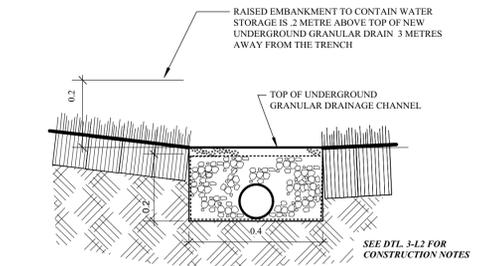


3 UNDERGROUND CHANNEL SECTION @ DEEPER POINT
Scale: 1:10



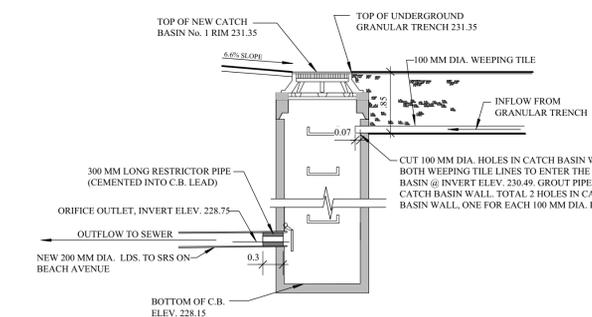
2 UNDERGROUND DRAINAGE SECTION @ SHALLOWER POINT
Scale: 1:10

GRADING NOTES:

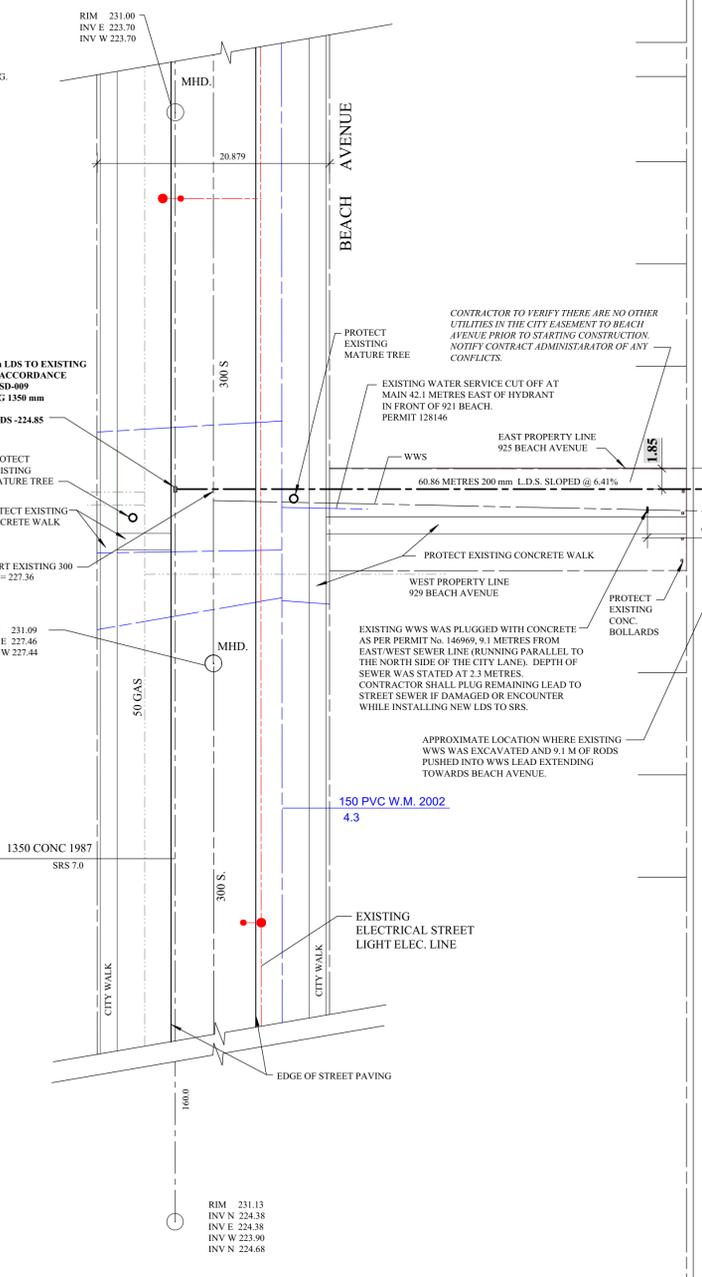
- EXISTING GRADE ELEVATIONS WERE SURVEYED BY KEN RECH LANDSCAPE ARCHITECTS AND MICHALENKO SURVEY ON OCT. 27, 2017. ELEVATIONS ARE GEODETIC AND REFERRED TO CITY OF WINNIPEG BENCH MARK No. 28-003 LOCATED IN THE NORTHWEST BOULEVARD, AT THE INTERSECTION OF CHALMERS AVENUE EAST AND KENT ROAD, ELEV. 230.997 METRES. SCALED BASE MAP IS BASED ON MEASUREMENTS UNDERTAKEN BY KEN RECH LANDSCAPE ARCHITECT INC. IN THE OCTOBER OF 2017.
- UNLESS NOTED OTHERWISE, ALL NEW GRADES SHALL BE A STRAIGHT LINE FROM ONE GRADE POINT TO ANOTHER.
- LOCATE AND PROTECT ALL UNDERGROUND UTILITIES, SURVEY MONUMENTS, ETC., PRIOR TO COMMENCING CONSTRUCTION.
- ALL FINISH ROUGH GRADING AND PLACEMENT OF THE NEW TOPSOIL MUST BE UNDERTAKEN BY GPS GUIDED EARTH MOVING EQUIPMENT, WHEREBY THE GPS CONTROLS THE OPERATION OF THE BLADE ON THE EARTH MOVING EQUIPMENT. THE CONTRACT ADMINISTRATOR WILL PROVIDE AN AUTOCAD FILE OF DRAWING L-2 FOR THE CONTRACTOR TO BUILD THEIR GPS PROGRAM. THE CONTRACTOR IS RESPONSIBLE FOR BUILDING THEIR OWN COMPUTER PROGRAM TO SUIT THEIR GPS EQUIPMENT, FROM THE FILE PROVIDED BY THE CONTRACT ADMINISTRATOR.

LAND DRAINAGE NOTES:

- SERVICES TO BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATION.
- THE NEW 200 LDS SHALL BE INSTALLED BY THE TRENCHLESS METHOD - NO OPEN CUT INSTALLATION WILL BE ALLOWED.
- OPEN CUT PITS IN THE EXISTING EASEMENT TO BEACH AVENUE SHALL BE BACKFILLED WITH TYPE 2 MATERIAL COMPACTED TO AT LEAST 95% OF STANDARD PROCTOR DENSITY.
- OPEN CUT PIT IN EXISTING CONCRETE PAVING FOR TIE-IN TO THE EXISTING SRS SHALL BE BACKFILLED IN ACCORDANCE WITH SD-009 AND CLASS 1 BACKFILL IN ACCORDANCE TO SD-002.
- CONTRACTOR TO REPAIR ALL SOD DAMAGE IN CITY EASEMENT TO BEACH AVENUE AS PART OF THE LDS COST INSTALLATION TO CW 3510-R9 SODDING.
- CONTRACTOR TO REPAIR ALL CONCRETE SIDEWALK DAMAGE IN THE CITY EASEMENT TO BEACH AVENUE AS PART OF THE LDS COST INSTALLATION TO CW 3325-R5 PORTLAND CEMENT CONCRETE SIDEWALK.



4 NEW CATCH BASIN No. 1 DETAIL
Scale: NTS



LAND DRAINAGE NOTES :

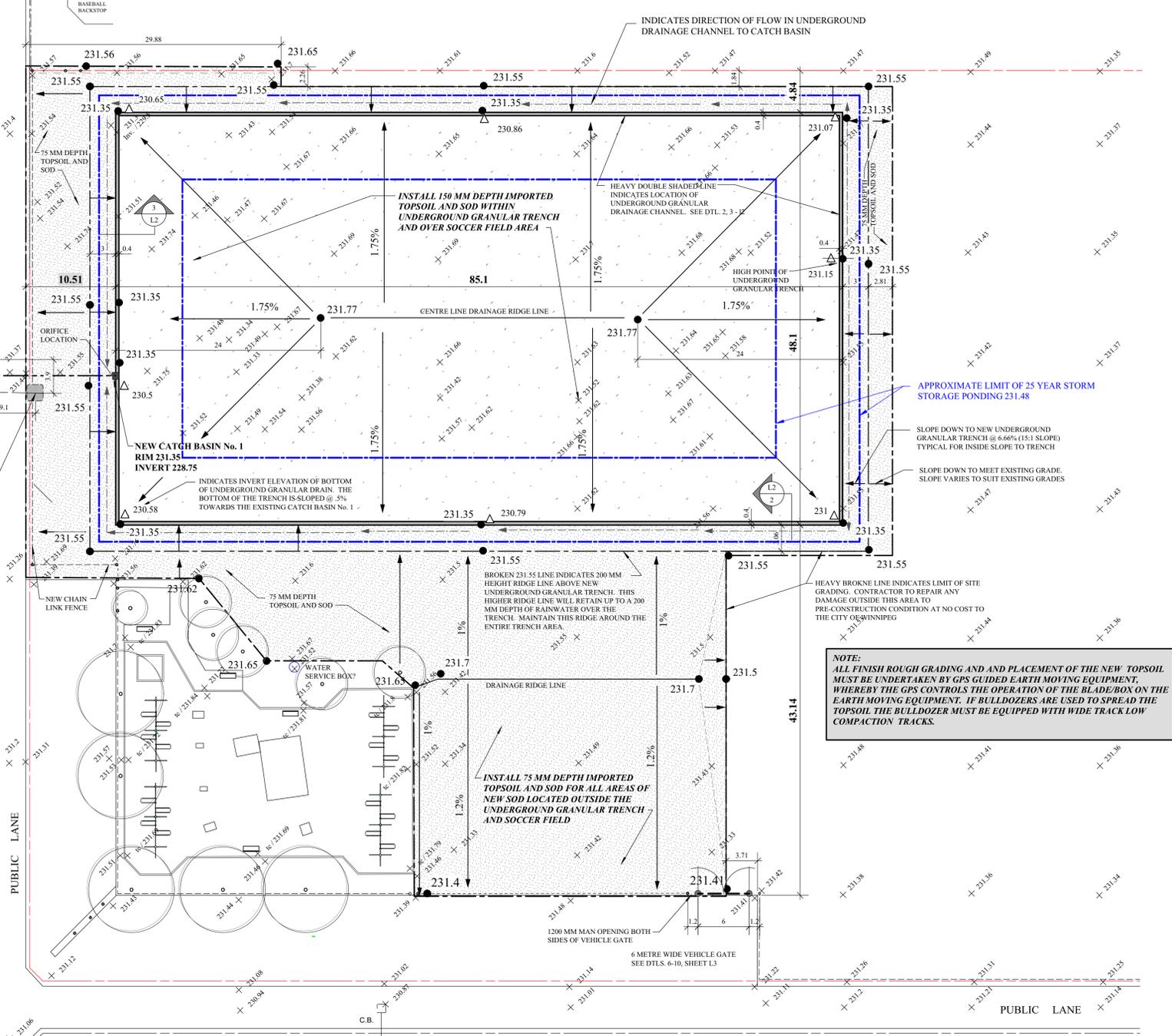
SOCCER FIELD AND WEST HALF OF OLD TENNIS COURTS
TOTAL AREA 1.425 ACRES
GRASS : 1.425 ACRES

SITE DRAINAGE RESTRICTION

- assigned "C" value for the site 0.2
- runoff restricted to 5 year event and storage on site for 25 year event
- allowable "Q" from site is 1.23cfs
- required storage for the 25 year design storm is 6,000 cubic feet
- available storage is 14,302 cubic feet with depth of storage at 0.20 metres (elevation 231.55)

ORIFICE DESIGN - New Catch Basin No. 1

$Q = cA \sqrt{2gh}$ "c" = 0.61 "Q" = 1.23 cfs
h = Height of water from centre of orifice (8.86feet)
Diameter of orifice = 3.934 inches (100 mm)
Contractor to install a 100 mm pipe grouted inside 200 LDS. See dtl. 4-1.2.



1 NEW GRADING PLAN AND SITE LAYOUT
Scale: 1:300

GRADING LEGEND:

- EXISTING GRADE ELEVATION
- NEW GRADE ELEVATION
- INVERT ELEVATION OF BOTTOM OF GRANULAR TRENCH
- DIRECTION OF DRAINAGE AND PERCENTAGE OF SLOPE
- LIMIT OF SITE GRADING AND SOD RESTORATION
- APPROXIMATE LIMIT OF 25 YEAR STORM WATER PONDING

PROVINCE OF MANITOBA
G.A. PRATT
REGISTERED ENGINEER

APEGM
Certificate of Authorization
G. A. Pratt & Associates Inc.
No. 758 Expiry: April 30, 2018

G.A. PRATT & ASSOCIATES INC.
ENGINEERING CONSULTANTS

PROJECT TITLE			
Old East Elmwood C.C. Grounds Reconstruction			
DRAWING TITLE			
GRADING PLAN / TRENCH DETAILS AND LAYOUT PLAN			
NO. REVISIONS		BY	DATE
A.	ISSUED FOR 99% REVIEW	K.R.	JAN. 31, 2018
B.	ISSUED FOR DEVELOPMENT PERMIT	K.R.	FEB. 23, 2018
1.	ADD NEW CATCH BASIN NO.1 AND LEAD TO SRS	K.R.	APRIL 9, 2018
KEN RECH LANDSCAPE ARCHITECTS INC.			
1480 Wellington Crescent		Winnipeg Manitoba	
Email: kenrech@mts.net R3N 0B3 Tel(204) 489-6616			
DRAWN BY	SCALE	SHEET NO.	
K. Rech	1:300	L-2	
PRINT DATE	DATE	REVISION	
April 9, 2018	Feb. 23, 2018	1	
FILE NO.	REVISION		
17-07	1		