

**PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS**

AGENDA ITEM SUMMARY

Meeting Date: October 6, 2009

Consent

Regular

Workshop

Public Hearing

Department

Submitted By: Environmental Resources Management

Submitted For: Environmental Resources Management

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to receive and file: Three (3) original Documents for the Department of Environmental Resources Management:

A) Task Assignment No. 9 from the Florida Department of Environmental Protection for petroleum contamination site cleanup services for six (6) months on 171 petroleum contaminated sites.

B) Florida Fish & Wildlife, Aquatic Vegetation Control Services Task Assignment Number AP8.

C) Construction Purchase Order for Limestone Creek Phase I Weir Repair Project No. 2009ERM05.

Summary: This is a Receive and File item for the Clerk's Office to note and receive delegated authority items according to County Policy and Procedure PPM No. CW-O-051. Countywide (SF)

Background and Justification: N/A

Attachments:

1. Task Assignment No. 9 from the Florida Department of Environmental Protection.
2. Florida Fish & Wildlife, Aquatic Vegetation Control Services Task Assignment Number AP8.
3. Construction Purchase Order for Limestone Creek Phase I Weir Repair Project No. 2009ERM05.

Recommended by: Richard E. Washby 9/10/09
 Department Director Date

Approved by: [Signature] 9/10/09
 County Administrator Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2009	2010	2011	2012	2013
Capital Expenditures	_____	_____	_____	_____	_____
Operating Costs	_____	_____	_____	_____	_____
External Revenues	_____	_____	_____	_____	_____
Program Income (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
NET FISCAL IMPACT	*	_____	_____	_____	_____
# ADDITIONAL FTE POSITIONS (Cumulative)	_____	_____	_____	_____	_____

Is Item Included in Current Budget? Yes _____ No _____
 Budget Account No.: Fund _____ Department _____ Unit _____ Object _____
 Program _____

B. Recommended Sources of Funds/Summary of Fiscal Impact:

*No Fiscal Impact.

C. Department Fiscal Review:

JF

III. REVIEW COMMENTS

A. OFMB Fiscal and /or Contract Dev. and Control Comments:

[Signature]
 OFMB *[Handwritten notes: 9/15/09, 9/15/09, 9/15/09]*

[Signature] 9/18/09
 Contract Development and Control

B. Legal Sufficiency:

[Signature] 9-22-09
 Assistant County Attorney

C. Other Department Review:

 Department Director

ATTACHMENT C-1

CO C-#6598
R2001-0941

TASK ASSIGNMENT NOTIFICATION FORM

FDEP Contract Number: GC 629 Task Assignment #: 9
 Contractor Name: Palm Beach County Environmental Resource Management
 Contract Manager: Dave Gibson Phone #: 561/233-2483
 FDEP Contract Manager: Grace Rivera Phone #: 850/245-8882

Task Description: (use additional pages if necessary)

Perform petroleum contamination site cleanup services for 6 months on 171 petroleum contaminated sites as described in Attachment A-1, Scope of Services of DEP Contract GC 629.

SEE ENCLOSED ATTACHMENT E-1 FOR FEE SCHEDULE CALCULATION

Deliverable: Completion of all activities, documents, letters, data entry, etc, per Scope of Services listed in Attachment A-1 of FDEP contract GC 629.

Task Assignment Type: Amount Not To Exceed Task Performance Period: July 1, 2009 to December 31, 2009

Fee Schedule: \$233,796.60

Total Task Assignment Value: \$233,796.60

Organization Code	E.O.	Object Code	Module	Special Category	Fiscal Year	Budget Representative Approval
37450404000	GP	750010	4713	104138	09/10	<i>Schuyette 7/13/09</i> <i>S. Lee 7/13/09</i>

Revised Attachment H-4, Exhibit-1, attached to this document

<u><i>[Signature]</i></u> FDEP Contract Manager	<u>7/8/09</u> Date
<u><i>[Signature]</i></u> Cost Center Administrator	<u>7/8/09</u> Date
<u><i>[Signature]</i></u> Bureau Chief	<u>7/8/09</u> Date
<u><i>[Signature]</i></u> Contractor Representative	<u>7/17/09</u> Date

cc: Ruth Heggen, Contracts Section (MS 93)
 Bureau of Petroleum Storage Systems, Accountant
 Finance and Accounting, Contracts Disbursements Section (MS 78) - 2 copies

Task Assignment Calculation Spreadsheet

Palm Beach County Task Assignment #: 9 Fiscal Year: 09/10
 Number of Sites: 171 Standard Multiplier: 54.17%

	ES II	PE/PG	Clerical	Admin	Addl Personnel	Total Bare Labor Cost Per Site	Total Loaded Labor Cost Per Site
Hours/Site	40	11.50	10	4			
Salary	\$ 26.75	\$ 33.56	\$ 20.24	\$ 49.20		\$ 1,855.14	\$ 2,860.07

Number of Site Managers (# sites*hours/site)/2080 ES II: 3.29 PE: 0.95 Total: 4.23

Travel (one trip/site manager + 1 [min 5 trips])

Cost per trip \$ 400.00
 # of Trips 5.00
 Travel Total \$ 2,000.00

Vehicle (2.5 site managers/vehicle [max 3 vehicles])

Monthly Cost per Vehicle \$ 300.00
 # of Vehicles 2.00
 Vehicle Total \$ 7,200.00

O&M inspector (1inspector /300 sites+ 1 vehicle)

Inspector \$ 17.64
 Hours 1,186
 Bare Salary \$ 20,913.98
 Inspector Salary \$ 32,243.09
 Vehicle
 O&M inspector Total \$ 32,243.09

Task Assignment Amount		
	Per site	Total
<input checked="" type="checkbox"/> Labor	\$ 2,860.07	\$ 489,071.86
<input checked="" type="checkbox"/> Travel		\$ 2,000.00
<input checked="" type="checkbox"/> Vehicle		\$ 7,200.00
<input checked="" type="checkbox"/> O&M	\$ 188.56	\$ 32,243.09
	\$ 3,048.63	
TA amount:		\$ 530,514.95

Non Program sites 88
 Cost per site \$2,860.07
 1/4 reduction \$715.02
 Reduction Non Program \$62,921.76

\$ 530,514.95
 (\$62,921.76)
 TA Total 1 year \$ 467,593.19
TA TOTAL 6 months \$ 233,796.60

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EXHIBIT - 1

FUNDS AWARDED TO THE RECIPIENT PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

State Funds Awarded to the Recipient Pursuant to this Agreement Consist of the Following Funds Subject of Section 215.97, F.S.:						
State Program Number	Funding Source	State Fiscal Year	Catalog of State Financial Assistance Number	CSFA Title or Funding Source Description	Funding Amount	State Appropriation Category
Original Agreement	Inland Protection Trust Fund Line Item #1767	2001/2002	37024	Petroleum Site Contamination	\$0.00	104132
Task Assignment No. 1	Inland Protection Trust Fund Line Item #1767	2001/2002	37024	Petroleum Site Contamination	\$647,411.54	104132
Task Assignment No. 2	Inland Protection Trust Fund Line Item #1786A	2002/2003	37024	Petroleum Site Contamination	\$654,264.84	104138
Task Assignment No. 3	Inland Protection Trust Fund Line Item #1655	2003/2004	37024	Petroleum Site Contamination	\$545,015.14	104138
Task Assignment No. 3 Change Order # 1	Inland Protection Trust Fund Line Item #1655	2003/2004	37024	Petroleum Site Contamination	-\$14,283.95	104138
Task Assignment No. 4	Inland Protection Trust Fund Line Item #1717	2004/2005	37024	Petroleum Site Contamination	\$590,919.62	104138
Task Assignment No. 5	Inland Protection Trust Fund Line Item #1737	2005/2006	37024	Petroleum Site Contamination	\$709,952.51	104138
Task Assignment No. 6	Inland Protection Trust Fund Line Item #1842	2006/2007	37024	Petroleum Site Contamination	\$732,145.76	104138
Task Assignment No. 7	Inland Protection Trust Fund Line Item # 1881	2007/2008	37024	Petroleum Site Contamination	\$726,884.33	104138
Task Assignment No. 8	Inland Protection Trust Fund Line Item # 1795	2008/2009	37024	Petroleum Site Contamination	\$784,363.94	104138
Task Assignment No. 9	Inland Protection Trust Fund Line Item # 1795	2009/2010	37024	Petroleum Site Contamination	\$233,796.60	104138
Total Award					\$5,610,470.33	

For each program identified above, the recipient shall comply with the program requirements described in the Catalog of Federal Domestic Assistance (CFDA) [<http://12.46.245.173/cfda/cfda.html>] and/or the Florida Catalog of State Financial Assistance (CSFA) [<https://apps.fldfs.com/fsaa/catalog.aspx>]. The services/purposes for which the funds are to be used are included in the Contract scope of services/work. Any match required by the recipient is clearly indicated in the Contract.

R2002-1748

**TASK ASSIGNMENT NOTIFICATION FORM
CONTRACT NO. FWC8135**

Task Assignment Number: **AP8**
 Task Assignment Term: **Upon execution to June 30, 2010**
 Contractor Name: **Palm Beach County Board of County Commissioners**
 Contractor's Contract Manager/Telephone: **Richard E. Walesky (561) 233-2400**
 Contractor's Site Manager/Telephone: **Barry Jennings (561) 967-6480**
 FWC Contract Manager/Telephone: **Kat Ethridge (850) 245-2819**

Task Description: **Provide aquatic vegetation control services in accordance with work plan for water bodies within Palm Beach County. A copy of the subject work plan is provided as Attachment A-1, attached hereto and made part hereof.**

Deliverables: **Receipt of an itemized invoice, payroll information (pay stubs or register), chemical invoices and approved and signed 454 forms. A completed invoice package is due by the 20th of each month with the exception of the invoice for the month of June. A complete invoice package for June must be submitted within the time period given by the FWC Contract Manager. The invoice must reflect the FWC Contract number as well as the Task Assignment number.**

Cost Reimbursement Task Assignment Amount: **\$119,826.00**

Invoicing Frequency: **Monthly, due by the 20th of each month following the month of service.**

Funding Information:

Org Code	EO	Fund	Category	Fiscal Year	Obj. Code	Amount
7735-8090-300	22	672002	102334	2009/2010	139940	\$119,826.00
PID 97839391000						

Approvals:

**Palm Beach County
Board of County Commissioners**

Fish and Wildlife Conservation Commission

Robert Robbins
 Contract Manager (or designee) 6/10/09
 Date

Kat Ethridge
 Contract Manager 6/1/09
 Date

Robert Robbins
 Print Name

William E. Cates
 Section Leader (or designee) 6/4/09
 Invasive Plant Management Date

Sharon Snyder
 Division Director (or designee) 6/20/09
 Division Habitat and Species Conservation Date

cc: Contracts Office
 Finance and Budget Office
 Regional Biologist

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**Florida Fish and Wildlife Conservation Commission, Chapter 68F-54, F.A.C.
FY 09-10 Cooperative Aquatic Plant Control Program - Workplan**



Contractor Area:	Palm Beach County	Phone:	561-681-3855
Water Body:	Lake Clarke	Water Body code:	43149
County:	Palm Beach County	Water Body Acres:	56.5
Major Water Uses:	Fishing, Water Skiing, Jet Skiing, Boating, Wildlife Observation		

Species of Concern:

Management Objective:

To keep the hydrilla population low and keep the floating plant population at maintenance control levels.

Plants to be Controlled	Acres to be Controlled	Estimated Cost	Control Method(s)
Water Hyacinth			
Water Lettuce			
Mixed Floating ERM NRS	25	\$3,250.00	Reward
Hydrilla ERM NRS	50	\$5,000.00	Aquathol Super K, Aquathol K, Hydrothol 191, Fluridone

Other Plants: (requires explanation below)

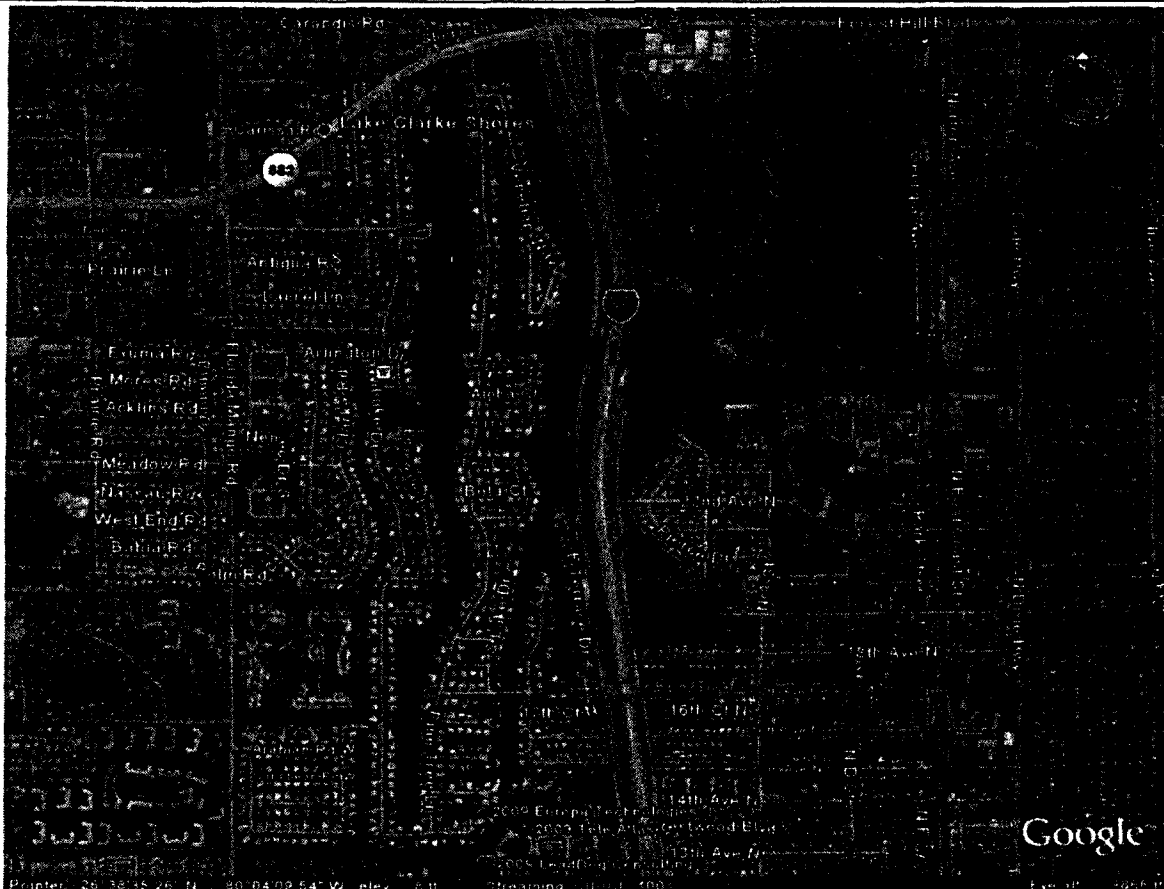
1 N. Cristata ERM NRS	1	\$451.00	Glyphosate, Clearcast, Aquathol K
2			
3			
4			
5			
6			

Other Plant Explanation:

1 Prevent Cristata from expanding in Lake Clarke

2			
3			
4			
5			
6			

Insert map of water body below. Add locations of boat ramps, Hydrilla and Other Plants proposed for control.



Public Notification Procedures (check those that apply)

Signs posted at access points Notices in newspapers meetings

Notices distributed to residents Signal or marker system Other

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**Florida Fish and Wildlife Conservation Commission, Chapter 68F-54, F.A.C.
FY 09-10 Cooperative Aquatic Plant Control Program - Workplan**



Contractor Area:	Palm Beach County	Phone:	661-681-3855
Water Body:	Lake Ida/Eden	Water Body code:	40001
County:	Palm Beach County	Water Body Acres:	170

Major Water Uses: Fishing, Water Skiing, Jet Skiing, Boating, Wildlife Observation

Species of Concern:

Management Objective:

To keep hydrilla and floating plants at maintenance control levels.

Plants to be Controlled	Acres to be Controlled	Estimated Cost	Control Method(s)
Water Hyacinth			
Water Lettuce			
Mixed Floating ERM NRS	25	\$3,250.00	Reward (working from airboat)
Mixed Floating ERM EER	9	\$4,730.00	Reward (working from the shoreline pulling hoses and cutting through vegetation)
Hydrilla ERM NRS	90	\$9,000.00	Aquathol Super K, Aquathol K, Hydrothol 191, Fluridone

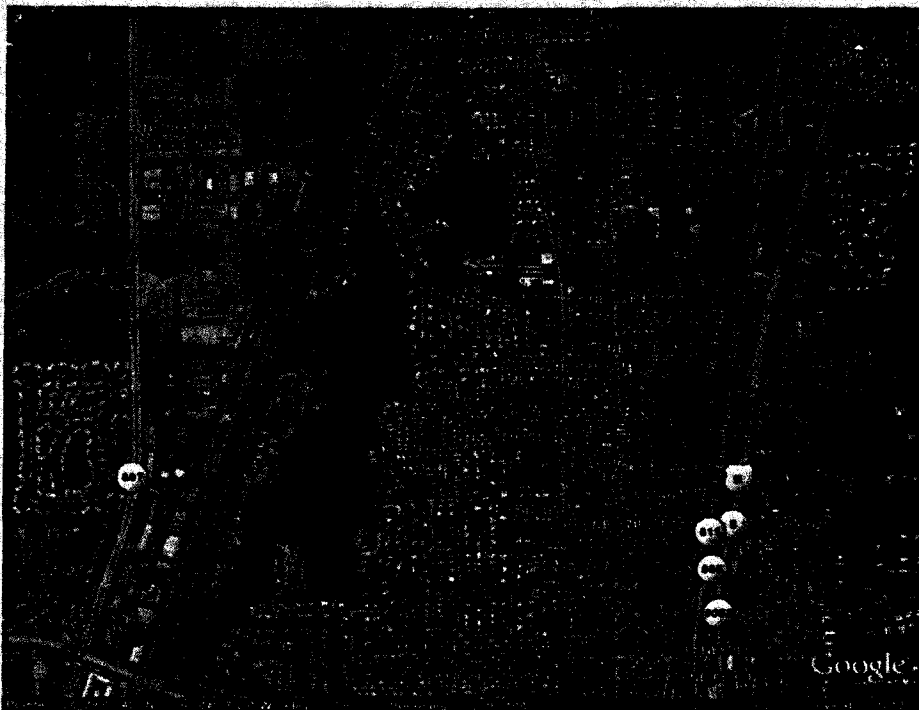
Other Plants: (requires explanation below)

1 Taro ERM NRS	1	\$451.00	Reward, Glyphosate, 2-4D, Clearcast
2 Torpedograss ERM EER	1	\$526.00	Glyphosate
Parks	6	\$3,153.00	Glyphosate
3 Phragmites ERM EER	3	\$1,576.00	Glyphosate
Parks	0.5	\$263.00	Glyphosate
4 Cattails ERM EER	6	\$3,152.00	Glyphosate
Parks	0.5	\$263.00	Glyphosate
5 Primrose ERM EER	1	\$526.00	Glyphosate
6 Alligatorweed Parks	0.5	\$263.00	Glyphosate

Other Plant Explanation:

- 1 Prevent Taro from expanding at mouth of Lake Worth Drainage District lateral canal on north end of Lake Ida Park
- 2 Prevent Torpedograss from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline
- 3 Prevent Phragmites from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline
- 4 Prevent Cattails from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline
- 5 Prevent Primrose Willow from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline
- 6 Prevent Alligatorweed from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline

Insert map of water body below. Add locations of boat ramps, Hydrilla and Other Plants proposed for control.



Public Notification Procedures (check those that apply)

- Signs posted at access points
 Notices in newspapers
 Public meetings
 Notices distributed to residents
 Signal or marker system
 Other

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**Florida Fish and Wildlife Conservation Commission, Chapter 68F-54, F.A.C.
FY 09-10 Cooperative Aquatic Plant Control Program - Workplan**



Contractor Area:	Palm Beach County	Phone:	561-681-3855
Water Body:	Lake Osborne	Water Body code:	40002
County:	Palm Beach County	Water Body Acres:	352
Major Water Uses:	Fishing, Water Skiing, Jet Skiing, Boating, Wildlife Observation		

Species of Concern:

Management Objective:

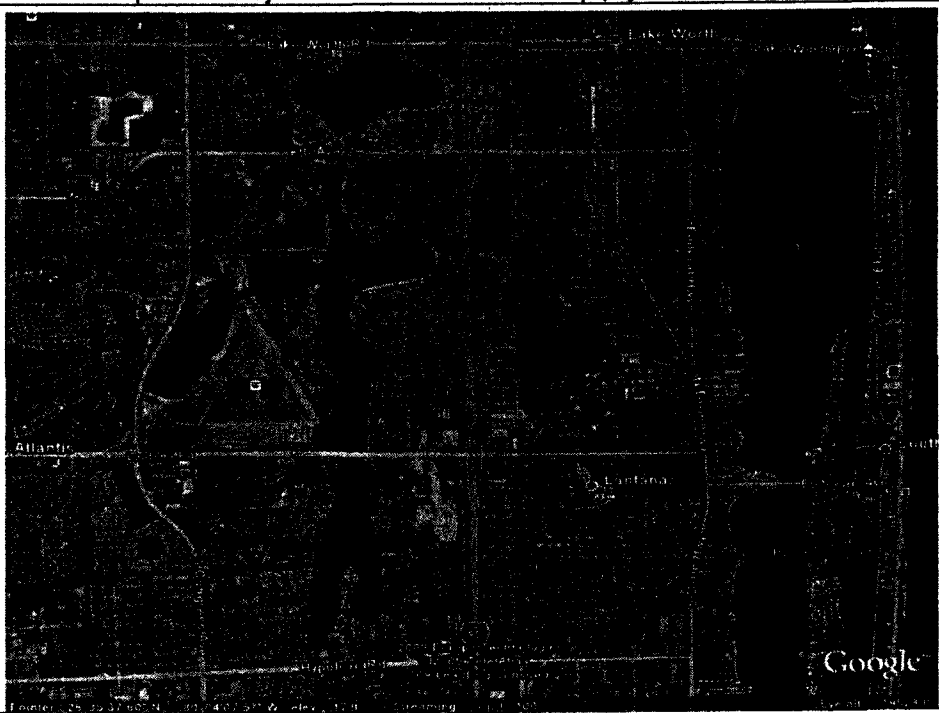
Hydrilla has started to expand again and the objective is to bring it back to maintenance control levels. Also to keep floating plants at maintenance control levels.

Plants to be Controlled	Acres to be Controlled	Estimated Cost	Control Method(s)
Water Hyacinth			
Water Lettuce			
Mixed Floating ERM NRS	25	\$3,250.00	Reward (applying from airboat)
Mixed Floating ERM EER	39	\$20,496.00	Reward (applying from the shoreline pulling hoses and cutting through vegetation)
Hydrilla ERM NRS	308	\$30,000.00	Aquathol Super K, Aquathol K, Hydrothol 191, Fluridone
Other Plants: (requires explanation below)			
1 Taro ERM NRS	1	\$451.00	Reward, Glyphosate, 2-4D, Clearcast (applying from airboat)
Parks	1	\$526.00	Reward, Glyphosate, 2-4D, Clearcast (applying from shoreline pulling hoses cutting through veg)
2 Torpedograss ERM EER	1	\$526.00	Glyphosate
Parks	20	\$10,511.00	Glyphosate
3 Phragmites ERM EER	2	\$1,054.00	Glyphosate
Parks	3	\$1,576.00	Glyphosate
4 Cattails ERM EER	6	\$3,152.00	Glyphosate
Parks	3	\$1,576.00	Glyphosate
5 Primrose Parks	1	\$526.00	Glyphosate
6 Alligatorweed Parks	2	\$1,051.00	Glyphosate
7 Paragrass Parks	3	\$1,576.00	Glyphosate

Other Plant Explanation:

- 1 Prevent Taro from expanding at mouth of Lake Worth Drainage District lateral canal on north end of Lake Ida Park
- 2 Prevent Torpedograss from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline
- 3 Prevent Phragmites from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline
- 4 Prevent Cattails from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline
- 5 Prevent Primrose Willow from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline
- 6 Prevent Alligatorweed from expanding into native plant restoration littoral areas along Lake Ida Park and southeastern shoreline

Insert map of water body below. Add locations of boat ramps, Hydrilla and Other Plants proposed for control.



Public Notification Procedures (check those that apply)

- Signs posted at access points
 Notices in newspapers
 meetings
 Notices distributed to residents
 Signal or marker system
 Other

**Florida Fish and Wildlife Conservation Commission, Chapter 68F-54, F.A.C.
FY 09-10 Cooperative Aquatic Plant Control Program - Workplan**



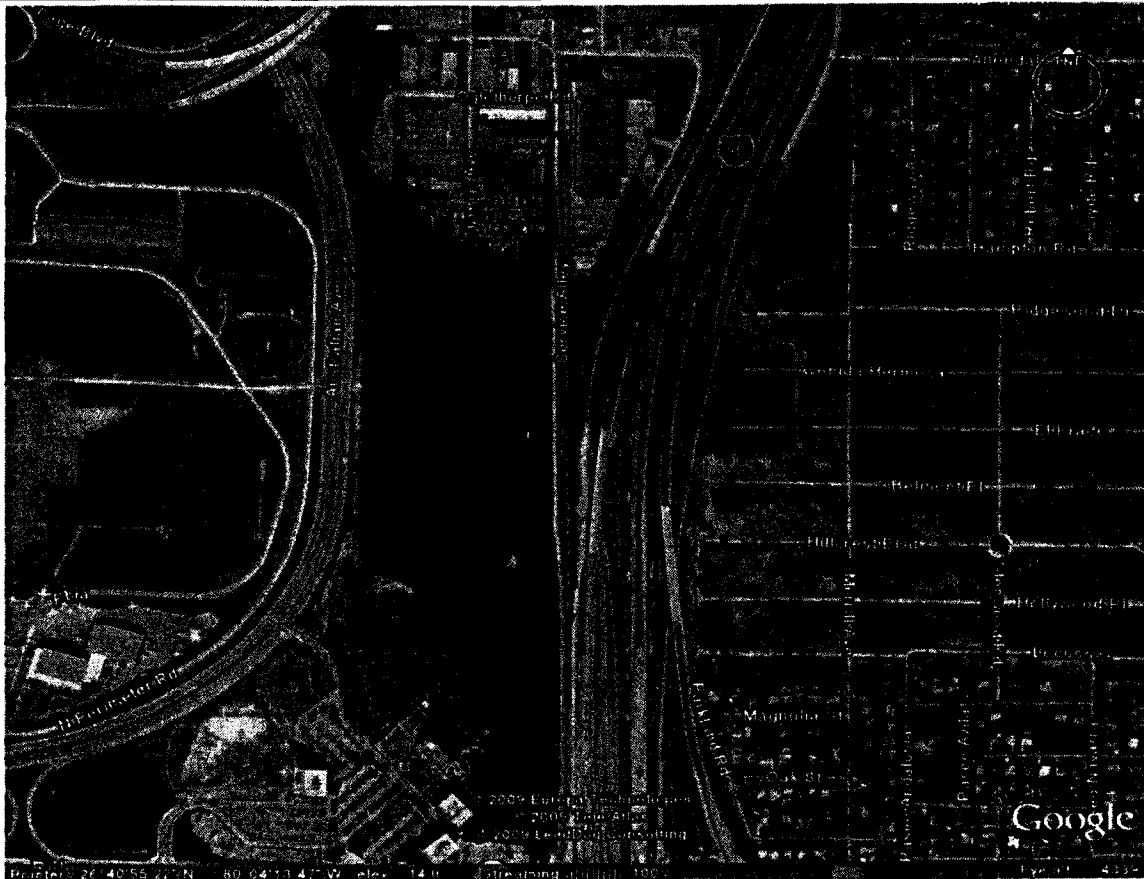
Contractor Area:	Palm Beach County	Phone:	561-681-3855
Water Body:	Lake Pine	Water Body code:	43148
County:	Palm Beach County	Water Body Acres:	34
Major Water Uses:	Fishing, Water Skiing, Jet Skiing, Boating		

Species of Concern:
Management Objective:
To keep hydrilla and floating plants at maintenance control levels.

Plants to be Controlled	Acres to be Controlled	Estimated Cost	Control Method(s)
Water Hyacinth			
Water Lettuce			
Mixed Floating ERM NRS	25	\$3,250.00	Reward
Hydrilla ERM NRS	40	\$4,000.00	Aquathol Super K, Aquathol K, Hydrothol 191, Fluridone
Other Plants: (requires explanation below)			
1 Torpedograss ERM NRS	1	\$451.00	Glyphosate
2			
3			
4			
5			
6			

Other Plant Explanation:
1 Prevent Torpedograss from expanding in Pine Lake
2
3
4
5
6

Insert map of water body below. Add locations of boat ramps, Hydrilla and Other Plants proposed for control.



Public Notification Procedures (check those that apply)
 Signs posted at access points Notices in newspapers Public meetings
 Notices distributed to residents Signal or marker system Other

Palm Beach County

Department of Environmental Resources Management
 2300 North Jog Road, 4th Floor
 West Palm Beach, FL 33411-2743
 Phone (561) 233-2400 Fax (561) 233-2414

**CONSTRUCTION
 SOLICITATION/QUOTATION/
 PURCHASE ORDER**

The following number must appear on all related invoices, packing slips and correspondence, and sent to the above address: **2009ERM05**

TO:
 Murray Logan Construction, Inc.
 313 65th Trail North, West Palm Beach, FL 33413
 Phone #561-686-3948, Fax #561-686-7465
 FEIN #59 1208353
 PBC Vendor Registration #MURR0001

PROJECT NAME: LIMESTONE CREEK PHASE I WEIR REPAIR
PROJECT NUMBER: 2009ERM05
PROJECT LOCATION: Central Boulevard and Church Street north of Indiantown Road, Jupiter, Florida

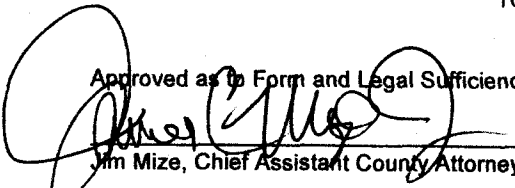
QUOTATION DATE	P.O. DATE	F.O.B. POINT	PAYMENT TERMS	DISCOUNT OR EARLY COMPLETION TERMS
7/20/09	7/31/09	Limestone Creek Natural Area	Prompt Payment: FS 218.735	N/A
COMPLETION DEADLINE	INSURANCE CERT.s ATTACHED	PROGRESS PAYMENTS/RETAINAGE	LIQUIDATED DAMAGES	CRITICAL FACILITY (Fingerprinting)?
8/31/09 (4 weeks)		N/A	N/A	No
BUDGET ACCOUNT: 1226-380-3162-3401-E441		FISCAL APPROVAL OF BUDGET AVAILABILITY: _____		

General Description: Engineering repair of weir 2 at the Limestone Creek Natural Area as follows:

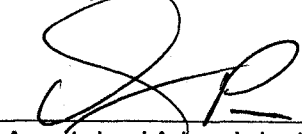
QTY	UNIT	DESCRIPTION	UNIT PRICE	TOTAL
1	Lump Sum	Perform the repair work outlined in Contractor's 7/20/09 Quotation (attached) and in accordance with the attached Technical Specification and four (4) Plansheets	\$28,792.00	\$28,792.00
Additional Indemnities: None			SUBTOTAL	\$28,792.00
Additional Insured: None			SHIPPING & HANDLING	Included in above
			TOTAL	\$28,792.00

The PO goods and/or services shall be provided in accordance with this Purchase Order and the following, which are incorporated herein by reference and attached:
 (a) Certificate (Corporation)
 (b) PBC Purchase Order Standard Terms and Conditions
 (c) SBE Schedule 1
 (d) Quotation
 (e) Insurance Certificate
 (f) Technical Specifications, 4 Plansheets

Contractor is required to review the accuracy of the above and sign both documents and return both originals to: Julie Aden, Environmental Contract Manager, at the above address. This Purchase Order is not effective until signed by the ERM Director. Contractor must notify the County immediately if unable to complete as specified.

Approved as to Form and Legal Sufficiency:

 Jim Mize, Chief Assistant County Attorney Date 8/3/09

Authorized by: Richard E. Walesky, Director Date 8/3/09
 Dept. of Environmental Resources Mgt.


 Accepted and Acknowledged by David Logan, Date 7/31/09
 President, for Murray Logan Construction, Inc.

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BUDGET AVAILABILITY STATEMENT

REQUEST DATE: 07/31/09 **REQUESTED BY:** Ross Shearer **PHONE:** 233-2478
PROJECT TITLE: Limestone Creek Phase I Weir Repair **Work Order NO:**
LOCATION: Limestone Creek **Project NO:** 2009ERM05
ORIGINAL CONTRACT AMOUNT: **BCC RESOLUTION#**
REQUESTED AMOUNT: \$28,792.00 **DATE:**
CSA/LOA CHANGE ORDER AMOUNT:
CSA/LOA CHANGE ORDER NUMBER:
CONTRACTOR/CONSULTANT NAME: Murray Logan Construction, Inc.
PROVIDE A BRIEF STATEMENT OF THE SCOPE OF SERVICES TO BE PROVIDED BY THE
CONSULTANT/CONTRACTOR: Perform repair work outlined in Contractor's 7/20/09 quotation.
BUDGET ACCOUNT NUMBER (IF KNOWN):

FUND: 1226 **DEPART:** 380 **UNIT:** 3162 **OBJ:** 3401 **SUBOBJ:** **PROG:** E44111 **PG PD:** 3162

AD VALOREM **OTHER** **FEDERAL**

REVENUE:

ANTICIPATED DATE OF APPROVAL:

BAS APPROVED BY: *Piz Ruvio* **DATE:** 8/3/09

ENCUMBRANCE NUMBER: KPO 380-022008*1103 *This is Ocean Gate*

**CERTIFICATE
(Corporation)**

The undersigned hereby certifies that the following are true and correct statements:

1. That he/she is the Secretary of MURRAY LOGAN CONSTRUCTION, INC. a corporation organized and existing in good standing under the laws of the State of FLORIDA hereinafter referred to as the "Corporation", and that the following Resolutions are true and correct copies of certain Resolutions adopted by the Board of Directors of the Corporation as the 31st day of JULY, 2009, in accordance with the laws of the State of the state of incorporation of the Corporation, the Articles of Incorporation and the By-laws of the Corporation.

RESOLVED, that the Corporation shall enter into that certain Agreement between Palm Beach County, a political subdivision of the State of Florida and the Corporation, a copy of which is attached hereto, and be it

FURTHER RESOLVED, that DAVID LOGAN (name), the PRESIDENT (title) of the Corporation, is hereby authorized and instructed to execute such Agreement and such other instruments as may be necessary and appropriate for the Corporation to fulfill its obligations under the Agreement.

2. That the foregoing resolutions were passed with the required corporate formalities and have not been modified, amended, rescinded, revoked or otherwise changed and remain in full force and effect as of the date hereof.

3. That the Corporation is in good standing under the laws of the State of Florida or its state of incorporation, if other, and has qualified, if legally required, to do business in the State of Florida and has the full power and authority to enter into such Agreement.

IN WITNESS WHEREOF, the undersigned has set his hand and affixed the Corporate Seal of the Corporation the 31st day of JULY, 2009.

(CORPORATE SEAL)

[Signature]
(Signature)

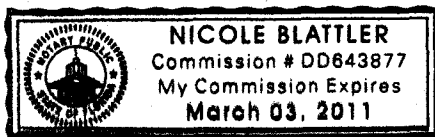
KURT KAPPOS, SEC.
(Print Signatory's name & title)

SWORN TO AND SUBSCRIBED before me this 31st day of JULY, 2009, by the Secretary of the aforesaid Corporation, who is personally known to me OR who produced _____ as identification and who did NOT take an oath.

[Signature]
(Notary Signature)

NICOLE BLATTLER
(Print Notary's Name) **NOTARY PUBLIC**

State of Florida at Large
My Commission Expires:
3/3/2011



BOARD OF COUNTY COMMISSIONERS
PALM BEACH COUNTY, FLORIDA

Limestone Creek Phase I Weir Repair
Project No. 2009ERM05

TERMS AND CONDITIONS

1. **Contract** - Contractor agrees that by submitting an offer which is accepted by the Department of Environmental Resources Management (ERM), as designee for the Palm Beach County Board of County Commissioners (County), a binding contract is formed in accordance with the County's terms, conditions and specifications as set forth in the solicitation and this Purchase Order (PO). Contractor certifies that the offer has been made by an officer or employee having the authority to bind the Contractor. Accordingly, payment will only be made to the company and the address as provided in the Contractor's offer unless prior written authorization is received from the County.
2. **Modifications** No modifications of this Purchase Order, including but not limited to these Terms and Conditions, shall be binding upon the County unless approved by the ERM Director.
3. **Assignments** Assignments are prohibited unless prior written consent is given by the ERM Director and the Contractor.
4. **Excusable Delays** The County may grant additional time for any delay if the delay will not adversely impact the best interest of the County and is due to causes beyond the control of the Contractor.
5. **Default** The County may, by written notice of default to the Contractor, terminate the PO in whole or in part if the Contractor fails to satisfactorily perform any provisions of this solicitation or resultant PO, or fails to make progress so as to endanger performance under the terms and conditions of this solicitation or resultant PO, or provides repeated non-performance, or does not remedy such failure within a period of three (3) calendar days (or such period as the ERM Director may authorize in writing) after receipt of notice from the ERM Director specifying such failure. In the event the County terminates this PO in whole or in part because of default of the Contractor, the County may procure goods and/or services similar to those terminated, and the Contractor shall be liable for any excess costs incurred due to this action. If it is determined that the Contractor was not in default or that the default was excusable (e.g. failure due to causes beyond the control of, or without the fault or negligence of, the Contractor), the rights and obligations of the parties shall be those provided in "Termination".
6. **Termination** The County may, whenever the interests of the County so require, terminate the PO, in whole or in part, for the convenience of the County, by written notice to the Contractor. Unless directed differently in the notice of termination, the Contractor shall incur no further obligations in connection with the PO. The Contractor shall only be compensated for acceptable goods and services up to the date of termination.
7. **F.O.B.** The F.O.B. point shall be the destination. If County agrees, freight charges may be prepaid by the Contractor and listed on the invoice; however, Contractor retains title and assumes all responsibility, liability and risk in transit, and shall be responsible for the filing of claims for loss or damages.
8. **Deliveries** Deliveries are to be made Monday through Friday, excluding holidays, unless otherwise stipulated on the PO.
9. **Punchlist, Inspection, Acceptance and Closeout** The Contractor shall notify the County in writing that the PO goods and/or services are substantially complete and request that the County prepare a Certificate of Substantial Completion. If the County considers the PO substantially complete, the County shall prepare the Certificate of Substantial Completion. The County shall issue the Punchlist, based on the aforementioned inspection or subsequent inspections, to the Contractor within thirty (30) calendar days after Substantial Completion. The Punchlist shall establish a date for completion of corrective work. All goods and/or services provided on this PO are subject to inspection and acceptance upon receipt or completion by the ERM Project Manager. Prior to payment, the Contractor shall provide satisfactory

- closeout statements and releases as required by the County. Payment shall not be authorized until the goods and/or services have been received, accepted and properly invoiced.
10. **Invoicing** Contractor must send original invoice to the Palm Beach County ERM, 2300 North Jog Road, 4th Floor, West Palm Beach, FL 33411-2743.
 11. **Payment Terms** Contractor agrees that interest penalties will only be paid in accordance with the Florida Prompt Payment Act, Florida Statute 218.735.
 12. **Taxes** The County is exempt from Federal and State taxes.
 13. **Insurance** The Contractor shall maintain insurance coverages during the performance of its PO services. Commercial General Liability/Combined Single Limit, Bodily Injury & Property Damage (including Premises/Operations, Independent Contractors, Personal Injury, Products/Complete Operations, Contractual liability, Broad Form Property Damage, X-C-U Coverages, if applicable and General Aggregate, if applicable, must be on a Per Project basis) \$500,000 per occurrence. Workers Compensation and Employer's Liability Statutory. U.S. Longshoreman's and Harbor Workers Act and/or Jones Act Endorsements (only if work is on or contiguous to navigable water bodies) \$100,000/500,000/100,000. Protection and Indemnity (only if work involves watercraft owned or operated by Contractor) \$1,000,000. Comprehensive Auto Liability \$500,000 per occurrence.
 14. **Purchase Order** The County will not accept any goods delivered or services performed unless a PO signed by the ERM Director has been issued for said goods and/or services. The PO number must appear on all invoices, packing slips and correspondence concerning the PO.
 15. **Pricing** Unless specifically requested in the specifications, any response containing modifying or escalation clauses shall be rejected. The price offered must be in accordance with the unit of measure provided on the response page(s). One (1) space or line requires only one (1) single, fixed unit price. Anything other than a single, fixed unit price shall result in the rejection of your response. Contractor warrants by virtue of submitting an offer that prices shall remain firm for a period of 90 calendar days from the date of opening to allow for evaluation and award. Prices shall remain firm for the initial and any subsequent term unless modified by a special condition.
 16. **Quantities** Quantities specified in the PO cannot be changed without County's written approval. Goods shipped in excess of quantity designated may be returned at Contractor's expense.
 17. **Site Conditions** The Contractor shall be responsible for having determined to its satisfaction, prior to the submission of its quote, the nature and location of the Work and the general and local conditions. The failure of Contractor to acquaint itself with any applicable condition shall not relieve it from the responsibility for properly estimating either the difficulties or the costs of successfully and timely completing the PO.
 18. **Florida Products and Labor** Section 255.04, Florida Statutes, requires that on public building contracts, Florida products and labor shall be used wherever price and quality are equal.
 19. **Material Safety Data Sheets (MSDS)** Contractor compliance is required under Chapter 442, Florida Statutes; that any toxic substance delivered as a part of this PO must be accompanied by an MSDS.
 20. **Contractor Responsibility** Contractor represents that it is fully experienced and properly qualified to perform the PO services, and that it is properly licensed, equipped, organized and financed to perform such services. Contractor shall act as an independent contractor and not as the agent of the County in performing the PO, maintaining complete control over its employees and all of its suppliers and subcontractors. Any services performed by the Contractor without proper authorization is performed at the Contractor's risk, and the County shall have no obligation to compensate the Contractor for such work. The Contractor's Construction Manager shall be present at the work site at all times while work is in progress. Failure to observe this requirement shall be considered as suspension of the Work by the Contractor until such time as a Construction Manager is again present at the site.
 21. **Employees** All labor required for the services shall be executed in a thoroughly substantial and workmanlike manner by workers skilled in the applicable trades. No intoxicating substance shall be allowed on the project or staging site(s).
 22. **Subcontractors and Suppliers** The Contractor shall provide a list of its subcontractors to the County when requested. The County reserves the right to reject the use of a subcontractor on the project. The Contractor is as fully responsible to the County for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by them, as Contractor is for the acts and omissions of

- persons directly employed by Contractor. Nothing contained in the PO or its attachments shall create any contractual relation between any subcontractor or supplier and the County.
23. **Guarantee** The Contractor guarantees that the goods and/or services to be provided under the PO and all workmanship, materials, and equipment performed, furnished, used, or installed shall be free from defects and flaws, and shall be performed and furnished in accordance with the PO; that the strength of all parts of all manufactured equipment shall be adequate and as specified; and that performance test requirements of the Contract shall be fulfilled. The Contractor shall remedy all defects and shall repair, correct, or replace all damage to the other work, persons or property resulting from failures covered by the guarantee. The guarantee shall remain in effect for one (1) year from the date of final acceptance unless a longer period is specified. Defects in material, workmanship, or equipment which are remedied as a result of obligations of the guarantee shall subject the remedied portion to an extended guarantee period of one (1) year after the defect has been remedied.
 24. **Not a Convicted Vendor** As provided in Florida Statute 287.133(2)(a) a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list. By entering into this PO or performing any work in furtherance hereof, the contractor certifies that it, its affiliates, suppliers, subcontractors and consultants who will perform hereunder have not been placed on the convicted vendor list maintained by the State of Florida Department of Management Services within the 36 months immediately preceding the date hereof. This notice is required by F.S. 287.133 (3) (a).
 25. **Anti-Discrimination** Contractors doing business with the County are prohibited from discriminating against any employee or client because of race, color, religion, disability, sex, age, national origin, ancestry, marital status, or sexual orientation.
 26. **Legal Requirements** The Contractor must strictly comply with all Federal, State, County and local laws, ordinances, rules, regulations, orders, notices, requirements and permits that in any manner affect the goods and/or services provided herein. The County shall not be liable to the Seller for any legal fees, court costs, or other legal expenses arising from the interpretation or enforcement of this PO, or from any other matter generated by or relating to this PO.
 27. **Criminal History Records Check Ordinance** Pursuant to Ordinance 2003-030, the Palm Beach County Criminal History Records Check Ordinance (Ordinance), the County shall conduct fingerprint based criminal history record checks on all persons not employed by the County who repair, deliver, or provide goods and/or services for, to, or on behalf of the County. A fingerprint based criminal history record check shall be conducted on all employees and subcontractors of Contractor, including repair persons and delivery persons who are unescorted when entering a facility determined to be critical to public safety and security of the County. County facilities that require this heightened level of security (Critical Facility) are identified in Resolution R-2003-1274, as may be amended, which is available upon request. The PO indicates if the project location is a Critical Facility. The Contractor is solely responsible for understanding the financial, schedule, and staffing implications of this Ordinance. Further, the Contractor acknowledges that its bid price includes any and all direct or indirect costs associated with compliance of this Ordinance, except for the applicable FDLE/FBI fees that shall be paid by the County.
 28. **SBE Program** It is the policy of the Board of County Commissioners of Palm Beach County, Florida, that Small Business Enterprises (SBE) have the maximum practical opportunity to participate in the competitive process of supplying goods, services and construction to the County. In accordance with the SBE Program, a preference is given to certified SBEs. The County has established a minimum goal of 15% SBE participation for all County solicitations.
 29. **Local Preference** In accordance with the Palm Beach County Local Preference Ordinance, a preference is given to bidders having a permanent place of business in Palm Beach County.
 30. **Indemnification** To the extent authorized by law, specifically Florida Statute 725.06, the Contractor shall indemnify, save and hold harmless the County, its employees and agents, and, any additional

indemnitees and their employees, against any and all claims, damages, liability and court awards including costs, expenses and attorney fees incurred as a result of any act or omission by the Contractor, or its employees, agents, subcontractors or assignees pursuant to the terms and conditions of this PO. Additional indemnitees are identified on the PO.

31. **Endorsements** No endorsements by the County of the goods and/or services will be used by the Contractor in any way, manner or form.
32. **Venue** Any and all legal actions arising from or necessary to enforce this PO will be held in a State court of competent jurisdiction in Palm Beach County.
33. **Public Records** Any information submitted relating to this PO will become a public document pursuant to Section 119.07, Florida Statutes.
34. **Right to Audit** The County shall have the right to audit for five (5) years after Final Payment or resolution of all claims Contractor's and its subcontractors' books, records, documents.

END OF SECTION

SCHEDULE 1

LIST OF PROPOSED SBE-M/WBE PRIME AND/OR SUBCONTRACTORS

PROJECT NUMBER: 2009ERM05

PROJECT NAME: Limestone Creek Phase I Weir Repair

NAME OF PRIME BIDDER: Murray Logan Construction, Inc.

ADDRESS 313 65th Trail North, West Palm Beach, FL 33413

CONTACT PERSON: David Logan

PHONE NO: 561-686-3948 FAX NO: 561-686-7465

RFQ DEADLINE: N/A

DEPARTMENT: Environmental Resources Management

PLEASE IDENTIFY ALL APPLICABLE CATEGORIES OF PRIME AND/OR SUBCONTRACTORS

Name, Address and Phone Number	(Check one or both Categories)		Subcontract Amount				
	Minority Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
1.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
5.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
(Please use additional sheets if necessary)			Total \$ _____	\$ _____	\$ _____	\$ _____	\$ _____

Total Bid Price \$28,792.00

Total Value of SBE Participation \$0.00

- NOTE:**
1. The amounts listed on this form must be supported by the Subcontractors (and, if applicable, Prime) prices included on Schedule 2 in order to be counted toward goal attainment.
 2. Firms may be certified by Palm Beach County as an SBE and/or an M/WBE. If firms are certified as both an SBE and M/WBE, please indicate the dollar amount under the appropriate category.
 3. M/WBE information is being collected for tracking purposes only.

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MURRAY LOGAN CONSTRUCTION, INC.

General Contractors
313 65th Trail North
West Palm Beach, FL 33413
TELEPHONE 561-686-3948
FAX 561-686-7465

QUOTATION

DATE: 7/20/09

TO: Palm Beach County Environmental Resource Management
Fax #: 233-2414
Attn: Brenda Hovde, Steve Pisano, Clint Thomas and Michael Evans

NAME OF PROJECT:

Limestone Creek Weir Repair

LOCATION:

Jupiter

PLANS AND SPECIFICATIONS:

PBCERM

WE PROPOSE TO FURNISH ALL LABOR, MATERIAL AND EQUIPMENT TO PERFORM THE FOLLOWING:

1. Perform Weir Repair Work as follows:

- A. Mobilize.
- B. Remove portion of concrete cap to expose existing sheet pile interlock on each side of structure.
- C. Supply/install 20 each 10' long sheet piling.
- D. Repair concrete cap.
- E. Remove existing rock riprap and filter cloth within 10' of wall in repair area.
- F. Reshape fill and install new filter fabric as needed.
- G. Reinstall existing rock riprap material.
- H. Sod disturbed work area with bahia sod.
- I. Demobilize.

FOR THE LUMP SUM OF \$28,792

NOTES:

- 1. Price excludes permit fees, engineering, testing fees, import of additional rock riprap and concrete cap over new sheet piling.

BUYERS' SIGNED ACCEPTANCE CONSTITUTES A BINDING CONTRACT. IN THE EVENT THERE IS ANY DEFAULT IN PAYMENTS DUE UNDER THIS CONTRACT AND THE SAME IS PLACED IN THE HANDS OF AN ATTORNEY FOR COLLECTION, THE PURCHASER AND/OR PURCHASERS HEREBY AGREE TO PAY ALL COST OF COLLECTION INCLUDING, BUT NOT LIMITED TO, A REASONABLE ATTORNEY'S FEE. TERMS NET 30 DAYS.

ACCEPTED:

DATE _____

MURRAY LOGAN CONSTRUCTION, INC.

TITLE: David Logan, President

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May 1, 2009 3:17PM

No.6634 P. 2



CERTIFICATE OF LIABILITY INSURANCE

Page 1 of 2 DATE (MM/DD/YYYY) 04/30/2009

PRODUCER Willis of Florida, Inc. 26 Century Blvd. P. O. Box 308191 Nashville, TN 37230-5191 877-945-7370	INSURERS AFFORDING COVERAGE	NAICS
INSURED Murray Logan Construction, Inc. Attn: Mr. David Logan 313 48 Trail North West Palm Beach, FL 33413	INSURER: The Travelers Indemnity Company of America	28669-003
	INSURER: The Chatham Park Fire Insurance Company	28618-011
	INSURER: Travelers Property Casualty Company of America	28674-002
	INSURER: Insurance Company of the State of Pennsylvania	19439-001
	INSURER: State National Insurance Company, Inc.	18821-001

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

TYPE OF INSURANCE	POLICY NUMBER	START DATE	END DATE	LIMITS
A <input checked="" type="checkbox"/> GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY CLAIMS MADE <input checked="" type="checkbox"/> OCCUR GEN. AGGREGATE LIMIT APPLIES PER: POLICY <input checked="" type="checkbox"/> PER <input type="checkbox"/> LOC	CO-83606808-TLA-09	5/1/2009	5/1/2010	EACH OCCURRENCE \$ 1,000,000 PRODUCTS-COMP/PROP AGG \$ 2,000,000 MED EXP (Per person) \$ 5,000 PERSONAL & ADULTERY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS-COMP/PROP AGG \$ 2,000,000
B <input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> MIXED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> BARNES LIABILITY <input type="checkbox"/> ANY AUTO	810-8366681A-COV-09	5/1/2009	5/1/2010	COMBINED SINGLE LIMIT (Per accident) \$ 1,000,000 BODILY INJURY (Per person) \$ 100,000 BODILY INJURY (Per accident) \$ 100,000 PROPERTY DAMAGE (Per accident) \$ 100,000 AUTO ONLY - BA ACCIDENT \$ AND/OR \$ 250,000 OTHER THAN BA ACCIDENT \$ 250,000 AUTO ONLY: AOE \$
C <input checked="" type="checkbox"/> EXCESS/UMBRELLA LIABILITY <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input checked="" type="checkbox"/> RETENTION \$ 10,000	CUP-83606845-TIL-09	5/1/2009	5/1/2010	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000 \$ 10,000 \$ 10,000
D <input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS LIABILITY <input checked="" type="checkbox"/> ANY EMPLOYER OR PARTNER/EXECUTIVE OFFICER/BOARD MEMBER (EXCLUDED) <input type="checkbox"/> (Yes, describe other SPECIAL PROVISIONS)	WC5316647	10/31/2008	10/31/2009	<input checked="" type="checkbox"/> WORKERS COMPENSATION \$1, EACH ACCIDENT \$ 500,000 \$1, DISEASE - EMPLOYEE \$ 500,000 \$1, DISEASE - POLICY LIMIT \$ 500,000
E OTHER CONTRACTOR'S Equipment Deductibles:	WALKER3130005003	5/1/2009	5/1/2010	\$4,463,868 MAX Limit \$500,000 MAX Leased/Rented 14 TIV min \$1,000 \$5 min \$5,000 wind

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EQUIPMENT / SPECIAL PROVISIONS
 Certificate Holder is included as an Additional Insured as respects to General Liability.
 Waiver of Subrogation applies in favor of Certificate Holder as respects to General Liability.

CERTIFICATE HOLDER Palm Beach County Board of County Commissioners c/o Purchasing Department Attn: Nancy Grant 30 S. Military Trail Ste 110 West Palm Beach, FL 33415	CANCELLATION 10 days notice of cancellation for non-payment of premium. SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL endeavor to MAIL 30 DAYS advance NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE: <i>[Signature]</i>
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TECHNICAL SPECIFICATIONS

PRE-BID

The Contractor shall review the plans of the existing sheet pile wall (weir). The Contractor shall visit the site and become familiar with the existing sheet pile wall, access to the wall, and the sensitive surroundings.

THE WORK

The Contractor shall remove concrete and steel from the ends of the cap as necessary to expose the end joints of the existing vinyl sheet pile wall.

The Contractor shall extend the existing wall by installing 10 new sheets to each end (20 sheets total). The sheets shall be 10 feet in length. When installed, the top of the new sheets shall be the same elevation as the top of the existing concrete cap (5.81 ft NGVD).

The Contractor shall use a concrete bonding agent, concrete, and forms to repair the exposed ends of the existing concrete cap.

The Contractor shall remove limestone boulders and filter fabric within 10 feet of the existing wall. The Contractor shall add fill if necessary and grade slopes no steeper than 2h:1v. The Contractor shall place new filter fabric to attain complete coverage of the creek bed, earthen slopes, and sheet pile wall with a minimum of 2 feet overlap on all fabric joints. The Contractor shall re-install the limestone boulders with minimum void space between stones and maximum contact between stones. The result shall be a tight compact rock structure with no loose stones.

The filter fabric shall be Mirafi Filterweave 700 or equivalent.

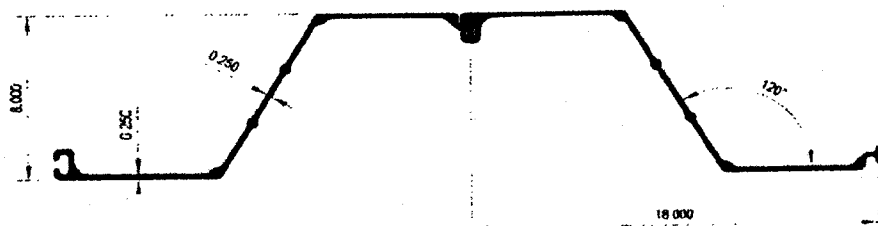
The Contractor shall not remove or damage any mature native trees with the exception of roots which may be removed in the footprint of the new sheet pile. Damage to any mature native trees shall be assessed at \$5,000 per tree.

Attachments: Material sheet and 4 plansheets

Northstar Endurance Polaris CE

Material Property Data Sheet

Properties	Units	Polaris CE	Test Method
Allowable Moment	ft-lbs/ft	30,400	
Peak Shear	lbs/ft	8,200*	
Allowable Shear	lbs/ft	4,100	
Allowable Stress - Longitudinal Direction	psi	28,333	
Peak Tensile - Longitudinal Direction	psi	90,000	ASTM D638
Peak Tensile - Transverse Direction	psi	12,000	ASTM D638
Modulus of Elasticity - Longitudinal Direction	$\times 10^6$ psi	4.6	ASTM D638
Modulus of Elasticity - Transverse Direction	$\times 10^6$ psi	1.7	ASTM D638
Peak Flexural - Longitudinal Direction	psi	100,000	ASTM D790
Peak Flexural - Transverse Direction	psi	35,000	ASTM D790
Izod Notched Impact - Longitudinal Direction	ft-lbs/in	65+	ASTM D256
Izod Notched Impact - Transverse Direction	ft-lbs/in	30	ASTM D256
Charpy Impact - Longitudinal Direction***	ft-lbs/in	100	ASTM D6110
Width	inches	18.0	
Depth of Section	inches	8.0	
Web Thickness	inches	0.25	
Flange Thickness	inches	0.25	
Neutral Axis (Paired)	inches	4.0	
Moment of Inertia	in^4/ft	51.58	
Section Modulus	in^3/ft	12.89	
Weight	lbs/ft	6.1	
Standard Color		Graphite Grey****	
UV Protection		Yes	
Reinforced Corners		Yes	
Structural Ribs		Yes	



The information provided are average values and believed to be accurate. No warranty of any kind is made as to the suitability of Northstar CSP for a particular application or the results obtained therefrom. Northstar recommends that you consult with a local professional (qualified engineer and/or contractor) as to the suitability for your particular application.

* Shear value based on failure load of full scale bench test of part.

** Shear value based on extrapolation from full scale bench testing on Polaris CE part and testing report 03-0224 Revised from Reichhold, Inc.

*** Due to the impact strength in Izod testing, a 300 ft-lb/ft capacity Satec Charpy impact tester was used. This tester is typically used for metallic specimens per ASTM E23-00 and has a striking edge different in dimensions than that called for per ASTM D 6110.

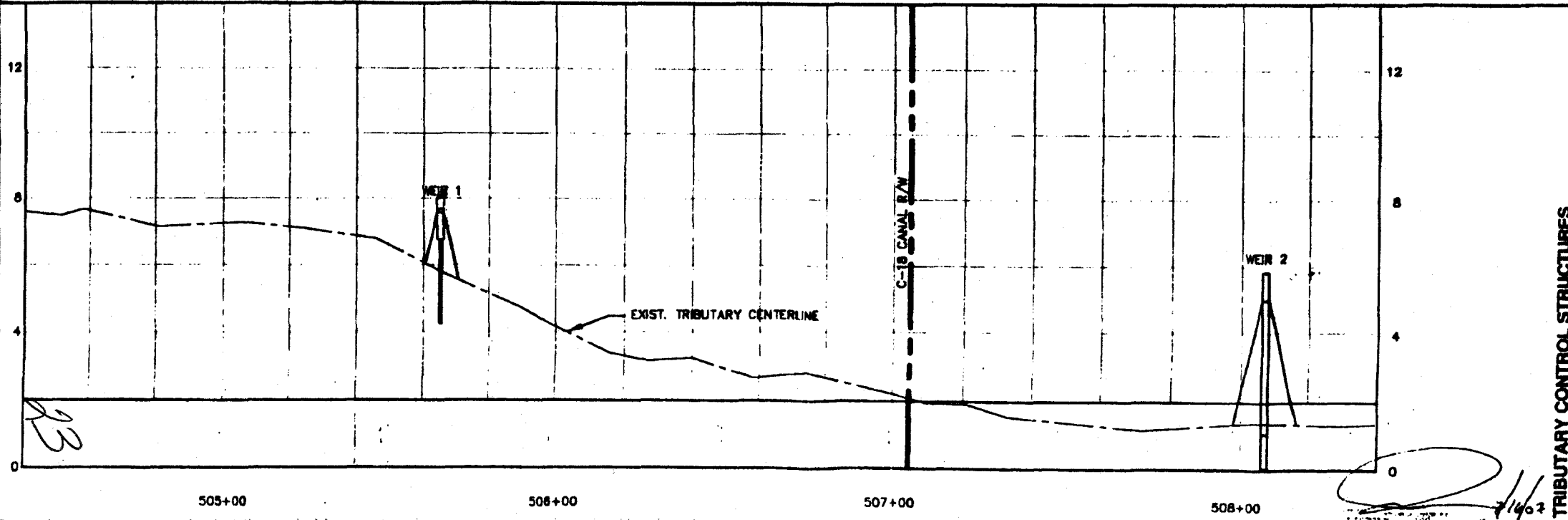
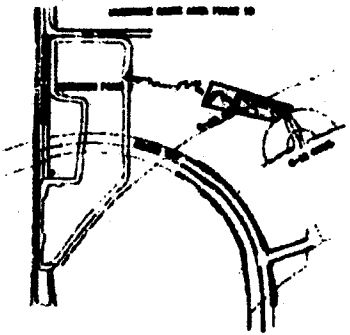
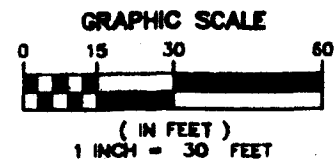
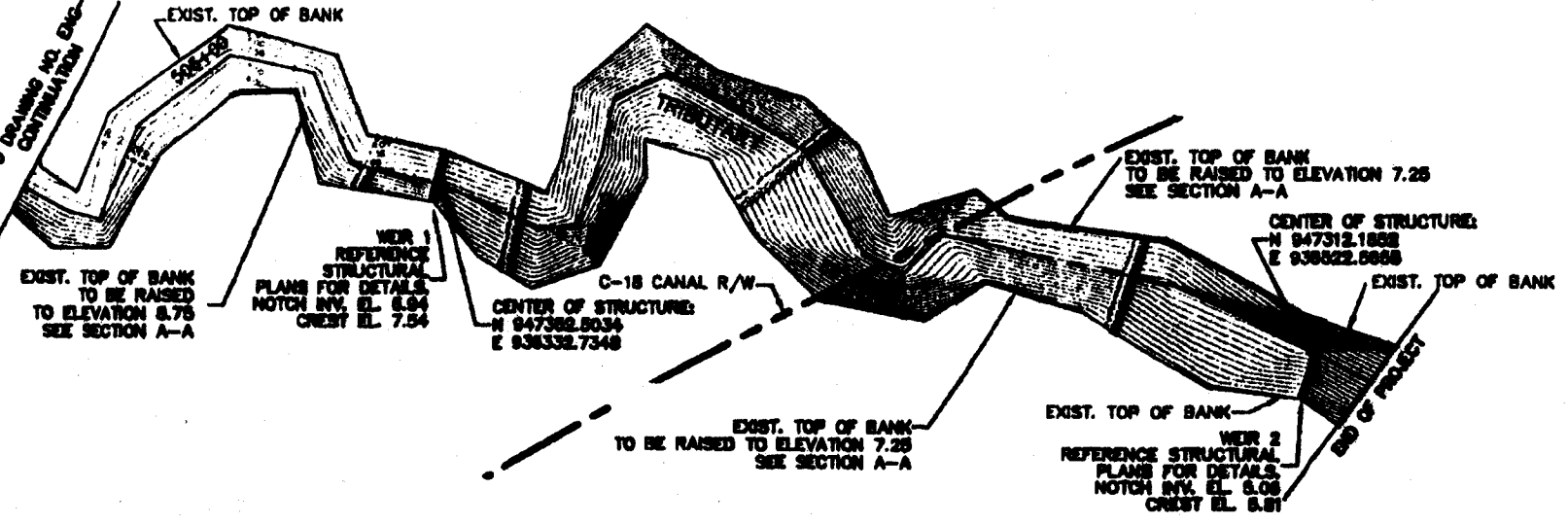
**** Color options are available. Please contact the sales representative for your area for details.

NORTHSTAR

ENDURANCE CSP
COMPOSITE SHEET PILING

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REFER TO DRAWING NO. ENG-1 FOR
CONTIGUOUS



LIMESTONE CREEK RESTORATION
 TRIBUTARY IMPROVEMENTS - PHASE 1
 FOR: PBC ENVIRONMENTAL RESOURCE MANAGEMENT

TRIBUTARY CONTROL STRUCTURES

MILLER LEGG
 ENGINEERS AND ARCHITECTS
 1000 1/2 STREET, SUITE 100
 FARMINGTON, CT 06030

08-00087
 ENG-2

11/20/07 (last revision) 08-00087 LIMESTONE CREEK RESTORATION PHASE 1 - TRIBUTARY IMPROVEMENTS - PHASE 1. THE DATE/REV IS SHOWN IN THE BOTTOM RIGHT CORNER OF EACH REVISION.

23

1/4/07

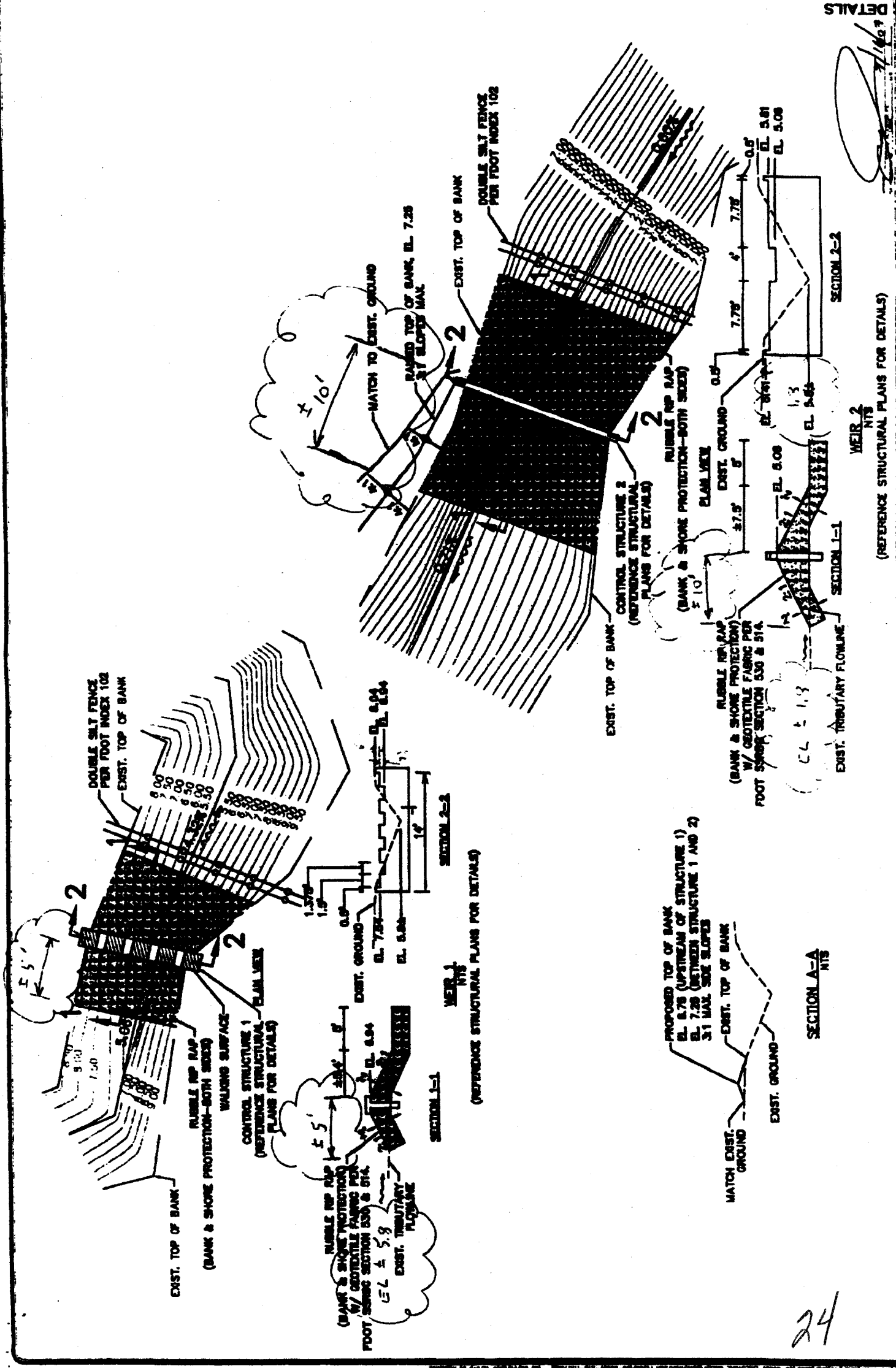
LIMESTONE CREEK RESTORATION TRIBUTARY IMPROVEMENTS - PHASE 1

FOR: PBC ENVIRONMENTAL RESOURCE MANAGEMENT

MILLER LEGG
ENGINEERS
INCORPORATED
4155 WEST 17TH AVENUE
DENVER, COLORADO 80202
PH: 303.751.2500
FAX: 303.751.2501
WWW.MILLERLEGG.COM

DATE	BY	REV	DESCRIPTION
06/15/07	PDD	2	REVISED PER COMMENTS
06/08/07	PDD	1	ISSUED FOR PERMITTING

06-00087 PDD
11/15/07



WEIR 2
NTS
(REFERENCE STRUCTURAL PLANS FOR DETAILS)

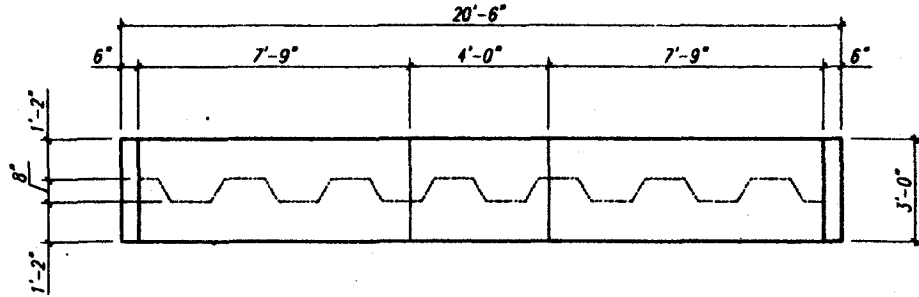
SECTION A-A
NTS

DETAILS

24

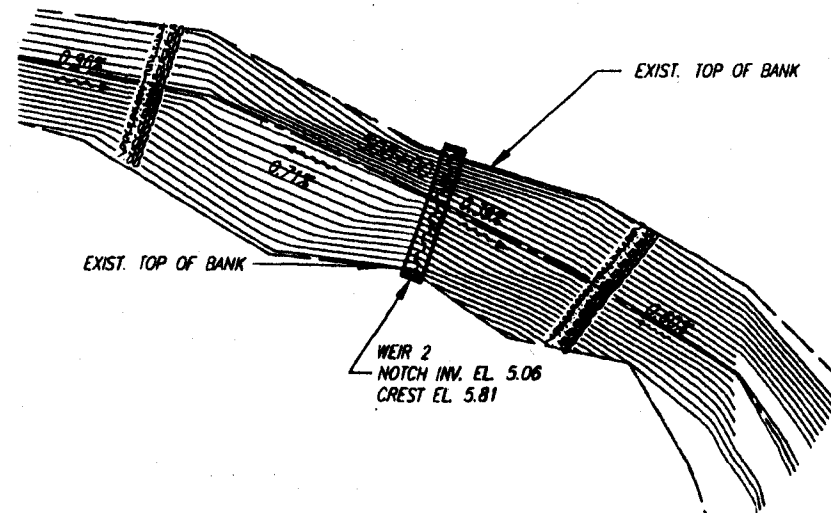
GENERAL NOTES:

CONCRETE: CLASS IV 5,500 p.s.i.
 STEEL: GRADE 60
 COMPOSITE SHEET PILING - SEE ATTACHED MATERIAL SHEET



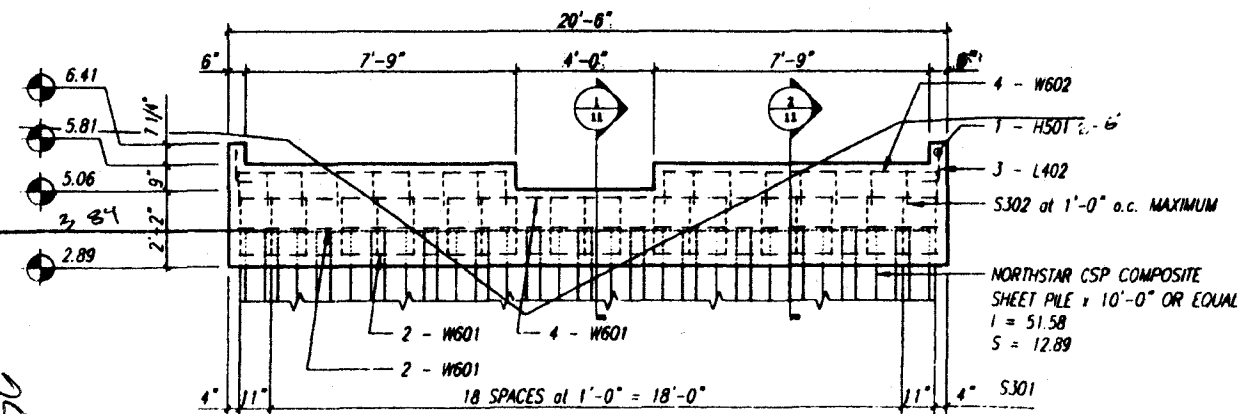
A WEIR 2 PLAN

Scale: 1/2" = 1'-0"



C WEIR 2 SITE PLAN

BRIDGE DESIGN ASSOCIATES, INC.
 2038 VISTA PARKWAY
 SUITE 200
 WEST PALM BEACH, FL 33411
 JASON C. HANSHUK, P.E. #66787
 6-1E-7



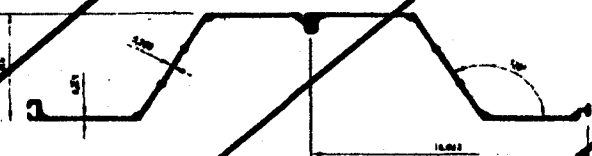
B WEIR 2 ELEVATION

Scale: 1/2" = 1'-0"

<p>LIMESTONE CREEK RESTORATION TRIBUTARY IMPROVEMENTS - PHASE 1 FOR: PBC ENVIRONMENTAL RESOURCE MANAGEMENT</p>	
<p>MILLER LEGG CONSULTING ENGINEERS 1000 N. W. 10th St., Suite 100 Ft. Lauderdale, FL 33304 Phone: (954) 561-1100 Fax: (954) 561-1101</p>	
<p>DATE: 6-1E-7 TIME: 10:00 AM SHEET NO. 07-558</p>	<p>REVISED BY: [Signature] CHECKED BY: [Signature] APPROVED BY: [Signature]</p>

Northstar CSP Composite Sheet Pile Material Property Data Sheet

Property	Units	Value	Test Method
Allowable Moment	ft-k/ft	21,400	
Peak Shear	lbs/ft	1,800	
Allowable Shear	lbs/ft	2,500	
Allowable Stress - Longitudinal Direction	ksi	50,000	
Peak Tensile - Longitudinal Direction	ksi	74,000	ASTM D638
Peak Tensile - Transverse Direction	ksi	8,000	ASTM D638
Modulus of Elasticity - Longitudinal Direction	ksi	4.0	ASTM D638
Modulus of Elasticity - Transverse Direction	ksi	1.0	ASTM D638
Peak Flexural - Longitudinal Direction	ksi	9,000	ASTM D790
Peak Flexural - Transverse Direction	ksi	15,000	ASTM D790
Peak Flexural Moment - Longitudinal Direction	ft-k/ft	27	ASTM D256
Peak Flexural Moment - Transverse Direction	ft-k/ft	15	ASTM D256
Charpy Impact - Longitudinal Direction	ft-lb/ft	50	ASTM D6110
Width	inches	18.0	
Depth of Section	inches	8.0	
Web Thickness	inches	0.25	
Flange Thickness	inches	0.25	
Neutral Axis Position	inches	4.0	
Moment of Inertia	in ⁴ /ft	51.98	
Section Modulus	in ³ /ft	12.89	
Weight	lbs/ft	6.1	
Standard/Adon		Composite Layer SM	
UV Protection		Yes	
Reinforced Corners		Yes	
Structural Ribs		Yes	

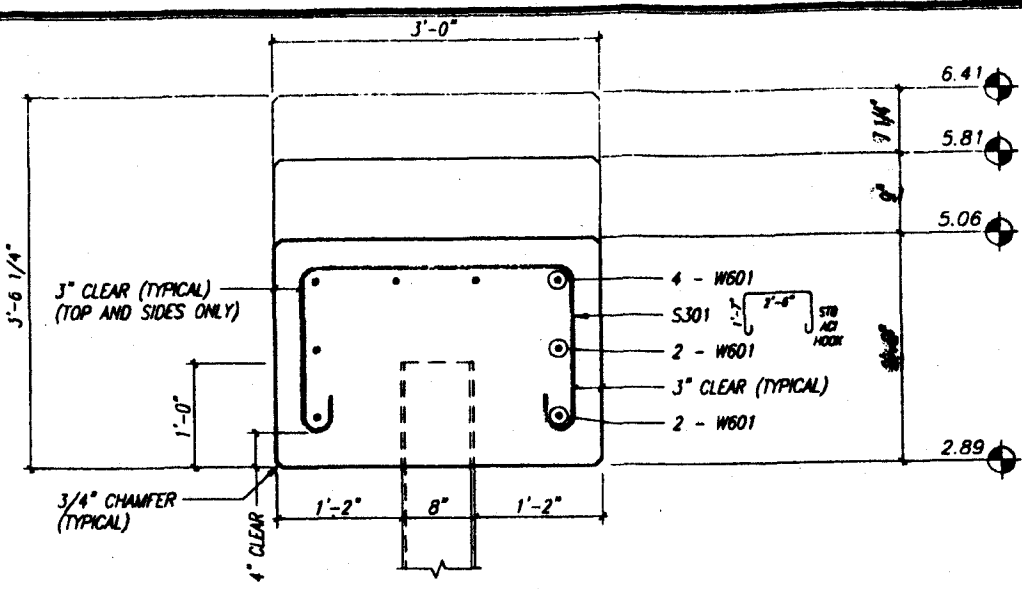


The information provided are average values and believed to be accurate. No warranty of any kind is made as to the suitability of Northstar CSP for a particular application or the results obtained therefrom. Northstar recommends that you consult with a local professional (qualified engineer and/or contractor) as to the suitability for your particular application.

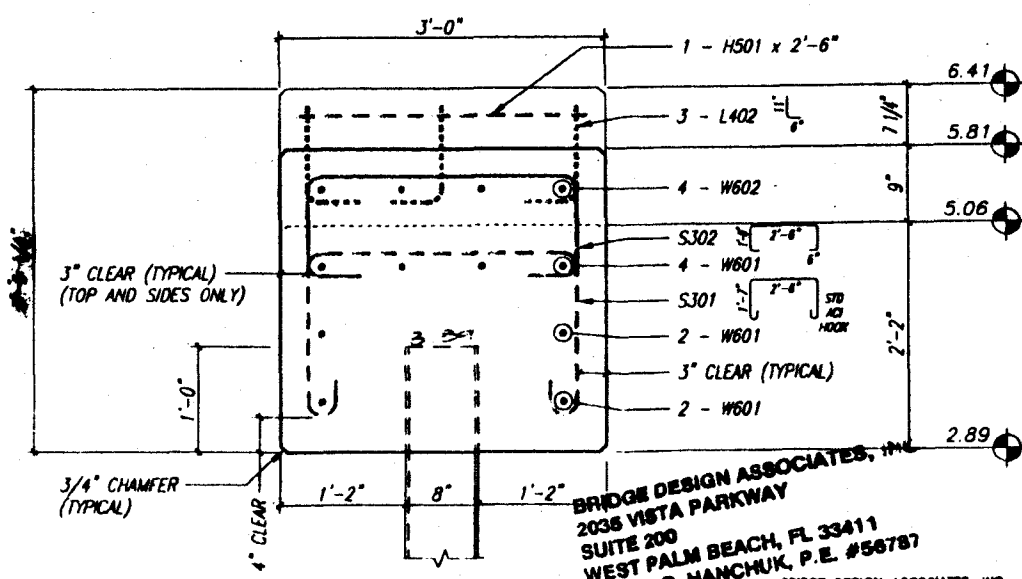
Shear value based on failure load of full scale bench test of post.
 Shear value based on extrapolation from full scale bench testing on Polaris CE post and testing report 03-0234 Revised from Northstar, Inc.
 Due to the impact strength in the testing, a 300 lb-ft capacity Scales Charpy Impact Tester is used. This tester is typically used for metals specimens per ASTM E23-02 and has a striking edge different in dimension than that called for per ASTM D 6110.
 Color options are available. Please contact the sales representative for your area for details.

NORTHSTAR

ENDURANCE CSP
COMPOSITE SHEET PILE



1 WEIR 2 SECTION
Scale: 1 1/2" = 1'-0"



2 WEIR 2 SECTION
Scale: 1 1/2" = 1'-0"

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JASON C. HANCHUK, P.E. #56787

LIMESTONE CREEK RESTORATION
TRIBUTARY IMPROVEMENTS - PHASE 1
FOR: PBC ENVIRONMENTAL RESOURCE MANAGEMENT

MILLER LEGG
Professional Engineer
P.E. License No. 10000
10000
10000

REV	BY	DATE	DESCRIPTION
06-00087			

07-558