



1. STANDARD TRANSVERSE SLOPE OF SIDEWALK IS 2% TOWARDS CURB.
2. ALL SIDEWALKS SHALL HAVE A MINIMUM WIDTH OF 6 FT. WHEN SEPARATED FROM THE ROADWAY BY A BUFFER STRIP. THE WIDTH OF THE BUFFER STRIP SHOULD BE A MINIMUM OF 4 FT. PREFERABLY 6 FT. FOR TREE SPACE. WHERE UTILITY POLES, SIGN SUPPORTS, FIRE HYDRANTS, TREE BOXES ETC. ARE PROVIDED IN THE SIDEWALK, THE MINIMUM USABLE WIDTH OF SIDEWALK SHALL BE 4 FT. TO ALLOW FOR WHEELCHAIR PASSAGE.
3. WHEN MINIMUM SIDEWALK WIDTH REQUIREMENTS ARE MET, A WIDER TREESPACE SHALL BE PROVIDED IF THE RIGHT-OF-WAY ALLOWS.
4. ANY EXCEPTIONS TO MINIMUM SIDEWALK OR TREESPACE REQUIREMENTS REQUIRE THE ENGINEER'S APPROVAL.
5. PROVIDE, AT A MINIMUM, THE REQUIRED TREE SOIL VOLUME PER DDOT GREEN INFRASTRUCTURE STANDARDS.

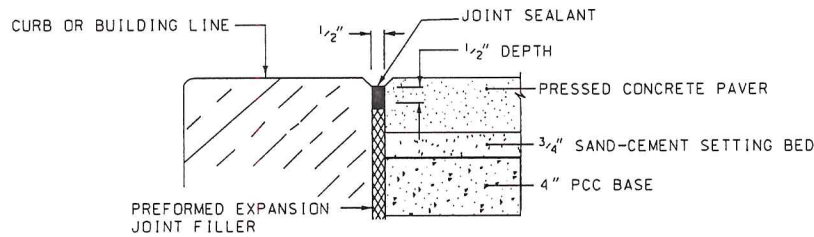
ISSUED: 8/2015		RECOMMENDED: 
REVISION	APPROVAL	PROJECT MANAGER
		APPROVED: 
		CHIEF ENGINEER

## TYPICAL SIDEWALK SECTIONS

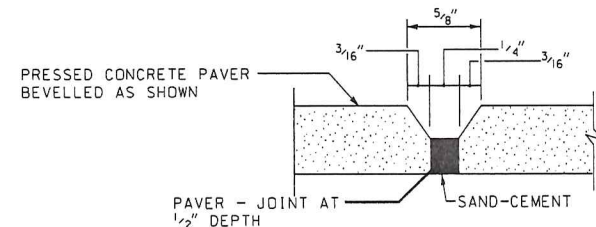
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DEPARTMENT OF TRANSPORTATION

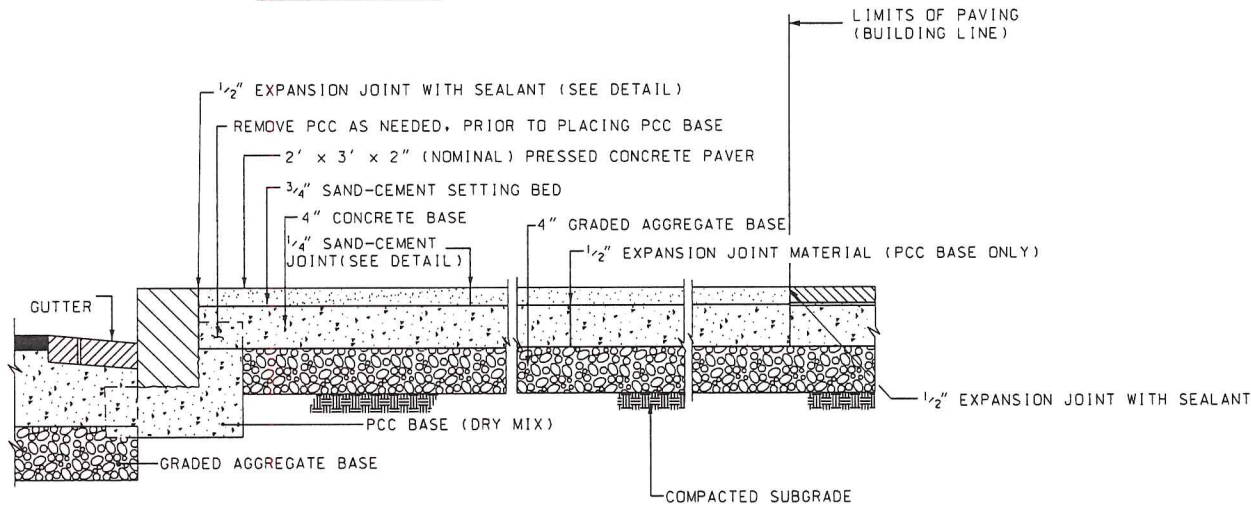
DWG. NO. 605.01



EXPANSION JOINT



PAVER-JOINT



TYPICAL CROSS-SECTION

PRESSED CONCRETE BLOCK PAVER SIDEWALK

NOTES:

1. ALL PRESSED CONCRETE PAVING BLOCKS SHALL HAVE A NON-SLIP SURFACE.
2. USE TRI-SECTED PATTERN, STARTING PERPENDICULAR AT CURB AND WORKING TOWARD BUILDING LINE.
3. SETTING BED SHALL BE SAND-CEMENT MIX, 2:1 BY VOLUME.
4. JOINTS SHALL BE SWEEPED WITH DRY SAND-CEMENT MIX, 2:1 BY VOLUME.
5. PAVING BLOCKS SHALL BE CUT TO FIT AROUND MANHOLES, VAULTS CATCH BASINS, CURBS, RAMPS, LIGHT POLES, KIOSKS AND FLAG POLES.
6. POURED CONCRETE SQUARE OR RECTANGULAR COLLARS AROUND SIDEWALK INTERRUPTIONS, USING AGGREGATE SIZE AND COLOR PER THE MANUFACTURER OF THE PRESSED CONCRETE PAVING BLOCKS, MAY BE USED SUBJECT TO APPROVAL BY THE ENGINEER.
7. USE PERPENDICULAR INTERSECTING PAVING PATTERN AT CORNERS.
8. PEPCO WILL FURNISH NEW STEEL VAULT COVERS IN LIEU OF THE EXISTING COVERS FILLED WITH CONCRETE. ONLY REMOVABLE TYPE VAULT COVERS WILL BE REPLACED. CONTRACTOR WILL INLAY PRESSED CONCRETE BLOCK PAVERS ON EPOXY MORTAR BED. JOINTS SHALL BE CONTINUOUS WITH SURROUNDING SIDEWALK PAVERS AS MUCH AS PRACTICABLE. LEVEL OF PAVERS SHALL BE FLUSH WITH ADJACENT GRADE.
9. CONTRACTOR SHALL NOTIFY PEPCO 3 WEEKS IN ADVANCE BEFORE PEPCO VAULT COVERS ARE READY TO BE REPLACED AND PAVED. ONLY PEPCO WILL REMOVE AND INSTALL THE STEEL VAULT COVERS.

ISSUED: 8/2015  
REVISION APPROVAL

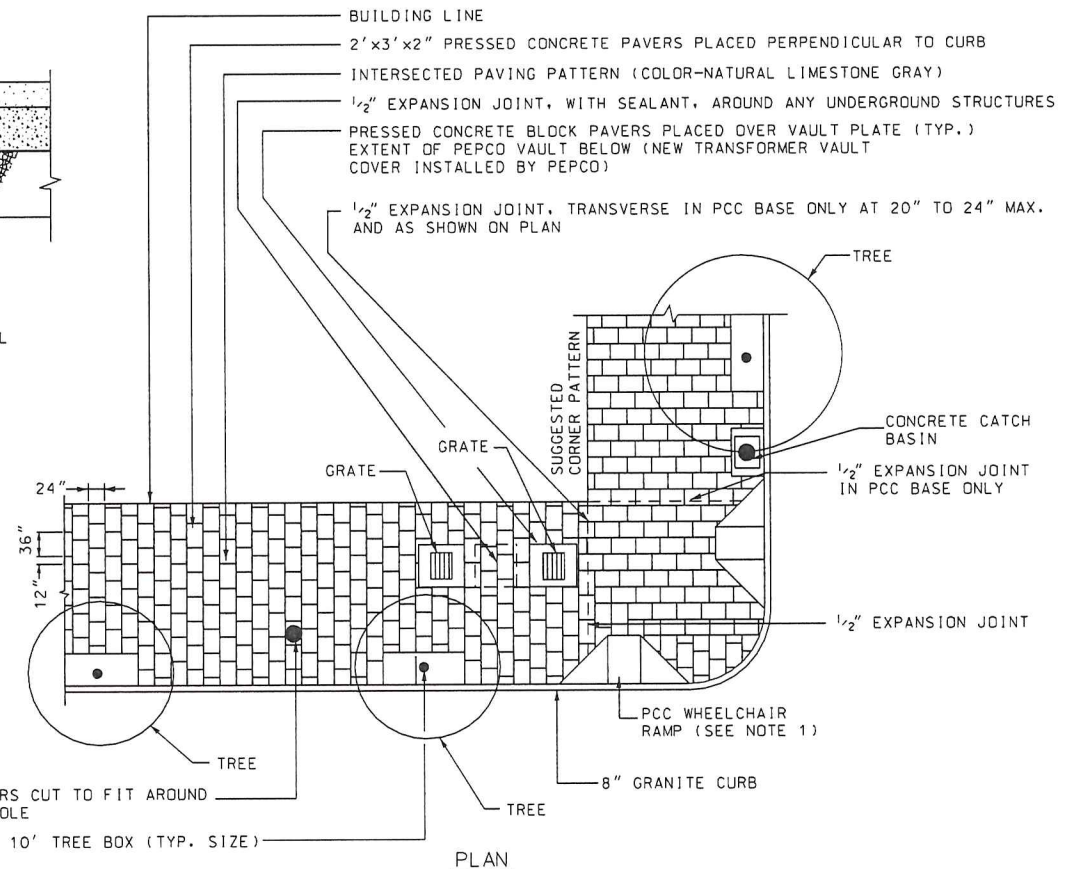
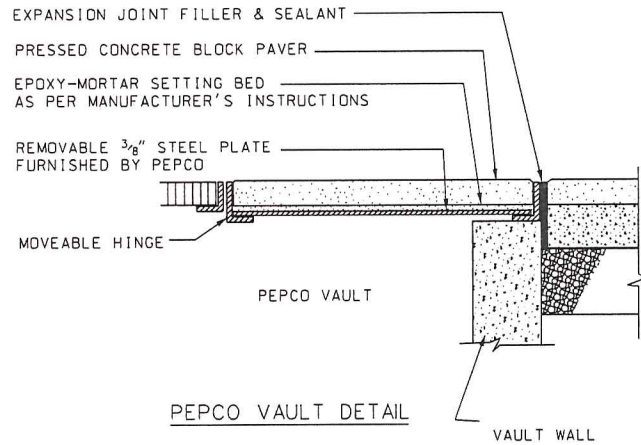
RECOMMENDED: *Adil Riaz*  
PROJECT MANAGER

APPROVED: *Muhammed Khelid*  
CHIEF ENGINEER

PRESSED CONCRETE BLOCK  
PAVER SIDEWALK

d. DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.02



**NOTE:**

1. SEE CONTRACT PLANS FOR EXACT LOCATION OF WHEELCHAIR RAMPS.

ISSUED: 8/2015

REVISION APPROVAL

RECOMMENDED:

*Adil Riaz*  
PROJECT MANAGER

APPROVED:

*Muhammed Kholid*  
CHIEF ENGINEER

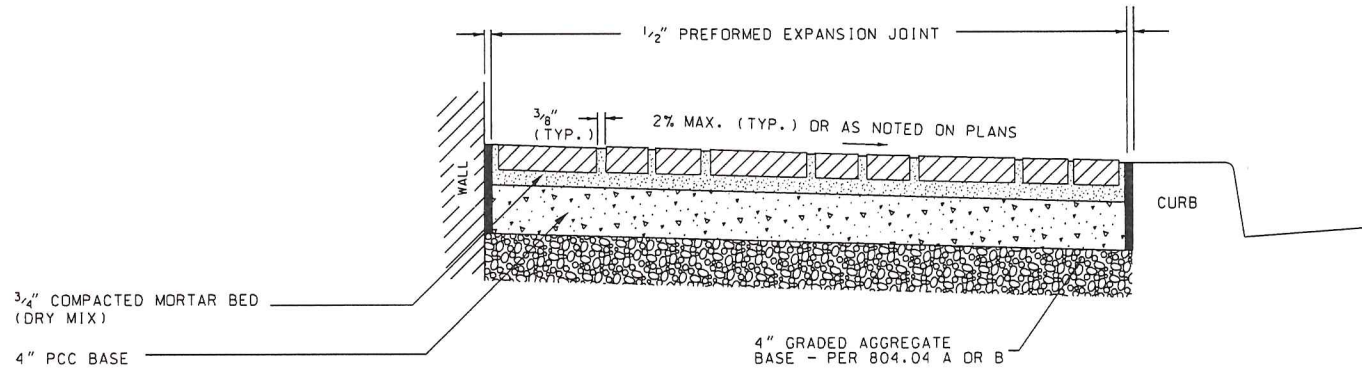
## PRESSED CONCRETE BLOCK PAVER PATTERN

d.

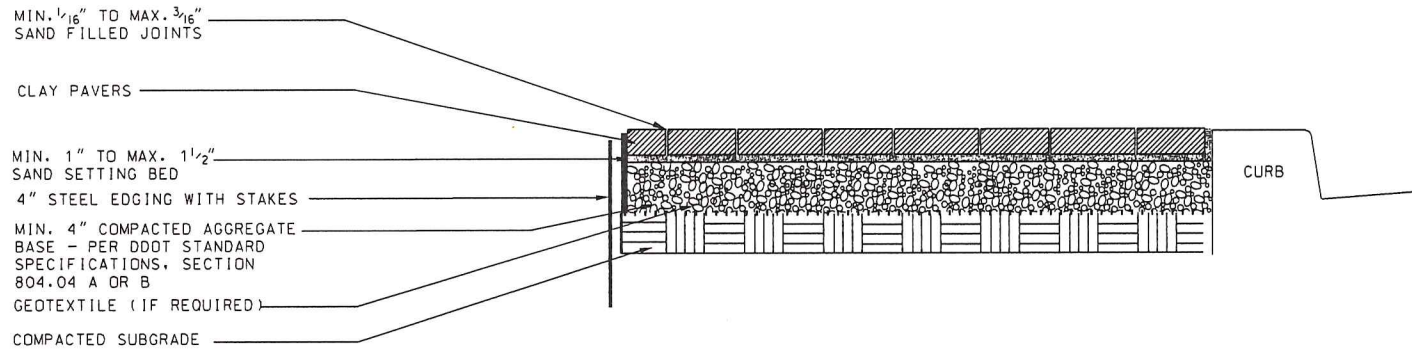
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DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.03





BRICK ON 4" PCC BASE - SECTION



BRICK ON SAND & GRAVEL BASE - SECTION

NOTES:

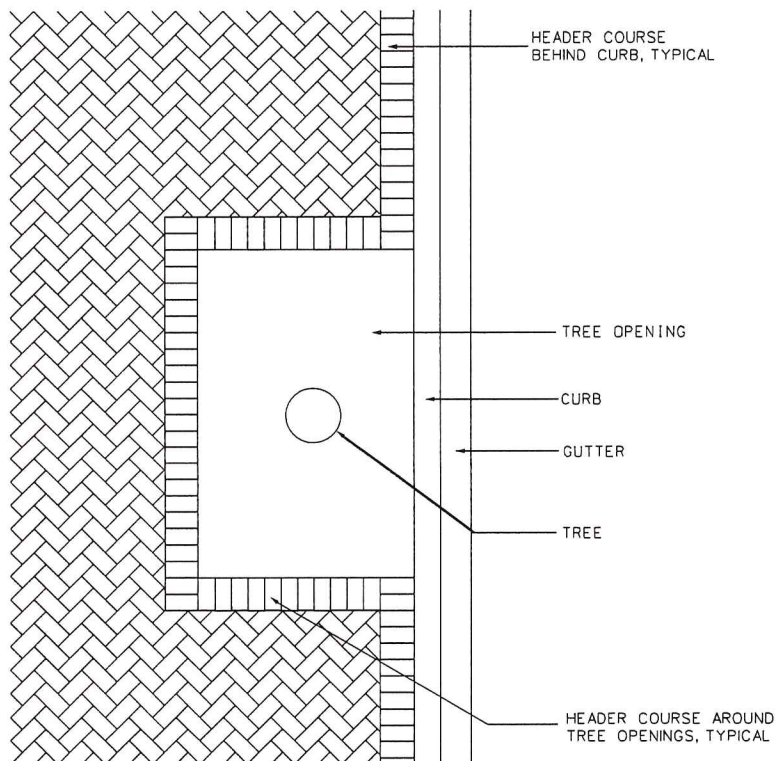
1. BRICK PATTERN SHALL BE AS SHOWN ON DWG NO. 605.05 OR PER APPROVED CONTRACT PLANS
2. SAND SHALL BE CONCRETE SAND (ASTM C33), OR APPROVED EQUAL
3. BRICK ON SAND & GRAVEL TO BE USED ONLY WITH APPROVAL FROM THE CHIEF ENGINEER

ISSUED: 8/2015	RECOMMENDED: <i>Adil Riaz</i>
REVISION	APPROVAL
	PROJECT MANAGER
	APPROVED: <i>Muhammed Khalid</i>
	CHIEF ENGINEER

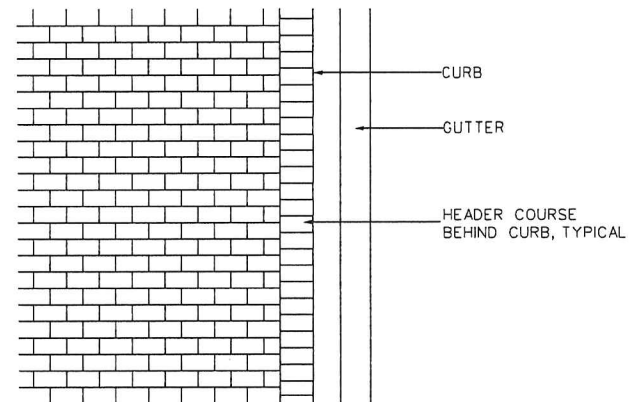
BRICK SIDEWALK SETTING BED

d. DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

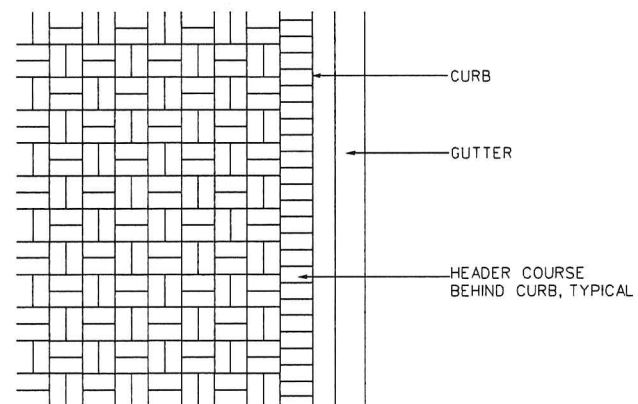
DWG. NO. 605.04



HERRINGBONE PATTERN



RUNNING BOND PATTERN



BASKET WEAVE PATTERN

NOTES:

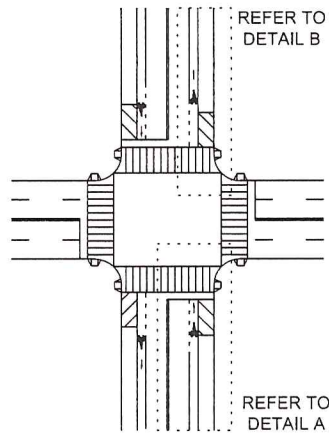
1. REFER TO DWG. NO. 605.04 FOR BRICK SETTING BED.
2. REFER TO CHAPTER 31 IN DESIGN AND ENGINEERING MANUAL FOR MORE INFORMATION.

ISSUED: 8/2015	RECOMMENDED: <i>Adil Riaz</i>
REVISION	APPROVAL
	PROJECT MANAGER
	APPROVED: <i>Muhammed Khelid</i>
	CHIEF ENGINEER

PATTERNS FOR BRICK SIDEWALK

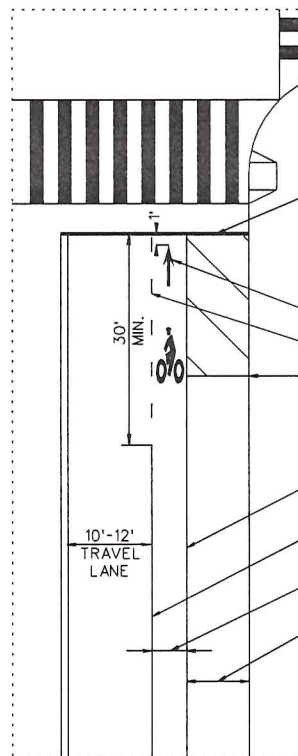
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DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.05

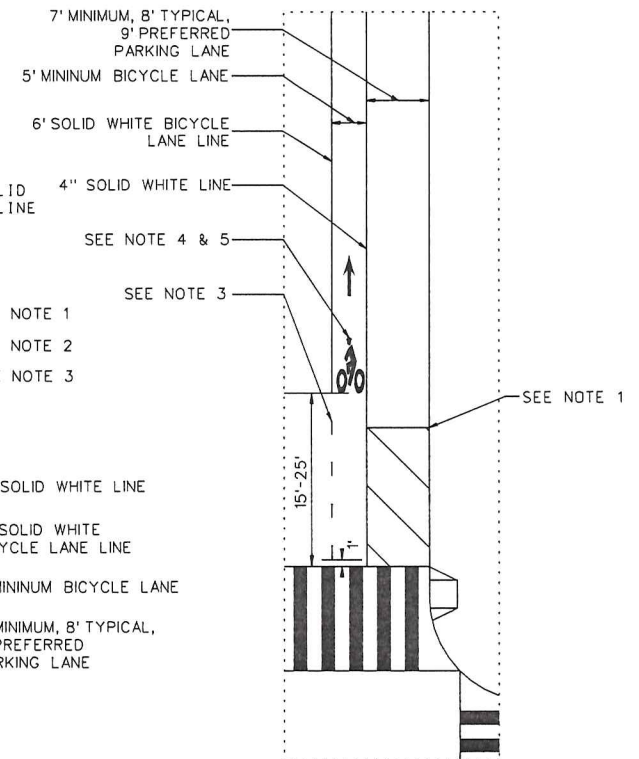


**NOTES:**

1. SEE DETAILS IN MUTCD SECTION 9C. LOCATE ARROW OF BICYCLE SYMBOL 1' FROM STOP LINE IF NO DETECTOR IS PRESENT. IF DETECTOR IS PRESENT SEEK GUIDANCE FROM DDOT.
2. USE DASHED LINE WHEN VEHICULAR RIGHT TURNS ARE ALLOWED (FROM ADJACENT ROADWAY). OTHERWISE USE SOLID LINE. 6" WHITE, DASHED BIKE LANE STRIPE - 2' SOLID WITH 4' GAP
3. TRANSVERSE LINE SHALL MATCH "NO PARKING" SIGN LOCATION IF PROVIDED. SEE CHAPTER 46 IN DESIGN AND ENGINEERING MANUAL FOR PARKING DESIGN CRITERIA.
4. SEE DETAIL 605-19. PLACE 4" FROM BEGINNING OF PARKING ZONE OUTSIDE OF TURNING VEHICLE WHEEL TRACK.
5. SYMBOLS SHALL BE PLACED ACCORDING TO AASHTO STANDARDS.



**DETAIL A**  
**BICYCLE LANE STRIPING**  
**NEAR SIDE OF INTERSECTION**



**DETAIL B**  
**BICYCLE LANE STRIPING**  
**FAR SIDE OF INTERSECTION**

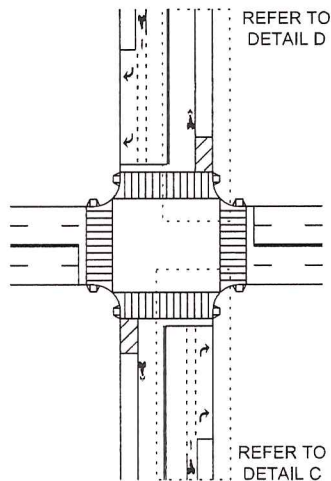
ISSUED:	8/2015
REVISION	APPROVAL

RECOMMENDED:	<i>Adil Riaz</i>
	PROJECT MANAGER
APPROVED:	<i>Muhammed Khalid</i>
	CHIEF ENGINEER

**BICYCLE TREATMENT**  
**AT INTERSECTION**  
**DETAIL A & B**

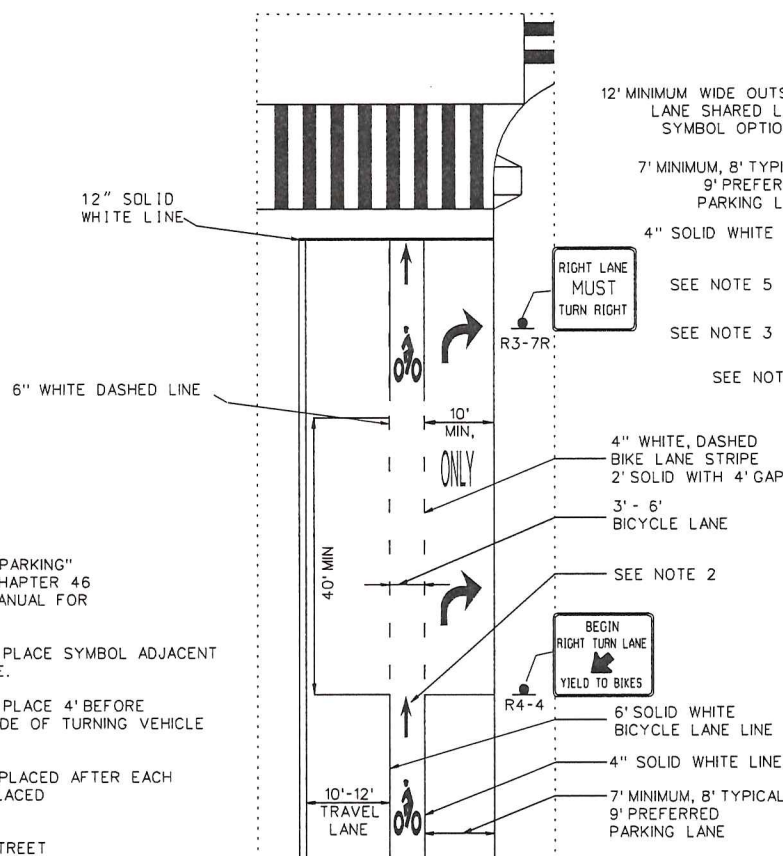
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DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.06

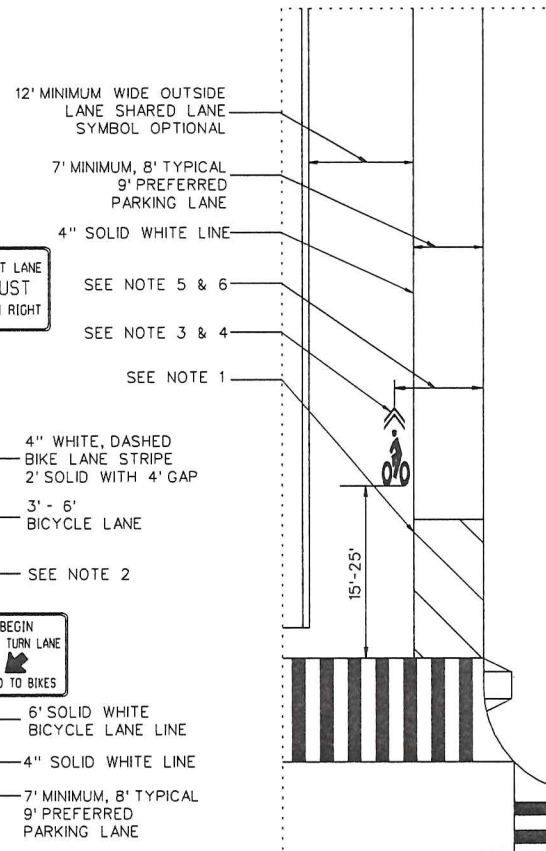


**NOTES:**

1. HATCHED AREA SHALL MATCH "NO PARKING" SIGN LOCATION IF PROVIDED. SEE CHAPTER 46 IN THE DESIGN AND ENGINEERING MANUAL FOR PARKING DESIGN CRITERIA.
2. SEE DETAILS IN MUTCD SECTION 9. PLACE SYMBOL ADJACENT TO BEGINNING OF RIGHT TURN LANE.
3. SEE DETAILS IN MUTCD SECTION 9. PLACE 4' BEFORE BEGINNING OF PARKING ZONE OUTSIDE OF TURNING VEHICLE WHEEL TRACK.
4. SHARED LANE SYMBOLS SHALL BE PLACED AFTER EACH INTERSECTION. SYMBOLS MAY BE PLACED EVERY 250' THEREAFTER.
5. IF USED ON ROADWAYS WITH ON-STREET PARKING, SYMBOLS SHALL BE PLACED SO THAT THEIR CENTERS ARE A MINIMUM OF 11' FROM THE ADJACENT CURBFACE.
6. SYMBOLS PLACED IN A SHARED LANE WITHOUT PARKING SHALL BE PLACED SO THAT THEIR CENTERS ARE A MINIMUM OF 4' FROM THE ADJACENT CURBFACE.



**DETAIL C**  
**BICYCLE LANE STRIPING ADJACENT**  
**TO SEPARATE RIGHT TURN LANE**



**DETAIL D**  
**BICYCLE LANE STRIPING**  
**SHARED LANE SYMBOL PLACEMENT**

ISSUED: 8/2015	RECOMMENDED: <i>Adil Riaz</i>
REVISION	APPROVAL
	PROJECT MANAGER
	APPROVED: <i>Muhammed Khalid</i>
	CHIEF ENGINEER

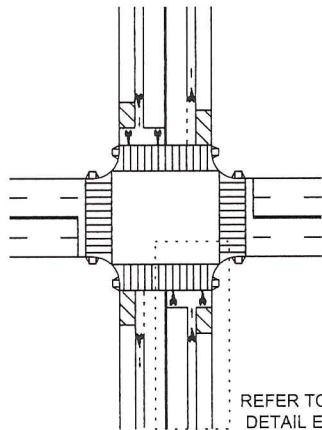
**BICYCLE TREATMENT**  
**AT INTERSECTION**  
**DETAIL C & D**

**d.**

DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

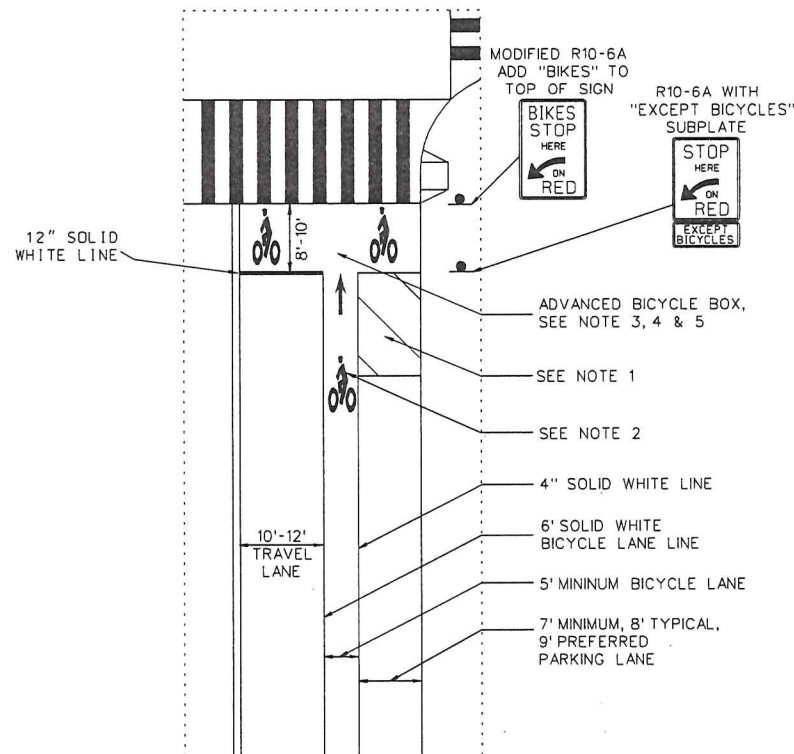
DWG. NO. 605.07





**NOTES:**

1. HATCHED AREA SHALL MATCH "NO PARKING" SIGN IF PROVIDED. SEE CHAPTER 46 IN THE DESIGN AND ENGINEERING MANUAL FOR PARKING DESIGN CRITERIA.
2. SEE DETAILS IN MUTCD SECTION 9. SYMBOLS SHALL BE PLACED AFTER EACH INTERSECTION. SYMBOLS MAY BE PLACED EVERY 250' THEREAFTER.
3. PLACE MULTIPLE SYMBOLS WITHOUT ARROW TO IDENTIFY BICYCLE BOX. UTILIZE WHERE BICYCLISTS ARE EXPERIENCING CONFLICTS WITH VEHICULAR TURNING MOVEMENTS.
4. PLACE 8' - 10' IN ADVANCE OF CROSSWALK WITH R10-6A SIGN. BREAK STOP LINE AT BICYCLE LANE.
5. BIKE BOX COLOR SHALL BE APPROVED BY DDOT BIKE COORDINATOR.



**DETAIL E**  
**BICYCLE BOX**  
**AT SIGNALIZED INTERSECTIONS**

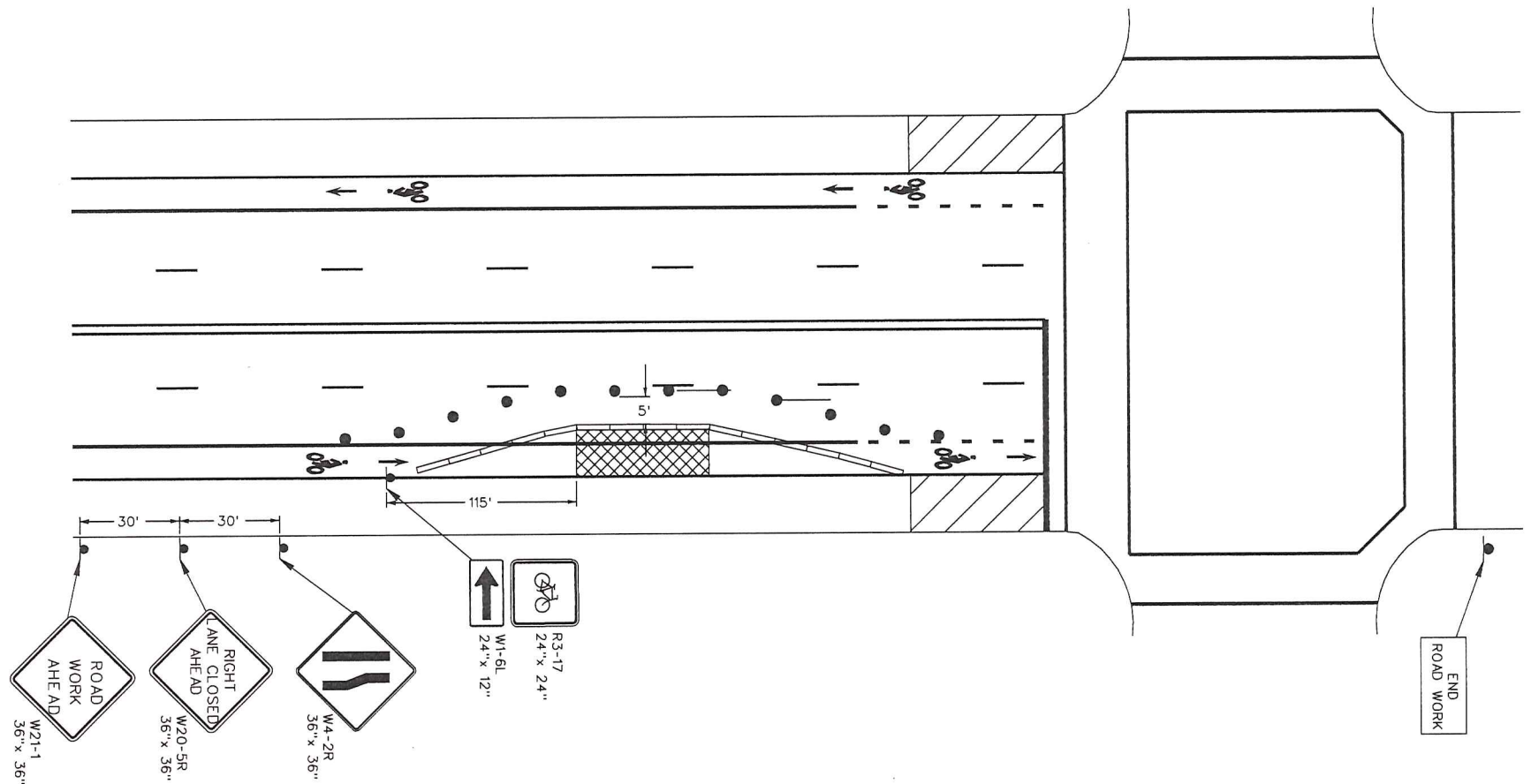
ISSUED: 8/2015		RECOMMENDED: <i>Adil Riaz</i> PROJECT MANAGER
REVISION	APPROVAL	
		APPROVED: <i>Muhammed Kholid</i> CHIEF ENGINEER

**BICYCLE TREATMENT  
AT INTERSECTION  
DETAIL E**

**d.** DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.08





# LEGEND

- CHANNELIZING DEVICES
- ▨ WORK ZONE
- ▬ BARRIERS
- ⬮ SIGNS

## NOTES:

1. CONTRACTOR MAY EXTEND WORK ZONE TO FACE OF CURB FOR STAGING OR CONVENIENCE OF OPERATION, AS APPROVED BY DDOT.
2. CONTRACTOR SHALL COORDINATE WITH DDOT BIKE COORDINATOR IF ONE TRAVEL LANE CAN NOT BE MAINTAINED.

ISSUED: 8/2015

REVISION APPROVAL

RECOMMENDED:

*Attila Ruj*  
PROJECT MANAGER

APPROVED:

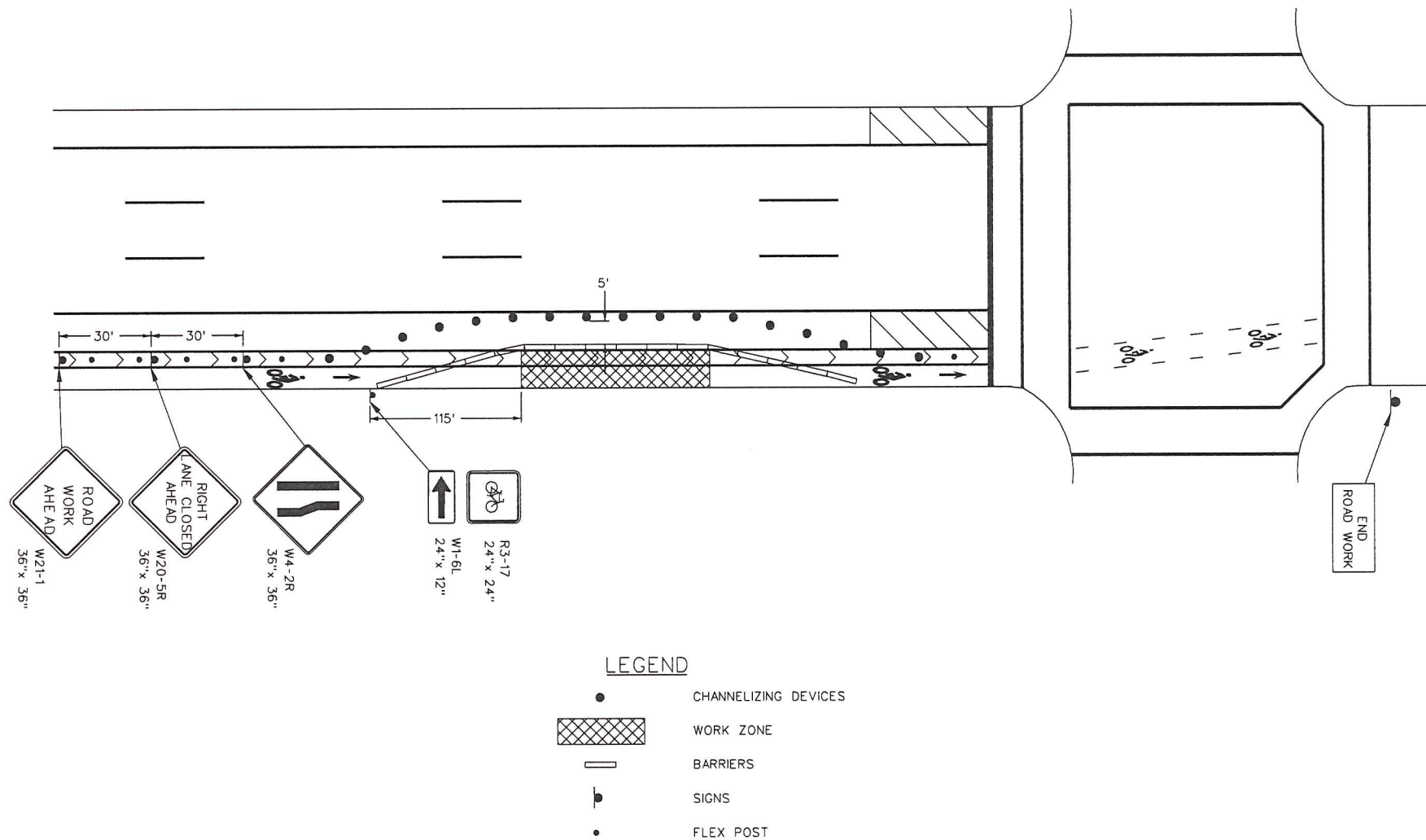
*Muhammed Khalid*  
CHIEF ENGINEER

## BIKE LANE CLOSURE

d.

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DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.09



ISSUED: 8/2015

REVISION	APPROVAL

RECOMMENDED: *Attila Rig*

PROJECT MANAGER

APPROVED: *Muhammed Khalid*

CHIEF ENGINEER

## BIKE LANE CLOSURE ONE-WAY PROTECTED BIKE LANE

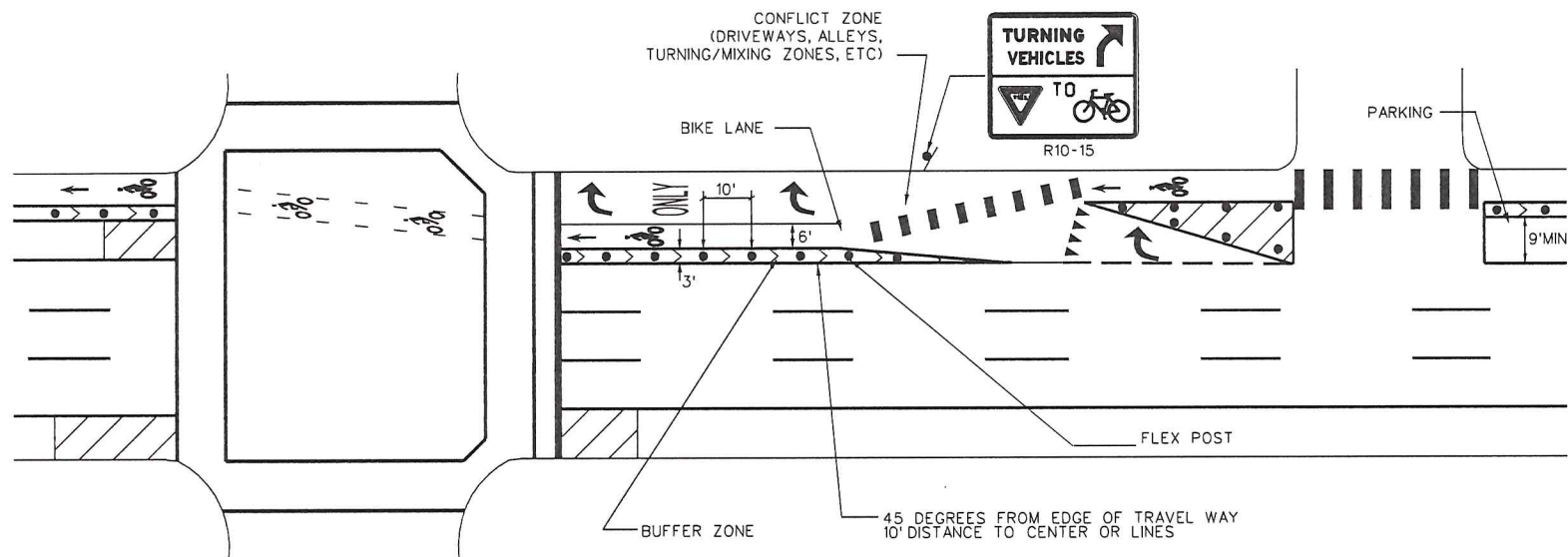
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DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.10

605.11





NOTES:

1. PARKING - 7' MIN, 8' TO 9' PREFERRED
2. BIKE LANE WIDTH - 5' MINIMUM, 6' PREFERRED
3. BUFFER ZONE - 2' MIN, 3' PREFERRED
4. FLEX POST SPACING - 10'
5. STANDARD FLEX POSTS SHALL BE 28" HIGH, WHITE, WITH 3M HIGH INTENSITY GRADE REFLECTIVE SHEETING, 1.5 LB HEAVY DUTY BASE AND CONFORMS TO MUTCD & NCHRP 350 STANDARDS
6. CONFLICT ZONE SHALL BE PAINTED GREEN, AS DIRECTED BY DDOT BIKE COORDINATOR.

ISSUED: 8/2015

RECOMMENDED:

APPROVED:

PROJECT MANAGER

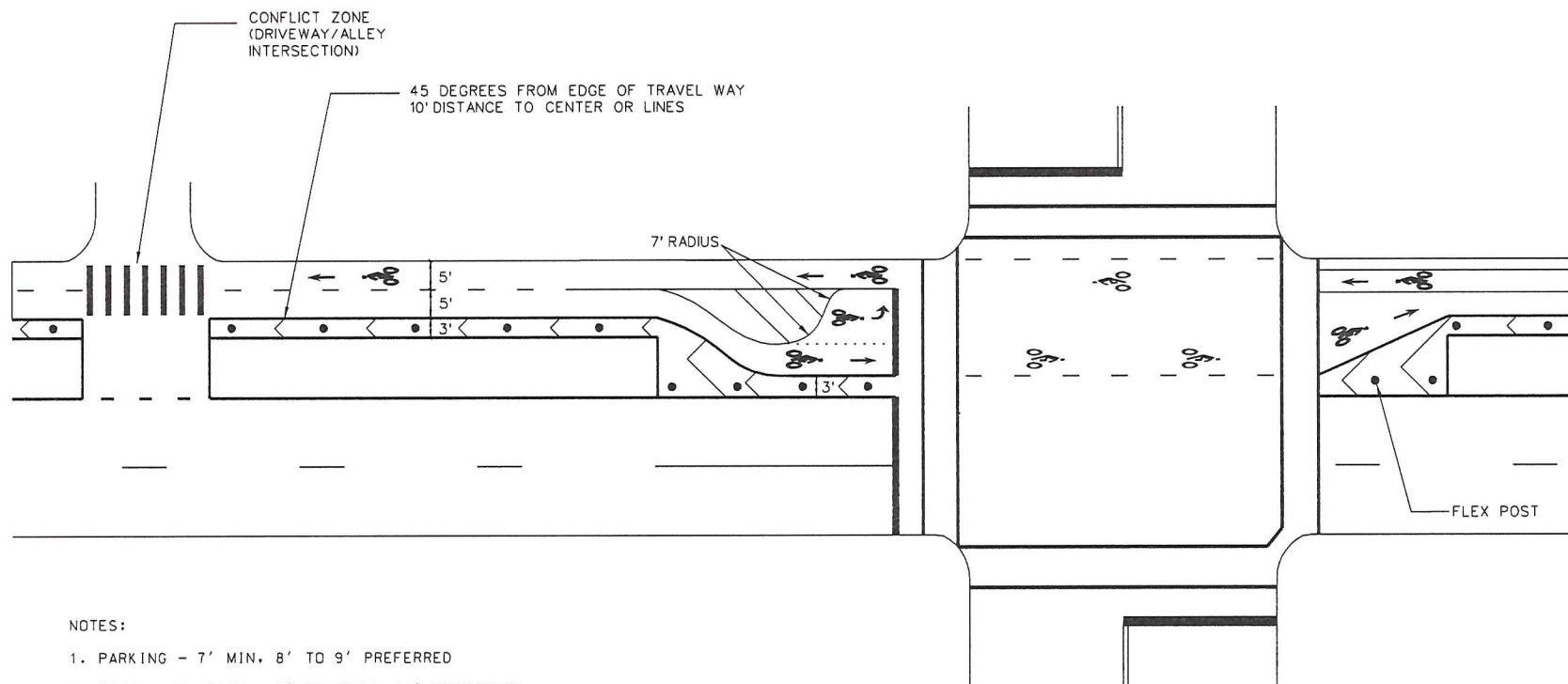
CHIEF ENGINEER

## ONE-WAY PROTECTED BIKE LANE WITH PARKING

d.

DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.12



NOTES:

1. PARKING - 7' MIN, 8' TO 9' PREFERRED
2. BIKE LANE WIDTH - 8' MINIMUM, 10' PREFERRED
3. BUFFER ZONE - 2' MIN, 3' PREFERRED
4. FLEX POST SPACING - 10'
5. STANDARD FLEX POSTS SHALL BE 28" HIGH, WHITE, WITH 3M HIGH INTENSITY GRADE REFLECTIVE SHEETING, 1.5 LB HEAVY DUTY BASE AND CONFORMS TO MUTCD & NCHRP 350 STANDARDS
6. CONFLICT ZONE SHALL BE PAINTED GREEN, AS DIRECTED BY DDOT BIKE COORDINATOR.
7. NUMBER OF LANES VARIES.

ISSUED: 8/2015

REVISION APPROVAL

RECOMMENDED:

*Adil Riaz*  
PROJECT MANAGER

APPROVED:

*Muhammed Khalid*  
CHIEF ENGINEER

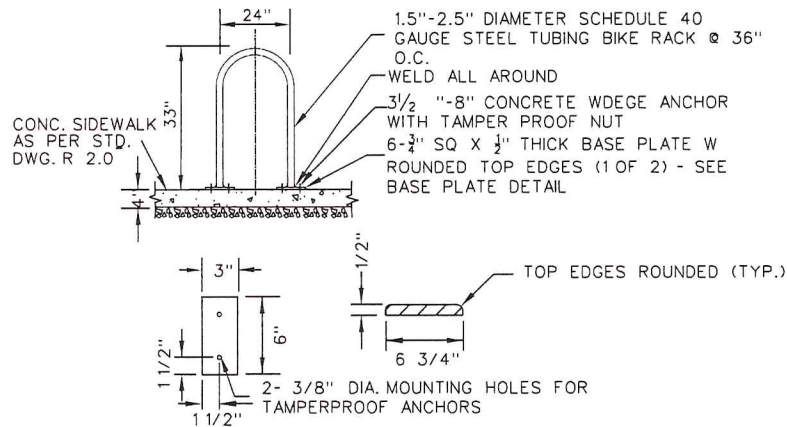
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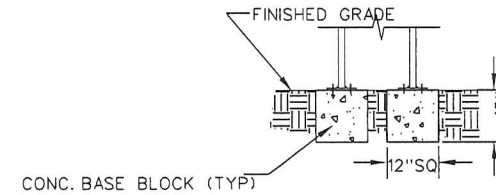
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DEPARTMENT OF TRANSPORTATION

DWG. NO.

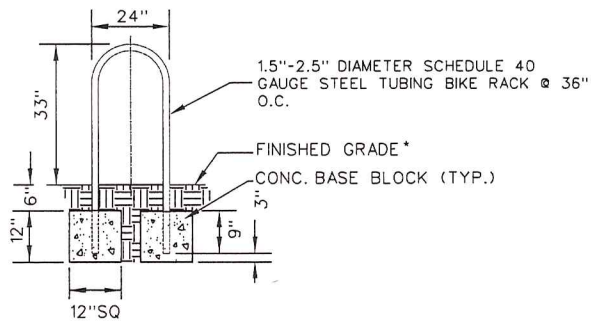
605.13



BASE PLATE DETAIL



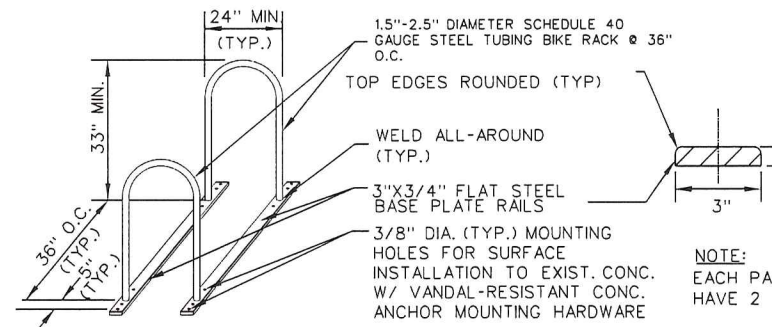
WITH BASE PLATE-INDIVIDUAL RACK



\* FINISHED GRADE SHALL BE:

- INTERLOCKING CONC. OR BRICK PAVERS AS PER STD. DWG. R-2.1, OR
- CONC. SIDEWALK AS PER STD. DWG. R-2.0, OR
- ASPHALT PAVEMENT/SIDEWALK, OR
- FINISHED GRAVEL, OR
- UNPAVED GRADE/GRASS STRIP

WITHOUT BASE PLATE



WITH BASE PLATE-MULTIPLE RACK

NOTES:

- ALL CONC. SHALL BE TYPE A-3.
- ALL RACKS & BASE PLATES SHALL BE HOT-DIP GALVANIZED AND FINISHED WITH GLOSS BLACK PVC COATING BEFORE MOUNTING IN PLACE.
- SQUARE TUBING IS ACCEPTABLE.
- STAINLESS STEEL FINISH IS ACCEPTABLE.

ISSUED: 8/2015	RECOMMENDED: <i>Adil Raza</i>
REVISION	APPROVAL
	PROJECT MANAGER
	APPROVED: <i>Muhammed Kholid</i>
	CHIEF ENGINEER

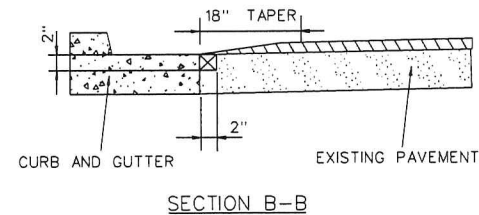
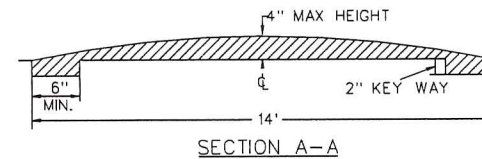
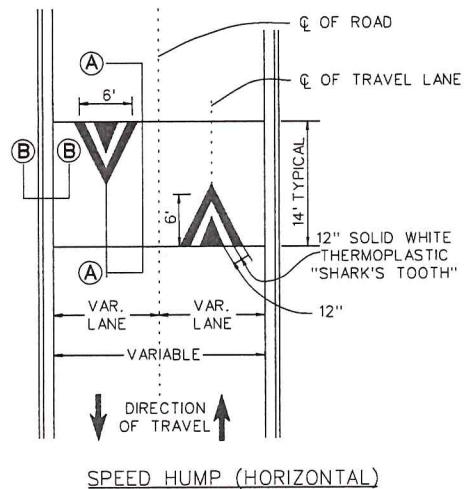
BIKE RACK

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DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.14





**NOTE:**

1. SPEED HUMPS SHOULD NOT BE CONSIDERED ON: EMERGENCY AND EVACUATION ROUTES; ROADWAYS WITH GRADES OF 8% OR MORE; ARTERIALS OR COLLECTOR STREETS AND THROUGH BUS OR TRUCK ROUTES; AT DRIVEWAYS, ENTRANCES AND/OR ALLEYS; AVOID UTILITIES; DRAINAGE STRUCTURES.
2. SPEED HUMPS SHOULD NOT BE PLACED WITHIN 150 FEET OF AN UNSIGNALIZED INTERSECTION OR 250 FEET OF A SIGNALIZED INTERSECTION.
3. SPEED HUMPS ARE TYPICALLY PLACED 250-550 FEET APART.
4. REFER TO "DOT TRAFFIC CALMING ASSESSMENT APPLICATION (APRIL 2012)" FOR ADDITIONAL INFORMATION.
5. TYPICALLY A HUMPS IS 14' BUT CAN BE BETWEEN 10' AND 14' IN LENGTH AND HEIGHT CAN BE BETWEEN 3" AND 4" WITH TYPICAL HEIGHT BEING 4".

ISSUED: 8/2015

REVISION APPROVAL


RECOMMENDED:

*Attilio Rizzo*  
PROJECT MANAGER

APPROVED:

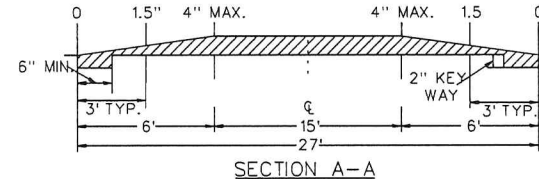
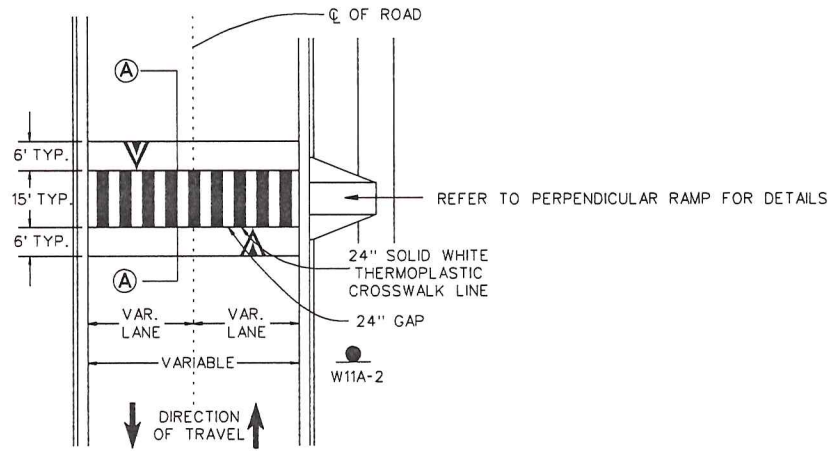
*Muhammed Kholid*  
CHIEF ENGINEER

**TRAFFIC CALMING  
SPEED HUMPS  
STANDARD DRAWINGS**

**d.**

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DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.15



RAISED CROSSWALK (HORIZONTAL)

NOTES:

1. THE WIDTH FOR RAISED CROSSWALK WILL BE 15 FOOT FOR COLLECTOR ROADS, 10 FOOT FOR LOCAL ROADS, 20 FOOT FOR ARTERIAL ROADS. THE MAX HEIGHT IS 4" BUT CAN BE 3" IF NECESSARY.
2. REFER TO "DDOT TRAFFIC CALMING ASSESSMENT APPLICATION (APRIL 2012)" FOR ADDITIONAL INFORMATION.
3. IF PERPENDICULAR RAMP IS NOT FEASIBLE THEN REFER TO OTHER RAMP DETAILS.

ISSUED:	8/2015
REVISION	APPROVAL

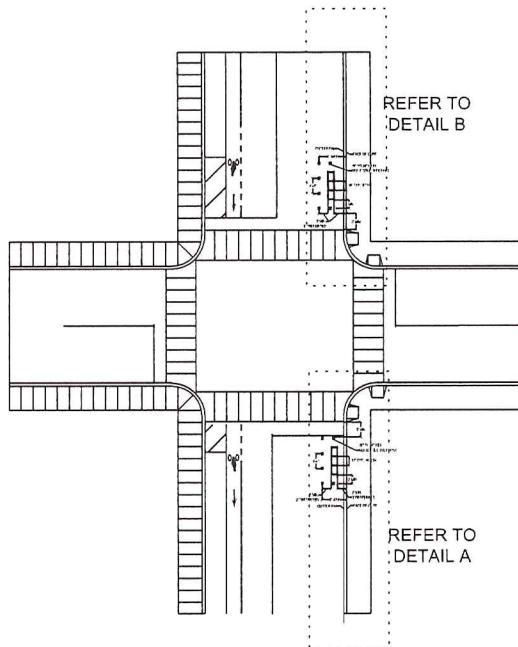
RECOMMENDED: *Adil Riaz*  
PROJECT MANAGER

APPROVED: *Muhammed Khalid*  
CHIEF ENGINEER

TRAFFIC CALMING  
RAISED CROSSWALK

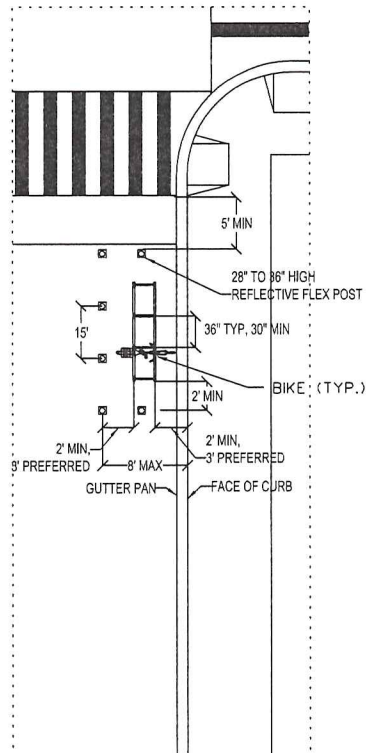
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DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.16

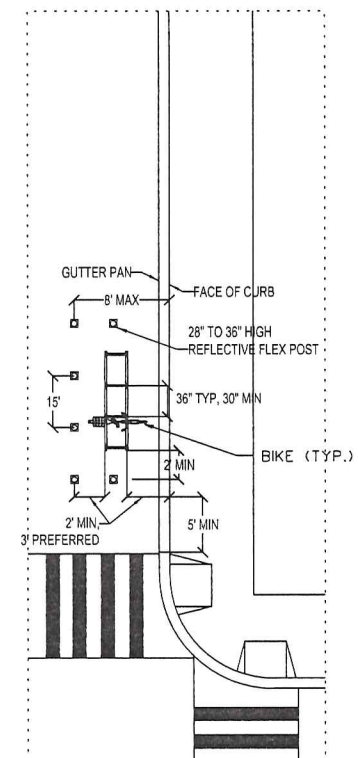


**NOTES:**

1. RACK ELEMENTS SHALL BE "INVERTED U" TYPE OR SIMILAR (SEE DWG. NO. 605.14).
2. SHALL BE LOCATED WITHIN AN EXISTING OR PROPOSED FULL-TIME PARKING ZONE ONLY.
3. RACKS SHALL BE FASTENED TO ROADWAYS.
4. RACKS TYPICALLY MOUNTED ON GALVANIZED STEEL RAILS.
5. NUMBER OF RACKS VARIES TYPICALLY FROM 2 TO 6.
6. ON-STREET BICYCLE PARKING SHALL ONLY BE USED WHEN THERE IS NOT SUFFICIENT SPACE ON THE SIDEWALK FOR THE DEMAND.
7. ON-STREET BICYCLE PARKING SHALL BE LOCATED ON STREETS WITH BIKE LANES OR ON LOW VOLUME, LOW SPEED STREETS.
8. IF USED ON HIGHER VOLUME, HIGHER SPEED STREETS, ON-STREET BICYCLE PARKING SHALL LOCATED IN SUCH A WAY THAT CYCLISTS WILL LOAD AND UNLOAD BIKES FROM THE SIDEWALK.
9. TO BE INSTALLED WITH APPROVAL FROM DDOT CHIEF ENGINEER.



**DETAIL A**  
**ON STREET BICYCLE PARKING**  
**RACK REPLACEMENT**  
**NEAR SIDE OF INTERSECTION**



**DETAIL B**  
**ON STREET BICYCLE PARKING**  
**RACK REPLACEMENT**  
**FAR SIDE OF INTERSECTION**

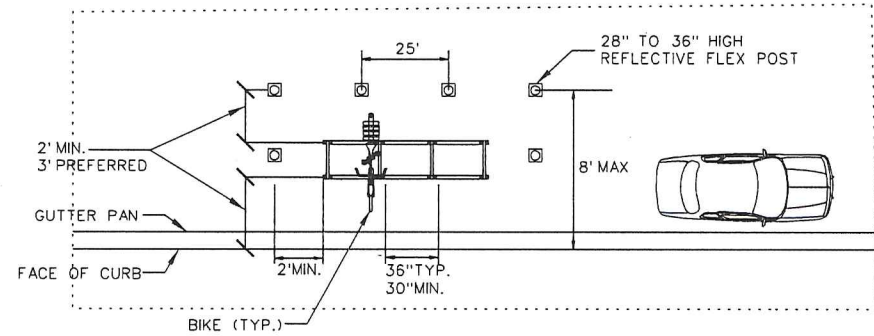
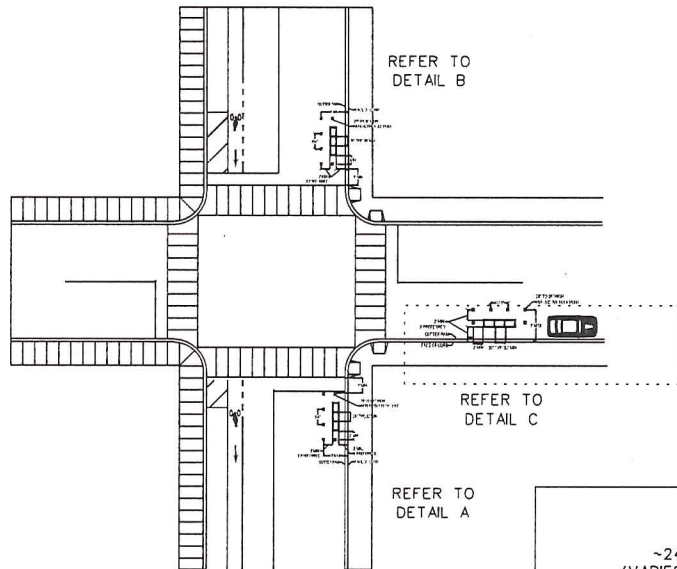
ISSUED: 8/2015	RECOMMENDED: <i>Adil Riaz</i>
REVISION	APPROVAL
	PROJECT MANAGER
	APPROVED: <i>Muhammed Khaleel</i>
	CHIEF ENGINEER

**ON STREET BICYCLE PARKING**  
**RACK PLACEMENT**  
**(NEAR AND FAR SIDE)**

**d.** DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

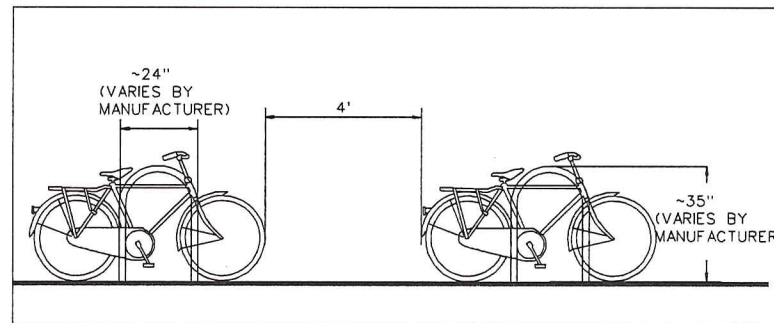
DWG. NO. 605.17



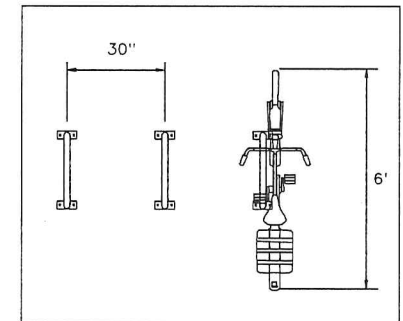


DETAIL C

SIDE VIEW



SIDE BY SIDE RACKS



NOTES:

1. RACK ELEMENTS SHALL BE "INVERTED U" TYPE OR SIMILAR (SEE DWG. NO. 605.14).
2. SHALL BE LOCATED WITHIN AN EXISTING OR PROPOSED FULL-TIME PARKING ZONE ONLY.
3. RACKS SHALL BE FASTENED TO ROADWAYS.
4. RACKS TYPICALLY MOUNTED ON GALVANIZED STEEL RAILS.
5. NUMBER OF RACKS VARIES TYPICALLY FROM 2 TO 6.
6. ON-STREET BICYCLE PARKING SHALL ONLY BE USED WHEN THERE IS NOT SUFFICIENT SPACE ON THE SIDEWALK FOR THE DEMAND.
7. ON-STREET BICYCLE PARKING SHALL BE LOCATED ON STREETS WITH BIKE LANES OR ON LOW VOLUME, LOW SPEED STREETS.
8. IF USED ON HIGHER VOLUME, HIGHER SPEED STREETS, ON-STREET BICYCLE PARKING SHALL BE LOCATED IN SUCH A WAY THAT CYCLISTS WILL LOAD AND UNLOAD BIKES FROM THE SIDEWALK.
9. TO BE INSTALLED WITH APPROVAL FROM DDOT CHIEF ENGINEER.

ISSUED:	8/2015
REVISION	APPROVAL

RECOMMENDED:	<i>Adil Raza</i>
	PROJECT MANAGER
APPROVED:	<i>Muhammed Khalid</i>
	CHIEF ENGINEER

ON STREET BICYCLE PARKING  
RACK PLACEMENT  
(MID-BLOCK)

d.

DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION

DWG. NO. 605.18

DWG. NO. 605.19