



## **Statement of Qualifications**

## **LA 447 CORRIDOR**

CONTRACT NO. 4400024641



# **DOTD FORM: 24-102**

#### 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.

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

1.	Contract title as shown in the advertisement	CONTRACT FOR LA 447 CORRIDOR
2.	Contract number(s) as shown in the advertisement	4400024641
3.	State Project Number(s), if shown in the advertisement	H.005734
4.	Prime consultant name (as registered with the Louisiana Secretary of State where such registration is required by law)	G.E.C., Inc.
5.	Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.001917
6.	Prime consultant mailing address	P.O. Box 84010, Baton Rouge, LA 70844-4010
7.	Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	8282 Goodwood Blvd., Baton Rouge, LA 70806
8.	Name, title, phone number, and email address of prime consultant's contract point of contact	Cary Bourgeois, PE, Senior Vice President, (225) 612-4121, cbourgeois@gecinc.com
9.	Name, title, phone number, and email address of the official with signing authority for this proposal	Cary Bourgeois, PE, Senior Vice President, (225) 612-4121, cbourgeois@gecinc.com
10.	This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.	Signature (shall be the same person as #9):  Out Market Date: July 19, 2022

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

Firm(s):

La Terre Engineering, LLC

5%

## 12. Past Performance Evaluation Discipline Table

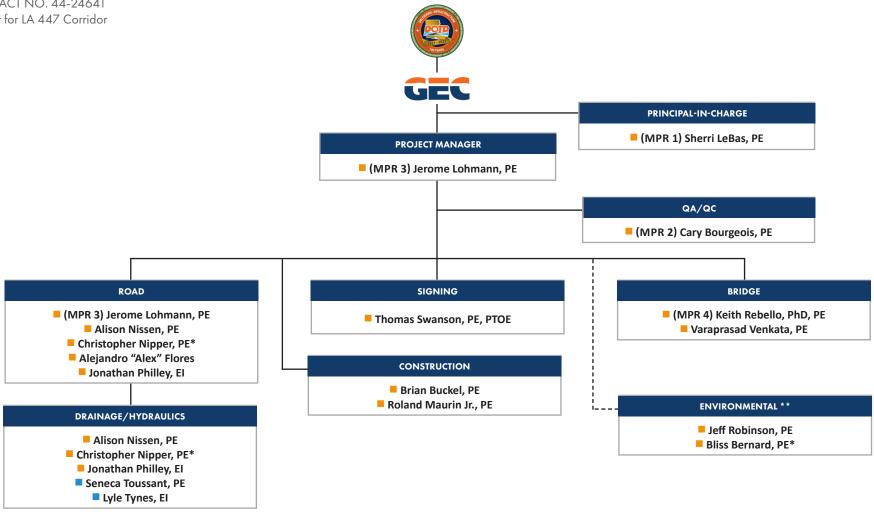
			DBE FIRM	
Evaluation Discipline	% of Overall Contract	G.E.C., Inc. (GEC) (Prime)	La Terre Engineering, LLC	
Road	90%	94.4%	5.6%	
Bridge	10%	100%	0%	
Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.				
Percent of Contract	100%	95%	5%	

#### 13. Firm Size

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
G.E.C., Inc.	Principal	3	3
G.E.C., Inc.	Engineer	3	6
G.E.C., Inc.	Supervisor-Engineer	6	6
G.E.C., Inc.	Engineer Intern	1	3
G.E.C., Inc.	Technician	1	1
La Terre Engineering, LLC	Engineer	1	1
La Terre Engineering, LLC	Engineer Intern	1	1
La Terre Engineering, LLC	Cadd Drafter	1	1

### 14. Organizational Chart

CONTRACT NO. 44-24641 Contract for LA 447 Corridor



#### **LEGEND**

- G.E.C., Inc.
- La Terre Engineering, LLC
- (#) Fulfills MPR
- \* LTRC Modules 1-3 Training
- \*\* Assistance as needed

## 15. Minimum Personnel Requirements

MPR No. Do not insert wording from ad	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license / certification & number	State of license	License / certification expiration date
1	Sherri LeBas, PE	GEC	PE No. 23844 (Civil, Environmental)	Louisiana	03/31/2023
2	Cary Bourgeois, PE	GEC	PE No. 23414 (Civil)	Louisiana	09/30/2023
3	Jerome Lohmann, PE	GEC	PE No. 24673 (Civil)	Louisiana	09/30/2022
4	Keith Rebello, PhD, PE	GEC	PE No. 24937 (Civil)	Louisiana	03/31/2023

MPR Nos. 1 through 4 may be met by the same person.

MPR No. 4 may be satisfied through the use of a sub-consultant(s).

## 16. Staff Experience



Firm employed	by <b>G.E</b>	.C., Inc.				
Name Sh	herri LeBas,	PE	Years of relevant experience with this employer	6		
Title Se	enior Vice Pr	esident	Years of relevant experience with other employer(s)	30		
Degree(s) / Yea	ars / Specializa	ition	B.S. / 1985 / Civil Engineering			
Active registration	ion number / sto	ate / expiration date	23844 / Louisiana / 03-31-2023			
Year registered	1990	Discipline	Professional Engineer, Civil & Environmental	Professional Engineer, Civil & Environmental		
Contract role(s)	) / brief descript	tion of responsibilities	Role on this Project: Principal-in-Charge / MPR 1			
Experience date (mm/yy-mm/y		Experience and qualifications releventhe time specified in the applicable <i>I</i>	ant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates MPR(s).	should cover		
and programs during her career in Louis and Development (LADOTD), Ms. LeBas facilitator for the Change Management 2016. From 1998 to 2003, Ms. LeBas mand Control. In May of 2016, Ms. LeBas Baton Rouge Parish and St. Tammany Pofor infrastructure. Additionally, Ms. LeBas		and programs during her career and Development (LADOTD), M facilitator for the Change Man 2016. From 1998 to 2003, Ms. L and Control. In May of 2016, M Baton Rouge Parish and St. Tam for infrastructure. Additionally,	dent of GEC. She is a professional civil engineer with 36 years of experience in designing and managing number in Louisiana state government and private industry. During her 24.5 years at the Louisiana Department of This. LeBas designed and managed projects for a combined 14 years in the Road Design Section which led to agement Program, Assistant to the Secretary for Policy, Deputy Secretary and then Secretary for 6 years are also managed projects funded through Capital Outlay at the Louisiana State Division of Administration, Facts. LeBas brought her skills and experience to GEC providing services for LADOTD, City of Kenner, City of New amany Parish. Ms. LeBas also meets with elected officials and other stakeholders discussing policy and resounds. LeBas discusses opportunities for teaming with other consulting firms in order to present and provide a cutstanding services and deliverables.	ransportation o serving as a from 2010 to cility Planning Orleans, East urces required		
Manager for this CMAR project, leading Plan, Project Implementation Plan and which includes meetings with stakehold designed by GEC engineers which includes		Manager for this CMAR project Plan, Project Implementation I which includes meetings with s	SEN LANE ON I-10 AND I-12: Baton Rouge, Louisiana. Assistant Project Manager - Ms. LeBas serves as Assa, leading the development and annual updates of the Design Quality Manual, Project Management Plan, In Plan and document control. Ms. LeBas is managing the Community Connections/ Context Sensitive Solustakeholders and public outreach. In addition, Ms. LeBas provides management oversight of the design elich include lighting (roadway and enhancement), retaining wall, bridge, and noisewalls and coordination	nitial Financial tions process ements being		
08/20-Present management of the quality design rev		management of the quality de	GE DRIVE FLYOVER RAMP DESIGN-BUILD: Baton Rouge, Louisiana. Quality Design Manager - Ms. LeBatsign reviews for the GEC/Boh Bros. team. GEC is responsible for engineering design and quality reviews raffic management plans, intelligent transportation systems, and lighting.			
2016-Present LADOTD Road Transfer Program. Ms. Le		LADOTD Road Transfer Program	MANAGEMENT: Statewide, LA. Principal-in-Charge - Ms. LeBas serves as a resource to GEC's Program Mn. Ms. LeBas provides feedback, is the direct link for communication and service between GEC's Project Marters and GEC's staff, and attends bi-monthly status meetings with the LADOTD Road Transfer Team.	_		
03/10 – 01/16		led LADOTD in the delivery of transportation policy, issues, fe pursued and obtained funding to develop solutions to some of funding, design and constructive which included aesthetic features.	F TRANSPORTATION AND DEVELOPMENT (LADOTD): Baton Rouge, LA. Secretary - Ms. LeBas set the \$1.8 Billion annual transportation infrastructure capital and operating program. She developed a sedback, future planning with stakeholders, media, citizens and local, state and national public and elected working with state and federal officials. She has the skills and credentials to provide design guidance, working the most complicated design policy issues. Some notable projects that required Ms. LeBas's leadership on of I-49 from I-220 to the Arkansas State line which included the 2019 ACEC Award Winning I-220/I-49 res such as the locally designed column motifs and decorative lighting; LA 1 from Leeville to Fourchon TIFIA Livingston Parish as well as two Design Build Interchange projects on US 90 (Future I-49).	and discussed d officials. She fork with staff o included the 9 Interchange		



Firm employed by G	E.C., Inc.
Name Sherri LeBas	s, PE Continued Resume
05/05 – 03/10	LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT (LADOTD): Baton Rouge, LA. Change Management Facilitator (1 year); Assistant to the Secretary of Policy (2 years); Deputy Secretary (2 years) - Ms. LeBas was a facilitator on the Change Management Team which today is referred to as Quality Continuous Improvement (QCIP). She facilitated teams consisting of LADOTD staff, consultants and other stakeholders for utility relocations, project Management and consultant services. As Assistant Secretary for Policy, Ms. LeBas worked with staff and the Secretary to develop the \$1.2 Billion list of roadway projects that were funded with State surplus dollars in 2007, 2008 and 2009. She served as the program manager for this \$1.2 Billion surplus program, scheduling projects, managing the budget and working through issues in order to get the program delivered on time and within budget. As Deputy Secretary, Ms. LeBas served as the program manager for the \$430 million American Recovery and Reinvestment Act (ARRA) working with LADOTD staff to deliver the projects within the federally set deadlines of 50% of the funding obligated within 6 months and the remainder within a year.
09/03 – 05/05	<b>THE TRANSPORTATION MODEL FOR ECONOMIC DEVELOPMENT (TIMED) PROGRAM: Statewide, LA.</b> Assistant to the TIMED Program Manager, LADOTD Road Design Section - Ms. LeBas served as the Assistant TIMED Program Manager for the \$5.2 Billion Program. She was responsible for the financials working with LADOTD administration, LADOTD staff and consultant. This included reviewing the program changes, change orders, and total program costs from design through construction. She assisted in the coordination and management of the consultant's plan delivery and construction schedule.
01/98 – 09/03	STATE OF LOUISIANA NON-STATE ENTITY CAPITAL OUTLAY PROGRAM: Statewide, LA. Program Manager - Ms. LeBas served as Program Manager at the Division of Administration (DOA)/Facility Planning & Control (FP&C) for the non-state projects that receive funding through the State of Louisiana. She was responsible for the development of the Cooperative Endeavor Agreement between the State and the local entity, working with local entities in the delivery of projects in accordance with State guidelines, cash flow from inception through construction. At any one time 75 to 100 active projects were in production including but not limited to waterlines, sewer lines, pump stations, roadways, livestock arenas, renovation of theaters, park roadways and amenities and port facilities.
09/95 – 05/97	<b>ESTHERWOOD CANAL BRIDGE, LA 1124 (STATE PROJECT NUMBER 801-22-0007): Acadia Parish, LA.</b> <i>Project Design Supervisor LADOTD Road Design Section</i> - Ms. LeBas served as the road design engineer supervisor for the in-house design of the project. The design included all design aspects of a bridge replacement project including drainage, typical sections, horizontal and vertical alignment, cross sections, quantity calculations, summary of estimated quantities in accordance with LADOTD standard specifications.
04/95 – 01/98	US 165 (I-10 TO WOODWORTH)(STATE PROJECT NUMBER 014-02: 0020-0023   014-03: 0022, 0023, 0027, 0028   014-04: 0028, 0029, 0032   014-05: 0017, 0018, 0020, 0021, 0031): Jefferson Davis, Allen, and Rapides Parish, LA. Project Manager LADOTD Road Design Section - Ms. LeBas served as the project manager for the consultant designed expanded line and grade plans for the addition of two lanes to the existing roadway which encompassed 16 roadway segments. She negotiated contracts, developed the plan development schedule, reviewed the plan in hand design plans and coordinated review comments with other LADOTD sections. She attended all of the plan in hand field visits for each segment, coordinating and addressing all comments for incorporation into the plans.
07/88 – 08/97	I-49 SHREVEPORT URBAN INTERSTATE (INNER LOOP EXPRESSWAY (LA 3132) TO THE I-49/I-20 INTERCHANGE) (STATE PROJECT NUMBERS 455-08: -0013, 0015, 0016, 0017, 0018, 0019, 0020, 0021, 0022, 0023, 0024, 0025, 0028, 0030, 0033, 0034, & 0037): Caddo Parish, LA. Project Manager LADOTD Road Design - Ms. LeBas served as Project Manager responsible for scope, schedule & budget, design plans, specifications, & estimate (PS&E) of new interstate (I-49) through Shreveport Urban area which at this time was the largest roadway program at LADOTD. During construction, Ms. LeBas worked closely with District Construction Engineers to resolve issues. She was responsible for checking roadway design plans & coordinating plan reviews with other LADOTD sections. Ms. LeBas prepared the summary of estimated quantities and assisted in the development of special specifications required. She designed & developed the sequence of construction for the I-49/I-20 interchange which included new concept to LA to use concrete barriers to separate lanes of interstate traffic during construction. She also met with property owners within the corridor to discuss driveway access, modifications, and concerns.



				GE
Firm employ	red by <b>G</b>	.E.C., Inc.		
Name	Cary Bourge	ois, PE	Years of relevant experience with this employer	36
Title	Senior Vice I	President	Years of relevant experience with other employer(s)	0
Degree(s)/	Years / Speciali	zation	B.S. / 1983 / Civil Engineering	
Active regist	ration number /	state / expiration date	23414 / Louisiana / 09-30-2023	
Year register	red 1989	Discipline	Civil	
Contract role	e(s) / brief descr	iption of responsibilities	Role on this Project: QA/QC / MPR 2	
Experience ( (mm/yy-mr		Experience and qualifications relevant to the time specified in the applicable MPR(s).	e proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Exp	perience dates should cover
in safety inspect familiar with A Traffic Control Signals. He has plan and specification and specification of Mr. Bourgeois years. In this tirecommendati and reporting, GNOEC repair specifications a Collection Systexpanded the lequipment, institute the original of and planning for the BLUEBONNET include an add the bridge showing personal of the AASHTO Melalso oversations and the also oversations and the also oversations.		in safety inspection of bridges. He has familiar with AASHTO Policy on Geon Traffic Control Devices, the Highway of Signals. He has provided ITS deployments plan and specification development.	y, Bridge, Toll Collection Systems, and Intelligent Transportation Systems (ITS) design along valuable experience in the design and geometry associated with roadways and bridge stockeric Design of Highways and Streets, AASHTO Standard Specifications for Highway Bric Capacity Manual and the Standard Specifications for Structural Support for Highway Sigent and implementation planning, field device optimum positioning and placement, civil/seas Senior Vice President of Engineering, he manages design and development, and supectionstruction engineering and inspection.	tructures. He is thorough idges, Manual on Uniforr Ins, Luminaries and Traffi tructural engineering, an
		served as Consulting Engineer for GI Mr. Bourgeois has been associated wyears. In this time GEC has designed recommendations for operations and reporting, annual physical cond GNOEC repair and improvement prospecifications and estimates for variable Collection System was installed in 19 expanded the North Toll Plaza from 3 equipment, installed a new toll booth	AUSEWAY, CONSULTING ENGINEER: St Tammany and Jefferson Parishes, LA. Prince NOEC since 1991 performing Trust Indenture Services in accordance with the GNOEC with the project since the selection of GEC as Consulting Engineer and has served as Project implemented over \$200,000,000 in improvements to the GNOEC system. Our responsition in projects in accordance with National Bridge Inspection Standards, planning jects, review of Toll Plaza configurations and toll system operation, preparation of concous repair and improvement projects, and construction inspection and shop drawing 4 under GNOEC Project I & IIC – North Shore Toll Plaza Improvements. The 1994 Legis Ianes to 4 lanes and replaced all Automatic Vehicle Classification (AVC) & Automatic Vehicle Classification	General Bond Resolution of piect Manager for over 10 onsibilities have included ency response, inspection and scheduling of future instruction contract plans greview. The Legacy To acy Toll Collection System /ehicle Identification (AVI in lanes 1 & 2. In addition
		include an additional lane in each din the bridge should be widened or rep inspection to determine Condition Ra the AASHTO Manual of Bridge Evalua	PICARDY): Baton Rouge, LA. Principal-in-Charge/QA/QC - GEC is designing the wideni rection. Mr. Bourgeois oversaw an investigation of the existing bridge over Dawson Crelaced in accordance with Part 1, Chapter 6 of the LADOTD BDEM. This investigation statings for the bridge superstructure, substructure, and piles. A Bridge Load Rating was to ation and the LADOTD BDEM. Based on the load rating, GEC recommended that the exign for the replacement bridge as well as the design study for a six-lane, curb and gutter	eek to determine whethe arted with an NBIS bridg then carried out based o cisting bridge be replaced

1991-1997

ROUTE I-12, I-10 FROM ACADIAN THRUWAY TO U.S. 61 (S.P. NO. 700-28-0004): Baton Rouge, LA. *Project Manager* - This project consisted of the rebuilding and widening while under traffic of 2.2 miles of urban interstate highway with roadway and bridges. The bridges consist of AASHTO prestressed concrete girders (50' to 90' spans) and steel plate girders (135' to 180' spans). The project also required bridge feasibility and drainage studies.

facilities and subsurface drainage.



Firm employed by	G.E.C., Inc.
Name Cary Box	urgeois, PE Continued Resume
06/17-12/21	H.003074, I-10 WIDENING, WILLIAMS TO VETERANS: Jefferson Parish, LA. Principal-in-Charge/QA/QC - Mr. Bourgeois oversaw the superstructure and substructure load rating for existing bridges and ramps for this highly congested 2.28 mile urban interstate. The extensive load rating and documentation, allowed LADOTD to make an informed decision on widen or replace the existing bridges. The data supported the replacement of the bridges. GEC designed concrete slab spans, pre-stressed concrete girder spans and steel girder spans. All pre-stressed girders were Louisiana (LG) girders designed in accordance with AASHTO LRFD bridge specs.
04/19-12/21	CHEVELLE AND SARASOTA DRIVE BRIDGE REPLACEMENTS: Baton Rouge, LA. Principal-in-Charge - GEC performed a Design Study, including hydraulics, environmental, and geotechnical considerations, overseeing topographic survey and Right-of-Way (ROW) Mapping as required; developing preliminary and final construction plans and cost estimates. GEC will oversee construction phase services and preparation of an as-designed load rating for the bridge according to LADOTD criteria. The project includes the replacement of the existing Chevelle Drive Bridge over the West Fork of the North Branch of Ward Creek and the existing Sarasota Drive Bridge over Engineers Depot Canal, both located in Baton Rouge, LA.
2019-Present	LA SAFE-AIRLINE AND MAIN COMPLETE STREETS: Laplace, LA. Principal-in-Charge/QA/QC - This project consists of a 10' shared use path, 5' sidewalk along the north side of US 90, bike lanes on shoulders, and softening of the median. Existing ditches will have pipes added and be reshaped to provide detention ponds to reduce time of concentration. Along Main St., the design will provide parallel parking utilizing decorative brick and permeable base to reduce time of concentration. GEC oversaw the calculation of preliminary quantities and development of a preliminary estimated construction cost. GEC proposed the conceptual design to the Parish and received approval. GEC also oversaw development of the fee for all costs from surveying to construction.
03/95-06/10	<b>450-15-0089 / ROUTE I-10, CAUSEWAY BLVD TO 17TH STREET CANAL: Metairie, LA.</b> <i>Project Manager/Engineer</i> -of-Record/Structural Engineer - Mr. Bourgeois performed Quality Assurance and project management on this project. He specifically acted as QA for all disciplines involved including surveying, structures/bridge design, electrical & controls design and civil engineering design. Project consisted of widening while under traffic of 1.64 miles of urban interstate highway from six to 10 lanes with roadway and bridges. He performed PPC girder layout and design and performed the design check of a two-span (425' total length) continuous steel girder with integral steel intermediate bent.
10/19-11/20	<b>I-10 SERVICE ROAD BRIDGE REPLACEMENTS: Slidell, LA.</b> <i>Principal-in-Charge</i> - The project included the replacement of two slab span bridges, approach roadways, and drainage. Mr. Bourgeois was Principal-in-Charge and oversaw the design phase of the project.
07/09-06/12	U.S. ARMY CORPS OF ENGINEERS, LAKE PONTCHARTRAIN, LOUISIANA AND VICINITY, HURRICANE PROTECTION PROJECT LPV 17.2, BRIDGE ABUTMENT AND FLOODWALL TIE-INS AT CAUSEWAY BRIDGE: Metairie, LA. Overall Project Manager - This project was located in Jefferson Parish, Louisiana and was part of the Lake Pontchartrain and Vicinity, New Orleans, Louisiana, Hurricane Protection Project. This reach consisted of levees, floodwalls, crib walls, Causeway Boulevard and other miscellaneous access points. The designs were intended to bring the hurricane protection to the Phase II 100-year level. The professional services required of GEC included detailed engineering and design (E&D), preparation of a Design Report (DR), preparation of plans and specifications (P&S), and E&D support during advertisement.
1997-2012	ROUTE I-12, ESSEN LANE INTERCHANGE (S.P. NO. 454-01-0051 AND 258-32-0016): Baton Rouge, LA. <i>Project Manager</i> - This project consists of the installation of on and off ramps to complete the I 12/Essen Lane Interchange. The off ramp consists of a 1,200' long eight-span bridge with continuous curved steel girder units. The project would also involve the construction of sound barriers.
08/20-Present	H.013897 / I-10 & I-12 COLLEGE DR. FLYOVER RAMP DESIGN-BUILD PROJECT: East Baton Rouge Parish, LA. Design Manager - Mr. Bourgeois is responsible for the overall design and design quality control of this \$53,000,000 project which will provide exit ramps that are separated from the merge of I-10 and I-12. To accomplish this, I-12 westbound will be re-routed under a rebuilt I-10 westbound bridge.



Firm emp	loyed by G	.E.C., Inc.		
Name	Jerome Lohr	mann, PE	Years of relevant experience with this employer	7
Title	Senior Proje	ct Manager	Years of relevant experience with other employer(s)	32
Degree(s)	/ Years / Speciali	zation	B.S. / 1984 / Civil Engineering; A.A.S / 1977 / Surveying	
Active reg	gistration number /	state / expiration date	24673 / Louisiana / 09-30-2022	
Year regis	stered 1992	Discipline	Professional Engineer, Civil	
Contract	role(s) / brief descr	iption of responsibilities	Role on this Project: Project Manager, Road Design / MPR 3	
Experience (mm/yy-		Experience and qualifications relevant to the the time specified in the applicable MPR(s).	proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates sl	hould cover
		engineering/construction company in 1 and B.S. in Civil Engineering. His career construction, route/location, etc.), sanithas served as Project Manager/Design	versified engineering, surveying, and construction experience to his credit. He began his career wo 1969. Since that time, he has gained progressive experience, an Associate degree in Applied Science If has included extensive experience in the area of surveying (right-of-way, boundary, topographic, hy tary sewer design, water supply systems, highway and transportation systems, drainage design, etc. No In Engineer on various LADOTD Projects. He has been responsible for the design and management Bridge Replacement Projects to a major interchange on I-49.	(Surveying), ydrographic, ⁄Ir. Lohmann
additional lane in each direction. Mr. Lobridge replacement, green infrastructions. Services Manual. Mr. Lohmann supervices Manual. Mr. Lohmann supervices Manual. Mr. Lohmann supervices in accordance with Part 1, Characteristic for the bridge superstructure, substructions and the LADOTD BDEM. Based on the IIII SERVICE ROAD BRIDGE REPLACTION two-slab span bridges and approximate placement of the new bridges, and g		additional lane in each direction. Mr. Lobridge replacement, green infrastruct Services Manual. Mr. Lohmann superv replaced in accordance with Part 1, Chafor the bridge superstructure, substructure.	ICARDY): Baton Rouge, LA. Project Manager - GEC is designing the widening of Bluebonnet Blvd. to ohmann is Project Manager, overseeing design of a six-lane, curb and gutter roadway with subsurfacture and pedestrian facilities. GEC's design is in accordance with MOVEBR Design Guidelines and ised a study of the existing bridge over Dawson Creek to determine whether the bridge should be apter 6 of the LADOTD BDEM. This study started with an NBIS bridge inspection to determine Condicture, and piles. A Bridge Load Rating was then carried out based on the AASHTO Manual of Bridge load rating, GEC recommended that the existing bridge be replaced. (City-Parish Project No. 19-CPH)	ce drainage, I Consultant widened or ition Ratings e Evaluation
		two-slab span bridges and approximate placement of the new bridges, and g	<b>CEMENTS: Slidell, LA.</b> <i>Project Manager</i> - Mr. Lohmann managed the GEC design staff for the replely 1.1 miles of milling and overlay. He oversaw design of the vertical alignment, proposed length of uardrail design. Mr. Lohmann also oversaw the design of the new roadway approaches to the tion cost estimating for the project. Construction of the project was completed in June 2021.	the bridges
12,	/21-Present	SHARP ROAD: Mandeville, LA. Project improvements, subsurface drainage in:	t Manager - Mr. Lohmann is managing the preparation of preliminary and final construction plans stallation, and sidewalk construction.	for roadway
09,	/19-present	and preliminary layout for the project, softening of the median. Existing ditch Main St., the design will provide paralle the calculation of preliminary quantiti	which consists of a 10' shared use path, 5' sidewalk along the north side of US 90, bike lanes on shortes will have pipes added and be reshaped to provide detention ponds to reduce time of concentrated parking utilizing decorative brick and permeable base to reduce time of concentration. Mr. Lohman es and development of a preliminary estimated construction cost. He proposed the conceptual decoration of the fee for all costs from surveying to construction.	oulders, and ation. Along ann oversaw
04/19-12/21		Manager performing a Design Study inc way (ROW) mapping as required; and o the existing Chevelle Drive Bridge over	DRIVE BRIDGE REPLACEMENTS: East Baton Rouge Parish, LA. Project Manager - Mr. Lohmann cluding hydraulics, environmental, and geotechnical considerations, overseeing topographic survey a developing preliminary and final construction plans and cost estimates. The project included the repet the West Fork of the North Branch of Ward Creek and the existing Sarasota Drive bridge over Engine 800561; City Parish Project No. 18-BRUS-0016)	and right-of- lacement of



Firm employed by	G.E.C., Inc.
Name Jerome	Lohmann, PE Continued Resume
07/19-Present	H.011670, I-10 / LOYOLA INTERCHANGE IMPROVEMENT, DESIGN-BUILD PROJECT: Jefferson Parish, LA. Quality Assurance - GEC is the Owner Verification Firm (OVF) for this design-build project which includes the CE&I, right-of-way acquisition, and utility relocation. As LADOTD's OVF representative, GEC is responsible for the acceptance of the work and materials in order to ensure contract compliance. As LADOTD's designated representative, Mr. Lohmann administers the contract which includes design oversight.
08/17-07/18	H.004932, US 90 (FUTURE I-49 SOUTH), LA 318 INTERCHANGE: ROUTE US 90: St Mary Parish, LA. Quality Assurance - As LADOTD's OVF representative, Mr. Lohmann was responsible for the acceptance of the work and materials in order to ensure contract compliance. As LADOTD's designated representative, Mr. Lohmann administered the contract which included design oversight. He reviewed the design-builder's RFC for compliance with the design standard, performance specification, etc. and reviewed as-built was for completeness and provided recommendation to the LADOTD Project Manager and Chief Engineer for approval. He reviewed D-B team proposed resolutions to RFIs and NCR to ensure sound engineering judgement was used as the basis for all responses.
09/19-Present	WEST TAMMANY HILLS DRAINAGE: Covington, LA. Project Manager - Mr. Lohmann is overseeing development of a drainage report, along with plans for the installation of subsurface drainage for the residential area north of the Crestwood Subdivision in Covington. Mr. Lohmann's road design services include pavement structural design for rehabilitated and/ or reconstructed sections and preliminary and final roadway design and plan development. He will also work with the Parish to finalize plans and specifications into the Parish frontend documents and format for bidding, address request for information (RFIs) during the bidding process, attend and document pre-bid meeting, review and tabulate bids, and make recommendation on acceptance of bids as required.
09/17-12/18	CAMP COUSHATTA ROAD IMPROVEMENTS: Allen Parish, LA. <i>Project Manager</i> - Mr. Lohmann managed the design of a new road for the Coushatta Tribe of Louisiana, including the new alignment and drainage structures/systems. The road consisted of two eleven foot lanes, with 3 foot outside aggregate shoulders, and ditches on both sides. A subsurface drainage system was designed that tied into an existing subsurface system. Two reinforced concrete box culverts were designed to facilitate the flow of local canals through the new roadway, and one of the canals was realigned.
2015-2016	<b>US 11 IMPROVEMENTS AT SCHNEIDER CANAL: Slidell, LA.</b> <i>Project Manager</i> - The project elevated US 11 at the levee so that ongoing construction of the levee (in separate projects by the Parish) could continue beyond this point without a break in flood protection at the highway. The road section is a divided two-lane raised median with full-width shoulders and curb & gutter drainage. The highway remained on-grade on embankment and was raised approximately 10 feet at the levee. Approximately 2,300 feet of the highway was affected. GEC accomplished all aspects of design with its own in-house personnel, excluding geotechnical services. GEC completed the construction plans for this project in the summer of 2016. It incorporates an improved curbed road section including a raised median and a bike path. This project was the first project ever designed with LADOTD specifications that included a levee. Mr. Lohmann designed approximately 2,700' of divided two lane and multi-lane roadway to raise the roadway over the levee on Schneider Canal.
11/15-12/21	H.003074 / I-10 WIDENING, WILLIAMS BLVD. TO VETERANS BLVD.: Jefferson Parish, LA. Project Manager - GEC is currently designing the widening of I-10 between Williams Boulevard and Veterans Boulevard interchanges in Jefferson Parish. Final design plans are over 90% complete. The total project length is 2.58 miles and consists of the construction of one 12' additional lane with a 10' shoulder inside along the I-10 eastbound and westbound roadways. Included in the project is the replacement and widening of the bridges over Canal No. 3 and Veterans Blvd. Sound Barriers, both ground-mounted and structure-mounted on the north side of I-10, form part of this project. Design has also been performed on the replacement of portions of the concrete lining of Canal No. 3 that will be impacted by the new bridge design. Mr. Lohmann provided design in the preliminary plans phase and design review of the roadway during the final plans phase.
2002-2013	TIMED PROGRAM PROJECT MANAGEMENT: Statewide, LA. Design Segment Manager - For the two years Mr. Lohmann served as a Design Segment Manager (DSM), he was responsible for taking over 8 DOTD TIMED projects at different stages of completion and coordinates all the preconstruction activities through letting. His duties included overseeing the Contract Design Consultant (CDC), justifying contract changes, managing plan in hand inspections, insuring that the CDC used current DOTD STD Plans and pay items and resolving day to day problems, along with budgeting.



Firm empl	oyed by	G.E.	C., In	с.			
Name	Alis	on Nissen,	PE		Years of relevant experience with this employer	2	
Title	Civi	l Engineer			Years of relevant experience with other employer(s)	24	
Degree(s)	/ Years	/ Specializa	tion		B.S. / 1984 / Civil Engineering		
Active reg	jistration	number / sto	te / exp	oiration date	28801 / Louisiana / 09-30-2022		
Year regis	tered	2000	Ι	Discipline	Professional Engineer, Civil		
Contract r	ole(s)/	brief descript	ion of re	esponsibilities	Role on this Project: Road Design, Drainage		
Experience (mm/yy-				nce and qualifications relevant to the paper specified in the applicable MPR(s).	proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates sh	ould cover	
			enginee with pro control develor	ering and management experien oject supervision, frequently inte I plans, and other associated des	ivil engineer with 24 years of experience with project management and transportation design proce includes preliminary and final design, plan preparation, and construction phase services. She has a refaces with clients, subconsultants and government agencies, and has prepared roadway design, drain ign for preliminary and final design of roadways from major thoroughfares to residential streets for pushed agencies. Ms. Nissen has a wealth of experience in the design of roadways and drainage, including the substance of the design of roadways and drainage, including the substance of the design of roadways and drainage, including the substance of the design of roadways and drainage, including the substance of the su	experience nage, traffic private land	
01	01/16-11/16 ro		roadwa were fo	ay improvements replacing the 2	(WAX-HOOPER): East Baton Rouge Parish, LA. Project Engineer - Ms. Nissen was responsible for design 2-lane asphalt roadway with a 4-lane concrete, divided roadway with raised median. The road imp x Road to Hooper Road on over 1.2 miles of roadway and included horizontal and vertical geometry, in	rovements	
	2019		widenii estimat alignme	ng Pecue Lane (Perkins to Airline tes for Pecue Lane from Jamesto ents, typical sections, super elev	D INTERCHANGE: Baton Rouge, LA. Project Manager - Ms. Nissen provided engineering design set including a Diverging Diamond Interchange with I-10. She prepared construction plans and construction Blvd to south of Ward Creek and the I-10 EB entrance and exit ramps. Tasks included horizontal avation diagrams, intersection layout, geometric details, storm drainage design, construction sequentraffic plans, and construction cost estimates.	uction cost and vertical	
03/12-04/13		/13	for pre <sub>l</sub> 17-mile and ver	paration of the final line and grade, 4-lane bridge structure to repla	DLDEN MEADOW TO PORT FOURCHON: Lafourche Parish, LA. Project Engineer - Ms. Nissen was rede study, preliminary roadway and right-of-way plans and construction cost estimate for an 8-mile seace the existing LA 1 roadway. She was responsible for coordinating road and bridge designs including , major pipeline crossings and a levee crossing, scheduling, and interfacing with client, project subcompanies.	egment of a g horizontal	
01/15-01/16		/16	H.002301 / NORTH SHERWOOD FOREST DRIVE IMPROVEMENTS: Baton Rouge, LA. Project Engineer - Ms. Nissen was responsible for the design 1.7 miles of roadway replacing the existing 2-lane rural roadway with a 5-lane urban roadway. Her responsibilities during construction plan preparation included sequence of construction, signing and striping, erosion control, quantities and QA/QC reviews.			_	
10/19-12/21		/21	plan re	eview services for this project wh	AND SARASOTA DRIVE BRIDGE REPLACEMENTS: East Baton Rouge Parish, LA. QA/QC - Ms. Nissenich includes the replacement of the existing Chevelle Drive Bridge over the West Fork of the North Drive bridge over Engineers Depot Canal, both located in Baton Rouge, Louisiana.		
2018			prepara	ation of plans, specifications, ar	HABILITATION AND DRAINAGE UPGRADE: New Orleans, LA. Project Manager - Ms. Nissen of cost estimate for improvements to Airline Park Blvd. (500' north of Camphor to West Napoleon vertical geometry, storm sewer design, earthwork calculations, and sequence of construction.	•	



Firm employed by	G.E.C., Inc.
Name Alison Ni	ssen, PE Continued Resume
10/19-07/20	<b>I-10 SERVICE ROAD BRIDGE REPLACEMENTS: Slidell, LA.</b> <i>QA/QC</i> - The project includes the replacement of two slab span bridges. Ms. Nissen provided review of the project plans. Construction of the project was completed in June 2021.
10/19-Present	MID CITY GROUP C, D, & E, FEMA RECOVERY ROADS PROGRAM: New Orleans, LA. Project Engineer - Ms. Nissen is preparing plans, specifications, and estimates for the removal and replacement of an existing asphalt and concrete pavement and drainage structures, as well as replacement of waterline and sewer main. Tasks include horizontal and vertical geometry, subsurface drainage design, and cross section development.
09/20-Present	<b>BLUEBONNET BLVD.</b> (PERKINS TO PICARDY): Baton Rouge, LA. Design Engineer - For the widening of Bluebonnet Blvd., Ms. Nissen completed a design study of a six-lane, curb and gutter roadway with subsurface drainage, bridge replacement, green infrastructure and pedestrian facilities. Design is in accordance with MOVEBR Design Guidelines and Consultant Services Manual. Ms. Nissen made slight modifications to the horizontal alignment to avoid conflicts with existing railroad and pedestrian bridge support columns, raised the profile for the replacement bridge over Dawson Creek. Ms. Nissen prepared typical sections, roadway plan and profile drawings, geometric details and construction cost estimate for the design study report.
2016	CHEROKEE STREET DRAINAGE IMPROVEMENTS: New Orleans, LA. Project Engineer - Ms. Nissen was responsible for preparation of plans and specifications for roadway replacement, drainage improvements and Green Infrastructure on Cherokee Street in the southwest region of the City near Audubon Park. The proposed improvement project consisted of a new subsurface storm water system to address localized flooding along a two-block region of Cherokee Street. Green Infrastructure design elements of the project consisted of rain gardens with high performance modular bio-filtration systems at intersection radii and the use of permeable pavers with perforated pipe underdrain for parking lanes on each side of the roadway.
03/14-01/15	MT. PLEASANT BLVD. WIDENING (BARNETT ROAD TO LA 964) AND AMERICANA ROUNDABOUT: Zachary, LA. Project Engineer - Ms. Nissen was responsible for the conceptual layout and subsequent final design for replacing approximately 7,000 feet of the existing 2-lane rural roadway with a 4-lane divided roadway with a raised median. Project included a double-lane roundabout for the proposed main entrance to the Americana Traditional Neighborhood Development (TND). She was responsible for roadway and roundabout geometrics, plan preparation and construction cost estimates. Also coordinated with the City, LADOTD, subconsultants, and Americana TND engineers.
03/13-02/14	HIGHWAY 64 BYPASS ROAD: Zachary, LA. <i>Project Engineer</i> - Ms. Nissen was responsible for the design of approximately 4,300 feet of new 4-lane divided roadway with a 16-foot raised median, and 1,700 feet of 2-lane roadway. The project included the study and conceptual design of two double-lane roundabouts. She was responsible for plan preparation, construction cost estimates, determining right-of way requirements for the roundabouts and coordinating with property owners. She coordinated with LADOTD and the subconsultant providing roundabout study and conceptual design.
04/17-07/19	FILMORE NORTH GROUP B, FEMA RECOVERY ROADS PROGRAM, CITY OF NEW ORLEANS: New Orleans, LA. Project Engineer - As Project Engineer on this pavement reconstruction project for several streets in the Filmore Neighborhood, Ms. Nissen prepared the PS&E for the removal and replacement of exiting asphalt and concrete pavement and drainage structures, as well as replacement of waterline & sewer main. Plan development tasks included horizontal & vertical geometry, subsurface drainage design, and cross section development.



Firm empl	loyed by	G.E.C	., Inc.		
Name	Chris	topher Nip	per, PE	Years of relevant experience with this employer	5
Title	Road	Design		Years of relevant experience with other employer(s)	2
Degree(s)	) / Years /	<sup>/</sup> Specializatio	n	B.S. / 2014 / Civil Engineering	
Active reg	gistration n	umber / state	/ expiration date	43281 / Louisiana / 09-31-2023	
Year regis	stered	2019	Discipline	Professional Engineer, Civil	
Contract	role(s) / b	rief description	n of responsibilities	Role on this Project: Road Design, Drainage	
Experience (mm/yy-			perience and qualifications rel time specified in the applicab	elevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience to the MPR(s).	dates should cover
		sy. ar Ar	stems and milling and over nd guidelines required for	perience in roadway widening and realignment in both rural and urban environments. In addition, he has rlay. Prior to joining GEC, Mr. Nipper worked with LADOTD for more than two years, affording him knowledge roadway projects. He is also familiar with AASHTO standards and guidelines and has completed the Modules 1-3 training. Mr. Nipper also completed FHWA-NHI-380096 Modern Roundabouts: Intersections I	e of their standards Traffic Engineering
02	2/19-07/2	20 in of	cluded the replacement of	OVERNMENT, I-10 SERVICE ROAD BRIDGE REPLACEMENTS: St Tammany Parish, LA. Road Design Engine two slab span bridges, Mr. Nipper was responsible for the vertical alignment, proposed length of the bardrail design. Mr. Nipper designed the new roadway approaches to the new bridge and calculated all of cost for the project.	oridges, placement
04	1/19-05/2	20 pr Sa	ovided all investigations, rasota Drive Bridges in Eas	LE DRIVE AND SARASOTA DRIVE BRIDGE REPLACEMENTS: East Baton Rouge Parish, LA. Design Engine preliminary plans, and preparation of final construction contract plans for the replacement of the Cost Baton Rouge Parish. Mr. Nipper provided the horizontal and vertical alignments, calculated the quantionidge sites. He also performed a hydraulic analysis and prepared a hydraulics report for each bridge.	Chevelle Drive and
06	6/17-202	.1 ex	isting interstate and the w	, WILLIAMS TO VETERANS: Jefferson Parish, LA. Road Design - Project included the design of the additividening/replacement of bridges to accommodate the additional lane. Mr. Nipper was responsible for the ks, the westbound proposed bridge vertical curve, and for calculating elevations along bridge bents and	ne hydraulic design
02,	/20-Prese	ent De	esigner for the GEC/Boh B	EGE DR FLYOVER RAMP DESIGN-BUILD PROJECT: East Baton Rouge Parish, LA. Roadway Design - Mr. cros. team. GEC is responsible for engineering and design quality control services as necessary to completely College Dr Flyover Ramp Design-Build Project.	
09,	/20-Prese	ent in th	clude an additional lane ir e drainage map depicting	<b>RKINS TO PICARDY): Baton Rouge, LA.</b> Road Design Engineer - GEC is designing the widening of Blue neach direction. The project includes replacement of existing bridges at Dawson Creek. Mr. Nipper assets existing conditions for the 9,730-acre drainage area. Mr. Nipper also developed the soil map for the er and associated flow through Dawson Creek. (City-Parish Project No. 19-CP-HC-0034)	sisted in preparing
09,	/19-Prese	ent Ai to sid	rline Highway that would capture and slow runoff dewalks were added dowi prizontal alignments for th	AIN COMPLETE STREETS: LaPlace, LA. Road Design Engineer - The project involved the design of a share connect to Main St. This path would accommodate pedestrians and bicyclists. The corridor utilizes land while simultaneously providing beautification of the area. Main St. was redesigned to accommodate in the entire project corridor on both sides, and bicycle lanes were added as well. Mr. Nipper provide the project, as well as the design for Main St. He provided the hydraulic analysis needed to convert exitations of the provided the stimated quantities and provided the estimated quantities are	dscaped bioswales on street parking, ed the vertical and sting open ditches



Firm employed by	G.E.C., Inc.
Name Christo	pher Nipper, PE Continued Resume
09/19-Present	<b>WEST TAMMANY HILLS DRAINAGE: Covington, LA.</b> <i>Project Engineer</i> - Mr. Nipper has assisted in the delineation of drainage maps and hydraulic calculations. He was involved in the design of the subsurface drainage systems and the roadway rehabilitation design. He also assisted in the development of the construction plans and associated quantities.
06/20-10/20	<b>US HWY 190 DRAINAGE CROSSING: Livingston Parish, LA.</b> Road Design Engineer - This project involved the design of a concrete box culvert cross drain. This cross drain was being added alongside an existing box culvert in order to assist with drainage to alleviate backwater flooding. Mr. Nipper calculated the quantities and developed the construction plan documents. Mr. Nipper also assisted in the drainage analysis and design of the concrete box culvert.
2018	<b>GREENWOOD MULTI-USE TRAIL: East Baton Rouge Parish, LA.</b> <i>QA/QC</i> - This project involved the design of a multi-use path in a BREC park. Mr. Nipper was involved in the QA/QC of this project and reviewed plans and quantities.
2017	LA 3152, CLEARVIEW OPERATIONAL IMPROVEMENTS: Jefferson Parish, LA. Designer - This project involved the milling and overlaying of LA 3152. Along with the milling and overlaying, turn lanes were being added, extended, etc., so new pavement sections were designed. Mr. Nipper was involved in checking and correcting the plans. He checked and calculated quantities and the estimated costs associated with this project.
06/17-10/18	H.012783 / WB VETERANS, SEVERN AVE. – CLEARVIEW PKWY.: Jefferson Parish, Veterans Blvd. Co-Designer – This project involved the milling and overlay of Veterans Blvd. Two new drainage systems were also designed to reduce ponding along the road way. Christopher Nipper was involved with checking the design of the drainage systems, along with the design of the typical sections. He also calculated quantities and estimated costs associated with the project.
09/17-12/18	CAMP COUSHATTA ROAD IMPROVEMENTS: Allen Parish, LA. Designer - This project involved the design of a new road for the Coushatta Tribe of Louisiana. Mr. Nipper was the designer of the road, drainage structures/systems, and all associated quantities, and the creator of the construction plan set. The road consisted of two eleven foot lanes, with 3 foot outside aggregate shoulders, and ditches on both sides. A subsurface drainage system was designed that tied into an existing subsurface system. Two reinforced concrete box culverts were designed to facilitate the flow of local canals through the new roadway, and one of the canals was realigned. Mr. Nipper calculated the quantities and estimated costs associated with the road and drainage systems.
2016-Present	<b>POWER BLVD. MEDIAN IMPROVEMENTS: Kenner, LA.</b> <i>Road Design Engineer</i> - This project is a shared-use path beginning at W. Esplanade Avenue and ending at Vintage Drive. A 12'-wide concrete shared use path will replace an existing 6'-width path. The wider section allows for a greater level of service that comfortably accommodates bi-directional pedestrian and bicycle use. In addition to the completed concrete path, the project will feature improved pedestrian lighting, a new steel bridge for pedestrians and bicyclists, seating, landscaping, irrigation, donated art, striping, signage, and more. This project connects to the recently completed Erlanger shared use path. Mr. Nipper's responsibilities included completion of construction plans for the shared use path including QA/QC of horizontal and vertical geometry, typical sections, construction phasing, signing and striping and estimated quantities.
2018	US 90 (FUTURE I-49 SOUTH), LA 318 INTERCHANGE, ROUTE US 90: St Mary Parish, LA. QA/QC - GEC was the Owner Verification Firm (OVF) for this Design-Build Project, which includes the CE&I, right-of-way acquisition, and utility relocation. Mr. Nipper was involved in the QA/QC of the construction plans. He checked quantities, and verified that elements of the design met LADOTD standards.
2016-2017	LA 990, 6TH-ED LEJEUNE (OVERLAY-DRAINAGE): West Baton Rouge Parish, LA. Designer - Mr. Nipper's project involved the milling and overlaying of the existing road, replacing the existing subsurface drainage system to bring it up to current standards, and extending the existing subsurface drainage system. This project required the analysis of the local drainage areas. Mr. Nipper assisted in designing a subsurface drainage system using the collected data from the drainage areas. He computed quantities for the milling/overlaying and the drainage system. The drainage system was designed according to the current LA DOTD standards and guidelines.



					GE
Firm emplo	oyed by	G.I	E.C., Inc.		
Name	Jona	than Phi	lley, El	Years of relevant experience with this employer	1
Title	Road	d Design		Years of relevant experience with other employer(s)	3
Degree(s)	/ Years	/ Specializ	ation	B.S. / 2019 / Civil Engineering	
Active reg	istration	number / s	tate / expiration date	34937 / Louisiana / 03-31-2024	
Year regist	tered	2022	Discipline	Engineer Intern	
Contract re	ole(s) / l	orief descrip	otion of responsibilities	Role on this Project: Road Design	
Experience (mm/yy-r			Experience and qualifications relative time specified in the applicab	evant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates ole MPR(s).	should cover
			and milling and overlay. Prio	perience with many projects, including roadway widening and realignment. In addition, he has designed drain or to joining GEC, Mr. Philley worked with HRC Engineers, Surveyors, and Landscape Architects and Pritchard the standards and guidelines required for roadway projects. He is also very familiar with AASHTO standards an	Engineering,
04/	'21-Pres	sent	the existing surface drainag collected data from the drain	<b>DRAINAGE: St Tammany Parish, LA.</b> <i>Designer</i> - This project involved milling and overlaying of the existing roge system to bring it up to current standards. This project required the analysis of the local drainage area nage areas a subsurface drainage system was designed. Quantities for the milling/overlaying and the drainage tem was designed according to the current LA DOTD standards and guidelines.	is. Using the
03/	'22-Pres	sent	it up to current standards. Th	<b>EMENTS:</b> St Tammany Parish, LA. <i>Designer</i> - This project involved replacing the existing surface drainage systems project required the analysis of the local drainage areas. Using the collected data from the drainage areas led. Quantities for the drainage system were computed. The drainage system was designed according to the nes.	a subsurface
20	017-201	18	<b>TURKEY CREEK ROAD: Oktibbeha County, MS.</b> <i>Designer</i> - This project involved full depth reclamation of the existing road, adding cement to the ne subgrade and new asphalt road. This project required calculating subgrade volume. It required designing superelevation for the curves being realign with consideration to the nearby intersection. The new road was designed with the current MDOT standards and guidelines.		
	2019		existing road, lot grading, sto drainage areas. Using the col	MONT: Douglas County, GA. Designer - This project involved design of 27 lots for townhomes. It required or mwater drainage and retention, sediment calculations, and erosion control. This project required the analysis llected data from the drainage areas it was determined an existing storm water management pond could be used. This project was designed with the current Douglas County standards and guidelines.	s of the local
20	2019-2020 design of eros			<b>ounty, GA.</b> <i>Designer</i> - This project involved the permitting of several existing lots. This required lot grading, loe easures. Quantities of cut/fill volume, and sediment volumes were computed. This project was designed with guidelines.	
20	019-202	20	grading, lot fit, and the desi	<b>UNTAIN:</b> Douglas County, GA. Designer - This project involved the permitting of several existing lots. This ign of erosion control measures. Quantities of cut/fill volume, and sediment volumes were computed. This ouglas County standards and guidelines.	
20	019-202	20	_		



Firm emplo	oyed by G.	E.C., Inc.		
Name	Keith Rebell	o, PhD, PE	Years of relevant experience with this employer	22
Title	Structural En	gineer	Years of relevant experience with other employer(s)	6
Degree(s)	/ Years / Specializ	zation	BS / 1983 / Civil Engineering; MS / 1986 / Civil Engineering; PhD / 1990 / Civil Engineering	
Active regi	istration number / s	state / expiration date	24937 / Louisiana / 03-31-2023	
Year regist	ered 1992	Discipline	Professional Engineer, Civil	
Contract re	ole(s) / brief descri	ption of responsibilities	Role on this Project: Bridge / MPR 4	
Experience (mm/yy-r		Experience and qualifications relevant to the time specified in the applicable MPR(	the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates s s).	should cover
		concrete bridges. He has designed a rehabilitation and widening), retain hydraulic structures. He has experie	Il engineering experience following his research work on non-linear deformation behavior of pre-stresse nd managed a variety of structural projects involving complex interstate and highway bridges (new, rep ing walls, noise walls, buildings, water and wastewater treatment facilities, hurricane protection system ince in rating of bridges in accordance with LADOTD and AASHTO MBE requirements and performed rations for two software and finite element analysis where required.	placement, ns &
07/	12-Present	100 feet long concrete slab span br	IAMS TO VETERANS: Jefferson Parish, LA. Structural Engineer - This project includes the replacement dge over Reine Canal and 5 span 100 feet long slab span bridge with 30-degree skew over French Branch is project and oversaw the structural design, plan preparation and Q.C.	-
11,	/18-07/20	span bridge over Reine Canal and !	<b>ell, LA.</b> <i>Project Manager (Structural)</i> - This project includes the replacement of a 5 span 100 feet long of span 100 feet long of span 100 feet long slab span bridge with 30-degree skew over French Branch Canal. Dr. Rebello is the doversaw the structural design, plan preparation and Q.C.	
04,	/19-12/21	of the existing Chevelle Drive Bridge Sarasota Drive bridge over Engine	E BRIDGE REPLACEMENTS: Baton Rouge, LA. Structural Project Manager - This project includes the ever the West Fork of the North Branch of Ward Creek with a 4-span 80-foot long slab span bridge and ears Depot Canal with a 5-span 105-foot long slab span bridge. Both bridges will have pedestrian work. Rebello is the Project Manager for this project and is overseeing the structural design, plan preparationality control.	d the existing ralks and are
04/	13-Present	a team involved in the design of th	<b>EN MEADOW:</b> Lafourche Parish, LA. Structural Engineer - Dr. Rebello serves as a Structural Engine e widening of an existing bridge and the construction of a new bridge totaling 6,500 feet in length. ists of prestressed concrete Type III girder spans. The new bridge portions will be supported on special	The variably
09/:	20-Present	investigation of the bridge over Day of the LADOTD BDEM. This investig will provide Condition Ratings for t	O PICARDY): Baton Rouge, LA. Bridge Design - For the roadway widening project, Dr. Rebello provides a sound of the bridge should be widened or replaced in accordance with Part ation will start with an in-depth investigation of the bridge superstructure and substructure. The inspective superstructure, substructure, and piles. The Condition Ratings will be used in the performance of a sel of Bridge Evaluation and the LADOTD BDEM. (City-Parish Project No. 19-CP-HC-0034)	1, Chapter 6 ection report
02/:	20-Present	for the GEC/Boh Bros. team. He had of the I-10 & I-12 College Dr. Flyove order to maintain at least two lane the Flyover as well as rolled steel gi	R. FLYOVER RAMP DESIGN-BUILD PROJECT: Baton Rouge, LA. Bridge Task Lead - Dr. Rebello is Brid as been responsible for engineering and design quality services necessary to complete the design and reproject. The Flyover was designed and construction plans were developed to permit a two-phase cost of traffic at all times. Dr. Rebello designed the two-span continuous (180 feet per span) steel super right spans for widening the existing I-10 westbound bridge over Ward Creek. He has also designed an ire project and is currently working on the design of the required sound barriers.	construction nstruction in structure for



Firm employ	yed by G	E.C., Inc.		
Name	Varaprasad	Venkata, PE	Years of relevant experience with this employer	14
Title	Senior Civil	Structural Engineer	Years of relevant experience with other employer(s)	10
Degree(s) /	/ Years / Specia	lization	B.S. / 1992 / Civil Engineering; M.S. / 1995 / Structural Engineering	
Active regist	stration number /	state / expiration date	40594 / Louisiana / 09-30-2022	
Year register	ered 2016	Discipline	Professional Engineer, Structural	
Contract rol	le(s) / brief desc	ription of responsibilities	Role on this Project: Bridge	
Experience (mm/yy-mi		Experience and qualifications ret the time specified in the applicab	levant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience do le MPR(s).	ites should cover
		hurricane protection system inclusive of FHWA funding, t supports for highway signs, t light pole attachments and fo	structural engineering experience involving highway bridges, low & high mast light pole supports, highwas, water treatment and distribution facilities, and industrial structures. He has provided design services for olling commissions, as well as non-state entities and private industry. His design experience includes AASH1 traffic signal supports, camera pole platforms and supports, DMS sign supports and main platforms, and loop oundations. His bridge design experience includes the widening of existing structures and new structures for ays, which includes, but not limited to, the design of pile bents, column bents, PSC girders, concrete deck, paders.	or state agencies O structural sign w and high mast highly congestea
200	06-2011	new bridge crossings at bot	ND ROAD (LA 42) IMPROVEMENTS (PERKINS TO AIRLINE): Baton Rouge, LA. Structural Design - Mr. Vand's Creek and Old Ward's Creek and tied to completed intersection improvements at Perkins Road (6 spans at 40') and 160' (4 spans at 40') in length respectively composed of quad beams or 24" pile be	nd and at Airline
04/1	19-12/21	replacement of the existing and the existing Sarasota Di will have pedestrian walks a designed rating for both bri	RASOTA DRIVE BRIDGE REPLACEMENTS: East Baton Rouge Parish, LA. Structural Engineer - This pro- Chevelle Drive Bridge over the West Fork of the North Branch of Ward Creek with a 4-span 80-foot long rive bridge over Engineers Depot Canal with a 5-span 105-foot long (20', 20', 25', 20', 20') slab span brid nd are located in Baton Rouge, Louisiana. Mr. Venkata is performing the final design calculations, plan pre- dges in accordance with AASHTO LRFD Bridge Design Specifications, the ASASHTO Manual for Bridge Eva- ual. (Bridge Recall No(s). 800541 and 800561; City Parish Project No. 18-BRUS-0016)	slab span bridge ge. Both bridges paration and as-
09/20-Present		BLUEBONNET BLVD. (PERKINS TO PICARDY): Baton Rouge, LA. <i>Bridge Design</i> - GEC is designing the widening of Bluebonnet Blvd. to include additional lane in each direction. Mr. Venkata performed QC checks on bridge rating calculations to determine whether the bridge should be wistor replaced in accordance with Part 1, Chapter 6 of the LADOTD BDEM and AASHTO Manual of Bridge Evaluation. Based on the load rating, recommended that the existing bridge be replaced. Mr. Venkata performed the feasibility review of phased construction of the new replaced bridge, maintaining two lanes of traffic in each direction during all phases of construction. He developed a new widened bridge layout plantage and the properties of the properties o		
11/1	18-07/20	bridge over Reine Canal and	<b>E REPLACEMENTS: Slidell, LA.</b> Structural Engineer - Included the replacement of a 5 span 100 feet long co I 5 span 100 feet long slab span bridge with 30-degree skew over French Branch Canal. Mr. Venkata works bridges in accordance with AASHTO LRFD Bridge Design Specifications and LA DOTD Bridge design standa	ed on design and
02/20-Present		Primary Bridge Engineer for for the Flyover and concrete for all substructures, median	the I-10 & I-12 College Dr. Flyover Design-Build Project. He designed and supervised the design of conce decks for both the Flyover and Ward Creek Bridge. Additionally, Mr. Venkata designed and supervised plan barriers, and moment slabs on the project. Currently, he is working on developing plans for the phasedek Bridge, to ensure maintenance of 5 lanes of traffic on I-10 westbound.	ete girder spans an development



Firm empl	loyed by	G.E.C., Inc.		GE
Name	Brian E	Buckel, PE	Years of relevant experience with this employer	10
Title	Senior	Vice President	Years of relevant experience with other employer(s)	31
Degree(s)	/ Years / S	pecialization	B.S. / 1981 / Civil Engineering	
Active rec	gistration nur	nber / state / expiration date	21816 / Louisiana / 09-30-2023	
Year regis	stered 19	Discipline	Professional Engineer, Civil	
Contract	role(s) / brie	f description of responsibilities	Role on this Project: Construction Coordination	
Experience (mm/yy-		Experience and qualifications relevant the time specified in the applicable MP	t to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates s PR(s).	hould cover
		from 2006 to 2012, managing the Delivery projects. He served as Ar managing the seven parishes und Mr. Buckel's portfolio of projects a high density populated and traveled managing OV for LADOTD DB pro	Vice President of Construction after 31 years of service with LADOTD, where he served as Chief Construct e Construction Section as well as policy setting of construction projects including implementation for severa rea Engineer throughout the State of Louisiana for seven years and as District Construction Engineer for der District 02 where he led the state into Superpave, warm mix, and other significant asphalt pavement at LADOTD include the most complex construction projects in Louisiana with much of his work being perform led Greater New Orleans area. He leads GEC's Construction Division through the most complicated projects ojects and CEI on DBB projects for major highway and interstate projects, urban and rural, with complex He has the following certifications: ATSSA TCT/TCS, ATSSA Flagger	al Alternative seven years, innovations. ormed in the in Louisiana,
07,	/19-Presen	firm, is providing all necessary eng contract on behalf of LADOTD, alo	CHANGE IMPROVEMENTS: Jefferson Parish, Louisiana. Principal-in-Charge - GEC, selected as the Owne gineering & related services for Design-Build Construction Support Services for the administration of the ong with managing the implementation of the Project's Construction Quality Assurance Program (CQAP). In constructability review to the LADOTD Project Manager to verify requirements of the contract docume	Design-Build Mr. Buckel is
09	)/20-06/21	long concrete slab span bridge ov	<b>EPLACEMENT: Slidell, Louisiana.</b> Construction Engineer - This project included the replacement of a 5-s ver Reine Canal and 5-span 100 feet long slab span bridge with 30-degree skew over French Branch Canal ering and inspection for this project.	
05	5/15-09/21	management and oversight for th	<b>RTICAL LIFT SPAN BRIDGE REHABILITATION: Larose, LA.</b> <i>Principal-in-Charge</i> - Mr. Buckel is proving the GEC Project Engineer and inspectors for the rehabilitation of the West Larose Bridge. The project income and of the existing paint system and repainting, structural repairs and bolt replacement, and rehabilities.	ludes a new
09/	/12-Presen	Parish, LA. Principal-in-Charge - T for all City of Baton Rouge Street inspectors. These inspectors mus	RISH STREET AND ROAD REHABILITATION PROGRAM (DPW PROJECT NO. 15-CEST-0001): East Ending project began in 1990 and GEC has been the prime consulting engineer, responsible for construction improvements since 1991. In this role, GEC provides one project engineer, one senior chief inspector, a list be certified by LADOTD in both asphalt and concrete construction. In addition, GEC provides between Asphaltic Concrete Paving, Portland Cement Concrete Paving or Embankment and Base Course construction.	n inspection nd two chief een 5 and 6
03/	/17-presen	Engineer until October 2018 and t existing lanes, widening the westl overpass and widens the overpas	9 JCT.: Lafayette and St. Martin Parishes, LA. Project Engineer/Principal-in-Charge - Mr. Buckel served is currently Principal-in-Charge of this project that includes full-depth replacement of the pavement bound and eastbound pavement surface, and installing concrete median protection. The project replaces sses and structures on Bayou Teche, Vermillion River, Louisiana Ave, Francis Coulee, and LA 176 (Moss Stable strips would also be installed.	t within the s the LA 328



		<u> </u>		
Firm empl	oyed by <b>G.</b>	E.C., Inc.		
Name	Roland Mau	rin Jr., PE	Years of relevant experience with this employer	7
Title	Construction	Engineer	Years of relevant experience with other employer(s)	39
Degree(s)	/ Years / Specializ	zation	B.S. / 1977 / Civil Engineering	
Active reg	gistration number / s	state / expiration date	20553 / Louisiana / 09-30-2022	
Year regis	tered 1983	Discipline	Professional Engineer, Civil	
Contract r	role(s) / brief descri	ption of responsibilities	Role on this Project: Construction Coordination	
Experience (mm/yy-		Experience and qualifications relevant to the the time specified in the applicable MPR(s).	proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates sh	iould cover
		included roadway, bridge, and facility management. He served as manager system) bridges. He was also district activities. In addition, he served as Dis in Hammond, Terrebonne Parish, and	rin was Assistant District Administrator LADOTD Operations, managing District 62 district-wide operations maintenance, movable bridge operations, ferry landings, rest area operations, roadside development of traffic engineering, traffic operations, and bridge inspection and painting of state (on system) are incident commander for all road/weather events, preparations, coordination with authorities, and trict Maintenance Engineer LADOTD for seven years, overseeing all LADOTD maintenance activities in Lafourche Parish. For 13 years, he served as Resident Construction Engineer, performing contract admin, St. Helena, and northern Tangipahoa parishes. He has the following certifications: ATSSA TCT/TCS, AT.	nt, and fleet nd local (off after event n District 62 ministration
01/	/15-Present	This project began in 1990 and GEC has improvements since 1991. In this role must be certified by LADOTD in both a	ABILITATION PROGRAM (DPW PROJECT NO. 15-CEST-0001): East Baton Rouge Parish, LA. Project as been the prime consulting engineer, responsible for construction inspection for all City of Baton Role, GEC provides one project engineer, one senior chief inspector, and two chief inspectors. These asphalt and concrete construction. In addition, GEC provides between 5 and 6 inspectors certified by the ement Concrete Paving or Embankment and Base Course construction.	ouge Street inspectors
05	/15-09/21	representing the LADOTD on the reha	<b>L LIFT SPAN BRIDGE REHABILITATION: Larose, LA.</b> <i>Project Engineer</i> - Mr. Maurin was the Proje bilitation of the West Larose Bridge. The \$26M project included a new fender system construction, ng, structural repairs and bolt replacement, and rehabilitation of the electrical and mechanical system.	removal of
11	/14-03/18	project is the most recent to expand damaged the access ramps on the 9-M was to widen Crossover 5 instead of re Southbound bridges that is approximately	ROUND SPANS, CROSSOVER #5 WIDENING: St. Tammany and Jefferson Parishes, LA. Project Over the Lake Pontchartrain Causeway. Mr. Maurin had project oversight of this project. Hurricane Katri ile Turnaround. An economic study was performed and it was determined that the most prudent cour ebuilding the ramps to the turnaround. This \$8.3M project constructed a platform between the North ately 120'x80'. The platform, constructed of AASHTO Type IV PPC Girders, was designed for full vehions tower. All GNOEC and Cell Phone equipment located at the turnaround was moved to the platfor	ina severely rse of action abound and sicle loading
06	5/16-04/18		<b>OF THE 9 MILE: St. Tammany and Jefferson Parishes, LA.</b> <i>Construction Engineer</i> - Mr. Maurin I D SiteManager Approval of DWRs and final change orders, as well as compiling the final punch list for a	
09	//06-06/13	roadway, bridge and facility maintenan Manager of traffic engineering, traffic	TOR LADOTD OPERATIONS: Mr. Maurin was the manager of District 62 district-wide operations ce, movable bridge operations, ferry landings, rest area operations, roadside development and fleet mapperations and bridge inspection and painting of state (on system) and local (off system) bridges. Districts, preparations, coordination with authorities and after events.	anagement.
08	/05-09/06	of 6 parishes, 1842 miles of roadway,	<b>R, LADOTD:</b> Mr. Maurin managed all LADOTD maintenance activities in District 62, Hammond, wh 550 bridges, 8 movable bridges & 3 rest areas. Responsible for roadway, bridge/facility maintenance als, striping, drainage, rest area operations, herbicide program, fleet management & emergency operations.	ce, movable



Firm empl	loyed by	G.E.C., Inc.		
Name	Jeff Ro	binson, PE	Years of relevant experience with this employer	27
Title	Senior	Environmental Engineer	Years of relevant experience with other employer(s)	11
Degree(s)	) / Years / :	Specialization	B.S. / 1995 / Civil Engineering	
Active reg	gistration nu	mber / state / expiration date	29322 / Louisiana / 03-31-2023	
Year regis	stered 2	001 Discipline	Professional Engineer, Civil	
Contract i	role(s) / brid	ef description of responsibilities	Role on this Project: Environmental Coordination	
Experience (mm/yy-		Experience and qualifications relevant the time specified in the applicable	vant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experien e MPR(s).	ce dates should cover
		consulting services for federal respected for his thorough and design, federal and state complete can match the breadth and dwetland mitigation bank plans	25 years of civil/environmental engineering project management experience and provides planning and state regulatory compliance issues for numerous governmental and private sector clients. Multiply objective approach to environmental, hydrologic, transportation and geotechnical issues as the poliance, wetlands, hazardous materials, and other critical issues surrounding major infrastructure professed in NEPA documentation, HTRW investigations, environmental policy and permitting, ASTM E 1527 Phase I ESA, storm water planning/design, noise analyses, and asbured the NHI Course No. 142005, "National Environmental Policy Act (NEPA) and Transportation Decisions."	1r. Robinson is widely y relate to permitting, ojects. Few engineers ntal baseline studies, estos inspections. Mr
2006-2011  HIGHLAND ROAD (LA 42) IMPROVE Site Assessment (ESA) and a wetland of 1527-13 Standard Practice for Environ conditions for the project GEC: (1) re pertinent personnel; and (4) perform		Site Assessment (ESA) and a w 1527-13 Standard Practice for conditions for the project GE	PROVEMENTS (PERKINS TO AIRLINE): Baton Rouge, LA. Environmental Engineer - GEC conduct vetland delineation. Mr. Robinson oversaw production of the ESA in accordance with the scope and I Environmental Site Assessments: Phase I Environmental Site Assessment Process. In order to character (1) reviewed federal, state, and local environmental databases; (2) conducted historical research performed a site investigation. This assessment revealed no recognized environmental conditions	limitations of ASTM E terize environmenta arch; (3) interviewed
01	1/14-05/17	responsibilities included projet for the widening of approximation of will include the construction of agency coordination / Solicitat mitigation and permitting, Sec	COLLINS BOULEVARD WIDENING (US-190B – LA 25): Covington, LA. Environmental Project Management for the preparation of an Environmental Assessment (EA) with Finding of No Significately three miles of U.S. Hwy 190 in Covington in accordance with DOTD, FWHA, and NEPA requirem of new bridges across the Bogue Falaya River. GEC's services included the development of a Purpose ation of Views, and the preparation of environmental documentation. Among other items, the EA ctions 4(f) and 6(f) consultations, floodplains, and threatened and endangered species consultation deffort to improve traffic flow efficiency through the primary north-south roadway corridor in Covi	ficant Impact (FONSI lents, a project which and Need statement addressed wetland ns. Mr. Robinson wa
01	1/14-05/16	responsibilities included proje for the widening of approxim included plans to raise the hig statement, agency coordination	VIDENING (LAKE PONTCHARTRAIN-SPARTAN DRIVE): Slidell, LA. Environmental Project Management for the preparation of an Environmental Assessment (EA) with Finding of No Significately 2.8 miles of U.S. Hwy 11 in Slidell in accordance with DOTD, FHWA, and NEPA requirements, ghway at its intersection with a flood protection levee. GEC's services included the development of on / Solicitation of Views, and the preparation of environmental documentation. Among other iteratiting, Sections 4(f) and 6(f) consultations, floodplains, and threatened and endangered species con	ficant Impact (FONSI a project which also a Purpose and Need ns, the EA addressed
2	2001-2009	responsible for all environmer more than 260 miles of new Infrastructure Model for Econ	TD PROGRAM: Various Locations in LA. Environmental Manager - Mr. Robinson served as the Environmental planning, permitting, design and regulatory clearance pursuant to the construction of 35 projects in highway construction addressed in the Louisiana Department of Transportation and Development (TIMED) Program. The program required National Environmental Policy Act (Nure Federal and other environmental permits required for construction and included the following parts.	segments comprising nent's Transportation EPA) evaluations and



Firm employed b		E.C., Inc.	V L	of all the second	-4
	ss Bernard	nt Environmental / Business De	Years of relevant experie	, ,	<1
		·	B.S. / 2014 / Civil Engineering	ence with other employer(s)	8
Degree(s) / Yea	•		42709 / Louisiana / 03-31-2023		
Year registered	2018	state / expiration date  Discipline	Professional Engineer, Civil		
-		ption of responsibilities	Role on this Project: Environmental Coordi	ination	
Experience date (mm/yy-mm/y	S		o the proposed contract; i.e., "designed drainage", "desig		ce dates should cover
		(open channel, sub-surface, flood has extensive knowledge of NEP, Statements for federal and state TCT, TCS, and Certified Flagger t	ional Engineer, experienced with a range of engin lain mapping, and numerical modeling), coastal/ho regulations and has served as the Project Manage gencies, including LADOTD, FHWA, USDA, NRCS, L ining courses, NHI Course NEPA & the Transportat ering Process and Report Training Modules 1, 2, ar	abitat restoration, traffic engineering, and road or on several Environmental Assessments and En USACE, NPS, NRDA, LATIG, and CPRA. She has c tion Decision-Making Process, the LADOTD Hig	dway design. She ha invironmental Impac completed the ATSS ihway Safety Manua
05/17-05/20 as ou to stu stu the Bri of		as the project manager. Prime co outreach, and engineering and e to reach an environmental decis studies, including line & grade s studies, and cultural resources s the compilation of all studies re- Bridge. She developed and recei of Louisiana. She developed a F	HURCH STREET ENVIRONMENTAL ASSESSMENT Sultant assisted LADOTD and FHWA to formulate a vironmental services necessary to gauge public support as required by NEPA. She analyzed project imparty, GIS mapping, wetland delineation & threaten riveys. She directed all activities for numerous stall irred by NEPA and public and agency involvement, and approval on the first known LADOTD and FHWA ding of No Significant Impact (FONSI) document, d as a template for future FONSIs developed in page	a concise public document, or EA. She provided pport and document information necessary for cacts by coordinating and assisting in developined and endangered species study, phase 1 EA keholder meetings, public meetings, and public, she developed the Final EA for the replaceme "net benefit determination" for Section 4(f) properties which was approved by FHWA and LADOTD.	I the planning, public r LADOTD and FHWA ing various technica A, air & noise impactic ic hearings. Through ent of the Cane Rive roperties in the State
05/17-03/22		served as project manager and v in developing various technical presentations, postcard mailers, the web. She hosted one of the f many of the standard procedure	ICIL ROAD TO WELL ROAD ENVIRONMENTAL A is a member of prime consultant team to develop udies, including line & grade study, GIS mapping, and other documents for stakeholder & community st LADOTD virtual public meetings held completely for the meeting for a social-distance-friendly plattine developed the draft EA Report.	the EA. She analyzed project impacts by coord phase 1 EA, and air & noise impact studies. Shy outreach and worked directly with LADOTD or y online following the COVID-19 pandemic which	linating and assistin, he prepared reports n public outreach vi ch required adaptin
01/20-12/21		and was the engineer-of-record necessary improvements along to with LADOTD, and overseeing co of-record, preparing the Stage 0 alternatives and presented find study, she was responsible for	D TO LIBERTY ROAD): East Baton Rouge Parish, I esponsible for managing and providing all enginese corridor. In Phase 1, she was responsible for perfecept development and evaluation for roadway alternatives study & Environmental Inventory to example to LADOTD to select 3 preferred alternatives for the provided and developed finate, roadway engineering plans, and opinion of prob	ering, environmental, and planning services re- forming project research, establishing design co ernatives, based upon a traffic study. In Phase 2 nine feasibility of improving mobility and opera or 3 segments along LA 37. Upon completion co al signed and sealed Stage 0 Feasibility Repo	equired to determin criteria in accordanc 2, she was enginee ations. She evaluate of alternatives traffi



Firm emplo	oyed by	G.E.C	C., Inc.				
Name	Thon	nas Swans	on, PE, PTOE	Years of relevant experience with this employer	13		
Title	ITS Se	ection Mar	nager	Years of relevant experience with other employer(s)	10		
Degree(s)	/ Years /	/ Specialization	on	B.S. / 1992 / Civil Engineering			
Active regi	istration n	number / state	e / expiration date	30139 / Louisiana / 09-30-2022 1016 / US / 04-10-2024			
Year regist		2002 2006	Discipline	Professional Engineer, Civil Professional Traffic Operations Engineer (PTOE)			
Contract re	ole(s) / b	rief descriptio	n of responsibilities	Role on this Project: Signing			
Experience (mm/yy-r			sperience and qualifications releventimes to the common time applicable time specified in the applicable	vant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates a MPR(s).	should cover		
		co hi pr tr d	ompleted several Electrical an as over 20 years of experienc rofessional engineering servic affic data collection and and evelopment of traffic contro	over 33 years ago when he worked as an electrician for the U.S. Navy. Even though he graduated in Civil En and Power Engineering courses and much of his career has focused on Electrical Engineering since he graduate are with transportation planning and traffic engineering. While in GEC's Electrical Department, Mr. Swanson are associated with Stage O Feasibility Studies, Stage 1 Environmental Assessments, traffic studies and traffic alysis, traffic signal warrant analysis, traffic signal timing and optimization, design of isolated traffic signal and devices plans and computerized signal system design and engineering projects. He has completed Traffic signal lighting and ITS projects. This includes several Level 4 TMPs in accordance with all applicable stand	d in 1992. He has provided signal design intersections ransportation		
02/	02/20-Present responsibilities included the ITS system		esponsibilities included the I		OR. FLYOVER RAMP DESIGN-BUILD PROJECT: East Baton Rouge Parish, LA. Traffic Engineer - Mr. Swanson's em relocation design, and construction signage and striping (Maintenance of Traffic) and permanent signage and empleted the construction signing/striping layout as well as permanent signing/striping.		
09/	19-Prese	ent cı	ossings at Airline Highway (I	<b>N COMPLETE STREETS: LaPlace, LA.</b> <i>Traffic Engineer</i> - Mr. Swanson performed design of ADA-compliar US 61) and Main Street for this ongoing project. He also completed a pedestrian/traffic study for the Main Sing vehicular and pedestrian traffic, to assess the need to add crosswalks.			
	2017	P	ALMISANO BLVD. IMPROV	<b>EMENTS: Chalmette, LA.</b> <i>Traffic Engineer</i> - Mr. Swanson completed striping and signing for a bike path.			
Mr. Swanson provided Signal Modificat 621 at the I-10 interchange including pr zone signage and assigned deliverables intersection analysis and with signal str		Ir. Swanson provided Signal 21 at the I-10 interchange income signage and assigned detersection analysis and with raffic Counts for LA 21 at Pine	W AND DESIGN, DISTRICT 61, TASK 1 – LA HIGHWAY 73 AT I-10 AND LA 621: Ascension Parish, LA. Traf. Modifications and Geometric Study. Task required conducting a traffic and transportation network analysis cluding project management, warrant analysis, traffic signal study, traffic signal timing and optimization, ten eliverables. Traffic counts, warrant analysis, field inspection of all four intersections; deliverables (report); a signal study for St. John Street at Main Street, LA 22 at Pine and LA 22 at LA21/ LA1077. Traffic Signal St. and St. John Street at Main Street (LA 21); Manual Traffic Counts for LA 22 at Pine and LA 22 at LA 21/LA 107 tt.	s of LA 73/LA nporary work Unsignalized udy - Manua			
2013 between Jefferson Highway and I-10		etween Jefferson Highway a	STRICT 61: Baton Rouge, LA. <i>Traffic Engineer</i> - Project included widening and improvements of Essen Lane in nd I-10, by adding additional lane in the southbound direction. Mr. Swanson designed modifications and e velopment of a Transportation Management Plan.				
04,	/16-10/1	16 0	RMOND BLVD. REHABILIT	ATION: St. Charles Parish, LA. Traffic Engineer - Mr. Swanson performed traffic counts and a new roadway	striping plan		
20	011-201	5 al	ignment and recommended	WAY CAPACITY IMPROVEMENTS: Jefferson Parish, LA. Traffic Engineer - Mr. Swanson provided a stude geometric improvements, specifically improvement of the Clearview/Airline Highway and Clearview/I Stage 0 and was involved in the Transportation Management Plan.			



Firm empl	oyed by Lo	Terre Engineering, LLC				
Name	Seneca Tous	sant, PE	Years of relevant experience with this employer	2		
Title	Civil Enginee	r	Years of relevant experience with other employer(s)	18		
Degree(s)	/ Years / Speciali	zation	B.S. /1999 / Biological Engineering			
Active reg	jistration number /	state / expiration date	36080 / Louisiana / 09-30-2023			
Year regis	tered 2011	Discipline	Professional Engineer, Civil			
Contract r	ole(s) / brief descr	iption of responsibilities	Role on this Project: <b>Drainage Design, Roadway Design Support</b>			
Experienc (mm/yy-		Experience and qualifications relevant to the the time specified in the applicable MPR(s).	proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates sh	ould cover		
20 year	rs of experience	His experience includes roadway and of Toussant has been involved in projects f	Mr. Toussant is a registered civil engineer in four states currently with over 20 years of consulting experience for an extensive and varied range of projects. His experience includes roadway and drainage design, preparation of planning documents, design studies and hydrologic and hydraulic studies. Mr. Toussant has been involved in projects from the initial planning stages, through design, to project coordination and construction inspection through final acceptance. He is registered as a professional civil engineer in four states and his relevant project experience includes:			
06/2	022-Ongoing	SHARP ROAD (FLORIDA BLVD TO OLD HAMMOND HWY): Baton Rouge, LA. Mr. Toussant is providing roadway design services including existing and proposed drainage maps, subsurface drainage design and preparation of preliminary and final plans, including typical sections and plan and profile sheets.				
03/2	022-Ongoing	<b>WARD CREEK AT SIEGEN LANE CHANNEL IMPROVEMENTS:</b> Baton Rouge, LA. Mr. Toussant is assisting in the preparation of construction documents for channel improvements for Ward Creek in Baton Rouge, Louisiana. His responsibilities also includes preparation of temporary traffic control plans, permits and permit figures for DOTD approval.				
08/2	021-Ongoing	MOVEBR CAPACITY MANAGEMENT PROGRAM: Baton Rouge, LA. Mr. Toussant serves as project manager for specialty contracts for the MoveBR Capacity program management team. He is responsible for the specialty contracts program which include environmental services, geotechnical services, surveying, lighting design and landscaping services. His responsibilities include preparing project scopes, soliciting proposals, contract negotiations, submittal coordination and submittal reviews.				
03/2	020-06/2020	S.P. NO H.012339, LA 24 SIDEWALKS REHAB: Houma, LA. Mr. Toussant was responsible for the preparation of construction documents for ADA compliant sidewalks on both sides of LA 24 from Barataria Avenue to New Orleans Boulevard in Houma, LA. He prepared preliminary and final plans, including grading, cost estimates, and design reports.				
03/2	020-06/2020	CITY OF NEW ORLEANS: RR119 Marlyville-Fontainebleau Group D (FRC): New Orleans, LA. Mr. Toussant was responsible for the preparation of preliminary plans for Colapissa Street and Nelson Street for the Marlyville-Fontainebleau Group D Project. He prepared typical sections and plan and profile sheets for the roadway reconstruction, which included upgrades to existing subsurface drainage and inlets in accordance with the LADOTD Hydraulics Manual.				
03/2020-06/2020		CITY OF NEW ORLEANS: RR119 Marlyville-Fontainebleau Group F (FRC): New Orleans, LA. Mr. Toussant was responsible for the preparation of preliminary plans for Vincennes Place for the Marlyville-Fontainebleau Group F Project. He prepared typical sections and plan and profile sheets for the roadway reconstruction, which included upgrades to existing subsurface drainage and inlets in accordance with the LADOTD Hydraulics Manual.				
07/2020 – 9/2020		Culvert Replacement project which inc 72" RCPA pipes on Church Street in Ma site visits, review of pay applications, s	H STREET CULVERT REPLACEMENT: Maringouin, LA. Mr. Toussant was project engineer and construction manager for the Church Street Replacement project which included preparing construction documents required for the replacement of 2-60" CMP Cross Drain pipes with PA pipes on Church Street in Maringouin LA in Iberville Parish. Mr. Toussant duties included conducting a preconstruction meeting, biweekly its, review of pay applications, submittals and RFI's, progress meeting between contractor and owner, reviewed and monitored all required sting, project final acceptance and project closeout.			



Firm employed by La Terre Engineering, LLC				
Name Seneca Tous	csant, PE Continued Resume			
02/2020 – 08/2020	<b>COASTAL PROTECTION AND RESTORATION AUTHORITY:</b> Grand Isle State Park Improvement Phase I: Grand Isle, LA. Mr. Toussant was the lead civil engineer and project manager for the roadway and drainage improvement project at Grand Isle State Park. He was responsible for preparation of construction documents for 3 miles of asphalt roadway repairs, overlay and asphalt parking areas in accordance with LADOTD specifications, standards, and guidelines, including ADA accessible parking and access. Mr. Toussant provided construction administration including the review of pay applications, submittals and RFI's, conducted progress meeting between contractor, owner and CPRA, performed site visits, reviewed and monitored all required field testing, final acceptance and project closeout.			
02/2018 – 09/2018	S.P. NO. H.010768.6 MULTI-USE TRAILS (WEST BATON ROUGE): Addis, LA. Mr. Toussant provided Construction Administration and CE&I services for the West Baton Rouge Multi Use Trail project on top of the Mississppi River Levee in West Baton Rouge Parish. Mr. Toussant was responsible for engineering and inspection services including conducting the pre-construction meeting, maintaining field records and project diaries on LADOTD SiteManager, coordinating testing and sampling for Quality Assurance in accordance with the LADOTD Sampling and Testing Manual, review and approval of contractor submittals, final acceptance and project closeout.			
2016	<b>LA 3127 EXTENSION CORRIDOR STUDY:</b> Ascension Parish, LA. Mr. Toussant provided QA/QC for a feasibility study for the extension of LA 3127 from its current terminus at LA 70 in Ascension Parish to the intersection of LA 943 and US Hwy 1 including a proposed Bayou Lafourche bridge crossing at Hwy 1 and LA 308.			
03/2017 - 08/2017	<b>FALGOUT CANAL ROAD REPAVING PROJECT:</b> Terrebonne Parish, LA. Mr. Toussant was the lead civil engineer and project manager for the roadway project. He was responsible for preparation of construction documents for roadway repairs, elevation adjustments and overlay in accordance with LADOTD specifications, standards, and guidelines. Mr. Toussant performed construction administration including biweekly site visits, the of review of pay applications, submittals and RFI's, progress meeting between contractor and owner, reviewed and monitored all required field testing, project final acceptance and project closeout.			
12/15 - 08/16	INTERSECTION IMPROVEMENTS AND ROADWAY REALIGNMENTS: Calcasieu Parish, LA. Mr. Toussant was the project manager and lead design engineer responsible for the design and preparation of construction documents and cost estimates for 11 roadway intersection improvements required to mitigate traffic impacts along state and parish roadways for the proposed Axiall Plant Expansion in Calcasieu Parish, LA. He prepared and reviewed plans, including demolition, geometric drawings, signing plans, associated drainage improvements and was responsible for ROW acquisitions, coordinating existing utility relocations.			
02/07 – 06/08	<b>S.P. NO. 817-41-0014, CP PROJECT NO. 06-CS-HC-0029:</b> South Harrell's Ferry Road Improvements, GLP East Baton Rouge Parish: Baton Rouge, LA. Mr. Toussant was responsible for the horizontal and vertical alignments designs for portions of the project and the subsurface drainage design which was completed utilizing the LADOTD hydraulics software.			



Firm employed by La	Terre Engineering, LLC								
Name Lyle Tynes, E	il .	Years of relevant experience with this employer	1						
Title Engineer Into	ern	Years of relevant experience with other employer(s)	0.5						
Degree(s) / Years / Speciali	zation	B.S. /2020 / Civil Engineering							
Active registration number /	state / expiration date	35128 / Louisiana / 09-30-2022							
Year registered 2022	Discipline	Engineer Intern							
Contract role(s) / brief descr	ption of responsibilities	Role on this Project: Drainage Design, Roadway Design Support							
Experience dates (mm/yy-mm/yy)	Experience and qualifications relevant to the the time specified in the applicable MPR(s).	proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience c	lates should cover						
1.5 years of experience		iana State University in Civil Engineering. Mr. Tynes' experience includes subsurface and open compiling construction packages for a wide range of projects, including preparing drawings, straining with clients							
06/2022-Ongoing		<b>D HAMMOND HWY):</b> Baton Rouge, LA. Mr. Tynes is providing roadway design services include rainage design and preparation of preliminary and final plans, including typical sections and preserving the providing typical sections.							
02/2022-Ongoing		LA 22 GAPPING PROJECT: Ascension, LA. Mr. Tynes is part of the grant administration team action administration assistance, site inspections, review of contractor invoices and construction							
03/2022-Ongoing		NNEL IMPROVEMENTS: Baton Rouge, LA. Mr. Tynes is assisting in the preparation of constructed in Baton Rouge, Louisiana. His responsibilities also includes preparation of temporary trapproval.							
08/2021-Ongoing		<b>PROGRAM:</b> Baton Rouge, LA. Mr. Tynes is currently providing drafting and permit drawing sunt projects as part of the capacity management program for the City of Baton Rouge's MoveBF							
01/2022-Ongoing	preliminary and final construction doc	<b>TOWN OF MARINGOUIN IMPROVEMENTS:</b> Maringouin, LA. Mr. Tynes is responsible for the uments for roadside drainage improvements for the Town of Maringouin Drainage Improvements construction documents for roadside open channel and subsurface drainage systems, cost est	ents project. His						
08/2021-Ongoing	for multiple projects for Diamond D Inc permits throughout the state of Louisia	<b>D INDUSTRIES:</b> Calcasieu Parish, LA. Mr. Tynes is providing engineering and construction support as required industries on behalf of Entergy Louisiana. This support includes preparing temporary traffic control plans and siana to DOTD for road and lane closures and civil site design for laydown yards, driveway permitting, turn action and access roads with DOTD and multiple Parishes.							

### 17. Firm Experience



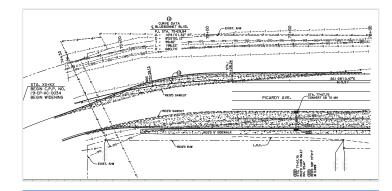
Firm Name	G.E.C., Inc.				Past Performance Evaluation Discipline(s)* Road,			Road, Bridge	
Project Name	Bluebonnet Blvd. (Pe	rkins Road to Pi	cardy Avenue)				Firm respons	sibility (prime or sub?	Prime
Project Number	City-Parish Project No	City-Parish Project No. 19-CP-HC-0034 Owner's Name City-Parish of East Baton Rouge							
Project Location	Baton Rouge, Louisia	Baton Rouge, Louisiana					Owner's Project Manager Tom Stephens, PE		
Owner's address	, phone, email	PO Box 1471, Ba	aton Rouge, LA 708	321, (225) 389-3186, tstep	hens@	@brla.gov			
Services commenced by this firm (mm/yy) 09/20			09/20	Total consultant contract cost (\$1,000's)					\$ 1885
Services completed by this firm (mm/yy) Ongoing			Cost of consultant services provided by this firm (\$1,000's)					\$ 995	

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

GEC was selected by the City-Parish of East Baton Rouge to design an additional lane in each direction on Bluebonnet Blvd., currently a four-lane roadway between Perkins Road and Picardy Avenue, along with redesigning the existing bridges over Dawson Creek. GEC completed a design study and is currently in the final design phase for a six-lane boulevard, curb and gutter roadway with subsurface drainage, green infrastructure and pedestrian facilities. GEC's design is in accordance with MOVEBR Design Guidelines and Consultant Services Manual. GEC's design study included preliminary horizontal/vertical alignments and intersection geometry based on LIDAR information.

GEC provided a hydraulic analysis for Dawson Creek Bridge replacement and a study of the existing bridge over Dawson Creek to determine whether the bridge should be widened or replaced in accordance with Part 1, Chapter 6 of the LADOTD BDEM. GEC performed an NBIS bridge inspection to determine Condition Ratings for the bridge superstructure, substructure, and piles. A Bridge Load Rating was then carried out based on the AASHTO Manual of Bridge Evaluation and the LADOTD BDEM. Based on the load rating, GEC recommended that the existing bridge be replaced and is currently performing design and construction plan development of the replacement bridges.

The existing separated bridges provide for two (2) traffic lanes in both the southbound and northbound directions. The new bridges will provide five (5) lanes of traffic (three (3) through and two (2) turn lanes)



GEC was tasked with threading an additional lane through this narrow, highly-congested corridor with underground utilities

in the southbound direction and three (3) lanes of through traffic in the northbound direction. The southbound bridge will have a clear roadway width of 58'-0" made up of five (5) 11-0" lanes and two (2) 1'-6" shoulders. On the northbound bridge, three (3) 11'-0" lanes and two (2) 1'-6" shoulders will provide a clear roadway width of 38'-0". The bridges will have a 10'-0" wide multi-mode sidewalk (southbound) and a 5'-0" wide pedestrian sidewalk (northbound). The assumed bridge structure consists of three 80'-0" LG-36 pre-stressed concrete girder spans with cast-in place concrete decks. All spans contain parallel girders and do not have any end skews. The cast-on-place abutments will be supported by two (2) rows of 16" square pre-stressed concrete piles and the intermediate bents will consist of cast-in-place concrete caps supported by 24" square precast pre-stressed concrete piles. The bridge design will incorporate a construction phasing that ensures 2-lanes of traffic at all times in both directions. The temporary traffic lanes will be 11'-0" wide and no shoulders will be provided. Phasing will be as follows: Phase I: Construction of a bridge in the median between the 2 existing bridges; Phase II: Demolition and re-construction/widening of the existing southbound bridge after southbound traffic is re-directed on to the median bridge; Phase III: Demolition and re-construction/widening of the existing northbound bridge after moving southbound traffic on to the new southbound bridge and re-directing northbound traffic on to the median bridge. GEC will also provide a complete analysis of the existing drainage system to determine its adequacy and necessary modifications following completion of a topographic survey. GEC is participating in public and other agency meetings, including bi-weekly status meetings.

Firm Members Involved: Cary Bourgeois, Keith Rebello, Jerome Lohmann, Alison Nissen, Chris Nipper

<sup>\*</sup> 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.



Firm Name	G.E.C., Inc.				Past Performance Evaluation Discipline(s)*			Road, Bridge	
Project Name	Chevelle Drive and Sa	rasota Drive Bri	dge Replacemer	nts	Firm responsibility (prime or sub			onsibility (prime or sub?)	Prime
Project Number	Bridge Recall No(s). 8 Project No. 18-BR-US			Owner's Name	City-	City-Parish of East Baton Rouge			
Project Location	Baton Rouge, Louisia	Baton Rouge, Louisiana					Owner's Project Manager Tom Stephens, PE		
Owner's addres	s, phone, email	PO Box 1471, Ba	aton Rouge, LA 708	321, (225) 389-3186, tstep	hens@	Dbrla.gov			
Services commenced by this firm (mm/yy) 04/19			04/19	Total consultant contract cost (\$1,000's)				\$	319
Services comple	eted by this firm (mm/yy)		12/21	Cost of consultant services provided by this firm (\$1,000's)				\$	271

GEC provided all investigations, preliminary plans, and preparation of final construction contract plans for the replacement of the Chevelle Drive and Sarasota Drive Bridges in East Baton Rouge Parish.

GEC's preliminary and final design study tasks included planning, procuring, and preparing environmental studies for preliminary design. GEC performed an alignment study to determine detour routes, typical sections, and horizontal and vertical alignments along with bridge site/watershed evaluations and associated preliminary construction cost estimates.

GEC provided a hydraulic analysis using HEC-RAS, following LADOTD's Guidelines for Off System Bridges. This included an analysis of alternate replacement structures, based on flow and compared replacement alternates to the existing structure, along with recommendations for replacement and scour analyses.

GEC prepared a final report summarizing findings. GEC also conducted a wetland analysis/delineation for the replacement project, performed in accordance with Section D, Subsection 2 of Technical Report Y-87-1, Corps of Engineers Wetlands Delineation Manual as well as the Atlantic and Gulf Coastal Plains Regional Supplement.

GEC also provided USACE Permitting services including a Pre-Construction Notification (PCN) packet.

GEC performed final design of both replacement bridges and 98% final plans were submitted. Each replacement bridge provides 30' clear roadway with a 7'-0" walkway on each side. GEC designed 20' approach slabs with sidewalks at each end. Detailed design for each bridge consisted of the following:

Chevelle Drive Bridge: This bridge crosses the west fork of the north branch of Ward Creek at a 30-degree skew angle. This 80' long slab span bridge consists of four 20' spans supported by pile bents within 16" square PPC piles.

Sarasota Bridge: This 100' long slab span bridge crosses Engineers Depot Canal with zero skew angle and consists of five 20' spans supported by pile bents with 24" square PPC piles.

Rebuilding of the approach roadways and drainage were also included in the project.

Firm Members Involved: Cary Bourgeois, Keith Rebello, Jerome Lohmann, Alison Nissen, Chris Nipper





Both bridges were located in a FEMA flood plain and the 100 year design water surface could not be raised

<sup>\*</sup> 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



Firm Name	G.E.C., Inc.	G.E.C., Inc.					Past Performance Evaluation Discipline(s)* Road, Brid		
Project Name	-10 & I-12 College Dr	Flyover Ramp [	Design-Build		Firm responsibility (prime or			bility (prime or sub?	) Prime
Project Number	H.013897			Owner's Name	LADO	OTD			
Project Location	Baton Rouge, Louisian	, Louisiana				Owner's Project Manager Peggy Jo Paine, PE			
Owner's address,	phone, email	1201 Capital Acc	cess Road, Baton F	Rouge, LA 70804, Peggy.pa	ine@l	a.gov, (225) 379-1065			
Services commenced by this firm (mm/yy) 02/20 Total consu			otal consultant contract cost (\$ 1,000's)			Ç	5 52,385		
Services complete	ed by this firm (mm/yy)		Ongoing	Cost of consultant services pr	ovided	by this firm (\$1,000's)		Ç	6,079

LADOTD selected the BOH/GEC Team to provide engineering services for this Design-Build contract. Our Team's design improves the flow of traffic and increases safety by realigning the two existing I-12 WB through lanes to more closely follow the I-12 EB existing alignment. Our design replaces the I-10 WB Overpass Bridge with a new structure at a bridge width, which will accommodate both the I-10 WB through lanes and the I-10 WB College Drive exit ramp, while utilizing the existing I-12 WB pavement for the I-12 WB College Drive exit ramp. GEC's design services also include improvements to the I-12/I-10 exit lane at the College Drive intersection.

GEC designed the widening of the I-10 westbound bridge over Ward Creek, a bridge structure encompassing three (3) 55' long simple spans composed of rolled steel girders with a cast-in-place concrete deck. While the bridge is in a curve, the girders are parallel with a varying overhang. The spans are skewed at approximately 55 degrees. GEC's design rehabilitates the existing bridge, replaces the deck joints, and incorporates a bridge sound barrier. The project requires that 5-lanes of traffic be maintained at all times though this heavily-traveled corridor; therefore, GEC staff developed the bridge plans to construct the widening and rehabilitation in multiple phases.

In addition to bridge design, GEC completed roadway construction plans and geometric layout for the entire project, ensuring conformance to LADOTD and AASHTO standards. GEC also provided hydraulic design, which included several subsurface drainage systems, cross drains, and a hydraulic channel analysis to ensure the project did not negatively impact the surrounding areas.

GEC's electrical department provided a photometric report and lighting design plans, which consist of both high-mast and low-mast lighting. GEC's electrical design includes eight (8) new high-mast light poles and re-uses four (4) existing high-mast light poles, along with the addition of three (3) ground-mount low-mast light poles and twenty-two (22) median barrier mount low-mast light poles.

GEC staff is currently providing construction engineering and inspection services, which requires the review of engineering shop drawings and equipment submittals from the contractor for this ongoing project.

GEC's innovative design allows the majority of the project to be constructed without any significant changes to current traffic patterns, greatly increasing worker and public safety.



Firm Members Involved: Cary Bourgeois, Keith Rebello, Jerome Lohmann, Alison Nissen, Chris Nipper

<sup>\*</sup> 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.



Firm Name	G.E.C., Inc.				Past Pe	erformance Evaluation Disciplin	ne(s)*	Road	
Project Name	US 11 Improvements	at Schneider Ca	ınal				Firm respons	ibility (prime or sub?)	Prime
Project Number	H.011435		Owner's Name St. Tammany Parish Government, LADOTD						
Project Location	Slidell, Louisiana		Owner's Project Manager Donna O'Dell					na O'Dell	
Owner's address	s, phone, email	21490 Koop Driv	ve, Mandeville, LA	70471, (985) 898-2522, d	sodell	@stpgov.org			
Services commenced by this firm (mm/yy) 03/15			Total consultant contract cost (\$1,000's)				\$	4,900	
Services completed by this firm (mm/yy) 08/16			Cost of consultant services provided by this firm (\$1,000's)				\$	442	

This project is on US Hwy 11 at its intersection with the St. Tammany Parish flood protection levee near Lake Pontchartrain. The Parish funded the design of the project and LADOTD funded its construction. The plans and specifications were produced by GEC in conformance with LADOTD standards. GEC understood the importance of this project to St. Tammany Parish and, to ensure that the Parish didn't lose Federal funding, GEC submitted final stamped plans to LADOTD for advertisement with the Parish's approval before receiving a signed contract from the Parish.

The project elevated US 11 at the levee so that ongoing construction of the levee (in separate projects by the Parish) could continue beyond this point without a break in flood protection at the highway. The road section is a divided two-lane raised median with full-width shoulders and curb & gutter drainage. The highway remained on-grade on embankment and was raised approximately 10 feet at the levee. Approximately 2,300 feet of the highway was affected. The project was complicated by the presence of Schneider Canal (approximately 90-100 feet wide) which was directly adjacent and parallel to the levee. GEC redesigned the large triple-barrel box culvert cross drain under US 11 for Schneider Canal from its original 70-foot length to 200-feet. A well-planned 3-phase sequencing plan enabled maintenance of traffic throughout construction. GEC accomplished all aspects of design with its own inhouse personnel, excluding geotechnical services.

GEC completed the construction plans for this project in the summer of 2016. It incorporates an improved curbed road section including a raised median and a bike path. This project was the first project ever designed with LADOTD specifications that included a levee. Low bid for the construction was \$4.9 million and construction of the project was completed in 2018. In addition, the levee, which was part of this project, was completed before the start of hurricane season.



This project was the first project ever designed with LADOTD specifications that included a levee.

Firm Members Involved: Jerome Lohmann

<sup>\*</sup> 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.



Firm Name	G.E.C., Inc.				Past Performance Evaluation Discipline(s)* Road, Bridg			Road, Bridge	
Project Name	Highland Road (LA 42	) Improvements	s (Perkins to Airl	line)		Firm responsibility (prime or s			Prime
Project Number	06-CS-HC-0026	Owner's Name City-Parish of East Baton Rouge							
Project Location	Baton Rouge, Louisia	na			Owner's Project Manager Bryan Harmon, PE				
Owner's address	s, phone, email	PO Box 1471, Ba	aton Rouge, LA 70	821, (225) 389-3186					
Services commenced by this firm (mm/yy) 2006			Total consultant contract cost (\$1,000's)					\$ 1,213	
Services completed by this firm (mm/yy) 2011			Cost of consultant services provided by this firm (\$1,000's)				:	\$ 1,213	

For this Green Light Plan project, GEC designed additional lanes, new bridge crossings, and a raised median for Highland Road from Perkins Road to Airline Highway.

The new bridge crossings at both Ward's Creek and Old Ward's Creek tied to completed intersection improvements at Perkins Road and at Airline Highway. GEC's design included an at-grade railroad crossing with the Kansas City Southern Railroad.

The bridges are 240' (6 spans at 40') and 160' (4 spans at 40') in length respectively composed of quad beams or 24" pile bents all designed from AASHTO LRFD. GEC's contract responsibilities included the design and detail of the roadway and bridges, topographic survey, right-of-way maps, environmental permitting, coordinate with railroad and utilities and hydraulic analysis.

GEC conducted an Environmental Site Assessment (ESA) and a wetland delineation. The ESA was performed in accordance with the scope and limitations of ASTM E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. In order to characterize environmental conditions for the project GEC: (1) reviewed federal, state, and local environmental databases; (2) conducted historical research; (3) interviewed pertinent personnel; and (4) performed a site investigation. This assessment revealed no recognized environmental conditions (RECs) on or in the vicinity of this project.



GEC designed this curb and gutter roadway with sub-surface drainage and two replacement bridge structures.

The wetland delineation was conducted in accordance with Section D, Subsection 2 of *Technical Report Y-87-1*, *Corps of Engineers Wetlands Delineation Manual* as well as the *Atlantic and Gulf Coastal Plains Regional Supplement*. The results of the delineation were compiled in a formal report and submitted to the New Orleans District, Corps of Engineers for an approved Jurisdictional Determination.

Firm Members Involved: Varaprasad Venkata, Jeff Robinson

<sup>\*</sup> 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

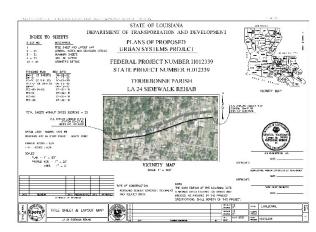


Firm Name	La Terre Engi	neering, LLC			Past Performance Evaluation Discipline(s)*			Road	
Project Name	a 24 Sidewalk Rehab	ilitation			Firm responsibility (prime or s			ibility (prime or sub?)	Sub
Project Number	H.012339.5			Owner's Name	Louisiana Department of Transportation and Development				
Project Location	Houma, LA					Owner's Project Manager	Prim	e Contact: Jacob N	Л. Loeske, PE
Owner's address,	phone, email	Prime: 450 Laure	el Street, Suite 15	00, Baton Rouge LA 70801	L, 225.	408.0700 jloeske@gisy.cor	n		
Services commenced by this firm (mm/yy) 04/21			04/21	Total consultant contract cost (\$1,000's)				\$	92
Services completed by this firm (mm/yy) 07/21			Cost of consultant services provided by this firm (\$1,000's)				\$	4	

This project consisted of the design of ADA compliant sidewalks on both sides of LA 24 from Barataria Avenue to New Orleans Boulevard in Houma, LA. The purpose of this project was to improve pedestrian access along the corridor. LTE supported the preliminary and prepared final design plans for the project which included:

- 1. Assembly and study of existing data, As-Built plans, improvement studies, boring information, traffic data, and field reconnaissance.
- 2. Design and preparation of preliminary plans in accordance with the requirements outlined in the latest AASHTO Standard Specifications for Highways and Bridges and in accordance with the Urban System Project Manager.
- 3. Preparation of specifications for the project in accordance with the latest edition of the Louisiana Standard Specifications for Roads and Bridges, and with the current practices of the DOTD.
- 4. Preparation of 100% Preliminary Plans QA/QC Checklist, and other pertinent documents.
- 5. Preparation of initial cost estimates based on the preliminary plans.
- 6. Preparation of all special specifications, specialty item descriptions, and details for the project.
- 7. Preparation and Engineer of Record for Final Construction Plans.





Firm Members Involved: Seneca Toussant, PE

<sup>\*</sup> 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.

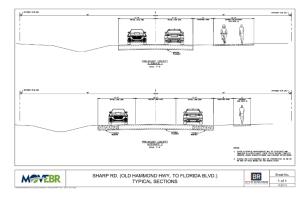


Firm Name	La Terre Engineering, LLC					Past Performance Evaluation Discipline(s)*			oad	
Project Name	Sharp Road (Florida B	rida Blvd to Old Hammond Hwy)				Firm responsibility (prime of			Sub	
Project Number	22-CP-HC-0025		Owner's Name City of Baton Rouge Parish of East Baton Rouge							
Project Location	Baton Rouge, LA					Owner's Project Manager Prime Contact: Dre		ne Contact: Drew W	alsh, PE	
Owner's address,	phone, email	Prime: 8383 Blu	uebonnet Bouleva	rd, Baton Rouge LA 70810	, 225.7	766.5358 dwalsh@gotech-	inc.com			
Services commenced by this firm (mm/yy) 06/22 Total consultant contract of			Total consultant contract cost	contract cost (\$1,000's)			\$ 8	300 (E)		
Services completed by this firm (mm/yy) Ongoing			Ongoing	Cost of consultant services provided by this firm (\$1,000's)				\$ :	100 (E)	

La Terre Engineering, LLC (LTE) is part of the team selected by East Baton Rouge City Parish for the Sharp Rd Corridor Enhancement (Old Hammond Hwy to Florida Blvd) Project No. 20-CP-HC-0025

This project will enhance both pedestrian and cyclist mobility along the Sharp Road corridor for approximately 8,500 L.F. Access to public facilities as well as addressing walkability / bikeability concerns in problematic areas by providing better crossing conditions are some of the main considerations to enhancing this corridor for pedestrian and bicycle users. Intersection, signalization, and turn lane improvements will also be considered at key locations.

LTE is providing preliminary and final plans for the project including development of existing and proposed drainage maps and subsurface drainage design in accordance with the DOTD Hydraulics Manual.





Project: Sharp Rd. (Old Hammond Hwy. to Florida Blvd.)

Firm Members Involved: Seneca Toussant, PE, Lyle Tynes

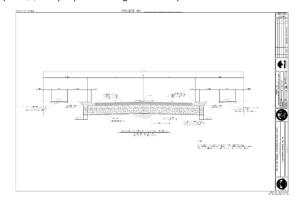
<sup>\*</sup> If there is more than one past performance evaluation discipline included in the proposal, then indicate which past performance evaluation discipline(s) this project is being used to represent.

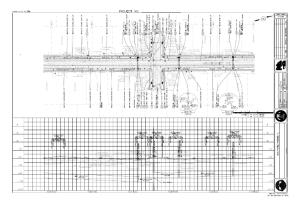


Firm Name	La Terre Engineering, LLC					Past Performance Evaluation Discipline(s)* Road			
Project Name F	ountainebleau Grou	p F					Firm responsi	bility (prime or sub?)	Sub
Project Number	RR119			Owner's Name	City	of New Orleans			
Project Location	New Orleans, LA					Owner's Project Manager	Prim	e Contact: Drew Wa	alsh, PE
Owner's address,	phone, email	Prime : 8383 Blu	uebonnet Bouleva	rd, Baton Rouge LA 70810	, 225.7	766.5358 dwalsh@gotech-	inc.comv		
Services commenced by this firm (mm/yy) 03/20		03/20	Total consultant contract cost (\$1,000's)				\$ 2	200 (E)	
Services completed by this firm (mm/yy) 06/20			06/20	Cost of consultant services provided by this firm (\$1,000's)				\$ 7	7

La Terre Engineering, LLC (LTE) and specifically, Mr. Seneca Toussant, P.E prepared preliminary plans for Marlyville-Fontainebleau Group F project as part of the FEMA Recovery Program as a subconsultant to GOTECH, Inc. LTE developed typical sections, prepared plan and profile sheets and cross section sheets for the reconstruction of Vincennes Place which included replacement of damaged underground water, sewer and drainage lines, repaving the roadway, replacement of damaged sidewalks and driveway aprons, and installing ADA compliant curb ramps at intersections. Rehabilitation included resizing and replacement of existing storm drainpipes and demolition and replacement of existing drain inlets. Storm drain pipe sizes and inlet spacing were sized and placed in accordance with the LADOTD Hydraulics Manual using the LADOTD Hydraulics Program.

LTE prepared preliminary plans in accordance with the City of New Orleans Design Guidelines, LADOTD Hydraulics Manual, 2017 LADOTD Minimum Design Guidelines and 2016 LADOTD Standard Specifications for Roads and Bridges.





Firm Members Involved: Seneca Toussant, PE

<sup>\*</sup> 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.

# **LA 447 Corridor**

# **Summary of Experience**

**G.E.C., Inc. (GEC)** is pleased to offer LADOTD a team significantly experienced in developing preliminary and final roadway and bridge plans, cost estimates, hydraulic analysis and design, special provisions, Transportation Management Plans (TMPs), quality plan reviews, and construction support in accordance with LADOTD. The GEC Team will perform roadway and bridge design to provide the highest quality project to advance to successful construction. GEC, along with team member, **La Terre, a DBE firm,** provides LADOTD all required capabilities to meet the needs of this contract. **This extremely experienced team has the skill to exceed LADOTD's expectations for the various road, roundabout, intersection, turning lane, and bridge sections that are required as a part of this contract.** 

GEC's 36+ year portfolio of road and bridge projects is diverse, ranging from local 2-lane roadways and bridge replacement projects to multi-lane urban roadways and interstate widening.La Terre is experienced with a full range of transportation infrastructure projects, including local roadway and state highway design, stormwater conveyance, green infrastructure, ADA Compliance, and multi-modal transit. Our team of professional engineers and support staff have significant experience in the design of all major AASHTO highway classifications. GEC has maintained a core team of engineers that specialize in transportation projects in our Baton Rouge Headquarters and Metairie office supported by technical staff. We have performed engineering services for roadways, bridges, traffic and ITS systems, port facilities, flood protection, water and sewer systems for LADOTD and other agencies and municipalities throughout Louisiana in accordance with the current edition of LADOTD's Roadway Design Procedures and Details Manual. As seen in our portfolio of projects, GEC has performed road design services for state routes, whether it was directly through contract with LADOTD or through permit for a municipality. GEC has also provided design reviews on Design-Build projects for LADOTD through OV contracts.

# **Scope Understanding**

GEC's design staff performed a site visit to evaluate current conditions. Figure 1 displays the project vicinity, major drainage channels, wetlands, and crash hot spots. LA 447 (Walker South Road), located just south of the City of Walker, is a North-South Urban Arterial roadway with a posted speed of 45 mph for most of the corridor. This area has seen tremendous growth, with Livingston Parish ranked as one of the fastest growing parishes in the state. Due to the increase in population, LA 447 experiences major queues along the corridor as well as onto the interstate. GEC understands that, although roundabouts were installed at the I-12/LA 447 ramp intersections to alleviate some of the congestion, further upgrades are necessary to improve traffic flow and reduce congestion.

Figure 1. **Project Area Map** 



PROJECT OBSERVATIONS



**UTILITIES** It appears multiple utilities are present along the corridor, including overhead power and cable alternating between the west & east sides of LA 447, water & fire hydrants located on the west side of LA 447, fiber optic telephone & gas along the east side of LA 447, & gas crossings.



**BRIDGE** Colyell Creek crosses the project corridor near Landover Dr., approx.1,400' south of Buddy Ellis. Middle Colyell Creek Bridge (Structure 62322680106971) was built in 1958 and is a pre-cast concrete slab bridge, consisting of 2 travel lanes.



**DRAINAGE** At the south side of the east bound off ramp of Highway 12, there are 3 crossdrains and one bridge that drains storm water to Middle Colyell Creek.

# **Approach**

GEC understands LADOTD's typical sequence of project development and will complete all tasks that are a part of each required submittal. GEC will provide all engineering services necessary for LADOTD's Stage 3, Design: Preliminary Plans and understands that Stage 3, Design: Final Plans and Stage 5, Construction Support may be initiated by a supplemental agreement in the future, if necessary. GEC is prepared and has the capacity and capability to provide all services to get the project to completion through Stage 6: Operation, as defined by LADOTD's Project Development Process. The following is an overview of the methodology GEC will follow to provide Stage 3, Design: Preliminary Plans for the LA 447 Corridor Project:

# **Project Kickoff**

Once a project is assigned by Task Order and Notice to Proceed (NTP) is issued, GEC will hold a kickoff meeting with LADOTD staff to determine the status and scope of the project. The steps for this work will include:

- 1. Field Review to determine any constraints, including right-of-way, drainage, utilities, railroad, and other design and construction impacts.
- 2. The pre-design criteria and LADOTD Minimum Design Guidelines will be established before the kickoff meeting and will be reviewed at the meeting.
- 3. Traffic data, geotechnical data, pavement design, as-built plans, and other relevant data that is available will be requested and reviewed at this meeting to determine if any additional field services are necessary. If additional services are required, supplemental agreements will be prepared.
- 4. The environmental assessment will be reviewed to determine the current status, and if any findings result in necessary changes to the proposed improvements.
- 5. Project points of contact, schedule, budget, invoicing procedures, QA/QC procedures, QA/QC plan document, project schedule, and other project management tasks will be discussed and established.
- 6. Minutes from this meeting will be prepared and distributed to all attendees and will become a part of the official project record.

The schedule will be established at the kickoff meeting and will be continuously updated throughout the project process, submitted monthly as a part of the invoice packet and with each project milestone. The schedule will include each task, estimated completion dates, percent complete, and actual dates. Suitable reoccurring project meetings will be scheduled for both the internal team and the external team as needed as the project progresses. A sample project schedule is included as Figure 2.

# **Preliminary Engineering Plan Development**

GEC is very familiar with LADOTD, national, and local standards and practices. Due to our diverse portfolio of roadway design and management services for both LADOTD and municipalities, GEC is poised to provide LADOTD with robust experiences that will allow the GEC team to provide innovative solutions to the toughest roadway design challenges. For the US 11 Improvements project at Schneider Canal in Slidell, GEC

accomplished all aspects of design (excluding geotechnical) with its own in-house personnel incorporating an improved curbed road section including a raised median and a bike path for the first project ever designed with LADOTD specifications that included a levee. GEC's Jerome Lohmann, PE served as Project Manager for the design which elevated US 11 at the levee so that ongoing construction could continue without a break in flood protection at the highway.

The GEC Team will prepare all plans in accordance with the most current LADOTD CAD standards. In addition to the key personnel shown in this package, GEC support staff includes a depth of highly knowledgeable and skilled CAD personnel, experienced in utilizing Bentley's *Microstation* and *InRoads* programs.

After either performing any necessary additional services such as survey or geotechnical or approving the existing provided information, and after receiving approval on road and bridge design criteria, the GEC Team will begin developing engineering plans. The GEC Team will upload e-deliverables into the LADOTD ProjectWise repository at any necessary milestone as required by the Task Order. For each required LADOTD submittal, the GEC Team will perform stringent quality reviews to ensure all required items are submitted and that they are accurate and meet our quality acceptance criteria. The plan submittals for this work will generally adhere to the LADOTD Road Design and Bridge Design requirements, as follows:

# 1. 30% Preliminary Plans ROADWAY

- a. Field reviews if necessary and update pre-design criteria and minimum design guidelines
- b. Topographic survey, including apparent right-of-way and traffic data
- c. Pavement design, soil boring and pH/resistivity data, utility and railroad review, if necessary
- d. Plan Sheets to include: plan and profile sheets with existing topo, establishing horizontal and vertical alignment, typical sections, title sheet

### **BRIDGE**

- a. Completed Bridge Design Criteria and write-up discussing Bridge Type, Size and Location
- b. Plan sheets under development containing a bridge index, bridge general notes, a summary of estimated quantities, general plans and tyical sections

GEC is prepared to provide LADOTD with bridge design criteria for approval to develop bridge plans to replace the bridge. GEC will ensure traffic is maintained during construction by developing construction sequencing and a Level 2 TMP.

# 2. 60% Preliminary Plans ROADWAY

- a. Revise based upon comments received in 30% Preliminary Plan review
- b. Existing and proposed hydraulics calculations and drainage map
- c. Plan Sheets to include: plan and profile sheets including revised horizontal and

vertical alignments, geometric details, cross sections, typical sections, existing and proposed drainage, utility and railroad recommendations, earthwork computations, preliminary right-of-way taking, and sequence of construction and signing

### **BRIDGE**

- a. Revise based upon comments received in 30% Preliminary Plan review.
- b. Existing and proposed bridge hydraulics calculations
- c. In addition to further developed plan sheets from the 30% submittal, develop and submit plans for a superelevation diagram (if required), construction phasing details, traffic controls details, and a foundation pile layout.

# 3. 95% Preliminary Plans (Plan-In-Hand) ROADWAY

- a. Revise based upon comments received in 60% Preliminary Plan Review
- b. A preliminary QA/QC will be performed and then a pre-plan-in-hand review will take place before the plan-in-hand is distributed
- c. Plan sheets to include: title sheet, typical sections, plan and profile, including right-of-way taking lines, existing and proposed drainage, geometric details, sequence of construction, construction signing, summary of estimated quantities, and cross sections

GEC has provided project management and road design services to local entities on non-state highways as well as complete streets elements including bike and pedestrian paths and green infrastructure.

d. Once the plans are distributed, a plan-in-hand meeting will be scheduled.
 Attendees typically include LADOTD, municipal/parish representatives,
 LADOTD district personnel, and members of the design team. The GEC
 Team will assist in scheduling and conducting the meeting and documenting comments received.

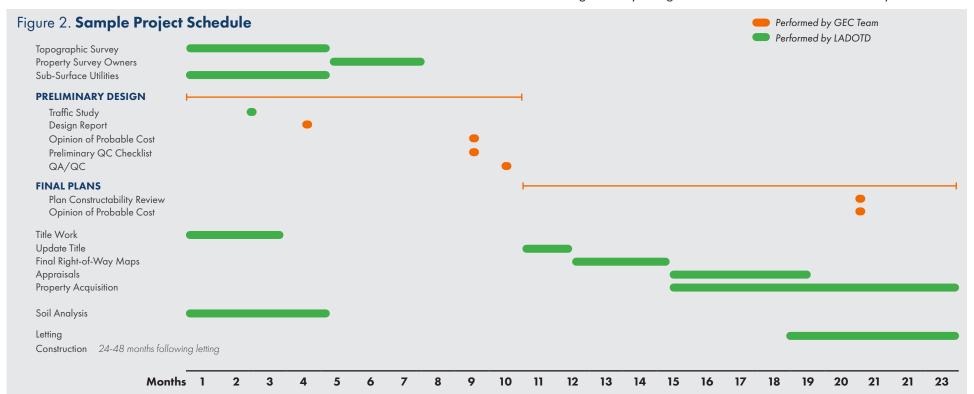
### **BRIDGE**

- a. Revise based upon comments received in 60% Preliminary Plan Review.
- Summary of estimated quantities, bridge general plans and typical sections completed.
- c. Continued development of all other plans.
- d. Submit a cost estimate for bridge construction.

# 4. 100% Preliminary Plans

### **ROADWAY**

- a. Revise based upon comments received in 95% Plan-In-Hand Review
- b. Final right-of-way taking lines transmitted to location and survey



- c. Permit sketches, if needed; at this time environmental clearance may be necessary. The Team has staff to provide for any required environmental tasks.
- d. Preliminary cost estimate

### BRIDGE

- a. Revise based upon comments received in 90% Preliminary Plan review.
- b. Complete all plan sheets.
- c. Submit a cost estimate for bridge construction.

The 100% preliminary submittal will include the 100% preliminary road and bridge plans, opinion of probable costs, design report, QA/QC Certification, TMP, detour plans, special provisions, non-standard pay items, design waivers, and/or exceptions, if necessary. **GEC** is fully prepared to continue this contract following the approval of the 100% preliminary plans and proceed to final plans and construction support, if needed. GEC will follow the LADOTD requirements established in the Roadway Design Procedures and Details Manual and Hydraulics Manual, similar to the preliminary plan stages, as outlined above, for the additional phases once environmental clearance has been received.

# **Transportation Management Plan**

The GEC Team will develop a Level 2 Transportation Management Plan (TMP) in accordance with EDSM VI.1.1.8, as follows:

- Coordinate with LADOTD to obtain traffic volume, peak counts if needed, and safety data for traffic study to perform safety analysis and alternative route analysis.
- If historic data is not available, follow the Traffic Study Scope of Services as outlined on the LADOTD Traffic Engineering website.
- Along with specifying the correct TTC Details, coordinate with the bridge/road designers on a Work Zone Impact Management Strategy document to minimize risk and delays to the travel public.
- TMP submittals may include: TTC Details and Plan, Mitigation, Evacuation Strategies, Detour Analysis, Queue Analysis, Work Restrictions, Safety Analysis, and Stakeholder/Public Involvement.

GEC has developed Level 2 TMPs for LADOTD projects. GEC has also completed Level 4 TMPs for LADOTD electrical and ITS projects which include the I-12/LA 1088 and I-12/LA 434 Interchanges.

# **Construction Sequencing**

The sequence of construction will generally be to widen to one side of the existing roadway at a time, with exceptions for the bridge and roundabouts. As per the EA, a detour will be provided for the bridge construction and traditionally constructed roundabouts; however, GEC will work with LADOTD to confirm options for construction sequencing and traffic flow in order to provide a best-valued approach.







# **Hydraulic Analysis and Design**

GEC and sub-consultant La Terre Engineering will provide all hydraulic analysis and design of drainage and bridge features. LADOTD's requirements, which shall govern hydraulic analysis and design, are specified in the current edition of LADOTD's Hydraulics Manual. GEC will perform any necessary hydraulic analyses for the design of adequate drainage along the roadway and for the replacement of the 55' bridge over Middle Colyell Creek to ensure that stormwater is effectively managed. To complement traditional drainage systems, green infrastructure solutions will also be evaluated to improve and provide better opportunities to manage stormwater as well as the added social, economic, and environmental benefits. As shown in the photos above, there are three crossdrain locations within the project limits. Crossdrain #1 is a 42" Corrugated Metal Pipe Arch (CMPA) approximately 900' north of Buddy Ellis Rd. Crossdrain #2 is three 42" CMPA pipes. Crossdrain #3 is one 54" CMPA.

# **Quality Plan Reviews**

GEC will perform detailed engineering reviews not limited to construction plans, cost estimates, and special provisions developed in association with this contract, by LADOTD's in-house design section or by other consultants. GEC's written Quality and Assurance procedures meet LADOTD's requirements and serve as the basis for our work on all contracts, requiring that each member of the team follows the procedures so that work is performed correctly and delivered on time and within budget. Deliverables must comply with current standards and sound practices and reflect current technology. An independent professional checks the deliverables and the originator corrects any errors. The lead roadway Quality Control reviewer, Cary Bourgeois, PE, has 36 years of supervising and performing design services on a variety of roadway and bridge projects for state and local entities.

GEC will comply with the requirements in the LADOTD Bridge Design Section Policy for QA/QC and will implement the policy, both internally and for our team members, for all bridge design activities for both design phase and during construction phase. All project submittals will include a QA/QC certification that ensures the submittals meet the requirements of the established QA/QC Plan Document.

We look forward to a continued working relationship with LADOTD on this project and appreciate the Selection Committee's review of our extensive qualifications.

# 19. Workload

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining unpaid balance**	
G.E.C., Inc.	Planning	SP# 4400016958	Road Transfer Program Management, Statewide (Note: Unlikely to bill this entire amount)	1,670,166	
G.E.C., Inc.	Planning	Contract #'s 4400006551, 4400006552 and 4400006553	Retainer Contracts for Comprehensive Strategic Advisory Related to Louisiana Transportation Authority (LTA) Participation In Public-Private Partnerships (PPP) (Sub to HNTB) (No Task Orders Issued)	N/A	
G.E.C., Inc.		SP# H.004273.5	I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange) (Sub to Stantec)		
	Road		Geometrics	70,810	
	Bridge		Bridge Study	59,473	
	Environmental		Environmental	19,863	
	ITS		ITS	19,447	
	Other		Program Management (\$100,520), Electrical (\$301,419)	401,939	
	Geotechnical		Geotechnical (Task Closed)	51,213	
G.E.C., Inc.		S.P.# H.004100	I-10 Baton Rouge Widening CMAR Segment 1 (Sub to Huval)		
	Bridge		Bridge	79,351	
	ITS		ITS	137,981	
	Other		Project Management (\$326,749), Retaining Walls (\$166,661), Sound Walls (\$124,711) & Electrical (\$1,253,493)	1,871,614	
G.E.C., Inc.		S.P.# H.013897	I-10 & I-12 College Drive Flyover Ramp Design-Build Project (Sub to Boh Bros.)		
	Road		Road	317,310	
	Bridge		Bridge	174,800	
	ITS		ITS	28,665	
	Other		Project Management (\$66,668), Sound Walls (\$44,640) & Electrical (\$16,335)	127,463	
G.E.C., Inc.	Bridge	SP# H.008145.5	Leeville to Golden Meadow, Route LA 1 Relocated, Const. Engineering Services (Sub to HNTB)	232,047	
G.E.C., Inc.		SP# H.003074.5	Williams Blvd – Veterans Blvd., Route I-10, Jefferson Parish, LA		
	Bridge		Bridge	148,795	
	Other		Electrical	54,012	

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining unpaid balance**
G.E.C., Inc.	Bridge	Contract # 4400010099	Retainer Contract for Off-System Complex Bridge Load Rating (Sub to Forte & Tablada)	
		TO# H.012485.1	Rating of Off-system Bridge Structures	19,056
		TO# H.092481.5	Off-System Load Testing and Evaluation	14,800
G.E.C., Inc.	ITS	Contract # 4400009327	Retainer for Intelligent Transportation Systems	
		TO# H.014512	Monroe Regional ITS Architecture Update (Note: Contract Expired. Remaining amounts will not be billed.)	44,245
		TO# H.012381.5-1	Fiber Optic Mapping and Management (Note: Contract Expired. Remaining amounts will not be billed.)	38,242
G.E.C., Inc.	Other	Contract # 4400011354	IDIQ Contract for Electrical Statewide	
	(Electrical)	TO# H.013442.6	I-10: Crowder Boulevard Interstate Lighting	47,379
		TO# H.013617.5	I-10: I-610E Interchange Lighting	37,742
		TO# H.014552.5	I-49: LA 31 Interchange Lighting (Opelousas) (Note: Survey T.O. Work performed by GOTECH.)	N/A
		TO# H.014553.5	I-49: LA 3233 Interchange Lighting (Opelousas) (Note: Survey T.O. Work performed by GOTECH.)	N/A
		TO# H.012469.5	US 190: BRB-Navigation Light Replacement	0
		TO# H.014556.5	I-49: US 190 Interchange Lighting (Opelousas) (Note: Survey T.O. Work performed by GOTECH.)	N/A
		TO# H.014557.5	I-49: Judge Walsh Drive Interchange Lighting (Opelousas) (Note: Survey T.O. Work performed by GOTECH.)	N/A
		TO# H.013617.6	I-10: I-610E Interchange Lighting	194,001
G.E.C., Inc.	Other (Electrical)	S.P. # H.004774.5 & H.007300.6	Kansas Lane - Garrett Road Connector and I-I-20 Improvements, Ouachita Parish (Sub to Lazenby & Associates, Inc.)	2,100
G.E.C., Inc.	Other (Electrical)	S.P. # H.010916.6	Prien Lake Re-Deck and Safety Improvements (Sub to Kiewit Infrastructure South, Co.)	3,028
G.E.C., Inc.	Other (Electrical)	Contract # 4400005660	Retainer Contract for Electrical Services (Sub to Buchart-Horn)	
		TO# H.012404.6	I-10 Off Ramps at LA 182	N/A
		TO# H.012422.6	I-110 Interchange Modification at Terrace	59
		TO# H.012874.6	I:55: LA 22 Interstate Lighting	20,153
G.E.C., Inc.	CE&I/OV	Contract # 440013710	Retainer Contract for CE&I, Statewide with the Majority of Work in District 03	

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining unpaid balance**
		TO# H.003014.6	I-10 Widening and Reconstruction (LA 37 to ATCR BR.) St. Martin and Lafayette Parishes	42,183
		TO# H.010601.6	I-10 Widening and Reconstruction (LA 328 - LA 347)	286,671
G.E.C., Inc.	CE&I/OV	Contract # 4400023074	IDIQ for CE&I Services and Staff Augmentation, District 61	
		TO# H.010724.6	Pecan Island Road Over the Chenal, Pointe Coupee Parish	96,968
		TO# H.012465.6	Dist 61 Flashing Yellow Arrow Part 3	444,962
G.E.C., Inc.	CE&I/OV	S.P. # H.011670.6	I-10/Loyola Interchange Improvements, Jefferson Parish	0
G.E.C., Inc.	CE&I/OV	Contract No. 4400019950	IDIQ for CE&I, Statewide, with Majority of Work in District 03	
		TO# H.002735.6	Bayou Vermillion Bridge	82,962
		TO# H.003003.6	I-10: I-49 - LA 328	228,133
		TO# H.002151.6	Bayou Parc Perdue and Creek Bridges	123,781
		TO# H.010601.6	I-10 Widening and Reconstruction (LA 328 - LA 347)	101,498
		TO# H.002868.6	I-49 S: Amb Caffery / US 90 Interchange	1,003,620
G.E.C., Inc.	CE&I/OV	Contract # 440005410	Retainer Contract for CE&I w/Painting Inspection & Environmental Monitoring, Statewide (Sub to GPI)	
		TO# H.009479.6	W. Larose Vertical Lift Bridge Rehab., Route LA 1	0
G.E.C., Inc.	CE&I/OV	Contract # 440014315	Retainer Contract for Painting Inspection & Environmental Monitoring with CE&I, Statewide (Sub to GPI)	
		TO# H.003370.6	1-220/1-20 Interchange IMP & BAFB Access	84,263
		TO# H.010000.6	US 171: Calcasieu River Bridge Repairs	191,138
G.E.C., Inc.	CE&I/OV	Contract # 4400017329	Retainer Contracts for Innovative Procurement and Alternative Delivery Support Services (Sub to HNTB Corporation) (No Task Orders Issued)	N/A

<sup>\*</sup> The 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. 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.

<sup>\*\*</sup> Round to the nearest dollar. Do not 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. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

# 19. Workload

Firm(s)	Past Performance Evaluation Discipline(s) *	State project number	Project name	Remaining unpaid balance**
La Terre Engineering	N/A	N/A	N/A	N/A

<sup>\*</sup> 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. 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.

<sup>\*\*</sup> Round to the nearest dollar. Do not 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. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

# 20. Certifications/Licenses



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

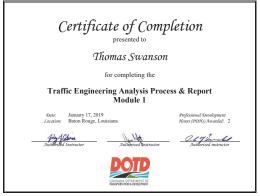
# **Christopher Nipper**







### **Thomas Swanson**







# **Bliss Bernard**









Office of the Secretary
PO Box 94245 | Baton Rouge, LA 70804-9245
PH: 225-379-1200 | FX: 225-379-1851

John Bel Edwards, Governor Shawn D. Wilson, Ph.D., Secretary

October 5, 2021

La Terre Engineering, LLC. ATTN: Seneca Toussant 343 Third Street, Suite 511B Baton Rouge, LA 70801

### Dear Seneca Toussant:

We have received your firm's Disadvantaged Business Enterprise (**DBE**) and Small Business Element (**SBE**) annual affidavit. Based on the information which you provided we have concluded that your firm continues to meet the eligibility requirements of our program and remains certified for <u>only</u> the following specific work categories that fall under the listed NAICS codes:

NC541330-Engineering Services NC541340-Drafting Services NC541620- Environmental Consulting Services

C09- Civil Engineering

C10- Management

C11- Planning

C21- Construction Inspections

C22- Environmental Engineering

C43- Computer Assisted Drafting

Please note that per the federal regulations, suppliers only receive 60% goal credit towards the materials they provide. Also note that A Louisiana Contractor's License is required by any contractor performing work in excess of \$50,000 with the exception of electrical, mechanical and plumbing which are required to have a license if work is in excess of \$10,000. You may contact the State Licensing Board for Contractors at (225) 765-2301 for more information. Your firm's certification will be recognized by all participants of the Louisiana Unified Certification Program. This includes all entities receiving federal transportation funding within the boundaries of our state.

You will be required to submit an annual affidavit with all supporting documents (Business taxes with all attachments, such as 1098, 1099, K-1's and/or W-2's) stating your firm continues to meet the eligibility requirements of the program. An email informing you to submit the necessary documentation will be forwarded to you approximately six (6) weeks prior to your anniversary date of September 30, 2022.

However, should you not receive notification from this office for your annual affidavit, it is your responsibility to contact us. Additionally, you must notify our office immediately regarding any changes which affect the social and economic disadvantage, size, ownership or control of your firm.

Louisiana Department of Transportation and Development | 1201 Capitol Access Road | Baton Rouge, LA 70802 | 225-379-1200

An Equal Opportunity Employer | A Drug-Free Workplace | Agency of Louisiana.gov | dotd.la.gov

PAGE **45** OF 63 PRIME CONSULTANT NAME: **G.E.C., INC.** 

# 20. Certifications/Licenses



La Terre Engineering, LLC. October 5, 2021 Page 2

The Department has contracted with SJB Group, LLC to provide DBE Supportive Services to all our certified DBE's at no cost to you. This consultant can offer your firm assistance and guidance on areas such as marketing, estimating, bidding, financial preparations, etc. Please feel free to contact Jackie des Bordes or Kenyatta Sparks with the SJB Group, LLC at (225) 769-3400 for any assistance needed to grow your organization.

We reserve the right to withdraw this certification, if at any time, it is determined that **DBE** and **SBE** certifications was knowingly obtained by the submission of false, misleading or incorrect data. We further reserve the right to request additional information and/or conduct an on-site visit at any time during your certification period.

If further assistance is needed, contact the DBE Certification Unit at (225) 379-1382.

Respectfully,

Rhonda Wallace

Rhonda Wallace DBE/SBE Programs Manager





# **Seneca Toussant**



# 21. QA/QC Plan and/or Work Plan

If the advertisement requires submission of a QA/QC plan or Work plan, include them here. Otherwise, leave this section blank.

The Scope of Services provided in Attachment A includes design of one (1) or more bridges and/or component parts thereof. Per advertisement instructions, GEC has included a bridge design QA/QC plan document specifically developed for this contract.



# GEC BRIDGE DEPARTMENT QUALITY ASSURANCE/QUALITY CONTROL MANUAL

CONTRACT NO. 4400024641
CONTRACT FOR LA 447 CORRIDOR
STATE PROJECT NO. H.005734
F.A.P. NO. H005734
ROUTE: LA 447
LIVINGSTON PARISH

September 2017 Revised August 2019 Revised September 2020



### **Overview**

# **Goals and Objectives**

The Bridge Department of GEC has developed and implemented this Quality Assurance/Quality Control (QA/QC) guide in accordance with FHWA and LADOTD requirements. The QA/QC process applies to all types of bridge projects. In addition, the QA/QC process applies to the development of design guidelines, design examples, spreadsheets, and other design aides. Modifications to the QA/QC process and procedures may be required for large or complex structures.

The Quality Assurance/Quality Control (QA/QC) program establishes the following goals:

- Communicate openly to address concerns and solve problems immediately.
- Plan, coordinate, supervise, and provide technical direction.
- Employ skilled personnel who perform their work with care to produce a quality product.
- Produce quality work through review and checking by individuals not directly responsible for the initial work product.
- Take responsibility for the QA/QC of a project, regardless of role. This includes the review of all Sub-consultant work and deliverables.

The objectives of the QA/QC program are to produce bridge designs that are:

- **Designed and Detailed** in accordance with the policies and procedures defined in the current LADOTD BDEM, applicable technical memorandums, and in relevant guidelines on the LADOTD Website.
- Clearly define the sources of information for the calculations and the interface with related documents.
- described in **constructible plans**.

### Bridge Design and QA/QC Process

As part of the QA/QC process, this document will serve as a template to follow for every bridge project. The process can be summarized as follows:

- Step 1 Selection of the Project Team
- Step 2 Development of Design Criteria
- Step 3 Design and Development of Details
- Step 4 Quality Control (QC) of Design and Details
- Step 5 Quality Assurance (QA) of Design and Details
- Step 6 Peer Review (if requested by the Bridge Design Engineer Administrator)
- Step 7 Sealing of Design Calculation Book and Plans by the EOR
- Step 8 QC/QA for Design Activities after Final Plans
- Step 9 Archiving Bridge Design Files

# Step 1 - Selection of the Project Team

At the beginning of each project, a project team will be selected based on the complexity of the project. Team member responsibilities are as outlined below:

• Supervisor/Group Leader – A licensed professional engineer who manages a group of Engineers and Detailers. The supervisor/group leader must have substantial experience in the design of structures similar to the proposed project. The supervisor/group leader is responsible for assigning work to Engineers and Detailers based on their level of experience and the complexity of the project. In addition, a supervisor/group leader is responsible for internal Quality Assurance reviews.



- Design Engineer A licensed professional engineer or engineering assistant working under the direct supervision
  of a licensed professional engineer. The Design Engineer provides the data, such as design sketches, necessary for
  detail drawing development. In addition, the Design Engineer checks the details for errors, completeness,
  conformity, and consistency.
- Checker A licensed professional engineer or engineering intern working under the direct supervision of a licensed professional engineer. The Checker thoroughly reviews the calculations or detail drawings for the purpose of reducing errors and omissions and increasing completeness, applicability, and conformance.
- Detailer A drafter or engineer who generates and revises details, plan sheets, and drawings in electronic format.
- Engineer-of-Record A licensed professional engineer who is responsible for supervision and/or preparation of plans, sealing calculations, signing and sealing the final plan set, and special provisions if required. This may be the Design Engineer or Supervisor. The Engineer-of-Record must have substantial experience in the design of structures similar to the proposed project.

# <u>Step 2 – Development of Design Criteria</u>

Design criteria must be established at the beginning of each project and submitted to the LADOTD for review and approval before the design process is initiated. The design criteria shall be updated as appropriate throughout the project. A current listing of design criteria shall be maintained at all times. The design criteria shall be included in the final calculation book. All design assumptions and any design exemptions that are granted are to be included in the design criteria. The design criteria shall include at least the following sections with the minimum information indicated in each section.

# Design Criteria Checklist

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

 Hydraulic Design Criteria – provided by the Hydraulic Engineer

Design year

Design water elevations

Scour depth

Scour elevation

Design Loads

Dead loads

Live loads

Wind loads

Thermal loads

Vessel collision loads

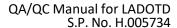
Seismic loads

Wave loads

Other applicable loads

Limit States

All applicable limit states shall be listed in this section.





General Information

Bridge information (number of bridges, bridge clear width, length, number 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

Approach Slab

Design criteria

List standard plans and special details utilized.

Bearings

Type(s)

Design criteria

List standard plans and special details utilized.

Superstructure

Type(s)

Design criteria

List standard plans and special details utilized.

• Piles and Drilled Shafts

Type(s)

Design criteria

List standard plans and special details utilized.

Mechanical Design

Design criteria

List standard plans and special details utilized.

• As-Designed Bridge Rating Criteria

Rating criteria

Software

List all software used for design and checking.

Design Factors

Ductility factor  $\eta_D$ 

Redundancy factor  $\eta_{\text{R}}$ 

Operational importance factor  $\eta_1$ 

Bridge Barrier

Type(s)

Design criteria/test levels

List standard plans and special details utilized.

Guardrail

Type(s)

Design criteria/test levels

List standard plans and special details utilized.

Deck and Deck Drainage

Design criteria

List standard plans and special details utilized.

Joints

Type(s)

Design criteria

List standard plans and special details utilized.

Substructure

Type(s)

Design criteria

List standard plans and special details utilized.

• Geotechnical Design – to be provided by the

Geotechnical Engineer

Design criteria

List standard plans and special details utilized.

Electrical/Lighting Design

Design criteria

List standard plans and special details utilized

# Step 3 – Bridge Design and Development of Details

# **Bridge Design**

The Design Engineer is responsible for the development of the design calculations, details, cost estimate, and any special provisions that may be required. Prior to beginning the design process, confirm that the bridge type, size, location, and design criteria have been established and approved by the Supervisor/Team Leader.

The design calculations are to be organized and maintained by the Design Engineer in a Calculation Book that includes, but is not limited to, the following sections.

Cover Sheet – include the following information:

- LADOTD project number
- Project name
- The title of "Final Calculation Book"
- The EOR's seal with signature and date



Design Criteria

Superstructure Design Calculations

**Substructure Design Calculations** 

**Quantity Calculations** 

QC/QA Certification

Refer to Appendix A

Final Hydraulic Analysis Report from Hydraulic Engineer

Final Geotechnical Analysis Report from Geotechnical Engineer

Special Provisions/NS-Items

**Construction Cost Estimate** 

As-Designed Rating Report

List of All Final Electronic Design Files and File Locations (ProjectWise directory name)

The Final Calculation Book is to be submitted to the LADOTD Bridge Task Manager. Consult with the Bridge Task Manager to determine if submittal shall be on a CD, a Flash Drive, or placed to a designated ProjectWise folder. Include the following:

A PDF File of the Calculation Book
All Electronic Design Files
A PDF File of the As-Designed Rating Report

### **Development of Details**

The Design Engineer must work together with the Detailer on the establishment of the bridge details and supervise the detailing work to verify that the details represent the bridge type, size, location, and design criteria that have been established.

Submittals of bridge details are to follow current LADOTD requirements. Typical submittals and their order are as follows:

- 1. Design Criteria
- 2. Bridge Type, Size, and Location (TS&L)
- 3. 30% Preliminary Plans
- 4. 60% Preliminary Plans
- 5. 90% Preliminary Plans
- 6. 100% Preliminary Plans
- 7. 30% Final Plans

- 8. 60% Final Plans
- 9. 90% Final Plans
- 10. 100% Final Plans
- 11. Final Calculation Book
- 12. Plan Revisions (if required)
- 13. Change Orders (if required)

Use the template on the following page as an outline for sheet order and plan development for each submittal to the LADOTD.



Table 1. Typical Submittals and Associated Design and Detail Progress.

	Submittals							
ltem	Preliminary Plans			Final Plans				
	30%	60%	90%	100%	30%	60%	90%	100%
QC/QA Certification	R	R	R	R	R	R	R	R
Bridge Index	D	D	D	D	D	D	С	S
General Notes	D	D	D	D	D	D	С	S
Summary of Estimated Quantities	D	D	С	С	D	D	С	S
General Plans	D	D	С	С	С	С	С	S
Typical Sections	D	D	С	С				
Superelevation Diagram		D	D	С	С	С	С	S
Construction Phasing Details		D	D	С	С	С	С	S
Traffic Controls Details		D	D	С	С	С	С	S
Foundation/Pile Layout		D	D	С	С	С	С	S
Pile Loads/Details			D	D	D	С	С	S
Pile Data Tables					D	D	С	S
Bent Details					D	D	С	S
Fender Details					D	D	С	S
Girder Details					D	D	С	S
Span Details					D	D	С	S
Joint Details						D	С	S
Bearing Details						D	С	S
Approach Slab						D	С	S
Guardrail Details						D	С	S
Bridge Barrier/Railing Details						D	С	S
Bridge Drainage Details						D	С	S
Detour Bridge Details						D	С	S
Revetment Details						D	С	S
Signing/Lighting Details						D	С	S
Year Plate						D	С	S
Rebar Support						D	С	S
Misc. Details						D	С	S
Project Specific Standard Plans						D	С	S
and Special Details						D		ა
Electrical/Lighting Details						D	С	S
Mechanical Details						D	С	S
As-Built Plans						D	С	S
Special Provisions/NS-Items					D	D	С	С
Cost Estimate			D	D	D	D	С	С

# Legend:

<sup>&</sup>quot;R" – The item is required and shall be included in the submittal.

<sup>&</sup>quot;D" – The item shall be in development and included in the submittal.

<sup>&</sup>quot;C" – The item shall be complete and included in the submittal.

<sup>&</sup>quot;S" – The item is stamped by the EOR and shall be included in the submittal.



# Step 4 – Quality Control (QC) of Design and Details

Quality Control is the process of checking the accuracy of calculations and consistency of the drawings, detecting and correcting design omissions and errors prior to finalizing design plans and specifications.

At the beginning of each project, design engineers and calculation checkers are to be assigned to the design of each component. Likewise, detailers will be assigned to the detailing and checking of each component to be detailed.

The Engineer-of-Record will sign and seal all final details and modified standards.

# **Quality Control of Calculations**

This process applies to calculations, reports, studies, design spreadsheets and any other documents that are not details, plan sheets, or drawings. The required process and the responsibilities of each team member when confirming that calculations are prepared and checked, are as provided in the following section and as summarized in the Quality Control of Calculations flow chart shown in Figure 1.

# Preparation (Design Engineer)

- Prepare relevant, appropriate calculations and sketches containing all information (input, basis, comments, references and sketches) necessary to convey the purpose and nature of the calculations. Calculations are standalone, to the extent reasonably possible.
- Present the calculations and sketches in a neat and logical manner that is conducive to checking.
- Conform the calculations and design sketches to be in accordance with the policies and procedures defined in the current LADOTD BDEM and all relevant Technical Memorandums. Review the LADOTD Website frequently to access additional directives and modifications to the information provided in the current LADOTD BDEM.
- Perform all calculations on GEC calculation sheets, or spreadsheet equivalents (i.e. personal spreadsheets or design spreadsheets), or with LADOTD approved software. See LADOTD Bridge Design Section website for a list of preapproved software.

# Checking (Checker)

- Check each component to ensure compliance with the policies and procedures defined in the current LADOTD BDEM and relevant Technical Memorandums and the LADOTD Website.
- Check the calculations for internal consistency and traceability of sources. Thoroughly check the calculations, including assumptions, given values, formulas, omissions, and accuracy of arithmetic.
- Check methodology, reasonableness of results, and constructability. If necessary, ask for clarification from the Design Engineer, request additional calculations, and if unsure of any particular element, seek technical advice.
- Check the calculations by the method shown in the Quality Control of Calculations flowchart provided in Figure 4.1. Alternatively, check the calculations by providing independent calculations. Keep the alternate, independent calculation with the original. Indicate on the original that an alternate calculation was used for checking.
- When an error in computer input, assumptions, or load calculations is found, consider what that error will do to the outcome before redesigning the member. If the error has a negligible impact to the final design, it may not be necessary to redo the calculation. For instance, it may be unnecessary to re-run a program for a 0.1 k difference in load or a 1-foot station difference in geometry.



• When an error is found that will have impact on the remainder of the calculations, return the calculations to the Design Engineer for correction prior to completing checking of the calculations. The Designers calculations are the calculations of record and must be updated.

# Correcting (Design Engineer)

 Revise the calculations and sketches based on the mark-ups. If not in agreement with a mark-up, discuss it with the Checker. Come to an agreement on whether to incorporate the mark-up. If unable to come to a resolution, consult the supervisor/group leader.

# Verifying (Checker)

 Back check the revised calculations and sketches against the mark-ups to confirm all corrections have been incorporated or otherwise addressed.

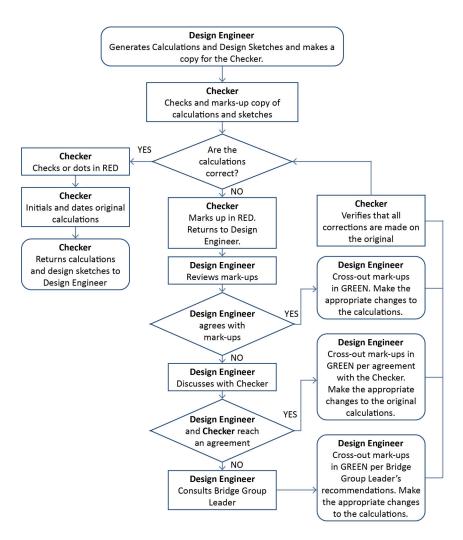


Figure 1. QC for Calculations Flowchart



# **Quality Control of Details**

This process applies to details, plan sheets, and drawings. The Quality Control of Details flow chart included as Figure 2 provides the process for the checking of the drawings.

# Preparation (Detailer)

Develop all details in accordance with the current LADOTD BDEM and applicable LADOTD policies and practices.

# Checking (Design Engineer or Checker)

- Check the details for completeness of the plan set for design intent, technical adequacy and conformity to applicable standards, and for consistency with the corresponding calculations.
- Check individual drawings using appropriate guidelines from the current LADOTD BDEM for errors, completeness, conformance, and consistency.

# Correcting (Detailer)

• Revise the details based on the mark-ups. If not in agreement with a mark-up, discuss it with the Checker. Come to an agreement on whether to incorporate the mark-up. If unable to come to a resolution, consult the supervisor/group leader. Mark any additional revisions on the originals.

# Verifying (Design Engineer or Checker)

 Back check the revised details against the mark ups to confirm all corrections have been incorporated or otherwise addressed.

### **Addendum and Change Orders**

It is sometimes necessary to submit revised plan sheets to address a change order or an addendum. For change orders and addendum, follow the current LADOTD policy and procedures. Remember to update all relevant calculations and details.

### Completion

Upon completion of the design and detail check, the Designer shall prepare a QA Information Package that includes:

- Calculation Book
- Plans
- Special Provisions including Non-Standard Items
- Cost Estimate
- Other Relevant Documents



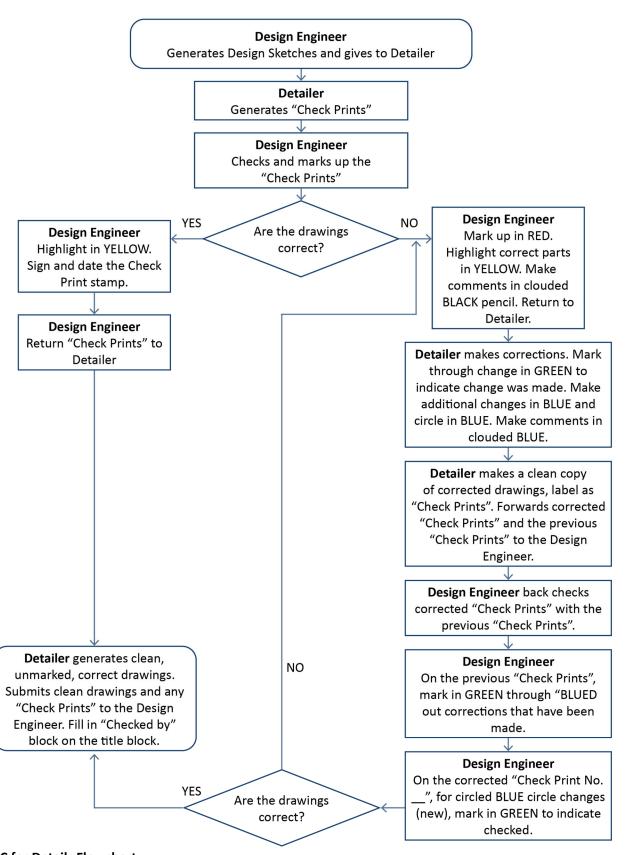


Figure 2. QC for Details Flowchart



# Step 5 – Quality Assurance (QA) of Design and Details

Quality Assurance is the process of reviewing the quality control process for use and effectiveness at preventing mistakes and ensuring compliance. The Quality Assurance process varies depending on the stage of plan development and who develops the plans. The Quality Control Plan is to be maintained such that it can be submitted to the LADOTD if requested.

### **During Plan Development**

The Supervisor/Group Leader is responsible for Quality Assurance. The Supervisor/Group leader determines the level and complexity of the Quality Control process, assigns the Design Engineer, Checker, and Detailer. The Supervisor/Group Leader confirms the Quality Control process by reviewing that the details identify the correct Design Engineer, Checker, and Detailer. In addition, the Supervisor/Group Leader completes a review of the details for constructability, applicability, completeness, and conformity.

Upon completeness of the QA process (no later than the 95% final plans stage) the design calculations, details, special provisions, and cost estimate are considered final and the QC/QA Certificate included in Appendix A is to be signed by members of the project team.

## **During Construction**

During construction, LADOTD engineers assume the role of Engineer-of-Record and complete field-engineering reviews. If a complex problem occurs, the LADOTD may contact the original Engineer-of-Record, who will determine a solution and if necessary, provide calculations and revised details.

### Step 6 – Peer Review (if required)

Typically, a peer review will not be required. For more complex projects, however, the LADOTD Bridge Design Engineer Administrator may request a peer review. The peer review process is to be in accordance with the requirements specific to the project. At the conclusion of the review, a Peer Review Resolution Agreement may be required. See BDEM for current Peer Review Resolution Agreement form.

### Step 7 – Sealing of the Calculation Book and Plans by EOR

Near the completion of the project, it is the responsibility of the Engineer of Record (EOR) that all calculations, details, QC/QA requirements, and all other department requirements are substantially complete. At this stage, the following items are to be verified.

- Confirm that the QC/QA certification has been signed by all responsible parties.
- Confirm that the Geotechnical Engineer has co-stamped the geotechnical design information shown on the bridge plans.
- Confirm that the Hydraulic Engineer has co-stamped the hydraulic information shown on the bridge plans.
- Assemble final Geotechnical Report and Hydraulic Report.
- Finalize calculation book and seal the cover sheet.
- Verify that the names of the designer, design checker, detailer, detail checker, and reviewer are all correctly shown on the title block of each plan sheet.



- Stamp the General Notes sheet. EOR may sign the remaining sheets or designate qualified Professional Engineers to stamp the sheets developed under their supervision.
- Verify that 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 must stamp these provisions.

# Step 8 – QC/QA for Design Activities after Final Plans

The previously established QC/QA process and procedures are to be utilized for all plan revisions, change orders and addenda.

# **Step 9 – Archiving Bridge Design Files**

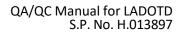
The EOR is responsible for archiving all bridge design files including calculation books, plans, special provisions, cost estimate, and other pertinent documents in accordance with the LADOTD records retention policy. It is also the responsibility of the EOR to deliver all bridge design files to the 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 must be delivered with the signed plan revisions or change order sheets.

## Notebook/File

The Design Engineer keeps a binder or folder clearly labeled with the Structure Name, Parish (or County), and State Project Number that contains, but is not limited to the following:

- Request for Qualifications Keep a record of the original advertisement, addendums, Q&A, and the shortlist and award as determined by the Project Evaluation Team.
- Correspondence Correspondence includes emails, memos, or other documents that affect the design of the structure or clarify design requirements.
- Calculations Calculations generated and reviewed in accordance with the Quality Control Program. Calculations
  include hand-written documents, spreadsheets, and output from software. Convert the calculations to PDF for
  archive purposes.
- Details Check Prints and Final Plan Sets generated and reviewed in accordance with the Quality Control Program.
- Any other documents required for design, such as existing plan sheets and review comments.

The Design Engineer documents any changes that occur after the Plan Review, such as Addendum, and post-letting, such as Change Orders and RFIs by including correspondence, calculations, check prints, and details that relate to the change or request in the electronic Notebook/File for the project.





# Appendix A QC/QA Certification



Number:

Name:

We, the undersigned designers, 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 current LADOTD Bridge Design Section policy on QC/QA.

Team Members	Name	P.E. Reg. #	Responsible Plan Sheets	Responsible Special Provisions	Construction Cost Estimate	Signature
Designers						
Design Checkers						
Detailers						
Detail Checkers						
Reviewers						
Peer Reviewer						
Geotechnical Engineer						
Hydraulic Engineer						
Engineer-of- Record (EOR)						

# 22. Sub-consultant Information

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 (as registered with Louisiana's Secre	etary of State)	Address	Point of Contact and email address	Phone Number
La Terre Engineering, LLC	LA TERRE ENGINEERING, LLC	343 Third Street, Suite 511B, Baton Rouge, LA 70801	Seneca Toussant, PE stoussant@laterre-eng.com	(225) 960-1160

# 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.

