



VILLAGE OF KEY BISCAYNE

Office of the Village Manager

MEMORANDUM

Village Council
Robert L. Vernon, *Mayor*
Enrique Garcia, *Vice Mayor*
Michael W. Davey
Robert Gusman
Michael E. Kelly
Jorge E. Mendia
Thomas Thornton

DATE: April 27, 2010

TO: Honorable Mayor and Members of the Village Council

FROM: Genaro "Chip" Iglesias, Village Manager

Village Manager
Genaro "Chip" Iglesias

RE: WEST WOOD DRIVE TRAFFIC CALMING

RECOMMENDATION

It is recommended that the Village Council approve the proposal submitted by Tetra Tech for engineering services in the amount of \$34,407.00. The scope of work included in this proposal is for the engineering design and construction management of West Wood Drive Traffic Calming Improvements.

BACKGROUND

At the April 13th, 2010 Council Meeting Tetra Tech provided Council with three proposed plans depicting different combinations of traffic devices at four intersections. Council approved Option 2 with the following four devices:

- Speed table between Curtiswood Road and Allendale Road
- Speed table between Warren Road and Hampton Lane
- Traffic Circle at Ridgewood Road
- Decorative intersection at Fernwood with choked-down curbing and enhanced landscaping.

This project was originally packaged for bid under the West Heather Drive & West Wood Drive Traffic Calming Improvements & Sidewalk. The traffic calming portion for West Wood Drive was not installed at the time of construction in the year 2000.

The duration of this project will be accomplished within thirty nine weeks of acceptance of this proposal.

The funding for this project will be obtained from the Capital Outlay Master Plan Initiatives.

RESOLUTION NO. 2010-

A RESOLUTION OF THE VILLAGE COUNCIL OF THE VILLAGE OF KEY BISCAIYNE, FLORIDA, APPROVING WORK AUTHORIZATION FOR THE SERVICES OF THE FIRM OF TETRA TECH, INC. (“TETRA TECH”); PROVIDING FOR TETRA TECH TO CONDUCT DATA COLLECTION, CONDUCT REVIEW MEETINGS, PREPARE CONSTRUCTION DOCUMENTS, PROVIDE BIDDING SERVICES, AND PERFORM CONSTRUCTION ADMINISTRATION/INSPECTION SERVICES FOR THE WEST WOOD DRIVE TRAFFIC CALMING PROJECT; PROVIDING FOR IMPLEMENTATION; PROVIDING FOR EFFECTIVE DATE.

WHEREAS, pursuant to Resolution No. 98-34, the Village of Key Biscayne (the “Village”) has previously entered into a series of continuing contracts with engineering and architecture firms for necessary services; and

WHEREAS, the engineering, architecture and planning firm of Tetra Tech, Inc., formerly known as Williams, Hatfield, & Stoner, Inc. (“Tetra Tech”), is under a continuing contract to the Village as authorized by Resolution No. 98-34, and has provided professional services to the Village on several projects in a timely and efficient manner; and

WHEREAS, the Village finds that it is in the best interest of the Village to utilize Tetra Tech for the purpose of conducting data collection, conducting review meetings, preparing construction documents, providing bidding services, and performing construction administration/inspection services for the West Wood Drive Traffic Calming Project (the “Project”) in accordance with the attached Work Authorization and with the Village Manager’s memorandum, which accompanies this Resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE VILLAGE OF KEY BISCAIYNE, FLORIDA, AS FOLLOWS:

Section 1. Recitals Adopted. That each of the recitals stated above is hereby adopted and confirmed.

Section 2. Work Authorized, Specification of Funds. That pursuant to the existing continuing contract between Tetra Tech and the Village, the performance of additional engineering and related services (the “Engineering Services”), as described above and as described in the attached Work Authorization, dated April 29, 2010, is hereby approved and authorized for the Project, subject to the funding source and any other limitations which are set forth in the above referenced Village Manager’s memorandum.

Section 3. Work Authorization Approved.

A. That the Village Manager is hereby authorized to execute the Work Authorization, in substantially the form attached hereto, for the accomplishment of the Engineering Services which are authorized hereunder, once approved by the Village Attorney as to form and legal sufficiency.

B. That the total fees payable pursuant to the Work Authorization shall not exceed Thirty-Four Thousand, Four Hundred Seven and 00/100 (\$34,407) Dollars, unless further authorized by the Village Council.

Section 4. Implementation. That the Village Manager is hereby authorized to take any and all action which is necessary to implement the purposes of this Resolution and the Work Authorization.

Section 5. Effective Date. That this Resolution shall be effective immediately upon adoption hereof.

PASSED AND ADOPTED this 11th day of May 2010.

MAYOR ROBERT L. VERNON

ATTEST:

CONCHITA H. ALVAREZ, MMC, VILLAGE CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

VILLAGE ATTORNEY

PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES
VILLAGE OF KEY BISCAIYNE
WEST WOOD DRIVE - TRAFFIC CALMING

INTRODUCTION:

Tetra Tech (Tt) is pleased to provide professional engineering services for the above referenced project. This project was originally packaged for bid under the West Heather Drive & West Wood Drive Traffic Calming Improvements & Sidewalk. The traffic calming portion for West Wood Drive was not installed at the time of construction in the year 2000. The revised traffic calming design shall include four devices: a speed table between Curtiswood Drive and Allendale Road; a speed table between Warren Lane and Hampton Lane; a traffic circle at the intersection of Ridgewood Road; and a decorative intersection at Fernwood Road with choked-down curbing and enhanced landscaping. The scope of work for the revised design included in this proposal is as follows:

SCOPE OF SERVICES:

Task 1 – Data Gathering

Tetra tech will gather the necessary data by field verifying topographic features including trees, driveways, and landscape improvements in the area where the traffic device will be located and coordinating with Sanitary Sewer Project engineers to obtain latest as-built information.

Task 2 – Meetings

For the purpose of this proposal, Tt has budgeted to conduct two (2) review meetings with the Village during the course of preparing the design to the Traffic Calming Plans and one (1) meeting to present to the Village Council. Should the Village request any further meetings, Tt will amend this agreement as needed to cover the additional time.

Task 3 - Construction Documents

Tetra Tech will update and revise the Civil Plans and Specifications accordingly for this project. This proposal also includes preparation of Opinion of Probable Construction Cost. These plans will include the following sheets:

- | | |
|---------------------------------------|------------------|
| • Cover Sheet, Index of Drawings | (1 sheet) |
| • Traffic Device Layout | (5 sheets) |
| • Details | (2 sheets) |
| • Signing and Marking Plans & Details | <u>(1 sheet)</u> |
| Total | 9 sheets |

Task 4 – Bidding & Award Services

Tetra Tech will facilitate a pre-bid conference and the bid opening. Tetra Tech will assist the Village in evaluating the Bids and recommending a bidder to the Village.

Task 5 - Construction Services

Tetra Tech will provide construction administration and inspections for this project. These services will include being the primary contact for the Contractor and the following services:

- facilitate pre-construction meeting
- review shop drawings
- review pay requests
- respond to Requests For Information (RFI)
- regular inspections
- final inspection
- preparation of final change order

SERVICES NOT INCLUDED:

- Permitting
- Geotechnical
- Surveying

PROPOSED FEE:

Tetra Tech proposes to accomplish the work for a lump sum fee of \$34,407.00. Construction Services can be provided by Tetra Tech on an hourly basis. Our rates will be per the attached Tetra Tech billing rate schedule. The breakdown of our fee is as follows:

Task 1 – Data Gathering	\$ 1,500.00
Task 2 – Meetings	\$ 3,000.00
Task 3 – Construction Documents	\$15,907.00
Task 4 - Bid Related Services	\$ 2,000.00
Taks 5 - Construction Services	<u>\$12,000.00</u>
Total	\$34,407.00

PROPOSED SCHEDULE:

The above described work will be accomplished within 39 weeks of acceptance of this proposal with the break down as follows:

	<u>From Acceptance</u>
Task 1 - Data Gathering	30 days
Task 2 - Meetings	
Task 3 - Preparation of Construction Documents	60 days
Task 4 - Bidding	90 days
Notice to Proceed	150 days
Construction Substantially Complete	240 days
Construction Final Complete	270 days

If this proposal is acceptable to you, please sign below and return one copy to our office so that we may proceed. Thank you for the opportunity to serve you.

ACCEPTED AND AGREED

VILLAGE OF KEY BISCAZYNE

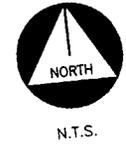
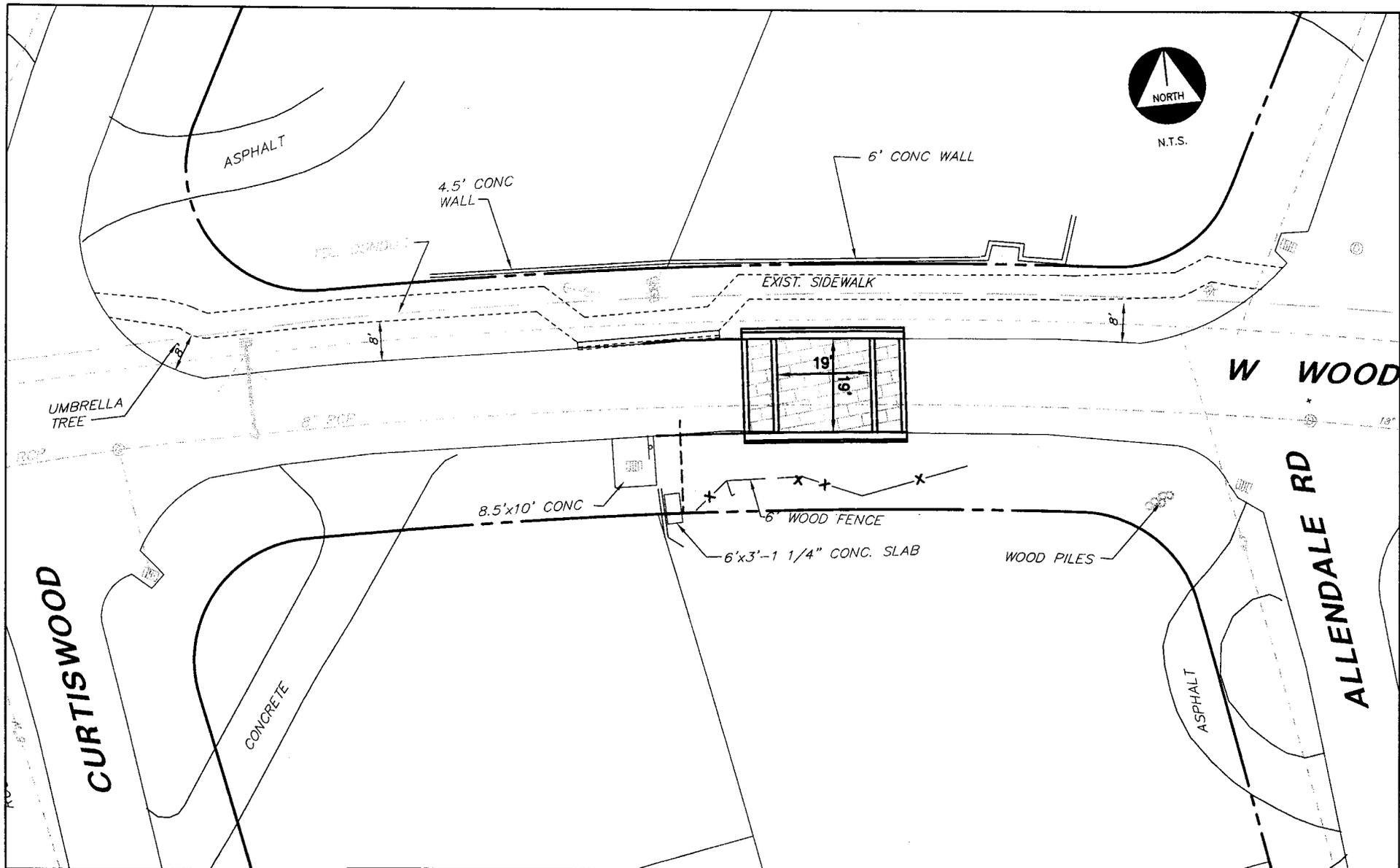
TETRA TECH

Genaro Chip Iglesias
Village Manager


Rod Cashe, P.E.
Senior Project Manager

Date: _____

Date: 4/29/2010



TETRA TECH

www.tetratech.com

7220 NW 36th STREET, SUITE 408
 MIAMI, FL 33166
 PHONE: 305-632-8321

Drawing Description
**OPTION 2-CONCEPTUAL
 SPEED TABLE**
 CURTISWOOD RD-ALLENDALE RD
 VILLAGE OF KEY BISCAYNE
 W WOOD DR TRAFFIC CALMING

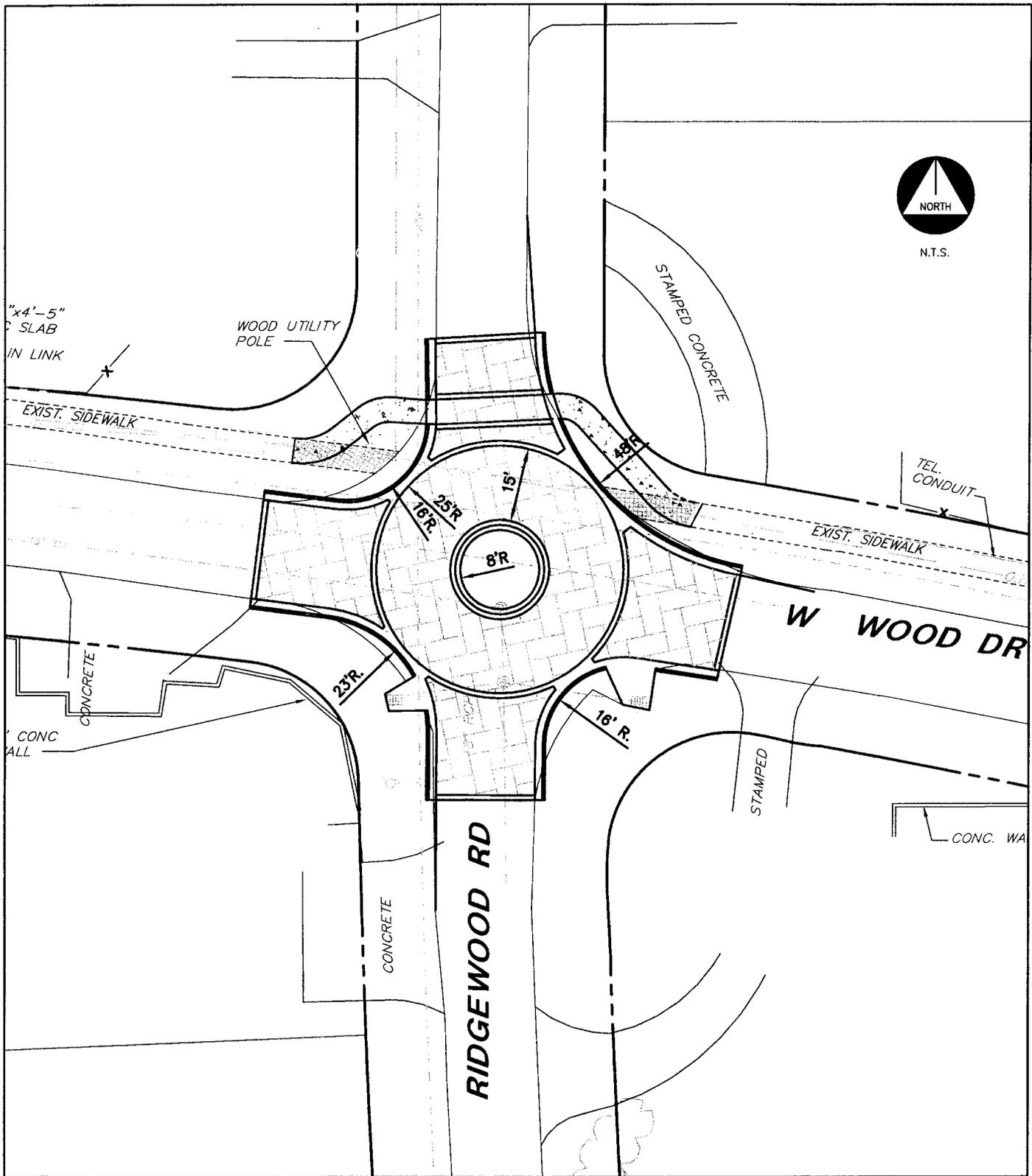
Project No.: 200-15460-10001

Date: April 29, 2010

Designed By: AMVF

Figure

1



N.T.S.

"x4'-5"
CONCRETE SLAB
IN LINK

WOOD UTILITY
POLE

STAMPED
CONCRETE

EXIST. SIDEWALK

TEL.
CONDUIT

EXIST. SIDEWALK

W WOOD DR

RIDGEWOOD RD

STAMPED

CONC. WA

CONCRETE
CONC
ALL



TETRA TECH

www.tetrattech.com

7220 NW 36th STREET, SUITE 408
MIAMI, FL 33166
PHONE: 305-632-8321

Drawing Description

**OPTION 2-CONCEPTUAL
TRAFFIC CIRCLE
RIDGEWOOD RD**

**VILLAGE OF KEY BISCAIYNE
W WOOD DR TRAFFIC CALMING**

Project No.: 200-15760-10001

Date: April 29, 2010

Designed By: AMVF

FIGURE

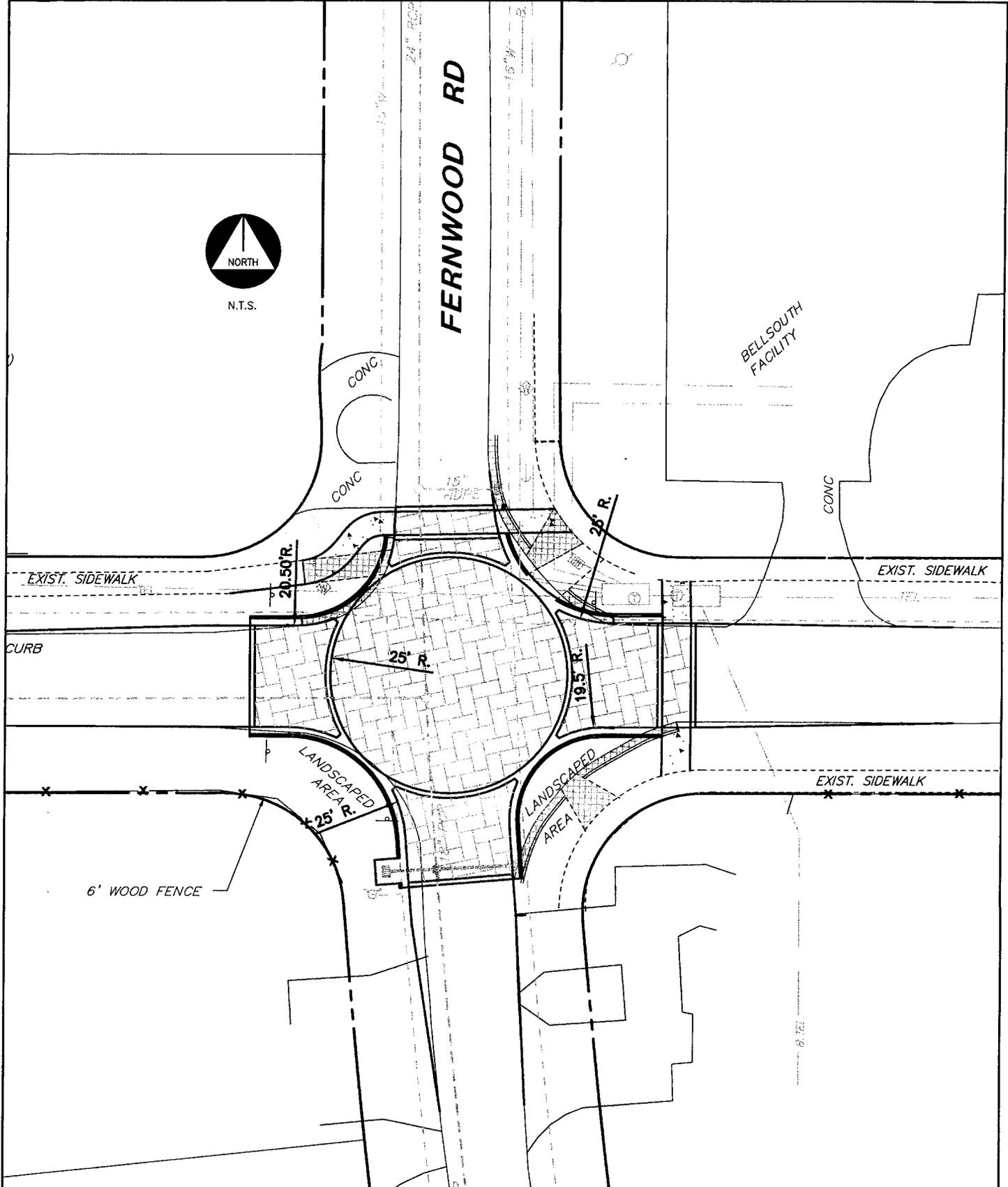
3



N.T.S.

FERNWOOD RD

BELLSOUTH FACILITY



TETRA TECH

www.tetrattech.com

7220 NW 36th STREET, SUITE 408
MIAMI, FL 33166
PHONE: 305-632-8321

Drawing Description

**OPTION 2-CONCEPTUAL
DECORATIVE CIRCLE
FERNWOOD RD**

**VILLAGE OF KEY BISCAIYNE
W WOOD DR TRAFFIC CALMING**

Project No.: 200-15760-10001

Date: April 29, 2010

Designed By: AMVF

FIGURE

4

**VILLAGE OF KEY BISCAYNE
WEST WOOD DRIVE TRAFFIC CALMING
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST SUMMARY**

WEST WOOD AND	DEVICE DESCRIPTION	2009	April 2010
Allendale Road to Curtiswood Road	Speed Table	\$33,732.00	\$31,851.00
Warren Lane to Hampton Rd	Speed Table	\$33,732.00	\$31,851.00
Ridgewood Road	Traffic Circle	\$97,240.00	\$89,035.00
Fernwood Road	Decorative Circle	\$97,446.00	\$87,447.00
Proposed Construction Cost		\$262,150.00	\$240,184.00
Landscaping		\$0.00	\$21,966.00
Engineering Design		\$24,407.00	\$24,407.00
Construction Management		\$12,000.00	\$12,000.00
TOTAL		\$298,557.00	\$298,557.00

**VILLAGE OF KEY BISCAINE
WEST WOOD DRIVE TRAFFIC CALMING
ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST**

OPTION 2 (with UPDATED COSTS)

(1 - Decorative Intersection @ Fernwood Rd, 1 - Traffic Circle @ Ridgewood Rd, 1 - Speed Table between Hampton Rd and Warren Ln, 1 - Speed Table between Allendale Rd & Curtiswood Dr)

SCHEDULE OF BID ITEMS-W. Wood Traffic Calming Improvements			Sheet C-9 Speed Table			Sheet C-10 Speed Table			Sheet C-11 Traffic Circle @ Ridgewood			Sheet C-12 Decorative Circle @ Fernwood			UPDATED COST (REVISED DESIGN)		
Item No.	Description	Unit	Estimated Quantity	Unit Cost	Total	Estimated Quantity	Unit Cost	Total	Estimated Quantity	Unit Cost	Total	Estimated Quantity	Unit Cost	Total	Estimated Quantity	Unit Cost	Total
100-1	Allowance Account	LS	0.25	\$10,000.00	\$2,500.00	0.25	\$10,000.00	\$2,500.00	0.25	\$10,000.00	\$2,500.00	0.25	\$10,000.00	\$2,500.00			
101-1	Mobilization (Traffic Calming)	LS	0.25	\$10,000.00	\$2,500.00	0.25	\$10,000.00	\$2,500.00	0.25	\$10,000.00	\$2,500.00	0.25	\$10,000.00	\$2,500.00	1	\$10,000.00	\$10,000.00
101-2	Indemnification	LS	0.25	\$25.00	\$6.25	0.25	\$25.00	\$6.25	0.25	\$25.00	\$6.25	0.25	\$25.00	\$6.25	1	\$25.00	\$25.00
101-3	Performance and Payment Guaranty & Insurance	LS	0.25	\$8,600.00	\$2,150.00	0.25	\$8,600.00	\$2,150.00	0.25	\$8,600.00	\$2,150.00	0.25	\$8,600.00	\$2,150.00	1	\$8,600.00	\$8,600.00
102-1	Maintenance of Traffic (Traffic Calming) (5%)	LS	0.25	\$25,000.00	\$6,250.00	0.25	\$25,000.00	\$6,250.00	0.25	\$25,000.00	\$6,250.00	0.25	\$25,000.00	\$6,250.00	1	\$25,000.00	\$25,000.00
110-1	Clearing and Grubbing (Traffic Calming)	LS	0.25	\$15,000.00	\$3,750.00	0.25	\$15,000.00	\$3,750.00	0.25	\$15,000.00	\$3,750.00	0.25	\$15,000.00	\$3,750.00	1	\$15,000.00	\$15,000.00
110-4	Removal of Existing Concrete Pavement	EA	0	\$10.00	\$0.00	0	\$10.00	\$0.00	50	\$10.00	\$501.48	20	\$10.00	\$195.13	0	\$10.00	\$0.00
120-1	Grading (Traffic Calming)	LS	0.25	\$15,000.00	\$3,750.00	0.25	\$15,000.00	\$3,750.00	0.25	\$15,000.00	\$3,750.00	0.25	\$15,000.00	\$3,750.00	1	\$15,000.00	\$15,000.00
160-4	12" Stabilized Subgrade	SY	5	\$13.50	\$71.25	5	\$13.50	\$71.25	38	\$13.50	\$519.74	38	\$13.50	\$518.03	87	\$13.50	\$1,160.27
200-1	Limerock Base, Primed (8" Thick)	SY	5	\$15.00	\$79.17	5	\$15.00	\$79.17	38	\$15.00	\$577.49	38	\$15.00	\$575.58	87	\$15.00	\$1,311.41
210-1	Reworking Limerock Base	SY	53	\$10.50	\$554.17	53	\$10.50	\$554.17	385	\$10.50	\$4,042.43	384	\$10.50	\$4,029.08	874	\$10.50	\$9,179.85
337-1	SP-9.5 Superpave Asphaltic Concrete (1-1/2" Thick)	TN	0	\$116.00	\$0.00	0	\$116.00	\$0.00	0	\$116.00	\$0.00	0	\$116.00	\$0.00	0	\$116.00	\$0.00
380-1A	Driveway Restoration (Asphalt) (Traffic Calming)	SY	0	\$50.00	\$0.00	0	\$50.00	\$0.00	0	\$50.00	\$0.00	0	\$50.00	\$0.00	0	\$50.00	\$0.00
380-1B	Driveway Restoration (Concrete) (Traffic Calming)	SY	0	\$62.50	\$0.00	0	\$62.50	\$0.00	0	\$62.50	\$0.00	0	\$62.50	\$0.00	0	\$62.50	\$0.00
380-1C	Driveway Restoration (Specialty) (Traffic Calming)	SY	0	\$75.00	\$0.00	0	\$75.00	\$0.00	0	\$75.00	\$0.00	0	\$75.00	\$0.00	0	\$75.00	\$0.00
526-1	Brick Pavers (Traffic Calming)	SY	53	\$55.00	\$2,902.78	53	\$55.00	\$2,902.78	385	\$55.00	\$21,174.63	384	\$55.00	\$21,104.72	874	\$55.00	\$48,084.91
400-4	Concrete, Class I (Substructure)	CY	12	\$200.00	\$2,345.68	12	\$200.00	\$2,345.68	86	\$200.00	\$17,110.81	85	\$200.00	\$17,054.32	194	\$200.00	\$38,856.48
425-1	Inlets	EA	0	\$4,000.00	\$0.00	0	\$4,000.00	\$0.00	0	\$4,000.00	\$0.00	0	\$4,000.00	\$0.00	0	\$4,000.00	\$0.00
425-2	Manholes	EA	0	\$4,000.00	\$0.00	0	\$4,000.00	\$0.00	0	\$4,000.00	\$0.00	0	\$4,000.00	\$0.00	0	\$4,000.00	\$0.00
425-4	Adjust Inlets	EA	0	\$400.00	\$0.00	0	\$400.00	\$0.00	0	\$400.00	\$0.00	0	\$400.00	\$0.00	0	\$400.00	\$0.00
425-5	Adjust Manholes	EA	0	\$570.00	\$0.00	0	\$570.00	\$0.00	3	\$570.00	\$1,710.00	3	\$570.00	\$1,710.00	6	\$570.00	\$3,420.00
425-6	Adjust Valve Boxes, Fire Hydrants, Meter Boxes and Cleanouts	EA	0	\$150.00	\$0.00	0	\$150.00	\$0.00	0	\$150.00	\$0.00	0	\$150.00	\$0.00	0	\$150.00	\$0.00
425-7	Modify Inlets	EA	0	\$500.00	\$0.00	0	\$500.00	\$0.00	0	\$500.00	\$0.00	0	\$500.00	\$0.00	0	\$500.00	\$0.00
425-8	Modify Manholes	EA	0	\$680.00	\$0.00	0	\$680.00	\$0.00	0	\$680.00	\$0.00	0	\$680.00	\$0.00	0	\$680.00	\$0.00
425-9	Convert Inlet to Manhole	EA	0	\$1,000.00	\$0.00	0	\$1,000.00	\$0.00	0	\$1,000.00	\$0.00	0	\$1,000.00	\$0.00	0	\$1,000.00	\$0.00
430-1A	Storm Sewer Pipe (15" HDPE)	LF	0	\$73.00	\$0.00	0	\$73.00	\$0.00	0	\$73.00	\$0.00	0	\$73.00	\$0.00	0	\$73.00	\$0.00
430-1B	Storm Sewer Pipe (18" HDPE)	LF	0	\$73.00	\$0.00	0	\$73.00	\$0.00	0	\$73.00	\$0.00	0	\$73.00	\$0.00	0	\$73.00	\$0.00
430-2	Additional Bidding	LF	0	\$5.00	\$0.00	0	\$5.00	\$0.00	0	\$5.00	\$0.00	0	\$5.00	\$0.00	0	\$5.00	\$0.00
520-1A	Type "E" Concrete Curb and Gutter	LF	0	\$26.00	\$0.00	0	\$26.00	\$0.00	0	\$26.00	\$0.00	0	\$26.00	\$0.00	0	\$26.00	\$0.00
520-1B	Type "E" Concrete Curb and Gutter (Reinforced)	LF	0	\$35.00	\$0.00	0	\$35.00	\$0.00	240	\$35.00	\$8,393.00	280	\$35.00	\$9,800.00	520	\$35.00	\$18,193.00
520-1C	Type "E" Concrete Curb and Gutter (Modified)	LF	0	\$23.00	\$0.00	0	\$23.00	\$0.00	60	\$23.00	\$1,380.00	60	\$23.00	\$1,380.00	60	\$23.00	\$1,380.00
520-1D	Type "D" Curb	LF	64	\$25.00	\$1,600.00	64	\$25.00	\$1,600.00	0	\$25.00	\$0.00	0	\$25.00	\$0.00	128	\$25.00	\$3,200.00
520-1E	Concrete Band (Roadway) (Colored)	LF	76	\$25.00	\$1,900.00	76	\$25.00	\$1,900.00	281	\$25.00	\$7,033.00	289	\$25.00	\$7,225.00	722	\$25.00	\$18,058.00
522-1	Concrete Sidewalk, 4" Thick	SY	0	\$35.00	\$0.00	0	\$35.00	\$0.00	31	\$35.00	\$1,071.35	37	\$35.00	\$1,286.79	67	\$35.00	\$2,358.14
575-1	Sodding (Traffic Calming)	SY	32	\$3.50	\$112.00	32	\$3.50	\$112.00	22	\$3.50	\$77.17	6	\$3.50	\$21.44	92	\$3.50	\$321.61
700-1	Traffic Signs (Permanent)	EA	4	\$325.00	\$1,300.00	4	\$325.00	\$1,300.00	12	\$325.00	\$3,900.00	8	\$325.00	\$2,600.00	28	\$325.00	\$9,100.00
700-20	Single Post Sign (< 12 SF) (Allendale)	AS	0	\$325.00	\$0.00	0	\$325.00	\$0.00	0	\$325.00	\$0.00	0	\$325.00	\$0.00	0	\$325.00	\$0.00
706-1	Reflective Pavement Markers	EA	14	\$5.65	\$79.10	14	\$5.65	\$79.10	56	\$5.65	\$316.40	18	\$5.65	\$101.70	102	\$5.65	\$576.30
711-1	Thermoplastic Marking	SF	0	\$2.00	\$0.00	0	\$2.00	\$0.00	160	\$2.00	\$320.00	160	\$2.00	\$320.00	320	\$2.00	\$640.00
948-1A	4" Schedule 40 PVC Pipe	LF	0	\$8.00	\$0.00	0	\$8.00	\$0.00	0	\$8.00	\$0.00	0	\$8.00	\$0.00	0	\$8.00	\$0.00
Total Base Bid					\$31,850.39			\$31,850.39			\$89,034.75			\$87,446.06			\$240,181.59

Note: Unit costs are based on FDOTs Basis of Estimates 12-month Average Cost for Area 13 = Miami-Dade Count

Approximately 4% mark-up per year for 10 years = 40%
 New Item
 Stormwater related items - installed under Water & Sewer Project