

APPENDIX B | MCES Design Peaking Factors

MCES Flow Variation Factors for Sewer Design

Average Flow (MGD)	Peak Hourly Flow Factor	Average Flow (MGD)	Peak Hourly Flow Factor
0.00 to 0.11	4.0	1.90 to 2.29	2.8
0.12 to 0.18	3.9	2.30 to 2.89	2.7
.019 to 0.23	3.8	2.90 to 3.49	2.6
0.24 to 0.29	3.7	3.50 to 4.19	2.5
0.30 to 0.39	3.6	4.20 to 5.09	2.4
0.40 to 0.49	3.5	2.10 to 6.39	2.3
0.50 to 0.64	3.4	6.40 to 7.99	2.2
0.65 to 0.79	3.3	8.00 to 10.39	2.1
0.80 to 0.99	3.2	10.0 to 13.49	2.0
1.00 to 1.19	3.1	13.50 to 17.99	1.9
1.20 to 1.49	3.0	18.00 to 29.99	1.8
1.50 to 1.89	2.9	Over 30.00	1.7

APPENDIX C | Infiltration and Inflow Policies and Reduction Capital Improvements Plan

7.8 | City Code Section 19-44

Sec. 19-44. - Prohibited discharges into sanitary sewer system.

- » No person shall discharge or cause to be discharged any substance not requiring treatment or any substance not acceptable for discharge, as determined by the city or the Minnesota Pollution Control Agency, into the sanitary sewer system. Only sanitary sewage from approved plumbing fixtures may be discharged into the sanitary sewer system.
- » No person shall discharge or cause to be discharged, directly or indirectly, any stormwater, surface water, groundwater, roof runoff, subsurface drainage, or cooling water to any sanitary sewer. Any person having a roof drain, sump pump, unauthorized swimming pool discharge, cistern overflow pipe or surface drain connected and/or discharging into the sanitary sewer shall disconnect and remove any piping or system conveying such water to the sanitary sewer system.
- » All construction involving the installation of clear water sump pits shall include a sump pump with minimum size 1½" diameter discharge pipe. The pipe attachment must be a rigid permanent type plumbing such as PVC or ABS plastic pipe with glued fittings, copper or galvanized pipe. All discharge piping shall be installed in accordance with the plumbing code. Discharge piping shall start at the sump pit and extend through the exterior of the building and terminate with not less than six inches of exposed pipe. Sump pump discharge location and flow shall be consistent with the approved development drainage plan for the lot. The discharge may not be pumped directly onto any public right-of-way unless approved by the city engineer or his designee. Any disconnects or openings in the sanitary sewer shall be closed and repaired in compliance with applicable codes.
- » Every person owning improved real estate that discharges into the city's sanitary sewer system shall allow inspection by authorized city employees or its agents of all properties or structures connected to the sanitary sewer system to confirm there is no sump pump or other prohibited discharge into the sanitary sewer system. Any persons refusing to allow their property to be inspected shall immediately become subject to the surcharge as described in subsection (g) hereinafter.
- » Any owner of any property found to be in violation of this section shall make the necessary changes to comply with this section and such change shall be verified by authorized city employees or its agents. Any property or structure not inspected or not in compliance by May 1, 1994, shall, following notification from the city, comply within 14 calendar days or be subject to the surcharge as provided in subsection (g) hereinafter.
- » Upon verified compliance with this section, the city reserves the right to reinspect such property or structure at least annually to confirm continued compliance. Any property found not to be in compliance upon re-inspection or any person refusing to allow their property to be reinspected shall, following notification from the city, comply within 14 calendar days or be subject to the surcharge hereinafter provided for.
- » A surcharge of \$100.00 per month is hereby imposed and shall be added to every sewer billing, to property owners who are found not in compliance with this section. The surcharge shall be added every month until the property is verified to be in compliance through the city's inspection program.
- » The city council, upon recommendation of the city engineer, shall hear and decide requests for temporary waivers from the provisions of this section where strict enforcement would cause a threat to public safety because of circumstances unique to the individual property under consideration. Any request for a temporary waiver shall be submitted to the city engineer in writing. Upon approval of a temporary waiver from the provisions of this section, the property owner shall agree to pay an additional fee for sanitary sewer services based on the number of gallons discharged into the sanitary sewer system as estimated by the city engineer.
- » Violation of this section is a misdemeanor and each day that the violation continues is a separately prosecutable offense. The imposition of the surcharge shall not limit the city's authority to prosecute the criminal violations, seek an injunction in district court ordering the person to disconnect the nonconforming connection to the sanitary sewer, or for the city to correct the violation and certify the costs of connection as an assessment against the property on which the connection was made.

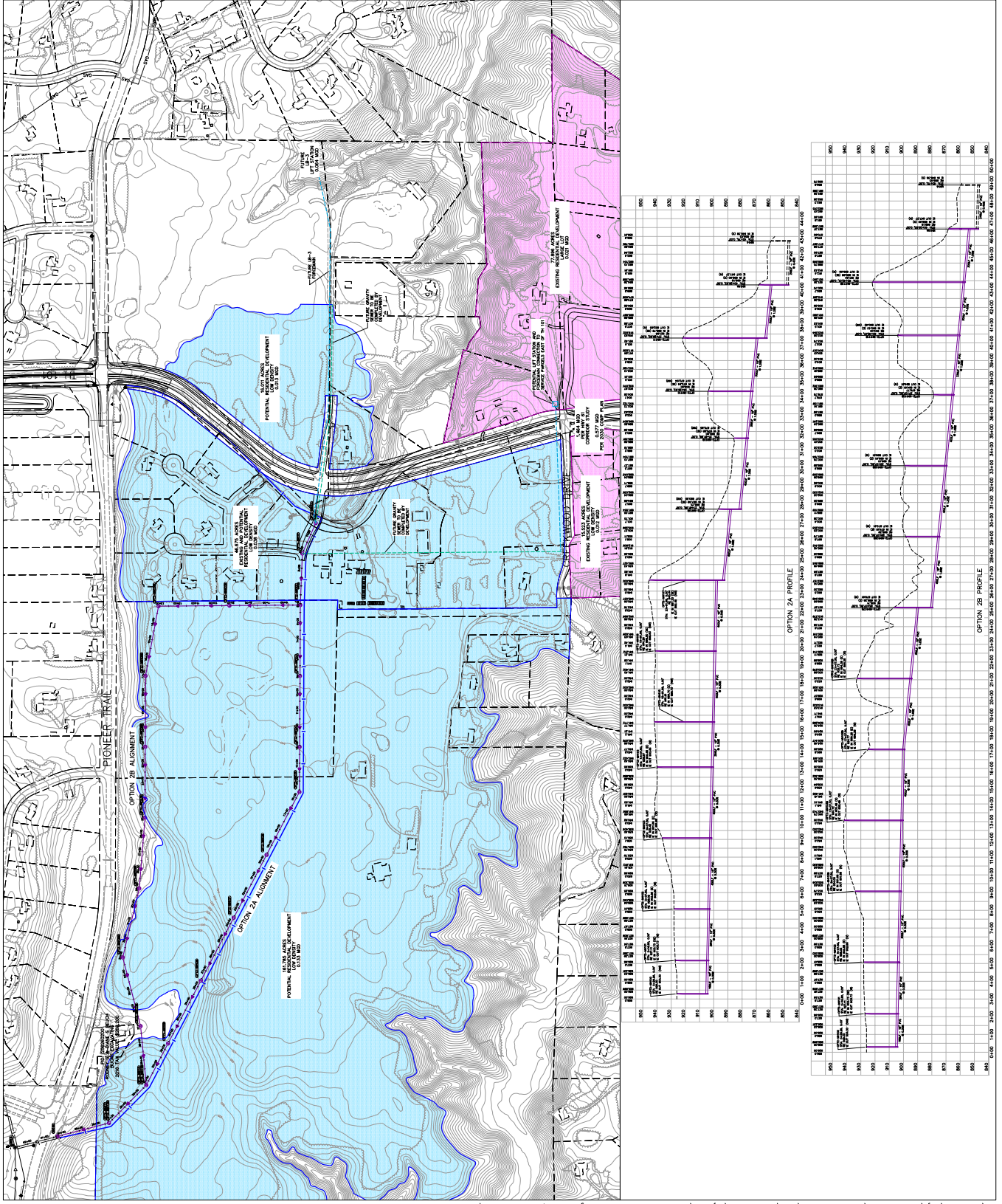
APPENDIX D | Alternative Sanitary Sewer Service for the TH 101 and Pioneer Trail Area

ENGINEER'S OPINION OF PROBABLE COST - ALTERNATIVES SUMMARY

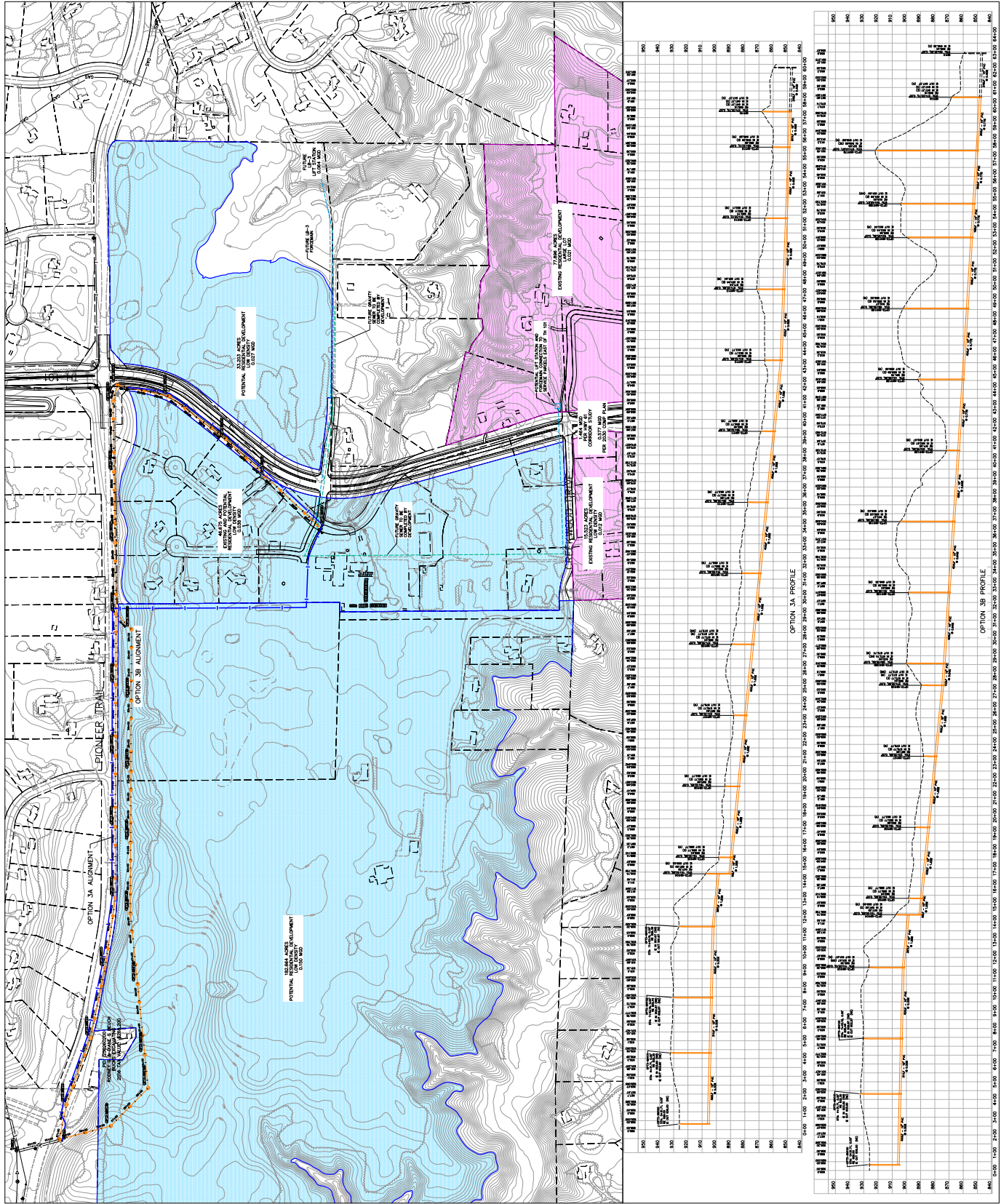
Contract: CP PW285bb
Owner: CITY OF CHANHASSEN
Project: LOWER BLUFF CREEK DISTRICT SANITARY SEWER STUDY
Date: Monday, June 6, 2016



<u>Alternative</u>	<u>Amount</u>
OPTION 2A	\$ 3,620,000.00
OPTION 2B	\$ 3,780,000.00
OPTION 3A	\$ 5,520,000.00
OPTION 3B	\$ 4,040,000.00
OPTION 5	\$ 2,390,000.00



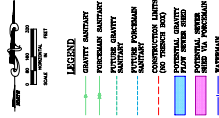
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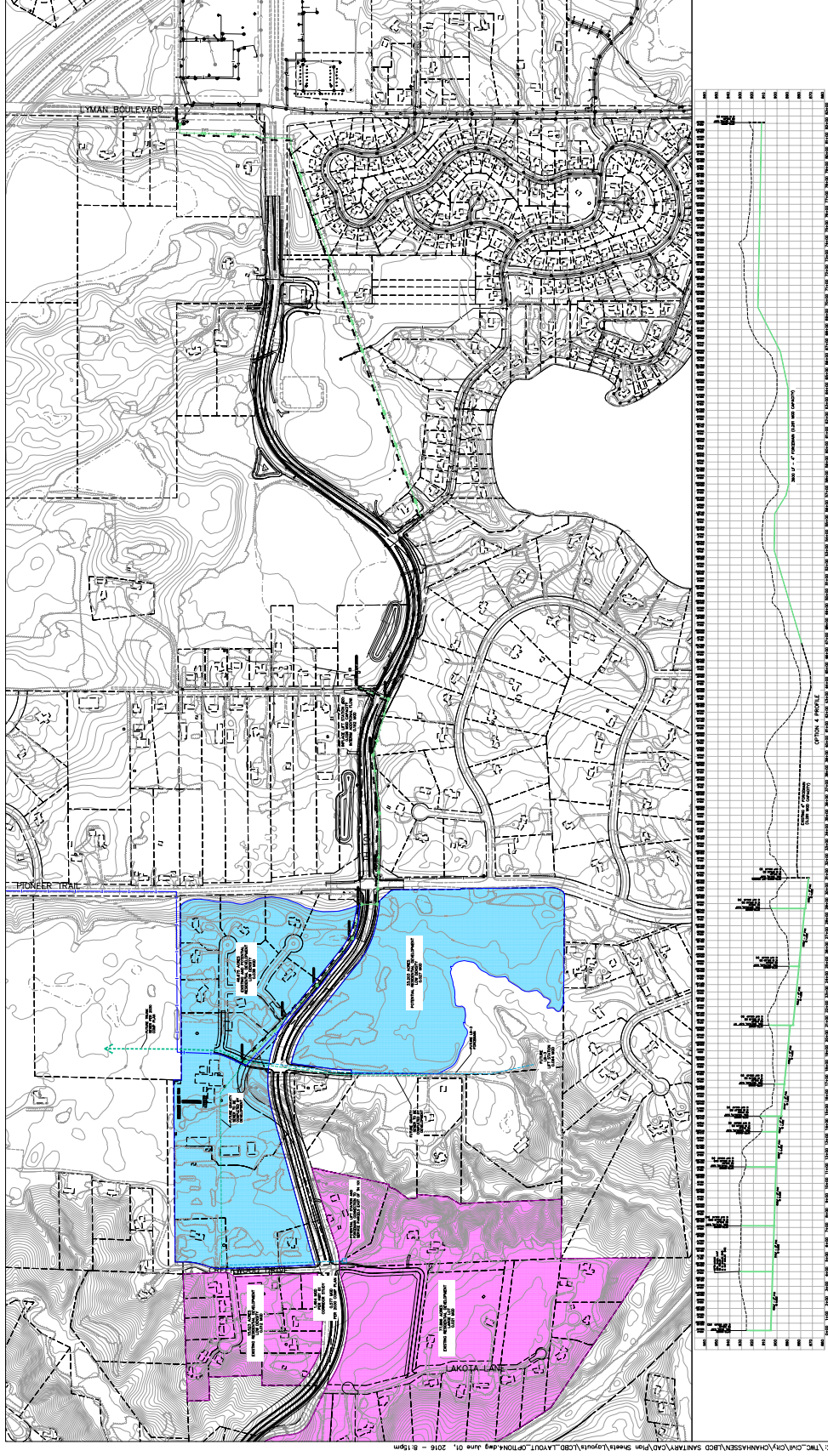


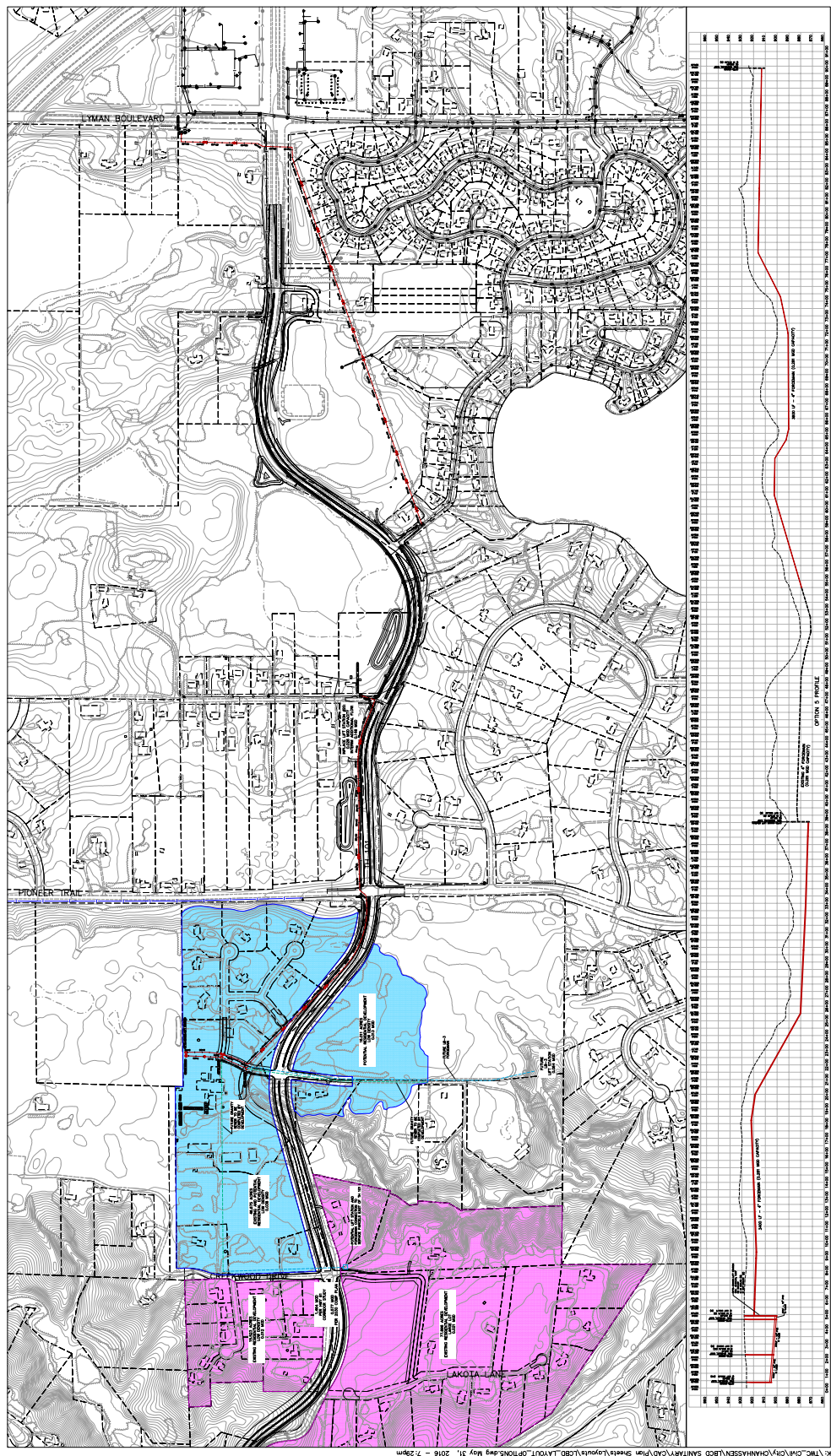
CITY OF CHANHASSEN
LOWER BLUFF CREEK
SANITARY SEWER
IMPROVEMENTS
CITY PROJECT NO.
LAYOUT OPTION 3



Kimley-Horn

CITY OF CHANHASSEN
 LOWER SANITARY FORCEMAIN
 IMPROVEMENTS
 SANITARY SEWER
 CITY PROJECT NO.
 LAYOUT OPTION 4





APPENDIX E | City of Chanhassen Sanitary Sewer Fee Structure

Residential based on winter quarter usage	\$4.64 per 1,000 gallons
Commercial based on actual quarterly usage	\$4.64 per 1,000 gallons
Minimum sewage charge per quarter (for amounts up to 6,000 gallons per quarter)	\$23.85

