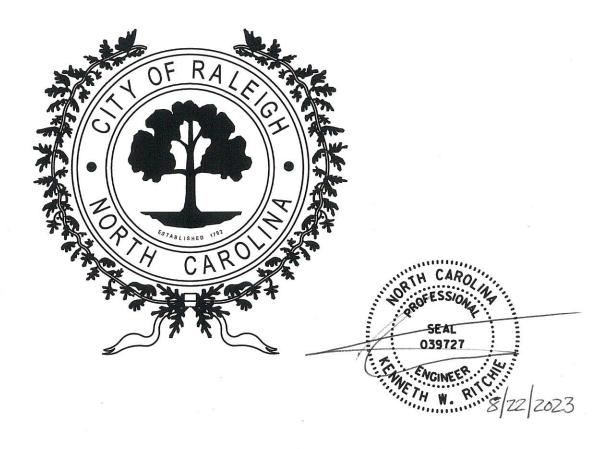
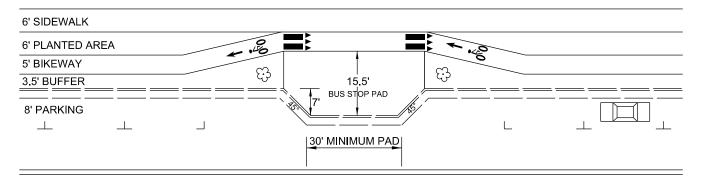
# CITY OF RALEIGH

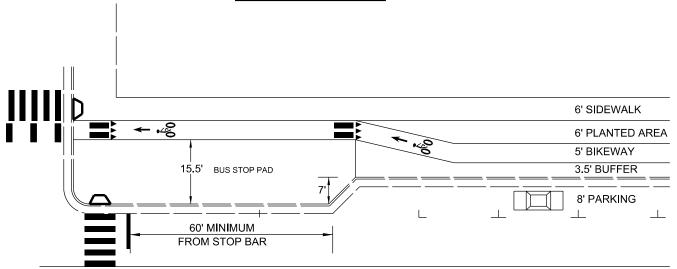
## STANDARD DETAILS



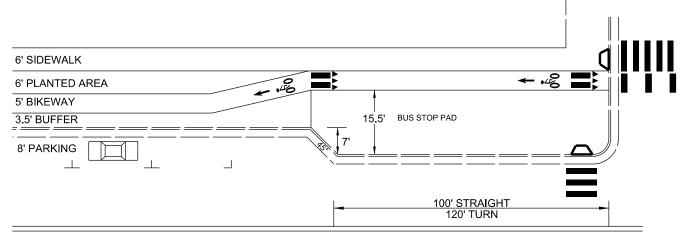
TRANSIT



### **MID WITH PARKING**



### **NEAR SIDE WITH PARKING**



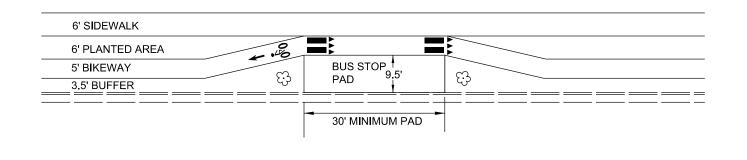
### FAR SIDE WITH PARKING

### NOTES:

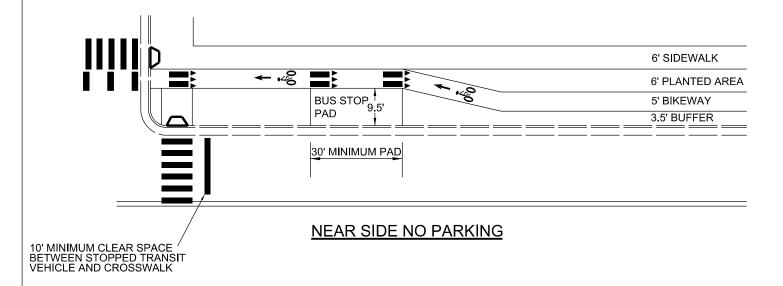
- 1. STOPS SERVING HIGH-FREQUENCY ROUTES SHOULD BE TWICE AS LONG AS THE DIMENSIONS SHOWN, OR AS OTHERWISE APPROVED BY THE TRANSIT DIVISION.
- 2. SEE TT-02 FOR BUS STOP PAD DESIGN SPECIFICATIONS.
- 3. THE BIKEWAY SHIFTING TAPER SHOULD BE 7:1 PREFERRED, 3:1 MINIMUM.

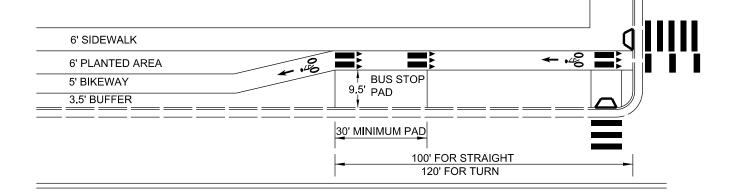
SHEET 1 OF 3

STANDARD DETAIL			
REVISIONS	DATE: 08/2023	NOT TO SCALE	
		BUS STOP VEL BIKEWAY	
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### **MID NO PARKING**





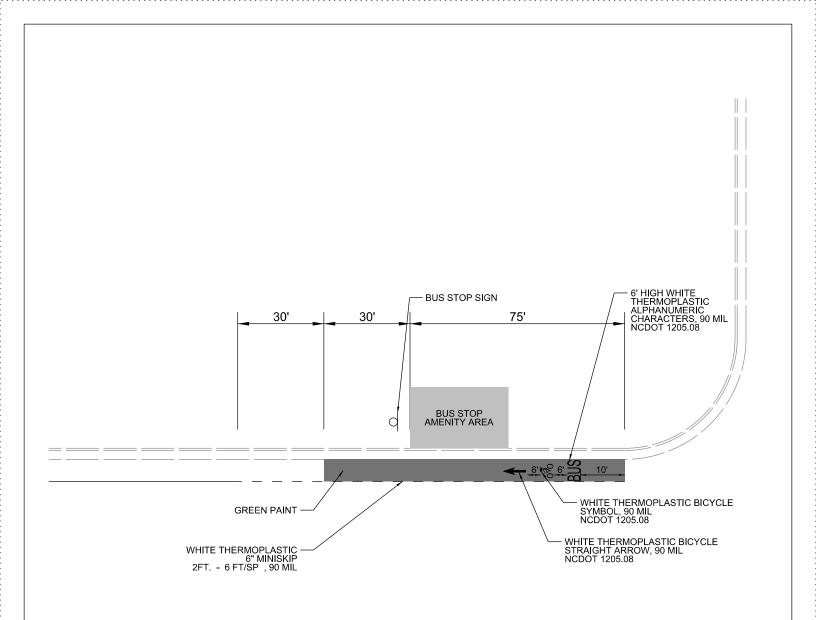
### FAR SIDE NO PARKING

SHEET 2 OF 3

### NOTES:

- 1. STOPS SERVING HIGH-FREQUENCY ROUTES SHOULD BE TWICE AS LONG AS THE DIMENSIONS SHOWN, OR AS OTHERWISE APPROVED BY THE TRANSIT DIVISION.
- 2. SEE TT-02 FOR BUS STOP PAD DESIGN SPECIFICATIONS.
- 3. THE BIKEWAY SHIFTING TAPER SHOULD BE 7:1 PREFERRED, 3:1 MINIMUM.

STANDARD DETAIL		
REVISIONS	DATE: 08/2023	NOT TO SCALE
		BUS STOP VEL BIKEWAY
	TT-	01.2



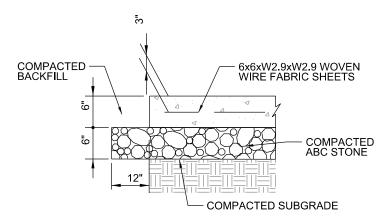
### **BUS STOP AT STREET-LEVEL BIKEWAY**

### NOTES:

- 1. STOPS SERVING HIGH-FREQUENCY ROUTES SHOULD BE TWICE AS LONG AS THE DIMENSIONS SHOWN, OR AS OTHERWISE APPROVED BY THE TRANSIT DIVISION.
- 2. SEE TT-02 FOR BUS STOP PAD DESIGN SPECIFICATIONS.

SHEET 3 OF 3

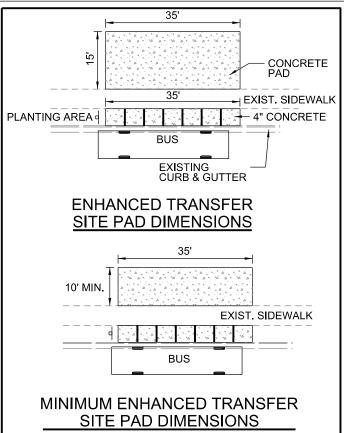
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	TYPICAL BUS STOP AT STREET-LEVEL BIKEWAY	
REVISIONS	DATE: 08/2023	NOT TO SCALE

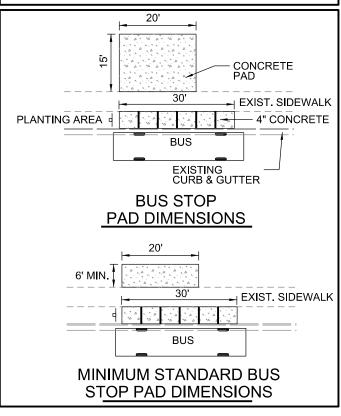


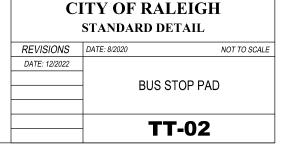
### CONCRETE PAD DETAILS

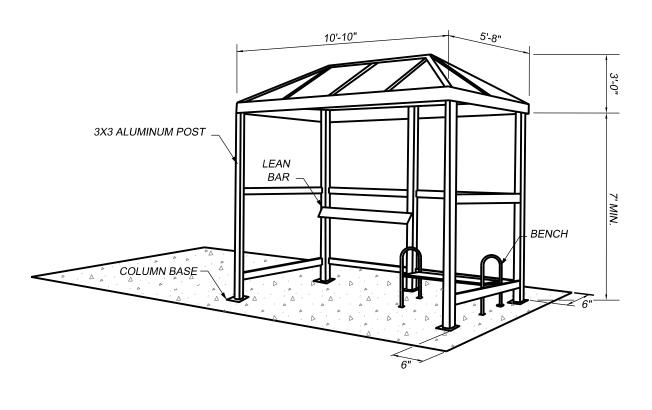
#### **GENERAL CONCRETE PAD NOTES:**

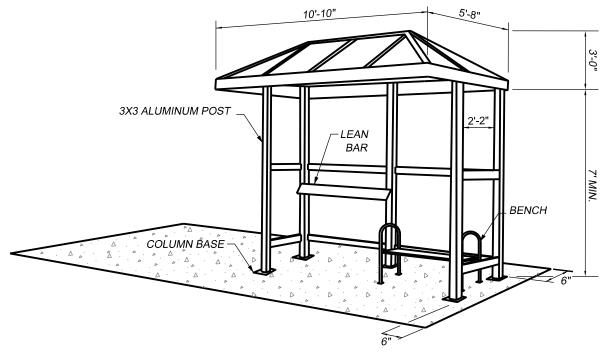
- 1. TYPICAL SECTION AND DIMENSIONS OF PAD ARE SUBJECT TO CHANGE DUE TO RIDERSHIP, AMENITIES TO BE INSTALLED, AND TO ENSURE PROPOSED FIXED OBJECTS ARE OUTSIDE THE CLEAR ZONE. COORDINATE WITH THE CITY OF RALEIGH & GORALEIGH, BY CALLING 919-996-4043 OR COMMUNICATING WITH TRANSIT DIVISION (TRANSPORTATION DEPARTMENT) STAFF.
- 2. CONCRETE PAD WILL CONSIST OF 3,000 PSI CONCRETE IN ACCORDANCE WITH NCDOT STANDARDS.
- 3. REINFORCE AS SHOWN IN TYPICAL SECTION. WOVEN WIRE FABRIC SHALL HAVE MINIMUM 6" OVERLAPS AND MINIMUM COVER OF 3" ON ALL SIDES.
- 4. WHERE PROPOSED SHELTER PAD ELEVATION IS ABOVE EXISTING GRADE, PROVIDE A 1' WIDE CONCRETE "BEAM" TO EXTEND A MINIMUM OF 6" BELOW THE EXISTING SURROUNDING GRADE WITH A 45° SECTION TO BRING BACK TO THE STANDARD 6" THICKNESS.
- 5, CONCRETE PAD WILL HAVE A BROOM FINISH.
- 6. 1.5%; 2.08% (48:1) MAX CROSS SLOPE.
- 7. EXTEND ABC 1' BEYOND EDGE OF PAD IN ALL DIRECTIONS EXCEPT WHERE BORDERED BY EXISTING PAVEMENT OR SIDEWALK.
- 8. WHERE HANDRAIL IS INSTALLED INCREASE PAD THICKNESS AS SHOWN ON THE HANDRAIL DETAIL STD. T-8.
- 9. EXPANSION JOINTS WILL BE INSTALLED AT ALL RIGID OBJECTS AND ADJACENT TO EXISTING PAVEMENT AND HAVE 1/8 " RADIUS TOOLED EDGE AND FILL WITH SEALER. JOINT SEALER TO BE GREY IN COLOR.
- 10. WHERE SIDEWALK IS EXISTING, PLACE CONCRETE IN BETWEEN THE SIDEWALK AND THE EDGE OF PAVEMENT OR CURBING. IF NO SIDEWALK IS EXISTING PLACE CONCRETE IN THREE (3) SECTIONS: THE UTILITY STRIP, THE SIDEWALK SECTION, AND THE SHELTER PAD.
- 11. SIDEWALK AND CONCRETE IN UTILITY STRIP AT BACK OF CURB WILL BE 4" THICK IN ACCORDANCE WITH THE STANDARD SIDEWALK SECTION.







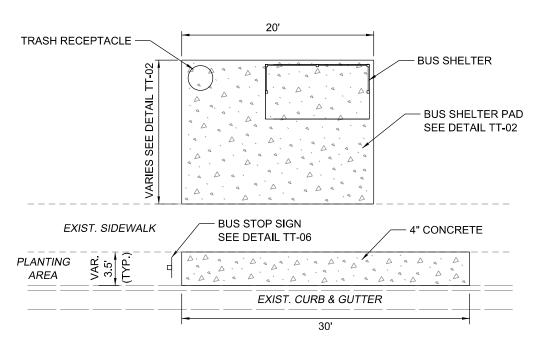




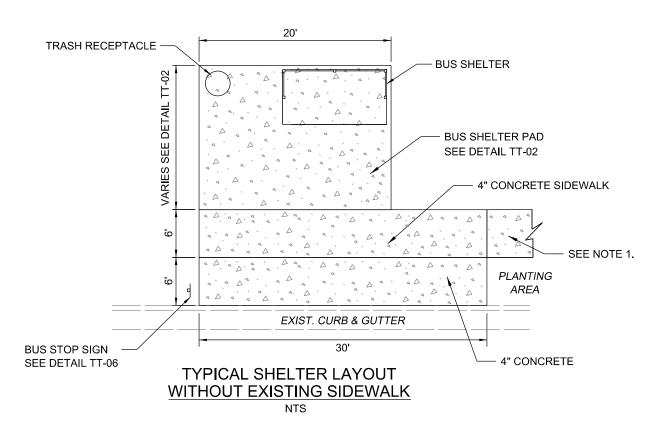
#### NOTES:

- 1. SHELTER SHOWN IS A 5'  $\times$  10' BRASCO SLIMLINE SERIES SL-0510-F/C WITH FULL SIDE WALLS (TOP), CANTILEVER SIDE WALLS (BOTTOM), OR APPROVED EQUAL. COORDINATE WITH CITY OF RALEIGH FOR SHELTER TYPE.
- 2. INSTALL COLUMN BASE 6" FROM EDGE OF CONCRETE PAD WITH APPROVED CONCRETE ANCHOR UNITS RECOMMENDED BY THE MANUFACTURER, TYPICAL UNLESS OTHERWISE SHOWN.
- 3. INSTALL BENCH ON OPPOSITE SIDE OF LEAN BAR. LEAN BAR IS MOUNTED ON SHELTER COLUMNS.
- 4. ALL CERTIFICATIONS OF STRUCTURES TO BE PROVIDED BY MANUFACTURER.
- 5. IF INSTALLED WITHIN NCDOT RIGHT-OF-WAY, SHELTER MUST BE ON THE NCDOT APPROVED PRODUCTS LIST.

	TT-03	
	BUS SHELTER LAYOU	Γ
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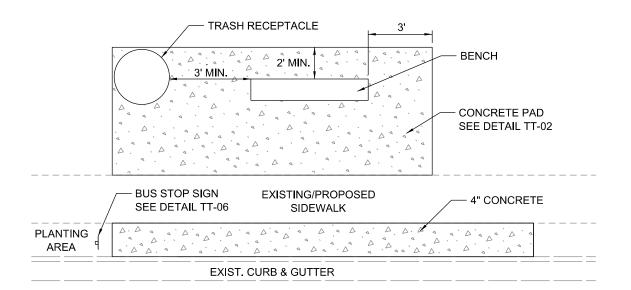
## TYPICAL SHELTER LAYOUT WITH EXISTING SIDEWALK NTS



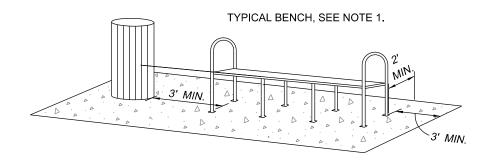
### NOTES:

- IF NO SIDEWALK CURRENTLY EXISTS, PROVIDE SIDEWALK TO NEAREST ADA ACCESSIBLE INTERSECTION OR DRIVEWAY WITH APPROPRIATE RAMPS. SIDEWALK AND PLANTING AREA WIDTH TO BE IN COMPLIANCE WITH THE CITY'S UDO. PROVIDE CURB RAMP IN ACCORDANCE WITH CITY STANDARDS.
- 2. BUS SHELTER SHALL BE MINIMUM 6" FROM EDGE OF CONCRETE PAD.
- 3. FIXED OBJECTS SHALL BE PLACED OUTSIDE OF THE CLEAR ZONE.

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## TYPICAL BENCH LAYOUT WITH EXISTING SIDEWALK

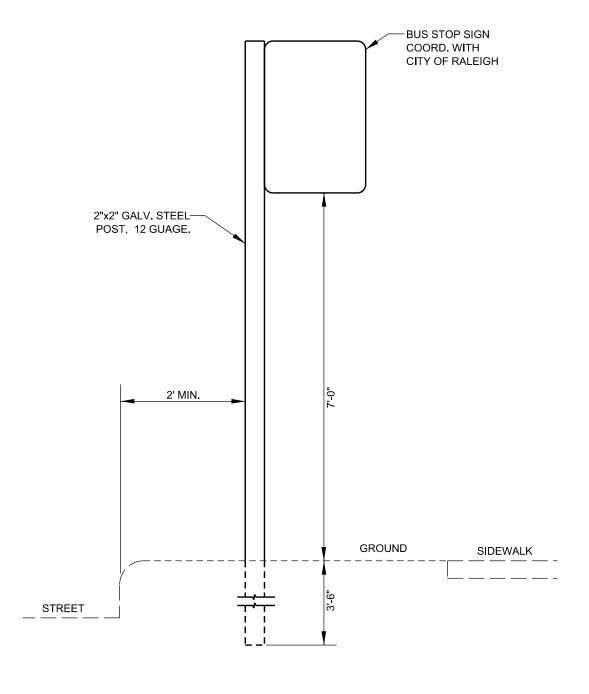


### BENCH SCHEMATIC

### NOTES:

- 1. BENCH STYLE SUBJECT TO CHANGE, COORDINATE WITH CITY.
- 2. BENCH SHOULD BE A MINIMUM OF 3' FROM THE SIDE OF THE CONCRETE PAD AND 2' FROM THE BACK EDGE OF THE CONCRETE PAD. COORDINATE LOCATION WITH THE CITY.
- 3. IF NO SIDEWALK CURRENTLY EXISTS, PROVIDE SIDEWALK TO NEAREST ADA ACCESSIBLE INTERSECTION OR DRIVEWAY WITH APPROPRIATE RAMPS.
- 4. FIXED OBJECTS SHALL BE PLACED OUTSIDE OF THE CLEAR ZONE.

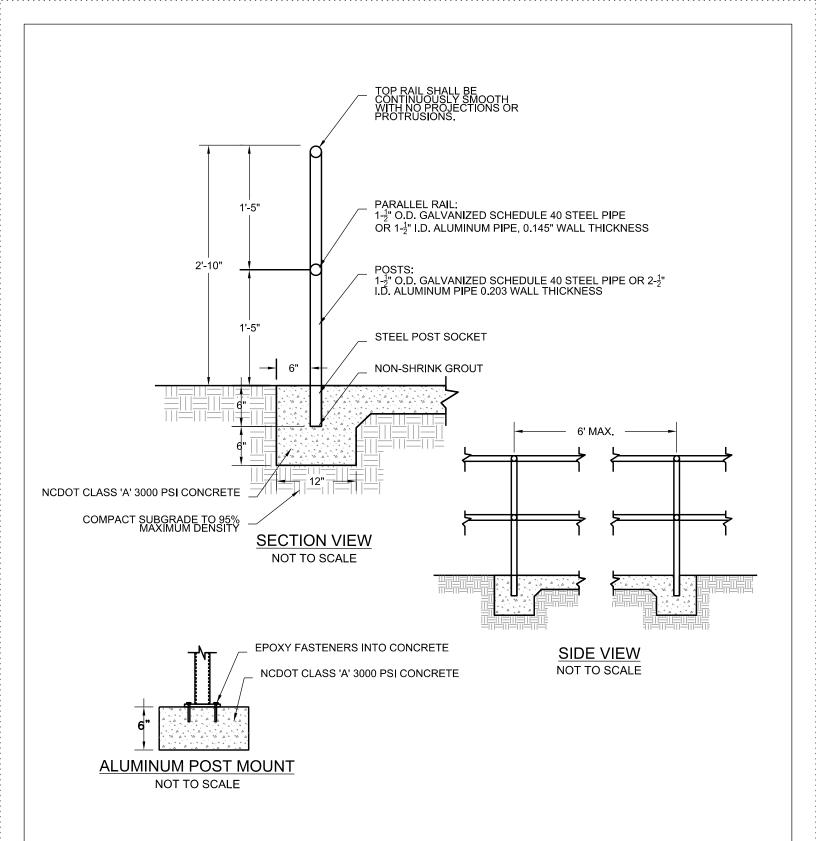
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DATE: 12/2022		
	SITE LAYOUT FOR BENC	Н
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### NOTES:

- 1. INSTALL SIGN AHEAD OF STOP 2' FROM CONCRETE SECTION IN UTILITY STRIP
- 2. CALL 811 FOR UNDERGROUND UTILITY LOCATION PRIOR TO INSTALLATION.

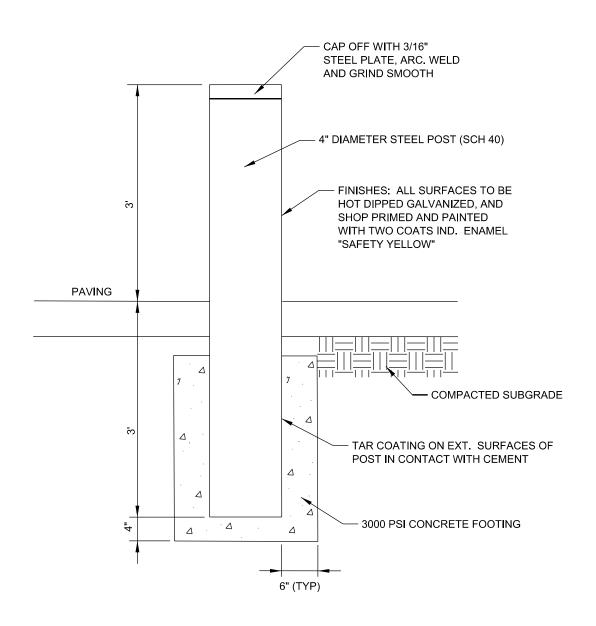
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### NOTES:

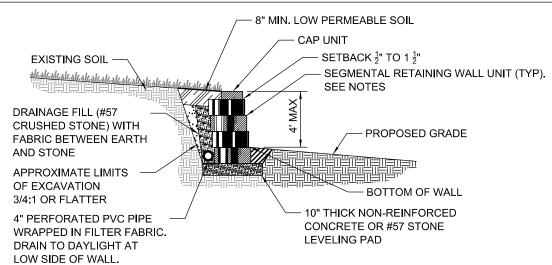
1. CONTRACTOR TO PROVIDE FULL SHOP DRAWINGS FOR HANDRAIL PRIOR TO INSTALLING.

	TT-07
	HANDRAIL INSTALLATION
	HANDRAIL INSTALLATION
REVISIONS	DATE: 8/2020 NOT TO SCALE

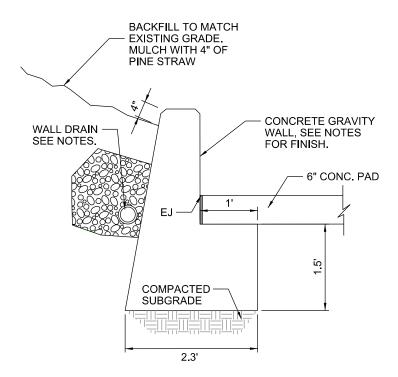


CITY OF RALEIGH	
STANDARD DETAIL	

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### SEGMENTAL GRAVITY RETAINING WALL



## REINFORCED CONCRETE GRAVITY RETAINING WALL

### SEGMENTAL GRAVITY RETAINING WALL NOTES:

- STANDARD UNIT WILL MEET NCDOT APPROVED VENDORS LIST. DIMENSIONS OF CONCRETE BLOCKS ARE TYPICALLY 18" WIDE BY 18" DEEP BY 8" TALL WITH PIN OR SIMILAR LOCKING MECHANISMS. BACK FILL VOIDS IN BLOCKS WITH #57 STONE TO TOP.
- 2. DO NOT MIX UNITS FROM DIFFERENT VENDORS ON SAME WALL.
- 3. TOP CAP UNIT WILL BE GLUED TO BLOCKS WITH ADHESIVE MEETING MANUFACTURERS RECOMMENDATIONS.
- DO NOT USE SEGMENTAL GRAVITY WALLS WHEN SURCHARGE LOADS WILL BE WITHIN 5'-6" OF THE BACK OF THE CAP UNIT.
- 5. DO NOT ATTACH FENCE OR HANDRAIL TO WALL.
- 6. WALL SIMILAR TO NCDOT STANDARD DRAWING 453.02.

### REINFORCED CONCRETE GRAVITY RETAINING WALL NOTES:

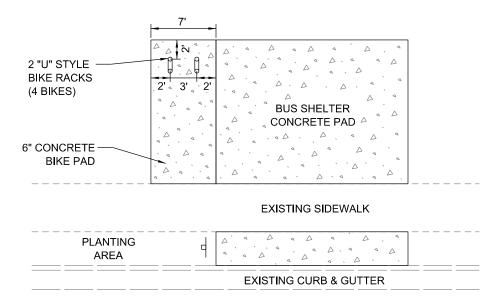
- USE CLASS A CONCRETE AND PROVIDE CLASS I SURFACE FINISH ON ALL EXPOSED SURFACES.
- 2. PROVIDE GROVED CONTRACTION JOINTS EVERY 10'-0".
- 3. PROVIDE 4" PERFORATED PVC DRAIN PIPE THE LENGTH OF THE WALL. WRAP PIPE WITH FILTER FABRIC AND PROVIDE 1' WIDE BY 1' DEEP WASHED STONE AROUND PIPE. TIE TO STORM DRAIN OR DAYLIGHT AT ENDS AND PROVIDE SOCK AROUND END OF PIPE.
- 4. DO NOT BACKFILL WALL UNTIL CONCRETE DEVELOPS A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. COMPACT BACKFILL AND COMPACT WITH HAND OPERATED EQUIPMENT.
- 5. TAPER ENDS OF WALL TO 6" ABOVE GRADE IN 3' MINIMUM. END OF WALL SHALL HAVE 6" HORIZONTAL CLEARANCE FROM THE EDGE OF SIDEWALK.
- 6. WALL SIMILAR TO NCDOT STANDARD DRAWING 453.01.

### **GENERAL NOTES:**

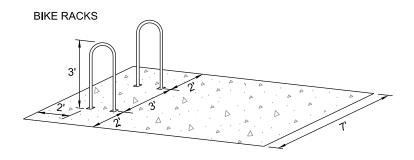
- 1. COORDINATE WITH CITY OF RALEIGH ON WHICH WALL TYPE TO USE.
- ALL RETAINING WALLS SHALL BE DESIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER.

### CITY OF RALEIGH

STANDARD DETAIL		
REVISIONS	DATE: 8/2020	NOT TO SCALE
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### $\frac{\mathsf{TYPICAL}\;\mathsf{BIKE}\;\mathsf{PAD}\;\mathsf{LAYOUT}}{\mathsf{NTS}}$



### BIKE RACK SCHEMATIC

### NOTES:

- 1. BIKE RACK TO BE 2" SCHEDULE 40 STEEL POWDER COATED BLACK.
- 2. COORDINATE LOCATION WITH THE CITY PRIOR TO INSTALLATION.

REVISIONS	DATE: 8/2020	NOT TO SCALE
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	BIKE PAD	
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