



KANSAS CITY MISSOURI


Ordinance 240335

TI & O Committee

April 10, 2024



Standards Change Process

1. Public Works Standards Committee reviews proposed changes
2. Public meeting is held to receive public input on proposed changes
3. Public comments are received for 30 days immediately following the public meeting
4. Standards Committee may then recommend that the changes be approved, approved with modifications, denied, or continued for further consideration
-  5. City Council must make final approval of changes

Focus Area**Summary of Changes**

Speed Humps
TC-SH-1

- Updated intersection spacing from 150ft to 125ft
- Added signage details for standard drawings
- Updated use of Type 5 asphalt instead of Type 3
- Added waiver requirements for curbs



Raised Crosswalks
TC-RC-1

Added new standard with various scenarios for drainage treatment



Raised Intersections
TC-RI-1

Added new standard

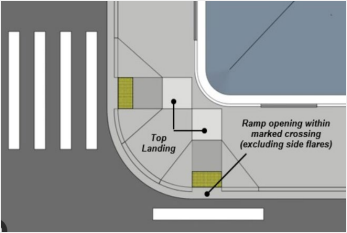


Chicane
TC-C-1

Added new standard

Focus Area

Summary of Changes



ADA Ramps
SW-1

- Consolidated the previous ADA Ramps to be aligned with PROWAG and MoDOT
- Added flares as preferred approach than vertical curb ramps
- Vertical curb ramps exception to be approved by an Engineer from the City
- Added standards for construction to be poured monolithic to the curb
- Added standards for island for pedestrian crossing



Alley (Concrete/Asphalt)
AS-2-C
AS-2-A

Added new standard



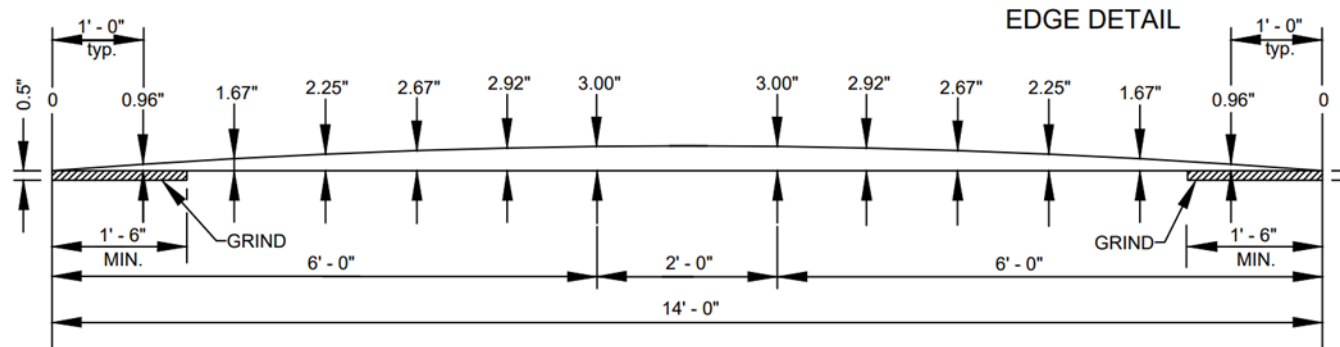
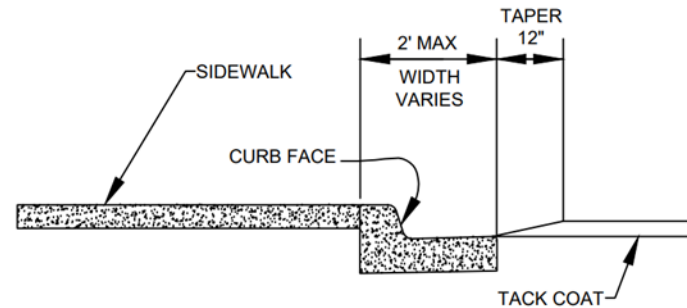
KCMO – APWA 2200
Subgrade Roll Testing

Update subgrade roll testing from 20 tons to 25 tons (2201.3E)

Speed Humps (1 of 2) – TC-SH-1

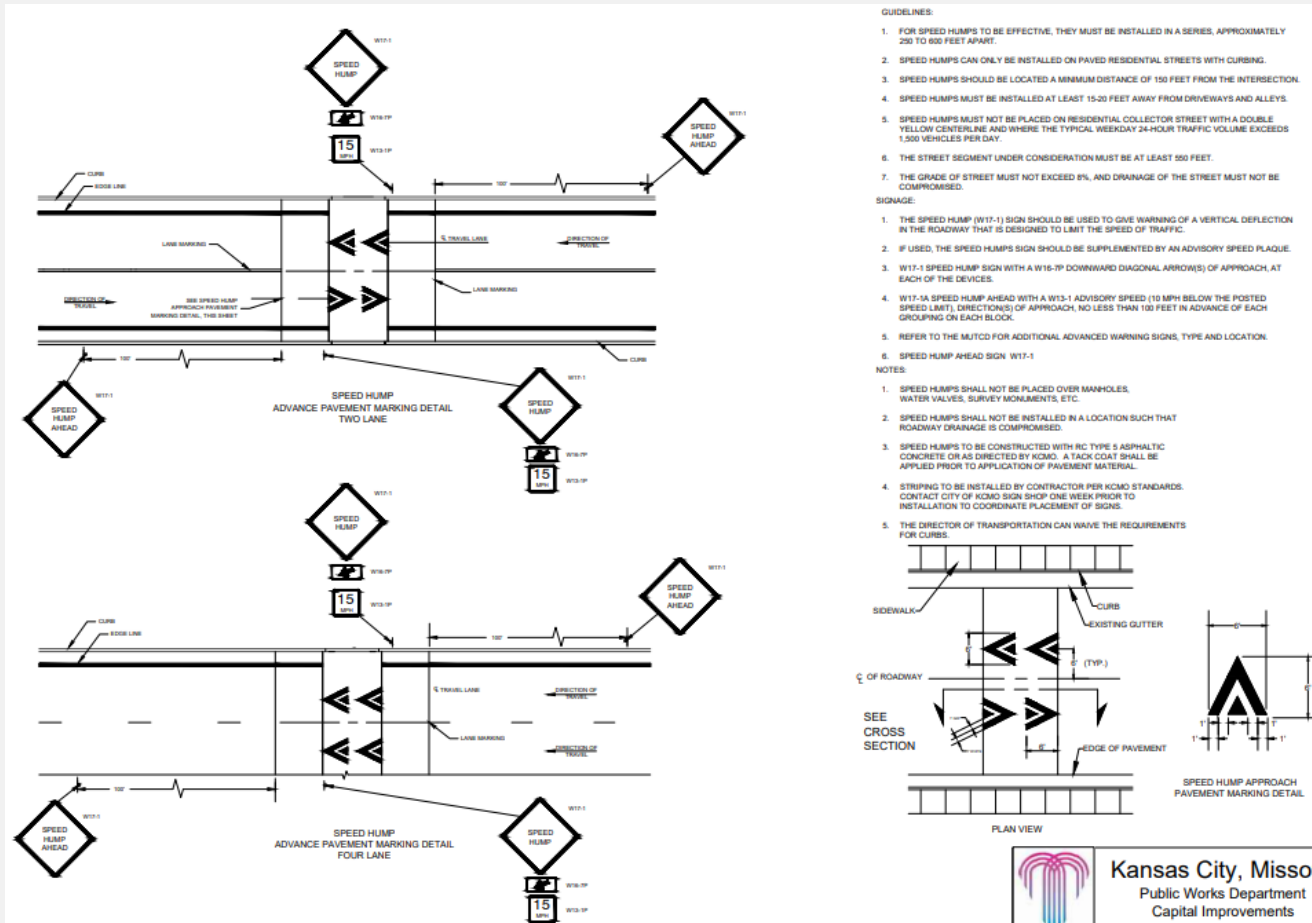
SPEED HUMP SPECIFICATIONS

IMPORTANT: SPEED HUMPS TO BE 3" IN HEIGHT TO PROVIDE MAXIMUM EFFECTIVENESS, WHILE NOT BEING OVERLY RESTRICTIVE TO EMERGENCY, POLICE AND FIRE VEHICLES.



CROSS SECTION

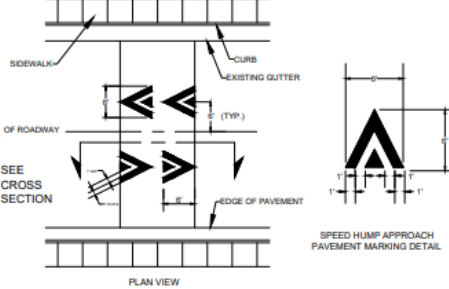
Speed Humps (2 of 2)- TC-SH-1



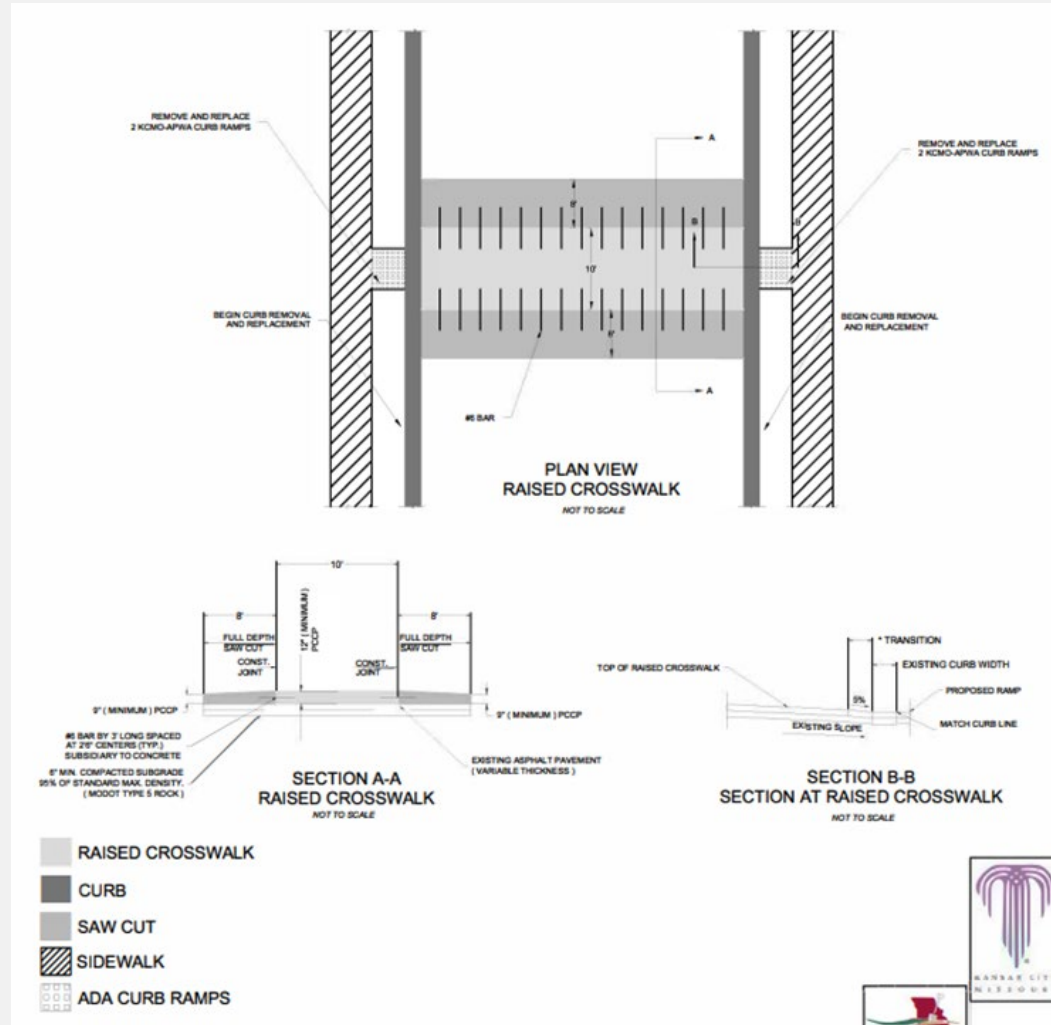
- GUIDELINES**
1. FOR SPEED HUMPS TO BE EFFECTIVE, THEY MUST BE INSTALLED IN A SERIES, APPROXIMATELY 250 TO 600 FEET APART.
 2. SPEED HUMPS CAN ONLY BE INSTALLED ON PAVED RESIDENTIAL STREETS WITH CURBING.
 3. SPEED HUMPS SHOULD BE LOCATED A MINIMUM DISTANCE OF 150 FEET FROM THE INTERSECTION.
 4. SPEED HUMPS MUST BE INSTALLED AT LEAST 15-20 FEET AWAY FROM DRIVEWAYS AND ALLEYS.
 5. SPEED HUMPS MUST NOT BE PLACED ON RESIDENTIAL COLLECTOR STREET WITH A DOUBLE YELLOW CENTERLINE AND WHERE THE TYPICAL WEEKDAY 24-HOUR TRAFFIC VOLUME EXCEEDS 1,500 VEHICLES PER DAY.
 6. THE STREET SEGMENT UNDER CONSIDERATION MUST BE AT LEAST 500 FEET.
 7. THE GRADE OF STREET MUST NOT EXCEED 6%, AND DRAINAGE OF THE STREET MUST NOT BE COMPROMISED.

- SIGNAGE:**
1. THE SPEED HUMP (W17-1) SIGN SHOULD BE USED TO GIVE WARNING OF A VERTICAL DEFLECTION IN THE ROADWAY THAT IS DESIGNED TO LIMIT THE SPEED OF TRAFFIC.
 2. IF USED, THE SPEED HUMPS SIGN SHOULD BE SUPPLEMENTED BY AN ADVISORY SPEED PLAQUE.
 3. W17-1 SPEED HUMP SIGN WITH A W16-7P DOWNWARD DIAGONAL ARROW(S) OF APPROACH, AT EACH OF THE DEVICES.
 4. W17-1A SPEED HUMP AHEAD WITH A W13-1 ADVISORY SPEED (10 MPH BELOW THE POSTED SPEED LIMIT), DIRECTION(S) OF APPROACH, NO LESS THAN 100 FEET IN ADVANCE OF EACH GROUPING OR EACH BLOCK.
 5. REFER TO THE MUTCD FOR ADDITIONAL ADVANCED WARNING SIGNS, TYPE AND LOCATION.
 6. SPEED HUMP AHEAD SIGN W17-1.

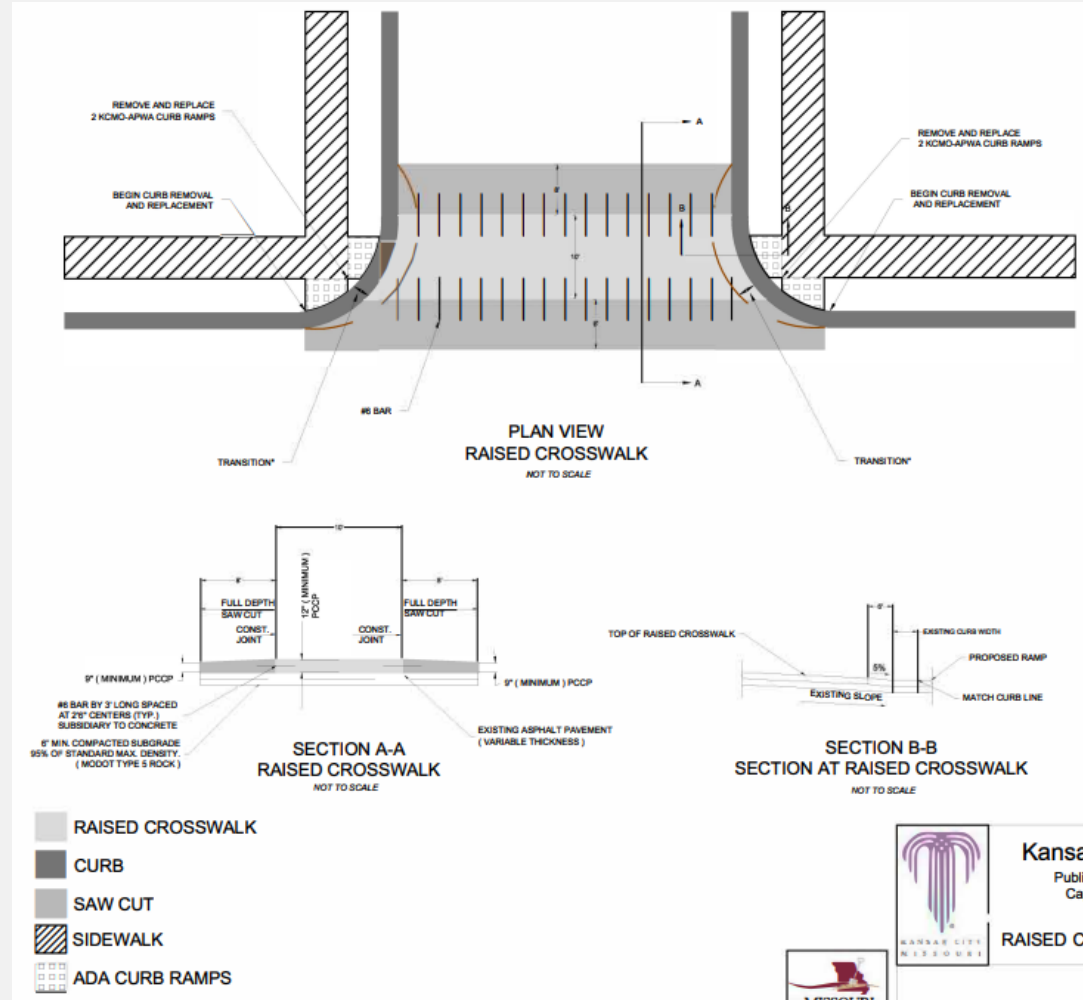
- NOTES:**
1. SPEED HUMPS SHALL NOT BE PLACED OVER MANHOLES, WATER VALVES, SURVEY MONUMENTS, ETC.
 2. SPEED HUMPS SHALL NOT BE INSTALLED IN A LOCATION SUCH THAT ROADWAY DRAINAGE IS COMPROMISED.
 3. SPEED HUMPS TO BE CONSTRUCTED WITH R/C TYPE 5 ASPHALTIC CONCRETE OR AS DIRECTED BY KCMO. A TACK COAT SHALL BE APPLIED PRIOR TO APPLICATION OF PAVEMENT MATERIAL.
 4. STRIPING TO BE INSTALLED BY CONTRACTOR PER KCMO STANDARDS. CONTACT CITY OF KCMO SIGN SHOP ONE WEEK PRIOR TO INSTALLATION TO COORDINATE PLACEMENT OF SIGNS.
 5. THE DIRECTOR OF TRANSPORTATION CAN WAIVE THE REQUIREMENTS FOR CURBS.



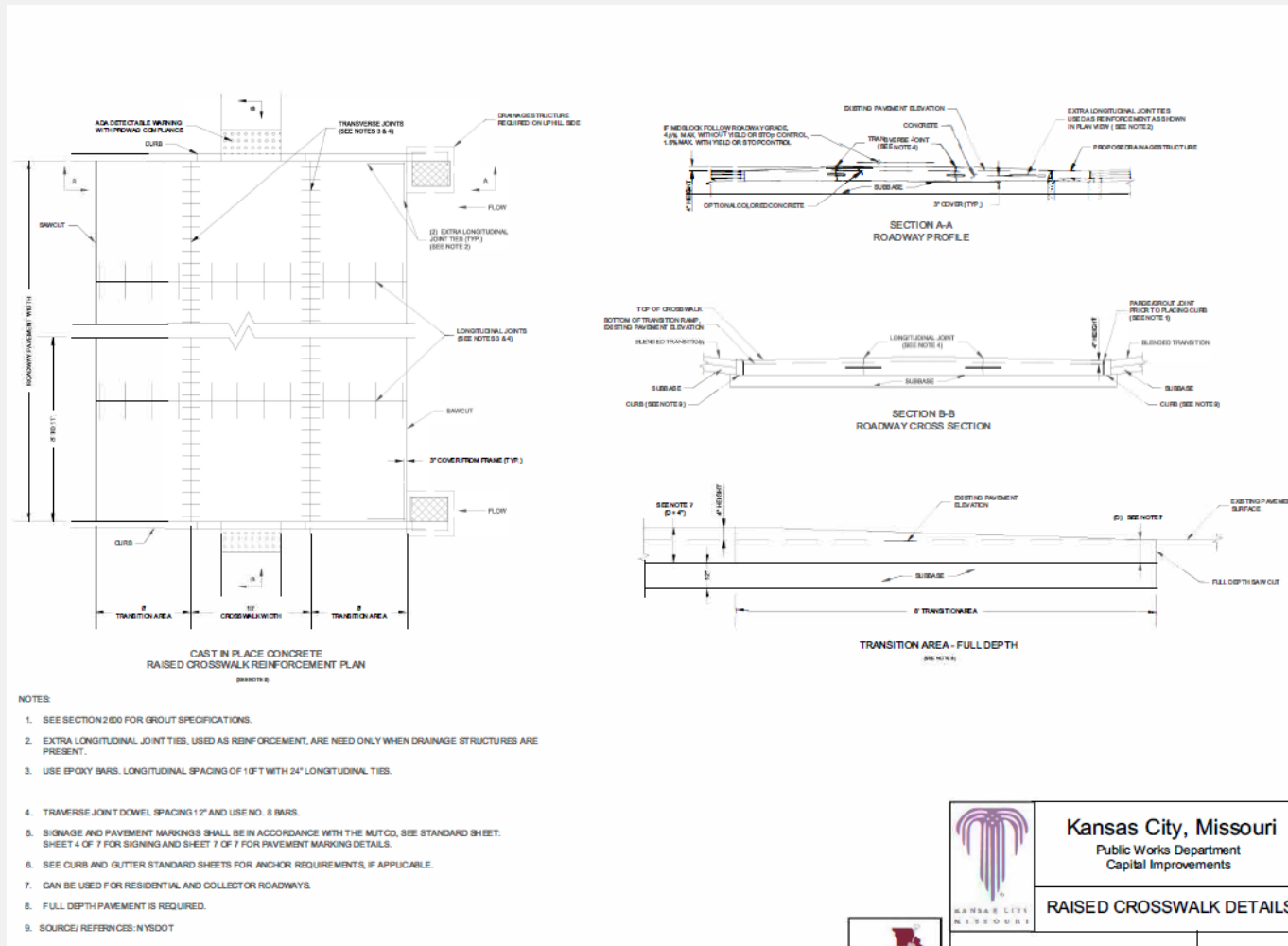

Raised Crosswalk (1 of 7) – TC- RC-1



Raised Crosswalk (2 of 7)-TC-RC-1



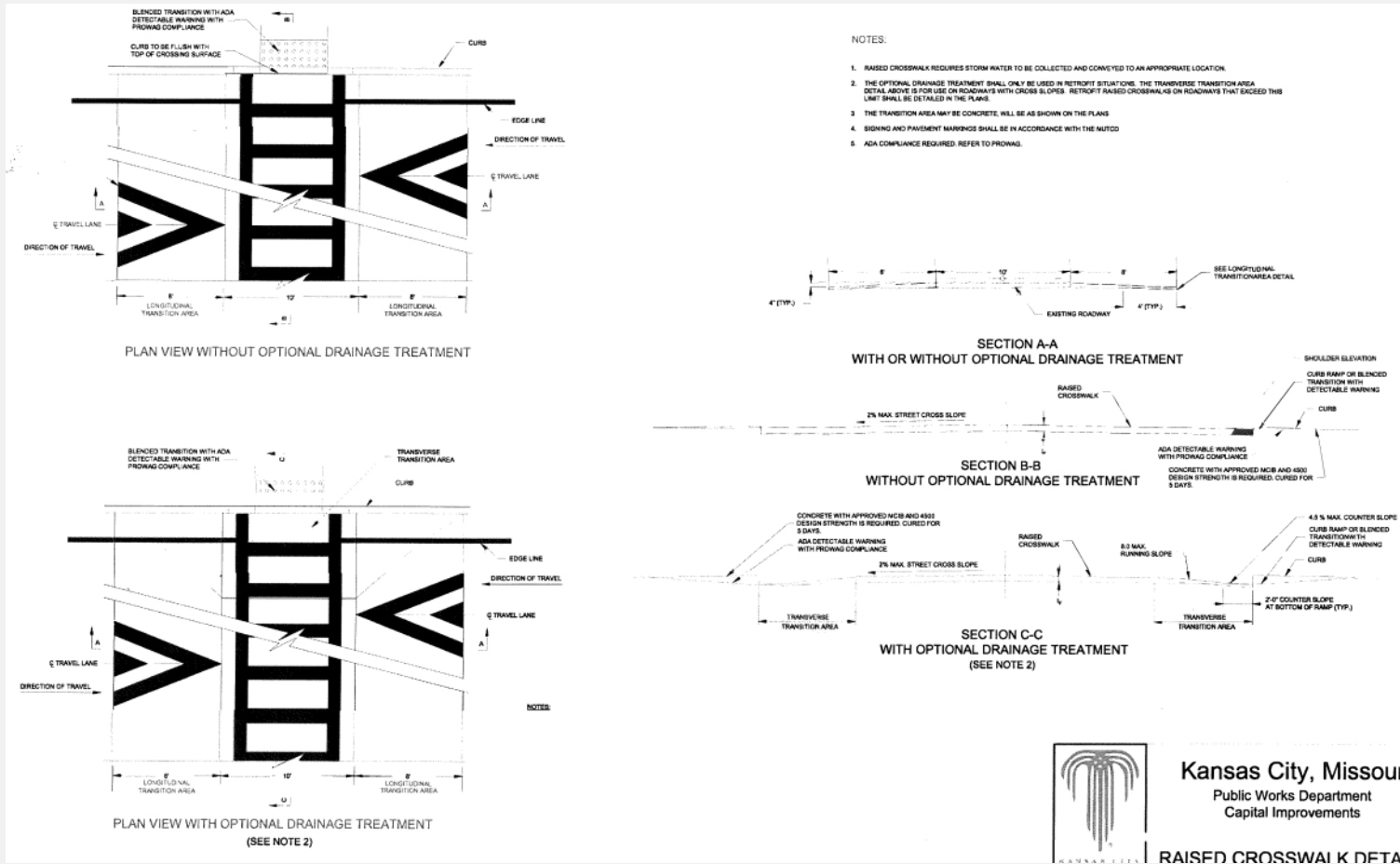
Raised Crosswalk (3 of 7)-TC-RC-1

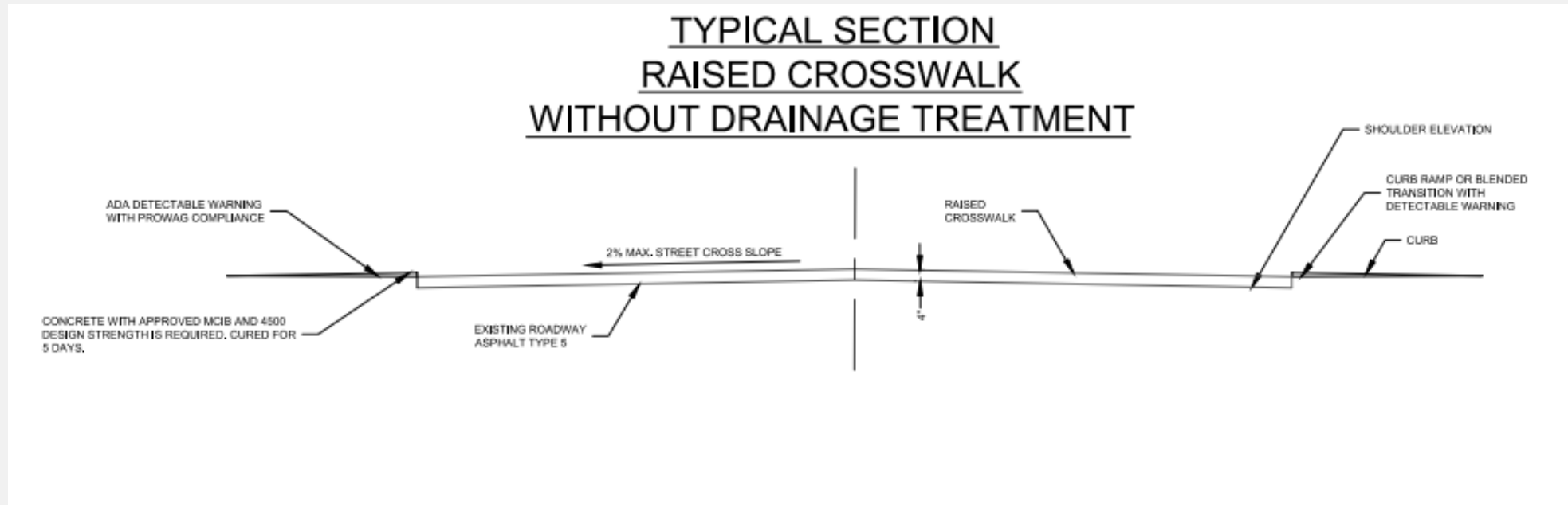
Kansas City, Missouri
Public Works Department
Capital Improvements

RAISED CROSSWALK DETAILS

Raised Crosswalk (4 of 7)-TC-RC-1

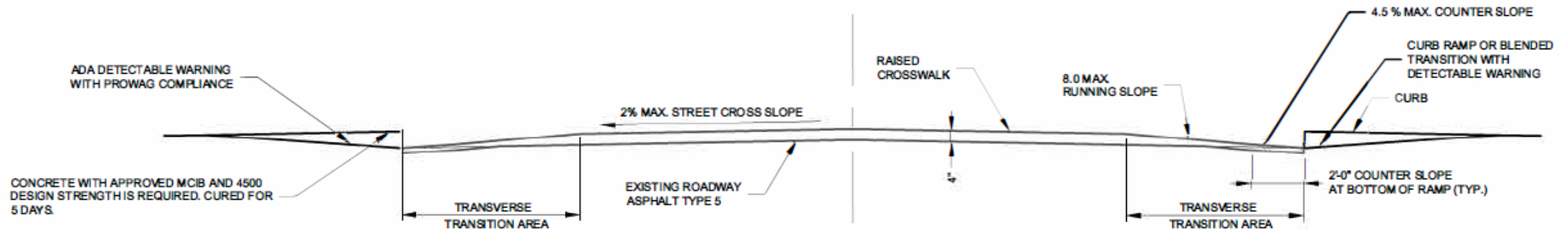


Raised Crosswalk (5 of 7)-TC-RC-1

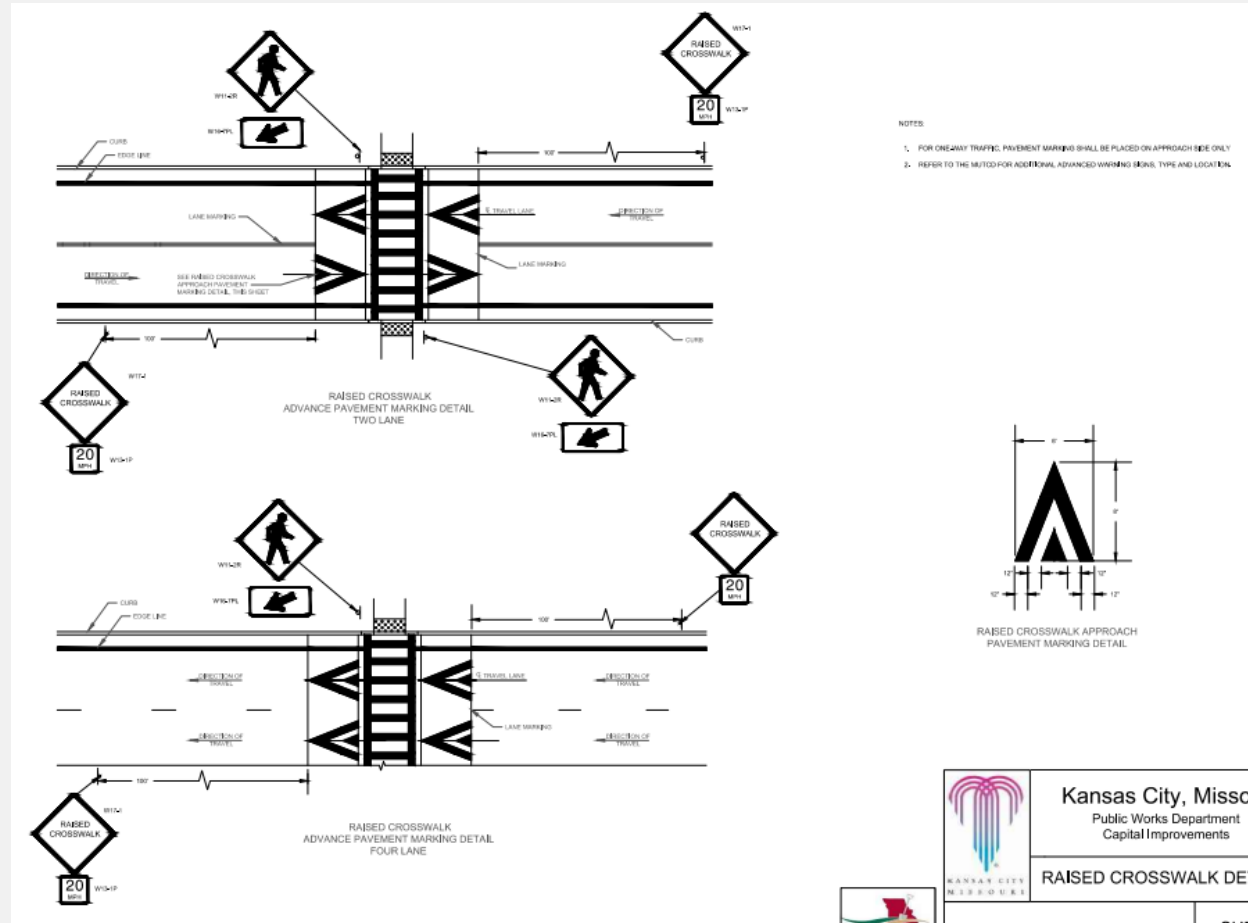


Raised Crosswalk (6 of 7)-TC-RC-1

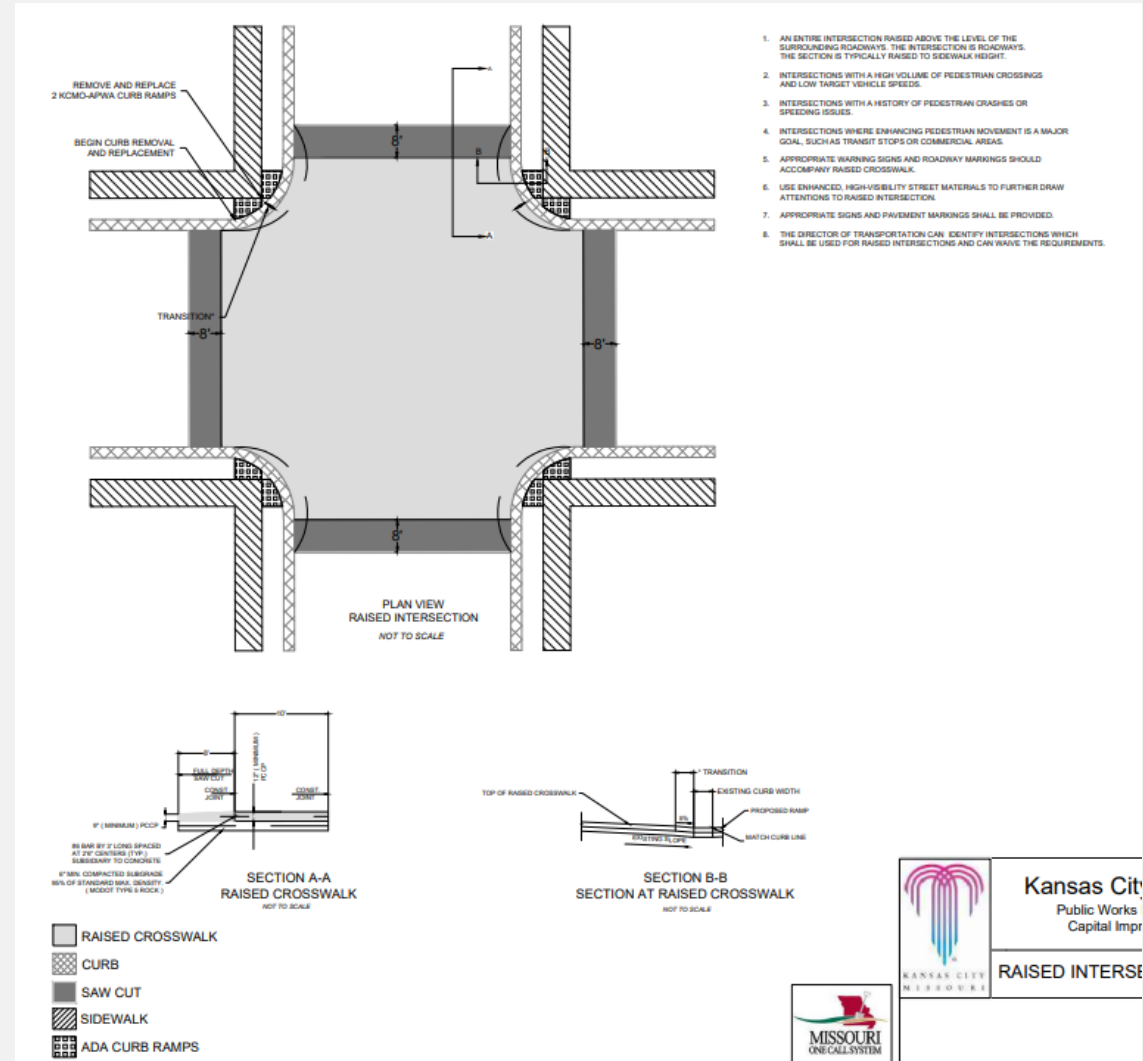
TYPICAL SECTION RAISED CROSSWALK WITH OPTIONAL DRAINAGE TREATMENT (REFER TO SHEET 4: NOTE 2)



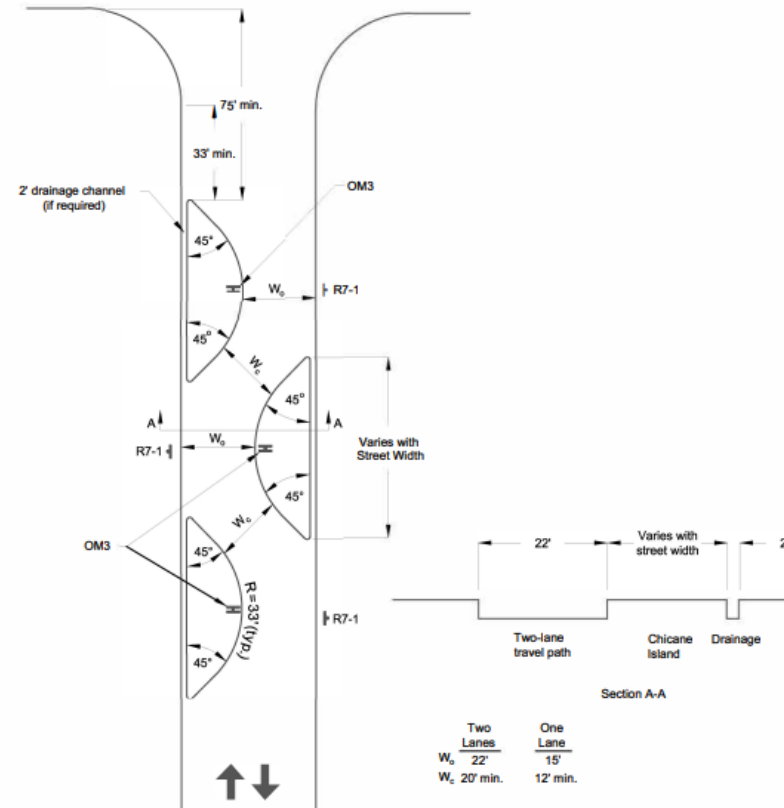
Raised Crosswalk (7 of 7)-TC-RC-1



Raised Intersection – TC-RI-1

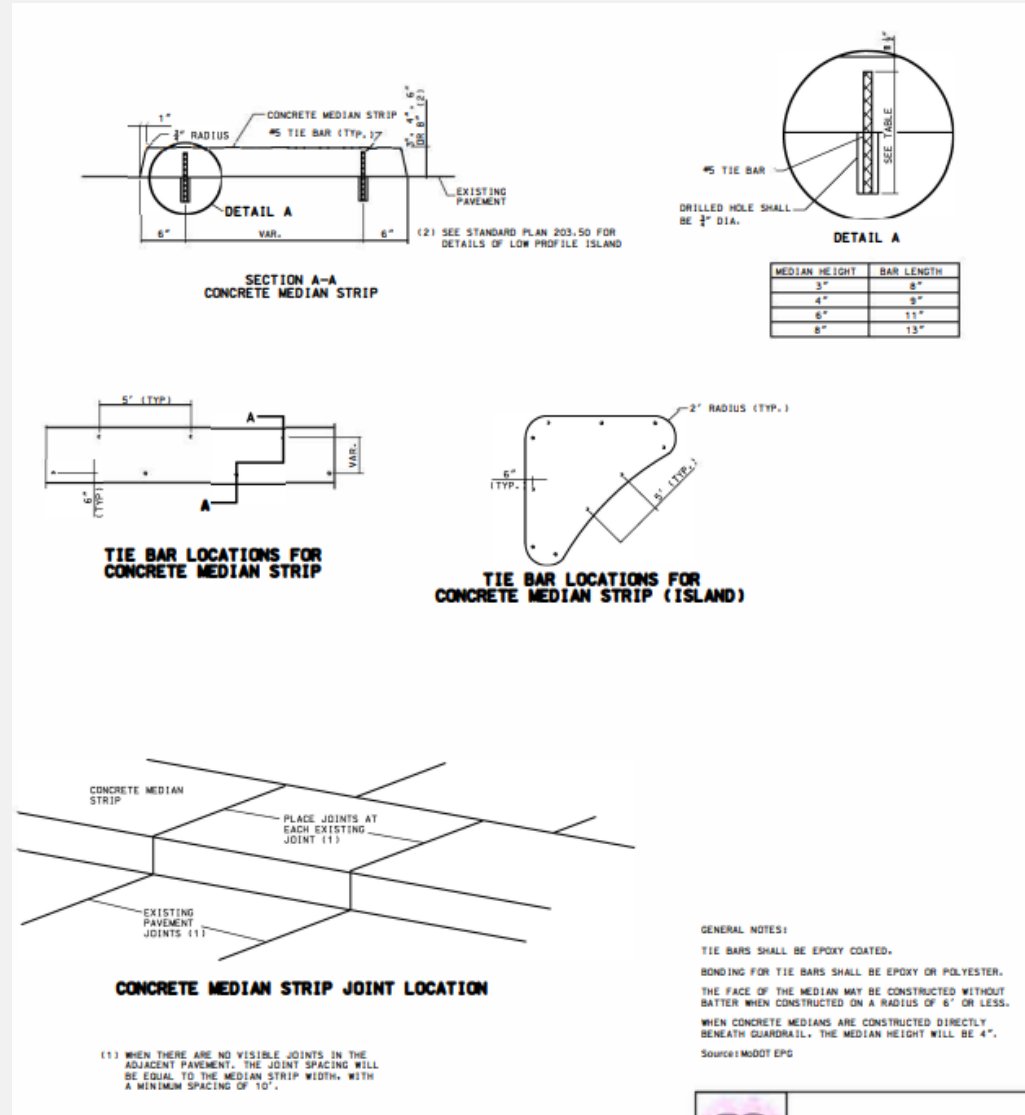


Chicane (1 of 2)- TC-C-1

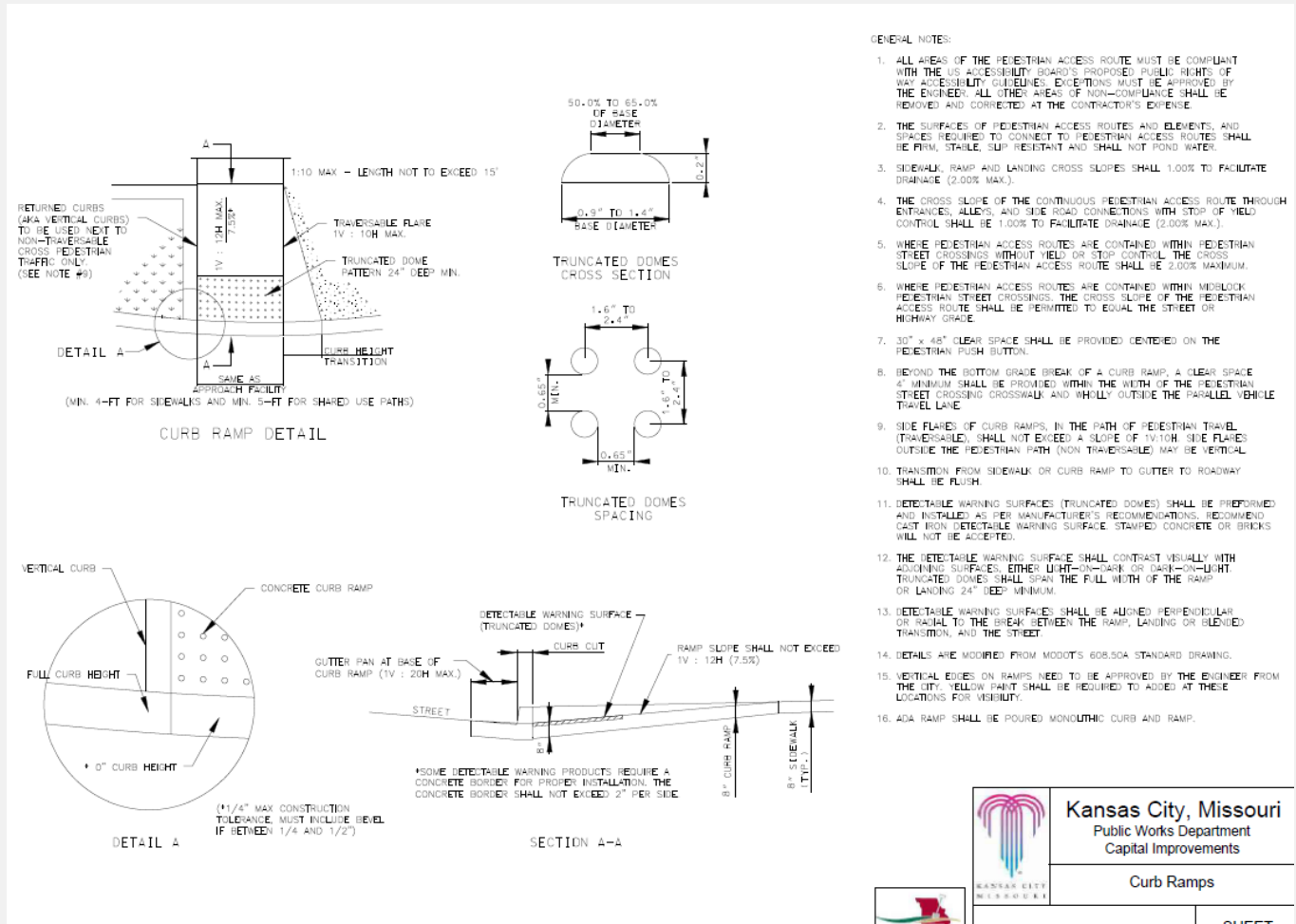


1. The travel path through the chicane can be one lane or two lanes as noted.
2. Spacing of chicane segments dependent on site considerations, e.g. driveway locations.
3. Island planting should not obscure drivers view of chicane traffic.
4. Additional R7-1 signs may be required to satisfy local convention.
5. Bicycles are to use the same path as motor vehicles, not the drainage channel.
6. Depending of locale climate and preference, vertical delineation other than Object Markers (OM3) may be more appropriate. Possible alternatives include landscaping and curb painting.
7. The drainage channel should be 2 feet wide or a minimum of gutter length as specified by CG-1 / CG-2.
8. The chicanes when placed shall be checked for turning movements.

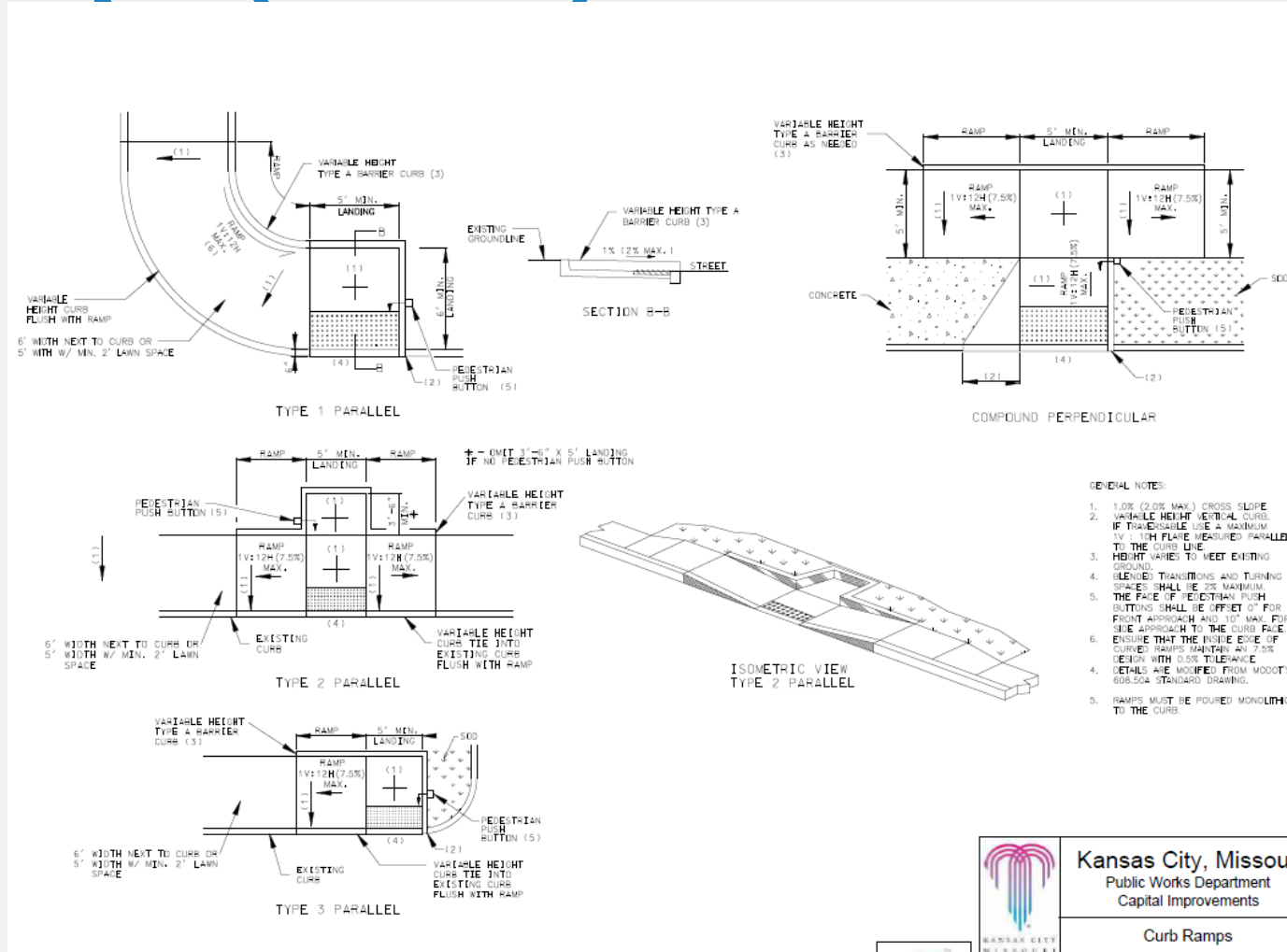
Chicane (2 of 2)- TC-C-1



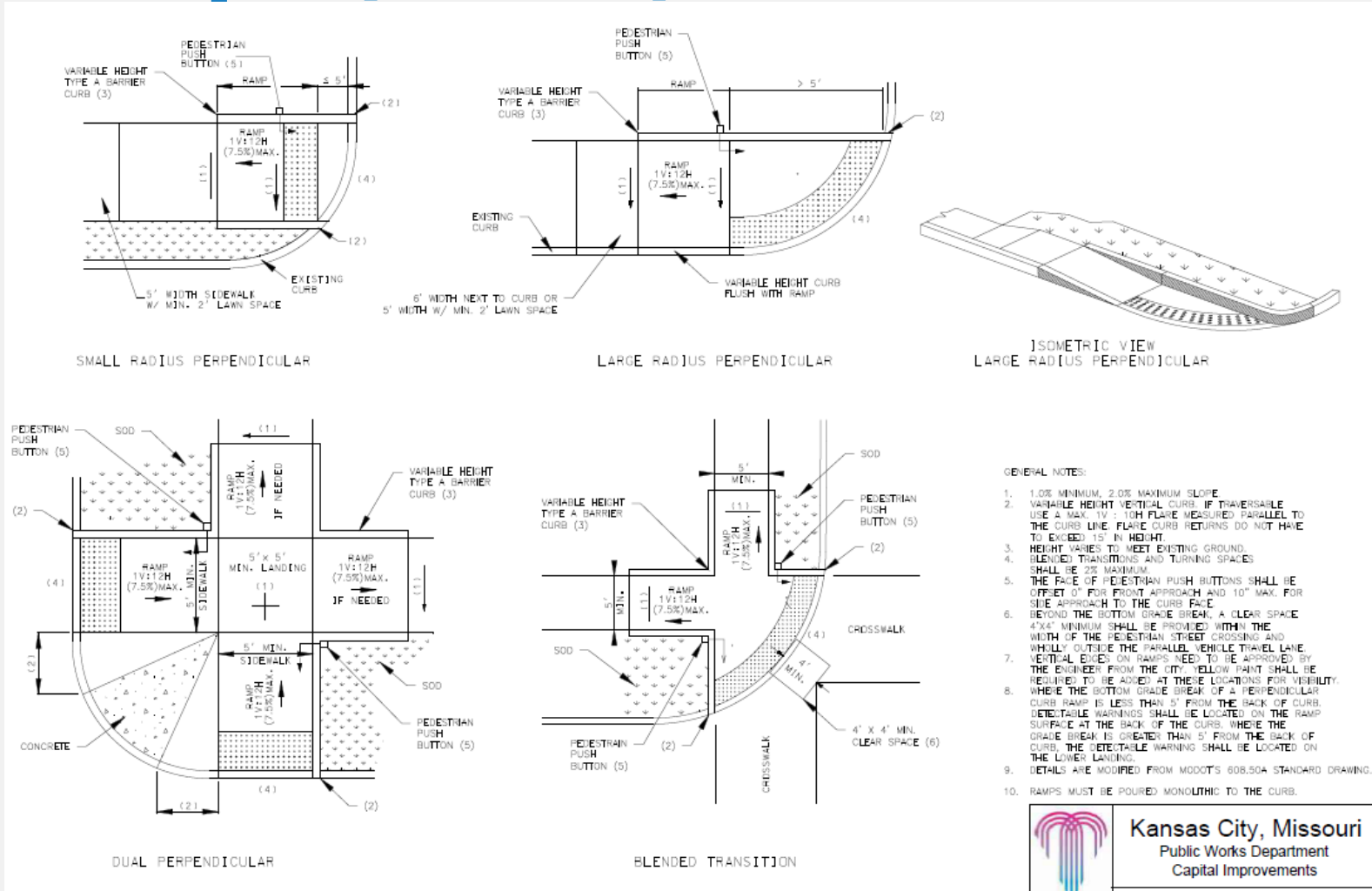
ADA Ramps (1 of 4)-SW-1



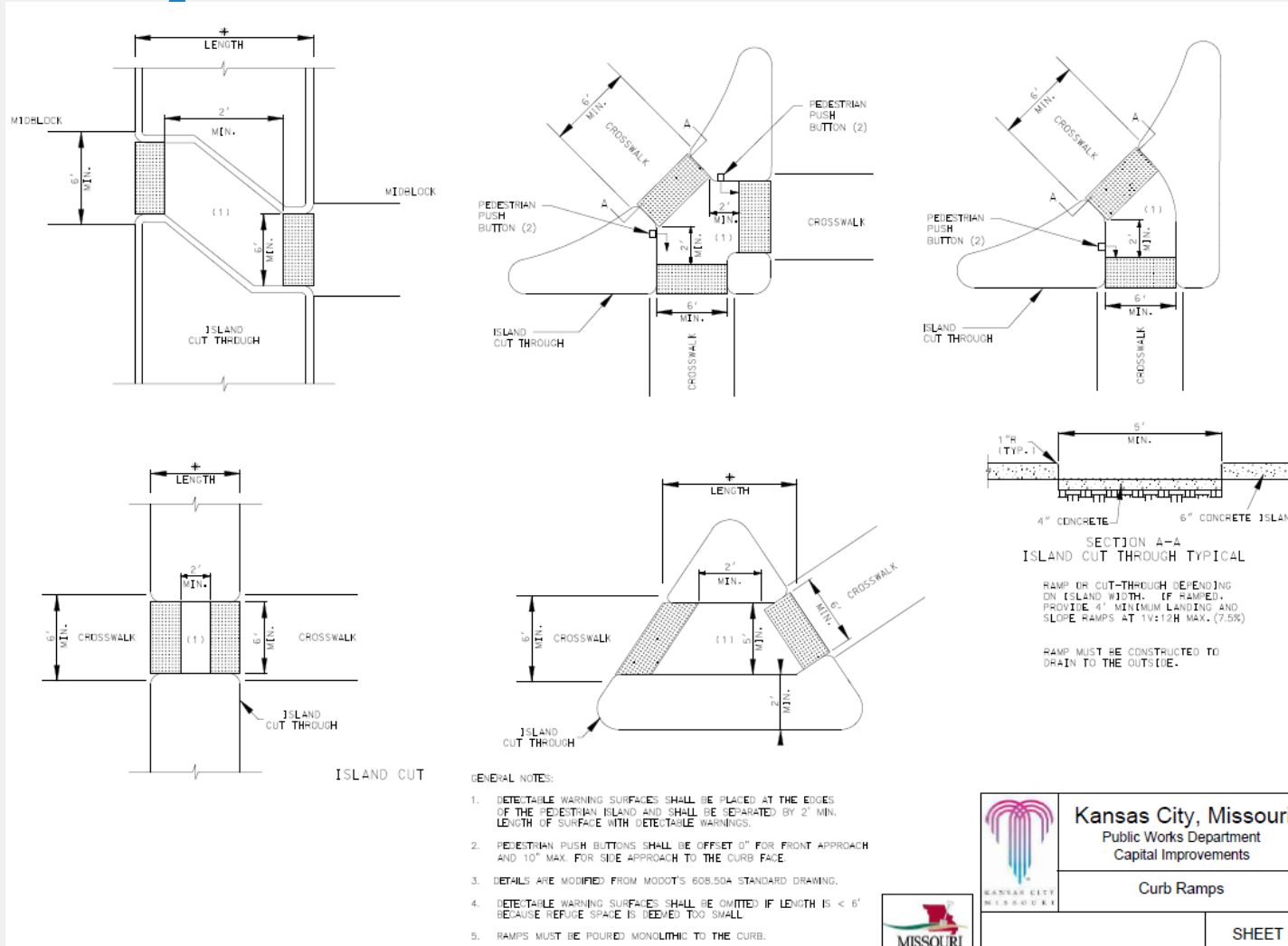
ADA Ramps (2 of 4)-SW-1



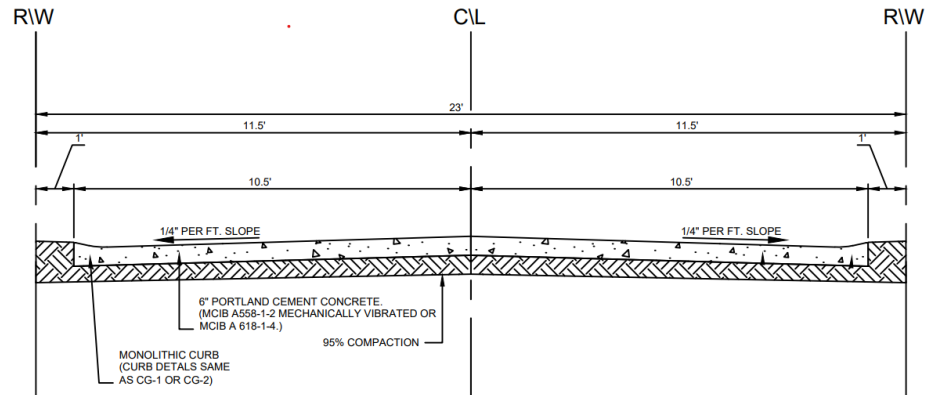
ADA Ramps (3 of 4)-SW-1



ADA Ramps (4 of 4)-SW-1



Alley Typical Detail (Concrete)-AS-2-C

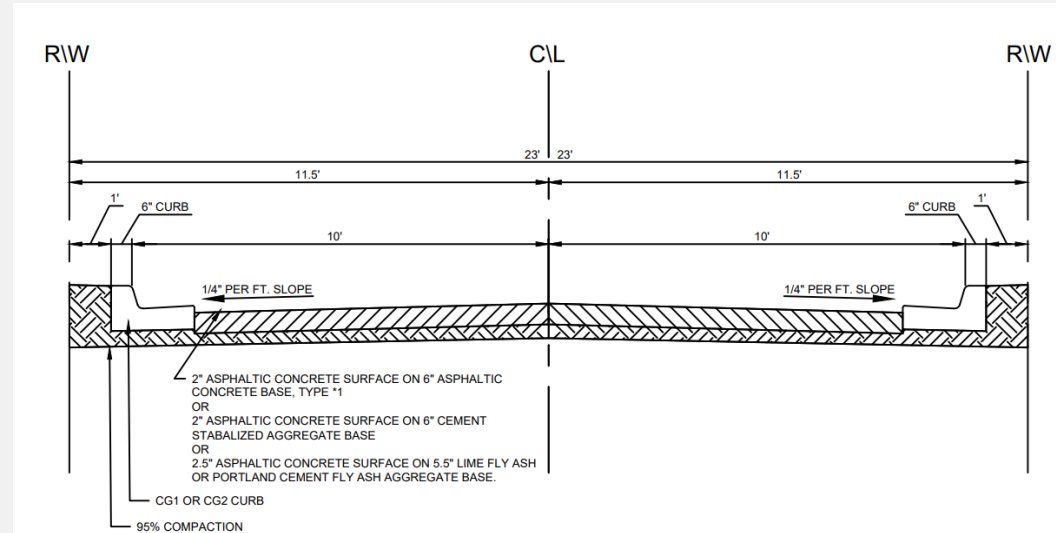


ALLEY SECTION

NOTES:

1. MIX DESIGNS OF P.C.C. SHALL BE PER SECTION 2208.2
2. TRANSVERSE CONTRACTION JOINT SHALL BE SPACED AT INTERVALS EQUAL TO THE WIDTH OF ALLEY. IF THE ALLEY IS 15 FEET OR GREATER IN WIDTH, A LONGITUDINAL CONTRACTION JOINT SHALL BE CONSTRUCTED AT THE C.L. OF THE ALLEY.
3. EXPANSION JOINTS SHALL BE CONSTRUCTED AT EACH END OF THE ALLEY AND AT EACH ABUTTING DRIVEWAY.
4. DRAINAGE STRUCTURES MAY BE REQUIRED IF DETERMINED BY THE CITY ENGINEER.
5. WHERE THE ALLEY INTERSECTS WITH A STREET, A DRIVEWAY APPROACH SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROPRIATE STANDARD DRAWING.
6. WHERE NEEDED, HANDICAP RAMPS SHALL BE CONSTRUCTED.

Alley Typical Detail (Asphalt)-AS-2-A



ALLEY SECTION

NOTES:

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KCMO APWA 2200 (2201.3E)

- E. **Roll Testing:** Once the subgrade has been brought to the final plan elevation, but prior to approval of the subgrade for paving, all lanes shall be roll tested in their entire length. The subgrade will not be acceptable if rutting, pumping, or deformation of the subgrade results from the roll test. This testing will be done by the contractor, and will be in addition to the applicable moisture and density testing.
- Equipment for roll testing shall be a tandem dump truck (one front and two rear axles) ***carrying a twenty ton load.***
(Increasing this twenty ton load to twenty five ton load).