

## Rural Municipality of East St. Paul Bottomley Creek Bank Remediation and Permanent Dike Construction Update - July 23rd to August 19th, 2017

Work Performed:

- Arborists removed stumps at 1020 and 1030 Highland Park Drive.
- Organic material below original dike was removed at 1020 Highland Park Drive.
- Original dike material below fence between 1010 and 1020 Highland Park Drive was removed. The fence was removed and replaced on new ground elevation.
- Foundation for creek side segmental block wall at 1020 and 1030 Highland Park Drive was completed.
- Creek side segmental block wall placement began at 1020 and 1030 Highland Park Drive.
- Culvert at 1020 Highland Park Drive has been placed.
- Flap gates and canal gates have been placed on all culverts at 3144 and 3154 Henderson Highway.
- Creek side and house side segmental block wall placement at 1040 Highland Park Drive began. Placement of stairs on the house side of the segmental block wall began.
- Perforated toe and heel drains are completed on creek side segmental block wall at 3144 and 3154 Henderson Highway.
- Segmental block wall placement on the creek side of the dike at 3144 and 3154 Henderson Highway has completed. Capstones for the wall still need to be placed.



Photographs:

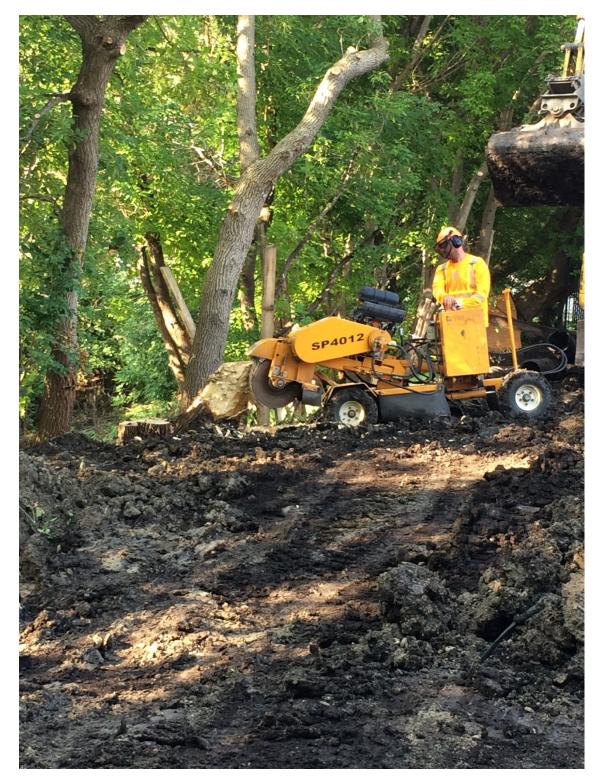


Photo 1 - Arborists removing stumps at 1020 Highland Park Drive.



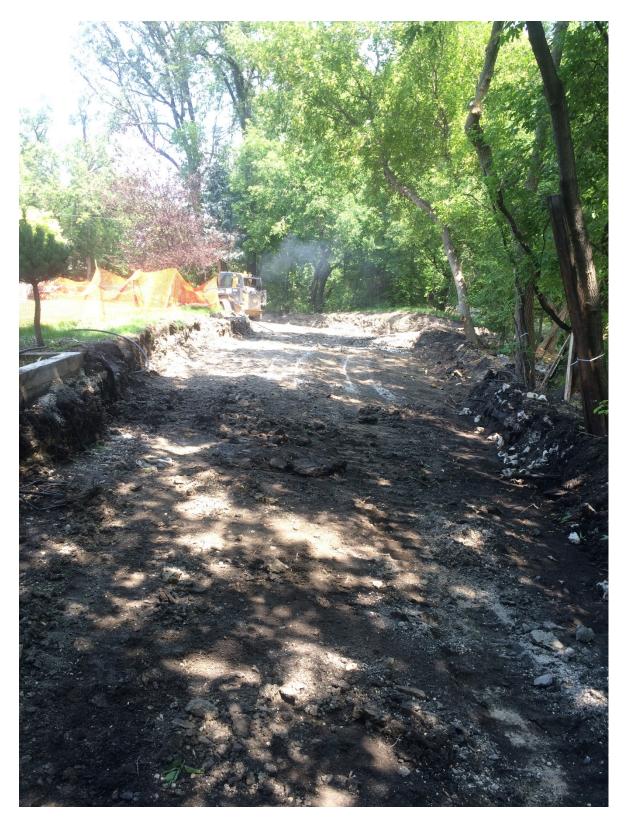


Photo 2 - Removal of organic material below footprint of new dike at 1020 Highland Park Drive.





Photo 3 - Removal of existing dike below fence between 1010 and 1020 Highland Park Drive.



Photo 4 - Fence replaced at new ground elevation between 1010 and 1020 Highland Park Drive.





Photo 5 - Foundation for creek side segmental block wall excavated at 1020 Highland Park Drive.



Photo 6 - Foundation for creek side segmental block wall excavated at 1030 Highland Park Drive.





Photo 7 - Segmental block wall placement at 3144 Henderson Highway.



Photo 8 - Gravel placed for foundation of segmental block wall at 1020 Highland Park Drive.





Photo 9 - Placement of the creek side segmental block wall at 3144 Henderson Highway.



Photo 10 - Placement of the creek side segmental block wall at 3144 Henderson Highway.





Photo 11 - Placement of the creek side segmental block wall at 3154 Henderson Highway.



Photo 12 - Foundation of creek side segmental block wall at 1040 Highland Park Drive.





Photo 13 - Placement of the creek side segmental block wall at 1040 highland Park Drive.



Photo 14 - Placement of the creek side segmental block wall at 1040 highland Park Drive.





Photo 15 - Placement of the house side segmental block wall at 1040 Highland Park Drive.





Photo 16 - Toe and heel drain installation behind creek side segmental block wall at 3144 Henderson Highway.



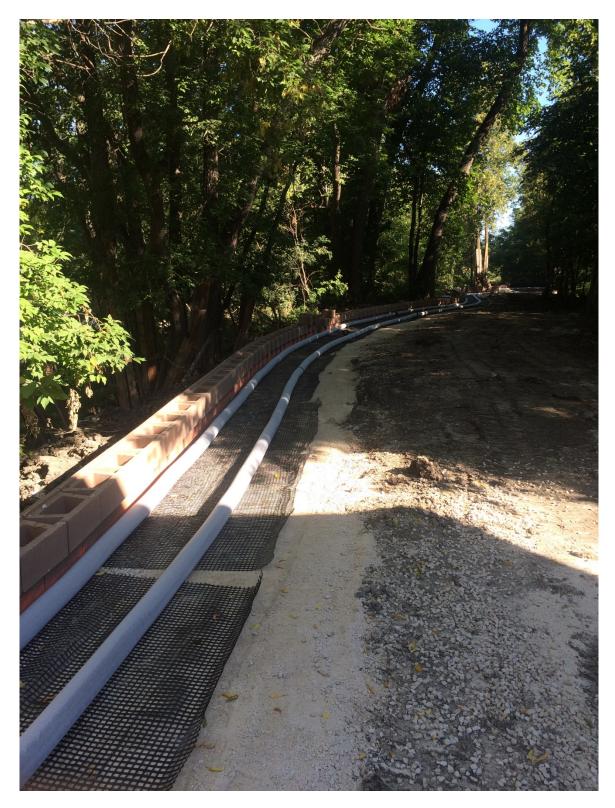


Photo 17 - Toe and heel drain installation behind creek side segmental block wall at 3144 Henderson Highway.





Photo 18 - Segmental block wall placement at 1020 Highland Park Drive.





Photo 19 - Segmental block wall placement at 1030 Highland Park Drive.





Photo 20 - Removal of asphalt driveway for house side segmental block wall placement at 1040 Highland Park Drive.



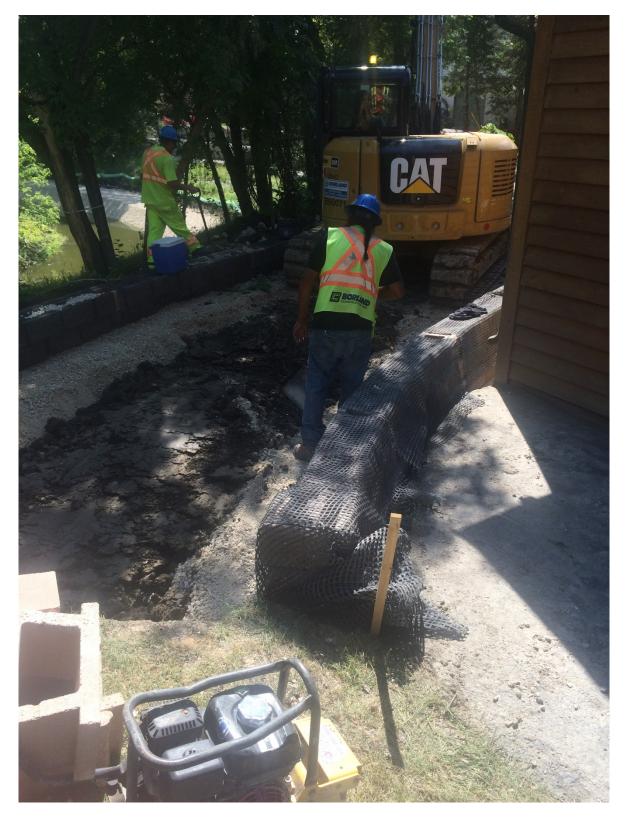


Photo 21 - Segmental block wall placement at 1040 Highland Park Drive.





Photo 22 - Final height of creek side segmental block wall at 3154 Henderson Highway.





Photo 23 - Stair construction on house side segmental block wall at 1040 Highland Park Drive.





Photo 24 - Canal gate placed on culvert at 3154 Henderson Highway.



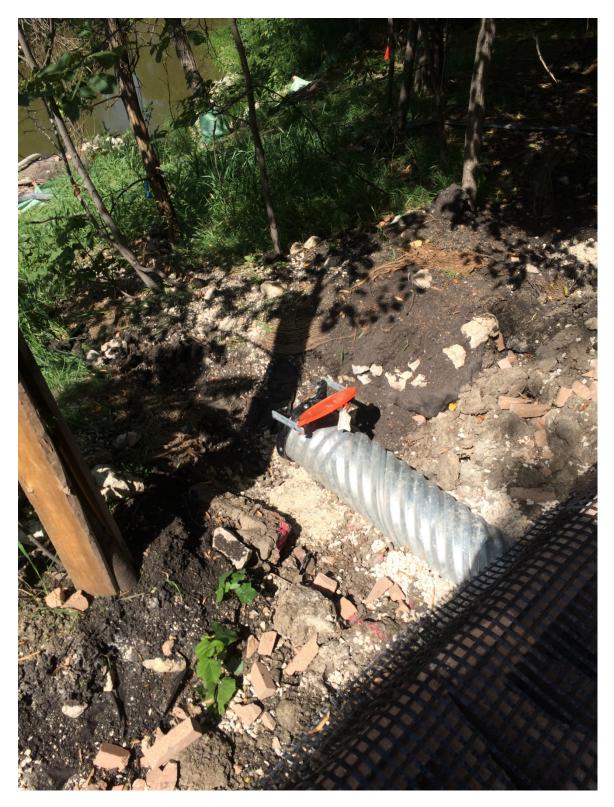


Photo 25 - Flap gate placed on culvert at 3144 Henderson Highway.