

**Gowanus Facilities Upgrade
CB 6
October 25, 2010**

Waterbody/Watershed Characteristics

Watershed Drainage Area

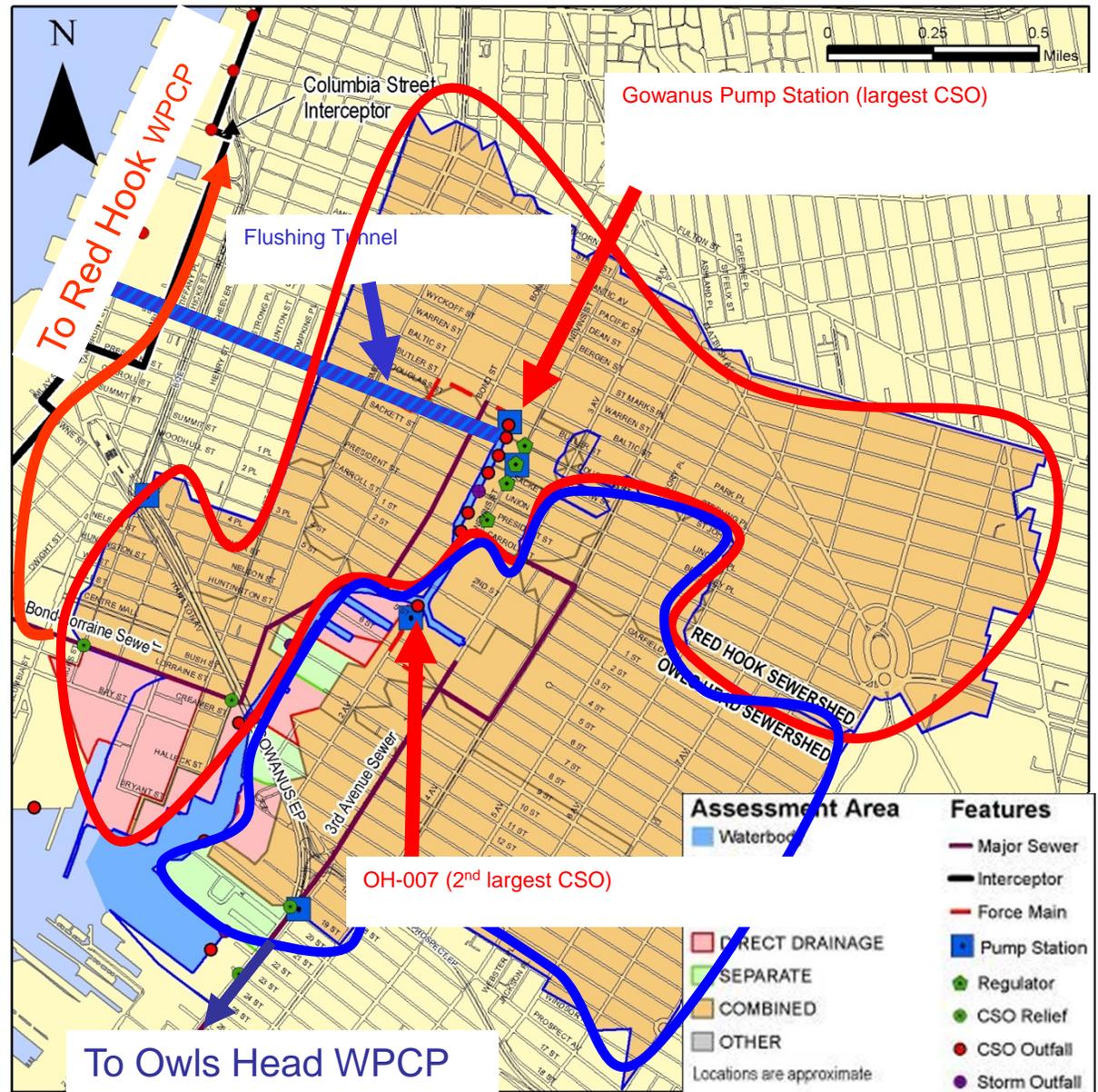
- Entirely urbanized sewer-shed
- No continuous fresh inputs
- 1,759 Acres
 - 92% Combined (1,613 acres)
 - 8% Stormwater (146 acres)

Combined Sewer System

- 2 WPCP Service Areas
 - Red Hook WPCP
 - Owls Head WPCP
- Pump Stations
- 11 CSO Outfalls
- 4 Storm Sewer Outfalls

Annual Wet-Weather Discharge Volume:

- 300+/- MG (typical year)
 - CSO: ~70%
 - Stormwater: ~30%
- Currently SD Classification
- Fish Survival
- Water Quality Issues
 - Low DO w/o tunnel
 - Floatables and Grease
 - Exposed Nuisance Sediments



EPA Superfund Designation

- March 2010
- Investigation Phase
- DEP has been cooperating with EPA as investigations are ongoing
- DEP has provided historical documents and environmental investigations to the EPA
- EPA has installed four (4) monitoring wells on site as part of the investigation
- The EPA has installed monitoring wells throughout the neighborhood

Upgrade Gowanus Canal Flushing Tunnel System

- Perform tunnel rehabilitation repairs as necessary
- Installation of three new submersible pumps
- Reconstruction of the intake chamber and discharge channel

Upgrade Gowanus Pump Station

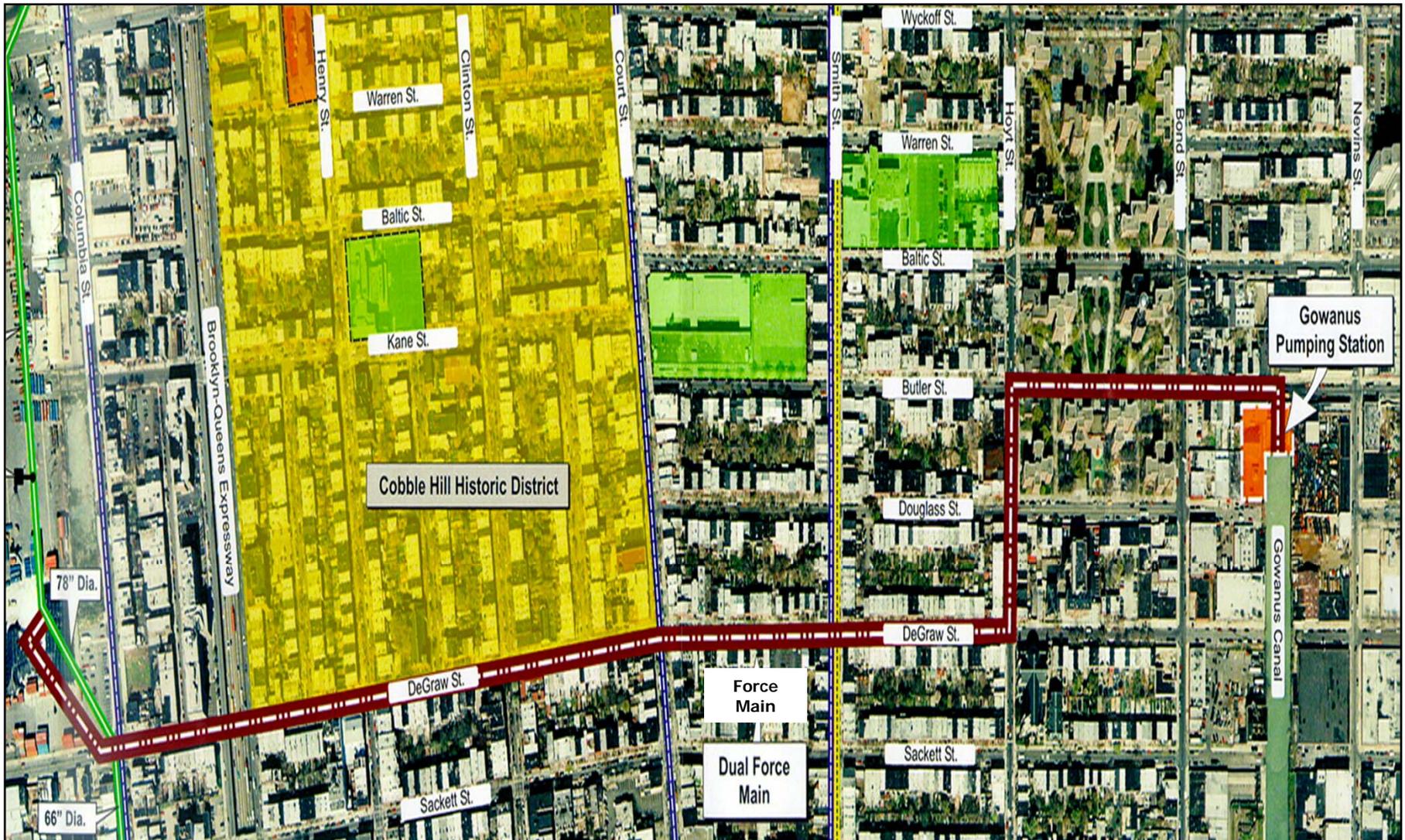
- Mechanical upgrades to increase capacity and reliability
- Construct new Forcemain through Flushing Tunnel
- Install CSO screening system to increase floatables capture
- Installation and operation of an interim Pumping System

WASTEWATER FORCEMAIN



Existing Flow Path Along Bond Street

WASTEWATER FORCEMAIN



New Forcemain Route

TEMPORARY CANAL OXYGENATION SYSTEM

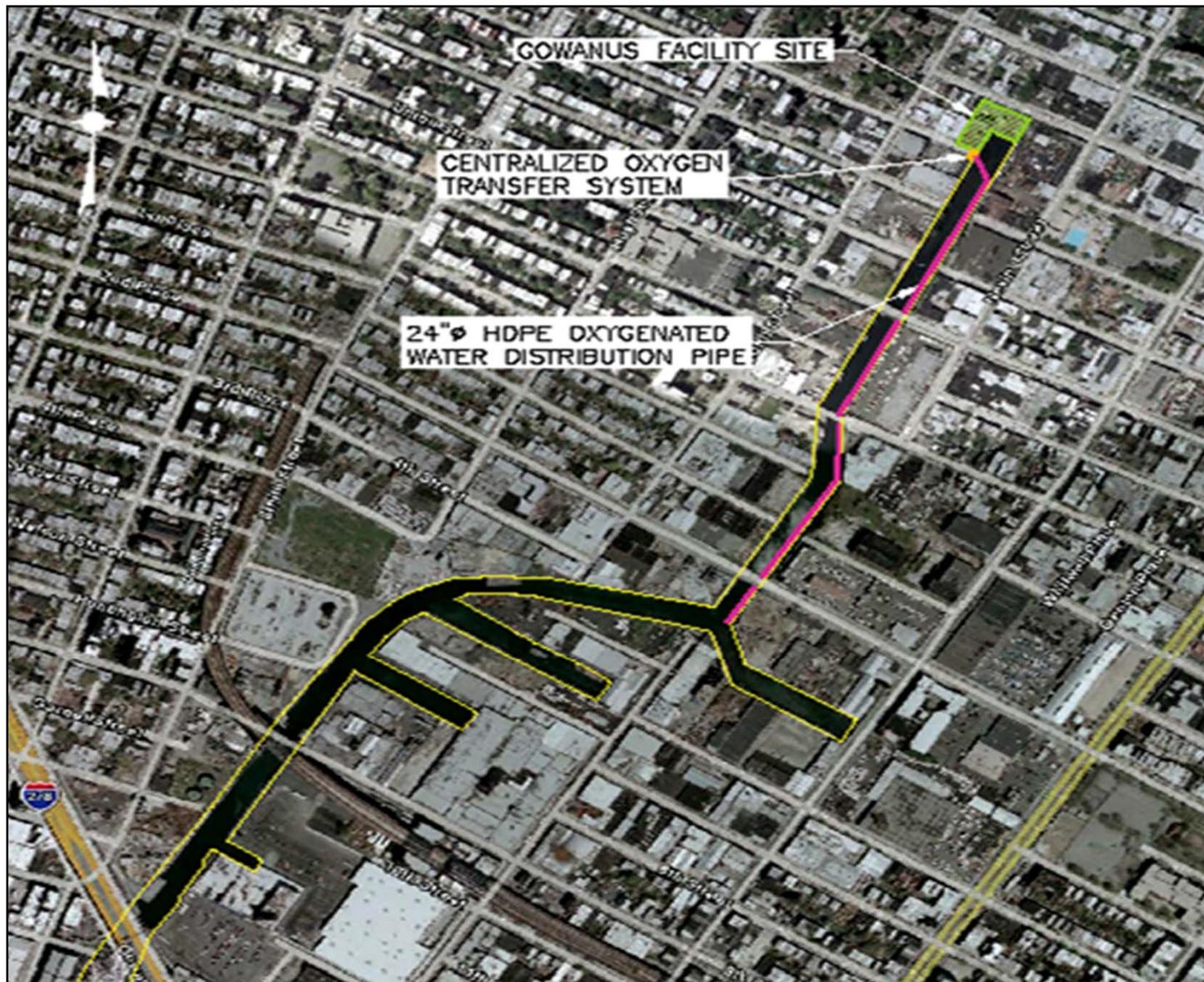


TEMPORARY CANAL OXYGENATION SYSTEM



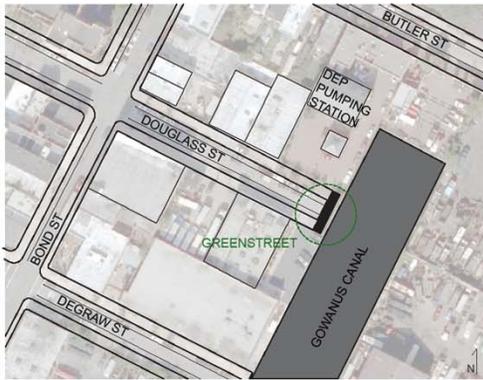
OTS Location

TEMPORARY CANAL OXYGENATION SYSTEM



OTS Distribution Piping

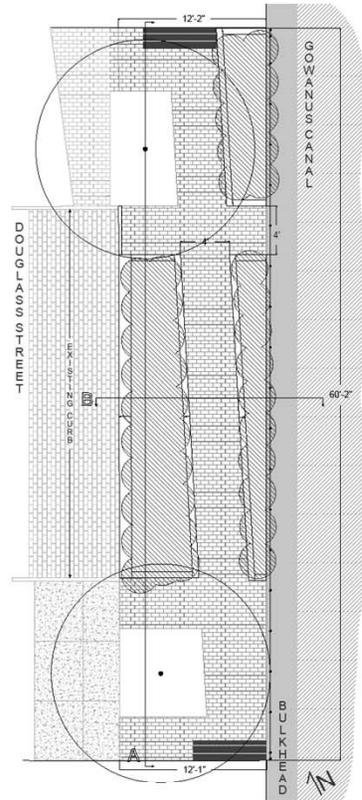
TEMPORARY CANAL OXYGENATION SYSTEM



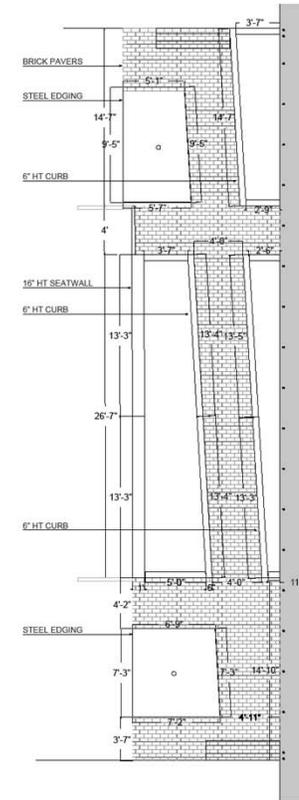
SITE CONTEXT



EXISTING CONDITIONS



SITE PLAN

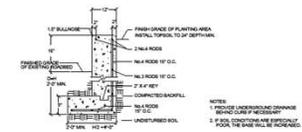


PLANTERS AND PAVING



A 16" HT CONCRETE SEATWALL

SCALE: 3/4" = 1'-0"



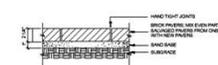
B 6" HT CONCRETE PLANTING BED CURB

SCALE: 3/4" = 1'-0"



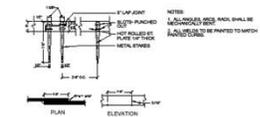
C BRICK PAVEMENT ON SAND

SCALE: 1-1/2" = 1'-0"



D STEEL EDGING

SCALE: 3/4" = 1'-0"

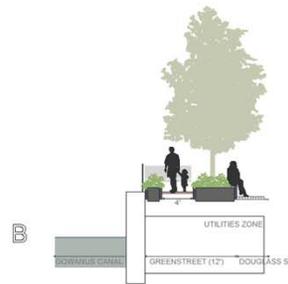
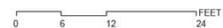


DETAILS

SCALE AS SHOWN



A SECTIONS



B

NOTES

All work to be completed per current NYC Parks & Recreation Specifications.

Contractor is responsible to protect all utilities above and below ground. Contact the One Call Center two to ten days prior to beginning any excavation, 1-800-272-4480.

Installation of new pavement shall be flush with any adjacent pavement, to avoid potential tripping hazards.

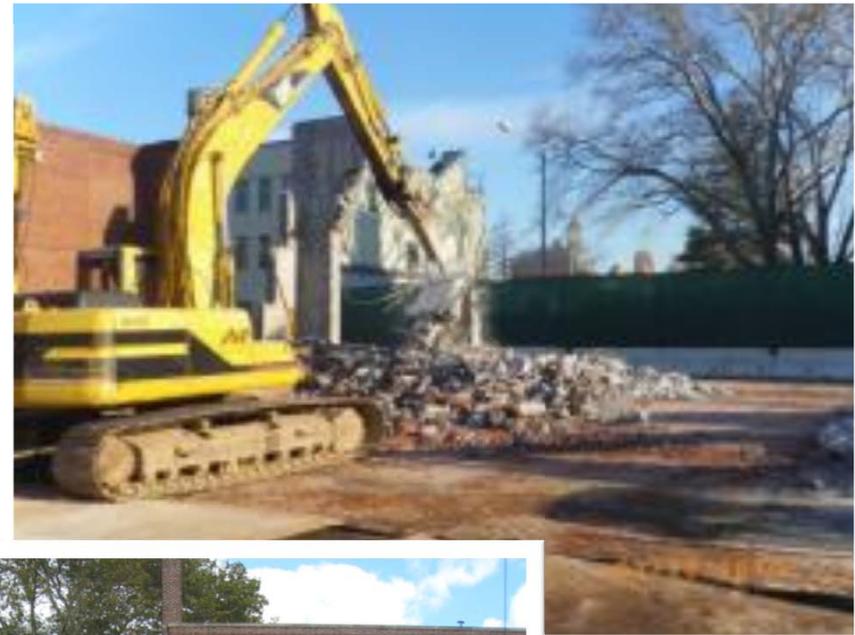
Contractor to repair any damage caused to existing or adjacent pavement and/or structures.

The Contractor shall furnish and install steel edging as show on DPR Standard Detail Sheet #16 and in accordance with the specifications and directions of the Engineer.

Greenstreets		
City of New York/Parks & Recreation Olmsted Center Flushing Meadows-Corona Park Flushing, New York 11368 Michael R. Bloomberg, Mayor Adrian Benepe, Commissioner		
GOWANUS CANAL		
PLANS AND DETAILS		
PROJECT TITLE: GOWANUS AT DOUGLASS ST GREENSTREET		
DRAWING TITLE: SITE PLAN		
BROOKLYN	COMMUNITY BOARD	PROJ ID #
Brooklyn		DEP
CONTRACT NO.	DESIGNED BY:	DRAWN BY:
	S. Martorel	S. Martorel
APPROVED BY: CHIEF OF FORESTRY:	APPROVED BY: DIRECTOR:	
Fiona Weir	Brian Gouber	
DATE	SCALE	SHEET
19-Aug-08	As Noted	L1

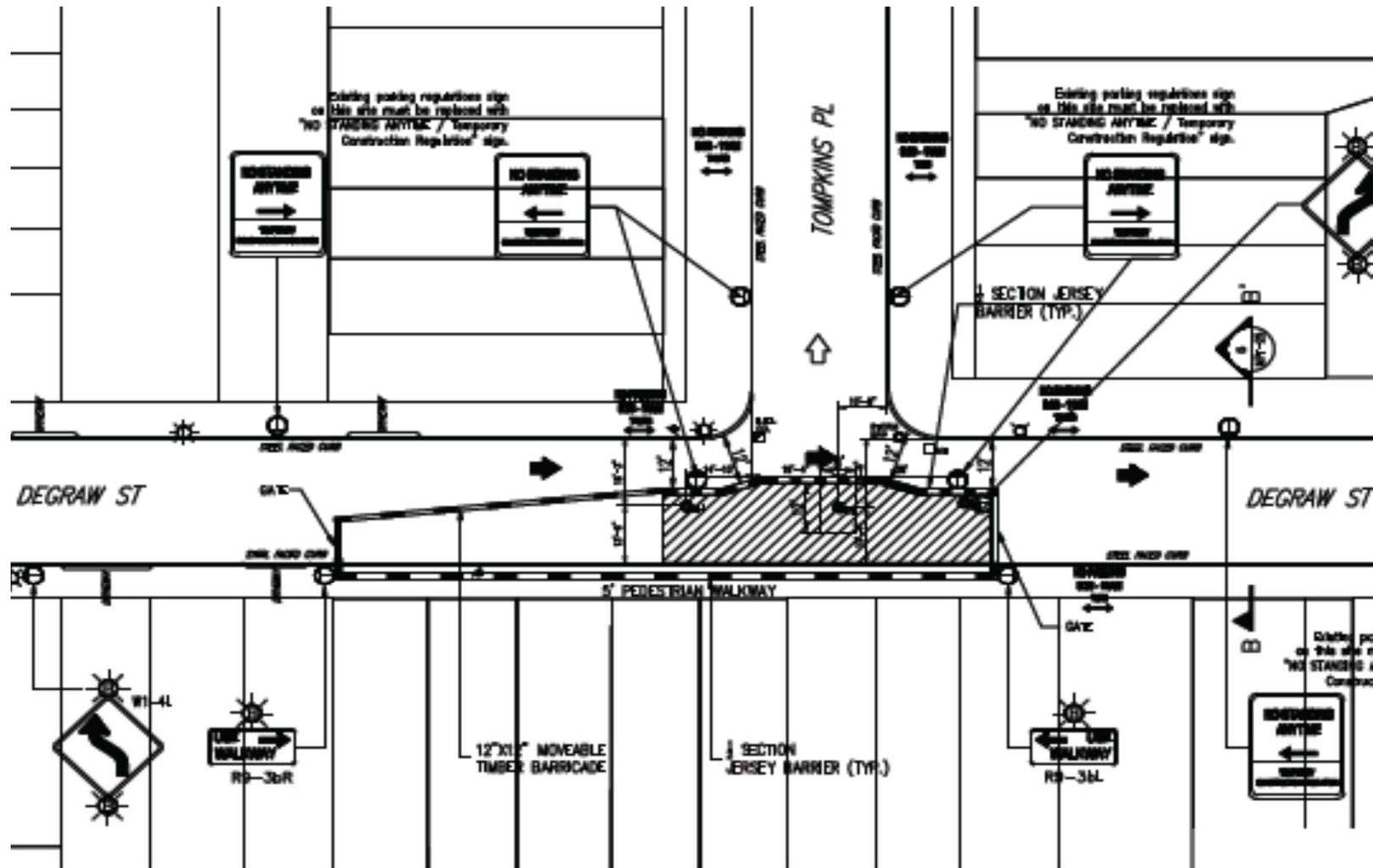
Restoration of Douglass Street "Greenstreet" Area

MAINTENANCE & PROTECTION OF TRAFFIC



Ongoing Work at Butler Street

MAINTENANCE & PROTECTION OF TRAFFIC



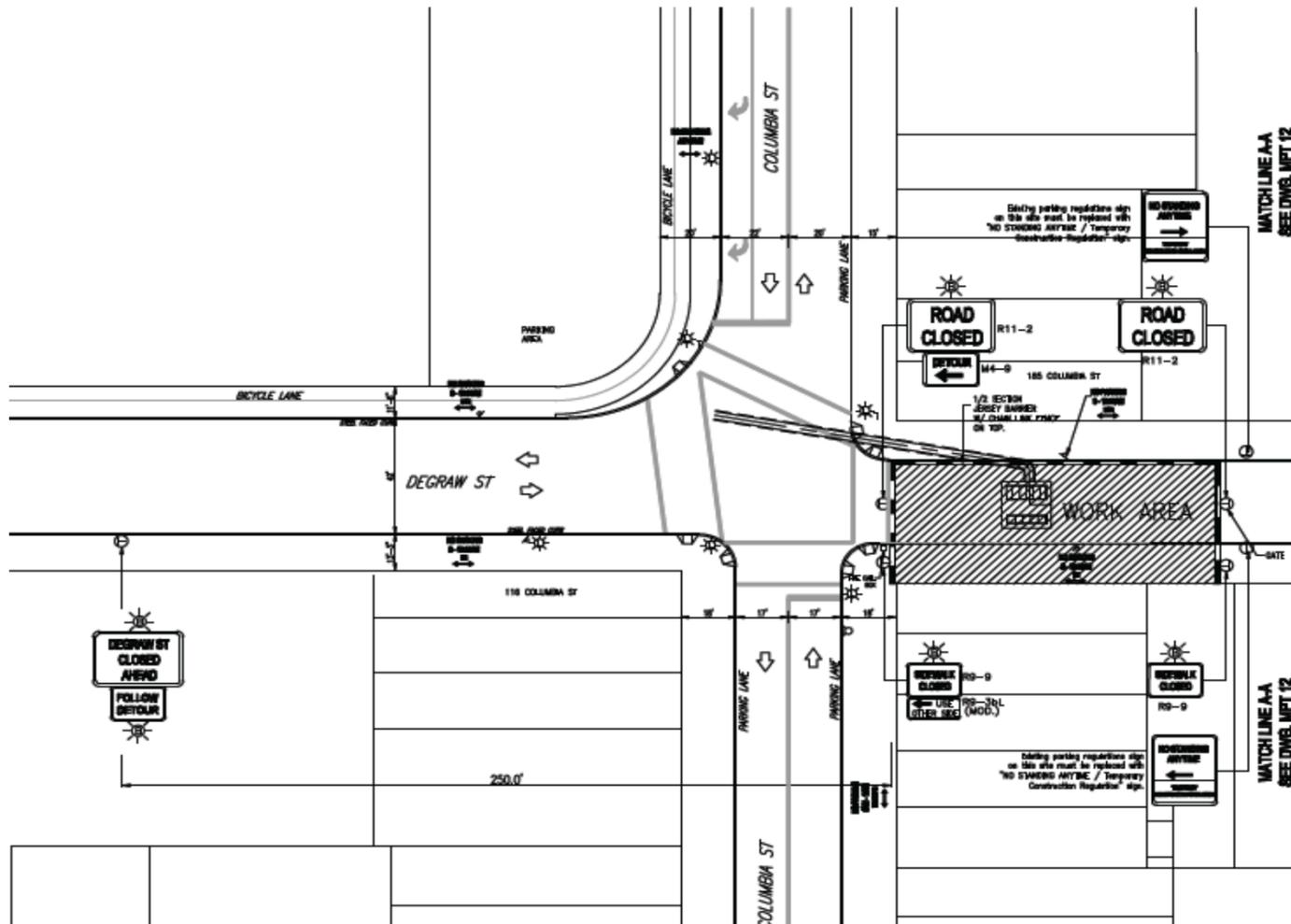
Degraw Street and Tompkins Place

May 2010 to December 2012



Degraw Street and Tompkins Place

MAINTENANCE & PROTECTION OF TRAFFIC



Degraw St. bet. Columbia St. & Tiffany Pl.
May 2010 to December 2012

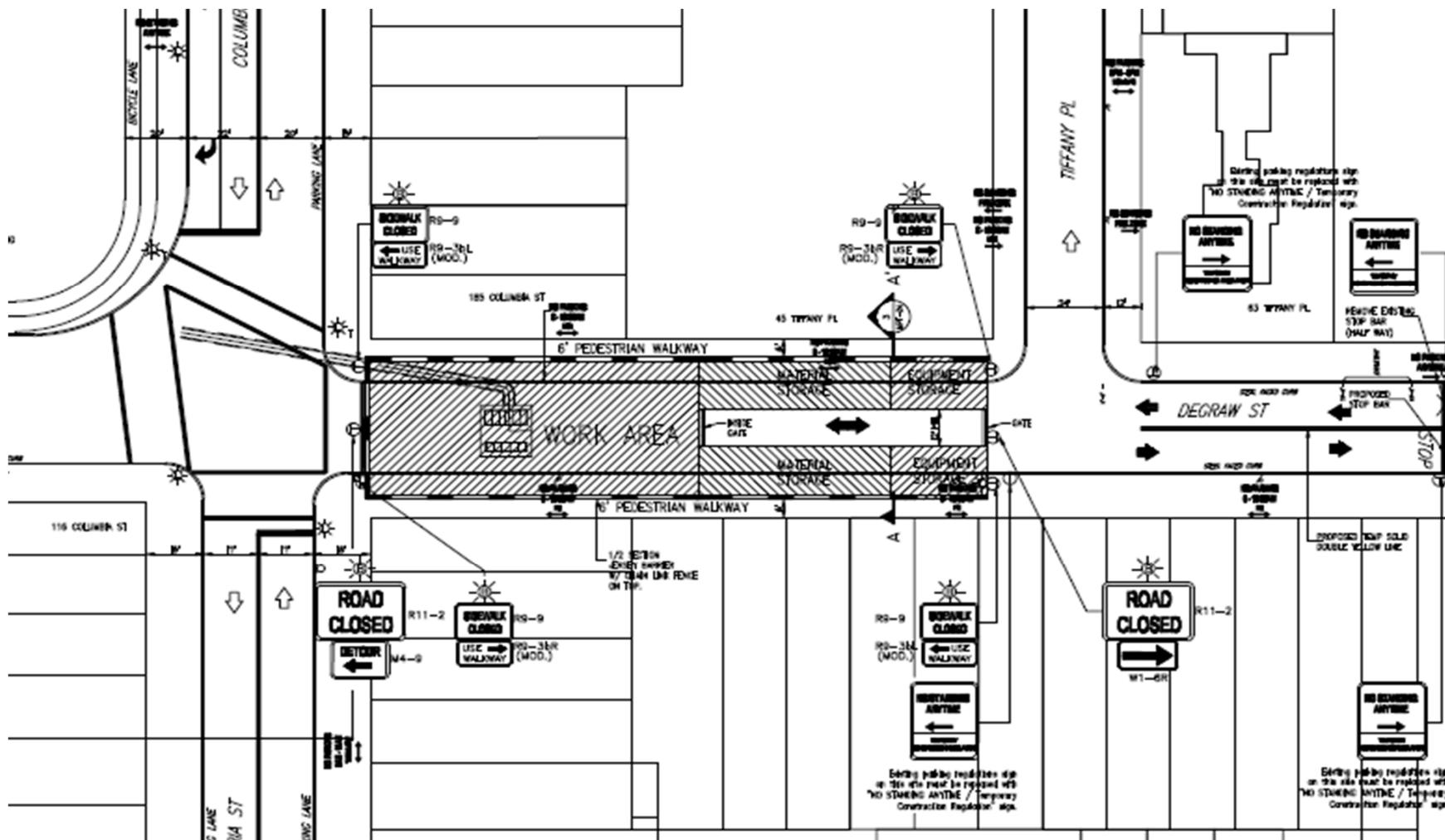
MAINTENANCE & PROTECTION OF TRAFFIC



Degraw St. bet. Columbia St. & Tiffany Pl.

May 2010 to December 2012

MAINTENANCE & PROTECTION OF TRAFFIC



Degraw St. bet. Columbia St. & Tiffany Pl.

June 2010 to December 2012

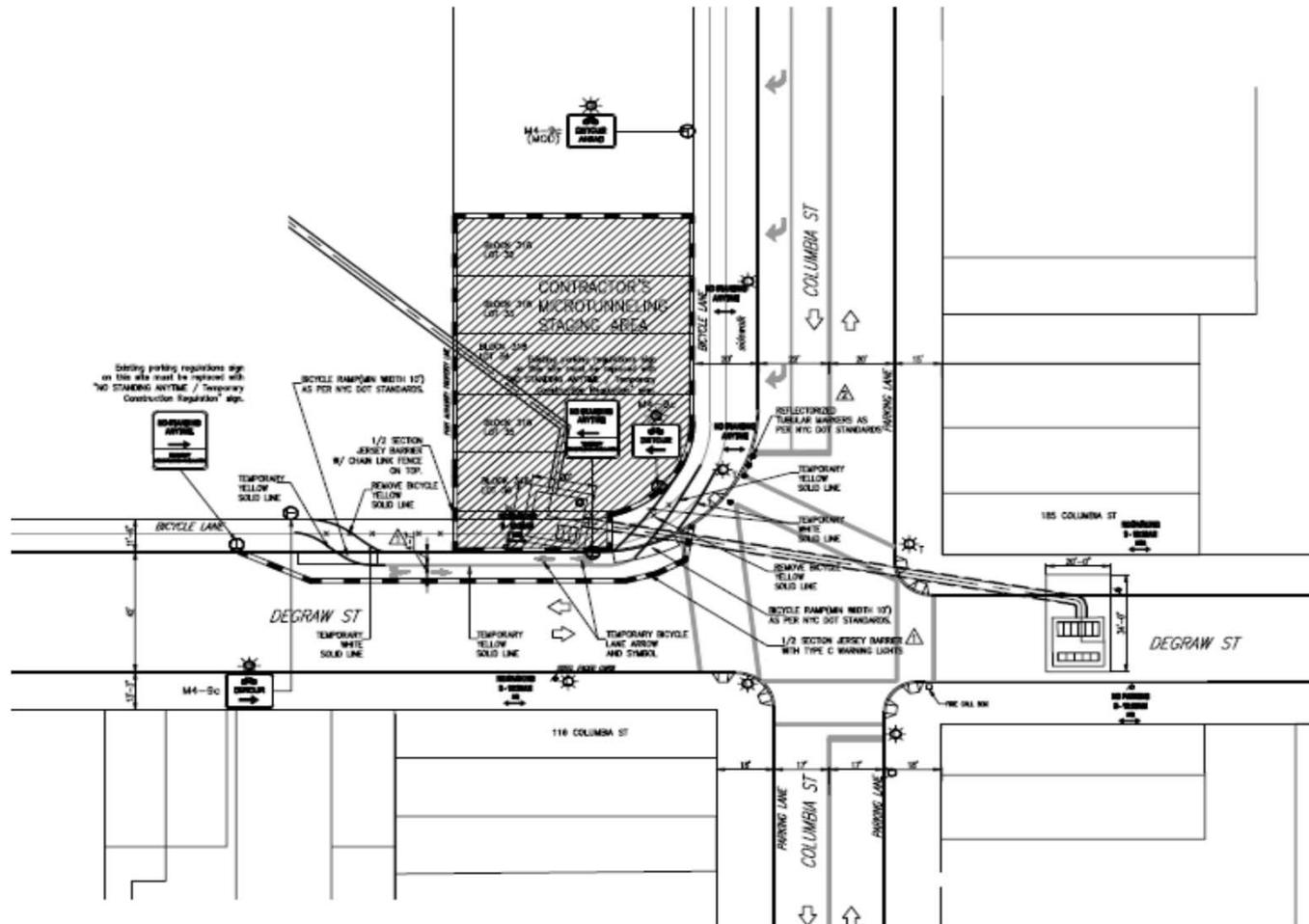
MAINTENANCE & PROTECTION OF TRAFFIC



Degraw St. bet. Columbia St. & Tiffany Pl.

June 2010 to December 2012

MAINTENANCE & PROTECTION OF TRAFFIC

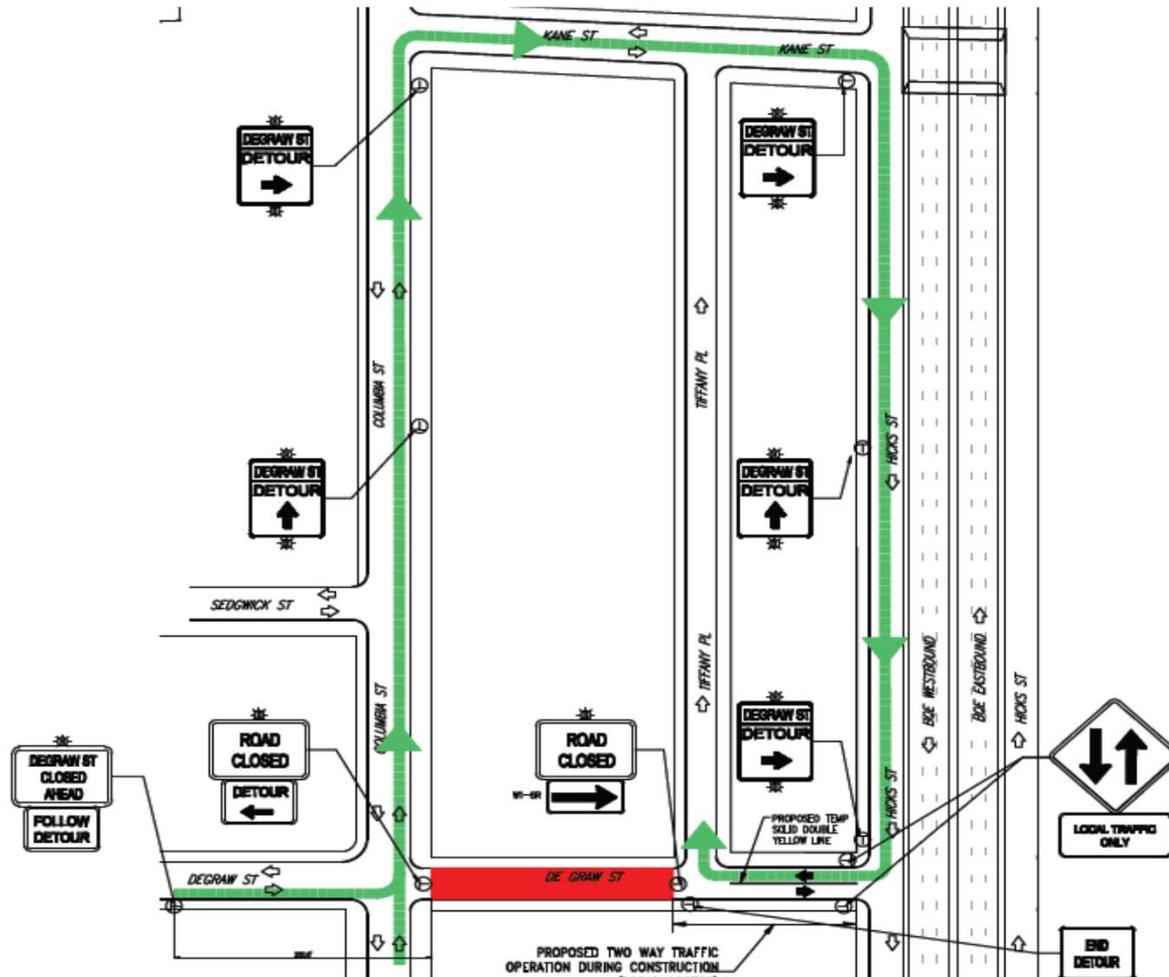


Degraw Street and Columbia Street Intersection



Degraw Street and Columbia Street
Construction of Exit Chamber/Micro-tunneling

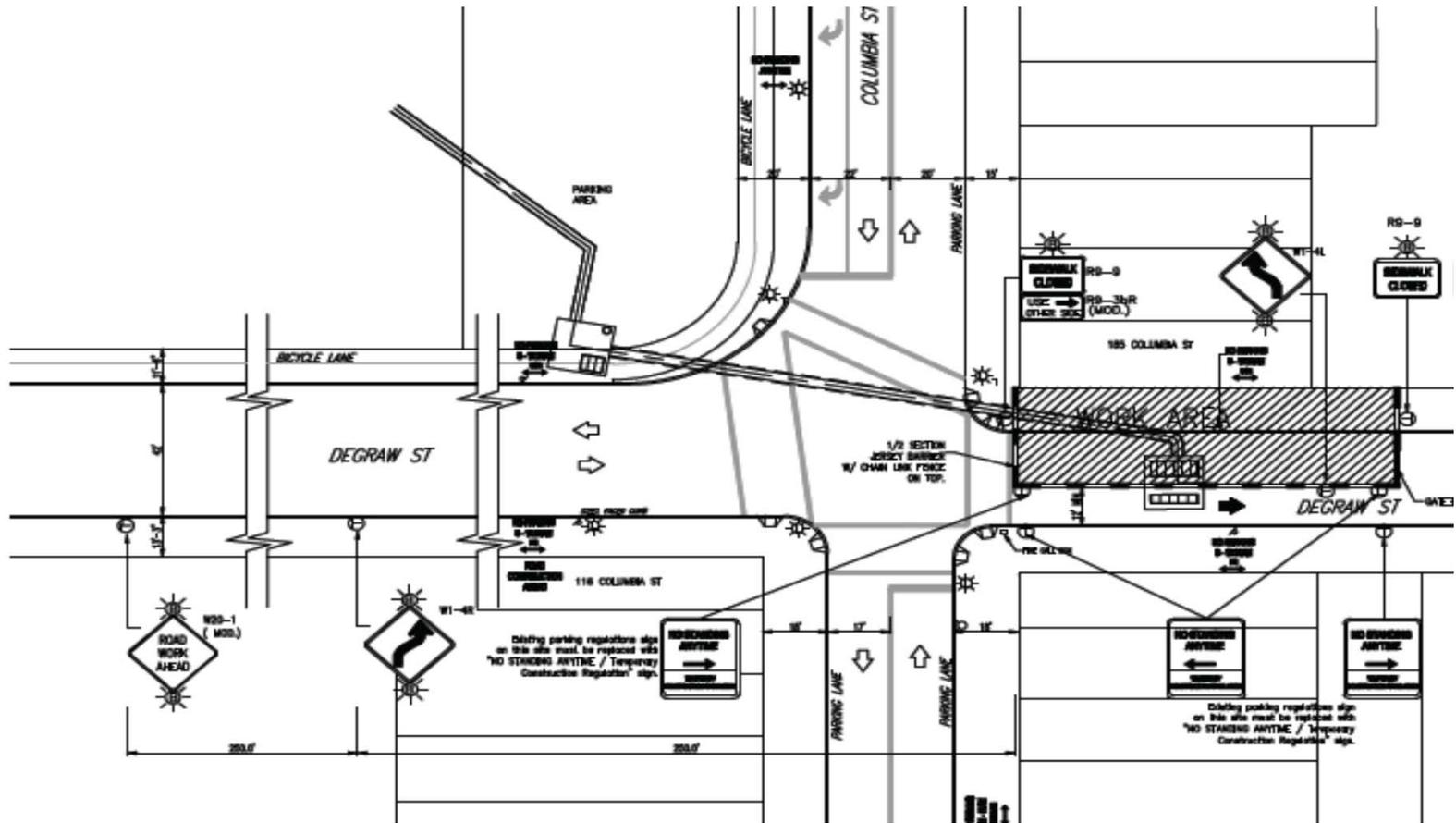
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June 2012 to December 2012

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