HUITT-ZOLLARS

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May 13, 2019

Ms. Jamie Brierton
City of Coppell
Department of Public Works and Engineering
265 E Parkway Blvd.
Coppell, TX 75019

Ref: Consulting Engineers Contract – Rev 2
Spanish Moss Drive & Court and Jeb Court Reconstruction

Dear Ms. Brierton,

We are enclosing pdf copies of the revised Scope of Work and Fee Schedule, associated Engineer's Manhour Estimate, and preliminary Opinion of Probable Construction Costs for the reconstruction of Spanish Moss Drive & Court and Jeb Court in Coppell, Texas.

Please contact us if you have any questions or need additional information. We look forward to working with you and the City of Coppell on this important project.

Sincerely,

HUITT-ZOLLARS, INC.

Kenneth A. Roberts, P.E.
Vice President

Katie D. McCarty, P.E.
Associate

Attachments

SCOPE OF SERVICES – BASIC SERVICES
Spanish Moss Drive & Court and Jeb Court Reconstruction
Coppell, Texas

I. Project Definition

This project consists of the preparation of surveys, reports, construction plans & details, specifications and bidding documents for the reconstruction of Spanish Moss Drive & Court and Jeb Court. The Spanish Moss Court and Jeb Court reconstruction involves the replacement of approximately 1,950 linear feet of 28 ft. wide undivided reinforced concrete street; the replacement of sidewalks on both sides of the road; the construction of improved water and sanitary sewer lines; and the construction of an improved storm drainage system. Basic Services will include surveying for design, the production of construction and bidding documents; and coordination with the **City of Coppell**, consultants, and the franchised utility companies.

II. Basic Services

Part A – Surveying for Design

1. Horizontal and vertical control will be established and tied to available **City** control and the control that will be established for the Spanish Moss Drive & Court and Jeb Court project. Three horizontal / vertical control points will be set outside the limits of construction along Spanish Moss Court for use by the Contractor during construction.
2. Record research at the County to determine ownership and existence of easements and right-of-way on the properties affected by the proposed roadway.
3. Perform field surveys to locate existing rights-of-way, property lines, boundary corners and easements for all parcels affected by the proposed roadways. Review of County information and field data to establish the existing right-of-way for the roadway.
4. Perform field topographic surveys to compile sufficient data for design. Cross-sections will be taken at 50 ft. intervals, 120 ft. wide maximum width and include all driveways, lead sidewalks and cross streets. Produce a topographic map with a one-foot contour interval suitable for civil design.
5. Obtain field data on existing franchised utilities above ground and as located and uncovered by the owners of the utilities.
6. Obtain field data on existing City water mains, sanitary sewer lines, storm water mains, traffic signals and streetlights.
7. Tie-in and identify all trees, shrubs, landscaped areas, sprinkler heads, irrigation controls and valves, mailboxes, walls, signs and other features that are within the area to be surveyed.

Part B – Schematic Design 30% Complete

1. Perform records research in an effort to determine the size, type, location and description of

existing public and franchise utility lines and right-of-ways/easements.

2. Review "As-Built" drawings and other pertinent data in the vicinity of the roadways.
3. Site visit to identify and photograph physical elements that will affect the design process.
4. Develop schematic typical paving sections.
5. Develop schematic paving plan layout.
6. Develop schematic drainage area map and runoff calculations. Drainage design criteria will be based on full land use development in accordance with the City's adopted plan.
7. Develop schematic stormwater plan layout. All drainage design will be limited to within 100 feet of the proposed right-of-way.
8. Develop schematic water and sanitary sewer plan layout.
9. Submit a pdf copy of schematic plans to the City for review and comment.

Part C – Preliminary Design 60% Complete

1. Meet with the **City** to receive review comments on the schematic design prior to proceeding with the production of preliminary documents.
2. Prepare preliminary construction plans on 22" x 34" sheets with a scale of 1" = 20' horizontal and 1" = 5' vertical, except as noted, for the following:

    - Cover Sheet
    - General Notes
    - Typical Paving Sections
    - Construction Sequencing (Scale: 1" = 40')
    - Paving Plans / Profiles
    - Drainage Area Map and Calculation Sheets (Scale: 1" = 100')
    - Stormwater Plans / Profiles
    - Water and Sanitary Sewer Plans / Profiles
    - Erosion Control Plans (Scale: 1" = 40')
    - Roadway Cross-Sections (Scale: 1” = 20’ H, 1” = 4” V)

3. Develop preliminary bidding and contract documents. The bid schedule will also include a description of bid items to clarify what is included with each bid item.
4. Prepare an opinion of probable construction costs utilizing the preliminary design.
5. Submit 1 set of preliminary plans to the franchised utility companies for utility coordination. Meet with utility companies to discuss the proposed improvements and any easement requirements they may have (maximum of 2 utility coordination meetings included in Basic Services).
6. Submit a pdf copy of the Preliminary Design to the City for review and comment.

Part D - Final Design 100% Complete

1. Meet with the **City** to receive review comments on the preliminary design prior to proceeding with the production of final documents.
2. Attend public meetings (maximum of 2 public meetings included in Basic Services) called by the City to discuss the project with the citizens of Coppell. Evaluate input from meetings with the City.
3. Prepare final construction plans on 22" x 34" sheets with a scale of 1" = 20' horizontal and 1" = 5' vertical, except as noted, for the following:

    - Cover Sheet
    - General Notes
    - Typical Paving Sections
    - Construction Sequencing (Scale: 1" = 40')
    - Paving Plans / Profiles and Details
    - Drainage Area Map and Calculation Sheets (Scale: 1" = 100')
    - Stormwater Plans / Profiles and Details
    - Water and Sanitary Sewer Plans / Profiles, and Details
    - Erosion Control Plans and Details (Scale: 1" = 40')
    - Roadway Cross-Sections (Scale: 1” = 20’ H, 1” = 4” V)

4. Prepare final Bidding and Contract Documents for construction.
5. Prepare a final Opinion of Probable Construction Costs.
6. Submit a pdf set of the Final Design to the City for approval.
7. Complete the Final Design to reflect final review comments.
8. Submit 1 set of final plans to the franchised utility companies for final utility coordination.
9. Submit 1 set of plans to a Registered Accessibly Specialist (RAS) for project registration, review and approval of the pedestrian related elements of the project. City to reimburse Engineer for RAS & TDLR fees.

END ATTACHMENT “A”

SCOPE OF SPECIAL SERVICES

Spanish Moss Drive & Court and Jeb Court Reconstruction
Coppell, Texas

I. Project Definition

Special Services will include bid phase services, limited construction phase services, a geotechnical investigation, Level "B" Subsurface Utility Engineering, and reimbursable expenses.

II. Special Services

Part A – Bid Phase Services

1. Prepare a pdf copy of the final plans, specifications and bid documents for distribution to plan houses and potential bidders.
2. Attend pre-bid conference.
3. Answer bidder questions and prepare necessary addenda.
4. Tabulate bids.
5. Evaluate bids and make a recommendation to the City for the award of a construction contract.

Part B – Construction Phase Services

1. Assist the City in conducting a pre-construction conference.
2. Attend up to 4 meetings with the City and Contractor during construction.
3. Review submittals and shop drawings required of the Contractor by the contract documents.
4. Answer questions from the Contractor submitted through the City during construction.
5. Participate with the City and Contractor in conducting a final walk through.
6. Upon completion of the Work, the Engineer shall compile for and deliver to the City one reproducible set of Record Documents based upon the marked-up record construction drawings, addenda, furnished by the City. These Record Documents will show significant changes made during construction. Because these Record Documents are based on unverified information provided by other parties, which the Engineer shall assume to be reliable; the Engineer cannot and does not warrant their accuracy. The Record Documents will contain the following warning: "These Record Documents have been prepared based on information provided by others. The Engineer has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions that may be incorporated as a result of erroneous information provided by others."

Part C – Geotechnical Investigation

Engineer will contract with a Geotechnical Firm to provide the following services:

The geotechnical investigation performed will consist of field and laboratory investigations, engineering analysis, and a report prepared by a Registered Professional Engineer.

Field Investigation

The field investigation will consist of drilling a total of four (4) test borings along the proposed alignments. The test borings will be advanced to depths of fifteen (15) feet below the existing ground surface. The existing roadways will be penetrated by augering through the pavement. Thickness measurements of the pavement and base will be made where pavement penetrations are made. The borings will be backfilled with soil cuttings and the pavement will be patched upon drilling completion and water level measurements.

Subsurface soil samples will be secured with thin walled tube and/or split spoon samples depending on soil type and consistency. Rock encountered in the borings will be evaluated using the Texas Department of Transportation Penetrometer (TxDOT Cone). All samples will be properly logged, packaged, sealed, and placed in a core box for transportation to the laboratory. Should unusual soil conditions be encountered, we will contact the City with a recommendation and cost estimate to explore these unusual conditions.

Traffic control will consist of using safety cones only. The geotechnical firm will contact Texas 811 and the City of Coppell's Water Department to have them locate underground utilities.

Laboratory Investigation

Laboratory tests will be conducted to classify the soil and to evaluate the volume change potential and strength of the soil present at the site. Soil classification tests will consist of Atterberg Limits, percent passing minus #200 sieve, moisture content and dry unit weight. The volume change potential of the soils will be evaluated by swell tests. The strength of the soil will be determined by hand penetrometer tests and unconfined compressive strength tests. In addition, lime / PI series tests and sulfate testing will also be performed on selected clay samples.

Engineering Analyses

Results of field and laboratory work will be presented in an engineering report. The report will include recommendations to guide design and construction of the new pavement and will include the following:

1. Site reconnaissance, boring staking and utility clearance coordination.
2. Plan of borings, boring logs, water level observations, and laboratory test results.
3. Comments on the presence and effect of expansive soils on pavement construction will be provided. Alternative methods of reducing any anticipated shrink/swell movements associated with expansive clays will be included for pavement construction, if required.
4. Pavement subgrade stabilization recommendations.
5. Alternate flex base subgrade recommendations.

6. Concrete pavement thickness recommendations based on traffic control data provided by the City.
7. Open cut recommendations for the replacement of existing utility lines.
8. A discussion of potential construction problems based on the subsurface soil and groundwater conditions at the site.

Part D – Subsurface Utility Engineering

Engineer will contract with a Subsurface Utility Engineering (SUE) Firm to provide the following services:

The SUE subconsultant will perform the SUE work required for this project in general accordance with the recommended practices and procedures described in ASCE Publication CI/ASCE 38-02 (Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data).

It is the responsibility of the SUE provider to perform due-diligence with regard to records research (QL "D") and acquisition of available utility records. The due-diligence provided for this project will consist of visually inspecting the work area for evidence of utilities and reviewing the available utility record information. Utilities that are not identified through these efforts will be here forth referred to as "unknown" utilities. Subconsultant personnel will scan the defined work area using electronic prospecting equipment to search for "unknown" utilities. However, subconsultant is not responsible for designating and locating these "unknown" utilities.

The scope of this proposal includes Quality Level "B" SUE. Utilities to be designated include gas, telecommunications, electric, storm, water and sanitary sewer. Subconsultant will survey all designating marks as part of this scope.

Designating Procedures

Prior to beginning field designating activities (QL "B"), subconsultant's field manager will review the project scope of work and available utility records. Once these initial reviews are complete, the field manager and technicians will begin designating the approximate horizontal position of known subsurface utilities within the specified project limits. A suite of geophysical equipment (electromagnetic induction, magnetic) will be used to designate metallic/conductive utilities (e.g. steel pipe, electrical cable, telephone cable). Subconsultant will establish routine/ordinary traffic control (cones and free standing signage, etc.) whenever required as part of this work.

Accurate collection and recording of designated utilities is a critical component of the SUE process. Subconsultant utilizes a proven method of collecting and recording survey information once the utilities have been designated in the field. Subconsultant's field manager will produce detailed sketches depicting each utility as well as relevant surface features such as roadways, buildings, manholes, fire hydrants, utility pedestals, valves, meters, etc. Each utility will be labeled with a unique ID code. Paint and pin flags will be used to designate the utilities in the field. A labeled pin flag or paint mark will be used to mark each location where a survey shot is required. The locations will be numbered sequentially for each individual utility line.

Deliverables

The SUE subconsultant will produce a utility file, in MicroStation format, depicting the type and horizontal location of the designated utilities. The size of each utility will be presented in the utility file if this information is indicated on available record drawings. The engineer will provide subconsultant with base map/topographic files for use in preparing the utility file.

Part E – Reimbursable Expenses

Reimbursable expenses accrued through printing as described in the Basic Services, printing fees at the County, filing fees, review and processing fees, mileage, delivery fees, RAS & TDLR fees, and other out-of-pocket expenses, shall be reimbursed at cost plus 10% upon receipt of an invoice from **Engineer**, and shall have a maximum fee of $2000.

III. ADDITIONAL SERVICES

No additional services to be provided.

EXCLUSIONS

The intent of the scope is to include only the services specifically listed above and none others. Services specifically excluded from this Scope of Services include, but are not necessarily limited to the following:

1. *Right-of-Way Strip Map.*
2. *Horizontal and Vertical Control Plan.*
3. *New right-of-way and/or easement documents.*
4. *Trench excavation safety plan.*
5. *Landscape and Irrigation Plans.*
6. *Detailed traffic control and detouring plans in accordance with MUTCD.*
7. *Daily construction staking for the Contractor throughout the duration of construction.*
8. *Post-Construction Surveying.*
9. *Re-staking of horizontal and vertical control knocked out during construction.*
10. *Surveying to determine final quantities to be used in the final pay estimate.*
11. *Storm Water Pollution Prevention Plan (SWPPP).*
12. *Street Light Design.*
13. *Jurisdictional Waters and Wetlands Assessment and Delineation.*
14. *Mitigation design efforts for waters, wetlands and habitat areas.*
15. *Mitigation for tree loss within and outside the ROW.*
16. *USACOE 404 Permitting.*
17. *Historical and archeological investigation.*
18. *Material testing during construction.*

END ATTACHMENT "B"

FEE SCHEDULE
Spanish Moss Drive & Court and Jeb Court Reconstruction
Coppell, Texas

WORK STAGE SUBMITTAL OR COMPLETION	**TOTAL**
Basic Services:	
Part A – Surveying for Design	$16,680
Part B – Schematic Design 30% Complete	$40,290
Part C – Preliminary Design 65% Complete	$50,030
Part D – Final Design 100% Complete	$57,830
Basic Services Subtotal	**$164,830**
Special Services:	
Part A – Bid Phase Services	$4,480
Part B – Construction Phase Services	$10,260
Part C – Geotechnical Investigation	$5,950
Part D – Subsurface Utility Engineering	$12,775
Part E – Reimbursable Expenses	$2,000
Special Services Subtotal	**$35,465**
TOTAL PROJECT FEE	**$200,295**

ENGINEER'S MANHOUR ESTIMATE
SPANISH MOSS DRIVE AND COURT AND JEB COURT RECONSTRUCTION
COPPELL, TEXAS

FEE SUMMARY

BASIC SERVICES		
PART	**DESCRIPTION**	**FEE**
A	Surveying for Design	$ 16,680
B	Schematic Design 30% Complete	$ 40,290
C	Preliminary Design 60% Complete	$ 50,030
D	Final Design 100% Complete	$ 57,830
TOTAL BASIC SERVICES		**$164,830**

SPECIAL SERVICES		
PART	**DESCRIPTION**	**FEE**
A	Bid Phase Services	$ 4,480
B	Construction Phase Services	$ 10,260
C	Geotechnical Investigation	$ 5,950
D	Subsurface Utility Engineering	$ 12,775
E	Reimbursable Expenses	$ 2,000
TOTAL SPECIAL SERVICES		**$35,465**

TOTAL FEE	**$200,295**

ENGINEER'S MANHOUR ESTIMATE
SPANISH MOSS DRIVE AND COURT AND JEB COURT RECONSTRUCTION
COPPELL, TEXAS

PART A	TASK DESCRIPTION - BASIC SERVICES Surveying for Design	2-MAN FIELD CREW $150	RPLS/PM HOURS $200	SURVEY COORD. HOURS $150	CADD TECH HOURS $120	TOTAL HOURS
1	ESTABLISH SURVEY CONTROL	8	2			10
2	RECORDS RESEARCH				16	16
3	LOCATE EXISTING ROW, PROP. LINES, BOUNDARY CORNERS, ESMTS.	8	2			10
4	CROSS-SECTIONS AND TOPOGRAPHIC MAP	40	2		16	58
5	FRANCHISED UTILITY RESEARCH AND COORDINATION		1		4	5
6	CITY FACILITIES RESEARCH AND FIELD DATA		2		6	8
7	TIE IN ABOVE GROUND FEATURES	8			2	10
	TOTAL MANHOURS	64	9	0	44	117
	LABOR COSTS	$ 9,600	$ 1,800	$ -	$ 5,280	
	TOTAL TOPOGRAPHIC SURVEYING FEE					**$ 16,680**

PART B	TASK DESCRIPTION - BASIC SERVICES Schematic Design 30% Complete	PM HOURS $260	ENGR HOURS $170	SR. CADD HOURS $135	TOTAL HOURS
1	RECORDS RESEARCH	1	8		9
2	REVIEW AS-BUILT DRAWINGS	1	8		9
3	SITE VISIT	4	4		8
4	TYPICAL SECTIONS	2	8	12	22
5	PAVING PLAN LAYOUT	4	24	36	64
6	DRAINAGE AREA MAP & CALCULATIONS	2	12	24	38
7	SCHEMATIC STORMWATER LAYOUT	4	24	36	64
8	SCHEMATIC WATER AND SANITARY SEWER LAYOUT	2	12	24	38
9	SUBMIT SCHEMATIC PDF TO THE CITY			2	2
	TOTAL MANHOURS	20	100	134	254
	LABOR COSTS	$ 5,200	$ 17,000	$ 18,090	
	TOTAL SCHEMATIC DESIGN FEE				**$ 40,290**

ENGINEER'S MANHOUR ESTIMATE
SPANISH MOSS DRIVE AND COURT AND JEB COURT RECONSTRUCTION
COPPELL, TEXAS

PART C	TASK DESCRIPTION - BASIC SERVICES Preliminary Design 60% Complete	PM HOURS $260	ENGR HOURS $170	SR. CADD HOURS $135	TOTAL HOURS
1	SCHEMATIC DESIGN REVIEW MEETING	2	2		4
2	PREPARE PRELIMINARY PLANS				
	Cover Sheet	0.5	1	2	3.5
	General Notes	0.5	1	2	3.5
	Typical Paving Sections	0.5	2	8	10.5
	Construction Sequencing	2	8	28	38
	Paving Plan & Profile Sheets	2	16	24	42
	Drainage Area Map & Calculations	2	8	24	34
	Stormwater Plan & Profile Sheets	2	16	28	46
	Water and Sanitary Sewer Plan & Profile Sheets	2	8	24	34
	Erosion Control Plans	0.5	4	8	12.5
	Roadway Cross-Sections	1	8	24	33
3	PREPARE PRELIMINARY BIDDING & CONTRACT DOCS	8	16	4	28
4	PREPARE PRELIMINARY OPCC	2	8	16	26
5	SUBMIT FINAL PDF OF PLANS TO THE CITY		2		2
6	SUBMIT PRELIMINARY PLANS TO FRANCHISED UTILITIES		2	2	4
	TOTAL MANHOURS	25	102	194	321
	LABOR COSTS	$ 6,500	$ 17,340	$ 26,190	
	TOTAL PRELIMINARY DESIGN FEE				**$ 50,030**

PART D	TASK DESCRIPTION - BASIC SERVICES Final Design 100% Complete	PM HOURS $260	ENGR HOURS $170	SR. CADD HOURS $135	TOTAL HOURS
1	PRELIMINARY DESIGN REVIEW MEETING	2	2		4
2	PUBLIC MEETINGS (2)	4	4	8	16
3	PREPARE FINAL PLANS				
	Cover Sheet			1	1
	General Notes			1	1
	Typical Paving Sections	0.5	1	4	5.5
	Construction Sequencing	1	8	28	37
	Paving Plan & Profile Sheets and Details	1	16	32	49
	Drainage Area Map & Calculations	1	4	16	21
	Stormwater Plan & Profile Sheets and Details	1	16	32	49
	Water and Sanitary Sewer Plan & Profile Sheets and Details	1	16	24	41
	Erosion Control Plans and Details	0.5	4	8	12.5
	Roadway Cross-Sections		8	16	24
4	PREPARE FINAL BIDDING & CONTRACT DOCUMENTS	8	16	4	28
5	PREPARE FINAL OPCC	2	8	16	26
6	SUBMIT FINAL PDF OF PLANS TO THE CITY		2		2
7	ADDRESS FINAL REVIEW COMMENTS	2	16	32	50
8	SUBMIT FINAL PLANS TO FRANCHISED UTILITIES		2	2	4
9	SUBMIT FINAL PLANS TO TDLR		1	2	3
	TOTAL MANHOURS	24	124	226	374
	LABOR COSTS	$ 6,240	$ 21,080	$ 30,510	
	TOTAL FINAL DESIGN FEE				**$ 57,830**

TOTAL BASIC SERVICES FEE	**$ 164,830**

ENGINEER'S MANHOUR ESTIMATE
SPANISH MOSS DRIVE AND COURT AND JEB COURT RECONSTRUCTION
COPPELL, TEXAS

PART A	TASK DESCRIPTION - SPECIAL SERVICES Bid Phase Services	PM HOURS $260	ENGR HOURS $170	SR. CADD HOURS $135	TOTAL HOURS
1	PDF OF PLANS & SPECS FOR DISTRIBUTION		2	2	4
2	PRE-BID CONFERENCE	2	2		4
3	ANSWER BIDDER QUESTIONS & PREPARE ADDENDA	2	4	2	8
4	TABULATE BIDS	1	4		5
5	EVALUATE BIDS AND RECOMMEND CONTRACT AWARD	1	2		3
	TOTAL MANHOURS	6	14	4	24
	LABOR COSTS	$ 1,560	$ 2,380	$ 540	
	TOTAL BID PHASE SERVICES				**$ 4,480**

PART B	TASK DESCRIPTION - SPECIAL SERVICES Construction Phase Services	PM HOURS $260	ENGR HOURS $170	SR. CADD HOURS $135	TOTAL HOURS
1	PRE-CONSTRUCTION CONFERENCE	2	2		4
2	MEETINGS WITH CITY AND CONTRACTOR (4)	8	8		16
3	REVIEW SUBMITTALS AND SHOP DRAWINGS	2	8		10
4	ANSWER CONTRACTOR QUESTIONS	2	4		6
5	FINAL WALK THROUGH	2	2		
6	RECORD DRAWINGS	1	4	8	
	TOTAL MANHOURS	17	28	8	53
	LABOR COSTS	$ 4,420	$ 4,760	$ 1,080	
	TOTAL CONSTRUCTION PHASE SERVICES				**$ 10,260**

PART C	TASK DESCRIPTION - SPECIAL SERVICES Geotechnical Investigation	LUMP SUM
	TOTAL GEOTECHNICAL INVESTIGATION FEE	$ 5,950

PART D	TASK DESCRIPTION - SPECIAL SERVICES Subsurface Utility Engineering	SURVEY $1,850 DAILY	QL "B" $2,500 DAILY
1	Survey	1.5	
2	QL "B"		4
	SUBTOTALS	$ 2,775	$ 10,000
	TOTAL SUBSURFACE UTILITY ENGINEERING FEE		**$ 12,775**

PART E	TASK DESCRIPTION - SPECIAL SERVICES Reimbursable Expenses	LUMP SUM
	Printing, Filing Fees, Mileage, Delivery Fees, TDLR Permitting Fees	$ 2,000
	TOTAL REIMBURSABLE EXPENSES	**$ 2,000**

TOTAL SPECIAL SERVICES FEE	**$ 35,465**

OPINION OF PROBABLE CONSTRUCTION COST
ESTIMATE - MAY 13, 2019
SPANISH MOSS DRIVE & COURT AND JEB COURT RECONSTRUCTION
COPPELL, TEXAS

ITEM NO.	REMOVAL AND PAVING IMPROVEMENTS DESCRIPTION	UNIT	QUANT.	UNIT PRICE	TOTAL
100	PROJECT SIGNS	EA	2	$ 700.00	$ 1,400
101	MOBILIZATION	LS	1	$ 71,172.00	$ 71,172
102	BARRICADES & TRAFFIC CONTROL	MO	12	$ 2,500.00	$ 30,000
103	EROSION CONTROL	LS	1	$ 15,000.00	$ 15,000
104	REM. & RESET SMALL ROADSIDE ASSEMBLY	EA	4	$ 700.00	$ 2,800
105	SAWCUT REM. & DISPOSE EX. CONCRETE (ALL THICKNESS)	SY	8,784	$ 10.00	$ 87,838
106	REM. & REPLACE MAILBOX ASSEMBLY	EA	6	$ 500.00	$ 3,000
107	UNCLASSIFIED STREET EXCAVATION	CY	300	$ 12.00	$ 3,600
108	6" 3600 PSI REINF CONCRETE PAVEMENT W/ 6" INTEGRAL CURB	SY	6,939	$ 55.00	$ 381,663
109	6" LIME STABILIZED SUBGRADE	SY	6,939	$ 7.00	$ 48,575
110	LIME (36 LBS./SY)	TON	125	$ 260.00	$ 32,476
111	4" THICK 3000 PSI REINF. CONC. SIDEWALK	SY	2,278	$ 48.00	$ 109,333
112	BARRIER FREE RAMP	EA	12	$ 1,800.00	$ 21,600
113	SOLID SOD BUFFALO GRASS	SY	11,700	$ 8.00	$ 93,600
114	REPAIR, REPLACE, MODIFY EXISTING IRRIGATION SYSTEM	LS	1	$ 20,000.00	$ 20,000
	REMOVAL AND PAVING IMPROVEMENTS SUB-TOTAL				**$ 922,058**

ITEM NO.	STORMWATER IMPROVEMENTS DESCRIPTION	UNIT	QUANT.	UNIT PRICE	TOTAL
300	21" CLASS III RCP	LF	85	$ 120.00	$ 10,200
301	30" CLASS III RCP	LF	500	$ 150.00	$ 75,000
302	42" CLASS III RCP	LF	330	$ 180.00	$ 59,400
303	10' RECESSED INLET	EA	4	$ 6,000.00	$ 24,000
304	TRENCH SAFETY	LF	915	$ 2.00	$ 1,830
	STORMWATER IMPROVEMENTS SUB-TOTAL				**$ 170,430**

ITEM NO.	WATER AND SANITARY SEWER IMPROVEMENTS DESCRIPTION	UNIT	QUANT.	UNIT PRICE	TOTAL
400	8" WATERLINE PVC	LF	1,950	$ 50.00	$ 97,500
401	3/4" WATER SERVICE	EA	46	$ 1,500.00	$ 69,000
402	INSTALL METER BOX AND TRANSFER WATER SERVICE	EA	46	$ 590.00	$ 27,140
403	8" SANITARY SEWER PVC	LF	1,950	$ 50.00	$ 97,500
404	4" SANITARY SEWER SERVICE	EA	46	$ 1,500.00	$ 69,000
405	6" GATE VALVE	EA	2	$ 1,000.00	$ 2,000
406	8" GATE VALVE	EA	2	$ 1,500.00	$ 3,000
407	REMOVE EXISTING SANITARY SEWER MANHOLE	EA	5	$ 800.00	$ 4,000
408	SANITARY SEWER MANHOLE	EA	4	$ 3,800.00	$ 15,200
409	REMOVE, SALVAGE, AND TRANSPORT EXISTING FIRE HYDRANT	EA	2	$ 700.00	$ 1,400
410	FURNISH AND INSTALL FIRE HYDRANT	EA	2	$ 4,200.00	$ 8,400
411	TRENCH SAFETY	LF	3,992	$ 2.00	$ 7,984
	WATER AND SANITARY SEWER IMPROVEMENTS SUB-TOTAL				**$ 402,124**

SUBTOTAL	**$ 1,494,612**
20% CONTINGENCY	**$ 298,922**
OPINION OF PROBABLE CONSTRUCTION COST	**$ 1,793,534**