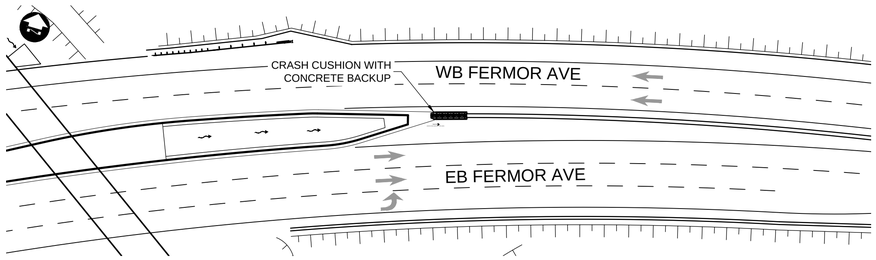
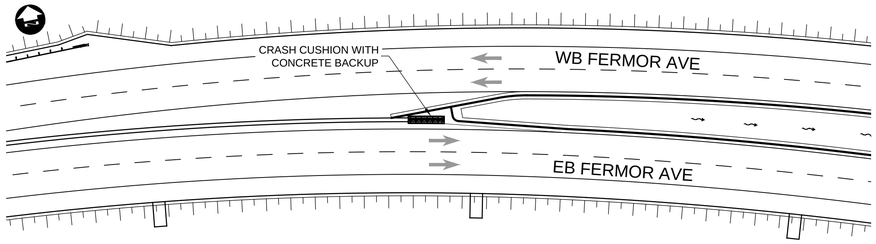
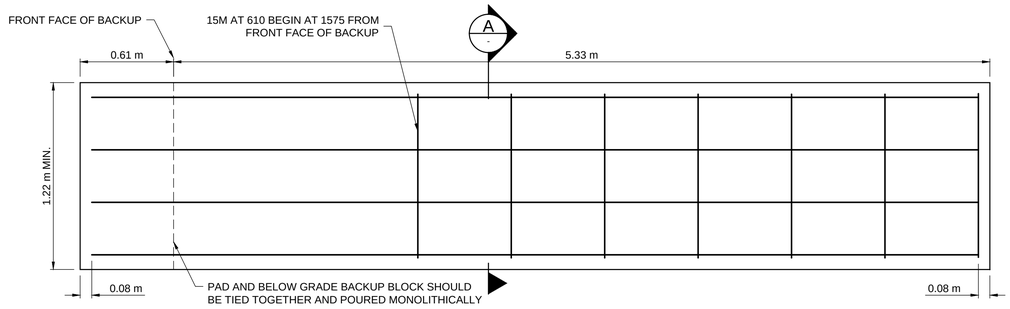


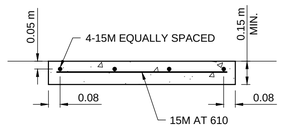




PLAN - PAD REINFORCING
1:20

CRASH CUSHION WITH CONCRETE BACKUP NOTES:

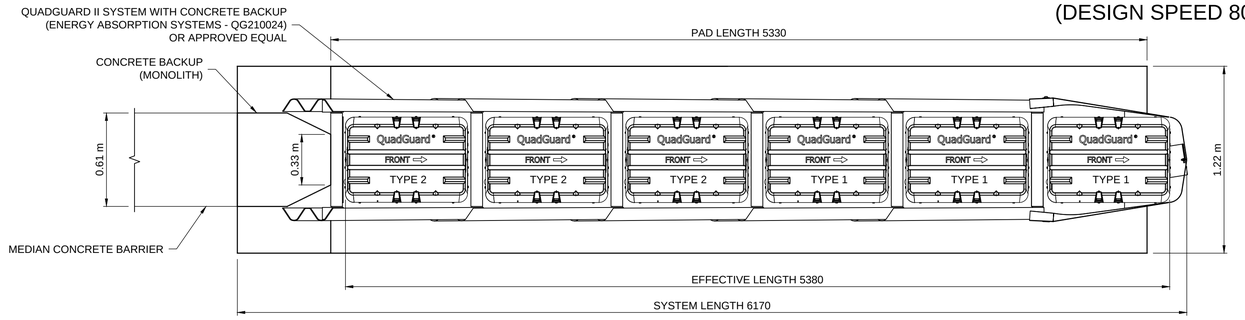
1. PROVISION SHALL BE MADE FOR REAR FENDER PANELS TO SLIDE REARWARD UPON IMPACT 762 MIN.
2. WHERE NECESSARY, THE CONTRACTOR SHALL SUPPLY AN ADEQUATE TRANSITION FROM THE QUADGUARD II SYSTEM TO THE OBJECT BEING SHIELDED.
3. ALL UNITS ARE MILLIMETERS UNLESS OTHERWISE NOTED.
4. BACKUP, EXTENSION PANEL, AND NOSE ASSEMBLIES ARE NOT INCLUDED IN MODEL NUMBER, ORDER SEPARATELY.
5. 75 mm LIP CURB SHALL BE USED ALONG ENTIRE LENGTH AND 15 m IN ADVANCE OF THE QUADGUARD II SYSTEM IN THE DIRECTION OF TRAVEL.
6. THE QUADGUARD II SYSTEM HAS BEEN TESTED TO NCHRP 350.
7. CRASH CUSHION SHALL BE SUPPLIED TO ACCOMMODATE A DESIGN SPEED OF 80 km/h. THE SYSTEM SHALL MEET THE REQUIREMENTS OF NCHRP REPORT 350 TEST LEVEL 3.



A SECTION
1:20

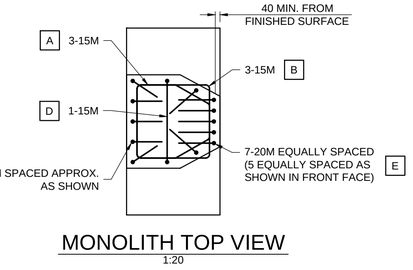
NOTE: DETAILS AND NOTES SHOW QUADGUARD II SYSTEM WITH CONCRETE BACKUP. EQUIVALENT CRASH CUSHION SYSTEM CAN BE USED PENDING APPROVAL FROM THE CONTRACT ADMINISTRATOR.

TRAFFIC
(DESIGN SPEED 80 km/h)

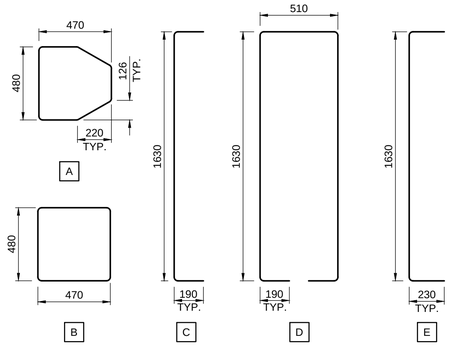


TRAFFIC
(DESIGN SPEED 80 km/h)

SITE PLAN
1:20

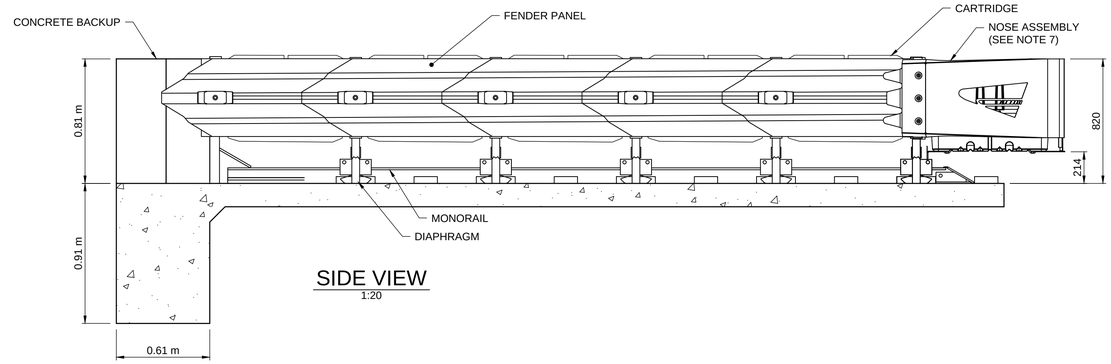


MONOLITH TOP VIEW
1:20

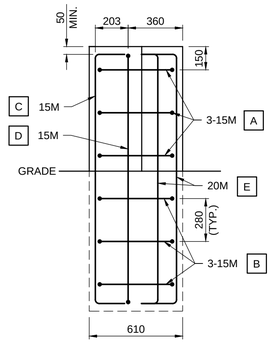


MONOLITH REINFORCING DETAILS
1:20

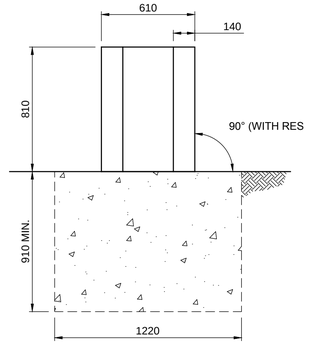
ALL CRASH CUSHION REINFORCING TO BE STAINLESS STEEL AS PER NOTE ON SHEET 001 REGARDING TRAFFIC BARRIER REINFORCING STEEL.



SIDE VIEW
1:20



MONOLITH SIDE VIEW
1:20



MONOLITH FRONT VIEW
1:20

ENGINEER'S SEAL FOR SELECTION OF CRASH CUSHION STYLE ONLY. CONCRETE PAD AND REINFORCING DESIGN, AND CRASH CUSHION DESIGN AND INSTALLATION SHALL BE AS PER MANUFACTURER'S DETAILS.

APEGM
Certificate of Authorization
Dillon Consulting Limited (MB)
No. 1789 **Date:** 18/02/09

150 WM	WATERMAIN	150 WM		CONCRETE		150 WM	WATERMAIN	150 WM
	HYDRANT			ASPHALT		300 LDS	LAND DRAINAGE SEWER	300 LDS
	VALVE			PLANING		250 WWS	WASTE WATER SEWER	250 WWS
	MANHOLE			SIDEWALK			HYDRANT	
	CATCH BASIN			PAVING STONES			VALVE	
	CURB INLET			PARTIAL DEPTH REPAIR			℄ PROFILE	
300 LDS	LAND DRAINAGE SEWER	300 LDS		PROPERTY LINE			NORTH/WEST GUTTER	
250 WWS	WASTE WATER SEWER	250 WWS		DRAINAGE ARROW			SOUTH/EAST GUTTER	
HYDRO	HYDRO	HYDRO		CURB RAMP (SD-229C)			NORTH/WEST DITCH	
MTS	M.T.S.	MTS		DETECTABLE WARNING SURFACE TILE (SD-229AA)			SOUTH/EAST DITCH	
100 GAS	GAS	100 GAS						
EXISTING	LEGEND—PLAN	PROPOSED	EXISTING	LEGEND—PLAN	PROPOSED	EXISTING	LEGEND—PROFILE	PROPOSED

UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES DATE

LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M. ELEV. SEE SHEET CT-001 FOR CONTROL POINT INFORMATION

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	18/02/09	JNC

DESIGNED BY JAT
DRAWN BY PMW
CHECKED BY JNC
APPROVED BY JNC
HOR. SCALE 1:250
VERTICAL 1:10
DATE

DILLON CONSULTING

RELEASED FOR CONSTRUCTION
DATE

ENGINEER'S SEAL
PROVINCE OF MANITOBA
J.N. CRANG
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT PROJECT NUMBER
17-5932

Winnipeg

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

FERMOR AVENUE BRIDGE OVER SEINE RIVER
BRIDGE REHABILITATION, PEDESTRIAN-CYCLIST UNDERPASS STRUCTURE AND ROADWORKS FROM ST. ANNE'S ROAD TO ARCHIBALD STREET

CITY DRAWING NUMBER P-3489-2017-CT-062
SHEET 062 OF 067
CONSULTANT DRAWING NUMBER CT-062

CRASH CUSION LAYOUT AND DETAILS

G:\CAD\17592X\Drawings\Roadworks\Contract\17592X-CON-CT-CRASH-CUSHION-LAYOUT-DETAILS.dwg