DOTD FORM: 24-102

PROPOSAL TO PROVIDE CONSULTANT SERVICES

(Revised January 1, 2023)

1.	Contract Name as shown in the advertisement	IDIQ Contract for Professional Hydrographic Surveying Services Statewide with Majority of Work in Districts 04,05,08, and 58
2.	Contract Number(s) as shown in the advertisement	Contract No. 4400027687
3.	State Project Number(s), if shown in the advertisement	N/A
4. Louisi	Prime consultant name (name must match as registered with the ana Secretary of State where such registration is required by law)	DELTA COAST CONSULTANTS, LLC
	Prime consultant license number (as registered with the Louisiana sional Engineering and Land Surveying Board (LAPELS) if registration is ed under Louisiana law)	Louisiana Engineering Firm #5462 Louisiana Land Surveying Firm#714
6.	Prime consultant mailing address	631 South Hollywood Road Houma, LA 70360
7. used as	Prime consultant physical address (existing or to be established, if location is an evaluation criteria)	631 South Hollywood Road Houma, LA 70360
8. point of	Name, title, phone number, and email address of prime consultant's contract of contact	Chad Robichaux, PLS 985-655-3100 chad.robichaux@deltacoastllc.com
9. author	Name, title, phone number, and email address of the official with signing ity for this proposal	Barry Jason Kennedy, PE, PLS Principal 985-655-3100 jason.kennedy@deltacoastllc.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.

Signature above shall be the same person listed in Section 9:

9-19-23

Date:

11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.

Firm(s): N/A
Firm(s)' %: N/A

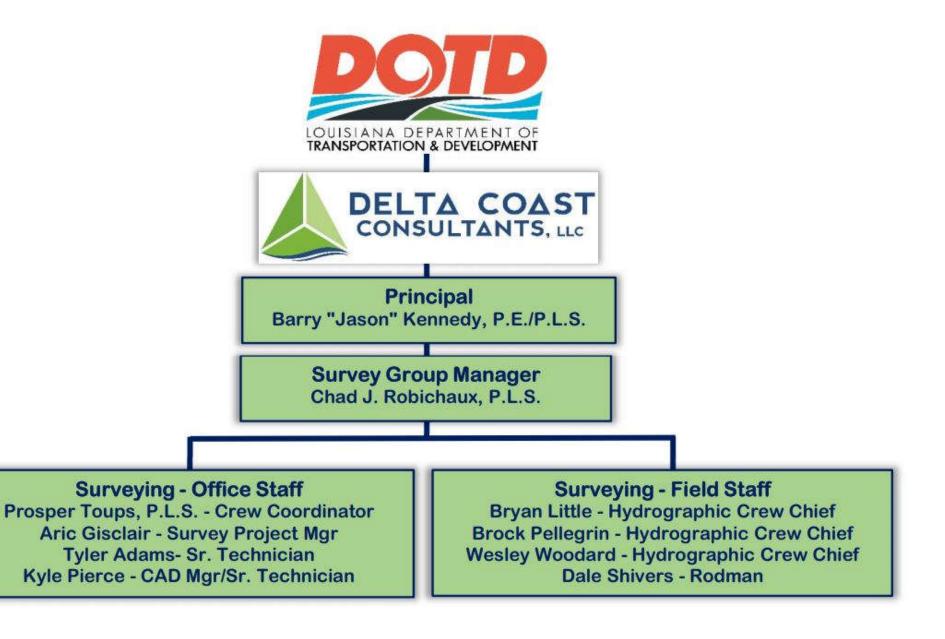
12. Past Performance Evaluation Discipline Table:

Past Performance Evaluation Discipline(s)	% of Overall Contract	
Survey	100%	
Identify the percentage of work for the <u>overall contract</u> to be performed by the prime consultant and each sub-consultant.		
Percent of Contract	100%	

13. Firm Size:

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
	Engineer		5
	Engineer Intern		1
A	Party Chief	3	6
	Biologist/Wetlands		1
	Environmental Manager		1
	Environmental Professional		1
	Principal	1	2
	Administrative		1
	Project Office Manager		1
	Inspector		4
DELTA COΔST CONSULTANTS, LLC	Rodman	1	4
DELIA COASI	Instrument Man		1
	Professional Land Surveyor	2	2
CONSULTANTS, LLC	Other (Project Manager)	1	2
0011002121110,220	Other (Land Surveyor Intern)		1
	CADD Drafter		0
	CADD Technician		2
	Senior Technician	2	4

(Add rows as needed)



15. Minimum Personnel Requirements:

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR/certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1	Barry "Jason" Kennedy PE, PLS	DELTA COAST CONSULTANTS, LLC	PLS 4982 15 Years PE 33218 (Civil) 16 Yrs	LA LA	9/30/2023 9/30/2023
2	Chad Robichaux, PLS	DELTA COAST CONSULTANTS, LLC	PLS 4882 22 Years	LA	9/30/2025

Firm employed by Delta Coast Consultants, LLC				
Name Barry "Jason" Kennedy		Years of relevant experience with this employer 9		
Title PE, PLS, Principal		Years of relevant experience with other employer(s) 12		
Degree(s) / Years / S	Specialization	B.S. Civil Engineering / 2002 – M.S. Coastal Engineering / 2011		
Active registration n	number / state / expiration date	PLS 4982 / LA / 9/30/2023 – PE 33218 / LA / 9/30/2023		
Year registered	2008 / 2007 Discipline	Survey / Civil Engineering		
	ief description of responsibilities	QA / QC Manager		
		nt to the proposed contract; i.e., "designed drainage", "designed girders", "designed		
		nould cover the years of experience specified in the applicable MPR(s).		
Mr. Kennedy is a Lo	ouisiana native and a licensed profession	onal engineer and land surveyor with 21 years of engineering experience in the design		
and surveying of a w	vide variety of civil engineering projec	ets. He has specialized experience in the planning and design of flood protection and		
coastal restoration p	rojects in south Louisiana. His backgro	ound in data collection and analysis aids in development of scientifically defensible		
solutions to engineer	ring projects. Work experience include	es grant applications, feasibility reports, damage assessments, hydraulic modeling,		
engineering design,	construction management, topographic	c surveys, hydrographic surveys, technical reports, and permitting.		
0/21 0				
		urricane Ida-Terrebonne Levee and Conservation District (Terrebonne Parish, LA)		
	• • •	mager for emergency response and associated services assisting TLCD in emergency		
	repairs and assessments following Hurricane Ida. These services included coordinating other consultants and contractors,			
	identifying damage along TLCD levees and structures, coordinating resources deployed to each location, and ultimately			
	organizing the FEMA PW applications for federal assistance. This work also included numerous underwater sonar surveys (S			
	& MB) of various floodgates and water	erways to identify damage and provide route clearance for marine vessels and equipment.		
6/18 - Ongoing	Mid-Breton Sediment Diversion Proj	<i>lect, CPRA (Plaquemines Parish, LA)</i> - The Mid-Breton Sediment Diversion Project is		
		sippi River at Willis Point and is being designed to use the Mississippi River to move		
		er into nearby basins, mimicking the natural deltaic land-building processes. Mr.		
	Kennedy serves as the project team lead for data collection, instrumentation, and surveying services. Mr. Kennedy helped to develop the data collection procedures and scope used by the project team to validate and calibrate the project modeling			
	efforts. Mr. Kennedy also assisted the project team in development of innovative data collection procedures to gather valuab			
	sediment and flow data in the near-bed regions of the Mississippi River channel.			
	sediment and now data in the near-bed regions of the ivitssissippi River channel.			

1/22 - Ongoing	Instrumentation and Monitoring System for the Terrebonne Levee and Conservation District (Terrebonne Parish, LA) -
	Mr. Kennedy serves as the program lead for TLCD's critical data collection and floodgate monitoring systems installed
	throughout Terrebonne Parish, LA. This system was started in 2014 with the installation of hydrodynamic monitoring
	equipment at 3 critical floodgates. Mr. Kennedy developed an online interface for TLCD staff to view water levels, flow, and
	windspeed in real-time over a mobile connection. This system now includes monitoring systems at 11 total floodgate
	locations in Terrebonne Parish.
11/17 – 09/19	Valhi Drainage Improvements Project, Terrebonne Parish Consolidated Gov't (Terrebonne Parish, LA) -Mr. Kennedy
	serves as the modeling / H&H lead on this project. Mr. Kennedy developed a coupled 1D/2D HEC-RAS model to combine
	the flow effects of the many small interconnected ditches and drainage canals with the 2D flow effects of flooded storage
	basins and wetlands within the system. This model was built from survey data collected by DCC and combined with LIDAR
	data of the various drainage basins. The model runs were performed in version 5.0.5 of HEC-RAS.
05/21 - Ongoing	Bayou Lafourche Pumping Capacity Improvements Project, Bayou Lafourche Freshwater District (Ascension Parish, LA)
	- Mr. Kennedy served as the Assistant Project Manager for the project team (Stantec Prime Consultant). Mr. Kennedy
	coordinated design efforts with the Owner and helped to guide the project through the modeling, design, and permitting
	process. Mr. Kennedy also developed the data collection program for in-river hydrodynamic and sediment data to aid in
	model calibration and validation. In-river sediment sampling was used to determine the sedimentation effects from increased
	flows into Bayou Lafourche and ultimately design mitigation efforts to reduce these effects.

Firm employed by	Delta Coast Consultants, LLC		
Name Prospe	er Toups, III	Years of relevant experience with this employer	8
Title Profes	sional Land Surveyor	Years of relevant experience with other employer(s)	19
Degree(s) / Years /	Specialization	Bachelor of General Studies-1991 Applied Science/ 30-hrs Surve	y Course for LA PLS
		Licensure	
Active registration:	number / state / expiration date	4967 /LA	
Year registered	2007 Discipline	Survey	
Contract role(s) / bi	rief description of responsibilities	PLS/Survey Project Manager/Crew Coordinator	
Experience dates		int to the proposed contract; i.e., "designed drainage", "designed	
(mm/yy-mm/yy)		hould cover the <u>years of experience</u> specified in the applicable MP	
Mr. Toups is a Lou	isiana licensed land surveyor with over	twenty-seven years of land surveying experience ranging from 3D	seismic surveys,
exploration permitt	ing, pipeline anomaly repair, unit surve	eys, right-of-way surveys, boundary & mortgage surveys, land recla	amation surveys,
property line shifts	& subdivision of property surveys, con	struction layout & topographic surveys, geodetic control surveys,	and hydrographic &
marsh restoration st	urveys. His background as a field surve	eyor performing countless hours of data collection and years behind	1 the desk reviewing,
processing, and app	olying this data to projects brings valua	ble experience to the team.	_
10/22 - Ongoing		tion Project BA-240, CPRA (Plaquemines Parish, LA) – Mr. Tou	
survey and data collection manager for the duration of this project. The purpose of this project is to rest			
marsh habitat adjacent to the eastern shoreline of Bayou Grande Cheniere by pu			•
from the Mississippi River. Mr. Toups is tasked with managing the magnetometer surveys, hydrographic		•	
areas and access routes, and the topographic surveys of the marsh creation areas. Mr. Toups als			outgoing data for
validity and compliance with the scope of work provided by CPRA and the client (Weeks Marine). 06/18 - Ongoing Mid-Breton Sediment Diversion Project, CPRA (Plaquemines Parish, LA) - The Mid-Breton Sediment Diversion			t Diversion Project is
00/16 - Oligoling	l	sippi River at Willis Point and is being designed to use the Mississ	3
		er into nearby basins, mimicking the natural deltaic land-building p	* *
	serves as the lead for data collection and surveying services. Mr. Toups helped to develop the data collection procedures and		
	scope used by the project team to validate and calibrate the project modeling efforts. Mr. Toups also assisted the project team		
	-	collection procedures to gather valuable sediment and flow data in	2 0
of the Mississippi River channel.			
05/21 - Ongoing		Improvements Project, Bayou Lafourche Freshwater District (A	scension Parish, LA)
		data Collection Manager for the project team (Stantec Prime Cons	
		ion program for in-river hydrodynamic and sediment data to aid in	
	validation. In-river sediment samplin	g was used to determine the sedimentation effects from increased t	lows into Bayou
	Lafourche and ultimately design mitig	gation efforts to reduce these effects.	·

01/23 - Ongoing	Ward 7 Levee Mitigation – Marsh Creation Project, Terrebonne Parish Consolidated Government, (Terrebonne Parish,		
	LA) - This project will create 37 acres of marsh along the eastern shoreline of Lake Boudreaux as mitigation for impacts		
	associated with the Ward 7 Levee Improvements project. Prosper served as the professional surveyor of record for the		
	construction phase of this project as a subcontractor to the overall construction contractor. Prosper was responsible for		
	completion of magnetometer surveys, pipeline probing and location, hydrographic surveys of the borrow area, shallow water		
	topographic surveys of the marsh creation area and rock dike alignments, and compliance / payment surveys.		
06/16 - 11/16	Falgout Canal Freshwater Enhancement (CIAP) Project (Terrebonne Parish, LA) - The goal of this CIAP project is to		
	reestablish historical north to south flow by constructing a new channel between the Houma Navigation Canal and the interior		
	marshes north of Falgout Canal. Prosper was the professional surveyor of record for the construction phase of this project as a		
	subcontractor to the overall construction contractor. Prosper was responsible for completion of magnetometer surveys,		
	pipeline location, pre-construction cross-sections, post-construction payment surveys, and certified dredging volume		
	calculations.		

Firm employed by Delta Coast Consultants, LLC				
Name Chad Robichaux	Years of relevant experience with this employer 2			
Title PLS/Survey Manager	Years of relevant experience with other employer(s) 27			
Degree(s) / Years / Specialization	Bachelor of Science / 1997 / Civil Engineering Technology - 30-hrs Survey Course for			
	LA PLS Licensure			
Active registration number / state / expiration date	4882/LA			
Year registered 2001 Discipline	Survey			
Contract role(s) / brief description of responsibilities	Supervising Surveyor			
	vant to the proposed contract; i.e., "designed drainage", "designed girders", "designed			
	should cover the <u>years of experience</u> specified in the applicable MPR(s).			
•	h over 29 years of land surveying experience including boundary, ALTA, residential &			
	rtification, hydrographic/bathymetric (single-beam & multibeam), hazard/geophysical			
`	profiler), pipeline construction (new-build and maintenance), pipeline depth of			
, , ,	tainment, dredging, construction stakeout, as-built, oil & gas exploration, and utility			
<u> </u>	d permitting at the local, state and federal level, land rights/ROW platting and legal			
	ations, levee and road layout, horizontal directional drill layout, route analysis and			
feasibility studies. His diverse background brings valuab	le experience to the team.			
08/21 – 09/21 Post Hurricane Ida Emergency Hydrographic Survey for Newpark Drilling Fluids in Fourchon – The purpose of this				
	project was to perform an emergency side scan sonar and single-beam survey of 2 slips in Fourchon to determine water depths			
1	ater near the client's docks so that they could determine whether it was safe to dock their			
	sporting drilling fluids to their clients in the Gulf of Mexico. During the survey we			
=	right next to the dock that was standing upright only a few feet below the surface of the			
	cated other storm related debris resting on the seafloor. Mr. Robichaux managed the field			
	g preparation. Field surveys included <u>a side scan sonar and water depth survey</u> . Office			
	le scan sonar and single beam echosounder data that collected. Drawings were prepared			
showing plan views of the side scan imagery, areas that were safe for mooring and coordinates of the sonar contacts (haza				
	drographic Survey of 24" Mars & 24" Amberjack Pipelines for Shell in the Gulf of			
	et was to perform a side scan sonar and multibeam survey of 2 pipelines in response to an			
oil leak after Hurricane Ida from the beach out to the 3-mile limit line. During the survey we found several broken pipeline				
and were able to determine that the pipelines were not for our client. Mr. Robichaux managed the field surveys, da				
	Field surveys included a side scan sonar and magnetometer survey. Office work consisted			
of processing the side scan sonar and magnetometer data that was collected. Drawings were prepared showing plan views o				
the side scan imagery, magnetic targets and coordinates of key features.				
the side scan imagery, magnetic targ	gets and coordinates of key features.			

08/21 - 10/21	Post Hurricane Ida Emergency Hydrographic Survey of 10" Ethylene Pipeline for Shell in the Bonnet Carre Spillway -
	The purpose of this project was to perform a side scan sonar and multibeam survey of an exposed pipeline in the Bonnet Carre
	Spillway. The pipeline was exposed before Hurricane Ida hit and our client wanted to ensure that the pipeline was not
	impacted by any storm debris or moved by the high intensity winds. We discovered that there was in fact some debris hung up
	on the pipeline. Mr. Robichaux managed the field surveys, data processing and drawing preparation. Field surveys included a
	side scan sonar and multibeam survey. Office work consisted of processing the side scan sonar and multibeam data that was
	collected. Drawings were prepared showing plan and profile views of the side scan imagery, multibeam data and coordinates
	of key features.
08/21 - 09/21	Post Hurricane Ida Emergency Hydrographic Survey for Magellan Midstream in Gibson – The purpose of this project was
	to perform an emergency side scan sonar and water depth survey of Bayou Black in Gibson to determine water depths and to
	look for storm debris underwater near the client's docks so that they could determine whether it was safe to access their docks.
	During the survey we discovered some storm related debris resting on the seafloor. Mr. Robichaux managed the field surveys,
	data processing and drawing preparation. Field surveys included a side scan sonar and multibeam survey. Office work
	consisted of processing the side scan sonar and multibeam echosounder data that collected. Drawings were prepared showing
	plan views of the side scan imagery and multibeam data, along with areas that were safe for mooring and coordinates of the
06/02 00/02	sonar contacts (hazards).
06/23 - 08/23	<u>Hydrographic Surveys for Shell's 22" Zydeco Pipelines in Berwick</u> — The purpose of this project was to perform a multibeam
	inspection survey of Shell's abandoned and active Zydeco pipelines across Bayou Shaffer and the Atchafalaya River to check
	the depth of cover over the pipelines. During the survey we discovered that the abandoned pipeline was still suspended off of
	the seafloor at both waterway crossings. Mr. Robichaux managed the field surveys, data processing and drawing preparation.
	Field surveys included a multibeam survey. Office work consisted of processing the side scan sonar and multibeam
	echosounder data that collected. Drawings were prepared showing plan and profile views of the multibeam data and coordinates of key features.
	coordinates of key features.

Firm employed by Delta Coast Consultants, LLC			
Name Brock	J. Pellegrin		Years of relevant experience with this employer 3
Title Survey	y Party Chief		Years of relevant experience with other employer(s) 10
Degree(s) / Years /	Specialization	High	School Graduate, 2010 / TWIC
Active registration	number / state / expiration date	N/A	
Year registered	N/A Discipline	Surve	
Contract role(s) / b	rief description of responsibilities		k will serve as a hydrographic survey party chief
Experience dates (mm/yy–mm/yy)			the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed cover the <u>years of experience</u> specified in the applicable MPR(s).
			performed surveys in the Louisiana coastal environment, is proficient in GPS
_	• • • • •		ence in the operation of nearly all types of watercraft used in the coastal surveying
	-	-	itboard-powered vessels. Furthermore, Brock has performed numerous
-			eam echosounders, side scan sonar, magnetometers and gradiometers.
ilydrograpine surve	sys utilizing single beam fathometers,	mumbe	cam echosounders, side scan sonar, magnetometers and gradiometers.
08/21 - Ongoing	performed annual side-scan and multibeam surveys on all flood gates within Terrebonne Parish. Brock was responsible for		
10/21 – 11/21	collecting side-scan and multibeam data used to visually inspect the locking structures of the floodgates for obstructions. LA Scrap Metal and Recycling – Mulit-beam and ALTA Survey (Terrebonne Parish, LA) – The project required a multi-		
10/21 11/21	beam survey of the slips that were to be purchased by LA Scrap Metal and Recycling in conjunction with a topographic survey		
	of the surrounding property. Brock was responsible for the collection of significant features surrounding the slips, as well as		
	the multi-beam data of the slips used to display usable water depths and any underwater obstructions.		
08/21 - 09/21	•		phic Survey for Newpark Drilling Fluids in Fourchon — The purpose of this
			can sonar and single-beam survey of 2 slips in Fourchon to determine water depths
	and to look for storm debris underw	ater nea	or the client's docks so that they could determine whether it was safe to dock their
	•		drilling fluids to their clients in the Gulf of Mexico. During the survey we
			ext to the dock that was standing upright only a few feet below the surface of the
water. Our side scan sonar also indicated other storm related debris resting on the seafloor. Brock performed the field debris resting on the seafloor.			
	collection work which included a side scan sonar and water depth survey.		
08/21 - 10/21			phic Survey of 10" Ethylene Pipeline for Shell in the Bonnet Carre Spillway –
			a side scan sonar and multibeam survey of an exposed pipeline in the Bonnet Carre
			Hurricane Ida hit and our client wanted to ensure that the pipeline was not
			the high intensity winds. We discovered that there was in fact some debris hung up
	on the pipeline. Brock performed th	e field s	urveys, which included a side scan sonar and multibeam survey.

Firm employed by	Delta Coast Consultants, LLC			
Name Bryan	Little	Years of relevant experience with this employer 6		
Title Surve	y Party Chief	Years of relevant experience with other employer(s) 20		
Degree(s) / Years /	Specialization	High School Graduate,1997 / USCG Boaters Safety/ TSA/ TWIC		
Active registration	number / state / expiration date	N/A		
Year registered	N/A Discipline	Survey		
Contract role(s) / b	rief description of responsibilities	Bryan may serve as a hydrographic survey party chief		
Experience dates (mm/yy-mm/yy)	intersection", etc. Experience dates s	ant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed hould cover the <u>-years of experience</u> specified in the applicable MPR(s).		
Bryan is a Louisiar	na native and has over 26 years of field	experience performing surveys in the Louisiana coastal environment. Experience		
field experience wi measurement of rea watercraft used in t proficient in the Hy	includes operation of nearly all types of surveying equipment. Proficient in GPS surveying principles and operation. Bryan also has extensive field experience with deployment and troubleshooting of various water level sensors and Acoustic Doppler Velocimeters (ADV's) for measurement of real-time water levels and flows in various waterways. He has extensive experience in the operation of nearly all types of watercraft used in the coastal surveying environment, including Airboats, Marsh-buggies, and various outboard-powered vessels. Bryan is proficient in the HyPack Max – Hydrographic Survey Software, as well as Sea-Spy magnetic data collection software. Bryan was responsible for field data collection activities for numerous task orders issued through an A/E CWPPRA Surveying Services contract with USDA/NRCS at a previous job.			
08/21 - Ongoing	ng TLCD – Flood Gate Side scan and Multibeam Survey (Terrebonne Parish, LA) - Bryan was one of the Party Chiefs that performed annual side-scan and multibeam surveys on all flood gates within Terrebonne Parish. Bryan was responsible for collecting side-scan and multibeam data used to visually inspect the locking structures of the floodgates for obstructions.			
08/21 – 09/21	<u>Post Hurricane Ida Emergency Hydrographic Survey for Magellan Midstream in Gibson</u> — The purpose of this project was to perform an emergency side scan sonar and water depth survey of Bayou Black in Gibson to determine water depths and to look for storm debris underwater near the client's docks so that they could determine whether it was safe to access their docks. During the survey we discovered some storm related debris resting on the seafloor. Bryan performed the field surveys, which included <u>a side scan sonar and multibeam survey</u> .			
08/21 - 10/21	<u>Mexico</u> – The purpose of this project oil leak after Hurricane Ida from the	was to perform a side scan sonar and multibeam survey of 2 pipelines in response to an beach out to the 3-mile limit line. During the survey we found several broken pipelines pelines were not for our client. Bryan performed the field surveys, which included a side		

06/23 – 08/23	<u>Hydrographic Surveys for Shell's 22" Zydeco Pipelines in Berwick</u> — The purpose of this project was to perform a multibeam inspection survey of Shell's abandoned and active Zydeco pipelines across Bayou Shaffer and the Atchafalaya River to check the depth of cover over the pipelines. During the survey we discovered that the abandoned pipeline was still suspended off of the seafloor at both waterway crossings. Bryan performed the field surveys, which included data collection with <u>a multibeam</u> echosounder.
10/22 - Ongoing	Weeks Marine – Grande Cheniere Ridge Marsh Creation Project (BA-0240) – Bryan served as survey lead for a borrow area survey performed in the Mississippi River. Bryan was tasked with collecting magnetometer and multi-beam data in the borrow area prior to dredging. The data collected was used in volume calculations and locating magnetometer anomalies that may interfere with the dredge cutter head. The purpose of this project is to restore over 300 acres of marsh habitat adjacent to the eastern shoreline of Bayou Grande Cheniere by pumping nearly 3 million cubic yards of material from the Mississippi River.

Firm employed by	Delta Coast Consultants, LLC						
Name Wesle	y Woodard	Years of relevant experience with this employer 3					
Title Survey	y Party Chief	Years of relevant experience with other employer(s) 5					
Degree(s) / Years /	Specialization	N/A					
Active registration	number / state / expiration date	N/A					
Year registered	N/A Discipline	Survey					
	rief description of responsibilities	Wesley may serve as a hydrographic survey crew member					
Experience dates		ant to the proposed contract; i.e., "designed drainage", "designed girders", "designed					
(mm/yy-mm/yy)		hould cover the - <u>years of experience</u> specified in the applicable MPR(s).					
=	-	experience performing surveys in the Louisiana coastal environment. Experience					
_		ent including Trimble GPS, digital levels, total stations, drones, etc. He has extensive					
experience in the op-	peration of nearly all types of watercraft	It used in the coastal surveying environment, including Airboats, Marsh-buggies, and					
various outboard-pe	owered vessels. Wesley is proficient ir	the HyPack Max – Hydrographic Survey Software, as well as Sea-Spy magnetic data					
collection software	, and also has an FAA license to fly UA	AV (drones). He is also a certified diver.					
00/01 0	TION FILLOW STILL						
08/21 - Ongoing	08/21 - Ongoing TLCD - Flood Gate Side scan and Multibeam Survey (Terrebonne Parish, LA) - Wesley assisted with the annual side-scan						
	· · · · · · · · · · · · · · · · · · ·	ates within Terrebonne Parish. The crew was responsible for collecting side-scan and					
	multibeam data used to visually inspe	ct the locking structures of the floodgates for obstructions.					
11/22 - Ongoing	11/22 - Ongoing Tchefuncte Marsh Creation Project in St. Tammany Parish – Wesley was responsible for performing a bathymetric and						
	<u> </u>	ore of Lake Pontchatrain. He performed surveys of the borrow area, access corridor and					
	fill areas to assist with the design of the						
20/21							
08/21 - 10/21	, , ,	ion Adjacent to an Entergy Transmission Tower - Wesley was responsible for					
		c and magnetometer survey of Port Allen Canal. The purpose of the survey was to gather					
	data to remediate a transmission towe	r that was at risk of falling into the canal.					
10/22 - Ongoing	Weeks Marine – Grande Cheniere R	idge Marsh Creation Project (BA-0240) – Wesley was responsible for collecting					
		ometer data along the access corridor and fill areas. The purpose of this project is to					
		at adjacent to the eastern shoreline of Bayou Grande Cheniere by pumping nearly 3					
	million cubic yards of material from t						

Firm employed by Delta Coast Consultants, LLC						
Name Dale S						
Title Survey	y Assistant (Rodman)		Years of relevant experience with other employer(s)			
Degree(s) / Years /		N/.				
	number / state / expiration d	ate N/	A			
Year registered			rvey			
	rief description of responsib		ıle will serve as a survey assistant (rodman)			
Experience dates	•		to the proposed contract; i.e., "designed drainage", "designed girders", "des	igned		
(mm/yy-mm/yy)			ld cover the - <u>years of experience</u> specified in the applicable MPR(s).			
08/21 - Ongoing			ibeam Survey (Terrebonne Parish, LA) - Dale assisted with the annual side-scar	n and		
	-	-	nin Terrebonne Parish. The crew was responsible for collecting side-scan and			
	multibeam data used to vis	ually inspect th	ne locking structures of the floodgates for obstructions.			
12/19 – 06/22	Terrebonne Basin Barrier Island and Beach Nourishment/West Belle Headland Restoration Project (TE-143 and TE-118), for CPRA (Terrebonne and Lafourche, LA) — The project will restore three critical barrier islands/headland within the Terrebonne Basin barrier shoreline system: West Belle Headland, Timbalier Island, and Trinity Island by hydraulically dredging 9,730,000 cubic yards of material from three sites located in State and Federal waters of the Gulf of Mexico. The sustainable restoration of beach, dune, and marsh habitat in a highly eroded area will help to protect the fragile landscape. Dale assisted with the field data collection for various types of surveys including bathymetric, topographic, magnetometer, and dredge progress/payment surveys.					
06/18 - Ongoing	with the construction of a cassociated river inlet chant trend that has plagued Lou	ontrol structurel, and a convesiona for the p	for CPRA (Plaquemines, LA) –The project will reconnect the Mississippi River in the mainline levee along the Mississippi River. The project also includes are eyance channel. This project is considered key to reversing the coastal land loss east hundred years. Dale assisted in the field data collection for various types of a multi-beam), topographic, magnetometer, ADCP and sediment sampling.	n s		
10/22 - Ongoing	topographic, bathymetric a	nd magnetome arsh habitat ad	e Marsh Creation Project (BA-0240) – Dale assisted with the collection of eter data along the access corridor and fill areas. The purpose of this project is to diacent to the eastern shoreline of Bayou Grande Cheniere by pumping nearly 3 Mississippi River.			

Firm employed by	Delta Coast Consultants, LLC						
Name Kyle	Pierce	Years of relevant experience with this employer 9					
	Manager / Senior Technician	Years of relevant experience with other employer(s) 17					
Degree(s) / Years /	.	N/A					
	number / state / expiration date	N/A					
Year registered							
	e(s) / brief description of responsibilities Data processing and drafting						
Experience dates		vant to the proposed contract; i.e., "designed drainage", "designed girders", "designed					
(mm/yy-mm/yy)		should cover the <u>years of experience</u> specified in the applicable MPR(s).					
		has twenty-six years of drafting experience in several disciplines. He is currently traine					
	•	ble for performing duties such as developing construction bid documents from concepts					
prepared by profes	ssional engineers. He also has experienc	ce with Bentley MicroStation.					
08/21 - Ongoing	TICD - Flood Gate Side seen and M	Multibeam Survey (Terrebonne Parish, LA) – Kyle performed the bulk of the drafting					
06/21 - Oligoling		ultibeam surveys on all flood gates within Terrebonne Parish.					
	work for the annual side-scan and mu	antibeam surveys on an flood gates within Terrebonne Parish.					
08/21 - 10/21	Post Hurricane Ida Emergency Hyd	drographic Survey for Newpark Drilling Fluids in Fourchon – The purpose of this					
	project was to perform an emergency	y side scan sonar and single-beam survey of 2 slips in Fourchon to determine water dept					
	and to look for storm debris underwar	ater near the client's docks so that they could determine whether it was safe to dock their					
	vessels to resume operations of transp	porting drilling fluids to their clients in the Gulf of Mexico. During the survey we					
	discovered a conex box underwater right next to the dock that was standing upright only a few feet below the surface of the						
	water. Our side scan sonar also indicated other storm related debris resting on the seafloor. Kyle prepared drawings showing						
	plan views of the side scan imagery, areas that were safe for mooring and coordinates of the sonar contacts (hazards).						
08/21 - 09/21		drographic Survey for Magellan Midstream in Gibson – The purpose of this project wa					
	_ ·	onar and water depth survey of Bayou Black in Gibson to determine water depths and to					
		ar the client's docks so that they could determine whether it was safe to access their docl					
	During the survey we discovered some	me storm related debris resting on the seafloor. Drawings were prepared by Kyle showing					
	plan views of the side scan imagery a	and multibeam data, along with areas that were safe for mooring and coordinates of the					
	sonar contacts (hazards).						
09/18 - 08/20	Rayou Lafourcha Emarganes Water	Control Structure (Assumption Parish, LA) -Mr. Pierce was responsible for the preparation					
09/10 - 08/20		control structure (Assumption Parish, LA) - Wif. Pierce was responsible for the preparation control structure located in Bayou Lafourche to be used in emergency situations when the					
		onaldsonville, La. would need to be shut down. The water control structure, consisting of a					
	* *	ce gates, and a 35-foot wide swing gate (for marine vessels) would be closed allowing Bayo					
	steet sheet pile Hoodwall, four (4) sluid	ce gaies, and a 55-1001 wide swing gate (101 marme vessels) would be closed allowing Bayo					

	Lafourche to act as a freshwater reservoir until the pump station could be re-started. The project is currently estimated to cost \$2,500,000.
05/14 - 08/17	Morganza to the Gulf, Reach G2 & H1 Mitigation / Marsh Creation Project, (Terrebonne Parish, LA) - Delta Coast Consultants was contracted as the prime consultant for this 205-acre marsh creation project near Dulac, LA. The project provided compensatory mitigation for impacts associated with the construction of two nearby levee alignments. The scope of the project included hydraulically dredging material from the Houma Navigation Canal and pumping over 4 miles to the target fill area just north of the Bayou Sale ridge. Mr. Pierce was responsible for processing survey data, calculating quantities, creating terrain models, preparing project plans, checking payment survey drawing packages, & preparing the As-Built survey drawing package. This project was completed in August of 2017.

Firm employed by	y Delta Coast Consultants, LLC				
	Gisclair, CST	Years of relevant experience with this employer 7			
	ey Project Manager	Years of relevant experience with other employer(s) 17			
Degree(s) / Years	, , ,	A.A.S. in Computer Aided Drafting & Design / 1999			
	n number / state / expiration date	N/A			
Year registered	N/A Discipline	Survey			
Contract role(s) /	Contract role(s) / brief description of responsibilities Project Management and data processing				
Experience dates (mm/yy-mm/yy)	intersection", etc. Experience dates s	ant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed hould cover the years of experience specified in the applicable MPR(s).			
	a native and Project Manager with a diverse, coastal restoration, and marine const	erse background of experience in sectors such as pipeline, exploration & production, cruction projects.			
8/21 – 10/21	to perform an emergency side scan so near the client's docks so that they co Ida. Our survey discovered various o unloading operations. Mr. Gisclair pr included a side scan sonar survey. On	ties for M-I Swaco (Schlumberger) in Fourchon, LA – The purpose of this project was mar survey of 5 facilities located in Fourchon to look for storm debris located underwater all resume loading and unloading vessels. This survey was performed Post-Hurricane bjects that required removal by our client prior to resuming normal loading and rocessed the data and managed the field surveys and drawing preparation. Field surveys affice work consisted of processing side scan sonar survey data collected. Drawings were ide scan mosaics and coordinates for all observed sonar contacts (hazards).			
08/21 – 10/21	project was to perform an emergency and to look for storm debris underwater vessels to resume operations of transper discovered a conex box underwater ri	rographic Survey for Newpark Drilling Fluids in Fourchon — The purpose of this side scan sonar and single-beam survey of 2 slips in Fourchon to determine water depths there near the client's docks so that they could determine whether it was safe to dock their corting drilling fluids to their clients in the Gulf of Mexico. During the survey we ght next to the dock that was standing upright only a few feet below the surface of the steed other storm related debris resting on the seafloor. Aric handled all of the data			
12/19 – 06/22	Terrebonne Basin Barrier Island an for CPRA (Terrebonne and Lafource The project will restore three critical Belle Headland, Timbalier Island, and sites located in State and Federal water in a highly eroded area will help to proversee field data collection and map	d Beach Nourishment/West Belle Headland Restoration Project (TE-143 and TE-118), the, LA) — barrier islands/headland within the Terrebonne Basin barrier shoreline system: West I Trinity Island by hydraulically dredging 9,730,000 cubic yards of material from three ters of the Gulf of Mexico. The sustainable restoration of beach, dune, and marsh habitat rotect the fragile landscape. Aric's role as a survey consultant in the project was to ping for various types of surveys including bathymetric, topographic, magnetometer, and also handled all of the data processing.			

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Mid-Breton Sediment Diversion Project, for CPRA (Plaquemines, LA) —The project will reconnect the Mississippi River with the construction of a control structure in the mainline levee along the Mississippi River. The project also includes an associated river inlet channel, and a conveyance channel. This project is considered key to reversing the coastal land loss trend that has plagued Louisiana for the past hundred years. Aric's role as a survey consultant in the project was to oversee field data collection and mapping for various types of surveys including bathymetric (single and multi-beam), topographic, magnetometer, ADCP and sediment sampling. He also handled all of the data processing.

Firm employed by	Delta Coast Consultants, LLC						
Name Tyler A	Adams	Years of relevant experience with this employer 6					
Title Senior	Technician	Years of relevant experience with other employer(s) 5					
Degree(s) / Years /	Degree(s) / Years / Specialization A.A.S. in Computer Aided Drafting & Design / 2012						
	number / state / expiration date	N/A					
Year registered	N/A Discipline	Survey					
	Contract role(s) / brief description of responsibilities Drafting and data processing						
Experience dates		nt to the proposed contract; i.e., "designed drainage", "designed girders", "designed					
(mm/yy-mm/yy)		nould cover the years of experience specified in the applicable MPR(s).					
	ž Č	erse background of experience in sectors such as pipeline, exploration & production,					
public works, levee	es, coastal restoration, and marine const	ruction projects.					
8/21 – 10/21	8/21 – 10/21 Hydrographic Survey of Dock Facilities for M-I Swaco (Schlumberger) in Fourchon, LA – The purpose of this project was to perform an emergency side scan sonar survey of 5 facilities located in Fourchon to look for storm debris located underwater near the client's docks so that they could resume loading and unloading vessels. This survey was performed Post-Hurricane Ida. Our survey discovered various objects that required removal by our client prior to resuming normal loading and unloading operations. Tyler prepared drawings showing plan views of the side scan mosaics and coordinates for all observed sonar contacts (hazards).						
10/22 - Ongoing	Grande Cheniere Ridge Marsh Creation Project BA-240, CPRA (Plaquemines Parish, LA) – The goal of the project is to create multiple marsh areas Southwest of West Pointe a La Hache using spoil dredged from the Mississippi River. The project involved magnetometer surveys, hydrographic surveys of borrow areas and access routes, and the topographic surveys of the marsh creation areas. Tyler is responsible for handling the majority of the drafting and deliverable preparation.						
Terrebonne Basin Barrier Island and Beach Nourishment/West Belle Headland Restoration Project (TE-143 and TE-118), for CPRA (Terrebonne and Lafourche, LA) — The project will restore three critical barrier islands/headland within the Terrebonne Basin barrier shoreline system: West Belle Headland, Timbalier Island, and Trinity Island by hydraulically dredging 9,730,000 cubic yards of material from three sites located in State and Federal waters of the Gulf of Mexico. The sustainable restoration of beach, dune, and marsh habitat in a highly eroded area will help to protect the fragile landscape. This project included field data collection and mapping for various types of surveys including bathymetric, topographic, magnetometer, and dredge progress/payment surveys. Tyler was responsible for handling the majority of the drafting and deliverable preparation.							
06/23 – 08/23	inspection survey of Shell's abandone the depth of cover over the pipelines.	<u>"Zydeco Pipelines in Berwick</u> – The purpose of this project was to perform a multibeam d and active Zydeco pipelines across Bayou Shaffer and the Atchafalaya River to check During the survey we discovered that the abandoned pipeline was still suspended off of gs. Tyler handled the drafting duties for this project.					

Firm employed by Delta Coast Consultants, LLC							
Name Kevin	Name Kevin Rizzo Years of relevant experience with this employer 3						
Title Engine	eering Manager, P.E., PMP	Years of relevant experience with other employer(s) 31					
Degree(s) / Years /	Specialization	BS Mathematics /1991; BS Civil Engineering/1998					
Active registration	number / state / expiration date	PE #30575 / LA / 03/31/2025					
Year registered	20 Discipline	Professional Engineer (Civil)					
	rief description of responsibilities	Engineering Supervisor					
Experience dates		nt to the proposed contract; i.e., "designed drainage", "designed girders", "designed					
(mm/yy-mm/yy)		nould cover the years of experience specified in the applicable MPR(s).					
10/14 - 12/17		xtension: LA 660 to LA 316, Terrebonne Parish Consolidated Government,					
Previous		ng Supervisor. Supervised roadway design including drainage, geometrics, subsurface					
Employer		fic Management Plans and utility relocation. Supervised the compilation of all project					
		es for a new, 1.6 mile, four-lane roadway extension (Urban Arterial) connecting state					
		ervised Construction Support services including shot drawing review, asphalt mix					
	designs, and reviewing and responding to Contractor RFIs.						
10/14 - 12/17	07-EXT-22, Bayou Gardens Blvd. Extension: LA 660 to LA 316, Terrebonne Parish Consolidated Government,						
Previous	Terrebonne Parish, LA – Engineering Supervisor. Provided supervision and quality control of all preliminary and final						
Employer	roadway design including H&V alignments, drainage, joint layouts, graphical grading, superelevation, sequence of						
	construction and utility relocation design and coordination for a 1.6 mile, 4-lane divided roadway extension of Bayou Gardens						
	Blvd. Also responsible for design of the intersection layouts and coordination of the signal improvements at state routes LA						
	660 and LA 316.						
01/14 - 06/21		11 (LA 435 to LA 40/41), LADOTD, St. Tammany Parish, LA – Engineering					
Previous	Supervisor. Supervising engineer for preliminary and final roadway design including H&V alignments, drainage, and R-Cut						
Employer	and median U-turns for a new, 5.5 mile, 4-lane, divided median, Rural Arterial Roadway from LA 435 to LA 40/41 near Bush,						
		the 100% Final Plan Submittal and reviewed the Final Cost Estimate and Calculations					
00/46	Book.						
09/16 - 08/19		US 190 to LA 59), LADOTD, St. Tammany Parish, LA – Engineering Supervisor.					
Previous		quality control of several roadway design elements including H&V alignments, drainage,					
Employer	<u> </u>	truction. Also assisted in the development of a Level 4 Traffic Management Plan and					
	oversaw the preparation of preliminar	y and final plan submittals and cost estimates.					

Firm name			Past Performance Evalu			
Project name	Emergency Response to Damage from Hurricane Ida on the Morg Hurricane Protection System			Firm responsib	oility (prime or sub?)	Prime
Project number	N/A	Terrebonne Levee and Cor	nservation District	(TLCD),		
Project location	Terrebonne Parish, Louis	Owner's Pro	ject Manager	Reggie Dupre, Jr.		
Owner's address, phor	ne, email 220A Clendennir	ng Road, Houma, LA 7	7036 , 985.262.85233,			
Services commenced	Services commenced by this firm (mm/yy) 08/21 To			Total consultant contract cost (\$1,000's) On		Ongoing
			Cost of consultant services	s provided by thi	is firm (\$1,000's)	\$5,600

This project demonstrates DCC's ability and expertise in managing large scale emergency conditions, involving multi-disciplinary project teams for storm damaged repairs of Flood Control Structures.

Relevance to Scope of Services:

- ✓ Post Hurricane Emergency Response
- ✓ Public Safety Concern
- ✓ Responsiveness
- ✓ High Quality Deliverables
- ✓ Excellent Communication Skills During an Emergency

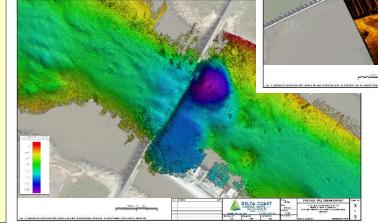
Services Provided:

- ✓ Side Scan Sonar Surveys
- ✓ Multibeam Surveys
- ✓ Data Collection & Processing
- ✓ Mapping Services
- ✓ Assessment of Flood Protection Services
- ✓ Technical Presentations
- ✓ Cost Estimating
- ✓ Project Scoping
- ✓ Report Preparation and Presentation

Key Personnel:

M. Marmande, J. Kennedy, K. Rizzo, D. Boudreaux, P. Toups, K, Pierce, A. Gisclair

Delta Coast Consultants provides overall Program Management services for the Terrebonne Levee and Conservation District on the Morganza to the Gulf – Hurricane Protection Project. Through this contract, DCC provides multi-level



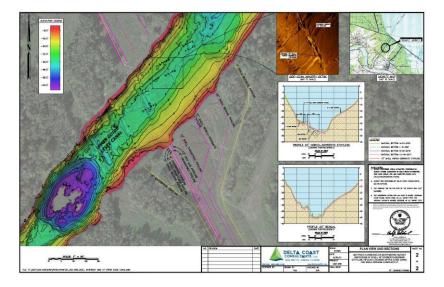
oversight and assists TLCD with nearly every aspect of project implementation including Emergency Response after tropical events. During Hurricane Ida, both the Bubba Dove and Humble Canal flood control structures failed and needed repair.

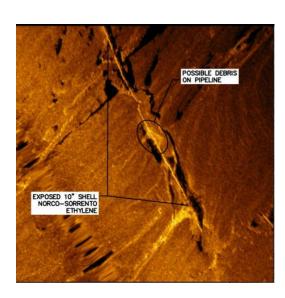
Immediately following the storm, DCC's team was able to access each of these structures with the use of side-scan sonar to determine the extent of the underwater damage and provide a competent repair plan that was then implemented by contractors and managed by DCC to put these structures back into service for the remainder of the 2021 hurricane season.

Firm name	Delta Coast Consultants,	LLC	Past Performance Evalu	uation Discipline	(s)* Survey	
Project name	Emergency Response to Hurricane Ida – 10" Ethylene			Firm responsib	ility (prime or sub?)	Prime
	Pipeline Inspection At Bonnet Carre Spillway					
Project number	N/A Owner's name Shell Pipeline Company			LP		
Project location	St. Charles Parish, Louisiana Owner's Pro			ject Manager	Shane Degruise	
Owner's address, phone, email 15601 Airline Highway, Norco, LA 70079, 985-856-7572, shane.degruise@shell.com						
Services commenced 1	ices commenced by this firm (mm/yy) 08/21			Total consultant contract cost (\$1,000's)		\$8.5
Services completed by	this firm (mm/yy)	10/21	Cost of consultant services	s provided by this	s firm (\$1,000's)	\$8.5

This project demonstrates DCC's ability and expertise in quickly responding to the needs of our clients during emergency conditions to ensure the integrity of their assets and the safety of the public.

The purpose of this project was to perform a hydrographic survey of an exposed pipeline in the Bonnet Carre Spillway. The pipeline was exposed before Hurricane Ida hit and our client wanted to ensure that the pipeline was not impacted by any storm debris or moved by the high intensity winds. We discovered that there was in fact some debris hung up on the pipeline (see image to the right). Delta Coast performed the field surveys, data processing and drawing preparation. Field surveys included a side scan sonar and multibeam survey. Office work consisted of processing the side scan sonar and multibeam data that was collected. Drawings were prepared showing plan and profile views of the side scan imagery, multibeam data and details of key features.





Relevance to Scope of Services:

- ✓ Post Hurricane Emergency Response
- Public Safety Concern
- ✓ Responsiveness
- ✓ High Quality Deliverables
- Excellent Communication Skills During an Emergency

Services Provided:

- ✓ Side Scan Sonar Survey
- ✓ Multibeam Survey
- ✓ Data Collection & Processing
- ✓ Cost Estimating
- ✓ Project Scoping
- ✓ Mapping Services
- Deliverable & Report Preparation

Key Personnel:

M. Marmande, J. Kennedy, C. Robichaux, K, Pierce, A. Gisclair, B. Little, B. Pellegrin, T. Adams

Firm name	Delta Coast Consultants,		Past Performance Evalu			
Project name		Emergency Response to Hurricane Ida – Side Scan Sonar Survey Firm responsibility (prime or sub?) Prime nspection of Docks in Fourchon				
Project number	N/A Owner's name Newpark Drilling Fluids					
Project location	Lafourche Parish, Louisia	na	Owner's Pro	ject Manager Sam Smith		
Owner's address, phor	Owner's address, phone, email 1340 Poydras Street, Suite 1750, New Orleans, LA 70112, 504-523-8446, ssmith@newpark.com					
Services commenced by this firm (mm/yy) 08/21			Total consultant contract cost (\$1,000's) \$8		\$8.5	
Services completed by	this firm (mm/yy)	10/21	Cost of consultant services	s provided by this firm (\$1,000's)	\$8.5	

This project demonstrates DCC's ability and expertise in quickly responding to the needs of our clients during emergency conditions to ensure public safety and to allow Newpark to safely and quickly resume shipping operations to minimize down time, loss of revenue and responsiveness to their GOM clients.

Relevance to Scope of Services:

- Post Hurricane Emergency Response
- **Public Safety Concern**
- Responsiveness
- High Quality Deliverables
- ✓ Excellent Communication Skills During an Emergency

Services Provided:

- Side Scan Sonar Survey
- Single-beam Survey
- Data Collection & Processing
- Cost Estimating
- **Project Scoping**
- **Mapping Services**
- **Deliverable & Report Preparation**

Key Personnel:

M. Marmande, J. Kennedy, C. Robichaux, K, Pierce, A. Gisclair, B. Little, B. Pellegrin, P. Toups

The purpose of this project was to perform an emergency side scan sonar and bathymetric survey of 2 slips in Fourchon to determine water depths and to look for storm debris underwater near the client's docks so that they could determine whether it was safe to dock their vessels to resume operations of transporting drilling fluids to their clients in the Gulf of Mexico. During the survey we discovered a conex box underwater right next to the dock that was standing upright only a few feet below the surface of the water. Our side scan sonar also indicated other storm related debris resting on the seafloor. Drawings were

> prepared showing plan views of the side scan imagery, areas that were safe for mooring and coordinates of the sonar contacts (hazards).



Firm name	Delta Coast Consultants, LLC Past Performance Evalu					
Project name	Emergency Response to Hurricane Ida – Side Scan Sonar Survey Inspection of Docks in Gibson Firm responsibility (prime or sub?) Prime				Prime	
Project number	N/A Owner's name Magellan Midstream Partn			ers LP		
Project location	Lafourche Parish, Louisiana Owner's Pro			ject Manager	Mark Brown	
Owner's address, phone, email One Williams Center, OTC-8, Tulsa, OK 74172, 918-574-7066, EMAIL						
Services commenced by this firm (mm/yy) 08/21			Total consultant contract cost (\$1,000's)		\$8.5	
Services completed by this firm (mm/yy) 10/21			Cost of consultant services	s provided by this	firm (\$1,000's)	\$8.5

This project demonstrates DCC's ability and expertise in quickly responding to the needs of our clients during emergency conditions to ensure public safety and to allow Magellan to safely and quickly resume crude oil delivery operations to minimize down time, loss of revenue and responsiveness to their clients.

Relevance to Scope of Services:

- ✓ Post Hurricane Emergency Response
- ✓ Public Safety Concern
- ✓ Responsiveness
- ✓ High Quality Deliverables
- ✓ Excellent Communication Skills During an Emergency

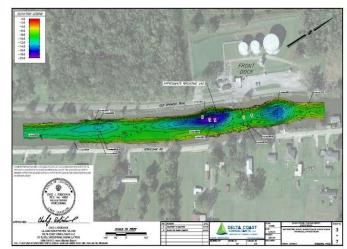
Services Provided:

- ✓ Side Scan Sonar Survey
- ✓ Multibeam Survey
- ✓ Data Collection & Processing
- ✓ Cost Estimating
- ✓ Project Scoping
- ✓ Mapping Services
- ✓ Deliverable & Report Preparation

Key Personnel:

M. Marmande, J. Kennedy, C. Robichaux, K, Pierce, A. Gisclair, B. Little, B. Pellegrin, P. Toups The purpose of this project was to perform an emergency side scan sonar and water depth survey of Bayou Black in Gibson to determine water depths and to look for storm debris underwater near the client's docks so that they could determine whether it was safe to access their docks. During the survey we discovered some storm related debris resting on the seafloor. Field surveys included a side scan sonar and water depth survey. Office work consisted of processing the side scan sonar and multibeam echosounder data that was collected. Drawings





were prepared showing plan views of the side scan imagery and multibeam data, along with areas that were safe for mooring and coordinates of the sonar contacts (hazards).

Firm name	Delta Coast Consultants, LLC		Past Performance Evaluation Discipline(s)* Survey		
Project name	Emergency Response to Hurricane Ida – Side Scan Survey Inspection of 24" Mars & 24" Amberjack Pipelines in GOM			Firm responsibility (prime or sub?)	Prime
Project number	N/A Owner's name Shell Pipeline Company LP				
Project location	Lafourche Parish, Louisia			ject Manager Micah Shanks	
Owner's address, phone, email 150 N. Dairy Ashford Road, Houston, TX 77079, 832-762-2606, micah.shanks@shell.com					
Services commenced by this firm (mm/yy) 08/21			Total consultant contract cost (\$1,000's)		\$20
Services completed by this firm (mm/yy) 10/21			Cost of consultant services	provided by this firm (\$1,000's)	\$20

This project demonstrates DCC's ability and expertise in quickly responding to the needs of our clients during emergency conditions to ensure the integrity of their assets and the safety of the public

The purpose of this project was to perform a side scan sonar survey of 2 pipelines in response to an oil leak after Hurricane Ida from the beach out to the 3-mile limit line. During the survey we found several broken pipelines and were able to determine

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that the pipelines were not for our client. Field surveys included a side scan sonar and magnetometer survey. Office work consisted of processing the side scan sonar and magnetometer data that was collected. Drawings were prepared showing plan views of the side scan imagery, magnetic targets and coordinates of key features.

Relevance to Scope of Services:

- ✓ Post Hurricane Emergency Response
- ✓ Public Safety Concern
- ✓ Responsiveness
- ✓ High Quality Deliverables
- Excellent Communication Skills
 During an Emergency

Services Provided:

- ✓ Side Scan Sonar Survey
- ✓ Single-beam Survey
- ✓ Magnetometer Survey
- ✓ Data Collection & Processing
- ✓ Cost Estimating
- ✓ Project Scoping
- ✓ Mapping Services
- ✓ Deliverable & Report Preparation

Key Personnel:

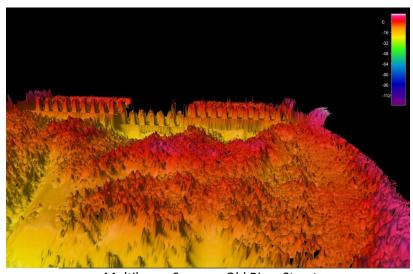
M. Marmande, J. Kennedy, C. Robichaux, K, Pierce, A. Gisclair, B. Little, B. Pellegrin, P. Toups

18. Approach and Methodology:

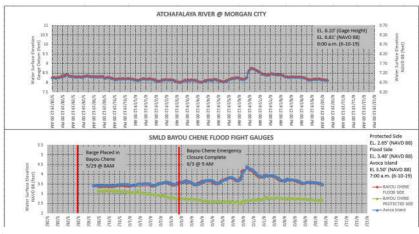
Delta Coast Consultants offers a specialized group of local experts with sound experience in engineering and surveying knowledge. We are uniquely positioned to assist with the planning, design and implementation of a wide range of projects throughout Louisiana. Our specialized experience is based on many years of hard work on coastal projects in our region; from Barrier Island restoration to the development of the Morganza to the Gulf Hurricane protection project, we have worked to fight for the implementation and continuation of these critical features. Our engineers and surveyors have an extensive working knowledge of both past and future projects planned in Louisiana. This knowledge allows our team to compile data, evaluate alternatives, and incorporate stakeholder comments more efficiently, which will translate into cost and time savings for DOTD.

Modeling Survey Support & Data Collection:

Our associates are experts at evaluating, scoping, and collecting accurate hydraulic and hydrographic data in support of modeling efforts on water resource projects. DCC is currently the data collection lead for the Mid-Breton Sediment Diversion Projects (Subconsultant to Stantec), responsible for collection of multibeam bathymetry, ADCP surveys, installation of CTD sensors (Conductivity, Temp, Depth), and other water quality parameters for validation and calibration of various modeling effects on the project. Our staff is highly skilled and experienced in deployment of various remote-sensing instrumentation; including real-time water-level gauges, ADCP's, turbidity probes, and other measurement techniques. DCC was tasked with deployment of real-time water level gauges and review/adjustment of various existing gauges throughout the Atchafalaya/Terrebonne Basin to assist the local flood protection authorities with maintaining and management of the Bayou Chene emergency Closure and other Flood-fight actions for a past Atchafalaya River Flood event. Our surveyors and engineers understand survey datum relationships and height modernization adjustments and the importance of accurate vertical adjustments to gauge data and survey data to ensure proper model validation and calibration. Our associates have performed numerous surveys for FEMA Flood Studies in accordance with FEMA Standards and Quality Control Procedures.



Multibeam Survey – Old River Structure



Real Time Water Levels During 2019 Flood Fight

Surveying and Data Collection Resources:

Our associates have provided high quality data collection and field surveying services for water resource projects throughout their careers. Mr. Chad Robichaux, PLS, has over 29 years of experience providing boundary, geodetic, control, hydrographic, and topographic surveys throughout the Gulf Coast and beyond. Delta Coast also maintains a highly efficient and skilled staff of surveying technicians and field personnel capable of collecting multiple types of data on a variety of projects. We maintain the most up-to-date surveying equipment and marine vessels to ensure the efficiency of our field personnel. Delta Coast Consultants has the personnel and equipment to complete any data collection task issued under this contract. The following is summary of our in-house equipment available for infrastructure projects:

Topographic Surveys:

Mr. Chad Robichaux, PLS will manage all topographic survey tasks issued under this contract. Mr. Robichaux's past work history on a variety of projects includes topographic cross-sections / transects for beach nourishment projects, channel dredging projects, marsh creation projects, pipeline, land development, and construction projects. Mr. Robichaux serves as the survey manager at Delta Coast, and is responsible for daily coordination of field crews, preparation of crew field packet information, quality control checks, and data transfer. Mr. Robichaux has excellent technical knowledge of Global Positioning Satellite (GPS) principles and

procedures, as well as conventional EDM style total stations, robotic total stations, and leveling equipment. Below is a listing of the topographic survey capabilities of our firm:

•	Real-Time Kinematic (RTK) GPS surveys, including
	LSU-C4G real time network

- Robotic Total Station (EDM) surveys
- Geodetic / Static GPS/GNSS surveys for primary and secondary control
- Pipeline / Utility location using magnetic locators and jet probing
- Shallow water / wetland bathymetry surveys using conventional soundings / rod readings

Equipment Name / Type	#	Equipment Name / Type	#
RTK GPS Total Stations – Trimble R10/R12 /Spectra Precision SP80 (2 GNSS receivers per unit)	5	Proton / Cesium Magnetometer	1*
Conventional Total Stations / Robotic Total Station - Trimble	1	Gradiometer / Metal Detector	2
Single Frequency Echosounder (200kHz) – Odom Hydrotrac II	1	Twin Engine Survey Vessel (Over 24')	1
Dual Frequency Echosounder (24 / 200 kHz) – Odom Mark III	1	Single Engine Survey Vessel (Under 24')	1
Multi-beam Echosounder – Norbit Winghead B 44	1	Airboats	2
Pipeline / Utility locator – Ditch Witch Utiliguard T12	1	RTV/ATV	1
Handheld Field Data Collectors – Trimble TSC3	4	Conventional Levels	3

Bathymetric and Hydrographic Surveys:

Mr. Barry "Jason" Kennedy, PE, PLS will manage all hydrographic surveying tasks for projects issued under this contract. Mr. Kennedy has an extensive background in performance of shallow-water hydrographic surveys for offshore / inshore borrow areas, river / channel dredging, and navigation projects. Mr. Kennedy has excellent technical knowledge of hydrographic surveying software, single beam (single and dual frequency) echosounders, multi-beam echosounders, and

cesium/proton magnetometers. Mr. Bryan Little will lead the inshore hydrographic field data collection efforts. Mr. Little has over 9 years of experience in performance of hydrographic surveys conforming to USACE Hydrographic Surveying Manual. Delta Coast Consultants exclusively uses RTK GPS onboard the survey vessel for real-time tidal corrections and highly accurate vertical and horizontal positioning of soundings. Below is a listing of the hydrographic surveying capabilities at Delta Coast Consultants:

- Single-Beam (Single & Dual Frequency) Bathymetric Surveys
- Multi-Beam Bathymetric Surveys
- Acoustic Doppler Current Profiler (ADCP) Surveys
- Side-Scan Sonar (Acoustic Imagery) Surveys
- Extreme Shallow-water, Light vessel, Bathymetric Surveys
- Dual-Frequency single-beam surveys for riverine / dredging turbidity layer penetration
- Hypack® Max data editing, line merging, tin-model construction, and volume calculation



Magnetometer Surveys:

Our associates have developed their surveying skills primarily in the coastal marshes and waterways of Terrebonne and Lafourche parishes. These areas contain some of the largest networks of decades-old underground oil / gas pipelines and flowlines in Louisiana. A vast majority of these pipelines are un-mapped and unmarked lines that have been abandoned or forgotten through subsequent sales of oilfield infrastructure. Mr. Chad Robichaux, PLS and Mr. Bryan Little have been providing oil/gas infrastructure and pipeline surveys for over 20 years in these areas. Mr. Kennedy also has an excellent working knowledge of underwater magnetic detection principles and procedures and has developed a proven methodology for pipeline/flowline detection in shallow coastal waters.

Property and Right-of-Way Surveys:

Mr. Prosper Toups, PLS has excellent experience in performance of boundary surveys in Louisiana, with particular expertise in riparian boundaries. He has over 27 years of experience in the surveying industry and was formerly the sole owner of a land-surveying firm in Houma, LA. Delta Coast Consultants has also gained experience with land-rights and right-of-way acquisition on coastal properties in performance of our program management responsibilities for the Terrebonne Levee and Conservation District. Our firm performs approximately 3-4 large boundary surveys each month, which keeps our associate's boundary surveying skills tested and sharp.

Capability and Capacity:

Delta Coast Consultants has the large project experience, credentials, and knowledge necessary to assist this project team and become a true local asset for DOTD. We already know the region, the people, the history and the challenges. Our team is positioned to respond quickly and efficiently.

Our firm focuses and specializes in data collection and surveying to support engineering and construction efforts on coastal restoration, flood protection and other infrastructure projects in South Louisiana. Unlike many surveying firms in our region, DCC is not committed to large oil/gas pipeline clients which require dedication of a large volume of staff and resources for their projects. We have 5 independent field crews assembled for the specific purpose of data collection needs on coastal restoration and infrastructure projects.

The capabilities of our firm are evident from the wide range of projects and clients that have used our services across Coastal Louisiana over the past 9 years. We feel that our firm is a perfect fit to assist DOTD in their effort to perform hydrographic survey inspections of their assets across the state due to our extensive experience in performing these types of surveys.

19. Workload:

Firm(s) ALL FIRMS MUST BE REPRESENTED IN THIS TABLE	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
N/A	N/A	N/A	N/A	N/A

8/26/22, 10:08 AM Print Lookup Details

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name: Public Address:

Delta Coast Consultants,

Ms. Brandi Voisin 631 South Hollywood Road

LLC

Houma, Louisiana 70360

License/Certificate Information w/ Supervision

License Status First Issuance Expiration Date Supervisor(s)

EF.0005462 Active 02/03/2014 09/30/2024 Mr. Barry Jason Kennedy # PE.0033218 -

Active

8/26/22, 10:07 AM Print Lookup Details

The Louisiana Professional Engineering and Land Surveying Board has the following information on file:

Name: Public Address:

Delta Coast Consultants,

Ms. Brandi Voisin 631 South Hollywood Road

LLC

Houma, Louisiana 70360

License/Certificate Information w/ Supervision

License Status First Issuance Expiration Date Supervisor(s)

VF.0000714 Active 02/03/2014 09/30/2024 Mr. Mitchell John Marmande # PLS.0005012 -

Active

QC and QA Procedures for Single Beam Surveys

Procedure	Recommended Application
Bar Check	Perform calibration periodically. Frequency of bar checks can be reduced if average velocity repeatedly correlates with velocity cast data. Perform at the beginning of critical projects. Correlate with dynamic draft variations.
Dynamic Draft Corrections	Monitor every 0.1 ft trim change.
Velocity Cast Calibration	Perform, at minimum, once daily. More often in highly variable waters. Correlate with bar check velocity.
Squat/Settlement Calibration	Perform annually over different vessel speeds and loading conditions.
Latency Calibration	Perform periodically to obtain average correction over time. Perform at beginning of any critical survey.
Horizontal Position Check	Conduct daily checks to project benchmarks where possible.
Vertical Calibration (RTK)	Conduct daily checks to project benchmarks where possible.
Motion Compensation	Apply if river or sea conditions warrant correction.
Survey Coverage (Density)	On most projects, single beam cross-sections should generally not exceed 200 ft line spacing.

QC and **QA** Procedures for Multibeam Surveys

Procedure	Recommended Frequency or Comment
Bar Check Calibration	Perform periodically (e.g., monthly or quarterly); recommended at start of new projects.
Sound Velocity Calibration	Once daily minimum, or more often in varying conditions
Horizontal Position Check	Conduct daily checks to project benchmarks where possible.
Vertical Elevation Check (RTK)	Conduct daily checks to project benchmarks where possible.
System Alignment/Orientation Tests (e.g., Latency/Patch Test	Perform periodically (e.g., quarterly) or as required. Recommended at start of new projects.
Vessel Squat/Settlement Test	Annually
Survey Coverage (Density)	100% coverage is recommended for maintenance dredging projects. 200% coverage is recommended for deep-draft projects with critical under keel clearances over rock.
Object or Shoal Detection: Minimum object size	3 ft cube (periodically verify by independent detection test)
Minimum number of acoustic hits to confirm a shoal or strike above grade	3 acoustic hits recommended. (successive passes over object)

22. Sub-consultant information:

Firm Name (Name must match as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number
N/A	N/A	N/A	N/A

(Add rows as needed)

23. Location:

If location is an evaluation criterion for this advertisement and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank. Any information included in this section will be redacted if not required by the advertisement.