

PARKS CANADA  
PARCS CANADA  
NORTHERN ONTARIO REGION

# PUKASKWA NATIONAL PARK

## RIVERBANK STABILIZATION PROJECT

ISSUED FOR  
CONSTRUCTION

### LIST OF DRAWINGS

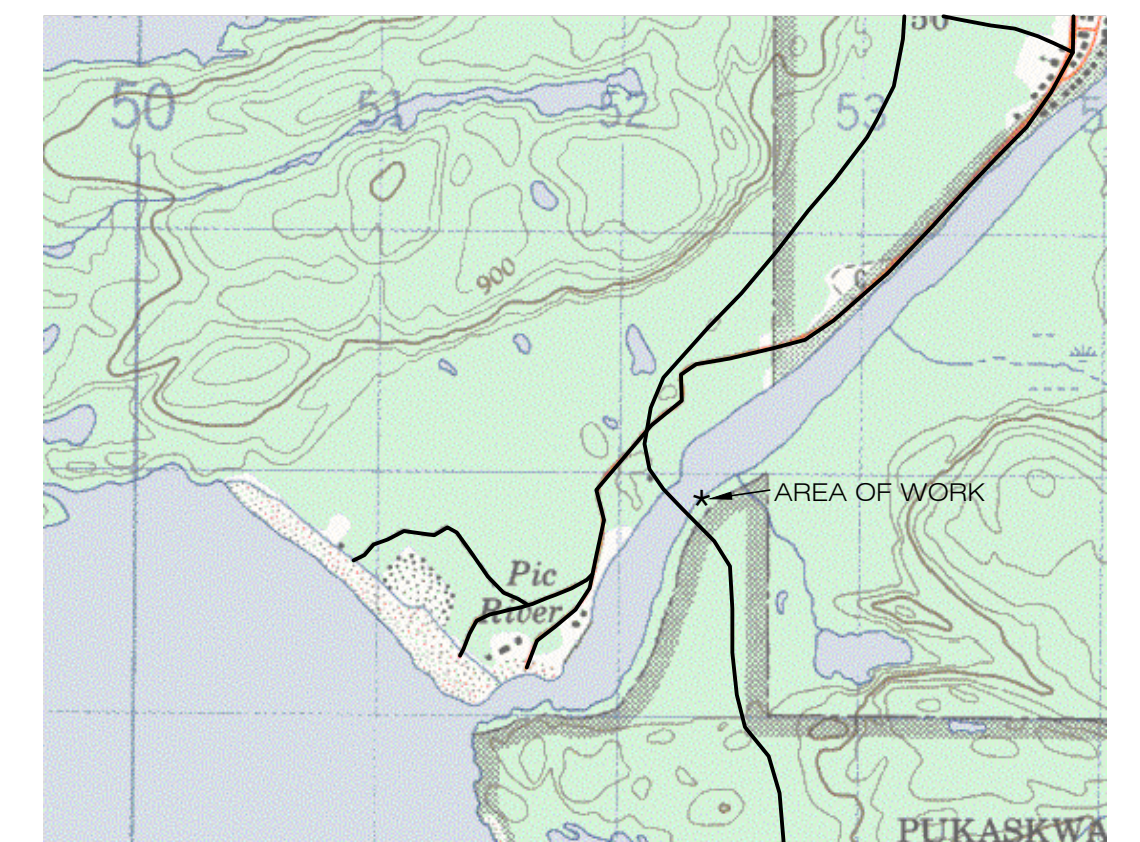
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|----|---|
| G1 | GENERAL NOTES AND SCOPE OF WORK                   |
| G2 | EXISTING SITE PLAN AND SECTIONS                   |
| G3 | NEW SITE PLAN, SECTION AND TYPICAL MOORING ANCHOR |
| G4 | SEDIMENT CONTROL PLAN AND DETAILS                 |

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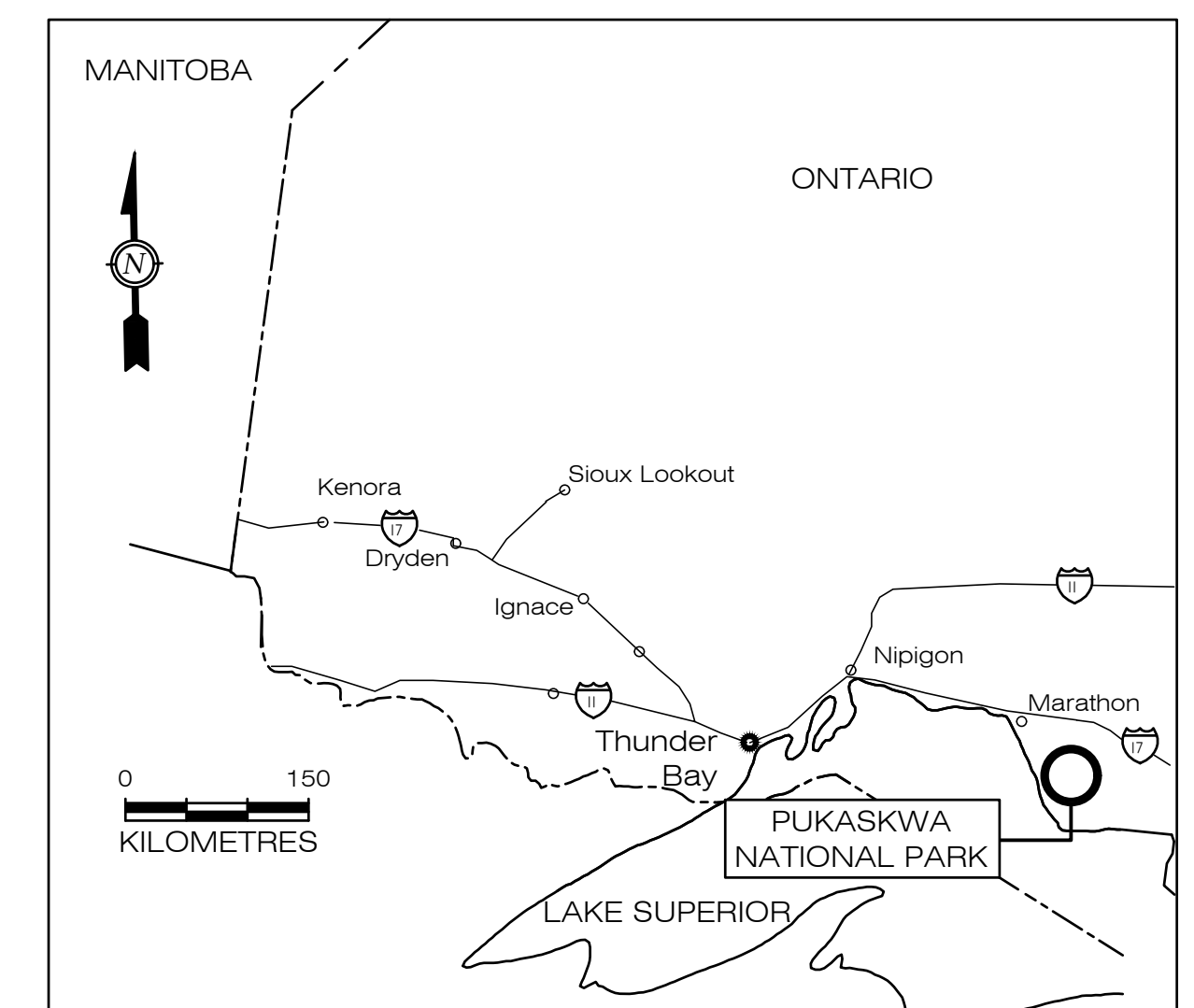


Parks  
Canada

Parcs  
Canada



KEY PLAN  
N.T.S.



KEY MAP  
N.T.S.

**JML**  
Engineering

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JML PROJECT No. 2019065



GENERAL NOTES

1. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON SITE, PRIOR TO START OF CONSTRUCTION.
2. CONTRACTOR TO CONFIRM LOCATION OF ALL UTILITIES PRIOR TO START OF CONSTRUCTION.
3. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE ENVIRONMENT, EXISTING BUILDINGS, FIXTURES, EQUIPMENT AND SERVICES FROM DAMAGE DURING CONSTRUCTION OPERATIONS.
4. EXCAVATE TO DEPTH AND EXTENTS SHOWN ON DRAWING.
5. SUITABLE EXCAVATED MATERIAL TO BE FREE OF ORGANICS, BOULDERS, FROZEN LUMPS OR OTHER DELETERIOUS MATERIALS.
6. DO NOT ALLOW WATER TO ACCUMULATE IN THE EXCAVATION FOR THE CONCRETE MOORING ANCHORS. HAVE PUMPS RUNNING CONTINUOUSLY IF NECESSARY. WATER SHALL BE PUMPED INTO APPROVED SEDIMENT STORAGE POND.
7. ALL IN-WATER WORK SHALL BE DONE AS PER DEPARTMENT OF FISHERIES AND OCEANS (DFO) "IN-WATER WORK TIMING WINDOW GUIDELINES" - JULY 15 - AUGUST 30.
8. PRIOR TO COMMENCING WORK ON SITE, THE CONTRACTOR SHALL PROVIDE TRAFFIC AND PEDESTRIAN PROTECTION BY INSTALLING SAFETY BARRIERS AND SIGNAGE.
9. TRAFFIC AND PEDESTRIAN ACCESS TO THE DOCK MUST BE MAINTAINED AT ALL TIMES ALONG THE SOUTHWEST SIDE OF THE PUMPHOUSE BUILDING.
10. PRIOR TO COMMENCING WORK ON SITE, THE CONTRACTOR SHALL PROVIDE ENVIRONMENTAL PROTECTION BY INSTALLING SILT BARRIER AS INDICATED AND ACCORDING TO THE EROSION AND SEDIMENT CONTROL PLAN ON DRAWING G-4.
11. ENVIRONMENTAL PROTECTION MEASURES ARE IDENTIFIED IN THE "CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA), 2012" BASIC IMPACT ANALYSIS FOR THIS PROJECT AND MUST BE ADHERED TO BY THE CONTRACTOR.
12. GRANULAR 'A' MATERIAL SHALL CONFORM TO OPSS 1010 AND SHALL BE PLACED IN LIFTS NOT EXCEEDING 150mm THICK AND COMPACTED TO 100% SPMD.
13. GEOTEXTILE SHALL BE 'AMOCO' NON-WOVEN FILTER FABRIC, OR APPROVED ALTERNATIVE, CONFORMING TO OPSS 1860 CLASS II.
14. PROTECT TREES AND SHRUBS ON SITE AS PER OPSS 801.
15. REPAIR ALL DISTURBED AREAS WITH TOPSOIL AND SEED. TOPSOIL SHALL BE FROM APPROVED SUPPLIER OR SALVAGED FROM SITE.
16. ALL SEED TO SPECIFICATIONS IDENTIFIED IN THE PROJECT SPECIFIC CEAA, 2012 BASIC IMPACT ANALYSIS.
17. PARKS CANADA AGENCY (PCA) STAFF SHALL REMOVE AND REINSTALL REQUIRED SECTIONS OF FLOATING DOCK.
18. TWO SECTIONS OF FLOATING DOCKS ARE LOCATED AT SOUTH/EAST SIDE OF CONSTRUCTION AREA. CONTRACTOR TO MOVE TO LOCATION SUITABLE TO PCA STAFF.

CONCRETE NOTES

1. CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 30 MPa AT 28 DAYS WITH 5-8% AIR ENTRAINMENT. NORMAL COARSE AGGREGATE SIZE TO BE 20mm. F-1 EXPOSURE IN ACCORDANCE WITH CSA A23.1.
2. CLEAR CONCRETE COVER TO REINFORCING STEEL SHALL BE AS DETAILED.
3. REINFORCING BARS SHALL BE DEFORMED BARS GRADE 400.
4. ANCHORS AND COUPLERS SHALL BE ASTM A307.
5. LAP LENGTHS FOR REINFORCING BARS SHALL BE CLASS 'B' U.N.O.
6. BAR HOOKS, WHERE REQUIRED, SHALL BE MINIMUM LENGTH AND STIRRUPS SHALL HAVE MINIMUM HOOKS AS PER REINFORCING STEEL INSTITUTE OF CANADA (RSIC) U.N.O.

ARMOUR STONE NOTES

1. ARMOUR STONE:
  - a. THE LARGEST DIMENSION OF EACH STONE IS NOT TO EXCEED TWO TIMES THE SMALLEST DIMENSION.
  - b. ARMOUR STONE: 40kg TO 1.0 TONNES EACH BY WEIGHT.
  - c. STONES ARE TO BE FRACTURED AND ANGULAR. FIELD STONE IS NOT ACCEPTABLE.
  - d. THE ARMOUR STONE IS TO BE FREE FROM CRACKS, SEAMS AND OTHER DEFECTS WHICH MAY IMPAIR DURABILITY. THE LOS ANGELES ABRASION LOSS DETERMINED USING ASTM PROCEDURES SHALL NOT EXCEED 35%. THE ARMOUR ROCK SHALL BE DURABLE, BLASTED LIMESTONE OR GRANITE. SLATE AND SHALE ARE NOT ACCEPTABLE.
2. ARMOUR STONE TO BE PLACED IN A RANDOM FASHION.

EROSION CONTROL BLANKET NOTES

1. EROSION CONTROL BLANKET SHALL BE 'NILEX' C32 BD OR APPROVED ALTERNATIVE.
2. EROSION CONTROL BLANKET TO BE TRANSPORTED, STORED AND HANDLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
3. INSTALLATION SHALL BE AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND FOLLOW 'HIGH FLOW CHANNEL' GUIDELINES WITH RESPECT TO STAPLING PATTERN, LAPS AND ORIENTATION OF MAT.
4. WHERE EROSION CONTROL BLANKET IS CUT OR MODIFIED TO INSTALL TRANSPLANTED VEGETATION ADDITIONAL STAPLES SHALL BE USED TO SECURE.

TREES AND SHRUBS NOTES

1. ALL TREES AND SHRUBS TO BE TRANSPLANTED AS DIRECTED BY PARKS CANADA AGENCY (PCA) STAFF.
2. PCA GUIDELINES TO BE FOLLOWED FOR ALL TRANSPLANTED TREES OR SHRUBS.
3. MAXIMUM TREE HEIGHT TO BE TRANSPLANTED IS 1.83m.

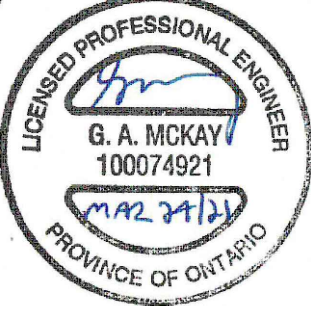

SCOPE OF WORK

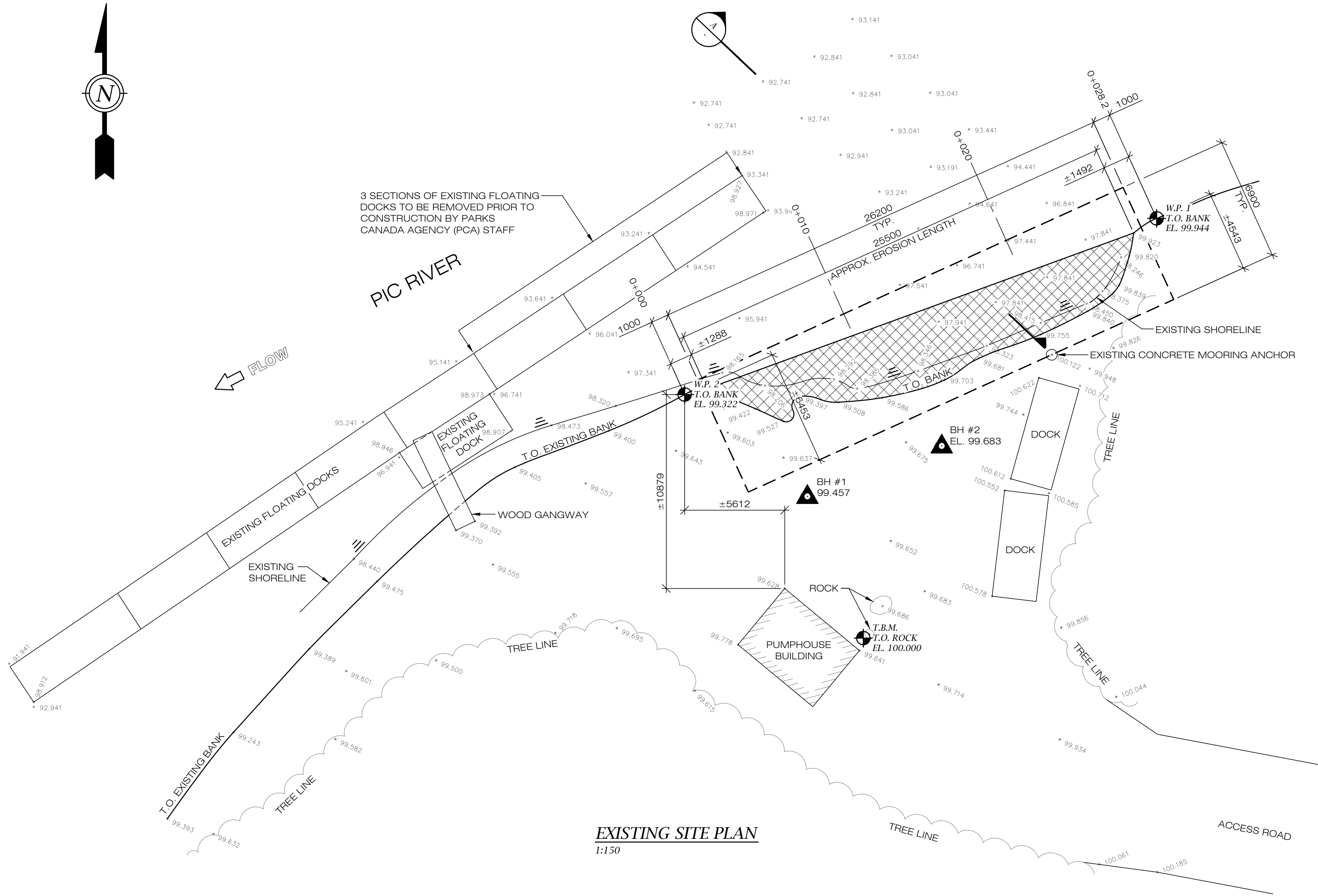
1. ESTABLISH TRAFFIC, PEDESTRIAN, AND ENVIRONMENTAL PROTECTION.
2. PREPARE SLOPE TO EXTENTS SHOWN.
3. INSTALL GEOTEXTILE ON RIVER BANK TO EXTENTS SHOWN.
4. INSTALL ARMOUR STONE FROM BOTTOM OF CHANNEL TO WATER LINE.
5. INSTALL UPPER SECTION OF ARMOUR STONE TO EXTENTS SHOWN, SMALLER ROCKS TO BE CHINKED IN LARGE VOIDS BETWEEN LARGER ROCKS.
6. INSTALL TOP SOIL 600mm THICK.
7. INSTALL SEED TO EXTENTS SHOWN.
8. INSTALL EROSION CONTROL BLANKET ON EXPOSED SLOPE TO EXTENTS SHOWN.
9. TRANSPLANT TREES AND SHRUBS FROM ADJACENT FORESTED AREAS, AS DIRECTED BY PARKS CANADA AGENCY (PCA) STAFF.
10. INSTALL TWO NEW CONCRETE MOORING ANCHORS AS SHOWN.
11. REMOVE TRAFFIC, PEDESTRIAN, AND ENVIRONMENTAL PROTECTION.

LEGEND:

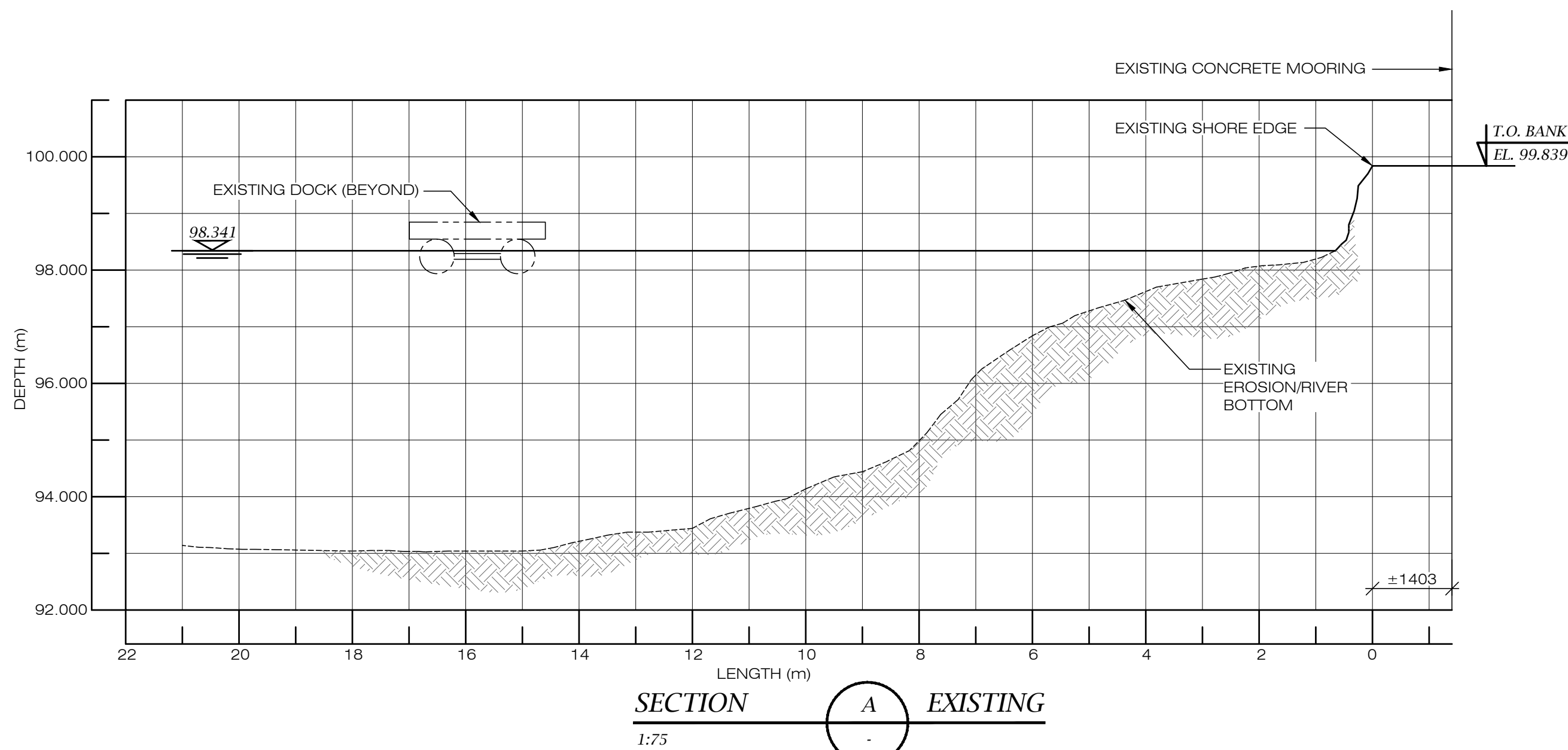


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STAMP		STAMP		
				
D.S.	2	ISSUED FOR CONSTRUCTION	03/24/21	
D.S.	1	REISSUED FOR TENDER	07/17/20	
REVISED BY	REV No	DESCRIPTION OF REVISION	APPROVED BY	DATE
				
NATIONAL PARK: PUKASKWA		FIELD UNIT: NORTHERN ONTARIO		
PROJECT TITLE: PUKASKWA RIVERBANK STABILIZATION		DRAWING DESCRIPTION: GENERAL NOTES AND SCOPE OF WORK		
DRAWN BY:	D.S.	DATE: OCTOBER, 2019		
DESIGNED BY:	N.S. P.ENG.	SCALE: AS NOTED		
CHECKED BY:	G.A.M. P.ENG.	DWG. No. G1		
ARCHITECTURAL REVIEWED BY:		PROJECT No.		
DESIGN COORDINATOR:		FILE No. 2019065-G1.DWG		
SECTION MANAGER:				



EXISTING SITE PLAN  
1:150



**LEGEND:**

- EXISTING ELEVATIONS
- LIMIT OF CONSTRUCTION
- TEMPORARY BENCH MARK
- BORE HOLES
- EXISTING TREE LINE
- EXISTING BUILDING
- AREA OF RIVER BANK EROSION

**TEMPORARY BENCHMARK**  
PAINT SPOT ON ROCK AT S/E CORNER OF BUILDING  
ELEV. 100.00m

**GENERAL NOTES**

1. REFER TO JML ENGINEERING DRAWING G-1.

**SCOPE OF WORK**

1. REFER TO JML ENGINEERING DRAWING G-1.

**CONCRETE NOTES**

1. REFER TO JML ENGINEERING DRAWING G-1.

**ARMOUR STONE NOTES**

1. REFER TO JML ENGINEERING DRAWING G-1.

**EROSION CONTROL BLANKET NOTES**

1. REFER TO JML ENGINEERING DRAWING G-1.

**TREES AND SHRUBS NOTES**

1. REFER TO JML ENGINEERING DRAWING G-1.

WORKING POINT	COORDINATE		ELEV. (m)
	EASTING	NORTHING	
T.B.M.	50000.000	50000.000	100.000
W.P. 1	50025.126	49981.712	99.944
W.P. 2	50013.476	50007.452	99.322

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STAMP

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D.S.	1	ISSUED FOR CONSTRUCTION	03/24/21
D.S.	0	ISSUED FOR TENDER	05/15/20
REVISED BY	REV No	DESCRIPTION OF REVISION	APPROVED BY DATE

**NATIONAL PARK:**  
PUKASKWA

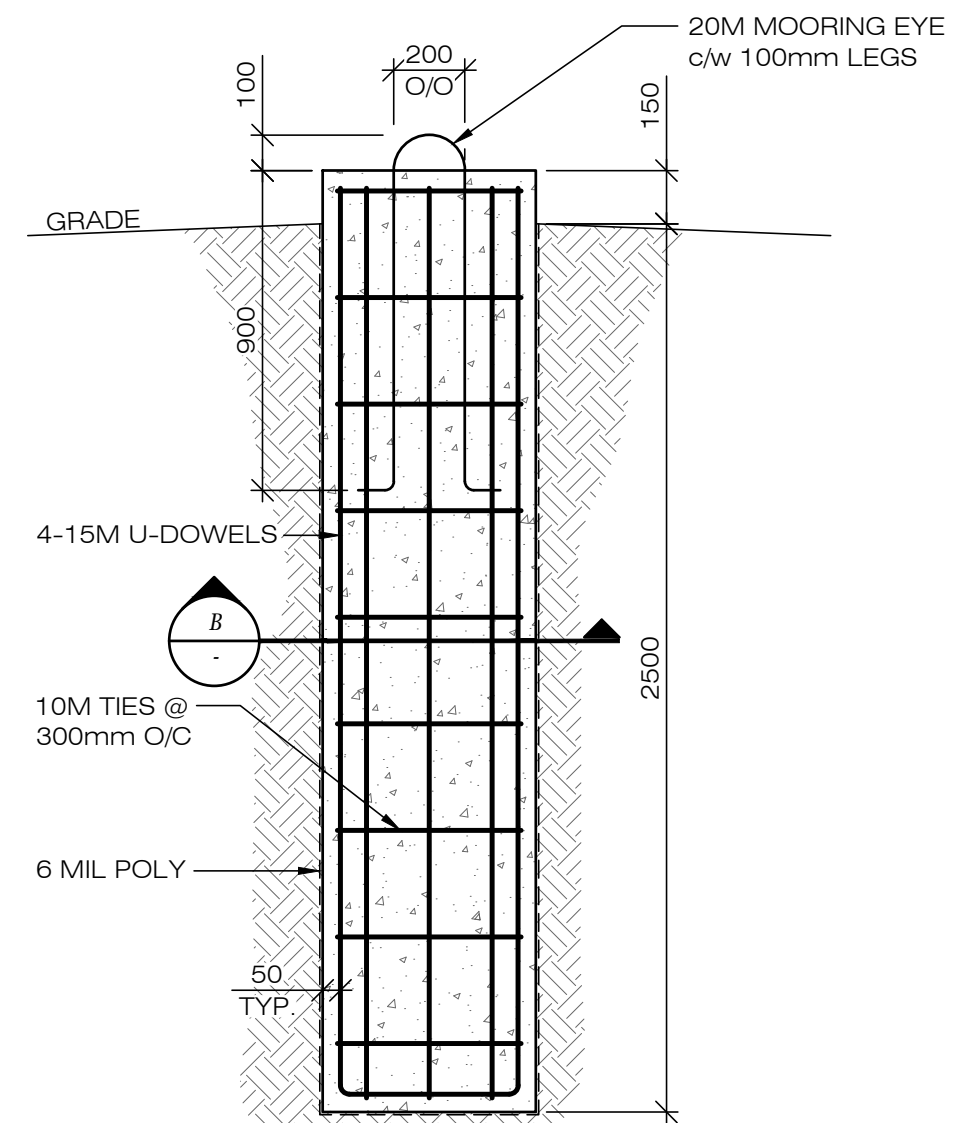
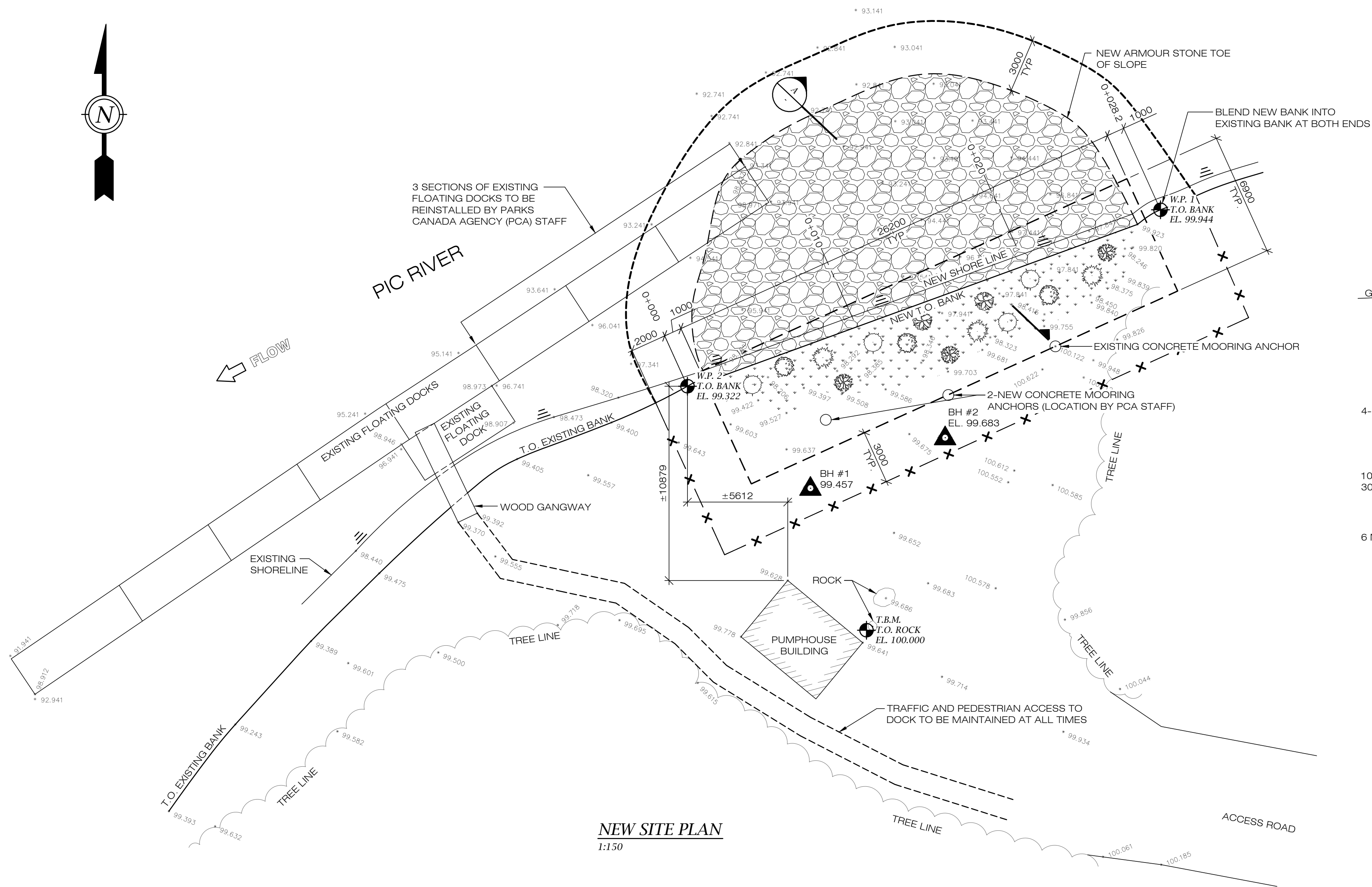
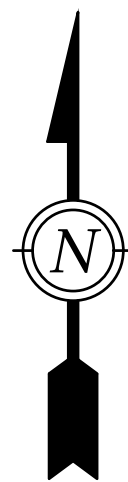
**FIELD UNIT:**  
NORTHERN ONTARIO

**PROJECT TITLE:**  
PUKASKWA RIVERBANK STABILIZATION

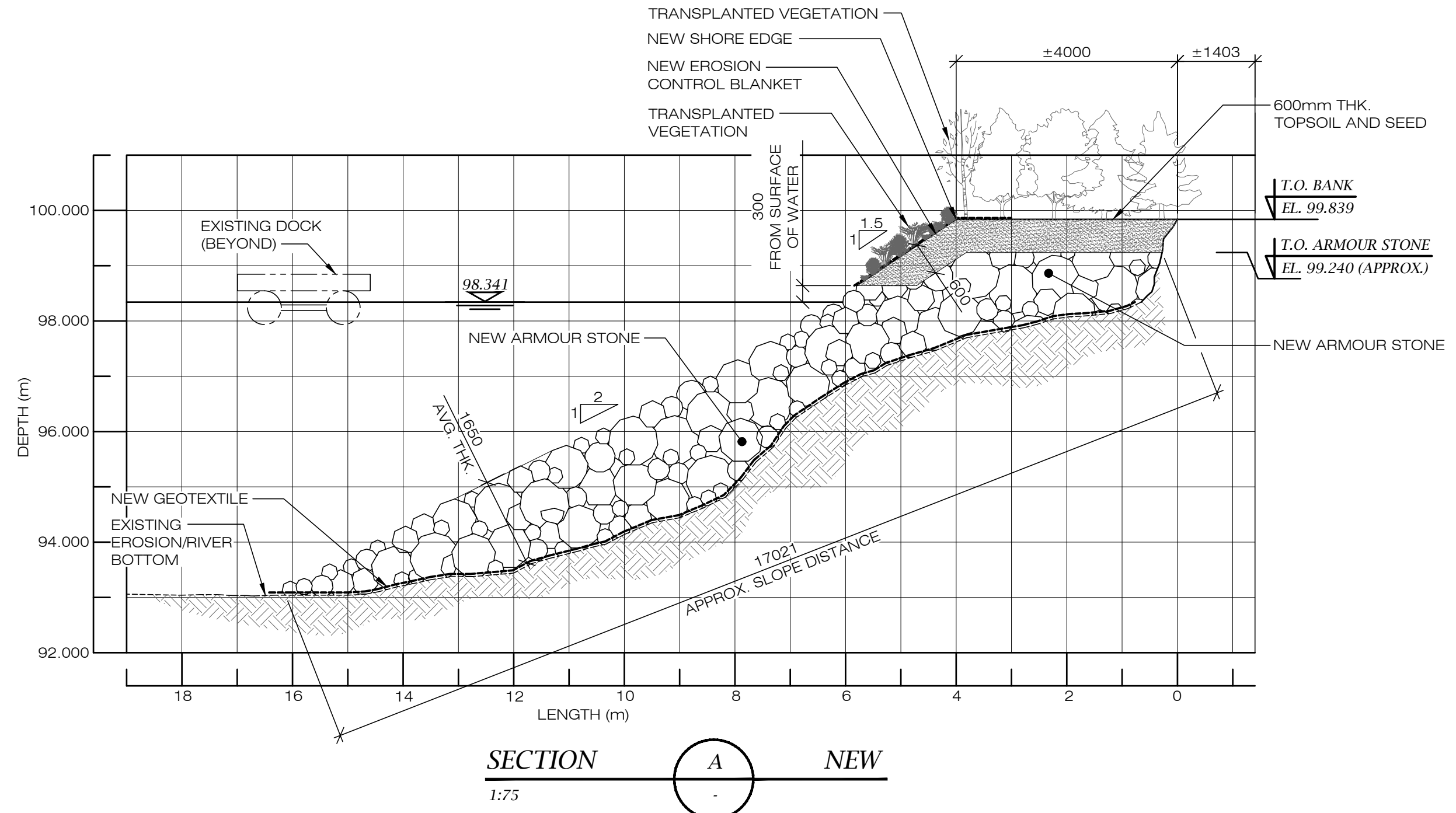
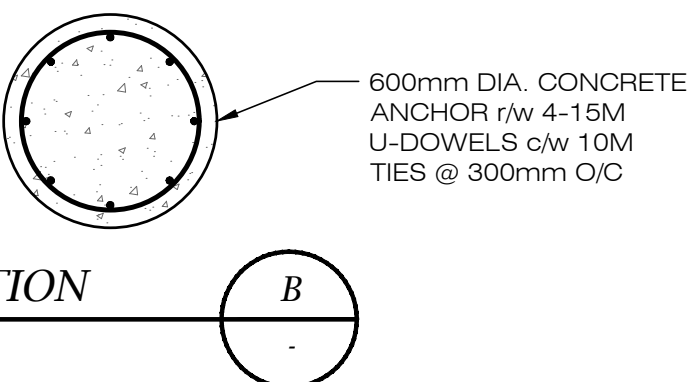
**DRAWING DESCRIPTION:**  
EXISTING SITE PLAN AND SECTIONS

DRAWN BY:	D.S.	DATE:	OCTOBER, 2019
DESIGNED BY:	N.S. P.ENG.	SCALE:	AS NOTED
CHECKED BY:	G.A.M. P.ENG.	DWG. No.	G2
ARCHITECTURAL REVIEWED BY:		PROJECT No.	
DESIGN COORDINATOR:		FILE No.	2019065-G2.DWG
SECTION MANAGER:			





TYPICAL MOORING ANCHOR  
1:20 2 - REQUIRED



LEGEND:

- EXISTING ELEVATIONS
- LIMIT OF CONSTRUCTION
- TEMPORARY TURBIDITY CURTAIN
- TEMPORARY CONSTRUCTION FENCE
- TEMPORARY BENCH MARK
- BORE HOLES
- EXISTING TREE LINE
- EXISTING BUILDING
- NEW TREES AND GRASS

TEMPORARY BENCHMARK  
PAINT SPOT ON ROCK AT S/E CORNER OF BUILDING  
ELEV. 100.00m

GENERAL NOTES

- REFER TO JML ENGINEERING DRAWING G-1.

SCOPE OF WORK

- REFER TO JML ENGINEERING DRAWING G-1.

CONCRETE NOTES

- REFER TO JML ENGINEERING DRAWING G-1.

ARMOUR STONE NOTES

- REFER TO JML ENGINEERING DRAWING G-1.

EROSION CONTROL BLANKET NOTES

- REFER TO JML ENGINEERING DRAWING G-1.

TREES AND SHRUBS NOTES

- REFER TO JML ENGINEERING DRAWING G-1.

DESIGN LOADS

- MOORING ANCHOR DESIGN LOAD = 22kN (5000 LBS.)


WORKING POINT	COORDINATE		ELEV. (m)
	EASTING	NORTHING	
T.B.M.	50000.000	50000.000	100.000
W.P. 1	50025.126	49981.712	99.944
W.P. 2	50013.476	50007.452	99.322

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G. A. MCKAY  
100074921  
PROVINCE OF ONTARIO

D.S.	1	ISSUED FOR CONSTRUCTION	03/24/21
D.S.	0	ISSUED FOR TENDER	05/15/20

REVISED BY	REV No	DESCRIPTION OF REVISION	APPROVED BY	DATE
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 Parks Canada

NATIONAL PARK:	PUKASKWA	FIELD UNIT:	NORTHERN ONTARIO
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PROJECT TITLE:	PUKASKWA RIVERBANK STABILIZATION	DRAWING DESCRIPTION:	NEW SITE PLAN, SECTION AND TYPICAL MOORING ANCHOR
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DRAWN BY:	D.S.	DATE:	OCTOBER, 2019
DESIGNED BY:	N.S. P.ENG.	SCALE:	AS NOTED
CHECKED BY:	G.A.M. P.ENG.	DWG. No.	G3
ARCHITECTURAL REVIEWED BY:		PROJECT No.	
DESIGN COORDINATOR:		FILE No.	2019065-G3.DWG
SECTION MANAGER:			



EROSION AND SEDIMENT CONTROL PLAN

1.0 GENERAL

- .1 THIS SPECIAL PROVISION COVERS THE REQUIREMENTS FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO MINIMIZE THE IMPACT OF CONSTRUCTION ON THE NATURAL ENVIRONMENT INCLUDING WATERCOURSES, RIVERS, LAKES AND WETLANDS.
- .2 THESE REQUIREMENTS ARE IN ADDITION TO THOSE THAT MAY BE SPECIFIED ELSEWHERE IN THE CONTRACT AND DO NOT RELIEVE THE CONTRACTOR OF OBLIGATIONS IMPOSED BY STATUTE.
- .3 EROSION AND SEDIMENT CONTROL MEASURES SHALL MEET THE MINIMUM STANDARDS AS OUTLINED IN THE MTO DRAINAGE MANUAL, CHAPTER 'F' - EROSION AND SEDIMENT CONTROL. (AND THIS SPECIAL PROVISION.)

2.0 PLAN OBJECTIVES

- .1 THE OBJECTIVE OF THIS PLAN IS TO STABILIZE A SECTION OF THE EXISTING RIVER BANK ALONG THE PIC RIVER TO KEEP THE INTRODUCTION OF SHORT TERM SEDIMENT AND IMPACTS ON FISH HABITAT TO THE LOWEST LEVELS PRACTICALLY ACHIEVABLE. THE SITE WILL BE STABILIZED ON COMPLETION TO ENSURE NO SEDIMENT ENTERS THE WATER IN THE LONG-TERM AS A RESULT OF THE CONSTRUCTION.

3.0 PROJECT DESCRIPTION

- .1 PARKS CANADA WISHES TO STABILIZE A SECTION OF THE EXISTING RIVER BANK ALONG THE PIC RIVER AT PUKASKWA NATIONAL PARK.
- .2 THE WORK WILL INVOLVE THE PLACEMENT OF ARMOUR STONE AND VEGETATION AT THE TOP OF THE RIVER BANK.
- .3 SITE INSPECTION WILL BE PERFORMED BY AN EXPERIENCED CONSTRUCTION INSPECTOR, RETAINED FOR THIS PURPOSE BY THE OWNER.
- .4 ENVIRONMENTAL INSPECTION WILL BE PERFORMED BY PARKS CANADA AGENCY (PCA) STAFF OR AUTHORITY HAVING JURISDICTION AT A REGULAR INTERVAL.
- .5 THE CONSTRUCTION TECHNIQUES AND MITIGATION MEASURES SET OUT IN THIS PLAN WILL BE USED TO CONTROL EROSION AND REDUCE SEDIMENT.

4.0 CRITICAL AREAS, IDENTIFIED VALUES AND CONCERNS

- .1 CARE MUST BE EXERCISED DURING CONSTRUCTION ALONG THE SHORELINE TO ENSURE THAT SUSPENDED SOLIDS DO NOT ENTER THE RIVER OUTSIDE THE CONTROL AREA.
- .2 STREAM FLOW MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD SO AS NOT TO INTERFERE WITH FISH MIGRATION AND SPAWNING OR OTHER RIVER USERS EVEN AT LOWEST WATER LEVELS.

5.0 PREVENTIVE MEASURES

- .1 THE CONTRACTOR WILL BE EXPERIENCED IN IN-WATER CONSTRUCTION AND WILL HAVE KNOWLEDGE OF RIVER AND SEDIMENT CONTROL. THE CONTRACTOR WILL FOLLOW ESTABLISHED INDUSTRY STANDARD PRACTICES, THE CONTRACT DOCUMENTS AND THE SEDIMENT CONTROL PLAN.
- .2 CONSTRUCTION OPERATIONS SHALL BE DISCUSSED AT AN ONSITE MEETING BETWEEN THE CONTRACTOR, THE ENGINEER AND THE OWNER, SO EVERYONE UNDERSTANDS THE CONTROL-MEASURES PRIOR TO CONSTRUCTION THE CONTRACTOR WILL INSTRUCT WORKERS AND EQUIPMENT OPERATORS WORKING ON THIS PROJECT TO ENSURE COMPLIANCE WITH THE SEDIMENT CONTROL PLAN.
- .3 THE CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENT CONTROL MEASURES TO CONTROL EROSION AND SEDIMENT ON THE CONSTRUCTION SITE. EROSION AND SEDIMENT CONTROL SHALL BE INTEGRATED WITH A CONSTRUCTION OPERATION SCHEDULE AS DETERMINED BY THE CONTRACTOR AND THIS SPECIAL PROVISION.
- .4 OPERATIONS IN ANY CONTROL AREA SHALL NOT BE COMMENCED UNTIL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND APPROVED BY THE ENGINEER AND PARKS CANADA ENVIRONMENTAL SURVEILLANCE OFFICER.
- .5 HAZARD MARKERS SHALL BE ADDED OR BRIGHT COLOUR SHALL BE USED FOR TURBIDITY CURTAIN LOADLINE/FLOATATION.
- .6 TEMPORARY CONTROL MEASURES SHALL BE MAINTAINED AND KEPT IN PLACE UNTIL 100% OF ALL WORK WITHIN THE CONTROL AREA HAS BEEN COMPLETED AND STABILIZED.
- .7 TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AT THE COMPLETION OF THE WORK.

6.0 OPERATIONAL CONSTRAINTS

- .1 ALL ACTIVITIES INCLUDING EQUIPMENT MAINTENANCE AND REFUELING, SHALL BE CONTROLLED TO PREVENT ENTRY INTO THE WATERCOURSE OR RIVER OF PETROLEUM PRODUCTS OR ANY OTHER DELETERIOUS SUBSTANCE, INCLUDING DEBRIS, WASTE OR RUBBLE. ALL REFUELING, MAINTENANCE, AND STORAGE OF PETROLEUM PRODUCTS AND DELETERIOUS MATERIALS SHALL OCCUR 100 METERS FROM WATER BODY. EQUIPMENT AND MACHINERY MUST BE KEPT CLEAN AND PROPERLY MAINTAINED, IN SOUND MECHANICAL CONDITION, AND FREE OF ANY LEAKS OR CONTAMINANTS.
- .2 INTERCEPTOR DITCHES, SILT FENCES, OR MODIFICATIONS THEREOF MAY BE REQUIRED AT THE LAY-DOWN AREA. THEY SHALL BE PROVIDED BEFORE COMMENCEMENT OF CONSTRUCTION.
- .3 ALL VEGETATION COVER NOT SPECIFIED FOR REMOVAL SHALL BE PRESERVED IN ORDER TO MINIMIZE EROSION AND SEDIMENTATION.
- .4 EROSION AND SEDIMENTATION CONTROL SHALL ACCOMMODATE OTHER ASPECTS OF THE WORK INCLUDING, BUT NOT RESTRICTED TO, THE FOLLOWING:
  - a) WORK AREA REQUIREMENTS, INCLUDING ACCESS, OPERATION AND STORAGE, AND MATERIAL SUPPLY, UTILIZATION AND STORAGE;
  - b) SURFACE DRAINAGE FROM OUTSIDE, THROUGH OR AROUND THE WORK;
  - c) AREAS OF DISTURBED SOILS AND SOILS STOCKPILES;
  - d) MEANS OF ACCESS TO EROSION AND SEDIMENT CONTROL DEVICES REQUIRING MAINTENANCE;
  - e) ENVIRONMENTAL REQUIREMENTS AND CONSTRAINTS, THAT MAY BE SPECIFIED ELSEWHERE IN THE CONTRACT;
  - f) PROTECTION OF COMPLETED PORTION OF WORK.
- .5 WATERCOURSE SHALL NOT BE DIVERTED, INTERCEPTED OR BLOCKED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

7.0 CONSTRUCTION OPERATIONS AND SEDIMENT CONTROL MEASURES

- .1 THE CONSTRUCTION OPERATIONS BELOW ARE EXPECTED TO OCCUR ON THE PROJECT. EROSION AND SEDIMENT CONTROL MEASURES ARE EXPLAINED FOR EACH OPERATION. IT IS RECOGNIZED THAT SOME SEDIMENT WILL ENTER THE WATER DURING CONSTRUCTION; HOWEVER, IT WILL BE KEPT TO THE MINIMUM LEVEL POSSIBLE BY ADHERENCE TO THIS SEDIMENT CONTROL PLAN.

A. GENERAL

- .2 CONTROL OF SURFACE WATER RUNOFF MUST BE MAINTAINED AT ALL TIMES.

B. CONSTRUCTION AND REMOVAL

- .3 THE STAGED CONSTRUCTION PROCESS WHICH SHALL BE FOLLOWED IN THIS SEDIMENT CONTROL PLAN SHALL BE AS PER SCOPE OF WORK SHOWN ON THIS DRAWING.

8.0 INSPECTION AND MAINTENANCE

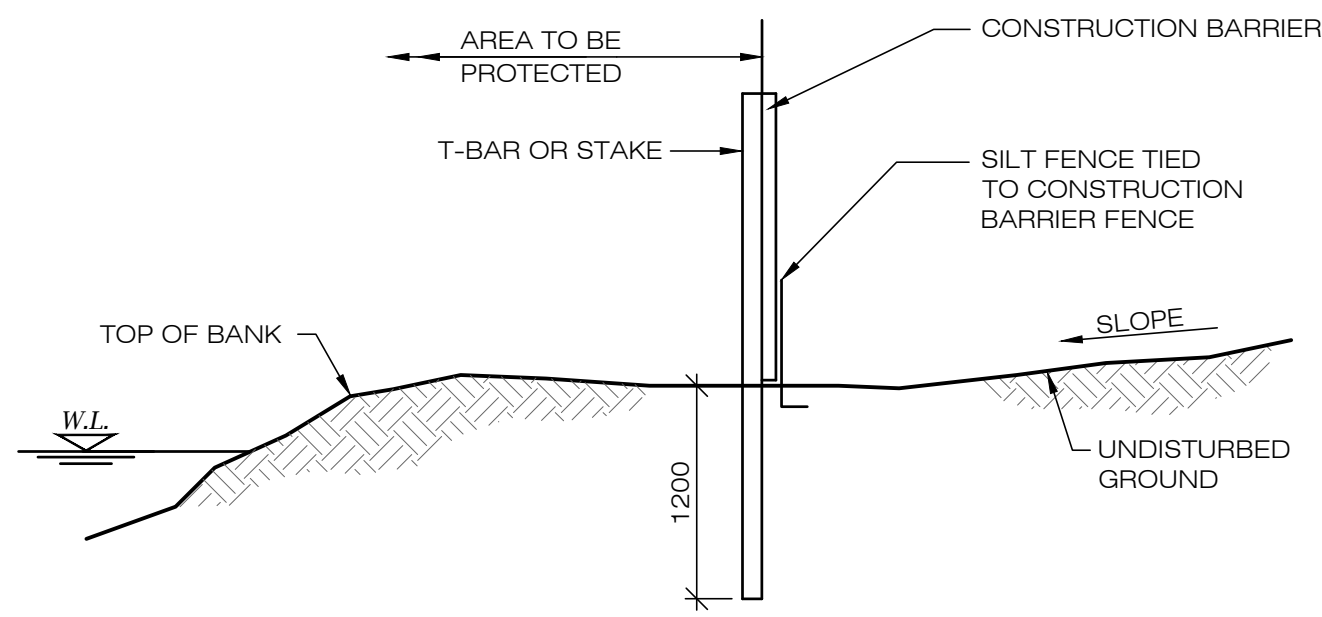
- .1 CONSTRUCTION OPERATIONS WILL BE UNDER THE DIRECTION OF THE CONTRACTOR AND INSPECTION BY A JML REPRESENTATIVE TO ENSURE COMPLIANCE WITH THIS SEDIMENT CONTROL PLAN AND THE CONTRACT. ANY PROBLEMS OR CONCERNS WILL BE RESOLVED ON SITE BY CONTACTING THE OFFICE OF THE CONSULTANT OR OWNER.
- .2 COMMENTS RESULTING FROM INSPECTIONS BY JML STAFF WILL BE MADE TO THE CONTRACTOR AND/OR THE OWNER AS NECESSARY.
- .3 EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED EACH WORKING DAY AND AFTER EACH STORM EVENT AND SHALL BE MAINTAINED AND CLEANED OUT BY THE CONTRACTOR AS WARRANTED. MAINTENANCE SHALL INCLUDE THE REPAIR OF ANY DEFICIENCY IN AN EROSION AND SEDIMENT CONTROL MEASURE OR CAUSED BY THE CONTRACTORS OPERATION. REPAIR AND MAINTENANCE SHALL BE AT THE CONTRACTORS EXPENSE.
- .4 SEDIMENT THAT HAS ACCUMULATED SHALL BE REMOVED IN A MANNER THAT MINIMIZES IMPACT IN ENVIRONMENTALLY SENSITIVE AREAS. ACCUMULATED SEDIMENT SHALL BE MANAGED AS EXCESS EARTH MATERIAL AS SPECIFIED ELSEWHERE IN THE CONTRACT.

9.0 EMERGENCY RESPONSE

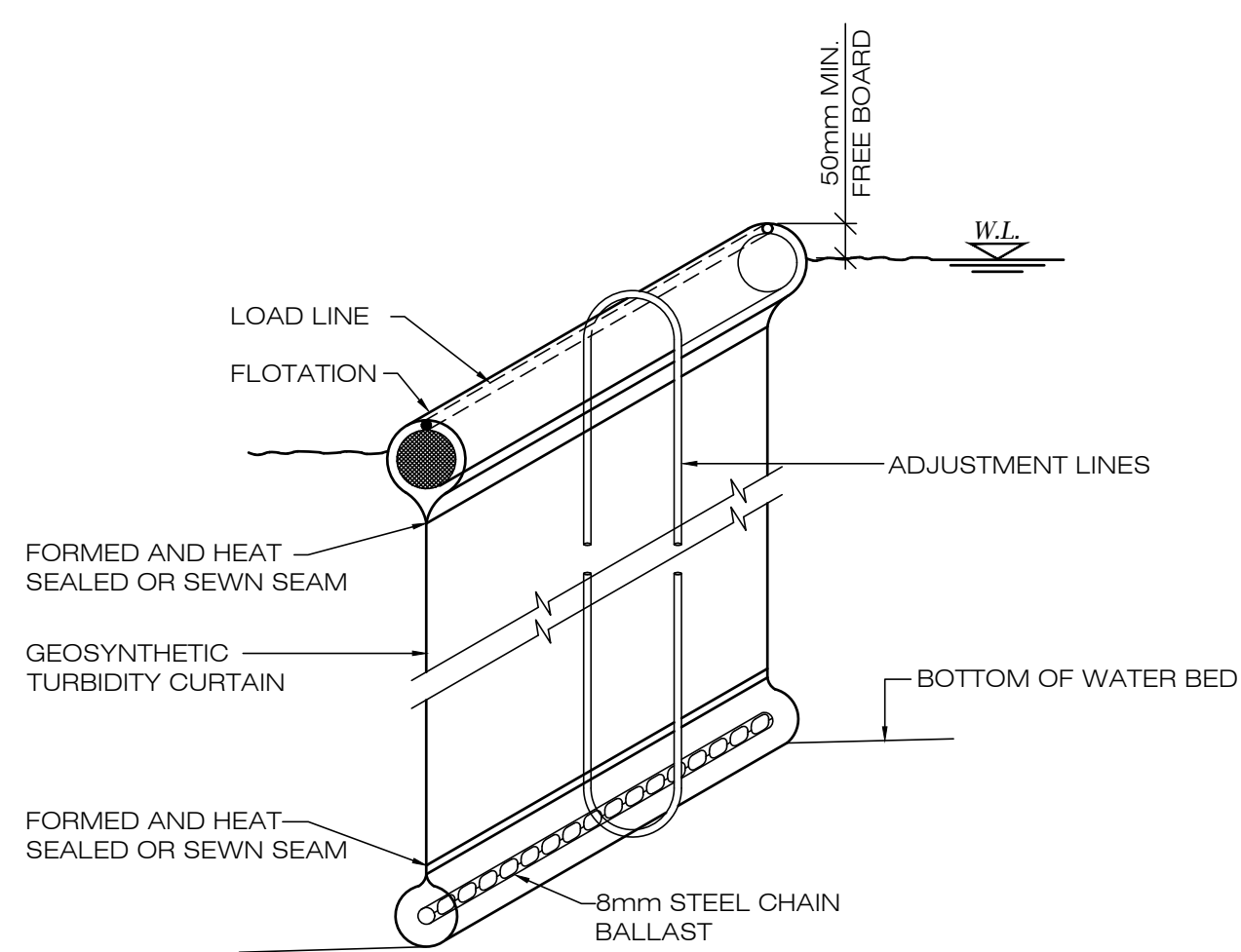
- .1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THEY ARE ADEQUATELY PREPARED FOR AN EMERGENCY RESPONSE. THIS MAY INCLUDE HAVING AVAILABLE AT THE CONSTRUCTION SITE, PRIOR TO THE COMMENCEMENT OF OPERATIONS AND THROUGHOUT THE DURATION OF THE CONTRACT, ADDITIONAL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.
- .2 CONTRACTOR SHALL HAVE A SPILL KIT ONSITE AT ALL TIMES CAPABLE OF CONTAINING 110% OF TOTAL FUEL VOLUME AND A SPILL RESPONSE PLAN IN PLACE PRIOR TO COMMENCING WORK.
- .3 SPILL RESPONSE PLAN SHALL DETAIL THE CONTAINMENT AND STORAGE, SECURITY, HANDLING, USE AND DISPOSAL OF CONTAINERS, SURPLUS PRODUCT OR WASTE GENERATED IN THE APPLICATION OF THESE PRODUCTS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND PROVINCIAL LEGISLATION. THE PLAN SHALL INCLUDE A LIST OF PRODUCTS AND MATERIALS TO BE USED OR BROUGHT TO THE CONSTRUCTION SITE THAT ARE CONSIDERED OR DEFINED AS HAZARDOUS OR TOXIC TO THE ENVIRONMENT.
- .4 IN THE EVENT THAT UNFORESEEN EVENTS CAUSE THE STRATEGIES SET OUT IN THIS PLAN TO BE INSUFFICIENT OR INAPPROPRIATE TO MEET THE OBJECTIVE, CONTRACTOR IS TO RESPOND IN A TIMELY MANNER WITH ALL REASONABLE MEASURES CONSISTENT WITH SAFETY, TO PREVENT, COUNTERACT OR REMEDY ANY EFFECTS ON FISH OR FISH HABITAT THAT MAY RESULT.
- .5 EXISTING SPILL REPORTING PROCEDURES ESTABLISHED BY THE MINISTRY OF THE ENVIRONMENT (MOE) SHALL BE USED TO REPORT ANY UNEXPECTED DISCHARGE OF SILT OR SEDIMENT OR OTHER DELETERIOUS SUBSTANCE INTO THE RIVER. THE SPILL SHALL ALSO BE REPORTED TO PUKASKWA NATIONAL PARK AS SOON AS POSSIBLE.

10.0 TECHNICAL

- .1 SILT FENCES - SEE SEDIMENT CONTROL DETAIL BELOW
- .2 WOVEN GEOTEXTILE FOR THE SILT FENCES SHALL BE TERRATRACK 24-11 OR AN APPROVED EQUAL.



SEDIMENT CONTROL DETAIL  
N.T.S.



TURBIDITY CURTAIN SEAM  
N.T.S.

LEGEND:

GENERAL NOTES

- 1. REFER TO JML ENGINEERING DRAWING G-1.

SCOPE OF WORK

- 1. REFER TO JML ENGINEERING DRAWING G-1.

CONCRETE NOTES

- 1. REFER TO JML ENGINEERING DRAWING G-1.

ARMOUR STONE NOTES

- 1. REFER TO JML ENGINEERING DRAWING G-1.

EROSION CONTROL BLANKET NOTES

- 1. REFER TO JML ENGINEERING DRAWING G-1.

TREES AND SHRUBS NOTES

- 1. REFER TO JML ENGINEERING DRAWING G-1.

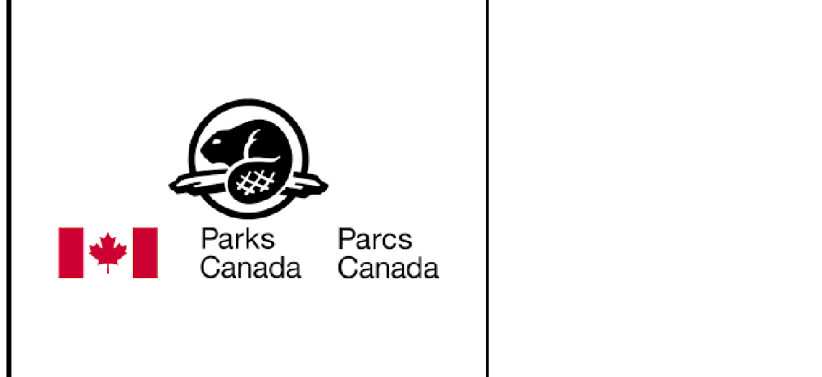


STAMP

STAMP



D.S.	1	ISSUED FOR CONSTRUCTION	03/24/21
D.S.	0	ISSUED FOR TENDER	05/15/20
REVISED BY	REV No	DESCRIPTION OF REVISION	APPROVED BY



NATIONAL PARK:	FIELD UNIT:
PUKASKWA	NORTHERN ONTARIO

PROJECT TITLE:	DRAWING DESCRIPTION:
PUKASKWA RIVERBANK STABILIZATION	SEDIMENT CONTROL PLAN AND DETAILS

DRAWN BY:	D.S.	DATE: OCTOBER, 2019
DESIGNED BY:	N.S. P.ENG.	SCALE: AS NOTED
CHECKED BY:	G.A.M. P.ENG.	DWG. No. G4
ARCHITECTURAL REVIEWED BY:		PROJECT No.
DESIGN COORDINATOR:		FILE No. 2019065-G4.DWG
SECTION MANAGER:		

PUKASKWA RIVERBANK STABILIZATION

PUKASKWA NATIONAL PARK

PROJECT NO.

JML PROJECT NO. 2019065

G-4