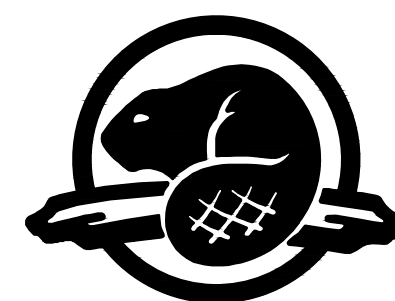


Parcs
Canada

Parks
Canada

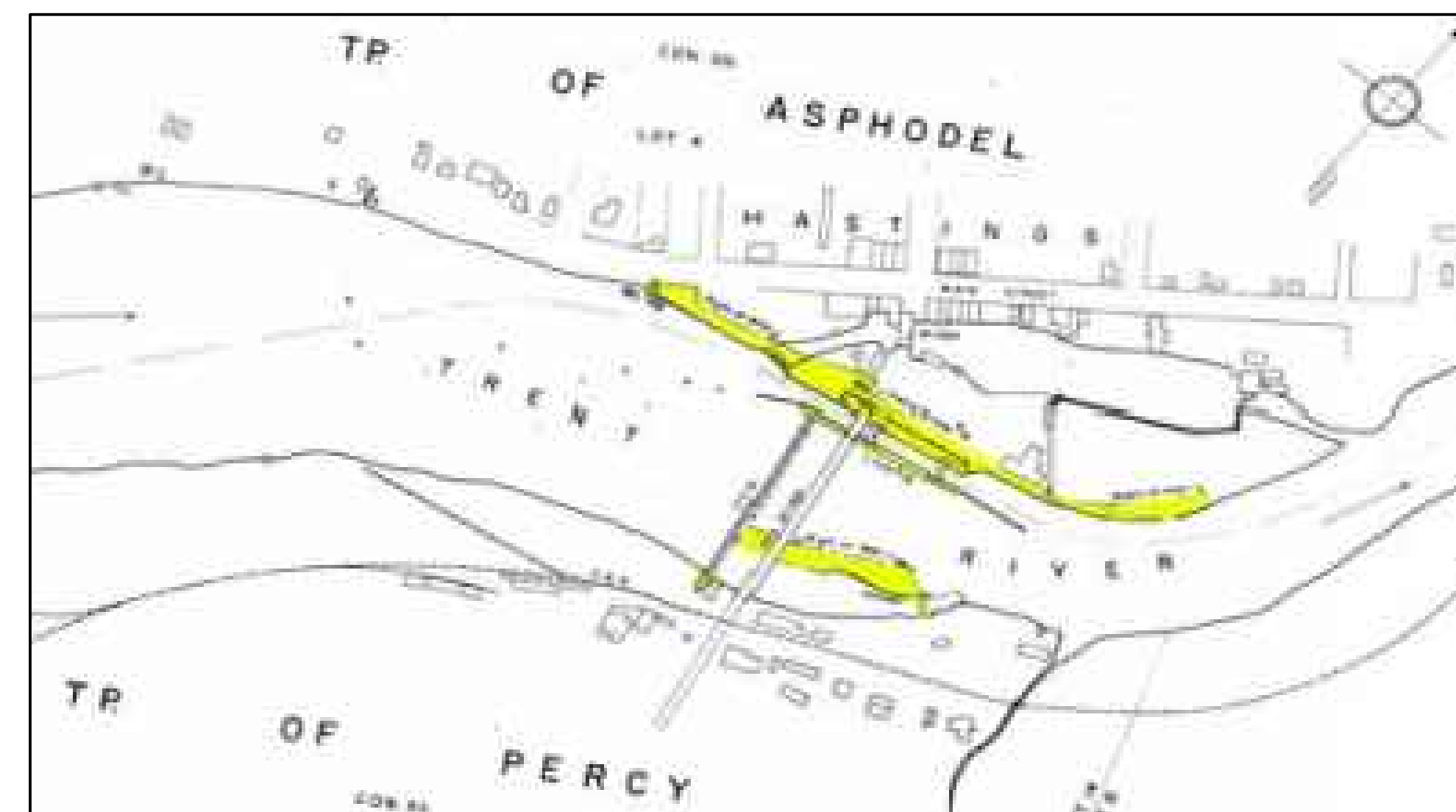


Canada

HASTINGS DAM AT LOCK 13

SAFETY BOOM

4 BRIDGE STREET N., VILLAGE OF HASTINGS,
NORTHUMBERLAND COUNTY, ONTARIO



KEY PLAN
N.T.S.

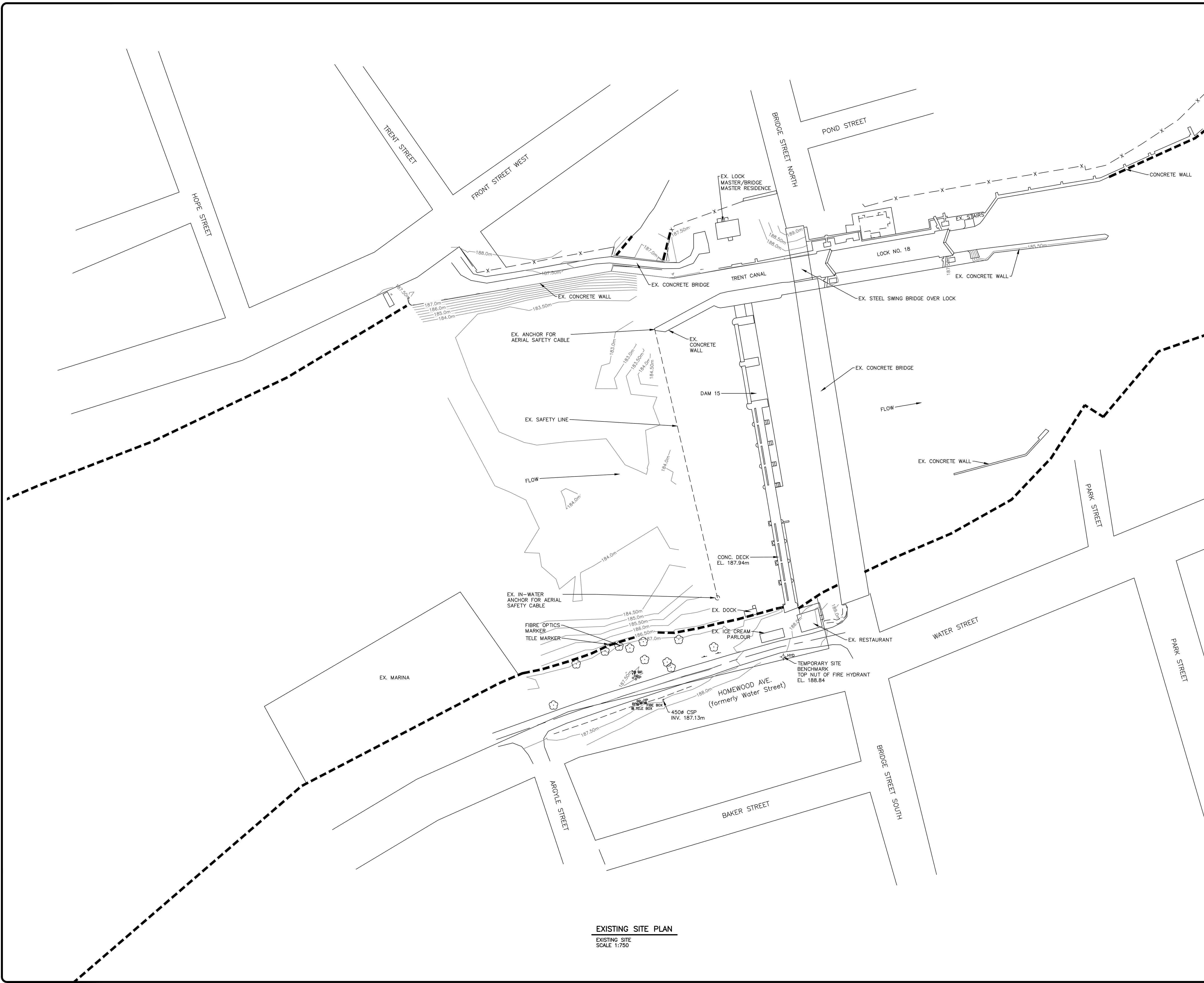
DWG No.	DESCRIPTION
HAS-01	EXISTING SITE PLAN
HAS-02	PROPOSED SAFETY BOOM
HAS-03	MISCELLANEOUS DETAILS

ISSUED FOR TENDER

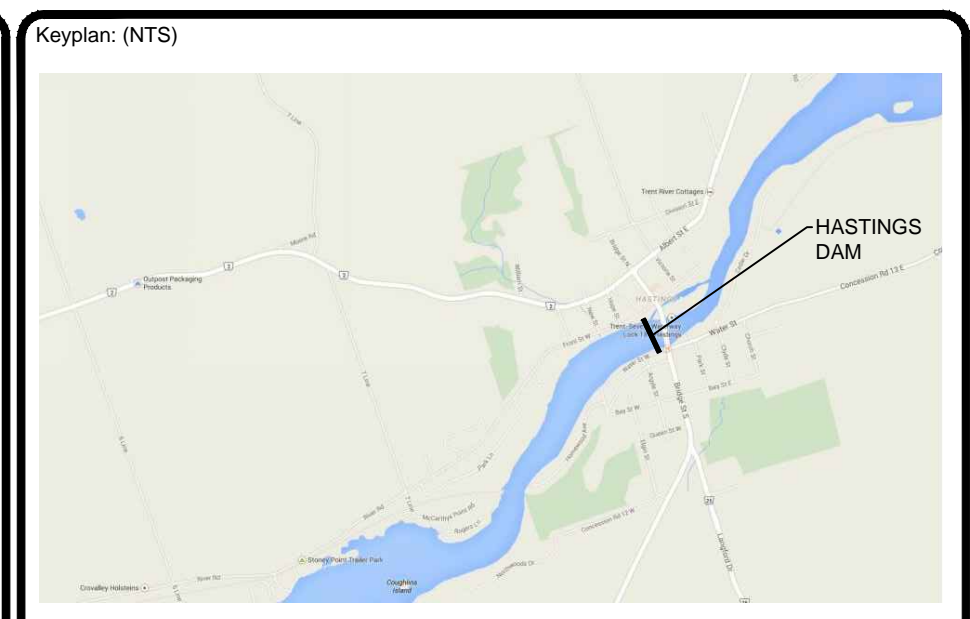
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PROJECT No.:
BRM00605127a



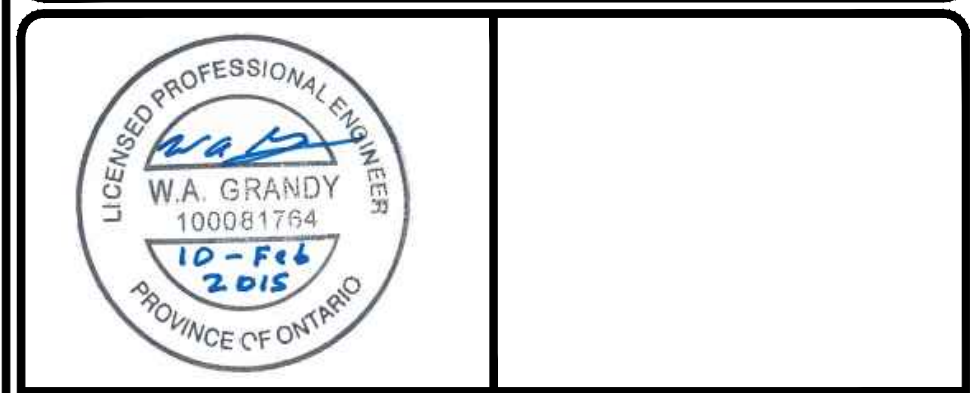
EXISTING SITE PLAN
 EXISTING SITE
 SCALE 1:750



GENERAL NOTES:

1. ALL DIMENSIONS AND ELEVATIONS SHOWN ARE METRIC, UNLESS OTHERWISE NOTED.

No.	REVISIONS	Date	By	App.
D	ISSUED FOR TENDER	FEB 10, 2015	T.M.	WAG
C	ISSUED FOR 99% SUBMISSION	DEC 04, 2014	T.M.	WAG
B	ISSUED FOR 66% SUBMISSION	SEPT 29, 2014	T.M.	WAG
A	ISSUED FOR REVIEW	FEB 18, 2014	T.M.	WAG



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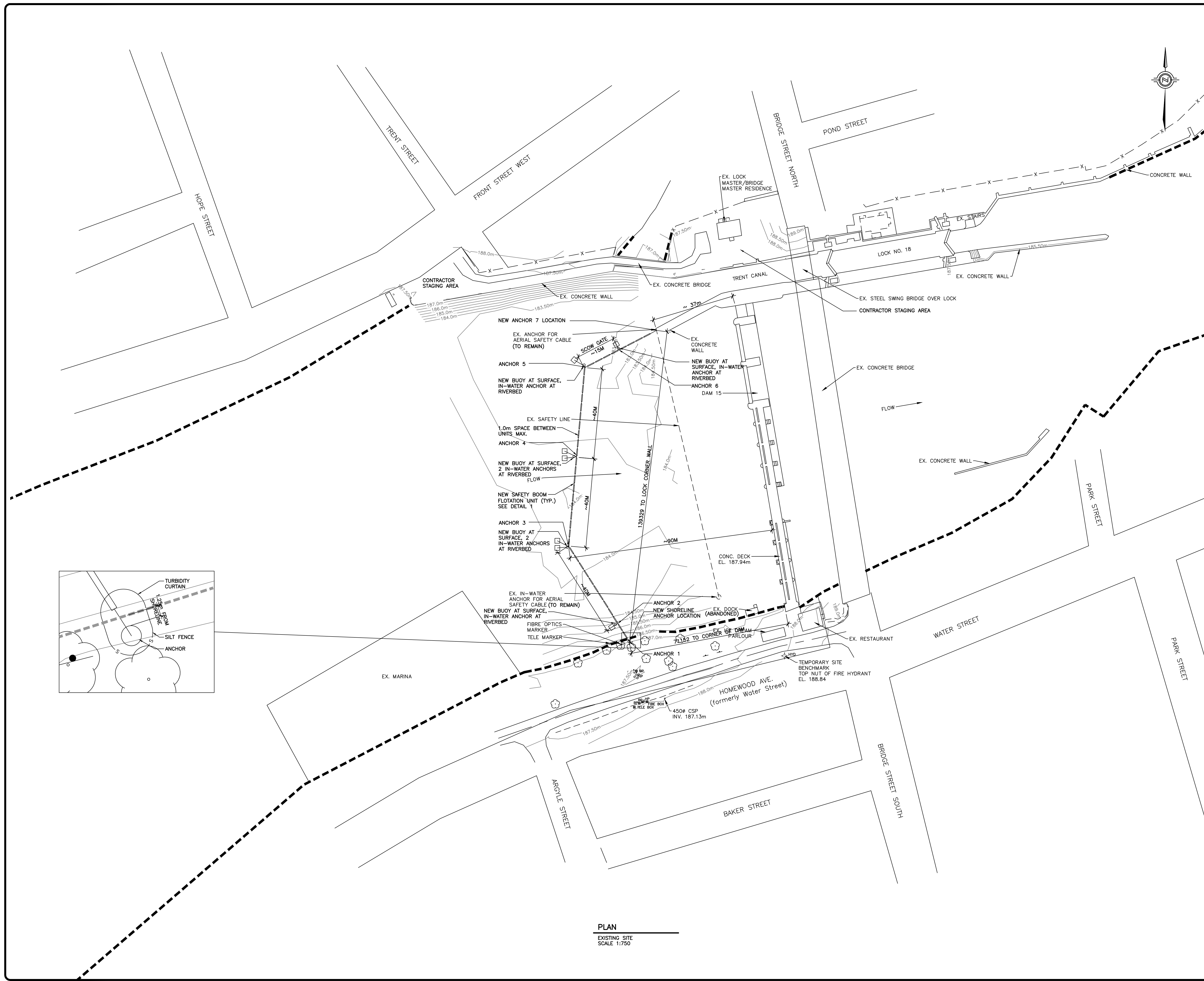
- BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
- INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •



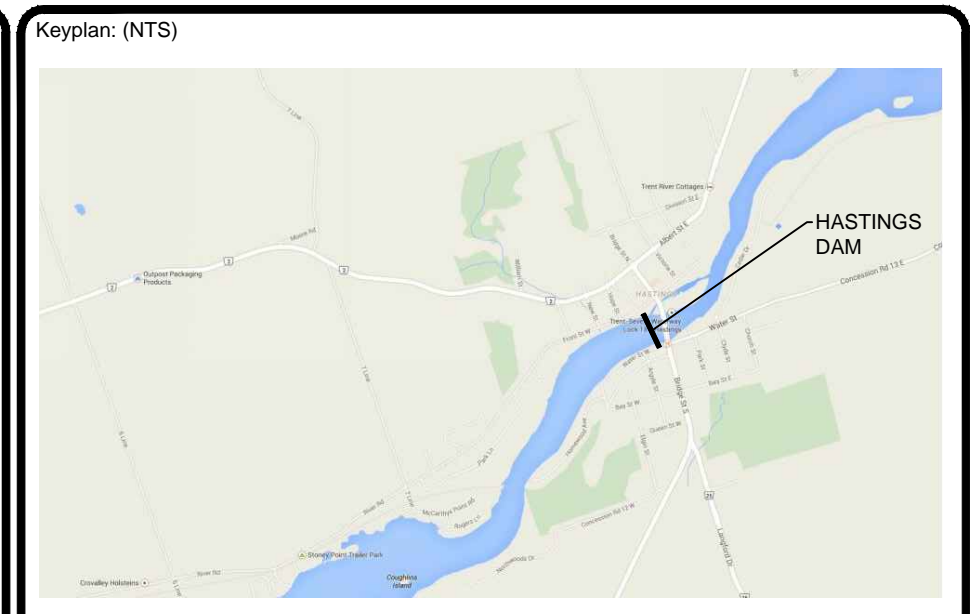
Location: **4 BRIDGE STREET N., VILLAGE OF HASTINGS, NORTHUMBERLAND COUNTY, ONTARIO**

Title: **EXISTING SITE PLAN
 HASTINGS DAM AT LOCK 18**

CAD File: BRM00605127a HAS-01-RC	Base File:
Designed By: T.M.	Drawn By: T.M.
Scale: AS NOTED	Date: DECEMBER 2013
Dam No.: ---	Project No.: BRM00605127a
Checked By: W.A.G.	Drawing No.: HAS-01



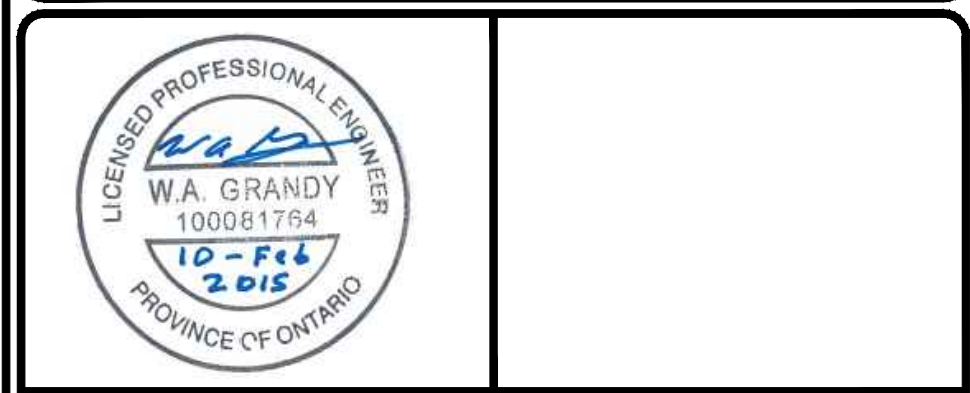
PLAN
EXISTING SITE
SCALE 1:750



GENERAL NOTES:

1. ALL DIMENSIONS AND ELEVATIONS SHOWN ARE METRIC, UNLESS OTHERWISE NOTED.

No.	REVISIONS	Date	By	App.
G	ISSUED FOR TENDER	FEB 10 2015	T.M.	WAG
F	ISSUED FOR 99% SUBMISSION	DEC 04 2014	T.M.	WAG
E	ISSUED FOR 66% SUBMISSION	SEPT 29 2014	T.M.	WAG
D	RE-ISSUED FOR 33% SUBMISSION	MAY 28 2014	Z.S.	WAG
C	RE-ISSUED FOR 33% SUBMISSION	MAY 02 2014	Z.S.	WAG
B	RE-ISSUED FOR 33% SUBMISSION	MAR 11 2014	T.M.	WAG
A	ISSUED FOR 33% SUBMISSION	FEB 20 2014	T.M.	WAG



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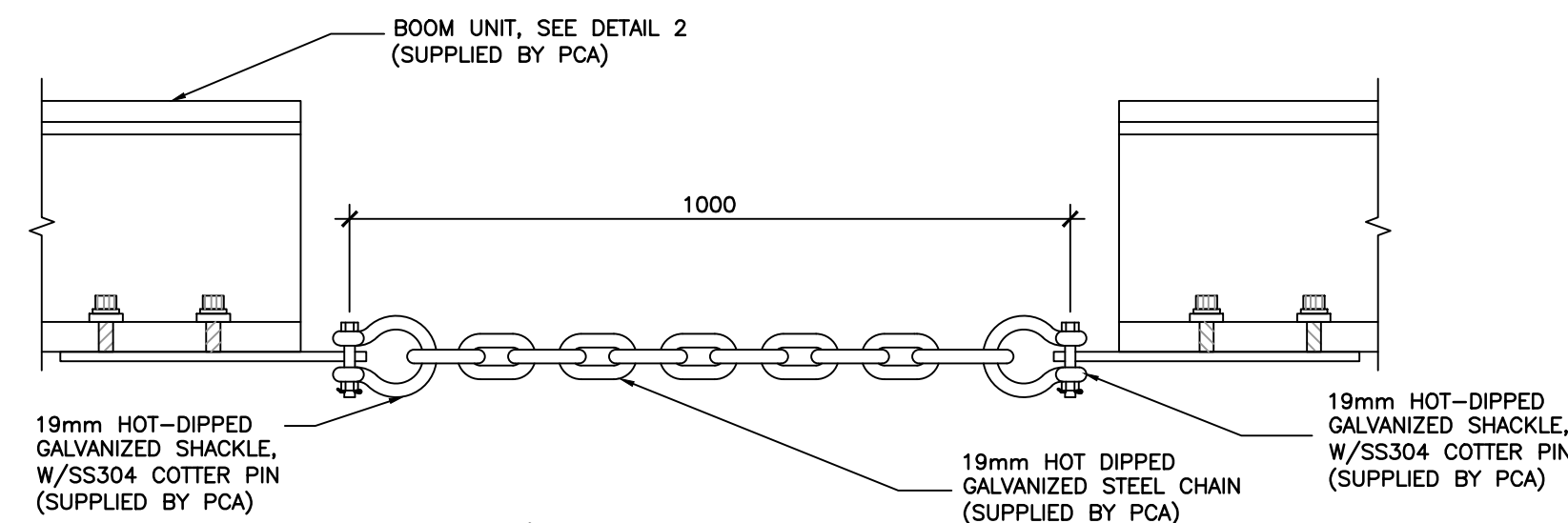


Canada

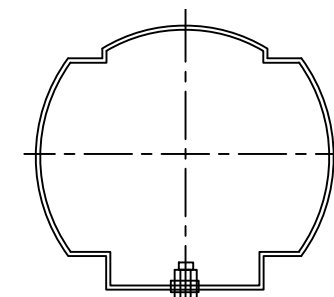
Location: 4 BRIDGE STREET N., VILLAGE OF HASTINGS, NORTHUMBERLAND COUNTY, ONTARIO

Title: HASTINGS DAM AT LOCK 18 PROPOSED SAFETY BOOM

CAD File: BRM00605127a HAS-02-OPT1.RF	Base File:
Designed By: T.M.	Drawn By: T.M.
Scale: AS NOTED	Date: DECEMBER 2013
Dam No.: ---	Project No.: BRM00605127a
Checked By: W.A.G.	Drawing No.: HAS-02

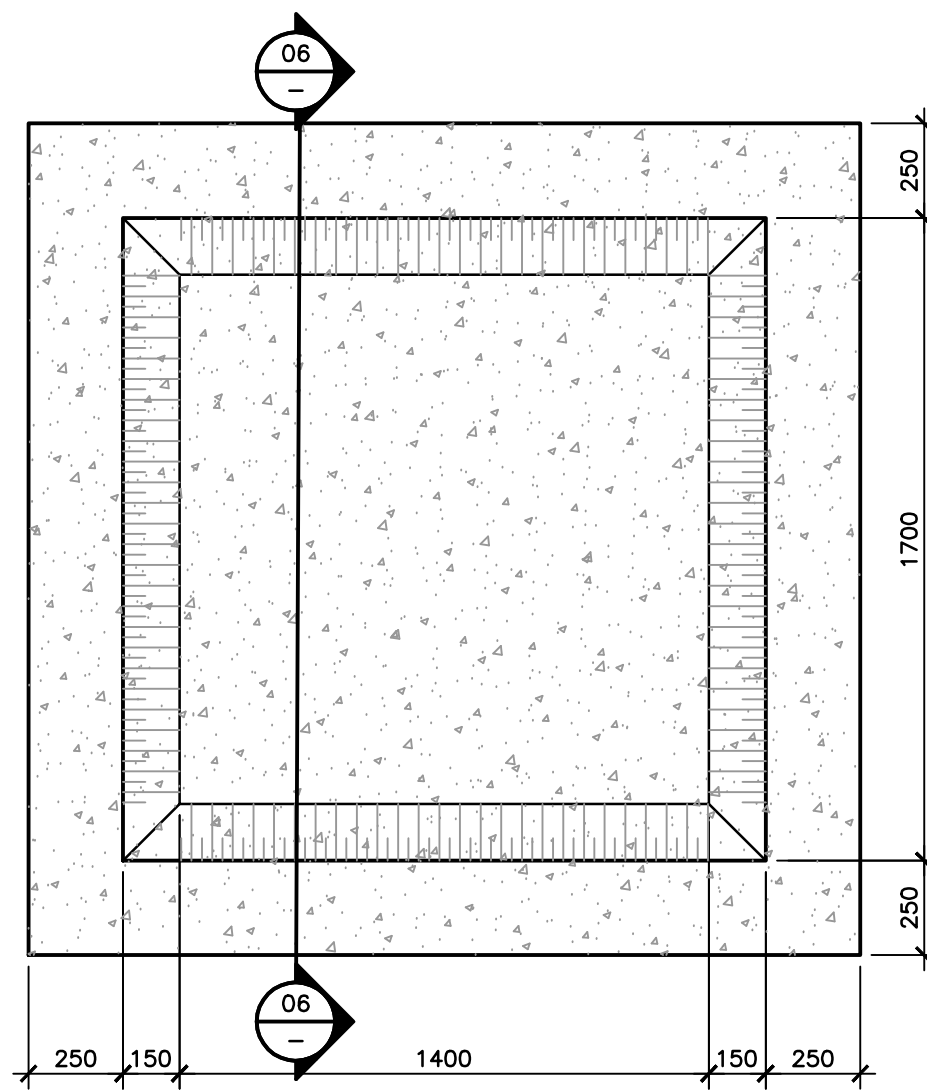


01 DETAIL
ELEVATION SAFETY BOOM ASSEMBLY
SCALE 1:10

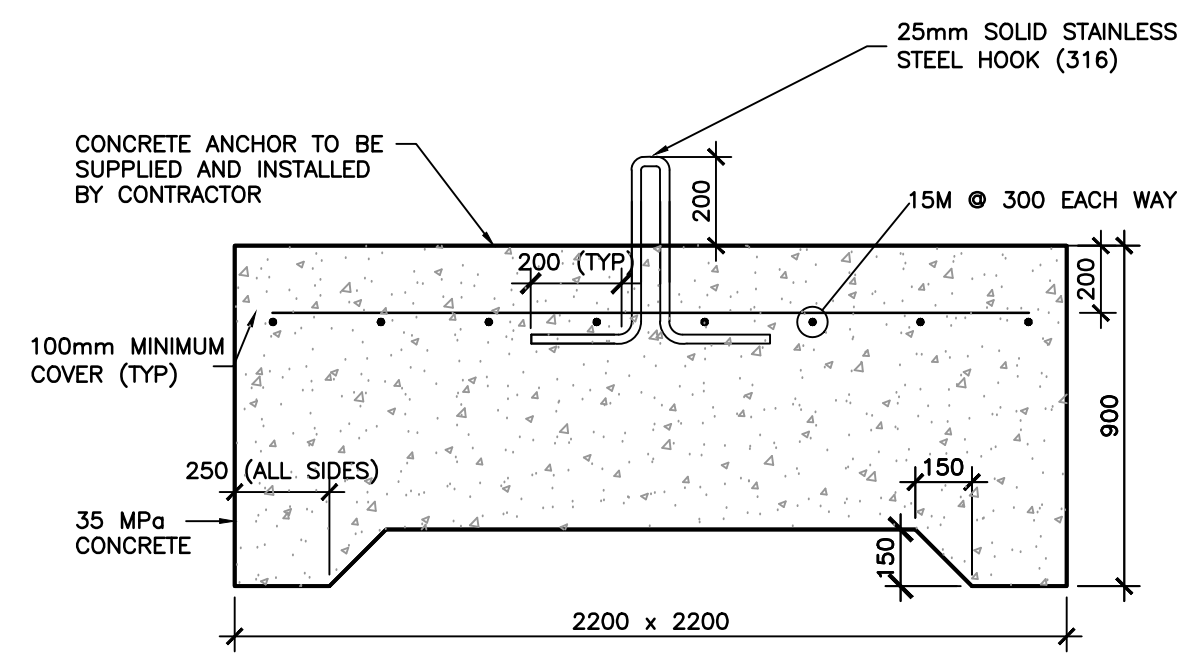


NAME: SAFETY BOOM FLOTATION UNIT
TYPE: INTERNAL FOAM FILL CORE
SHAPE: CYLINDRICAL
LENGTH: 3.0M +/- 0.3M EACH
DIAMETER: 0.4M +/- 0.5M EACH
GRAPHICS ON FRONT FACE OF ALL UNITS TO ALTERNATE BETWEEN:
◇ DANGER - DAM AHEAD - KEEP OUT ◇ AND
◇ DANGER - BARRAGE DEVANT - NE PAS APPROCHER ◇
GRAPHICS ON REAR FACE OF ALL UNITS TO BE:
Parcs Parks
Canada Canada
COLOUR: YELLOW (FS-13655)
SUPPLIED BY PCA

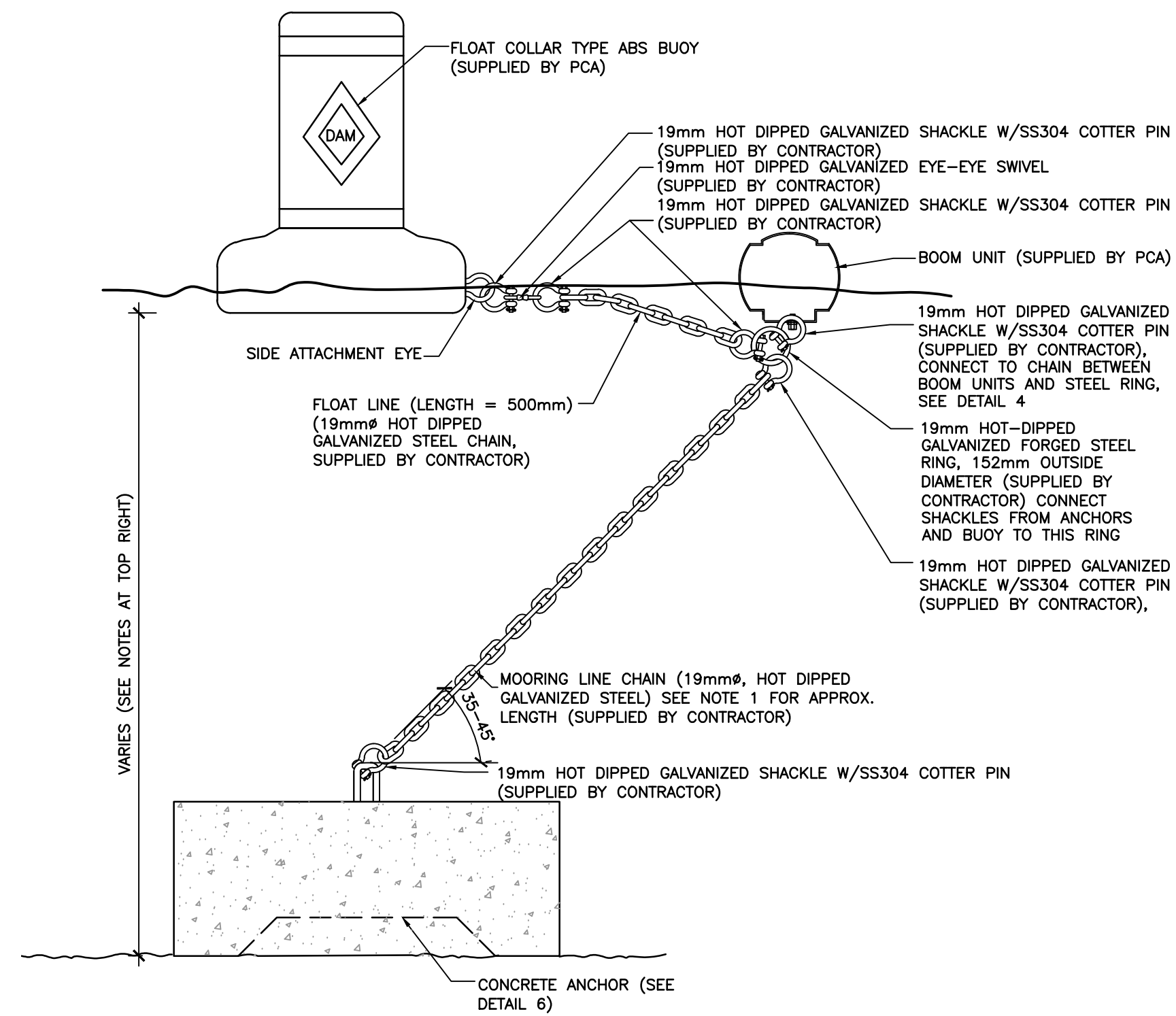
02 DETAIL - SECTION
BOOM FLOTATION UNIT
SCALE 1:10



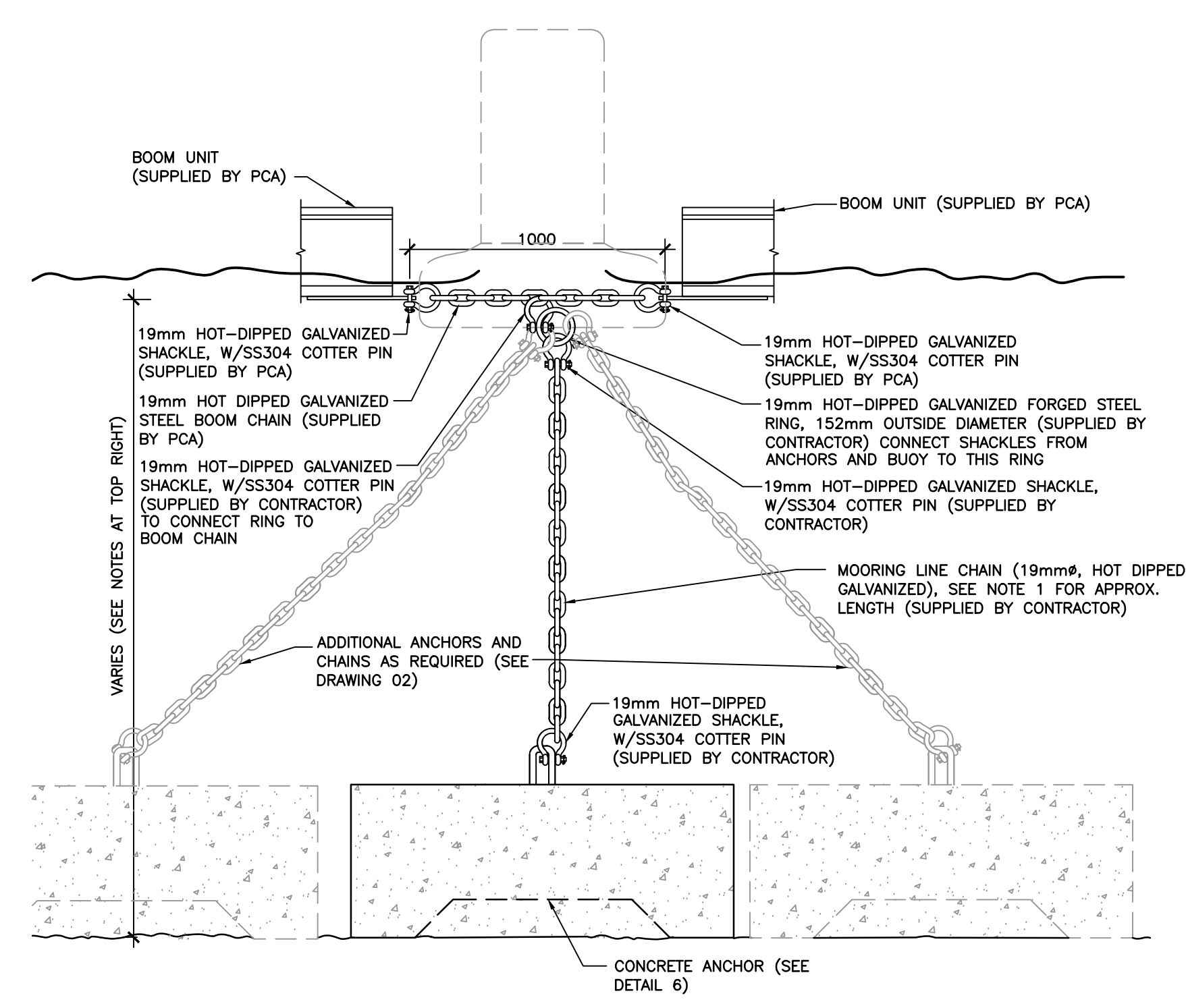
05 PLAN - UNDERSIDE OF ANCHOR
ANCHOR INVERTED SHOWING CAVITY AT BASE
SCALE 1:20



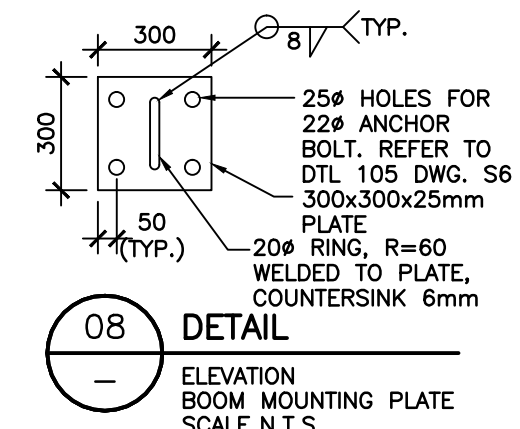
06 DETAIL - SECTION
CONCRETE ANCHOR - IN-WATER
SCALE 1:20



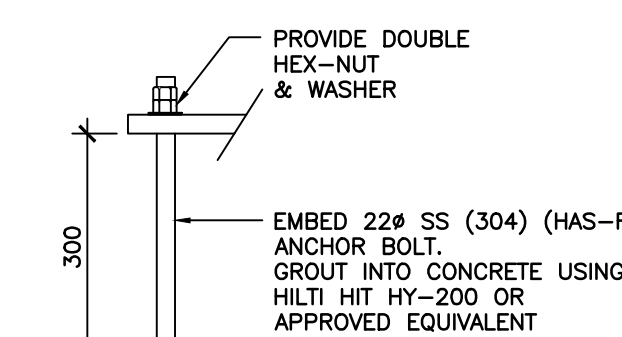
03 DETAIL
ANCHOR-SAFETY BOOM-BUOY CONNECTIONS
SCALE 1:20



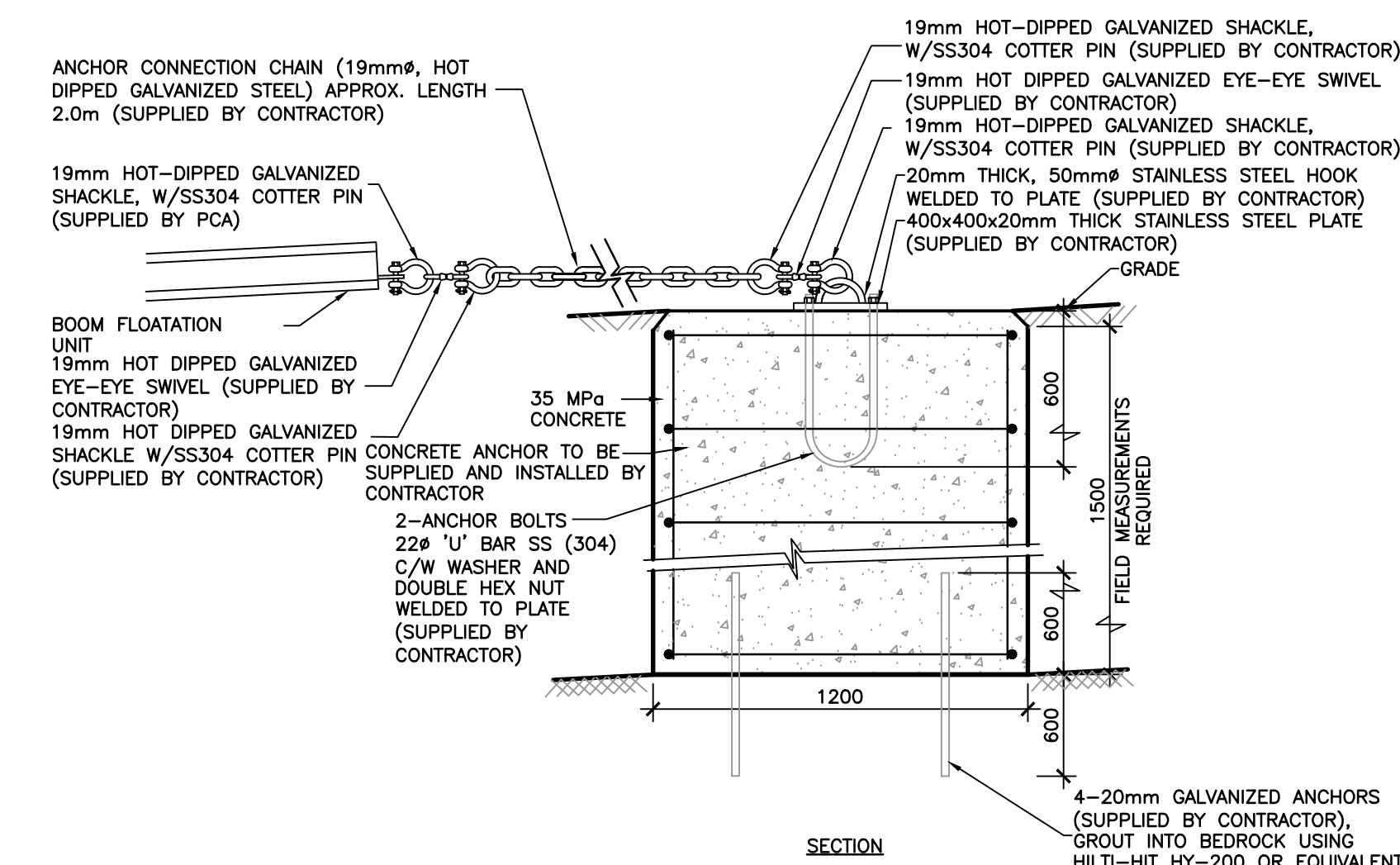
04 DETAIL
ANCHOR-SAFETY BOOM CONNECTION
SCALE 1:20



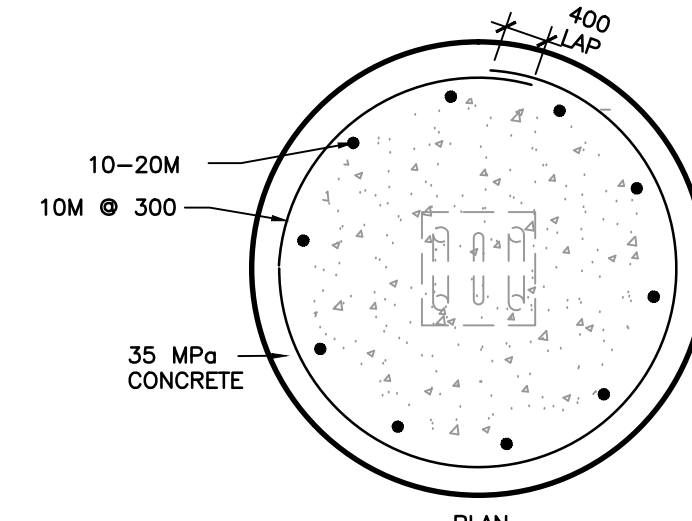
08 DETAIL
ELEVATION BOOM MOUNTING PLATE
SCALE N.T.S.



09 DETAIL
SECTION ANCHOR BOLT
SCALE N.T.S.



10 ANCHOR 1 DETAIL - SECTION
PLAN & SECTION CONCRETE ANCHOR AT SHORE (GROUND)
SCALE N.T.S.



NOTES RE ANCHOR CHAIN LENGTHS
1. ANCHORS 2-6
WATER ELEVATION ~ 186.6m
ANCHOR 2 ~ ~185.0m AT BASE, LENGTH = 1.2m
ANCHOR 3 ~ ~184.0m AT BASE, LENGTH = 3.0m
ANCHOR 4 ~ ~183.4m AT BASE, LENGTH = 4.0m
ANCHOR 5 ~ ~183.2m AT BASE, LENGTH = 4.4m
ANCHOR 6 ~ ~182.6m AT BASE, LENGTH = 5.4m
2. WATER LEVEL VARIES, CONTRACTOR TO MEASURE WATER LEVEL PRIOR TO BOOM INSTALLATION AND ADJUST CHAIN ANGLE OF INCLINATION TO MATCH AS SHOWN ON DETAIL 3.

No.	REVISIONS	Date	By	App.
C	ISSUED FOR TENDER	FEB 10, 2015	T.M.	WAG
B	ISSUED FOR 99% SUBMISSION	DEC 04, 2014	T.M.	WAG
A	ISSUED FOR 66% SUBMISSION	SEPT 29, 2014	T.M.	WAG

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Owner/Client:

Canada
 Location: 4 BRIDGE STREET N., VILLAGE OF HASTINGS, NORTHUMBERLAND COUNTY, ONTARIO
HASTINGS DAM SAFETY BOOM MISCELLANEOUS DETAILS

CAD File: BRM00605127a HAS-03-RB	Base File:
Designed By: T.M.	Checked By: W.A.G.
Scale: AS NOTED	Date: JUNE 2014
Dam No.: ---	Project No.: BRM00605127a

HAS-03