

U.S. Army Corps of Engineers

City Council Meeting

5 November 2009

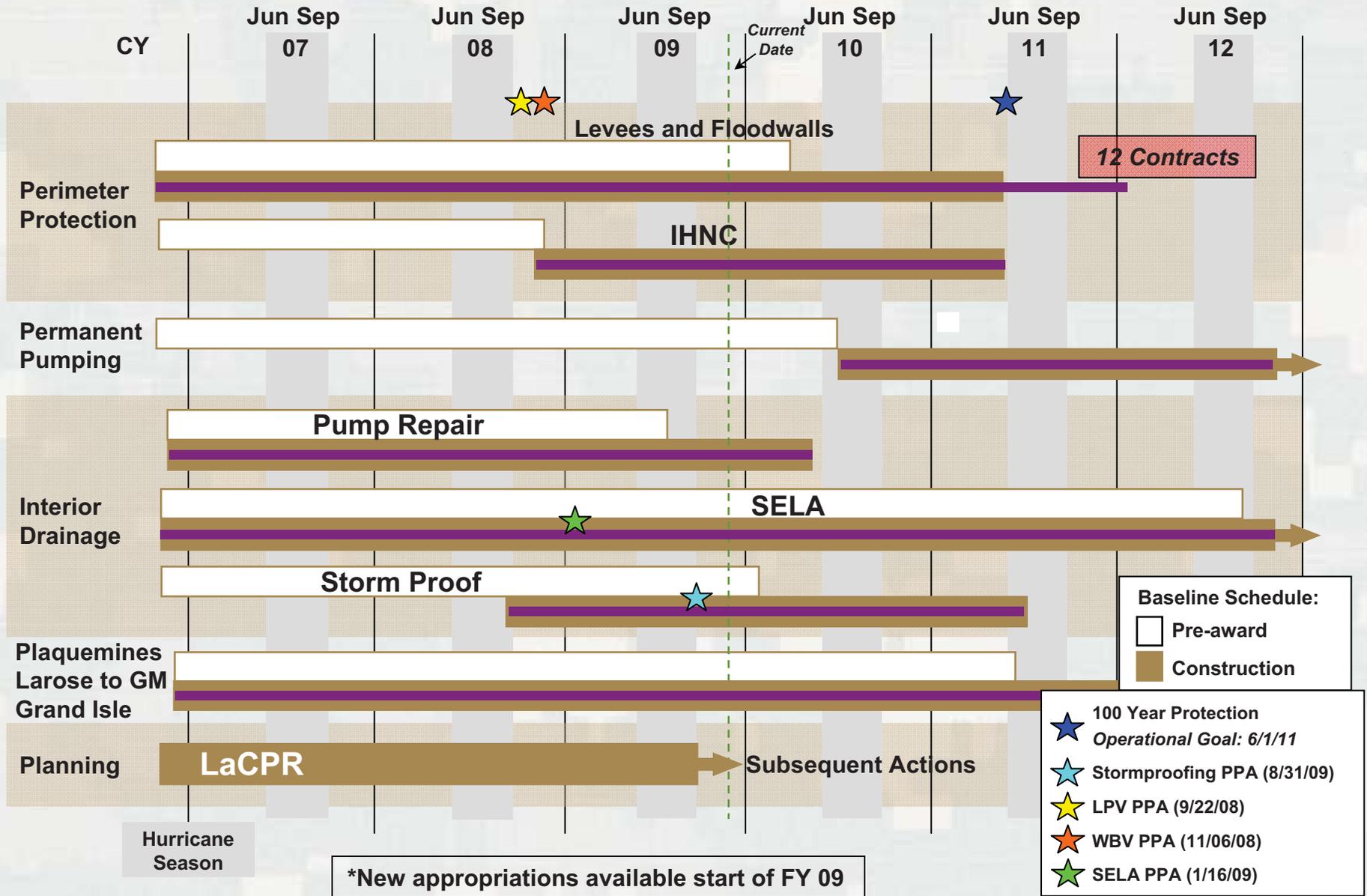


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US Army Corps of Engineers
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Current System Programmatic Schedule



Construction Status

- **Total expected construction contracts: ~360**
- **Overall Program Estimate: ~\$14.6B**
- **Awarded: 231 construction contracts worth \$6.0B**
- **Ongoing: 73 construction contracts worth \$5.0B**
- **Complete: 139 construction contracts worth \$1B**

2009

- **Awarded 48 contracts so far at value of \$2.7B**
 - ▶ **Levees and Floodwalls**
 - ▶ **Pump station repairs / improvements**
 - ▶ **West Closure Complex**
 - ▶ **IHNC Seabrook Surge Barrier**



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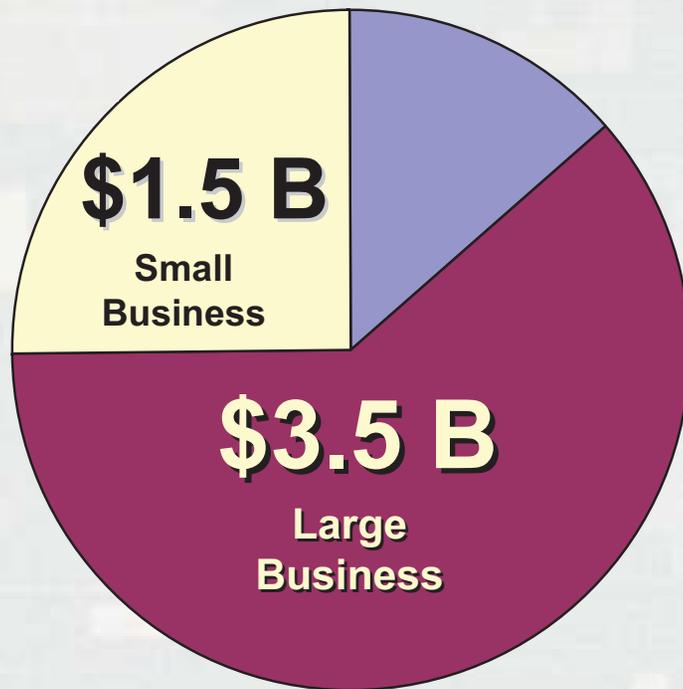
2009 Contract Awards

Contract Name		Contract Awarded	Award Amount	Contractor
LPV-120.01	Westbank IHNC - Almonaster to Lakefront Floodwall	27-Feb-09	\$4.6 M	Cycle Construction Co.
GI-01A	Grand Isle Federal Levee (Post Gustav)	1-Apr-09	\$26 M	Weeks Marine, Inc.
WBV-15b.2	Lake Cataouatche PS Fronting Protection, Modifications	10-Apr-09	\$24 M	Merrick Construction Co.
WBV-90	GIWW-West Closure Complex	17-Apr-09	\$834 M	Gulf Intracoastal Construction
LPV-117.01	Eastbank IHNC - Almonaster to Lakefront Floodwall	6-May-09	\$2.2 M	Progressive Construction Co.
LPV-09a.2	Pumping Station #1 (Bonnabel) Breakwater - Phase 2	7-May-09	\$9 M	Boh Bros Construction Co.
JSP-01	Climber Screens	14-May-09	\$9 M	Cycle Construction Co.
WBV-16.1a	Company Canal Interim Barge Closure	4-Jun-09	\$1.5 M	Creek Services, LLC
LPV-111.01	New Orleans East Back Levee - CSX RR to Michoud Canal	29-Jun-09	\$298 M	Archer Western Alberici / Joint Venture
WBV-14d	V-line Floodwall	2-Jul-09	\$17 M	Shavers-Whittle Construction
LPV-01.1	Reach 2 Lakefront Levee - Phase 1	14-Jul-09	\$3.6 M	Southern Services
LPV-02.2	Reach 3 Lakefront Levee- Phase 2	14-Jul-09	\$3.6 M	Southern Services
LPV-145	Chalmette Loop Levee - Bayou Bienvenue to Bayou Dupre.	14-Jul-09	\$357 M	Chalmette Levee Constructors
LPV-113	Citrus Back Levee (Michoud Canal to Michoud Slip) to Auth. Elevation	29-Jul-09	\$6.6 M	Purnell Construction Co.
LPV-101.02	Lakefront Levee OEB - 17th St. Canal to Topaz St.	31-Jul-09	\$33 M	Tetra Tech EC Inc.
LPV-146	Chalmette Loop Levee - Bayou Dupre to Hwy 46	6-Aug-09	\$281 M	St. Bernard Levee Partners LLC
LPV-103.01a	Lakefront Levee OEB - 17th St. canal to London Av. Canal	7-Aug-09	\$10 M	AquaTerra-CAYO Joint Venture
OPS-11	Elaine Pump Station Repair	13-Aug-09	\$3.2 M	Healtheon, Inc.
LPV-109.02a1	Wick Drain Test Section	14-Aug-09	\$843 K	Cycle Construction Co.
LPV-07d.2	Almedia / Walker Drainage Structures – Phase 2	14-Aug-09	\$6.5 M	Cycle Construction Co.
LPV-00.2	Reach 1 Lakefront Levee – Phase 2	18-Aug-09	\$3.0 M	Phylway Construction, LLC
LPV-12a.2	Pumping Station #4 (Duncan) Breakwater – Phase 2	21-Aug-09	\$8 M	Boh Bros Construction Co.
WBV-18.2	Hwy 90 to Lake Cataouatche PS – Phase 2	21-Aug-09	\$12 M	Circle, Inc.
WBV-14g.2	Estelle PS Vicinity Floodwalls	21-Aug-09	\$21 M	Creek Services, LLC

2009 Contract Awards

Contract Name		Contract Awarded	Award Amount	Contractor
LPV-19.2	Reach 4 Lakefront Levee – Phase 2	3-Sep-09	\$2.6 M	Phylway Construction, LLC
LPV-18.2	Floodwall and Gate at Williams Blvd. Boat Launch-Phase 2	10-Sep-09	\$3.3 M	Phylway Construction, LLC
OEB-18	Condominium Purchase and Demolition at 17th St Canal	15-Sep-09	\$497 K	Garner Services, LLC
SELA-01a	Soniat Canal - West Napoleon to Lynette	15-Sep-09	\$11 M	Buck Town Contractors & Co.
WBV-33	Old Estelle PS Fronting Protection and Modifications	17-Sep-09	\$23 M	Purnell Construction Co.
WBV-14f.2	Hwy 45 levee- Phase 2	17-Sep-09	\$5 M	Clark Construction
WBV-30	Westminister PS Fronting Protection and Modifications	18-Sep-09	\$14 M	Buck Town Contractors & Co.
WBV-08	S&WB PS#13 Fronting Protection and Modifications	24-Sep-09	\$30 M	Boh Bros Construction Co.
WBV-10	Belle Chasse PS#1 Fronting Protection and Modifications	24-Sep-09	\$32 M	Boh Bros Construction Co.
WBV-14b.2	Orleans Village to Hwy 45 Levee - phase 2	25-Sep-09	\$11 M	Creek Services, LLC
WBV-70	Western Tie-in Levees (dewatering cells)	25-Sep-09	\$11 M	Phylway Construction, LLC
WBV-71	Western Tie-in Levees (North-South)	25-Sep-09	\$5 M	DQSI
LPV-148.02	Chalmette Loop Levee Hwy 46 to River (Verret to Caernarvon)	25-Sep-09	\$278 M	Odebrecht-Baker
LPV-04.2A	Levee - Reach 1A from Cross Bayou to St. Rose and Gulf South	28-Sep-09	\$9 M	Buck Town Contractors & Co.
WBV-07	Planters PS Fronting Protection and Modifications	28-Sep-09	\$33 M	Kiewit Louisiana Co.
WBV-13	S&WB PS #11 Fronting Protection and Modifications	28-Sep-09	\$21 M	Boh Bros Construction Co.
WBV-20	New Westwego PS fronting Protection and Modifications	2-Oct-09	\$15 M	Shavers-Whittle Construction
LGM-28A	S. L. Crawfish Farm Pump Station Discharge	6-Oct-09	\$4.4 M	Reeves Electrical Service
JSP-02	Mount Kennedy Generator	14-Oct-09	\$3 M	Cycle Construction Co.
LPV-7b.2a	Cross Bayou Access Bridge and Pile Load Test	15-Oct-09	\$1 M	DQSI
LPV-104.01a	Lakefront Levee OEB - London Ave. Canal to IHNC - Phase 1A	21-Oct-09	\$14 M	Cycle Construction Co.
WBV-22	Westwego Floodwall	22-Oct-09	\$7.5 M	W, G, Yates & Sons Construction
LPV-109.02a2	Drainage Blanket	23-Oct-09	\$26 M	B.I.S. Services
IHNC-01	IHNC Seabrook Surge Barrier	30-Oct-09	\$155 M	Alberici Constructors

Contractual Obligations



**Total Obligations:
\$6.0 B**

- E&D, S&A, Real Estate, Work by Other Corps, etc
- Total Large Business Contracts
- Total Small Business Contracts

26% of all contractual dollars have been awarded to small businesses

HSDRRS Contract Opportunities:

http://www.mvn.usace.army.mil/hps/hps_contract_info.aspx

100-yr Contracts Projected Beyond 1 June 2011

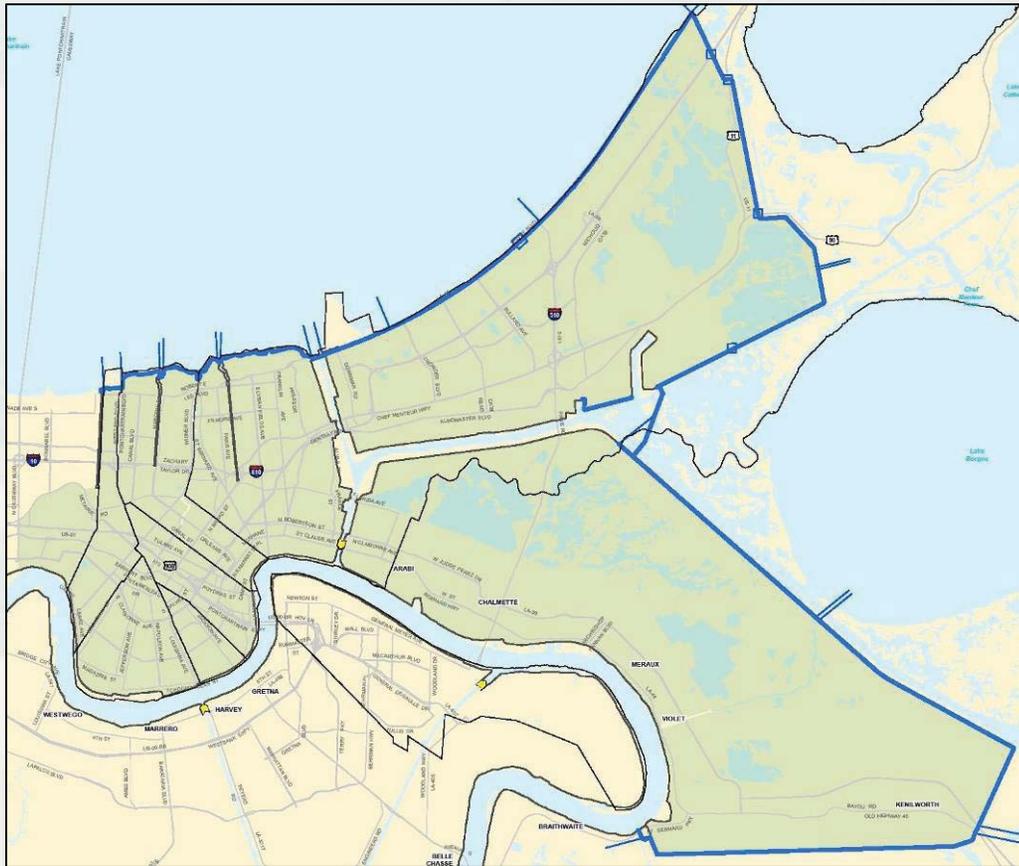
<u>100-yr Contract</u>	<u>100-yr Date</u>
<u>LPV-146 Chalmette Loop Levee - Bayou Dupre to Hwy 46</u>	11-Jun-11
WBV-15a.2 Lake Cataouatche PS to Segnette State Park-Phase 2	07-Jul-11
WBV-16.2 Bayou Segnette Complex	11-Jul-11
WBV-73 Western Tie-In Highway Crossing	30-Jul-11
<u>LPV-111.01 New Orleans East Back Levee - CSX RR to Michoud Canal</u>	04-Aug-11
LPV-149 Chalmette Loop Levee - Verret to Caernarvon Structures	13-Aug-11
LPV-17.2 Bridge abutment and Floodwall Tie-ins at Causeway Bridge -Phase 2	20-Aug-11
LPV-03.2B West Return Floodwall (Northern Segment) - Phase 2	26-Aug-11
LPV-03.2A West Return Floodwall (Southern Segment) - Phase 2	29-Aug-11
LPV-144 Chalmette Loop Levee - Bayou Dupre Floodgate	10-Sep-11
<u>WBV-90 GIWW-West Closure Complex</u>	18-Sep-11
<u>LPV-148.02 Chalmette Loop Levee Hwy 46 to River (Verret to Caernarvon)</u>	11-Dec-11

Awarded contracts are bold / underlined



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New Orleans Area Projects



- Orleans Metro
- New Orleans East
- Inner Harbor Navigation Canal
- Permanent Canal Closures & Pumps



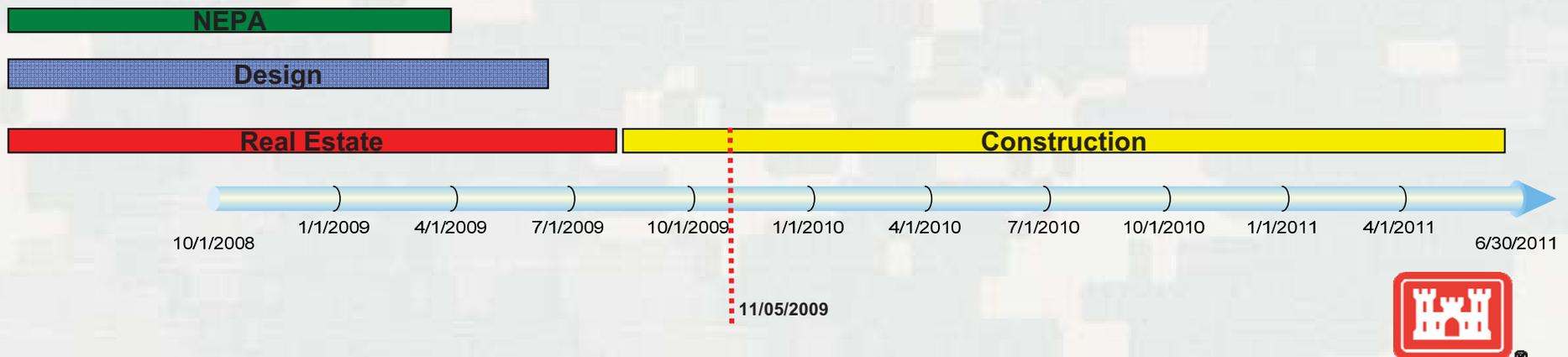
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Orleans Metro - 5 Contracts

Proposed Actions: Raise approximately **6 miles** of levees and replace / strengthen **1.5 miles** of existing floodwalls, and improve all road crossings / gates from 17th St. Canal to west side of IHNC / modify the existing floodgate at Bayou St. John.

- **More than 90% of the perimeter now meets the 100-year level of protection;**
- **LPV 101.02 contract awarded** in July 09 – contractor is mobilized and construction will begin this month;
- **LPV 103.01A contract awarded** in August 09 – contractor is mobilizing and construction will begin this month;
- **LPV 104.01a contract awarded** in October 09 - contractor is mobilizing and construction will begin next month.
- **LPV 104.02 contract will be awarded** next month; last remaining contract (LPV 103.01A2) will be awarded next spring and has a six-month construction duration.

Schedule:

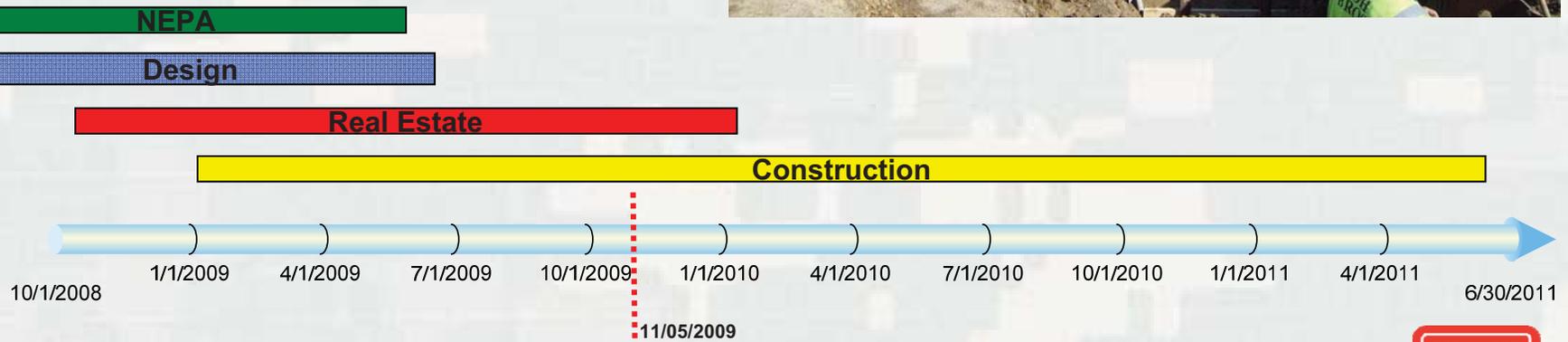


New Orleans East -16 Contracts

- LPV 108 levee work (**6.3 miles**) along Lake Pontchartrain (Paris Rd. to South Point) is 99% complete. Construction of the floodwall at Collins Pipeline is 40% complete.
- **Awarded ECI contract** for LPV 111 in June 09; **awarded NASA betterment contract** in July 09;
- **Awarded LPV 109.02a1 wick drain test section** in August 09.
- **Awarded LPV 109.02a2 drainage blanket** in October 09.



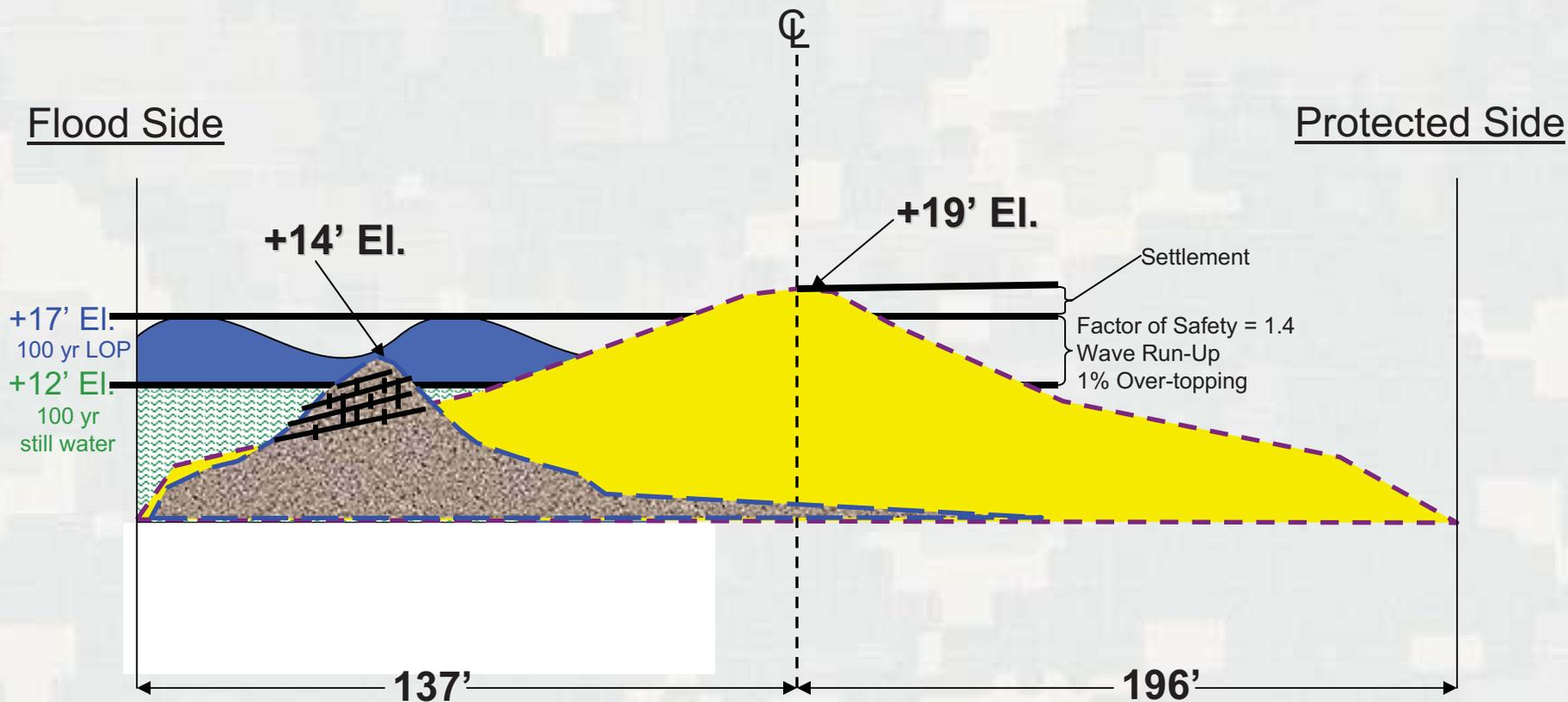
Schedule:



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LPV 109.02a

(not to scale)



**Levee Enlargement
Between I-10 and US-90
New Orleans East**



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IHNC East Wall - Relief Wells



(97% complete – Fully Operational Now)



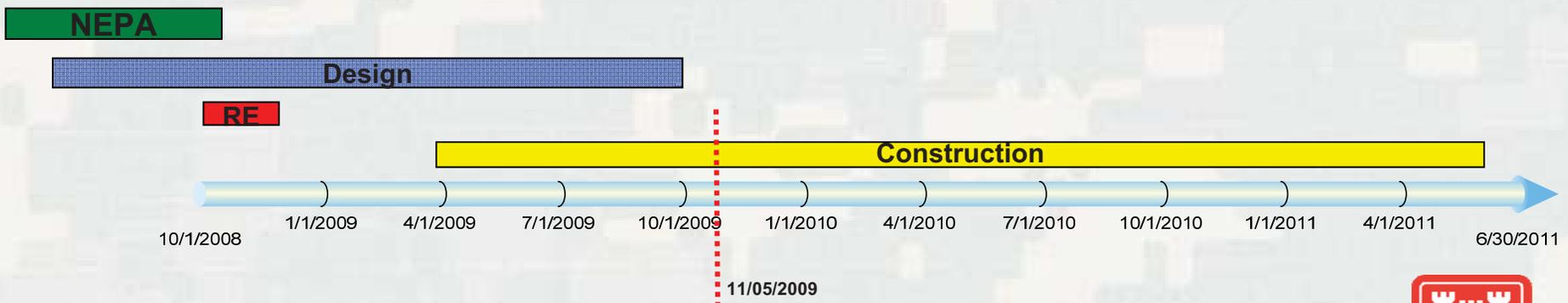
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IHNC Lake Borgne

Proposed Action: Construct a surge barrier with a 1.8 miles (10,000 feet) of floodwall / gate system extending from the east of Michoud Canal to the Chalmette Loop Levee just south of Bayou Bienvenue.

- Four and a half months spent assuring navigational safety and meeting NEPA requirements;
- Main elements of wall construction are on or ahead of projected construction rates;
- **MRGO fill operation complete;**
- Completed driving 1,271 66-inch spun cast piles on 21 Oct.
- Pile driving for closure piles, batter piles, and foundation piles are exceeding expected driving rates.

Schedule:



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Base Structure is Complete







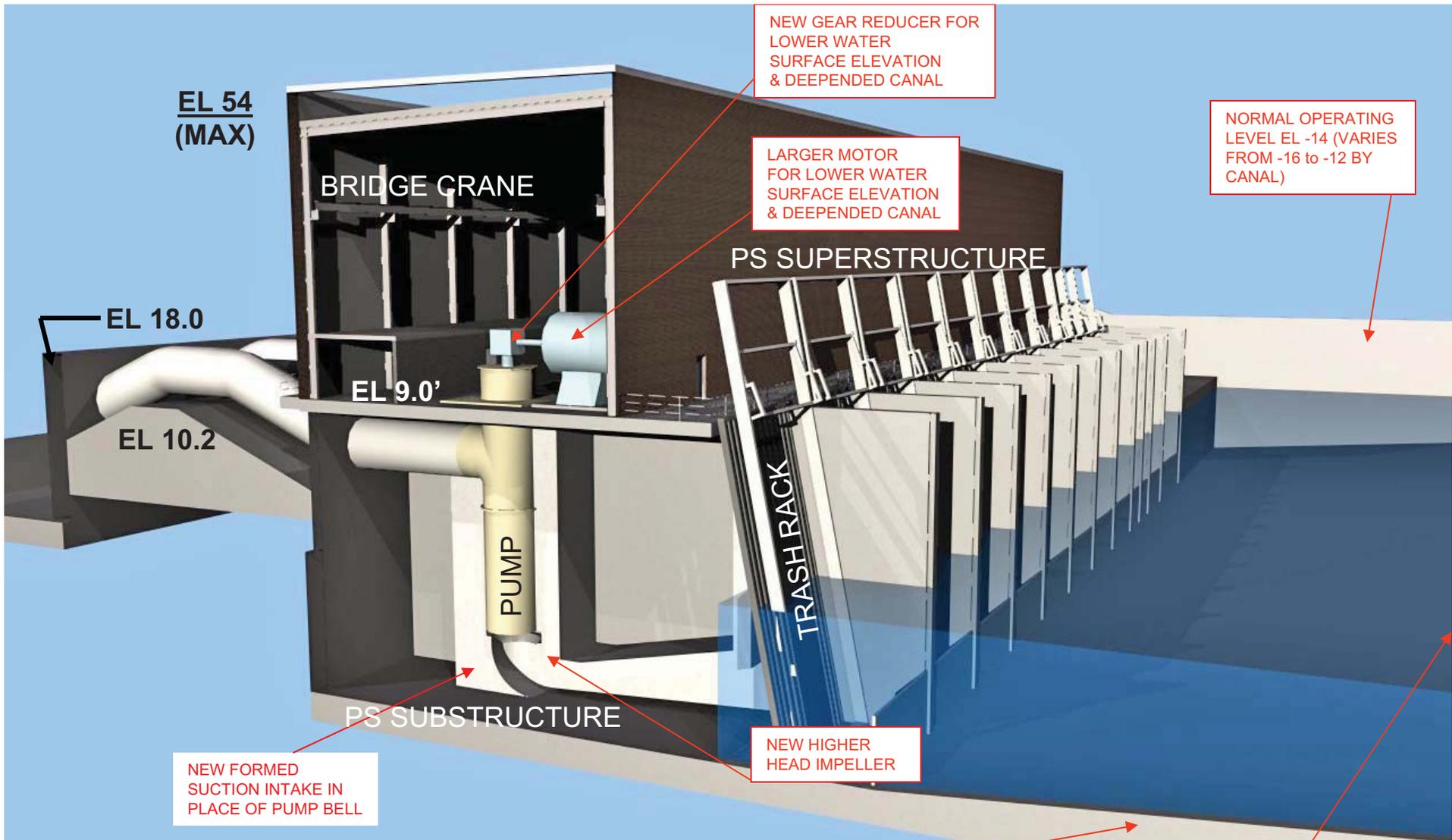




IHNC Seabrook

2 Nov 09	Awarded ECI contract – Preconstruction Services Only
12 Nov 09	CZM Consistency Determination Completed
23 Nov 09	IER 11b Seabrook out for Public Review
7 Jan 10	NEPA Compliance IER 11b Seabrook
30 Jan 10	Right of Entry Obtained
1 Feb 10	Exercise Construction Option
1 Jun 11	100-year Level Attained





Permanent Pump Station adapted to deepened canals & Water Surface Elevation
 Conceptual

Construction Activities and Diversion

Authorized adaptable Permanent Pump Station

- Build Pump Station
- Remove ICS

*Currently authorized
and funded by
Congress.*

Possible Future Deepened Canals and Lower Water Surface Elevation with Diversion

- Deepen Canals
- Bypass Drainage Pump Stations
- Pump Stations Adaptation
- Construct Diversion & Pump Station (Hoey's Basin)*
- Floodwall and Levee Removal Along Outfall Canals

***Not authorized
or funded by
Congress.***

* Current construction plans would also allow adding an interior pumping station to intercept and divert Jefferson Parish rain water from the 17th Street Canal and pump it into the Mississippi River, if that were later authorized and funded.



Project Schedule

13 Nov 2009	Project Partnership Agreement (tentative)
19 Nov 2009	Meeting # 1 Community Involvement
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****This schedule is tentative and based on the execution of the PPA by 13 Nov 2009.***



Back Up



Permanent Canal Closures & Pumps (PCCP)



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Congressional Authority

4th Supplemental

*In June 2006, Congress passed Public Law 109-234 giving the Corps **authorization and appropriations** to design and construct **Permanent Pumps** for the outfall canals – specifically, to “...modify the 17th Street, Orleans Avenue, and London Avenue drainage canals and install pumps and closure structures at or near the lakefront...”*



Outline

- Pump Station Locations
- Aerial View of IER Footprints
- Operable System Features of the Authorized Permanent Pump Stations
- Permanent Pump Station with Current Canal Configuration at Current Water Surface Elevation Graphics
- Canal Deepening
- Drainage Pump Station Intake Canal & Basin
- Providing Operable Systems for Deepened Canals
- Permanent Pump Station Adapted to Deepened Canals & Lower Water Surface Elevation Graphics
- Construction Activities
- Project Schedule



Lake Pontchartrain



17th Street Canal



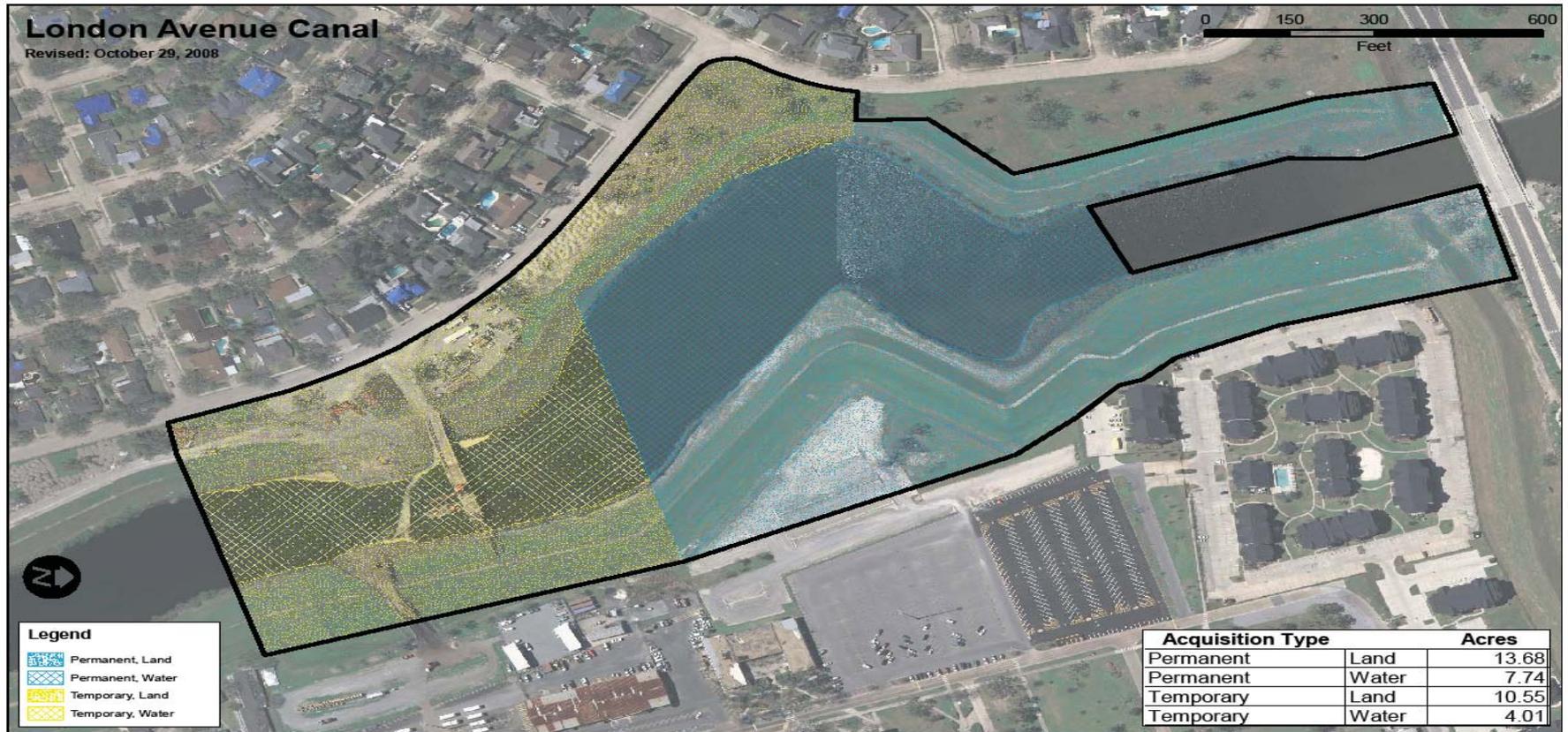
Selected Maximum Footprint



London Avenue Canal



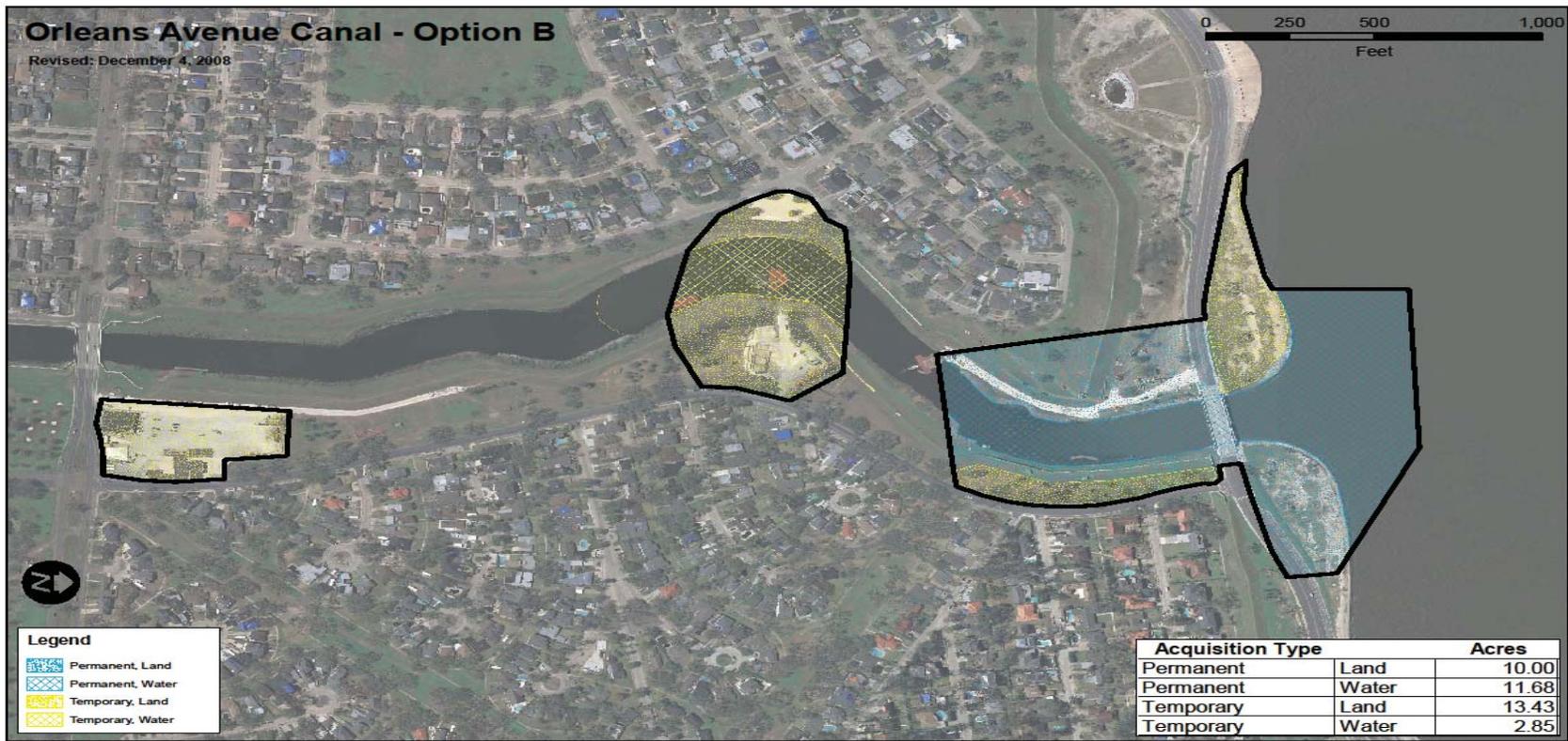
Selected Maximum Footprint



Orleans Avenue Canal



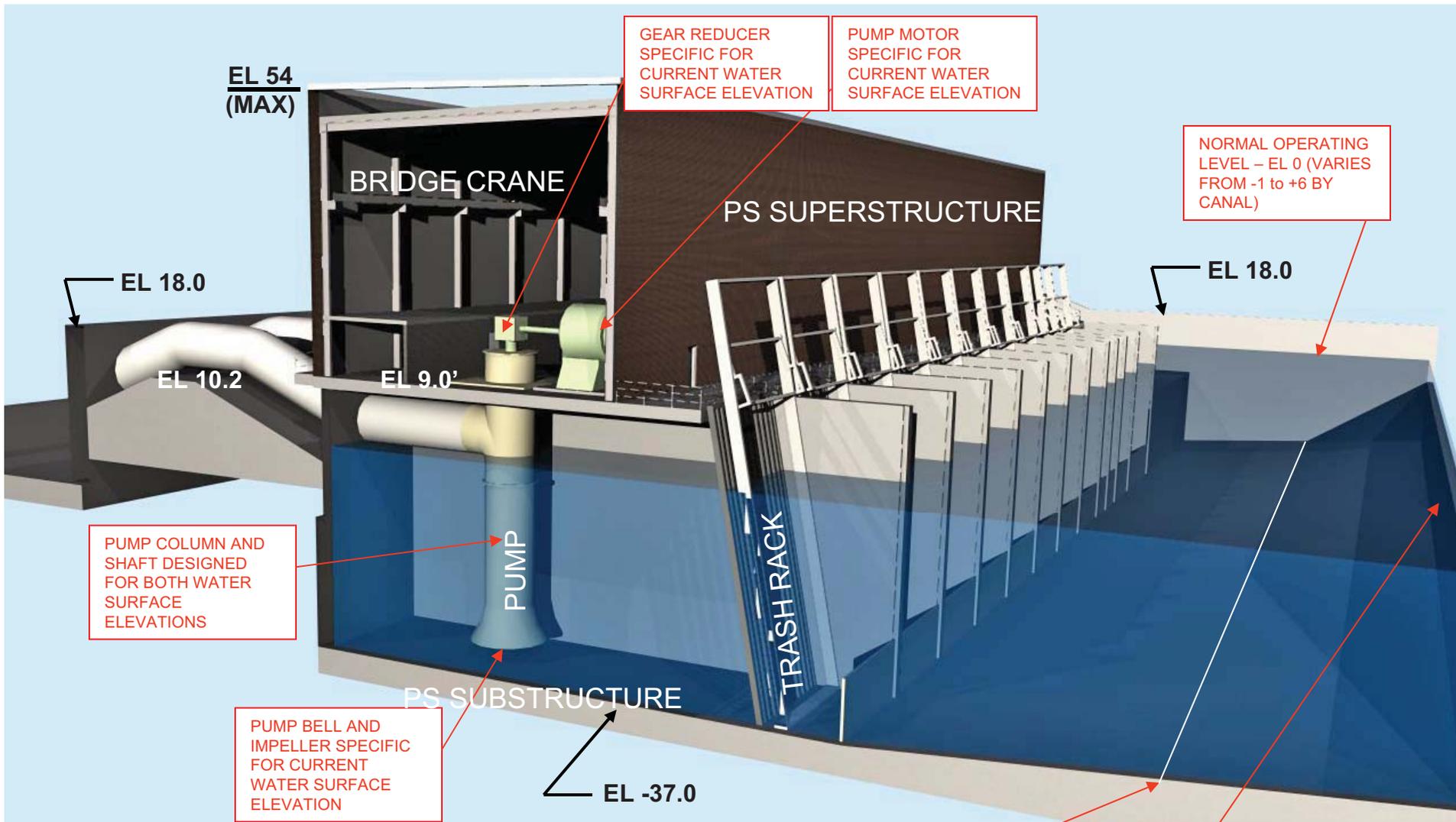
Selected Maximum Footprint



Operable System Features of the Authorized Permanent Pump Stations

- Pump Station Substructure Intake Sill Elevation Adaptable to a Deepened Canal and Lower Water Surface Elevation
- Pump Station Substructure Designed for a Deepened Canal & Lower Water Surface Elevation Without Need for Removal
- Pump Station Superstructure Designed to Accommodate Larger Engines & Gear Boxes
- General Site Development, Access and Pump Station Foot Print sized for future upgrades
- Channel Transition Adaptable to Deepened Canals & Lower Water Surface Elevation
- Expandable Generating Station
- Bridge Crane Rails and Supports (will be estimated based on requirements of increased driver sizes necessary for deepened canals and lower water surface elevation)



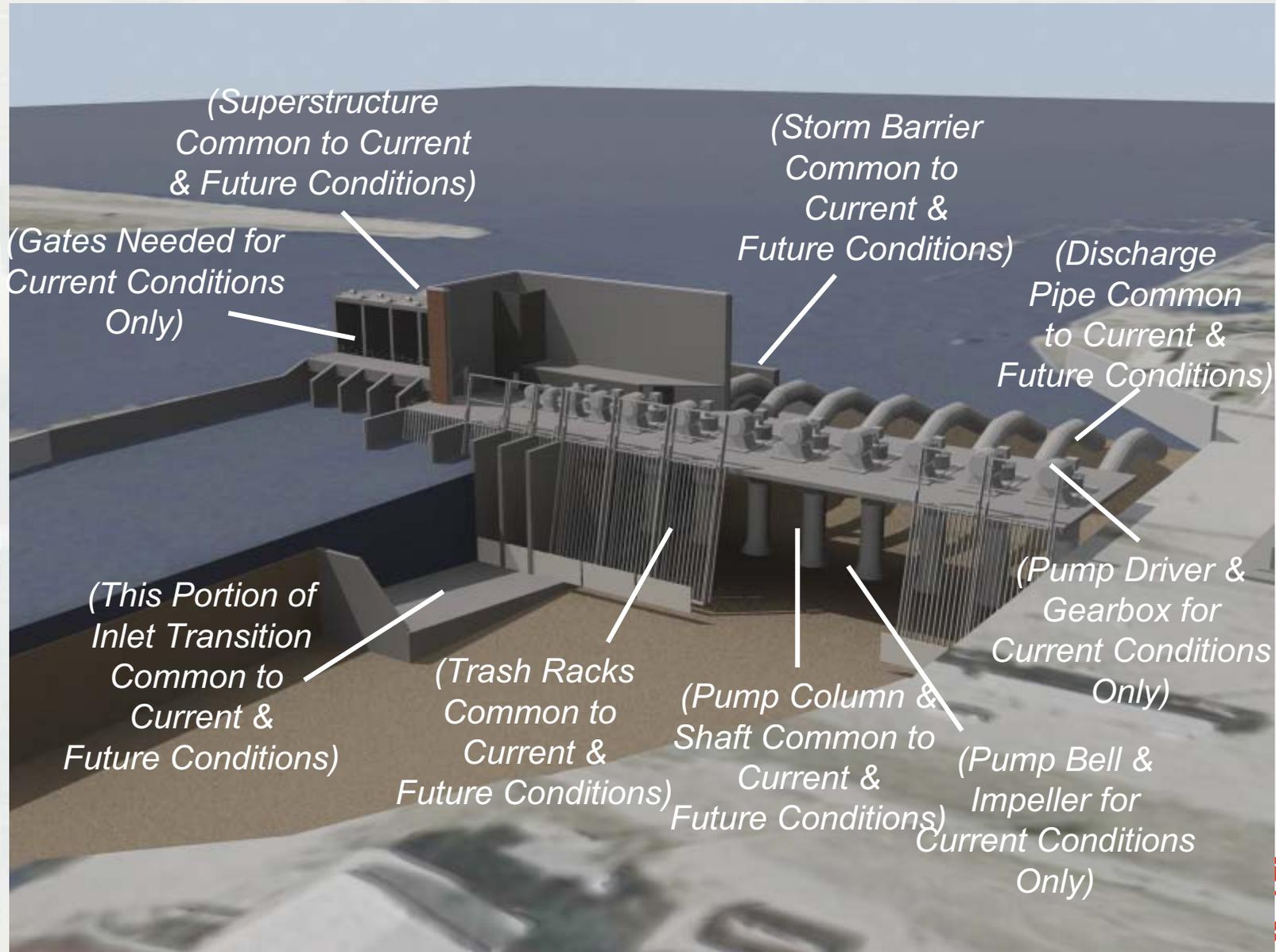


Permanent Pump Station with Current Canal Configuration at Current Water Surface Elevation
 Conceptual

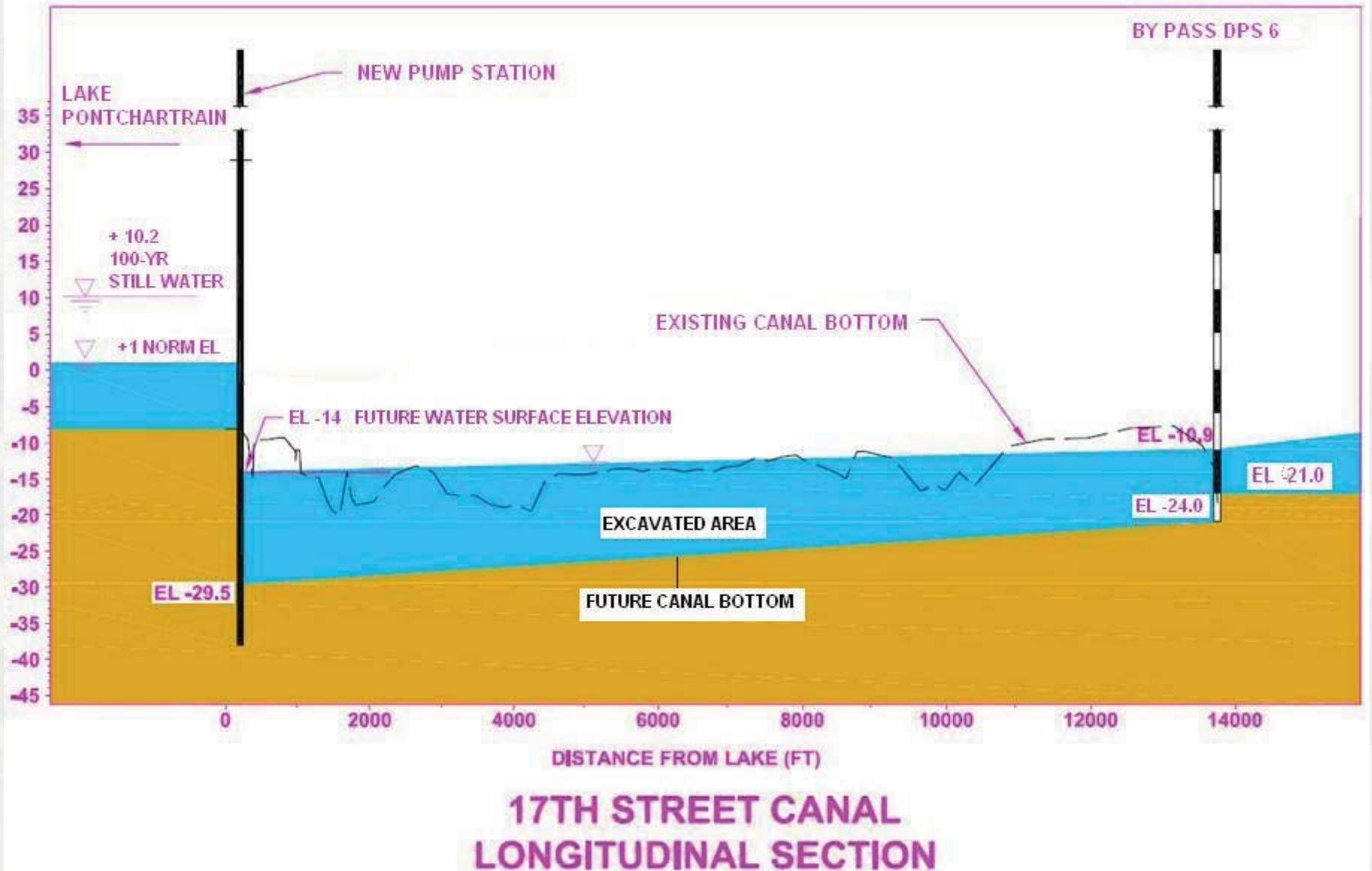
Current Conditions



Current Conditions



Deepened Canal and Lower Water Surface Elevation at 17th Street



Drainage Pump Station 6 Intake Canal

The intake canal to the permanent pump stations.



Drainage Pump Station 6 Intake Basin

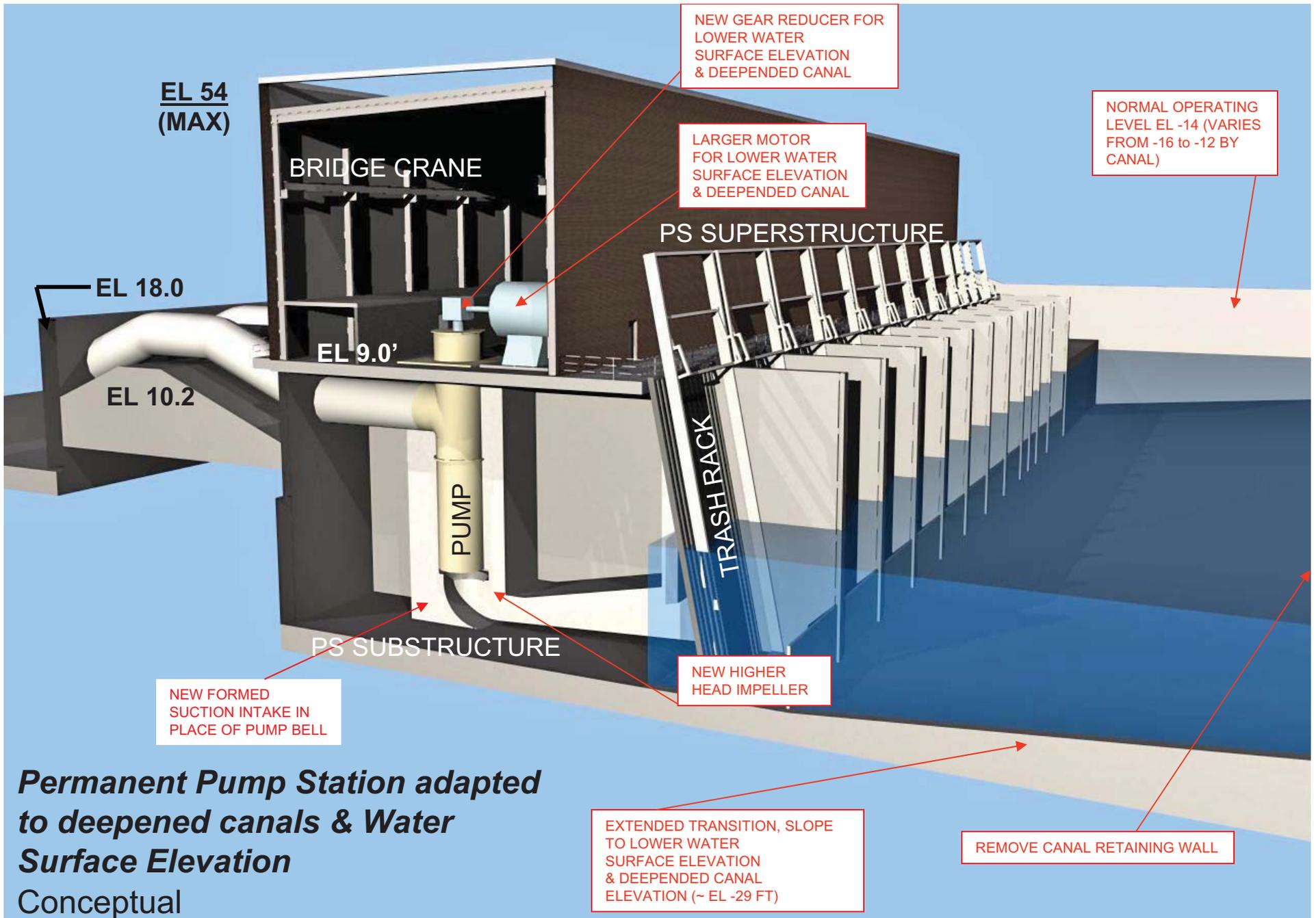
Water in the intake basin will bypass Drainage Pump Station 6 and gravity flow to the permanent pump stations.



Providing Operable Systems for Deepened Canals & Lower Water Surface Elevation

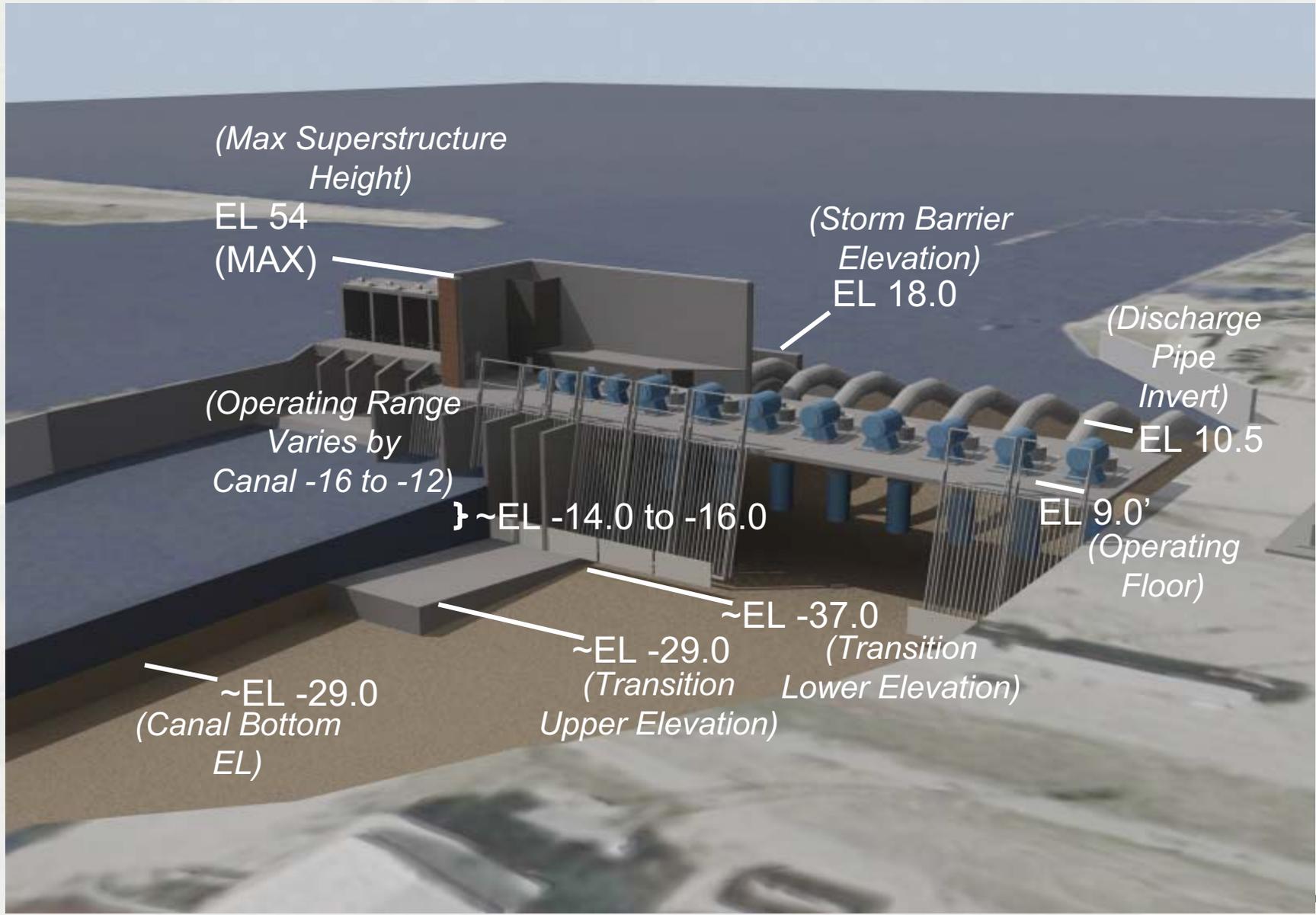
- Add Formed Suction Inlet and Remove Pump Bell
- Replace Driver Motor with Larger Size
- Change Pump Impeller Type
- Replace Gear Reducer
- Increase Number of Generators, Number of Fuel Tanks, HVAC Capacity and Size of Electrical Switch Gear
- Permanently Close the Gates



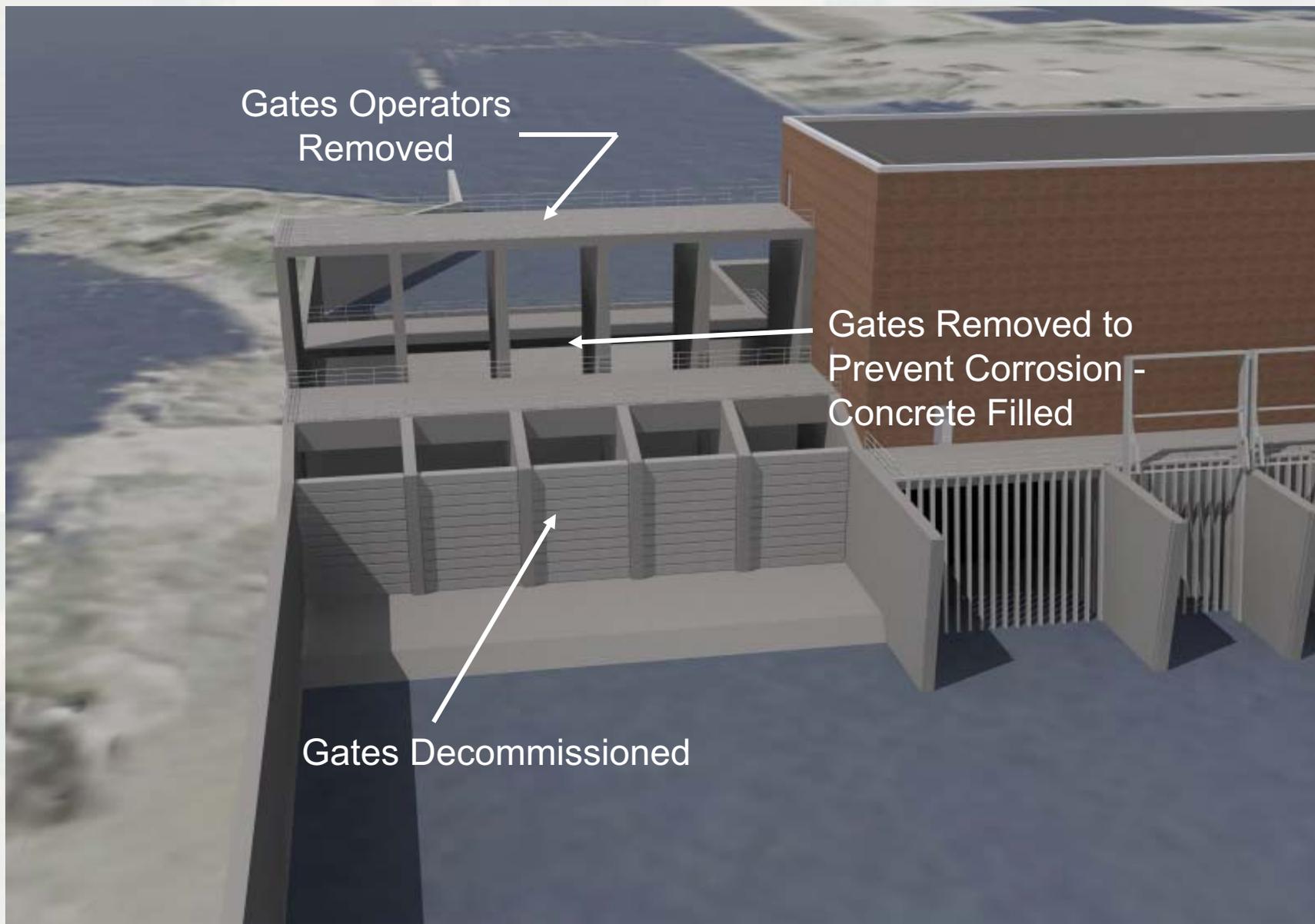


Permanent Pump Station adapted to deepened canals & Water Surface Elevation
 Conceptual

Possible Future Conditions



Possible Future Conditions



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SELA Update

Current Work

Florida Ave Phase 1

Napoleon Phase 2

S. Claiborne Phase 1

Florida Ave Phase 2

Award

Jan 10

May 10

May 10

May 11

Est. Cost (M)

\$10+

\$10+

\$10+

\$10+

Issues/Updates:

1. Florida Ave Ph 2 rescheduled to avert conflicts with Ph 1.



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