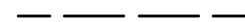




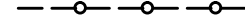
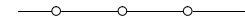
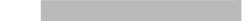

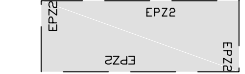
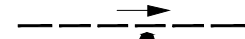









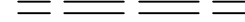
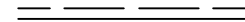


SUPPLEMENTAL LEGEND (ENVIRONMENTAL)



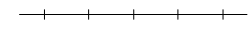
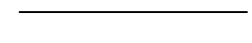

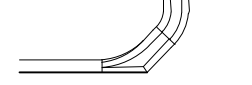
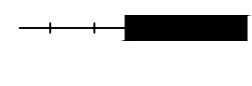

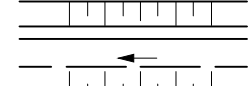
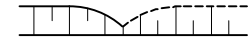



RIGHT OF WAY, FENCES, ETC.

-  RIGHT OF WAY (ROW)
-  ROW – TEMPORARY LIMITED INTEREST (TLI)
-  FUTURE TRANSITWAY ROW
-  CHAIN LINK FENCE (TOP WIRE) ON RIGHT OF WAY (OPSD 972.130)
-  HEAVY DUTY SILT FENCE BARRIER (OPSD 219.130)
-  TURBIDITY CURTAIN (OPSD 219.260)
-  TREE PROTECTION
-  DRAINAGE CATCHMENT AREA BOUNDARY
-  ENVIRONMENTAL PROTECTION ZONE 1
-  ENVIRONMENTAL PROTECTION ZONE 2

DRAINAGE

-  STORM SEWER
-  150mmØ PERFORATED PIPE SUB-DRAIN (OPSD 809.010)
-  CATCH BASIN / DITCH INLET, MANHOLE
-  TWIN INLET CATCH BASIN / MANHOLE
-  CATCH BASIN, MANHOLE TO BE ADJUSTED
-  CULVERT
-  CULVERT WITH HEADWALL
-  FLOW CHECK DAM
OPSD 219.211 – TEMPORARY ROCK (DURING CONSTRUCTION)
OPSD 219.180 – PERMANENT STRAW BALE
-  FLOW ARROW
-  V-TYPE DITCH
-  FLAT BOTTOM DITCH
-  INTERCEPTOR DITCH (EARTH CUT SECTION)

NEW CONSTRUCTION

-  CONCRETE SIDEWALK / MULTI-USE PATH
-  RETAINING WALL
-  STEEL BEAM GUIDERAIL
-  CONCRETE BARRIER
-  CONCRETE CURB AND GUTTER
-  GUTTER OUTLET 45° WITH ASPHALT SPILLWAY
-  STEEL BEAM ENERGY ATTENUATING TERMINAL (SBEAT) / ENERGY ATTENUATOR PERMANENT (EAP)
-  EARTH FILLS RAISED BENCH
-  EARTH CUTS RAISED BENCH
-  CUTS AND FILLS (EARTH)
-  RIP-RAP
-  EROSION CONTROL BLANKET (ON SLOPES STEEPER THAN 3:1)
-  MISCELLANEOUS ASPHALT PAVING

NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PROJ. MAN.
A	18/03/20	90% SUBMISSION TO CA				

SCALE :

N.T.S

DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH
NAME (PRINT)	
INT.	
DATE	

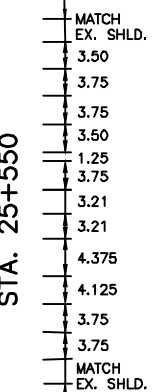
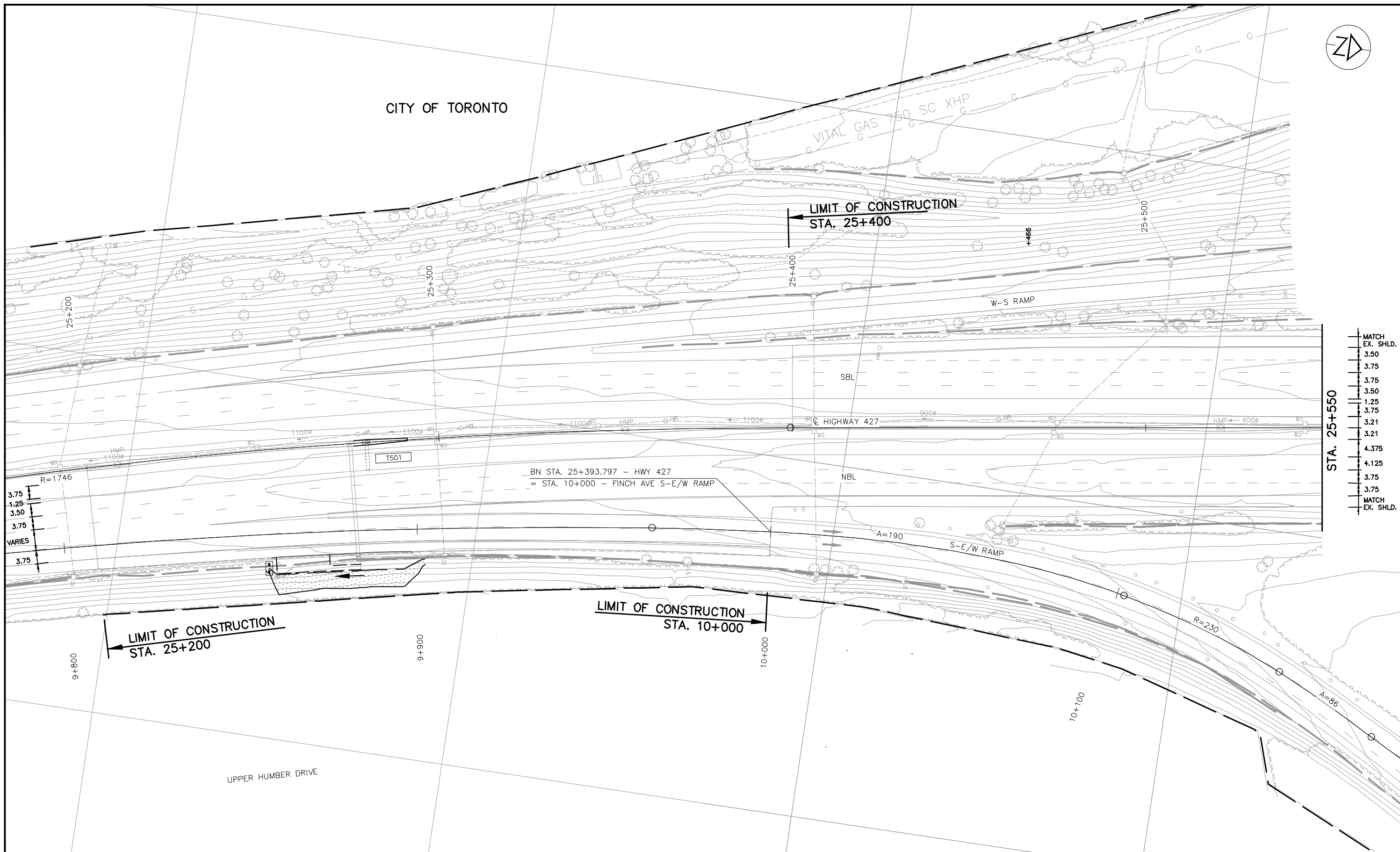
CONSULTANT	
DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH
NAME (PRINT)	
INT.	
DATE	



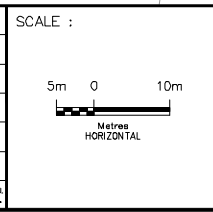
TITLE							
HWY 427 EXPANSION							
SUPPLEMENTAL LEGEND (ENVIRONMENTAL)							
HIGHWAY 427 MAINLINE							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2160	A



CITY OF TORONTO



NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJ.	MAN.
A	18/03/20	90% SUBMISSION TO CA					



DESIGNED			
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		

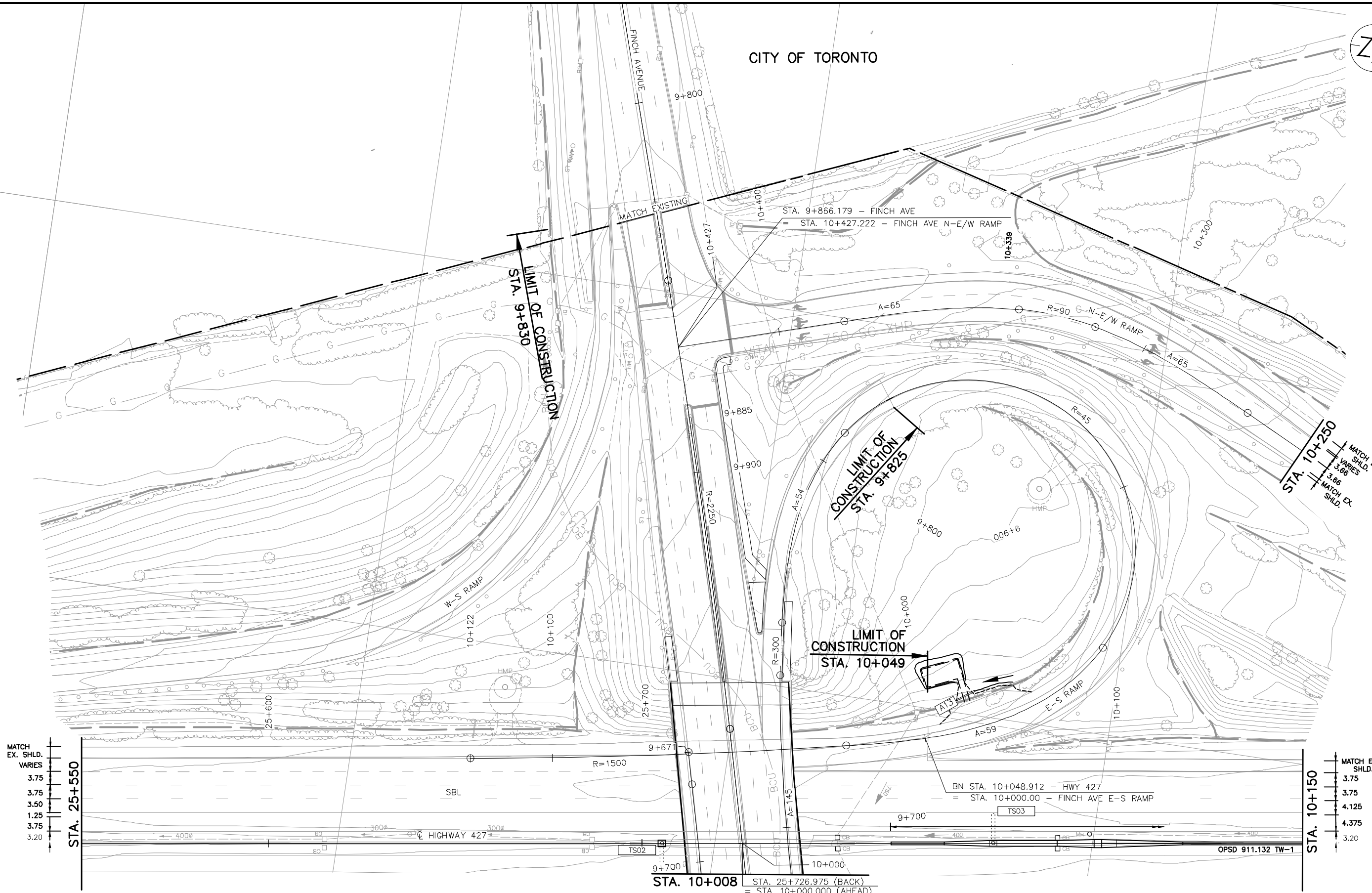
NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 25+200 TO STA. 25+550							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2161	A



CITY OF TORONTO



MATCH EX. SHLD. VARIES

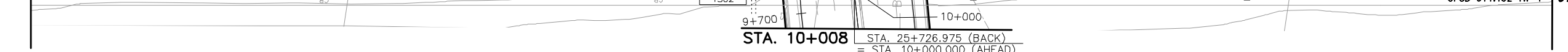
3.75
3.75
3.50
1.25
3.75
3.20

STA. 25+550

MATCH EX. SHLD. VARIES

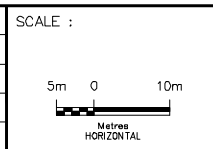
3.75
3.75
4.125
4.375
3.20

STA. 10+150



STA. 10+008 STA. 25+726.975 (BACK) = STA. 10+000.000 (AHEAD)

NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJ.	MAN.
A	18/03/20	90% SUBMISSION TO CA					

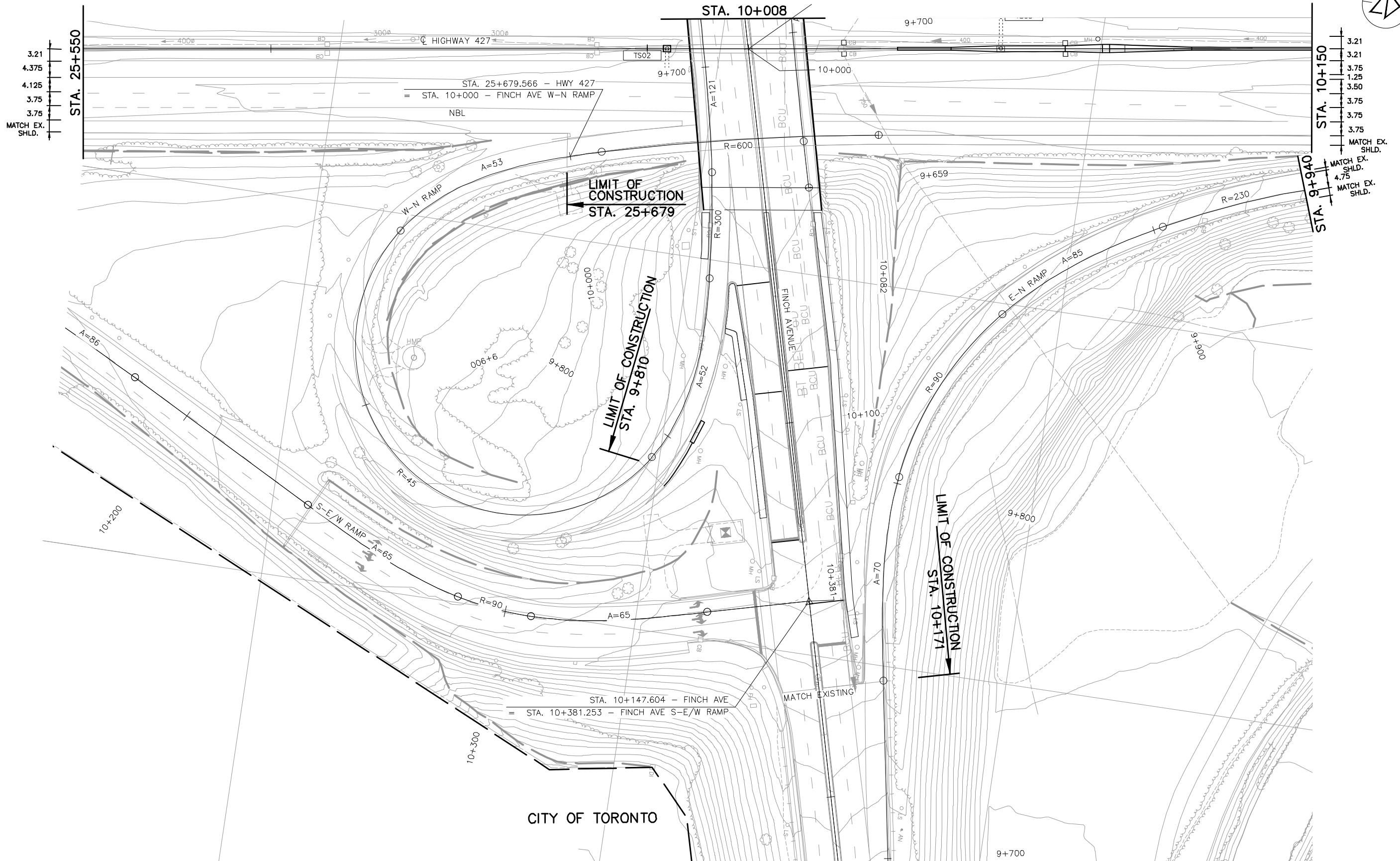


DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

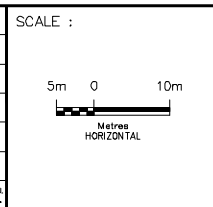
CONSULTANT	NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 25+550 TO STA. 10+150							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2162	A



NO.	DATE	REVISIONS
A	18/03/20	90% SUBMISSION TO CA

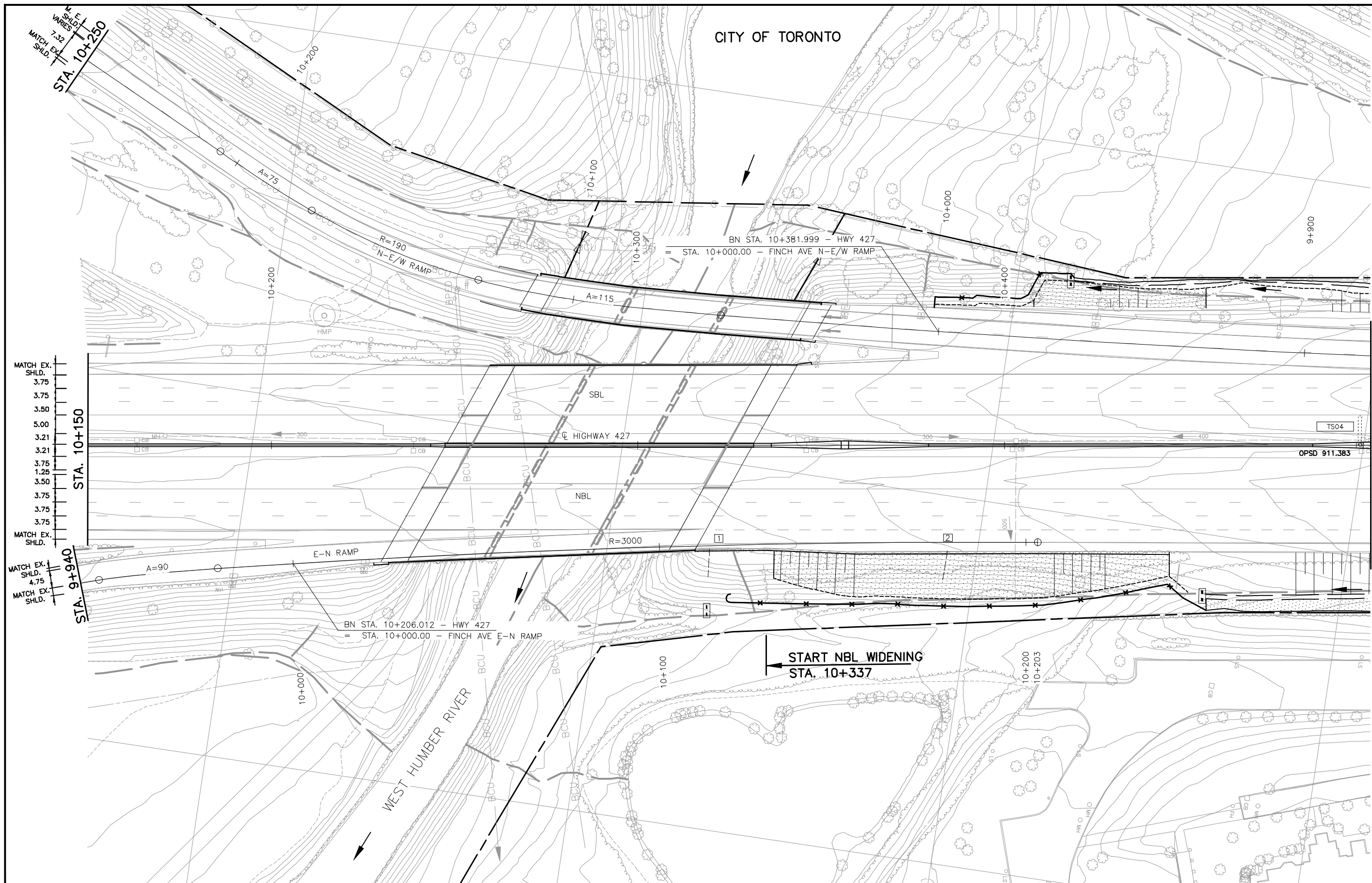


DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

NAME (PRINT)	INIT.	DATE



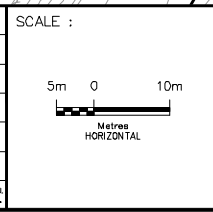
TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 25+550 TO STA. 10+150							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2163	A



MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.50
MATCH EX. SHLD.	5.00
MATCH EX. SHLD.	3.21
MATCH EX. SHLD.	3.21
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	1.25
MATCH EX. SHLD.	3.50
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.50
MATCH EX. SHLD.	2.50 SHLD.

MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	1.07
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.50
MATCH EX. SHLD.	5.00
MATCH EX. SHLD.	3.21
MATCH EX. SHLD.	VARIES
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	1.25
MATCH EX. SHLD.	VARIES
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.75
MATCH EX. SHLD.	3.50
MATCH EX. SHLD.	2.50 SHLD.

NO.	DATE	REVISIONS	BY	CHK	LEAD	PRG.
A	18/03/20	90% SUBMISSION TO CA				



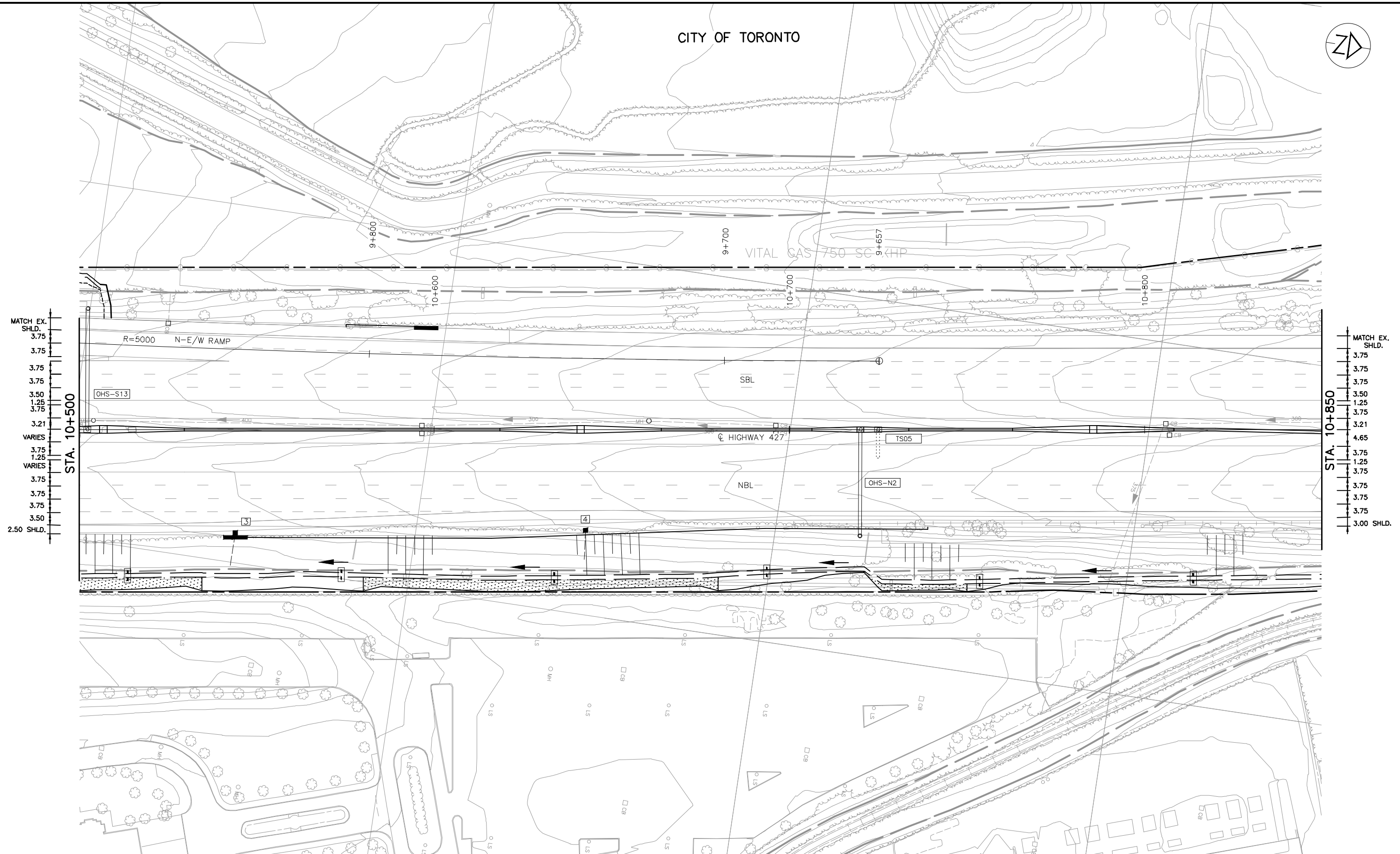
DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH
CONSULTANT	
NAME (PRINT)	
INIT.	
DATE	

DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH
CONSULTANT	
NAME (PRINT)	
INIT.	
DATE	

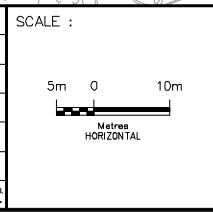


TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 10+150 TO STA. 10+500							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2164	A

CITY OF TORONTO



NO.	DATE	REVISIONS
A	18/03/20	90% SUBMISSION TO CA



DESIGNED	BARRY McCANDLESS
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

CONSULTANT	NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 10+500 TO STA. 10+850							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2165	A

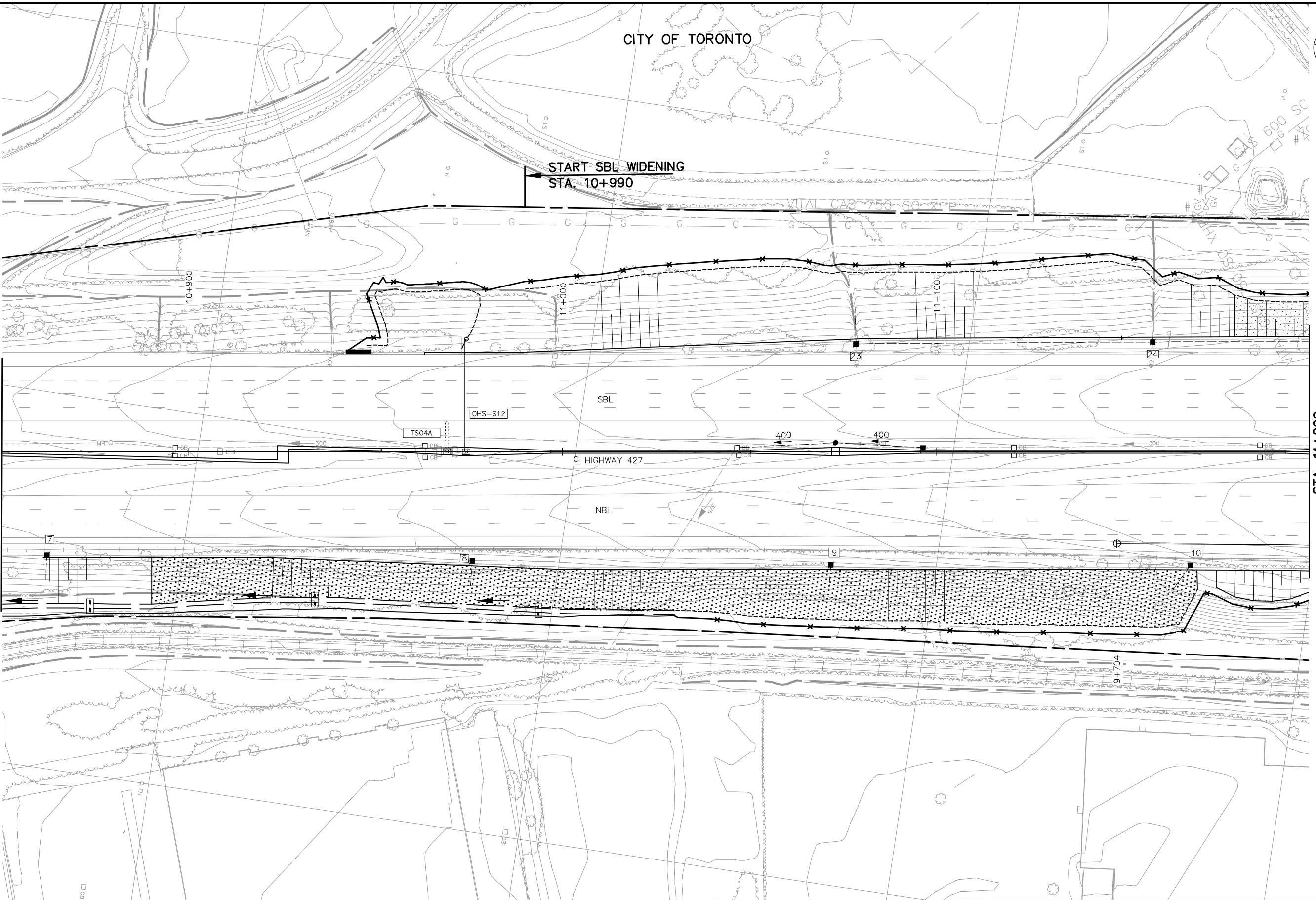
CITY OF TORONTO



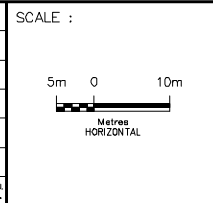
START SBL WIDENING
STA. 10+990

MATCH EX. SHLD.
3.75
3.75
3.75
3.50
1.25
3.75
3.21
4.65
3.75
1.25
3.75
3.75
3.75
3.75
3.00 SHLD.
STA. 10+850

2.50 SHLD.
3.75
3.75
3.75
3.75
1.25
3.75
4.65
3.75
3.75
VARIES
3.75
3.75
VARIES
3.75
2.50 SHLD.
STA. 11+200



NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJ	MAN
A	18/03/20	90% SUBMISSION TO CA					



DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

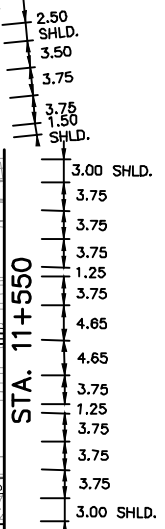
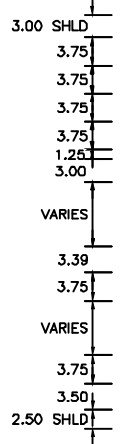
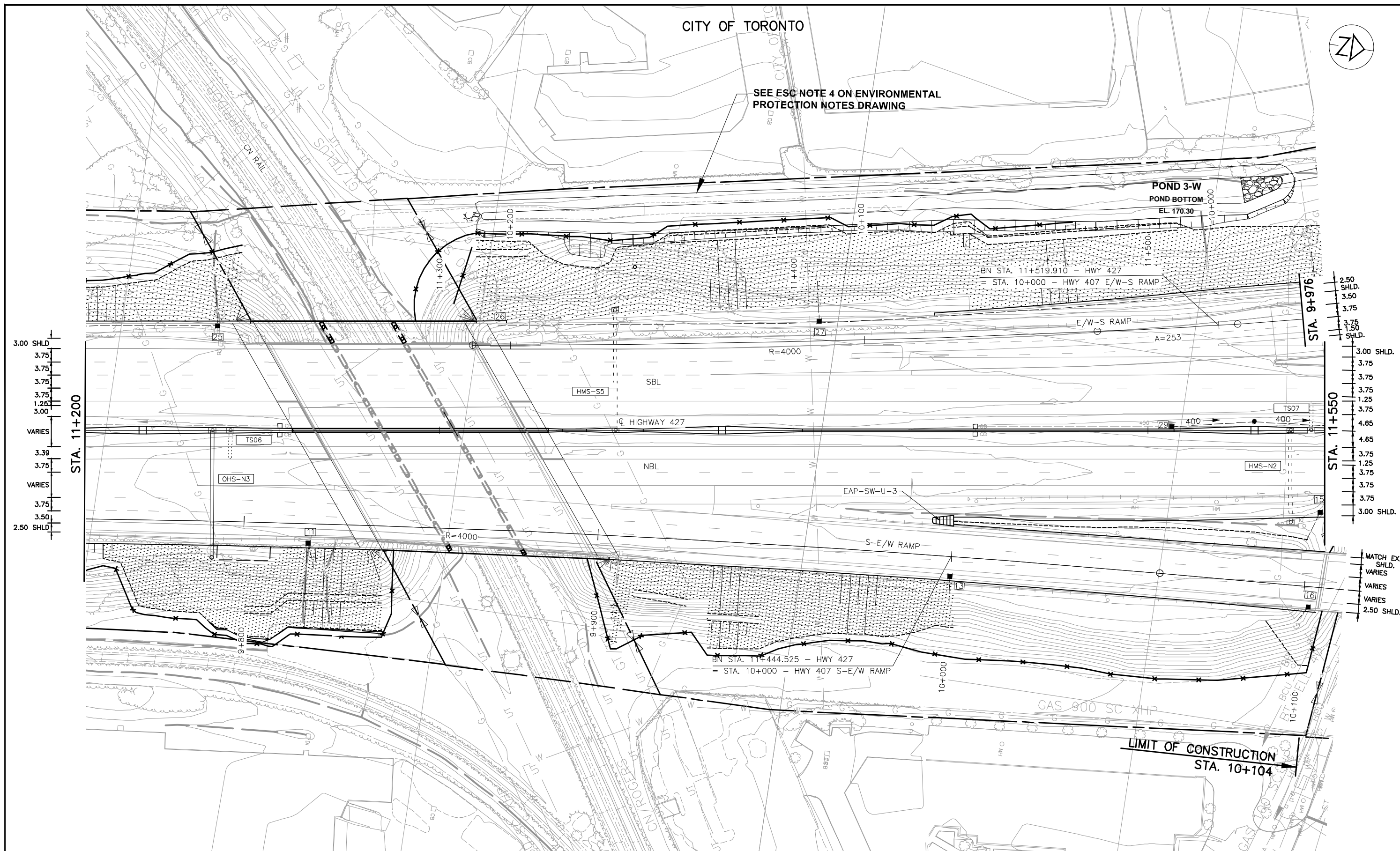
CONSULTANT	NAME (PRINT)	INIT.	DATE



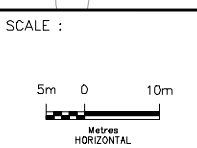
TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 10+850 TO STA. 11+200							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2166	A



SEE ESC NOTE 4 ON ENVIRONMENTAL PROTECTION NOTES DRAWING



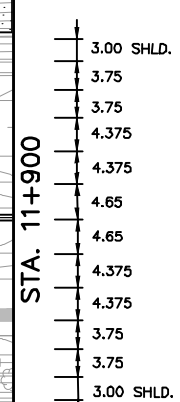
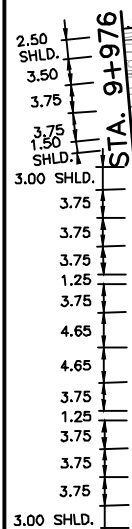
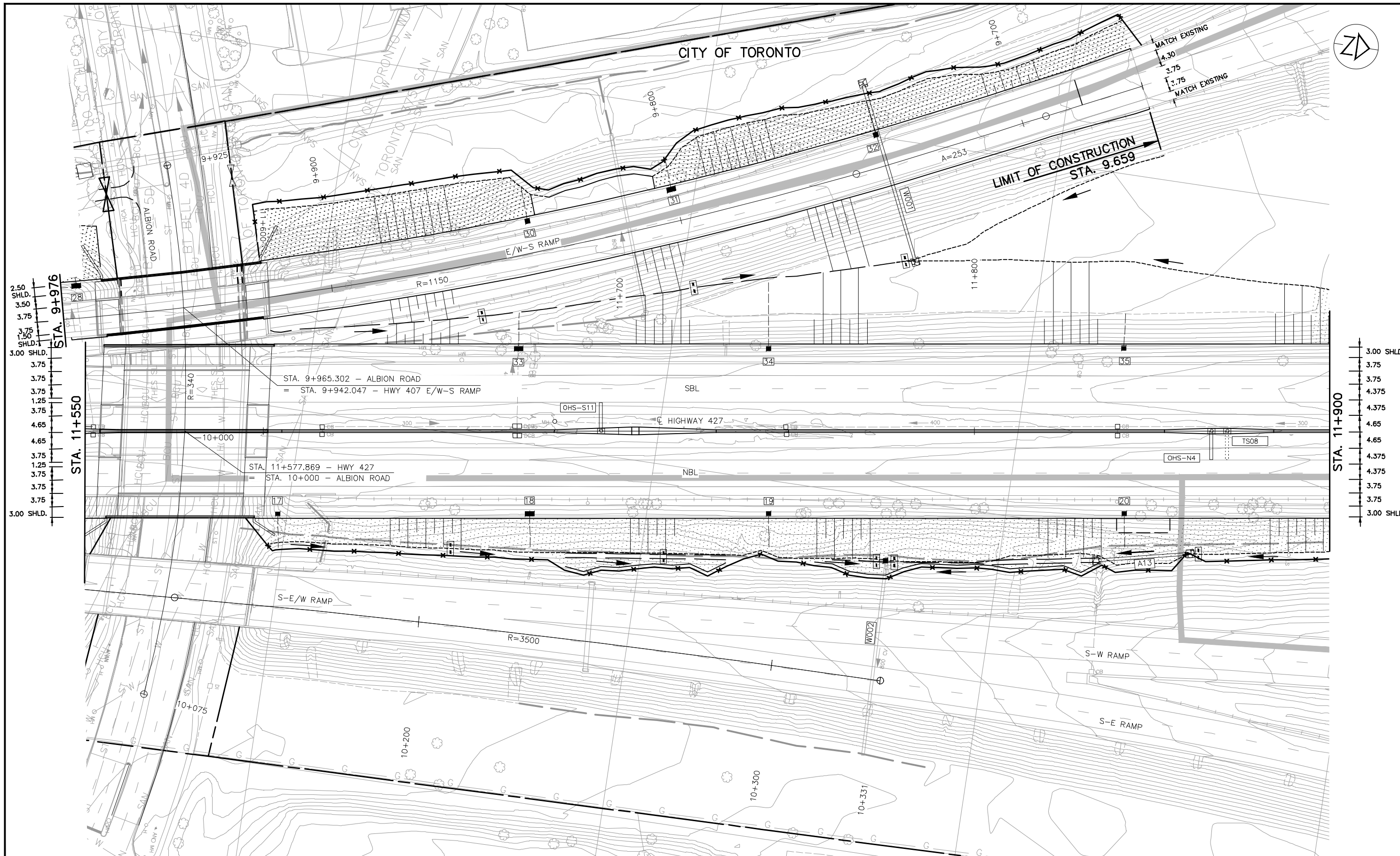
A 18/03/20		90% SUBMISSION TO CA		BY	CHK	LEAD DISC.	PROJ. MAN.
NO.	DATE	REVISIONS					



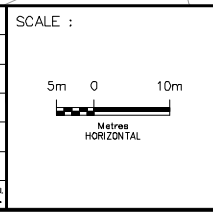
DESIGNED	BARRY McCANDLESS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT		NAME (PRINT)	INT. DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 11+200 TO STA. 11+550							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2167	A



A 18/03/20		90% SUBMISSION TO CA		BY	CHK	LEAD	PRJ.
NO.		DATE		REVISIONS		DISC.	MAN.

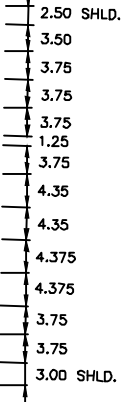
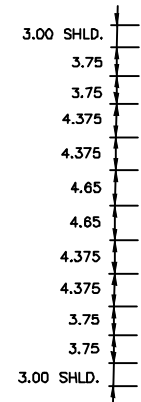
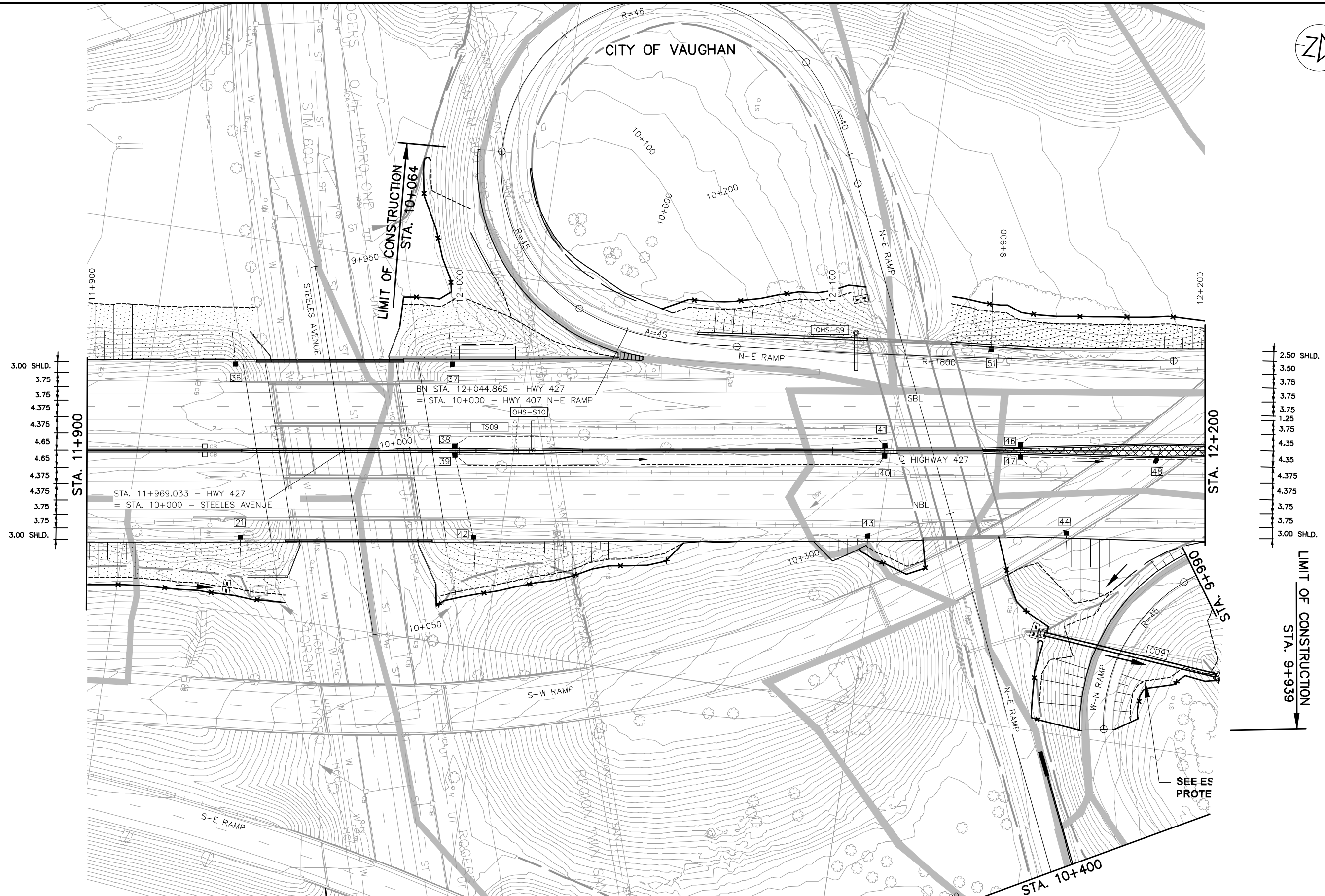


DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

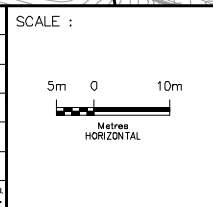
CONSULTANT	
NAME (PRINT)	INIT. DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 11+550 TO STA. 11+900							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2168	A



A		18/03/20	90% SUBMISSION TO CA				
NO.	DATE	REVISIONS		BY	CHK	LEAD	PROJ. MAN.



DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

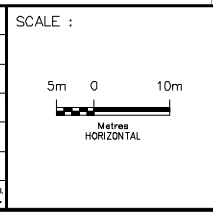
CONSULTANT			
NAME (PRINT)		INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 11+900 TO STA. 12+200							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2169	A



NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PROJ. MAN.
A	18/03/20	90% SUBMISSION TO CA				

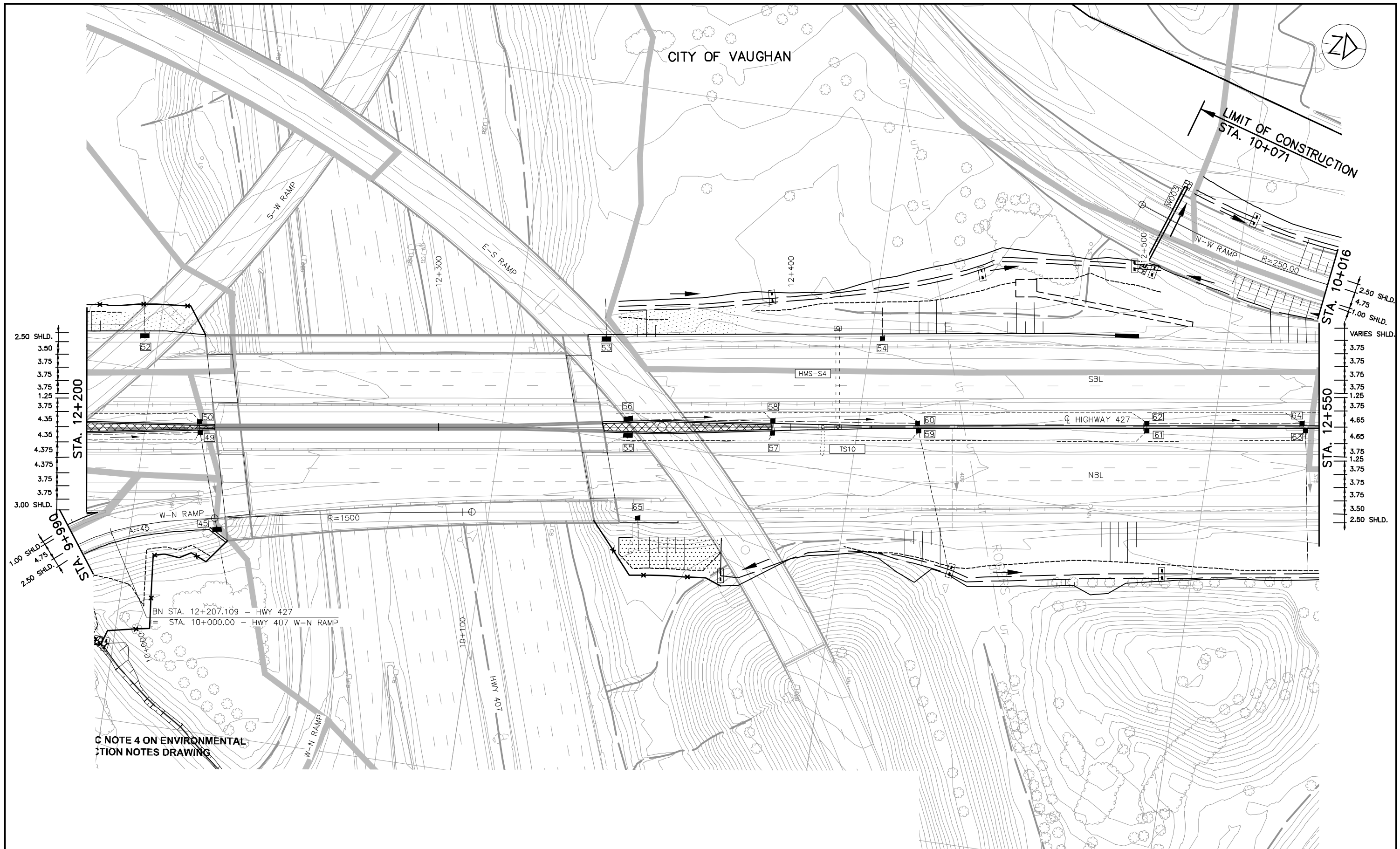


DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

CONSULTANT	NAME (PRINT)	INIT.	DATE



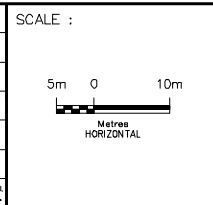
TITLE								HWY 427 EXPANSION							
								ENVIRONMENTAL							
								STA. 10+400 TO STA. 10+585							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER	PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2170	A	H427-D	N	9	ENV	000	DWG	2170	A



C NOTE 4 ON ENVIRONMENTAL
ACTION NOTES DRAWING

BN STA. 12+207.109 - HWY 427
= STA. 10+000.00 - HWY 407 W-N RAMP

NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PRJ. MAN.
A	18/03/20	90% SUBMISSION TO CA				



DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

CONSULTANT	NAME (PRINT)	INIT.	DATE



TITLE						
HWY 427 EXPANSION						
ENVIRONMENTAL						
STA. 12+200 TO STA. 12+550						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER
H427-D	N	9	ENV	000	DWG	2171 A



CITY OF VAUGHAN

POWERSTREAM PRIMARY U/G

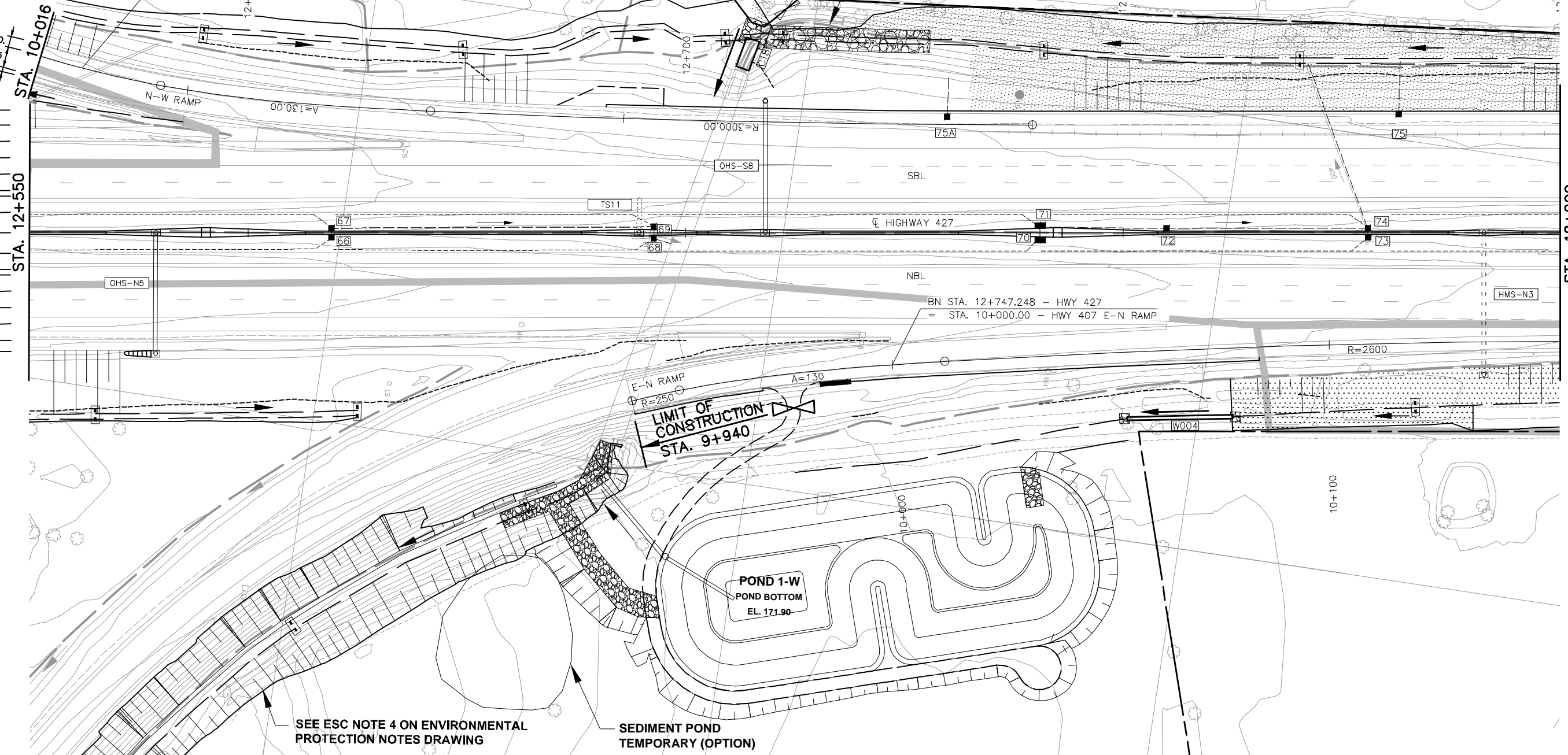
NOTE: ALBION CREEK DITCHLINE

BN STA. 12+568.086 - HWY 427
STA. 10+000.00 - N-E RAMP

2.50 SHLD.
4.75
1.00 SHLD.
STA. 10+016

VARIES SHLD.
3.75
3.75
3.75
3.75
1.25
3.75
4.65
4.65
3.75
1.25
3.75
3.75
3.50
2.50 SHLD.

2.50 SHLD.
3.75
3.75
3.75
3.75
1.25
3.75
4.65
4.65
3.75
1.25
3.75
3.75
3.50
2.50 SHLD.
VARIES

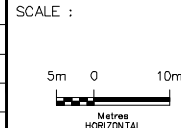


LIMIT OF CONSTRUCTION
STA. 9+940

POND 1-W
POND BOTTOM
EL. 171.90

SEE ESC NOTE 4 ON ENVIRONMENTAL PROTECTION NOTES DRAWING

SEDIMENT POND TEMPORARY (OPTION)



DESIGNED	BARRY McCANDLESS	
DRAWN	BARRY McCANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BAMFORTH	
CONSULTANT		
NAME (PRINT)	INIT.	DATE



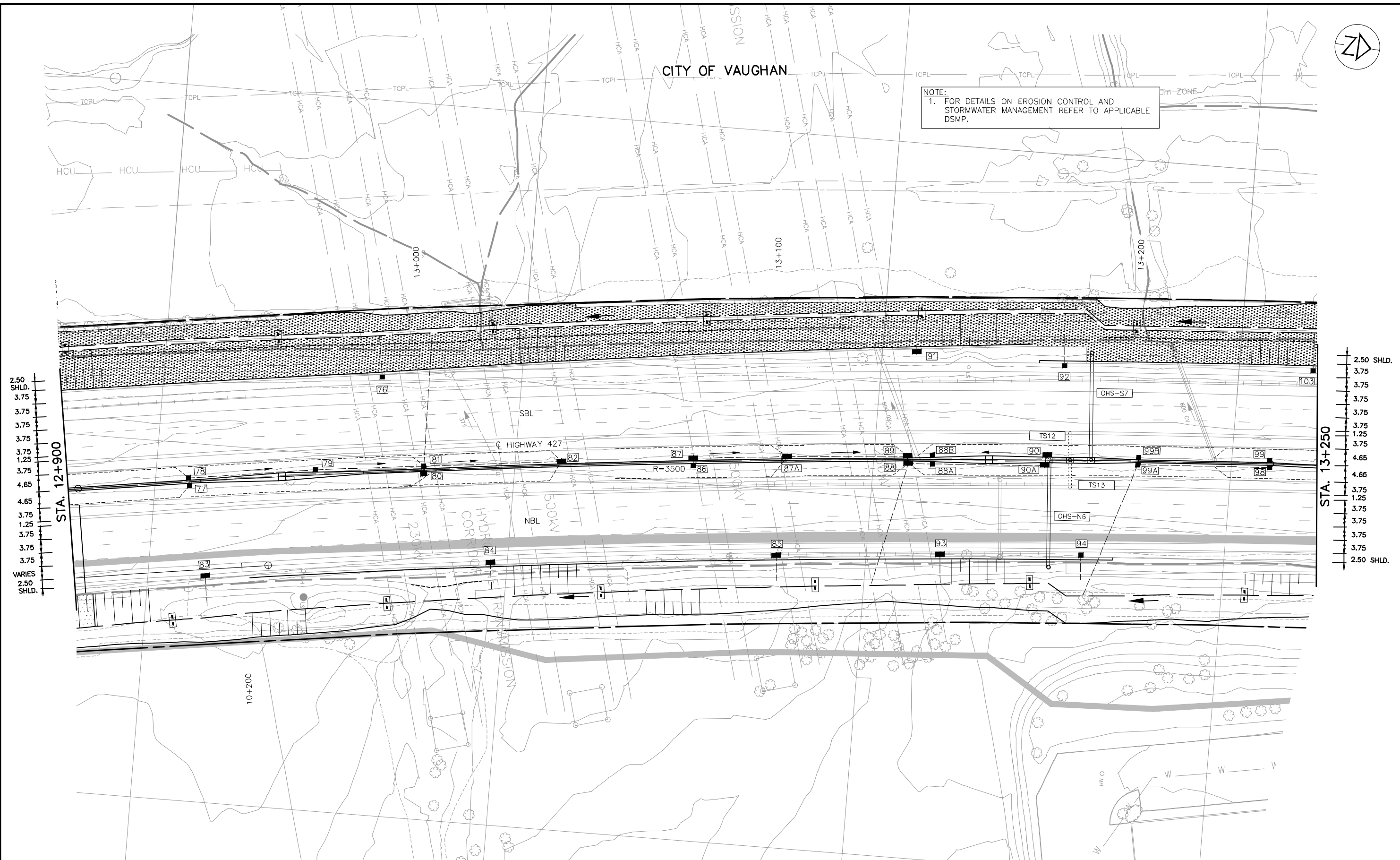
TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 12+550 TO STA. 12+900							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2172	A

A	18/03/20	90% SUBMISSION TO CA					
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PRJ. MAN.	

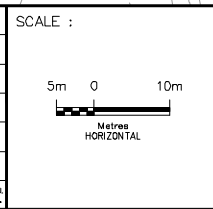


CITY OF VAUGHAN

NOTE:
1. FOR DETAILS ON EROSION CONTROL AND STORMWATER MANAGEMENT REFER TO APPLICABLE DSMP.



NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJ.
A	18/03/20	90% SUBMISSION TO CA				



DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

CONSULTANT	
NAME (PRINT)	INIT. DATE

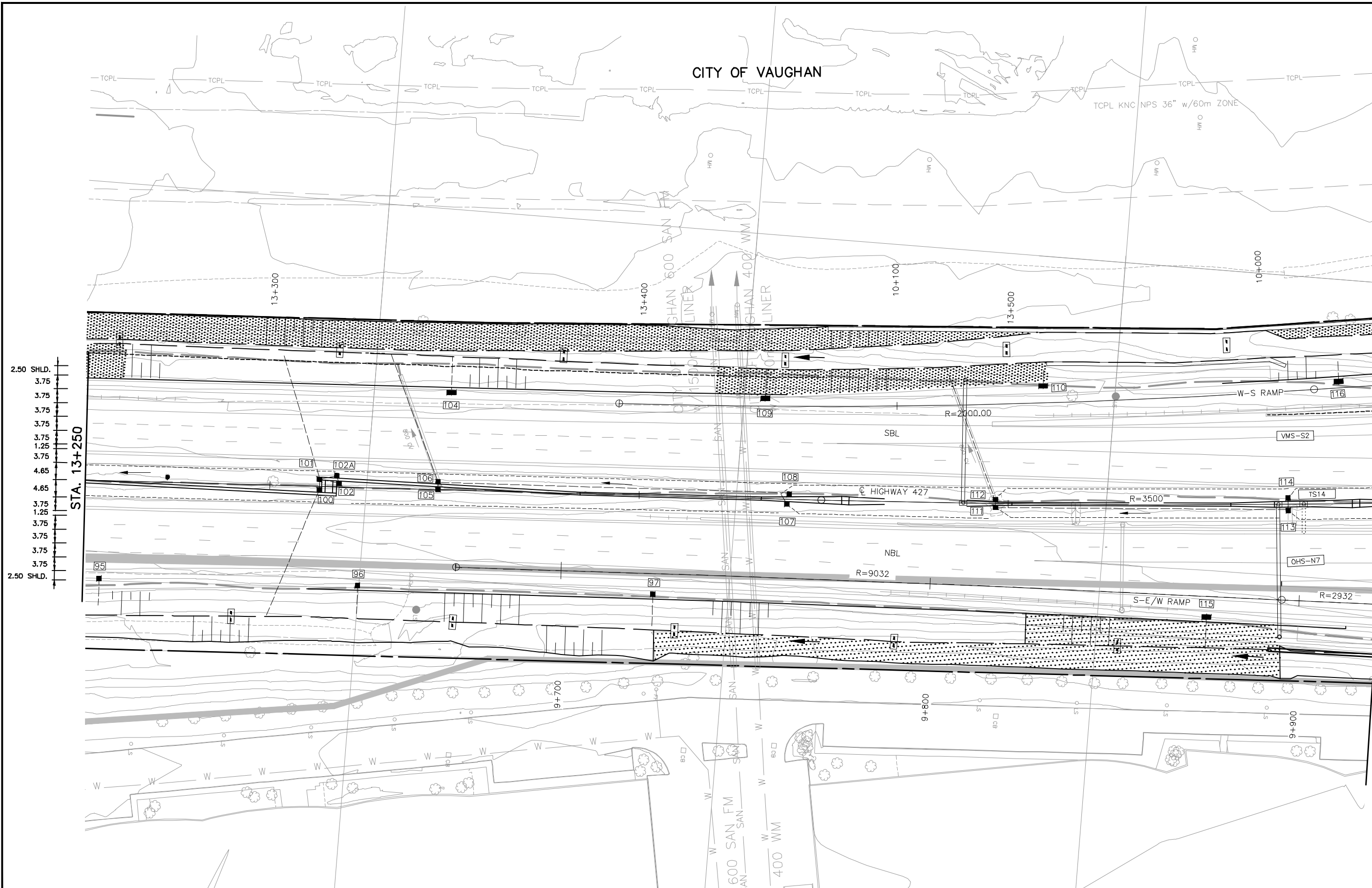


TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 12+900 TO STA. 13+250							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2173	A



CITY OF VAUGHAN

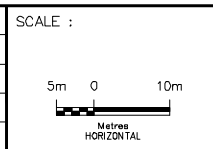
TCPL KNC NPS 36" w/60m ZONE



2.50 SHLD.
3.75
3.75
3.75
3.75
3.75
4.65
4.65
3.75
3.75
3.75
3.75
2.50 SHLD.

2.50 SHLD.
4.75
VARIES
3.75
3.75
3.75
1.25
3.75
4.65
4.65
4.375
4.375
3.75
3.75
VARIES
3.75
3.75
2.50 SHLD.

NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJ.
A	18/03/20	90% SUBMISSION TO CA				

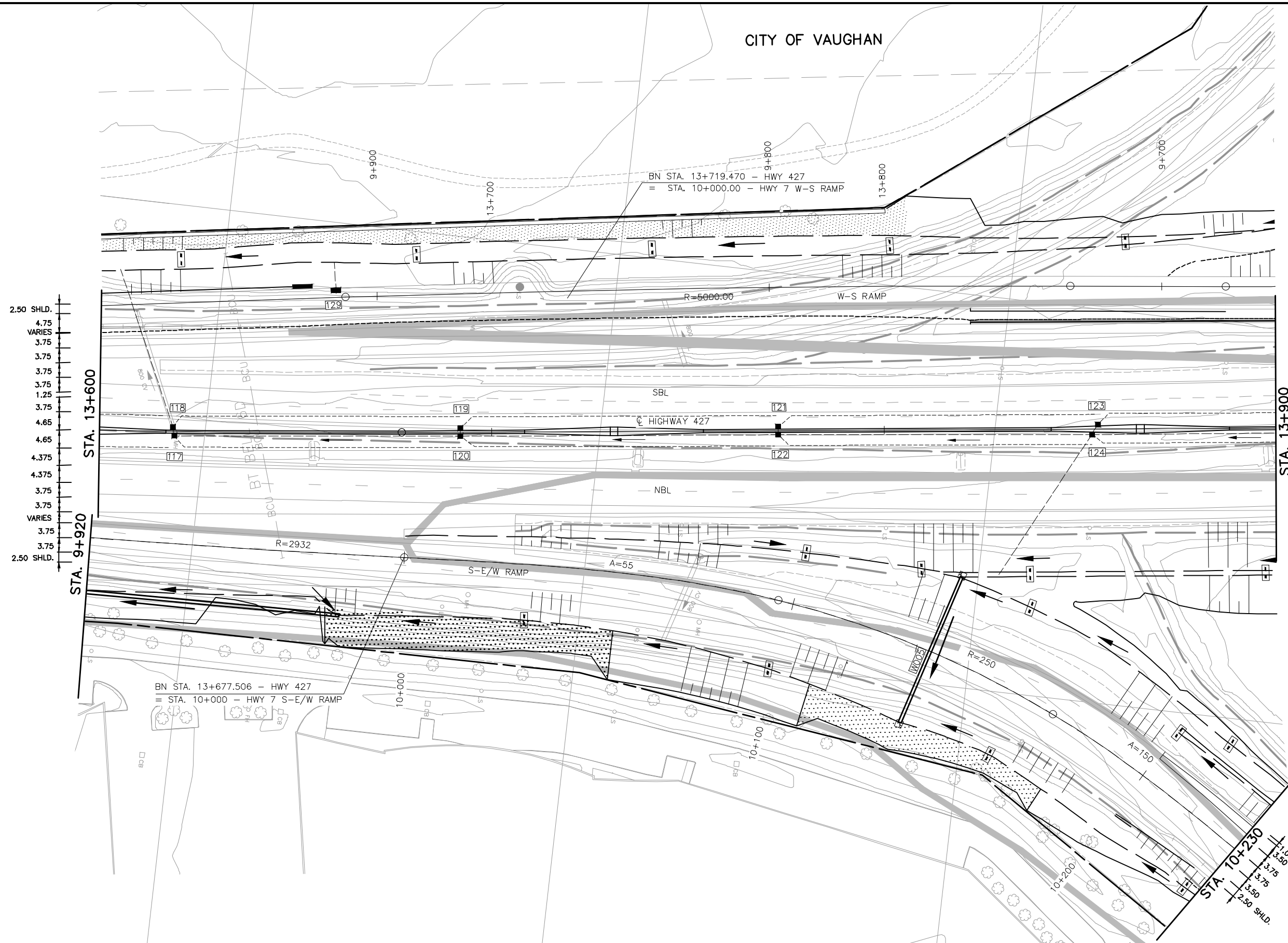


DESIGNED	BARRY McCANDLESS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT		NAME (PRINT)	INIT. DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 13+250 TO STA. 13+600							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2174	A

CITY OF VAUGHAN



2.50 SHLD.
4.75
VARIES
3.75
3.75
3.75
3.75
3.75
4.65
4.65
4.375
4.375
3.75
3.75
VARIES
3.75
3.75
2.50 SHLD.

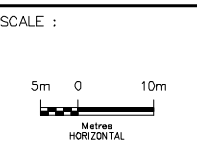
2.50 SHLD.
4.75
1.00 SHLD.
VARIES
3.00 SHLD.
3.75
3.75
3.75
1.25
3.75
4.65
4.65
4.375
4.375
3.75
3.75
3.00 SHLD.

BN STA. 13+677.506 - HWY 427
= STA. 10+000 - HWY 7 S-E/W RAMP

BN STA. 13+719.470 - HWY 427
= STA. 10+000.00 - HWY 7 W-S RAMP

1.00 SHLD.
3.50
3.75
3.75
3.50
2.50 SHLD.

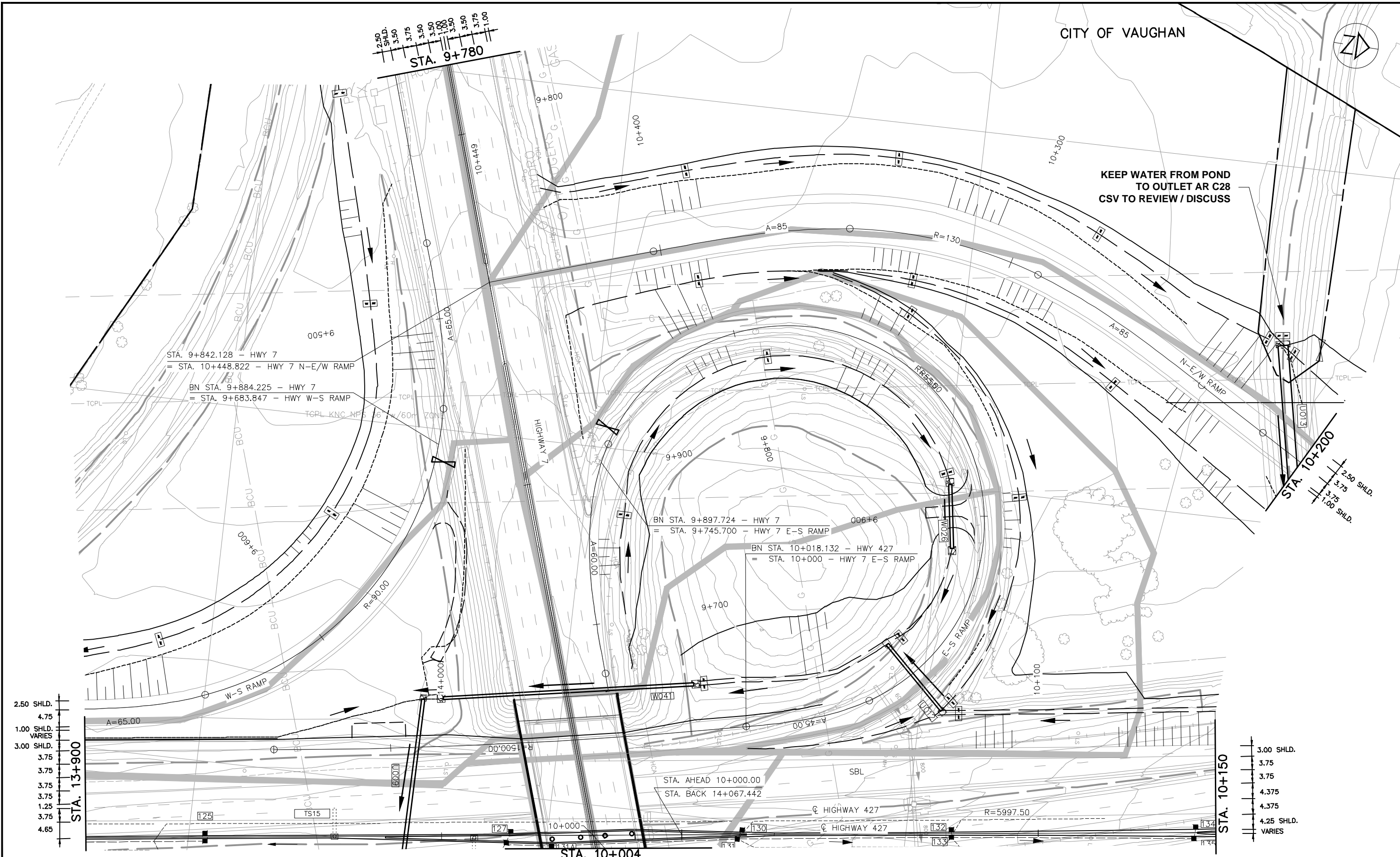
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PRJ. MAN.
A	18/03/20	90% SUBMISSION TO CA				



DESIGNED			
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 13+600 TO STA. 13+900							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2175	A



KEEP WATER FROM POND
TO OUTLET AR C28
CSV TO REVIEW / DISCUSS

STA. 9+842.128 - HWY 7
= STA. 10+448.822 - HWY 7 N-E/W RAMP
BN STA. 9+884.225 - HWY 7
= STA. 9+683.847 - HWY W-S RAMP

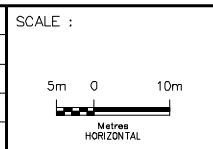
BN STA. 9+897.724 - HWY 7
= STA. 9+745.700 - HWY 7 E-S RAMP
BN STA. 10+018.132 - HWY 427
= STA. 10+000 - HWY 7 E-S RAMP

STA. AHEAD 10+000.00
STA. BACK 14+067.442

2.50 SHLD.
4.75
1.00 SHLD.
VARIES
3.00 SHLD.
3.75
3.75
3.75
1.25
3.75
4.65
STA. 13+900

3.00 SHLD.
3.75
3.75
4.375
4.375
4.25 SHLD.
VARIES
STA. 10+150

NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJL	MAN
A	18/03/20	90% SUBMISSION TO CA					

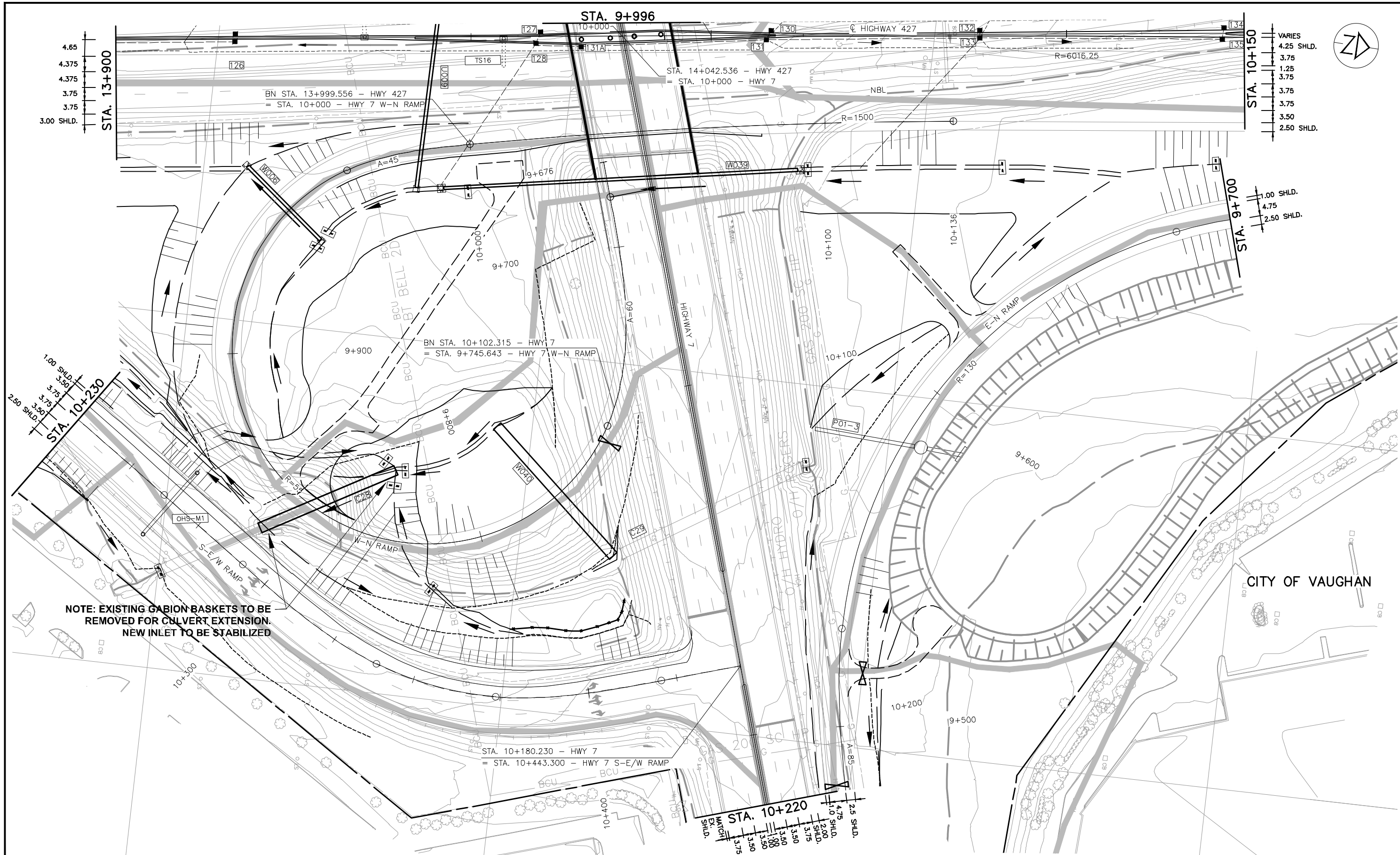


DESIGNED	BARRY McCANDLESS
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

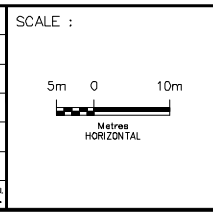
NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 13+900 TO STA. 10+150							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2176	A



NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJ.
A	18/03/20	90% SUBMISSION TO CA				



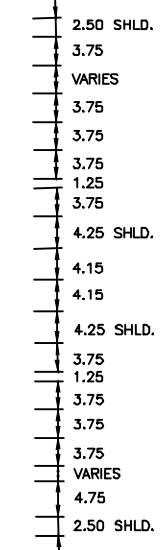
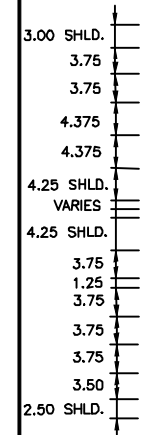
DESIGNED	BARRY McCANDLESS
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

CONSULTANT	NAME (PRINT)	INIT.	DATE

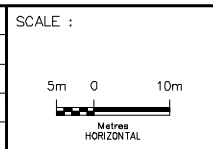


TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 13+900 TO STA. 10+150							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2177	A

CITY OF VAUGHAN



A 18/03/20		90% SUBMISSION TO CA		BY	CHK	LEAD	PRJ.
NO.	DATE	REVISIONS					

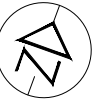


DESIGNED			
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 10+150 TO STA. 10+500							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2178	A

CITY OF VAUGHAN

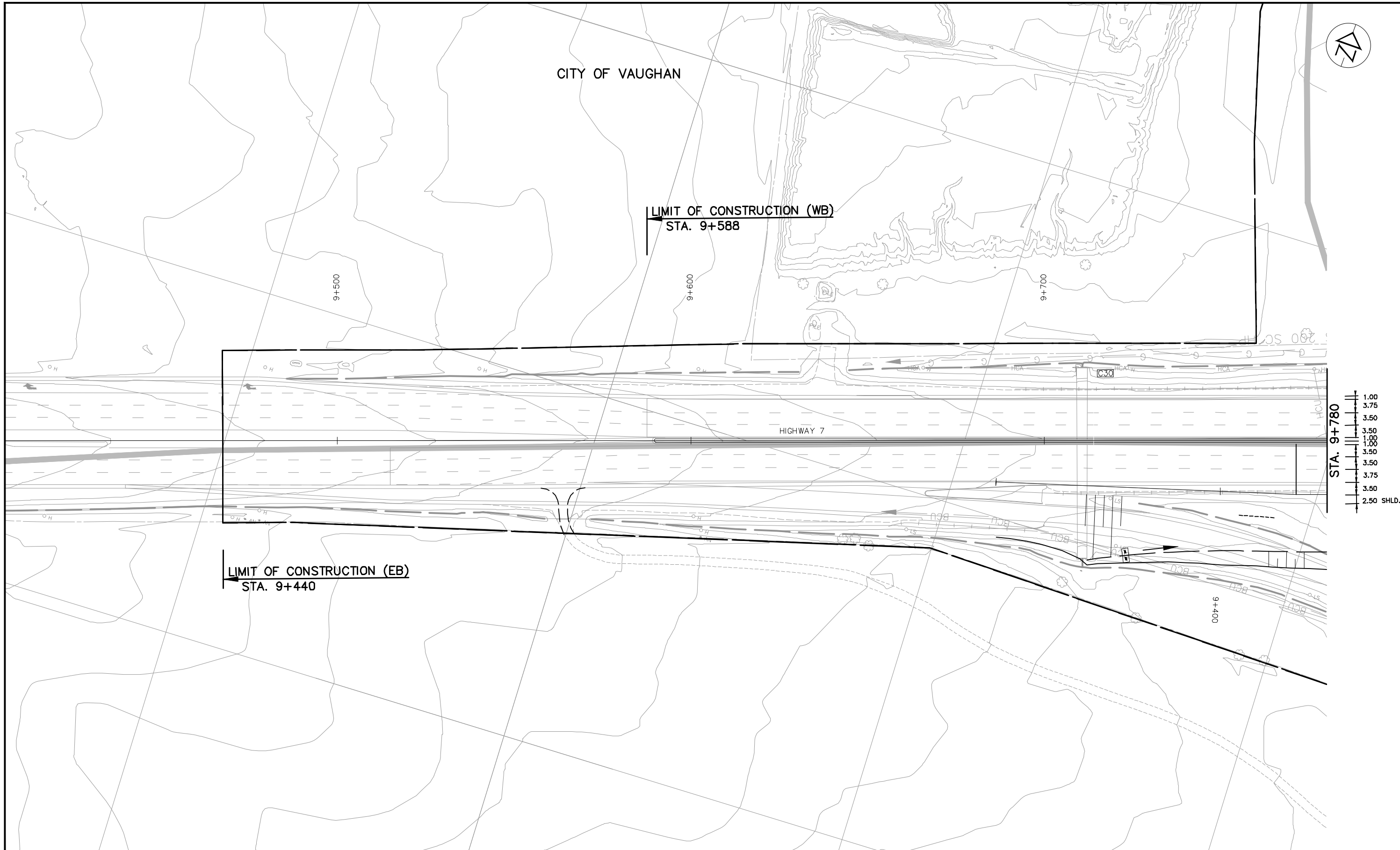
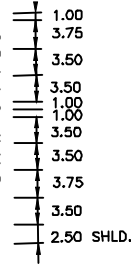


LIMIT OF CONSTRUCTION (WB)
STA. 9+588

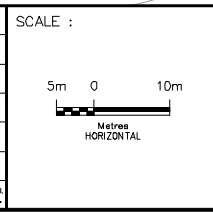
LIMIT OF CONSTRUCTION (EB)
STA. 9+440

HIGHWAY 7

STA. 9+780



NO.	DATE	REVISIONS
A	18/03/20	90% SUBMISSION TO CA



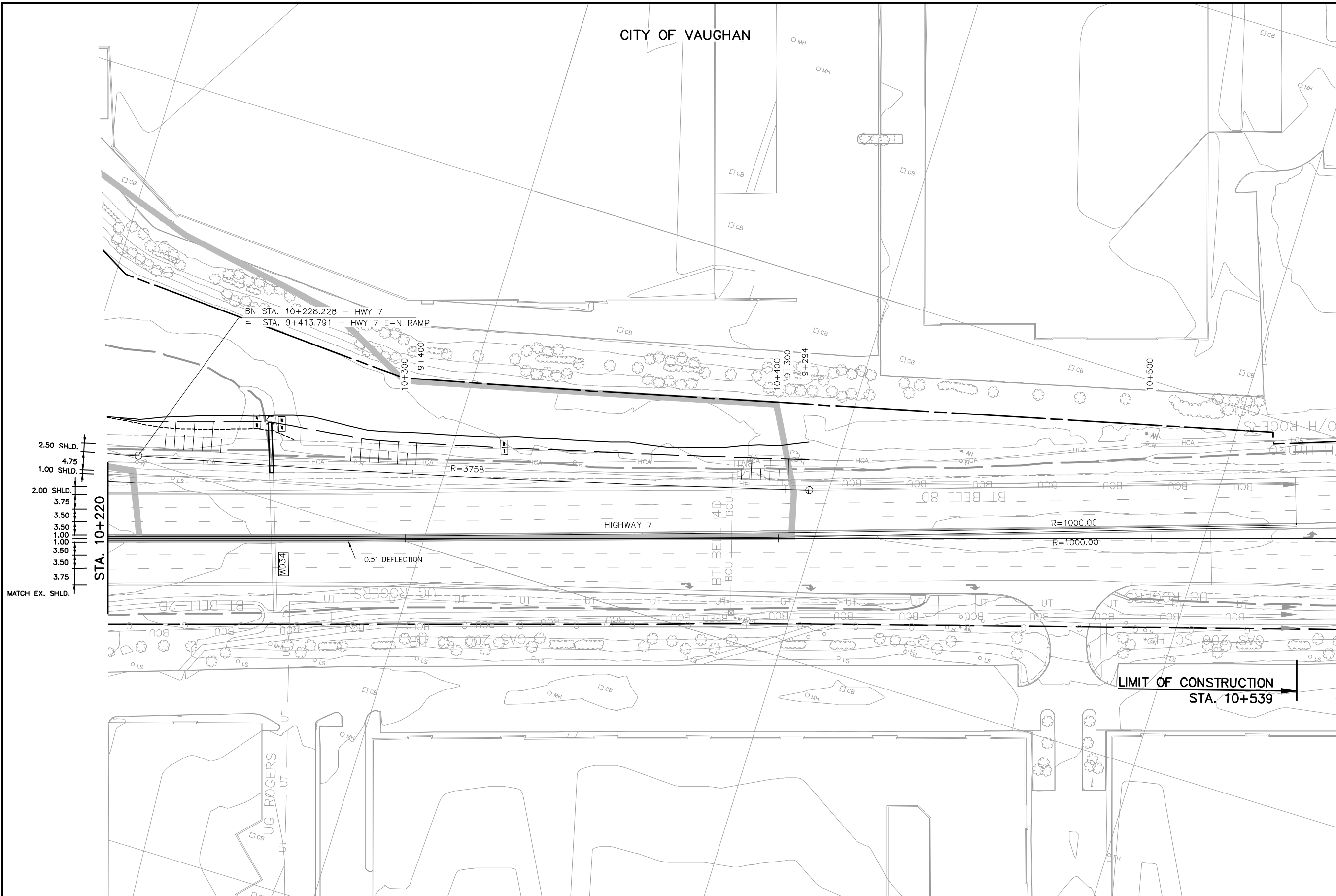
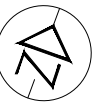
CONSULTANT	DESIGNED	DRAWN	CHECKED	APPROVED LEAD ENGINEER	APPROVED PROJ. MANAGER
	BARRY McCANDLESS	DUNCAN CAMPBELL	KARL VAN KESSEL	PETER BAMFORTH	

NAME (PRINT)	INIT.	DATE

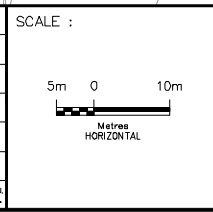


TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
HIGHWAY 7							
STA. 9+440 TO STA. 9+780							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2179	A

CITY OF VAUGHAN



NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJ.
A	18/03/20	90% SUBMISSION TO CA				

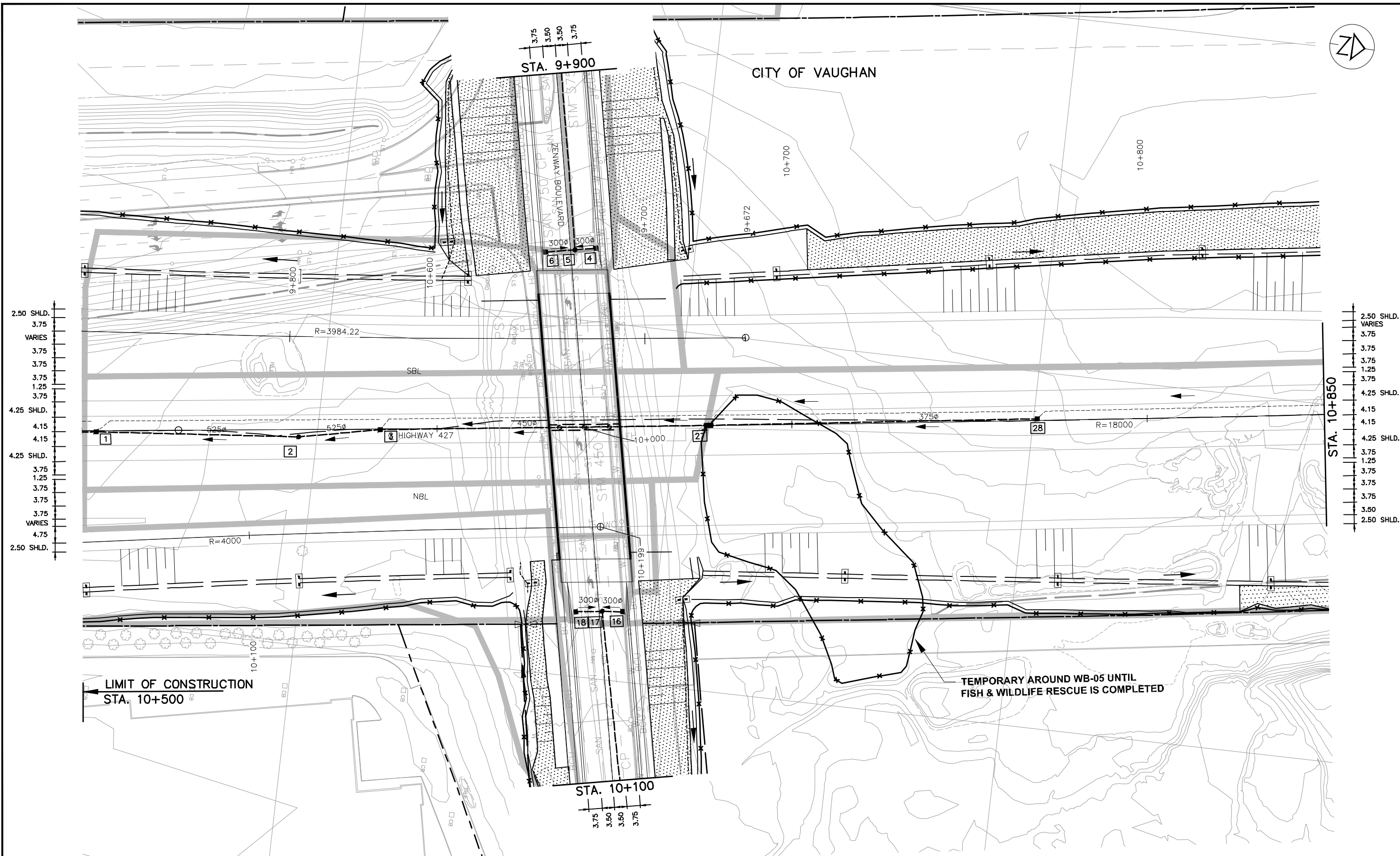


DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

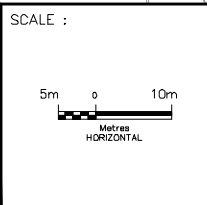
CONSULTANT	NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
HIGHWAY 7							
STA. 10+220 TO STA. 10+539							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	9	ENV	000	DWG	2180	A



NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PRJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				



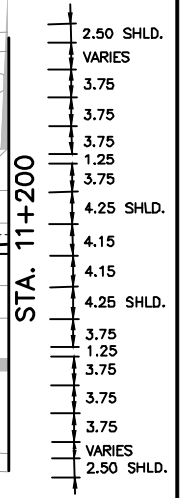
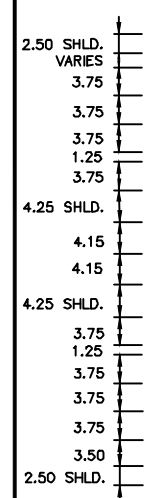
DESIGNED	BARRY McCANDLESS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BANFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE



HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 10+500 TO STA. 10+850							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	1	ENV	000	DWG	2101	A

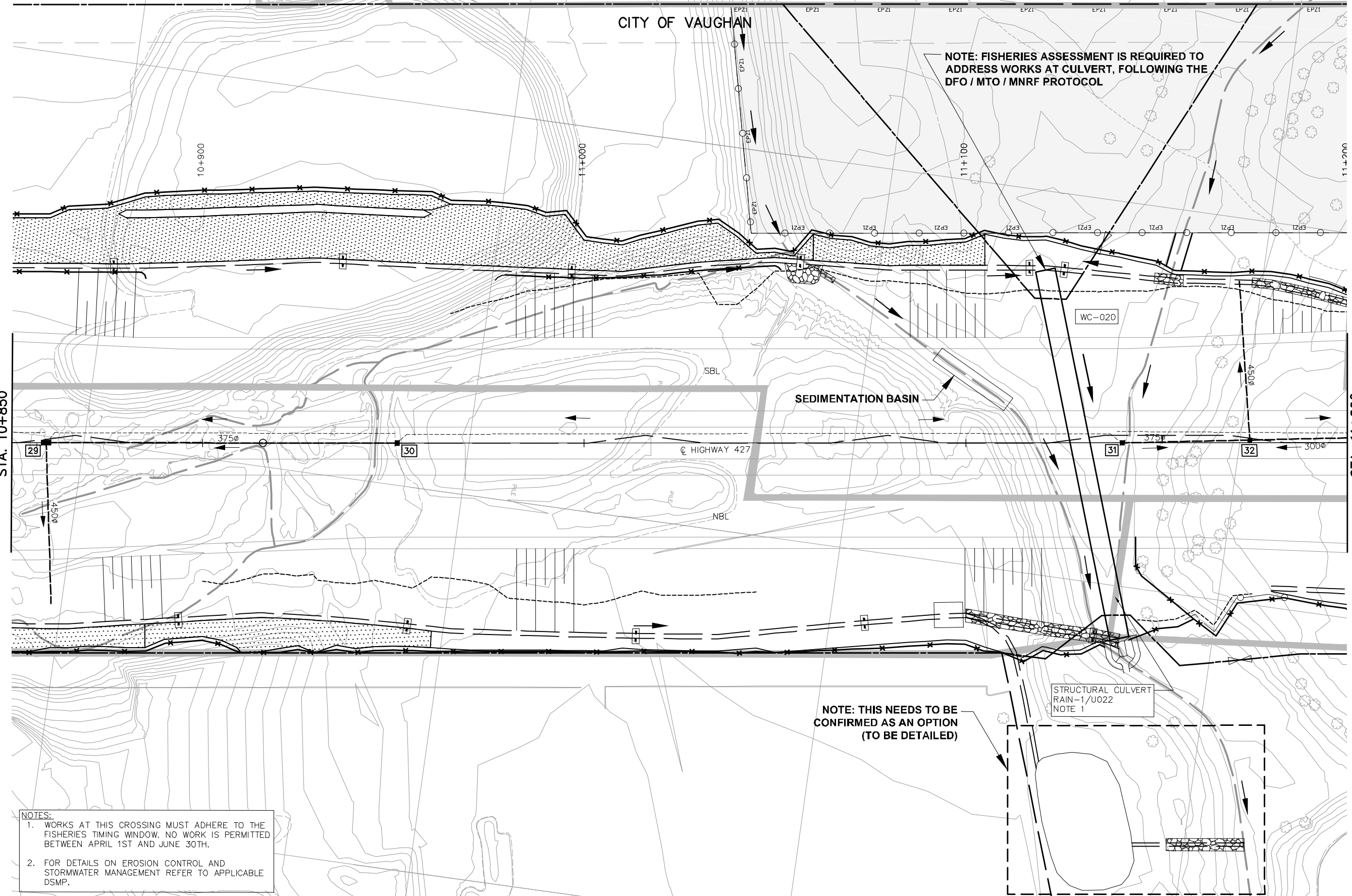
CITY OF VAUGHAN

NOTE: FISHERIES ASSESSMENT IS REQUIRED TO ADDRESS WORKS AT CULVERT, FOLLOWING THE DFO / MTO / MNRF PROTOCOL



STA. 10+850

STA. 11+200

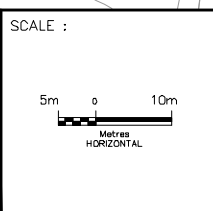


- NOTES:
1. WORKS AT THIS CROSSING MUST ADHERE TO THE FISHERIES TIMING WINDOW. NO WORK IS PERMITTED BETWEEN APRIL 1ST AND JUNE 30TH.
 2. FOR DETAILS ON EROSION CONTROL AND STORMWATER MANAGEMENT REFER TO APPLICABLE DSMP.

NOTE: THIS NEEDS TO BE CONFIRMED AS AN OPTION (TO BE DETAILED)

STRUCTURAL CULVERT RAIN-1/U022 NOTE 1

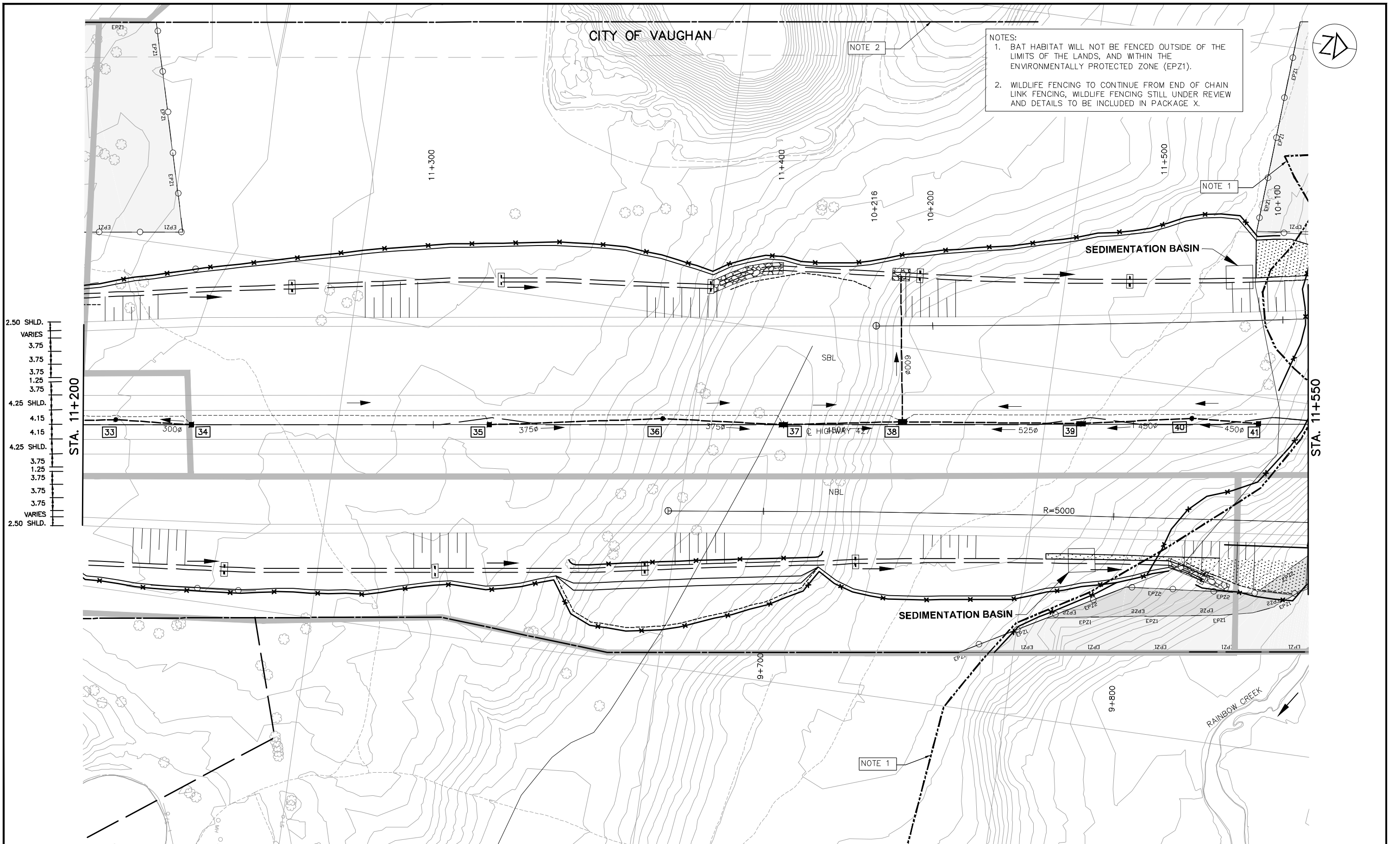
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	BARRY McCANDLESS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BANFORTH		
		NAME (PRINT)	INIT. DATE



HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 10+850 TO STA. 11+200							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	1	ENV	000	DWG	2102	A

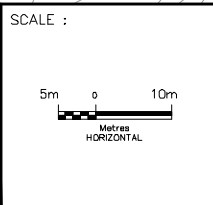


NOTES:
 1. BAT HABITAT WILL NOT BE FENCED OUTSIDE OF THE LIMITS OF THE LANDS, AND WITHIN THE ENVIRONMENTALLY PROTECTED ZONE (EPZ1).
 2. WILDLIFE FENCING TO CONTINUE FROM END OF CHAIN LINK FENCING, WILDLIFE FENCING STILL UNDER REVIEW AND DETAILS TO BE INCLUDED IN PACKAGE X.



2.50 SHLD.
 VARIES
 3.75
 3.75
 1.25
 3.75
 4.25 SHLD.
 4.15
 4.15
 4.25 SHLD.
 3.75
 3.75
 3.75
 VARIES
 2.50 SHLD.

NO.	DATE	REVISIONS	BY	CHK	LEAD DISC	PRJ MAN.
A	18/3/20	90% SUBMISSION TO CA				

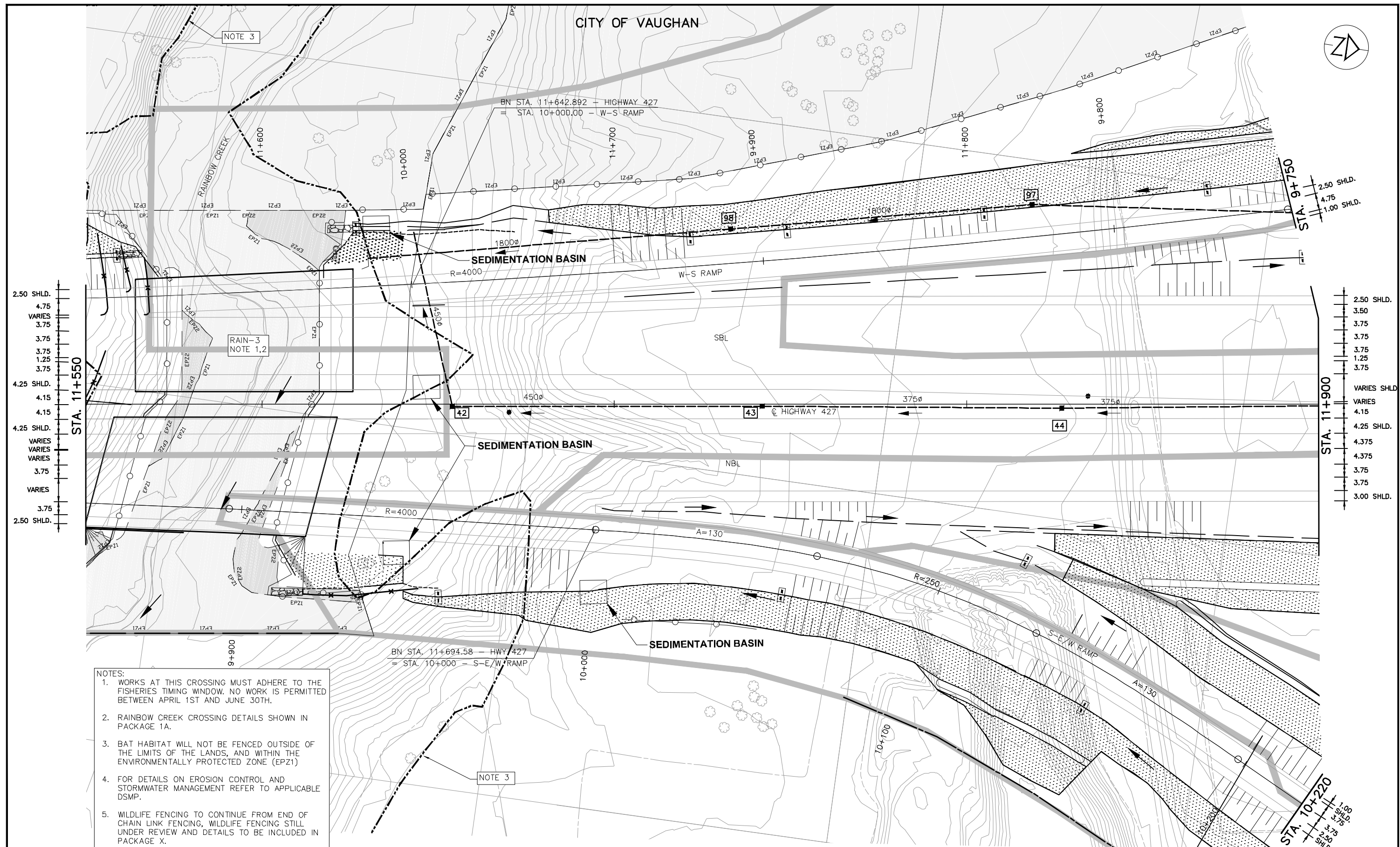


DESIGNED	BARRY McCANDLESS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BANFORTH		
CONSULTANT			
NAME (PRINT)		INIT.	DATE



HWY 427 EXPANSION						
ENVIRONMENTAL						
STA. 11+200 TO STA. 11+550						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER
H427-D	N	1	ENV	000	DWG	2103
						REVISION NUMBER
						A

CITY OF VAUGHAN



NOTE 3

RAIN-3
NOTE 1,2

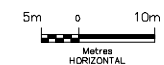
BN STA. 11+642.892 = HIGHWAY 427
= STA. 10+000.00 = W-S RAMP

BN STA. 11+694.58 = HWY 427
= STA. 10+000 = S-E/W RAMP

- NOTES:
1. WORKS AT THIS CROSSING MUST ADHERE TO THE FISHERIES TIMING WINDOW. NO WORK IS PERMITTED BETWEEN APRIL 1ST AND JUNE 30TH.
 2. RAINBOW CREEK CROSSING DETAILS SHOWN IN PACKAGE 1A.
 3. BAT HABITAT WILL NOT BE FENCED OUTSIDE OF THE LIMITS OF THE LANDS, AND WITHIN THE ENVIRONMENTALLY PROTECTED ZONE (EPZ1)
 4. FOR DETAILS ON EROSION CONTROL AND STORMWATER MANAGEMENT REFER TO APPLICABLE DSMP.
 5. WILDLIFE FENCING TO CONTINUE FROM END OF CHAIN LINK FENCING, WILDLIFE FENCING STILL UNDER REVIEW AND DETAILS TO BE INCLUDED IN PACKAGE X.

NOTE 3

SCALE :



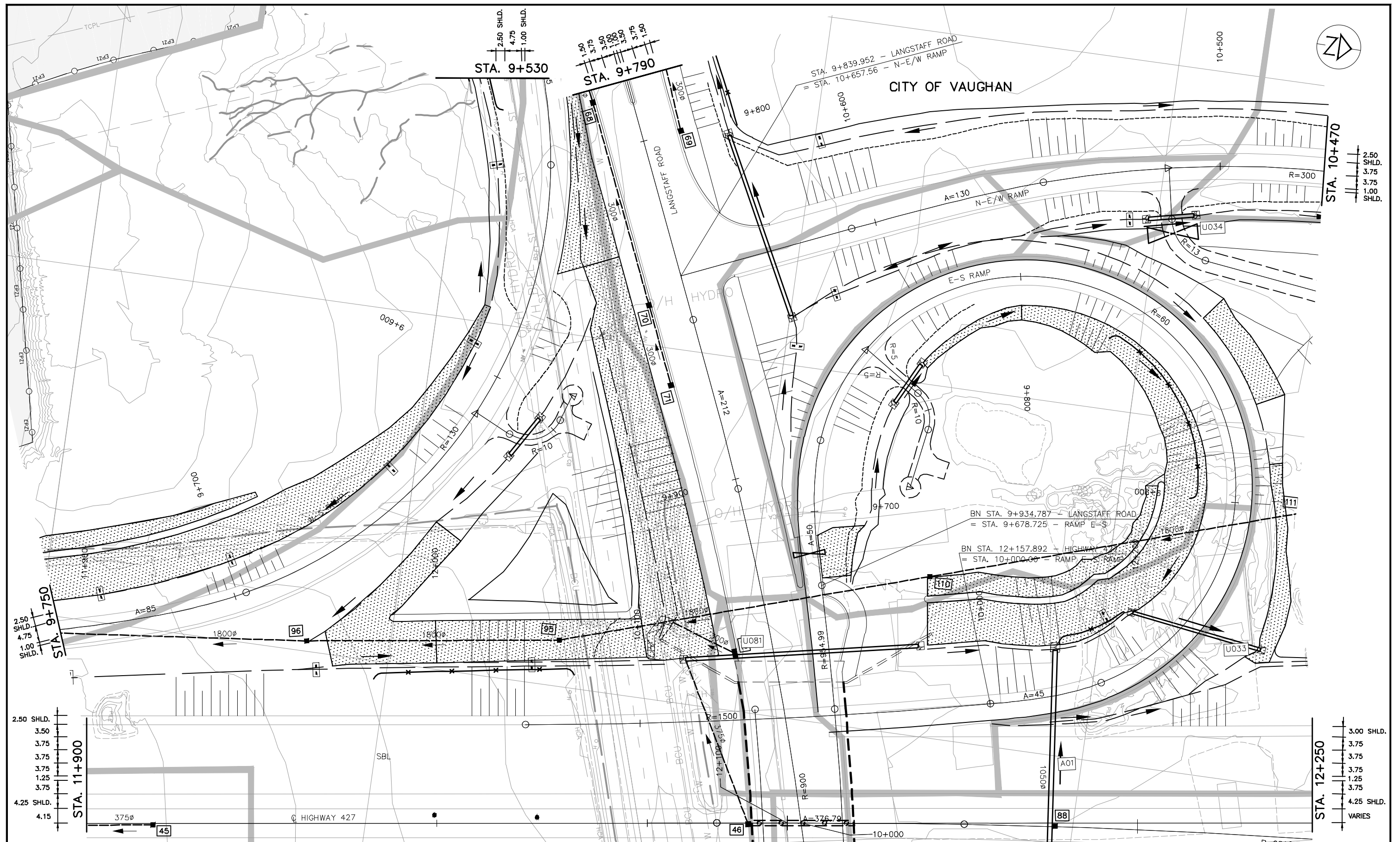
DESIGNED	
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BANFORTH
CONSULTANT	
NAME (PRINT)	INIT. DATE



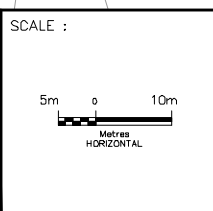
HWY 427 EXPANSION
ENVIRONMENTAL
STA. 11+550 TO STA. 11+900

A	18/3/20	90% SUBMISSION TO CA					
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC	PROJ MAN.	

PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	1	ENV	000	DWG	2104	A



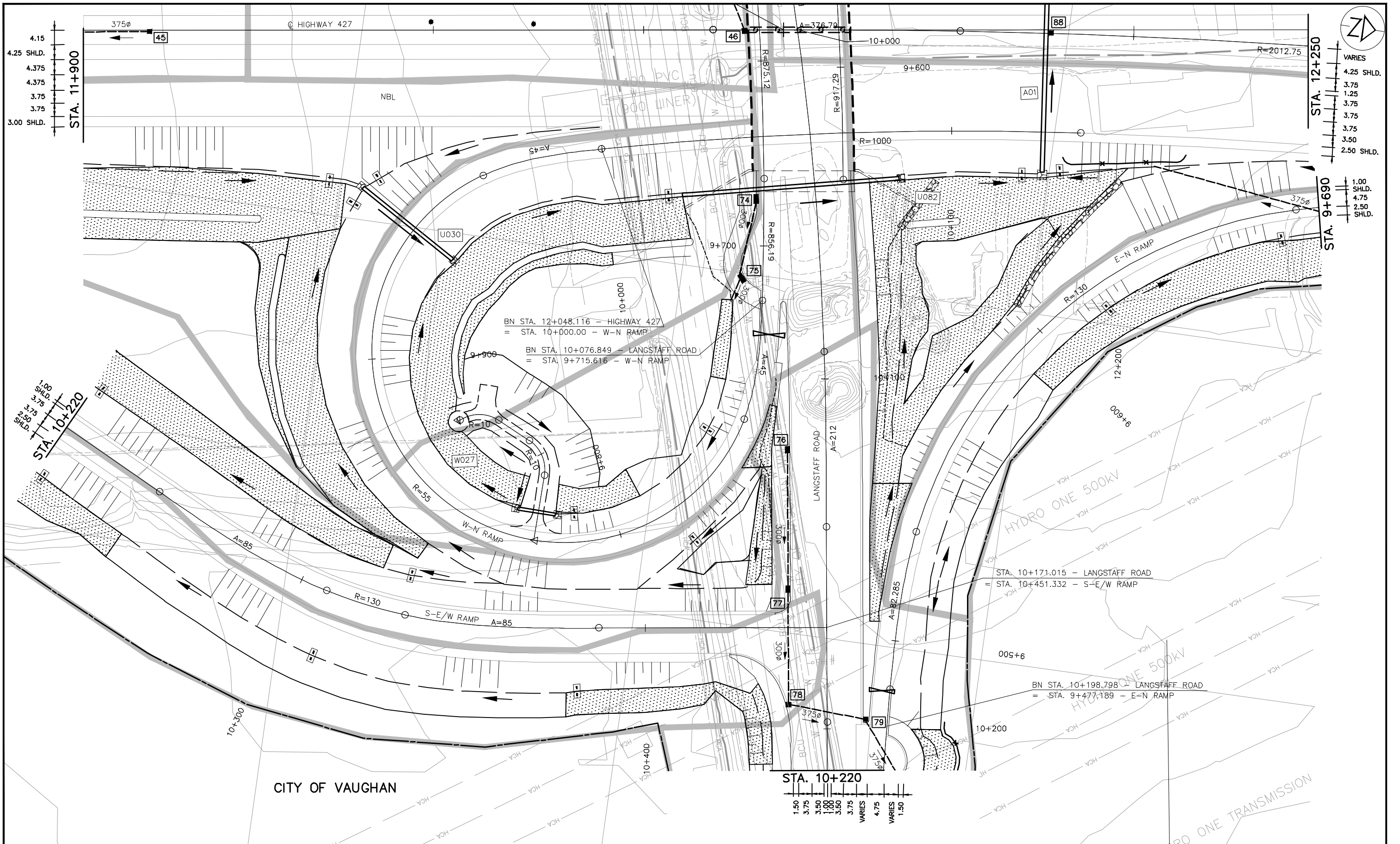
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PRJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				



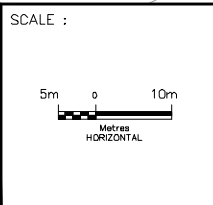
DESIGNED	BARRY McCANDLESS
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BANFORTH
CONSULTANT	
NAME (PRINT)	INIT. DATE



HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 11+900 TO STA. 12+250							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	1	ENV	000	DWG	2105	A



NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PRJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	BARRY M. CANDLESS	
DRAWN	BARRY M. CANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BANFORTH	
NAME (PRINT)	INIT.	DATE

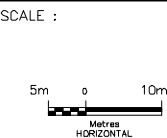


HWY 427 EXPANSION						
ENVIRONMENTAL						
STA. 11+900 TO STA. 12+250						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER
H427-D	N	1	ENV	000	DWG	2106
						REVISION NUMBER
						A



NOTES:
1. BAT HABITAT WILL NOT BE FENCED OUTSIDE OF THE LIMITS OF THE LANDS, AND WITHIN THE ENVIRONMENTALLY PROTECTED ZONE (EPZ1).

NO.	DATE	REVISIONS	BY	CHK	LEAD DISC	PRJ MAN
A	18/3/20	90% SUBMISSION TO CA				

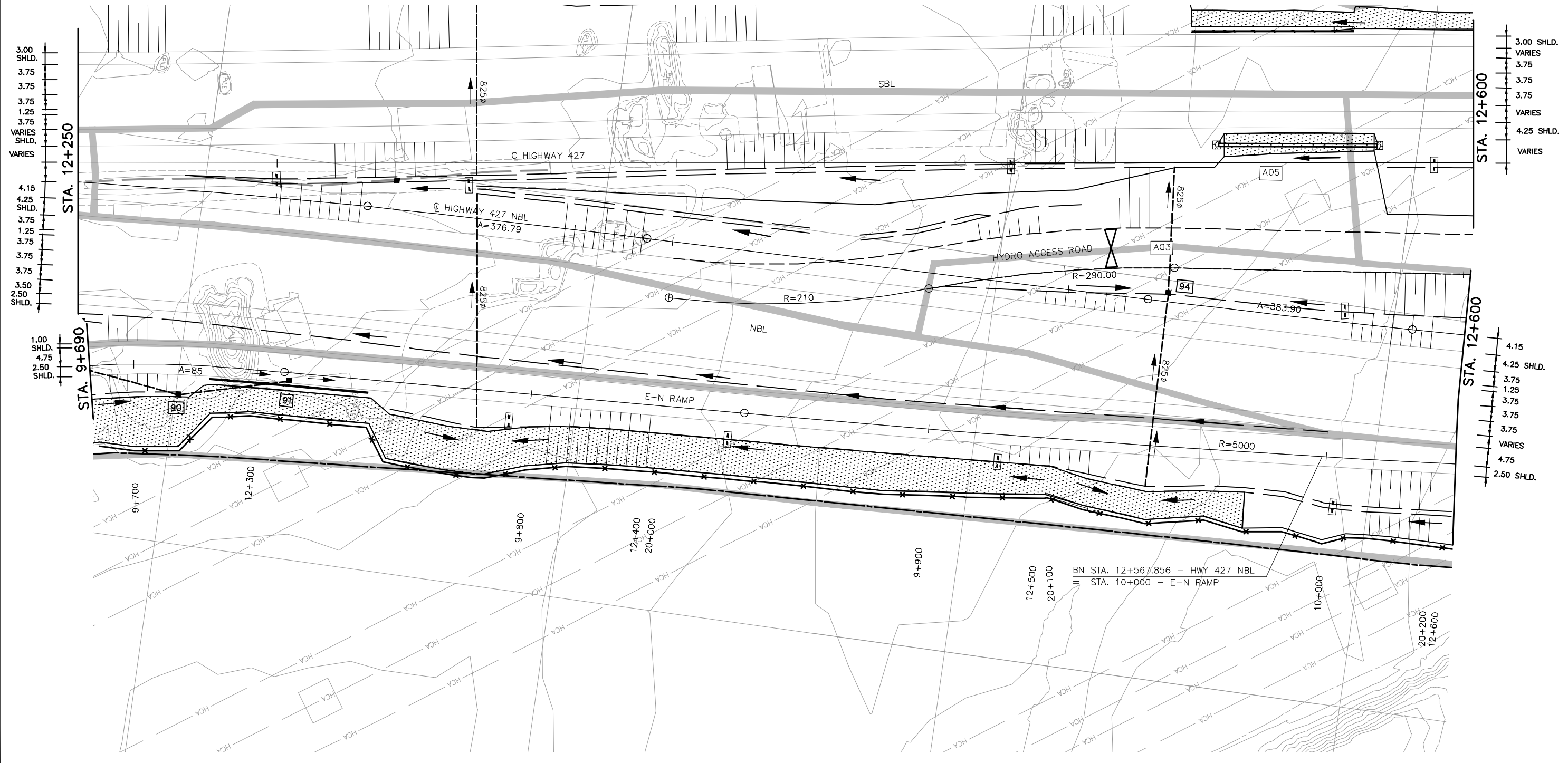


DESIGNED	BARRY MCDONNELL		
DRAWN	BARRY MCDONNELL		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BANFORTH		
CONSULTANT			
NAME (PRINT)		INIT.	DATE

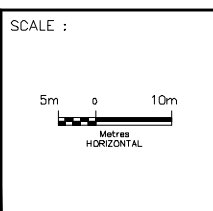


HWY 427 EXPANSION
ENVIRONMENTAL
STA. 10+470 TO STA. 10+100

PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	1	ENV	000	DWG	2107	A



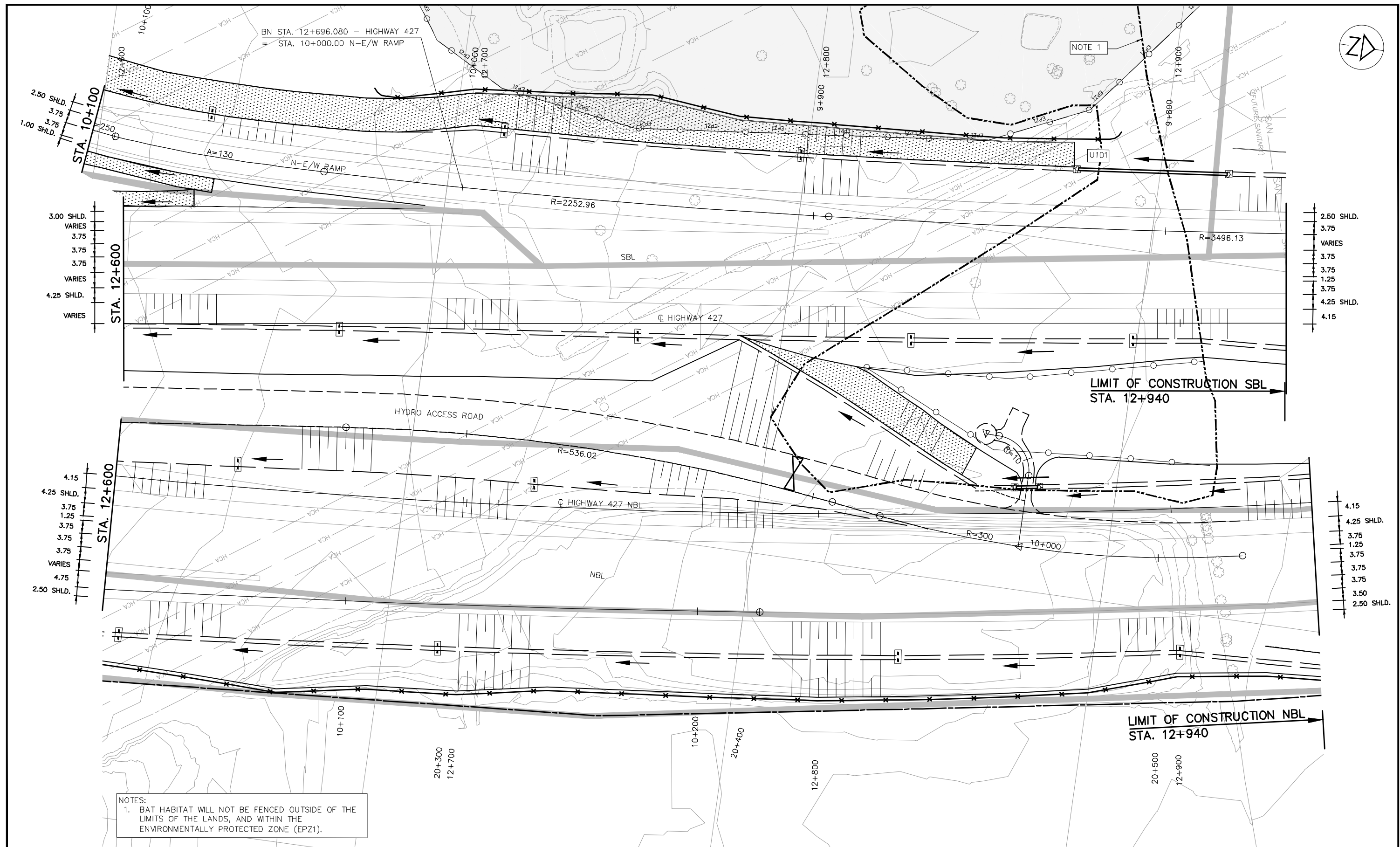
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC	PROJ MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED		
DRAWN	BARRY MCDONALD	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BANFORTH	
CONSULTANT		
	NAME (PRINT)	INIT. DATE

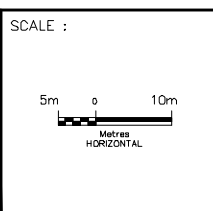


HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 12+250 TO STA. 12+600							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	1	ENV	000	DWG	2108	A



NOTES:
 1. BAT HABITAT WILL NOT BE FENCED OUTSIDE OF THE LIMITS OF THE LANDS, AND WITHIN THE ENVIRONMENTALLY PROTECTED ZONE (EPZ1).

NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				

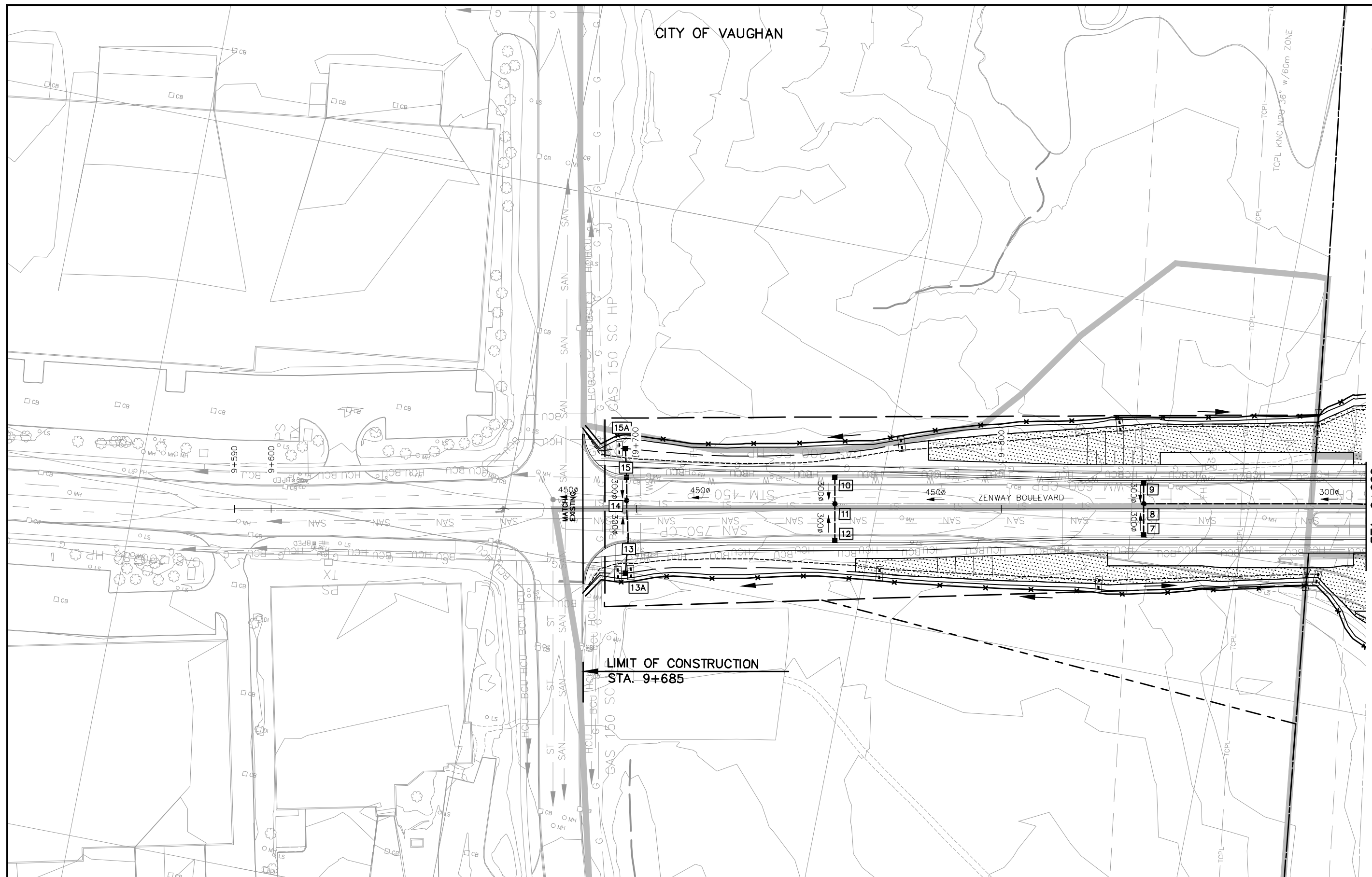
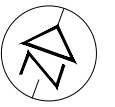


DESIGNED	BARRY McCANDLESS	
DRAWN	BARRY McCANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BANFORTH	
CONSULTANT		
NAME (PRINT)		INIT. DATE

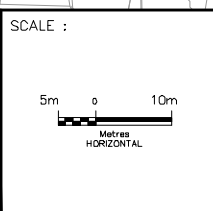


HWY 427 EXPANSION									
ENVIRONMENTAL									
STA. 12+600 TO STA. 12+930 SBL									
STA. 12+600 TO STA. 12+940 NBL									
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER		
H427-D	N	1	ENV	000	DWG	2109	A		

CITY OF VAUGHAN



NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				

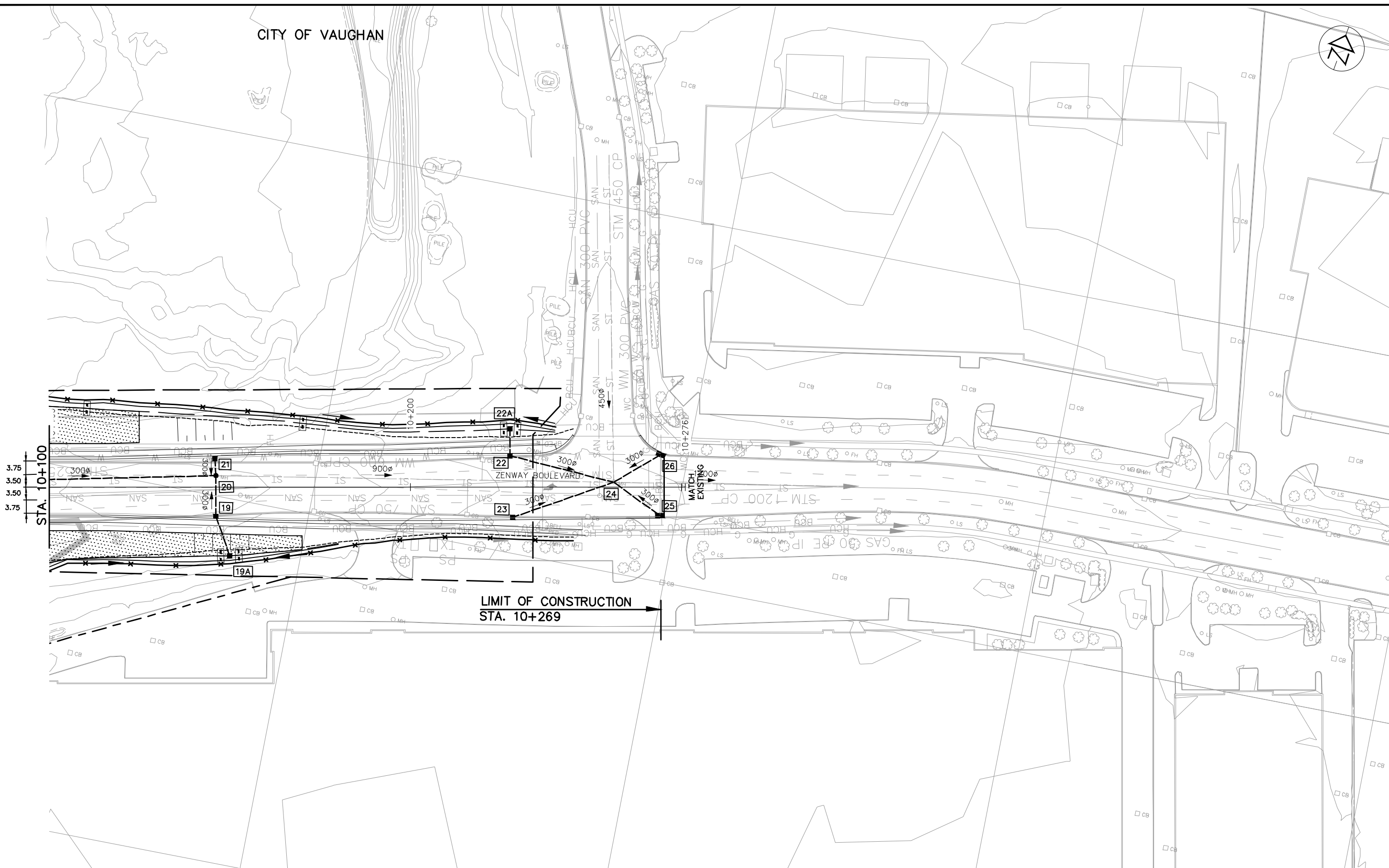
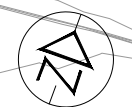


DESIGNED	BARRY MCDONNELL		
DRAWN	BARRY MCDONNELL		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BANFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE

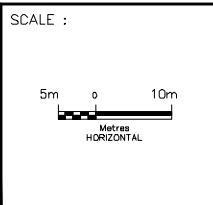


HWY 427 EXPANSION							
ENVIRONMENTAL							
ZENWAY BOULEVARD							
STA. 9+685 TO STA. 9+900							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	1	ENV	000	DWG	2110	A

CITY OF VAUGHAN



NO.	DATE	REVISIONS	BY	CHK	LEAD DISC	PROJ MAN.
A	18/3/20	90% SUBMISSION TO CA				

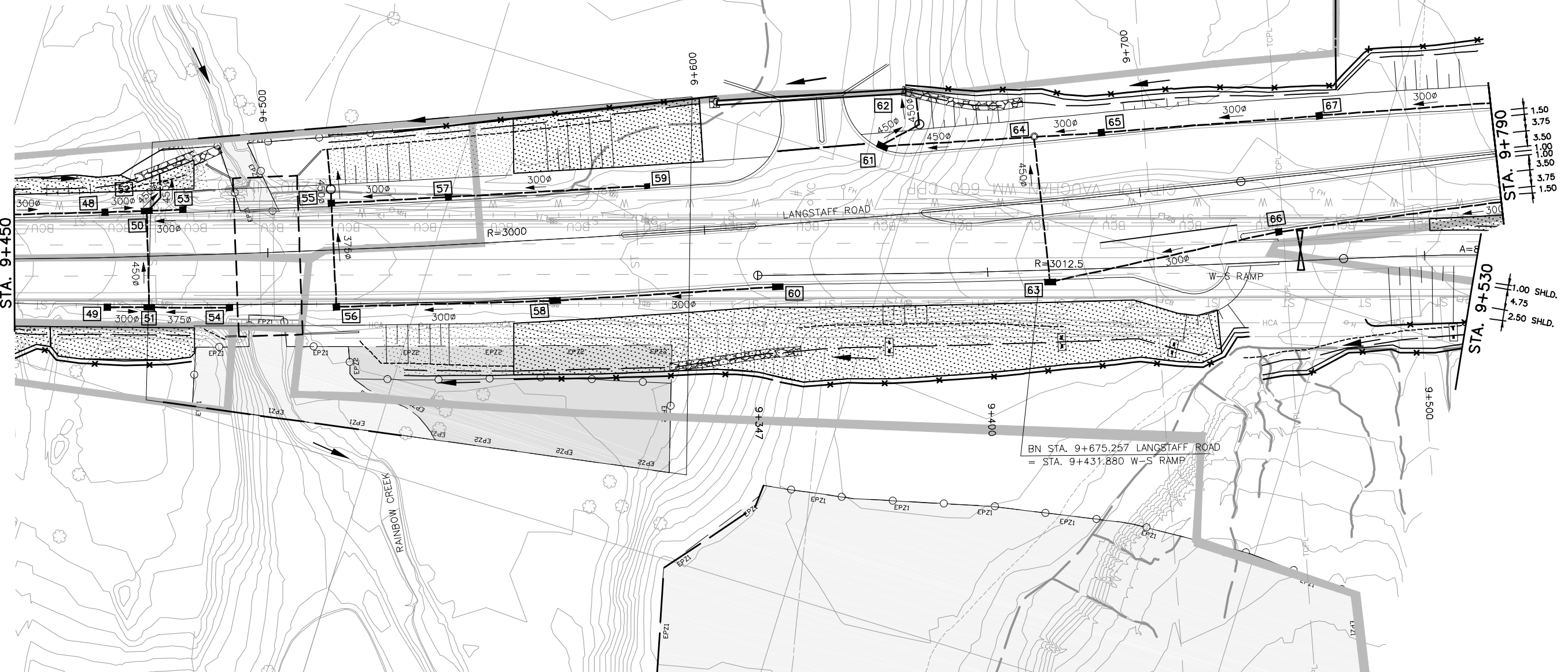
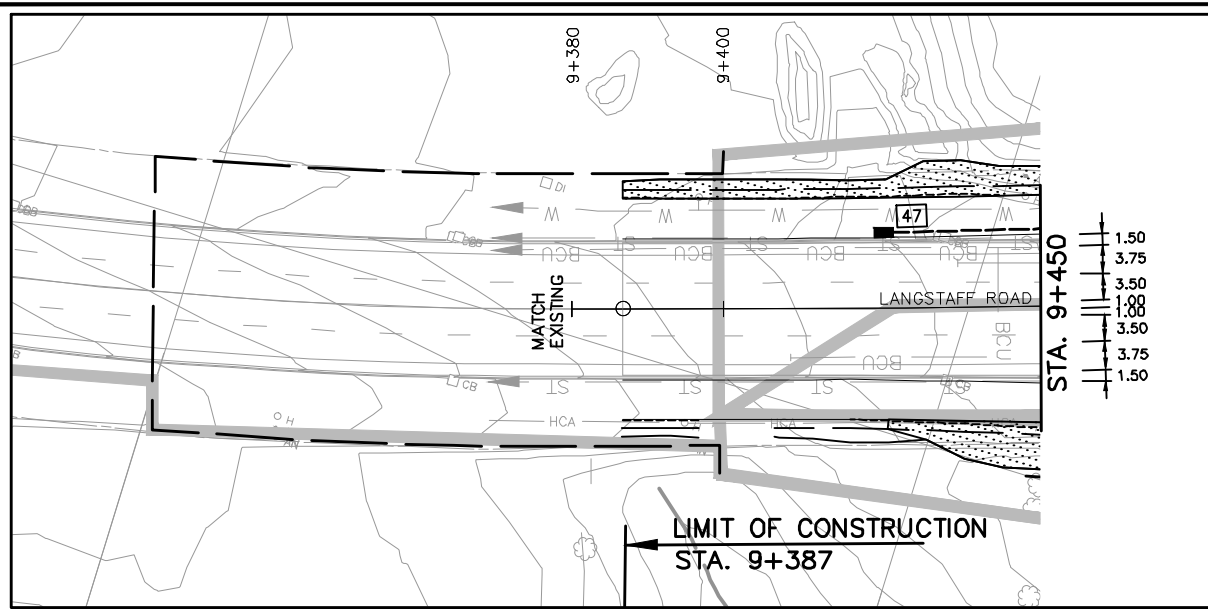
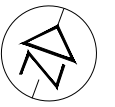


DESIGNED	BARRY McCANDLESS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BANFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE

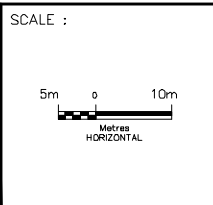


HWY 427 EXPANSION						
ENVIRONMENTAL						
ZENWAY BOULEVARD						
STA. 10+100 TO STA. 10+269						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER
H427-D	N	1	ENV	000	DWG	2111
						REVISION NUMBER
						A

CITY OF VAUGHAN



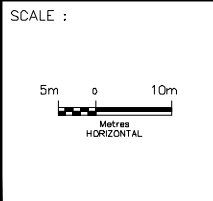
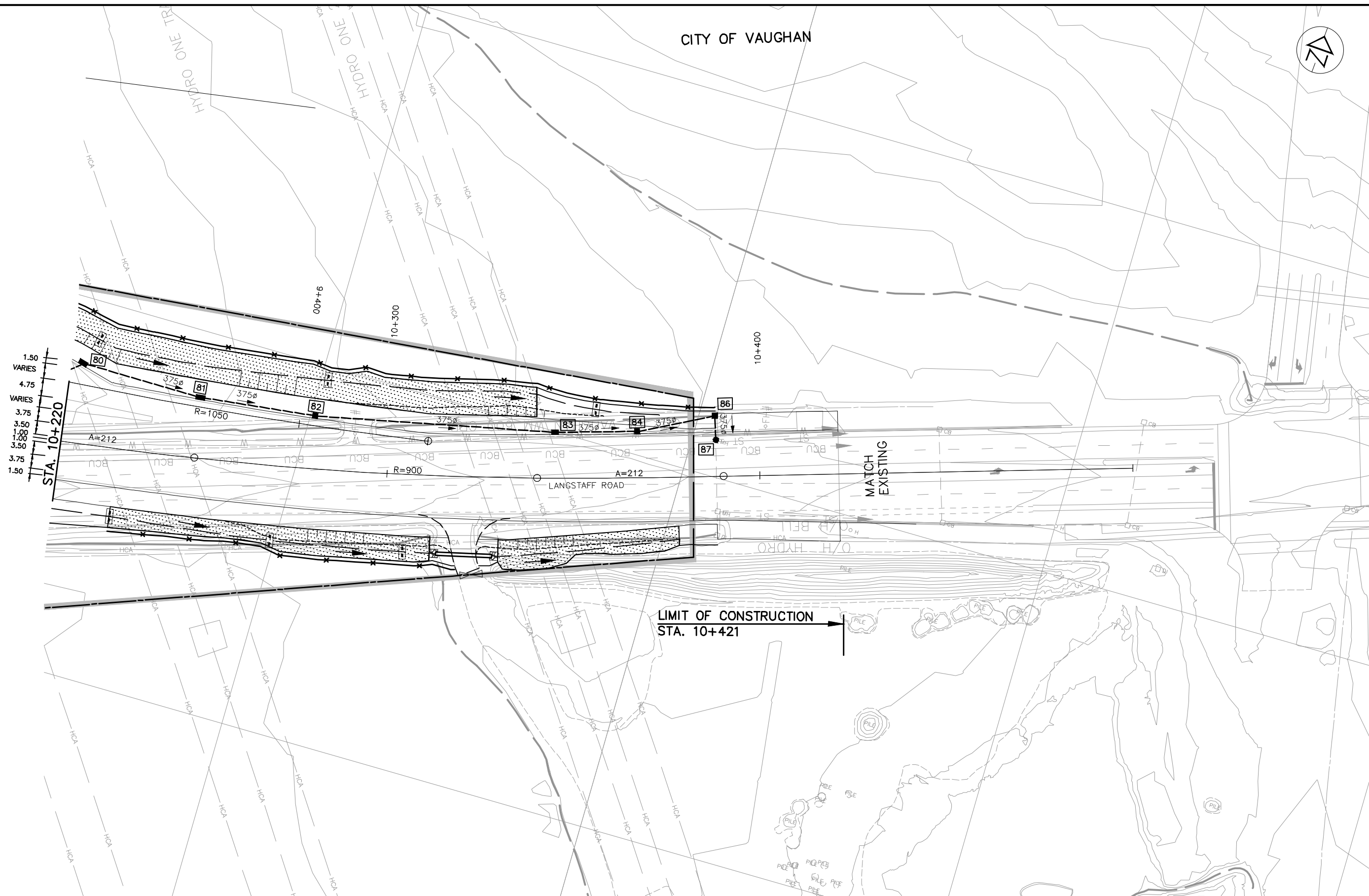
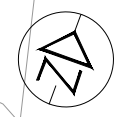
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC	PROJ MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	BARRY McCANDLESS	
DRAWN	BARRY McCANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BANFORTH	
NAME (PRINT)	INIT.	DATE



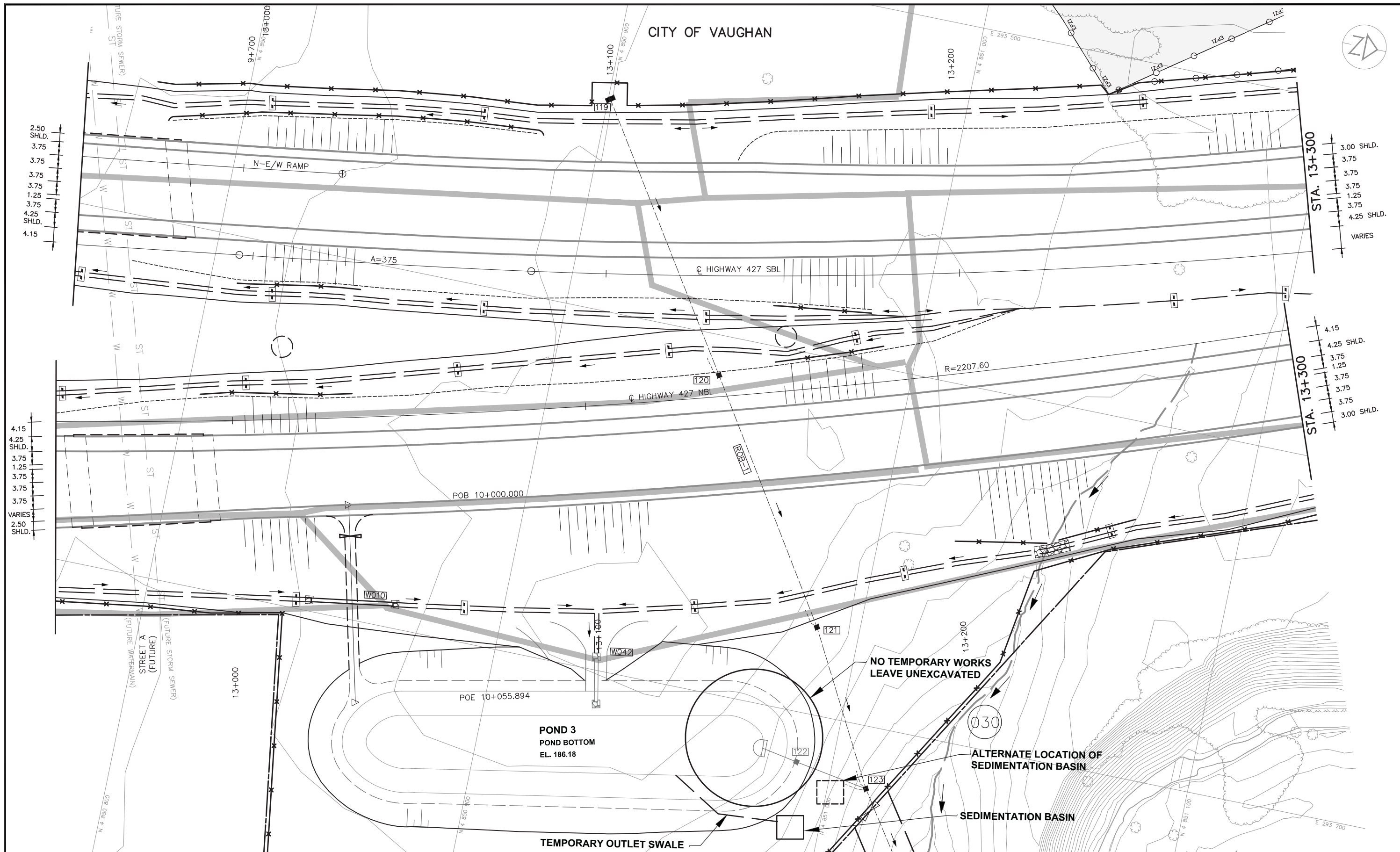
HWY 427 EXPANSION						
ENVIRONMENTAL LANGSTAFF ROAD						
STA. 9+387 TO STA. 9+790						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	REVISION NUMBER
H427-D	N	1	ENV	000	DWG	2112 A



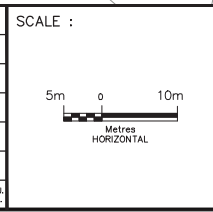
CONSULTANT	DESIGNED			
	DRAWN	BARRY MCDANDLESS		
	CHECKED	DUNCAN CAMPBELL		
	APPROVED LEAD ENGINEER	KARL VAN KESSEL		
	APPROVED PROJ. MANAGER	PETER BANFORTH		
	NAME (PRINT)	INIT.	DATE	



HWY 427 EXPANSION						
ENVIRONMENTAL						
LANGSTAFF ROAD						
STA. 10+220 TO STA. 10+421						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER
H427-D	N	1	ENV	000	DWG	2113
						A



NO.	DATE	REVISIONS	BY	CHK	LEAD. DES.	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				

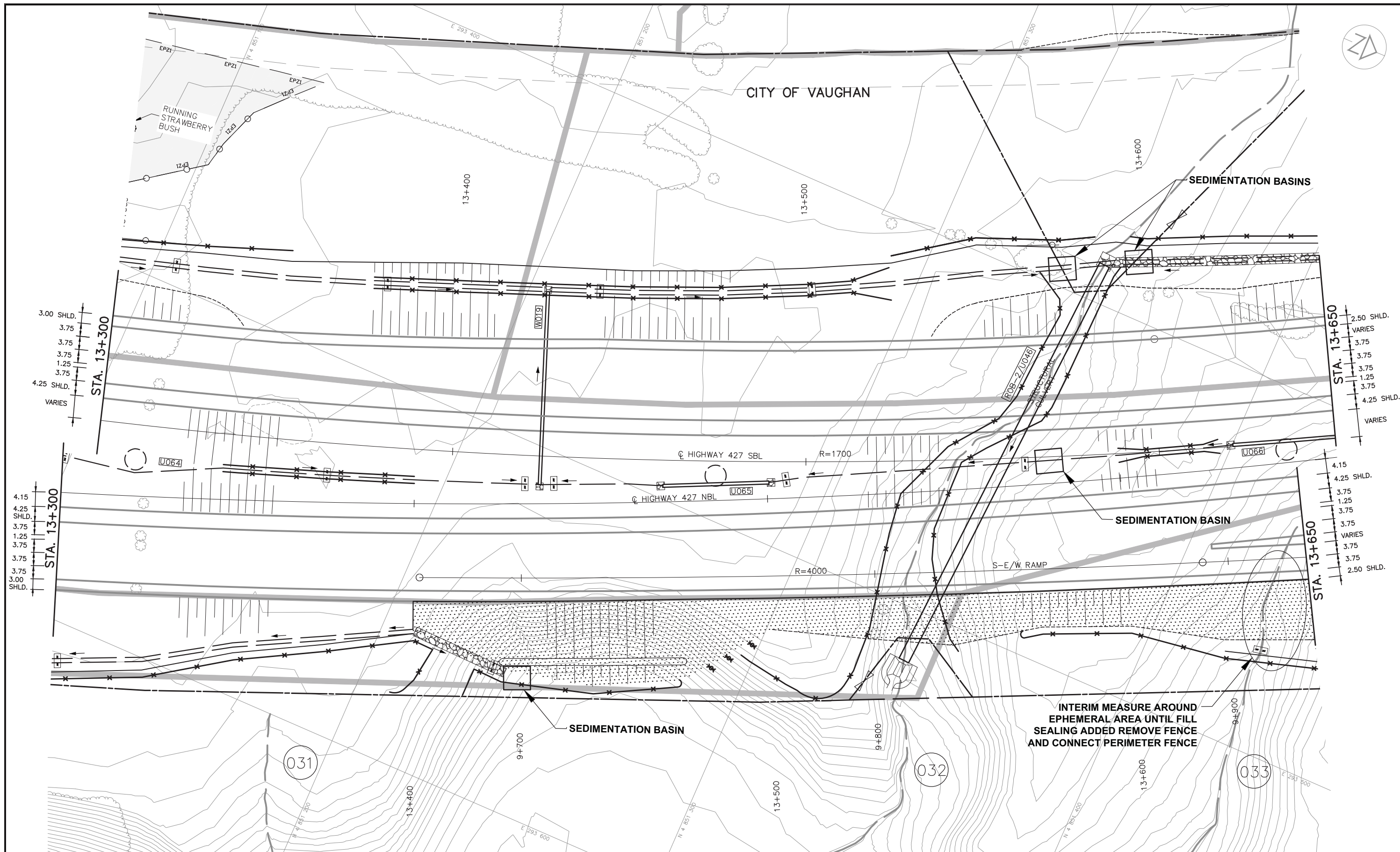


DESIGNED	ISABELLE HEMMINGS
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

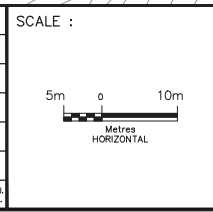
NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 12+930 TO STA. 13+300 SBL							
STA. 12+940 TO STA. 13+300 NBL							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	2	ENV.	000	DWG	2122	A



NO.	DATE	REVISIONS	BY	CHK	LEAD	PROJ.
A	18/3/20	90% SUBMISSION TO CA				

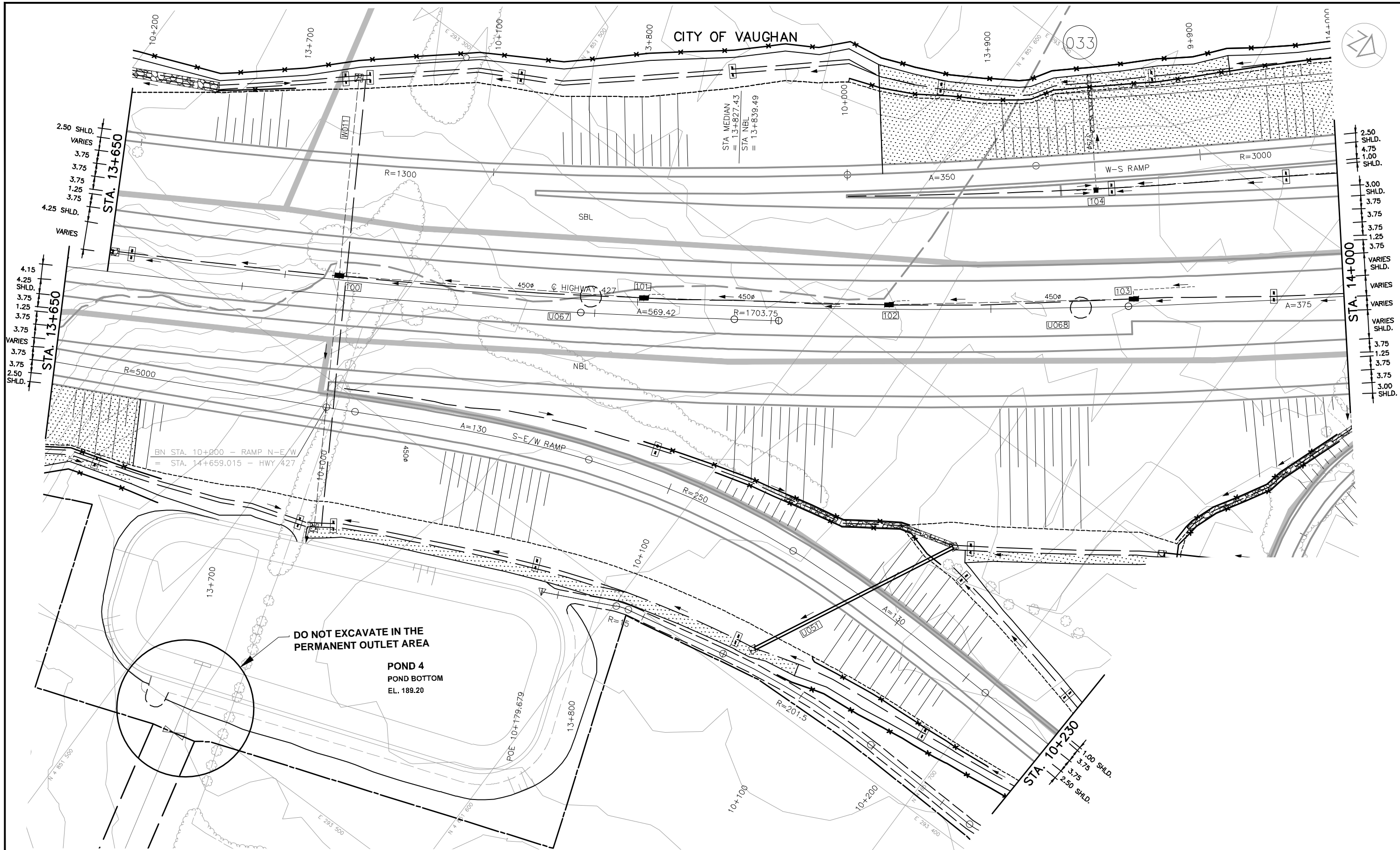


DESIGNED	ISABELLE HEMMINGS
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

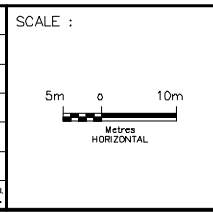
CONSULTANT	
NAME (PRINT)	INT. DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 13+300 TO STA. 13+650							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	2	ENV	000	DWG	2123	A



NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJL
A	18/3/20	90% SUBMISSION TO CA				

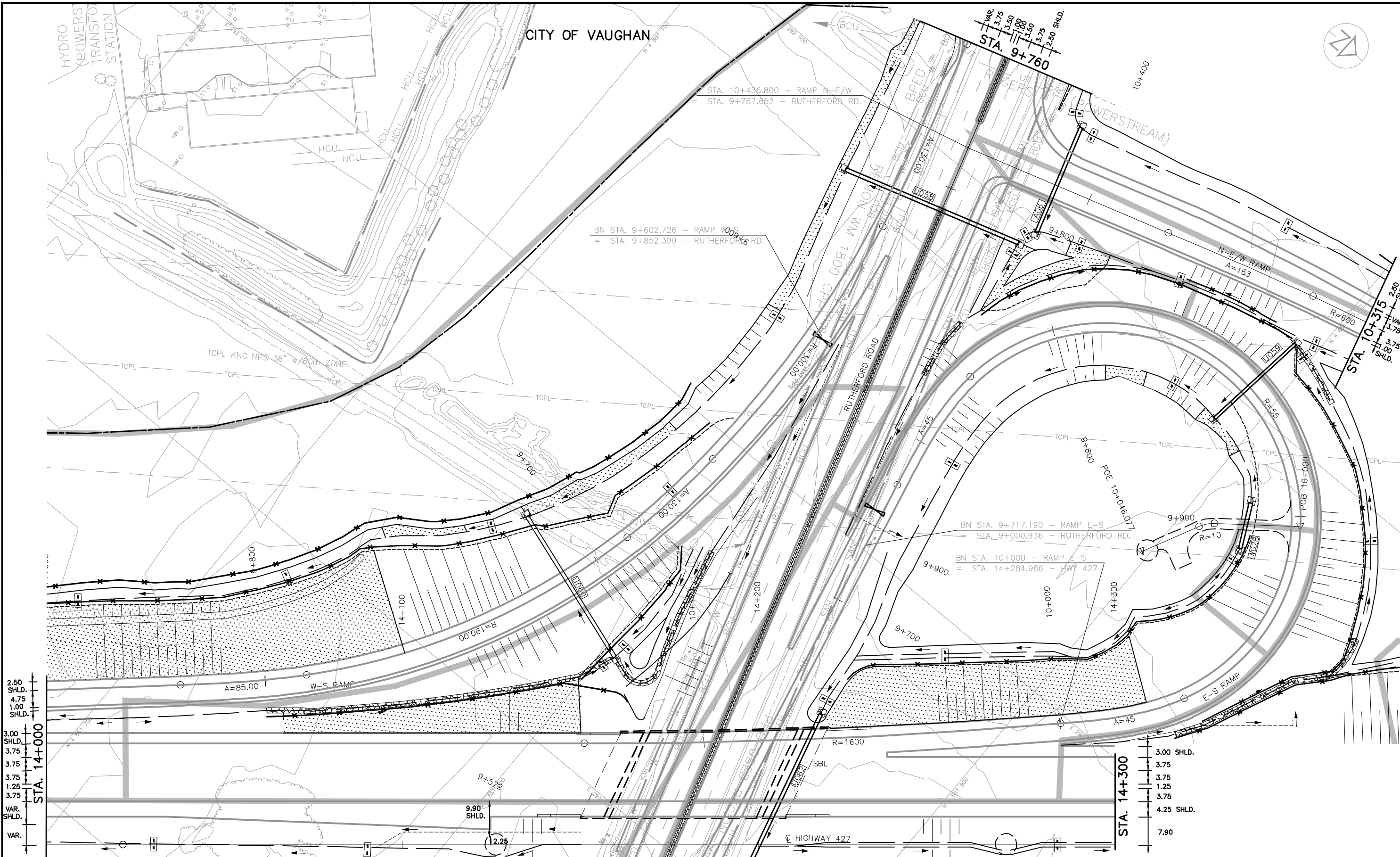


DESIGNED	ISABELLE HEMMINGS
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

CONSULTANT	NAME (PRINT)	INIT.	DATE



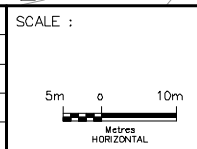
TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 13+650 TO STA. 14+000							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	2	ENV	000	DWG	2124	A



2.50 SHLD.
4.75 SHLD.
1.00 SHLD.
3.00 SHLD.
3.75 SHLD.
3.75 SHLD.
1.25 SHLD.
3.75 SHLD.
VAR. SHLD.
VAR.

3.00 SHLD.
3.75 SHLD.
3.75 SHLD.
1.25 SHLD.
3.75 SHLD.
4.25 SHLD.
7.90 SHLD.

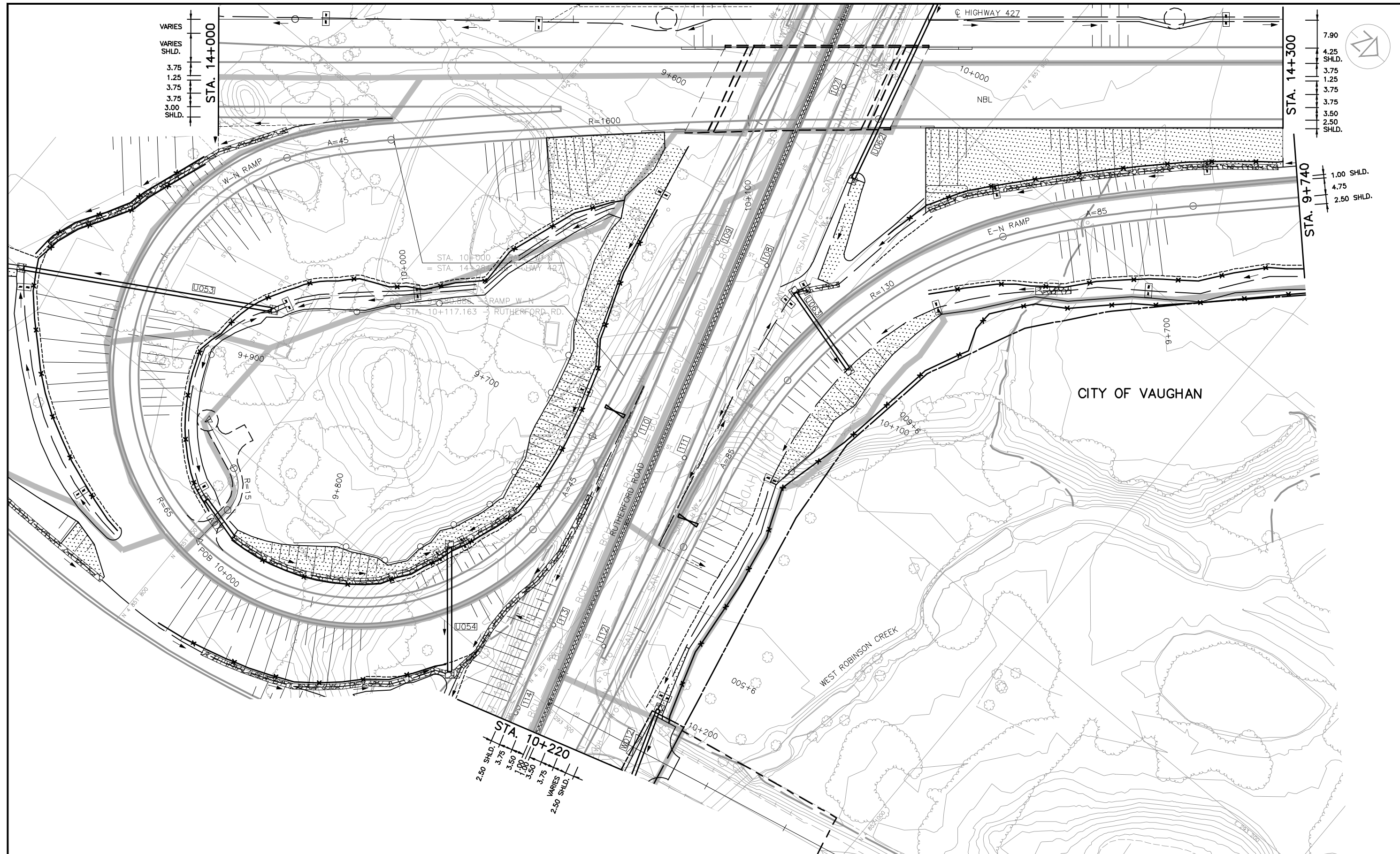
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PRJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		



TITLE: HWY 427 EXPANSION						
ENVIRONMENTAL						
STA. 14+000 TO STA. 14+300						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER
H427-D	N	2	ENV	000	DWG	2125



VARIES
VARIES
SHLD.
3.75
1.25
3.75
3.75
3.00
SHLD.

STA. 14+000

7.90
4.25
SHLD.
3.75
1.25
3.75
3.75
3.50
2.50
SHLD.

1.00 SHLD.
4.75
2.50 SHLD.

STA. 14+300

STA. 9+740

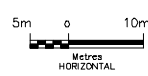
STA. 10+220
2.50 SHLD.
3.75
3.50
1.25
3.50
3.75
VARIES
2.50 SHLD.

CITY OF VAUGHAN

WEST ROBINSON CREEK

HIGHWAY 427

SCALE :

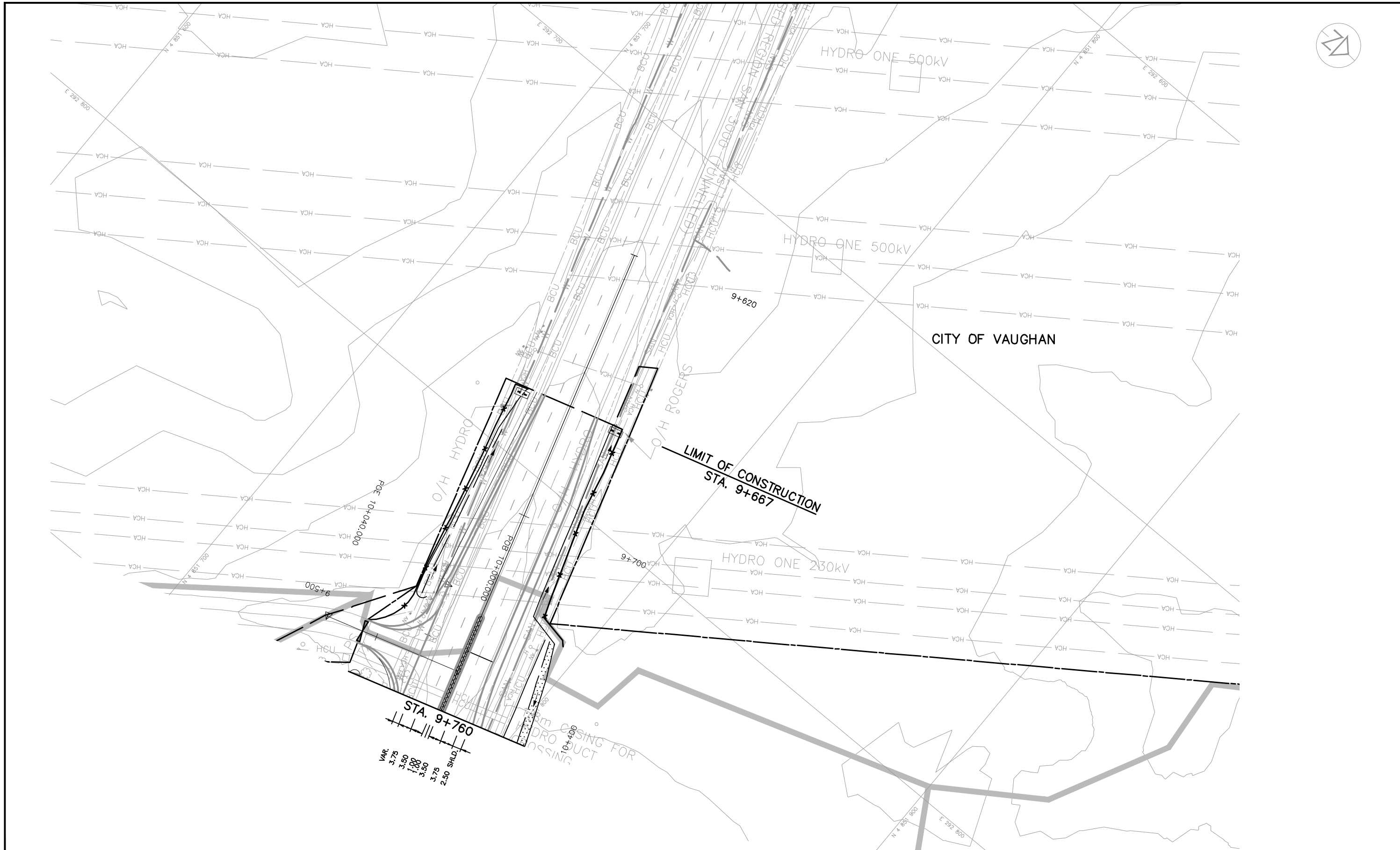


DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT		NAME (PRINT)	INIT. DATE

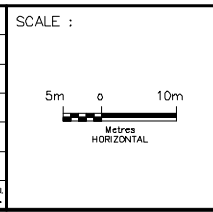


TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 14+000 TO STA. 14+300							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	2	ENV	000	DWG	2126	A

A	18/3/20	90% SUBMISSION TO CA					
NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJ.	MAN.



A		18/3/20	90% SUBMISSION TO CA						
NO.	DATE	REVISIONS		BY	CHK	LEAD	PRJ	MAN	

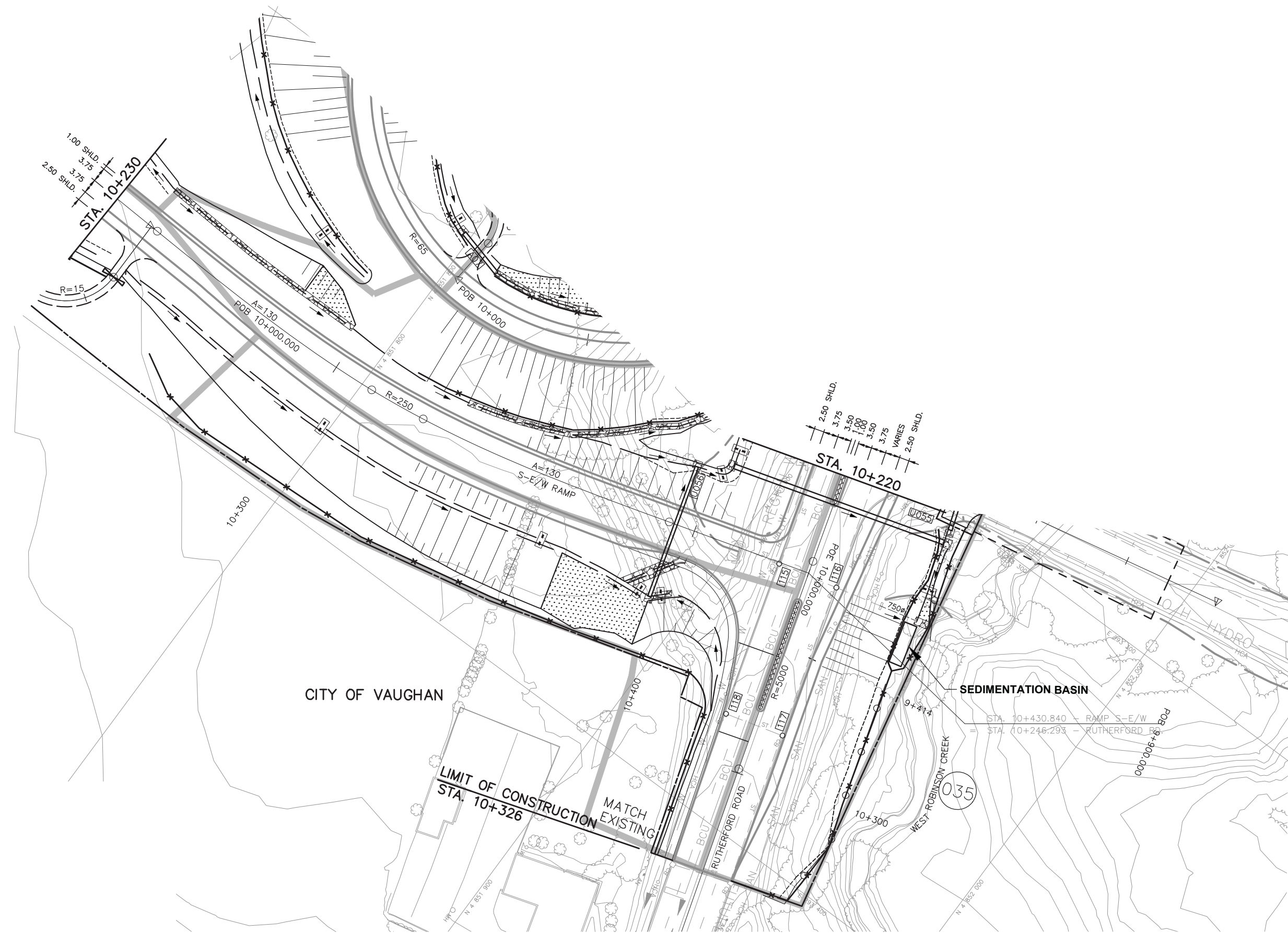


DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		

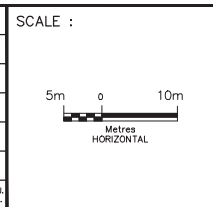
CONSULTANT			
NAME (PRINT)		INIT.	DATE



TITLE								HWY 427 EXPANSION			
								ENVIRONMENTAL			
								STA. 9+629 TO STA. 9+760			
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER				
H427-D	N	2	ENV	000	DWG	2127	A				



NO.	DATE	REVISIONS	BY	CHK	LEAD. DISC.	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				

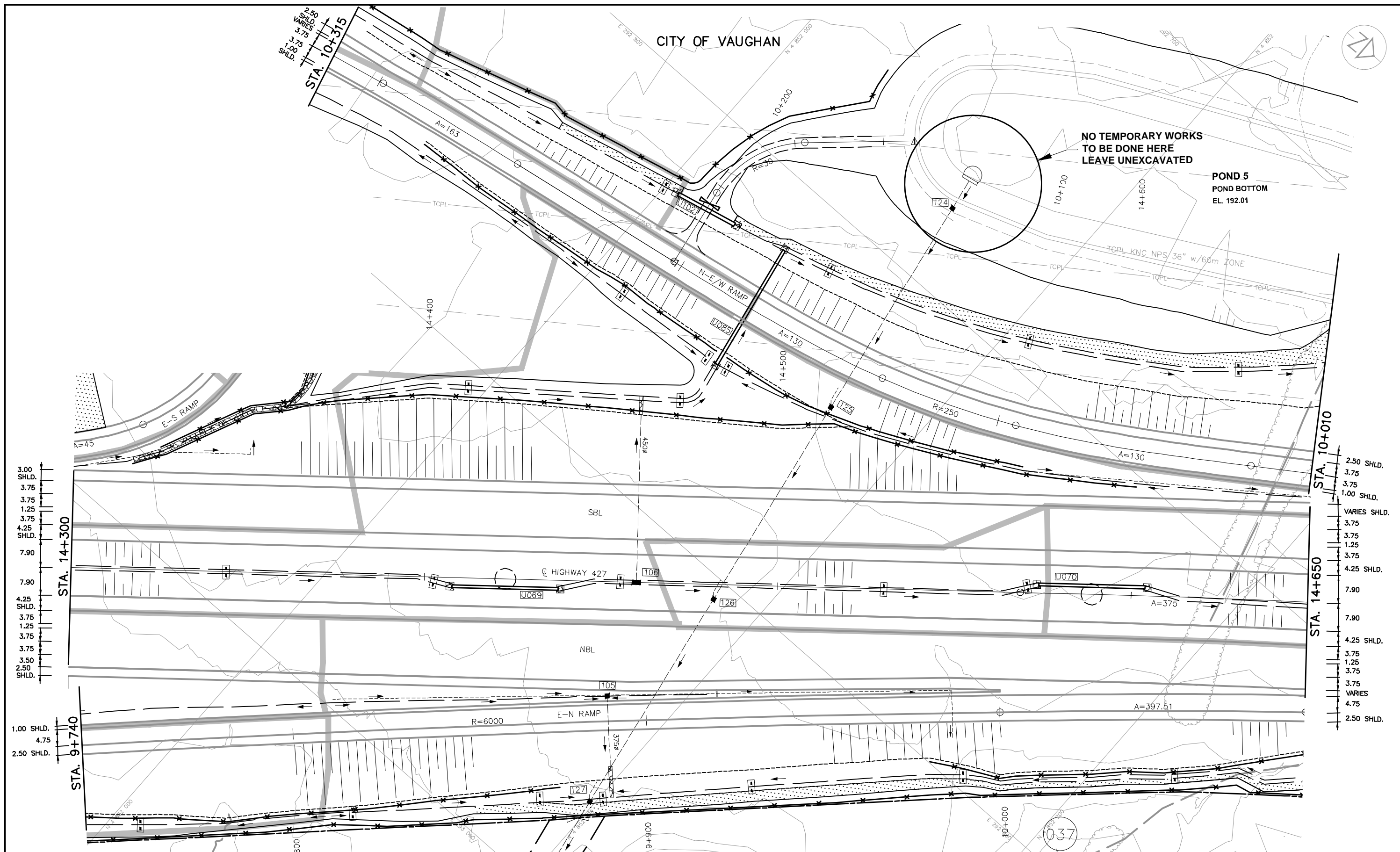


DESIGNED	ISABELLE HEMMINGS	
DRAWN	BARRY McCANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BAMFORTH	
CONSULTANT		
NAME (PRINT)	INIT.	DATE

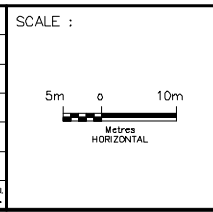
DESIGNED	ISABELLE HEMMINGS	
DRAWN	BARRY McCANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BAMFORTH	
CONSULTANT		
NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 10+220 TO STA. 10+326							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	2	ENV	000	DWG	2128	A



NO.	DATE	REVISIONS
A	18/3/20	90% SUBMISSION TO CA

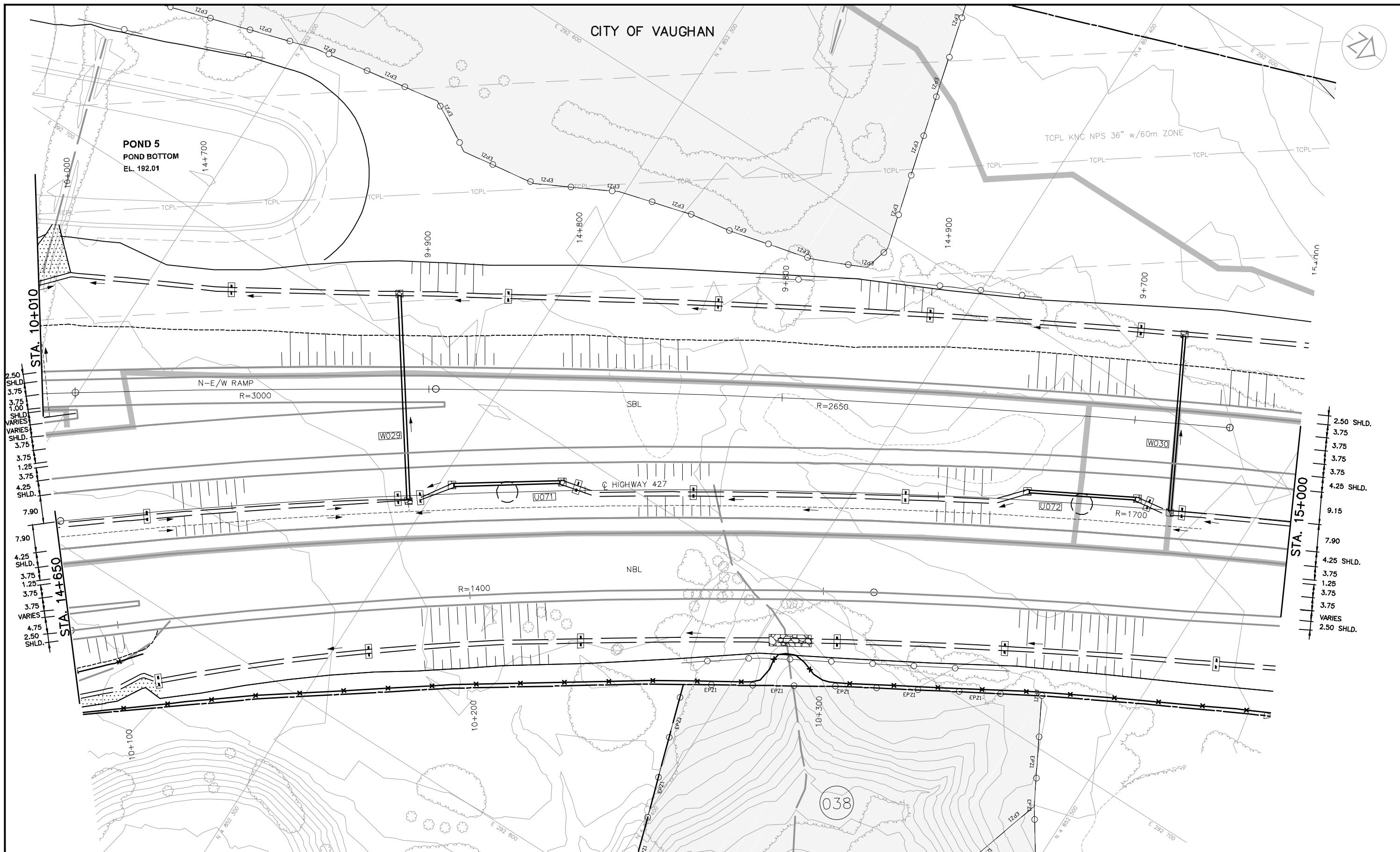


DESIGNED	ISABELLE HEMMINGS
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

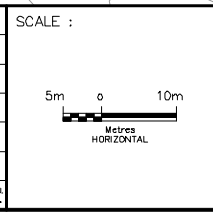
CONSULTANT	NAME (PRINT)	INIT.	DATE



HWY 427 EXPANSION ENVIRONMENTAL STA. 14+300 TO STA. 14+650							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	2	ENV	000	DWG	2129	A



NO.	DATE	REVISIONS	BY	CHK	LEAD	PRJL
A	18/3/20	90% SUBMISSION TO CA				

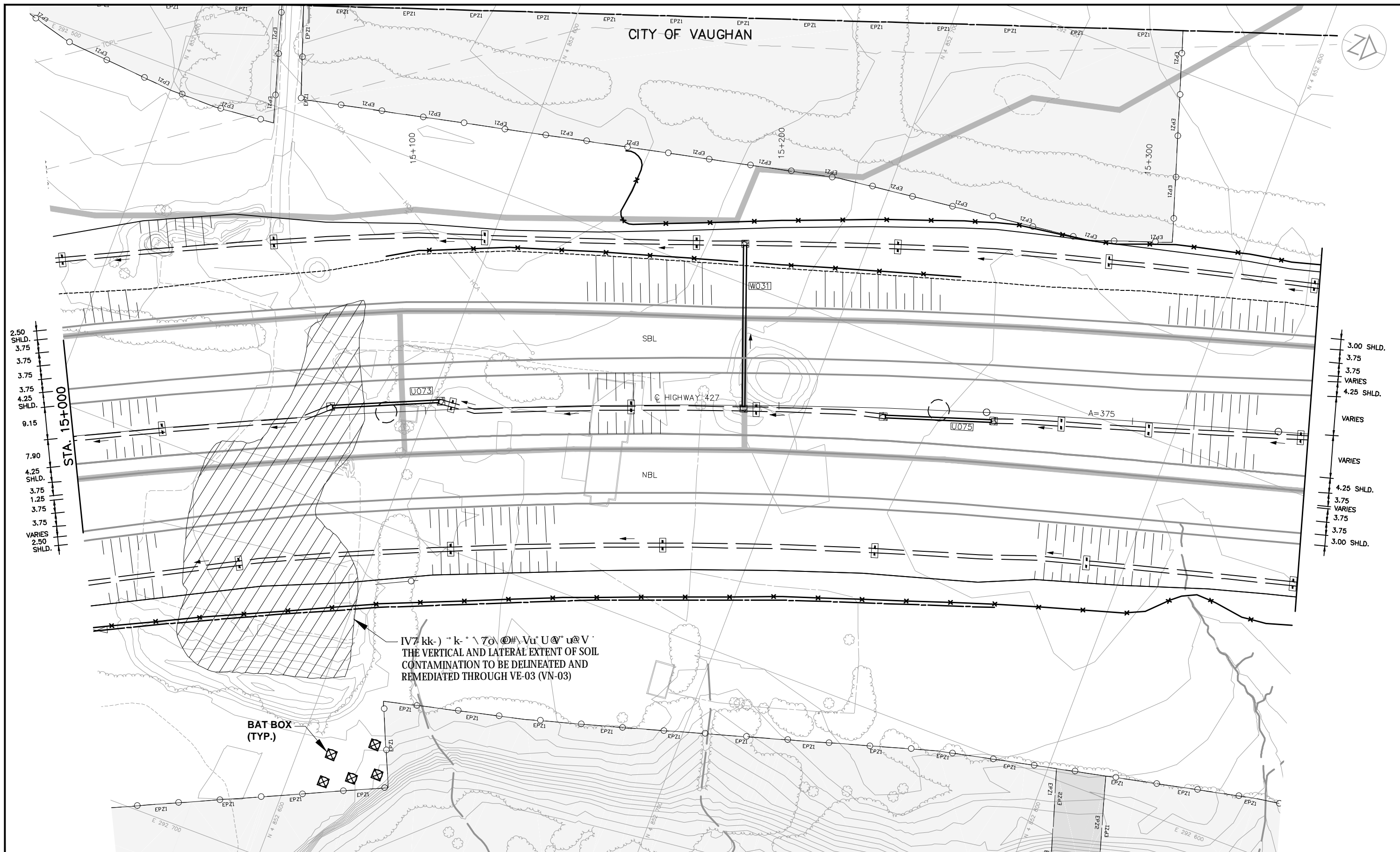


DESIGNED	ISABELLE HEMMINGS
DRAWN	BARRY McCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

CONSULTANT	
NAME (PRINT)	INIT. DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 14+650 TO STA. 15+000							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	2	ENV	000	DWG	2130	A



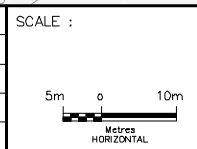
2.50 SHLD.
3.75
3.75
3.75
4.25 SHLD.
9.15
7.90
4.25 SHLD.
3.75
1.25
3.75
3.75
VARIES
2.50 SHLD.

3.00 SHLD.
3.75
3.75
VARIES
4.25 SHLD.
VARIES
VARIES
4.25 SHLD.
3.75
VARIES
3.75
3.00 SHLD.

IV7 kk-) * k- ^ \ 7o @#\ Vu* U@* u@V
THE VERTICAL AND LATERAL EXTENT OF SOIL
CONTAMINATION TO BE DELINEATED AND
REMIEDIATED THROUGH VE-03 (VN-03)

BAT BOX
(TYP.)

NO.	DATE	REVISIONS	BY	CHK	LEAD. DISC.	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				

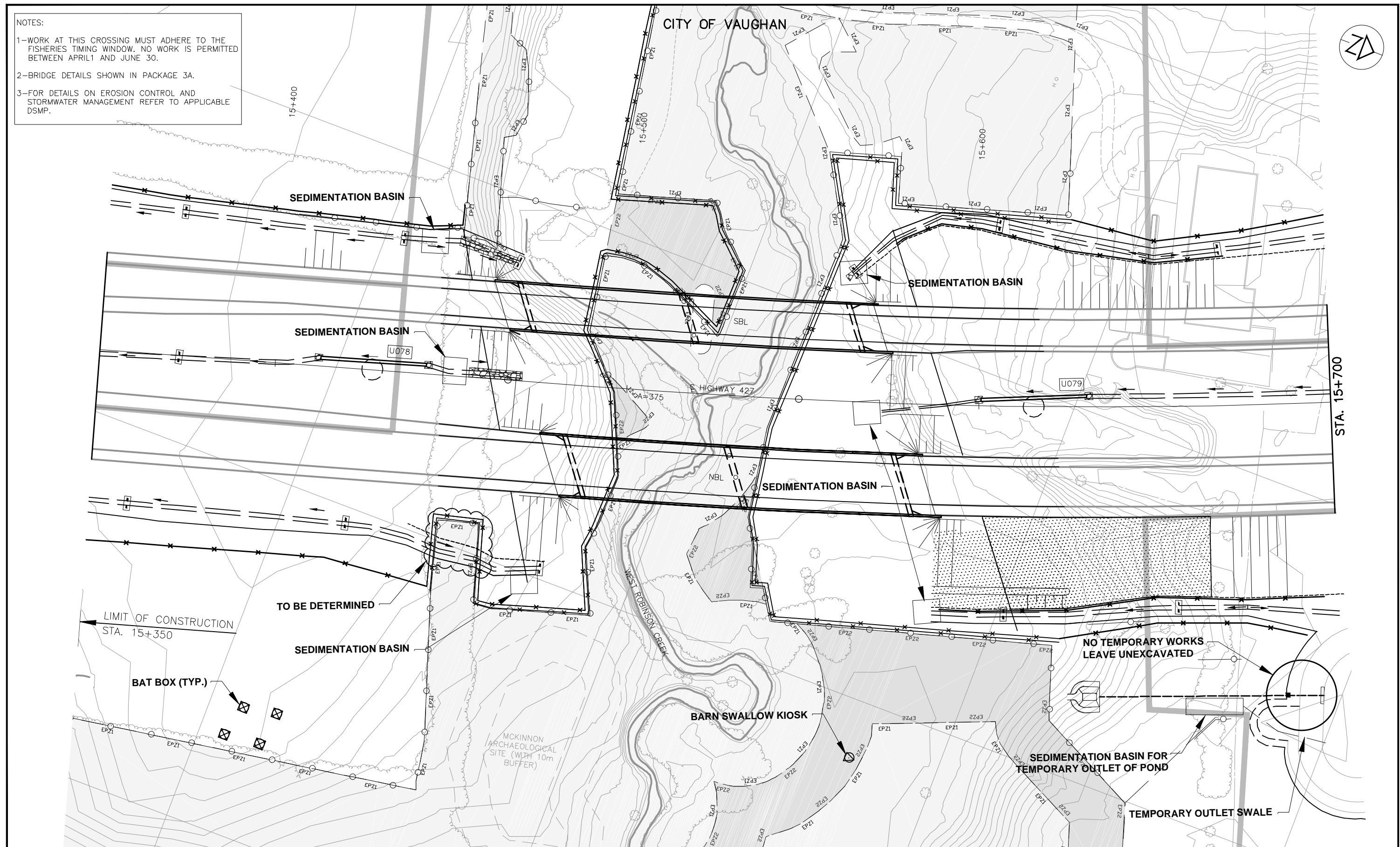


DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE

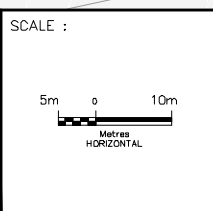


TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 15+000 TO STA. 15+350							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	2	ENV	000	DWG	2131	A

NOTES:
 1-WORK AT THIS CROSSING MUST ADHERE TO THE FISHERIES TIMING WINDOW. NO WORK IS PERMITTED BETWEEN APRIL 1 AND JUNE 30.
 2-BRIDGE DETAILS SHOWN IN PACKAGE 3A.
 3-FOR DETAILS ON EROSION CONTROL AND STORMWATER MANAGEMENT REFER TO APPLICABLE DSMP.



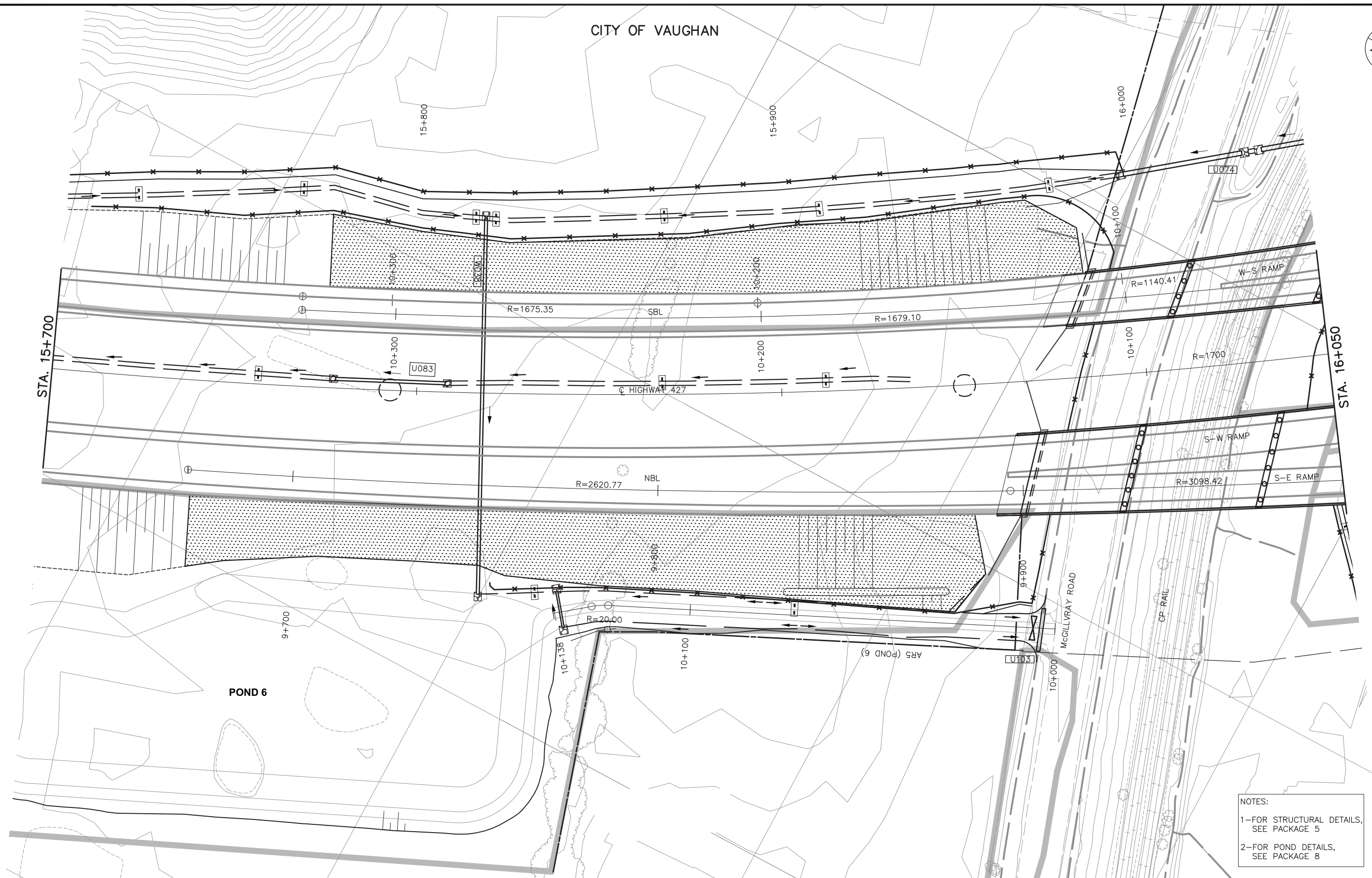
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC	PROJ MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BANFORTH		
CONSULTANT		NAME (PRINT)	INIT. DATE

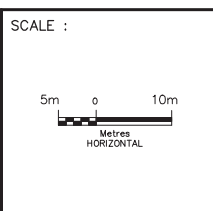


TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 15+350 TO STA. 15+700							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	3	ENV	000	DWG	2142	A



NOTES:
 1-FOR STRUCTURAL DETAILS,
 SEE PACKAGE 5
 2-FOR POND DETAILS,
 SEE PACKAGE 8

A		18/3/20	90% SUBMISSION TO CA	BY	CHK	LEAD DISC.	PRJL MAN.
NO.	DATE	REVISIONS					

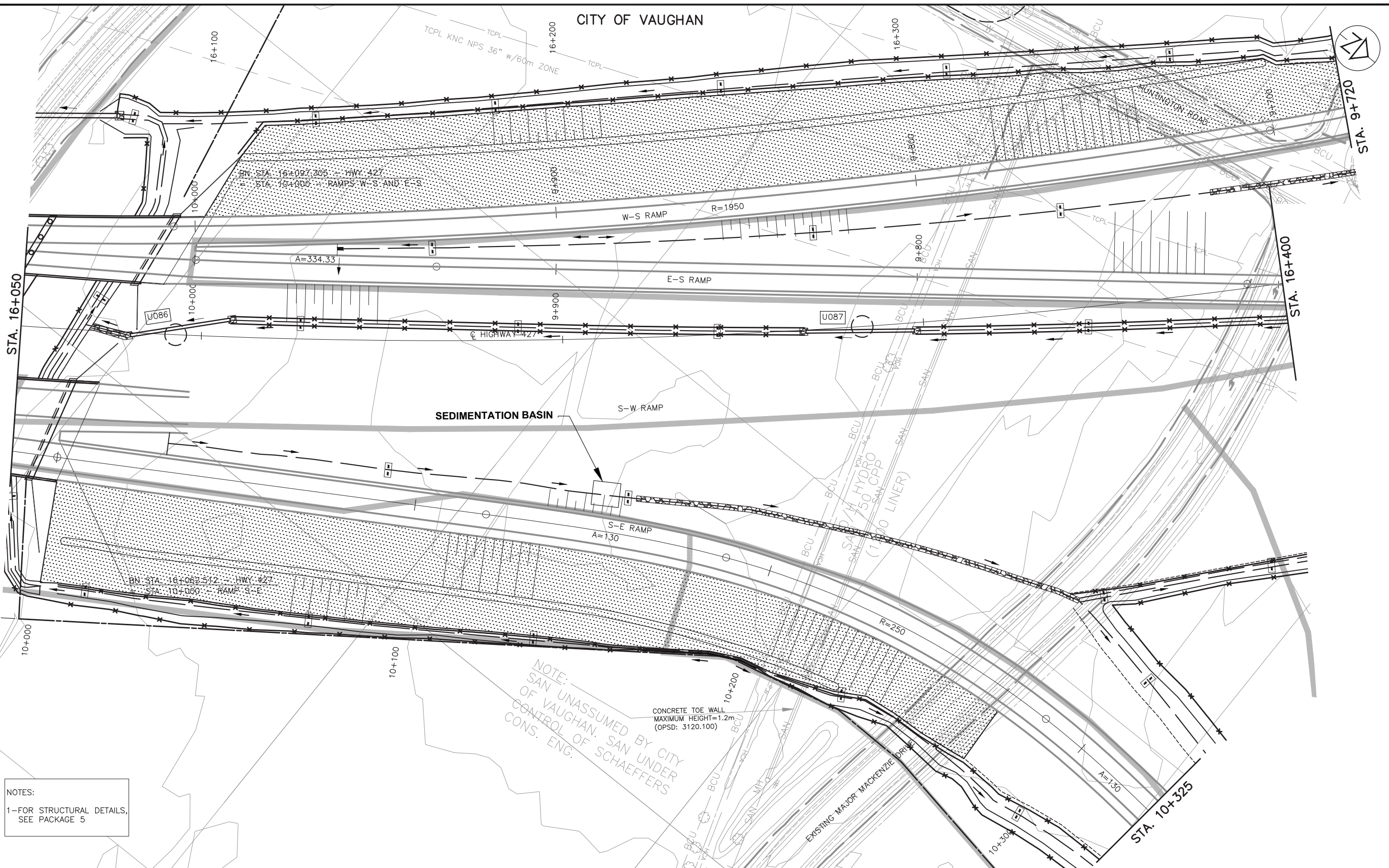


DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE



TITLE								HWY 427 EXPANSION							
								ENVIRONMENTAL							
								STA. 15+700 TO STA. 16+050							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER								
H427-D	N	3	ENV	000	DWG	2143	A								

CITY OF VAUGHAN



BN STA. 16+097.305 - HWY 427
 STA. 10+000 - RAMPS W-S AND E-S

BN STA. 16+062.512 - HWY 427
 STA. 10+000 - RAMP S-E

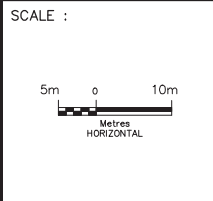
SEDIMENTATION BASIN

NOTE:
 SAN UNASSUMED BY CITY
 OF VAUGHAN. SAN UNDER
 CONTROL OF SCHAEFFERS
 CONS. ENG.

CONCRETE TOE WALL
 MAXIMUM HEIGHT=1.2m
 (OPSD: 3120.100)

NOTES:
 1-FOR STRUCTURAL DETAILS,
 SEE PACKAGE 5

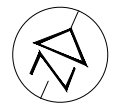
NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PRJL MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
		NAME (PRINT)	INIT. DATE

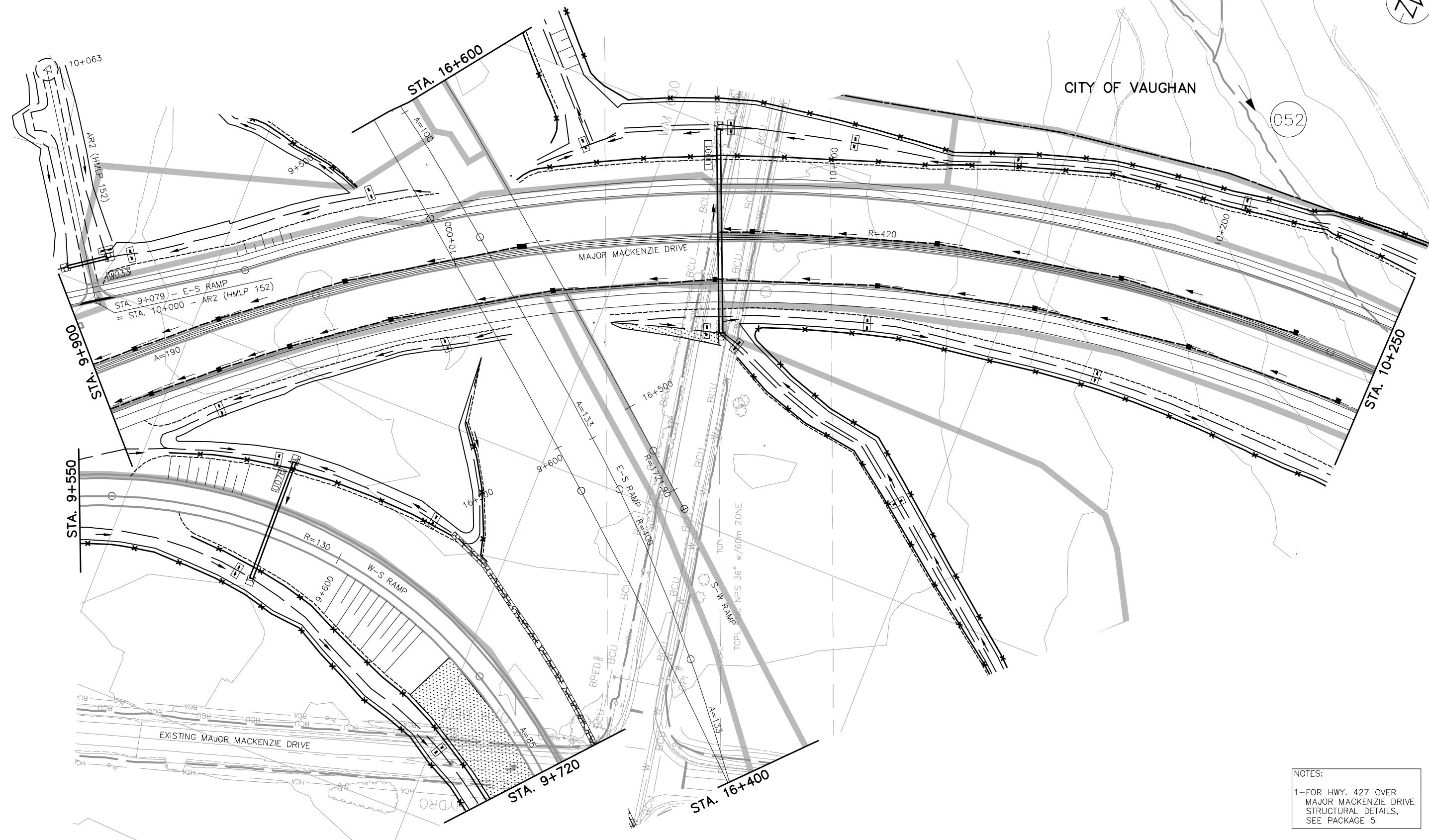


TITLE						
HWY 427 EXPANSION						
ENVIRONMENTAL						
STA. 16+050 TO STA. 16+400						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER
H427-D	N	3	ENV	000	DWG	2144
						REVISION NUMBER
						A

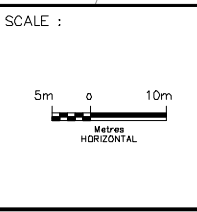


CITY OF VAUGHAN

052



A		18/3/20	90% SUBMISSION TO CA	BY	CHK	LEAD	PROJ.
NO.	DATE	REVISIONS					

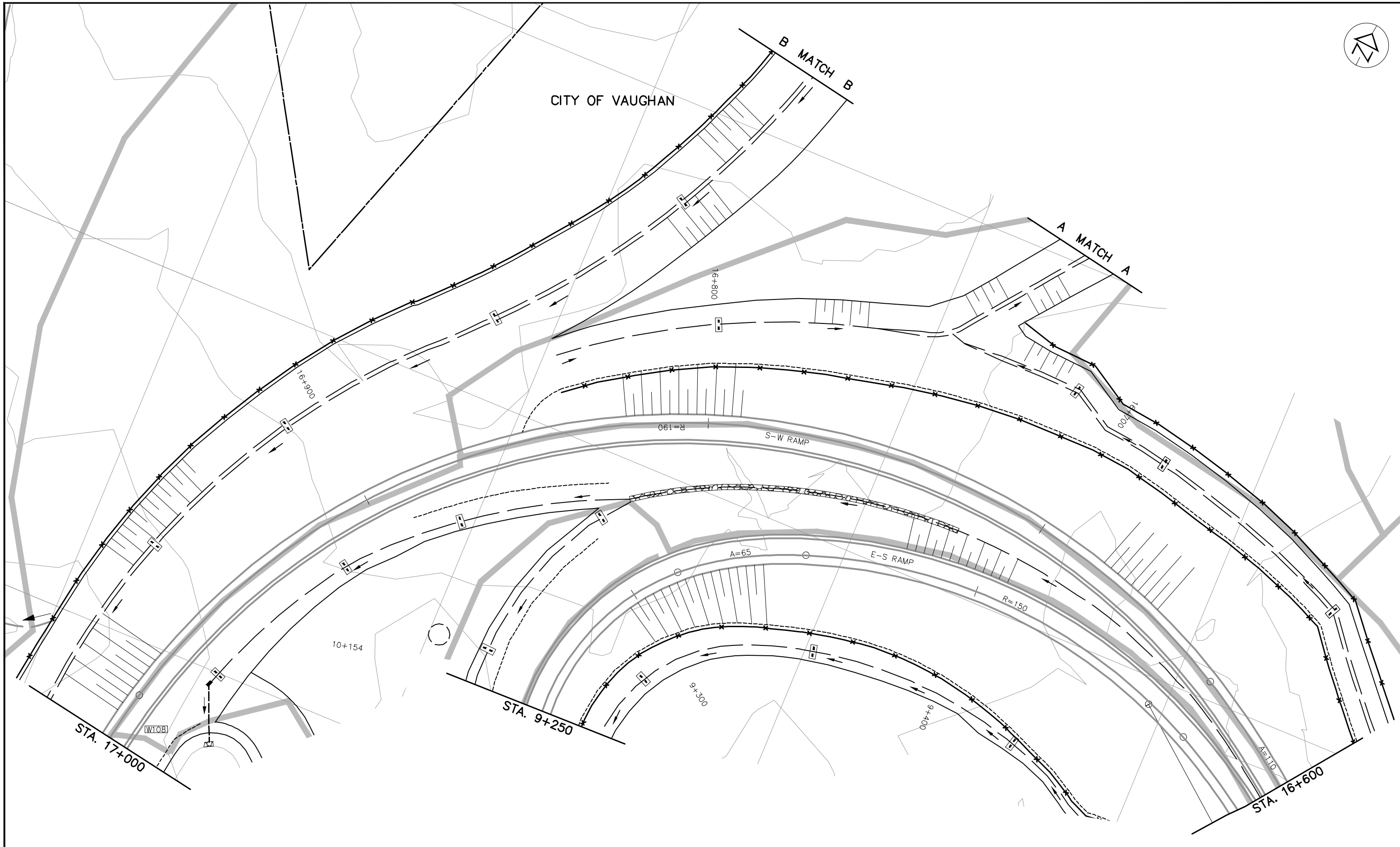
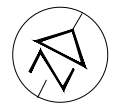


DESIGNED	ISABELLE HEMMINGS
DRAWN	BARRY MCGANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH

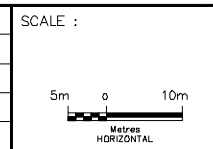
CONSULTANT	
NAME (PRINT)	INIT. DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 9+900 TO STA. 10+250							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	3	ENV	000	DWG	2145	A



NO.	DATE	REVISIONS	BY	CHK	LEAD	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				

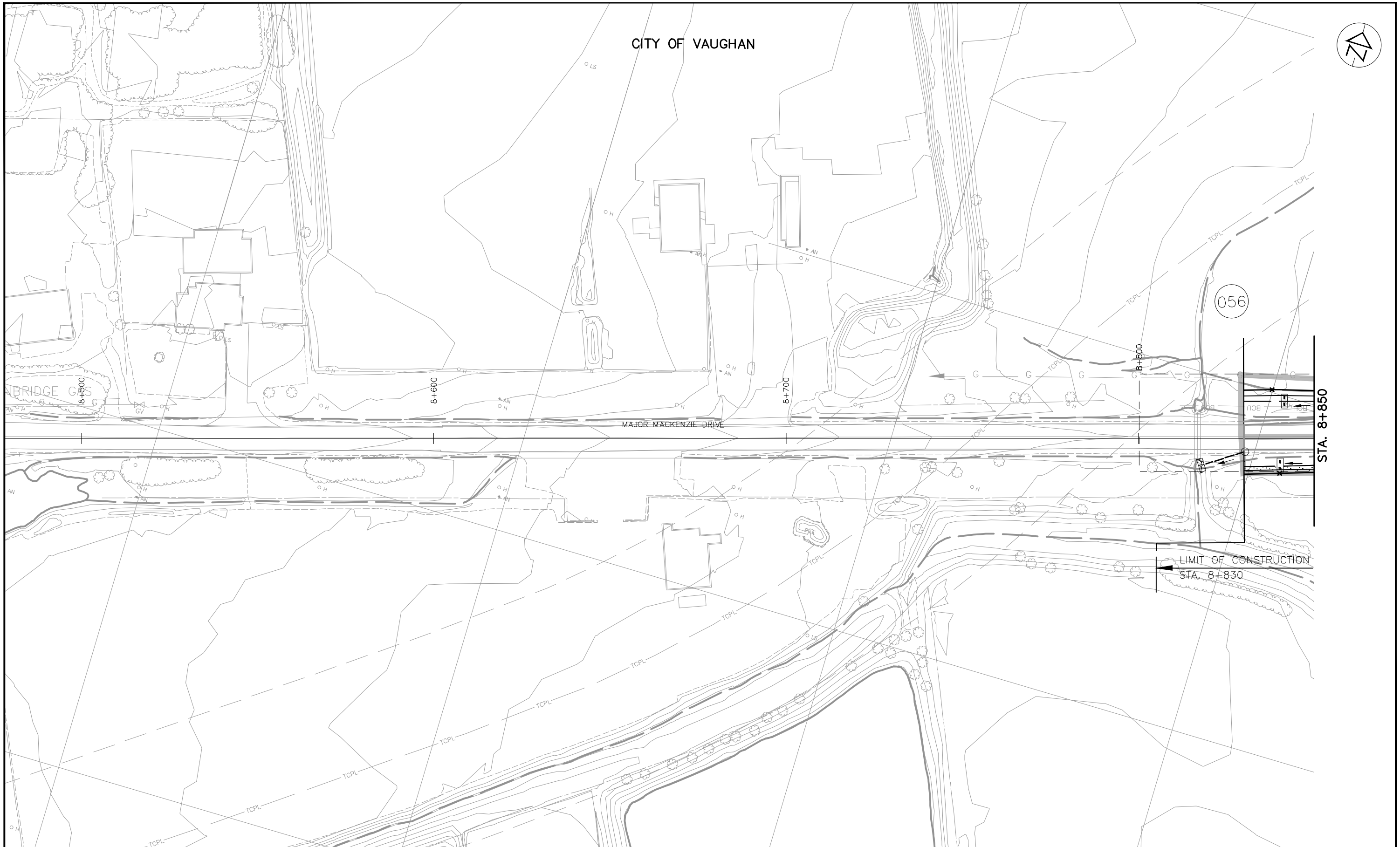
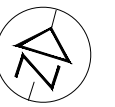


DESIGNED	ISABELLE HEMMINGS	
DRAWN	BARRY McCANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BAMFORTH	
CONSULTANT		
	NAME (PRINT)	INIT. DATE

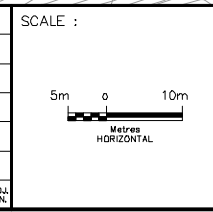


TITLE						
HWY 427 EXPANSION						
ENVIRONMENTAL						
STA. 16+600 TO STA. 17+000						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER
H427-D	N	3	ENV	000	DWG	2146
REVISION NUMBER	A					

CITY OF VAUGHAN



NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				

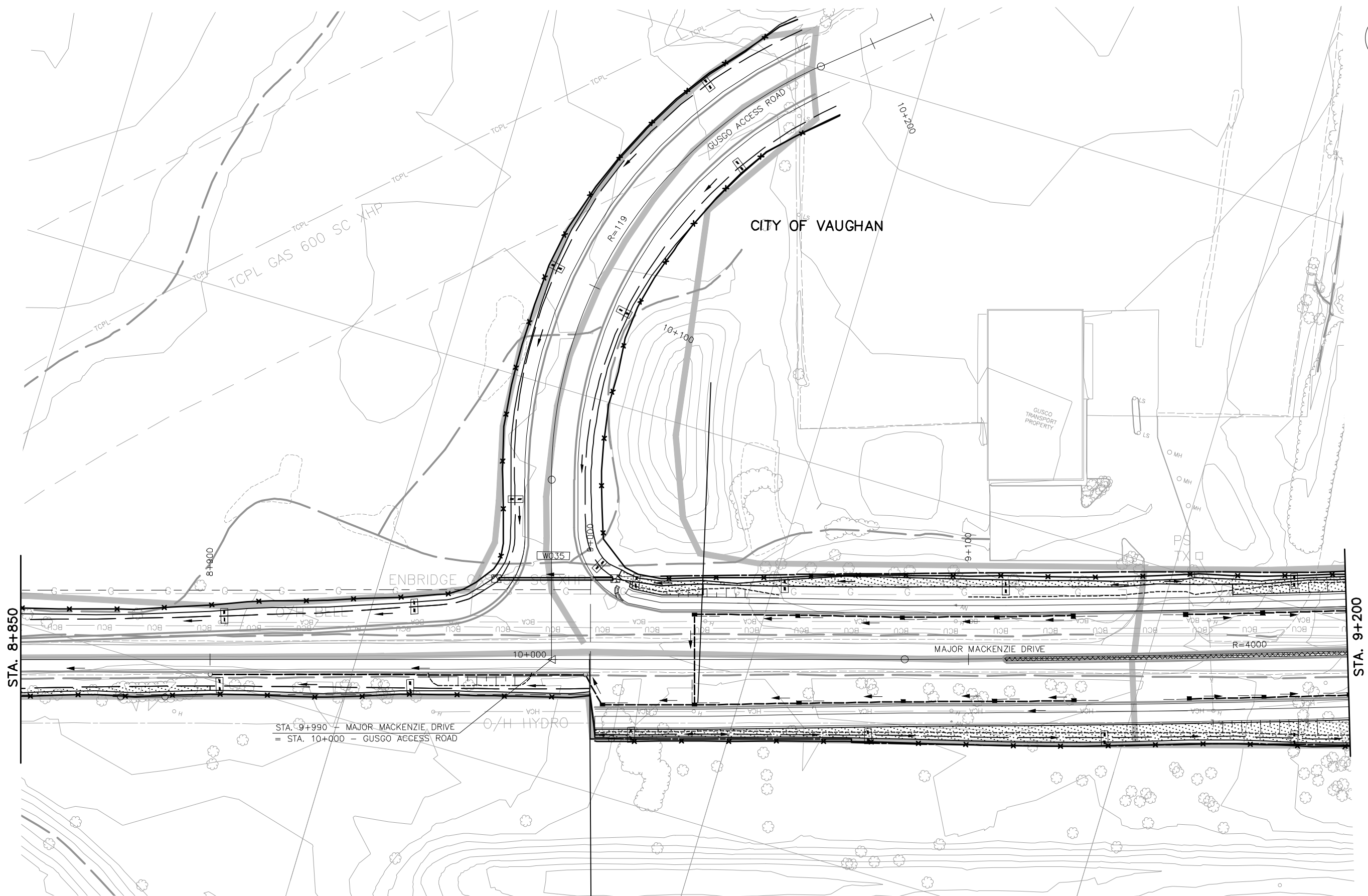


DESIGNED	ISABELLE HEMMINGS
DRAWN	BARRY MCCANDLESS
CHECKED	DUNCAN CAMPBELL
APPROVED LEAD ENGINEER	KARL VAN KESSEL
APPROVED PROJ. MANAGER	PETER BAMFORTH
CONSULTANT	

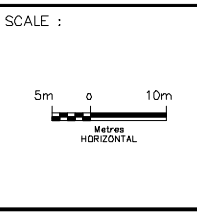
NAME (PRINT)	INIT.	DATE



TITLE								HWY 427 EXPANSION			
								ENVIRONMENTAL			
								STA. 8+830 TO STA. 8+850			
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER				
H427-D	N	3	ENV	000	DWG	2147	A				



NO.	DATE	REVISIONS	BY	CHK	LEAD	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	ISABELLE HEMMINGS	
DRAWN	BARRY McCANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BAMFORTH	
CONSULTANT		
	NAME (PRINT)	INIT. DATE

DESIGNED	ISABELLE HEMMINGS	
DRAWN	BARRY McCANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BAMFORTH	
CONSULTANT		
	NAME (PRINT)	INIT. DATE



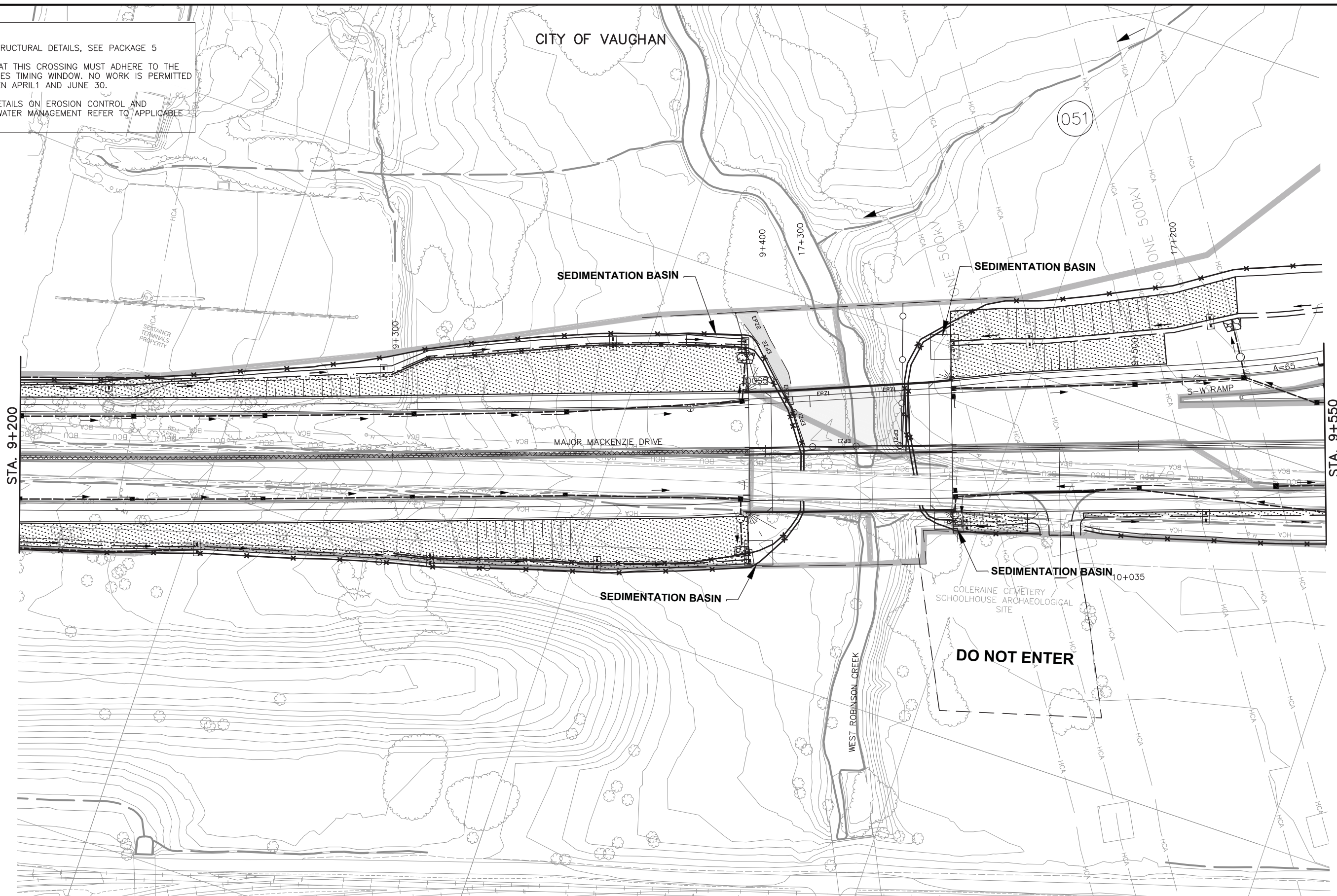
TITLE								HWY 427 EXPANSION			
								ENVIRONMENTAL			
								STA. 8+850 TO STA. 9+200			
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER				
H427-D	N	3	ENV	000	DWG	2148	A				

NOTES:
 1-FOR STRUCTURAL DETAILS, SEE PACKAGE 5
 2-WORK AT THIS CROSSING MUST ADHERE TO THE FISHERIES TIMING WINDOW. NO WORK IS PERMITTED BETWEEN APRIL 1 AND JUNE 30.
 3-FOR DETAILS ON EROSION CONTROL AND STORMWATER MANAGEMENT REFER TO APPLICABLE DSMP.

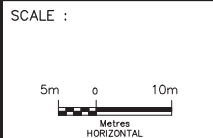


CITY OF VAUGHAN

051



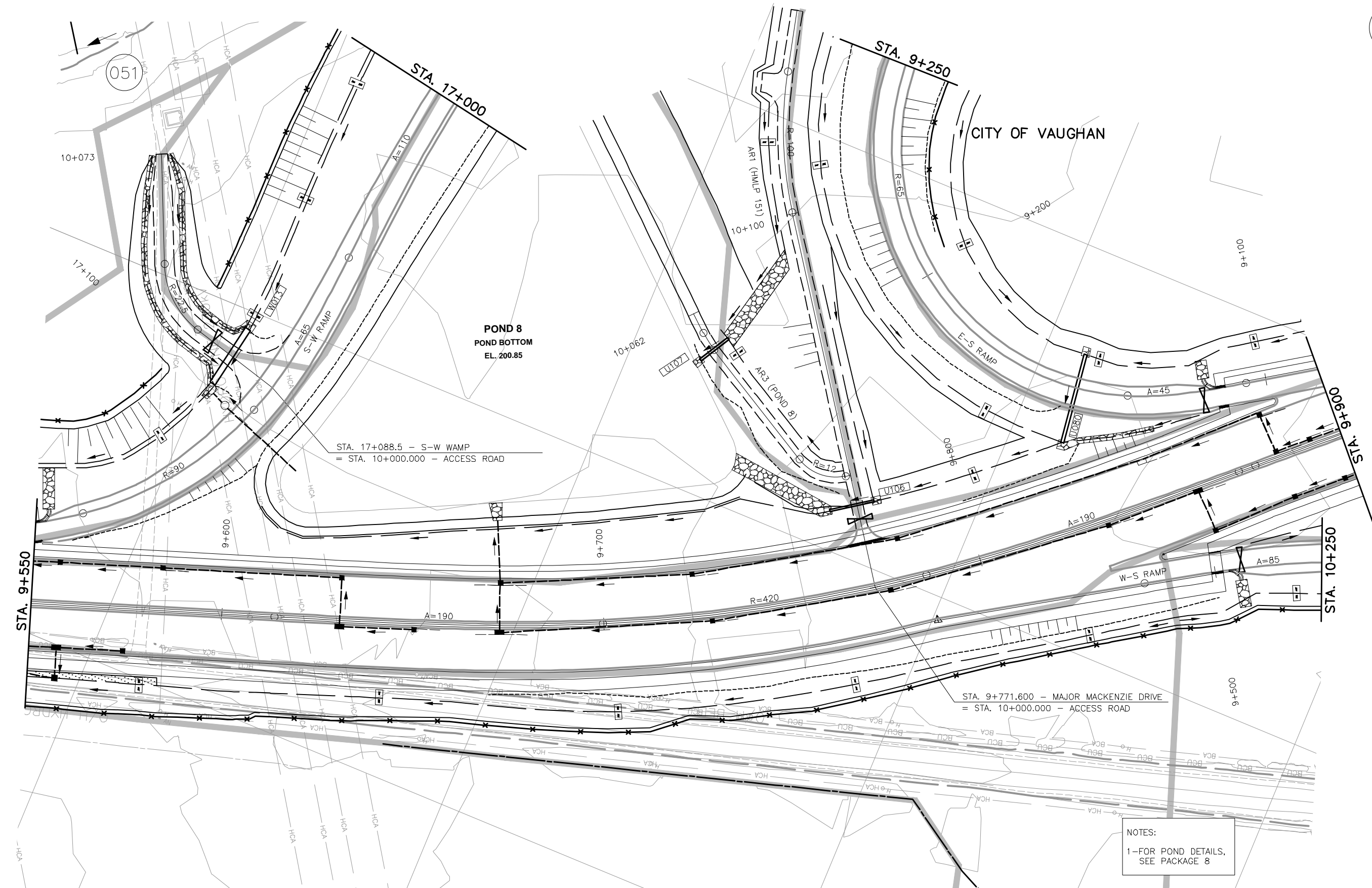
A 18/3/20		90% SUBMISSION TO CA	
NO.	DATE	BY	CHK
REVISIONS		LEAD DISC.	PRD. MAN.



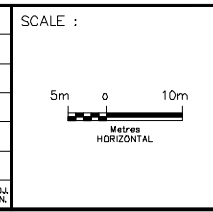
DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE



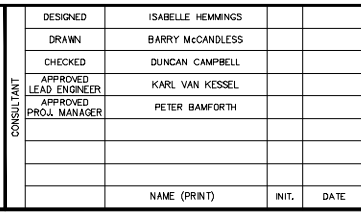
TITLE							HWY 427 EXPANSION				
							ENVIRONMENTAL				
							STA. 9+200 TO STA. 9+550				
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER				
H427-D	N	3	ENV	000	DWG	2149	A				



NO.	DATE	REVISIONS	BY	CHK	LEAD	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	ISABELLE HEMMINGS	
DRAWN	BARRY McCANDLESS	
CHECKED	DUNCAN CAMPBELL	
APPROVED LEAD ENGINEER	KARL VAN KESSEL	
APPROVED PROJ. MANAGER	PETER BAMFORTH	
CONSULTANT		
	NAME (PRINT)	INIT. DATE

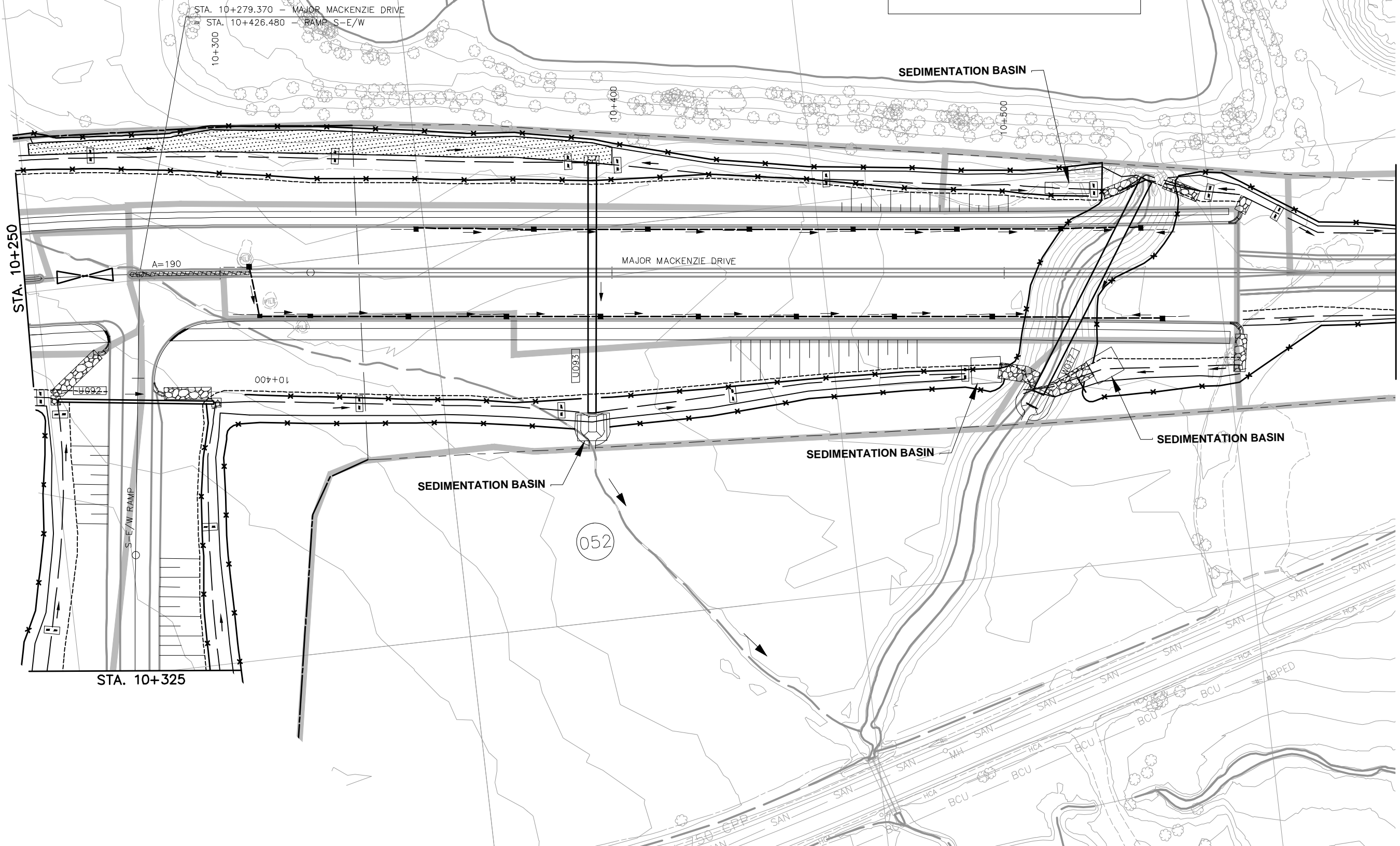


TITLE						
HWY 427 EXPANSION						
ENVIRONMENTAL						
STA. 9+550 TO STA. 9+900						
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER
H427-D	N	3	ENV	000	DWG	2150

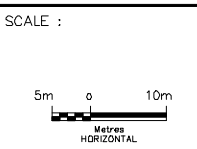
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	3	ENV	000	DWG	2150	A

CITY OF VAUGHAN

NOTES:
1-WORK AT THIS CROSSING MUST ADHERE TO THE FISHERIES TIMING WINDOW. NO WORK IS PERMITTED BETWEEN APRIL 1 AND JUNE 30.



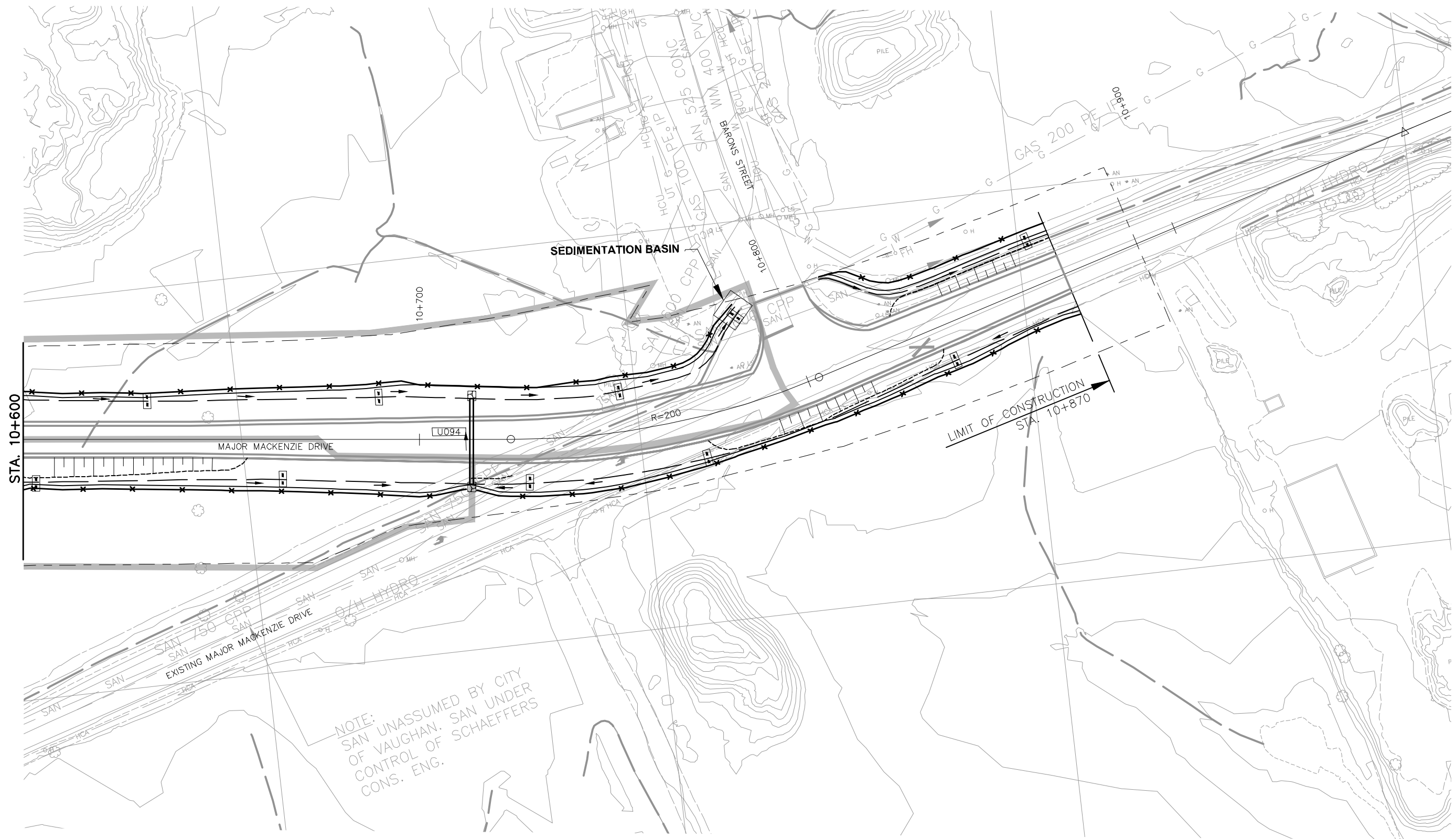
NO.	DATE	REVISIONS	BY	CHK	LEAD	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY MCGANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE

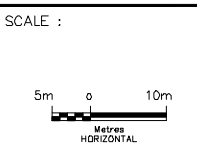


TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 10+250 TO STA. 10+600							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	3	ENV	000	DWG	2151	A



NOTE:
SAN UNASSUMED BY CITY
OF VAUGHAN. SAN UNDER
CONTROL OF SCHAEFFERS
CONS. ENG.

NO.	DATE	REVISIONS	BY	CHK	LEAD DISC.	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				

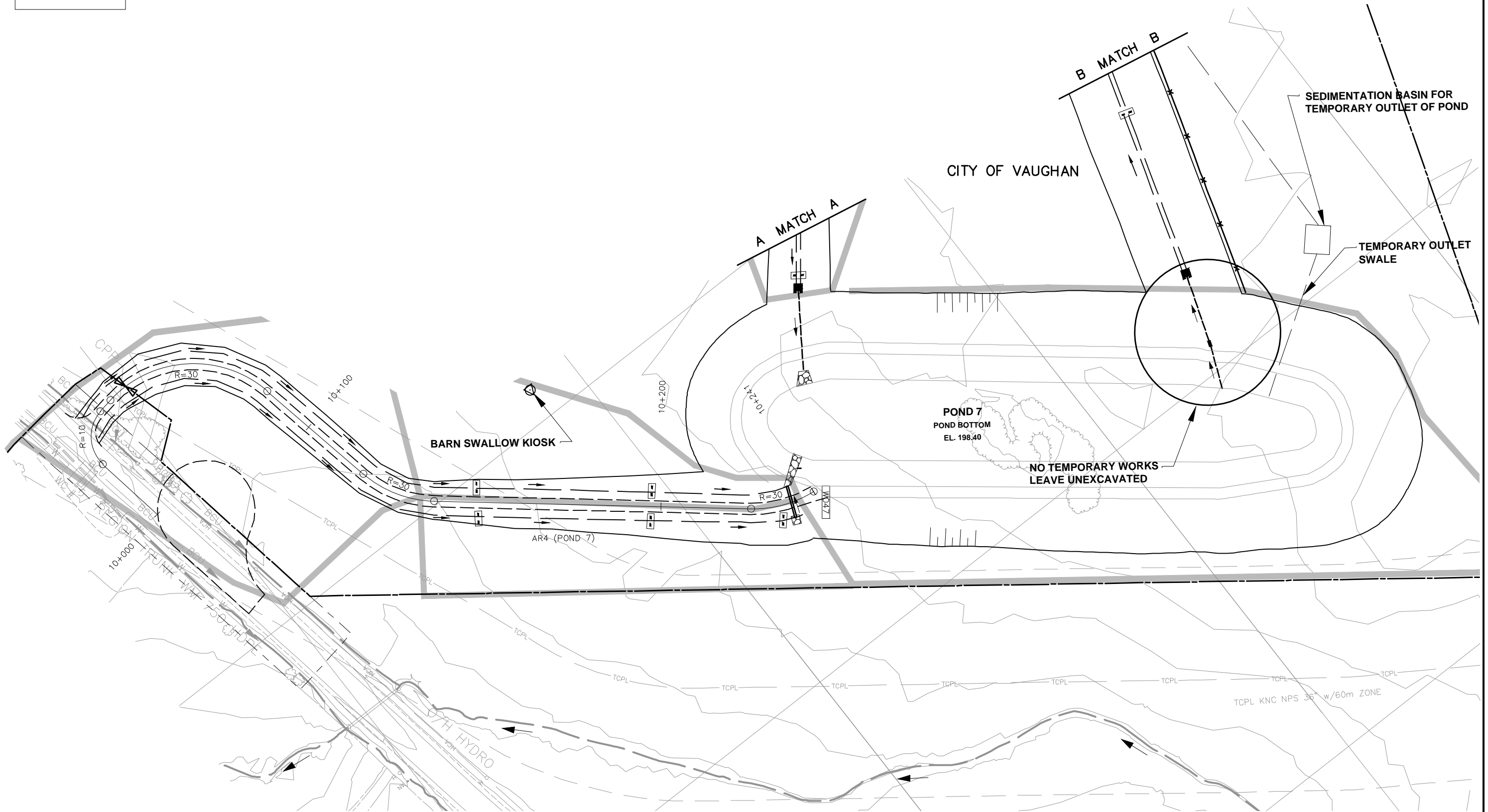


DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
		NAME (PRINT)	INIT. DATE

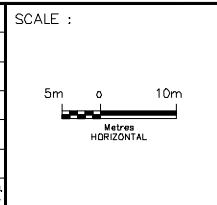


TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
STA. 10+600 TO STA. 10+870							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	3	ENV	000	DWG	2152	A

NOTES:
1-FOR POND DETAILS,
SEE PACKAGE 8



NO.	DATE	REVISIONS	BY	CHK	LEAD	PROJ. MAN.
A	18/3/20	90% SUBMISSION TO CA				



DESIGNED	ISABELLE HEMMINGS		
DRAWN	BARRY McCANDLESS		
CHECKED	DUNCAN CAMPBELL		
APPROVED LEAD ENGINEER	KARL VAN KESSEL		
APPROVED PROJ. MANAGER	PETER BAMFORTH		
CONSULTANT			
	NAME (PRINT)	INIT.	DATE



TITLE							
HWY 427 EXPANSION							
ENVIRONMENTAL							
POND 08							
PROJECT ID.	STAGE IDENTIFIER	DESIGN PACKAGE NUMBER	DISCIPLINE	STRUCTURE NUMBER	DOCUMENT TYPE	DRAWING NUMBER	REVISION NUMBER
H427-D	N	3	ENV	000	DWG	2153	A