to repair and/or replace damaged sensor to existing condition or better at no cost to the City and shall be in working condition upon completion of construction.

Sidewalks and wheelchair ramps shall comply with current City of Houston and Texas Department of Licensing and Regulation (TDLR) requirements. Additionally, Contractor will adhere to tapering the driveways from the proposed paving to the right-to-way, as shown on the plans.

2. The construction of the storm system will include the removal of existing roadway and driveway culverts and headwalls, manholes and inlets, as noted in the Contract Drawings. The proposed drainage system will include leads which will be standard 24-inch circular RCP as well as 30-inch circular RCP. The storm sewer lines will range from 24-inch RCP to 60-inch RCP and 9-foot x 7-foot RCB.

There are two existing outfalls for this project area and both outfall into existing City of Houston maintained facilities. The majority of the drainage from the Minnetex Place Subdivision is conveyed by a 9-foot x 7-foot RCB to an existing 9-foot x 7-foot RCB approximately 375 feet north of the intersection of Almeda Genoa Road and ML King Boulevard.

The second outfall is at Kier Road where the roadside ditches are regraded from the intersection of Allison Road and Hendricksen Road east to the ditch on the west side of Kier Road.

If Contractor encounters water service lines during storm sewer construction, Contractor shall repair any damaged service line promptly to avoid extended water service interruptions. The costs related to preserve the existing water service lines are incidental to all other pay items and are at no additional cost to the City of Houston.

3. The construction of the sanitary sewer consists of the removal of existing 8 to 15-inch sanitary sewers within the City's right-of-way, and installing proposed 8 to 36-inch sanitary sewers as indicated in the Contract Drawings. Work on the sanitary sewers and all related appurtenances within this project are to be complete in place, including diversion pumping as required. The contractor shall notify the City of all sanitary sewer service interruptions two (2) weeks in advance.
4. **Diversion Pumping is required for construction of the proposed sanitary sewers. Contractor to conform to Section 01506 – Diversion Pumping. Cost will be considered incidental to the various construction bid items included in Document 00410 – Bid Form, Parts A & B.**

If Contractor encounters water service lines during sanitary sewer construction, Contractor shall repair any damaged service line promptly to avoid extended water service interruptions. The costs related to preserve the existing water service lines are incidental to all other pay items and are at no additional cost to the City of Houston.

5. The construction of water lines consists of the removal and/or plugging and abandonment of existing 4, 6, 8 and 12-inch water lines, along with associated appurtenances and replacing them with proposed 6, 8, 12, and 16-inch water lines and associated appurtenances. The proposed water lines shall be installed by open cut and/or trenchless construction method. The contractor shall notify the City of all water line service interruptions two (2) weeks in advance.

Water line construction activities will be such as to maintain continuous water service to residents throughout the duration of the project. Existing fire hydrants in the project limits will either remain or be salvaged, as stated on the plans. Water meter and valve boxes shall be adjusted to the new grade, or relocated, as stated on the plans. The cost of the proposed water line includes all valves and fittings.

6. Contractor will be responsible to coordinate with residents and the HOA on handling of any private features within the right-of-way a minimum of 72-hours prior to any construction activities which may impact these features. These features may include, but are not limited to: existing irrigation systems (including spray and rotary heads and related piping and electrical wiring), mailboxes, landscaping, and existing yard drains. All landscaping, irrigation and private electrical conduits and/or equipment including sprinkler systems which are affected by construction of proposed pavement, driveway, sidewalk, storm sewer, sanitary sewer, and/or water line replacement and/or due to contractor activities, will be considered incidental to the various construction bid items included in Document 00410 – Bid Form, Parts A & B. Contractor shall use caution while working within the proximity of these types of facilities so as to avoid impacts. Should impacts occur, restoration shall be to a condition that is equal to or better than prior to start of construction. The repair or replacement of these types of facilities, necessitated by construction activities, will be the contractor's responsibility at no cost to the City. Contractor should verify the operation of irrigation systems with the property owner prior to starting construction.

7. There are custom mail boxes adjacent to the roadway within the project limits. The contractor is responsible for securing and relocating the custom mailboxes during construction, and to re-install them adjacent to the roadway upon completion of installing the concrete pavement and curbs. The custom mail boxes shall be installed on a proposed 4 ½" reinforced concrete base included in the cost to relocate and re-install the custom mailboxes. Contractor is to be paid by relocating and re-installing of each mailbox. Contractor is responsible for repairing any damage to the mailbox and will be required to make the repairs to the mailbox as good condition or better at no cost to the City, and match in size, shape.
8. The Phase II ESA Assessment (ESA) has identified Potentially Petroleum Contaminated Areas on Lea Street from Station between Station 13+00 to Station 16+00. The contractor is required to inform the COH PWE Construction Manager within 24 hours if actual PPCA soil and water contaminants are encountered by the Contractor. The specific underground utilities and appurtenances that are to be installed by the contractor within this area include but are not limited to: reinforced concrete storm sewer leads, storm sewer pipe, storm sewer inlets, storm sewer manholes, sanitary sewer lines, sanitary sewer manholes, sanitary sewer leads, water lines, and new water services.
9. 7-inch High-Early Strength Reinforced Concrete is to be placed on Lincolnshire and Glengarry Road from Station 1+00 to Station 5+63.50. High-Early Strength Reinforced Concrete is to be placed to the end of radius north and south on Lea Street of the respective intersections.
10. Contractor to connect proposed 16-inch water line to the existing 16-inch water line at the nearest joint to avoid cutting of existing 16-inch water line.
11. No separate payment for post-construction closed circuit television of new sanitary sewer lines. Contractor to include the price in the installation of the new sanitary sewer lines.
12. Contractor to remove and replace all existing sanitary sewer service leads and install new clean-out right-of-way. Contractor to match the existing flowline of the service lead and transfer service. A clean-out will not be placed on the sanitary sewer service lead to empty lots.
13. Portions of the existing 4-inch, 6-inch, and 8-inch water lines are required to construct the proposed utilities for this project. Removal of each size line is paid per linear foot. Cutting and plugging of existing lines for removal to be included in the price of removal. Additional cutting and plugging of existing water lines for contractor's convenience shall be at contractor's expense.
14. Contractor will be responsible to remove and replace permanent signs and pavement markings, as denoted in the Contract Drawings. Pavement striping shall be in accordance to standard City of Houston specifications and details.
15. Contractor will be responsible to maintain adequate traffic control for the duration of the project, as provided in the Contract Drawings. Traffic control will be accordance with the latest version of the Texas Manual of Uniform Traffic Control Devices (TMUTCD).
16. No separate payment will be made for proposed bends in the storm sewer box. Cost will be considered incidental to the various construction bid items included in

27. Contractor will be responsible to provide tree and plant protection in accordance with City standards, specifications, details and the TPP for the project.

If shown on contract drawings, location(s) of tree root protection steel checker plates shall be coordinated with Project Manager at a time after the bid process is complete for this project. Contractor's qualified Arborist shall determine and recommend location(s) of checker plates to Project Manager for approval.

Contractor is responsible for obtaining all tree removal permits prior to any tree removals that are not included in the TPP. Permits can be obtained from the City of Houston Department of Parks and Recreation by contacting Mr. Dale Temple at (832)-395-8459. Any tree removal permit provided to the Contractor by the City of Houston prior to construction will only be issued for the trees listed for removal in the Contract Drawings.

Notify City of Houston Parks and Recreation Department representative Mr. Dale Temple, City Forester, at (832)-395-8459 at least two (2) weeks in advance of clearing and/or cutting any tree.

28. Contractor will be responsible to implement the Storm Water Pollution Prevention Plan (SWPPP) and use best practices during construction. Project construction activities will disturb an area greater than 5 acres. See Section 01410 – TPDES Requirements. Contractor shall be responsible for all fees, including notices, filings and permits, associated with SWPPP and TPDES requirements at no additional cost to the City of Houston. The Cash Allowance for TPDES permit is limited to the application fee for the Notice of Intent for Storm Water Discharges Associated with Construction Activity under TPDES General Permit.
29. The contractor will be responsible to obtain all necessary permits, including, but not limited to: lane closures, street cut, driveway and tree removal. Permits that are required and are not paid under Cash Allowances are incidental to all other pay items and are at no additional cost to the City of Houston.
30. Project identification signs are required on this project. See Section 01580 – Project Identification Signs. Cost is incidental to Bid Item for Mobilization.
31. Contractor may not move construction activities from one street to another without completely finishing the prior street.
32. Contractor is to maintain access to all residences and business along construction route at all times during construction.
33. No separate payment will be made for PVC yard drains. Surface restoration under Section 01145 – Use of Premises, covers PVC and yard drains as incidental work to restore the site to the existing condition before construction, or better.
34. Contractor is responsible to ensure that all fences are maintained during construction so as to protect livestock within the project limits.
35. All mailboxes damaged or in need of relocation shall be done by the Contractor during construction including restoration of like boxes in kind. U.S. Postal Service Mailboxes and delivery routes within each neighborhood interrupted by construction shall be relocated and detoured at the Contractor's expense and shall be coordinated with the local branch of the U.S. Postal Service. This work will not

01110-6

03-26-2014

Addendum No. 1

be paid for separately but shall be incidental to the various work being performed.

36. All existing traffic signs, stop signs, warning signs, and barricades noted on the construction drawings as being relocated or that may exist at the time of construction shall be removed, stored, and relocated to their present location upon completion of the roadway construction. If these signs are damaged or no longer suitable for use, then replacement signs shall be provided in kind at no additional cost to the City. This item shall be paid for per each sign to be removed, stored and replaced. Prior to removal, Contractor is to provide a list of signs to the City Project Manager for approval.

D. COORDINATION

1. Coordinate with Robert L. Frost Elementary School of Space Science located at 5002 Almeda-Genoa Road, Houston, Texas 77048 by contacting Principal David E. Terrell at (713) 732-3490 for the construction along Hendricksen Road to minimize disruption to student drop-off/pickup and also during traffic control switch, transfer of utility services, potential delays and other construction activities which may impact the operation of the school. Two uniformed peace officers will be required for school related traffic control between 7:00 AM to 8:00 AM and 3:00 PM to 4:30 PM Monday through Friday, except school holidays. No construction activities are permitted during these hours. Contractor shall cover open excavations with steel plates anchored properly during non-working hours. The Contractor is also encouraged to perform all the work along Hendricksen Road during summer months from June to August if their construction schedule/sequence permits. Contractor shall also contact Houston Independent School District (HISD) Construction and Facility Department at 713-556-9250 a minimum of 10 working days prior to any construction activity or traffic control near the school.
2. Coordinate with CenterPoint Energy Lighting Design Section during construction of proposed street lighting including scheduling of inspection and transfer of services following installation.
3. Contractor is responsible for scheduling and coordinating construction activities associated with private utility construction so as not to adversely impact the construction schedule. Only one mobilization is allowed for this contract. Contractor will notify the City's representative once the utility relocation schedule has been established. See below for contact information and estimated relocation times for the private utility companies.

- CenterPoint Energy Electric: Contact Travis Drabek, Tel: (281) 561-3236.

Relocation of four (4) existing CenterPoint Electric power poles are expected to begin on March, 2015. Completion of Relocating the power poles are to be complete by April 2015. Contact: Scott Owens, Tel: (713) 945-6211 email: scott.owens@centerpointenergy.com

- CenterPoint Energy Street Lighting: Contact Robert Tinnin, Tel: (713) 945-6242.
- CenterPoint Energy Gas: Contact Louis Cardenas 1111 Louisiana, 12th floor, Houston, TX 77002, Tel: (713) 207-4605.

Relocation of existing CenterPoint Energy Gas lines are expected to begin on January 1, 2015. Relocation of existing gas lines are expected to be completed within four (4) months once commencement.

City of Houston is to be notified in the event that the contractor anticipates the CenterPoint Energy schedule is not adhered to.

- AT&T: Contact Ms. Diana Ward, 6500 West Loop South, Zone 1.3, Bellaire, Texas 77401, Tel: (713) 660-5304.
- Comcast: Contact William Leopard, 7033 Airport Blvd, Houston, TX 77061 Tel: (281) 624-3022 email: William.leopard@cable.comcast.com

1.03 CASH ALLOWANCES

- A. Include the following specific Cash Allowances in Contract Price under provision of General Conditions Paragraph 3.11:

1. Street cut permit.
2. TPDES Permit.
3. CenterPoint Energy Street Lighting.

Cash allowance included in Document No. 00410B.

1.04 ALTERNATES

- A. None.

1.05 CITY-FURNISHED PRODUCTS

- A. Items Furnished by the City for Installation and final connection by Contractor:

1. None.

- B. Contractor's Responsibilities:

1. Arrange and pay for Product delivery to the site.
2. Receive and unload Products at the site; jointly with the City, inspect for completeness or damage.
3. Handle, store, Install, and finish Products.
4. Repair or replace damaged items.

1.06 WORK SEQUENCE

- A. Construct the Work in Phases during the construction period as shown on the Traffic Control and Detour Plans.
- B. For projects with no Phases, Contractor shall not disturb more than 50% of total project linear feet of disturbed right-of-way and easement until site is restored in accordance with

Section 01740 – Site Restoration.

C. Coordination of the Work: Refer to Section 01312 - Coordination and Meetings.

1. The Contractor shall coordinate with the Project Manager for special meetings.

1.07 CONTRACTOR USE OF PREMISES

A. A field office is required on this project. See Section 01520 – Temporary Field Office. Cost is incidental to Bid Item for Mobilization.

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

B. Construction Operations: Limited to the City's rights-of-way provided by the City and areas shown or described in the Contract documents.

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

1.08 STREET CUT ORDINANCE

A. Excavations on or under pavement in the City's right-of-way must have a permit. Comply with City of Houston, Texas Ordinance No. 2000-1115, an ordinance amending Chapter 40 of the Code of Ordinances, Houston, Texas, relating to excavating in the Public right-of-way.

B. Comply with the latest edition of street cut New Pavement Repair and Pavement Replacement details.

C. Quantities are included for street cut pavement repair and replacement in applicable Specification sections for Unit Price contracts.

D. For detailed information concerning the ordinances' latest detail drawings and permits related to compliance with excavation in the Public Right-of-Way and Street Cut, visit the City's web site at: <http://www.publicworks.houstontx.gov/documents/index.htm> or <http://www.gims.houstontx.gov/>

1.09 WARRANTY

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

1.10 ADDITIONAL CONDITIONS FOR SUBSTANTIAL COMPLETION

A. In addition to requirements outlined in Document 00700 – General Conditions, for Contractor to be substantially complete with the Work and call for inspection by Project Manager to confirm, the following conditions must be met or completed:

1. All pay items complete report.

2. All testing shall be completed and accepted by Project Manager.

01110-9

03-26-2014

Addendum No. 1

3. All safety related work, including pavement striping, signing and permanent signalization, is complete and accepted by Project Manager.
4. All safety related systems and equipment shall be installed, accepted by manufacturer's representative (per Specification requirements) and approved for use.
5. Contractor shall contact Project Manager to complete Texas Department of Licensing and Regulation Post Construction Inspection of pedestrian elements, such as sidewalks and wheelchair ramps, for Texas Accessibility Standards.
6. Traffic is operating in all lanes at all times, unless lane reductions are due to adjacent construction projects.
7. All services and utilities are operational.

PART 2 P R O D U C T S - Not Used

PART 3 E X E C U T I O N - Not Used

END OF SECTION

Section 01506

DIVERSION PUMPING

PART 1 G E N E R A L

1.01 DEFINITIONS

- A. Diversion-pumping: Installation and operation of bulkheads, plugs, hoses, piping, and pumps required to maintain sewer flow and prevent backups and overflows.

1.02 SYSTEM DESCRIPTION

- A. Provides continuous sewer service to users of sewer systems while maintenance or construction operations are in progress, by diverting flow around construction locations. Maintain sewer flow to prevent backup or overflow onto streets, yards and unpaved areas or into buildings, adjacent ditches, storm sewers, and waterways. Do not divert sewage outside of sanitary sewer system.
- B. When pumps are operating, have an experienced operator on site to monitor operation, adjust pumps, make minor repairs to system, and report problems.

1.03 SUBMITTALS

- A. Conform to requirements of Section 01330 - Submittals Procedures.
- B. For systems that bypass sanitary sewer line segments of 42-inch diameter or larger, submit a Diversion Pumping Plan prior to installation. Show location, number and size of pumps, number, location, size and type of hoses or rigid piping, and location of downstream discharge; and special features where pipes or hoses cross roadways, temporary trenches, support bridges.

1.04 SCHEDULING

- A. When the City operates or maintains diversion pumping in construction areas, coordinate construction activities with Project Manager.
- B. Cease operation of diversion pumping when approved by Project Manager.

DIVERSION PUMPING

CITY OF HOUSTON
STANDARD GENERAL REQUIREMENT

PART 2 P R O D U C T S

2.01 MATERIALS

- A. Design piping, joints and accessories to withstand at least twice maximum system pressure or 50 psi, whichever is greater.
- B. Use self-priming type or submersible electric pumps, with a working pressure gauge on the discharge. Pumps shall meet requirements of City of Houston Noise and Sound Level Regulations.

PART 3 E X E C U T I O N

3.01 FIELD QUALITY CONTROL

- A. During diversion pumping, do not allow sewage to leak, dump, or spill into or onto areas outside of existing sanitary sewer systems.
- B. In the event of an accidental spill or overflow, immediately stop discharge and take action to clean up and disinfect spill. Promptly notify Project Manager so required reporting can be made to the Texas Commission on Environmental Quality (TCEQ) and the Environmental Protection Agency (EPA).

3.02 CLEANING

- A. When diversion-pumping operations are complete, drain sewage within piping into sanitary sewers prior to disassembly.

END OF SECTION

DRAWING INDEX

SHEET NO	DRAWING NAME	SHEET NO	DRAWING NAME	SHEET NO	DRAWING NAME
1	COVER SHEET AND VICINITY MAP	131	STORM WATER POLLUTION PREVENTION PLAN SHEET 3 OF 8	131	STORM WATER POLLUTION PREVENTION PLAN SHEET 3 OF 8
2	DRAWING INDEX	132	HENDRICKSEN ROAD - PLAN AND PROFILE - STA 1+00 TO STA 6+00	132	STORM WATER POLLUTION PREVENTION PLAN SHEET 4 OF 8
3	GENERAL CONSTRUCTION & PRIVATE UTILITY NOTES	133	HENDRICKSEN ROAD - PLAN AND PROFILE - STA 6+00 TO STA 11+00	133	STORM WATER POLLUTION PREVENTION PLAN SHEET 5 OF 8
4	LEGEND & ABBREVIATIONS	134	HENDRICKSEN ROAD - PLAN AND PROFILE - STA 11+00 TO STA 16+00	134	STORM WATER POLLUTION PREVENTION PLAN SHEET 6 OF 8
5	PLAN & PROFILE KEY NOTES	135	ALMEDA GENOA - PLAN - CROSS STREET AT COTTINGHAM	135	STORM WATER POLLUTION PREVENTION PLAN SHEET 7 OF 8
6	SURVEY CONTROL MAP SHEET 1 OF 3	136	ALMEDA GENOA - PROFILE - CROSS STREET AT COTTINGHAM	136	STORM WATER POLLUTION PREVENTION PLAN SHEET 8 OF 8
7	SURVEY CONTROL MAP SHEET 2 OF 3	137	DRIVEWAY SCHEDULE 1 OF 2	137	STORM WATER POLLUTION PREVENTION PLAN DETAILS AND NOTE SHEET
8	SURVEY CONTROL MAP SHEET 3 OF 3	138	DRIVEWAY SCHEDULE 2 OF 2	138	ROADWAY CROSS SECTIONS 1 OF 10
9	SURVEY CONTROL - SWING TIES 1 OF 5	139	PAVEMENT DETAILS SHEET 1 OF 4	139	ROADWAY CROSS SECTIONS 2 OF 10
10	SURVEY CONTROL - SWING TIES 2 OF 5	140	PAVEMENT DETAILS SHEET 2 OF 4	140	ROADWAY CROSS SECTIONS 3 OF 10
11	SURVEY CONTROL - SWING TIES 3 OF 5	141	PAVEMENT DETAILS SHEET 3 OF 4	141	ROADWAY CROSS SECTIONS 4 OF 10
12	SURVEY CONTROL - SWING TIES 4 OF 5	142	PAVEMENT DETAILS SHEET 4 OF 4	142	ROADWAY CROSS SECTIONS 5 OF 10
13	SURVEY CONTROL - SWING TIES 5 OF 5	143	CONSTRUCTION SIGN DETAIL	143	ROADWAY CROSS SECTIONS 6 OF 10
14	PAVING AND BORING LAYOUT 1 OF 2	144	STORM SEWER DETAILS SHEET 1 OF 3	144	ROADWAY CROSS SECTIONS 7 OF 10
15	PAVING AND BORING LAYOUT 2 OF 2	145	STORM SEWER DETAILS SHEET 2 OF 3	145	ROADWAY CROSS SECTIONS 8 OF 10
16	WATERLINE LAYOUT	146A	STORM SEWER DETAILS SHEET 3 OF 3	146A	ROADWAY CROSS SECTIONS 9 OF 10
17	SANITARY SEWER LAYOUT	147	JUNCTION BOX DETAIL 1 OF 2	147	ROADWAY CROSS SECTIONS 10 OF 10
18	SANITARY SEWER LAYOUT	148	JUNCTION BOX DETAIL 2 OF 2	148	TRAFFIC SIGNAL - GENERAL NOTES
19	DRAINAGE AREA MAP-2-YR 1 OF 2	149	WATER LINE DETAILS SHEET 1 OF 2	149	HARDWARE LEGEND
20	DRAINAGE AREA MAP-2-YR 2 OF 2	150	WATER LINE DETAILS SHEET 2 OF 2	150	LEGEND, ABBREVIATIONS, AND GENERAL CONSTRUCTION NOTES
21	PROPOSED HOUSTON ANALYSES	151	SANITARY SEWER DETAILS SHEET 1 OF 3	151	ALMEDA GENOA AT COTTINGHAM - SUMMARY OF QUANTITIES
22	PROPOSED HOUSTON ANALYSES	152	SANITARY SEWER DETAILS SHEET 2 OF 3	152	PROPOSED TRAFFIC SIGNAL PLAN - ALMEDA GENOA RD. AT COTTINGHAM ST.
23	DRAINAGE AREA MAP 100-YR 1 OF 2	153	SANITARY SEWER DETAILS SHEET 3 OF 3	153	TRAFFIC SIGNAL POLE SCHEDULE - ALMEDA GENOA RD. AT COTTINGHAM ST.
24	DRAINAGE AREA MAP 100-YR 2 OF 2	154	TRAFFIC CONTROL MAP SHEET 1 OF 14	154	CABLE SCHEMATIC - ALMEDA GENOA RD. AT COTTINGHAM ST. (HVC)
25	100 YEAR STORM EVENT ANALYSIS	155	TRAFFIC CONTROL MAP SHEET 2 OF 14	155	CABLE SCHEMATIC - ALMEDA GENOA RD. AT COTTINGHAM ST. (LVC)
26	TYPICAL ROADWAY SECTIONS 1 OF 3	156	TRAFFIC CONTROL MAP SHEET 3 OF 14	156	PAVEMENT MARKING AND SIGNING - ALMEDA GENOA RD. AT COTTINGHAM ST. (HVC)
27	TYPICAL ROADWAY SECTIONS 2 OF 3	157	TRAFFIC CONTROL MAP SHEET 4 OF 14	157	UPS BATTERY BACK-UP SYSTEM DETAILS
28	TYPICAL ROADWAY SECTIONS 3 OF 3		TRAFFIC CONTROL MAP SHEET 5 OF 14		TYPICAL WIMAX INSTALLATION DETAILS
29	LINCOLNSHIRE ROAD - PLAN AND PROFILE - STA 1+00 TO STA 6+00		TRAFFIC CONTROL MAP SHEET 6 OF 14		
30	LINCOLNSHIRE ROAD - PLAN AND PROFILE - STA 6+00 TO STA 11+00		TRAFFIC CONTROL MAP SHEET 7 OF 14		
31	LINCOLNSHIRE ROAD - PLAN AND PROFILE - STA 11+00 TO STA 16+00		TRAFFIC CONTROL MAP SHEET 8 OF 14		
32	LINCOLNSHIRE ROAD - PLAN - STA 16+00 TO STA 21+00		TRAFFIC CONTROL MAP SHEET 9 OF 14		
33	LINCOLNSHIRE ROAD - PROFILE - STA 16+00 TO STA 21+00		TRAFFIC CONTROL MAP SHEET 10 OF 14		
34	LINCOLNSHIRE ROAD - PLAN AND PROFILE - STA 21+00 TO STA 26+00		TRAFFIC CONTROL MAP SHEET 11 OF 14		
35	LINCOLNSHIRE ROAD - PLAN AND PROFILE - STA 26+00 TO STA 31+00		TRAFFIC CONTROL MAP SHEET 12 OF 14		
36	GLENGARRY ROAD - PLAN AND PROFILE - STA 1+00 TO STA 6+00		TRAFFIC CONTROL MAP SHEET 13 OF 14		
37	GLENGARRY ROAD - PLAN AND PROFILE - STA 6+00 TO STA 11+00		TRAFFIC CONTROL MAP SHEET 14 OF 14		
38	GLENGARRY ROAD - PLAN AND PROFILE - STA 11+00 TO STA 16+00		SIGNING AND PAVEMENT MARKING LAYOUT SHEET 1 OF 3		
39	GLENGARRY ROAD - PROFILE - STA 16+00 TO STA 21+00		SIGNING AND PAVEMENT MARKING LAYOUT SHEET 2 OF 3		
40	GLENGARRY ROAD - PLAN AND PROFILE - STA 21+00 TO STA 26+00		SIGNING AND PAVEMENT MARKING LAYOUT SHEET 3 OF 3		
41	GLENGARRY ROAD - PLAN AND PROFILE - STA 26+00 TO STA 31+00		PAVEMENT MARKING NOTES AND DETAILS (1 OF 3)		
42	ALLISON ROAD - PLAN AND PROFILE - STA 1+00 TO STA 6+00		PAVEMENT MARKING NOTES AND DETAILS (2 OF 3)		
43	ALLISON ROAD - PLAN AND PROFILE - STA 6+00 TO STA 11+00		PAVEMENT MARKING NOTES AND DETAILS (3 OF 3)		
44	ALLISON ROAD - PROFILE - STA 11+00 TO STA 16+00		SIGN NOTES AND DETAILS (1 OF 4)		
45	ALLISON ROAD - PLAN AND PROFILE - STA 16+00 TO STA 21+00		SIGN NOTES AND DETAILS (2 OF 4)		
46	ALLISON ROAD - PLAN AND PROFILE - STA 21+00 TO STA 26+00		SIGN NOTES AND DETAILS (3 OF 4)		
47	ALLISON ROAD - PLAN AND PROFILE - STA 26+00 TO STA 31+00		SIGN NOTES AND DETAILS (4 OF 4)		
48	ALLISON ROAD - PLAN AND PROFILE - STA 31+00 TO STA 36+00		STREET LIGHTING LAYOUT SHEET 1 OF 3		
49	ALLISON ROAD - PLAN AND PROFILE - STA 36+00 TO STA 41+00		STREET LIGHTING LAYOUT SHEET 2 OF 3		
50	ALLISON ROAD - PLAN AND PROFILE - STA 41+00 TO STA 46+00		STREET LIGHTING LAYOUT SHEET 3 OF 3		
51	ALLISON ROAD - PLAN AND PROFILE - STA 46+00 TO STA 51+00		TREE PROTECTION PLAN SHEET 1 OF 11		
52	ALLISON ROAD - PLAN AND PROFILE - STA 51+00 TO STA 56+00		TREE PROTECTION PLAN SHEET 2 OF 11		
53	ALLISON ROAD - PLAN AND PROFILE - STA 56+00 TO STA 61+00		TREE PROTECTION PLAN SHEET 3 OF 11		
54	LEA ROAD - PLAN AND PROFILE - STA 1+00 TO STA 6+00		TREE PROTECTION PLAN SHEET 4 OF 11		
55	LEA ROAD - PLAN AND PROFILE - STA 6+00 TO STA 11+00		TREE PROTECTION PLAN SHEET 5 OF 11		
56	LEA ROAD - PLAN AND PROFILE - STA 11+00 TO STA 16+00		TREE PROTECTION PLAN SHEET 6 OF 11		
57	LEA ROAD - PLAN AND PROFILE - STA 16+00 TO STA 21+00		TREE PROTECTION PLAN SHEET 7 OF 11		
58	COTTINGHAM ROAD - PLAN - STA 1+00 TO STA 6+00		TREE PROTECTION PLAN SHEET 8 OF 11		
59	COTTINGHAM ROAD - PROFILE - STA 6+00 TO STA 11+00		TREE PROTECTION PLAN SHEET 9 OF 11		
60	COTTINGHAM ROAD - PLAN - STA 11+00 TO STA 16+00		TREE PROTECTION PLAN SHEET 10 OF 11		
61	COTTINGHAM ROAD - PROFILE - STA 16+00 TO STA 21+00		TREE PROTECTION PLAN SHEET 11 OF 11		
62	COTTINGHAM ROAD - PLAN - STA 1+00 TO STA 6+00		STORM WATER POLLUTION PREVENTION PLAN SHEET 1 OF 8		
63	COTTINGHAM ROAD - PROFILE - STA 6+00 TO STA 11+00		STORM WATER POLLUTION PREVENTION PLAN SHEET 2 OF 8		
64	COTTINGHAM ROAD - PLAN - STA 11+00 TO STA 16+00				
65	COTTINGHAM ROAD - PROFILE - STA 16+00 TO STA 21+00				
66	COTTINGHAM ROAD - PLAN - STA 1+00 TO STA 6+00				
67	COTTINGHAM ROAD - PROFILE - STA 6+00 TO STA 11+00				

SDPS
Houston Storm Drainage
Program Support

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
MINNETEX PLACE AND ALMEDA
GENOA PLACE DRAINAGE AND
PAVING IMPROVEMENTS

5924
CITY ENGINEER

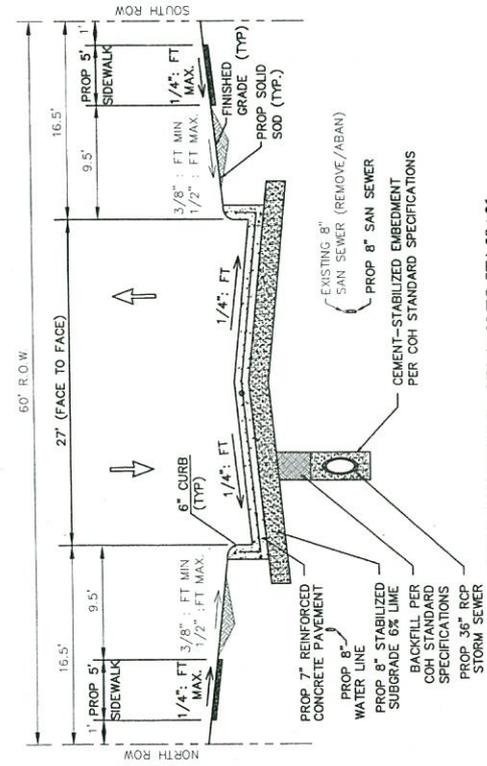
KIT
KIT Professionals, Inc.
Professional Engineers
10000 Katy Freeway, Suite 1000
Houston, Texas 77054
Phone: 281-416-1100
Fax: 281-416-1101
www.kitprofessionals.com

REGISTERED PROFESSIONAL ENGINEER
No. 10000 Katy Freeway, Suite 1000
Houston, Texas 77054
Phone: 281-416-1100
Fax: 281-416-1101
www.kitprofessionals.com

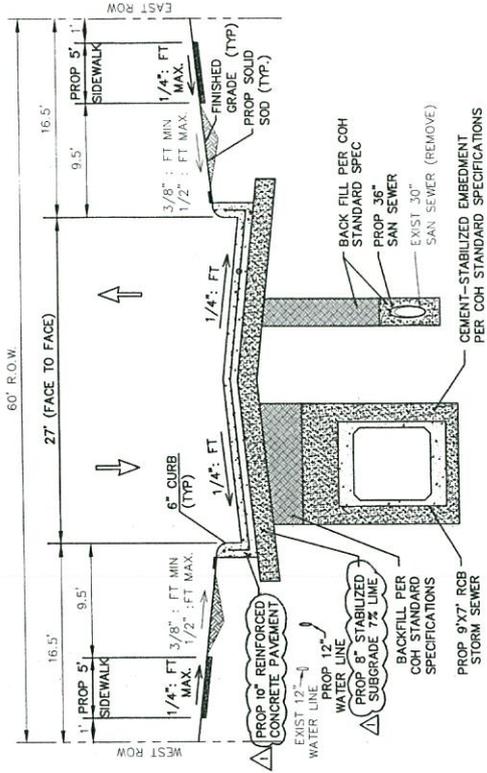
STATE OF TEXAS
CITY OF HOUSTON
MINNETEX PLACE AND ALMEDA
GENOA PLACE DRAINAGE AND
PAVING IMPROVEMENTS
DRAWING INDEX

WBS NUMBER
M-000289-0002-4
DRAWING SCALE
CITY OF HOUSTON PM
JASON V. V.
SHEET No. 2 OF 157

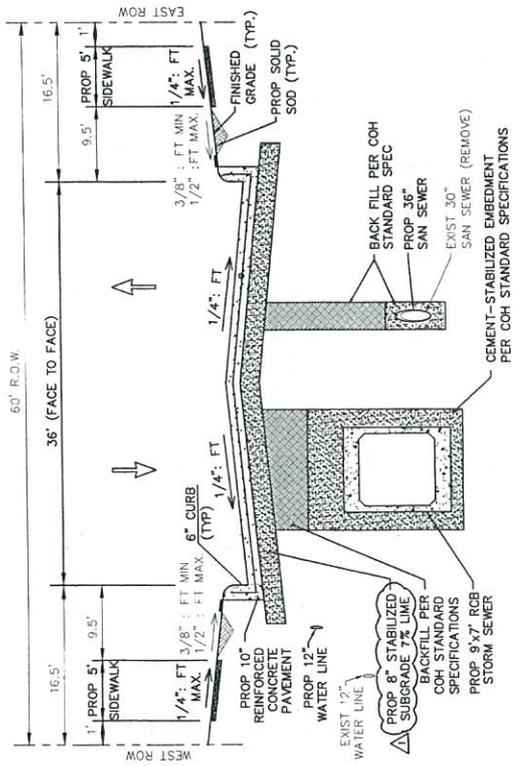
TYPICAL ROADWAY SECTIONS



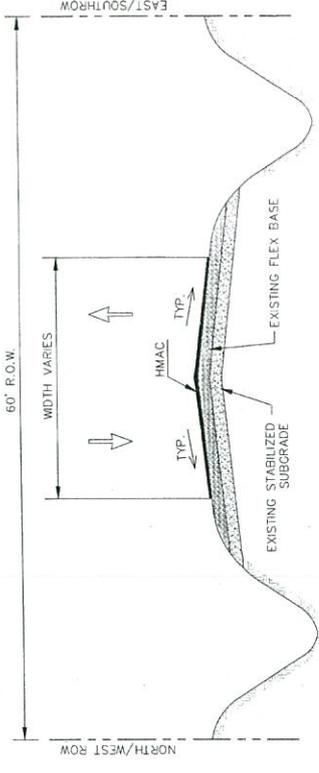
COTTINGHAM RD @ STA 16+90 TO STA 17+90
 LINCOLNSHIRE RD - STA 1+00 TO STA 28+21
 LEA ST - STA 1+00 TO STA 28+21
 GLENGARRY RD - STA 1+00 TO STA 28+26
 HENDRICKSEN RD - STA 1+00 TO STA 21+00
 ALLISON RD STA - 1+00 TO STA 25+63



COTTINGHAM RD - STA 1+00 TO STA 15+66



COTTINGHAM RD @ STA 1+00 TO STA 15+66



EXISTING ROADWAY SECTION

LINCOLNSHIRE RD - STA 1+00 TO STA 28+21
 LEA ST - STA 1+00 TO STA 28+21
 GLENGARRY RD - STA 1+00 TO STA 28+26
 HENDRICKSEN RD - STA 1+00 TO STA 21+00
 ALLISON RD STA - 1+00 TO STA 25+63



SDPS
Houston Storm Drainage Program Support

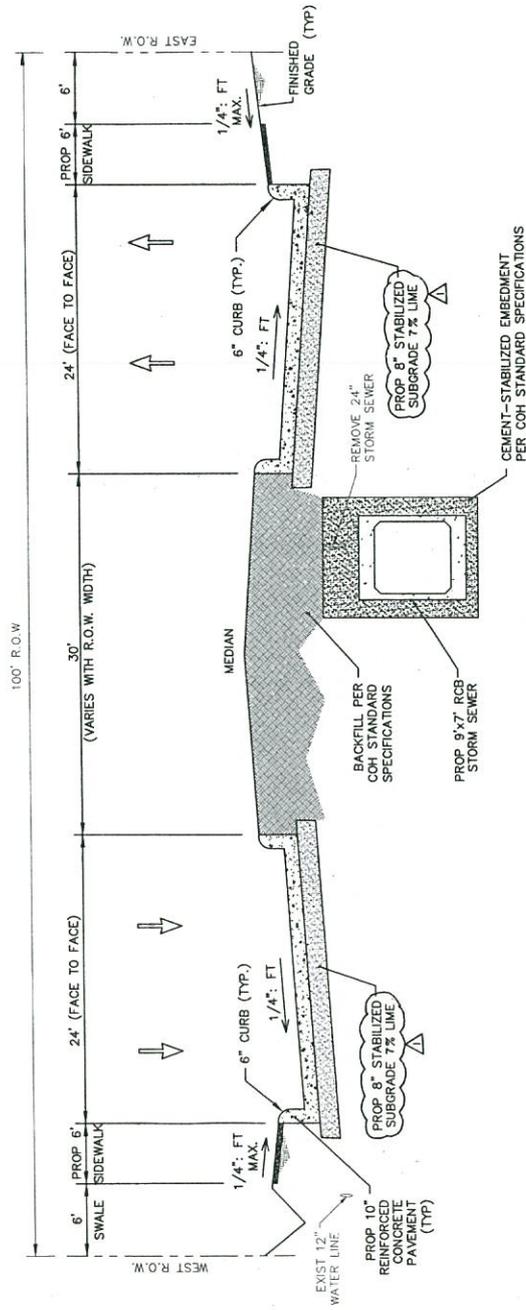
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
MINNETEX PLACE AND ALMEDA
GENOA PLACE DRAINAGE AND PAVING IMPROVEMENTS

K.T. Pappas, Inc.
Professional Engineer
No. 53824
City of Houston, TX

WES. NUMBER	H-000289-002-4
DRAWING SCALE	1"=10'
CITY OF HOUSTON PM	JASON VO
SHEET No.	27 OF 197

DATE: 01/20/2014 10:48 AM
 PROJECT: 01/20/2014 10:48 AM
 DRAWING: 01/20/2014 10:48 AM

TYPICAL ROADWAY SECTIONS



ML KING BOULEVARD
STATION 21+46 TO STATION 21+96

APPENDUM NO. 1

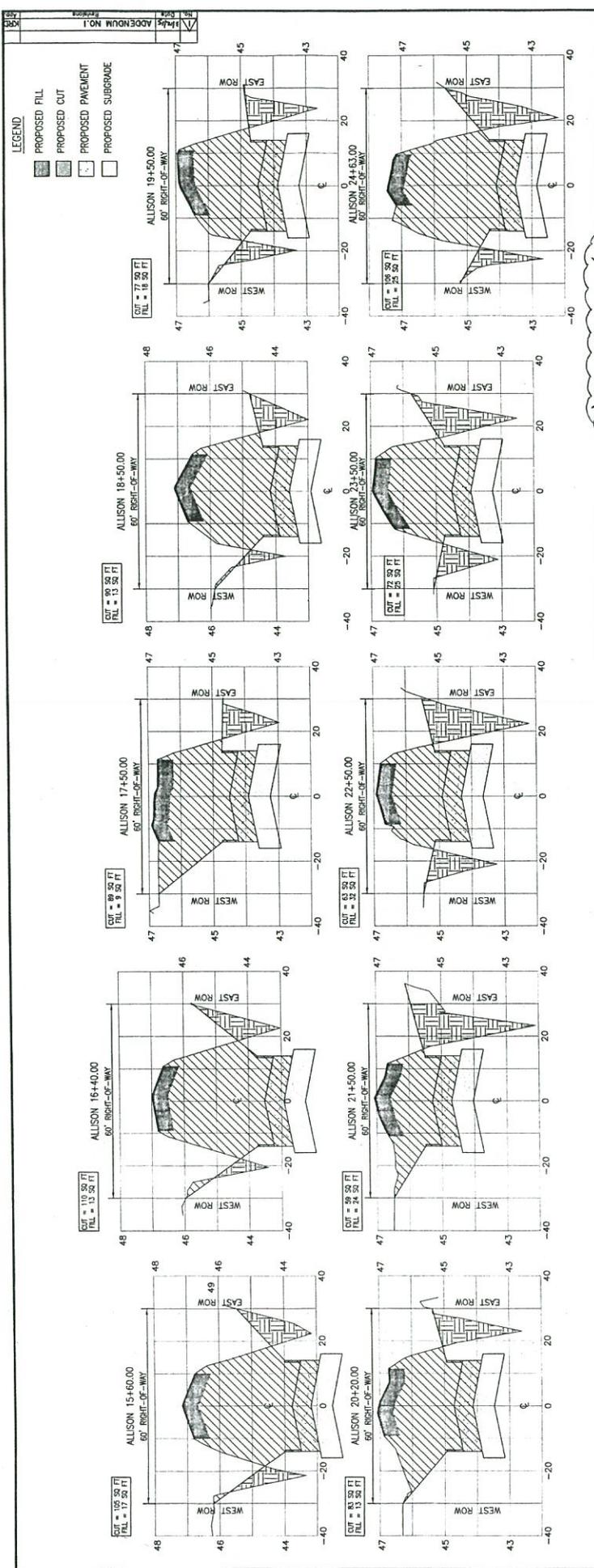
SDPS
Houston Storm Drainage
Program Support

KEITH L. DAVIS
No. 82925
STATE OF TEXAS
Professional Engineer

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
MINNETEX PLACE AND ALMEDA
GENOA PLACE DRAINAGE AND
PAVING IMPROVEMENTS
TYPICAL ROADWAY SECTIONS
(3 OF 3)

WBS NUMBER M-000289-0002-4
DRAWING SCALE 1"=10'
CITY OF HOUSTON PM JASON VO
SHEET No. 28 OF 137

APPENDUM NO. 1



- LEGEND**
- PROPOSED FILL
 - PROPOSED CUT
 - PROPOSED PAVEMENT
 - PROPOSED SUBGRADE

SDPS
Houston Storm Drainage
Program Support

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
MINNETEK PLACE AND ALMEDA
GENOA PLACE DRAINAGE AND
PAVING IMPROVEMENTS
ROADWAY CROSS
SECTIONS
(10.05.10)

WBS NUMBER
M-000289-0002-4
DRAWING SCALE
N1S
CITY OF HOUSTON PW
JASON VOZ
SHEET No. 146B OF 157

CUT AND FILL EARTHWORK SUMMARY

ROADWAY TYPE (CY)	ADJUSTMENT FACTOR (CY)	TOTAL CUT (CY)	FILL
ROADWAY SIDEWALK (CY)	12,231	5,878	
ADJUSTMENT FACTOR (CY)	12,231		414,607
ROADWAY SECTIONS (CY)	89,787		
VOID ADJUSTMENT FACTOR (CY)	13,469		
TOTAL BORROW	76,318		
*BORROW FOR ROADWAY EXCAVATION AND BORROW WITH THE PROPOSED FILL QUANTITIES			
**COMBINATION FACTOR WAS NOT INCLUDED WHEN TABULATING THE QUANTITIES			
**BID ITEMS FOR ROADWAY EXCAVATION AND BORROW			
REFLECTS TOTALS, NO SEPARATE FILL QUANTITIES			
TOTAL CUT: 34,300 CY			
TOTAL FILL: 6,460 CY			

COTTINGHAM ROAD ROADWAY EARTHWORK CALCULATIONS

STATION	CUT AREA (Sq Ft)	FILL AREA (Sq Ft)	CUT VOL (CY)	FILL VOL (CY)	COMB VOL (CY)	CUT/FILL RATIO
1+00	40	13	11	5	5	2.2
1+25	107	15	27	4	4	6.8
1+50	115	7	29	2	2	14.5
1+75	91	9	23	3	3	7.7
2+00	77	15	20	4	4	5.0
2+25	72	15	19	4	4	4.8
2+50	58	10	15	3	3	5.0
2+75	58	9	15	2	2	7.5
3+00	62	14	16	3	3	5.3
3+25	65	24	17	6	6	2.8
3+50	69	25	18	7	7	2.6
3+75	51	12	13	3	3	4.0
4+00	51	12	13	3	3	4.0
4+25	51	12	13	3	3	4.0
4+50	51	12	13	3	3	4.0
4+75	51	12	13	3	3	4.0
5+00	51	12	13	3	3	4.0
5+25	51	12	13	3	3	4.0
5+50	51	12	13	3	3	4.0
5+75	51	12	13	3	3	4.0
6+00	51	12	13	3	3	4.0
6+25	51	12	13	3	3	4.0
6+50	51	12	13	3	3	4.0
6+75	51	12	13	3	3	4.0
7+00	51	12	13	3	3	4.0
7+25	51	12	13	3	3	4.0
7+50	51	12	13	3	3	4.0
7+75	51	12	13	3	3	4.0
8+00	51	12	13	3	3	4.0
8+25	51	12	13	3	3	4.0
8+50	51	12	13	3	3	4.0
8+75	51	12	13	3	3	4.0
9+00	51	12	13	3	3	4.0
9+25	51	12	13	3	3	4.0
9+50	51	12	13	3	3	4.0
9+75	51	12	13	3	3	4.0
10+00	51	12	13	3	3	4.0
10+25	51	12	13	3	3	4.0
10+50	51	12	13	3	3	4.0
10+75	51	12	13	3	3	4.0
11+00	51	12	13	3	3	4.0
11+25	51	12	13	3	3	4.0
11+50	51	12	13	3	3	4.0
11+75	51	12	13	3	3	4.0
12+00	51	12	13	3	3	4.0
12+25	51	12	13	3	3	4.0
12+50	51	12	13	3	3	4.0
12+75	51	12	13	3	3	4.0
13+00	51	12	13	3	3	4.0
13+25	51	12	13	3	3	4.0
13+50	51	12	13	3	3	4.0
13+75	51	12	13	3	3	4.0
14+00	51	12	13	3	3	4.0
14+25	51	12	13	3	3	4.0
14+50	51	12	13	3	3	4.0
14+75	51	12	13	3	3	4.0
15+00	51	12	13	3	3	4.0
15+25	51	12	13	3	3	4.0
15+50	51	12	13	3	3	4.0
15+75	51	12	13	3	3	4.0
16+00	51	12	13	3	3	4.0
16+25	51	12	13	3	3	4.0
16+50	51	12	13	3	3	4.0
16+75	51	12	13	3	3	4.0
17+00	51	12	13	3	3	4.0
17+25	51	12	13	3	3	4.0
17+50	51	12	13	3	3	4.0
17+75	51	12	13	3	3	4.0
18+00	51	12	13	3	3	4.0
18+25	51	12	13	3	3	4.0
18+50	51	12	13	3	3	4.0
18+75	51	12	13	3	3	4.0
19+00	51	12	13	3	3	4.0
19+25	51	12	13	3	3	4.0
19+50	51	12	13	3	3	4.0
19+75	51	12	13	3	3	4.0
20+00	51	12	13	3	3	4.0
20+25	51	12	13	3	3	4.0
20+50	51	12	13	3	3	4.0
20+75	51	12	13	3	3	4.0
21+00	51	12	13	3	3	4.0
21+25	51	12	13	3	3	4.0
21+50	51	12	13	3	3	4.0

INCUMBEN SHIRE ROAD ROADWAY EARTHWORK CALCULATIONS

STATION	CUT AREA (Sq Ft)	FILL AREA (Sq Ft)	CUT VOL (CY)	FILL VOL (CY)	COMB VOL (CY)	CUT/FILL RATIO
1+00	44	13	11	5	5	2.2
1+25	11	10	3	3	3	1.0
1+50	11	10	3	3	3	1.0
1+75	11	10	3	3	3	1.0
2+00	11	10	3	3	3	1.0
2+25	11	10	3	3	3	1.0
2+50	11	10	3	3	3	1.0
2+75	11	10	3	3	3	1.0
3+00	11	10	3	3	3	1.0
3+25	11	10	3	3	3	1.0
3+50	11	10	3	3	3	1.0
3+75	11	10	3	3	3	1.0
4+00	11	10	3	3	3	1.0
4+25	11	10	3	3	3	1.0
4+50	11	10	3	3	3	1.0
4+75	11	10	3	3	3	1.0
5+00	11	10	3	3	3	1.0
5+25	11	10	3	3	3	1.0
5+50	11	10	3	3	3	1.0
5+75	11	10	3	3	3	1.0
6+00	11	10	3	3	3	1.0
6+25	11	10	3	3	3	1.0
6+50	11	10	3	3	3	1.0
6+75	11	10	3	3	3	1.0
7+00	11	10	3	3	3	1.0
7+25	11	10	3	3	3	1.0
7+50	11	10	3	3	3	1.0
7+75	11	10	3	3	3	1.0
8+00	11	10	3	3	3	1.0
8+25	11	10	3	3	3	1.0
8+50	11	10	3	3	3	1.0
8+75	11	10	3	3	3	1.0
9+00	11	10	3	3	3	1.0
9+25	11	10	3	3	3	1.0
9+50	11	10	3	3	3	1.0
9+75	11	10	3	3	3	1.0
10+00	11	10	3	3	3	1.0
10+25	11	10	3	3	3	1.0
10+50	11	10	3	3	3	1.0
10+75	11	10	3	3	3	1.0
11+00	11	10	3	3	3	1.0
11+25	11	10	3	3	3	1.0
11+50	11	10	3	3	3	1.0
11+75	11	10	3	3	3	1.0
12+00	11	10	3	3	3	1.0
12+25	11	10	3	3	3	1.0
12+50	11	10	3	3	3	1.0
12+75	11	10	3	3	3	1.0
13+00	11	10	3	3	3	1.0
13+25	11	10	3	3	3	1.0
13+50	11	10	3	3	3	1.0
13+75	11	10	3	3	3	1.0
14+00	11	10	3	3	3	1.0
14+25	11	10	3	3	3	1.0
14+50	11	10	3	3	3	1.0
14+75	11	10	3	3	3	1.0
15+00	11	10	3	3	3	1.0
15+25	11	10	3	3	3	1.0
15+50	11	10	3	3	3	1.0
15+75	11	10	3	3	3	1.0
16+00	11	10	3	3	3	1.0
16+25	11	10	3	3	3	1.0
16+50	11	10	3	3	3	1.0
16+75	11	10	3	3	3	1.0
17+00	11	10	3	3	3	1.0
17+25	11	10	3	3	3	1.0
17+50	11	10	3	3	3	1.0
17+75	11	10	3	3	3	1.0
18+00	11	10	3	3	3	1.0
18+25	11	10	3	3	3	1.0
18+50	11	10	3	3	3	1.0
18+75	11	10	3	3	3	1.0
19+00	11	10	3	3	3	1.0
19+25	11	10	3	3	3	1.0
19+50	11	10	3	3	3	1.0
19+75	11	10	3	3	3	1.0
20+00	11	10	3	3	3	1.0
20+25	11	10	3	3	3	1.0
20+50	11	10	3	3	3	1.0
20+75	11	10	3	3	3	1.0
21+00	11	10	3	3	3	1.0
21+25	11	10	3	3	3	1.0
21+50	11	10	3	3	3	1.0

ALLISON ROAD ROADWAY EARTHWORK CALCULATIONS

STATION	CUT AREA (Sq Ft)	FILL AREA (Sq Ft)	CUT VOL (CY)	FILL VOL (CY)	COMB VOL (CY)	CUT/FILL RATIO
1+00	32	35	8	9	9	0.9
1+25	33	35	8	9	9	0.9
1+50	33	35	8	9	9	0.9
1+75	33	35	8	9	9	0.9
2+00	33	35	8	9	9	0.9
2+25	33	35	8	9	9	0.9
2+50	33	35	8	9	9	0.9
2+75	33	35	8	9	9	0.9
3+00	33	35	8	9	9	0.9
3+25	33	35	8	9	9	0.9
3+50	33	35	8	9	9	0.9
3+75	33	35	8	9	9	0.9
4+00	33	35	8	9	9	0.9
4+25	33	35	8	9	9	0.9
4+50	33	35	8	9	9	0.9
4+75	33	35	8	9	9	0.9
5+00	33	35	8	9	9	0.9
5+25	33	35	8	9	9	0.9
5+50	33	35	8	9	9	0.9
5+75	33	35	8	9	9	0.9
6+00	33	35	8	9	9	0.9
6+25	33	35	8	9	9	0.9
6+50	33	35	8	9	9	0.9
6+75	33	35	8	9	9	0.9
7+00	33	35	8	9	9	0.9
7+25	33	35	8	9	9	0.9
7+50	33	35	8	9	9	0.9
7+75	33	35	8	9	9	0.9
8+00	33	35	8	9	9	0.9
8+25	33	35	8	9	9	0.9
8+50	33	35	8	9	9	0.9
8+75	33					