

7 Parking

The location of the Northeast Boundary Tunnel Project sites will impact curbside parking in all three study areas. Proposed surface work will reduce the number of available spaces during construction. Curbside parking is predominantly utilized by residents with a small number of metered parking spaces along the 1st Street NW, 7th Street NW and Rhode Island Avenue NE commercial corridors. To assess the potential impacts, a parking occupancy survey was conducted within a three block radius of each project site. This section of the package summarizes the results of the parking survey. For each study area the number of spaces around the project sites was quantified, the number of spaces currently used was assessed, and the available parking capacity considering a reduction in spaces during construction was evaluated.

The parking occupancy survey was conducted on a weekday in April 2014 between 5:00 AM and 7:00 PM and on a Sunday morning between 7:00 AM and 11:00 AM. The original survey was supplemented with additional counts recorded in May 2015 during the same times. The number of vehicles parked along each block within a three block radius was recorded once each hour.

7.1 Study Area 1 Parking Impacts

The impacts to parking in Study Area 1 during construction at the two Mt Olivet Road sites are minimal. A parking occupancy survey for this area was performed for on a weekday during the time of peak parking and on a Sunday morning when parking would be at capacity. The number of possible parking spaces currently available, the number of vehicles parked along each block and the approximate number of spaces lost during construction of the diversion facilities are shown in Figure 7-1.

Based on the limits of the Mt Olivet Road NE, adjacent to the Mt Olivet Road Shaft site, approximately thirty (30) parking spaces located on eastbound Mt Olivet Road NE from West Virginia Avenue NE to Trinidad Avenue NE will potentially be lost during construction. In the westbound direction along Mt Olivet Road NE between Trinidad Avenue NE and West Virginia Avenue NE, parking is signed as restricted from 9:30 AM to 4:30 PM on weekdays. The survey revealed there were no cars parked along westbound Mt Olivet Road NE during any of the study hours, but twenty five (25) potential spaces would be eliminated. The Newborn Pentecostal Church of God is located on the southwest corner of Mt Olivet Road NE and Trinidad Avenue NE. An existing church parking lot is located adjacent to the church with fourteen (14) parking spaces available. The Sunday parking survey revealed nine (9) spaces occupied, leaving five (5) spaces available. In addition to the spaces lost along Mt Olivet Road between West Virginia Avenue NE and Capitol Avenue NE during the construction of the Mt Olivet Road Shaft, parking will be impacted on Capitol Avenue NE north of Mt Olivet Road NE near the Mt Olivet Road Diversion site. Approximately five (5) northbound spaces and four (4) southbound spaces will potentially be lost during construction. These are non-metered spaces with no posted time restrictions.

Parking shortages during construction in areas surrounding the Mt Olivet Road Shaft site and Diversion site are not anticipated for the following reasons:

- Parking in the vicinity of the CSAs is not currently utilized to its maximum potential. For example, parking along Mt Olivet Road NE is already restricted and not being utilized by residents in hours outside of the current restriction.
- Major CSAs are grouped along Mt Olivet Road NE, where parking is already restricted during weekdays.
- Businesses along Mt Olivet Road NE have ample parking in front of or adjacent to their facilities.

- Residents have alternative parking locations including alleyways and rear yard parking.
- The two churches in the vicinity of the CSAs have off-street parking for patrons.

Access to the two church lots, Bethesda Baptist and Newborn Pentecostal, will be maintained at all times during construction. Table 7-1 summarizes the total parking impacts by location and construction site as shown in Figure 7-1: Study Area 1 Parking Study.

Table 7-1: Study Area 1 Parking Space Impacts

TOTAL PARKING IMPACT BY LOCATION				
Location	Metered or Non-Metered/Time Restrictions		Estimated No. of Spaces Reduced During Construction	
Mt Olivet Road NE between Trinidad Road NE and West Virginia Avenue NE	Non-Metered		EB = 30 WB = 25	
Capitol Avenue NE – North of Mount Olivet Avenue NE	Non-Metered		NB = 5 SB = 4	
TOTAL PARKING IMPACT BY CONSTRUCTION SITE				
Site	Approximate Available Spaces Before Construction	Daily Maximum Spaces Occupied Before Construction	Spaces Eliminated Due to Construction	Approximate Available Spaces During Construction
Mt Olivet Road Diversion Site	112	48	9	103
Mt Olivet Road Shaft Site	145	57	55	90

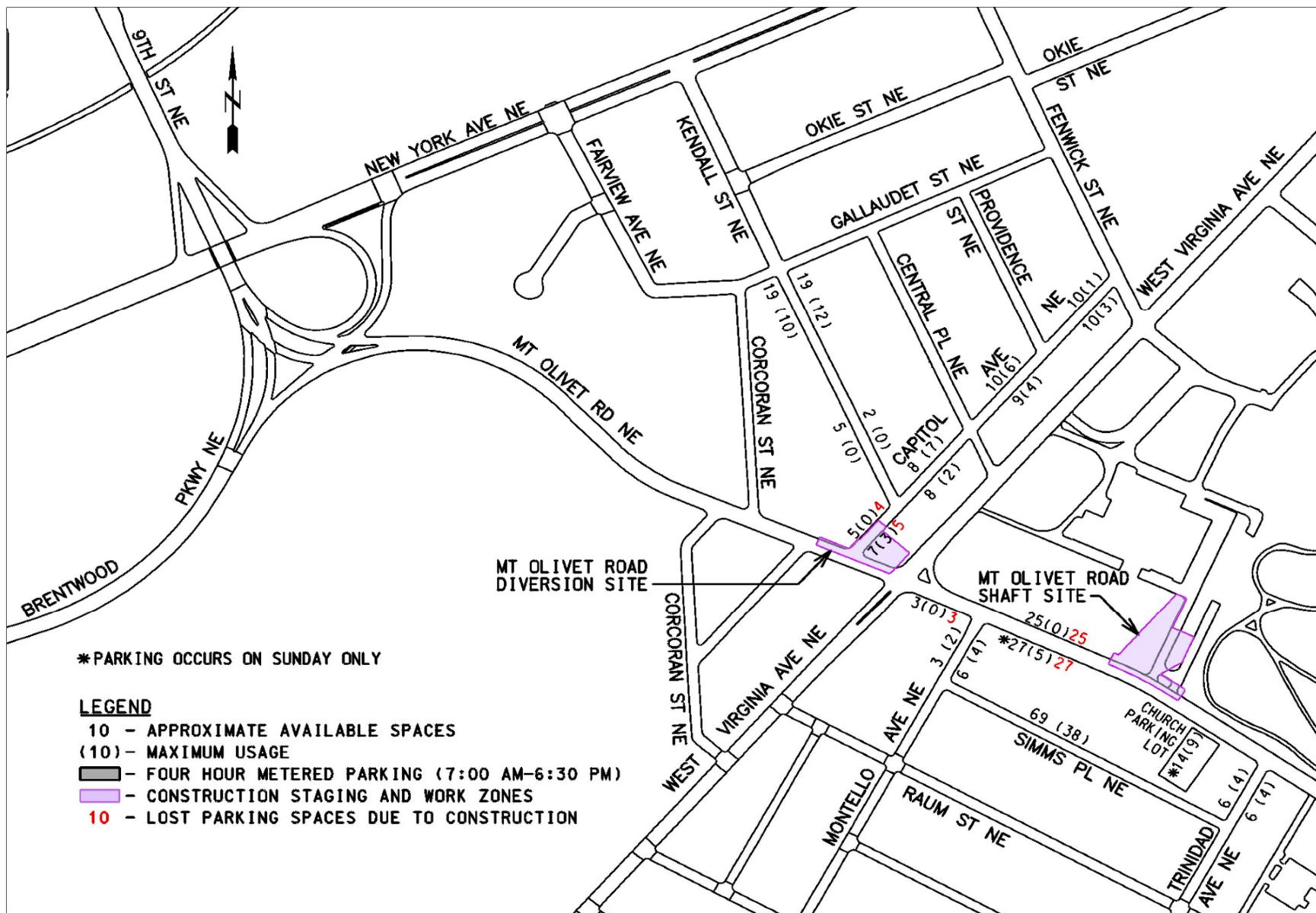


Figure 7-1: Study Area 1 Parking Study

7.2 Study Area 2 Parking Impacts

The parking impacts in Study Area 2 are associated with the construction at the 4th Street and Rhode Island Avenue sites. The survey reviewed the parking capacity within a three block radius of the construction sites. Figure 7-2 depicts the number of possible parking spaces currently available, the number of vehicles parked along each block and the approximate number of spaces lost during construction of the diversion facilities.

7.2.1 Rhode Island Avenue Site

The major impact to parking in Study Area 2 is associated with the Rhode Island Avenue site along Rhode Island Avenue NE between 5th Street NE and Reed Street/Metro Station NE. This location will impact some of the public parking spaces utilized by the Greater Mount Calvary Holy Church, located on Rhode Island Avenue NE between the Rhode Island Shopping Plaza and Reed Street/Washington Place NE intersections. A separate survey was conducted on a Sunday morning between the hours of 8:00 AM and 11:00 AM during the morning church services to analyze potential impacts. Church patrons park along both sides of Rhode Island Avenue NE, stretching from Reed Street/Metro Station NE to 5th Street NE. Parking is not permitted along most blocks of this section of Rhode Island Avenue NE with No Parking signs posted. The Sunday morning survey revealed a total of sixty (60) and forty eight (48) vehicles parked illegally on the north and south sides of Rhode Island Avenue NE, respectively. During other times, no parking occurred through this section. Parking along Rhode Island Avenue on Sunday is not considered lost parking spaces during construction due to the existing restrictions.

Other parking impacts associated with the Rhode Island Avenue site will occur west of Reed Street NE to east of 12th Street NE. Approximately thirty five (35) spaces will be eliminated during construction.

As a mitigation measure to improve traffic operations during construction, the nearside bus stop situated on eastbound Rhode Island Avenue NE west of the 10th Street NE intersection is proposed to be relocated to the far-side location, east of Bryant Street NE. Approximately six (6) parking spaces will be eliminated to accommodate the relocated bus stop.

Parking shortages in the vicinity of the Rhode Island Avenue site are not anticipated during construction, since little public parking exists in the vicinity of the project site. As part of the public outreach strategy, DC Water will continue to meet with the Greater Mount Calvary Holy Church to keep them informed as the project progresses.

7.2.2 4th Street Site

Prior to the start of construction at the 4th Street site a left turn lane at the Lincoln Avenue NE intersection will be constructed on eastbound Rhode Island Avenue NE to accommodate the detour for the closure of northbound 4th Street NE. Approximately fifty one (51) parking spaces will be eliminated along Rhode Island Avenue NE between North Capitol Street NE and 2nd Street NE while constructing the left turn lane. It is anticipated that parking lost during this time will be absorbed within the adjacent neighborhoods, back alleys and off-street parking. Parking will be restored upon completion of the left turn lane and this area will not be impacted during construction of the remaining work associated with the 4th Street CSAs.

Parking spaces anticipated to be lost during the construction of the 4th Street site is approximately sixty two (62) spaces. The closure of northbound 4th Street NE will eliminate approximately eighteen (18) parking spaces. Work at the intersection of Rhode Island Avenue NE/4th Street NE will impact parking

along Rhode Island Avenue NE. Twenty one (21) spaces on the south side of Rhode Island Avenue NE between 2nd Street NE and 5th Street NE will be eliminated and twenty (20) spaces on the north side.

Due to the northbound closure of 4th Street NE, the bus route utilizing 4th Street NE northbound will be detoured. It will be necessary to eliminate approximately three (3) parking spaces on Edgewood Street NE to accommodate buses turning left from 4th Street NE southbound as per the proposed detour. In addition, emergency vehicles will be detoured to northbound 3rd Street NE during construction of the 4th Street NE site. Approximately eleven (11) parking spaces along 3rd Street NE and seven (7) spaces on Bryant Street NE will be eliminated to accommodate the turning radius of the emergency vehicles along the detour.

Parking loss in the area surrounding the 4th Street site can be absorbed by the adjacent blocks since parking is not currently at capacity in the neighborhood. Impacts to the approximately forty one (41) spaces on Rhode Island Avenue NE (4S-CSA3) are not anticipated to occur concurrently with impacts imposed by other CSAs (4S-CSA1 and 4S-CSA2) and will be short in duration, three (3) to six (6) months, relative to the overall construction duration at the site. Table 7-2 summarizes the total parking impacts by location and construction site as shown in Figure 7-2: Study Area 2 Parking Study.

Table 7-2: Study Area 2 Parking Space Reduction

TOTAL PARKING IMPACT BY LOCATION		
Location	Metered or Non-Metered/Time Restrictions	Estimated No. of Spaces Reduced During Construction
4th Street NE – Rhode Island Avenue NE to Adams Street NE	Non-Metered 1 hour limit 7:00AM to 6:30PM	NB = 1 SB = 0
4th Street NE – Adams Street NE to Bryant Street NE	Non-Metered 1 hour limit 7:00AM to 6:30PM	NB = 7 SB = 10
Edgewood Street NE east of 4th Street	Non-Metered	EB = 3
3rd Street NE between Rhode Island Avenue NE and Adams Street NE	Non-Metered 2 hour limit 7:00AM to 6:30PM	NB – East side = 1 NB –West side = 2
3rd Street NE between Adams Street NE and Bryant Street	Non-Metered 2 hour limit 7:00AM to 6:30PM	NB – East side = 5 NB –West side = 3
Bryant Street NE between 3rd Street NE and 4th Street NE	Non-Metered 2 hour limit 7:00AM to 6:30PM	EB = 5 WB = 2
Rhode Island Avenue NE between North Capitol Street NE 2nd Street NE	Non-Metered 7:00AM to 9:30AM WB 4:00PM to 6:30PM EB	EB = 24 WB = 26
Rhode Island Avenue NE between 2nd Street NE and 3rd Street NE	Non-Metered 7:00AM to 9:30AM WB 4:00PM to 6:30PM EB	EB = 5 WB = 6
Location	Metered or Non-Metered/Time Restrictions	Estimated No. of Spaces Reduced During Construction
Rhode Island Avenue NE between 5th Street NE and Reed Street/Metro Station NE	Restricted	EB = 1 WB = 5

Rhode Island Avenue NE between Reed Street NE/Washington Place NE and 10th Street NE	Non-Metered 7:00AM to 9:30AM WB 4:00PM to 6:30PM EB	EB = 4 WB = 13		
Rhode Island Avenue NE between 10th Street NE and 12th Street NE	Non-Metered 7:00AM to 9:30AM WB 4:00PM to 6:30PM EB	EB = 6 WB = 12		
Location	Metered or Non-Metered/Time Restrictions	Estimated No. of Spaces Reduced During Construction		
Rhode Island Avenue NE between 3rd Street NE and 4th Street NE	Non-Metered 7:00AM to 9:30AM WB 4:00PM to 6:30PM EB	EB = 13 WB = 14		
Rhode Island Avenue NE between 4th Street NE and 5th Street NE	Metered 2 hour limit 9:00AM to 3:30PM	EB = 3 WB = 0		
TOTAL PARKING IMPACT BY CONSTRUCTION SITE				
Site	Approximate Available Spaces Before Construction	Daily Maximum Spaces Occupied Before Construction	Spaces Eliminated Due to Construction	Approximate Available Spaces During Construction
Rhode Island Avenue Site	345	265	81	264
4th Street Site	514	392	82	425

NOTE: Parking is Signed Restricted on Rhode Island Avenue NE

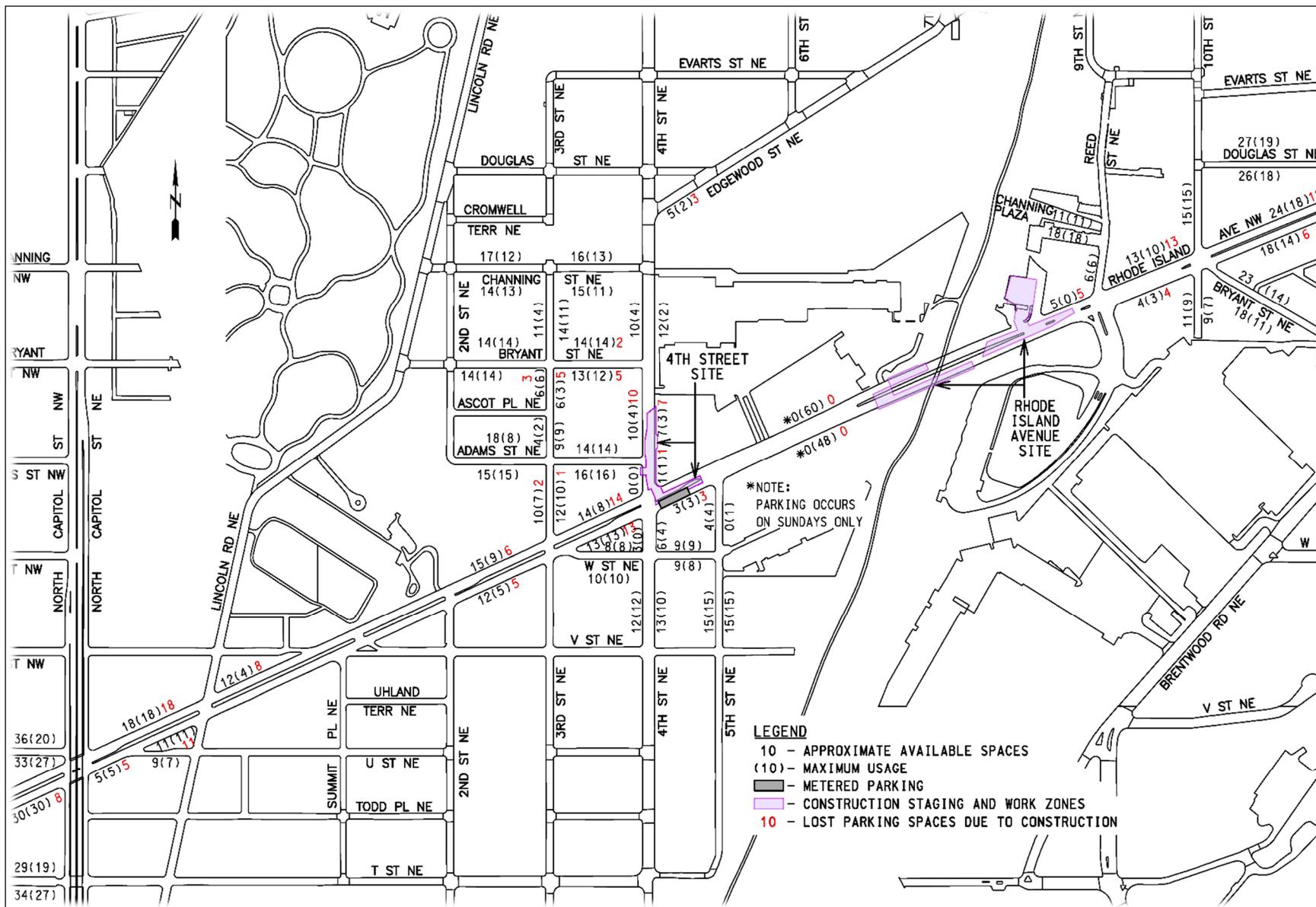


Figure 7-2: Study Area 2 Parking Study

7.3 Study Area 3 Parking Impacts

The parking impacts in Study Area 3 are associated with the construction at the T Street, Pumping Station, Channing Street, Michigan Avenue, Florida Avenue and R Street sites. The survey analyzed the parking capacity within a three block radius of the proposed construction sites. Figure 7-3 depicts the number of possible parking spaces currently available, the number of vehicles parked along each block and the approximate number of spaces lost due to construction. Table 7-3 summarizes the total parking impacts by location and construction site as shown in Figures 7-3 and 7-4 Study Area 3 Parking Study.

7.3.1 T Street Site

The parking impacts associated with the T Street site includes the reduction of parking spaces along Rhode Island Avenue NW and T Street NW. The closure of T Street NW will be necessary during construction and will result in the loss of all available parking spaces along the north and south sides of T Street NW. Impacts to parking along Rhode Island Avenue NW are also anticipated due to the installation of the proposed facilities. See Section 7.3.6 for a detailed discussion of parking impacts and proposed mitigations for the T Street site and immediate Rhode Island Avenue corridor.

7.3.2 Channing Street and Michigan Avenue Sites

Minimal parking impacts are expected to occur along First Street NW between Channing Street NW and Michigan Avenue NW during the modifications of the Channing Street Diversion Facility. The detour of northbound First Street NW during off-peak hours and will result in the loss of approximately thirty one (31) metered parking spaces south of McMillan Drive NW.

Construction for the Michigan Avenue NW Diversion Facility will occur during off peak traffic hours and will impact parking during that time. It is anticipated that a small loss of approximately sixteen (16) parking spaces will result during the construction along the east side of North Capitol Street between Franklin Street NW and Michigan Avenue NW. Parking reductions will be limited to off-peak hours.

7.3.3 Pumping Station Site

With the exception of impacts to parking along Rhode Island Avenue NW, impacts to parking around the Pumping Station site are minimal. A total of ten (10) spaces will be impacted at various times during construction and can be mitigated by available parking in the neighborhood. See Section 7.3.6 for a detailed discussion of parking impacts and proposed mitigations along the Rhode Island Avenue corridor in the vicinity of the Pumping Station site.

7.3.4 Florida Avenue Site

Work associated with the Florida Avenue site will impact parking along Rhode Island Avenue NW between the intersections of 3rd Street NW and 2nd Street NW. In addition, parking spaces on northbound 3rd Street NW will be eliminated during construction.

With the exception of impacts along Rhode Island Avenue NW (see Section 7.3.6), impacts to parking surrounding the Florida Avenue site are minimal, with a reduction of two (2) spaces along 3rd Street NW. No parking impacts along Florida Avenue NW are anticipated.

7.3.5 R Street Site

The R Street site will impact parking along R Street NW, 6th Street NW and 7th Street NW. Construction staging requires the elimination of parking along R Street NW between Rhode Island Avenue NW and 6th Street NW for the duration of work. Parking on the east side of 6th Street NW south of the R Street intersection will be eliminated to transition northbound traffic to the curb lane.

Approximately thirty two (32) parking spaces are anticipated to be lost as a result of construction at the R Street site, however, parking shortages are not anticipated around the R Street site since surplus parking is available within a 3 block radius of the site. The analysis showed approximately eight (8) spaces along 7th Street NW, thirteen (13) spaces along R Street NW and eleven (11) spaces along 6th Street NW will be eliminated.

7.3.6 Rhode Island Corridor within Study Area 3

Significant parking impacts are predicted along Rhode Island Avenue NW between North Capitol Street NW as a result of staging at the Pumping Station, T Street, and Florida Avenue sites. Approximately eighty five (85) parking spaces will be impacted along Rhode Island Avenue NW due to construction at these sites. As a result, DC Water will restrict work from occurring concurrently within the CSAs along Rhode Island Avenue NW. This includes all of the T Street CSAs, PS-CSA3 and FLA-CSA3. By restricting concurrent construction these sites, the maximum impact to parking is approximately forty two (42) spaces lost along Rhode Island Avenue NW between First and 2nd Streets NW. DC Water has committed to maintain the Bryant Street Alternative Parking Area (intersection of 2nd and W Streets NW) in operation through the construction of the NEBT project. Parking deficiencies associated with construction impacts along Rhode Island Avenue NW at T Street NW will be mitigated by allowing parking at the Bryant Street Alternative Parking Area. The lot is designed to accommodate approximately thirty (30) vehicles and approximately twenty six (26) spaces adjacent to the lot along 2nd Street NE. A general plan is provided as Figure 7-5.

Table 7-3: Study Area 3 Parking Space Impacts

TOTAL PARKING IMPACT BY LOCATION		
Location	Metered or Non-Metered/Time Restrictions	Estimated No. of Spaces Reduced During Construction
Rhode Island Avenue NW between Florida Avenue NW and 2nd Street NW	Non-Metered 7:00AM to 9:30AM WB 4:00PM to 6:30PM EB	EB = 13 WB = 15
Rhode Island Avenue NW East of First Street NW	Non-Metered 7:00AM to 9:30AM WB 4:00PM to 6:30PM EB	EB = 15 WB = 12
Rhode Island Avenue NW west of First Street NW to west of T Street NW	Non-Metered 7:00AM to 9:30AM WB 4:00 PM to 6:30 PM EB	EB = 15 WB = 15
First Street NW between Rhode Island Avenue and Thomas Street NW	Non-Metered	NB = 3 SB = 3
T Street NW Between Rhode Island Avenue NW and 2nd Street NW	Non-Metered 2 hour limit 7:00AM to 8:30PM	Northside = 15 Southside = 11
TOTAL PARKING IMPACT BY LOCATION		

Location	Metered or Non-Metered/Time Restrictions	Estimated No. of Spaces Reduced During Construction		
R Street NW - Phase 1/Phase 2 of Construction	Non-Metered 2 hour limit 7:00AM to Midnight	Northside = 6 Southside = 7		
6th Street NW	NB is Non-Metered 2 hour limit SB is Residential Permit Parking	NB = 7 SB = 4		
3rd Street NW between Florida Avenue NW and Rhode Island Avenue NW	Non- Metered	NB = 2 SB = 0		
7th Street NW – Phase 1 of Construction	Metered 1 hour or 2 hour limit 7:00AM to 6:30PM	NB = 8 SB = 0		
First Street NW between Channing Street NW and Michigan Avenue NW	Metered 4 hour limit 7:00AM to 6:30PM	NB = 18 SB = 13		
North Capitol Street NW between Franklin Avenue NW and Michigan Avenue NW	Non-Metered Restricted NB 4:00PM to 6:00PM	NB = 16		
TOTAL PARKING IMPACT BY CONSTRUCTION SITE				
Site	Approximate Available Spaces Before Construction	Daily Maximum Spaces Occupied Before Construction	Spaces Eliminated Due to Construction	Approximate Available Spaces During Construction
Channing Street Site	457* (*Does Not Include Bryant Street Lot)	383	101	412* (*Includes Bryant Street Lot)
Michigan Avenue Site	91	75	16	75
Pumping Station Site	737* (*Does Not Include Bryant Street Lot)	706	45	748* (*Includes Bryant Street Lot)
T Street Site	630* (*Does Not Include Bryant Street Lot)	608	86	600* (*Includes Bryant Street Lot)
Florida Avenue and 3rd Street Sites	651* (*Does Not Include Bryant Street Lot)	622	30	677* (*Includes Bryant Street Lot)
R Street and 6th Street Sites	489	436	32	457

Note: Approximate Available Spaces And Daily Maximum Spaces Were Calculated From Approximately A Three (3) Block Radius Around Each Construction Site.

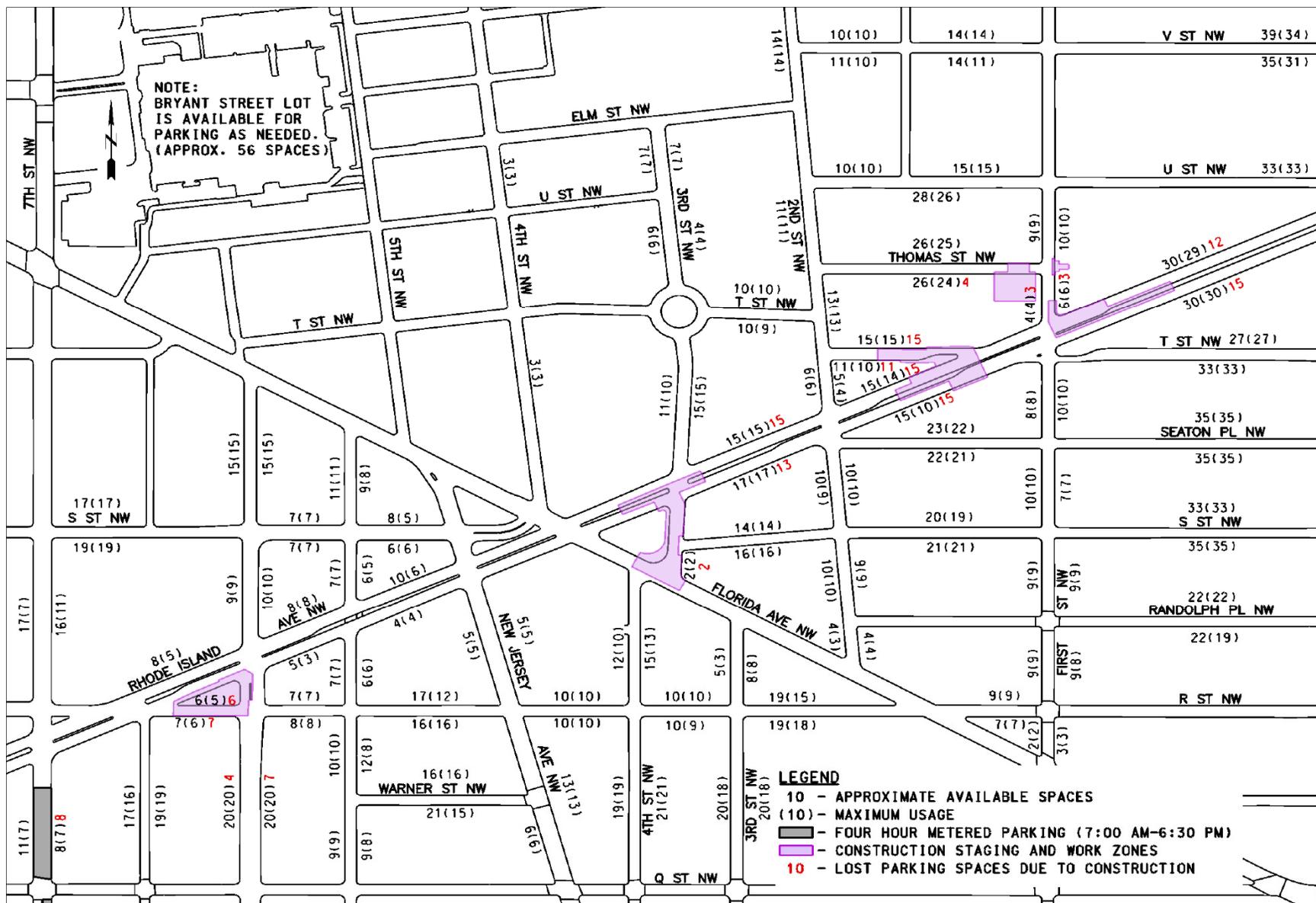


Figure 7-3: Study Area 3 Parking Study

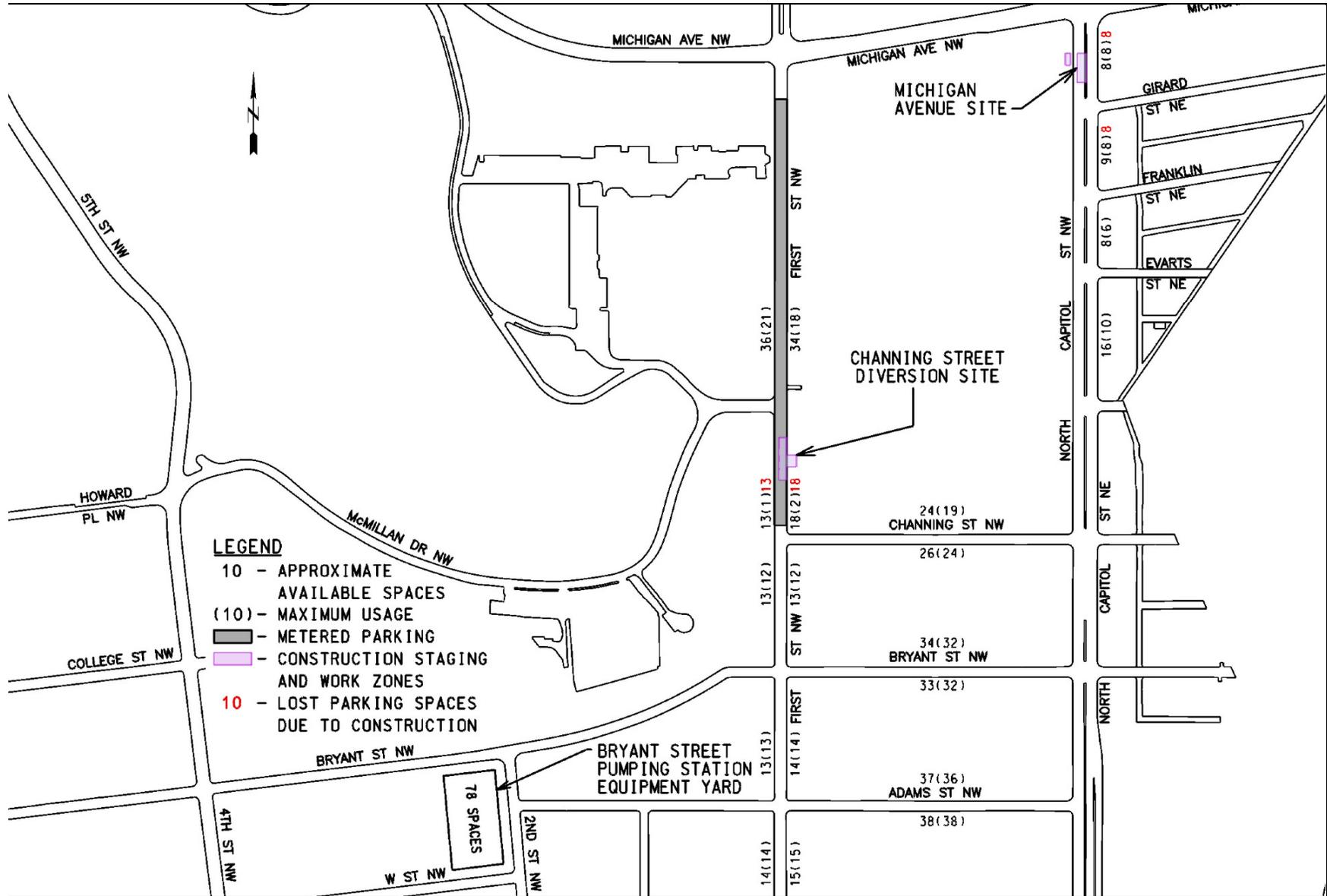


Figure 7-4: Study Area 3 Parking Study

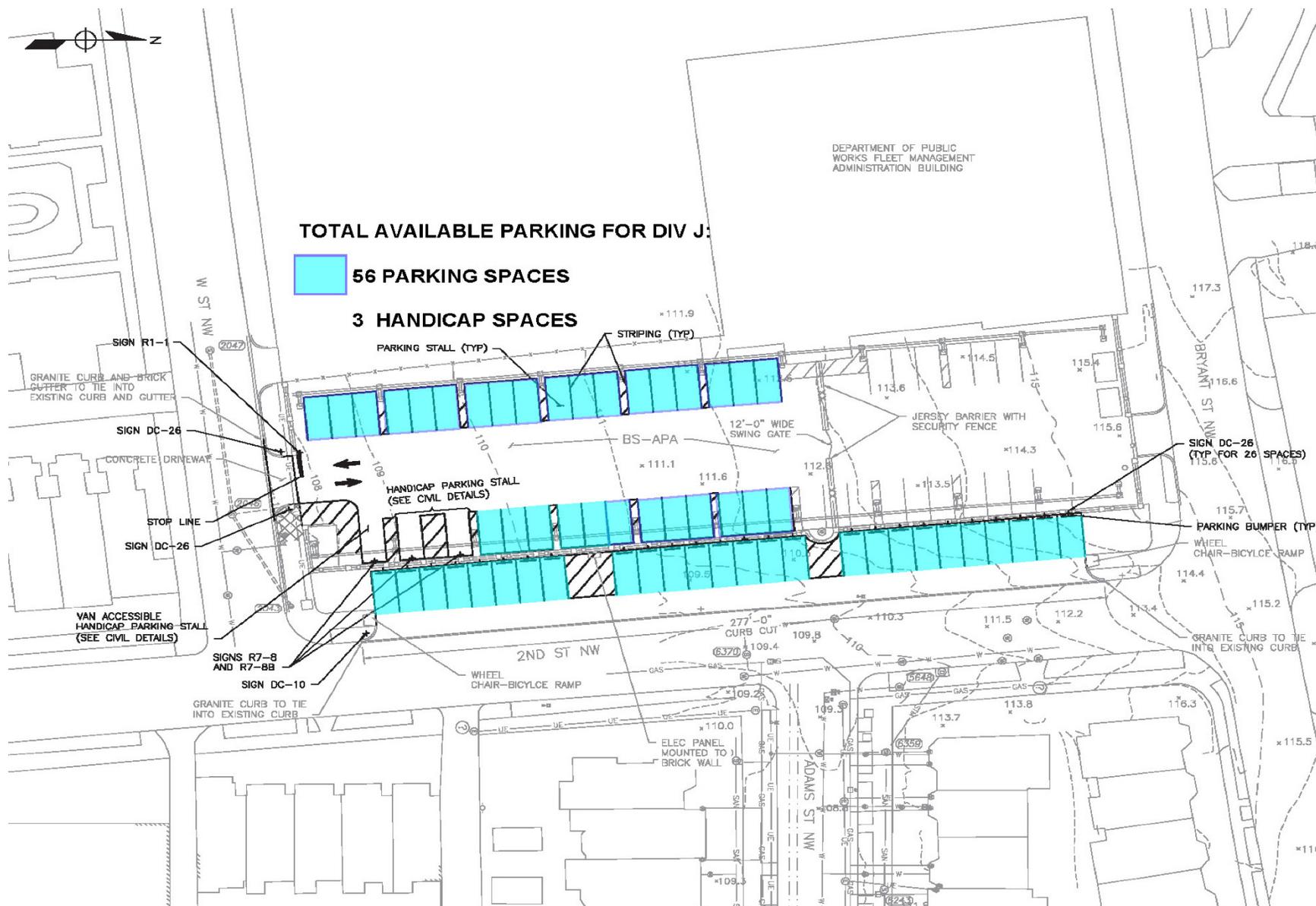


Figure 7-4: Bryant Street Alternative Parking Area Plan

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