

Louisiana Department of Transportation and Development

IDIQ CONTRACTS FOR ELECTRICAL SERVICES STATEWIDE

Contract Nos. 4400026073 and 4400026074

Request for Qualifications













May 25, 2023



DOTD FORM: 24-102

Page **1** of **82**

PROPOSAL TO PROVIDE CONSULTANT SERVICES

Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number.

ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

1. Contract Name as shown in the advertisement	IDIQ Contracts for Electrical Services - Statewide
2. Contract Number(s) as shown in the advertisement	4400026073 and 4400026074
3. State Project Number(s), if shown in the advertisement	
4. Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	Modjeski and Masters, Inc.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) is registration is required under Louisiana law)	EF.0000570
6. Prime consultant mailing address	1100 Poydras Street, Suite 900, New Orleans, LA 70163
7. Prime consultant physical address (existing or to be established, i location is used as an evaluation criteria)	1100 Poydras Street, Suite 900, New Orleans, LA 70163
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Cullen J. Ledet, PE Senior Project Manager 504-524-4344 CJLedet@modjeski.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Ralph J. Eppehimer, PE Senior Vice President 504-524-4344 RJEppehimer@modjeski.com

Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

10. This is to certify that all information contained herein is accurate and true, presently has sufficient staff to perform these services within the designate submitting this proposal, proposer certifies that it is not engaged in a boyc will, for the duration of its contract obligations, refrain from a boycott of Isr certifies and agrees that the following information is correct: In preparing proposer has considered all proposals submitted from qualified, potential s suppliers, and has not, in the solicitation, selection, or commercial subcontractor or supplier, refused to transact or terminated business activit actions intended to limit commercial relations, with a person or entity the accomplish a boycott or divestment of Israel. The proposer also has not retain person or other entity for reporting such refusal, termination, or commercial DOTD reserves the right to reject the response of the bidder or proposer if subsequently determined to be false, and to terminate any contract awarde false response.	and that the team ed time frame. By tott of Israel and it rael. Proposer also g its response, the subcontractors and treatment of any ies, or taken other hat is engaging in e specific intent to aliated against any ly limiting actions. this certification is ed based on such a	Signature above shall be the same person listed in Section 9: <u>May 25, 2023</u> Date
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this	Firm(s):	Firm(s)' %:
advertisement, indicate which firm(s) will be used to meet the DBE goal	Civil Design & Co	onstruction, Inc 5%
and each firm(s)' percentage.	Vectura Consulting	g Services, LLC 5%

12. Past Performance Evaluation Discipline Table:

As indicated in the advertisement, insert the completed table here. The percentages for the prime and sub-consultants must total 100% for each past performance evaluation discipline, as well as the overall total percent of the contract.

The **only** past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify).

Past Performance	% of Overall	Modjeski and	Aillet, Fenner,	Lazenby &	Civil Design &	Vectura	Each Discipline
Evaluation Discipline(s)	Contract	Masters, Inc.	Jolly,	Associates, Inc.	Construction	Consulting	must total to 100%
			McClelland, Inc.			Services	10111110110070
Other (Bridge Design	75%	90%	10%				100%
Roadway Lighting)							
Bridge	10%	20%	80%				100%
Survey	10%			50%	50%		100%
Traffic	5%					100%	100%
Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.							
Percent of Contract	100%	69.5%	15.5%	5%	5%	5%	

13. Firm Size:

For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify "Other (please specify)" and include the classification title inside the parentheses.

The DOTD Job Classification(s) to be used can be found at the following link:

http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Job_Qualification/Job%20Classifications%20with%20Descriptions.pdf

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
	Principal	1	7
	Supervisor Engineer	3	15
	Supervisor - Other	0	11
	Engineer	1	6
	Engineer - Other	1	21
MODIESKI	Engineer Intern	2	19
	Technician	0	2
	Senior Technician	0	3
	CADD Technician	2	9
	Professional	1	1
	Accountant	0	1
	Cadd-Operator	3	4
	Clerical	1	2
	Designer	0	1
	Engineer	1	5
AILLET, FENNER, JOLLY, & McCLELLAND INC.	Engineer Intern	0	1
	Professional	0	2
	Principal	2	3
	Supervisor-Engineer	2	4
	Surveyor	0	1

	CADD Drafter	0	3
	CADD - Operator	1	1
	Clerical	0	3
	Engineer	1	6
	Engineer Intern	1	1
	Instrument Man	2	2
	Party Chief	2	2
LAZENDY	Principal	1	1
LAZENBY & ASSOCIATES, INC.	Rodman	2	2
	Supervisor Engineer	0	3
	Surveyor	1	1
	Inspector - Certified	0	2
	Inspector	0	1
	Surveyor	1	3
	Party Chief	3	5
	Instrument Man	2	3
	Rodman	1	2
	CADD Operator	1	1
INCORFORATED	Senior Technician	2	5
	Supervisor - SUE	1	1
P 7	Supervisor	2	2
\\// VECTURA	Engineer	2	4
V CONSULTING SERVICES, LLC	Engineer Intern	0	1
	Inspector	2	2

(Add rows as needed)

14. Organizational Chart:

Provide an organizational chart showing ALL **relevant** prime consultant and sub-consultant (if applicable) personnel assigned to the contract, area of project responsibility for each, and reporting lines for the purposes of this contract. An individual's role does not necessarily have to match their DOTD job classification identified in Section 13. If applicable, identify all personnel performing traffic engineering analysis and/or QC of traffic engineering analysis by placing an asterisk next to their name. Include the certificates required by the Traffic Engineering Process and Report Training Requirements article of the Advertisement in Section 20. It is acceptable to use an 11x17 format for Section 14.



Modjeski and Masters, Inc.

15. Minimum Personnel Requirements:

Use the table below to identify both prime consultant and sub-consultant staff designated to work on this contract meeting the Minimum Personnel Requirements (MPRs) specified in the advertisement. Ensure the résumé reflects the required experience stated in the MPR. Make sure the P.E. discipline is also listed (highlighted in table) that is meeting the MPR; e.g. professional civil engineer should show the discipline of the license as civil if meeting that MPR.

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	Ralph J. Eppehimer, PE	Modjeski and Masters, Inc.	PE #23251 – Civil	LA	3/31/2025
2	Jonathan E. Gerhart, PE	Modjeski and Masters, Inc.	PE #43052 – Electrical	LA	3/31/2025
3	Jonathan E. Gerhart, PE	Modjeski and Masters, Inc.	PE #43052 – Electrical	LA	3/31/2025
40	Jonathan E. Gerhart, PE	Modjeski and Masters, Inc.	PE #43052 – Electrical	LA	3/31/2025
4a	Robbin Cassity, PE	Aillet, Fenner, Jolly & McClelland, Inc.	PE #26059 – Electrical	LA	3/31/2024
4 h	Joseph G. Strenkoski, PE	Modjeski and Masters, Inc.	PE #38336 – Electrical	LA	3/31/2024
40	Daniel Brown, PE	Aillet, Fenner, Jolly & McClelland, Inc.	PE #41687 – Electrical	LA	9/30/2023
5	Cullen J. Ledet, PE	Modjeski and Masters, Inc.	PE #33222 – Civil	LA	9/30/2023
	Matthew J. Wallace, PE, SE		PE #25922 – Structural	LA	9/30/2023
6	Paul Cormier, PE	Aillet, Fenner, Jolly & McClelland, Inc.	PE #27019 – Civil	LA	3/31/2025
	J. Daniel Thompson, PE, SE		PE #35628 – Structural	LA	9/30/2024
	Erin N. Rodgers, PE	Modjeski and Masters, Inc.	NEC / NFPA 70E		
7	Ronald St. Angelo	Vesture Consulting Services LLC	NEC / NFPA 70E		
	David Watkins	vectura Consulting Services, LLC	NEC / NFPA 70E		
	Ralph D. Burgess, PLS	Civil Design & Construction Inc	PLS #5040	LA	9/30/2024
8	Chris L. Ballard, PLS	Civil Design & Construction, Inc.	PLS #5033	LA	9/30/2024
	Ronald J. Riggin, PE, PLS	Lazenby & Associates, Inc.	PLS #5119	LA	3/31/2025

Firm employed by	Modjeski and Masters, Inc.				
Name Ralph J.	Eppehimer, PE	Years of relevant experience with this employer	40		
Title Principal	& Director of Field Services	Years of relevant experience with other employer(s)	1		
Degree(s) / Years	/ Specialization	BS 1982 Civil Engineering	TO ANY		
Active registration	number / state / expiration date	23251 LA 03/31/2025			
Year registered	1989 Discipline	Civil			
Contract role(s) / b	orief description of responsibilities:				
Mr. Eppehimer ha	s over 40 years of field services experien	ce with Modjeski and Masters, Inc. and is the Director of Field Service	s. He has vast		
experience in all a	spects of field services including new br	idge construction, safety and maintenance inspections of existing bridge	s, repair and		
rehabilitation of b	idges, and emergency response to bridg	e accidents. He has been the construction project manager, resident eng	ineer, assistant resident		
engineer and techr	ical advisor on a number of significant	novable bridge projects, primarily railroad bridges. Mr. Eppehimer's te	chnical specialties are		
the field inspection	n of all types of bridge, field monitoring	of movable bridge construction, repair and rehabilitation of bridges, and	I the repair and retrofit		
of movable bridge	s. Mr. Eppehimer fulfills the minimum j	ersonnel requirements for MPR #1 and will serve as Principal-in-Charg	e for this project.		
Experience dates	Experience and qualifications relevant	to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders",	"designed intersection",		
(mm/yy-mm/yy)	etc. Experience dates should cover th	e time specified in the applicable MPR(s).			
12/15 - 03/20	UPRR 305.45 Angelton Sub San Be	nard Bridge. Sweeney, I A Union Pacific Railroad (2016-2018)			
	M&M provided the design for a new the Angleton Sub division of the Union	vertical lift bridge that will replace an existing swing span bridge over the	ie San Bernard River in		
	the Angleton Subdivision of the Unio	n Pacific Railroad. M&M worked with the UPRR to accommodate and	Iccelerated construction		
	schedule, and provided construction st	bis project. The new bridge was designed to be Temple Control	ready. Mr. Eppennier		
02/12 02/23	2007-062-RB Lanalco Bridge Benai	ns project. 25. Jaffarson Parish I A			
02/12 - 02/23	This project involved the rehabilitation	renairs (structural mechanical electrical and architectural) and renair	nting of this four lane		
	hascule highway bridge Modieski and Masters provided the development of plans and specifications and construction services. Mr				
	Eppehimer was the Project Manager f	or all the construction engineering support services associated with this	project.		
11/16-5/17	Port of New Orleans Seabrook Brid	ge Floor System Replacement. New Orleans, LA			
	Modjeski and Masters prepared the pl	ans and specifications to replace the railroad floor system between the tr	usses of the Seabrook		
	Railroad Bridge for the Port of New C	rleans. M&M also developed the sequence of construction to minimize	the impacts to the rail		
	and marine traffic as well as maintain	the span balance throughout construction. Mr. Eppehimer was Principa	l-in-Charge for this		
	project.		-		
02/17-5/17	Port of New Orleans Seabrook Brid	ge Link Pin Joints Emergency - Construction Services. New Orlean	s, LA: After M&M		
	completed the initial investigation and	developed emergency repair contract documents for the partially failed	2nd Link joint on the		
	Seabrook Strauss Bascule Bridge, the	Port of New Orleans called upon M&M to provide Construction Support	t Services for the		
	project. M&M reviewed all Contracto	r RFIs, shop drawings, and procedure submittals for the project. M&M	also provided on-site		
	construction inspection services throu	shout the repair effort. Mr. Eppehimer was Principal-in-Charge for this	project.		
03/09-01/10	Bridge 73.31 across Bayou Boeuf, B	NSF Railway, Amelia, LA			
	Mr. Eppehimer served as the Construct	tion Project Manager for M&M, overseeing the replacement of an older	, single- track railroad,		
	through-plate girder swing span with a	new through-plate girder swing span. He made monthly project site vis	sits during construction,		

	including during the span change-out period. He also provided construction engineering office support and supervised the full-time,
	on-site Resident Inspector on the project.
02/07-07/07	Vertical Lift Span Relocation, Union Pacific Railroad, Houma, LA to Freeport, TX
	Mr. Eppehimer served as the Construction Project Manager overseeing the disassembly and relocation of an existing, single- track
	railroad vertical lift span from Houma, LA to Freeport, TX where it was rebuilt with modifications to replace an older through-truss
	swing. He made monthly visits during construction to either project site, as appropriate, including during the span change-out period
	in Texas. He also provided construction engineering office support and supervised the full-time, on-site Resident Inspector.
01/01-05/09	Florida Avenue Bridge Replacement, Port of New Orleans, New Orleans, LA
	Mr. Eppehimer served as the Construction Project Manager for M&M, overseeing the replacement of an older bascule span carrying
	a double-track and two vehicular roadway lanes with a new vertical lift span carrying a single-track and two vehicular roadway lanes,
	to improve the width of the navigation channel. He made periodic fabrication shop visits, including to South Korea, and monthly
	project site visits during construction, including during the span change-out period. He also provided construction engineering office
	support and supervised the on-site Resident Engineer and inspection team.
12/06-07/07	Pointe-A-La-Hache Ferry Landing Rehabilitation. Plaquemines Parish, LA LADOTD
	The proposed overall project consisted of performing a rehabilitation of the Pointe-A-La-Hache East Bank and West Bank Ferry
	Landings for the ferry crossing the Mississippi River. Preliminary plans were prepared in accordance with the requirements of the
	DOTD Roadway Plan Preparation Manual, Bridge Design Manual, Off-System Bridge Rehabilitation and Replacement Program
	Guidelines and Hydraulics Manual. Specifications were in accordance with latest edition of the Louisiana Standards Specifications
	for the Road and Bridges. As a sub-consultant, Modjeski and Masters developed preliminary plans for the electrical and mechanical
	layout drawings and associated electrical and mechanical general notes. This work basically covered the design of the approach
	lifting mechanism and electrical power requirements for the lifting equipment and approach bridge lighting. Mr. Eppehimer
	provided constructability oversight for this project.
09/05 - 10/06	LADOTD-CCCD Ferry Facilities Repairs. New Orleans, LA LADOTD
	Hurricane Katrina struck the Greater New Orleans area causing significant damage to LADOTD-CCCD facilities. Modjeski and
	Masters swiftly responded to establish communications with LADOTD personnel and quickly received assignments for emergency
	response to fixed and floating assets as related to the LADOTD-CCCD ferry facilities. M&M provided inspection, reporting, repair
	detailing and monitoring of construction repairs of damages caused by Hurricane Katrina to ferry facility buildings, pedestrian access
	bridges, vehicle roadway bridges and moorings. The facilities included: Canal Street, Algiers, Jackson Avenue, Greta, Lower Algiers
	and Maintenance Landing. Mr. Eppehimer served as the Project Manager for this project.
1996-1997	Casco Bay Bridge Replacement, Maine DOT, Portland, ME
	The project called for the replacement of a double-leaf bascule bridge over the Fore River with a structure consisting of a 285 ft.
	double-leaf bascule span. Mr. Eppehimer served as a Technical Advisor to the Maine DOT during construction of the bascule spans.
	This assignment included making structural and machinery shop visits to observe fabrication and shop assemblies and tests, and
	providing a full-time presence, on-site, during the movable span and machinery erection period.

Firm employed by	Modjeski and Masters, Inc.					
Name Jonatha	Name Jonathan E. Gerhart, PE		Years of re	elevant experience with this employer	13	
Title Project N	Manager – Electrical Design		Years of re	elevant experience with other employer(s)	12	
Degree(s) / Years	/ Specialization	BS	1998 E	lectrical Engineering		
Active registration	number / state / expiration date	4305	52 LA	03/31/2025		
Year registered	2016 Discipline	Elec	trical			
Contract role(s) / b	orief description of responsibilities					
Mr. Gerhart is a Pr	oject Manager in Modjeski and Masters	Elect	rical Enginee	ering Section and has over 25 years of experience in	the design of a	electrical
distribution system	ns, control systems and safety systems, ir	cludi	ng roadway li	ighting systems. Having over 10 years of experience	on LADOTD	Roadway
Lighting Projects,	Mr. Gerhart is experienced with photome	etric a	nalysis and r	oadway lighting design (both HPS and LED), includi	ing inspection	s, construction
support, and troub	leshooting. He has vast expertise in all m	atters	related to lig	hting systems having served as Lead Design Engined	er for numeror	us LADOTD
roadway lighting p	projects and has developed evaluations, re	ecomr	nendations, c	ost estimations, value engineering and consultations	with LADOT	D electrical
staff. Mr. Gerhart	will serve as a Project Manager and Res	ponsił	ole Member f	for this contract and fulfills MPR #2, #3 and #4a.		
Experience dates	Experience and qualifications relevant	to the	e proposed co	ontract; <i>i.e.</i> , "designed drainage", "designed girders"	, "designed in	itersection", etc.
(mm/yy–mm/yy)	Experience dates should cover the year	s of e	xperience spe	ecified in the applicable MPR(s).		
12/19 -	H.011137.5 Lighting Engineering De	sign S	Services for 1	I-12: LA 1077 to US 190. Covington, LA LADO	ſD	
On-going	As part of an overall interstate widen	ng pr	oject, M&M	provided an investigation for a future roadway light	ting system a	long I-12 in St.
	Tammany Parish. M&M provided an	illumi	nation analy	sis per LADOTD standards for a complete lighting d	lesign at the I	-12 at LA 1077,
	I-12 at LA 21, I-12 at Pinnacle Pkwy,	and I-	12 at US 190	interchanges. M&M provided plans and specificati	ons for lightir	ng and electrical
	equipment to accommodate installation of a future lighting system as well as plans and specifications for a new navigation lighting design					
	on the widened Tchefuncte River Bridge. M&M is currently providing construction related engineering services for this project. Mr. Gerhart					
	oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performs					
	field inspections during construction and	nd wo	rks directly v	with LADOTD electrical engineers.		
01/17 -	H.003184: I-10: Texas State Line – F	. of C	oone Gully	Lighting, Calcasieu Parish, LA LADOTD	<i>a</i> , 1 ,	
On-going	M&M performed a study of the existing roadway lighting system of Interstate 10 (I-10) in Calcasieu Parish at five locations for the					
	LADOID as part of S.P. H.003184 wh	ich ca	lls for a port	ion of 1-10 from the Texas state line through to the E	ast of Coone	Gully to be
	widened from four to six lanes of trave	I. The	e scope of the	e work and inquiry consisted of an illumination and r	oadway lighti	ng construction
	feasibility study at the five specified lo	catior	is. The as-de	signed roadway lighting systems were evaluated and	compared to	the proposed
	widened geometry to determine if the	xistin	g systems we	buld remain in compliance with LADOTD Illuminati	on standards.	Where needed,
	modifications were recommended to sa	itisfy :	required illur	nination and electrical criteria. Mr. Gerhart oversaw	the photometr	ic analysis,
	electrical calculations and final plan de	velop	ment for the	design portion of this project. He also performs field	i inspections c	Juring
07/10 06/01	construction and works directly with L	$\frac{ADO}{C}$	D electrical	engineers.		
0//18 - 06/21	H.012739: 1-20 @ Vicksburg - Electi	ical,	Vicksburg, N	AS LADUID - Gual alars and an aritimation of the ashabilitation of th		
	M&M provided electrical engineering	servic	es to develop	inal plans and specifications for renabilitation of th	e existing ele	ctrical systems,
	including photometric report and repla	cemer	it of roadway	lighting with an LED design, replacement of naviga	tion lighting a	and aerial
	beacons, and renabilitation and relocat	on of	iow-voltage	electrical components including monitoring equipme	ni including r	nonitoring
	equipment, MIDOI equipment, river cu	irrent	monitoring e	quipment. Maximum also provided construction related	1 engineering	services,
	algorithm and shop di	awing	as-built dra	wing and submittal review. Wr. Gernart oversaw the	photometric a	narysis,
	electrical calculations and final plan de	velop	TD ala ata	design portion of this project. He also performed fie	iu inspections	uring
	construction and worked directly with	LAD	JTD electrica	al engineers.		

09/16 - 06/19	H.012503: I-12 @ LA 447 (Walker) Interchange Lighting, Walker, LA LADOTD
	The project involved the design of roadway lighting at the I-12/LA 447 Interchange in Walker, LA. The design included providing
	lighting for two roundabouts at the ramp terminals and was coordinated with the local government agencies as well as the electrical utility
	company in order to simplify future maintenance and to provide desired aesthetics. M&M performed photometric analysis, and provided
	plans & construction estimates and construction related engineering services including shop drawing review and field inspections. Mr.
	Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also
	performed field inspections during construction and worked directly with LADOTD electrical engineers.
09/15 - 07/16	H.003003: I-10: E. Jct. I-49 to LA 328 Lighting, Lafayette and St. Martin Parishes LA LADOTD
	The project involved the design of roadway lighting on Interstate 10 from I-49 to LA328 in Lafayette, LA. The design included the use of
	high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the
	electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction
	estimates, and is currently providing construction related engineer services including shop drawing review and field inspections. Mr.
	Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also
	performs field inspections during construction and works directly with LADOTD electrical engineers.
10/15 - 09/20	H.003014: I-10: LA 347 to Atchafalaya Floodway Bridge Lighting, St. Martin Parish LA LADOTD
	The project involved the design of roadway lighting for Interstate 10 from LA347 to Atchafalaya Floodway Bridge in Lafayette, LA. The
	design included providing low-mast lighting for two roundabouts at the ramp terminals and was coordinated with the local government
	agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided
	plans & construction estimates, and is currently providing construction related engineering services including shop drawing review and
	field inspections. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion
	of this project. He also performs field inspections during construction and works directly with LADOTD electrical engineers.
12/13 - 05/17	H.010863: I-10 @ Ambassador Caffery Parkway Interchange Lighting, Lafayette, LA LADOTD
	The project involved the design of roadway lighting for the Ambassador Caffery Parkway (LA 3184) Interchange along Route I-10 in
	Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the
	Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired
	Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field
	Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan
	Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with
00/12 10/17	Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers.
06/12 - 10/17	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD
06/12 - 10/17	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low meet poles and underpase lighting and was coordinated with the local government agencies as well as the electrical section.
06/12 - 10/17	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics.
06/12 - 10/17	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering and O&M manual review and field inspections. Mr. Gerbart served as Lead Electrical Design
06/12 - 10/17	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr. Gerhart served as Lead Electrical besign engineer and Field Inspector for this project
06/12 - 10/17	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr. Gerhart served as Lead Electrical Design Engineer and Field Inspector for this project.
06/12 - 10/17 11/10 - 05/15	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr. Gerhart served as Lead Electrical Design Engineer and Field Inspector for this project. H.002691: LA8/US 171 Roundabout. Vernon Parish, LA LADOTD The project the design of roadway lighting for a two-lane four-legged modern roundabout that was reconstructed from a
06/12 - 10/17 11/10 - 05/15	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr. Gerhart served as Lead Electrical Design Engineer and Field Inspector for this project. H.002691: LA8/US 171 Roundabout. Vernon Parish, LA LADOTD The project involved the design of roadway lighting for a two-lane, four-legged modern roundabout that was reconstructed from a signalized T-intersection of US-171 with LA 8/28. The design incorporated the use of decorative light fixtures and poles and was
06/12 - 10/17	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr. Gerhart served as Lead Electrical Design Engineer and Field Inspector for this project. H.002691: LA8/US 171 Roundabout. Vernon Parish, LA LADOTD The project involved the design of roadway lighting for a two-lane, four-legged modern roundabout that was reconstructed from a signalized T-intersection of US-171 with LA 8/28. The design incorporated the use of decorative light fixtures and poles and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to government agencies as well as the electrical utility company in order to simplify future maintenance and to be design of roadway lighting for a two-lane, four-legged modern roundabout th
06/12 - 10/17 11/10 - 05/15	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr. Gerhart served as Lead Electrical Design Engineer and Field Inspector for this project. H.002691: LA8/US 171 Roundabout. Vernon Parish, LA LADOTD The project involved the design of roadway lighting for a two-lane, four-legged modern roundabout that was reconstructed from a signalized T-intersection of US-171 with LA 8/28. The design incorporated the use of decorative light fixtures and poles and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired include the use of decorative light fixtures and poles and was coordinated with the local government agencies as well as the electrical utility company in order to simplif
06/12 - 10/17 11/10 - 05/15	 Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections, including final punch-list inspection. Mr. Gerhart oversaw the photometric analysis, electrical calculations and final plan development for the design portion of this project. He also performed field inspections during construction and worked directly with LADOTD electrical engineers. H.009201: I-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr. Gerhart served as Lead Electrical Design Engineer and Field Inspector for this project. H.002691: LA8/US 171 Roundabout. Vernon Parish, LA LADOTD The project involved the design of roadway lighting for a two-lane, four-legged modern roundabout that was reconstructed from a signalized T-intersection of US-171 with LA 8/28. The design incorporated the use of decorative light fixtures and poles and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections of US-171 with LA 8/28. The desi

Firm employed by	y Modjeski and Masters, Inc.					
Name Cullen	J. Ledet, III, P.E.		Years of relevant experience with this employer	21		
Title Senior	Project Manager		Years of relevant experience with other employer(s)	0		
Degree(s) / Years	/ Specialization	BS	2000 Civil Engineering			
Active registratio	n number / state / expiration date	3322	22 LA 09/30/2023			
Year registered	2007 Discipline	Civil	1			
Contract role(s) /	brief description of responsibilities					
Mr. Ledet is a Set	nior Associate in Modjeski and Masters' N	lew O	Orleans Office and has over 18 years of experience in the design of	fixed and movable highway		
and railroad bridg	ges. He also has provided quality assurance	e for a	all disciplines represented in the plans and specifications for numer	rous LADOTD Roadway		
Lighting Projects	. He has consulted with personnel at DO	ГD Не	eadquarters (Electrical Design) and various District offices to ensur	re the proposed lighting		
design meets the	local needs while adhering to DOTD Illum	ninatic	on Standards. Mr. Ledet is very familiar with the DOTD Electronic	c Deliverable requirements		
and ensures that t	he firm remains up-to-date with current Co	onsult	ant Workflow procedures. Mr. Ledet also led the development of	Transportation Management		
Plans (including l	Level 4) for various DOTD projects and he	e is cu	rrently compliant with work zone training (TCT/TCS/Flagger). M	r. Ledet will serve as the		
Project Manager	and Quality Assurance Manager for all eng	gineer	ring disciplines on all task orders and fulfills MPR #5.			
Experience	Experience and qualifications relevant to	the p	proposed contract; i.e., "designed drainage", "designed girders", '	"designed intersection", etc.		
dates (mm/yy-	Experience dates should cover the years of	of exp	perience specified in the applicable MPR(s).			
mm/yy)						
1/2017 -	H.003184: I-10: Texas State Line – E. c	of Coo	one Gully Lighting, Calcasieu Parish, LA LADOTD			
On-going	M&M performed a study of the existing roadway lighting system of Interstate 10 (I-10) in Calcasieu Parish at five locations for the					
	LADOTD as part of S.P. H.003184 which calls for a portion of I-10 from the Texas state line through to the East of Coone Gully to be					
	widened from four to six lanes of travel. The scope of the work and inquiry consisted of an illumination and roadway lighting construction					
	feasibility study at the five specified locations. The as-designed roadway lighting systems were evaluated and compared to the proposed					
	widened geometry to determine if the existing systems would remain in compliance with LADOTD Illumination standards. Where needed,					
	modifications were recommended to satisfy required illumination and electrical criteria. Mr. Ledet provided contract management and					
	provided quality assurance for all engineer	ering c	disciplines as part of this project.			
09/16 - 09/19	H.012503: I-12 @ LA 447 (Walker) Int	ercha	ange Lighting, Walker, LA LADOTD			
	The project involved the design of roadw	ay ligl	hting at the I-12/LA 447 Interchange in Walker, LA. The design in	ncluded providing lighting		
	for two roundabouts at the ramp terminal	s and	was coordinated with the local government agencies as well as the	electrical utility company		
	in order to simplify future maintenance as	nd to p	provide desired aesthetics. M&M provided plans & construction es	stimates, and is currently		
	providing construction related services in	cludir	ng shop drawing review and field inspections. Mr. Ledet provided	contract management and		
	quality assurance for all engineering disc	iplines	s as part of this project. He also provided construction related supp	port by reviewing the		
	structural components of the installed light	nt pole	es including anchor bolts, base plates and drilled shafts.			
09/15 - 07/21	H.003003: I-10: E. Jct. I-49 to LA 328	Light	ting, Lafayette and St. Martin Parishes LA LADOTD			
	The project involved the design of roadw	ay ligl	hting on Interstate 10 from I-49 to LA328 in Lafayette, LA. The d	esign included the use of		
	high-mast and low-mast poles as well as	underj	pass lighting and was coordinated with the local government agence	cies as well as the electrical		
	utility company in order to simplify futur	e maiı	ntenance and to provide desired aesthetics. M&M provided plans &	& construction estimates,		
	and is currently providing construction re	lated	engineer services including shop drawing review and field inspecti	ons. Mr. Ledet provides		

	contract management and quality assurance for all engineering disciplines as part of this project. He also provided construction related support by reviewing the structural components of the installed light poles including anchor bolts, has plates and drilled shafts.
	support by reviewing the structural components of the instance right poles mereting anchor bons, base plates and errice sharts.
10/15 - 11/22	H.003014: I-10: LA 347 to Atchafalaya Floodway Bridge Lighting, St. Martin Parish LA LADOTD The project involved the design of roadway lighting for Interstate 10 from LA347 to Atchafalaya Floodway Bridge in Lafayette, LA. The
	agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction estimates, and is currently providing construction related engineering services including shop drawing review and field
	inspections. Mr. Ledet provides contract management and quality assurance for all engineering disciplines as part of this project. He also provided construction related support by reviewing the structural components of the installed light poles including anchor bolts, base plates
	and drilled shafts.
12/13 - 05/17	H.010863: I-10 @ Ambassador Caffery Parkway Interchange Lighting, Lafayette, LA LADOTD
	The project involved the design of roadway lighting for the Ambassador Caffery Parkway (LA 3184) Interchange along Route I-10 in
	Lafayette, LA. The design included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the
	local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics.
	M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr.
	Ledet provided quality assurance for all engineering disciplines and oversaw plan development for this project. He also provided
	construction related support by reviewing the structural components of the installed light poles including anchor bolts, base plates and drilled
06/10 10/17	shafts.
06/12 - 10/17	H.009201: 1-20 @ Garrett Road Interchange Lighting, Monroe, LA LADOTD
	The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included
	the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility
	company in order to simplify future maintenance and to provide desired aesthetics. Maxim also provided construction related engineering
	disciplines and oversaw plan development for this project. He also provided construction related support by reviewing the structural
	components of the installed light poles including anchor bolts, have plates and drilled shafts
10/10 - 04/15	H 000336. LA 431 Lighting Improvements Ascension Parish LA LADOTD
10/10 04/13	The project involved the design of roadway lighting for four intersections along Route LA 431 as part of an overall improvement project
	The design was coordinated with the local government agencies as well as the electrical utility company in order to simplify future
	maintenance and to provide desired aesthetics. M&M performed a photometric analysis of the intersections and provided plan development
	of lighting plans and specifications conforming to the LADOTD Illumination Standards and National Electrical Code. M&M also provided
	construction related engineering services during construction. Mr. Ledet provided quality assurance for all engineering disciplines and
	oversaw plan development for this project.
11/10 - 05/15	H.002691: LA8/US 171 Roundabout. Vernon Parish, LA LADOTD
	The project involved the design of roadway lighting for a two-lane, four-legged modern roundabout that was reconstructed from a signalized
	T-intersection of US-171 with LA 8/28. The design incorporated the use of decorative light fixtures and poles and was coordinated with the
	local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics.
	M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. Mr.
	Ledet provided quality assurance and oversaw plan development for this project.

Firm employed by	Modjeski and Mas	sters, Inc.						
Name Joseph G	G. Strenkoski, PE			Years of relev	ant experience with this employ	ver	10	
Title Project N	lanager – Electrical	Design		Years of relev	ant experience with other emplo	oyer(s)	24	
Degree(s) / Years	/ Specialization		BS	1988	Electrical Engineering			
Active registration	n number / state / exp	piration date	3833	36 LA	03/31/2024			E A
Year registered 2013 Discipline I			Elec	trical				ALD
Contract role(s) / l	orief description of r	esponsibilities	Mr.	Strenkoski has	been employed by the Modjeski	and Masters,	Inc. since 2	2013. He has
			more	e than 31 years	of experience in the electrical er	ngineering con	sulting fiel	ld including
			over	a decade of pro	ject management work and alm	ost two decad	es of electr	ical group
			man	agement. Mr. S	trenkoski has multi-discipline ar	nd multi-proje	ct manager	nent exposure
			inclu	iding in-house of	coordination of civil, structural,	and mechanic	al/electrica	l efforts, as
			well	as relating with	clients and consultants. Mr. St	renkoski has s	erved as P	roject
		1.0	Man	ager for numer	bus LADOTD Roadway Lightin	g Design Proj	ects. He fu	ilfills MPR 4b.
Experience dates	Experience and qu	ualifications rel	evant	to the propose	ed contract; <i>i.e.</i> , "designed dra	inage", "desig	gned girde	rs", "designed
(mm/yy-mm/yy)) intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).							
12/19 - On-	H.011137.5 Lighting Engineering Design Services for I-12: LA 1077 to US 190. Covington, LA LADOTD)	
going	As part of an overall interstate widening project, M&M provided an investigation for a future roadway lighting system along I-							
	12 in St. Tammany Parish. M&M provided an illumination analysis per LADOTD standards for a complete lighting design at							
	the I-12 at LA 107	/, 1-12 at LA 21	, I-12	at Pinnacle PK	vy, and I-12 at US 190 interchar	iges. Mæm p	rovided pla	ans and
	specifications for lighting and electrical equipment to accommodate installation of a ruture lighting system as well as plans and						mayiding	
	specifications for a new navigation lighting design on the widened I chefuncte River Bridge. M&M is currently providing						providing	
01/17	Construction related engineering services for this project. Mr. Strenkoski serves as the Project Manager for this project.							
01/17 =	H.005184: 1-10: 1 exas State Line – E. OI Coone Guily Lighting, Calcasieu Parisn, LA LADOTD							
On-going	for the LADOTD as part of S.D. H 002184 which calls for a partice of L10 from the Tayos state line through to the East of							
	Coope Gully to be widened from four to six lanes of travel. The scope of the work and inquiry consisted of an illumination							
	and roadway lighting construction feasibility study at the five specified locations. The as designed roadway lighting systems						ting systems	
	were evaluated and compared to the proposed widened geometry to determine if the existing systems would remain in						ain in	
	compliance with LADOTD Illumination standards. Where needed modifications were recommended to satisfy required							
	illumination and el	ectrical criteria	Mr. S	strenkoski serve	d as Project Manager for this pr	oiect	to suisiy	required
09/16 - 09/19	H.012503: I-12 @	LA 447 (Walk	er) In	terchange Lig	ting. Walker, LA LADOTD	0,000		
	The project involve	ed the design of	roadv	vay lighting at t	he I-12/LA 447 Interchange in V	Valker, LA. 7	The design	included
	providing lighting	for two roundab	outs a	it the ramp term	inals and was coordinated with	the local gove	rnment age	encies as well
	as the electrical uti	lity company in	order	to simplify fut	re maintenance and to provide	desired aesthe	tics. M&M	provided
	plans & construction	on estimates, and	d is cu	rrently providi	ng construction related services	including shor	o drawing r	review and
	field inspections.	Mr. Strenkoski s	erved	as Project Man	ager for this project	C 1		

09/15 - 07/16	H.003003: I-10: E. Jct. I-49 to LA 328 Lighting, Lafayette and St. Martin Parishes LA LADOTD
	The project involved the design of roadway lighting on Interstate 10 from I-49 to LA328 in Lafayette, LA. The design
	included the use of high-mast and low-mast poles as well as underpass lighting and was coordinated with the local government
	agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics.
	M&M provided plans & construction estimates, and is currently providing construction related engineer services including
	shop drawing review and field inspections. Mr. Strenkoski serves as Project Manager for this project.
10/15 - 07/16	H.003014: I-10: LA 347 to Atchafalaya Floodway Bridge Lighting, St. Martin Parish LA LADOTD
	The project involved the design of roadway lighting for Interstate 10 from LA347 to Atchafalaya Floodway Bridge in
	Lafayette, LA. The design included providing low-mast lighting for two roundabouts at the ramp terminals and was
	coordinated with the local government agencies as well as the electrical utility company in order to simplify future
	maintenance and to provide desired aesthetics. M&M provided plans & construction estimates, and is currently providing
	construction related engineering services including shop drawing review and field inspections. Mr. Strenkoski serves as
	Project Manager for this project.
08/13 - 04/17	Route 79/Braga Bridge Improvements, Fall River, MA MassDOT
	Route 79/Braga Bridge Improvements Project - This design-build project included the design of roadway LED lighting and
	architectural landscape and decorative LED lighting for major improvements to the Fall River Route 79 and Braga Bridge
	interchanges. Design involved detailed lighting with photometric calculations, voltage drop calculations, wire and conduit
	sizing for lighting circuits. The design also involved power distribution and lighting control design to meet MassDOT
	standards. Mr. Strenkoski served as the Project Electrical/Lighting Design Engineer.

Firm employed by Me	odjeski and Masters, Inc.							
Name Erin N. Rod	lgers, PE		Years of relevant experience with this employer 6					
Title Engineer - E	lectrical		Years of	of relev	ant experience with other employer(s)	0	- Maan	
Degree(s) / Years / Sp	pecialization	BS	2017	Me	echanical and Electrical Concentrations			
Active registration nu	Active registration number / state / expiration date 093			PA	09/30/2023			
Year registered	Year registered 2022 Discipline Ele						an The	
Contract role(s) / brief	f description of responsibilities							
Ms. Rodgers joined M	Iodjeski and Masters, Inc. as an	engine	eer in trai	ining in	2017 following her graduation from Elizab	ethtown Colleg	ge with a	
Bachelor of Science in	n Engineering. Ms. Rodgers serv	ves as	an Electr	ical En	gineer E3 for the Electrical section and has b	been involved	in design	
and inspection of seve	eral movable bridges and lightin	g syste	ems durir	ng her t	ime with the firm. She also has experience w	ith roadway li	ighting	
design, tunnel lighting	g design and utility coordination	proje	cts. Ms.	Rodger	s is NEC/NFPA certified and fulfills MPR #	7 for this proje	ect.	
Experience dates Ex	xperience and qualifications re	levant	to the p	propose	ed contract; <i>i.e.</i> , "designed drainage", "des	igned girders'	", "designed	
(mm/yy-mm/yy) int) intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).							
12/22 - Ongoing H .	g H.014646.5 I-20: US 165 to East of Garrett Road Lighting. Monroe, LA LADOT							
M	& M provided plans, technical sp	pecific	ations, sp	pecial p	rovisions and illumination analysis for the re	habilitation of	t the existing	
lig	inting system along I-20 from US	5 165 t	0 E. 0f G	arrett R	Coad. M&M coordinated with the City of Mo	nroe and interia	aced with the	
Pr	oject Team for S.P. H.00/300 on	the se	ieun lieb	LED II	twore to achieve entired lighting illumination	nout the project	st limits. She	
	completed a photometric analysis using visual lighting software to achieve optimal lighting illumination levels and uniformity while							
1111	minimizing pole quantity and relate	u costi	5.					
12/20 - Ongoing H.	.012889.5: I-20 Rehabilitation (Pines 1	Road to I	-220), 9	Shreveport, LA LADOTD			
& As	s part of an overall interstate imp	rovem	ent projec	t, M&	M was selected to develop roadway lighting p	lans to accomr	modate future	
01/18 - 01/19 int	terstate median lighting and to re	elocate	any exist	ting lig	ht poles in conflict with reconfigured on and	off ramps. M	is. Rodgers is	
wo	worked under the direction of a senior engineer to design a preliminary roadway lighting system for the I-20 widening project. She						g project. She	
als	so participated in a site inspection	n to ide	entify all	existing	g electrical components in service. She perfor	med a photom	etric analysis	
us	sing Visual lighting software to a	chieve	optimal	lighting	g illumination levels and uniformity while m	inimizing pole	quantity and	
rel	lated costs. She used the final app	proved	photome	etric ana	lysis report to generate final plans and specific	cations.		
12/19 - Ongoing H .	.011137.5 Lighting Engineering	Desig	n Service	es for I	-12: LA 1077 to US 190. Covington, LA LA	ADOTD		
As	s part of an overall interstate wide	ening p	project, M	&M pr	ovided an investigation for a future roadway h	ighting system	along I-12 in	
St.	. Tammany Parish. M&M provid	led an	illuminat	10n ana	lysis per LADOID standards for a complete I	ighting design	at the I-12 at	
	A 10//, I-12 at LA 21, I-12 at Pint	hacle P	kwy, and	1-12 at	US 190 interchanges. M&M provided plans at	a specification	is for a now	
all	a electrical equipment to accom-	videna	e ilistalia 1 Tchefun	uon or	a future lighting system as well as plans an ver Bridge $M\&M$ is currently providing cons	truction related	d engineering	
lia	rvices for this project. Ms Rode	vers ne	rformed	nhotom	etric analysis and assisted in final electrical r	lan developme	ent She also	
na	articipated in field inspections and	report	ting for th	e const	ruction of this project.	and developine	site one diso	
	r	-r 31	0		F			

10/17 - 12/21	H.003003.6: I-10: I-49 to LA 328 Lighting Construction Related Engineering Services. Lafavette, LA LADOTD
	M&M was selected to prepare final plans, specifications, photometric calculations and a construction cost estimate for the I-10 at I-
	49 to LA 328 Interchange Lighting. M&M will be working closely with local government agencies and utility companies to
	provide an optimum, low-maintenance lighting system.
	Ms. Rodgers worked under the direction of a senior engineer to review submittals for the roadway lighting design for the I-10
	widening project in Louisiana. Her responsibilities included verifying contractor submissions met design intent and coordinating all
	equipment to be used on the project with the contractor. She also participated in field inspections and reporting for the construction
	of this project.
10/17 - 09/20	H.003014.6: I-10: LA 347 to Atchafalaya Floodway Bridge Lighting Construction Related Engineering Services. New
	Orleans, LA LADOTD
	M&M was selected to prepare final plans, specifications, photometric calculations and a construction cost estimate for the I-10 @
	LA 347 Interchange which consists of two roundabouts. M&M worked closely with local government agencies and utility
	companies to provide an optimum, low-maintenance lighting system. Ms. Rodgers worked under the direction of a senior engineer
	to review submittals for the roadway lighting design for the I-12 widening project in Louisiana. Her responsibilities included
	verifying contractor submissions met design intent and coordinating all equipment to be used on the project with the contractor.
	She also participated in field inspections and reporting for the construction of this project.
01/18 - 05/19	H.003184.5-2: I-10: Texas State Line to East of Coone Gully Lighting Design Related Engineering Services. Calcasieu
	Parish, LA LADOTD
	Ms. Rodgers worked under the direction of a senior engineer to design a roadway lighting system for I-10 widening project near
	Coone Gully, Louisiana. She completed a photometric analysis using Visual lighting software to achieve optimal lighting
	illumination levels and uniformity while minimizing pole quantity and related costs. Ms. Rodgers also worked to develop complete
	lighting plans for the project including plan layouts, pole schematics, and equipment detailing. She also participated in field
	inspections and reporting for the construction of this project.
07/18 - 07/19	H.011235.5: I-49 South at Verot School Road – Lafayette, LA LADOTD
	Ms. Rodgers worked under the direction of a senior engineer to design a preliminary roadway lighting system for the new
	interchange to be built at the intersection of I-49 and Verot School Rd near Lafayette, Louisiana. She completed a photometric
	analysis using Visual lighting software to achieve optimal lighting illumination levels and uniformity while minimizing pole
	quantity and related costs.
10/17 – 04/19	H.012503: I-12 LA 447 (Walker) Lighting Interchange. Walker, LA LADOTD
	M&M was selected to prepare final plans, specifications, photometric calculations and a construction cost estimate for the I-12 at
	LA 44/ Interchange which includes two roundabouts. M&M worked closely with local government agencies and utility companies
	to provide an optimum, low-maintenance lighting system. Ms. Rodgers worked under the direction of a senior engineer to review
	submittals for the roadway lighting design for the I-12 widening project in Louisiana. Her responsibilities included verifying
	contractor submissions met design intent and coordinating all equipment to be used on the project with the contractor. She also
	participated in field inspections and reporting for the construction of this project.

Name Robbin K. Cassity, PE, LEED AP Years of relevant experience with this employer 25 Title Principal / Electrical Engineer Years of relevant experience with other employer(s) 13 Degree(s) / Years / Specialization BS 1985 Electrical Engineering 13 Active registration number / state / expiration date PE.0026059 LA 3/31/24 13/1/24 Year registered 1995 Discipline Electrical Contract role(s) / brief description of responsibilities Electrical Design and fulfills MPR #4a. Experience dates intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s). 5/16 to 11/16 H.012182.1, Weigh Station Design, Renovation and Upgrade – Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control. 2/13 to 12/16 SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange. 3/11 to 8/13 SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed. H.1711
Title Principal / Electrical Engineer Years of relevant experience with other employer(s) 13 Degree(s) / Years / Specialization BS 1985 Electrical Engineering 13 Active registration number / state / expiration date PE.0026059 LA 3/31/24 14 Year registered 1995 Discipline Electrical Contract role(s) / brief description of responsibilities Electrical Design and fulfills MPR #4a. Experience dates (mm/yy-mm/yy) intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s). 5/16 to 11/16 H.012182.1, Weigh Station Design, Renovation and Upgrade – Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control. 2/13 to 12/16 SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange. 3/11 to 8/13 SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design nervices for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed. 11/11 H.971895.1, Section 42 - Central Repair Shop Renovations, East Baton Rouge Parish - HQ Renovation Truck Per
Degree(s) / Years / Specialization BS 1985 Electrical Engineering Active registration number / state / expiration date PE.0026059 LA 3/31/24 Year registered 1995 Discipline Electrical Contract role(s) / brief description of responsibilities Electrical Design and fulfills MPR #4a. Experience dates (mm/yy-mm/yy) Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s). 5/16 to 11/16 H.012182.1, Weigh Station Design, Renovation and Upgrade – Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control. 2/13 to 12/16 SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange. 3/11 to 8/13 SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed. 11/11 H.970609.1, District 62 – Franklinton Maintenance Unit, Washington Parish 7/13 to 8/13 H.971852.1, East Baton Rouge Parish – HQ Renovation Tru
Active registration number / state / expiration date PE.0026059 LA 3/31/24 Year registered 1995 Discipline Electrical Contract role(s) / brief description of responsibilities Electrical Design and fulfills MPR #4a. Experience dates (mm/yy-mm/yy) Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s). 5/16 to 11/16 H.012182.1, Weigh Station Design, Renovation and Upgrade – Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control. 2/13 to 12/16 SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange. 3/11 to 8/13 SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed. 11/11 H.970609.1, District 62 – Franklinton Maintenance Unit, Washington Parish 7/13 to 8/13 H.971895.1, Section 42 – Central Repair Shop Renovations, East Baton Rouge Parish 7/13 to 8/13 H.971895.1, Section 42 – Central Repair Shop Renovation Truck Permits 12/19
Year registered1995DisciplineElectricalContract role(s) / brief description of responsibilitiesElectrical Design and fulfills MPR #4a.Experience dates (mm/yy-mm/yy)Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).5/16 to 11/16H.012182.1, Weigh Station Design, Renovation and Upgrade – Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control.2/13 to 12/16SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange.3/11 to 8/13SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed.11/11H.970609.1, District 62 - Franklinton Maintenance Unit, Washington Parish H.9711895.1, Section 42 - Central Repair Shop Renovations, East Baton Rouge Parish J11 to 4/11DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.12/19DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
Contract role(s) / brief description of responsibilitiesElectrical Design and fulfills MPR #4a.Experience dates (mm/yy-mm/yy)Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).5/16 to 11/16H.012182.1, Weigh Station Design, Renovation and Upgrade – Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control.2/13 to 12/16SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange.3/11 to 8/13SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed.11/11H.970609.1, District 62 - Franklinton Maintenance Unit, Washington Parish H.971895.1, Section 42 - Central Repair Shop Renovations, East Baton Rouge Parish 3/11 to 4/117/13 to 8/13H.971895.1, Section 42 - Central Repair Shop Renovation Truck Permits12/19DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.2/12 c/16CM UPT Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
 Experience dates (mm/yy-mm/yy) Experience and qualifications relevant to the proposed contract; <i>i.e.</i>, "designed drainage", "designed girders", "designed (mm/yy-mm/yy) 5/16 to 11/16 H.012182.1, Weigh Station Design, Renovation and Upgrade – Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control. 2/13 to 12/16 SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange. 3/11 to 8/13 SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed. H.970609.1, District 62 – Franklinton Maintenance Unit, Washington Parish H.971895.1, Section 42 – Central Repair Shop Renovations, East Baton Rouge Parish H.971552.1, East Baton Rouge Parish – HQ Renovation Truck Permits 12/19 DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
(mm/yy-mm/yy)intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).5/16 to 11/16H.012182.1, Weigh Station Design, Renovation and Upgrade – Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control.2/13 to 12/16SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange.3/11 to 8/13SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed.11/11H.970609.1, District 62 - Franklinton Maintenance Unit, Washington Parish7/13 to 8/13H.971895.1, Section 42 - Central Repair Shop Renovations, East Baton Rouge Parish3/11 to 4/11H.971552.1, East Baton Rouge Parish - HQ Renovation Truck Permits12/19DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
 5/16 to 11/16 H.012182.1, Weigh Station Design, Renovation and Upgrade – Site visits to conduct assessment and inventory of all existing electrical equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control. 2/13 to 12/16 SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111 / H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange. 3/11 to 8/13 SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed. H.970609.1, District 62 – Franklinton Maintenance Unit, Washington Parish T/13 to 8/13 H.971895.1, Section 42 – Central Repair Shop Renovations, East Baton Rouge Parish H.971552.1, East Baton Rouge Parish – HQ Renovation Truck Permits 12/19 DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
equipment and conditions. Included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control.2/13 to 12/16SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003495 / H.011111 / H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange.3/11 to 8/13SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed.11/11H.970609.1, District 62 - Franklinton Maintenance Unit, Washington Parish H.971895.1, Section 42 - Central Repair Shop Renovations, East Baton Rouge Parish H.971552.1, East Baton Rouge Parish - HQ Renovation Truck Permits12/19DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
Ighting control.2/13 to 12/16SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange.3/11 to 8/13SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed.11/11H.970609.1, District 62 - Franklinton Maintenance Unit, Washington Parish H.971895.1, Section 42 - Central Repair Shop Renovations, East Baton Rouge Parish H.971552.1, East Baton Rouge Parish - HQ Renovation Truck Permits12/19DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
 2/13 to 12/16 SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111 / H.011105) - 1-49 North, 1-220 to LA 1 - Electrical Engineer responsible for roadway lighting on I-49. This segment includes the I-49/I-220 Interchange. 3/11 to 8/13 SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed. H.970609.1, District 62 – Franklinton Maintenance Unit, Washington Parish H.971895.1, Section 42 – Central Repair Shop Renovations, East Baton Rouge Parish H.971552.1, East Baton Rouge Parish – HQ Renovation Truck Permits 12/19 DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
3/11 to 8/13SP#4400001234, Retainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing DOTD facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed.11/11H.970609.1, District 62 – Franklinton Maintenance Unit, Washington Parish H.971895.1, Section 42 – Central Repair Shop Renovations, East Baton Rouge Parish H.971552.1, East Baton Rouge Parish – HQ Renovation Truck Permits12/19DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
S/11 to 6/15Si # Hooder25-4, Retainer Contract for Electrical ber vices blace what is intervices blace what is interviewed what is interviewe
11/11H.970609.1, District 62 – Franklinton Maintenance Unit, Washington Parish7/13 to 8/13H.971895.1, Section 42 – Central Repair Shop Renovations, East Baton Rouge Parish3/11 to 4/11H.971552.1, East Baton Rouge Parish – HQ Renovation Truck Permits12/19DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad.
7/13 to 8/13 H.971895.1, Section 42 – Central Repair Shop Renovations, East Baton Rouge Parish 3/11 to 4/11 H.971552.1, East Baton Rouge Parish – HQ Renovation Truck Permits 12/19 DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad. 2/22 to C/DC CPU/044.01.0020 P to P
3/11 to 4/11 H.971552.1, East Baton Rouge Parish – HQ Renovation Truck Permits 12/19 DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad. 2/22 to C/DC CDV 044 01 0020 Pool to
12/19 DOTD Headquarters Helipad, Baton Rouge, LA (H.972332.1) Electrical design for the DOTD Headquarters helipad. 2/22 + C/02 CD// 0.44 01 0020 P P D </th
8/03 to 6/06 SP# 044-01-0038, Benton Road, LA Highway 3 Overpass, Bossier City, LA - Responsible for engineering design for the installation
of roadway lighting along the approaches and overpass at LA Highway 3 and Benton Road Spur. Plans coordinated with roadway and
overpass design plans by AFJMc Transportation group. Plans included with overall project set and issued for bid as part of complete
roadway project.
12/01 to 0/04 SF# 427-01-01-0024, Louisiana Highway 5152, The Inner Loop Expressway - Roadway Lighting, Shreveport, LA - Responsible for the installation of roadway lighting for an approximate 7-mile section of the highway
Project included lighting layout-design power distribution and control Teamed with DBE firm for COS Fair Share Program Design
complete and submitted to the City of Shreveport.
8/07 to 9/07 SP #5029-06B-02, Highway 80, Bossier Parish, LA, Industrial Drive To I-220 - Provided design engineering of lighting system.
Performed lighting and electrical calculations, determined fixture locations and electrical service/control for approximately 2.5 miles of
highway.
11/02 to 6/03 General Motors Boulevard - Roadway Lighting, Shreveport, LA (no project number) - Responsible for the engineering design and
project management for the installation of roadway lighting for an approximate 2-mile roadway. Project included lighting layout/design,
power distribution and control, as well as preparation of the complete bid package.
12/02 to 10/05 11 and Street, r hase 2 - Koauway Lighting, bossier City, LA (no project number) - Responsible for the engineering design of a section of roadway lighting extending from the intersection with U.S. Highway 80. Project included lighting layout/design power
distribution and control. Project required coordination with traffic signal engineering. Utilized architectural poles and fixtures for
coordination with area retail development.

12/02 to 10/05	Traffic Street, Phase 3 - Roadway Lighting, Bossier City, LA (no project number) - Engineering design for the extension of Phase 2
	lighting further along Traffic Street and underneath an existing railway overpass. Design complete. Plans included with overall roadway
	design by AFJMc Transportation Group. Awaiting issue for construction.
7/04 to 8/07	Arthur Teague Parkway - Roadway Lighting, Bossier City, LA (no project number) - Engineering design for roadway lighting along
	the Phase I Extension north, approximately 1/4 mile. Utilized architectural poles and fixtures for coordination with existing and planned
	lighting along Traffic Street. Plans included with roadway design plan set by AFJMc Transportation group.
11/98 to 5/01	SP #604-01-0037, LaDOTD Office Building, Bossier City, LA - Responsible for the engineering design of lighting, power, voice and
	data communications, fire alarm and access control systems for a new, two-story office building for the LaDOTD District 04
	Headquarters.

Firm employed by: Aillet, Fenner, Jolly & McClelland, Inc.					
Name Danie	l Brown, PE, LEED A	Р		Years of relevant experience with this employer	15
Title Electr	ical Engineer / Supervis	or Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Years /	Specialization		BS	2008 Electrical Engineering	
Active registration	number / state / expiration	ion date	PE.0	0041687 / LA / 9-30-23	
Year registered	1995	Discipline	Elec	trical	
Contract role(s) / b	rief description of respo	onsibilities	Elec	trical Design and fulfills MPR #4b.	
Experience dates	Experience and quali	fications releva	nt to	the proposed contract; i.e., "designed drainage", "designe	d girders", "designed
(mm/yy–mm/yy)	intersection", etc. Exp	perience dates sl	nould	cover the years of experience specified in the applicable MPF	₹ (s).
4/13 - 3/18	SP #455-09-0001 and S	P#455-09-0002 ((H.00)	3886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North,	I-220 to LA 1 –
	Electrical design for roa	dway lighting on	I-49.	This segment includes the I-49/I-220 Interchange.	
4/19 to 4/20	9 to 4/20 Virtual Weigh-in-Motion US Hwy 61, W. Feliciana Parish, LA, (H.012164-1) Prime consultant to develop construction road plan				struction road plans for
the placement of a Virtual Weigh-In-Motion (VWIM) station, south of Louisiana/Mississippi State Line. The plans included electrical				is included electrical	
0/11 5/16	and guardrail design for	the site.	Floor	micel Commisses Statemide Duessiding electrical design commisses for	
8/11 - 5/10	SP#4400001254, Ketainer Contract for Electrical Services Statewide - Providing electrical design services for new and existing				
(0/11 //12)	LaDOID facilities. Including the design of building electrical power, lighting, emergency generator and other special systems as needed.				
(8/11 - 4/13) (8/11 - 5/16)	H.9/U0U9.1, District 02 – Franklinton Maintenance Unit, Wasnington Parish				
(0/11 - 5/10) 11/20 to 8/21	H.9/1095.1, Section 42 – Central Repair Snop Renovations, East Baton Rouge Parisn				
11/20 t0 0/21	site lighting CCTV surv	veillance systems	hack	-up generator systems surge protection and replacing lighting on the	ne interstate ramps
2/19 to 4/20	I-10: Texas State Line-	E. of Coone Gul	lev. V	VIM Toomey Weigh Station. I-10 – Electrical design for electrical	equipment including
	cabinet, poles, and came	eras,	,		
7/08 - 4/09	Louisiana Tech Data R	Replication Cent	er, Ru	ston, LA (no project number) - Project consisted of designing his	the security for a
	data replication center for	or all LA state ag	encies	. High level of security wing consisted of designing and coordinatin	ng with all city and state
	municipalities in provid	ing normal and U	PS el	ectrical power, security clearances, access control systems, preaction	n fire system, CCTV,
	and HVAC systems.				
7/10	Bossier Law Enforcem	ent – Administr	ation	Building, Bossier Parish, LA (no project number) - MEP engine	ering services for the
	renovation and expansio	on of an existing t	wo-st	ory office building. Under the scope of work, associated construction	on areas included
12/10	Offices, meeting rooms,	communications,		nistration and storage.	alumbing design for -
12/10	Rea Kiver Parish Amb	mbulance Station,	Kea h	Ever Parish, LA (no project number) - Mechanical, electrical and	plumbing design for a
	communications admin	istration and stor	aciiit age M	AEP services included HVAC plumbing fire protection power lig	, uannig, hting & data
	communications, admin	istration and store	150. I	in services menueer revice, premong, me protection, power, ng	mm ₅ & tata

Firm emplo	oyed by:	Aillet, Fenner, Jolly	& McClelland	, Inc.		
Name	Paul C	Cormier, PE			Years of relevant experience with this employer	15
Title	Structu	ural Engineer			Years of relevant experience with other employer(s)	18
Degree(s) /	Years /	Specialization		BS	1989 Civil Engineering	
				ME	1994 Civil Engineering	
Active regi	stration	number / state / expirati	on date	PE.0	0027019 / LA / 3-31-25	
Year registe	ered	1996	Discipline	Civi	l, Structural	
Contract ro	le(s) / bi	rief description of respo	nsibilities	Stru	ctural Design and fulfills MPR #6.	
Experience	dates	Experience and quality	fications releva	ant to	the proposed contract; i.e., "designed drainage", "designed	ed girders", "designed
(mm/yy-m	m/yy)	intersection", etc. Exp	erience dates s	hould	cover the years of experience specified in the applicable MP	R(s).
11/20 to 8/2	1	H.011446.5, Mound H	Rest Area Imp	roven	nents, Route I-20 – Responsible for structural design which inc	ludes foundation design
		for overhead structures s	uch as pavilions	, cove	red walkways and the design of wood bridges and bulkhead at pond	1 edges.
6/13 to 8/13	6/13 to 8/13 SP #455-09-0001 and SP#455-09-0002 (H.003886 / H.003496 / H.003495 / H.011111/ H.011105) - I-49 North, I-220 to LA 1 – Ch				, I-220 to LA 1 – Check	
2/00 / 2/12		concrete structures for in	iverted siphon.	6 01		1.1.1. (
2/09 to 2/12	2 Regional Commerce Center for Port of Shreveport-Bossier, Shreveport, LA, (no project number) - Structural design for a 33,000					
		area. The second and the	ird floors are cor	ventio	and steel structures. The Commerce Center is designed with alumi	inum composite skins
		and glass curtain wall sy	stem, and is desi	gned t	to take advantage of natural lighting and sun exposure.	indin composite skins
2007 - 2008	2007 - 2008 Pratt Paper (LA), LLC, Shreveport, LA, (no project number) - Provided building and equipment foundation design, pile-supported				lesign, pile-supported	
		concrete ground floor fra	aming, steel-fran	ned op	erating floor framing and roof design for manufacturing plant, offic	ce, materials recycling
		facility and waste treatm	ent facilities. Ci	ane g	irder framing and foundation design for (2) 55 metric tonne bridge	cranes. AFJMc provided
	design services for construction and installation of a truck scale including roadways, maps, foundations, electrical power and					power and
		communication conduit.				
2016-2017		Wieland Davco, Shreve	eport, LA, (no p	roject	number) - AFJMc served as structural engineer of record for conv a Sei Dert children's reveaux into an affine for a construction conv	version of load-bearing
		demolition and remodeli	ng of front focod	origina lo ord	the addition of interior lateral load resisting elements to stabilize h	pany. Project involved
	the creation of openings in the existing load bearing masonry walls					
2008-2009		A.D.S. Logistics / Port	Of Caddo Bossi	er. Sh	reveport. LA. (no project number) - Structural design of 100.000) SF warehouse which
		included foundation plar	is and framing pl	lans fo	or roof and bridge cranes.	
		1	01		č	

Firm employed by	Firm employed by: Aillet, Fenner, Jolly & McClelland, Inc.					
Name Matt	hew J. Wallace, PE, SE	Years of relevant experience with this employer	28			
Title Princ	ipal / Structural Engineer	Years of relevant experience with other employer(s)	6			
Degree(s) / Years	/ Specialization	BS 1989 Civil Engineering				
Active registration	number / state / expiration date	PE.0025922 / LA / 9-30-23				
Year registered	1994, 2016 Discipline	Civil, Structural				
Contract role(s) / b	orief description of responsibilities	Structural Design and fulfills MPR #6.				
Experience dates	Experience and qualifications releva	int to the proposed contract; i.e., "designed drainage", "designed	ed girders", "designed			
(mm/yy–mm/yy)	intersection", etc. Experience dates s	hould cover the years of experience specified in the applicable MP	$\mathbf{R}(\mathbf{s})$.			
1/22 to 4/22	SP #H.972448.1 DOTD Central Repair	Shop (Heavy Repair Shop Addition), East Baton Rouge Parish, LA	- Project manager for			
	foundation design for metal building base	ed on DOTD's provided soils report or matching existing adjacent buildi	ng; Slab design;			
	Schematic metal building design based o	n architectural floor plan, roof plan, and elevations; Shop drawing review	v for metal building and			
5/11 4- 2/20	foundation elements and site visit during	construction.				
5/11 to 2/20	SP #455-09-0001 and SP#455-09-0002	(H.003886 / H.003496 / H.003495 / H.011111 / H.011105) - 1-49 North his segment includes the L 40/L 220 Interchange. Designed light pole has	, I-220 to LA I – Project			
ensuring L aDOTD standards were mot						
9/12 to 12/17	SP # 742-10-0130 Sale Road Bridge Lake Charles LA - 0.375 mile urban bridge replacement project. Widening of Sale Road and					
	bridge from two lanes to a four lane road with curb, subsurface drainage, 7 span bridge, sheet pile retaining walls, guard rails and sanitary					
	sewer relocation.		0			
3/12 to 6/12	Palmetto Road Bridge, Bossier Parish,	LA (no project number) - Structural lead for widening of a slab span b	ridge.			
2/04 to 6/10	SP #038-03-0022, U.S. 425, Bastrop-Lo	g Cabin, Morehouse Parish - Structural Lead for final design of one fi	ve-lane and one two-			
	lane highway bridges.					
1996	Ockley Street Bridge Replacement, Cit	ty Of Shreveport, Shreveport, LA (no project number) - Structural er	gineer for new two lane			
	bridge with sidewalks required when Ocl	cley Ditch was widened. Prestressed concrete beam with concrete deck a	ind concrete pile.			
6/04 to 7/04	Willow Chute Bridge, Parish Hwy No.	3105, Bossier Parish, LA (no project number) - Structural Lead for fi	nal design of a precast			
1000	P 1 Poilway Bridge FT Polk I A (no	nroiget number) Project Management, Pridge design for the replacem	ant of D 1 roilway			
1777	hridge	project number)- rioject Management, bridge design for the replacent	fit of K-1 fallway			
1/03 to 11/06	SP#044-01-0038, LA 3, Benton Road C	vernass, Bossier Parish - Project Supervision for a five-lane urban real	ignment of LA 3 over			
1,00 00 11,00	the Kansas City Southern Railroad. Desig	gned light pole bases in addition to ensuring LaDOTD standards were mo	et.			
6/01 to 4/11	Traffic Street Improvements and Under	erpass, Bossier Parish (no project number) - Project Supervision and s	structural design for a			
	five lane urban street widening and Kans	as City Southern Railroad underpass. Designed light pole bases in addition	on to ensuring LaDOTD			
	standards were met.					
1/06	Arthur Ray Teague Parkway, Bossier	City, LA (no project number) - Project Principal for the continuation o	f the existing parkway			
	along the Red River in Bossier City.					

Firm employed by: Aillet, Fenner, Jolly & McClelland, Inc.						
Name	J. Dan	iel Thompson, PE, S	SE		Years of relevant experience with this employer	17
Title	Superv	visor Engineer / Struct	tural Engineer		Years of relevant experience with other employer(s)	0
Degree(s) / Y	Years /	Specialization		BS	2006 Civil Engineering; MS 2010 Engineering & Techno	ology Mgmt.
Active regist	tration	number / state / expira	ation date	PE.0	0035628 / LA / 9-30-24	
Year register	red	2006; 2016	Discipline	Civi	l, Structural	
Contract role	e(s) / br	ief description of resp	oonsibilities	Stru	ctural Design and fulfills MPR #6.	
Experience of	dates	Experience and qua	alifications releva	ant to	the proposed contract; i.e., "designed drainage", "designed	ed girders", "designed
(mm/yy–mm	n/yy)	intersection", etc. E	xperience dates s	hould	cover the years of experience specified in the applicable MP	$\mathbf{R}(\mathbf{s})$.
5/12-10/12		Arthur Ray Teague	Parkway Extensio	n Sou	ndwall, Bossier Parish, LA (no project number): Designed post	ts, base plates, anchor
		bolts and foundations	for new sound wal	l syste	m for the ART Parkway Extension.	
4/12-2/14		I-10 Soundwall, New	Orleans, LA (no	proje	ct number): Design of posts and connections for new soundwall o	n I-10.
5/14-6/14		LaDOTD Soundwall	, New Orleans, LA	<u>A (no</u>)	project number): Analysis of LADOTD soundwall gate.	
5/06-5/07		SP #455-09-0001 and	SP#455-09-0002	(H.00	3886 / H.003496 / H.003495 / H.011111/ H.011105) - 1-49 North,	, I-220 to LA 1 – Built
		templates, decision tal	bles and supereleva	tion f	or ramps over 1-220 and MLK Drive. Also calculated and set right	of way for mainline 49
1/06-3/08		SP#038_03_0022 US	Highway 425 Bas	rive a	IIU LA Log Cabin Marahausa Parish I A - Designed subsurface drai	nage and storm server
4/00-3/00		systems with the use of	f Inroads Storm ar	nd San	itary and I ADOTD Hydraulics programs Built templates decision	tables and
		superelevation for mai	inline US 425 and i	the sid	le roads that connect. Performed design for all returns for the side r	oads and created all
		Typical Sections for the	ne project.			
6/06-12/07		SP#044-01-0038, LA	3, Benton Road C)verpa	ass, Bossier Parish, LA - Final construction plans and documents	for a five lane urban
		realignment of LA 3 o	ver the Kansas Cit	y Sou	thern Railroad, including parcel calculations and right-of-way maps	s and construction phase
		services.				
1/07-8/09		Linton Road, Bossier	r Parish, LA (no p	rojec	t number): The redesign and reconstruction of a deadly curve and	the rehabilitation of the
		remainder of the road.	AFJM corrected the	he cur	ve to AASHTO and LADOTD standards to allow for a safe sight d	istance. AFJM also
		relocated an existing 8	" waterline and de	velop	ed Right-Of-Way maps.	
4/06-6/07		Arthur Ray Teague	Parkway, Bossier	Paris	h, LA (no project number): Project Designer for the continuation	of the existing parkway
6/12		along the Red River in	Bossier City. Des	igned	light pole bases in addition to ensuring LaDOID standards were m	let.
0/12		lane road Having con	noted the study A	ым , Бил ,	eveloped Preliminary Plans and Final Plans to widen the road and	an existing 2 long
		hridge	ipieteu tile study A	1 J IVI (acveroped i remninary rians and rinar rians to widen the road and	an existing 2-tane
4/06 to 12/10)	Traffic Street Impro	vements and Und	ernas	s. Bossier Parish (no project number) - Project engineer for a five	ve lane urban street
		widening and Kansas	City Southern Rail	road u	inderpass. Designed light pole bases in addition to ensuring LaDOT	D standards were met.

16. Staff Experience:

Firm employed	by Lazenby & Associa	tes, Inc.						
Name Ronald	l J. Riggin, II, P.E., P.L.S.			Years of relevant experience with this employer	11			
Title Project	Surveyor			Years of relevant experience with other employer(s)	6			
Degree(s) / Years	/ Specialization		B.S. /	/ 2006 / Civil Engineering		(mm)		
Active registration	Active registration number / state / expiration date P.L			5. 0005119/ Louisiana / 03/31/2023				
	P.1			0036016 / Louisiana / 03/31/2023				
Year registered	2014	Discipline	Profe	rofessional Land Surveyor				
	2011		Profe	essional Engineer (Civil)				
Contract role(s) /	brief description of responsib	ilities	Торо	graphic Survey				
Experience dates	Experience and qualification	ons relevant to the	propo	sed contract; <i>i.e.</i> , "designed drainage", "designed girders", "desig	gned intersection", etc	c. Experience dates		
(mm/yy–mm/yy)	should cover the years of e	experience specifie	ed in th	e applicable MPR(s).				
	Mr. Riggin is familiar with the requirements of the LDOTD Location and Survey Section for conducting topographic surveys, property surveys and hydrographic surveys. Mr. Riggin is responsible for quality control of all survey data obtained by survey crews in conducting topographic surveys, property surveys, and hydrographic surveys. Mr. Riggin has over five (5) years of experience in conducting and performing topographic surveys, property surveys, and developing right-of-way maps.							
	 Mr. Riggin has successfully completed following continuing education classes, workshops, and seminars: LA Specific Traffic Control Technician Course, 2020 (refresher) LA Specific Traffic Control Supervisor Course, 2020 (refresher) ATSSA Course for Traffic Flagger, 2020 On this project, Mr. Riggin meets the MPR Requirement No. 8. 							
07/14 - 06/16	Retainer Contract No. 440	0003471 – Retaine	er Cont	tract for Professional Surveying Services – Statewide. Project Su	rvevor responsible fo	r coordination and		
	supervision of survey field crews performing topographic surveys and property surveys on 14 Task Orders for an accumulated value of \$436,473.00 for LDOTD State Projects at various locations in northern Louisiana.							
10/14 - 06/17	Retainer Contract No. 4400004541 – Retainer Contract for Professional Surveying Services – Statewide. Project Surveyor responsible for coordination and supervision of survey field crews performing topographic surveys and property surveys on 8 Task Orders for an accumulated value of \$811,513.00 for LDOTD State Projects at various locations in Louisiana.							
04/13 - 06/16	Project Surveyor for Contract No. 4400002862, S.P. # H.008768 – Hydrographic Survey Monitoring of Existing Bridges – Statewide (North Region). Performed hydrographic surveys on 14 Task Orders for monitoring scour at major bridge sites in north Louisiana. Duties included supervision of survey crews, analysis of survey data, and the development of required hydrographic survey reports at the various bridge locations.							
04/14 - Present	Professional Surveyor of R developments in Ouachita developments.	Record for develop Parish and norther	oing top rn Loui	pographic surveys and Property Surveys for private clients on res isiana. Professional Engineer of Record for the overall design of	idential developments residential and comm	s and commercial nercial		
03/15 - 08/17	State Project No. H.011742: Ole Highway 15 Improvements, Ouachita Parish. Mr. Riggin performed a topographic survey of a 2.2-mile section of Ole Hwy 15 from US 80 to LA 616 and then was the project engineer responsible for roadway design. This project consisted of pavement reconstruction under the DOTD Urban Systems program. (Note that we typically perform a full topo survey, within existing right-of-way, on pavement preservation projects on Ouachita Parish roadways. This is not always done on pavement preservation projects in other parts of the state.)							

05/16-02/18	Project Surveyor on the Steep Bayou Sewer Main project of the West Ouachita Sewerage District No. 5. Mr. Riggin performed a topographic survey of the
	alignment for a sewer main trunk line from I-20 to New Natchitoches Road along Steep Bayou in Ouachita Parish. He also conducted a boundary survey of
	the right-of-way parcels along this route and developed the necessary ROW maps and legal descriptions.
09/18 - 01/23	Retainer Contract No. 4400012668 – Retainer Contract for Professional Surveying Services – Statewide (North Region). Performed hydrographic surveys
	on major bridge structures in northern Louisiana for monitoring channel scour. Duties included supervision of field crews, analysis of survey data and
	development of required hydrographic survey reports at the various bridge locations for submission to the LDOTD.
06/18 - 09/18	State Project No. H.013776, Well Road, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of
	survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 0.8-mile segment of Well Road
	from LA 838 to I-20 under the DOTD Urban Systems program.
08/18 - 11/18	State Project No. H.013798: Harrell Road, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of
	survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 1.8-mile segment of roadway
	from US 80 to LA 616 under the DOTD Urban Systems program.
12/18 - 02/19	State Project No. H.013802: Garrett Road, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews, analysis of
	survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 0.4-mile segment of roadway
	from LA 15 to Austin Street under the DOTD Urban Systems program.
01/19 - 04/19	State Project No. H.013804: Wall Williams Road, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews,
	analysis of survey data, and development of field roll for use in project design. This project consisted of segments of mill, patch, and overlay and segments
	of reconstruction of a 1.6-mile segment of roadway from Good Hope Road to LA 143 under the DOTD Urban Systems program.
04/19 - 07/19	State Project No. H.014348: Lee Avenue, City of Monroe, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey
	crews, analysis of survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 1.2-mile
	segment of roadway from Jackson Street to Standifer Avenue under the DOTD Urban Systems program.
07/19 - 09/19	State Project No. H.013796: Tanglewood Drive, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field survey crews,
	analysis of survey data, and development of field roll for use in project design. This project consisted of roadway reconstruction a 0.3-mile segment of
	roadway from LA 15 to Dellwood Drive under the DOTD Urban Systems program.
02/20 - 04/20	State Project No. H.014347: South Grand Street, City of Monroe, Ouachita Parish. Mr. Riggin was responsible for supervision and scheduling of field
	survey crews, analysis of survey data, and development of field roll for use in project design. This project consisted of a mill, patch, and overlay of a 1.8-
	mile segment of roadway from Orange Street to Standifer Avenue under the DOTD Urban Systems program.
11/20 - present	Retainer Contract No. 4400019714 – Retainer Contract for Professional Surveying Services – Statewide (North Region). Performing hydrographic surveys
	on major bridge structures in northern Louisiana for monitoring channel scour. Duties include supervision of field crews, analysis of survey data and
	development of required hydrographic survey reports at the various bridge locations for submission to the LDOTD.
01/17 - 01/20	Retainer Contract No. 4400009384 – Retainer Contract for Professional Surveying Services – Statewide. Project Surveyor responsible for coordination and
	supervision of survey field crews performing topographic surveys and property surveys on 14 Task Orders for an accumulated value of \$989,478 for
	LDOTD State Projects at various locations in Louisiana.
10/19 – present	Retainer Contract No. 4400015326 – Retainer Contract for Professional Surveying Services – Statewide. Project Surveyor responsible for coordination and
	supervision of survey field crews performing topographic surveys and property surveys at various locations in Louisiana. To date, 14 Task Orders have
	been issued for an accumulated value of \$1,825,144.
01/20 - present	Retainer Contract No. 4400017710 – Retainer Contract for Professional Surveying Services – Statewide. Project Surveyor responsible for coordination and
	supervision of survey field crews performing topographic surveys and property surveys at various locations in Louisiana. To date, 1 Task Order has been
	issued for a value of \$393,871.

16. Staff Experience

Firm employed by	Lazenby & Associates, Ir	nc.				
Name Randy	Randy Hammons, P.E.			Years of experience with this firm/employer	21	
Title Project	Title Project Engineer			Years of experience with other firm(s)/employer(s)	8	
Degree(s) / Years / Specialization B			B.S.	/ 1993 / Civil Engineering		62.59
Active registration	number / state / expiration of	date	P.E.	0029504 / Louisiana / 09/30/2023		
Year registered	2001	Discipline	Civil	Engineering		
Contract role(s) / b	orief description of responsib	oilities	Торс	ographic Survey		
Experience dates	Experience and qualification	ons relevant to the	e propo	sed contract; i.e., "designed drainage", "designed girders", "de	esigned intersection	n", etc. Experience dates
(mm/yy–mm/yy)	should cover the years of e	experience specific	ed in th	e applicable MPR(s).		-
	Mr. Hammons has in excess of 25 years of experience in planning and designing highways and bridges on transportation projects in Louisiana, Arkansas, Mississippi, and Tennessee. Mr. Hammons has approximately 15 years of experience supervising and processing topographic survey data, including establishing survey control, calculating existing alignments, creating digital terrain models (DTM's), and developing existing drainage maps for LDOTD projects.					
	Mr. Hammons has successfully completed the following continuing education classes, workshops, and seminars: LA Specific Traffic Control Technician Course, 2020 (refresher) LA Specific Traffic Control Supervisor Course, 2020 (refresher)					
10/14 - 06/17	 Project Engineer processing topographic survey field data and development of topographic survey maps and images for State Contract No. 4400004541: Retainer Contract for Professional Surveying Services – Statewide. This retainer contract contained eight task orders to perform topographic surveys for various projects at a cost of \$811,513 over a 3-year period. Some of the task orders for Topographic Surveys were as follows: State Project No. H.004774.5 – Kansas Lane – Garrett Road Connector & I-20 Interchange Improvements, in Ouachita Parish. (06/2015 – 06/2016). Topographic survey using GPS receivers and robotic total stations. State Project No. H.001270.5 – LA I-X: Natchitoches By-Pass on Keyser Avenue and the Cane River in Natchitoches Parish. (04/2017 – 07/2017). Topographic Survey of road and bridge replacement project using GPS receivers, robotic total stations and a SX-10 terrestrial scanner. State Project No. H.009997.5 – US 167: Johnston Street Improvements on Route US 167 in Lafavette Parish. (04/2017 – 09/2017). Topographic survey of a 					
	heavily traveled urban syst	tem route in Lafay	yette, L	ouisiana using GPS receivers, robotic total stations and a SX-1	10 terrestrial scann	ier.
01/10/2017 - 01/10/2020	 Project Engineer processing topographic survey field data and developing topographic survey maps and images for State Contract No. 4400009384: Retainer Contract for Professional Surveying Services – Statewide. This retainer contract contained six task orders to perform topographic surveys for various projects at a cost of \$989,478 over a 3-year time frame. Some of the task orders for Topographic Surveys were as follows: State Project No. H.003370.5 – I-220/I-20 Interchange and BAFB Access, Route I-220 & I-20 in Bossier Parish (04/2018 – 10/2018). Topographic survey of the proposed I-220/I-20 Interchange and BAFB Access roadway in Bossier Parish using GPS receivers, robotic total stations, SX-10 terrestrial scanner, and mobile lidar. State Project No. H.007300.5 & H004774.5 – Kansas Lane – Garrett Road Connector and I-20 Interchange in Ouachita Parish (3/2018 – 9/2018) Topographic Survey of the proposed Kansas Lane - Garrett Road Connector and I-20 Interchange using GPS receivers, robotic total stations and a SX-10 terrestrial scanner. 					
	State Project No. H.012036.5 – US 80: Boeuf River Bridge in Richland Parish (03/2019 – 6/2019). Topographic survey for a bridge replacement project a the US 80 crossing of the Boeuf River using GPS receivers, robotic total stations and a SX-10 terrestrial scanner.					e replacement project at

10/19 – present	Project Engineer processing topographic survey field data and developing topographic survey maps and images for State Contract No. 4400015236: Retainer Contract for Professional Surveying Services – Statewide. This retainer contract has contained fifteen task orders to perform topographic surveys for various projects at a cost of \$1,825,144 over a 5-year time frame. Some of the task orders for Topographic Surveys were as follows:
	State Project No. H.011706.5 – BNSF Several RR Xings (Baldwin) in St. Mary Parish (01/2021-08/2021). Topographic survey of the BNSF RR and several local urban routes and crossings in the town of Baldwin, Louisiana using GPS receivers and robotic total stations.
	State Project No. H.012030 – US 371: KCS RR Overpass HBI, Route LA 159 and US 371 in Webster Parish (10/2020-04/2021). Topographic survey of two bridge replacements over KCS RR using GPS receivers, robotic total stations and SX-10 terrestrial scanner to locate bridges.
	State Project No. H.012032.5 – LA 2: Bridges Near Mer Rouge, Route LA 2 in Morehouse and West Carroll Parishes (02/2021-04/2021). Topographic survey of two bridge replacement sites using GPS receivers, robotic total stations and SX-10 terrestrial scanner to locate bridges.
	State Project No. H.013832.5 – LA 6: Grand Ecore Bridge Deck Repair, Route LA 6 in Natchitoches Parish (04/2021-06/2021). Topographic survey of the existing deck, barrier rails & river pier top of cap elevations for the Grand Ecore Bridge across the Red River using GPS receivers, robotic total stations and SX-10 terrestrial scanner to locate complete bridge deck & barrier rails.
	State Project No. H.008220.5 – LA 406 @ F.E. Hebert Roundabout, Route LA 406 in Plaquemines Parish (03/2021-07/2021). Topographic survey of a proposed roundabout site located at the intersection of LA 406 and Keating Dr and F.E. Hebert Blvd using GPS receivers and robotic total stations.
	State Project No. H.014554.5 – LA 3025: Coulee Mine Scour Repair, Route LA 3025 in Lafayette Parish (04/2021-07/2021). Topographic survey of a bridge located near the intersection of LA 3025 & West Bayou Parkway using GPS receivers, robotic total stations and SX-10 terrestrial scanner to locate bridge, roadway and intersection.
	State Project No. H.012541.5 – LA 594: Overpass I-20, Route LA 594 in Ouachita Parish (01/2022-06/2022). Topographic survey of a bridge replacement near the intersection of I-20 and LA 594 (Texas Ave) using GPS receivers, robotic total stations and SX-10 terrestrial scanner. Terrestrial mobile lidar used to locate 4,200 LF of I-20 mainline and two bridge decks over interstate.
	State Project No. H.014646.5 – I-20: US 165 – E. of Garrett Road, Route I-20 in Ouachita Parish (08/2021-01/2022). Topographic survey of a proposed 2.49 mi interstate widening near the intersection of Garrett Road and I-20 using GPS receivers, robotic total stations and SX-10 terrestrial scanner. Terrestrial mobile lidar was used to locate 7,130 LF of I-20 mainline.
01/20 - present	Project Engineer processing topographic survey field data and developing topographic survey maps and images for State Contract No. 4400017710: Retainer Contract for Professional Surveying Services – Statewide. This retainer contract has contained one task order to perform topographic surveys at a cost of \$393,871 over a 5-year time frame. The task order for Topographic Surveys is as follows:
	State Project No. H.015052.5 – I-20 Widening & Improvements (Vancil to LA 34), Route I-20 in Ouachita Parish (05/2022-01/2023). Topographic survey of a proposed 3.94 mi interstate widening from Vancil Road to LA 34 along I-20 in West Monroe using GPS receivers, robotic total stations and SX-10 terrestrial scanner. Terrestrial mobile lidar was used to locate 20,815 LF of I-20 mainline.

16. Staff Experience

Firm employed by Lazenby & Associates, Inc.						
Name James S. Ellingburg P.E.				Years of experience with this firm/employer	14	
Title Project Engineer				Years of experience with other firm(s)/employer(s)	0	
Degree(s) / Years / Specialization				2008 / Civil Engineering		19.Ph
Active registration nu	mber / state / expiration date		P.E. 0	0037236 / Louisiana / 09/30/2022		
Year registered	2012 Discipline			Engineering		
Contract role(s) / brief	f description of responsibiliti	es	Road	Design, Hydraulic Analysis & Design, Topographic Survey		
Experience dates	Experience and qualificat	ions relevant to the	propos	ed contract; i.e., "designed drainage", "designed girders", "designe	d intersection"	, etc. Experience
(mm/yy–mm/yy)	dates should cover the years of experience specified in the applicable MPR(s).					
	Mr. Ellingburg has over 14 years of experience in developing roadway plans on both LDOTD and local roadway projects. Mr. Ellingburg is family with the LDOTD Roadway Design Procedure and Details Manual and the LDOTD Hydraulics Manual, as well as AASHTO design standards for roadway design. Mr. Ellingburg has assisted in hydraulic analysis and design, as well as roadway design and preparation of roadway plans, on a variety of roadway projects.					ingburg is familiar ndards for roadway variety of roadway
	Mr. Ellingburg has succes	ssfully completed th	ne follov	wing continuing education classes, workshops, and seminars:		
	LA Specific Traffic Control Technician Course, 2020 (refresher)					
	LA Specific Traffic Control Supervisor Course, 2020 (refresher)					
	Designing Streets for Pedestrians and Bicyclists Workshop, 2016					
	Highway Safety Manual Workshop, 2016					
	Roundabout Design W Traffic Engineering A One-Dimensional Moo	Vorkshop, 2013 nalysis Process & R deling of River Enc	Report C roachm	Class Module 1, 2 & 3, 2021 ents with HEC-RAS Class, 2022		
05/08 - 06/15	State Project No. H.0026 topographic survey in the existing drainage maps, d and sequence of construc two-lane section to a five development in order to p provided construction sup	522: Arkansas Roac e field for accuracy. rainage design map tion in both Prelimi e-lane urban roadwa meet AASHTO and oport on an as-neede	d (LA 6 Mr. El s, utility inary an ay, and l LDOT ed basis	(516), Ouachita Parish. Mr. Ellingburg initially served as an engining burg then served as a project staff engineer, assisting the project adjustments, and developing roadway plans. Mr. Ellingburg also a difinal plan development. This project consisted of widening a 3 included four multi-lane roundabouts that required extensive geom b standards and requirements for safety. Once the project was let by answering field questions from the contractor or LDOTD.	neering technic ect engineer wi assisted with ro .2-mile portion netric design an for construction	cian, checking the th development of bundabout designs, of LA 616 from a nd graphical grade on, Mr. Ellingburg
12/10 - 10/12	State Project No. H.0038 Mr. Ellingburg served as and assisting with roadwa realignment of a 3.7-mile southern portion of the pr on the project.	54: Bossier North-S a project staff engi ay and bridge design section of Swan La oject contains an ur	South Co ineer, w n and p ake Roa ban thre	porridor Roadway and Bridges (I-220/Swan Lake Road Interchange vorking on development of existing drainage maps, design drainag lan development for both Preliminary and Final plans. This project ad and construction of a new 4.2 mile roadway connecting Swan La ee-lane section, while the northern segment is a rural, two-lane road	to Crouch Roa e maps, roadw xt consisted of ake Road and C way. There ar	d), Bossier Parish. ay drainage plans, reconstruction and Crouch Road. The re three bridge sites

11/11 - 01/12	State Project No. H.004684: El Camino East/West Corridor, Route LA 6, Natchitoches Parish. Mr. Ellingburg served as a project staff engineer, developing existing drainage maps for a LDOTD Topographic Survey.
09/17 – Present	State Project Nos. H.004774 & H.007300: Kansas Lane – Garrett Road Connector and I-20 Improvements, Ouachita Parish. Mr. Ellingburg served as a project staff engineer, assisting with generating topographic survey deliverables, developing existing drainage maps for the topographic survey portion of the project. During the design and plan preparation portion of the project, Mr. Ellingburg has performed drainage design, developed design drainage maps, and assisted with design of five multi-lane roundabouts, developing graphical grades and assisting with geometric design. This urban project includes five multilane roundabouts and interstate ramp modifications that required extensive geometrics and graphical grades in order to meet AASHTO and LDOTD standards and requirements for safety. The final plans are currently 98% complete.

16. Staff Experience

Firm emplo	yed by Lazenby & Associate	es, Inc.			
Name	Noah J. Sampognaro, E.I.		Years of experience with this firm/employer	2	-
Title	Engineer Intern		Years of experience with other firm(s)/employer(s)	0	
Degree(s) / Years / Specialization			B.S. / 2020 / Civil Engineering		259
Active registr	ration number / state / expiration da	ate	E.I. 0034746 / Louisiana / 09/30/2023		
Year registered 2021 Discipline		Discipline	Civil Engineering (E.I.)		
Contract role	(s) / brief description of responsibi	lities	Road Design, Hydraulic Design & Analysis, Topographic Surve	ey	
Experience dates (mm/yy-mm/yy)Experience and qualifications relevant to the pro- dates should cover the years of experience specific			oposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "dified in the applicable MPR(s).	lesigned intersection"	, etc. Experience
	Mr. Sampognaro has 2 variety of LDOTD and the University of Wyo Details Manual and the topographic survey and models (DTM's), and p Mr. Sampognaro has su TOPO Dot User Co One-Dimensional M LA Specific Traffic LA Specific Traffic	 Mr. Sampognaro has 2 years of experience in performing drainage design, hydraulic analysis, roadway design, and preparation of roadway plans variety of LDOTD and local roadway projects. Mr. Sampognaro passed his P.E. Civil Transportation exam in October 2022 and is currently enroll the University of Wyoming Cadastral Surveying Certificate Program. Mr. Sampognaro is familiar with the LDOTD Roadway Design Procedure Details Manual and the LDOTD Hydraulics Manual, as well as AASHTO design standards for roadway design. Mr. Sampognaro also assists in proce topographic survey and mobile LIDAR data, creating survey centerline alignments (ALG's) using horizontal regression analysis, developing digital to models (DTM's), and producing existing drainage maps for LDOTD topographic surveys. Mr. Sampognaro has successfully completed the following continuing education classes, workshops, and seminars: TOPO Dot User Conference, 2022 One-Dimensional Modeling of River Encroachments with HEC-RAS Class, 2022 LA Specific Traffic Control Technician Course, 2022 			
01/21 - 06/20	22 State Contract No. 4400 to perform topographic collected with the use o with a terrestrial mobil regression analysis, dev Some of the task orders State Project No. H State Project No. H State Project No. H	 State Contract No. 4400015236: Retainer Contract for Professional Surveying Services – Statewide. This retainer contract consisted of fifteen task orders to perform topographic surveys for various projects across Louisiana. Mr. Sampognaro assisted in post-processing topographic survey data which was collected with the use of GPS receivers, robotic total stations, and SX-10 terrestrial scanners, as well as using TOPO Dot software to extract data collected with a terrestrial mobile lidar scanner. His duties also included creating survey centerline alignments (ALG's) and associated reports using horizontal regression analysis, developing existing digital terrain models (DTMs), and producing existing drainage maps. Some of the task orders on which Mr. Sampognaro has assisted include the following: State Project No. H.011706.5 – BNSF Several RR Xings (Baldwin) in St. Mary Parish (01/2021-08/2021) State Project No. H.012032.5 – LA 2: Bridges Near Mer Rouge, Route LA 2 in Morehouse and West Carroll Parishes (02/2021-04/2021) State Project No. H.00232.5 – LA 406 @ F.E. Hebert Roundabout, Route LA 406 in Plaquemines Parish (03/2021-07/2021) State Project No. H.012541.5 – LA 594: Overpass I-20, Route 594 in Ouachita Parish (01/2022-06/2022) 			
01/22 - 1/23	State Project No. H State Project No. H.01 along I-20 from the We Pines Road, Thomas R robotic total stations, S extracting mobile LID comparing field data co	5052: I-20: I-20: US 16: 5052: I-20: I-20 Widenin 11 Road Interchange to th oad, and LA 34 (Stella N X-10 terrestrial scanners AR data using TOPO D billected by the survey cre	ng/Overlay (Vancil Rd to LA 34). This project consisted of perf e LA 34 (Stella Mill St) Interchange in Ouachita Parish. It also inc Mill St) for a total cumulative length of 25,625 ft (4.85 miles). D s, and a terrestrial mobile LIDAR scanner. Mr. Sampognaro assis bot software, and creating the existing drainage map. He also a ew to LDOTD as-built drawings.	orming a complete to cluded portions of We vata was collected usin sted in post-processin issisted in quality cor	pographic survey Il Road, Downing ag GPS receivers, g the survey data, atrol measures by

01/21 – Present	Ouachita Parish Police Jury Road Program. Mr. Sampognaro has assisted with the Ouachita Parish Police Jury Road Program. His duties consist of post- processing topographic survey data, developing pavement preservation roadway plans, including design of cross drain structures, superelevation correction calculations, and quantity calculations, to preserve and extend the life of Ouachita Parish roadways, some of which are constructed under the DOTD Urban Systems program. Some of the Ouachita Parish Urban Systems projects on which Mr. Sampognaro has assisted include the following:
	State Project No. H.013805 – Finks Hide-A-Way Road (Mill, Patch and Overlay and includes a segment of Reconstruction) State Project No. H.014397 – Rowland Road (Mill, Patch and Overlay)
06/21 - Present	City of Monroe, Louisiana roadways. Mr. Sampognaro has assisted with City of Monroe roadways designed under the LDOTD Urban Systems program. His duties consist of post-processing topographic survey data, developing pavement preservation roadway plans, including hydraulic design, quantity calculations, and construction cost estimates.
	Some of the City of Monroe Urban Systems projects on which Mr. Sampognaro has assisted include the following:
	State Project No. H.014347 – South Grand Street (Mill, Patch and Overlay) State Project No. H.014348 – Lee Avenue (Mill, Patch and Overlay)
	Mr. Sampognaro is currently assisting with construction support activities by field marking and verifying required areas of pavement patching.
08/22 – Present	US 165 Turn Lanes at Scott Drive, Ouachita Parish. Mr. Sampognaro assisted in the development of roadway plans and post-processing the topographic survey data, including creating the existing digital terrain model (DTM), drainage design, and quantity calculations. This project, which was prepared for the Ouachita Parish School board, consists of adding a left and right turn lane on US 165 and traffic signal modifications at Scott Drive in Sterlington Louisiana.

Firm employed by Civil Design & Construction, Inc. (CD&C)						
Name Karla F	C. Weston, PE	Years of relevant experience with this employer	18			
Title Presider	nt	Years of relevant experience with other employer(s)	6			
Degree(s) / Years /	Specialization	Bachelor of Science / 1999 / Civil Engineering				
Active registration	number / state / expiration date	31010 / Louisiana / March 31, 2024				
Year registered	2004 Discipli	e Civil Engineer				
Contract role(s) / b	rief description of responsibilitie	Mrs. Weston will oversee the firms' role as a sub-consult	Mrs. Weston will oversee the firms' role as a sub-consultant and make sure the work is completed			
		to LADOTD standards.				
Experience dates	Experience and qualification	relevant to the proposed contract; i.e., "designed drainage", "de	signed girders", "designed intersection",			
(mm/yy–mm/yy)	etc. Experience dates should	cover the years of experience specified in the applicable MPR(s).				
02/16-09/19	H.003047 Pecue Lane/I-10	nterchange, Baton Rouge, LA: Mrs. Weston's served as Principa	al-in-Charge for the firm's role as a sub-			
	consult for the engineering d	sign services of the West Bound on Ramp to I-10, the West Boun	d Off Ramp from I-10, the extension to			
	Rieger Road and Pecue Lane	Extension. She has worked to oversee the firms design, coordinat	e with the prime consultant and			
	government agencies.					
12/13 - 10/19	H.02960 Gramercy Bridge,	St. James Parish, LA: Mrs. Weston served as Principal-in-Charg	e for the firm's role as a subconsultant			
	for the engineering design elements of the plans including Hydraulic Analysis and Design, Typical Sections, and Graphical Grades for					
	the project					
02/14 - 02/15	H.010620 1-49 Design Build, Lafayette, LA: Mrs. Weston provided QA/QC review for the Roadway Design Plans on this Design-					
	Build Project for part of the 1-49 South Corridor.					
05/13 – 05/14	H.009288.5 LA I Railroad Bridge at DOW, WBR Parish, LA: Mrs. Weston served as Principal-in-Charge for the firm's role as a					
	sub-consult for the engineering design elements of the plans including Hydraulic Analysis and Design, Typical Sections, and Graphical					
01/06 10/10	Grades for the project. She has worked to oversee the firms design, coordinate with the prime consultant and government agencies.					
01/06 - 12/12	EBK City/parisn Project No. 06-CS-HC-0018, Fairchild-Badley Koadway, EBK Parish, LA: Mrs. Weston served as Principal in					
	Charge for this project that was approx. 1.25 miles in length along Fairchild-Badley Road and also included approximately 600					
	teet of Elm Grove Garden Dr. CD&C designed the upgrade to the existing narrow roadway to a typical section of 2-11' lan					
	barrier curb and gutter, and a 6° adjacent sidewalk. This included the design of a new sub-surface drainage system throughout the					
02/12 07/12	length of the project as well.					
03/12 - 07/12	H.009104.5 - Sunshine Bridge Phase 2: Ms. Weston served as Project Manager and Engineer for CD&C's portion of this Bridge Debab Detainer Contract project which included the Traffic Management along for the project. CD&C sportion of this Bridge					
	Renab Retainer Contract project which included the Traffic Management plans for the project. CD&C provided the Traffic Control					
05/11 04/12	design plans including detour maps of local road network for the repairs and widening to the Sunshine Bridge.					
03/11 - 04/12	this Bridge Rebab Datainar (Druge, Alexandria, LA: Wis. Weston served as Project Manager	the project CD&C provided the Traffic			
	Control design plans including detour mans of local road network for the replacement of the Jackson Street Bridge over the Dad Di					
06/12 - 10/12	H 009986 _ Paths ? Program	a Lefferson Orleans Plaquemines St Rarnard and St Tamp	nany Parishes _ Crown 33 Ms Weston			
00/12 - 10/12	served as the Principal-in-ch	Project Manager for this roadway rehabilitation project of roads in Jefferson Parish. This included				
	served as the rimelpar-in-energer roject wanager for this roadway renabilitation project or roads in serverson raisin. This included					

	field reconnaissance to determine severity of inundated roadways due to Hurricane Katrina, preparation and detailing of roadway
	rehabilitation plans, typical sections, providing quantity calculations, etc.
12/11 - 4/12	H.005902.5 - Consulting Services for the Permanent Repair to Federal Aid Eligible Roads as a Result of Damage due to
	Hurricane Katrina in 2005. Jefferson, Orleans, Plaquemines, St. Bernard and St. Tammany Parishes – Group 29 Ms. Weston
	served as the Principal-in-charge/Project Manager for this project which included survey, field reconnaissance to determine severity of
	inundated roadways due to Hurricane Katrina in the City of New Orleans, preparation and detailing of roadway rehabilitation plans,
	typical sections, providing quantity calculations, etc.
01/06 - 07/06	Picardy Avenue Extension-City/Parish of East Baton Rouge: Mrs. Weston served as Principal-in-Charge for this extension of
	Picardy Avenue, connecting Bluebonnet Blvd. with I-10 West. Duties included project layout and design as wells as subsurface
	drainage design for approximately 1/2 mile.

Firm employed	Firm employed by Civil Design & Construction, Inc. (CD&C)					
Name Ralph Burgess, PLS			Years of relevant experience with this employer	12		
Title Principal Land Surveyor			Years of relevant experience with other employer(s)	12		
Degree(s) / Years / Specialization			BS / 2004 / Industrial Design & Supervision, Southeastern	LA University		
Active registrati	on number / state / expira	ation date	5040 / Louisiana – September 30, 2024			
Year registered	2010	Discipline	Land Surveyor			
Contract role(s)	/ brief description of resp	onsibilities.	Mr. Burgess serves as the Survey Manager for this project. He will work to oversee the project			
			progress stays on schedule, aide in both crew coordination and office production, and provide final			
			QC on the firms' deliverable to the Prime Consultant. Mr. Burgess has an extensive background in			
			providing topographic surveys for LADOTD in accordance	with Location and Survey policies and		
			procedures. He has overseen projects utilizing traditional n	neans and methods of collecting data as		
E	E	1:6:	well as those that include the use of 3D Terrestrial Scannin	g. Mr. Burgess fulfills MPR #8.		
Experience dat	Experience and qua	ould cover the w	nt to the proposed contract; <i>i.e.</i> , designed drainage, designed drainage, designed space of experience specified in the applicable MDP(s)	gned girders, designed intersection, etc.		
$\frac{10/20}{10/20}$	$\frac{\mathbf{y}}{1} = \frac{\mathbf{H}014302}{\mathbf{H}\mathbf{S}} 1\mathbf{S} \mathbf{S} \mathbf$	ighting Monro	a I A: Mr. Burgess served as the Survey Manager on this pr	priect CD&C was a sub consultant on this		
10/20 - 01/2	nroject and was res	nonsible for topo	graphic surveying of US 165 south of Monroe for a highwa	v lighting improvement. The topographic		
	data for this project	data for this project was collected both traditionally and with the use of 3D Terrestrial Scanning				
09/21 - 03/22	H.014747 Southern	H.014747 Southern University Ravine Protection. East Baton Rouge Parish: Mr. Burgess was the Survey Manager for this project. CD&C				
	as a sub-consultant	as a sub-consultant on this project was responsible for topographic survey of the sites at Southern University The topographic data for this				
	project was collecte	project was collected both traditionally and utilizing 3D Scanning. Mr. Burgess worked with SUE sub-consultant, TBS, as well as CD&C				
	crews to obtain and	crews to obtain and incorporate all utility data as well.				
08/21 – On-Goi	ng H.011833.5 St. Ma	H.011833.5 St. Mary Street Sidewalks; Scott, LA:Mr. Burgess was the Survey Manager for this project. CD&C completed a topographic				
	along this route. Th	along this route. The survey utilized 3D Terrestrial Scanning of all hard surfaces and traditional methods for all other features. CD&C SUE				
	personnel worked t	personnel worked to coordinate the collection for all the utility information and location such that survey crews could collect data and				
	incorporate for the s	incorporate for the submittal up to QLD Level B however an official SUE submittal was not required of this project. Final submittal will be				
	in accordance with	in accordance with latest LADOTD Location and Survey standards.				
7/17-12/18	H.010960.5-2, LA	H.010960.5-2, LA 30 Roundabout at Tanger I-10, Ascension Parish, LA: Mr. Burgess served as Survey Manager for the project. Duties				
	included meeting w	included meeting with LADOTD & Cardno, Inc for utility locations, coordination of crews and 3D terrestrial scanning crew along with office				
	personnel, coordina	personnel, coordination. Special duties were merging of two state projects with project survey for final submittal to combine all projects				
02/22 00/22	U 010060 5 2 Down	ndahauta at TA	192 Laforetta LA. Mr. Durgans control on Summer Man	again for the project CD&C completed a		
03/22 - 09/22	topographic along t	his route. The su	102, Latayette, LA : IVII. Durgess served as Survey Man	ager for the project. CD&C completed a		
	CD&C SUF person	CD&C SUE personnel worked to coordinate the collection for all the utility information and location such that survey crows could collect				
	data and incorporate	data and incorporate for the submittal up to OLD I evel B however an official SUE submittal was not required of this project. Final submittal				
	was in accordance v	was in accordance with latest LADOTD Location and Survey standards				
L						

07/20 - 04/21	H.001352.5 and H.002273.5 Comite River Diversion Bridge at LA 67, LA 19 and LA 19 Railroad Bridge, East Baton Rouge Parish:							
	Mr. Burgess was the Survey Manager for this project. CD&C as a sub-consultant on this project was responsible for topographic surveying							
	the LA 67 and LA 19 sites of the Comite River Diversion project. This included merging of data from a previous survey on one portion of							
	the site and field verifications of that data. The topographic data for this project was collected traditionally.							
01/18-01/20	H.004100 I-10: LA 415 to Essen Lane on I-10 and I-12, West and East Baton Rouge, LA: . Burgess was the surveying Manager for this							
	project. CD&C as a sub-consultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish							
	beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415							
	including work on Tributaries of the Intercoastal Canal. This work included using 3D Scanning for the bridge at I-10 bridge @ LA 415 as							
	well as scanning every 500' for control verification and incorporation of the Mobile Lidar for the I-10 pavement.							
7/17-12/18	H.010960.5-2, LA 30 Roundabout at Tanger I-10, Ascension Parish, LA: Mr. Burgess served as Survey Manager for the project. Duties							
	included meeting with LADOTD & Cardno, Inc for utility locations, coordination of crews and 3D terrestrial scanning crew along with office							
	personnel, coordination. Special duties were merging of two state projects with project survey for final submittal to combine all projects							
	together.							
01/16-08/16	H.005733.5 US 190 Superstreet, St. Tammany Parish, LA: Mr. Burgess served as Survey Manager for the project. Duties included complete							
	topographic survey and drainage map for this project including all utility coordination. The survey began at the intersection of US 190 and							
	Holiday Square Frontage Road. From this point, the survey proceeded in a northerly direction along US 190 for approximately 2.9 miles to							
	a point that is 700 feet South of Intersection of US 190 and E. Boston St. in Covington, LA. This project also included work in the Abita							
10/15 10/10	River and utilized 3D Terrestrial Scanning for the main route.							
10/15-12/18	H.003184.5 I-10 Texas State Line – East of Coone Gully, Calcasieu Parish, LA: Mr. Burgess served as Survey Manager for the project.							
	Duties included meeting with LADOID, coordination of traditional crews and 3D terrestrial scanning crew, coordination of utility companies							
	on the project, review and verification of drainage crossing 110, merging of existing topographic survey of bridges from LADOID and final							
09/16 12/17	review of all survey data for submittals							
08/10-12/17	H.011235 1-49 South at verot School Road, Larayette, LA: Mr. Burgess served as the Survey Manager for the project. Duties included							
	meeting with LADOID, and all consultants on the team, coordination of both traditional crews and 3D terrestrial scanning crew, coordination							
	of survey crews with Cardno, Inc, utility locations on the project, met and review right of entry with landowners for project, review of drainage							
	map, merging of existing topographic survey of the 1-49 Connector project from LADOID with current survey of project, review of apparent							
07//14 10/15	I gitt of way mapping for prime consultant, and final review of an survey data.							
07//14-10/13	H.011060.5 I-110 North Street to Flank Koad, EBK Farish, LA: Mr. Burgess served as Survey Manager for the project. Duties included mosting with LADOTD, according to a fit reditional groups and 2D terrestrial generating groups and verification of drainage man, marging							
	and final review of all survey data for submittals. Other special duties were coordinating with LADOTD District 61 for a rolling lane closure							
	for location of drainage located in the interior of the project along the existing crash wall. Also, coordination with LADOTD Records and							
	EBR City Parish regarding the research of all drainage structures that enter and leave the project area							
04/17-07/17	H 010006 5-3 I A 58 Petit Caillon Bridge Rehabilitation (Sarah Bridge) Terrahonne Parish I A: Mr. Burgess served as Survey Manager							
04/1/-0//1/	on this project which included a complete tonographic survey utility coordination channel cross-sections and the scanning of the existing							
	vertical lift bridge for the design of its renairs/replacement. Project included data collection of the tonography via traditional means and							
	methods along with 3D terrestrial scanning and hydrographic surveying							
	moulous wong with 5D terrestria sounning and rydrographic surveying.							
Firm en	Firm employed by Civil Design & Construction, Inc. (CD&C)							
---------	---	--------------------------	--------------------	---	--	--	--	--
Name	Chris Ba	ullard, PLS		Years of relevant experience with this employer	8			
Title	Survey P	roject Manager		Years of relevant experience with other employer(s)	19			
Degree	e(s) / Years	/ Specialization		BS / 2004 / Biological Science / Southeastern LA University				
Active	registratio	n number / state / expir	ation date	5033 / Louisiana – September 30, 2022				
Year re	egistered	2010	Discipline	Land Surveyor				
Contra	ct role(s) /	brief description of res	ponsibilities.	Mr. Ballard serve as the Survey Project Manager for this project. H	He will work to oversee the project			
		-	-	progress stays on schedule, aide in both crew coordination and offi	ce production, and provide final			
				QC on the firms' deliverable to the Prime Consultant. Mr. Burgess	s has an extensive background in			
				providing topographic surveys for LADOTD in accordance with L	ocation and Survey policies and			
				procedures. He has overseen projects utilizing traditional means an	nd methods of collecting data as			
				well as those that include the use of 3D Terrestrial Scanning. Mr. E	Sallard fulfills MPR #8.			
Experi	ence dates	Experience and qual	lifications relev	ant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed gi	rders", "designed intersection", etc.			
(mm/y	y-mm/yy)	Experience dates she	ould cover the	years of experience specified in the applicable MPR(s).				
09/01	/18-01/20	H.004100 I-10: LA	415 to Essen L	ane on I-10 and I-12, West and East Baton Rouge, LA: Mr. Balla	rd is the Surveying Project Manager			
		for this project. CD&	&C as a sub-cor	sultant on this project is responsible for topographic surveying the p	portion of I-10 in West Baton Rouge			
		Parish beginning at	the start of the p	project limits to a point just before the approach of the I-10 Bridge and	nd the limits of the project along LA			
		415 including work	on Tributaries o	f the Intercoastal Canal. This work included using 3D Scanning for	the bridge at I-10 bridge @ LA 415			
		as well as scanning e	every 500' for c	ontrol verification and incorporation of the Mobile Lidar for the I-10) pavement.			
04/1	7-07/17	H.010006.5-3 LA 58	8 Petit Caillou	Bridge Rehabilitation (Sarah Bridge), Terrebonne Parish, LA: M	r. Ballard served as the firms Survey			
		Project Manager on	this project whi	ch included a complete topographic survey, utility coordination, chai	anel cross sections, and the scanning			
		of the existing vertic	cal lift bridge fo	r the design of its repairs/replacement. Project included data collection	ion of the topography via traditional			
00/1	10.00/10	means and methods	along with 3D	errestrial scanning and hydrographic surveying.				
02/1	19-09/19	Bridge Replacemen	nts in East Fell	ciana Parisn, Rural Last Feliciana Parisn, LA: Mr. Ballard is serv	ing Survey Project Manager for this			
		project for East Felle	ciana Parisi Po	nce Jury. It includes the replacement of 2 bridges which were dama	ged from flooding and the repairs to			
		FEMA's policies an	d procedures	e parish. These projects are being funded thru FEMA and an docume	intation has to be in accordance with			
01/1	7_12/17	Fast Baton Rouge I	Parish Bridges	Fast Baton Rouge Parish I A. In 2017 CD&C has performed tone	araphic surveys for at least 4 Bridge			
01/1	1-12/17	Replacement Project	ts throughout F	ast Baton Rouge Parish. Mr. Ballard served as Survey Project Man	ager on each of these projects which			
		included cross-section	oning and tracin	g the channel at each location. These included bridges over Dawson	Creek Claycut Bayou Copper Mill			
		Bayou and Cypress Bayou						
10/1	6 - 11/16	H.012728.5 LA 44	3: Tangi Rive	Bridge Replacement, Tangipahoa Parish, LA : Mr. Ballard serv	ved as the Project Manager for this			
		Project. Among the	duties perform	ed for the project were review of the crew work conditions, review	w & processing of the survey data.			
		verification, and rev	view of final sub	omittal. CD&C completed a topographic survey which included all u	utilities with depths, all drainage, all			
		building information	n including fin	sh floor elevations, and all super/substructure of the bridge over	the Tangipahoa River. Additional			
		-	-					

	information regarding the river was located by traditional means upstream and downstream for the engineer's design of the new bridge. To
	utilize data collection of the failed bridge, 3D Terrestrial Scanning was incorporated in conjunction with traditional means to complete the
	topographic survey. Due to the nature of the project being an Emergency Bridge replacement all staff worked on this project non-stop until
	field work was completed in less than 3 weeks.
09/17 -09/17	H.012650.5-1 District 62 Bridges, Livingston and Tangipahoa Parishes, LA: Mr. Ballard served as a Survey Project Manager for this
	project which included 5 bridge sites in District 62. In addition to all of the existing data for the bridge and roadway at each site, each channel
	was cross-sectioned both upstream and downstream of the bridge. These included bridges over the US 190 Bridge over Gray's creek, 2
	bridges on LA 442 both crossing East Hog Branch, LA 1063 over the Natalbany River, and US 51 over Ponchatoula Creek. Several of these
	bridges including the US190 one was surveyed utilizing 3D Terrestrial Scanning.
10/15 - 12/18	H.003184.5 I-10 Texas State Line - East of Coone Gully, Calcasieu Parish, LA: Mr. Ballard served as the Survey Project Manager on
	this project which is a 6-lane widening of I-10. Duties performed on this project included the review of the survey information from crew,
	verification of project delivery schedule, processing of data and final review of submittal of project. 3D Terrestrial Scanning was used in
	conjunction with traditional means and methods for the completion of this project.
01/16 - 08/16	H.005733.5 US 190 Superstreet, St. Tammany Parish, LA: Mr. Ballard served as the Survey Project Manager on this project. CD&C
	provided a complete topo survey & drainage map along with utility coordination for the project. Project duties included processing of data,
	review of field notes and weeklies, & performing final punch list. This project also included work in the Abita River utilized 3D Terrestrial
	Scanning for the main route.
10/15 - 01/16	H.011773 Hanks Dr/Landis Drive Pedestrian Improvements, East Baton Rouge Parish, LA: Mr. Ballard served as the Survey Project
	Manager on this project that included a topographic survey and establishment of the ROW for Hanks Dr. for installation of new sidewalk.
06/11 - 09/13	260-01-0028, H.002372 LA 42 Widening and Improvements, Ascension Parish, LA: Mr. Ballard worked as a PLS on this project which
	included boundary and topography, establishing the existing ROW and acquisition of additional ROW.
07/17 - 12/18	H.010960.5-2, LA 30 Roundabout at Tanger I-10, Ascension Parish, LA: Mr. Ballard served as the Survey Project Manager on this
	project that includes a complete topo survey, utility coordination and drainage, along with finish floor elevations of all buildings that fall
	within the survey limits. Project included data collection of the topography via traditional means and methods along with 3D terrestrial
	scanning.

Firm employed by	Civil Design &	& Construction,	Inc. (CD&C)			
Name Madison I	Mills, PLS		Years of relevant experience with this employer	1+		
Title Profession	al Land Surveyor		Years of relevant experience with other employer(s)	4		
Degree(s) / Years /	Specialization		BS / 2016 / Civil Engineering			
Active registration	number / state / expira	tion date	PLS 5293/LA/03/31/2025			
Year registered	11/15/2022	Discipline	Professional Land Surveyor			
Contract role(s) / br	rief description of resp	onsibilities.	Mr. Mills joined CD&C in 2021 as a Land Surveying Inter	n and has recently been licensed as a		
			Professional Land Surveyor. He serves as a Survey Techn	ician and assistant PM for CD&C		
			working to manage field crews, process field crew data, an	d finalize deliverables.		
Experience dates	Experience and qua	lifications relevat	nt to the proposed contract; i.e., "designed drainage", "design	ned girders", "designed intersection", etc.		
(mm/yy–mm/yy)	Experience dates sh	ould cover the ye	ears of experience specified in the applicable MPR(s).			
08/22 – On-Going	4400017091 Louisi	ana Watershed	Initiative Region 5 – Task Order 3: Mr. Mills is working a	is a Survey PM this Louisiana Watershed		
	Initiative project.	He has been resp	onsible for managing crews, processing field data, creating	g punch-lists, working with utilities, and		
	complete the final d	eliverables to the	client. CD&C is a sub-consultant on this project.			
01/22 - 11/22	4400017091 Louisi	ana Watershed	Initiative Region 5 – Task Order 2: Mr. Mills is working a	as a Survey PM this Louisiana Watershed		
	Initiative project.	He has been resp	onsible for managing crews, processing field data, creating	g punch-lists, working with utilities, and		
00/01 00/00	complete the final d	eliverables to the	client. CD&C is a sub-consultant on this project.			
09/21 - 03/22	H.014747 Southern	n University Rav	ine Protection, East Baton Rouge Parish:Mr. Mills served	1 as a Survey Technician for this project.		
	CD&C as a sub-con	sultant on this pro	bject was responsible for topographic survey of the sites at S	outhern University The topographic data		
$\frac{09}{21}$ On Coinc	II 011922 5 St Ma	w. Street Sidew	ultionally and utilizing 5D Scalining.	mainet CD&C completed a tono anophic		
08/21 - 011-Going	along this route. The	ry Street Sluewa	AIKS; SCOU, LA . MIIIS Served as a Survey Tech for unis	project. CD&C completed a topographic		
	nersonnel worked t	o coordinate the	collection for all the utility information and location such	that survey crews could collect data and		
	incorporate for the s	ubmittal up to Ol	D Level B however an official SUE submittal was not requi	red of this project. Final submittal will be		
	in accordance with 1	latest LADOTD I	ocation and Survey standards	red of this project. I that submittal will be		
03/22 - 09/22	H.010960.5-2 Rour	ndabouts at LA 1	82. Lafavette. LA: Mr. Mills served as a Survey Tech for the	e project. CD&C completed a topographic		
	along this route. The	e survey utilized	BD Terrestrial Scanning of all hard surfaces and traditional m	ethods for all other features. CD&C SUE		
	personnel worked to coordinate the collection for all the utility information and location such that survey crews could collect data and					
incorporate for the submittal up to QLD Level B however an official SUE submittal was not required of this project. Final submitta						
	accordance with late	est LADOTD Loc	cation and Survey standards.			
02/21 - 07/22	H.013958 Carpent	ers Bridge Rd. `	Whiskey Chitto Creek: Mr. Mills worked as a LSI on this	s project. He has helped manage crews,		
	processed field data	, created punch-li	sts, worked with utilities, and helped complete the final deli	verables to the client. He also worked on		
	property surveys an	d ROW mapping				

02/21 - 07/22	H.013955 LA 961 Bride at Sandy Creek, West Feliciana Parish, LA : Mr. Mills worked as a LSI on this project. He has helped manage
	crews, processed field data, created punch-lists, worked with utilities, and helped complete the final deliverables to the client. He also
	worked on property surveys and ROW mapping.
02/21 - 07/22	H.013956 LA 961 Bridge at Beamon Rd. Bayou Maringouin, Pointe Coupee Parish, LA: Mr. Mills worked as a LSI on this project.
	He has helped manage crews, processed field data, created punch-lists, worked with utilities, and helped complete the final deliverables to
	the client. He also worked on property surveys and ROW mapping.
07/21 - 11/21	H.009290.5 Safe Routes to Schools – LSU Sidewalk Improvement near LSU Lab School, Baton Rouge, LA: Mr. Mills worked as a
	LSI on this project. He has helped manage crews, processed field data, created punch-lists, worked with utilities, and helped complete the
	final deliverables to the client.
02/21 - 05/21	H.010108 Safe Routes to Schools – Independence Sidewalks, Baton Rouge, LA: Mr. Mills worked as a LSI on this project. He has
	helped manage crews, processed field data, created punch-lists, worked with utilities, and helped complete the final deliverables to the
	client.
07/21 - 12/21	H.0014560.5 LA 94 Vermillion River, St. Martin Parish, LA: Mr. Mills worked as a LSI on this project. He has helped manage crews,
	processed field data, created punch-lists, worked with utilities, and helped complete the final deliverables to the client.

Firm employ	yed by	Design Civil & Construction, Inc. (CD&	¢C)				
Name	Trent	Norris	Years of relevant experience with this employer	9			
Title	Senior	· Technician	Years of relevant experience with other employer(s)	0			
Degree(s) / `	Years / S	Specialization					
Active regis	tration n	umber / state / expiration date	NSPS Certified Survey Technician, Level I Boundary Certificate No.: ()418-5963			
			ATSSA Traffic Control Supervisor, Technician & Flagger				
Year register	red	Discipline					
Contract role	e(s) / bri	ef description of responsibilities	Mr. Norris serves as the firm's 3D Scanning Technician who will aide	n field data collection as			
			well as process all 3D scan data in the office and assist in any other pro	cessing to complete the			
			submittal.				
Experience	dates	Experience and qualifications relevant to	the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "de	signed intersection", etc.			
(mm/yy-mn	n/yy)	Experience dates should cover the years	of experience specified in the applicable MPR(s).	~			
10/20 - 01	/21	H014302 US 165 Lighting, Monroe, LA	A: Mr.Norris served as the lead Survey Technician on this project. CD&C	was a sub-consultant			
		on this project and was responsible for to	prographic surveying of US 165 south of Monroe for a highway lighting	mprovement. The			
01/10 01/2	0	topographic data for this project was coll	ected both traditionally and with the use of 3D Terrestrial Scanning.	#2D C			
01/18 - 01/2	20	H.004100 I-10: LA 415 to Essen Lane	on 1-10 and 1-12, west and East Baton Kouge, LA: Mr. Norris was the	#3D Scanning			
		Baton Pougo Parish beginning at the star	t of the project limits to a point just before the approach of the L 10 Brid	portion of 1-10 in west			
		project along I A 415	t of the project mints to a point just before the approach of the 1-10 bridg	e and the mints of the			
07/17 - 12/1	8	H 010060 5 2 I A 30 Doundabout at Tangar I 10 Acconsion Darish I A: Mr. Narris served as the firm's 2D Scenning Tech on this					
0//1/ = 12/1	10	project by working with the scan crew in the field nost processing the scans, and extracting all of the necessary tonographic data from					
		them thru TopoDot to put into InRoads	the field, post processing the search, and extracting an of the necessary a	pographic data nom			
04/17 - 07/1	7	H.010006.5-3 LA 58 Petit Caillou Bridge Rehabilitation (Sarah Bridge). Terrebonne Parish, LA: Mr. Norris served as the firm's 3D					
0.12. 0.12		Scanning Tech on this project by workin	g with the scan crew in the field, post processing the scans, and extracting	g all of the necessary			
		topographic data from them thru TopoDo	ot to put into InRoads.	<u>,</u>			
08/16 - 01/1	8	H.011235 I-49 Verot School Road, Laf	ayette, LA: Mr. Norris served as the firm's 3D Scanning Tech on this pr	oject by working with			
		the scan crew in the field, post processing	g the scans, and extracting all of the necessary topographic data from the	m thru TopoDot to put			
		into InRoads.		· · ·			
10/16 - 10/1	6	H.012728.5 LA 443 Emergency Bridge	Replacement, Tangipahoa Parish, LA: Mr. Norris served as the firm'	s 3D Scanning Tech on			
		this project by working with the scan crew in the field, post processing the scans, and extracting all of the necessary topographic data from					
		them thru TopoDot to put into InRoads.					
10/15 - 12/1	8	H.003184.5 I-10 TX State Line-E of Co	oone Gully, Calcasieu Parish, LA: Mr. Norris served as the firm's 3D S	canning Tech on this			
		project by working with the scan crew in	the field, post processing the scans, and extracting all of the necessary to	pographic data from			
		them thru TopoDot to put into InRoads.					
01/16 – 07/1	6	H.005733.5 US 190 Superstreet, St. Ta	mmany Parish, LA: Mr. Norris served as the firm's 3D Scanning Tech	on this project by			
		working with the scan crew in the field, j	post processing the scans, and extracting all of the necessary topographic	data from them thru			
		TopoDot to put into InRoads.					

Firm er	nployed by	Civil Design & Construction, I	nc. (CD&C)				
Name	Philip Du	pree	Years of relevant experience with this employer	11			
Title	Survey Pa	rty Chief	Years of relevant experience with other employer(s)	30			
Degree	(s) / Years /	Specialization					
Active	registration	number / state / expiration date	NSPS Certified Survey Technician, Level III, Boundary Cert. No. 0799 Certified as Registered Flagger	9-1106 Nationwide; ATSSA			
			ATSSA Certified Traffic Control Tech & Traffic Control Supervisor				
Year re	gistered	Discipline					
Contrac	ct role(s) / bi	rief description of responsibilities	Mr. Dupree is the Senior Survey Party chief who will work to oversee	a crew as well as aide in			
			coordinating all crews with Survey PM to ensure field work is being co	ompleted timely and accurately.			
Experie	ence dates	Experience and qualifications re	levant to the proposed contract; i.e., "designed drainage", "designed gir	ders", "designed intersection", etc.			
(mm/yy	y–mm/yy)	Experience dates should cover t	he years of experience specified in the applicable MPR(s).				
07/20 -	- 04/21	H.001352.5 and H.002273.5 Co	omite River Diversion Bridge at LA 67, LA 19 and LA 19 Railroad B	bridge, East Baton Rouge Parish:			
		Mr. Dupree was the Senior Party	Chief & Field Coordinator for this project. CD&C as a sub-consultant of	on this project was responsible for			
		topographic surveying the LA 6	7 and LA 19 sites of the Comite River Diversion project. The topograph	ic data for this project was			
		collected traditionally.					
01/18-0)2/2020	H.004100 I-10: LA 415 to Esse	n Lane on I-10 and I-12, West and East Baton Rouge, LA: Mr. Dupree is the Survey Party Chief for				
		this project. CD&C as a sub-con	sultant on this project is responsible for topographic surveying the portion of I-10 in West Baton Rouge				
		Parish beginning at the start of the	ne project limits to a point just before the approach of the I-10 Bridge an	d the limits of the project along			
		LA 415.					
07/17-1	2/2018	H.010960.5-2, LA 30 Roundab	out at Tanger I-10, Ascension Parish, LA: Mr. Dupree is serving as Fi	ield coordinator on this project by			
10/17	0.0010	working specifically to set the co	ontrol on the job and overseeing field crews as they work to complete the	e topography.			
10/15-1	12/2018	H.011235 1-49 South at Verot	School Road, Lafayette, LA: Mr. Dupree served as Field coordinator of	n this project. He resurrected the			
		original control set on the project	t and oversaw the checking of it. Mr. Dupree was the field coordinator	with the R/R and also the SUE			
01/16/	0/2016	contractor on the project. He ov	ersaw all field crews and ensured that the project was completed accurat	ely and timely.			
01/16-0	08/2016	H.005733.5 US 190 Superstree	et, St. Tammany Parish, LA: Mr. Dupree served as Field coordinator o	n this urban roadway topography			
		project that included 3D scannin	ig in addition to traditional topography. He oversaw the daily progress of both traditional field crews and				
10/161	1/2016	scan crews and completed the pr	oject accurately and on schedule.				
10/16-1	1/2016	H.012728.5 LA 443: Tangi Riv	ver Bridge Replacement, Tangipahoa Parish, LA: Mr. Dupree served	as Field coordinator on this			
		project. CD&C completed a topographic survey which included all utilities with depths, all drainage, all building information including					
		Innish floor elevations, and all st	iper/substructure of the bridge over the Langipanoa River. Additional in	tormation regarding the fiver was			
		huidan 2D Townstrial Security	tream and downstream for the engineer's design of the new bridge. To u	tinze data collection of the failed			
07/14/1	0/2015	Unuge, 5D Terrestrial Scanning	was incorporated in conjunction with traditional means to complete the t	opographic survey.			
0//14/1	10/2015	H.010319.5 1-110 North St. to	riank Koau, Baton Kouge, LA: Mr. Dupree served as Field coordinato	f on this neavily traveled interstate			
		project that included 3D scannin	g in addition to traditional topography. He oversaw the daily progress o	a down traditional field crews and			

	scan crews and completed the project accurately and on schedule. He also coordinated with the district and state police to oversee the
	rolling lane closure that was required to obtain the drainage invert data.
05/13-07/13	H.009288 LA 1 Railroad Bridge at DOW, West Baton Rouge, LA: Mr. Dupree served as Senior Party Chief for this project located in
	West Baton Rouge Parish. The intent is to create a grade separation at the intersection of LA 1 and the R/R spur for DOW. CD&C is
	performing all of the topographic survey for this project including utility coordination and R/R coordination and permits so that CD&C can
	survey the spur and parallel line.
10/14-12/14	H.011088.5 West Prien Lake, Lake Charles, LA: Mr. Dupree served as the Senior Party Chief for this project working to collect all field
	data as required by the project. This project was to provide topographic survey for a new route to be constructed. Topographic survey and
	DTM was required along the proposed alignment including all utilities and all drainage with the survey limits.
02/14-03/17	H.010620 I-49 Design Build: Mr. Dupree served as the Senior Party Chief for this project working to collect all field data as required by
	the project. CD&C also produced ROW maps for the project. Mr. Dupree also was the lead Party Chief for the property surveys on this
	project.

Firm emplo	oyed by	Vectura Consultin	ng Services, LLC	r -			
Name	Sheelag	gh Brin Ferlito, PE	, PTOE		Years of relevant experience with this employer	7	
Title	Supervi	sor			Years of relevant experience with other employer(s) 27		
Degree(s) /	Years / S	Specialization		B.S.	/ 1988 / Civil Engineer		
Active regis	stration n	umber / state / expir	ation date	PE.	0025383 / LA 09/30/2023		
Year registe	ered	1993	Discipline	Civi	1		
Contract ro	le(s) / bri	ef description of res	ponsibilities	CE&	zI Lead		
Experience d	dates	Experience and qualif	fications relevant to	the pr	oposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "de	signed intersection", etc.	
(mm/yy–mm	n/yy)	Experience dates show	uld cover the years	of exp	erience specified in the applicable MPR(s).		
07/21 - Cur	rent	H.007160 - EBR Com Engineering and Inspe accepting the manufactulocations.	Example 1 Traffic S ection of 24 traffic sigured poles. Brin and	Signal, gnals. B Reece,	Phase VB (Baton Rouge, Louisiana) Brin is the task leader for Vec Brin oversaw the review of signal mast arm shop drawings to assist the Cit with the DOTD, City-Parish and the Contractor conducted field visits	tura for the Construction y-Parish of Baton Rouge in to confirm pole foundation	
02/20 – 11/21 H.010616 DOTD I:20 LA 544 Overpass Replacement (Ruston, LA) Brin was the project manager for the Transportation Management as part of a design for a bridge replacement and three roundabouts in Ruston, LA. The TMP was a Level 2 and included evaluation of 10 Construction Phases. Detours included rerouting traffic to other interchanges at nighttime only, rerouting traffic from I-20 to the off ramp an nighttime only, and rerouting traffic to service roads in vicinity of the project. Brin coordinated the queue analysis with DOTD to determine closures would be allowed utilizing 24 hour tube counts. She also coordinated the development of temporary traffic signal plans for this pr				Management Plan (TMP) aluation of 10 Sequence of the off ramp and on ramp at TD to determine when lane ans for this project as well.			
07/19 – current H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement PPP (Belle Chasse, LA) Brin is the project manager for the temporary and project is the intersections of LA 23 at Burmaster St and at Engineers Rd. She based her traffic signal plans on design year very were developed using growth rates from the New Orleans Regional Planning Commission Travel Demand Model. This project is the first e Private-Partnership performed by Louisiana DOTD.				emporary and permanent in design year volumes that ject is the first ever Public-			
03/13-08/15	5	H.001609.6 CE&I for EBR Traffic Signal Systems Phase VA Construction (Baton Rouge, LA) Brin was project Resident Engineer on behalf of DOTD and EBR to perform CE&I services for the construction of 24 traffic signals. She developed the project Sample Plan, maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, coordinated concrete sampling for DOTD Materials Lab, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into interstate I-110 fiber backbone and ATM / EOC building. She processed all monthly tasks electronically in DOTD Site Manager and in EBR required formats as well as all items on the DOTD Project Closeout Checklist including the 2059 Report					
07/12-03/14 EBR 03-TS-CI-0026 CE&I for EBR Traffic Signal Systems Jefferson Highway Construction (Baton Rouge, LA) Brin was the Project Engineer on behalf of EBR for performing CE&I services for the construction of 11 traffic signals. She maintained records of the contract operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted progress meetings, recorded daily installed quantities, developed change orders and monthly contractor pay estimates. She also coordinated well as all items on the EBR project closeout checklist. 07/08.00/00 SPN 013-05-0043 CE&I for EBR Traffic Signal Systems Phase IV Construction (Baton Rouge, LA) Brin was the Project Engineer Phase IV Construction of 11 traffic signals. She maintained records of the contract progress meeting.					was the Project Resident ds of the contractor's daily wings, conducted monthly so coordinated with DOTD in EBR formats as well as		
07/08-09/05	7	DOTD and EBR to perf contractor's daily oper conducted monthly pro- orders and monthly con ATM / EOC building. S DOTD Project Closeout	form CE&I services ations, coordinated s gress meetings, recon- tractor pay estimates She processed all mo t Checklist including	for the signific rded da . She al onthly ta the 205	construction of 21 traffic signals. She developed the project Sample Plar ant events that affected construction progress including utility issues, ily installed quantities, coordinated concrete sampling for DOTD Mater lso coordinated with DOTD ITS division for fiber splicing into Airline H asks electronically in DOTD Site Manager and in EBR required formats 59 Report.	i, maintained records of the reviewed shop drawings, ials Lab, developed change ighway fiber backbone and as well as all items on the	

Firm emplo	yed by	Vectura Consulting	Services, LLC					
Name	Laure	nce Lucius Lambert, I	I, PE, PTOE, I	РТР	Years of relevant experience with this employer	7		
Title	Superv	visor			Years of relevant experience with other employer(s)	18		
Degree(s) /	Years /	Specialization		B.S. /	/1997/Civil Engr. M.S./2006/Civil Engr. (Transportation foc	us) M.B.A./2010		
Active regis	stration	number / state / expirati	on date	PE.0	029901 / LA / 3/31/2024			
Year registe	ered	Civil	Discipline	Civil				
Contract rol	le(s) / b	rief description of respo	nsibilities	TMF	P Lead			
Experience d	lates	Experience and qualification	tions relevant to	the pr	oposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed drainage", "designed girders", "designed drainage", "design	esigned intersection", etc.		
(mm/yy–mm	n/yy)	Experience dates should	cover the years	of expe	erience specified in the applicable MPR(s).	C C		
02/21 - 03/2	1	H.013256.5 I-10 ITS Scot	t to Lake Charle	s (Sout	hwest Louisiana) Laurence was the lead traffic engineer for a Level 2	Traffic Management Plan		
		(TMP) for the construction	of ITS equipment	along I	-10. The plan included a safety strategy that included a CAT Scan, LOS d	etermination utilizing Citrix		
0.4/10 10/0	1	data, lane closure recomme	endations based on	a queu	e analysis and public information strategies.	1 . C.1 4		
04/18 - 12/2	1	H.010960.5 LA 30 Koun	dabouts at Tang	er & I	-10 Gonzales (Ascension, LA) Laurence provided a Quality Control Vecture else provided Quality Control review of signing and strining	n review of the temporary		
		sets to ensure the roundah	outs conformed to	the Pa	venent Markings Details Sheet PM-09 and the MUTCD details on roun	dabouts		
04/18 - 12/2	1	H.011909.5-4 Roundabout: US 171 at Boone St. (Vernon Parish, LA) Laurence provided a Quality Control review of the temporary construction						
0.,10 12,2	-	and sequence of construc	tion plans. Laurer	nce also	provided Quality Control review of signing and striping plans at 30%	and 60% plan sets to ensure		
		the roundabouts conformed	ed to the Pavement	t Marki	ngs Details Sheet PM-09 and the MUTCD details on roundabouts.	-		
02/14 – 06/14 H.010193 Alexandria ITS Deployment Pha		se I (A	lexandria, LA) Laurence was the project manager for a Level 2 Transpo	ortation Management Plan				
(TMP) as part of an ITS design.			esign.					
$01/14 - 0^{1}/14$ H.010719 US 90 Z Improvements (New Or			vements (New Or	leans,	LA) Laurence was the project manager for a Level 4 Transportation M	anagement Plan (TMP) as		
02/14 06/1	Λ	H 006831 Baton Rouge I	'S Deployment Pl	hase III	$[(\mathbf{Baton Rouge I A})]$ aurence was the project manager for a Level 2 \mathbf{Tr}	ansportation Management		
02/14 - 00/15	4	Plan (TMP) as part of an 1	TS design.	1ast 11	(Daton Rouge , LA) Laurence was the project manager for a Lever 2 11	ansportation Management		
04/13 - 09/1	3	H.010138 Sunshine Bridg	ge ITS Deployme	nt (Asc	ension and St. James Parishes) Laurence was the project manager for	r a Level 2 Transportation		
	-	Management Plan (TMP)	as part of an ITS	design.		•		
12/12 - 04/1	3	H.010151 I-210: Cove La	ne Interchange	ГМР (I	Lake Charles, LA) Laurence was the task leader for traffic analysis of	a Level 2 Transportation		
		Management Plan (TMP)	as part of a new i	ntercha	nge at Cove Lane and I-20.			
04/11 - 09/12	1	SPN 424-04-0032 US 90 at LA 85 Design-Build Maintenance of Traffic Plan (Iberia Parish, LA) Laurence developed a Maintenance of Traffic						
		plan that accommodated th	e bridge and road	widenii	ng, but also maintain passage of large trucks and freight through the heav	ily travelled corridor crucial		
		the construction of a grade	separated diamor	was the	Lead Traffic Engineer for one of the first design-build projects undertake	n by DOTD, which included Parish to upgrade this future		
I-49 corridor to interstate standards.				ransh to upgrade this future				
06/10 - 10/10	0	SPN 454-02-0071 I-12 Wi	dening Design-Bu	iild An	nite River Bridge to Juban Road Maintenance of Traffic Plan (Living	gston Parish, LA) Laurence		
	-	was responsible for design	ing a Maintenan c	e of Ti	raffic plan that would keep drivers informed of real time traffic situation	ns through a comprehensive		
		traffic management system	. Four lanes (two	lanes ii	n each direction) were to remain open during peak travel times through	out the length of the project.		
		Temporary lane closures of	nly occurred at nig	ght.				

Firm employed by	Firm employed by Vectura Consulting Services, LLC					
Name Reece	Rodrigue, PE, PTOE, RSP	1	Years of relevant experience with this employer	3		
Title Projec	t Traffic Engineer		Years of relevant experience with other employer(s)	7		
Degree(s) / Years /	Specialization	B.9	S./2013/Civil Engr.			
Active registration	number / state / expiration da	te PE	.0042074 / LA / 3/31/2024			
Year registered	Civil Disc	cipline Civ	/il			
Contract role(s) / b	rief description of responsibil	ities CE	&I Support			
Experience dates	Experience and qualification	ons relevant t	o the proposed contract; i.e., "designed drainage", "designed	d girders", "designed		
(mm/yy–mm/yy)	intersection", etc. Experien	ce dates shoul	d cover the years of experience specified in the applicable MPR	₹ (s).		
04/20 - Current	H.004791 DOTD Belle Chasse	Bridge & Tunr	el Replacement Public-Private Partnership Project (Belle Chasse, LA	.) Reece is responsible for		
	designing the temporary traffic s	ignal for the inte	ersection of LA 23 at Engineers Rd. for eight phases of construction per th	ne anticipated sequence of		
	construction. Temporary pole lo	cation and heigh	ts were recommended for placement for use for all construction phases.	Vehicle clearance interval		
	calculations were conducted for e	each phase in acc	ordance with DOTD and ITE guidance. Reece is responsible for producing	the traffic impact analysis		
	portion of the Traffic Manageme	ent Plan that was	also used in planning for the permanent and temporary signal timing plans. I	Reece was also responsible		
	vahiele and padastrian clearance	i plans for the LA	A 23 intersections at Engineers Road and at Burmaster Street. He evaluated sto up the railroad preamption sequence for both at grade crossings, design	op bar locations, calculated		
	developed the interconnect plan	in addition Reec	was responsible for reviewing and approving shop drawings that were subr	net the willing layout, and		
	use in construction.	in addition, Rece	e was responsible for reviewing and approving shop drawings that were sub-	inteed by the contractor for		
01/21 - 05/21	 H.013256 - I-10 ITS Scott to Lake Charles (Lafavette, Acadia, and Jefferson Davis Parishes) Reece was a member of the subconsultant team whether team whether the subconsultant team whether t					
00/21 00/21	was tasked with reviewing the ITS plans for 15 sites along I-10 where CCTV cameras were being installed. Reece was responsible for measuring					
	anticipated construction quanti	ties and produc	ing a cost estimate for said quantities by using DOTD's Bid Tabulation and	l Cost Estimating Tool.		
07/21 - Current	H.007160 - EBR Computerize	d Traffic Signa	l, Phase VB (Baton Rouge, Louisiana) Reece is part of the team resp	onsible for Construction		
	Engineering and Inspection. R	eece has review	ed the signal mast arm shop drawings to assist the City-Parish of Baton	n Rouge in accepting the		
00/00 10/01	manufactured poles. Reece, with	the DOTD, City-	Parish and the Contractor conducted field visits to confirm pole foundation	locations.		
09/20 - 12/21	H.011909.5-4 Koundabout: US	1/1 at Boone S	ot. (vernon Parish) Reece is an essential design engineer, who is assisting	g in the production of the		
	the US 171 corridor's existing all	owable movement	the of construction for the novements that would be restricted during the propose	ed construction process and		
	how it would impact the typical th	affic patterns.	its and identified the movements that would be resurfied during the propose	a construction process and		
09/20 - 12/21	H.010960.5 LA 30 Roundabout	s at Tanger I-1	(Ascension Parish) Reece is a design engineer, who is assisting in the pr	oduction of the temporary		
0,9,20 12,21	signal design associated with the	sequence of co	nstruction for the roundabouts on LA 30 in Gonzales, LA. This project	consists of eight proposed		
	construction phases. He assisted	in calculating the	e temporary pole heights, determining the placement location for the tempo	orary poles for each phase,		
	measuring and calculating clearance intervals. Reece conducted a thorough analysis of the LA 30 corridor's existing allowable movements and identif					
	the movements that would be rest	ricted during the	proposed construction process and how it would impact the typical traffic p	atterns.		
11/21 - 12/21	Emergency Street Light and T	raffic Sign Ass	essment (New Orleans, LA) In response to the damage caused by Hurric	ane Ida, Reece inspected		
	streetlights and street signs to r	eport damage us	ing the City's ArcGIS Unline Organization and ArcGIS Field Maps app.	The assessment area was		
	approximately 2.5 miles by 2 mile	es area in the Cit	y of new Orleans.			

Firm emplo	Firm employed by Vectura Consulting Services, LLC					
Name	Kriste	n Farrington, PE, P	TOE, RSP1		Years of relevant experience with this employer	2
Title	Projec	t Traffic Engineer			Years of relevant experience with other employer(s)	7
Degree(s) /	Years /	Specialization		B.S.	/ 2013 / Civil Engr.	
Active regis	stration	number / state / expir	ation date	PE.0	042074 / LA / 3/31/2025	
Year registe	ered	Civil	Discipline	Civi	1	
Contract ro	le(s) / bi	rief description of res	ponsibilities	TMF	Support	
Experience	dates	Experience and qu	alifications releva	ant to	the proposed contract; i.e., "designed drainage", "designed	d girders", "designed
(mm/yy–m	m/yy)	intersection", etc. E	Experience dates s	hould	cover the years of experience specified in the applicable MPI	R(s).
04/21 - curre	ent	CP No. 16 CI-US-0032 traffic signal design of the safety analysis as we	Bus Rapid Transit (19 signals along thre ell.	(BRT) : e corric	Improvement Project (Baton Rouge, LA) Kristen a project engineer for dors: Plank Road, 22nd Street and US 190 (Florida Street). Kristen assisted	a traffic design study and 1 the prime consultant with
02/20 - 09/	⁷ 20 – 09/21 MOVEBR College Drive Enhancement Project (Baton Rouge, LA) Kristen assisted with the data collection task of the College Drive project Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand obser driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.				ollege Drive project limits. met demand observations,	
6/19 - 2/21		H.013459 US 167 Impe to evaluate the addition prepared, as well as a b method, over-represent and comparison matrix materials and minutes.	rovements Stage 0 El of a third lane to US penefit-cost analysis of ation, CATScan quali- to determine best prel	Isie Str 5 167 fr of all im ity assu liminary	eet to Gilbert Street (St. Landry Parish, LA) Kristen served as project n rom Elsie Street south to a point past Gilbert Drive. Environmental impact approvements considered. Civil Engineer responsible for safety analysis in trance, HSM existing safety analysis, and No-Build Analysis. Designed I y alternatives moving forward to meet the purpose and need of the project.	hanager for a Stage 0 study its and cost estimates were icluding crash rate number high-level concept exhibits Compiled meeting agenda
6/19 - 2/21		H.013460 US 167 Imp of a two-lane road to ren connecting existing pro prepared. Civil Engined existing safety analysis determine best prelimin	rovements Stage 0 E move a curvilinear se- perty owners to a nev er responsible for saf , and No-Build Anal ary alternatives movi	Enola S ction of w roadv čety ana ysis, as ng forw	treet to Ross Road (Evangeline Parish, LA) Kristen served as project m f US 167 from Enola Street near LA 748, southeast for approximately 1.2 way with driveways or intersection of old roadway. Environmental impact alysis including crash rate number method, over-representation, CATSca well as a benefit-cost analysis. Designed high-level concept exhibits and ward to meet the purpose and need of the project. Compiled meeting agence	anager for a Stage 0 study miles. The study compared tts and cost estimates were in quality assurance, HSM and a comparison matrix to a materials and minutes.
04/19 - 6/21		H.013817.1 LA 117 In study for 18 miles of tw along the corridor, wide responsible for perform analysis, and No-Build and comparison matrice Stage 0 report and coor	nprovements Stage (vo-lane LA 117 from ening for the addition ing the safety analysis Analysis. Kristen des es to determine which dinated with stakehol	0 (Vern LA 8 t of show includ signed h prelim ders an	non and Natchitoches Parishes, LA) Kristen served as project engineer to LA 118. The study evaluated the impacts of correcting deficient vertical ulders, and adding passing lanes and turn lanes at strategic locations alon ing crash rate number method, over-representation, CAT Scan quality assu- nigh-level concept exhibits, evaluated environmental impacts, and prepare inary alternatives best meet the purpose and need of the project. Kristen of d local agencies to ensure the purpose and need of project is met.	responsible for a Stage 0 al and horizontal geometry g the corridor. Kristen was rance, HSM existing safety cd high level cost estimates compiled all findings in the
03/19 – 11/1	9	H.012311 LA 429 Con for a limited-access cor were evaluated. The sco scope and budget check high level concept exhi project. Compiled meet	nector Stage 0 (Ascer ridor (LA 429) near pe consisted of stakeh lists, and an opinion o bits and comparison ing agenda materials	ension I I-10, be nolder a of proba matrix and min	Parish, LA) Kristen was the task leader for the preparation of a Stage 0 st etween LA 30, LA 73, and US 61. Two alternatives for the widening and and public meetings, site visits and data collection, phasing of alternative de able cost to prepare the Stage 0 Report. Kristen served as the civil engineer to determine the best preliminary alternatives moving forward to meet the nutes, coordinated with interchange study consultants for a cohesive proje	udy to evaluate alignments reconstruction of LA 429 velopment for the corridor, r responsible for designing te purpose and need of the ct, and wrote report.

11/18 - 3/21	H.013322 LA 3040 Feasibility / Safety Study Stage 0 (Houma, LA) Kristen served as project engineer for a study to identify safety and operational
	issues along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA to evaluate reasonable alternatives to address any deficiencies
	discovered. Kristen was responsible for compiling a data collection plan for submittal to DOTD, including count locations, determined peak periods, and
	peak hours. Kristen performed peak period observations in the field and geometric field checks, as well as unmet demand observations and calculations .
	Kristen prepared TMC figures, as well as performed existing analysis in Vistro. Compiled all data collected into Appendices A and B per the DOTD
	Traffic Process and Report and wrote Chapter 1 of report. Kristen represented the project at stakeholder meetings to discuss project status.
04/18 - 04/19	H.011243.1 I-49 at US 190 and LA 31 Interchange Improvements Stage 0 (St. Landry Parish, LA) Kristen was the project engineer responsible for
	crash and safety analysis, report writing, planning, and designing for this Stage 0 Study to evaluate alternatives to improve traffic operations and safety
	at the I-49 interchanges with US 190 and LA 31. Crash and safety analysis was performed using the LADOTD CAT Scan tool and IHSDM, and line and
	grade was prepared to DOTD Design Standards for various corridors, including arterial collectors and freeway ramps. Close coordination with traffic
	engineer ensured maximum improvement of safety and operations given limited right-of-way and utility conflicts along the corridors.
09/17 - 09/18	H.011160 LA 73 Corridor Study Stage 0 LA 74 to LA 621 (Ascension Parish, LA) Kristen was the designer responsible for concept development,
	report writing, and impact analysis for a Stage 0 study. The purpose of the study was to evaluate conceptual alternatives to improve capacity and operations
	along the LA 73 corridor and its connecting transportation network. The scope included the evaluation of three interchange configurations for the
	interchange of I-10 at LA 73 in conjunction with two corridor alternatives for LA 73, resulting in six different alternatives for which line and grade,
	impacts, and high-level cost estimates were prepared.
11/16 - 07/17	H.001271 Cane River Bridge Church Street Route LA 1-X Environmental Assessment Kristen was the project engineer responsible for assisting
	with the site visits, data organization, analysis of permanent alternatives and traffic control alternatives, and traffic report to aid in the delivery of an
	environmental assessment for the Cane River Bridge Replacement

Firm emplo	yed by	Vectura Consulting	g Services, LLC	1						
Name	Ronal	d St. Angelo			Years of relevant experience with this employer	<1				
Title	Constr	ruction Specialist			Years of relevant experience with other employer(s)	48				
Degree(s) /	Years /	Specialization		High	High School Diploma / 1975					
Active regis	stration	number / state / expira	tion date							
Year registered Civil Discipline										
Contract rol	e(s) / bi	rief description of resp	onsibilities	Seni	or-level Construction Specialist and fulfills MPR# 7.					
Experience	dates	Experience and qual	ifications releva	ant to	the proposed contract; i.e., "designed drainage", "designed	ed girders", "designed				
(mm/yy–mr	n/yy)	intersection", etc. Ex	perience dates s	hould	cover the years of experience specified in the applicable MPI	R(s).				
02/03 - 04/23	3	Jack B Harper Elec	trical, LLC (Wa	alker,	LA) Ronnie specialized in programming traffic signal control	s / ITS equipment and				
		troubleshooting constru	ction issues in th	e field	such as utility conflicts and traffic signal issues. He was a project	t manager for numerous				
		traffic signal related pro	jects and oversaw	/ a tean	n of field technicians for signal related construction projects. He was	s an estimator for bidding				
		traffic signal / ITS equip	oment projects. Ro	onnie v	vorked extensively throughout the state of Louisiana on hundreds of	local, state, and federally				
		funded traffic signal / I'	TS projects, to inc	clude n	najor metropolitan areas, such as Greater New Orleans, Baton Roug	ge, and Lafayette. During				
		this time, Ronnie worke	ed on projects that	built i	ntersections from the ground up, to include base / signal installation	, signal control electrical				
		installation, and signal	termination. Read	d and 1	interpreted construction plans to ensure proper installation requirements	ments were met for span				
		wire and mast arm inst	allation. Extensiv	e expe	rience in installing all forms of traffic signals during all construct	10n phases. Assisted site				
		inspectors with confirm	ning mast arm fou	indatio	n locations; drawing reviews; change requests; and verifying conti	coller data collection and				
05/55 01/0	2	timing checks.		D!						
$0^{1/7} - 0^{1/0}$	3	East Baton Rouge Tr	affic Engineering	g Divis	sion Ronnie was a certified IMSA Level 1 & 2 Technician while	employed at the City of				
		Baton Rouge. Ronnie j	performed numero	$\frac{1}{1}$	nstruction tasks in relation to traffic signals within East Baton Rol	uge Parish. Construction				
		included traffic signal	poles, signal head	is, sigr	al wiring, vehicle detection, traffic signal controller / cabinet pow	er service. In the earlier				
		part of his career, the t	raffic signal cont	trollers consisted of mechanical parts. As time progressed, the controller evolved to steady-state						
		While even loved in the	i, Konnie perform	ned traffic signal tasks related to maintenance after damage from collisions or extreme weather.						
		while employed in the	city, Konnie was	is tasked with maintaining over 500 signals that included DOTD intersections. Kolline started his						
		career at the City of Ba	ton Kouge as a 16	rechnician, then frame Signal feennician, then Foreman and finally a supervisor. Konnie was also						
		responsible for program	mining traffic sign	ai cont	roners while at the City.					

(Add rows as needed)

Firm emplo	yed by	Vectura Consulting	Services, LLC	1						
Name	David	Watkins			Years of relevant experience with this employer	<1				
Title	Constr	ruction Specialist			Years of relevant experience with other employer(s)	35				
Degree(s) /	Years /	Specialization		High	High School Diploma / 1978					
Active regis	Active registration number / state / expiration date									
Year registe	Year registered Civil Discipline									
Contract rol	le(s) / bi	rief description of respo	nsibilities	Seni	or-level Construction Specialist and fulfills MPR# 7.					
Experience	dates	Experience and quali	fications releva	ant to	the proposed contract; i.e., "designed drainage", "design	ed girders", "designed				
(mm/yy–mi	m/yy)	intersection", etc. Exp	perience dates s	hould	cover the years of experience specified in the applicable MF	'R (s).				
11/06 - 02/2	3	Jack B Harper Electri	cal, LLC (Walk	ker, LA	A) David worked extensively throughout the state of Louisiana or	n hundreds of local, state,				
		and federally funded trat	fic signal projec	ts, to ii	nclude major metropolitan areas, such as Greater New Orleans, Ba	ton Rouge, and Lafayette.				
		During this time, worke	d projects that b	uilt int	ersections from the ground up, to include base / signal installation	i, signal control electrical				
		installation, and signal t	ermination. Read	$\frac{1}{2}$ and $\frac{1}{2}$	nterpreted blueprints to ensure proper installation requirements w	ere met for span wire and				
		mast arm installation. Ex	stensive experies	nce in	installing all forms of traffic signals during all construction phase	s. Assisted site inspectors				
		with confirming mast a	rm toundation to	ocation	is; drawing reviews; change requests; and verifying controller d	ata conection and timing				
03/01 - 10/0	6	Dave's Flectric (Denhs	m Springs I.A) Davi	d conducted electrical work on numerous residential and comme	rcial iob assignments He				
05/01 - 10/0	0	was responsible for inst	alling all wiring	and el	ectrical components as directed by site blueprints; installed all cir	registry and electrical items				
		during multi-phasal con	struction project	s (i.e r	ough-in: trim-out): conducted final walk-through inspection: com	pleted punch list items as				
		required. David was also	assigned as site	lead d	luring most job assignments.					
01/96 - 04/0	1	Diamond Electric Con	npany, Inc. (Ba	ton R	ouge, LA) David performed duties as a Traffic Signal Technic	ian Level I that included				
technical work in the construction, insta					allation, maintenance, and repair of traffic signal systems. David also developed the ability to read					
		and interpret blueprints	during this time.	. Maintained electrical experience while working on roadways requiring traffic control. David also						
		performed technical tasl	ks to maintain ar	and install all traffic signals, signal systems, signs, and associated traffic equipment. He delivered						
		and set-up barricades for	work zones, det	etours, and other areas in need of barricades; assisted with traffic control as needed. David performed						
		related technical tasks; v	vorked with cont	ractors	s on the installation and relocation of traffic signals and componen	its.				

Identify the team's project experience <u>most relevant</u> to the scope in the advertisement. The projects should be limited to a total of 20, with no more than 5 projects being represented by the prime consultant and with no more than 3 projects represented by each sub-consultant on the team. If more than 5 projects are identified for the prime consultant, all projects identified after the first 5 will not be evaluated. If more than 3 projects are identified for a single sub-consultant, all projects identified after the first 3 from that sub-consultant will not be evaluated. Include no more than one page per project. Projects identified shall only include work performed by firms on the team. The projects identified do not necessarily need to have been DOTD projects.

Firm name	Modjeski and Masters, Inc.		Past Performance Evaluation Discipline(s)* Other (reference)			Other (roady	way light)	
Project name	I-20 at Garrett Road Interch	ange Ligh	nting Design/Cl	CRES Firm responsibility (prime or sub?) Prime				
Project number	H.009201 & H.014646	Owner's	name	Louisiana Department of Transportation and Development				nt
Project location	Monroe, LA			Owner's Project Manager Michael Armentor, PE				
Owner's address	s, phone, email 1201 Capital	Access Ro	oad, Baton Roug	ge, LA 70802	; (225) 379-1088	8; Michael.Arme	entor@la.gov	7
Services comm	enced by this firm (mm/yy)	Total consultat	nt contract cos	st (\$1,000's)			280	
Services compl	eted by this firm (mm/yy)	tant services p	provided by this	firm (\$1,000's)		280		

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) * If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

The project involved the design of roadway lighting for the Garrett Road Interchange along Route I-20 in Monroe, LA. The design included the use of low-mast poles and underpass lighting and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M also provided construction related engineering services including shop drawing and O&M manual review and field inspections. As a separate project (S.P. H.014646), M&M provided plans, technical specifications, special provisions and illumination analysis for the rehabilitation of the existing lighting system along I-20 from US 165 to E. of Garrett Road. M&M coordinated with the City of Monroe and interfaced with the Project Team for S.P. H.007300 on the selection of LED luminaires to provide consistent lighting throughout the project limits.



PROJECT FEATURES:

- Development of a photometric analysis of the interchange and associated flyover ramps conforming to the LADOTD Illumination Standards.
- Design and development of electrical lighting plans and specifications conforming to the LADOTD Illumination Standards and the National Electric Code.

PERSONNEL: Lance V. Borden, PE, Cullen J. Ledet, PE, Jonathan E. Gerhart, PE, Erin N. Rodgers

Modjeski and Masters, Inc.

17. <u>Firm Experience:</u>

Firm name Modjeski and Masters, Inc.					Past Performan	nce Evalu	ation Discipline(s)*	Othe	er (roadway light)
Project name I-12 @ LA 447 (Walker) Interchange Lighting					S	Firm res	ponsibility (prime or su	ub?)	Prime
Project number	H.012503.5		Owner's name	Lou	uisiana Departm	ent of Tra	ansportation and Devel	opme	nt
Project location	Livingston I	Parish		Ow	Owner's Project Manager Christopher LeBourgeois, PE			PE	
Owner's address	s, phone, email	1201 Capita	al Access Road, Bator	n Rou	ige, LA 70802;	(225) 379	9-1088; Christopher.lel	oourge	eois @la.gov
Services commenced by this firm (mm/yy) 09/16				Tota	Total consultant contract cost (\$1,000's)			316	
Services completed by this firm (mm/yy) 09/19					t of consultant se	ervices pr	ovided by this firm (\$1	,000'	s) 316

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) * If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

The project involved the design of roadway lighting at the I-12/LA 447 Interchange in Walker, LA. The design included providing lighting for two roundabouts at the ramp terminals and was coordinated with the local government agencies as well as the electrical utility company in order to simplify future maintenance and to provide desired aesthetics. M&M provided plans & construction estimates, and construction related services including shop drawing review and field inspections.

PROJECT FEATURES:

• Development of a photometric analysis of the interchange and two roundabouts conforming to the LADOTD Illumination Standards.



- Design and development of electrical lighting plans and specifications conforming to the LADOTD Illumination Standards and the National Electric Code.
- Construction Related Engineering Support Services

PERSONNEL: Zolan Prucz, PhD, PE, Principal-in-Charge, Joseph Strenkoski, PE, Project Manager, Jonathan Gerhart, PE, Cullen Ledet, PE, Erin Rodgers, PE

Firm name	Modjeski and Masters, Inc.		Past Performance Evalua	Other (roadway light))	
Project name	I-10: Texas State Line – E. of Co	one Gully Lighting	g Design/CRES	Design/CRES Firm responsibility (prime or sub?)		
Project number	H.003184.5	Owner's name	Louisiana Department	of Transportation and Dev	elopment	
Project location	Calcasieu Parish		Owner's Project Ma	nager Michael Arment	or, PE	
Owner's address	s, phone, email 1201 Capital Ac	cess Road, Baton R	ouge, LA 70802; (225) 3	379-1088; Michael.Armen	tor@la.gov	
Services comm	enced by this firm (mm/yy)	01/17	Total consultant contra	ct cost (\$1,000's)	353	
Services comple	eted by this firm (mm/yy)	ongoing	Cost of consultant services provided by this firm (\$1,000's)			

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) * If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

M&M performed a study of the existing roadway lighting system of Interstate 10 (I-10) in Calcasieu Parish at five locations for the LADOTD as part of S.P. H.003184 which calls for a portion of I-10 from the Texas state line through to the East of Coone Gully to be widened from four to six lanes of travel. The scope of the work and inquiry consisted of an illumination and roadway lighting construction feasibility study at the five specified locations. The as-designed roadway lighting systems were evaluated and compared to the proposed widened geometry to determine if the existing systems would remain in compliance with LADOTD Illumination standards. Where needed, modifications were recommended to satisfy required illumination and electrical criteria.

M&M investigated the existing roadway lighting system at five locations within the project limits.

- I-10 at the Sabine River Turnaround
- I-10 at US 90 (Toomey Road)

- I-10 at Weigh Station (Toomey)
- I-10 at LA 108 (Gum Cove Road)

M&M also developed final plans, specifications and cost estimates for accommodations for the future replacement of the existing roadway lighting systems at these locations and is providing construction related engineering services, including field inspections and shop drawing, as-built drawing and submittal review.

As separate projects (S.P. H.014555, H.015019, and H.015085), LADOTD has asked M&M to complete the new lighting design at I-10 @ LA US 90, I-10 @ LA 3063 and I-10 @ LA 108. The original outdated lighting system at each interchange was removed as part of the widening system and a new lighting system was agreed to be installed after the widening project was completed. M&M will provide plans, specifications, special provisions, cost estimates and illumination analysis for a complete interchange lighting system.

• I-10 at LA 3063 (West St.)



PERSONNEL: Zolan Prucz, PhD, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE, Cullen J. Ledet, PE, Erin Rodgers, PE

Modjeski and Masters, Inc.

Firm name Modjeski and Masters, Inc.				Р	Past Perform	ance Evaluation Disc	ipline(s)*	Other (r	oadway light)
Project name I-49 South @ Verot School Road Interchange I					ighting Firm responsibility (prime or sub?)S			Su	b
Project number	H.011235.5		Owner's name		Louisiana	a Department of Trans	sportation and D	evelopm	ent
Project location	Lafayette Pari	sh		C	Owner's Project Manager Corey Landry, P.E.			P.E.	
Owner's address	s, phone, email	1201 Capitol	Access Rd., Bat	ton Rou	uge, LA 708	802, (225) 379-1889, 0	Corey.Landry@	LA.GOV	
Services commenced by this firm (mm/yy) 07/18 To					consultant c	contract cost (\$1,000's	3)		82
Services completed by this firm (mm/yy) ongoing Co					of consultan	t services provided by	r this firm (\$1,00	00's)	82

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) * If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation

discipline(s) this project is being used to represent.

The proposed project limits begin at the intersection of US 90 and South Park Road to 1,300 feet south of the intersection of US 90 and Kaliste Saloom Road. The Project consists of an above grade frontage road bridge structure that traverses over I-49 South/US 90 mainline roadway and its paralleled railroad. It also includes one-way frontage roads on both sides of the mainline roadway, a two-way collector service road east of the mainline roadway, and a new alignment of Verot School Road from the interchange to the a bridge structure approximately 600 feet west of its intersection with LA 182.



M&M was responsible for all engineering services required for the completion of preliminary lighting plans and lighting construction estimates for the project area. The scope of work includes a photometric analysis on the proposed widened and realigned geometry to determine an appropriate roadway lighting system that achieves compliance to DOTD and all other applicable illumination and electrical standards. M&M also conducted a lighting design feasibility study within the project limits. In addition to a report that documents the findings and provides recommendations, the study included a photometric analysis, selected preliminary plans, and an estimate construction cost estimate. Preliminary Plans were developed in conformance with the DOTD Software and Deliverable Standards for Electronic Plans and DOTD Electrical Design Plan Standards. The cost estimate was broken down by individual pay items as defined in the 2016 Edition of the Louisiana Standard Specifications for Roads and Bridges.

PERSONNEL: Zolan Prucz, PhD, PE, Joseph G. Strenkoski, PE, Jonathan E. Gerhart, PE, Cullen J. Ledet, PE, Erin Rodgers, PE

Firm name	Firm name Modjeski and Masters, Inc.					ance Evaluation Disci	ipline(s)*	Other (r	oadway light)
Project name	Project name I-20 at Vicksburg – Electrical Design / CRES					Firm responsibility (prime or sub?) prime			me
Project number	H.012739.5		Owner's name		Louisiana Department of Transportation and Development			ent	
Project location	Ouachita Pari	sh		(Owner's Project Manager Mark Bucci, P.E.				
Owner's address	s, phone, email	1201 Capitol	Access Rd., Bat	ton Ro	ouge, LA 708	02, (225) 379-1076, N	Mark.Bucci@LA	A.GOV	
Services commenced by this firm (mm/yy) 07/18 T					l consultant c	ontract cost (\$1,000's	3)		250
Services compl	eted by this firm (mm/yy)	06/21	Cost	of consultant	t services provided by	this firm (\$1,00	00's)	250

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) * If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

The Vicksburg Bridge is an Interstate highway bridge built in 1973 that carries I-20 over the Mississippi River. The main bridge is a steel cantilever through truss. The approaches consist of three simple through truss spans and three steel girder spans on the west side and one simple through truss span and two steel girder spans on the east side. The center span of the main bridge is 870 feet long and its vertical clearance is 60 feet from high water elevation. The Vicksburg Bridge underwent a rehabilitation consisting of performing hydro-demolition and overlay of the existing bridge deck, repairing floorbeam cracks, and adding safety enhancements to the maintenance walkways and electrical systems. The work also included design and detail of a new bearing assembly jacking system to accommodate additional transverse jacking of the trusses at Pier E-2. M&M provided electrical engineering services to provide final plans and specifications for rehabilitation of the existing electrical systems, including photometric report and replacement of roadway lighting with an LED design, replacement of navigation lighting and aerial beacons, and rehabilitation and relocation of low-voltage electrical components including monitoring equipment including monitoring equipment, monitoring equipment, monitoring equipment, monitoring equipment.

report and replacement of roadway lighting with an LED design, replacement of navigation lighting and aerial beacons, and rehabilitation and relocation of low-voltage electrical components including monitoring equipment including monitoring equipment, MDOT equipment, river current monitoring equipment. M&M also provided construction related engineering services, including field inspections and shop drawing, as-built drawing and submittal review.



PERSONNEL: Zolan Prucz, PhD, PE, Jonathan E. Gerhart, PE, Cullen J. Ledet, PE, Joshua Rinehart, PE

Modjeski and Masters, Inc.

Firm name	Aillet, Fenner, Jolly & M	McClelland, Inc.	Past Performance Evalu	Past Performance Evaluation Discipline(s)* Other, Bridge				
Project name Mound Rest Area Improvements, Route I-2			-20	Firm responsibili	ty (prime or sub?)	Prime		
Project number	H.011446.5	Owner's name	LaDOTD					
Project location	Madison Parish LA		Owner's Pro	ject Manager				
Owner's address, phor	ne, email LaDOTD, 121	2 E. Hwy Dr., Bator	n Rouge, LA 70802, 225-3	79-1739, scott.gui	nn@la.gov			
Services commenced by this firm (mm/yy) 11/20			Fotal consultant contract cost (\$1,000's)			432		
Services completed by this firm (mm/yy) 08/21 Co			Cost of consultant services	provided by this f	firm (\$1,000's)	401		

As part of LaDOTD's Statewide Facilities and Rest Area retainer contract, AFJMc is designing site improvements to the Mound Rest Area on I-20 in Madison Parish. The project consists of new acceleration and deceleration ramps/drives into the rest area, new car and truck parking facilities, site grading and drainage systems with storm water management. The project also includes general site amenities such as pedestrian walkways and a courtyard.

AFJMc, provided not only civil design services for this project but also structural and electrical designs services. The structural design includes foundation design for overhead structures such as pavilions, covered walkways and the design of wood bridges and bulkhead at pond edges. The electrical design includes converting the site to 3-Phase power, site lighting, CCTV surveillance systems, back-up generator systems, surge protection, and replacing lighting on the interstate ramps.



AFJMc tasks included development of final plans, the development of specifications, the development of cost estimates, the review of shop drawings, and the response to Request for Information (RFI) on an as needed basis when the project is complete.

Members involved: **Daniel Brown, PE, Paul Comier, PE**, Edie Langley, Alan Fenner



Firm name	Aillet, Fenner, Jolly & M	McClelland, Inc.	Past Performance Evalu	Past Performance Evaluation Discipline(s)* Other (Roadway Lig		
Project name	roject name Weigh Station Design, Renovation and Upg			radeFirm responsibility (prime or sub?)Prime		
Project number	H.012182.1	Owner's name	LaDOTD			
Project location	Statewide, LA		Owner's Pro	ject Manager	Jeffery Brown	
Owner's address, phor	ne, email PO Box 94245	, Baton Rouge, LA	70804, 225-377-7103, jef	fery.brown@la.g	OV	
Services commenced l	by this firm (mm/yy)	05/16	Total consultant contract cost (\$1,000's)			42
Services completed by this firm (mm/yy) 11/16 Co			Cost of consultant services	s provided by thi	s firm (\$1,000's)	42

As part of LaDOTD's Weigh in Motion retainer contract, AFJMc was tasked to document the existing conditions of the lighting and electrical equipment for all weigh stations in the state of Louisiana. The Stationary Scales Division within the Louisiana State Police Transportation Safety Services (TSS) was managing the weigh stations during the length of the project. The existing fifteen fixed-site weigh stations were inspected and studied for upgrade and/or refurbishment needs. Two locations per site were inspected at the Greenwood, Delta, Kentwood, Baptist, LaPlace, Breaux Bridge, and Toomey locations. The Starks location only had one site.

AFJMc services included site visits to conduct assessment and inventory of all existing electrical equipment and conditions. It also included the assessment of the existing site lighting including pole location with fixture type, and exterior/site lighting control. Close coordination with LaDOTD and State Police personnel was maintained during the length project.

A report was prepared based on information derived from the condition assessment of each weigh station. The report documented all findings and provided proposed electrical system improvements for each weigh station including power upgrades, lighting at the stations and in the truck inspection parking areas.

Members involved: Robbin K. Cassity, PE, Gabriel Whitaker, Edie Langley



Firm name	Aillet, Fenner, Jolly & M	Past Perfor	rmance Evalua	ation Discipline	(s)* Other (Roa	dway Lighting)	
Project name	I-49 North				Firm responsibility (prime or sub?) Prime		
Project number	SP# H.003886 / SP#	Owner's name	LaDOTD				
	H.003496 / SP# H.003495						
Project location	Caddo Parish, LA			Owner's Proj	ect Manager	Joe Umeozulu, PE	
Owner's address, phor	ne, email PO Box 94245,	Baton Rouge, LA 7	0804 / 225-379-	1386 / joachim	.umeozulu@la.g	OV	
Services commenced by this firm (mm/yy) 12/03			Total consulta	'otal consultant contract cost (\$1,000's)			3,720
Services completed by this firm (mm/yy) 2/20 C			Cost of consu	ltant services	provided by thi	s firm (\$1,000's)	1,862

I-49 North is Sections J, K1 and K2. AFJMc was responsible for the preliminary and final roadway plans for the revisions to I-220, the Interchange of I-49/I-220, the Interchange at Martin Luther King Drive, the south half of the Interchange at Highway 1, the roadway from I-220 to Highway 1, Martin Luther King Drive and the drainage design, lighting, sewer relocation, and the design of five cul-de-sacs.

Members involved: **Robbin Cassity, PE, Daniel Brown, PE, Paul Cormier, PE,** Edie Langley, Matthew J. Wallace, PE SE, J. Daniel Thompson, PE SE The I-49 Segment K Phase 2 Interchange with I-220 earned the regional award for "Best Use of Technology & Innovation" from the American Association of State Highway & Transportation Officials (AASHTO). The \$142 million I-49 Interchange project was also awarded the 2020 Louisiana Transportation Conference Excellence Award in the "Roadway/Bridge Construction Project over \$10 Million" category.





Firm name Lazenby & Associates, Inc.			Past Perfo	rmance Evalu	ation Discipline	(s)* Survey		
Project name US 371: KCS RR Overpasses (HBI)				Firm responsibility (prime or sub?) Prime				
Project number	S.P.N. H	.012030	Owner's name	Louisiana	Department of	of Transportation	and Development	
Project location	Webster	Parish			Owner's Pro	ject Manager	Steve A. LeBlanc	, P.L.S.
Owner's address, phor	ne, email	P.O. Box 9424	5, Baton Rouge, L	A 70804-924	5			
		Telephone (22:	5) 379-1292	email: S	Steve.LeBlanc	2@la.gov		
Services commenced by this firm (mm/yy) 12/2022			Total consultant contract cost (\$1,000's)				222.3	
Services completed by this firm (mm/yy) current C				Cost of consu	ultant services	s provided by this	s firm (\$1,000's)	222.3

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Lazenby & Associates, Inc. is the prime consultant on this project, performing topographic surveying services within the existing US 371/I-20 interchange ROW for existing roadway lighting improvements. Approximately 3,800 feet along US 371 (urban minor arterial) and 5,600 feet along I-20 (urban interstate) located in Minden, LA is included in the topographic survey limits.

Static/RTK GPS survey methods were used to establish horizontal and vertical control for the field survey. Conventional survey methods using total stations and digital levels were used to collect the topographic survey data for the project. In addition, 3D LIDAR point clouds were collected using both stationary terrestrial tripod mounted scanner and UAV scanner payload. Topographic features were extracted from the 3D point cloud such as hard surface pavement, bridge structures, traffic signs, overhead truss sign supports, guardrails, and existing traffic lighting. UAV photogrammetry was collected to assist with the QA/QC validation of the topographic survey. In addition to the collection of topographic survey features, other surveying services include the establishment of referenced iron rods along the project to define the GPS control, locating and research of ownership of all utilities within the limits of the topographic survey using LA One Call and preparation of an existing drainage map of the project area. An existing DTM was developed using surface elevations collected and existing alignments

were calculated along the US 371/I-20 corridors, including all interchange ramps.

Key personnel involved in the project include the following:

- Ronald J. Riggin, P.E., P.L.S.
- Randy C. Hammons, P.E.
- James S. Ellingburg, P.E.
- Noah J. Sampognaro, E.I.



17. Firm Experience:

Firm name	Firm name Lazenby & Associates, Inc.					Past Performance Evaluation Discipline(s)* Survey			
Project name I-20 Widening/Overlay (Vancil Rd to LA 3					34) Firm responsibility (prime or sub?) Prime				
Project number	S.P.N. H	.015052	Owner's name	Louisiana Department of Transportation and Development					
Project location	Ouachita	Parish			Owner's Project Manager Steve A. LeBlanc, P.L.S.			, P.L.S.	
Owner's address, phor	ne, email	P.O. Box 9424	5, Baton Rouge, L	A 70804-9245	5				
		Telephone (22	5) 379-1292	email: <u>S</u>	teve.LeBlanc	2@la.gov			
Services commenced by this firm (mm/yy) 5/2022				Total consult	Fotal consultant contract cost (\$1,000's)			393.9	
Services completed by	Cost of consu	Cost of consultant services provided by this firm (\$1,000's) 393.9		393.9					

Lazenby & Associates, Inc. is the prime consultant on this project, performing topographic surveying services within the existing I-20 ROW for existing interstate widening & overlay. Approximately 20,815 feet (3.94 mi) along I-20 (urban interstate) thru West Monroe, LA is included in the topographic survey limits, including portions of 3 urban principal arterial and 1 urban major collector interchanges/overpasses.

Static/RTK GPS survey methods were used to establish horizontal and vertical control for the field survey. Conventional survey methods using total stations and digital levels were used to collect the topographic survey data for the project. In addition, 3D LIDAR point clouds were collected using both stationary terrestrial tripod mounted scanner and mobile scanning. Topographic features were extracted from the 3D point cloud such as hard surface pavement, bridge structures, traffic signs, overhead truss sign supports, guardrails, and existing traffic lighting. 360 camera images collected with the mobile LIDAR and georeferenced aerial imagery were used to assist with the QA/QC validation of the topographic survey. In addition to the collection of topographic survey features, other surveying services include the establishment of referenced iron rods along the project to define the GPS control, locating and research of ownership of all utilities within the limits of the topographic survey using LA One Call and preparation of an existing drainage map of the project area. An existing DTM was developed using surface elevations collected and existing alignments were calculated along the I-20 corridor, interchanges and overpasses.

Key personnel involved in the project include the following:

- Ronald J. Riggin, P.E., P.L.S.
- Randy C. Hammons, P.E.
- James S. Ellingburg, P.E.
- Noah J. Sampognaro, E.I.

Modjeski and Masters, Inc.

Firm name	Lazenby & Associates, Inc.			Past Performance Evaluation Discipline(s)* Survey				
Project name	US 165 I	Lighting from I	A 15 (Winnsboro	Rd) to Century Blvd) Prime			
Project number	S.P.N. H.011739 Owner's name City of Monroe (Urban System Project)							
Project location	Ouachita Parish Owner's Project Manager Curt Kelley							
Owner's address, phor	ne, email	P.O. Box 123,	Monroe, LA 71201	1				
		Telephone (31	8) 329-2210	email: <u>lacurtis.kelly</u>	@ci.monroe.la.us	<u>.</u>		
Services commenced by this firm (mm/yy) 9/2016				Total consultant contract cost (\$1,000's)			59.7	
Services completed by this firm (mm/yy) 12/2016				Cost of consultant services provided by this firm (\$1,000's) 59.7			59.7	

Lazenby & Associates, Inc. is the prime consultant on this project, performing topographic surveying services within the existing US 165 ROW for the design of roadway lighting improvements. Approximately 5,100 feet along US 165 (urban principal arterial) located in Monroe, LA is included in the topographic survey limits.

Static/RTK GPS survey methods were used to establish horizontal and vertical control for the field survey. Conventional survey methods using total stations and digital levels were used to collect the topographic survey data for the project. Georeferenced aerial imagery was used to assist with the QA/QC validation of the topographic survey. In addition to the collection of topographic survey features, other surveying services include the establishment of referenced iron rods along the project to define the GPS control, and locating and research of ownership of all utilities within the limits of the topographic survey using LA One Call. An existing DTM was developed using surface elevations collected and existing alignments were calculated along the US 165 corridor including all side and frontage roads.



Key personnel involved in the project include the following:

- Ronald J. Riggin, P.E., P.L.S.
- Randy C. Hammons, P.E.
- James S. Ellingburg, P.E.
- Noah J. Sampognaro, E.I.

<u>17.Firm Experience:</u>

Firm name	Civil Design & Co	onstruction, I	nc.		Past Perform	nance Evaluation I	Discipline(s)*	Survey		
Project name	US 190 Superstre	et				Firm responsibil	ity (prime or sub?)	Sub		
Project number	H.005733.5 Owner's name LADOTD									
Project location	1 St. Tammany Parish, LA Ov					Owner's Project Manager Josh Harrouch				
Owner's address, phone, email 1201 Capitol Access Rd., Baton Rouge, LA 70802					A 70802 (225)	379-123 Joshua.	harrouch@la.gov			
Services commenced by this firm (mm/yy) 01/16			01/16	Total cons	Total consultant contract cost (\$1,000's)			N/A		
Services completed by this firm (mm/yy) 08/16 C			Cost of co	onsultant servic	es provided by thi	is firm (\$1,000's)	\$207			

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance e evaluation discipline(s) this project is being used to represent.

Project Description: This project was the topographic survey of US 190 in Covington. The survey limits were along a portion of the existing routes of US 190, Holiday Square Frontage Road, US 190 Service Road, Holiday Blvd., Holycrest Plaza Driveway, Louis Prima Drive, Park Place Drive, Lake Drive, Crestwood Blvd., 9th Avenue, Three Rivers Road, River Highlands Blvd., Harrison Ave., Maple Ridge Ave., North 12th Street, Sunshine Ave., North 6th Street, Riverside Drive, and North 2nd Street and is approximately 2.9 miles in length.

CD&C's Role: CD&C's role was to provide the complete topographic survey and drainage map for this project including all utility coordination. The survey begins at the intersection of US 190 and Holiday Square Frontage Road. From this point, the survey proceeded in a northerly direction along US 190 for approximately 2.9 miles to a point that is 700 feet South of Intersection of US 190 and E. Boston St. in Covington, LA. The width of the survey and DTM extended to the Western Edge of Pavement to Eastern Edge of Pavement along US 190 and tied in with the existing topographic features picked up on the previous survey done under H.011137.5 and H.011152.5 (Interstate 12 Survey). This also included cross sectioning a portion of the Abita River in the project



area. All topographic survey elements were performed in accordance with the latest LADOTD Location and Survey Manual and conformed to the latest standard practices/procedures. All deliverables were in LADOTD required formats. **3D Terrestrial Scanning** was used in conjunction with traditional means and methods to complete this project.

<u>Members Involved:</u> CD&C employees involved in the project included Karla Weston, PE, Ralph Burgess, PLS, Survey Manager; Christopher Ballard, PLS Survey Project Manager; Philip Dupree, Party Chief; Jacob Stoehr, Party Chief; Trent Norris, 3D Scanning Technician; John Ewing, Survey Technician.

Performed in LA: 100%

Firm name	Civil Design & Construction, Inc. Past Per				ast Performance Evaluation Discipline(s)* Survey					
Project name	e I-10: LA 415 to Essen Lane on I-10 and I-12					Firm responsibil	ity (pr	ime or sub?))	Sub
Project number	H.004100		Owner's na	me LADO	TD					
Project location	West and East	Baton Rouge,	LA		Owner's Proj	ject Manager	Nich	olas Olivier		
Owner's address	, phone, email	1201 Capital	Access Rd, I	Baton Rouge, L	A 70802 / 225-3	879-1232 / Nichola	as.oliv	ier@la.gov		
Services commenced by this firm (mm/yy) 01/18 Total consult				Total consultat	nt contract cost ((\$1,000's)			N/A	
Services completed by this firm (mm/yy) 04/19 Cost of con				Cost of consul	tant services pro	ovided by this firm	(\$1,0	00's)	\$296	5
Describe the pro-	jost including the	firm's role on	d mambara	involved (Ui	ablight staff to	be used in this r	rono	vol.)		

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Project Description: This project is located in West Baton Rouge and East Baton Rouge Parishes in the cities of Port Allen and Baton Rouge, LA. A complete Topographic survey including all utilities (ASCE 38-02, QL "B") with depths and all drainage is required, along with Finish floor elevations of all buildings that fall within the survey limits. The survey begins 1,500 feet West of the western most entrance/exit ramps of the LA 415 and I-10 Interchange. From the I-10, I-12 split the survey shall proceed in southerly and easterly directions along the existing main alignment of I-10 for approximately 1.5 miles & I-12 for approximately 1.5 miles to end the route limits.

CD&C's Role: CD&C as a sub-consultant on this project was responsible for topographic surveying the portion of I-10 in West Baton Rouge Parish beginning at the start of the project limits to a point just before the approach of the I-10 Bridge and the limits of the project along LA 415. This work included using 3D Scanning for the bridge at I-10 bridge @ LA 415 as well as scanning every 500' for control verification and incorporation of the Mobile Lidar for the I-10 pavement.



Members Involved: Karla E. Weston, P.E.; Ralph Burgess, PLS, Christopher Ballard, PLS; Phil Dupree, Party Chief; Jacob Stoehr, Party Chief; Trent Norris 3D scanning technician; John Ewing, Survey Tech;

Performed in LA: 100%

Firm name	Ci	Civil Design & Construction, Inc.				Past Perfor	Past Performance Evaluation Discipline(s)* Survey					
Project name	U	S 165 Lighting					Firm responsibility (prime or sub			rime or sub?)	Sub	
Project number]	H.014302.5		Owner's	name	LADOT	D					
Project location	oject location Ouachita Parish, LA Owner's Pro						ect Manager Michael A. Arm		hael A. Armei	ntor, P.E.		
Owner's address, phone, email 1201 Capitol Access Rd., Baton Rouge, LA 70802/225-379-1088/Michael.Armentor@la.gov												
Services commenced by this firm (mm/yy) 09/20				09/20	Total	Total consultant contract cost (\$1,000's)				N/A		
Services completed by this firm (mm/yy) 02/21 Cost				Cost o	st of consultant services provided by this firm (\$1,000's))'s)	\$144			

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

* If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance e evaluation discipline(s) this project is being used to represent.

Project Description: This project performed topographic survey utilizing both traditional means and methods as well as 3D terrestrial scanning in Ouachita Parish. The project began at the intersection of Charleston Drive and US 165 and continued North until the intersection of La 15 and US 165. The survey limits extended 500 feet from the intersection of US 165 and the major side street along LA 15, Ticheli Rd, Dellwood Dr., Richwood Road 1/Martin Luther King Dr., and Richwood Road 2. This project is approximately 4 miles in length.

CD&C's Role: CD&C's role was to provide a limited topographic survey specifically for electrical lighting design. In addition, since most of the project limits are wide, the topographic data for this survey was collected through a combination of conventional ground

survey and Terrestrial LiDAR data collection methods. Specified project limits to include the area between the established apparent rightof-way for the width of the project.

<u>Members Involved:</u> CD&C employees involved in the project included Karla Weston, PE, Ralph Burgess, PLS, Survey Manager; Christopher Ballard, PLS Survey Project Manager; Scott Benton, 3D Scanning Technician, Trent Norris, 3D Scanning Technician, Philip Dupree, Party Chief; Jason Stoehr, Party Chief;

Performed in LA: 100%







Firm name	Vectura Consulting Services, LLC			Past Perfe	Past Performance Evaluation Discipline(s)*Traffic			
Project name	EBR Co	mputerized Tra	affic Signal, PH V	B		Firm responsib	ility (prime or sub?)) sub
Project number	H.00716	0	Owner's name	DOTD				
Project location	East Bate	on Rouge	Owner's Project Manager Desmond Sam, PE					3
Owner's address, phone, email 8100 Airline Highway, Baton Rouge,					15, (225) 231-4	4123, Desmond.	Sam@LA.GOV	
Services commenced by this firm (mm/yy) 01/21 T			Total consultant contract cost (\$1,000's)603.989			603.989		
Services completed by this firm (mm/yy) current Co			Cost of cons	ultant services	provided by thi	s firm (\$1,000's)	93.368	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Vectura is a sub-consultant to provide traffic signal equipment inspection for 24 traffic signals under the following scope:

- Signal Equipment Inspection (2 visits per intersection), Tracking the Sampling and Testing of required Traffic Signal Materials / Attend and Review Fiber Optic Test Results
- Coordinate Review and Approval of all Shop Drawings
- Provide Traffic Signal Support Services / Troubleshoot traffic signal equipment related problems such as foundation / utility conflicts / Field visits (10 months)
- Assist in preparing Change Orders for DOTD / City Parish (2 Separate Forms)
- Attend Monthly Progress Meetings Assist with Monthly Progress Meeting Agenda & Minutes (10)
- Compile As-built Plans from Contractor
- Final Inspection Field Visit to all intersections / Assist with developing punch list / Final Field Visit verification

Personnel Utilized on this project: Brin Ferlito, Laurence Lambert, and Reece Rodrigue (100% performed in Louisiana)

Firm name	Vectura Consulting Ser	Past Performance Evaluation Discipline(s)* Traffic					
Project name	Belle Chasse Bridge & '	ent PPP		Firm responsib	ility (prime or sub?)) sub	
Project number	H.004791	Owner's name	DOTD				
Project location	Belle Chasse, LA			Owner's Pro	ject Manager	Nickolas Olivier, I	ΡE
Owner's address, phone, email 1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1133, Nicholas.olivier@la.gov							
Services commenced by this firm (mm/yy) 04/19 T			Total consultant contract cost (\$1,000's)unknown			unknown	
Services completed by this firm (mm/yy) current C			Cost of consu	ultant services	provided by thi	s firm (\$1,000's)	211.890

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Vectura is providing the traffic engineering services for the Belle Chasse Bridge & Tunnel Replacement Project for improvements along LA 23. Vectura is responsible for the following tasks:

- Preliminary and final traffic studies
- Temporary and final traffic signal plans
- Assist the Prime with Traffic Management Plan (TMP)
- Response to request for information (RFI's)
- As-built plans for the traffic signals

Personnel Utilized on this project: Brin Ferlito, Laurence Lambert, and Reece Rodrigue (100% performed in Louisiana)

Firm name	Vectura Consulting Ser	vices, LLC	Past Performance Evaluation Category(ies)* Traffic				
Project name	I-10 ITS Scott to Lake	Charles		Firm responsib	ility (prime or sub?)	sub	
Project number	H.013256.5	Owner's name	DOTD				
Project location	I-10 (District 07)		Owner's Pro	oject Manager	Roy Esteven, PE		
Owner's address, phor	ne, email 1201 Capitol A	Access Road, Baton	Rouge, LA 70802, 225-37	79-2527, Roy.Es	teven@LA.gov		
Services commenced by this firm 01/21 T			Total consultant contract cost (\$1,000's) unknown				
Services completed by this firm 03/21 Co			Cost of consultant services	s provided by thi	s firm (\$1,000's)	\$20,162	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Vectura performed a Level 2 **Traffic Management Plan** (TMP) for the construction of ITS equipment along I-10. The plan included the following activities:

- safety strategy that included a CAT Scan,
- LOS determination utilizing Citrix data,
- lane closure recommendations based on a queue analysis,
- cost estimate,
- and public information strategies.

Personnel Utilized on this project: Laurence Lambert, Brin Ferlito, Reece Rodrigue, & Kristen Farrington (100% performed in Louisiana)

18. <u>Approach and Methodology:</u>

Provide a description of how the work will be performed and provide the proposed project schedule. Include any additional information or description of unique resources that are planned to be used to produce the deliverables. Include any proprietary technologies, methods or approaches that will be used on this project to improve quality or efficiency. If the proposal is for an IDIQ contract, the consultant should review the scope of services in Attachment A to the advertisement to obtain a general understanding of what a typical task order would entail. Based upon that understanding, the consultant should provide a sample schedule that identifies the major milestones, deliverables, tasks, etc., to demonstrate sufficient understanding of a typical task order. The duration of the task order is not required. This section shall be limited to four pages. If more than four pages are included, all pages after the fourth page will not be evaluated.

If the consultant has information it believes is proprietary, label it accordingly.

Modjeski and Masters has extensive experience in LADOTD roadway lighting design projects and is well versed in the tasks required for contract management, design and construction engineering services. A typical design and construction project schedule are shown in the tables below.

Contract Management Task List
Contract Administration
Task Order Development
Sub-Consultant Coordination
Other Consultant Coordination (if needed)
Meeting Minutes
Monthly Invoicing (using latest format)
Written Monthly Reporting
Budget Monitoring
Contract Time Monitoring

Design Project Task List
Notice To Proceed (NTP)
Issued
Design Kick Off Meeting
Initial Site Visit
30% Design Submission
60% Design Submission
95% Design Submission
98% Design Submission
100% Design Submission
Bid Support
Bid Analysis
Project Closeout

Construction Project Task List
Notice To Proceed (NTP) Issued
Pre-Construction Meeting
Submittal Review / RFI Response
Site Visit #1 – Review Staked Pole Locations
Site Visit #2 – Review Foundations & Trenching
Site Visit #3 – Review Pole & Luminaire
Installation
Site Visit #4 – Review SPC Orientation &
Components
Site Visit #5 – Review Wiring Installation
Site Visit #6 – Final Inspection
Review O&M & As Builts
Project Closeout

Modjeski and Masters will respond to the initial request from the LADOTD Project Manager with a proposal within two weeks. The proposal will consist of a scope of work document as well as proposed hours to complete the tasks in the scope of work. A standard hours spreadsheet consisting of standard tasks has been used successfully on previous proposals and will continue to be used to develop hours. M&M has partnered with two firms to provide any surveying required for the lighting task orders. Lazenby & Associates will perform surveying tasks in northern Louisiana while Civil Design & Construction will provide coverage in southern Louisiana. We also have an additional electrical and structural design support subconsultant Aillet, Fenner, Jolly, and McClelland, Inc. (AFJMc). AFJMc will be utilized for electrical design support and for design of structural supports on bridges. Vectura Consulting Services Inc. will utilize their experienced PTOEs to develop any required transportation management plans for each project. If needed, subconsultants will be consulted during the proposal phase to obtain their requirements and hours and will be included in the overall proposal submitted by M&M.

A design kickoff meeting and initial site visit will be initiated and led by Modjeski and Masters after the NTP has been received from the LADOTD Project Manager. Invitations will be sent to all stakeholders in the project which typically consist of LADOTD Headquarters and District personnel, representatives from the affected Parish/Local Government, utility company representatives, as well as any required subconsultants. M&M will provide a summary of the project during the kickoff meeting as well as solicit any preferences for the lighting design as it pertains to maintenance or equipment selection from the local government representatives and establish the schedule for the project. At the initial site visit, existing field conditions will be investigated and existing equipment affected by the project will be identified. M&M will issue meeting minutes from the kickoff meeting and initial site visit. Throughout the design of the project, Modjeski and Masters will hold additional meetings and site visits as agreed upon in the task order.

Following the initial site visit the design team will acquire available As-Built drawings from the local Parish, City/Town or LADOTD headquarters. If a survey is required in the task order either one of our subconsultants will conduct a full survey detailing existing locations of electrical equipment, utilities, traffic signals and roadway signs along with geographic and roadway features. Preliminary plans will be procured from the Roadway designer when available and used to develop preliminary locations for new equipment, as well as identify existing equipment to be removed or any existing equipment that may require relocation due to new roadway geometry. If required by the task order, M&M will develop a concept for the lighting design detailing the approach for the project, locations where new lighting or provisions for new lighting will be installed, and existing equipment to remain in use. This concept will be provided to the Project Engineer for approval before photometric analysis and plan development begins.

After the design concept is solidified, a preliminary photometric analysis will be developed using Visual lighting software. Preliminary roadway geometry will be used to place calculation zones and proposed light poles in accordance with ANSI/IES RP-8 and the LADOTD Highway Lighting Design Guide. IES files will be used to input proposed luminaire models utilizing a light loss factor (LLF) of 0.7. Depending on roadway geometry, calculations zones are designed to differentiate lighting levels in specific locations such as roadways, interstates, ramps, roundabouts, and intersections. Proposed light pole locations will be designed to conform to average lighting levels and uniformity levels detailed in the LADOTD Highway Lighting Design Guide. Light pole mounting heights will be determined by roadway type, as specified in the Design Guide and light pole locations will be determined so that clearances from roadway lanes or curbs, as specified in the Design Guide, are maintained.

After a system which meets all forementioned requirements is achieved, pole locations will be checked with the FAA to ensure the lighting system meets all FAA requirements. A photometric report will be created which includes plan layout sheets showing proposed pole locations identified via station numbering and calculation zones showing foot-candle lighting levels. A photometric statistics sheet will be included detailing average illuminance levels and uniformity ratios for each calculation zone along with the requirements used during design. Cutsheets for proposed luminaires will also be included in the report. During the remainder of the project, the photometric analysis will be revised as necessary to reflect any changes required as a result of review comments or design changes. Photometric reports are provided at each submission stage beginning at 60% Final Plans.

Lighting plan development typically will not begin until the overall project reaches the final plan stages. This schedule helps to eliminate substantial redesign that would result from major roadway geometry changes during preliminary design phases. M&M will procure final plan DGN files from the roadway designer to use in lighting plan sheet development. Lighting plan sets typically begin with Electrical General Requirements which detail project specifics such as scope of work, coordination, submittals, identification, and testing requirements. Followed by project schedules for conduits, luminaires, and quantities. If applicable, removal sheets will be developed detailing the locations where equipment is to be removed, as well as removal and disposal methods. LADOTD standard pay items will be used to quantify removal quantities.

Lighting layout sheets will be developed by overlaying electrical equipment onto roadway plan layout drawings to detail proposed locations of light poles, junction boxes, conduit runs, duct runs and service points. Riser diagrams will be provided to detail the number of poles connected to each controller and general conduit routing to the light poles. Electrical schematics will be developed to detail wiring connections from the incoming service conductors to the photocontrol device and individual lighting circuits. All applicable LADOTD Roadway Lighting (RL) details will be modified as necessary and added to the plans.

If needed, additional details will be included for items not covered by standard LADOTD RL details. If light poles or provisions for future light poles are to be installed in a concrete median barrier, median barrier pole foundation details showing electrical equipment installed at each pole location will be provided.

Detailed technical specifications will be developed to supplement the standard specifications and will include descriptions for all electrical equipment required on the project along with two manufacturers and technical specification pay item numbers. All Microstation DGNs will be run through CadConform software prior to each submittal and uploaded with properly indexed attributes to the project folder on ProjectWise. Plan sets, completed to the required level as detailed in the task order, will be provided along with ControlCAD reports at each submission stage beginning at 30% Final Plans. Between submittal stages, M&M will continue coordination with other designers to identify and eliminate cross-discipline issues, specifically allowable spacing for pole foundations on median barriers and bridges, interference with sign locations, and interference with existing or new utilities.

In conjunction with plan development, calculations will be performed to determine sizing and ratings of new equipment. Circuit calculations will be used to determine wire sizing based on load, wire type, overcurrent protective device ratings, and current carrying conductor and ambient temperature derating factors, according to the National Electric Code (NEC). Voltage drop calculations using the impedance formula from the NEC will be performed for all circuits, and conductors will be upsized as necessary to limit total voltage drop on any circuit to a maximum of 5%. After wire sizing is complete a conduit fill calculation will be conducted using the LADOTD standard of 25% maximum fill. Short circuit calculations are developed for all circuit breakers to determine the minimum interrupting ratings. Required interrupting ratings will be listed in the equipment descriptions for applicable items. A preliminary arc flash analysis will be performed using SKM in accordance with NFPA 70E. Additional structural calculations will be performed to determine the low mast pole foundation depth as required.

A cost estimate will be prepared for each submission beginning at 60% Final plans. Cost estimates will be organized and separated by LADOTD standard pay items. Using pay item costs from prior LADOTD lighting projects along with historical electrical industry data, item costs will be determined from the most recent and most applicable bid prices available. If information from previous bid prices is not adequate for determining an acceptable estimated cost, further research will be conducted to obtain a reliable estimate.

Prior to all submissions, all materials will be thoroughly checked in accordance with the M&M QC/QA policy and the LADOTD Bridge Design Section policy on QA/QC. Plans, calculations, photometric reports, and cost estimates will be checked for design elements by personnel other than the Designer, also known as the Design Checker. Changes to design and detailing will be backchecked and corrected by the Designer and Detailer respectively and verified by the corresponding checker. In addition to the QC/QA process, the design will be reviewed in the field during a design site visit and a Google Earth overlay will be created to aid in the review process. This process ensures that all submission materials provided by M&M are of high quality and correctness. M&M will provide the Consultant Submittal QA/QC Certification Forms "Appendix D" and "Appendix I" signed by the team leader and the design team.

During the bidding phase M&M will provide support and assistance by responding to contractor questions posted in Falcon. If a plan revision is required, M&M will create revised plans per LADOTD standards, marking all plan changes with a revision bug, and update affected items shown on the photometric report and cost estimate. Once the bids have been opened, M&M will perform a bid analysis comparing all contractor bid prices per pay item to the design cost estimate and inform the LADOTD project manager of any significant discrepancies. After the bid analysis is complete, the design project will be closed out and final invoicing will occur.

At the beginning of the construction process, M&M will lead the lighting portion of the pre-construction kickoff meeting lead by the construction project engineer. During the meeting M&M will answer any initial contractor questions and describe the submittal review process. Meeting minutes will be created and distributed following the meeting.

M&M will review submittals in a timely manner according to the submittal requirements section of the LADOTD Standard Specifications. Submittal Logs have been developed and maintained for previous projects to track when submittals are received, returned, the status of all items and the percentage of items that are approved. M&M will review each submittal for proper formatting, ensuring no highlighting is used and contractor stamps and item numbers are provided on all submittal sheets. Submittal information will be checked against the requirements detailed on the plans and stamped approved or returned for corrections. If a submittal is returned for corrections the reviewer will mark the submittal sheets in red pointing out the incorrect or missing information.

M&M will review and provide responses to contractor RFI's received during construction. If an RFI results in issuing of a change order, M&M will develop revised plans, photometric analysis and reports, calculations, cost estimates and quantities, as applicable per the change. Change order plans will be developed per LADOTD standard change order procedures, marking all revisions with the triangular change order bug.

Throughout construction M&M will conduct field visits to observe the status of construction and meet with the contractors on site. Field visits will typically be scheduled following a major construction milestone or if the contractor is having an issue that requires investigation. Typical major construction milestones are detailed in the Construction Project Task List table shown on the first page of this section. By visiting the site after each major step in the construction process M&M will have the opportunity to correct any issues witnessed before the next construction step begins. A site visit report detailing the construction progress and any observed deficiencies which require contractor action will be provided after each site visit. The contractor will provide M&M information on the utility service, final conductor lengths and routing, for use in the final arc flash analysis. This analysis will allow M&M to provide the contractor the required information for the arc flash label as required by NFPA 70E.

When the contractor notifies M&M that their work is complete M&M will conduct a final acceptance inspection. Final acceptance inspection will include verification that all equipment has been installed correctly and is functioning properly and final dressing has been completed at all locations. A punch list will be created and sent to the project engineer detailing items requiring correction before final acceptance will be granted.

Following the completion of the final acceptance inspection M&M will review the O&M Manual, submitted by the Contractor, verifying that equipment information provided matches electrical equipment installed and the included As-Built drawings properly detail all changes made during construction and field conditions observed during final acceptance inspection. The O&M manual will be turned over to the local entity who will take ownership and provide maintenance of the newly installed roadway lighting system. Construction project closeout occurs after all documents have been uploaded to ProjectWise and final invoicing has occurred.

Workload:

For all contracts where a firm on the team is a prime consultant or sub-consultant and where **a**) the consultant selection was made by DOTD, and **b**) a contract was executed by the consultant and the contracting entity by the date the advertisement for this proposal was posted, list all work meeting the following criteria:

1) one of the team's firms is responsible for the performance of the work;

2) authorization to perform the work has been provided, as provided in the contract between the consultant and the contracting entity;

3) the work has not yet been performed and invoiced; and

4) the work is not currently suspended for an indefinite period of time.

For indefinite delivery/indefinite quantity (IDIQ) contracts, list open Task Orders individually.

List only the portion of the fees attributable to firms on the team.

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**
		S.P. 700-66-0486 / 440000668	Engineering Services for Bridge Preservation Retainer Statewide	
	Bridge	H.009479	West Larose Vertical Lift Bridge Rehabilitation - Supplement No. 2	\$0
	Bridge	JN 3144	Expert witness services in bridge design, construction, repair and forensic analysis	\$273,414
		Retainer Contract 4400002538	Engineering Services for Bridge Preservation Statewide	
	Bridge	H.010882.5	LA 18: 4th Street Bridge Rehabilitation (Supplement No. 2) Construction Services Jefferson Parish	\$0
Modjeski and	Bridge	H.010882.6	4th Street Bridge Rehabilitation Paint (Supplement No. 3) Route LA 18	\$3,000
Masters, Inc.		Retainer Contract 4400005395	Construction Engineering and Inspection with Painting Statewide	
	CE&I/OV	H.011705.6	US 11 Lake Pontchartrain Bridge Rehabilitation - Ph2, Sup1	\$131,229
	CE&I/OV	H.011494.6	US 90 Atchafalaya River Bridge Rehabilitation	\$0
		Retainer Contract 4400004921	Complex Bridge Rating (on-system trusses and other complex bridges) Statewide	
	Bridge	H.009859.5	Load Rating of 14 Complex Bridges	\$257,576
		Retainer Contract 4400005774	Bridge Preservation Statewide	
	Bridge	H.001234.5	Port Allen Canal Bridge	\$64,231
	Other (Roadway Lighting)	H.010601.6	I-10: LA 328 to LA 347 - CRES	\$44,879
	Other (Roadway	H.011137.5	I-12: LA 1077 to US 10 Roadway and Navigation Lighting	\$35,452
-------------------------------	-----------------------------	-----------------------------------	---	-----------
		IDIO Contract Bridge Preservation		
		4400012382	Statewide	
	Bridge	H.011705.6	US 11: Lake Pontchartrain Bridge Rehab Phase 2 (HBI) Sup1	\$0
	Bridge	H.013193.6	US 61: Thompson Creek Bridge - Construction Svcs.	\$804
	6		Rehabilitation and Replacement	
	Bridge	H.003144.6-2	Luling Bridge Cable Stay Replacement Project	\$331,253
	Other (Roadway Lighting)	H.011235	Subconsultant: I-49 South at Verot School Road - Lighting	\$32,989
	Other (Roadway	H.004791	Subconsultant: Belle Chasse B7T Replacement P3 - Electrical and	\$22,870
	Lighting)		Structural	
		IDIQ Contract 4400017263	Bridge Preservation Statewide	
	Bridge	H.010603.6	I-20 Mississippi River Bridge at Vicksburg - Monitoring	\$0
	Other (Roadway Lighting)	H.013866.6	I-12: LA 21 to US 190 Navigation Lighting & Roadway Lighting	\$59,280
	Other (Roadway Lighting)	H.003184.6	I-10: Texas State Line - E. of Coone Gully - CRES	\$53,971
	Bridge	H.011485.6	LA336-1: Bayou Teche Bridge Rehabilitation	\$77,027
Modjeski and Masters, Inc.	Other (Roadway Lighting)	H.012889.5	I-20 Rehabilitation - Roadway Lighting (Pines Road to I-220)	\$103,858
	Bridge	H.000263.5	Chef Menteur Pass Bridge & Approach	\$27,466
	Bridge	H.009859.5	Prien Lake Bridge Structural Rating	\$18,259
	Bridge	H.004420.5	Barataria Preliminary Fender Design	\$2,120
	Bridge	H.014280.5	Bayou Ramos Bridge Girder Study	\$37,975
	Bridge	H.014673.5	I-49 US 165 Debonded PPC Girder Rehab	\$0
	Bridge	H.014587	LA 302: Kerner Ferry Bridge Repairs PH 2 - Constr Support	\$68,714
	Bridge	H.013946.6	Sunshine Bridge Fender Construction - 2021	\$28,038
	Bridge	H.009859.5-2	Load Rating of two existing bridges	\$152,416
	Bridge	H.004420.5	Bayou Barataria Bridge at Jean Lafitte - Supp 1 and 2	\$0
	Bridge	H.014406.6	Houma Navigation Canal Swing Bridge - Electrical Repair CRED	\$24,606
	Bridge	H.014673.5-2	NSFRP Specification Review	\$1,336
	Bridge	H.014465.5	Perry Bridge Rehabilitation - Final Design	\$111,591
	Bridge	H.004647.6 (T.O. 1)	I-20 MS River Bridge at Vicksburg, - Monitoring	\$119,313
	Bridge	H.015028.6	Bayou Barataria Bridge MB Replacement - Phase I	\$152,630
	Bridge	H.001234.6	LA 1 Port Allen Bridge - Geotech Settlement Remediation	\$158,024
	Bridge	H.010882.6	LA18: 4th Street Bridge Rehabilitation Construction Support	\$55,115
	Bridge	H.009479.6	West Larose Lift Bridge Rehabilitation - Const Support	\$44,616
	Bridge	H.015217.5	I-10 Atchafalaya Basin Speed Enforcement PH2	\$2,457
	Bridge	H.011705.6	US 11 Lake Pontchartrain Bridge Rehabilitation - Ph2	\$101,576

	Bridge	H.004100	Subconsultant: LA 415 to Essen Lane on I-10 and I-12 CMAR RCP Plans	\$495,590
	Bridge	H.001234.6	LA 1: Port Allen Canal Bridge Replacement - Phase 1 CRES	\$43,302
	U	IDIQ Contract	Electrical Services	
		4400020063	Statewide	
	Bridge	H.014212.6	I-10 Atchafalaya Bridge Navigational Lights Repl	\$53,247
	Other (Roadway Lighting)	H.014646	I-20: US 165 to Garrett Road Lighting	\$214,017
	Other (Roadway Lighting)	H.014555.5	I-10 at LA109 Interchange Lighting (Toomey)	\$157,679
	Other (Roadway Lighting)	H.015019.5	I-10 at LA3063 Interchange Lighting (Vinton)	\$159,747
Modjeski and	Bridge	Contract 44-20156 H.011965.6	Subconsultant: LA 47 IWGO Bridge Rehab CRES	\$176,252
Wasters, me.		IDIQ Contract 4400014317	Painting Inspection and Environmental Monitoring with Construction Engineering and Inspection - Statewide	
	CEI/OV	H.011487.6	LA 182: Berwick Bay Bridge Rehabilitation	\$2,765,766
		IDIQ Contract 4400024187	Bridge Preservation Statewide	
	Other (Roadway Lighting)	H.015504.5	CCC Decorative Lighting	\$311,772
	Bridge	Contract 44-05673 H.011235.5	I-49 South @ Verot School Road	\$147,439
		IDIQ Contract 4400021593	Bridge Load Rating Services Statewide	
	Bridge	H.009859.5	Bridge Load Rating (Task Order 1)	\$3,592,058

		4400025025	Infrastructure Investing & Jobs Act (IIJA) Off-System			
	Bridge	(L&A, Inc. 22E048.00)	Bridge Program – District 05	\$1,718,495		
			(13 Off-System Bridge Structures) (2% Complete)			
		4400010428	Kansas Lane-Garrett Road Connector & I-20 Improvements,	ents, \$144,765		
	Roadway	H.004774.5	Ouachita Parish			
		(L&A, Inc. 17E051.00)	(Road Design-Urban & Road Design-Controlled) (98%			
			Complete)			
T 1 0	Survey	4400015236	IDIQ Contract for Topographic Surveys – Statewide			
Lazenby &	·	(District 04, 05, 08 & 58)				
Associates, Inc.			No Active Task Orders At This Time			
	Survey	4400017710	IDIQ Contract for Topographic Surveys – Statewide			
		(L&A, Inc. 198056.00)	No Active Task Orders At This Time			
	Survey	4400019714	IDIQ Contract for Hydrographic Surveys - Statewide			
		(L&A, Inc. 208038.00)	8.00) (Districts 04, 05, 08 & 58)			
	Survey		T.O. #2 – Hydrographic Surveying Services – Statewide			
			(Districts 04, 05, 08 & 58)	\$88,838.00		
			(0% Complete)			
		SP 700-99-0436	Retainer Contract for Safe Routes To School Local Road			
		SP 700-99-0444 FAP # SRS-9907(518)	Safety Program Dist. 04, 05, 08 & 58			
	Road	H.006618	High School Drive Sidewalk Improvements, Vernon Parish	\$3,606		
	Road	H.006619	Louisiana Avenue Sidewalk Improvements, Vernon Parish	\$0		
Aillet Fenner		Contract Nos.	Sub-Consultant to Huval & Associates			
Iolly and		4400011225 &	Retainer Contract for Bridge Preservation Engineering Svcs			
McClelland Inc		4400012382	Statewide, IDIQ Contract for Bridge Preservation			
Mechenand, me.	Other	H.010000.5-2	US 171 Bridge Navigational Lighting, Lake Charles, LA	\$9,962		
·		Contract No.	IDIQ Contract for Statewide Facilities and Rest Area			
		4400016477	Engineering Services, Statewide			
	Other	H.972448.1	DOTD Central Repair Shop (Heavy Repair Shop Addition)	\$7,480		
	0.1		Task Order 3	¢15.550		
	Other	HU11446.5	Mound Kest Area, Madison Parish	\$15,559		
	коаа	H.U10010.3 Contract No. 44 17202	Sub-Consultant to Neel Schaller	\$9,606		
	1	+ COMPACE NO. 44-1/293	1-20/LA344 Overbass Kediacement			

Civil Design & Construction, Inc.	Surveying	4400017091/ TO-3	LWI Statewide Modeling R5 – Task Order #3	\$89,482
	Surveying	H.011833.5	St. Mary Street Sidewalks	\$3,236
	Surveying	H.011235.5	I-49 South @ Verot School Rd	\$198,880
	Surveying	H.011235.5	I-20: UPRR Overpass	\$317,022
	Traffic	H.010616	I-20: LA 544 Overpass Replacement	\$124,583
	Traffic	H.005168.2	New Orleans Rail Gateway Jefferson Highway EA	\$15,068
Vectura Consulting Services, LLC	Traffic	H.005168.2	New Orleans Rail Gateway Avondale EA	\$147,225
	CE&I	H.007160	EBR Computerized Traffic Signal, Ph VB	\$47,412
	Traffic	H.004791	Belle Chasse Bridge & Tunnel Replacement PPP	\$14,740
	Traffic	H.012030.5	KCS RR Overpasses HBI	\$28,026
	ITS	H.011504.5	Alexandria ITS Phase 2	\$14,305

* The **only** past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify). If a firm has more than one past performance evaluation discipline for any single project, the firm can use multiple rows to express the remaining unpaid balance per evaluation discipline.

** Round to the nearest dollar. <u>**Do not**</u> round to the nearest thousands. If there are no active contracts with a remaining unpaid balance, place N/A in the Remaining Unpaid Balance column. NOTE: ALL FIRMS MUST BE REPRESENTED IN THIS TABLE. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

ion blank. Any information included in this section will be redacted if not required by the advertisement.

20. Certifications/Licenses:

If the advertisement requires submission of licenses and/or certificates, include them here. Otherwise, leave this section blank.











21. QA/QC Plan:

If the advertisement requires submission of a QA/QC plan, include it here. Otherwise, leave this section blank. If a QA/QC plan is included in this section and was not required by the advertisement, it will be redacted.

CONTRACT NO. 4400026073 and 4400026074 IDIQ CONTRACTS FOR ELECTRICAL SERVICES STATEWIDE

QUALITY CONTROL / QUALITY ASSURANCE PLAN FOR BRIDGE DESIGN

Prepared For:



Prepared By:



May 25, 2023

M&M QUALITY CONTROL / QUALITY ASSURANCE PLAN

GENERAL PROJECT QC/QA POLICY DEFINITIONS **ROLES AND RESPONSIBILITY** QC/QA PROCESS CONTROLS SUB-CONSULTANTS **ELECTRONIC DELIVERABLES IDENTIFYING NON-CONFORMING WORK** SCHEDULES / DELIVERY DATES / BUDGETS ADMINISTRATIVE QUALITY MANGEMENT PROCEDURES **DOCUMENT CONTROL TECHNICAL QUALITY MANAGEMENT PROCEDURES INTERNAL QUALITY AUDITING EXTERNAL AUDITS** QC/QA CERTIFICATION **ATTACHMENTS 1 - 11**

GENERAL

Quality is obtained when design and/or rating calculations, plans, specifications and reports, correspondence, invoices and oral communication, related to a particular project, are delivered to the owner in an accurate, error-free, professional, and timely manner, and in a presentation consistent with the owner's requirements.

Modjeski and Masters Quality Management Plan relates to both the technical and administrative aspects of the full engineering service life cycle of a project, including proposal preparation, staffing, design activities, field activities, internal and external communication, project review, field operations, including inspection and construction observation, and document storage. The plan is applicable to all engineering services offered by the firm including: bridge design, bridge rating, highway design, bridge rehabilitation, bridge inspection, mechanical design, electrical design, instrumentation, geotechnical investigations/design, construction consultation, inspection of construction, research and code development. Checklists and forms are often developed to monitor special needs of the owner and/or a specific engineering activity.

PROJECT

This project is an Indefinite Delivery/Indefinite Quantity (IDIQ) Contract for Electrical Services. The work under this contract may consist of performing topographic survey, and providing plans, specifications and special provisions, construction estimates, construction proposal, photometric report, engineering calculations, shop drawing, submittal, operational and maintenance manual and as-built drawing reviews/approvals, inspections, and construction related engineering services for existing and proposed interstate lighting projects.

QC/QA POLICY

Modjeski and Masters' Team QC/QA policy is to meet or exceed the QC/QA requirements of the following documents, in addition to those described in this document.

- 1. AASHTO Standards The American Association of State Highway Transportation Officials
- 2. AASHTO A Policy on Geometric Design of Highways and Streets –
- 3. ASTM Standards https://www.astm.org/BOOKSTORE/BOS/index.html
- 4. CyberSecurity Training
- 5. DOTD Bridge Design and Evaluation Manual (BDEM)
- 6. DOTD Complete Streets –
- 7. DOTD Construction Contract Administration Manual
- 8. DOTD Consultant Contract Services Manual
- 9. DOTD Hydraulics Manual
- 10. DOTD Location and Survey Manual
- 11. DOTD Addendum "A" to the Location & Survey Manual
- 12. DOTD Louisiana Standard Specifications for Roads and Bridges
- 13. DOTD Materials Sampling Manual
- 14. DOTD Minimum Design Guidelines
- 15. DOTD Off-System Highway Bridge Program Guidelines
- 16. DOTD Roadway Design Procedures and Details Manual
- 17. DOTD Stage 1 Planning/Environmental Manual of Standard Practice
- 18. DOTD Testing Procedures Manual
- 19. DOTD Traffic Engineering Manual
- 20. DOTD Traffic Engineering Process and Report
- 21. DOTD Traffic Signal Manual
- 22. e-CFR Electronic Code of Federal Regulations (all applicable)
- 23. FHWA Bridge Inspector's Reference Manual (BIRM)
- 24. FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) –
- 25. National Electrical Safety Code (NESC)
- 26. NFPA 70 National Electrical Code (NEC)
- 27. NEPA National Environmental Policy Act
- 28. Standard for Electrical Safety in the Workplace (NFPA 70E)
- 29. IES Illumination Standards (e.g. ANSI/IES RP-8, IES DG-19)
- 30. DOTD "A Guide to Constructing, Operating, and Maintaining Highway Lighting Systems"
- 31. DOTD Bridge Design Technical Memorandum

QC/QA requirements for bridge design and preparation of plans and specifications are described in detail in the LADOTD Bridge Design and Evaluation Manual and the LADOTD Bridge Design Section QC/QA, and these policies will be fully adhered to by all team members. This document is consistent with and complements the LADOTD Bridge Design and Evaluation Manual and the LADOTD Bridge Design Section QC/QA.

A Quality Assurance Certification will be provided at the completion of each task using the Department's QC/QA Certification Form (LADOTD BDEM Chapter 3, Appendix D) and Certification Form (LADOTD BDEM Chapter 3, Appendix I). See Attachments 5 and 3, respectively.

DEFINITIONS

<u>Quality Control (QC)</u>: A process of applying systematic procedures to ensure accuracy and consistency during electrical design calculation, electrical inspections, analyses and ratings and their documentations. It includes procedures for checking the accuracy of the calculations and consistency of design drawings, detecting and correcting design omissions and errors before the drawings are finalized, and verifying the design criteria have adequately been applied, and any past changes to the electrical system have been considered. QC is to be applied to all stages of the electrical analysis, design, including plan and document reviews related inspections and instrumentations. QC is to be applied also to verifying the specifications for the electrical service equipment are adequate for the service and operations loads.

<u>Quality Assurance (QA)</u>: A systematic process aimed to ensure that the quality control process was followed during the development of electrical design plans, specifications, inspection and instrumentation reports. It includes procedures of reviewing the work to ensure that quality control is in place and effective in preventing mistakes, and providing consistency in the development of electrical design plans, specifications and reports.

<u>Supervisor or Team Leader</u>: Project Manager or task assignee, responsible for overseeing the project and the personnel assigned to the project.

<u>Design Engineer</u>: Engineer, licensed by the State of Louisiana as a professional engineer or certified as an engineering intern, directly responsible for the development of design calculations, reports, drawings and other related documents with a level of technical skills and experience commensurate with the complexity of the subject structure.

<u>Detailer</u>: Engineer or technician directly responsible for the creation and development of CAD drawings.

<u>Design Checker</u>: Engineer responsible for performing a full technical review of the electrical analyses, design calculations, reports, drawings, specifications and cost estimate with a level of technical skills and experience commensurate with the complexity of the subject structure. If

the information being checked was developed by an engineering intern, the design checker shall be an engineer licenses by the State of Louisiana as a professional engineer.

<u>Detail Checker</u>: Engineer or technician responsible for performing a full review of the CAD drawings ensuring that the drawings are in accordance with the design information and CAD standards.

<u>Reviewer</u>: Engineer, licensed by the State of Louisiana as a professional engineer, responsible for performing QA procedures for assuring that QA procedures have been performed as outlined in this policy and in accordance with LADOTD Bridge Design practices, policies and procedures. The Reviewer must have substantial technical skills and experience in the design of similar electrical systems and be independent of production.

<u>Engineer of Record</u>: The Engineer of Record, licensed by the State of Louisiana as a professional engineer, is responsible for the design shown on the plans and/or other deliverables and whose seal appears on the title sheet of the plans and/or deliverables. He typically ensures that the QC/QA certifications are signed by all parties, all design calculations and reports are included, and the names of all personnel are correctly shown.

<u>Independent Technical Reviewer</u>: Engineer who completes an independent review of the design calculations and is part of the consultant team. Independent Technical Reviewer must have experience reviewing tasks that meet or exceed those of the designer and or checker.

<u>Peer Review</u>: Engineering group with no prior involvement in the project, performing an independent check of the design calculations and results. Peer reviewers may not be employed by the same consultant.

RESPONSIBILITY AND AUTHORITY

Modjeski and Masters (M&M), as the Prime Consultant, will be fully responsible for QC/QA of their work as well as the work of all Sub-consultants. All project submittals will include a QC/QA certification that the submittals meet the requirements of the QC/QA plan document. The LADOTD shall not perform QC/QA of the consultant's work and the responsibilities of the LADOTD for consultant projects shall be limited to those listed in the LADOTD Bridge Design and Evaluation Manual.

The Principal-In-Charge (PIC) and Project Manager (PM) assigned to the Retainer will be responsible to ensure that the requirements of this QC/QA Plan are met by all members of the M&M Team. M&M will be assisted as needed by four (4) Sub-consultants for this work:

Sub-Consultant	Services Provided
Lazenby and Associates, Inc.	Topographic Surveying Services
Civil Design & Construction, Inc.	
Vectura Consulting Services, LLC	Traffic Engineering
	Transportation Management Plans
Aillet, Fenner, Jolly, & McClelland, Inc.	Structural Design for Roadway Lighting Support
	Structures
	Electrical Engineering Support

Principal-In-Charge (PIC) in consultation with the Project Manager (PM) will assign a Supervisor/Team Leader, Design Engineer, Detailer, Design Checker, Detail Checker and Reviewer to each task order, with a level of technical skills and experience commensurate with the complexity of the structures included.

A specific organizational structure will be developed for each task order outlining responsibilities for every role of the project. See Attachment 1 for the overall organization structure.

Sub-consultants are required to follow the same QC/QA Plan. Modjeski and Masters will assist the Sub-consultants with their QC/QA activities by:

- Meeting with each Sub-consultant to go over this QC/QA Plan and its implementation
- Conducting technical meetings
- Providing and coordinating technical assistance
- Providing training materials
- Developing checklists and standard forms specific to each task order
- Performing quality audits

QC/QA PROCESS CONTROLS

a. Project Initiation

During the initial identification and proposal phase of each task order the Principal-in-Charge (PIC) and Project Manager (PM) determine the personnel that will be assigned to the project and their responsibilities. When possible, these individuals will participate in the initial conceptualization of the project and manpower estimating, as these initial activities identify the path to project completion. Design tasks shall be assigned to engineers qualified by virtue of education and/or experience commensurate with the complexity of the subject project.

At the immediate initiation of the project, the PM will prepare a project schedule indicating the major milestone dates and deliverable dates on the project and, if required, submit it to the LADOTD for approval.

The staff assigned to the project will include an appropriate Supervisor/Team Leader, Design Engineer, Detailer, Design Checker, Detail Checker and Reviewer. Additional senior staff with experience related to the project will be assigned where appropriate. As additional staff joins the project, they will have a designated mentor among the senior staff to act as the first source for advice and counsel on technical and administrative matters. The technical scope of work contained in the Agreement will be made available to all individuals working on the project.

b. Project Design Criteria

Design criteria specific for each project will be developed by the PM prior to initiating the design process and will be submitted to the LADOTD for review and approval. Any design assumptions made or design exceptions obtained will be listed in the design criteria and referenced in the design calculations and drawings as appropriate. A design criteria checklist as developed by the LADOTD is included in Attachment 7.

c. Development of Designs and Plan Details

During the design phase, the design engineer will follow the design criteria established for the project. Electrical/Photometric analyses and preliminary plans will be developed first and approved by the PM prior to proceeding with the design of structural components. The design calculations will be organized and maintained in a standard calculation book format. The calculation book checklist as developed by the LADOTD is included in Attachment 8. The design engineer will communicate and coordinate with the detailer and supervise the detailing work to ensure that the drawings adequately and accurately present the design information.

d. Quality Control of Designs and Plan Details

All work will be checked in order to minimize errors. If the design engineer is an engineer intern, the design checker will be a professional engineer registered in the State of Louisiana. The design checker will verify the accuracy of the designer's calculations, pay items, quantities, special provisions including Non-Standard Items, and cost estimate and will also ensure that the drawings adequately and accurately present the design information. The designer's calculations are considered the calculations of record and will be updated to correct any errors or omissions discovered by the design checker.

The detail checker will ensure that the drawings are in accordance with the design information and CAD standards. In addition, all dimensions and quantity calculations will be verified.

After the completion of the design and detail check (which shall be completed no later than the 95% Final Plans stage), the designer will prepare and provide to the Reviewer a QA information package which includes the following:

- QA information package check list (see Attachment 9)
- Calculation Book(s)
- Plans
- Special provisions including Non-Standard Items
- Cost Estimate
- Any other relevant documents (checklists, review comments, etc.)

e. Quality Assurance of Designs and Plan Details by the Reviewer

The Reviewer for M&M will perform a cursory review of all documents in the QA information package focusing on the following items:

- Constructability of the Plan Details
- Areas of Critical Importance
- Areas where mistakes are typically found
- Areas that are new to the design practice

After all issues discovered during the QA process are rectified, the design calculations, plan details, special provisions and cost estimate shall be considered as final and the QC/QA certification (see Attachment 5) shall be signed by the designer, design checker, detailer, detail checker, and reviewer.

f. Peer Review

When requested by the LADOTD Bridge Design Engineer Administrator, M&M will conduct peer reviews by team members or engage the services of a Sub-consultant licensed by the State of Louisiana as a professional engineer to perform a peer review. The Sub-consultant chosen for the peer review will have no prior involvement in the project but will have substantial experience in the design of similar structures. All peer review comments will be submitted to the LADOTD and the design team for evaluation and resolution. All resolutions agreed upon by the designer, peer reviewer and the LADOTD will be incorporated into the final design. A Peer Review Resolution agreement (see Attachment 10) will be signed by the peer reviewer, the PM and an LADOTD representative.

g. Sealing of Design Calculation Book and Plans by the Engineer of Record (EOR)

In addition to the previously defined requirements for the Engineer of Record, the Engineer of Record shall be responsible for the following tasks:

- Ensure the QC/QA certification is signed by all responsible parties.
- Ensure the geotechnical design information shown on the plans is co-stamped by a

Geotechnical Engineer and the hydraulic information shown on bridge plans is costamped by a Hydraulic Engineer. When more than one engineering stamp is required on a sheet, the responsibilities for each engineering stamp shall be clearly defined.

- Assemble design calculations from all designers including the final geotechnical analysis report and the hydraulic report from the geotechnical engineer and the hydraulic engineer, finalize the calculation book, and seal the cover sheet of the calculation book.
- Ensure the names of the designer, design checker, detailer, detail checker, and reviewer are correctly shown on the title block of each plan sheet.
- Stamp all plan sheets or designate a designer, design checker, or reviewer who shall be licensed by the State of Louisiana as a professional engineer to stamp the sheets developed under their supervision.
- The EOR must stamp the general notes sheets.
- Ensure all special provisions are accurately shown on the construction proposal. The special provisions are typically stamped by the Specification Engineer as part of the construction proposal; however, if the Specification Engineer is not qualified or not willing to stamp the special provisions, the EOR will stamp these provisions.
- Archiving all bridge design files including calculation books, plans, special provisions, cost estimate and other pertinent documents in accordance with the LADOTD Bridge Design Section records retention policy.

i. QC/QA for Design Activities after Final Plans are Signed by the Chief Engineer

The same QC/QA process above shall be applied to all design activities such as plan revisions, change orders, etc. occurring after the final plans are signed by the Chief Engineer.

j. Archiving Electrical Design Files

The PM will deliver all electrical design files to the LADOTD Bridge Task Manger no later than 30 calendar days after the stamped final plans are delivered. Any revisions made to these documents due to plan revisions and change orders will be delivered with the signed plan revisions or change order sheets. The final calculation book and other final design documents for all projects including in-house and consultant projects will be uploaded to the archiving location designated in the record retention policy within 30 calendar days after the stamped final plans are delivered.

k. Project Monitoring and Coordination

The PM will monitor the state of the project's progress, any unique technical issues that need to be resolved, and anticipated needs for increased or decreased staffing and report to the PIC.

The PM will be responsible to see that M&M internal minutes are kept at meetings with the LADOTD, Sub-consultants, and in-house project meetings. All the technical information in the

minutes will be made available to all individuals working on the project. Where action is required, an individual will be identified as having been assigned that responsibility and a place shall be provided for the PM to indicate when that action has been completed.

All telephone contacts with the LADOTD, fellow design team members or Sub-consultants which lead to decisions or assignments will be recorded on a telephone log sheet. The telephone log sheet will be circulated to all individuals involved, and will become part of the correspondence file for the project (See Attachment 2 for an example telephone log). The log's project title and task order number will be edited as required for each project.

The PM will be responsible for establishing and maintaining a task list, which will identify the anticipated tasks, the team leaders, design engineers, detailers, design checkers, detail checkers and reviewers.

The PIC and the PM are responsible for being current with the project as it develops and for resolving all comments made by the LADOTD and document the resolution.

The PM, or his/her discipline reviewer designee, is responsible for overall quality assurance of the project deliverables.

All calculations and reports, which become superseded during the course of the project, will be clearly identified as being superseded and will be filed separately from the current work. Superseded work will not be discarded until the end of the project.

State-of-the-art computer hardware and software will be used to monitor and track the project development process. The software packages to be used are Microsoft Excel and Deltek Vision.

I. Communication Plan

All project team communication will flow through the PM or his/her team leader designee. This includes all communication with the LADOTD and Sub-consultants.

The methods of communication to be used, listed in order of decreasing preference, include: face to face (not feasible in many cases), telephone, e-mail, express mail and regular mail.

m. Electrical Related Inspections and Instrumentations

All field activities will be conducted by certified inspectors and will be supervised by a Registered Professional Engineer. The PM will identify one member of a field party to serve as a Safety Officer. It will be the Safety Officer's responsibility to:

- Identify local emergency services prior to the start of field work
- Review inspection and field safety requirements of the client, OSHA and Modjeski and Masters, Inc. with the field crew prior to the start of work,

- Verify that safety equipment is being properly used, and
- Supervise any accident reporting that may be necessary.

All field activities will be summarized in a report. Depending on the type of project, this report may be a memorandum to the files or a formal report to be submitted to a client. All reports will contain sufficient descriptions, measurements, sketches, or photographs to document conditions found and will undergo QC/QA reviews.

n. Construction Support Phase

All design activities in the construction support phase will also adhere to the requirements and policies described in this document. These activities include but are not limited to the following:

- Providing responses to Requests for Information (RFI)
- Reviewing Shop Drawings/Submittals, including Operation and Maintenance Manuals
- Tracking progress of As-Built drawings
- Perform periodic field inspections
- Development of Plan Changes/Change Orders

M&M will ensure timely responses to RFIs submitted by the Contractor and/or the LADOTD. M&M will also ensure that the design engineers and/or design checkers from the design phase will participate in the RFI response process.

M&M will ensure that the design engineers and/or design checkers from the design phase will participate in the shop drawing/submittal review process. Shop drawings and submittals will be reviewed to ensure compliance with design details and project requirements included in the plan drawings. M&M will also review the submitted shop drawings for compliance with the requirements set forth in the Louisiana Standard Specifications for Roads and Bridges. All comments will be returned to the Contractor for agreement, resolution and drawing revisions. Stamps to be applied to shop drawings during the intermediate and final review will adhere to the policies set forth in Bridge Design Technical Memorandum No. 75 and the Louisiana Standard Specifications for Roads and Bridges.

M&M will also distribute the final shop drawings and submittals according to the distribution list provided by the LADOTD Project Manager or LADOTD Bridge Task Manager. Shop drawing distribution letters as provided in BDTM.75 will be used for each distribution.

M&M will track the progress of the As-Builts during construction and will review the As-Builts to determine if they are complete and accurate. M&M will ensure that a final copy of the Electrical Record Drawings is included by the Contractor in the Operation and Maintenance Manuals.

Plan changes will adhere to all requirements and policies set forth in this document including the CAD Standards and Electronic Deliverables Policy.

SUB-CONSULTANTS

The Sub-consultants for a given task order and their general responsibilities under the contract are to be listed in Attachment 4 of this document.

Upon receipt of Notice-To-Proceed from the LADOTD, the PM will provide and confirm with each Sub-consultant, the scope of services and upper budget limit for the work. Invoicing procedures will be provided to expedite the billing process.

Each Sub-consultant will be asked to provide monthly status reports, which will include a summary of the progress to-date, and which will identify any issues encountered with its work during the period, any decisions or information from M&M that is delaying completion of its work, and the anticipated work for the next reporting period. Each Sub-consultant will be asked to provide interim results of their work, so that M&M can assess the information completed to-date, and either confirm that the task is being completed as scoped, or make the necessary adjustments to ensure that the work is being performed as scoped. All results provided by the Sub-consultants will be reviewed by the appropriate M&M staff prior to the information being used for preparation of deliverables to the LADOTD.

Internal team meetings will be held on a routine basis, and may or may not include all Team members, depending on the major tasks underway at that point in the schedule. Meeting minutes will be recorded and distributed by M&M to the Sub-consultants as deemed appropriate.

Information provided by the LADOTD will be assessed by M&M, and forwarded to the Subconsultant as necessary for information and action.

ELECTRONIC DELIVERABLES

M&M will produce all electronic deliverables in conformance with the pre-approved list of software posted on the DOTD Bridge Design Section website and the DOTD Software and Deliverables Standards for Electronic Plans document (see Attachment 11). In addition, M&M will ensure that all Sub-consultants submit their electronic deliverables in conformance with the same standards.

M&M and all Sub-consultants will upload or check-in electronic deliverables directly into the LADOTD ProjectWise repository at each plan delivery milestone. In addition, M&M will perform the following operations at each milestone:

• Upload or check in CAD plan deliverables to the discipline "Plans" folder

- Apply and maintain indexing attributes to CAD plans (and other deliverables as needed)
- Publish to PDF format plan submittals in ProjectWise using automated publishing tools
- Digitally sign PDF format plan submittals in ProjectWise according to LADOTD standards and procedures. Signatures will be applied in the appropriate signature blocks with electronic seals and Title Sheets.
- Provide ControlCAD reports in ProjectWise and utilize these reports to correct indexing attributes and CAD standards of all electronic .DGN files.

M&M will apply patches to CAD Standard Resources and install updates to software as needed. In addition, M&M will install major updates to software versions and CAD Standard Resources in a timely manner or as directed by the LADOTD.

IDENTIFYING NON-CONFORMING WORK

The Project Manager or his/her designee will monitor day-to-day activities of the Design Team to confirm that the work is being performed as described in the scope of services and maintains the quality level expectations for the project, and it is within the established budget constraints. Discipline team leaders and reviewers will conduct quality control reviews at regularly scheduled intervals between and up to major milestone submissions throughout the course of the project. The schedule for these reviews will be established at the beginning of each major phase of the project by the Project Manager and the quality assurance reviewers based upon the agreed upon task schedule. Regular staff meetings will be held to discuss interim results, and to quickly identify work that may be considered non-conforming to the requirements of the project. Meeting minutes will indicate the extent of the non-conforming work, and action taken to correct the work and prevent re-occurrence for the remainder of the project. The impact of any non-conforming work on external parties will be assessed, and affected parties will be notified as required. Corrected information will be provided to the affected parties as soon as practical. The results of non-conforming work will be sent to a "dead" file, and disposed of at the completion of the project. With day-to-day monitoring of activities, and regular staff meetings, the potential for, and associated costs of, non-conforming work will be minimized.

M&M's Sub-consultants will also be asked to monitor their activities for non-conforming work in a similar fashion, either identified internally, or through reviews of their work by M&M.

SCHEDULES / DELIVERY DATES / BUDGETS

The Project Manager will establish accounting phase codes for the project that follow the task designations included in the technical and price proposal. The associated budget for each phase based on negotiated man-hours will also be developed. Task codes will be established

for each subtask within a particular designated proposal task. This information is then provided to the Accounting Department in order to track project man-hours used and job costs.

In addition, when deemed expedient by the Project Manager, project specific progress spreadsheets will be used to monitor efforts, and provide a second weekly means to track progress and project percent complete.

Quality assurance reviews will be conducted at regular intervals within each major phase of the project. Milestone submission dates will be used to develop the quality assurance review schedule to provide quality deliverables, and to ensure that sufficient time is included to perform the review, as well as permit the design team to respond and/or correct non-conforming work without compromising the overall submission schedule.

M&M will provide a project schedule to the LADOTD for record that identifies key deliverables and their milestone dates. This schedule will conform to the milestone dates established by the LADOTD at the project's start unless a revised schedule has been agreed upon by the LADOTD subsequent to the project start date. The schedule will be updated on a monthly basis to confirm that the project is proceeding as originally anticipated.

In the event a task order falls behind the projected schedule, an assessment will be made by the Project Manager or his designee on how to correct the issue. Potential corrective actions will include more staff added to the task, re-assignment of more specialized staff to the task, or perhaps a re-assessment of the schedule to determine if adjustments can be made to accommodate the delay in the task under concern, without impacting future project milestones.

ADMINISTRATIVE QUALITY MANGEMENT PROCEDURES

The PIC and PM are responsible for the preparation of the technical and price proposals for the project, including both the original agreement and subsequent supplements/work orders. The PIC will review all proposals prior to submission to the LADOTD. A copy of the executed agreement(s) is kept on file in the Accounting Department. This file is readily available to management staff.

Estimation of percent completion and invoice costs will be performed by the PM, with assistance from the discipline team leaders. Using project specific progress tracking spreadsheets, and input from senior staff on completion of work for the various tasks performed for the period under consideration, a project percent complete will be established. This information will be compared against the projected percent compete per the design schedule at that time to determine if the project is on or ahead of schedule, or what corrective actions are necessary to get back on schedule.

DOCUMENT CONTROL

a. Input

Project specific files are to be established at the beginning of the project. Information is to be filed using the project number as the primary element followed by numerals set up for the project (for example 3000-1 with 3000 being the job number and the numeral 1 being general correspondence and so on) or in accordance with a file numbering system established by the LADOTD.

Information received by the PM is assessed and a copy forwarded to appropriate staff primarily responsible for the task. All senior staff will be provided with the file copy for review and information purposes, in order to keep them aware of associated tasks being performed in conjunction with their work. Electronic documents, including e-mail, are kept on our secure server that all staff can access using the same file naming convention.

All staff will be provided access to current design codes, and addendums which are provided by the Firm when available. Staff will be notified of project specific design criteria and standards, either at staff meetings, or by receipt of memorandum, or by e-mail.

Comments received from the LADOTD or Sub-consultants are reviewed by the PM or his designee, and the appropriate staff made aware of the comments for their response. If a date of response is not included with the comment document, the Project Manager will establish a date, and follow-up with the appropriate staff to make certain that resolution is occurring in a timely manner. The PM will provide M&M's response to the LADOTD and await a follow-up reply.

b. Output

The PM or his designee will confirm that the design staff have been supplied and are using the most current project information, project specific design criteria, design specifications and standards during the course of the project. Staff will be notified either through face-to-face meetings, inter-office mail or electronic mail of updates to information/specifications/criteria that will impact their work.

Quality assurance reviews will be conducted to confirm that the assigned project staff is using the correct project information, design criteria, specifications and standards for completion of their work.

TECHNICAL QUALITY MANAGEMENT PROCEDURES

Specific design procedures for this QC/QA Plan include the following:

- The PM or his team leader designee will identify the design criteria established for each task
 order, and ensure that the staff is kept updated on any changes or additions to the criteria
 as the project progresses. Project specific exceptions to standard design specifications
 discussed with the LADOTD will be documented. Reports and technical documents will be
 reviewed by the PM or his team leader designee to confirm that the results and/or
 recommendations utilize the current criteria. Reports and documents will be provided to
 the quality assurance reviewer to assess the results and recommendations of the design
 team.
- Continuing training is part of M&M's culture. M&M Design Engineers are constantly being trained by the more senior staff and by attending relevant courses and conferences, and these efforts shall continue. The training materials and references collected are readily available in the office, and will also be made available to the Sub-consultants.
- Design Engineers shall perform self-checking as the work progresses using in-house developed self-checking guidelines. They shall also perform cross checking as needed as the work progresses, when any team member is unsure of the results.
- Design engineers shall provide calculations for formal checking that include assumptions, design criteria and all reference material used to develop the calculations. Calculations shall be in a neat and orderly format. Individual sheet (or sheets) considered as trial designs, or no longer valid, shall be marked to prevent checking of preliminary or superseded work. All formal design calculation sheets will be checked, initialed and dated by the originator and the checker. The quality assurance reviewer will confirm that the established checking procedures and Quality Review Color Codes contained in Attachment 6 have been followed, and that the calculations are complete.
- Any and all LADOTD approved computer programs to be used for a project will have been checked independently by M&M as part of the approval process. Program input is checked to confirm that the appropriate geometry, section properties and material properties have been used, and the output assessed to make certain that the results are trending in the right direction, based on both the current project, as well as past experience, prior to the results being used to complete the design. It is of utmost importance that the designer understands when computer results are reasonable. Checks are made using hand calculations or different computer programs used in parallel. Two engineers working in parallel may be needed when using software that requires a high degree of accuracy and detail. Spreadsheets are checked to confirm that the appropriate design criteria and specifications are being utilized, and that the results of the analysis programs are being transferred correctly and appropriate load factors are being applied.
- Drawings for the design will be developed by qualified technicians and reviewed and checked by engineers or qualified technicians and will meet the requirements of the LADOTD. Drawings will be initialed and/or signed, as applicable, by the originator and the checker. Drawings marked up with changes and/or corrections resulting from the review

process are returned to the designer for action. Upon completion of the revisions, the team leader will compare the revised drawings with the marked up review drawings to ensure that all comments have been incorporated into the plans. The completed drawings and mark up's will be provided to the quality assurance reviewer to confirm that the necessary corrections have been completed, the Quality Review Color Codes contained in Attachment 6 have been followed, as well as assess the drawings for overall completeness and clarity.

- Special provisions for non-standard items will be reviewed by the PM or discipline lead for clarity, as well as consistency with the contract plans. Conformance to the LADOTD's standard specifications (content and format) will also be checked. The quality assurance reviewer will assess the special provisions for completeness and compatibility with contract plans.
- Construction cost estimates will be developed based on estimated quantities for the various
 pay items associated with the design and in accordance with the LADOTD's requirements.
 An in-house cost estimate will be determined based on M&M plan details. In addition,
 industry experts (suppliers, fabricators and contractors) may be consulted in development
 of the estimates. Current bid price (averages) and similar recently bid and/or completed
 projects will also be reviewed to confirm that the estimate is reasonable. The PM will
 review the information used to create the cost estimate. The completed cost estimate will
 be provided to the quality assurance reviewer to assess if the costs appear reasonable for
 the work included in the contract plans and specifications.
- The PM or a qualified reviewer designee will review all calculations, drawings and specifications to determine that work is being completed in accordance with applicable specifications and the requirements of the LADOTD. This is not to be a number-by-number, line-by-line review, but is to be sufficiently in-depth to identify significant shortcomings in content or presentation, and to determine that the intent of design specifications is being met. This review also includes checking the constructability of the project.
- Completed LADOTD quality assurance certification forms will be submitted for the project. A copy of the certification forms are attached (see Attachments 3 and 5.)
- The PM will be responsible to determine that the project is successfully and completely finalized. This will include:
 - o the filing and indexing of design calculations and record copies of drawings,
 - confirmation that the correspondence file and accounting files are in their proper locations,
 - confirmation of the delivery of all required drawings, calculations, reports, correspondence and other documentation to the LADOTD., and
 - o confirmation that quality assurance records and certification forms have been filed.
- Records will include the following items:
 - non-conformance and corrective action reports

- o drawings, procedures and the QA/QC plan
- design input, output and verification
- o certification records
- All files, storage boxes or other containers shall be clearly identified with the proper name of the project, the colloquial name, if applicable, the year completed, the LADOTD's project identification number and M&M's project number. These will be transmitted to the LADOTD if required. The accounting office will be notified that the project is complete and that final invoicing may take place.

INTERNAL QUALITY AUDITING

An internal QA audit schedule for each project will be developed. The schedule will be a function of the length of the Task order; shorter task orders will require more frequent audits versus longer projects. Individuals named by the PIC will be performing quality assurance reviews, and will be primarily responsible for confirming that the QC/QA plan is being implemented by the PM on the project. The results of these quality assurance audits will be provided to the PM. If any deficiencies are noted, the PM will be responsible for taking corrective action, follow-up and providing documentation of the actions taken.

Frequency of review meetings for the following items is anticipated to be as follows:

- Schedules monthly
- Scope monthly
- Budget monthly
- Team organization adjustments bi-weekly (max), or as needed by the project schedule
- Approvals as needed
- Coordination at the discretion of the Design Team

During the course of the project, periodic reviews of the policies and procedures in QC/QA Plan will be reviewed by the PM and the quality assurance reviewers to ensure usability and compatibility with interfacing procedures.

Assigned project staff and new staff as they are assigned to the project will be made aware of the specific QA/QC controls established for the project by the PM or his designee. Senior staff will mentor new staff on policies and procedures used to ensure a quality deliverable. The quality assurance reviewers will also monitor the staff to confirm that the quality management plan has been properly communicated to the assigned staff, and that modifications to the plan are communicated to all staff throughout the course of the project.

EXTERNAL AUDITS

M&M will accommodate and facilitate LADOTD audits at various times throughout the duration of the project if required.

QC/QA CERTIFICATION

At the end of each project the Department's QC/QA Certification Form (LADOTD BDEM Chapter 3, Appendix D) will be completed and submitted along with the Certification Form (LADOTD BDEM Chapter 3, Appendix I). See Attachments 5 and 3 respectively.

ATTACHMENT 1 - QUALITY CONTROL / QUALITY ASSURANCE PLAN ORGANIZATION CHART



ATTACHMENT 2 – <u>TELEPHONE LOG</u>



TELEPHONE LOG

			URGENT		OUTGOING CALL			
DATE:	TIME:		INCOMING CALL		RETURNING YOUR CALL			
YOUR NAME:	YOUR NAME:							
CALLER/PERSON CALLED:								
PHONE NO:								
PN: XXXX								
PROJECT: XXXXX Bridge Task Order #: XXXXXXX								
				NIS T	Ο RF ΤΔΚΕΝ			
SUBJECT DI	SCUSSED		ACTIC	ONS T	O BE TAKEN			
SUBJECT DI	SCUSSED		ACTIC	ONS T	O BE TAKEN			
SUBJECT DI	SCUSSED		ACTIC	ONS T	O BE TAKEN			
SUBJECT DI	SCUSSED		ACTIC	ONS T	O BE TAKEN			
SUBJECT DI	SCUSSED		ACTIC	ONS T	O BE TAKEN			
SUBJECT DI	SCUSSED		ACTIC	ONS T	O BE TAKEN			

ATTACHMENT 3 – <u>CERTIFICATION FORM</u>

Appendix I

Consultant Submittal QC/QA Certification

Project No.:

Project Name:

I, the undersigned Supervisor or Team Leader for this project, certify that the information included in this submittal has been prepared in accordance with the QC/QA plan documents and LADOTD Bridge Design Section policy on QC/QA and the information presented is accurate and meets the requirements of this submittal. All CAD drawings meet LADOTD CAD standards.

Submittal Description

Supervisor or Team Leader Name

Signature

Date

ATTACHMENT 4 – LIST OF SUB-CONSULTANTS AND FUNCTION

Sub-Consultant	Services Provided
Lazenby and Associates, Inc.	Topographic Surveying Services
Civil Design & Construction, Inc.	
Vectura Consulting Services, LLC	Traffic Engineering
	Transportation Management Plans
Aillet, Fenner, Jolly, & McClelland, Inc.	Structural Design for Roadway Lighting Support
	Structures
	Electrical Engineering Support

ATTACHMENT 5 – <u>QC-QA CERTIFICATION</u>

Appendix D QC/QA Certification

Project No.: Project Name:

We, the undersigned designers, raters, detailers, checkers and reviewers for this project, have reviewed and accepted the calculations, plans, quantities, special provisions, and cost estimate prepared for the project. We certify that the work for which we are responsible has been completed in accordance with the LADOTD Bridge Design Section policy on QC/QA.

Team Members	Name	PE Registration No.	Responsible Plan Sheets	Responsible Special Provisions	Construction Cost Estimate	Signature
Designers						
Design						
Checkers						
Detailers						
Detail						
Checkers						
Reviewers						
Peer Reviewer						
Geotechnical						
Engineer						
Hydraulic						
Engineer						
EOR						

ATTACHMENT 6 – QUALITY REVIEW COLOR CODE

The originator will generate printed or copied reports, calculations, drawings, or other similar originals.

The checker will:

Highlight in YELLOW everything that is correct.

incorrect

Strike in RED everything that is incollect or needs to be deleted.

Write all additions and corrections in GREEN.

The originator will then:

Back-check in **BLUE**.

All comments that do not require edits are to be made in BLACK ink or pencil.

ATTACHMENT 7 – EXAMPLE OF DESIGN CRITERIA CHECKLIST

(This is an illustrative example as provided by the LADOTD. Specific checklists and forms will be developed for each bridge type and task order)

Design criteria for each project shall include, but not limited to, the following sections:

____ Cover sheet

The following information must be included on the cover sheet:

- LADOTD project number
- Project name
- Revision date
- The Supervisor or Team Leader's signature and date

Governing Design and Construction Specifications and Other References

A list of governing design and construction specifications and other references used for the project shall be included in this section. The edition number, interim revisions, and/or publication date must be specified for each reference.

____ Design Assumptions and Design Exceptions

All design assumptions and design exceptions received must be included in this section along with supporting documents.

General Information

The general information as listed below should be included in this section:

- Bridge information (no. of bridges, bridge clear width, length, no. of lanes, lane width, shoulder width, etc.)
- Road information (roadway classifications, design speed, traffic data, etc.)
- Vertical datum
- Vertical and horizontal clearances
- Other relevant information

Hydraulic Design Criteria

All hydraulic design criteria (design year, design water elevations, scour depth and scour elevation, etc.) shall be included in this section and the information shall be provided by the Hydraulic Engineer.

Design Factors

The ductility factor η_D , redundancy factor η_R , and operational importance factor η_I shall be listed in this section.
Design Loads

All design loads (dead load, live load, wind load, thermal loads, vessel collision loads, seismic load, wave loads, etc.) used for the project shall be included in this section.

Limit States

All applicable limit states for this project shall be listed in this section.

____ Bridge Barrier

The design criteria, types, and test levels for bridge barriers shall be listed in this section. Standard plans and special details should be listed if they are utilized.

___ Guardrail

The design criteria, types, and test levels for guardrails shall be listed in this section. Standard plans and special details should be listed if they are utilized.

___ Approach Slab

Design criteria for approach slab shall be included in this section. Standard plans and special details should be listed if they are utilized.

____ Deck and Deck Drainage

All design criteria for deck and deck drainage design shall be included in this section. Standard plans and special details should be listed if they are utilized.

___ Bearing

All bearing types and design criteria for each bearing type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Joint

All joint types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

____ Superstructure

All superstructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

Substructure

All substructure types and design criteria for each type shall be included in this section. Standard plans and special details should be listed if they are utilized.

____ Piles and Drilled Shafts

All pile types, sizes, and structural design criteria shall be included in this section. Standard plans and special details should be listed if they are utilized.

Geotechnical Design

All geotechnical design criteria shall be included in this section and the information shall be provided by the Geotechnical Engineer. Standard plans and special details should be listed if they are utilized.

____ Mechanical Design

All mechanical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.

Electrical/Lighting Design

All electrical design criteria shall be included in this section if applicable. Standard plans and special details should be listed if they are utilized.

____ As-Designed Bridge Rating Criteria

All as-designed bridge rating criteria shall be included in this section.

Software

All software used for design and check shall be included in this section.

ATTACHMENT 8 – FINAL CALCULATION BOOK CHECKLIST

The final calculation book for each project shall include, but not limited to, the following sections:

- Cover Sheet
- The following information must be included on the cover sheet:
- LADOTD project number
- Project name
- The title of "Final Calculation Book"
- The EOR's seal with signature and date
- ____ Final Calculation Book Check List
- ____ QC/QA Certifications
- ____ Peer Review Resolution Agreement (if peer review is performed)
- ____ Design Criteria
- Photometric Analysis Report
- ____ Final Hydraulic Analysis Report from Hydraulic Engineer
- ____ Final Geotechnical Analysis Report from Geotechnical Engineer
- ____ Electrical Design Calculations
- ____ Superstructure Design Calculations
- ____ Substructure Design Calculations
- ___ Quantity Calculations
- ____ Special Provisions/NS-Items
- ____ Construction Cost Estimate
- ____ As-Designed Rating Report
- List of All Final Electronic Design Files and File Locations (ProjectWise directory name) Consultants shall submit the final calculation book to LADOTD bridge task managers; the submittal shall be on a CD or Flash Drive or placed to a designated ProjectWise folder including the following information:
- ____ A PDF File of the Calculation Book (Including the As-Designed Rating Report)
- ____ All Electronic Design Files
- ____ A PDF File of the As-Designed Rating Report Only

The final calculation book for in-house projects shall include the same files listed above for consultant projects. The final calculation book and other final design documents for all projects including in-house and consultant projects shall be uploaded to the archiving location designated in the record retention policy within 30 calendar days after the stamped final plans are delivered.

ATTACHMENT 9 – QUALITY ASSURANCE INFORMATION PACKAGE CHECKLIST

Project No.: Project Description:

 Calculation Book
 Plans
 Special Provisions
 Cost Estimate
 Other Documents

ATTACHMENT 10 – PEER REVIEW RESOLUTION AGREEMENT

Project No.:

Project:

Name:

We, the undersigned Peer Reviewer, Supervisor or Team Leader of the design team, and LADOTD Representative for this project, have reviewed and accepted the attached peer review resolutions. We certify that the peer review has been performed in accordance with the LADOTD Bridge Design Section policy on QC/QA.

Team Members	Name	Signature
Peer Reviewer		
Supervisor or Team Leader		
LADOTD Representative		

ATTACHMENT 11 – LADOTD SOFTWARE AND DELIVERABLES STANDARDS FOR ELECTRONIC PLANS

LaDOTD Software and Deliverable Standards for Electronic Plans					
Function	LaDOTD Software Standards	Consultant Software Standards	Deliverables	Comments	
CAD Drafting	Bentey MicroStation V6i V8.11.07.443 (SS2) or V8.11.09.852 (SS4)	Bertley MicroStation Vill V8.11.07.443 (SS2) or V8.11.09.852 (SS4)	MicroStation DGN	Consultants must uploed MicroStation plan submittais directly into the Project/Wise discipline "Pame" folder:	
CAD Standards Management	Altiva CADconform V8.00.70 (MicroStation)	Attve CADconform V6.00.70 (MicroStation)	MicroStation DGN (Hith valid CADconform certification stamp)	Carify the DON files as DOTD CAD Standard Compliant (Indicated by wild compliance stamp) using CADconform running on MonStation.	
CAD Standards Quality Authentication	Alliva DMSconform "Check CAD Standards" (Administered by LaDOTD in Project/Mae)	Aitva DWScordorm "Cheok CAD Standards" (Asministered by LaDOTD in ProjectWee)	Approved CentrolCAD Microsoft Excel report	DOTD reviewers use the DMSconform "Check CAD Standards" function to check for valid CADconform certification starting and to reven other control income. The control of the control of the control of the control and incoment repeated by the Project Manager. Solariander devicementation starts de approved and cocumented (as to reason) by the Project Manager.	
CAD Attributes Quality Authentication	Attiva DWSconform "Check Attributes" (Administered by LaDOTD in ProjectWise)	DMScarform "Check Attributes" (Acministered by LaDOTD in ProjectWise)	Approved ControlCAD Microsoft Excel report	OOTD reviewers use the DMSconform "Check Atributes" function to check for completed indexing attribute values Stause reports raise reflect: 100% complement by 00% Final Prans (or sonore if specified by the Project Manager), Substandard develocations and the approved and doou mented (as to reason) by the Project Manager.	
CAD Plotting	Bentley ProjectiWise InterPiot Organizer V8i V8:11.11 XX (SS4)	Bentley ProjectWise InterPlot Organizer V8 V811.11.3X (SS4)	Paper format drawings (InterPlot can also be used to create PDFs)	• Full Size Submittats: Full size submittal sheets shall have an outside edge measuring 227 X 341. Provide a 100 margin on the top, bothm and orth hand side of the sheet, and a 21 margin on the left hand side of the sheet. If the sheet and a 21 margin on the left hand side of the sheet and a 10 margin on the left hand side of the sheet and a 50% requestion of the full size source drawing. Provide a 102 Size source and the full hand side of the sheet and a 1 margin on the left hand side of the sheet and a 1 margin on the left hand side of the sheet and a 1 margin on the left hand side of the sheet and a 1. margin on the left hand side of the sheet and the sheet and thand side of the sheet and the sheet and th	
Electronic Plans Publishing	Bentay Publish to PDF (Integrated with ProjectWise)	Bentley Publish to PDF (Integralled with ProjectWise)	PDF drawings in ProjectWise	PDF brund strainings wer the formal electronic deliverable Consultants in an import privage interest in MicroStation format crawings into the appropriate Project/Wire clicical Plans" food (reach plan delaver) relations to the ability able to publish PDF plan submittatis - A MSI statish plan in needed to use the Publish to PDF tool. Project/Was External PDF Publishing Downloads Error Consultants	
Road Design	Bentley Inroids V8 V8 11.07 615 (552)	Bentley knoads V8 V8.11.07.615 (552)	InRoads DGN graphics, ALC, DTM	DOTD only allows in Roads that runs on the MicroStation station. Infrads SS4 and OpenRoads Designer are not supported at this time.	
Hydraulic Design Drafting (Optional)	Bendey Inroed's Storm & Senihiny V8 V8 11.07 616 (SS2)	Bentley tricada Storm & Sentery V8 V8.11.07.015 (SS2)	Hydraulios DGN Graphica	Bunday Storm and Sanilary is recommended for generating griptics only. DOTD only allows inRoads Storm & Sanitary that runs on the NicroStorm platform. The current desgn standard is HYDR, which is used to check hydraulic designs.	
Electronic Survey	Bensley Inroads, Survey Vili Vili 11.07 615 (SS2)	Beniley Incods Survey VSi V8.11.07.615 (SS2)	Survey DGN Granhics, FWO, DTM, ALG, TXT	Any data collection tool and method that produces the neuroid deriverable content and accuracy are accestable. DOTD tailauric adde must be used wing data collection to drable usbut of CALS survey graphics and associated Tag DOCTD on yal accum lineads Survey that runs on the thirroStation platform.	
PDF Plan Reader	Adobe Acrobat Reader	Adobe Acrobat Reader	N/A		
Digital Signatures	NA (New Process In Developement)	NA (New Process in Developement)	NA (New Process in Developement)	NA (New Process In Developement)	
Collaboration Platform	Bentey Project/Wea Explorer VBi VB.11.11.XXX (\$\$4}	Bantoy Proper/Vise Explorar V8i V8.11.11.JXXX (SS4)	Project plans and associated documents	Computants are required to manage their plan submittals with 10 DD breakWas systems - Use the managed Savort Export (Locks File) and managed trapost functions to manage CA2 downownet pole-mount brothule indows: - The ProyectWas Explore application is provided the of thorbus indows: - The ProjectWas Explore application is provided the of Baniage for consultant avanting on LA DDT projects. The Baniage Passpon License anguided to run ProjectWas will be the Consultant's regresolity to purchase.	
	Software versions posted herein are the late	st supported version as of this document publishing. We will	seek to keep this document as up to date as possible as we	move forward.	
Contact Ryan Felder at ryan felder@la gov (225-379-1366) for general information and assistance regarding LaDOTD electronic standards, Projectifvise workflow and electronic plan delivery, authentication and publishing. Contact David Ringuette at david-ringuette@la.gov (or call 225 379 1860) for general information and assistance regarding Projectifvise. PDF publishing setup.					
	Browse to http://www.dotd.la.gov and the	n select Doing Business with LaDOTD > Electronic Standards	s for Plans for links to all DOTD electronic standards and softwar	e downloads	
Contact support@attivesoft.com (or call 281-295-2924) for information and assistance answerline instance of LaCOTD CAR Resources and Asso CARbordom relevance					
Contact Altiva Software to purchase CADconform. Contact Bentley Systems to purchase MicroStation. Project/Wise InterPol Organizer and Inroads products.					

Louisiana Department of Transportation and Development Bridge Design Section Pre-Approved Software List Updated: March 10, 2021

Developer	Software Name	
AASHTO, Inc.	AASHTOWare Bridge Design	
AASHTO, Inc.	AASHTOWare Bridge Rating	
AASHTO, Inc.	AASHTOWare PS Design Tool	
Acuity Brands Lighting, Inc.	Visual	
Bentley Systems, Inc.	CONBOX	
Bentley Systems, Inc.	CONSPAN	
Bentley Systems, Inc.	CONSPLICE	
Bentley Systems, Inc.	GEOMATH	
Bentley Systems, Inc.	Microstation	
Bentley Systems, Inc.	OPEN Bridge Modeler	
Bentley Systems, Inc.	RCPier	
Bentley Systems, Inc.	RM Bridge	
Bentley Systems, Inc.	STAAD	
Bentley Systems, Inc.	STAAD Beava	
Bentley Systems, Inc.	STAAD Section Wizard	
Bridge Software Institute	FB-Pier	
Computers and Structures, Inc.	CSiBridge	
Computers and Structures, Inc.	CSiCOL	
Computers and Structures, Inc.	SAP 2000	
CSI, Ltd.	DDM	
DOTD In-House	COMPSTIL	
DOTD In-House	TimberC	
Drive Systems Technology, Inc.	Power Gear	
Elite Software	CHVAC 8	
Ensoft, Inc.	L-Pile	
Finite Element Analysis, Ltd.	LUSAS	
LARSA, Inc.	LARSA 4D Bridge Plus	
Lighting Analysts, Inc.	AGi32	
MDX Software, Inc.	MDX	
MIDASoft	Midas Civil	

Operating Technology, Inc.	ETAP
PTC, Inc.	MathCAD
Smart Bridge Technology	Smart Bridge Suites
SolidWorks Corporation	SOLIDWORKS
Structure Point, LLC	spColumn
University of Maryland	Sabre
Vista Data Vision	VDV
Wyoming DOT	BRASS-Culvert

Notes:

1. If any other software is required for unique applications for which pre-approved software cannot be used, a synopsis of the software shall be submitted to the Bridge Design Engineer Administrator for approval prior to use. The synopsis shall include the name of the software and the developer, a general description of the functions, a certification from the software developer stating that it is maintained in accordance with the latest AASHTO LRFD Bridge Design Specifications, and an account of the requester's experience and the experience of other organizations or agencies that use the software. Data/results from in-house software will not be accepted as part of the deliverable.

2. The cost of software shall be included in the overhead cost of the firm and not a direct expense for the projects.

22. <u>Sub-consultant information:</u>

If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name	Address	Point of Contact and email address	Phone Number
(Name must match as registered with			
Louisiana's Secretary of State)			
Aillet, Fenner, Jolly & McClelland, Inc.	3003 Knight Street, Ste. 120	Matthew J. Wallace, PE SE	318-425-7452
	Shreveport, LA 71105	mwallace@afjmc.com	
Lazenby & Associates, Inc.	2000 North 7th Street	Paul D. Fryer, P.E., P.L.S.,	318-387-2710
	West Monroe, LA 71291	Senior Vice President	
		pfryer@lazenbyengr.com	
Civil Design & Construction, Inc. (CD&C)	PO Box 857	Karla E. Weston, PE, President	225-765-1802
	Port Allen, LA 70767	kweston@cdcbr.com	
Vectura Consulting Services, LLC	4467 Bluebonnet Blvd, Suite A,	Sheelagh Brin Ferlito;	225-223-6685
	Baton Rouge, LA 70809	bferlito@vecturacs.com	

(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**.