## **COVER LETTER**

February 18, 2020 Patti Wallace, Purchasing Director Sewerage and Water Board of New Orleans 625 St. Joseph Street, Room 131 New Orleans, Louisiana 70165

Dear Ms. Wallace:

It is with pleasure that Concordia submits this response to the Sewerage & Water Board of New Orleans' Request for Information for the initial phase of an Integrated Master Planning effort. We are encouraged to see such a thoughtful approach to addressing our major infrastructure challenges in the face of a changing climate. We believe that the citizens of this great city are up for addressing these challenges and we welcome the opportunity to be part of a team to develop a process that will result in meaningful solutions.

Concordia has designed and managed complex recovery and resilience planning processes in New Orleans, the region and beyond. We have a team of planners, designers and engagement specialist with relevant experience and a desire to help our great city lead the development of creative solutions to the challenges that we and coastal cities across the nation and the world now face.

We would be honored to be invited to participate in a workshop with other invited respondents, as well as academic and technical partners, that will seek to further examine each line of business and opportunities for innovative, integrated planning.

This RFI is presented on behalf of Concordia, LLC. 2016 O. C. Haley Blvd., New Orleans, LA 70113. The primary contact for this RFI is Bobbie Hill. Phone number – 304.541.2653 and email is bhill@concordia.com.

Regards,

Bobbie Hill

Partner, Concordia, LLC

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## ABOUT CONCORDIA

#### ARCHITECTURE, PLANNING, COMMUNITY ENGAGEMENT | ESTABLISHED 1983 | 15 FULL-TIME STAFF

Concordia, LLC is a national award-winning architecture and planning firm based in New Orleans, Louisiana. "Concordia," is our one-word name and mission statement; it means harmony and agreement among people and things. To achieve this goal, we work collaboratively and think holistically. Our range of work includes architecture, urban planning, community engagement, strategic planning, and graphic design.

We place our greatest emphasis on stakeholder engagement and participation, especially for large-scale planning with broad and shared consequences. We led the UNOP recovery planning in New Olreans after Hurricane Katrina and the more recent 6-Parish LA SAFE resilience planning process. We specialize in designing and implementing community engagement processes that authentically address the challenge at hand. Our approach creates a two-way street of information-sharing nd trustbuilding, and leads to strong plans, projects, and policies that address community concerns. Communication, collaboration and engagement is at the core of our practice.

We see resilience not as simply recovering from disaster more quickly, but also being prepared to respond to adverse changes in any domain of community life, whether physical, cultural, social, economic, organizational or educational.



## RFI RESPONSES

New Orleans is a unique place in America and the world. While our city and region have long-standing structural and ecological challenges, we also have some of the most talented and experienced climate scientists, engineers, and research professionals in the field. Harnessing this technical knowledge in partnership with our creative class will provide the best integrated, long-range planning to address all of the challenges outlined in the three questions posed for this RFI.

New Orleans knows this. Our recovery post-Katrina has been amazing, especially given how broken so many systems were even before Katrina. The federal, state and local governments failed us during Katrina. It was local residents, our not-for-profit organizations, and the philanthropic community that stepped up to develop the city's recovery plan – the Unified New Orleans Plan. Knowing that we were able to pick ourselves up by the boot straps under such dire circumstances gives reason to believe that we are up for the challenge of addressing the challenges of stormwater/drainage, wastewater/sewerage, and drinking water over the next 50 years.

## What will be New Orleans' biggest stormwater/drainage challenges in 50 years and what is the best approach to integrated, long-range planning to address those challenges?

The engineering sciences are well equipped to calculate and design the pipes and pumps needed for long term sustainable stormwater evacuation. However, the scale of these solutions may not be economical given increases in rain water volumes. So, the real challenge will be to find and implement opportunities to detain and retain increasing quantities of stormwater so that the pipes and pumps can be designed within reasonable physical and financial limits. The trick will be to authentically engage local citizens, neighborhoods, real estate developers and others in addressing the urgent need for developing higher volumes of stormwater detention and retention. Concordia proposes to employ our unique experience and skills in authentic planning and community engagement to educate, engage and rally community organizations and stakeholders across the city to address these opportunities and needs.

# What will be New Orleans' biggest wastewater/sewerage challenges in 50 years and what is the best approach to integrated, long-range planning to address those challenges?

The greatest challenges in waste water/sewerage will come from increasing rise in sea levels and water levels in general. One logical solution will be to add more sewerage pumping stations. Other solutions can be found in urban planning solutions that consolidate the distribution or waste generation through higher density development. The Mayor's office and City Council are already working on increased density allocations to accommodate more affordable housing. Addressing these two opportunities (and more) together can be helpful in developing solutions that are less disruptive and cost effective all around.



## What will be New Orleans' biggest drinking water challenges in 50 years and what is the best approach to integrated, long-range planning to address those challenges?

New Orleans will always have access to fresh water, and perhaps too much at times. However, drinking water harvested from the Mississippi River comes with the chemical runoff of the whole country. Recent reports about previously undetected "forever chemicals" are raising alarms. Aging lead pipes in homes and increasingly common boil advisories add to the challenges and community concerns with the aging water system. Each of these issues and more will need to be carefully looked at and addressed. In the future, as the sea level rises, saltwater intrusion up the Mississippi will multiply the challenges and possibly require expensive desalination processes to safely drink from the river. Given the costs and uncertainty associated with the future conditions of the river water, it may also be useful to include rainwater harvesting as an additional back-up solution or as an integral component of our drinking water infrastructure. While the implementation and health hazard monitoring of individual cisterns may not be the answer, some larger and more efficiently managed rain water harvesting solutions may be practical at the neighborhood or citywide level.

Our answer to each of these questions at this point represents our initial thoughts, however, we are not trained scientists or civil engineers. We do have significant experience in collaborating with a diverse team of technical experts to address complex planning and design questions. We also fully understand and appreciate the expertise of local citizens.

Research has proven that having 100 people in a room working together to solve a problem will result in a better solution than that developed by the smartest person in the room. There is a growing acceptance in the social sector of non-formal knowledge and the value of intuitive responses. This is where emergent solutions can arise. Creating an environment with meaningful differences in perspectives provides fertile ground for innovation. We have seen this time and time again in our own work and we know how to do it.





Concordia's participatory planning and design process has been developed and refined over the past 25 plus years. Our work was discovered by a team of visiting scholars at the Stanford Global Project Center in 2017. We have been a part of their ongoing research since then and were featured in an article in the Stanford Social Innovation Review where they acknowledged five ways to practice prototyping based on our engagement process:

- 1. Begin with prototyping the fundamentals: defining the problems to be addressed, the key goals to be achieved, and the best processes to do so.
- 2. Turn participants' ideas into prototypes at each step of the process, testing out the viability of that piece before moving on to the next.
- 3. Engage participants to roll up their sleeves and do the synthesis and creative work required to turn many ideas into a consolidated prototype.
- 4. Encourage transparency and open discussion about what input was incorporated into a prototype, what didn't make it in, and why.
- 5. Encourage participants to let go of perfectionism and freely share half-baked or even crazy ideas as vital inputs of a collective innovation process.

Every planning effort must begin with the gathering of all relative studies, plans, and reports that have been conducted on system components over the last 30 years to inform the future planning process. This provides the foundation not only for having a deep understanding of the history and existing conditions relevant to the project, but this also provides the basis for informing and building trust amongst citizens that choose to participate in such a planning project.



#### Unified New Orleans Plan

NEW ORLEANS, LA | 2006

Following Hurricane Katrina, Concordia convened and facilitated an interdisciplinary team of urban planners, architects, and community organizers to develop the Unified New Orleans Plan (UNOP). Twelve national and local architecture and urban design firms collaborated to deliver ten district plans and one citywide redevelopment plan in less than five months, and the plan included voices of more than 9,000 current and displaced New Orleans residents.

The district plans identified immediate and mid-term priority projects in every community, encouraging resettlement patterns around clusters of school and community services. The majority of stakeholder participants expressed their support for neighborhood schools with gymnasiums, libraries, auditoriums, and health care centers that are open for community use at nights and on weekends. UNOP received a 91% approval rating from citizens and stakeholders and was approved by the City Planning Commission, New Orleans City Council, the Mayor, and the Louisiana Recovery Authority for release of FEMA and CDBG recovery funds.





# CITYWIDE STRATEGIC RECOVERY AND REBUILDING PLAN



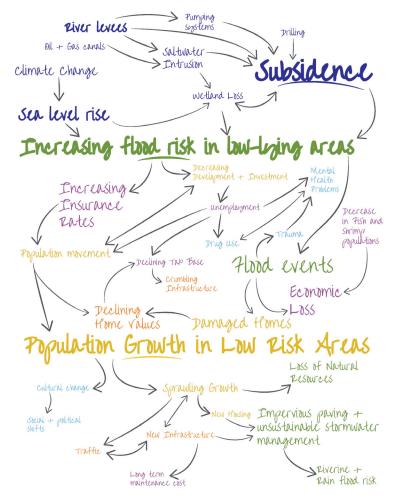


## LA SAFE COASTAL ADAPTATION PLANNING

SOUTHEAST LOUISIANA | 2017

LA SAFE (Louisiana's Strategic Adaptations for Future Environments) was an ambitious planning process that integrated the expertise of Louisiana's best environmental science, planning, and design firms with local knowledge and experience of thousands of residents across the coast. LA SAFE includes programs, policies, and projects that will help coastal communities build resilience and adap to increasing flood risk and spin-off impacts.

Concordia led the strategic planning for the project and then led the community engagement component, orchestrating 71 meetings in 9 months across 6 parishes. Over 2,800 participants helped create the final adaptation strategies. Concordia designed activities and exercises to harness the experience and wisdom of coastal residents to adapt to increasing risk and all of its consequences. The resulting adaptation strategies address expected risk over the next 50 years, complementing the Coastal Master Plan.













#### SLE DE JEAN CHARLES RESETTLEMENT PROJECT

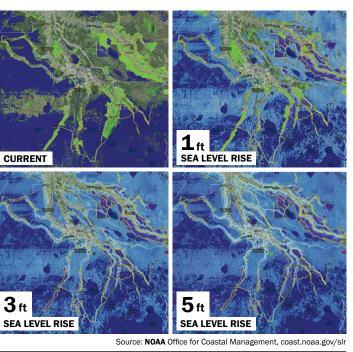
ISLE DE JEAN CHARLES, LA

Isle de Jean Charles, once surrounded by miles of marshland and home to as many as 80 households, is now a narrow strip of land surrounded by open water. By 2016, when the Louisiana Office of Community Development (OCD) hired Concordia, the number of permanent households had dwindled to 37. Families have left over the past half-century because of the chronic flooding and severe storms.

In January 2016, OCD was awarded a \$48 million grant through the HUD's National Disaster Resilience Competition to create a pilot relocation project with the residents of Isle de Jean Charles. OCD hired Concordia to spearhead engagement with the community, many of whom were skeptical about the need to resettle or the outcome of the project. By close work with the community and the state, Concordia began to form understanding and

trust between all parties, and orchestrated an engagement that was inclusive, transparent, and informative for all.

Concordia designed and facilitated two community meetings on the island. To ensure that residents who could not attend the community meetings were heard in depth, Concordia also conducted one-onone interviews with 34 of the 37 permanent households on the island. Synthesizing input from the Isle de Jean Charles community with technical details from CB&I's land use survey, Concordia wrote summary report that will provides the baseline information to the master planning team about the island, its residents, and their desire to resettle. The process empowered the community to communicate to the state their preferences and needs as the resettlement goes forward.







CPRA 50 YEAR SCENARIOS RELATIVE SEA LEVEL RISE TERREBONNE PARISH

**SEA LEVEL RISE** 

4.9ft

4.9ft

3.7ft

### THINKALEX RESILIENCY PLANNING

#### ALEXANDRIA, LA | 2013

Alexandria, LA is home to a rich cultural heritage, historic architecture, and diverse people, but it is geographically vulnerable to the upheavals that come with hurricanes, as evacuees pass through in massive numbers during storms and other disasters. Alexandria is also subject to flooding by the Red River and local bayous. In 2011, Alexandria was awarded a Resiliency Planning Grant, funded by HUD and the Louisiana Office of Community Development.

Concordia was the project lead and coordinator of the Resiliency Planning process, dubbed THINKAlex, which centered

around community engagement to guide the creation of a new land use plan, housing plan, and transportation plan, concluded by the revision of the city's development code.

A broad engagement process incorporated citywide and neighborhood scales. The citywide meetings empowered citizens to develop a vision for how they see Alexandria changing in the future, while the neighborhood meetings uncovered more detailed information about how to improve the daily life of all residents through the land use, housing, and transportation plans.

