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# Engineering & Construction Services



## City of Toronto Stream Restoration

Kumar Sivakumaran

Daniel McCreery

March 22, 2018

Building a Better Toronto Together



# Today's Agenda

1. Wet Weather Flow Master Plan
2. A review of stream restoration in the City of Toronto
3. An introduction to the new City of Toronto Engineering and Construction Services Stormwater Management Infrastructure Group

# Canadian and U.S. Areas of Concern in the Great Lakes–St. Lawrence River Basin





# Wet Weather Flow Management

## Master Plan

Overview and  
Implementation Plan

July 2003



# Highland Creek Sanitary Trunk Sewer

Exposed Trunk Sanitary Sewer























## AFTER – Birkdale Ravine West Highland Creek South of Ellesmere Road

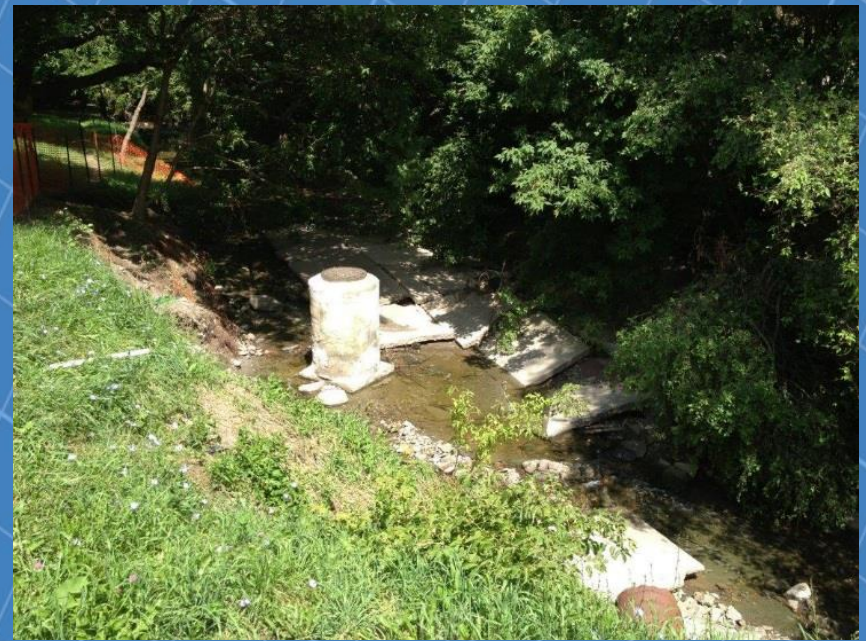




## BEFORE AND AFTER East Highland Creek at Markham Road









Humber Bay Wastewater Treatment Plant

Storm Water Management Pond

FG Gardiner Expressway



Humber Bay Arch Bridge

New Development

**Engineering In Your Neighbourhood**













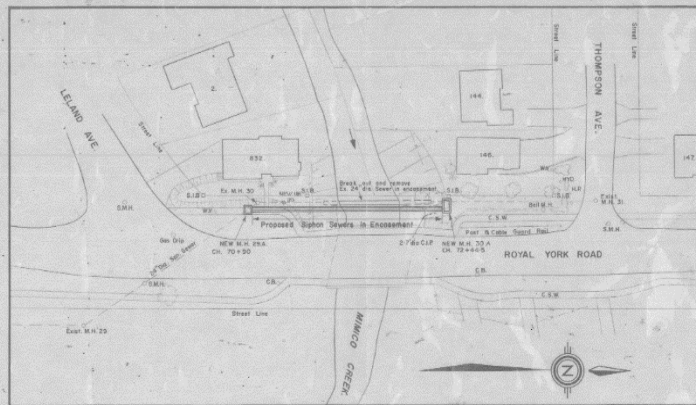




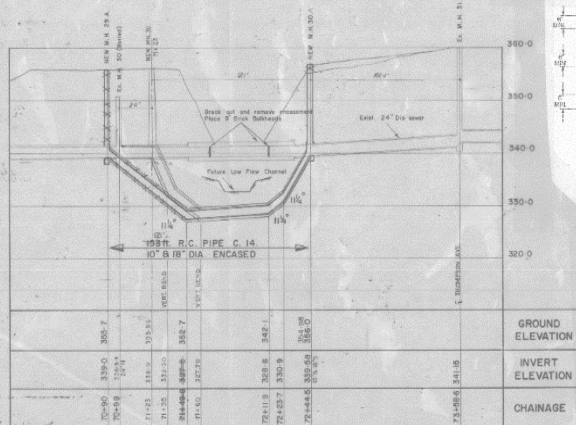








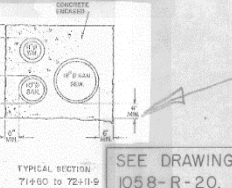
PLAN  
Scale 1" = 40'



PROFILE  
Scale  
HOR. 1" = 40'  
VERT. 1" = 10'

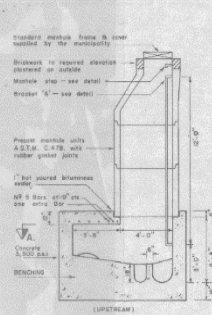
FIELD BOOKS	322	DESIGNED	BY	A. C. Leggett
SCALES	AS SHOWN	CHECKED	BY	200
		DIRECTOR OF ENGINEERING		

SECTION B-B  
NEW M.H. CH. 72+44.5  
Scale 1/4" = 1'-0"

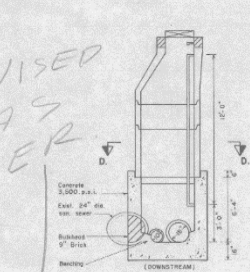


BEGINNING IN M.H. AT  
CH. 72+44.5

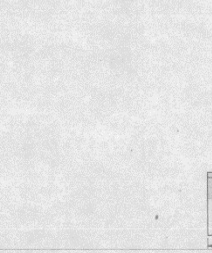
SECTION A-A



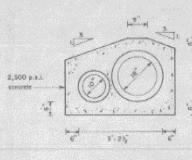
SECTION D-D



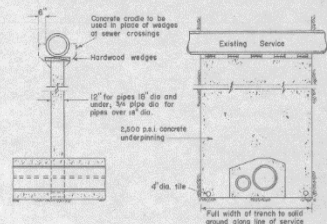
SECTION C-C  
NEW M.H. CH. 70+90  
Scale 1/4" = 1'-0"



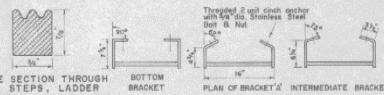
DETAIL OF ENCASMENT  
Scale 1/4" = 1'-0"



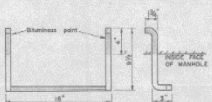
SUPPORT OF UTILITIES UNDER 8" DIA.  
Scale 1/4" = 1'-0"



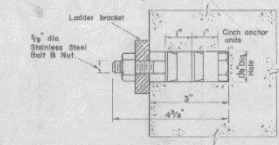
SUPPORT OF UTILITIES 8" DIA. & OVER  
Scale 1/4" = 1'-0"



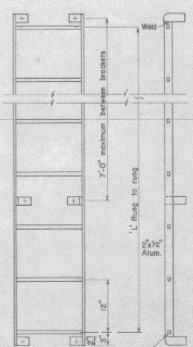
FULL SIZE SECTION THROUGH  
MANHOLE STEPS, LADDER  
RUNGS



MANHOLE STEP  
Scale 1 1/2" = 1'-0"



DETAIL OF CINCH ANCHOR  
Scale Half Size



ALUMINUM MANHOLE LADDER  
Scale 1" = 1'-0"











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