WORK AUTHORIZATION

CSID WA No. 118 Globaltech No. 155102

Pursuant to the provisions contained in the "Contract for Professional Engineering Consulting and Design-Build Services on a Continuing Contract Basis " between the <u>CORAL SPRINGS IMPROVEMENT DISTRICT</u>, hereinafter referred to as "OWNER", and <u>Globaltech, Inc.</u>, hereinafter referred to as "FIRM", dated <u>July 1</u>, <u>2012</u> (hereinafter referred to as "AGREEMENT"), this Work Authorization authorizes the FIRM to provide services under the terms and conditions set forth herein and in the AGREEMENT, which is incorporated herein by reference as though set forth in full.

The OWNER desires design-build services related to the <u>CSID/Margate</u> <u>Interconnect</u>, hereinafter referred to as the "Specific Project".

Section 1 – Terms

FIRM shall be defined as an individual, corporation or contractor having a direct contract with the OWNER or with any other subcontractor in the performance of a part of the work contracted for under the terms of this Work Authorization with the OWNER.

Section 2 – Scope of Work

The OWNER and the City of Margate (Margate) have agreed to construct a potable water interconnect. The interconnect will connect the OWNER's 8-inch water main in the intersection of Shadow Wood Blvd. and NW 82 Ave. (east end of Shadow Wood Blvd.) with Margate's 12-inch water main at the intersection of W. Margate Blvd. and NW 80 Ter. (west end of Margate Blvd.). The interconnect will require a directionally drilled crossing under the Sunshine Water Control District (SWCD) East Outfall Canal (EOC). The costs of this work will be split between the OWNER and Margate. The FIRM's contract will only be with the OWNER.

Task 1 – Engineering Services

This task includes project management and engineering services required to complete the project.

Engineering and Project Management

- 1. Attend preliminary scoping meetings with the OWNER to assist in site selection, preliminary design parameters and overall scope.
- 2. Conduct Kick-Off meeting with the OWNER and Margate to review the preliminary design parameters and overall project activity and schedule.
- 3. Collect pre-construction video and photographs of the construction areas and the adjacent properties.
- 4. Locate existing utilities within the work area.
- 5. Develop a site plan of the work area using a licensed surveyor.
- 6. Coordinate work with the OWNER and Margate. This task will include development of traffic plans/MOT for lane and road closure.
- 7. Meet with the OWNER to review the preliminary design parameters and overall project activity and schedule.
- 8. Pre-application meetings with Broward County Health Department (BCHD) and SWCD.
- 9. Prepare preliminary design drawings and submit five (5) sets to the OWNER and five (5) sets to Margate. Drawings will be provided in half-size (11"x17") format. Anticipated drawings include the following:
 - a. Cover/Site Location
 - b. General Mechanical/Civil Sheet
 - c. Site Plan/Piping Plan
 - d. Pipe Profile
 - e. Interconnect and Vault Details
 - f. Mechanical Details
 - g. Miscellaneous Details
 - h. Standard Details

- 10. Meet with the OWNER, along with Margate, at the same meeting, to discuss the preliminary design review comments.
- 11. Incorporate the preliminary design review comments into a final design drawing set. Submit five (5) sets of final design half-size drawings to the OWNER and Margate.
- 12. Prepare and submit permits to the BCHD, SWCD, Margate and the City of Coral Springs. Close out permits at the end of the project.
- 13. Prepare detailed construction schedule to include as a minimum; design, site mobilization, detailed construction activities, scheduled shut downs and durations, equipment/material delivery times, testing, and startup and commissioning.
- 14. Coordinate material and equipment purchase and subcontractors.
- 15. Review, administer, and track equipment submittals.
- 16. Schedule and conduct meetings, inspections, and testing with OWNER's staff and Margate.
- 17. Attend progress meetings and coordination meetings
- 18. Oversee construction activities enforcing the conditions of the design.
- 19. Conduct Substantial Completion inspection. Develop punch-list items in association with OWNER and Margate.
- 20. Conduct Final Completion inspection meeting and site walk through with OWNER and Margate.
- 21. Collect post-construction photographs and video following Final Completion inspection.
- 22. Prepare record drawings. Record drawings will include as-built elevations and coordinates of fittings, vault corners and manhole lids as collected by a licensed surveyor. Record drawings will be delivered to both the OWNER and Margate in AutoCAD file format, Adobe PDF, and three (3) copies of 11" X 17" half-size drawings.

Task 2 – Construction Services

This task entails constructing the new interconnect. The work, in general consists of the following:

- 1. Implement the traffic plans/MOT's as required.
- 2. Install 8" x 8" tapping saddle with tapping gate valve on the 8" CSID water main in the intersection of Shadow Wood Blvd. and NW 82 Ave.
- 3. Install 8" C-900 PVC pipe (with cement-lined DIP fittings) from the tapping saddle to the end of the 10" HDPE canal crossing pipe. A second 8" gate valve and sample tap will be installed within 3' of the tapping saddle/gate valve for pressure testing and bacteriological clearing purposes. Install a fire hydrant on this section of piping.
- 4. Install 10" HDPE pipe (SDR 11), via directional drilling, under the EOC. It is anticipated that the directional drill will be approximately 385' long and the entrance/exit pits will be located in the swale on the south side of Shadow Wood Blvd about 60' east of NW 82 Ave and in the middle of the east-bound lanes of Margate Blvd. about 20' west of NW 80 Ter. Install MJ adapters at each end of the installed HDPE pipe, one MJ adapter will be butt-fused and the other will be connected using a fusion coupling.
- 5. Install air relief valves in manholes at each end of the canal crossing. The manhole on Shadow Wood Blvd. will be in the swale and the manhole on Margate Blvd. will be in the island in the street median.
- 6. Install 8" cement-lined DIP from the end of the HDPE pipe to the interconnect vaults. This will require looping back to the west since the directional drill installation will extend beyond the tie-in point.
- 7. Install two sets of interconnect vaults with two sets of strainers, turbine flow meters, check valves and isolation valves to allow sending water to either utility. The interconnect vault piping will be ductile iron. The flow meters will be reduced diameter and local readout only. The vaults will be installed in the swale on the south side of Margate Blvd., west of NW

- 80 Ter. The H-20 (traffic-rated) vaults will be equipped with 2-piece lockable aluminum hatches with spring assisted lids. The vaults will be approximately 6' x 6' x 4.5' deep with a cored hole in the bottom to allow drainage.
- 8. Install 8" cement-lined DIP from the west end of the interconnect vaults to the tie-in location on the 12" Margate water main. Install an 8" gate valve within 3' of the tie-in location and a fire hydrant on the 8" piping. Install 12" x 8" reducer and connect to Margate 12" water main using 12" sleeve.
- 9. Install water main sampling stations upstream and downstream of the interconnect vaults. The sampling stations shall be above ground (similar to Kupferle Foundry Model No. 88S), lockable and EPA approved. Four 4" diameter concrete bollards will be placed around each sampling station.
- 10. Disinfect the new interconnect. The OWNER will collect the samples and perform the bacteriological testing.
- 11. Open trenches/excavations will be filled at the end of each day. The fill for the excavations in the road on Shadow Wood Blvd. will be compacted at the end of each day. The filled excavations on Margate Blvd. will not be compacted each day, but they will be protected by barricades.
- 12. Disconnect the existing 8" stub on the north side of Shadow Wood Blvd., east of NW 82 Ave. Install an 8" restrained plug on the remaining water main. Fill the abandoned 8" pipe section with grout.
- 13. Install silt barriers to limit construction runoff into the canal during construction.
- 14. Repair private irrigation lines damaged during construction.
- 15. Install sod to match existing. The FIRM will provide up to 14 half-days of labor, to water the new sod within a three (3) week time span. Watering will be every day during the first week. The FIRM will provide two fire hydrant flow meter/back flow preventers and connect them to the nearby fire hydrants to provide the water for irrigation.

Assumptions

Assumptions for the project are as follows:

- An allowance of \$20,000 is included with this project. Allowance is only
 to be accessed with OWNER's written approval. Unused portion of
 allowance to be credited back to OWNER. Allowance is in place for use
 at the OWNER's discretion for additional work or for unforeseen
 conditions.
- Working hours will be Monday through Friday from approximately 8:00
 AM until 5:00 PM.
- All joints, including bell-ends, will be mechanically restrained.
- No power or telemetry will be provided.
- No easements will be required.
- The existing valves operate satisfactorily and will hold back water during construction.
- OWNER will pay the permit fees.

Section 3 – Location

The services to be performed by the FIRM shall be from the intersection of Shadow Wood Blvd. and NW 82 Ave. (east end of Shadow Wood Blvd.) to the intersection of Margate Blvd. and NW 80 Ter. (west end of Margate Blvd.) crossing under the SWCD EOC.

Section 4 – Deliverables

The FIRM will provide the following Deliverables to OWNER and Margate:

- Pre and post-construction video and still pictures of adjacent properties
- Preliminary and final design drawings.
- Submittals for materials/equipment.
- Construction Improvements
- Record Drawings of Improvements

Section 5 - Time of Performance

Project will commence after execution of this Work Authorization and a Notice to Proceed is issued by OWNER. The FIRM and OWNER agree to the following schedule:

Task	Time Elapsed to Completion
Notice to Proceed (NTP)	0 Days
Preliminary Design	90 Days after NTP
Final Design	150 Days after NTP
Permitting	180 Days after NTP
Construction of Improvements	270 Days after NTP

Section 6 – Method and Amount of Compensation

- The FIRM shall be paid by the OWNER in accordance with the Florida's Prompt Payment Act Florida Statute 218.70-79 and in accordance with the payment method as set forth in Section 6 of the AGREEMENT. The calculations shall begin using the date the invoice was received.
- 2. Total job price: **\$480,456.00.** Price includes bonding and an allowance of \$20,000.00. Included in the total price is \$9,376.00 for abandoning the old 8" stub line on the north side of Shadow Wood Blvd., east of NW 82 Ave.
- On the terms contained in the FIRM's said proposal for the doing of said work and the said award therefore, and the specifications herein specifically referred to and made a part of this contract.
- 4. The cost for the above scope of services is a lump sum (LS). The LS is based on the materials, methods, and assumptions presented in the scope of services and may be adjusted based on final detail design and alternative selections or omissions. The LS shall not be greater than the stated amount unless there is an approved increase in the scope of services.
- 5. A Budget Summary for the above LS is provided in Attachment A.

Section 7 – Application for Progress Payment

1. Unless otherwise prescribed by law, at the end of each month, the FIRM shall submit to the OWNER for review, an Application for Progress Payment filled out and signed by the FIRM covering the Work completed as of the

- date of the Application and accompanied by such supporting documentation as is required by the AGREEMENT.
- 2. The Application for Progress Payment shall identify the amount of the FIRM Total Earnings to Date based upon value of original contract Work performed to date as approved by fully executed Change Orders.
- 3. Payment shall be based upon percentage of work completed based upon the approved schedule of values. Retainage in the amount of 10% will be withheld on the calculated value of any work, with the exception of stored materials which may be paid at the supplier's invoiced cost. At FIRM's request, after 50% completion of the work has been achieved, the OWNER will implement a reduction in retainage to 5% of all future pay requests. If retainage is reduced, FIRM may not withhold more than 5% retainage from subcontractors or suppliers and will be required to certify compliance with F.S. 218.70 et seq on each subsequent pay application. Notwithstanding the foregoing, in no instance can the amount retained be less than the value of OWNER's good faith claims plus the value of the work the OWNER determines remains to be put in place or required to be performed as remedial activities. For the purposes of this section, 50% completion shall be that point in time when OWNER determines that half of the Work required by the Contract has been completed. In no event shall the Work be determined to be 50% completed before the OWNER has paid 50% of the Contract amount and 50% of the Contract time has expired. The amount of previous Pay Estimate payments shall then be subtracted to equal the Balance Due during the Pay Estimate period.
- 4. When the OWNER reduces the retainage to five percent (5%), FIRM must obtain the written consent of the Surety Companies furnishing the required Public Construction Bond on consent forms provided by the OWNER. The OWNER may reinstate the retainage up to ten percent (10%) if the OWNER determines, at its discretion, that the FIRM is not making satisfactory progress toward final completion of the Work or where there is other specific cause for such withholding.

- 5. Partial payment may be made for the delivered cost of stored materials planned for incorporation into the Work, provided such materials meet the requirements of this Contract, the Contract Drawings, and the Specifications, and are delivered and suitably stored at the project site, or at another location acceptable to the OWNER. Such material must be stored in a secure manor acceptable to the OWNER, and in accordance with the manufacturer's recommendations.
- 6. The delivered cost of such stored or stockpiled materials may be included in any subsequent application for payment provided the FIRM meets the following conditions:
 - a. An applicable purchase order or supplier's invoice is provided listing the materials in detail, the cost of each item, and identifies this specific contract by name.
 - The materials are fully insured against loss or damage (from whatever source) or disappearance prior to incorporation into the Work.
 - c. Stored materials approved for payment by the OWNER shall not be removed from the designated storage area except for incorporation into the Work.
 - d. Evidence that the FIRM has verified quantity and quality of the materials delivered (verified packing list).
 - 7. It is further agreed between the parties that the transfer of title and the OWNER's payment for any stored or stockpiled materials pursuant to these General Conditions, and any applicable provisions of the Supplementary General Conditions, shall in no way relieve the FIRM of the responsibility of ensuring the correctness of those materials and for furnishing and placing such materials in accordance with the requirements of this Contract, the Contract Drawings, the Technical Specifications, and any approved changes thereto.
 - 8. The following monthly Application for Progress Payment shall be accompanied by Bills of Sale, copies of paid invoices, releases of lien,

- or other documentation warranting that the FIRM has received the stored materials and equipment free and clear of all liens, charges, security interests, and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the stored materials and equipment are covered by appropriate property insurance and other arrangements to protect the OWNER's interest therein, all of which shall be satisfactory to the OWNER.
- 9. The FIRM shall warrant and guarantee that title to all Work, materials, and equipment covered by an Application for Progress Payment, whether incorporated in the Work or not, will pass to the OWNER no later than the time of Final Payment free and clear of all liens or other encumbrances.
- 10. Progress Payments shall be made in accordance with the Local Government Prompt Payment Act. In the event any dispute with respect to any payment or pay request cannot be resolved between the FIRM and OWNER's project staff, FIRM may, in accordance with the alternative dispute resolution requirements of Florida Statute section 218.72, et seq, demand in writing a meeting with and review by the OWNER'S (agency) director. In the absence of the agency director, a deputy director may conduct the meeting and review. Such meeting and review shall occur within ten (10) business days of receipt by OWNER of FIRM's written demand. The OWNER's manager, shall issue a written decision on the dispute within ten (10) business days of such meeting. This decision shall be deemed the OWNER's final decision for the purposes of the Local Government Prompt Payment Act.
- 11. The OWNER may refuse to make payment of the full amount because claims have been made against the OWNER on account of the FIRM's performance of the Work, or because Liens have been filed in connection with the Work, or there are other items entitling the OWNER to a credit against the amount recommended, but the OWNER must give the FIRM written notice within twenty (20) business days after the date

on which the invoice is stamped as received which specifies the invoice deficiency and any action necessary to make the invoice complete and proper.

Section 8 – Responsibilities

The FIRM shall, under no circumstance, look to the OWNER to provide any labor or equipment for the FIRM. The FIRM shall provide all of the labor and equipment necessary to perform the job or services contracted for at the expense of the FIRM. Property of any kind that may be on the premises, which are the site of the performance of this contract, during the performance of this Work Authorization, shall be at the sole risk of the FIRM.

- **8.1** The OWNER hereby designates <u>David McIntosh</u> as the OWNER's representative.
- **8.2** In addition to applicable provisions of Section 2 of the AGREEMENT, the OWNER will:
 - Provide copies of existing drawings and equipment cut sheets if requested by FIRM
 - Pay for any required permit fees

The FIRM acknowledges and understands that it is an independent contractor in its relationship with the OWNER. The FIRM hereby designates <u>David Schuman</u> as the FIRM's representative.

Section 9 – Insurance

The FIRM shall provide certificate of insurance to the OWNER setting forth the type and amount of insurance carried by the FIRM and conforming to the minimum requirements set forth in the AGREEMENT.

Section 10 - Level of Service

The OWNER shall have the right to terminate said Agreement by giving the FIRM thirty (30) days written notice if the service that is being provided is not maintained

at levels necessary to provide the required service. The OWNER will determine in its sole judgment what constitutes a satisfactory level of service.

Section 11 - Indemnification

The Firm shall indemnify and hold harmless the Owner and its officers and employees as set forth in Section 11 of the Agreement.

IN WITNESS WHEREOF, this Work Authorization, consisting of <u>thirteen (13)</u> pages and Attachment A has been caused fully executed on behalf of the FIRM by its duly authorized officer, and the OWNER has the same to be duly name and in its behalf, effective as of the date herein above written.

CORAL SPRINGS IMPROVEMENT DISTRICT

Signature of Witness	Signature of President
	Dr. Marty Shank .
Printed name of Witness	Printed Name of President
	Date
	Approved as to form and legality
	District Counsel
	FIRM
State of Florida	
County of Palm Beach	Globaltech, Inc
	Company
The foregoing instrument was	
acknowledged before me on this	
day of, 2016 by	Signature
who is personally known to me OR	Troy Lyn, P.E., Vice President
produced	Name and Title (typed or printed)
as identification.	
Signature of Notary	Date

Attachment A

Budget Summary

ATTACHMENT A

Engineering - CSID/Margate Interconnect

Engineering Budget Summary

	Officer	E6	E4	CADD	Adm 3	Adm 1		Expense/ Subconsul. Fee	Expense/ Subconsul.
Task Description	\$210.00	\$175.00	\$150.00	\$85.00	\$75.00	\$50.00	Total Labor		
ngineering - Design									
roject Coordination and Review		24			8	4			
coping Meeting w/site visit		16							
ollect Existing Information			12						
urvey		4	4					\$ 3,500.00	Avirom
ocates			4					\$ 2,500.00	Inframap
reliminary Design		40	50	90					-
inal Design		32	32	64					
ermitting		8	32						
eview Meetings (2)		12	12						
Outstand Tools	0	400	4.40	454			* 50 500 00		
Subtotal Task 2	0	136	146	154	8	4	\$ 59,590.00		
DC									
ubmittals		2	16			2			
ite Inspections (4)		8	12						
larifications		8	8						
s Built Survey		4	4	8				\$1,750	Avirom
ecord Drawings		2	16	16		2			
ermit Closeout		2	12						
Subtotal Task 3	0	26	68	24	0	4	\$ 16,990.00		
abor Subtotal Hours	0	162	214	178	8	8	Ψ 10,000.00		
abor Subtotal	\$0	\$28,350	\$32,100	\$15,130	\$600	\$400	· ·		
Labor Total							\$ 76,580.00		
ubconsultant Labor Total								\$ 7,750.00	
ubconsultant Multiplier								1.12	
ubcontract Total								\$ 8,680.00	
PRO IECT TOTAL								\$ 85.260.00	
ubcor	nsultant Multiplier	nsultant Multiplier ntract Total	nsultant Multiplier ntract Total	nsultant Multiplier ntract Total	nsultant Multiplier 1.12 ntract Total \$ 8,680.00				





To: Coral Springs Improvement Dist 10300 NW 11th Manor Attn: Ken Cassel Coral Springs FL 33071 **Project:** 155102

CSID Margate Interconnect 10300 NW 11th Manor Attn: Ken Cassel Coral Springs FL 33071

	Plans Attached
Client Job No.:	Specifications Attached
1 General Conditions	
Temporary Facilities	
Job Site Trailer	2,438.0
Sanitary	585.1
Job Site Office Supplies	243.8
Waste Hauling	2,925.6
General Conditions	
Submittal Labor	2,770.4
O&M	2,770.4
Progress Meeting	2,281.1
Scheduling Labor	1,846.9
Construction PM	12,005.1
Construction Superintendent	8,071.9
Purchasing & Subcontracts	1,846.9
Safety	554.0
Safety Equipment	1,219.0
Building Permit Application	2,770.4
Office Admin	1,010.5
2 Sitework	Item Total: 43,339.4
Mobilization	
Construction PM	738.7
Construction Superintendent	645.7
3 man Crew	2,501.9
Locates	1,980.0
Trenching, Backfilling, and Compaction	.,,555.6
ARV Manhole	6,060.3
Meter Station	9,090.4
C-900 Piping Trench	6,060.3
Irrigation Repair	609.5
Irrigation Repair Labor	1,250.9

Stone/Fill Seed & Sod Installation Watering Sod Asphalt Startup Crew		4,876.00 3,047.50 3,030.15 6,694.21 11,000.00 1,250.97
Punch Out Crew		2,501.95
Demob		
Construction PM		738.78
Construction Superintendent		645.75
3 man Crew		2,501.95
	Item Total:	65,225.26
3 Concrete	item rotai.	05,225.20
Grout & Abandon Exiting Pipe		
Cast In Place Concrete		451.03
MJ Plug & Megalug		121.90
Compactor 5000-7000LB		548.55
Backhoe		1,462.80
Equipment Fuel		121.90
Seed & Sod		609.50
Cut & Plug Existing Piping		4,545.23
Grout Installation		1,515.08
Grout Manholes & Vaults		
Grout & Misc Material		1,219.00
Installation		2,501.95
		•
4' Diameter Manhole		2,328.29
5' Diameter Manhole		6,241.28
Vault		17,434.14
Vault & Manhole Delivery		575.00
Comb & Cideouglic Densin		
Curb & Sidewalk Repair Form & Materials		1,219.00
Cast In Place Concrete		2,255.15
Concrete Pump		609.50
Installation		4,545.23
5 Misc Metals	Item Total:	48,304.53
		2,438.00
Misc Metals, Supports & Fasteners		2,438.00
···	Item Total:	2,438.00
9 Finishes		
Coatings		609.50
Installation		2,501.95
	Item Total:	3,111.45
15 Mechanical		·
8"X8" Tapping Valve & Sleeve		3,128.61
Hot-Tap Installation (RangeLine)		1,100.00
Installation		4,545.23
SCH 80 PVC Pipe & Ftgs		2,438.00

DI Pipe & Fittings Tapping Saddle Flange Kits & Misc Materials Fire Hydrant & Fittings Isolation Valve 8" Check Valve Water Meter & Strainer ARV Assembly W/ Inflow Preventer Directional Drilling Pipe Supports Installation Bollards Coatings	20,803.67 316.94 1,462.80 8,533.00 6,788.16 9,656.60 12,122.02 4,500.26 40,876.00 3,169.40 36,361.80 3,900.80 182.85
Sampling Station SS Pipe Ftgs	1,548.13 609.50
Installation	3,030.07
Item Total: 18 Rental Equipment	165,073.84
Excavator	2,681.80
Backhoe	10,239.60
10,000lb Traversing Fork Lift	5,912.15
Compactor 5000-7000LB	1,097.10
Road Plates & Signs	6,095.00
Traffic Planning, MOT, Silt Fence	3,897.60
Pump & Hose (Dewatering)	1,219.00
Consumables	2,438.00
Equipment Fuel	609.50
25 Allowance Item Total:	34,189.75
Allowance	20,000.00
Utem Total: 50 Engineering/Record Drawing	20,000.00
Engineering	85,260.00
<u> </u>	
60 Bonds, Insurance & Certification	85,260.00
Bonds & Certifications	11,818.83
Builders Risk Insurance	1,695.53
Item Total:	13,514.36
Total Estimate Amount:	480,456.62