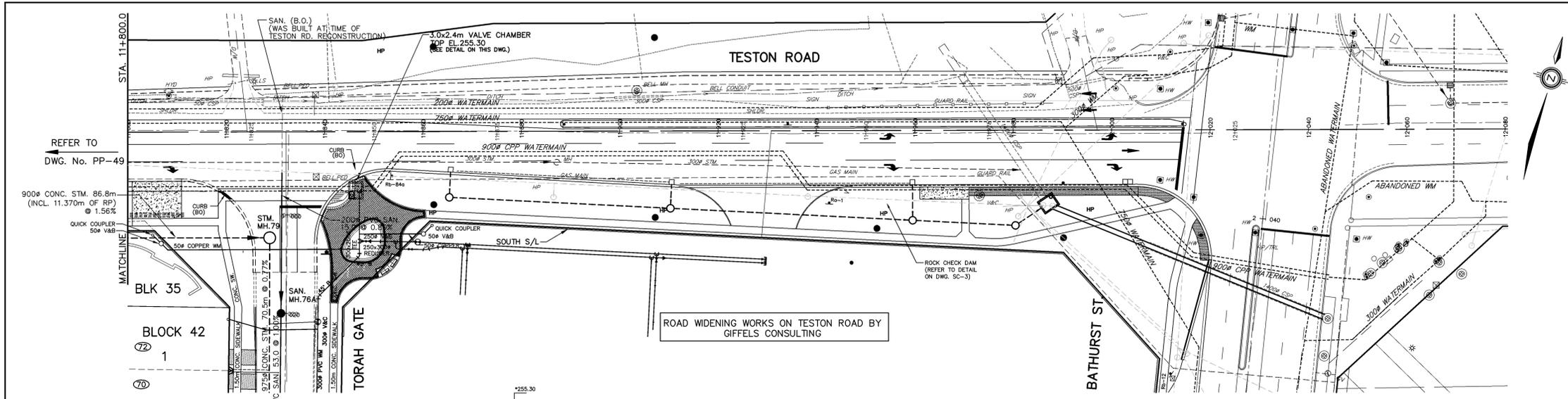
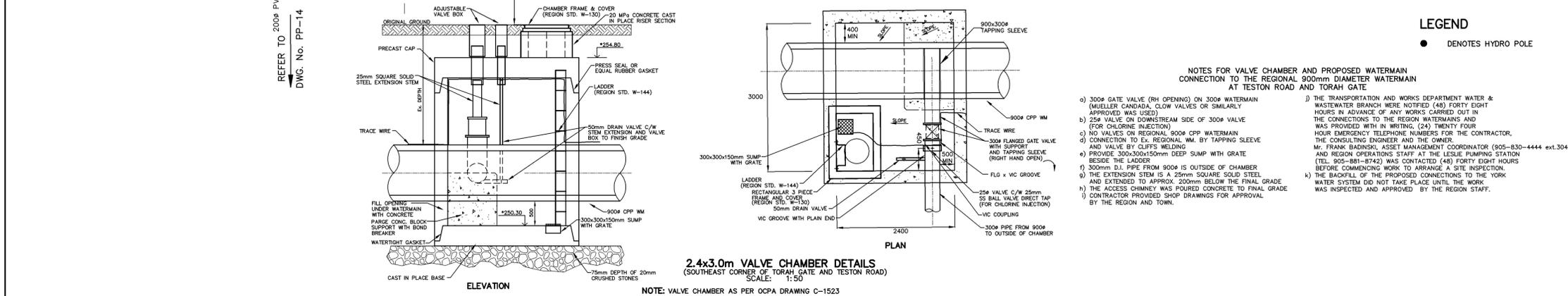
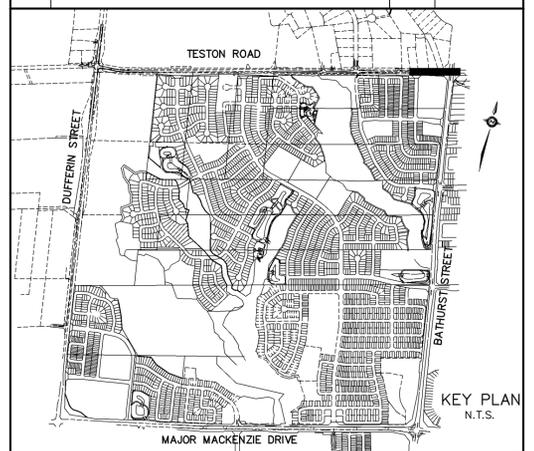


**APPENDIX K.3 – Drainage & Stormwater Management Report**

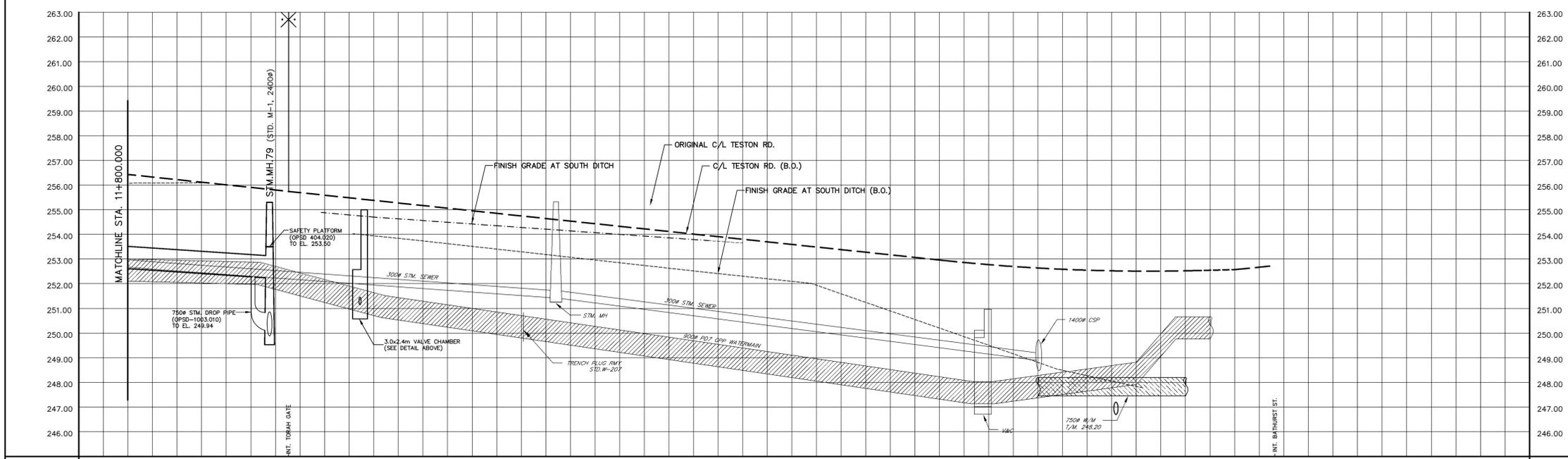
# **APPENDIX A4: EXCEPTS FROM PREVIOUS DESIGN/AS-BUILT DRAWINGS**



REVISIONS			
No.	DESCRIPTION	By	Date
1.	GENERAL REVISIONS	TD	JUNE 15, 2005
2.	3x2.4m V&C ELEVATION REVISED, TEMP. DIGB ADDED	HT	JUNE 25, 2005
3.	TEMP. DIGB & RISER REMOVED, LOCATION OF STM. MH.79 CHANGED	HT	JULY 04, 2005
4.	REVISED AS PER REGIONS COMMENTS	HT	SEPT 29, 2005
5.	REVISED SOUTH STREETLINE ON TESTON ROAD	TD	JAN 16, 2006



- LEGEND**
- DENOTES HYDRO POLE
- NOTES FOR VALVE CHAMBER AND PROPOSED WATERMAIN CONNECTION TO THE REGIONAL 900mm DIAMETER WATERMAIN AT TESTON ROAD AND TORAH GATE**
- 300ø GATE VALVE (RH OPENING) ON 300ø WATERMAIN (MUELLER CANADA, CLOW VALVES OR SIMILARLY APPROVED WAS USED)
  - 25ø VALVE ON DOWNSTREAM SIDE OF 300ø VALVE (FOR CHLORINE INJECTION)
  - NO VALVES ON REGIONAL 900ø CPP WATERMAIN
  - CONNECTION TO EX. REGIONAL WM. BY TAPPING SLEEVE AND VALVE BY CLIFFS WELDING
  - PROVIDE 300x300x150mm DEEP SUMP WITH GRATE BESIDE THE LADDER
  - 300mm D.I. PIPE FROM 900ø IS OUTSIDE OF CHAMBER
  - EXTENSION STEM IS A 25mm SQUARE SOLID STEEL AND EXTENDED TO APPROX. 200mm BELOW THE FINAL GRADE
  - THE ACCESS CHIMNEY WAS POURED CONCRETE TO FINAL GRADE
  - CONTRACTOR PROVIDED SHOP DRAWINGS FOR APPROVAL BY THE REGION AND TOWN.
  - THE TRANSPORTATION AND WORKS DEPARTMENT WATER & WASTEWATER BRANCH WERE NOTIFIED (48) FORTY EIGHT HOURS IN ADVANCE OF ANY WORKS CARRIED OUT IN THE CONNECTIONS TO THE REGION WATERMANS AND WAS PROVIDED WITH IN WRITING (24) TWENTY FOUR HOUR EMERGENCY TELEPHONE NUMBERS FOR THE CONTRACTOR, THE CONSULTING ENGINEER AND THE OWNER.
  - MR. FRANK BARDOSKI, ASSET MANAGEMENT COORDINATOR (905-830-4444 ext.3047) AND REGION OPERATIONS STAFF AT THE LESLIE PUMPING STATION (TEL. 905-881-8742) WAS CONTACTED (48) FORTY EIGHT HOURS BEFORE COMMENCING WORK TO ARRANGE A SITE INSPECTION.
  - THE BACKFILL OF THE PROPOSED CONNECTIONS TO THE YORK WATER SYSTEM DID NOT TAKE PLACE UNTIL THE WORK WAS INSPECTED AND APPROVED BY THE REGION STAFF.



- NOTES:**
- THE LOCATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES WERE NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES WERE NOT GUARANTEED. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR VERIFIED THE EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND ASSUMED ALL LIABILITIES OF DAMAGE.
  - ALL AREAS DISTURBED DURING CONSTRUCTION OF SEWERS AND WATERMANS WERE RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE CITY OF VAUGHAN AND REGION OF YORK ENGINEERING DEPARTMENT. GRASSSED AREAS WERE TOPPED WITH 100mm TOPSOIL AND SOGGED AS PER OPSD 218.01. ALL EXISTING SERVICES WERE ADJUSTED TO SUIT THE FINISH GRADES.
  - FOR GENERAL NOTES REFER TO DWG. Nos. ON-1 AND ON-2
  - FOR CLEAN WATER COLLECTOR (CWC) PIPE DETAILS, TYPICAL CWC TRENCH DETAIL, MANHOLE INSTALLATION DETAILS AND CWC PIPE PLUGS, REFER TO DWG. D-1.
  - WATERMAIN ALONG TESTON ROAD WAS CONSTRUCTED IN VERTICAL TRENCH AND BACKFILLED WITH GRANULAR FILL UNLESS SPECIFIED OTHERWISE ON THE PROFILES (SEE DETAILS ON THE DRAWING No. PP-44)

- LEGEND:**
- Ⓜ DENOTES MUNICIPAL HOUSE NUMBER
  - 150 DENOTES LOT NUMBER

AS CONSTRUCTED FEBRUARY 2008

**BENCHMARK**  
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF VAUGHAN BENCHMARK No. 12-1 CONCRETE BENCH MARK POST WEST SIDE OF BATHURST STREET 183m NORTH OF MAJOR MACKENZIE DRIVE HAVING A PUBLISHED ELEVATION OF 232.309m

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF SCHAEFFERS CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION (PHASE 1 SPINE ONLY)

**Vaughan**  
The City Above Toronto

**CONSTRUCTION DRAWING**  
June 30, 2011

DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING DATE

**BLOCK 12 SPINE SERVICES**

**SCHAEFFERS**  
CONSULTING ENGINEERS

6 Ronrose Drive, Concord, Ontario L4K 4R3  
Tel: (905) 738-6100  
Fax: (905) 738-6875  
E-mail: design@schaeffers.com

SCHAEFFER & ASSOCIATES LTD.

PROJECT No.	2004-2644	DRAWING No.	PP-50
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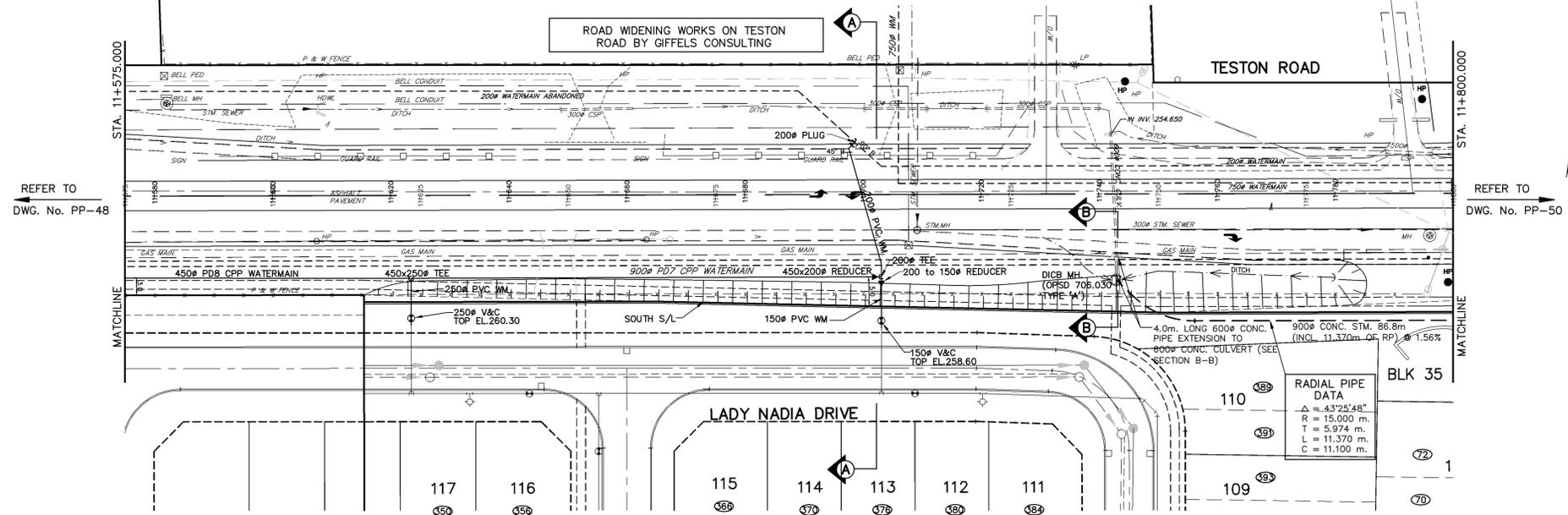
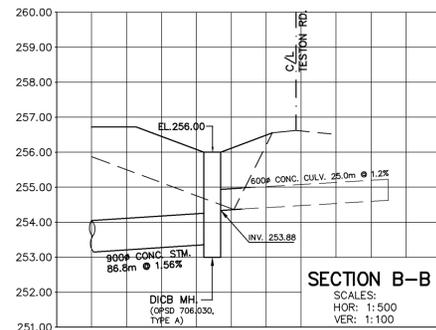
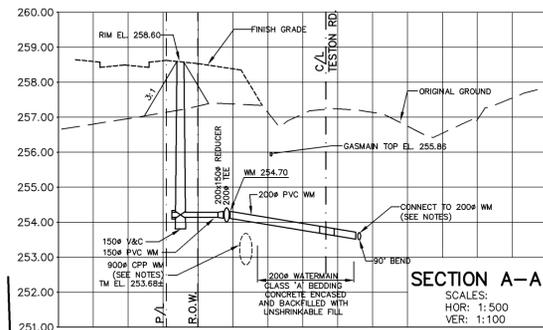
SCALE	HORIZONTAL	0 5 10 15 20 25 30 35 40 45 50m
	VERTICAL	0 1 2 3 4 5 6 7 8 9 10m

**Vaughan**  
The City Above Toronto

**PLAN AND PROFILE OF WATERMAIN ON TESTON ROAD**  
FROM STA. 11+800.000 TO STA. 12+033.167

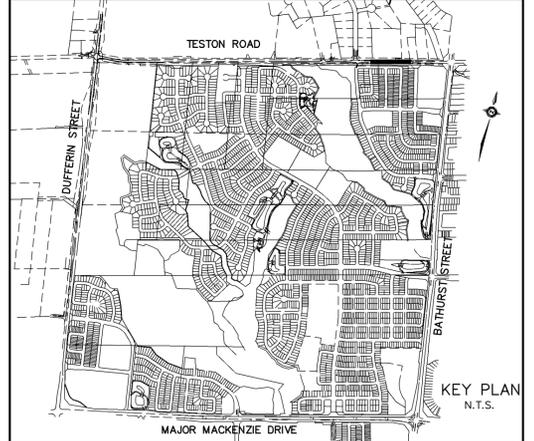
DESIGNED BY: H.T.	DATE: APRIL 2007	CHECKED BY: H.T.
DRAWN BY:		APPROVED BY:
SCALE HORIZONTAL 1:500	19T-99V08	DWG. No.
SCALE VERTICAL 1:100		

CLEAN WATER COLLECTOR SEWER	
SANITARY SEWER	
STORM SEWER	900ø CONC. STM. 86.8m (INCL. 11.370m OF RP) @ 1.56% CL.65-D
C/L ELEVATION	
C/L CHAINAGE	11+800.000 11+820.000 11+832.654 11+840.000 11+860.000 11+880.000 11+900.000 11+920.000 11+940.000 11+960.000 11+980.000 12+000.000 12+020.000 12+033.167 12+040.000



**LEGEND**  
● DENOTES HYDRO POLE

REVISIONS			
No.	DESCRIPTION	By	Date
1.	GENERAL REVISIONS	TD	JUNE 15, 2005
2.	WM STUB ON SOUTH SIDE OF TESTON REVISED TO 150#	TD	AUG. 18, 2005
3.	REVISED AS PER REGIONS COMMENTS	HT	SEPT 29, 2005
4.	BACKFILL SPECIFICATIONS INCLUDED IN PROFILE	HT	NOV 23, 2005
5.	REVISED SOUTH STREETLINE ON TESTON ROAD	TD	JAN 16, 2006
6.	REVISED WM CROSSING TESTON ROAD AT STA. 11+700	TD	MAR 30, 2006



- NOTES:**
- THE LOCATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES WERE NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES WERE NOT GUARANTEED. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR VERIFIED THE EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND ASSUMED ALL LIABILITIES OF DAMAGE.
  - ALL AREAS DISTURBED DURING CONSTRUCTION OF SEWERS AND WATERMANS WERE RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE CITY OF VAUGHAN AND REGION OF YORK ENGINEERING DEPARTMENT. GRASSED AREAS WERE TOPPED WITH 100mm TOPSOIL AND SODDED AS PER OPSD 218.01. ALL EXISTING SERVICES WERE ADJUSTED TO SUIT THE FINISH GRADES.
  - FOR GENERAL NOTES REFER TO DWG. Nos. GN-1 AND GN-2
  - FOR CLEAN WATER COLLECTOR (CWC) PIPE DETAILS, TYPICAL CWC TRENCH DETAIL, MANHOLE INSTALLATION DETAILS AND CWC PIPE PLUGS, REFER TO DWG. D-1.
  - WHERE REQUIRED EXISTING FENCES WERE REMOVED AND REINSTALLED UPON COMPLETION OF THE CONSTRUCTION.

**LEGEND:**  
 (25) DENOTES MUNICIPAL HOUSE NUMBER  
 150 DENOTES LOT NUMBER

**AS CONSTRUCTED FEBRUARY 2008**

**BENCHMARK**  
 ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF VAUGHAN BENCHMARK No. 12-1 CONCRETE BENCH MARK POST WEST SIDE OF BATHURST STREET 183m NORTH OF MAJOR MACKENZIE DRIVE HAVING A PUBLISHED ELEVATION OF 232.309m

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF SCHAEFFERS CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION (PHASE 1 SPINE ONLY)

**Vaughan**  
The City Above Toronto

**CONSTRUCTION DRAWING**  
June 30, 2011

DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING DATE

**BLOCK 12 SPINE SERVICES**

**SCHAEFFERS**  
CONSULTING ENGINEERS

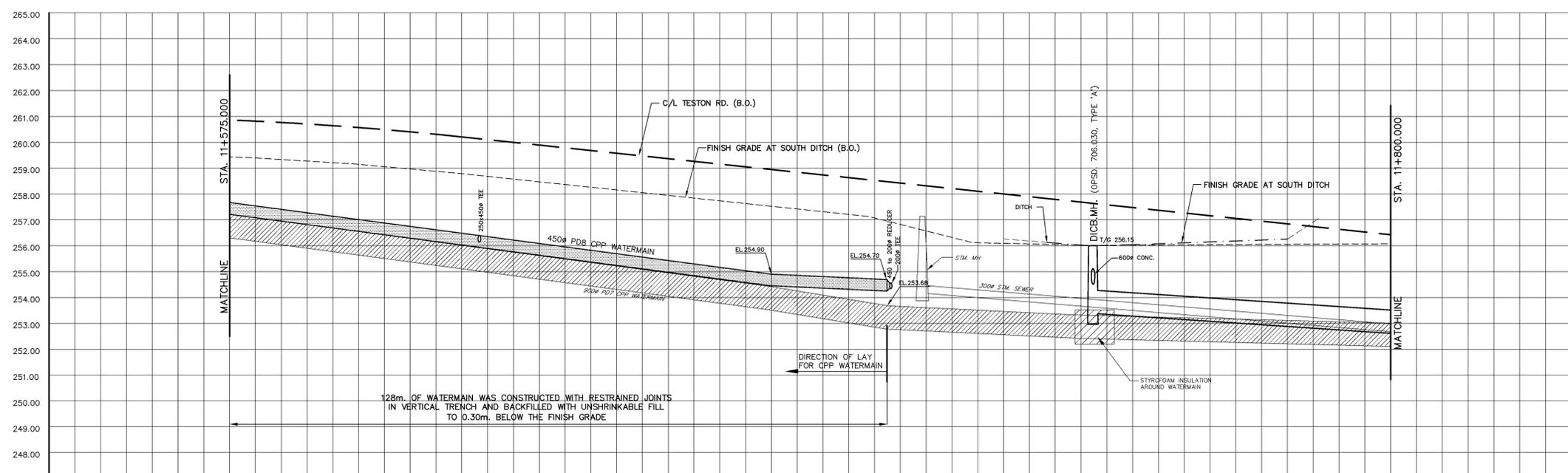
6 Ronrose Drive, Concord, Ontario L4K 4R3  
Tel: (905) 738-6100  
Fax: (905) 738-6875  
E-mail: design@schaeffers.com

PROJECT No.	2004-2644	DRAWING No.	PP-49
SCALE	HORIZONTAL	0 5 10 15 20 25 30 35 40 45 50m	
	VERTICAL	0 1 2 3 4 5 6 7 8 9 10m	

**Vaughan**  
The City Above Toronto

**PLAN AND PROFILE OF WATERMAIN ON TESTON ROAD**  
FROM STA. 11+575.000 TO STA. 11+800.000

DESIGNED BY: H.T.	DATE: APRIL 2007	CHECKED BY: H.T.
DRAWN BY:		APPROVED BY:
SCALE HORIZONTAL 1:500	19T-99V08	DWG. No.
SCALE VERTICAL 1:100	19T-03V16	



CLEAN WATER COLLECTOR SEWER		
SANITARY SEWER		
STORM SEWER	E. 253.37	900# CONC. STM. 86.8m (INCL. 11.370m OF RP) @ 1.56% CL.65-D
C/L ELEVATION		
C/L CHAINAGE	11+580.000	11+800.000

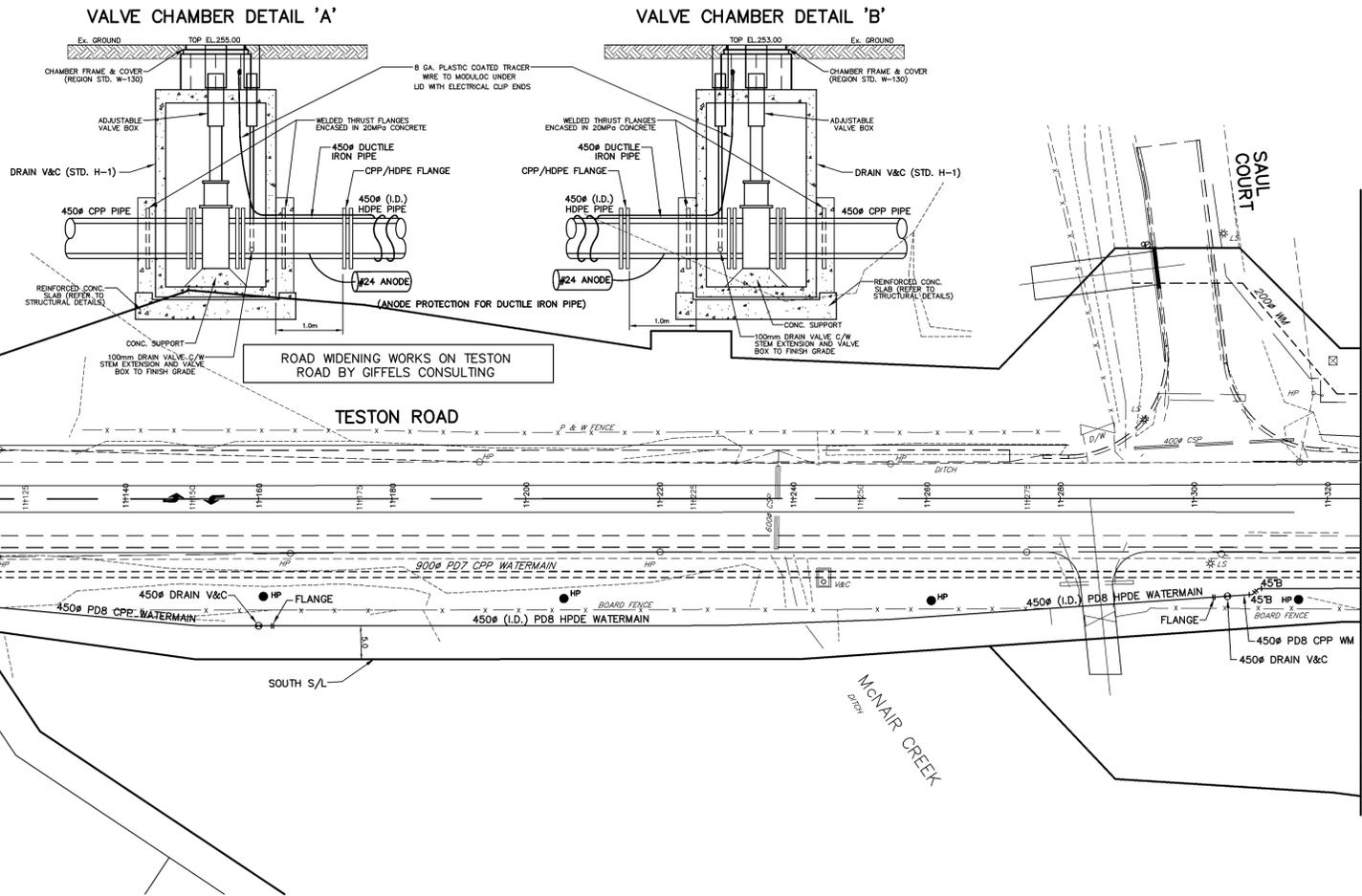
Seeding Notes for Water Main Crossing of McNair Creek  
 To disturbed areas, including construction equipment access, excavation of horizontal drilling sites, and fill/topsoil piles from installation and construction activities of the water main crossing of the McNair Creek watercourse, the following seeding notes apply:  
 1. Installed seeds using Terraseeding application method as described in Drawing No. 3N of 4 (Aboud & Associates, Terrestrial Resources Edge Management Plan - Phase 2).  
 2. Apply seeds at a rate of 15kg per hectare.  
 3. Used Reformation Grounder Plus Seed Mix (0-1 Mix) and Temporary Cover Crop Seed Mix (0-2 Mix) as described in Drawing No. 3N of 4 (Aboud & Associates).

**SPECIAL NOTES FOR CPP WATERMAIN**

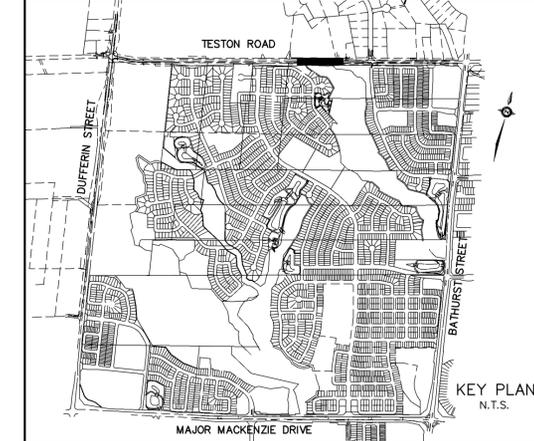
- LAY WAS STARTED FROM LOW POINT
- PROVIDED CLOSURE PIECE AT HIGH POINTS AND WERE REQUIRED AT CONNECTIONS EXISTING WATERMAIN.
- CONTRACTOR PREPARED SHOP DRAWINGS SHOWING ALL BENDS (VERTICAL AND HORIZONTAL), SLOPES, CLOSURE PIECES AND DIRECTION OF LAY

**LEGEND**

● DENOTES HYDRO POLE

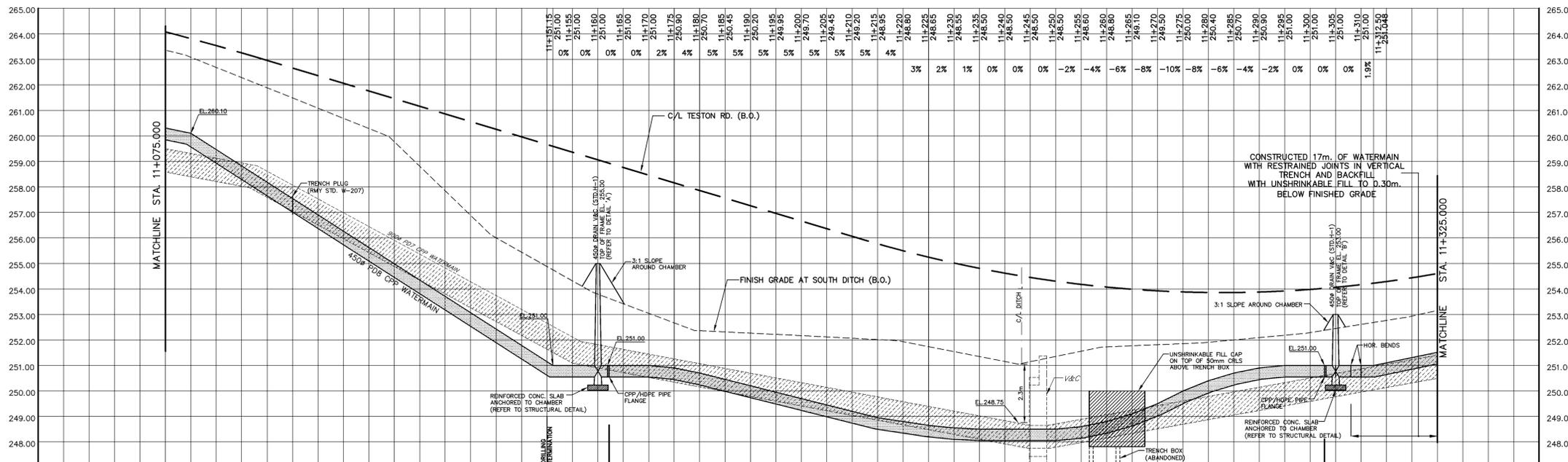


REVISIONS			
No.	DESCRIPTION	By	Date
1.	GENERAL REVISIONS	TD	JUNE 15, 2005
2.	REVISED NOTES AND ENVIRONMENT FENCE LAYOUT	TD	JUNE 24, 2005
3.	REVISED AS PER REGIONS COMMENTS	HT	SEPT 29, 2005
4.	BACKFILL SPECIFICATIONS INCLUDED IN PROFILE	TD	NOV 23, 2005
5.	WATERMAIN REVISED	TD	MAR 24, 2006
6.	VALVE CHAMBER DETAILS REVISED	WL	MAR 28, 2006
7.	MCAIR CREEK REMEDIATION	AR	APRIL 17, 2006
8.	WATERMAIN REVISED	AR	APRIL 26, 2006



**NOTES:**

- THE LOCATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITIES OF DAMAGE.
- ALL AREAS DISTURBED DURING CONSTRUCTION OF WATERMAIN WERE SEEDED WITH NATIVE AND RESTORED TO ORIGINAL OR BETTER CONDITION, TO THE SATISFACTION OF THE CITY OF VAUGHAN AND REGION OF YORK ENGINEERING DEPARTMENT. GRASSED AREAS TO BE TOPPED WITH 100mm TOPSOIL AND SODDED AS PER CPD 218.01. ALL EXISTING SERVICES WERE ADJUSTED TO SUIT NEW GRADES.
- FOR GENERAL NOTES REFER TO DWG. Nos. GN-1 AND GN-2



**AS CONSTRUCTED FEBRUARY 2008**

**BENCHMARK**  
 ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF VAUGHAN BENCHMARK No. 12-1 CONCRETE BENCH MARK POST WEST SIDE OF BATHURST STREET 183m NORTH OF MAJOR MACKENZIE DRIVE HAVING A PUBLISHED ELEVATION OF 232.309m

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF SCHAEFFERS CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION (PHASE 1 SPINE ONLY)  
**Vaughan**  
 The City Above Toronto  
**CONSTRUCTION DRAWING**  
 June 30, 2011  
 DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING DATE

REGISTERED PROFESSIONAL ENGINEER  
 H. O. TOZCU  
 MAY 2006  
 PROVINCE OF ONTARIO

**BLOCK 12 SPINE SERVICES**

**SCHAEFFERS**  
 CONSULTING ENGINEERS  
 6 Ronrose Drive, Concord, Ontario L4K 4R3  
 Tel: (905) 738-6100  
 Fax: (905) 738-6875  
 E-mail: design@schaeffers.com

PROJECT No. **2004-2644** DRAWING No. **PP-47**



**Vaughan**  
 The City Above Toronto

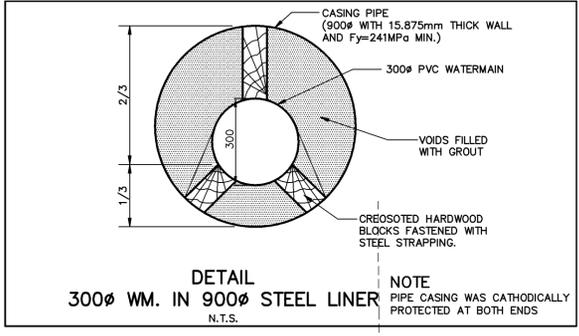
**PLAN AND PROFILE OF WATERMAIN ON TESTON ROAD**  
 FROM STA. 11+075.000 TO STA. 11+325.000

DESIGNED BY: H.T. DATE: MAY 2006 CHECKED BY: H.T.  
 DRAWN BY: 19T-99V08 APPROVED BY:  
 SCALE HORIZONTAL 1:500 19T-03V16 DWG. No.  
 VERTICAL 1:100

CLEAN WATER COLLECTOR SEWER	← 450# CPP WATERMAIN	450# (I.D.) HDPE WATERMAIN	→ 450# CPP WATERMAIN	CLEAN WATER COLLECTOR SEWER
SANITARY SEWER	DIRECTION OF LAY FOR CPP WATERMAIN			SANITARY SEWER
STORM SEWER	CONSTRUCTED WATERMAIN IN VERTICAL TRENCH AND BACKFILLED WITH GRANULAR FILL			STORM SEWER
ELEVATION	WATERMAIN INSTALLED BY DIRECTIONAL DRILLING			ELEVATION
CHAINAGE	11+080.000	11+100.000	11+120.000	11+140.000
	11+160.000	11+180.000	11+200.000	11+220.000
	11+240.000	11+260.000	11+280.000	11+300.000
	11+320.000			

H:\As Constructed\2644-AC2644PP-47.dwg, 10/12/2013 11:23:08 AM, mhan, SCH (850.00 x 600.00) MTD

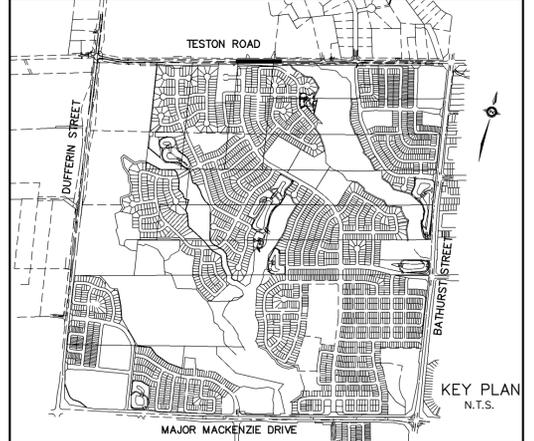
ROAD WIDENING WORKS ON TESTON ROAD BY GIFFELS CONSULTING



**SPECIAL NOTES FOR CPP WATERMAN**

- LAY WAS STARTED FROM LOW POINT
- PROVIDED CLOSURE PIECE AT HIGH POINTS AND WERE REQUIRED AT CONNECTIONS EXISTING WATERMAIN.
- CONTRACTOR PREPARED SHOP DRAWINGS SHOWING ALL BENDS (VERTICAL AND HORIZONTAL), SLOPES, CLOSURE PIECES AND DIRECTION OF LAY

REVISIONS			
No.	DESCRIPTION	By	Date
1.	GENERAL REVISIONS	TD	JUNE 15, 2005
2.	REVISED AS PER REGIONS COMMENTS	HT	SEPT 29, 2005
3.	BACKFILL SPECIFICATIONS INCLUDED IN PROFILE	TD	NOV 23, 2005



**NOTES:**

- THE LOCATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES WERE NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES WERE NOT GUARANTEED. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR VERIFIED THE EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND ASSUMED ALL LIABILITIES OF DAMAGE.
- ALL AREAS DISTURBED DURING CONSTRUCTION OF SEWERS AND WATERMANS WERE RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE CITY OF VAUGHAN AND REGION OF YORK ENGINEERING DEPARTMENT. GRASSED AREAS WERE TOPPED WITH 100mm TOPSOIL AND SODDED AS PER OPSD 218.01. ALL EXISTING SERVICES WERE ADJUSTED TO SUIT THE FINISH GRADES.
- FOR GENERAL NOTES REFER TO DWG. Nos. GN-1 AND GN-2
- FOR CLEAN WATER COLLECTOR (CWC) PIPE DETAILS, TYPICAL CWC TRENCH DETAIL, MANHOLE INSTALLATION DETAILS AND CWC PIPE PLUGS, REFER TO DWG. D-1.

**LEGEND**

- DENOTES HYDRO POLE

**LEGEND:**

- ②5 DENOTES MUNICIPAL HOUSE NUMBER
- 150 DENOTES LOT NUMBER

AS CONSTRUCTED FEBRUARY 2008

**BENCHMARK**

ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF VAUGHAN BENCHMARK No. 12-1 CONCRETE BENCH MARK POST WEST SIDE OF BATHURST STREET 183m NORTH OF MAJOR MACKENZIE DRIVE HAVING A PUBLISHED ELEVATION OF 232.309m



APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF SCHAEFFERS CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION (PHASE 1 SPINE ONLY)

**Vaughan**  
The City Above Toronto

**CONSTRUCTION DRAWING**  
June 30, 2011

DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING DATE

**BLOCK 12 SPINE SERVICES**



**SCHAEFFERS**  
CONSULTING ENGINEERS

6 Ronrose Drive, Concord, Ontario L4K 4R3  
Tel: (905) 738-6100  
Fax: (905) 738-6875  
E-mail: design@schaeffers.com

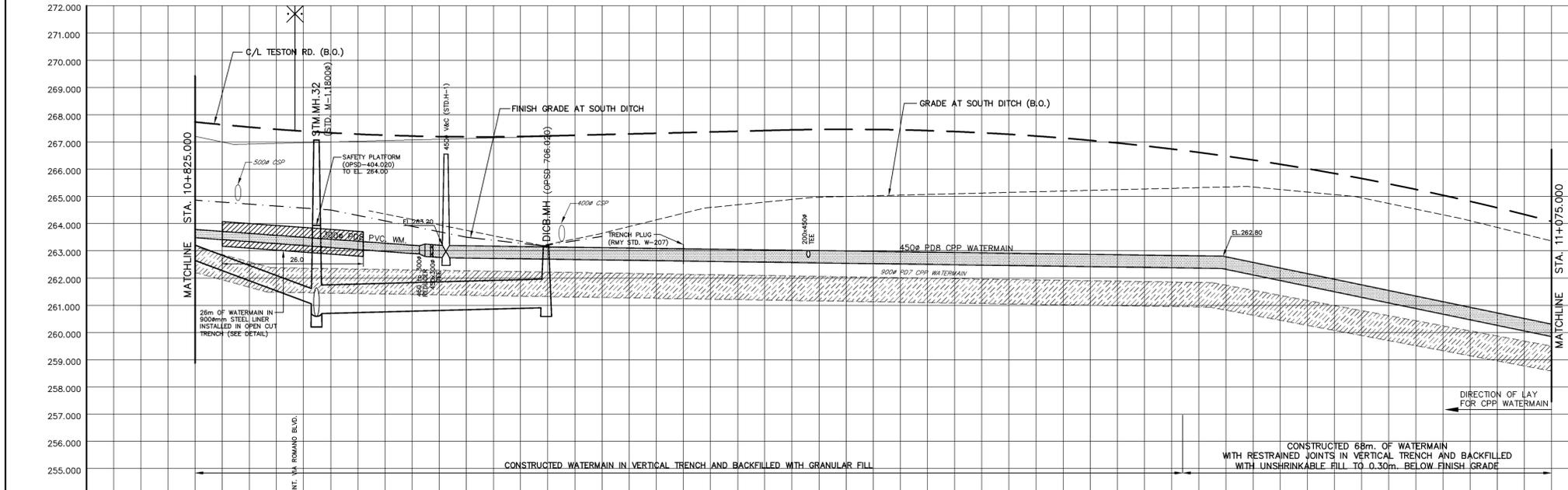
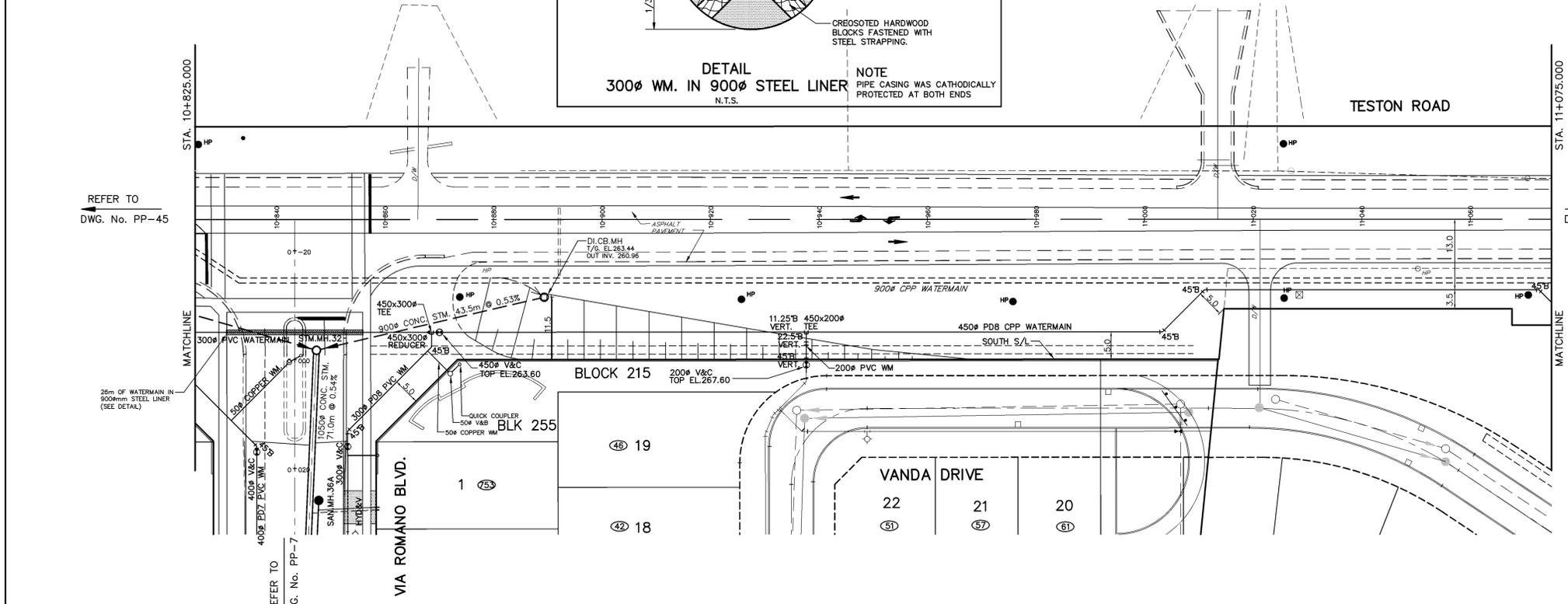
PROJECT No. 2004-2644 DRAWING No. PP-46

SCALE	HORIZONTAL	0 5 10 15 20 25 30 35 40 45 50m
	VERTICAL	0 1 2 3 4 5 6 7 8 9 10m



**PLAN AND PROFILE OF WATERMAIN ON TESTON ROAD**  
FROM STA. 10+825.000 TO STA. 11+075.000

DESIGNED BY: H.T.	DATE: APRIL 2007	CHECKED BY: H.T.
DRAWN BY:	19T-99V08	APPROVED BY:
SCALE HORIZONTAL 1:500	19T-03V16	DWG. No.
SCALE VERTICAL 1:100		



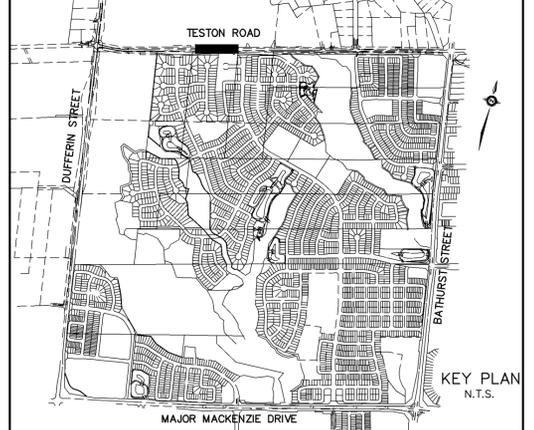
CLEAN WATER COLLECTOR SEWER																				
SANITARY SEWER																				
STORM SEWER	525# CONC. STM. 27.5m @ 6.84% CL.65-D	900# CONC. STM. 43.5m @ 0.53% CL.100-D																		
C/L ELEVATION	260.92 260.90 260.73	260.92 260.90 260.73																		
C/L CHAINAGE	10+840.000 10+843.313	10+860.000	10+880.000	10+900.000	10+920.000	10+940.000	10+960.000	10+980.000	11+000.000	11+017.921	11+020.000	11+040.000	11+060.000							

ROAD WIDENING WORKS ON TESTON ROAD  
ROAD BY GIFFELS CONSULTING

REFER TO  
DWG. No. PP-44

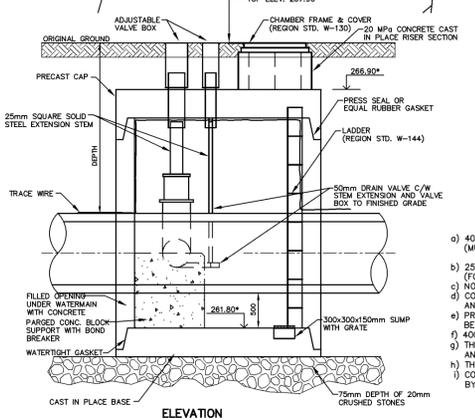
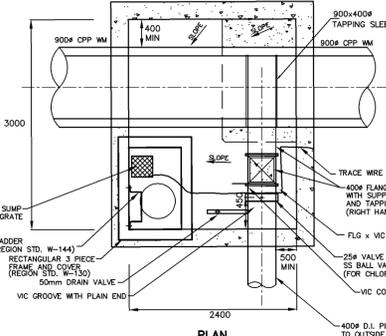
REFER TO  
DWG. No. PP-46

REVISIONS			
No.	DESCRIPTION	By	Date
1.	GENERAL REVISIONS	TD	JUNE 15, 2005
2.	V&C NEAR STA. 0+750 CHANGED TO V&B	TD	JULY 05, 2005
3.	REVISED AS PER REGION COMMENTS	HT	SEPT 29, 2005
4.	BACKFILL SPECIFICATIONS INCLUDED IN PROFILE	TD	NOV 23, 2005
5.	REVISED SOUTH STREETLINE ON TESTON ROAD	TD	JAN 16, 2006
6.	REVISED 300# WM LOCATION & ELEV. (STA.10+700 - 10+820)	TD	JAN 20, 2006



**2.4x3.0m VALVE CHAMBER DETAILS**  
(SOUTHWEST CORNER OF MAJOR MACKENZIE BLVD. AND TESTON ROAD)  
SCALE: 1:50

NOTE: VALVE CHAMBER WAS AS PER OCPA DRAWING C-1523



**NOTES FOR VALVE CHAMBER AND WATERMAIN CONNECTION TO THE REGIONAL 900mm DIAMETER WATERMAIN AT TESTON ROAD:**

- a) 400# GATE VALVE (RH OPENING) ON 400# WATERMAIN (MUELLER CANADA, GLOW VALVES)
- b) 25# VALVE ON DOWNSTREAM SIDE OF 400# VALVE (FOR CHLORINE INJECTION)
- c) NO VALVES ON REGIONAL 900# CPP WATERMAIN AND VALVE BY CLIFFS WELDING
- d) CONNECTION TO REGIONAL WM BY TAPPING SLEEVE AND VALVE BY CLIFFS WELDING
- e) PROVIDED 300x300x150mm DEEP SUMP WITH GRATE BESIDE THE LADDER
- f) 400mm D.I. PIPE FROM 900# TO OUTSIDE OF CHAMBER
- g) THE EXTENSION STEM WAS 25mm SQUARE SOLID STEEL AND WAS EXTENDED TO APPROX. 200mm BELOW THE FINISH GRADE
- h) THE ACCESS CHIMNEY WAS POURED CONCRETE TO FINISH GRADE
- i) CONTRACTOR PROVIDED SHOP DRAWINGS FOR APPROVAL BY THE REGION AND TOWN.
- j) THE TRANSPORTATION AND WORKS DEPARTMENT WATER & WASTEWATER BRANCH WERE NOTIFIED (48) FORTY EIGHT HOURS IN ADVANCE OF ANY WORKS CARRIED OUT IN THE CONNECTIONS TO THE REGIONAL WATERMANS, AND WERE PROVIDED WITH IN WRITING, (24) TWENTY FOUR HOUR EMERGENCY TELEPHONE NUMBERS FOR THE CONTRACTOR, THE CONSULTING ENGINEER AND THE OWNER.
- k) Mr. FRANK BADINSKI, ASSET MANAGEMENT COORDINATOR (905-830-4444 ext.3047) AND REGION OPERATIONS STAFF AT THE LESLIE PUMPING STATION (TEL. 905-881-8742) WERE CONTACTED (48) FORTY EIGHT HOURS BEFORE COMMENCING WORK TO ARRANGE A SITE INSPECTION.
- l) THE BACKFILL OF THE CONNECTIONS TO THE YORK WATER SYSTEM DID NOT TAKE PLACE UNTIL THE WORK WAS INSPECTED AND APPROVED BY THE REGION STAFF. IF THE BACKFILL WAS PLACED PRIOR TO INSPECTION, THE REGION MAY REQUEST THAT SUCH BACKFILL BE REMOVED AT THE CONTRACTOR'S EXPENSE AND RECOMPACTED UNDER THE REGION'S SUPERVISION, THE CONSULTING ENGINEER AND THE OWNER.

**LEGEND**  
● DENOTES HYDRO POLE

- NOTES:**
- THE LOCATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES WERE NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES WERE NOT GUARANTEED. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR VERIFIED THE EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND ASSUMED ALL LIABILITIES OF DAMAGE.
  - ALL AREAS DISTURBED DURING CONSTRUCTION OF SEWERS AND WATERMANS WERE RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE CITY OF VAUGHAN AND REGION OF YORK ENGINEERING DEPARTMENT. GRASSSED AREAS WERE TOPPED WITH 100mm TOPSOIL AND SODDED AS PER OPSD 218.01. ALL EXISTING SERVICES WERE ADJUSTED TO SUIT THE FINISH GRADES.
  - FOR GENERAL NOTES REFER TO DWG. Nos. ON-1 AND ON-2
  - FOR CLEAN WATER COLLECTOR (CWC) PIPE DETAILS, TYPICAL CWC TRENCH DETAIL, MANHOLE INSTALLATION DETAILS AND CWC PIPE PLUGS, REFER TO DWG. D-1.

**LEGEND:**  
②5 DENOTES MUNICIPAL HOUSE NUMBER  
150 DENOTES LOT NUMBER

AS CONSTRUCTED FEBRUARY 2008

**BENCHMARK**  
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF VAUGHAN BENCHMARK No. 12-1 CONCRETE BENCH MARK POST WEST SIDE OF BATHURST STREET 183m NORTH OF MAJOR MACKENZIE DRIVE HAVING A PUBLISHED ELEVATION OF 232.309m

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF SCHAEFFERS CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION (PHASE 1 SPINE ONLY)

**Vaughan**  
The City Above Toronto

**CONSTRUCTION DRAWING**  
June 30, 2011

DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING DATE

**BLOCK 12 SPINE SERVICES**

**SCHAEFFERS**  
CONSULTING ENGINEERS

6 Ronrose Drive, Concord, Ontario L4K 4R3  
Tel: (905) 738-6100  
Fax: (905) 738-6875  
E-mail: design@schaeffers.com

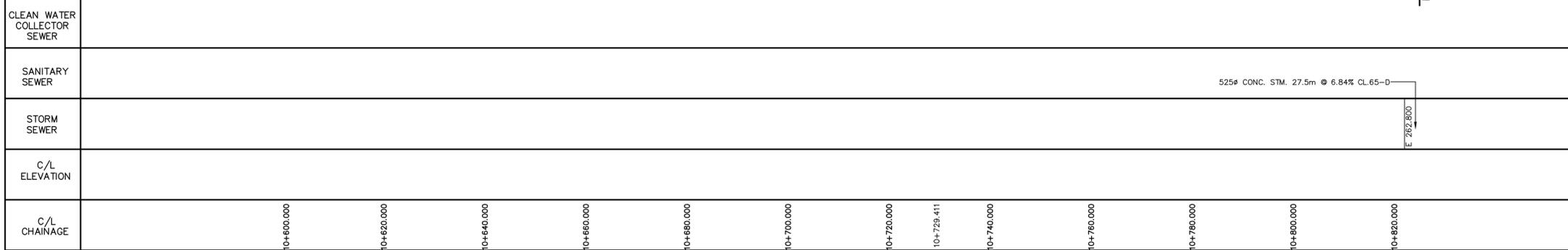
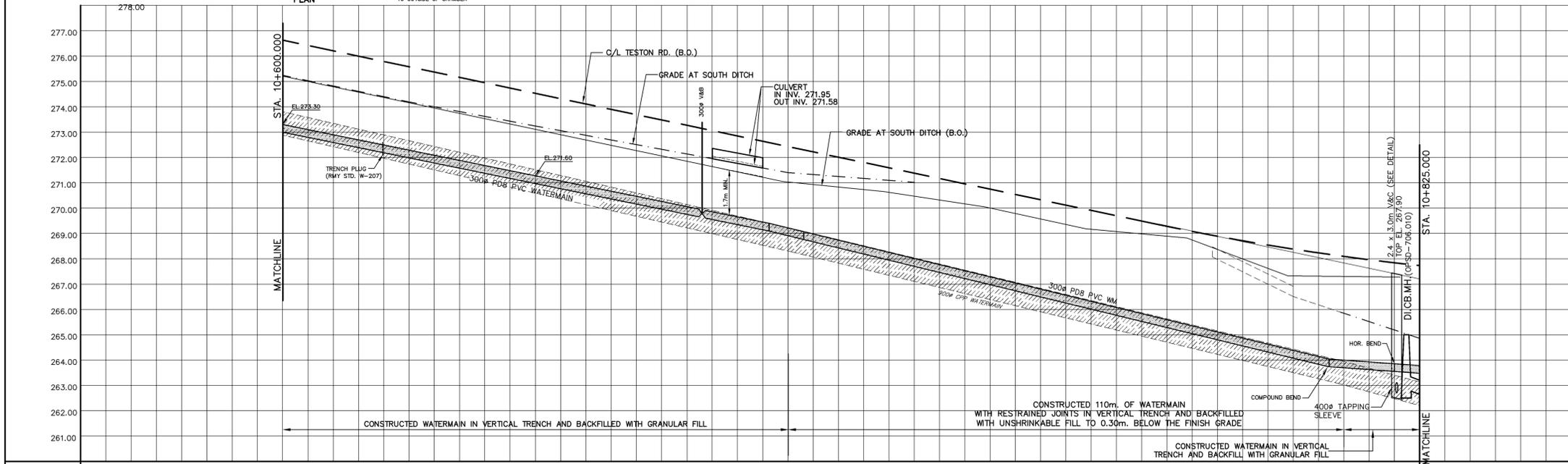
PROJECT No. 2004-2644 DRAWING No. PP-45



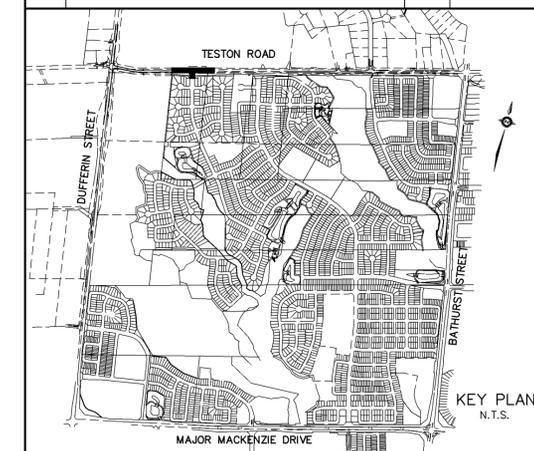
**Vaughan**  
The City Above Toronto

**PLAN AND PROFILE OF WATERMAIN ON TESTON ROAD**  
FROM STA. 10+600.000 TO STA. 10+825.000

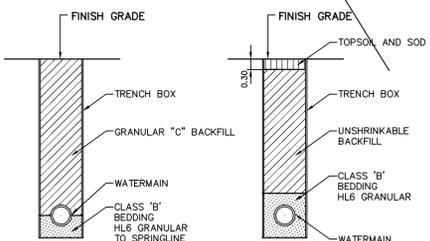
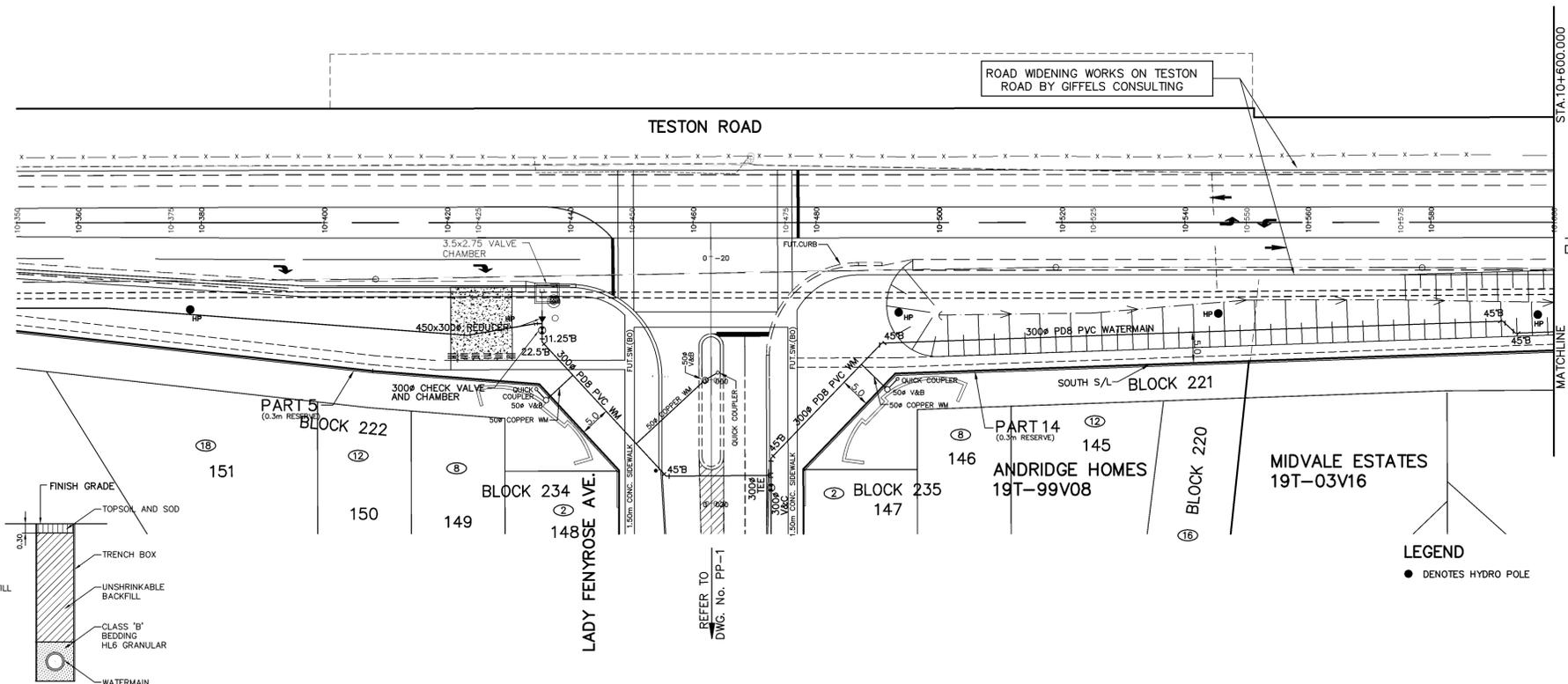
DESIGNED BY: H.T.	DATE: APRIL 2007	CHECKED BY: H.T.
DRAWN BY:	19T-99V08	APPROVED BY:
SCALE HORIZONTAL 1:500	19T-03V16	DWG. No.
SCALE VERTICAL 1:100		



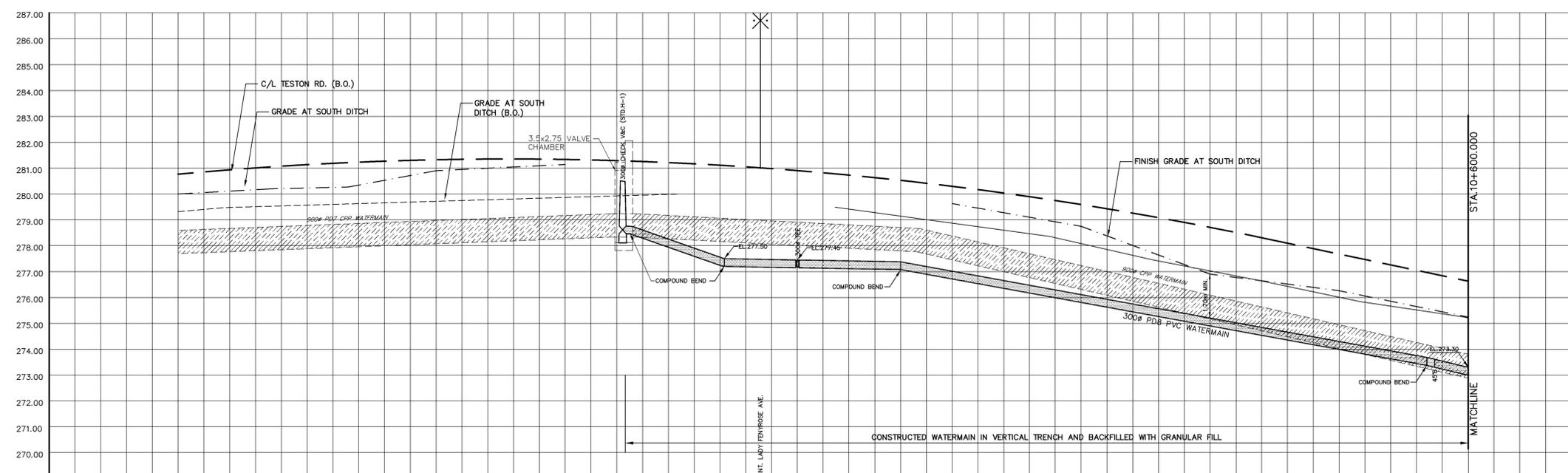
REVISIONS			
No.	DESCRIPTION	By	Date
1.	GENERAL REVISIONS	TD	JUNE 15, 2005
2.	REVISED AS PER REGIONS COMMENTS	HT	SEPT 29, 2005
3.	BACKFILL SPECIFICATIONS INCLUDED IN PROFILE	TD	NOV 23, 2005



- NOTES:**
- THE LOCATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES WERE NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES WERE NOT GUARANTEED. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR VERIFIED THE EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND ASSUMED ALL LIABILITIES OF DAMAGE.
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  - FOR GENERAL NOTES REFER TO DWG. Nos. GN-1 AND GN-2
  - FOR CLEAN WATER COLLECTOR (CWC) PIPE DETAILS, TYPICAL CWC TRENCH DETAIL, MANHOLE INSTALLATION DETAILS AND CWC PIPE PLUGS, REFER TO DWG. D-1.



**TYPICAL DETAILS OF WATERMAIN TRENCH N.T.S.**



- LEGEND:**
- 150 DENOTES LOT NUMBER
  - 151 DENOTES MUNICIPAL HOUSE NUMBER
- AS CONSTRUCTED FEBRUARY 2008**

**BENCHMARK**

ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF VAUGHAN BENCHMARK No. 12-1 CONCRETE BENCH MARK POST WEST SIDE OF BATHURST STREET 183m NORTH OF MAJOR MACKENZIE DRIVE HAVING A PUBLISHED ELEVATION OF 232.309m

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF SCHAEFFERS CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION (PHASE 1 SPINE ONLY)

**Vaughan**  
The City Above Toronto

**CONSTRUCTION DRAWING**  
June 30, 2011

DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING DATE

**BLOCK 12 SPINE SERVICES**

**SCHAEFFERS**  
CONSULTING ENGINEERS

SCHAEFFER & ASSOCIATES LTD.

6 Ronrose Drive, Concord,  
Ontario L4K 4R3  
Tel: (905) 738-6100  
Fax: (905) 738-6875  
E-mail:  
design@schaeffers.com

PROJECT No.	2004-2644	DRAWING No.	PP-44
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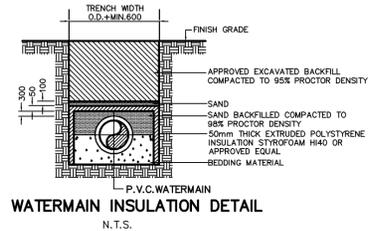
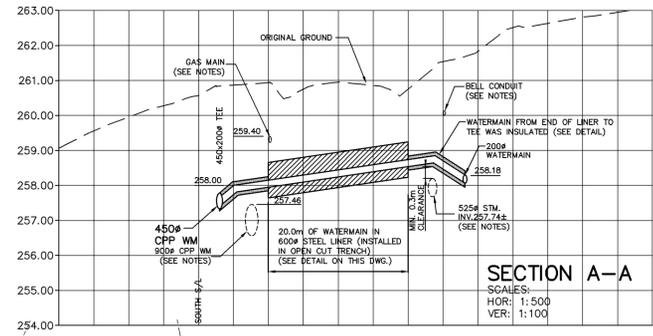
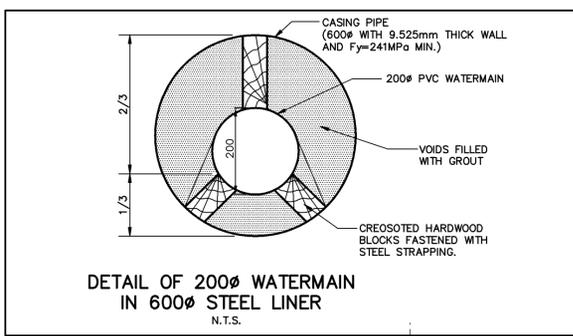
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	VERTICAL	0 1 2 3 4 5 6 7 8 9 10m

**Vaughan**  
The City Above Toronto

**PLAN AND PROFILE OF**  
**WATERMAIN ON TESTON ROAD**  
FROM STA. 10+350.000 TO STA. 10+600.000

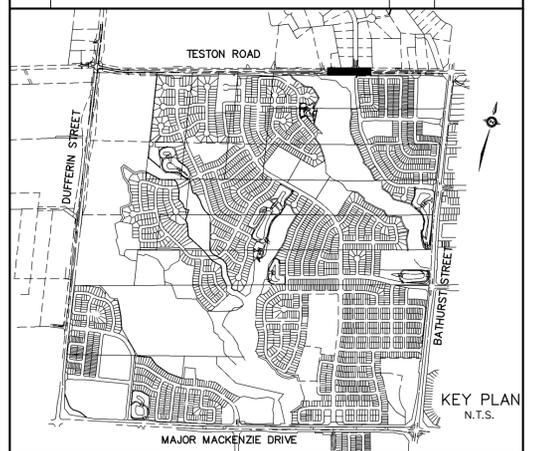
DESIGNED BY: H.T.	DATE: APRIL 2007	CHECKED BY: H.T.
DRAWN BY:		APPROVED BY:
SCALE HORIZONTAL 1:500	19T-99V08	DWG. No.
SCALE VERTICAL 1:100	19T-03V16	

CLEAN WATER COLLECTOR SEWER		CLEAN WATER COLLECTOR SEWER
SANITARY SEWER		SANITARY SEWER
STORM SEWER		STORM SEWER
C/L ELEVATION		C/L ELEVATION
C/L CHAINAGE	10+360.000    10+380.000    10+400.000    10+420.000    10+440.000    10+460.000    10+480.000    10+500.000    10+520.000    10+540.000    10+560.000    10+580.000    10+600.000	C/L CHAINAGE



**LEGEND**  
● DENOTES PROPOSED HYDRO POLE

REVISIONS			
No.	DESCRIPTION	By	Date
1.	GENERAL REVISIONS	TD	JUNE 15, 2005
2.	REVISED AS PER REGIONS COMMENTS	HT	SEPT 15, 2005
3.	BACKFILL SPECIFICATIONS INCLUDED IN PROFILE	TD	NOV 23, 2005



- NOTES:**
- THE LOCATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES WERE NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES WERE NOT GUARANTEED. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR VERIFIED THE EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND ASSUMED ALL LIABILITIES OF DAMAGE.
  - ALL AREAS DISTURBED DURING CONSTRUCTION OF SEWERS AND WATERMANS WERE RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE CITY OF VAUGHAN AND REGION OF YORK ENGINEERING DEPARTMENT. GRASSED AREAS WERE TOPPED WITH 100mm TOPSOIL AND SODDED AS PER OPSD 218.01. ALL EXISTING SERVICES WERE ADJUSTED TO SUIT THE FINISH GRADES.
  - FOR GENERAL NOTES REFER TO DWG. Nos. ON-1 AND ON-2
  - FOR CLEAN WATER COLLECTOR (CWC) PIPE DETAILS, TYPICAL CWC TRENCH DETAIL, MANHOLE INSTALLATION DETAILS AND CWC PIPE PLUGS, REFER TO DWG. D-1.
  - PRIOR TO CONNECTING TO THE WATERMAIN, ALL NEW WATERMANS WERE PRESSURE TESTED, CHLORINATED AND SAMPLE TESTED.
  - WATERMAIN ALONG TESTON ROAD WAS CONSTRUCTED IN VERTICAL TRENCH AND BACKFILLED WITH GRANULAR FILL UNLESS SPECIFIED OTHERWISE ON THE PROFILES (SEE DETAILS ON THE DRAWING No. PP-44)

**LEGEND:**  
 (25) DENOTES MUNICIPAL HOUSE NUMBER  
 150 DENOTES LOT NUMBER

**AS CONSTRUCTED FEBRUARY 2008**

**BENCHMARK**  
 ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF VAUGHAN BENCHMARK No. 12-1 CONCRETE BENCH MARK POST WEST SIDE OF BATHURST STREET 183m NORTH OF MAJOR MACKENZIE DRIVE HAVING A PUBLISHED ELEVATION OF 232.309m

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF SCHAEFFERS CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION (PHASE 1 SPINE ONLY)

**Vaughan**  
The City Above Toronto

**CONSTRUCTION DRAWING**  
June 30, 2011

DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING DATE

**BLOCK 12 SPINE SERVICES**

**SCHAEFFERS**  
CONSULTING ENGINEERS

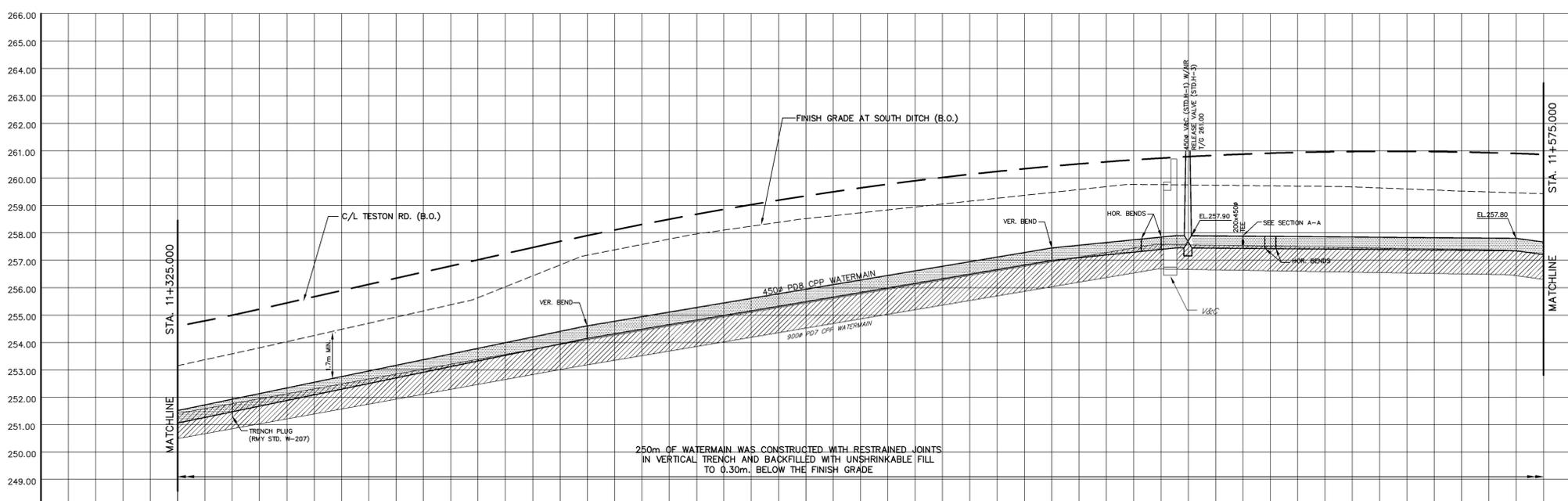
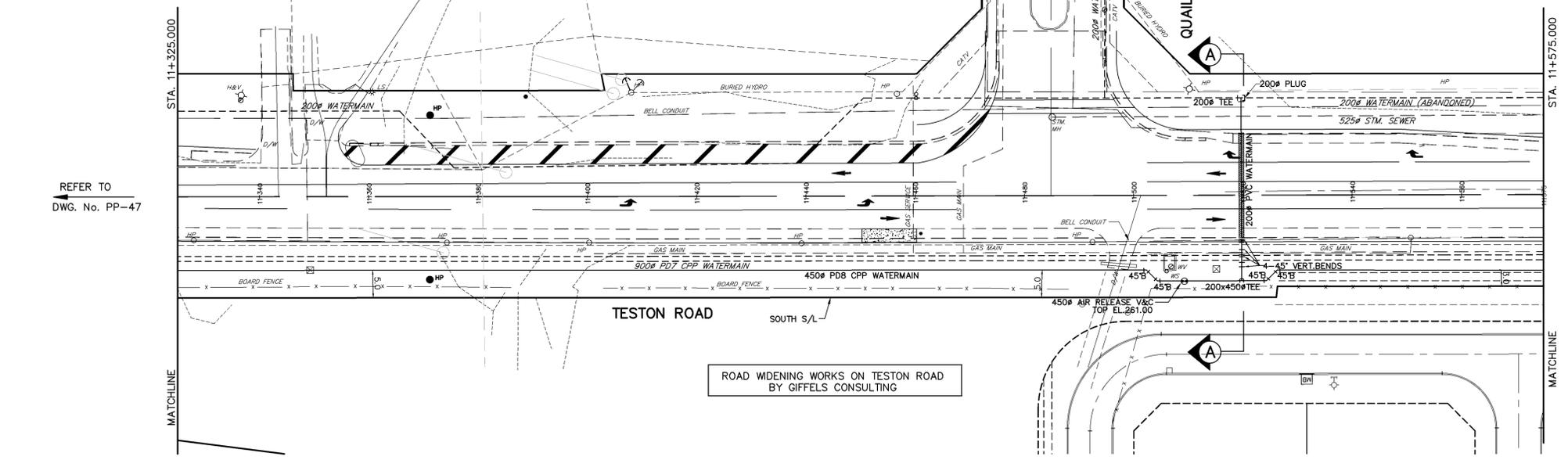
6 Ronrose Drive, Concord, Ontario L4K 4R3  
Tel: (905) 738-6100  
Fax: (905) 738-6875  
E-mail: design@schaeffers.com

PROJECT No.	2004-2644	DRAWING No.	PP-48
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	VERTICAL	0 1 2 3 4 5 6 7 8 9 10m	

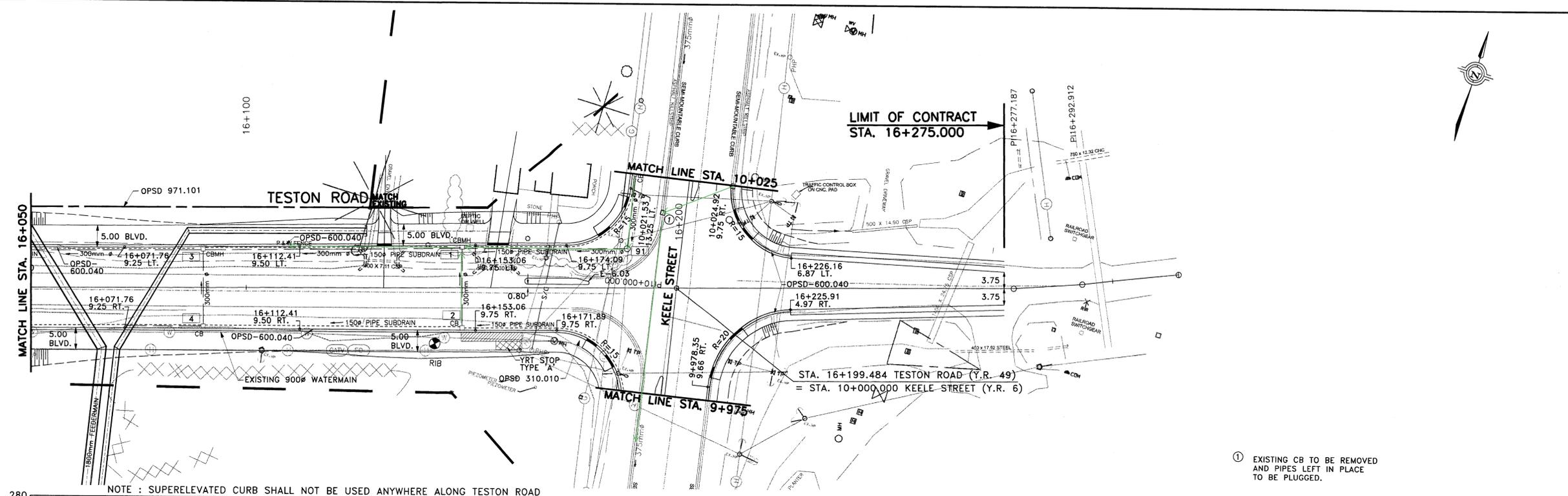
**Vaughan**  
The City Above Toronto

**PLAN AND PROFILE OF WATERMAIN ON TESTON ROAD**  
FROM STA. 11+325.000 TO STA. 11+575.000

DESIGNED BY: H.T.	DATE: APRIL 2007	CHECKED BY: H.T.
DRAWN BY:		APPROVED BY:
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SCALE VERTICAL: 1:100	19T-03V16	

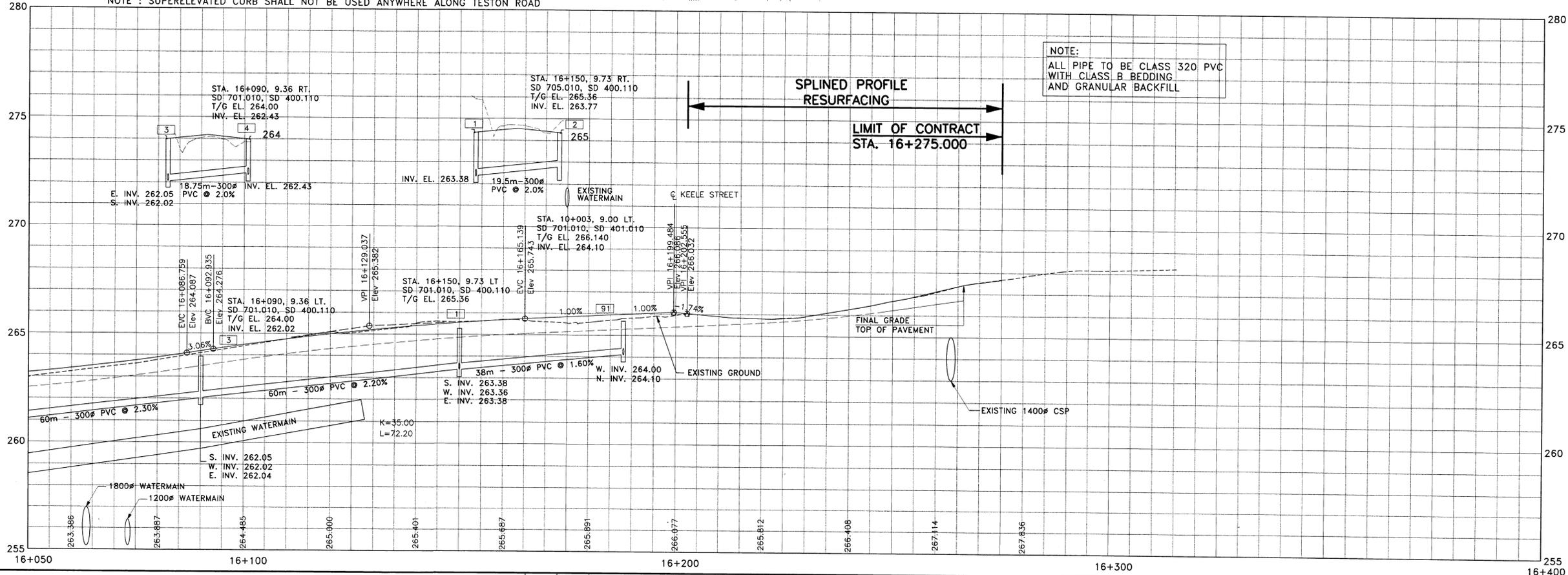


CLEAN WATER COLLECTOR SEWER		CLEAN WATER COLLECTOR SEWER
SANITARY SEWER		SANITARY SEWER
STORM SEWER		STORM SEWER
C/L ELEVATION		C/L ELEVATION
C/L CHAINAGE	11+340.000, 11+360.000, 11+380.000, 11+400.000, 11+420.000, 11+440.000, 11+460.000, 11+480.000, 11+500.000, 11+520.000, 11+540.000, 11+560.000	C/L CHAINAGE

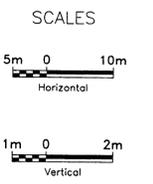


NOTE : SUPERELEVATED CURB SHALL NOT BE USED ANYWHERE ALONG TESTON ROAD

① EXISTING CB TO BE REMOVED AND PIPES LEFT IN PLACE TO BE PLUGGED.



NOTE:  
ALL PIPE TO BE CLASS 320 PVC WITH CLASS B BEDDING AND GRANULAR BACKFILL



NOTE:  
THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE DURING CONSTRUCTION.

- STORM SEWERS:
1. INVERT ELEVATIONS SHOWN ARE AT CENTRE-LINE OF CATCHBASIN OR MANHOLE.
  2. PIPE LENGTHS SHOWN ARE CENTRE-LINE TO CENTRE-LINE OF CATCHBASIN OR MANHOLE.
  3. OFFSETS SHOWN ARE TO CENTRE OF CATCHBASIN OR MANHOLE COVER.

No.	DATE	REVISIONS	BY
1	12/15/04	UPDATED PROFILE	IP
2	05/06/05	REVISED FOR FINAL MOEE APPROVALS	NC



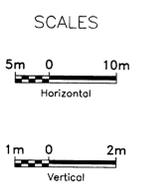
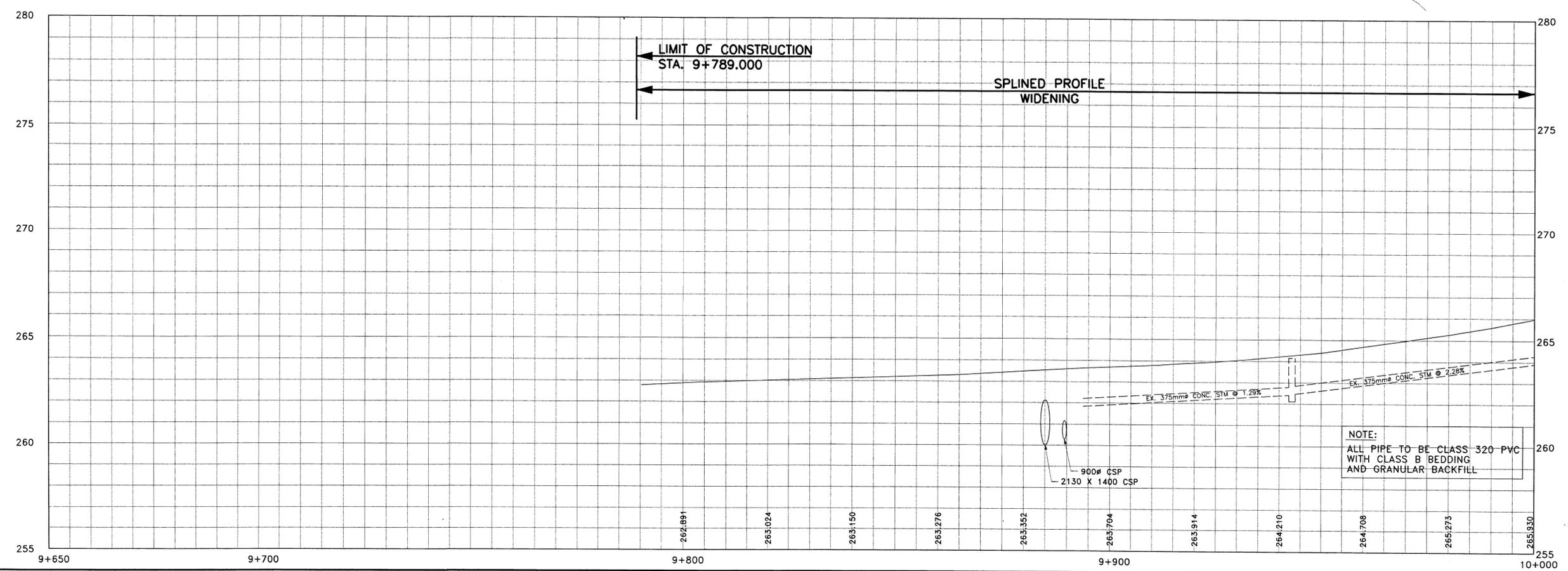
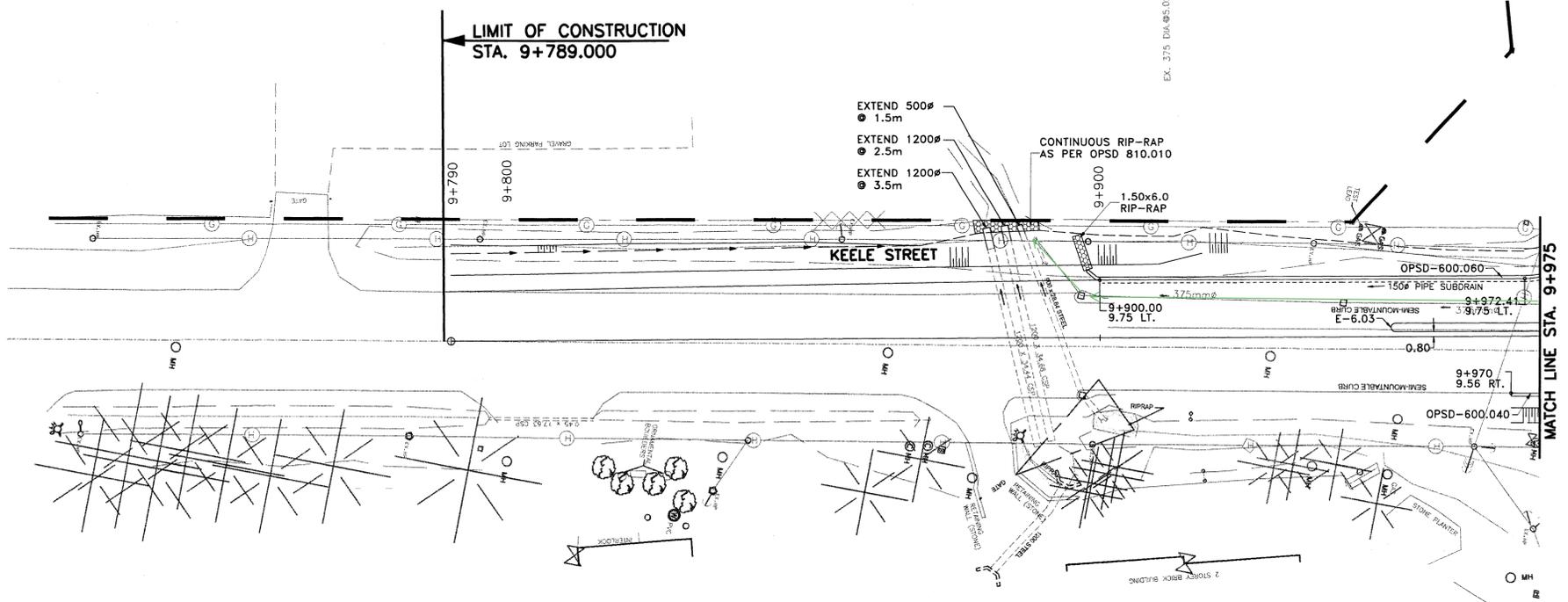
DESIGN JBA, NC	TESTON ROAD (Y.R. 49) NEW CONSTRUCTION STA. 16+050 TO STA. 16+400	DWG. NO. P-1093-035
DRAWN NC, PJ, LL		CONT. NO. P-03-04
CHECKED PW, KH		SHEET NO. 27

York\_Border.dgn

METRIC



HVCM 10519980



NOTE:  
THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE DURING CONSTRUCTION.

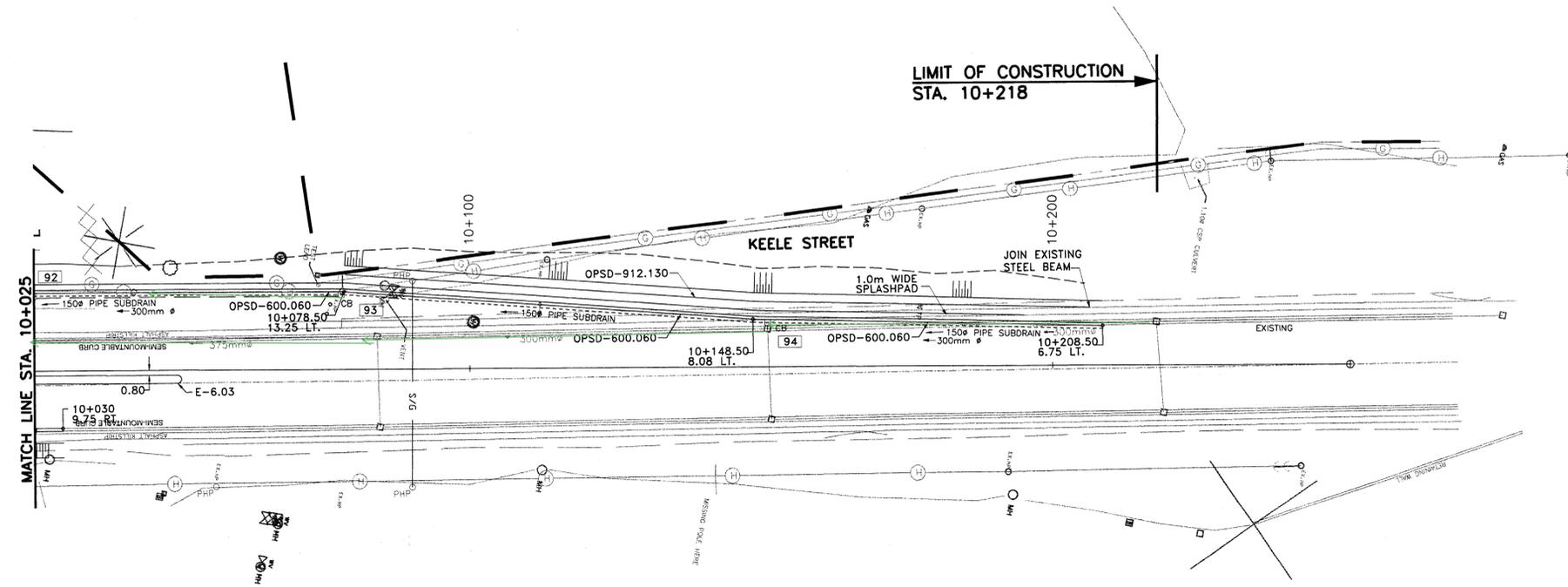
- STORM SEWERS:
1. INVERT ELEVATIONS SHOWN ARE AT CENTRE-LINE OF CATCHBASIN OR MANHOLE.
  2. PIPE LENGTHS SHOWN ARE CENTRE-LINE TO CENTRE-LINE OF CATCHBASIN OR MANHOLE.
  3. OFFSETS SHOWN ARE TO CENTRE OF CATCHBASIN OR MANHOLE COVER.

No.	DATE	REVISIONS	BY
1	12/15/04	NEW CULVERTS AND STORM SEWER ADDED	JP
2	05/06/05	REVISED FOR FINAL MOEE APPROVALS	NC

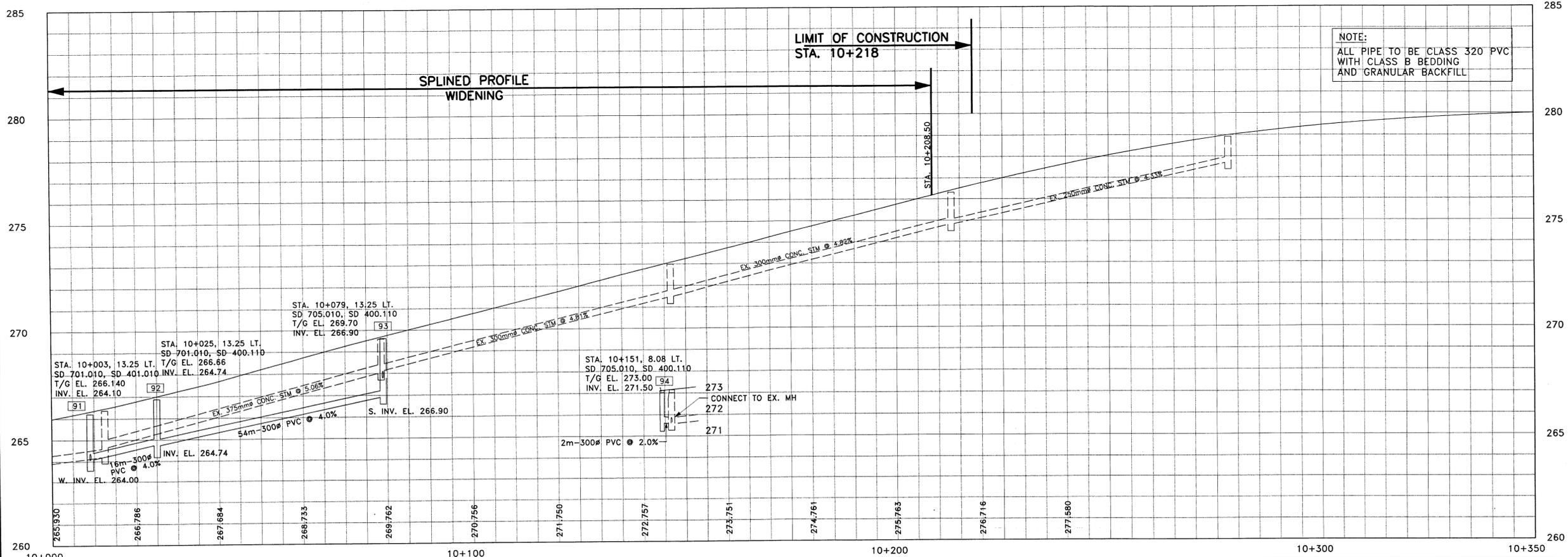


DESIGN JBA, NC	KEELE STREET (Y.R. 6) NEW CONSTRUCTION	DWG. NO. P-1093-035
DRAWN NC, PJ, LL		CONT. NO. P-03-04
CHECKED PW, KH		SHEET NO. 30

STA. 9+790 TO STA. 9+975

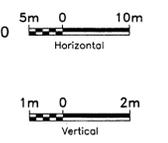


HVCM 01019840



NOTE:  
 ALL PIPE TO BE CLASS 320 PVC  
 WITH CLASS B BEDDING  
 AND GRANULAR BACKFILL

SCALES



NOTE:  
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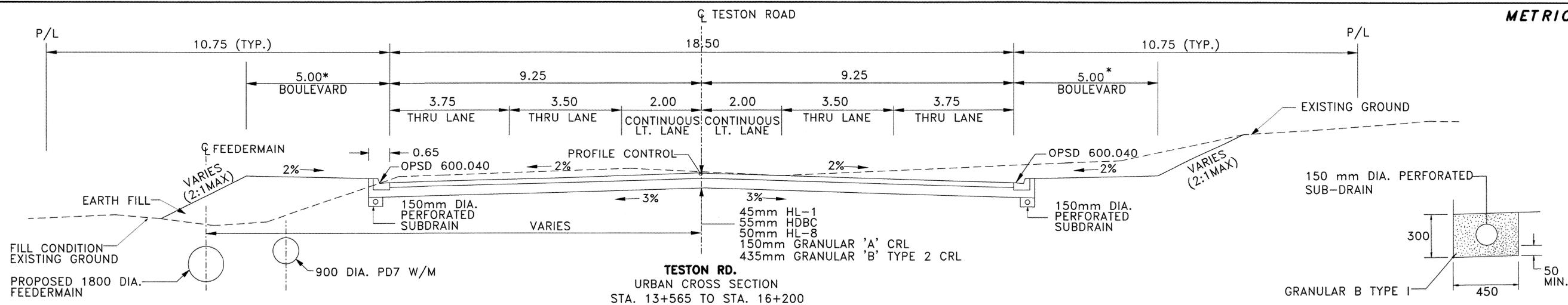
- STORM SEWERS:
1. INVERT ELEVATIONS SHOWN ARE AT CENTRE-LINE OF CATCHBASIN OR MANHOLE.
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No.	DATE	REVISIONS	BY
1	12/15/04	NEW STORM SEWER ADDED	IP
2	05/06/05	REVISED FOR FINAL MOEE APPROVALS	NC

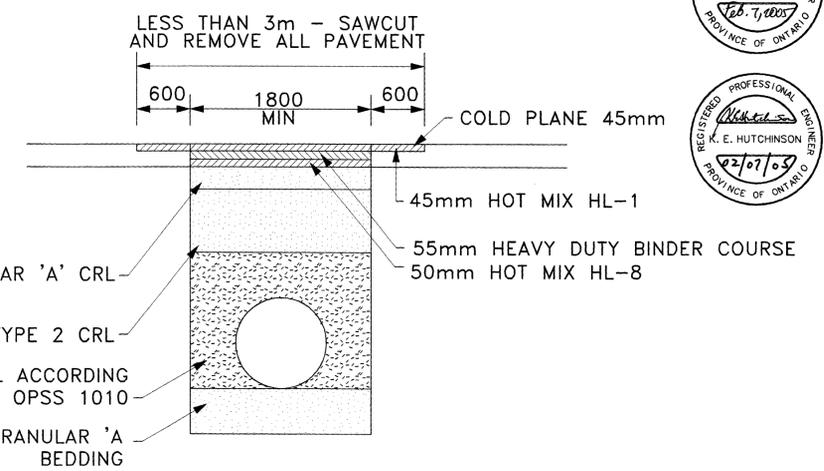
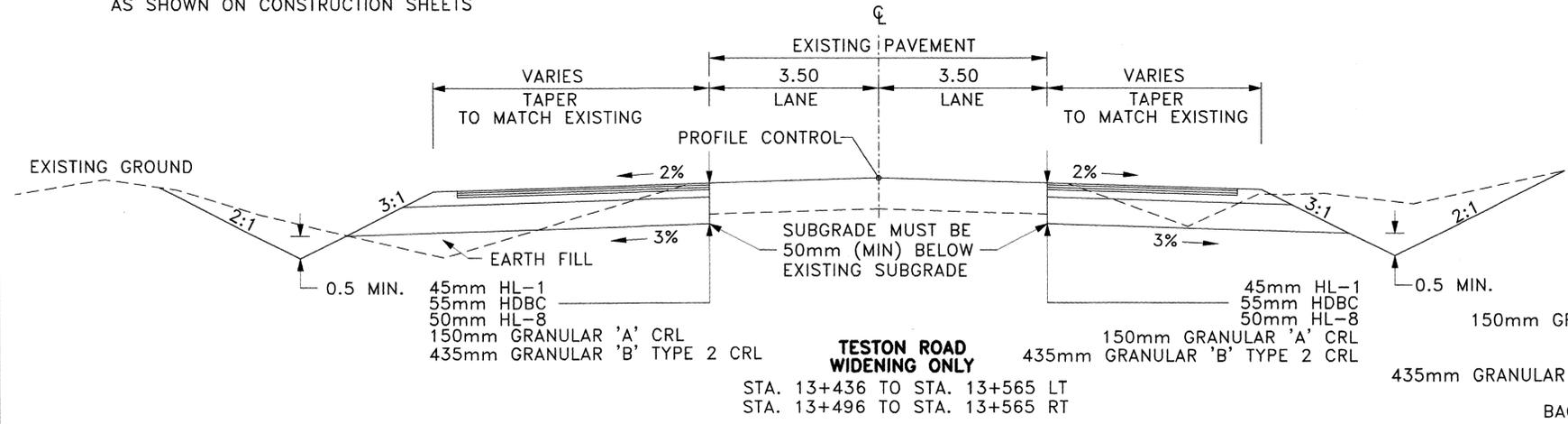
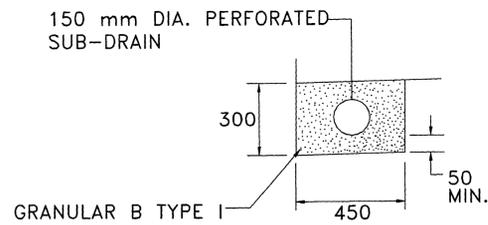
DESIGN JBA, NC	<b>KEELE STREET (Y.R. 6)</b> NEW CONSTRUCTION STA. 10+025 TO STA. 10+250	DWG. NO. P-1093-035
DRAWN NC, PJ, LL		CONT. NO. P-03-04
CHECKED PW, KH		SHEET NO. 31

York\_Border.dgn

METRIC

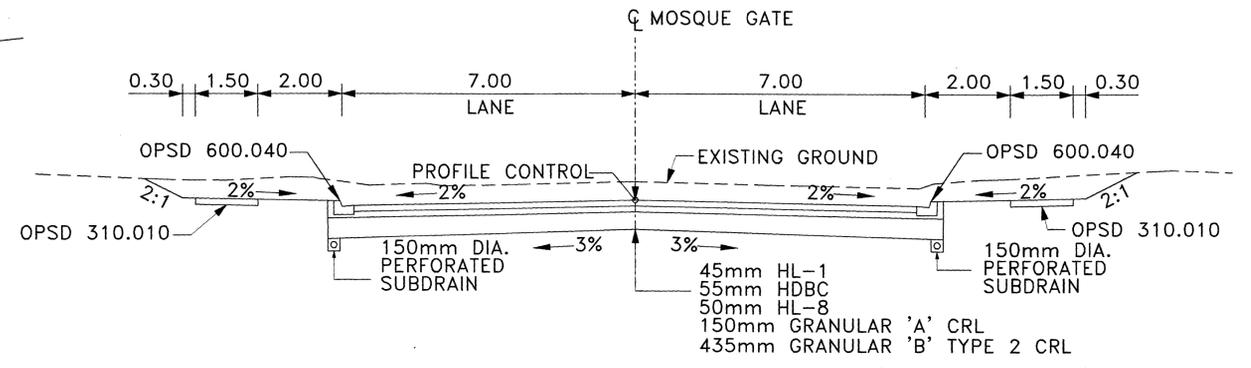
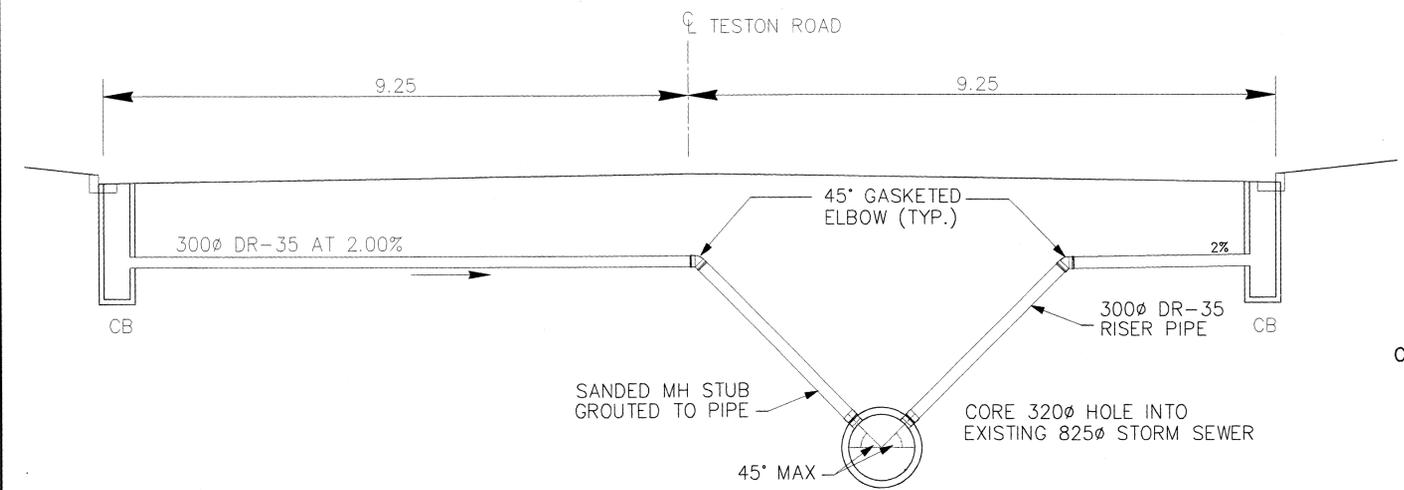


**\*NOTE**  
BOULEVARD WIDTH TO BE REDUCED TO 3.5m AS SHOWN ON CONSTRUCTION SHEETS



REGISTERED PROFESSIONAL ENGINEER  
P. J. WOVK  
Feb. 7, 2003  
PROVINCE OF ONTARIO

REGISTERED PROFESSIONAL ENGINEER  
K. E. HUTCHINSON  
02/07/03  
PROVINCE OF ONTARIO



CB'S #25,26,27 & 28 CONNECTION DETAIL

MOSQUE GATE

NOTE:  
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STORM SEWERS:  
1. INVERT ELEVATIONS SHOWN ARE AT CENTRE-LINE OF CATCHBASIN OR MANHOLE.  
2. PIPE LENGTHS SHOWN ARE CENTRE-LINE TO CENTRE-LINE OF CATCHBASIN OR MANHOLE.  
3. OFFSETS SHOWN ARE TO CENTRE OF CATCHBASIN OR MANHOLE COVER.

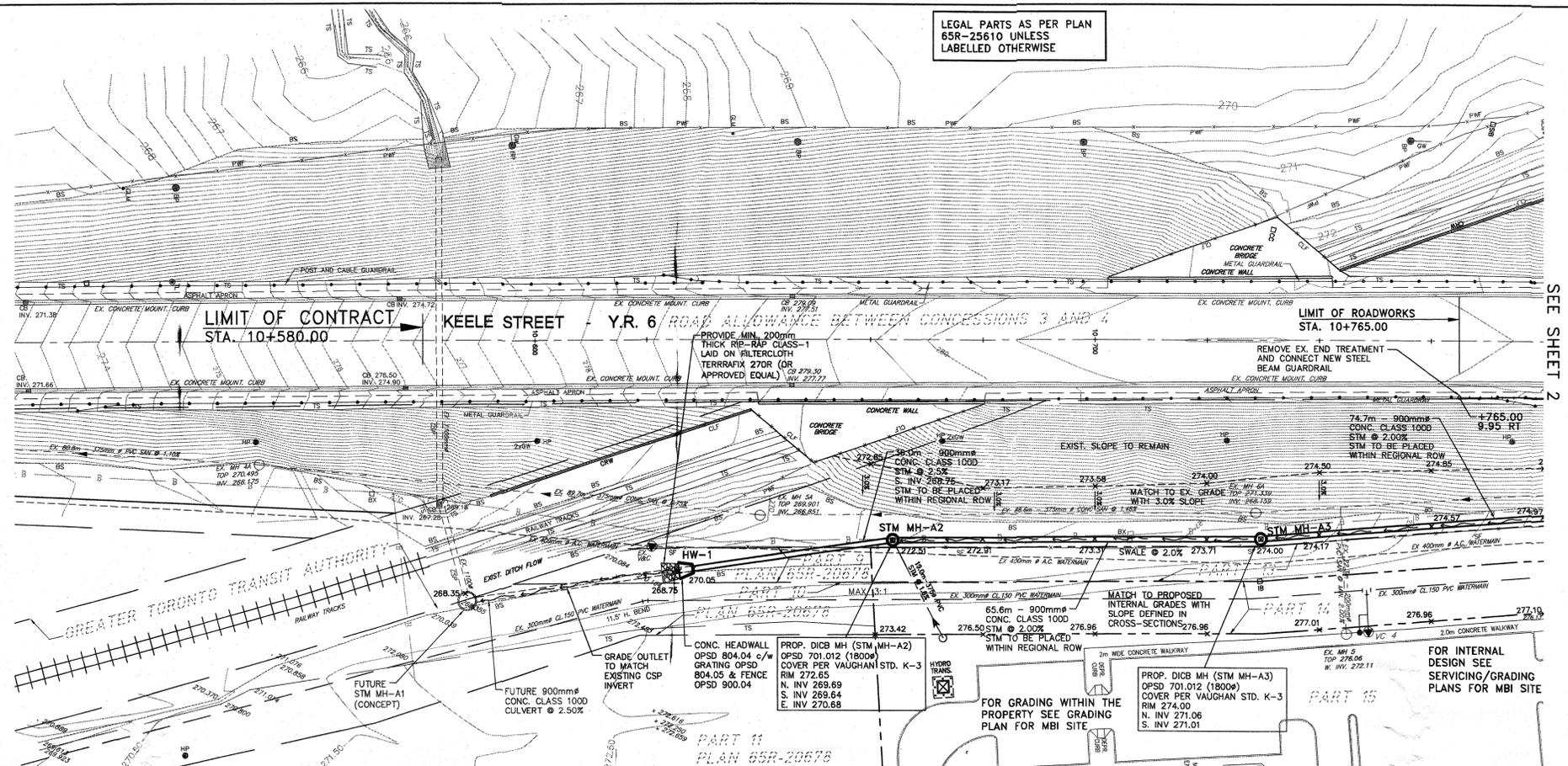
No.	DATE	REVISIONS	BY

**York Region** Transportation and Works

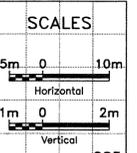
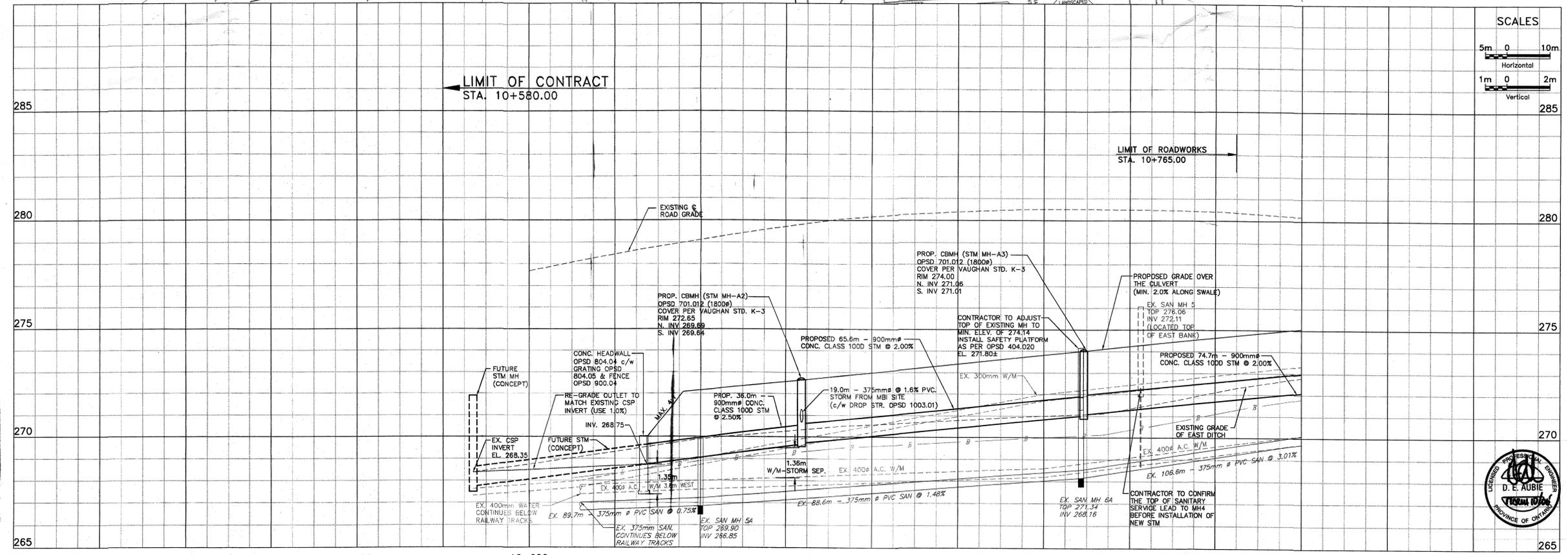
DESIGN  
JBA, NC  
DRAWN  
NC, PJ, LL  
CHECKED  
PW, KH

TESTON ROAD (Y.R. 49)  
TYPICAL SECTIONS

DWG. NO.  
P-1093-035  
CONT. NO.  
P-03-04  
SHEET NO.  
32



- NOTES:**
- ELEVATIONS ARE GEODETIC AND ARE DERIVED FROM: BENCH MARK NUMBER: 26-4 CITY OF VAUGHAN ELEVATION: 243.156 INSCRIPTION: 26-4 DESCRIPTION: MAPLE COMMUNITY CENTRE ON WEST SIDE OF KEELE ST., 19.3m SOUTH OF NORTH-EAST CORNER OF BUILDING WITH SINGLE OVERHEAD SERVICE DOOR AND 5.10m EAST OF BUILDING CORNER JOG, 0.300m NORTH OF SOUTH-EAST CORNER PILLAR, 0.100m BELOW BRICKWORK ON EAST FACE. #10190 KEELE STREET.
  - EXISTING ELEVATIONS AND CONTOURS BASED ON TOPOGRAPHIC SURVEY DONE BY HOLDING JONES VANDERVEEN INC. O.L.S. (905-660-4400) DATED JUNE 1998 AND OCTOBER 2003.
  - FOR LEGAL PLAN REFER TO CALCULATED PLAN BY HOLDING AND JONES LTD., DATED JUNE 1998.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT OF THE WORK BASED ON THE HORIZONTAL AND VERTICAL CONTROL PROVIDED ON THIS DRAWING, AND THE CROSS-SECTION DRAWINGS. THE CONTRACTOR SHALL CHECK AND VERIFY THE DUFFERIN STREET CENTRELINE LAYOUT WITH THE ENGINEER PRIOR TO PROCEEDING WITH SETTING OF GRADE STAKES OR OTHER CONSTRUCTION LAYOUT.
  - PPS - PARTIALLY PAVED SHOULDER  
FDPS - FULL DEPTH PAVED SHOULDER
  - FOR STORM, SANITARY & WATERMAIN DETAILS, REFER TO MBI SERVICING PLANS (DWGS 1-8).
  - THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE DURING CONSTRUCTION.



**NOTE:**  
THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE DURING CONSTRUCTION.

No.	DATE	REVISIONS	BY
2	MAR 23/05	REVISED AS PER 2nd SUBM. COMMENTS (EXIT TAPER REMOVED)	D.E.A.
3	MAY 25/05	REVISED AS PER 3rd SUBM. COMMENTS (NEW END TREATMENT)	D.E.A.
4	JUNE 29/05	REVISED AS PER 4th SUBM. COMMENTS (HEADWALL & DICB)	D.E.A.
5	AUG 22/05	STORM SEWER EXTENDED TO DICB AND HW-1	D.E.A.
6	SEP 22/05	FUT. SERVICE STUBS EXTENDED, ISSUED FOR CONSTRUCTION	D.E.A.
7	JAN 11/06	MOE SUBMISSION - STM EXTENDED SOUTH, SHORTENED NORTH	D.E.A.
7	MAR 10/06	MOE SUBMISSION - RIP-RAP ENLARGED, CB LEADS RE-LABELLED	D.E.A.



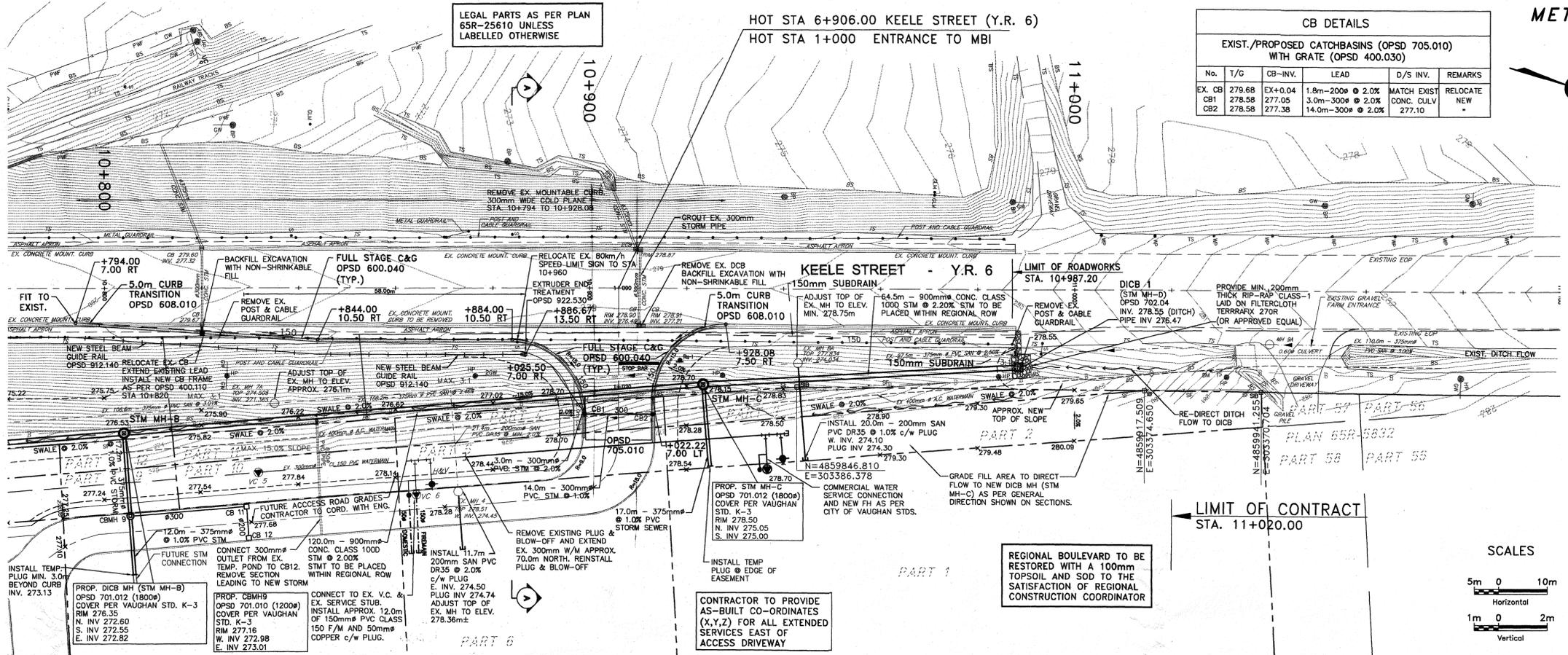
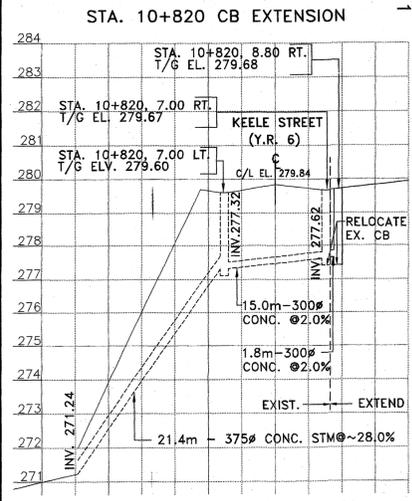
DESIGN D.A.E.	KEELE STREET (Y.R. 6) NEW CONSTRUCTION STA. 10+600 TO STA 10+780	DWG. NO. 1
DRAWN CAD		CONT. NO. 1
CHECKED D.A.		SHEET NO. 1

CB DETAILS				
EXIST./PROPOSED CATCHBASINS (OPSD 705.010) WITH GRATE (OPSD 400.030)				
No.	T/G	CB-INV.	LEAD	D/S INV. REMARKS
EX. CB	279.68	EX+0.04	1.8m-200# @ 2.0%	MATCH EXIST
CB1	278.58	277.05	3.0m-300# @ 2.0%	CONC. CULV
CB2	278.58	277.38	14.0m-300# @ 2.0%	277.10 RELOCATE NEW

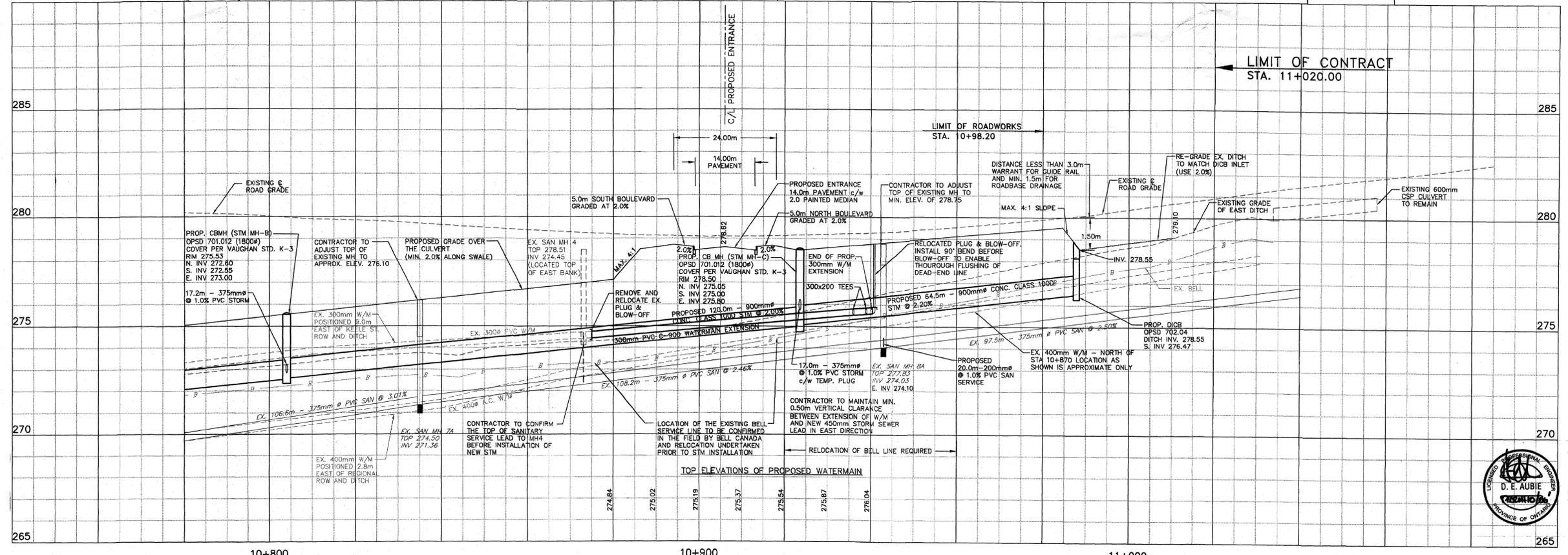
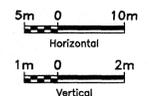


NOTE:  
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SEE SHEET 1



SCALES

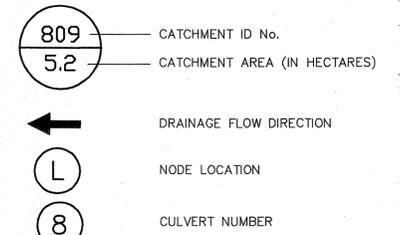


NOTE:  
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No.	DATE	REVISIONS	BY
2	MAR 23/05	REVISED AS PER 2ND SUBM. COMMENTS (EXIT TAPER REMOVED)	D.E.A.
3	MAY 25/05	REVISED AS PER 3RD SUBM. COMMENTS (NEW END TREATMENT)	D.E.A.
4	JUNE 29/05	REVISED AS PER 4TH SUBM. COMMENTS (HEADWALL & DICB)	D.E.A.
5	AUG. 22/05	STORM SEWER EXTENDED TO DICB AND HW-1	D.E.A.
6	SEPT. 30/05	FUT. SERVICE STUBS EXTENDED, ISSUED FOR CONSTRUCTION	D.E.A.
7	JAN. 1/06	MOE SUBMISSION - STM EXTENDED SOUTH, SHORTENED NORTH	D.E.A.
7	MAR. 07/06	MOE SUBMISSION - RP-RAP ENLARGED, CB LEADS RE-LABELLED	D.E.A.



DESIGN D.A.E.	KEELE STREET (Y.R. 6) NEW CONSTRUCTION STA. 10+780 TO STA 11+040	DWG. NO.
DRAWN CAD		CONT. NO. 1
CHECKED D.A.		SHEET NO. 2



NOTE:  
 PRE - DEVELOPMENT AND POST - DEVELOPMENT AREAS OBTAINED FROM MAPLE VALLEY MASTER ENVIRONMENTAL SERVICING PLAN, MAY 2003. (FIGURES 2.9 & 2.11).

ALL DRAINAGE AREAS WITHIN KEELE STREET ROW TO HAVE C=0.75

$808 + 809 = 5.9 + 5.2 = 11.1\text{ha}$   
 $A+B+C = 4.0 + 3.5 + 3.6 = 11.1\text{ha}$

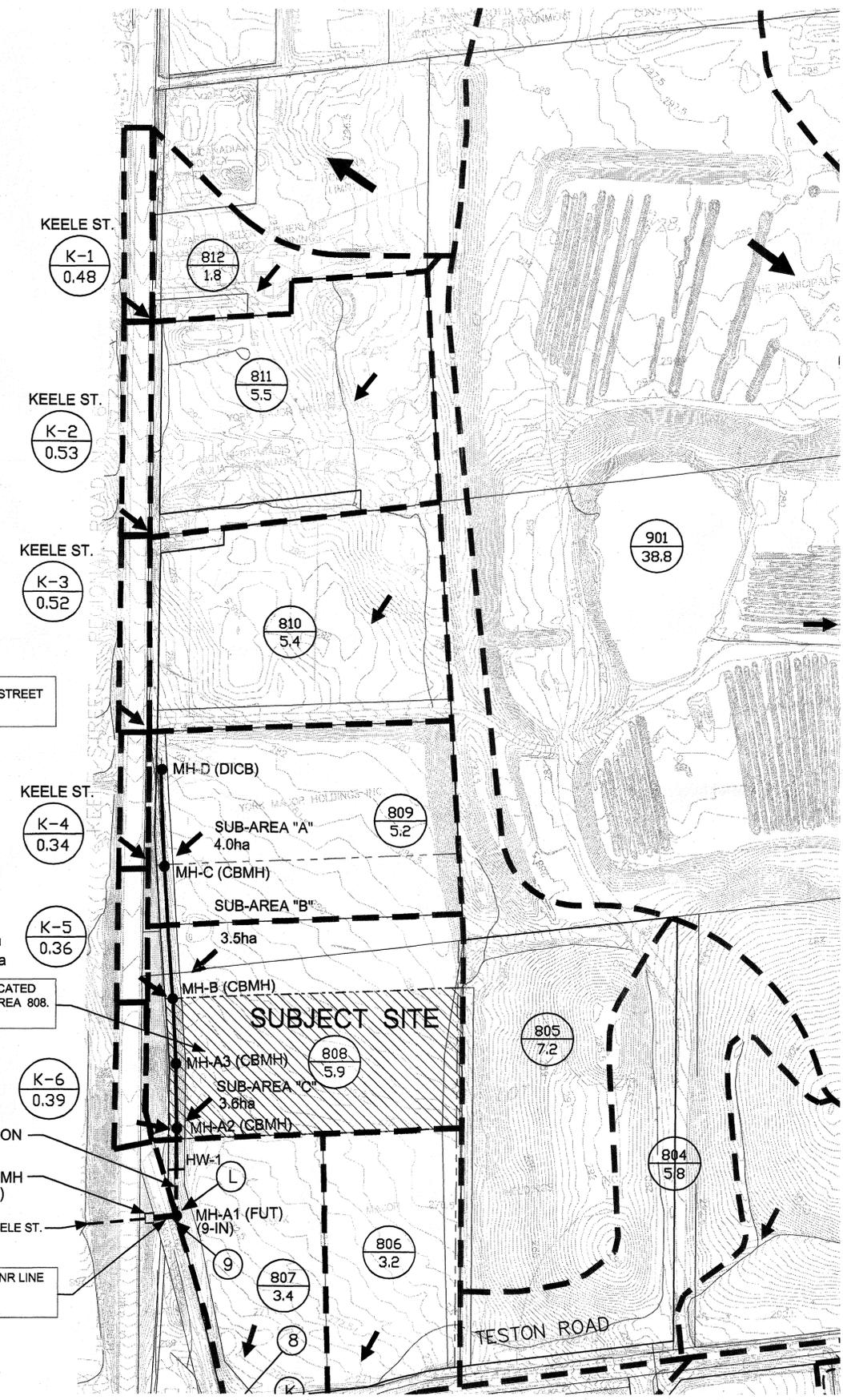
PROPOSED DEVELOPMENT SITE LOCATED WITHIN POST - DEV CATCHMENT AREA 808. DEVELOPMENT SITE AREA = 3.6ha

FUTURE CONSTRUCTION

EX. CBMH (9-OUT)

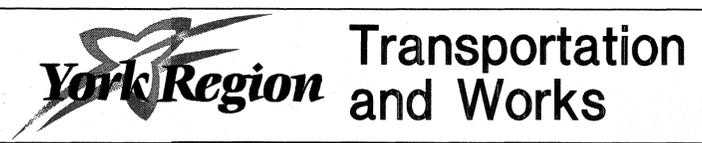
EXISTING CULVERT UNDER KEELE ST. 1100mm Ø CSP

EXISTING CULVERT UNDER CNR LINE 1100mm Ø CSP CRITICAL GRADE - 1.0%



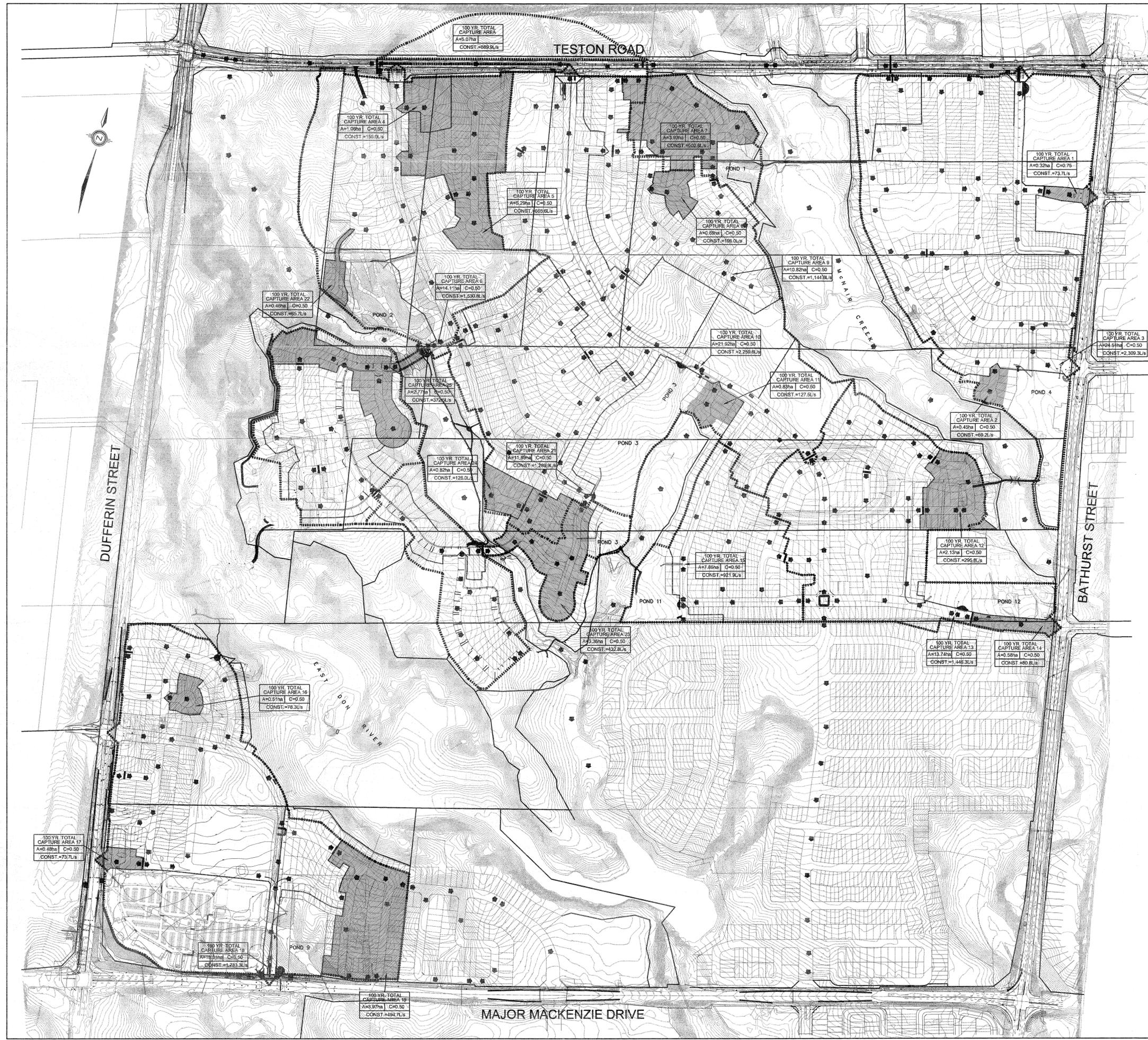
NOTE:  
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No.	DATE	REVISIONS	BY
1	OCT 18/04	REVISED AS PER FIRST SUBMISSION COMMENTS	D.E.A.
2	MAR 23/05	REVISED AS PER 2nd SUBM. COMMENTS (EXIT TAPER REMOVED)	D.E.A.
3	MAY 25/05	REVISED AS PER 3rd SUBM. COMMENTS (NEW END TREATMENT)	D.E.A.
4	JUNE 29/05	REVISED AS PER 4th SUBM. COMMENTS (HEADWALL & DICB)	D.E.A.
5	AUG. 22/05	STORM SEWER EXTENDED TO DICB AND HW-1	D.E.A.
6	SEPT. 20/05	FUT. SERVICE STUBS EXTENDED, ISSUED FOR CONSTRUCTION	D.E.A.
7	JAN. 11/06	MOE SUBMISSION - STM EXTENDED SOUTH, SHORTENED NORTH	D.E.A.



DESIGN D.A.E.	KEELE STREET (Y.R. 6)	DWG. NO.
DRAWN CAD	KEELE ST. DRAINAGE PLAN	CONT. NO. 1
CHECKED D.A.	POST - DEVELOPMENT CONDITIONS	SHEET NO. 12





REVISIONS			
No.	DESCRIPTION	By	Date

- LEGEND:**
- DENOTES TOTAL FLOW CAPTURE AREA
  - DENOTES DRAINAGE AREA IN HECTARES
  - DENOTES CONSTANT FLOW IN m³/s
  - DENOTES OVERLAND FLOW ROUTE
  - DENOTES TOTAL AREA OF 100 YEAR CAPTURE
  - DENOTES MAJOR SYSTEM FLOW BOUNDARY

**BENCHMARK**  
 ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF VAUGHAN BENCHMARK No. 12-E CONCRETE BENCH MARK POST WEST SIDE OF BATHURST STREET 183m NORTH OF MAJOR MACKENZIE DRIVE HAVING A PUBLISHED ELEVATION OF 232.309m

REGISTERED PROFESSIONAL ENGINEER  
 H. O. TOZCU  
 APR 16, 10  
 PROVINCE OF ONTARIO

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF SCHAEFFERS CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION

\_\_\_\_\_  
 DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING DATE

**COUNTRY WIDE HOMES (THORNHILL ESTATES) INC.**

**SCHAEFFERS**  
CONSULTING ENGINEERS  
SCHAEFFER & ASSOCIATES LTD.

6 Ronrose Drive, Concord, Ontario L4K 4R3  
 Tel: (905) 738-6100  
 Fax: (905) 738-6875  
 E-mail: design@schaeffers.com

PROJECT No. **2007-3084** DRAWING No. **OL-1**

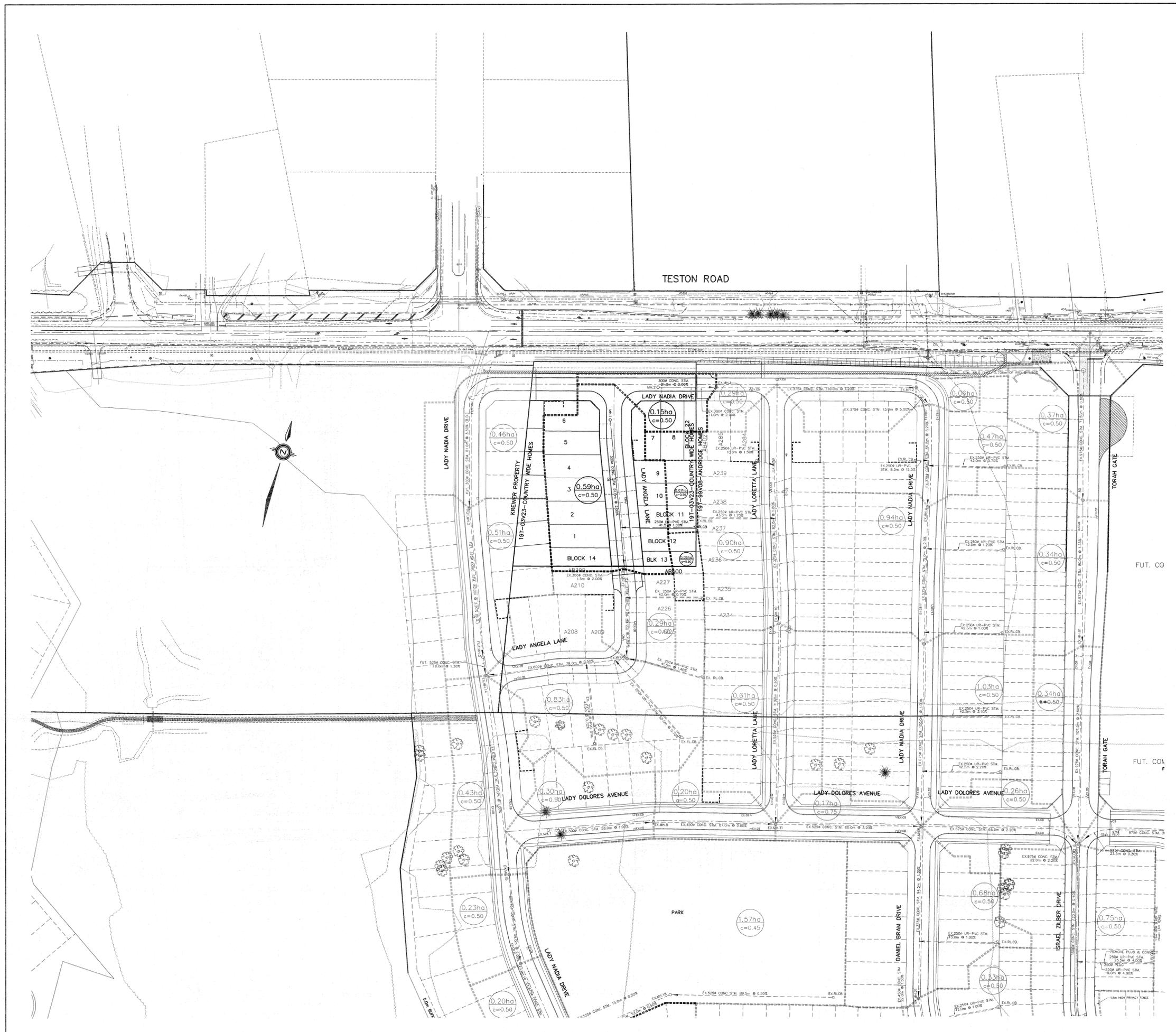
HORIZONTAL



19T-03V23

## OVERLAND FLOW

DESIGNED BY: T.D.	DATE: APRIL 2010	CHECKED BY: H.T.
DRAWN BY: W.L.		APPROVED BY:
SCALE: 1:4000		DWG. No.



REVISIONS			
No.	DESCRIPTION	By	Date



- LEGEND:**
- 1.32ha  
c=0.50 DENOTES DRAINAGE AREA IN HECTARES
  - 0.50 DENOTES RUNOFF COEFFICIENT
  - 0.50 DENOTES REAR LOT CATCHBASIN TRIBUTARY AREA
  - DENOTES DRAINAGE AREA BOUNDARY
  - DENOTES EXTERNAL PHASE DRAINAGE AREA BOUNDARY

- NOTES:**
- THE LOCATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITIES OF DAMAGE.
  - ALL AREAS DISTURBED DURING CONSTRUCTION OF SEWERS AND WATERMANS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE CITY OF VAUGHAN AND REGION OF YORK ENGINEERING DEPARTMENT. GRASSED AREAS TO BE TOPPED WITH 100mm TOPSOIL AND SODDED AS PER OPSD 218.01. ALL EXISTING SERVICES TO BE ADJUSTED TO SUIT NEW GRADES.
  - FOR GENERAL NOTES REFER TO DWG. No. GN-1

**BENCHMARK**  
 ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF VAUGHAN BENCHMARK No. 12-1 HAVING A PUBLISHED ELEVATION OF 232.309m

REGISTERED PROFESSIONAL ENGINEER  
 H. G. TOZCU  
 APR. 16, 10  
 PROVINCE OF ONTARIO

APPROVED AS TO FORM IN RELIANCE, UPON THE PROFESSIONAL SKILL AND ABILITY OF SCHAEFFERS CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATION

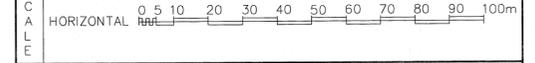
DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING    DATE

**COUNTRY WIDE HOMES (THORNHILL ESTATES) INC.**

**SCHAEFFERS**  
CONSULTING ENGINEERS  
SCHAEFFER & ASSOCIATES LTD.

6 Ronrose Drive, Concord, Ontario L4K 4R3  
 Tel: (905) 738-6100  
 Fax: (905) 738-6875  
 E-mail: design@schaeffers.com

PROJECT No. **2007-3084**    DRAWING No. **TA-1**



19T-03V23

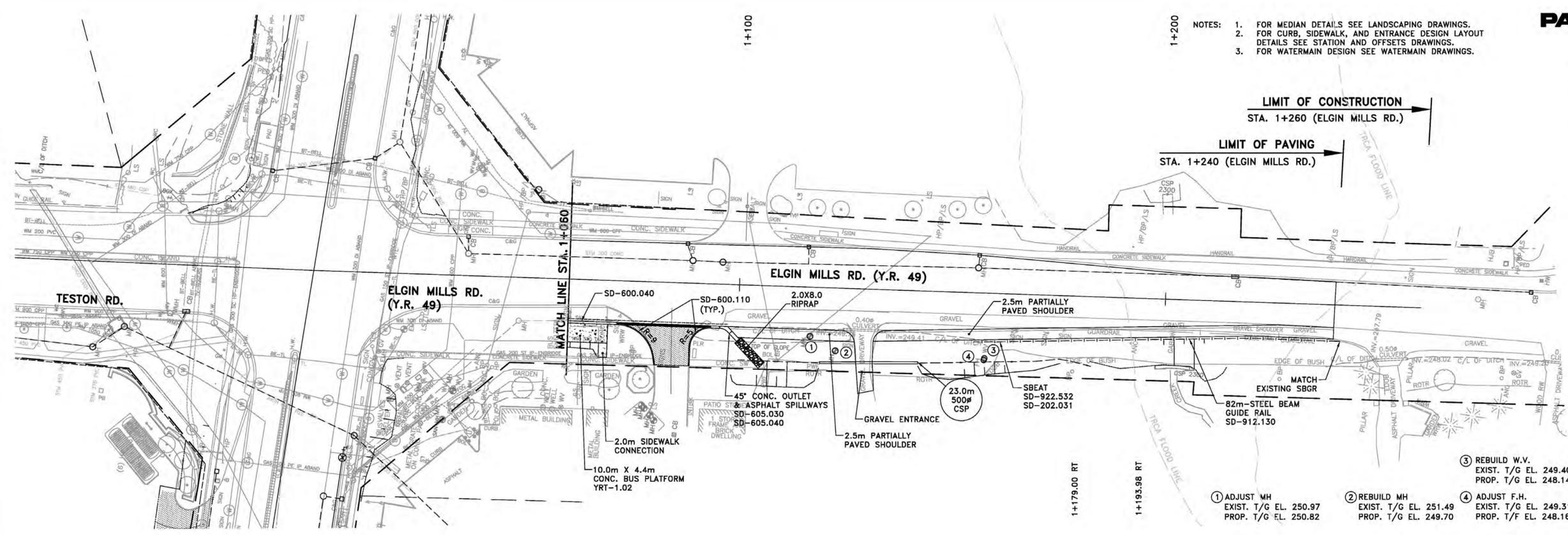
**STORM TRIBUTARY AREAS**

DESIGNED BY: T.D.	DATE: APRIL 2010	CHECKED BY: H.T.
DRAWN BY: T.D.		APPROVED BY: H.T.
SCALE: 1:1000		DWG. No.

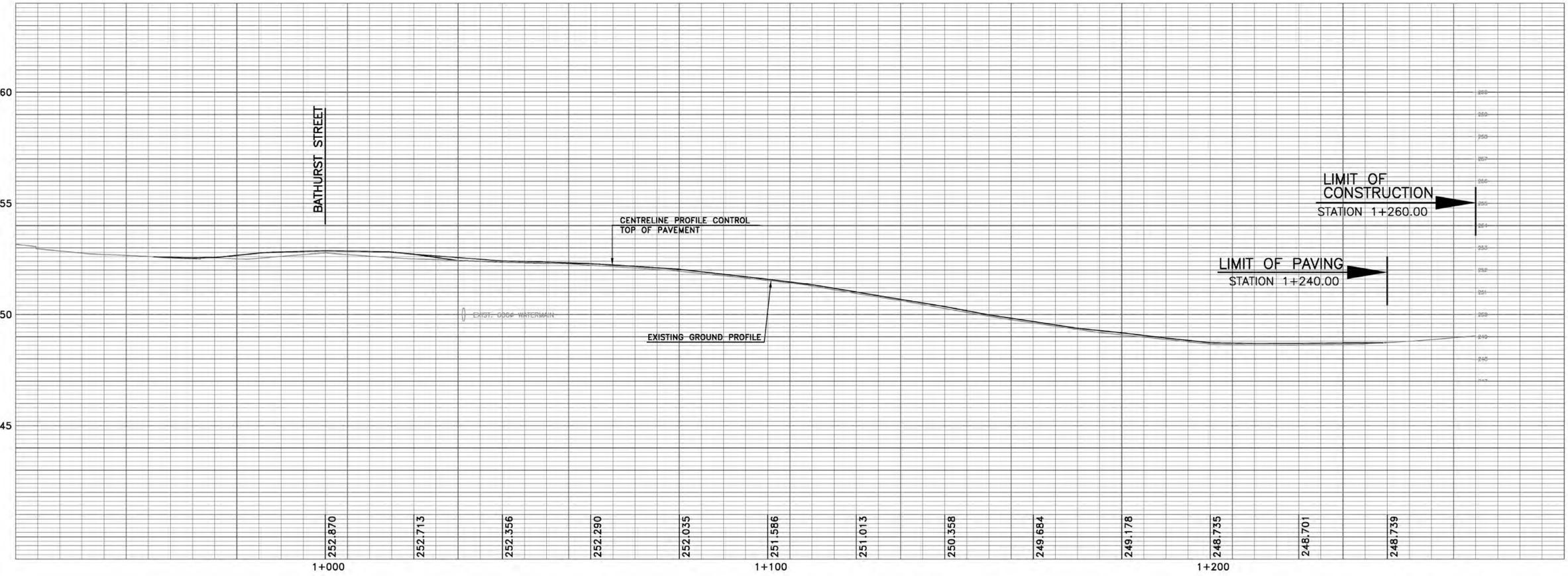




- NOTES:
1. FOR MEDIAN DETAILS SEE LANDSCAPING DRAWINGS.
  2. FOR CURB, SIDEWALK, AND ENTRANCE DESIGN LAYOUT DETAILS SEE STATION AND OFFSETS DRAWINGS.
  3. FOR WATERMAIN DESIGN SEE WATERMAIN DRAWINGS.

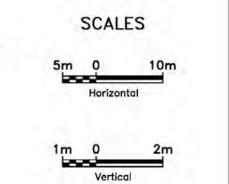


1. ADJUST MH  
EXIST. T/G EL. 250.97  
PROP. T/G EL. 250.82
2. REBUILD MH  
EXIST. T/G EL. 251.49  
PROP. T/G EL. 249.70
3. REBUILD W.V.  
EXIST. T/G EL. 249.40  
PROP. T/G EL. 248.14
4. ADJUST F.H.  
EXIST. T/G EL. 249.31  
PROP. T/G EL. 248.16



QUANTITIES

CUT	1615	m <sup>3</sup>
FILL	42	m <sup>3</sup>
STRIPPING	274	m <sup>3</sup>
DITCHING	-	m <sup>3</sup>
AVAIL. CUT	1615	m <sup>3</sup>



J:\TOR\T4014 - BATHURST 7 - TESTON DD\T\5 GENERAL\DATA\DRAWINGS\LAYOUTS\NEW CONSTRUCTION\BATHURST\_PLATES.DWG

NOTE:  
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STORM SEWERS:  
1. INVERT ELEVATIONS SHOWN ARE AT CENTRE-LINE OF CATCHBASIN OR MANHOLE.  
2. PIPE LENGTHS SHOWN ARE CENTRE-LINE TO CENTRE-LINE OF CATCHBASIN OR MANHOLE.  
3. OFFSETS SHOWN ARE TO CENTRE OF CATCHBASIN OR MANHOLE COVER.

No.	DATE	REVISIONS	BY
1	SEP-18	60% SUBMISSION	JK
2	DEC-17	90% SUBMISSION	JK



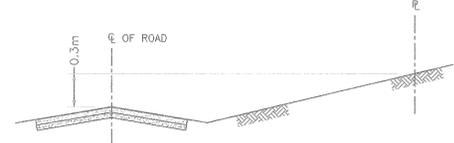
Transportation  
Services

DESIGN  
NM  
DRAWN  
JW  
CHECKED  
JK

ELGIN MILLS ROAD (Y.R. 49)  
NEW CONSTRUCTION  
PLAN AND PROFILE  
STA. 1+060 TO STA. 1+240

DWG. NO.  
P-XXXX-XX  
CONT. NO.  
8139/8286/  
8415  
SHEET NO.  
53

**TYPICAL ROAD VS. PROPERTY LINE ELEVATION DETAIL**  
N.T.S.



NOTE:  
AT THE TIME OF SITE PLAN SUBMISSION, FINAL GRADES AT PROPERTY LINE ARE TO BE MINIMUM 0.3m ABOVE CENTRELINE OF ROAD ELEVATIONS. CROSS SECTIONS REQUIRED AT THE TIME OF SITE PLAN SUBMISSION TO BE SUBMITTED TO THE REGION OF YORK.

**SWALE SCHEDULE**

SWALE	Q <sub>100</sub> (m <sup>3</sup> /s)	s (m/m)	d (m)	v (m/s)
A-A	0.12	0.024	0.19	1.06
B-B	0.24	0.013	0.28	0.99
C-C	0.13	0.027	0.20	1.13
D-D	0.29	0.025	0.27	1.34
E-E	0.53	0.016	0.37	1.31

**TYPICAL SECTION** N.T.S.



**GENERAL NOTES:**

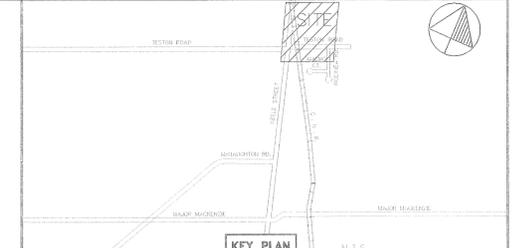
- ELEVATIONS ARE GEODETIC AND ARE DERIVED FROM: BENCH MARK NUMBER: 26-4 CITY OF VAUGHAN ELEVATION: 243.156 INSRIPTION: 26-4 DESCRIPTION: MAPLE COMMUNITY CENTRE ON WEST SIDE OF KEELE ST., 19.3m SOUTH OF NORTH-EAST CORNER OF BUILDING WITH SINGLE OVERHEAD SERVICE DOOR AND 5.10m EAST OF BUILDING CORNER JOG, 0.30m NORTH OF SOUTH-EAST CORNER PILLAR, 0.10m BELOW BRICKWORK ON EAST FACE, #10190 KEELE STREET.
- EXISTING ELEVATIONS TAKEN FROM TOPOGRAPHIC SURVEY BY STANTEC CONSULTING LTD. (FORMERLY STANLEY CONSULTING GROUP LTD. AND PARAGON ENGINEERING, RESPECTIVELY) IN FEBRUARY 1997.
- LEGAL SURVEY INFORMATION AND LOT FABRIC FROM CALCULATED PLAN BY HOLDING & JONES LIMITED JUNE 1998. EXISTING ELEVATIONS WITHIN KEELE STREET R.O.W. AND ALONG CENTRELINE OF TESTON ROAD BY HOLDING & JONES, JUNE 1998.
- BUILDINGS ARE NOT TO BE SITED WITH THIS DRAWING.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SEDIMENT AND EROSION CONTROL DRAWING AND WITH THE ISOPACH DRAWING, BOTH BY STANTEC CONSULTING LTD.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, SERVICE LOCATIONS AND INVERT ELEVATIONS, REPORTING ANY DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING, AND OBTAIN ALL UTILITY LOCATES AND ALL REQUIRED PERMITS/LOCKS PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL MAKE ALL NECESSARY ARRANGEMENTS WITH THE REGIONAL MUNICIPALITY OF YORK FOR WORK WITHIN THE TESTON ROAD AND KEELE STREET R.O.W.'S.
- CONSTRUCTION SHALL NOT BEGIN UNTIL APPROVAL IS OBTAINED FROM THE CITY OF VAUGHAN AND THE REGIONAL MUNICIPALITY OF YORK.
- ANY PROPOSED CHANGES SHALL BE APPROVED BY THE ENGINEER AND THE CITY OF VAUGHAN PRIOR TO CONSTRUCTION.
- UNLESS OTHERWISE NOTED ON THE DRAWINGS THE STANDARD CITY OF VAUGHAN DRAWINGS ARE TO CONSTITUTE PART OF THIS CONTRACT.
- ALL CONSTRUCTION WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
- SNOW FENCE TO BE INSTALLED AT A DISTANCE OF 2.0m AROUND EACH OF THE MONITORING WELLS ON THE PROPERTY (3-74, 4-74, 6-92, W1-97, W2-97, W3-97, W4-97 AND W7-97) FOR PROTECTION DURING GRADING OPERATIONS.
- CITY OF TORONTO TO PROVIDE WRITTEN APPROVAL TO NO OBJECTION TO GRADING WORK AROUND MONITORING WELLS.
- ALL FILL MATERIAL TO BE CLEAN AND FREE OF TRASH, RUBBISH, GLASS, LIQUID OR TOXIC CHEMICALS OR GARBAGE MATERIALS.
- NO DISTURBANCE OR GRADE CHANGE WITHIN 0.6m OF PROPERTY BOUNDARY WITHOUT WRITTEN CONSENT FROM ADJACENT NEIGHBOUR(S).

**RAILWAY CROSSING:**

- THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE OF RAILWAY PROPERTY.
- ONCE CONSTRUCTED, THE RAILWAY R.O.W. MUST BE RESTORED TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE RAILWAY. ANY FENCING REMOVED TO FACILITATE CONSTRUCTION MUST BE RESTORED.

**CONDITIONS OF APPROVAL:**

- THE FOLLOWING CONDITIONS MUST BE IMPLEMENTED PRIOR TO STRIPPING TOPSOIL OR GRADING:
- THE RESULTS OF THE PHASE 1 ESA TO BE PRESENTED AND CONCLUSIVELY INDICATE THAT OTHER IMPACTS ARE NOT PRESENT.
  - THE IMPACTED TOPSOIL REMOVAL PROGRAM IS COMPLETED AND CONFIRMATORY SAMPLES OF THE TOPSOIL AND UNDERLYING SOILS COMPLETED AFTER THE RESTORATION INDICATE THAT NO IMPACTS REMAIN.
  - A REPORT OR CERTIFICATE TO BE ISSUED BY THE ENVIRONMENTAL CONSULTANT OUTLINING THAT THE RESTORATION IS COMPLETE.



**LEGEND**

- PROPOSED ELEVATION
- EXISTING CONTOUR
- MONITORING WELL (BY STANTEC CONSULTING LTD.)
- MONITORING WELL (BY OTHERS)
- EXISTING LANDFILL GAS VENT

ALL WORK TO STOP IF ANY WASTE, LEACHATE ENCOUNTERED OR ANY LANDFILL RELATED ODOURS ENCOUNTERED AT PROPERTY BOUNDARIES RELATED TO THE GRADING WORK ON-SITE. FURTHERMORE, APPROPRIATE REMEDIAL ACTION IS TO BE TAKEN AS DETERMINED BY THE PROJECT ENGINEER(S).

**LEGAL:** PLAN 65R-20678 PART OF LOTS 26 AND 27 CONCESSION 3 CITY OF VAUGHAN THE REGIONAL MUNICIPALITY OF YORK.

**NOTE:** EXISTING WATERMAIN LOCATION INFORMATION OBTAINED FROM THE TOWN OF VAUGHAN ENGINEERING DRAWING P-52-1 & P-52-2 DATED SEPT 1982. ACTUAL LOCATION OF ALL WATERMAIN TO BE CONFIRMED PRIOR TO COMMENCEMENT OF SANITARY SEWER CONSTRUCTION.

**TOPOGRAPHIC:** TOPOGRAPHIC SURVEY OF KEELE STREET AND TESTON ROAD COMPLETED BY HOLDING & JONES LIMITED JUNE 28, JULY 2 1998. LEGAL INFORMATION FOR SITE OBTAINED FROM PLAN 65R-20678 PREPARED BY HOLDING & JONES LIMITED OCTOBER 1998.

**BENCH MARK:** MAPLE COMMUNITY CENTRE ON WEST SIDE OF KEELE STREET, 19.3m SOUTH OF NORTH-EAST CORNER OF BUILDING WITH SINGLE OVERHEAD SERVICE DOOR AND 5.10m EAST OF BUILDING CORNER JOG, 0.30m NORTH OF SOUTH-EAST CORNER PILLAR, 0.10m BELOW BRICKWORK ON EAST FACE, #10190 KEELE STREET. ADDITIONAL BENCHMARK INFORMATION TO BE PROVIDED BY STANTEC CONSULTING DURING CONSTRUCTION.

**JOB STATUS:**

12			
11			
10			
9			
8			
7			
6			
5	CNR APPROVAL	W.T.	MAR. 08/00
4	AS PER CITY OF VAUGHAN COMMENTS	C.E.S.	SEPT 01/99
3	FORMERLY SHEET 1 OF 3, REVISION 3	W.T.	APR 29/99
2	APPROVED FOR CONSTRUCTION	W.T.	MAR 18/99
1	AS PER CITY OF VAUGHAN COMMENTS	W.T.	MAR 11/99
0	AS PER CITY OF VAUGHAN COMMENTS	W.T.	AUG 19/98

**REVISIONS**

Stantec Consulting Ltd.  
2002 - 1700 Langstaff Road  
Concord ON Canada  
L4K 3S3  
Tel. (905) 761-6100  
Fax. (905) 761-6101  
www.stantec.com

ENGINEER'S STAMP:

APPROVED BY:

W. E. ROBINSON, P. ENG.  
DIRECTOR OF ENGINEERING  
DATE: August 14, 2000

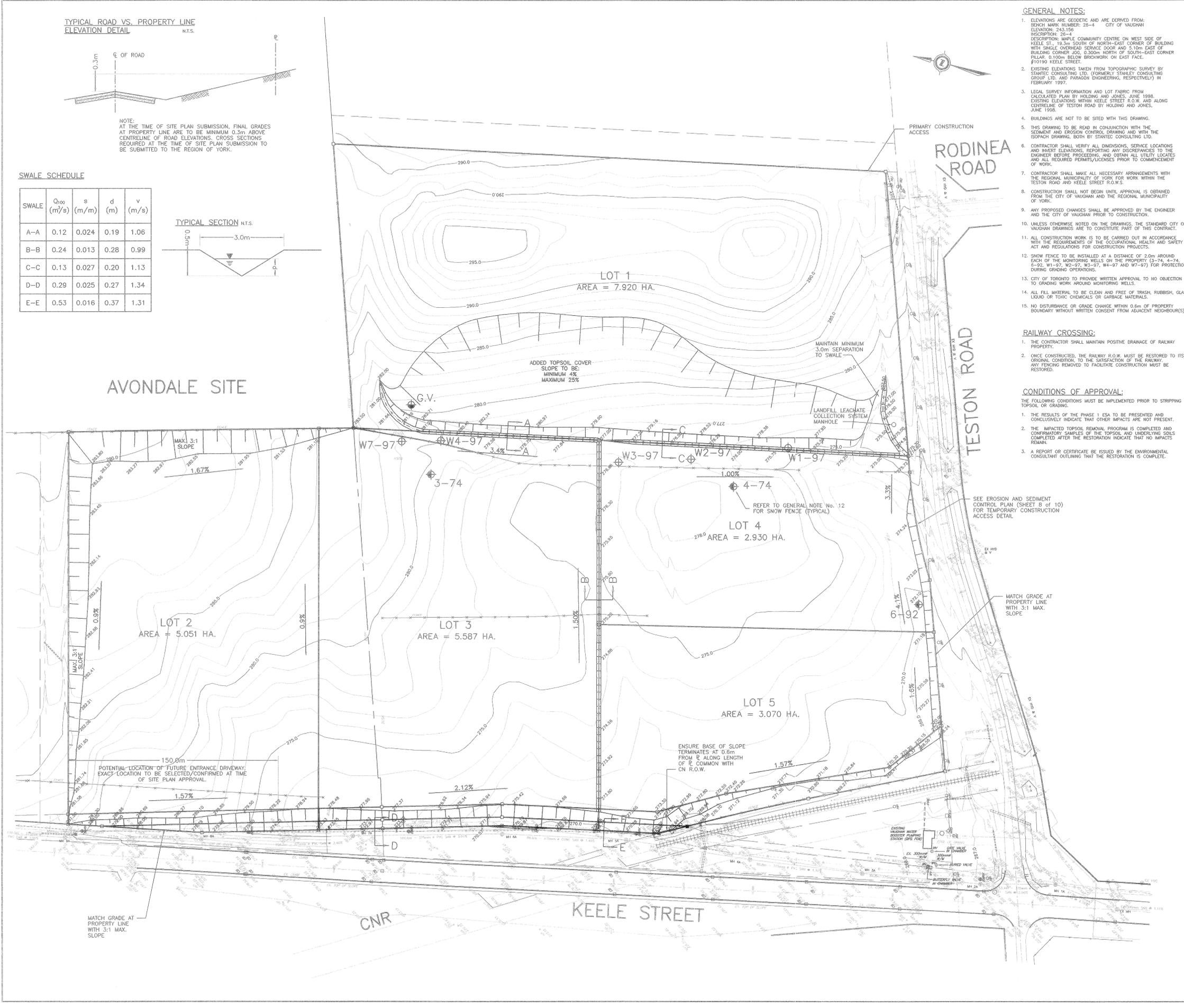


**GRADING PLAN**  
KEELE/TESTON INDUSTRIAL SUBDIVISION

**City of Vaughan**  
The City Above Toronto

**ENGINEERING DEPARTMENT**

DESIGNED BY: W.T.	DATE: APRIL 1999	CHECKED BY: D.E.A.
DRAWN BY: S.C.	SURVEYED BY:	APPROVED BY:
SCALE: HORIZONTAL: 1:1250	PROJ. No. 60607493	DWG. No. 3 of 10





original ground model:	C:\PROJ\7493\temp\7493n.ttn	Proposed model:	C:\PROJ\7493\temp\7493i.ttn
Area#	cut area	fill area	total area
1	61740.2	101291.6	163031.8
2	48912.1	155312.8	204224.9
3	202886.2	47573.4	-0.50
4	48912.1	155312.8	204224.9
5	202886.2	47573.4	-0.50
6	48912.1	155312.8	204224.9
7	202886.2	47573.4	-0.50
8	48912.1	155312.8	204224.9
9	202886.2	47573.4	-0.50
10	48912.1	155312.8	204224.9
11	202886.2	47573.4	-0.50
12	48912.1	155312.8	204224.9
13	202886.2	47573.4	-0.50
14	48912.1	155312.8	204224.9
15	202886.2	47573.4	-0.50
16	48912.1	155312.8	204224.9
17	202886.2	47573.4	-0.50
18	48912.1	155312.8	204224.9
19	202886.2	47573.4	-0.50
20	48912.1	155312.8	204224.9
21	202886.2	47573.4	-0.50
22	48912.1	155312.8	204224.9
23	202886.2	47573.4	-0.50
24	48912.1	155312.8	204224.9
25	202886.2	47573.4	-0.50
26	48912.1	155312.8	204224.9
27	202886.2	47573.4	-0.50
28	48912.1	155312.8	204224.9
29	202886.2	47573.4	-0.50
30	48912.1	155312.8	204224.9
31	202886.2	47573.4	-0.50
32	48912.1	155312.8	204224.9
33	202886.2	47573.4	-0.50
34	48912.1	155312.8	204224.9
35	202886.2	47573.4	-0.50
36	48912.1	155312.8	204224.9
37	202886.2	47573.4	-0.50
38	48912.1	155312.8	204224.9
39	202886.2	47573.4	-0.50
40	48912.1	155312.8	204224.9
41	202886.2	47573.4	-0.50
42	48912.1	155312.8	204224.9
43	202886.2	47573.4	-0.50
44	48912.1	155312.8	204224.9
45	202886.2	47573.4	-0.50
46	48912.1	155312.8	204224.9
47	202886.2	47573.4	-0.50
48	48912.1	155312.8	204224.9
49	202886.2	47573.4	-0.50
50	48912.1	155312.8	204224.9

AVONDALE SITE



RODINEA ROAD

TESTON ROAD

AREA = 7.920 HA.

AREA = 5.051 HA.

AREA = 5.587 HA.

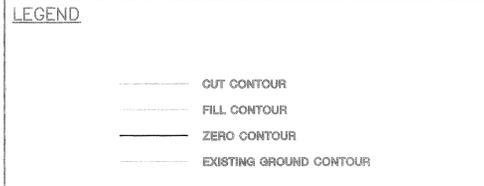
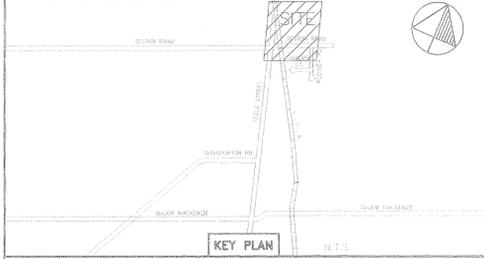
AREA = 2.930 HA.

AREA = 3.070 HA.

CNR

KEELE STREET

- GENERAL NOTES:**
- ELEVATIONS ARE GEODETIC AND ARE DERIVED FROM BENCH MARK NUMBER 26-4 CITY OF VAUGHAN ELEVATION: 243.156 DESCRIPTION: MAPLE COMMUNITY CENTRE ON WEST SIDE OF KEELE ST., 19.3m SOUTH OF NORTH-EAST CORNER OF BUILDING WITH SINGLE OVERHEAD SERVICE DOOR AND 5.10m EAST OF BUILDING CORNER JOG 0.500m NORTH OF SOUTH-EAST CORNER PILLAR 0.100m BELOW BRICKWORK ON EAST FACE, #10190 KEELE STREET.
  - EXISTING ELEVATIONS TAKEN FROM TOPOGRAPHIC SURVEY BY STANTEC CONSULTING LTD. (FORMERLY STANLEY CONSULTING GROUP LTD. AND PARAGON ENGINEERS, RESPECTIVELY) IN FEBRUARY 1997.
  - LEGAL SURVEY INFORMATION AND LOT FABRIC FROM CALCULATED FROM BY HOLDING AND JONES, JUNE 1988. EXISTING ELEVATIONS WITHIN KEELE STREET R.O.W. AND ALONG CENTRELINE OF TESTON ROAD BY HOLDING AND JONES, JUNE 1988.
  - SEE GRADING PLAN (SHEET 3 OF 10) FOR ADDITIONAL NOTES.



ALL WORK TO STOP IF ANY WASTE, LEACHATE ENCOUNTERED OR ANY LANDFILL RELATED ODOURS ENCOUNTERED AT PROPERTY BOUNDARIES RELATED TO THE GRADING WORK ON-SITE. FURTHERMORE, APPROPRIATE REMEDIAL ACTION IS TO BE TAKEN AS DETERMINED BY THE PROJECT ENGINEER(S).

**LEGAL:** PLAN 65R-20678 PART OF LOTS 26 AND 27 CONCESSION 3 CITY OF VAUGHAN THE REGIONAL MUNICIPALITY OF YORK.

**NOTE:** EXISTING WATERMAIN LOCATION INFORMATION OBTAINED FROM THE TOWN OF VAUGHAN ENGINEERING DRAWING P-52-1 & P-52-2 DATED SEPT 1982. ACTUAL LOCATION OF ALL WATERMAIN TO BE CONFIRMED PRIOR TO COMMENCEMENT OF SANITARY SEWER CONSTRUCTION.

**TOPOGRAPHIC:** TOPOGRAPHIC SURVEY OF KEELE STREET AND TESTON ROAD COMPLETED BY HOLDING & JONES LIMITED JUNE 28, JULY 2 1998. LEGAL INFORMATION FOR SITE OBTAINED FROM PLAN 65R-20678 PREPARED BY HOLDING & JONES LIMITED OCTOBER 1998.

**BENCH MARK 26-4**  
ELEV.=243.156  
MAPLE COMMUNITY CENTRE ON WEST SIDE OF KEELE STREET, 19.3m SOUTH OF NORTH-EAST CORNER OF BUILDING WITH SINGLE OVERHEAD SERVICE DOOR AND 5.10m EAST OF BUILDING CORNER JOG 0.30m NORTH OF SOUTH-EAST CORNER PILLAR 0.10m BELOW BRICKWORK ON EAST FACE, #10190 KEELE STREET. ADDITIONAL BENCHMARK INFORMATION TO BE PROVIDED BY STANTEC CONSULTING DURING CONSTRUCTION.

**JOB STATUS:**

12			
11			
10			
9			
8			
7			
6			
5	AS PER CITY OF VAUGHAN COMMENTS	C.E.S.	SEPT 01/99
4	FORMERLY SHEET 3 OF 3, REVISION 3	W.T.	APR 29/99
3	APPROVED FOR CONSTRUCTION	W.T.	MAR 18/99
2	ISSUED FOR TENDER (FORMERLY REV. No. 1)	J.J.	SEPT 30/98
1	AS PER CITY OF VAUGHAN COMMENTS	W.T.	AUG 19/98
NO.	DESCRIPTION	BY	DATE

**REVISIONS**

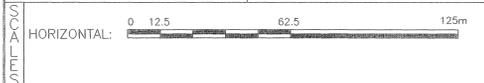
Stantec Consulting Ltd.  
2002 - 1700 Langstaff Road  
Concord ON Canada  
L4K 3S3  
Tel. (905) 761-6100  
Fax. (905) 761-6101  
www.stantec.com

**ENGINEER'S STAMP:**

**APPROVED BY:**

W. E. ROBINSON, P.ENG  
DIRECTOR OF ENGINEERING

DATE: \_\_\_\_\_



**VOLUMETRICS & ISOPACH**  
KEELE/TESTON INDUSTRIAL SUBDIVISION

**City of Vaughan**  
The City Above Toronto

**ENGINEERING DEPARTMENT**

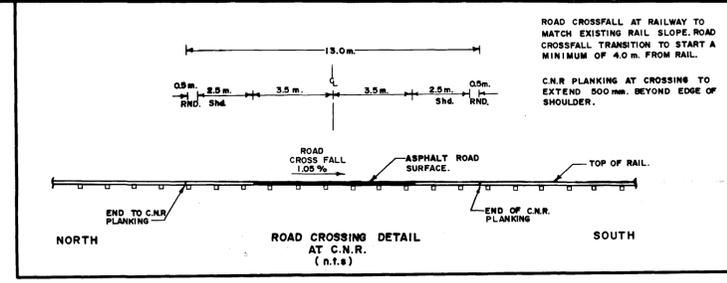
DESIGNED BY: W.T.	DATE: APRIL 1999	CHECKED BY: D.E.A.
DRAWN BY: S.C.	SURVEYED BY:	APPROVED BY:
SCALE: HORIZONTAL: 1:1250	PROJ. No. 60607493	DWG. No. 10 of 10
VERTICAL:		



# TESTON ROAD

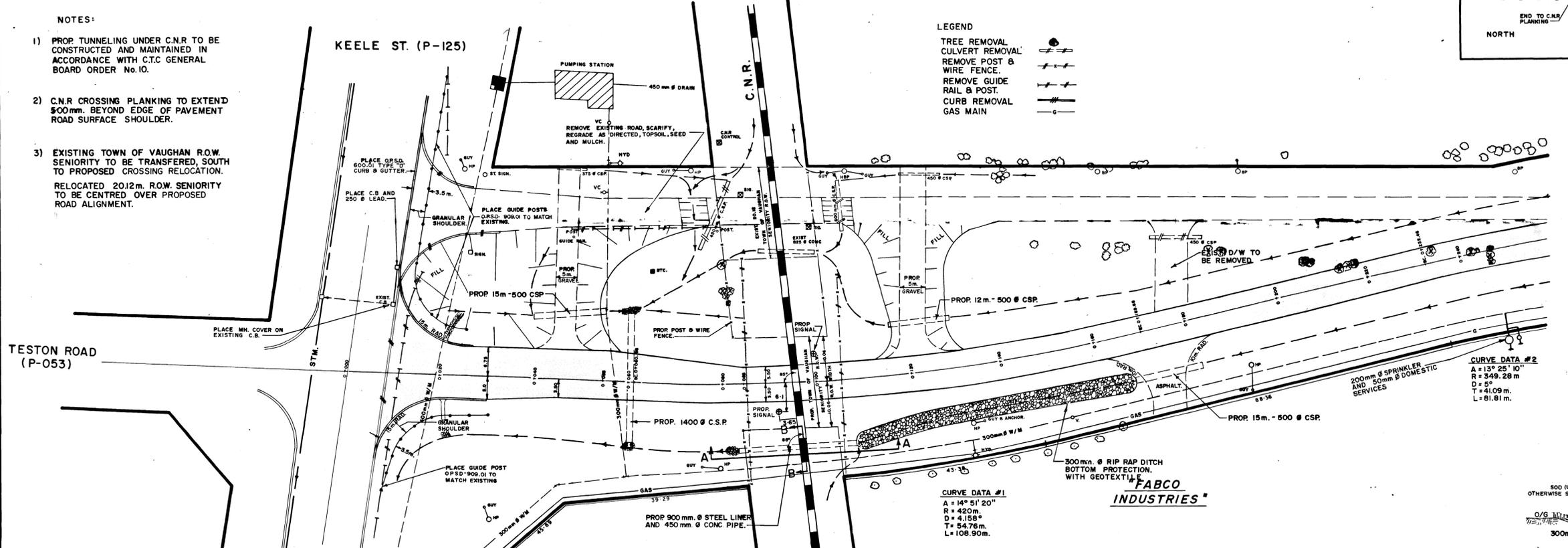
**NOTES:**

- 1) PROP. TUNNELING UNDER C.N.R. TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH C.T.C. GENERAL BOARD ORDER No.10.
- 2) C.N.R. CROSSING PLANKING TO EXTEND 500mm. BEYOND EDGE OF PAVEMENT ROAD SURFACE SHOULDER.
- 3) EXISTING TOWN OF VAUGHAN R.O.W. SENIORITY TO BE TRANSFERRED, SOUTH TO PROPOSED CROSSING RELOCATION. RELOCATED 20.12m. R.O.W. SENIORITY TO BE CENTRED OVER PROPOSED ROAD ALIGNMENT.



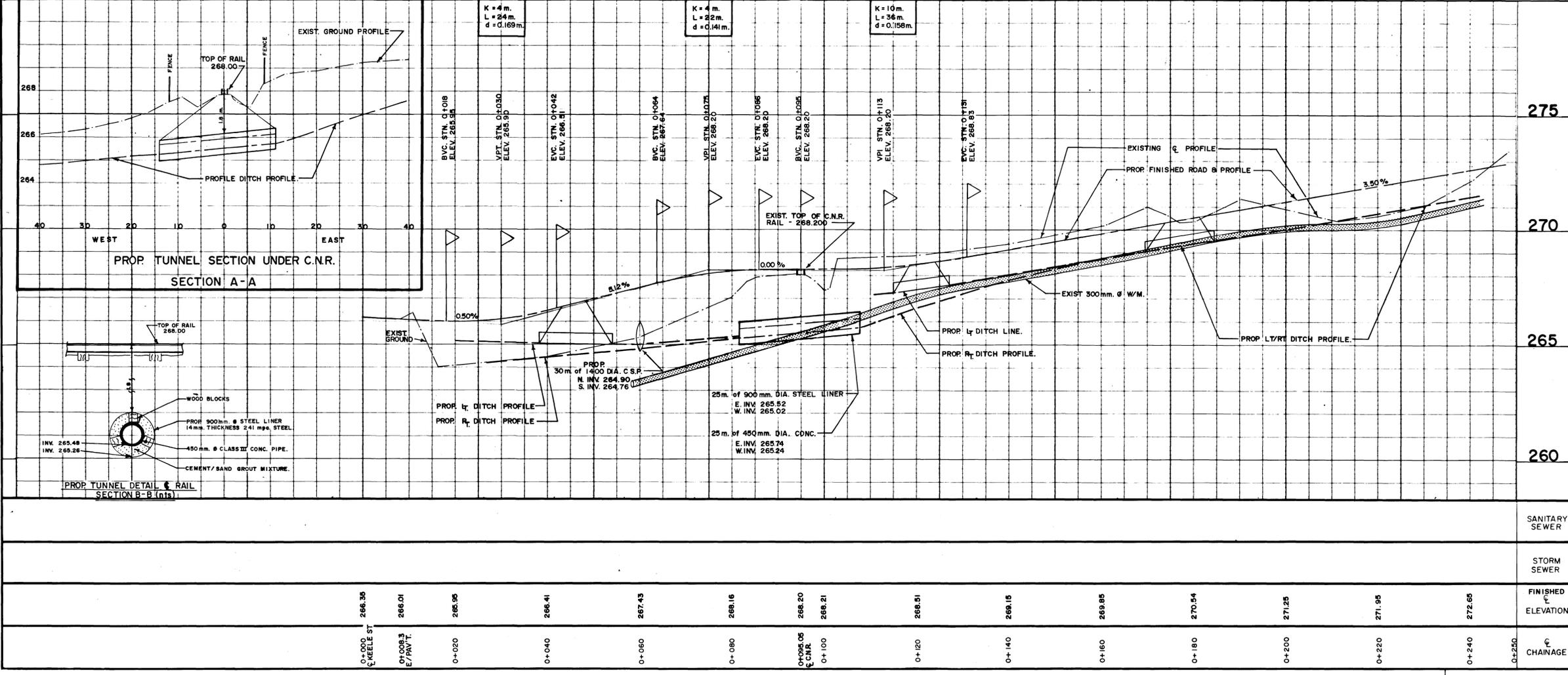
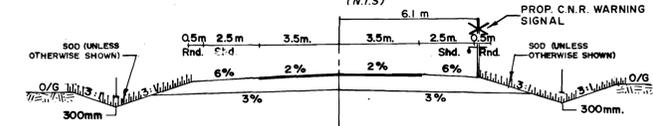
**LEGEND**

- TREE REMOVAL
- CULVERT REMOVAL
- REMOVE POST & WIRE FENCE
- REMOVE GUIDE RAIL & POST
- CURB REMOVAL
- GAS MAIN

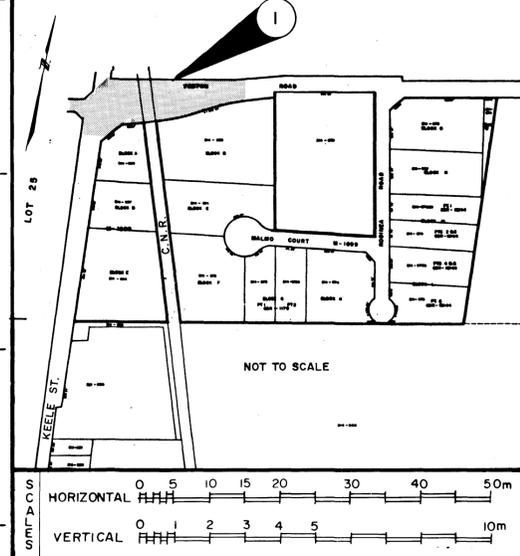


**PAVEMENT DESIGN :** 50 mm. HL 3. ASPHALT  
75 mm. HL 8 ASPHALT  
125 mm. GRAN. A LIMESTONE  
330 mm. 50mm Ø CRUSHED STONE

**TESTON ROAD TYPICAL ROAD SECTION (N.T.S.)**



REFERENCE DRAWINGS	
Dwg. No.	DESCRIPTION
M-1699	REGISTERED PLAN OF SUBDIVISION
S-52	PLAN OF SURVEY
64R-7545	REGISTERED PLAN OF SURVEY
64R-2485	REGISTERED PLAN OF SURVEY
64R-4901	REGISTERED PLAN OF SURVEY
64R-8032	REGISTERED PLAN OF SURVEY



**TOWN OF VAUGHAN**  
ENGINEERING DEPARTMENT

**TESTON ROAD**  
KEELE ST. to STA. 0+250

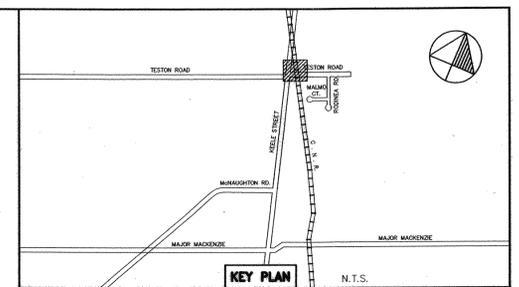
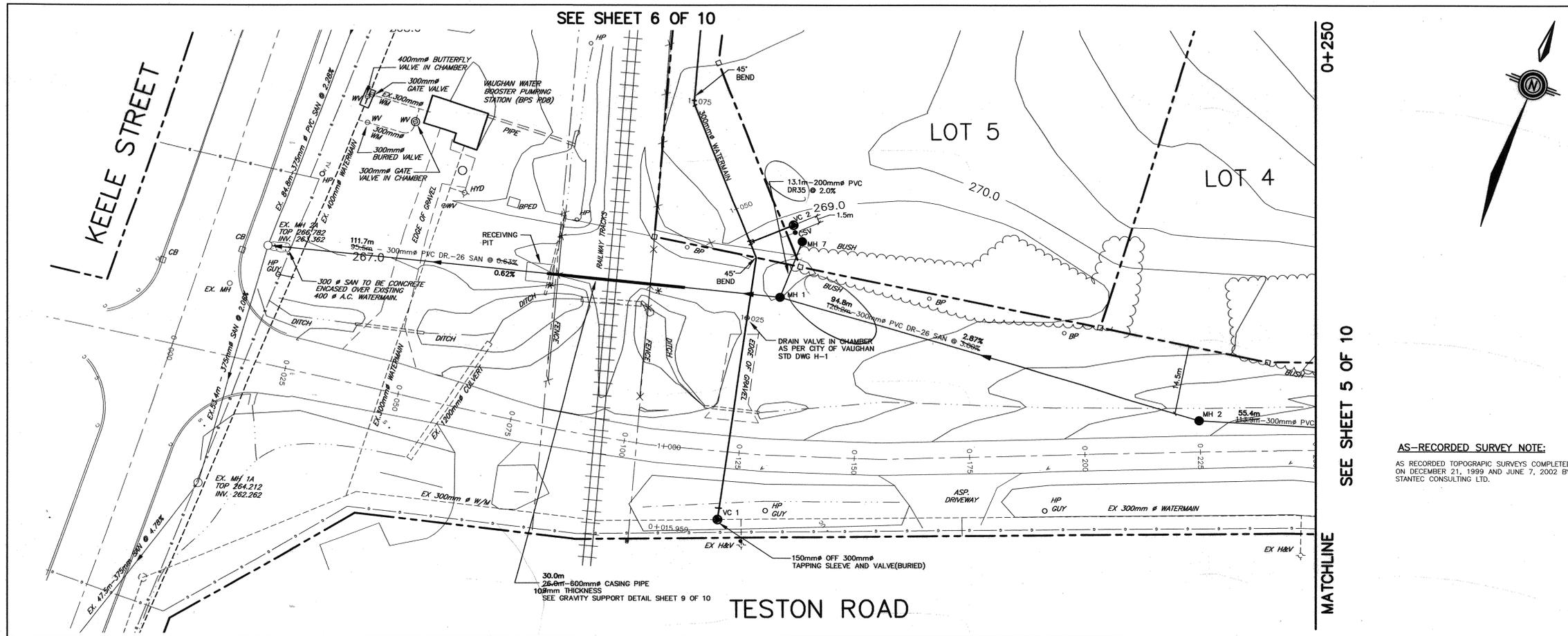
DESIGNED BY: K.D. YOUNG    DATE: SEPT. 1982    CHECKED BY: \_\_\_\_\_

DRAWN BY: W.R. PUGH    APPROVED BY: \_\_\_\_\_

SCALE: HORIZONTAL: 1:500    VERTICAL: 1:100

DWG. NO. P-52-1

CHAINAGE	ELEVATION
0+000	266.30
0+020	266.01
0+040	265.90
0+060	266.41
0+080	267.43
0+100	268.16
0+120	268.20
0+140	268.21
0+160	268.51
0+180	269.15
0+200	269.85
0+220	270.54
0+240	271.25
0+250	271.95
0+260	272.65



**LEGEND**

○	EXISTING MANHOLE	□	EXISTING BELL PEDESTAL
○	EXISTING CATCH BASIN	□	EXISTING LIGHT STANDARD
○	EXISTING WATER VALVE	□	STANDARD IRON BAR
○	EXISTING HYDRANT	○	ROUND IRON BAR
○	EXISTING GAS VALVE	○	DECIDUOUS TREE
○	EXISTING GAS MARKER	○	SIGN
○	EXISTING HYDRO GUY WIRE	○	EXISTING ELEVATION
○	EXISTING HYDRO POLE	○	LIMIT OF WOODED AREA
○	EXISTING BELL POLE	○	WARNING MARKERS (TO BE PLACED AT THE EDGE OF THE RAILWAY RIGHT OF WAY)
○	PROPOSED VALVE CHAMBER		
○	PROPOSED HYDRANT AND VALVE		
○	PROPOSED MANHOLE		
○	PROPOSED ELEVATION		
○	AS RECORDED ELEVATION		

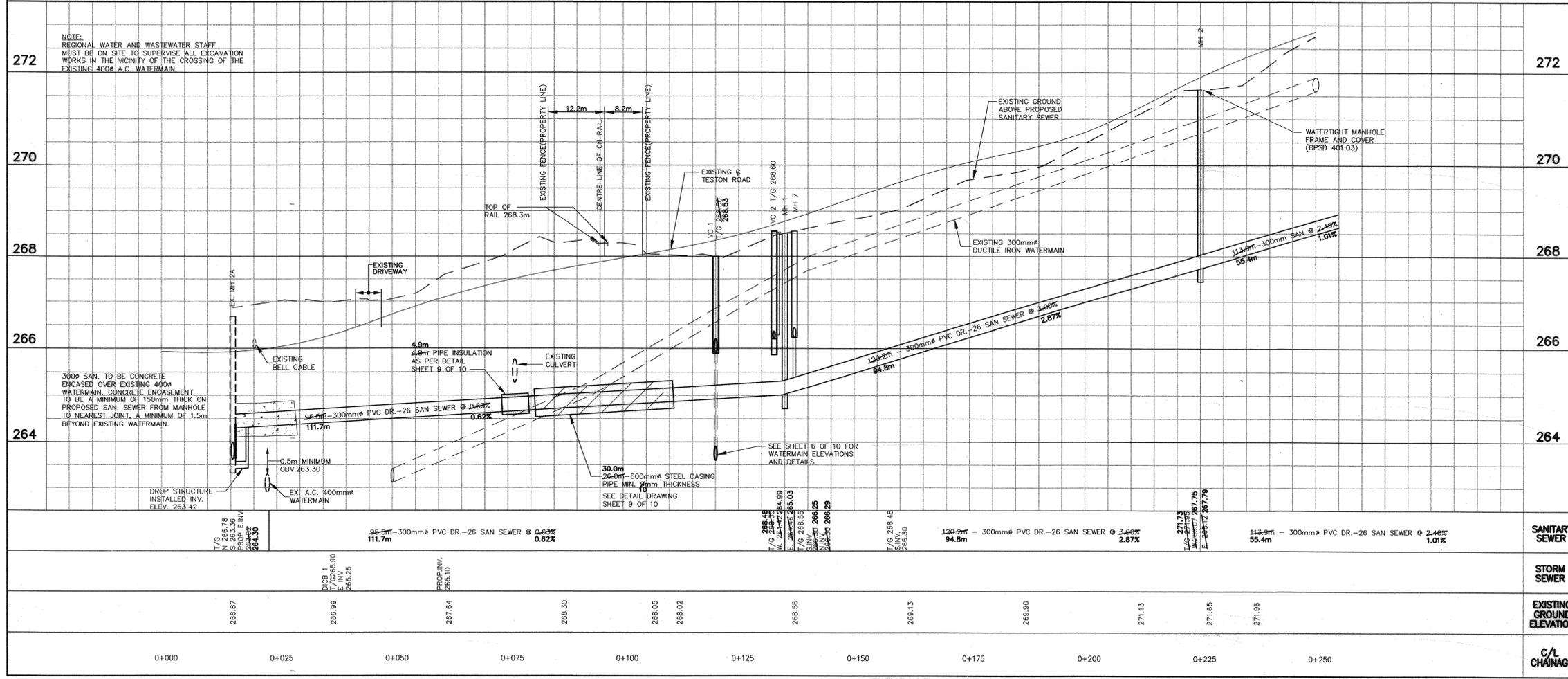
**AS-RECORDED SURVEY NOTE:**  
 AS RECORDED TOPOGRAPHIC SURVEYS COMPLETED ON DECEMBER 21, 1999 AND JUNE 7, 2002 BY STANTEC CONSULTING LTD.

**LEGAL:** PLAN 65R-20678 PART OF LOTS 26 AND 27 CONCESSION 3 CITY OF VAUGHAN THE REGIONAL MUNICIPALITY OF YORK.

**NOTE:** EXISTING WATERMAIN LOCATION INFORMATION OBTAINED FROM THE TOWN OF VAUGHAN ENGINEERING DRAWING P-52-1 & P-52-2 DATED SEPT 1982. ACTUAL LOCATION OF ALL WATERMAIN TO BE CONFIRMED PRIOR TO COMMENCEMENT OF SANITARY SEWER CONSTRUCTION.

**TOPOGRAPHIC:** TOPOGRAPHIC SURVEY OF KEELE STREET AND TESTON ROAD COMPLETED BY HOLDING & JONES LIMITED JUNE 26, JULY 2, 1998. LEGAL INFORMATION FOR SITE OBTAINED FROM PLAN 65R-20678 PREPARED BY HOLDING & JONES LIMITED OCTOBER 1998.

**BENCH MARK:** MAPLE COMMUNITY CENTRE ON WEST SIDE OF KEELE STREET, 19.3m SOUTH OF NORTH-EAST CORNER OF BUILDING WITH SINGLE OVERHEAD SERVICE DOOR AND 5.10m EAST OF BUILDING CORNER JOG, 0.30m NORTH OF SOUTH-EAST CORNER PILLAR 0.10m BELOW BRICKWORK ON EAST FACE, #10190 KEELE STREET. ADDITIONAL BENCHMARK INFORMATION TO BE PROVIDED BY STANTEC CONSULTING DURING CONSTRUCTION.



**JOB STATUS:**

11		
10		
9		
8		
7		
6		
5		
4		
3	AS RECORDED	M.M. OCT 15/02
2	REGION OF YORK COMMENTS	C.E.S. SEPT 01/99
1	REGION OF YORK COMMENTS	W.T. APR 29/99

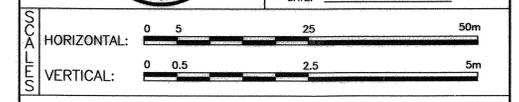
**REVISIONS**

NO.	DESCRIPTION	BY	DATE
3	AS RECORDED	M.M.	OCT 15/02
2	REGION OF YORK COMMENTS	C.E.S.	SEPT 01/99
1	REGION OF YORK COMMENTS	W.T.	APR 29/99

**ENGINEER'S STAMP:**

**APPROVED BY:**

W. E. ROBINSON, P.ENG  
 DIRECTOR OF ENGINEERING

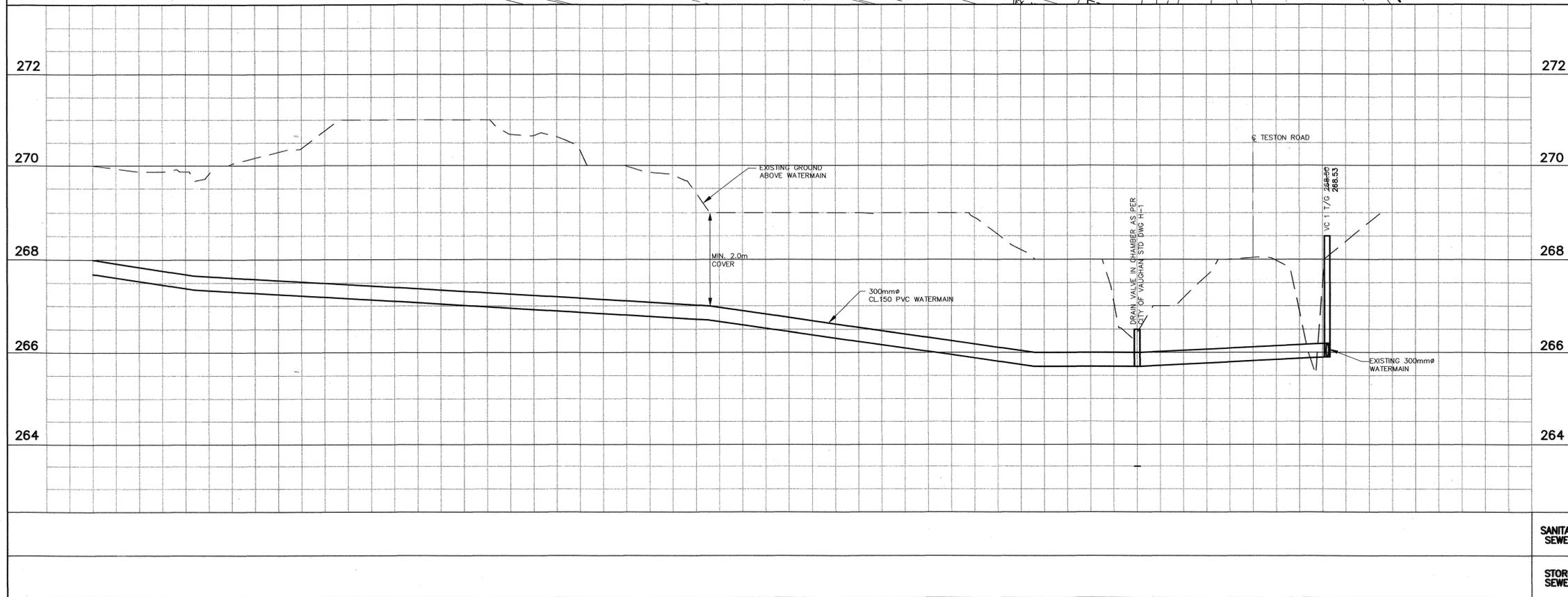
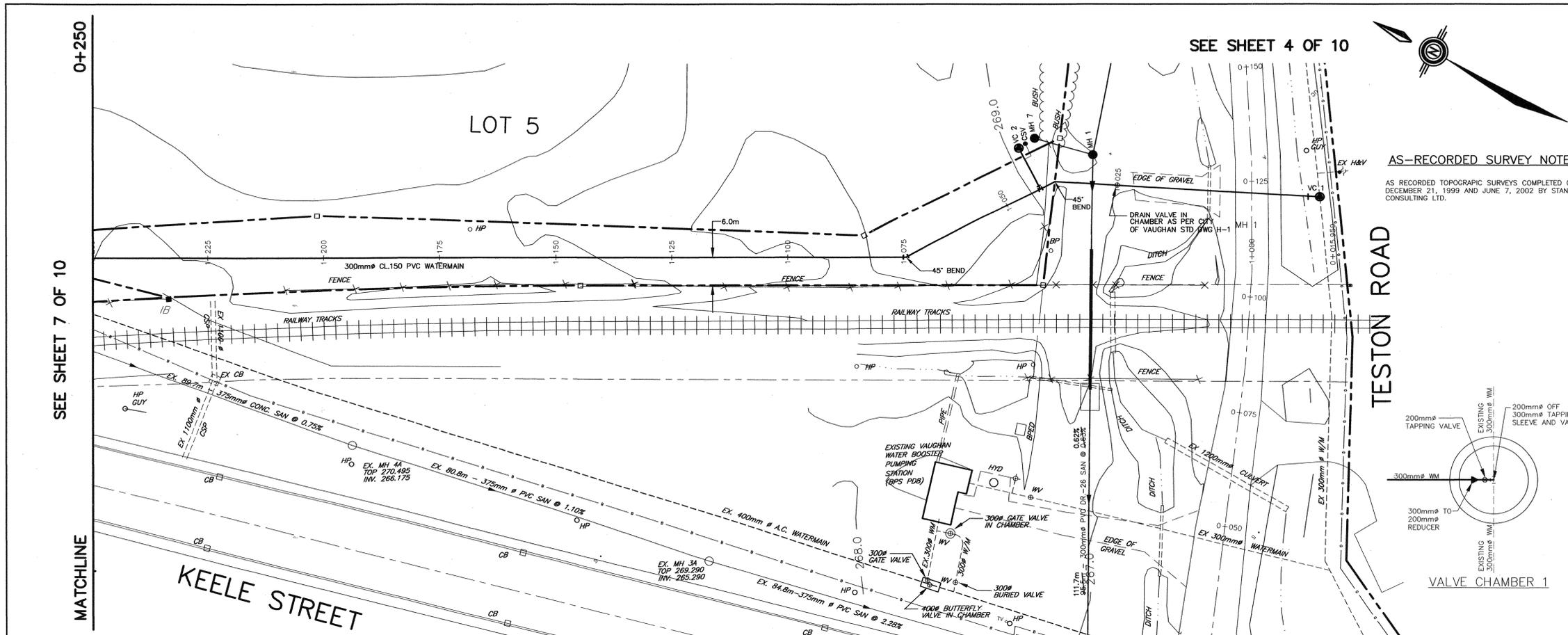


**TESTON ROAD**  
 KEELE/TESTON INDUSTRIAL SUBDIVISION  
 PLAN & PROFILE STA. 0+000 TO STA. 0+250

**City of Vaughan**  
*The City Above Toronto*

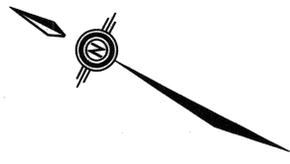
**ENGINEERING DEPARTMENT**

DESIGNED BY: D.E.L.	DATE: APRIL 1999	CHECKED BY: D.E.B.
DRAWN BY: J.J.L.	SURVEYED BY:	APPROVED BY: W.E.R.
SCALE:	PROJ. No.	DWG. No.
HORIZONTAL: 1:500	60607493	4 of 10
VERTICAL: 1:50		

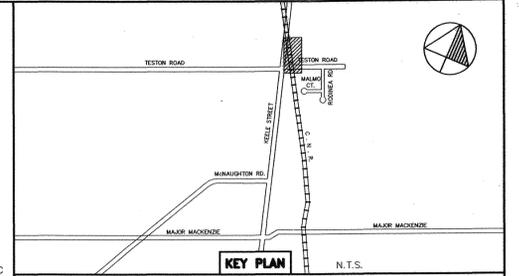


270.00	269.81	270.76	271.00	270.63	269.79	269.00	268.00	268.21	266.42	266.04	267.10
1+250	1+225	1+200	1+175	1+150	1+125	1+100	1+075	1+050	1+025	1+000	-1+015.959

SEE SHEET 4 OF 10



**AS-RECORDED SURVEY NOTE:**  
 AS RECORDED TOPOGRAPHIC SURVEYS COMPLETED ON DECEMBER 21, 1999 AND JUNE 7, 2002 BY STANTEC CONSULTING LTD.



**LEGEND**

○	EXISTING MANHOLE	□	EXISTING BELL PEDESTAL
□	EXISTING CATCH BASIN	○	EXISTING LIGHT STANDARD
⊗	EXISTING WATER VALVE	□	STANDARD IRON BAR
⊕	EXISTING HYDRANT	●	ROUND IRON BAR
⊘	EXISTING GAS VALVE	○	DECIDUOUS TREE
⊙	EXISTING GAS MARKER	○	SIGN
—	EXISTING HYDRO GUY WIRE	—	EXISTING ELEVATION
○	EXISTING HYDRO POLE	—	LIMIT OF WOODED AREA
○	EXISTING BELL POLE	○	AS RECORDED ELEVATION
●	PROPOSED VALVE CHAMBER		
+	PROPOSED HYDRANT AND VALVE		
○	PROPOSED MANHOLE		
○	PROPOSED ELEVATION		

**LEGAL**  
 PLAN 65R-20678 PART OF LOTS 26 AND 27 CONCESSION 3 CITY OF VAUGHAN THE REGIONAL MUNICIPALITY OF YORK.

**NOTE:**  
 EXISTING WATERMAIN LOCATION INFORMATION OBTAINED FROM THE TOWN OF VAUGHAN ENGINEERING DRAWING P-52-1 & P-52-2 DATED SEPT 1982. ACTUAL LOCATION OF ALL WATERMAIN TO BE CONFIRMED PRIOR TO COMMENCEMENT OF SANITARY SEWER CONSTRUCTION.

**TOPOGRAPHIC**  
 TOPOGRAPHIC SURVEY OF KEELE STREET AND TESTON ROAD COMPLETED BY HOLDING & JONES LIMITED JUNE 28, JULY 2 1998. LEGAL INFORMATION FOR SITE OBTAINED FROM PLAN 65R-20678 PREPARED BY HOLDING & JONES LIMITED OCTOBER 1998.

**BENCH MARK**  
 MAPLE COMMUNITY CENTRE ON WEST SIDE OF KEELE STREET, 19.3m SOUTH OF NORTH-EAST CORNER OF BUILDING WITH SINGLE OVERHEAD SERVICE DOOR AND 5.10m EAST OF BUILDING CORNER JOG, 0.30m NORTH OF SOUTH-EAST CORNER PILLAR 0.10m BELOW BRICKWORK ON EAST FACE, #01090 KEELE STREET. ADDITIONAL BENCHMARK INFORMATION TO BE PROVIDED BY STANTEC CONSULTING DURING CONSTRUCTION.

**JOB STATUS:**

11			
10			
9			
8			
7			
6			
5			
4			
3	AS RECORDED	M.M.	OCT 15/02
2	REGION OF YORK COMMENTS	C.E.S.	SEPT 01/99
1	REGION OF YORK COMMENTS	W.T.	APR 29/99
NO.	DESCRIPTION	BY	DATE

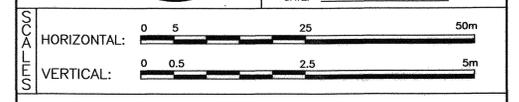
**REVISIONS**

Stantec Consulting Ltd.  
 300 - 7270 Woodbine Avenue  
 Markham ON Canada  
 L3R 4B9  
 Tel. (905) 474-0455  
 Fax. (905) 474-9889  
 www.stantec.com

**ENGINEER'S STAMP:**

**APPROVED BY:**

W. E. ROBINSON, P.ENG  
 DIRECTOR OF ENGINEERING  
 DATE: \_\_\_\_\_

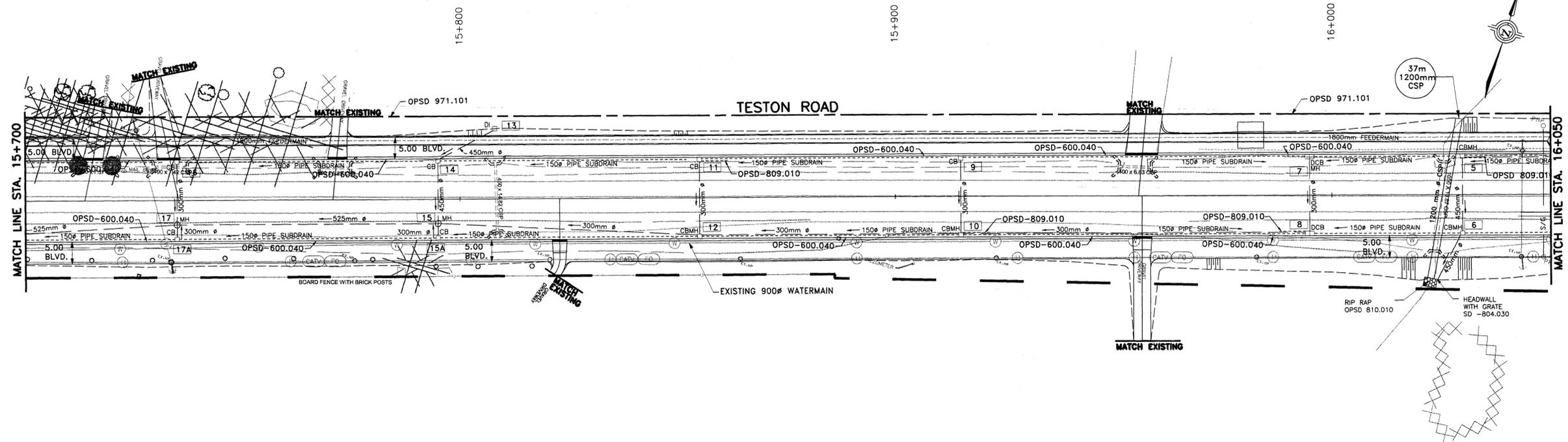


**PROPOSED WATERMAIN**  
 KEELE/TESTON INDUSTRIAL SUBDIVISION  
 PLAN & PROFILE STA.-1+015.959 TO STA.1+250

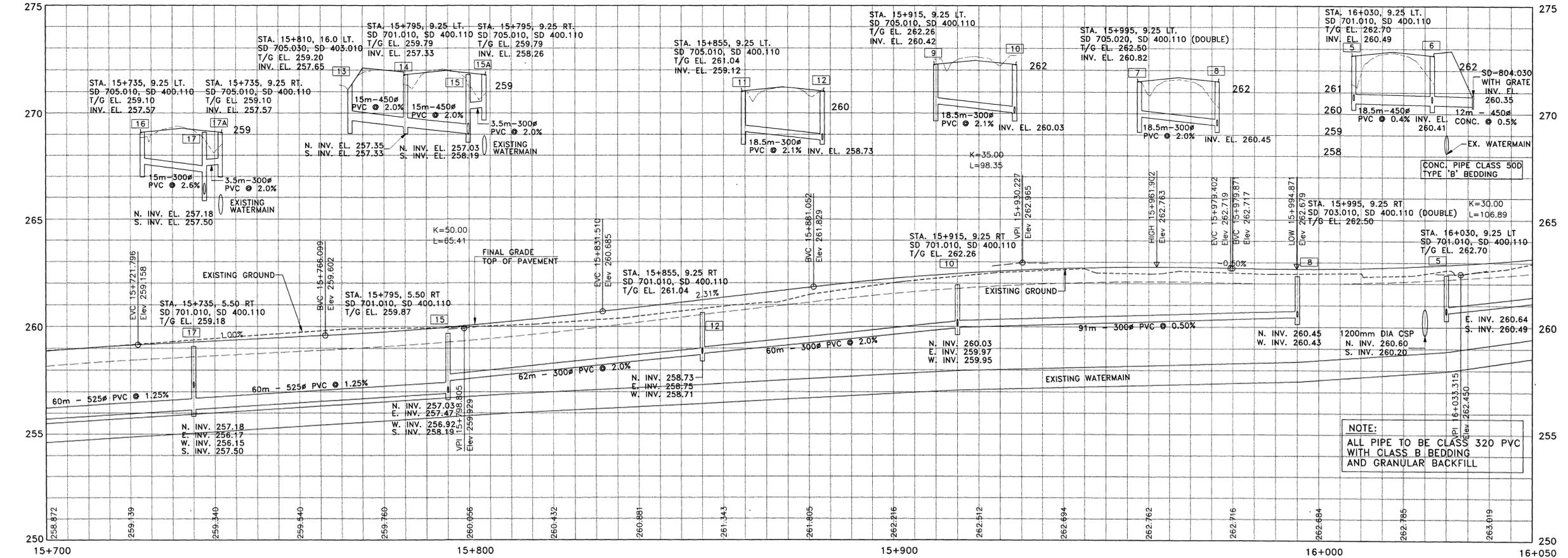
**City of Vaughan**  
*The City Above Toronto*

**ENGINEERING DEPARTMENT**

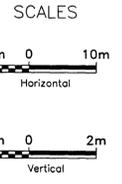
DESIGNED BY: D.E.L.	DATE: APRIL 1999	CHECKED BY: D.E.B.
DRAWN BY: J.J.L.	SURVEYED BY:	APPROVED BY: W.E.R.
SCALE: HORIZONTAL: 1:500 VERTICAL: 1:50	PROJ. No. 60607493	DWG. No. 6 OF 10



NOTE : SUPERELEVATED CURB SHALL NOT BE USED ANYWHERE ALONG TESTON ROAD



NOTE:  
ALL PIPE TO BE CLASS 320 PVC  
WITH CLASS B BEDDING  
AND GRANULAR BACKFILL



NOTE:  
THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE DURING CONSTRUCTION.

- STORM SEWERS:
1. INVERT ELEVATIONS SHOWN ARE AT CENTRE-LINE OF CATCHBASIN OR MANHOLE.
  2. PIPE LENGTHS SHOWN ARE CENTRE-LINE TO CENTRE-LINE OF CATCHBASIN OR MANHOLE.
  3. OFFSETS SHOWN ARE TO CENTRE OF CATCHBASIN OR MANHOLE COVER.

No.	DATE	REVISIONS	BY
1	05/06/05	REVISED FOR FINAL MOEE APPROVALS	NC

DESIGN JBA, NC	TESTON ROAD (Y.R. 49) NEW CONSTRUCTION STA. 15+700 TO STA. 16+050	DWG. NO. P-1093-035
DRAWN NC, P.J, LL		CONT. NO. P-03-04
CHECKED PW, KH		SHEET NO. 26