Public Meeting Summary

IER 1, 2 and 3 Public Meeting
Wednesday, April 9, 2008

Location	St. Rose Public Library 90 East 90th St. Rose, LA 70087
Time	6:00 p.m. Open House 7:00 p.m. Presentation
Attendees	approx 14 including 10 staff
Format	Open house Presentation Q & A
Handouts	• PPT print out • Borrow handout
Facilitator	Welcome – Wade Habshey, USACE Public Affairs Presentation – Carl Anderson, USACE Senior Project Manager

Welcome

Wade Habshey, USACE Task Force Hope Public Affairs

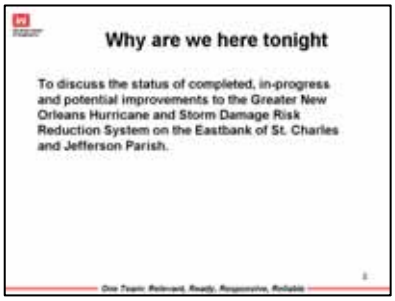
Good evening. I'm Wade Habshey with the U.S. Army Corps of Engineers New Orleans District and on behalf of our district Commander Colonel Alvin Lee I'd like to thank you for taking time out of your busy schedule to come here tonight. The Corps has been in the river business for a long time now and as you know all of our work depends on your input and being part of our team. Our work is only as good as you can make it so we are glad you are here tonight and we're here to hear what you have to say. How many of you are here for the first time? [Hands raise]. Okay well thank you again for showing up tonight. The way this is gonna work is we're going to give a presentation about where we are with these Individual Environmental Reports at this time. After the presentation we'll have a question and answer session. I would like to get your help so everyone can get a chance to hear what is being said so I'm going to ask you to hold off with your questions until the first part of this done which will take about 15 minutes. We'll have the presentation by Mr. Carl Anderson who is the Senior Project Manager for the Lake Pontchartrain and Vicinity area which includes St. Charles and Jefferson parishes. We also have Fran Campbell, the Executive Director for the East Jefferson Levee District here. Thank you for being here. Is anyone here from Jefferson Parish? [No response]

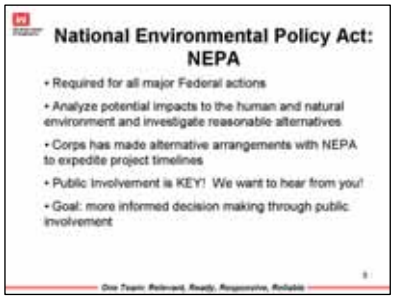
Now, as we move into the question and answer session after Carl's presentation, what I would like you to do is please stand, state your name and ask your question. We have a couple people here I will introduce later on that will be able to help you out. Without further ado this is Carl Anderson.

The following notes were recorded by USACE contractors. These notes are intended to provide an overview of the presentations and public questions and comments, and are not intended to provide a complete or verbatim account of the meeting. This account is not intended to be a legal document.

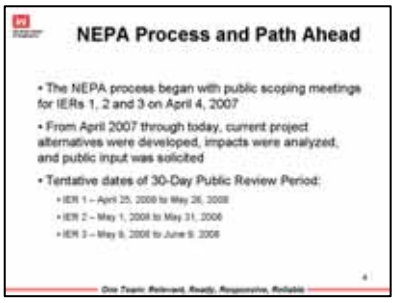
Public Meeting Summary

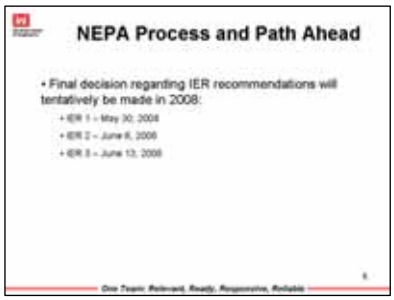
Carl Anderson, Senior Project Manager



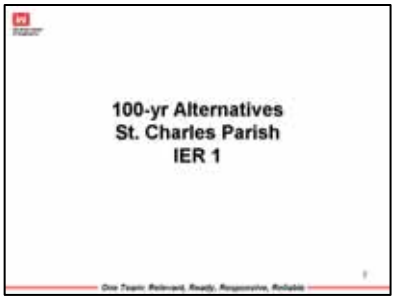


Good Evening. We are just gonna give you the status of where we are on projects in the area. The reason why we are out here is the National Environmental Protection Act. We are out here to try to get your input because we're evaluating what projects are needed and are trying to determine all the impacts of those[of those projects]. The public is the key [to the process]. We need your input. This is the path forward.





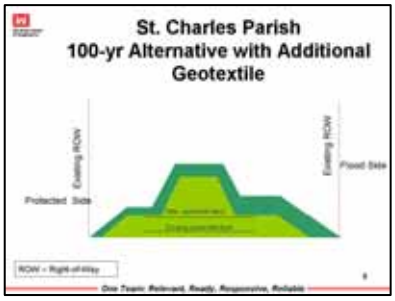
Tonight we are going to talk about 3 environmental reports that we will be putting out [for public review]. We've developed an expedited schedule [and environmental review process that results in] an Individual Environmental Report. IER 1 is the levee in the St. Charles Parish area, IER 2 is the West Return Wall along the Jefferson and St. Charles parish border and IER 3 is the levee along Jefferson Parish Lakefront. We're going to cover all 3 of these tonight. As you can see right here these are tentative dates and were gonna be getting these reports out to the public so that you can review them and provide comments to us. Later on in the year we're going to make a final decision based on all of the input we get from people and we are gonna put together those reports and those will be the final documents. These are just tentative dates right now.



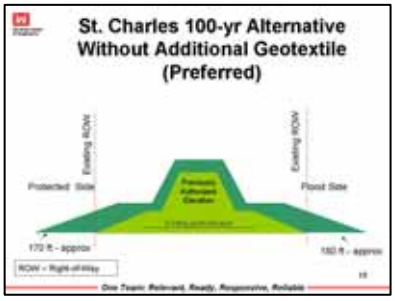
What we are going to cover tonight is focused on St. Charles Parish. This is IER 1 here [pointing]. This is IER 2 West Return and here is Jefferson Lakefront [pointing].

The following notes were recorded by USACE contractors. These notes are intended to provide an overview of the presentations and public questions and comments, and are not intended to provide a complete or verbatim account of the meeting. This account is not intended to be a legal document.

We're talking about 100-year protection. We're trying to get [the system] up to 100-year level of protection. The levee reaches are broken into basically four reaches and a small reach around the airport.



These are the alternatives that we looked at. The existing levee has a very high, straight, geotextile fabric that helps its stability. We put that in when we built the levee 10-12 years ago. These levees have been out here that long. One of the plans was to go in there, degrade the levee and put a brand new layer of high, straight fabric to try to keep it within the existing right-of-way that's out there now.



Due to uncertainties of the fabric, the preferred alternative is to just go ahead and do a straddle enlargement of the levee adding more dirt to the existing levee. The unfortunate part of [this plan] is that we're going to have to get additional right-of-way on either side of the levee, both the flood side and the protected side.

This basically what you are seeing is [the project footprint] this purple line [pointing].

The dark blue is the existing right-of-way and what we are looking at is having to buy some additional land on the flood side and additional land on the back side as opposed to building berms. As we go higher we will have stability berms.

This is the picture of the airport. This enlargement [pointing], the only difficult part is the landing lights. You can see them. There's a row of lights and they have to be a certain distance apart. There's a landing light right there and there another one right there and we can't separate them any further. We have to try to fit the levee between the landing lights.

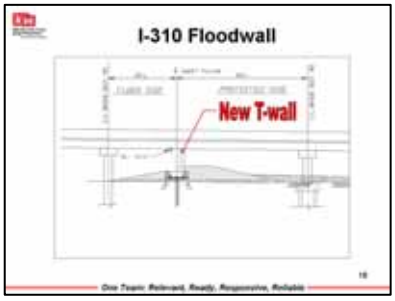
The following notes were recorded by USACE contractors. These notes are intended to provide an overview of the presentations and public questions and comments, and are not intended to provide a complete or verbatim account of the meeting. This account is not intended to be a legal document.

These are all the floodwalls we have in the St. Charles area.

This is Bayou Trepagnier. There's a pump station and drainage structure over there. You've got 3 floodwalls for pipeline crossings. You've got a floodwall under 1-310 and a railroad gate and some floodwall pilings. This is just a picture of Bayou Trepagnier. We're going to be replacing the existing wall with a brand new t-wall and that draining structure will be modified.

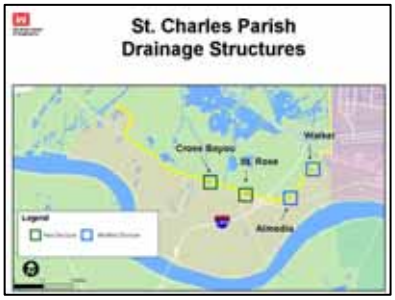
These are the existing pipeline crossings will be replacing all these existing floodwalls with a brand new t-wall.

This is the picture of the 3-10 crossing. There's the wall right there. We are going to try to fit the levee in there underneath [the interstate]. We are going to fit that wall underneath the existing bridge.



As you can see we have to go up against the [inaudible]. That's the challenge with that particular reach of the levee.

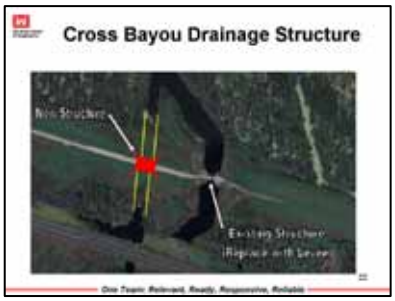
At the railroad you can see you have all these walls that are going to be replaced with T-walls and the gate will be modified with new heights. All these walls have to be about 2-3 feet higher than the current wall.



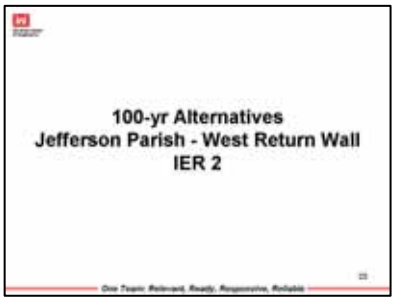
Then we have the remaining four drainage structures. We're looking at Cross Bayou in St. Rose where we're going to completely replace the structure because we can't retrofit the new wall. At Almedia and Walker we're going to be able to retrofit, we feel we can raise the existing wall enough and add some piling to adjust.

These are pictures of Cross Bayou. These are all drainage structures now.

The parish is working toward putting a pump station in this location and we'll work with them closely on their designs and we'll be reviewing their designs.



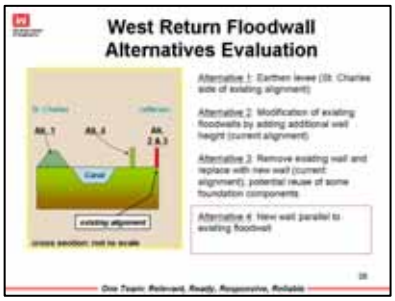
This shows you what happens [when we build the new structure]. At Cross Bayou what we would do is build a brand new structure here [pointing], then demolish the original structure. We'd make it across the levee if we can't retrofit it.



Now we're moving on to IER 2, which covers the West Return Wall.

This picture is looking toward the river. The existing wall is approximately 3.5 miles long. The majority of it is what we call a T-wall but it doesn't meet the current design criteria we have to replace the whole thing.

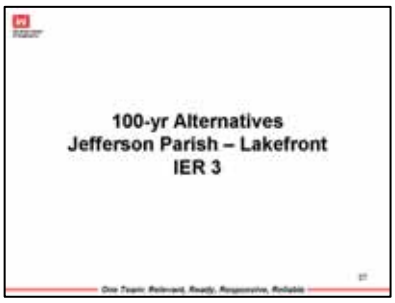
We've done some alternative design studies and they will be complete in November. We also looked at putting a rock dike out here at the canal to see if that will help us to reduce the surge. It doesn't reduce surge elevation but [building a rock dike is] still possible from an environmental standpoint. The rock dike would reduce saltwater from coming in the canal. We'll be starting construction [on this project] in early to mid 2009.



These are alternatives that we looked at [for improving the protection].

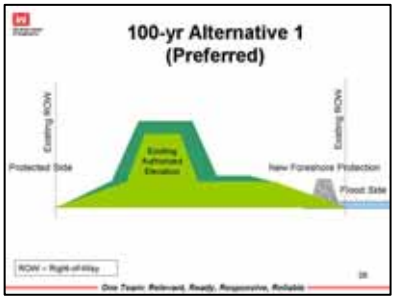
The first one is to just build a levee on the western side of the canal but that was very costly. The levee footprint was between 600-800 feet wide. We'd need that much space to get the berms in there and get [the new wall] in place by 2011. It is a long process to build these brand new levees. Also we looked at 2 alternatives to try to retrofit the existing wall by adding piles. [Inaudible] you have to look at the foundation. The fourth alternative was to build a brand new wall just west of the existing wall, on the

flood side. This alternative is the preferred plan. It has a lot of advantages because you have the existing level of protection in place, we don't have to touch it. We do have to make some openings to get to the new one but we will have that in place while we are building a brand new wall.

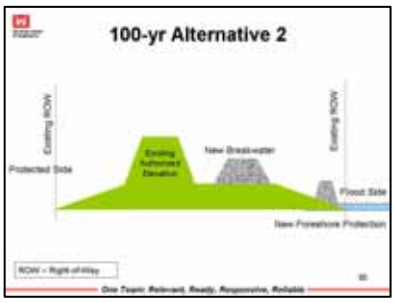


Now we'll move on to the alternatives for the Jefferson Parish Lakefront. This is IER 3.

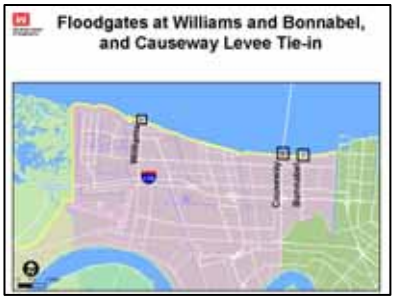
This levee system was broken into 5 levee reaches and it's approximately 10-10.5 miles long.



Of the alternatives that we looked at, this is the preferred alternative. We're going to add dirt to the existing levee and are staying within the existing right-of-way.



The other alternative was to put a small breakwater in front of the levee which would knock the wave down then we wouldn't have to raise the levee. But the preferred alternative is that we just add the dirt because it's most cost effective. It is a lot cheaper.



There are three road crossings along the Lakefront. One is at Williams Blvd., Causeway Blvd. and Bonnabel Ave.

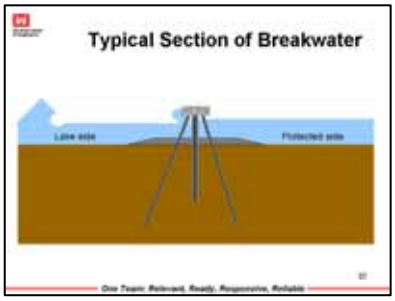
At Williams and Bonnabel there's an existing floodgate with tie-in walls to the levee. At both locations we are going to replace both walls. We weren't able to retrofit those walls, we'll have to add another 2-3 feet to them. We would put in a brand new gate to tie-in to the levee.

This is Causeway Blvd. In the existing line of protection you can see there's a wall that goes around here [pointing]. That's not high enough. We looked at a variety of different alternatives here. Raising the [inaudible], putting breakwaters out in front. What we are going to do is build the levee here [pointing], make a connection between it and then ramp the road over the levee. The road will [begin to incline] here and then it will start [to decline here]. It will [meet the] natural ground at 6th Street.

We also have four large pumps stations along the Jefferson Parish Lakefront. Their combined capacity is over 18,000 cubic feet per second. Just like everywhere else, every drop of rain has to be pumped out of the area. What we have to do there is, there are 2 things that we're looking at. Primarily we have to develop new line of protection because the existing line doesn't meet our current design criteria. So we have to put fronting protection in front of each pump station and also we are looking at [possibly building] a breakwater.

This is an existing breakwater. This is pump station #2 on Severn

This is a breakwater that we built prior to Hurricane Katrina. It actually worked really well during Katrina. It knocks the wave down before it gets to the station and that takes away a lot of force. You're breaking [up the force of the water].



This is how breakwater works [animation].

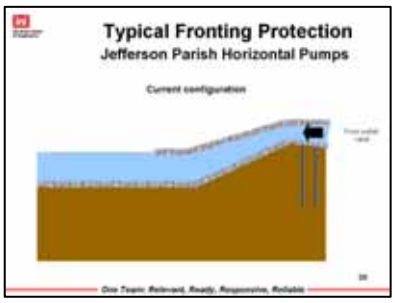
What happens is the wave comes in [and the breakwater] takes out its energy. All that happens is a little rise of water. We can design the fronting protection to do that.

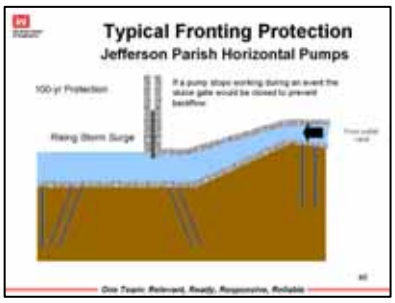
The next line of protection that we are going to be doing is a new wall in front of the pump station. You can see there is an existing wall there now but we are going to build a brand new wall, it is fronting protection.

Each pump station has what they call horizontal pumps. These are really large. Each one of these pumps holds over 1,000 cubic feet per second.

This is Elmwood. This Elmwood station has 8 vertical pumps. You can see that they have circular steel discharge pipes. So we would build new fronting protection where all these discharge pipes go through [inaudible] and also the tubes for horizontal pumps.

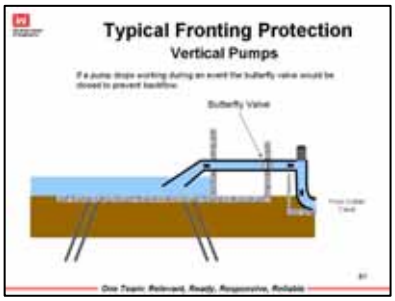
The current configuration allows discharge for the horizontal pumps to go out. The prevention for backflow right now is air suppression. They would pump air into that tube to keep the water from going back in.





Now what we are going to do is fronting protection. What we're going to is build a brand new wall in front and that's going be tied into the levee system.

During the operation of the pump station this won't hinder any flow and when a storm comes [or if] for any reason you have to shut the pump down, we just put the gate down. That will prevent backflow.



All the vertical pumps have what they call a butterfly valve. Prior to Hurricane Katrina they had to be manually closed. Under separate contracts we're going to go in there, at each of the 14 pumps, to put a little motor on top. That motor will close that valve. During normal operations with this pump if anything happens and you have to shut the pump down you close that valve and it shuts it down.

For construction purposes, we have to dredge to get access to all four pump stations and to build breakwaters. Dredging will also allow us to do fronting protection. All along the lakefront we're gonna be putting four shore protection to protect the levee system because over the past 30 to 40 years the shoreline has receded over 200 feet. We can't allow that recession to continue. We need to protect the berm so we're putting four shore protection in and will dredge areas so we can barge in rock that will be distributed along the Lakefront.

This is a picture of all the borrow sites [we've investigated for use in the hurricane system]. We have areas that have been approved and under investigation. There is a map in the back you can look at to get closer look [at the areas we've investigated].

The borrow source for the Jefferson Lakefront and St. Charles Parish is the Bonnet Carre Spillway. As a result of continued heavy rain in Arkansas and the upper Mississippi, the Corps is closely monitoring the rising river and the flow that

determines the Bonnet Carre operations. Flow is the key and everybody needs to understand that. Weather conditions are being constantly monitored to access impacts and the safety in the New Orleans area. Advance preparations are taking place [inaudible] operations.

The decision to open the Bonnet Carre is the responsibility of the Mississippi River Commission president, Brigadier General Michael Walsh. He's the commander of the Mississippi Valley Division up in Vicksburg.

The Spillway is only operated to minimize risk of high water. Operation of the structure will release pressure on local levees and lowers river stages to reduce velocity of the river. The Spillway is designed to operate when the river flows reach 1.25 million cubic feet per second and our forecast will continue to rise. The Spillway remains open until the risk associated with the high water is diminished.

Based on current forecast a decision may be made in the next 2 weeks. It all depends on what's going on up north. We are currently inspecting levees up and down the Mississippi River 12 hours a day. We are meeting daily to monitor the river stages, discuss inspection reports and determine if there is a need to open the Bonnet Carre Spillway.

Currently, in my area, we have a major contract going out along St. Charles Parish but the contractor got ahead [of the spillway opening] and for the past 3-4 weeks has been hauling dirt. He's been stockpiling it along the levee so now he is going to shift his operation because his borrow pit was flooded [by the high river water]. He's going to go out there and start putting material down out on the levees. He has enough work out there to last him about a month to a month and a half so we'll see what happens after that. There is also this small job that we have our hired labor doing, it's about 1,600 feet and they were doing the same thing. They were stockpiling material as much as they could. Both of the contractors are ahead of schedule so we should be in pretty good shape.

This is the opportunity for input. This is the [contact information for Gib Owen] he's the guy you call, not me okay (audience laughs).

This is the [www.nolaenvironmental.gov] webpage.

Now we are open for questions.

Wade Habshey, Public Affairs

One quick reminder here. This is academic freedom. We are here to have fun tonight so don't be shy in asking your questions. Of course this is not the Jerry Springer show either so what we want to do is, if someone is up there speaking or whatnot, let them finish before you interject. We'll be getting to you so you don't have to worry about that.

Question 1. Terry McCarthy: Do you have funding for all these projects?

Response 1. Carl Anderson: We have about half the funding so far. The other half is pending in the President's Fiscal Year 2009 budget.

Question 2. McCarthy: The St. Charles Parish return levee, you said you'll start it in 2009. Is that true?

Response 2. Anderson: Yes, that is true.

McCarthy: How long is that project supposed to take?

Anderson: 2 ½ years.

Question 3. Beverly Crais: The wall behind my house. Do you have funding for that project?

Response 3. Carl Anderson: We have half the funding for all the work that's going on right now. We are working toward getting the other half this year, [it will be in the President's] FY '09 budget. They only appropriated so much and it is close to $7 billion. Now we're looking at getting another $5-6 billion.

Comment 4. Crais: It's most probably not going to affect most of the people that this wall protects but during construction I think you're gonna do more damage to my home, my property than a storm would.

Response 4. Anderson: That's your opinion. The new wall is gonna be on the flood side.

Question 5. Crais: I realize that but you're going to have deeper pilings. The wall that's there right now has 90 foot criss cross pilings. When you all drove those pilings, now this is the truth, we have pictures that the [rain] gutters came off my house. It shook the gutter loose off my house. We had to go back and redo them. Plus [the construction] cracked my concrete. What am I going to live through with 150 foot pilings?

Response 5. Brett Herr: At this time we don't know what length the piles will be. Generally the zone of influence is at a 45 degree angle. We'll do advance work. We'll come in and take pictures and take video, and if damage to your house does result from the work you would file a claim with the Corps. We'd evaluate that claim and see if you are eligible for reimbursement.

Question 6. Crais: So there is no guarantee for getting a reimbursement even if you take a picture because everything is new?

Response 6. Herr: If it is determined that the damage is associated with our construction activities you will be reimbursed. We get lots of claims from people who have damaged houses that have nothing to do with our construction activities. So we have forensic experts that make the determination if damage was associated with our construction activities. We do a lot of this with the SELA projects. We also set-up vibration monitoring and it will tell us how much the ground is shaking. Three's a limit on what is tolerable. We understand that's a big concern and we want to do everything we can.

Crais: We know how the ground is out there. We've been here for 27 years so when you start shaking its like putting sand in a bottle and you keep shaking it, it just keeps going down.

Comment 7. Fran Campbell, East Jefferson Levee District: I can attest that they're trying to do the right thing and they will set-up a vibration monitor and they will send us the results of that. If for example your gutters were shaken, please call me and we'll go see it. So if something is occurring during construction and you're very concerned about it, call us when it's happening. I'll give you my card.

Question 8. John de Mond, Louisiana Department of Environmental Quality: I have a question about IER 1. The control structures that are present there, you said "modifications". How is that going to be modified?

Response 8. Carl Anderson: Bayou Trepaginer is not being operated as a drainage structure anymore it has the pump station right there so they are looking to officially close it.

Question 9. de Mond: How about La Branch or Cross Bayou?

Response 9. Anderson: We're planning to replace it but if the parish and levee board wants to go in and build a pump station that will be a replacement for this structure.

Gib Owen: They are applying for the permits.

Question 10. de Mond: Does the permit call for keeping the existing structure there in addition to pumps?

Response 10. Anderson: They're going to have to provide the same level of interchange there but they'll also have capability of pumps.

Owen: The permit basically limits where this red area would be the pump station. If we knew they were doing that our structure would be replaced.

Question 11. de Mond: What replaced [inaudible] structure [inaudible] combination?

Response 11. Anderson: Yes, that's the plan.

Question 12. Don Grush, Metairie: I would like to address something that's tied into the Corps of Engineers. We're all here basically for one thing to protect ourselves from a 1 in 100 year storm. The levee system is an important part of that. My question has been since 1999, it's evacuation. I want to ask, aren't you trying to build the levees in Jefferson Parish to 18 feet?

Response 12. Anderson: We're enlarging these levees. We just enlarged reach 1, 3 and 4 . We're planning on enlarging reach 5 and 2 this year.

Question 13. Grush: That'll be 15 feet?

Response 13. Anderson: This lift will probably be in the neighborhood of 16-17 feet.

Question 14. Grush: That's primarily to take care of any water surge. That's where I come in. My problem is it looks like we're trying to do the best we can to protect Jefferson Parish and hopefully by 2011 will have St. Charles finished. My problem is have you ever addressed vulnerability of possible Lake Pontchartrain storm surge destroying the 1-10 Bonnet Carre Spillway bridge? Mr. Anderson [have you or the people] in Vicksburg ever addressed that?

Response 14. Anderson: We haven't addressed the I-10 bridge, that's the Department of Transportation.

Grush: No, I'm talking about the water surge in that area.

Anderson: That's the Department of Transportation's bridge.

Question 15. Grush: You're in charge of the levee system. There are no levees. Water does not stop at St. Charles Parish. It doesn't stop at Jefferson Parish. It takes a right angle there. It's not gonna stop there. God doesn't say it can't go in. If it does, then what? Have you thought about protecting that bridge?

Response 15. Anderson: That's the Department of Transportation's bridge.

Question 16. Grush: You know what happened to the bridge on the I-10 Twinspan? What destroyed it? The waves. From where? Lake Pontchartrain.

Response 16. Anderson: The waves were from Lake Borgne.

Grush: No, Lake Pontchartrain.

Anderson: What is your question about Lake Pontchartrain?

Question 17. Grush: My question is have you ever addressed it? I want to know how vulnerable [the Bonnet Carre Spillway bridge] is to a storm.

Response 17. Anderson: No we have not addressed it. Like I told you, that is the Department of Transportation.

Question 18. Grush: Is the bridge going to withstand a storm that you don't seem to be worried about?

Habshey: We can get your contact information and get back to you.

Response 18. Anderson: You need to talk to the Department of Transportation. That question needs to be asked of them.

Question 19. Grush: Well how are you gonna protect it if it's there? If a storm comes in and it's a 15 foot wave. You guys protect the bridge.

Response 19. Herr: It's actually not a matter of protecting the bridge. It's similar to the new bridge that is under construction at the Twinspan. As a result of Hurricane Katrina [inaudible].

Question 20. Grush: The problem I have is there is no way in the world that bridge can take a 15 foot storm surge. You have nothing there but Lake Pontchartrain. Nothing at all. You have no levee, no breakwater. [A storm surge would] destroy [the bridge]. What happens if there is a storm and everyone is out of town? How do we get back in? Suppose there is another storm. How do you get out? Think about it. I just wanted to go on record with you guys and let you know that you all haven't thought about it and I think you should have some kind of a breakwater out there to protect the surge like you talked about. That would help but you have nothing now zero, zip. It's the end of St. Charles Parish. That bridge is gonna go.

Response 20. Herr: But sir, we don't have anything protecting the Causeway, Spillway or Twin Span. A bridge is over open water you can't protect it.

Question 21. Billy Marchal, Flood Protection Alliance: I know there are issues about rising [inaudible] and geotextile material from the St. Charles Parish and the West Return Canal. I know they are authorized until 2054 and only funded to 2011. So my question is, given 100-year level of authorization and funding, are the foundations being put in sufficiently to raise the existing structures? For example, the IHNC project, to my understanding, is being constructed for a nominal 100-year but the foundations will be there to take it up to a 400-year or even a 1,000-year condition.

Response 21. Anderson: All the structures are designed and will be built to 2057.

Question 22. Marchal: On the IHNC project the elevation is built to a 1 percent 100-year storm. My understanding is the foundation must be [inaudible]. Can you build a T-wall so you can add to the length later? Rather than go back and build higher?

Response 22. Herr: We are looking at resiliency and overtopping in addition to 100-year stage. We are also making sure that the top of the levees and floodwalls are above the 500-year storm. We don't have authority to go above 100-year storm.

Question 23. Lisa Lentini, St. Rose: I've been living here about 10 years and in the past 2-3 years, right before Katrina, every time we get a really hard rain, there's a lot more standing water and I also know the river is higher than the lake so the water is draining out towards the lake. With all these projects going through the area I'm concerned about the level of water that's going to get caught standing on the protected side because of being trapped by the levee system. There is definitely a lot more water because of standing water.

Response 23. Anderson: All I know is that those drainage structures were designed to handle the flow.

Comment 24. Lentini: Anytime it rains here in St. Rose all these lots are going under water. At the dollar store [next door], you can't go to the dollar store if it rains hard because it goes under water. Almedia Road all those ditches, water is coming out of the ditches. It's never done that before.

Response 24. Herr: There is an urban flood control drainage study underway in St. Charles Parish to address the internal drainage issues. We don't have the authority to look at that as part of the hurricane protection system. That's a separate study.

Comment 25. Lentini: I realize that this levee system protects people and I realize these protect people's lives. I'm concerned about what kind of damage is going to happen if the water continues to rise on the protected side, then we're actually not getting any protection at all.

Response 25. Anderson: That study is underway. We're trying to make improvements to the interior drainage structure.

Gib Owen: The parish is pursing a pump station.

Comment 26. Lisa: Right there on Almedia Road where they have that pump station, right across the street Race Track [gas station] has been going under water. That never went under water before.

Response 26. Herr: That could be attributed to the development [inaudible]

Lentini: It's getting scary though.

Question 27. Beverly Crais: On the new wall, are you all going to have anything to block wave action? So that the waves won't hit directly up against wall? Some kind of concrete?

Response 27. Herr: Generally no. There's going be some rock on the flood side but it's not going to get break waves. The wall is designed to take that load. We drive the piles down 100 feet and there's a base slab underneath [inaudible] 20-30 feet wide. It is designed to take that load. [Inaudible]

Fran Campbell: It's not that it's not strong, it's just short.

Comment 28. Crais: Waves being driven by 110 mph winds up against a flat concrete wall have a tendency to make everything shake and I was thinking if you had something where the waves just wouldn't be up against the wall. We all know how the ground is out there. When the dump trucks go behind my house, it shakes.

Response 28. Herr: People could feel shaking from waves during Katrina.

Habshey: Well if there are no more questions, we'll stick around here and meet with you one-on-one if you want to. Again, thank you all for coming out and spending time with us. Good questions I have to say. On the way out say hi to Officer Smith from St. Charles Parish for being here tonight and for his protection.

The following notes were recorded by USACE contractors. These notes are intended to provide an overview of the presentations and public questions and comments, and are not intended to provide a complete or verbatim account of the meeting. This account is not intended to be a legal document.

U.S. ARMY CORPS OF ENGINEERS
HURRICANE AND STORM DAMAGE RISK REDUCTION SYSTEM

US Army Corps of Engineers

Why are we here tonight

To discuss the status of completed, in-progress and potential improvements to the Greater New Orleans Hurricane and Storm Damage Risk Reduction System on the Eastbank of St. Charles and Jefferson Parish.

US Army Corps of Engineers

National Environmental Policy Act: NEPA

- Required for all major Federal actions
- Analyze potential impacts to the human and natural environment and investigate reasonable alternatives
- Corps has made alternative arrangements with NEPA to expedite project timelines
- Public Involvement is KEY! We want to hear from you!
- Goal: more informed decision making through public involvement

US Army Corps of Engineers

NEPA Process and Path Ahead

- The NEPA process began with public scoping meetings for IERs 1, 2 and 3 on April 4, 2007
- From April 2007 through today, current project alternatives were developed, impacts were analyzed, and public input was solicited
- Tentative dates of 30-Day Public Review Period:
  - IER 1 – April 25, 2008 to May 26, 2008
  - IER 2 – May 1, 2008 to May 31, 2008
  - IER 3 – May 9, 2008 to June 9, 2008

US Army Corps of Engineers

NEPA Process and Path Ahead

- Final decision regarding IER recommendations will tentatively be made in 2008:
  - IER 1 – May 30, 2008
  - IER 2 – June 6, 2008
  - IER 3 – June 13, 2008

US Army Corps of Engineers

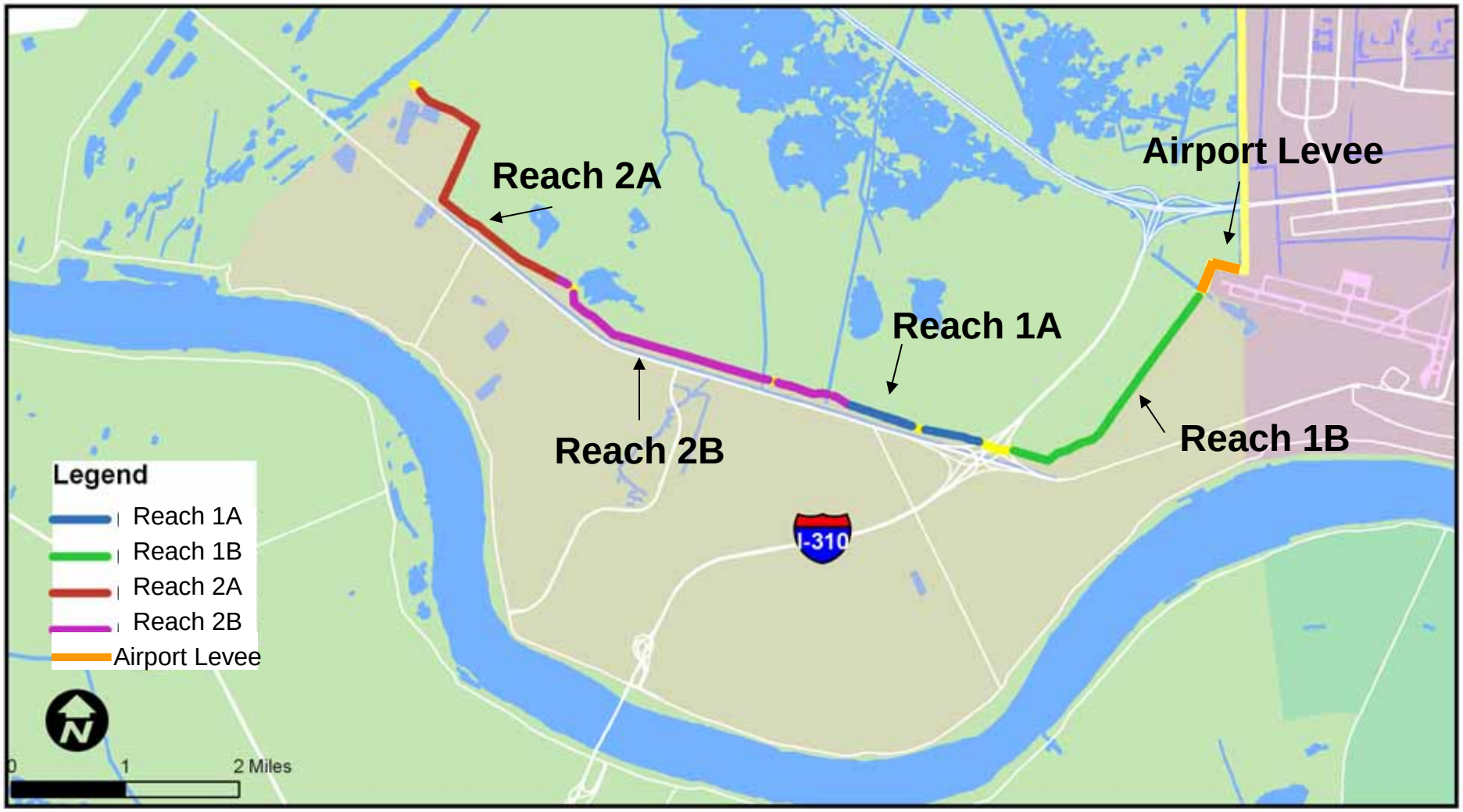
Lake Pontchartrain and Vicinity Hurricane Protection Project

US Army Corps of Engineers

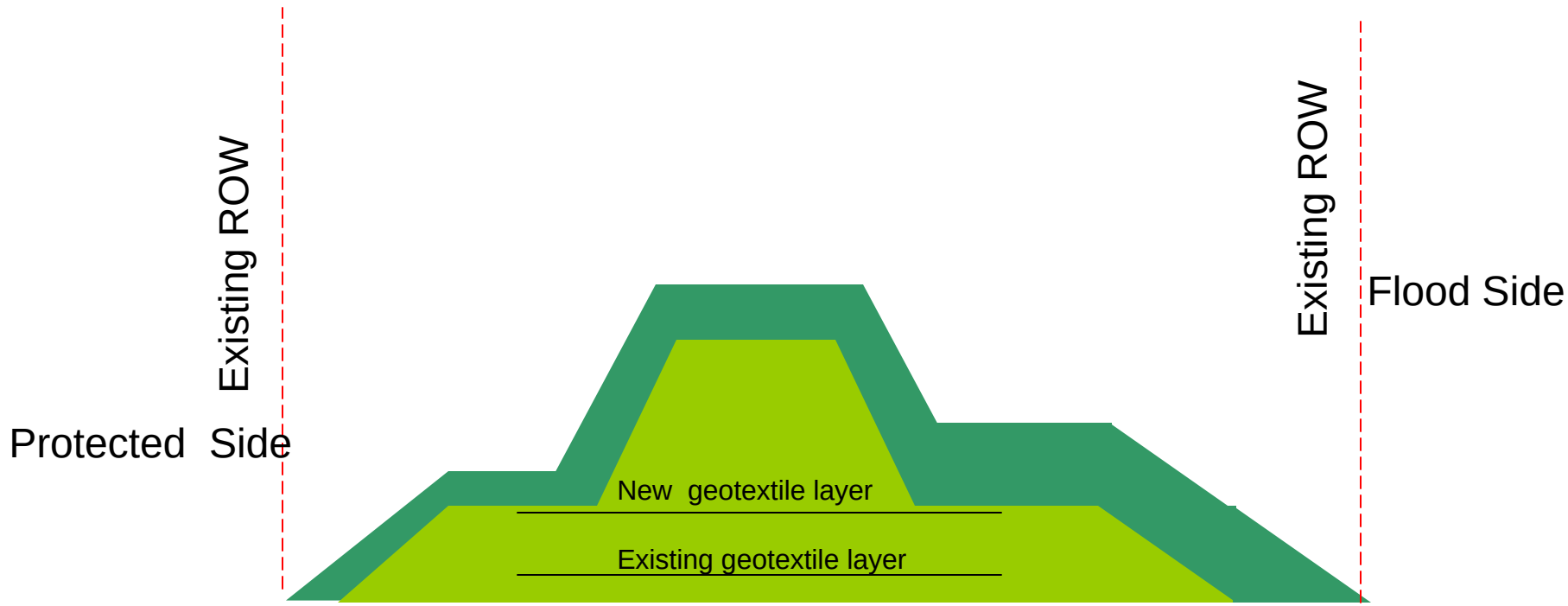
100-yr Alternatives
St. Charles Parish
IER 1

US Army Corps of Engineers

St. Charles Parish Levee Reaches

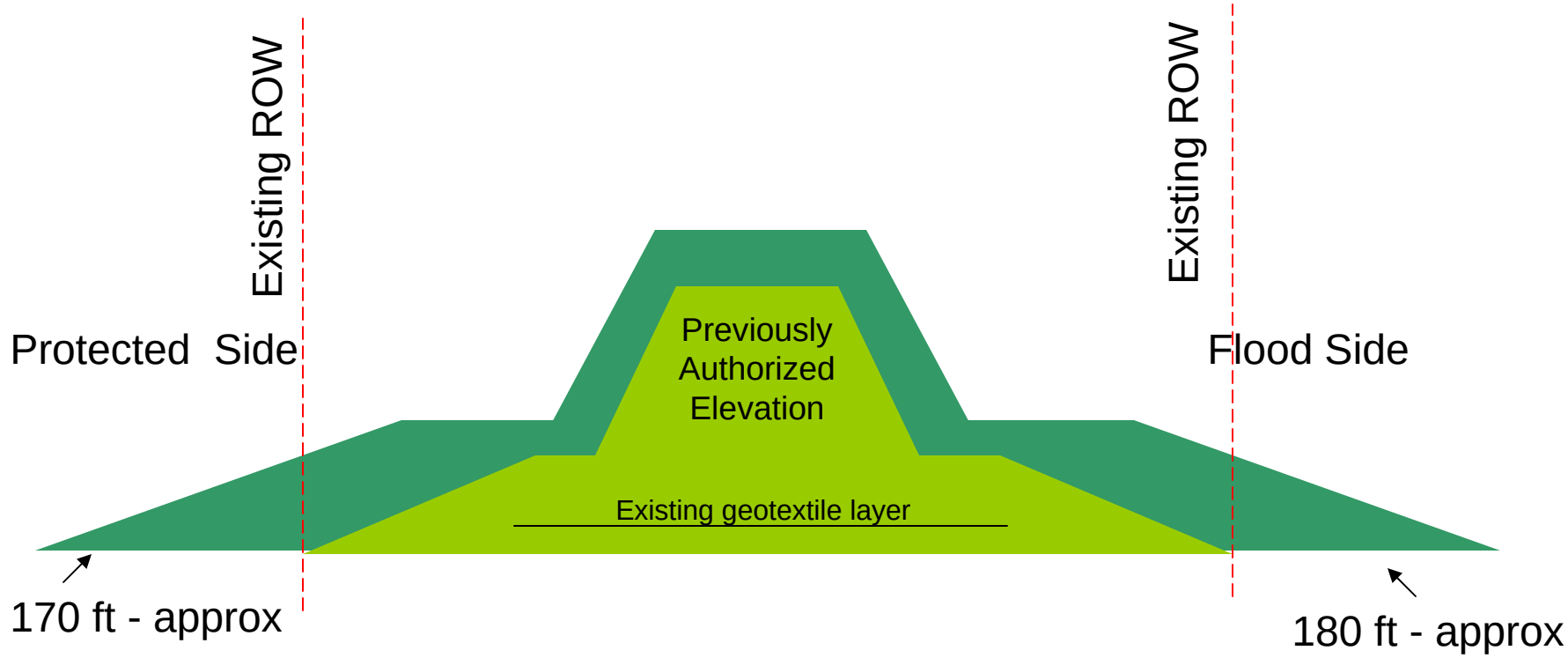


St. Charles Parish
100-yr Alternative with Additional Geotextile



ROW – Right-of-Way

St. Charles 100-yr Alternative Without Additional Geotextile (Preferred)



ROW – Right-of-Way

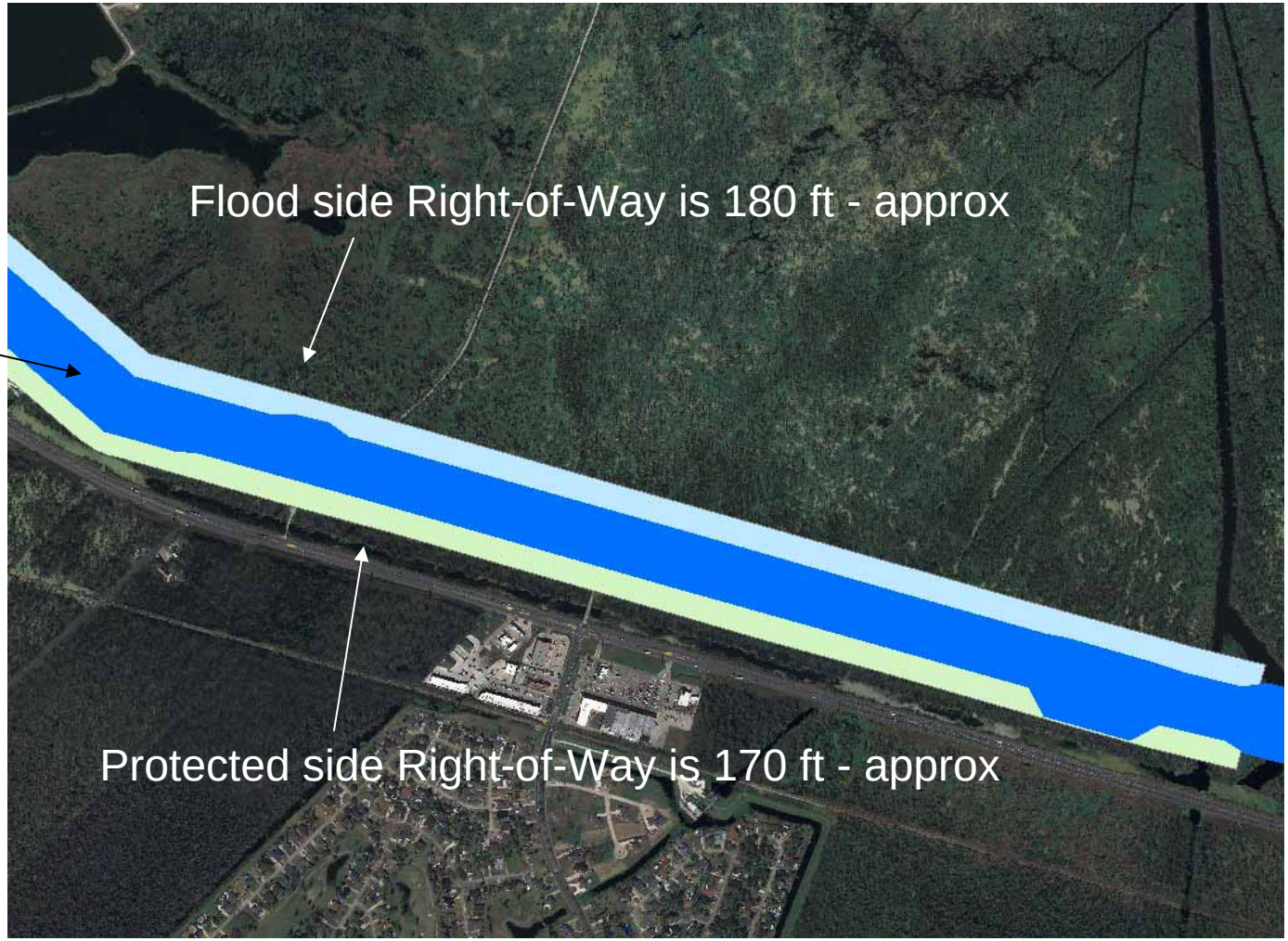
100-year Project Footprint

Legend

- Necessary Right of Way for 100-year protection, flood side
- Existing Right of Way
- Necessary Right of Way for 100-year protection, protected side
- Structures and pipelines that will not require any new Right of Way

100-year Project Footprint

Existing Right-of-Way is 380 ft - approx



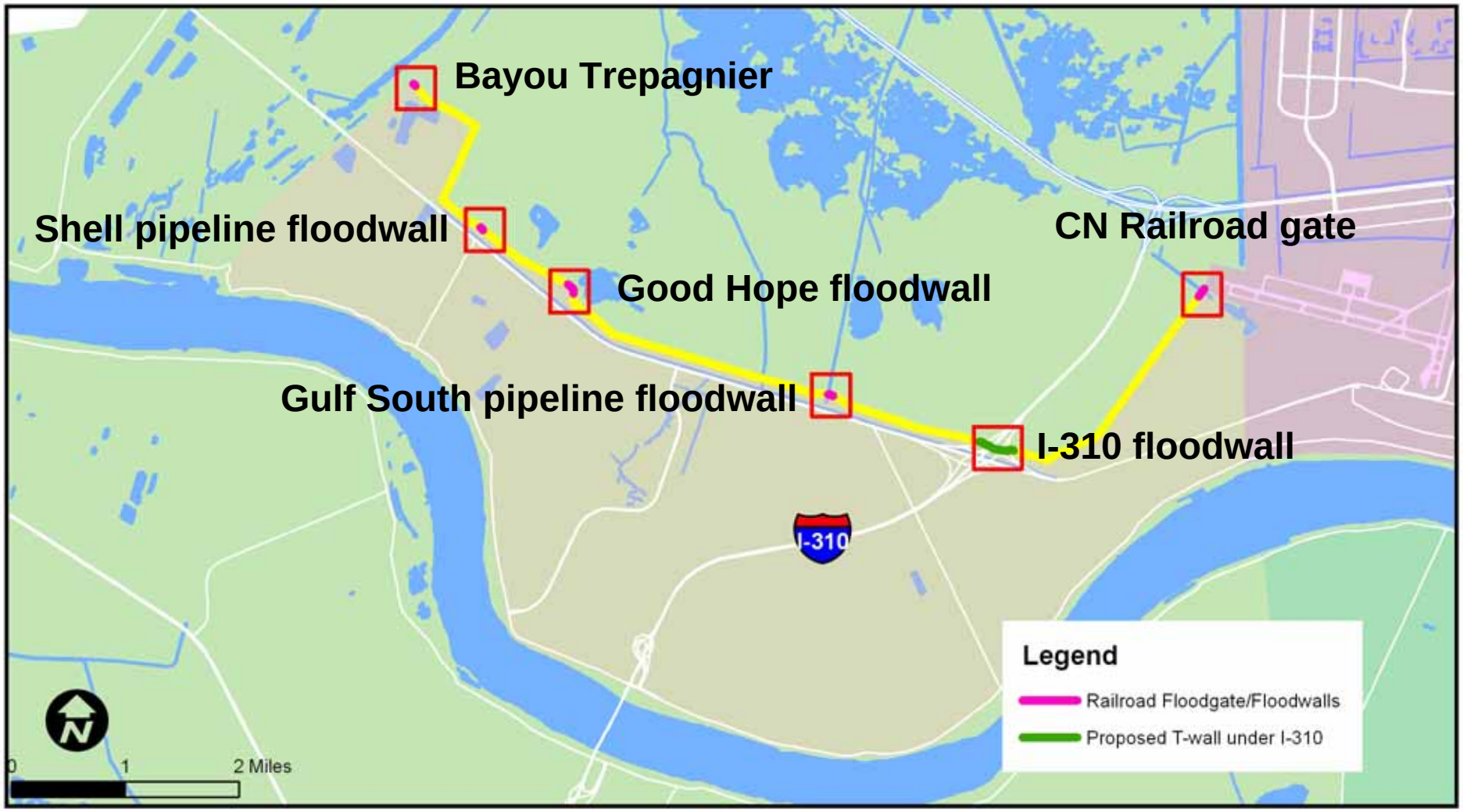
Legend
- Necessary Right of Way for 100-year protection, flood side
- Existing Right of Way
- Necessary Right of Way for 100-year protection, protected side

US Army Corps of Engineers

Armstrong Airport Levee

US Army Corps of Engineers

St. Charles Parish Floodwalls



US Army Corps of Engineers

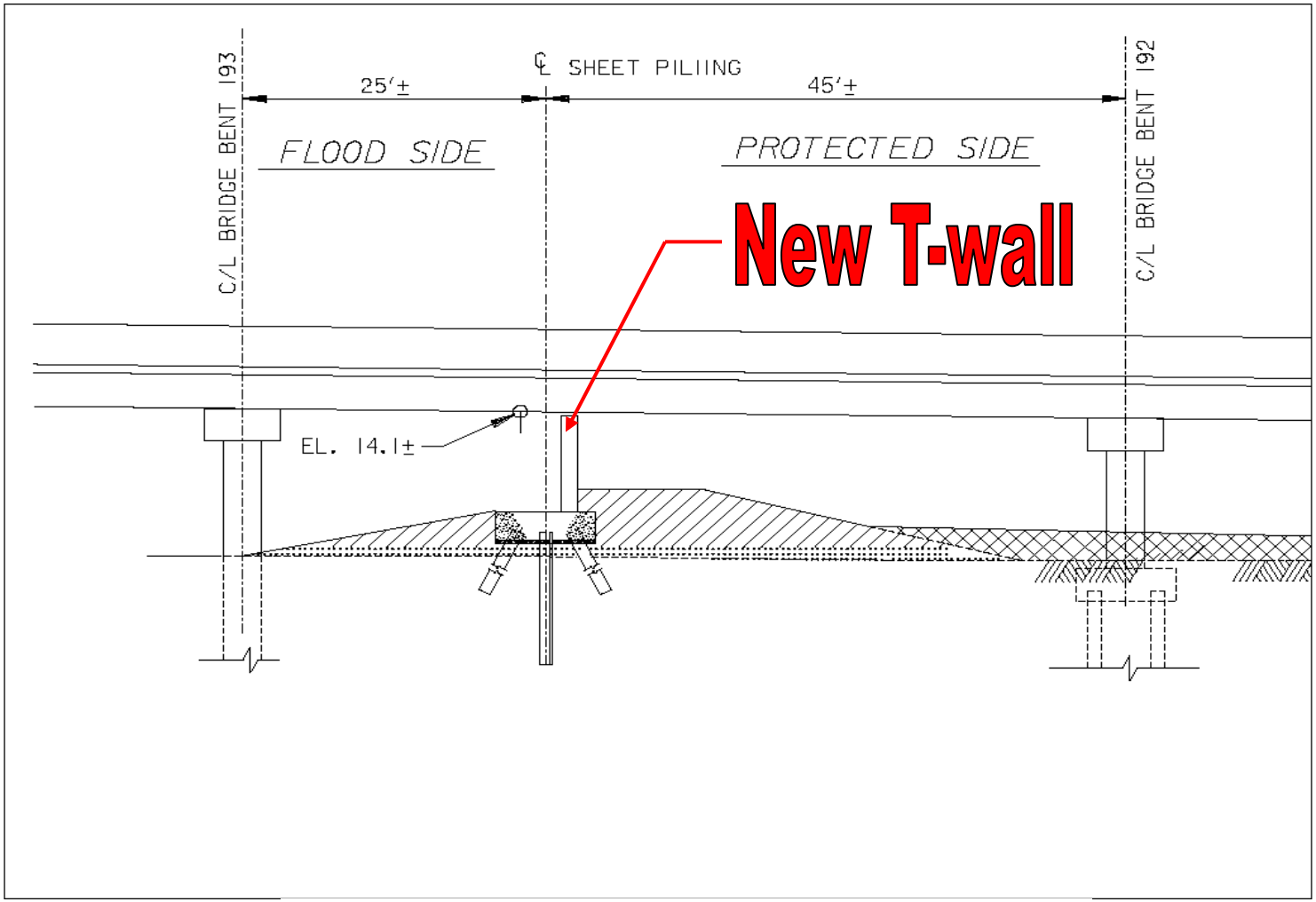
Bayou Trepagnier Floodwall

Floodwalls at Pipeline Crossings

US Army Corps of Engineers

I-310 Floodwall

I-310 Floodwall

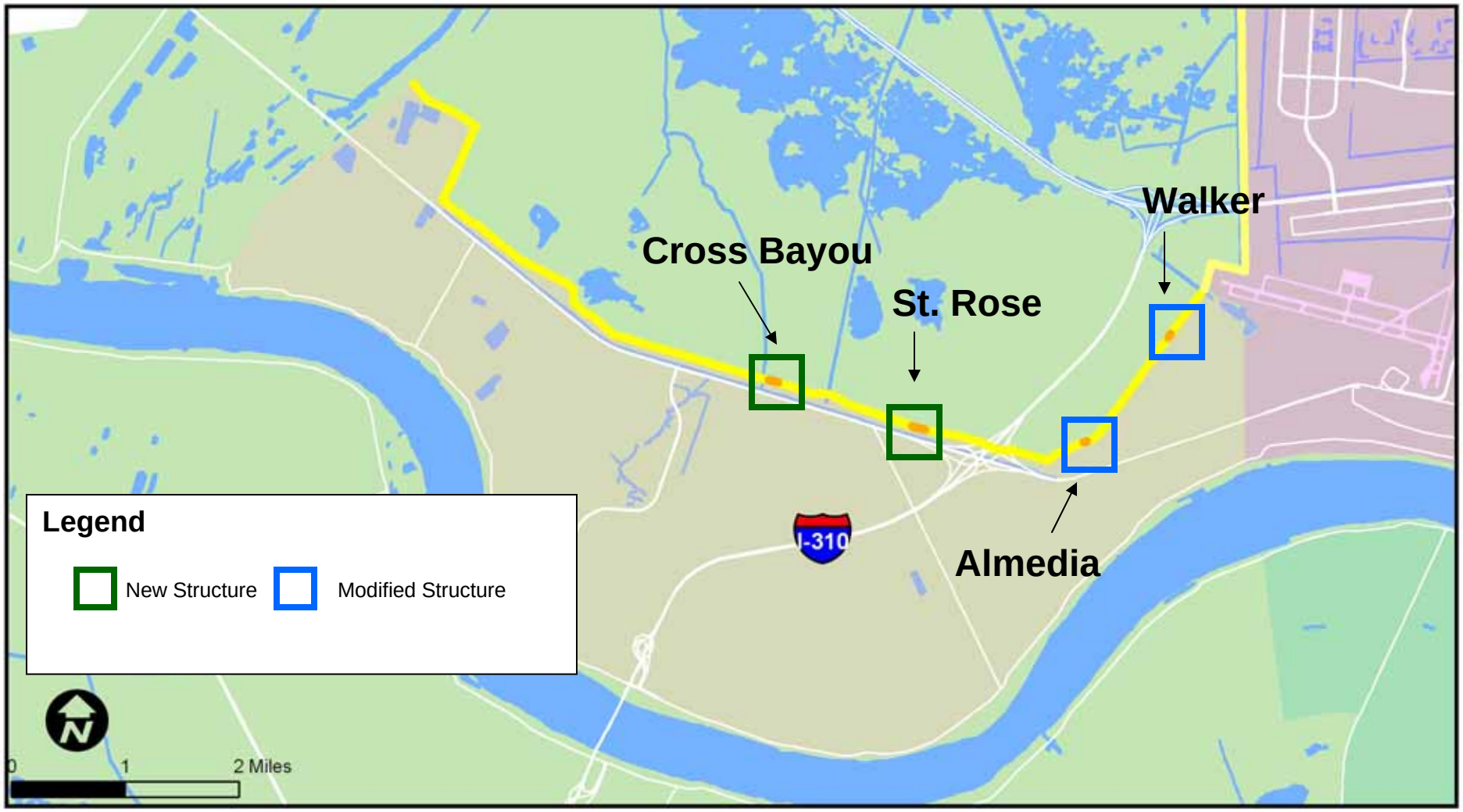


US Army Corps of Engineers

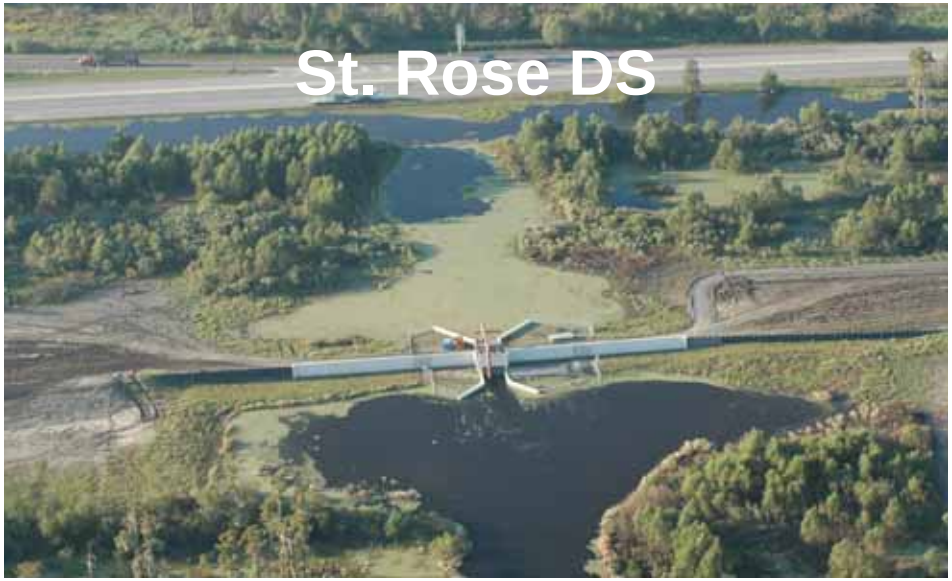
Canadian Railroad Floodgate

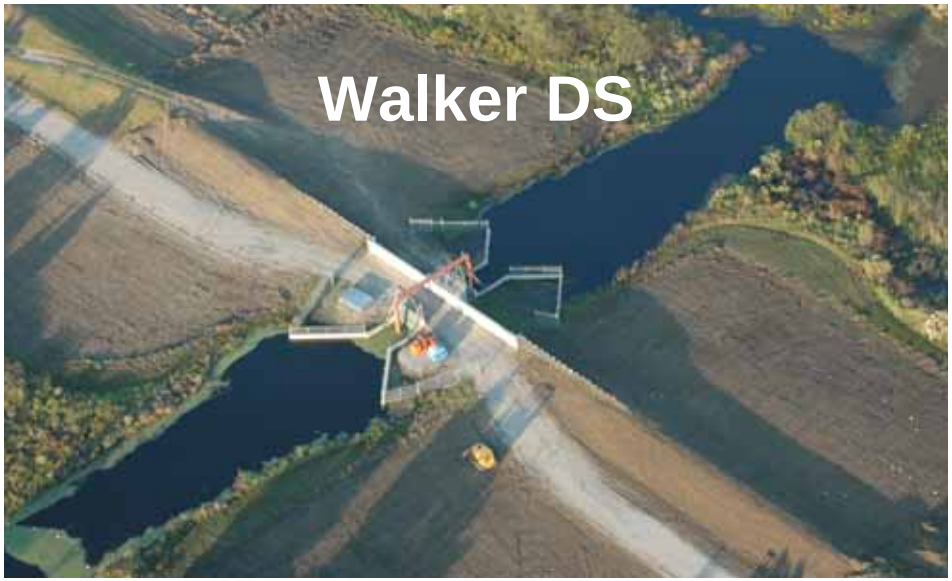
US Army Corps of Engineers

St. Charles Parish Drainage Structures



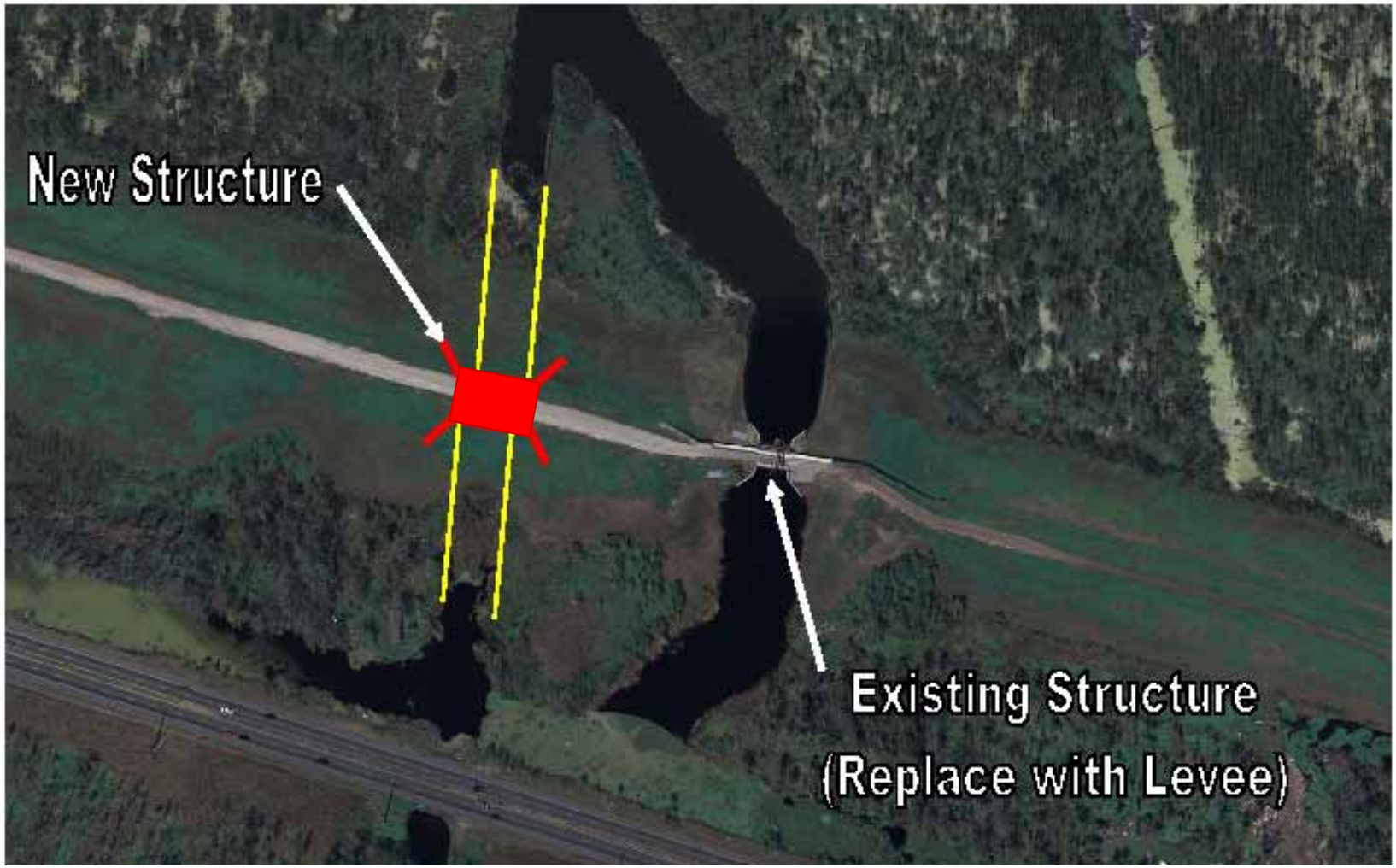
St. Charles Parish Drainage Structures





US Army Corps of Engineers

Cross Bayou Drainage Structure

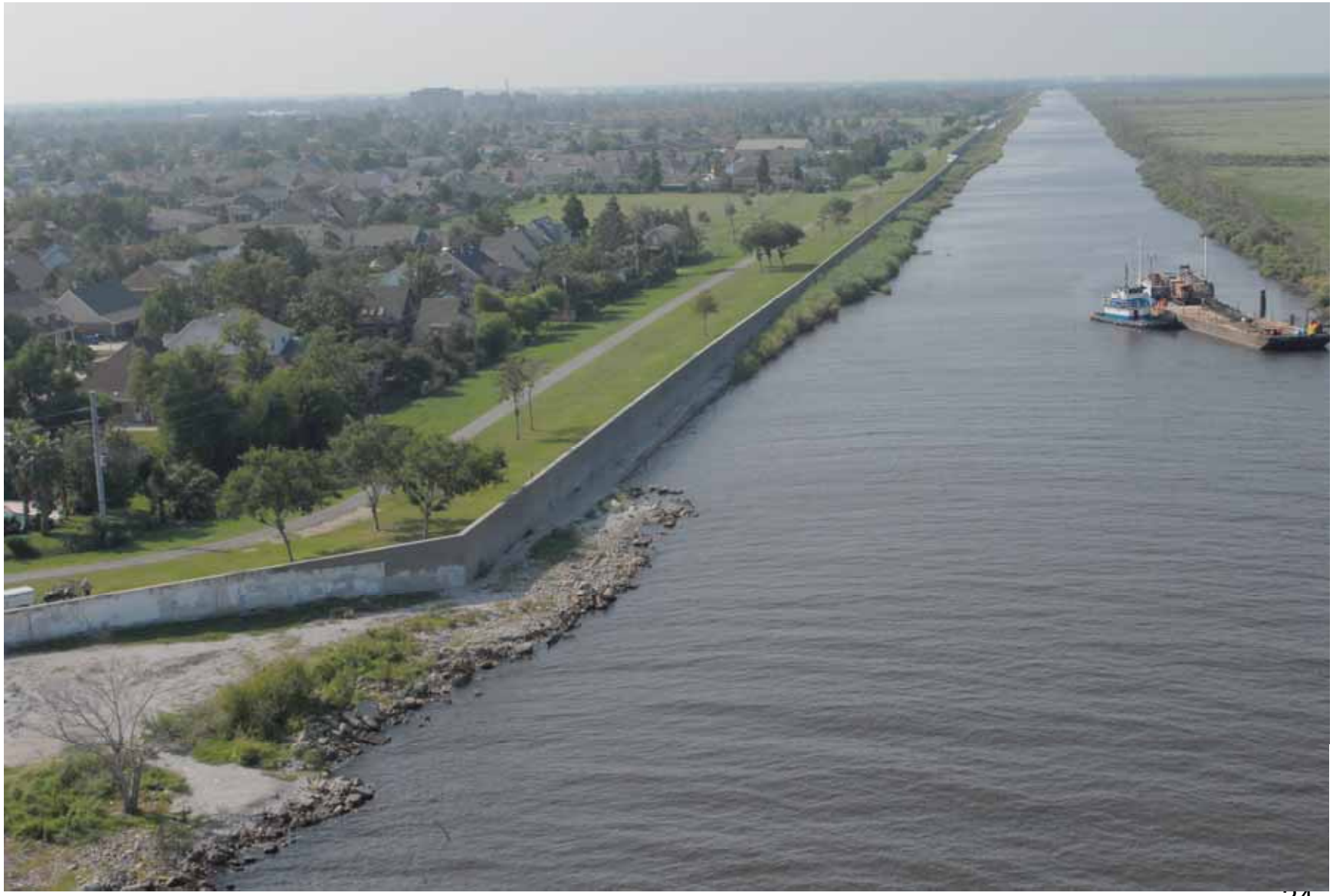


US Army Corps of Engineers

100-yr Alternatives
Jefferson Parish - West Return Wall
IER 2

US Army Corps of Engineers

West Return Floodwall



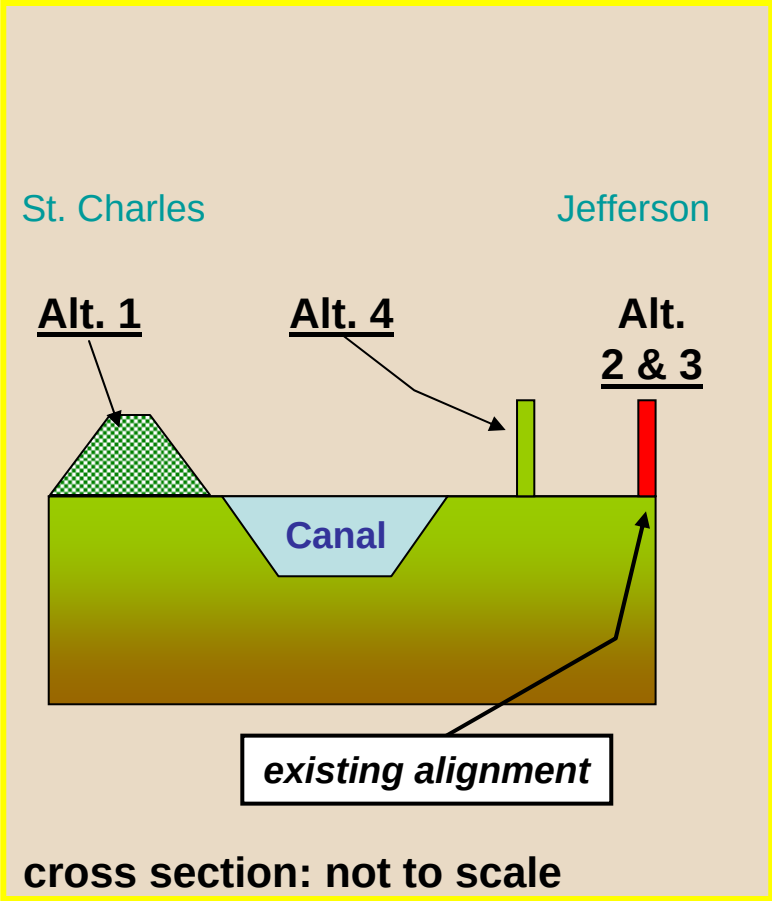
West Return Floodwall Alternatives Evaluation

Study Area:

New Orleans International Airport to the Jefferson Lakefront Levee

- Evaluation of Alternative Designs complete - Nov 2007
- Possible Rock Dike considered at head of canal
- Scheduled Start of Construction – early 2009

West Return Floodwall Alternatives Evaluation



Alternative 1: Earthen levee (St. Charles side of existing alignment)

Alternative 2: Modification of existing floodwalls by adding additional wall height (current alignment)

Alternative 3: Remove existing wall and replace with new wall (current alignment); potential reuse of some foundation components

Alternative 4: New wall parallel to existing floodwall

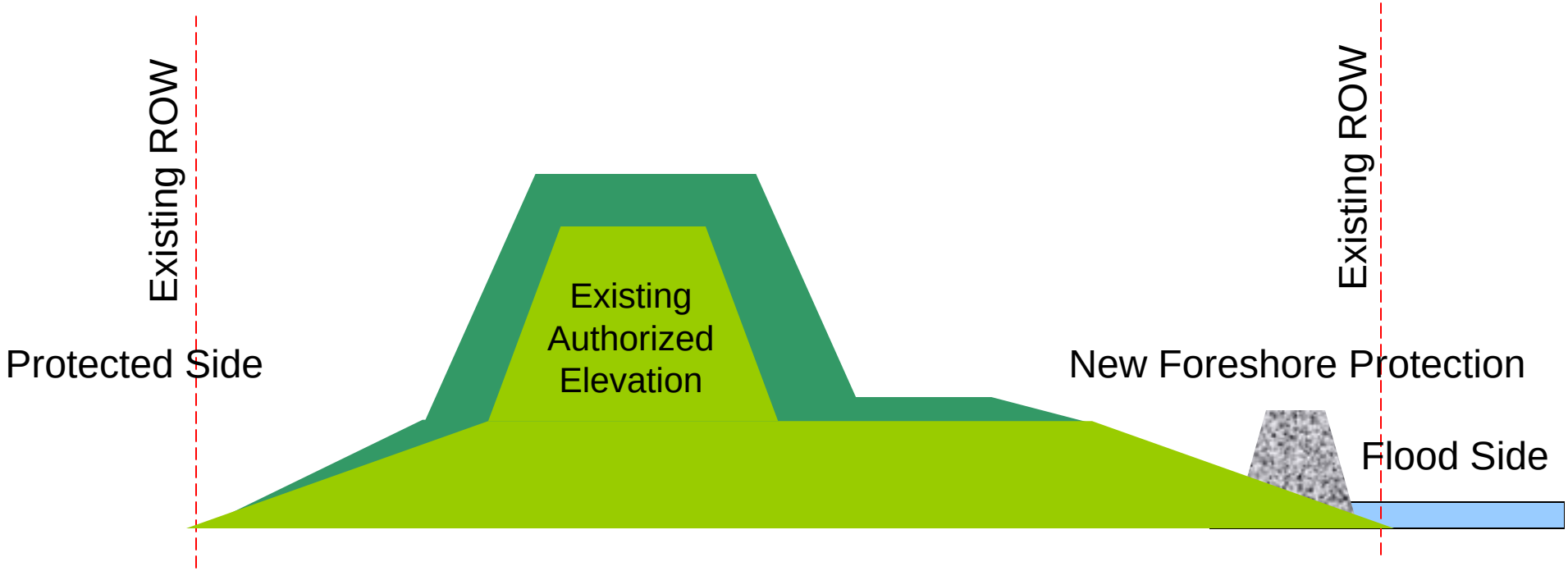
US Army Corps of Engineers

100-yr Alternatives
Jefferson Parish – Lakefront
IER 3

US Army Corps of Engineers

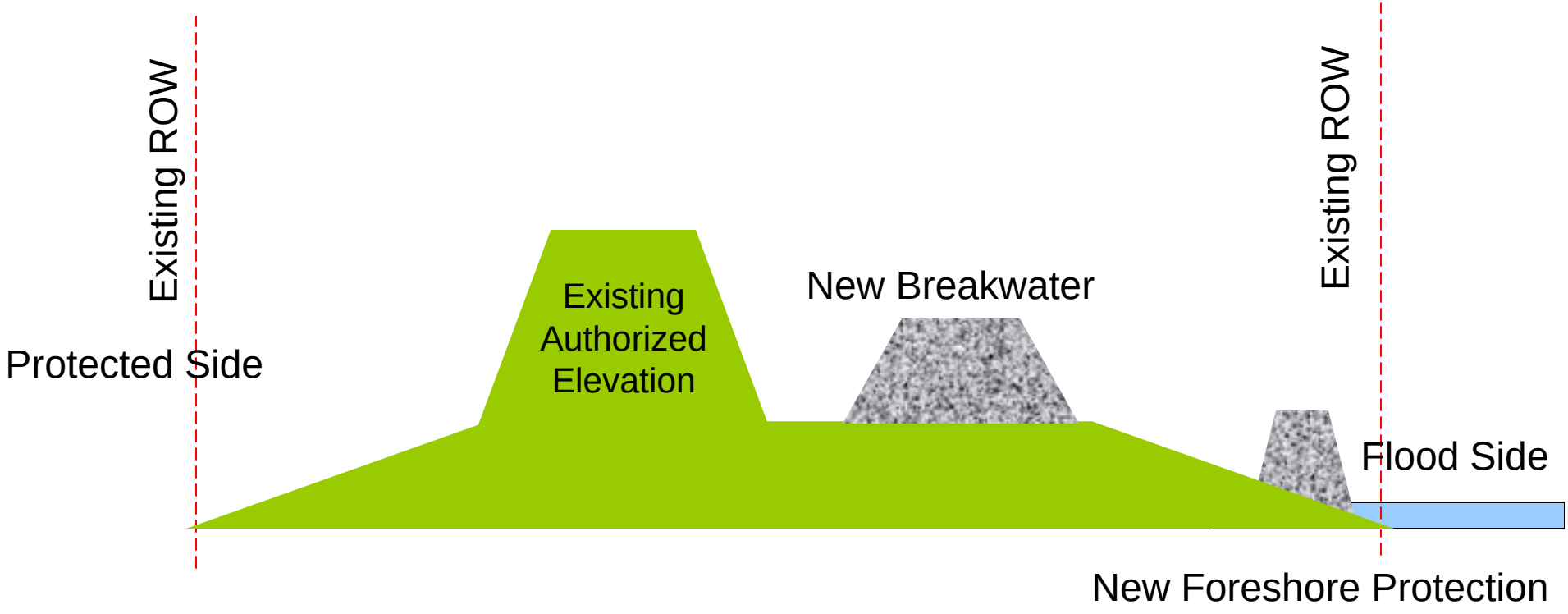
Jefferson Parish Levee Reaches

100-yr Alternative 1 (Preferred)



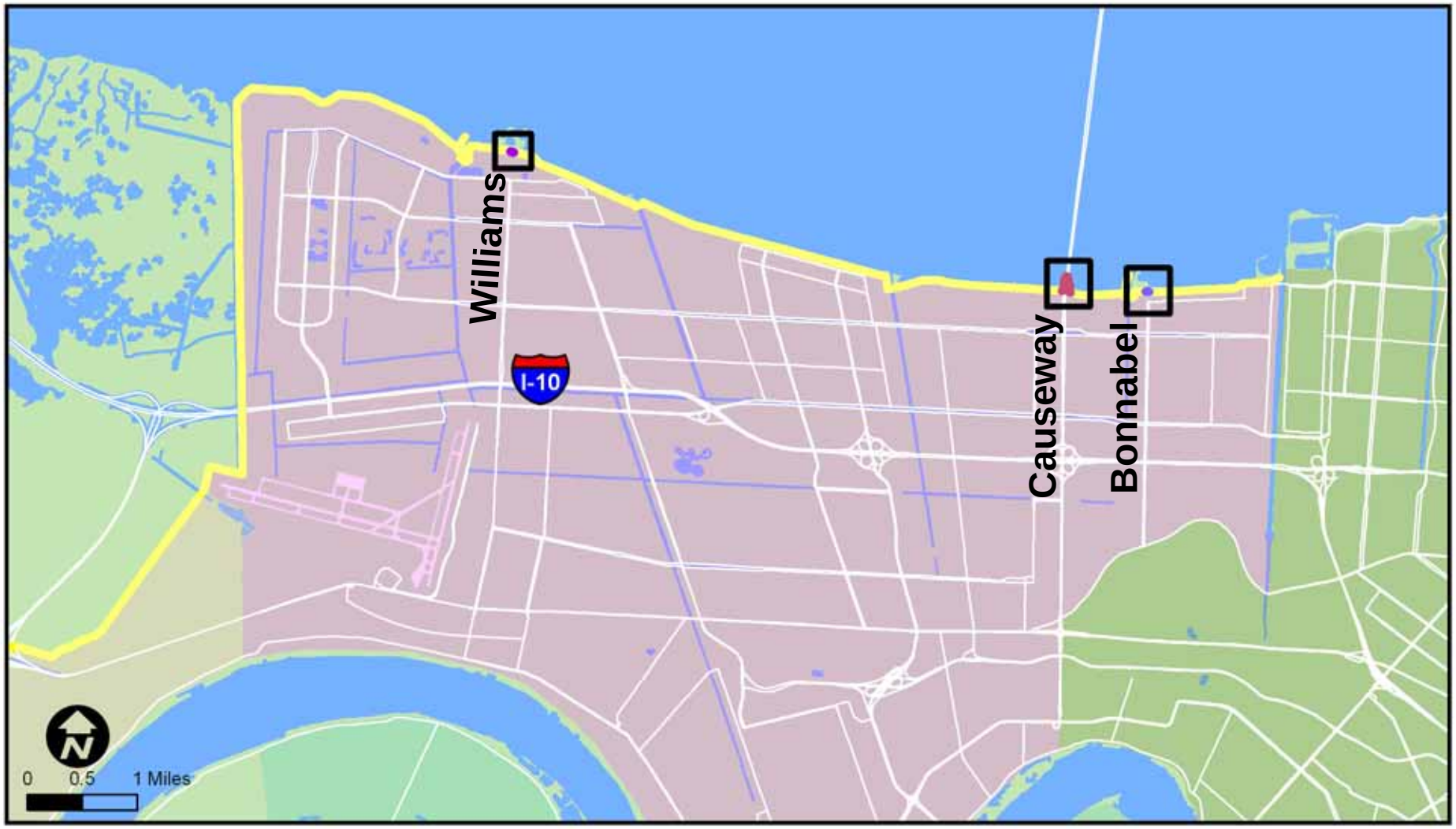
ROW – Right-of-Way

100-yr Alternative 2



ROW – Right-of-Way

Floodgates at Williams and Bonnabel, and Causeway Levee Tie-in



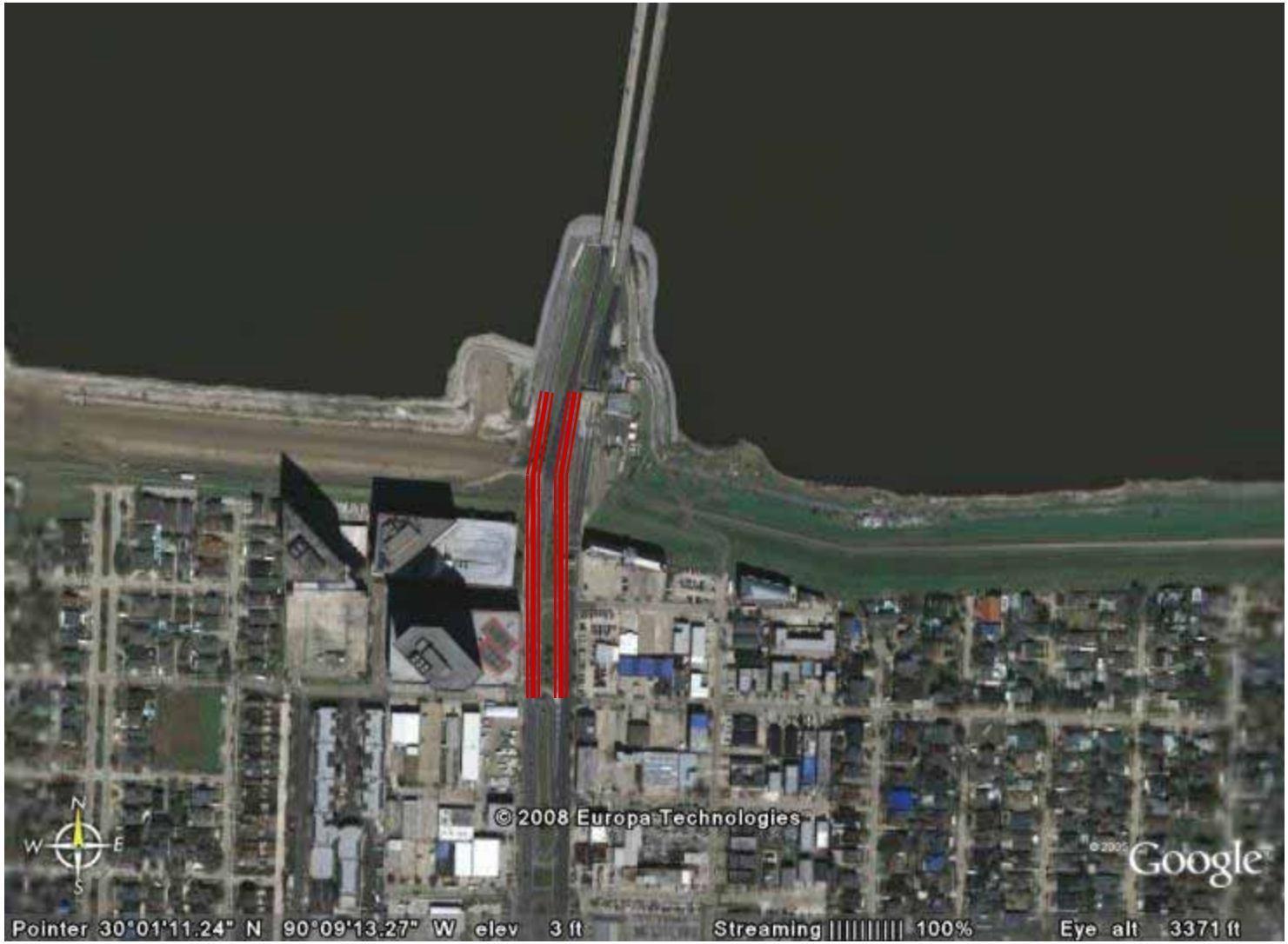
Jefferson Parish Floodgates

Williams Blvd

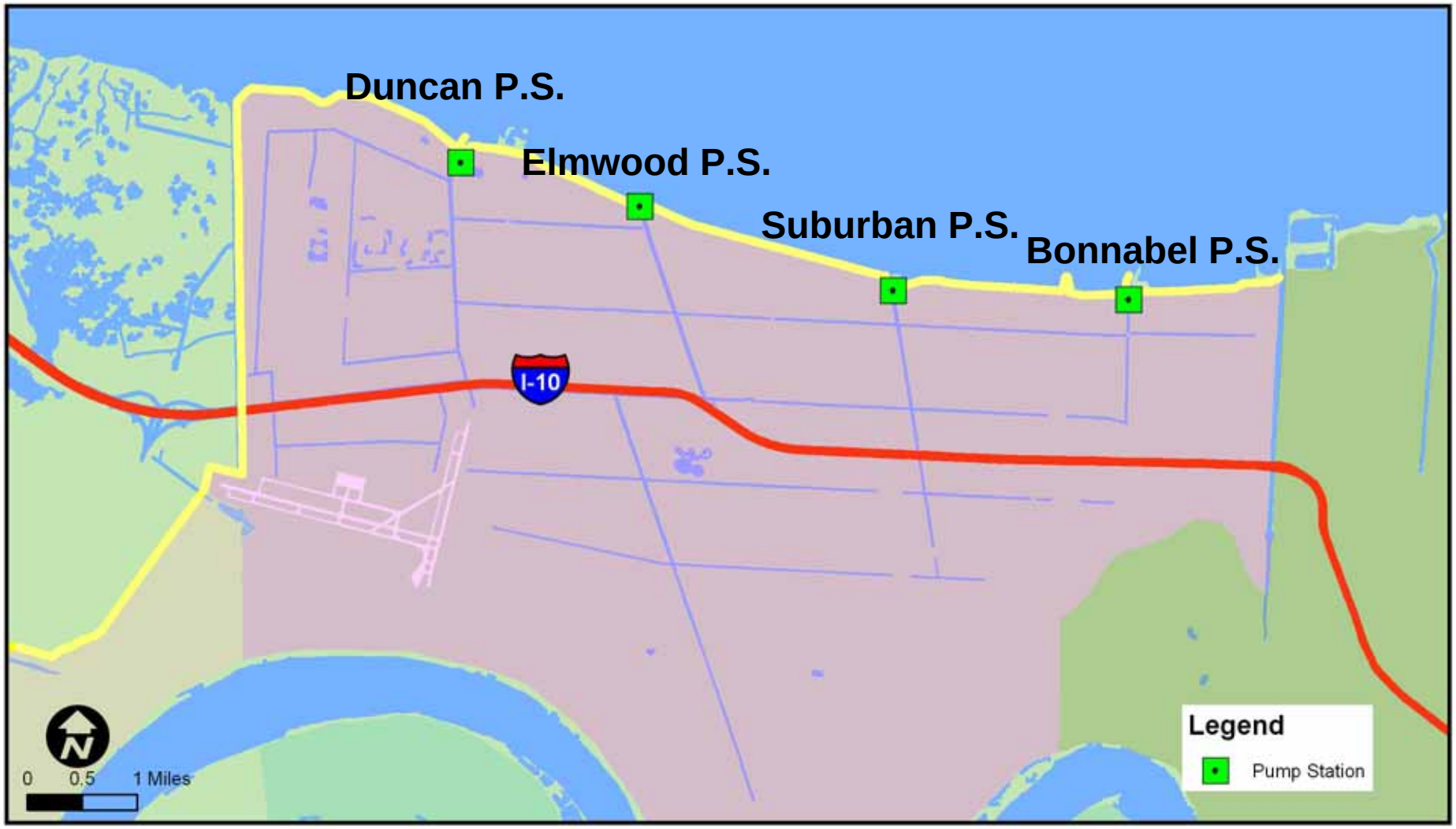
Bonnabel Ave

Causeway Levee Tie-in

Causeway Levee Tie-in

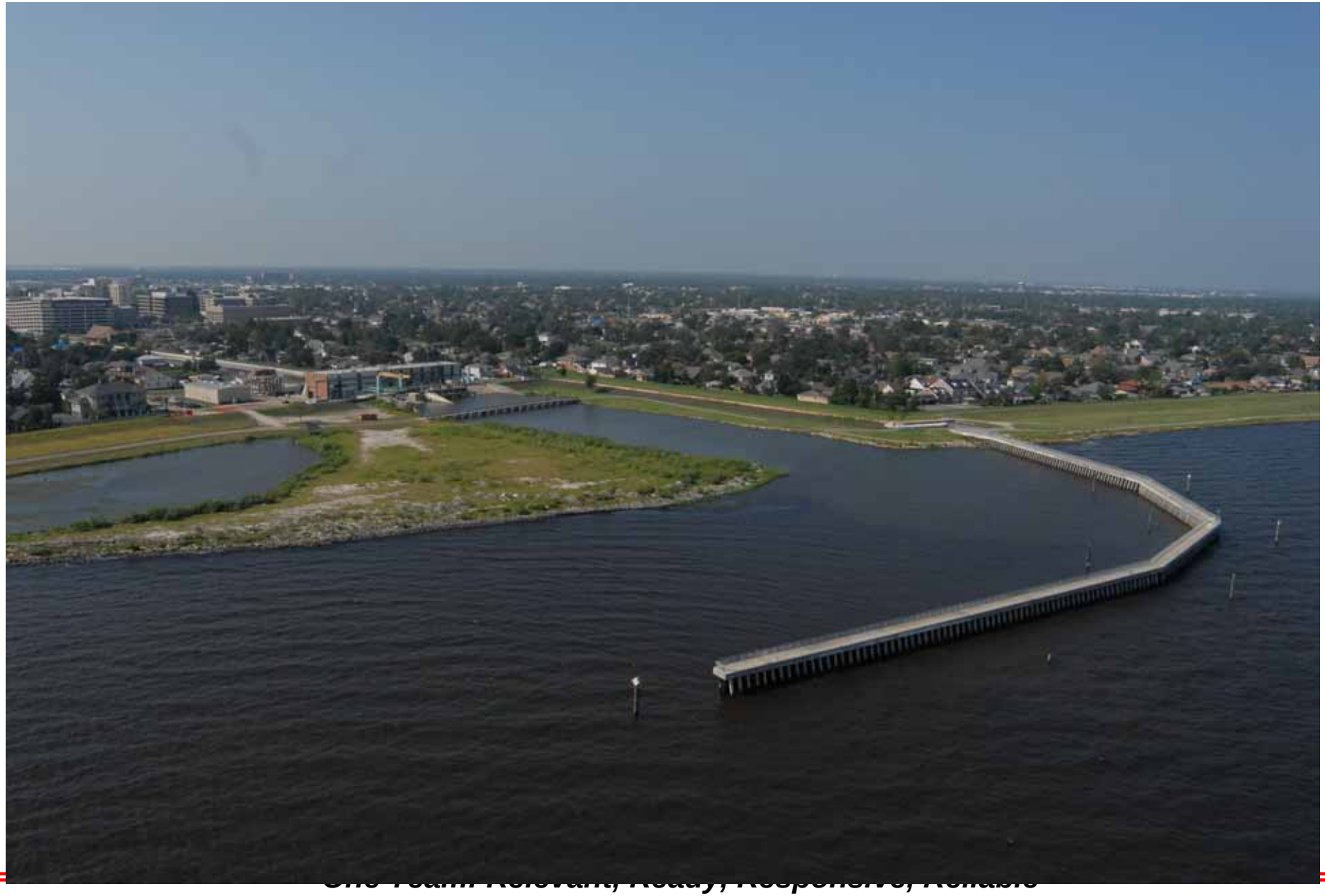


Jefferson Lakefront Pump Stations

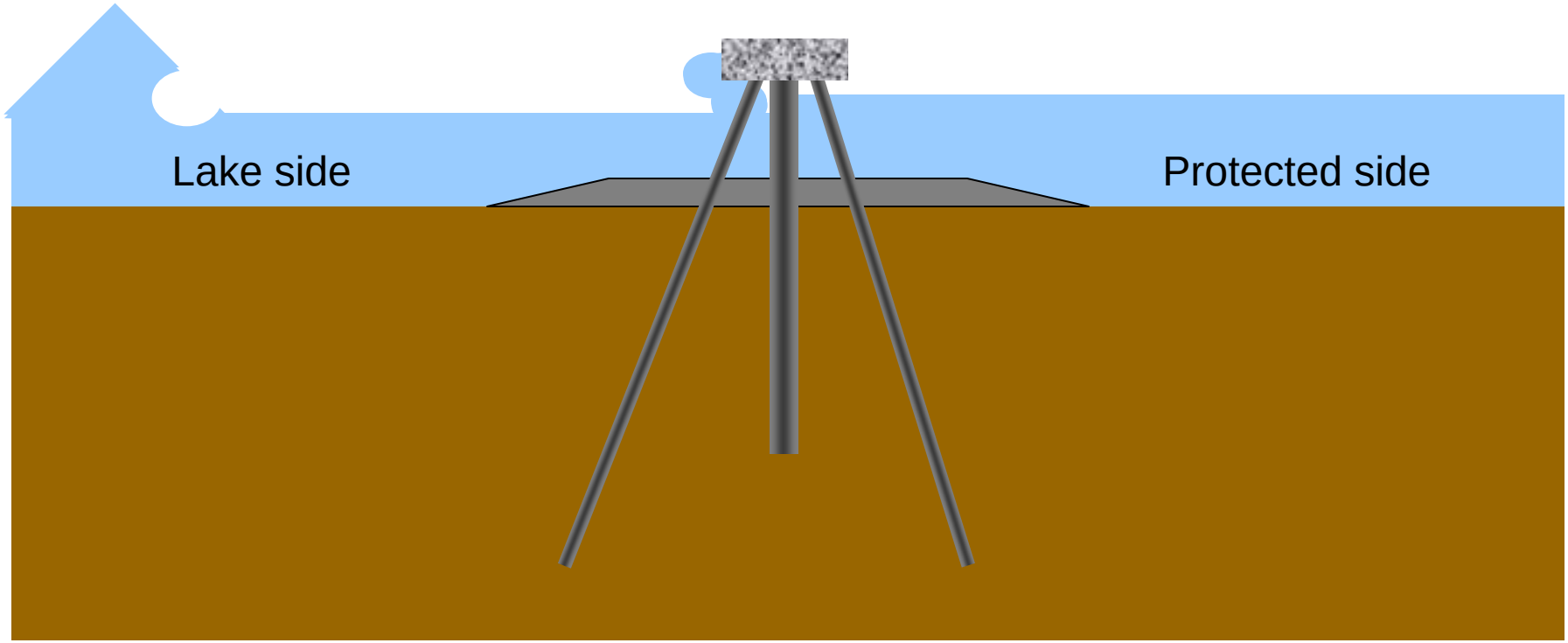


US Army Corps of Engineers

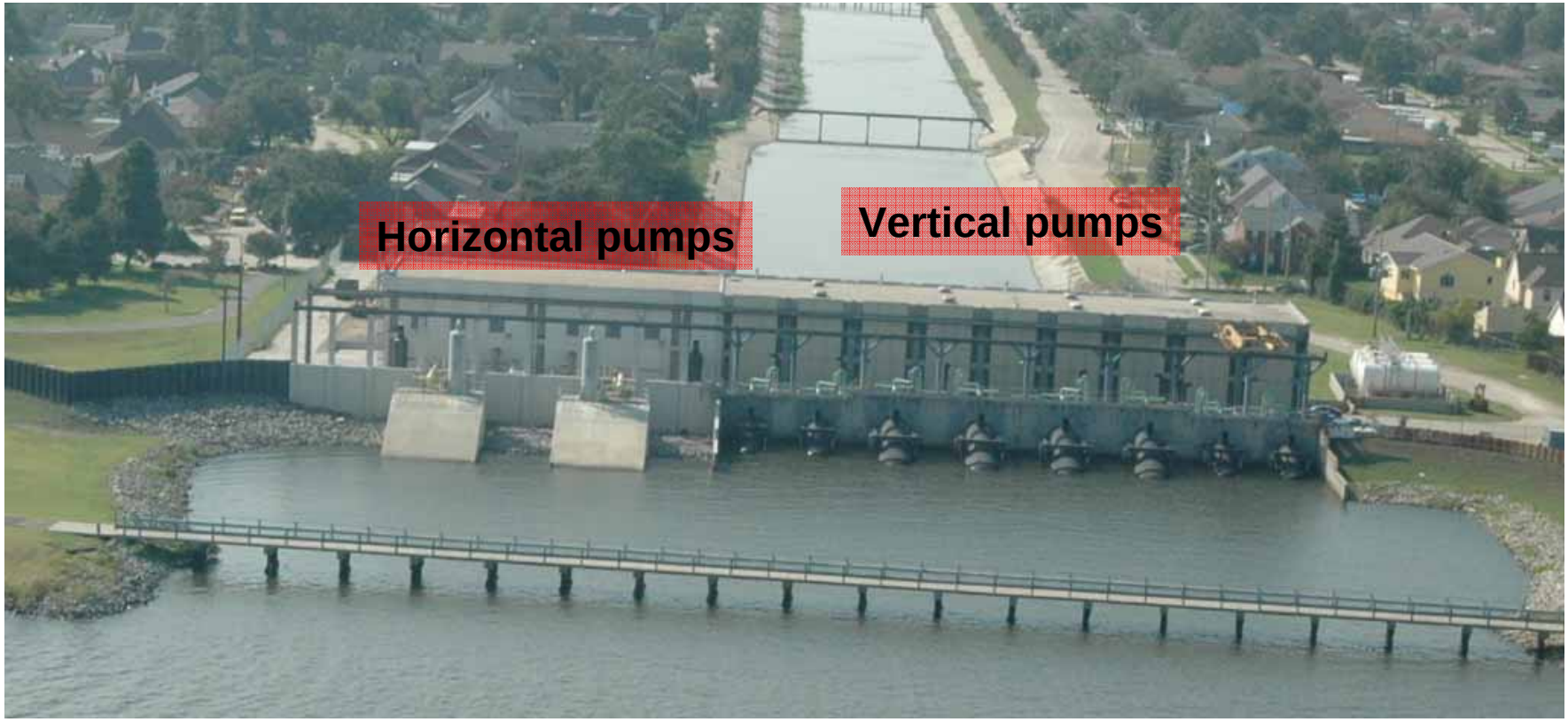
Breakwater Suburban PS #2



Typical Section of Breakwater



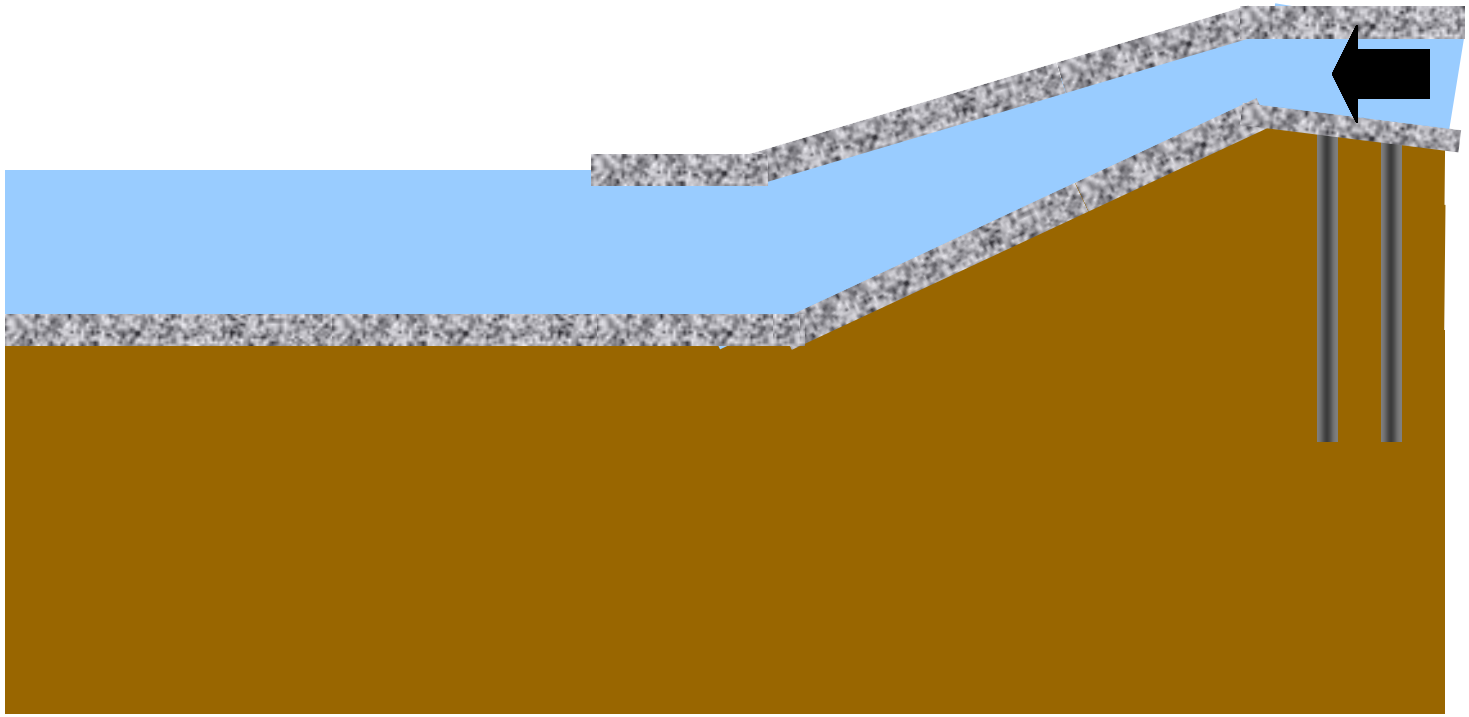
Fronting Protection Elmwood PS #3



Typical Fronting Protection

Jefferson Parish Horizontal Pumps

Current configuration



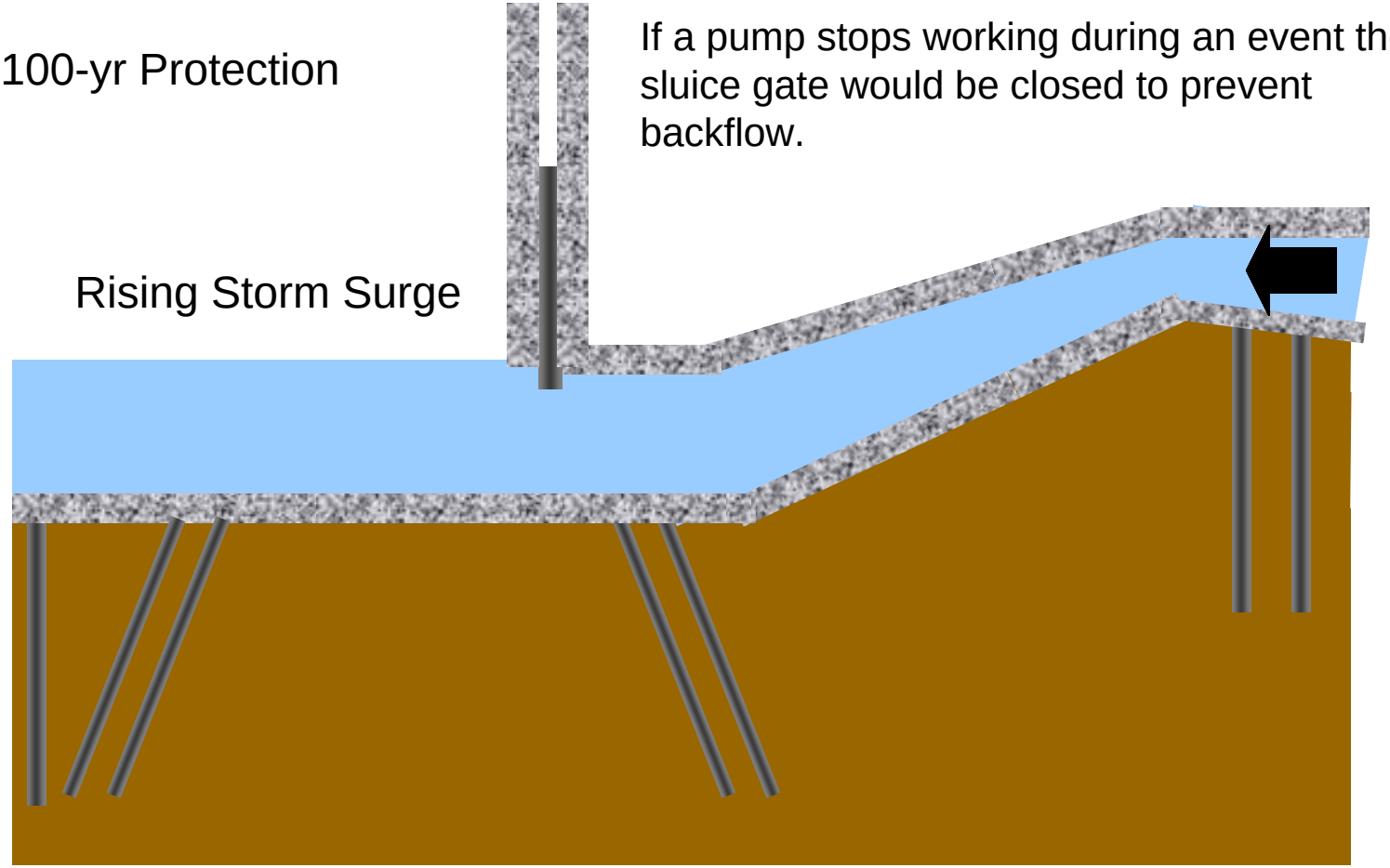
Typical Fronting Protection

Jefferson Parish Horizontal Pumps

100-yr Protection

If a pump stops working during an event the sluice gate would be closed to prevent backflow.

Rising Storm Surge

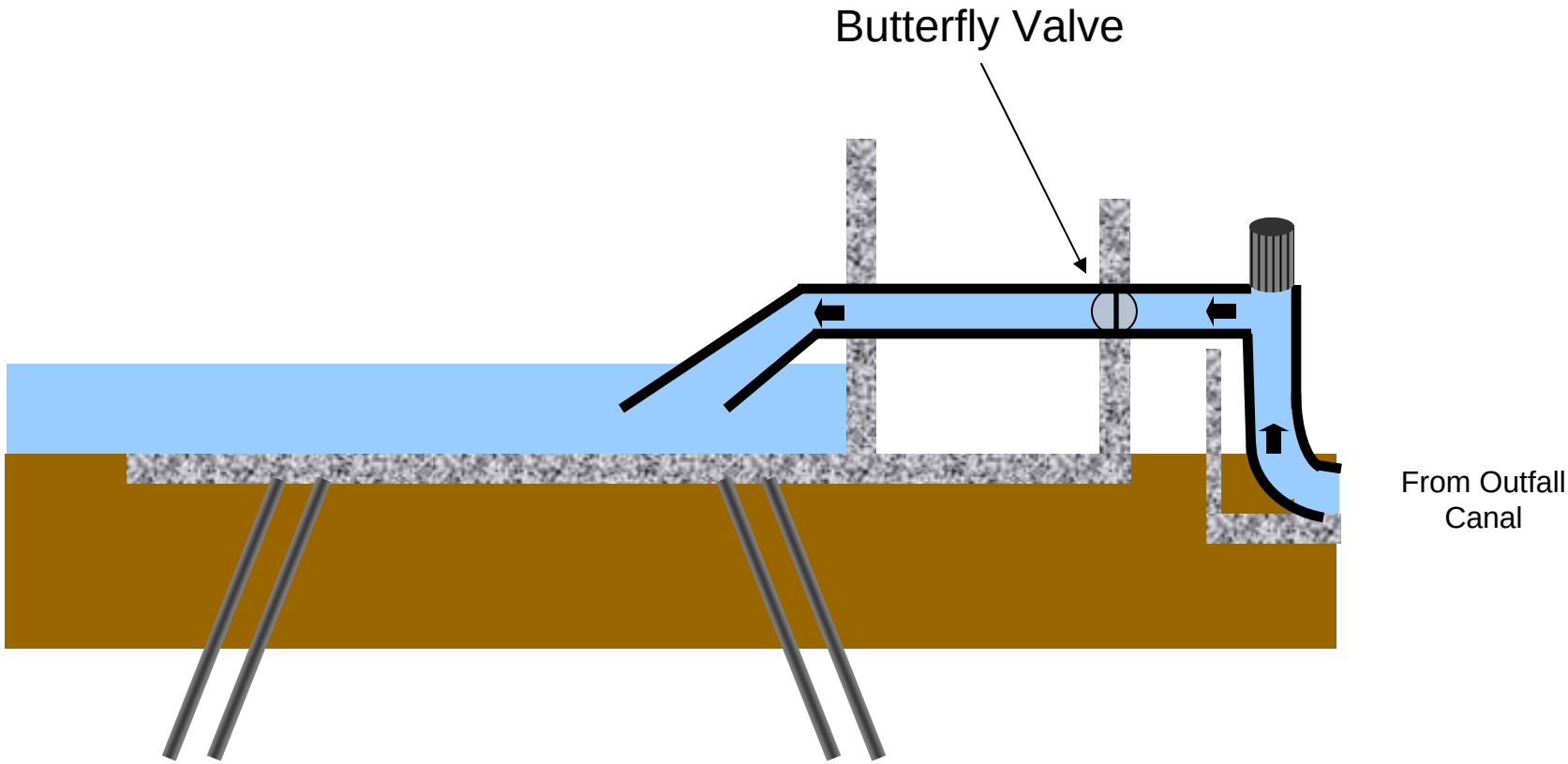


From outfall canal

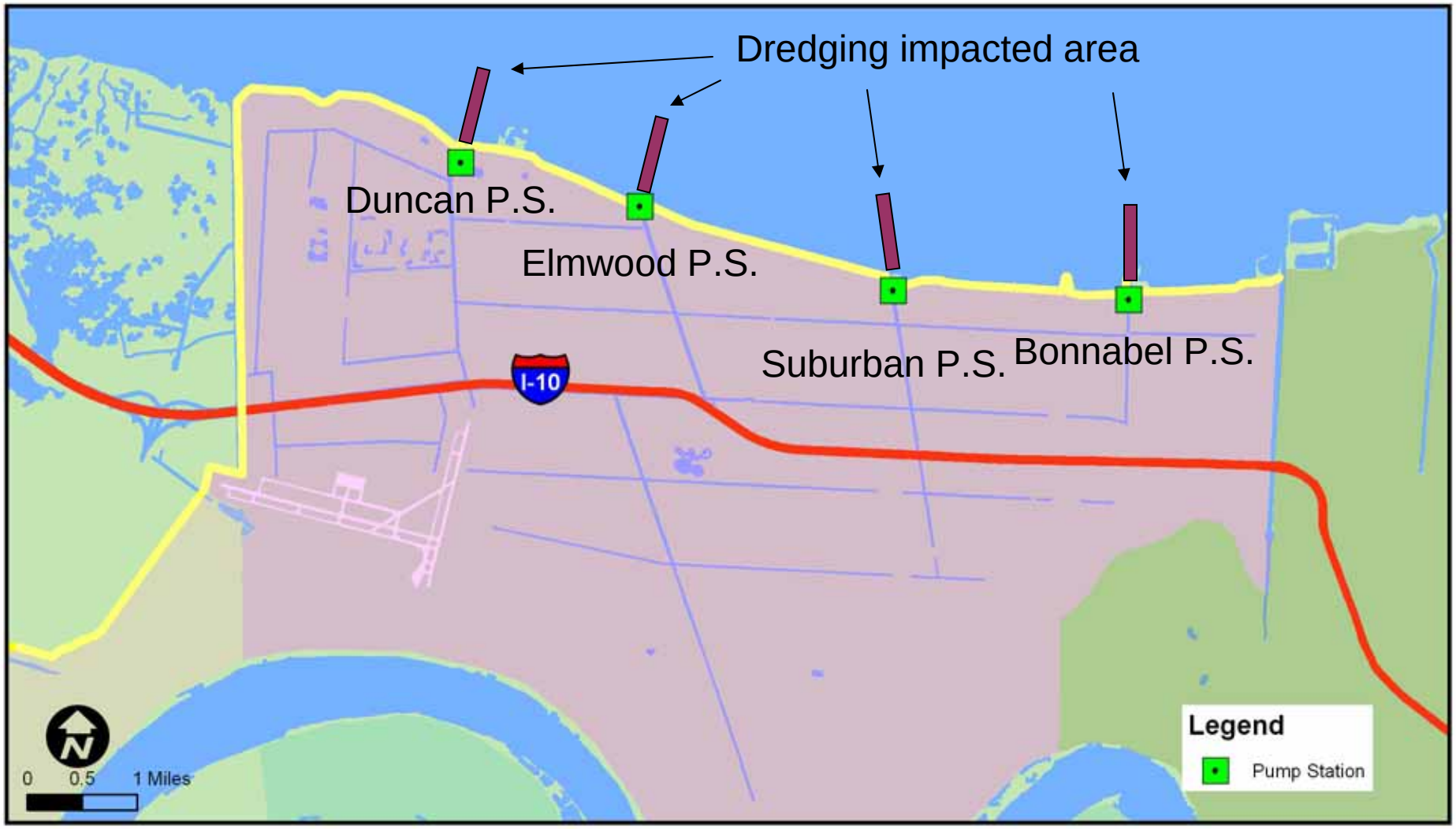
Typical Fronting Protection

Vertical Pumps

If a pump stops working during an event the butterfly valve would be closed to prevent backflow.

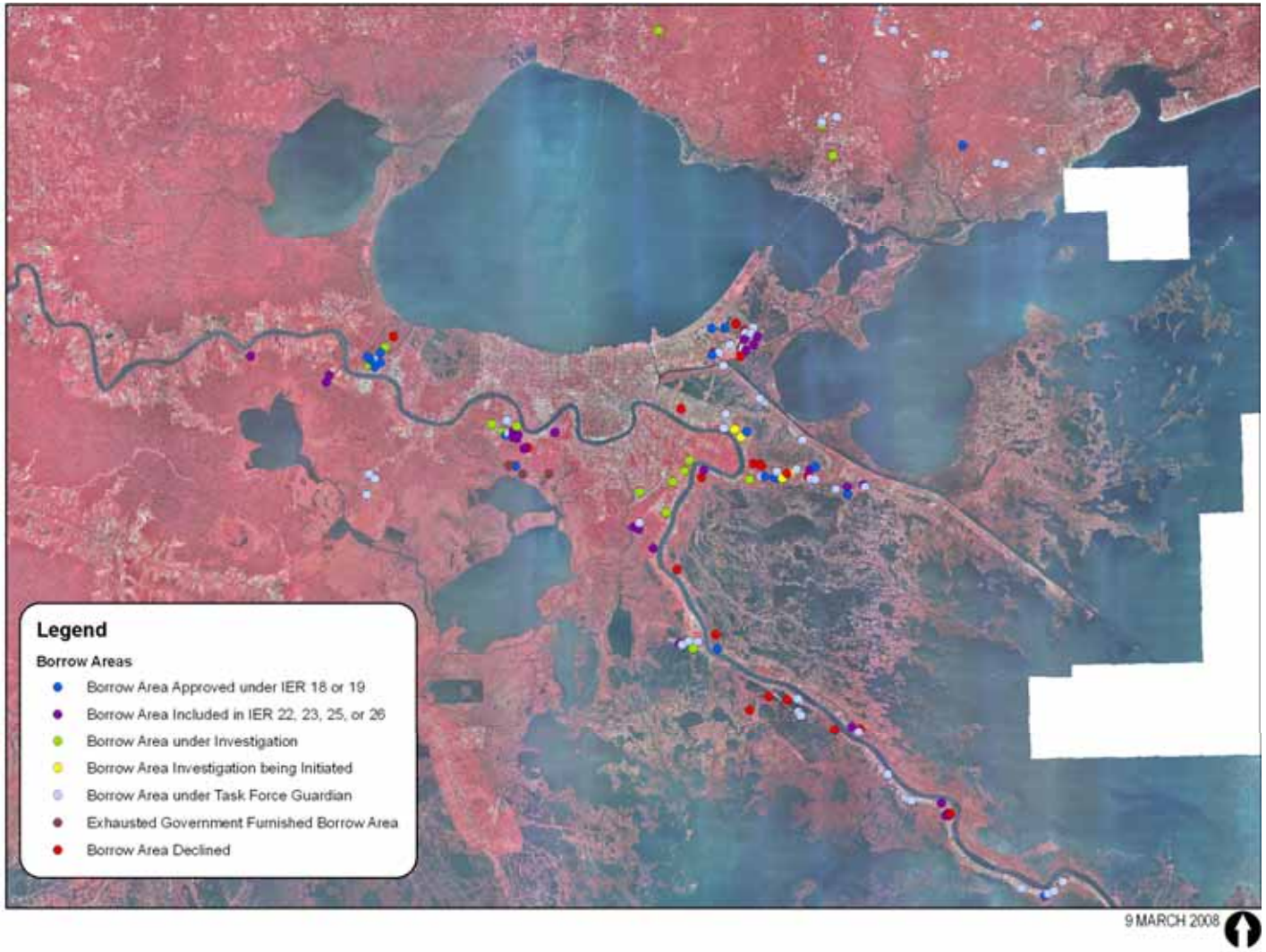


Dredging for Construction Access



US Army Corps of Engineers

Investigated Borrow Sites – System Wide



US Army Corps of Engineers

Opportunities for Public Input

- Monthly Public Meetings throughout New Orleans Metro Area
  - Make sure to sign in tonight to get on our meeting notification mailing list
- Comments can be submitted at any time at **www.nolaenvironmental.gov**
- Individual Environmental Reports (IER) 30-day Public Review

Questions and comments regarding Hurricane Protection Projects

should be addressed to:

Gib Owen
PM-RS
P.O. Box 60267
New Orleans, LA 70160-0267
Phone: 504-862-1337

E-mail: mvnenvironmental@usace.army.mil

US Army Corps of Engineers

NOLA Environmental

NEW ORLEANS, LOUISIANA

Environmental Compliance Data Bank

www.nolaenvironmental.gov

PROJECTS | MEETINGS | LIBRARY | DATA VIEWER | GET INVOLVED | RELATED LINKS

Welcome to NOLA Environmental! This site has been set up to share with the public the efforts being made by the U.S. Army Corps of Engineers and other Federal and state agencies in south Louisiana regarding the environmental compliance for proposed Federal and state Hurricane Protection Projects. Additional information pertaining to other Federal and state agencies' hurricane recovery efforts in southeast Louisiana will also be posted on the site as it becomes available. Learn more...

Announcements

- **IER 22** Draft Public Comment Period: 4/01 - 4/30
- **IER 23** Draft Public Comment Period: 3/24 - 4/23
- The Decision Record for **IER 11** has been signed by the District Commander: Final IER 11 *(News Release)*
- **IER 14** (Map) and **IER 15** (Map) Sec 404 (wetland impacts) Public Comment Period: 3/10 - 4/14
- The Decision Records for **IER 18** and **IER 19** have been signed by the District Commander

Featured Project

USACE-MVN Emergency Alternative Arrangements
Greater New Orleans
Hurricane and Storm Damage
Risk Reduction System Projects

Upcoming

- 04/09/2008 - Public Meeting (IERs 1 2 3 & Borrow)
- 04/10/2008 - Neighborhood Focused Public Meeting (IERs 4 5 & 11)

More...

Newly Available

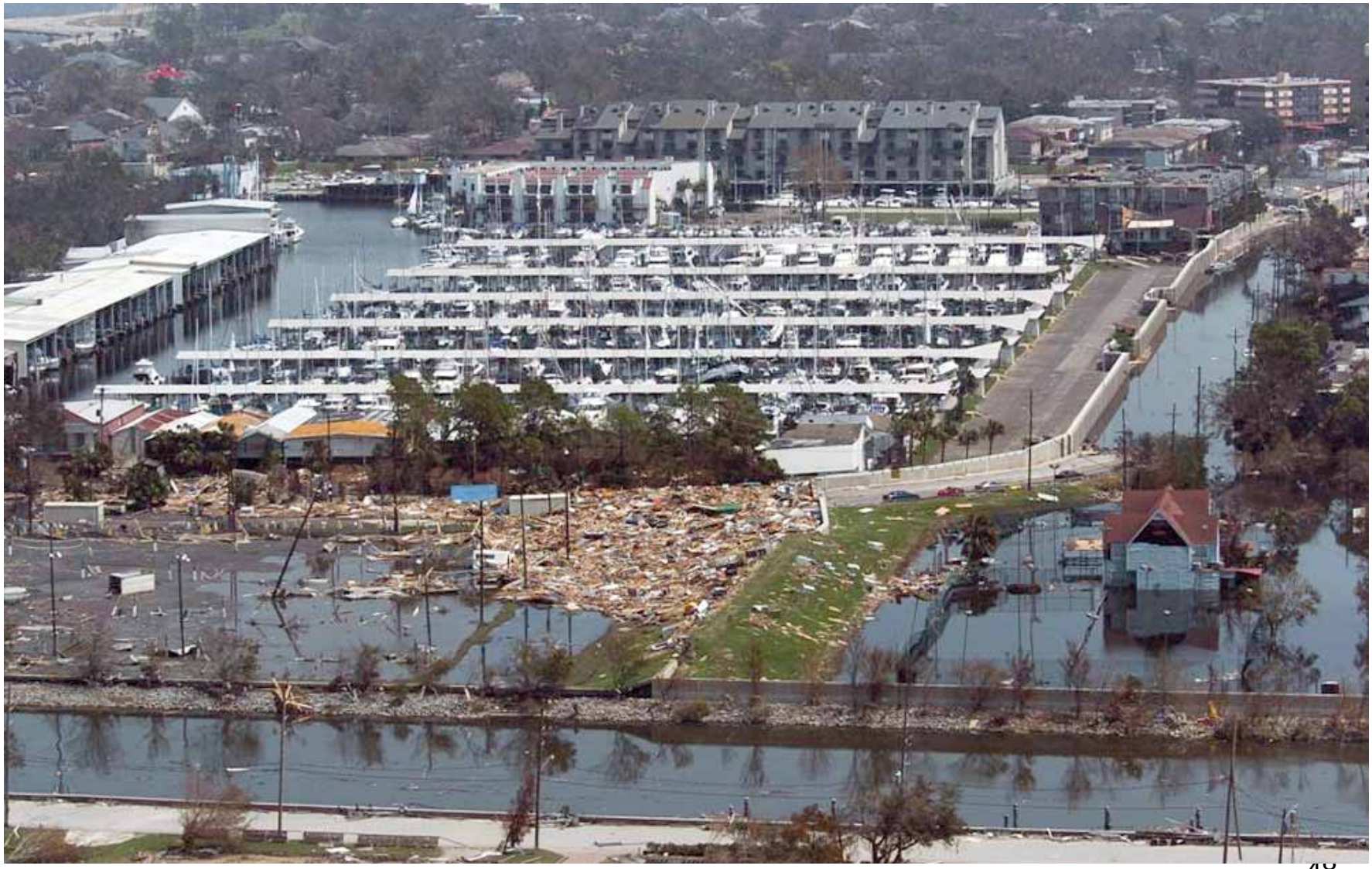
- 26 February 08 Public Meeting Summary IERs 4 5 Borrow
- 28 February 08 Public Meeting Summary IERs 1 2 3 and Borrow

More...

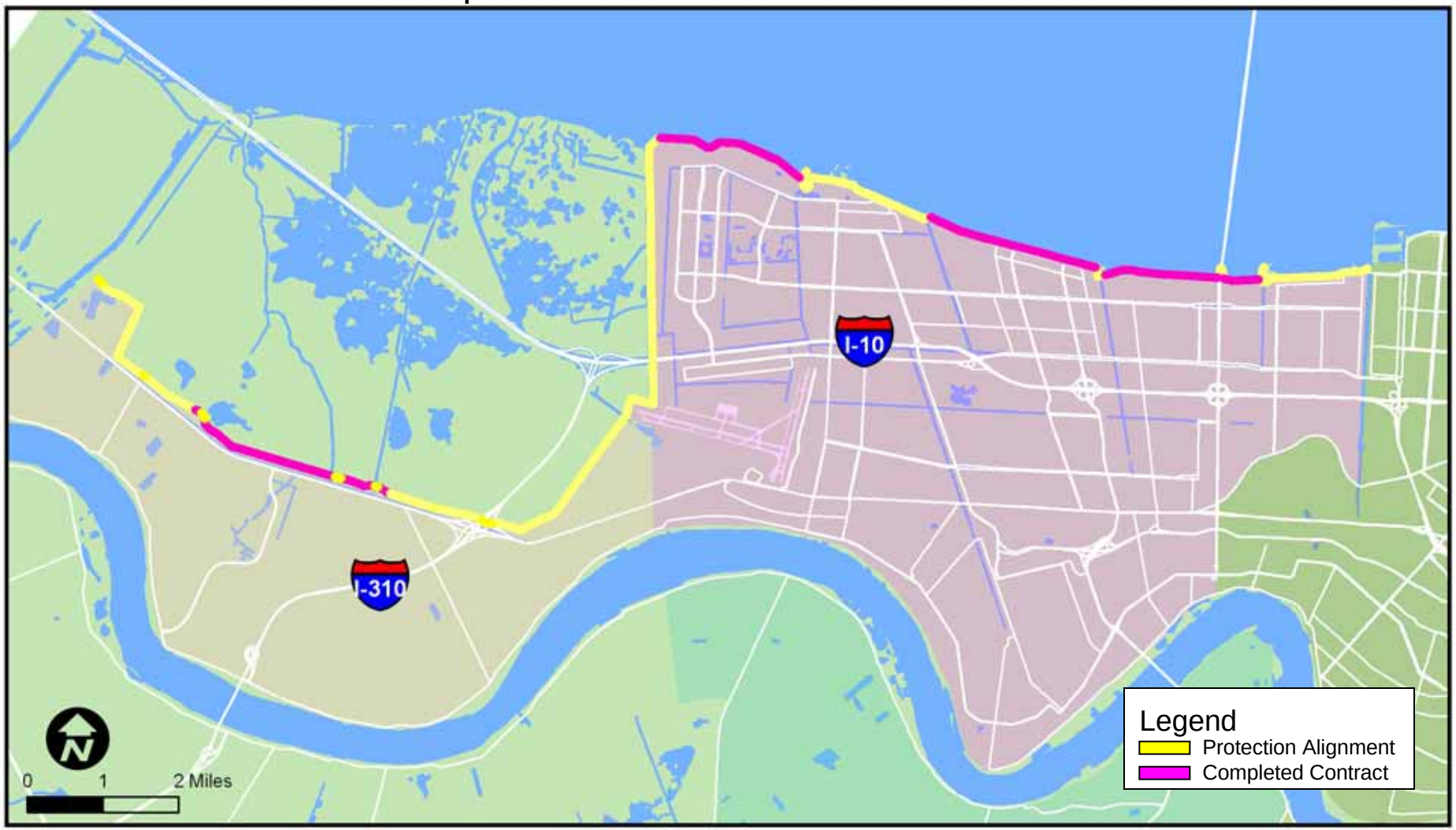
U.S. ARMY CORPS OF ENGINEERS
HURRICANE AND STORM DAMAGE RISK REDUCTION SYSTEM

US Army Corps of Engineers

US Army Corps of Engineers



US Army Corps of Engineers
New Orleans District

Levees Raised to Previously Authorized Elevation

- 6.3 miles completed in Jefferson Parish
- 2.2 miles completed in St. Charles Parish