

CONSULTANT WORK ORDER PROPOSAL

Date: July 22, 2024

Dear Ms. Perez:

Gannett Fleming, Inc. (Consultant) is pleased to present this proposal to provide design services for the project entitled “**City of Doral – NW 117th Avenue and NW 34th Street New Signal based on traffic signal warrant approved by Miami Dade County**”, pursuant to its Professional Service Agreement with the City of Doral (City), RFQ No. 2023-08.

I. GENERAL

Gannett Fleming, Inc. will perform engineering design services for the City of Doral for the above-referenced project. The scope of services consists of civil engineering services related to the new Traffic Signal design for NW 117 Ave and NW 34 St.

The design includes re-aligning and widening NW 34th Street to accommodate an exclusive SB left turn lane and NB right turn lane at the intersection with NW 117th Avenue. The improvements will require widening, a new curb and gutter, new drainage structures and French drain, and new signage and pavement markings, and a new sidewalk along the north side of NW 34th Street, from NW 117th Avenue to NW

Task 1 - Geotechnical Services: The geotechnical scope of services includes the performance of SPT borings for the proposed signalization structures. See Appendix “A”, Sub-consultant Fee proposal for scope of services.

Task 2 – Roadway Construction Documents:

Roadway Plans:

1. Typical Section: It is anticipated that one (1) typical section will be required for NW 34th Street
2. Roadway Plan (2 sheets)
 - Horizontal and vertical alignment
 - Utility adjustments
 - New drainage system in plan and profile view
3. Drainage Structures
4. Roadway Cross Sections
5. Details (Tree Protection)
6. Temporary Traffic Control Plans
 - Typical Sections and Notes

Signing and Pavement Marking:

Gannett Fleming shall analyze and document Signing and Pavement Markings Tasks in accordance with all applicable Miami-Dade Transportation and Public Works Department (DTPW) manuals, guidelines, standards, handbooks, procedures, and current design memorandums. Signing and Marking construction plans and other deliverables will contain the following information:

1. Reference and Master Design File: Gannett Fleming shall prepare the Signing and Pavement Marking Design file to include all necessary design elements and all associated reference files.

2. Signing and Marking Plans in accordance with the County Design Standards to include one additional Signing and Marking Plan Sheet

Signalization:

Gannett Fleming shall analyze and document Signalization Tasks in accordance with all applicable Miami Dade transportation and Public Works Department (DTPW) manuals, guidelines, standards, handbooks, procedures, and current design memorandums. Signalization construction plans and other deliverables will contain the following information:

1. Reference and Master Design File: Gannett Fleming shall prepare the Signalization Design file to include all necessary design elements and all associated reference files. One proposed dual mast arm at NW 34th Street and one new mast arm at NW 25th Street due to the new lane configuration. See **Exhibit 1** for proposed signalization improvements
2. Mast Arm Tabulation sheet: Gannett Fleming shall prepare a mast arm tabulation sheet for the proposed mast arms at NW 34th Street and NW 25th Street.
3. Standard Mast Arm Assemblies Data Table sheet: Gannett Fleming shall prepare a Standard mast arm assemblies data table sheet for the proposed mast arms at NW 34th Street and NW 25th Street.
4. Sign Panel Design Analysis: Gannett Fleming shall establish sign layout, letter size and series for three internally illuminated street name signs and develop Guide Sign Work Sheets to be included in the design plans.
5. Signalization Plans in accordance with the County Design Standards to include Tabulation of Quantities, General Notes/Pay Item Notes, Signalization Plan Sheet, and Guide Sign Tabulation Sheet. Plans shall be prepared in scale of 1"=40'. Estimated number of sheets is 6 Sheets.

II. COMPENSATION

Consultant shall perform the Work detailed in this Proposal for a Time and Material, Not to Exceed fee of Ninety Nine Thousand Ninety Four dollars and Sixty cents (\$99,094.60). The City shall not be liable for any fee, cost, expense or reimbursable expense or other compensation beyond this amount.

SUMMARY OF COMPENSATION TASKS 1 and 2*			
Task, Sub-task, or Activity ID #	Major Task Name and/or Activity Description	Fee Amount	Fee Basis
1.1	Geotechnical Services	\$6,311.00	Time and Material, Not to Exceed
1.2	Survey Services	\$1,930.00	Time and Material, Not to Exceed
1.3	Landscape/Tree Permit	\$8,200.00	Time and Material, Not to Exceed
1.3	Design Services	\$82,653.60	Time and Material, Not to Exceed
	<i>Subtotal – Professional Fees</i>	\$99,094.60	Time and Material, Not to Exceed
	<i>Allowance for Additional Services</i>		
	<i>Allowance for Reimbursable Expenses</i>	\$0.00	Direct Expense
	TOTAL	\$99,094.60	Time and Material, Not to Exceed

*Note: Compensation should match the Task, Activities, and/or Deliverables identified.

III. ADDITIONAL SERVICES

The City may establish an allowance for additional services requested by the City and for unforeseen circumstances, which shall be utilized at the sole discretion of the City.

IV. PROJECT MANAGER

CONSULTANT'S Project Manager for this Work Order assignment will be Carmen Bermudez, P.E.



Submitted by:

Alina Fernandez, P.E. - Senior Project Manager
Gannett Fleming, Inc.

Reviewed and approved by:

Darlin Perez., P.E. - Chief of Engineer
City of Doral

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project:

NW 117th Ave from NW 25th St to NW 34th St

Gannett Fleming

7/22/2024

Alina Fernandez, P.E.

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Project Manager	Senior Engineer	Project Engineer	Engineer Technician	Staff Classification 8	Staff Classification 9	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$257.80	\$238.40	\$199.85	\$142.40	\$0.00	\$0.00			
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	72	7	18	22	25	0	0	72	\$14,053	\$195.17
5. Roadway Plans	43	5	11	13	14	0	0	43	\$8,503	\$197.75
6. Drainage Analysis	18	2	5	5	6	0	0	18	\$3,561	\$197.85
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	9	1	2	3	3	0	0	9	\$1,761	\$195.71
18. Structures - Miscellaneous	36	4	9	11	12	0	0	36	\$7,084	\$196.78
19. Signing & Pavement Marking Analysis	17	2	4	5	6	0	0	17	\$3,323	\$195.46
20. Signing & Pavement Marking Plans	10	1	3	3	3	0	0	10	\$2,000	\$199.98
21. Signalization Analysis	139	14	35	42	48	0	0	139	\$27,182	\$195.55
22. Signalization Plans	62	6	16	19	21	0	0	62	\$12,149	\$195.95
23. Lighting Analysis	15	2	4	5	4	0	0	15	\$3,038	\$202.54
Total Staff Hours	421	44	107	128	142	0	0	421		
Total Staff Cost		\$11,343.20	\$25,508.80	\$25,580.80	\$20,220.80	\$0.00	\$0.00		\$82,653.60	\$196.33

Check = \$82,653.60

SUBTOTAL ESTIMATED FEE:	\$82,653.60
Geotechnical Services - Geosol Inc.	\$6,311.00
Survey Services - M.G. Vera and Assoc., Inc	\$1,930.00
Landscape/Tree Permit Services - RES	\$8,200.00
SUBTOTAL ESTIMATED FEE:	\$99,094.60
Additional Services (Allowance)	\$0.00
Reimbursables (Allowance)	\$0.00
GRAND TOTAL ESTIMATED FEE:	\$99,094.60

Darlin Perez, P.E.
City of Doral Chief Engineer

Date



07/22/2024

Alina Fernandez, P.E.
Gannett Fleming Project Manager

Date

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.2	Typical Section Package	LS	1	0	0	
4.3	Pavement Design Package	LS	1	0	0	
4.4	Cross-Slope Correction	LS	1	0	0	
4.5.1	Horizontal /Vertical Master Design Files	LS	1	30	30	Realignment and widening along NW 34th Street accommodate left turn, thru, and right turn movements. Includes Back of sidewalk profile to verify longitudinal slope meets ADA. Assume FDOT Mid Range: 300 hrs x 0.10 miles= 30 hrs
4.5.2	Horizontal /Vertical Master Design Files (skeletal plans)	LS	1	0	0	
4.6	Access Management	LS	1	0	0	
4.7	Cross Section Design Files	LS	1	15	15	Low Range: 110 hrs x 0.10 miles x 2 (every 50 ft) = 22 hrs (includes sidewalk cross sections)
4.8	Traffic Control Analysis	LS	1	16	16	TCP Phasing for NW 34 Street - Typical Sections and Notes
4.9	Master TCP Design Files	LS	1	0	0	
4.10	Design Variations and Exceptions	LS	1	0	0	
4.11	Design Report	LS	1	0	0	
4.12	Quantities	LS	1	4	4	
4.13	Cost Estimate	LS	1	0	0	
4.14	Technical Special Provisions	LS	1	0	0	
4.15	Other Roadway Analysis	LS	1	0	0	
Roadway Analysis Technical Subtotal					65	

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.16	Field Reviews	LS	0	0	0	
4.17	Technical Meetings	LS	0	0	0	
4.18	Quality Assurance/Quality Control	LS	%	5%	3	
4.19	Independent Peer Review	LS	%	0%	0	
4.20	Supervision	LS	%	5%	3	
Roadway Analysis Nontechnical Subtotal					6	
4.21	Coordination	LS	%	2%	1	
4. Roadway Analysis Total					72	

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.1	Key Sheet		Sheet	1	0	0	0	
5.3	Drainage Maps		Sheet	1	0	0	0	
5.4	Typical Section Sheets							
5.4.1	Typical Sections		EA	1	12		12	1 additional Typical Section (NW 34th Street)

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.4.2	Typical Section Details		EA	1	0		0	
5.5	General Notes/Pay Item Notes		Sheet	1	0	1	0	
5.6	Summary of Quantities		Sheet	1	0	1	0	
5.7	Box Culvert Data Sheet		Sheet	1	0	1	0	
5.8	Bridge Hydraulics Recommendation Sheets		Sheet	1	0	1	0	
5.9	Summary of Drainage Structures		Sheet	1	0	1	0	
5.10	Optional Pipe/Culvert Material		Sheet	1	0	1	0	
5.11	Project Layout		Sheet	1	0	1	0	
5.12	Plan/Profile Sheet		Sheet	1	6	1	6	1 additional plan sheet (NW 34th Street)
5.13	Profile Sheet		Sheet	1	0	1	0	
5.14	Plan Sheet		Sheet	1	0	1	0	
5.15	Special Profile		Sheet	1	0	1	0	
5.16	Back-of-Sidewalk Profile Sheet		Sheet	1	0	1	0	
5.17	Interchange Layout Sheet		Sheet	1	0	1	0	
5.18	Ramp Terminal Details (Plan View)		Sheet	1	0	1	0	
5.19	Intersection Layout Details		Sheet	1	0	1	0	
5.20	Special Details		EA	1	0		0	

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.21	Drainage Structure Sheet (Per Structure)		EA	4	2		8	4 additional drainage structures on NW 34th Street
5.22	Miscellaneous Drainage Detail Sheets		Sheet	1	0	1	0	
5.23	Lateral Ditch Plan/Profile		Sheet	1	0	1	0	
5.24	Lateral Ditch Cross Sections		EA	0	0		0	
5.25	Retention/Detention Ponds Detail Sheet		Sheet	0	0	0	0	
5.26	Retention Pond Cross Sections		EA	0	0		0	
5.27	Cross-Section Pattern Sheet		Sheet	0	0	0	0	
5.28	Roadway Soil Survey Sheet		Sheet	0	0	0	0	
5.29	Cross Sections		EA	10	0.5		5	Cross sections every 50-ft
5.30	Temporary Traffic Control Plan Sheets		Sheet	0	0	0	0	
5.31	Temporary Traffic Control Cross Section Sheets		EA	0	0		0	
5.32	Temporary Traffic Control Detail Sheets		Sheet	1	8	1	8	Typical sections and notes for NW 34 Streer TCP Phasing
5.33	Utility Adjustment Sheets		Sheet	0	0	0	0	
5.34	Selective Clearing and Grubbing		Sheet	0	0	0	0	
5.35	Erosion Control Plan		Sheet	0	0	0	0	
5.36	SWPPP		Sheet	0	0	0	0	
5.37	Project Network Control Sheet		Sheet	0	0	0	0	
5.38	Environmental Detail Sheets		LS	0	0	0	0	
5.39	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0	
Roadway Plans Technical Subtotal						18	39	
5.40	Quality Assurance/Quality Control		LS	%	5%		2	
5.41	Supervision		LS	%	5%		2	
5. Roadway Plans Total						18	43	

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6.1	Determine Base Clearance Water Elevation	Per Basin	0	0	0	
		EA	0	0	0	
6.4	Design of Ditches	Per Ditch Mile	0	0	0	
6.5	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	0	0	0	
6.6	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	
6.7	Design of Flood Plain Compensation	Per Flood-plain Basin	0	0	0	
6.8	Design of Storm Drains	EA	4	2	8	
6.9	Optional Culvert Material	LS	0	0	0	
6.10	French Drain Systems	Per Cell	1	8	8	One additional cell of French Drain
6.11	Drainage Wells	EA	0	0	0	
6.12	Drainage Design Documentation Report	LS	0	0	0	
6.13	Bridge Hydraulic Report	EA	0	0	0	
6.14	Temporary Drainage Analysis	LS	0	0	0	
6.15	Cost Estimate	LS	1	0	0	
6.16	Technical Special Provisions	LS	1	0	0	
6.17	Other Drainage Analysis	LS	1	0	0	

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
Drainage Analysis Technical Subtotal					16	
6.18	Field Reviews	LS	0	0	0	
6.19	Technical Meetings	LS	1	0	0	Meetings are listed below
6.20	Quality Assurance/Quality Control	LS	%	5%	1	
6.21	Independent Peer Review	LS	%	0%	0	
6.22	Supervision	LS	%	5%	1	
Drainage Analysis Nontechnical Subtotal					2	
6.23	Coordination	LS	%	2%	0	
6. Drainage Analysis Total					18	

Technical Meetings

Base Clearance Water Elevation	EA	0	0	0
Pond Siting	EA	0	0	0
RER	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
City Drainage	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				0

Progress Meetings (if required by City)	EA	0	0	0
Phase Review Meetings	EA	0	0	0

Total Meetings				0
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Carries to 6.19

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

NW 117th Ave from NW 25th St to NW 34th St
0

Task No.	Task	Units	Design and Production Staffhours				Comments					
			No. of Units	Hours per Unit	No. of Sheets	Total						
General Drawings												
9.1	Key Sheet and Index of Drawings	Sheet	0	0	0	0						
9.2	Project Layout	Sheet	0	0	0	0						
9.3	General Notes and Bid Item Notes	Sheet	0	0	0	0						
9.4	Miscellaneous Common Details	Sheet	1	4	1	4	structural information for mast arm data table (3 mast arms)					
9.5	Incorporate Report of Core Borings	Sheet	0	0	0	0						
9.6	Existing Bridge Plans	LS	0	0		0						
9.7	Assemble Plan Summary Boxes and Quantities	LS	0	0		0						
9.8	Cost Estimate	LS	0	0		0						
9.9	Technical Special Provisions	LS	0	0		0						
Structures - Summary and Miscellaneous Tasks and Drawings Subtotal					1	4						
Task No.	Task	Total	Task 10	Task 11	Task 12	Task 13	Task 14	Task 15	Task 16	Task 17	Task 18	
10-16	Bridge 1	0	0	0	0	0	0	0	0			
10-16	Bridge 2	0										
10-16	Bridge 3	0										
17	Retaining Walls	0								0		
18	Miscellaneous Structures	36									36	
Structures Technical Subtotals		36	0	0	0	0	0	0	0	0	36	

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Task No.	Task	Units	No. of Units	Hours per Unit	Total	Comments
9.10	Field Reviews	LS	1	0	0	
9.11	Technical Meetings	LS	1	0	0	Meetings are listed below
9.12	Quality Assurance/Quality Control	LS	%	5%	2	
9.13	Independent Peer Review	LS	1	0	0	
9.14	Supervision	LS	%	5%	2	
Structures Nontechnical Subtotal					4	
9.15	Coordination	LS	1	2%	1	
9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total					9	

Technical Meetings				
BDR Coordination/Review	EA	0	0	0
90/100% Comment Review	EA	0	0	0
Aesthetics Coordination	EA	0	0	0
Regulatory Agency	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
Utility Companies	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				0
Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0
6/17/2024				0

Project Activity 18: Miscellaneous Structures

Estimator: Rodrigo Zambrano, PE

NW 117th Ave from NW 25th St to NW 34th St

0

Task No.	Task	Unit	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
Concrete Box Culvert							
18.1	Concrete Box Culverts	EA	0	0	0	0	
18.2	Concrete Box Culverts Extensions	EA Extension	0	0	0	0	
Strain Poles							
18.3	Steel Strain Poles	Initial Config	0	0	0	0	
		EA Add'l Config	0	0	0	0	
18.4	Concrete Strain Poles	Initial Config	0	0	0	0	
		EA Add'l Config	0	0	0	0	
Mast Arms							
18.5	Mast Arms	EA Design	3	12		36	3 mast arms (2-NW 34 Street + 1-NW 25th Sreet)
Overhead/Cantilever Sign Structures							
18.6	Cantilever Sign Structures	EA Design	0	0	0	0	
18.7	Overhead Span Sign Structures	EA Design	0	0	0	0	
18.8	Special (Long Span) Overhead Sign Structures	EA Design	0	0	0	0	
18.9	Monotube Overhead Sign Structure	EA Design	0	0	0	0	
18.10	Bridge Mounted Signs (Attached to Superstr.)	EA Design	0	0	0	0	
High Mast Lighting							
18.11	Non-Standard High Mast Lighting Structures	EA Design	0	0	0	0	

Project Activity 18: Miscellaneous Structures

Noise Barrier Walls (Ground Mount)							
18.12	Horizontal Wall Geometry	EA Wall	0	0	0	0	
18.13	Vertical Wall Geometry	EA Wall	0	0	0	0	
18.14	Summary of Quantities - Aesthetic Requirements	Sheet	0	0	0	0	
18.15	Control Drawings	Sheet	0	0	0	0	
18.16	Design of Noise Barrier Walls Covered by Standards	EA Design	0	0	0	0	
18.17	Design of Noise Barrier Walls Not Covered by Standards	EA Design	0	0	0	0	
18.18	Aesthetic Details	LS	1	0		0	
Special Structures							
18.19	Fender System	LS	1	0		0	
18.20	Fender System Access	LS	1	0		0	
18.21	Special Structures	LS	1	0		0	
18.22	Other Structures	LS	1	0		0	
18. Structures - Miscellaneous Total					0	36	

Project Activity 19: Signing and Pavement Marking Analysis

Estimator: Alina Fernandez, PE

NW 117th Ave from NW 25th St to NW 34th St
0

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
19.1	Traffic Data Analysis	LS	1	0	0	
19.2	No Passing Zone Study	LS	1	0	0	
19.3	Reference and Master Design File	LS	1	11	11	150 hrs/mile X 0.07 miles = 11 hrs
19.4	Multi-Post Sign Support Calculations	EA	1	0	0	
19.5	Sign Panel Design Analysis	EA	1	0	0	
19.6	Sign Lighting/Electrical Calculations	EA	1	0	0	
19.7	Quantities	LS	1	4	4	
19.8	Cost Estimate	LS	1	0	0	
19.9	Technical Special Provisions	LS	1	0	0	
19.10	Other Signing and Pavement Marking	LS	1	0	0	
Signing and Pavement Marking Analysis Technical Subtotal					15	
19.11	Field Reviews	LS	1	0	0	
19.12	Technical Meetings	LS	1	0	0	
19.13	Quality Assurance/Quality Control	LS	%	5%	1	
19.14	Independent Peer Review	LS	%	0%	0	
19.15	Supervision	LS	%	5%	1	
Signing and Pavement Marking Analysis Nontechnical Subtotal					2	
19.16	Coordination	LS	%	2%	0	
19. Signing and Pavement Marking Analysis Total					17	

Project Activity 19: Signing and Pavement Marking Analysis

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
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Technical Meetings

Sign Panel Design	EA	0	0	0	0	
Queue Length Analysis	EA	0	0	0	0	
Local Governments (cities, counties)	EA	0	0	0	0	
FDOT Traffic (signals)	EA	0	0	0	0	

Subtotal Technical Meetings 0

Progress Meetings	EA	0	0	0	0	
Phase Review Meetings	EA	0	0	0	0	

Total Meetings 0

Project Activity 20: Signing and Pavement Marking Plans

Estimator: Alina Fernandez, PE

NW 117th Ave from NW 25th St to NW 34th St
0

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
20.1	Key Sheet		Sheet	1	0	1	0	
20.2	Summary of Pay Items Including TRNS•Port Input		LS	0	0	0	0	N/A
20.3	Tabulation of Quantities		Sheet	2	0	0	0	
20.4	General Notes/Pay Item Notes		Sheet	1	0	0	0	
20.5	Project Layout		Sheet	0	0	0	0	
20.6	Plan Sheet		Sheet	2	4	0	8	Plan sheet for NW 34th Street and intersection of NW 117th Avenue and NW 25 Street
20.7	Typical Details		EA	1	0	0	0	
20.8	Guide Sign Worksheet(s)		EA	1	0	0	0	
20.9	Traffic Monitoring Site		EA	0	0	0	0	
20.10	Cross Sections		EA	0	0	0	0	
20.11	Special Service Point Details		EA	0	0	0	0	
20.12	Special Details		LS	1	0	0	0	
20.13	Interim Standards		LS	1	0	0	0	
Signing and Pavement Marking Plans Technical Subtotal						1	8	
20.14	Quality Assurance/Quality Control		LS	%	5%		1	
20.15	Supervision		LS	%	5%		1	
20. Signing and Pavement Marking Plans Total						1	10	

Project Activity 21: Signalization Analysis

Estimator: Constanza Suarez, PE

NW 117th Ave from NW 25th St to NW 34th St

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
21.1	Traffic Data Collection	LS	1	0	0	
21.2	Traffic Data Analysis	PI	1	0	0	
21.3	Signal Warrant Study	LS	0	0	0	
21.4	System Timings	LS	1	12	12	Signal timing fro new signal
21.5	Reference and Master Signalization Design File	PI	2	30	60	2 Intersections at 30 hours each.
21.6	Reference and Master Interconnect Communication Design File	LS	1	0	0	Assume not interconnected
21.7	Overhead Street Name Sign Design	EA	3	3	9	3 new overhead street name signs
21.8	Pole Elevation Analysis	LS	1	3	3	2 hour for one intersection with new poles plus 1 hour for second intersection
21.9	Traffic Signal Operation Report	LS	0	0	0	
21.10	Quantities	LS	1	24	24	20 hours for first intersection, plus 4 hours for each additional intersection
21.11	Cost Estimate	LS	1	4	4	
21.12	Technical Special Provisions	LS	0	0	0	
21.13	Other Signalization Analysis	LS	0	0	0	
Signalization Analysis Technical Subtotal					112	
21.14	Field Reviews	LS	1	4	4	1 field visit, 2 staff, 2 hours
21.15	Technical Meetings	LS	1	8	8	See meetings below
21.16	Quality Assurance/Quality Control	LS	%	5%	6	
21.17	Independent Peer Review	LS	%	0%	0	
21.18	Supervision	LS	%	5%	6	
Signalization Analysis Nontechnical Subtotal					24	
21.19	Coordination	LS	%	2%	3	

Project Activity 21: Signalization Analysis

21. Signalization Analysis Total	139
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Technical Meetings

County Traffic Operations	EA	0	0	0
County Traffic Design	EA	1	2	2
Power Company (service point coordination)	EA	1	2	2
Maintaining Agency (cities, counties)	EA	1	2	2
Railroads	EA	0	0	0
Other Meetings	EA	1	2	2
Subtotal Technical Meetings				8

Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0

Total Meetings **8**

Carries to 21.15

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Project Activity 22: Signalization Plans

Estimator: Constanza Suarez, PE

NW 117th Ave from NW 25th St to NW 34th St
0

Task No.	Task	Scale	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
22.1	Key Sheet		Sheet	0	0	0	0	
22.2	Summary of Pay Items Including TRNS•Port Input		Sheet	0	0		0	N/A
22.3	Tabulation of Quantities		Sheet	1	12	1	12	2 plan sheets; then 1 tabulation sheet required - 12 hrs for first sheet
22.4	General Notes/Pay Item Notes		Sheet	1	9	1	9	9 hours for standard
22.5	Plan Sheet		Sheet	2	4	1	8	4 hours per plan sheet for midrange
22.6	Interconnect Plans		Sheet	0	0	1	0	Assume not interconnected
22.7	Traffic Monitoring Site		EA	0	0		0	N/A
22.8	Guide Sign Worksheet		EA	3	2	1	6	3 guidesigns at 2 hours per guidesign
22.9	Special Details		Sheet	2	2	2	4	pedestrian ramp views, splicing diagrams
22.10	Special Service Point Details		EA	2	4	1	8	4 Hours for service point detail x 2 service points
22.11	Mast Arm/Monotube Tabulation Sheet		PI	3	3	2	9	3 mast arms (2-NW 34 Street + 1-NW 25th Sreet)
22.12	Strain Pole Schedule		PI	0	0		0	
22.13	TCP Signal (Temporary)		EA	0	0		0	
22.14	Temporary Detection Sheet		PI	0	0		0	
22.15	Utility Conflict Sheet		Sheet	0	0		0	
22.16	Interim Standards		LS	0	0		0	
Signalization Plans Technical Subtotal						10	56	
22.17	Quality Assurance/Quality Control		LS	%	5%		3	
22.18	Supervision		LS	%	5%		3	
22. Signalization Plans Total						10	62	

Project Activity 23: Lighting Analysis

Estimator: Constanza Suarez, PE

NW 117th Ave from NW 25th St to NW 34th St

0

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
23.1	Lighting Justification Report	LS	1	0	0	
23.2	Lighting Design Analysis Report	LS	1	0	0	
23.3	Aeronautical Evaluation	LS	1	0	0	
23.4	Voltage Drop Calculations	LS	1	0	0	
23.5	FDEP Coordination and Report	LS	1	0	0	
23.6	Reference and Master Design Files	LS	1	12	12	Signalized intersection lighting to comply with Horizontal and Vertical illumination criteria
23.7	Temporary Lighting	LS	1	0	0	
23.8	Design Documentation	LS	1	0	0	
23.9	Quantities	LS	1	0	0	
23.10	Cost Estimate	LS	1	0	0	
23.11	Technical Special Provisions	LS	1	0	0	
23.12	Other Lighting Analysis	LS	1	0	0	
Lighting Analysis Technical Subtotal					12	
23.13	Field Reviews	LS	1	0	0	
23.14	Technical Meetings	LS	1	0	0	
23.15	Quality Assurance/Quality Control	LS	%	5%	1	
23.16	Independent Peer Review	LS	%	0%	0	
23.17	Supervision	LS	%	0%	1	
Lighting Analysis Nontechnical Subtotal					2	
23.18	Coordination	LS	%	2%	1	
23. Lighting Analysis Total					15	

Project Activity 23: Lighting Analysis

Technical Meetings				
County Lighting Design	EA	0	0	0
County Traffic Design	EA	0	0	0
coordination)	EA	0	0	0
Maintaining Agency (cities, counties)	EA	0	0	0
Airport authority	EA	0	0	0
FDEP Lighting (coast areas)	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				0
Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0
Total Meetings				0

Carries to 23.14

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

APPENDIX A

SUB-CONSULTANT FEE PROPOSAL FOR SCOPE OF SERVICES

GEOSOL, INC

Gannett Fleming, Inc.
800 NW 62nd Avenue, Suite No. 490
Miami, FL 33126

March 4, 2024

Attention: Mr. Alejandro Uribe, P.E., ENV SP - Project Manager

Re: **Proposal for Geotechnical Services**
Proposed Mast Arm Signalization Structures at
NW 117th Avenue and NW 34th Street
City of Doral, Florida
GEOSOL Proposal No. P-224118

Dear Mr. Uribe:

In accordance with your request on March 1, 2024, Geosol, Inc. (GEOSOL) is pleased to submit this proposal pertaining to geotechnical services for the above-referenced project. The enclosed proposal includes an estimate of the work effort and our anticipated approach, based on our understanding of the project.

PROJECT INFORMATION

As we understand it, the City of Doral plans to provide improvements along NW 117th Avenue from NW 25th Street to NW 34th Street in the City of Doral. As we understand it, the proposed improvements include the installation of mast arm signalization structures at the intersection of NW 117th Avenue and NW 34th Street. A total of two (2) Standard Penetration Test (SPT) borings will be required for the design of the proposed signalization structures.

SCOPE OF SERVICES

General

The geotechnical scope of services includes the performance of SPT borings for the proposed signalization structures. The following section provides a discussion regarding the proposed geotechnical investigation program.

Field Exploration and Laboratory Testing Programs

1. Perform site reconnaissance, locate and coordinate for existing utilities that may interfere with the drilling operations.
2. Provide traffic control in accordance with the Index 600 series of the FDOT Roadway and Traffic Design Standards.



5795-A N.W. 151st Street
Miami Lakes, FL 33014
Phone (305) 828-4367; Fax (305) 828-4235
E-mail: geosolusa@bellsouth.net

3. Perform two (2) Standard Penetration Test (SPT) borings to depths of 25 feet below existing grades for the proposed mast arm signalization structures. We understand that the test locations are accessible to a truck-mounted drill rig. Samples of the in-place materials will be recovered with a standard split barrel drive with 140-pound hammer falling 30 inches (the Standard Penetration Test after ASTM D1586). The boring will be advanced with rotary drilling methods and the borehole fully supported by temporary NX size steel casing in order to prevent loss of drilling fluids and borehole collapse.
4. Measure the groundwater levels at the test boring locations.
5. Backfill the boreholes using cement grout mix.
6. Visually examine all recovered soil/rock samples in the laboratory. A geotechnical engineer will examine all recovered soil and rock samples. The laboratory testing will include natural moisture content, grain-size analysis, percent passing #200 sieve, and organic content determination. The tests will be conducted in accordance with applicable ASTM and FDOT standards.

For location of our test, we will use the aerials provided to us that show the proposed signalization structure locations. We will use the aerials, existing landmarks and standard taping procedures to locate the testing locations in the field.

Traffic Control

The work will be coordinated to minimize the amount of traffic disruption. Flagmen, barricades, signs, cones and off-duty police officers will be used in accordance with Index 600 Series of the FDOT Roadway and Traffic Design Standards to allow for continuous traffic flow. As we understand it, many test locations will need to be performed adjacent to on-going traffic and/or lane closure. We are anticipating that many test borings will require MOT.

REPORTING

The data will be used in performing geotechnical engineering evaluations and developing foundation recommendations in the following areas:

1. Derivation of soil/rock parameters for the design of the proposed signalization structures.



Geotechnical Report

A geotechnical report will be prepared to summarize the course of the study pursued and for support of the design plans. The report will contain the field and laboratory data generated, and subsurface conditions encountered. The reports will contain the results of the SPT borings. The report will be prepared using the results of the field investigations, laboratory testing and will contain geotechnical recommendations for the design and construction of the proposed signalization structures. The report will also provide soil/rock parameters for use in the signalization structure foundation analysis and design. QA/QC checklist and report limitations will also be included as part of the report.

SCHEDULE

Our work can begin immediately upon your notice to proceed. We will begin with our services by coordinating utility clearances at the boring locations and will proceed to obtain a Right-of-Way permit from the City of Doral Public Works Department. The permit application process typically takes up to ten (10) working days. Given the scope described herein, we can complete the field study for the site within one (1) working days. The laboratory testing can be completed within a period of five (5) working days. The geotechnical reports can be completed in ten (10) working days after completion of the laboratory testing program. Therefore, we can complete the requested services in about a five (5) to six (6)-week period upon receiving Notice to Proceed. However, we will pledge our corporate resources to expedite the project schedule as much as possible.

FEES

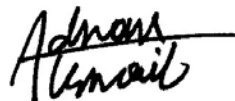
Based on our general knowledge and an interpretation of your requirements, we are willing to complete the subsurface exploration and report preparation for the subject site for a total sum of \$6,311.00. We have enclosed a detailed Fee Proposal for your review in Attachment 1.

GEOSOL appreciates your consideration of our firm to undertake this project. If you have any questions, please do not hesitate to contact us.

Sincerely,
GEOSOL, INC.



Oracio Riccobono, P.E.
Chief Geotechnical Engineer/President



Adnan Ismail, P.E.
Senior Geotechnical Engineer

Attachment 1 – Fee Proposal



ATTACHMENT 1

FEE PROPOSAL



GEOSOL, INC.
FEE PROPOSAL FOR GEOTECHNICAL SERVICES
Proposed Mast Arm Signalization Structures at NW 117th Avenue and NW 34th Street
City of Doral, Florida

GEOSOL PROPOSAL No. P-224118

<u>DESCRIPTION</u>	UNITS	# OF UNITS	UNIT RATE (\$)	TOTAL \$
<u>1. FIELD INVESTIGATION</u>				
<u>1A) FIELD ACTIVITIES</u>				
Mobilization of truck mounted rig	EACH	1.0	\$401.27	\$401.27
SPT Borings (0 ft to 50 ft), Land: 2 SPTs to 25 ft. deep for proposed Mast Arm Signalization Structures	FEET	50.0	\$22.93	\$1,146.50
Closing Holes = (total depth of SPT boring)	FEET	50.0	\$9.17	\$458.50
Sr. Engineering Technician (For Test Layout and Utility Clearances)	HOUR	6	\$101.30	\$607.80
Cones, Sign, Flags, Barricades, Arrow Board	EACH	1	\$200.00	\$200.00
TOTAL FIELD INVESTIGATION				\$2,814.07
<u>2. LABORATORY PROGRAM</u>				
Moisture Test	EACH	2	\$43.57	\$87.14
Grain Size per AASHTO T-27 including -200 wash	EACH	2	\$73.37	\$146.74
Material Finer than 200 Sieve per ASTM C-117	EACH	2	\$51.59	\$103.18
Organic Content Test/Limerock per AASHTO T-267	EACH	2	\$57.32	\$114.64
TOTAL LABORATORY PROGRAM				\$451.70
TOTAL FIELD AND LABORATORY PROGRAM				\$3,265.77
<u>3. ENGINEERING SERVICES</u>				
Chief Geotechnical Engineer	HOUR	4	\$201.46	\$805.84
Senior Geotechnical Engineer	HOUR	8	\$157.85	\$1,262.80
Project Geotechnical Engineer	HOUR	6	\$117.16	\$702.96
CADD Technician	HOUR	3	\$91.21	\$273.63
TOTAL ENGINEERING SERVICES				\$3,045.23
TOTAL GEOTECHNICAL FEES FOR PROJECT				\$6,311.00

M G Vera, INC



13960 SW 47th St, Miami, FL 33175
t: 305.221.6210 | f: 305.221.1295
www.mgvera.com

June 26, 2024

Gannett Fleming
800 NW 62nd Avenue,
Suite 490,
Miami, FL 33126

Project: NW 117th Avenue Design Survey
Project Limits: NW 34th Street extended East to NW 115th Ave., See attached Exhibit.

Dear Mr. Alina Fernandez,
MGV appreciates the opportunity to perform our surveying services on this project. Below is the scope of services for the Design Survey Services of the above referenced project. In addition to the specific scope items, all survey work will adhere to the City of Doral survey Guidelines and will comply with the Standards of Practices for Land Surveyors Rule 5J-17 F.A.C., Florida Statute 472.027. The proposed Survey Scope of work includes the following survey services:

Survey Scope of Services

This survey scope is derived with the intention of extending the existing design survey east along NW 34th St. east to NW 115th Ave. as shown on attached exhibit. The proposed Design Survey Scope of work includes the following survey task:

Horizontal Control

Secondary control will be established on the Florida State Plane Coordinate System, East Zone, and North American Datum (NAD) of 1983 / 2011 Adjustment as needed.

Vertical Control

Secondary control will be established on the NAVD 88 vertical datum as needed.

Survey Baseline

The Historic survey baseline and right of ways will be extended as per project limits.

Topographic Survey / DTM (3D) / Cross Sections

Topographic and DTM Survey will be extended along NW 34th St. east to NW 115th Ave. as shown on attached exhibit. All above ground features and improvements, break-lines, high and low points will be located with sufficient density of points in order to create a DTM. All topographic features will be located including: existing lighting, pavement markings, trees, pedestrian ramps, driveways, visible above ground utilities, sodded and paved areas, pedestrian ramps, drainage structures, etc.

Underground Utilities / Subsurface Utility Designating

Not a part of this scope of services.

Work Zone Safety

Work zone survey safety will be provided as required by applicable standards.

Cost and Man-hour breakdown

M.G.V. shall perform the Work detailed in this Proposal for a Lump Sum of one thousand nine hundred thirty dollar (\$ 1,930.00).

Survey Rates	Units	Rate	Total
Survey Field Crew (8-hr day)	1.0	\$1,350.00 / Day	\$1,350.00
Senior Surveyor & Mapper	0.0	\$150.00 / Hour	\$0.00
Surveyor & Mapper	2.0	\$110.00 / Hour	\$220.00
Survey Technician	4.0	\$90.00 / Hour	\$360.00
MGV Survey Total			\$1,930.00

We look forward to providing our services and please contact me if you have any questions or require additional information.

Sincerely,
Manuel G. Vera & Associates, Inc.



Manuel G. Vera Jr. PSM

