# Resilience Project Design Committee Meeting June 2, 2016, 2:30 P.M. 8 Floor Conference Room, City Hall 1300 Perdido St., New Orleans, LA

# Resilience Project Design Committee Members:

- 1. Cedric Grant, Executive Director, Sewerage and Water Board (Absent)
- 2. Jeff Hebert, Chief Resiliency Officer for the City of New Orleans and Executive Director New Orleans Redevelopment Authority
- 3. Vicki Rivers, Sewerage and Water Board
- **4.** Tyler Anthrup, City Planning Commission
- 5. Daniel McElmurray Parks and Parkways
- 6. Bruce Adams, Sewerage and Water Board
- 7. Vince Smith Capital Projects
- 8. Bill Gilchrist Director of Placed Based Planning (Chairman)

## Agenda Items:

- I. Consideration: Design Review of Dillard HMGP 100% Design Plans
  - Location: Dillard University
  - Submitted: Chester Engineers
  - Contact: Mark Scally; <u>mScally@chesterengineers.com</u>
  - Department/Agency: Dillard University
- II. Consideration: Design Review of Pontilly Stormwater HMGP Project 100% Design Plans
  - Location: Pontilly Area
  - Submitted By: CDM Smith
  - Contact: Jessica Watts <u>Wattsjl@cdmSmith.com</u>
  - Department/Agency: NORA
- III. Consideration: Design Review of St. Roch 30% Project Scope Report
  - Location: Elysian Fields Franklin, N. Robertson St. Claude
  - Submitted By: Moffat & Nicholl
  - Contact: Jason Doll: <u>JDoll@moffatnichol.com</u>
  - Department/Agency: DPW
- IV. Consideration Design Review of Algiers Drainage Upgrades and Green Infrastructure 30% Design Report
  - Location: De Armast St Mardi Gras Blvd, L.B. Landry Hermosa & Verret
  - Contact: Maria Papacharalambous maria@wbarchitects.com

Welcome Remarks: Jeff Hebert, Chief Resilience Officer

Jeff Hebert opened the meeting and provided background for the formation of the Resilience Project Design Committee and introduced its members.

Hebert read segment of CAO Policy Memorandum 133, explaining that the purpose of The Resilience Project Design Committee is to review and advise the Chief Resilience Officer regarding proposed resilience projects at stages early enough to realize efficacious design and long-range planning objectives according to the following criteria:

- Location, character and extent
- Best maintenance/quality material for resilience performance criteria
- Best maintenance design for resilience performance criteria
- Energy conservation in design & maintenance
- Context-sensitive expression in design

In addition to CAO Policy Memorandum 133; Hebert stated that:

- All Resilience Projects are to be reviewed by this design committee;
- The committee shall determine if whether a site visit is necessary;
- Project managers will provide documents as appropriate to the committee;
- Committee shall review documents submitted by project managers;
- Official recommendations to be made by committee; meetings are to be public

# Committee's preferred presentation format and materials:

- 1. Project location, character and extent (ONLY to the extent needed to understand the remaining presentation and no archeological treatises unless it pertains directly to the problem or solution!)
- **2.** Analysis and findings
- **3.** Alternative solutions(approach, resources, means/methods)
- 4. Suggested execution with expected remedy
- **5.** Questions and answers
- 6. Motion and second (this can flip with item 7)
- 7. Audience Comments
- 8. Discussion
- 9. Call for question

Bill Gilchrist (Chairman): Requested a motion to approve the agenda: motion is 2nd by Vince Smith; voice vote is unanimous

**Project:** Dillard University Hazard Mitigation Grant Program Drainage Project

Scope: Capture, Store and Convey Campus Stormwater runoff without negatively impacting existing

(downstream) systems (S&WB). Incorporate Low Impact Development (LID) where Practical, Minimize

(associated) Maintenance Costs, Protect and Preserve Historic Assets (trees).

**Presenter:** Mark Scally (Chester Engineers)

**Key Points:** Mixture of grey and green infrastructure

Grassed swales

- Stormwater detention pond
- o Enhanced use of rear campus concrete ditch
- o Optimization of subsurface Stormwater system

Project has construction within footprint of an Orleans Levee District Wall

 Geotechnical analysis work done and submitted to USACE, CPRA, Levee District; resulting in letters of no objection On condition that a buried sheet pile is installed

#### \$5.2 million estimated construction costs

- 100% design plans and specifications completed
- Environmental impact assessment complete (EIA)
- Benefit cost analysis complete (BCA)
- Hydrologic and hydraulic study completed (H&H)

#### Phase II Construction Component Next Steps

Estimated duration 1 Years - Additional time needed due to school schedule

# **Discussion:** Project Details (Scope, Bid & Costs)

- Smith it doesn't appear that you are addressing the flooded area at the front of the campus near Gentilly Blvd.?
  - Scally we looked into a few areas trying to do this by gravity and minimizing downstream impacts it was difficult to retain water and be able to have structures up front
- Smith looking at probable cost I am assuming your prices are considering general conditions ... what about project contingencies?
  - Scally yes there is about a 10% contingency built into the estimate
- Smith what is your strategy about having a mandatory pre-bid meeting v. having a public bid was that intentional?
  - Scally the project is unique enough to have a public pre-bid I think it would be nice to have but I don't think its mandatory –

## Impact to existing systems

- McElmurray is the flood wall is a t-wall or an I-wall? If it is an I-wall there may be an area of seepage?
  - Scally rotational analysis was completed and indicative that the sheeting goes 5 ft. beyond the sand layer
- McElmurray will the concrete ditch be widened; when you are widening this you are doing this to the Dillard side of the fence?
  - Scally it will be widened allowing for more water to be conveyed; Yes (widening this to the Dillard side of the fence)
- Watts the ditch will contain some water during wet periods?
  - Scally it will contain water during dry periods there will be geotextiles to protect the drains during wet periods – under the swales there will be some pipe connectivity – outside of that it will be graded –the drainage for the swales will be your standard grass drains – the ditch will be more detention rather than retention
- McElmurray how are you controlling outfall into the downstream system

 Scally – we looked at the downstream pump station and its capacity –the intent is not to increase the peak flow – we will install a weir to help control the flow.

### Protect and Preserve Historic Assets (trees)

- McElmurray do you have an arborist on your team? The pipes appear to go through tree roots you are either going to have to do direction boring or excavation– that would be my suggestion to add something to this about tree protection
- → Daniel McElmurray Motion to approve subject to language being added about tree protection
- → Motion 2<sup>nd</sup> by Bruce Adams;
- Unanimous vote in favor motion carries

**Project:** Pontilly Neighborhood Stormwater Network

**Scope:** Projects to slow and store Stormwater: There are eight different elements creating storm water lots

throughout the neighborhoods using two underutilized DPW right of ways.

**Presenter:** Watts (CDM Smith)

**Key Points:** Green infrastructure improvements are being made to add redundancy to the system

Dwyer canal

Hazard mitigation grant money will only allow for the Stormwater part of this, we are doing the
widening of the canal – the path, the bridge, everything else will come to this from NDRC – the
plan only allows for elements that improve or reduce Stormwater runoff

Golf course bioswale

Plants have been vetted thru parks and parkways, also reviewed by those who will maintain it –
those parts considered parks and parkways may, but it is not yet certain, who will be responsible
for maintaining.

- Stormwater lots
  - Basic v. enhanced version (Basic trees only; enhanced trees and plantings)
- Stormwater parks
  - Green spaces in the Robert E. Lee right of ways; it will be deepened with various slopes with basic grass and trees landscaping (larger version of a Stormwater lot).
- Street improvements
  - Permeable pavers will not be in most neighborhoods just in the SUNO parking areas;
     street basins will be located throughout the neighborhoods Stormwater basins will be utilized urban bioswales trees will be added in certain places
- o Green alleyways
  - Discussions were held with the community about permeable concrete. The community wanted less visible walkways, concerned over increased crime in the remote walkways.

### **Project Timeline**

- 2 months release bid
- 2 months contracting
- 1 year construction
- Ongoing maintenance

# Possible Maintenance Roles costs

- o Lots NORA
- o Rights of ways DPW
- Pervious Pavers their rights of ways
- Areas immediately in front of house Homeowners
- Street basins Public Works

## **Discussion:** Project Details (Scope, Renderings, Schedules & Forecasts)

- Smith there seems to be a lot of mature trees that happen overnight what is the actual situation? this
  is misleading to the public
- Gilchrist we need to be mindful of the quality of the inspections on these (renderings). Please include location information and provide a details sheet. What is being shown (currently) is not what the site will look like (initially) once complete, we need the renderings to reflect what the site will look like immediately post construction.
- Hebert we need to get more details for all of these details need to be placed on all renderings so that this group may do an analysis.
  - Hebert In the future we will have the project details and specifications loaded on the computer for reference purposes.
  - Watts documentation on stop signs will be included
- Hebert on a design note, look to see you are maintaining positive drainage under the bioswales
  - DPW Congress Drive was recently repayed but there is an issue of removing the interventions bump outs – because the work was done within the last 5 years

#### **Maintenance**

- Vicki Rivers S&WB staff is not equipped with arborist but just with grass cutters?
  - Jennifer we designed around the equipment that S&WB uses
- McElmurray was a mow strip included where fences will be used in the green alleyways to facilitate management of overgrowth? Some of these things such as bioswales take 3 years or more to establish.
   Parks and Parkways do not have crews that will continue to do the maintenance for this I want to caution you on saying that agencies have agreed to do the maintenance.
- Adams have you received a letter of no objection from Entergy you will need to see if they have servitude within the area of the Stormwater park – any maintenance contracts need to make sure the equipment needed can be procured by the City
  - Watts –with the Stormwater parks we can add a drivable area as is needed for Entergy to maintain the power lines
- Smith there needs to be language in the construction contract saying stating that the contractor is responsible for maintenance before the process has been 'completed'/handed over - there are going to be issues trying to establish for plantings outside of season. – What is the mechanism to make sure that residents upkeep their maintenance responsibilities – I think this is within the scope that is being handed over to the maintenance committee
  - Hebert to lay the groundwork for the city we have an entire separate team to develop what that will look like we may want to ask what maintenance will look like but as far as who will do it we need to leave that to Cedric Grant and others to figure out who will do what we should be in scope focusing on what will be done not who will be doing it –part of the reason this was created is if we identify something that is 100 percent ornamental the committee may need to step in and find a different solution
- William Gilchrist Moved to approve this project pursuant to the recommendations regarding: maintenance, warranty periods for planting, pervious pavement, servitudes of Entergy, mow strip, street signage, confirmation on restrictions of federal dollars along Congress Drive
- → Motion 2<sup>nd</sup> by Vincent Smith
- → Unanimous vote in favor motion carries

**Project:** St. Roch Drainage Upgrades and Green Infrastructure

Scope: Hazard Mitigation Grant Program (HMGP) funding to address chronic flooding and drainage issues in the St. Roch neighborhood. Project area is 26 city blocks bounded by N. Robertson St., St. Claude Ave., Elysian Fields Ave. and Franklin Ave.

Presenter: Jason Doll (Moffat & Nicholl)

**Key Points:** Increased Public Safety

Improved Resident Quality of Life

Enhanced Community & Neighborhood Morale

Reduced Resident Financial Burden

Restored & Enhanced Multi-Modal Transportation Function

Reduced Flooding & Increased Water Quality
Minimized DPW & S&WB Maintenance Burden

Avenues for Public Education & Community Outreach

Provide a benchmark for all projects aimed at increasing the disaster (and day to day) resiliency of New

Orleans

## **Discussion:** Project Details (Scope, Renderings, Schedules & Forecasts)

- Doll When we worked out the footprint of project the main solution is going to be to maintain the hydrologic storage under the street which form detention basins underneath the block while on the surface adding the green infrastructure
- ODII there is aging infrastructure throughout St. Roch there are no storm drain pipes underneath the streets this is common in many of the areas in St. Roch much of our effort is focused on streets with no drainage infrastructure old houses are packed right up to the street there are few streets it is a hot inhospitable environment the proposed scope is to narrow the traffic lane create green scape edges alongside bump outs large storm drains under the street we would like to consider making some of these two way streets into one way in order to increase more options of what we can do on the streets integrated permeable parking in the neighborhood the next step is to conduct a geotech investigation to see what is possible. Within our budget we do not have HMGP budget justifying the street trees yet
  - McElmurray if you want the trees then you will have to justify it within the HMGP budget because the city does not have the resources to purchase trees – It is critical that DPW obtain the support in for making the streets one way now prior to proceeding with detailed design plans to avoid changes to the project. – I believe the current ADA rules are that there needs to be a 5ft not a 4ft clearance for sidewalks
  - Adams I agree that when it comes to coordination with the agencies I would like to know what DPW thinks and S&WB think before the public does
  - Anthrup People park on both sides of the street therefore you need to find a way to address this
    issue in order to get neighborhood support
- o Smith are you connecting the details to the catch basins.
  - Doll Yes.
  - Watts documentation on stop signs will be included
- Gilchrist we will need you to illustrate this in such a way that we can see where you place your trees, canopy, etc. I think we need to get the traffic question answered as soon as possible this looks like it is moving in a good direction but we will need to see an analysis on the maintenance opportunities and the directional flow of the roads as soon as possible
- Hebert to try to get some consistency across the city's streetscape and urban design character we have now seen a couple of projects that are suggesting materials but have not yet brought details for materials we need to figure out some sort of consistency policy.
  - Hebert we need to see in all these presentations what the other benefits from doing this need to be included in the presentation
- Vincent Smith Moved to approve this project pursuant to the recommendation to resolve traffic flow issues as discussed forward.
- → Motion 2<sup>nd</sup> by Daniel McElmurray
- Unanimous vote in favor motion carries

**Project:** Algiers Drainage Upgrades and Green Infrastructure

Scope: Hazard Mitigation Grant Program (HMGP) funding to reduce flood risk through a combination of

structural and non–structural interventions to more efficiently remove Stormwater runoff from surfaces of streets and properties. All upgrades will be designed to accommodate and/or mitigate 10–year 24–hr

storm event.

**Presenter:** Maria Papacharalambous

**Key Points:** DOTD jurisdiction under the expressway

Existing and proposed flood reduction from the projects within the 3 million dollar budget from green

in frastructure

System of green infrastructure features including cuts to improve water management using bioswales and

rain gardens from the modeling we have so far we saw that we have pretty good results

Awaiting benefit cost analysis

**Discussion:** Project Details (Scope, Renderings, Schedules & Forecasts)

McElmurray – where is the large water line in this area – we are working with Sewerage and Water board and Deep South studios to avoid impacts –you will need to get infiltration rates for the footings DOTD is going to need close coordination – you also need to work closely with Sewerage and Water board for Deep Souths plans –What is the width of your planting space?

- Papacharalambous we are getting about 900000 cubic ft. of storage we have included the engineering breakdown and the cost estimates for the components that we are using
- Gilchrist & Anthrup we need to make sure HMGP will cover this if this does not decrease the flooding but only has water quality benefits then this may not be covered
- Gilchrist we need to go back and table this project we need to understand the nature of the problem and make sure this project addresses it
  - Anthrup we need to have significantly more data on how this will impact the repetitively flooded properties in the area.
- ◆ Vincent Smith Moved to approve this project pursuant to the recommendations to coordination with Parks
   & Parkways, Deep South & DOTD; Documentation of decrease of competitive flood risk on properties.
- → Motion 2<sup>nd</sup> by Tyler Antrup
- → Unanimous vote in favor motion carries