

**PLANNING AND DEVELOPMENT SERVICES STAFF REPORT**

**For Planning Commission Meeting of June 5, 2012**

**SUBJECT: DTE Buckler Substation Site Plan for Planning Commission Approval  
(984 Broadway)  
File No. SP12-006**

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission hereby approves the DTE Buckler Site Plan for Planning Commission Approval, subject to:

- 1) Obtaining variances from the Zoning Board of Appeals from the conflicting land use buffer and storm water detention requirements;
- 2) Obtaining a Michigan Department of Environmental Quality (MDEQ) permit for work within the floodplain, prior to issuance of building permits;
- 3) Relocating the fire hydrant and construction of associated water main, prior to the issuance of building permits;
- 4) Completion of required footing drain disconnects, prior to final inspection approval; and
- 5) Execution of water main easements, prior to final inspection approval.

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission hereby approves the proposed off-site mitigation of flood storage capacity as shown on the approved site plan and on the Michcon Site Plan for Planning Commission that was approved on May 15, 2012.

**STAFF RECOMMENDATION**

Staff recommends that this petition be **approved** because, if the requested variances are granted, it will comply with all the applicable local, state, and federal laws, ordinances, standards, and regulations; the development would limit the disturbance of natural features to the minimum necessary to allow a reasonable use of the land; would not cause a public or private nuisance; and would not have a detrimental effect on public health, safety, or welfare.

**STAFF REPORT**

At the May 15, 2012 Planning Commission meeting, this petition was postponed to allow the petitioner an opportunity to address a number of issues. The following is a summary of how those issues have been addressed:

Planning – Bicycle parking spaces are now shown on the plan. The off-site floodplain mitigation was approved on May 15 when the Michcon site plan for Planning Commission was approved. The Michcon project included floodplain capacity being created on the Michcon site, upstream from the DTE Buckler site to mitigate the construction of the transformer pads in the floodplain.

Public Services – The footing drains must be disconnected in accordance with City specifications prior to final inspection; this information must be included on the site plan. A note must be added to the plan indicating that the water main easement will be provided. Details of the final relocation of the fire hydrant must be approved by City staff. The hydrant relocation shall be shown on the utility sheet.

Fire Marshal – The fire hydrant will be relocated to meet fire protection standards. The entire building must fall within the 250 foot hydrant radius or combination of hydrant radii. The entire external portions of the building must be reached by a hose lay, along an approved fire route, that does not exceed 400 feet from a hydrant or combination of hydrants.

Floodplain – Staff supports the motion to approve off-site floodplain mitigation because it is consistent with the conditions described in Chapter 57 (Subdivision and Land Use Control) Section 5:127(5). DTE Buckler proposes to add 363 cubic yards of fill to accommodate the transformer pads and create 1,210 cubic yards of floodplain capacity on the Michcon site located upstream and across the Huron River at 841 Broadway.

Prepared by Jeff Kahan  
Reviewed by Wendy Rampson  
mg/5/31/12

Attachment: May 15, 2012 Planning Staff Report

c: Petitioner/Owner: Detroit Edison Company  
One Energy Plaza  
Detroit, MI 48226-1279

Petitioner's Representative: Mark Fairless, DTE  
One Energy Plaza, 560 S. B.  
Detroit, MI 48226-1279

Systems Planning  
File No. SP12-006

## PLANNING AND DEVELOPMENT SERVICES STAFF REPORT

For Planning Commission Meeting of May 15, 2012

**SUBJECT: DTE Buckler Substation Site Plan for Planning Commission Approval  
(984 Broadway)  
File No. SP12-006**

### **PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission hereby approves the DTE Buckler Site Plan for Planning Commission Approval, subject to obtaining variances from the Zoning Board of Appeals for a conflicting land use buffer and storm water detention and subject to obtaining a Michigan Department of Environmental Quality (MDEQ) permit for work within the floodplain.

### **STAFF RECOMMENDATION**

Staff recommends that this petition be **postponed** to give the petitioner an opportunity to respond to staff comments.

### **LOCATION**

The site is located at 984 Broadway near Canal Street (Northeast Area/Lowertown, Huron River Watershed).

### **DESCRIPTION OF PETITION**

The petitioner proposes to construct a new electrical substation at its service center facility to address increased demand for electric power in downtown Ann Arbor. The substation addition will be located at the northeast corner of the site in an area now occupied by a service drive. The drive connection to Canal Street at this corner will be closed to accommodate the addition.

The substation will consist of two 15.5-foot tall electrical transformers and related electrical equipment on raised concrete pads and a new Power Delivery Center (PDC), a 630 square foot, 12.5' ft tall steel structure. The project also will include a new six-foot tall perimeter chain link fence with one foot of barb wire, a concrete block retaining wall. The source of power will be through underground sub-transmission cable in an existing manhole and conduit system. The distribution circuits will exit the site underground as well.

The site is located in the 100-year floodplain of the Huron River. The petitioner proposes to provide 800 cubic yards of fill to construct the raised transformer pads. To mitigate this impact to the floodplain, the petitioner proposes to remove 1,155 cubic yards of earthen fill on the Michcon site (841 Broadway) as well as remove a building on the Michcon site to provide an additional 55 cubic yards of storage capacity. The site plan for these changes has been submitted as a separate petition.

No change is proposed to the main access to the site. A vehicular access door will be relocated from the east wall to the south wall to accommodate the new transformers.

The petitioner indicates DTE is unable to provide on-site the conflicting land use buffer required along the east side property line abutting Riverside Park. The petitioner is requesting a variance from this requirement to allow 33 trees and 38 shrubs to be planted along the far western side of Riverside Park instead.

The petitioner is able to accommodate first flush and bankfull storm water storage on the south side of the site by modifying the outlet structure in the existing basin. The previous site plan received a variance to allow this detention basin in a 100 year floodplain. It appears that the variance was intended to waive the requirement to provide detention for the 100-year event. However, that variance was not specifically requested or provided and the variance language was somewhat vague. As a result, staff has recommended that the petitioner go to the Zoning Board of Appeals to specifically request a variance from the 100-year detention requirement.

### COMPARISON CHART

		EXISTING	PROPOSED	REQUIREMENTS
Zoning		C3 (Fringe Commercial)	C3 (Fringe Commercial)	C3
Gross Lot Area		215,186 sq/ft (4.94 acres)	215,186 sq/ft (4.94 acres)	6,000 sq/ft MIN
Floor Area Ratio In % of Lot Area		28% (55,975 sq/ft)	28% (55,975 sq/ft)	200% MAX (649,066 sq/ft)
Setbacks	Front	Canal: 25' Broadway: 95''	Canal: 25' Broadway: 95'	10' MIN 25' MAX (MAX applies to at least 1 ROW)
	Side	East: 85 ft	East: 85 ft	East: 0 ft MIN
	Rear	South: 185 ft	South: 185 ft	South: 0 ft MIN
Building Height		23.5 ft (Vehicle Shed)	23.5 ft (Vehicle Shed)	55 ft MAX
Parking – Automobiles		TBD	TBD	38 spaces MIN
Parking - Bicycles		NONE	TBD	3 spaces – MIN (Class B)

### SURROUNDING LAND USES AND ZONING

	LAND USE	ZONING
NORTH	Medical, Residential	R4C (Multiple-Family Dwelling) C1 (Local Business) R5 (Hotel)
EAST	Park	PL (Public Land)
SOUTH	Huron River	PL (Public Land)
WEST	River, Broadway Bridge	PL (Public Land)

### HISTORY

The brick building on the western edge of the site was constructed around 1905 and is not proposed to be affected by this project. A site plan was approved in 1999 to construct a 39,192 square foot truck shelter. The large steel garage/storage shed was completed in 2000.

### PLANNING BACKGROUND

The Master Plan: Land Use Element recommends residential and recreational uses for this site. The property is zoned C3 (Fringe Commercial).

### STAFF COMMENTS

Fire Marshal - The entire building footprint must fall within a 250 foot hydrant radius or combination of hydrant radii. The entire external portions of the building must be reached by a hose lay, along an approved fire route, that does not exceed 400 feet from a hydrant or combination of hydrants.

Public Services – Driveway dimensions for all existing connections to Canal Street shall be noted on the plans. A separate utility sheet shall be provided.

Floodplain – Show the floodway boundary on the site plan. Provide a narrative on the plan explaining the flood mitigation process. Provide a natural features alternatives analysis on the plan.

Storm Water – The updated calculations show that bankfull storage can be accommodated on the existing site plan by modifying the outlet structure. Staff recommends that a variance be granted waiving the requirement for detention to be provided for the 100-year event, based on the detention being located in the floodplain.

Planning – Bicycle parking must be provided. Show existing parking spaces on plan.

DTE Buckler Substation  
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Prepared by Jeff Kahan  
Reviewed by Wendy Rampson  
mg/5/11/12

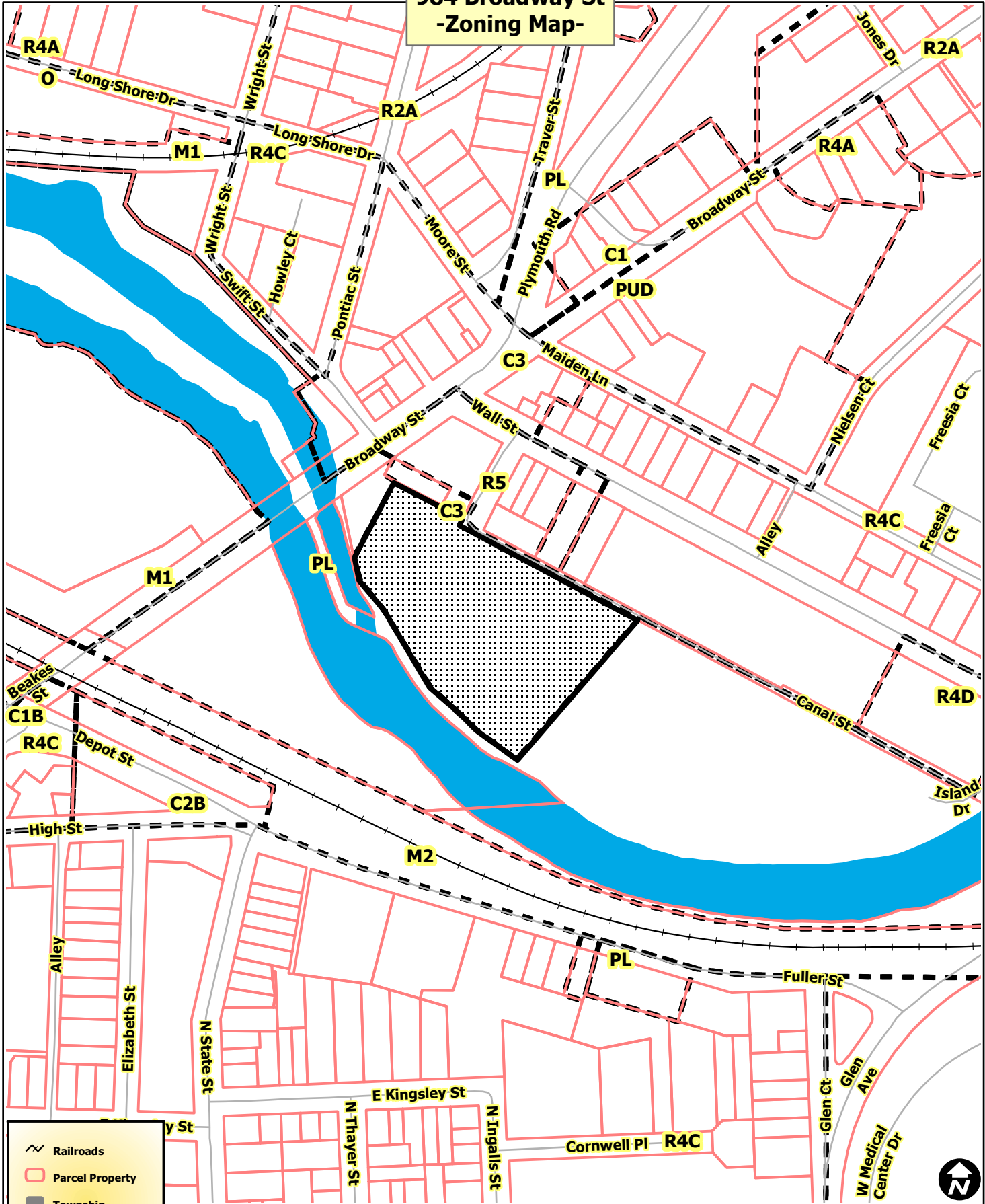
Attachments:   Zoning/Parcel Maps  
                  Aerial Photo  
                  Site Plan  
                  Site Plan Detail  
                  Elevation

c:   Petitioner/Owner:   Detroit Edison Company  
                          One Energy Plaza  
                          Detroit, MI 48226-1279

Petitioner's Representative:   Mark Fairless, DTE  
                                  One Energy Plaza, 560 S. B.  
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Systems Planning  
File No. SP12-006

# 984 Broadway St -Zoning Map-



-  Railroads
-  Parcel Property
-  Township
-  City of Ann Arbor
-  Huron River



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# 984 Broadway St -Aerial Map-



-  Railroads
-  Parcel Property



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BROADWAY STREET



EXISTING BUILDING

EXISTING PARKING



EXISTING SERVICE CENTER GARAGE

DETROIT EDISON  
ANN ARBOR  
SERVICE CENTER

EXISTING PARKING

EXISTING PARKING

SILT BASIN

HURON RIVER



BUILDING

CANAL STREET

UM KELLOGG  
EYE CENTER



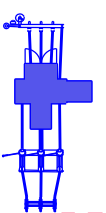
PROPOSED LANDSCAPING



EXIST  
CELL  
TOWER



PDC



PROPOSED  
BUCKLER  
SUBSTATION



EXISTING  
BENCH AND  
PICNIC TABLE

RIVERSIDE PARK



PROPOSED LANDSCAPING

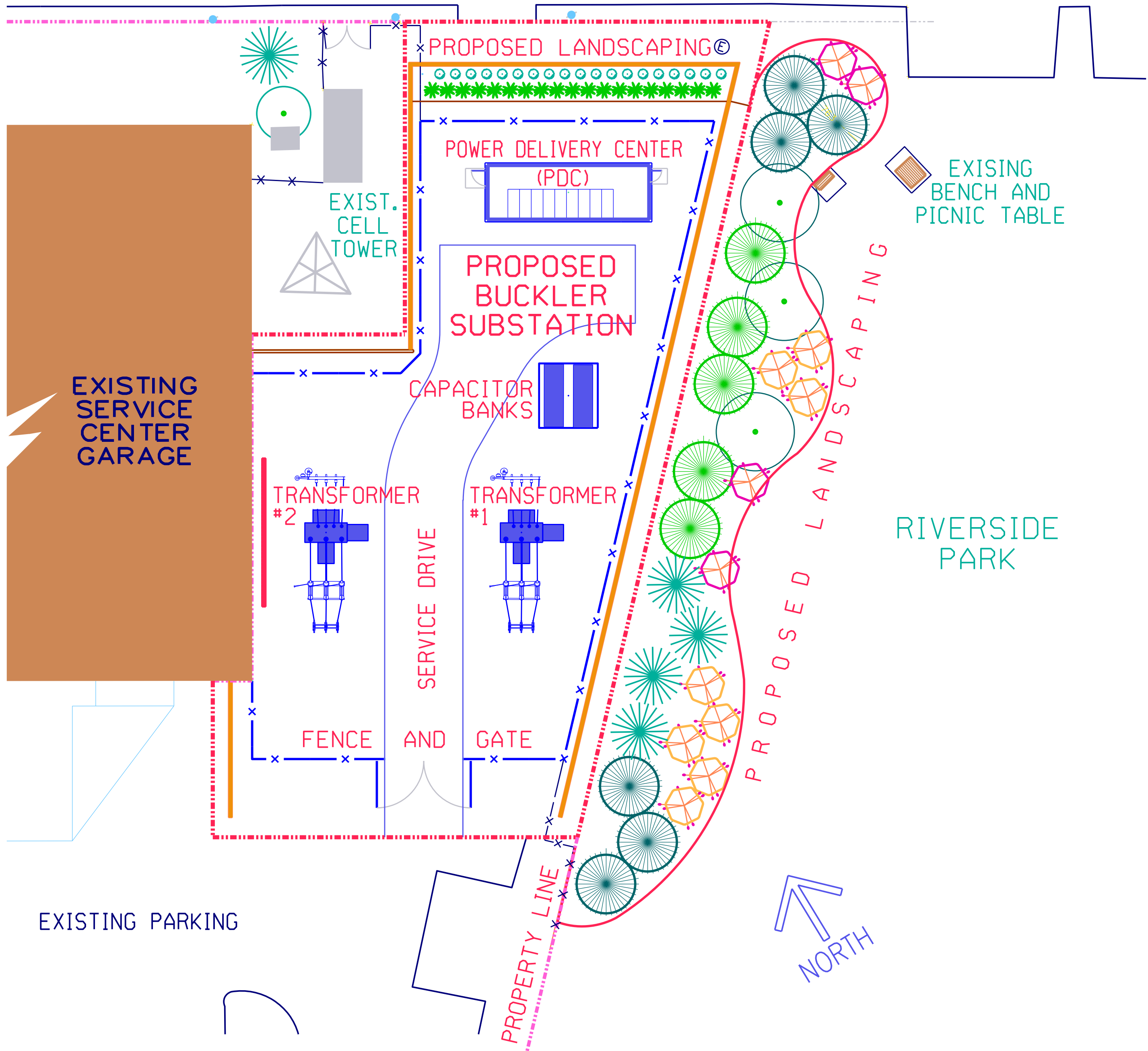
PROPERTY LINE



NORTH

UM KELLOGG  
EYE CENTER

CANAL STREET



EXISTING  
BENCH AND  
PICNIC TABLE

POWER DELIVERY CENTER  
(PDC)

PROPOSED  
BUCKLER  
SUBSTATION

CAPACITOR  
BANKS

TRANSFORMER  
#2

TRANSFORMER  
#1

SERVICE DRIVE

FENCE AND GATE

PROPOSED LANDSCAPING

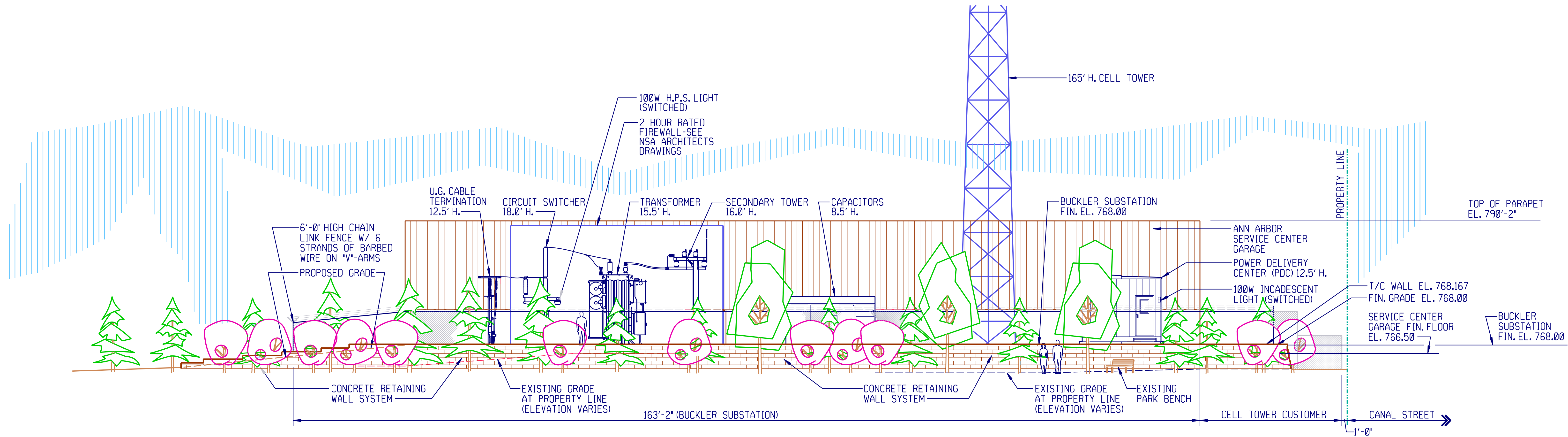
RIVERSIDE  
PARK

EXISTING  
SERVICE  
CENTER  
GARAGE

EXISTING PARKING

PROPERTY LINE

NORTH



**EAST ELEVATION 'A-A' - LOOKING WEST FROM RIVERSIDE PARK**

SUBSTATION YARD ELEVATION 768.00