



MAYOR & COUNCIL COMMUNICATION

DATE: August 18, 2015

REGULAR

ITEM # 7

AGENDA ITEM: 5th Street Design Standards – Approve Landscaping and Lighting Design

SUBMITTED BY: Jack Griffin, City Engineer

THROUGH: Clark Schroeder, City Administrator

REVIEWED BY: Kyle Klatt, Community Development Director
Mike Bouthilet, Public Works
Cathy Bendel, Finance Director
Ryan Stempki, Assistant City Engineer

SUGGESTED ORDER OF BUSINESS (if removed from the Consent Agenda):

- Questions from Council to Staff..... Mayor Facilitates
- Public Input, if Appropriate.....Mayor Facilitates
- Call for Motion Mayor & City Council
- Discussion Mayor & City Council
- Action on Motion..... Mayor Facilitates

POLICY RECOMMENDER: Planning / Engineering.

FISCAL IMPACT: No immediate impact.

The 5th Street Design Standards inform the developers how to design and construct 5th Street within each of their respective development projects. At this time, there is no City cost contribution for these improvements.

SUMMARY AND ACTION REQUESTED:

The City Council is respectfully requested to consider approving the Landscaping and Lighting Design details to be incorporated into the 5th Street Design Standards. If removed from the Consent Agenda, the recommended motion for this action is as follows:

“Move to approve the Landscaping and Lighting Design details to be incorporated into the 5th Street Design Standards to inform the design and construction for all portions of the 5th Street North MSA Collector Street from Inwood Avenue to Manning Avenue.”

LEGISLATIVE HISTORY/BACKGROUND INFORMATION:

5th Street North from CSAH 13 (Inwood Avenue) to CSAH 15 (Manning Avenue) will become the backbone of future development along the I94 corridor, essentially becoming the primary access in and out of the future neighborhoods and commercial properties. The street will be designed to meet State Aid Urban Design standards [8820.9936] with a 40 mph posted speed and is projected to carry 5,000 vehicles per day on average by year 2030.

The quality of the street and its connections are critically important. The purpose of the proposed street standards are to 1) improve the function and appearance of the street, 2) encourage pedestrian and bicycle use, and 3) reduce the potential for speeding. From a Community Development perspective, the design of 5th Street is intended to provide a consistent street plan from Manning Avenue to Inwood Avenue that serves to connect the various unique neighborhoods using a common design theme.

Over the past year City staff has been working to develop and finalize Design Standards and Guidelines to inform the design and construction details for 5th Street. A council workshop was held on August 11, 2015 to present the final landscaping and street light details. The details have been updated to incorporate the input received at this workshop.

RECOMMENDATION:

Staff is recommending that the City Council approve the Landscaping and Lighting Design details to be incorporated into the 5th Street Design Standards. If removed from the Consent Agenda, the recommended motion for this action is as follows:

“Move to approve the Landscaping and Lighting Design details to be incorporated into the 5th Street Design Standards to inform the design and construction for all portions of the 5th Street North MSA Collector Street from Inwood Avenue to Manning Avenue.”

ATTACHMENT(S):

1. 5th Street Collector Design Guidelines.
2. Street Boulevard Landscape Plan detail.
3. Center Median Landscape Plan detail.
4. Evans light pole and fixture exhibit.

5TH STREET COLLECTOR DESIGN GUIDELINES

5th Street North from CSAH 13 (Inwood Avenue) to CSAH 15 (Manning Avenue) will become the backbone of future development along the I94 corridor, essentially becoming the primary access in and out of the future neighborhoods and commercial properties. The quality of the street and its connections are critically important. The purpose of the proposed street standards are to 1) improve the function and appearance of the street, 2) encourage pedestrian and bicycle use, and 3) reduce the potential for speeding. From a Community Development perspective, the design of 5th Street is intended to provide a consistent street plan from Manning Avenue to Inwood Avenue that serves to connect the various unique neighborhoods using a common design theme.

2030 PROJECTED ADT is 5,000 [Transportation Plan]. 4-lane road not required in foreseeable future.
STATE AID URBAN DESIGN [8820.9936] – Collector with ADT > 10,000; 40 mph design speed and posted speed.

TYPICAL SECTION

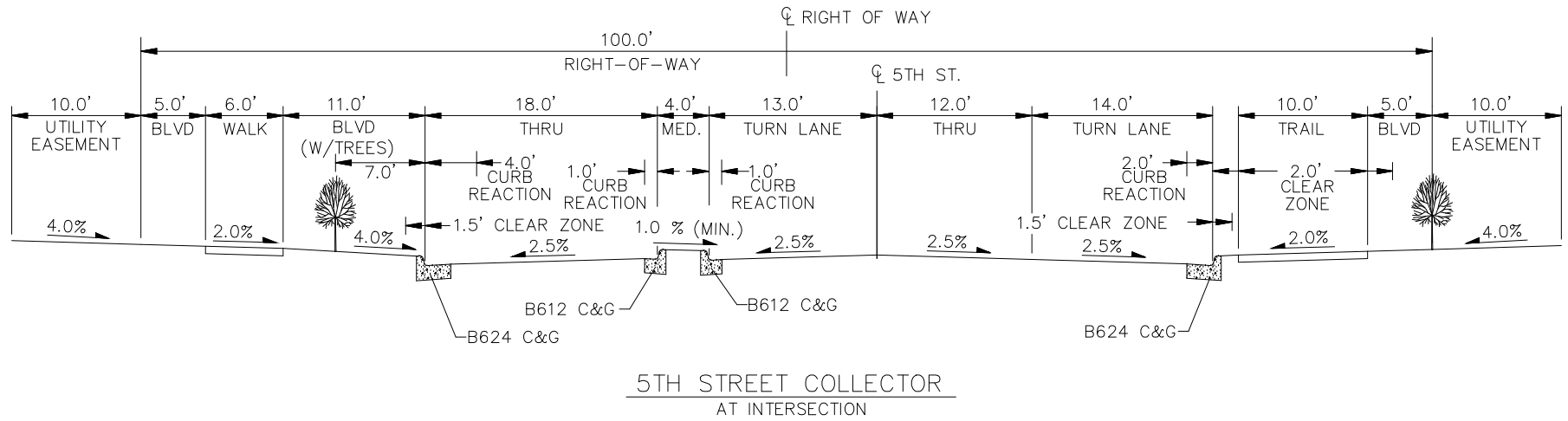
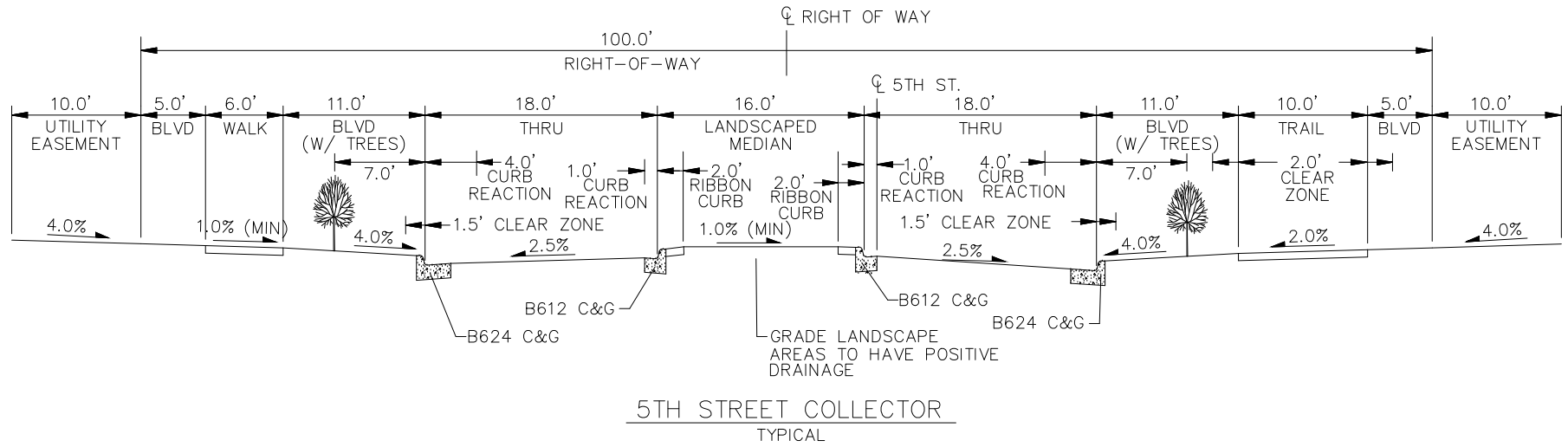
- Minimum R/W is 100 feet. **PLUS** 10-ft utility easements/clear zones on each side of the street.
- Two-lane Parkway design with 16 foot center landscaped median.
- Through Lanes must be 18 feet wide from face-face with 4-foot curb reaction zones.
- Median curb reaction zone is 1 foot on either side.
- Minimum median width with turn lanes is 4 feet hardscaped.
- Posted speed is 40 mph. Requires 1.5 foot minimum clearance from face of curb to fixed objects.
- No on-street parking. If parking is incorporated, minimum parking lane width is 10 feet.
- No super elevation. Maintain 2.5% cross slopes on curves.
- Minimum horizontal centerline curvature is 667 feet.
- Pavement Section must meet minimum 10 ton design. Geotechnical Report required to verify minimum pavement City section or recommend increased pavement section.

ACCESS SPACING AND INTERSECTION REQUIREMENTS

- Residential driveways prohibited.
- Commercial driveways, non-continuous streets, and continuous local streets every 660 feet.
- Collector streets every 1,320 feet. Arterial streets every 2,640 feet.
- Left turn lanes required at all full access intersections.
- Right turn lanes required for all non-residential areas and residential areas with 25 units or greater.

AMENITIES

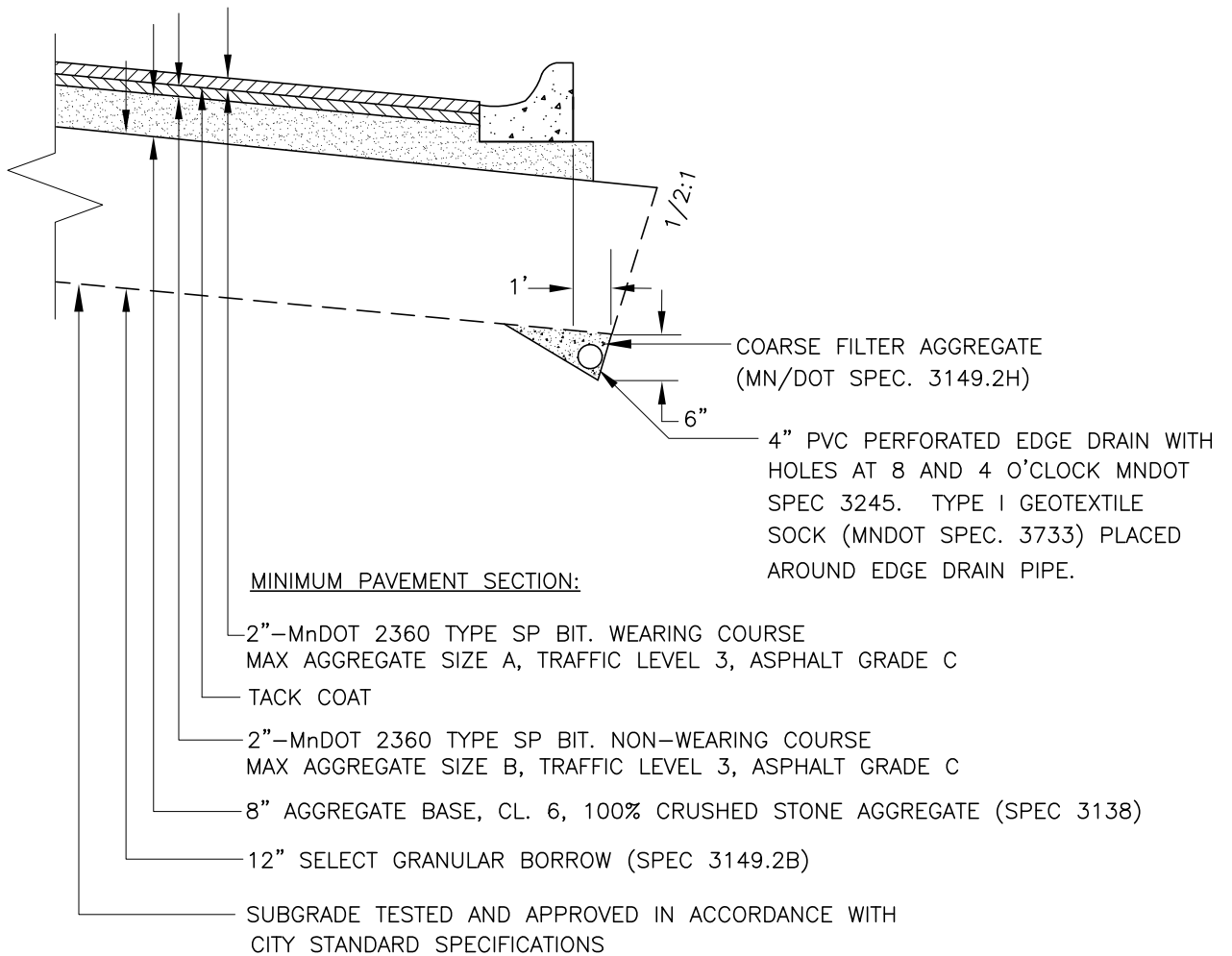
- North side Bituminous Trail. 10 foot minimum with 2 foot clear zone.
- South side Concrete Sidewalk. 6 foot minimum with 2 foot clear zone.
- Landscaping elements (See 5th Street Center Median and Boulevard Landscape Plan Details):
 - Center landscape median. Center median lined with 2 foot wide concrete ribbon curb. Landscape area to be planted with Little Blue Stem, Butterfly Candy and Daffodil Bulbs grouped at nodes.
 - Boulevards to include boulevard trees and sod. Trees to be placed 7 feet behind face of curb, spaced every 40 feet on both sides. Boulevard trees to be Oak, Maple or Elm, minimum 4-inch caliper.
 - Turf sod to be located from back of curb to 5 feet behind trail or sidewalk. Prairie sod may be used for remaining R/W.
 - Site Irrigation required for boulevard areas.
 - Drip irrigation required for center landscaped medians.
- Theming Elements:
 - Street Lighting to include Xcel Energy 'Evans' style lamp on 30 ft. poles. Light Poles to be placed at intersections and every 250 feet apart on alternating sides of the street.
 - White post and rail fencing is encouraged along 5th Street at major intersections.



**5TH STREET
STANDARD DETAILS**

JUNE 2015

COLLECTOR TYPICAL SECTIONS



NOTE:

1. TACK FACE OF GUTTER PRIOR TO BOTH LIFTS OF BITUMINOUS
2. 4" PVC PERFORATED EDGE DRAIN REQUIRED AT ALL LOW POINTS. EDGE DRAIN DESIGN PER APPROVAL OF CITY ENGINEER.

10-TON DESIGN MINIMUM

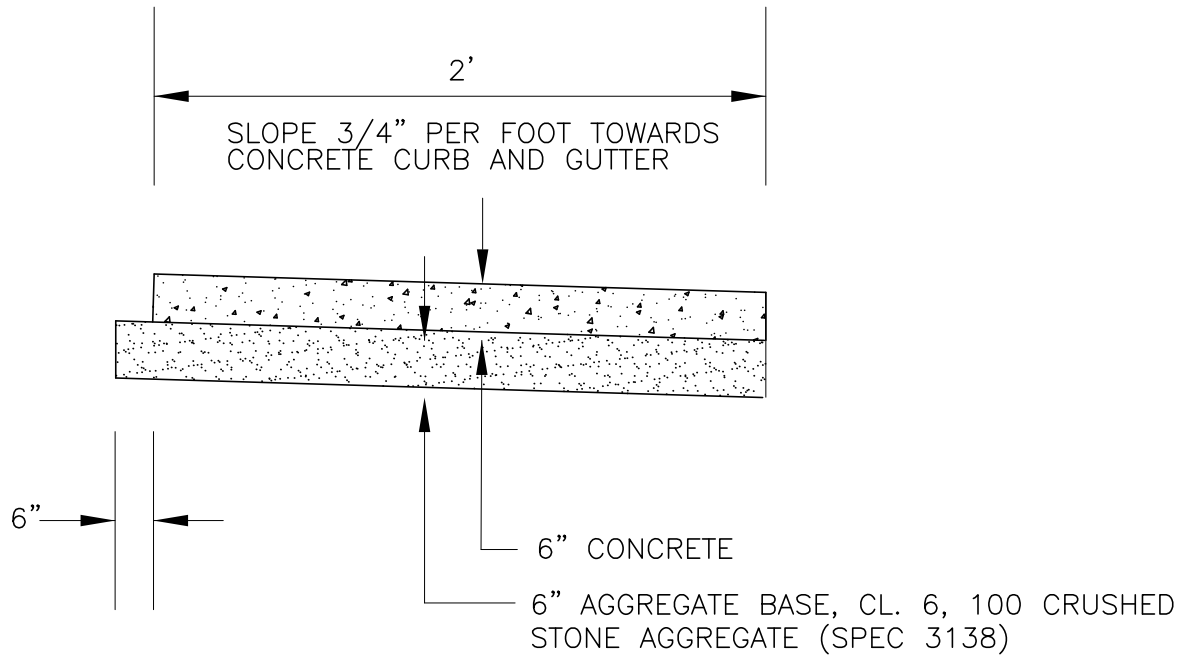
GEOTECHNICAL REPORT REQUIRED TO VERIFY MINIMUM PAVEMENT CITY SECTION OR RECOMMEND INCREASED PAVEMENT SECTION.



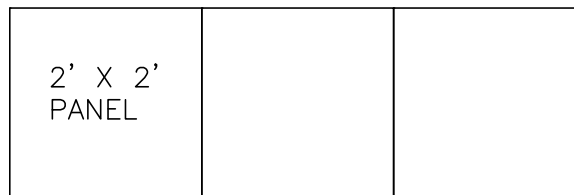
**5TH STREET
STANDARD DETAILS**

MARCH 2015

**MINIMUM PAVEMENT
SECTION**



RIBBON CURB DETAIL



NOTE:

1. TOOL JOINTS 2' O/C.

CONCRETE MEDIAN DETAIL



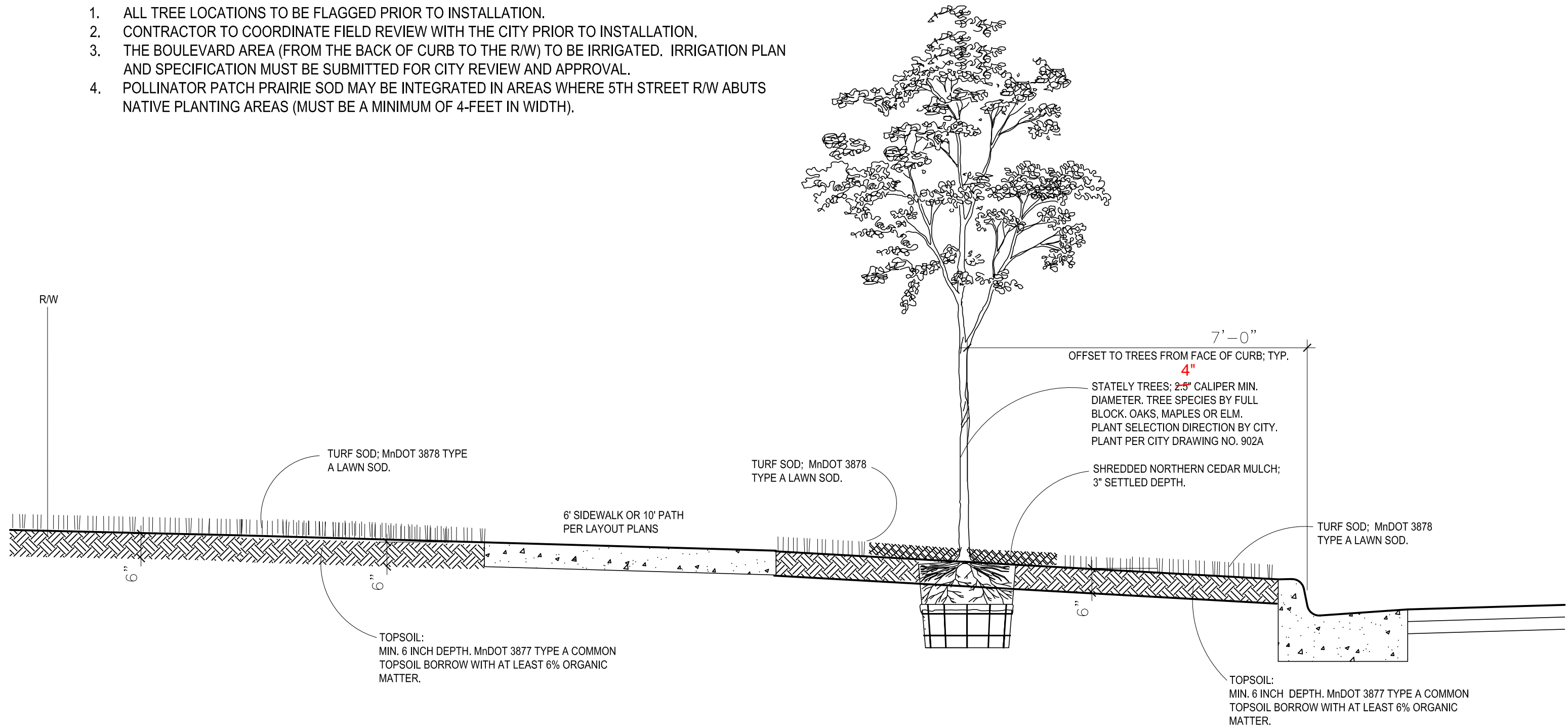
5TH STREET
STANDARD DETAILS

MARCH 2015

STREET MEDIAN
CONCRETE
SURFACING

ADDITIONAL PLANTING NOTES:

1. ALL TREE LOCATIONS TO BE FLAGGED PRIOR TO INSTALLATION.
2. CONTRACTOR TO COORDINATE FIELD REVIEW WITH THE CITY PRIOR TO INSTALLATION.
3. THE BOULEVARD AREA (FROM THE BACK OF CURB TO THE R/W) TO BE IRRIGATED. IRRIGATION PLAN AND SPECIFICATION MUST BE SUBMITTED FOR CITY REVIEW AND APPROVAL.
4. POLLINATOR PATCH PRAIRIE SOD MAY BE INTEGRATED IN AREAS WHERE 5TH STREET R/W ABUTS NATIVE PLANTING AREAS (MUST BE A MINIMUM OF 4-FEET IN WIDTH).



5TH STREET
STANDARD DETAILS

AUGUST 2015

STREET BOULEVARD LANDSCAPE PLAN