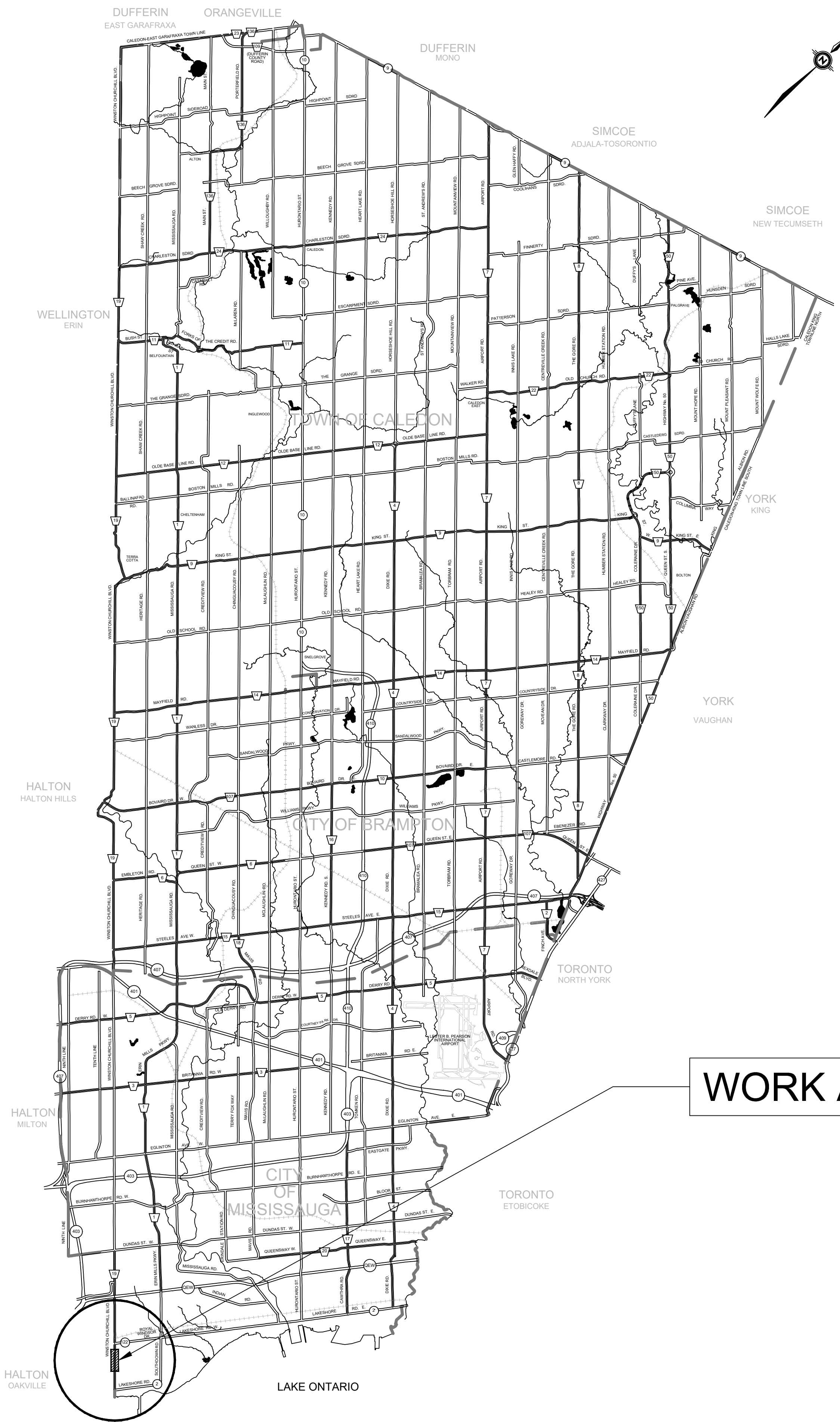


# EMC PROJECT No. 223123

## ULTIMATE INTERSECTION IMPROVEMENT

### WINSTON CHURCHILL BOULEVARD

#### CITY OF MISSISSAUGA



LIST OF DRAWINGS	
DWG No.	DRAWING TITLE
--	<b>CIVIL (EMC GROUP LIMITED)</b>
	COVER SHEET
	GENERAL NOTES
223123-N	REMOVAL AND ADJUSTMENT PLAN
223123-RP	PAVEMENT MARKING AND SIGNAGE PLAN
223123-PMSP	PLAN & PROFILE - STA 0+000 TO 0+160
223123-P1	PLAN & PROFILE - STA 0+160 TO 0+460
223123-P2	GRADING AND PAVEMENT ELEVATION
223123-GR	SECTION DETAILS PLAN - PART 1
223123-SEC1	SECTION DETAILS PLAN - PART 2
223123-SEC2	EROSION AND SEDIMENT CONTROL PLAN
223123-ES	STANDARD DETAIL PAGE
223123-STD	
	<b>ELECTRICAL (RTG SYSTEM INC.)</b>
SL-01	INTERIM STREET LIGHTING
SL-02	INTERIM PHOTOMETRIC SUMMARY
	<b>CULVERT HEADWALL - HAZEL HURST ROAD (IBI GROUP)</b>
01	PRECAST CULVERT UNITS - GENERAL ARRANGEMENT - I FORTHCOMING
02	PRECAST CULVERT UNITS - GENERAL ARRANGEMENT - II FORTHCOMING
03	PRECAST CULVERT UNITS - TYPICAL DETAILS - I FORTHCOMING
04	PRECAST CULVERT UNITS - TYPICAL DETAILS - II FORTHCOMING
05	PRECAST CULVERT UNITS - STANDARD DETAILS FORTHCOMING
	<b>CULVERT EXTENSION - WINSTON CHURCHILL BLVD (IBI GROUP)</b>
01	GENERAL ARRANGEMENT FORTHCOMING
02	PRECAST UNIT DETAILS FORTHCOMING
03	FOOTING DETAILS FORTHCOMING

**OWNER**

**FENGATE**  
Asset Management

772 WINSTON LP.  
c/o FENGATE ASSET MANAGEMENT  
2275 UPPER MIDDLE ROAD EAST, SUITE 700, OAKVILLE, ONTARIO, L6H 0C3  
TEL: (905) 491-6599

**MUNICIPALITY**

CITY OF MISSISSAUGA  
TRANSPORTATION & WORKS DEPARTMENT  
201 CITY CENTRE DRIVE, 8TH FLOOR,  
MISSISSAUGA, ONTARIO, L5B 2T4  
TEL: (905) 615-4950  
FAX: (905) 896-5504

**REGION**

REGIONAL MUNICIPALITY OF PEEL  
10 PEEL CENTRE DRIVE, SUITE A  
BRAMPTON, ON L6T 4B9  
TEL: (905) 791-7800

**CONSULTANT**

**EMC GROUP LIMITED**

Engineers Planners Project Managers  
7577 Keele Street Suite 200  
Concord Ontario  
L4K 4X3  
(905) 738-3939 FAX (905) 738-6993

TRAFFIC FILE# TO BE ASSIGNED  
SP# 1601.029/01

REVISIONS		
DATE	DETAILS	INIT.
NOV. 24, 2023	ISSUED FOR 1st SUBMISSION	J.C.

## REGION OF PEEL GENERAL NOTES

### GENERAL

- The applicant, applicant's representative, consultant, contractor and sub contractors are responsible to ensure that their design materials and construction practices conform to the latest Region of Peel standards, specifications, materials and design criteria, posted on Region of Peel's website. In the absence of Region specifications, the Ontario Provincial Standard Specifications (OPSS) shall apply.
- All works shall be completed in accordance with the "Occupational Health and Safety Act". The general contractor shall be deemed the constructor as defined in the act.
- The contractor, at their expense, shall verify the location, dimension and elevation of all existing services and utilities in the field.
- Prior to excavation or boring contractor at their expense shall expose and verify the location and elevation of all existing utilities and services to be crossed and must notify the design engineer and the agency field inspector and/or project manager immediately, in writing, of any conflicts or discrepancies. Contractor shall be responsible for exposing the existing utilities far enough in advance of construction to make necessary design modifications for review and approval, if required, without delaying the work.
- The contractor, at their expense and to the satisfaction of the Region of Peel, shall be responsible for the restoration and the repair of the existing utilities and all areas disturbed during construction.
- The support of all utilities shall be in accordance with the requirements of the authority having jurisdiction.
- All backfill for sewers, water mains and utilities on the road allowance must be mechanically compacted.
- All boreholes shown on drawing are for information only. Refer to geotechnical report.
- All dimensions are in metres unless otherwise specified.

### REGIONAL ROAD

- Construction and detour signage must conform to "manual of uniform traffic control devices" and latest revision of the Ontario ministry of transportation "traffic control manual for roadway work operations".
- All temporary signage and traffic control measures shall be in accordance with requirements of Ontario traffic manual, book 7 "temporary conditions", Ontario Provincial Standard Specifications (OPSS) and Ontario Provincial Standard Drawings (OPSD).
- Pavement markings must be in accordance with the Ontario traffic manual, book 11 "pavement hazard and delineation markings".
- The contractor shall notify with minimum 72 hours in advance, as required, the appropriate authority having jurisdiction for the road prior to commencing any work and shall acquire and satisfy the requirements of appropriate permits (fees, inspections, signage, traffic, maintenance, diversion, etc...)
- Regional road closure is not permitted at any time unless approval from regional council was obtained for the works, where a minimum two month lead time is required, as per regional policy w30-12.
- Work operations that require diverting traffic to one lane are subject to time restrictions and /or night time operations as specified in road occupancy permit. Through lanes must be minimum 3.5m, unless otherwise approved.
- For temporary delineation of traffic in opposite directions a yellow centre line on pavement must be painted. Traffic control barrels (cones) are not permitted for this use on regional roads.
- New jersey barriers (NJB) with crash attenuation devices must be used on long term projects as opposed to traffic control delineators (barrels).
- Access to existing entrances and side streets, including pedestrian access, shall be maintained. Access requirements must comply with Region of Peel controlled access by-law.
- Location of existing utilities to be established by the contractor. All existing utility elevations (storm, sanitary and watermain) including centre line of the road elevations have to be verified by contractor prior to commencing any work on site. Any discrepancies shall be reported to the engineer and the Region immediately.
- The contractor(s) shall be solely responsible, at their expense, for locating, supporting and protecting all underground and overhead utilities and structures existing at the time of construction in the area of his work, whether shown on the plans or not, and for all repairs and consequences resulting from damage to same.
- The contractor(s) shall be solely responsible to give 72 hours written notice to utility authority prior to crossing such utilities for the purpose of inspection. This inspection will be for the duration of construction with the contractor responsible for all costs arising from such inspections.
- All road base shall be as per Region of Peel std. Dwg. 5-1-1 and 5-1-2.
- Asphalt preservative sealer such as re-climate or approved equivalent shall be applied after the one-year maintenance period for the top course asphalt.
- All existing pavements, curbs, sidewalks and boulevards, and other areas disturbed by the work, to be reinstated equal to existing and to the satisfaction of applicable authority having jurisdiction over the road allowance. Existing pavement and curbs to be saw-cut to provide a smooth joint.
- Erosion control measures are to be implemented as required and as instructed by the Environmental Consultant.
- For road projects that will not be completed prior to the end of the construction season, the following will need to be considered in order to winterize the construction project to ensure safe conditions during winter:
  - Where applicable, curb and gutter sections are to be completed, the base course asphalt shall be in place
  - Catch basins and maintenance holes set to existing base grade
  - Steel plating not permitted
  - Hot mix asphalt (HMA) only
  - Lane delineation and pavement marking completed
  - Where new jersey barriers used, offset no less than 4.25m from edge of travelled lane
  - Road and boulevard must be free of obstructions and accommodate safe snow plow operation considering that a wing and plow is 6m wide and 1.52m snow storage minimum required
  - All catch basin grates shall be side inlet, OPSD 400.081 (latest version) unless otherwise noted
  - Winter shut-down meetings with the Region of Peel road maintenance staff are required prior to seasonal shut-down and shall be organized by the consultant or project manager or designate.

### TRAFFIC SIGNS AND SIGNALS ON REGIONAL ROADS

- All required traffic signs, whether regulatory, warning, temporary or guide/directional in nature shall be installed in accordance with the standards specifications and legislation contained in the OTM manuals, the HTA and Region of Peel traffic by-law.
- Electrical works shall conform to the Ontario provincial standard (OPS) drawings and Region of Peel standard drawings and specifications.
- Traffic controllers must be installed as per approved locations. Equipment must not encroach on private property without permission to enter, easement, permanent or temporary undertakings.

## GENERAL PAVEMENT NOTES

- The pavement makeup is to match existing road makeup or to follow the pavement design outlined in the Pavement Investigation And Design Report by Thurber Engineering Ltd. i.e.;

#### Pavement makeup for Winston Churchill Boulevard:

- 50mm DFC (PG 64-28)
- 120mm HDBC (PG 64-28)
- 150mm Granular 'A' Base and
- 650mm Granular 'B' Type II Subbase

- Prior to placement of granular bases, the subgrade surface should be proof-rolled. Any identified soft subgrade should be sub-excavated and replaced by properly compacted and selected organic-free on-site material, or as directed by the geotechnical engineer.
- In the zone within 1.0m below the pavement subgrade, the backfill should be compacted to at least 98% of its maximum SPDD, with water content 2% to 3% drier than the optimum. In the lower zone, the fill is to be compacted to 95% or + SPDD.
- All granular bases are to be compacted to their maximum SPDD.
- All disturbed boulevard areas are to be re-instated, to existing condition or better, to the satisfactory of the contract administrator.

## SUBMITTALS TO EMC

- Contractor to submit shop drawings for approval by engineer for all structures.
- Request for substitutions will be reviewed by the consultant team at the contractors expense. The contractor will enter into an agreement with the pertinent consultant team member prior to undertaking the review process.
- The contractor is to supply one (1) fully coordinated neatly marked up set of as-built grading and servicing plans prepared by an O.L.S. In both hard and digital forms (CAD and PDF) for review by the consultant team.
- Contractor to supply a topographic survey and plan identifying cut/fill ticks identifying pre-grade elevation vs. Stripped; and volume calculation verifying percentage completion with each PC in order to support the draw percentages claimed. The PC items will not be approved without supporting backup. The surveys shall be completed by a register Ontario Land Surveyor.
- The contractor will be entitled to a set of PDF drawings for their use. If the contractor requires drawings in CAD format, the contractor will directly compensate the engineer for the cost of preparation of the CAD drawings and any subsequent issuances of revised CAD drawings. The engineer and contractor will enter into an Electronic File Transfer Agreement at project inception.
- Inspection documentation - the contractor will be responsible for documenting active construction on a daily basis by photographing their work as it progress and submitting photographic records to the consultant team on a weekly basis for record keeping purposes.



Approved by

Chkd.

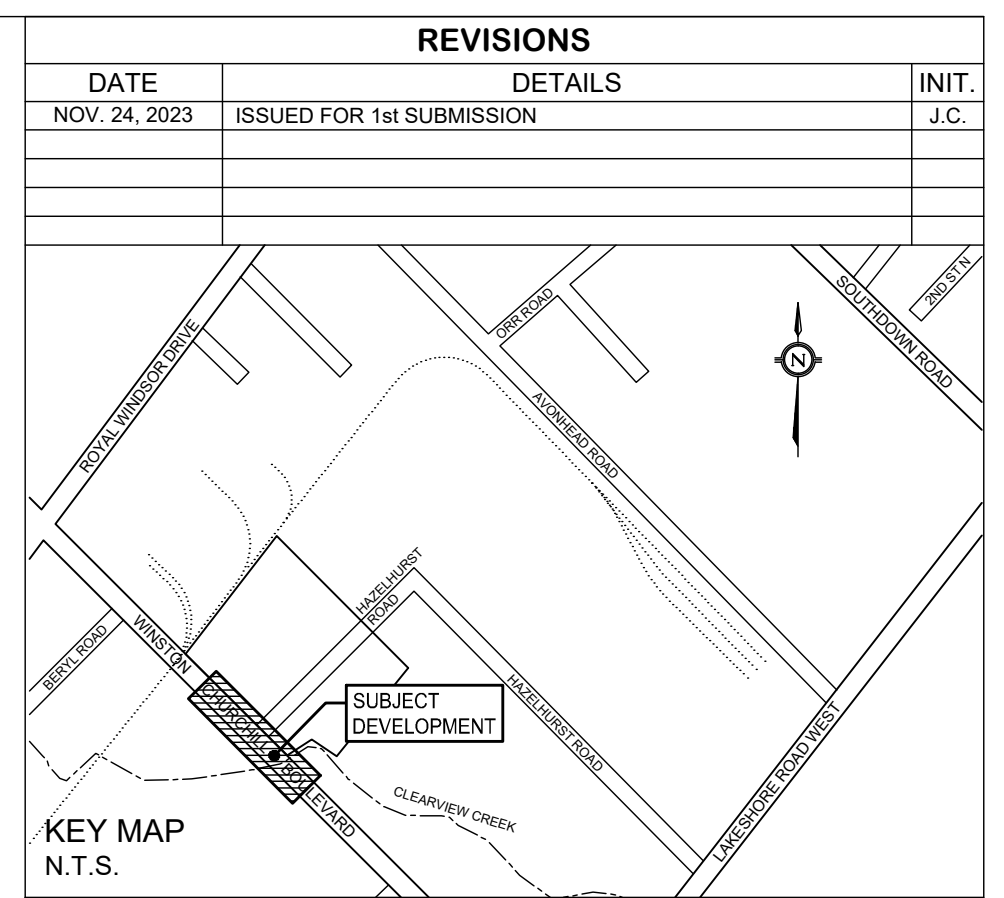
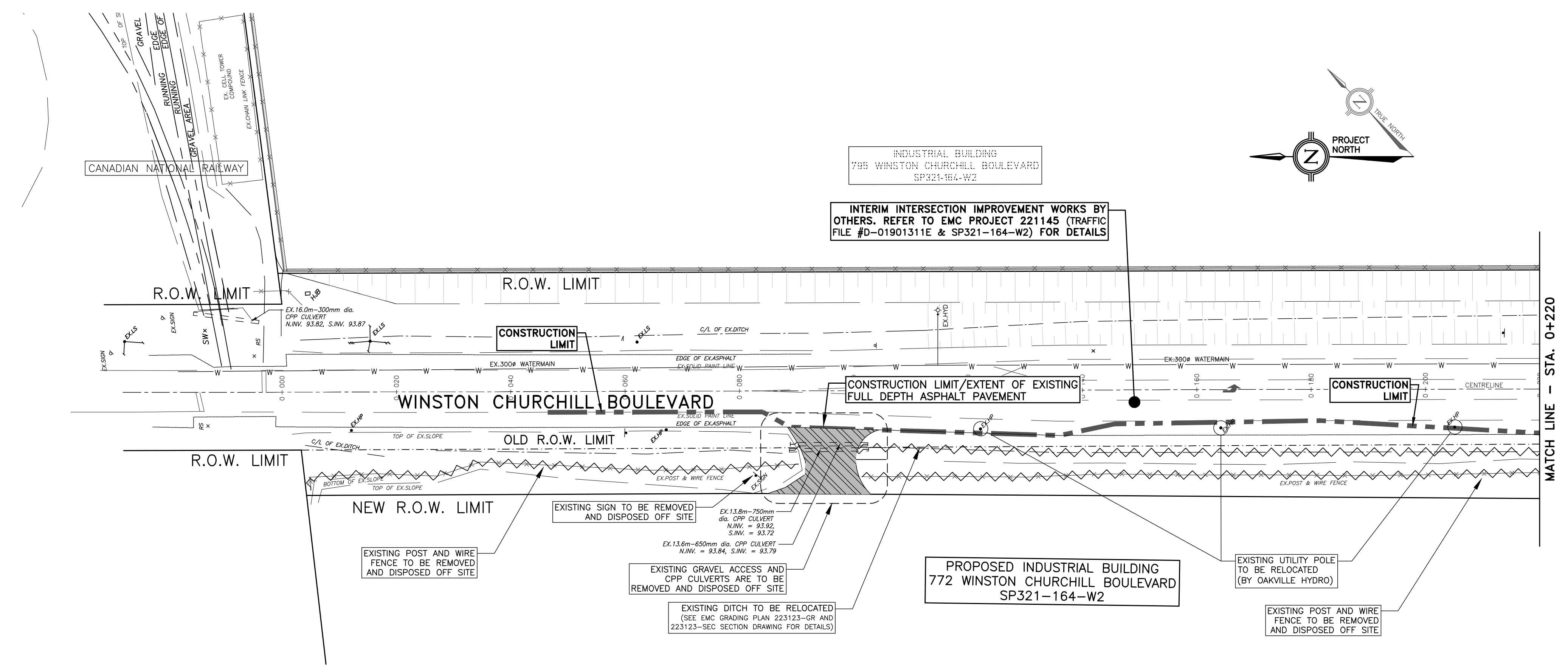
**EMC GROUP LIMITED**

Engineers Planners Project Managers  
Vaughan Ontario (905) 738-3939

**ULTIMATE INTERSECTION IMPROVEMENT  
WINSTON CHURCHILL BOULEVARD  
GENERAL NOTES**

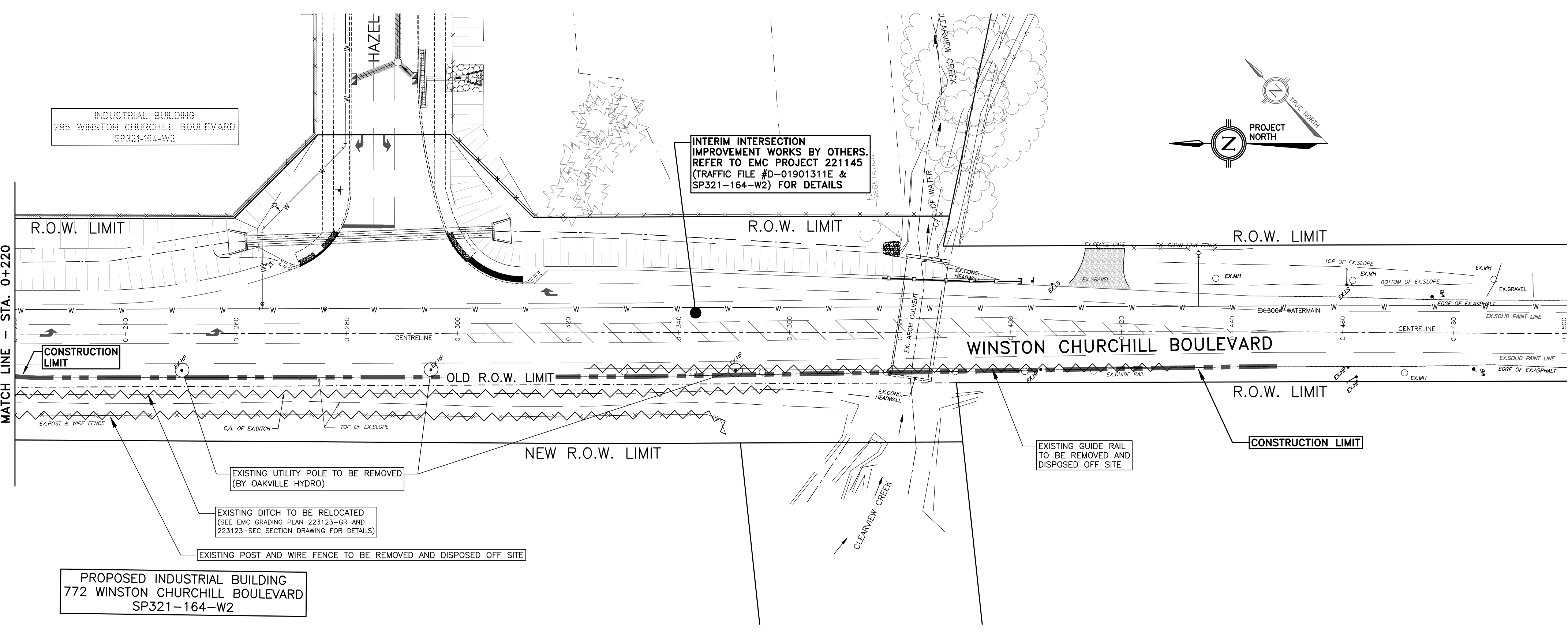
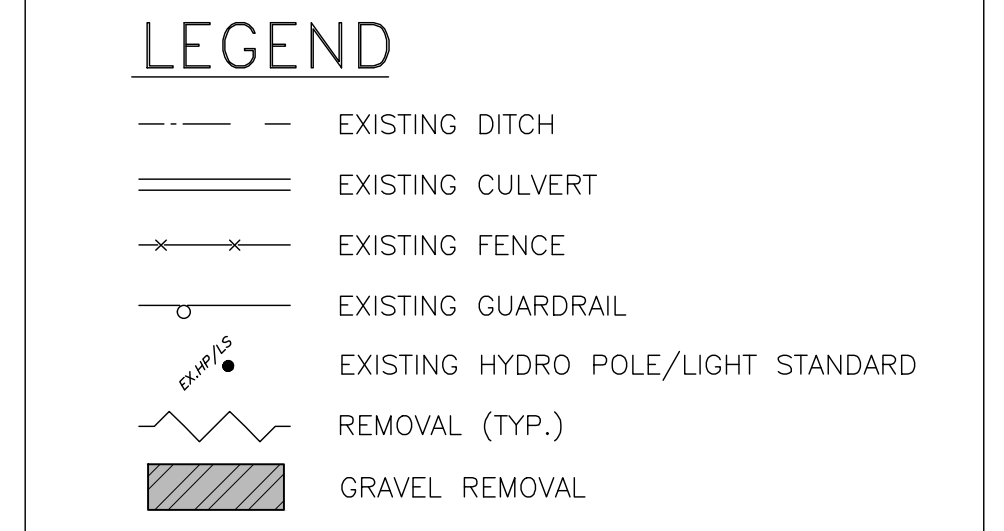
CAD Area	X-XX	Area	X-XX	Project No.	<b>223123</b>
Checked by	M.Z.	Drawn by	J.C.	Plan No.	N
Date	SEPT, 2023	Sheet	2 of 11		

TRAFFIC FILE# To Be Assigned  
SP# 1601.029/01



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**NOT APPROVED FOR CONSTRUCTION**



**General Notes**  
 All Driveways Are ASPHALT Unless Otherwise Noted  
 All Water And Sanitary Service Locations Are Approximate And Must Be Located Accurately In The Field  
 All Pipes Size In mm

**Bench Mark Notes**  
 B.M. No. Mississauga - 774  
 B.M. Elev. 101.386m  
 B.M. Description On the West face at the North end of a brown brick office building on the East Side of Winston Churchill Blvd, (No. 935)  
 B.M. Location 137m South of Royal Windsor Drive

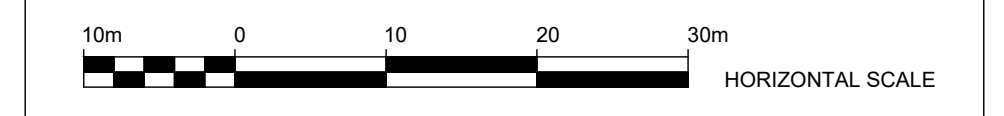
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Approved by

**NOTICE TO CONTRACTOR**  
 48 HOURS PRIOR TO COMMENCING WORK NOTIFY THE FOLLOWING, AS APPLICABLE

THE REGIONAL MUNICIPALITY OF PEEL	CABLE TELEVISION/FIBROPTIC PROVIDERS:
CITY OF MISSISSAUGA WORKS DEPT.	BELL CANADA
CITY OF BRAMPTON WORKS DEPT.	ENERSOURCE TELECOM
TOWN OF CALEDON WORKS DEPT.	HYDRO ONE TELECOM
BELL CANADA	ROGERS CABLE
ENBRIDGE INCORPORATED-GAS DISTRIBUTION	ALLSTREAM PSN (PUBLIC SECTOR NETWORK)
ONTARIO MINISTRY OF TRANSPORTATION	FUTUREWAY (FCI BROADBAND)
ONTARIO CLEAN WATER AGENCY	
HYDRO ONE NETWORKS	
ENERSOURCE, HYDRO MISSISSAUGA	
HYDRO ONE BRAMPTON	

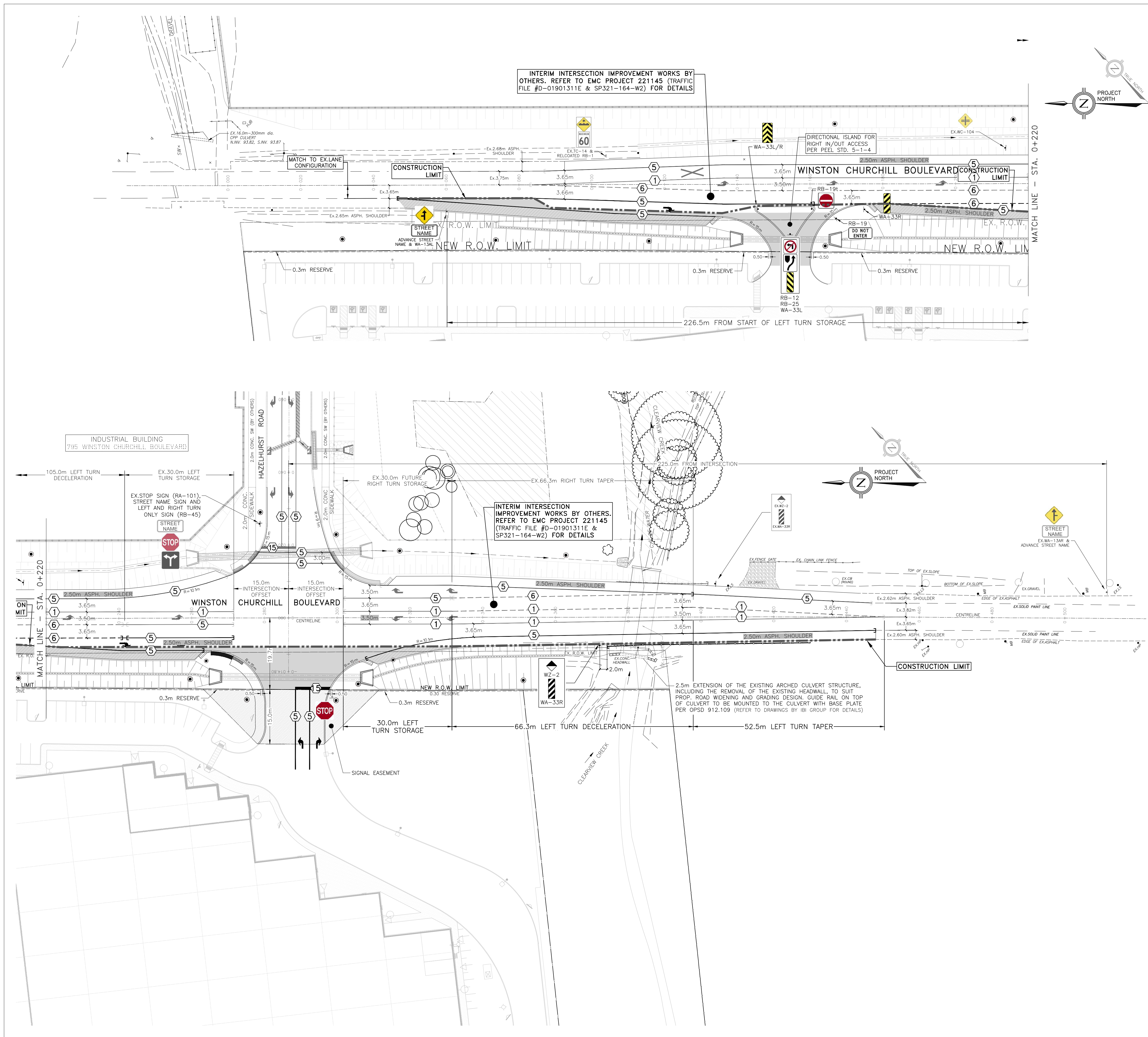


**EMC GROUP LIMITED**  
 Engineers Planners Project Managers  
 Vaughan Ontario (905) 738-3939

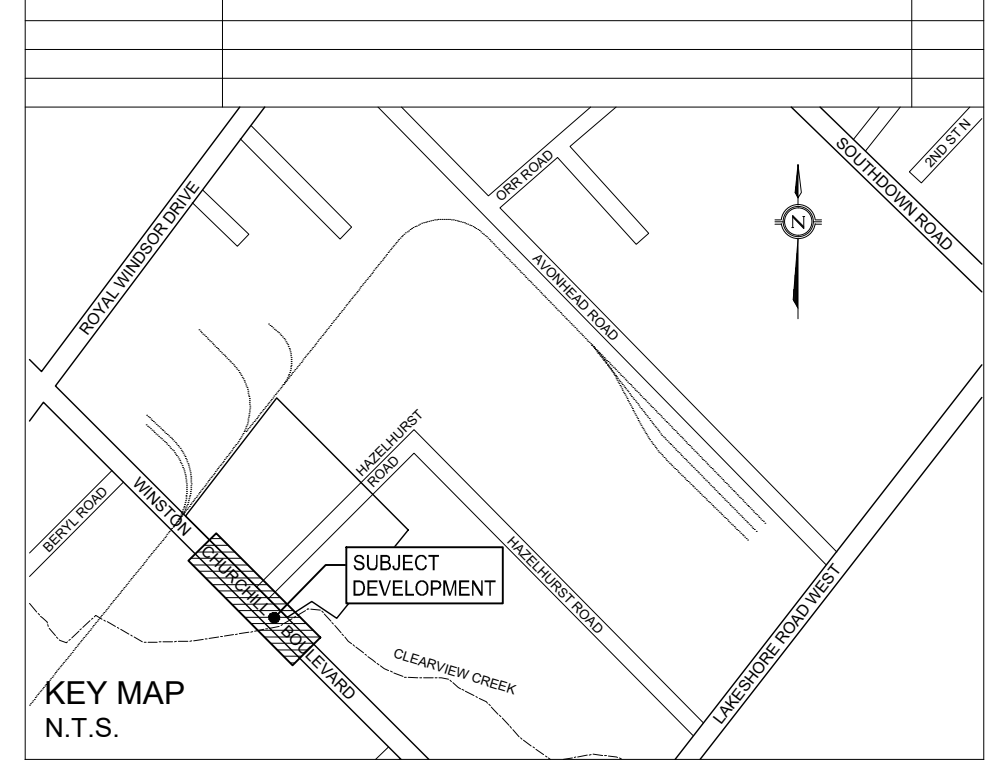
**ULTIMATE INTERSECTION IMPROVEMENT  
 WINSTON CHURCHILL BOULEVARD  
 REMOVAL AND ADJUSTMENT PLAN**

CAD Area	X-XX	Area	X-XX	Project No.	223123
Checked by	M.Z.	Drawn by	J.C.	Plan No.	RP
Date	SEPT, 2023	Sheet	3 of 11		

TRAFFIC FILE# To Be Assigned  
 SP# 1601.029/01



REVISIONS		
DATE	DETAILS	INIT.
NOV. 24, 2023	ISSUED FOR 1st SUBMISSION	J.C.



KEY MAP  
N.T.S.

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**NOT APPROVED FOR CONSTRUCTION**

**PAVEMENT MARKINGS**

1	SOLID YELLOW, 10cm
2	SOLID DOUBLE YELLOW, 10cm
3	363 BROKEN YELLOW, 10cm
4	SOLID YELLOW, 20cm
5	SOLID WHITE, 10cm
6	333 BROKEN WHITE, 10cm
7	363 BROKEN WHITE, 10cm
8	393 BROKEN WHITE, 10cm
9	SOLID WHITE, 20cm
10	111 BROKEN WHITE, 10cm
11	333 BROKEN WHITE, 20cm
12	333 BROKEN WHITE, 30cm
13	SOLID WHITE, 30cm
14	SOLID WHITE, 45cm
15	SOLID WHITE, 60cm
16	SOLID YELLOW, 30cm
20	SYMBOLS
LIMITS OF MARKINGS	

EXISTING TRAFFIC SYMBOLS  
PROPOSED TRAFFIC SYMBOLS  
TRAFFIC DIRECTION

NOTES:

- 333, 363, 393, DENOTES PAVEMENT MARKING SPACING (IE, 3m LINE, 3m GAP, 3m LINE)
- USE (1) TO DENOTE PAVEMENT MARKING
- USE (T) TO DENOTE PAVEMENT MARKING, TEMPORARY
- USE (A) TO DENOTE PAVEMENT MARKING, TEMPORARY-REMOVABLE
- USE (1) TO DENOTE PAVEMENT MARKING, DURABLE
- LADDER PEDESTRIAN CROSSWALK MARKINGS ARE LONGITUDINAL WHITE LINES INSTALLED ACROSS THE PEDESTRIAN CROSSWALK, PARALLEL TO THE DRIVER'S DIRECTION OF TRAVEL. THE LINES ARE 60CM WIDE AND ARE SPACED 60CM APART.

**General Notes**  
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All Pipes Size In mm

**Bench Mark Notes**  
B.M. No. Mississauga - 774  
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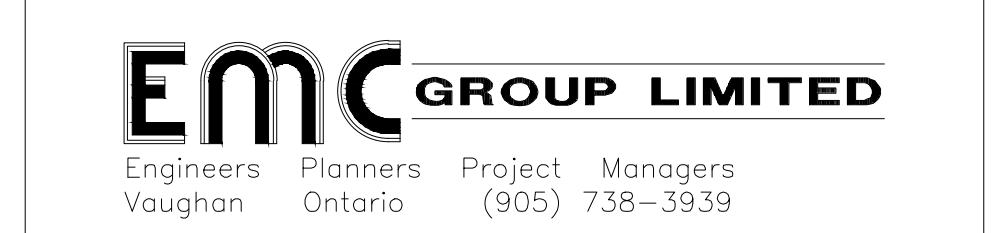
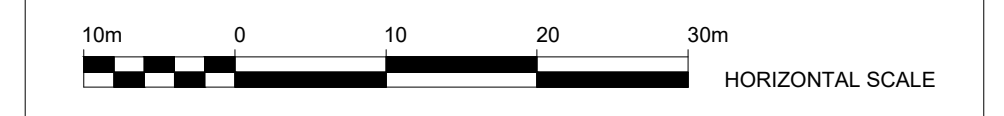
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Approved by: \_\_\_\_\_  
Chkd.

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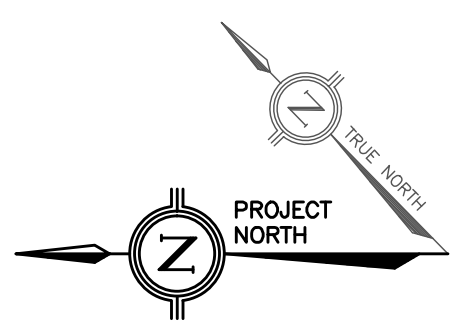
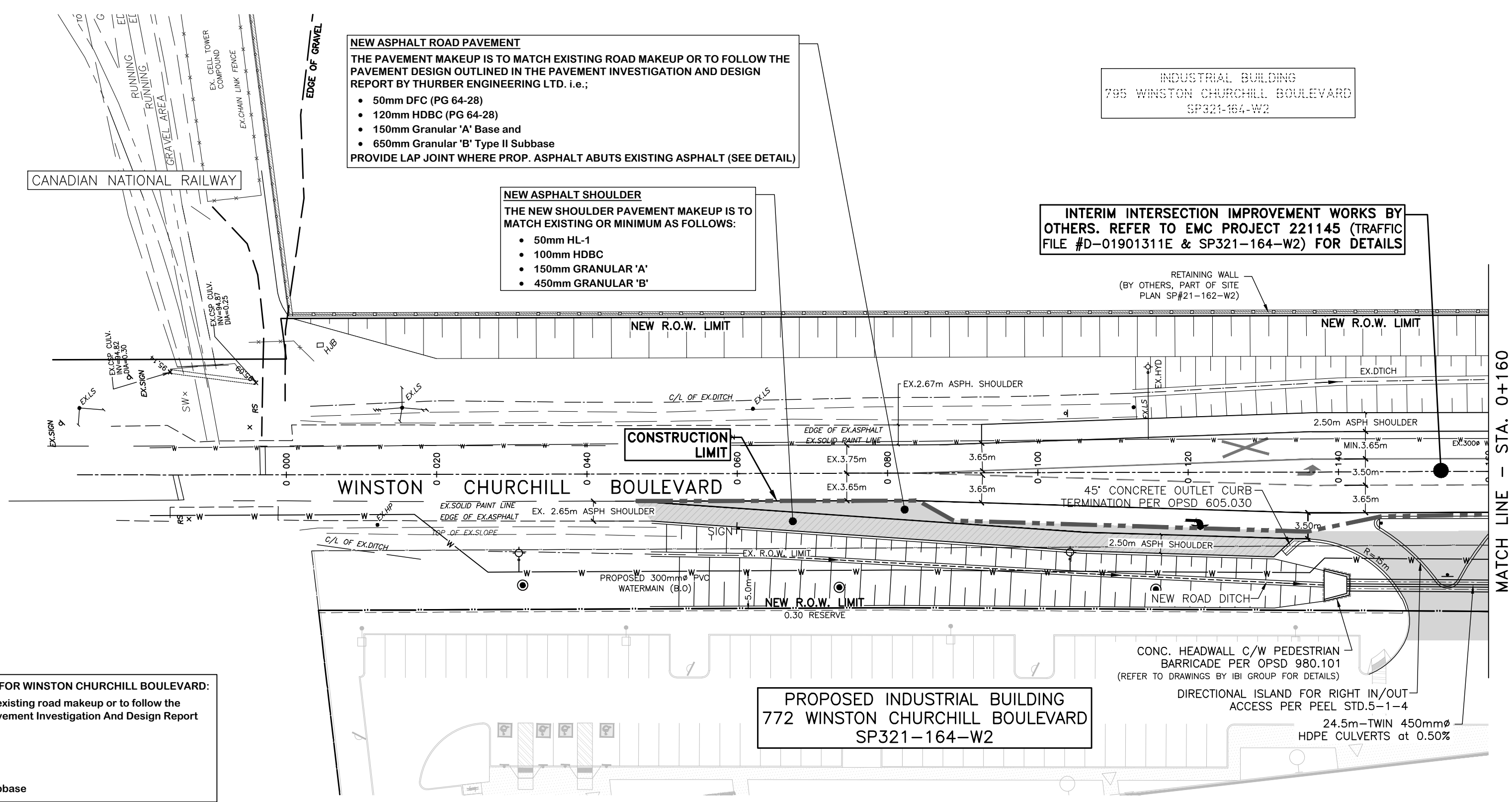
- |  |                                       |
|--|---------------------------------------|
| THE REGIONAL MUNICIPALITY OF PEELE     | CABLE TELEVISION/FIBROPTIC PROVIDERS: |
| CITY OF MISSISSAUGA WORKS DEPT.        | BELL CANADA                           |
| CITY OF BRAMPTON WORKS DEPT.           | ENERSOURCE TELECOM                    |
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| ONTARIO CLEAN WATER AGENCY             |                                       |
| HYDRO ONE NETWORKS                     |                                       |
| ENERSOURCE, HYDRO MISSISSAUGA          |                                       |
| HYDRO ONE BRAMPTON                     |                                       |



**ULTIMATE INTERSECTION IMPROVEMENT  
WINSTON CHURCHILL BOULEVARD  
PAVEMENT MARKING AND SIGNAGE PLAN**

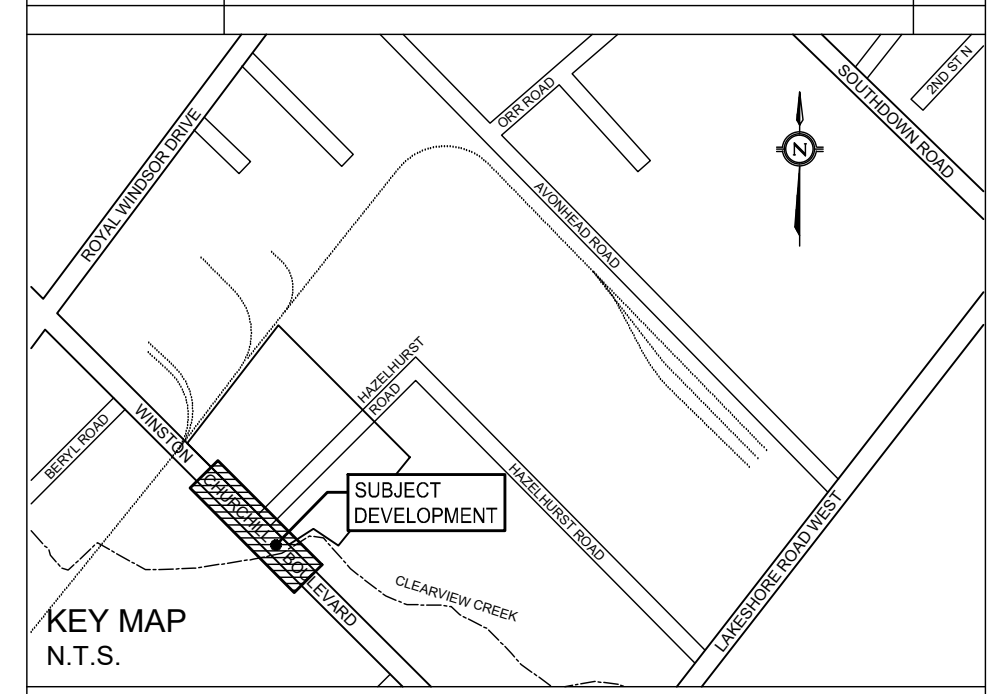
CAD Area	X-XX	Area	X-XX	Project No.	223123
Checked by	M.Z.	Drawn by	J.C.	Plan No.	PMSP
Date	SEPT, 2023	Sheet	of 11		

TRAFFIC FILE# To Be Assigned  
SP# 1601.029/01



SERVICE DATA					
SERVICE	DATE	INIT.	SERVICE	DATE	INIT.
SAN SEWERS			GAS MAINS		
STORM SEWERS			BELL U/G CABLE		
WATERMANS			HYDRO U/G CABLE		
TRANSIT			HYDRO ONE		
PARKS & REC.			CTV		
ONT. CLEAN WATER			COMMUNIC. CABLES		

REVISIONS		
DATE	DETAILS	INIT.
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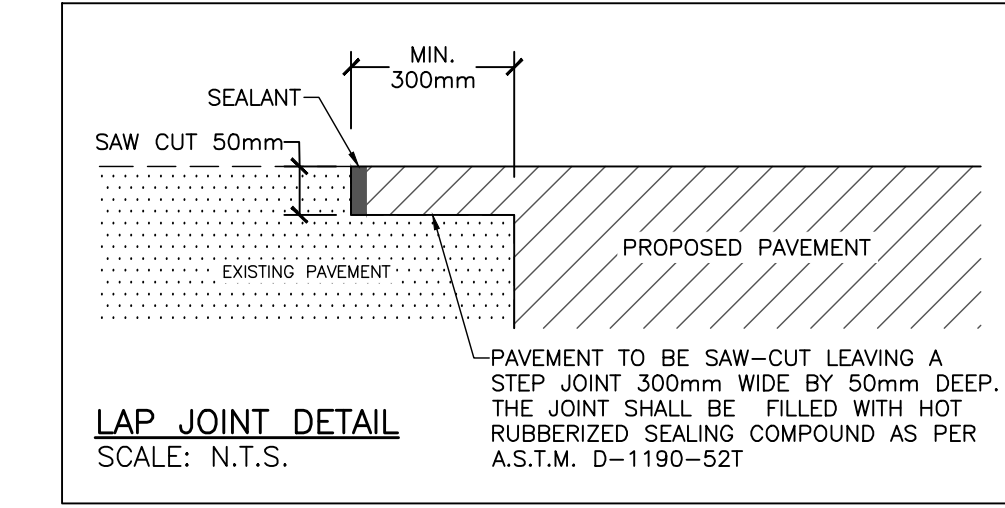


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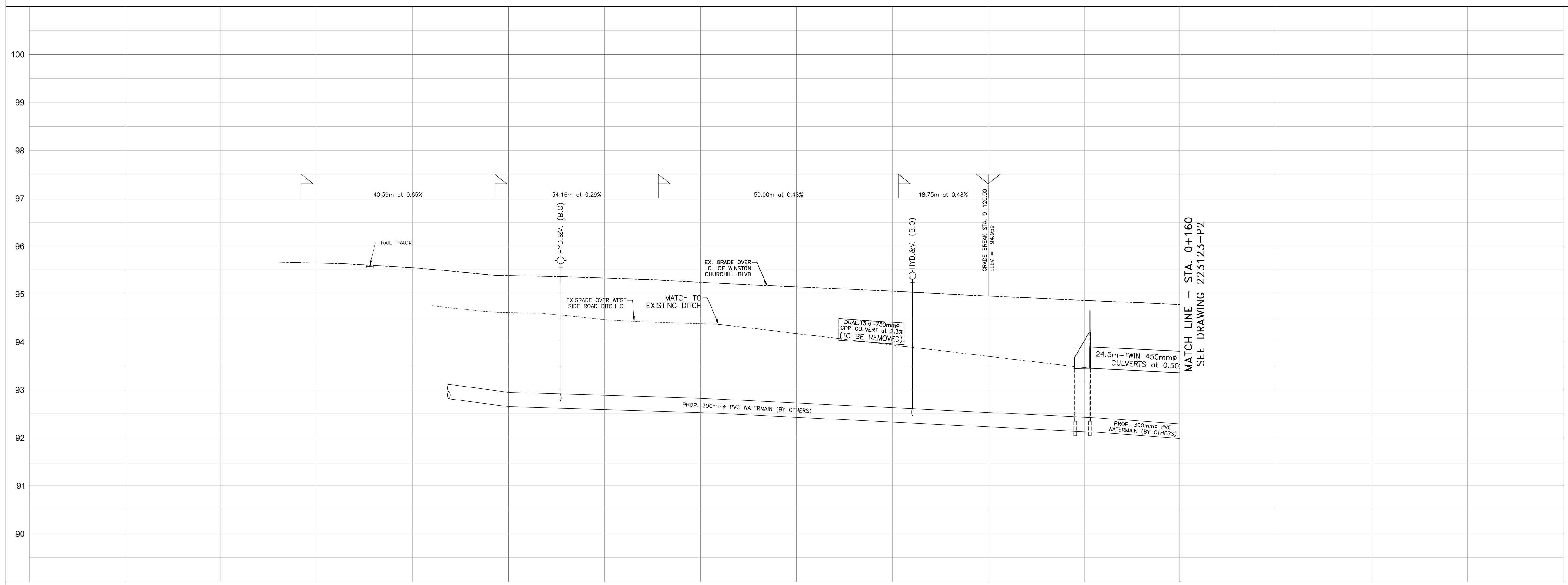
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**NOT APPROVED FOR CONSTRUCTION**

LEGEND	
	WATERMAIN
	DITCH
	STORM CULVERT
	FIRE HYDRANT
	NEW ASPHALT SHOULDER (SEE NOTE #1)
	NEW ASPHALT PAVEMENT (SEE NOTES #2)
	45° CURB OUTLET
	MAX. 2.5:1 SLOPE (UNLESS NOTED OTHERWISE)
	RELOCATED HP/SL (BY OAKVILLE HYDRO)
	CONSTRUCTION LIMIT



**THIS DRAWING SHOWS PROPOSED WORKS ONLY.  
FOR REMOVAL DETAILS, REFER TO REMOVAL PLAN 223123-RP**



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Approved by

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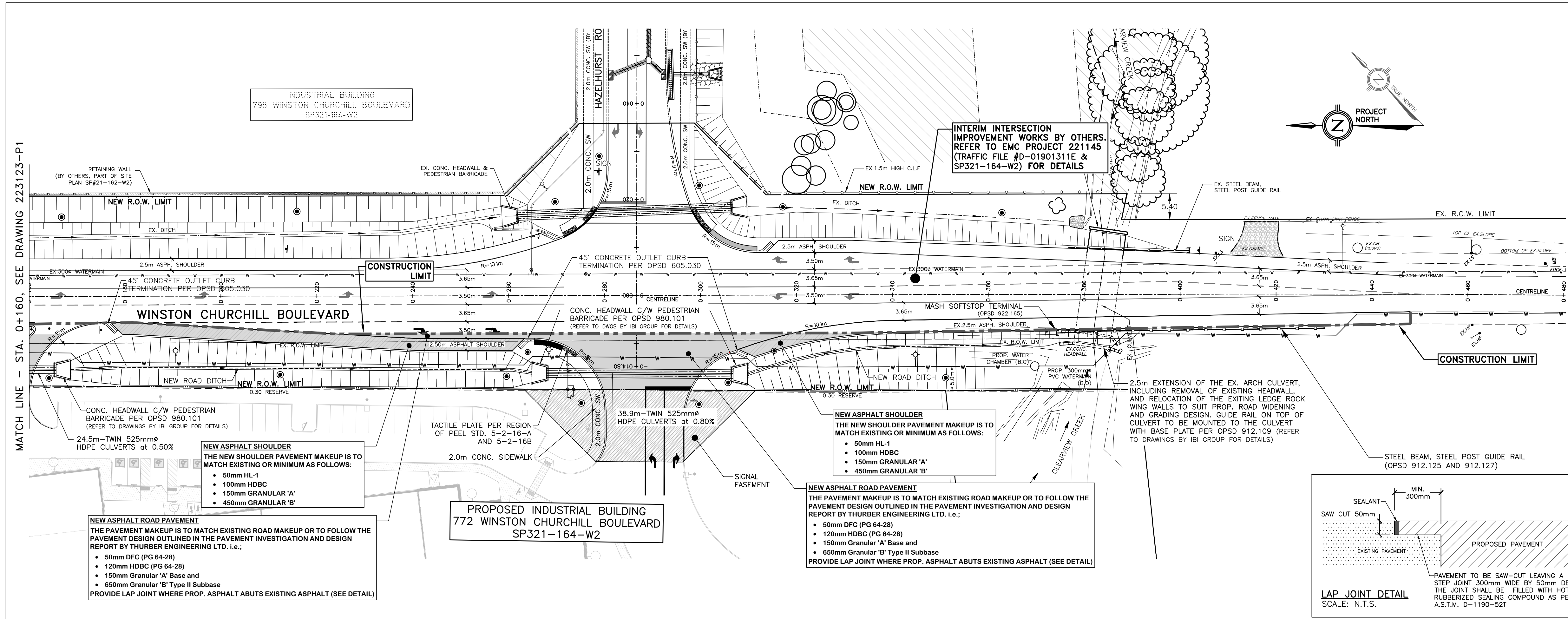
**EMC GROUP LIMITED**  
 Engineers Planners Project Managers  
 Vaughan Ontario (905) 738-3939

**ULTIMATE INTERSECTION IMPROVEMENT  
 WINSTON CHURCHILL BOULEVARD  
 (FROM SOUTH OF CNR TO NORTH OF LAKESHORE ROAD)  
 PROPOSED ROAD WIDENING  
 STA. 0+000 TO STA. 0+160**

10m 0 10 20 30m HORIZONTAL SCALE  
 1m 0 1 2 3m VERTICAL SCALE

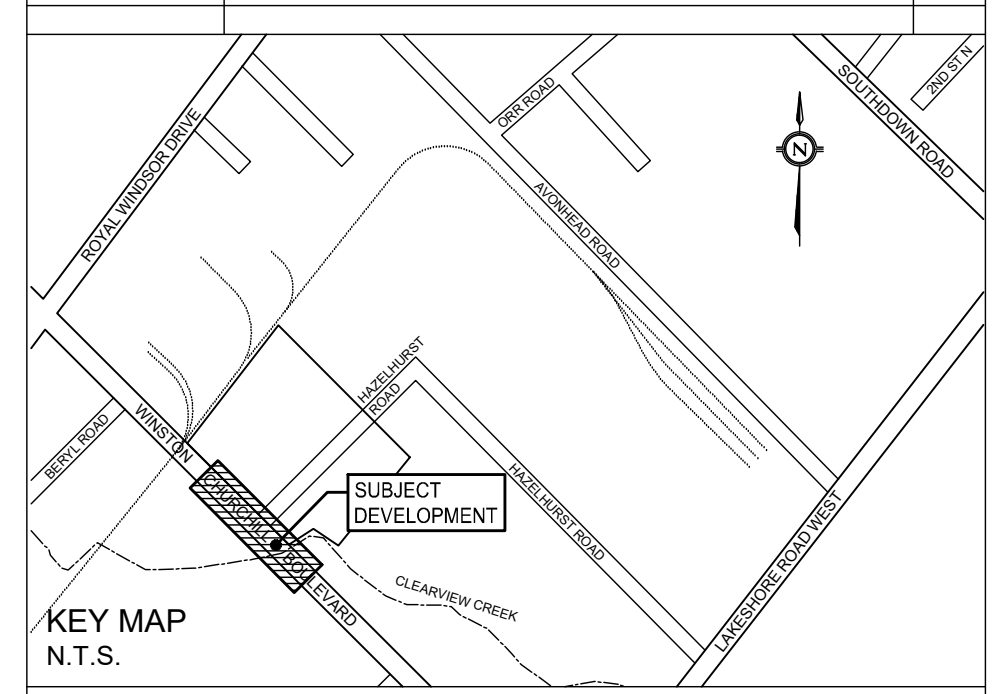
STATION	PROP. STM. INVERT RESTRAINED JOINTS BOT. EL. OF WM.	PROP. DITCH ELEV.	EX. DITCH ELEV.	PROP. ROAD ELEV.	EX. ROAD ELEV.	ROAD CHAINAGE
0+000	94.61	94.47	94.39	94.37	94.18	0+000
0+020	95.55	95.39	95.33	95.25	95.15	0+020
0+040						0+040
0+060						0+060
0+080						0+080
0+100						0+100
0+120						0+120
0+140						0+140
0+160						0+160
0+180						0+180
0+200						0+200
0+220						0+220

CAD Area X-XX Area X-XX Project No. **223123**  
 Checked by M.Z. Drawn by J.C.  
 Date SEPT, 2023 Sheet 5 of 11 Plan No. **P1**



SERVICE DATA					
SERVICE	DATE	INIT.	SERVICE	DATE	INIT.
SAN SEWERS			GAS MAINS		
STORM SEWERS			BELL U/G CABLE		
WATERMANS			HYDRO U/G CABLE		
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REVISIONS		
DATE	DETAILS	INIT.
NOV. 24, 2023	ISSUED FOR 1st SUBMISSION	J.C.

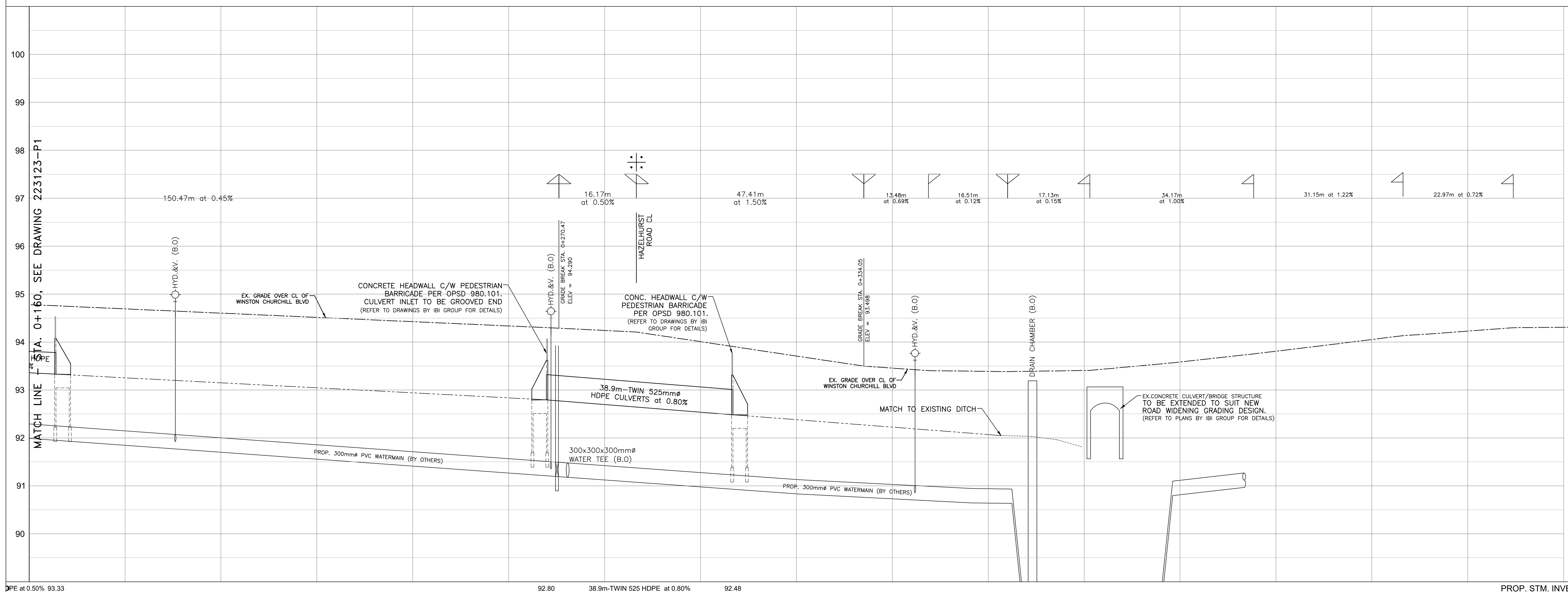


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**NOT APPROVED FOR CONSTRUCTION**

LEGEND	
	WATERMAIN
	DITCH
	STORM CULVERT
	FIRE HYDRANT
	NEW ASPHALT SHOULDER (SEE NOTE #1)
	NEW ASPHALT PAVEMENT (SEE NOTES #2)
	45° CURB OUTLET
	MAX. 2.5:1 SLOPE (UNLESS NOTED OTHERWISE)
	RELOCATED HP/SL (BY OAKVILLE HYDRO)
	CONSTRUCTION LIMIT

**THIS DRAWING SHOWS PROPOSED WORKS ONLY.  
FOR REMOVAL DETAILS, REFER TO REMOVAL PLAN 223123-RP**



**General Notes**  
All Driveways Are ASPHALT Unless Otherwise Noted  
All Water And Sanitary Service Locations Are Approximate And Must Be Located Accurately In The Field  
All Pipes Size In mm

**Bench Mark Notes**  
B.M. No. Mississauga - 774  
B.M. Elev. 101.356m  
B.M. Description On the West face at the North end of a brown brick office building on the East Side of Winston Churchill Blvd. (No. 935)  
B.M. Location 137m South of Royal Windsor Drive

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Approved by

**NOTICE TO CONTRACTOR**  
48 HOURS PRIOR TO COMMENCING WORK NOTIFY THE FOLLOWING

THE REGIONAL MUNICIPALITY OF PEEL	CABLE TELEVISION/FIBROPTIC PROVIDERS:
CITY OF MISSISSAUGA WORKS DEPT.	BELL CANADA
CITY OF BRAMPTON WORKS DEPT.	ENERSOURCE TELECOM
TOWN OF CALEDON WORKS DEPT.	HYDRO ONE TELECOM
BELL CANADA	ROGERS CABLE
ENBRIDGE INCORPORATED-GAS DISTRIBUTION	ALLSTREAM PSN (PUBLIC SECTOR NETWORK)
ONTARIO MINISTRY OF TRANSPORTATION	FUTUREWAY (FCI BROADBAND)
ONTARIO CLEAN WATER AGENCY	
HYDRO ONE NETWORKS	
ENERSOURCE, HYDRO MISSISSAUGA	
HYDRO ONE BRAMPTON	

10m 0 10 20 30m HORIZONTAL SCALE  
1m 0 1 2 3m VERTICAL SCALE

**EMC GROUP LIMITED**  
Engineers Planners Project Managers  
Vaughan Ontario (905) 738-3939

ULTIMATE INTERSECTION IMPROVEMENT WINSTON CHURCHILL BOULEVARD (FROM SOUTH OF CNR TO NORTH OF LAKESHORE ROAD)			
PROPOSED ROAD WIDENING STA. 0+160 TO STA. 0+460			
CAD Area	X-XX	Area	X-XX
Checked by	M.Z.	Drawn by	J.C.
Date	SEPT, 2023	Sheet	6 of 11
Project No.	223123		Plan No.
			<b>P2</b>

PROF. STM. INVERT	RESTRAINED JOINTS	BOT. EL. OF WM.	PROP. DITCH ELEV.	EX. DITCH ELEV.	PROP. ROAD ELEV.	EX. ROAD ELEV.	ROAD CHAINAGE
93.36	93.25	93.15	93.05	92.94	92.84	92.70	92.54
93.71	93.61	93.23	93.25	93.16	92.98	92.72	92.68
94.78	94.69	94.60	94.51	94.43	94.34	94.29	94.24
94.70	94.56	94.43	94.30	94.14	94.00	93.92	93.85
0+160	0+180	0+200	0+220	0+240	0+260	0+270.47	0+280
						0+286.64	0+300
							0+320
							0+334.05
							0+340
							0+360
							0+380
							0+400
							0+420
							0+440
							0+460

REVISIONS		
DATE	DETAILS	INIT.
NOV. 24, 2023	ISSUED FOR 1st SUBMISSION	J.C.

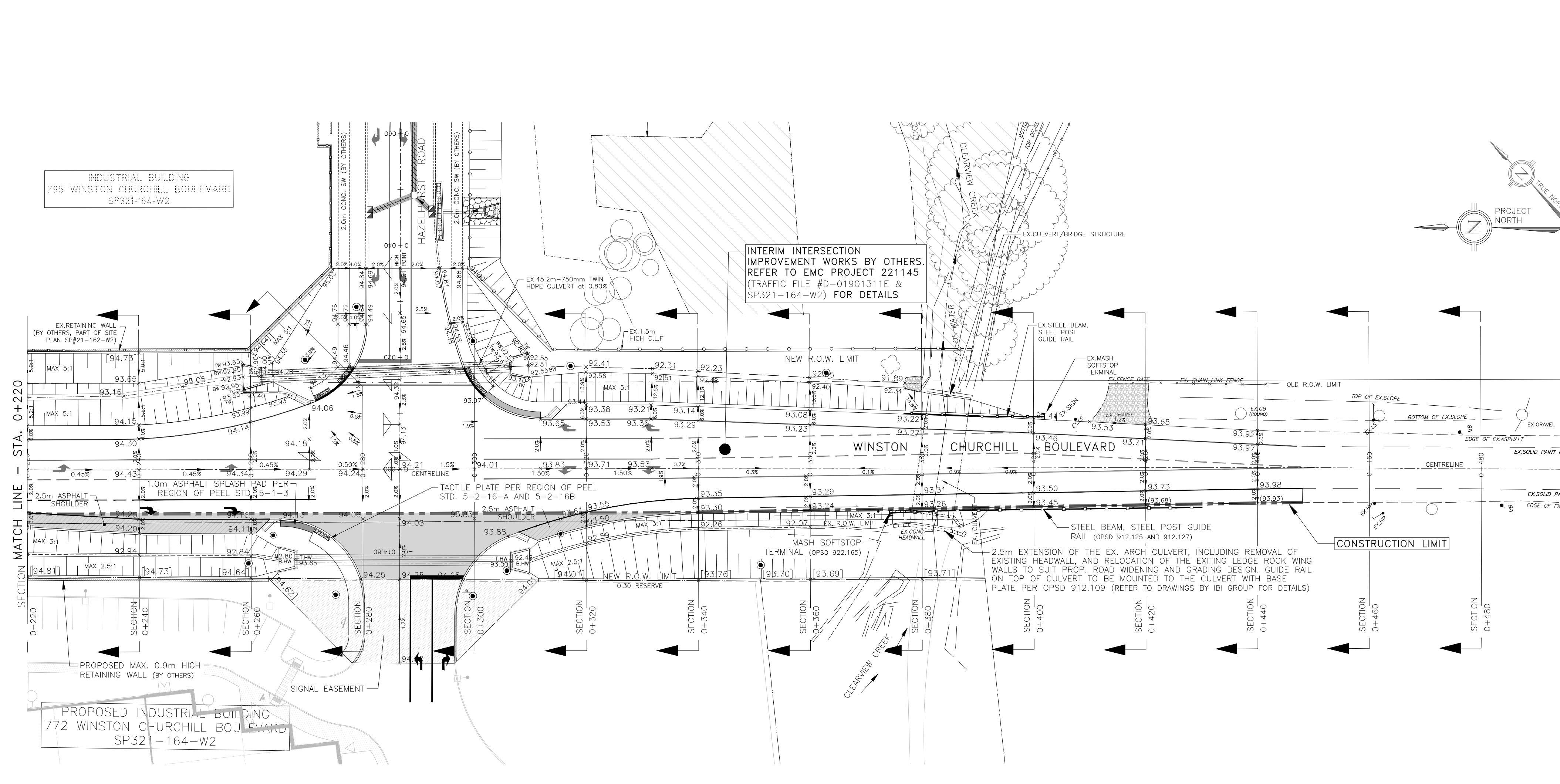
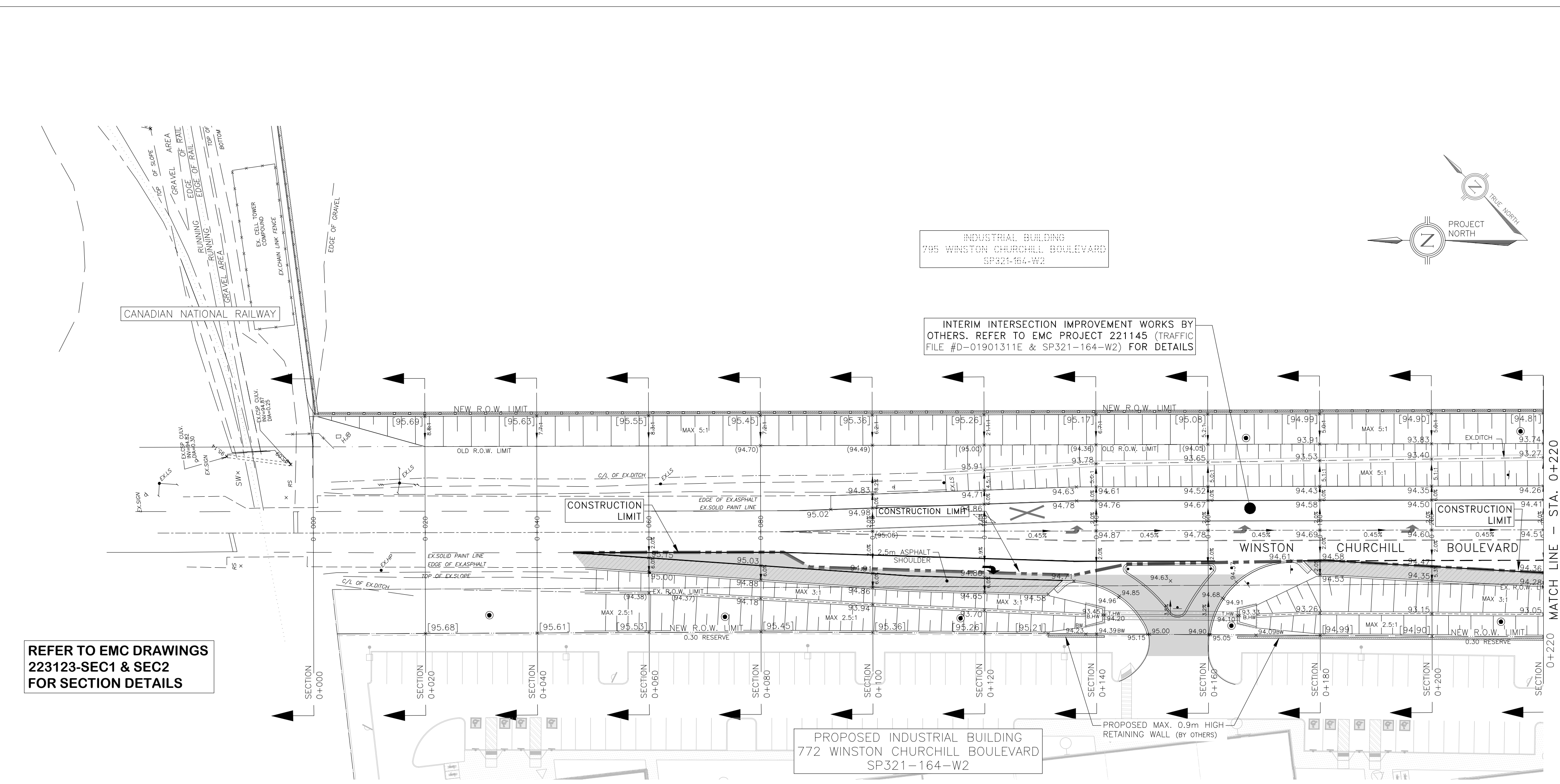
**KEY MAP**  
N.T.S.

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**NOT APPROVED FOR CONSTRUCTION**

**LEGEND**

- EXISTING CONTOUR
- DITCH
- STORM CULVERT
- FIRE HYDRANT
- NEW ASPHALT PAVEMENT
- 45° CURB OUTLET
- PROP. ELEV. TO MATCH EXISTING
- PROPOSED ELEVATION
- PROP. ELEV. AT WIDENING LIMIT (CL+0.3m)
- DRAINAGE DIRECTION WITH GRADE
- MAX. 2.5:1 SLOPE (UNLESS NOTED OTHERWISE)
- RELOCATED HP/SL (SEE RTG DRAWINGS FOR DETAILS)



**General Notes**  
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All Water And Sanitary Service Locations Are Approximate And Must Be Located Accurately In The Field  
All Pipes Size In mm

**Bench Mark Notes**  
B.M. No. Mississauga - 774  
B.M. Elevation 101.356m  
B.M. Description On the West face at the North end of a brown brick office building on the East Side of Winston Churchill Blvd, (No. 935)  
B.M. Location 137m South of Royal Windsor Drive

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**Professional Engineer**  
M. ZUCCARO  
10083723  
NOV-24-2023  
PROVINCE OF ONTARIO  
Approved by

**NOTICE TO CONTRACTOR**  
48 HOURS PRIOR TO COMMENCING WORK NOTIFY THE FOLLOWING, AS APPLICABLE

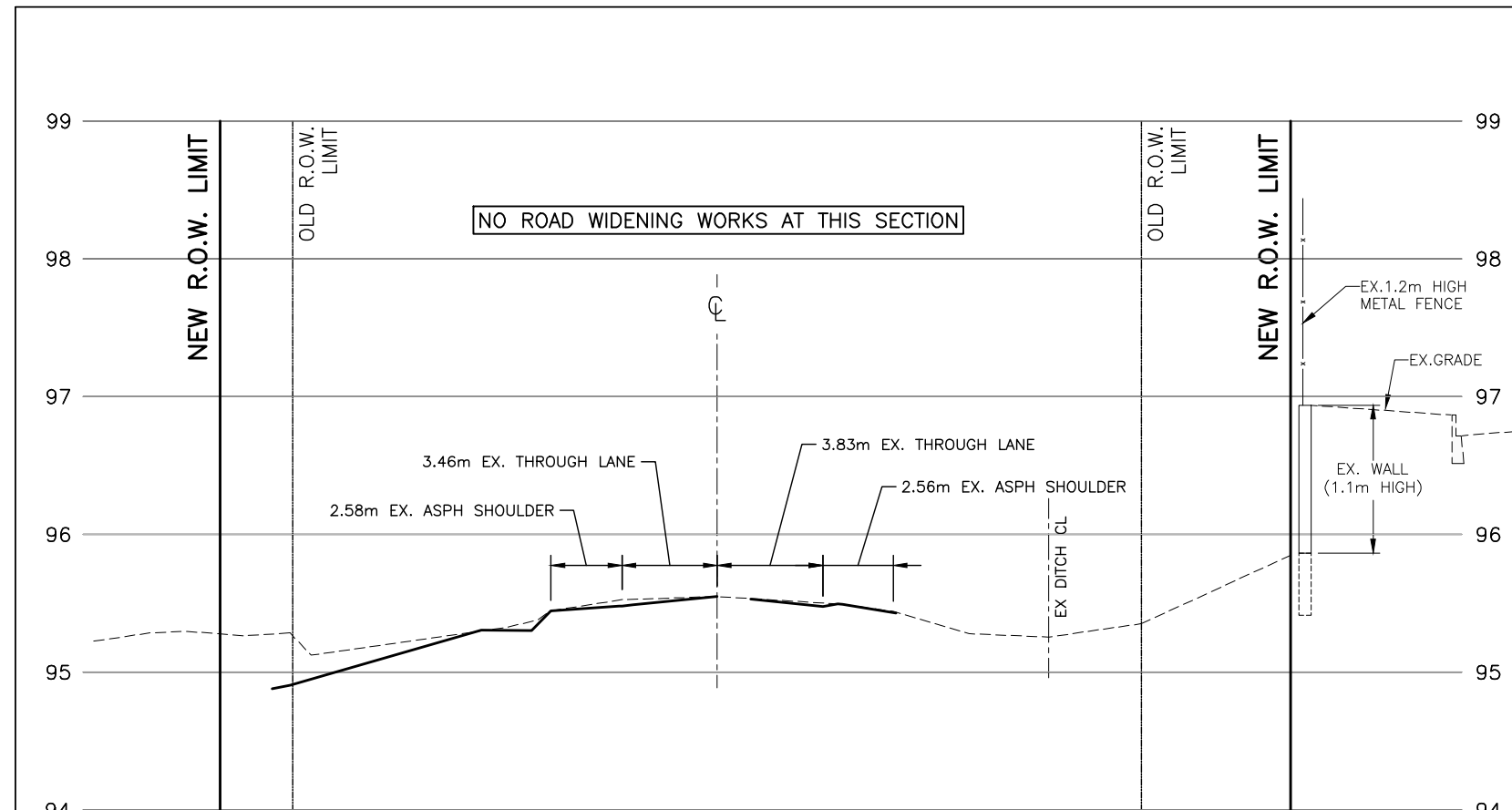
THE REGIONAL MUNICIPALITY OF PEEL	CABLE TELEVISION/FIBROPTIC PROVIDERS:
CITY OF MISSISSAUGA WORKS DEPT.	BELL CANADA
CITY OF BRAMPTON WORKS DEPT.	ENERSOURCE TELECOM
BELL CANADA	HYDRO ONE TELECOM
ENBRIDGE INCORPORATED-GAS DISTRIBUTION	ROGERS CABLE
ONTARIO MINISTRY OF TRANSPORTATION	ALLSTREAM PSN (PUBLIC SECTOR NETWORK)
ONTARIO CLEAN WATER AGENCY	FUTUREWAY (FCI BROADBAND)
HYDRO ONE NETWORKS	
ENERSOURCE, HYDRO MISSISSAUGA	
HYDRO ONE BRAMPTON	

10m 0 10 20 30m  
HORIZONTAL SCALE

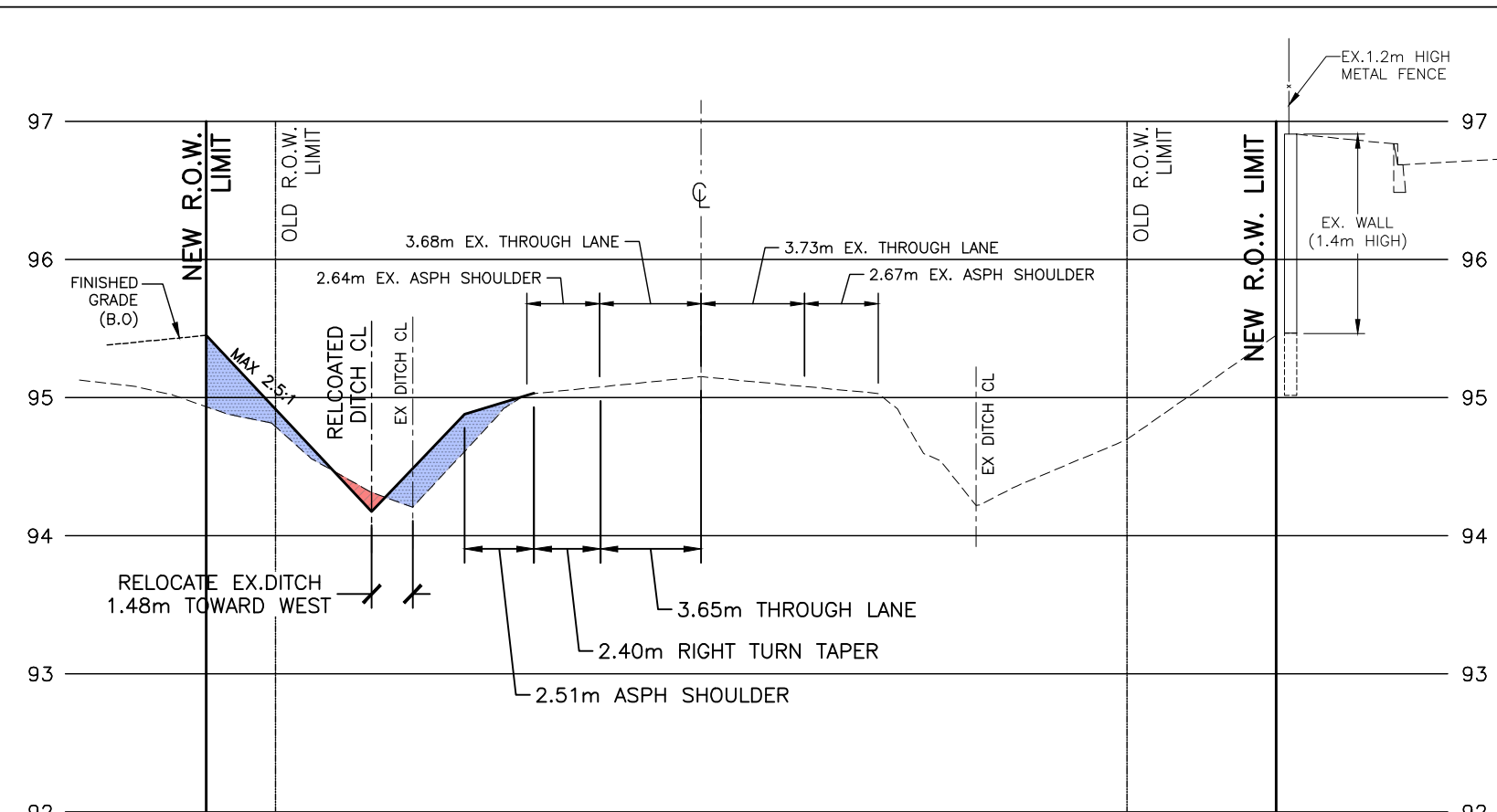
**EMC GROUP LIMITED**  
Engineers Planners Project Managers  
Vaughan Ontario (905) 738-3939

**ULTIMATE INTERSECTION IMPROVEMENT**  
**WINSTON CHURCHILL BOULEVARD**  
**GRADING AND PAVEMENT ELEVATIONS**

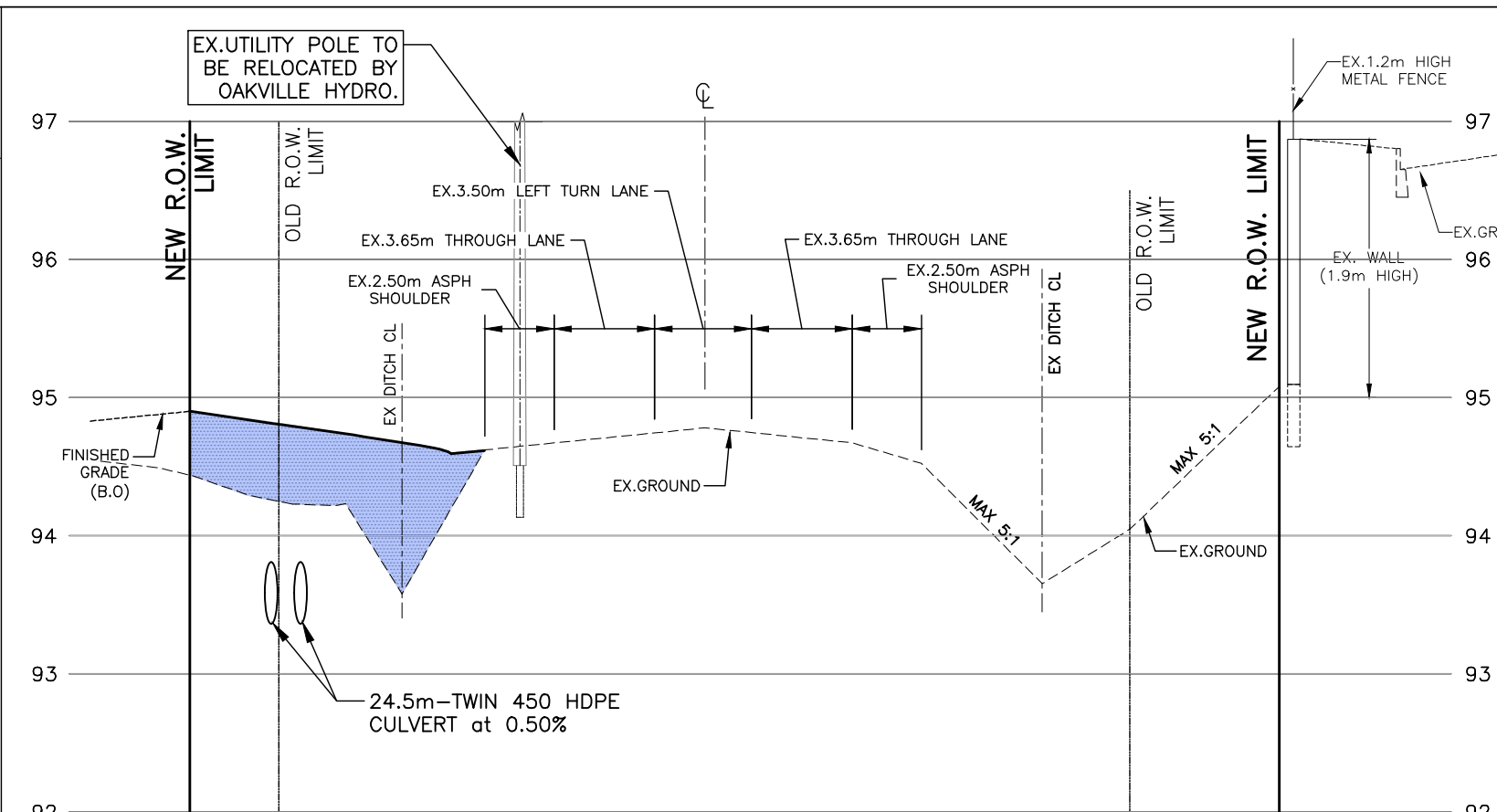
CAD Area	X-XX	Area	X-XX	Project No.	223123
Checked by	M.Z.	Drawn by	J.C.	Plan No.	GR
Date	SEPT, 2023	Sheet	7 of 11		



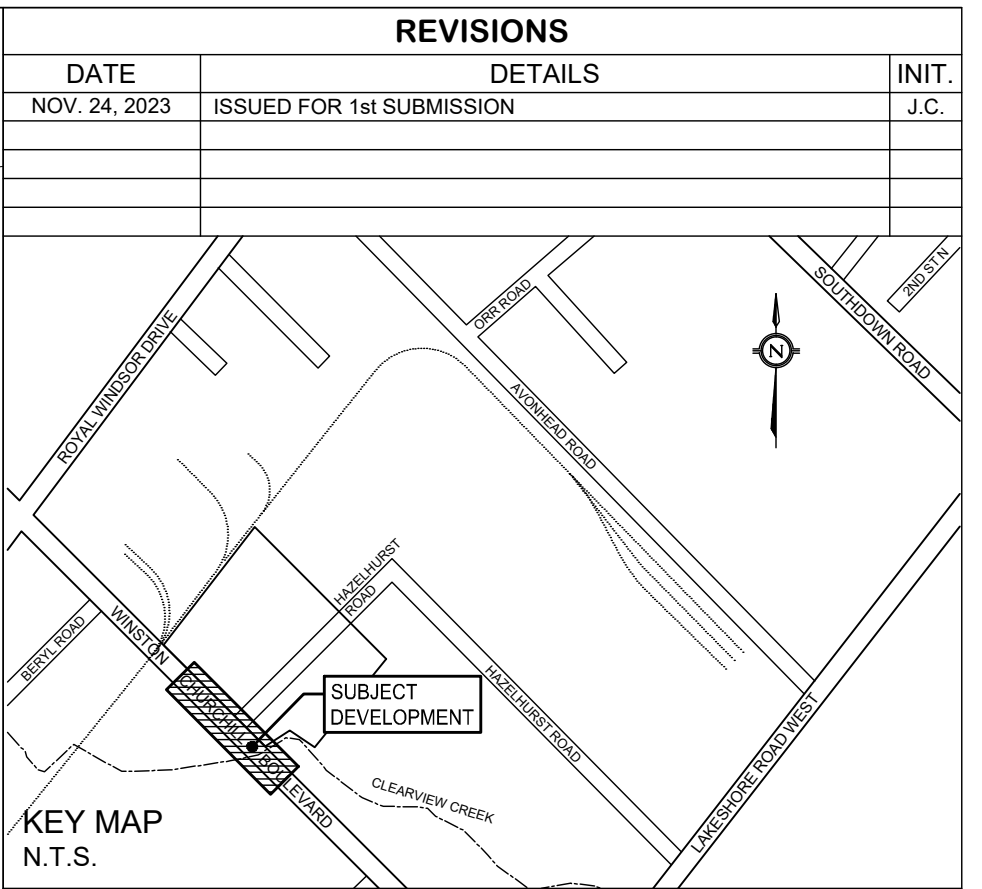
**SECTION 0+000**  
HOR. = 1:250  
VER. = 1:50



**SECTION 0+080**  
HOR. = 1:250  
VER. = 1:50



**SECTION 0+160**  
HOR. = 1:250  
VER. = 1:50



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**NOT APPROVED FOR CONSTRUCTION**

**LEGEND**

- CUT
- FILL

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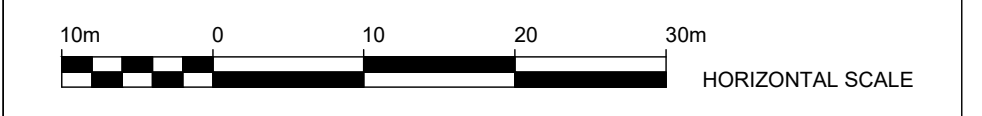
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- |  |                                       |
|--|---------------------------------------|
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| CITY OF BRAMPTON WORKS DEPT.           | ENERSOURCE TELECOM                    |
| TOWN OF CALEDON WORKS DEPT.            | HYDRO ONE TELECOM                     |
| BELL CANADA                            | ROGERS CABLE                          |
| ENBRIDGE INCORPORATED-GAS DISTRIBUTION | ALLSTREAM PSN (PUBLIC SECTOR NETWORK) |
| ONTARIO MINISTRY OF TRANSPORTATION     | HYDRO ONE NETWORKS                    |
| ONTARIO CLEAN WATER AGENCY             | ENERSOURCE, HYDRO MISSISSAUGA         |
| HYDRO ONE NETWORKS                     | HYDRO ONE BRAMPTON                    |
| ENERSOURCE, HYDRO MISSISSAUGA          | FUTUREWAY (FCI BROADBAND)             |
| HYDRO ONE BRAMPTON                     |                                       |

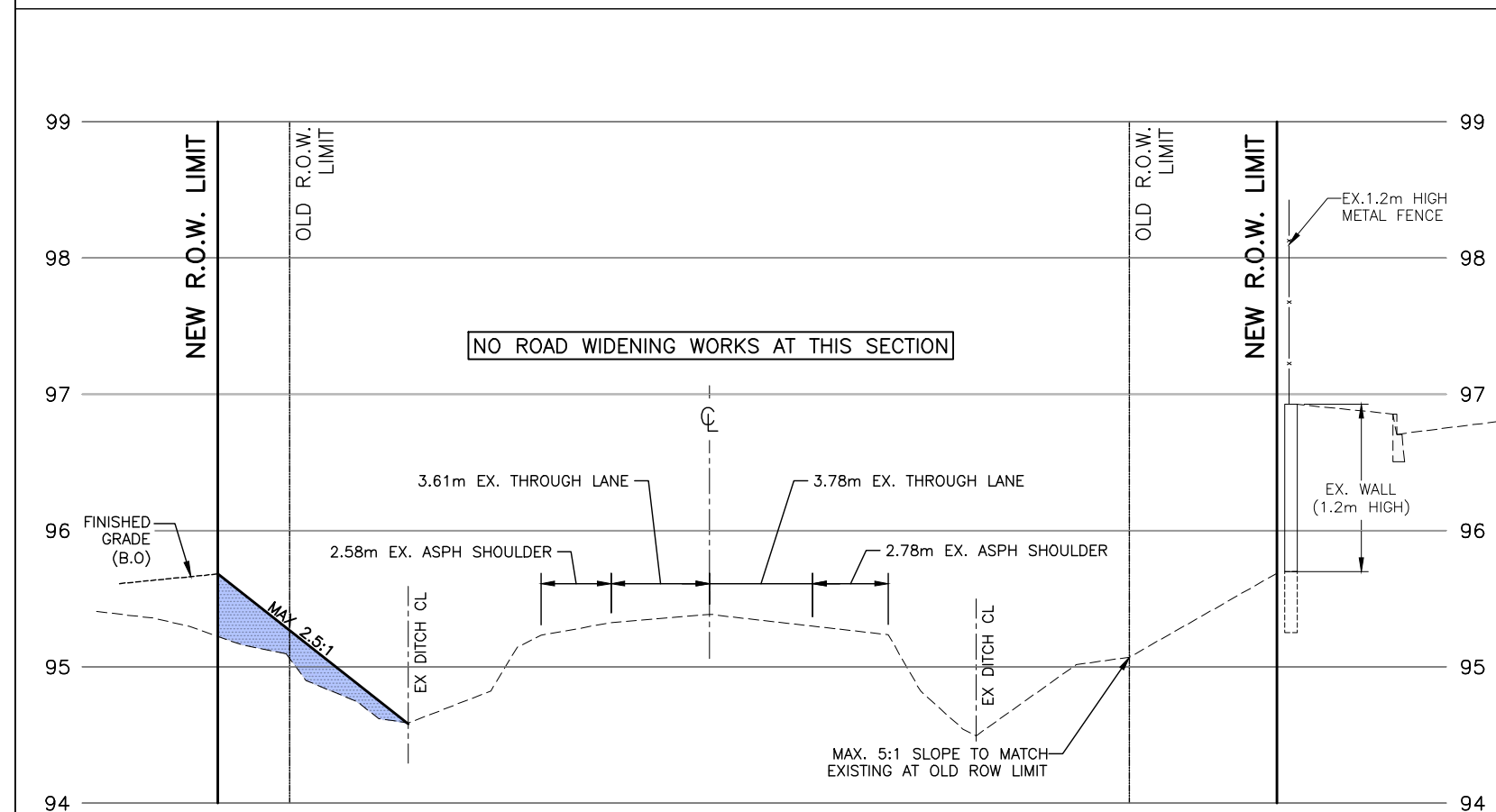


Engineers Planners Project Managers  
Vaughan Ontario (905) 738-3939

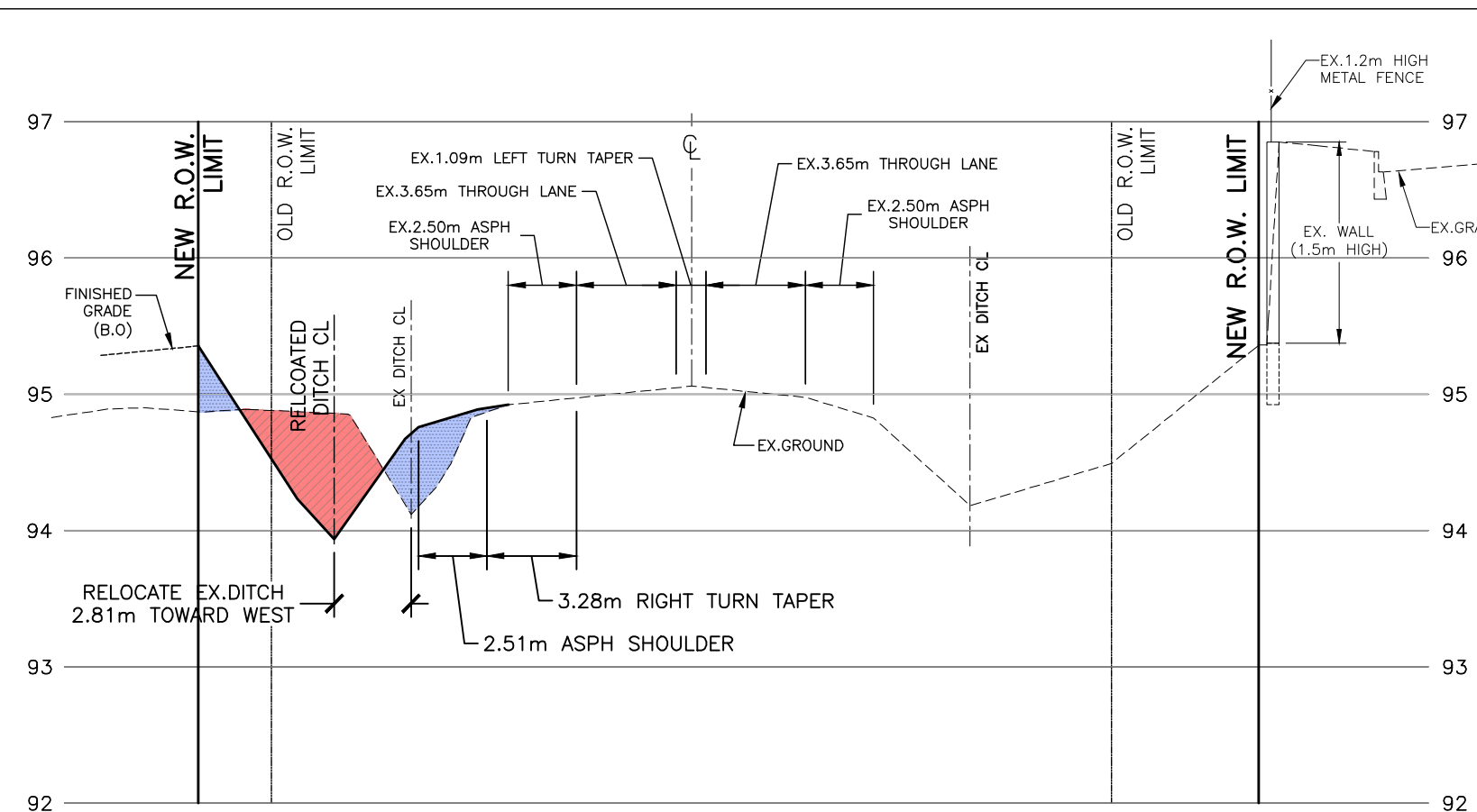
**INTERSECTION IMPROVEMENT  
WINSTON CHURCHILL BLVD./ HAZELHURST RD.  
TYPICAL CROSS SECTIONS  
SECTIONS 0+000 TO STA. 0+220**

CAD Area	X-XX	Area	X-XX	Project No.	223123
Checked by	M.Z.	Drawn by	J.C.	Plan No.	SEC1
Date	SEPT, 2023	Sheet	8 of 11		

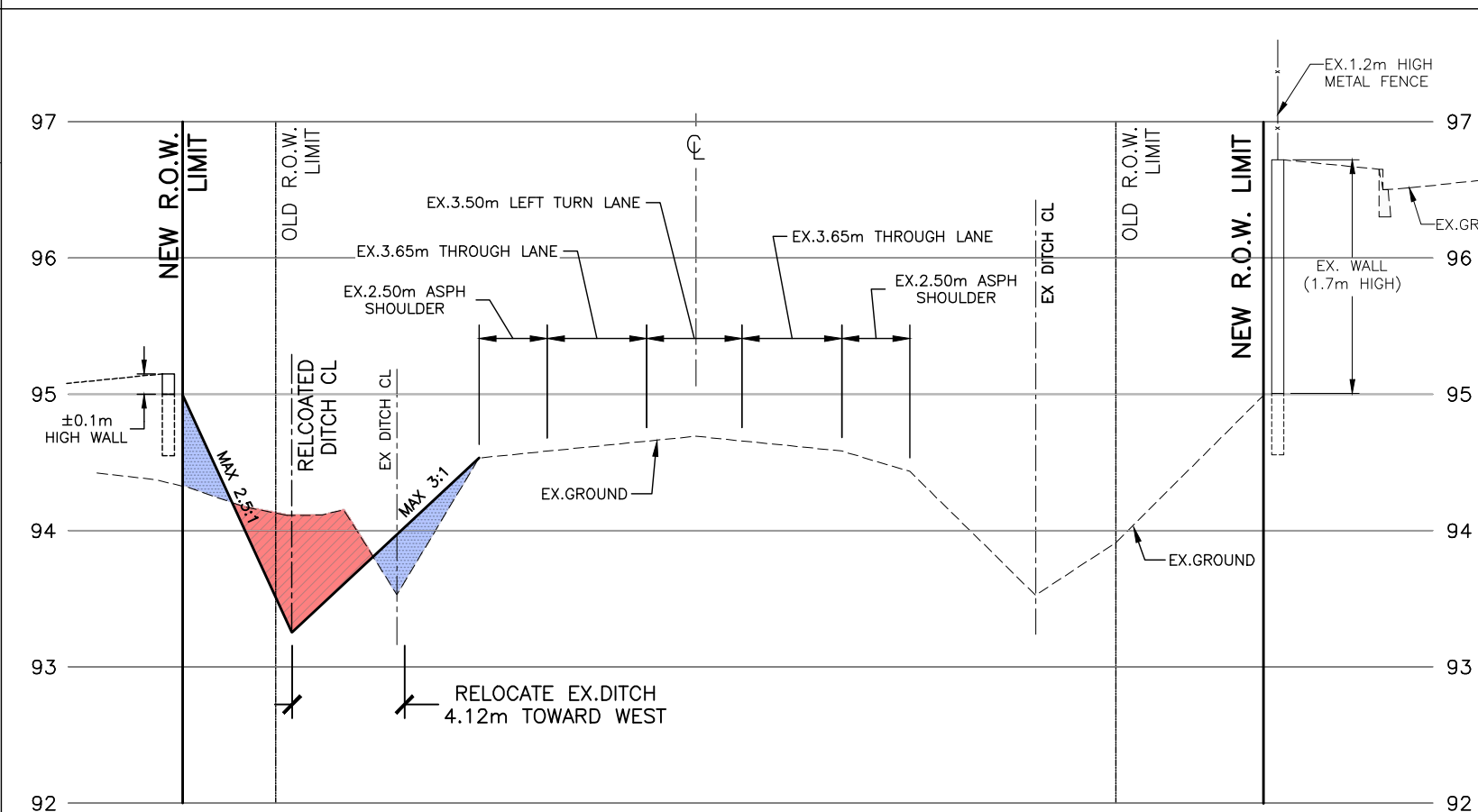
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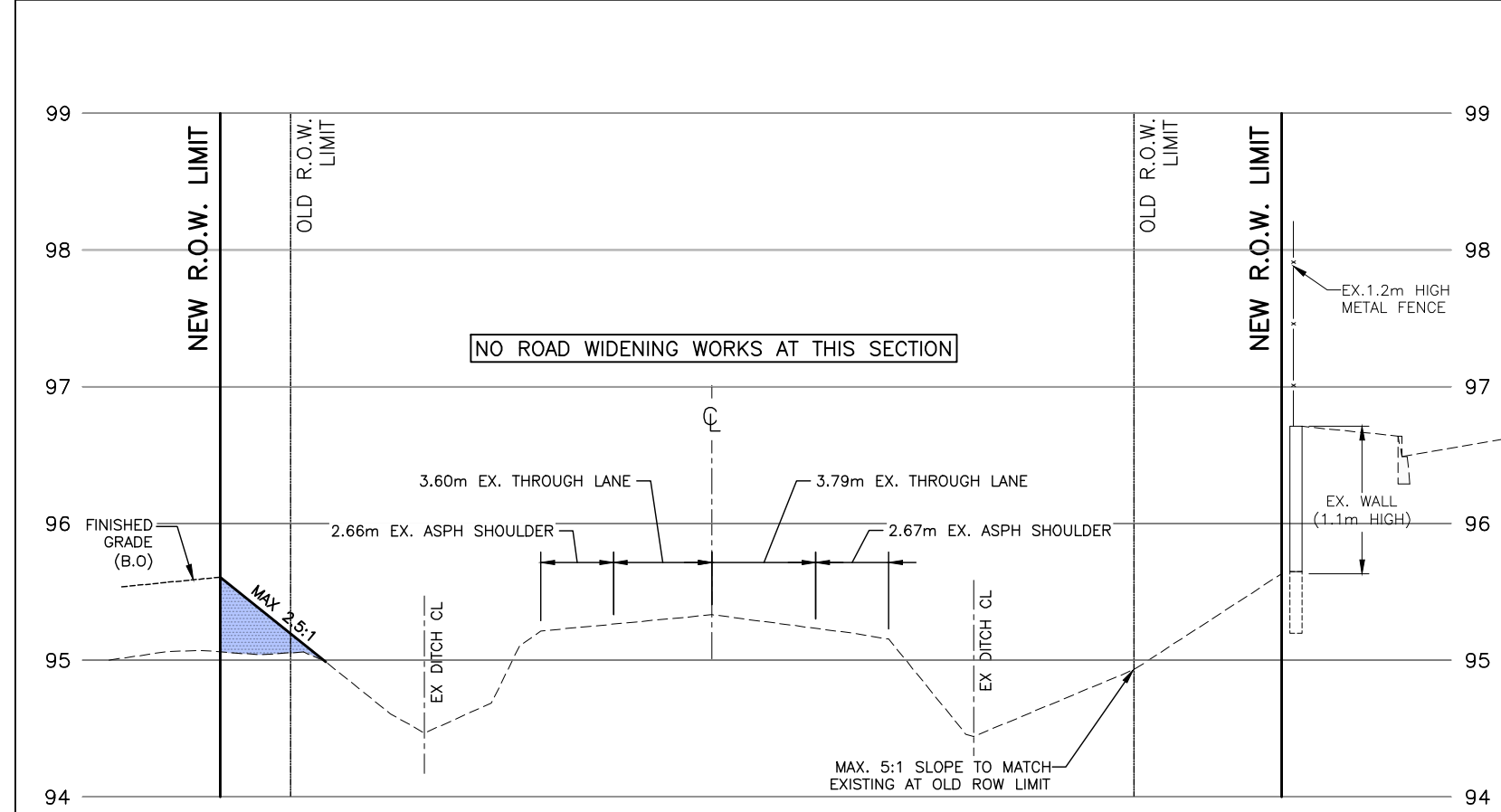
**SECTION 0+020**  
HOR. = 1:250  
VER. = 1:50



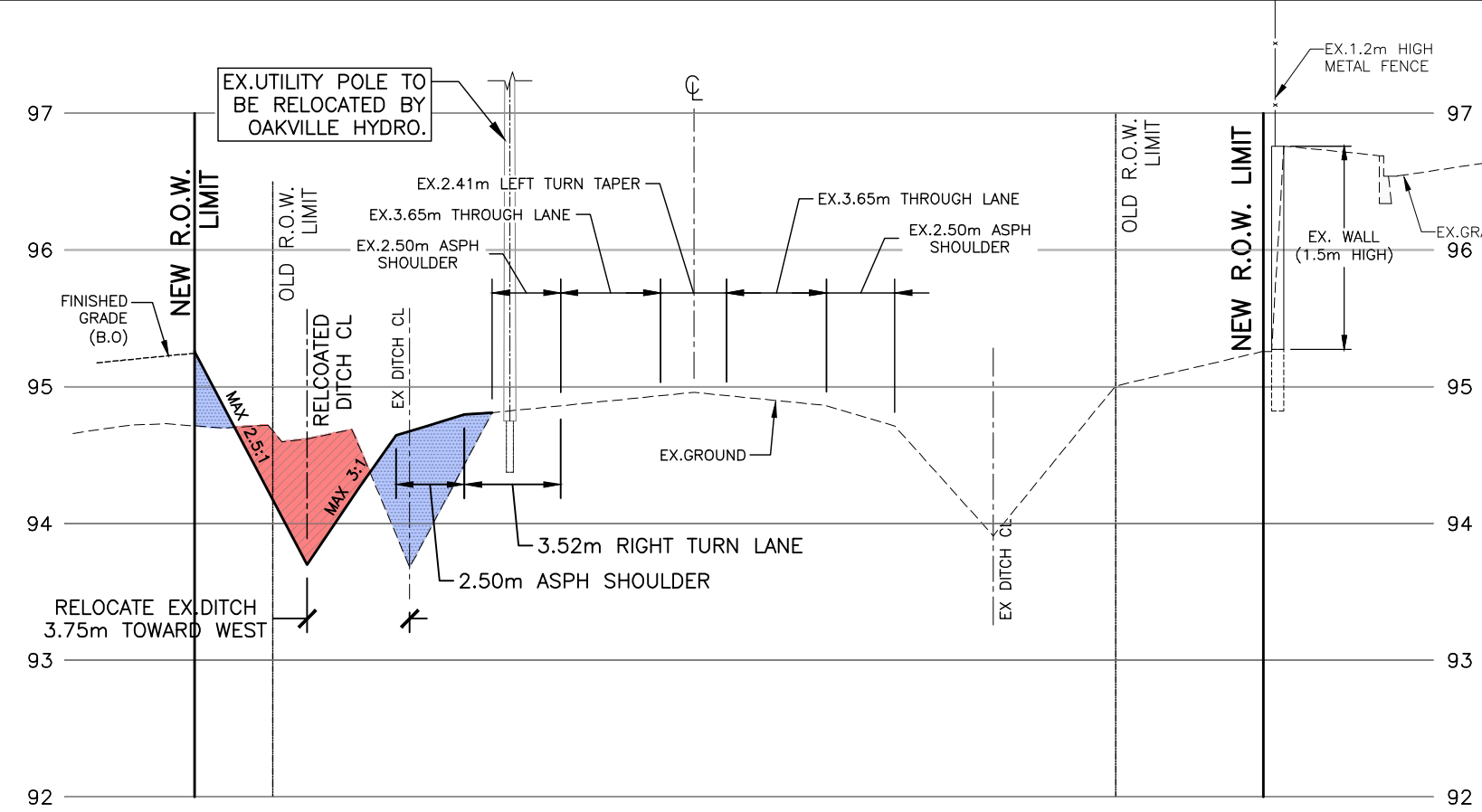
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HOR. = 1:250  
VER. = 1:50



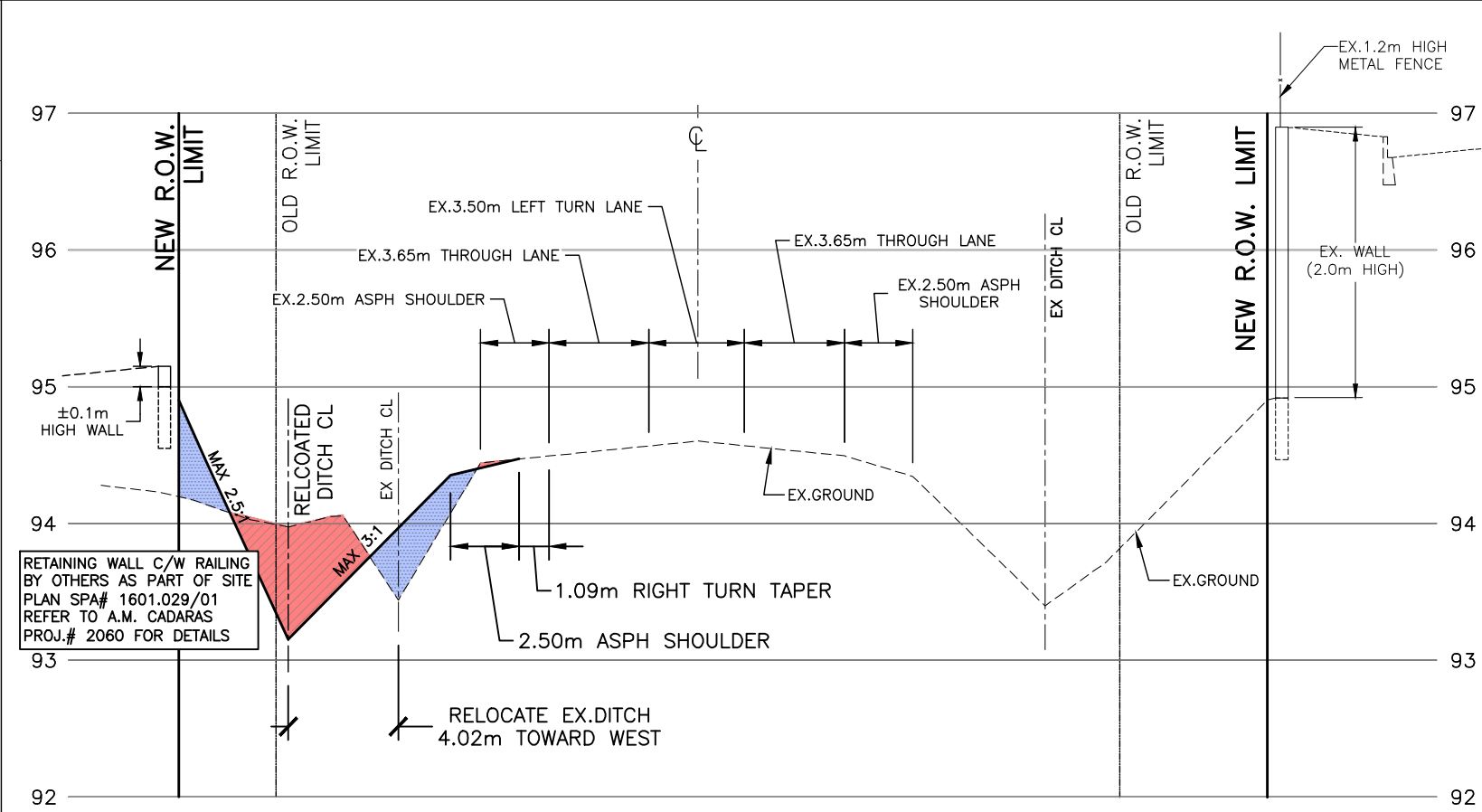
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VER. = 1:50



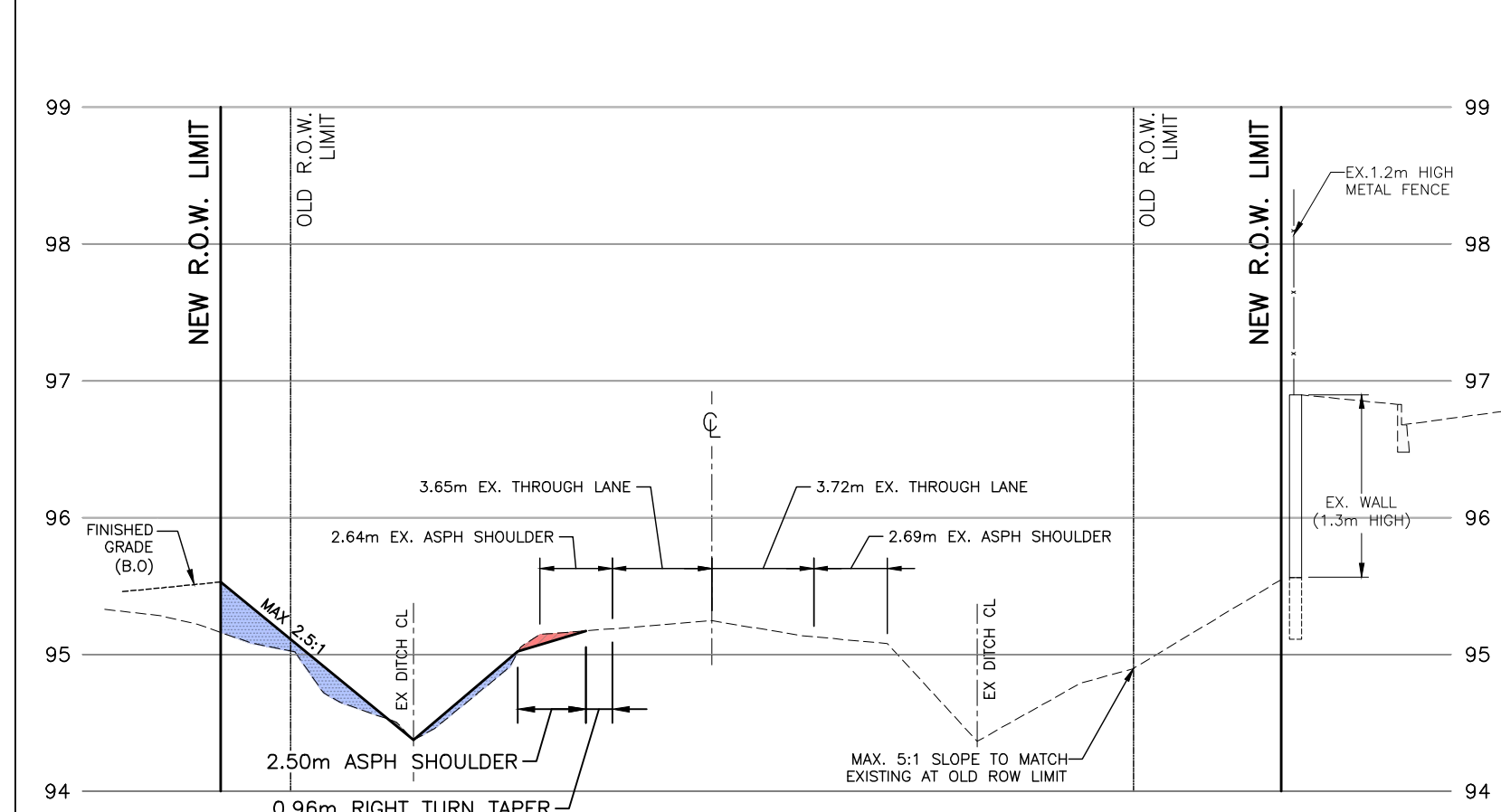
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HOR. = 1:250  
VER. = 1:50



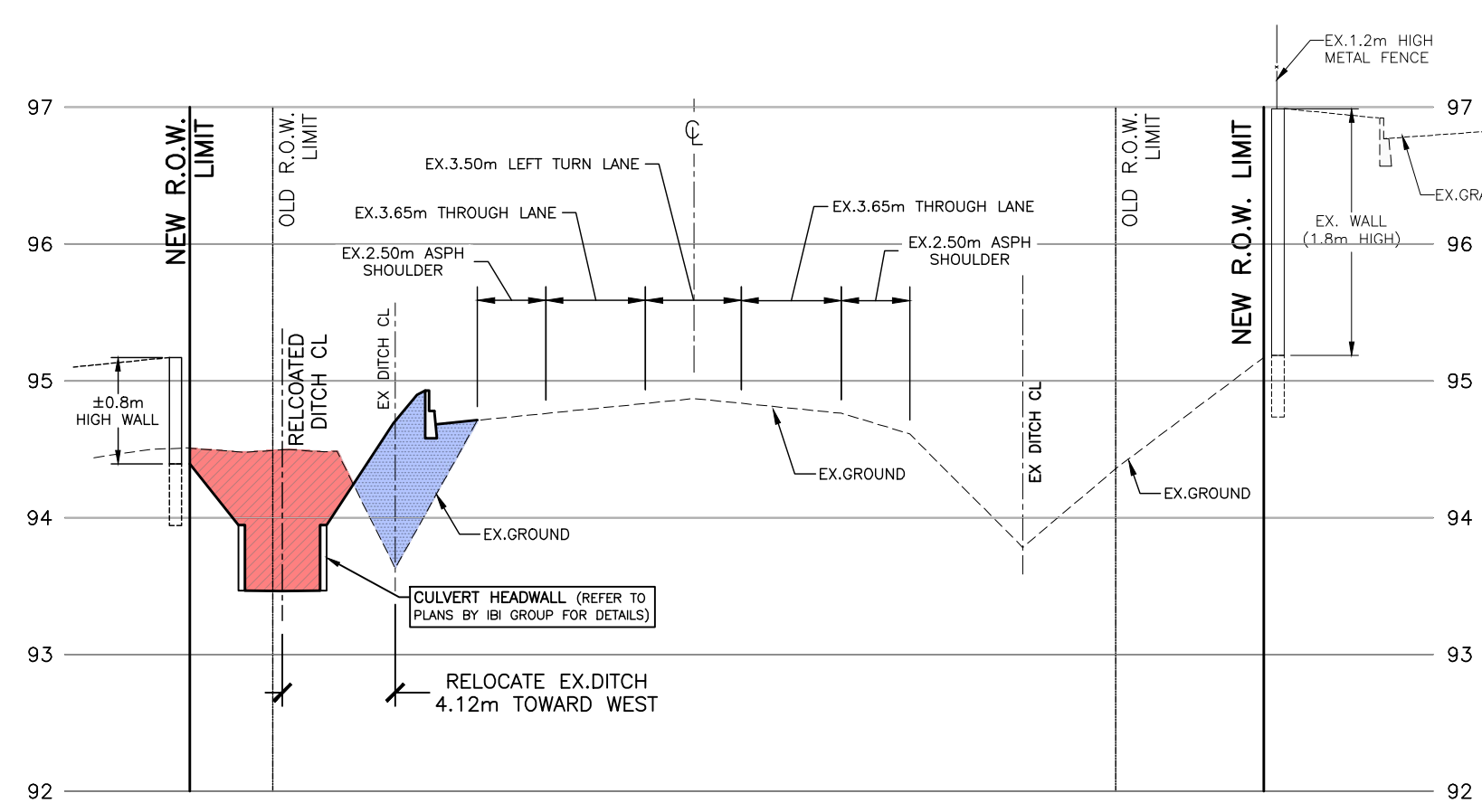
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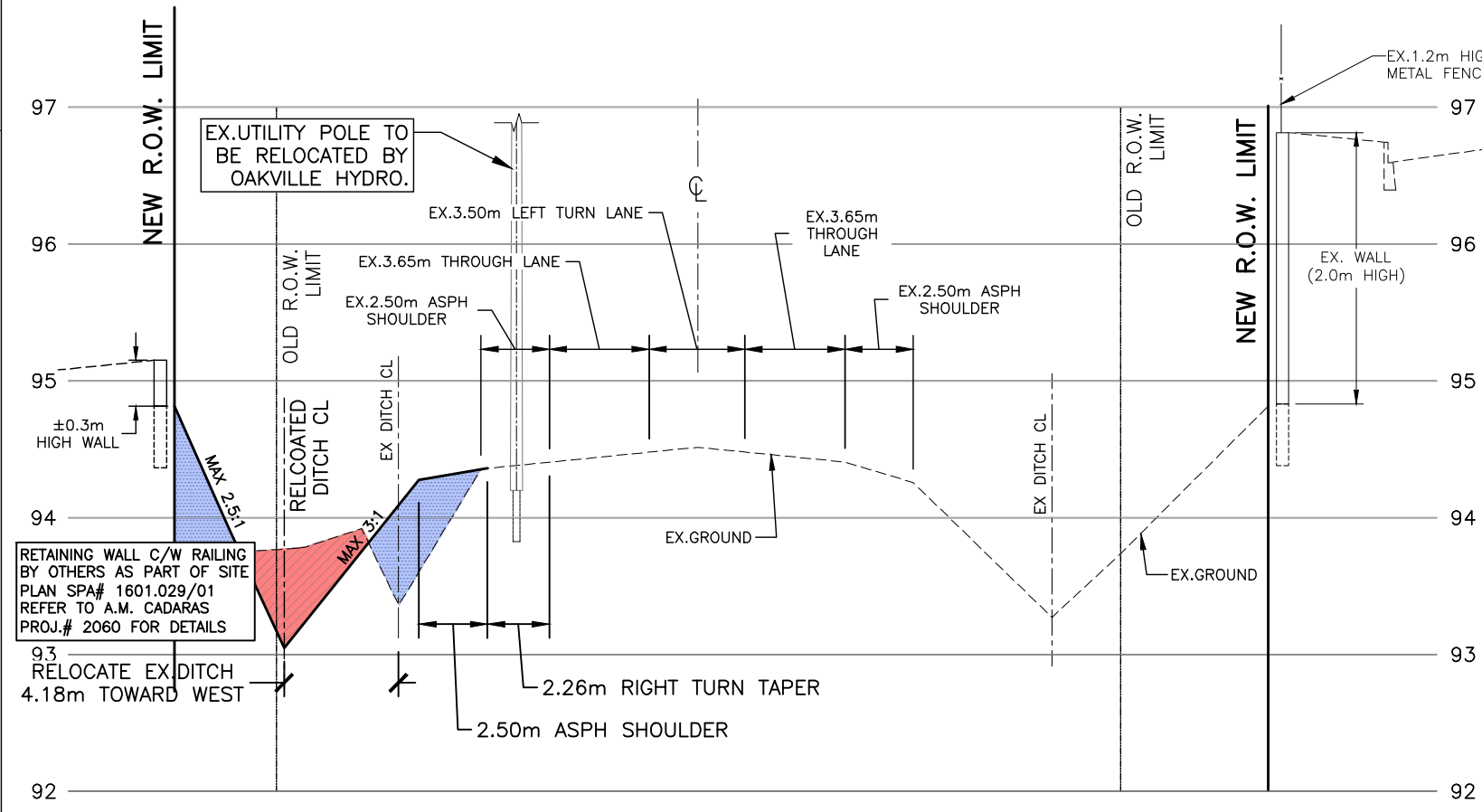
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HOR. = 1:250  
VER. = 1:50



**SECTION 0+060**  
HOR. = 1:250  
VER. = 1:50



**SECTION 0+140**  
HOR. = 1:250  
VER. = 1:50



**SECTION 0+220**  
HOR. = 1:250  
VER. = 1:50

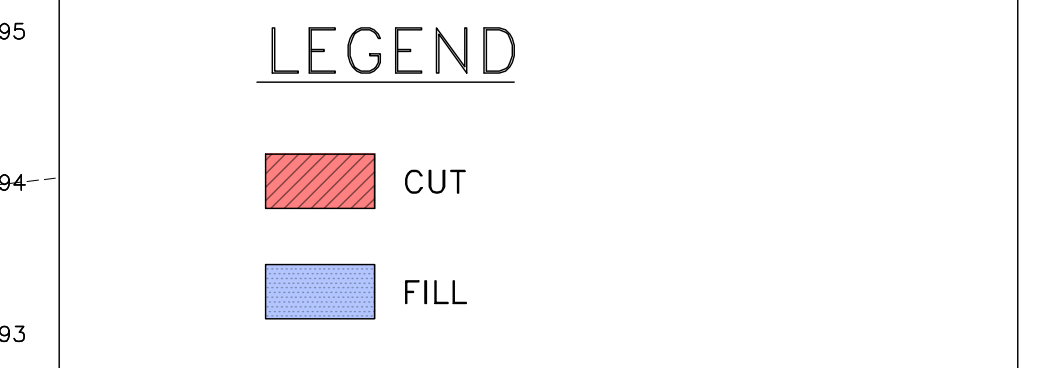


REVISIONS		
DATE	DETAILS	INIT.
NOV. 24, 2023	ISSUED FOR 1st SUBMISSION	J.C.

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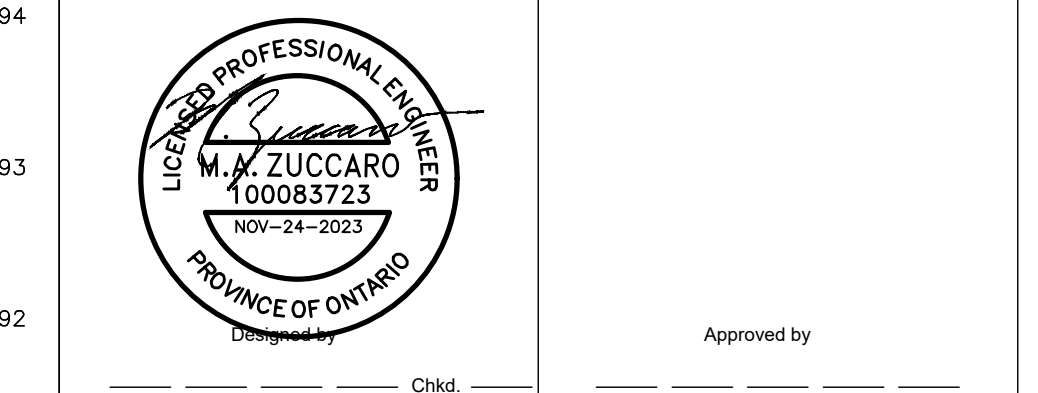
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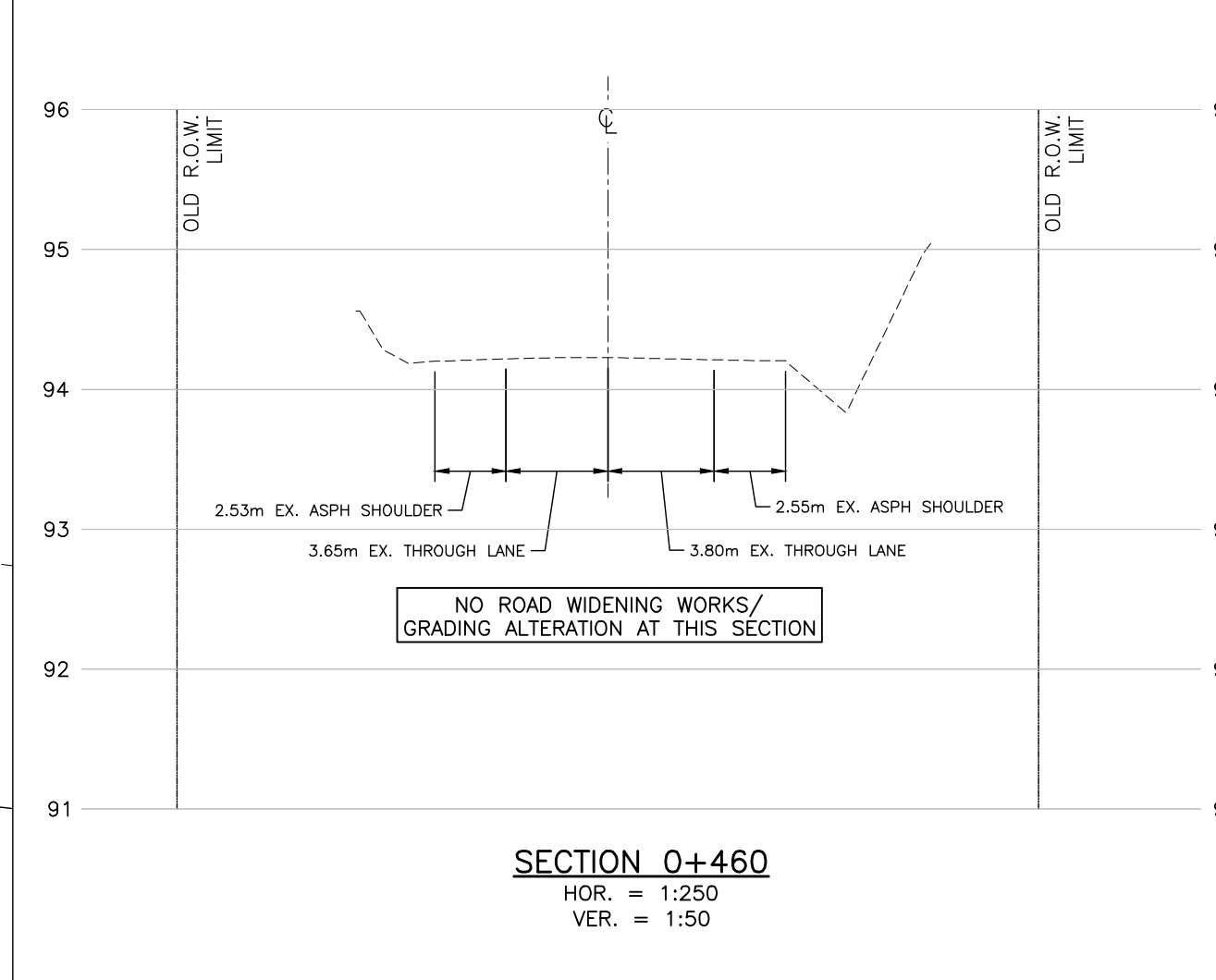
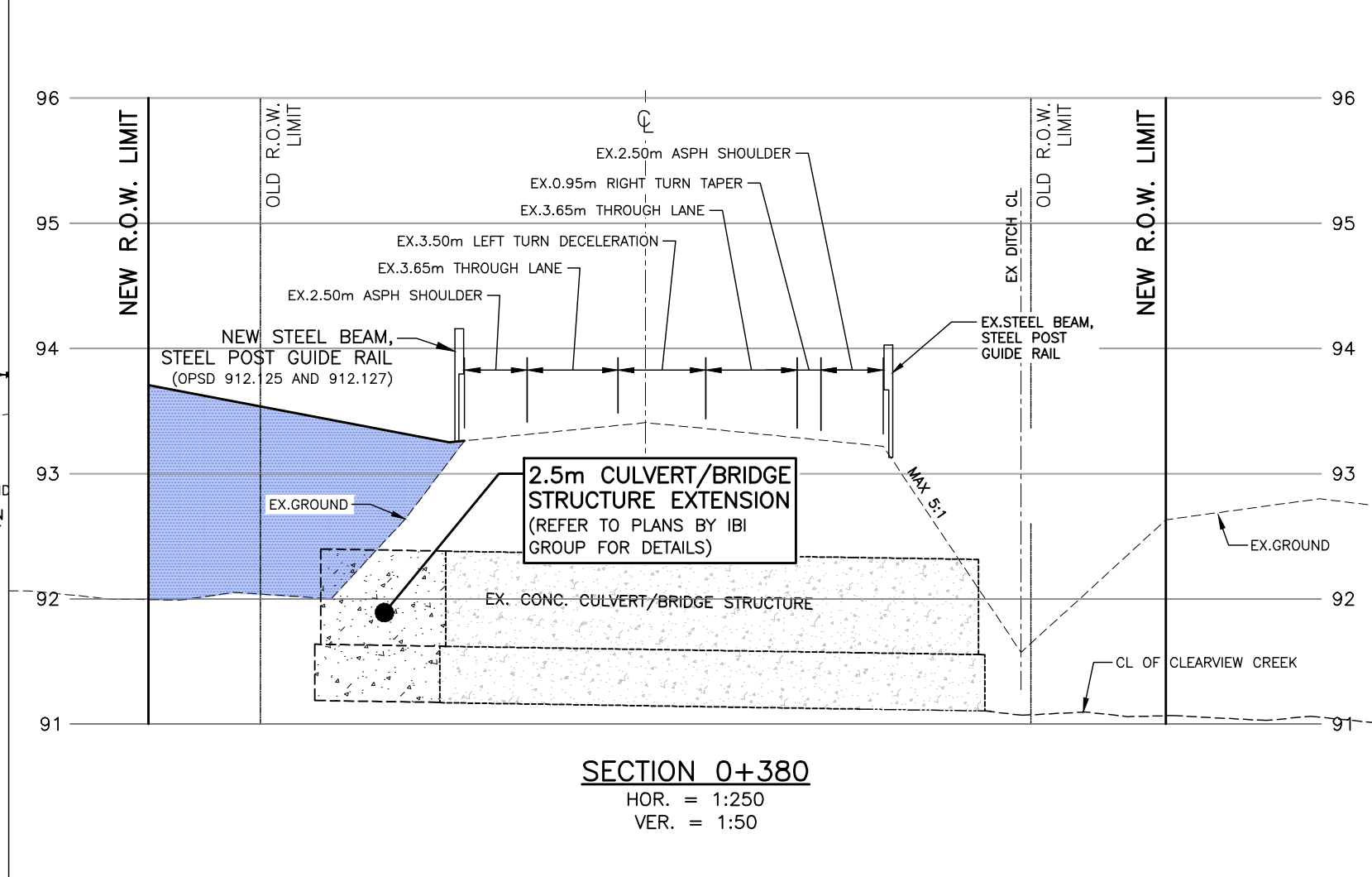
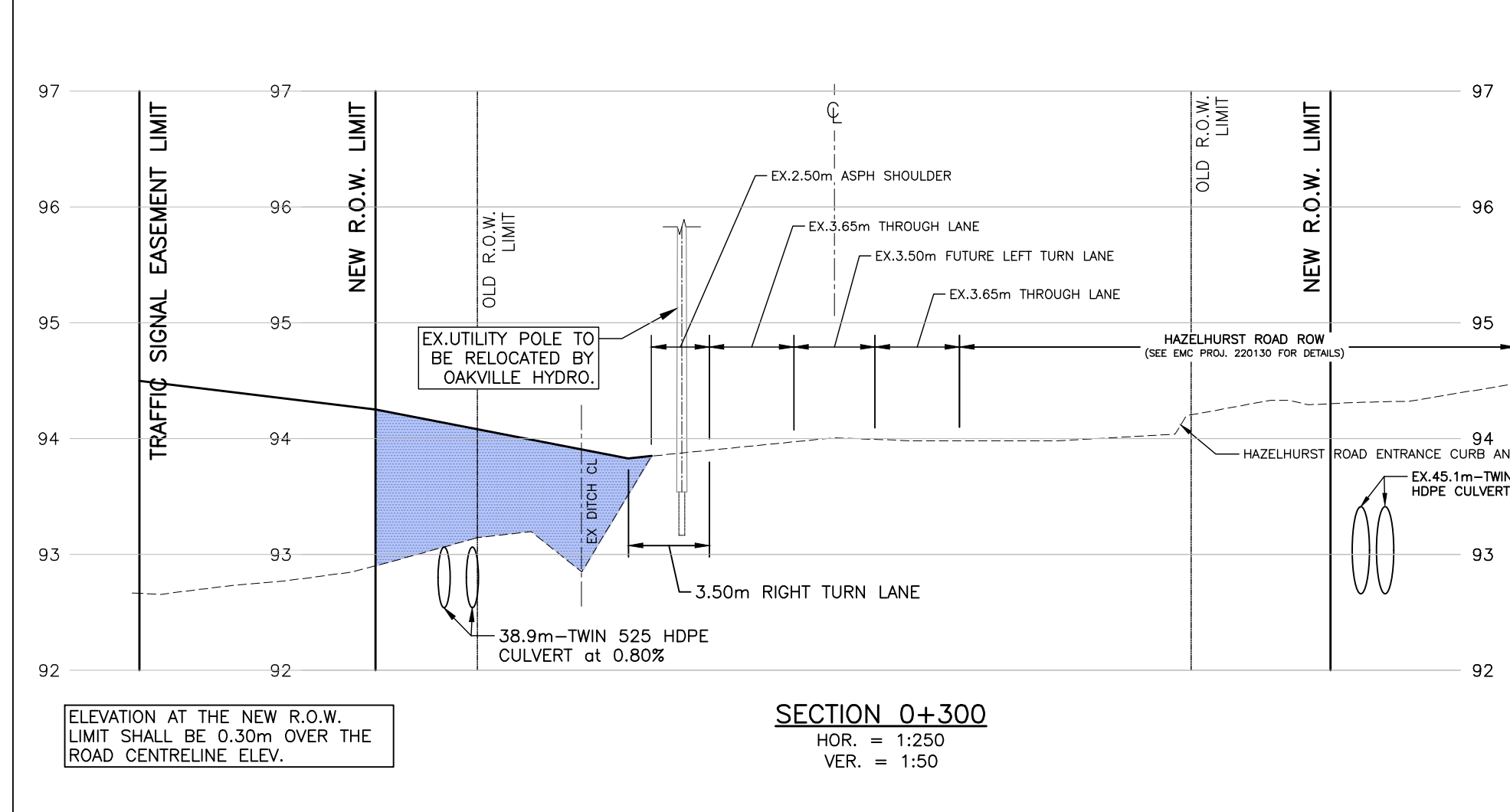
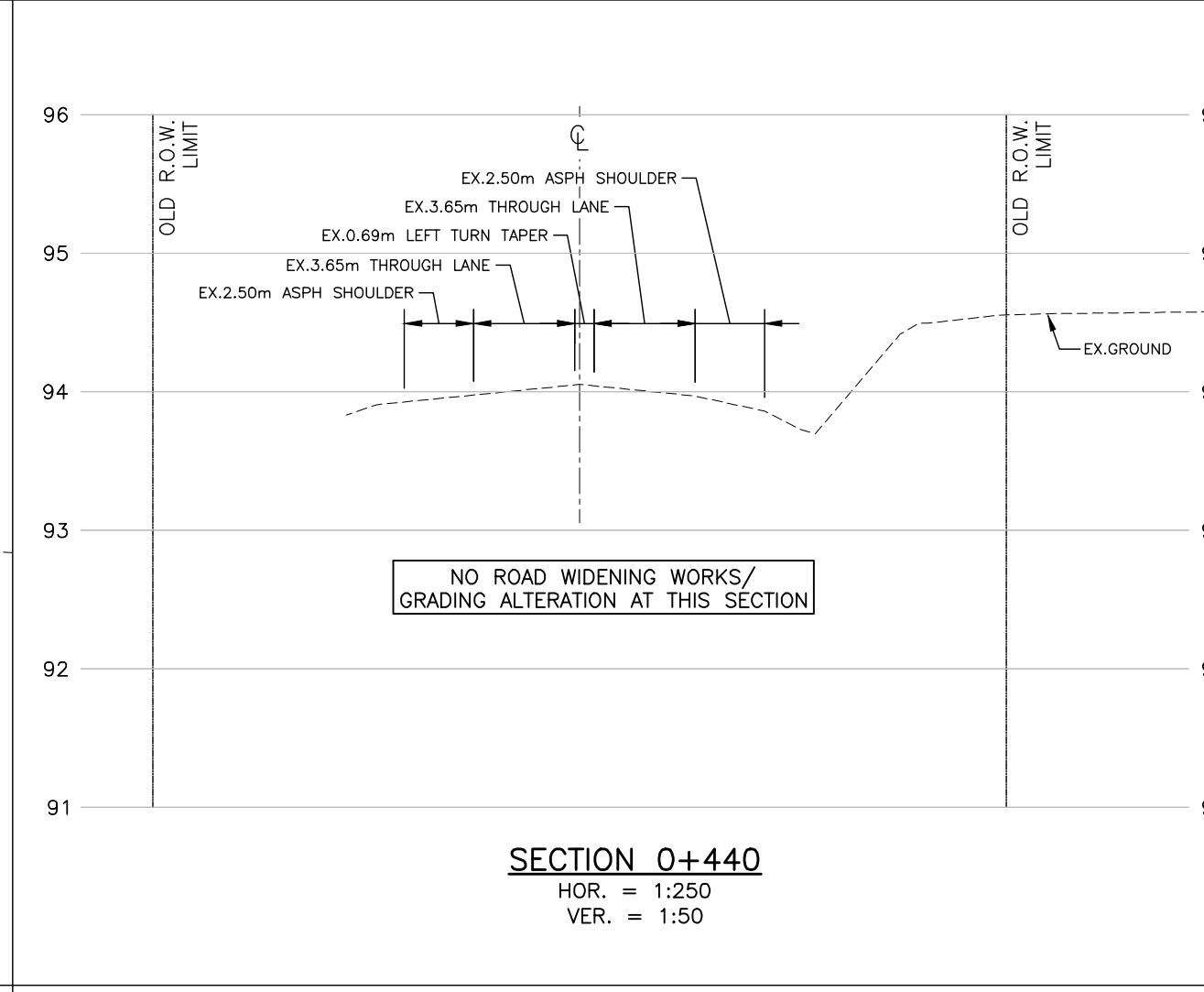
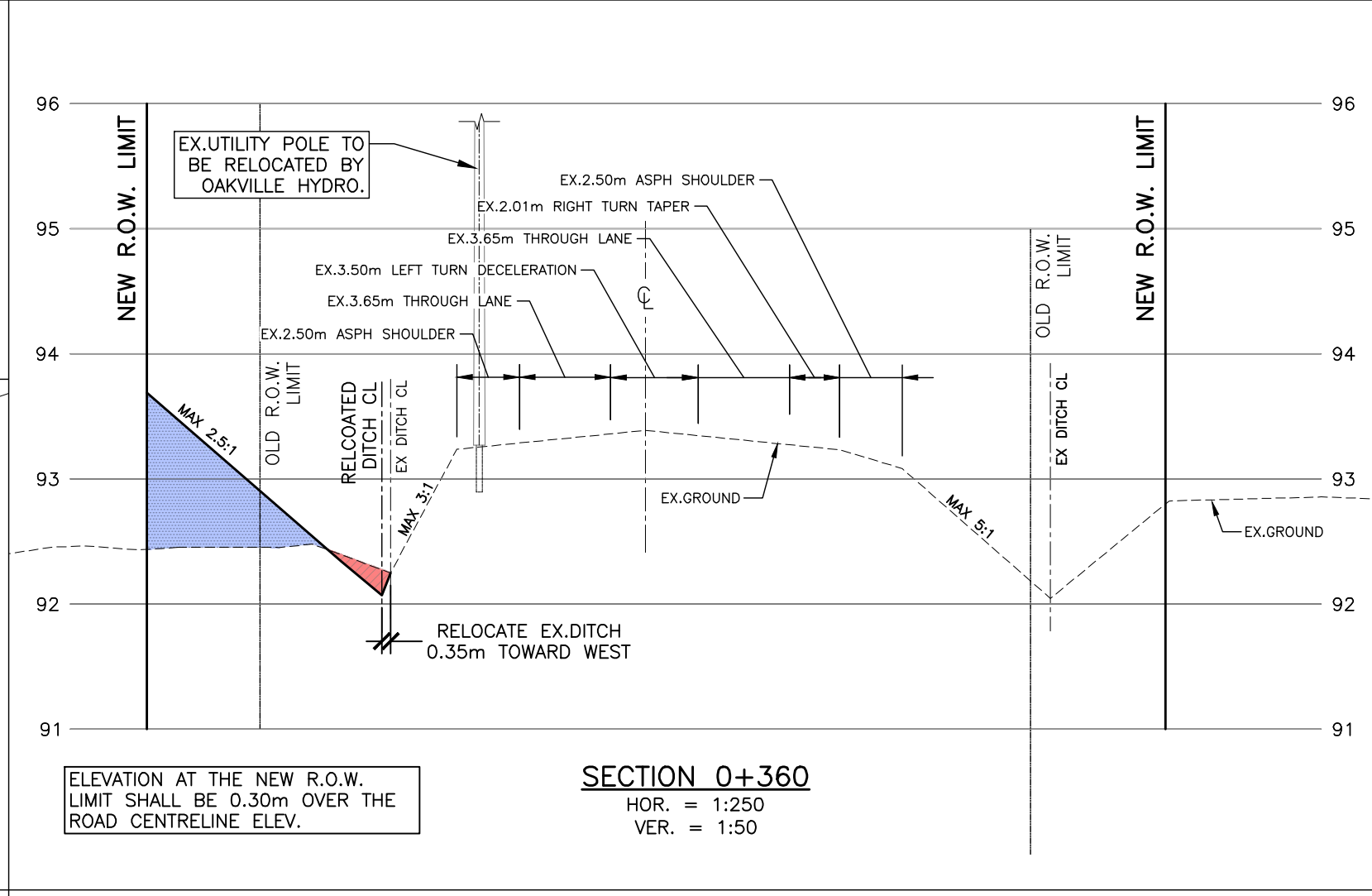
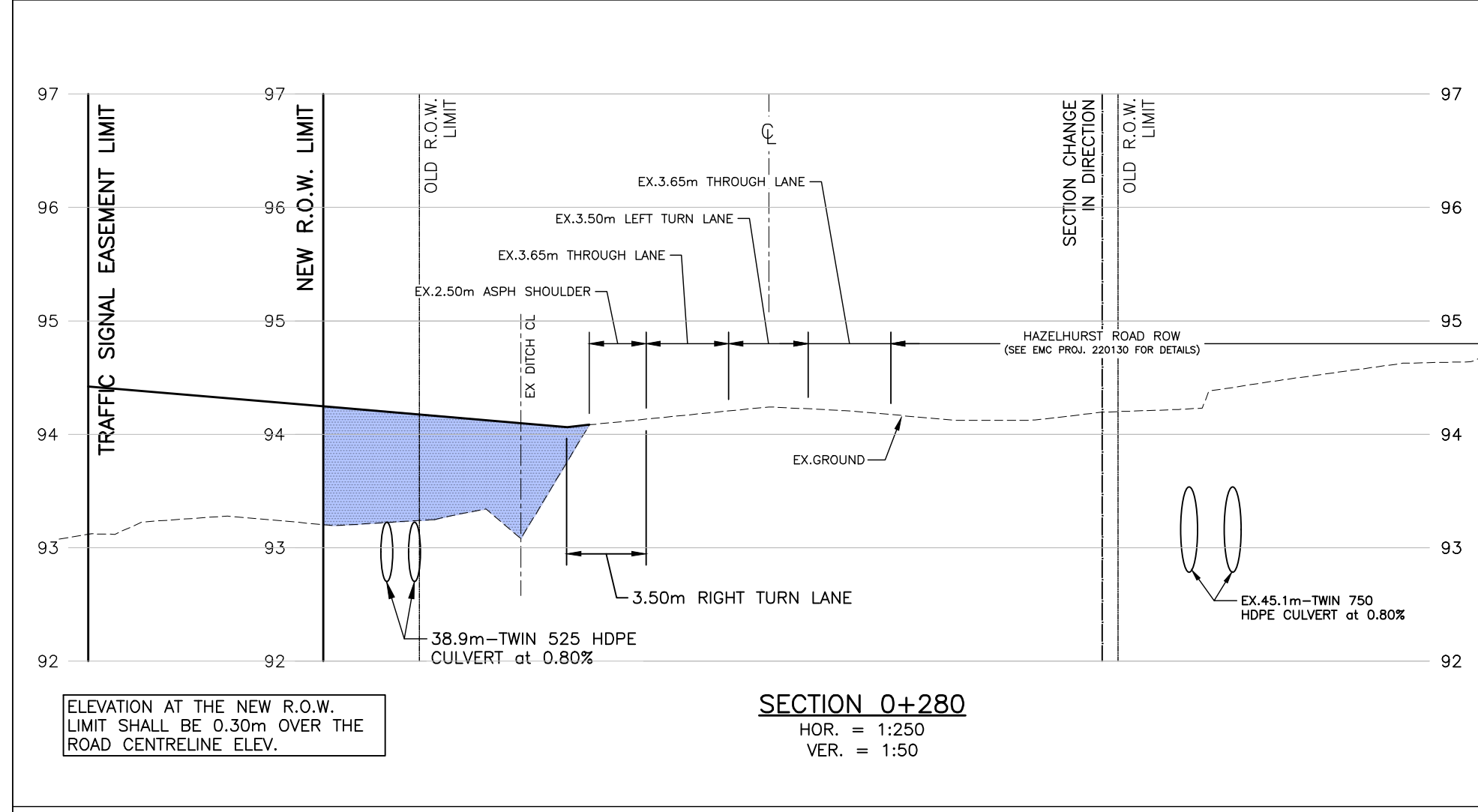
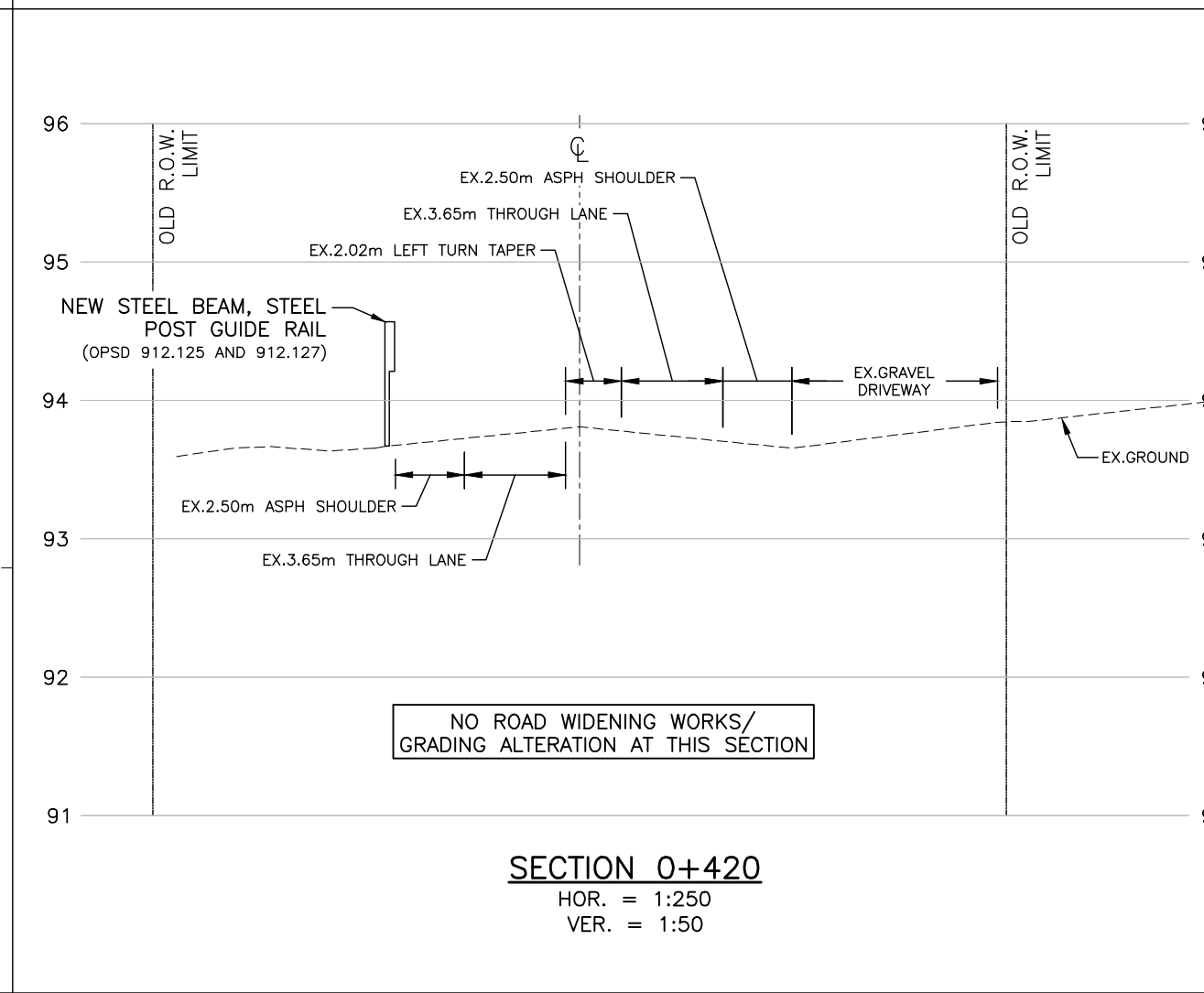
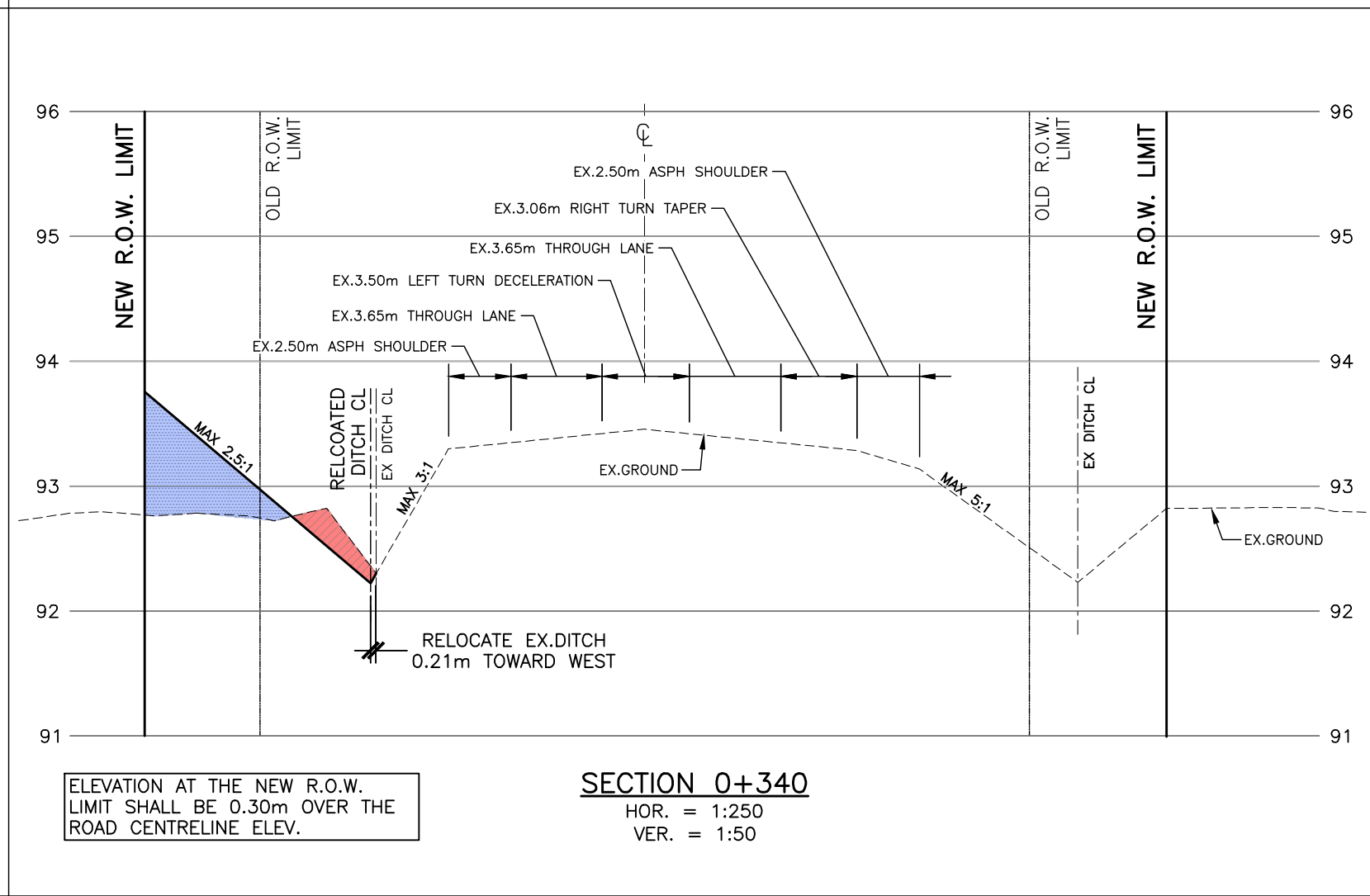
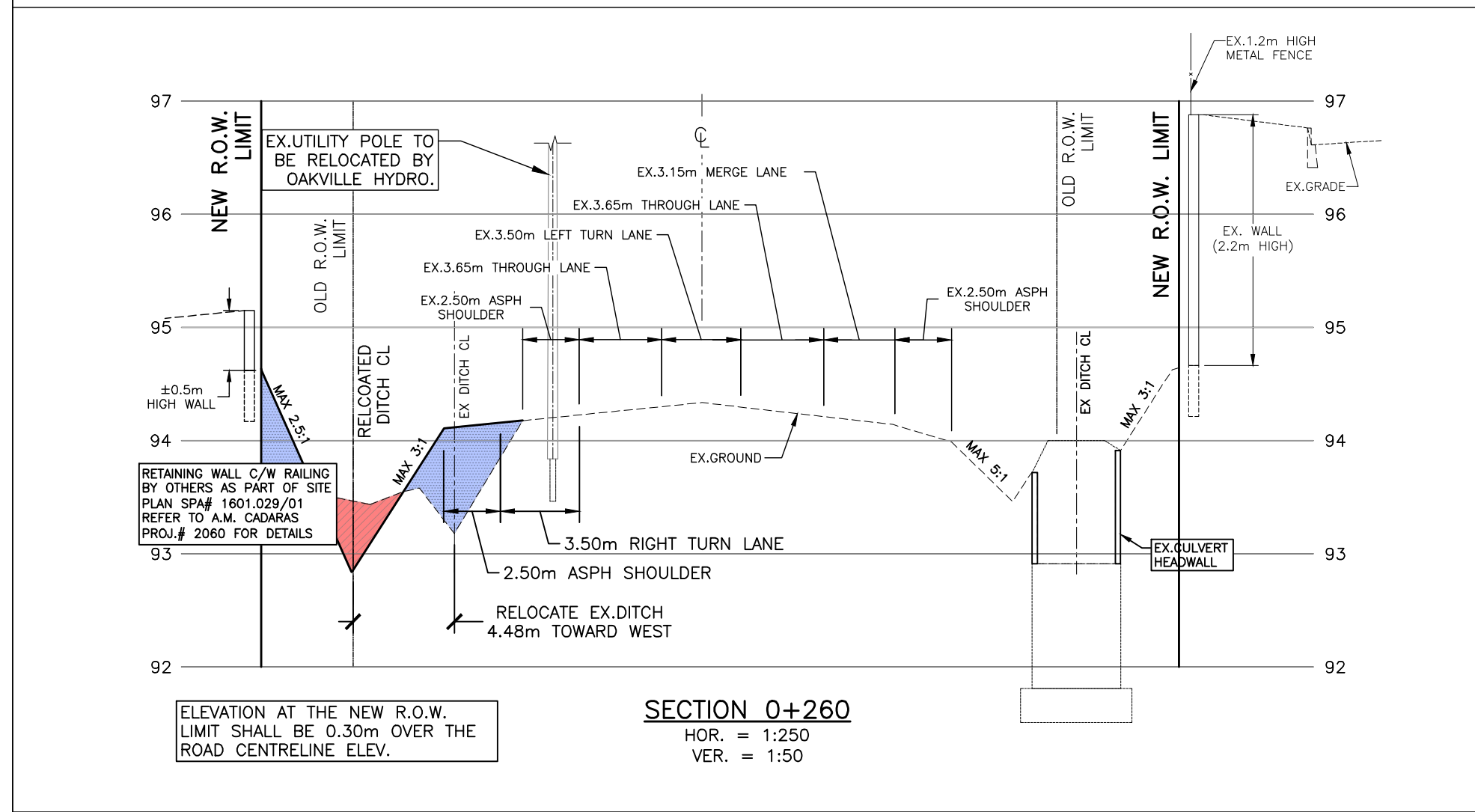
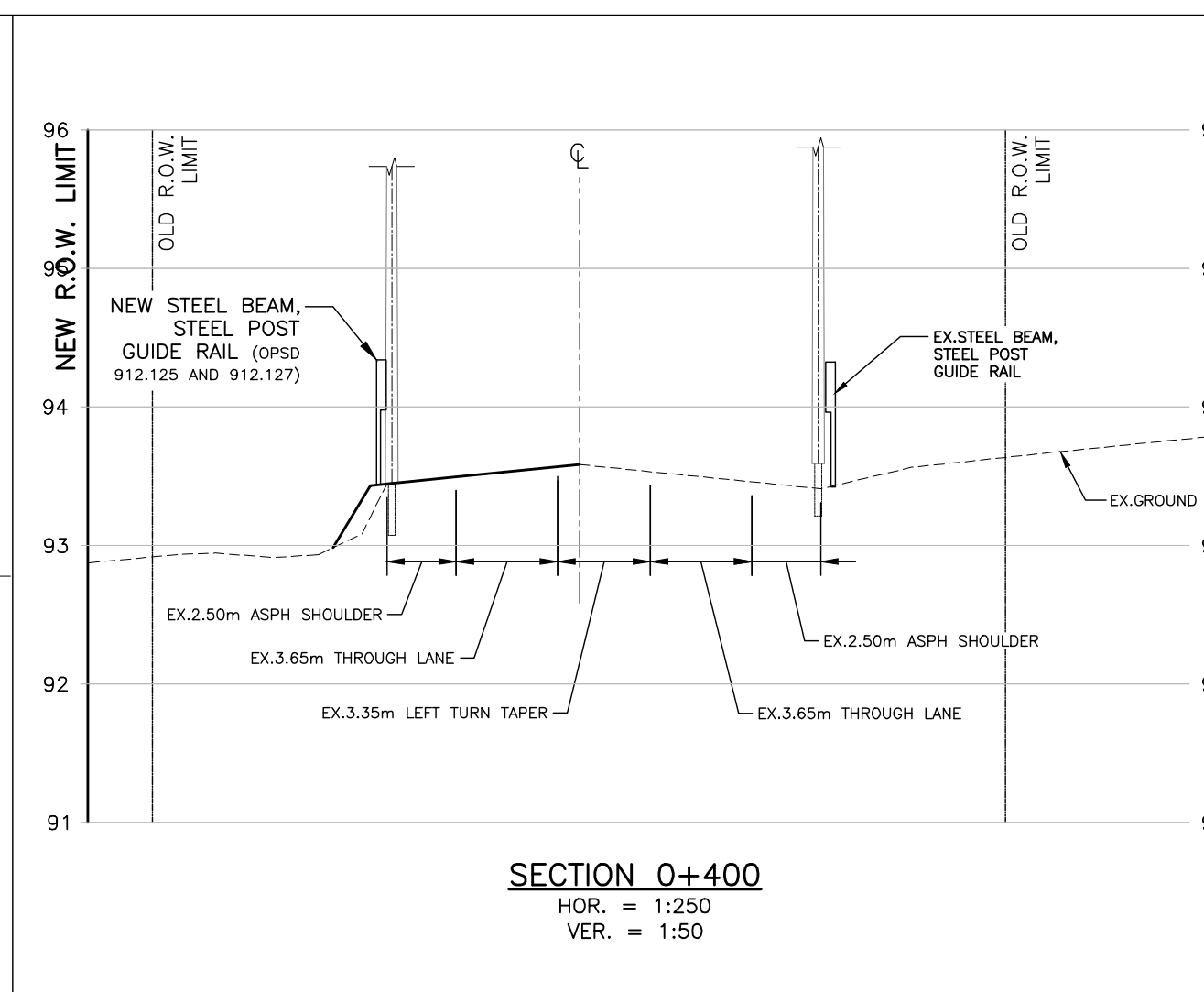
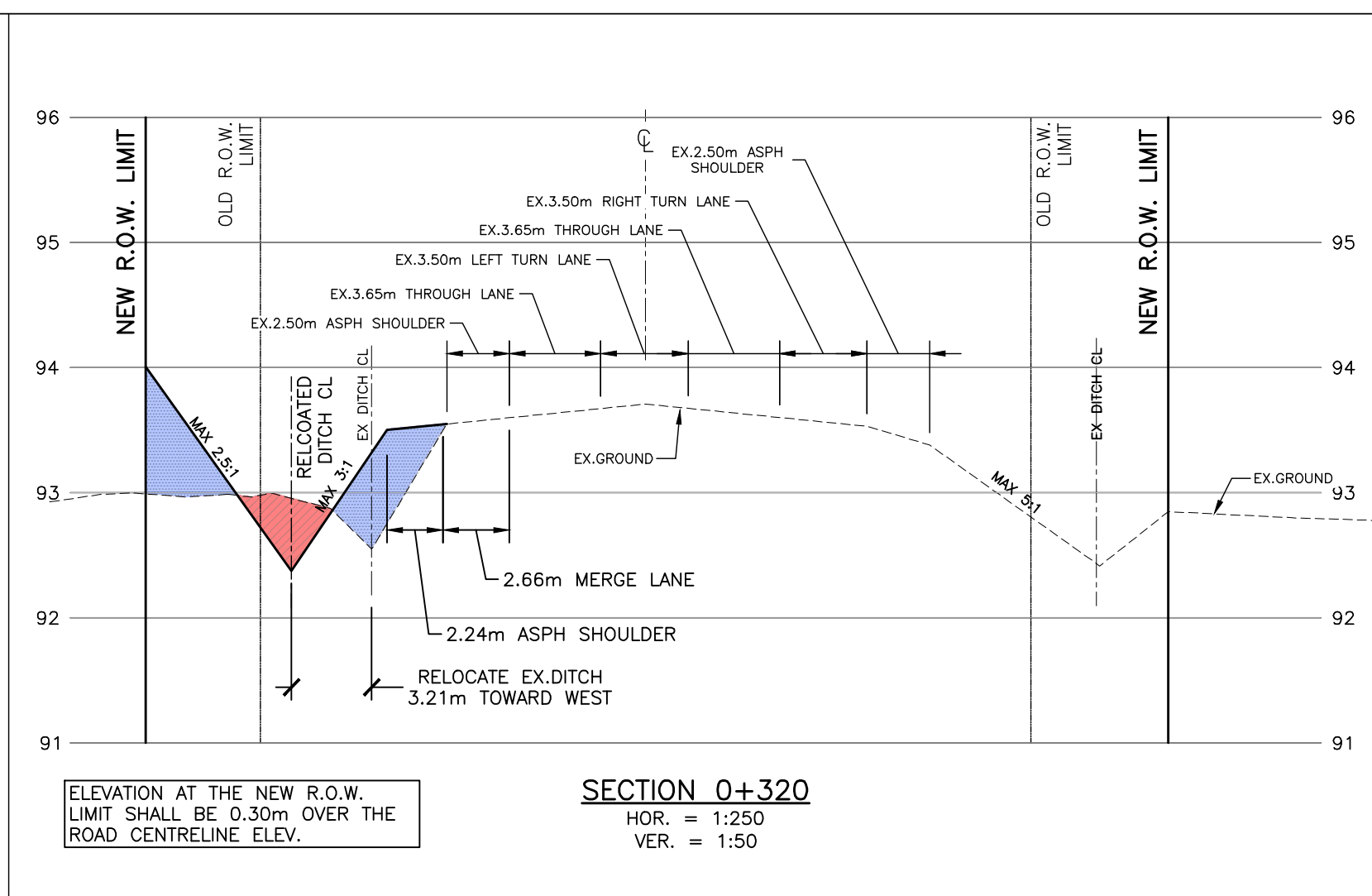
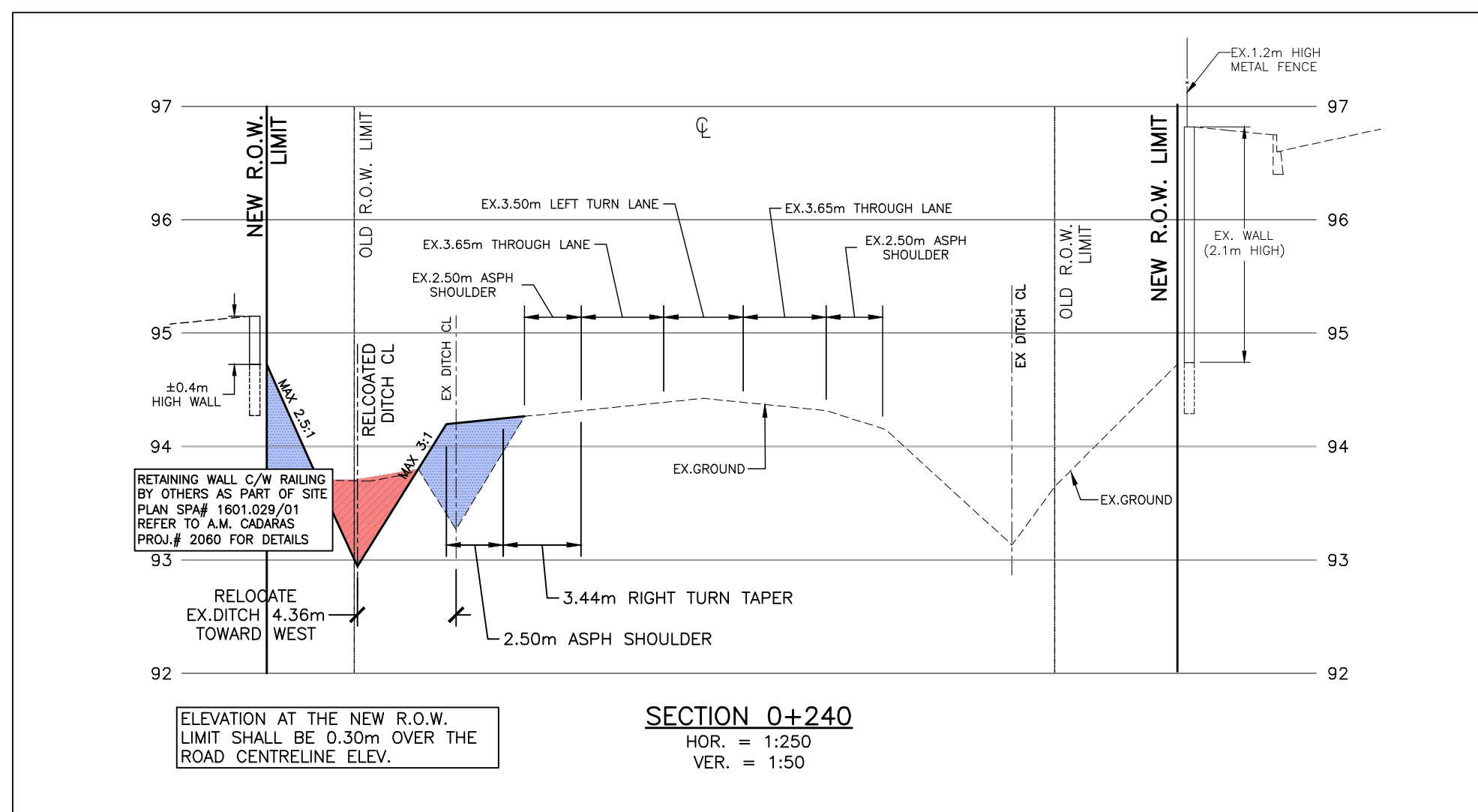
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|------------------------------------|---------------------------------------|
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| BELL CANADA                        | HYDRO ONE TELECOM                     |
| ENERSOURCE                         | ROGERS CABLE                          |
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| HYDRO ONE NETWORKS                 |                                       |
| ENERSOURCE, HYDRO MISSISSAUGA      |                                       |
| HYDRO ONE BRAMPTON                 |                                       |



**ULTIMATE INTERSECTION IMPROVEMENT  
 WINSTON CHURCHILL BOULEVARD  
 TYPICAL CROSS SECTIONS  
 SECTIONS 0+240 TO STA. 0+460**

CAD Area	X-XX	Area	X-XX	Project No.	223123
Checked by	M.Z.	Drawn by	J.C.	Plan No.	SEC2
Date	SEPT, 2023	Sheet	9 of 11		

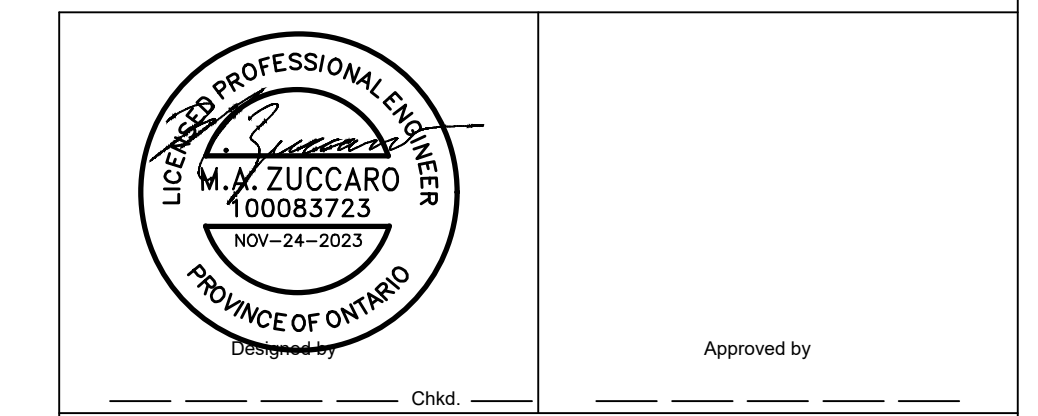
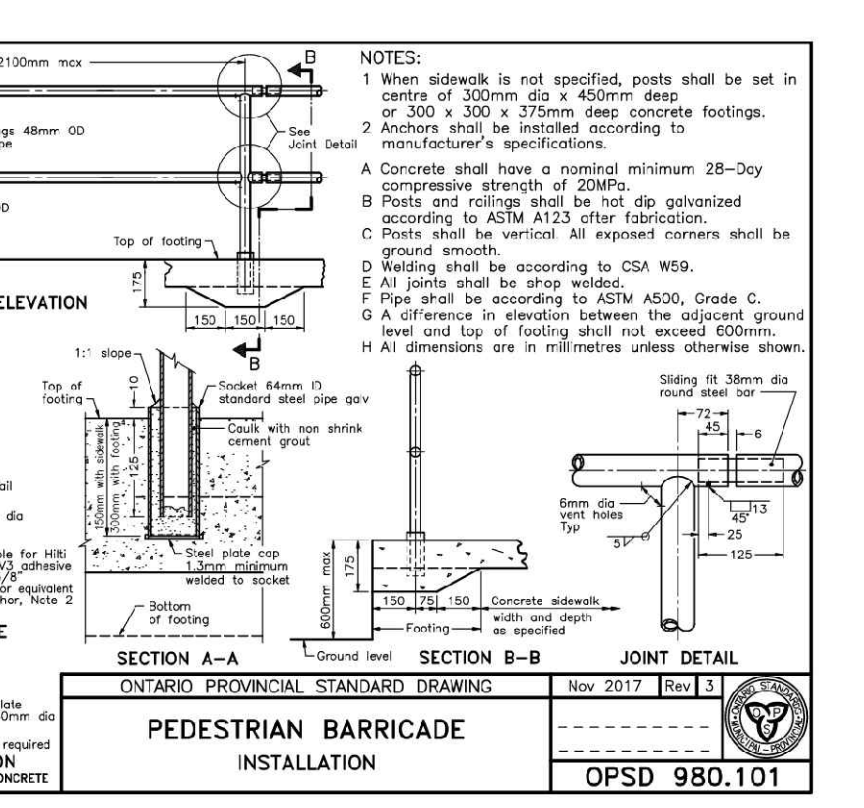
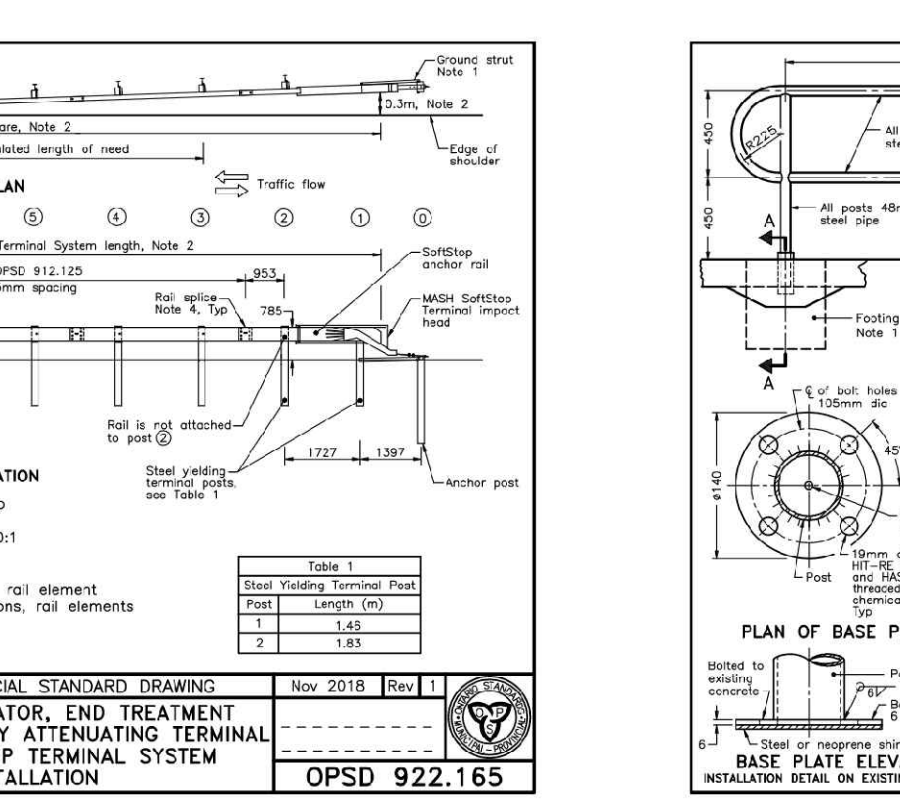
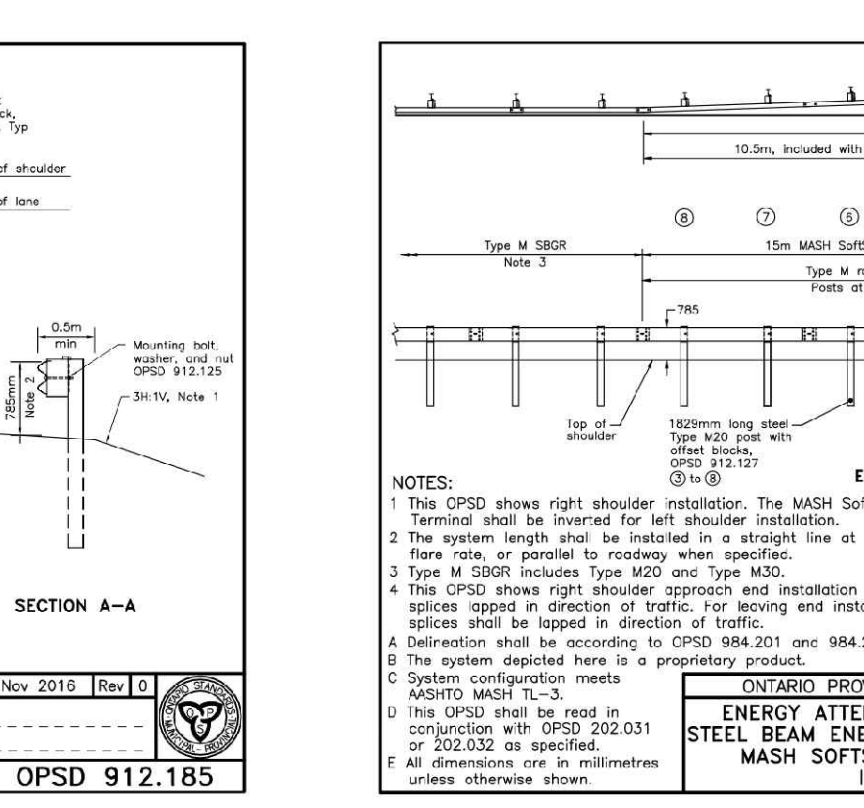
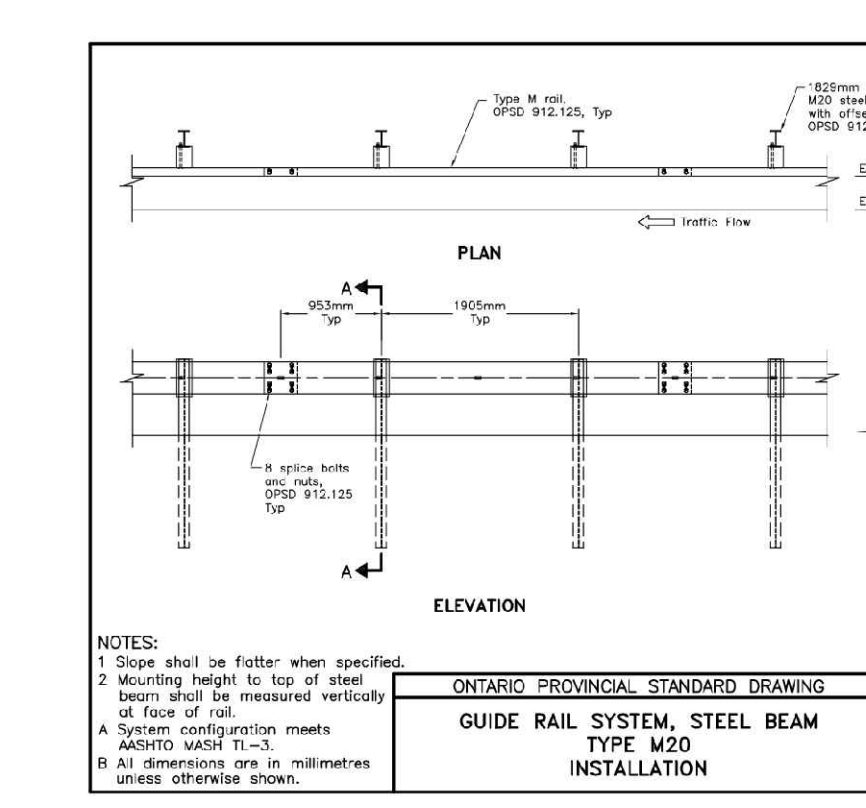
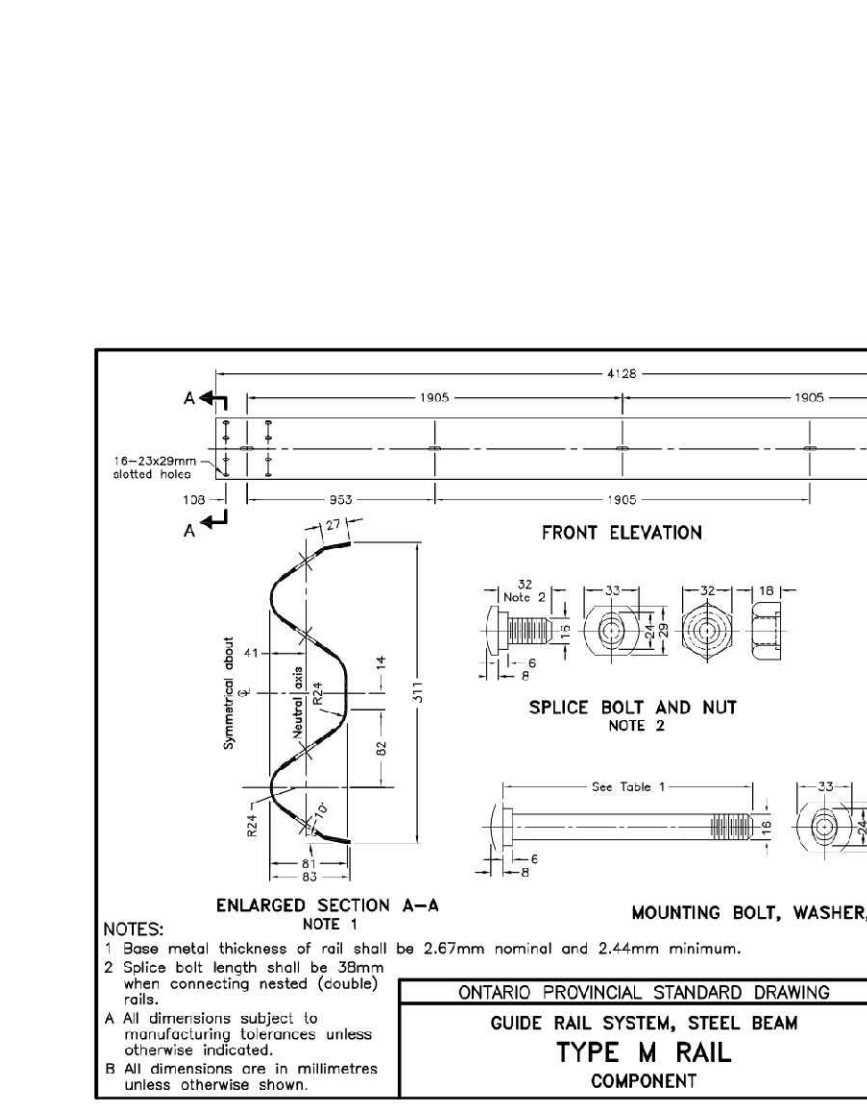
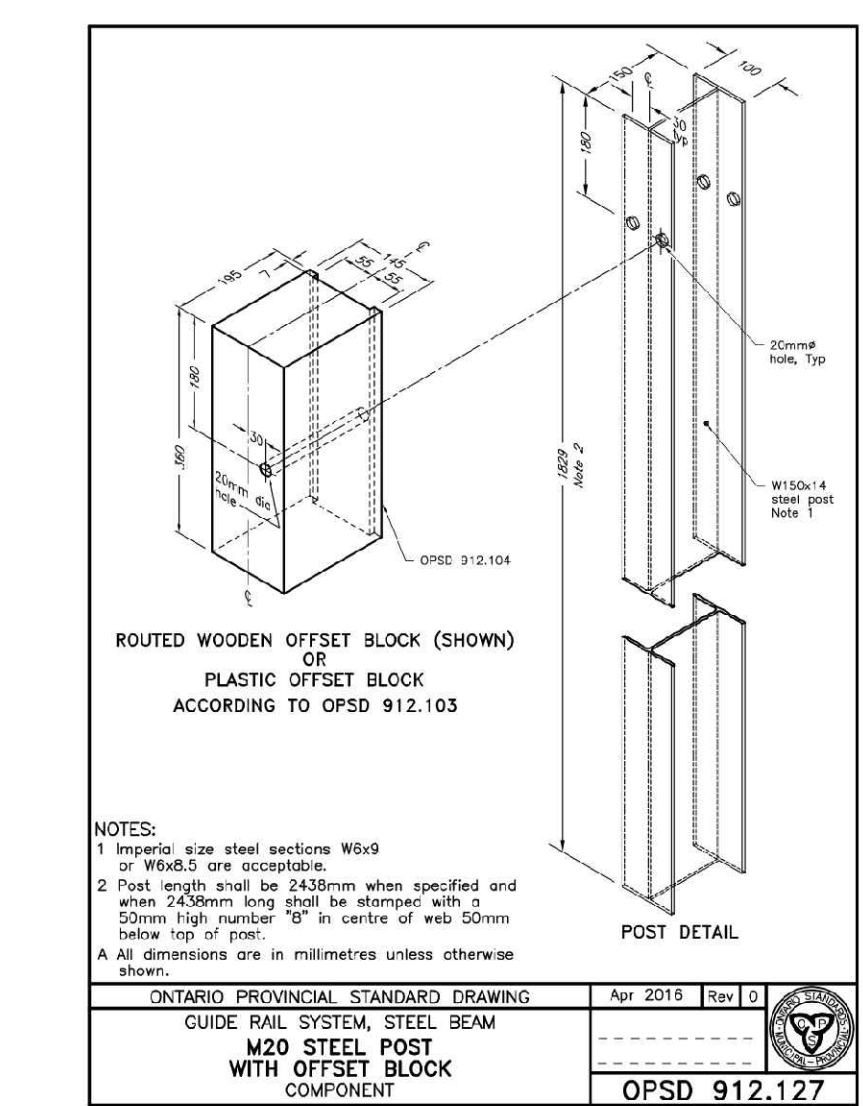
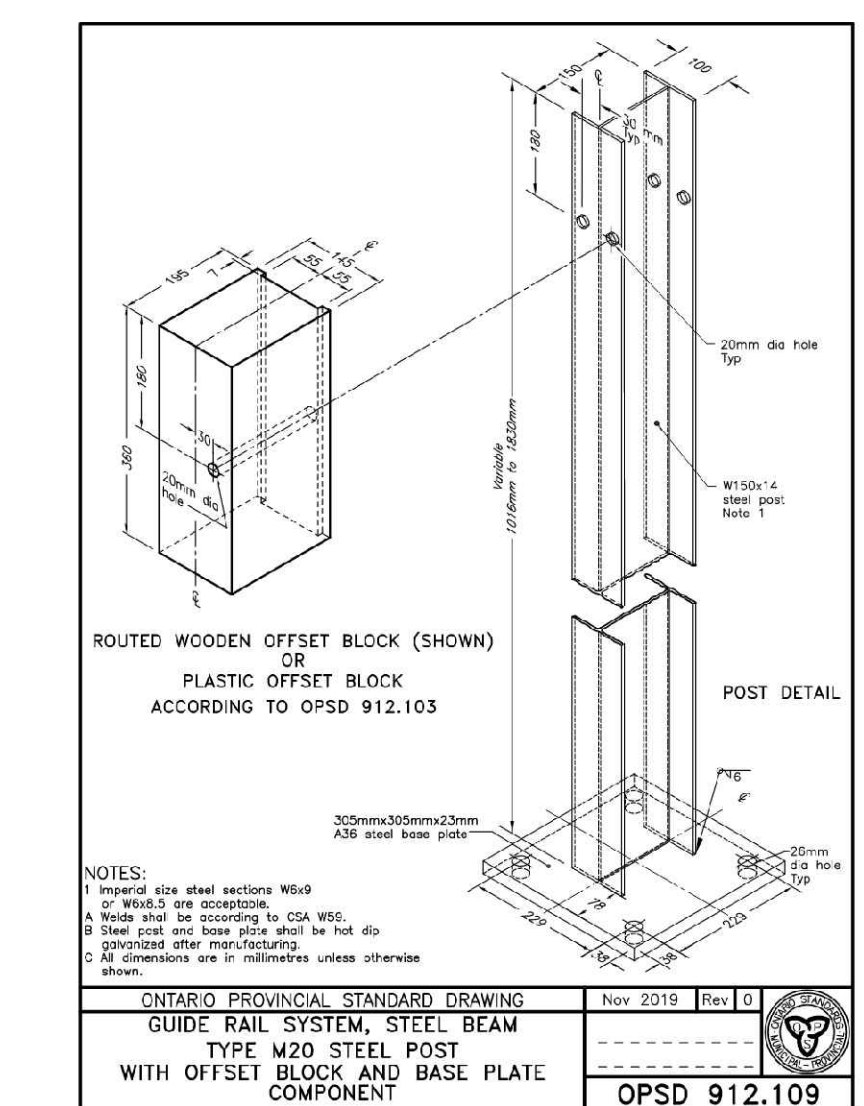
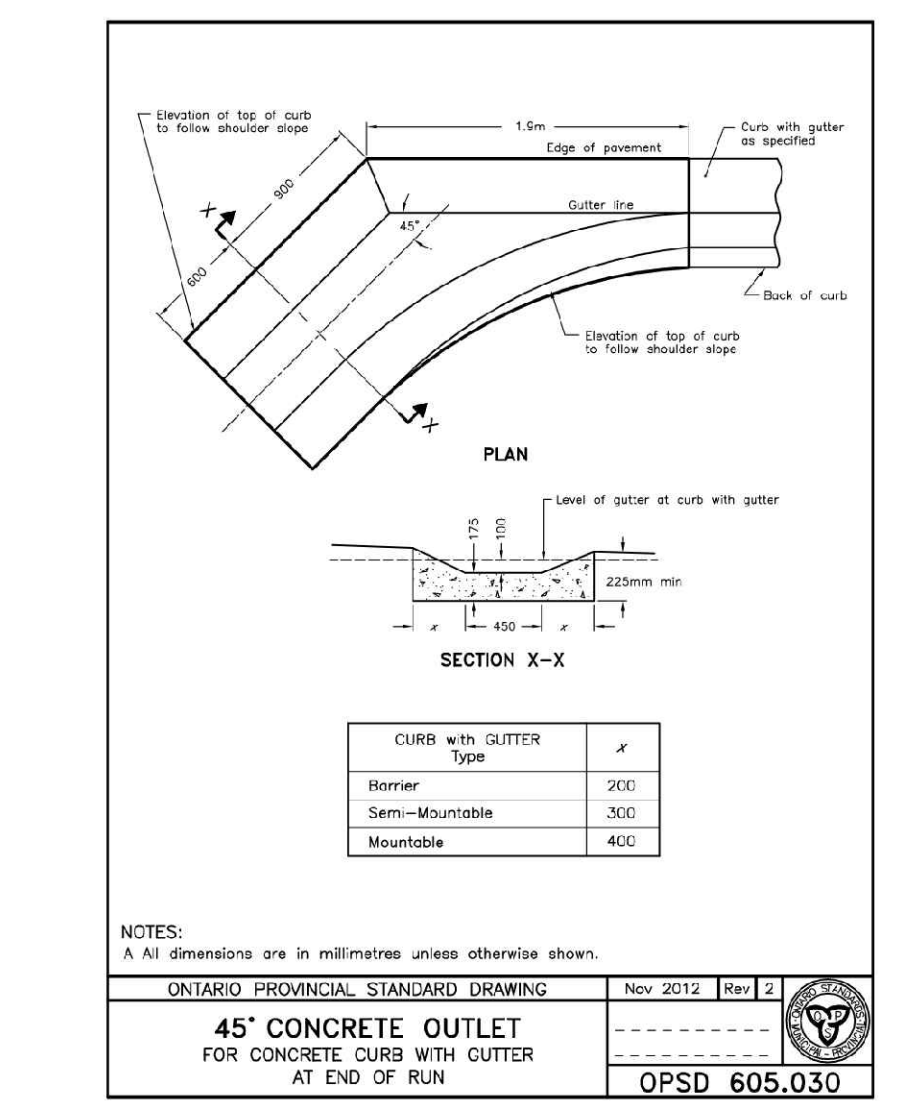
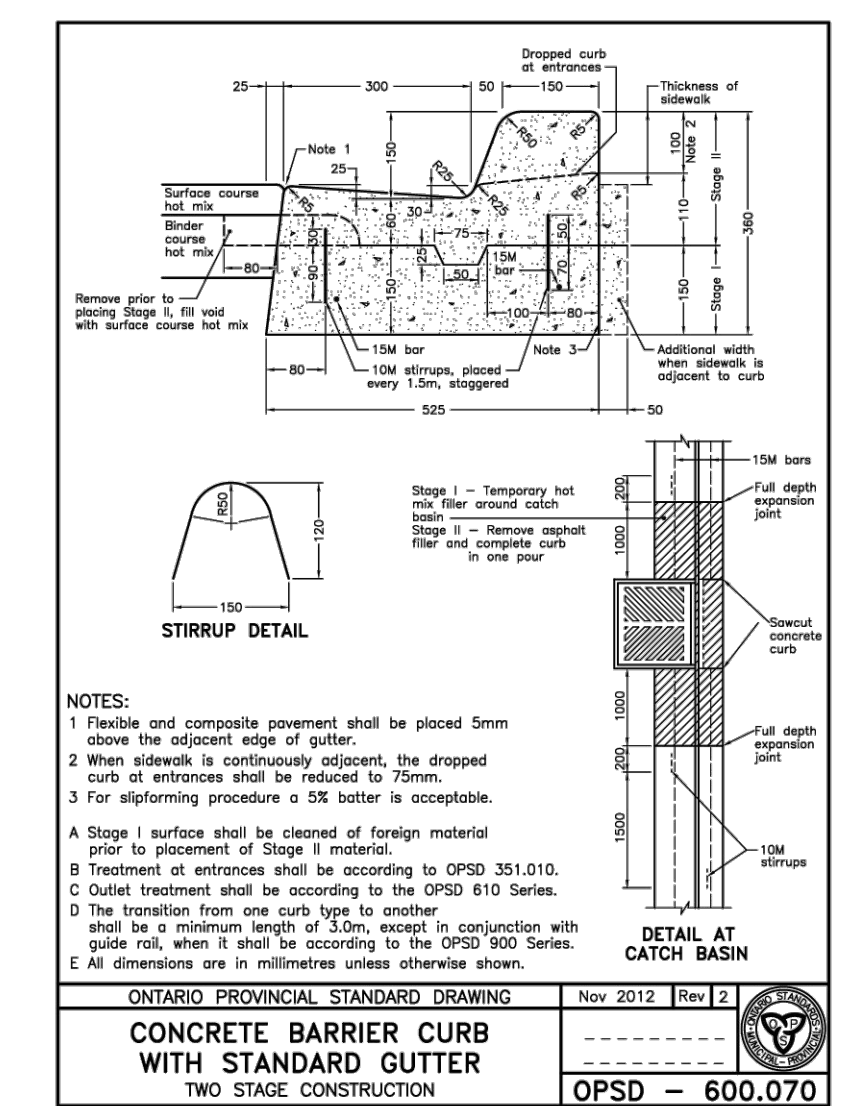
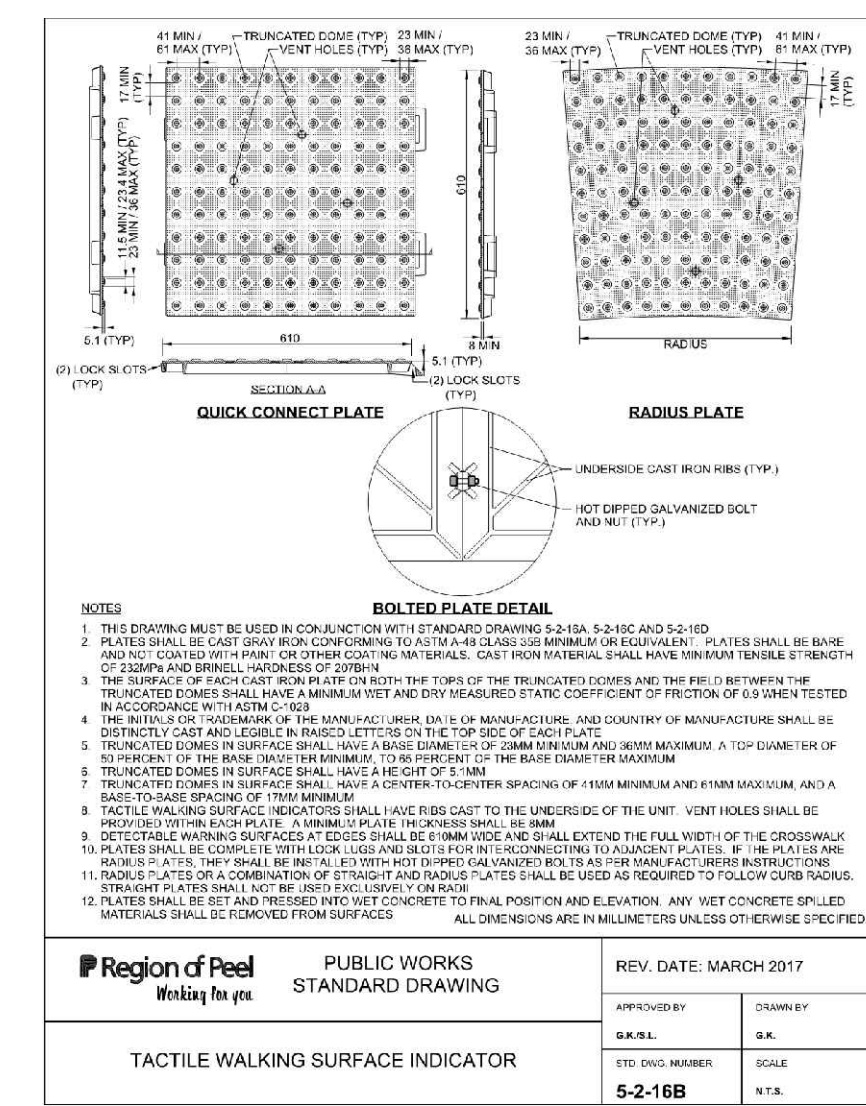
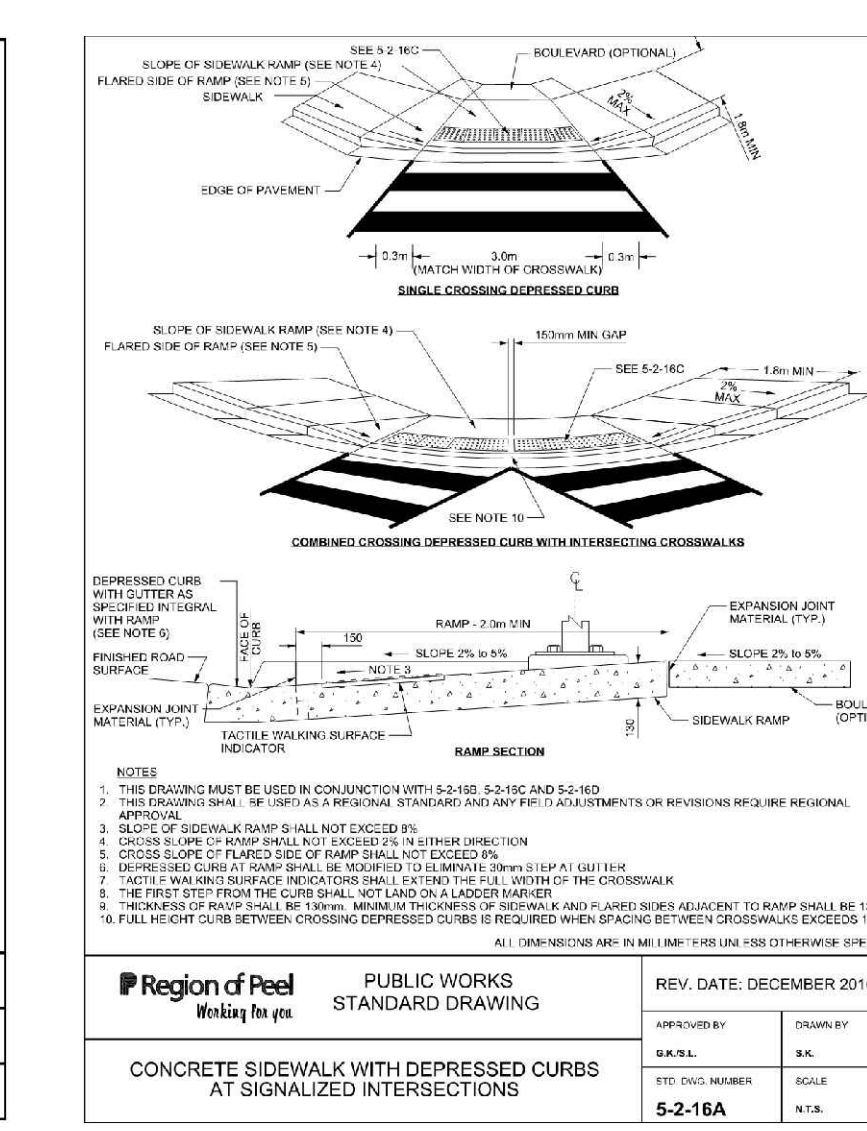
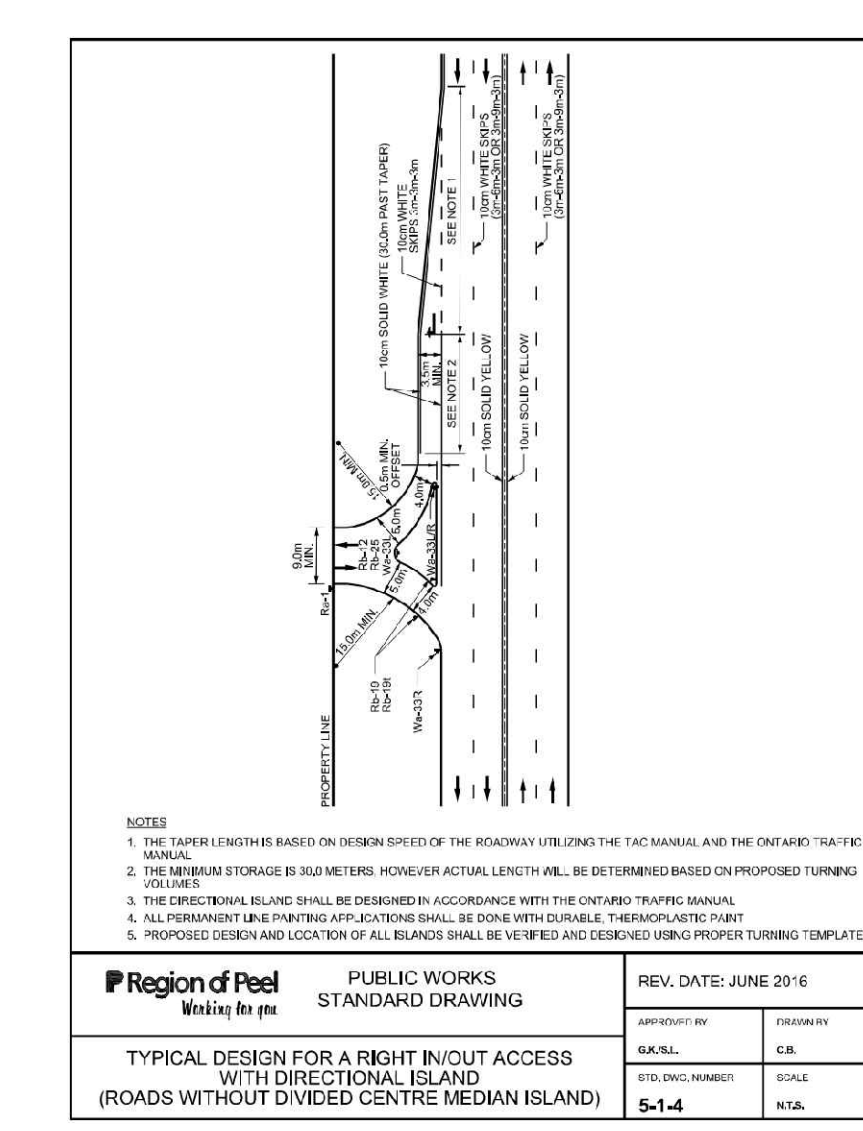
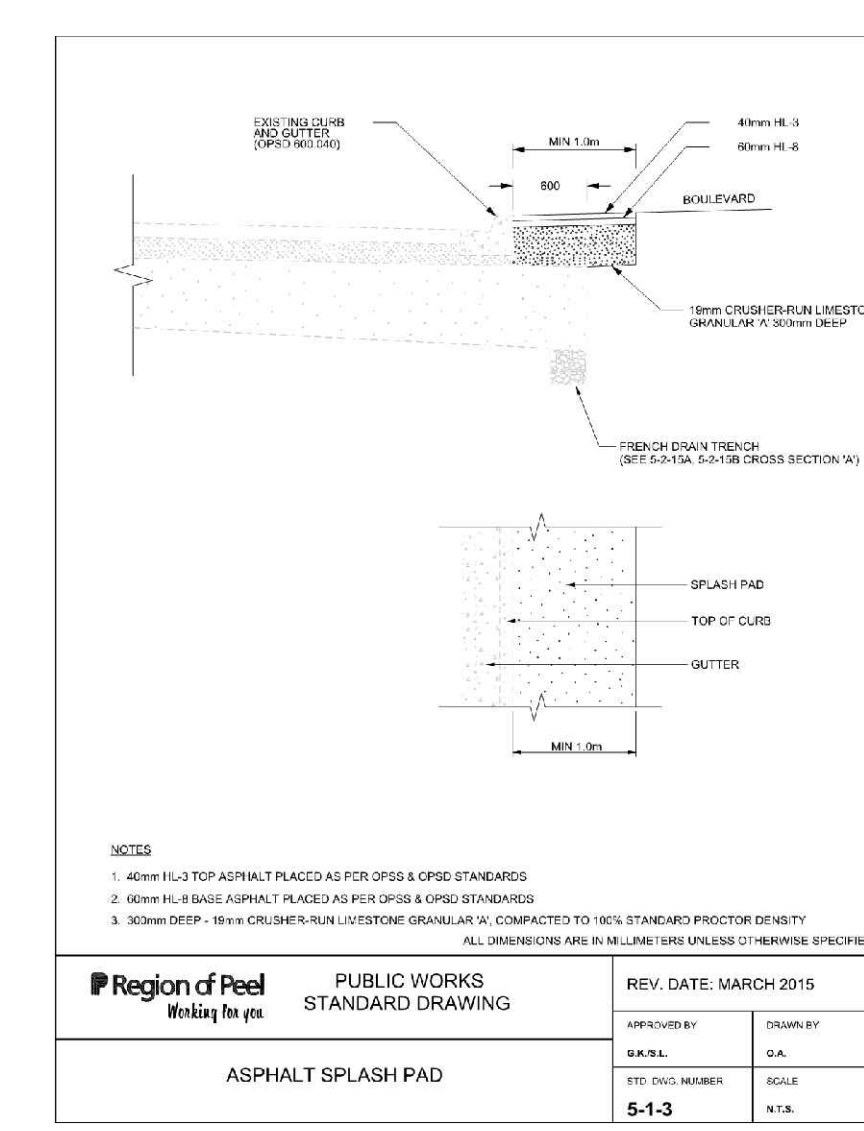
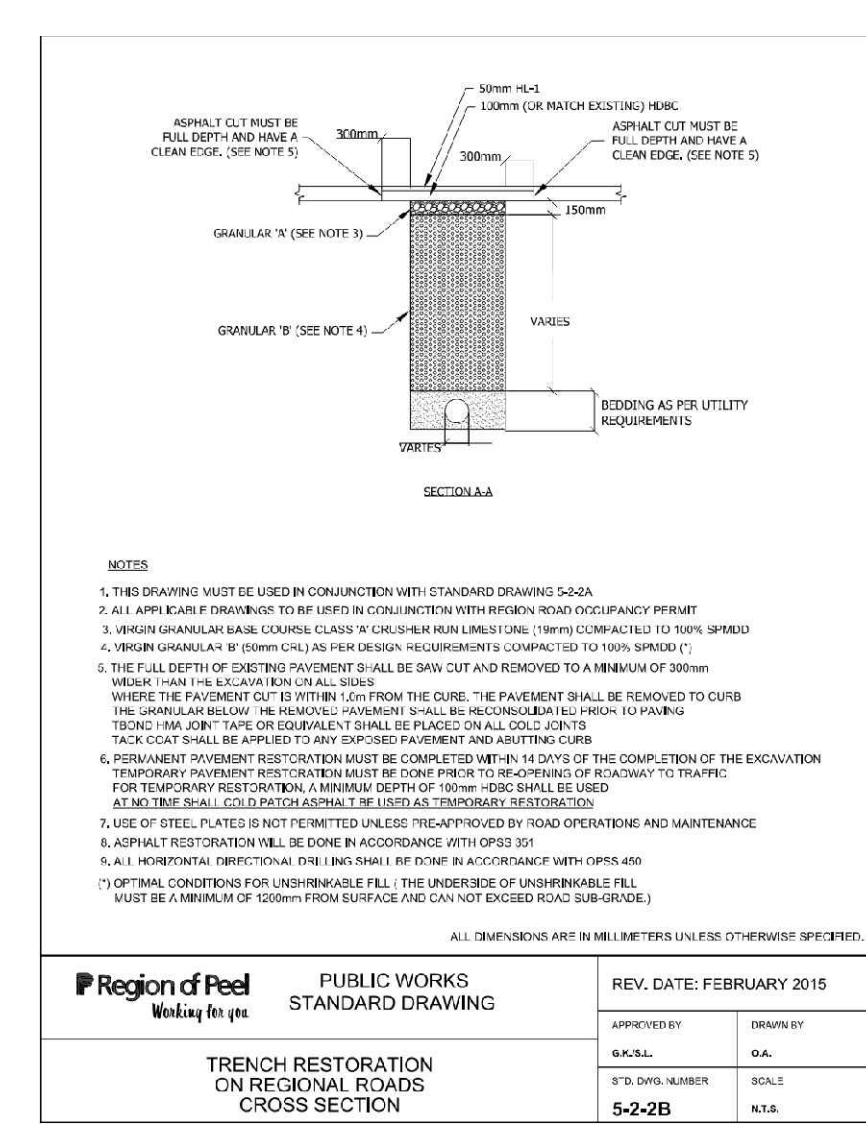
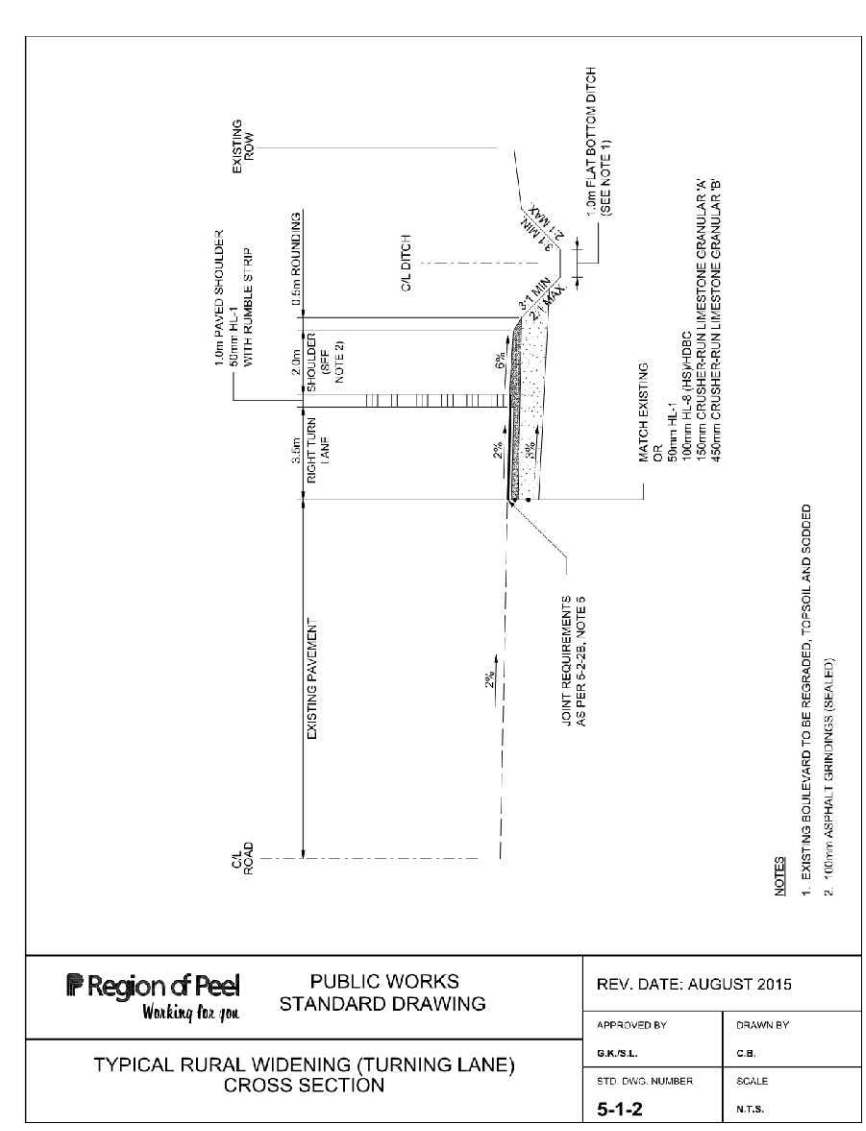
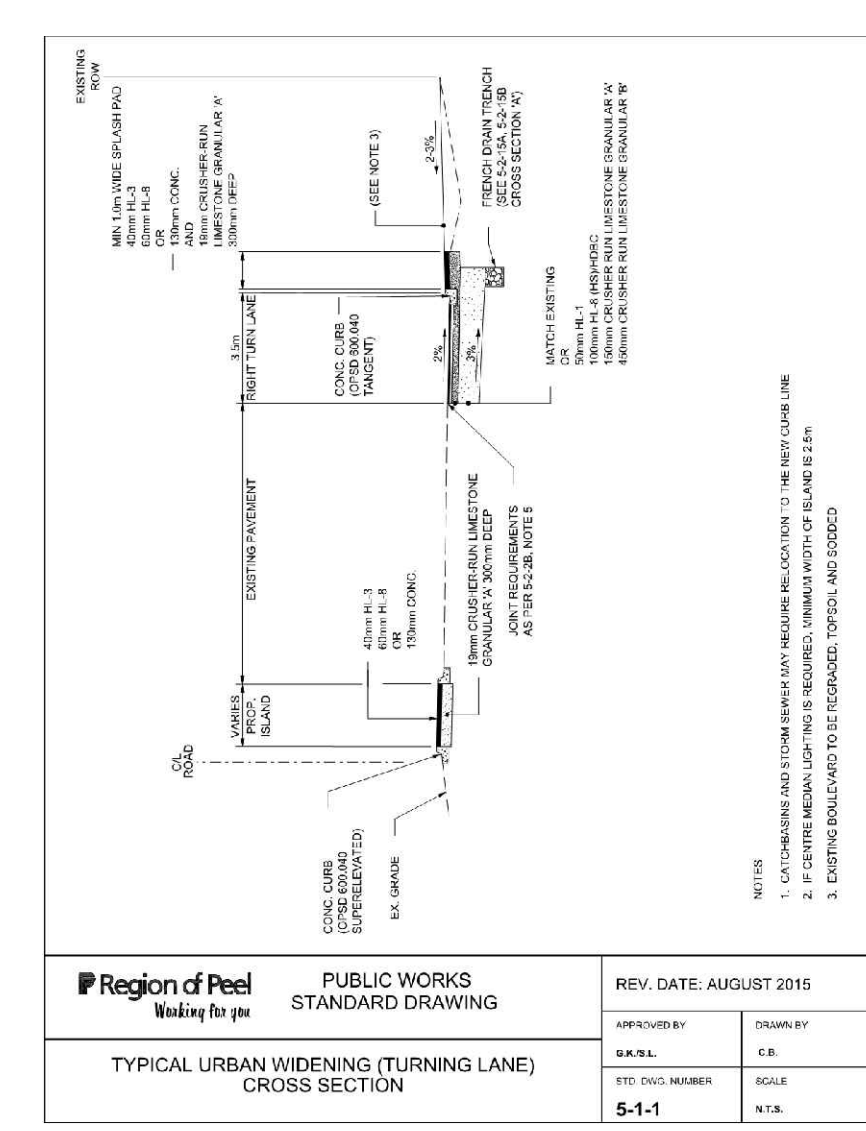
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 SP# 1601.029/01



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REVISIONS		
DATE	DETAILS	INIT.
NOV. 24, 2023	ISSUED FOR 1st SUBMISSION	J.C.



**EMC GROUP LIMITED**  
Engineers Planners Project Managers  
Vaughan Ontario (905) 738-3939

**ULTIMATE INTERSECTION IMPROVEMENT  
WINSTON CHURCHILL BOULEVARD  
DETAIL SHEET**

CAD Area	X-XX	Area	X-XX	Project No.	223123
Checked by	M.Z.	Drawn by	J.C.	Plan No.	STD
Date	SEPT, 2023	Sheet	11 of 11		

TRAFFIC FILE# To Be Assigned  
SP# 1601.029/01