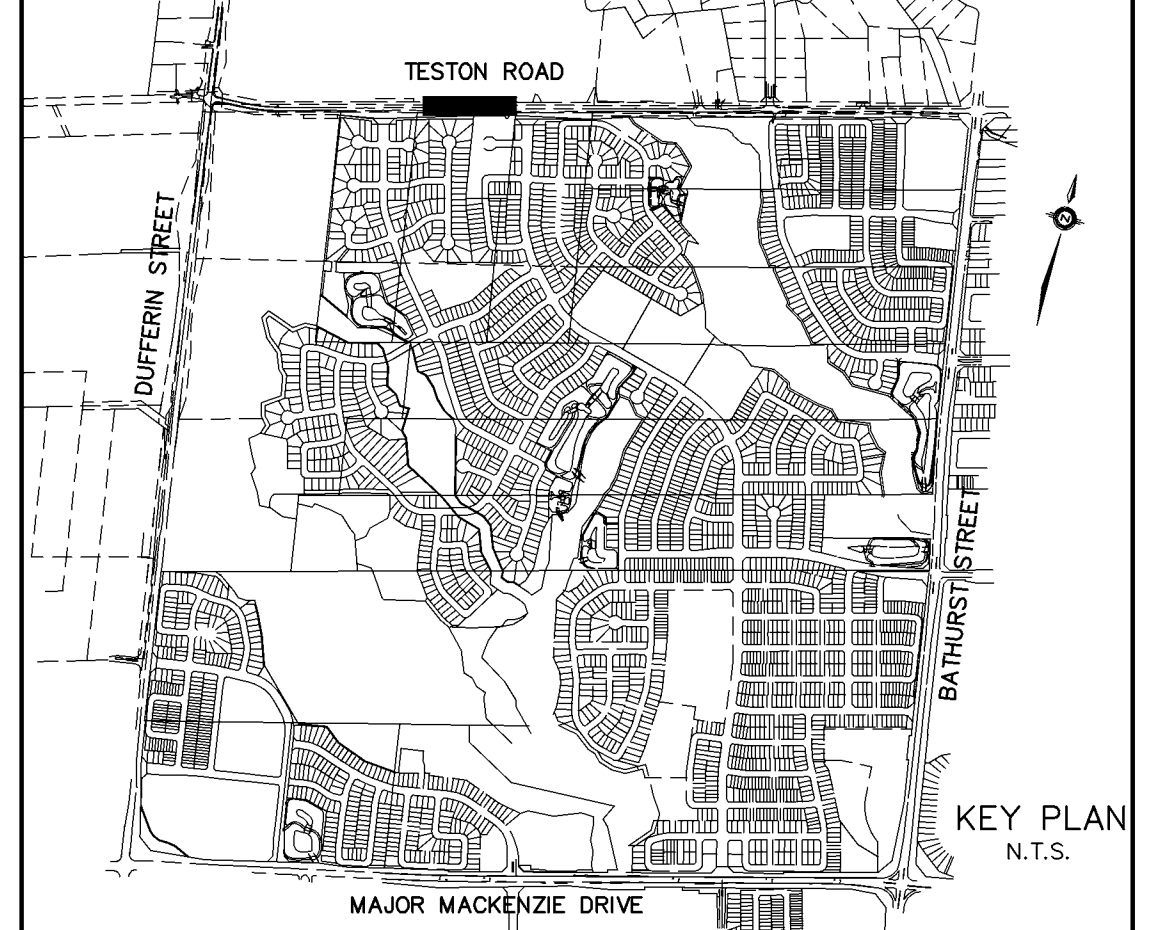


ROAD WIDENING WORKS ON TESTON ROAD
ROAD BY GIFFELS CONSULTING

REFER TO
DWG. No. PP-44

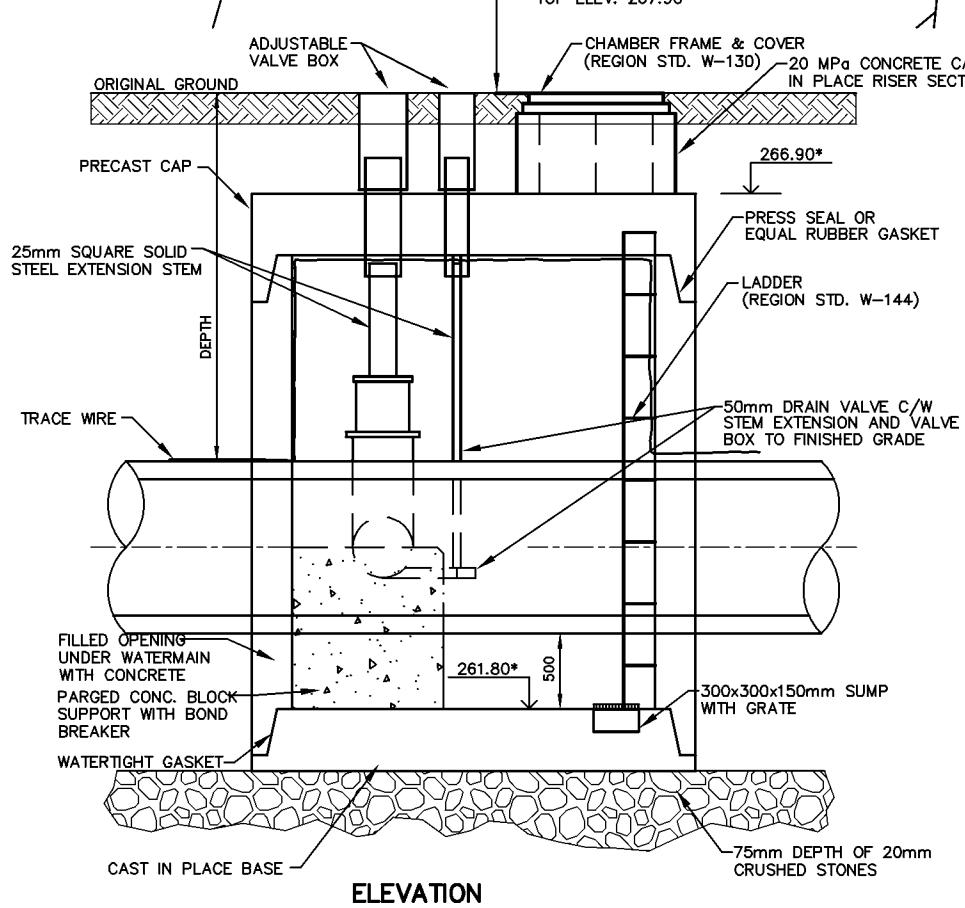
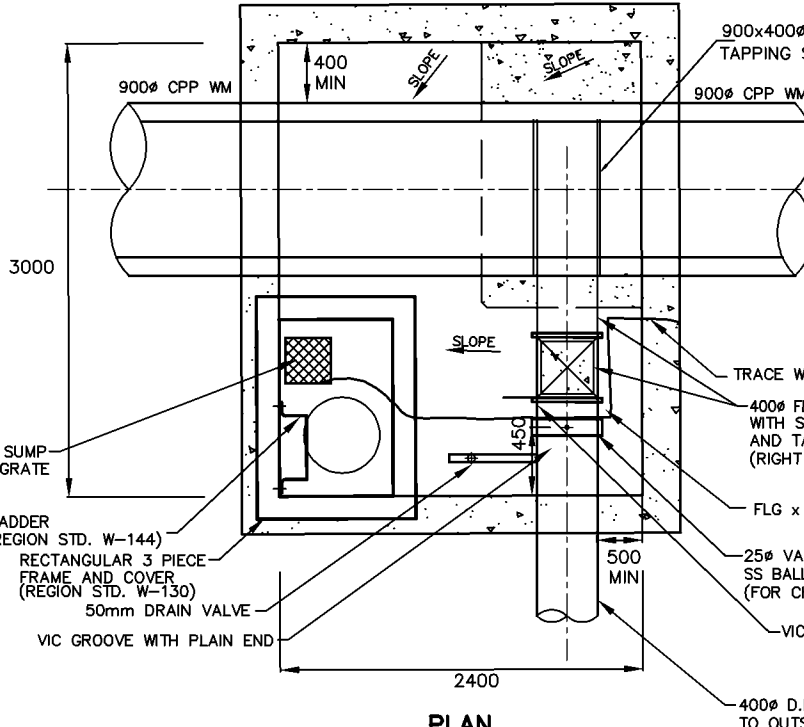
REFER TO
DWG. No. PP-46

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: 1:30

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
- e) PROVIDED 300x300x150mm DEEP SLUMP 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) THE BACKFILL OF THE CONNECTIONS TO THE 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

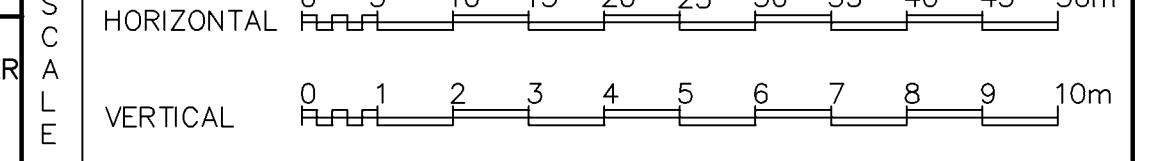
DIRECTOR OF DEVELOPMENT/ TRANSPORTATION ENGINEERING DATE

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

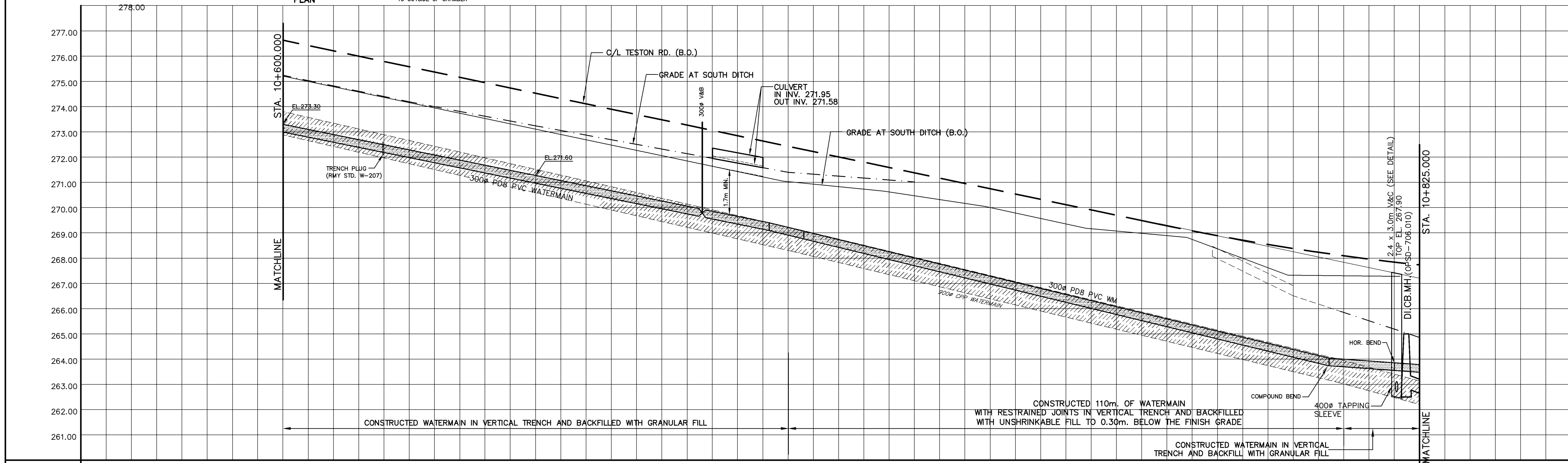
PROJECT No. 2004-2644 DRAWING No. PP-45



Vaughan
The City Above Toronto

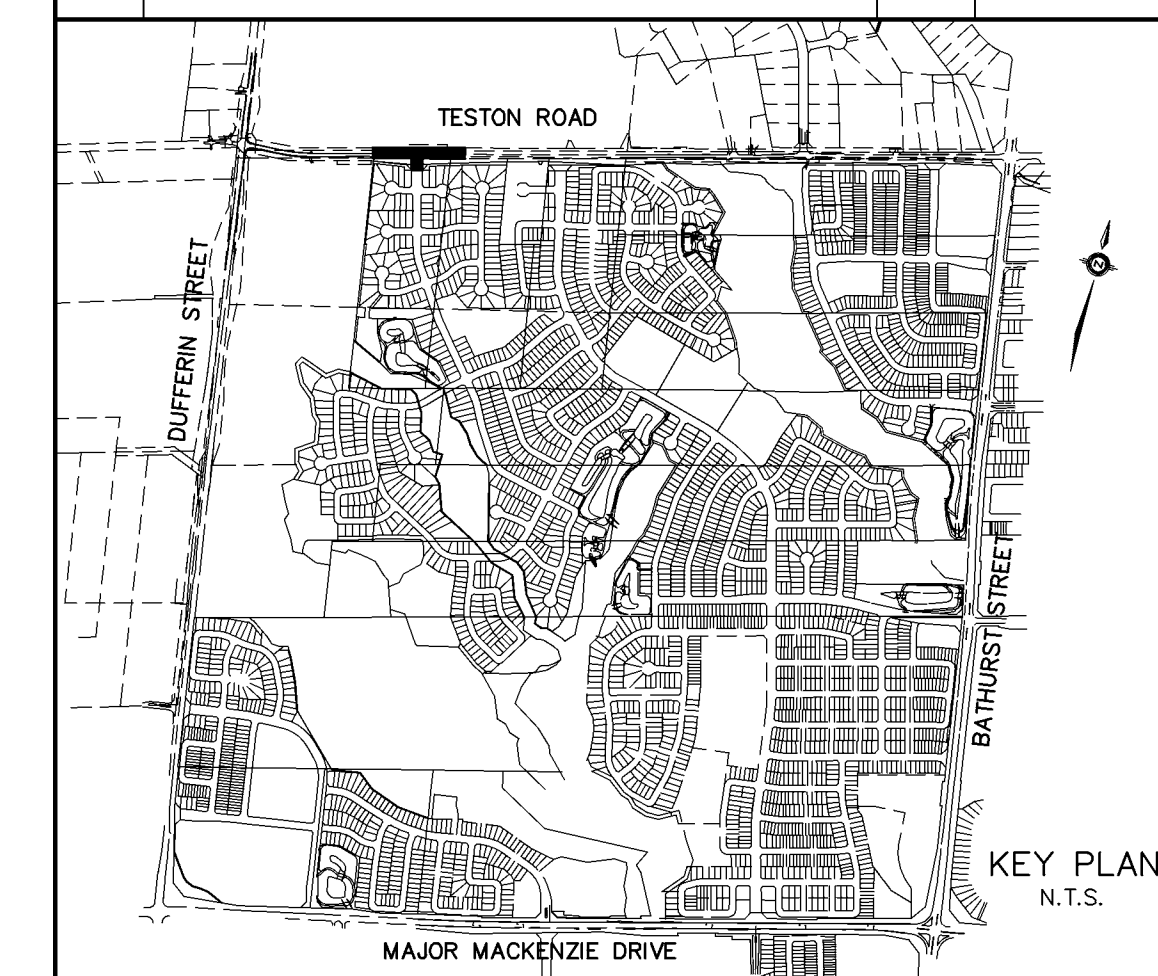
PLAN AND PROFILE OF WATERMAIN ON TESTON ROAD
FROM STA. 10+600.000 TO STA. 10+825.000

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		

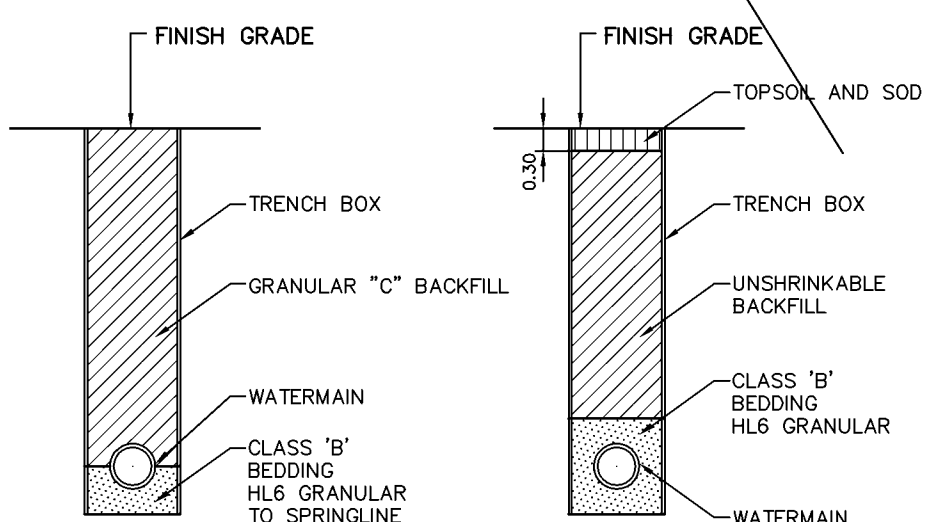
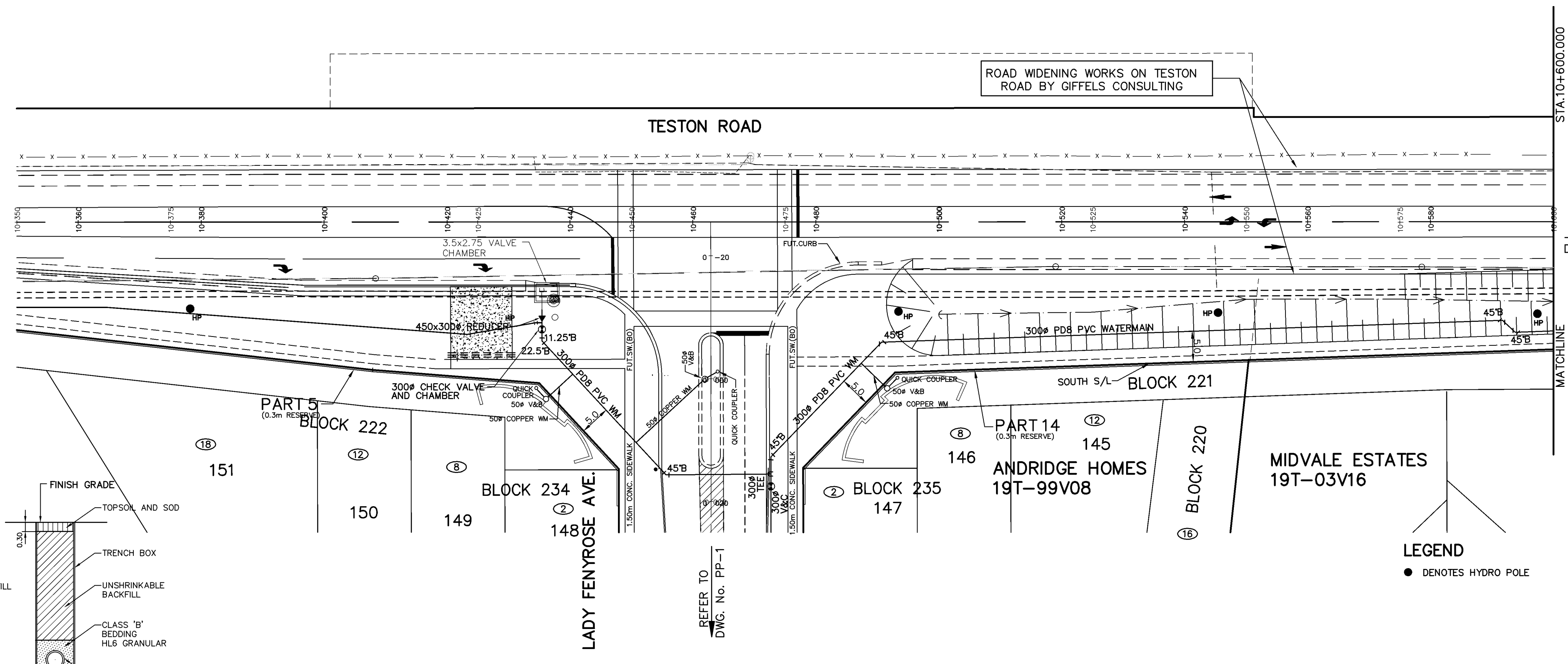


CLEAN WATER COLLECTOR SEWER		
SANITARY SEWER	525# CONC. STM. 27.5m @ 6.84% CL.65-D	
STORM SEWER		
C/L ELEVATION		
C/L CHAINAGE	10+600.000 10+620.000 10+640.000 10+660.000 10+680.000 10+700.000 10+720.000 10+729.411 10+740.000 10+760.000 10+780.000 10+800.000 10+820.000	

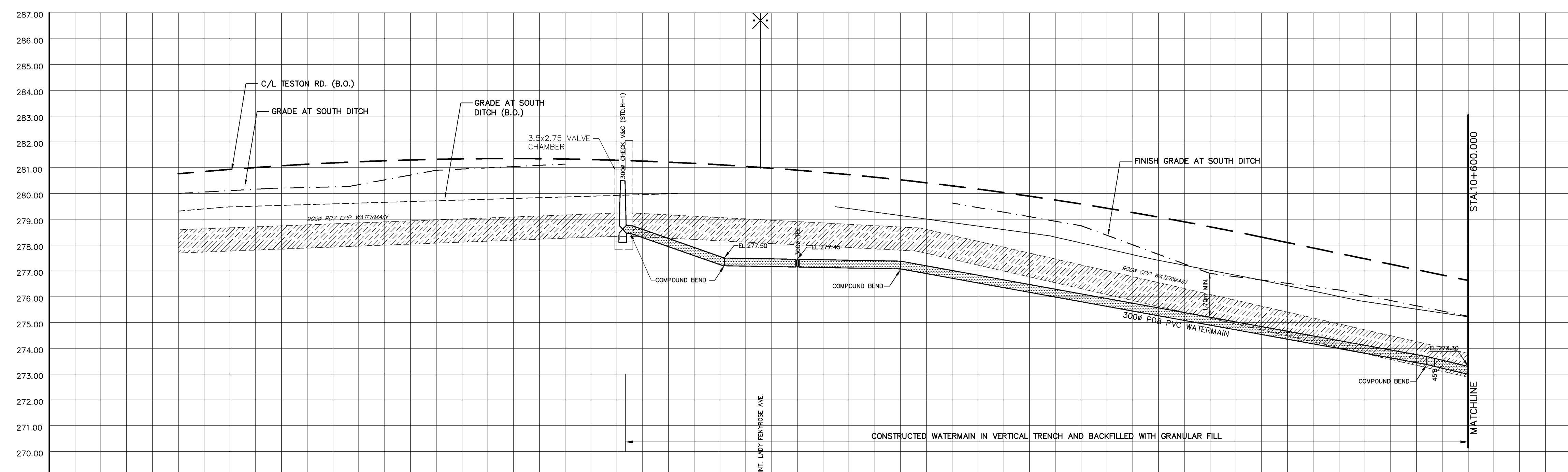
REVISIONS			
No.	DESCRIPTION	By	Date
1.	GENERAL REVISIONS	TD	JUNE 15, 2005
2.	REVISED AS PER REGIONS COMMENTS	HT	SEPT 29, 2005
3.	BACKFILL SPECIFICATIONS INCLUDED IN PROFILE	TD	NOV 23, 2005



- NOTES:**
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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:**
- (15) 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-44

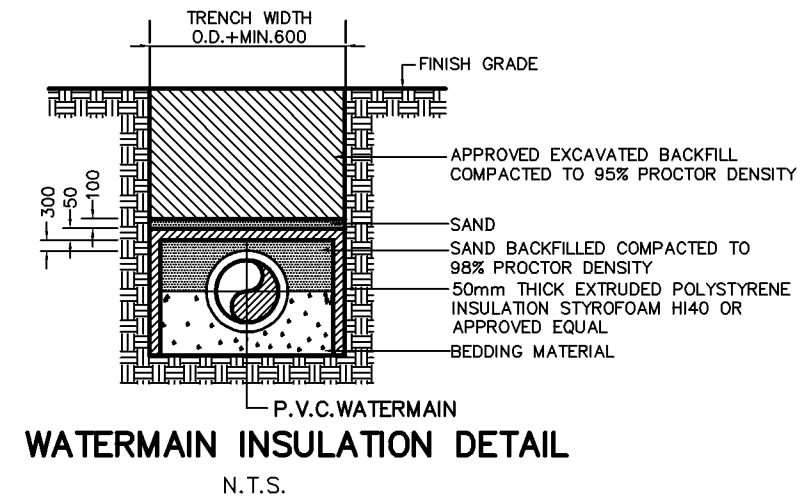
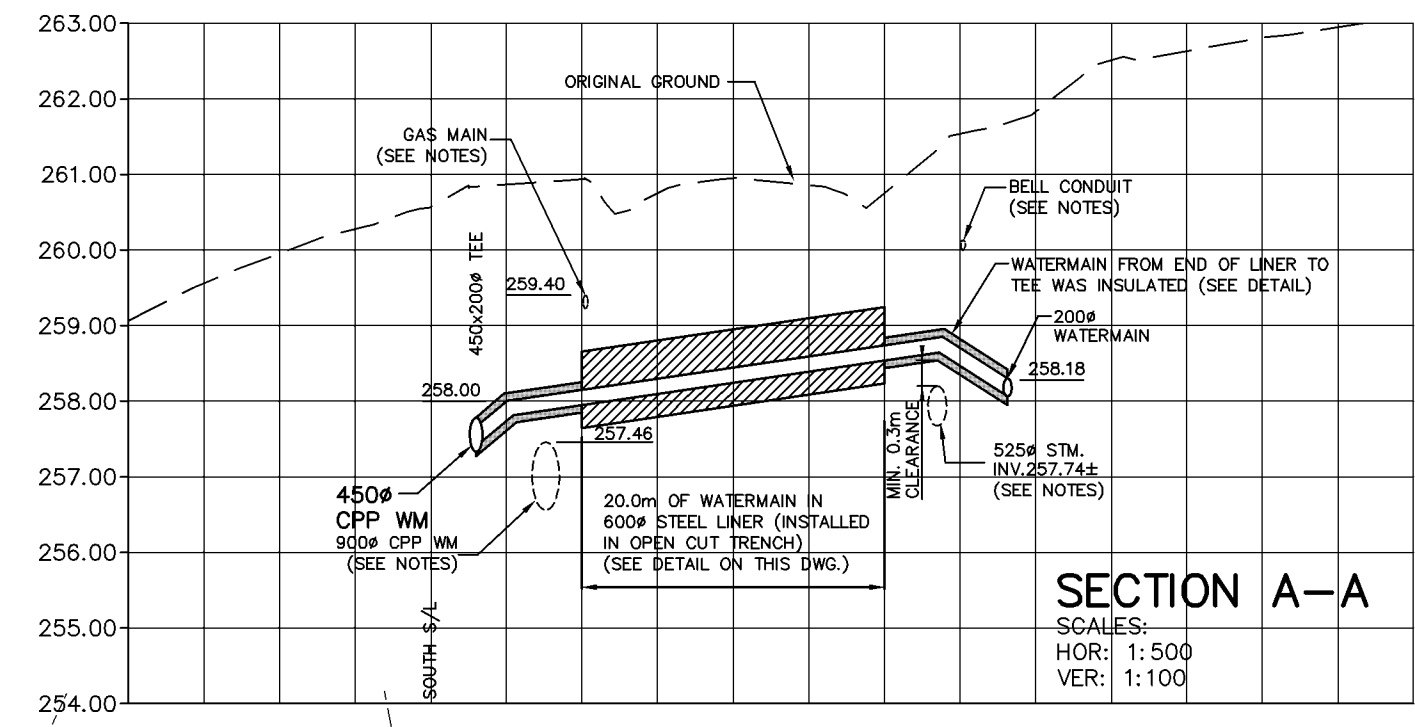
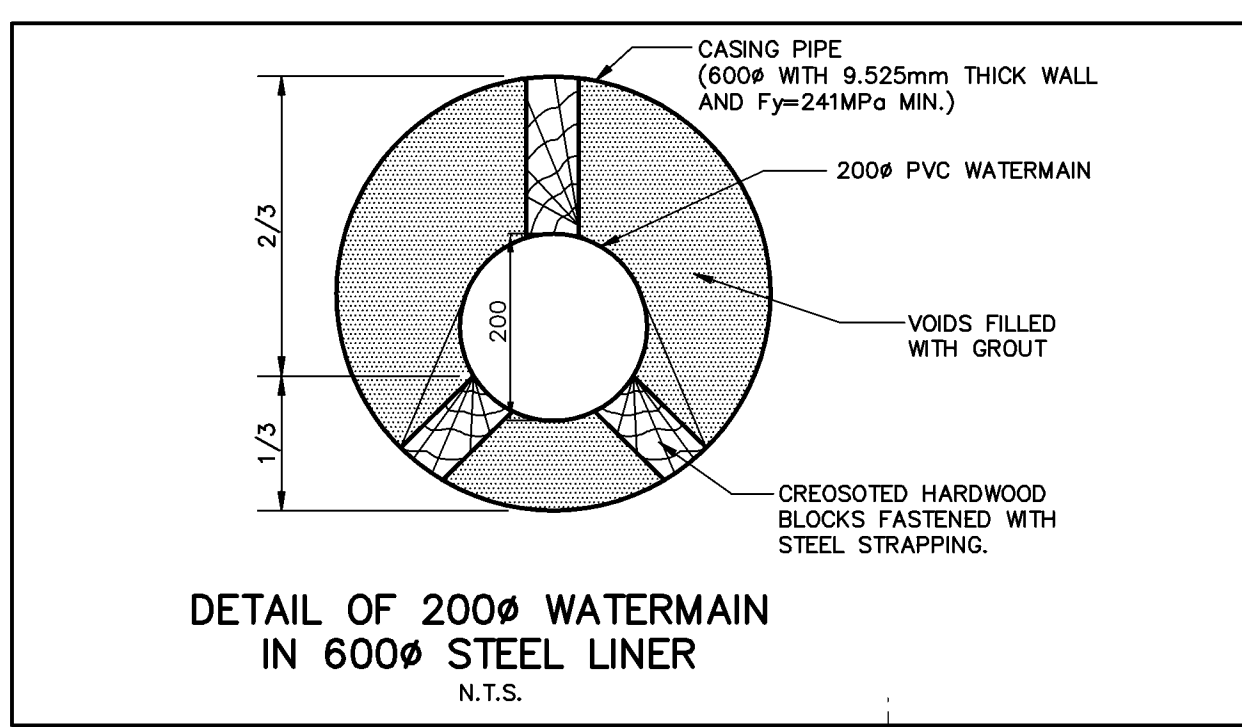
S C A L E
HORIZONTAL 0 5 10 15 20 25 30 35 40 45 50m
VERTICAL 0 1 2 3 4 5 6 7 8 9 10m

Vaughan
The City Above Toronto

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

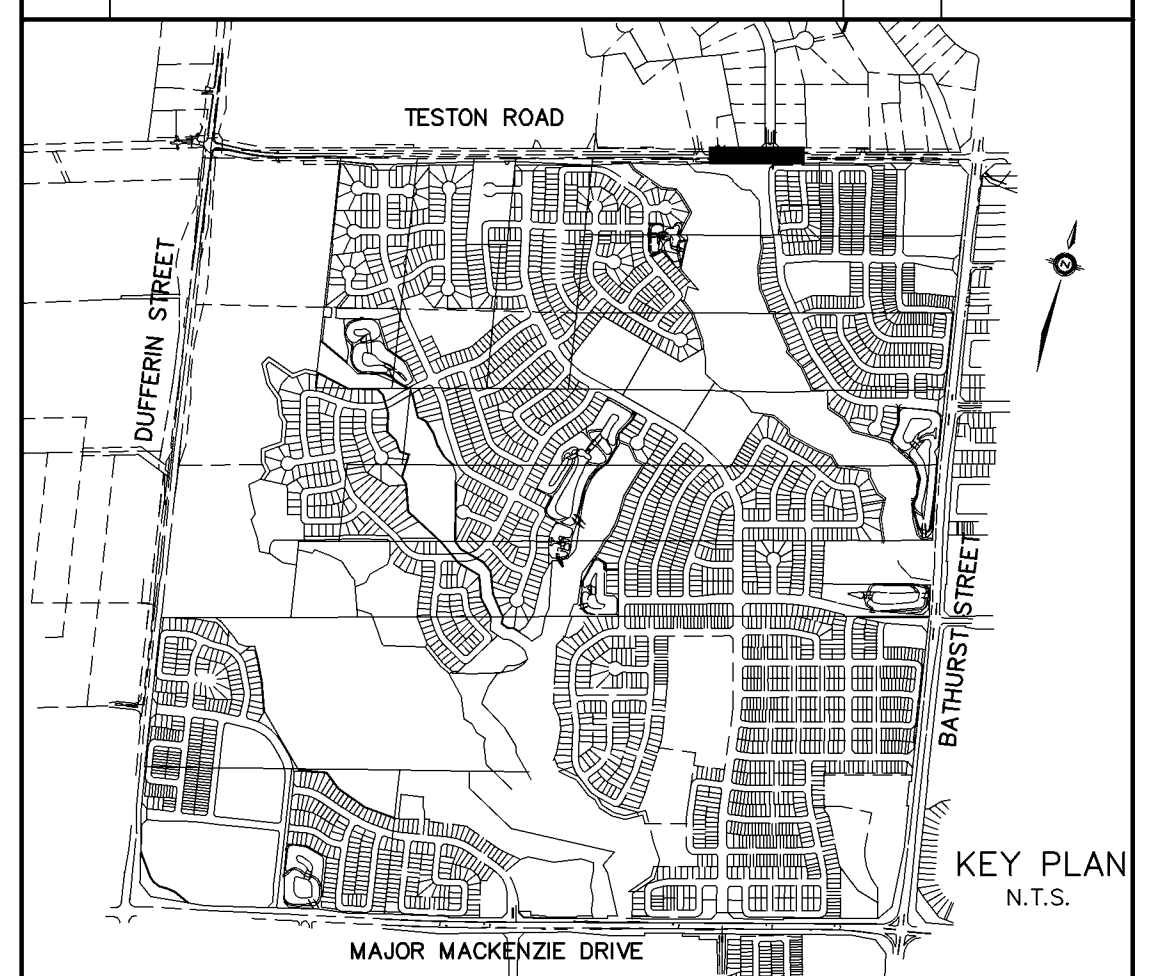
DESIGNED BY: H.T. DATE: APRIL 2007 CHECKED BY: H.T.
DRAWN BY: APPROVED BY:
SCALE HORIZONTAL 1:500 19T-99V08 DWG. No.
VERTICAL 1:100 19T-03V16

CLEAN WATER COLLECTOR SEWER																					
SANITARY SEWER																					
STORM SEWER																					
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								



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:**
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 - 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

SCHAEFFER & ASSOCIATES LTD.

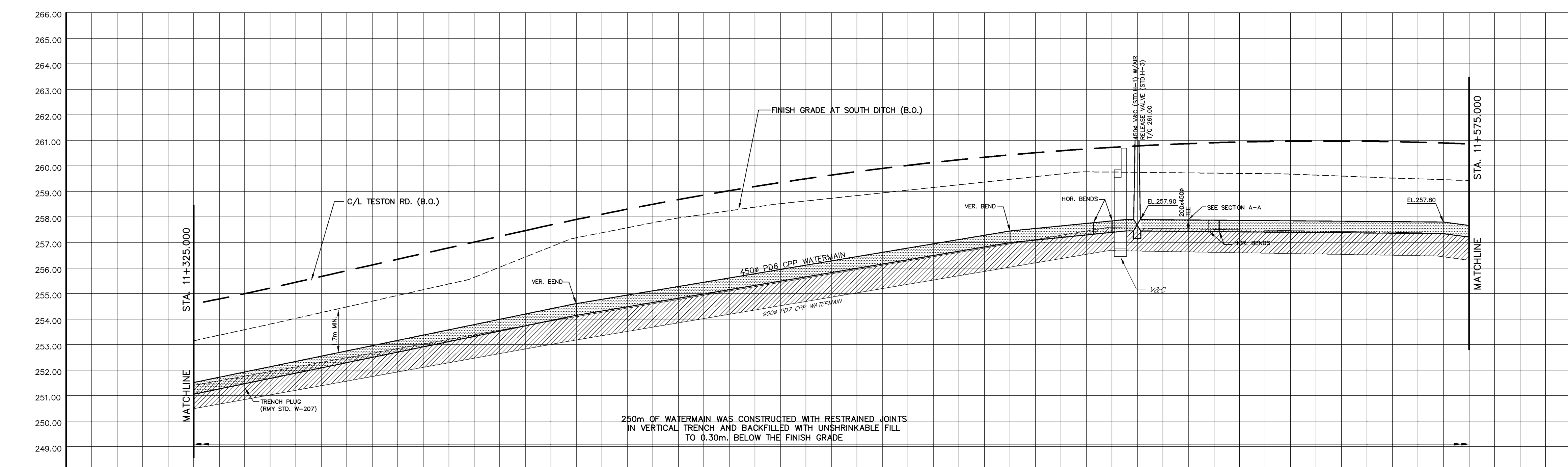
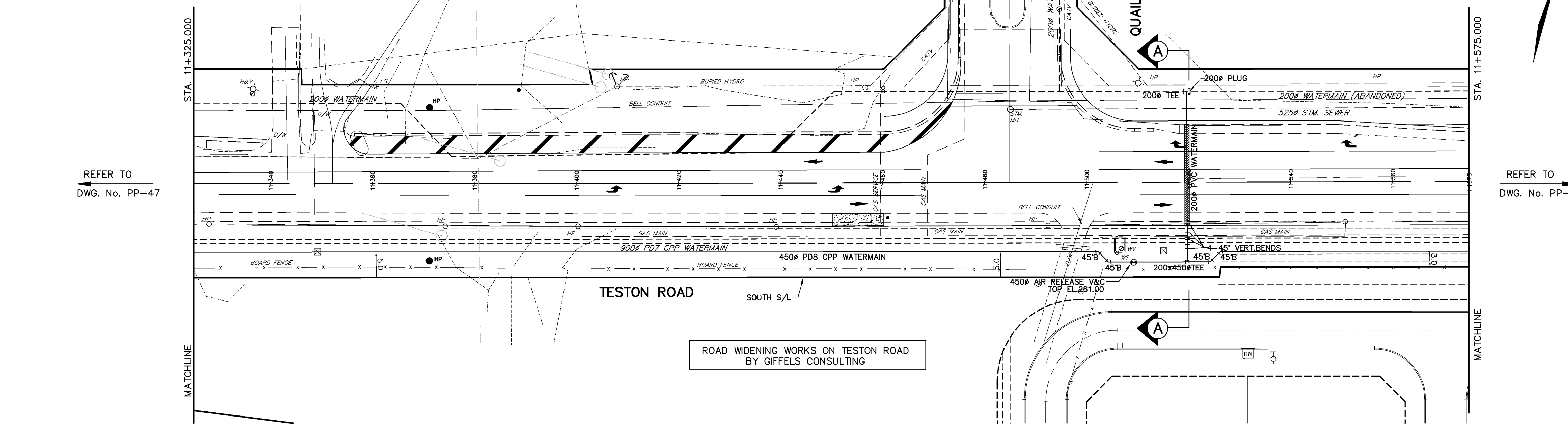
6 Ronrose Drive, Concord,
 Ontario L4K 4R3
 Tel: (905) 738-6100
 Fax: (905) 738-6875
 E-mail:
 design@schaeffers.com

PROJECT No.	2004-2644	DRAWING No.	PP-48
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	

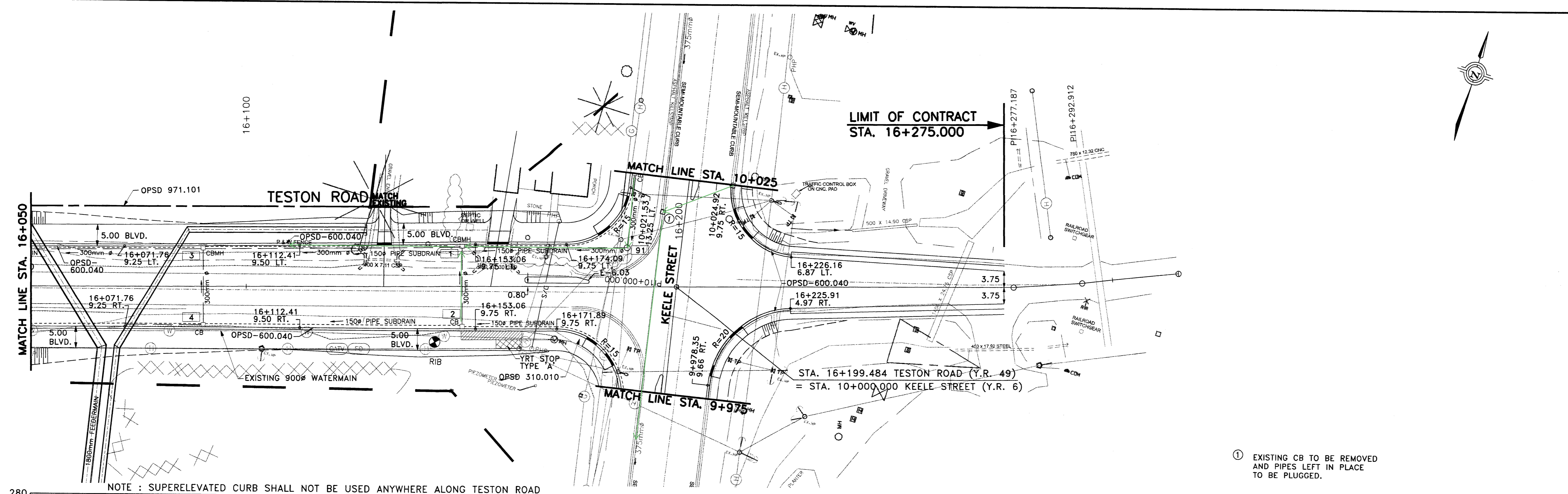
Vaughan
 The City Above Toronto

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

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	

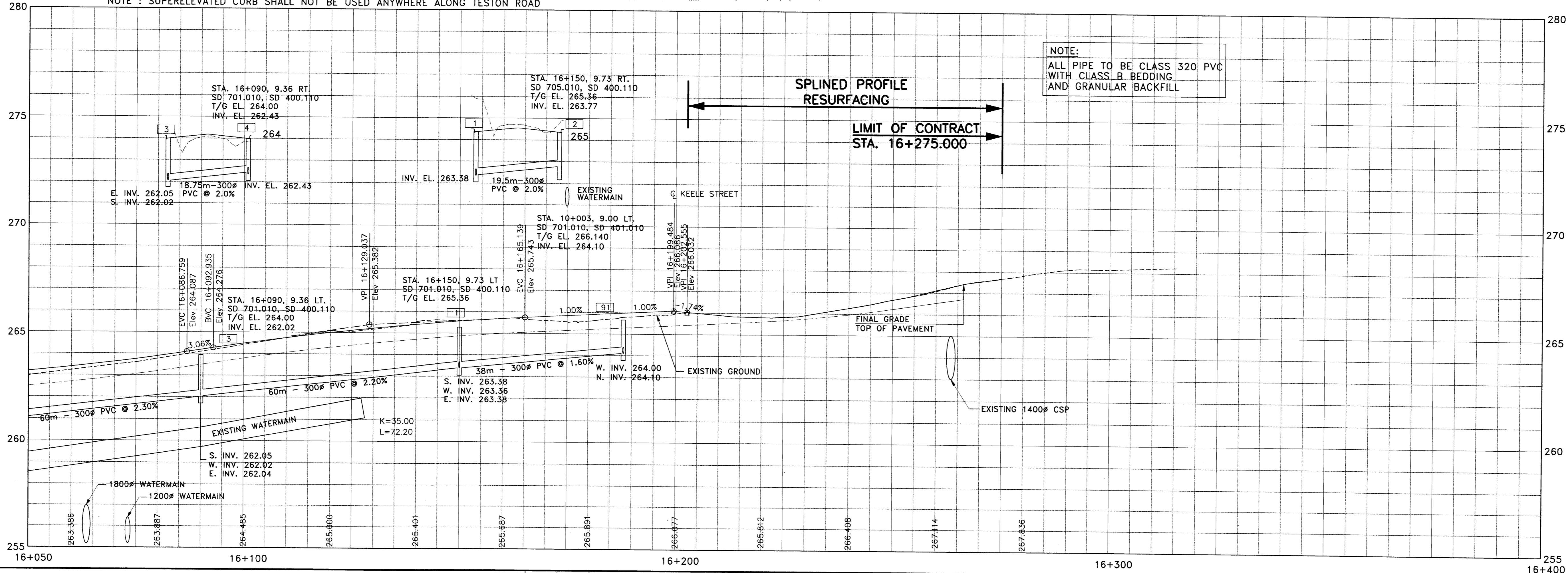
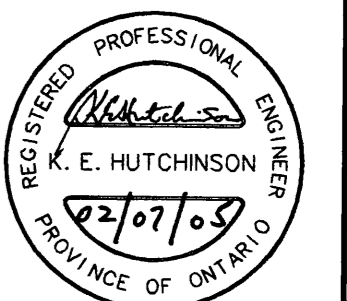
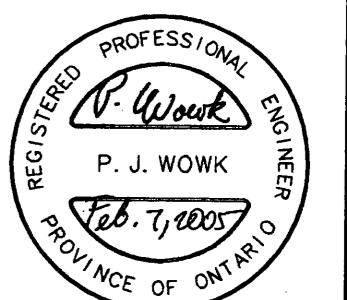


CLEAN WATER COLLECTOR SEWER		CLEAN WATER COLLECTOR SEWER
SANITARY SEWER		SANITARY SEWER
STORM SEWER		STORM SEWER
C/L ELEVATION		C/L ELEVATION
C/L CHAINAGE	11+340.000 11+360.000 11+380.000 11+400.000 11+420.000 11+440.000 11+460.000 11+480.000 11+500.000 11+520.000 11+540.000 11+560.000	C/L CHAINAGE

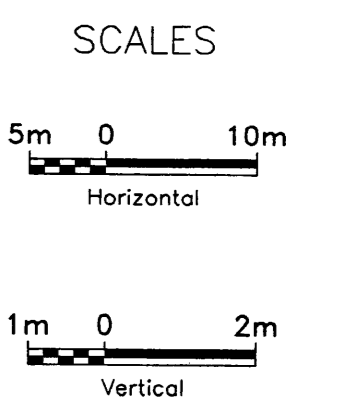


NOTE : SUPERELEVATED CURB SHALL NOT BE USED ANYWHERE ALONG TESTON ROAD

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



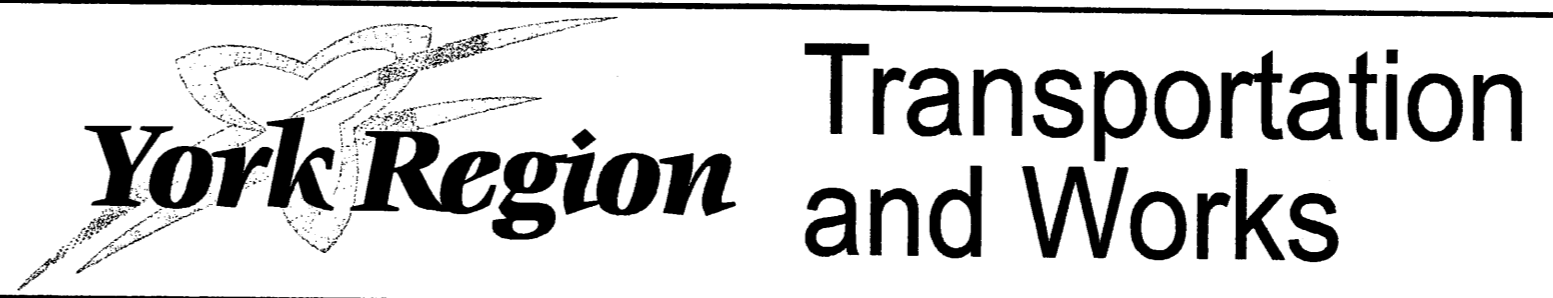
NOTE: ALL PIPE TO BE CLASS 320 PVC WITH CLASS B BEDDING AND GRANULAR BACKFILL



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.

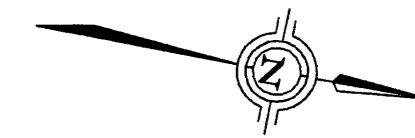
No.	DATE	REVISIONS	BY
1	12/15/04	UPDATED PROFILE	IP
2	05/06/05	REVISED FOR FINAL MOEE APPROVALS	NC



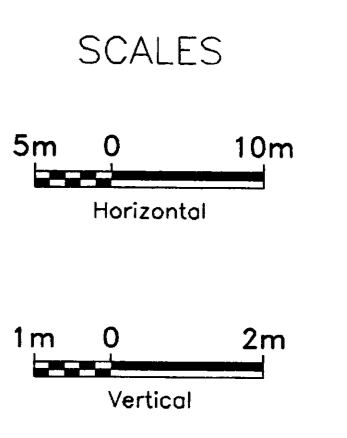
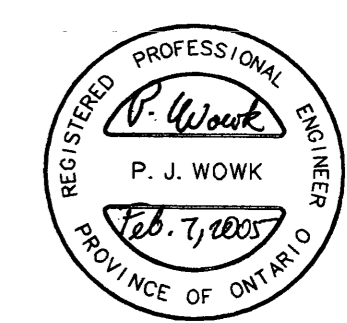
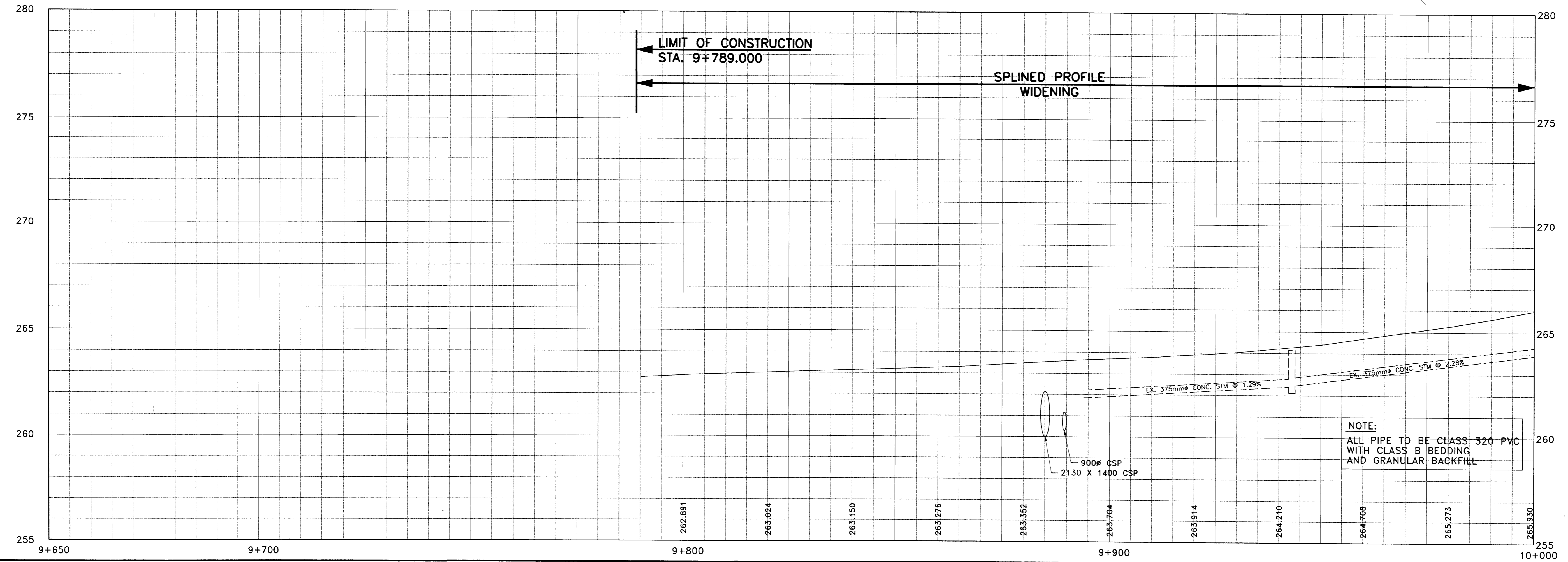
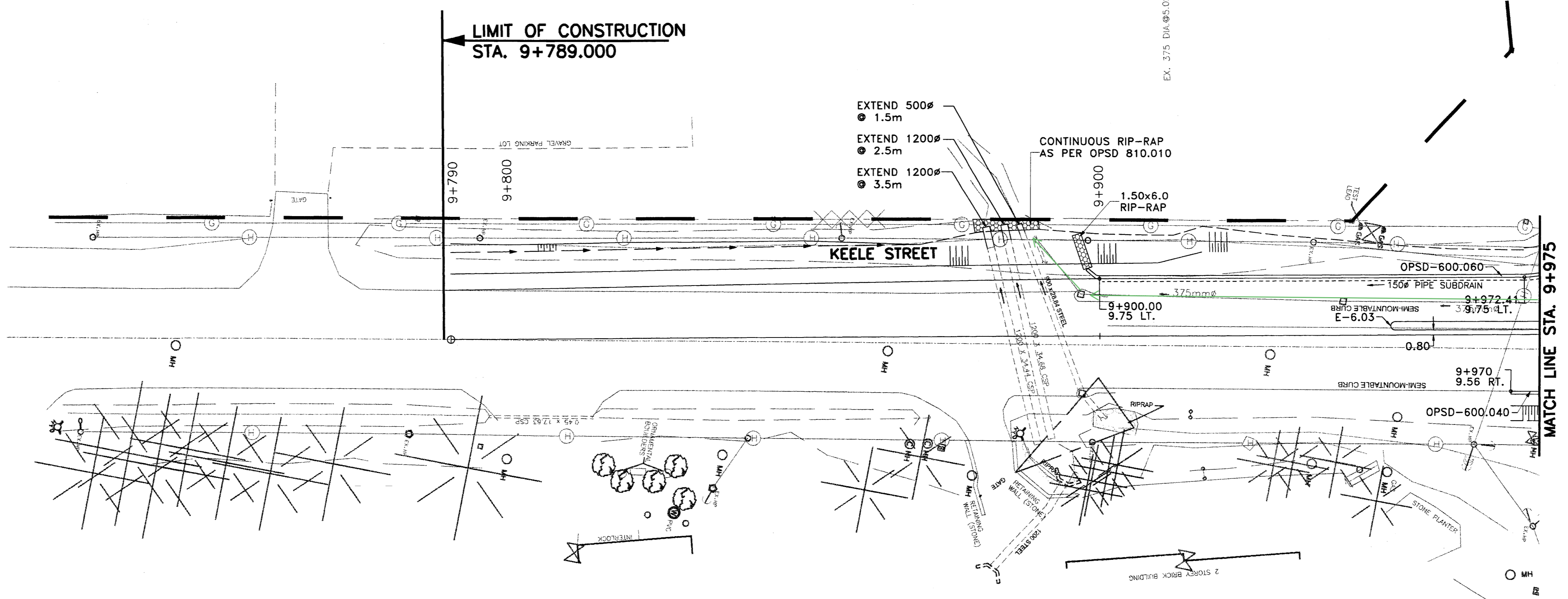
DESIGN JBA, NC	TESTON ROAD (Y.R. 49) NEW CONSTRUCTION STA. 16+050 TO STA. 16+400	DWG. NO. P-1093-035
DRAWN NC, PJ, LL		CONT. NO. P-03-04
CHECKED PW, KH		SHEET NO. 27

York_Border.dgn

METRIC



HVCM 10519980



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

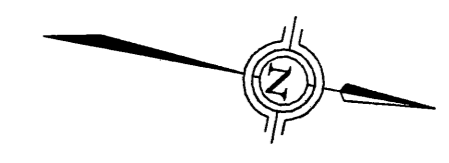
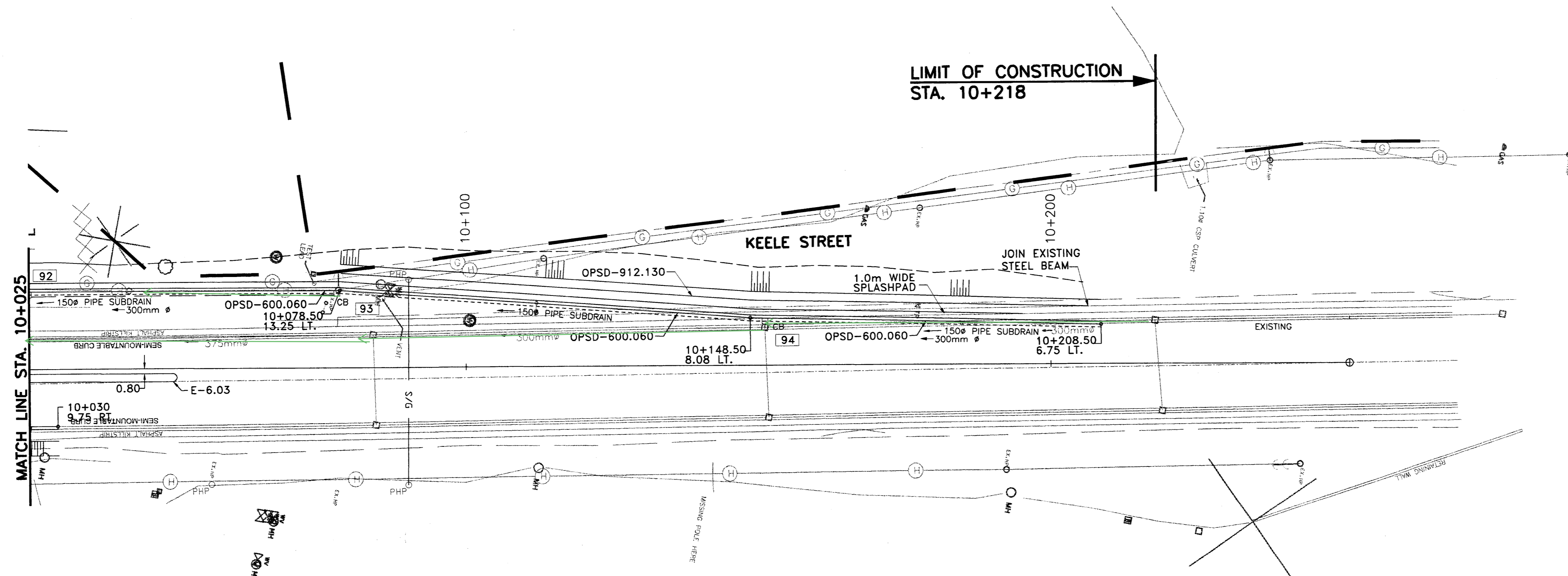
NOTE:
THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE DURING CONSTRUCTION.

- 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.

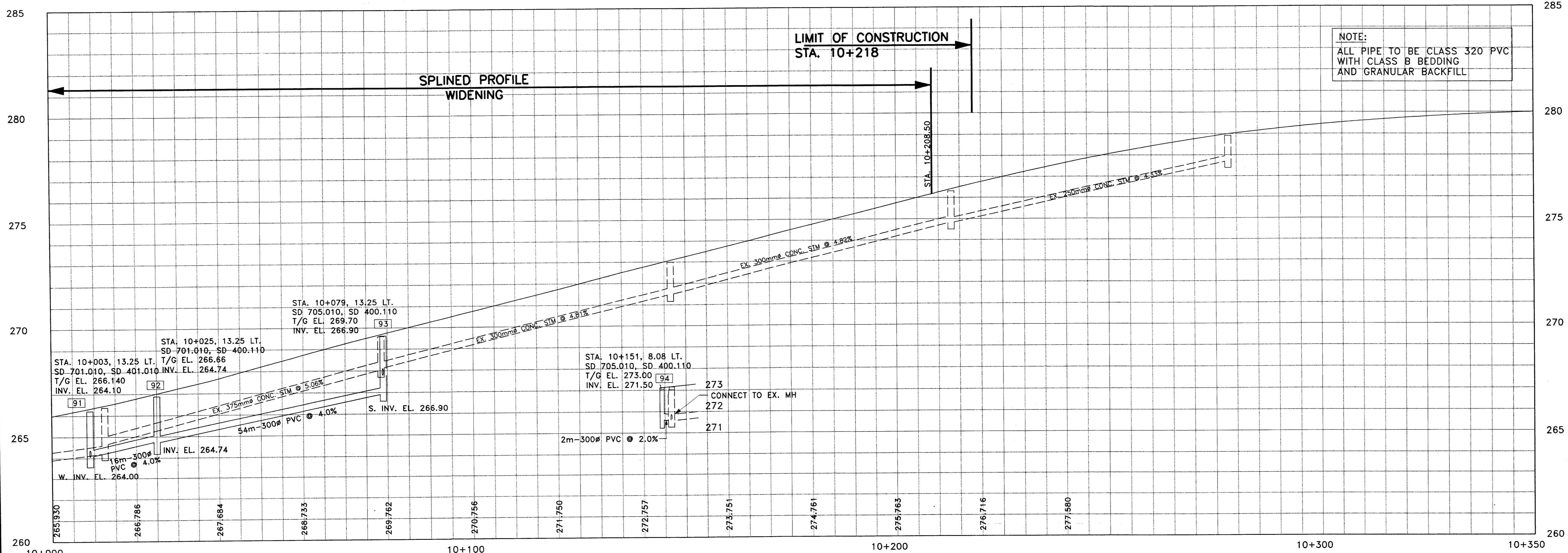
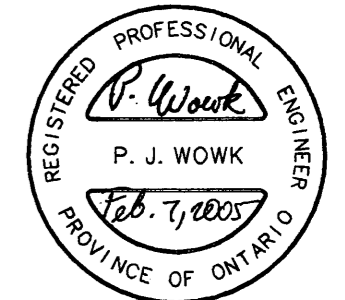
No.	DATE	REVISIONS	BY
1	12/15/04	NEW CULVERTS AND STORM SEWER ADDED	JP
2	05/06/05	REVISED FOR FINAL MOEE APPROVALS	NC

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

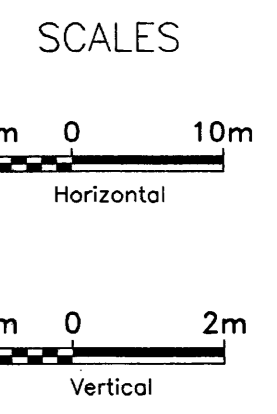
STA. 9+790 TO STA. 9+975



HVCM 01019840



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



NOTE:
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 3. OFFSETS SHOWN ARE TO CENTRE OF CATCHBASIN OR MANHOLE COVER.

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	KEELE STREET (Y.R. 6) 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