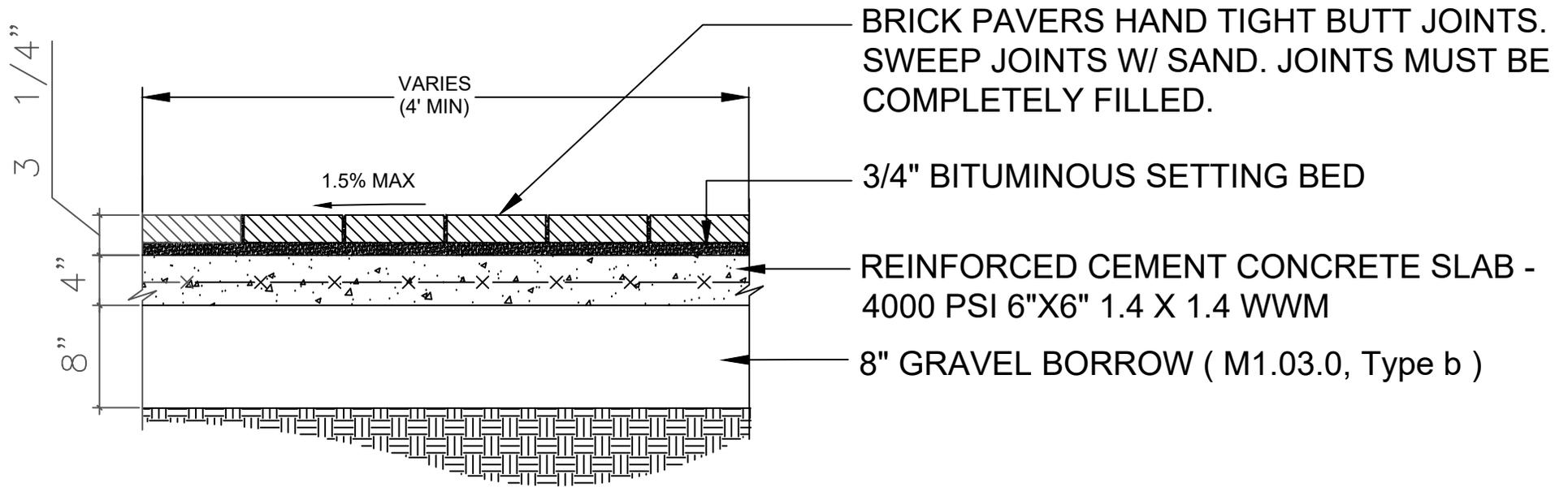


ASPHALT SIDEWALK SECTION		
City of Lowell Standard Specifications and Details		
Spec.	Date: 10/01/2025	Scale: N.T.S.



## BRICK SIDEWALK

### NOTE:

1. MORTAR LEVELING BED WILL BE PLACED AFTER THE CONCRETE BASE HAS SET FOR SEVEN (7) DAYS.
2. SIDEWALKS TO BE BUILT IN COMPLIANCE WITH ADA REGULATIONS.



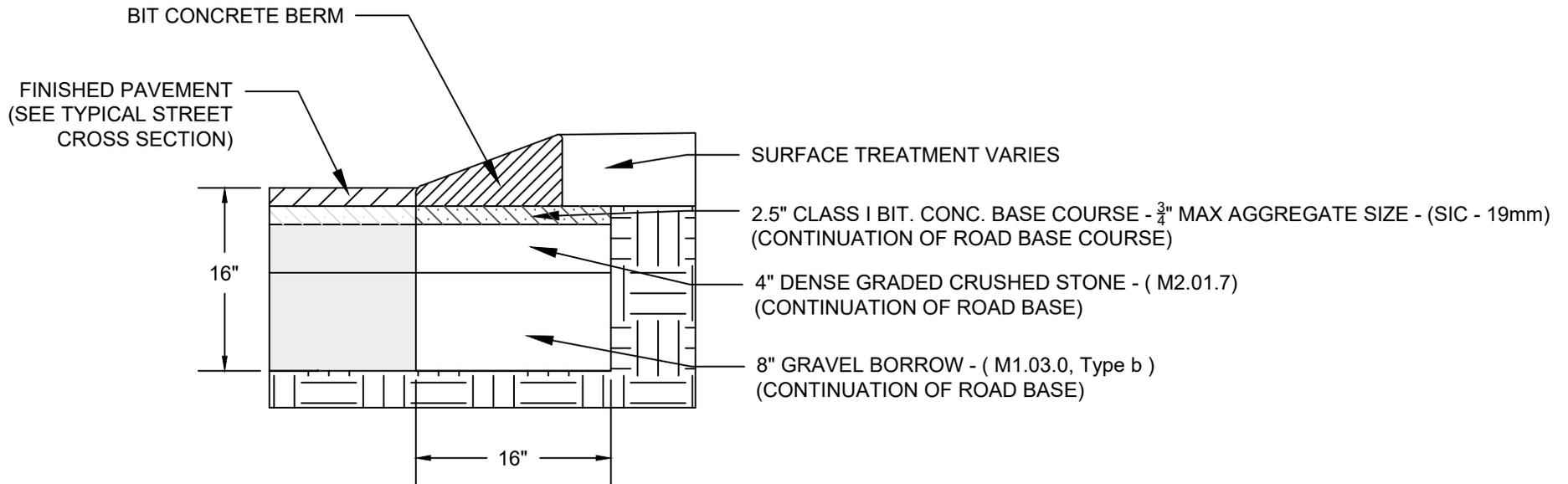
### BRICK SIDEWALK SECTION

City of Lowell Standard Specifications and Details

Spec. Ref #: 243-61.A(3)

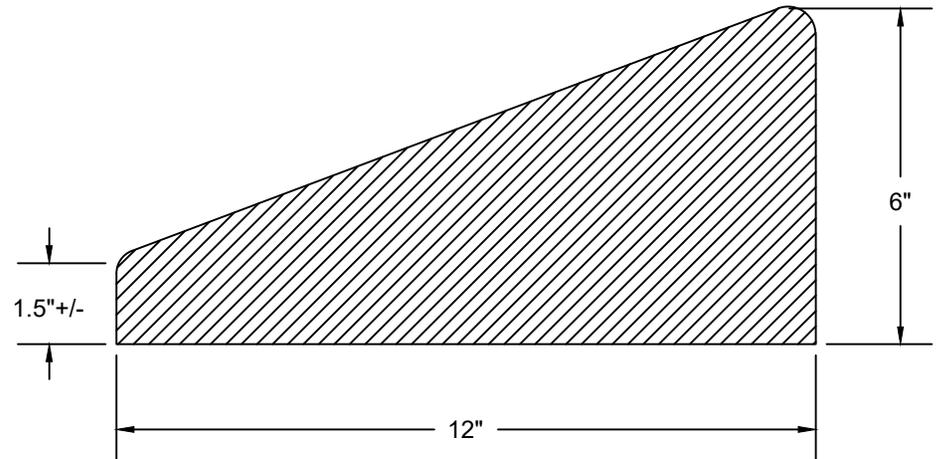
Date: 10/01/2025

Scale: N.T.S.



NOTE:

1. ENTIRE TRENCH AREA SHALL BE EXCAVATED TO A DEPTH OF 16" BELOW FINISHED GRADE OF THE STREET AND EXCAVATED FROM THE PAVEMENT LINE 16" INTO THE SIDEWALK AREA.
2. TOP COURSE OF STREET PAVEMENT SHALL BE LAID TO BUTT INTO THE BERM



CURB DETAIL



CAPE COD BERM

City of Lowell Standard Specifications and Details

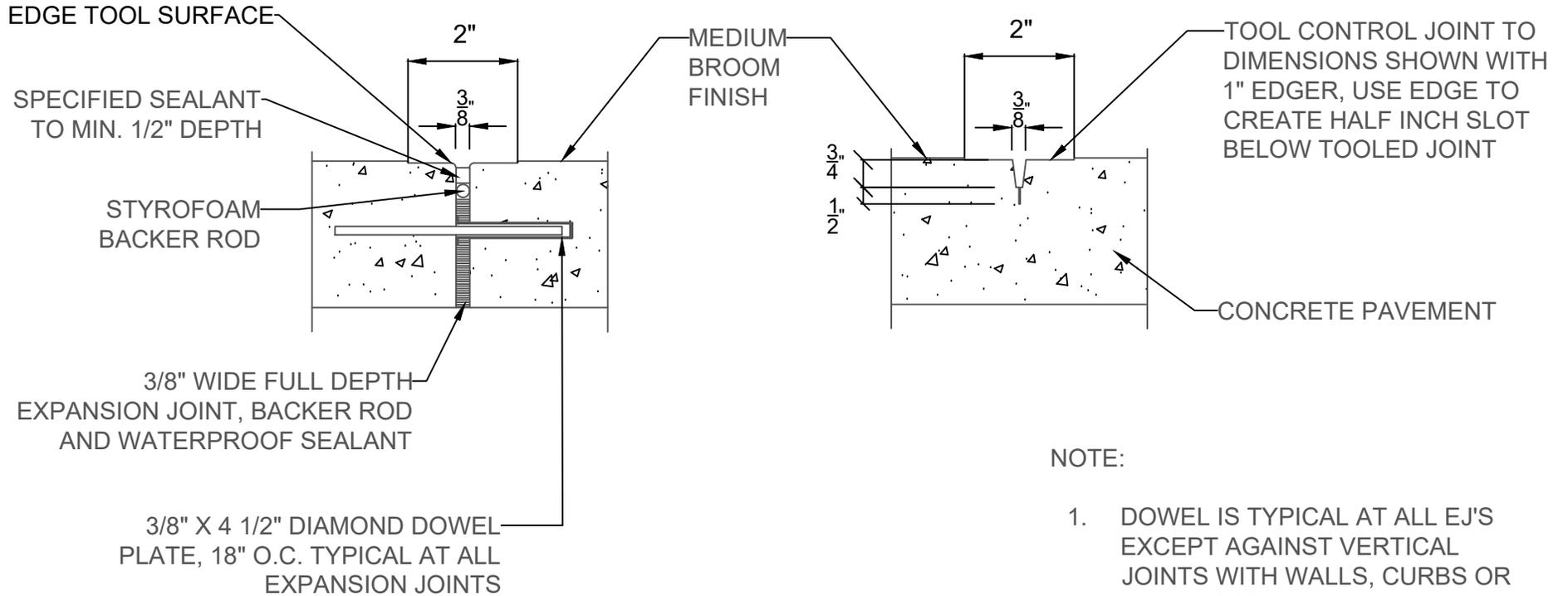
Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.

EXPANSION JOINT

CONTROL JOINT  
IN CEMENT CONCRETE



NOTE:

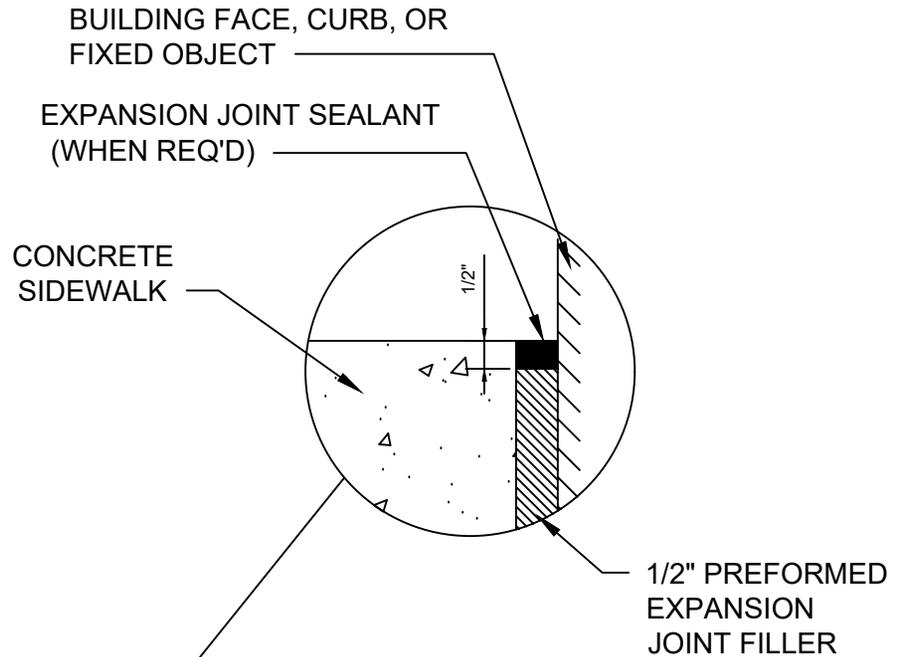
1. DOWEL IS TYPICAL AT ALL EJ'S EXCEPT AGAINST VERTICAL JOINTS WITH WALLS, CURBS OR SITE IMPROVEMENTS.
2. TOOLED EDGES AND JOINTS, ALL PANELS.



CEMENT CONCRETE SIDEWALK JOINTS		
City of Lowell Standard Specifications and Details		
Spec. Ref #:	Date: 10/01/2025	Scale: N.T.S.

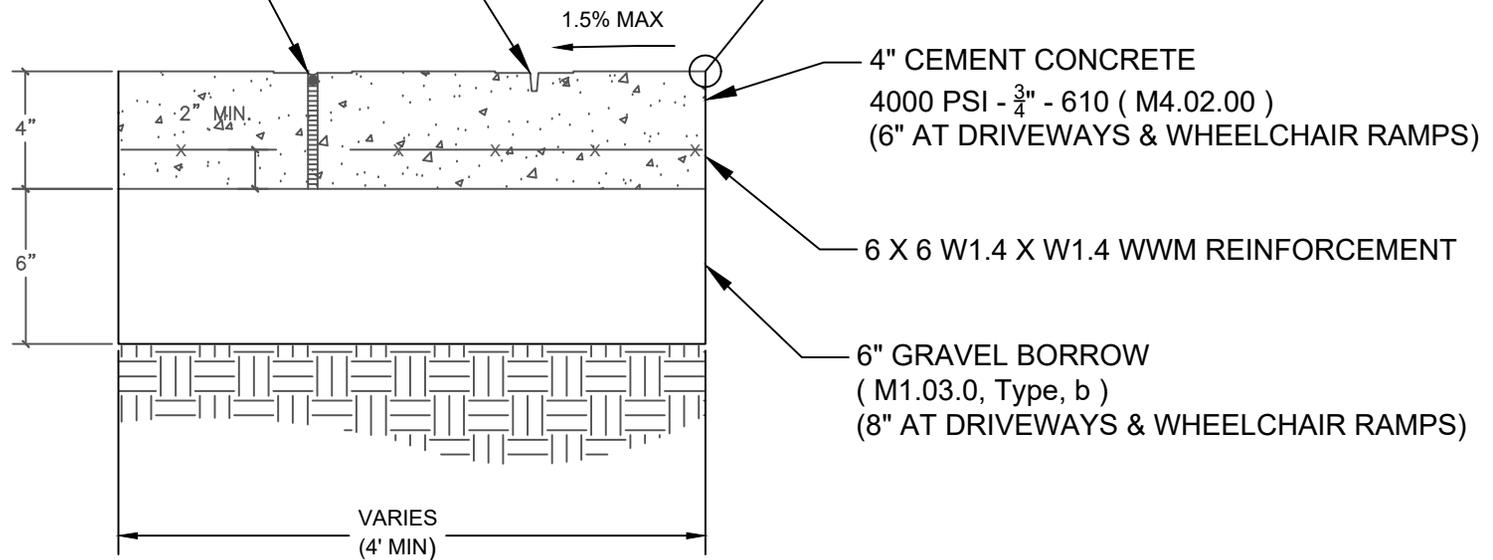
NOTES:

1. PROVIDE EXPANSION JOINTS AT MIN 30' O.C. WITH PRE-MOULDED JOINT FILLER
2. PROVIDE TOOLED DUMMY JOINTS
3. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB
4. SCORE LINES PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK BUT NOT TO EXCEED FIVE (5) FEET.
5. SIDEWALKS TO BE BUILT IN COMPLIANCE WITH ADA REGULATIONS
6. SEE CEMENT CONCRETE SIDEWALK JOINTS DETAIL FOR MORE INFO



TOOLED CONTROL JOINTS

TOOLED EXPANSION JOINT



CONCRETE SIDEWALK SECTION

City of Lowell Standard Specifications and Details

Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.

## CURB TRANSITION LENGTH FOR WHEELCHAIR RAMPS AND DRIVEWAYS

ROADWAY PROFILE GRADE	*HIGH SIDE TRANSITION LENGTH (HSL) 6" REVEAL
%	
0	6'-6"
> 0 TO 1	7'-8"
> 1 TO 2	9'-0"
> 2 TO 3	11'-0"
> 3 TO 4	14'-0"
> 4 TO 5	15'-0" MAX

NOTE: \* BASED ON A DESIGN SLOPE OF 7.5% AND A REVEAL OF 6".



**CURB TRANSITION LENGTH FOR WHEELCHAIR RAMPS AND DRIVEWAYS**

City of Lowell Standard Specifications and Details

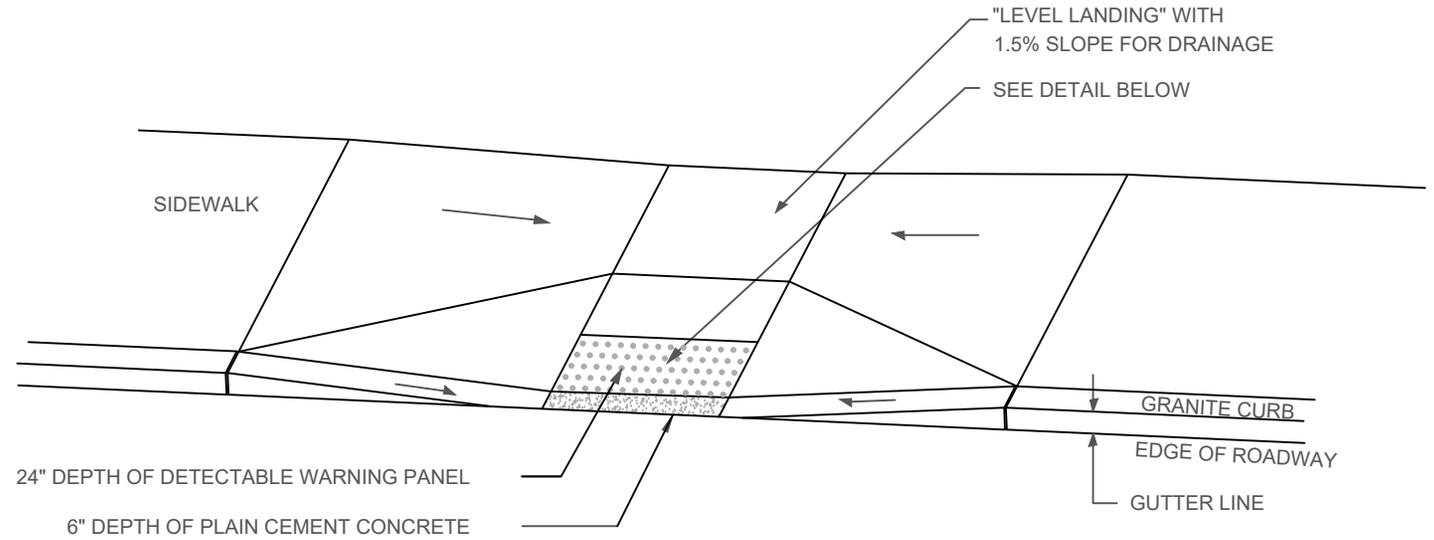
Spec. Ref #:

Date: 10/01/2025

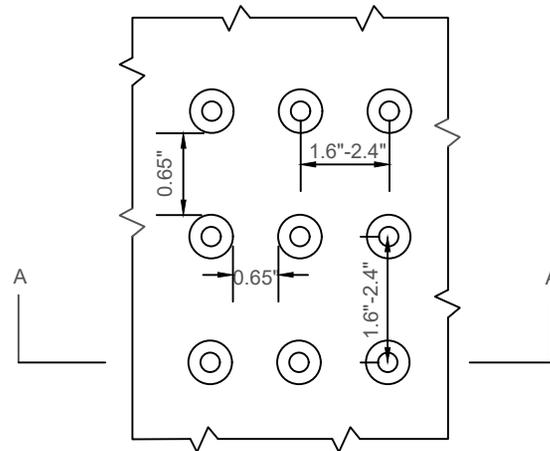
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**NOTE:**

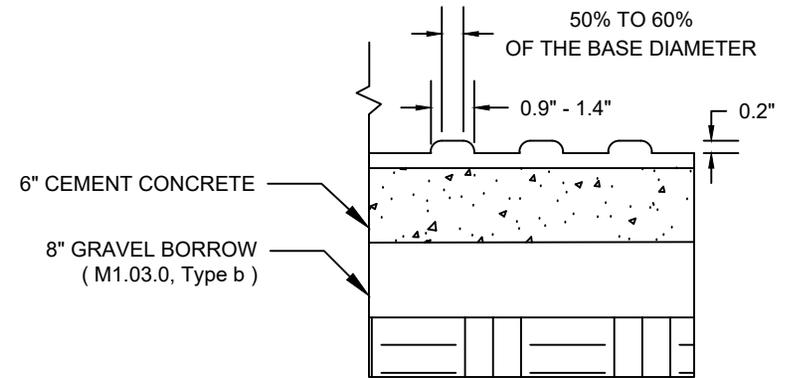
1. CAST IRON TACTILE PANELS TO BE APPLIED TO RAMP UNLESS DIRECTED BY CITY ENGINEER



**TYPICAL INSTALLATION**



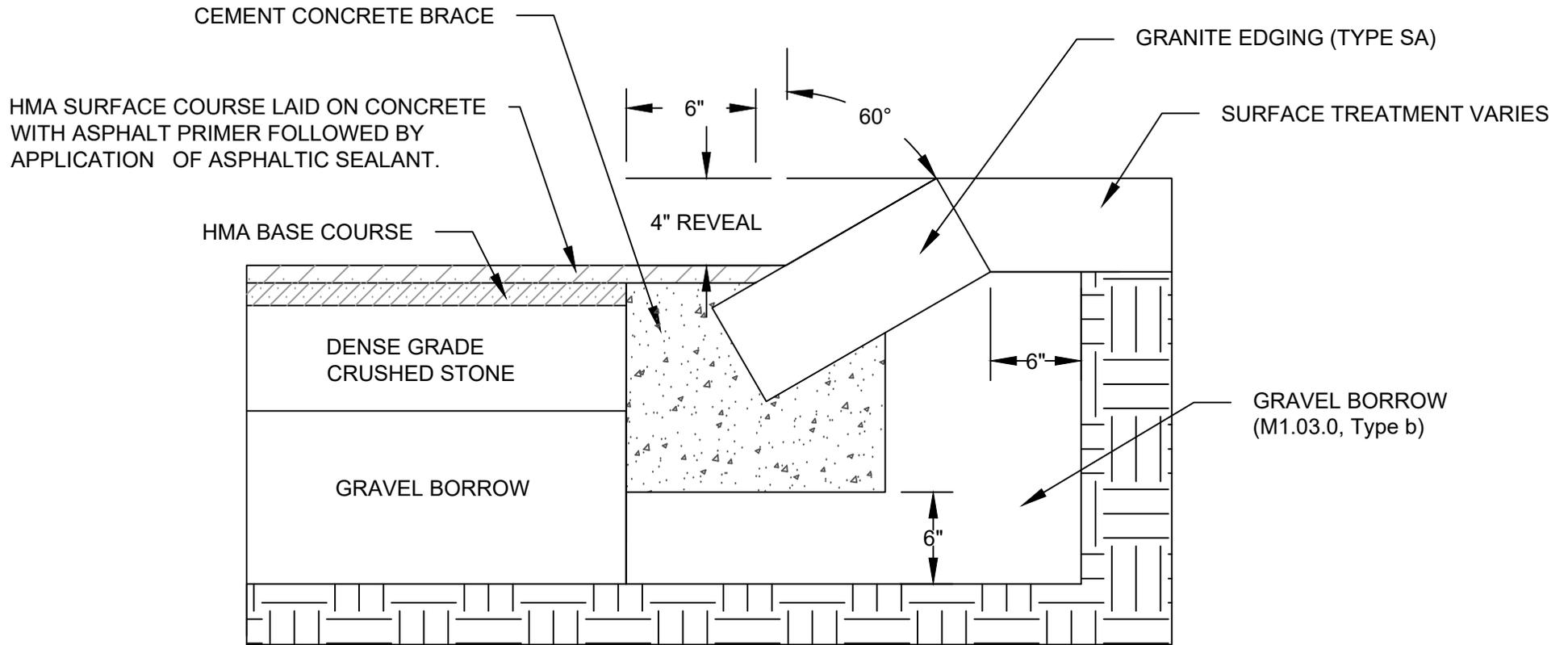
**DETAIL OF DETECTABLE WARNING PANEL**



**SECTION A-A**



<b>DETECTABLE WARNING PANEL</b>		
City of Lowell Standard Specifications and Details		
Spec. Ref #:	Date: 10/01/2025	Scale: N.T.S.



NOTE:

1. PLACE AND COMPACT GRAVEL BORROW PRIOR TO SETTING CURB
2. STREET AREA SHALL BE COMPLETED TO THE BINDER COURSE PRIOR TO SETTING CURB
3. CURB TO BE PLACED AT AN APPROXIMATE 60 DEGREE ANGLE FROM THE VERTICAL ALONG THE FACE OF THE CURB
4. CONCRETE BRACE TO BE LAID ALONG THE ENTIRE LENGTH OF THE CURB



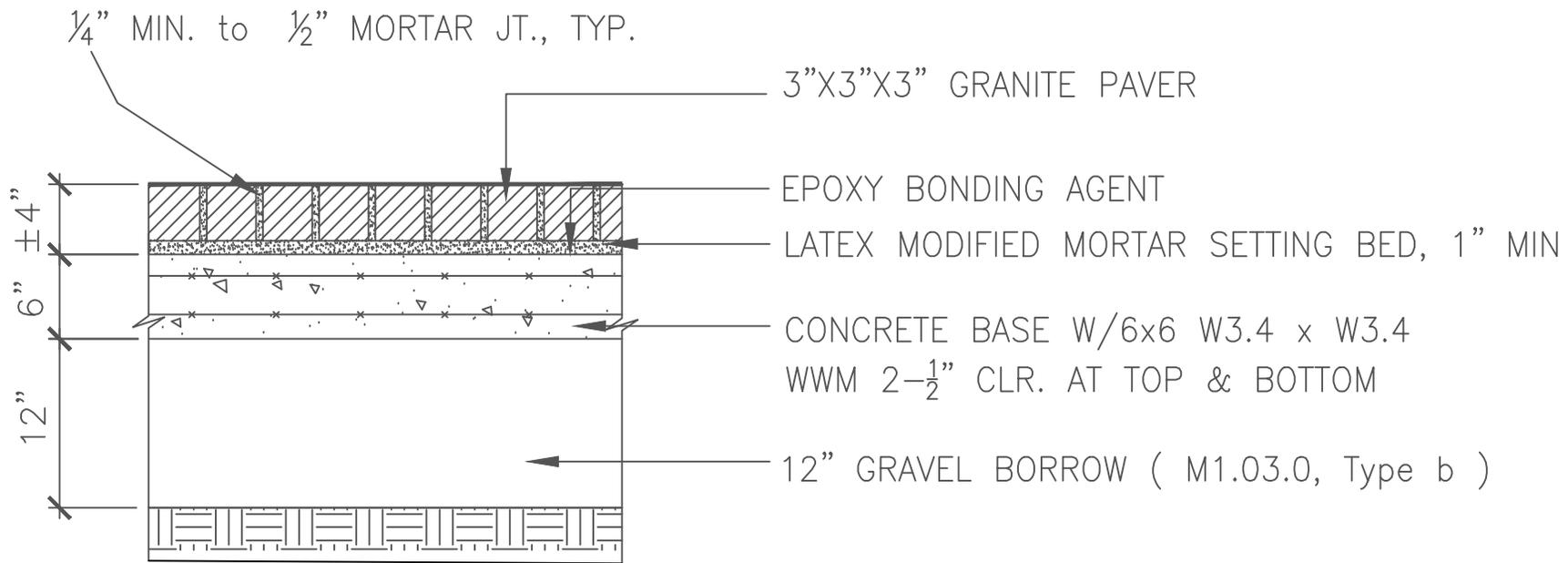
GRANITE EDGING (TYPE - SA)

City of Lowell Standard Specifications and Details

Spec. Ref #: 243-61:  
A(3)(c)[6]

Date: 10/01/2025

Scale: N.T.S.



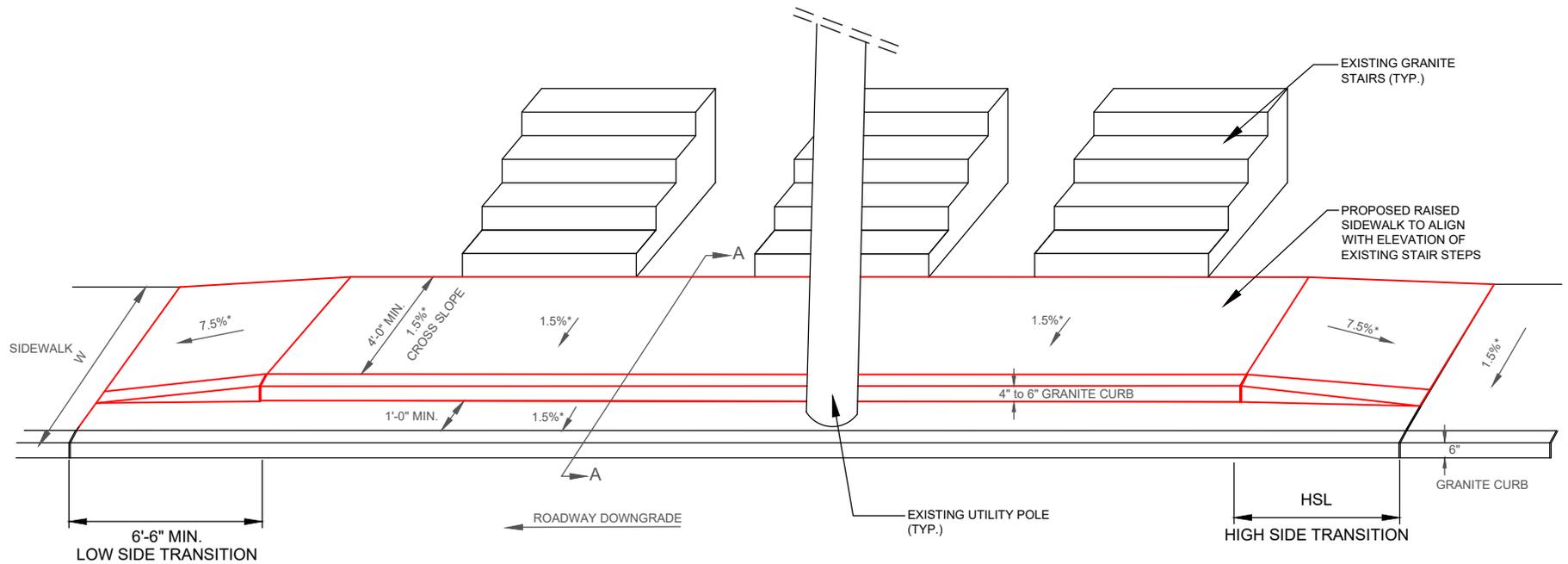
**GRANITE PAVEMENT SETTS**

**NOTE:**

1. MORTAR LEVELING BED WILL BE PLACED AFTER THE CONCRETE BASE HAS SET FOR SEVEN (7) DAYS.
  
2. SIDEWALKS TO BE BUILT IN COMPLIANCE WITH ADA REGULATIONS.



<b>GRANITE PAVEMENT SETTS</b>		
City of Lowell Standard Specifications and Details		
Spec. Ref #:	Date: 10/01/2025	Scale: N.T.S.

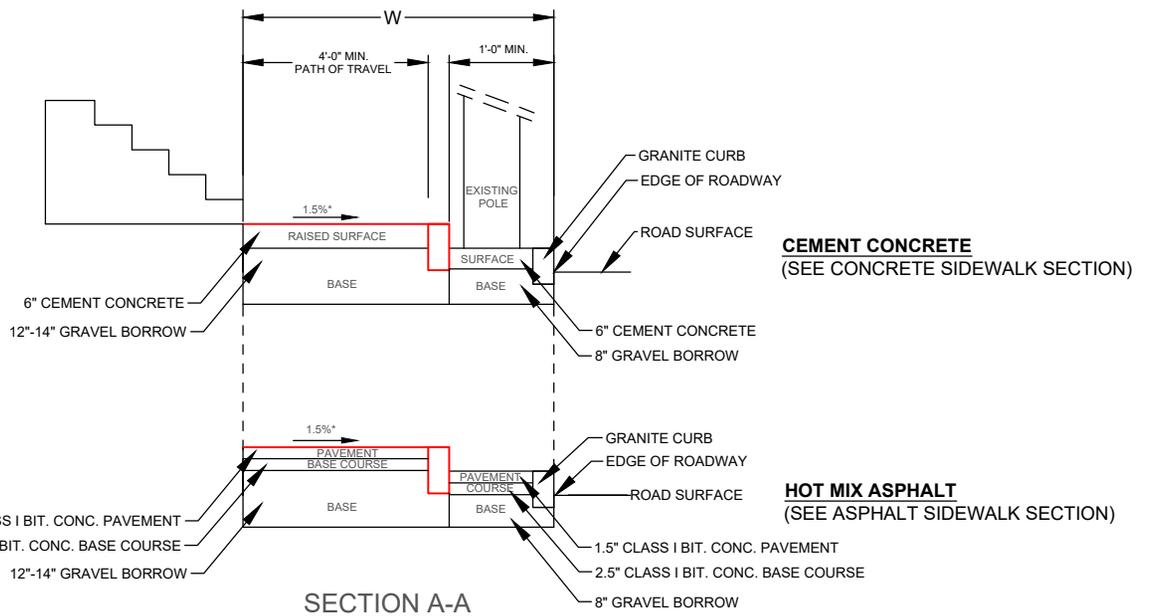


**NOTE:**

1. SIDEWALK CONSTRUCTION SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICANS WITH DISABILITIES ACT (ADA).
2. ALL DIMENSIONS AND GRADES SHALL BE FIELD-VERIFIED PRIOR TO CONSTRUCTION.
3. WHERE FIELD CONDITIONS VARY, CONTRACTOR SHALL NOTIFY ENGINEER.

**LEGEND:**

- W = SIDEWALK WIDTH  
 \* = TOLERANCE FOR CONSTRUCTION ±0.5%  
 HSL = HIGH SIDE TRANSITION LENGTH (AS REQUIRED TO MEET 7.5% MAX SLOPE)



**SIDEWALK TRANSITION TO EXISTING STAIRS – TYPICAL DETAIL**

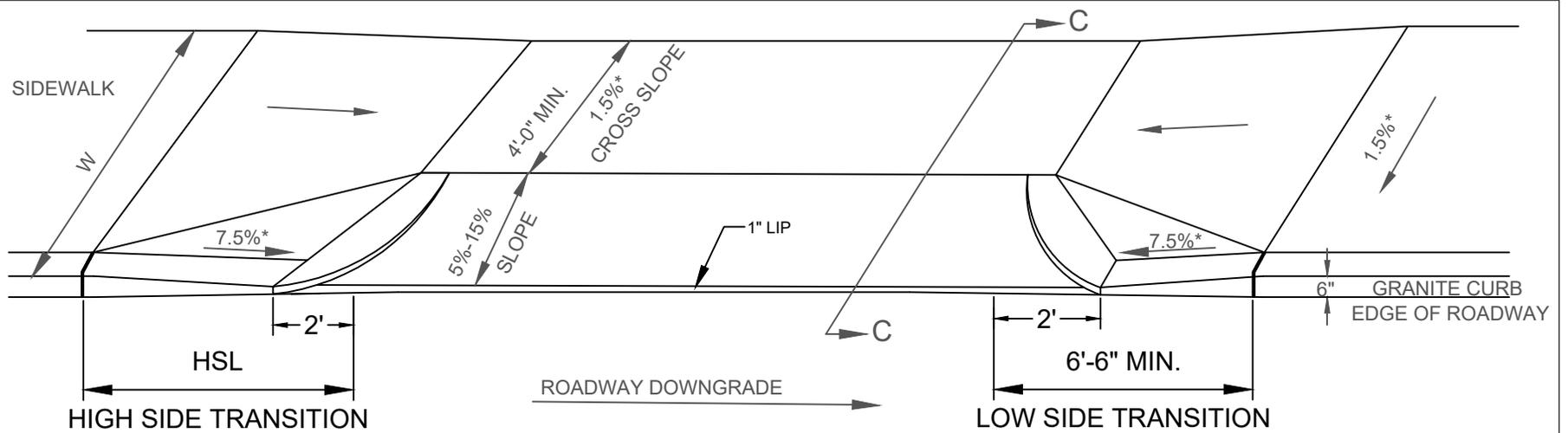
City of Lowell Standard Specifications and Details

Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.





**NOTE:**

- DRIVEWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT.

**CEMENT CONCRETE**  
(SEE CONCRETE SIDEWALK SECTION)

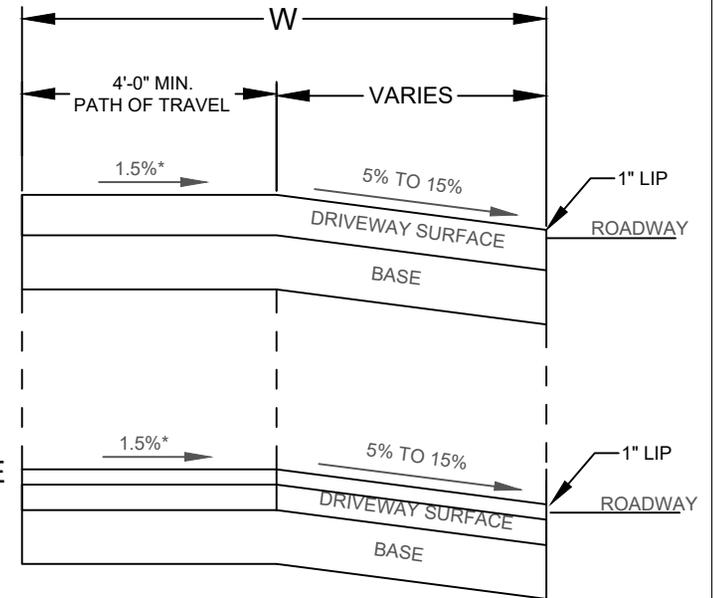
SURFACE: 6" CEMENT CONCRETE

BASE: 8" GRAVEL BORROW

**HOT MIX ASPHALT**  
(SEE ASPHALT SIDEWALK SECTION)

SURFACE: 1.5" CLASS I BIT. CONC. PAVEMENT  
2.5" CLASS I BIT. CONC. BASE COURSE

BASE: 8" GRAVEL BORROW



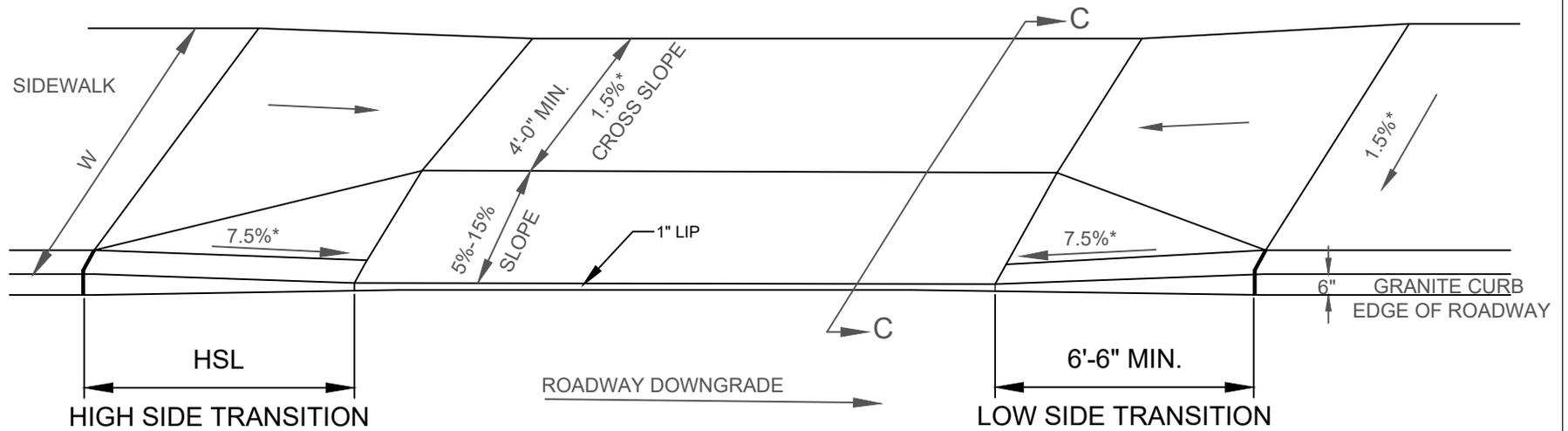
**SECTION C-C**

**LEGEND:**

- W = SIDEWALK WIDTH
- \* = TOLERANCE FOR CONSTRUCTION ±0.5%
- HSL = HIGH SIDE TRANSITION LENGTH (AS REQUIRED TO MEET 7.5% MAX SLOPE)



SIDEWALK THROUGH DRIVEWAY WITH CURB RETURNS (2' CURB CORNERS)		
City of Lowell Standard Specifications and Details		
Spec. Ref #:	Date: 10/01/2025	Scale: N.T.S.



**NOTE:**

1. DRIVEWAYS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT.

**CEMENT CONCRETE**  
(SEE CONCRETE SIDEWALK SECTION)

SURFACE: 6" CEMENT CONCRETE

BASE: 8" GRAVEL BORROW

**HOT MIX ASPHALT**  
(SEE ASPHALT SIDEWALK SECTION)

SURFACE: 1.5" CLASS I BIT. CONC. PAVEMENT  
2.5" CLASS I BIT. CONC. BASE COURSE

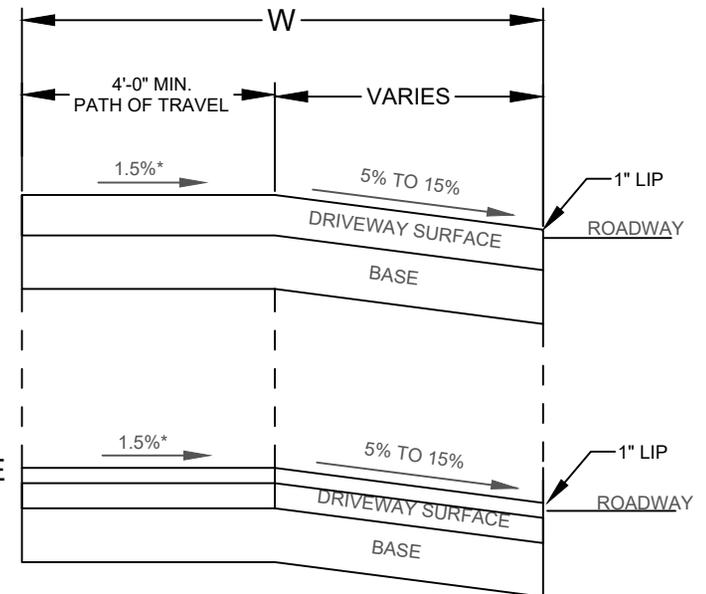
BASE: 8" GRAVEL BORROW

**LEGEND:**

W = SIDEWALK WIDTH

\* = TOLERANCE FOR CONSTRUCTION  $\pm 0.5\%$

HSL = HIGH SIDE TRANSITION LENGTH (AS REQUIRED TO MEET 7.5% MAX SLOPE)



**SECTION C-C**



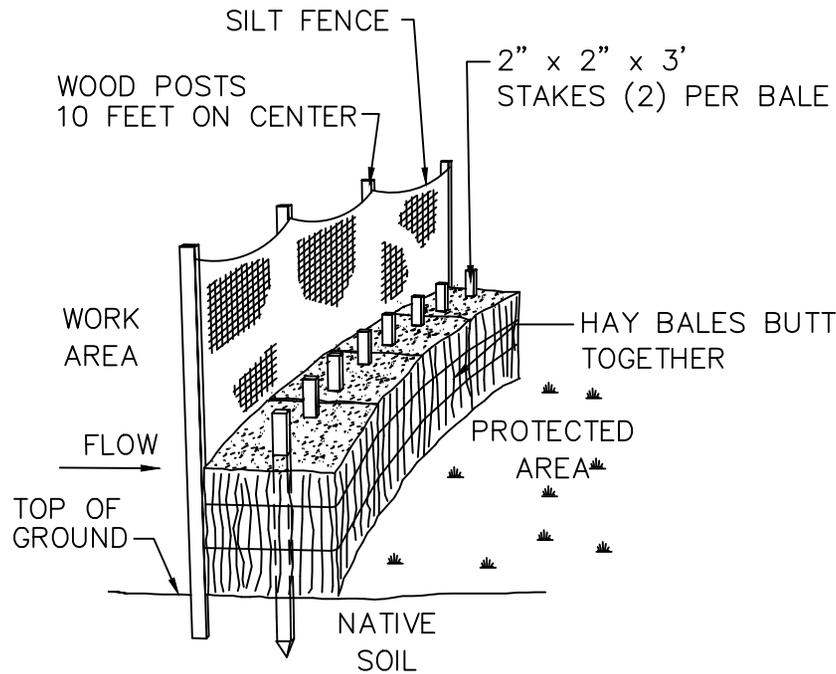
**SIDEWALK THROUGH DRIVEWAY WITHOUT CURB RETURNS**

City of Lowell Standard Specifications and Details

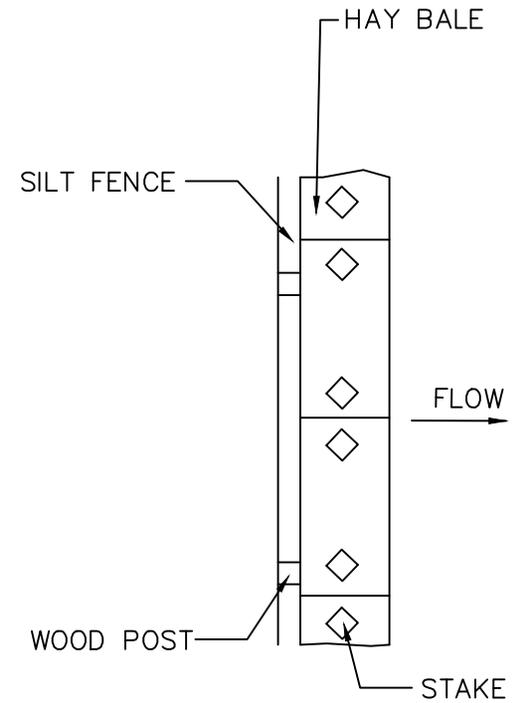
Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.



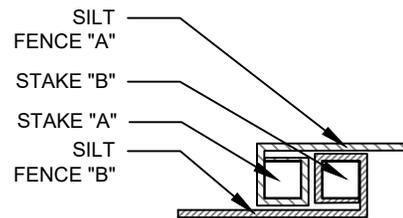
CROSS SECTION



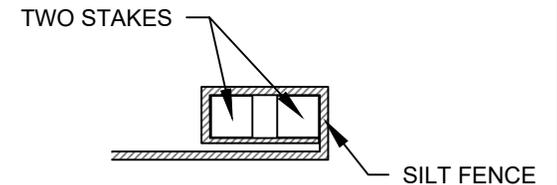
PLAN VIEW

NOTE:

1. FILTER CLOTH SHALL BE FASTENED SECURELY TO POSTS WITH WIRE TIRES OR STAPLES AND POSTS SHALL BE SPACED EVERY 10 FT.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6 INCHES AND FOLDED.
3. ENTRENCH SILT FENCE BUT NOT HAY BALES
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS.



SECTION JOINT DETAIL



END SECTION JOINT DETAIL



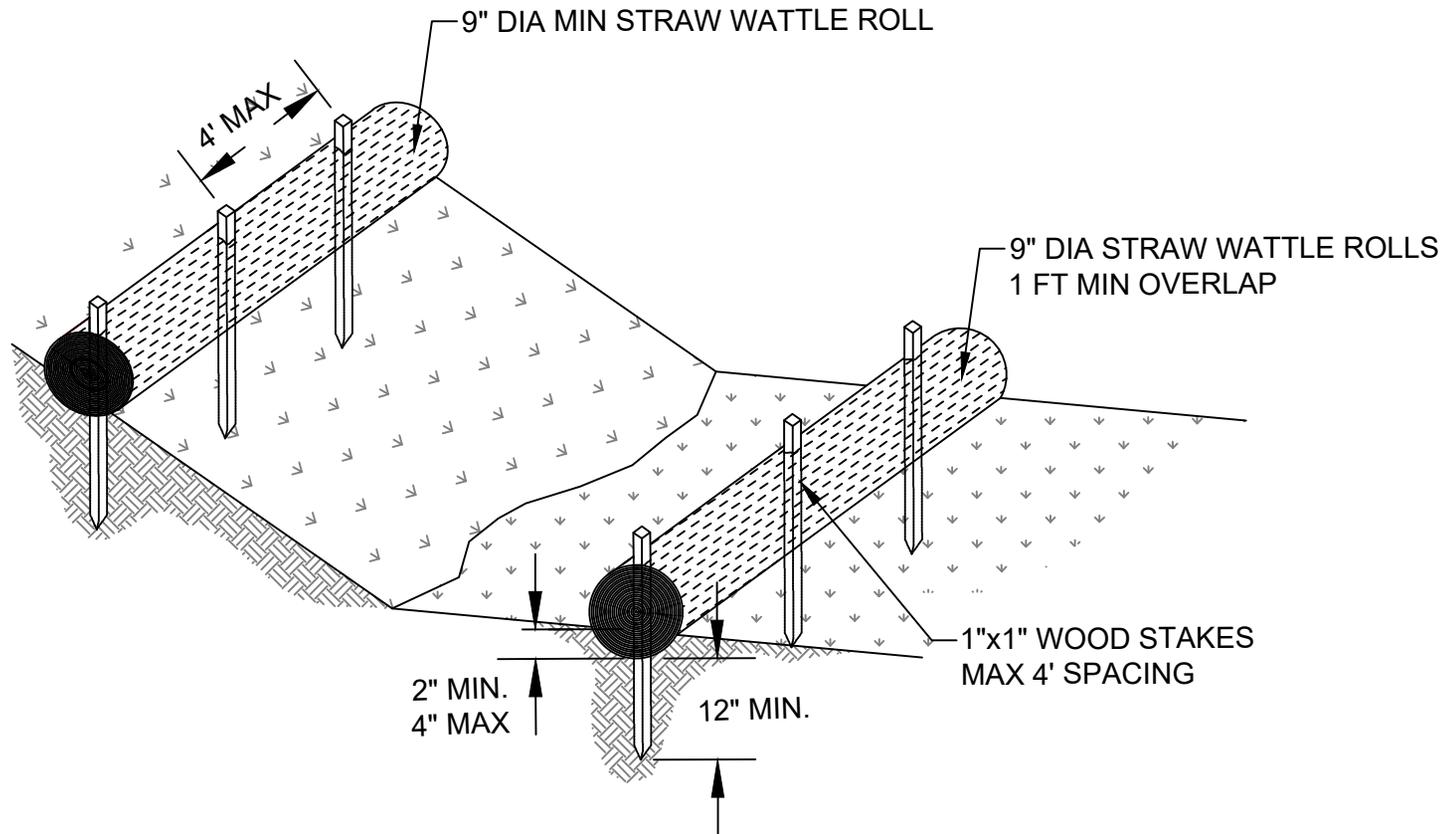
SILT FENCE

City of Lowell Standard Specifications and Details

Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.



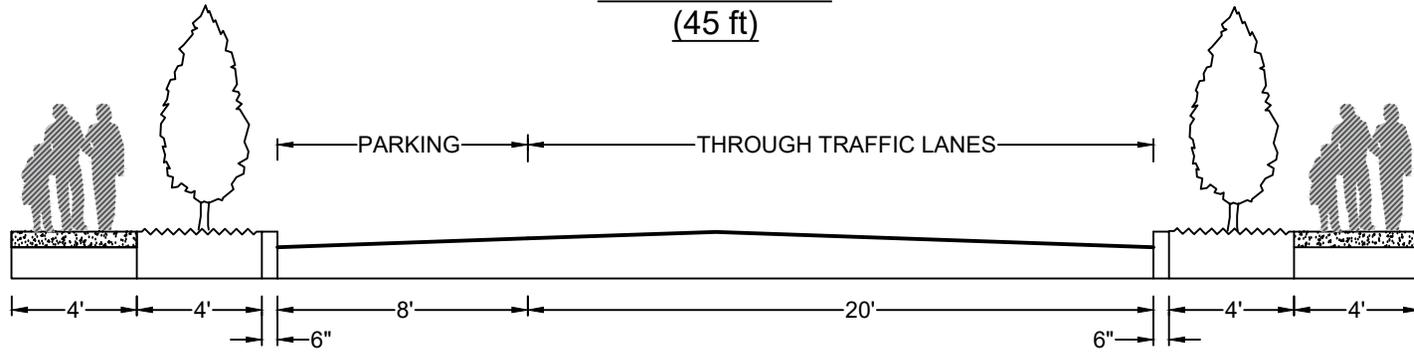
NOTE:

1. MAINTENANCE SHALL OCCUR WHEN NECESSARY.
2. ROLLS SHALL BE INSPECTED WEEKLY AND ALL MAINTENANCE ISSUES SHALL BE CORRECTED AT THAT TIME. ROLLS SHALL BE REPLACED EVERY 6 MONTHS.
3. ROLLS SHALL BE SECURED BY WOOD STAKES. WOOD STAKES SHALL BE SPACED EVERY 4 FT.
4. WHEN TWO SECTIONS OF STRAW WATTLE ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 1 FOOT MINIMUM.

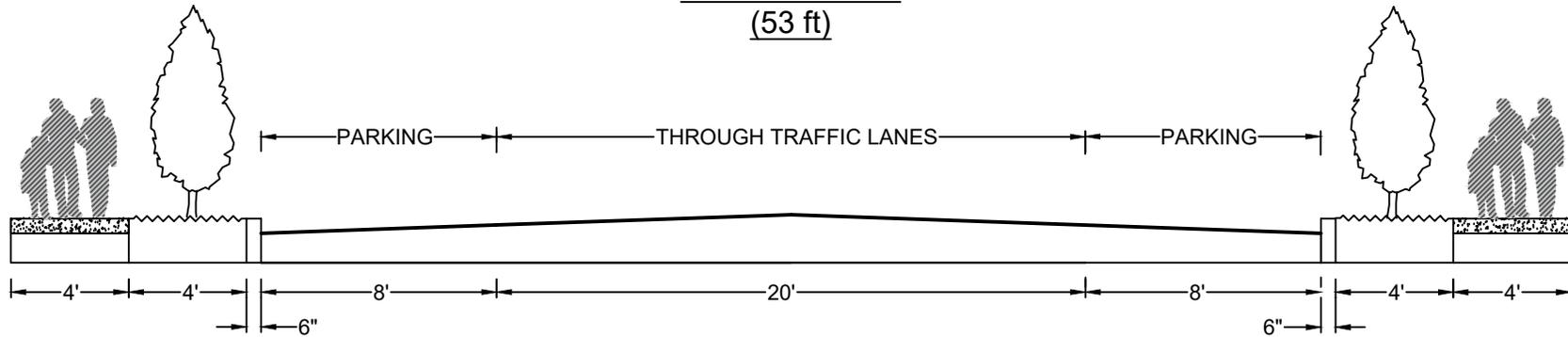


<b>STRAW WATTLE</b>		
City of Lowell Standard Specifications and Details		
Spec. Ref #:	Date: 10/01/2025	Scale: N.T.S.

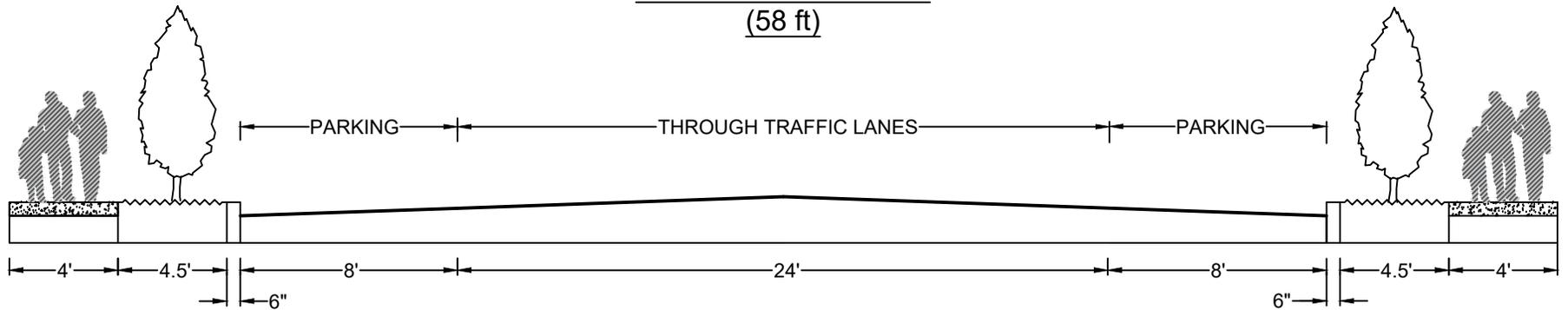
**LOCAL TYPE A**  
(45 ft)



**LOCAL TYPE B**  
(53 ft)



**COLLECTOR STREET**  
(58 ft)



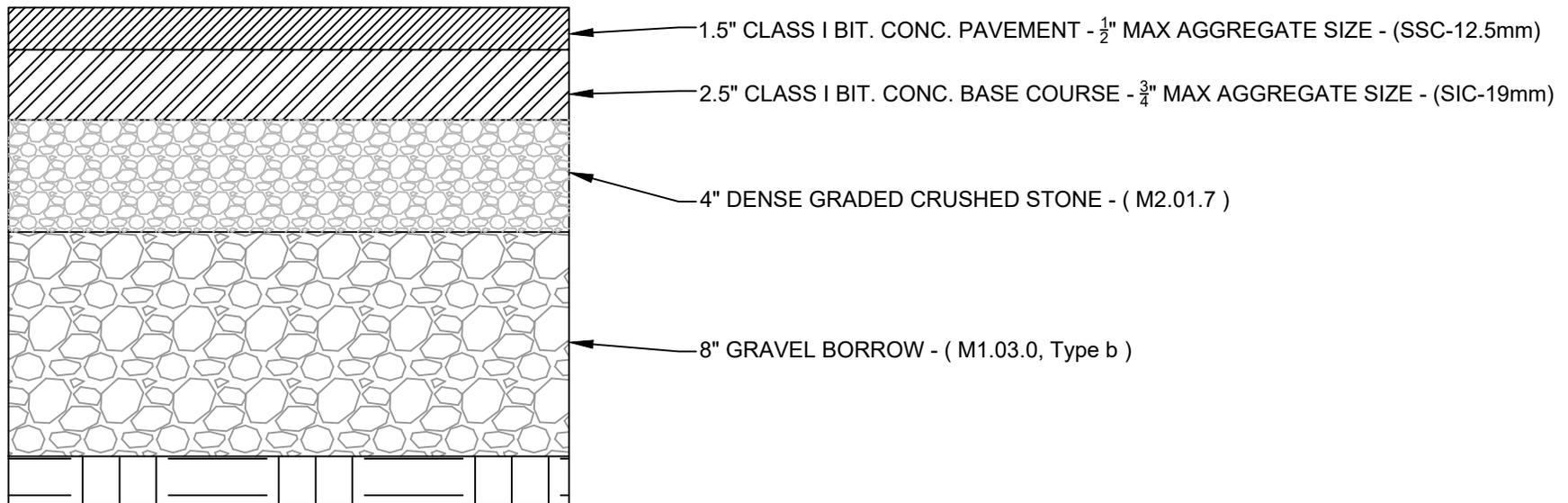
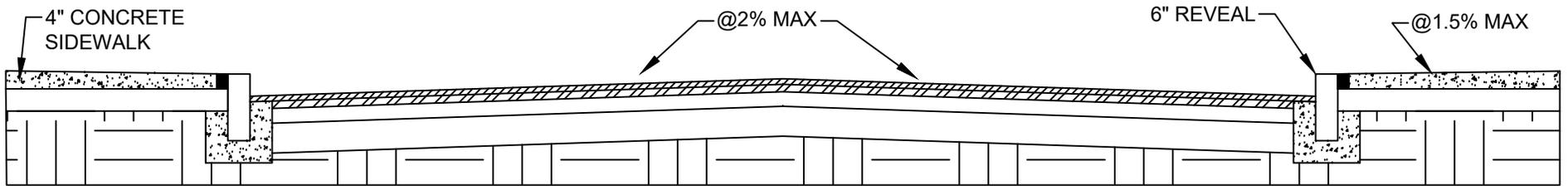
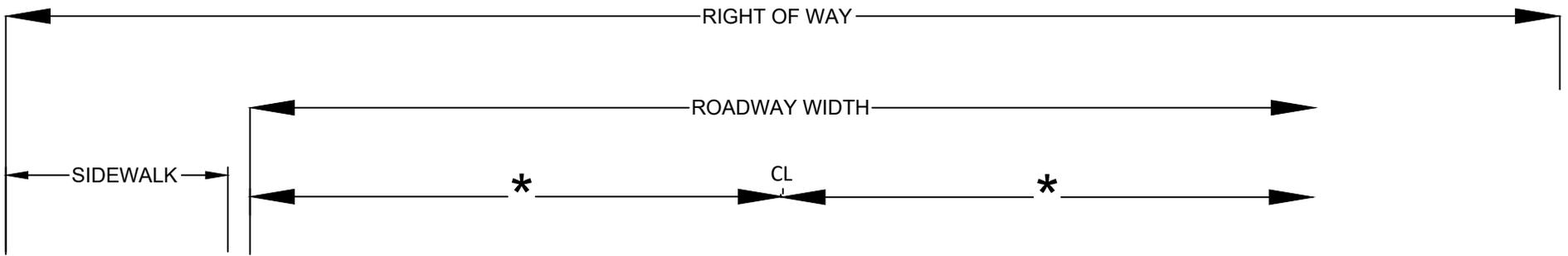
**STREET CROSS SECTIONS**

City of Lowell Standard Specifications and Details

Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.



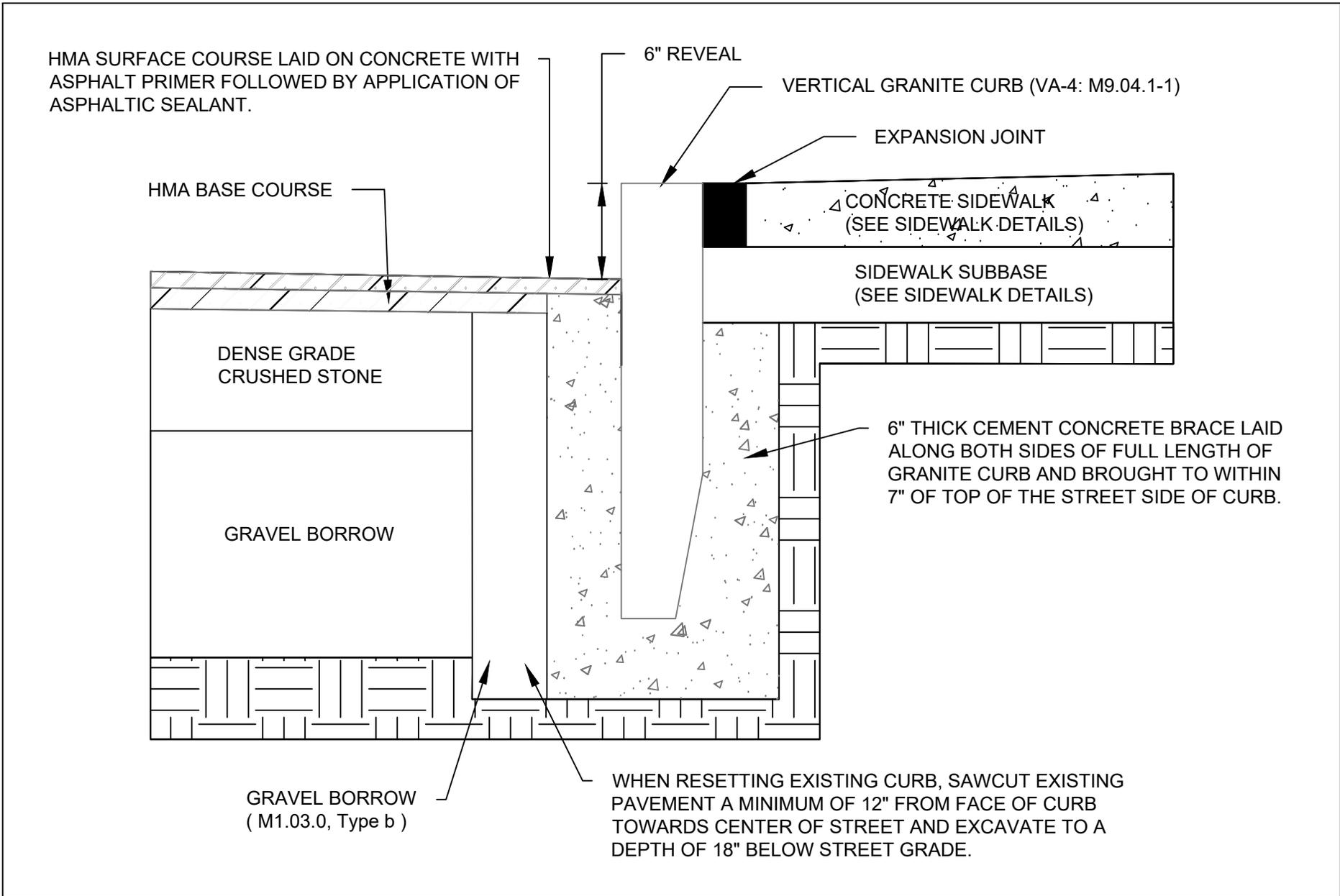
### TYPICAL STREET CROSS SECTION

City of Lowell Standard Specifications and Details

Spec. Ref #: Sub of Land  
Regs: Sect V.A.2

Date: 10/01/2025

Scale: N.T.S.



VERTICAL GRANITE CURB VA-4 (REMOVED AND RESET)

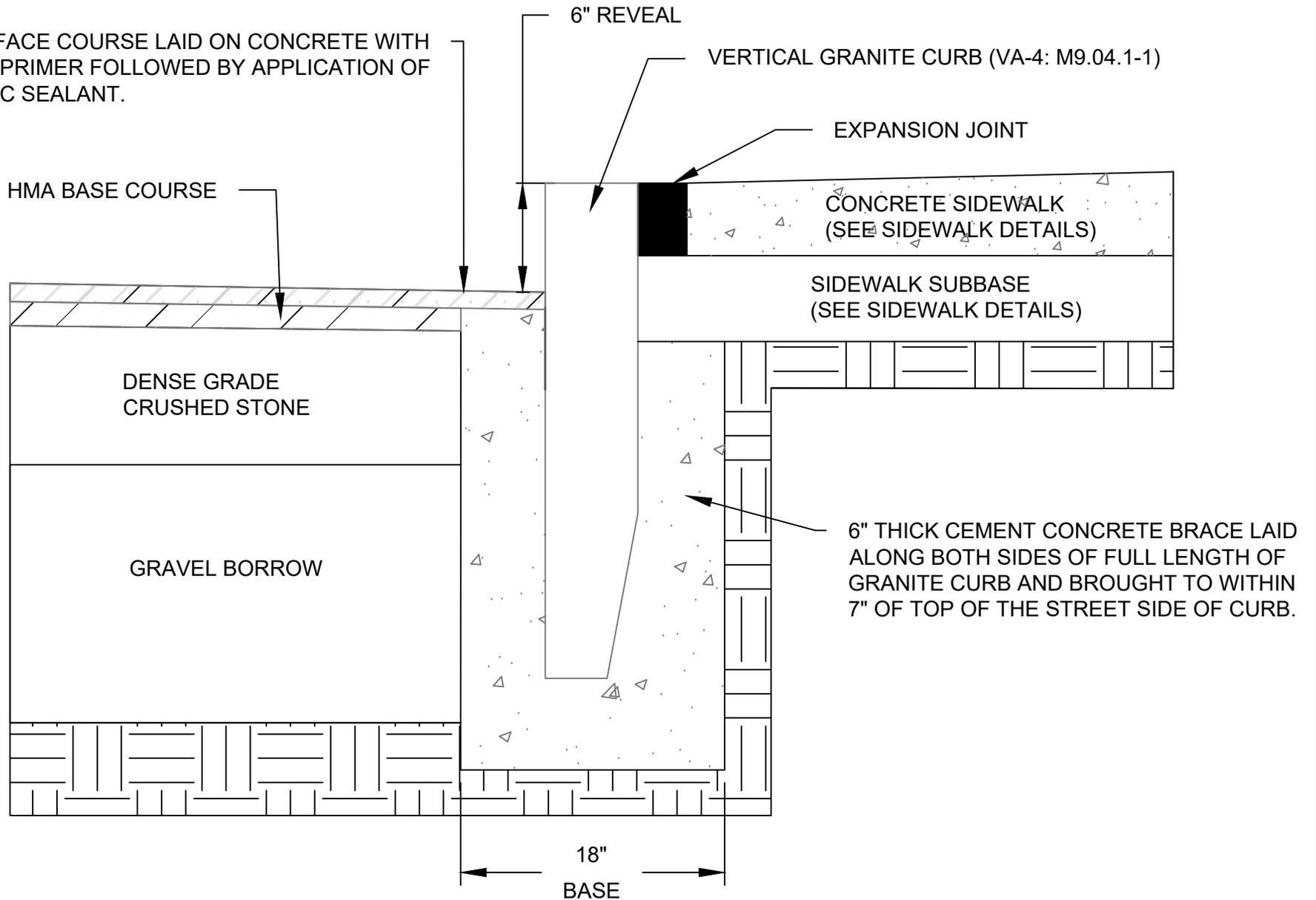
City of Lowell Standard Specifications and Details

Spec. Ref #: 243-61:  
A(3)(C)[4]

Date: 10/01/2025

Scale: N.T.S.

HMA SURFACE COURSE LAID ON CONCRETE WITH ASPHALT PRIMER FOLLOWED BY APPLICATION OF ASPHALTIC SEALANT.



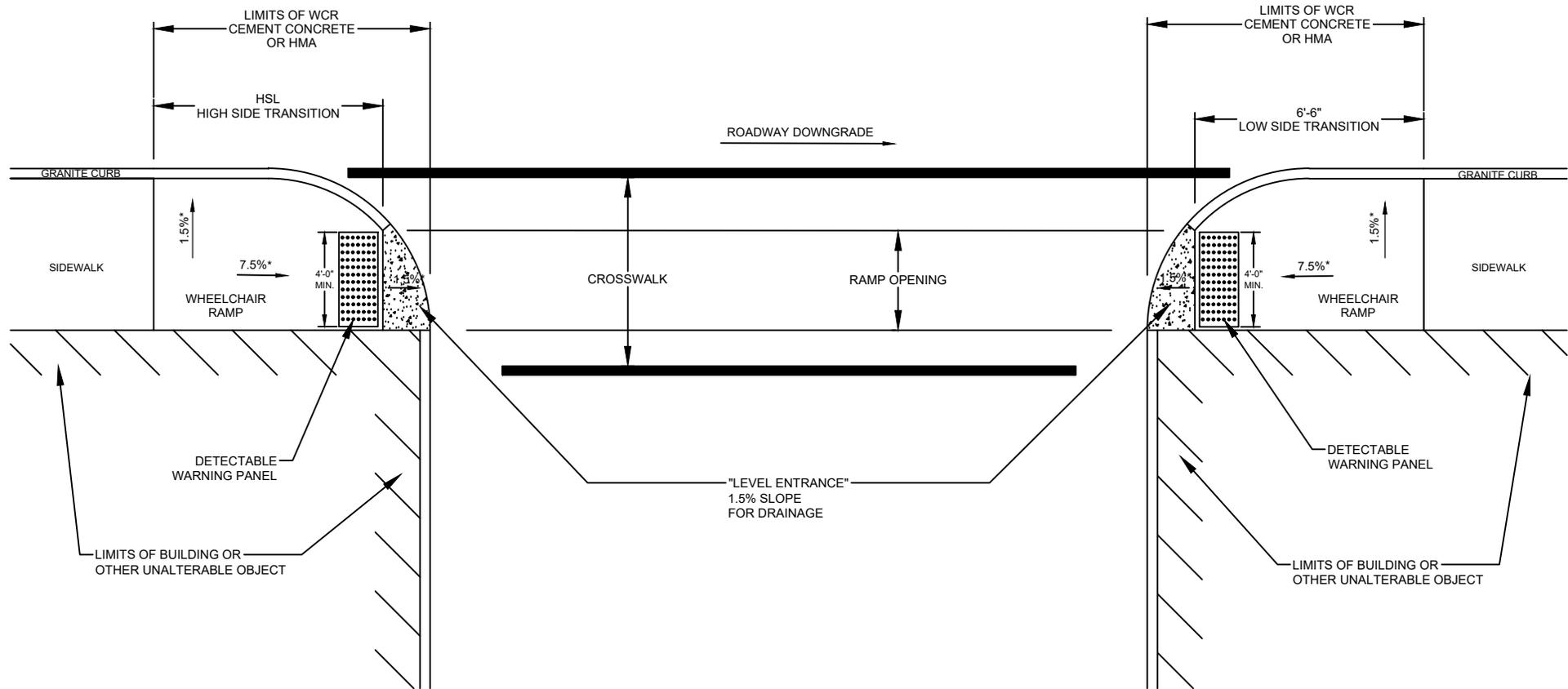
VERTICAL GRANITE CURB VA-4

City of Lowell Standard Specifications and Details

Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.



**LEGEND:**

HSL = HIGH SIDE TRANSITION LENGTH  
(SEE CURB TRANSITION LENGTH TABLE)

\* = TOLERANCE FOR CONSTRUCTION  $\pm 0.5\%$

**NOTE:**

1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT.
2. SEE DETECTABLE WARNING PANEL DETAIL



**WHEELCHAIR RAMP FOR ONE CONTINUOUS DIRECTION OF PEDESTRIAN TRAVEL**

City of Lowell Standard Specifications and Details

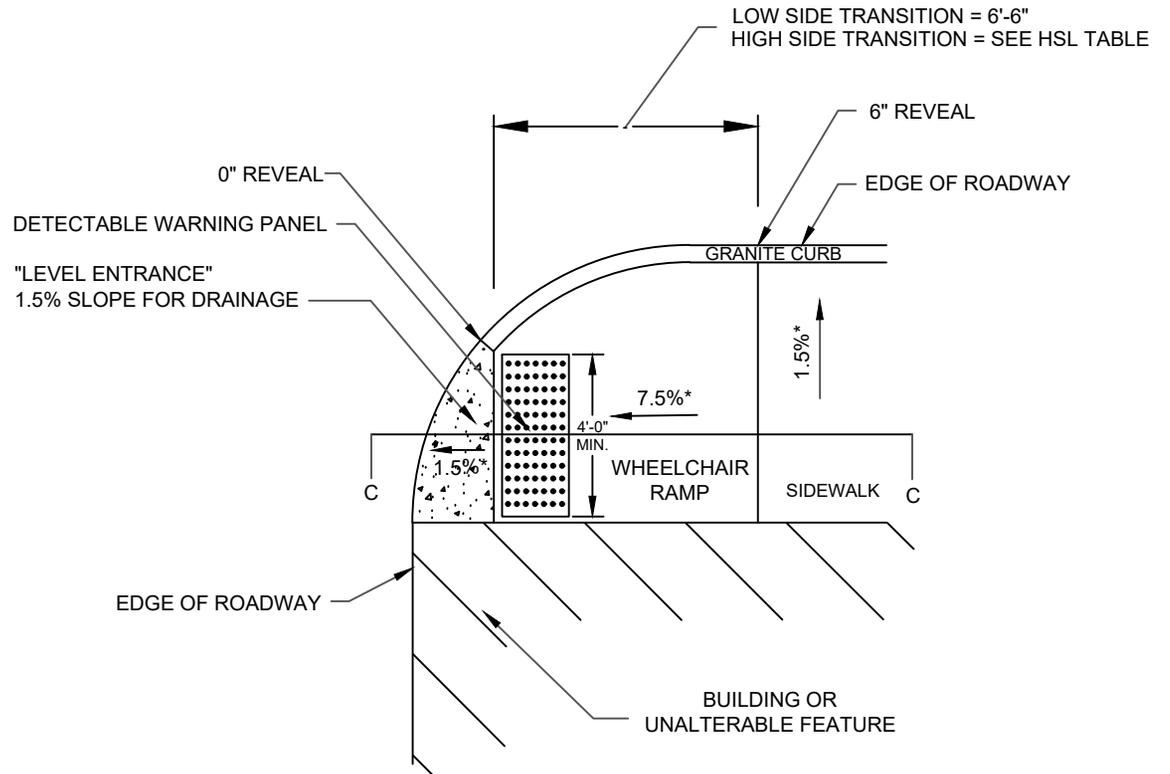
Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.

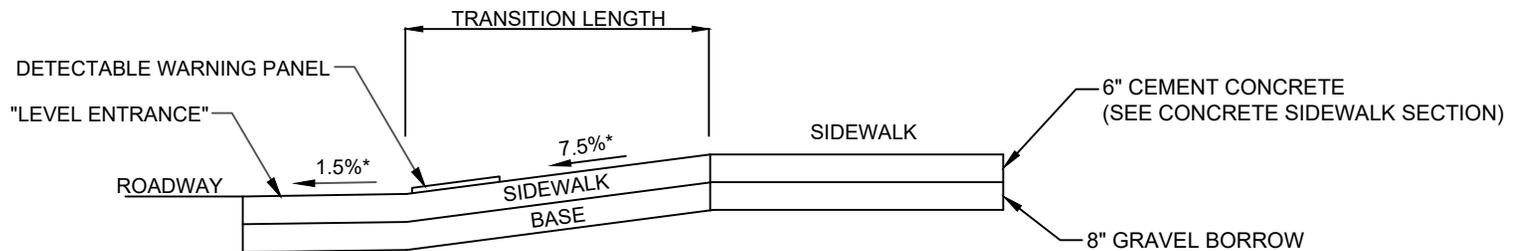
NOTE:

1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT.
2. SEE DETECTABLE WARNING PANEL DETAIL



LEGEND:

HSL = HIGH SIDE TRANSITION LENGTH  
(SEE CURB TRANSITION LENGTH TABLE)  
\* = TOLERANCE FOR CONSTRUCTION  $\pm 0.5\%$



SECTION C-C



WHEELCHAIR RAMP SINGLE DIRECTION

City of Lowell Standard Specifications and Details

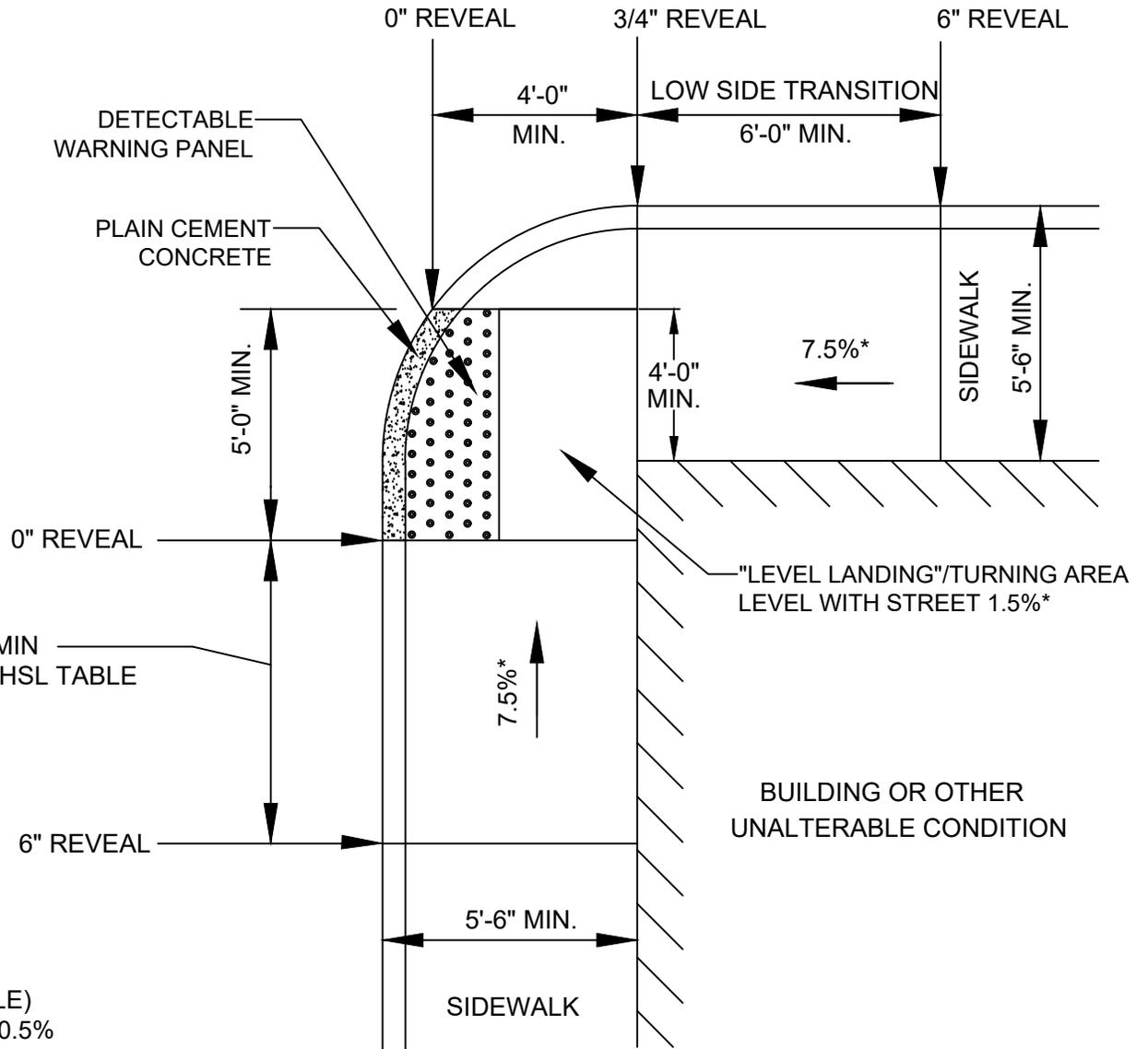
Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.

**NOTE:**

1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT.
2. SEE DETECTABLE WARNING PANEL DETAIL



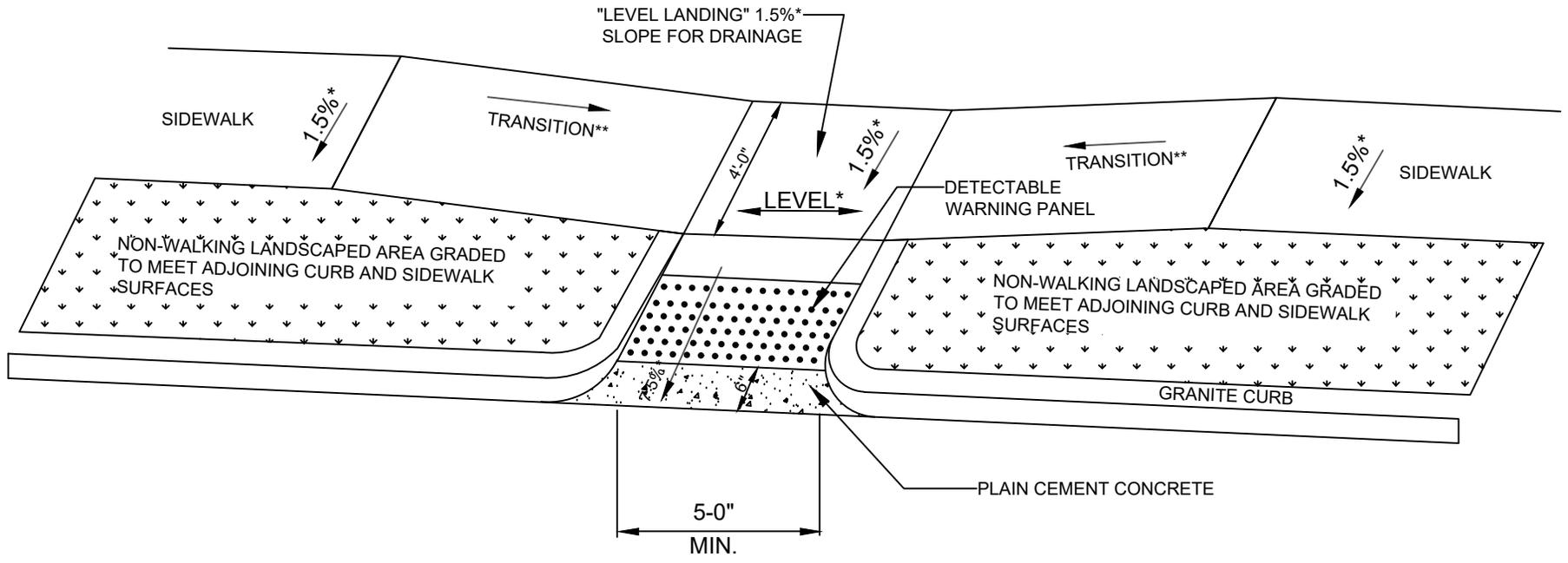
LOW SIDE TRANSITION = 6'-6" MIN  
 HIGH SIDE TRANSITION = SEE HSL TABLE

**LEGEND:**

HSL = HIGH SIDE TRANSITION LENGTH  
 (SEE CURB TRANSITION LENGTH TABLE)  
 \* = TOLERANCE FOR CONSTRUCTION ±0.5%



WHEELCHAIR RAMP "T" INTERSECTION		
City of Lowell Standard Specifications and Details		
Spec. Ref #:	Date: 10/01/2025	Scale: N.T.S.



LEGEND:

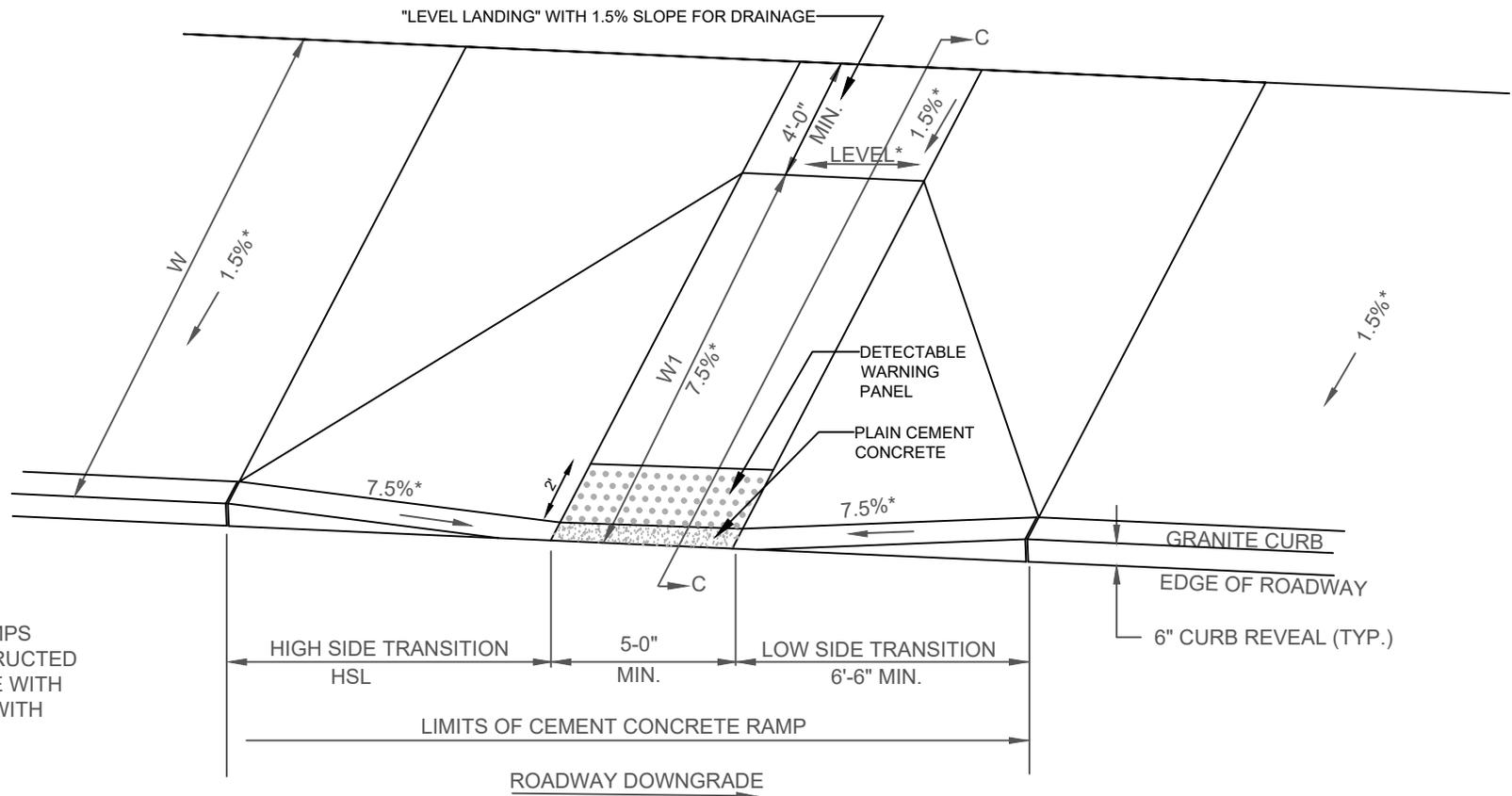
- \*\* = SEE CURB TRANSITION LENGTH TABLE
- \* = TOLERANCE FOR CONSTRUCTION  $\pm 0.5\%$

NOTE:

1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT.
2. SEE DETECTABLE WARNING PANEL DETAIL



WHEELCHAIR RAMP WITH LANDSCAPING STRIP		
City of Lowell Standard Specifications and Details		
Spec. Ref #:	Date: 10/01/2025	Scale: N.T.S.

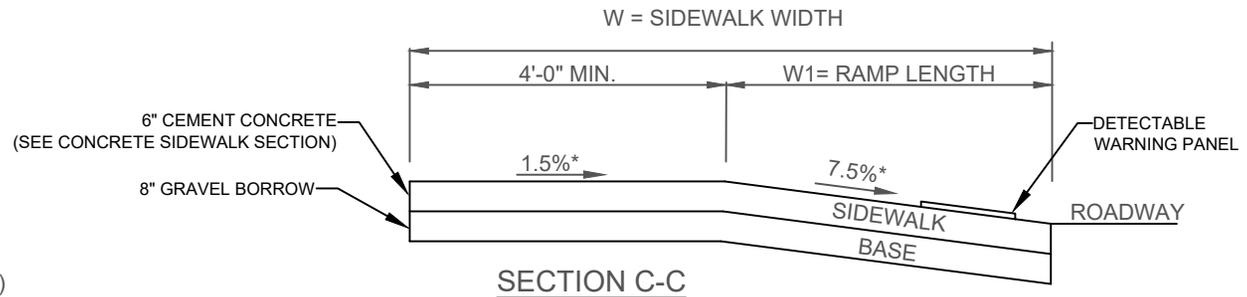


**NOTE:**

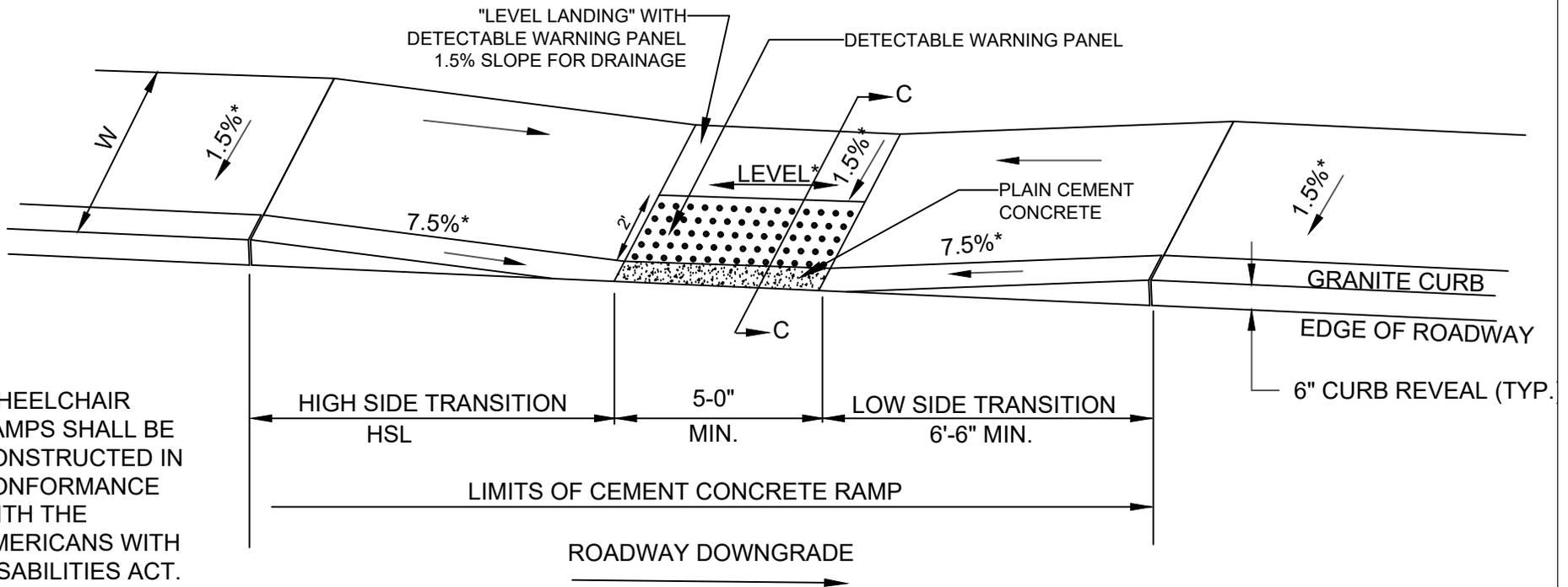
1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT.
2. SEE DETECTABLE WARNING PANEL DETAIL

**LEGEND:**

- W = SIDEWALK WIDTH
- W1 = RAMP LENGTH = W - 4'-0" MIN
- HSL = HIGH SIDE TRANSITION LENGTH  
(SEE CURB TRANSITION LENGTH TABLE)
- \* = TOLERANCE FOR CONSTRUCTION ±0.5%



<b>WHEELCHAIR RAMP WITH SIDEWALK GREATER THAN 12 FT</b>		
City of Lowell Standard Specifications and Details		
Spec. Ref #:	Date: 10/01/2025	Scale: N.T.S.

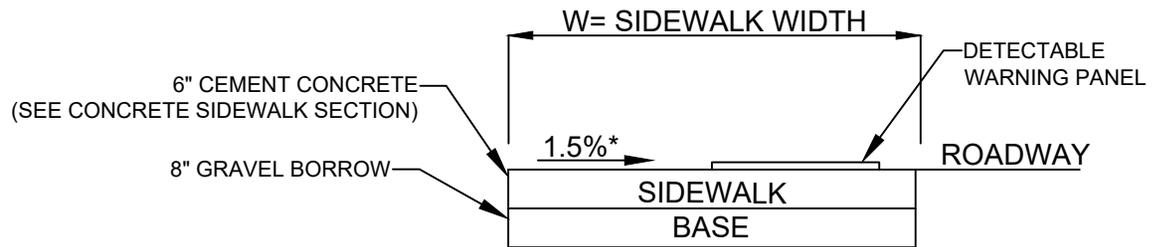


**NOTE:**

1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT.
2. SEE DETECTABLE WARNING PANEL DETAIL

**LEGEND:**

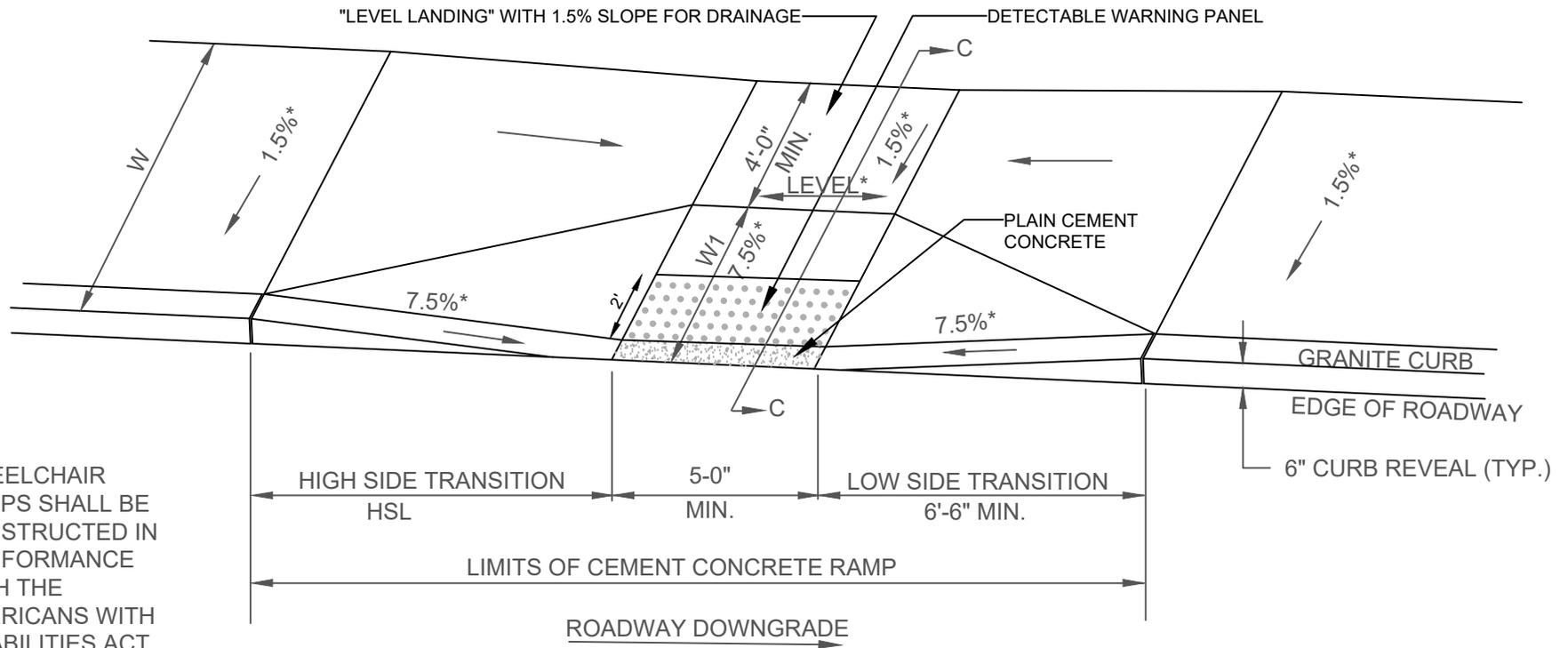
W = SIDEWALK WIDTH  
 W1 = RAMP LENGTH = W - 4'-0" MIN  
 HSL = HIGH SIDE TRANSITION LENGTH  
 (SEE CURB TRANSITION LENGTH TABLE)  
 \* = TOLERANCE FOR CONSTRUCTION ±0.5%



**SECTION C-C**



WHEELCHAIR RAMP WITH SIDEWALK LESS THAN 6.5 FT		
City of Lowell Standard Specifications and Details		
Spec. Ref #:	Date: 10/01/2025	Scale: N.T.S.

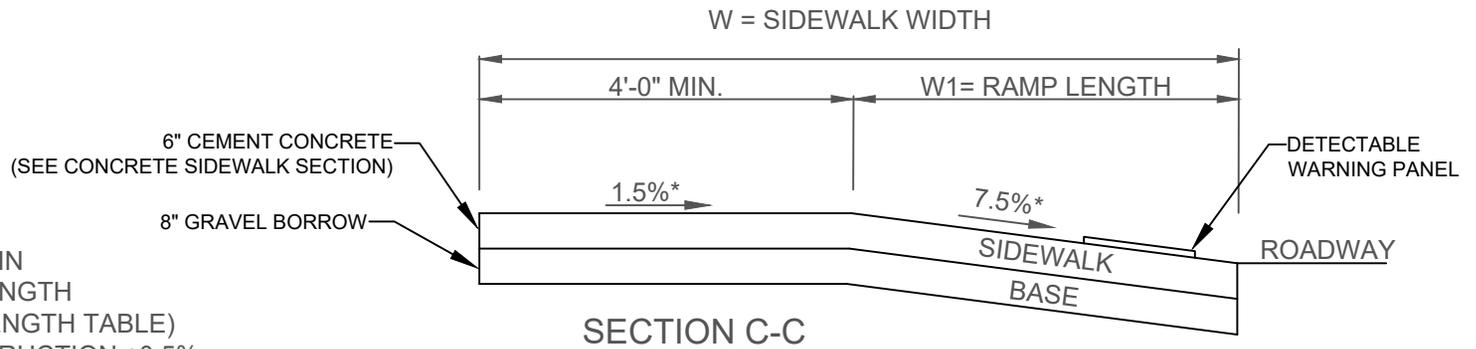


**NOTE:**

1. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT.
2. SEE DETECTABLE WARNING PANEL DETAIL

**LEGEND:**

W = SIDEWALK WIDTH  
 W1 = RAMP LENGTH = W - 4'-0" MIN  
 HSL = HIGH SIDE TRANSITION LENGTH  
 (SEE CURB TRANSITION LENGTH TABLE)  
 \* = TOLERANCE FOR CONSTRUCTION ±0.5%



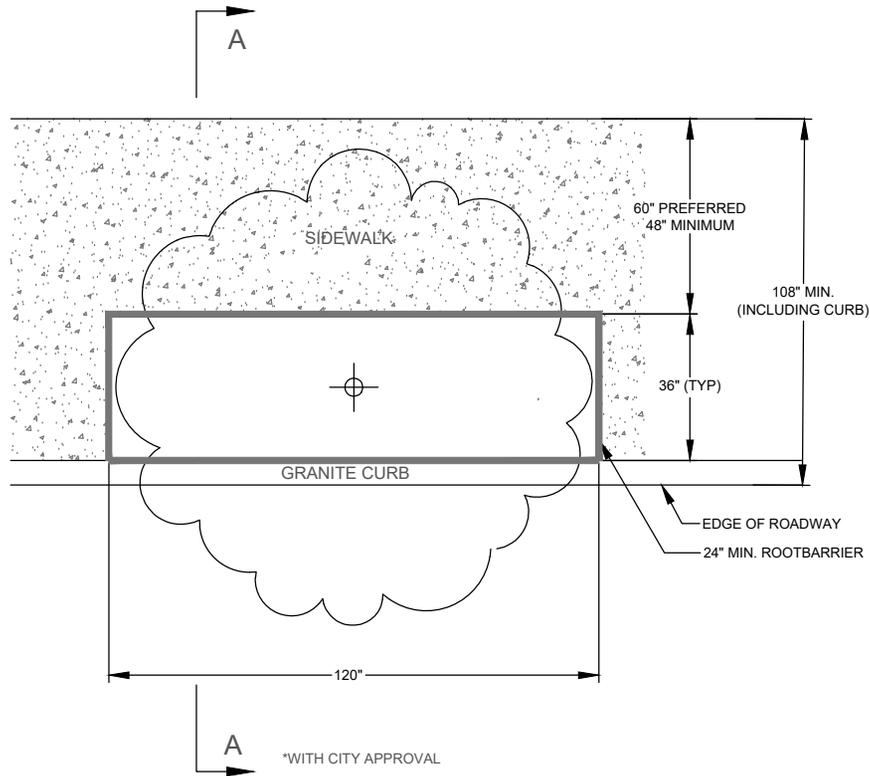
**WHEELCHAIR RAMP WITH SIDEWALK LESS THAN 12 FT**

City of Lowell Standard Specifications and Details

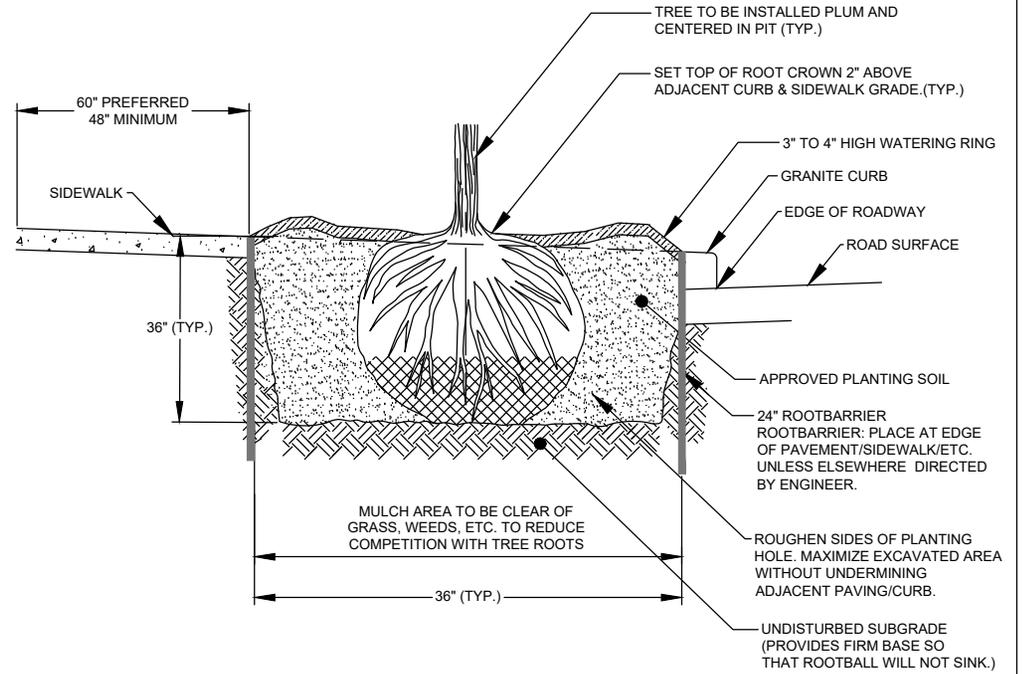
Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.



TREE PLANTING PLAN VIEW (TYP.)



SECTION A-A (TYP.)

NOTE:

1. TREE PIT TO BE A MINIMUM OF 24 SQUARE FEET.
2. PROVIDE 10' LONG X 3" SQ.
3. CONTRACTOR SHALL PERFORM PERCOLATION TEST ON SUB-GRADE PRIOR TO PLANTING. IF TEST IS NOT PASSING, CONTRACTOR SHALL ADJUST SUB-GRADE ACCORDINGLY.

TREE PIT SPACING REQUIREMENTS

1. MINIMUM 5 FT FROM FIRE HYDRANTS
2. MINIMUM 3 FT FROM UNDERGROUND UTILITIES (WATER, SEWER, GAS)
3. MINIMUM 7 FT FROM DRIVEWAYS
4. MINIMUM 6 FT FROM TRAFFIC SIGNS
5. MINIMUM 30 FT FROM STOP SIGNS
6. MINIMUM 20 FT FROM LIGHT POLES
7. MINIMUM 30 FT BETWEEN TREE PITS (TREE-TO-TREE SPACING)



SIDEWALK - TREE PIT (3'X10')

City of Lowell Standard Specifications and Details

Spec. Ref #:

Date: 10/01/2025

Scale: N.T.S.