DWSD
CS-1314 WASTEWATER MASTER PLAN

PROFILES OF SELECT DWSD INTERCEPTORS AND TRUNK SEWERS

TECHNICAL MEMORANDUM
TASK B.1.b - ANALYZE CRITICAL FACILITIES
22. APRIL .02
VERSION 2

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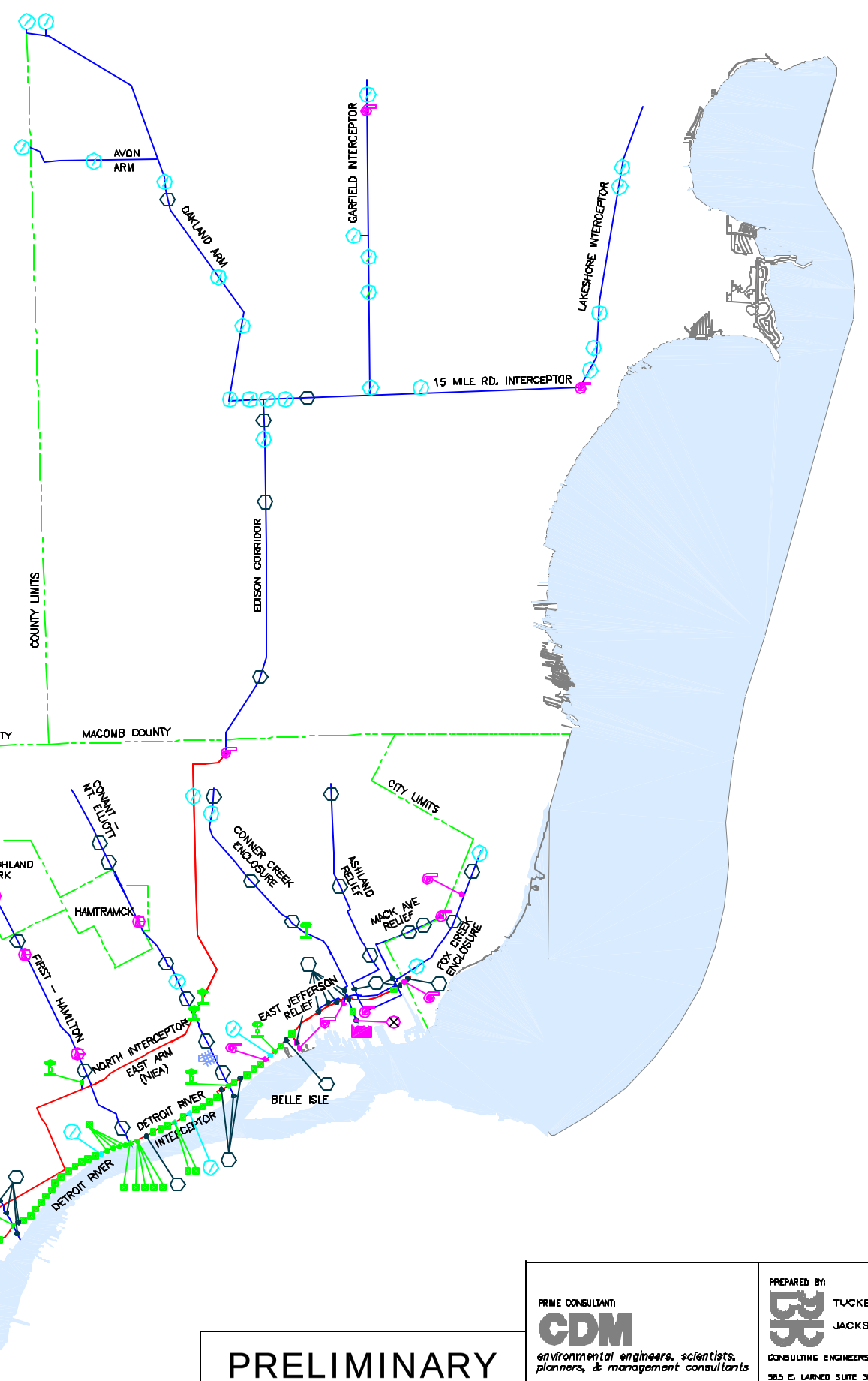
PROFILES ARE ONLY FOR PLANNING PURPOSES



LEGEND

- CITY/COUNTY LIMITS
- INTERCEPTOR
- TRUNK SEWER
- VALVE REMOTE (VR)
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER
- CSO CONTROL FACILITY-DETENTION BASIN-
- CSO CONTROL FACILITY-SCREENING AND DISINFECTION FACILITY-
- PUMP STATION (P.S.)
- REGULATOR/DAM/BACKWATER GATE
- LEVEL SENSOR (L.S.)

PRELIMINARY

PRIME CONSULTANT: CDM — environmental engineers, scientists, planners, & management consultants

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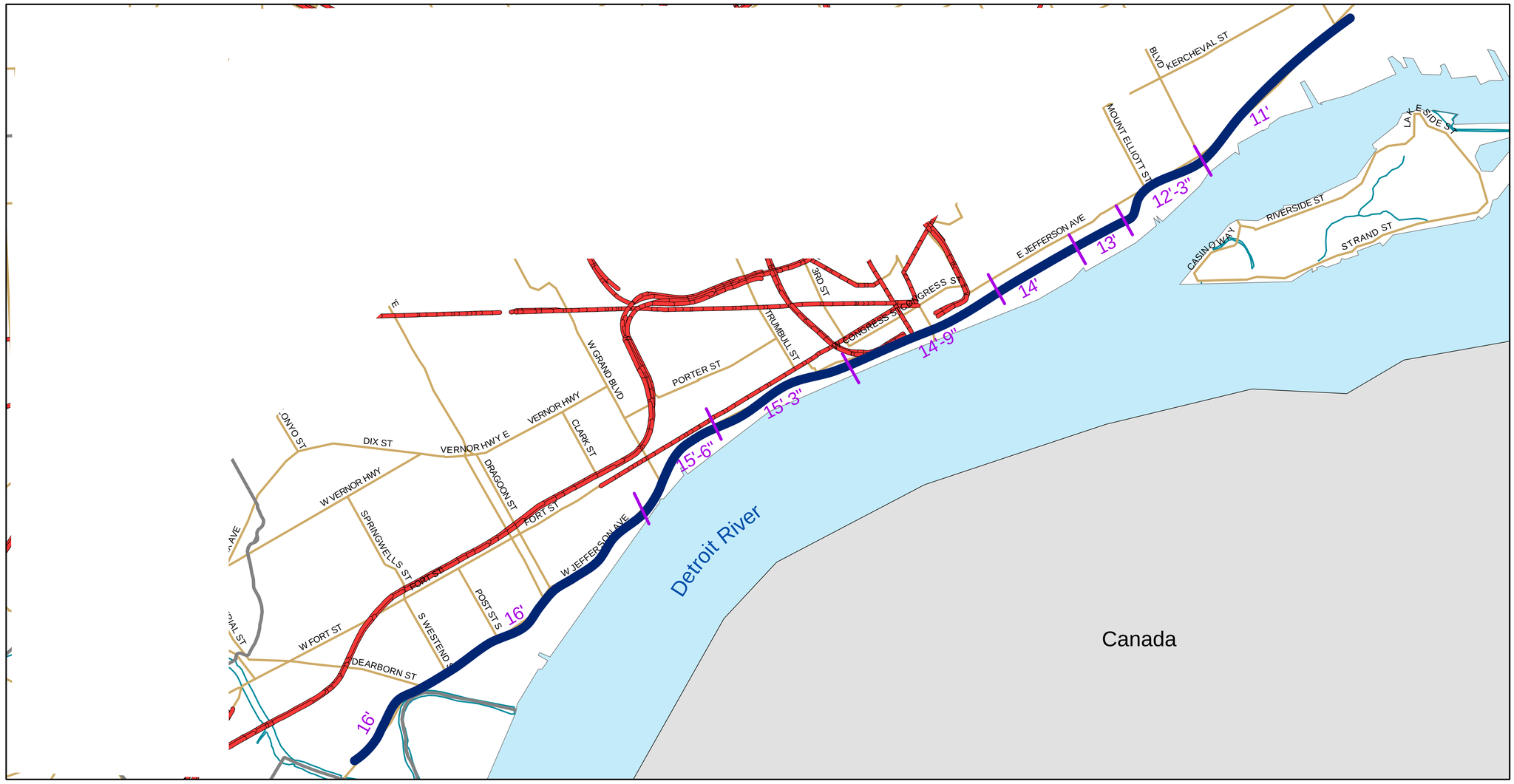
CITY OF DETROIT

DETROIT WATER AND SEWERAGE DEPARTMENT
CS-1314

WASTEWATER COLLECTION SYSTEM
INDEX SHEET

CONTRACT NO. CS-1314	DATE: APRIL 22, 2002	DWG. NO.INDEX



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Detroit River Interceptor Plan

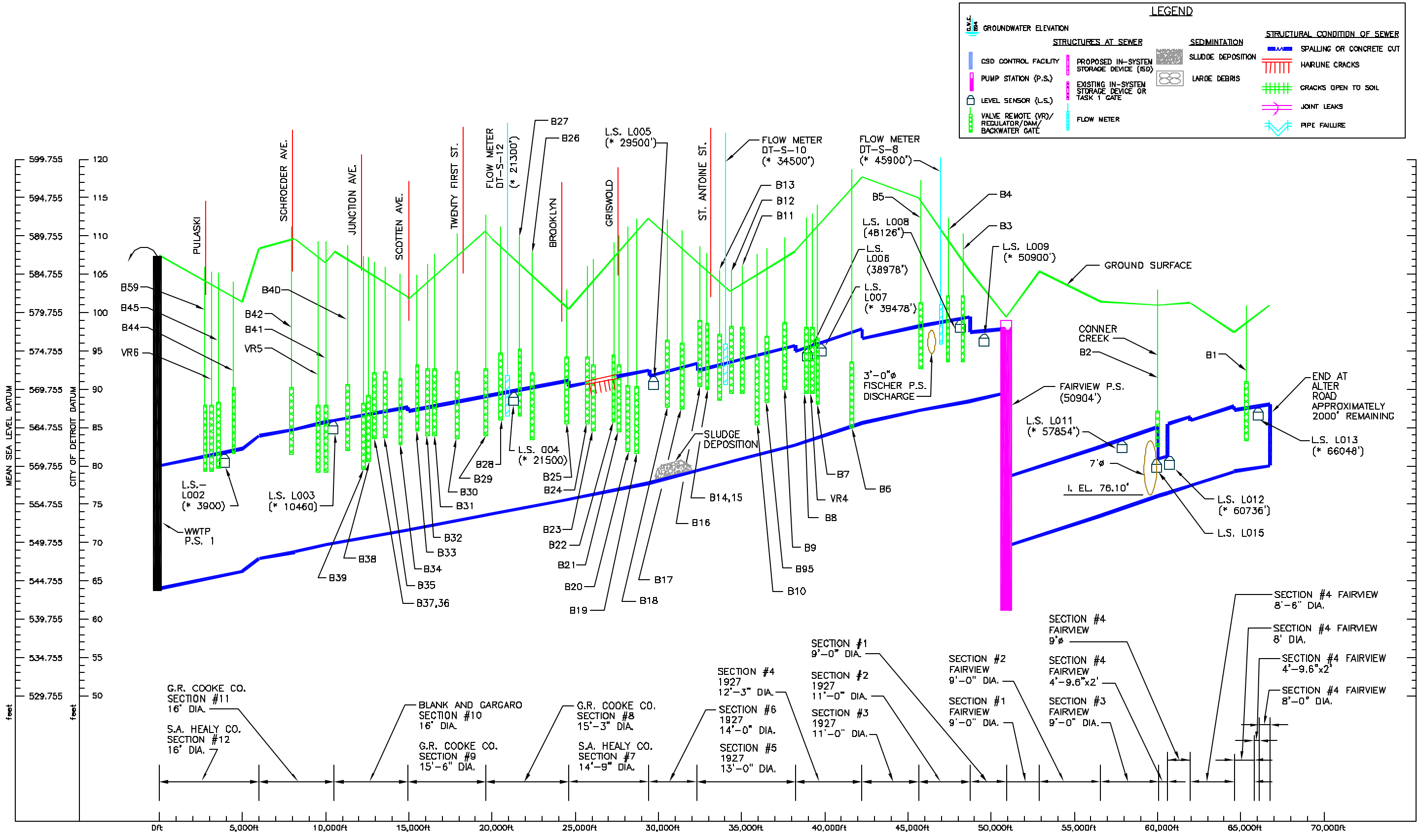
April 22, 2002

CDM

DWSD-T-003r

0 0.375 0.75 1.5 Miles

N



NOTE:

1. * APPROX. DISTANCE
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CITY OF DETROIT

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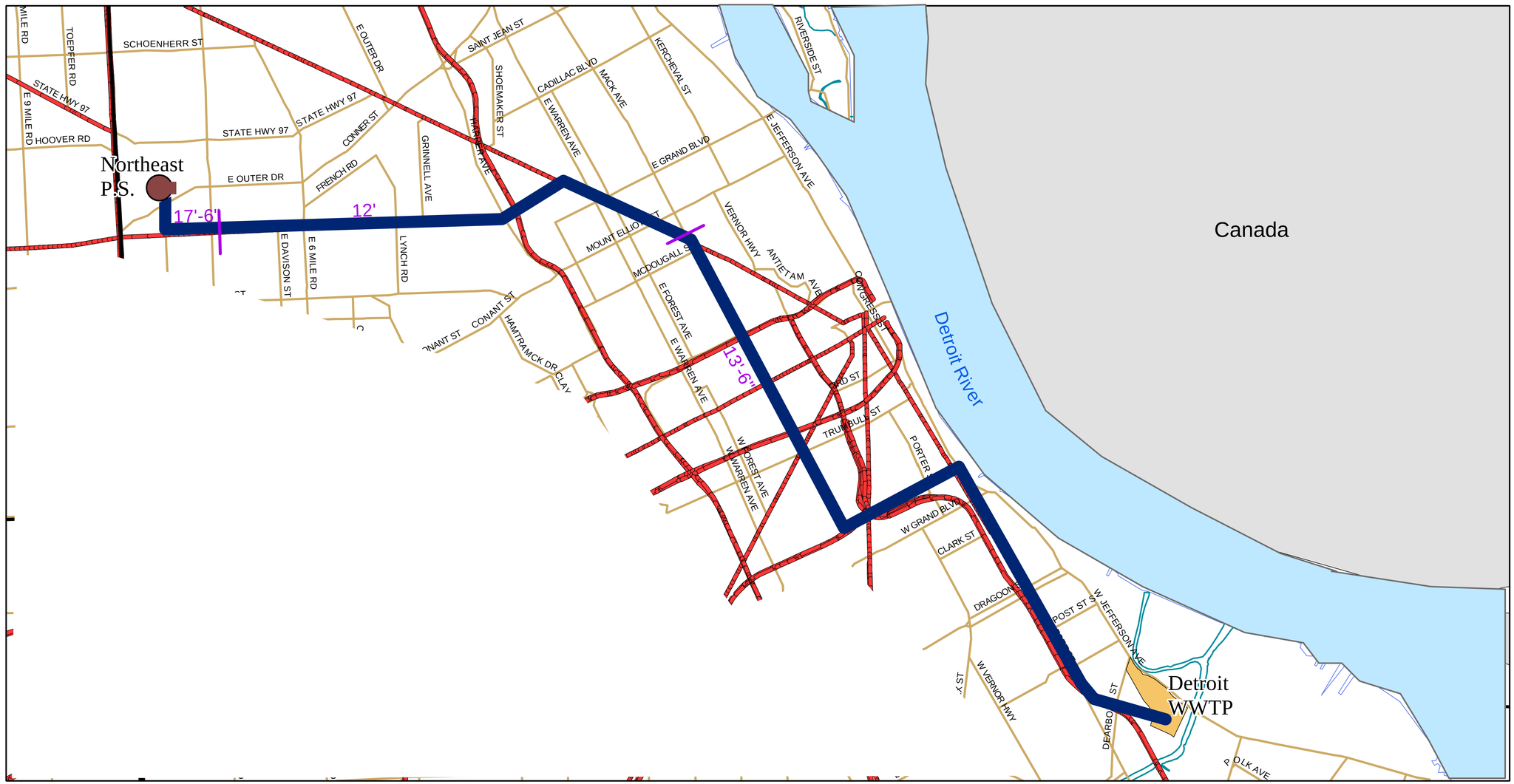
CS-1314 WASTEWATER MASTER PLAN

PROFILE
DETROIT RIVER INTERCEPTOR

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. I-1



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

North Interceptor-East Arm Plan

April 22, 2002

CDM

0 0.5 1 2 Miles

DWSD-T-003w

LEGEND

G.W.E. 594' — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

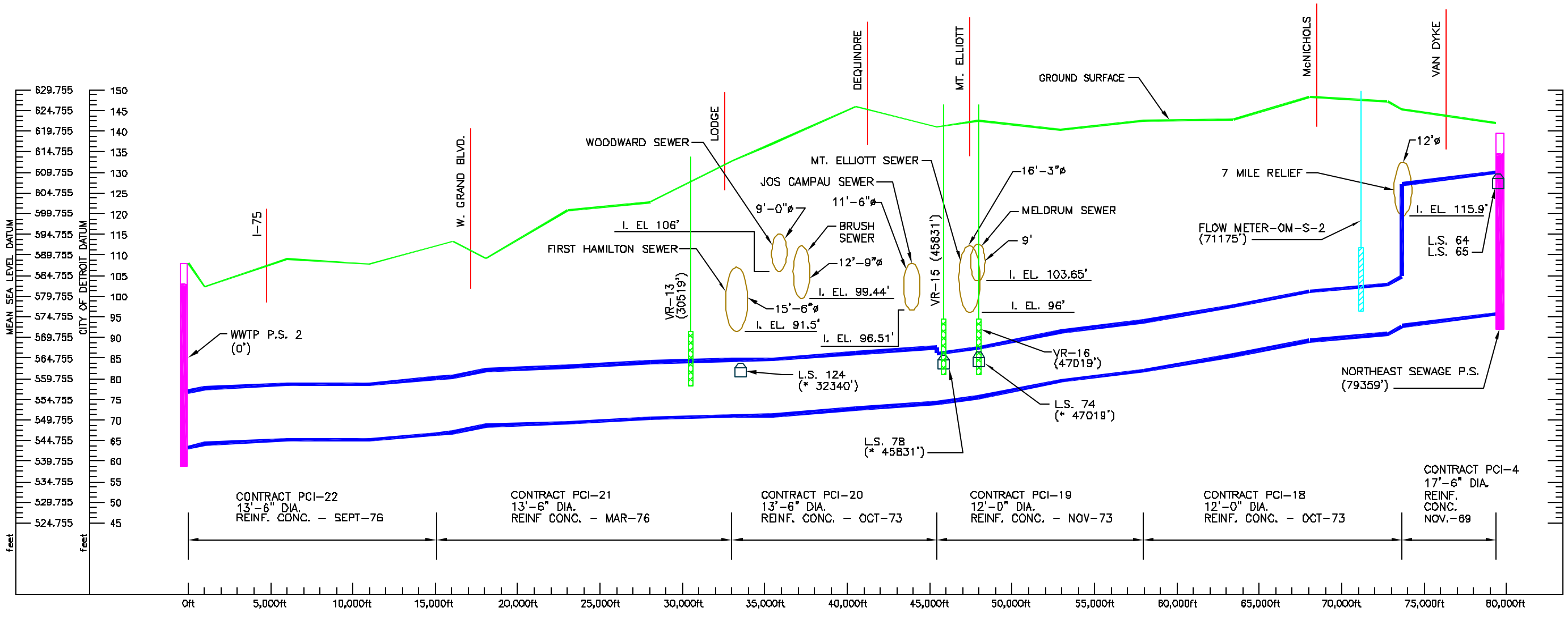
- PUMP STATION (P.S.)
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER
- CSO CONTROL FACILITY

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE



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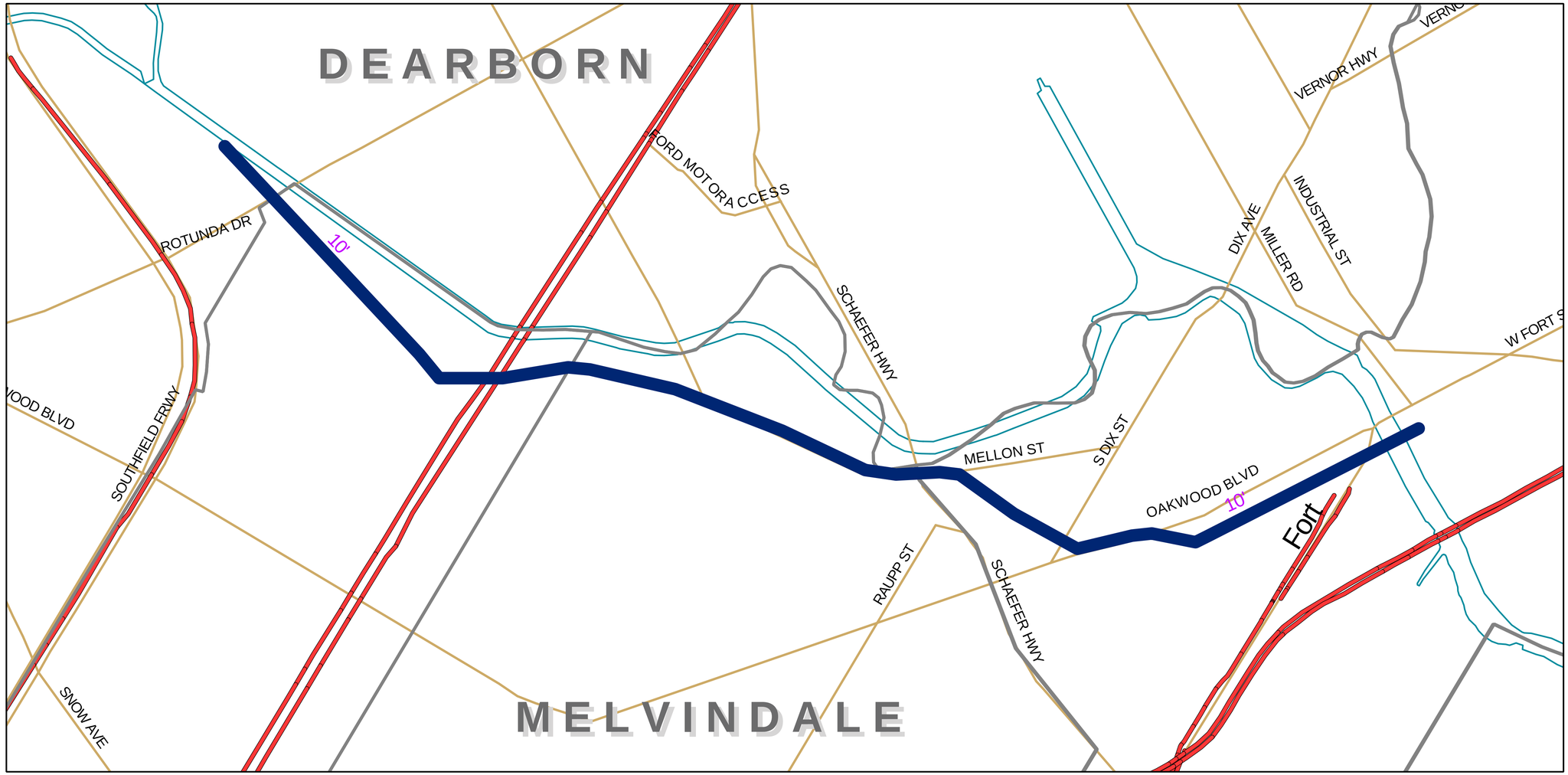
PROFILE
NORTH INTERCEPTOR - EAST ARM

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. I-2



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Oakwood-Northwest Interceptor Plan

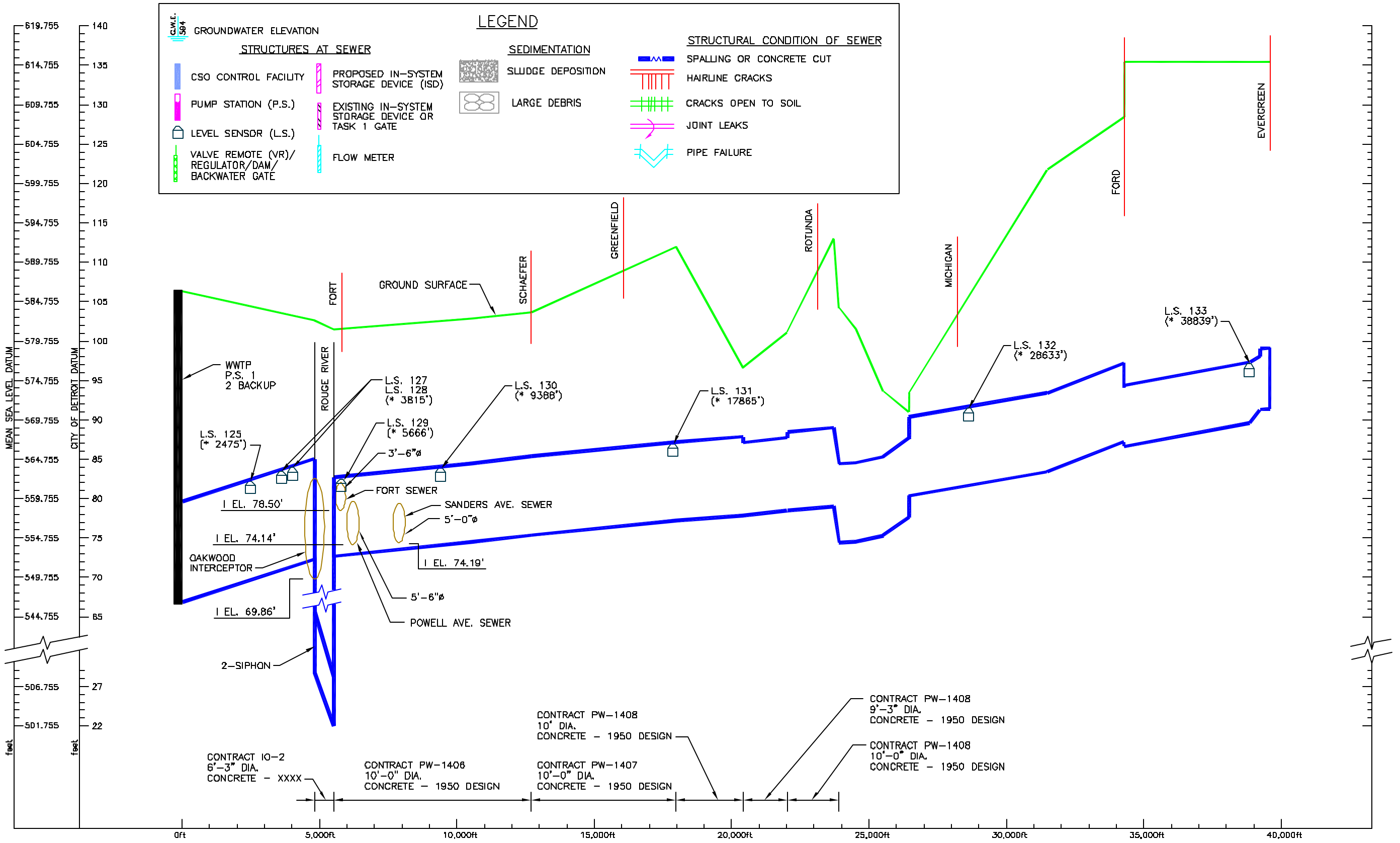
April 22, 2002

CDM

0 0.125 0.25 0.5 Miles

N

DWSD-T-003x



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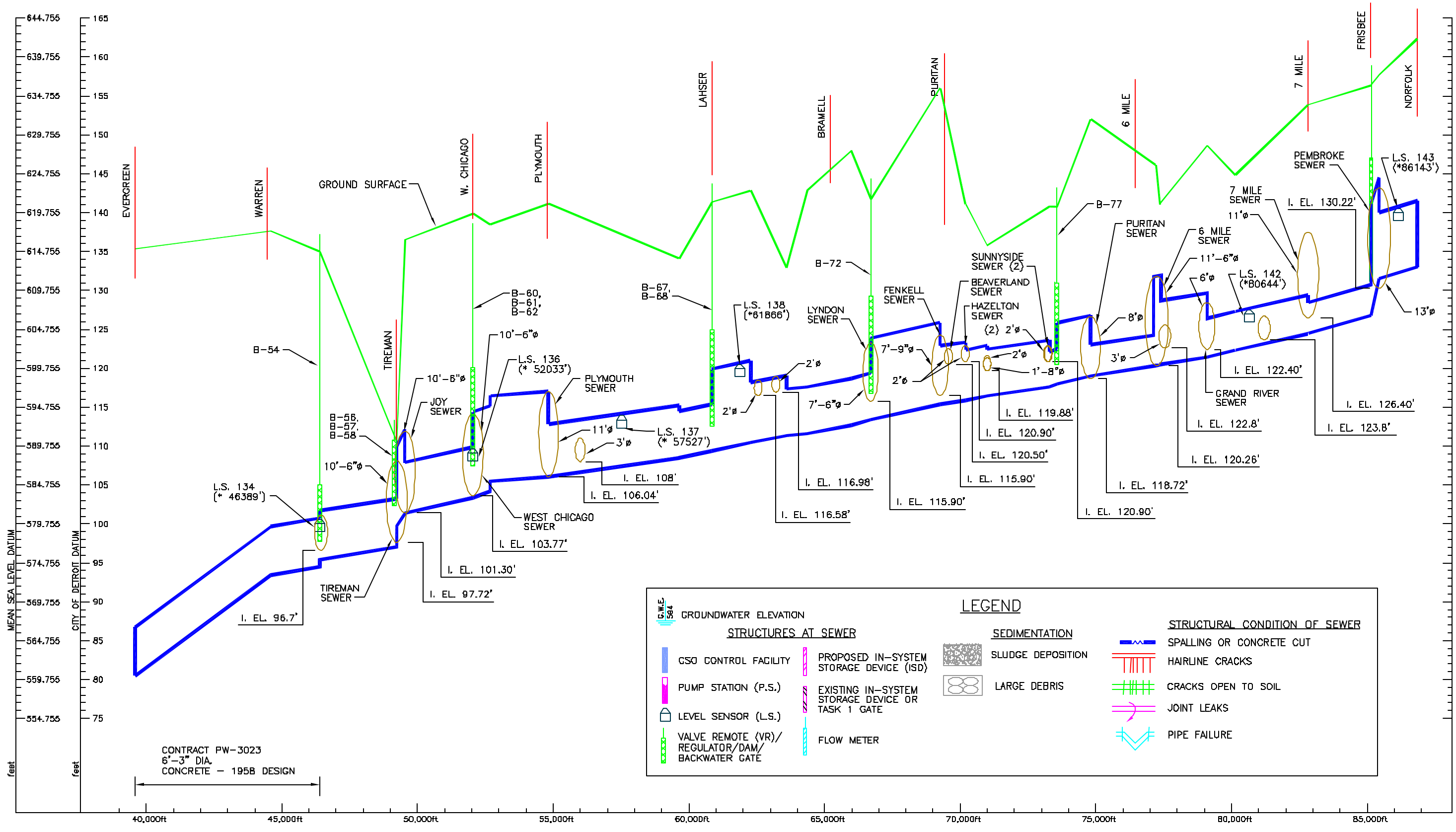
CS-1314 WASTEWATER MASTER PLAN

PROFILE
OAKWOOD - NORTHWEST INTERCEPTOR

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. I-3A



C.W.E. 584 GROUNDWATER ELEVATION

LEGEND

STRUCTURES AT SEWER

- CSO CONTROL FACILITY
- PUMP STATION (P.S.)
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE

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CS-1314 WASTEWATER MASTER PLAN

PROFILE
OAKWOOD - NORTHWEST INTERCEPTOR

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. I-38



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Mack Ave Relief Sewer Plan

April 22, 2002

CDM

DWSD-T-003y

0 0.1 0.2 0.4 Miles

N

LEGEND

G.W.E. 584 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

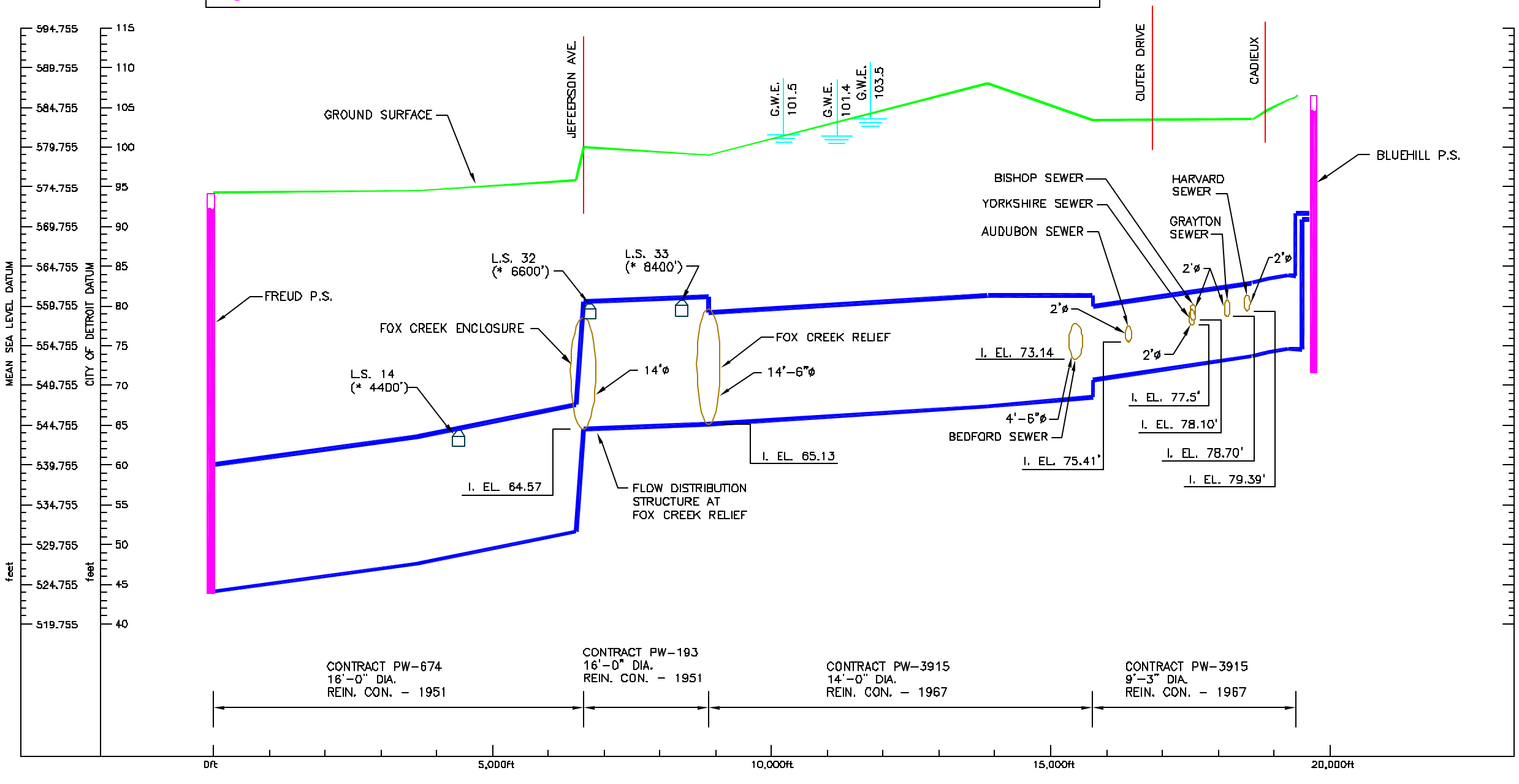
- PUMP STATION (P.S.)
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER
- CSO CONTROL FACILITY

SEDIMINTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE



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CS-1314 WASTEWATER MASTER PLAN

PROFILE
MACK AVENUE RELIEF SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-4



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Fox Creek Enclosure

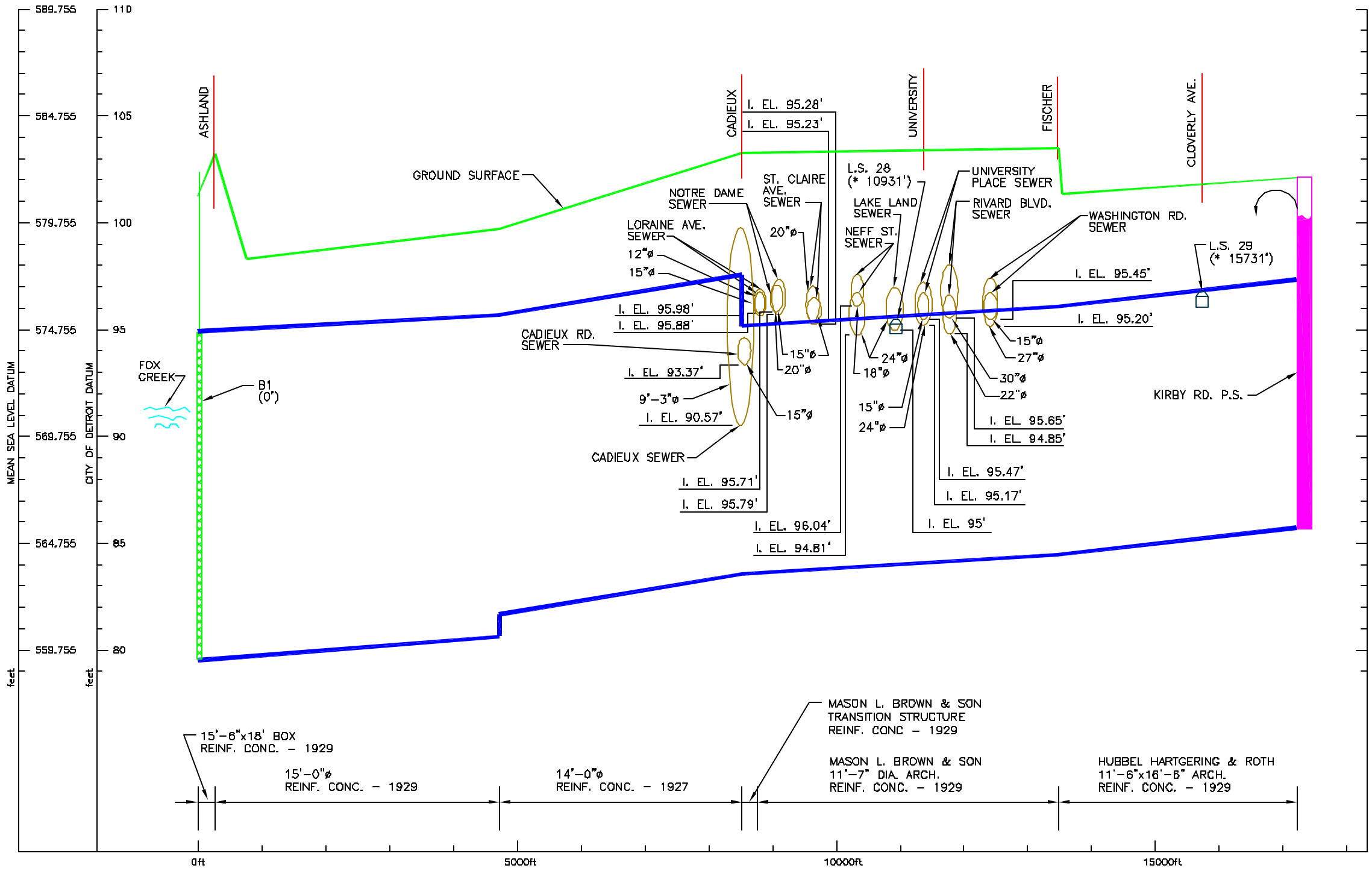
April 22, 2002

CDM

N

0 0.125 0.25 0.5 Miles

DWSD-T-003i



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE

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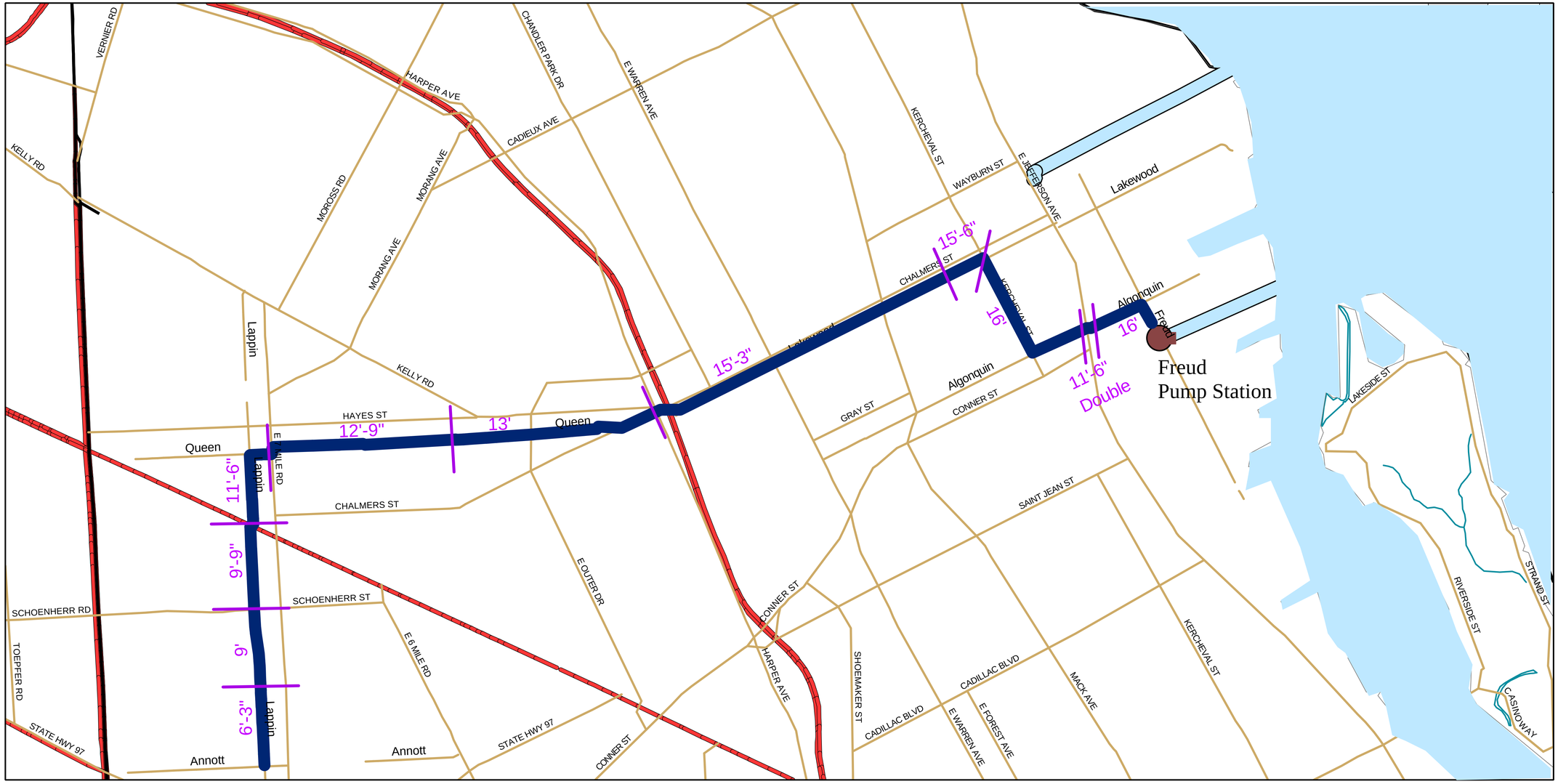
PROFILE
FOX CREEK ENCLOSURE

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-5



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

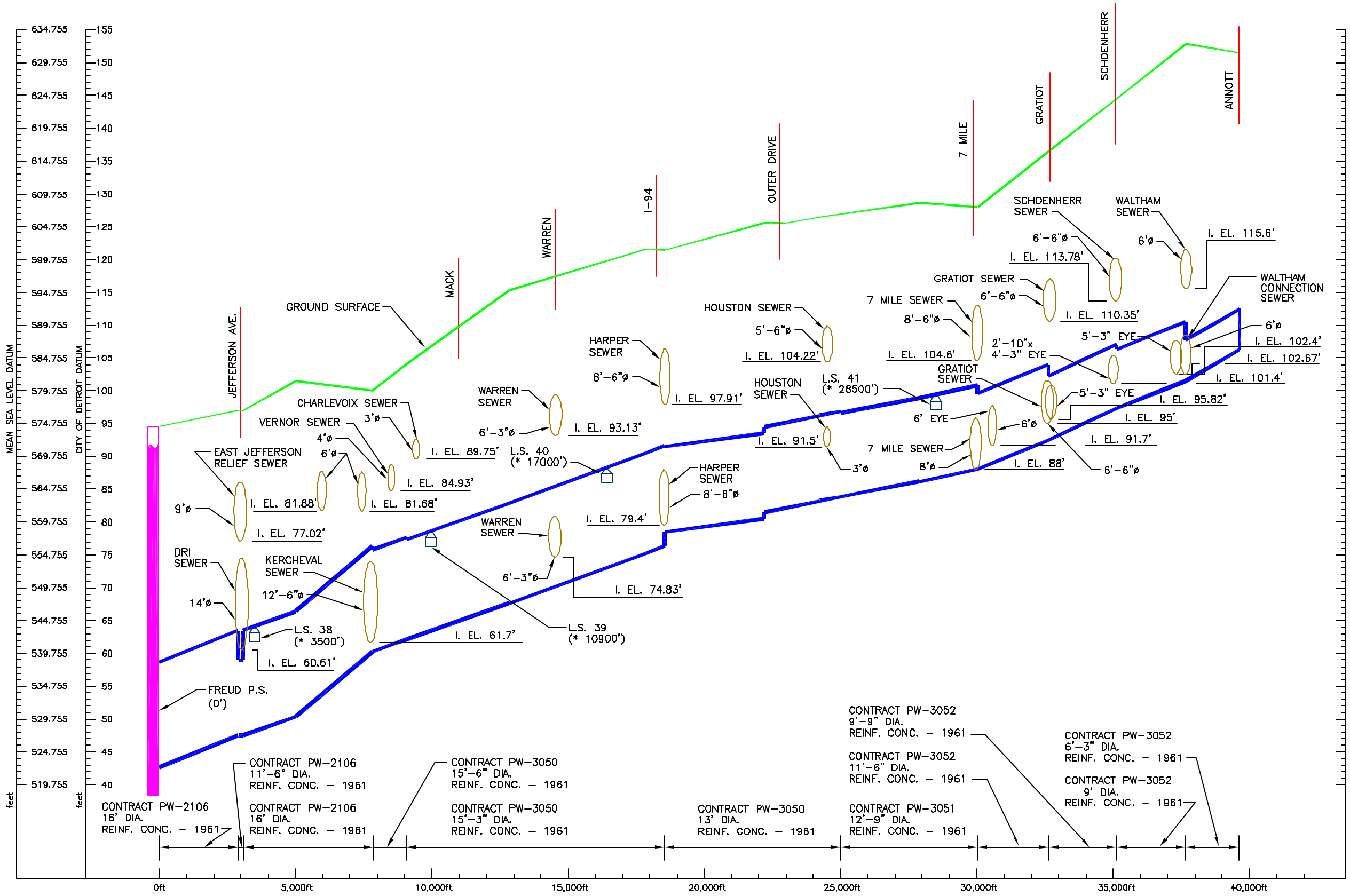
Ashland Relief Sewer Plan

April 22, 2002

CDM

0 0.5 1 2 Miles

DWSD-T-003z



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE

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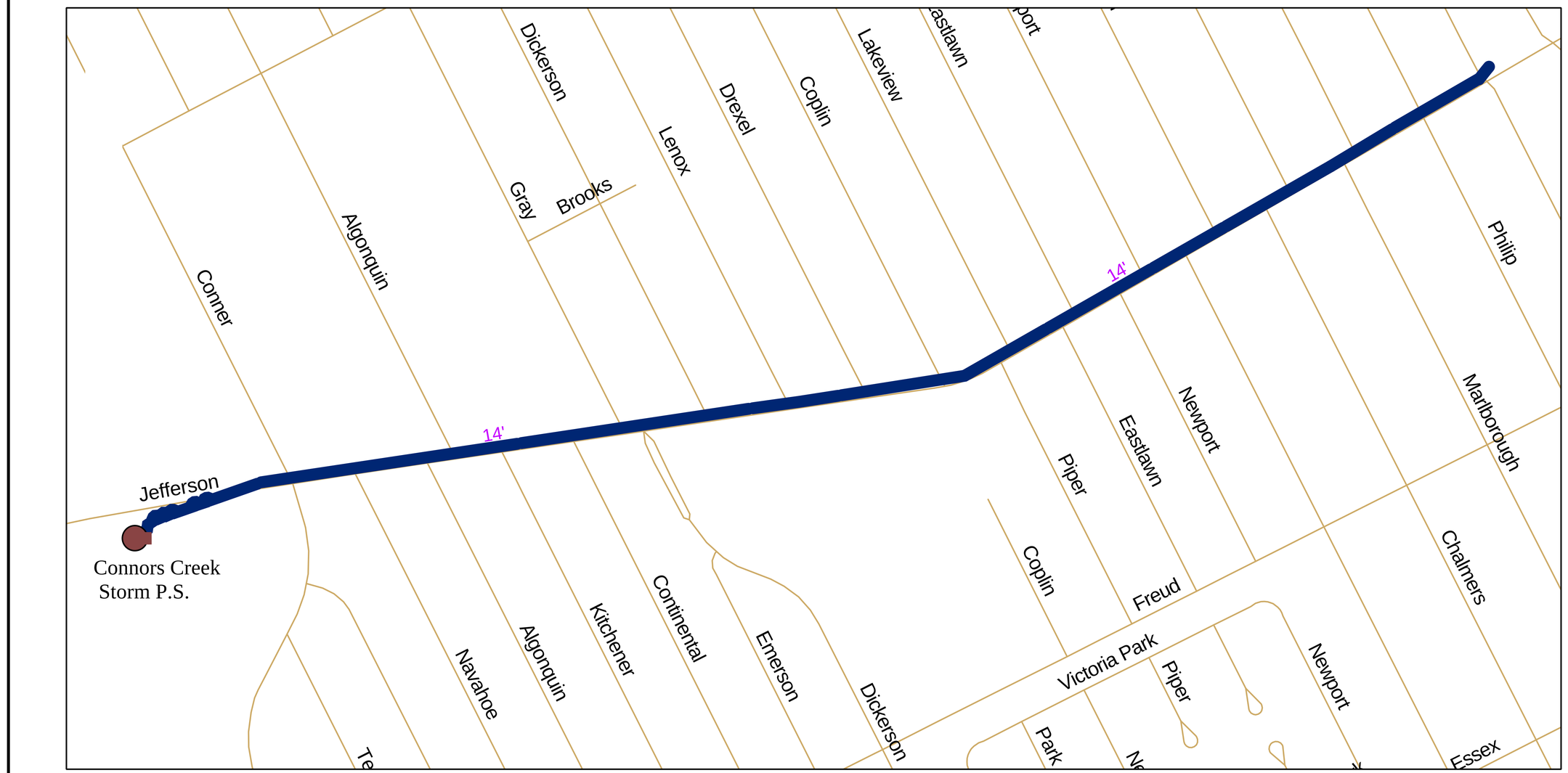
CS-1314 WASTEWATER MASTER PLAN

PROFILE
ASHLAND RELIEF SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-6



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

East Jefferson Relief Sewer (East Arm) Plan

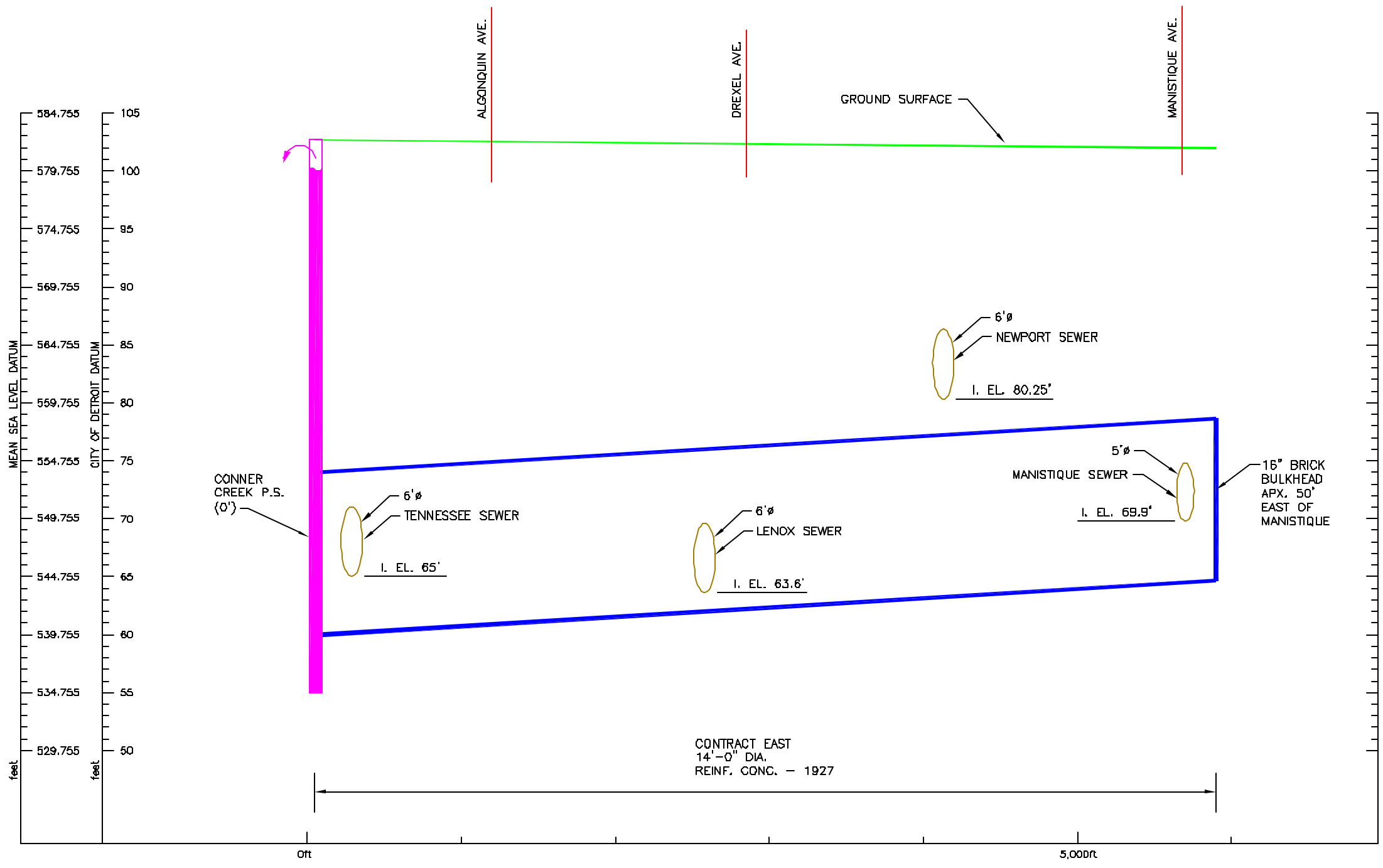
April 22, 2002

CDM

0 0.05 0.1 0.2 Miles

N

DWSD-T-003s



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE

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CS-1314 WASTEWATER MASTER PLAN

PROFILE
EAST JEFFERSON RELIEF SEWER (EAST ARM)

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-7



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

East Jefferson Relief Sewer (West Arm) Plan

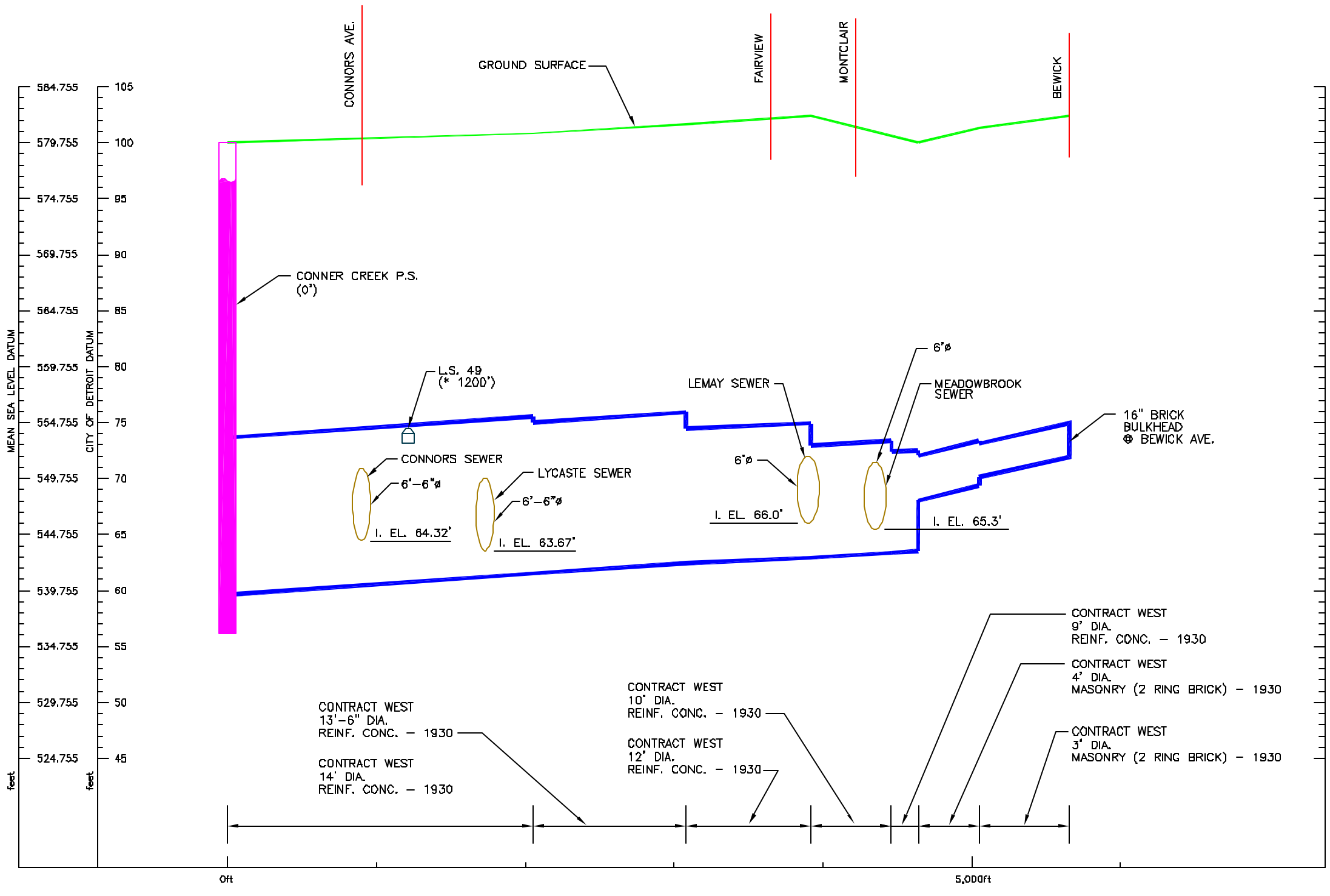
April 22, 2002

CDM

0 0.035 0.07 0.14 Miles

N

DWSD-T-003t



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
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CS-1314 WASTEWATER MASTER PLAN

PROFILE
EAST JEFFERSON RELIEF SEWER (WEST ARM)

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-8



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Conner Creek Enclosure Plan

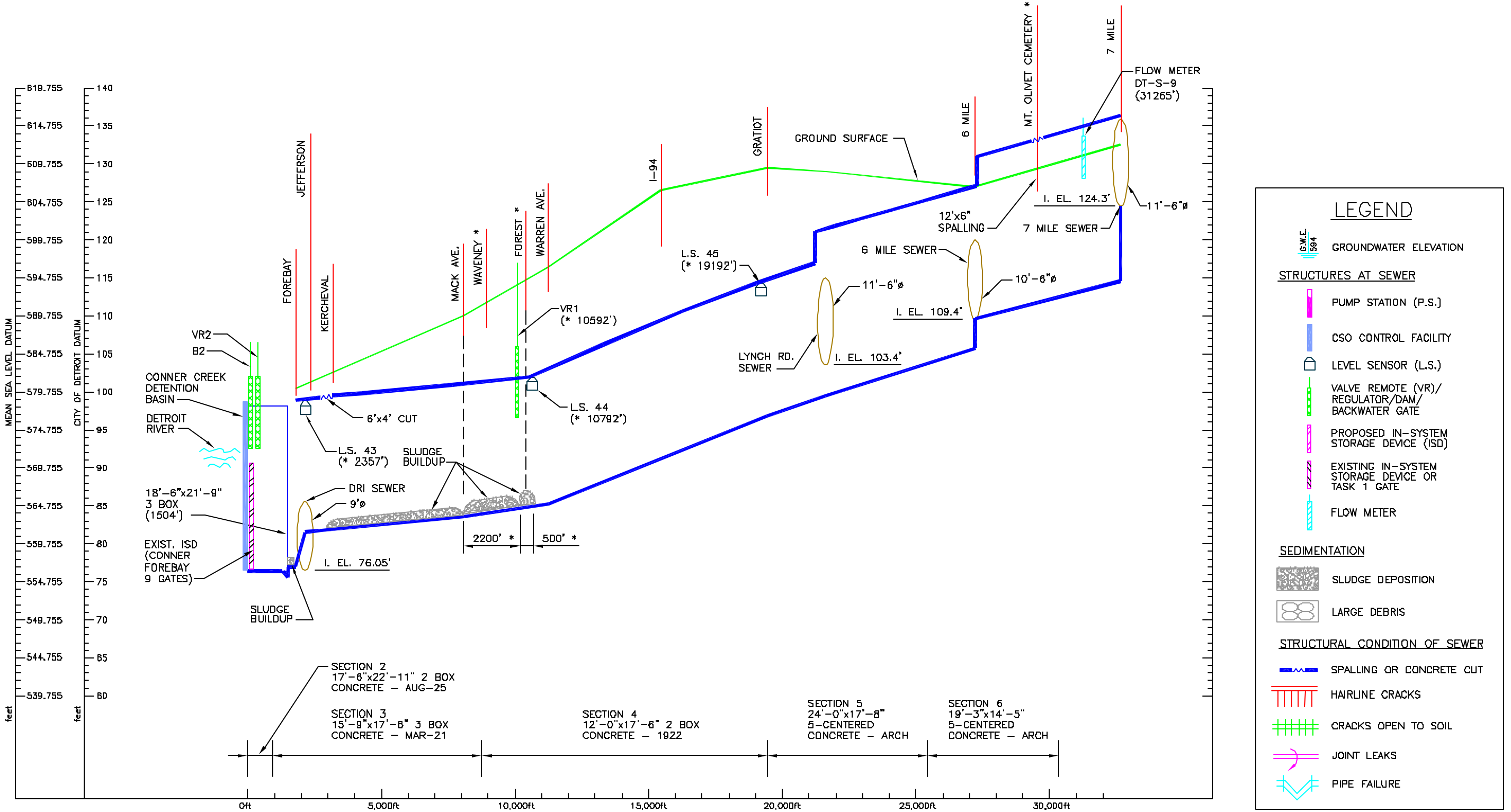
April 22, 2002

CDM

N

0 0.25 0.5 1 Miles

DWSD-T-003h



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
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- LEVEL SENSOR (L.S.)
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SEDIMENTATION

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- LARGE DEBRIS

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- SPALLING OR CONCRETE CUT
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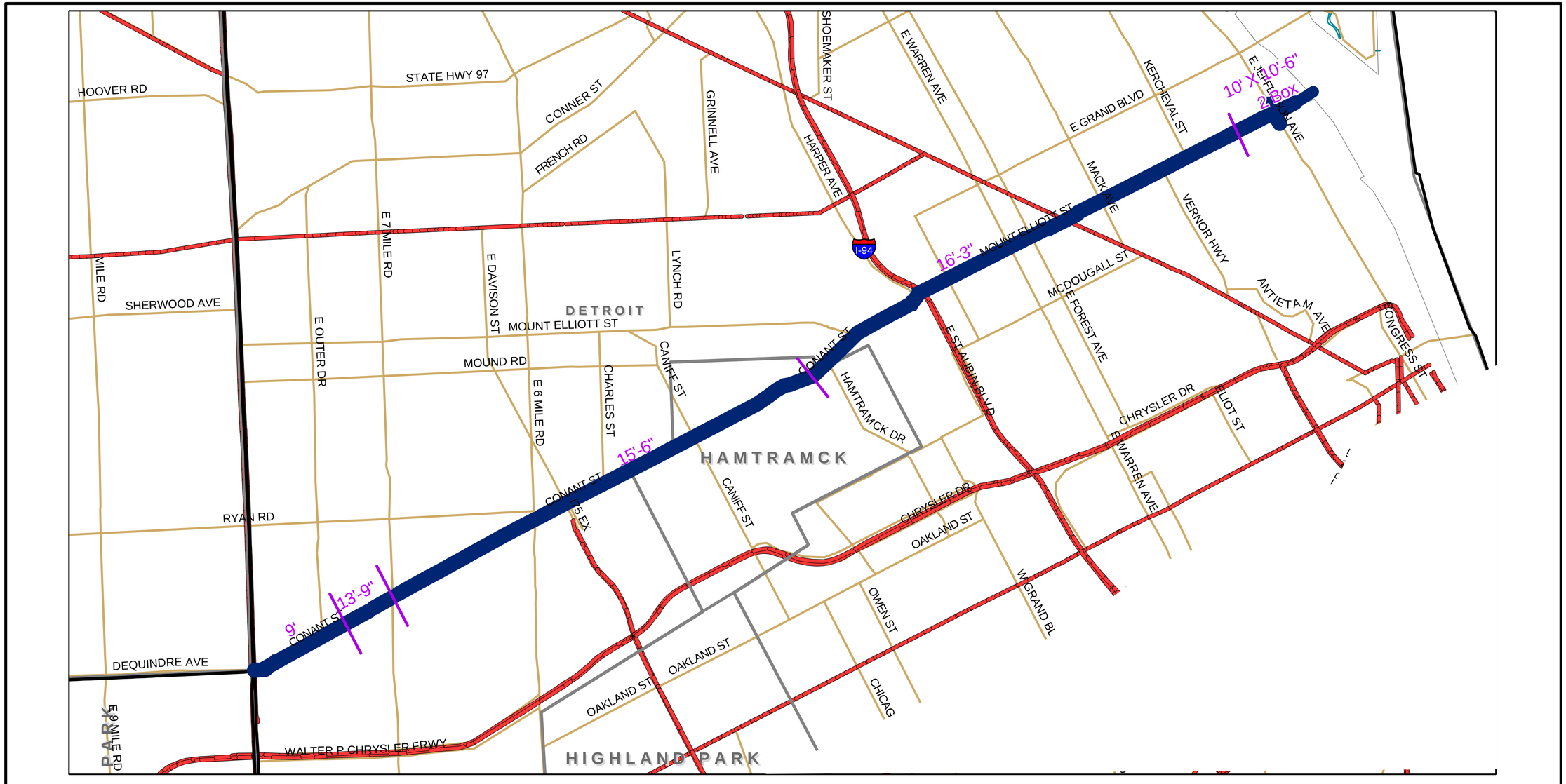
PROFILE
CONNER CREEK ENCLOSURE

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-9



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Conant-Mt. Elliot Sewer Plan

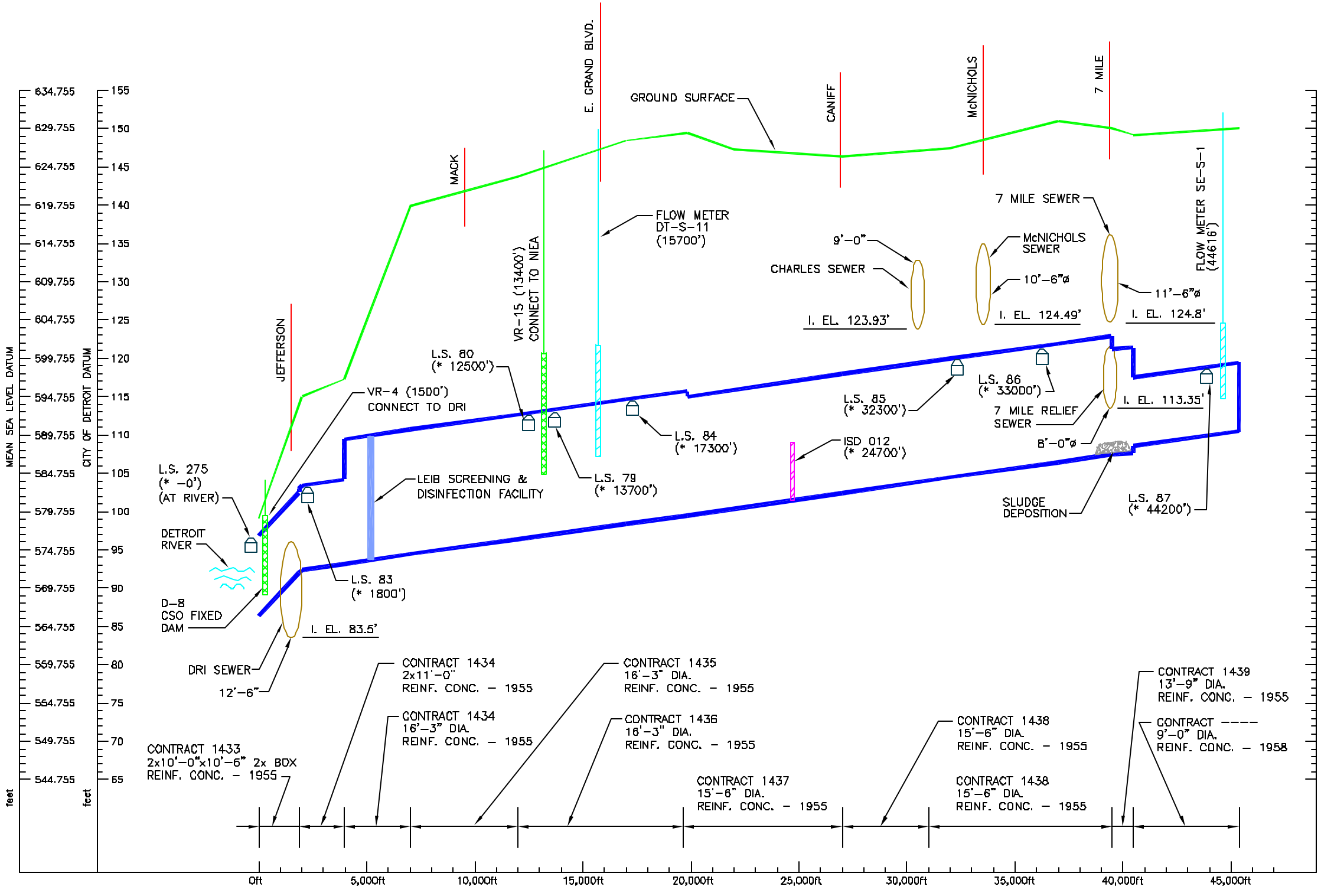
April 22, 2002

CDM

N

0 0.5 1 2 Miles

DWSD-T-003q



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

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STRUCTURAL CONDITION OF SEWER

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- JOINT LEAKS
- PIPE FAILURE

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1. * APPROX. DISTANCE
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PRELIMINARY

PRIME CONSULTANT
CDM
environmental engineers, scientists, planners, & management consultants

PREPARED BY:
TUCKER, YOUNG JACKSON, TULL INC.
CONSULTING ENGINEERS PLANNERS
565 E. LARNED SUITE 300 DETROIT, MICHIGAN 48226
(313) 883-0612

CITY OF DETROIT

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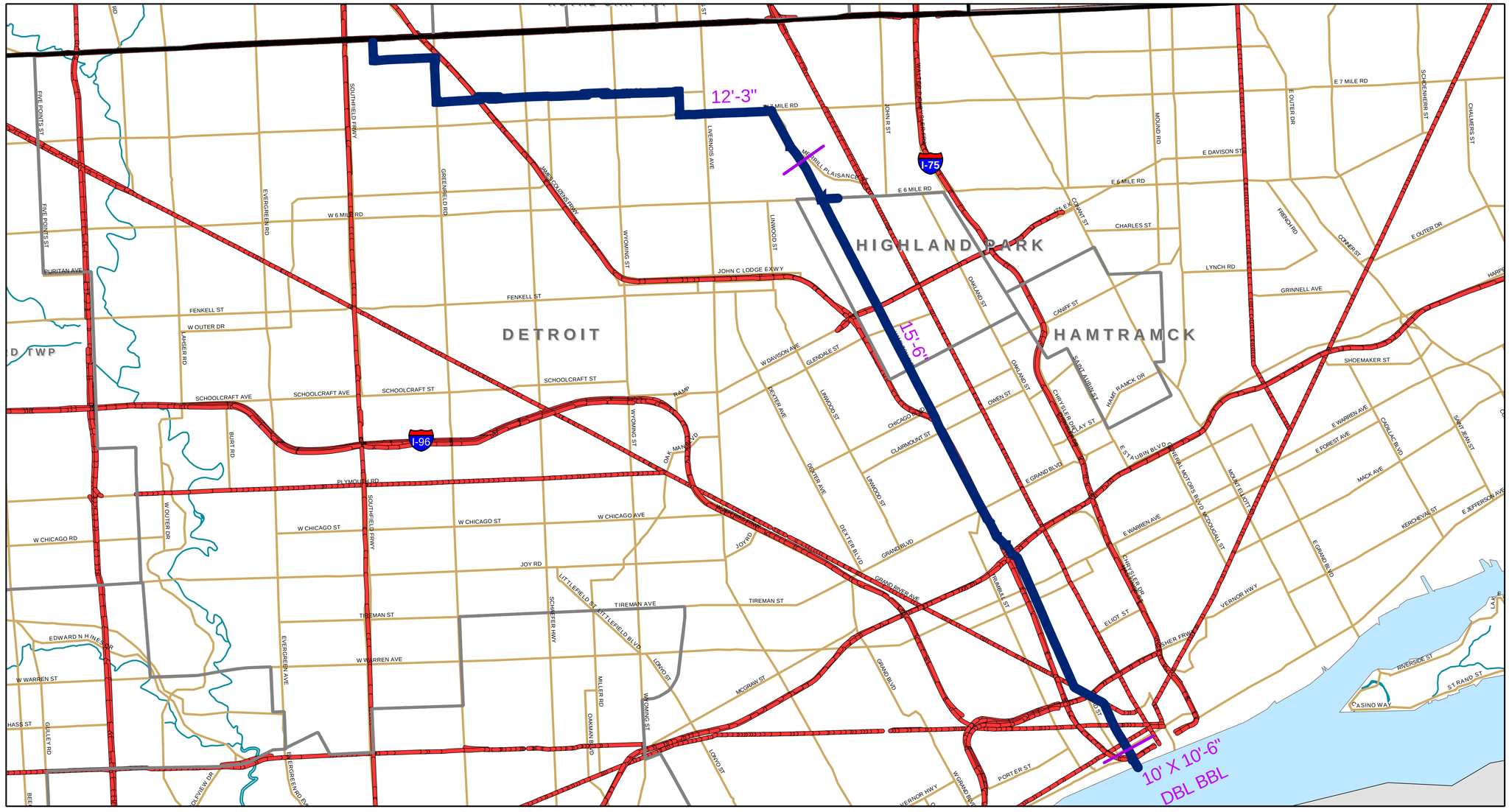
DETROIT WATER AND SEWERAGE DEPARTMENT
CS-1314 WASTEWATER MASTER PLAN

PROFILE
CONANT - MT. ELLIOT SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-10



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

First-Hamilton Sewer Plan

April 22, 2002

CDM

0 0.5 1 2 Miles

N

DWSD-T-003p

LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

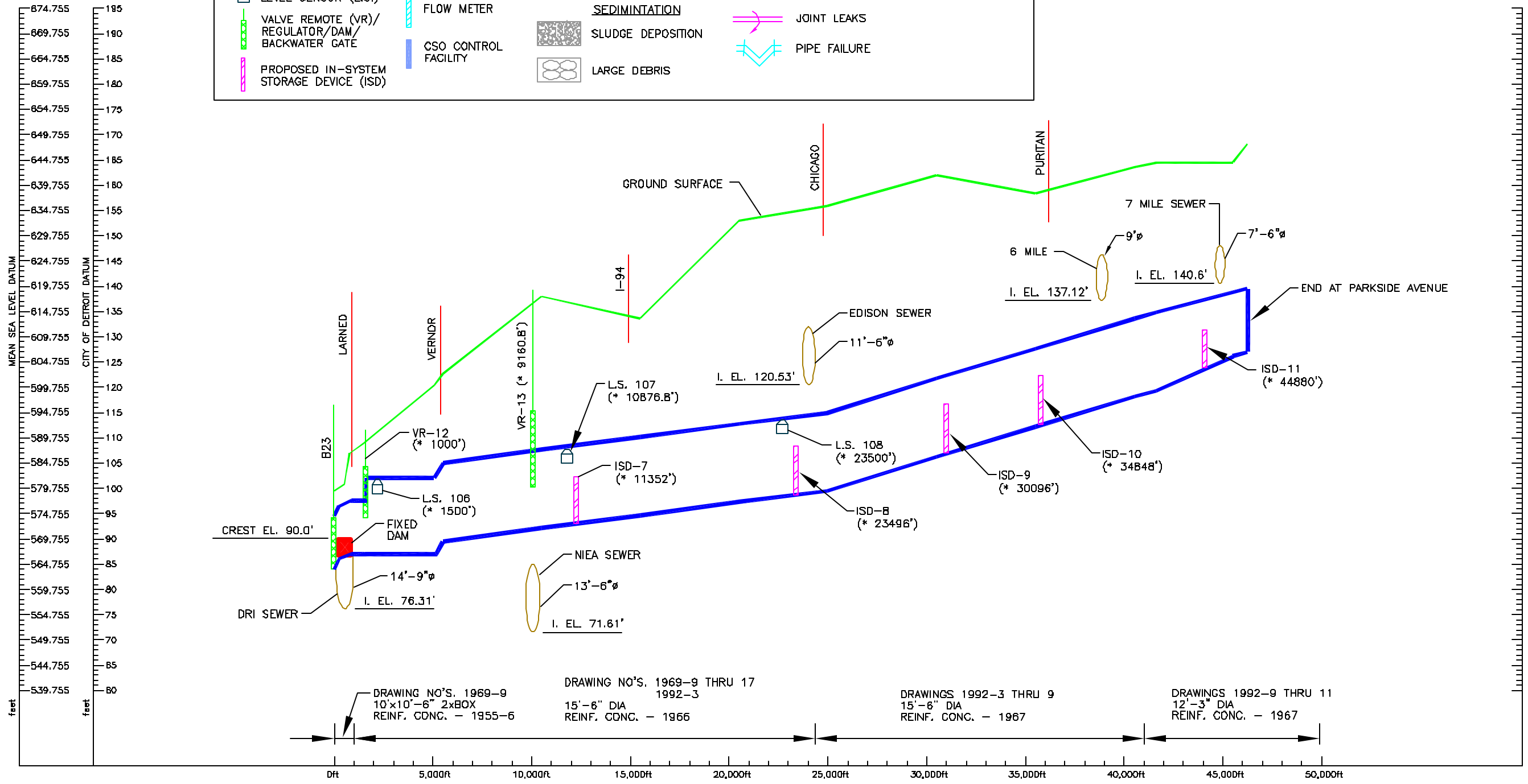
- PUMP STATION (P.S.)
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER
- CSO CONTROL FACILITY

SEDIMINTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE



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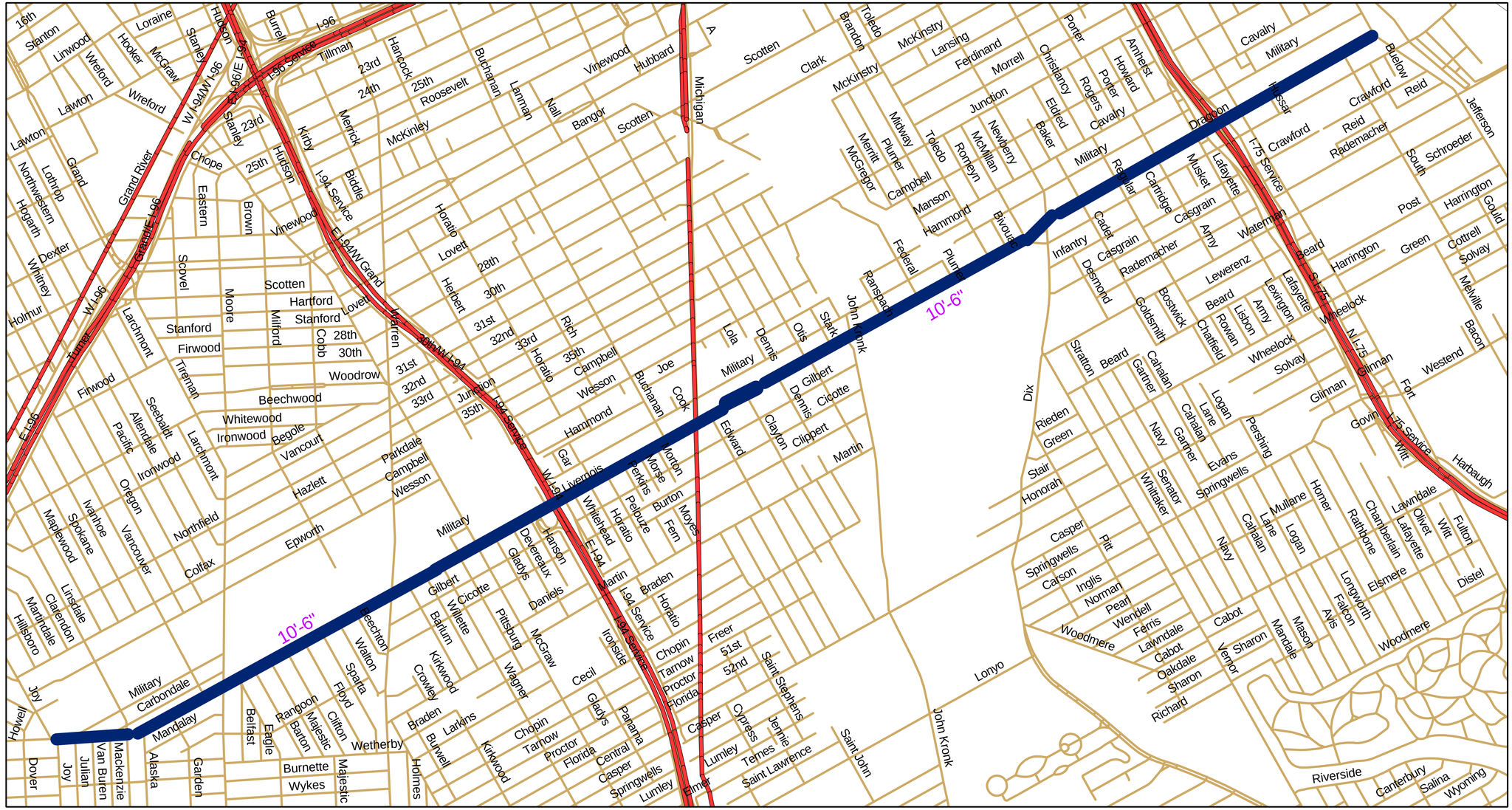
PROFILE
FIRST - HAMILTON SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-11


10'-6"
10'-6"
Grand River
Grand River
W I-96
E I-96
I-96 Service
W I-94/W I-96
E I-94/W Grand
I-94 Service
W I-94
E I-94
I-94 Service
I-75 Service
I-75 Service
N I-75
Michigan
Military
Junction
Beechton
Dix
John Kronk
Lonyo
Saint John
Saint Lawrence
Saint Stephens
Riverside
Canterbury
Salina
Wyoming
Woodmere
Elsmere
Distel
Fulton
Witt
Harbaugh
Govin
Glinnan
Westend
Bacon
Melville
Gould
Harrington
Green
Gottrell
Solvay
Wheelock
Beard
Lafayette
Waterman
Post
South
Schroeder
Jefferson
Reid
Crawford
Rademacher
Bluelow
Cavalry
Military
Dragoon
Tiesar
Junction
Porter
Howard
Annhelst
Rogers
Cavalry
Eldred
Baker
Christiancy
Morrell
Ferdinand
Lansing
McKinstry
Brandon
Toledo
Scotten
Clark
Hubbard
Vinewood
Buchanan
Lannman
Nall
Bangor
Scotten
McKinley
Roosevelt
Hancock
Tillman
Burrell
Hudson
Stanley
Hooker
Loraine
Linwood
Stanton
16th
Wreford
Lawton
Grand
Lothrop
Northwestern
Hogarth
Dexter
Whitney
Holmur
Fumet
Larchmont
Finwood
Seebaldt
Allendale
Pacific
Ironwood
Oregon
Ivanhoe
Spokane
Maplewood
Linsdale
Claremont
Marlindale
Hillsboro
Joy
Howell
Dover
Julian
Van Buren
Mackenzie
Alaska
Garden
Northfield
Coltax
Epworth
Vancouver
Vancouver
Larchmont
Ironwood
Begole
Whitewood
Beechwood
Woodrow
Cobb
Milford
Moore
Scovel
Brown
Eastern
Chope
Stanley
Kirby
Merrick
Biddle
Horatio
Lovett
Helbert
Harren
Rich
Campbell
Wesson
Hammond
Joe
Buchanan
Cook
Lola
Military
Dennis
Otis
Stark
John Kronk
Ransbach
Federal
Plumer
Bivouac
Infantry
Cadet
Casgrain
Desmond
Rademacher
Army
Waterman
Musket
Lafayette
Cartridge
Regular
Military
Manson
Hammond
Campbell
McGregor
Merritt
Plumer
Midway
Toledo
Romeyn
McMillan
Newberry
Junction
Ferdinand
Morrell
Christiancy
Porter
Howard
Annhelst
Rogers
Cavalry
Eldred
Baker
Cavalry
Military
Dragoon
Tiesar
Crawford
Reid
Rademacher
Bluelow
Jefferson
South
Schroeder
Post
Harrington
Gould
Green
Gottrell
Solvay
Melville
Bacon
Westend
Fort
Harbaugh
Govin
Witt
Fulton
Lawndale
Olivet
Lafayette
Chamberlain
Raithbone
Longworth
Falcon
Avis
Elsmere
Distel
Woodmere
Mason
Mandale
Cabot
Sharon
Vernor
Richard
Oakdale
Cabot
Lawndale
Ferris
Wendell
Pearl
Norman
Inglis
Carson
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Casper
Navy
Calhatan
Lane
Logan
Mullane
Homer
Navy
Springwells
Senator
Whittaker
Evans
Garner
Calahan
Lane
Logan
Cahalan
Gartner
Beard
Stratton
Dix
Rieden
Green
Stair
Honorah
Wheelock
Solvay
Glinnan
Lexington
Army
Lisbon
Rowan
Chatfield
Goldsmith
Bostwick
Lewerenz
Army
Casgrain
Desmond
Rademacher
Infantry
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Buchanan
Cook
Wesson
Hammond
Campbell
Rich
Horatio
Helbert
Lovett
Horatio
Scotten
Vinewood
Biddle
Merrick
Kirby
Hudson
Chope
Stanley
Eastern
Brown
Moore
Scovel
Hartford
Stanford
Firwood
Tireman
Woodrow
Beechwood
Whitewood
Ironwood
Begole
Vancouver
Hazlett
Epworth
Northfield
Coltax
Parkdale
Campbell
Wesson
Military
Junction
Beechton
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Spalta
Floyd
Clifton
Majestic
Barton
Eagle
Belfast
Rangoon
Mandalay
Carbondale
Military
Howell
Joy
Dover
Burnette
Wykes
Majestic
Holmes
Wetherby
Braden
Larkins
Burwell
Crowley
Kirkwood
Barlum
Willette
Cicotte
Gilbert
Gladys
Devereaux
Hanson
Daniels
Pittsburg
McGraw
Wagner
Cecil
Ironside
Chopin
Tarnow
Proctor
Florida
Central
Casper
Springwells
Lumley
Elmer
Ternes
Cypress
Jennie
Freer
51st
52nd
Martin
Braden
Horatio
Pelouze
Burton
Moyes
Fern
Whitehead
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Morton
Edward
Clayton
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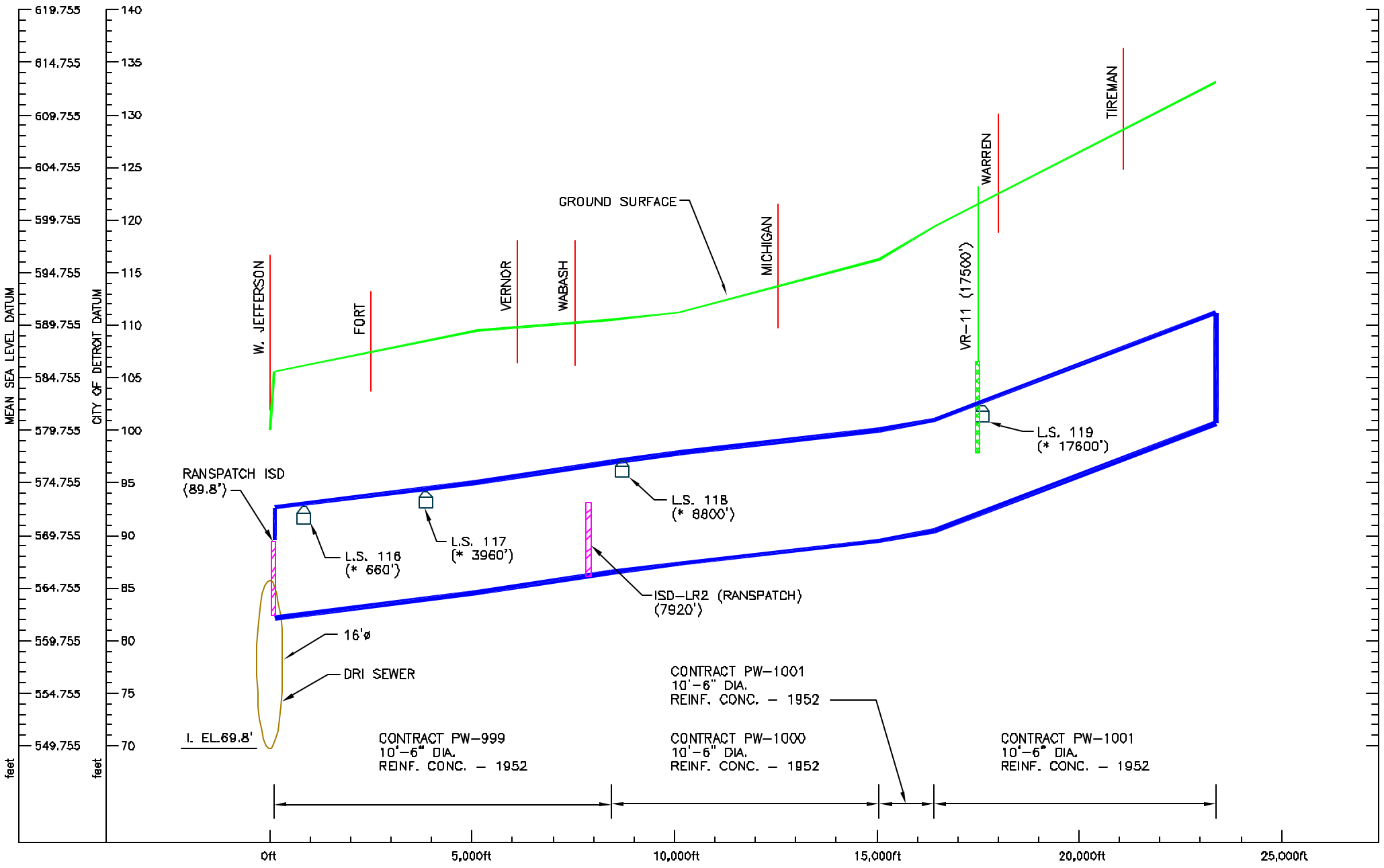

LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
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- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
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- PIPE FAILURE

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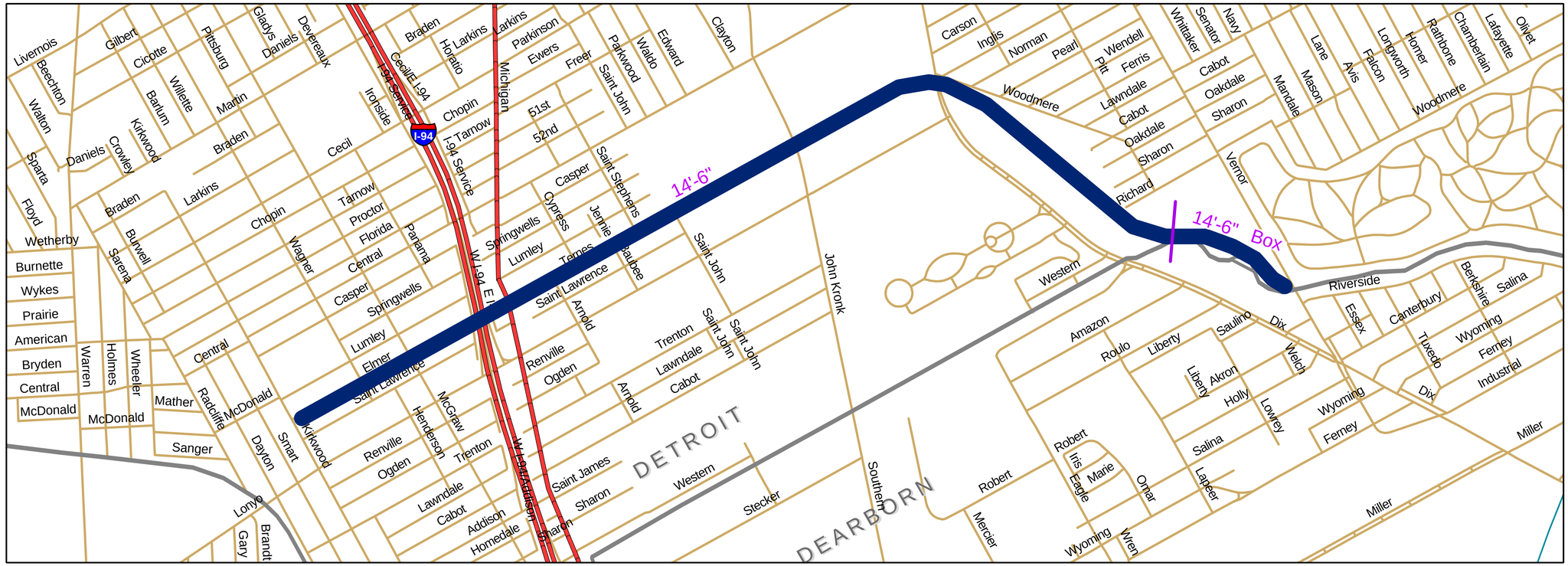
CS-1314 WASTEWATER MASTER PLAN

PROFILE
LIVERNOIS RELIEF SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO.T-12



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

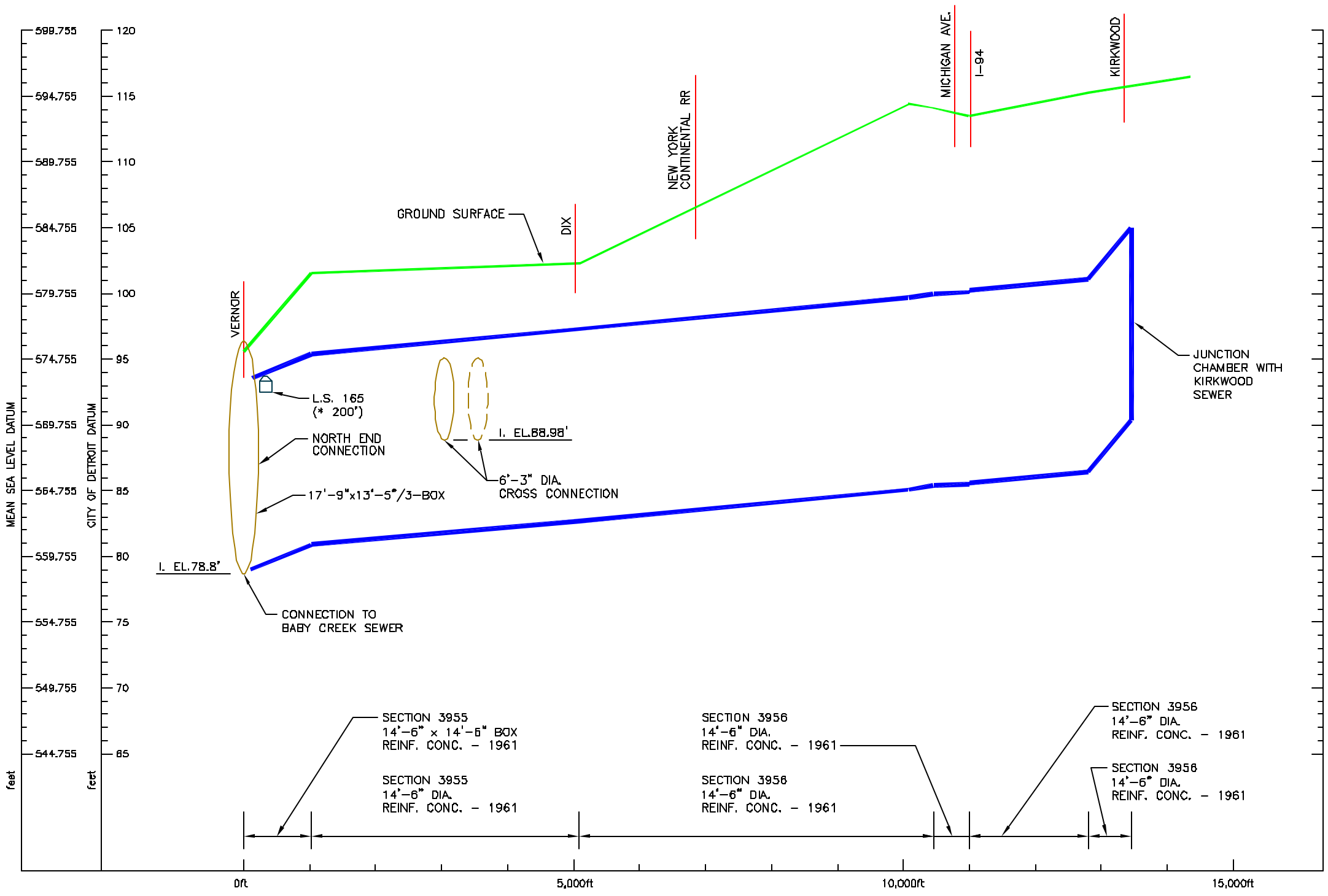
Elmer Ternes Sewer Plan

April 22, 2002

CDM

0 0.125 0.25 0.5 Miles

DWSD-T-003K



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
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- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
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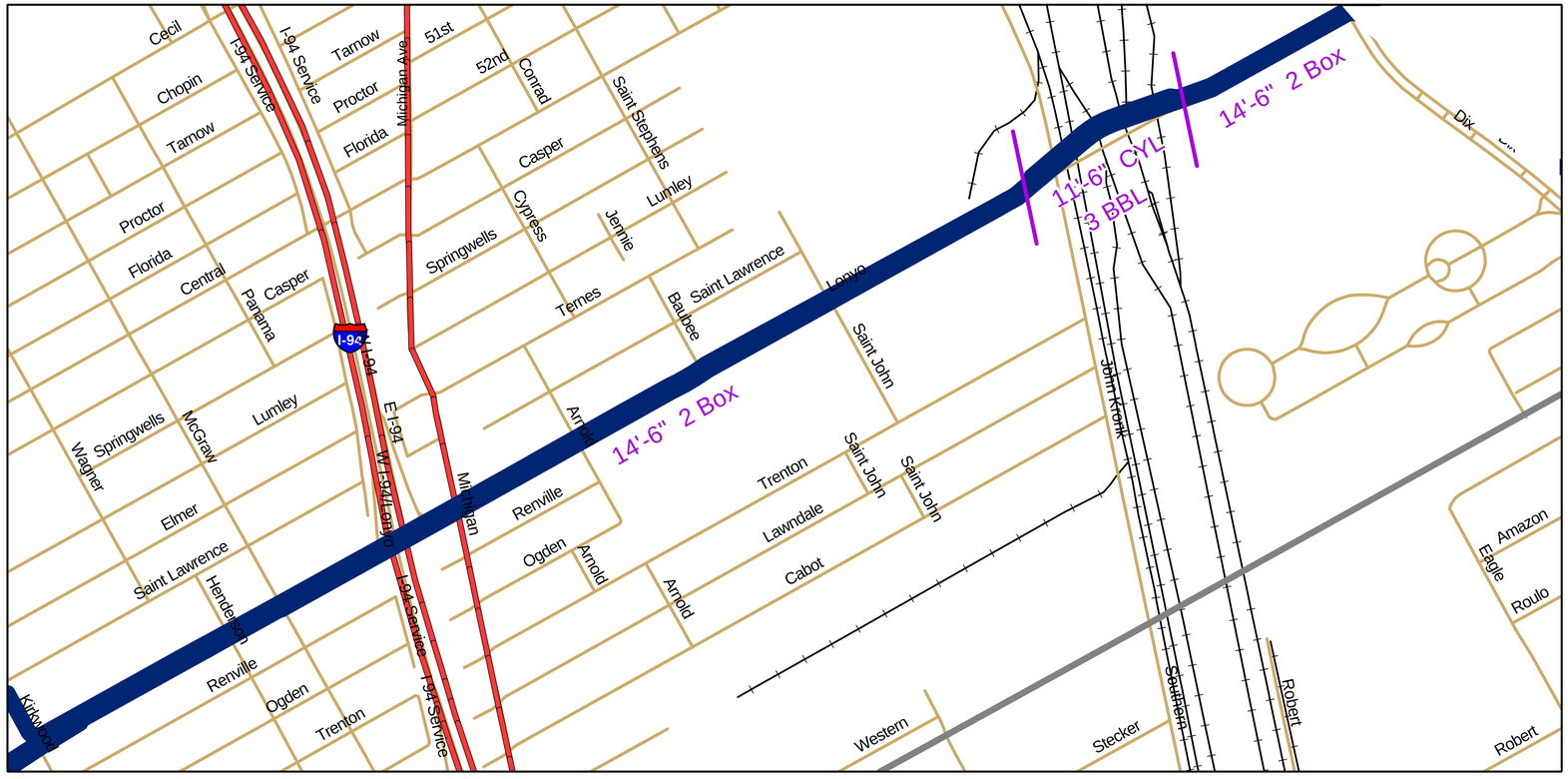
PROFILE
ELMER TERNES SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-13



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

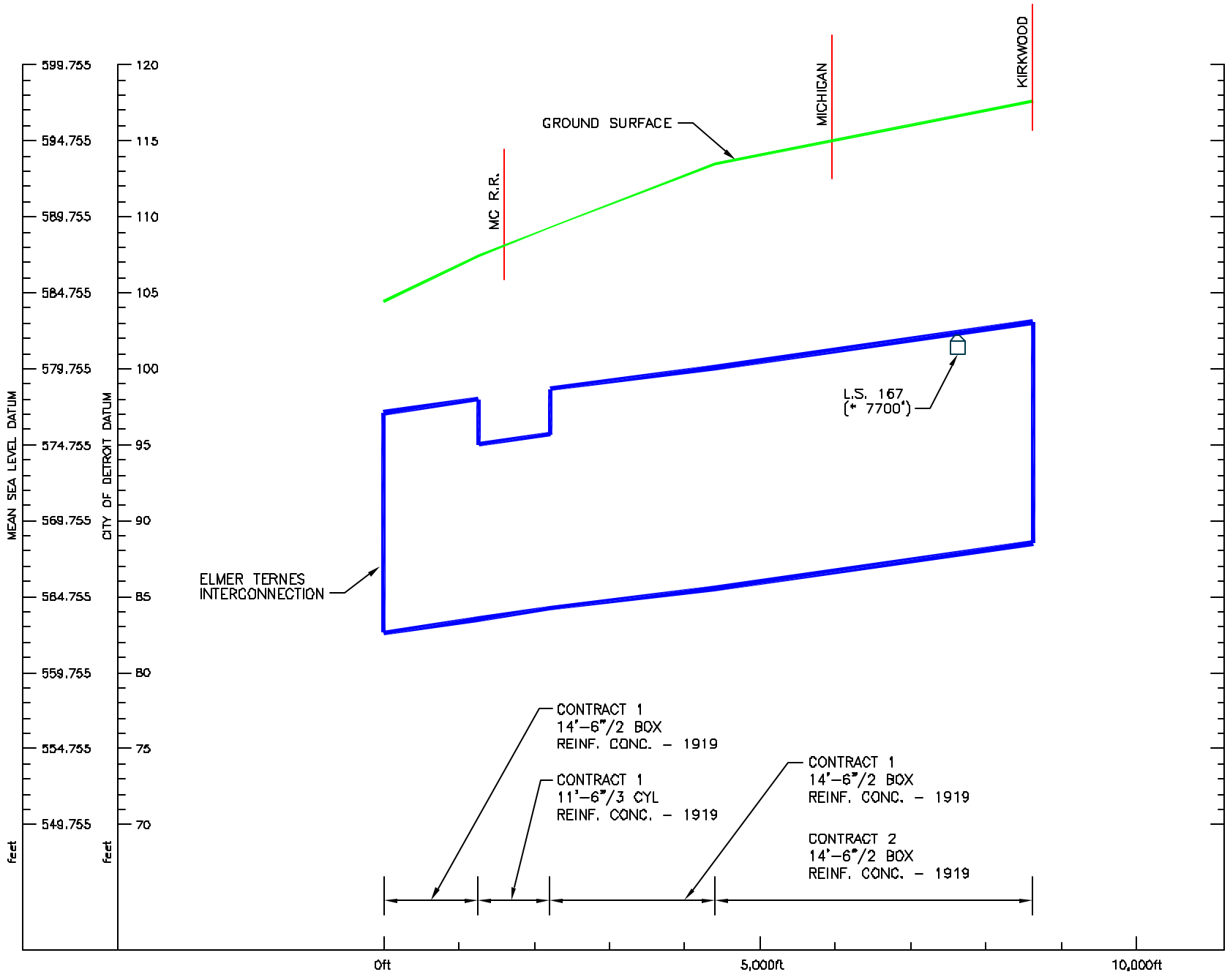
Lonyo Sewer Plan

April 22, 2002

CDM

0 0.125 0.25 0.5 Miles

DWSD-T-003m



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
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SEDIMENTATION

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PROFILE
LONYO SEWER

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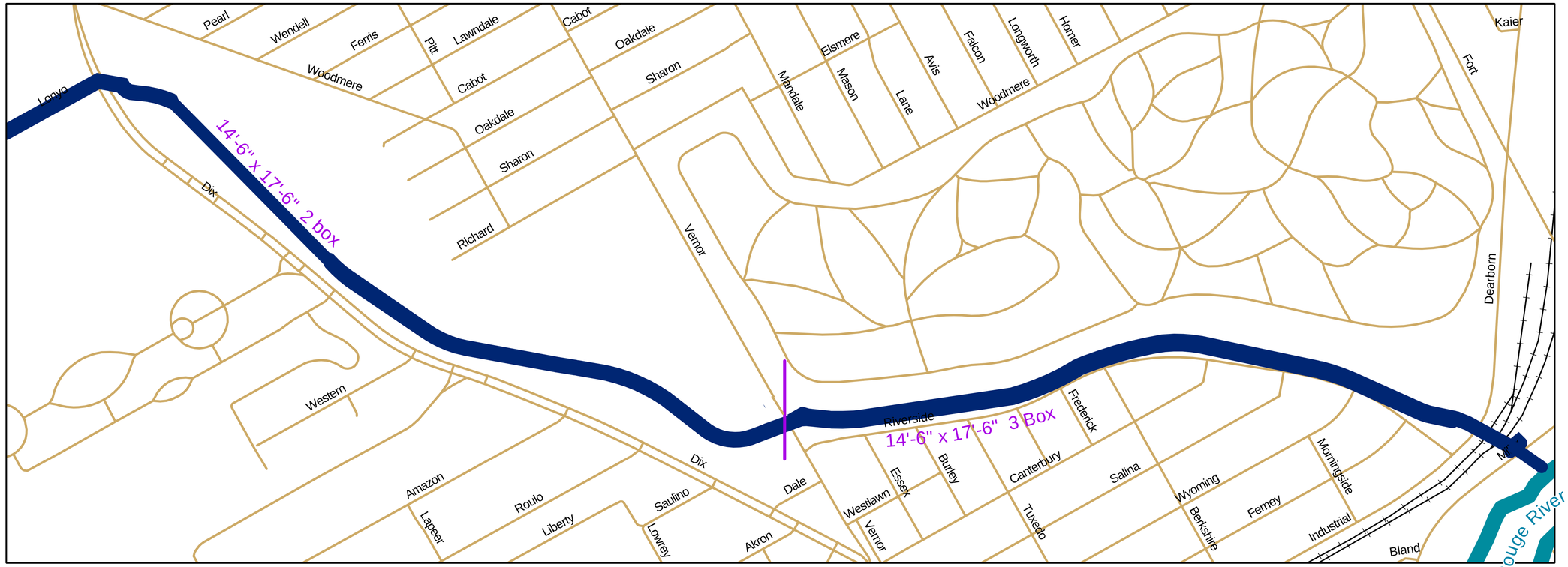


Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

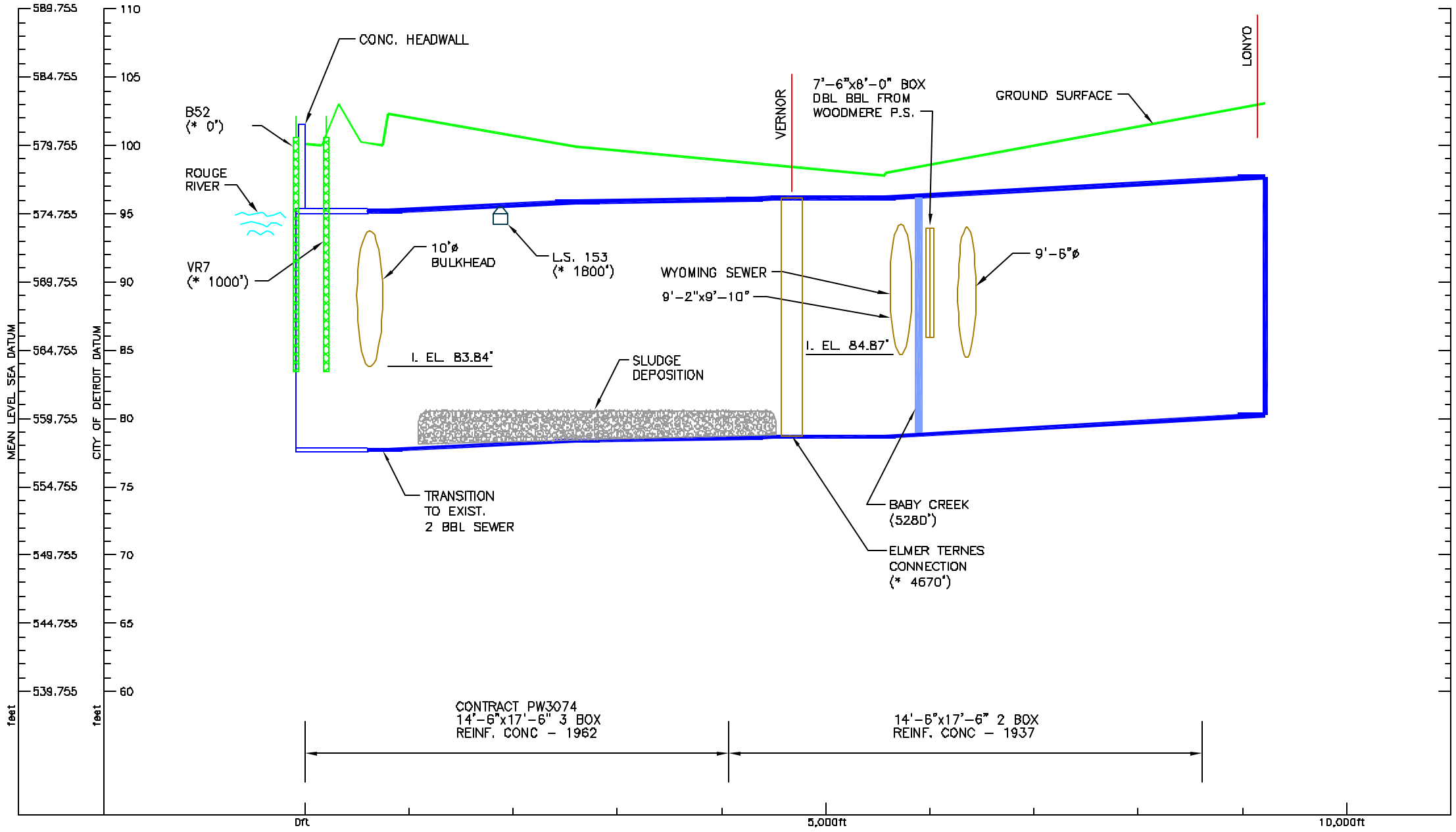
Baby Creek Enclosure Plan

April 22, 2002

CDM

0 0.05 0.1 0.2 Miles

DWSD-T-003L



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

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- FLOW METER

SEDIMENTATION

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- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

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PROFILE
BABY CREEK ENCLOSURE

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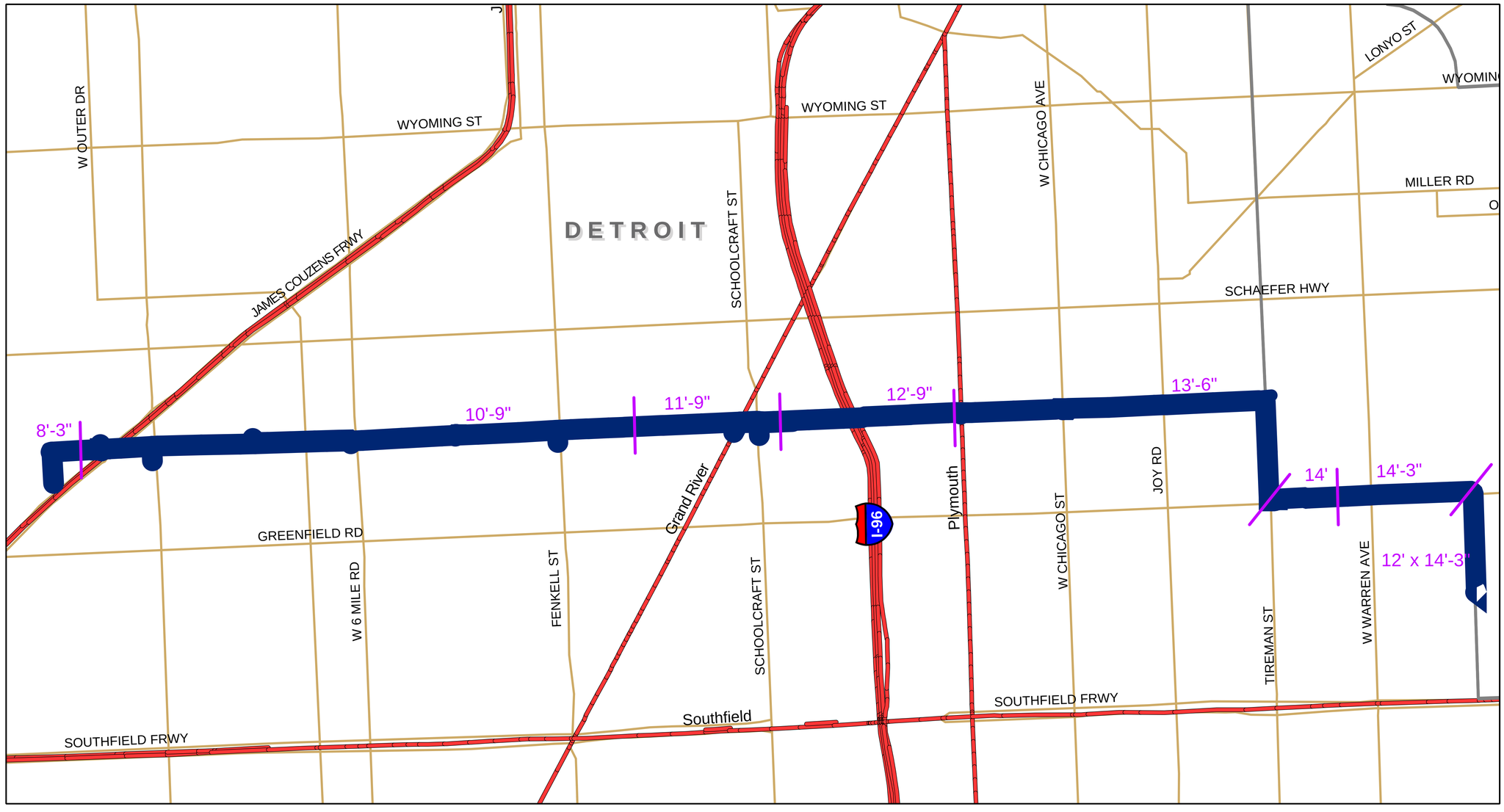


Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

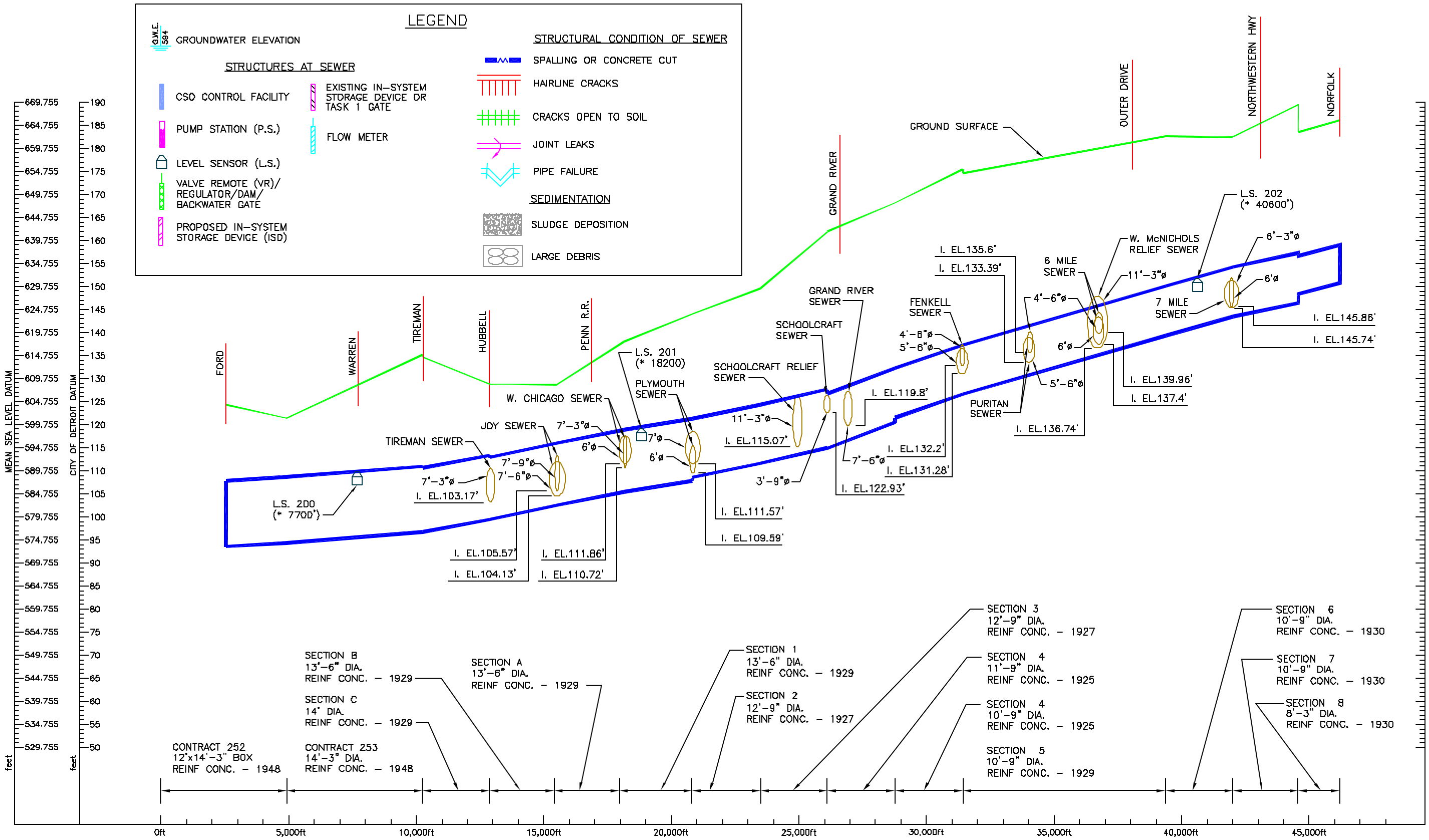
Hubbell Sewer Plan

April 22, 2002

CDM

0 0.25 0.5 1 Miles

DWSD-T-003J



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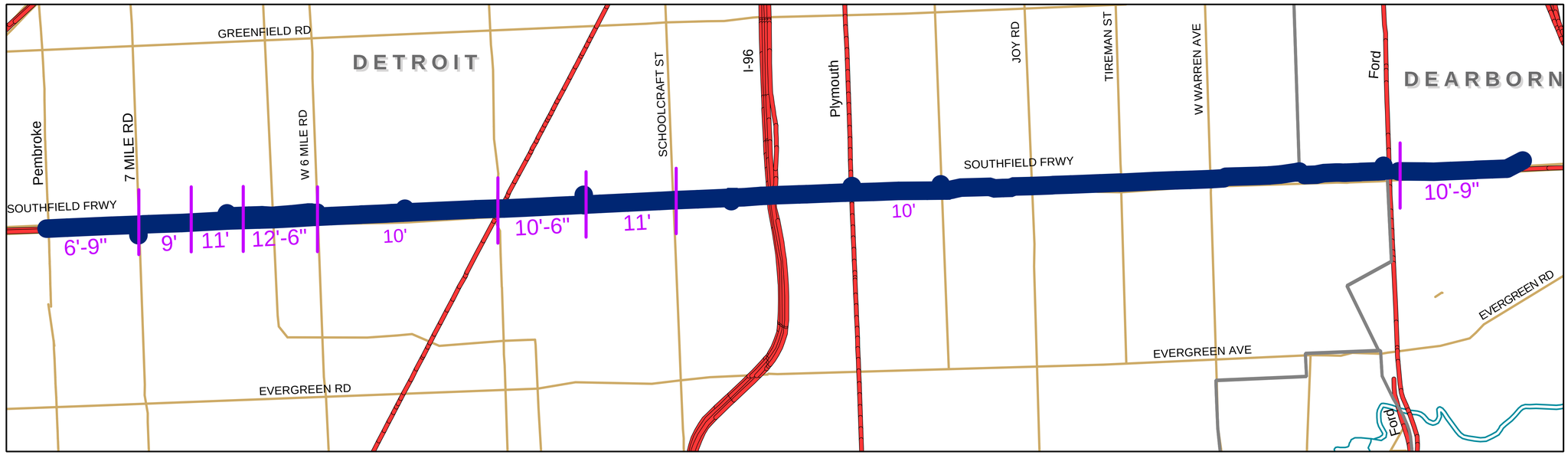
PROFILE
HUBBELL SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-16



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Southfield Sewer Plan

April 22, 2002

CDM

0 0.25 0.5 1 Miles

DWSD-T-003g

LEGEND

G.W.E. 594 GROUNDWATER ELEVATION

STRUCTURES AT SEWER

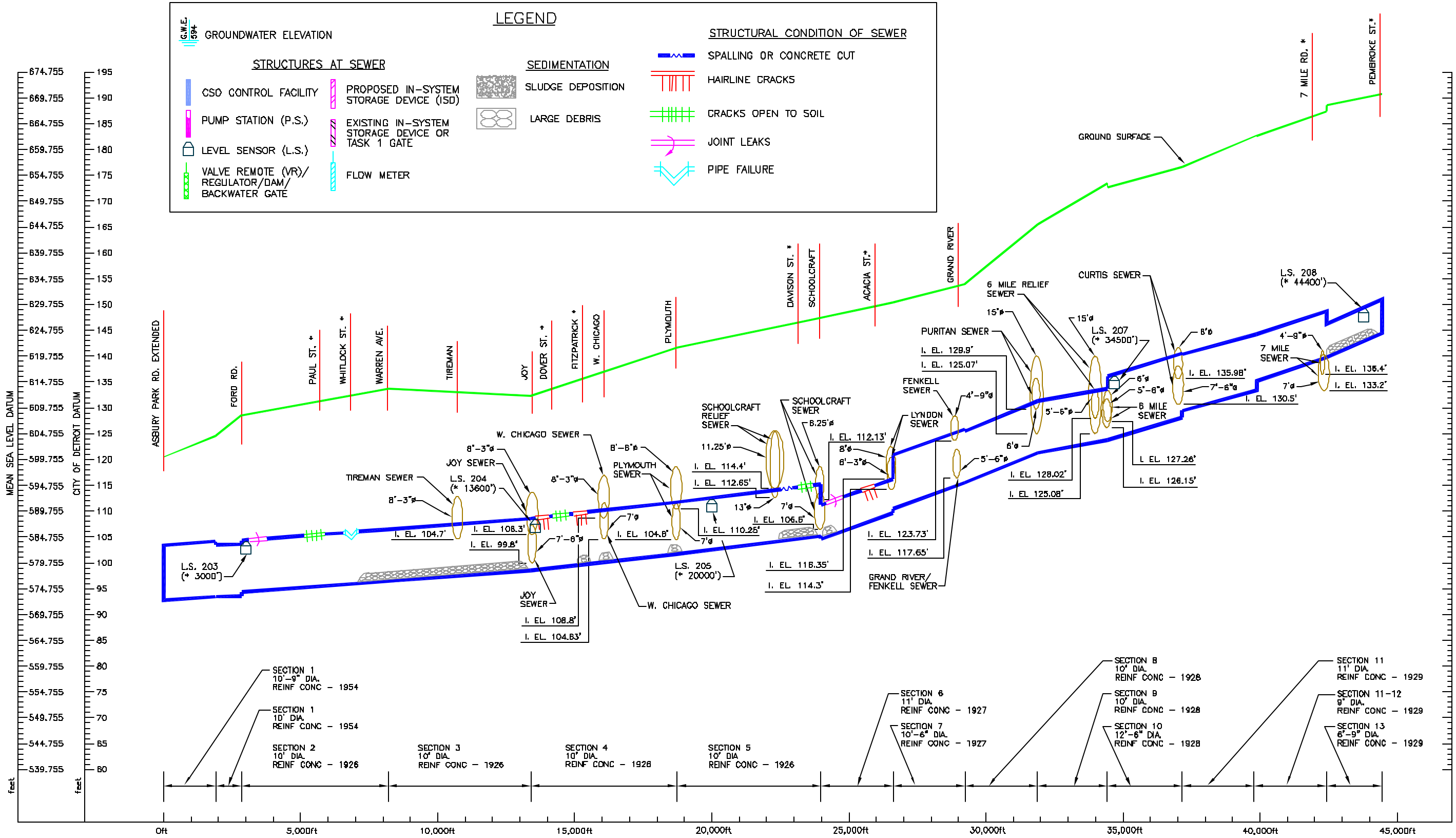
- CSO CONTROL FACILITY
- PUMP STATION (P.S.)
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE



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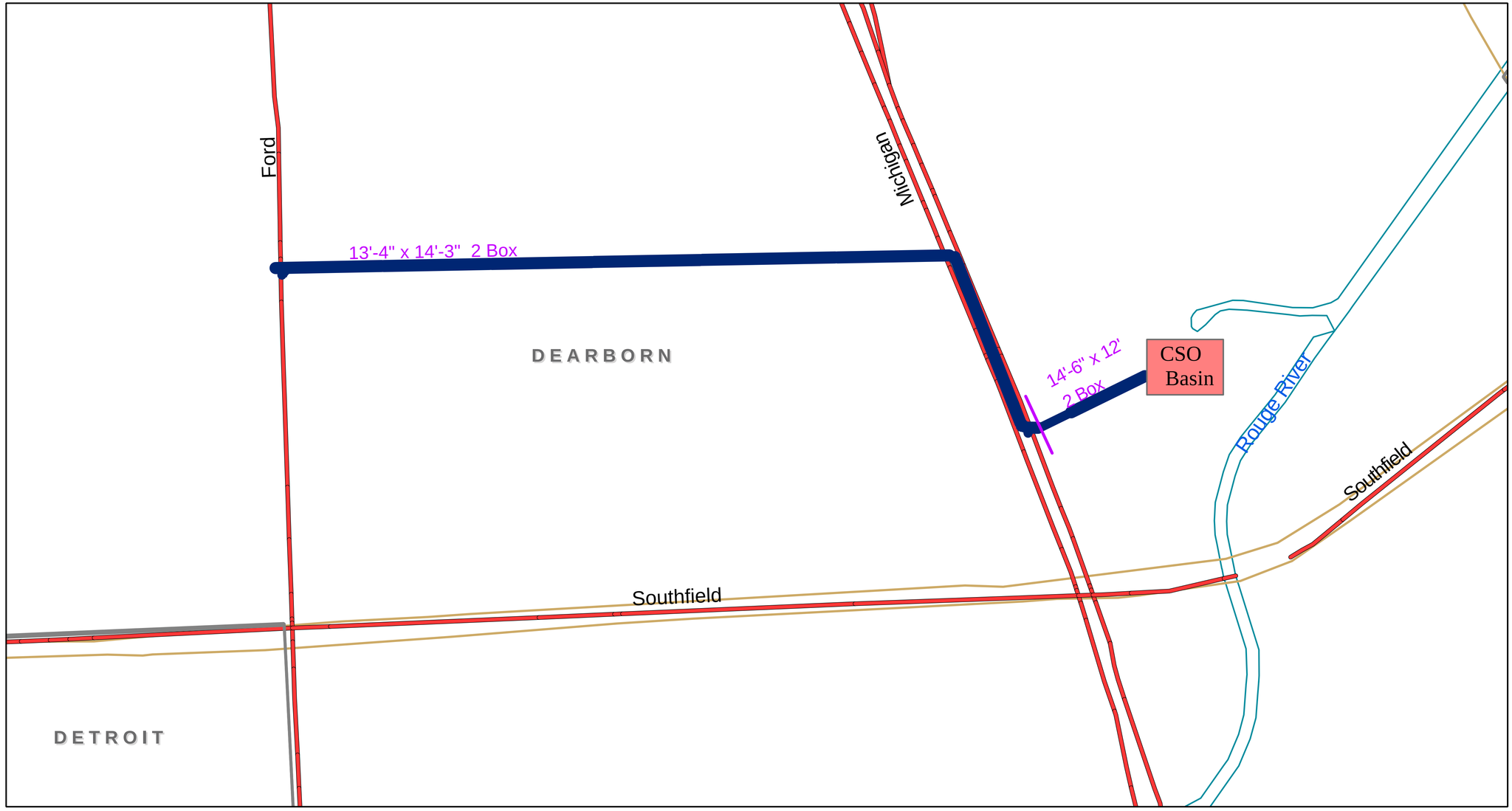
PROFILE
SOUTHFIELD SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-17



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

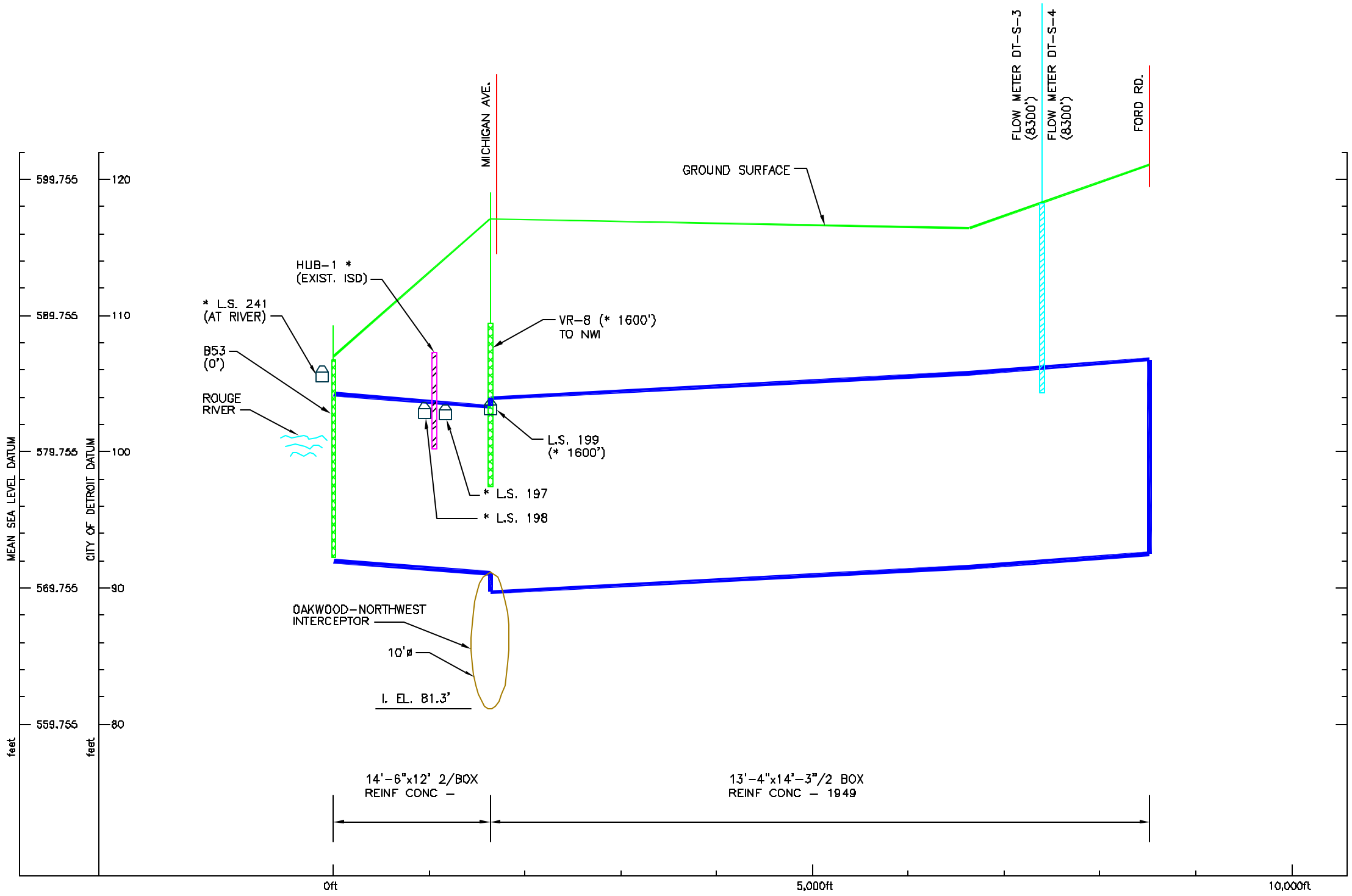
Hubbell-Southfield Outlet Sewer Plan

April 22, 2002

CDM

0 0.125 0.25 0.5 Miles

DWSD-T-003o



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
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SEDIMENTATION

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- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
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CITY OF DETROIT

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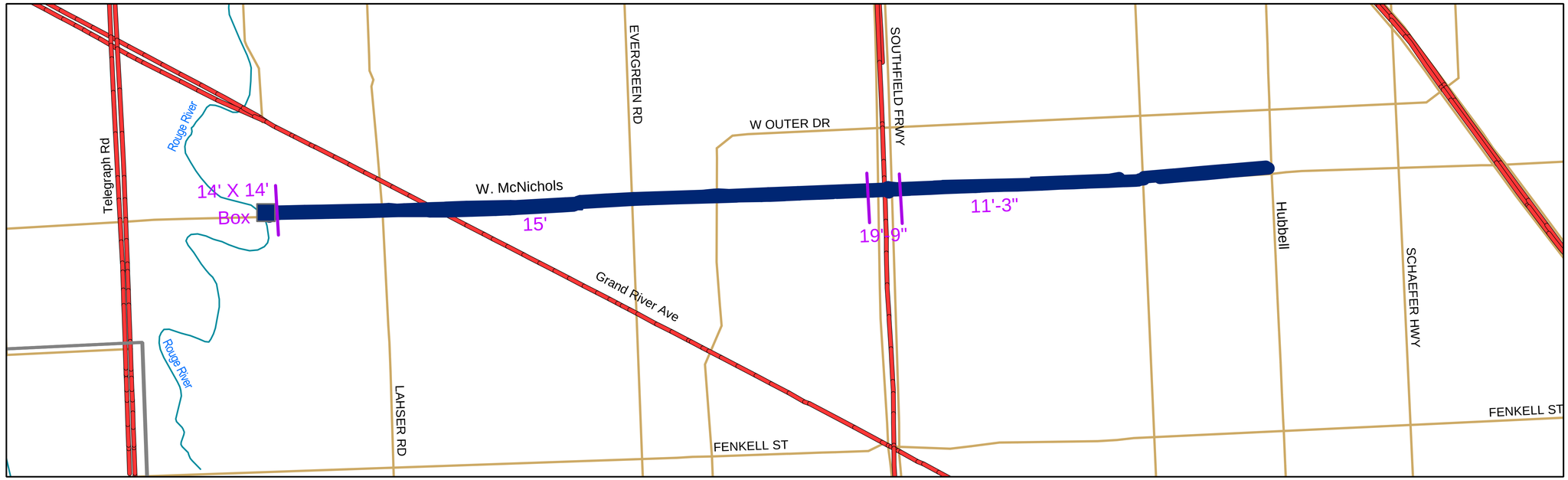
CS-1314 WASTEWATER MASTER PLAN

PROFILE
HUBBELL - SOUTHFIELD OUTLET SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-18



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

W. McNichols Relief Sewer Plan

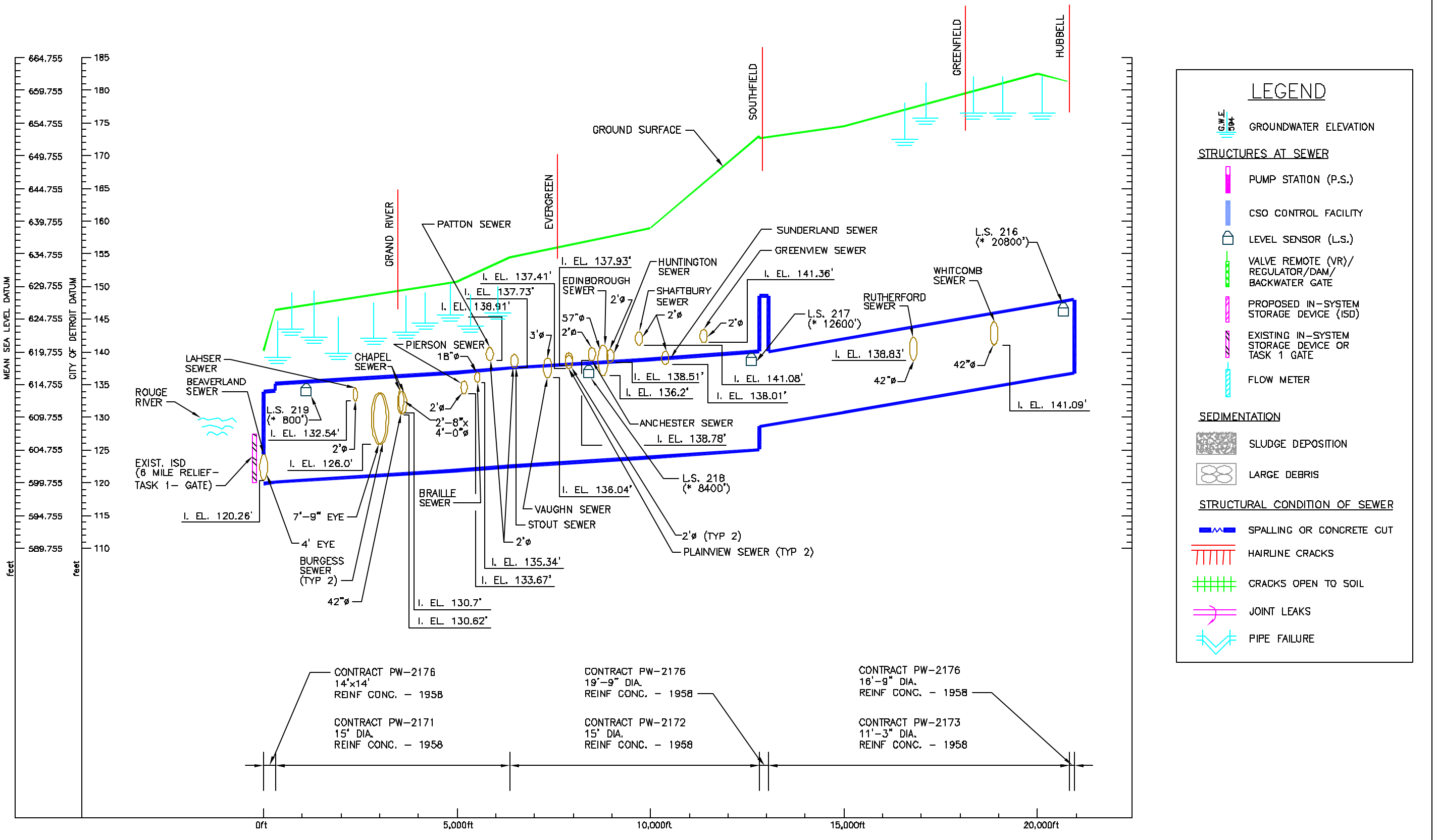
April 22, 2002

CDM

0 0.25 0.5 1 Miles

N

DWSD-T-003u



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE

NOTE:

1. * APPROX. DISTANCE
2. PROFILE IS ONLY FOR PLANNING PURPOSES.

PRELIMINARY

PRIME CONSULTANT:
CDM
environmental engineers, scientists, planners, & management consultants

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CITY OF DETROIT

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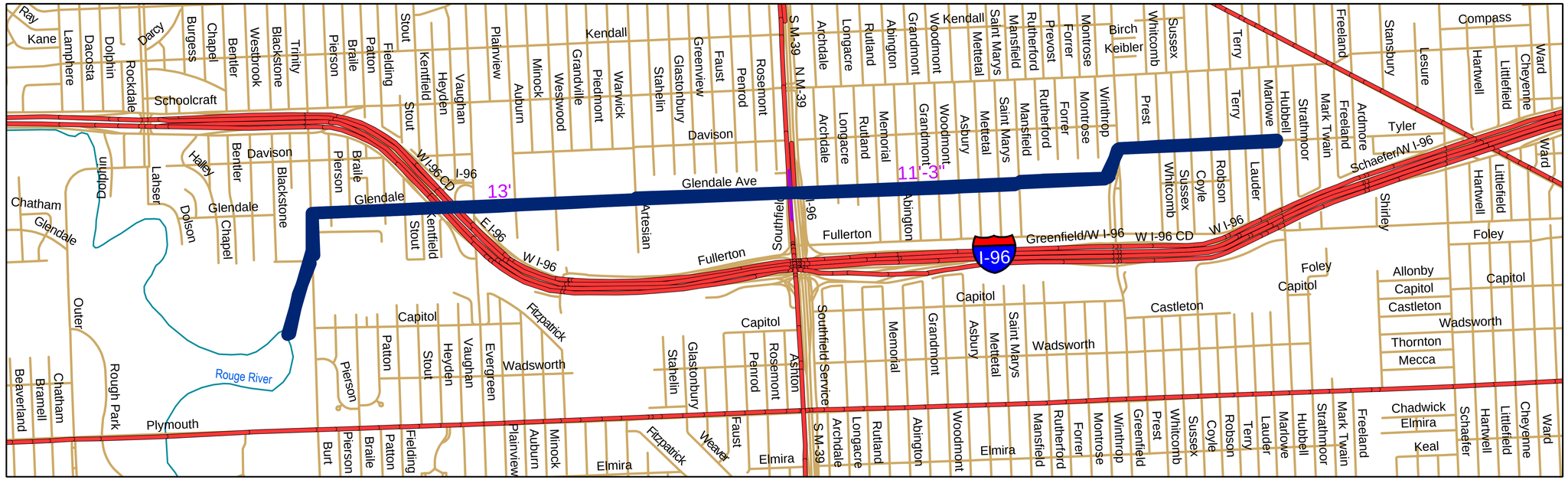
CS-1314 WASTEWATER MASTER PLAN

PROFILE
W. McNICHOLS RELIEF SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-19



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Schoolcraft Relief Sewer Plan

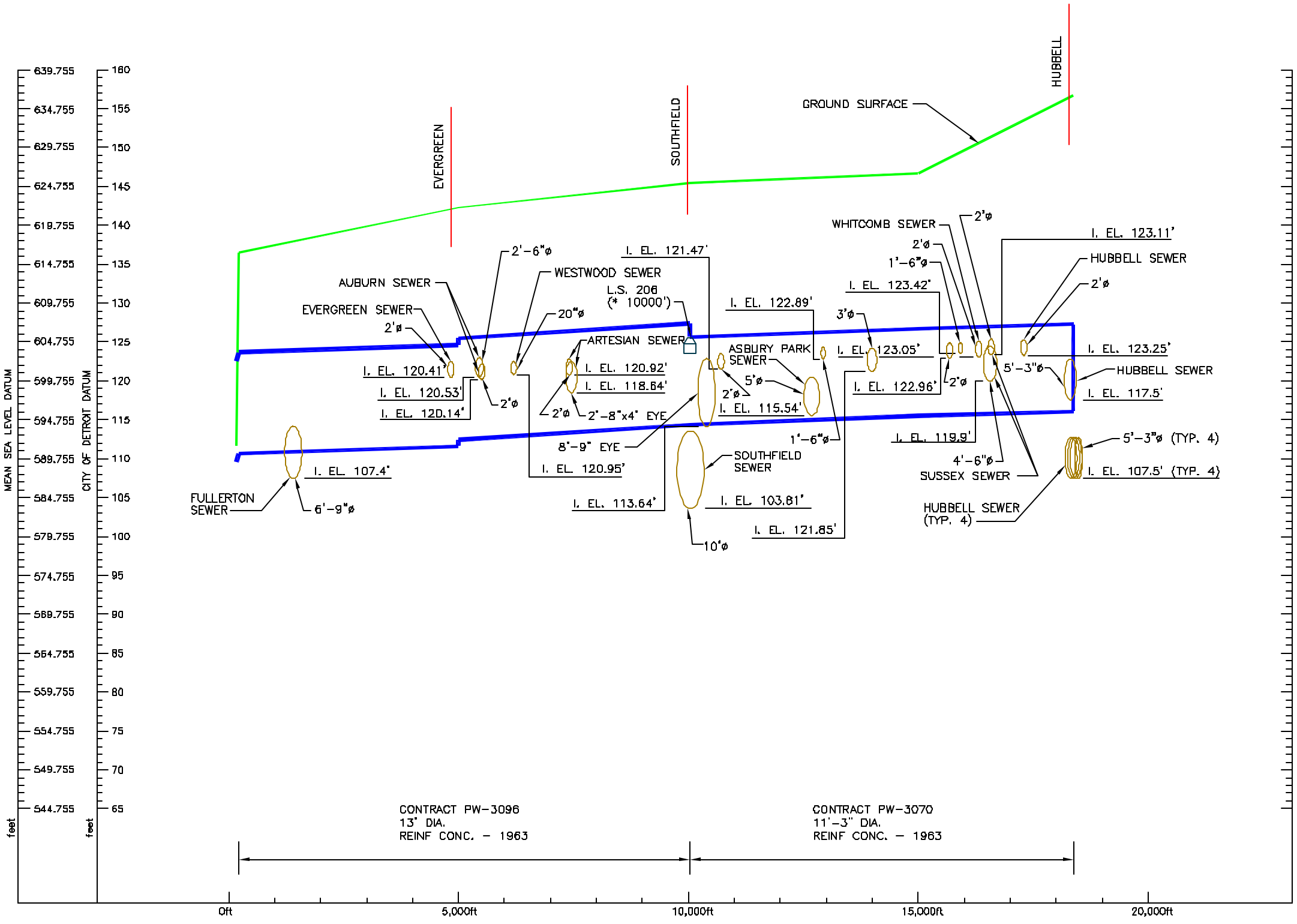
April 22, 2002

CDM

0 0.25 0.5 1 Miles

N

DWSD-T-003v



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE

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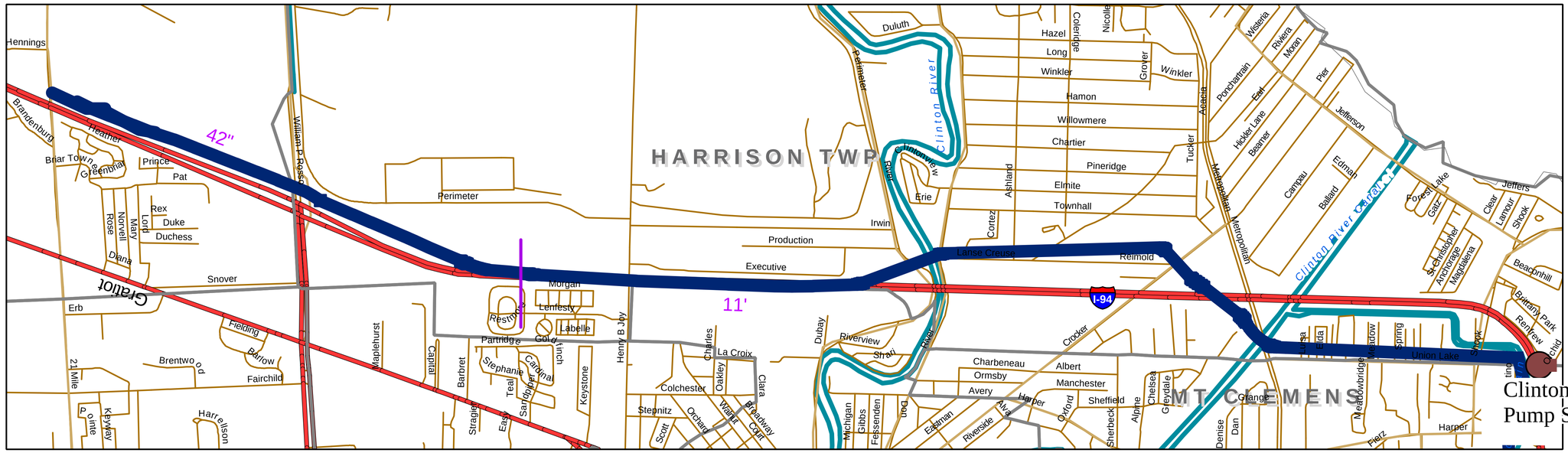
CS-1314 WASTEWATER MASTER PLAN

PROFILE
SCHOOLCRAFT RELIEF SEWER

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. T-20



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Lakeshore Interceptor Plan

April 22, 2002

CDM

N

0 0.25 0.5 1 Miles

DWSD-T-003f

LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- CSO CONTROL FACILITY
- PUMP STATION (P.S.)
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE

MEAN SEA LEVEL DATUM: 614.755, 609.755, 604.755, 599.755, 594.755, 589.755, 584.755, 579.755, 574.755, 569.755, 564.755, 559.755, 554.755, 549.755, 544.755, 539.755, 534.755, 529.755, 524.755 feet

CITY OF DETROIT DATUM: 135, 130, 125, 120, 115, 110, 105, 100, 95, 90, 85, 80, 75, 70, 65, 60, 55, 50, 45 feet

SHOOK
METRO PKWY
I-94
GROUND SURFACE
S. RIVER RD.
N. RIVER RD.
HENRY JOY
IRWIN DRAIN
ROSSO HWY.
I-94 RAMP
TUCKER JONES DRAIN
21 MILE RD.

HR-S-3 (* 2200)
CT-S-2 (* 3700)
HR-S-2 (* 7900)
HR-S-1 (* 21500)
CH-S-5

CLINTON RIVER
CLINTON RIVER

24"ø SEWER FOR CONNECTION TO FUTURE
27"ø
I. EL. 80.36'
I. EL. 81.10'

DROP CONN.
CONTROL CHAMBER

CONNECTION TO 15 MILE RD. INTERCEPTOR
FUTURE
FUTURE
36"ø
54"ø
I. EL. 60.28'
I. EL. 58.42'
60"ø
CONNECTION TO CLINTONDALE P.S.
I. EL. 53.72'

FUTURE
48"ø
I. EL. 50.72'
FUTURE
42"ø
I. EL. 61.74'
I. EL. 58.04'

CONTRACT PCI-13
11' DIA.
REINF. CONC. - FEB. 1972

CONTRACT PCI-14
11' DIA.
REINF. CONC. - APR. 1972

CONTRACT PCI-42A
42" DIA.
REINF. CONC. - NOV. 1989

CONTRACT PCI-42A
24" DIA.
REINF. CONC. - NOV. 1989

0ft, 5,000ft, 10,000ft, 15,000ft, 20,000ft, 25,000ft, 30,000ft, 35,000ft

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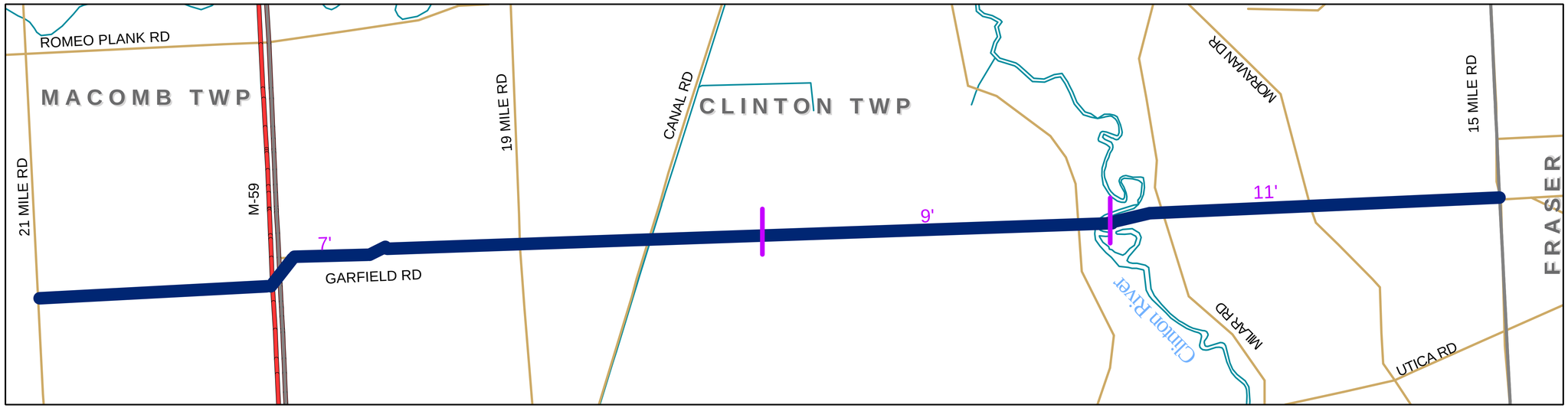
DETROIT WATER AND SEWERAGE DEPARTMENT
CS-1314 WASTEWATER MASTER PLAN

PROFILE
LAKESHORE INTERCEPTOR

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. M-1



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

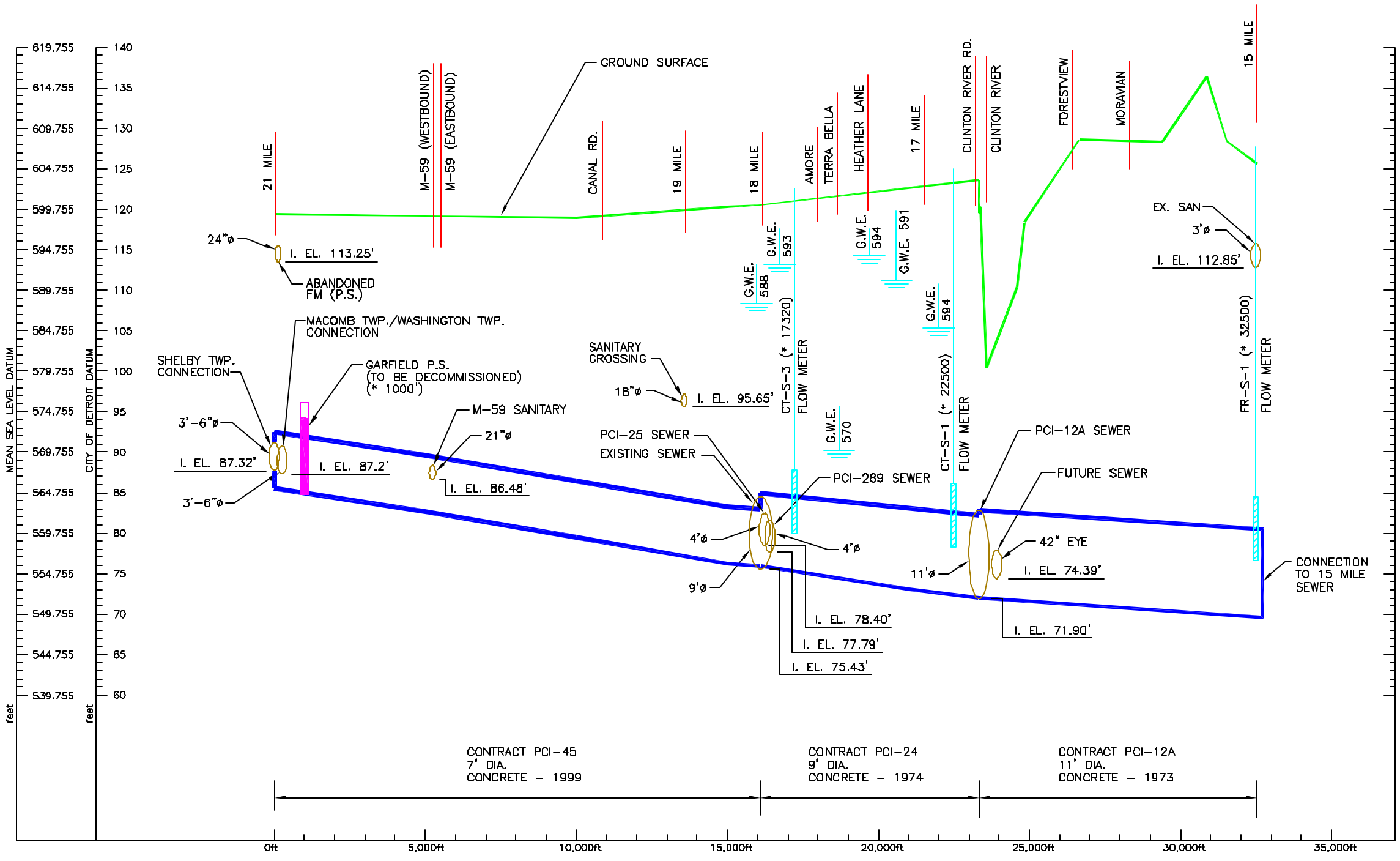
Garfield/Romeo Interceptor Plan

April 22, 2002

CDM

DWSD-T-003a

0 0.25 0.5 1 Miles



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
- PROPOSED IN-SYSTEM STORAGE DEVICE (ISD)
- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE

NOTE:

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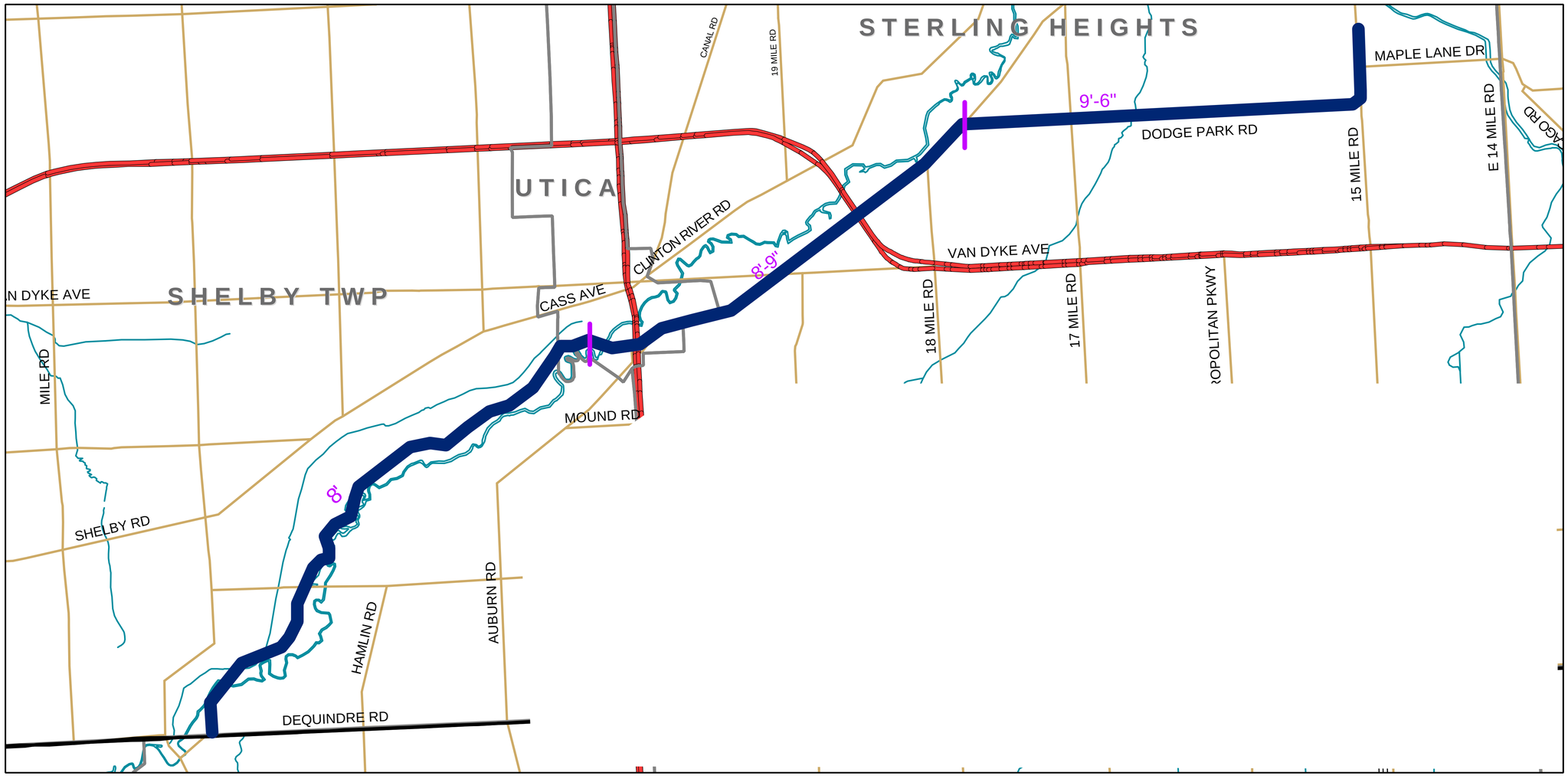
DETROIT WATER AND SEWERAGE DEPARTMENT
CS-1314 WASTEWATER MASTER PLAN

PROFILE
GARFIELD/ROMEO INTERCEPTOR

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. M-2



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

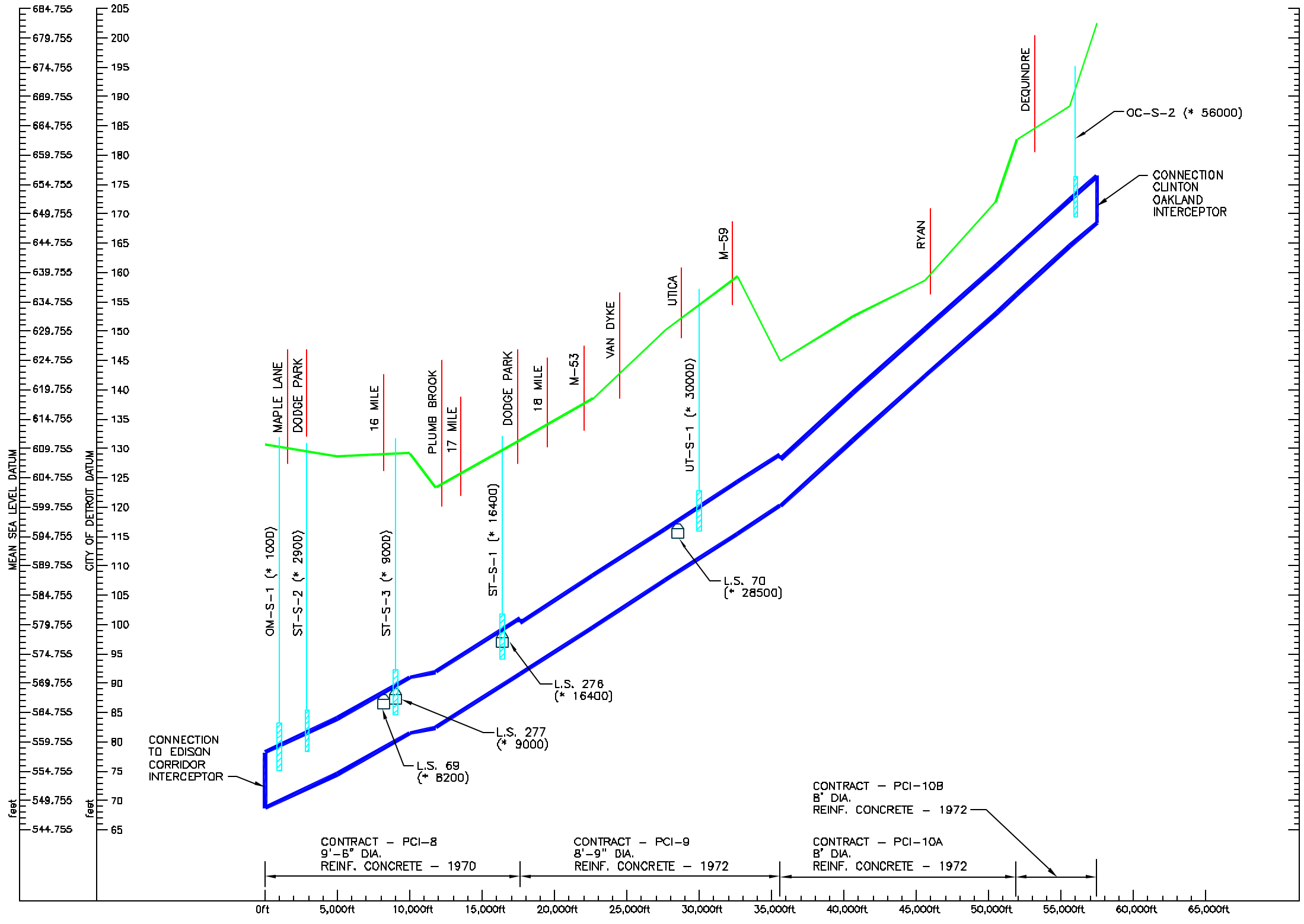
Oakland Arm Plan

April 22, 2002

CDM

0 0.5 1 2 Miles

DWSD-T-003b



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
- VALVE REMOTE (VR)/ REGULATOR/DAM/ BACKWATER GATE
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- EXISTING IN-SYSTEM STORAGE DEVICE OR TASK 1 GATE
- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
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PROFILE
OAKLAND ARM

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. M-3



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

Avon Arm Plan

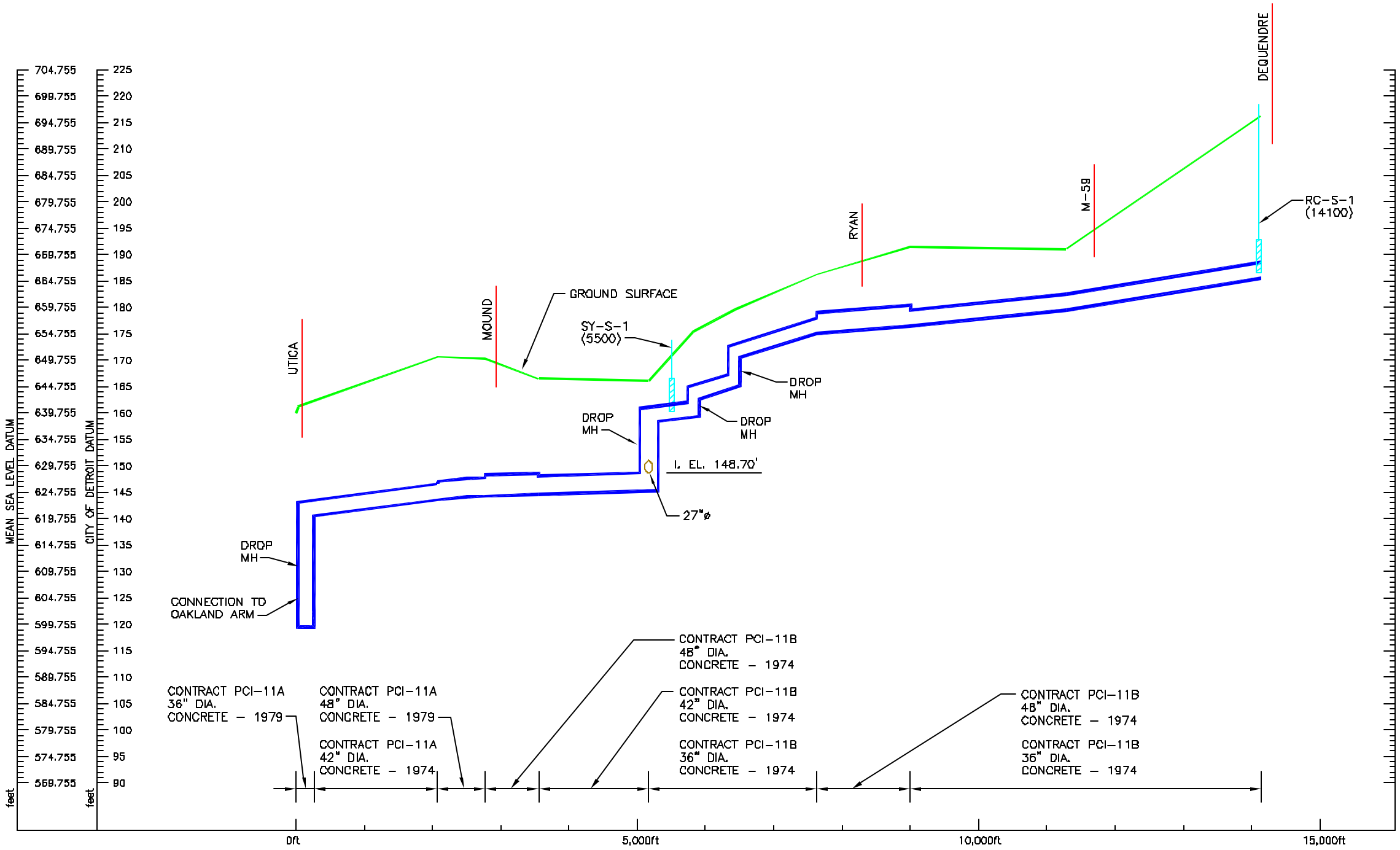
April 22, 2002

CDM

0 0.125 0.25 0.5 Miles

N

DWSD-T-003c



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
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- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
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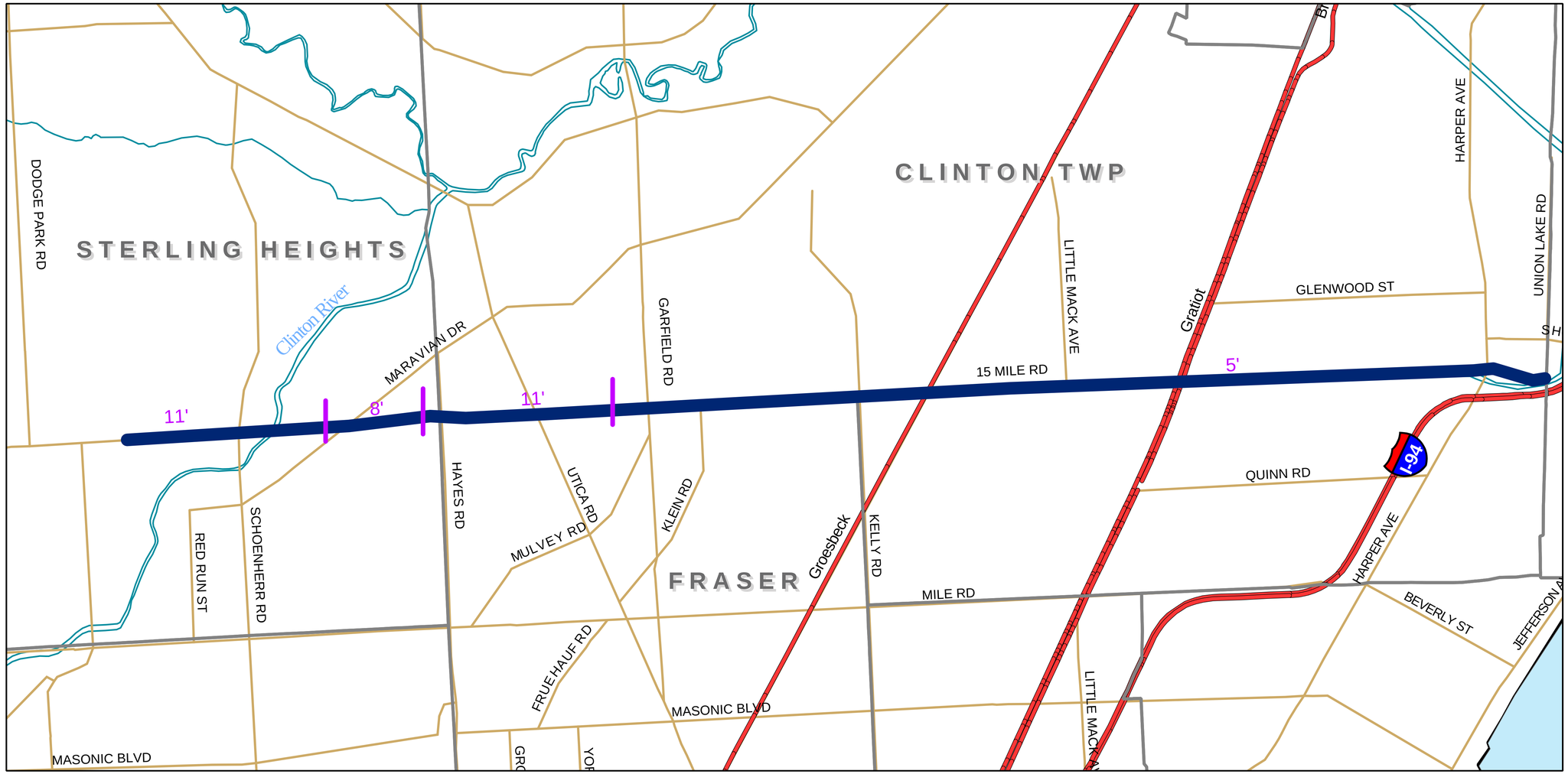
CS-1314 WASTEWATER MASTER PLAN

PROFILE
AVON ARM

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. M-4



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

15 Mile Rd Interceptor Plan

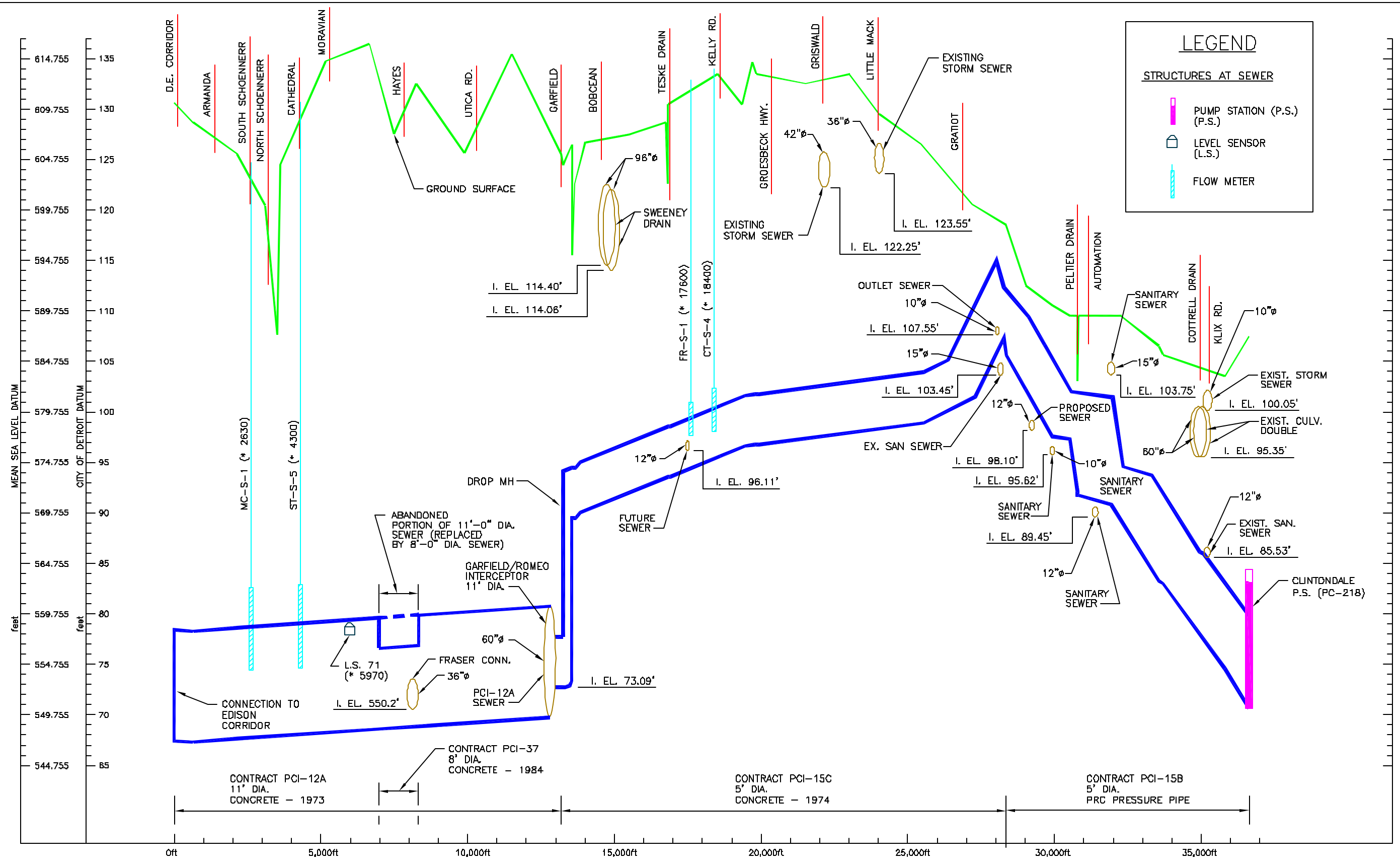
April 22, 2002

CDM

DWSD-T-003d

0 0.25 0.5 1 Miles

N



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CITY OF DETROIT

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CS-1314 WASTEWATER MASTER PLAN

PROFILE
15 MILE RD. INTERCEPTOR

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. M-5



Planning Purposes Only.

LEGEND

- Sewer
- Transition in Pipe Diameter
- Pump Station

CS-1314 DWSD Wastewater Master Plan

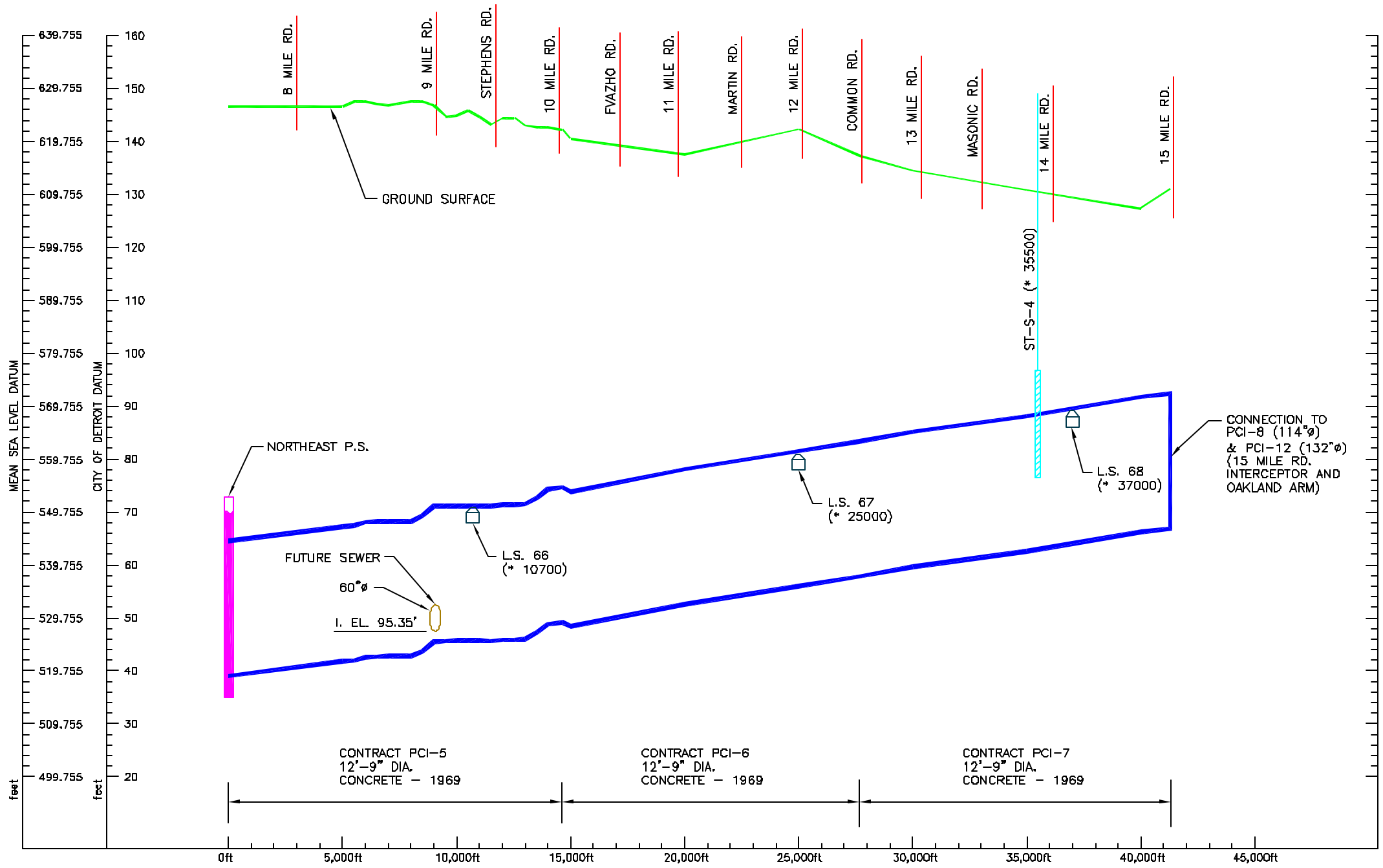
Edison Corridor Plan

April 22, 2002

CDM

0 0.25 0.5 1 Miles

DWSD-T-003e



LEGEND

G.W.E. 594 — GROUNDWATER ELEVATION

STRUCTURES AT SEWER

- PUMP STATION (P.S.)
- CSO CONTROL FACILITY
- LEVEL SENSOR (L.S.)
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- FLOW METER

SEDIMENTATION

- SLUDGE DEPOSITION
- LARGE DEBRIS

STRUCTURAL CONDITION OF SEWER

- SPALLING OR CONCRETE CUT
- HAIRLINE CRACKS
- CRACKS OPEN TO SOIL
- JOINT LEAKS
- PIPE FAILURE

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CS-1314 WASTEWATER MASTER PLAN

PROFILE
EDISON CORRIDOR

CONTRACT NO. CS-1314 | DATE: APRIL 22, 2002 | DWG. NO. M-6